



**Town of Prescott**

**WATERFRONT  
CONCEPT DESIGN  
REPORT**

**Ainley Group  
Ottawa, Ontario**

**Commonwealth Historic Resource Management Ltd  
Perth, Ontario**

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## 1.0 **INTRODUCTION**

The purpose of the *'Prescott Waterfront Concept Design Report'* is to identify and establish the overall design concept and detailed design elements for the Prescott waterfront. The design was prepared with regard to the technical, legal and environmental constraints of the area. It builds on and incorporates elements of the *'Downtown Design & Urban Design Guidelines'* approved by Council in 2005. Input from Town Council and the public was obtained during design workshops and public open house events.

The objective of the design concept is to create an attractive, multi-use waterfront area that contributes to the overall 'greening' of the town, promotes a healthy and active lifestyle and responds to the needs of a wide variety of user groups. These groups include, but are not limited to, families, area merchants and residents, tourists, scuba divers and special event organizations.

The report includes a description and cost estimate for the overall design concept as well as several of the key design elements. The report concludes with recommendations for construction phasing and funding options.

## 2.0 **BACKGROUND**

The Town of Prescott is a St. Lawrence riverfront community that was founded by Colonel Edward Jessup, settled by United Empire Loyalists, and named in honour of General Robert Prescott (1725-1816) Governor-in-Chief of Canada from 1787-1807.

The waterfront has played a significant role in the development of the town; a role that continues to the present day. Prior to construction of the St. Lawrence Seaway, the town was the major forwarding port for passengers and goods moving between Montreal and Toronto. In addition, the Prescott ferry transported goods and passengers across the St. Lawrence River between Canada and the United States until the mid 1970's. As a result of these historic transportation links, many commercial enterprises were located on or near the waterfront to take advantage of Prescott's strategic location on the river.

Following construction of the St. Lawrence Seaway and the International Bridge, Prescott's waterfront became less important as a commercial transportation hub and many of the commercial/industrial enterprises closed or moved to other locations. Over the past 30 years, the waterfront has slowly evolved into a centre for recreational and cultural activities. For example, the Sandra S. Lawn Marina, located adjacent to the Fort Wellington National Historic Site and constructed in the late 1980's, is regarded as one of the finest pleasure craft marinas on the St. Lawrence River. In addition, the St. Lawrence Shakespeare Festival located in the amphitheatre on the waterfront has grown steadily since its inception in 2004 to become one of Ontario's premier summer festivals.

In response to the continued evolution of the waterfront, the Town has prepared a waterfront design plan to redevelop the lands adjacent to and beyond the aforementioned facilities. It is anticipated that this work will contribute to the overall economic well-being of the Town and provide residents and visitors access to a greater range of recreational and cultural experiences.

### **3.0 WATERFRONT USER GROUPS AND DESIGN ISSUES**

The objective of the concept design is to establish an accessible, multi-use, public waterfront space that will attract and respond to the needs of a variety of user groups while contributing to the overall 'greening' of the Town of Prescott. The area is currently used by many groups and is promoted as a segment of the Lake Ontario – St. Lawrence River Waterfront Trail. However, the area is in desperate need of redevelopment in order to maximize its benefits to the Town.

The specific user groups include but are not limited to the following:

- Residents and visitors of all ages and physical abilities;
- Tourists arriving by water (i.e. cruise ships and individual pleasure craft);
- Tourists arriving by automobile and bicycle;
- Downtown merchants and businesses;
- Scuba diving community; and
- Shakespeare Festival, Harbour Days Festival and Sunday Series events

Each of the user groups requires design elements that address and meet their specific needs. These elements include passive and active recreational facilities including a multi-use trail along the waterfront, parking areas, children's activity centre, safety and security facilities for cruise ships, change room facilities for the Shakespeare Festival, public washrooms and shower facilities for scuba divers. However, the design elements must be located and constructed in consideration of the social, technical, legal and environmental issues and constraints associated with the area.

