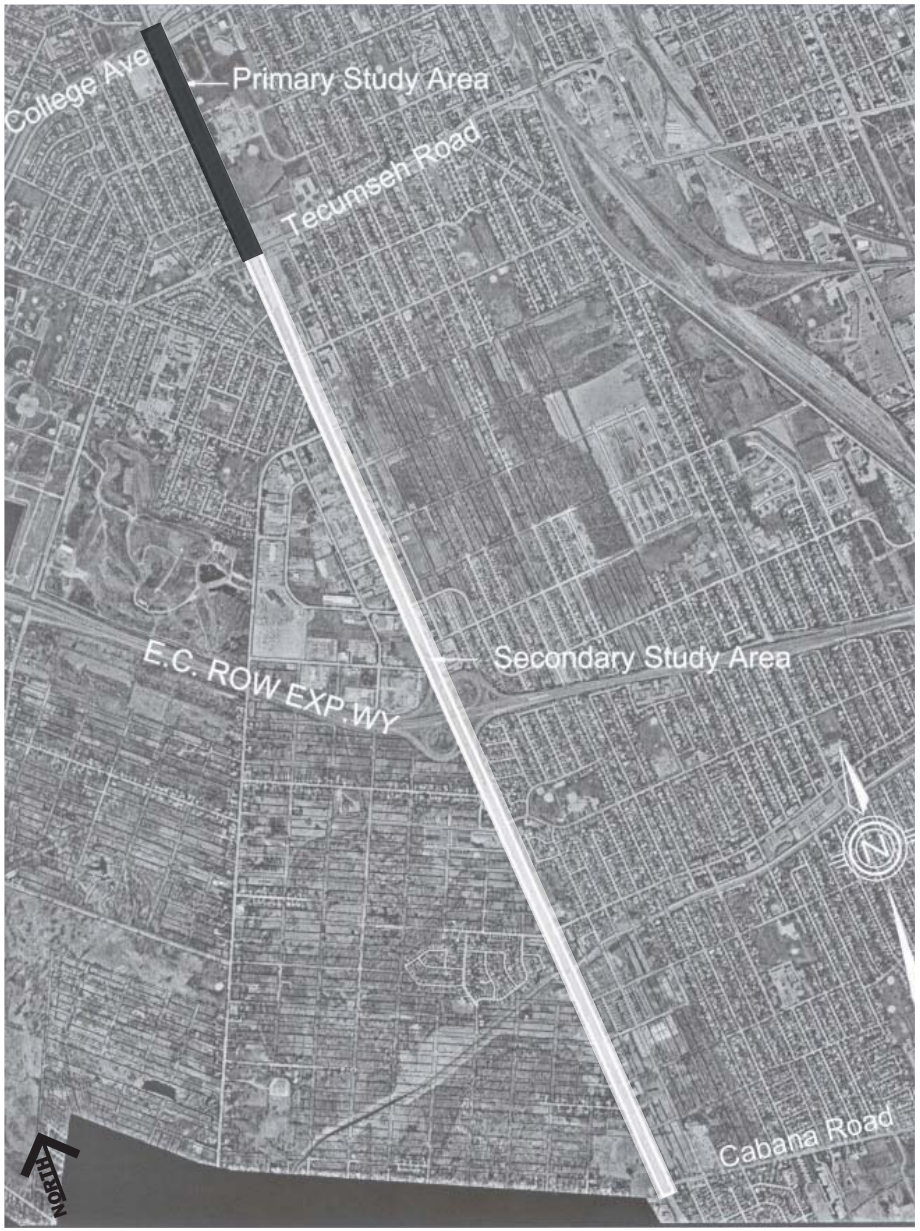
2.0 opportunities and constraints analysis summary



2.1 introduction

The purpose of the Opportunities and Constraints Analysis Summary is to consolidate and summarise findings of initial research, consultation and interviews, and design development efforts. Based on the review of relevant background material and community and stakeholder input, a series of preliminary design goals, objectives and concepts were presented for discussion.

Huron Church Civic Way is divided into two Study Areas, the Primary Study Area, from College Ave. to Tecumseh Road W. and the Secondary Study Area, from Tecumseh Road W. to Cabana Road. The Primary Study Area largely overlaps with the University of Windsor's Green Corridor initiative and is identified in this document as an International Gateway for Windsor, Essex, Ontario and Canada. The scope and analysis of this section concentrates on the Primary Study Area but will identify Design Elements, Streetscape Installations and Guidelines that can be implemented in the Secondary Study Area. To achieve a continuity of design for the entire length of Huron Church Road Civic Way many of the same streetscape and landscaping elements are recommended for both Study Areas.

Huron Church Road already plays a vital role as an international gateway for tourists and travellers entering Windsor, Ontario and Canada from the USA. The appearance, design and function of Huron Church Road should therefore be characterised by a positive and coherent image that expresses the unique identity of Canada.

2.2 primary study area context

2.2.1 Existing Open Space

Between College Avenue and Tecumseh Road W., Huron Church Road is flanked primarily by a linear green space with approximately 1.7 Km of open space fronting on Huron Church Road. The City of Windsor is one of the major land owners of greenbelt adjacent to Huron Church Road between College Ave and Tecumseh Road W.. A large proportion of the other open spaces in the Primary Study Area are owned by the University of Windsor and Assumption High School. The existing conditions of the open spaces range from forested mature growth trees, newly planted trees and shrubs, turf covered open spaces and the bermed pathways linking to the recently built 'Green Bridge'.

