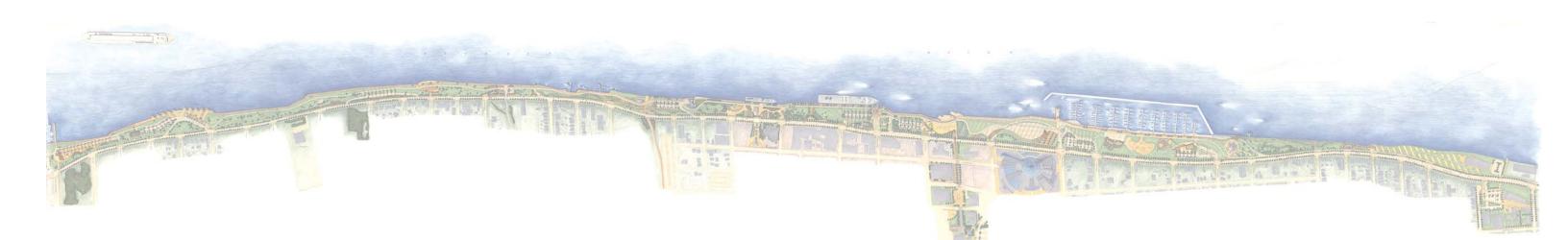


# Central Riverfront Implementation Plan

September 2000



BROOK McILROY INC. + THE MBTW GROUP



# WINDSOR CENTRAL RIVERFRONT IMPLEMENTATION PLAN CONTENTS

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#### Acknowledgements

The Windsor Central Riverfront Implementation Plan is the product of a highly collaborative process involving the widest cross-section of the Windsor community. Many individually and collectively contributed to the process including:

- .
- Participating in stakeholder interviews and public consultation.
- Participating in design workshops.
- Offering technical expertise. .
- Providing base information and background research.
- Providing historical information often from personal collections.
- Assisting in assembling displays of work in progress.

The direction and expertise of Windsor City Council, and the Central Riverfront Technical Advisory Committee has been invaluable in the formulation of the plan.

City Council (1999-2000)

Michael Hurst	Mayor
Michael Roach	Ward 1 Councillor
Margaret Williams	Ward 1 Councillor
Brian Masse	Ward 2 Councillor
Peter Carlesimo	Ward 2 Councillor
Alan Halberstadt	Ward 3 Councillor
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Bill Marra	Ward 4 Councillor
Tom Wilson	Ward 5 Councillor
Eddie Francis	Ward 5 Councillor

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We extend our thanks to these people for providing valuable assistance through the course of the study.

# **CITY OF WINDSOR CENTRAL RIVERFRONT** IMPLEMENTATION PLAN

Reviewing and providing feedback on concepts and recommendations that evolved during the study.

& Recreation

nd Development **Review Services** ect Manager)

Manager Special Events ns & Assistant Commissioner er

#### **Executive Summary**

#### **1.1 Introduction**

The Central Riverfront area represents approximately 95 acres over a 6-kilometer stretch of riverfront. The central position of these lands in the City along the Detroit River and the views of the Detroit skyline, enhance the importance of these lands as a major international "gateway" location for visitors arriving in Canada.

In September 1999 as the result of a three-day design charette, the City of Windsor commissioned Cochrane Brook Planning and Urban Design in collaboration with the MBTW Group to prepare the Central Riverfront Implementation Plan. The winning scheme was based on the concept of unifying the riverfront through the placement of five key park pavilions called Beacons.

The purpose of the Central Riverfront Implementation Plan is to provide an implementation strategy and design guidelines that will assist in attaining the vision that Windsorites hold for the riverfront. The Central Riverfront Implementation Plan is a master plan as defined by the Environmental Assessment Act. As such the plan is shaped by the design objectives and guidelines that have evolved through the course of pubic consultation, stakeholder input, and through the ongoing direction and support of the Technical Advisory Committee. The Central Riverfront Implementation Plan will be the basis for a Secondary Plan amendment to the City's Official Plan.

The implementation plan, design principles and guidelines describe standards that are intended to guide the design of park lands, open space, buildings, circulation networks and public infrastructure within the Central Riverfront.

To clarify the multiple riverfront systems and elements the entire Central Riverfront is described as nine individual segments beginning in the west at McKee Park in Sandwich, and ending at the east at Hiram Walker Lands in Walkerville. The Riverfront Segments each contain descriptions of the major elements and destinations for which the context, symbolic and thematic potential and proposed use for these elements is followed by general and specific recommendations. The status of the works for each Segment under the Canadian and Ontario EA Acts is discussed, outlining the work that has been done to date and the work that is still outstanding to comply with the applicable environmental laws and regulations.

The implementation plan illustrates the development projects underway and those anticipated over the next twenty-five years. This document will serve both as an illustration of design principles and a reference point for the on-going development within the immediate, staged and long-term implementation.

#### **1.2 Elements that Link the Riverfront**

To ensure that the Central Riverfront will be perceived as one cohesive area with a series of special and distinct elements within it, a series of systems are described including circulation, landscaping, urban design amenities, infrastructure systems and building components, including the five Beacons. Each of these systems will display consistency in design, while allowing for the interpretation of a number of themes and heritage narratives or story-lines to be explored through-out the length of the Central Riverfront.

#### Beacons

At the heart of the concept for the riverfront are five park pavilions called 'Beacons' to be placed along the length of the riverfront. They provide a series of visual landmarks and destinations where the public can access services including washrooms, concessions, information, emergency assistance and shelter. Each Beacon is located close to small surface parking courts. They provide an important ingredient in the wider strategy for the Central Riverfront to create a safe, well-used, year-round park environment.

The design and interpretive content associated with each Beacon explores an aspect of the human condition which will provoke contemplation of past and future, the planet as a miracle of life, earth in relation to space (sun, moon, stars and beyond) and human creation. The Beacons contribute to the broader objective for the entire riverfront of creating a 'place' in the heart of a highly urbanized region that serves as a sanctuary and source of inspiration for the body and mind and offers a perspective often lost within the context of urban life.

The Beacons from west to east are: Celestial, Legacy, Peace, City and Dawn. The design of the Beacons is based on the seamless integration of building and landscape, and collectively creates the Central Riverfront's primary orientation system and identity feature. Viewed from the city, river and Detroit they will create an indelible and intriguing image that will assist in unifying the 6 kilometre length of the park.

#### **Buildings and Structures**

New buildings in addition to those that the plan retains represent less than 2% of the total 95 acre park area. The majority of these structures are built into the slope of the riverbank and provide publicly accessible landscaped terraces at the Riverside Drive level. The majority of buildings therefore 'replace' the open space that they would otherwise displace if designed as conventional freestanding structures. The positive results of this concept for the integration of buildings into the hillside is twofold. First, of the total park area, over 99% of the land is accessible landscaped area while still providing interior facilities. Second, clear, unobstructed views from Riverside Drive to the Park and the River are enhanced.

Limited indoor areas are essential to make the riverfront safe, accessible on an all-season basis, and attractive to a wide range of the population. It is important that the size, location and extent of buildings constructed on the Central Riverfront be restricted, and that the use of these buildings be limited to activities that are appropriate and complementary to the enjoyment of the setting. Buildings include all structures that accommodate or support activities related to the recreational and cultural use of the riverfront. Retail and food service uses are only recommended as an ancillary function to service a primary service, cultural or recreation activity within a building.

#### Circulation

The circulation system includes Riverside Drive, Riverside Drive Pedestrian Promenade, River Walk, the Recreationway and Connector Trails. The circulation system links to all major riverfront facilities, as well as joins with adjacent local and regional networks including street, park and recreational trail systems. Easy access for residents in the neighborhoods to the south is a primary objective; thus direct connections across Riverside Drive and the slowing of vehicular traffic are guiding principles of the design.

#### Parking

The major objective for surface parking is to prevent these areas from becoming a dominant physical element, while providing enough parking to complement year round riverfront activities and destinations including the Marina, Festival Plaza and Steamboat Wharf. In addition parking is located in proximity to the five Beacons that serve as a framework of significant landmarks.

#### Landscaping

The landscaping system, through the selection of distinct trees and plant materials complements the circulation system and enhances the thematic role of the riverfront areas, and includes gardens, public plazas and open space areas.

#### **Urban Design Amenities**

For pedestrian comfort and to ensure that the riverfront will be used year round, urban design amenities should be provided as consistent thematic treatments. The design of amenities should be pedestrian in scale, whether traditional or contemporary, be simple, elemental and nonobtrusive.

#### Signage

Orientation signage provides direction to recreational and pedestrian pathways, and key activities and services. Interpretative signs convey information about specific elements along the Central Riverfront such as natural features, gardens, heritage elements etc. and should provide an educational or artistic role. Signage should contribute to the orientation and understanding of the riverfront, as well as to place-specific identity.

#### **Other Linking Elements**

Heritage Narratives: In addition to the interpretative aspects of the Beacons and signage, a variety of opportunities to involve artists or groups in the creation of interpretive areas exist. The emphasis on these interpretative areas is to make installations that physically as well as intellectually engage the viewer. They should allow history to come alive, and provide something for children to explore through touch, sound, activities, sequences etc. These heritage narratives include:

-Arts and culture: Sculpture Gardens

- -Labor and industry: CP Ferry Docks, Walkerville
- -Natural systems and ecology: Outdoor Ecological Garden
- -Marine history and shipping: Steamboat Wharf
- -The Detroit River: Interpretative sign integrated into the railing along River Walk
- -Memorials and monuments: Dieppe Gardens
- -Civic history and festivals: City Beacon and Festival Plaza
- -Railway history: CN Ferry Docks
- -Honouring Windsorites and First Nations: Bert Weeks Memorial Fountain and Gardens, Joan and Clifford Hatch Wildflower Gardens, Great Western Park
- Interpretative Wall: a low linear wall proposed to run parallel to River Walk that acts as a place of congregation and accommodates activities such as sitting, water play and is a divider between the recreational path (Recreationway) and the walking path (River Walk).

### **1.3 Connections to the Riverfront**

There will be tremendous synergy between the City Centre and the Central Riverfront when riverfront activities are seen in the context of existing and future attractions on the city side of Riverside Drive (Casino, Civic Esplanade, Western Super Anchor, Art Gallery of Windsor). There will be multiple opportunities to access riverfront facilities and destinations through designated crosswalks on Riverside Drive. Grade separated links are recommended over Riverside Drive at the Civic Esplanade and beneath the street at Steamboat Wharf. The existing pedestrian link beneath the bridge at the CP Ferry lands site will provide a critical link to the city-owned Caron Avenue lands. This site has enormous potential in association with the adjacent abandoned railcut to provide a future public/cultural attraction with a continuous open space link between the downtown and the park. Creation of a new link under Riverside Drive at the International Gardens will provide access to the neighbourhoods to the south and back into the City.

### 1.4 Consistent Design Approach

The design of riverfront landscapes, structures and buildings, and the selection of lighting standards, park fixtures and furnishings, signage etc. will occur over many years and will involve the participation of a multitude of design professionals including landscape architects, engineers, architects, urban designers and others. The intent of the overall design approach is to provide consistency in the design of the Central Riverfront. It is not intended to stifle creative interpretation by a variety of designers but rather to ensure that a solid context exists to guide a design process that will enable multiple design projects to lead to a cohesive, integrated Central Riverfront that is easily recognized as one park.

#### 1.5 Responsibilities

Once Council has approved the Central Riverfront Implementation Plan, the Commissioner of Parks & Recreation will be responsible for implementing the recommendations contained within this document. To provide support and advice to the Commissioner on riverfront design development at Technical Review Panel is recommended. The Technical Review Panel would provide independent, multidisciplinary advice from experts in the disciplines of art, architecture, landscape architecture, urban design, planning, engineering and ecology during the design development stage of an undertaking. The Panel will be primarily concerned with design and site development aspects of a project, as well as its context and fit with the Central Riverfront quiding principles.

The public has the responsibility of continuing to protect and cherish the riverfront as a community legacy. The support of the public in the implementation of this plan is integral to its success. Citizens are encouraged to work with Council and Parks & Recreation to attain the high ideals and long term vision set out in this document.

1.6 Phasing and Costs for New Development Phasing for construction is based on a first and second priority basis over the 25 years involving an average of \$2.6 million in capital costs per year. The total capital costs over the 25 year buildout are estimated at \$65 million (yr. 2000 dollars). The total capital costs include the marina,

design and engineering fees, quantifiable shoreline works, and taxes. In addition to municipal sources – community, corporate and private sponsorships, public/private partnerships in association with provincial and federal programs will represent a significant source of funding for many central riverfront components.

#### 1.7 Priority Setting

Priority for development will depend on the following principles:

- The order of development must proceed in a logical manner. In some cases this means that seemingly less visible items may be carried out prior to higher profiles items. For example, installation of servicing, shoreline works should be done prior to the plazas and plantings.
- Scheduling of the development should take into consideration riverfront use, legal regulations, availability of material and weather conditions. For example, shoreline works could be performed during the winter months but will be dependent on ice and fish spawning season restrictions.
- Development should be balanced throughout the length of the Central Riverfront. Improvements should be evenly distributed throughout, but in keeping with the Implementation Plan and benefiting the majority of users.
- Alleviating operating issues such as emergency access, pedestrian access, security lighting are a few examples of works that must be undertaken to ensure the safety and comfort of all riverfront users.
- Development is dependent on the availability of funding from the City and funding partners. Projects that are cost shared or fully funded by groups will be considered if they respect the implementation plan and the appropriate infrastructure is in place. Availability of specific types of funding may mean that certain aspects of the riverfront development will advance ahead of their anticipated priority.
- Development of the beacons with complementary revenue generating facilities (e.g. concessions, etc) that would assist in recovery of capital and maintenance costs and assist in the promotion, usage and marketability of the riverfront should be an implementation priority.

#### 1.8 Implementation

City Council has already begun to implement the recommendations of this study. Improvements made during 1999 and 2000 to Riverside Drive West; the addition of pedestrian crossings; work on the shoreline; the Civic Esplanade; lighting and irrigation of the Sculpture Garden and approved projects that are to be constructed during 2000 show the commitment of Council in implementing this plan. It is recommended that after endorsement of the plan a five year capital development plan and strategy be set out based on the recommendations of the plan and funding for implementation be pre-committed.

MBTW GROUP

#### INTRODUCTION AND HISTORY 1.0

The Windsor Central Riverfront is a unique 6 kilometre linear urban park system which parallels the Canadian shore of the Detroit River. As an open space system, it is a key resource in the ongoing urban revitalization of the City of Windsor. Yet the site has a broader international significance due to its location on the border. From the vantage of downtown Detroit, a city-region of 5 million, the Central Riverfront establishes the prominent foreground to views of Windsor and Canada.

The Windsor Central Riverfront Implementation Plan represents the synthesis and culmination of many past studies, significant public involvement and ongoing discussions with City Council, the Department of Parks and Recreation, the Technical Advisory Committee, stakeholders and the Windsor community. In September, 1999 the City of Windsor commissioned Cochrane Brook Planning and Urban Design in collaboration with the MBTW Group to prepare the Central Riverfront Implementation Plan to assist the municipality in guiding future development of the Central Riverfront.

The project was awarded as the result of an intensive three-day design competition and charette held in August of 1999. The winning scheme was based on the concept of unifying the riverfront through the placement of five key park pavilions called Beacons. Each of the Beacons explores a thematic aspect intended to provoke the contemplation of things we rarely are provided the luxury to consider, such as: the poetry of planet earth; the miracle of life - both human and otherwise; the vast cosmos and our place in it; and the creative works of mankind in words, art and industry.

Movement through the riverfront will be through a sequence of pathways and spaces based on narratives and themes related to the culture and history of Windsor. The emphasis on interpretation in all aspects of the riverfront's design and development will engage the user intellectually and physically. The Beacons and circulation system are the framework for making the central riverfront one comprehensive open space; while retaining the character of its many individual spaces.

#### 1.1 Central Riverfront Area Description

The Central Riverfront is located north of Riverside Drive extending from McKee Park at Chewitt Street west of the Ambassador Bridge to Hiram Walkers Distillery at Devonshire Road, representing some 6 kilometres of continuous frontage on the Detroit River with an area of approximately 95 acres. Approximately 2 kilometres of the central riverfront is adjacent to the City Centre. All of the lands are accessible to residents and visitors. The Central Riverfront varies in width from approximately 12 metres at its narrowest and 107 metres at its broadest. (Figure 1)

Throughout the history of the region, the lands which now constitute the Central Riverfront have played a critical role in the socio-economic evolution of the various communities which have inhabited this region. These communities include First Nations settlements, the colonial period of French and English settlement, the Railroad Era, Marine History and now the modern period in which the Central Riverfront has been reclaimed as an open space system. (Photos 1 and 2)

The lands which constitute the Central Riverfront are primarily open and manicured, some of which are existing municipal parks (e.g. Dieppe Gardens, Centennial Park) and some of which are former industrial or commercial lands (e.g. the former CP and Ramada Inn lands between Cameron and Caron Avenue). These lands are interspersed with pathways, parking lots and access roads leading off Riverside Drive. There is minimal natural vegetation and terrestrial wildlife habitat.

Along the Detroit River within most of the study area, there is shore protection in varying states of repair. Water quality in the Detroit River is somewhat turbid and high in bacteriological contamination. River sediments along the central riverfront are coarse sands and gravel, due to relatively fast currents in the river. Environment Canada testing at several stations along the Windsor riverfront confirms that sediments within the study area shoreline are not highly contaminated. The City of Windsor is currently undertaking a study to more fully understand the fish habitat and river hydraulics along the riverfront.

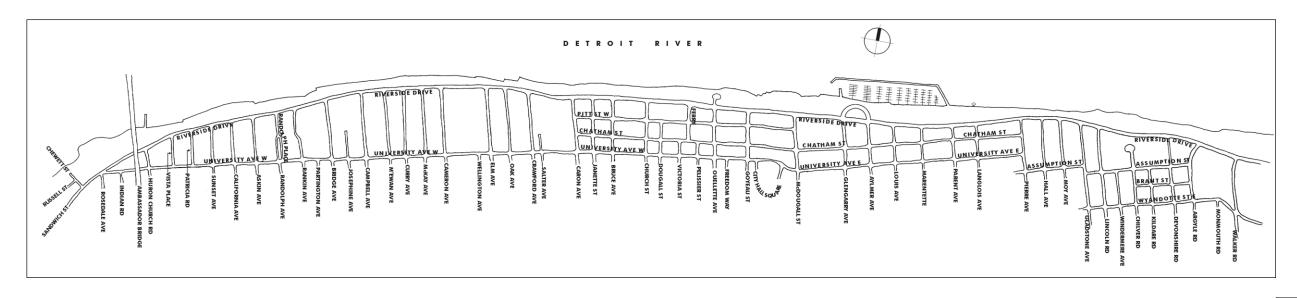


Figure 1 **Central Riverfront Area** 

#### 1.2 Vision

As a significant public asset, the Central Riverfront Implementation Plan is guided by the vision of linking people to their culture and environment. The programming and design of Riverfront destinations, the Beacons and circulation system will bring this vision to life through the proposed developments over an extended time frame (e.g. 25 years).

As a result of ongoing public input and consultation with stakeholders during preparation of the Central Riverfront Implementation Plan, several themes emerged. The themes include the expression of healthy community, natural and cultural heritage, and the pedestrian character of the riverfront, riverfront connections and sustainable approaches to park development. In particular these themes address the following:

*Natural Heritage:* The natural heritage of the lands and its evolution as a riverfront should be communicated by establishing a sense of connection between the original natural and developed landscape. The Beacons, streetscape, and site management should reinforce an awareness of the riverfront and its natural heritage.

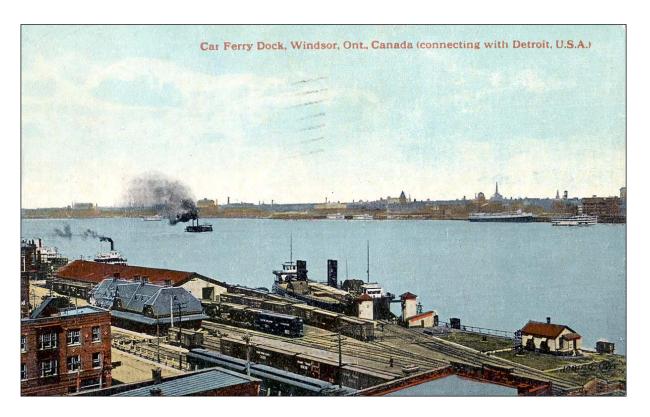
*Cultural Heritage:* The cultural history of the riverfront (including pre-colonial, early settlement, railway, military and urban development periods), can be revealed through the integration of specially designed elements that convey a theme related to the riverfront history. These themes can be integrated into the riverfront as gardens, interpretive elements, the Beacons, other riverfront buildings and structures, all interconnected by a circulation network.

*Healthy Community*: An emphasis on the contribution of the riverfront to a healthy community should be evident through the elements and activities provided in the Central Riverfront. Circulation systems, the Beacons and parkland can provide direct connections between the downtown and the riverfront and will enrich the community by providing places to interact. Links with the residential neighbourhoods and City Centre through improved transportation, transit, access across Riverside Drive and strategic views and places for people to gather will promote future vitality between the Central Riverfront and the City.

*Public Character*. The Central Riverfront is a series of linked public activities and attractions. The residents of Windsor already have a strong affinity for the riverfront. The riverfront development strategy includes the introduction of public buildings, efficient circulation systems, broadly distributed parking, public transit and clear signage.

*Diversity:* The diversity of Windsor should be revealed in the components of and activities on the riverfront by providing interest and access to the broadest cross-section of people. Traditions of the City add to the diversity of the riverfront experience. These traditions include festivals, concerts, memorials, recreational and other special events and should be recognized in the ongoing physical development of the riverfront.

*Sustainable Development:* The riverfront presents an opportunity to promote sustainable development practices and environmental regeneration.



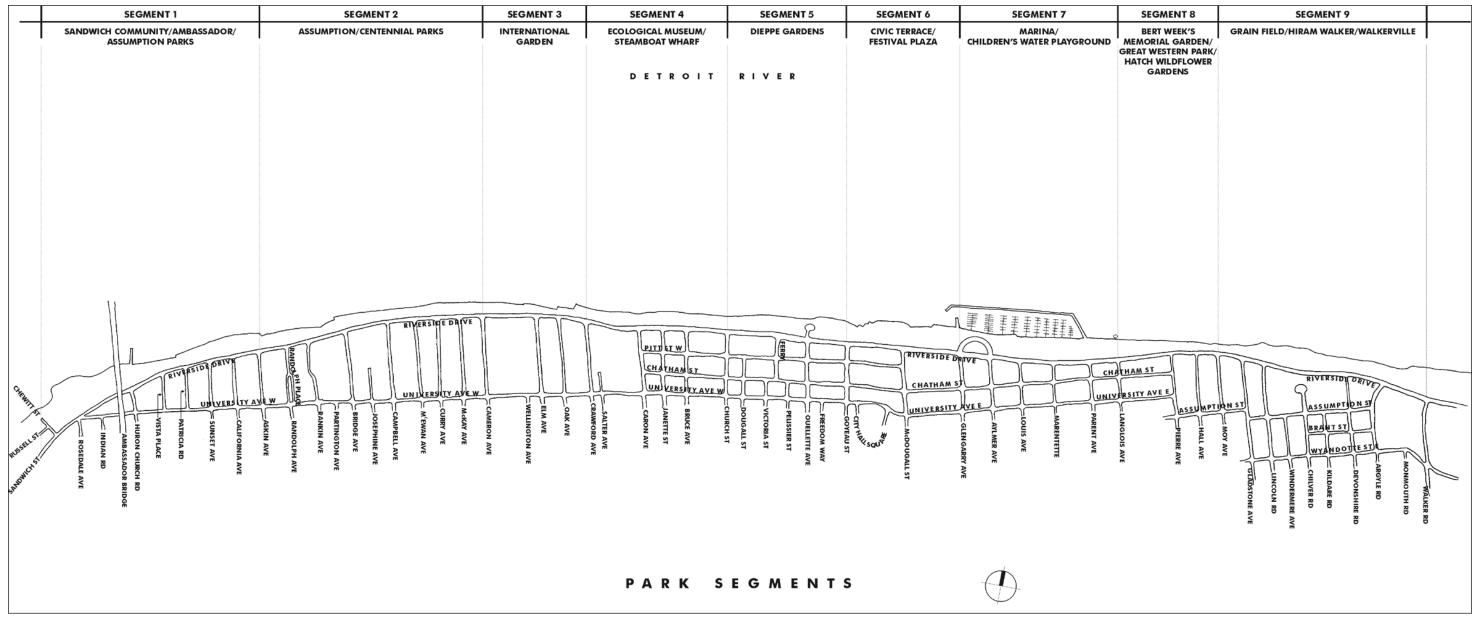


#### 1.3 Purpose of the Central Riverfront Implementation Plan

The Central Riverfront Implementation Plan is a comprehensive implementation plan and is the basis for the urban design principles that will be incorporated into the Official Plan Amendment for the area. The plan draws upon the previous studies prepared for the various segments of the Central Riverfront. The design guidelines and illustrations describe standards that are intended to guide the design of park lands, open space, the Beacons, circulation networks and public infrastructure. This document has been prepared in accordance with the federal and provincial environmental assessment processes and will serve as the overall implementation plan for the Central Riverfront.

Photo 1

Photo 2 Dieppe Gardens



#### Figure 2 **Central Riverfront Park Segments**

This study has also developed the design parameters that shape a master plan. The master plan includes the projects that are already being considered, as well as those that are anticipated in the future, and places them within the context of developing a major public riverfront park at the core of the City of Windsor. The master plan serves as both an illustration of design principles and as a point of reference for the on-going evaluation of development options. The urban design guidelines are intended to:

- Provide a design direction for site planning and building improvements. •
- Provide design parameters for both the private and the public sector in preparing development • concepts.
- Provide municipal staff with a framework for reviewing development applications.

The Central Riverfront Plan addresses both immediate and staged or long-term implementation of development.

Concurrent with the public consultation process and the formulation of this document the City is preparing an Official Plan amendment based on the guiding principles and land uses set out in this document. The adoption of the guiding principles and intent of this study within the Official Plan assures the public of due process should administration or a future Council vary from the intent of this plan.

Activity on the riverfront is desirable, especially as it promotes and enhances safety. Activity will take shape in many forms from small gatherings to community events and festivals. The highest

intensity of use will occur in the City Centre. Regardless of whatever events or activities are underway the general public should have access to the promenade and cycle path. Special events, community uses and festivals are a priority for riverfront use.

### 1.4 Central Riverfront Area Description

The City of Windsor has been working to gain control of the Central Riverfront for over 100 years. On March 8, 1999 Council bought back the lease on the former Ramada Inn property completing this long-term vision and securing some 95 acres of riverfront land for public use. The Central Riverfront is considered to be the jewel of the city parks system. This 6-km stretch of riverfront takes advantage of Windsor's most notable geographic feature, the Detroit River and the views of the Detroit skyline. The Central Riverfront functions as a major international "gateway" location for visitors arriving in Canada.

For the purpose of this study the Central Riverfront area has been divided into 9 segments. (**Figure 2**) The following describes each of the segments and their proposed activities and uses from west to east.

#### Segment 1: Chewitt Street to Askin Avenue

#### Sandwich Community, Ambassador/Assumption Parks (Photo 3)

- West anchor and gateway to riverfront marked by the Ambassador Bridge.
- Future pathways will be extended further to the west (e.g. McKee Park).
- Existing linkage to the University of Windsor to the south.
- Ambassador and Assumption Parks: were redeveloped in the 1980's and 1990's with new shoreline protection works, paths and walkways.
- Windsor Sculpture Garden established in 1997/98 through donations by the L&P Odette Foundation and will continue to be expanded with new works of art and site design.
- Celestial Beacon provides park concession and washrooms and rooftop outlook.

### Segment 2: Askin Avenue to Cameron Avenue

**Assumption/ Centennial Parks (Photo 4)** 

- Parkland extends the Windsor Sculpture Garden.
- Activities include children's playground, passive recreation and fishing pier.

# Segment 3: Cameron Avenue to Crawford Avenue

## International Gardens (Photo 5)

- The International Gardens will be developed above the railway tunnel from Elliott Street to Riverside Drive.
- Area concept includes a series of international gardens connected by a trail system (along the railway cut) representing the various cities that are "twinned" with Windsor. The Canada-Japan Association have a conceptual plan for the "Fujisawa Gardens" which will be located between Riverside Drive and University Avenue.

# Segment 4: Crawford Avenue to Church Street Outdoor Ecological Gardens, Steamboat Wharf (Photo 6) *Outdoor Ecological Museum*







Photo 3 Aerial Photograph: Segment 1

Photo 4 Aerial Photograph: Segment 2

Photo 5 Aerial Photograph: Segment 3

Photo 6 Aerial Photograph: Segment 4







- this site should be interpreted.

#### Steamboat Wharf

the Western Super Anchor core site.

# Segment 5: Church Street to Goyeau Street Dieppe Gardens, Piazza Udine, CNR Parking Lot (Photo 7)

# Segment 6: Goyeau Street to Glengarry Avenue Civic Terrace, Festival Plaza (Photo 8)

- area.
- of the railway to Windsor's development will be interpreted.

## Segment 7: Glengarry Avenue to Langlois Avenue Marina (Photo 9)

- component.
- area.

Photo 7 Aerial Photograph: Segment 5

Photo 8 Aerial Photograph: Segment 6

# **CITY OF WINDSOR CENTRAL RIVERFRONT** IMPLEMENTATION PLAN

Includes Legacy Beacon, wet meadow, interpretative wildflower meadow.

Will provide opportunities to demonstrate sustainable development practices including stormwater management, regeneration of natural habitats and other sustainable infrastructure applications. The lands formerly known as both the CP Ferry Slips and Shergar Property were expropriated in 1998. The historical importance to the birth and growth of Windsor of

The redevelopment of the former CP Railway right of way will provide the opportunity to create a walkway connection underneath Riverside Drive to the City Centre.

• Historically this was the Government Dock where the steamboats and other river traffic docked and was a focus of the commercial area of the downtown. The proposed uses provide opportunities for year round destinations including a small conservatory and artisan's studios. A reintroduction of the historical name, Steamboat Wharf, will provide a connection to the past. It will be physically connected to the south, under Riverside Drive via a pedestrian allee, between the Art Gallery and the commercial development parcel to its west, leading to

• Dieppe Gardens, an established park will provide opportunities for historical interpretation features and improvements for tour and cruise boats docking. The memorials in Dieppe are a commemorative to World War I and II Veterans and will be enhanced.

Civic Terrace includes City Beacon, pedestrian link to Esplanade and the Railway interpretative

The Civic Terrace is the terminus of the Esplanade from City Hall Square to the Central Riverfront. Conversion of the former parking lots into the Civic Terrace has already started and implementation of the Civic Esplanade is underway. Development of this area for civic functions and travelling sculpture displays is one of the first priorities of this study.

Festival Plaza: The long term use and development of the festival site will be determined in consultation with the special events and festival operators. The shoreline will require refurbishment in the immediate future. The old ferry lifts are the location where the importance

• The Provincial Environmental Assessment for the area between Glengarry and Langlois was approved in November of 1996 for a 272 slip transient marina with a floating breakwall. It is anticipated that the transient marina could be developed as a private/public partnership. • The shoreline works and on-shore development could proceed in advance of the marina

The on-shore facilities include marina related uses, a restaurant and children's water play

#### Segment 8: Langlois Avenue to Moy Avenue

Bert Weeks Memorial Garden, Dawn Beacon, Great Western Park, Joan and Clifford Hatch Wildflower Gardens (Photo 10)

- The Memorial Gardens commemorate Bert Weeks, a former Mayor of Windsor, who fought for riverfront land acquisition and improvement for public purposes. The Greater Windsor Community Foundation are fundraising the estimated \$2 million cost of the gardens/fountain. Construction is anticipated to proceed in 2000.
- The Dawn Beacon is integrated into the historic pump house.
- The Great Western Park will include an earthwork mound creating a high point for passive activity and contemplation.
- The Joan and Clifford Hatch Wildflower Gardens will be a passive garden representing the different wildflower flora types for the Carolinian climatic zone of Canada. Representation of the rare Canadian native trees and plants indigenous to Essex County will demonstrate the City's special locale within Canada.
- The shoreline in this area will be improved through stabilization.
- There is a significant opportunity to interpret the Aboriginal and early settlement history of this site.

#### Segment 9: Moy Avenue to Walker Road

## Grain Field, Hiram Walker Distillery, Walkerville (Photo 11)

• Walkerville is the only portion of the Central Riverfront Implementation Plan that is not immediately adjacent to the river, this area is viewed as an extention of the riverfront circulation system and the eastern gateway. It will be a location for parking, rental facilities and services. Realization of the vision for this segment will entail cooperation between Hiram Walker, the City and adjacent landowners. The development is to reflect the historic Walkerville town character.

#### 1.5 Environmental Assessment Process

The Windsor Central Riverfront Implementation Plan is subject to environmental assessment (EA) requirements, under both the Ontario *Environmental Assessment Act* and the Canadian *Environmental Assessment Act*. These requirements, and the manner in which the Windsor Central Riverfront Implementation Plan will comply with them, are discussed below.

#### 1.5.1 The Ontario Environmental Assessment (EA) Act

The Ontario *Environmental Assessment (EA) Act* (R.S.O. 1990, C. E-18) was first proclaimed in 1976. It was amended by the *Environmental Assessment and Consultation Improvement Act* of 1996. Its purpose is "the betterment of the whole or any part of Ontario by providing for the protection, conservation and wise management in Ontario of the environment." The intent of the Act is to assess the environmental effects of a proposed undertaking before it is implemented with an eye to minimizing or mitigating those effects.

The *EAAct* sets out an environmental planning and decision-making process in which the Minister must give an approval before an undertaking may proceed. The Minister's decision is based on a EA document submitted by the proponent of the undertaking and review comments made on it





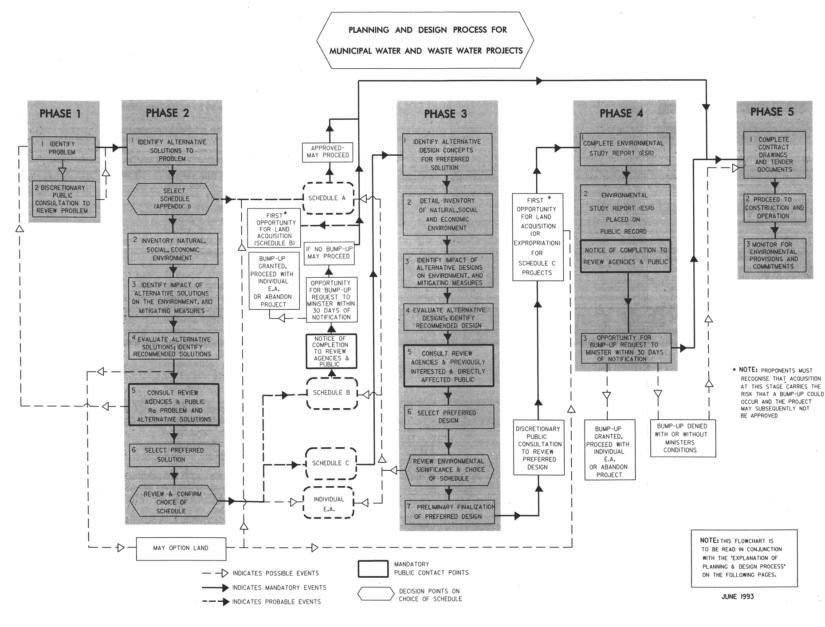


Photo 9 Aerial Photograph: Segment 7

Photo 10 Aerial Photograph: Segment 8

Photo 11 Aerial Photograph: Segment 9

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#### Figure 3

by review agencies and the public. The Minister may also refer an approval decision respecting a proposed undertaking to the EA Board for a hearing.

#### 1.5.2 Class Environmental Assessments

Significantly, the Environmental Assessment Act enables an approval by the Minister of a "class of undertakings." Class EA's, (as they are known) once approved by the Minister, set out a selfassessment process to be followed by proponents when carrying out specific projects approved under the Class EA. Class EA approvals have traditionally been for undertakings which are recurring, usually similar in nature, usually limited in scale, have a predictable range of

environmental effects and are responsive to mitigation measures. When proponents satisfy the provisions of the class EA for their particular project, the project may proceed; they need not go through the individual EA approval process described in Section 1.5.1.

An exception to this is where the Minister decides to elevate the status of a project from one being carried out in accordance with a class EA approval to one requiring an individual approval (and possibly an EA Board hearing). This decision, formerly known as a "bump-up," is done by way of a ministerial Order issued under Part II of the EAAct, usually in response to environmental concerns from the public. There are presently 11 Class EA's approved under the EA Act. 90% of the undertakings subject to the EA Act in Ontario are planned and implemented in accordance with these class EA approvals. The two class EA's under which the Windsor Central Riverfront Implementation Plan has been prepared are:

- The Class EA for Municipal Water and Wastewater Projects; and •
- The Class EA for Municipal Road Projects.

As a municipality in Ontario, the City of Windsor is eligible to use these class EA approvals for the planning and implementation of any of their projects covered by the class EA approval.

# 1.5.3 The "Master Plan" Provisions of the Municipal Class EA's

Class EA's set out a process by which projects approved under it are to be planned and implemented. Figure 3 shows the 5-phase planning process set out in the Municipal Class EA's which municipalities must comply with for their class EA projects. Briefly, the requirements of these five phases are:

Phase 1 - identify the problem, deficiency or opportunity that the municipality needs, or would like. to address:

Phase 2 - identify the alternative solutions by which the problem or opportunity can be resolved or taken advantage of and establish a "preferred solution" based on public and agency review and comment;

Phase 3 - examine the alternative methods of implementing the preferred solution, analyze their environmental effects and methods of minimizing negative effects and maximizing positive effects and select a preferred design for the project;

Phase 4 - prepare an Environmental Study Report (ESR) of the environmental analysis and consultation undertaken in Phases 1-3 and submit the report for public and agency review; and

Phase 5 - implement the project in accordance with any terms and conditions agreed to with public and agency reviewers.

Increasingly, Ontario municipalities and the Ministry of the Environment have recognized that projects subject to the Municipal Class EA's can be part of larger "master plans" (road network plans, pollution control plans, subwatershed plans etc.) which aggregate a number of projects for one primary purpose. Because of this, there are "master plan" provisions within the municipal

Class EA's which:

- Acknowledge that it is sometimes beneficial to look at projects in their broader context before proceeding to project-specific analysis;
- Allow proponents to aggregate a number of class EA projects where they all are "part of a larger management system"; and
- Enable proponents to address Phases 1 and 2 of the Class EA planning process in one "Master Plan" for all of the component parts which will arise from the master plan, rather than having that analysis done for each of the plan components.

The Windsor Central Riverfront Implementation Plan is such a master plan and has been prepared to satisfy the Master Plan provisions of the Municipal Class EA's. The intent of this document is to satisfy the requirements of phases 1 and 2 of the Municipal Class EA planning process. When component parts of the central riverfront are implemented in the future, they will need only comply with Phases 3-5 of the Municipal Class EA planning process, if anything at all. Many of the component parts of the Central Riverfront Implementation Plan have already received individual EA approvals, have been the subject of full ESR's under the Municipal Class EA's or are not subject to the EA Act. For a full discussion of how EA applies to each of the riverfront park components, see section 4 of this report. The attractiveness of the Windsor Central Riverfront Implementation Plan is that it brings all of the park components and their respective studies into one document so that their interrelationships can be more clearly understood.

# 1.5.4 Phases 1 and 2 of the Municipal Class EA Planning Process as it Applies to the Windsor Central Riverfront Implementation Plan

As noted in sections 1.2 and 1.3 of this report, the vision for the Windsor Central Riverfront is one of open space and recreational land uses for the enjoyment of the people of, and visitors to, the City of Windsor. Some of the land within the study area has been owned by the City of Windsor for decades (e.g. Dieppe Gardens, Centennial Park) and used for recreational purposes. Other areas (e.g. the former CP lands) have only recently been acquired, allowing the City of Windsor for the first time to look at the entire study area from Devonshire Road in the east to Chewitt Street in the west as one contiguous riverfront park.

The desire of the City of Windsor is to aggregate all of the component parts of the riverfront study area ("Segments") into one implementation plan for recreational land uses. Put in the language of the Municipal Class EAs, the "problem" to be solved by the City of Windsor in Phase 1 of the class EA planning process was the lack of adequate recreational space and facilities on the Detroit River waterfront. This problem has been acknowledged by City Officials and residents for decades. The City conducted extensive public consultations, to confirm that:

- their problem definition was accurate; and
- their proposed solution that of a contiguous riverfront park was appropriate.

The public overwhelmingly agreed that there has historically been a problem of insufficient recreational access to the Windsor riverfront and that a riverfront open space land use was an excellent solution to that problem. The public also requested that water quality in the Detroit River be improved, providing justification for the combined sewer overflow retention treatment basins (RTBs) which are now part of the central riverfront implementation plan. They further requested that any potential contaminated sites and archaeological resources in the study area be properly addressed before construction works of the park facilities take place.

Alternative land uses were examined by City of Windsor officials, to address the requirement of Phase 2 of the Municipal Class EA planning process, but were dismissed because:

- they did not resolve the Phase 1 problem definition of insufficient recreational access to the Central Riverfront adequately; and
- the public was strongly opposed to land uses other than recreational ones in the study area.

Providing further justification for a recreational land use in the study area are the policies set out in Section 6.10 of the City of Windsor's Official Plan which provide for:

- "an interconnected, safe and publicly accessible waterfront; which
- accommodates a variety of water-oriented recreation and leisure activities and facilities for public use."

A recreational land use for the Central Riverfront study area is, therefore, what emerged as the "preferred alternative solution" from the Phase 1 and Phase 2 analysis under the Municipal Class EA planning process for this project. This land use concept was made more specific by a design charette process hosted by the City in August, 1999 to assist with planning and design of the future use of the site. The design charette consisted of a tour and briefing session for four consulting firms by the City's administrative staff. The consultants worked for 3 days to create design plans that synthesized existing information from all of the previous studies and provided alternative development schemes for park development for each Segment of the riverfront. At the end of the design charette, City Council and the Technical Committee selected the team of Cochrane Brook Urban Design and Planning and the MBTW Group to assist the City in refining these alternative plans into an implementation plan for the Central Riverfront.

### 1.5.5 The Canadian Environmental Assessment Act

The Canadian Environmental Assessment Act (CEAA) was proclaimed in 1995 by the Government of Canada. It sets out EA requirements for projects which are:

- proposed by a federal government agency;
- proposed on federal government lands;
- proposed with federal government funds; or which
- require an approval by a federal government agency.

It is in the latter situation where CEAA applies to the Windsor Central Riverfront Implementation Plan. Since in-water construction works are proposed along the Detroit River shoreline as part of the plan (see detailed discussion in Chapter 4), approvals under the federal Fisheries Act and the Navigable Waters Protection Act will likely be required. Such approvals are "triggers" for the application of CEAA. In such instances, the authorities responsible for approvals under those

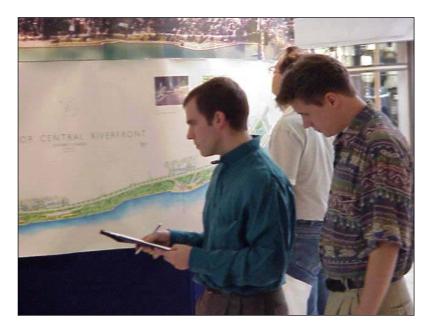


Photo 12 Windsor Central Riverfront Public Consultation



Photo 13 Windsor Central Riverfront **Public Consultation** 

statutes - the Department of Fisheries and Oceans and the Coast Guard, respectively - undertake an "environmental screening" of the environmental implications of their decisions. This screening report is submitted to the Canadian Environmental Assessment Agency or their designate for clearance.

For this study, it is highly unlikely that more than an environmental screening will be required under CEAA, given that the project is already undergoing an EA under the Ontario process and that the works requiring federal approvals will be relatively small. The other possible CEAA "trigger" for the Windsor Central Riverfront Implementation Plan is an approval under The

Boundary Waters Treaty Act of 1909. The possible application of CEAA to the various segments of the Windsor Central Riverfront Implementation Plan is discussed in greater detail in Chapter 4 of this report.

#### 1.6 Public Consultation

A fundamental component of EA practice is involving the public in the planning and decisionmaking process of the project to which an EA applies. Since the notion of a publicly owned and accessible riverfront has been envisioned, the City of Windsor has established a meaningful and ongoing public process. The following chronology outlines the public consultation activities the City has undertaken respecting the Windsor Central Riverfront Implementation Plan: (Photos 12 and 13)

- former CN lands on numerous occasions between 1984-1998.
- Ambassador Bridge.
- and circulated by the City in August 1999.
- March, 1999.
- on October 2 1999.
- October 31<sup>st</sup> mid-November 1999.
- and Development.

# **CITY OF WINDSOR CENTRAL RIVERFRONT** IMPLEMENTATION PLAN

Public meetings and involvement regarding the acquisition, design and development of the

Public purchase of the remaining privately held lands between Hiram Walker Distillery and

Once Windsor City Council endorsed the concept of a Windsor Central Riverfront Implementation Plan in June 1999, a news release and public newsletter announcing the design charette process for the plan (described at the end of section 1.5.4) was prepared

Following the design charette, the workbook of the four design plans and principles, was circulated to a number of interested individuals and community leaders in September 1999 by Cochrane Brook Planning and Urban Design and the MBTW Group.

On October 2 1999, the City hosted "Riverwalk", a community information and involvement event, also attended by the Cochrane Brook-MBTW design team with a proposed concept plan. Over 400 people viewed the study area and the future park design proposals for it. Riverwalk was publicized by way of advertisements and press releases starting as early as

From October 4<sup>th</sup>-7<sup>th</sup> 1999, the design proposal from Riverwalk moved to the lobby of the Cleary International Centre. Stakeholder and public meetings were held during the afternoon and evening of October 7th. Advertisements for the public meeting were in the local newspaper

From October 8<sup>th</sup> –23<sup>rd</sup> 1999, the design proposal from Riverwalk moved to the Central Library. After October 23rd, it was mounted at the Devonshire Mall for nine days. The opportunity to view these displays and provide comments was also advertised in the local newspaper. Staff from the City was available to discuss the concepts with interested individuals on October 23, 24, 30, 31 from noon until 4p.m. The display was then on view at the Central Library from

On October 30<sup>th</sup> 1999, the City published the optional Phase 1 public notice under the Municipal Class EA planning process notifying the public of the "master plan" approach being used for the Central Riverfront Implementation Plan. Members of the public who wished to comment were invited to do so by either phoning, writing or e mailing the City's Co-ordinator of Design

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The press releases, public advertisements, questionnaires and results of public involvement, noted above, are attached in Appendix A to this report. The City of Windsor has conducted an open and consultative process in its development of the Central Riverfront Implementation Plan, in keeping with the spirit and intent of the provincial and federal EA processes. To conclude its compliance with Phases 1 and 2 of the Municipal Class EA planning process for this plan, the City must give one more public notice advising of the final report's publication and availability for comment. A draft notice for this purpose is attached in Appendix A.

Opportunity for public review and comment on the Central Riverfront Implementation Plan will take place on a five year, recurrent basis. As noted in section 1.3, the Central Riverfront Implementation Plan, when finalized, will form an amendment to the City of Windsor's Official Plan. The Official Plan is reviewed every five years. Where there are any proposed changes to the Central Riverfront Implementation Plan, it will need to be done in the context of an Official Plan Amendment (OPA). Public consultation associated with that OPA can be done concurrently with any future EA public involvement process.

The balance of this report addresses the details of the proposed Central Riverfront Implementation Plan. Section 4 discusses the EA requirements for each of the component parts of this implementation plan and what outstanding EA compliance issues still need to be addressed.

#### 2.0 GUIDING PRINCIPLES

As a result of ongoing consultation with the public, stakeholders and other proponents, the following principles guided the development of this Central Riverfront Implementation Plan:

- Beacons.
- all seasons.
- Provide opportunity for a series of highly visible public activities.
- Promote a pedestrian-oriented, barrier-free environment.

- landscape elements and infrastructure.
- Provide continuous and connected circulation networks.

- Balance recreational uses for all ages and abilities.

- Create a cohesive riverfront identity through the park elements.
- of the City.
- Environmental Assessment Acts.

 Recognize the Central Riverfront's locale as well as national and international significance. Provide for a series of linked activities through narratives, landscape treatments and the 5

• Provide opportunity for a balance of activities that can accommodate recreational use during

• Allow for a range of activities and facilities that appeal to a wide segment of the population.

Enhance accessibility by the general public and local neighbourhood residents.

Develop Riverside Drive as a pedestrian promenade and scenic drive.

Enhance views to the Detroit River through the design and siting of buildings, structures,

Provide a broad distribution of conveniently located and landscaped parking areas.

Develop site conditions and integration of uses/activities that promote public safety.

Demonstrate design excellence in all aspects of the Central Riverfront's development.

Promote sustainable development practices and the efficient use of resources and energy. Promote heritage and cultural themes as part of the riverfront experience.

Provide a maintainable and manageable riverfront within the fiscal responsibilities and priorities

Develop the Central Riverfront in a manner compliant with the Canadian and Ontario

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#### 3.0 RIVERFRONT SYSTEMS

To ensure that the Central Riverfront will be perceived as one cohesive park with a series of special and distinct areas within it, the Beacons, circulation systems, landscaping and other elements of the Central Riverfront will have common themes, or heritage narratives, to be carried throughout the entire length of the Central Riverfront over the next twenty-five year implementation time frame. The riverfront is seen as both a quiet contemplative area as well as a place of activity, recreation and celebration. While providing locations for festivals and celebrations it is also a retreat from the hustle and bustle of urban life.

#### 3.1 The Beacons

Five park pavilions called Beacons are located within the six kilometre long park. They are designed to glow at night as beacons along the Detroit River. Each of them explores a thematic aspect intended to provoke contemplation of time—both past and future, the planet as a miracle of life, earth in relation to space (sun, moon, stars and beyond) human creation and the human condition. (Figure 4)

Each of the Beacons is based on the integration of building and landscape. (Figure 5 and Photo 14) Collectively, the Beacons create the Central Riverfront's primary orientation system and identity feature. They provide a series of visual landmarks and destinations where public park services including washrooms, concessions, information and shelter are located in proximity to small surface parking courts.

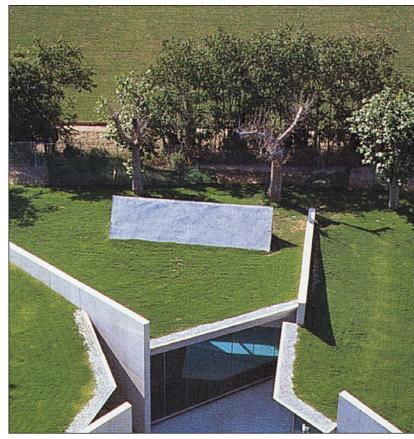
All of the Beacons except the Dawn Beacon which is integrated into the existing 1800's Pump House, are set within the south slope of the riverbank. The roofs of the Beacons are designed as a landscaped terrace accessible from the Riverside Drive Promenade with overlook areas to the river, and will provide seating areas. By setting the Beacons into the slope with the roof level at the elevation of Riverside Drive, views to the river from Riverside Drive are unobstructed.

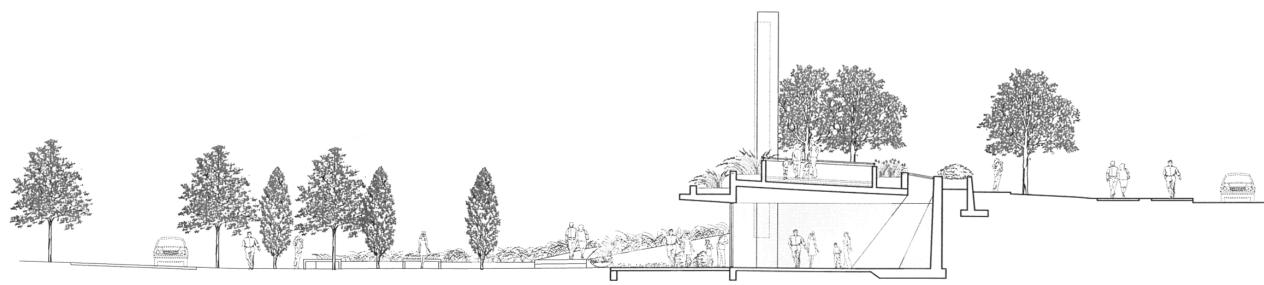
**Figure 4** Night View of Windsor Central Riverfront Beacons



The design of each Beacon includes transparent, vertical elements that form a pattern of highly visible landmarks along the riverfront that extend up to Riverside Drive. These Beacons are either transparent skylights or light metal structures integrating glass and lighting. Because 4 of the 5 Beacons are set into the riverbank slope and the building areas are not visible from Riverside Drive the vertical elements will act as important place markers and gateways into the riverfront. Key facilities including washrooms, telephones, concessions and information areas are included in the Beacons. In the evenings the Beacons assist in creating a safe atmosphere by providing gathering places and islands of light.

The Beacons include from west to east the Celestial, Legacy, Peace, City and Dawn Beacons. **(Figure 6):** 



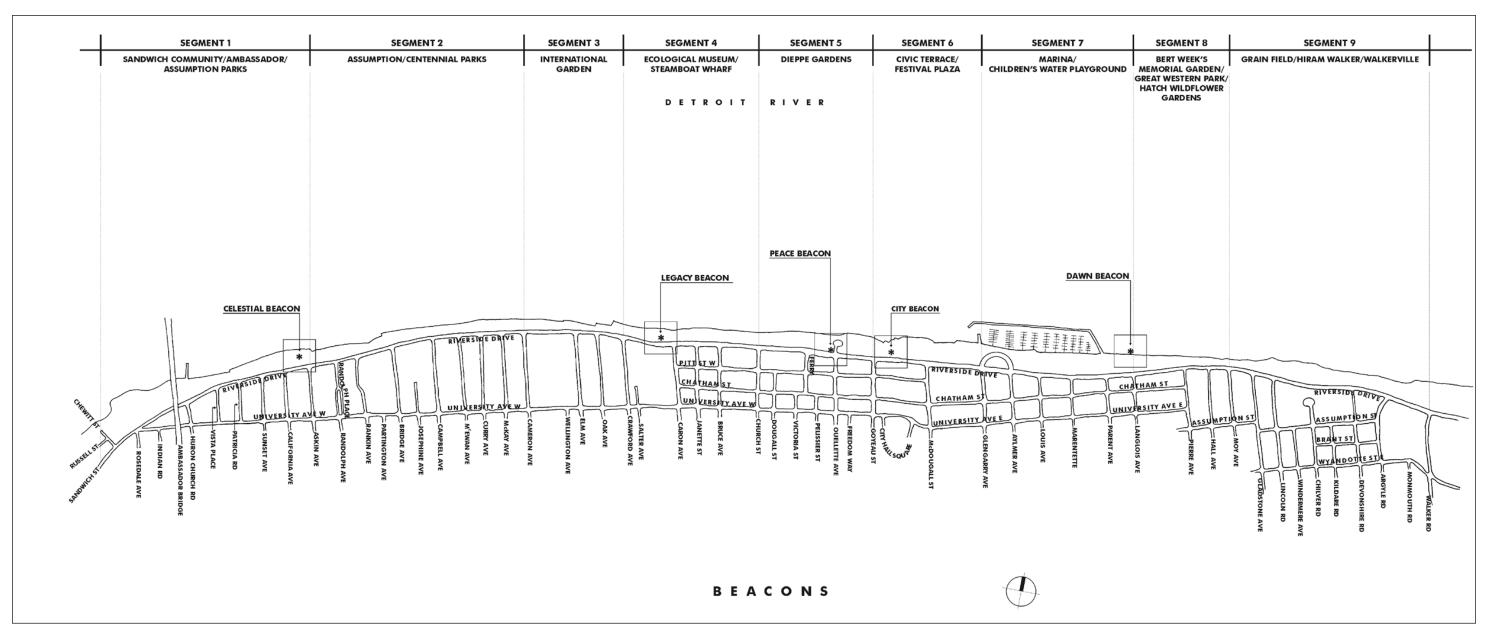


# SECTION A-A



Photo 14

Figure 5





#### 3.1.1 Celestial Beacon

#### Imagery and Function:

Situated as the westernmost Beacon closest to the University of Windsor, a reflection of where the sun sets and evening begins, this Beacon's theme brings attention to the night sky and the place of earth and human activity in the universe. (Figure 7)

Location: Segment 1, within the Outdoor Sculpture Garden at the foot of Askin Avenue. Interpretive aspects: Sculpture Garden information area, the arts, sunset and astronomy, international gateway and the river.

#### Design:

- Approximate building area 2,000 sq. ft. (186 m<sup>2</sup>).
- Set into the riverbank slope.
- Earth sheltered design as environmentally sustainable structure.
- · Contains washrooms, concession, Sculpture Garden interpretive information, storage.
- · Rooftop landscaped terrace with seating for viewing the sunset, river and night sky.
- · Large circular wind sculpture and skylight as beacon and weather vane.
- Exterior translucent wall extends from interior building to create a semi-sheltered outdoor sculpture surface on the west side of the building leading to the Sculpture Garden allee. The celestial cosmological theme will be explored utilizing light patterning and screen elements.
- The building structure frames an outdoor sculpture plaza to the north between the Beacon and the Detroit River.

