

# Mirror Lake Waterfront Final Design



Placid Planning 2021



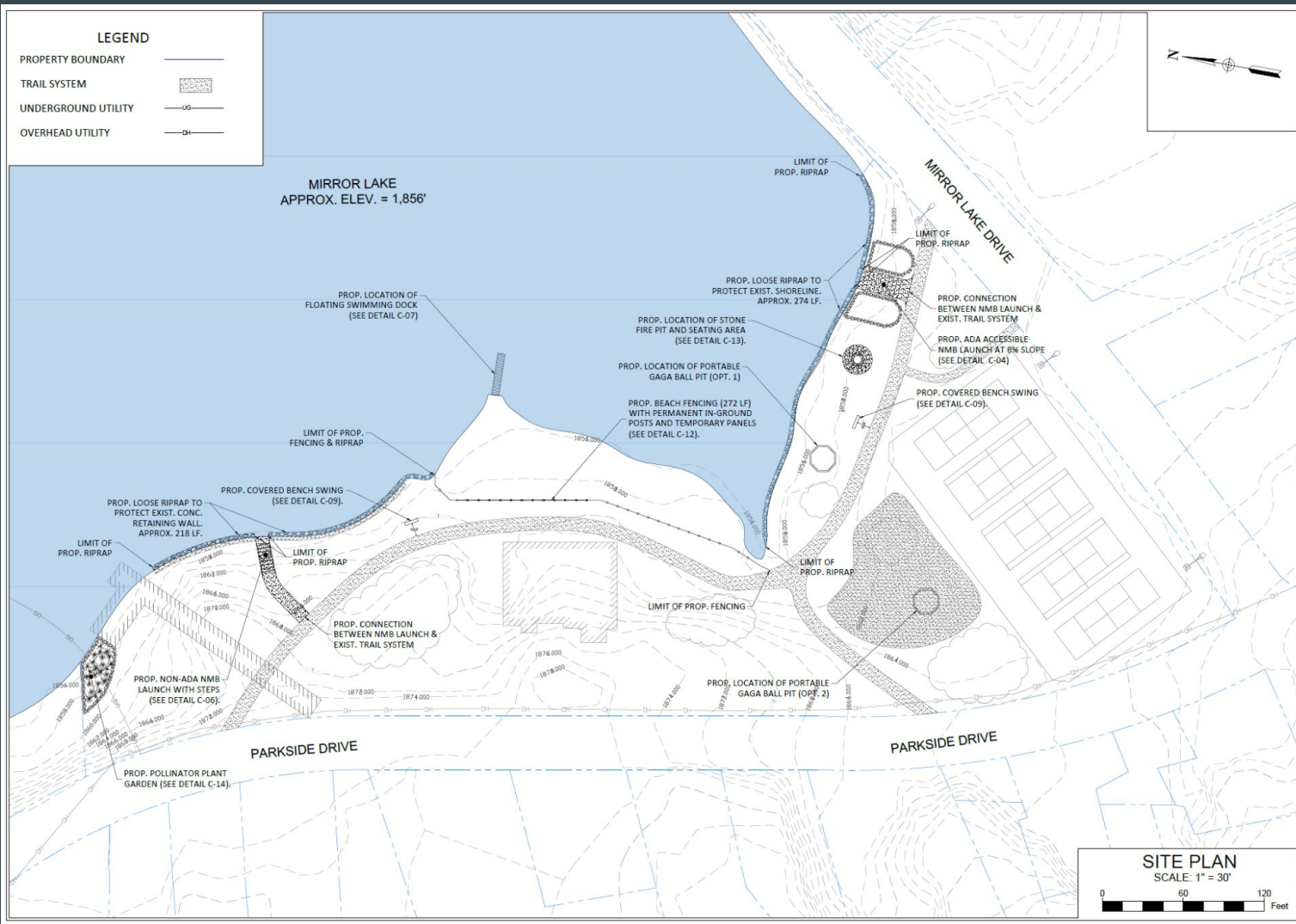
# Agenda

- Owner's Performance Requirements
- Final Design Plan:
  - Site Plan
  - Boat Launch
  - Dock
  - Fencing
  - Retaining Walls
  - Park Aesthetics