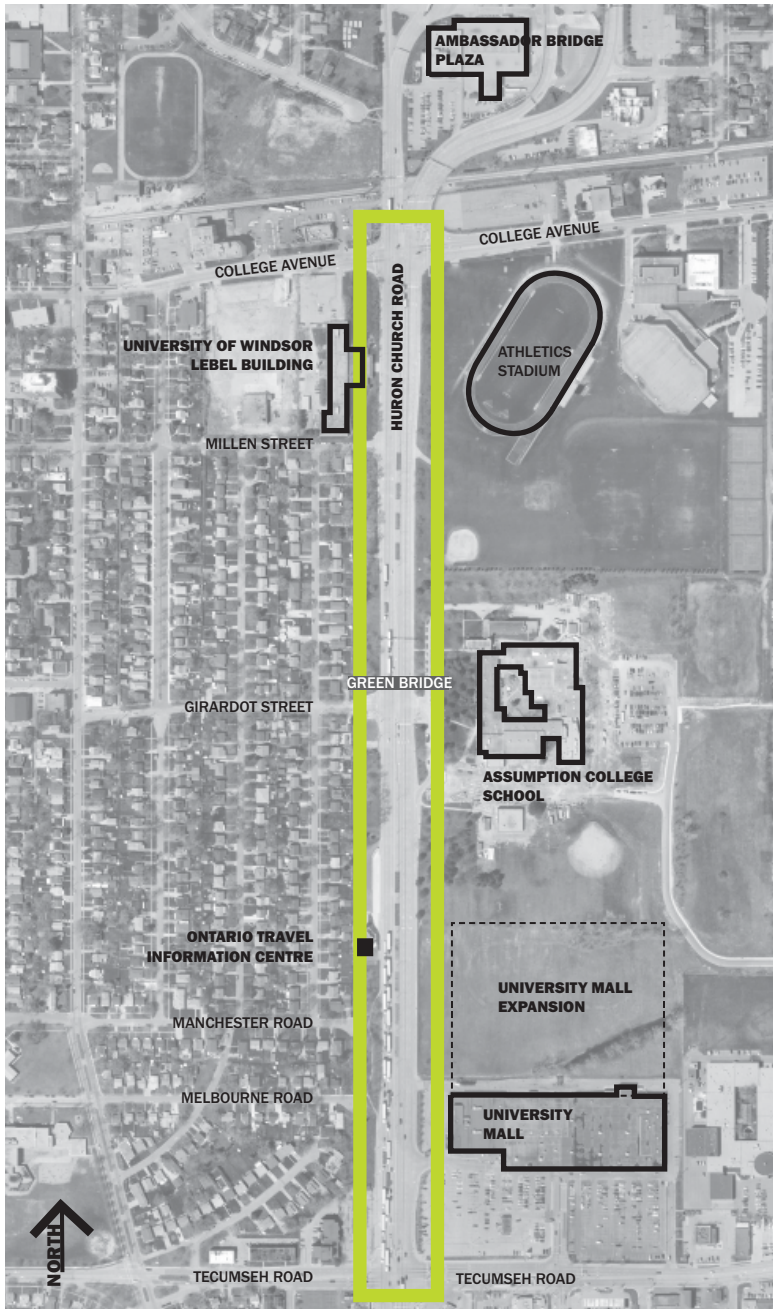
2.2.2 Existing Land Use, Condition and Development Potential

Commercial

The Primary Study Area from Tecumseh Road W. to College Ave is anchored by commercial uses on both the northern and southern ends of the street. It is important that accessibility and visibility to their sites are taken into account in the development of the Master Plan and Development Guidelines and conversely that the design of retail sites reflects a high level of design excellence that complements Huron Church Road's role as an International Gateway.

The Ambassador Plaza and University Mall

The low density retail plazas on the eastern side of Huron Church Road at the intersection of Tecumseh Road W. share the same owner. Within the Primary Study Area, at the north east corner of the Tecumseh Road W. and Huron Church Road intersection is the University Mall and within the Secondary Study Area is the Ambassador Plaza is to the south. Both plazas have installed landscaping at the intersection but the landscaping is overwhelmed by the scale of roadbed and the vehicular traffic. The current site configurations are not generally supportive of pedestrian and cyclists travel. Large curb cuts at vehicular entrances reinforce the feeling of an unsafe and undefined pedestrian zone, as do the existing parking areas, which are largely asphalt paved without buffered pedestrian zones or tree planting.



Major elements of the Huron Church Road 'Primary Study Area'.

Huron Church Road - existing conditions.

Rendering of potential streetscape transformation through new plantings and banner programs

The site to the north of the existing University Plaza and south of Assumption High School is intended as a long term expansion and redevelopment site for the University Mall. At such time that these two sites are redeveloped a more pedestrian friendly design can be implemented that includes the City's required 10m landscape buffer for Huron Church Road.

Vacant Site, SW Corner of Girardot and Huron Church Road

The former Petro Canada Site on the south west corner of Girardot and Huron Church Road is currently zoned as a commercial property. The existing zoning interrupts the continuous open space on the western side of Huron Church Road and presents a prime partnership opportunity for redevelopment into a park or open space. It is anticipated that the site will potentially require remediation and it is suggested in this document that the remediation process could be highlighted as part of the City's contribution to the Green Corridor Initiative. The site is also directly adjacent to the recently constructed Green Bridge and is across the street from Assumption High School.

Vacant Site, NW Corner of Tecumseh Rd. and Huron Church Rd.

The former A&W site at the northwest corner of Huron Church Road and Tecumseh Road W. is currently empty and for sale. A new retail or office development in this location would help better define the intersection as an urban gateway. This site could also be considered as a potential extension of the greenbelt land on Huron Church Road bringing the greenbelt into the intersection.

Residential

Well established residential areas exist on both the east and west sides of Huron Church Road. The proximity of these residential neighbourhoods to Huron Church Road has been a key consideration in the design recommendations of this study. Key issues include, sound mitigation of vehicular traffic, reduction of air pollutants (through planting) and reduction of light infiltration.

The impact of Huron Church Road on the residential areas varies greatly from the east side to the west side of the road. The residential area on the east side of Huron Church Road is located a distance from the roadway. The University Stadium, Assumption High School and the University Plaza buffer the neighbourhood from the majority of potential impact. On the west side, the residential neighbourhood is much closer to the road and so the impacts of sound, noise and air pollutants have a much greater effect. Fortunately, the west side neighbourhood is for the most part buffered from the roadway by a greenbelt of mature trees and grass. This greenbelt and trees are essential in mitigating some of the roadway impacts on the directly adjacent neighbourhood.