### 3.1.2 Legacy Beacon

### Imagery and Function:

Situated at the most important remaining connection of where previous intensive human activity (industry and railways) converged, this site is a key demonstration of a return to natural processes. This Beacon's theme focuses on the relationship of human settlement and the fragile natural environment in the past and in the future. (Figure 8)

Location: Segment 4, Outdoor Ecological Museum at the CP Railway underpass. Interpretive Aspects: Integration of landscape and building, history of the CP Railway, Ecology and Sustainable Development.

### Design:

- Approximate building area 2,000 sq. ft. (186 m<sup>2</sup>).
- Set into the existing heritage retaining wall containing the original station tower entrance.
- Earth sheltered design as environmentally sustainable structure.
- · Contains washrooms, concession, interpretive information, storage.
- · Rooftop landscaped terrace with seating for river viewing.
- Glazed vertical skylight element pays homage to the original station tower (while not reflecting its literal form), provides interior building light during the day and an illuminated landmark at night.





Figure 7 Celestial Beacon

Figure 8 Legacy Beacon

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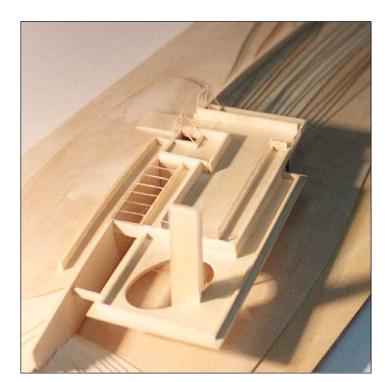


Photo 15 Physical Model of the Peace Beacon



Figure 9 Peace Beacon

#### **3.1.3 Peace Beacon** (see Appendix, Peace Beacon Proposal)

#### Imagery and Function:

Situated at the important connection where Windsor's main street (Ouellette) meets the riverfront, the Peace Beacon's theme is the peaceful coexistence of neighbouring cities and countries facing each other along the world's longest undefended international border. Peace through sacrifice is commemorated in Dieppe Gardens directly adjacent to the Beacon. (Figure 9 and Photo 15)

Location: Segment 5, northwest corner of Riverside Drive and Ouellette Avenue. Interpretive Aspects: Integration of landscape and building, sustainable development, honor of war veterans, peace between Canada, the United States and the world.

#### Design:

- Set into the riverbank.
- Earth sheltered design as environmentally sustainable structure.
- Contains washrooms, concession, visitors centre, storage.
- Rooftop landscaped terrace with seating for River viewing.

- illuminated landmark at night.

**CITY OF WINDSOR CENTRAL RIVERFRONT** IMPLEMENTATION PLAN

Outdoor sheltered courtyard provides outdoor seating area for concession.

Inscriptions, extracts from poetry in languages of the world interpret the peace theme.

Skylights and illuminated landmark provides interior building light during the day and an

# 3.1.4 City Beacon

#### Imagery and Function:

Situated as the focal point destination of the Civic Esplanade (formerly Windsor Avenue), the City Beacon's theme is dedicated specifically to the meaning and use of Windsor's Central Riverfront in Windsor's past and future. (Figure 10) The structure of the building is integrated with a pedestrian bridge over Riverside Drive linking the Esplanade to the Riverfront. Access from the first front level to Riverside Drive and the Riverfront are via stairs and elevator.

Location: Segment 6, Civic Terrace at the extension of the pedestrian bridge linking the Esplanade over Riverside Drive

Interpretive Aspects: History of Windsor and the region including the railway, music and the arts (performing and visual).

#### Design:

- Approximate building area 2,000 sq. ft. (186 m<sup>2</sup>).
- · Set into the riverfront slope.
- · Earth sheltered design as environmentally sustainable structure.
- · Contains washrooms, concession, passenger/handicap elevator, interpretive information related to the railways and arts, storage.
- · Rooftop landscaped terrace with seating for river viewing at Riverside Drive elevation.
- Bridge supports extend above Riverside Drive as a transparent light metal frame structure and serves as an illuminated landmark at night.
- Bridge level cantilevered platform provides a high point overlook to the park, river, Esplanade and City Hall.
- Stairs and elevator are integrated into the vertical bridge support structure providing access from the bridge level (approximately 17 feet above Riverside Drive) to both the Riverside Drive level and the park level below.



Figure 10 City Beacon

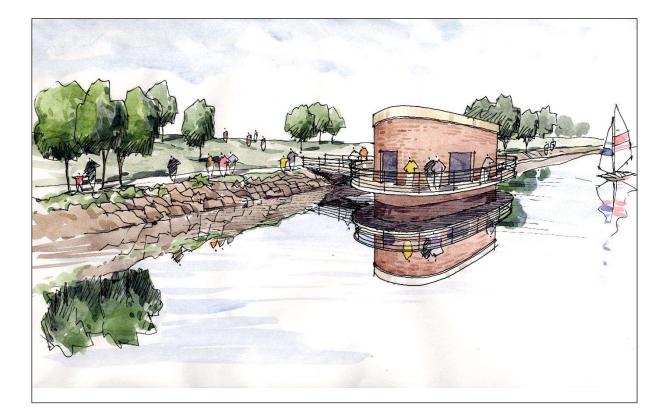


Figure 11 Dawn Beacon

# 3.1.5 Dawn Beacon

Imagery and Function:

Situated as the easternmost Beacon, the Dawn Beacon is a literal reflection of where the day begins and a more figurative reflection of where time begins. This beacon's theme acknowledges the earliest settlement and natural condition of the riverfront. This focus on early beginnings is an appropriate place to specifically reference children and youth in the context of the riverfront. (Figure 11)

Location: Segment 8, at the 1800's Pump House at the foot of Langlois Avenue. Interpretive aspects: Dawn, contemplation, original settlement, children's future vision, original function of the pumphouse.

#### Design:

- (46.4 m<sup>2</sup>), total 1,500 sq. ft. (139 m<sup>2</sup>).
- visible from the riverfront.
- Storage closet and mezzanine provided.
- Clerestory will provide panoramic views of the river.
- Adapting the building to operate by water power.
- the day and an illuminated landmark at night.

Existing building area approximately 1,000 sq. ft., (92.9 m<sup>2</sup>) mezzanine addition of 500 sq. ft.

New light steel bridge creates pedestrian connection between the riverfront to the heritage building which is located approximately 15 feet from the River shoreline.

Steel bridge connects to lightly cantilevered steel walkway surrounding sides of pump house

Contains renovated interior area for children's story telling or other programmed activities and events (preferably educational relating to original settlement heritage) for small groups.

Interpretation of the pumphouses' original purpose, that of pumping water.

Skylight at mezzanine level provides 360 degree overlook area, natural interior light during

#### 3.1.6 Other Linking Elements

Heritage Narratives: In addition to the interpretive aspects of the Beacons, a variety of applications to involve artists, historians or other groups in the creation of interpretive areas exist. The emphasis on these interpretative areas is to make them active/living installations that physically as well as intellectually engage the viewer. They should allow history to come alive, and provide something for a child to explore through touch, sound, activities, sequences etc. These interpretative installations are excellent vehicles for community involvement and stewardship, in the conceptualization, design, fundraising, execution of projects and long-term maintenance.

These heritage narratives would include:

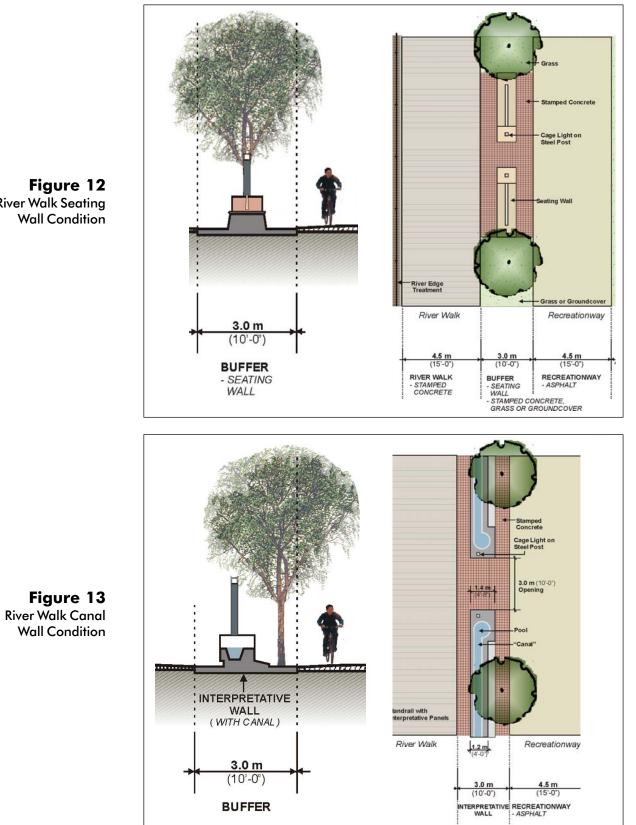
- · Arts and Culture: the Sculpture Garden, Festival Plaza.
- Railway and Marine History: CP Railway, CP Ferry Docks, Steamboat Wharf, interpretative signs along the River Walk.
- · Honouring Windsorites: Dieppe Gardens, the "Interpretive Wall".
- · First Nation: Great Western Park.
- · Natural systems and ecology: Outdoor Ecological Garden, Hatch wildflower Gardens.

#### Interpretative Wall:

A low linear wall is proposed to run parallel to the River Walk (between Caron Avenue and Parent Avenue) alongside the river. The Interpretative Wall will act as place for congregation allowing for such elements as seating, water fountains, water trough, planters, lighting, waste containers etc. and as a divider between the walking path (River Walk) and the bike/recreation path (Recreationway).

The Interpretative Wall provides a series of simple activities such as children's water play in the water trough within the top of the wall and looking at inscriptions or "relief" created by artists embedded into the wall. At the same time it provides a restful place for people to sit and watch the River.

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by a concrete seat back.

Seat Wall: (Figure 12)

•

to drain.

Design recommedations include:

- 1.2 metres (4.0 feet high).
- Seat wall length at 4.0 metres (13.0 feet). -
- Locate seat wall in pairs of two divided by 1.0 metre (3.0 feet) space between.

Interpretative Canal Wall: (Figure 13)

- Step top edge of trough down to 0.5 metres (18 inches) high for seating or raised area for children's waterplay. - Place high branching shade trees at minimum 12.0 metres (40.0 feet) apart on
- centre.
- Include interpretative signs or similar elements as relief set into concrete or on steel, copper or other metal and set flush with the concrete wall.

# **CITY OF WINDSOR CENTRAL RIVERFRONT** IMPLEMENTATION PLAN

#### **Interpretative Wall Design Guidelines**

- Locate as a continuous system between Caron Avenue and Parent Avenue.
- Height varies between 0.6 1.0 metres (2.0 3.5 feet).
- Width varies between 1.2 1.4 (4.0 4.6 feet).
- A poured concrete wall designed to accommodate the following conditions:
  - Seating level 0.5 metres (18 inches) high and 1.2 metres (4.0 feet) wide, divided
  - Optional wood seat inset into the concrete. All seat conditions should be sloped
  - Raised seat wall end for light post, waste receptacle container and/or planter
  - Provide cage light on steel post in centre of raised seat wall end.
  - Place high branching shade trees at minimum 12.0 metres (40.0 feet) apart on centre, or 1.25 metres (4.1 feet) on centre from edge of seat wall.
  - Include interpretative signs or similar elements as relief set into concrete or on steel, copper or other metal and set flush with the concrete wall.

- Canal wall at 1.2 metres high and 1.2 metres (4.0 feet) wide.
- Water trough or 'canal' on canal wall can be centred or aligned to one edge. - Create a small pool on canal wall ends leading from trough.
- Allow for water pumping and filtration equipment.
- Provide cage light on steel post in centre of canal wall end.

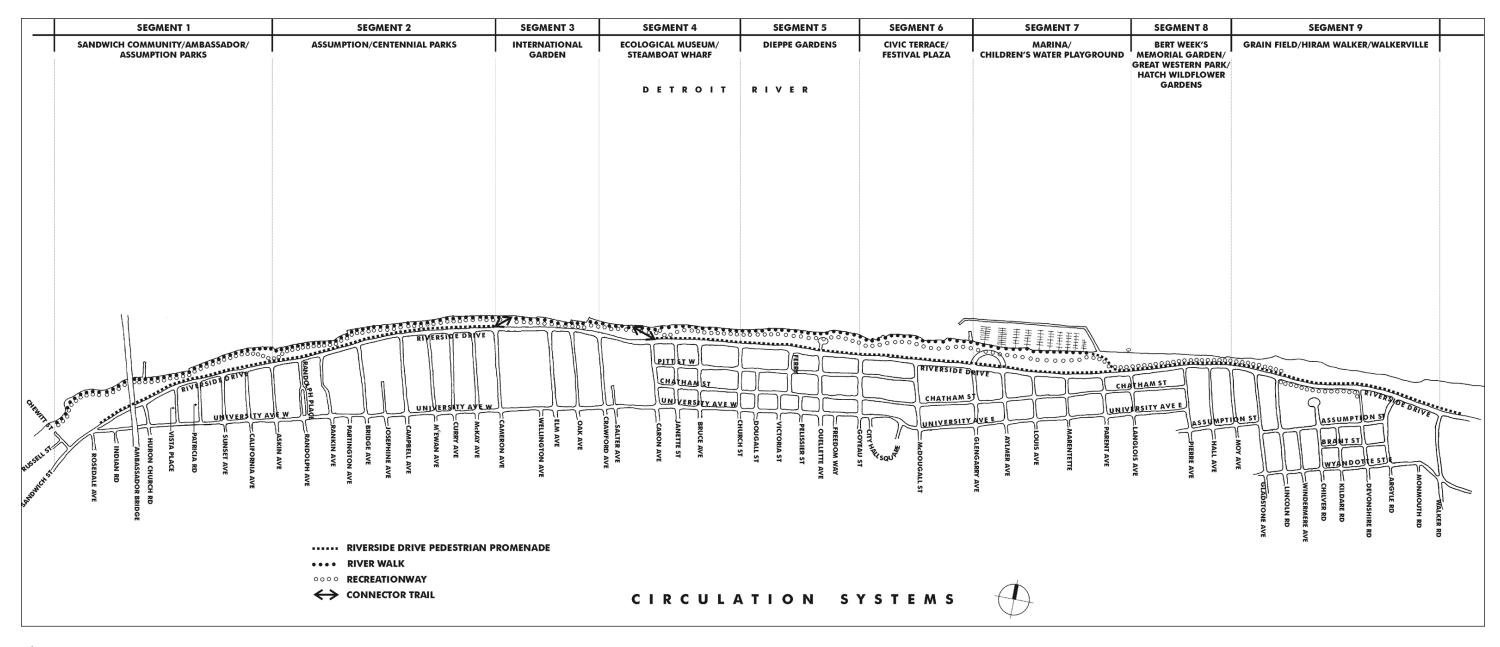
#### 3.2 Circulation

A priority in the design of the riverfront is to ensure that people are drawn naturally between areas and activities. The circulation system provides pedestrian, and recreational access throughout the riverfront and vehicular access at appropriate locations. Through a series of visual markers, the five Beacons create distinct and regularly placed destinations where services including public washrooms, concessions, information and other necessary services are located.

The circulation system is based on the framework of existing City street and block patterns as well as the existing and proposed riverfront circulation patterns and topography. The system will link to all major riverfront facilities, as well as join with adjacent local and regional networks including street, park and Recreationway systems. Easy access for residents in the neighbourhoods to the south is one of the guiding principles, thus direct connection across Riverside Drive and slowing the vehicular traffic is a guiding principle of the design. The system should provide direct, well-lit and barrier-free connections as well as include design elements such as landscaping and pedestrian amenities that will promote and extend the riverfront experience.

Pedestrian walkways should be comfortable and attractive, and should be distinct from other networks for cyclists/rollerbladers and vehicles. A park environment should be emphasized through the varied use of trees and landscape elements, special paving, seating and pedestrian scale lighting.

The circulation system includes Riverside Drive, Riverside Drive Pedestrian Promenade, River Walk, Recreationway, and Connector Trail. **Figure 14** illustrates the 5 primary circulation systems that link key riverfront destinations.



**Figure 14** Windsor Riverfront Circulation System

#### 3.2.1 Riverside Drive

Riverside Drive defines the south edge of the riverfront, creating a strong visual and physical edge between the City Centre and the riverfront. As a tree-lined pedestrian promenade and scenic drive, Riverside Drive has an important role in defining the image of the riverfront and establishing links to the City Centre, local neighbourhoods, the University of Windsor and other adjacent areas. (Figure 15) The primary objective for Riverside Drive, in the context of this study, is to create direct pedestrian connections across the street from the City Centre and adjacent neighbourhoods to the riverfront. As such, the distance from the curbline on the south side to the curbline on the north side of Riverside Drive is a critical distance in maintaining the public's perception of accessibility. Road widening for vehicular traffic, cycle lanes, additional travel lanes or turning lanes should be minimized and subject to public input through the appropriate study process (e.g. Bicycle Use Master Plan or Environmental Study Reports, etc.). (Figure 16)

The growth of the City Centre and adjacent properties facing the River will benefit from proximity to the riverfront. In order to maximize the mutual benefits of the City Centre and the Riverfront, access across Riverside Drive is critical. Riverside Drive should not be considered as an expressway, rather as a scenic drive. Traffic calming and additional pedestrian activated crossing signals should be implemented in conjunction with specially designed pedestrian connections across and along Riverside Drive.

A shuttle service is proposed to provide public transit along the riverfront between the Walkerville gateway in the east and the Sandwich gateway in the west. The shuttle will travel primarily along Riverside Drive entering the riverfront at designated sites including the Bert Weeks Gardens, the Marina, Dieppe Gardens, Steamboat Wharf, the Outdoor Ecological Gardens and the Sculpture Garden.







**Figure 16** Riverside Drive Streetscape Condition

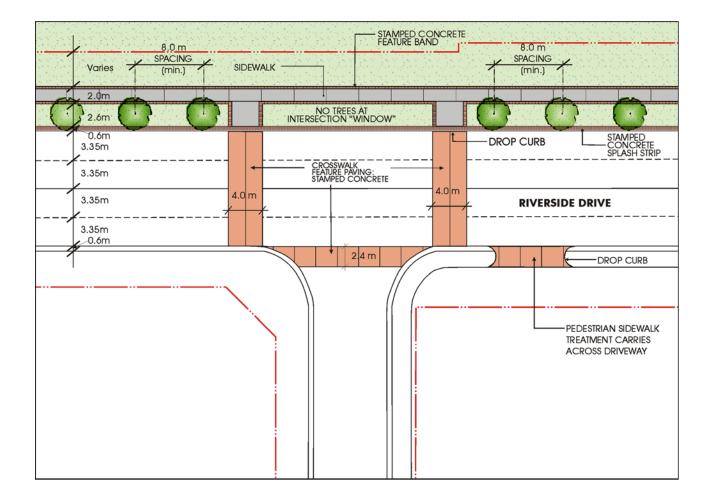


Figure 17 Typical Riverside Drive Pedestrian Crossing for **Signalized Intersections** 

# **Riverside Drive Design Guidelines**

The following recommendations apply:

- Riverside Drive should not be widened for additional through lanes of auto traffic.
- The street should be developed as a scenic tree-lined drive encouraging reduced traffic speeds and volumes and greater opportunity to cycle on road safely.
- Specially marked and textured pedestrian crossings should be provided at key intersections to assist movement across Riverside Drive to the riverfront.
- The boulevard on the riverfront side of Riverside Drive should include enhanced treatments to provide a strong visual landscaped image for the riverfront including upgraded sidewalk paving (coordinated with entrances and walkways), street trees, seating and framed riverfront views. In addition to defining the perimeter image of the riverfront, these treatments will contribute to the definition of the riverfront lands and present a positive relationship with neighbouring properties.
- The boulevard on the south side of Riverside Drive should have street trees coordinated with the spacing of trees on the riverfront side and the desired views.
- Maintenance of the current 2-4 lane cross-section, allowing an additional lane for left turning movements at Gladstone, Parent and Aylmer Avenues. Should any additional localized operational road improvement cost more than \$6 million, phases 3-5 of the Municipal Class EA planning process would apply to the project; if under \$6 million, there would be no EA requirement; however to ensure compliance with this plan public input would be sought.
- Riverside Drive does not have a consistent right-of-way width and the north side is not well-defined. Public perception is that the right-of-way is part of the riverfront. Where additional turning lanes are anticipated, the features on the riverfront have been moved towards the river to accommodate the necessary width.
- Trees planted on both sides of Riverside Drive spaced at regular intervals with the views from north/south streets being kept clear. The spacing recommended is a minimum 20 foot (6 meters) single row on the south side and spaced at minimum 26 foot (8 meter) double rows on the north side as part of the Riverside Drive Pedestrian Promenade. (see Section 3.1.2, Riverside Drive Pedestrian Promenade).
- Upgraded sidewalk paving treatments (see Section 3.1.2).
- Pedestrian crosswalks at the following signalized and other intersections (from west to east) located at key entry points. Pedestrian crosswalks should be provided across Riverside Drive and the intersecting street for signalized intersections, and across Riverside Drive only for non-signalized intersections. (Figure 17)

Huron Church Road: Signalized Askin Avenue: Non signalized Campbell Avenue: Non signalized (to be signalized in future) mid-block between Bridge and Cameron Avenue-signalized) Crawford Avenue: Non signalized (to be signalized in future) Caron Avenue: Non-signalized Bruce Avenue: Signalized **Church Street: Signalized** Ferry Street: Signalized (half signal) **Ouellette Avenue: Signalized** Goyeau Street: Signalized McDougall Street: Signalized (access down into park to be added) **Glengarry Avenue: Signalized** Aylmer Avenue: Signalized Parent Avenue: Signalized Pierre Avenue: Non-signalized Moy Avenue: Non-signalized Lincoln Road: Signalized Devonshire Road: Non-signalized (to be signalized in future)

#### 3.2.2 Riverside Drive Pedestrian Promenade

Riverside Drive Pedestrian Promenade aligns with the north side of Riverside Drive and is expressed as a wide pedestrian walk. Strolling is encouraged through enhanced sidewalk treatments, the consistent use of street trees on both sides of the street and pedestrian amenities (See Section 3.9, Pedestrian Amenities) are to be integrated into the Riverside Drive Pedestrian Promenade at regular intervals. It is the promotion of pedestrian use, street trees, views to the river and slower traffic speeds on Riverside Drive that will help to define the street as a pedestrian promenade and a scenic drive.

There are two characters for the Riverside Drive Pedestrian Promenade. The first, adjacent to the City Centre spanning from Caron Street to Parent Street, is a formalized urban character.

For the more residential areas, from Parent Avenue east and from Caron Avenue west, the Promenade will take on a more passive and less structured character. Within these areas Design Guidelines conditions two through four will apply.

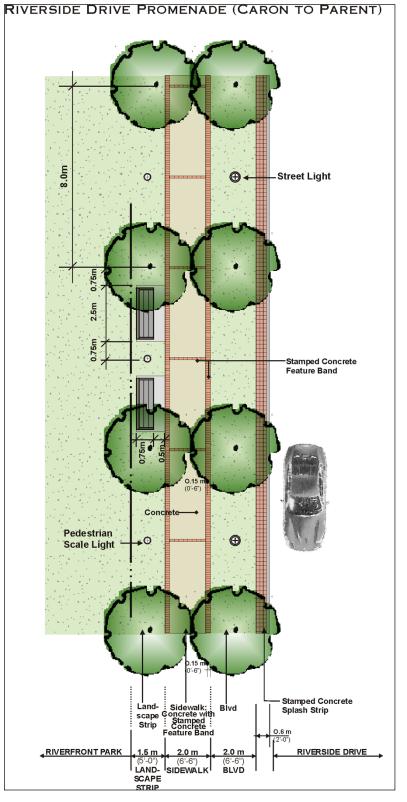
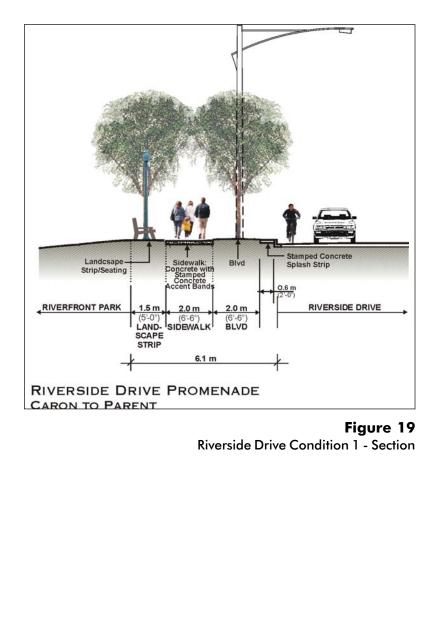


Figure 18 **Riverside Drive Condition 1 - Plan** 



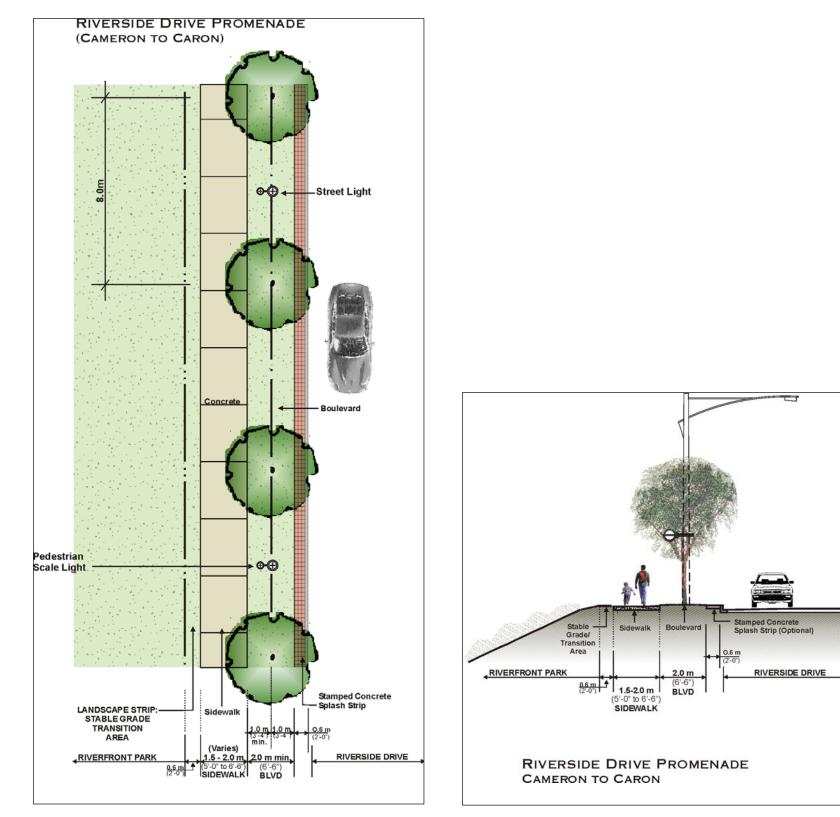
**Riverside Drive Pedestrian Promenade Design Guidelines:** Design recommendations include:

Condition One: In the City Centre the promenade will align with Riverside Drive, the width will be increased beyond that of a typical sidewalk and street trees will shade the walk. (Figures 18 and 19)

Condition Two: Between Cameron and Caron Street, the topography will not accommodate the desired dimension of the Promenade. The section for this condition will be narrow. (Figures 20 and 21)

Condition Three: From Huron Church to Cameron Avenue the Promenade will be allowed to meander somewhat from the edge of Riverside Drive. The grades in this stretch of the site will accommodate a more curvilinear alignment, which will promote the more residential nature of the Promenade. (Figures 22 and 23)

Condition Four: From Parent Avenue to Walker Road the promenade will be combined into both the pedestrian/Recreationway and separate at Lincoln Road where the Recreationway will move to the south side of the street. (River Walk and Recreationway) (Figures 24 and 25)



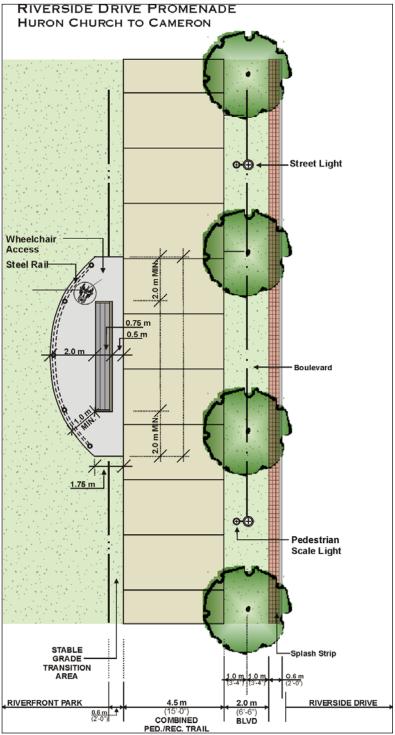
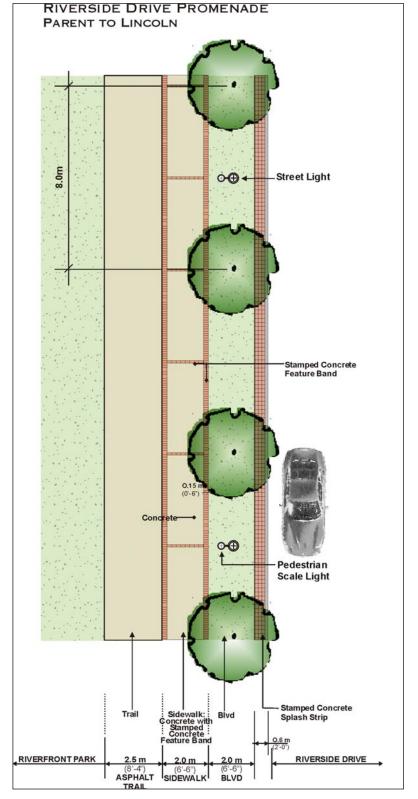


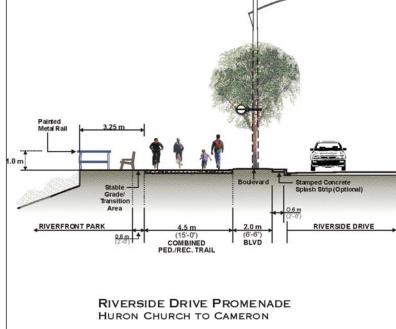
Figure 20 Riverside Drive Condition 2 - Plan

Figure 21 **Riverside Drive Condition 2 - Section** 

Figure 22

Riverside Drive Condition 3 - Plan

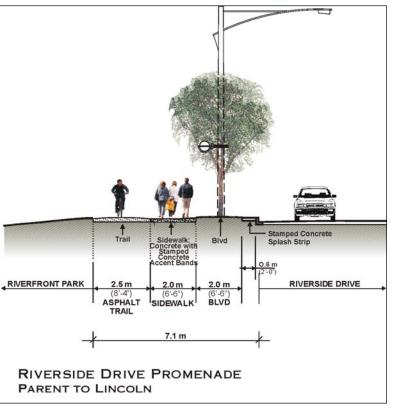




**Figure 23** Riverside Drive Condition 3 - Section



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**Figure 25** Riverside Drive Condition 4 - Section

#### 3.2.3 River Walk

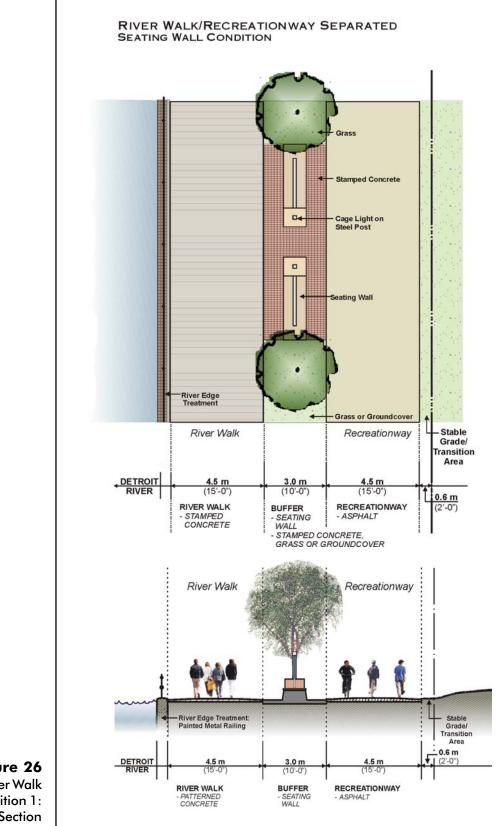
Riverwalk aligns with the Detroit River between Parent Avenue in the east and Chewitt/Russell Streets in the west. At Parent Avenue the trail system moves inland and aligns with Riverside Drive.

The River Walk is intended for pedestrian use only and should be indicated by textured treatments and the creative use of construction materials and details. The visual image of the River Walk should generally be uninterrupted, except in special locations including the Marina, where a boardwalk is considered appropriate. In the Joan and Clifford Hatch Wildflower Gardens, where the design is less formal the Riverwalk moves up to Riverside Drive adjacent to the Recreationway. Pedestrian amenities, including the safety/interpretative handrail should be integrated into the River Walk at consistent intervals (see Section 3.9, Pedestrian Amenities).

#### 3.2.4 Recreationway

Recreationway generally aligns with the River Walk and the Detroit River but is set back from the water's edge. It is intended for faster moving recreational uses, with appropriate surface treatment. It includes lighting, seating, and landscape edge treatments, signs and rest stops.

Cyclists, rollerbladers and joggers will use Recreationway. Surfacing is to be consistent and smooth (e.g. asphalt). The trail will also accommodate use by service and emergency vehicles. The lighting along the Recreationway is to occur at a consistent rhythm to provide a minimum of 1.0 to 1.5 foot candles of light.



## **River Walk Design Guidelines:**

As the property boundaries and topography allow, the River Walk will be visually defined and physically separated from the Recreationway with the use of a landscape treatment, varied paving and other treatments. (Figures 26, 27, 28 and 29)

#### Condition One:

- Walk path and Recreationway.
- ends.
- Stamped concrete River Walk path.
- - within grass or ground cover.

#### Condition Two:

- meters (27 feet) spacing.

#### **Condition Three:**

#### **Condition Four:**

#### **Recreationway Design Guidelines:**

As the property boundaries and topography allow, the Recreationway will be visually defined and physically separated from the River Walk or Riverside Pedestrian Promenade. The Recreationway will be consistent, smooth asphalt surface for ease of use by wheeled modes. (Figures 26, 27, 28 and 29)

Figure 26 **River Walk** Condition 1: Plan & Section

# CITY OF WINDSOR **CENTRAL RIVERFRONT** IMPLEMENTATION PLAN

Seat Wall set within a min. 3.0m wide stamped concrete buffer area between River

Seat Wall includes cage light on steel post and waste receptacle integrated into seat

Standard rail treatment with interpretative panals attached where appropriate.

Seat Wall arranged in pairs and framed by high branching tree (ie. honey locust) set

River Walk constructed of board walk material separated from the Recreationway by a min. 0.6m (2 feet) wide flush curb of stamped concrete/feature paving.

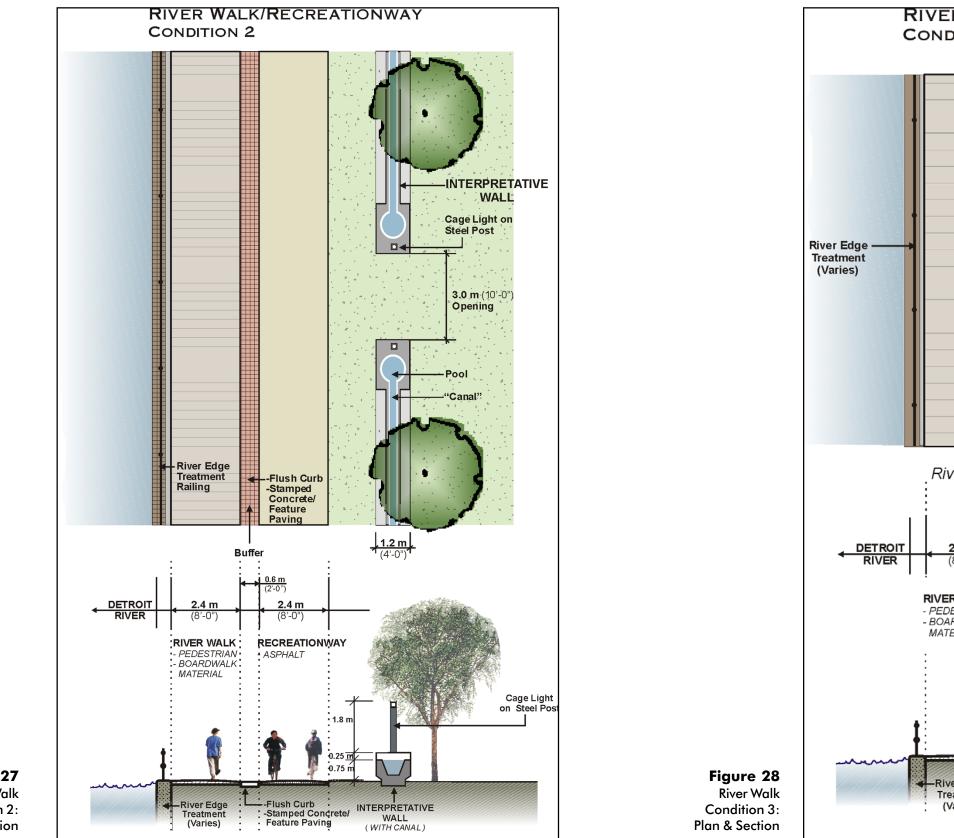
Interpretative Wall includes linear water element for children water play.

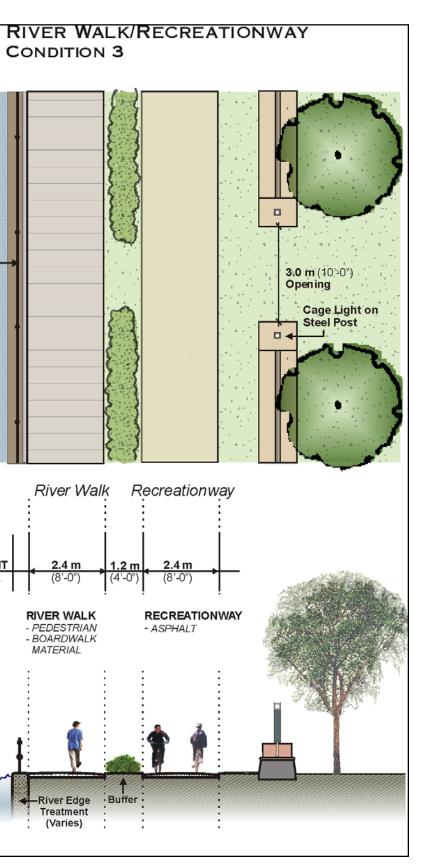
Interpretative Wall located directly south of Recreationway.

Interpretative Wall includes high branching trees (ie. honey locust) arranged at min. 8

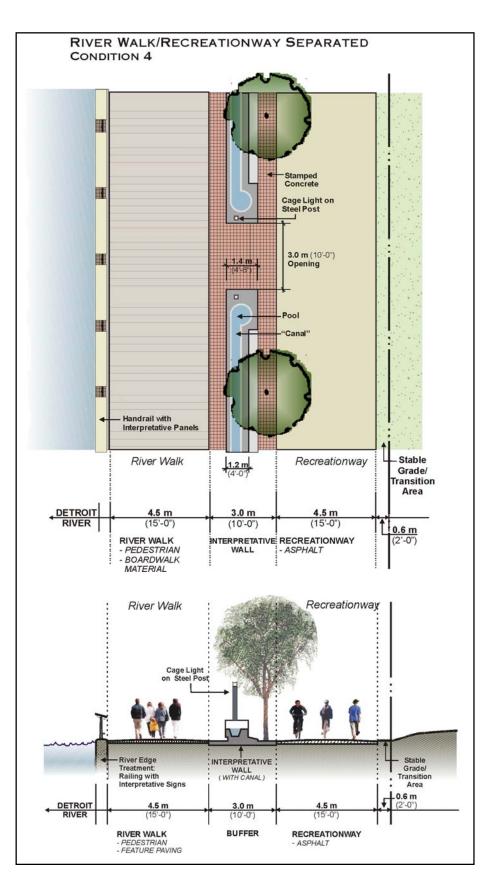
Same as Condition Two except for planted buffer between River Walk and Recreationway, and inclusion of Seat Wall instead of Interpretative Wall.

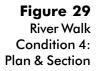
Same as Condition One except for the use of Interpretative Wall instead of Seat Wall condition within stamped concrete buffer area between River Walk and Recreationway.





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IMPLEMENTATION PLAN		

#### 3.2.5 Connector Trails

The Connector Trails connect between Riverside Drive and River Walk at Cameron and Caron Avenue where the embankment slope is steep and narrow. Connector Trails are not considered to be part of the formal east-west pedestrian movement system, but should however conform to a design standard.

#### **3.2.6 Surface Treatments**

All paving materials should be of excellent quality and workmanship. Materials installed are required to be durable, low maintenance, vandal resistant and resistant to chemical damage, for example, de-icing compounds and petroleum products. All paving material installations must not create tripping hazards or drainage problems, and must provide for barrier-free access.

#### **Connector Trails Urban Design Guidelines:**

Design recommendations include:

- Consistent width of 6-8 feet (2.0 2.4 meters).
- Barrier-free Asphalt surfacing recommended.
- Aligned along paths of desire.

#### **Surface Treatments Design Guidelines**

Design recommendations for the following elements include:

#### Asphalt Pavement:

- Existing asphalt pavement that falls within the limits of proposed asphalt will be maintained if it is in an acceptable condition. If the existing aspl is in poor condition it is to be replaced with new pavement.
- Asphalt is the recommended surfacing in the following areas due to smooth surface, cost effectiveness at installation and low maintenar costs:
  - Recreationway (see section 3.1.4).
  - Connector Trails (see section 3.1.6).
  - Festival Plaza.
- Parking courts and access drives.
- All asphalt should be designed to
  - Withstand the heaviest vehicle loading.
- Have a properly compacted base.
- Be composed of high grade aggregates and bitumen.
- Be well graded and drained to minimize cracking and heaving.

#### Concrete Pavement:

- Concrete is the recommended surfacing in the following areas due to coloured, its rigidity, durability, low long term maintenance costs and
- Amphitheaters.
- Plazas (other than the Festival Plaza), terraces and courts.
- Promontories, piers and overlooks.
- Riverside Drive Pedestrian Promenade (see section 3.1.2).
- Building entrances and aprons.

All concrete pavement should conform to the following design guidelines:

- Designed to withstand loading from the heaviest anticipated vehicle.
- · Contain reinforcement and admixtures to minimize spalling, cracking
- · Finishing and colour that is appropriate to the use it will receive.
- Geometry and alignment that responds to the anticipated use.

#### Stamped / patterned concrete:

Stamped concrete is the recommended surfacing in the following areas due be coloured, its rigidity, durability, low long term maintenance costs and lo

- Amphitheaters.
- Plazas, terraces and courts.
- · Building Aprons.

alt paving areas, sphalt pavement	
to its flexibility, ance and repair	
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- Promontories, piers and overlooks.
- Children's play areas.
- Riverside Drive Pedestrian Promenade (see section 3.2.2).
- River Walk (see section 3.2.3).
- Pedestrian crosswalks at the base of street intersections.
- Should be used across street intersections and other circulation system intersections along the riverfront where pedestrians, cyclists and vehicles may intersect.
- Seating, rest areas.
- Shuttle stops.

All stamped concrete pavement should conform to the following design guidelines:

- Designed to withstand loading from the heaviest anticipated vehicle.
- Contain reinforcement and admixtures to minimize spalling, cracking and heaving.
- Stamped pattern that relates to the concept and design of area in which it is to be used.
- Finishing and colour that is appropriate to use and location.
- Geometry and alignment that responds to the anticipated use.
- Should be consistent in colour and pattern of use at all crossing and intersection locations.
- Smooth enough to provide barrier free access.

#### Stonedust or Woodchips:

Stonedust or woodchip surfacing is the recommended surfacing for Joan and Clifford Hatch Wildflower Gardens due to its informal appearance, soft edges and texture.

All surfacing should conform to the following design guidelines:

- Designed to withstand loading from the heaviest anticipated vehicle.
- Be installed with an edge restraint treatment.
- Provide barrier-free access.
- Geometry and alignment that responds to the anticipated use.

### Boardwalk Decking:

Boardwalk decking is the recommended paving material in the following areas to support the nautical theme and provide a warm, boardwalk atmosphere:

- The Marina, from base of Glengarry to Bert Weeks Garden Lookout.
- Bert Weeks Garden Lookout.

All boardwalk decking should conform to the following design guidelines:

- Designed to withstand loading from the heaviest anticipated vehicle.
- Use durable, low maintenance, long lived material.
- Provide barrier free access.
- Geometry and alignment that responds to the anticipated use.

### Steps, Stairways and Ramps:

- Steps, stairways and ramps will be located in the following areas:
- Celestial Beacon Sculpture Plaza.
- International Gardens.
- Steamboat Wharf.
- **Dieppe Gardens**.
- Festival Plaza.

- Children's Water Play Area.
- Hatch Wildflower Gardens.
- Integrated with the Beacons.

- Constructed from materials that are durable, low maintenance and long lived. Materials chosen, including handrails, should respond to the concept or theme of the area in which they are to be installed.
- Provide easily discernable, non-slip treads.
- Satisfy all provincial and federal standards.

### All ramps should conform to the following design guidelines:

- Constructed from materials that are durable, low maintenance and long lived. Materials chosen , including handrails, should respond to the concept or theme of the area in which they are to be installed.
- proximity.
- Efficiently designed and placed in landscape.
- Comply with barrier-free access guidelines.
- Dimensions and geometry that respond to the flow of pedestrian movement.
- Provide easily discernable, non-slip surface.
- Satisfy all provincial and federal standards.

### Pavement Interpretive elements:

Interpretive elements in pavement will occur throughout the entire park. Areas to locate interpretive elements in pavement include:

- **Riverside Drive Pedestrian Promenade.**
- River Walk.
- Parking areas.
- Sculpture Walk.
- Dieppe Gardens.
- Historic Brick Walk.

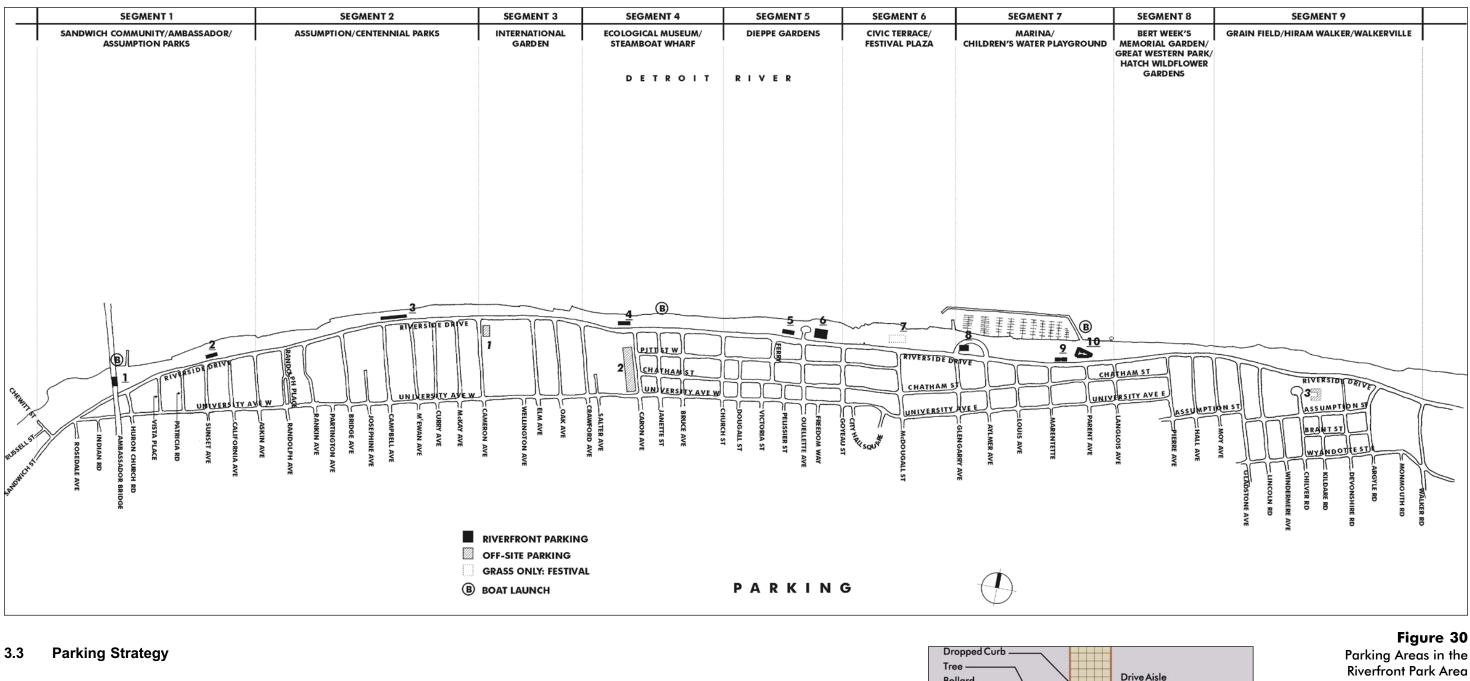
- Interpretive elements in pavement should be manufactured out of durable, long lasting, nonslip materials that are resistant to chemical damage. They may include the following: Inscribed letters or figures in concrete pavement.
- Pre-fabricated metal or stone panels or shapes embedded in concrete.
- Mosaic patterns or coloured portions of concrete pavement.
- They are intended to be for educational and memorial purposes only.

### Pavement Markings:

Pavement markings refer to all lines, figures, words and shapes that are applied to asphalt pavement. Pavement markings should primarily be used to assist in directing rollerbladers, cyclists on the Recreationway (see section 3.1.4). All pavement markings should conform to the following design guidelines:

- Used to mark lanes and intended lane users.
- Used to warn of crossings, stops and steep slopes.
- Use standard, easily recognizable symbols and colours.
- Durable, long lasting paint that can be visible in low light conditions.

- All steps and stairs should conform to the following design guidelines:
  - Dimensions and geometry that respond to the flow of pedestrian movement.
  - Be utilized instead of stairs where possible, if stairs are necessary, locate ramps in close



Parking facility design will have a significant role in establishing the image of the riverfront. Individual treatments are coordinated so that landscaping; tree planting, lighting, walkways and other parking court elements are designed to represent an extension of the riverfront environment.

The major objective for surface parking is to prevent these areas from becoming a dominant physical element, while providing enough parking to complement year round riverfront activities. Parking is provided as a series of small and conveniently placed surface parking courts. The placement of these courts is based on the location of major riverfront destinations including the Marina, Festival Plaza and Steamboat Wharf. In addition, parking is located in proximity to the

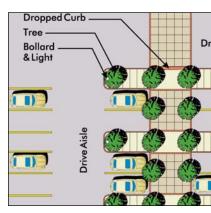


Figure 31

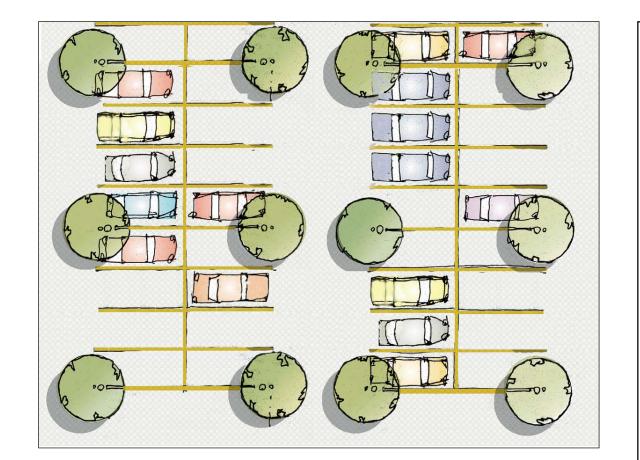


Figure 32 One Tree for Every Four **Parking Stalls** 

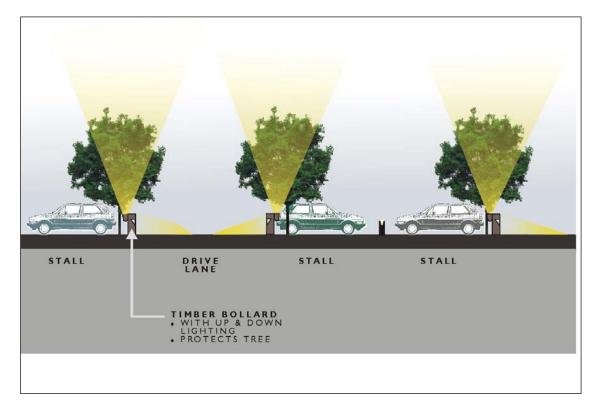


Figure 33 Parking Area: Section

#### **Parking Strategy Design Guidelines** Recommendations include: (Figure 32)

- .
- into the trees. (Figure 33)
- .
- concrete.
- Walkway widths at a minimum 5 feet (1.5 metre).
- .
- •
- Operations.

# CITY OF WINDSOR **CENTRAL RIVERFRONT** IMPLEMENTATION PLAN

Tree-planting, landscaping, pedestrian scale lighting and pedestrian walkways. Extensive tree planting at a minimum ratio of one tree for every four cars, within the first two rows of parking at the perimeter of surface parking courts.

A system of wood post and metal bollards containing a downward and upward light

Pedestrian walkways at the perimeter and where appropriate across drive aisles. Pedestrian walkways constructed of concrete and/or a combination of stamped

Dropped curbs on walkways and parking court edges at appropriate locations. Parking areas located below the sight lines from Riverside Drive, where possible. City Centre (Caron to Alymer) parking courts to be operated as part of Traffic

Other parking courts are to be free of charge (with time limits) or of minimal charge.

five Beacons that serve as a framework of significant landmarks, which thematically identify the riverfront and connect together its destinations. (Figure 30)

In the City Centre a considerable amount of municipal and private parking in surface and structured facilities is located within a reasonable walking distance from the riverfront. The availability of a substantial amount of parking within the City Centre (approximately 8,300 stalls) provides the opportunity to limit the size and the amount of surface parking on the Riverfront.

Riverfront surface parking courts are proposed to present a high level of amenity to surrounding areas including open space, walkways, trails and buildings. The first two rows of parking should integrate tree planting at a preferred minimum ratio of one tree for every four parking spaces. Pedestrian scale lighting and textured pavement along pedestrian walkways should be provided to connect to other riverfront walkways and circulation systems. (Photos 16 and 17)

Pedestrian walkways are designed to link parking to riverfront circulation networks and primary destinations. **(Figure 31)** Public safety is promoted through surveillance opportunities by locating parking courts close to frequently used riverfront areas. The parking courts should, where possible, be located at a level below the sight lines of Riverside Drive.

#### 3.4 Water Transportation

There are two proposed non-motorized boat launching areas to encourage kayak, canoe and other such water transport. (See Figure 34)

- Segment 1: West location, located under the Ambassador Bridge, with access to parking from Riverside Drive at the base of Huron Church Road. (Photo 18)
- Segment 7: East location, located at the Marina near parking court between Marentette and Parent.

The following locations are provided for motorized boat docking and facilities:

- · Segment 1: launching but no long term docking facilities.
- Segments 4-6: between Glengarry and Bruce Street, docking facilities for boats too large for the Marina.
- · Segment 7: Marina at Glengarry Street to Parent (may include Canada Customs).

### Ferry docking locations may include:

- · Segment 1: McKee Park (may include Canada Customs).
- · Segment 4: CP Ferry Docks (may include Canada Customs).
- Segment 6: Commercial ferries dock at the area directly west of Glengarry near Marina entrance (may include Canada Customs).
- · Segment 9: Hiram Walker at historic ferry landing location (may include Canada Customs).



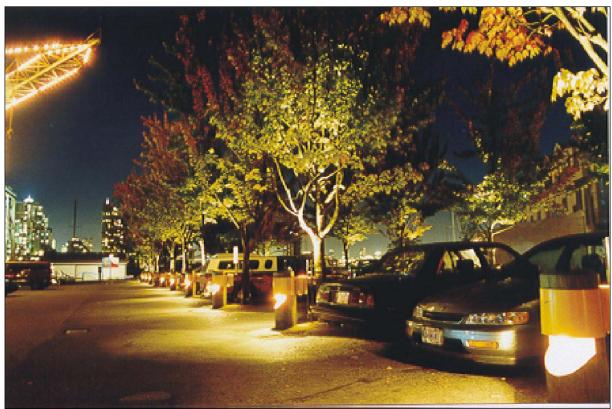
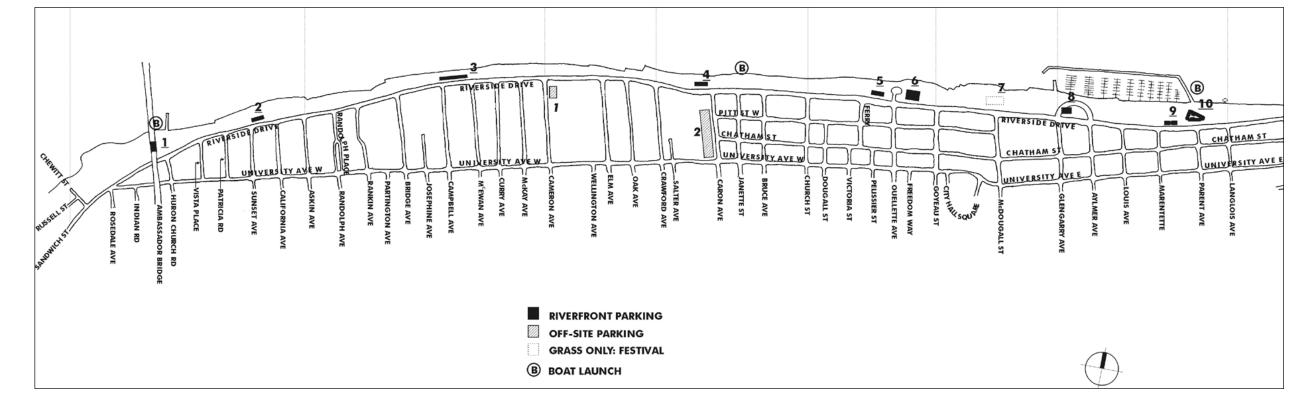


Photo 16 Granville Island Parking Area During the Day.