# Owner's Performance Requirements

- Revitalize shoreline along southern end of Mirror Lake
- Enhance visitor experience while maintaining views and natural landscape
- Make Mirror Lake accessible to non-motor vehicles through boat launches
- Preserve and protect surrounding ecosystem
- Construct structures that will not impede events such as the Ironman
- Connect visitors with local artists
- Comprehensive, multi-year plan

# Site Plan



Designed	04/20
Drawn	DMH
Checked	

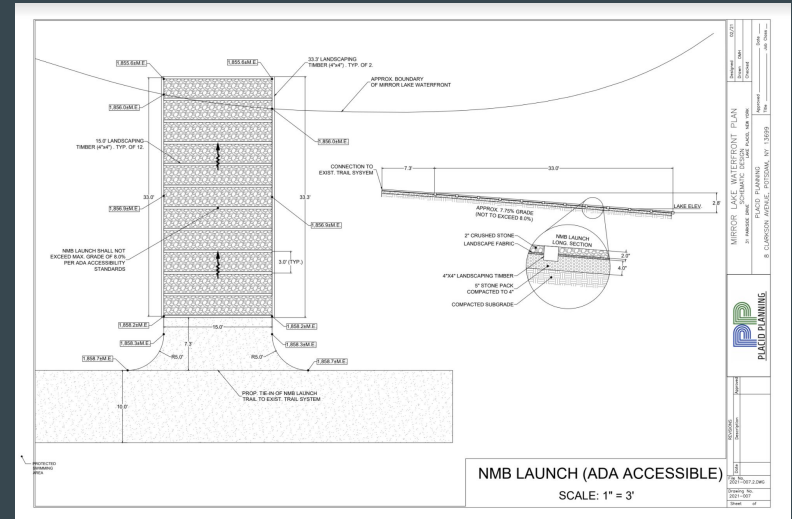
MIRROR LAKE WATERFRONT PLAN	Approved	Title
31 PARKSIDE DRIVE	PLACID PLANNING	LAKE PLACID, NEW YORK
8 CLARKSON AVENUE, POTSDDAM, NY 13699		



REVISIONS	Approval
Description	
Date	
File No.	2021-007.2.DWG
Drawing No.	2021-007
Sheet	C-03 of 14

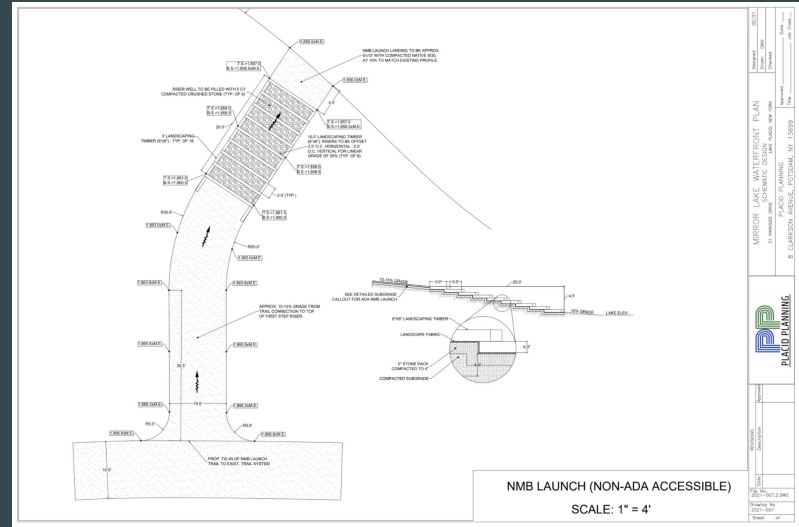
# ADA-Accessible NMB Launch

- Dimensions:
  - Length: 30.3 ft
  - Width: 15 ft
  - Depth: 7.75% grade, ~2.8 ft
  - Pathway Length to Existing Trail: 7.3 ft
- Features:
  - Less than the required 8% grade
  - 15 ft wide for a large capacity
  - Connection to existing trail for easy access
  - Crushed stone used to help prevent shore erosion
  - Location, width, & durability sufficient for occasional motor boat/trailer usage