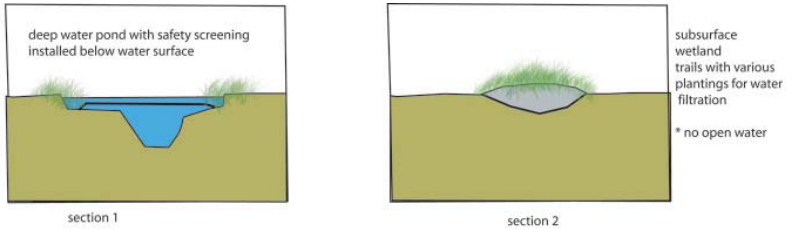
Institutional

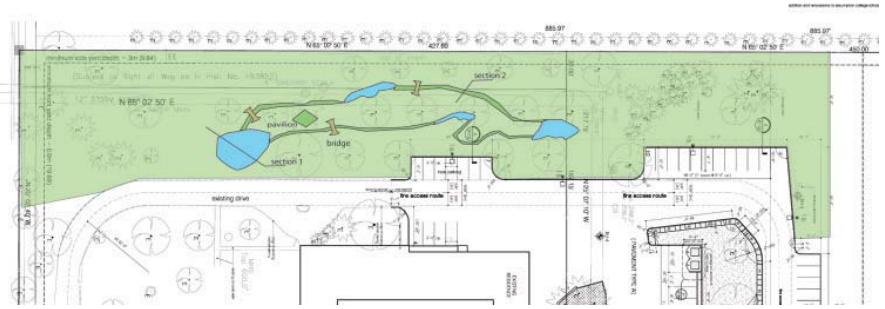
Both the University of Windsor and Assumption High School own land within the Primary Study Area. Both groups are committed to the concept of establishing a Green Corridor on Huron Church Road. The University owns three corners of the intersection at College Avenue and Huron Church Road. These are the most critical areas for creating a positive gateway treatment to Huron Church Road. On the southeast corner the University has recently constructed an outdoor stadium venue. On the southwest corner the Lebel building houses the Department of Visual Arts.

The University of Windsor (U of W) is a land owner and stakeholder in the design of Huron Church Road. It has an opportunity to promote itself as an academic institution of excellence through an investment in high quality gateway installations. The University of Windsor can add value to the identity of Huron Church Road through improvements to its lands and at the same time create opportunities for enhanced awareness of a wide range of academic activities including environmentally sustainable teaching, research and design initiatives.

The Ontario Tourism Centre (OTC) provides an important institutional presence in the Primary Study Area. The location of the Tourism Centre enforces the idea of an international gateway and is a key destination area for the corridor. The visibility and attractiveness of the OTC is compromised by the practice of providing transport truck parking flanking Huron Church Road.

The first Green Corridor project to be implemented is the 'green' pedestrian bridge. The Green Corridor Group is actively pursuing projects relating to the sustainability of Huron Church Road.





Green Corridor Group and Assumption High School partnership to create a naturalized wetland on Huron Church Road

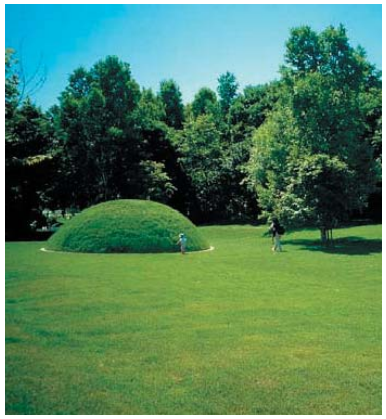
2.2.3 Existing Traffic Patterns

Huron Church Road Civic Way is classified in the City of Windsor Official Plan as a Class 1 Arterial Road. The road is a multi-functional transportation corridor for travellers, transportation of goods, residents of Windsor/Essex and nearby residents. Maintaining and where possible enhancing the existing road functions are important considerations the Master Plan Design.

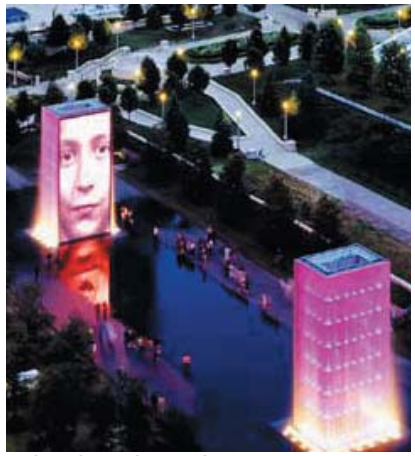
Potential Redevelopment Areas

Through out the Huron Church corridor, including both Primary and Secondary Study Areas, there are many potential redevelopment areas. The redevelopment of these properties will have a lasting and defining impact on the quality of the streetscape. A long term vision for the corridors design will help to guide the future development.

The following analysis drawings provide further insight into the existing conditions of the Primary Study Area.



Examples from elsewhere, landforms, plantings and pedestrian infrastructure.



Other creative design elements should be introduced to enhance the streetscape.

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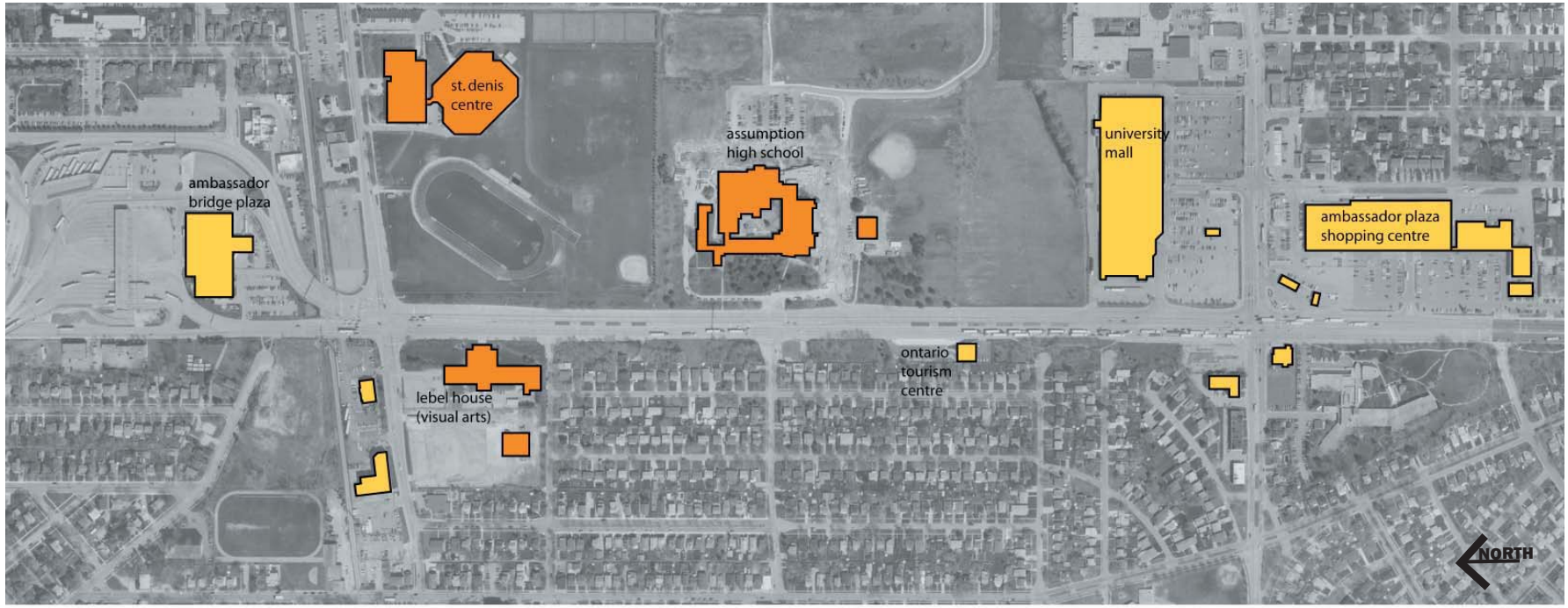
2.2.1 analysis drawings

