



**WINNETKA PARK DISTRICT
SPECIAL BOARD MEETING:
LAKEFRONT BREAKWATER DESIGN WORKSHOP
Monday, July 18, 2022
5:00 p.m. Centennial Beach
6:00 p.m. Lloyd Beach
7:00 p.m. Hubbard Woods School Auditorium
VIA ZOOM VIDEOCONFERENCE PLATFORM***

AGENDA

1. Centennial Beach, 225 Sheridan Road – 5:00 – 5:50 p.m.
 - a. View Breakwater/Planting Pocket Draft Workshop concept (rope line)
 - b. Public Comments and Questions Regarding Lakefront Breakwater Design

2. Lloyd Beach, 799 Sheridan Road – 6:00 – 6:50 p.m.
 - a. View Breakwater Structure – Compare Height to Centennial Beach Breakwater Design Options
 - b. Public Comments and Questions Regarding Lakefront Breakwater Design

3. Hubbard Woods School Auditorium, 1110 Chatfield Road – 7:00 – 9:00 p.m.
 - a. Remarks from Visitors
 - b. Presentation of Workshop Draft of Elder Lane + Centennial Beach Breakwater Design Proposal**
 - c. Public Comments and Questions Regarding Lakefront Breakwater Design

4. Adjournment

***Zoom participation instructions**

Please note the portions of the workshop held at Centennial Beach and Lloyd Beach will not be video or audio recorded. To participate via the Zoom software, sign in and enter Meeting ID #894 5819 5715 and Passcode #868929. To participate via phone, call +1.312.626.6799 and use the same meeting number and passcode.

****Items included in packet**

Winnetka Park District

Board Summary

Date: July 8, 2022
To: Board of Commissioners
Subject: Lakefront Workshop, Elder & Centennial Breakwater Project
From: Costa Kutulas, Director of Parks and Maintenance
Thru: John Peterson, Executive Director

Summary:

In an effort to improve the previous Elder Lane + Centennial Breakwater Project plan, Park District staff worked in conjunction with the Lakota Group to adjust the original design to include as many elements put forth by the community during open houses, board meetings, comments received from the IDNR permit process, etc. In doing so, the following items were included in the “workshop draft” to try and adjust the original design, including: riparian access north and south, un-obstructed views of the lake, no louvers, minimize the size of the structures when possible, and no plantings which could obstruct the views of the lake.

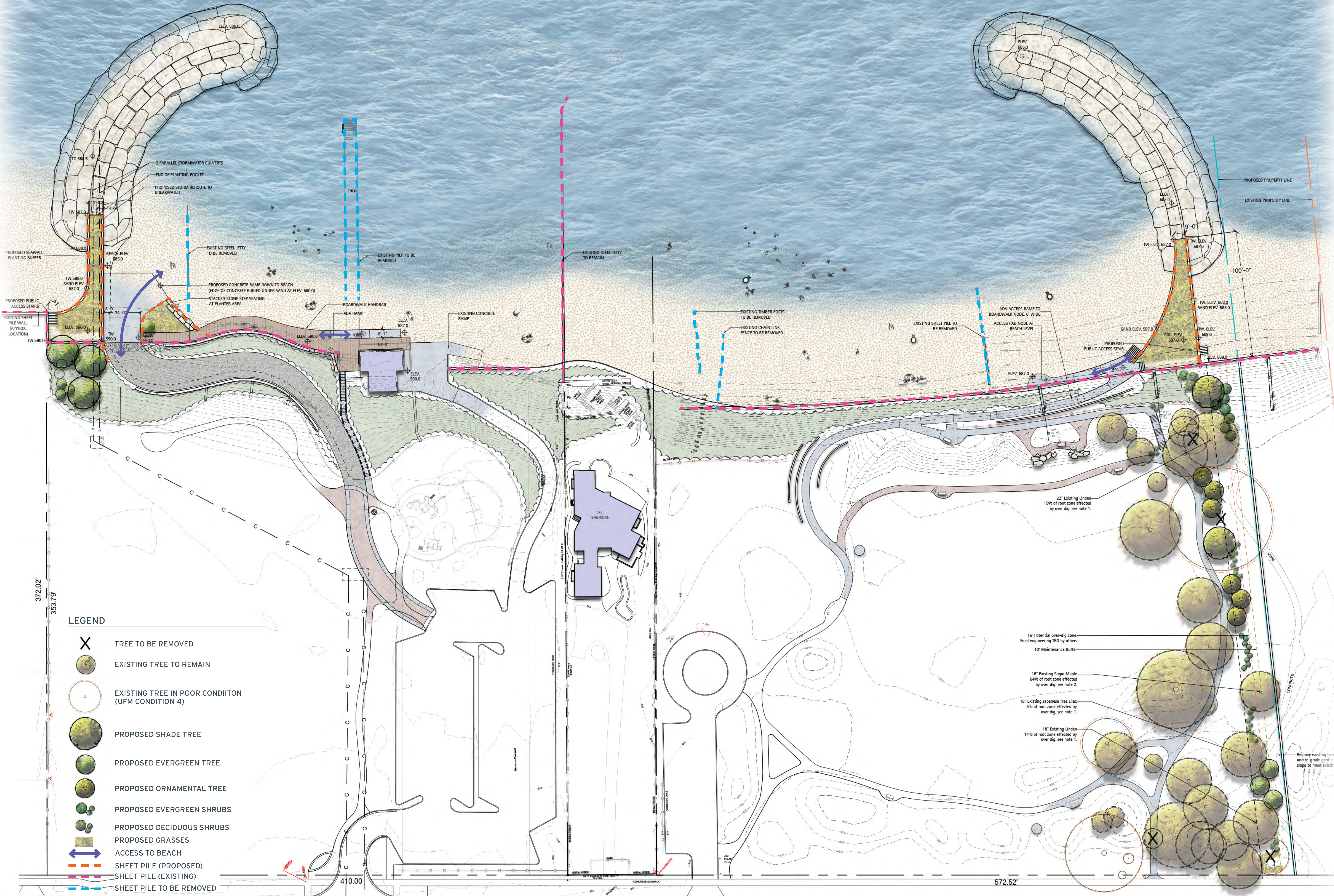
The following documents labeled “Elder Centennial Overall Plan – Workshop Draft” and “Elder Centennial South Elevation – Workshop Draft” are being provided as a base plan to help facilitate the workshop discussion. Again, these “workshop draft” documents are the result of collaboration between Winnetka Park District staff and the Lakota Group. We invite anyone to please come to the Lakefront Workshop Monday, July 18, with ideas and concepts to help drive the project to become the best beach on the north shore.