Photo 17 Granville Island Parking Area at Night.

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been approved under the EA Act as part of the marina EA.

Photo 18 Non-Motorized Boat Launch

New boat docks and launches are "new municipal service facilities" under the Municipal Class EA's. Such facilities are "Schedule B" activities under the Municipal Class EA for Water and Wastewater` Projects. Schedule B activities do not require full compliance with phases 3-5 of the municipal class EA planning process; rather, they require a "screening" exercise in which the public and affected agencies must be consulted before the project may be constructed. This Schedule B screening requirement would apply to the boating facilities proposed in segments 1 and 4, above. The boat docks and launching facilities proposed for segment 7 have already

#### Landscaping System 3.5

The landscape system complements the circulation system and enhances the thematic role of riverfront areas including gardens, public plazas, and open space areas through the selection of distinct trees and plant materials.

The majority of the plant materials should be low-maintenance, open crowned, non-toxic, and thornless, and produce as little litter (fruit, twigs, seeds etc.) as possible. Species should be chosen that are long lived, disease resistant, hardy, seasonally interesting and that culturally suit the location in which they are to be planted. Windsor's southern location provides the unique opportunity to highlight the use of native Carolinian species.

#### **Landscaping Urban Design Guidelines**

#### Design recommendations include:

Trees planted along Riverside Drive and in Parking Courts

- Minimum height of 45 feet (14 meters) at maturity.
- Minimum 7' clearance from ground to branching structure.
- Single stem, open habit that does not form dense canopy.
- Minimum 4" (100mm) caliper at time of installation.
- Provides adequate shade in summer.
- Opportunity to provide seasonal lighting displays.
- Mixture of appropriate species, avoid mass planting of a single species.
- Planting list to support Carolinian theme throughout these areas.
- Reserve a "tree-free" gap at street intersections to preserve views to river and provide adequate cone of vision for intersection traffic, 65 feet (20 meters) in each direction from centerline of roadway.

Trees planted in Sculpture Garden, Steamboat Wharf, Dieppe Gardens, Civic Terrace/ Festival Plaza and Bert Weeks Memorial Garden

- Minimum height of 26 feet (8 meters) at maturity.
- Minimum 7' clearance from around to branching structure.
- Minimum 2" (50mm) caliper at time of installation.
- Installed with tree supports.
- Orchestrated seasonal display with color themes.
- Provides adequate shade in summer.
- Green, single stem, open habit tree for Allee (e.g. Honeylocust).
- Ornamental tree for clusters along south edge of Allee (e.g. Pear or Redbud).
- Plant list to support an orchestrated flowering and color theme unique to each area.

Joan and Clifford Hatch (Great Western Park), Marina and Outdoor Ecological Garden

- Minimum height of 30 feet (10 meters) at maturity.
- Minimum 7' clearance from ground to branching structure.
- Minimum 2" (50mm) caliper at time of installation.
- Provides adequate shade in summer.
- Mixture of appropriate species, avoid mass planting of a single species.
- Plant list to support a native planting theme throughout area.

#### Mass plantings (shrubs and groundcovers)

- Used to enhance paths, walks and trails, play areas and naturalized areas.
- Maximum height of 4 feet (1.2 meters).
- Preferably native species.
- Spaced appropriately at installation to provide full massed effect within one growing season.
- Shrubs: max. 3 feet (1 meter) on center.
- Herbaceous perennials: max. 12" (0.3 meters) on center.

#### ornamental grasses: max. 2 feet (0.6 meters) on center.

#### Slope stabilization / Erosion Control

- Used to protect slopes of 3:1 (33%) or steeper.
- Species to have free-spreading root systems.
- Maximum height of 3 feet (1 meter).
- season.
- Shrubs: max. 3 feet (1 meter) on center.

#### Horticultural Planting

- possible.

### Meadows / Wildflower Gardens

to Windsor and Essex County.

Spaced appropriately at installation to effectively stabilize slope within one growing

Herbaceous perennials: max. 12" (0.3 meters) on center. Ornamental grasses: max. 2 feet (0.6 meters) on center. Use slope stabilization fabric in conjunction with planting.

Used in key areas where the landscape should have a formal, well-maintained appearance, for example, at focal points and main entrances.

Combinations of small, medium and large shrubs, annuals, perennials and ornamental grasses that are seasonally interesting and can be maintained with as little effort as

Utilize a layering of heights, low plants at the front, taller plants at the back. Plant list to support an ornamental, formal landscape theme.

It is desirable that the Meadow theme planting adjacent to the Ecological Garden, and the Hatch Wildflower Gardens highlight the wetland and prairie species unique

#### 3.6 Sign Systems

The Central Riverfront will require three principal types of sign systems: orientation signs, interpretative and directional signs. The first two categories relate specifically to the riverfront, while directional signs relate to the circulation system and are defined by the City standard as set out in the *Windsor Trail Signage Design Guidelines*. Parking and road signage will follow the *Manual of Uniform Traffic Control Devices for Canada*. The general purpose, functional qualities, specific objectives and design guidelines for orientation and interpretative sign systems are described below.

#### 3.6.1 Orientation Signs

Orientation signs are required throughout the central riverfront to provide direction to people who are visiting the area. Specifically, orientation signs will assist people in:

- navigating through the central riverfront on pedestrian and recreational pathways;
- finding their way between key elements of the riverfront; and
- finding their way to specific destinations such as the Beacons, Marina, gardens, children's play areas, concessions, parking courts, etc.

#### **Functional Qualities**

The general qualities of a well-designed, effective orientation sign system include:

- it achieves a clear purpose, is easy to understand, communicates orientation information in a clear, concise manner, and does not provide conflicting information;
- · it is comprehensible to a wide variety of cultures and languages;
- · is part of an integrated way-finding system that is consistent throughout the area it serves;
- · it does not conflict with any other sign system, such as directional signage; and
- it is provided at regular, frequent intervals so that users are able to orient themselves without confusion throughout the area it serves.

#### Objectives

The objectives that should be achieved through the orientation sign system for the Central Riverfront area are as follows:

- the sign system should achieve the functional objectives outlined above;
- signs should be sensitively integrated into the design of the riverfront area. They should be clearly visible, but should not be visually dominant within its context;
- the overall sign system should be consistent in terms of size, location, intervals between signs, height, lighting, etc.; and
- there should be a consistent design theme addressing colour, the use of symbols and text, font etc.

# **Orientation Sign Design Guidelines**

- Recommendations for the orientation sign system include: information on signs should be presented clearly and concisely, with consistent lettering. . Recognizable symbols should be used, wherever possible instead of words;
- the design of the system should be distinct from other sign systems, such as the City's . directional signs;
- a sufficient number of signs should be provided to achieve a clear, effective orientation . system;
- the location, height and position of signs should be established based on site-specific . conditions. Signs should be positioned at a height that is convenient for pedestrians to view;
- wherever possible, signs should be integrated with other elements, rather than on free-standing posts;
- maps and directories should be provided at each Beacon and at the shuttle stations . at the east and west anchors; and
- the City should adopt a master design for the orientation sign system which is compatible with the overall Central Riverfront.

#### 3.6.2 Interpretative Signs

The purpose of interpretative signs is to convey information about specific Central Riverfront elements. Interpretative signs fulfil an educational role that is intended to enhance the overall Central Riverfront experience.

### Functional Qualities

The functional qualities of the interpretative sign system for the Central Riverfront area are as follows: (Photos 20 and 21)

- it provides an educational or artistic role; .
- it contributes to the cultural qualities and discovery of unique aspects of the Riverfront;
- it conveys information regarding natural or cultural heritage, local history etc.;
- generates interest, enthusiasm or excitement; and
- it contributes to the understanding of the area, as well as to place-specific identity.

### Objectives

In developing the Central Riverfront sign system, the following objectives should be considered:

- the system should achieve the objectives outlined above;
- the design of interpretative signs should be contextual and consistent with the thematic expression of the element it is associated with (e.g. the signs associated with individual Beacons should respond to the design of the Beacon);
- signs for groups of Central Riverfront elements, such as natural features, gardens, heritage elements etc., should be linked by a common design theme; and
- signs should communicate information through both written narratives and visual images.



Photo 20



Photo 21

**Interpretative Signs** 

Interpretative Signs

# Interpretative Sign Design Guidelines could be conveyed through interpretative signs includes:

- . the railway era, the Wars, the Underground Railway, etc.;
- gardens, etc.;
- riverfront; and
- •

The design of interpretive signs should be contextual and consistent with the design of the element it is associated with. Opportunities to integrate the message into the specific element should be explored. For example, the interpretive message of a Beacon's imagery and function should be integrated into the design. Signs associated with a recurring Central Riverfront theme or that convey an inter-related narrative through the overall area should be linked by a common design approach. Signs describing different sculptures, for instance, should be consistent in design and in terms of the information conveyed.

# **CITY OF WINDSOR CENTRAL RIVERFRONT** IMPLEMENTATION PLAN

The principal objective of interpretative signs is to fulfil an educational, artistic and poetic role that enhances the overall Central Riverfront experience. Possible information that

the cultural heritage of the area, such as the history of native settlements, shipping,

the general themes expressed through central riverfront elements, such as the Beacons,

the stories of individuals or families that were formative in the development of the

Natural history, including botanical and ecological information.

#### 3.7 Consistent Design Approach

The design of the riverfront landscapes, structures and buildings, and the selection of lighting standards, park fixtures and furnishings, signage etc. will occur over many years and will involve the participation of a multitude of design professionals including landscape architects, engineers, architects, urban designers and others.

This extended process has the potential to result in a fragmentation of the imagery and design quality of the park if consistent design standards and thematic focus are not approved and followed.

This section summarizes an approach – a design philosophy - recommended to govern the design process as it occurs in the coming years. It is intended that this section be used as a design brief to be adhered to by all consultants, city staff or others involved in each design project for the Central Riverfront Implementation Plan. This section also serves as a key reference document to be used by the Technical Review Panel in its on going review and evaluation process.

The overall intent of this guide is to provide consistency in the design of the Central Riverfront. It is not intended to stifle creative interpretation by a variety of designers but rather to ensure that a solid context exists to guide a design process that will enable multiple design projects to lead to a cohesive, integrated Central Riverfront that is easily recognized as one park.

*Emphasize Nature:* The riverfront experience should predominately convey a sense of being within a composed setting of natural systems including land forms, trees, grass, riparian systems, gardens etc. (Photo 22)

This focus on nature should not be interpreted as an attempt to replicate pre-settlement environments (i.e. forests, river valley). Rather it is a consciously conceived human-made creation using natural systems, elements and processes as a design palette.

*Integrate Buildings:* Buildings, fixtures and furnishings should be seen as both simple and integrated additions to this landscape which do not distract from the predominant experience as a landscaped environment of natural elements.

Buildings should be visually integrated with the landscape, minimize the difference between outdoor and indoor areas and should: (Figure 35)

- Emphasize transparency through the use of large areas of glass.
- Extend paving materials and patterns from the inside to the outdoors.
- Provide skylights as a source of natural illumination.
- · Be set into existing or newly created land forms as earth sheltered structures where possible.
- Integrate shading and semi- weather protective elements such as overhangs, trellises, arbors, and pergolas.
- Provide semi-weather protected "outdoor rooms" which can accommodate the extension of indoor programmed activities (café, displays, events etc.) to the outdoors.
- · Integrate planting in interior areas, semi-weather protected areas and on rooftops where possible.

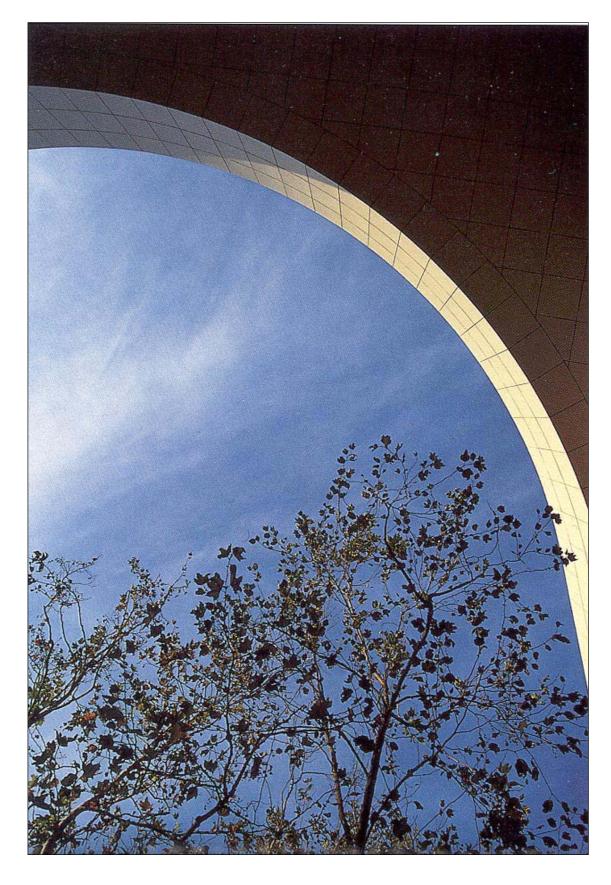


Photo 22

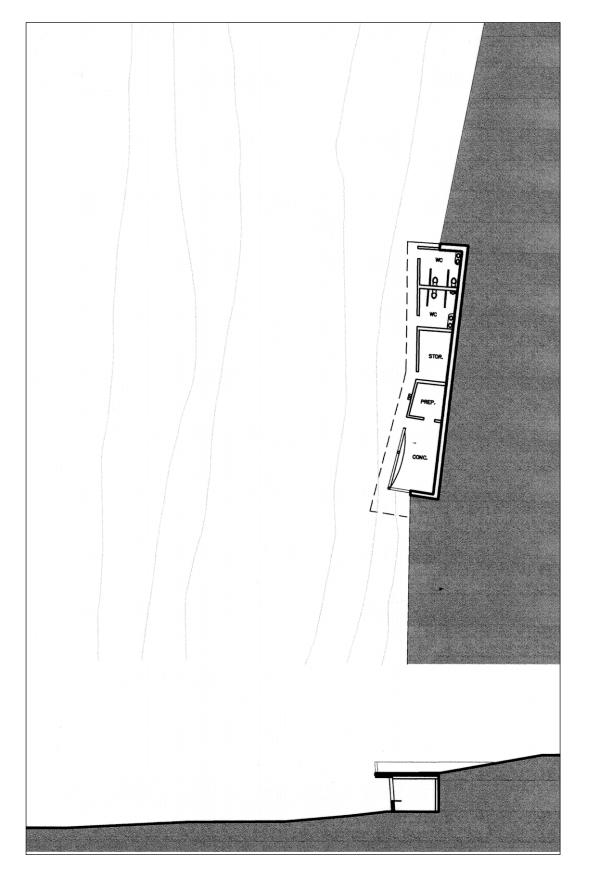


Figure 35

Buildings should be Visually Integrated with the Landscape

CITY OF WINDSOR · BROOK MCILROY PLANNING + URBAN DESIGN ·

where possible.

Elemental Design: Design can heighten one's experience of natural elements such as light, water, and wind. Each design intervention in the park should strive to work with these elements as key design considerations.

Elemental design also favors simplicity and clarity in the form of, for instance a building or a light standard, over excessive ornamentation or replication of historic styles.

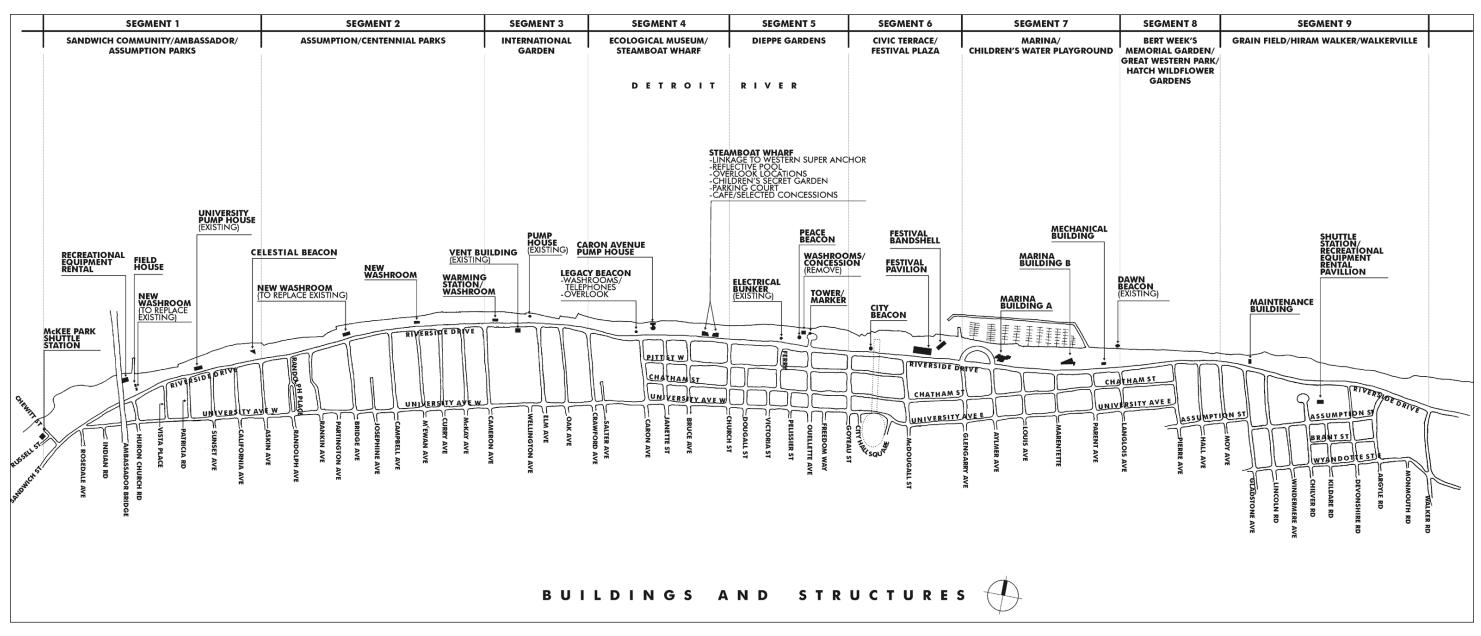
*Timeless Design:* Design of the riverfront should be timeless. It should avoid both the replication of past stylistic periods and contemporary trends that guickly become outdated. Timeless design also infers a preference for the use of natural materials or man-made materials in a relatively unadorned state. Stone, wood, metal and concrete should be used in a manner where these materials do not attempt to replicate other materials. For instance a building design which uses metal panel systems to mimic a pattern of wood siding or incorporates historic architectural elements such as cupolas or paned window systems would be inappropriate.

Character Areas: The following areas have attributes of use and history that provide guidance in the design of their respective areas of the central riverfront:

Heritage: Walkerville, CP Railway Cut and Ferry Docks. Environmental Restoration: Hatch Gardens, Great Western Park, Outdoor Ecological Gardens, and Ambassador Bridge to McKee Park. Elemental Aspects: The Five Beacons. Marine Activity: Steamboat Wharf, Marina. The Arts: Festival Plaza and the Sculpture Garden. Commemoration: Dieppe Gardens, Civic Terrace and Bert Weeks Memorial Garden.

# **CITY OF WINDSOR CENTRAL RIVERFRONT** IMPLEMENTATION PLAN

Provide rooftop landscaped terraces as viewing platforms where possible. Integrate exterior stairs and ramps to link the Riverside Drive elevation to the water's edge



#### 3.8 Buildings and Structures

The majority of the Central Riverfront should be dedicated to the enjoyment of its outdoor setting. Limited indoor areas are essential to make the riverfront safe, accessible on an all-season basis, and attractive to a wide range of the population. Indoor areas complement outdoor use of the central riverfront. (Figure 36)

It is important that the size, location and extent of buildings constructed on the Central Riverfront be restricted, and that the use of these buildings be limited to activities, which are appropriate and complimentary to the enjoyment of the setting. As a general guideline it is recommended that no more than 2% of the area of the central riverfront be dedicated to buildings. Where

**Figure 36** Building Locations



Figure 37 **Celestial Beacon** 



Figure 38 Legacy Beacon



Figure 39 Peace Beacon

revenue-generating uses (e.g. concessions) are permitted they should be small and ancillary to a primary public use. They must be designed and sited in a manner that is unobtrusive and does not compromise the overall 'public' and 'green' image of the riverfront.

Buildings

and cultural use of the riverfront.

To as great extent as possible, new structures are to be integrated into the south slope of the riverfront. The rooftops of these structures will provide public landscaped overlook areas. In this sense any land occupied by a building is "replaced" by providing new open space at the roof level.

From a qualitative perspective some indoor areas offering food, beverage and ancillary park and visitor services, such as one finds in Stanley Park, Vancouver (Ferguson Point Tea House) or Central Park, New York City (Tavern on the Green) will:

- of-town visitors;
- and seniors:
- Increase the use of the Central Riverfront in the wintertime.

#### Segment 1

- 1.0 Shuttle Station, McKee Park
- 2.0 Recreation Equipment Rental
- 3.0 Service Building
- 4.0 Washroom Pavilion
- 5.0 Celestial Beacon (Figure 37)

### Segment 2

- 1.0 Washroom (Figure 35)
- 2.0 Washroom (Figure 35)

### Segment 3

1.0 Washroom (Figure 35)

### Segment 4

- 1.0 Legacy Beacon (Figure 38)
- 2.0 Steamboat Wharf

### Segment 5

1.0 Peace Beacon (Figure 39)

# **CITY OF WINDSOR CENTRAL RIVERFRONT** IMPLEMENTATION PLAN

Buildings include all structures that accommodate or support activities related to the recreational

Broaden the range of people who will use the Central riverfront, such as the elderly and out-

Make the Central Riverfront safe at night particularly increasing park-use by families, women

1,100sf 750 sf 650 sf 1,000 sf 2,000 sf 1,000sf 1,000 sf 1,000 sf 2,000sf 9,000 sf 2,000 sf

<ul> <li>Segment 6</li> <li>1.0 City Beacon (Figure 40) (not incl. pedestrian bridge components</li> <li>2.0 Festival Pavilion</li> <li>3.0 Festival Bandshell</li> </ul>	s) 2,000 sf 2,150 sf 1,950 sf
<b>Segment 7</b> 1.0 Marina Building A including Marina Restaurant 2.0 Marina Building B with Waterplay Change Rooms	sf 10,70%9850sf
Segment 8	10,700,000 31
<ol> <li>Dawn Beacon (Figure 41) (1800's Pump House)</li> <li>Mechanical Building (Bert Weeks)</li> </ol>	1,500sf 600 sf
Segment 9 1.0 Shuttle Station	1,100sf
NEW BUILDING SUBTOTAL	50,350 sf
Existing Building To Remain	
University Pump House Caron Avenue Pump House (proposed addition) CP Ferry Docks Pump House 1800's Pump House (see Dawn Beacon above)	5,300 sf 4,200 sf 400 sf NA
EXISTING BUILDING SUMMARY	9,900sf
Total New and Existing Buildings	sf

#### Notes:

- Total Park area: 95 acres/4.14 million sf.
- Building area as a percentage of total park area: 1.6%, a maximum of 2% has been recommended to address changes that may happen over time and to accomodate any operational or maintenance requirements.

60,250

- Percentage of buildings with landscaped roof terraces: 78%
- Percentage of total park area that is accessible landscaped.
- Area including building roof terraces: 99.65%
- All of the structural works associated with the marina were part of an individual EA submitted by the City of Windsor and approved by the Minister of Environment in 1996. The City will construct the marina, as part of the Central Riverfront Implementation Plan, in accordance with the environmental terms and conditions of the Minister's approval.

#### **Urban Design Amenities** 3.9

For pedestrian comfort and to ensure the riverfront will be used and enjoyed year round, urban design amenities should be provided as consistent or thematic treatments throughout the riverfront. These amenities include lighting, seating, banners, waste receptacles, telephones, drinking fountains, safety / interpretive handrails and bike racks. Refer to sections 3.5 and 3.6 for Sign Systems and Surface Treatments respectively. The design of urban design amenities should, whether traditional or contemporary, be simple, elemental and non-obtrusive. General recommendations for riverfront urban design amenities include:



Figure 40 City Beacon

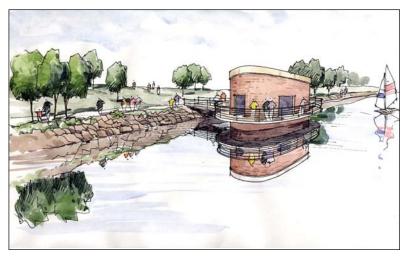


Figure 41 Dawn Beacon

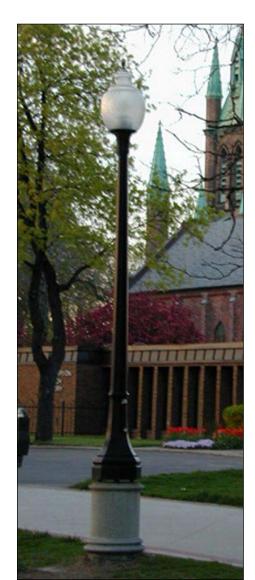


Photo 23



Photo 24

Photo 25



## **Urban Design Amenities Design Guidelines**

#### **General Recommendations**

- Placement of amenities should be well thought out to avoid visual clutter.
- Consideration of scale and location within the riverfront setting.
- Placement of elements such as lighting and signs so as not to obstruct riverfront views.
- Placement in a co-ordinated manner that does not obstruct pedestrian circulation on sidewalks, and vehicular circulation to driveways, parking, loading and service areas.
- Urban design amenities are not to be used in conjunction with private advertising.

#### **Specific Recommendations** Lighting

- Lighting to provide comfort and safety in all areas of the riverfront.
- Lighting placed along the Circulation Systems (Section 3.2) should be spaced at a consistent rhythm that will provide a minimum of 1.0 to 1.5 footcandles (7.5 lux) of light, approx. 80 feet (25%).
- Lighting placed in parking courts should provide a minimum of 1.0 footcandles (7.5 lux) of light, approx. 80 feet (25%).
- Buildings, stairs and other features are to be lit appropriately and should be evaluated on an individual case basis.
- Lighting should be of the same type throughout the riverfront, for example, high pressure sodium or metal halide.
- Free-standing light poles should be designed to allow the hanging of banners, where desired.

Lighting Condition 1: Street Lighting along Riverside Drive

Evaluate existing street lighting in terms of consistency of placement, on both north and south side of the street. Street lighting should be improved / upgraded to be more visually organized yet still provide the desired level of lighting.

Lighting Condition 2: Along the length of Riverside Drive Pedestrian Promenade

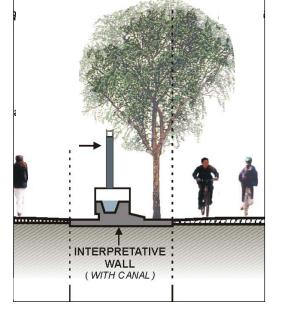
- 24)
- Where there are restrictions in the placement of new freestanding fixtures, lighting may be fixed to existing poles at appropriate heights/clearances.

Lighting Condition 3: Along the length of the Riverwalk, Recreationway and Connector Trail A simplified 15' (4.5m) light standard design based on the historic City of Windsor pedestrian scale standard recommended for Riverside Drive Pedestrian Promenade. (Photo 25) The new standard should resemble the old standard in scale, form and colour.

Lighting Condition 4: Lighting Incorporated into Special Features

- In plaza areas, to reduce visual clutter, lighting should be integrated with special features, for example, the Interpretive Wall, plaza seating or retaining walls.
- A simplified 15' (4.5m) light standard design, or standard recommended for Condition 3, should incorporated using an altered pole and base detail. (Figure 42)
- The Marina will have unique lighting requirements.

Figure 42 **Detail of Section** through the River Walk/ Recreationway



- Utilize the historic 15' (4.5m) City of Windsor pedestrian scale light standard. (Photos 23 and

Lighting Condtion 5: Parking areas

- Utilize a lighted bollard with up-light and down-light systems as recommended in Section 3.1.6 Parking Strategy.
- Supplement bollard lighting with simplified light standard, as recommended for Lighting Condition 3, to achieve desired lighting level.

#### <u>Seating</u>

- Seating design to be comfortable, sturdy, low maintenance and of a design that will not become 'dated'.
- Seating should be of a scale and geometry that is appropriate for each location.
- Should be universally accessible.
- Installed in appropriate locations where they will be beneficial to park visitors, for example, in areas where there are exceptional views, where large groups may gather for long periods of time or where rest stops may be desired.

#### Seating Condition 1: Free Standing Benches

- · Located along the length of the Riverwalk and Recreationway at appropriate intervals.
- · Located along the Riverside Drive Pedestrian Promenade at appropriate intervals.
- All benches to be of the same manufacturer, colors, materials and design. (Photos 26 and 27)
- · Located within plaza and play areas where appropriate.
- High quality benches constructed of wood and steel or wrought iron, permanently placed on concrete pavement or on a stamped concrete pad.
- Free-standing bench seating areas to be place every 30 meters (100 feet) on pedestrian oriented circulation systems.

#### Seating Condition 2: Interpretive Wall

- Seating wall built within buffer between the Riverwalk and the Recreationway between Caron Avenue and Parent Avenue (Figure 43)
- · Concrete seatwall with wooden seating surface.
- · Interpretive elements to be incorporated as informative panels, insets or engravings in the concrete surface.

#### Seating Condition 3: Plaza Seating

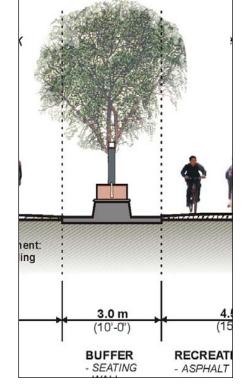
- A concrete seat wall for large gatherings placed at the perimeter of civic plaza areas including Steamboat Wharf, Civic Terrace and Festival Plaza. (Photo 28)
- · Wooden or metal seat insets for comfort and drainage of precipitation.

#### <u>Banners</u>

- A "banner" program developed along Riverside Drive to create a sense of identity within the Central Riverfront (Photo 29)
- Banners to identify local cultural, arts, recreational or seasonal events, designed with a distinct colour and pattern for the Central Riverfront. (Figure 44)
- Festival Plaza to distinguish as a high activity area and provide an opportunity for festivals to identify their event.
- Banners are to be incorporated into the proposed light poles.

#### Waste Receptacles

- Waste and recycling receptacles should be placed discretely throughout the riverfront in conjunction with seating areas
- Waste receptacles are to be high capacity, self compacting, below grade refuse containers with air and water tight covers
- $\cdot$   $\,$  All containers are to be of the same manufacturer, colour, materials and design
- · Group regular waste and recycling waste containers together
- · Locate at:
  - Pedestrian entrances.
  - Parking courts.



#### **Figure 43** Detail of River Walk/Recreationway Seating Wall Buffer







Photo 26

Photo 27

Photo 28

MBTW GROUP

Figure 44 **Riverside** Drive Banner Program

Photo 29



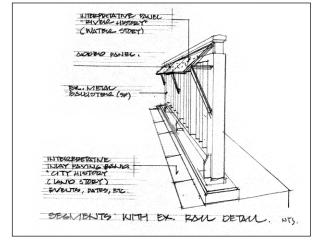


Figure 45 River Walk Handrail with Interpretative Panel



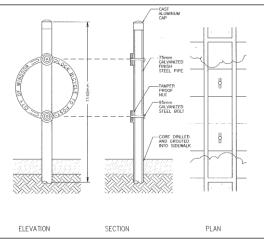


Figure 46 **Detail: Typical Bike Rack** 



Photo 30

#### Play Areas.

- Washrooms.
- At the edge of key destinations.
- At regular intervals (along linear Circulation Systems: Riverside Drive Pedestrian Promenade, Riverwalk and Recreationway as warranted).
- Plaza areas.

#### **Telephones**

- Regular and emergency telephones should be provided throughout the riverfront.
- Telephones can be free-standing or can be wall mounted, associated with buildings or facilities.

#### **Drinking Fountains**

- Drinking fountains should be placed discretely throughout the riverfront.
- Drinking fountains are to be high quality and requires low levels of maintenance.
- All drinking fountains are to be of the same manufacturer, colour, materials and design.
- All drinking fountains are to be universally accessible.
- Drinking fountains can be free-standing or can be wall mounted, associated with buildings or facilities.

#### Safety / Interpretive Handrails

- Located along the river's edge where the riverbank topography changes abruptly and may pose safety issues.
- Should be of consistent design throughout entire length.
- Incorporates river oriented interpretive elements in angled handrail feature.
- Incorporates land oriented interpretive elements in paving band at handrail base. (Figure 45)

#### **Bike Racks**

- Bike racks should be placed discretely but inhighly active areas throughout the riverfront.
- All bike racks are to be of the same manufacturer, colour, materials and design.
- Bike racks are to be of a good quality, single locking ring and post design. The number and configuration of bike racks at any location should be evaluated on an individual case basis. (Figure 46) Locate at:
  - Pedestrian entrances.
  - Parking courts.
  - Play Areas.
  - Washrooms.
  - At the edge of key destinations.
  - At circulation system intersections. Where the Riverside Drive Pedestrian Promenade, the Riverwalk, Recreationway and Connector Trails may intersect.
  - Plaza areas.

#### **Barrier-Free Design**

- Direct, well-lit and barrier free pedestrian walkways should be provided between facilities, parking courts, buildings and structures throughout the central riverfront.
- Seating areas should be provided in locations adjacent to a barrier-free path of travel.
- Curb ramps should be provided at all walkways where they intersect with streets or driveways for barrier-free accessibility. (Photo 30)

#### 3.10 Service Infrastructure

Service infrastructure refers to above ground utility boxes, vaults and service boxes and underground utilities. The placement of above ground facilities should be done in a co-ordinated manner to minimize their visual impact.

The Public Works Department is the maintenance and operating authority for significant existing infrastructure on or adjacent to the riverfront and for future infrastructure identified in Section 3.12. Clear access to this infrastructure must be maintained.

#### 3.11 Pollution Control: Retention Treatment Basin (RTB) Sites

Council Resolution 754/99 has approved the *Windsor Riverfront Pollution Control Planning Study* prepared by Stantec Consulting Limited with technical input and directions from both a Technical Steering Committee and Executive Committee composed of representatives from Environment Canada, the Ontario Ministry of the Environment and the City of Windsor Public Works Department.

The preferred alternative of the Pollution Control Planning Study to satisfy provincial regulatory guidelines for Combined Sewer Overflow (CSO) control and to reduce pollutant loadings to the Detroit River is:

(a) the construction of three Retention-Treatment Basins along the Riverfront; and

(b) tunnel storage downstream of Caron Avenue, detailed below in Subsections 3.11(a) and 3.11(b), respectively.

In the preparation of the *Windsor Riverfront Pollution Control Planning Study*, the Municipal Class Environmental Assessment (EA) Planning and Design Process, **(See Figure 3)** including public consultation, was used as a model in anticipation of the same process being used for approval of the preferred alternative.

#### 3.11(a) Retention-Treatment Basins

Three RTB's will be constructed at the following sites along the Riverfront, in approximate sizes as noted, to control CSO's upstream of Caron Avenue:

- · West of Hiram Walker's (7,200 cu. metres).
- At the proposed marina site between Parent Avenue and Glengarry Avenue (12,000 cu. metres).
- At the Caron Avenue Pumping Station (5,000 cu. metres).

## Service Infrastructure Design Guidelines

be:

- or within strategic view corridors.
- including low shrubs or floral gardens.
- Easy to access for service or maintenance.

The Riverfront Interceptor Sewer runs the distance of the Central Riverfront. It is crossed by a number of sewer outfalls that discharge directly into the river. The location, condition and potential for replacement of these underground utilities should be considered when designing the surface development.

#### **RTB Design Guidelines**

The sizing and location of these RTB's will be the subject of a detailed assessment still to be carried out (scheduled for the latter half of 2000). A certain amount of flexibility in the design and proportion of the RTB's allows them to be located within the proposed landscape treatments. Generally, the RTB's should be located in open space areas or beneath surface parking lots, away from riverfront buildings where foundations would interfere with the RTB placement and service access.

Locations and volumes are conceptual (from west to east):

- pipe paralleling the Riverfront Interceptor Sewer.
- 5,000 cubic metres.
- Volume necessary is 12,000 cubic metres.

These recommended locations are conceptual and represent how the RTB's could fit within the context of the Central Riverfront Implementation Plan. The technical feasibility, environmental considerations and cost implications will be included in the upcoming ESR and Functional Design Report for the RTB's.

# **CITY OF WINDSOR CENTRAL RIVERFRONT** IMPLEMENTATION PLAN

Service infrastructure including above ground utility boxes, vaults and service boxes should

Located in unobtrusive areas to reduce their visual and physical impact. They should not be located at street intersections, on pathways, within public plazas or terraces,

Where suitable, screened from public view through the use of landscape elements

Utility boxes are to be coloured to blend with the riverfront landscape setting.

Segment 1,2,3, 4: Tunnel Storage Option - downstream of Caron Avenue Pumping Station consisting of approximately 4.8 kilometres of 2.5 metre diameter

Segment 4: RTB, could be located beneath the meadow planting between the Ecological Museum and the Caron Avenue Pump Station. Volume necessary is

Segment 7: RTB, could be located to the west of the Children's Water Play area.

Segment 9: RTB, could be located beneath the Urban Infill Area at Walkerville or adjacent to Riverside Drive. Volume necessary is 7,200 cubic metres.

The intent of the RTB's is to retain combined sewer flows, treat and release the effluent to the Detroit River. The proposed RTB's will be underground; consideration will be given to constructing the structure adjacent to the River to act in place of a sheet pile structure. As noted, the Municipal Class EA Planning and Design Process will be used for approval of this preferred alternative. Integration with the Central Riverfront Implementation Plan will be maintained throughout the design and construction of the RTB's.

3.11(b) Tunnel Storage Downstream of Caron Avenue

Tunnel storage will be constructed downstream of Caron Avenue consisting of approximately 4.8 km of 2.5 m diameter pipe paralleling the Riverfront Interceptor Sewer.

Implementation of tunnel storage will be a function of several other factors which must be completed and monitored prior to construction of the tunnel portion. These would include the construction of the RTB's, the upgrade of the Lou Romano Water Reclamation Plant, and a reanalysis of storage requirements based on the conditions at that time.

As noted, the municipal Class EA Planning and Design process will be used for approval of this preferred alternative.

Integration with the Central Riverfront Implementation Plan will be maintained throughout the design and construction of the tunnel storage facility.

#### 3. 12 Monuments and Sculpture

A strategy for placement of monuments and sculpture is critical to promote meaningful examples of public art and commemorative elements throughout the Central Riverfront. For the acceptance and placement of sculptures in the Windsor Sculpture Garden a specific Committee has been established. The Technical Review Committee will review other applications for the placement of sculpture and/or monuments within the riverfront. (Photos 31 and 32)

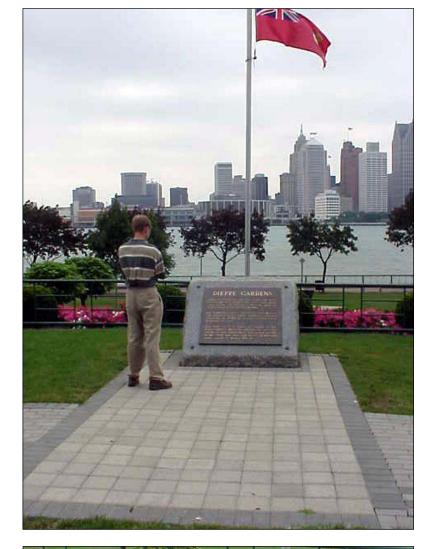




Photo 31

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Photo 33





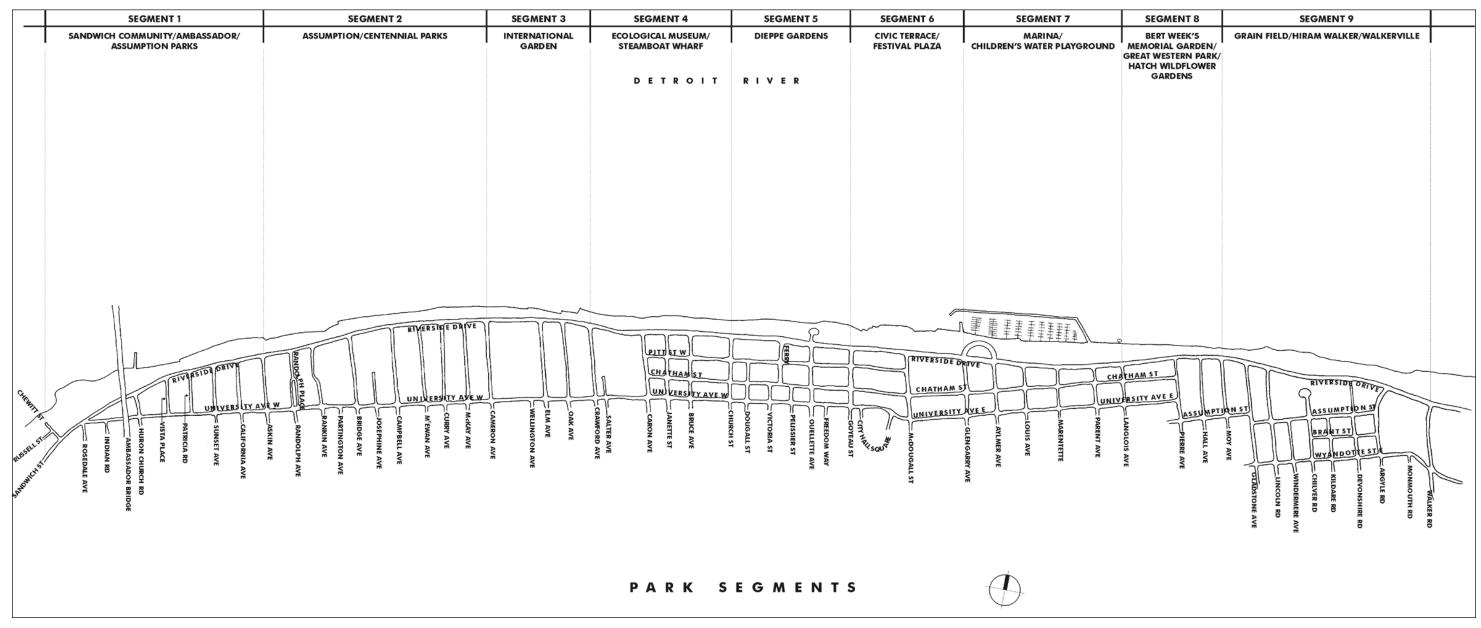
Photo 35

Photo 34

# **Monuments and Sculpture Design Guidelines**

- The Sculpture or monument should be: .
- .
- children (Photo 33).
- Constructed of high quality materials suitable to the riverfront's year round conditions and climate (Photos 34 and 35).
- Monuments should be expressive of community values and commemorate the admirable efforts of groups or individuals associated with the City as citizens, employees or volunteers and have relevance to the riverfront.
- . the riverfront be prepared.

- Thematically or symbolically relevant to the Central Riverfront.
- Historically, culturally or ecologically themed in relation to the setting.
- Inspiring in its expression and suitable for audiences of all ages including young
- CR 155/2000 recommended that a formal policy for monuments and memorials on



#### Figure 47 Windsor Central Riverfront Park Segments

### **4.0 RIVERFRONT SEGMENTS**

To clarify the multiple riverfront systems and elements, the entire Central Riverfront is described as 9 individual segments beginning in the west at McKee Park, and ending at the east at Hiram Walker and Walkerville (Figure 47). The Riverfront Segments each contain descriptions of the major elements and destinations. The context, symbolic and thematic potential and proposed use for these elements is followed by the general and specific recommendations. Finally, the status of the structural works in these park segments under the Canadian and Ontario EAActs is discussed, outlining the work which has been done to date and the work which is still outstanding

to comply with these Acts and the Municipal Class EA's. As a conclusion to this section, a table entitled Potential Environmental Effects Associated with the Central Riverfront is provided which:

- identifies the approval process to be addressed; and

# **CITY OF WINDSOR CENTRAL RIVERFRONT** IMPLEMENTATION PLAN

outlines the outstanding environmental issues which need to be addressed;

provides preliminary suggestions on how those environmental issues can be mitigated.

# 4.1 Segment 1, West Anchor: Sandwich Community; McKee, Ambassador and Assumption Parks (Chewitt Street to Askin Avenue)

#### Context

The West riverfront anchor includes the Sandwich Community; McKee Ambassador and Assumption Parks. (Figure 48)

Segment 1 represents the Central Riverfront's western anchor and gateway, emphasized by the presence of the Ambassador Bridge built in 1929 between Windsor and Detroit. (Photos 36 and 37) Assumption Park south of Riverside Drive is well treed and has a neighbourhood park setting separate from the riverfront. This park has been historically designated for the landforms (e.g. original creek bed formations) that are still evident today near the corner of Huron Church Road and University Avenue.

#### **General Recommendations**

- · Symbolic international gateway from Detroit and the United States.
- Ambassador Bridge provides a visual anchor to the west end of the Central Riverfront.
- The Celestial Beacon and Sculpture Garden, plaza and other elements provide a setting for the enjoyment and contemplation of:
  - Sunsets.
  - Sculptural works of art.
  - The Ambassador Bridge.
- Astronomical patterns.
- Existing and proposed trails and walkways provide access to the Celestial Beacon, Sculpture Garden, washrooms, parking and a terraced assembly plaza east of the Ambassador Bridge.
- · Access to parking underneath and west of the Ambassador Bridge .
- The non-motorized boat launch and the existing beach are to be enhanced.
- Recreationway and walkway connections are proposed west to McKee Park where parking, facilities for both non-motorized and motorized boats exist, washrooms and connection to a shuttle service station is recommended.

#### Specific Recommendations (west to east)

Sandwich Entrance and McKee Park:

- Trail head location.
- · Shuttle Service western terminus.
- Existing park, parking lot and boat launch facilities to be maintained and enhanced.
- · Trail connection via easements along the river to Ambassador Bridge.

Ambassador Bridge Parking Court/Recreational Equipment Rental/Non-motorized Boat Launch:

- A 28+/- car parking court underneath the Ambassador Bridge providing parking at the western anchor, the existing beach and non-motorized boat launch.
- Parking lot access from Riverside Drive at the foot of Huron Church Road.
- An Equipment Rental Pavilion at the north east edge of the parking lot for recreational equipment rental including bicycles, rollerblades, non-motorized boats (e.g. kayaks, canoes).

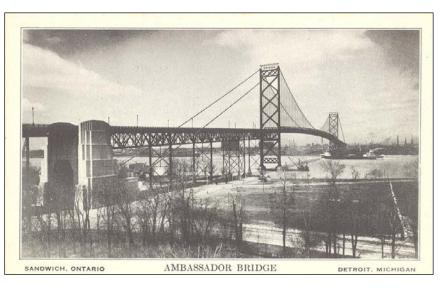






Photo 36

Photo 37

Photo 38

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# **SEGMENT 1**

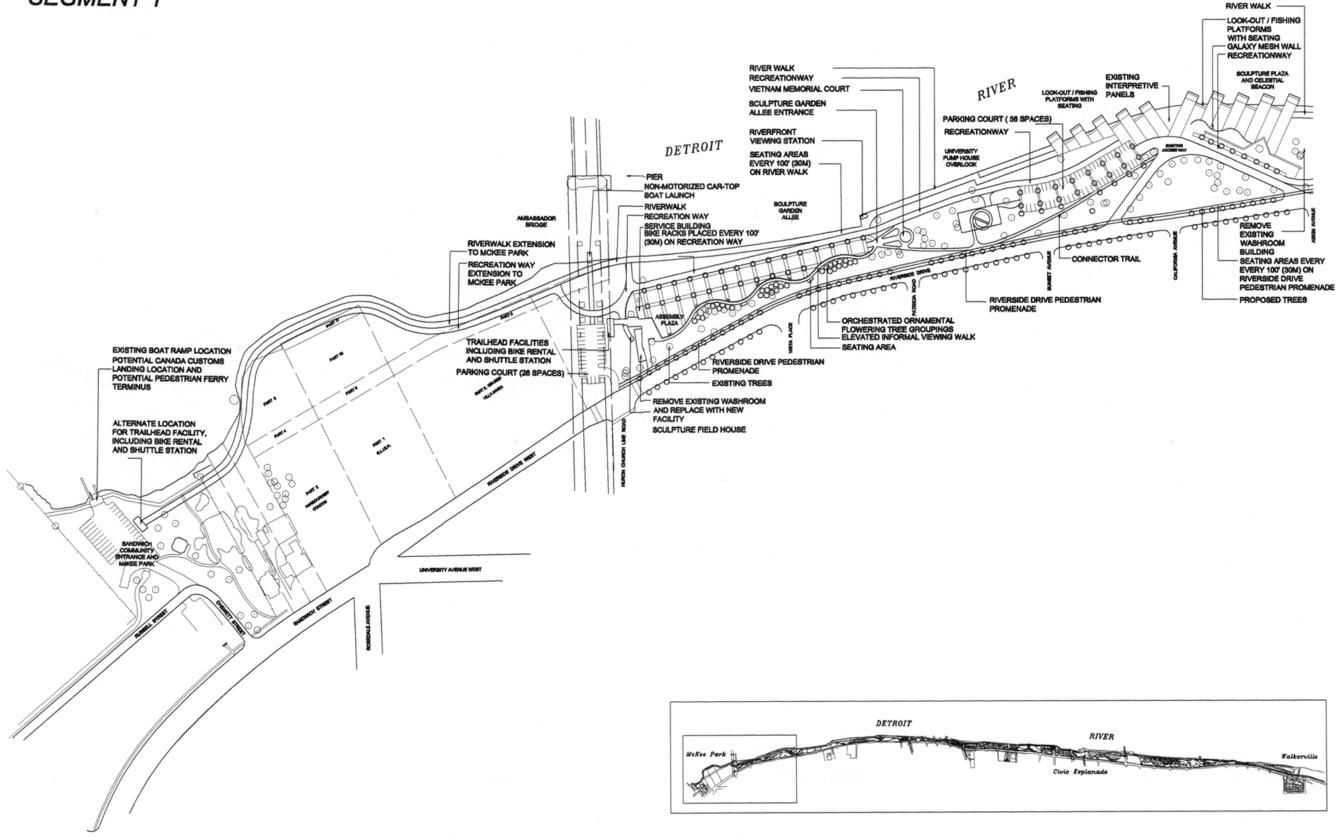




Photo 39

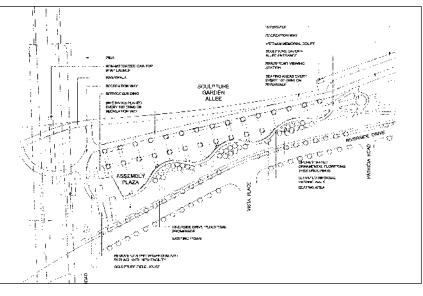


Figure 49



investigation.

#### Assembly Plaza

- Location for children's and adults' outdoor arts. (Photo 38)
- (Photo 39)
- paving.
- creative arts

Service Building

Washroom

#### Sculpture Garden Allee

The sculpture garden extends east from Ambassador Bridge to the International Gardens. (Figure

**49)** The sculpture allee extends between the assembly plaza to the University Pump House. The sculpture allee provides a more formal, landscaped setting for viewing permanent and temporary sculptural installations. The Riverwalk and Recreationway link the tree-lined sculpture allee to the Sculpture Plaza directly south of the Celestial Beacon. Specific treatments within the sculpture allee include:

- length. (Figure 50)
- through the garden. (Photo 40)
- rollerbladers. (Photo 41) Recommended surface treatments include:
  - gravel set in concrete (e.g. exposed aggregate)

  - spaced granite sets or other paving placed in sod
- Free-standing park benches placed between every other pair of trees.
- A meandering seat wall at the edge of the allee.(Figure 51)

#### Vietnam War Memorial

The existing Vietnam War memorial is to be retained as a tribute to our Canadian and American friends and family who lost their lives in this conflict.

#### Viewing and Resting Station

A steel frame sitting and shade construction placed at the east end of the Sculpture Garden allee where the river edge projects outwards. (Figure 52)

This area of the riverfront has archaeological significance and is recommended for further

Terraced assembly area created by a combination of grass and concrete retaining walls.

A hard surfaced lower assembly area including a combination of concrete and feature

Feature paving and patterned elements within the concrete should be used to delineate an assembly area and replicate themes related to the International Gateway and the

• A service building to provide power source, parks equipment and storage facility.

· Replace the existing washroom at the foot of Huron Church Road.

A formal linear landscaped sculpture garden approximately 15m wide and 200 metres in

A paved allee lined by a double row of flowering trees (pear or redbud) set approximately 12 metres apart. The ground cover and columnar enclosure of flowering trees are to signal formality of the sculptural setting and to encourage slower and more contemplative movement

Paving should be textured to discourage recreational use of the allee by cyclists and

- granite sets patterned to reflect the rhythm of tree and lighting placement

#### University Pump House

This existing structure forms part of the embankment and operates as a pump house for the University of Windsor. The pump house bridges the embankment, providing potential use as a rooftop viewing platform.

- An enhanced viewing platform on the existing rooftop of the pump house.
- Rooftop decking landscaped with hard and soft landscaping including a spiral grassed mound, allowing park users to spiral up to a higher viewing point.
- Interpretative information about the Ambassador Bridge and International Gateway, the park and the river incorporated into visual signs/displays within the handrail and panels on the rooftop.

#### **Celestial Beacon**

One of the five key Beacons, the Celestial Beacon bridges the embankment and provides an outdoor rooftop viewing platform accessible from Riverside Drive and below. In support of the passive role of the surrounding open space and sculpture gardens, the Beacon provides the opportunity to view the river from above. The Beacon enriches the contemplative experience of the park. (see Section 3.1.1). (Figures 53 and 54)

Celestial Beacon Parking Court (between Sunset and California)

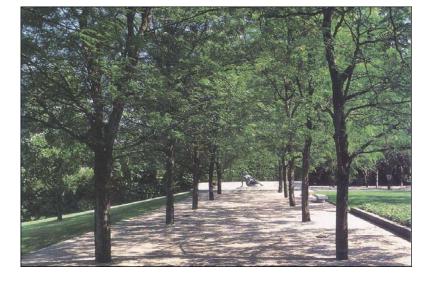
- A 50+/- car landscaped surface parking court between the University Pump House and the Celestial Beacon. Service vehicle access is provided at the west end of the parking court.
- Provides close access to major elements and activities in Segment 1. This is an adaptation of the existing two parking lots into one consolidated parking court.

Specific design treatments are described in Section 3.3, Parking Strategy.

#### **Environmental Assessment Implications**

It is proposed that a non-motorized boat launch and temporary dock facility be located under the Ambassador Bridge in Segment 1. This is an activity requiring a "Schedule B screening" under *the Municipal Class EA for Water and Wastewater Projects*. In-water construction works or the placement of fill for these facilities may require approval under the federal *Fisheries Act and Navigable Waters Protection Act* and, as such, "trigger" the application of CEAA. In the screening consultations the City will need to conduct for this facility, the City should contact the Environmental Policy, Planning and Assessment Division of the Great Lakes and Corporate Affairs Branch, Environment Canada and the Essex Region Conservation Authority. Generally, if temporary/ floating docks are used, there are minimal environmental effects to fish habitat and water flows.

