

An aerial photograph of Sunset Park, showing a large body of water (likely a lake or reservoir) in the upper half, surrounded by green trees and some buildings. A semi-transparent white rectangular box is centered over the image, containing the title and date. The text is in a clean, black, sans-serif font.

Sunset Park Master Plan

January 16, 2019

Prepared By



City of Sturgeon Bay



Applied Ecological Services



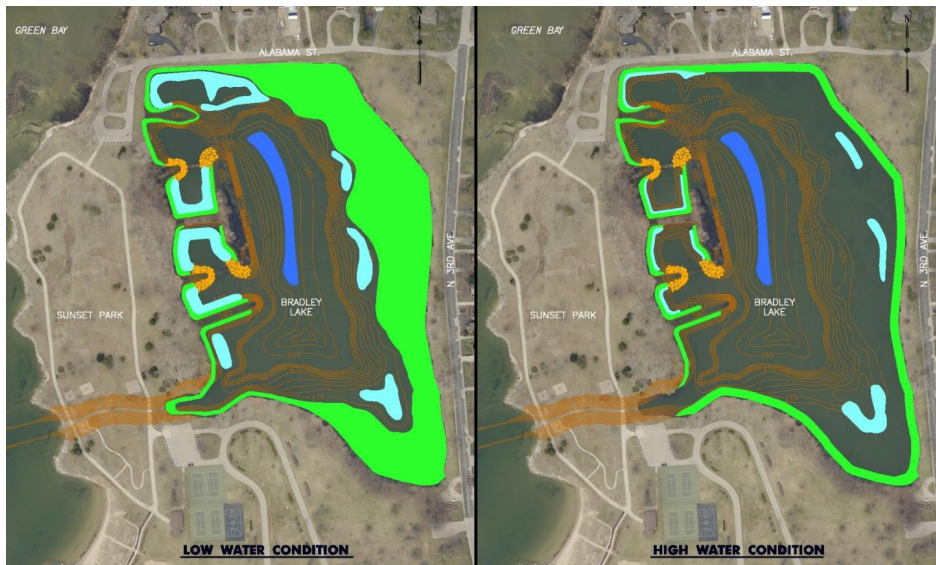
Foth Infrastructure & Environment



Project Background

The master plan for Sunset Park was first instigated in 2016 following plans to remove sediment accumulation and to create additional aquatic habitat for native species by dredging Bradley Lake. While this work is being completed, parts of Sunset Park will be disrupted. The master plan that follows looks at future improvements that capitalize on the dredging project while improving circulation, landscape aesthetic, wildlife habitat, stormwater treatment, and recreational amenities for the residents and visitors to Sturgeon Bay.

The two plans below to the left provide an example of designed topography and aquatic plant vegetation zones associated with the dredging project that will re-establish the fish hatchery and optimize shoreline restoration. The aerial below to the right provides existing conditions of stormwater detention wetlands that were a separate project and recently installed as the first natural area in the park.



Goals and Objectives

Goals for Bradley Lake Work

- Improve **water quality**
- Create fish habitat & **fishing** nodes
- Paddle **access** to and from Bradley Lake and Bay
- Discourage **invasive species** such as phragmites and carp
- Able to be **permitted** and **funded**
- Design **improvements** to attract multiple **funding sources** (water quality, habitat, parks and rec, boating access, etc.)

Purpose of the Master Plan

- Inform **future planning** and implementation
- Assess **opportunities** and **constraints**
- Identify **community** goals
- Incorporate recent completed **projects** at park
- Implement **phased** planning strategy
- Leverage **dredging** momentum to advance the above goals

Existing Conditions



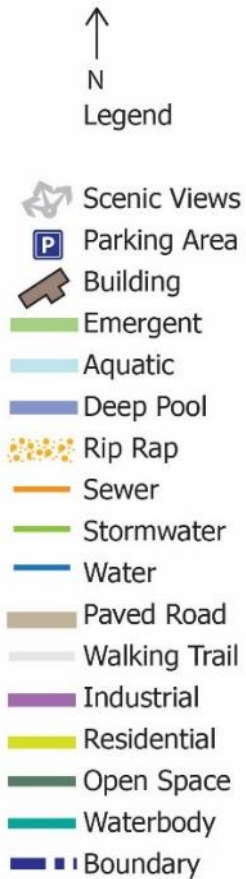
Bradley Lake

Sturgeon Bay

Opportunities & Constraints



Bradley Lake Improvements



Opportunities

- Great **views** of Sturgeon Bay and Bradley Lake
- Opportunities to enhance **connections to water**
- Flat terrain allows for a variety of improvements including **reorganizing circulation system**
- Space to grow and **improve walking** trail network
- Some nice old trees and existing **vegetation**
- Underutilized lawn can transform into **native plantings** to improve habitat and **lower maintenance** costs

Constraints

- Disconnected and **confusing circulation** system
- **Limited network** of trails
- Minimal room on **north side** of park for trail connection
- **Shipbuilding yard** is a hard edge to the south that is a source of noise and industrial views but also a **connection opportunity**
- **Playgrounds** are outdated and not **accessible** to those with disabilities
- Beach is shrinking with **higher water levels**
- Bradley Lake **channel connection** could divide park
- Plethora of dying **ash trees**

Public Participation

Public participation has been a vital element to providing a complete master plan vision for Sunset Park. In collaboration with the City of Sturgeon Bay, two public meetings were held at City Hall to present ideas and gain feedback for the park's future. The first meeting was an open charrette where attendees voted on ideal amenities and outlined past, current, and future elements the park can accommodate.

The second meeting was a public presentation to the City Council, Parks & Recreation Board, and community members of a draft master plan with several phased options for attendees to review. This meeting provided attendees with the first interpretation of Sunset Park's overall vision that was then finalized based on public review.