These issues and constraints include, but are not limited to:

- Property ownership and legal interests in land;
- Compatibility with adjacent lands;
- Structural integrity of the existing seawall;
- Site servicing including sewer and water, drainage and lighting;
- Safety and security issues; and
- Downtown Design and Urban Design Guidelines

The following sections of the report provide a detailed description of the issues and constraints to be considered in the design.

### **3.1 Property Ownership and Legal Interests in Land**

There are three issues related to property ownership and legal interests in land that must be considered in the design process

First, property ownership of the area must be established to ensure that all elements of the design are located on lands owned or controlled by the Town of Prescott. In this regard, a legal survey was completed by the Town to establish property ownership boundaries. The survey determined that all lands along the waterfront extending west from the marina (including the marina lands) to George Street are owned by the Town of Prescott.

Ownership of waterfront lands located west of George Street is privately held by the Canadian Coast Guard and a private landowner. The Town will need to negotiate access easements with these landowners in order to establish a continuous waterfront trail along the shoreline. In the short term, existing roads and sidewalks will be used to complete the trail.

The second issue relates to vehicular access to the Mariner's Club Condominium Corporation building. There is a 12.2 metre (40 feet) registered easement on the north portion of the Town property extending east from Centre Street to the east end of the condominium building. This easement provides vehicular access to the condominium parking facilities. Although the surveyed easement is 12.2 metres (40 feet) the registered Site Plan Agreement provides for a 25 foot unobstructed access driveway.

The final issue also relates to requirements of the Site Plan Agreement between the Town of Prescott and the Mariner's Club Condominium Corporation. This agreement places a 4.57 metre (15 foot) height restriction for any development located on Town property located south of the condominium building. The height restriction applies to buildings and structures.

### **3.2 Compatibility with Adjacent Land Uses**

The waterfront design should be compatible with, and complimentary to, adjacent land uses. This would include consistency in architectural styles, building materials, plantings and design themes. Also, walkway materials, similar to those currently in existence at the marina, should be utilized.

Furthermore, the '*Downtown Design and Urban Design Guidelines*' suggests a design theme in keeping with the nautical history of the Prescott waterfront. This historical theme should be reflected in building materials, architectural style, colours, historical plaques and information kiosks.

### **3.3 Structural Integrity of the Existing Seawall**

The existing seawall along the St. Lawrence River has been in place for many decades. A preliminary engineering assessment revealed no major constraints to prevent construction of the Waterfront trail/walkway. There is, however, some settling of the fill area occurring on the north side of the seawall. This settling is most likely caused by sheet flow drainage from the existing parking area and will be rectified during construction of the trail/walkway and parking area.

### **3.4 Site Servicing**

There are several site servicing issues that need to be addressed in order to successfully implement the waterfront design concept. These issues relate to stormwater drainage, provision of sanitary sewer and water facilities and the provision of electrical and other public utilities.

With respect to storm water drainage, the parking area may prove to be the most challenging as a result of impervious surfaces and a need to convey stormwater away from the parking area and trail/walkway. The existing storm sewer located on Centre Street will be utilized.

Sanitary sewer and water facilities are located on Water Street and can easily be extended into the area to service any design element that requires such services.

Although electrical facilities are currently in place, there may be a need to upgrade them depending on the design needs.

### **3.5 Safety and Security**

Safety and security issues include the safety and security of waterfront users including general security, cruise ship security and emergency vehicle access.

With respect to general security, the plan must consider the location and placement of lighting, landscaping and safety barriers to ensure the safety of all users.

In order to accept international cruise ships at the Prescott dock, the area must be designed in accordance with the International Ship and Port Security (ISPS) Code. This code has been adopted by Transport Canada. In order to determine the exact design details for international cruise ship security, the town will need to work with the federal Department of Transport to first complete a Port Security Assessment that will identify security needs and then develop a Port Security Plan to implement the required security measures. An allowance has been made in the design and cost estimates for the

required fencing, lighting, signage, surveillance cameras and security barriers. These elements will be integrated into the final design following completion of the Port Security Plan in late 2009.