Workshop participants will be given the opportunity to present their concept/ideas during the third session of the Special Board Meeting which is being held at Hubbard Woods School. The site meetings at Centennial Beach (5pm) and Lloyd Beach (6pm) are to help residents visualize the proposed planting pocket in a live setting with rope to illustrate the proposed Centennial Planting Pocket vs. the as-built stone breakwater at Lloyd Beach. These ropes will be in place on Monday July 11th at both sites leading up to the July 18th Lakefront Workshop Meeting.

We’re excited to listen and hear the community’s ideas and thoughts as we continue to design what could be the best beach on the north shore.

END

LAKE MICHIGAN

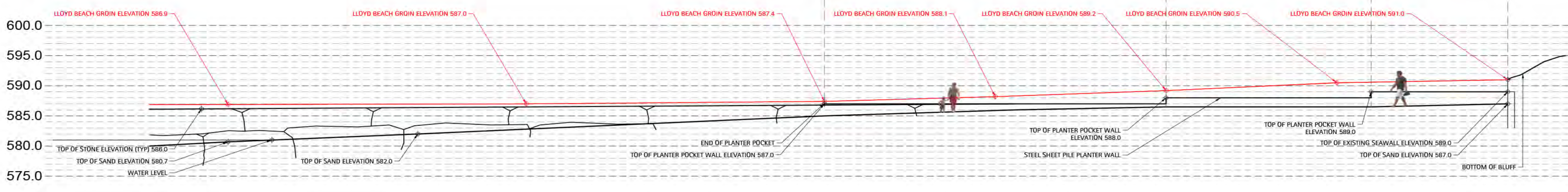
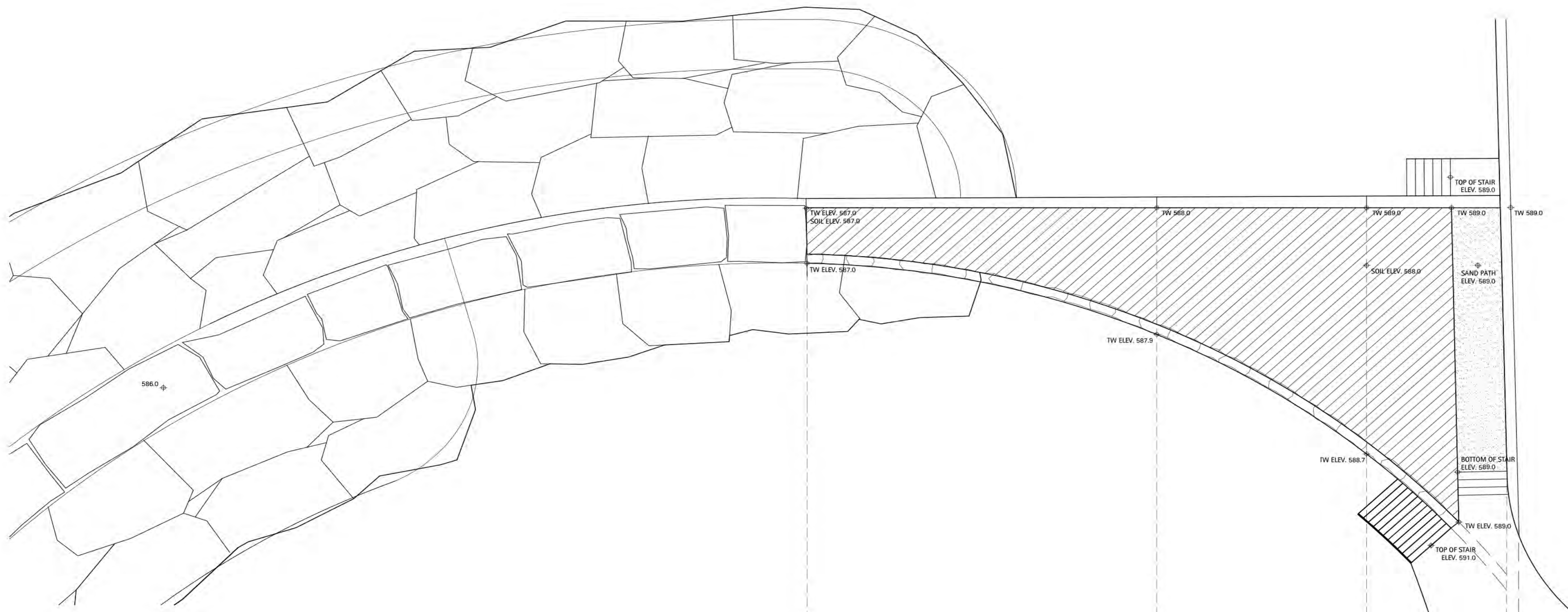


