

NOTICE OF *REVISED* AGENDA

ECONOMIC DEVELOPMENT AUTHORITY

[City of Forest Lake - Link to Meeting Livestream](#)

Forest Lake City Center – Community Room
Forest Lake, Minnesota

April 8, 2024 – 5:30 PM

- 1) Call to Order
- 2) Roll Call
- 3) Pledge of Allegiance
- 4) Approve the Agenda
- 5) Election of Officers
- 6) Approve Minutes from Regular Meeting of March 11, 2024
- 7) Downtown Shoreline Study Recommendation
- 8) Updates
 - a. City
 - b. Washington County
 - c. Forest Lake Area Chamber of Commerce
 - d. Other
- 9) Closed joint EDA and City Council session pursuant to Minnesota Statutes § 13D.05, Subd. 3(c)(3), to develop or consider offers or counteroffers for the purchase or sale of Lot 1, Block 2, Northern Pacific Addition, Washington County, Minnesota.*
- 10) Adjourn

EDA MISSION STATEMENT

Assist and support the economic climate of the City of Forest Lake through programming and communication to achieve the greatest outcome for its citizens and businesses by:

- Marketing the City and its assets
- Supporting existing businesses
- Supporting new businesses
- Creating partnerships
- Providing a vision for the future of commercial areas

*A quorum of the City Council is possible at all Board and Commission Meetings



ECONOMIC DEVELOPMENT AUTHORITY

1408 Lake Street South
Forest Lake, MN 55025
www.ci.forest-lake.mn.us

Regular Meeting ~ Minutes ~

Monday, March 11, 2024	5:30 PM	City Center - Council Chamber
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[City of Forest Lake - Livestream and Recorded Meetings](#)

1. Call to Order

EDA Vice President Husnik called the meeting to order at 5:31pm

2. Roll Call

Attendee Name	Title	Status	Arrived
Mara Bain	EDA President	Absent	
Sam Husnik	EDA Member	Present	
Jenny Lorge	EDA Member	Present	
Jeff Larson	EDA Member	Present	
Jill Grindahl	EDA Member	Absent	
Chris Hoyt	EDA Member	Absent	
Eric Langness	EDA Member	Present	

3. Pledge of Allegiance

4. Approve the Agenda

Motion: EDA Member Langness made a Motion to Approve the Agenda.
Motion seconded by EDA Member Lorge. Motion carried 4-0.

5. Approve EDA Minutes from Regular Meeting of February 12, 2024

Motion: EDA Member Lorge made a Motion to Approve the EDA minutes from the Regular Meeting of February 12, 2024, as submitted.
Motion seconded by EDA Member Larson. Motion carried 4-0.

6. Shoreline Stabilization and Boat Launch Relocation Study

Bruce Chamberlain with TLAL-LI presented the draft report on the boat launch and shoreline stabilization near Lakeside Park. EDA members provided feedback. Chamberlain will update the report and it will be brought back to the EDA again for recommendation to City Council.

7. 2024 BR&E Agreement

Director Wittman provided background on the agreement and two minor changes.

Motion: EDA Member Larson made a motion to approve the Cooperative Economic Development Agreement for Business Retention and Expansion activities between the Forest Lake EDA and Forest Lake Area Chamber of Commerce.



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Motion seconded by EDA Member Husik. Motion carried 4-0.

8. 2024-2025 EDA Work Plan

Director Wittman reported that the City Council determined the 2024-2025 EDA work plan was appropriate. She noted some shift sin timing sue to it already being near the end of the first quarter and presented a chart showing the timeline for each action item.

Motion: EDA Member Langness made a motion to approve the EDA’s 2024-2025 work plan. Motion seconded by EDA Member Lorge. Motion carried 4-0.

9. Staff Updates

Director Wittman advised EDA members of the written Oath of Office and the electronic resources on the dais. She noted these were items the City had previously not required or provided but asked members to sign the Oath and review resources.

10.Adjourn

Motion: EDA Larson made a Motion to Adjourn the Regularly Scheduled EDA Meeting at 6:20 p.m. Motion seconded by EDA Member Langness. Motion carried 4-0.



Date: April 8, 2024

To: President and Members of the EDA

From: Abbi Wittman, Community Development Director

Re: Boat Launch Relocation Evaluation/Downtown Shoreline Conceptual Design Draft Plan

At the EDA's last regularly-scheduled meeting, the EDA reviewed and comments on a draft boat launch relocation evaluation and downtown shoreline conceptual design plan. Staff has worked with the City's consultant to finalize the plan. A copy of the final plan documents are enclosed for EDA review.

Requested Action

Staff is recommending the EDA move to recommend the City Council approve the Downtown Shoreline Redesign plan.

March 12, 2024

Abbi Wittman, Community Development Director
City of Forest Lake
abbi.wittman@ci.forest-lake.mn.us

Subject: Final Submittal - Downtown Boat Launch Relocation & Shoreline Design Project.

Dear Abbi:

This letter in conjunction with the graphic packet for the project outlines the downtown analysis and conceptual design project completed by TLAL-LI Collaborative for the City of Forest Lake. With this project, Forest Lake takes preliminary steps toward implementing two initiatives that will directly enhance the vitality and visitor experience of the downtown district as well as remove barriers to completing other important improvements. The initiatives are:

1. **Relocation of the downtown public boat launch and trailer parking.**
2. **Redesign of the Forest Lake shoreline within Lakeside Memorial Park.**

A working group, which met three times across several months, was established to advise on the project. Forest Lake will use this project as a platform from which to communicate project intent and design, prepare capital improvement plans, pursue grants and partnerships, and prepare future construction documents.

The Forest Lake Downtown Plan, adopted in 2022 identifies numerous capital improvement projects that represent incremental implementation of the downtown vision. The Plan is organized around key *findings* about downtown, Plan *directives* to address the findings and recommended *actions* important to accomplishing the directives. The following *finding/directive/actions* relate to the current work.

Finding. Lakeside Memorial Park is a tremendous asset that could accomplish even more visitor/recreational benefit. The lake itself is an under-utilized recreational asset that holds potential for greater programming through all seasons to draw people downtown.

Directive. Expand recreational programming in all seasons at Forest Lake's downtown shoreline.

Actions.

- Conduct boat launch relocation study to identify potential alternatives to downtown trailer parking, boat launch, or both.
- Secure and develop alternative boat trailer parking / boat launch site to allow for relocation of downtown facilities. The ideal location would be close to downtown but outside the core.
- Expand Lakeside Memorial Park across the relocated boat launch.
- Install expanded and more guest-friendly transient boat slips.
- Establish canoe/kayak launch and secure tie-up.
- Rehabilitate shoreline through Lakeside Memorial Park and add overlook/pedestrian water access.

BOAT LAUNCH & TRAILER PARKING RELOCATION

The downtown boat launch with twenty-one trailer parking stalls is the most active of three public launches on Forest Lake. The downtown launch is owned and operated by the City of Forest Lake, which has a DNR operating agreement through 2025 in exchange for funding granted when the launch was constructed.

Relocation of the downtown boat launch is a Downtown Plan directive for two reasons. First, because of ongoing parking and traffic circulation conflicts between general downtown patrons and boat trailers. Second, expanding Lakeside Memorial Park across the current boat launch can help address the growing popularity and space constraints of the park. The Plan acknowledges that the boat launch does have economic benefits for downtown but concludes that the negative impacts outweigh the positive; that the launch is having a stunting effect on downtown vibrancy; and that the launch would have greater economic benefits if positioned close by but outside the downtown core.

Leading up to a recommended relocation site, City and TLÂL-LI staff explored any potential sites within a few blocks of downtown and determined that three were worthy of analysis. The three are the current launch, a launch from NE 2nd Avenue with all remote parking across Hwy. 61, and a launch from NE 3rd Avenue with attached parking plus an additional parking alternative across Hwy. 61. See the attached graphic packet for more detailed depiction of the alternatives.