Finally, the waterfront design must ensure that emergency vehicles, including fire, ambulance and police vehicles, have direct and open access to all parts of the waterfront

### **3.6 Downtown Design and Urban Design Guidelines**

In 2005, the town adopted the '*Downtown Design & Urban Design Guidelines*'. These guidelines recommended that the waterfront area be designed in accordance with a historical nautical theme to be reflected in the building materials, architectural style, colours, signage etc. The guidelines also recommended that construction materials be environmentally-sustainable and that environmentally-sensitive areas be avoided in the design.

### **4.0 PUBLIC INPUT**

An integral component of any design process is the role of the public and stakeholders. In order to obtain public input into the waterfront design process, a series of design workshops and open houses were held.

The first design workshop was held in the afternoon of November 4<sup>th</sup> 2008 for identified stakeholders and again in the evening of November 4<sup>th</sup> 2008 for the general public. A survey questionnaire was distributed and detailed minutes of the workshops were taken to ensure the design team was well aware of the needs and desires of the stakeholders and general public. Several written submissions were also received and considered in the design process.

A Public Open House was held on March 31<sup>st</sup> 2009 to present the design concept to the public and stakeholders. Minor changes were completed to the design prior to adoption by Town Council as a result of input received

### **5.0 WATERFRONT CONCEPT DESIGN**

It is recognized that the waterfront design project is a major recreational and cultural facility development that significantly contributes to the Town's economic development strategy. As such, the design will accommodate the needs of many user groups including local residents, local business, tourists arriving from land or water, festival attendees (Shakespeare Festival and Concert Series) and the scuba diving community.

Equally important is how the design incorporates connections with the downtown and the balance of the town's waterfront located east and west of the site. Good pedestrian connections to the north, east and west are critical to the success of the design concept.

The design concept builds on the work completed by the Town in 2005 and incorporates many elements and recommendations of the '*Downtown Design & Urban Design Guidelines*' including recommendations on signage, landscaping, architectural style, building materials, colour and development themes

The design provides for the overall 'greening' of the waterfront and promotes active and healthy lifestyles.

## **6.0 DESIGN ELEMENTS AND COST ESTIMATE**

Figure 1 *Waterfront Design Concept Overall Site Plan* identifies several of the key elements of the design and is based on the technical, legal, social and environmental constraints of the area as well as input received from the public and stakeholders.

These elements include:

1. Riverfront Trail/Walkway following the shoreline as closely as possible;
2. Landscaped park area including benches and lighting;
3. Parking areas for downtown business and visitors to the waterfront;
4. Pedestrian connection King Street and re-development of Market Square;
5. Children's play structure;
6. Dressing rooms and washrooms for the Shakespeare Festival;
7. Public washrooms and shower facilities for divers;
8. Information kiosks;
9. Breakwater boardwalk

Figures 2-6 provides additional detail with respect to selected key elements listed above. Construction cost estimates have been prepared and a detailed cost breakdown is included in Figure 7 *Prescott Waterfront Concept Design Cost Estimate* The total cost of the concept design is \$1,922,450+GST

## **7.0 PROJECT PHASING and FUNDING**

While it is possible to implement this plan in 4 or more phases, it is recommended that final design and construction take place in a single phase. A single construction phase will eliminate duplication of effort on behalf of designers and contractors resulting in overall cost reductions.