LEGEND

- TREE TO BE REMOVED
- EXISTING TREE TO REMAIN
- EXISTING TREE IN POOR CONDITION (UFM CONDITION 4)
- PROPOSED SHADE TREE
- PROPOSED EVERGREEN TREE
- PROPOSED ORNAMENTAL TREE
- PROPOSED EVERGREEN SHRUBS
- PROPOSED DECIDUOUS SHRUBS
- PROPOSED GRASSES
- ACCESS TO BEACH
- SHEET PILE (PROPOSED)
- SHEET PILE (EXISTING)
- SHEET PILE TO BE REMOVED

- 15' Potential over-dig zone—Final engineering TBD by others
- 10' Maintenance Buffer
- 18' Existing Sugar Maple—64% of root zone effected by over dig, see note 2
- 18' Existing Japanese Tree Lilac—5% of root zone effected by over dig, see note 1
- 18' Existing Linden—14% of root zone effected by over dig, see note 1
- Remove existing berm and re-grade gentle slope to meet existing

SHERIDAN ROAD





JULY 18, 2022 | 5 - 9PM




Lakefront Workshop

5pm Centennial Beach | 6pm Lloyd Beach | 7pm Hubbard Woods School



Centennial Beach South Breakwater Rope Line*

*only showing first 50' of the proposed plan; current lake conditions don't allow staff to extend rope further into the water

-  **TOP OF PROPOSED CENTENNIAL SAND ELEVATION: 587' tapering into lake**
-  **TOP OF PLANTER POCKET WALL ELEVATION: 589' to 587'**
-  **TOP OF LLOYD BEACH STONE ELEVATION: 591' to 586'**



JULY 18, 2022 | 5 - 9PM

Lakefront Workshop

5pm Centennial Beach | 6pm Lloyd Beach | 7pm Hubbard Woods School



Lloyd Beach South Breakwater Rope Line



TOP OF LLOYD SAND ELEVATION: 587' (proposed Centennial beach similar)



TOP OF PLANTER POCKET WALL ELEVATION: 589' to 587'



TOP OF PROPOSED CENTENNIAL BEACH STONE ELEVATION: 587' to 586'

(Top of Lloyd Beach stone elevation is 591' to 586')

WINNETKA WATERFRONT 2030

A Community Vision for the Winnetka Lakefront



7/15

Elder Lane Park & Beach and Centennial Park & Beach

Elder Lane and Centennial Park and Beach and Park anchor the southern end of the Winnetka lakefront system. While each of these lakefront parks is an individual park, they are discussed in this Master Plan as a symbolic whole. The Master Plan seeks to explore ways to combine these two special open space and lakefront areas to maximize both community open space and opportunities for passive and active recreation and programming. While this discussion describes initiatives and projects that may be undertaken at each of these two parks, the District should strive to a long-term goal of bridging the gap between the two parks by purchasing the single-family home and property between the two. While it is understandably difficult for the District to prioritize such a costly purchase in the short term, in the long term acquiring some or all of this property would unlock tremendous potential to create a southern hub to Winnetka's lakefront. This strategic purchase would allow the district to create new continuity of programming for both active and passive users, provide better circulation and parking, and add a new seasonal facility for rental, programs and potential dining that would be revenue-generating.



Illustration of proposed improvements at Centennial Park and Beach

Coupled with this long-term vision is an improved shoreline/beachfront developed around new breakwater groin facilities. These facilities illustrated in the plan and renderings seek to stabilize and enlarge beachfront sand areas and support enhanced programming and a more clear separation of beachfront uses or zones. The Master Plan seeks to enhance Elder Lane Park and Beach into the “Southern hub” of the waterfront trail system and a second non-motorized watercraft beach. A part of this long-term goal the District should also explore reuse of Centennial Park and Beach or a portion thereof to a dedicated southern hub swimming beach.

Some of these long-term goals can be implemented individually and over time without acquisition of the single family property. Similarly the Master Plan envisions that no changes will be made to the current Dog Beach use at Centennial Park and Beach within the short term horizon. As noted earlier in this plan, the District should monitor community pet owner needs and trends and determine if future pet recreation needs are best met with a dedicated dog beach or through another large open space opportunity elsewhere in the village. More specifically, a number of smaller initiatives and projects are identified for each of these two parks which improve the quality of the spaces, enhance environmentally systems and activate recreation opportunities.