Evaluation of Alternatives

Existing launch

Pros

- It already exists.
- Capital repair and upkeep needs along with operational improvements are minor compared with the cost of a new launch.

Cons

- Even with operational improvements such as parking tickets, physical parking barriers, and better signage, the launch will continue to have some level of stunting effect on downtown economics.
- Downtown placement interferes with other Downtown Plan initiatives important to propelling private investments and downtown activation.
- The activity of the launch is a poor fit with the rhythms of downtown and the park.
- The need to accommodate the circulation demands of boat trailers will preclude creation of a better pedestrian environment between Lake Street and Lakeside Memorial Park.
- The current scattered trailer parking spaces cause confusion and conflicts. Consolidating trailer parking would represent a significant parking lot investment.
- Downtown economic benefits of the launch are likely minor compared with lost activity caused by a core downtown launch.

Alternative A (NE 2nd Ave.)

Pros

- The location has direct proximity to downtown but precludes the need to navigate trailers through downtown.
- Construction is likely eligible for DNR Legacy/Public Water Access grants.

Cons

- Requires willing sellers of two residential properties.
- A very confined site unless more than two properties are purchased.
- An undetermined, remote trailer parking location would be needed across Highway 61.

- A more expensive option than leaving the current launch in place.
- Shallow water levels at the shoreline may require periodic mechanical dredging.
- Overflow trailer parking (if deemed necessary) has negative attributes including Hwy. 61 ped crossing and impacts to redevelopment potential.

Alternative B (NE 4th Ave.)

Pros

- The location is currently an undeveloped property.
- Open space exists to co-locate the launch + more trailer parking than currently exists.
- Proximity to downtown with negligible impacts on residential streets.
- Potential for overflow trailer parking across Highway 61.
- Construction is likely eligible for DNR Legacy/Public Water Access grants.

Cons

- Requires a willing seller of property.
- A more expensive option than leaving the current launch in place.
- Shallow water levels at the shoreline may require periodic mechanical dredging.
- Overflow trailer parking (if deemed necessary) has negative attributes including Hwy. 61 ped crossing and impacts to redevelopment potential.

Recommendation

After evaluation by the Working Group, Alternative B, NE 4th Ave. became the clear recommendation. The site is located between a commercial funeral home to the south and NE 4th Avenue to the north. The launch and adjacent trailer parking would require acquisition of three vacant parcels totaling 0.8 acres and use of the lake-end of the 4th Avenue right-of-way. The dual-lane launch would include access docks, adjacent trailer parking, an inspection/cleaning bay, stormwater treatment, shoreline stabilization, landscaping, portable restrooms, potable water, furnishings, signage, and security lighting.

Twenty-seven boat trailer parking stalls could be placed adjacent to the launch (5 on-street, 22 in parking lot). This is more parking than at the current launch and is anticipated to accommodate foreseeable demand. However, if more parking were deemed necessary, a remote parking site across Highway 61 has been identified that could accommodate an added 14-18 stalls. If the overflow site is believed to be necessary, this study recommends it be developed in careful coordination with mixed-use redevelopment of the block and that significant Highway 61 pedestrian safety improvements be made.

Cursory analysis of water depths in the fall of 2023 (lower than normal water levels) at the recommended site suggests depths that range from roughly 1.5 to 3 feet within 150 feet from shore. This suggests that some mechanical dredging (potentially done by boat prop) may be needed at low water levels to maintain a desired 3-foot draft. While dredging at launches around the region (like some on Lake Minnetonka) are not uncommon, it is apparently unusual for Forest Lake.

A project budget that includes construction of the proposed launch/parking as well as deconstruction of the current launch has been prepared. Project costs are categorized into a baseline cost of \$1.1m for the launch, adjacent parking, and deconstruction of the current launch. An add-alternate cost of \$400k for remote parking is also identified. Each project budget includes the full scope of anticipated hard and soft costs. The project budget includes a standard construction contingency of 20% however, does not include the cost of land acquisition or any extraordinary contingencies such as soil contamination cleanup.

The project would be of interest to potential granting and partnering agencies.

Next Steps

1. Review and seek approval by Forest Lake leadership.
2. Review plans with potential grant agencies.
3. Identify potential funding streams.
4. Secure needed properties.
5. Pursue grants.
6. Conduct detailed engineering.
7. Construct and open the project.

LAKESHORE REDESIGN

Forest Lake (the lake) is the central feature in the community's identity and critically important to downtown's success. While it is routine to glimpse the lake from surrounding roadways, the one meaningful place for all the public to be at the lakeshore is downtown's Lakeside Memorial Park. These factors and others make the downtown lakeshore strategically important to Forest Lake and a large part of why its reinvestment is a directive of the Downtown Plan.

For purposes of this project, the downtown lakeshore is defined as the shoreline and adjacent upland within Lakeside Memorial Park (about 475 x 50 feet). Its current state could be described as "unremarkable." There is a shallow riprap edge, no landscape other than turf, and a paver walkway paralleling the shore. In addition to the aesthetic and experiential challenges, the ecological services provided by the lakeshore such as stormwater infiltration, shading, and habitat are also mostly absent.

There are, however, legitimate reasons that the downtown lakeshore has become what it is; barriers to overcome if it is to become something greater. The most challenging barrier is ice. In many winters, powerful ice action pushes sheets of ice onto shore wiping out features in its path. In the spring, City crews carry rip rap, sand, and soil back to their rightful place from where the ice left them, repair what was damaged, and toss what was ruined. A few events like these and what remains is the minimalistic landscape we see today.

With the lakeshore project, TLÂL-LI's work included two critical factors; first, preparing the lakeshore design itself and second, proposing structural strategies to overcome damaging ice and wave actions. The strategy proposed for counteracting the forces of ice and water is to mimic the dynamics of a snowplow blade. Rather than populating the shoreline with things ice sheets will push against or push over, the concept uses design features that curl ice sheets into the air, so ice drops to the ground under its own weight.

Two preliminary shoreline concepts labeled "A: The Boardwalk" and "B: The Piers" were prepared that could apply these structural principles plus provide ecological services and create a dynamic, interesting landscape for visitors. See the attached graphic packet for more depiction of the concepts.

Recommendation

After evaluation by the Working Group, Concept "B": The Piers became the recommended lakeshore design approach. Key elements of the design include:

- Bold use of cut/split stone blocks stacked at pitch along most of the shore to create clamoring, lounging, and seating opportunities and to dissipate the forces of ice and waves.
- Dual boardwalk piers perpendicular to the shore will draw in visitors from the two primary park entry corridors. The south pier has an adjacent, narrow sand shore for visitors to walk directly into the lake.

- A narrow stretch of sand shore where the current boat launch sits for canoe/kayak landing and lockup.
- A linear pedestrian promenade of stone, masonry, or concrete that follows the shoreline but varies in its elevation and dimension from shore. The promenade is protected from ice action by stone stacks or distance back from shore.
- A low-profile bridge of wood, composite, or steel in a stretch of promenade that spans the infiltration garden.
- Stormwater capture and infiltration garden that treats park stormwater rather than allowing direct flow into the lake.
- Redesign and consolidation of docks (transient and boat club) to be less visually obtrusive of the lake and to improve overall park circulation.
- Undulating shoreline grades from current park grades to a high point at the south pier as an overlook several feet up in elevation.
- Addition of landscaping, furnishings, and pedestrian-scale lighting that would be either protected from ice or selected for resilience to ice.
- A dynamic and sturdy construction materials palette for visitor interest and longevity (stone, steel, concrete, wood).

A project budget of \$1.4m includes the full scope of anticipated hard and soft costs as well as a 20% contingency. The project would be of interest to regional and state funding streams.

Next Steps

1. Review and seek approval by Forest Lake leadership.
2. Review plans with potential partner agencies.
3. Identify potential funding streams.
5. Pursue outside funding.
6. Conduct detailed design and engineering.
7. Construct and open the project.