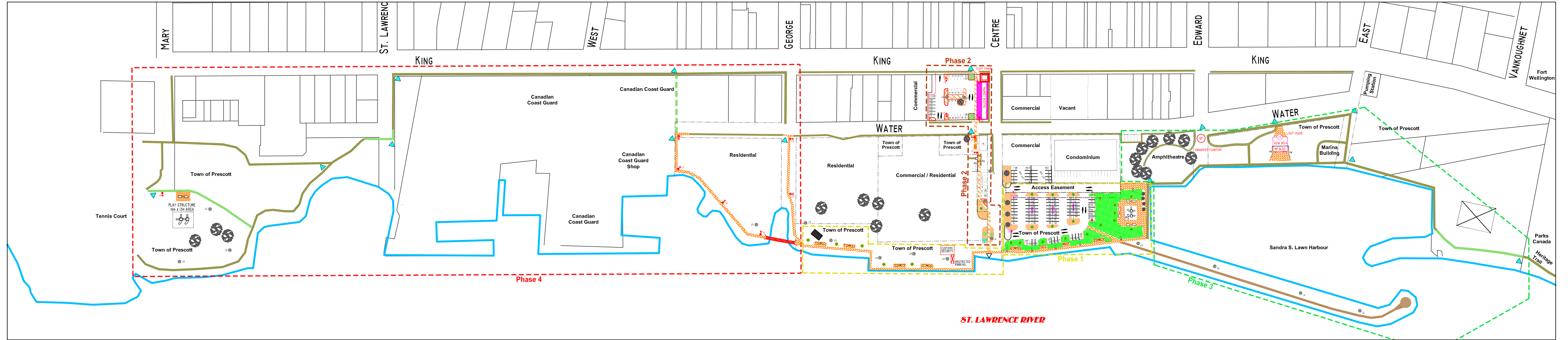


With respect to funding the cost of the concept design and construction, it is recommended that the Town continue to monitor and utilize federal and provincial grant opportunities. In addition, local service clubs should be contacted to assist in funding specific design elements

With respect to construction timing, it is estimated that final design and tender documents could be prepared within 45 days of adoption of the concept design by Town Council.



# PRESCOTT WATERFRONT CONCEPT DESIGN



### LEGEND:

- Interlock Concrete Pavers Pathway - Replacement & New Materials
- Interlock Concrete Pavers for Market Booth Area

- Existing Sidewalks - Width Varies 1.0 - 1.5m
- Asphalt Pathway - 1.8m Wide
- Wood Boardwalk on Marina Breakwater - 1.8m Wide

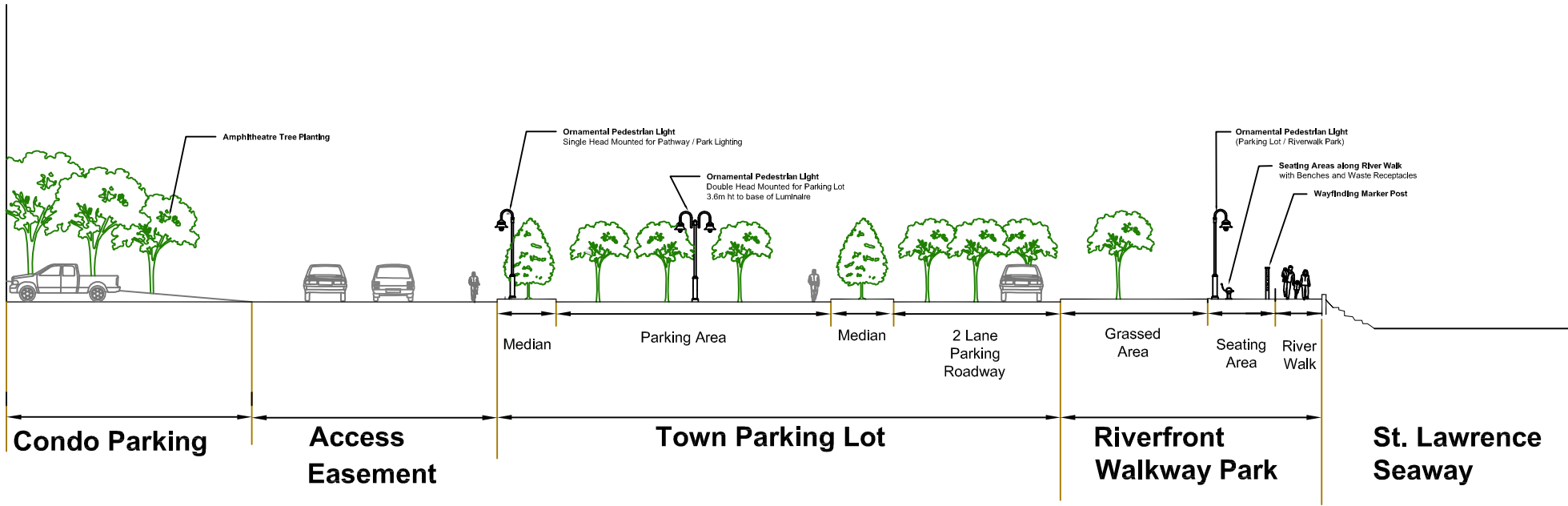
- Mulch Area
- Grassed Area
- Existing Tree Planting
- New Tree Planting

