## Welcome to the Public Information Centre

- All relevant information regarding this project (including the display material presented today) is available for public review on the City of Windsor website (www.citywindsor.ca)
- Please sign in to record your attendance
- Please review the display material and provide any comments on the sheet provided. You may submit your comments by mail / fax / e-mail or you may place them in the Comment Box located on the sign-in table
- All comments for this Drop-In Centre must be received by **December 6th, 2022** to be given consideration in the development of the Preferred Solution for this project. Contact information for the Project Team is available below, and also on the comment sheet provided
- The Project Team members present will be pleased to discuss any questions you may have

Scan with your phone's camera to access the Project Website:



## **Purpose**

This Public Information Centre (PIC) is intended to:

- Present the Problem / Opportunity Statement for the Project;
- Introduce the members of the Project Team;
- Present the scope of the Class Environmental Assessment (Class EA) process;
- Present the design alternatives and recommended solution; and,
- Obtain feedback from local residents and community groups.

## **Project Team**

This study has been initiated by the City of Windsor. Landmark Engineers Inc. has been retained by the City to serve as the Lead Consultant on the project.

Any comments, questions or suggestions relevant to this study should be directed to the following primary members of the Project Team:



Laura Ash, P.Eng.
City Of Windsor
1266 McDougall Avenue
Windsor, Ontario N8X 3M7
Phone: (519) 253-2300 ext.2735

Email: lash@citywindsor.ca

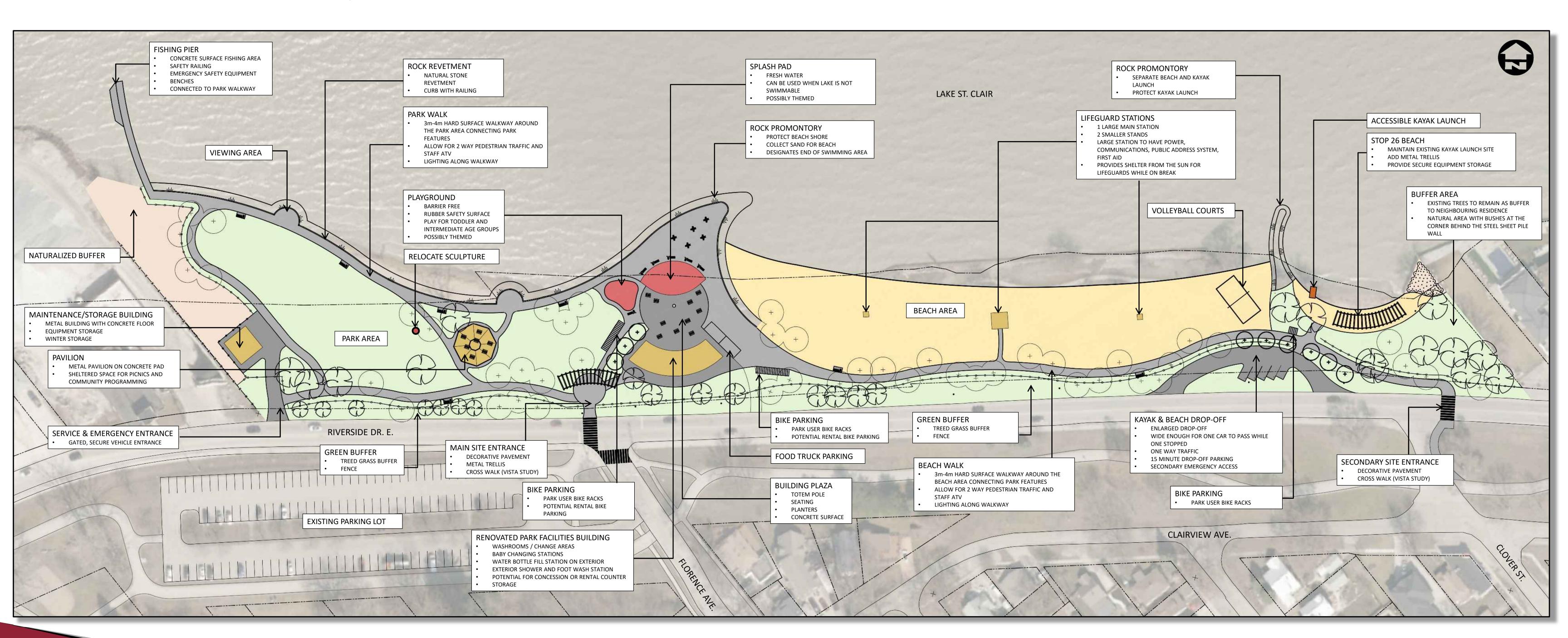


Liz Michaud, P.Eng.
Landmark Engineers Inc.
2280 Ambassador Drive
Windsor, Ontario N9C 4E4
Phone: (519) 972-8052

Email: Imichaud@landmarkengineers.ca



- > A Public Information Centre (PIC) for the Sandpoint Beach Park Master Plan was held on May 19th, 2022. A feedback survey was also made available online for 2 weeks following the PIC. More than 150 survey responses were received from the public.
- > Through the Sandpoint Beach Park Master Plan process, a Concept Plan was developed for the site, based on feedback from the public, the City and other stakeholders.
- The current Concept Plan (depicted below) includes potential shoreline improvements, including the relocation of the existing beach and the installation of new rock revetments along the west half of the site. The inclusion of potential shoreline improvements trigger the Environmental Assessment process which must be completed prior to finalization of the Park Master Plan, detailed design or construction.