TLÂL-LI Collaborative is honored to have worked with the community of Forest Lake on this interesting effort. We look forward to the opportunity to collaborate on next steps.

Sincerely,

TLALLI COLLABORATIVE, LLC



BRUCE CHAMBERLAIN, FASLA
PRESIDENT, PRACTICE LEAD

Downtown Shoreline Redesign |

Boat Launch Relocation Study

Conceptualize Future Design
Communicate Project Intent
Tool in Grant Pursuits
A Step Toward Implementation

Finding.

Lakeside Memorial Park is a major asset that could accomplish even more visitor/recreational benefit. The lake itself is an under-utilized recreational asset that holds potential for greater programming through all seasons to draw people downtown.

Directive. Expand recreational programming in all seasons at Forest Lake's downtown shoreline.

Actions.

Conduct boat launch relocation study to identify potential alternatives to downtown trailer parking, boat launch, or both.

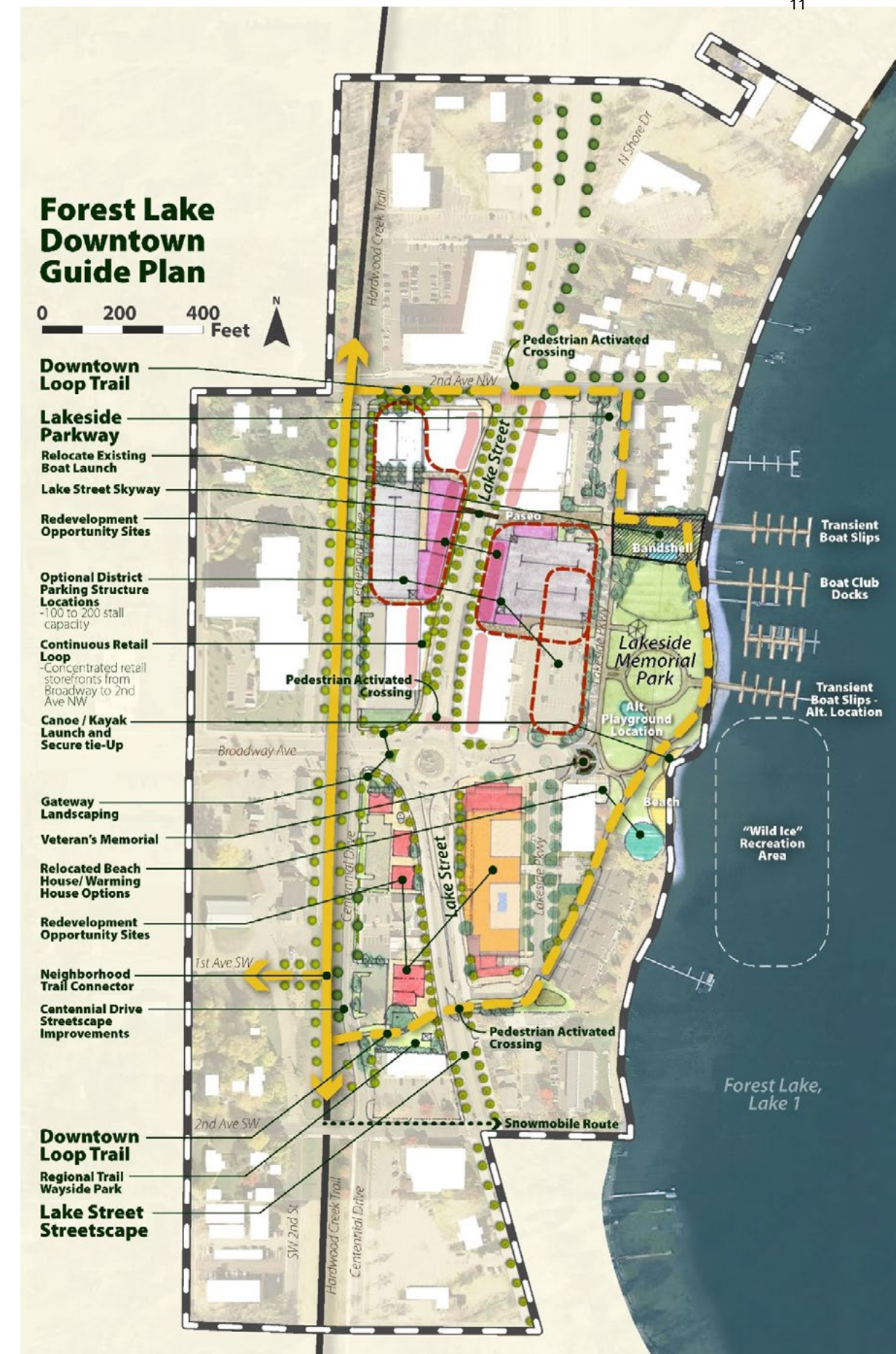
Secure and develop alternative boat trailer parking / boat launch site to allow for relocation of downtown facilities. The ideal location would be close to downtown but outside the core.

Expand Lakeside Memorial Park across the relocated boat launch.

Install expanded and more guest-friendly transient boat slips.

Establish canoe/kayak launch and secure tie-up.