- WF Water Feature & Light Enhancement @ Edward & Water
- Wood/Metal Bench and Garbage Container
- LS Parking Lots, Pathway & Sidewalk Lighting Pole and Luminaire
- Existing Lighting Park Lights

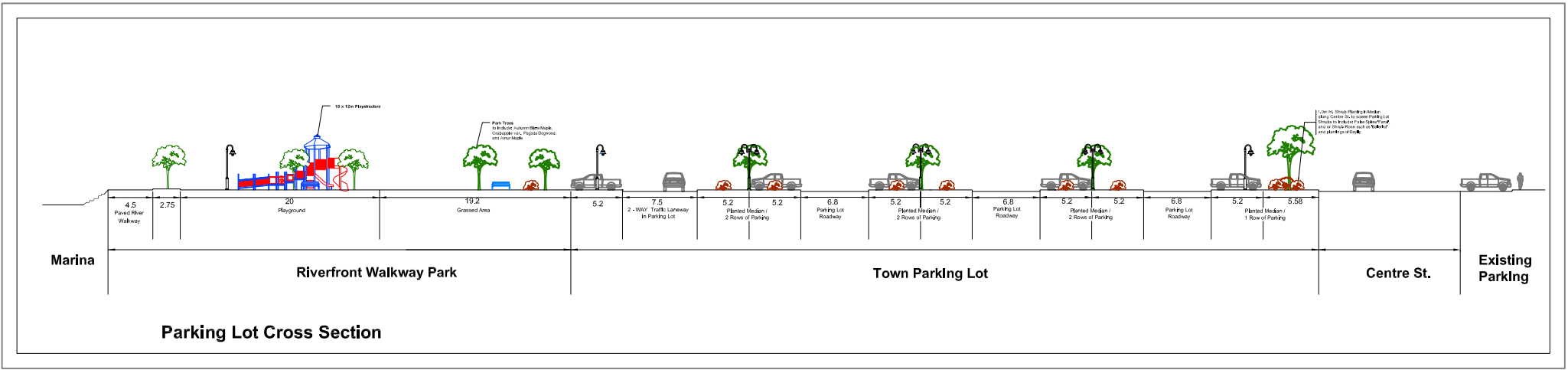
- RW Retaining Walls - Centre Street Main Sidewalk
- RW Retaining Walls - Multi-Purpose Building
- New Concrete Curb
- Arched or Level Wood Pedestrian Bridge - 1.8m Wide
- Trail/Pathway/Sidewalk Marker or Kiosk