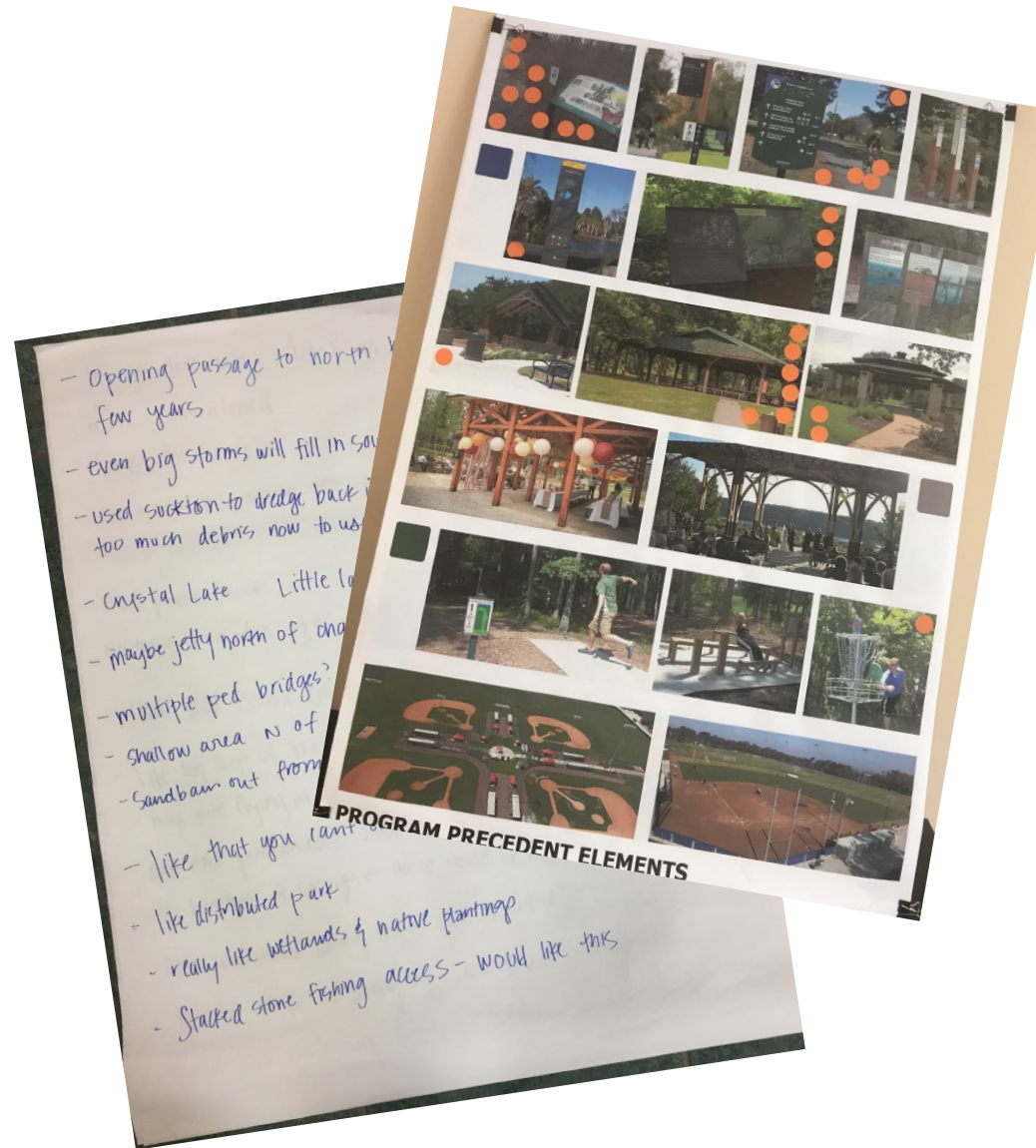
The following slides provide outlined notes of public comments from both meetings.

Master Plan Public Charrette

October 25, 2017

Public and Board Member Comments

- Preference to expand **natural areas** with a balance between a nature conservancy and traditional recreational park.
- Provide a **trail** that surrounds the entire park with new seating areas.
- Update the existing pavilion with **upgraded amenities**
- Provide a **new enclosed pavilion** in the north area of the park for year-round events. Enhance existing Bay overlooks for sunset viewing and water access.
- Highlight the **beach** drawing locals along with visitors from northern and southern Door County.