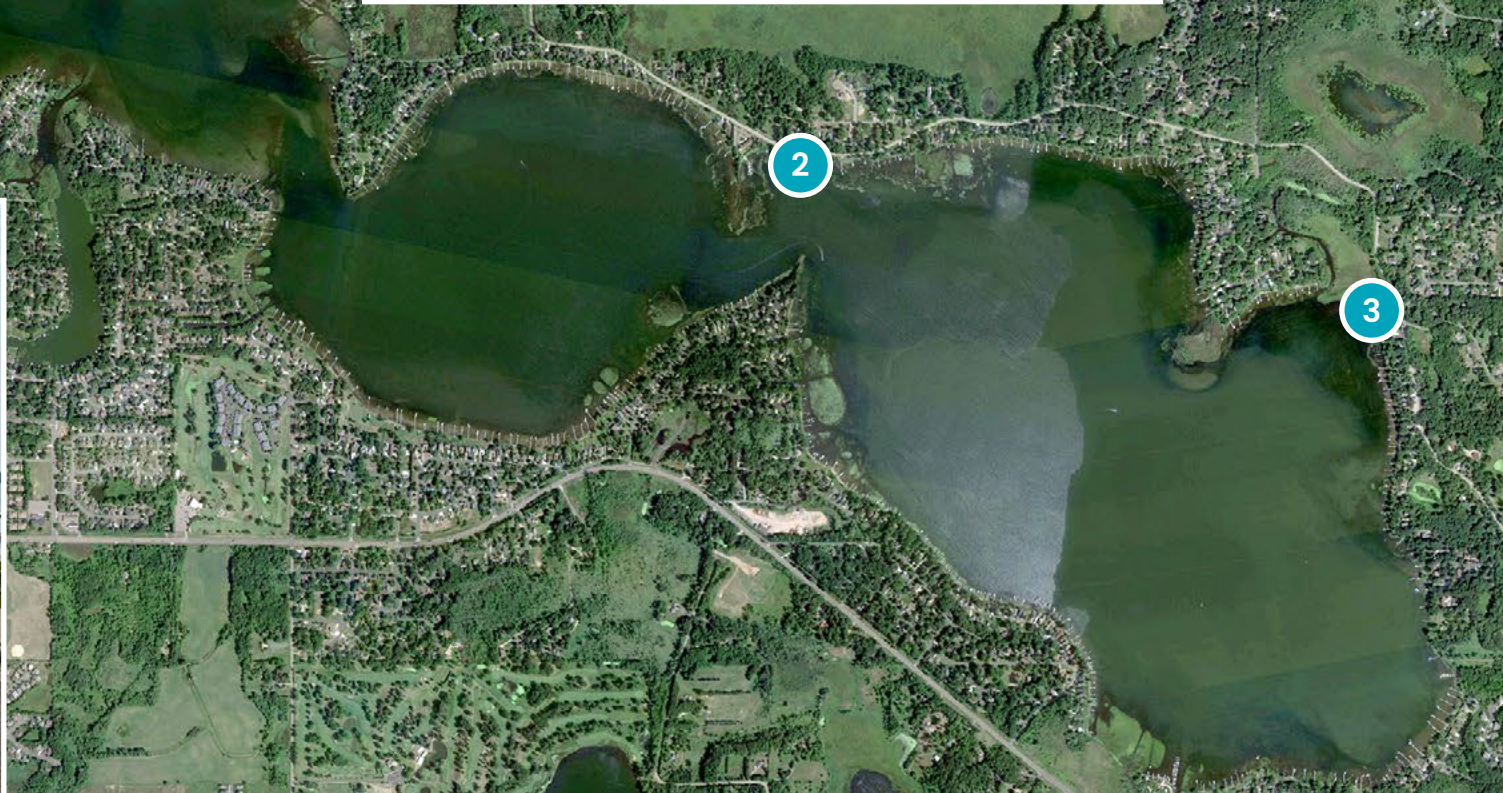
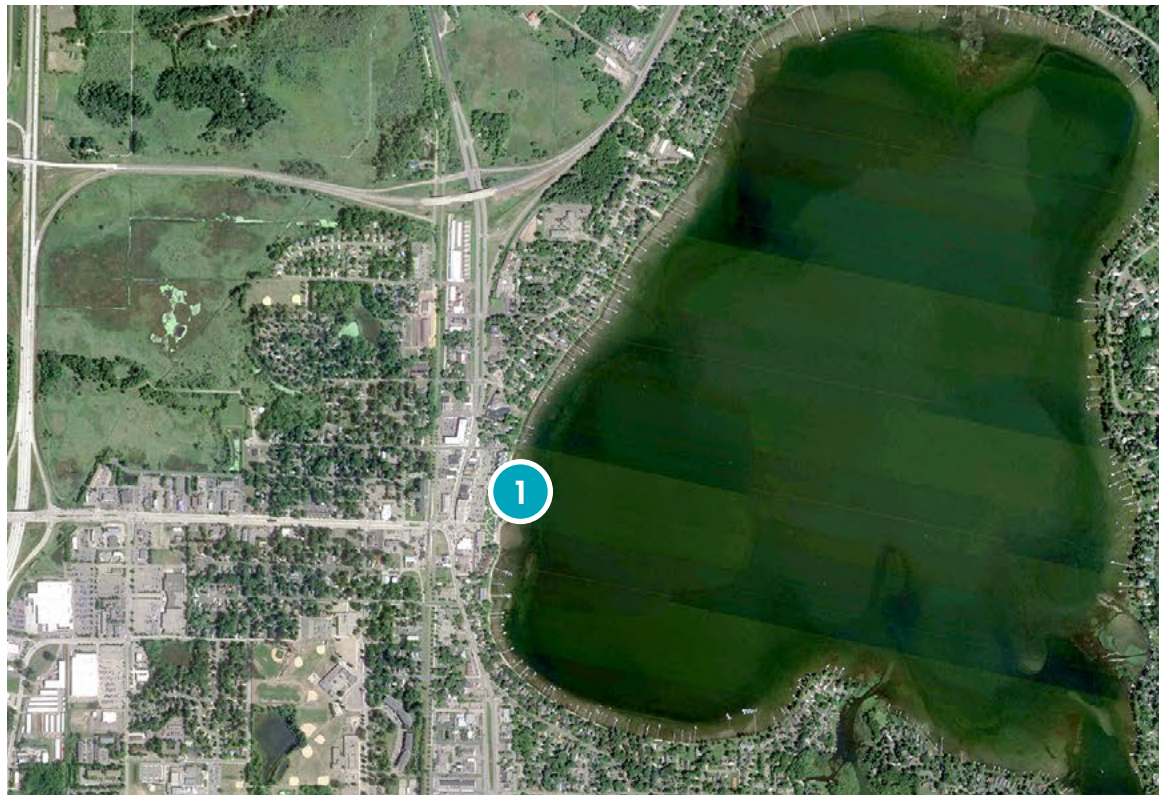
Rehabilitate shoreline through Lakeside Memorial Park and add overlook/pedestrian water access.



INITIATIVE OF THE DOWNTOWN PLAN

Downtown Shoreline Redesign | Boat Launch Relocation

Forest Lake, MN | 3.11.2024



1

Downtown Launch - Lakeside Memorial Park

- Owned by the city of Forest Lake
- 20 boat trailer parking spots
- No specific bathrooms or trash receptacles
- Dock on both sides of launch

2

Lake 2 Boat Launch - Next to the old Acqa restaurant, now Pizza Pub

- Owned by the DNR
- 11 boat trailer parking spots
- Porta potties provide by DNR
- Recycle and trash containers provided by Comfort Lake Watershed District
- Dock

3

Lake 3 Boat Launch - located on North Shore Trail on the east side of 3rd lake

- Owned by the DNR
- 30 Boat trailer parking spots
- Porta Potty provided by DNR
- Recycle and trash containers provided by Comfort Lake Watershed District
- Dock

BOAT LAUNCH RELOCATION STUDY

EXISTING LAUNCHES ON FOREST LAKE

-- Three Potential Sites In / Near Downtown Were Identified --

Analysis of alternative boat launch sites used the following search criteria:

- Within a few blocks of downtown.
- Launch within walking distance of adequate boat trailer parking, even if trailer parking is remote from launch site.
- Leverage existing infrastructure for access/circulation.
- Awareness of compatibility with adjacent uses.

All possible locations within a few blocks of downtown were identified with only the three illustrated in the adjacent diagram being feasible alternatives.

Existing launch

Pros

- Already in place – status quo is always easier than change
- Capital repair needs less costly than new launch

Cons

- Disruption to downtown circulation & parking
- Poor fit with public lakefront destination
- Scattered trailer parking causes confusion and conflicts
- Interferes with other downtown plan initiatives important to propelling private investments and downtown activation
- Downtown economic benefits likely small compared with lost activity caused by a core downtown launch

Alternative A (NE 2nd Ave.)

Pros

- Direct proximity to downtown w/o need to navigate trailers through downtown
- Likely eligible for DNR grant

Cons

- Requires willing sellers of two residential properties
- Tight site constraints unless more than two properties are purchased
- Undetermined, remote trailer parking location needed
- More expensive than leaving current launch in place
- Shallow water levels