Illustration of proposed improvements at Elder Lane Park and Beach



IMPROVEMENTS WITHOUT PROPERTY ACQUISITION - PHASE 1

- A** Rubble-mound breakwater structure
- B** Stormwater management improvements
- C** Secure non-motorized water craft storage
- D** Existing boat house improvements
- E** Boardwalk improvements
- F** Vehicular circulation improvements and retaining walls
- G** New sheet-pile groin
- H** Bluff restoration
- I** Nature based play area
- J** Construct a new upper-level restroom building



- A** Rubble-mound breakwater structure
- B** Stormwater management improvements
- C** Secure non-motorized water craft storage
- D** Existing boat house improvements
- E** Boardwalk improvements
- F** Dune landscape restoration
- G** Bluff restoration
- H** Expand surface parking
- I** Nature based play area
- J** Construct a new upper-level restroom building
- K** Vehicular circulation improvements and retaining walls
- L** Lifeguard stations
- M** New sheet-pile groin
- N** Renovate single-family home into new beachfront event space
- O** New beach house

Elder Lane Park & Beach: Program & Site Improvements Matrix

0 - \$250,000 \$\$\$\$\$\$
 \$250,000 - \$500,000 \$\$\$\$\$\$
 \$500,000 - \$1,000,000 \$\$\$\$\$\$
 \$1,000,000 - \$3,000,000 \$\$\$\$\$\$
 \$3,000,000 - \$5,000,000 \$\$\$\$\$\$
 \$5,000,000 + \$\$\$\$\$\$

"LAC Priority? (1 = highest priority)	Supports plan goals?		Cost (construction, soft costs)
Elder Program and Operations Improvements			
1	✓	Dedicate north half of beach as non-motorized boating beach	\$\$\$\$\$
1	✓	Establish partnerships for environmental educational programming	\$\$\$\$\$
2	✓	Dedicate full beach as non-motorized boating beach	\$\$\$\$\$
2	✓	Expand program offerings and partnerships with local rowing / sailing clubs	\$\$\$\$\$
2	✓	Provide a rental program for non-motorized boats and paddle boards	\$\$\$\$\$
Elder General Site Improvements			
1	✓	Sign program implementation (allowance)	\$\$\$\$\$
1	✓	Site furnishing and lighting program implementation (allowance)	\$\$\$\$\$
1	✓	Stormwater management improvements Constructed wetland Storm sewer improvements	\$\$\$\$\$



Non-motorized boating beach.



Nature education.

Grant opportunity?	Partnership opportunity?	Revenue generator?	"Level of effort"	Dependent on shoreline improvements?	Notes
✓	✓		low		Interim plan
✓	✓		low		
✓	✓		low	✓	
	✓	✓	low		
	✓	✓	medium		Partnership with private operator, local preference
✓			low		May be eligible for ICMP Sustainable Coastal Planning Grant, Illinois Transportation Enhancement Program (ITEP) funding*
✓			low medium		[WPD Operational budget item] Requires partnership with Village.

*Grant source funded by State of Illinois



Partner with local rowing / sailing clubs.



Stormwater management improvements.

Centennial Park & Beach: Program & Site Improvements Matrix

0 - \$250,000 \$\$\$\$\$\$
 \$250,000 - \$500,000 \$\$\$\$\$\$
 \$500,000 - \$1,000,000 \$\$\$\$\$\$
 \$1,000,000 - \$3,000,000 \$\$\$\$\$\$
 \$3,000,000 - \$5,000,000 \$\$\$\$\$\$
 \$5,000,000 + \$\$\$\$\$\$

"LAC Priority? (1 = highest priority)	Supports plan goals?		Cost (construction, soft costs)
Centennial Program and Operations Improvements			
1	✓	Property acquisition	\$\$\$\$\$\$
1	✓	Dedicate beach as swimming beach	\$\$\$\$\$
Centennial General Site Improvements			
1	✓	Sign program implementation (allowance)	\$\$\$\$\$
1	✓	Site furnishing and lighting program implementation (allowance)	\$\$\$\$\$



Single family property acquisition possibility.

Grant opportunity?	Partnership opportunity?	Revenue generator?	"Level of effort"	Dependent on shoreline improvements?	Notes
✓	✓		high		
✓	✓		medium		Requires relocation of dog run to alternate open space within the Village
✓			low		May be eligible for ICMP Sustainable Coastal Planning Grant, Illinois Transportation Enhancement Program (ITEP) funding*
			low		[WPD Operational budget item]

*Grant source funded by State of Illinois



Dedicate as swimming beach.

Elder Lane Park & Beach: Shoreline Improvements Matrix

- 0 - \$250,000 \$\$\$\$\$\$
- \$250,000 - \$500,000 \$\$\$\$\$\$
- \$500,000 - \$1,000,000 \$\$\$
- \$1,000,000 - \$3,000,000 \$\$\$
- \$3,000,000 - \$5,000,000 \$\$\$
- \$5,000,000 + \$\$\$

"LAC Priority? (1 = highest priority)	Supports plan goals?	Elder Shoreline Improvements	Cost (construction, soft costs)
1	✓	<ul style="list-style-type: none"> Rubble-mound breakwater structure Remove existing stormwater outfall and pier Remove sheet pile groins Back-shore rubble-mound revetment Beach sand backfill 	\$\$\$



Example of stone breakwater structure.