## **Background**

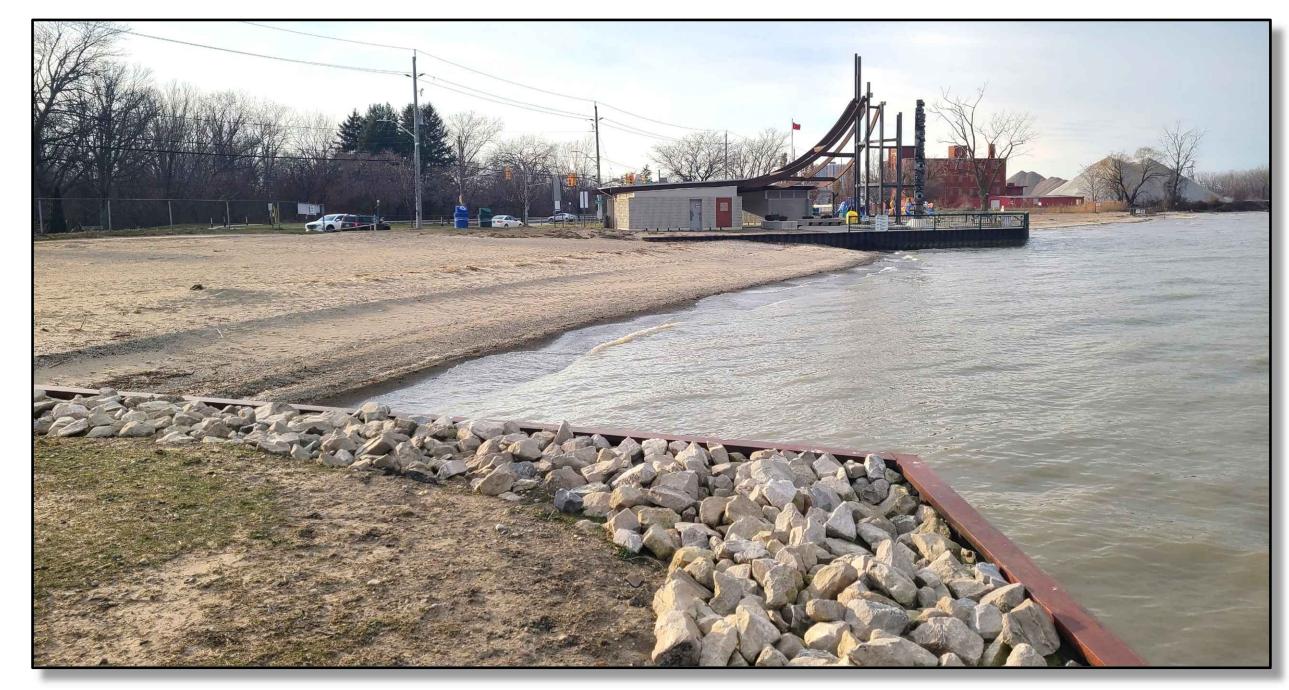
Sandpoint Beach is a Municipally-owned Park that provides recreational facilities and public beach access to Lake St. Clair. It is our understanding that over the past few decades there have been several drownings that have occurred at the park – primarily due to patrons straying outside the marked swimming areas.

The primary purpose of this redesign is to modify the existing shoreline and swimming facilities within the park in a manner that would improve public safety, while maintaining functional erosion and flood protection.

In December 2021, Landmark Engineers Inc. was retained by the City to develop a Park Master Plan, in preparation for a shoreline Environmental Assessment (EA) and eventual implementation of the project.

## **Project Objectives**

- Assess the condition of the existing shoreline;
- Improve overall public safety. (Since 1986 there have been six (6) documented drownings, the most recent was in May of 2021);
- Preserve the only public beach access located within the City of Windsor;
- Create a stable shoreline that provides erosion and flooding protection for the adjacent parkland and municipal right-of-way; and,
- Determine if Blue Flag status is achievable for the beach.



GANATCHIO PARK, LOOKING WEST



SANDPOINT BEACH

## Problem / Opportunity Statement

"This study intends to review and assess possible shoreline modifications at Sandpoint Beach Park in order to:

- Limit public assess to the neighbouring shoreline area where deep water and strong currents are known to exist;
- Maintain public access to Lake St. Clair while improving safety;
- Maintain/improve flood and erosion protection; and,
- Improve the overall function of the park.



- This project will follow the planning process set out in the Municipal Engineers Association's *Municipal Class Environmental Assessment (Class EA)*. A copy of this document, which sets out the details of the approved Planning and Design Process for municipal projects (such as this), is on-site and is available for review.
- Project Team has concluded that this project falls under Schedule 'B' of the *Municipal Class EA*. For 'Schedule B' projects, only one point of Public Consultation is required. Today's PIC will satisfy the Public Consultation requirement.



**Note:** In accordance with the terms of the Municipal Engineers Association's *Municipal Class EA*, a request may be made to the Ministry of the Environment, Conservation and Parks for an order requiring a higher level of study, or that conditions be imposed, only on the grounds that the requested order may prevent, mitigate or remedy adverse impacts on constitutionally protected Aboriginal and treaty rights. Requests premised on other grounds will not be considered.



The following displays are intended to present the Environmental Inventory of the Study Area that has been compiled by the Project Team. This inventory documents the existing conditions of the site in terms of the following categories:

### **Physical Environment**

- Site Location
- Physical Environment (e.g.: utilities, existing structures, etc.)
- Topography
- Bathymetry and Wave Climate

#### **Natural Environment**

- Aquatic Habitat
- Species at Risk

## **Social / Economic Environment**

- Land Ownership
- Adjacent Land Uses
- Heritage & Archaeological Resources



SANDPOINT BEACH (WEST OF BUILDING)



SANDPOINT BEACH (EAST OF BUILDING)