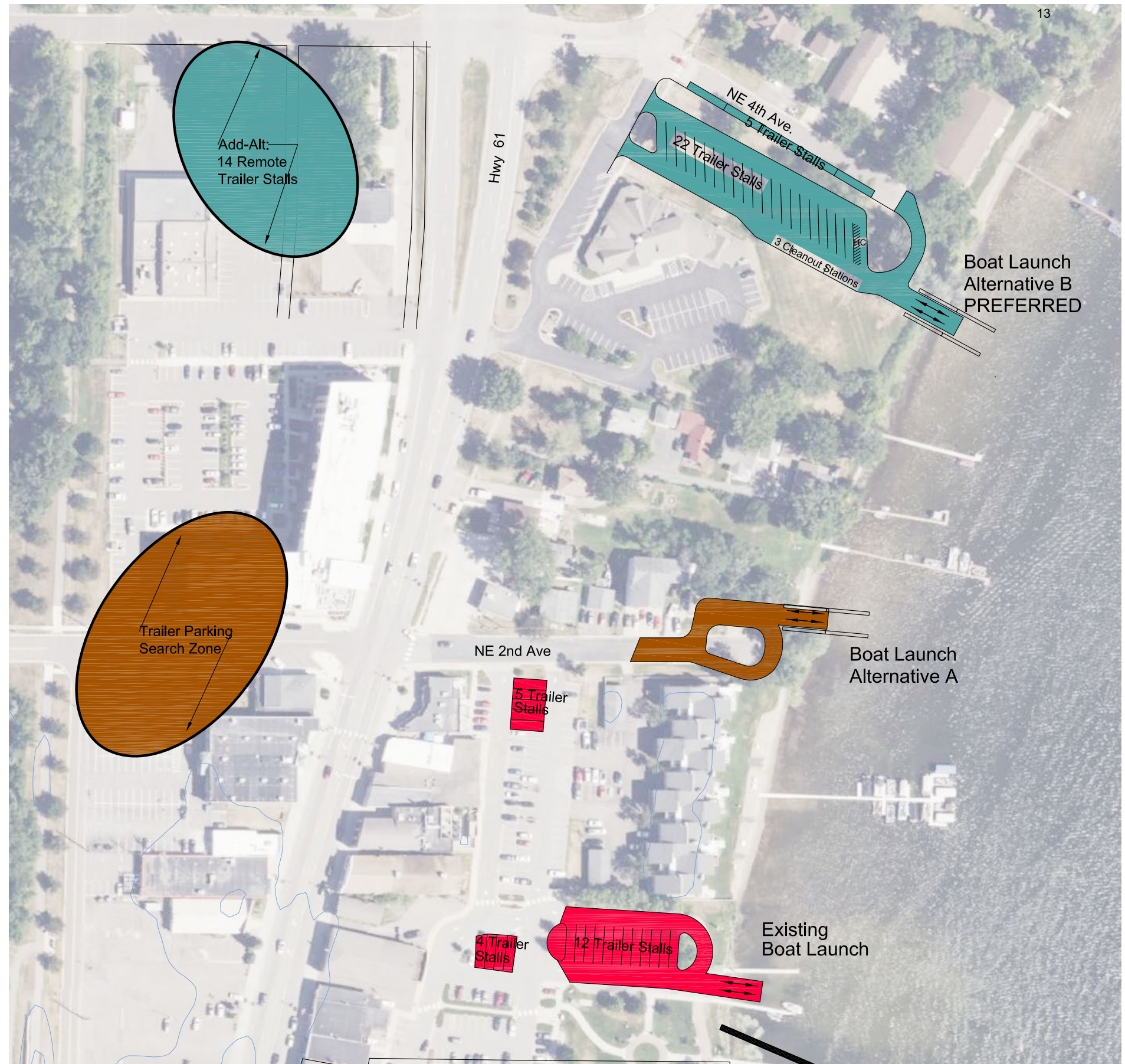
Alternative B (NE 4th Ave.) **RECOMMENDED**

Pros

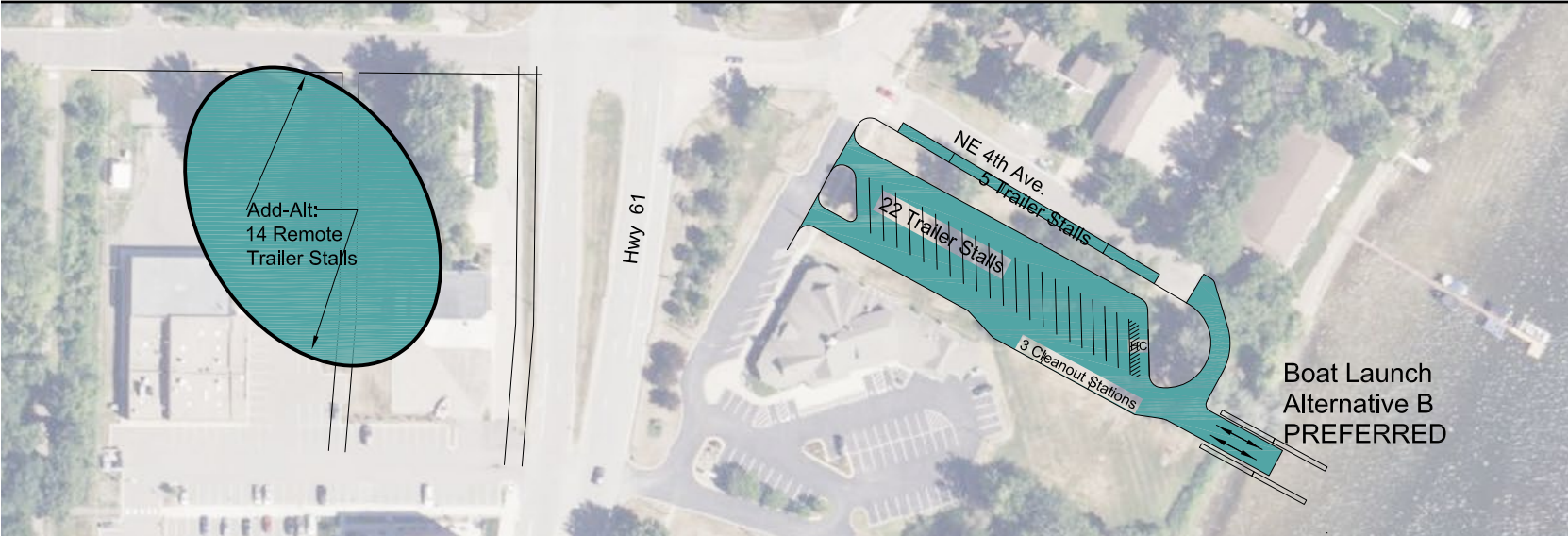
- Currently undeveloped site
- Space to co-locate both launch & trailer parking
- Close proximity to downtown with negligible impacts to residential streets
- Likely eligible for DNR grants
- Potential nearby overflow trailer parking site

Cons

- Requires willing property seller
- More expensive than leaving current launch in place
- Shallow water levels
- Overflow trailer parking has negative attributes



BOAT LAUNCH RELOCATION ALTERNATIVES IDENTIFIED AS VIABLE LOCATION ALTERNATIVES



NE 4th Ave. Project Description **RECOMMENDED ALTERNATIVE**

The recommended boat launch would replace, in-total, the current public launch in downtown Forest Lake. The proposed launch, located two blocks north of the downtown core would be accessed from NE 4th Avenue.

The site is located between a commercial funeral home to the south and NE 4th Avenue to the north. The launch and adjacent trailer parking would require acquisition of three vacant parcels totaling 0.8 acres and use of the lake-end of the 4th Avenue right-of-way. The dual-lane launch would include access docks, adjacent trailer parking, an inspection/cleaning bay, stormwater treatment, shoreline stabilization, landscaping, portable restrooms, potable water, furnishings, signage, and security lighting. Twenty-seven boat trailer parking stalls could be placed adjacent to the launch (5 on-street, 22 in parking lot). If more parking is deemed necessary, a remote parking site across Highway 61 could accommodate an added 14-18 stalls but has significant negative implications for pedestrian circulation and adjacent redevelopment.

Project Budget

A project budget that includes construction of the proposed launch/parking and deconstruction/restoration of the current A project budget that includes construction of the proposed launch/parking as well as deconstruction of the current launch has been prepared. Project costs are categorized into a baseline cost of \$1.1m for the launch, adjacent parking, and deconstruction of the current launch. An add-alternate cost of \$400k for remote parking is also identified. Each project budget includes the full scope of anticipated hard and soft costs. The project budget includes a standard construction contingency of 20% however, does not include the cost of land acquisition or any extraordinary contingencies such as soil contamination cleanup. The project would be of interest to potential granting and partnering agencies.

Next Steps

1. Review and seek approval by Forest Lake leadership.
2. Review plans with potential granting agencies.
3. Identify funding stream.
4. Secure needed properties.
5. Pursue grants.
6. Conduct detailed engineering.
7. Construct and open the project.