- Customs/Security Tent/Building at Dock
- Play Structure



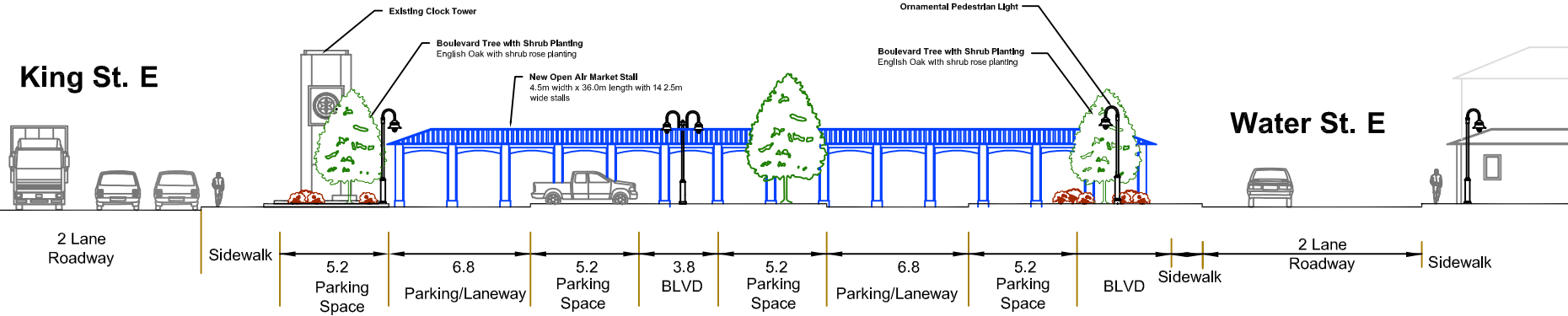


**Parking Lot Cross Section**



King St. E

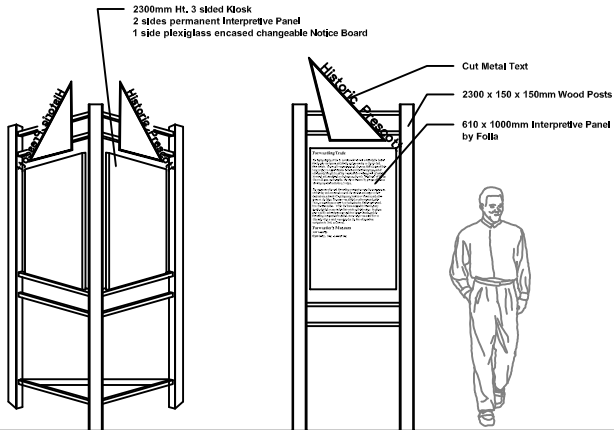
Water St. E



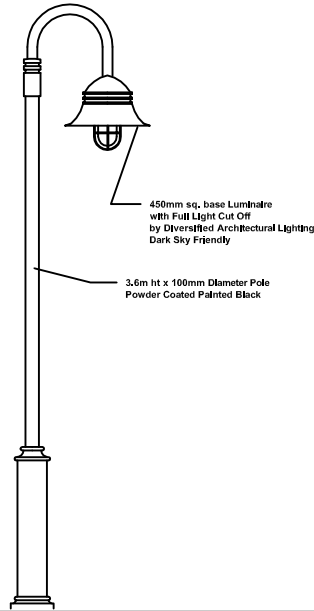
Market Square Parking Lot Cross Section

**Historic Themes for Interpretive Panels**

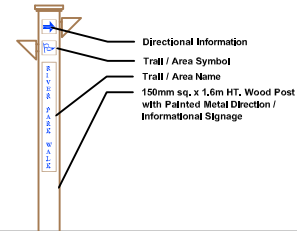
- ✦ Protecting Our Borders
- ✦ Challenging Navigational Traditions
- ✦ Transportation Hub of Upper Canada
- ✦ Beer, Whiskey and Prosperity: The Distilleries
- ✦ Ready for a New Century