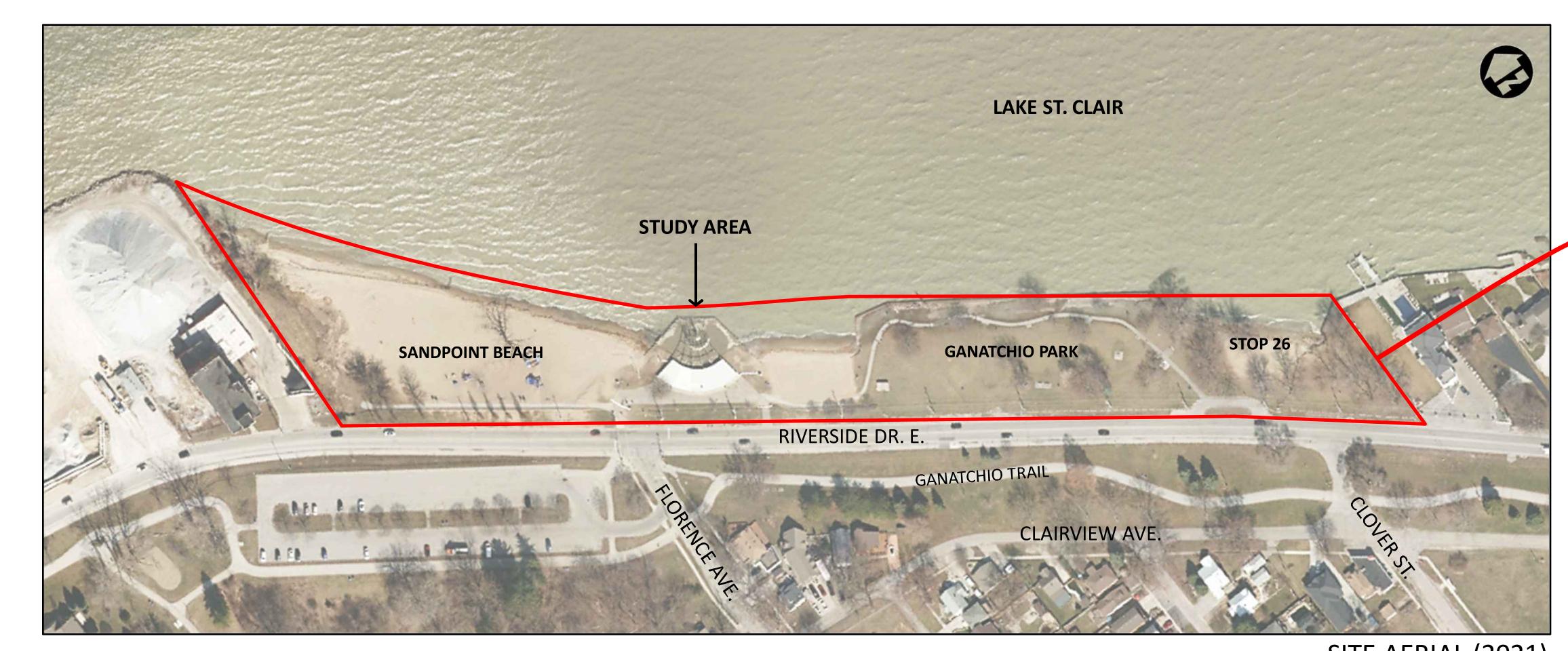
PAVILION AND FACILITIES BUILDING



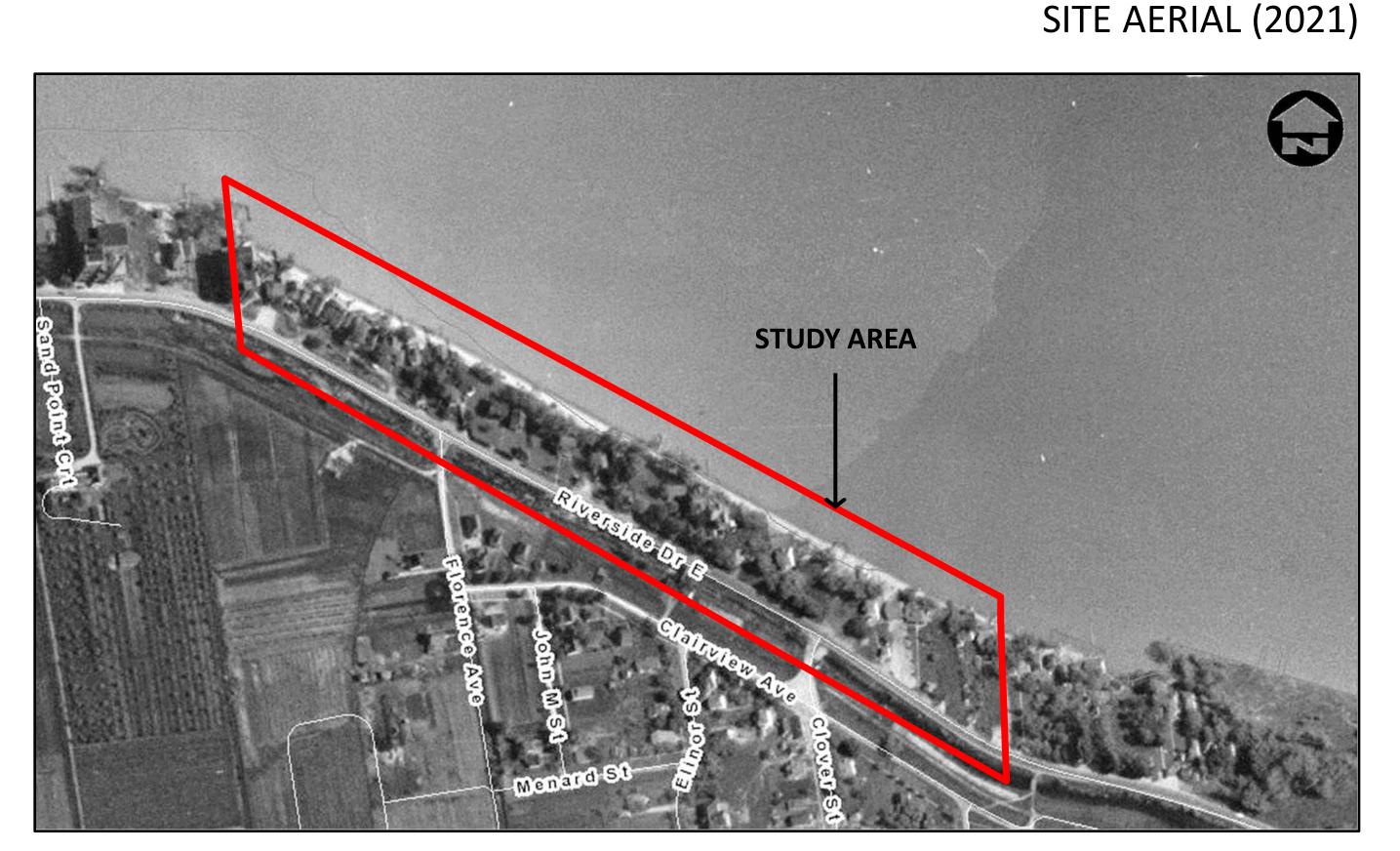
STOP 26 BEACH AND GANATCHIO PARK



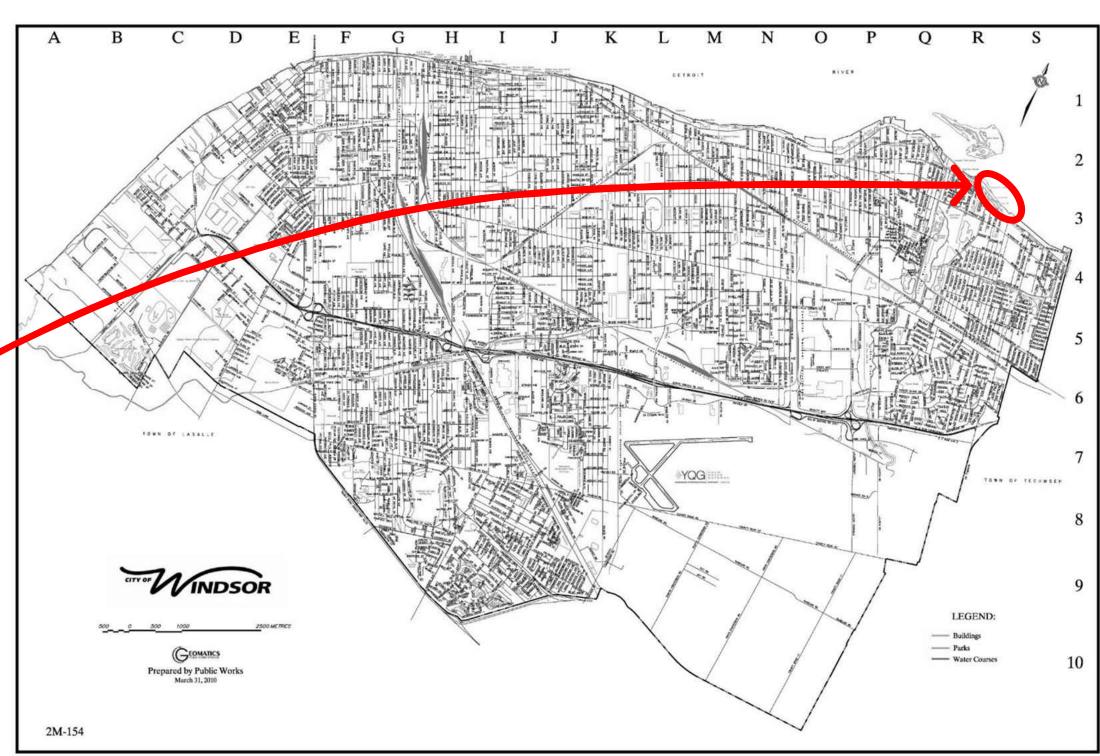
## **Site Location**



The Study Area is comprised of Sandpoint Beach, Ganatchio Park and Stop 26. Together the three areas are commonly known as **Sandpoint Beach Park**.