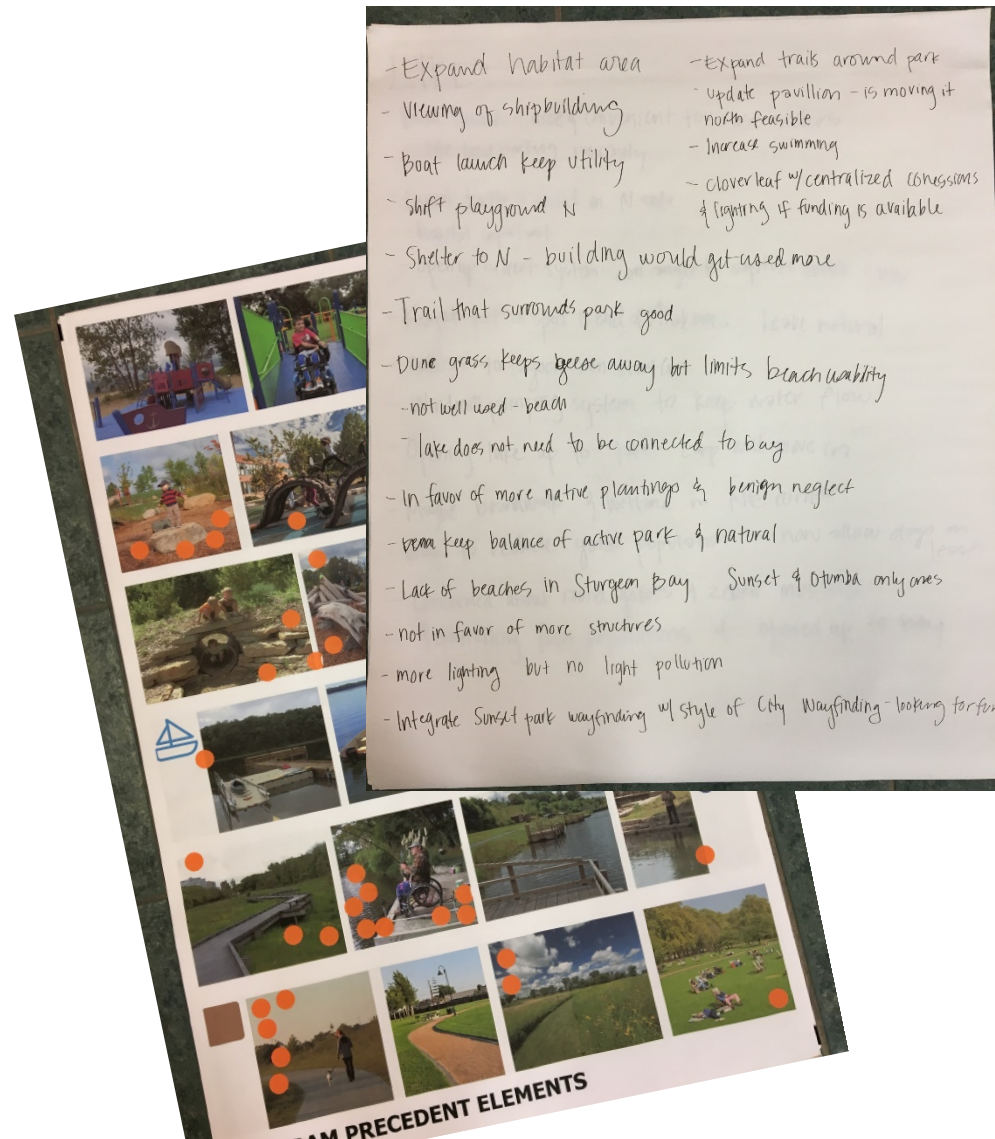


Master Plan Public Charrette

October 25, 2017

Public and Board Member Comments

- Reconfigure the **ballfields into a cloverleaf layout** with new lighting and concessions.
- **Upgrade playground** equipment to ADA standards and incorporating nature play zones.
- Provide educational **signage** or incorporate into the City wayfinding plan.
- Accentuate Sturgeon Bay ship building history with an **overlook** from the park into neighboring ship yard.
- Debatable measure whether opening the lake to the bay may allow invasive species to enter the lake and impact overall **water quality**.



Master Plan Draft Public Meeting

March 28, 2018

Public and Board Member Comments

- Preference toward keeping the north park **passive recreation** and the south area **recreation** based.
- Limited agreement for expense of adding second event **pavilion**. Favor in **renovating** existing pavilion.
- Updated central **playground** and addition of **nature play** amenities is favored.
- Create a higher **overlook** to accommodate ship yard viewing for all ages.
- The **boardwalk** features and **tea house** create great passive experiences for park users.



Master Plan Overview

The Master Plan is divided into two phases and an alternate option. The first phase is associated with improvements aligned with dredging Bradley Lake and amenity enhancements heavily in favor of implementation by the public. This first phase focuses on the north area of the park ultimately creating a passive recreation experience with added naturalized area to improve wildlife habitat and organic stormwater management.

The second phase provides a complete vision for the park post construction of phase one. Based on public interest in improving circulation and active recreation in the southern region of the park, phase two provides a central drive with expanded boat and vehicular parking. The alternate park plan has been provided as an overall park vision with an intimate Bradley Lake sand beach and paddle craft launch without the channel open to Sturgeon Bay.

Each point of enhancement has an associated opinion of probable cost based on a magnitude of planning with a contingency reflecting implementation experience and current 2019 economic parameters. A cost range is provided for particular elements from low to high based on customizable elements.

Master Plan - Phase 1

STURGEON BAY

FLORIDA ST.

ALABAMA ST.

N 3RD AVE.