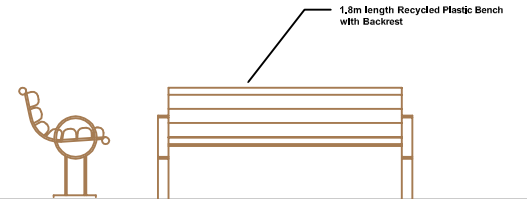
**3 Sided Interpretive Kiosk**



**Ornamental Pedestrian Light  
 (Parking Lot / Riverwalk Park)**



**Wayfinding  
 Marker Posts**



**Benches**

# Site Furnishings and Interpretive Features

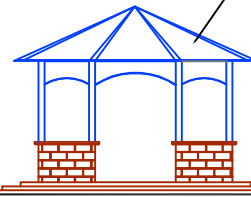
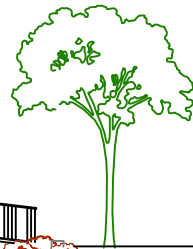
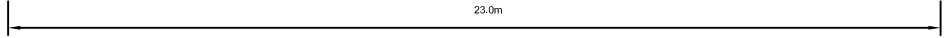
Ornamental Pedestrian Light  
4.15m ht Pole with 3.6m to base of  
Luminaire



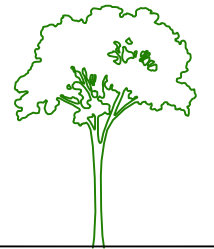
Foot Bridge  
2.5m wide Wooden Arched Bridge with  
Black Metal Railing



23.0m



George's Pt. Lookout Pavilion  
4.8m diameter Open Air Wood  
Frame Pavilion with Stone Base