SITE AERIAL (1947)



CITY OF WINDSOR MAP

## **Existing Site Information**

- The study area consists of approx. 2.2 ha (5 acres) of public parkland
- The site includes approx. 265m of beach (90m on the west end is fenced off for safety no swimming)
- The site includes approx. 170m of steel sheet pile shoreline
- The existing facilities building was built in 1982
- Stop 26 is used as kayak launch site
- A kayak drop off area is located near the east end of the site across from Clover St
- Parking is located off Florence Ave
- A playground is located within the beach area east of the facilities building



## Physical Environment – Existing Shoreline

#### **Beach**

The public beach areas located within the study area appear to be stable and generally consists of naturally deposited, well-graded sand. Approximately half of the west beach is currently fenced off with a fence. Swimming areas are delineated with buoy lines that are deployed and maintained by City staff during the swimming season.



SANDPOINT BEACH

### **Steel Sheet Pile Shore Wall**

The existing steel sheet pile shorewall sections of the shoreline generally appear to be in fair condition. Based on historical photos and drawings, the walls appear to have been installed sometime in the 1980s. A gabion-sized rock apron has recently been added behind the wall east of the main beach to fill areas of substantial erosion in the backfill.

The rock apron generally appears to be continuous and well graded and runs along the entire length of the steel sheet pile wall. There is currently no guardrail in place along this segment of the sharewall.



STEEL SHEET PILE SHOREWALL (SSP)



STEEL SHEET PILE SHORE WALL WITH ROCK APRON

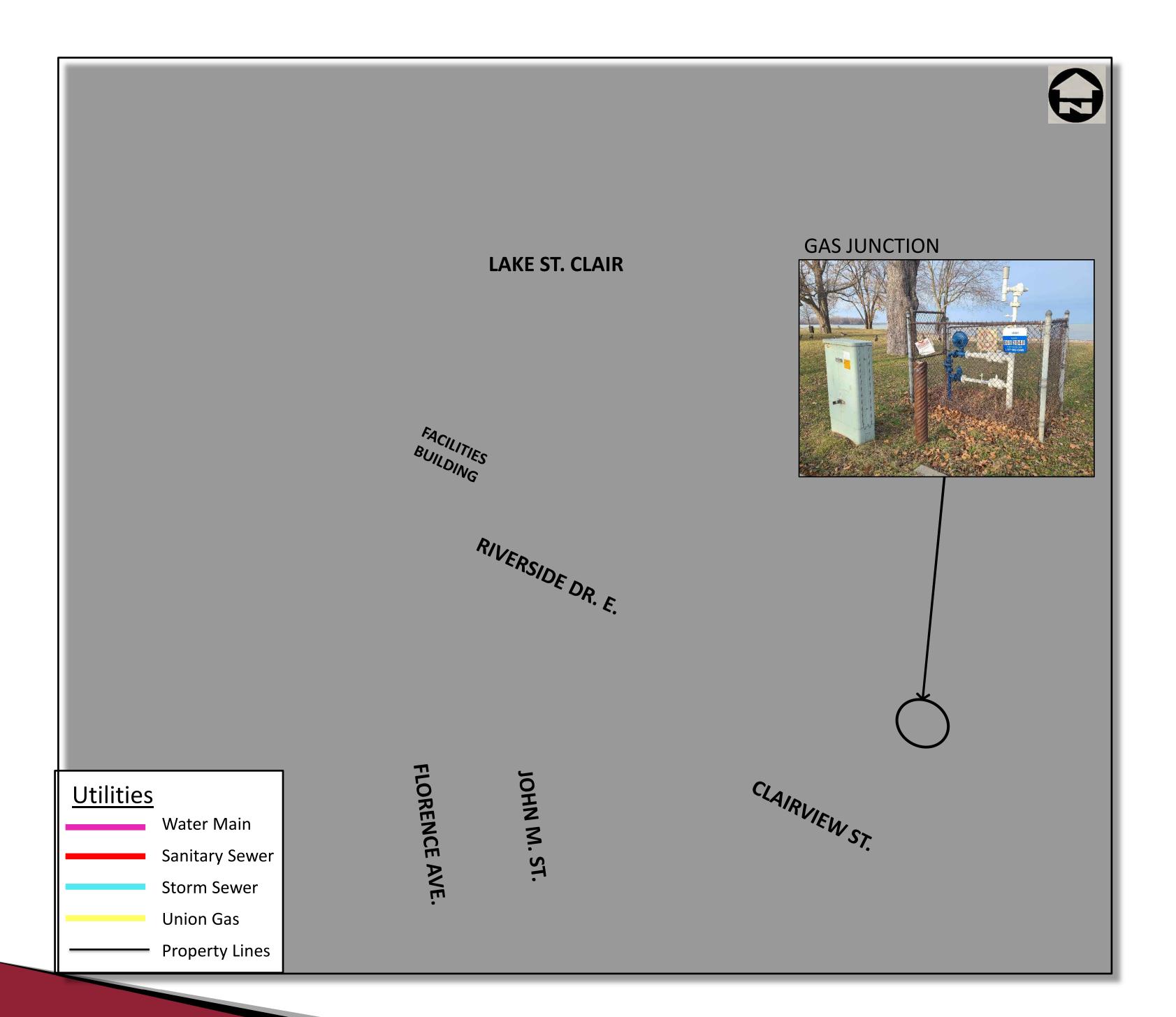




## Infrastructure & Adjacent Land Use

### **Utilities**

The locations of all known utilities within the vicinity of the site have been compiled and are shown below. The existing facilities building is currently serviced with sanitary sewer, storm sewer and power connections. There is an existing gas junction on the site, located east of the existing kayak drop-off, just north of Clover Street. No other utilities are known to exist within the park limits.



### **Adjacent Land Uses**

- The site is currently abutted by additional City of Windsor parkland to the south (i.e., the Ganatchio Trail Corridor), residential properties to the east, and by privately-owned commercial property to the west. This corridor also provides parking that is used by the patrons of Sandpoint Beach Park.
- Lake St. Clair and the mouth of the Detroit River are located immediately to the north of the site.
- It is understood that the water lots are controlled by the Windsor Port Authority.