NORTH



Legend



Existing Parking

Existing Roadway

Concrete Path

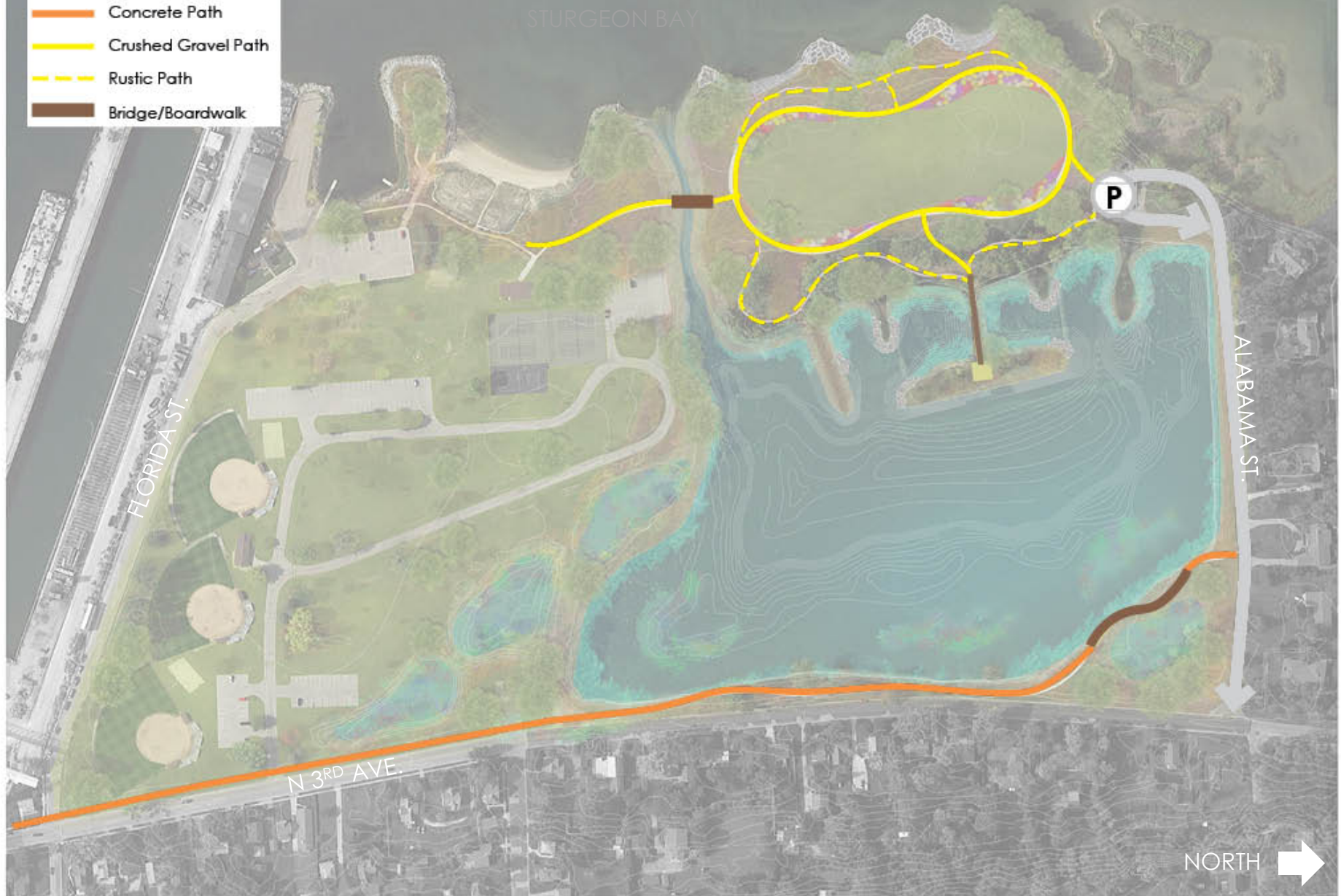
Crushed Gravel Path

Rustic Path

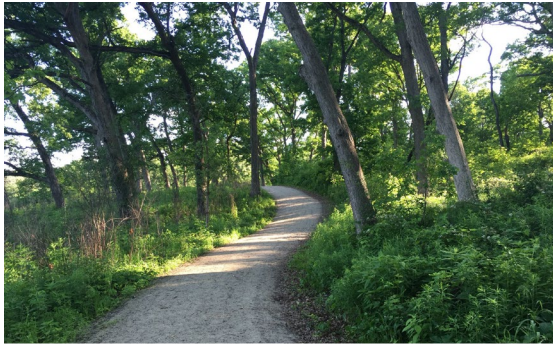
Bridge/Boardwalk

Trail Improvements

STURGEON BAY



Trail Improvements



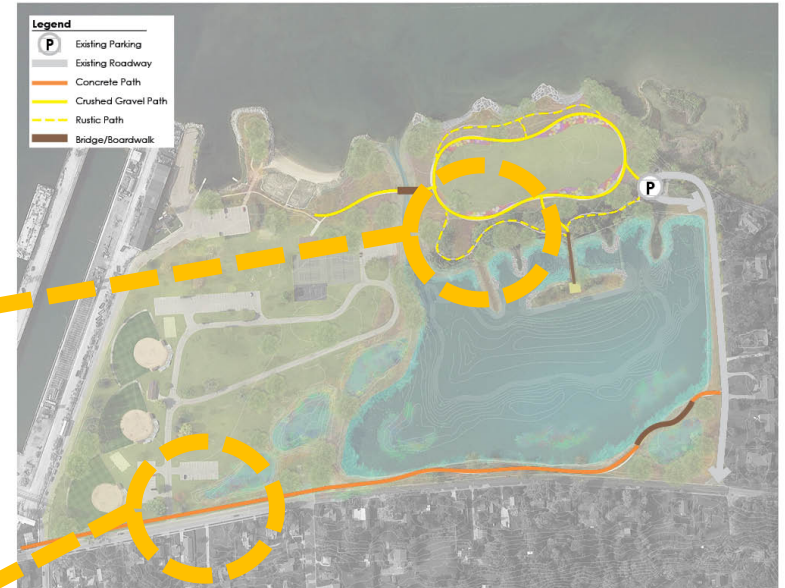
Crushed Gravel Trails



Rustic Trails



Concrete Path Extension Along 3rd Ave



Trail Improvements

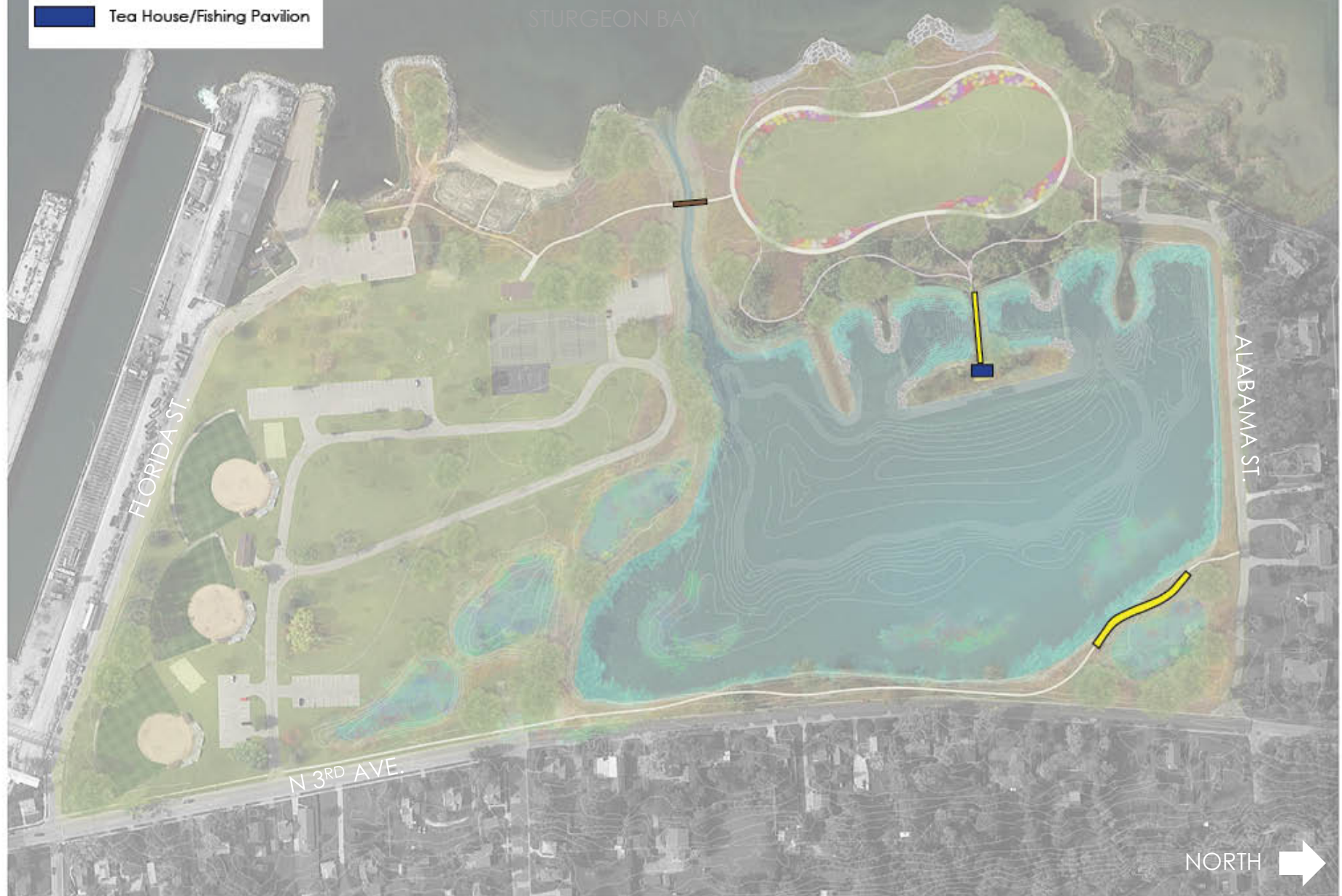
| | |
|--------------------------------|---------------------|
| Remove existing trails | |
| Install concrete walking paths | |
| Install gravel walking paths | |
| Install rustic trails | |
| | \$124,000.00 |