Forest Lake Downtown Boat Launch Relocation & Shoreline Enhancement Projects: Project Budgeting

rev: 11/21/2023
prepared by: TLÂL-LI Collaborative

11 Boat Ramp Relocation Project (budget identified in downtown master plan: \$327k & only included removal of ex. launch)					
Baseline Project (new launch w/adjacent parking)					
Removal of existing launch					
Demolition	1	LS	\$	25,000	\$25,000
Existing parking lot adjustments	1	LS	\$	25,000	\$25,000
Existing parkland and shoreline restoration	1	LS	\$	20,000	\$20,000
New launch					
Land acquisition	1	LS	\$	-	\$0
Paving	30500	SF	\$	4	\$122,000
Curb & Gutter	1200	LF	\$	58	\$69,600
Boat Ramp	1	LS	\$	80,000	\$80,000
Docks	2	EACH	\$	6,000	\$12,000
Shoreline Stabilization	1	LS	\$	60,000	\$60,000
Utilities	1	LS	\$	40,000	\$40,000
Stormwater Improvements	1	LS	\$	80,000	\$80,000
Signage	1	LS	\$	15,000	\$15,000
Furnishings	1	LS	\$	25,000	\$25,000
Landscaping	1	LS	\$	60,000	\$60,000
Lighting & Electrical	1	LS	\$	80,000	\$80,000
Miscellaneous Improvements	1	LS	\$	20,000	\$20,000
Mobilization		8%			\$58,688
Hard Cost Total					\$792,288
Soft Costs					
Contingency		20%			\$158,458
Design/Engineering/Admin		14%			\$110,920
Soft Cost Total					\$269,378
PROJECT BUDGET					\$1,061,666
* Budget does not include land acquisition.					
* Four trailer parking stalls (in addition to those listed in estimate) would be placed on-street at no project cost.					

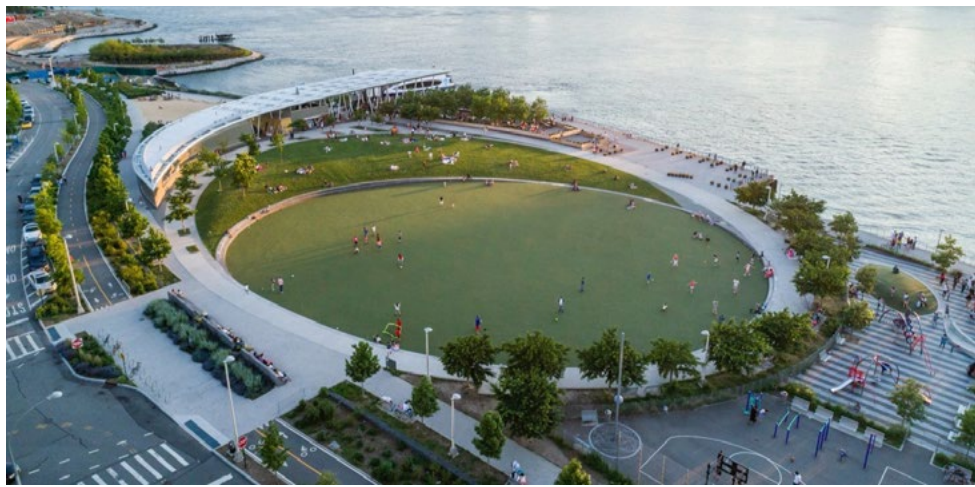
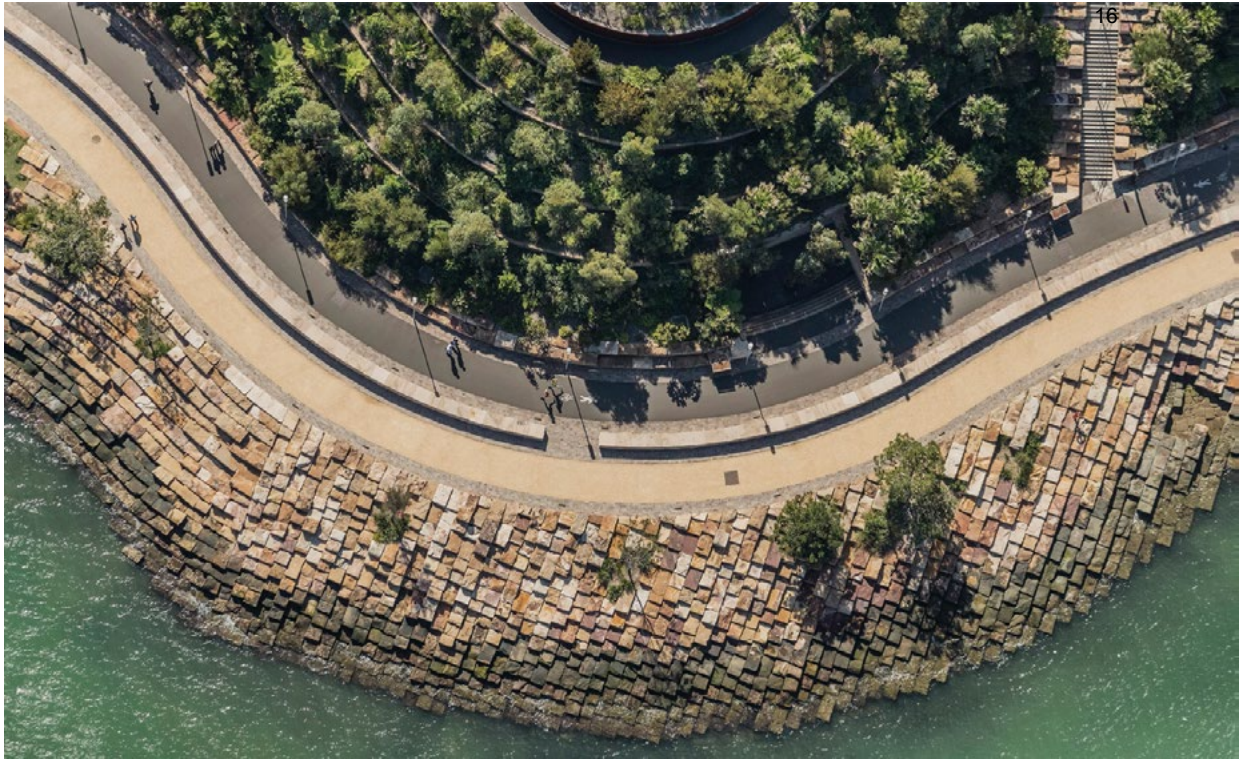
Add-Alternate Project (remote parking)					
Land acquisition	1	LS	\$	-	\$0
Paving (14 stalls)	10000	SF	\$	4	\$40,000
Curb & Gutter	500	LF	\$	58	\$29,000
Hwy. 61 pedestrian crossing enhancements	1	LS	\$	80,000	\$80,000
Stormwater Improvements	1	LS	\$	30,000	\$30,000
Signage	1	LS	\$	5,000	\$5,000
Furnishings	1	LS	\$	5,000	\$5,000
Landscaping	1	LS	\$	20,000	\$20,000
Lighting & Electrical	1	LS	\$	40,000	\$40,000
Miscellaneous improvements	1	LS	\$	20,000	\$20,000
Mobilization		8%			\$21,520
Hard Cost Total					\$290,520
Soft Costs					
Contingency		20%			\$58,104
Design/Engineering/Admin		14%			\$40,673
Soft Cost Total					\$98,777
PROJECT BUDGET					\$389,297
* Budget does not include land acquisition.					