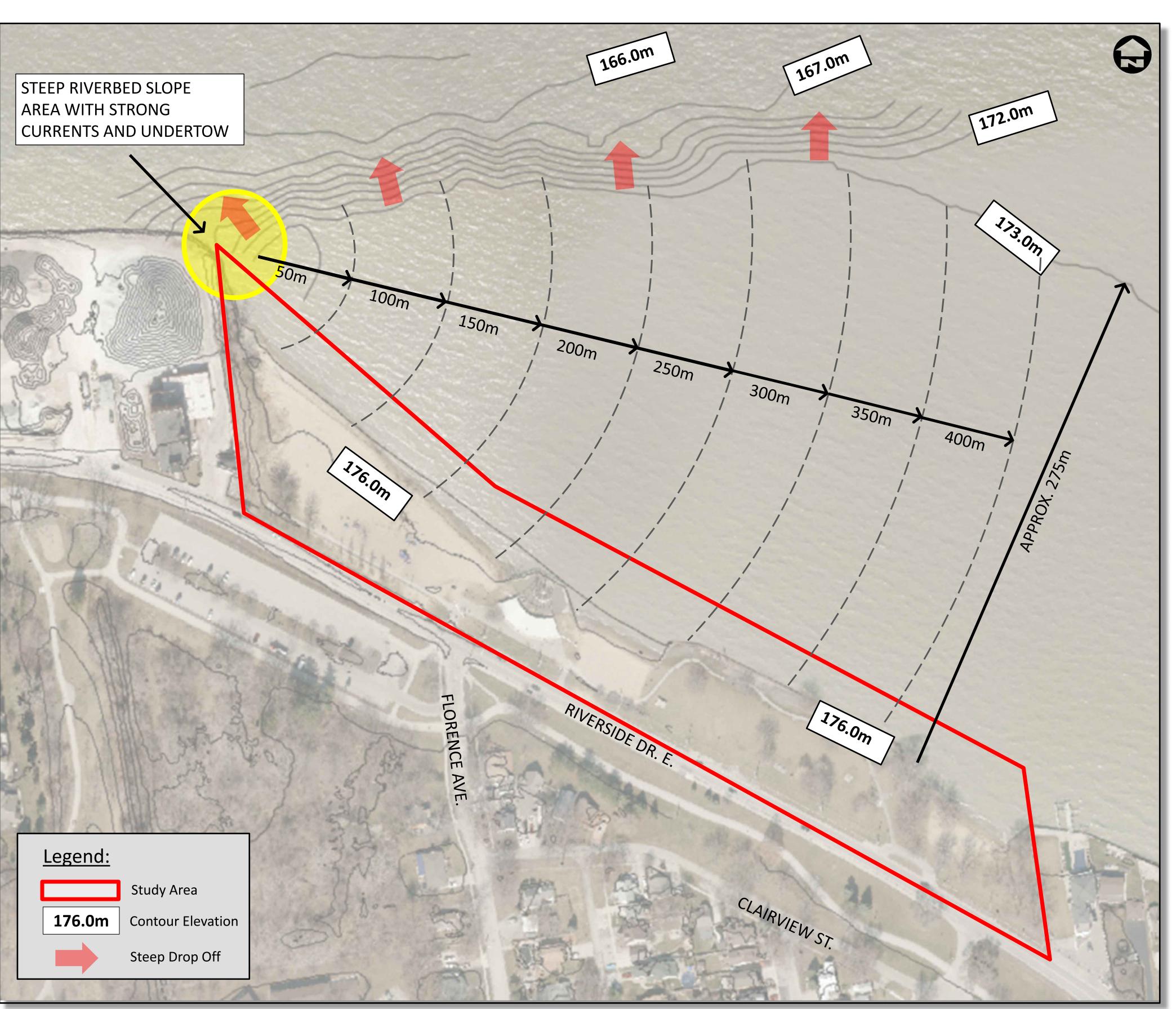


## **Bathymetry & Safe Swimming Considerations**

- The lake bottom fronting the study area slopes very gently from an elevation of 175.5m to 173.0m, along a line approx. 100-150m offshore of the existing beach.
- As one approaches the west end of the site, there is a steep drop-off in the riverbed, with strong currents and undertows.
- Although the west side of the existing beach area has been fenced-off along the shoreline and deemed unsafe for public swimming, park users have been known to bypass the fencing, which has led to several unfortunate drownings.
- The east side of the site is approx. 300-400 meters away from the dangerous area as well as approx. 275m south of the lake drop-off.



SANDPOINT BEACH: FENCED-OFF AREA LOOKING TOWARD AREA WITH STRONG CURRENTS





## **Natural Environment**

CLASS ENVIRONMENTAL ASSESSMENT

Insight Environmental was retained to undertake an assessment of the Natural Environment. They attended the site on June 7<sup>th</sup>, 2022

### Potential Species at Risk (SAR), Mitigation Measures and Impacts

### **Northern Madtom**

The Department of Fisheries and Oceans Canada (DFO) has defined critical habitat along the Detroit River for the Northern Madtom. The works may require a Fisheries Act Authorization and/or a Species at Risk Act Authorization. Potential mitigation measures may include:

- Restricted activity window for spring spawning fish (March 15<sup>th</sup> to July 15<sup>th</sup>)
- An erosion and sediment control plan should be developed to avoid the introduction of sediment into the Detroit River during any phase of the proposed development.
- Plan activities so that materials such as paint, primers, blasting abrasives, rust solvents, degreasers, grout, poured concrete or other chemicals do not leach into the ground or enter the watercourse.
- Ensure that machinery arrives on-site in a clean condition and is maintained free of fluid leaks and invasive species.
- More specific mitigation directed by DFO.

<u>Impacts</u>: Potential infill of the lake bottom along the west side of the site (revetment) and the rock promontories on either side of the main beach area.

## Bald Eagle

Bald Eagles maintain large territories so they would likely be seen foraging over the Detroit River. No permits should be required for this species. Mitigation measures may include:

- Timing windows for any tree and shrub removals can protect any breeding birds from using the property (No tree or shrub clearing should be allowed during the breeding bird window April  $1^{st}$  to August  $30^{th}$ )
- A nest search can be conducted by a qualified ornithologist in the area designated for clearing. Any active nests found cannot be disturbed by work activity until the young have fledged. If not active nest are observed, vegetation clearing must take place within three days of the nest search, otherwise the nest search must be repeated.

Impacts: N/A

### **Spiny Softshell**

Mitigation measures should be sufficient to avoid a permit from MECP for this species unless they have records of them laying eggs on the beach. The beach is heavily trafficked by humans and other anthropogenic disturbances making it not an ideal egg-laying site. Mitigation may include:

 Reptile exclusion fencing should be installed following the recommendations of the Species at Risk Branch Best Technical Note: Reptile and Amphibian Exclusion Fencing (2013) document. Fencing should be set to exclude Eastern Foxsnake as well.

<u>Impacts</u>: Temporary loss of potential nesting habitat (beach) while it is located to the eastern side of Sand Point Beach. Naturalized wildlife corridors will be maintained for resting or basking areas for turtles.