Legend

-  Pedestrian Bridge
-  Boardwalk
-  Tea House/Fishing Pavilion

Structures

STURGEON BAY



Pedestrian Channel Bridge



| Structures | | | |
|-------------------|--------------|----|---------------|
| Pedestrian bridge | \$146,000.00 | to | \$ 219,000.00 |

Tea House/Fishing Pavilion



Trail Structures

| | | | |
|--------------------|-------------|----|--------------|
| Tea house pavilion | \$52,000.00 | to | \$ 78,000.00 |
|--------------------|-------------|----|--------------|



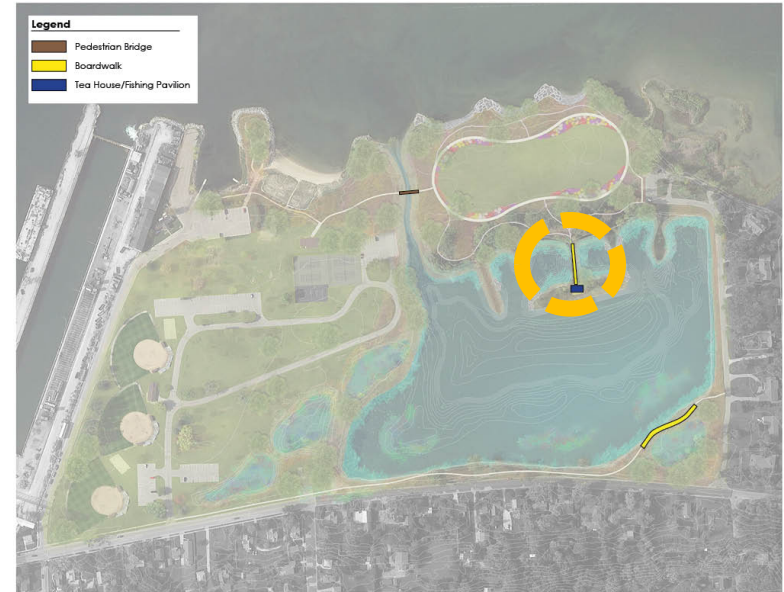
Tea House/Fishing Pavilion Boardwalk



Provides Lake Observation Point and Fishing Access



Boardwalk Connects the Park to the Tea House Island



Structures

| | |
|-----------------------|-----------------------------|
| Boardwalk – Tea House | \$41,000.00 to \$ 62,000.00 |
|-----------------------|-----------------------------|

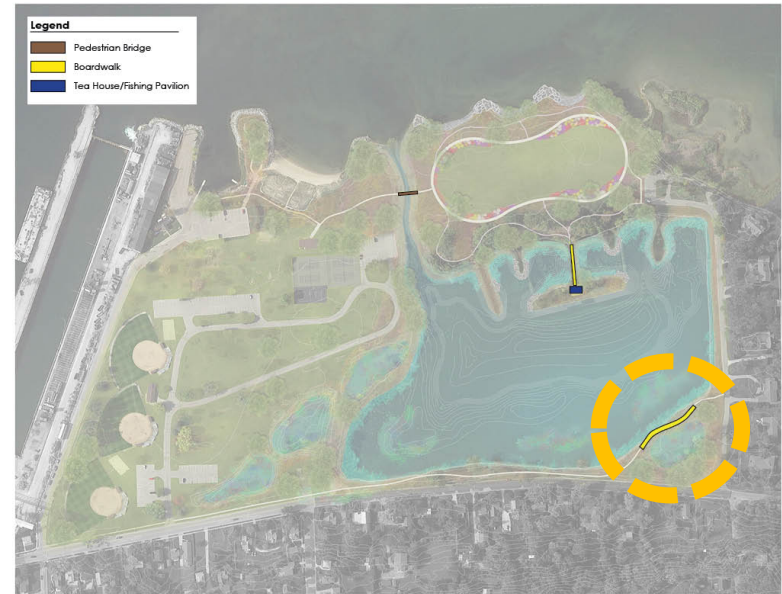


Opportunity to Provide ADA Accessibility

Northeast Wetland Boardwalk



Section View of Proposed Wetland Boardwalk



Structures

| | | | |
|-------------------------------|--------------|----|---------------|
| Boardwalk - Northeast Wetland | \$128,000.00 | to | \$ 192,000.00 |
|-------------------------------|--------------|----|---------------|



Provides Lake Bradley Observation



Optimal Birding Platform



Connected to Concrete Path

Landscape

STURGEON BAY

Legend

- Mown Lawn
- Ornamental Plantings
- Upland Native Meadow
- Emergent Vegetation

FLORIDA ST.

ALABAMA ST.

N 3RD AVE.

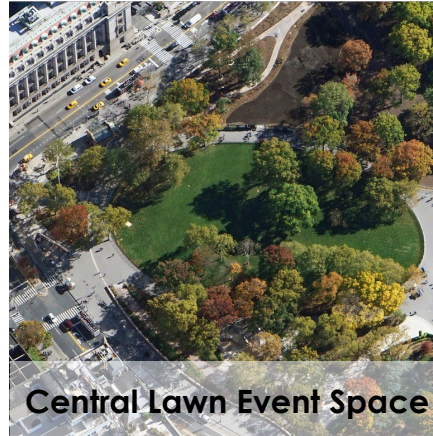
NORTH



Landscape Enhancements



Ornamental Landscape Beds



Central Lawn Event Space



Naturalized Shoreline Along Lake and Channel



Lawn Converted to Low Prairie



Emergent Vegetation

Landscape

| | |
|-------------------------------------------|---------------------|
| Trees of varying sizes throughout phase 1 | |
| Shrubs and perennials in planting beds | |
| Emergent plants-lakeshore and channel | |
| Native seeding in naturalized areas | |
| Seeded turfgrass in active lawn areas | |
| | \$396,000.00 |

Northeast Wetland



Low Drainage Point Converted to Wetland



Northeast Wetland

| | |
|---------------------------------|--------------------|
| Earthwork for northeast wetland | |
| Native seed and erosion control | |
| Emergent plants | |
| | \$42,000.00 |