SHORELINE REDESIGN EXISTING CONDITIONS

Downtown Shoreline Redesign | Boat Launch Relocation

Forest Lake, MN | 3.11.2024



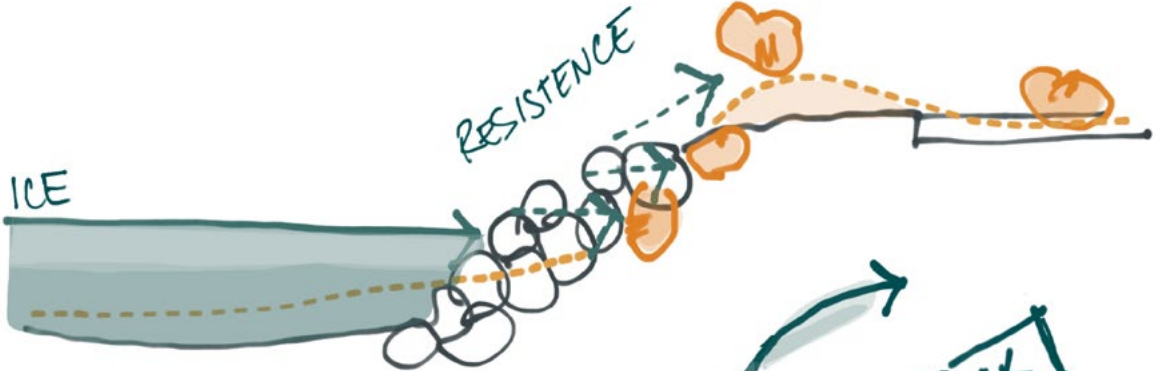
SHORELINE REDESIGN EXAMPLES WE CAN DRAW FROM

Downtown Shoreline Redesign | Boat Launch Relocation
Forest Lake, MN | 3.11.2024

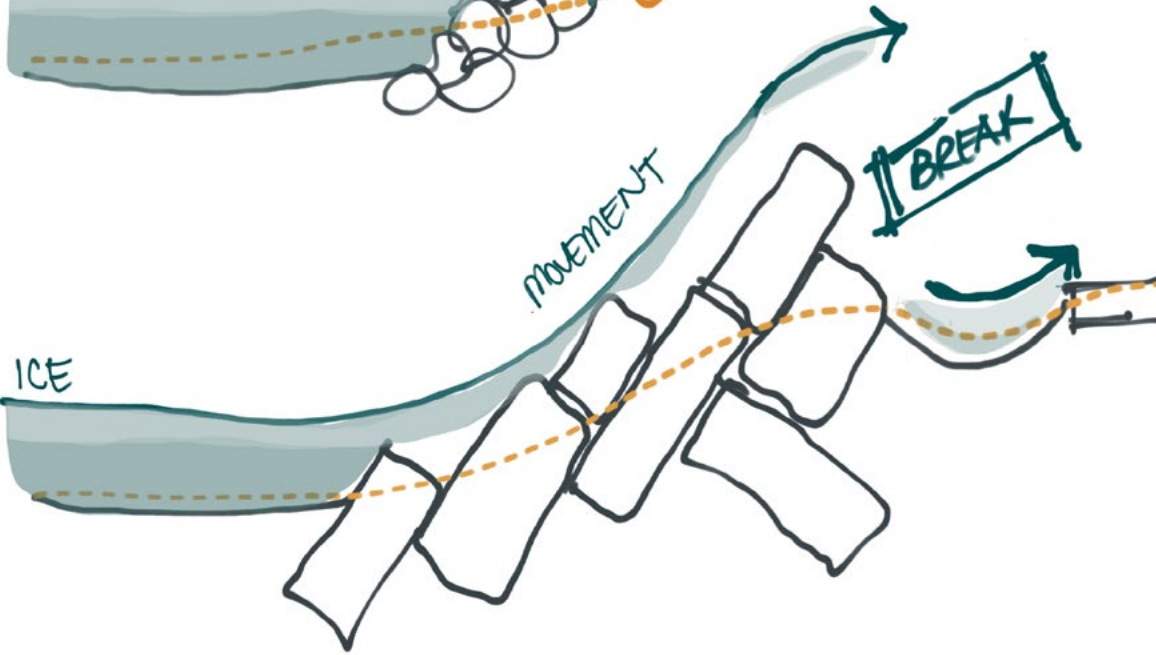
Existing Condition | Summer



Existing Condition | Winter



Proposed Approach



LAKE / ICE SHORELINE STRATEGY WALKING PATH



Lake Miltona



Ottertail Lake



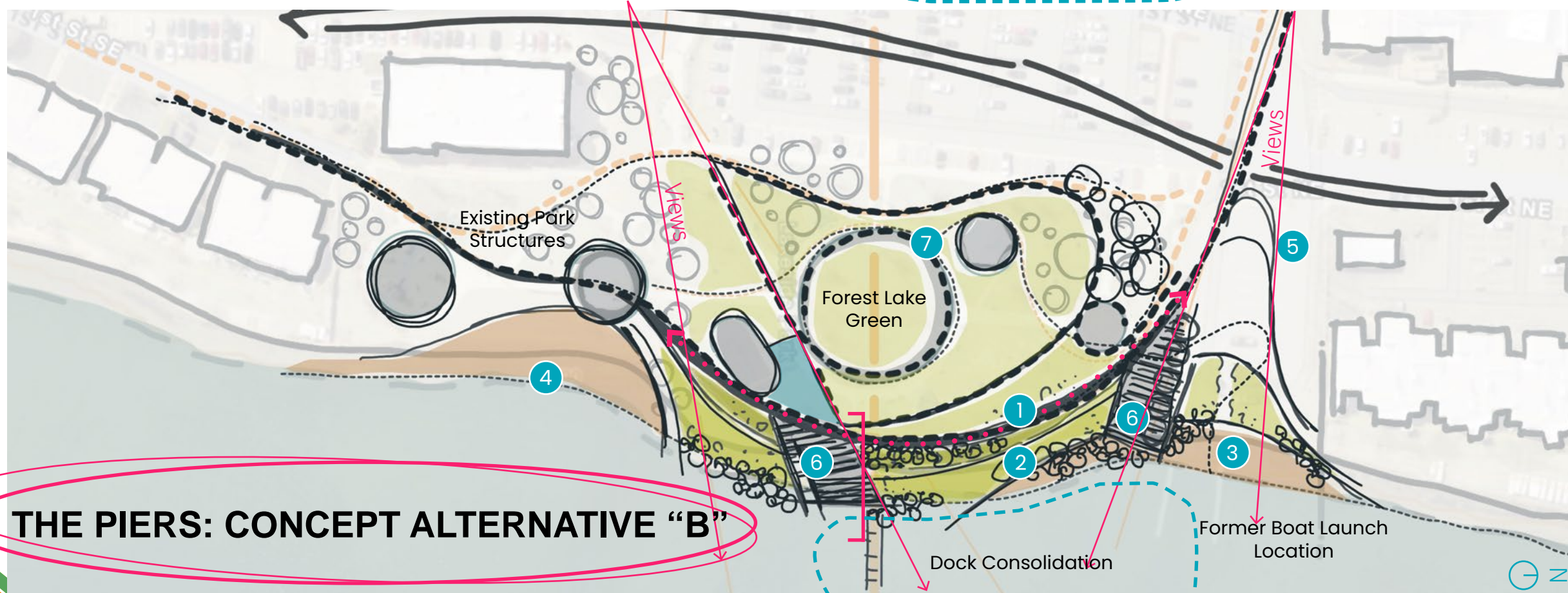
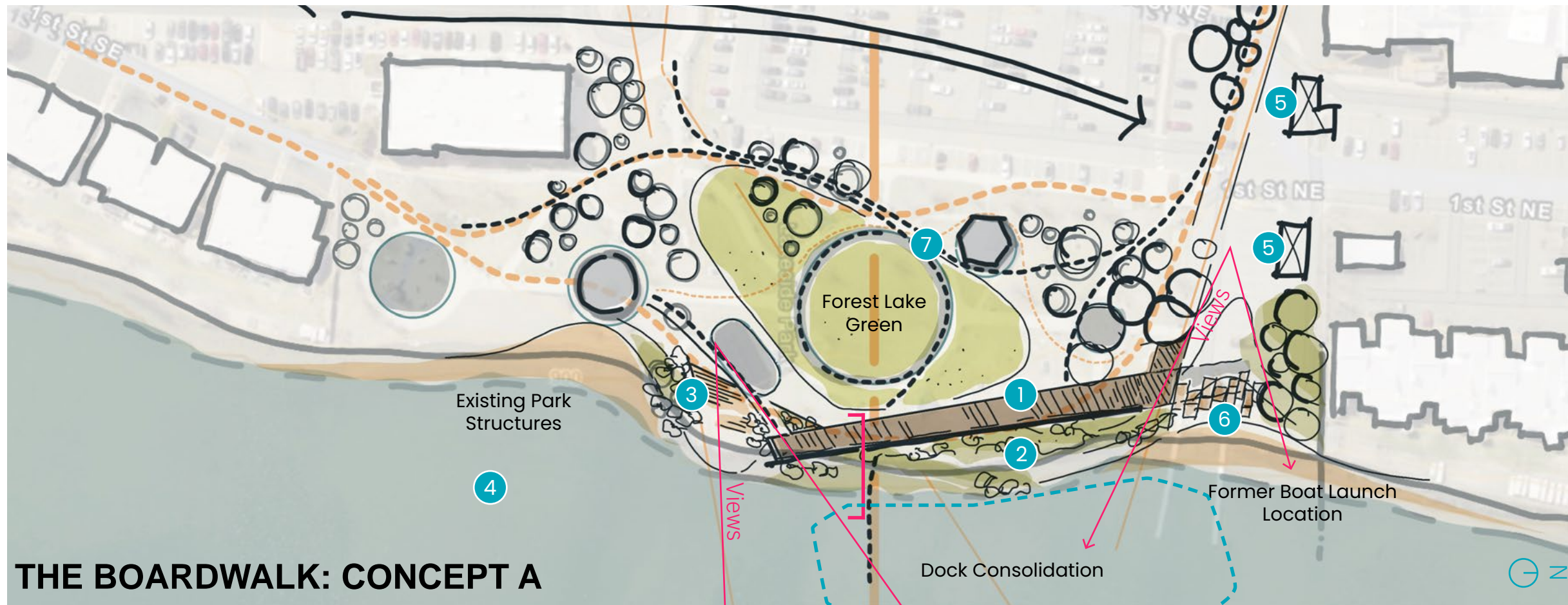
Downtown Forest Lake