## **Little Brown Myotis**

It is unlikely that this species would be using the trees for maternity roost habitat as the trees are not part of a woodland, forest, or swamp. Limited foraging habitat is found within the vicinity of the project. It is unlikely that a permit would be required by the MECP for this species. Mitigation measures may include:

• Clearing of trees outside of the active period for bats (i.e. April 1<sup>st</sup> to September 30<sup>th</sup>)

<u>Impacts</u>: Potential loss of tree with suitable maternity roost features. It is unlikely that SAR bats would utilize trees within an area of mown lawn in such a heavily anthropogenically disturbed area.



## **Archaeological and Cultural Heritage**

## CLASS ENVIRONMENTAL ASSESSMENT

#### **Archaeological Potential**

A Stage 1 Archaeological Assessment of the site was completed by AMICK Consultants Inc. The study area was identified as a property that exhibits the potential to yield archaeological deposits of Cultural Heritage Value or Interest (CHVI). As a result, a Stage 2 Assessment of the site was initiated. All work was conducted in conformance with the Ontario Ministry of Citizenship and Multiculturalism standards and guidelines (MCM), and the *Ontario Heritage Act* (RSO 1990a)

The Stage 2 on-site Archaeological Assessment was completed on May 25, 2022. Over the course of this field assessment, no archaeological resources were found. The following recommendations were provided by AMICK:

- No further archaeological assessment of the study area is warranted;
- The Provincial interest in archaeological resources with respect to the proposed undertaking has been addressed; and,
- The proposed undertaking is clear of any archeological concern.

A copy of AMICK's full report is available for reference.

### **Heritage Sites**

The site is not considered a Heritage Site and contains no designated Heritage Buildings.

## First Nations Consultation and Feedback

During the Park Master Plan phase of the project, local First Nations were contacted to provide background information regarding the project and to request feedback on the proposed site improvements. The site contains a Totem Pole that was installed in 1984 in front of the existing facilities building. This pole remains in place today as a focal point of the site. It is intended that the Totem Pole will be maintained in its original location, not to be affected by any proposed shoreline improvements.

To date, Chippewas of the Thames First Nation is the only consulted group to provide a formal response after reviewing the project details. They have identified minimal concerns with the plan presented and have requested to be notified of any changes as the project progresses.





#### **Totem Pole Condition**

The existing connection at the base of the pole is in need of repairs. The concrete is starting to crumble and the wood is splintered and broken around the connection point. As well, the decorative paint on the pole is starting to wear and fade.



## **Shoreline Protection Alternatives**

CLASS ENVIRONMENTAL ASSESSMENT

The Environmental Assessment for this site was commenced to evaluate the potential shoreline improvements that were identified in the site Concept Plan. This slide discusses the alternative shoreline solutions that were considered, and provides a general assessment of the degrees to which they satisfy (or fail to satisfy) the criteria that were established in the Problem/Opportunity statement at the onset of the project.

Generally positive assessments are depicted in BLUE; negative assessments are shown in RED.

	PROJECT OBJECTIVES AND CONSIDERATIONS				
	Limit public access to the neighbouring shoreline area where deep water and strong currents are known to exist	Maintain public access to Lake St. Clair while improving safety	Maintain/improve flood and erosion protection	Improve overall function of the park	Other Considerations
Option A: Do Nothing No changes to the existing shoreline	Does nothing to limit public access to deep water area beyond the existing fence.	<ul> <li>Maintains public access to the Lake.</li> <li>Does not improve safety.</li> </ul>	Does not address flood and erosion issues at the site.	<ul> <li>Most of the desired site improvements could still be implemented.</li> <li>Update required to the Park Master Plan Concept.</li> </ul>	Does not address the demand for a safe fishing area near the deep water area.
Option B: Enhance Safety of the Existing Beach Keep the existing beach and add additional safety measures	<ul> <li>Potential to create a physical barrier (i.e., a rock promontory) east of the existing beach to further deter swimmers from accessing the deep water area</li> <li>Proximity of barrier to beach may facilitate it being bypassed by swimmers</li> </ul>	<ul> <li>Maintains public access to the Lake.</li> <li>Swimming area remains in fairly close proximity to the deep water area.</li> </ul>	Limited opportunities to address flood and erosion issues at the site.	<ul> <li>Most of the desired site improvements could still be implemented.</li> <li>Update required to the Park Master Plan Concept.</li> </ul>	Does not address the demand for a safe fishing area near the deep water area.
Option C: Move the Beach  Eastward  Based on the Concept Plan — move the beach east of the Facilities Building	<ul> <li>Limits access to the deep water and strong currents by moving the beach further east.</li> <li>Fence and railing along the shoreline to deter swimming at the west end of the site.</li> </ul>	Swimming area located	Shoreline improvements along the shoreline will address flood and erosion issues.  Proposed shoreline works will be installed to a higher elevation.  Will address existing scour issues along the east side of the site.	All desired functions identified in the Park Master Plan Concept could be implemented.	<ul> <li>Improved natural habitat connection to the water while keeping the site secure.</li> <li>Opportunity for more naturalized shoreline treatments to replace existing steel sheet piles.</li> <li>Highest initial cost option.</li> </ul>
Option D: No Public Beach at Sandpoint Beach Park Remove the beach and close the shoreline to restrict all access to the water	Effectively eliminates access to the deep water and strong currents.	<ul> <li>Does not maintain public access to the Lake.</li> <li>Removes the only public sand beach where swimming is permitted within the City.</li> </ul>	Potential to improve the shoreline to address flood and erosion protection.	<ul> <li>Many of the desired park improvements could still be implemented.</li> <li>Cannot incorporate beach features or kayak launch if all water access is removed.</li> </ul>	<ul> <li>Opportunity for more naturalized shoreline treatments to replace existing steel sheet piles.</li> <li>Elimination of Stop 26 Beach as a historic beach.</li> </ul>