existing non-residential buildings



Educational Institution

Other building Types

existing land ownership

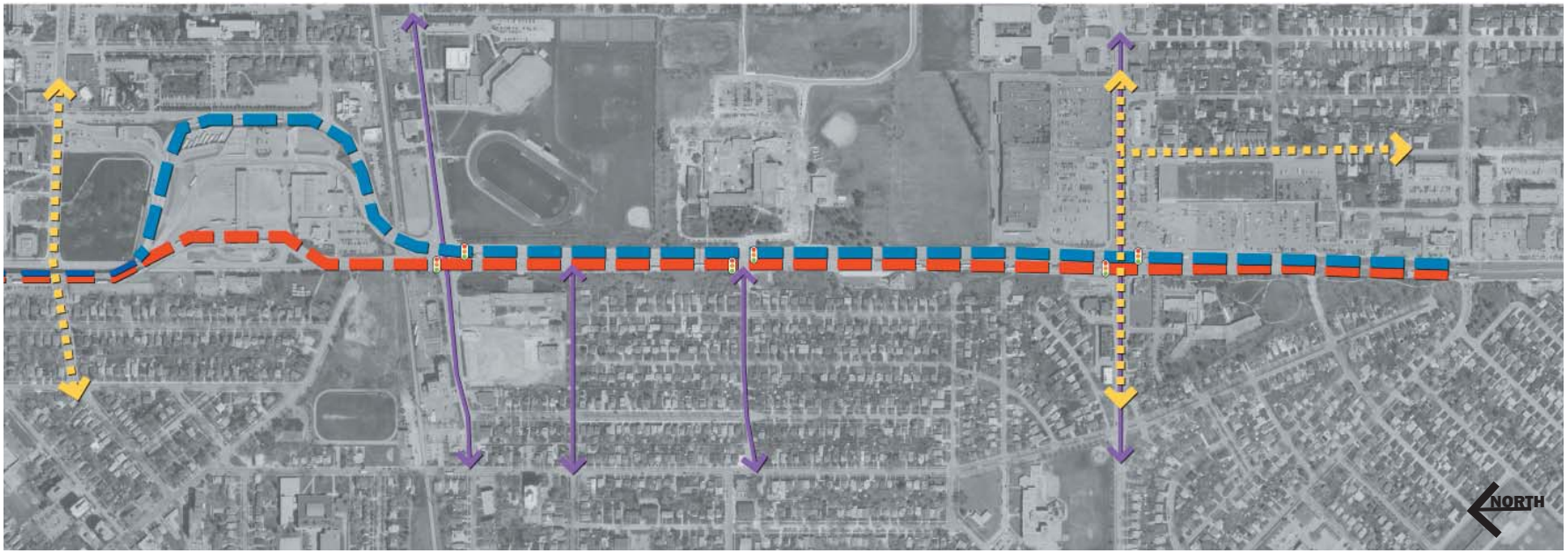
Ownership

1	Essex Terminal Railway Company
2	McDonald's Restaurant Limited of Canada
3	University of Windsor
4	City of Windsor
5	Private (Residential)
6	City of Windsor
7	City of Windsor
8	City of Windsor
9	Petro Canada (unoccupied)
10	City of Windsor
11	Province of Ontario
12	City of Windsor
13	City of Windsor
14	City of Windsor
15	Trades Incorporated (Commercial)
16	Private (Commercial)
17	Shell Canada
18	First Capital (Ambassador Plaza Shopping Centre)
19	First Capital (University Plaza)
20	First Capital (Future University Plaza Expansion)
21	Windsor Essex Catholic District School Board
22	University of Windsor
23	University of Windsor

existing land-use

- Commercial
- Residential
- Institutional
- Open Space
- Railway Corridor
- Vacant Site

existing traffic patterns



primary truck route to usa
primary truck route to canada
existing transit route
local traffic route