In Segment 1 of the Central Riverfront, there are no other outstanding EA requirements to comply with, provided that the proposed parking facilities, new road access and landscaping for these road facilities is less than \$6 million. Beginning in 1986, the Essex Region Conservation Authority (ERCA) and the City undertook extensive improvements to the seawall in Segment 1 and Segment 2 extending from Huron Church Road in the west to Cameron Avenue in the east. This work was done in three phases for which ESR's were prepared, in accordance with the Conservation Authorities of Ontario's *Class Environmental Assessment for Water Management Structures,* and is now complete.





rigure

Photo 40



# CITY OF WINDSOR CENTRAL RIVERFRONT IMPLEMENTATION PLAN

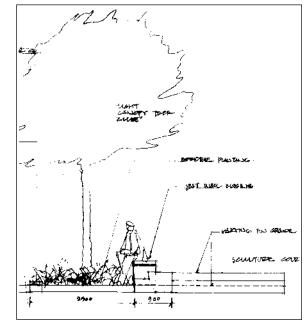
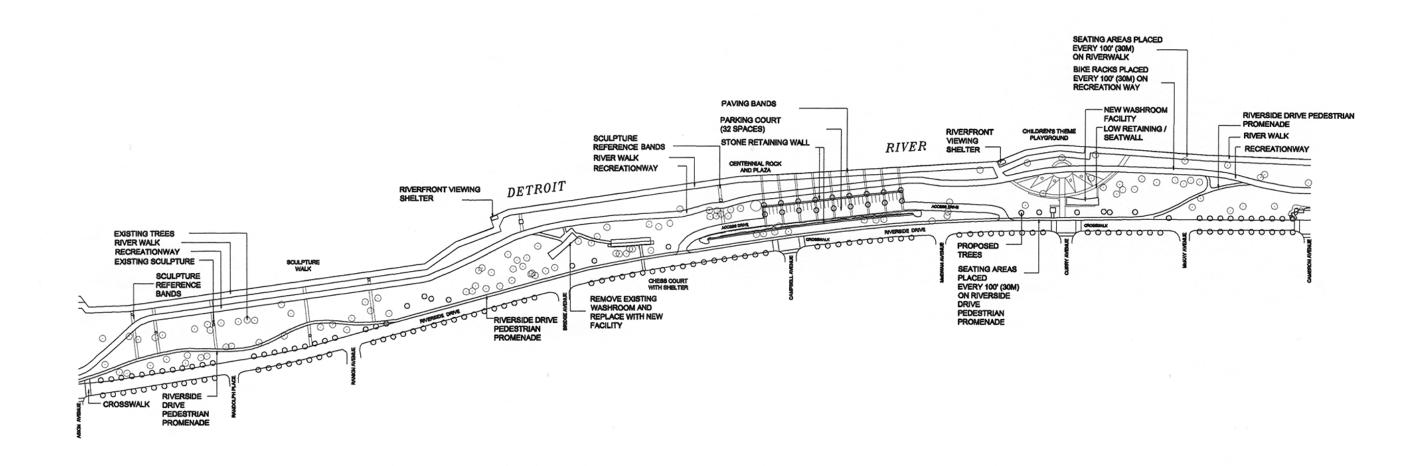


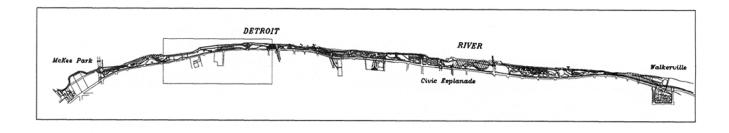
Figure 51

Figure 52



# SEGMENT 2





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#### Segment 2: Centennial Park (Askin Avenue to Cameron Avenue) 4.2

#### Context:

Segment 2 provides linkage between the Celestial Beacon and the International Gardens and provides a passive recreational use area that incorporates the existing sculpture garden, trails and landscaping. (Figure 55)

#### **General Recommendations**

- Existing sculptures encourage art appreciation.
- for all ages.

- on portion of existing parking lot.
- main walkway and trail systems along riverfront.

### Specific Recommendations (west to east)

Sculpture Walk

- <sup>3</sup>/<sub>4</sub> of a mile (1.3 km). (Photo 42)
- Walk, respectively. (Photo 43)
- description of the sculpture.

### Chess/Checkers Tables

- Introduction of a new overhead trellis structure for shade.
- Constructed on the existing platform, overlooks river. (Photo 44)
- Provides direct access to Riverside Drive.

### Parking Court

- 32+/- car parking area (an adaptation of the existing parking lot).
- Provides access to walkways and children's play area.

### Washrooms

court (to the west).

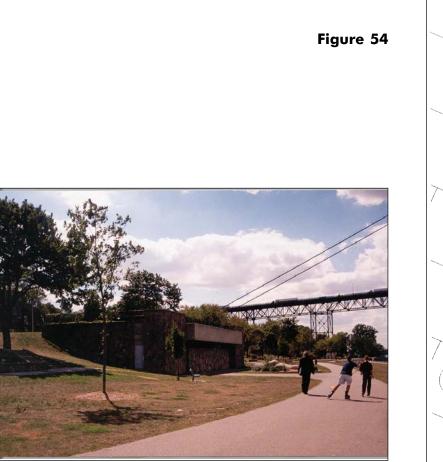


Photo 41





Provides setting for passive activities including picnicking, painting and sketching. Children's play areas, and fishing piers provide potential to promote family oriented activities

Redefinition of parking areas to further reinforce the riverfront setting.

Provide pedestrian access through and within the site on existing and proposed walkways. Vehicles enter site off Riverside Drive on an existing access drive, parking area constructed

Children's play area and parking court linked with connector trails that provide access to

Introduction of board games area and trellis structure with access from trails and walkways.

Sculpture walk spans from the Celestial Beacon to the International Gardens, approximately

Utilization of existing walkway and promenade, to become part of Recreationway and River

Existing sculptures linked to Recreationway and River Walk with a series of hard surfaced (coloured or stamped concrete) or planted areas that will provide an organizing element for the existing sculptures (noted as sculpture reference bands on drawings). (Photo 44) Inscripted paving panels will be installed near the base of each sculpture that will provide a

Incorporates integrated checker board / chess board tables with seating.

Access from Riverside Drive using existing driveway between Campbell and Bridge Avenue.

Existing restrooms will be replaced with upgraded facilities located adjacent to the parking

Children's Theme Play Area

- A new theme children's play approximately 60 x100 feet (20 x 30 meters).
- Age groups 2 to 5 and 5 to 12.
- The play area will have a theme that relates to the Celestial Beacon, for example, the theme could be based on the universe, astronomy, diversity or similar themes.
- New washroom building to be immediately adjacent to this area.

#### **Fishing Pier**

- Fishing to be maintained on pier between children's play area and International Garden.
- Fishing activities to be concentrated into "fishing stations" that are spaced at 15 meter (50 feet) intervals along pier.
- Fishing Stations to be 3 x 6 meter (10 x 20 feet) areas defined by handrails with elbow-rests. Park benches to be provided at each station (see Section 3).
- Story-telling and interpretive opportunities.

#### **Environmental Assessment Implications**

There are no outstanding EA implications or compliance issues for this segment of the park.

#### 4.3 Segment 3: International Garden (Cameron Avenue to Crawford Avenue)

#### Context

Segment 3 includes the International Garden, Meadow Planting and the former C.P. Ferry Docks. (Figure 56)

This segment represents a significant destination feature linking the neighbourhoods south of Riverside Drive to the Central Riverfront.

#### **General Recommendations**

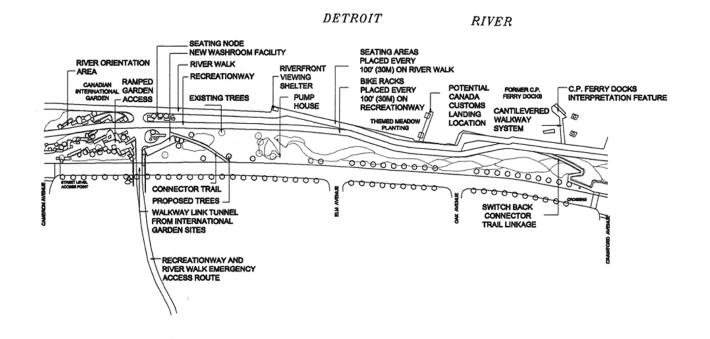
- Physical linkage of neighbourhoods south of Riverside Drive to the riverfront via a new underpass under Riverside Drive.
- Potential to create terraced symbolic "Canadian" garden on slope at base of Cameron Avenue and Riverside Drive. Symbolizes the unique Canadian locale as an entrance to the International Gardens from the Detroit River, an international waterway.
- Possible wind/water pump to feed water features in International Gardens.
- Former C.P. Ferry docks provide opportunity for interpretive elements such as information panels and displays linked by a cantilevered walkway system.
- Ferry landing area potential location for pedestrian ferry docking facilities and Canada Customs location for visitors entering Canada.
- Pedestrian access through site on River Walk, Recreationway, and Connector Trails linking garden areas to Riverside Drive.
- River Walk to be accessible from Riverside Drive from the pedestrian crossing, overlook and ramp at Crawford Avenue.

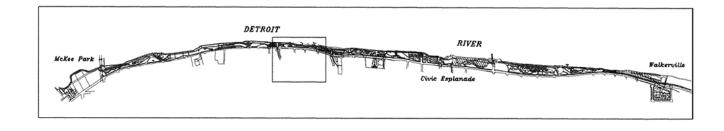




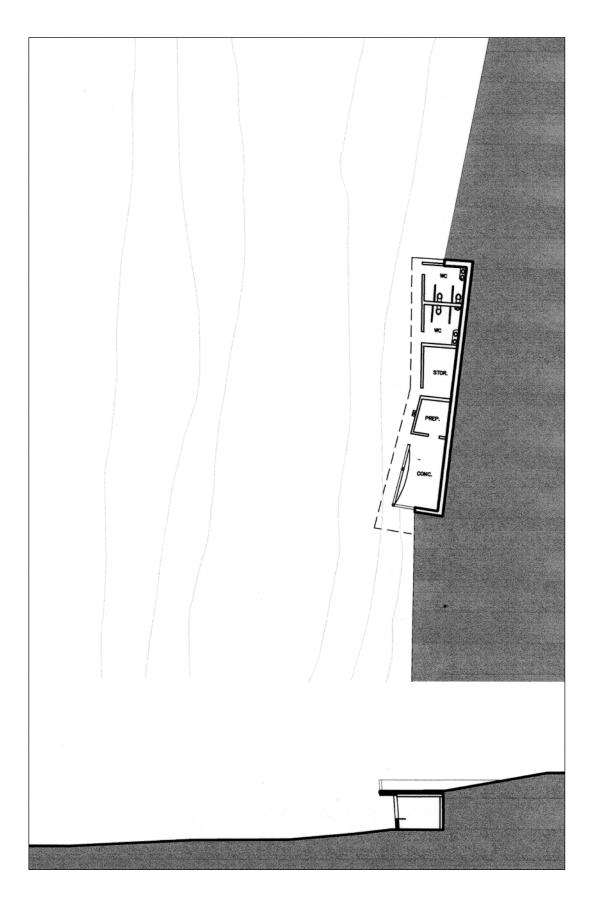
Photo 44

# **SEGMENT 3**





CITY OF WINDSOR **CENTRAL RIVERFRONT** IMPLEMENTATION PLAN



#### Figure 57 Washroom: Plan and Section

#### Specific Recommendations (west to east)

International Gardens (south of Riverside Drive) The conceptual design prepared and adopted by Council in 1997 calls for the City to become the owner of the surface rights above the rail tunnel. The area is to be developed with a linking trail that will extend back to Elliott Street (south of Wyandotte Street). The remainder of the "railway cut" is to be developed as a series of gardens that pay tribute to the Twin Cities of Windsor. Thus a Chinese, Japanese, Italian and other gardens will meet the trail at certain locations as it leads to the Detroit River. Development of a new pedestrian underpass will provide direct connection under Riverside Drive. (underpasses at University and Wyandotte are intended to be developed).

#### Washrooms

- . Garden adjacent to the underpass. (Figure 57)
- Emergency telephone service is to be provided.

"Canadian" Garden, Trails and Viewing Points

- switch-back garden trail of varying widths. (Photo 45)
- include handrails.
- information. (Photo 46)
- by seating areas.

#### Parking Court

- Drive.
- Access to Riverfront along trail in International Gardens.

#### Themed Meadow Planting

- Covers approximately 4200 square meters (4500 square yards).
- explain planting.
- Seasonal display of flowers, seed heads and fall colour.
- ramp and will become part of the Ecological Garden foreground.

#### Former C.P. Ferry Docks

- Existing piers to be enhanced with sculptures and lanterns.

New washroom facilities are to built into the existing slope to the east of the International

The "Canadian" Garden is conceived as a series of terraced outdoor rooms linked by a

Garden trail surfacing to be asphalt paving, steps along garden path are to be cut stone and

Native plantings and natural stone work will provide opportunities for interpretive displays relating to Canadian themes, for example, famous people, historical events and educational

Positions along the route will provide opportunities for viewing points which will be identified

An area across from the base of the steps will be reserved for riverfront orientation information.

20+/- car parking area located off of Cameron Avenue along the alley south of Riverside

Carolinian/ meadow native species only, to be installed on slope north of Riverside Drive. Educational panels and viewing areas incorporated along River Walk / Recreationway to

Riverbank planting becomes wet meadow on the east side of the Crawford Avenue pedestrian

Existing docking facilities to remain, the easternmost to be used for interpretive displays which are to be accessed by a proposed cantilevered walkway system. (Figure 58)

- · Access from River Walk / Recreationway and from pedestrian overlook and ramp at the base of Crawford Avenue.
- · Possible location for a pedestrian ferry landing and Customs facility.

#### **Environmental Assessment Implications**

Segment 3 and the western half of Segment 4 of the park are on lands historically owned by Canadian Pacific (CP) and have been used for railway purposes for over 100 years. The City of Windsor only acquired these lands in 1998. Prior to the acquisition of these lands, the City retained Golder Associates to undertake an environmental site audit. (in Segment 4)

A factor, which is readily apparent in Segment 3, is the current state of the riverfront seawall. It is significantly dilapidated and requires remedial work (if not replacement), if the above-noted recreational trail uses and interpretive displays at the ferry docks are to be implemented in these segments. The construction or repair of shoreline erosion control works is an activity subject to the requirements of the *Municipal Class EA for Water and Wastewater Projects*. Following the publication and acceptance of this Central Riverfront Implementation Plan, phase 3-5 of the Municipal Class EA planning process will need to be complied with for this remedial work and an ESR prepared. The scope of this ESR should be broad enough to address the assessment and mitigation of in-water construction effects, primarily to fish habitat, water quality and flow regimes.

An approval under the federal *Fisheries Act and Navigable Waters Protection Act* may be required for remedial works to the seawall in park Segment 3. As such, the application of CEAA could be "triggered." In the ESR's preparation, the City will need to address the regulatory requirements of the Department of Fisheries and Oceans and the Coast Guard to ensure that they can undertake an environmental screening of the works which meets CEAA requirements.

# 4.4 Segment 4: Outdoor Ecological Garden and Steamboat Wharf (Crawford Avenue to Church Street)

#### Context:

Segment 4 occurs between Crawford Ave. to Church St. and includes the Outdoor Ecological Museum and Steamboat Wharf. (Figure 59)

The Segment represents opportunities for two connections underneath Riverside Drive from Outdoor Ecological Garden and Steamboat Wharf to the City Centre. The Ecological Garden provides a more naturalized park experience through the visible treatment of stormwater. The creation of a continuous pedestrian link between the Riverfront and the Caron Avenue parking lot south of Riverside Drive is a critical connection. A pedestrian connection south of Riverside Drive through the entire parcel of land can be negotiated at the time of development as the required parkland dedication. The existing Riverside Drive bridge structure is part of the original CP Railway station and should be preserved and integrated as part of the Legacy Beacon. (Photo 47)







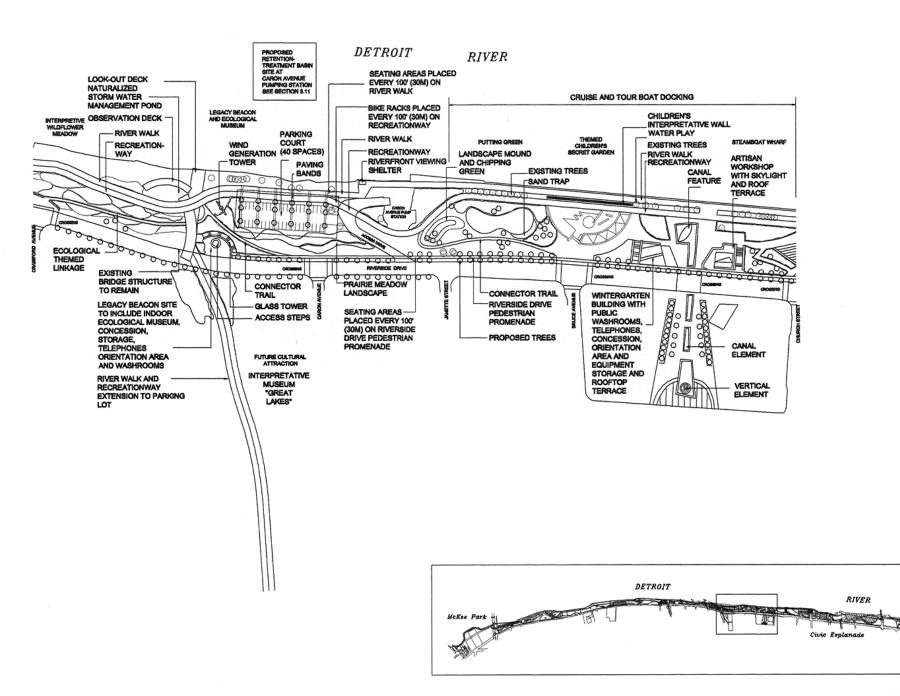
CITY OF WINDSOR CENTRAL RIVERFRONT IMPLEMENTATION PLAN

### Photo 45

Photo 46

Figure 58

**SEGMENT 4** 



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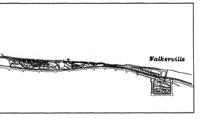


Photo 47

Photo 48



Photo 49



Figure 60

Steamboat Wharf provides indoor uses including a Wintergarden and artisans workshops within buildings built into the Riverbank slope. A Riverside Drive underpass will create a major pedestrian link between the Riverfront, the Windsor Art Gallery and the Western Super Anchor. The activity proposed in this area is more intense than other areas along the riverfront and is intended to bring back some of its historical character from the turn of the century.

#### **General Recommendations**

- access to the Art Gallery of Windsor and Western Super Anchor.
- and purification.
- this ecological demonstration site.
- across the river from early 1900's.

#### Specific Recommendations (west to east)

Naturalized Stormwater Management and Interpretative Wildflower Meadow Create a functioning demonstration landscape to assist visitors in understanding the concepts and theories behind naturalized storm water management. Partnerships with local experts and community groups in developing this concept should be explored. (Figure 60)

Primary elements include:

- 49 and 50)
- Seasonally dynamic.
- Opportunity to display unique Carolinian plants.
- investigation.

#### Legacy Beacon (see Section 3.1.2)

- C.P. railway cut and Riverside Drive. (See Figure 60)
- Earth sheltered design as environmentally sustainable structure.
- Contains washrooms, concession, interpretive information, storage.
- Rooftop landscaped terrace with seating for river viewing.
- at night.

## **CITY OF WINDSOR CENTRAL RIVERFRONT** IMPLEMENTATION PLAN

Interpret the historic significance of former C.P. Railway passage under Riverside Drive. Physical linkage to the neighbourhoods and City Centre south of Riverside Drive including

Opportunities for demonstrating sustainable development practices including stormwater management, regeneration of natural habitats, wind generated power for water movement

Opportunity to work with G.L.I.E.R.(Great Lakes Institute for Environmental Research) on

Opportunities for historical interpretive elements based on the Steamboat and Ferry travel

A series of ponds, wetlands, wetland vegetation and monitoring apparatus. (Photo 48) Educational panels and stations located where different functions and levels of the storm water management process, as it is seen in the demonstration, can be described. (Photos

Meadow is roughly 9000 square feet (836 square metres) in size.

This area of the riverfront has archeological significance and is recommended for further

A free-standing Beacon within the Outdoor Ecological Garden at the intersection of the former

Set into the existing stone retaining wall containing the original station tower entrance.

Glazed tower element provides interior building light during the day and a illuminated landmark

- Station tower access through internal or exterior stair to provide viewing opportunities to the River.
- · Interpretative panels relating to legacy of CP Railway, riverfront ferry travel, ecology and sustainable development.

#### Riverside Drive Bridge Structure

- the existing stone bridge structure should be retained.
- · access to the south can be negotiated in future development agreements.
- a cantilevered walkway to the north at Riverside Drive should be investigated to determine feasibility for continuous sidewalk access along Riverside Drive.
- The steel structure that currently blocks the view for drivers along Riverside Drive could be turned into an art work

#### Windmill

- Freestanding windmill location marks transition into City Centre. (Photo 51)
- Windmill power generation related to movement of water for treatment and purification purposes.
- · Represents potential for sustainable development practices on the riverfront.

#### Parking Court

- 36+/-car upgraded parking area located at existing parking lot east of the Outdoor Ecological Garden.
- RTB site (5,000 cubic metres).

### Caron Avenue Pumping Station

- · Future expansion.
- Opportunity to update exterior in similar style to other riverfront buildings.
- Opportunity to interpret function that building serves.

### **Putting Green**

· Will attract visitors and downtown workers. (Photo 52)

### Theme Children's Secret Garden

A garden scaled and designed for children's imaginative play. (Photo 53) Elements include:

- A small gathering area for children's plays, puppet shows and story telling.
- · Sheltered areas with seats, table and interactive devices for measuring aspects of the environment.
- 5 foot tall (1.5 metres) Topiary-hedge maze and topiary animals.
- · 'Chalk-talk' area for creative sidewalk chalk play. (Photo 54)
- Swinging baskets: swings with large woven baskets for up to four children. (Photo 55)
- · Outdoor 'fire-place' as an evening and winter gathering area for programmed events.

### Steamboat Wharf West Building: Wintergarden

- Building structure located below (under) the elevation of Riverside Drive providing access to the rooftop as a landscape terrace and viewing platform to the river.
- A 4,500 sq. ft. (418 m<sup>2</sup>) building containing horticultural displays (e.g. conservatory), public washrooms and telephones, concession, orientation and storage area.

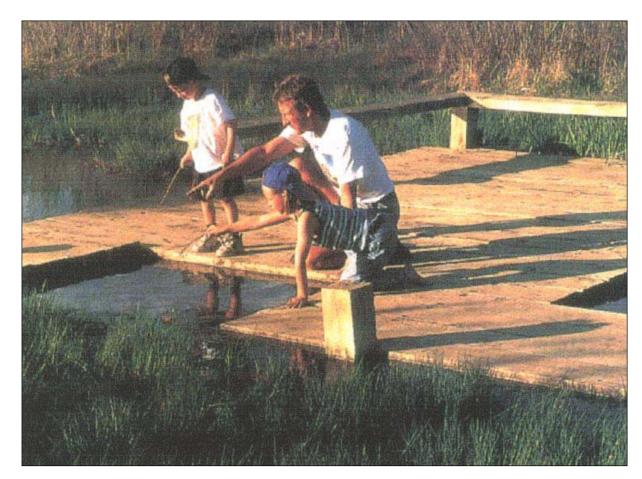




Photo 50

Photo 51

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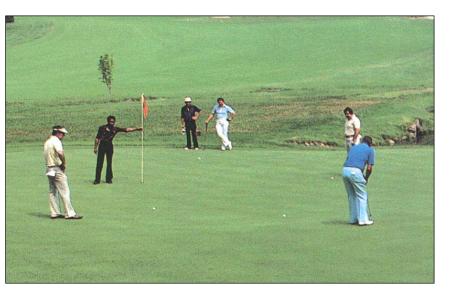


Photo 52

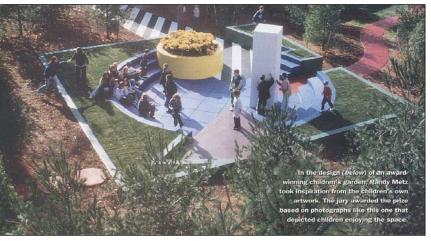




Photo 53

Photo 54

- side Drive and Bruce Street.

**Riverside Drive Pedestrian Underpass** 

and safety.

#### Canal

into the Detroit River.

Steamboat Wharf East Building: Artisan's Workshop

- viewing areas and equipment storage.
- Continuous glazed wall facing riverfront and underpass corridor.

#### Large Boat Docking

docking.

Children's Interpretive Wall Water Play

- (see Section 3.1.6, other linking elements). (Figure 61)

Fire Fighter's Memorial

A memorial to commemorate Windsor and Detroit fire fighters who have died in the line of duty. To incorporate elements that pay tribute to the Detroit fire boat and the role of water in fighting fires (e.g. drawing water from and returning it to the river). This site is significant as the historic location ferry boats that off-loaded Detroit fire apparatus in emergency aid of Windsor.

## **Environmental Assessment Implications**

The western portion of the lands in Segment 4 were purchased in 1998. Golder Associates prepared a Phase 1 and 2 Environmental Site Audit. They concluded that some contaminated soils are present on site. Further, they noted that, due to the former presence of Fort Gowie (from the War if 1812) on this site, an archeological assessment of the property should take place.

## **CITY OF WINDSOR** CENTRAL RIVERFRONT IMPLEMENTATION PLAN

Underpass to be a continuation of the site to be developed at the southeast corner of River-

Continuous glazed wall facing riverfront and underpass corridor. Plaza and canal provides outdoor seating and river views. (Photo 56)

Riverside Drive underpass provides a strategic link to indoor and outdoor year round uses. A pedestrian underpass connecting the Western Super Anchor to Steamboat Wharf. The pedestrian walkway under Riverside Drive is sloped 6% (183.0 to 178.0) and would integrate a linear cascading water element to draw people down to the river. The Wintergarden and artisan's workshops will promote visual interest

A north-south water feature linking the Western Super Anchor extends through the proposed Riverside Drive underpass and Pitt Street. A linear canal of cascading water appears to flow

Building structure located below the elevation of Riverside Drive providing access to the rooftop as a landscape terrace and viewing platform to the river and park.

A 4,500 sq. ft. (418 m<sup>2</sup>) building containing artist's studios, washrooms, studio store, studio

Along the Steamboat Wharf additional pilings should be added to accommodate large boat

River Walk Interpretive Wall at River Walk (locations as identified on the plan).

Contains a 2 ft (0.6 meter) linear water trough at 3 ft (0.9 meter) height for children's water and model boat play. The trough terminates in a 4 ft (1.2 meter) 'pool' at each end of the wall

Part of the western half of Segment 4 is the proposed site for a 5,000m<sup>3</sup> underground RTB for treating combined sewer overflows recommended in the Windsor Riverfront Pollution Control Study (see section 3.1.12). In this study, Stantec has also recommended a 10% increase in the firm capacity of the Caron Avenue Pumping Station. Each of these recommendations has been justified and documented in Stantec's work to date, but a full ESR under the Municipal Class EA for Water and Wastewater Projects for these works has not yet been completed. In the ESR which will be carried out for the Pollution Control Plan components, the environmental effects of the proposed RTB and the Caron Avenue Pumping Station expansion will be addressed.

It is proposed that a dock facility (for ferry service) be located in the central portion of Park Segment 4. This is an activity requiring a "Schedule B screening" under the Municipal Class EA for Water and Wastewater Projects (see section 3.1.11). In-water construction works or the placement of fill for these facilities may require approval under the federal Fisheries Act and Navigable Waters Protection Act and, as such, "trigger" the application of CEAA. In the screening consultations the City will need to conduct for this facility, the City should contact the Environmental Policy, Planning and Assessment Division of the Great Lakes and Corporate Affairs Branch, Environment Canada and the Essex Region Conservation Authority. Generally, if existing docks are used, there are minimal environmental effects to fish habitat and water flows.

Another factor, which is readily apparent in Segment 4 (west of Caron Avenue Pumping Station), is the current state of the riverfront seawall. It is significantly dilapidated and requires remedial work (if not replacement). The construction or repair of shoreline erosion control works is an activity subject to the requirements of the Municipal Class EA for Water and Wastewater Projects. Following the publication and acceptance of the Central Riverfront Implementation Plan, phase 3-5 of the Municipal Class EA planning process will need to be compiled with for these remedial works and an ESR prepared. The scope of this ESR should be broad enough to also address the remediation of the contaminated soil and archeological significance of this segment.

East of the Caron Avenue pumping station to Church Street, there is an old Government Dock built on piles, originally constructed in the1920's. Although replacement of this dock is not anticipated immediately, its structural integrity should be ascertained as part of the ESR for the shoreline improvement works in segment 3. If it requires replacement, any EA requirements associated with it can be done under the ESR for the segment 3 shoreline works or as a separate ESR.

#### 4.5 Segment 5: Dieppe Gardens and CNR Parking Court (Church Street to Goyeau Street)

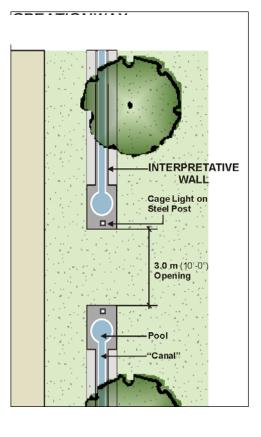
## Context:

This Segment occurs between the Ecological Garden and Railroad Heritage Area and includes the existing Dieppe Gardens, Udine Fountain and CNR parking lot. (Figure 62)

Dieppe Gardens is a unique and symbolic destination within the Central Riverfront due to the guiet and contemplative area it provides in juxtaposition to the bustle of the City Centre and the activities to east and west of it. Commemorative aspects of the Gardens should be preserved and enhanced.



Photo 55

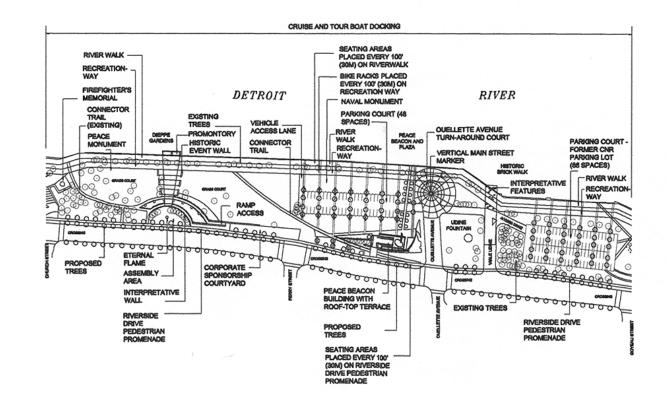


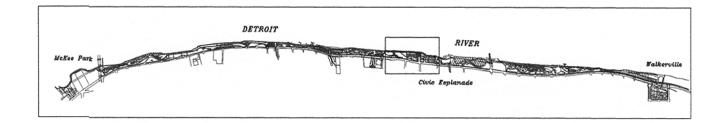






# **SEGMENT 5**





CITY OF WINDSOR CENTRAL RIVERFRONT IMPLEMENTATION PLAN



Photo 57



Photo 58

#### **General Recommendations**

- this segment. (Photo 57)
- commemoration.
- access and additional, upgraded berthing facilities.
- Provide a setting for the Peace Beacon.
- Remove the existing Cleary Welcome Pavillion.
- Link elements to River Walk and Recreationway

# Specific Recommendations

Peace Monument

part of Dieppe Gardens.

Dieppe Gardens

- (Photo 58)
- at the lower level.
- historical milestones.
- into the River Walk.

#### Naval Monument

within the gardens.

#### Corporate Sponsorship Courtyard

- imagery as an extension of the City Centre development.
- river
- Provide information on the history of industry as it relates to Windsor.
- panels.

The dominant theme will focus on the historical and educational qualities of the site. Secondary functions will support tourism activity, based on the Cruise and Tour boat dock in

Use of interpretive art to commemorate, explore the peace theme and welcome visitors. The enhancement of existing memorial features to amplify understanding. For example, the addition of engraved panels on walls or in pavement as narratives or illustrations of

Provide improved facilities for the cruise and tour boats including improved motor coach

The existing Peace Monument is to be preserved in its present location and landscape as

The existing memorial features, including the assembly area and rockery, are to be improved.

Interpretive historical event walls to line edge of concrete walkway leading to the promontory

Inscriptions to be installed on the existing retaining wall to improve the understanding of

Promontory look-out is to be developed north of the existing observatory and incorporated

Eternal flame to be added on the Observatory to signify memory, life and sacrifice of soldiers. Improved access from Riverside Drive and the introduction of planting and seating areas.

The existing Naval Monument is to be preserved in its present location and incorporated

Utilizes feature paving and patterned elements within concrete to convey formal corporate

The existing grades provide the opportunity to create the courtyard as an overlook to the

Use retaining wall bordering north edge of court to display interpretive and informational

Peace Beacon and Plaza (see Section 3.1.3 and Appendix, Peace Beacon Document) The Peace Beacon is to be built at the north west corner of Riverside Drive and Ouellette Avenue (Figures 63 and 64)

- Set into the riverfront slope.
- Earth sheltered design as environmentally sustainable structure.
- Contains washrooms, concession, storage, interpretive information related to peace, ecology and railway history.
- · Rooftop landscaped terrace with seating for river viewing.
- Skylight provides interior building light during the day and a illuminated landmark at night.

#### Parking Court and Turn-around

- A 48 +/- car parking court proposed to replace the existing lot.
- Access to parking off Riverside Drive at Ouellette Avenue extension.
- · Parking court to use a combination of stamped concrete pavement and asphalt.
- Specific parking court design treatments are proposed in Section 3.3, Parking Strategy.
- Turn-around plaza provided with 15 meter (50 feet) radius to accommodate buses and other large vehicles.
- Pedestrian access to Historic Brick Walk to the east and access to Udine Fountain to the south east.
- · Vertical marker element at base of Ouellette Avenue in the turn-around to signify location of main street within the City Centre.

#### Cruise / Tour Boat Docking

- Area along Dieppe Gardens to be upgraded for Cruise and Tour boat docking including the provision of bus loading and drop-off. (Photo 59)
- Construction of new retaining wall from Ouellette to 140 metres east of McDougall will accommodate additional tie up areas for tour boats and large vessels.

#### Udine Fountain and Rose Garden

· The existing Fountain and Rose Garden, is to be retained and improved.

#### Historic Brick Walk

- A significant section of a historic roadway exists to the east of the Udine Fountain. The brick paving area was the main departure area (enroute to the Train Station) for soldiers on their way to the war and was the place where they had the chance to say goodbye to their families. The Brick Walk will be reconditioned and expanded.
- Story-telling and interpretive features, such as inscribed paving panels and life-size bronze sculptures of troops/recruits and their families will be installed. Visitors will be encouraged to mingle and touch these sculptural representations.
- The brick walk is roughly 33x165 feet (10x50 meters) and will overlap the River Walk and Recreationway.
- It is proposed that an appropriate extract from correspondents between a Windsor soldier (for instance at Dieppe) and his family be reproduced as part of this sculptural area. This will link the visual experince to the human significance of Dieppe, and in general the sacrifice of all soldiers and their families. As such, it is intended to make "history" come alive for younger generations.

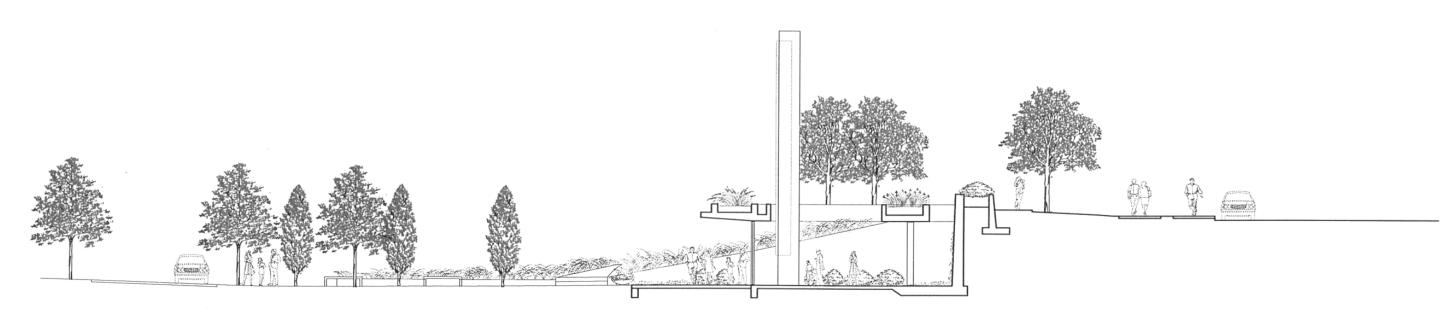




## CITY OF WINDSOR CENTRAL RIVERFRONT IMPLEMENTATION PLAN

Photo 59

Figure 63



## SECTION B-B

Figure 64

Parking Area (former CNR parking lot)

- A double bay 80 car parking area proposed on the east side of the Historic Brick Walk. Provides parking for downtown patrons as well as parking for the railroad interpretive area, Civic Terrace and Festival Plaza. (see segment 6)
- Access to parking off of Viale Udine from Riverside Drive.
- Specific parking design treatments are proposed in section 3.3, Parking Strategy.

#### **Environmental Assessment Implications**

Assuming that the parking and internal road improvements proposed for Segment 5 do not exceed \$6 million, there are no outstanding EA compliance issues to address for the implementation of segment 5 features.

Shoreline stabilization and erosion control works are required along the riverfront east of Ouellette Avenue in Segment 5, and these works require compliance with the *Class EA for Municipal Water and Wastewater Projects*. An ESR of these works and shoreline stabilization works for Segments 6 and 8 was submitted by BTS Consulting Engineers in June, 1999 to comply with

this requirement. For Segment 5, a new vertical shore wall has been recommended by BTS, except in the vicinity of the abandoned CN ferry lifts where a sloping rock revetment is recommended to preserve the historical structures. As no bump-up requests were received by the Minister of the Environment for these proposed works during the 30 day public review period of this ESR, they may proceed without any further compliance with the provincial EA requirements.

As the new vertical shore wall and sloping rock revetment in this park segment entail in-water construction works and facilitate greater tour boat access to the waterfront, approvals under the federal Fisheries Act and the Navigable Waters Protection Act are also required. Approvals under these federal statutes "trigger" the application of CEAA. A "screening" process under CEAA is underway at present, following which the shoreline works in this segment may be constructed.

#### 4.6 Segment 6: Civic Terrace, Festival Plaza (Goyeau Street to Glengarry Avenue)

#### Context:

The Civic Terrace, Festival Plaza and Festival Green are located at the foot of the Civic Esplanade between Glengarry Avenue and Goyeau Street. This site is of major significance to the riverfront as the prime location for a wide range of festivals and events. **(Figure 65)** 

#### **General Recommendations**

- The Civic Terrace is to include interpretation of the historic railway engine display and ferry lifts and explain the importance of the railway history to the City. (Figure 66) This theme can be carried over to the children's playground and kinetic display.
- The Festival Green is sited immediately west of the Festival Plaza providing overflow opportunities for larger festival and performance attractions as well as a unique "common green" within the central portion of the park. Festival Green can accommodate other uses during the week such as picnicking, art/sculpture or other displays, etc.
- The Festival Plaza will provide a flexible venue site for diverse programming of year –round festivals and performances. Located immediately north of the Windsor Casino, the sloped grade will accommodate a plaza with a covered bandshell.

#### Specific Recommendations (west to east)

#### Railway Engine 5588 and Ferry Lifts Interpretation

- Railway history interpretation through explanation of the features on site including the engine 5588 and the ferry lifts. As detailed in the EDAW report this area is to be where the railways significance to the development of Windsor is interpreted using the features on site and the historical foundations of the railway station.
- New paving and circulation to accommodate a minimum 3.0 meter (10.0 feet) zone around the display.
- The existing ferry lifts can retrofitted for use as fishing piers. (Photo 60)

#### Civic Terrace/Rotary Plaza

- · A barrier-free ramp and pair of stairs to Civic Plaza from Goyeau Street.
- Maintain current location of Rotary Plaza, but raise to elevation of Riverside Drive to provide overlook.
- Terraced landscaping on riverfront slope between Rotary Plaza and the City Beacon.
- · Provide space for traveling sculpture displays.

#### Civic Esplanade

The Civic Esplanade is made up of the four blocks between City Hall Square and the riverfront along the former Windsor Avenue right-of-way. City Hall Square has been redeveloped with a Heritage Garden and other civic installations related to the function of City Hall. The block between University and Chatham Street is being developed as the Charles J. Clark Square an outdoor skating rink that can be used for other gatherings in the summer months. Adjacent to the Joint Justice Facility the Esplanade will be developed as a plaza. The final block between Pitt and Riverside Drive is currently being redeveloped as The Civic Green, the base for the bridge over Riverside Drive. The plaque and monument to the Underground Railroad is to be located in either the Civic Green or Joint Justice Plaza.



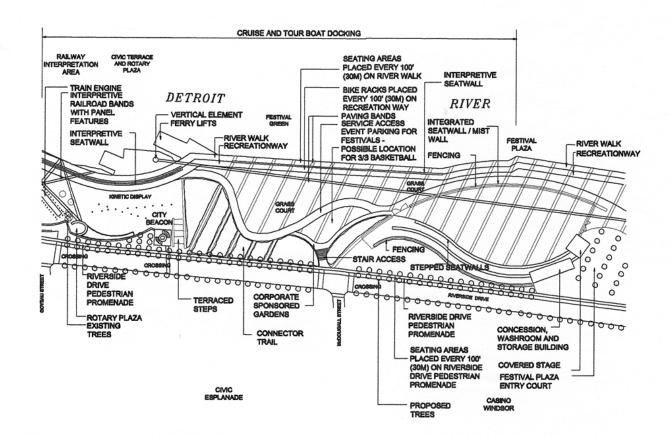


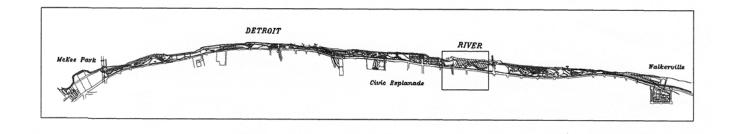
### CITY OF WINDSOR CENTRAL RIVERFRONT IMPLEMENTATION PLAN

Figure 66

Photo 60

# **SEGMENT 6**





80

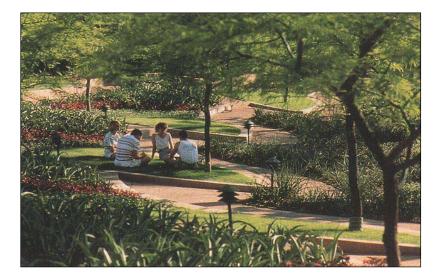


Photo 61



Photo 64

Photo 63



Photo 62

- Sloped ramp @ 8.9% from Pitt Street (elevation 182.5) to 16 feet (5 meters) above Riverside Drive.
- Elevator in City Beacon.

City Beacon see Section 3.1.4

- Set into the riverfront slope.
- Earth sheltered design as environmentally sustainable structure.
- Contains washrooms, concession, storage, interpretive information related to the arts. Rooftop landscaped terrace with seating for river viewing will act as a landing for the pedestrian
- bridae.
- Skylight provides interior building light during the day and a illuminated landmark at night.

#### Kinetic Display

#### Corporate Sponsored Gardens

- Esplanade terraced steps link to Corporate Sponsored Gardens.
- Garden segments are defined as a sweeping border between the upper Riverside Drive Promenade and the lower Festival Green. (e.g. floral mosaic displays).
- An access walk from Riverside Drive defines each garden segment.
- Windsor.
- Emergency and vendor access to west end of festival green.

#### Festival Green

#### Festival Plaza

- Festival Plaza provides approximately 7,200 sm (77,500 sf) of open paved space that can accommodate a variety of uses from formal performances to festivals or fairs. (Photo 63) It includes a covered stage, a separate building for concession, storage and washrooms.
- Informal seating areas include the stepped or terraced embankment and trellis and the integrated seat wall/mist wall that will provide seating to approximately 1,100 people. (Photo 64 - see Appendix G: Festival Plaza Occupancy Estimate)
- Festival Plaza will have controlled access points for venue-goers and will provide separate gated access for service vehicles.



## **CITY OF WINDSOR CENTRAL RIVERFRONT** IMPLEMENTATION PLAN

Stairs up to pedestrian bridge level (elevation 187.0) from Riverside Drive (elevation 182.0)

- A three dimensional kinetic display is proposed to provide year-round animation for all ages in an educational and interactive format. The emphasis of the kinetic display will be visual, however; any sound animation should be audible for only those in the immediate vicinity.
- A series of themes will be explored to provide continuous interest and desire to visit and interact with the garden elements. Initial examples to explore include railway and steamboat references, climate patterns including passive solar, wind gain and other weather influences. (Photo 61)
  - Sponsorship is encouraged by local community groups and corporations within the City of
- The Festival Green provides an overflow site for larger festivals as well as a significant open lawn area for recreational use and informal gatherings. Emergency and vendor access to west end of Festival plaza and vendor parking (max 40 cars) during festivals. (Photo 62)

Mist Wall

- Water feature Mist Wall to create access control between the River Walk, Recreationway and Festival Plaza. (Figure 67)
- · Visible definition of plaza.
- Provides a series of water / mist sequences. Lighting to provide an extended animation quality into the evening.

**Proposed Shoreline** 

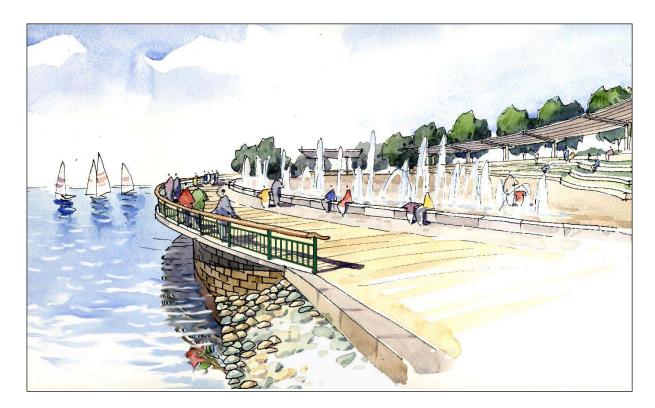
- Proposed cantilever over armour stone shoreline to provide 40 ft (12 meter) width for Riverwalk and Recreationway between the Mist Wall and river edge.
- Large boat docking along shoreline and possible pedestrian ferry docking. (Photo 65)

#### **Environmental Assessment Implications**

In the "EA Implications" discussion in Section 3.2, mention was made of the ESR submitted by BTS Consulting Engineers for improvements to the Riverfront Park Shoreline. In Segment 6, this ESR covers works that are proposed to take place between Goyeau Street and McDougall Street. These works will entail the placement of a new vertical shore wall. As part of a complete ESR, for which no bump-up requests were made, this shore wall can be constructed with no further provincial EA compliance requirements.

As the new vertical shore wall in this segment entails in-water construction work in the Detroit River, approvals under the federal Fisheries Act and the Navigable Waters Protection Act are also required. Approvals under these federal statutes "trigger" the application of CEAA. A "screening" process under CEAA is underway at present, following which the shoreline work in this segment may be constructed.

In Segment 6, shoreline improvements have also been recommended between McDougall St. and easterly 140 metres to mid-block before Glengarry Ave. Shoreline treatments in this area are proposed to be armor stone to be consistent with the marina shoreline treatments proposed in Segment 7. These improvements have been documented as an addendum to the aforementioned BTS ESR and finalized on April 3, 2000.



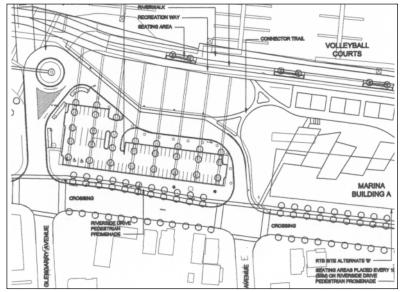




Figure 68

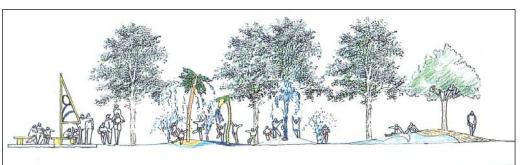
Photo 65

Figure 67

MBTW GROUP



#### Figure 70



## Figure 71



#### Photo 66

#### Segment 7: Marina, Children's Water Spray Playground (Glengarry Avenue to 4.7 Langlois Avenue)

#### Context

Segment 7 includes the Marina and adjacent active all-season, recreational areas. Including children's water play, skateboard park, volleyball courts, parking and marina related facilities. (Figure 69)

#### **General Recommendations**

A marine and water theme is proposed for this segment. Elements such as the Children's Water Spray Playground, the boardwalk promenade, beach volleyball courts and wave-like masses of landscaping will promote and enhance the water concept.

## Specific Recommendations (west to east)

- Circular Drop-off and Access Drive
- meters) minimum.

#### Parking Court

A 70+/- parking court within Alymer/Glengarry loop and drop-off.

#### Marina Building A

- (Figure 68)

#### Shuttle Stop Shelter

components of the Marina Building A is provided from this location.

#### Volley Ball Courts

- 2-3 volley ball courts north of the parking area.
- Viewing area on existing 3:1 slope of river embankment.

#### Children's Water Spray Playground

- 70 and 71)
- sources.
- Playground. (Photo 66)

**CITY OF WINDSOR CENTRAL RIVERFRONT** IMPLEMENTATION PLAN

A 100 foot wide (30 meters)circular drop off driveway to permit emergency and other vehicles to access Ferry Landing Dock and Marina facilities. The driveway width should be 20 feet (6

1,200 sq. ft. (111 m<sup>2</sup>) Public Marina building including administrative offices, restaurant, concession, boating related services, washrooms, equipment and Marina related storage.

Pedestrian Terrace and overlook. Non-accessible rooftop with skylights.

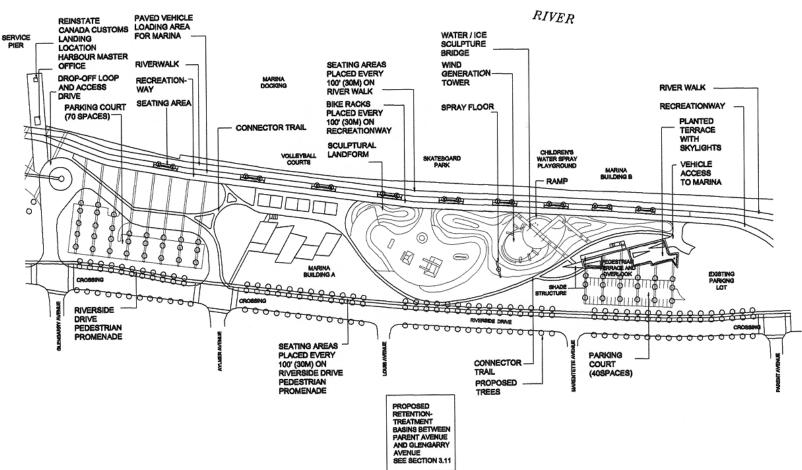
Sheltered shuttle stop located west of Marina Building A. Riverfront maps and time schedules may be posted in this area. Convenient access to the public washrooms and concession

A theme water spray playground environment that is built into dune-like landforms. (Figures

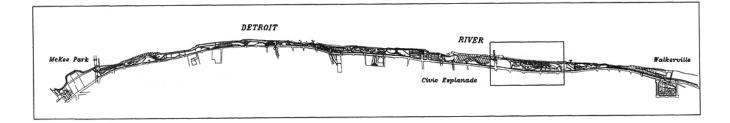
Walkway systems are integrated into three dimensional forms from which the water spray

Special care to be taken so that the playground will have all season appeal. Windmill location west of Marina Building B providing wind generated power to Water Spray

# SEGMENT 7



DETROIT



#### Skateboard Park

- a concrete terrain designed for skateboard use. .
- elements include half pipe, low walls, ramps.
- provide shade trees at perimeter.

#### RTB Site

RTB Site (12,000 cubic metres) could be located under Children's Water Spray Playground or parking court.

#### Marina Building B

- 700 m<sup>2</sup> (7300 sq. ft.) Marina building. (Figure 72)
- Contains washrooms, change facilities for Children's Water Spray Playground, concession and storage area.

#### Parking Area

An additional 40 car expansion to Bert Weeks parking located south of Marina Building B between Marentette and Parent Ave.

#### **Environmental Assessment Implications**

The Marina (which is the central feature of Segment 7) is an activity that requires an individual approval under the Ontario EAAct. The City of Windsor undertook and submitted an EA study of the marina and all of its ancillary facilities and received the Minister of Environment's approval in November 1996. In building the Marina, the City must comply with the terms and conditions of approval set out by the Minister of the Environment.

Condition 13 of the above-noted EA approval requires the City to carry out the Marina's construction in a coordinated manner with the Windsor Riverfront Pollution Control Study. In the Stantec report for the Windsor Riverfront Pollution Control Study, a 12,000m<sup>3</sup> RTB is proposed at the foot of Louis Avenue just south of the proposed marina. As the RTB will be a subterranean facility, it is advisable that it be constructed before the marina, its infrastructure and the other segment 7 facilities are built.

Compliance with the federal EA process is also virtually complete. The only outstanding issue is negotiations with the Windsor Port Authority regarding an agreement for the use of the waterlots.

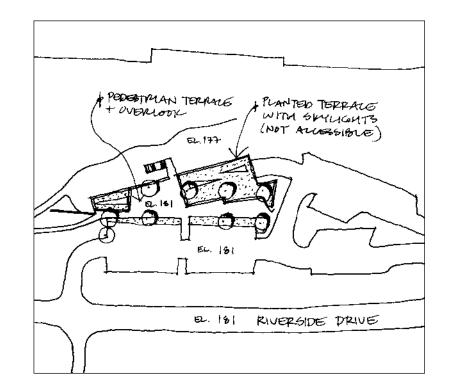




Photo 67

CITY OF WINDSOR
CENTRAL RIVERFRONT
IMPLEMENTATION PLAN

Figure 72



Photo 68

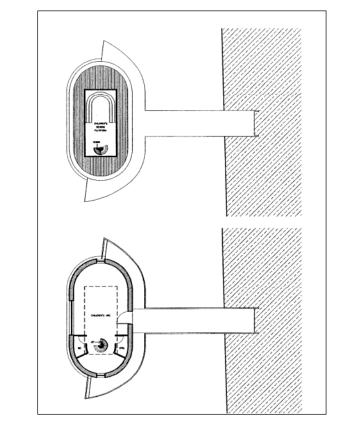
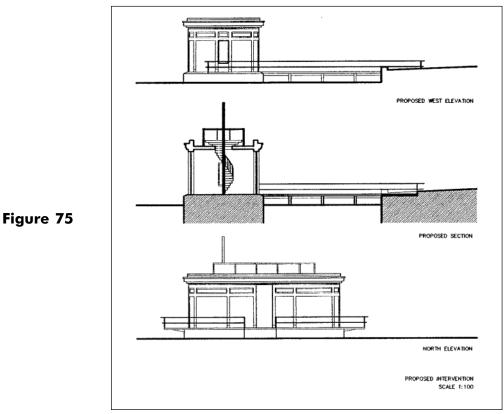


Figure 74



#### Segment 8: Bert Weeks Memorial Garden, Great Western Park and Joan and 4.8 Clifford Hatch Wildflower Garden (Langlois Avenue to Moy Avenue)

#### Context:

Segment 8 occurs between the Marina and Hiram Walkers Distillery. (Figure 73) The Bert Weeks Memorial Garden, Great Western Park and the Joan and Clifford Hatch Wildflower Garden collectively create a passive recreational area that has cultural, historical and archeological significance.

#### **General Recommendations**

- undisturbed areas for shoreline plantings and habitat creation.
- areas (i.e. elevated catwalk and overlook piers).
- system that may be used for fishing.

### Specific Recommendations (west to east)

Bert Weeks Memorial Garden and Fountain

- who fought for riverfront acquisition and parkland development.
- noon mark in honor of Mr. Week's profession as a watchmaker.

Dawn Beacon/1800's Pump House (see Section 3.1.5) (Figures 74 and 75)

The 1800s Pump House is the only remaining heritage building on the north side of Riverside Drive along the Central Riverfront. The original function of this building was as a pump house for the Waterworks plant that was on shore at this location in the late 1800's early 1900's. (Photos 67 and 68)

Bert Weeks Memorial Garden and Joan and Clifford Hatch Wildflower Gardens have been named to commemorate the contributions that these individuals have made to the Central Riverfront and overall development of the parks system. The development of the respective gardens should be in keeping with the character of the individuals being honored.

As a significant First Nations site in the history of Windsor, the dominant theme will focus on the cultural, historical and archeological qualities of the site. It is recommended that the archeological aspects be investigated, specifically in the First Nations Interpretive Area.

A complement of themes such as habitat creation, restorative landscaping, and stewardship will enhance the uniqueness of this segment and set it apart from the rest of the riverfront.

Education and interpretation will be the underlying objective of all the themes in this segment. Access through and to the site will be primarily from the south portion of the site along the integrated River Walk/Recreationway systems. No cycling or vehicular circulation will occur along the edge of the river in order to preserve views, protect existing features and provide

An informal shoreline path should be placed adjacent to the shoreline planting and wetland

Less formal connector trails will access destination points along the riverfront.

Overlook piers to be accessed directly from the integrated River Walk and Recreationway

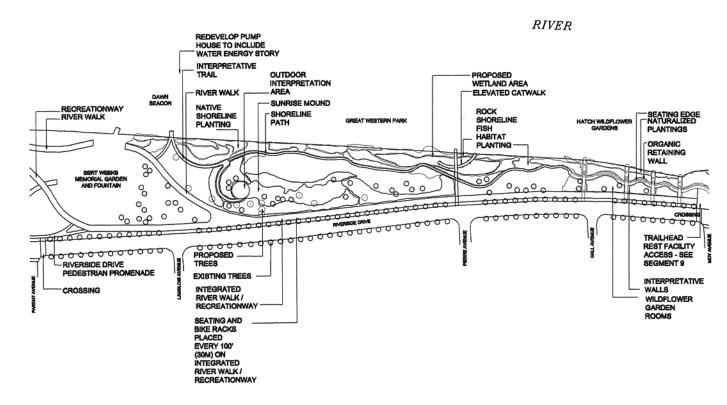
The memorial fountain and garden are scheduled for construction in 2000/2001.