## **Shoreline Protection Alternatives**

CLASS ENVIRONMENTAL ASSESSMENT

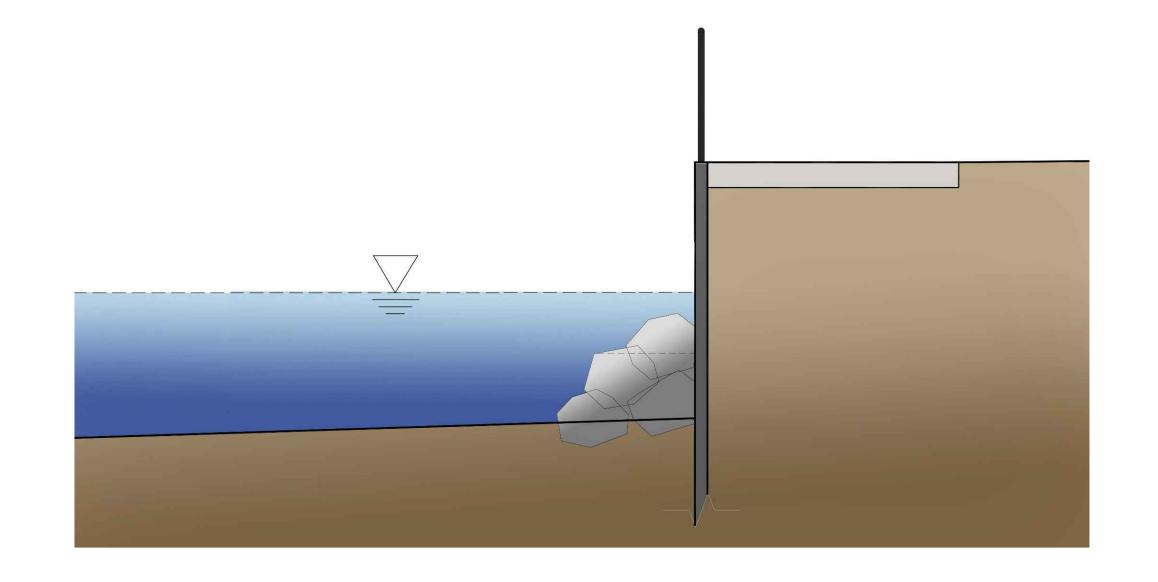
In order to protect the shoreline at Sandpoint Beach Park from erosion due to wave action, the following treatments have been considered:

#### Type 1: Shorewall

This treatment involves the installation of a vertical wall along the shoreline, typically consisting of steel sheet piles with a steel cap that can accommodate a safety railing attached to the top.

### Impacts, Opportunities and Constraints:

- Does not provide access to the water for swimming.
- Desirable in areas with deeper water or where direct access to the water should be discouraged.
- Height of the wall will typically be set at an elevation to provide erosion and flooding protection.
- Railings are typically installed along the top of the wall for safety.
- Limited lakebottom encroachment (depending on alignment).
- Vertical walls reflect wave energy and do not provide fish habitat.
- Rock is typically placed in front of the wall to prevent scouring of the lake bed and enhance fish habitat.
- High initial capital cost.
- Little to no maintenance required.



#### Type 2: Beach

This treatment consists of a groomed or natural sand (or cobble) slope that extends shoreward from the lake bottom at a shallow angle.

#### Impacts, Opportunities and Constraints:

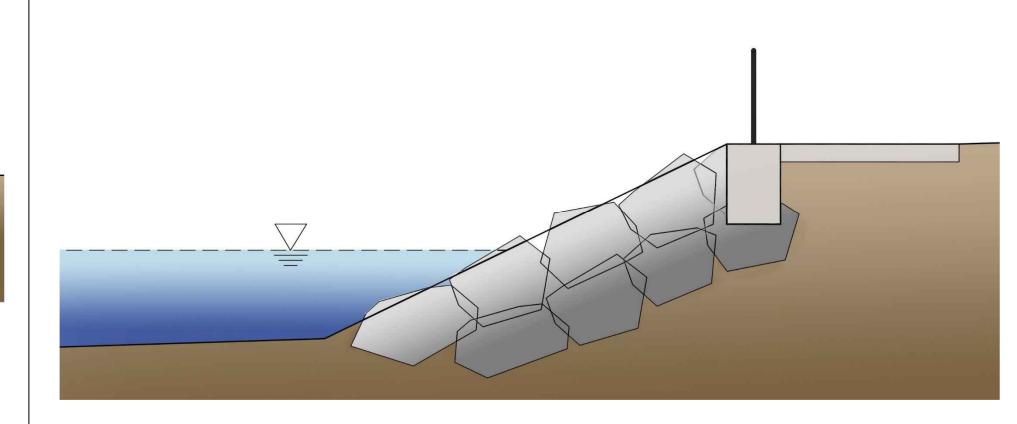
- Allows for direct access to the water.
- Desirable in areas that are away from deep water and/or strong currents.
- No lakebottom encroachment (depending on alignment)
- Provides minimal fish habitat.
- Low initial capital cost.
- Continued maintenance required to groom the beach and remove water-bourne debris

### Type 3: Rock Revetment / Promontory

In this option, large armour rock is used along the shoreline to protect against erosion and dissipate wave energy.

### Impacts, Opportunities and Constraints:

- Desirable in areas with a steeper lakebed slope or where direct access to the water should be discouraged.
- Railings can be installed behind the revetment along the top of a curb to further limit access to the water.
- Significant lakebottom encroachment (depending on alignment)
- Provides enhanced fish habitat.
- Rock promontories can be used to delineate/separate different functional areas along the shoreline.
- High initial capital cost.
- Little to no maintenance required.

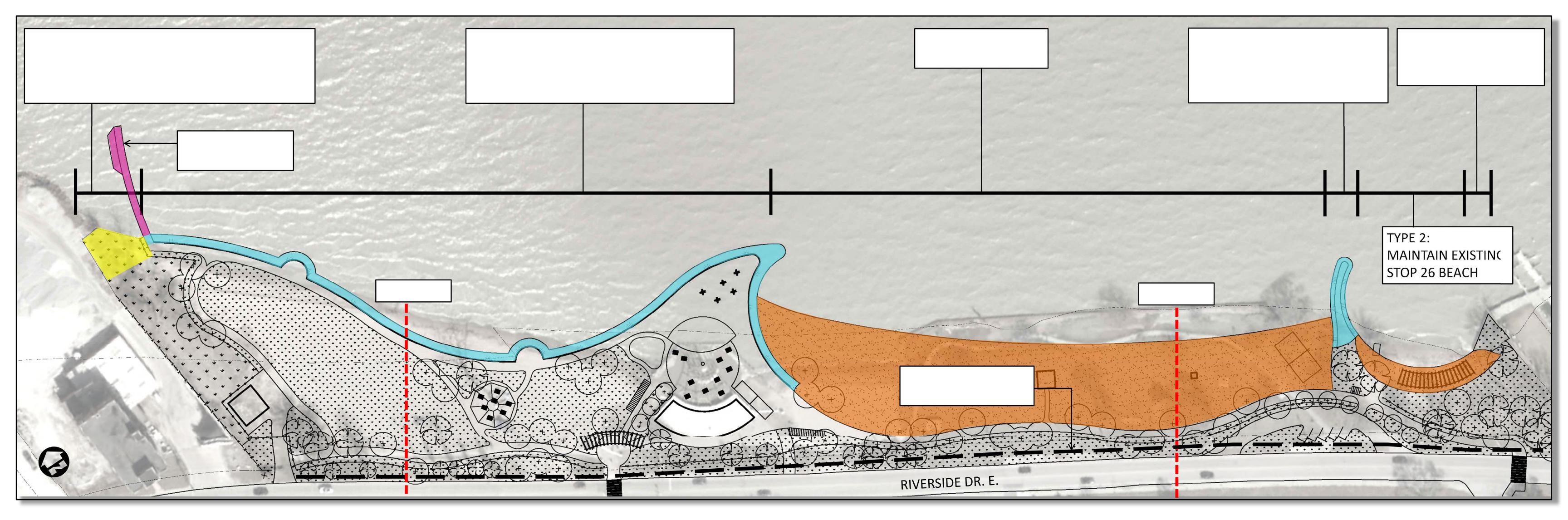




## Recommended Shoreline Improvements - Plan

CLASS ENVIRONMENTAL ASSESSMENT

In an effort to address the objectives outlined in the project's Problem/Opportunity Statement, the Project Team has developed a scope of shoreline improvements for Sandpoint Beach Park, as depicted below. The recommended plan incorporates all 3 shore protection alternatives that were under consideration, with each used in locations that maximize their individual advantages.