## George St. Foot Bridge and Pavilion

**FIGURE 7: PRESCOTT WATERFRONT CONCEPT DESIGN COST ESTIMATE**

Item Description	Unit	Quantity	Unit Cost	Estimated Cost
<b>ZONE 1</b>				
Removals, Excavations & Saw cutting	LS	1	\$25,000	\$25,000
Interlock Paver Sidewalk, including Granular Base Material	m2	1600	\$90	\$144,000
Topsoil and Sod	m2	1800	\$25	\$45,000
Concrete Curbing & Related Reinstatement	m	450	\$75	\$33,750
Trees (50mm), including Planting Soil	each	22	\$600	\$13,200
Shrub Plantings	each	50	\$80	\$4,000
Ground Cover/Mulch	m2	300	\$10	\$3,000
New Parking Lot Pavement Structure	m2	3300	\$50	\$165,000
Benches & Garbage Containers	each	9	\$2,000	\$18,000
Line Painting for Parking Areas	LS	1	\$5,000	\$5,000
Area Lighting Poles & Luminaires - Single	each	10	\$6,000	\$60,000
Area Lighting Poles & Luminaires - Double	each	3	\$7,500	\$22,500
Power Supply, Wire, Conduit & Grounding	LS	1	\$75,000	\$75,000
Minor Repairs to Mooring Dock Concrete Face and Steps	LS	1	\$5,000	\$5,000
Storm Drainage System at south end of Parling Lot	LS	1	\$50,000	\$50,000
Repairs to River Retaining Wall and New Wood Topping	LS	1	\$40,000	\$40,000
New Divers Ramp & Safety Handrails	LS	1	\$5,000	\$5,000
Customs/Security Control - Seasonal Tent and Metal Security Fencing	LS	1	\$20,000	\$20,000
Bollard & Chain Protection (Water side of Sidewalk)	LS	1	\$5,000	\$5,000
Play Structure and Play Area for Children	LS	1	\$40,000	\$40,000
Historical Information Kiosk	each	2	\$2,500	\$5,000
Markers/Boards/Signs/Banners	LS	1	\$1,000	\$1,000
<b>ZONE 2</b>				
Removals, Excavations & Saw cutting	LS	1	\$15,000	\$15,000
Interlock Paver Sidewalk, including Granular Base Material	m2	250	\$90	\$22,500
Interlock Market Area Pavers and Granular Base Material	m2	300	\$90	\$27,000
Concrete Curbing & Related Reinstatement	m	330	\$65	\$21,450
Trees (50mm),including Planting Soil	each	5	\$600	\$3,000
Shrub Plantings	each	25	\$80	\$2,000
Ground Cover/Mulch	m2	160	\$5	\$800
New Parking Lot Pavement Structure (partial lot area)	m2	500	\$50	\$25,000
Benches & Garbage Containers	each	3	\$2,000	\$6,000
Centre Street Staircase 2.0m Wide - Concrete Steps - Interlock Paver Landings	LS	1	\$50,000	\$50,000
Retaining Walls for Staircase	LS	1	\$15,000	\$15,000
Line Painting for Market Parking Area	each	1	\$3,000	\$3,000
Area Lighting Poles & Luminaires - Single	each	3	\$6,000	\$18,000
Area Lighting Poles & Luminaires - Double	each	2	\$7,500	\$15,000
Power Supply, Wire, Conduit & Grounding	LS	1	\$30,000	\$30,000
Historical Information Kiosk	each	2	\$2,500	\$5,000
Markers/Boards/Signs/Banners	LS	8	\$1,000	\$8,000
Bollard & Chain Protection (Water side of Sidewalk)	LS	1	\$5,000	\$5,000
<b>ZONE 3</b>				
Removals, Excavations & Saw cutting	LS	1	\$5,000	\$5,000
Interlock Pavers at New Multi-Purpose Building	m2	200	\$90	\$18,000
Asphalt Pathway (1.8m Wide)	m2	220	\$60	\$13,200
Topsoil and Sod	m2	265	\$20	\$5,300
Shrub Plantings	each	30	\$80	\$2,400
Concrete Curbing & Related Reinstatement	m	50	\$65	\$3,250
Retaining Wall for Multi-Purpose Building	LS	1	\$40,000	\$40,000
Wood Deck at Light House and over Roof of Multi Purpose Building	LS	1	\$40,000	\$40,000
Edward/Water Street Enhanced Water Feature & Lighting	LS	1	\$10,000	\$10,000
600SF Multi-Purpose Structure on Slab, incl Services & Utilities	LS	1	\$200,000	\$200,000
Breakwater Wood Boardwalk (1.8m Wide X 500m Long)	m	500	\$150	\$75,000
Conduit, Wire & Grounding	LS	1	\$5,000	\$5,000
Historical Information Kiosk	each	2	\$2,500	\$5,000
Markers/Boards/Signs/Banners	LS	1	\$3,000	\$3,000
<b>ZONE 4</b>				
Removals, Excavations & Saw cutting	LS	1	\$5,000	\$5,000
Interlock Paver Sidewalk, including Granular Base Material	m2	500	\$90	\$45,000
Asphalt Pathway (1.8m Wide)	m2	175	\$60	\$10,500
Topsoil and Sod Reinstatement	m2	500	\$20	\$10,000
Trees (50mm), including Planting Mix	each	30	\$600	\$18,000
Shrub Plantings	each	25	\$80	\$2,000
Ground Cover/Mulch	m2	400	\$5	\$2,000
Benches & Garbage Containers	each	2	\$2,000	\$4,000
Wood & Metal River Lookout Pavillion	LS	1	\$30,000	\$30,000
Pedestrian Bridge - Wood Deck with Metal Railings	LS	1	\$60,000	\$60,000
Play Structure and Play Area for Children	LS	1	\$40,000	\$40,000
Additional Pathway & Area Lighting	each	7	\$3,800	\$26,600
Power Supply, Conduit, Wire & Grounding	LS	1	\$5,000	\$5,000
Historical Information Kiosk	each	2	\$2,500	\$5,000
Markers/Boards/Signs/Banners	LS	1	\$3,000	\$3,000
Estimated Construcion Cost:				<b>\$1,747,450.00</b>
Estimated Civil, Mechanical, Electrical and Structural Engineering Design Services:				<b>\$175,000.00</b>
Subtotal Project Cost:				<b>\$1,922,450.00</b>
Federal GST @ 5% :				<b>\$96,122.50</b>
<b>Total Project Costs:</b>				<b>\$2,018,572.50</b>

Thursday, April 30, 2009