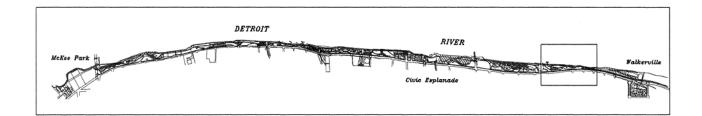
Bert Weeks Memorial Garden was designed to pay homage to this former Mayor of Windsor,

The fountain and gardens have been designed reminiscent of a watch and will include a

Mr. Weeks was an avid gardener and especially enjoyed visiting historic gardens; he particularly enjoyed fountains and waterfalls; thus this memorial is a fitting tribute to Mr. Weeks.

# **SEGMENT 8**





DETROIT

CITY OF WINDSOR **CENTRAL RIVERFRONT** IMPLEMENTATION PLAN The potential to access this structure set out in the river, becomes a unique destination affording a more direct experience of the River. It provides unobstructed views in all directions but particularly to the east in the direction of the sunrise. This Beacon has the potential to be powered by water. (Figure 76)

Joan and Clifford Hatch Wildflower Gardens/Great Western Park

Of all the landscape features found in this Segment, the earthwork is the most visually significant. Oriented to face the sunrise and built upon a high point of topography, the mound is a quiet place for contemplation and reflection. (Photo 69 and Figure 77)

- Wildflower garden "rooms" consisting of native plantings that have diverse themes such as a butterfly garden, a scented garden and gardens organized by colour or seasonal focus.
- Sinuous organic retaining wall, made from wood and stone to provide terraced area for wildflower garden. First Nations interpretive elements to be incorporated. (Photo 70)
- Outdoor interpretation installations will provide access to the mound and incorporate educational and interpretive information.
- · Seating areas convenient for viewing the gardens and the river to be provided.
- Cantilevered piers used for viewing and fishing accessed from the shared trail system along Riverside Drive by walkways.
- First Nations narrative and story to be incorporated.
- This area of the riverfront has archeological significance and is recommended for further investigation.

#### Eastern Reach Shoreline

- · Armor Stone and Beach shoreline with fish habitat enhancements.
- · On-shore plantings that shade the water, stabilize the shore and create wetland areas.
- · Naturalized Riverbank plantings.
- · Interpretive signage to be provided regarding history of Moy Wharf.

#### Trail Head and Rest Facility

- A rest facility incorporating public washrooms, telephones and storage facilities should be located at the eastern end of this segment, directly west of the Hiram Walker lands. As the eastern gateway on the riverfront, maps and other event information should be available here.
- Facility has the potential to be solar powered.

#### **Environmental Assessment Implications**

There are no outstanding provincial EA requirements for the proposed facilities and works in Segment 8. Between Langlois Avenue and Moy Avenue, a sloping rock revetment (armor stone) will address a shoreline erosion problem, as documented in the ESR for the Riverfront Park Shoreline submitted by BTS Consulting Engineers. These works may proceed without further provincial EA compliance.

As the new shoreline revetment in this segment entails in-water construction works in the Detroit River, approvals under the federal Fisheries Act and the Navigable Waters Protection Act are also required. Approvals under these federal statutes "trigger" the application of CEAA. A "screening" process under CEAA is underway at present, following which the shoreline works in this segment may be constructed.

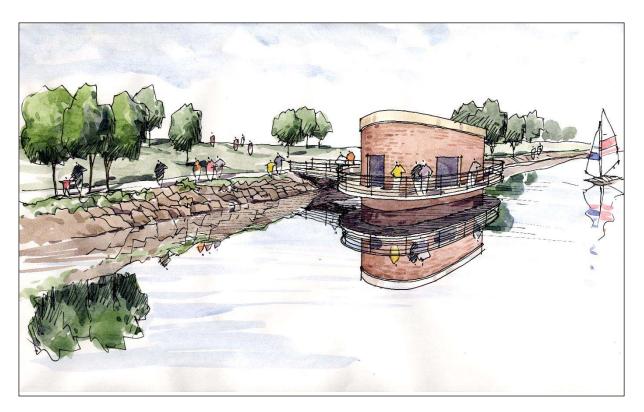






Photo 69

Figure 77

Figure 76



Photo 70



Figure 79

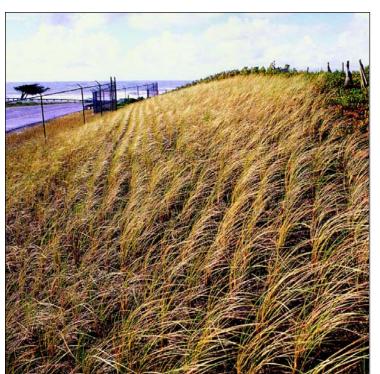


Photo 71

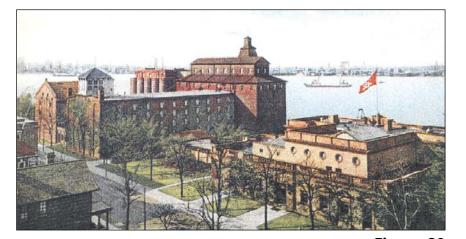


Figure 80

#### Segment 9, East Anchor: Hiram Walker Distillery Walkerville (Moy Avenue to Walker 4.9 Road)

#### Context:

The east riverfront anchor including the historic Walkerville area and the Hiram Walker site provides a distinct entrance to the Central Riverfront. (Figure 78) The heritage and other buildings on both sides of Riverside Drive represent the thriving distillery business founded by Hiram Walker in the late 19th century. As a result of the distillery industry, the adjoining Village of Walkerville grew including fine homes, schools and churches. In 1880, Hiram Walker established his own ferry service to and from Detroit, with a ferry terminal in Walkerville (Figure 79) (Source: Birth of a City, Carl Morgan, 1991).

#### **General Recommendations**

To be recognized as the eastern anchor for the Central Riverfront.

- infill and redevelopment of the area.
- destination to other uses and activities within the Central Riverfront.

#### Specific Recommendations (west to east)

#### Recreationway

- cyclists, rollerbladers and wheel-chair users.
- Provide barrier-free access.

Walkerville (former Peabody Site) (Figure 80)

- Multi-use parking area/outdoor market for approximately 100 cars.

- Potential site for reuse of Dominion Bank facade.
- new traffic light at Devonshire Road and Riverside Drive.
- RTB site (7,300 cubic metres).

#### Hiram Walker Lands

- store, and a potential pedestrian ferry terminus.
- (corn, barley, rye). (Photo 71)
- (Photo 72)
- Grain Elevators as potential viewing platform. (Photo 73)

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History and building fabric of the Hiram Walker distillery and Walkerville provides the potential to create a revitalized riverfront entry around Walkerville and Hiram Walker distillery through

Greater public access and a mix of uses, including office, retail, restaurants, artisan's workshops, markets and shuttle service terminus. The area can become a complementary

A combined 15 foot recreational trail (crossing at Lincoln Road) to accommodate walkers,

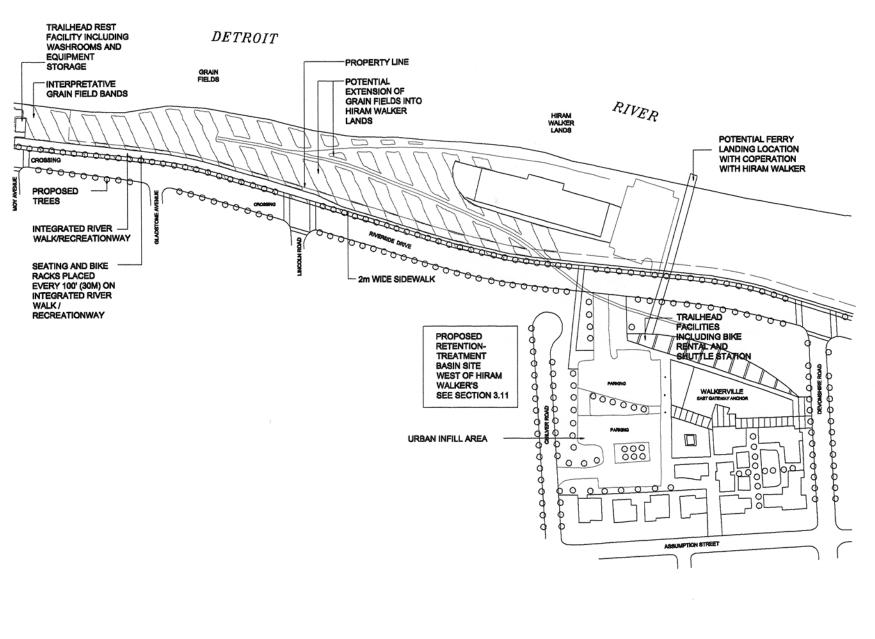
Shuttle Station including recreational equipment (bicycles, rollerblades) rental. Infill properties including restaurants, cafes, shops and artisan workshops.

Potential to strengthen public access if desired to designated areas such as courtyards.

Open landscape planted in bands including a variety of grasses used in the distilling process

Series of wind turbines as visual markers at the Central Riverfront east anchor, recalling the windmills of the late 18<sup>th</sup> and early 19<sup>th</sup> century that lined both sides of the Detroit River, to harness wind and convert to energy for use in parkland (i.e. walkway lighting, fountains).

# **SEGMENT 9**





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#### **Environmental Assessment Implications**

In this Segment, Stantec's Windsor Riverfront Pollution Control study recommended that a 7,200m<sup>3</sup> underground RTB be located north of Riverside Drive and east of Chilver Road. A more detailed ESR, prepared in compliance with phases 3-5 of the Municipal Class EA for Water and Wastewater Projects, will need to address the potential environmental effects of this preferred RTB site on the south side of Riverside Drive.

# 4.10 Summary of Environmental Effects Associated with the Windsor Central Riverfront Implementation Plan

In the attached table, a summary of the potential environmental effects associated with the Windsor Central Riverfront Implementation Plan is presented. The manner in which these effects will be addressed and some preliminary mitigation measures are also suggested.

# Table 1: Potential Environmental Effects Associated with the Windsor Central Riverfront Implementation Plan

Potential Environmental Effect	Comments on Procedural, Regulatory Requirements	Studies to be Undertaken; Possible Mitigation Measures
Changes in Detroit River flows resulting from new shoreline treatments, in- water structures (Segments 1, 3-8)	EC, ERCA require that river hydraulics not be affected by new in-water structures. ESR's for shoreline works in park segments 1,5,6,8 completed. EA for shoreline works in park Segment 7 approved. ESR's for shoreline works in park segments 3,4 still required.	Design of in-water construction works to minimize impacts to river's conveyance capacity. City has commissioned a river hydraulics and fish habitat study of the central riverfront. Use of floating docks.
Sedimentation of Detroit River from construction activities (all segments)	EC, MoE, DFO will all require minimization of Detroit River sedimentation.	Use of sediment traps, silt fences located between construction activities and Detroit River.
Contaminated sediments liberated during in-water construction of shoreline treatments (Segments 1, 3- 8)	EC, MoE, DFO will all require minimization of Detroit River contamination from sediments. ESR's for shoreline works in park segments 1,5,6,8 completed. EA for shoreline works in park segment 7 approved. ESR's for shoreline works in park segments 3,4 still required.	City of Windsor to establish toxicity of centra riverfront sediments. Monitor removal and proper disposal of contaminated sediments.
Contamination of Detroit River from spills, leaks of construction materials (all Segments)	EC, MoE, DFO will all require minimization of Detroit River contamination from spills, leaks.	Proper stockpiling and storage of hazardous construction materials.
Disruption of fish habitat from in-water construction activities (Segments 1, 3-8)	DFO requires that there be 'no net loss' of fish habitat from construction activities. Fish habitat considerations addressed in ESR's completed for segments 1,5,6 and 8 and in EA for segment 7. Fish habitat considerations still need to be addressed for Segments 3,4.	City of Windsor to assess existing fish habitat along central riverfront. Fish habitat enhancement plans as part of construction activities. Fish habitat compensation plans where fish habitat affected by construction.



Photo 72

Photo 73



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## CITY OF WINDSOR CENTRAL RIVERFRONT IMPLEMENTATION PLAN

Potential Environmental Effect	Comments on Procedural, Regulatory Requirements	Studies to be Undertaken; Possible Mitigation Measures
River bank erosion arising from construction activities (all Segments)	Issued addressed in completed ESR's for park segments 1,5,6,8 and completed EA for park segment 7. Issue still requires attention for ESR's in park Segments 3,4.	Effects expected to be minimal. Shoreline revetments (which are part of WCRIP) are meant to address existing shoreline erosion problems.
Effects to Waterfowl Staging Areas (all Segments)	Migratory Birds Convention Act administered by CWS.	Timing of (most noisy) construction in, or adjacent to, waterfowl staging areas to be conducted outside of main bird migration periods.
Contaminated soils dislodged during construction (Segment 3)	MoE lead agency for identification and disposal of contaminated soils. City to liase with local MoE office.	ESR for Shoreline Treatment works in former CP (Shergar) lands to address proper disposal of contaminated soils in this area.
Effects to historical and/or archaeological resources on site (Segments 1, 3 and 8)	Ontario Ministry of Citizenship, Culture and Recreation is lead agency for this issue.	ESR's to address archaeological and heritage features in these areas. Salvage or interpretative actions for features lost.
Temporary disruption of recreational activities during construction (all Segments)	No requirements; City to erect explanatory signs as necessary.	Employ noise and dust control measures. Stage construction to cause least disruption. City to provide info, signs on possible inconveniences.

#### **Environmental Assessment Process**

As noted in section 1.4 of this report, the development of the Windsor Central Riverfront Implementation Plan has been carried out to comply with the requirements of the Ontario and Canadian EA Acts. Specifically, this report has been prepared to comply with the master plan provisions of the Municipal Class EA's, noting the EA work done to date for various segments and acknowledging the outstanding EA work still to be done for other segments.

The next step to carry out for the Windsor Central Riverfront Implementation Plan to comply with the Municipal Class EA's master plan provisions is for this report to be placed on the public record for 30 days. A draft public notice for this purpose is in the Appendices to this document. Advertisements are to be placed in newspapers inviting public comment on the plan. It should be made clear to the public that it is the intent of the plan to provide a comprehensive understanding of all the works which are proposed in the study area, many of which are already approved. Following the 30 day public review period, fundamental objections to the Riverfront Park concept per se will not be entertained. For those components still requiring subsequent compliance with phases 3-5 of the class EA planning process, the public will have an opportunity to comment specifically when the detailed ESR's are prepared.

#### Acronyms:

EC – Environment Canada; ERCA- Essex Region Conservation Authority DFO – Department of Fisheries and Oceans; MoE – Ministry of the Environment CWS – Canadian Wildlife Service; ESR – Environmental Study Report WCRIP – Windsor Central Riverfront Implementation Plan

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CENTRAL RIVERFRONT
IMPLEMENTATION PLAN

#### 5.0 IMPLEMENTATION

#### 5.1 Responsibilities of Riverfront Groups

#### City Council

City Council will be responsible for the overall guiding principles and concept plan for the Central Riverfront. The Central Riverfront Implementation Plan and its companion Secondary Plan amendment to the Official Plan will be reviewed at least every 5 years. Should any significant changes be necessary that affect the guiding principles, land uses or environmental recommendations (e.g. shoreline, roadway or other items triggered under the Environmental Assessment Act) the appropriate amendments to this plan would be necessary. In addition, an amendment to the Secondary Plan would ensure opportunity for public input. The on-going development of the Central Riverfront will require funding approvals during the annual budgeting process for capital and on-going maintenance costs.

#### Parks & Recreation Department

The Commissioner of Parks & Recreation will be responsible for the implementation of this plan. Design development, construction, management and maintenance of the Central Riverfront will be co-ordinated and overseen by the Commissioner. The Commissioner will seek the co-operation and assistance of other departments, public and private agencies and individuals to carry out responsibilities successfully. In its co-ordinating role the Department will strive to provide proactive leadership in the fields of landscape architecture and urban design, as well as to promote and maintain appropriate standards for development and maintenance.

#### **Technical Review Panel**

A Technical Review Panel is recommended to provide support and advice to the Commissioner on the design development for the Central Riverfront. The Technical Review Panel will be similar to advisory committees in place for the National Capital Commission (Ottawa), Wascana Centre Authority (Regina) and Meewasin Valley Authority (Saskatoon) which have contributed significantly to the quality of each of those Cities' environmental and physical image. To a considerable degree, the present quality and amenities of these locales are a direct result of this design advisory service. A Technical Review Panel would provide independent, multidisciplinary advice from experts in the disciplines of art, architecture, landscape architecture, urban design, planning, engineering, and ecology during the design development stage of an undertaking. Technical review is primarily concerned with the layout, design and site development aspects of a specific undertaking, as well as its inherent significance and how it fits into and contributes to the Central Riverfront guiding principles. The role, terms of reference and process for appointments to the panel will be based on the examples cited above.

#### Other Departments and Agencies

Other City Departments and public agencies have significant facilities within the Central Riverfront. Some of these facilities include parking lots, pump stations, infrastructure and other facilities that contribute to the overall function and appearance of the riverfront. It is the responsibility of these agencies to seek approval from the Department of Parks and Recreation and if applicable the Technical Review Panel for any undertakings that will affect appearance, public enjoyment and access. Proposed facilities or infrastructure should have an undeniable purpose for being on the riverfront should be located in the appropriate areas, and must adhere to the design guidelines for the park.

#### **Committee of Adjustment**

Any buildings exceeding the height of the crown of Riverside Drive between Janette Avenue and Chilver Road will require Committee of Adjustment approval for a height variance. This ensures public input. The goal is to maintain or enhance views (e.g. by framing) for motorists and pedestrians using Riverside Drive. The only buildings and/or structures approved in concept are those shown on the plan; requests for additional buildings (e.g. Canada Customs facility) will be subject to recommendation by Parks & Recreation and approval by Council. All buildings must have the approval of the Technical Review Panel, meet the Building Code and other applicable City standards.

#### Windsor Sculpture Garden Committee

The Windsor Sculpture Garden Committee is an advisory committee to the Department of Parks & Recreation. The committee advises on which sculptures should be accepted for inclusion in the Windsor Sculpture Garden. They also have a role in the siting of the sculpture. It is anticipated that their role will evolve and change over time as travelling exhibits become part of the Sculpture Garden program. The Windsor Sculpture Garden Committee is appointed by Council based upon the recommendations of the Commissioner and assists the Commissioner in establishing the Sculpture Garden.

#### Non-Government Organizations and the Community

The Central Riverfront Implementation Plan is the work of many individuals and non-government organizations who have fought tirelessly to ensure that the City, Council and Administration acquired, developed and will maintain the Central Riverfront for the enjoyment of residents and visitors. This legacy is now the community's to protect and cherish. The community's responsibility is to continue to support the implementation of this plan.

#### 5.2 Proposals

Proposals received from the private sector or other agencies will be the subject of review by City Administration prior to being considered by Council for denial or approval in principle. Such proposals may require a professionally prepared Business Plan depending on the nature of the proposal. Proposals consistent with the overall intent will be considered by Council after administrative review, including any lease or legal agreements. Proposals that are not in keeping with the overall intent of the Central Riverfront Implementation Plan will not be considered.

#### **Groups with Commemorative or Monument Proposals**

Requests for monuments, etc. will be considered by Council upon the recommendation of the Commissioner of Parks & Recreation. The request must include specific and significant reasons for the monument being located on the riverfront and in the proposed location. The location requested must be in keeping with the overall long term intent of the plan. The monument must adhere to the high design standards set out in this document and meet with the approval of the Technical Review Panel. The long term maintenance of the monument should be the responsibility of the group or individuals making the request.

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#### 5.3 Buildings

Buildings recommended as part of the implementation plan will require funding approval from Council. Design development will be reviewed and approved by the Commissioner of Parks & Recreation and Technical Review Panel prior to any necessary permits (e.g. Building, ERCA) being obtained.

In conformity with the City of Windsor Zoning Bylaw 8600 the height of new buildings or other structures on the north side of Riverside Drive East from Janette Avenue and Chilver Road are to be below the elevation of the crown of Riverside Drive. Regardless, wherever possible along the central riverfront the rooftops of buildings should be built at or below the elevation of Riverside Drive to allow views for motorists and pedestrians using Riverside Drive. In most cases it is possible to achieve this objective with the exception of the trailhead building at the far eastern end of the riverfront where there is insufficient change in elevation between the riverfront and Riverside Drive.

The guidelines governing the design of buildings include:

- Wherever possible buildings should be located below the elevation of Riverside Drive and constructed into the side of the riverbank. Rooftops should be designed as platforms accessible from sidewalks along Riverside Drive and incorporate viewing areas, shade/trellis structures, seating and landscaping. Stairs and or ramps should directly link the rooftop decks to the riverfront.
- Narrow, transparent architectural features such as skylights or 'beacon'-type place-makers above the elevation of Riverside Drive where the elevation difference between the riverfront and Riverside Drive is restricted. Skylights shall serve a dual purpose of providing natural illumination for the interior of buildings and to act as place-markers both during the day and evening hours and are permitted to rise a maximum of 2000 mm above the elevation of Riverside Drive. Landmark 'beacon'-type elements should incororate illumination panels and are permitted to rise a maximum of 5000 mm above the elevation of Riverside Drive. An exception to these height restrictions will be the bridge support structure, landings elevation and stairways of the City Beacon which is incorporated with the pedestrian bridge across Riverside Drive.
- Mechanical penthouses should be addressed on a case by case base. In general, they should not be permitted to exceed the height recommendation. All mechanical equipment must be placed within a walled or screened area that is integral to the building's architectural design. Ventilation stacks should be designed to have minimal visual intrusion.

#### **5.4 Construction Cost Estimates**

Phasing for construction will total approximately \$2.6 million in capital costs per year. The total capital costs over the 25 year build-out are estimated at \$65 million (yr. 2000 dollars). The total capital costs include the marina, design and engineering fees, quantifiable shoreline works, and taxes. In addition to municpal sources - community, corporate and private sponsorships, public/ private partnerships in association with provincial and federal programs will represent a significant source of funding for many central riverfront components.

### See Appendix E.

### 5.5 Phasing

Priority for development phasing will depend on the following principles:

- The order of development must proceed in a logical manner. In some cases this means that seemingly less visible items may be carried out prior to higher profiles items. For example, installation of servicing, shoreline works should be done prior to the plazas and plantings.
- Scheduling of the development should take into consideration riverfront use, legal regulations, legislative requirements, safety, and availability of material and weather conditions. For example, shoreline works could be performed during the winter months but will be dependent on ice and fish spawning season restrictions.
- Development should be balanced throughout the length of the Central Riverfront. Improvements should be evenly distributed throughout, but in keeping with the Implementation Plan and benefiting the majority of users.
- Alleviating operating issues such as emergency access, pedestrian access, security lighting are a few examples of works that must be undertaken to ensure the safety and comfort of all riverfront users.
- Development is dependent on the availability of funding from the City and funding partners. Projects that are cost shared or fully funded by groups will be considered if they respect the implementation plan and the appropriate infrastructure is in place. Availability of specific types of funding may mean that certain aspects of the riverfront development will advance ahead of their anticipated priority.
- Development of the beacons with complementary revenue generating facilities (e.g. concessions, etc) that would assist in recovery of capital and maintenance costs and assist in the promotion, usage and marketability of the riverfront should be considered as set out below.
- An annual update on the 5 year capital forecast should be submitted for council consideration, prior to and during budget sessions.

#### 5.5.1 Current Phasing

Council has approved the following projects for construction in the current year 2000. Shoreline improvements Langlois to Moy: partial funding including Hatch Gardens.

- Dieppe Rockery: reconstruction complete.
- Windsor Sculpture Garden: lighting and irrigation.
- Bert Weeks Memorial Fountain and Gardens: partial funding. Committee and grants

consultant seeking additional funding to allow completion of the project within the year 2000.

- Civic Esplanade: all blocks except for the Joint Justice Facility will be completed by mid-summer of 2000.
- Western super Anchor Vision Corridor: funding approved for first phase of development from the Western Super Anchor to the Riverfront, adjacent to the Art Gallery to be complete in fall of 2000.

#### **First Priority Phasing** 5.5.2

Phasing for the Central Riverfront is based on a first and second priority basis over an estimated twenty-five year time frame. First priority development is recommended to occur within the first ten years and will be critical in establishing the Central Riverfront vision, it's key systems, anchor sites and their related areas and amenities. The creation of the anchor sites and infrastructure will provide the framework and momentum for subsequent or second priority development phasing.

First priority phasing is based on recommendations for creating a cohesive Central Riverfront identity through the establishment of the major circulation systems, major riverfront access points, anchor destinations and related infrastructure. The selection of specific anchor destinations relates to the objectives of providing balance, accessibility and year-round activity for all ages early in the riverfront's evolution. Barrier-free circulation; family, entertainment and recreational activities; sheltered areas and concessions will attract a diverse population to the Central Riverfront.

Additional priority elements are proposed in conjunction with these key destinations and include, washrooms, parking, urban design amenities, storage and other necessary riverfront services. The following recommendations provide a direction for phasing, rather than a prescriptive plan. As such, development projects can be initiated in a logical order as well as respond to development opportunities that will evolve in accordance with market conditions, capital resources and the evolving priorities of the City and its residents.

#### **Circulation Systems**

Riverside Drive and Riverside Drive Pedestrian Promenade: The image of the Central Riverfront as a key public destination for residents and visitors will be reinforced by upgrades to Riverside Drive including recommended landscape, paving, lighting, seating and pedestrian crosswalk treatments. The introduction of streetscape elements and pedestrian connections across Riverside Drive will assist in the overall objectives of pedestrianizing Riverside Drive as a scenic parkway and calming traffic. Upgrades should begin at the City Centre area between Caron and Parent Avenue, followed by Caron to Chewitt in the west section and Parent to Walker Avenue in the east section. Development of the circulation system should include directional signage.

include directional signage.

#### Anchor Destinations and Related Infrastructure

- simultaneously.
- Sponsorship Courtyard, Ouellette Avenue turn-around.
- Area and Civic Terrace)
- are constructed.

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*River Walk and Recreationway:* In the same manner as Riverside Drive and the Pedestrian Promenade, the establishment of these circulation systems should be articulated and complete. The priority area is the central section between Caron and Parent, including the Interpretable Wall, followed by Caron to McKee Park in the west section and Parent to Walker Avenue in the east section. Development should

The Beacons: The five Beacons will provide the most important visual anchor sites for the Central Riverfront and should be constructed as soon as possible. Priorities for the order of Beacon construction will depend on available resources and public and private sponsorship, however, if feasible, the Beacons adjacent to the City Centre (Peace, City and Legacy) are recommended to proceed prior to the Celestial Beacon in the west and the Dawn Beacon in the east. The City Centre Beacons are located in conjunction with strategic City connections including the CP Railway underpass, Ouellette Avenue and the Civic Esplanade and have the potential to provide strategic landmarks and connections to the Central Riverfront. The construction of adjacent parking areas should occur simultaneously with the construction of each Beacon. The following elements associated with each Beacon should be constructed

Peace Beacon (Segment 5): including landscaped parking court, Corporate

City Beacon (Segment 6): including Rotary Plaza, Civic Terrace. (Railway Interpretative

Legacy Beacon (Segment 4): including Riverside Drive underpass to south. The Outdoor Ecological Garden should be phased after these major infrastructure works

Festival Plaza and Festival Green (Segment 6): The strong public image and year round role of the Festival Plaza creates a catalyst for surrounding development to occur including Festival Green, the City Beacon, Civic Terrace and the river edge elements including the Ferry Lifts, Pedestrian Ferry Stop, etc. All buildings and elements associated with the Festival Plaza should be constructed simultaneously, including the parking court, festival buildings, Mist Wall and Festival Green.

Sculpture Garden Allee and Assembly Plaza (Segment 1): The Sculpture Garden Allee and Assembly Plaza provide an important gateway and destination at the west anchor. The allee will extend the existing well-established sculpture garden and provide a memorable pedestrian entry to the Central Riverfront. Development should include service and washroom buildings and related landscaping.

- Steamboat Wharf (Segment 4): Similar to the anchor role of the Beacons, Steamboat Wharf is an important anchor destination and connection from the Windsor Art Gallery and the City Centre. The large corridor proposed underneath Riverside Drive will be a major infrastructure project requiring significant capital resources. The underpass should be constructed before the associated buildings and elements including the canal, Children's Themed Secret Garden, Putting Green and other landscape and pedestrian elements. Consideration should be given to the incorporation of the development of the underpass, construction of the Wintergarden and Artisan's pavilion with the redevelopment of the City owned parcel of land west of the AGW site (south east corner of Riverside Drive and Bruce).
- The Marina, Skateboard Park and Children's Water Spray Playground (Segment 7): The Marina and associated activities will create a significant attraction in the City Centre area. The Marina's proximity to Festival Plaza will increase its profile and potential for intense public use.

The RTB site should be confirmed and constructed prior to the Marina Buildings and associated elements. Provide the Service Pier including and Harbour Master's Office and facilities for Canada Customs Landing.

Marina Building A should proceed before Building B. The Windmill, Skateboard Park and Children's Water Spray Playground should proceed after Marina Building B is complete.

#### Facilities, Buildings

- East and West Shuttle Stations and Parking Areas (Segments 1 and 9): Shuttle Station buildings and related parking areas should be constructed at McKee Park and Walkerville. Shuttle service will stop at regular riverfront stops and anchor destinations including the Beacons, Festival Plaza, Steamboat Wharf, Ecological Gardens and other riverfront areas as they evolve. Initial shuttle service may be limited to infrequent times or weekends only, but it should be provided as soon as resources permit to encourage access opportunities particularly for families and children.
- Recreational Equipment Rental (Segments 1 and 9): The pavilion in the west should be constructed in conjunction with the parking court underneath the Ambassador Bridge and non-motorized boat launch. The east anchor equipment rental area is included in the Walkerville Shuttle Station. The provision of rental equipment will help to establish the east and west anchors of the Riverfront as important entry points for athletes of all ages and abilities.
- Service and Maintenance Buildings (Segments 1 and 9): The service and maintenance buildings located at the west and east ends of the Central Riverfront should be constructed as soon as storage for equipment and maintenance is required.
- Shoreline Works: Shoreline remediation identified in Segments 3, 5 and 6.

Parking Areas First phase parking areas include: Segment 1: McKee Park, Ambassador Bridge Segment 4: west of Caron Avenue Segment 5: east of Viale Udine Segment 7: east of Glengarry Avenue, east of Marentette

#### **Urban Design Amenities**

- Lighting: Riverside Drive Pedestrian Promenade, River Walk, Recreationway, Connector Trail.
- Waste receptacles, drinking fountains, free-standing benches, bike racks associated with first priority destinations.
- Safety Handrails.

#### 5.5.3 Secondary Phasing Priorities

Second priority phasing recommendations relate to other development projects that play a significant role in the provision of activities and infrastructure within the Central Riverfront, but are seen as less critical elements in the overall phasing sequence. Some of these projects, depending on public interest, available funding or market forces, may become higher priority projects. It is anticipated that some second priority phasing, and in particular significant destinations will occur within the later half of the twenty-five year build out, or sometime after the first ten years of development.

#### Circulation

- Interpretative Signs (all segments)
- · Sculpture Walk

#### Destinations

- Outdoor Ecological Garden and Windmill (Segment 4): including Observation and Lookout Decks
- Udine Fountain, Rose Garden and Historic Brick Walk (Segment 5)
- Assembly Plaza and Interpretative Wall (Segment 5): including Interpretative Wall and Historical Event Wall, landscaping and Grass Courts
- International Gardens (Segment 3): including washroom
- Great Western Park (Segment 8): including completion of Hatch Gardens and Trail Head, Sunrise Mound, Elevated Catwalk and wetland area
- Walkerville (Segment 9): subject to further study
- University Pumphouse Rooftop Garden (Segment 1)

Other Areas and Elements

- Chess Court (Segment 2)
- Children's Themed Play Area (Segment 2)
- Putting Green (Segment 4)
- Fishing Shelters (Segment 4)
- Planted Terrace on Marina Buildings (Segment 7)

Parking Areas Segment 2: at Campbell Avenue. Segment 9: at Walkerville.

Pedestrian Amenities

Waste receptacles, drinking fountains, freestanding benches, bike racks and banners associated with second priority destinations.

#### 5.6 Capital Investment Sources

#### 5.6.1 Budget Process

Adoption of the Central Riverfront Implementation Plan by Council will include a referral of the capital costs to the budget process. The Central Riverfront development will be considered within the priorities of the City when reviewed on an annual basis by Council.

#### 5.6.2 National/Provincial Infrastructure Programme

The Federal Budget included the provision for a tri-party infrastructure programme, similar to the two previous programmes of the 1990's. The infrastructure programme is primarily geared towards infrastructure; however, there are specific components of the riverfront that are applicable; such as, the retention treatment basins, shoreline improvements and other infrastructure items.

#### 5.6.3 Off-Street Parking Reserve Fund

Any parking courts that are to be developed or redeveloped between Caron Avenue and Aylmer Street are within the City Centre and will be operated as pay and display lots. The development and redevelopment of these parking courts could be funded from the Parking Reserve.

#### 5.6.4 Governmental Programmes

These are numerous governmental programmes that may apply for specific aspects of the riverfront implementation. The Great Lakes Clean-up Fund has provided funding in other areas along the Windsor riverfront for fish habitat enhancement and armour stone revetment. Eco-Action 2000 has provided funds for river clean-up, habitat plantings and riparian planting projects. Human Resources Development Canada provided funding for the interim development of segments of the central riverfront based on the job creation, skill development and training provided by each specific project. These and other applicable government programmes should be pursued.

#### 5.6.5 Foundations

There are Foundations that the City has previously received funding from for aspects of the Central Riverfront development. While foundations generally have specific goals, tailor-made projects may meet the criteria of specific foundations. Foundations that have provided funding in the past or may be interested in specific projects include the Greater Windsor Community Foundation; P&L Odette Foundation and the Hatch Foundation. A search and review of the criteria set by specific Foundations should be undertaken.

#### 5.6.6 Fund Raising

The City will partner with user groups to raise funds for the development of the Central Riverfront. Examples of this co-operation have already been seen in the development of the Bert Weeks Memorial Fountain and Gardens; Charles J. Clark Square and the Rotary tree planting programme. Some partners may be eligible for Trillium funding depending on whether they have an interest in the land. The specifics of each partnership should be addressed on a case by case basis.

#### 5.6.7 Donations

The City has been very innovative in providing opportunities for private citizens to sponsor benches, bricks, trees and other amenities throughout the parks system, and the riverfront is no exception. The City provides tax receipts for private donations. In-kind or material donations are alos welcomed provided that they fit within the Implementation Plan.

#### 5.6.8 Naming Opportunities and Sponsorships

Naming of specific elements within the Central Riverfront implementation should follow the established city policy as set out in CR137/97. Further elaboration on this policy as a specific fundraising initiative for the Central Riverfront is recommended. Examples from other municipalities such as Mississauga, London and Toronto are a good basis to establish a specific policy to be adopted by Council. Corporate sponsors are an excellent vehicle for promoting the Central Riverfront. Local industries may be interested in having their corporate name identified with the central riverfront. Agreements for use of the riverfront as a ackdrop in photo shoots could have a dual benefit for both the private agency and the City.

#### 5.6.9 Dedication of New Tax Revenues

Council adopted a policy (M8-87) that allocated any increase in total market assessment on the south side of Riverside Drive for redevelopment towards the Riverfront Development Reserve. During the fiscal restraint measures in the early 1990's this resolution was amended and the increase in total market assessment was no longer deposited in the Riverfront Development Reserve. A similar resolution should be considered to establish a capital development reserve for the Central Riverfront.

#### 5.6.10 **Riverfront Development Reserve**

The Riverfront Development Reserve currently generates revenues from the sale of Commemorative Porcelain Plates honoring the Spirit of Windsor Locomotive No. 5588. Additional revenue is generated from the sale of miniature cars and the sale of prints of the Spirit of Windsor and other fundraising projects done in conjunction with The Greater Windsor Community Foundation (formerly Heritage Windsor). Vessel docking fees are added to this reserve. Other fundraising campaigns and sources of funding as outlined above should continue to be explored to assist in funding Central Riverfront development.

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#### 5.6.11 Self-Supporting Projects

Some projects within the riverfront could become self-supporting. They may require the involvement of private partners in their initiation. Items like the Marina, viewing devices, concessions and the putting green are examples.

#### 5.7 Programming and Marketing

The success of an effective programme and marketing strategy for the Central Riverfront will depend on a multi-faceted approach. The Central Riverfront Implementation Plan is designed to attract the residents of the City of Windsor. Tourism specialists quickly admit that visitors are attracted to places where the local citizens enjoy being. The overall planning and development programme for the riverfront is intended to attract citizens of Windsor of all ages, all year. There is very little structured programming to the Central Riverfront, rather it is a place where people can go and have the opportunity to participate in a number of leisure activities.

In tourism and recreation marketing, the product is the part of the place or facility that actually draws people. In this case the product is the opportunity to be on the riverfront. Many other cities have waterfront developments but few are 6 kilometres in length that spans the downtown core. In addition, the Detroit River is bordered by two cities in two different countries. The theme of *'two nations, two cities one river'* can be developed as a draw for the international market that are already coming to other attractions in Windsor such as Casino Windsor, Windsor Raceway, downtown shopping, wineries, birding and restaurants.

Individual components of the Central Riverfront will have different market draws and can have independent media and publicity campaigns. The spin-off of these promotions will benefit the entire riverfront and City. Individual components that merit their own publicity strategy are the Windsor Sculpture Garden; activities at the Festival Plaza; and special events that use the riverfront (e.g. walkathons, marathon).

Initiatives that should be undertaken by Parks & Recreation, in co-operation with other groups are:

- · Conduct presentations outlining the new facilities to community groups and agencies;
- · Develop an information package detailing the facilities and services available;
- · Develop a brochure for distribution in the hotels and City Centre businesses;
- · Develop co-operative advertising with local hotels, restaurants and tour operators.

Parks & Recreation have already publicized the Central Riverfront to many user groups and individuals by hosting Riverwalk '99, which has won a prestigious award for community events. The Trails, Parks & Facilities map being published by Parks & Recreation highlights the Central Riverfront. These initiatives have introduced the citizens of Windsor to Central Riverfront and the popularity of the riverfront will grow as it continues to develop.

#### 5.8 Maintenance & Management

The acquisition, interim greening and full development of the Central Riverfront represents a significant increase in maintenance responsibility for Parks & Recreation. The Central Riverfront because of its location, prominence, activities and uses will require daily maintenance year round. The Implementation Plan provides for access for servicing and maintenance. Maintenance requirements have been minimized, where possible, through the use of low maintenance paving, planting and pedestrian amenities. However, this type of development usually has a higher initial cost (e.g. capital cost) and may require establishment funding (e.g. funding over 3-4 years to establish planting and vegetated areas).

The Central Riverfront is a "Class A" park from a maintenance viewpoint. It will receive the highest level of maintenance which is the standard for City-wide, regional parks. The maintenance and management practises of Parks & Recreation take the latest technological advances, horticultural management procedures and practises into consideration.

In the course of carrying out maintenance responsibilities, the Public Works Department and other utility agencies may require access to infrastructure to complete "emergancy" repairs. In these specific instances, restoration of the disturbed area(s) will be undertaken with the approval of the Commission of Parks and Recreation and the co-operation of the Parks and Recreation Department.

The management practises and maintenance techniques to be employed along the riverfront will coincide with the guiding principles of the Implementation Plan. Because of the variety of landscape types that are being created the type of maintenance and management will be very different in different areas of the Central Riverfront.

# Appendix A: Sample Notice of Report Completion



CITY OF WINDSOR
CENTRAL RIVERFRONT
IMPLEMENTATION PLAN

## Windsor Central Riverfront Implementation Plan

Notice of Report Completion

Public Comment Invited

The City of Windsor has now completed the Windsor Central Riverfront Implementation Plan, in accordance with the "master plan" provisions of the Class Environmental Assessments for Municipal Water and Wastewater Projects and Municipal Road Projects. The study area for the plan is between Riverside Drive and the Detroit River stretching from Chewett Street in the west to Walker Road in the east. The study has been undertaken with a great deal of public involvement to date and City Council wishes to continue receiving your feedback on it.

This report is intended to comply with Phases 1 and 2 of the planning process set out in the abovenoted class EA documents. It is also meant to provide the public with a broad understanding of what is planned for the central riverfront and all of the park segments that make up the Windsor Central Riverfront Implementation Plan. Some of these component parts will still require more detailed EA studies to comply with phases 3-5 of the municipal class EA planning process.

The City of Windsor is now requesting comments on the report from interested members of the public. The report is available for public inspection at the following locations:

- Windsor Public Library, 850 Ouellette Ave., Monday-Thursday 10:00am-8:00pm and Friday-Saturday 9:00am-5:00pm;
- City of Windsor Clerk's Office, Room 203, 350 City Hall Sq. W., Monday-Friday, 8:30am-4:30am; and
- Windsor District Office, Ministry of the Environment, 250 Windsor Avenue, 6th Floor, Monday-Friday, 8:30am-4:30pm,.

If you wish to comment on the Windsor Central Riverfront Implementation Plan, please do so within **30 days** of the giving of this notice and address them to:

Ms Faye Langmaid City of Windsor Parks and Recreation Department 2450 McDougall St. Windsor, Ontario N8X 3N6



# Appendix B: Stakeholder and Consultation Summary



CITY OF WINDSOR
CENTRAL RIVERFRONT
IMPLEMENTATION PLAN

#### Appendix **B Stakeholder Consultation Summary**

The public consultation process for the Windsor Riverfront Implementation Plan included the following representative selection of stakeholder interviews. In each interview the concept Riverfront Plan was overviewed by the project consultant and followed by questions and comments.

#### September 22, 1999 Stakeholder Interviews

- Keith Andrews, Fran Funaro, Paul Twigg City Centre Business Association
  - Emphasized the enormous potential of the riverfront to enhance Windsor's attractiveness for visitors.
  - Expressed strong support for waterfront restaurant uses within the park and cited "Tavern on the Green" in Central Park, New York as a good example.
  - Need for parking in the park.
  - Water taxi's to Detroit.
  - Picnic spots. -
  - Skateboarding area should be designated.
  - Children's play areas needed.
  - Each Beacon should have a directory.
- Lois Smedick, President Art Gallery of Windsor and Natalie Nagy, Director, Art Gallery of Windsor.
  - Support activities in the Park including restaurants.
  - Concern that a large food facility at Steamboat Wharf could be in competition with the AGW's 70-seat restaurant.
  - -AGW could assist in the interpretive aspects of the Park's design linking artists to aspect of Windsor heritage and cultural themes.
  - Suggest that artist's competition may be appropriate for some elements of the Park design.
  - Multi-Cultural Council, which represents 97 committees, should be part of the implementation process for interpretive aspects of the Park design.
  - Tom Porter, former Councilor and former Chair of the Riverfront Task Force. •
    - Context has changed dramatically since the EDAW study.
    - There is no longer a need for a big destination tourist attraction. -
    - However the Park should be more than passive green space programmed activities, indoor and outdoor activities, things for families to do are critical.
  - Roy Battegello, former Councilor, Chair of Utilities Commission. ٠
    - University Pump House original agreement was to have a fountain associated with it.
    - Children's play areas are needed.
    - Udine Fountain should be moved to have a better context and use.
    - Does not support commercial activities in the Park.

- WACAC
  - An Archaeological Master Plan is needed urgently.
  - Particularly sensitive is the area of the park at Huron Church Road.
  - Dominion Bank relocation should be considered.
  - Access and use of 1800's Pump house was discussed general support for the revitalization of this structure and public access.

#### Rick Coronadov Lisa Tulen and Pat Schincariol

- The CEA representatives expressed concern over the inappropriateness of retail/ commercial proposals within the riverfront, based on store closures on Oulette Avenue. The control over future retail on the riverfront was questioned.
- Desire for fishing stations cantilevered beyond the rocks
- Support for ferry and linkages to the Detroit side
- Desire for more riverfront tree planting
- Question over marina facility and the provision of a silt curtain Question over provision of a fuel station within the marina proposal

#### Shelaugh Wisdom, United Way and Susan Haig, Windsor Symphony

- Discussion focused on the potential for cultural and performance related activities on the riverfront.
- The Festival Plaza design was discussed in detail including issues of acoustics, placement of the bandshell, preservation of riverfront views, access to the plaza and opportunities for a range of all season events to occur in the area.
- A number of other issues were discussed including: public and private sponsorship, activities for children and seniors and opportunities for music and art in other areas of the riverfront.
- Marty Lowman, Chair of Windsor Bicycling Committee
  - Cycling is a fundamental Riverfront activity.
  - Provide a safe and interconnected pathway for cyclists and rollerbladers that is separate from pedestrians.
  - Asphalt would be the preferred surface material.
  - Provide places to park and lock bicycles at primary destinations including the Beacons.
- John Grebnec, Engineering Services Superintendent, Hiram Walker
  - The discussion focused on the introducing the potential for greater connectivity and profile between the riverfront and Hiram Walker Lands. The consultant asked Mr. Grebnec to identify the buildings associated with the distillery and describe their sequence of use in the distilling process. The consultant described opportunities to provide greater connection between the riverfront and Hiram Walker through:

planting of grain fields within the vacant lands to the west of the grain elevator Improved access to the Hiram Walker store and the creation of public courtyards, walkways within Hiram Walker that could be accessed from Riverside Drive and future public activity within Walkerville.

- Centre.

#### industrial

-

- - Netherlands.

  - nieces.

#### Stakeholder Interviews, October 7, 1999

• Remo Mancini, Ambassador Bridge

commented that had an excellent mix of uses and activities, particularly for -famHediscussed general future plans for the construction of a second bridge

Roman Dzus, Windsor/Essex County Development Committee

A general discussion about the potential to for the riverfront to raise the City's profile and encourage improvements to commercial and development.

Mr. Dzus discussed the importance of finding the right balance of commercial activity on the waterfront (i.e. being able to have a cup of coffee), without compromising the future commercial role of the City

Seasonal activities were discussed as being essential, as well as activities that would appeal to residents and visitors of all ages and abilities. Opportunities for seniors and children in particular were noted.

• Carolyn Rourke, Co-chair of the Sculpture Garden

Discussed potential enhancements to the Sculpture Garden and useful precedents including the Kroller Mueller sculpture Garden in the

Need to provide a better setting for the viewing of art through a more structured landscape design.

Children should have things to do and be compelled to engage with the art

Discussed the new Windsor Endowment for the Arts. Consider a Donor Recognition Wall in the Park perhaps at Civic Terrace area.

• Elizabeth Hamel, General Manager, Windsor Essex County and Pelee Island Convention and Visitor's Bureau

> The discussion focused on the riverfront's potential to draw large volumes of visitor's to the riverfront and it's spin-off effects on culture and tourism in the rest of the City.

Ms. Hamel discussed the potential to improve the quality and use of convention and hotel facilities as a result of a revitalized riverfront.

- Mr. Mancini was very supportive of the direction of the plan to date, and

between Windsor and Detroit to parallel the existing bridge on the west -side The construction of the second bridge has entailed the purchase of This effort is underway, but not

properties at each end of the bridge. -commenciate Mancini was very enthusiastic about the Ambassador Bridge area being

developed as the west anchor to the park and believed that the second bridge would complement this vision. The new bridge is intended to be a worldclass bridge structure and landmark for Windsor and Detroit.

Chris Ryan, City Centre Restaurateur

- Mr. Ryan was in support of the concept plan to date -He was not adverse to have some small commercial on the Riverfront

-The discussion focussed on the kinds of retail and

restaurant/café uses that are appropriate for the Riverfront as opposed to the City Centre. He was concerned that new riverfront restaurants would not compete with those in the City Centre.

-Small concessions serving light snacks were suggested as being appropriate.

#### Stakeholder Interview, November 9,1999

Mr. Louis Odette, Past President Eastern Construction - Mr. Odette provided an overview of the sculpture

gardens from major urban cities including Toronto, Todelo, Kalamazoo and Grand Rapids. - Mr. Odette suggested the need to incorporate a high class

restaurant on the riverfront, citing examples in Europe. -Louisianna was provided as an example where the design of the sculpture garden was successfully achieved with an indoor and outdoor display area.

The extent of the garden should be coherent and within walking distance of the riverfront. The area defined for the sculpture garden was between the Ambassador Bridge to the Caron Avenue Pump House.

Orientation signs should be provided to direct people - Mr. Odette suggested an open bus type people mover

using the Princess Hotel bus in Hamilton, Bermuda as an example.

- The introduction of student competitions and children's

sculpture classes and workshops within the sculpture garden was encouraged.

Riverfront VINDSOR Development

#### August 1999

The City of Windsor authorized a Central **Riverfront Implementation Plan to pull** together all previous studies and public input for riverfront development. As part of the process, there will be a design charette. The flyer provides insight into the charette process.

W hat is a design charette?

A design charette is an illustrative brainstorming session which produces creative and feasible solutions for specific urban sites.

Who gets involved?

Design professionals such as architects, planners, landscape architects work together in teams to develop different design solutions for urban areas.

In Windsor four consulting teams have been chosen to participate in the design charette:

EDA Collaborative Inc./SENES Consultants Ltd, Architecttura Inc. Hough Woodland Naylor Dance Leinster/ dma, Hotson Baker, Dillon Consulting

Marshall Macklin Monaghan/WRT International Cochrane Brook/ the MBTW Group, Shal

Engineering, ESG International

hen is the design charette being held?

Aug. 10, 11, and 12, 1999

# Where is the design charette held?

The charette will be held in the Cleary International Centre. It will not be open to the public because it is an intensive work session.

An Occasional Publication

# W hat area is being designed?

In Windsor, numerous designs have been individually developed over the last 45 years for various segments of the riverfront parkland which stretches from the Ambassador Bridge to Hiram Walker Distillery. The design charette concentrates on how to integrate them and relate them to existing and future conditions in this area.

### W hy have a design charette?

Windsor's dream of an integrated riverfront park has been in the making since 1903. During these 96 years many park design ideas have percolated and some have been implemented. With the newest acquisitions of the former CPR, Ramada and CNR riverfront lands, the design challenge becomes that of creative synthesis. How can we creatively integrate the existing parks with the newest parks?

Consider the following analogy: How can you enlarge a house so that it resembles an integrated whole rather than a homehandyman's project? The design requires innovative architecture which integrates different styles and rooflines so that the whole becomes the sum of its parts, rather than separate add-ons unrelated to each other.

#### 

For the first time in Windsor's history, people will be able to enjoy 5 km of continuous riverfront parkland from the Ambassador Bridge to Hiram Walker. How will these parks creatively interconnect so that residents and visitors celebrate the different landscape styles, while enjoying a continuous journey?

The design charette offers an efficient, cost effective approach to providing realistic design solutions which integrate Windsor's riverfront

parkland.

# What is the process?

illustrative brainstorming session based on opportunities.

A briefing session opens the process with relevant data and designs from previous groups. Among the information presented to the design teams will be:

> Community Strategic Plan Current and draft Official Plans and zoning bylaws The Waterfront Park Master Plan (EDAW) The Windsor City Centre Revitalization and Design Study;

CN Riverfront Lands Study CN Riverfront Lands : A Historical Survey 1749-1955 Assumption/Centennial Park Environmental Assessment

reports for both the CN and CP rail lands Geotechnical investigations and reports for both the CN and CP rail lands

Relevant Council Resolutions Documents indicating public works installations Aerial base mapping

ave other projects used design charettes?

In the City of Windsor the design consultant for the East Riverside Community Plan held two design charettes as part of the planning process. The City of Surrey and Burnaby have held design charettes for land use issues that have

#### **CITY OF WINDSOR CENTRAL RIVERFRONT** IMPLEMENTATION PLAN

Four teams of professionals have been chosen by City Council to participate in a three day previous decisions and designs, constraints and

> Downtown Marina Environmental Assessment

Metro Windsor Water Front Plan Archaeological investigations and become models for similar processes in other municipalities.

Detroit, Calgary, Charlottetown and Ottawa has all held design charettes on significant projects such as the revitalization projects, the harbourfront and the ceremonial route.

#### hat do we get for \$135,000?

Windsor will pay \$85,000 to one firm, chosen from the four participating firms, to produce the Central Riverfront Implementation Plan. This will be the legacy document which allows the Department of Parks and Recreation to continue to consistently develop the parkland as funds become available.

The four participating firms will share in the remaining \$50,000 honoraria. The illustrated conceptual approaches and drawings produced by these firms during the charette become the property of the City of Windsor.

When can the media meet the designers?

Media may interview participating designers at 5 pm on Thursday, August 12 at the Cleary International Centre in the Port of Windsor Room (4th Floor). These interviews will follow the presentation to Project Committee (City Council) and Technical Committee (Administration) earlier in the day.

For more information:

On the Windsor design charette:

Faye Langmaid, Co-ordinator of Design and Development Department of Parks and Recreation 253-2300 x. 6395

Experts in Design Charettes:

Joe Passa, President, St. Clair Region of Architects 252-0775

Patrick Condon, Professor, University of British Columbia 604-822-9291

Susan Palmer, Senior Planner, City of Calgary 403-268-5455



City of Windsor Department of Parks and Recreation 2450 McDougall Street Windsor, Ontario N8X 3N6

# News Release

Immediate Aug. 20, 1999

Celebrate the dream of Windsorites to enjoy a continuous strip of riverfront parkland from the Ambassador Bridge to Hiram Walker Distillery by taking part in a gigantic community walk on Saturday, Oct. 2.

Join in a celebration to honour the International Year of Older Persons and the Year of the Arts by walking on a paved walkway which stretches from Assumption Park in the west to Lincoln Road in the east.

October 2 has been chosen by the United Nations for a global walk in honour of the International Year of Older Persons. Starting at 10 am all around the world, people will be walking and our community will be participating. Windsor will be adding culture, arts and recreation to the event to make it a real reflection of the diversity and cultural richness of our area.

Riverwalk '99 will start at 9:30 am at Assumption Park and at 10 am at Hiram Walker Distillery. The University of Windsor will design the ceremonies at both parks and the ceremony at the Civic Terrace scheduled for 11:30 am.

#### How to get involved:

- Ask your family, business or organization to get together and walk as a group;
- wear look-alike T-shirts;
- carry a banner;
- volunteer to staff a water station or direct traffic; or
- perform in the park or Civic Terrace.

#### After the riverfront walk

The party continues after the walk with a ceremony at the Civic Terrace and a full afternoon of events at the University of Windsor. Live music, a tour of the costume department, excepts from the evening performance of *She Stoops to Conquer*, are only part of the University of Windsor's Fall Arts Festival which will be held that afternoon. It will be open to free of charge to the public.

Riverwalk '99 August 20, 1999 Page Two

Riverwalk '99 is being organized for the Mayor's Office by the Department of Parks and Recreation with the cooperation of the Council on Aging, Arts Council Windsor and Region, and the University of Windsor. Numerous community groups have volunteered their support including the Arts Council of Windsor and Region, Windsor-Essex Health Unit, the Multicultural Council of Windsor and Essex County, and the Centres for Seniors Windsor.

If you are interested in volunteering to help with the event on October 2, please contact Deana Johnson, Council on Aging at 971-9217. Groups who wish to perform should call Mark Lefebvre, Arts Council Windsor and Region at 252-6855.

For more information, call Patricia Dolan Lewis, Marketing and Community Liaison Department of Parks and Recreation 253-2300 x. 6877

#### or

Paulette Kupnicki, Recreation Supervisor (Seniors) Department of Parks and Recreation 253-2300 x. 6159

## **Speak Out Share Your Vision** of Our Riverfront Parks

Meet the consulting team of Cochrane Brook, the MBTW Group, Shal Engineering and ESG International. View the conceptual plans ask questions and provide comments about the integrated design for our riverfront parks.

Thursday, October 7, 1999 6:30-8:00 pm Presentation at 7:00 pm Cleary International Centre Dieppe Room Windsor, ON

Lloyd Burridge, Commissioner





City of Windsor Department of Parks and Recreation 2450 McDougall Street Windsor, Ontario N8X 3N6

# **News Release**

Immediate October 4, 1999 Speak Out: Designing Windsor's Riverfront Parks

Getting ready for Riverwalk '99 was a challenge, but creating a seamless, universal and exciting park development for the next century is an opportunity for Cochrane Brook, the Planning and Urban Design and the MBTW group consulting team.

On October 7 at 6:30 pm, a public information session including viewing of the park design will be held at the Cleary International Centre in the Dieppe Room. The consultants will be present for questions.

#### Background

In his March 8<sup>th</sup> presentation to Council, Commissioner Burridge said, "To move from the interim 'greening' to a more finalized park development, we need to bring together the concepts of the EDAW plan, with the existing park developments and what we envision for the most recently acquired lands (the Ramada and Shergar properties.)"

The six year old EDAW plan focused exclusively on the former CN lands and did not anticipate a strong east-west connection and integration with the remainder of the riverfront parks. The linking of the riverfront parks into a 5 km of green parkland has increased the opportunities and multiplied the challenges.

#### **Interim Greening**

The interim greening ensured that the waterfront promenade and bike path was put into place. The interim greening has provided the long awaited public access to all of the riverfront. Safety barriers, planting, benches, playground units, shoreline works and about 150,000 cubic metres of fill provide the basics of the park. However to make the riverfront a year round family attraction, it is important to address where washrooms, concessions, drinking fountains, parking and other necessities and amenities are to be located.