Expansion of Existing Turtle Habitat



Provides Internal Park Buffer and Enhanced Property Value

Legend



Fishing Access



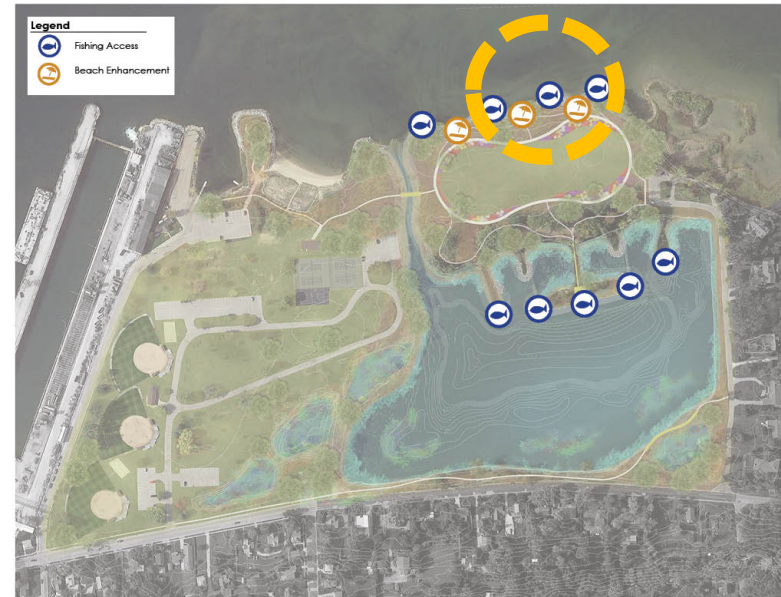
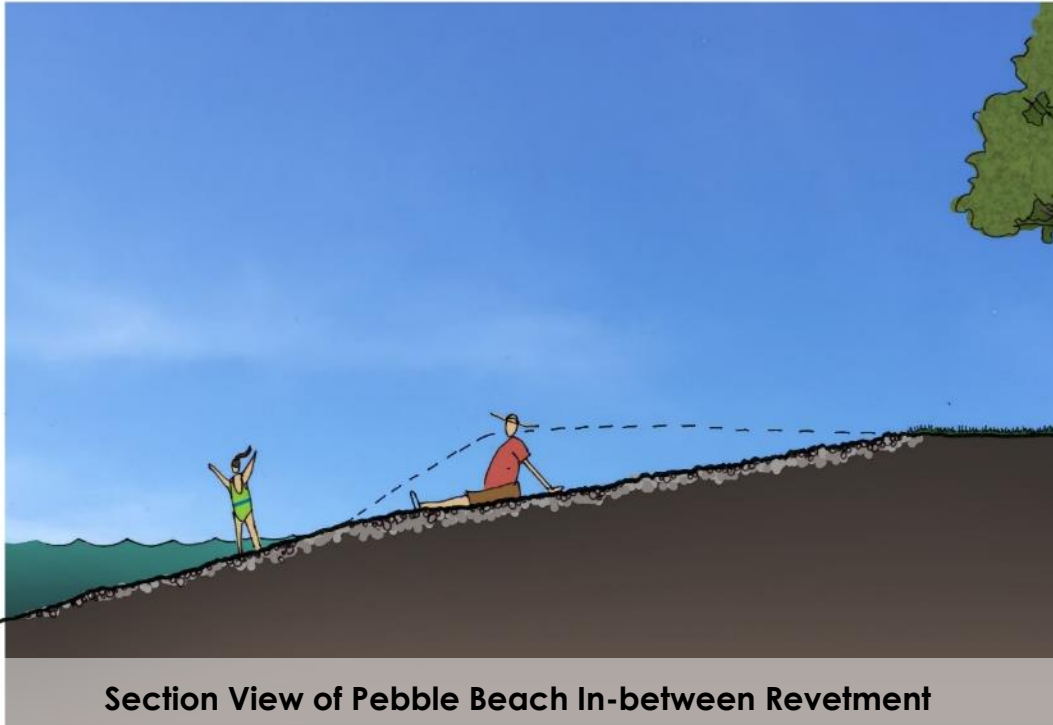
Beach Enhancement

Activity

STURGEON BAY



Pebble Beach Cove



Activity – Shoreline Revetment

Three pebble beach coves

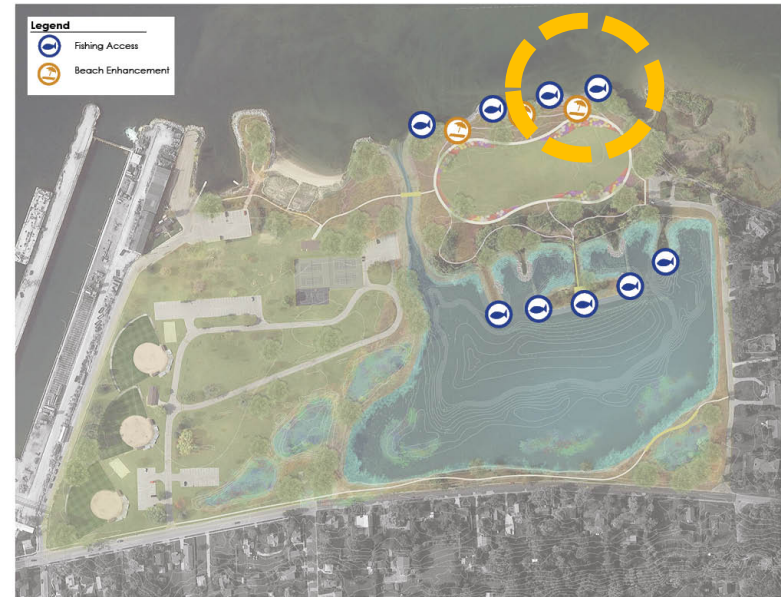
\$133,000.00



Stepped Stone Revetment



Section View of Shoreline Revetment and Fishing Access



Activity – Shoreline Revetment

| | |
|-------------------------------|--------------|
| Boulder/rip-rap revetment | \$122,000.00 |
| Four stepped stone revetments | \$135,000.00 |