Grant opportunity?	Partnership opportunity?	Revenue generator?	"Level of effort"	Dependent on shoreline improvements?	Notes
✓			high		PH 1 (north property line); includes minimum amount of shoreline structure required to replace existing structures, maintain beach and protect constructed improvements; requires sensitivity to aesthetics of structure; may be eligible for Great Lakes Fishery and Ecosystem Restoration (GLFER) Program funding (US Army Corps of Engineers); requires federal, state, and local permitting

*Grant source funded by State of Illinois



Example of a protected pocket beach.

Centennial Park & Beach: Shoreline Improvements Matrix

0 - \$250,000 \$\$\$\$\$\$
 \$250,000 - \$500,000 \$\$\$\$\$\$
 \$500,000 - \$1,000,000 \$\$\$
 \$1,000,000 - \$3,000,000 \$\$\$
 \$3,000,000 - \$5,000,000 \$\$\$
 \$5,000,000 + \$\$\$

"LAC Priority? (1 = highest priority)	Supports plan goals?		Cost (construction, soft costs)
Centennial Shoreline Improvements			
1	✓	Rubble-mound breakwater structure - Phase 1 improvement Remove sheet pile groins Back-shore rubble-mound revetment Beach sand backfill	\$\$\$\$\$
1	✓	New sheet-pile groin	\$\$\$\$\$
2	✓	Rubble-mound breakwater structure Remove sheet pile groins Back-shore rubble-mound revetment Beach sand backfill	\$\$\$\$\$



Example of stone breakwater structure and native bluff plantings.

Grant opportunity?	Partnership opportunity? Revenue generator?	"Level of effort"	Dependent on shoreline improvements?	Notes
✓		high		Phase 1 (south property line); includes minimum amount of shoreline structure required to replace existing structures, improve beach and protect constructed improvements; requires sensitivity to aesthetics of structure; may be eligible for Great Lakes Fishery and Ecosystem Restoration (GLFER) Program funding (US Army Corps of Engineers); requires federal, state, and local permitting
✓		high		Phase 1 (north property line); includes minimum amount of shoreline structure required to replace existing structures, improve beach and protect constructed improvements; requires sensitivity to aesthetics of structure; may be eligible for Great Lakes Fishery and Ecosystem Restoration (GLFER) Program funding (US Army Corps of Engineers); requires federal, state, and local permitting
✓		high		Phase 2 (north property line); dependent on property acquisition; includes minimum amount of shoreline structure required to improve beach and protect constructed improvements; requires sensitivity to aesthetics of structure; may be eligible for Great Lakes Fishery and Ecosystem Restoration (GLFER) Program funding (US Army Corps of Engineers); requires federal, state, and local permitting



Example of stone breakwater structure and dune landscape.

Elder Lane Park & Beach: Beach Improvements Matrix

0 - \$250,000 \$\$\$\$\$\$
 \$250,000 - \$500,000 \$\$\$\$\$\$
 \$500,000 - \$1,000,000 \$\$\$\$\$\$
 \$1,000,000 - \$3,000,000 \$\$\$\$\$\$
 \$3,000,000 - \$5,000,000 \$\$\$\$\$\$
 \$5,000,000 + \$\$\$\$\$\$

"LAC Priority? (1 = highest priority)	Supports plan goals?		Cost (construction, soft costs)
Elder Beach Improvements			
1	✓	Dune landscape restoration	\$\$\$\$\$
1	✓	Secure non-motorized water craft storage area (includes paving, racks)	\$\$\$\$\$
1	✓	Water trail stop	\$\$\$\$\$
1	✓	Boardwalk improvements (10' width)	\$\$\$\$\$



Dune landscape restoration.

Grant opportunity?	Partnership opportunity?	Revenue generator?	"Level of effort"	Dependent on shoreline improvements?	Notes
✓	✓		low		Restoration projects may be eligible for Great Lakes Restoration Initiative grants (USEPA), National Fish and Wildlife Foundation grants, US Fish and Wildlife grants, Great Lakes Fishery and Ecosystem Restoration (GLFER) Program; Garden club / volunteer steward partnership opportunity
		✓	low		[WPD Operational budget item]
✓	✓		low		
			low		[WPD Operational budget item]

*Grant source funded by State of Illinois



Water trail stop signage or kiosk.



Non-motorized boat storage.

Centennial Park & Beach: Beach Improvements Matrix

0 - \$250,000 \$\$\$\$\$\$
 \$250,000 - \$500,000 \$\$\$\$\$\$
 \$500,000 - \$1,000,000 \$\$\$\$\$\$
 \$1,000,000 - \$3,000,000 \$\$\$\$\$\$
 \$3,000,000 - \$5,000,000 \$\$\$\$\$\$
 \$5,000,000 + \$\$\$\$\$\$

"LAC Priority? (1 = highest priority)	Supports plan goals?		Cost (construction, soft costs)
Centennial Beach Improvements			
1	✓	Dune landscape restoration	\$\$\$\$\$
1	✓	Lifeguard stations	\$\$\$\$\$
3	✓	Boardwalk improvements (10' width)	\$\$\$\$\$



Example of an established dune landscape.

Grant opportunity?	Partnership opportunity? Revenue generator?	"Level of effort"	Dependent on shoreline improvements?	Notes
✓	✓	low		Restoration projects may be eligible for Great Lakes Restoration Initiative grants (USEPA), National Fish and Wildlife Foundation grants, US Fish and Wildlife grants, Great Lakes Fishery and Ecosystem Restoration (GLFER) Program; Garden club / volunteer steward partnership opportunity
✓		low		Standard for lifeguard stations to be defined as part of site furnishing standards
✓		low		[WPD Operational budget item]

*Grant source funded by State of Illinois



New boardwalk improvements.