In June '99, Council approved a proposal call seeking consultants to articulate the long term vision for the 80 acres of riverfront parkland, considered the jewel of the city parks' system. The

#### Designing Windsor's Riverfront Page Two

5 km stretch from Hiram Walker to Ambassador Bridge takes advantage of Windsor's most notable geographical feature, the Detroit River and the views of the Detroit skyline. To protect the investment and ensure that it is developed to its full potential, qualified firms were asked to submit a proposal for an implementation and guideline plan for the central riverfront. The goal was to obtain a design plan to illustrate the integration of existing approved plans for the park development; provide direction for riverfront areas without plans and produce design guidelines and standards for the future construction of each development phase. In addition, the implementation plan will to meet the requirements of the Phase 1 & 2 of the Environment Assessment process.

The proposal call was a two stage process. The first stage proposals were reviewed and four (4) consultant teams were recommended for the second stage. The second stage was a 3 day design charette. The four consulting teams were asked to complete conceptual designs and a workplan for the implementation of the designs including the desirable methods of public consultation and participation recommendations. Based on the results for the design charette, Council awarded the contract to Cochrane Brook Planning and Urban Design and the MBTW Group.

The design charette process left the City with four (4) very different, beautiful and implementable plans for the riverfront. The consulting team has compiled these plans into a workbook, reviewed them with numerous stakeholders, technical advisors and community leaders and based on comments and suggestions have formulated a more refined "melded" plan from all this information.

The melded plan was on display on October 2 at Riverwalk '99 and is available for public viewing in the lobby of the Cleary.

Following the public meeting on Thursday, Oct. 7 at 6:30 p.m. in the Dieppe Room of the Cleary International Centre, the consulting team will draft the design principles, guidelines, and standards which will be available for public review late in November.

For more information, contact: Faye Langmaid Coordinator of Design & Development Parks & Recreation 253-2300 x6395 or Patricia Dolan Lewis

Patricia Dolan Lewis Marketing and Community Liaison 253-2300 x. 6877

### CITY OF WINDSOR CENTRAL RIVERFRONT IMPLEMENTATION PLAN



City of Windsor Department of Parks and Recreation 2450 McDougall Street Windsor, Ontario N8X 3N6

# **News Release**

Immediate October 7, 1999

#### MEDIA ADVISORY Meet Riverfront Consultants

WHAT: Riverfront design consultants available for media questions

WHEN: 3 pm, Wednesday, Oct 7, 1999

WHERE: Cleary International Centre, Dieppe Room

**WHY:** Cochrane Brook Planning and Urban Design and the MBTW Group will meet the media at 3 pm to present drawings and answer questions.

The public are invited to arrive at 6:30 pm for additional comments and discussion with the riverfront planners.

For more information, contact: Faye Langmaid Coordinator of Design & Development Parks & Recreation 253-2300 x6395 or Patricia Dolan Lewis Marketing and Community Liaison 253-2300 x. 6877

## Central Riverfront Implementation Plan Stakeholders Meeting

**Date:** October 7, 1999

Attending: See listing attached

**Presentation:** Pat Bollenberghe gave a very detailed presentation of the concept plan which builds on the existing parks and evolves from them. Pat noted that the plan will continue to evolve over time based on input and implementation.

#### The guiding principles are:

- relevance to the people of Windsor (building on the culture and history of the site)
- seeks to achieve balance (acting both as a resource and a retreat)
- connective and interpretative

#### Defining structures and elements are:

- Circulation Network composed of Riverside Drive, Detroit River and north/south connections
- Beacons (visual reference points): Celestial, Legacy, Peace, Festival, Dawn
- Gateways: Mckee Park in Sandwich and Peabody site in Walkerville

**Other elements:** Sculpture Garden, International Gardens, CP Ferry Docks and Outdoor Ecological Museum, Steamboat Wharf, Dieppe Gardens, Civic Terrace, Transient Marina, Bert Weeks Memorial Gardens, Spiritual Mound and Joan and Clifford Hatch Wildflower Gardens.

#### **Comments:**

- 1. Lois Smedick asked if the concept of tying in the Great Lakes Environmental Institute of Research (GLIER) either at the Ecological Gardens or having a display on their site when the trail is extended to the west has been considered.
- 2. Barb Bondy asked if the interpretative elements (e.g. signage) could be put forward as design competitions for local artists.
- 3. John Hartig asked if there had been any discussion of joint initiatives with Detroit. He wondered how beacons could be complimented on the north shore carrying on the theme of 2 countries, 2 cities, 1 river.
- 4. Crossing of Riverside Drive at City Hall Esplanade and Western Super Anchor (over or under passes)
- 5. Barry Horrobin questions whether emergency access should be provided to each of the beacons at a minimum. The beacons would also add a measure of security because of the activity at each site.

- 6. John Hartig asked if the concept of having a presence and prominence of International Joint Commission (IJC) somehow expressed within the overall concept. There involvement should be pursued.
- 7. A question regarding how the priorities and timing will be set out in the study. Faye comments that the consultant has been asked to address this and some principles will be set out in the next steps.
- 8. Members of the City Centre Revitalization Task Force (CCRTF) comment that the walkway along the riverfront should be lite for night and wintertime use.
- 9. Barb Bondy questioned whether the Beacons could be an opportunity for local artists and how firm the themes are.
- 10. Lois Smedick wonders if there are areas that could be set aside or designed to provide sanctuary for migrating birds? Consultant answered that the wildflower gardens and ecological gardens are potential locations.
- 11. A resident questions the enhancements of Dieppe Gardens and if they have been reviewed with the veterans and community. Faye indicates that the Legions have been contacted.
- 12. A resident questions whether specific items were given to the consultant. Fave answers that because of the amount of study and time invested the design parameters of such items as the marina, Bert Weeks Memorial Gardens and existing parks were provided to the consultant. The consultant comments that they were charged with the task of tying everything together and enhance the existing sites. The design process is a continual reiterative process with refinements always being made.
- 13. A resident asks if a cost has been determined as of yet? Faye indicates that the shoreline works alone are in the magnitude of 5-10 million. The remainder of the park development will be in addition to that and the consultant will generate a cost estimate when a more refined design is arrived at.
- 14. Members of the CCRTF comment that complimentary retail creates a safer environment and brings people to the riverfront plus it also supplements revenue generation. They support the size, location and mix of commercial suggested. The consultant comments that the key is balance and the commercial needs add a measure of safety plus provide spots for people to return to (concessions, cafes, artisan shops). This needs to be defined so that the buildings become part of the landscape to be successful (citing a number of examples such as Stanley Park and Central Park).



Immediate October 19, 1999

From Saturday, Oct. 23 until Sunday, Oct. 31, drawings of the proposed riverfront parks will be on display across from the theatre in Devonshire Mall.

City staff will be available for questions and comments on Saturday, Oct. 23 and Sunday, Oct. 24, Saturday, Oct. 30 and Sunday, Oct. 31 from noon until 4 pm.

Visit the mall to help us design a magnificent riverfront parkland.

A comprehensive plan designed by Cochrane Brook, Urban Design and Planning and the MBTW Group for the five-kilometre park along the Detroit River builds on existing parks and plans. The design creates a coherent vision for the central riverfront area, based on a gateway theme and a sequence of stories related to the culture and history of the Windsor area. The proposed park design incorporates paths, as well as five park pavilions, called Beacons. The pavilions provide key landmarks along the riverfront and include services such as concessions, washrooms, telephones, water fountains etc.

The riverfront parks are designed to promote a variety of year round cultural and recreational activities for people of all ages and abilities.

#### For more information, call:

Faye Langmaid, Co-ordinator of Design and Development Department of Parks and Recreation 253-2300 x6395

#### or

Jim Yanchula City Centre Revitalization Manager 255-6966

#### or

Patricia Dolan Lewis, Marketing and Community Liaison Department of Parks and Recreation 253-2300 x. 6877

### **CITY OF WINDSOR CENTRAL RIVERFRONT** IMPLEMENTATION PLAN

City of Windsor Department of Parks and Recreation 2450 McDougall Street Windsor, Ontario N8X 3N6

# News Release

#### Visit the mall and help design the riverfront.

#### CENTRAL RIVERFRONT IMPLEMENTATION PLAN

Please take a few moments to give us your comments on the Central Riverfront Implementation Plan. Your opinions are required and important. They will be taken into consideration as the plan is developed. ALL INFORMATION IS CONFIDENTIAL. If you have questions, ask any staff on duty at the open house for assistance.

1.	Check the box which best	Adjacent to the Riverfront
	describes where you live.	-

Elsewhere in the City Centre

Elsewhere in The City of Windsor

Consider all the features of the plan listed below and check the box which best 2. describes your opinion of the feature (you might find it helpful to consult the plans on display)

		Like	Don't Care/ No Opinion	Dislike
a]	the overall riverfront park system			
<b>b</b> ]	the Riverside Drive promenade			
c]	the Walkerville entrance			
d]	the Children's Waterplay feature			
e]	extension of the trails for pedestrian/cyclists/rollerbladers past Hiram Walkers and Ambassador Bridge			
f]	concept of Steamboat Wharf			
gľ	concept for five beacons/ activity centres along the riverfron	<b>D</b> <b>t.</b>		
h]	the outdoor ecological museum			
i]	future extension to the south into the neighbourhoods.			

For any feature that you dislike, please give us your reasons.

3.	Are there any	y specific concerns which, in your opinion, have not been
	sufficiently c	onsidered in the concept plan?

Yes		No	
-----	--	----	--

.

If you checked yes, please state your concerns.

4.	In your opinion what should the order of priority be for development
	list your top five [5] choices in order).
	[4]

[1]		
[2[		
[3]		
[4]		¥.
[5]		
	1.	

What suggestions would you have regarding parking along the riverfront? 5.

•.		

6. It is proposed that each of the beacons would include some form of washroom, concession or food service. Are you in agreement with this limited commercial development?

Like	Don't Care/ No Opinion	Dislike

7. Restaurant/cafe's and limited complimentary commercial (i.e. small shops) are proposed at the marina and steamboat wharf. Are you in agreement with this limited commercial development?

Like	Don't Care/ No Opinion	Dislike

Please make any other responses (good or bad) which you feel would help us 8. develop the plan.

۰.

110

(please

MBTW GROUP

# Windsor Central Riverfront Implementation Plan

A long-range implementation plan has now been initiated for the City of Windsor for the Detroit riverfront between Hiram Walker (Devonshire Road) and the Ambassador Bridge (Huron Church) with proposed extensions beyond these limits and south back into the neighbourhoods.

There are two important considerations to note about this study. First, it is being conducted with a tremendous amount of public participation and will become the foundation for an amendment to the Official Plan, "Vision in Action". The City is considering parkland uses of this area of the riverfront as stated in the Official Plan and other planning documentation over the past 100 years.

Second, this study is being conducted in a way that will satisfy Phases 1 and 2 of the Master Planning Process requirements of a Class Environmental Assessment under the Environmental Assessment Act.

The City has previously obtained approval for a number of Class EA's for shoreline improvements in sections of the riverfront, the transient marina and retention treatment basins; this study builds on those documents and brings all of the other sections of the riverfront under one master plan for future development.

"Master plans are long range plans which integrate infrastructure requirements for existing and future land use with environmental assessment planning principles. These plans examine an infrastructure system(s) or group of related projects in order to outline a framework for planning for subsequent projects and/or developments."

Comments are invited for incorporation into the study, and will be received at the address below until November 15, 1999. Currently the concept plan is on display at Devonshire Mall and will move to the Central Library on November 1. Subject to comments received, the City of Windsor intends to proceed with the study to be completed by late 1999.

Further information regarding this study, please contact: Faye Langmaid, CSLA/MCIP Co-ordinator of Design and Development City of Windsor Parks & Recreation Department 2450 McDougall Windsor, N8X 3N6

Phone (519) 253-2300 x6395 Fax (519) 255-7990 e-mail flangmaid@city.windsor.on.ca Cochrane Brook and MBTW created a workbook from the 4 different design plans that resulted from the design charette and circulated this to a number of interested individuals and community leaders for comments and observations. The workbook was also the basis for a workshop, held on September 22nd with City Council and the Technical Committee.

Cochrane Brook Urban Design and Planning jointly with the MBTW Group attended Riverwalk on October 2nd, 1999. On display at the two start areas and in a tent at the Civic Terrace was a refined plan generated from all of the above noted input. Numerous people viewed the design plans at Riverwalk and some 400 people took the opportunity to discuss with the consultant and City staff present the future proposals for the riverfront. Generally, the comments were very positive; with many individuals expressing excitement and enthusiasm for the proposals.

The display then moved to the lobby of the Cleary International Centre for October 4th to 7th. Stakeholder and public meetings were held during the afternoon and evening of October 7<sup>th</sup> (summaries are attached). Next, the display moved to the Central Library until October 23<sup>rd</sup>; when it was mounted at Devonshire Mall. Thousands of people had the opportunity to view the plan during the nine days that it was on display at the Mall. Administrative staff from the City were available to discuss the concepts with interested individuals on October 23, 24, 30, 31 from noon until 4p.m. The number of people that took time to fill our the questionnaire, either in groups, as couples or individuals gives a very good indication of the general opinion expressed by the majority.

The display has been on view at the Central Library since October 31<sup>st</sup>. A newspaper advertisement invited any members of the public who wished to comment to do so by either phoning, writing or e-mailing the Co-ordinator of Design and Development. In addition, the Co-ordinator has made presentations to service clubs, school classes, at the University and other organizations in an attempt to have as open a dialogue, with as many groups as possible.

#### Analysis

It is immediately apparent that citizens attending the various display locations attach great importance to the riverfront. Indeed, the River and adjacent parkland has symbolic status - as the crown jewel. Citizens are prepared to wait for improvements and most would be happy to keep the riverfront as is, with modest improvements.

The results of the questionnaires amplify the general opinion. Care should be taken in extrapolating the results for the population of the entire city. The results represent the opinion only of those that took the time to complete a questionnaire. The following chart summaries the questionnaire, in order of the questions posed.

DSOF

0035152

Llovd Burridge

Commissioner

### CITY OF WINDSOR CENTRAL RIVERFRONT IMPLEMENTATION PLAN

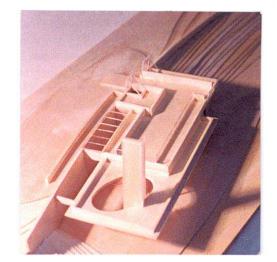
November 15, 1999

Appendix C: Peace Beacon Proposal



CITY OF WINDSOR
CENTRAL RIVERFRONT
IMPLEMENTATION PLAN

# Central Riverfront ParkCITYOFPeace Beacon ProposalWINDSOR



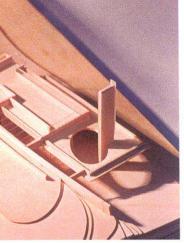




PBK Architects Inc. ARCHITECT The MBTW Group LANDSCAPE ARCHITECT Cochrane Brook Planning & Urban Design MASTER PLAN CONSULTANTS Blackwell Engineering Ltd. STRUCTURAL

Tou & Associates Ltd.

MECHANICAL&ELECTRICAL



The design of the Peace Beacon is based on a seamless integration of garden and building, of interior and exterior, both metaphorically and literally. The building is set into the small hillside at the south edge of the Park, its roof is designed as a landscaped terrace, accessible from the Riverside Drive Promenade, providing an overlook to the River for pedestrians. Views to the River from Riverside Drive are therefore unobstructed. The roof terrace will provide areas for viewing and seating within a garden setting of ornamental grasses.

A sloped retaining wall, set into the hillside, forms the back wall of the building and extends further beyond the interior portion to create a semi-sheltered "outdoor room" on the east side of the building. The focus of the outdoor courtyard is an oval cut into the roof structure providing framed views to the sky. On the interior rim of the oval an inscription in Latin reads: PAX ORBITUS TERRANUM (Universal Peace).

A strong vertical structure – the beacon itself - links the ground plane to the terrace and upwards to the sky. It is located at the edge of the oval and extends through the aperture. The beacon is constructed as an upright concrete fin with attachments of sandblasted glass panels. A gap between the glass and concrete support is fitted with lighting which will illuminate the full height of the frosted glass panels creating a visible landmark during the evening and daylight hours.

The roof slab with its landscaped terrace tilts slightly up in the northerly direction at a slope of 5%, offering a higher ceiling clearance as the building opens onto the Park. At the north end where the roof meets the buttress support, the roof slab is pulled away from the retaining wall to form a continuous open slot. Within the interior area this gap accommodates a linear skylight. In the area of the outdoor courtyard the gap is open to the sky. The slot allows southerly sunlight to penetrate into the back of the structure illuminating the canted retaining wall. Portions of the sloped retaining will be covered in Ivy - a symbol of peace.

The earth-sheltered design of the structure is consistent with the overall intent to create an environmentally sustainable structure. Portions of the linear skylight will be operable to promote convection currents as a means of natural cooling. Natural shading of the skylights with the strategic planting of deciduous trees at the terrace level will reduce heat gain during the summer months. The retaining wall will be cooled in the summer absorbing the colder temperatures of the below-grade soils. Mechanical heating will augmented by solar heat entering through the skylight and captured in the concrete retaining wall and floor slab.

The building area is approximately 1,910 square feet, providing washrooms, a small concession which may serve both interior and exterior areas, a mechanical room and the central visitor centre (970 sa. ft.) with continuous views to the Park, the courtvard

#### Central Riverfront Park CITY OF Peace Beacon WINDSOR

and the beacon. The visitor centre is also able to accommodate indoor seating areas providing a café type function in conjunction with the concession.

The peace theme is also communicated through the use of an exerpt from a poem by the Mexican poet Octavio Paz. The selection of Paz acknowledges the occasion of the OAS meeting in Windsor to coincide with the opening of the Peace Beacon. The excerpt will be inscribed in the sloped retaining wall set amongst the Ivy vine. The inscription will read in Spanish, English and French. It is a piece to be "discovered" and will therefore be a discreet size. It should not overpower or dominate the view to the lvy covered wall.

From Octavio Paz's collection of poetry entitled <u>A Tree Within an excerpt from the</u> poem - Letter of Testimony:

High above The constellations always write The same word; we, here below, write our mortal names.

The couple Is a couple because it has no Eden. We are exiles from the Garden,

We are condemned to invent it,

to nurture our delirious flowers, living jewels we clip to adorn a throat.

We are condemned To leave the Garden behind: before us is the world.

En la altura las constelaciones escriben siempre la misma palabre: nosotros, aqui abajo, escribimos nuestros nombres mortales.

La parèja es pareja porque no tiene Edén. Somos los expulsados del Jardín,

Estamos condenados a inventarlo

v cultivar sus flores delirantes. Joyas vivas que cortamos Para adornar un cuello.

Estamos condenados A deiar el Jardín: Delante de nosotros Está el mundo.

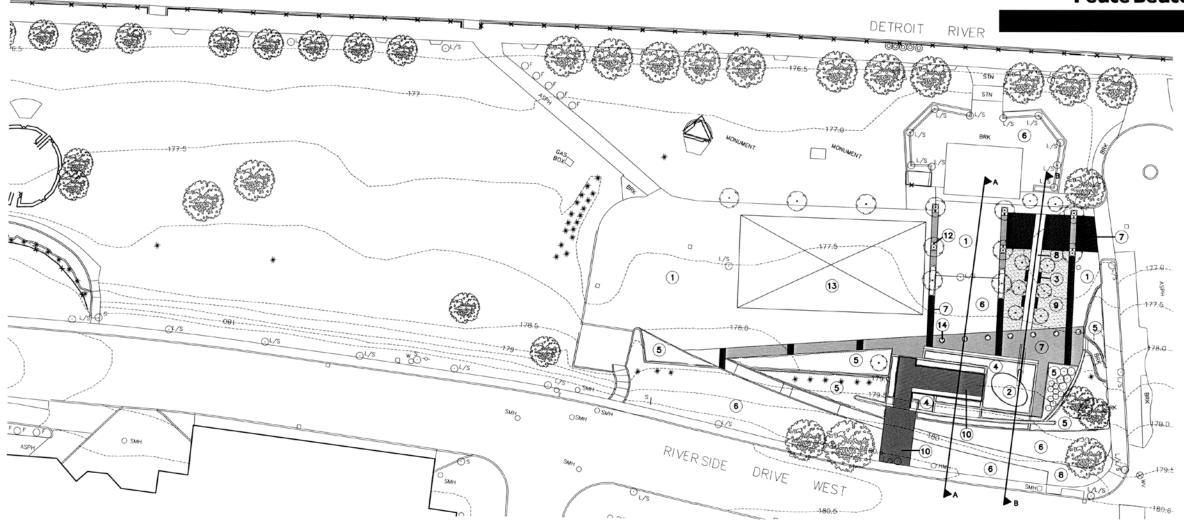
**CITY OF WINDSOR CENTRAL RIVERFRONT** IMPLEMENTATION PLAN

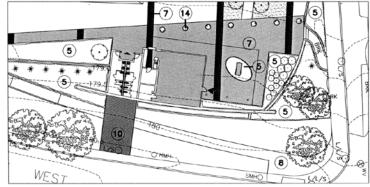
PBK Architects Inc. ARCHITECT The MBTW Group LANDSCAPE ARCHITECT **Cochrane Brook Planning** MASTER PLAN CONSULTANTS Blackwell Engineering Ltd. STRUCTURAL Tou & Associates Ltd.

**DESIGN BRIEF** 

MECHANICALAELECTRICAL

10.02.2000





GROUND FLOOR PAVING AND PLANTING

116

# **Central Riverfront** | CITY OF Peace Beacon

#### SCALE 1:200

# WINDSOR

$\sim$		
1)	<b>EXISTING</b>	ASPHALT

- 2 PEACE BEACON
- 3 BENCHES
- (4) ROOF PLANTING
- 5 LANDSCAPED AREA
- 6) SOD
- (B) CONCRETE PAVEMENT
- (9) GRANULAR PAVEMENT
- 10 TERRACE PAVERS
- (1) BOLLARDS
- (12) LIGHTED BOLLARDS
- (13) OAS TENT 60' x 120'
- 14 PLANTERS

PBK Architects Inc.

ARCHITECT

The MBTW Group LANDSCAPE ARCHITECT

**Cochrane Brook Planning** 

- MASTER PLAN CONSULTANTS
- Blackwell Engineering Ltd. STRUCTURAL

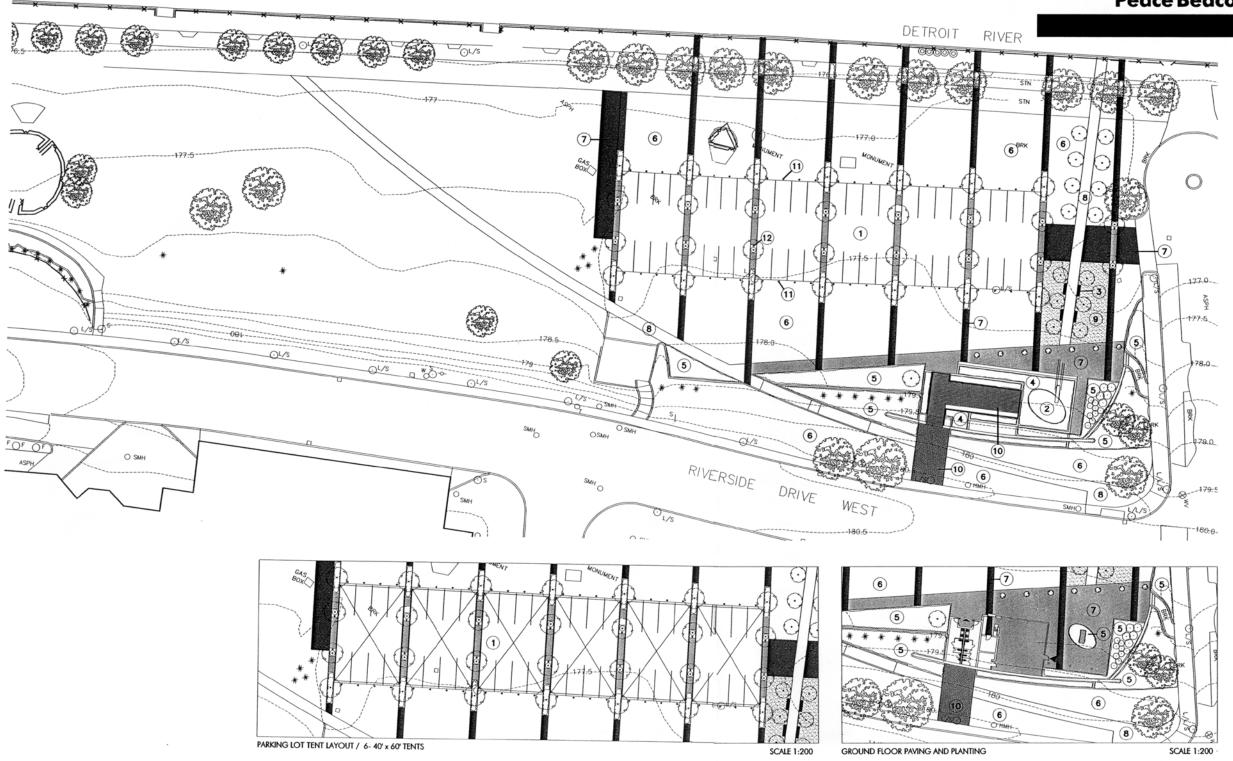
Tou & Associates Ltd. MECHANICAL & ELECTRICAL



LANDSCAPE SITE PLAN N.T.S.

10.02.2000

L1-PH1



# Central Riverfront | CITY OF **Peace Beacon**

# WINDSOR

- 2 PEACE BEACON
- 3 BENCHES
- (4) ROOF PLANTING
- (5) LANDSCAPED AREA
- (6) SOD
- (8) CONCRETE PAVEMENT
- (9) GRANULAR PAVEMENT
- (10) TERRACE PAVERS
- (11) BOLLARDS
- (12) LIGHTED BOLLARDS

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MECHANICAL & ELECTRICAL

LANDSCAPE SITE PLAN N.T.S.

10.02.2000

L2-PH2

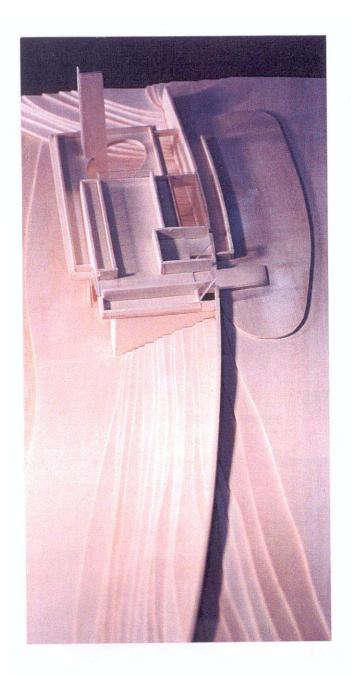


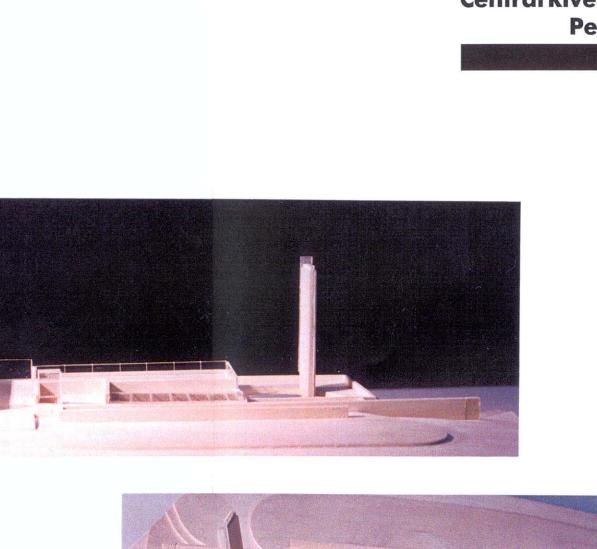
PBK Architects Inc. ARCHITECT The MBTW Group LANDSCAPE ARCHITECT Cochrane Brook Planning MASTER PLAN CONSULTANTS Blackwell Engineering Ltd. STRUCTURAL Tou & Associates Ltd. MECHANICAL & ELECTRICAL

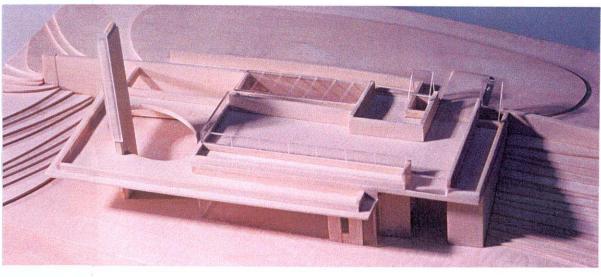
## PERSPECTIVE

10.02.2000

MBTW GROUP







# Central Riverfront Park | CITY OF Peace Beacon WINDSOR

PBK Architects Inc. ARCHITECT

The MBTW Group LANDSCAPE ARCHITECT

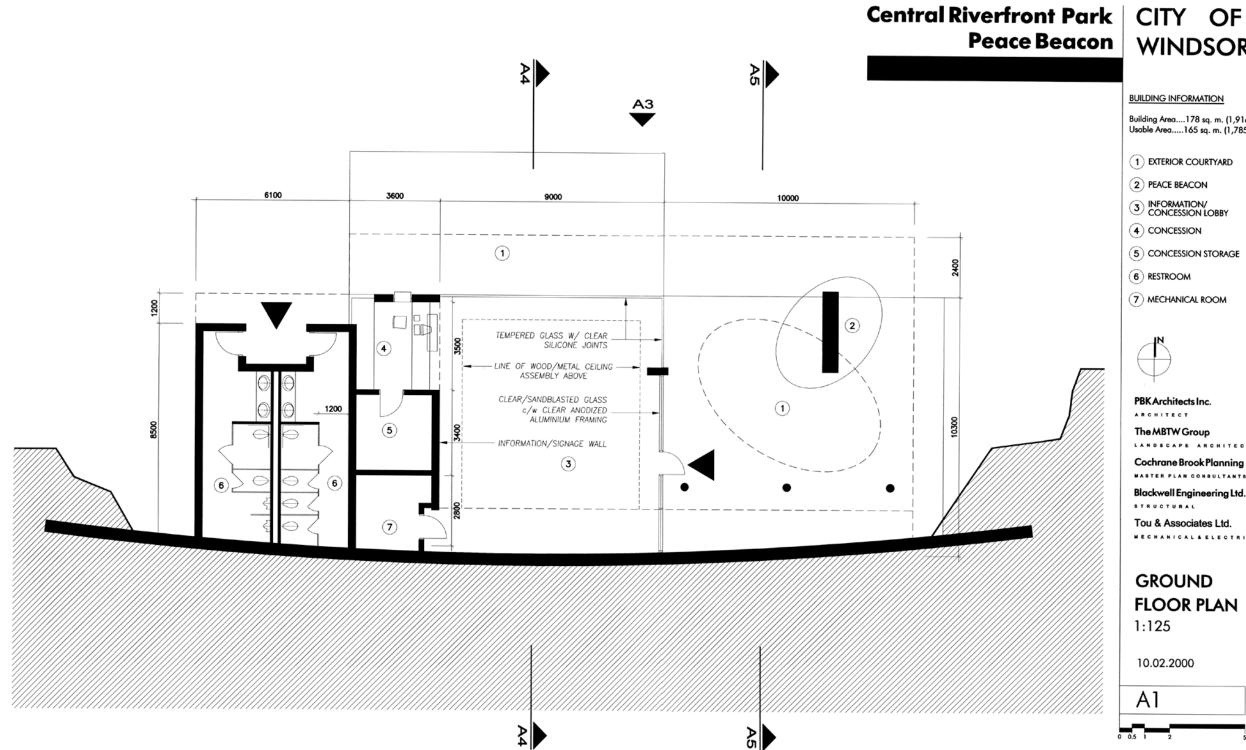
Cochrane Brook Planning MASTER PLAN CONSULTANTS

Blackwell Engineering Ltd. STRUCTURAL

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## MODEL

10.02.2000



# Peace Beacon WINDSOR

#### BUILDING INFORMATION

Building Area....178 sq. m. (1,916 sq. ft.) Usable Area.....165 sq. m. (1,785 sq. ft.)

- 1 EXTERIOR COURTYARD
- 2 PEACE BEACON
- 3 INFORMATION/ CONCESSION LOBBY
- 5 CONCESSION STORAGE
- 6 RESTROOM

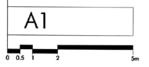


PBK Architects Inc. ARCHITECT The MBTW Group LANDSCAPE ARCHITECT Cochrane Brook Planning MASTER PLAN CONSULTANTS Blackwell Engineering Ltd. STRUCTURAL

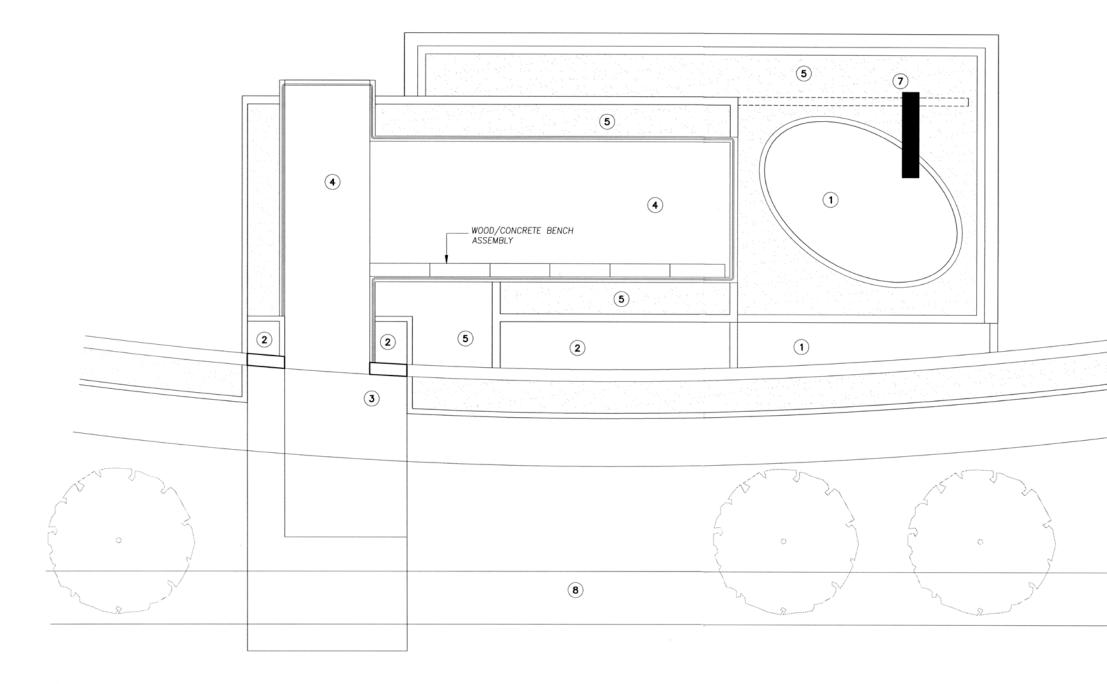
Tou & Associates Ltd. MECHANICAL & ELECTRICAL

## GROUND FLOOR PLAN 1:125

10.02.2000



# **Central Riverfront Park** | CITY OF Peace Beacon WINDSOR

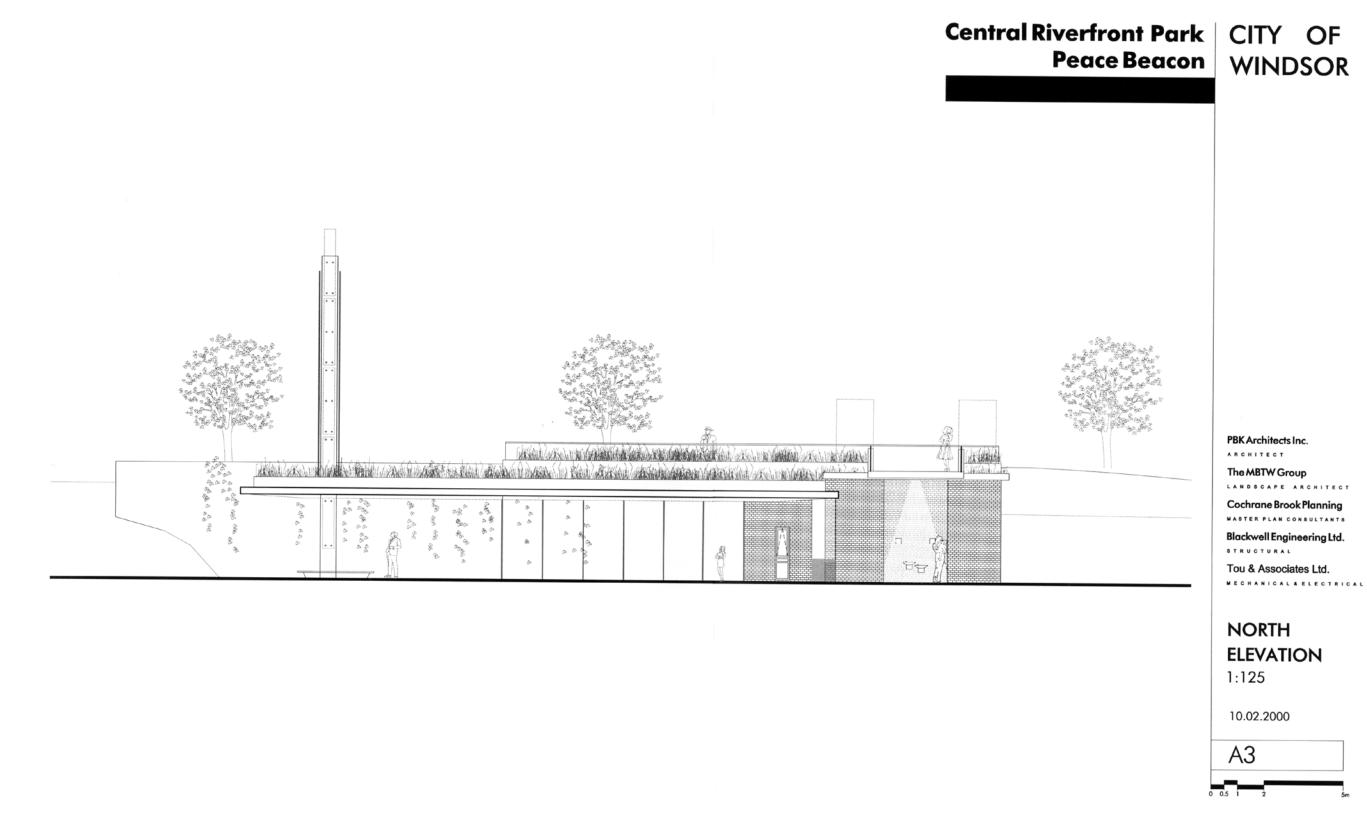


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CITY OF WINDSOR **CENTRAL RIVERFRONT** IMPLEMENTATION PLAN

(1) OPEN TO BELOW 2 SKYLIGHT (3) VISITOR INFORMATION (4) ROOF TERRACE (5) ROOF GARDEN (NON-ACCESSIBLE) 6 STAIR GROUND FLOOR LEVEL/ LOWER TERRACES 7 PEACE BEACON 8 PEDESTRIAN WALKWAY (REFER TO LANDSCAPE/SITE PLAN) PBK Architects Inc. ARCHITECT The MBTW Group LANDSCAPE ARCHITECT **Cochrane Brook Planning** MASTER PLAN CONSULTANTS Blackwell Engineering Ltd. STRUCTURAL Tou & Associates Ltd. MECHANICAL & ELECTRICAL **ROOF PLAN** 1:125 10.02.2000 A2

0 0.5 1



122

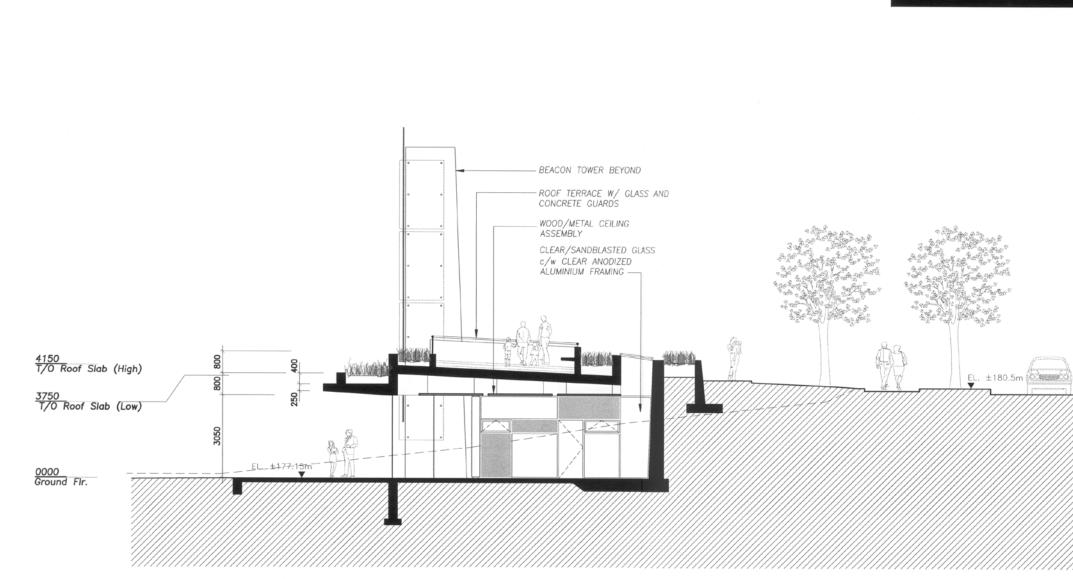
PBK Architects Inc. ARCHITECT The MBTW Group LANDSCAPE ARCHITECT **Cochrane Brook Planning** MASTER PLAN CONSULTANTS Blackwell Engineering Ltd. STRUCTURAL Tou & Associates Ltd.

NORTH **ELEVATION** 1:125

10.02.2000

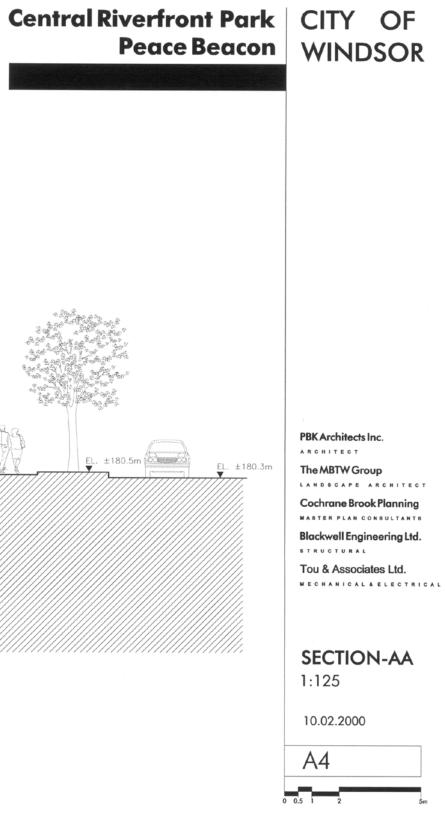
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MBTW GROUP

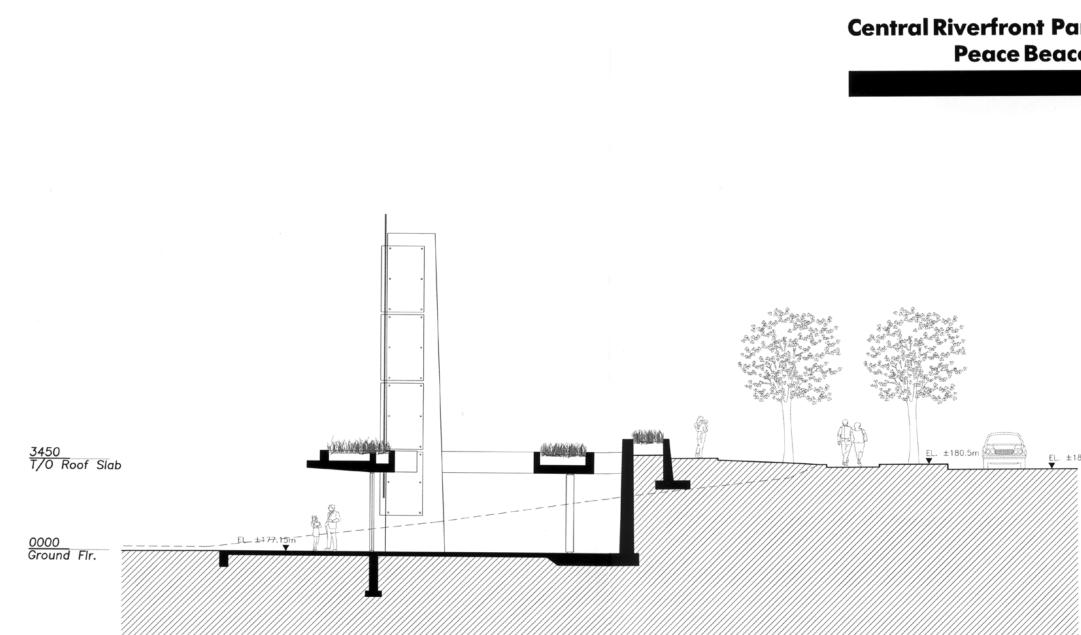


MBTW GROUP

CITY OF WINDSOR CENTRAL RIVERFRONT IMPLEMENTATION PLAN



123

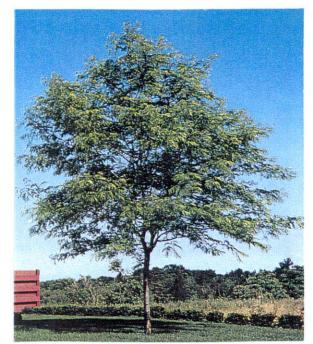


124

	CITY OF WINDSOR
±180.3m	PBK Architects Inc. ARCHITECT The MBTW Group LANDSCAPE ARCHITECT Cochrane Brook Planning MASTER PLAN CONSULTANTS Blackwell Engineering Ltd. STRUCTURAL Tou & Associates Ltd. MECHANICAL & ELECTRICAL
	SECTION-BB 1:125 10.02.2000 A5



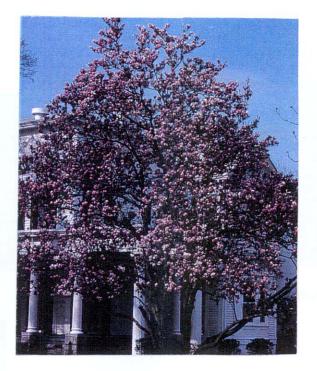




Shademaster Honey-Locust



**Chantecleer Pear** 



Saucer Magnolia









Yellowtwig Dogwood



Slender Deutzia



Rhododendrons and Azaleas



# Central Riverfront | CITY OF Peace Beacon



# WINDSOR

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LANDSCAPE MATERIAL IMAGES

10.02.2000

IMAGES







Forget-me-nots



Variegated Sweet Flag



**Dense Yew** 



White Wings Peony



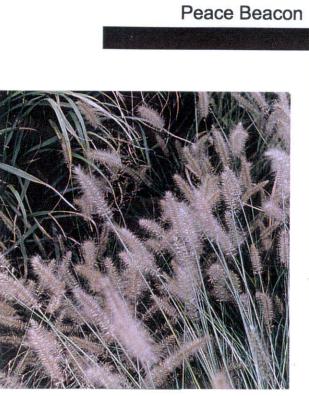
Stella D'oro Daylily



Emerald Gaiety Euonymus



**Evergreen Oat Grass** 



**Cassian Fountain Grass** 



Solling Fescue

# Central Riverfront | CITY OF WINDSOR

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LANDSCAPE MATERIAL IMAGES

10.02.2000

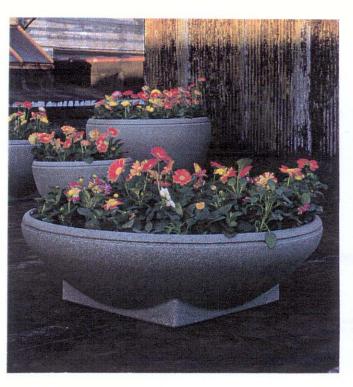
IMAGES







Coloured Concrete Paving



**Precast Planters** 



Waste Receptacles



Benches

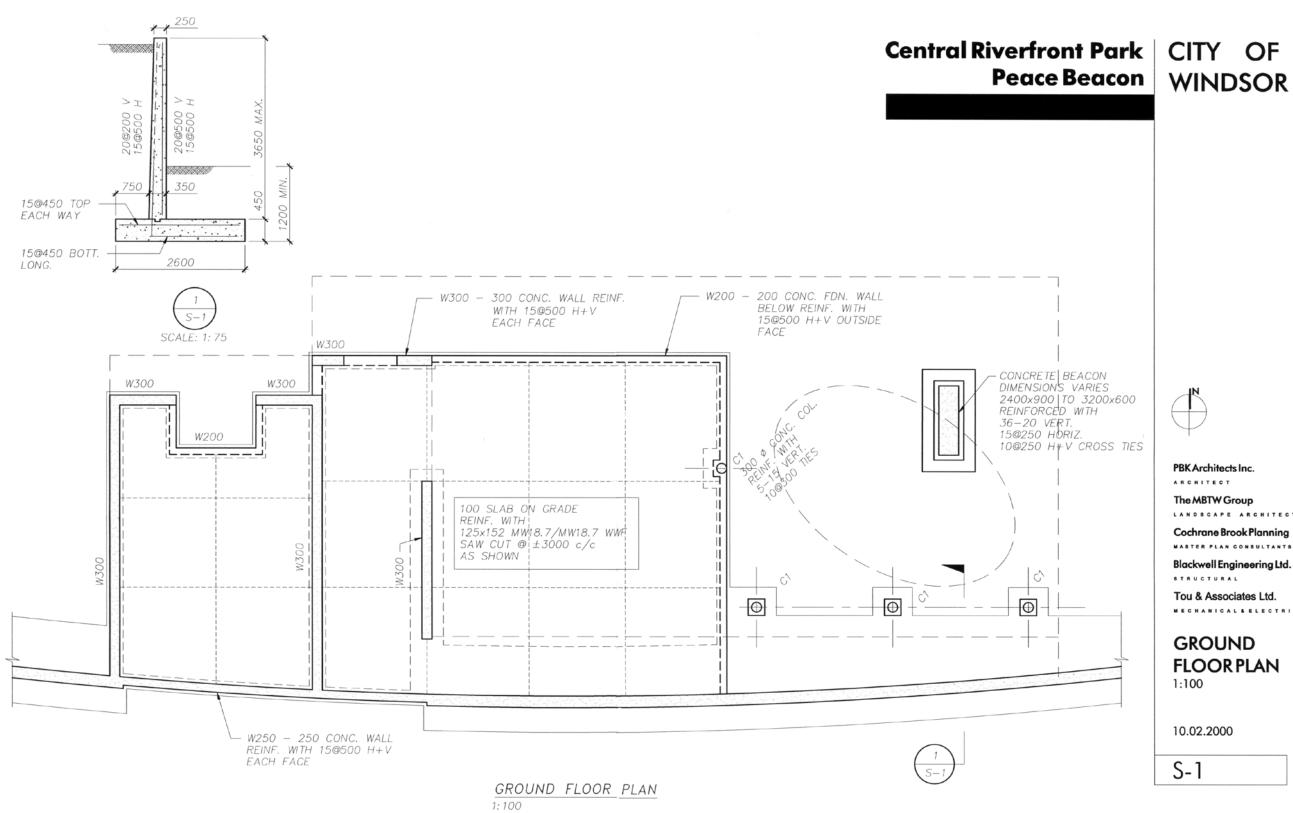
# Central Riverfront | CITY OF Peace Beacon WINDSOR

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LANDSCAPE MATERIAL IMAGES

10.02.2000

IMAGES



MBTW GROUP

CITY OF WINDSOR **CENTRAL RIVERFRONT** IMPLEMENTATION PLAN

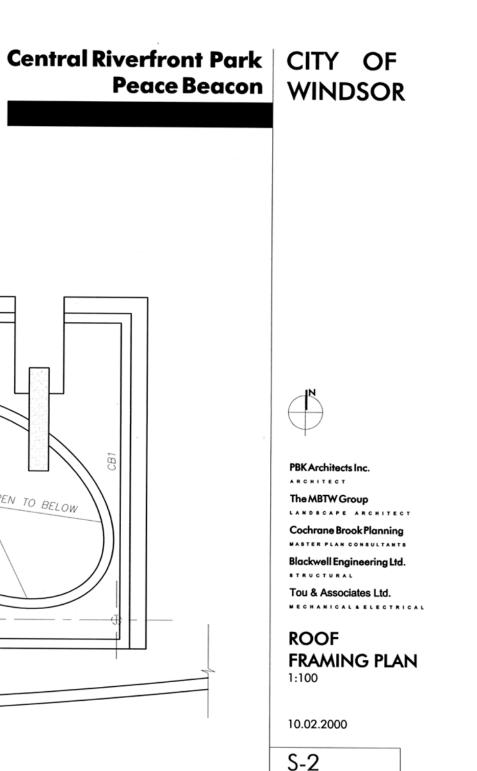
PBK Architects Inc. ARCHITECT The MBTW Group LANDSCAPE ARCHITECT **Cochrane Brook Planning** MASTER PLAN CONSULTANTS Blackwell Engineering Ltd. STRUCTURAL Tou & Associates Ltd.

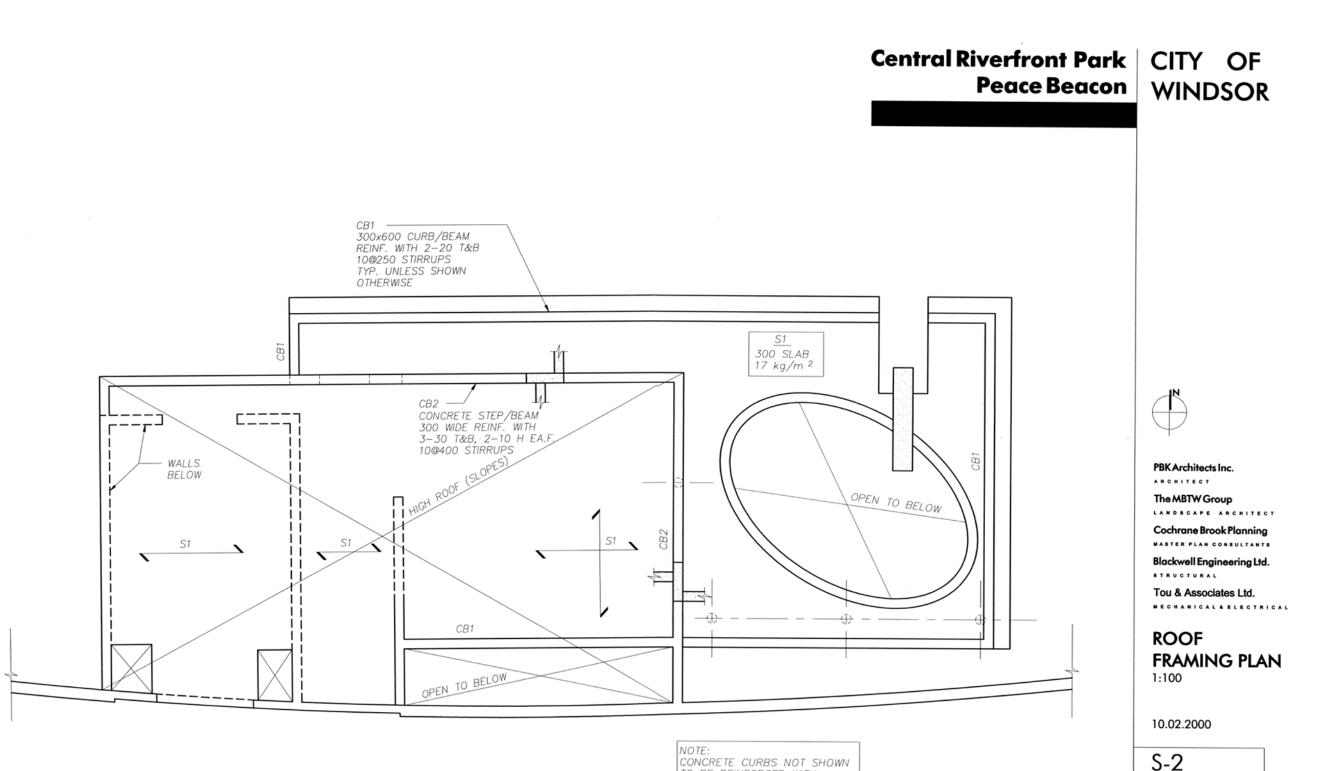
MECHANICAL & ELECTRICAL

## GROUND **FLOOR PLAN** 1:100

10.02.2000

S-1





CONCRETE CURBS NOT SHOWN TO BE REINFORCED WITH 10@400 DWLS, 10@300 HORIZ.