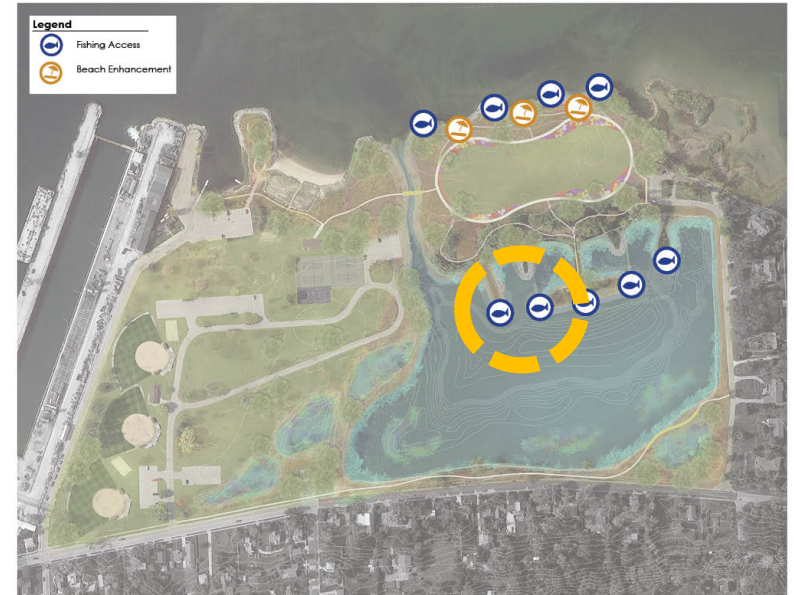
Boulder Revetment Adjoining Step Access



Fishing Access



Four Fishing Access Points Along Bradley Lake



Activity

Four stepped stone fishing access points

\$67,000.00



Stone Steps Accommodate Fluctuating Lake Depth



Encourages Direct Water Access Routes

Master Plan - Phase 2

STURGEON BAY



Circulation

STURGEON BAY

Legend



Existing Parking



Proposed Parking



Proposed Roadway



Concrete Path



Crushed Gravel Path



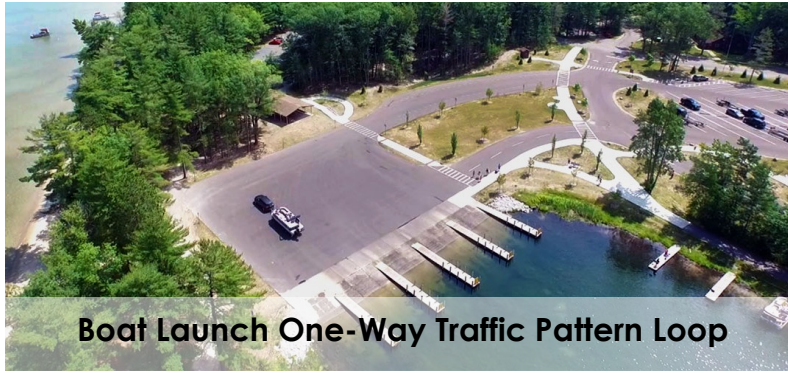
NORTH



Circulation



Enhanced Boat Launch Trailer Parking



Boat Launch One-Way Traffic Pattern Loop



Proposed Single Roadway Loop



Gravel Path



Circulation - Roadway Realignment

Demolish existing roadway
Prepare and pave new roadway

\$566,000.00

Circulation - Parking

Demolish storage building
Demolish existing parking lots
Resurface single parking lot to remain
Prepare and pave new parking lots

\$554,000.00

Circulation - Trail Improvements

Remove existing remaining trails
Install concrete walking paths
Install gravel walking paths

\$213,000.00

Legend

- Renovated Picnic Shelter
- New Concessions Building

Structures

STURGEON BAY



NORTH



Renovated Picnic Shelter

After



Perspective of Renovated Picnic Shelter with Restroom Extension

Before

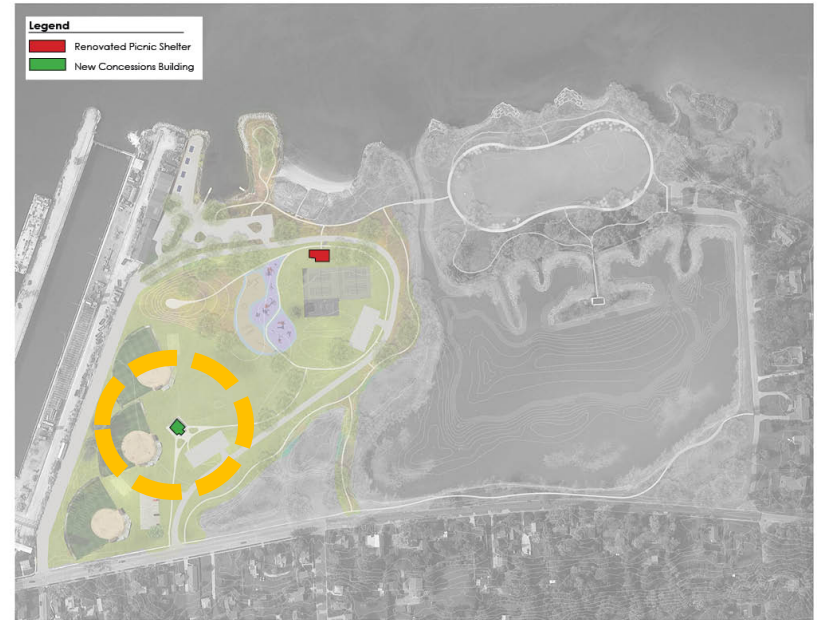


Structures

| | | |
|-------------------------|----------------|-------------|
| Renovate picnic shelter | \$57,000.00 to | \$90,000.00 |
|-------------------------|----------------|-------------|



New Concessions Building



| Structures | | | |
|-----------------------------------|--------------|----|--------------|
| Demolish old concessions building | | | |
| New concessions building | | | |
| | \$312,000.00 | to | \$468,000.00 |



Landscape

STURGEON BAY

Legend

- Mown Lawn
- Ornamental Plantings
- Upland Native Meadow
- Emergent Vegetation



Landscape Enhancements



| Landscape | |
|-------------------------------------------|--------------------|
| Trees of varying sizes throughout phase 2 | |
| Shrubs and perennials in planting beds | |
| Emergent plants-lakeshore and channel | |
| Native seeding in naturalized areas | |
| Seeded turfgrass in active lawn areas | |
| | \$62,000.00 |