existing conditions photo inventory

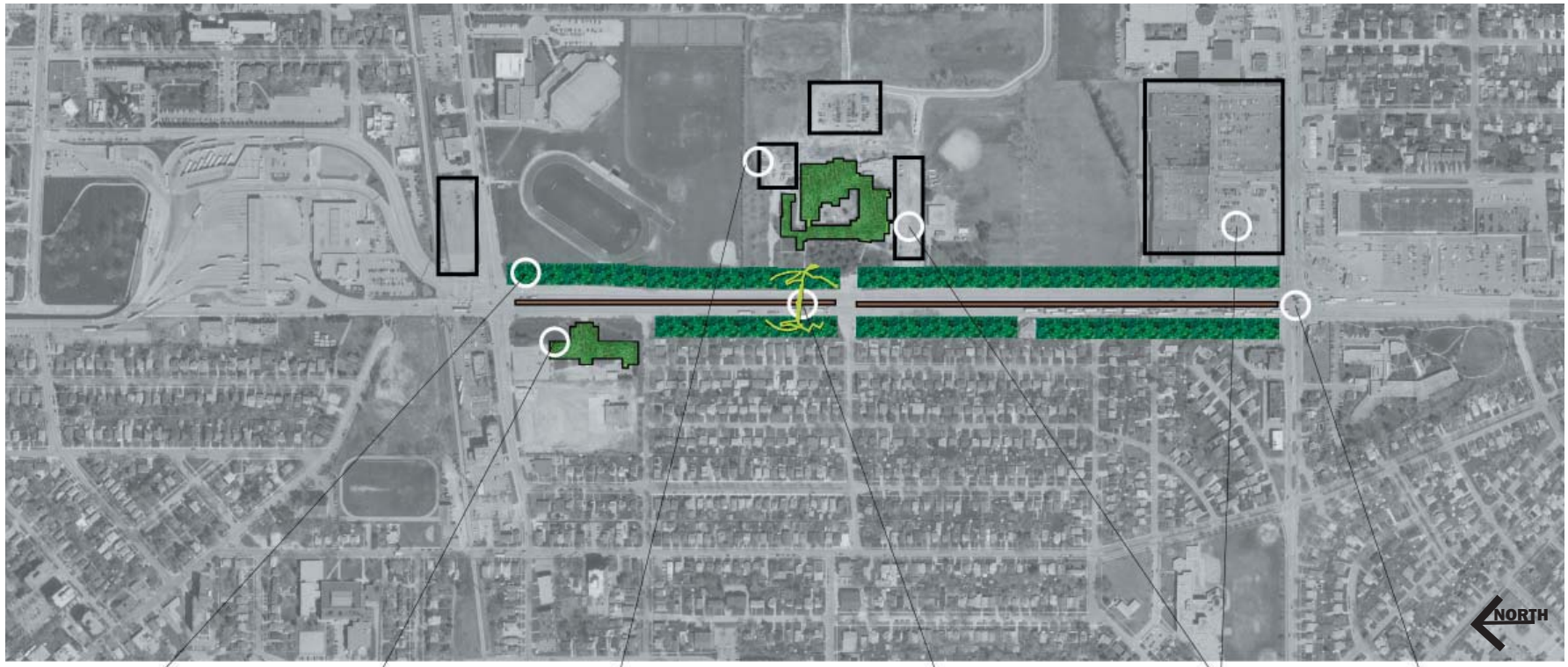
development and redevelopment potential

potential redevelopment site

future development site

'green' setback/buffer

potential "green" opportunities



green buffer:

buffer noise.
absorb co2.
produce oxygen.
minimise water runoff.
improve biodiversity.
aesthetic enhancements.

green roof:

buffer noise.
thermal insulation.
minimise water runoff.

bioswales:

planted with trees, shrubs and grasses.
contains aggregate and rocks.
traps pollutants.
cleanse water.
minimise water runoff.

green pedestrian bridge:

building on what has been already implemented

bioswales:

allows water infiltration from parking areas by introducing naturalized planting areas in large parking lots, minimizing storm water sewer use.

l.e.d. lighting:/photovoltaics

reduces energy consumption of feature lighting and design street light standards to generate solar power.

2.3 potential green opportunities

Throughout the Primary Study Area there are many opportunities to implement sustainable or green design installations. Although the very nature of a transportation corridor is typically contrary to environmental sustainability, many things can be done to highlight environmentally green themes.

The University of Windsor-Green Corridor Group's initiative aims to generate 'green' redevelopment of the Huron Church Road corridor from Tecumseh Road W. to the Ambassador Bridge. A key objective of this scheme is to engage local and international visitors with sustainable, artistic and scientific public projects that emphasise landscape over hardscape. Green Corridor projects to be along Huron Church Road include the Nature Bridge, green roof interventions, and environmental monitoring.

2.3.1 Environmental Sustainability

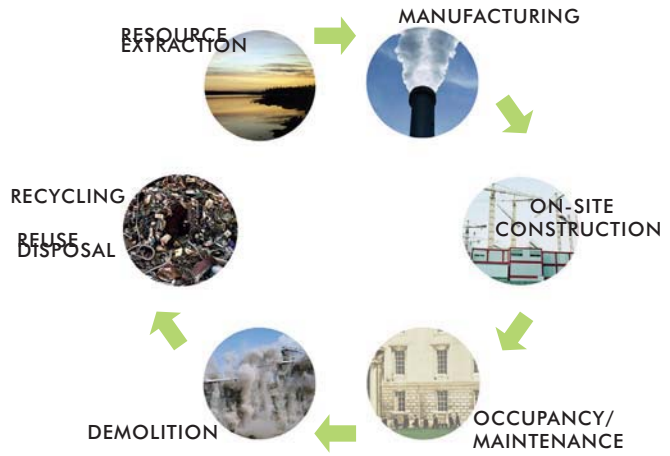
In 1987, the World Conference on Environment and Development defined sustainable development as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (WCED, 1987). Since then, sustainability has been understood as the need for all development to take place in an environmentally, socially and economically responsible fashion – over the long term, rather than the short term.

While a detailed plan for a sustainable Huron Church Road is beyond the scope of this Study, significant opportunities exist to implement key aspects of sustainability. Some of these opportunities are discussed below.

2.3.1.1 Principles

Huron Church Road should be promoted as a sustainable green corridor enlivened with sustainable public spaces. Key opportunities include minimizing impervious hard surfaces, choosing reused and local materials, favouring local drought and salt resistant species, minimizing the use of pesticides, minimizing storm water runoff, minimizing light pollution and promoting alternate transportation such as bicycles. A range of appropriate design cost and maintenance measures should be considered to evaluate the ability to achieve the above mentioned elements.

Green design is resource efficient, uses less energy, utilizes construction materials efficiently (including recycled, renewable, and reused resources),



reduces the internal and external impacts on the environment, and can reduce operating and infrastructure costs. Green building certification (e.g. LEED) should be pursued for any public built form developments. Private built form developments should also strive to make sustainability a primary design issue. New private built form developments should conform to any future policies regarding green practices and sustainability.

Sustainable components generally are initially more expensive than conventional components because they are more complex. But when energy savings, durability and non-monetary advantages are factored in, sustainability becomes advantageous.

2.3.1.2 Site Landscaping

Landscaping should be sized and located to allow plants to consume storm water or building grey water. The use of potable water to irrigate landscaping is discouraged. Native plant materials should be used wherever it can be demonstrated that they ensure minimal maintenance, watering and fertilization. The width of all planting beds should be at least 2.5m wide (except along sidewalks) to enable plant material to be massed to create a large soil area for moisture retention and reduce irrigation dependency.

Existing significant trees, tree stands, and vegetation should be protected and incorporated into site design and landscaping. Provisions should be made to protect such trees from any construction or development occurring in close proximity. Impervious areas directly connected to the storm drain system are the greatest contributor to the storm water management system. Breaks in such areas, by means of landscaping or other permeable surfaces should be provided to allow runoff absorption into the soil. Impervious areas can also be graded towards semi-permeable surfaces and landscaping to help redirect runoff from storm water management systems. The distribution of outdoor landscape lighting should be designed to minimize light pollution and maintain a dark night sky. Well-designed lighting networks that incorporate full cut-off fixtures are also more energy-efficient.