ROOF FRAMING PLAN 1:100

130

# Appendix D: Proposed Riverfront Parking Summary



-
CITY OF WINDSOR
CENTRAL RIVERFRONT
IMPLEMENTATION PLAN

# Appendix D – Proposed Riverfront Parking Summary

		Lot Number	No. of Stalls
Segment 1:	Under Ambassador Bridge	Lot 1	22 stalls
-	Sunset and California Ave.	Lot 2	51 stalls
Segment 2:	At foot of Campbell Ave.	Lot 3	38 stalls
Segment 3:	(Corner of Riverside Drive and Camero	on)	20 stalls
Segment 4:	East of Caron Ave. Pump House	Lot 4	36 stalls
Segment 5:	Between Ferry St. and Oulette Ave.	Lot 5	66 stalls
	East of turn-a-round	Lot 6	90 stalls
Segment 6:	West of Railway Engine display	Lot 7	40 stalls
	East of Festival Plaza	Lot 8	40 stalls
Segment 7:	Between Aylmer Ave. and Louis Ave.	Lot 9	60 stalls
	Between Marentette and Parent Ave.	Lot 10	40 stalls
	Existing Lot	Lot 11	40 stalls
Segment 8:	No parking		
Segment 9:	Surface parking area within Walkerville		60 stalls
Total Riverfr	ont Parking Stalls		523 stalls
•	Off-Street Lots		
	rking Lots and Garages: subtotal		2,884 stalls
•	Parking Lots and Garages: subtotal		1,661 stalls
Customer Or	ly Parking: subtotal	,	3,754 stalls
Total City Ce	entre Off-Street Parking		8,299 stalls

132

# Appendix E: Construction Costs by Segment



CITY OF WINDSOR
CENTRAL RIVERFRONT
IMPLEMENTATION PLAN

EXCLUDED ITEMS: 1.0 Site Demolition - minimal

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# \$4,356,145.00 Segment Total =

\$4,791,759.50

Total =

\$435,614.50

\$263,520.00	\$40,000.00 \$15,000.00 \$22,000.00	
\$540.00	\$500.00 \$300.00 \$1.00	
S	each each sm	
80		

80	50	22000
Trees - Riverside Drive Pedestrian Promenade	Trees - Other	Seeding
0.1	2.0	3.0

MO         OF WORK         OF WORK         OF         Type         PRC         COST           10         Riversida Dirke Pedesitian Pramenade         645         im         \$155.00         \$105.425.00         \$105.000         \$157.950.00         \$150.000.00         \$150.0000.00         \$150.000.00	ITEM	DESCRIPTION	EST.	UNIT	UNIT	TOTAL
Cutotion System:     645     im     \$165.00       Rivervalk     870     im     \$165.00       Sign System - Interpretive     1     allowance     \$100.00000       Sign System - Directional     150     each     \$35.0000       Riving Court #2     1     allowance     \$100.00000       Parking Court #2     1     1     Liphting-       Riving Court #2     1     1     Lip     \$100.00000       Riving Encires     5     each     \$100.00000	NO	OF WORK	QIY.	TYPE	PRICE	COST
Riverside Drive Pedestrian Promenade         445         im         \$165.00           Riverside Drive Pedestrian Promenade         870         im         \$165.00           Riverwolk         870         im         \$155.00           Reservation May         870         im         \$155.00           Sign System - Interpretive         10         allowance         \$100.0000           Parking Court #2         1         allowance         \$100.0000           Parking Court #2         1         1         allowance         \$100.0000           Parking Court #2         1         1         allowance         \$100.0000           Design Amenities         52         each         \$3.00000         \$100.0000           Ighting - Rivervalk         1         1         1         \$2.0000           Uphing - Rivervalk         1         1         1         \$2.00000	Circula	tion Systems				
Riverwalk         870         Im         \$450.00           Recercion Way         Exercention Way         870         Im         \$450.00           Sign System - Directional         Sign System - Interpretive         1         advance         \$100.000           Sign System - Directional         Sign System - Directional         1         advance         \$100.000           Sign System - Directional         Sign System - Directional         1         advance         \$100.000           Sign System - Directional         Lighting - Rivervalk         1         advance         \$100.000           Parking Court #2         1         Lighting - Rivervalk         1         Lighting - Rivervalk         \$100.0000           Lighting - Rivervalk         3         each         \$30.0000         \$30.0000         \$30.0000           Lighting - Rivervalk         3         each         \$30.0000         \$30.0000         \$30.0000           Lighting - Rivervalk         3         each         \$30.0000         \$30.0000         \$30.0000           Lighting - Rivervalk         Rivervalk         3         each         \$30.0000         \$30.0000           Lighting - Rivervalk         Rivervalk         S30.000         \$30.0000         \$30.0000         \$30.0000 <td< td=""><td>0.1</td><td>Riverside Drive Pedestrian Promenade</td><td>645</td><td><u></u></td><td>\$165.00</td><td>\$106,425.00</td></td<>	0.1	Riverside Drive Pedestrian Promenade	645	<u></u>	\$165.00	\$106,425.00
Recreation Way         1170         Im         \$135,00           Sign System - Interpretive         800         Im         \$135,00           Sign System - Interpretive         1         allowance         \$000000           Sign System - Interpretive         1         allowance         \$000000           Sign System - Interpretive         10         allowance         \$000000           Sign System - Interpretive         10         allowance         \$000000           Sign System - Directional         10         1         1         \$000000           Parking Count #1         1         1         1         \$000000           Parking Count #1         1         1         1         \$000000           Ughting - Riverside Drive Pedestrian Promenade         52         each         \$300000           Ughting - Riverside Drive Pedestrian Promenade         52         each         \$300000           Ughting - Riverside Drive Pedestrian Promenade         52         each         \$300000           Ughting - Riverside Drive Pedestrian Promenade         52         each         \$300000           Ramers         Samoins         53         each         \$300000           Ramers         Samoins         53         each         <	2.0	Riverwalk	870	<u></u>	\$450.00	\$391,500.00
Image: Connector Trails       800       Image: Sign System - Directional       800	3.0	Recreation Way	1170	<u></u>	\$135.00	\$157,950.00
Sign System - Interpretive       1       allowance \$100,000 0       5         Sign System - Directional       150       each       \$350,000 0       5         Rking Court #1       1       1       Lis       \$80,0000 0       5         Parking Court #2       1       1       Lis       \$80,0000 0       5         Parking Court #2       1       1       Lis       \$80,0000 0       5         Parking Court #2       1       1       Lis       \$80,0000 0       5         Design Amenties       Lighting - Riverside Drive Pedestrian Promenade       52       each       \$3,0000 0       5         Ughting - Riverside Drive Pedestrian Promenade       52       each       \$3,0000 0       5       5       6       5       6       6       5       5       6       5       5       5       6<	4.0	Connector Trails	800	<u></u>	\$60.00	\$48,000.00
Sgn System - Directional     150     each     \$350.00       rking Court #1     1     1     1     5       Parking Court #2     1     1     1     1     5       Parking Court #2     1     1     1     1     5       Parking Court #2     1     1     1     1     5       Can Design Amenties     1     1     1     1     5       Can Design Amenties     1     1     1     1     5       Can Design Amenties     1     1     1     1     1     5       Can Design Amenties     5     each     53,000.00       Ughting - Recendenton Way     45     each     53,000.00       Ughting - Connector Trail     32     each     51,600.00       Ughting - Connector Trail     33     each     55,000.00       Barners     5     each     51,600.00       Barners     5     each     55,000.00       Dinking Foundrins     3     each     55,000.00       Safety / Interpretive Handrolis     32     each     51,600.00       Distriking Foundrins     5     each     53,600.00       Distriking Foundrins     3     each     51,600.00       Disteretion Kuckee Lana	0.0	Sign System - Interpretive	-	allowance	\$100,	\$100,000.00
King Court #1       1       LS       \$80,000.00         Porking Court #1       1       LS       \$80,000.00         Porking Court #1       1       LS       \$80,000.00         Son Design Amenties       Lighting - Riverside Drive Pedestrian Promenade       52       each       \$5,000.00         Son Design Amenties       Lighting - Riverside Drive Pedestrian Promenade       52       each       \$5,000.00         Lighting - Riverside Drive Pedestrian Promenade       52       each       \$3,000.00         Lighting - Riverside Drive Pedestrian       35       each       \$3,000.00         Lighting - Riverside Drive Pedestrian       35       each       \$3,000.00         Lighting - Riverside Drive Pedestrian       32       each       \$3,000.00         Dinking Founding Benches       51       each       \$1,500.00         Banners       Safety / Interpretive Handralis       32       im       \$3,000.00         Dinking Founding Benches       51       each       \$1,500.00       \$4,000.00         Dinking Foundins       Benners       32       im       \$3,000.00         Dinking Foundins       Dinking Foundins       32       each       \$1,000.00         Dinking Foundins       Benches       51 <td< td=""><td>0.0</td><td>Sign System - Directional</td><td>150</td><td>each</td><td></td><td>\$52,500.00</td></td<>	0.0	Sign System - Directional	150	each		\$52,500.00
Parking Court #1         1         LS         \$80,000.00           Parking Court #2         1         Lg         \$160,000.00           Can Design Amenities         Lighting - Riverside Drive Pedestrian Promenade         52         each         \$5,000.00           Lighting - Riverside Drive Pedestrian Promenade         52         each         \$3,000.00           Lighting - Riverside Drive Pedestrian Promenade         52         each         \$3,000.00           Lighting - Riverside Drive Pedestrian Promenade         52         each         \$3,000.00           Lighting - Riverside Drive Pedestrian         35         each         \$3,000.00           Lighting - Romector Trait         32         each         \$1,500.00           Reservation Benners         51         each         \$1,500.00           Nutste Receptacies         51         each         \$1,500.00           Diriving Foundrins         32         each         \$1,500.00           Safety / Interpretive Handralis         32         each         \$1,500.00           Diriving Foundrins         32         each         \$1,500.00           Safets         2         each         \$1,500.00           Diriving Foundrins         32         each         \$1,500.00	arking	Courts (Includes Lighting and Access)				
Parking Court #2       1       Lg       \$160,000,00         Son Design Amenities       Lighting - Riverside Drive Pedestrian Promenade       52       each       \$5,000,00         Lighting - Riverwalk       35       each       \$5,000,00       \$3,000,00         Lighting - Riverwalk       35       each       \$3,000,00         Lighting - Riverwalk       35       each       \$3,000,00         Lighting - Riverwalk       35       each       \$3,000,00         Naste Receptacies       51       each       \$3,000,00         Banners       Waste Receptacies       51       each       \$3,000,00         Drinking Fountains       325       im       \$3,000,00       \$3,000,00         Drinking Fountains       325       im       \$3,500,00       \$3,500,00         Drinking Fountains       Steley / Interpretive Handralis       \$3,550,000       \$3,500,00	o.	Parking Court #1	-	S	\$80,000.00	\$80,000.00
con Design Amenities     Lighting - Riverside Drive Pedestrian Promenade     52     each     \$5,000.00       Lighting - Riversalts     Dighting - Riversalts     35     each     \$5,000.00       Lighting - Riversalts     35     each     \$5,000.00       Lighting - Riversalts     35     each     \$3,000.00       Lighting - Riversalts     32     each     \$3,000.00       Free Standing Benches     51     each     \$3,000.00       Ranners     52     each     \$3,000.00       Diriking Fourtains     32     each     \$3,000.00       Diriking Fourtains     32     each     \$1,500.00       Diriking Fourtains     32     im     \$300.00       Diriking Fourtains     32     each     \$1,000.00       Diriking Fourtains     2     each     \$1,000.00       Disteriet     Fishing Piatrer     2	0.0	Parking Court #2	_	SJ	\$160,000.00	\$160,000.00
Lighting - Riverside Drive Pedestrian Promenade       52       each       \$5,0000         Lighting - Riverwalk       35       each       \$5,0000         Lighting - Riverwalk       35       each       \$3,0000         Lighting - Recreation Way       45       each       \$3,0000         Lighting - Recreation Way       32       each       \$3,0000         Rree Standing Benches       51       each       \$3,0000         Banners       52       each       \$3,0000         Drinking Fountains       32       each       \$7,5000         Drinking Fountains       2       each       \$1,0000         Safety / Interpretive Handralis       1       Ls       \$1,50000         Drinking Sheiters	Jrban [	lesign Amenities	:•			
Lighting - Riverwalk       35       each       \$3,00000         Lighting - Recreation Way       45       each       \$3,00000         Lighting - Connector Trail       32       each       \$3,00000         Free Standing Benches       51       each       \$3,0000         Banners       52       each       \$3,0000         Banners       52       each       \$3,0000         Drinking Fountains       32       each       \$3,0000         Drinking Fountains       32       each       \$3,0000         Banners       51       each       \$3,0000         Drinking Fountains       32       each       \$3,0000         Safety / Interpretive Handralis       325       Im       \$3,0000         D Risk Racks       40       each       \$7,5000         D Risk Racks       2       each       \$1,61,00         Assembly Plaza       Scultpure Carden Allee       1       Ls       \$40,0000         University Pump House Rooftop Garden       1       Ls       \$42,0000       \$40,000         Celestial Beacon Sculpture Plaza and Fishing Platforms       1       Ls       \$42,000       \$40,000         Celestial Beacon Sculpture Plaza and Fishing Platforms       1 <td>o.</td> <td>Lighting - Riverside Drive Pedestrian Promenade</td> <td>52</td> <td>each</td> <td>\$5,000.00</td> <td>\$260,000.00</td>	o.	Lighting - Riverside Drive Pedestrian Promenade	52	each	\$5,000.00	\$260,000.00
Lighting - Recreation Way     45     each     \$3,00000       Lighting - Connector Trail     32     each     \$3,00000       Free Standing Benches     51     each     \$1,50000       Banners     52     each     \$1,50000       Banners     51     each     \$1,50000       Banners     51     each     \$1,50000       Drinking Fountains     32     each     \$1,50000       Drinking Fountains     325     Im     \$300000       Safety / Interpretive Handralis     325     Im     \$300000       Dinking Fountains     325     Im     \$300000       Safety / Interpretive Handralis     325     Im     \$300000       Dinking Fountains     325     Im     \$300000       Safety / Interpretive Handralis     325     Im     \$300000       Dinking Sheiters     2     each     \$1,50000       D     Fishing Sheiters     2     each     \$1,00000       Assembly Plaza     Scuthure Garden Allee     1     Ls     \$1,614.00       University Pump House Rooftop Garden     1     Ls     \$1,614.00       Celestial Beacon Sculpture Plaza and Fishing Platforms     1     Ls     \$1,614.00       Service Building     Service Building     70     s	0.0	Lighting - Riverwalk	35	each	\$3,000.00	\$105,000.00
Lighting - Connector Trail       32       each       \$3,00000         Free Standing Benches       51       each       \$1,50000         Banners       52       each       \$1,50000         Banners       51       each       \$1,50000         Banners       51       each       \$1,50000         Banners       33       each       \$1,50000         Drinking Fountains       32       each       \$1,50000         Drinking Fountains       325       Im       \$300000         Safety / Interpretive Handralis       325       Im       \$300000         Dinking Fountains       325       Im       \$300000         Safety / Interpretive Handralis       325       Im       \$300000         D       Fishing Shelters       325       Im       \$300000         D       Fishing Shelters       2       each       \$40,00000         Assembly Plaza       Scuitbure Garden Allee       1       1       1       \$7000000         Iniversity Pump House Rooffop Garden       1       1       1       \$425,000000       \$425,000000         Celestial Beacon Sculpture Plaza and Fishing Platforms       1       1       1       \$425,000000       \$40	<u>.0</u>	Lighting - Recreation Way	45	each	\$3,000.00	\$135,000.00
Free Standing Benches       51       each       \$1,500.00         Banners       52       each       \$1,500.00         Banners       53       each       \$1,500.00         Waste Receptacles       51       each       \$2,00.00         Dinking Fountains       325       Im       \$3,500.00         Safety / Interpretive Handralis       325       Im       \$3,500.00         Dinking Fountains       325       Im       \$3,500.00         Safety / Interpretive Handralis       325       Im       \$3,500.00         Diske Racks       40       each       \$1,610.00       \$1,610.00         Bike Racks       Assembly Plaza       Scuthure Garden Allee       1       LS       \$40,000.00         Miniersity Pump House Rooftop Garden       1       LS       \$425,000.00       \$1,614.00       \$1,614.00         Assembly Plaza / Scuthure Plaza and Fishing Platforms       1       LS       \$425,000.00       \$1,614.00       \$1,614.00         Assembly Plaza / Scuthure Plaza and Fishing Platforms       1       LS       \$425,000.00       \$2         University Pumphouse Rooftop Garden       1       LS       \$425,000.00       \$2       \$40,000.00         Kecreation Equipment Rental       Satoro Scut	0.1	Lighting - Connector Trail	32	each	\$3,000.00	\$96,000.00
Banners       52       each       \$200.00         Waste Receptacles       51       each       \$1,500.00         Drinking Fountains       3       each       \$1,500.00         Safety / Interpretive Handralis       325       Im       \$3,500.00         Dinking Fountains       325       Im       \$3,500.00         Safety / Interpretive Handralis       325       Im       \$3,500.00         Disk Racks       40       each       \$7,500.00         Pishing Shelters       2       each       \$7,500.00         Stembly Plaza / Scultpure Garden Allee       1       Ls       \$7,500.00         University Pump House Rooftop Garden       1       Ls       \$7,600.00       \$5,550.000.00         Celestial Beacon Sculpture Plaza and Fishing Platforms       1       Ls       \$40,000.00       \$5,550.000.00         Shuttle Station, McKee Park       100       sm       \$1,61,00       \$5,550.000.00       \$5,550.000.00         Shuttle Station, McKee Park       80,000       sm       \$1,200.00       \$5,550.000.00       \$5,550.000.00         Kecreation Equipment Rental       70       sm       \$1,200.00       \$5,550.000       \$5,550.000.00         Service Building       Service Building       70	0.0	Free Standing Benches	51	each	\$1,500.00	\$76,500.00
Waste Receptacles       51       each       \$1,500.00         Drinking Fountains       3       each       \$6,500.00         Safety / Interpretive Handralis       325       im       \$330.00         Dinking Fountains       325       im       \$3550.00         D       Fishing Shelters       40       each       \$550.00         D       Fishing Shelters       2       each       \$550.00         D       Fishing Shelters       2       each       \$1,000.00         Statembly Plaza       Scuthure Garden Allee       1       Ls       \$75,000.00         University Pump House Rooftop Garden       1       Ls       \$75,000.00       \$         Celestial Beacon Sculpture Plaza and Fishing Platforms       1       Ls       \$725,000.00       \$         Kercedtion Equipment Rental       70       sm       \$1,614.00       \$       \$         Kercedtion Equipment Rental       70       sm       \$1,250.00       \$       \$         Kercedtion Equipment Rental       70       sm       \$1,250.00       \$       \$         Kercedtion Equipment Rental       70       sm       \$1,200.00       \$       \$       \$       \$       \$         Kercreation Equ	0.	Banners	52	each	\$200.00	\$10,400.00
Drinking Fountains       3       each       \$6,500.00         Safety / Interpretive Handralis       325       Im       \$300.00         D       Bike Racks       40       each       \$750.00         D       Fishing Shelters       2       each       \$750.00         Satimations (Includes Landscaping)       40       each       \$75.000.00       \$2         Assembly Plaza / Scultpure Garden Allee       1       Ls       \$550.000.00       \$2         University Pump House Rooftop Garden       1       Ls       \$75.000.00       \$2         Celestial Beacon Sculpture Plaza and Fishing Platforms       1       Ls       \$425,000.00       \$3         Kecreation Equipment Rental       70       sm       \$1,614.00       \$3       \$3,00.00       \$3         Kecreation Equipment Rental       70       sm       \$1,256.000       \$3       \$3,00.00       \$5       \$55       \$3,00.00       \$5       \$3,00.00       \$5       \$3,00.00       \$5       \$5,00.00 <t< td=""><td>O.</td><td>Waste Receptacles</td><td>51</td><td>each</td><td>\$1,500.00</td><td>\$76,500.00</td></t<>	O.	Waste Receptacles	51	each	\$1,500.00	\$76,500.00
Safety / Interpretive Handralis       325       Im       \$300.00         Bike Racks       40       each       \$750.00         Fishing Shelters       2       each       \$750.00         Interpretive Handralis       2       each       \$750.00         Fishing Shelters       2       each       \$750.00         Intresity Pump House Rooftop Garden       1       Ls       \$550,000.00         University Pump House Rooftop Garden       1       Ls       \$75,000.00         University Pump House Rooftop Garden       1       Ls       \$425,000.00         Celestial Beacon Sculpture Plaza and Fishing Platforms       1       Ls       \$425,000.00         Idings, Facilities       1       Ls       \$425,000.00       \$5         Kecreation Equipment Rental       70       sm       \$1,514.00       \$1,300.00         Kecreation Equipment Rental       70       sm       \$1,250.00       \$5         Vashroom Pavilion       90       sm       \$1,250.00       \$5       \$5         Kestral Beacon       20       sm       \$1,260.00       \$5       \$5       \$5,000.00       \$5       \$5         Kestreation Equipment Rental       70       sm       \$1,260.00       \$5	0	Drinking Fountains	e	each	\$6,500.00	\$19,500.00
0       Bike Racks       40       each       \$750.00         0       Fishing Sheiters       2       each       \$40,000.00       \$3         stinations (Includes Landscaping)       Assembly Plaza / Scultpure Garden Allee       1       LS       \$550,000.00       \$3         Assembly Plaza / Scultpure Garden Allee       1       LS       \$550,000.00       \$3         University Pump House Rooftop Garden       1       LS       \$75,000.00       \$3         University Pump House Rooftop Garden       1       LS       \$425,000.00       \$3         Celestial Beacon Sculpture Plaza and Fishing Platforms       1       LS       \$425,000.00       \$3         Idings, Facilities       5       5       5       5       \$32,000.00       \$3         Kercreation Equipment Rental       70       5       5       5       \$3       \$3,000       \$5       \$5,000.00       \$5       \$5,000.00       \$5       \$3       \$3,000       \$5,000.00       \$5       \$5,000.00       \$5       \$5,000.00       \$5       \$5,000.00       \$5       \$5,000.00       \$5       \$5,000.00       \$5       \$5,000.00       \$5       \$5,000.00       \$5,000.00       \$5,000.00       \$5,000.00       \$5,000.00       \$5,000.00       \$5,	0.	Safety / Interpretive Handrails	325	<u></u>	\$300.00	\$97,500.00
0       Fishing Shelters       2       each       \$40,000.00         stinctions (Includes Landscaping)       stinctions (Includes Landscaping)       1       LS       \$550,000.00         Assembly Plaza / Scultpure Garden Allee       1       LS       \$550,000.00         University Pump House Rooftop Garden       1       LS       \$75,000.00         University Pump House Rooftop Garden       1       LS       \$75,000.00         Celestial Beacon Sculpture Plaza and Fishing Platforms       1       LS       \$425,000.00         Idings, Facilities       1       LS       \$550,000.00       00         Kecreation Equipment Rental       70       sm       \$1,614.00         Service Building       70       sm       \$1,614.00         Washroom Pavilion       65       sm       \$1,614.00         Celestial Beacon       90       sm       \$1,614.00         Kastroom Pavilion       70       sm       \$1,614.00         Kashroom Pavilion       90       sm       \$1,614.00         Celestial Beacon       90       sm       \$1,614.00         Kashroom Pavilion       90       sm       \$1,614.00         Celestial Beacon       90       sm       \$1,614.00 <t< td=""><td>0.0</td><td>Bike Racks</td><td>40</td><td>each</td><td>\$750.00</td><td>\$30,000.00</td></t<>	0.0	Bike Racks	40	each	\$750.00	\$30,000.00
stinations (Includes Landscaping) Assembly Plaza / Scultpure Garden Allee 1 Ls \$550,000,00 University Pump House Rooftop Garden 1 LS \$550,000,00 University Pump House Rooftop Garden 1 LS \$75,000,00 Celestial Beacon Sculpture Plaza and Fishing Platforms 1 LS \$425,000,00 Shuffle Station, McKee Park Recreation Equipment Rental 570 sm \$1,614,00 Service Building 65 sm \$1,300,00 Washroom Pavilion 66 sm \$1,300,00 Exist. University Pumphouse: Rooftop landscape 488 sm \$540,00	1.0	Fishing Shelters	2	each	\$40,000.00	\$80,000.00
Assembly Plaza / Scuttpure Garden Allee       1       Ls       \$550,000.00         University Pump House Rooftop Garden       1       Ls       \$75,000.00         University Pump House Rooftop Garden       1       Ls       \$75,000.00         Celestial Beacon Sculpture Plaza and Fishing Platforms       1       Ls       \$425,000.00         Celestial Beacon Sculpture Plaza and Fishing Platforms       1       Ls       \$425,000.00         Recentines       Nuttle Station, McKee Park       100       sm       \$1,614.00         Shuttle Station, McKee Park       100       sm       \$1,514.00         Recreation Equipment Rental       70       sm       \$1,300.00         Service Building       65       sm       \$1,250.00         Washroom Pavillon       90       sm       \$1,260.00         Exist. University Pumphouse: Rooftop landscape       488       sm       \$540.00	estina	ions (Includes Landscaping)				
University Pump House Rooftop Garden       1       LS       \$75,000.00         Celestial Beacon Sculpture Plaza and Fishing Platforms       1       LS       \$425,000.00       \$         Idings, Facilities       1       LS       \$425,000.00       \$       \$         Shuttle Station, McKee Park       100       sm       \$1,614.00       \$       \$         Shuttle Station, McKee Park       70       sm       \$1,300.00       \$	0.	Assembly Plaza / Scultpure Garden Allee	-	SJ	\$550,000.00	\$550,000.00
Celestial Beacon Sculpture Plaza and Fishing Platforms       1       LS       \$425,000.00         Idings, Facilities       Shuttle Station, McKee Park       100       sm       \$1,614.00         Shuttle Station, McKee Park       100       sm       \$1,514.00         Recreation Equipment Rental       70       sm       \$1,300.00         Service Building       65       sm       \$1,250.00         Washroom Pavilion       90       sm       \$1,260.00         Exist. University Pumphouse: Rooftop landscape       488       sm       \$2,000.00	o.	University Pump House Rooftop Garden	-	LS	\$75,000.00	\$75,000.00
Idings, Facilities100sm\$1,614.00\$Shuftle Station. McKee Park100sm\$1,614.00\$Recreation Equipment Rental70sm\$1,300.00\$Service Building65sm\$1,250.00\$Washroom Pavilion90sm\$1,880.00\$Celestial Beacon190sm\$5,000.00\$Exist. University Pumphouse: Rooftop landscape488sm\$5,000.00\$	O.	Celestial Beacon Sculpture Plaza and Fishing Platforms	-	LS	\$425,000.00	\$425,000.00
Shuffle Station, McKee Park100sm\$1,614.00\$Recreation Equipment Rental70sm\$1,300.00Service Building65sm\$1,250.00Washroom Pavilion90sm\$1,880.00Celestial Beacon190sm\$2,000.00Exist. University Pumphouse: Rooftop landscape488sm	uilding	s, Facilities				
Recreation Equipment Rental70sm\$1,300.00Service Building65sm\$1,250.00\$Washroom Pavilion90sm\$1,880.00\$Celestial Beacon190sm\$2,000.00\$Exist. University Pumphouse: Rooftop landscape488sm\$540.00\$	0.	Shuttle Station, McKee Park	100	Sm	\$1,614.00	\$161,400.00
Service Building65sm\$1,250.00Washroom Pavilion90sm\$1,880.00Celestial Beacon190sm\$2,000.00Exist. University Pumphouse: Rooftop landscape488sm\$540.00	0.	Recreation Equipment Rental	70	sm	\$1,300.00	\$91,000.00
Washroom Pavilion908m\$1,880.00Celestial Beacon1908m\$2,000.00Exist. University Pumphouse: Rooftop landscape4888m\$540.00	o.	Service Building	65	sm	\$1,250.00	\$81,250.00
Celestial Beacon \$2,000.00 Exist. University Pumphouse: Rooftop landscape 488 sm \$540.00	0.	Washroom Pavilion	8	Sm	\$1,880.00	\$169,200.00
Exist. University Pumphouse: Rooftop landscape 488 sm \$540.00	0.	Celestial Beacon	190	S	\$2,000.00	\$380,000.00
	o.	Exist. University Pumphouse: Rooftop landscape	488	SM	\$540.00	\$263,520.00
	1.0	Trees - Riverside Drive Pedestrian Promenade	80	each	\$500.00	\$40,000.00
Trees - Riverside Drive Pedestrian Promenade 80 each \$500.00	2.0	Trees - Other	50	each	\$300.00	\$15,000.00
Trees - Riverside Drive Pedestrian Promenade 80 each \$500.00 Trees - Other \$300.00						

Site Earthwork and Grading - minimal	Site Drainage - minimal	Site Storm Water Managerment - Not Applicable	Shoreline Stabilization Treatment - Not Applicable	Sanitary, Sewer, Water and Gas Connections - rework existing	Electrical Services and Connections - rework existing	Irrigation - rework existing	Public Telephones	Landscape Lighting (sculpture lighting already installed) Archeological Investigations	Design, Engineering and taxes: add 15% to total cost	
2.0	3.0	4.0	5.0	6.0	7.0	8.0	0.6	0.01	12.0	

Legend Im: linear meter sm: square meter LS: Lump Sum

Assumption and Centennial Parks Windsor Riverfront - Segment Two Budgetary Cost Opinion

NG         OF WORK         OF WORK         OF         NF         PRICI         COSI           10         Reversion Systems         1000         m         \$155.00         \$173.000         \$183.000 <th>ITEM</th> <th>DESCRIPTION</th> <th>EST.</th> <th>UNIT</th> <th>UNIT</th> <th>TOTAL</th> <th></th>	ITEM	DESCRIPTION	EST.	UNIT	UNIT	TOTAL	
Indem System     Number System     Sign System       Reverside Dive Pedestrian Promenciale Reverside Dive Pedestrian Promenciale Reverside Dive Pedestrian Promenciale     1040     im     \$1650       Reverside Dive Pedestrian Promenciale Reverside Dive Pedestrian Promenciale     10     1000     im     \$1650       Reverside Dive Pedestrian Promenciale Reverside Dive Pedestrian Promencial     10     1000     im     \$165000       Sign System - Interpretive Sign System - Interpretive     200     eoch     \$1000     im     \$16000       Revealed Dive Pedestrian Promencial     10     1     1     Is     \$1750000       Parking Court #1     1     1     Is     \$1750000       Parking Court #1     1     Is     \$1750000       Indian Reveals     40     eoch     \$30000       Ughting - Recreation Way     40     eoch     \$30000       Undianting Recreation Way     40     eoch     \$30000       Undiant Reveals     2     eoch     \$30000       Mide Rocks     8     eoch     \$30000       Revealed Mine Reveals     1     is     \$30000       Revealed Dive Receiption     2     eoch     \$30000       Revealed Dive Receiption     2     eoch     \$30000       Mide Rocks     1     is	NO	OF WORK	QIY.	TYPE	PRICE	COST	
Rverside Drive Pedestrian Promenoda Rivervacik         1040         Im         \$16.00           Rivervacik         100         Im         \$16.00           Rivervacik         100         Im         \$16.00           Rivervacik         100         Im         \$16.00           Sign System - Interpretive         200         each         \$30000           Sign System - Interpretive         200         each         \$30000           Sign System - Interpretive         200         each         \$30000           Righting - Rivervacik         1         1         Is         \$175,0000           Righting - Rivervacik         40         each         \$30000         \$30000           Ughting - Rivervacik         40         each         \$30000         \$30000           Ughting - Connector Ital         4         each         \$30000         \$30000           Ughting - Connector Ital         4         each         \$30000         \$30000           Binking Fourterins         0         66         each         \$30000           Binking Fourterins         0         66         each         \$30000           Binking Fourterins         0         66         each         \$300000	Circulati	ion Systems					
Rverwork         Rverwork         1020         Im         S450.00           Connector Totles         System - Interpretive         1000         im         S450.00           System - Interpretive         System - Interpretive         200         each         S350.00           System - Interpretive         System - Interpretive         200         each         S350.00           System - Interpretive         System - Interpretive         200         each         S350.00           System - Interpretive         System - Interpretive         200         each         S350.00           Interpretive         Recentation from recent and recent         40         each         S300.00           Lighting - Riverwalk         1         Lighting - Riverwalk         40         each         S300.00           Lighting - Riverwalk         Lighting - Riverwalk         40         each         S300.00           Lighting - Riverwalk         Lighting - Riverwalk         40         each         S300.00           Lighting - Riverwalk         Connector Trail         1         1         S300.00           Lighting - Riverwalk         Connector Trail         1         1         S300.00           Lighting - Riverwalk         Connector Trail         1         <	1.0	Riverside Drive Pedestrian Promenade	1040	<u></u>	\$165.00	\$171,600.00	
Recreation Woy         I010         Im         \$135.00           Sign System - Interpretive         20         econd.         \$300.000           Design Ammited         1         1         1         \$1         \$1           Design Ammited         Ughting - Riverside Drive Pedestrian Promenade         40         econd.         \$300.000           Ughting - Riverside Drive Pedestrian Promenade         40         econd.         \$300.000           Ughting - Riverside Drive Pedestrian Promenade         40         econd.         \$300.000           Ughting - Riverside Drive Pedestrian Promenade         40         econd.         \$300.000           Undate Recreation Way         1         1         1         \$300.000           Montering Recreation Way         1         6         econd.         \$300.000           Montering Recreation Way         1         1         \$300.000         1         \$300.000           Montering Recreation Way         1         1         1         \$300.000	2.0	Riverwalk	1020	<u></u>	\$450.00	\$459,000.00	
Connector Trais Sign System - Interpretive         10         Im         50.00           Sign System - Interpretive         1         ellowances         \$1000000           Sign System - Interpretive         200         eacch         \$300000           Sign System - Interpretive         1         ellowances         \$1000000           Parking Court #1         1         Lg         \$175,0000           Ughting - Recreation Way         40         eacch         \$3,0000           Dianers         Kee Rockin         \$1,0000         \$1,0000         \$1,0000           Rie Rockin         Standard         2         eacch         \$3,0000           Dinners         Scuptruce         1         I         I         \$1,0000           Rie Rockin         Standard	3.0	Recreation Way	0101	<u></u>	\$135.00	\$136,350.00	
Sign System - Interpretive Sign System - Interpretive Sign System - Interpretive Sign System - Directional 200 each \$350000 Sign System - Directional 200 each \$350000 Lighting - Riverside Drive Pectestrian Promenade Ughting - Riverside Drive Pectestrian Promenade 40 each \$3,0000 Birling Riverson Kay 10,000 Free Standing Benchas 50,0000 Dighting - Riverside Drive Handralis Benchas 2, 2, 6,000 Birling States 2, 2, 6,000 B	4.0	Connector Trails	100	<u></u>	\$60.00	\$6,000.00	
Sign System - Directional     200     each     \$350.00       ing Courts (Includes Lighting and Access)     1     LS     \$175,000.00       Parking Court #1     1     LS     \$175,000.00       Ing Privating Court #1     1     LS     \$175,000.00       Ing Privating Court #1     1     LS     \$175,000.00       Lighting - Revealed Prive Pedestrian Fromenade     40     each     \$3,000.00       Lighting - Recreation Way     40     each     \$3,000.00       District - Connector Tolil     2     each     \$3,000.00       Barner Receptacies     34     each     \$3,000.00       Dinking Fourtains     3     each     \$3,000.00       Sclefty / Interprive Handralis     3     each     \$3,000.00       Bike Receptacies     3     each     \$3,000.00       Bike Receptacies     3     each     \$3,000.00       Bike Receptacies     3     each     \$3,000.00       Chess Court     1     LS     \$5,000.00       Sclefty / Interered     1     LS     \$5,000.00	5.0	Sign System - Interpretive	-	allowance	\$100,	\$100,000.00	
In the function of the functio	6.0	Sign System - Directional	200	each		\$70,000.00	
Parking Court #1       1       15       \$175,0000         In Design Amerilies       10       <	Parking	Courts (Includes Lighting and Access)					
In Design Amerilies     Ughting - Riverside Drive Pedestrian Promende     40     each     \$5,0000       Ughting - Riverside Drive Pedestrian Promende     40     each     \$5,0000       Ughting - Riverside Drive Pedestrian Promende     40     each     \$5,0000       Ughting - Riverside Drive Pedestrian Promende     40     each     \$5,0000       Ughting - Riverside     40     each     \$5,0000       Ughting - Connector Trail     68     each     \$1,5000       Dinking Founding Benches     2     each     \$5,0000       Brine Rick     23     each     \$5,0000       Brine Rocks     34     each     \$5,0000       Brie Rocks     3     3     each     \$5,0000       Bries     3     3     each     \$5,0000       Bries     3     3 <t< td=""><td>1.0</td><td>Parking Court #1</td><td>-</td><td>LS</td><td>\$175,000.00</td><td>\$175,000.00</td><td></td></t<>	1.0	Parking Court #1	-	LS	\$175,000.00	\$175,000.00	
Lighting - Riverside Drive Pedestrian Promenade       40       each       55,0000         Lighting - Riverside Drive Pedestrian Promenade       40       each       55,0000         Lighting - Riverside Drive Pedestrian Navy       40       each       53,0000         Lighting - Riverside Drive Pedestrian       40       each       53,0000         Lighting - Connector Trail       68       each       53,0000         Free Standing Benches       68       each       53,0000         Branes       2       each       53,0000         Kathe Receptocies       2       each       53,0000         Dinking Foundairs       2       each       53,0000         Steley / Interpretive Handralis       1000       im       53,0000         Bile Racks       2       each       53,0000         Steley / Interpretive Handralis       1000       im       53,0000         Bile Racks       2       each       53,0000         Steley / Interpretive Handralis       1       1       53,0000         Steley / Interpretive Handralis       1       1       53,0000         Steley / Interpretive Walk       1       1       53,0000         Kathos       1       1       1	Urban D	esign Amenities					
Lighting - Riverwork     40     each     33,0000       Lighting - Riverwork     40     each     33,0000       Lighting - Connector Trail     73,0000     10     each     33,0000       Free Standing Benches     68     each     51,5000       Bornes     2     each     51,5000       Moste Receptocles     2     each     51,5000       Dinking Foundairs     2     each     57,5000       Dinking Foundairs     2     each     57,5000       Stely / Interpretive Handralis     1000     im     53000       Dinking Foundairs     2     each     57,5000       Stely / Interpretive Handralis     1000     im     53000       Dinking Shelters     2     each     57,5000       Scley / Interpretive Handralis     1000     im     57,5000       Bings Facilities     1     1     1     57,5000       Scleyture Wolk     1     1     1     57,5000       Chess Court     1     1     1     57,5000       Scupture Wolk     1     1     1     57,5000       Kashnom     Vashnom     1     1     57,5000       Masthroom     Washnom     90     an     31,7000       Masth	0.1	Lighting - Riverside Drive Pedestrian Promenade	40	each	\$5,000.00	\$200,000.00	
Lighting - Recreation Way     40     each     \$3,0000       Lighting - Connector Trail     4     each     \$3,0000       Free Standing Benchas     8     each     \$3,0000       Banners     40     each     \$3,0000       Banners     68     each     \$3,0000       Norste Receptacies     68     each     \$3,0000       Dinking Fountains     2     each     \$3,0000       Bike Racks     2     each     \$3,0000       Fishing Shelters     2     each     \$3,0000       Bike Racks     1     15     \$3,0000       Bike Racks     1     1     15     \$3,0000       Bike Racks     1     1     1     \$3,0000       Bike Racks     1     1     1     \$3,0000       Chess Court     1     1     1     \$3,0000       Bings, Facilities     1     1     1     \$3,0000       Undations Themed Ploy Area     1     1     \$3,0000       Bings, Facilities     1     1     \$3,0000       Children's Themed Ploy Area     1     1     \$3,0000       Bings, Facilities     1     1     \$3,0000       Bings, Facilities     1     1     \$3,0000       Bi	2.0	Lighting - Riverwalk	40	each	\$3,000.00	\$120,000.00	
Lighting - Connector Trail     4     each     \$3,0000       Free Standing Benches     68     each     \$3,0000       Banners     68     each     \$1,5000       Waste Receptacles     68     each     \$1,5000       Drinking Foundrins     2     each     \$1,5000       String Sherters     68     each     \$1,5000       Bike Racks     2     each     \$2,0000       Indrions (Includes Landscoping)     34     each     \$3,0000       Bike Racks     1     1     1     \$5,750000       Indrions (Includes Landscoping)     5     each     \$3,0000       Sculpture Walk     1     1     1     \$5,750000       Chess Court     1     1     1     \$5,750000       Ring Shelters     1     1     1     \$5,750000       Chess Court     1     1     1     \$5,750000       Children's Therned Play Area     1     1     1     \$5,750000       Rachoon     1     1     1     \$5,750000       Mashroom     Washroom     90     \$1,000     \$1,000       Washroom     Washroom     90     \$60     \$60     \$5,000       Index Colling     1     1     1     \$5,0000	3.0	Lighting - Recreation Way	40	each	\$3,000.00	\$120,000.00	
Free Standing Benches     68     each     \$1,500.00       Banners     68     each     \$1,500.00       Nastie Receptacies     2     each     \$1,500.00       Dinking Fountains     2     each     \$1,500.00       Safety / Interpretive Handrals     1000     im     \$300.00       Biking Setters     34     each     \$1,500.00       Biking Fountains     2     each     \$1,500.00       Biking Fountains     34     each     \$1,000.00       Biking Setters     34     each     \$1,000.00       Biking Setters     2     each     \$200.00       Biking Setters     34     each     \$1,000.00       Biking Setters     1     1     1     \$200.000.00       Indition (Includes Landscoping)     1     1     1     \$200.000       Chess Court     1     1     1     \$200.000       Children's Themed Play Area     1     1     \$200.000       Ings, Facilities     Washroom     90     \$1,700.00       Washroom     Vashroom     90     \$1,700.00       Ings, Facilities     1     1     \$200.000       Ings, Facilities     1     1     \$1,000       Ings, Facilities     1     1 <td< td=""><td>4.0</td><td>Lighting - Connector Trail</td><td>4</td><td>each</td><td>\$3,000.00</td><td>\$12,000.00</td><td></td></td<>	4.0	Lighting - Connector Trail	4	each	\$3,000.00	\$12,000.00	
Barners     40     each     \$200.00       Waste Receptacles     68     each     \$250.00       Diriking Fountains     2     each     \$550.00       Strifty / Interpretive Handrals     1000     Im     \$300.00       Bike Racks     34     each     \$750.00       Fishing Shetters     34     each     \$550.00       Scupture Walk     1     1     1     \$575.000.00       Inditions (Includes Landscoping)     1     1     1     \$575.000.00       Scupture Walk     1     1     1     \$500.000       Chess Court     1     1     1     \$500.000       Rings, Facilities     1     1     1     \$500.000       Washroom     90     sm     \$1,700.00       Washroom     90     sm     \$1,700.00       Mashroom     1     1     \$500.000       Ings, Facilities     1     1     \$500.000       Inderes Churte Walk     1     1     \$500.000       Mashroom     Washroom     90     sm     \$1,700.00       Mashroom     1     1     \$500.000     \$1,700.00       Inderes Churt     1     1     \$500.000     \$1,700.00       Rothosterding     1	5.0	Free Standing Benches	68	each	\$1,500.00	\$102,000.00	
Waste Receptacles         68         each         \$1,500.00           Dinking Fountains         2         each         \$1,500.00           Safety / Interpretive Handralis         2         each         \$40,000.00           Bike Racks         34         each         \$40,000.00           Biking Shelters         2         each         \$40,000.00           Inditions (Includes Landscaping)         2         each         \$40,000.00           Inditions (Includes Landscaping)         2         each         \$40,000.00           Inditions (Includes Landscaping)         2         each         \$40,000.00           Sculpture Walk         1         1         1         1         \$50,000.00           Inditions (Includes Landscaping)         Chess Court         1         1         1         \$50,000.00           Rishing Statiliers         1         1         1         \$50,000.00         1         \$1,700.00           Roshroom         Washroom         1         1         1         \$50,000.00         1         \$1,700.00           Mashroom         Washroom         1         1         \$50,000.00         1         \$1,700.00           Mashroom         Washroom         Washroom         90	5.0	Banners	40	each	\$200.00	\$8,000.00	
Drinking Fountains     2     each     \$6,5000       Safety / Interpretive Handralis     1000     im     \$30000       Bike Racks     34     each     \$6,50000       Fishing Shetters     2     each     \$750000       Indritons (Includes Landscoping)     2     each     \$7500000       Indritons (Includes Landscoping)     1     Ls     \$7500000       Sculpture Walk     1     Ls     \$7500000       Chicten's Themed Play Area     1     Ls     \$750000       Chicten's Themed Play Area     1     Ls     \$750000       Chicten's Themed Play Area     1     Ls     \$750000       Mashroom     Washroom     1     Ls     \$750000       Washroom     Washroom     90     sm     \$1,7000       Indscoping     Tees - Riverside Drive Pedestrian Promenade     126     \$30000       Lees - Other     Sooding     Seeding     \$30000 <td>2.0</td> <td>Waste Receptacles</td> <td>68</td> <td>each</td> <td>\$1,500.00</td> <td>\$102,000.00</td> <td></td>	2.0	Waste Receptacles	68	each	\$1,500.00	\$102,000.00	
Safety / Interpretive Handralis       1000       Im       \$300.00         Bike Roacks       34       each       \$40000.00         Fishing Sheiters       2       each       \$40000.00         Indrions (Includes Landscoping)       2       each       \$40000.00         Sculpture Walk       1       1       15       \$75000.00         Sculpture Walk       1       1       15       \$75000.00         Children's Themed Play Area       1       1       15       \$750000.00         Children's Themed Play Area       1       1       15       \$750000         Washroom       Washroom       1       1       15       \$750000         Washroom       Washroom       1       1       15       \$750000         Washroom       Washroom       90       sm       \$1,700.00       \$100         Indes of Plane Area       10       1       1       15       \$600.00       \$100	8.0	Drinking Fountains	5	each	\$6,500.00	\$13,000.00	
Bite Racks     34     edding     v/000000       Indrine Shelters     52     edding     v/000000       Indrine Kincludes Landscaping)     1     Ls     \$75,00000       Sculpture Walk     1     Ls     \$75,00000       Children's Themed Play Area     1     Ls     \$200,0000       Children's Themed Play Area     1     Ls     \$200,0000       Lings, Facilities     0     m     \$1,700.00       Washroom     90     sm     \$1,700.00       Washroom     90     sm     \$1,700.00       Washroom     125     each     \$500.00       Index Pedestrian Promenade     125     each     \$300.00       Tees - Other     1200     sm     \$1,00       Index caping     25000     sm     \$1,00       Seeding     25000     sm     \$1,00	0.0	Safety / Interpretive Handrails	1000	<u>E</u>	\$300.00	\$300,000.00 \$26 500 00	
D       Fishing Shelters       2       eddn       adjuoution         stindinos (includes tendscoping)       sculpture Walk       1       LS       \$75,000.00         Sculpture Walk       Chess Court       1       LS       \$75,000.00         Chess Court       1       LS       \$75,000.00         Chess Court       1       LS       \$75,000.00         Chess Court       1       LS       \$77,00.00         Children's Themed Play Area       1       LS       \$200,000.00         Children's Themed Play Area       1       LS       \$200,000.00         Children's Themed Play Area       1       LS       \$200,000.00         dings, Facilities       90       sm       \$1,700.00         Washroom       Washroom       90       sm       \$1,700.00         Washroom       Washroom       90       sm       \$1,700.00         Mashroom       Washroom       90       sm       \$1,700.00         Irees - Riverside Drive Pedestrian Promenade       125       each       \$300.00         Trees - Cher       Trees - Cher       1200       sm       \$1.00         Lees - Cher       Irees - Cher       1200       sm       \$1.00	0.0	Bike Racks	34	each	00.000.01.3	00.000,026	
stinctions (Includes Landscaping) Sculpture Walk Chees Court Chess Court Children's Themed Play Area Children's Themed Play Area Children's Themed Play Area Children's Themed Play Area Uchess Court Washroom Washroom Washroom Washroom Washroom Washroom Udings, Facilities Washroom Hata Hata Hata Hata Hata Hata Hata Hat	0.1	Fishing Sheiters	N	each	00'000'0 <del>0</del> ¢	00.000,000	
Sculpture Walk       1       Ls       \$75,000.00         Chess Court       1       Ls       \$75,000.00         Chess Court       1       Ls       \$75,000.00         Children's Themed Play Area       1       Ls       \$75,000.00         dings, Facilities       1       Ls       \$200,000.00         washroom       90       sm       \$1,700.00         Mashroom       90       sm       \$1,700.00         Mashroom       90       sm       \$1,700.00         Mashroom       126       each       \$500.00         Trees - Riverside Drive Pedestrian Promenade       126       sm       \$1,00         Trees - Other       1200       sm       \$1,00       \$1,00         Seeding       25000       sm       \$1,00       \$1,00         Seeding       25000       sm       \$1,00       \$1,00         Seeding       25000       sm       \$1,00       \$1,00 <t< td=""><td>Destinat</td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	Destinat						
Chess Court       1       LS       \$75,000.00         Children's Themed Play Area       1       LS       \$200,000.00         Children's Themed Play Area       1       LS       \$200,000.00         dilogs, Facilities       90       sm       \$1,700.00         Washroom       90       sm       \$1,700.00         Mashroom       90       sm       \$1,700.00         Mashroom       90       sm       \$1,700.00         Mashroom       125       each       \$500.00         Irees - Other       126       sm       \$1,000         Irees - Other       1200       sm       \$1,000         Seeding       25000       sm       \$1,000         Seeding       25000       sm       \$1,000         Seeding       10% Contingency =       Iotal =	1.0	Sculpture Walk	-	SJ	\$75,000.00	\$75,000.00	
Children's Themed Play Area 1 Is \$200,000.00 dings, Facilities (Washroom 90 sm \$1,700.00 Washroom 90 sm \$1,700.00 Washroom 90 sm \$1,700.00 Interes - Riverside Drive Pedestrian Promenade 125 each \$500.00 Trees - Other 50 each \$300.00 Landscaping 25000 sm \$1.00 Seeding 25000 sm \$1.00 Interest of the factor 120 sm \$1.00 Seeding 100 contingency = 10% Contingency = 1064	2.0	Chess Court	1	LS	\$75,000.00	\$75,000.00	
dings, Facilities Washroom Washroom Washroom Washroom Ascaping Trees - Riverside Drive Pedestrian Promenade Trees - Other Landscaping Seeding Seeding Seeding Seeding Seeding To% Contingency = 10% Contingency =	3.0	Children's Themed Play Area	5	s	\$200,000.00	\$200,000.00	
Washroom       90       sm       \$1,700.00         Washroom       90       sm       \$1,700.00         dscaping       90       sm       \$1,700.00         dscaping       125       each       \$500.00         Trees - Riverside Drive Pedestrian Promenade       125       each       \$300.00         Trees - Other       1200       sm       \$1,000       \$300.00         Landscaping       1200       sm       \$300.00       \$300.00         Seeding       25000       sm       \$1.00       \$1.00         Seeding       1200       sm       \$1.00       \$1.00         Seeding       100% Contingency =       10% Contingency =       10% Intellet	Building	s, Facilities					
Washroom Washroom 90 sm \$1,700.00 decaping Trees - Riverside Drive Pedestrian Promenade 125 each \$500.00 Trees - Other 550 sm \$300.00 Landscaping 25000 sm \$31.00 Seeding 25000 sm \$1.00 <b>remark of the section of the section s</b>	0.1	Washroom	8	sm	\$1,700.00	\$153,000.00	
dscaping Trees - Riverside Drive Pedestrian Promenade 125 each \$500.00 Trees - Other 50 each \$300.00 Trees - Other 50 each \$300.00 Landscaping 25000 sm \$1.00 Seeding 25000 sm \$1.00 Total = 10% Contingency = 10% Londingency = 10fal =	2.0	Washroom	06	sm	\$1,700.00	\$153,000.00	
Trees - Riverside Drive Pedestrian Promenade 125 each \$500.00 Trees - Other 50 each \$300.00 Landscaping 50 each \$300.00 Seeding 51.00 Seeding 51.00 25000 sm \$1.00 <b>25000 sm \$1.00</b> <b>7001 an 10d1 = 10% Contingency = 10% Contingency = 10tal </b>	Landsco	Buidt	1				
Trees - Other 50 each \$300.00 Landscaping 51.00 sm \$30.00 Seeding 51.00 sm \$1.00 I 25000 sm \$1.00 Segment Total = 10% Contingency = Total = 10/4	1.0	Trees - Riverside Drive Pedestrian Promenade	125	each	\$500.00	\$62,500.00	
Landscaping 1200 sm \$30.00 Seeding 25000 sm \$1.00 regment Total = 10% Contingency = Total = 10% Londingency = 10tal	2.0	Trees - Other	50	each	\$300.00	\$15,000.00	
Seeding 25000 sm \$1.00 Segment Total = .5 10% Contingency = .10	3.0	Landscaping	1200	Sm	\$30.00	\$36,000.00	
•/	4.0	Seeding	25000	SIT	\$1.00	\$25,000.00	
				Seg	ment Total =	\$2,994,950.00	
				10% Co	intingency =	\$299,495.00	
					Total =	\$3,294,445.00	

MBTW GROUP

EXCLUDED ITEMS:
1.0 Site Demolition - minimal
2.0 Site Earthwork and Grading - minimal
3.0 Site Drainage - minimal
3.0 Site Storm Water Management -Not Applicable
5.0 Shoreline Stabilization Treatment - Not Applicable
5.0 Shoreline Stabilization Treatment - Not Applicable
5.0 Sanitary, Sewer, Water and Gas Connections -rework existing
7.0 Electrical Services and Connections - rework existing
8.0 Irrigation - rework existing
9.0 Public Telephones -Landscape Lighting -(sculpture garden ligthing already existing) Design, Engineering and Taxes: add 15% to total cost Legend Im: linear meter sm:square meter LS:square meter 1.0 2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0 110.0