Elder Lane Park & Beach: Park Land Improvements Matrix

0 - \$250,000 \$\$\$\$\$\$
 \$250,000 - \$500,000 \$\$\$\$\$\$
 \$500,000 - \$1,000,000 \$\$\$\$\$\$
 \$1,000,000 - \$3,000,000 \$\$\$\$\$\$
 \$3,000,000 - \$5,000,000 \$\$\$\$\$\$
 \$5,000,000 + \$\$\$\$\$\$

"LAC Priority? (1 = highest priority)	Supports plan goals?		Cost (construction, soft costs)
Elder Park Land Improvements (Tableland and Bluff)			
1	✓	Bluff restoration (selective clearing, planting, and erosion control)	\$\$\$\$\$\$
2	✓	Expand surface parking	\$\$\$\$\$\$



Bluff restoration program.

Grant opportunity?	Partnership opportunity?	Revenue generator?	"Level of effort"	Dependent on shoreline improvements?	Notes
✓	✓		low		Restoration projects may be eligible for Great Lakes Restoration Initiative grants (USEPA), National Fish and Wildlife Foundation grants, US Fish and Wildlife grants, Great Lakes Fishery and Ecosystem Restoration (GLFER) Program; Garden club / volunteer steward partnership opportunity
	✓	✓	low		Potential partnership opportunity with New Trier; revenue generation via New Trier parking permits

*Grant source funded by State of Illinois



Expand surface parking with naturalized landscape and best management practices.

Centennial Park & Beach: Park Land Improvements Matrix

0 - \$250,000 \$\$\$\$\$
 \$250,000 - \$500,000 \$\$\$\$\$
 \$500,000 - \$1,000,000 \$\$\$
 \$1,000,000 - \$3,000,000 \$\$\$
 \$3,000,000 - \$5,000,000 \$\$\$
 \$5,000,000 + \$\$\$

"LAC Priority?" (1 = highest priority)	Supports plan goals?		Cost (construction, soft costs)
Centennial Park Land Improvements (Tableland and Bluff)			
1	✓	Bluff restoration (selective clearing, planting, and erosion control)	\$\$\$\$\$
3	✓	Vehicular circulation improvements, retaining walls	\$\$\$\$\$



Example of an established native bluff and dune landscape.

Grant opportunity?	Partnership opportunity?	Revenue generator?	"Level of effort"	Dependent on shoreline improvements?	Notes
✓	✓		low		Restoration projects may be eligible for Great Lakes Restoration Initiative grants (USEPA), National Fish and Wildlife Foundation grants, US Fish and Wildlife grants, Great Lakes Fishery and Ecosystem Restoration (GLFER) Program; Garden club / volunteer steward partnership opportunity
			medium	✓	May be eligible for Open Space Land Acquisition and Development Grants (OSLAD)*

*Grant source funded by State of Illinois

Elder Lane Park & Beach: Facility Improvements Matrix

- 0 - \$250,000 \$\$\$\$\$
- \$250,000 - \$500,000 \$\$\$\$\$
- \$500,000 - \$1,000,000 \$\$\$\$\$
- \$1,000,000 - \$3,000,000 \$\$\$\$\$
- \$3,000,000 - \$5,000,000 \$\$\$\$\$
- \$5,000,000 + \$\$\$\$\$

"LAC Priority? (1 = highest priority)	Supports plan goals?		Cost (construction, soft costs)
Elder Park Facility Improvements (Buildings)			
3	✓	Existing beach house improvements Lakefront lab / classroom space Restrooms Event space Rental window / office	\$\$\$\$\$



Existing beach house improvements.

Grant opportunity?	Partnership opportunity?	Revenue generator?	"Level of effort"	Dependent on shoreline improvements?	Notes
✓	✓		low		

*Grant source funded by State of Illinois



Lakefront lab / classroom space and educational programming opportunities.

Centennial Park & Beach: Facility Improvements Matrix

0 - \$250,000 \$\$\$\$\$\$
 \$250,000 - \$500,000 \$\$\$\$\$\$
 \$500,000 - \$1,000,000 \$\$\$\$\$\$
 \$1,000,000 - \$3,000,000 \$\$\$\$\$\$
 \$3,000,000 - \$5,000,000 \$\$\$\$\$\$
 \$5,000,000 + \$\$\$\$\$\$

"LAC Priority? (1 = highest priority)	Supports plan goals?		Cost (construction, soft costs)
Centennial Park Facility Improvements (Buildings)			
2	✓	Construct a new upper-level restroom building	\$\$\$\$\$
2	✓	Renovate single-family home into new beachfront event space	\$\$\$\$\$
3	✓	New beach house (concessions, bathrooms, showers, lifeguard office, storage)	\$\$\$\$\$



Example of a new upper level restroom facility.

Grant opportunity?	Partnership opportunity?	Revenue generator?	"Level of effort"	Dependent on shoreline improvements?	Notes
✓	✓	✓	high		Partnership with private operator, local preference
	✓	✓	high	✓	Partnership with private operator, local preference
✓		✓	low	✓	May be eligible for Open Space Land Acquisition and Development Grants (OSLAD)*

*Grant source funded by State of Illinois



Example of a new beach house.