2.3.1.3 New Building Design

Buildings consume about 38% of total Canadian secondary energy use, produce about 30% of total Canadian greenhouse gas emissions and

Storm water swales allow for water filtration

Photo-voltaic panels

use 40% of raw materials globally. New development should seek LEED certification or equivalent, at a minimum new development should achieve all LEED prerequisites. LEED certification distinguishes building projects that have demonstrated a commitment to sustainability by meeting higher performance standards in environmental responsibility and energy efficiency. Building construction and operation methods should aim to reduce dependence on non-renewable resources by using appropriate recycled materials and by promoting adaptive reuse of existing structures. Building flexibility should be maximized to satisfy the varied demands of current and future users and residents. Raised access flooring, modular partitions, a consistent structural grid and non-centralized HVAC systems all contribute to building flexibility.

2.3.1.4 Green Roofs

Temperature peaks on green roofs are lower than on conventional roofs, mitigating the Urban Heat Island Effect and reducing cooling loads. Not only is the general comfort level increased, the reduction of air conditioning equipment loads result in substantial energy savings. While the temperature of a conventional roof can reach 90 degrees Celsius, vegetation experiences temperatures between 15 and 40 degrees because it retains moisture (LEED). In general, temperature variations are greatly reduced on planted roofs. Over a full year, heat gain is reduced by 95% and heat loss by 26% (Soprema – NRC study). Green roofs capture and return rainwater to the atmosphere. Some excess may be evacuated through pipes as on a conventional roof, but the overall amount is reduced. In an NRC study, storm water runoff volume was found to be reduced by 54% by the use of green roofs (Soprema). Green roofs also improve the longevity of the roof membrane as the membrane is shielded from ultraviolet rays and the elements.

2.3.1.5 Adaptive Re-Use & Recycling

Materials selected for use in the public realm should be durable to avoid premature replacement. They should also be local as the use of local materials and products prevent the expenditure of fossil fuels and other energies used for freight transportation. Canadian products are also generally designed with our climate in mind.

An effective means of achieving environmentally sustainable objectives in the public realm is to reduce dependence on new materials use through remodeling or adaptive reuse of all or parts of existing structures. When feasible, this is often a better environmental option than demolition and recycling.

Green roof

Green roof garden

Bio-swales adjacent to parking lot

2.3.1.6 Water Runoff – Buildings

In general, multi-storey development is preferred over single storey buildings with the same total floor area to reduce the building footprint and impact on the site.

Roof drainage should flow, in part or fully, into landscaped areas on site where lot size and soil conditions are adequate to absorb such runoff. Several downspouts should be provided to better distribute rain runoff into various areas of the adjacent landscape.

2.3.1.7 Water Runoff - Surface Areas

In a storm, all water that falls on a hard surface is either directed to the storm or sanitary sewer. In either case, expensive pipes must be laid and maintained. Often, the runoff water collects pollutants which flow into watercourses untreated. A better alternative is to capture water through on-site infiltration or evapotranspiration. With on-site infiltration water is allowed to infiltrate slowly into the ground. A bio-swale can be constructed to filter the water before it seeps into the ground. Evapotranspiration is when, over time, water evaporates from the ground and is consumed by vegetation. The combined rate and quantity constitutes evapotranspiration.

Paved areas, such as surface parking, should be minimized wherever possible to maximize permeable surfaces that absorb and biodegrade certain toxins. This also reduces the volume of runoff into the storm drainage system. Streets, driveways and parking areas should also be as small as possible within allowable standards. Parking areas and walkways should drain into vegetative or grassy swales that are incorporated into large common landscaped areas within a project or perimeter landscaping. Bioswales can be created next to parking lots and walkways to collect stormwater runoff to minimize the dependency on stormwater sewers; they should be planted with salt-tolerant shrubs and grasses to filter water before it percolates into the ground and be graded to direct water away from paved areas.

Drainage basins should be located throughout parking lots to collect stormwater, these basins should be planted with native plant materials that thrive in wet conditions and contain trees for shade. A well-drained snow storage area should be provided in a location that enables melting snow to leach into drainage courses and storm drain inlets to prevent toxic materials from damaging plant material or ecosystems.

Semi-pervious pavement

Bio-swales capture runoff from asphalted areas

2.4 constraints

The single largest constraint in the redevelopment of Huron Church Civic Way is the requirement for a right-of-way that must simultaneously balance the needs of the pedestrian with the functional requirements of a high volume arterial road that accommodates a significant level of transport truck traffic. The key objective will be to achieve a design that can be implemented to the requirements of both users. The Master Plan Design addresses the long-term growth potential of the area to pro-actively achieve a coordinated vision. The following is a more detailed look at the specific constraints relating to the redesign of Huron Church Road.

Functionality

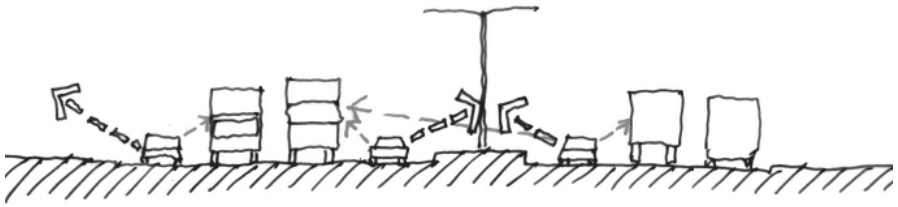
Huron Church Road is an essential transportation route for the City, Region, Province and Country. Urban design elements should not interrupt the functionality of the roadway.

Vehicular Scale

Scale is a vital consideration for the design of right-of-way elements located on Huron Church Road. Right-of-way elements that require a high degree of visibility include signage, gateway markers, public art, plantings, land forms, lighting, and traffic signals. The ability to view elements within the Huron Church Road corridor from vehicles is restricted by the height and volume of trucks and the overall width of the right-of-way. Due to these factors, highly visible right-of-way installations are required.

Pedestrian Scale

To ensure an environment that is pedestrian supportive, it is imperative to include urban elements at the scale of the pedestrian. Currently, Huron Church Road provides limited pedestrian amenities.



Relationship between scale of right-of-way, truck traffic, and vehicular traffic and the associated impact on views.

To make an area walkable, pedestrians must feel protected from and connected to their environment. The challenge here will be to provide a clearly defined pedestrian zone adjacent to Huron Church Road. To achieve this, a buffer zone must be created that gives pedestrians a pathway system that is separated from the roadway, wherever possible.

Travel Speed

The motion of vehicular travel limits the ability of passengers to understand their environment as there is less time to read and interpret information. It is important that right of way elements do not overwhelm or distract drivers with excessive or confusing information.