LEGEND

- 1 Boardwalk / Pier
- 2 Layered Planting and Rock Shoreline
- 3 Kayak Landing + Tie Up (3-6)
- 4 Beach
- 5 Pop-Up Market (food + art)
- 6 Water Access
- 7 Pedestrian Circulation

Types of Shoreline Treatment:

- 1) Sand Beach
- 2) Inter planted Rip Rap
- 3) Stacked Stone
- 4) Sea Wall



SHORELINE CONCEPT ALTERNATIVES

Downtown Shoreline Redesign | Boat Launch Relocation

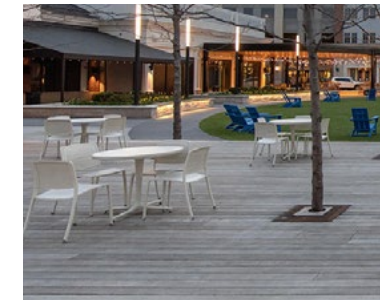
Forest Lake, MN | 3.11.2024



- 1 Boardwalk + Pier
- 2 Boardwalk Bridge
- 3 Layered Rock Shoreline
- 4 Water Access
- 5 Beach
- 6 Future Pop-Up Market (food + art)
- 7 Sloped Infiltration Planting
- 8 Concrete Promenade

Types of Shoreline Treatment:

- 1) Sand Beach
- 2) Stacked Stone
- 3) Batten Promenade
- 4) Planted Infiltration



RECOMMENDED SHORELINE CONCEPT

W/EXISTING LAUNCH REMAINING

Downtown Shoreline Redesign | Boat Launch Relocation

Forest Lake, MN | 3.11.2024



LEGEND

Boardwalk

Boardwalk Bridge

Layered Rock Shoreline

4 Kayak Landing + Tie Up (9)

Beach

Future Pop-Up Market (food + art)

Sloped Infiltration Planting

Concrete Promenade

Types of Shoreline Treatment:

1) Sand Beach

2) Stacked Stone

3) Batten Promenade

4) Planted Infiltration

RECOMMENDED SHORELINE CONCEPT

INTERIM vs. LONGTERM CONFIGURATION

Downtown Shoreline Redesign | Boat Launch Relocation

Forest Lake, MN | 3.11.2024



Project Budget

A project budget of \$1.4m includes the full scope of anticipated hard and soft costs as well as a 20% contingency. The project would be of interest to regional and state funding streams.

Next Steps

- 1. Review and seek approval by Forest Lake leadership.
- 2. Review plans with potential partner agencies.
- 3. Identify potential funding streams.
- 5. Pursue outside funding.
- 6. Conduct detailed design and engineering.

Project Description

After evaluation by the Working Group, Concept “B”: The Piers became the recommended lake-shore design approach. Key elements of the design include:

- Bold use of cut/split stone blocks stacked at pitch along most of the shore to create clamoring, lounging, and seating opportunities and to dissipate the forces of ice and waves.
- Dual boardwalk piers perpendicular to the shore will draw in visitors from the two primary park entry corridors. The south pier has an adjacent, narrow sand shore for visitors to walk directly into the lake.
- A narrow stretch of sand shore where the current boat launch sits for canoe/kayak landing and lockup.
- A linear pedestrian promenade of stone, masonry, or concrete that follows the shoreline but varies in its elevation and dimension from shore. The promenade is protected from ice action by stone stacks or distance back from shore.
- A low-profile bridge of wood, composite, or steel in a stretch of promenade that spans the infiltration garden.
- Stormwater capture and infiltration garden that treats park stormwater rather than allowing direct flow into the lake.
- Redesign and consolidation of docks (transient and boat club) to be less visually obtrusive of the lake and to improve overall park circulation.
- Undulating shoreline grades from current park grades to a high point at the south pier as an overlook several feet up in elevation.
- Addition of landscaping, furnishings, and pedestrian-scale lighting that would be either protected from ice or selected for resilience to ice.
- A dynamic and sturdy construction materials palette for visitor interest and longevity (stone, steel, concrete, wood).

Forest Lake Downtown Boat Launch Relocation & Shoreline Enhancement Projects: Project Budgeting

rev: 11/21/2023

prepared by: TLÂL-LI Collaborative

12 & 17 Shoreline Enhancement & Transient Dock Projects (budget identified in downtown master plan: \$542k)									
Hard Costs									
Grading/Shaping	1	LS	\$	50,000	\$50,000				
Granite Shoreline Armor (product only)	3,500	CF	\$	70	\$245,000				
Shoreline Armor Installation	3,500	CF	\$	40	\$140,000				
Pier/Overlook	2	EA	\$	50,000	\$100,000				
Shore Stairs	1	LS	\$	12,000	\$12,000				
Boardwalk Promenade	1,000	SF	\$	75	\$75,000				
Paved Promenade	3,200	SF	\$	22	\$70,400				
Rain Garden	5,000	SF	\$	12	\$60,000				
Kayak Landing	2,000	SF	\$	10	\$20,000				
Dock Reconfiguration	1	LS	\$	40,000	\$40,000				
Canopy Trees	30	EA	\$	800	\$24,000				
Shrubs & Ornamental Grasses	200	EA	\$	60	\$12,000				
Turf Restoration	1	LS	\$	10,000	\$10,000				
Lighting / Electrical	1	LS	\$	120,000	\$120,000				
Furnishings (benches, tables & chairs, kayak stantions)	1	ALLOW	\$	35,000	\$35,000				
Mobilization					8%				\$38,800
Hard Cost Total									\$1,002,200
Soft Costs									
Contingency					20%				\$200,440
Design/Engineering/Administration					18%				\$180,396
Soft Cost Total									\$380,836
PROJECT BUDGET									\$1,383,036



RECOMMENDED SHORELINE CONCEPT
FULL BUILD-OUT