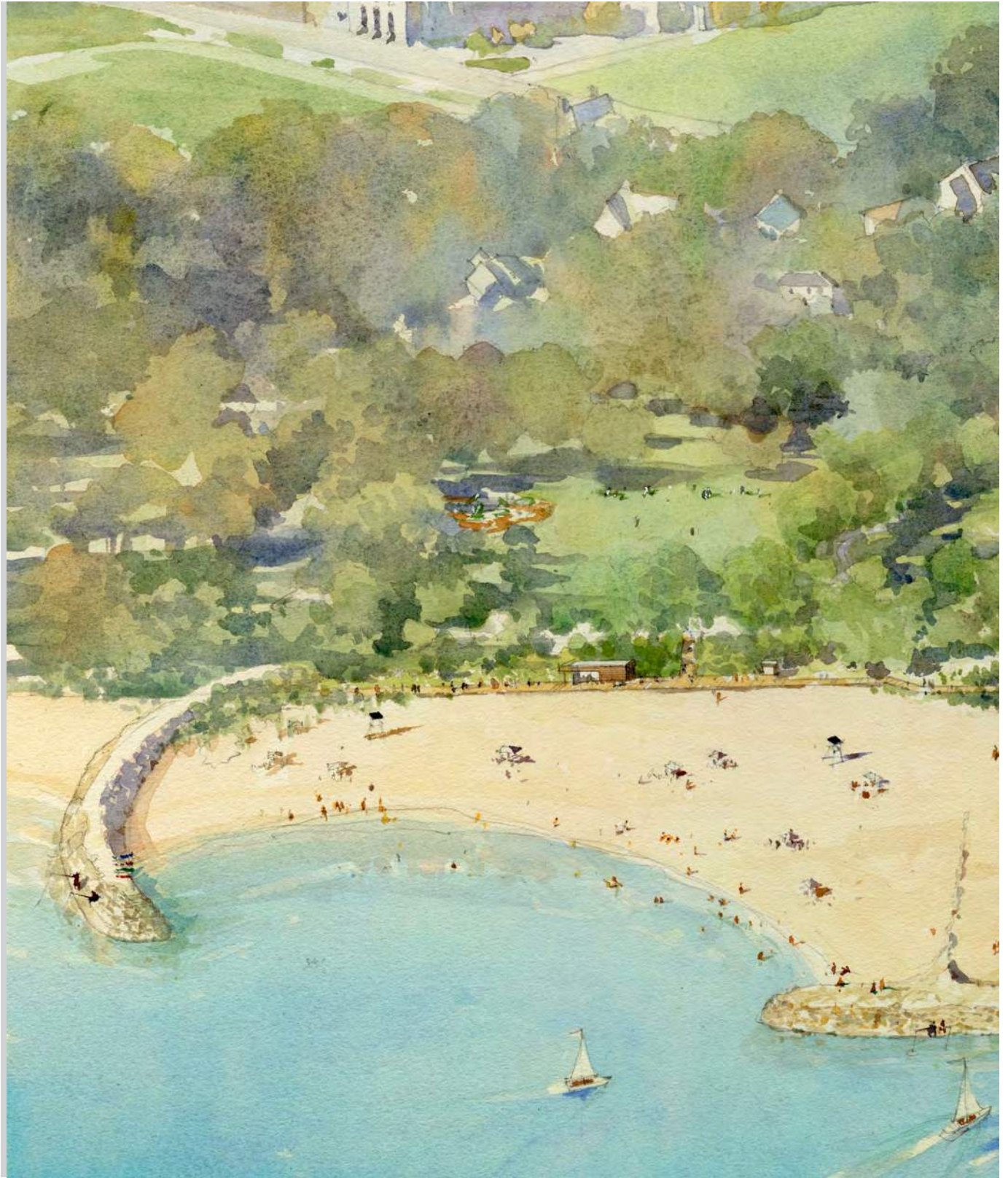
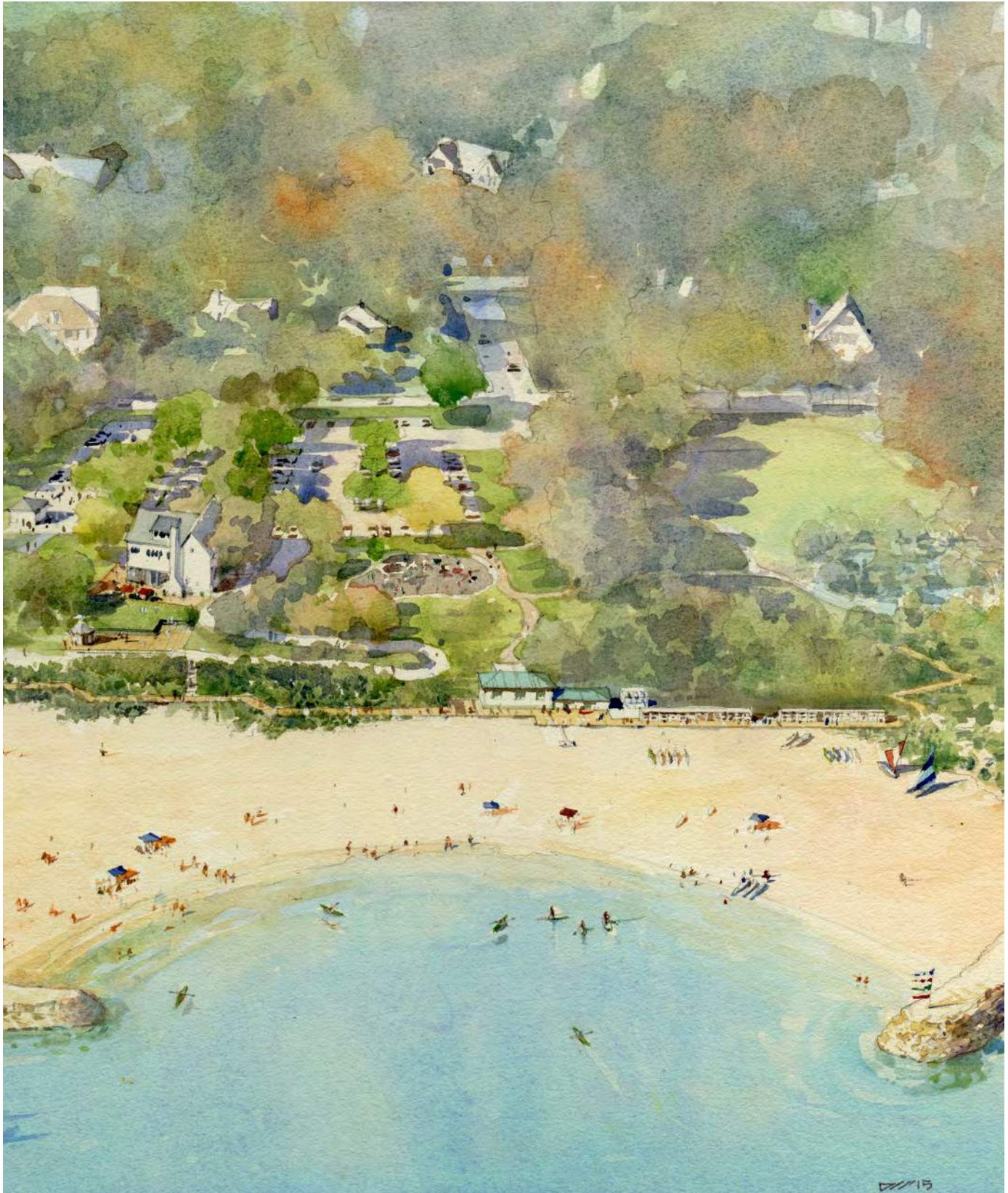