To be successful the Urban Design of Huron Church Road needs to create an awareness of arrival or departure into, or from Windsor and Canada without disturbing current travel speeds and traffic patterns.

Commercial Content

Information provided by new right-of-way elements should reflect the important role of Huron Church Road as a gateway into Canada and also recognise and respect existing academic, residential and open space uses. High quality Canadian content, such as a welcome to Canada message, educational messages or something that are representative of Canadian history, is paramount and an emphasis on the avoidance of an overly commercial image - especially at the intersection of Huron Church Road and College Avenue.

Trucks represent a significant challenge to the extent and quality of views to signage and gateway installations at the intersection of College Avenue and Huron Church Road.

TODAY ON HURON CHURCH ROAD ...





TRAFFIC HAS NEGATIVE NOISE AND AIR QUALITY IMPACTS



PEDESTRIAN SAFETY IS UNDERMINED WITHOUT CLEARLY DEFINED TRAVEL ZONES




IDENTITY OF THE STREETSCAPE IS UNCLEAR WITHOUT A UNIFORM SIGNAGE PLAN





PEDESTRIAN AMENITIES ARE NOT ADEQUATELY PROVIDED

2.5 opportunities

Open Space

With an abundance of open space areas and the already existing greenbelt spaces Huron Church Road has optimal conditions to implement an extraordinary landscape and planting design to create a memorable entranceway.

Design Themes

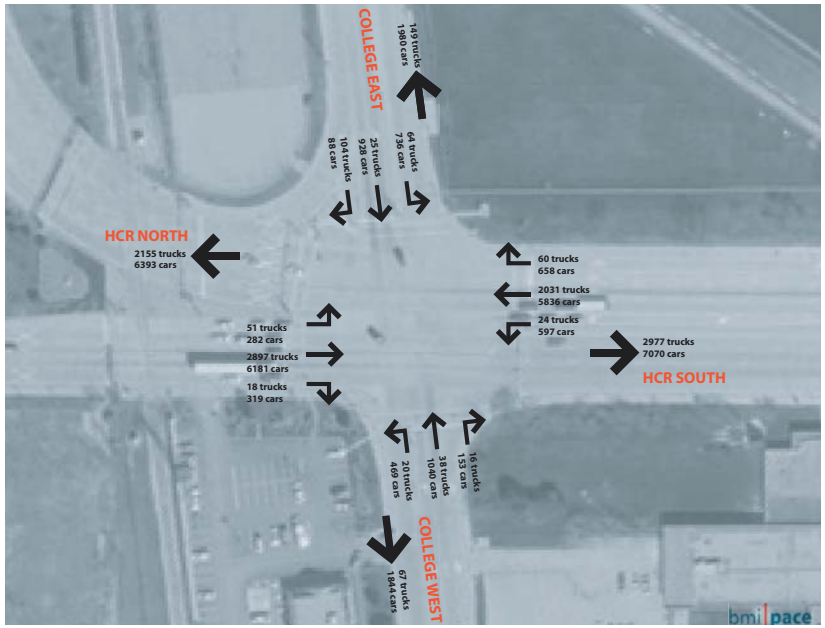
A variety of possible design themes may be adopted for right-of-way installations. Themes may be influenced by current urban design initiatives promoted by the City or by proposals associated with the Green Corridor.

Themes can be integral to the gateway, incorporating both fixed and changeable displays that welcome and celebrate entrance and arrival. The following design themes have been considered in the creation of the Master Plan.

- An Awareness of Environmental Sustainability
- Canadian Identity/History and Culture
- Public Art
- Local Industry (i.e. Automotive)
- Technology and Innovation
- Tourism
- Education

Traffic Volume

Huron Church Road is a significant gateway into Canada, especially for commercial vehicles. Over 25% of all trade between Canada and the USA crosses Ambassador Bridge. The intersection of Huron Church Road and College Avenue is the first signalized intersection for vehicles entering Canada from the USA and creates ideal conditions for establishing the Primary Study Area as the Gateway into Canada and Windsor



Average traffic volumes at intersection of Huron Church Road and College Avenue per day




Planting and pedestrian walkway in the greenbelt on western edge of Huron Church Road

red maple

dogwood

reedgrass

hackberry

sumac

maple

switch grass

hawthorn

columnar oak

kentucky coffee-tree

sycamore maple

juniper

Planting palette of species suitable for integration with Gateway and signage elements

Land Ownership

There is a significant set-back/buffer zone adjacent to Huron Church Road. The design for that area has the opportunity to set a high standard of landscape design that can be easily implementable in any new developments.

Plant Material

Huron Church Road benefits from extensive planting located along the western boulevard. This planting buffers adjacent residential properties and pedestrian walkways from the negative impacts associated with vehicular traffic. The existing landscape character of Huron Church Road should be protected and enhanced as part of new gateway and signage projects. Gateway and associated signage installations can incorporate creative planting programs that is representative of native Canadian species. Planting should be integrated with any streetscape installations to achieve maximum visual impact.

Partnerships

The redesign of Huron Church Road is of interest to many stakeholder groups in the Windsor Area. The diversity of land ownership found along the length of the Study Area provides for potential diversity of uses and pedestrian transit patterns. These multi-use requirements, including a public art locations; high school student, pedestrian zones; and residential backyards, will help inform the design of the pedestrian character.

The proximity of the University of Windsor's Visual Arts Department as well as the University's Sport Stadium provides the area with a wealth of community activities that can be made visible in the streetscape. Similarly, the future potential redevelopment and expansion of the commercial lands, including the First Capital properties, provides an opportunity for innovative design excellence, appropriate to an international gateway. Working with these groups towards a single implementable vision will involve design standards that can be incorporated into approvals. Such standards will be strengthen the overall design of Huron Church Road and help ensure its success.

2.6 design principles

In order to emphasise the function and role of Huron Church Road as a gateway into Canada, the following design principles have been established as a framework for the urban design master plan.

CHARACTER: Communicate Canada's/Ontario's/Essex's County/Windsor's diversity, character, and heritage through creative and unique urban design expression.

SUSTAINABILITY: Demonstrate and educate principles of environmental sustainability through the integration of sustainable technologies and design techniques.

SCALE: Provide design installations at the scale of both the pedestrian and vehicle.

OPEN SPACE: Protect and enhance existing open space character through the integration of unique and sustainable planting.

INFRASTRUCTURE: Improve the aesthetics of road infrastructure through the introduction of high quality and coordinated elements, including lighting, crosswalks, and median planting.