CITY OF WINDSOR **CENTRAL RIVERFRONT** IMPLEMENTATION PLAN

Mathematical System:     Mathematical System:       Revention Way     555     in     555     in     555       Sign System:     Freending     1     allowances     515000       Sign System:     Freending     0     each     515000       Sign System:     Freending     256     in     556       Sign System:     Freending     1     allowances     50000       Sign System:     Freeding     24     each     530000       Sign System:     Freeding     24     each     530000       Lighting - Reveack     1     80     each     530000       Lighting - Reveack     1     80     80     80       Divide Recepticles     1     80     80     80       Divid		DESCRIPTION	ESI.	UNIT	UNIT	TOTAL
curdion System     555     in     3450.00       nework     656     in     3450.00       nework     567     in     353.00       nework     567     in     353.00       nework     567     in     350.00       Spin System - Interpretive     24     eoch     350.00       nework     1     allownore     310.000       Sign System - Interpretive     24     eoch     350.000       nework     24     eoch     350.000       nework     27     eoch     31.000       nework     1     in     in       nework     1						
0     Revenuels     565     im     5450       0     Seprostern - Interpretive     35     im     54500       0     Seprostern - Interpretive     35     35000       0     Seprostern - Interpretive     35     35000       0     Seprostern - Interpretive     35     35000       0     Ughting - Revencin     32     6     330000       0     Ughting - Revencin     30     33000       0     Ughting - Revencin     31     6     330000       0     Ughting - Revencin     30     33000       0     Ughting - Revencin     30     30000       0     Ughting - Revencin     30000     30000       0     Vaste Receptodes     30000     30000       0     Fathing Shelters     24     6     5       0     State VI interpretive Hondrates     20     6     30000       0     Fathing Shelters     24     6     5       0     Fathing Shelters     24     6     5       1     Kaste Receptodes     1     5     5       1     Kaste Receptodes     1     1     5       1     Kaste Receptodes     1     5       1     Kaste Receptode	Circula	tion Systems				
0         Recretion Work         565         im         \$130           0         Sign System - Directional         365         im         \$100           0         Sign System - Directional         36         im         \$100           0         Sign System - Directional         36         im         \$100           0         Lighting - Revealt         24         ecch         \$10000           0         Lighting - Revealt         24         ecch         \$10000           0         Lighting - Revealt         24         ecch         \$10000           0         Fies Standing Benches         20         ecch         \$10000           0         Fies Standing Benches         20         ecch         \$10000           0         Fies Standing Benches         20         ecch         \$10000           0         Fies Randing Benches         20         ecch         \$10000           0         Fies Randing Benches         1         1         \$10000           0         Fies Randing Benches         3         \$10000           0         Fies Randing Benches         200         ecch         \$30000           0         Fies Randing Benches         7	1.0	Riverwalk	585	<u></u>	\$450.00	\$263,250.00
0     Connector Traits     265     Im     \$2000       0     Sign System - Interpretive     1     allowance     \$100000       0     Sign System - Interpretive     1     allowance     \$100000       0     Lighting - Recention Way     24     each     \$30000       0     Lighting - Recention Way     24     each     \$30000       0     Lighting - Recention Way     24     each     \$30000       0     Wash Reading Benches     20     each     \$30000       0     Wash Reaching Benches     20     each     \$30000       0     Wash Reaching Benches     20     each     \$30000       0     Res Standing Benches     20     each     \$30000       0     Res Nuther Foundacia     20     each     \$30000       0     Res Nuther Allocutor Notating     20     each     \$30000       1     Res Nuther Allocutor Notating     20     each     \$30000       1     Intersche Handrick     20     each     \$30000       1     Intersche Edition     1     is     \$170000       1     Intersche Edition     1     is     \$170000       1     Intersche Edition     Nutersche Edition     \$00000     \$100000<	2.0	Recreation Way	565	<u></u>	\$135.00	\$76,275.00
0         Sign System - Interpretive         1         allowance         \$100,000           0         Sign System - Interpretive         2         ecch         \$300,000           0         Uphting - Revendent         2         ecch         \$300,000           0         Files Stranding Benches         2         ecch         \$300,000           0         Step/ / Interpretive Handicitis         2         ecch         \$300,000           0         Fileng Stranding Benches         1         ecch         \$300,000           0         Fileng Stranding Benches         2         ecch         \$300,000           0         Fileng Stranding Benches         3         1         ecch         \$300,000           0         Fileng Stranding Strates         3         1         ecch         \$300,000           1         Fileng Strates         1         icc         \$300,000         1         icc         \$300,000           1         Filen	3.0	Connector Trails	265	<u></u>	\$60.00	\$15,900.00
0     Sign System - Directional     60     each     33000       0     Lighting - Rivewalk     24     each     33000       0     Lighting - Rivewalk     24     each     33000       0     Lighting - Connector frait     10     each     33000       0     Lighting - Connector frait     20     each     33000       0     Lighting - Exercation Way     20     each     33000       0     King Riping Foundains     20     each     33000       0     Stef VI / Interpretive Handralis     20     each     33000       0     Fishing Shellers     1     20     each     33000       0     Fishing Shellers     1     is     3175.0000       1     Fishing Shellers     1     is     3175.0000       1     Fishing Shelerero	4.0	Sian System - Interpretive	-	allowance		\$100,000.00
Den Design Armenties     24     eacch     530000       Ugniting - Revencits     28     eacch     530000       Noteste Recerptocles     20     eacch     5,5000       Den Marking Fourtains     20     eacch     5,5000       Den Revencion     28     each     5,5000       Den Revencion     28     each     5,5000       Den Revencion     20     each     5,0000       Den Revencin     20     each	5.0	Sign System - Directional	60	each		\$21,000.00
Ughting - Revends     24     each     530000       Ughting - Revends     24     each     530000       Ughting - Revends     20     each     530000       Ughting - Romestor Trait     20     each     530000       Marking - Connector Trait     20     each     530000       Marking Fourtains     20     each     530000       Rining Stellers     1     1     1     530000       Rining Stellers     30     30     30     31.00       Rining Stellers     5     5     5       Ididys Fourtains     5     5     5       Rining Stellers     5     5     5       Rining Stelendon     5	Irhan [	Jasian Amanitias				
0     ugning Terrention     24     ecch     330000       0     ugning Terrention     10     ecch     330000       0     Ugning Terrention     10     ecch     330000       0     Ugning Terrention     11     10     ecch     330000       0     Priving Fourthers     1     ecch     330000       0     Priving Fourthers     1     ecch     330000       0     Fishing Shelters     1     ecch     330000       0     Fishing Shelters     1     ecch     330000       0     Fishing Shelters     1     ecch     300000       0     Fishing Shelters     3     ecch     330000       0     Fishing Shelters     3     ecch     330000       0     Fishing Shelters     3     sech     330000       0     Fishing Shelters     3     sech     330000       1     Interer Uniterritional Garden     1     Is     sith and			VC	4000		470 MMM MM
0     Ugning-recreation may be aching benches     20     accin     33,0000       0     Free Standing Benches     20     accin     31,0000       0     Striety / Interpretive Hondralis     20     accin     31,0000       0     Striety / Interpretive Hondralis     20     accin     31,0000       0     Striety / Interpretive Hondralis     22     accin     31,0000       0     Fishing Shellers     1     accin     \$50000       0     Fishing Shellers     1     accin     \$500000       0     Fishing Shellers     1     1     1     \$5000000       0     Formational Garden     1     1     \$50000000       0     Formational Garden     20     accin     \$5000000       1     Internet Meadow Parting     1     1     \$17,0000       1     Internet Meadow Parting     1     1     \$17,0000       1     Internet Meadow Parting     1     \$17,0000       1     Internet Meadow Parting     1     \$1,0000       1     Meastroom Part			47 V C	- que	\$3,000.00	\$70 000 000
0     Freestrond     20     each     51,5000       0     Freestrond     20     each     51,5000       0     Rinking Fountains     20     each     55000       0     Rinking Fountains     20     each     55000       0     Rinking Fountains     20     each     550000       0     Rinking Fountains     20     each     55000000       1     Landscoping     1     1     55000000       1     Landscoping     20     each     530000       1     Less Riverside Drive Pedestrian Promenade     50     each     53000       1     Trees - Riverside Drive Pedestrian Promenade     50     each     53000       1     Trees - Cher     50     sm     59     5000       1     Trees - Cher     50     sm     51,00       1     Trees - Cher     50     sm     51,00       1     Trees - Cher     50 <td< td=""><td><u>,</u></td><td></td><td>7 C</td><td></td><td>\$3 000 00</td><td>\$30 000 000</td></td<>	<u>,</u>		7 C		\$3 000 00	\$30 000 000
0     Wate Receive January     20     each     5,5000       0     Fining Foundairs     1     each     5,5000       0     Fining Shelters     1     each     5,5000       1     Fining Shelters     1     each     5,5000       1     Foradiant International Garden     1     1     5,0000       1     Foradiant International Garden     1     1     5,0000       1     Foradiant International Garden     1     1     5,0000       1     Foradiant International Garden     5     50000     5000       1     Mastroom Pavilion     9     5     5     5       1     Mastroom Pavilion     90     5     5     5       1     Mastroom Pavilion     5     5			2 2	- Hono	\$1 500 M	
Dividing Fourthins     1     0     0     0       Safety / Interpretive Handralis     20     im     55000000       Dividing Fourthins     1     0     0     50000000       Octored contributional Cardem     1     1     5     50000000       Dividing Fourthins     0     0     m     5000000       Dividing Fourthing     0     0     m     500000       Dividing Fourthing     0     0     m     500000       Dividing Fourthing     0     0     m     500000       Dividing Fourthing     0     0     0     500000       Dividing Fourthing     0     0     0     500000       Dividing Fourthing     0     0     0     500000       Differs <td></td> <td>Marta Decentacias</td> <td>202</td> <td></td> <td>\$1 500 M</td> <td>\$30 000 000</td>		Marta Decentacias	202		\$1 500 M	\$30 000 000
0     Safety / Interpretive Handrals     20     mon     375000       0     Fahing Shelters     1     each     375000       0     Fahing Shelters     1     each     375000       0     Fahing Shelters     1     is     \$5000000       1     Canadian International Garden     1     is     \$5000000       1     Canadian International Garden     1     is     \$5000000       1     Former C. P. Fenty Docks     500     im     \$500000       1     Internet Meadow Planting     1     is     \$500000       1     Internet Weadow Planting     1     is     \$500000       1     Washroom Povilion     90     sm     \$50000       1     Interest Filters     90     sm     \$50000       1     Interest Filters     90     sm     \$1.000       1     Interest Chier     8000	0.0	Drinking Fountains	2 -	4000		\$ 4 FUU UU
0     Bike Racks     1     each     \$750.00       0     Fishing Shelters     1     each     \$750.00       0     Canadian International Garden     1     LS     \$500.000.00       0     Canadian International Garden     1     LS     \$500.000.00       1     Canadian International Garden     1     LS     \$500.000.00       1     Mathicentifications (Includes Landscoping)     1     LS     \$500.000.00       1     Mathicentifications     90     sm     \$1,700.00       Indings, Facilities     90     sm     \$1,700.00       Indings, Facilities     90     sm     \$1,000       Indiags, Facilities     90     sm     \$1,000       Indiags, Facilities     50     each     \$300.00       Indiags, Facilities     50     sm     \$1,00       Interes - Other     50     sm     \$200.00       Interes - Other     50     sm     \$1,00       Seeding     Trees - Other     50     sm       Interes - Other     50     sm     \$1,00%<	8.0	Safety / Interpretive Handrails	000			00.000.00¢
0       Fishing Shetters       1       each       \$40,00000         4       Entimediant (Includes Landscoping)       1       in       \$30,0000         0       Former CL, Feny Docts       500       in       \$30,0000         1       Infered Meadow Planting       1       is       \$176,00000         1       Meaner CL, Feny Docts       500       in       \$30,000         1       Meaner CL, Feny Docts       500       in       \$30,000         1       Meanor Pavilion       90       sn       \$1,700,000         1       Teses - Riverside Drive Pedestrian Promenade       55       each       \$30,000         1       Trees - Other       8000       sn       \$1,00         1       Trees - Other       8000       sn       \$1,00         1       Trees - Other       8000       sn       \$1,00         1       Teses - Other       8000       sn       \$1,00         1       Tese - Other       50	9.0	Bike Racks	18	each	\$750.00	\$13.500.00
Interactional Garden       1       1       1       5500,000         Former CL, Fenry Docks       500       1       1       5500,000         Interned Meadow Planting       1       1       1       5       5500,000         Idings, Facilities       500       1       1       5       5500,000         Idings, Facilities       500       50       50       50       5000       5000       5000       5000       5000       5000       5000       5000       5000       50000       5000       50000       50000       5000       5000       50000       5000       50000       50000       50000       5000       50000       5000       5000       5000       5000       5000       5000       50000       50000       5000       5000	10.0	Fishing Shelters	-	each	\$40,000.00	\$40,000.00
strations (includes tandscaping) Finance C. Farry Jocks 500 in 5300.000 Formed Meadow Planting 1 Ls \$175,0000 Inemed Meadow Planting 500 im \$300.000 Idings, Facilities 500.000 Idings, Facilities 500.000 Interes - Riverside Drive Pedestrian Pramenade 65 each \$300.000 Trees - Other 500 m \$1.000 Trees - Other 500 m \$1.000 Trees - Other 500 m \$1.000 Interes - Other 500 m \$1.0000 Interes - Other 500 m \$1.00000 Interes - Other 500 m \$1.00000 Interes - Other 500 m \$1.000000 Interes - Other 500 m \$1.00000000 Interes - Other 500 m \$1.000000000000000000000000000000000000						
0     Canadam International Garden     1     LS     \$500,000       1     Former C. P., Fenry Docks     500, Im     \$300,000       1     Kashroom Pavilion     90 - sm     \$1,700,000       1     Washroom Pavilion     90 - sm     \$1,700,000       1     Kashroom Pavilion     90 - sm     \$1,700,000       1     Kashroom Pavilion     90 - sm     \$1,000       1     Trees - Riverside Drive Pedestrian Promenade     65     each     \$500,000       1     Trees - Riverside Drive Pedestrian Promenade     65     each     \$500,000       1     Trees - Riverside Drive Pedestrian Promenade     65     each     \$500,000       1     Trees - Cher     500     sm     \$1,00       1     Fees - Cher     500     sm     \$1,00	Destina	tions (Includes Landscaping)				
D     Former C.P. Ferry Docks     500     im     \$300.00       Idings, Factilities     90     sm     \$1,700.00       Idings, Factilities     90     sm     \$1,700.00       Idings, Factilities     90     sm     \$1,700.00       Idings, Factilities     90     sm     \$1,00.00       Idings, Factilities     90     sm     \$1,00       Idings, Factilities     8000     sm     \$1,00       Inses - Riverside Drive Pedestrian Promenade     65     each     \$500.00       Inses - Riverside Drive Pedestrian Promenade     65     each     \$500.00       Inses - Chher     8000     sm     \$1,00       Seeding     8000     sm     \$1,00       Resching     8000     sm     \$1,00       Resth resching     Steption - Innind </td <td>0.0</td> <td>Canadian International Garden</td> <td>-  </td> <td>SJ</td> <td>\$500,000.00</td> <td>\$500,000.00</td>	0.0	Canadian International Garden	-	SJ	\$500,000.00	\$500,000.00
<ul> <li>Interned meadoow raming</li> <li>Washroom Pavilion</li> <li>Washroom Pav</li></ul>		Former C.P. Ferry Docks	200	<u></u> <u>3</u>	\$300.00	\$150,000.00
Idiangs, Facilities       90       sm       \$1,700.00         Indexcoping       0       washroom Pavilion       90       sm       \$1,700.00         Indexcoping       65       each       \$500.00       \$31.00         Intess - Ritverside Drive Pedestrian Promenade       65       each       \$300.00         Intess - Cither       50       each       \$300.00       \$1.00         Seeding       8000       sm       \$1.00       \$1.00       \$1.00         Seeding       8000       sm       \$1.00       \$1	0.0	Inemed Meadow Planting	-	S	\$175,000.00	\$175,000.00
0       Washroom Pavilion       90       sm       \$1,700.00         ndscoping       65       each       \$500.00       \$1.00         0       Trees - Riverside Drive Pedestrian Promenade       65       each       \$300.00       \$1.00         0       Trees - Other       50       each       \$300.00       \$1.00       \$1.00         0       Trees - Other       50       each       \$300.00       \$1.00       \$1.00         0       Seeding       8000       \$000       \$1.00       \$1.00       \$1.00       \$1.00         10%       Contingency =       10%       Contingency =       \$1.00	Building	is, Facilities				
Indecoping     65     each     550.00       Indecoping     50     each     550.00       Indecoping     50     each     550.00       Indecoping     50     each     500.00       Seeding     50     each     500.00       Seeding     50     each     500.00       Seeding     500     500     500.00       Seeding     500     500     500.00       Seeding     500     500     500.00       Seeding     500     500.00     500.00       Seeding     500.00     500.00     500.00       Seeding     500.00     500.00     500.00       Seeding     500.00     500.00     500.00       Statistic     500.00 <td< td=""><td>0.</td><td>Washroom Pavilion</td><td>- 06</td><td>sm</td><td>\$1,700.00</td><td>\$153,000.00</td></td<>	0.	Washroom Pavilion	- 06	sm	\$1,700.00	\$153,000.00
Itees - Riverside Drive Pedestrian Promenade       65       each       \$50.00         Itees - Other       50       each       \$300.00         Seeding       50       each       \$300.00         Seeding       50       each       \$300.00         Seeding       50       each       \$300.00         Seeding       5       5       5         Resonance       50       acch       \$300.00         Seeding       5       5       5         Resonance       5       5       5	andere					
Irees - Other       50       each       \$3000         Seeding       Seeding       m       \$1.00         Seeding       Invoke       Seeding       \$1.00         Seeding       Invoke       \$1.00       \$1.00         Seeding       Invoke       \$1.00       \$1.00         State       Invoke       Invoke       Invoke         State	0.	Trees - Riverside Drive Pedestrian Promenade	65	each	\$500.00	\$32,500.00
<ul> <li>Seeding seding in State</li> <li>Segment Total = \$</li> <li>Total = 10%</li> <li>Contingency = 10%&lt;</li></ul>	0	Trees - Other	50	each	\$300.00	\$15,000.00
Segment Total = \$ Segment Total = \$ Segment Total = 10% Contingency = Total =	0.1	Seeding	8000	Sm	\$1.00	\$8,000.00
Segment Total = Segment Total = Segment Total = 10% Contingency = 10% Contingency = 10% Contingency = Total = Total = Total = Total = Total = Ste Demolition -minimal Ste Earthwork and Grading - minimal Ste Earthwork and Grading - minimal Ste Storm Water Management - Management - Not Applicable Services and Connections -rework existing Electrical Services and Connections -rework existing Electrical Services and Connections -rework existing Electrical Services and Connections -rework existing Irigation - included in cost estimate for Canadian Garden Public Telephones Lighting - included in cost estimate for Canadian Garden Undergos at Riverside Dive						
Incontingency Technical Sector Condition - Technical Sector - Technical - Technical Sector - Technical Secto				Segr	nent Total =	\$1,869,925.00
Total       Total         Total       Site Demolition -minimal         Site Demolition -minimal       Site Demolition -minimal         Site Earthwork and Grading - minimal       Site Earthwork and Grading - minimal         Site Drainage - minimal       Site Drainage - minimal         Site Storm Water Management - minimal       Site Storm Water Management - minimal         Site Storm Water Management - minimal       Site Storm Water Management - minimal         Site Storm Water Management - minimal       Site Storm Water Management - minimal         Site Storm Water Management - minimal       Site Storm Water Management - minimal         Site Storm Water Management - minimal       Site Storm Water Management - minimal         Site Storm Water Management - minimal       Site Storm Water Management - minimal         Site Storm Water Management - minimal       Site Storm Water Management - minimal         Site Storm Water Management - minimal       Site Storm Water Management - minimal         Site Storm Water Management - minimal       Site Storm Water Management - minimal         Site Storm Water Management - minimal       Site Storm Water Management - minimal         Site Storm Water Management - minimal       Site Storm Water Management - minimal         Site Storm Water Management - minimal       Site Storm Water Management - minimal         Site Store Storm Kexisting       Site Store St				10% Cor		\$186,992.50
ССПОРЕВ					Total = =	\$2,056,917.50
	XCLUDI	ED ITEMS:				
	0	Site Demolition -minimal				
0.0	0	Site Earthwork and Grading - minimal				
0.0	O.	Site Drainage - minimal				
0.0	0	Site Storm Water Management - minimal				
0.0	0, 0	Shoreline Stabilization Treatment - Not Applicable				
0.0	0. 0	Sanifary, Sewer, Water and Gas Connections -rewor	k existing			
0.0		Lifectifical services and connections - rework existing Irrigation - included in cost estimate for Canadian G	arden			
	0.	Public Telephones				
	0.0	Landscape Lighting - included in cost estimate for C Underpass at Riverside Drive	anadian Garde	en		

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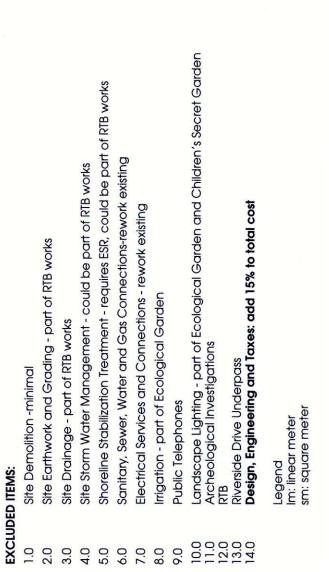
Legend Im: linear meter sm: square meter LS: Lump Sum

Ecological Museum/Steamboat Wharf Windsor Riverfront - Segment Four Budgetary Cost Opinion May 2000

	OF WORK	ATV	TVPF	PRICE	COST
	Circulation systems	Uav	8	\$145 OO	
		00 <del>1</del>			00.002,770
D'Z	KIVELWOIK	000	TIT.	00.0046	nninne (coze
3.0	Recreation Way	635	<u></u>	\$135.00	\$85,725.00
4.0	Connector Trails	325	Ë	\$60.00	\$19,500.00
5.0	Sian System - Interpretive	-	allowance	\$100.000.00	\$100.000.00
6.0	Sign System - Directional	011	each	\$350.00	\$38,500.00
Irking	Parking Courts (Includes Lighting and Access)				
1.0	Parking Court #1	-	l.s.	\$110,000.00	\$110,000.00
npo	Urban Design Amenities				
1.0	Lighting - Riverside Drive Pedestrian Promenade	20	each	\$5,000.00	\$100,000.00
2.0		25	each	\$3,000.00	\$75,000.00
3.0	Lighting - Recreation Way	25	each	\$3,000.00	\$75,000.00
4.0	Lighting - Connector Trail	13	each	\$3,000.00	\$39,000.00
5.0	Free Standing Benches	37	each	\$1,500.00	\$55,500.00
6.0	Interpretive Seatwall	150	each	\$450.00	\$67,500.00
8.0	Banners	02	each	\$200.00	\$14,000.00
0.6	Waste Receptacles	37	each	\$1,500.00	\$55,500.00
11.0	Drinking Fountains	0	each	\$6,500.00	\$13,000.00
12.0	Safety / Interpretive Handrails	305	E.	\$300.00	\$91,500.00
13.0	Bike Racks	21	each	\$750.00	\$15,750.00
14.0	Fishing Shelters	-	each	\$40,000.00	\$40,000.00
eting	Destinctions (Includes   andecomina)				
		- ,	l.S.	00.000.0120	00,000,6128
		- ,	each		
3.0	Putting Green	-	.S.	00.000,06\$	\$50,000.00
4.0	Children's Secret Garden	-	.s.	\$250,000.00	\$250,000.00
lding	Buildings, Facilities				
1.0	Legacy Beacon	200	Sm	\$2,000.00	\$400,000.00
2.0	Steamboat Wharf	800	S	\$2,000.00	\$1,600,000.00
dsc	Landscaping				
10	Trees - Riverside Drive Pedestrian Promenade	130	AUCh	\$500 00	\$45 000 OD
		201		00.0000	000,000,000
0.2			each	00.0000	
3.0	ranascaping	1000	s.m.	\$30.00	\$48,000.00
4.0	Seeding	1000	s.m.	\$1.00	\$1,000.00
			Seg	Segment Total =	\$4,812,175.00
			10% Co	10% Contingency =	\$481,217.50

MBTW GROUP

**CITY OF WINDSOR CENTRAL RIVERFRONT** IMPLEMENTATION PLAN



CITY OF WINDSOR **CENTRAL RIVERFRONT** IMPLEMENTATION PLAN

culation	DESCRIPTION	EST.	UNIT	UNIT	TOTAL
culation	OF WORK			- KICL	
1.0 Riverside Drive	Drive Pedestrian Promenade	480	<u>E</u>	\$165.00	\$79,200.00
		480	<u>E</u>	\$450.00	\$216,000.00
		480	E	\$135.00	\$64,800.00
		ADF	<u></u>	260 00	\$24.300.00
				¢100	
	Sign System - Interpretive	- :	allowance	510	\$100,000.00
6.0 Sign Syste	Sign System - Directional	06	each	00.065\$	231,500.00
Parkina Courts (Includes	udes Lighting and Access)				
1.0 Parking Court	court #1	-	SJ	\$140,000.00	\$140,000.00
	court #2	-	LS	\$160,000.00	\$160,000.00
Urban Design Amenities	ities				
1.0 Liahtina -	Liahtina - Riverside Drive Pedestrian Promenade	20	each	\$5,000.00	\$100,000.00
	Liahtina - Riverwalk	20	each	\$3,000.00	\$60,000.00
	Lichting - Recreation Way	20	each	\$3,000.00	\$60,000.00
		16	each	\$3,000.00	\$48,000.00
	Eron Standing Bonchas	32	each	\$1,500.00	\$48,000.00
		120	each	\$450.00	\$54,000.00
		AD AD	each	\$200.00	\$8,000.00
		32	ACCh	\$1.500.00	\$48,000.00
	Waste receptiones		each	\$6.500.00	\$6.500.00
		- 71	4000	\$750 DD	00 000 C1\$
10.0 Bike Racks	Ş	0			0000
Destinations (Includes Landscaping)	les Landscaping)				
1.0 Dieppe Gardens	Sardens	-	LS	\$375,000.00	\$375,000.00
	Udine Fountain and Rose Garden	-	LS	\$50,000.00	\$50,000.00
4.0 Historic B	Historic Brick Walk	-	rS	\$250,000.00	\$250,000.00
ildinas Facilitias					
Darra Rarron		200	S	\$2,000.00	\$400,000.00
Landscaping					
	verside Drive Pedestrian Promenade	811	each	nninnes	00.000.40¢
2.0 Trees - Other	ther	50	each	\$300.00	00.000,61\$
3.0 Seeding		7200	sm	\$1.00	\$7,200.00
			Seg	Segment Total =	\$2,416,500.00
			10% Co	10% Contingency =	\$241,650.00
				Total =	\$2,658,150.00
				I	
CLUDED					
	Site Demolition - minimal				
	Site Earthwork and Grading - minimal				
3.0 Site Drainage	Site Drainage - minimal				

- Site Storm Water Management -minimal Shoreline Stabilization Treatment -Ouellette to Goyeu included in Segment 6 costs Sanitary, Sewer, Water and Gas Connections -rework existing Electrical Services and Connections rework existing Irrigation rework existing Public Telephones existing Landscape Lighting rework existing **Design, Engineering and Taxes: add 15% to total cost**
- 4.0 5.0 6.0 7.0 8.0 9.0 11.0

Legend Im: linear meter sm: square meter LS: Lump Sum

Civic Terrace/ Festival Plaza

Windsor Riverfront - Segment Six Budgetary Cost Opinion May 2000

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Q					
	OF WORK	QTY.	TYPE	PRICE	COST
ircula	Circulation Systems				
1.0	Riverside Drive Pedestrian Promenade	515	<u></u>	\$165.00	\$84,975.00
2.0	Riverwalk	550	<u></u>	\$450.00	\$247,500.00
3.0	Recreation Way	580	<u></u>	\$135.00	\$78,300.00
4.0	Connector Trails	75	<u></u>	\$60.00	\$4,500.00
5.0	Sign System - Interpretive	-	allowance	\$100,000.00	\$100,000.00
6.0	Sign System - Directional	100	each	\$350.00	\$35,000.00
Irking	Parking Courts (Includes Lighting and Access)				
1.0	Service Road	-	LS	\$75,000.00	\$75,000.00
ban [	Urban Design Amenities				
1.0	Lighting - Riverside Drive Pedestrian Promenade	21	each	\$5,000.00	\$105,000.00
2.0	Lighting - Riverwalk	22	each	\$3,000.00	\$66,000.00
3.0	Lighting - Recreation Way	24	each	\$3,000.00	\$72,000.00
4.0	Lighting - Connector Trail	ю	each	\$3,000.00	\$9,000.00
5.0	Free Standing Benches	37	each	\$1,500.00	\$55,500.00
6.0	Interpretive Seatwall	160	each	\$450.00	\$72,000.00
7.0	Banners	70	each	\$200.00	\$14,000.00
8.0	Waste Receptacles	37	each	\$1,500.00	\$55,500.00
0.6	Drinking Fountains	2	each	\$6,500.00	\$13,000.00
10.0	Safety / Interpretive Handrails	350	<u></u>	\$300.00	\$105,000.00
11.0	Bike Racks	20	each	\$750.00	\$15,000.00
stina	Destinations (Includes Landscaping)				
1.0	Dieppe Gardens	-	rs	\$375,000.00	\$375,000.00
3.0	Udine Fountain and Rose Garden	٢	LS	\$50,000.00	\$50,000.00
4.0	Historic Brick Walk	-	LS	\$250,000.00	\$250,000.00
ilding	Buildings. Facilițies				
1.0	Peace Beacon	200	ST	\$2,000.00	\$400,000.00
ndsc	Landscaping				
1.0	Trees - Riverside Drive Pedestrian Promenade	118	each	\$500.00	\$59,000.00
2.0	Trees - Other	50	each	\$300.00	\$15,000.00
3.0	Seeding	7200	Sm	\$1.00	\$7,200.00
			Seg	Segment Total =	\$2,416,500.00
			10% Cc	10% Contingency =	\$241,650.00
				Total =	\$2,658,150.00
				1	

# EXCLUDED ITEMS:

1.0 2.0 3.0 4.0 5.0

Site Demolition - minimal Site Earthwork and Grading - minimal Site Drainage - minimal Site Storm Water Management -minimal Shoreline Stabilization Treatment -Ouellette to Goyeu included in Segment 6 costs

							 NTRAL		ONT PLA	N
Sanitary, Sewer, Water and Gas Connections -rework existing	Electrical Services and Connections - rework existing	Irrigation - rework existing	Public Telephones - existing	Landscape Lighting - rework existing Design, Engineering and Taxes: add 15% to total cost	Legend Im: linear meter sm: square meter	mp Sum	 			N
6.0 Sanit			ildud 0.0	10.0 Land 11.0 <b>Desi</b> ç	Legend Im: linear sm: squa	LS: LL				
		ω.	5							

CITY OF WINDSOR

\$83,700.00 \$34,500.00 \$100,000.00 \$38,500.00 \$20,000.00 \$60,000.00 \$13,000.00 \$1,437,500.00 \$437,000.00 \$50,000.00 \$210,000.00 \$1,327,000.00 \$157,500.00 \$14,245.00 \$95,700.00 \$270,000.00 \$300,000.00 \$60,000.00 \$260,000.00 \$26,000.00 \$15,000.00 \$85,000.00 \$400,000.00 \$5,090,400.00 \$480,000.00 \$2,040,000.00 \$238,000.00 \$120,000.00 \$72,000.00 \$75,000.00 \$67,500.00 \$15,750.00 \$337,500.00 \$50,000.00 \$80,000.00 **TOTAL** COST \$135.00 \$60.00 \$100,000.00 \$300,000.00 \$100,000.00 \$200.00 \$1,500.00 \$6,500.00 \$750.00 \$10,100.00 \$12,000.00 \$11,500.00 \$11,500.00 \$50,000.00 \$35,000.00 \$2.00 \$15,000.00 \$50,000.00 \$85,000.00 \$400,000.00 \$165.00 \$450.00 \$5,000.00 \$3,000.00 \$3,000.00 \$1,500.00 \$450.00 \$100.00 \$35.00 \$50.00 \$2,500.00 \$7.00 \$350.00 \$20.00 \$80,000.00 \$3,000.00 \$1,327,000.00 PRICE UNIT allowance each each each each each each each each cu.m each cu.m cu.m each cu.m UNIT TYPE cu.m <u><u><u>3</u></u> <u>3</u> <u>3</u></u> <u>E</u> E E SI LS LS Sm S <u></u> Ε <u></u> LS LS LS LS LS 13000 3000 20400 6800 6750 63 2035 580 600 620 575 110 ΩIV. 24 25 25 25 23 23 20 150 21 20 21 22 504 40 125 38 38 38 6 EST ----- -- -Rock Protection Installation Rock Infill incl. to Mercer Street and to Well House Lighting - Riverside Drive Pedestrian Promenade Lighting - Riverwalk\* 7.3m wide floating wave attenuator #27.3m wide floating wave attenuator #37.3m wide floating service pierspoiler at end of floating attenuator Riverside Drive Pedestrian Promenade 6m wide floating wave attenuator #1 Steel Sheet Pile Shorewall Installation Parking Courts (Includes Lighting and Access) Remove sunken piles and dolphins Grading of dredgate on site Sediment control during dredging DESCRIPTION OF WORK Dredging to elevation 172m Remove shorewall to 172m Lighting - Recreation Way\* Destinations (Includes Landscaping) Lighting - Connector Trail Sign System - Interpretive Sign System - Directional\* **Excavation and Disposal** Attenuators and Service Pier Free Standing Benches **Shoreline Rehabilitation** Ice Breaker Dolphins Interpretive Seatwall Waste Receptacles\* Drinking Fountains\* Service Pier Landfill Parking Court #1 Parking Court #2 Volleyball Courts Recreation Way\* Connector Trails **Design Amenities** Realign CSO **Bike Racks**\* Riverwalk\* **Circulation Systems** Lighting -Banners Marina Basin Existing : Urban Wave ITEM 10.0 3.0 4.0 6.0 7.0 8.0 4.0 5.0 6.0 6.0 3.0 3.0 5.0 6.0 7.0 20 0.1 2.0 5.0 0.1 2.0 1.0 9.0 0.1 2.0 3.0 0.1 2.0 4.0 0.1 2.0 1.0

Skateboard Park

G	R	0	υ	Ρ

2.0	0	Wind Generation Tower	-	S	\$750,000.00	\$750,000.00	
3.0	0	Children's Water Spray Play area*	١	LS	\$525,000.00	\$525,000.00	
4.0	0	Planted Terrace (on marina buildings)*	-	SJ	\$75,000.00	\$75,000.00	
B	uildings,	Buildings, Facilities					
1.1	0	Marina Building A including Marina Restaurant*	1000	sm	\$1,880.00	\$1,880,000.00	
2.	0	Marina Building B with Waterplay Change Rooms*	830	sm	\$1,880.00	\$1,560,400.00	
3.0	0	Building Foundations (piles)*	1800	sm	\$300.00	\$540,000.00	

Trees - Other 500 000 000 000 000 000 000 000 000 00	Landscaping	<b>:aping</b> Trace - Diverside Drive Pedestrian Dromenade	145	4000	SEAD OD	\$70 FOO OO
Seeding: seeding: Socialine Naturalization**     1000     5000     5000       Seeding: She Preparation**     1000     5000     5000       Ste Preparation**     1000     5500000       Ste Preparation**     1     1     1       Ste Preparation**     1     1     1     55000000       Ste Preparation**     1     1     1     5       Ste Preparation**     3     6001     5500000       Anno Service (pumpout, gas, clesely)**     1     1     1     5       Anno Service (pumpout, gas, clesely)**     3     6001     5       Anno Service (pumpout, gas, clesely)**     3     6001     5       Anno Service (pumpout, gas, clesely)**     1     1     5     5       Anno Service (pumpout, gas, clesely)**     2     5     5       Anno Service (pumpout, gas, clesely)**     1     1     5     5       Anno Service (pumpout, gas, clesely)**     2     1     5     5       Anno Service (pumpout, gas, clesely)**	- c				\$300.000	\$15 000 00
Seeding Seeding Seeding Shoreline Naturalization************************************	7'N		3	AUCH		
Shoreline Naturalization** 140 sm 35.00 decoping she Preparation** 1 is \$5600000 she Remediation (including decommissioning)** 1 is \$5500000 she Remediation (including decommissioning)** 1 is \$1300000 she Servicing*** 3 each \$1300000 Ramb Extensions*** 3 each \$1300000 Ramb Extensions**********************************	3.0	Seeding*	12000	SM	\$1.00	\$12,000.00
decoding       Ste Preparation**       1       IS       \$25,000.00         Site Preparation*       Site Preparation**       1       IS       \$25,000.00         Site Preparation**       3       Site Preparation**       3       \$200.000         Site Preparation**       3       Site Preparation**       3       \$335,00         Ining Docks       271       Segment Total       \$200.000	4.0		1400	sm	\$35.00	\$49,000.00
Site Preparation**       1       Ls       \$25,0000         Site Remediction (including decommissioning)**       1       Ls       \$25,0000         Site Remediction (including decommissioning)**       1       Ls       \$35,0000         Site Remediction (including decommissioning)**       1       Ls       \$35,0000         Bate Activity Area**       3       each       \$35,000         Ramp Extensions**       3       each       \$30000         Maina Service (pumpout, gas, diesel)**       1       Ls       \$130,000         Aling Docks       3       each       \$30000         Plotting Marginal Walk and Main Docks**       271       each       \$30000         Plotting Fingers per slip**       271       each       \$30000         Flotting Fingers per slip**       Segment Total       Index       Index         Flotting Fingers per slip**       271       each       \$30000         Flotting Finge	Landsc	caping				
stre servicing***********************************		Sita Drandridion**	_	SI	\$25 000 00	\$25 000 00
sin Savicing" and Activity Area" 3 each \$35,00000 Boater Activity Area" 3 each \$35,00000 Ramp Extensions" 3 each \$35,00000 Marina Service (pumpout, gas, diesel)" 1 LS \$130,00000 Indite Activity Area" 3 each \$35,00000 Footing Fingers per sip" 270 sm \$375,00 Footing Fingers per sip" 270 each \$9,00000 Footing Fingers per sip" 271 each \$9,000000 Footing Fingers per sip" 271 each \$9,000000 Footing Fingers per sip" 271 each \$9,000000 Footing Fingers per sip" 271 each \$9,000000000000000000000000000000000000		Site Demediation (including decommissioning)**		3 2		
Sire Servicing <sup>11</sup> Sire Service (purmout, gas, diesel) <sup>11</sup> Ramp Extensions <sup>11</sup> ating Docts Marina Service (purmout, gas, diesel) <sup>11</sup> 10% Contingence Floating Fingers per sip <sup>11</sup> Floating Fingers Per sip <sup>11</sup> Costs for the finder meter Floating Fingers Per sip <sup>11</sup> Floating Fingers Per sig <sup>11</sup> Floating Fingers Fingers Fingers Per sig <sup>11</sup> Floating Fingers	7.0		- ,	3 9		
Bodrer Activity Area <sup>-+</sup> 3 each \$35,0000 Ramp Extensions <sup>+</sup> 3 each \$35,0000 Marina Service (pumpout, gas, diesel) <sup>++</sup> 1 LS \$130,0000 Inding Docks Floating Marginal Wark and Main Docks <sup>++</sup> 2900 sm \$375,00 Floating Marginal Wark and Main Docks <sup>++</sup> 271 each \$3,000.00 Floating Fingers per slip <sup>++</sup> 271 each \$3,000.00 Floating Fingers per slip <sup>++</sup> 271 each \$3,000.00 Floating Fingers per slip <sup>++</sup> 271 each \$4,000 Floating Fingers per slip <sup>++</sup> 271 each \$4,000 Floating Fingers Per slip <sup>++</sup> 271 each \$4,000 Floating Fingers Per slip <sup>++</sup> 100% Contingency = 10% Contingency = 1016 = 100% Contingency = 100% Contingency = 1016 = 100% Contingency = 100% Contingency = 1016 = 100% Contingency	3.0	Site Servicing**	-	S	\$220,000.00	\$220,000.00
Ramp Extensions**       3       each       \$15,000.00         aftig Docts       aftig Docts       3335.00         And Docts       2900       sm       \$335.00         Floating Marginal Walk and Main Docks**       2900       sm       \$335.00         Floating Marginal Walk and Main Docks**       2900       sm       \$335.00         Floating Fingers per silp**       271       each       \$,000.00         Floating Fingers per silp**       10% Contingency =       Iotal =         Index constructs       Stattwork and Grading-minimal       Index constructs       Iotal =         Index constructs       Eachwork and Grading-minimal       Index constructs       Iotal =         Index cons	4.0	Boater Activity Area**	e S	each	\$35,000.00	\$105,000.00
Marina Service (pumpout, gas, diesel)** 1 Ls \$130,000.00 aning Docks Floating Marginal Walk and Main Docks** 2900 sm \$375,00 Floating Fingers per silp** 271 each \$,000.00 Floating Fingers per silp** 270 each \$,000.00 Floating Fingers per silp** 270 each \$,000.00 Floating Finder # 200.00 Floating	5.0	Ramp Extensions**	в	each	\$15,000.00	\$45,000.00
Jing Docks       200       sm       3375.00         Floating Marginal Wark and Main Docks**       271       each       \$9,000.00         Floating Fingers per silp**       271       each       \$9,000.00         Floating Fingers       10%       Contingency =       10%         Stab Eachtwork and Grading-minimal       10%       Contingency =       10did =         Stab Eachtwork and Grading-minimal       Indid a to	6.0	Marina Service (pumpout, gas, diesel)**	1	LS	\$130,000.00	\$130,000.00
Floating Marginal Walk and Main Docks**       200       sm       \$375.00         Floating Fingers per silp**       271       each       \$9,000.00         Floating Fingers per silp**       271       segment Total =       \$9,000.00         Step Each       10%       Contingency =       10%       Contingency =         Lubbic Fight       10%       Factor       10%       Contingency =       10%         Lingert       Step Each       Statingency =       10%       Contingency =       10%	Floatin	g Docks				
Floating Fingers per slip**       271       each       \$,000.00         Segment Total =       \$       \$       \$         Segment Total =       10% Contingency =       10% Contingency =         Total =       10% Contingency =       Total =         Site Demolition-minimal       Site Demolition-minimal       Interform         Site Demolition-minimal       Site Demolition-minimal       Total =         Site Demolition-minimal       Site Demolition-minimal       Interform         Politic Telephones       Costs trans Hublick Associntes dared Decomber 1995       Site Demolite	1.0	Floating Marginal Walk and Main Docks**	2900	Sm	\$375.00	\$1,087,500.00
segment Total = segment Total = segment Total = segment Total = 10% Contingency = Total = Tota	2.0	Floating Fingers per slip**	271	each	\$9,000.00	\$2,439,000.00
segment Total = , Segment Total = , 10% Contingency = Iotal = Site Demolition-minimal site Demolition-minimal site Earthwork and Grading-minimal site Earthwork and Grading-minimal irregation Public Telephones Landscape Lighting included above RTB Design. Engineering and Taxes: add 15% to total costs Landscape Lighting included above RTB Design. Engineering and Taxes: add 15% to total costs Costs trom Tothen Sims Hubicki Associates dated December 1995 .•Costs updated/revised from TSH Study Legend millerar meter S: Lump Sum cum: cubic meter					i.	
Io% contingency = Total = Tota				Seg	jment Total =	\$24,460,195.00
Includent Trends Site Demolition-minimal Site Earthwork and Grading-minimal Site Earthwork and Grading-minimal Site Earthwork and Grading-minimal Site Earthwork and Grading-minimal Incegation Public Telephones Landscope Lighting-Marine lighting included above Public Telephones Landscope Lighting-Marine lighting included above RTB Design. Engeneeren Pagena To costs trom Taxes: add 15% to total costs RTB Design. Engineering and Taxes: add 15% to total costs RTB Design. Engineering and Taxes: add 15% to total costs Costs trom Taxes: add 15% to total costs Costs trom Taxes: add 15% to total costs RTB Design. Engineering and Taxes: add 15% to total costs RTB RTB RTB RTB RTB RTB RTB RTB				10% Cc	ontingency =	\$2,446,019.50
Incomposition the second state of the second secon						
CLUDED					Total = =	\$26,906,214.50
	EXCLU	DED ITEMS:				
	1.0	Site Demolition-minimal				
	2.0	Site Earthwork and Grading-minimal				
	3.0	Irregation				
	4.0	Public Telephones				
	5.0	Landscape Lighting-Marine lighting included above				
	6.0	RTB				
Legend Im: linear meter sm: square meter LS: Lump Sum cu.m: cubic meter	7.0	Design, Engineering and Taxes: add 15% to total costs *Costs from Totten Sims Hubicki Associates dated Decem **Costs updated/revised from TSH Study	iber 1995			
Im: linear meter sm: square meter LS: Lump Sum cu.m: cubic meter						*
cu.m: cubic meter		Legen of Im: linear meter sm: square meter LS: Lump Sum				
		cu.m: cubic meter				

CITY OF WINDSOR
CENTRAL RIVERFRONT
IMPLEMENTATION PLAN

Windsor Riverfront - Segment Eight Budgetary Cost Opinion May 2000

Bert Weeks, Great Western Park, Hatch Gardens

# **CENTRAL RIVERFRONT** IMPLEMENTATION PLAN

**CITY OF WINDSOR** 

ITEM	DESCRIPTION	EST.	UNIT	UNIT	TOTAL
Q	OF WORK	QIY.	TYPE	PRICE	COST
Circula	Circulation Systems				2
1.0	Riverside Drive Pedestrian Promenade	620	<u></u>	\$165.00	\$102,300.00
2.0	Riverwalk	200	<u></u>	\$450.00	\$90,000.00
3.0	Recreation Way	06	<u></u>	\$135.00	\$12,150.00
4.0	Connector Trails	550	<u></u>	\$60.00	\$33,000.00
5.0	Sign System - Interpretive	-	allowance	\$100	\$100,000.00
6.0	Sign System - Directional	82	each	\$350.00	\$28,700.00
Urban [	Urban Design Amenities				
1.0	Lighting - Riverside Drive Pedestrian Promenade	25	each	\$5,000.00	\$125,000.00
2.0	Lighting - Riverwalk	8	each	\$3,000.00	\$24,000.00
3.0	Lighting - Recreation Way	4	each	\$3,000.00	\$12,000.00
4.0	Lighting - Connector Trail	22	each	\$3,000.00	\$66,000.00
5.0	Free Standing Benches	28	each	\$1,500.00	\$42,000.00
6.0	Banners	25	each	\$200.00	\$5,000.00
7.0	Waste Receptacles	28	each	\$1,500.00	\$42,000.00
8.0	Drinking Fountains	2	each	\$6,500.00	\$13,000.00
9.0	Bike Racks	С	each	\$750.00	\$2,250.00
Desting	Destinations (Includes Landscaping)				
0.1	Sunrise Mound	-	SJ	\$120,000.00	\$120,000.00
2.0	Elevated Catwalk	L	LS LS	\$85,000.00	\$85,000.00
3.0	Joan and Clifford Hatch Wildflower Garden	-	ΓS	\$625,000.00	\$625,000.00
Building	Buildinge Egolittige				
	js, ruciilles			and another state	
0.1	Dawn Beacon	140	S	\$2,000.00	\$280,000.00
Landscaping	aping				
1.0	Trees - Riverside Drive Pedestrian Promenade	75	each	\$500.00	\$37,500.00
2.0	Trees - Other	50	each	\$300.00	\$15,000.00
3.0	Landscaping	2000	sm	\$30.00	\$60,000.00
4.0	Seeding	11000	ST	\$1.00	\$11,000.00
			Segr	Segment Total =	\$1,930,900.00
			10% Coi	10% Contingency =	\$193,090.00
				Total =	\$2,123,990.00
EXCLUD	EXCLUDED ITEMS:			I	
1.0	Site Demolition - minimal				
2.0	Site Earthwork and Grading - included in other works				
3.0	Site Drainage -included in other works				

Site Drainage -included in other works Site Storm Water Management - included in other works

3.0 5.0 6.0 7.0 8.0 9.0 11.0 11.0 13.0

Shoreline Stabilization Treatment - \$1.0 million, budgetted in 2000 Sanitary, Sewer, Water and Gas Connections - rework existing Electrical Services and Connections - rework existing Irrigation - included in Bert Weeks and Hatch Gardens budgets

Public Telephones Landscape Lighting -(part if Bert Weeks & Hatch Gardens estimates) Bert Weeks Fountain & Gardens - \$2.6 million Archaelogical Investigations Design, Engineering and Taxes: add 15% to total

Legend Im: linear meter sm: square meter LS: Lump Sum

Grain Field/Hiram Walker/Walkerville Windsor Riverfront - Segment Nine Budgetary Cost Opinion May 2000

ITEM	DESCRIPTION	EST.	UNIT	UNIT	IOIAL
ON	OF WORK	QTY.	TYPE	PRICE	COST
Circulati	Circulation Systems				
1.0	Riverside Drive Pedestrian Promenade	530	<u></u>	\$165.00	\$87,450.00
2.0		265	<u></u>	\$450.00	\$119,250.00
3.0	Recreation Way	265	<u></u>	\$135.00	\$35,775.00
4.0	Sign System - Interpretive	-	allowance	\$100,000.00	\$100,000.00
5.0	Sign System - Directional	53	each	\$350.00	\$18,550.00
Urban De	Urban Design Amenities				
1.0	Lighting - Riverside Drive Pedestrian Promenade	22	each	\$5,000.00	\$110,000.00
5.0	Free Standing Benches	18	each	\$1,500.00	\$27,000.00
8.0	Banners	22	each	\$200.00	\$4,400.00
0.6	Waste Receptacles	18	each	\$1,500.00	\$27,000.00
11.0	Drinking Fountains	1	each	\$6,500.00	\$6,500.00
13.0	Bike Racks	18	each	\$750.00	\$13,500.00
Destinati	Destinations (Includes Landscaping)				
1.0	Walkverville - subject to further study	0	ри	ри	\$0.00
Building	Buildings, Facilities				
1.0	Shuttle Station	100	sm	\$1,700.00	\$170,000.00
Landscaping	bing				
	Irees - Kiverside Urive Pedestrian Promenaae				00 001 004
1.0	Trees - Other	65	each	\$500.00	\$32,500.00
2.0	Wildflower / Meadow	50	each	\$300.00	\$15,000.00
3.0	Seeding	4000	sm	\$10.00	\$40,000.00
4.0					
			Segi	Segment Total =	\$806,925.00
			10% 02	10%. Continuency -	580 602 50
				Total =	\$887,617.50

- 1.0 2.0 3.0 4.0 5.0 6.0 7.0 8.0 9.0 110.0

- Excluber Site Demolition -minimal
  1.0 Site Earthwork and Grading minimal
  2.0 Site Drainage minimal
  3.0 Site Storm Water Management minimal
  4.0 Shoreline Stabilization Treatment Not Applicable
  5.0 Sanitary, Sewer, Water and Gas Connections rework existing
  6.0 Electrical Services and Connections rework existing

  - Irrigation not applicable Public Telephones
- Landscape Lighting not applicable
- Design, Engineering and Taxes: add \$15% to total RTB
- Legend Im: linear meter sm: square meter LS: Lump Sum

CITY OF WINDSOR
CENTRAL RIVERFRONT
IMPLEMENTATION PLAN

CITY OF WINDSOR **CENTRAL RIVERFRONT** IMPLEMENTATION PLAN

## Appendix F: Hilton Valet Parking



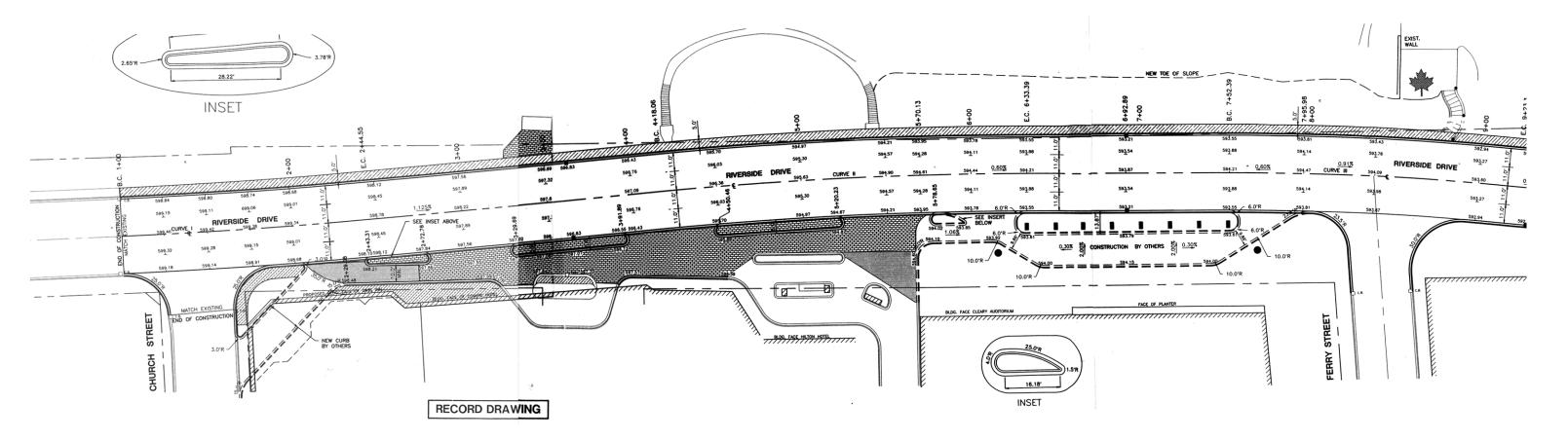
I
CITY OF WINDSOR
CENTRAL RIVERFRONT
IMPLEMENTATION PLAN

#### Appendix F

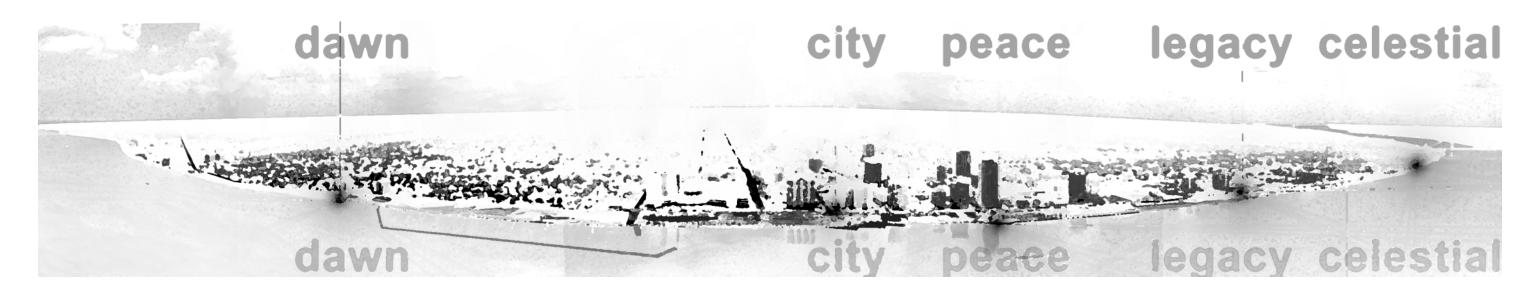
#### Hilton Valet Parking

The plan (Figure - ) illustrates recommendations provided by the City of Windsor Public Works Department in consultation with Dillon Consulting Engineers (Sheets 6 and 7: Riverside Drive Realignment, February 13, 1990) to improve the valet parking drop-off area in front of the Hilton and Radisson Hotels. The current drop-off area is being used to park vehicles and the existing pedestrian sidewalks/islands vary in width and are generally substandard to the 2.4 meter (8 feet) sidewalks required within the City Centre area. In addition to the changes illustrated in the plan, recommendations include:

- A consistent 2.4 meter (8 feet) sidewalk where feasible
- Feature paving delineating the pedestrian sidewalk continued across driveway
   accesses points
- Include drop curbs between the sidewalk and driveway access points
- Reduction of the number of existing driveway access points



### Appendix g: Festival Plaza Occupancy Estimates



I
CITY OF WINDSOR
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IMPLEMENTATION PLAN

Windsor Riverfront Festival Plaza Occupancy Estimates September 15, 2000. JSJ

#### • Area Requirements per person

Person standing (shoulder to shoulder but not touching) = 0.5m2 (based on physical test) Person seated on portable chair = 0.75m2 (based on 32" wide by 37" deep from TSS\*) Person seated on ground = 1.0m2 (based on physical test)

• Occupancy calculations (refer to diagram on page 141)

#### Area A (Paved surface)

Gross Area = 5900m2 Net Area = 5000m2 (subtract 15% area for aisles, access, safety etc.) Number of persons sitting on portable chairs = 6,600 Number of persons standing = 10,000

#### Area B (Overflow area)

Gross area = 3300m2 Net area = 2800m2 (subtract 15% area for aisles, access, safety etc.) Number of persons standing = 5,600

#### Area C (Amphitheatre)

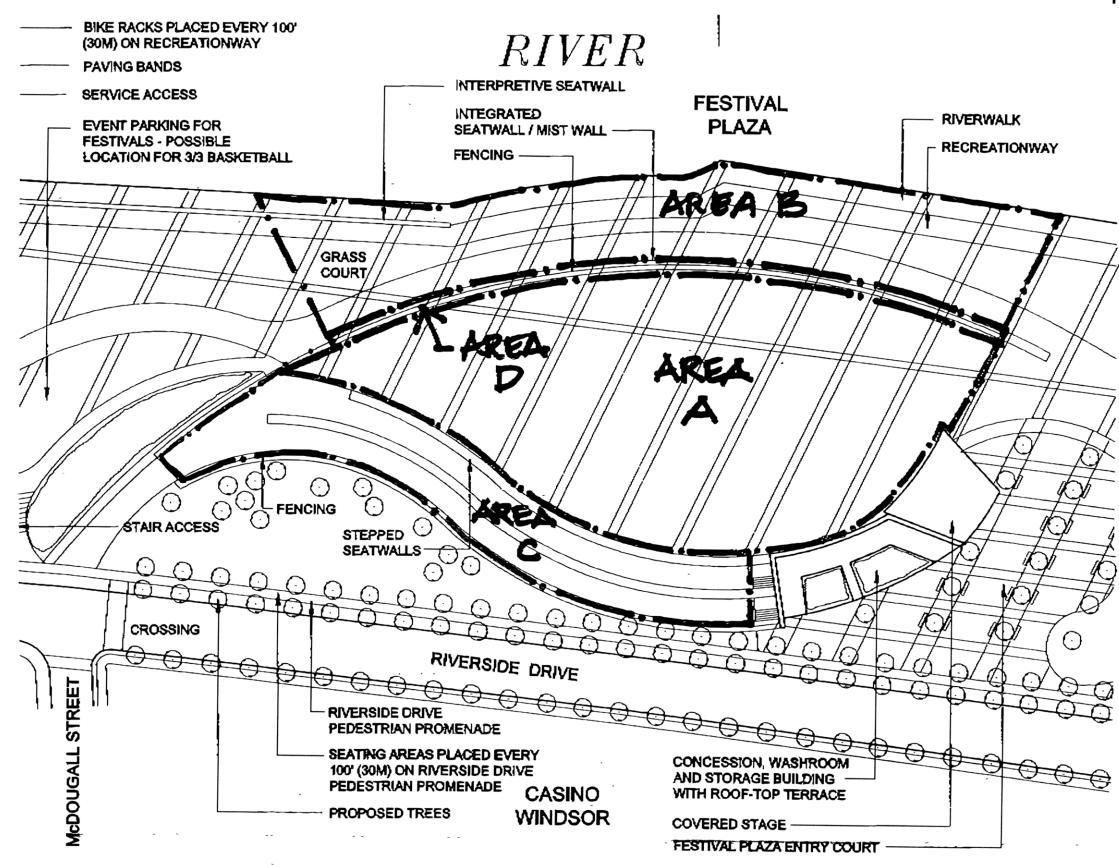
Gross area = 2100m2Net area = 1800m2 (subtract 15% area for aisles, access, safety etc.) Number of persons sitting on the ground = 1,800

\*The figure of 1100 persons (previous calculation) occupying the amphitheatre and the wall was based on allowing 2m2 per person – this seemed excessive upon review.

#### Area D (Mist Wall)

Gross area = 165m2Net area = 165m2 (subtract 15% area for aisles, access, safety etc not necessary) Number of persons sitting on the wall = 165

\* TSS (Time Saver Standards for Landscape Architecture, Charles W. Harris and Nicholas T. Dines, 1988)



**CITY OF WINDSOR CENTRAL RIVERFRONT** IMPLEMENTATION PLAN