The primary considerations used in developing this plan included:

- Restricting direct access to the lake for the entire shoreline within 250 metres of the neighbouring deep-water area.
- Maintaining access to the neighbouring deep-water area for anglers via a pile-supported fishing pier.
- Establishing an accessible, undivided swimming beach with as much lake access as currently exists.
- Maintaining the historic Stop-26 Beach as a dedicated kayak launch area.
- Maintaining a fenced-off connection between the lake and the naturalized buffer area at the west limit of the site.



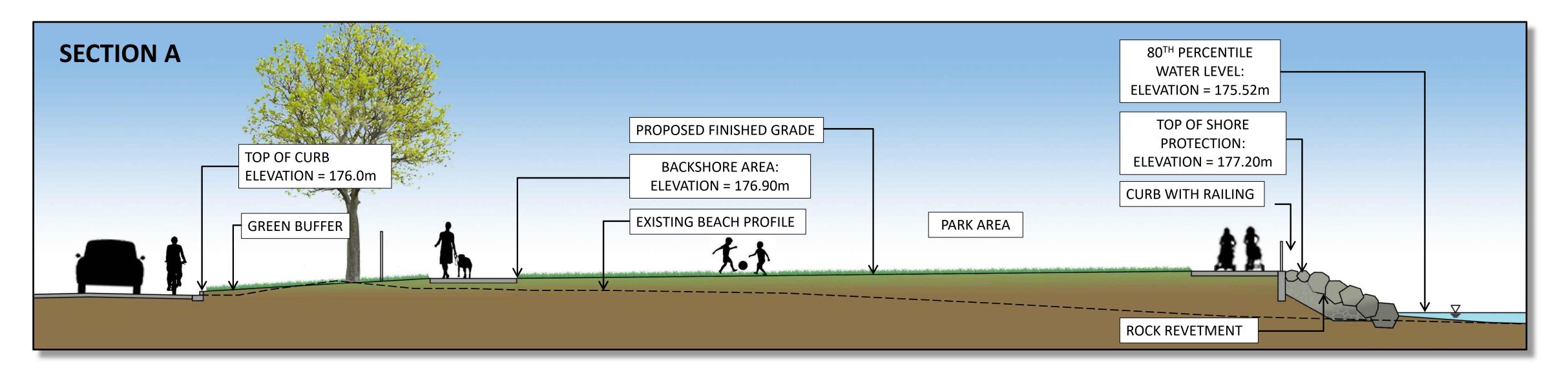
## Recommended Shoreline Improvements - Sections

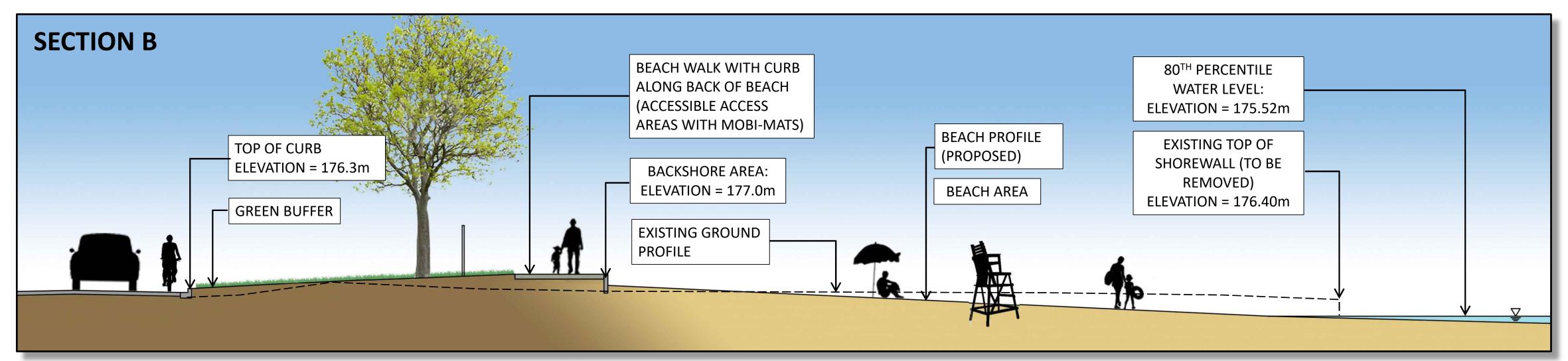
**CLASS ENVIRONMENTAL ASSESSMENT** 

The cross-sections of the site depicted below are intended to illustrate the general configuration of the proposed shoreline works with respect to the upland areas of the park.

### **Flooding and Erosion Protection Considerations:**

- The inland areas of East Riverside are currently protected from flooding via the barrier landform along the Ganatchio Trail (south of Riverside Drive, top elevation = 176.80m).
- A continuous barrier landform with a top elevation of 177.20m (minimum) will be established across the study area (along the shoreline and continuing along the back of the beach) to prevent flooding on Riverside Drive.
- It is anticipated that minimal stormwater management will be required on-site, with most wave splash and runoff outletting directly to the Lake.







- All comments received from today's meeting will be will be reviewed and used to help define the Preferred Solution for the proposed shoreline works. Comments will be accepted until <u>December 6, 2022</u>
- The project website will then be updated and a Notice of Completion will be published, alerting the public that the 30-day public review period for this Class EA has commenced
- Provided that all outstanding issues are resolved and that no Part II Orders are requested during the 30-day public review period, the Sandpoint Beach Park Master Plan will be finalized and the project may then proceed to approvals and construction

We encourage you to fill out a comment sheet so that your issues and concerns <u>related to the shoreline improvements</u> can be addressed early in the planning process and to have your comments become part of the public record.

# Thank you.

#### PRIVACY INFORMATION

All personal information included in a submission – such as name, address, telephone number and property location – is collected, maintained and disclosed by the Ministry of the Environment for the purpose of transparency and consultation. The information is collected under the authority of the Environmental Assessment Act or is collected and maintained for the purpose of creating a record that is available to the general public as described in section 37 of the *Freedom of Information and Protection of Privacy Act*.

Personal information you submit will become part of a public record that is available to the general public unless you request that your personal information remain confidential.



For more information, please contact the Project Office or the Ministry of the Environment's Freedom of Information and Privacy Coordinator at 416-327-1434.