BUFFERS: Mitigate the impacts of traffic with new landscape buffers and the appropriate location and design of walkways and development.

DEVELOPMENT: Promote development of a high quality commercial 'node' at Tecumseh Road W. to anchor the gateway.

Innovative signage installation can enhance the urban conditions

Landforms provide a landscape condition that can be scaled to the automobile and the pedestrian

2.7 preliminary design concepts

CORE THEMES

New landform patterns or 'earthworks' provide a new 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 convey 3 core themes: Canada, Environmental Sustainability and Innovation.

SIGNAGE

The preliminary design concept for signage for the perimeter areas of the stadium and the entire length of the primary study area are predicated on a integrated design approach. Signage should not be conceived as a design element separate from the overall approach to the Huron Church Gateway and the Green Corridor project.

DESIGN CONCEPTS

The concept for Huron Church Road as a Gateway into Canada and Windsor is founded on a series of elements that are integrated with landscaping, public art and street infrastructure (street lighting, paving materials etc.)

The urban design concept introduces land forms that are of a size and shape that are visible from the roadway. By creating continuous landforms along the entire length of the corridor pedestrians are able to weave in between the mounds in a protected and individually scaled environment. Benches, pedestrian scale lighting and public art are interspersed along the pathway creating visual points of interests and destination places. Public Art scaled for viewing from vehicles are located at proposed areas along the length of the roadway.

The entranceway at Huron Church Road and College Ave. will consist of elevated landforms on either side planted with a colourful range of planting that symbolizes the native species to Canada and it have a seasonal presence on the roadway. This is a designed landscape – not meant to replicate a natural setting – but intended to convey a new vision of nature integrated with the human-made world. In this sense it will incorporate patterns, forms, use of colour and mix of plant life and manufactured materials demonstrating, innovation and creativity.

MAINTENANCE

The ability to use uncomplicated landscape maintenance techniques is a key requirement for the entire Huron Church Road Corridor. With the introduction of earthwork landforms, the slopes and new plantings must be designed considering this requirement. Additionally, due to heavy salt use, the durability of all new and existing streetscaping items should be considered for their longevity and ability to withstand the existing street conditions. This could include a potential concrete base or galvanized stainless surround for new light poles.

STREETSCAPE ELEMENTS

Gateway streetlight standards are proposed which combine streetlights on the boulevards of Huron Church Road integrating tall banners that both complement the green corridor and provide opportunities for a signage program. The streetlights are constructed of steel channels with leaf pattern filigree inserted in the gap between the two channel posts. LED lighting behind the filigree and on a top cylindrical mast provides accent lighting as part of the Green Corridor. It is proposed that an alternating pattern of light standards be used which places photovoltaic panels on every other standard in the same area as the banner. Solar generated electricity has the potential to be fed into the power grid.

MEDIAN PLANTING

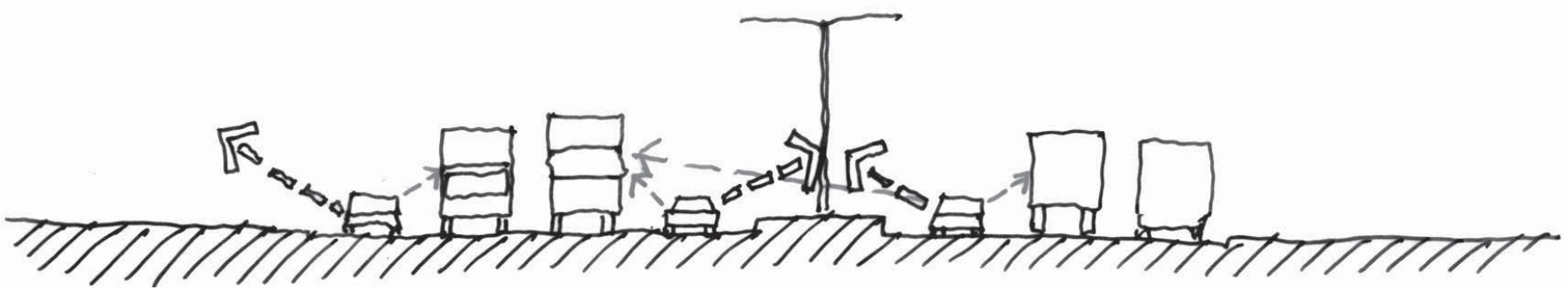
The median areas are proposed to continue as raised planted areas, but with a simplified planting pattern that eliminates the need for constant maintenance. A consistent row of Columnar Oak trees will be placed in the median providing tall, visible elements that reduce the perceived harshness of the Huron Church Road paved area.

Example of Eathworks Landforms

2.7.1 preliminary street sections

SCALE:

The ability to view elements within the Huron Church Road corridor from cars is restricted by the height of trucks. Visible elements must be of a height and scale that is noticeable within this environment.

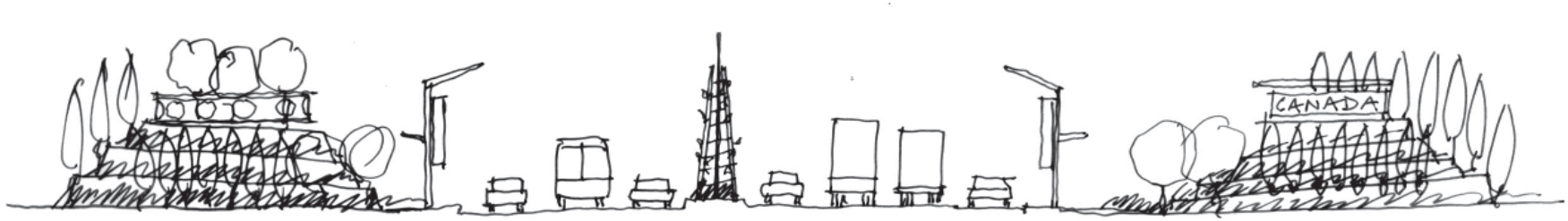


BOULEVARD:

Expanding upon the Green Corridor concept - the Boulevard design can incorporate berms with a variety of colourful plantings that symbolize the native species of Canada, Windsor and the Windsor-Essex region.

GATEWAY:

South of the College Ave. and Huron Church Road intersection, the theme of environment and Canadian identity can be integral to a gateway, incorporating both fixed and changeable signage.



MEDIAN:

Huron Church Road provides a wide median that can incorporate a range of elements communicating environmental and cultural themes, public art, and banner signage.