Legend



Playground



Ship Yard Overlook



Kayak Storage

Activity

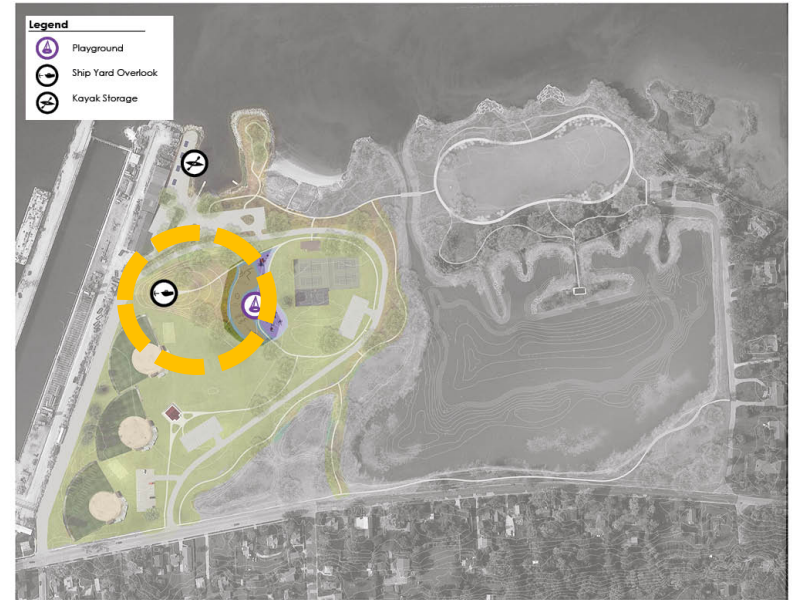
STURGEON BAY



Overlook and Butterfly Sanctuary



Overlook Constructed with Dredge Material

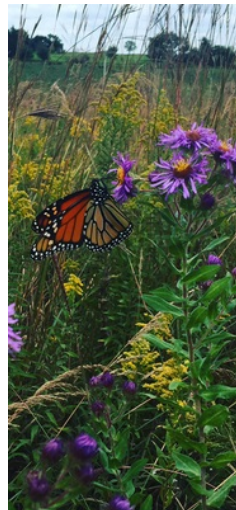


Activity - Overlook/Butterfly Sanctuary

| | |
|--------------------------------------------------|---------------------|
| Naturalized overlook built from dredged material | \$175,000.00 |
|--------------------------------------------------|---------------------|



Prairie Restoration Provides Butterfly Habitat



Playground



Activity - Playground

| | | | |
|------------------------------|--------------|----|--------------|
| Playground-soft surface play | \$390,000.00 | to | \$600,000.00 |
| Playground-nature play | \$39,000.00 | to | \$60,000.00 |



ADA Accessible Play Features



Nature Play Features for Creative Amusement

Site Features



Interpretive Signage



Wayfinding Signage



20 Kayak Storage Lockers

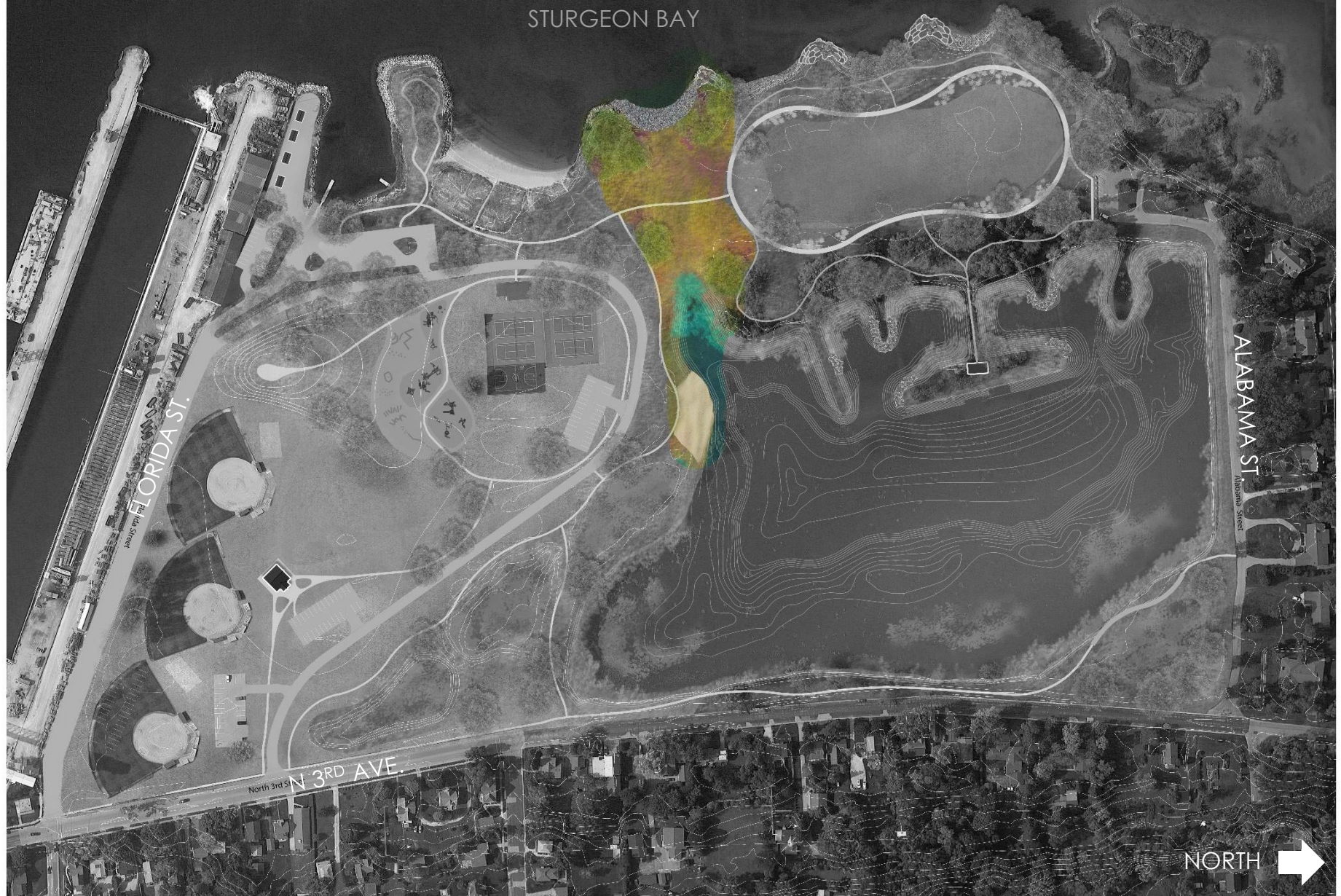


Activity - Site Features

| | |
|---------------------------------------|--------------------|
| Benches | |
| Picnic tables | |
| Dog waste stations | |
| Trash receptacles | |
| Signage - wayfinding and interpretive | |
| Twenty kayak storage lockers | |
| | \$80,000.00 |

Master Plan - Alternate

STURGEON BAY



FLORIDA ST.

ALABAMA ST

North 3rd N 3RD AVE.

NORTH



Sand Beach



Extension of Shoreline Revetment



Paddle Craft Launch



Sand Beach Along Bradley Lake



Activity - Shoreline Revetment

| | |
|--------------------------------|--------------|
| Single pebble beach cove | \$170,000.00 |
| Boulder/rip-rap revetment | \$91,000.00 |
| Single stepped stone revetment | \$173,000.00 |

Activity - Sand Beach

| | |
|------------|------------|
| Sand beach | \$1,300.00 |
|------------|------------|



Applied Ecological Services



Foth Infrastructure & Environment