Illustration of proposed improvements at Centennial and Elder Lane Park and Beach



**Elder:
Program & Site
Improvements
Matrix**

Elder Lane Park and Beach			
Year 1 - 3	Year 3 - 5	Year 5 - 10	Year 10+
Evaluate property acquisition	Evaluate property acquisition	Evaluate property acquisition	Evaluate property acquisition
Dedicate north half of beach as non-motorized boating beach			
Establish partnerships for environmental educational programming			
Stormwater management improvements			
Partnerships with local rowing / sailing clubs			
Sign program implementation			
Site furnishing and lighting program implementation			
Bluff restoration (clear invasive herbaceous plants and trees)			
Dune landscape restoration			
Secure non-motorized water craft storage area			
	Water trail stop		
	Boardwalk improvements		
	Rubblemound breakwater structure		
		Provide a rental program for non-motorized boats and paddle boards	
		Partnerships for environmental programming	
		Expand surface parking	
			Existing boat house improvements
			Dedicate full beach as non-motorized boating beach



- A** Rubble-mound breakwater structure
- B** Stormwater management improvements
- C** Secure non-motorized water craft storage
- D** Existing boat house improvements
- E** Boardwalk improvements
- F** Dune landscape restoration
- G** Bluff restoration
- H** Expand surface parking
- I** Nature based play area

- J** Construct a new upper-level restroom building
- K** Vehicular circulation improvements and retaining walls
- L** Lifeguard stations
- M** New sheet-pile groin
- N** Renovate single-family home into new beachfront event space
- O** New beach house

**Centennial:
Program & Site
Improvements
Matrix**

Centennial Park and Beach			
Year 1 - 3	Year 3 - 5	Year 5 - 10	Year 10+
Bluff restoration			
Sign program implementation			
Site furnishing and lighting program implementation			
Dune landscape restoration			
	Dedicate beach as swimming beach		
	Lifeguard stations		
	Rubblemound breakwater structure		
	New sheet pile groin		
	Boardwalk improvements		
		Construct a new upper-level restroom building	
		Vehicular circulation improvements, retaining walls	
			Rubblemound breakwater structure
			Vehicular circulation improvements, retaining walls
			Renovate single-family home into new beachfront event space
			New beach house



- A** Rubble-mound breakwater structure
- B** Stormwater management improvements
- C** Secure non-motorized water craft storage
- D** Existing boat house improvements
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- F** Dune landscape restoration
- G** Bluff restoration
- H** Expand surface parking
- I** Nature based play area

- J** Construct a new upper-level restroom building
- K** Vehicular circulation improvements and retaining walls
- L** Lifeguard stations
- M** New sheet-pile groin
- N** Renovate single-family home into new beachfront event space
- O** New beach house