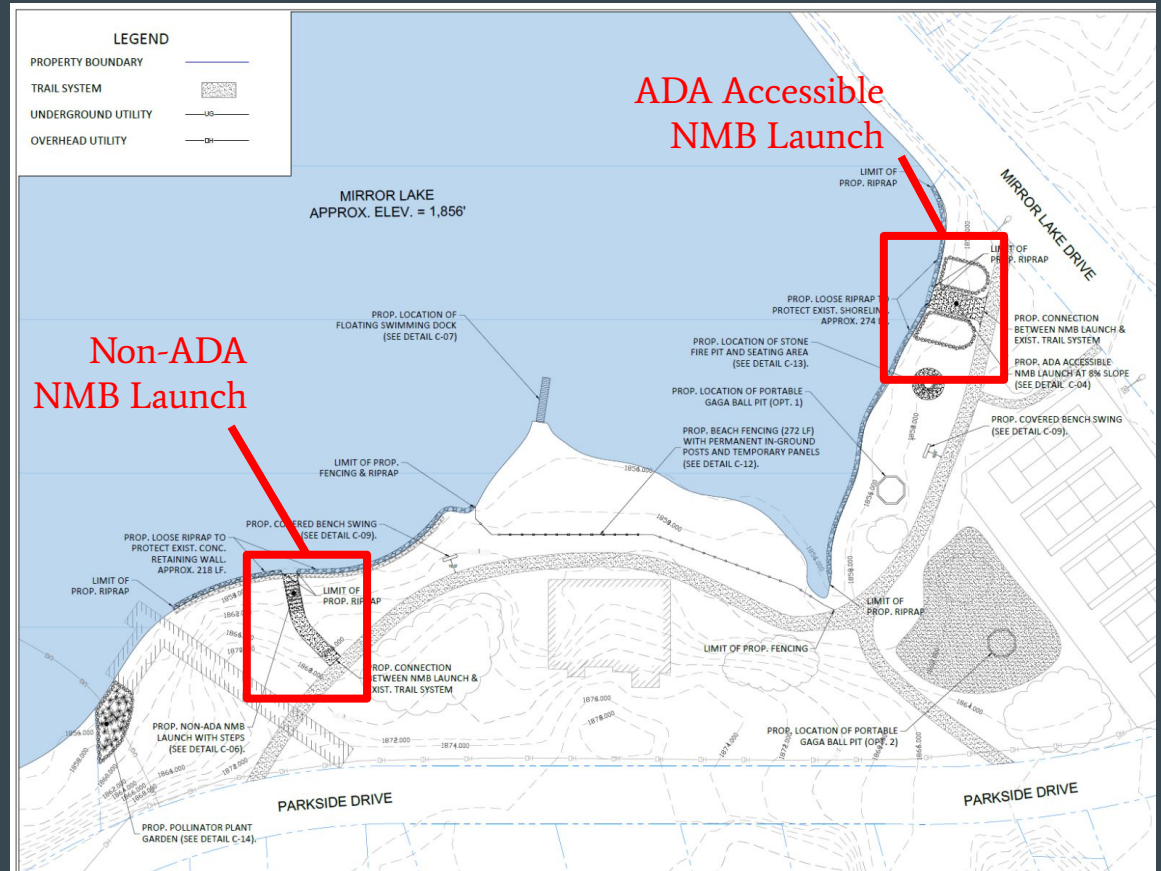
# Non-ADA NMB Launch

- Dimensions:
  - Length: 20 ft
  - Width: 10 ft
  - Depth: 10-15% grade, ~4 ft
  - Length of Landing at Bottom: 5ft
  - Pathway Length to Existing Trail: ~62ft
- Features:
  - Steeper slope and shorter length for a cheaper cost to help offset the cost of a longer path
  - Connection to existing trail for easy access
  - Crushed stone used to help prevent shore erosion
  - Proximity to existing canoe/kayak storage



# NMB Launch Locations

- Locations:
  - Chosen based on the correct shoreline grading, ease of access
  - Needs to be away from the swimming dock



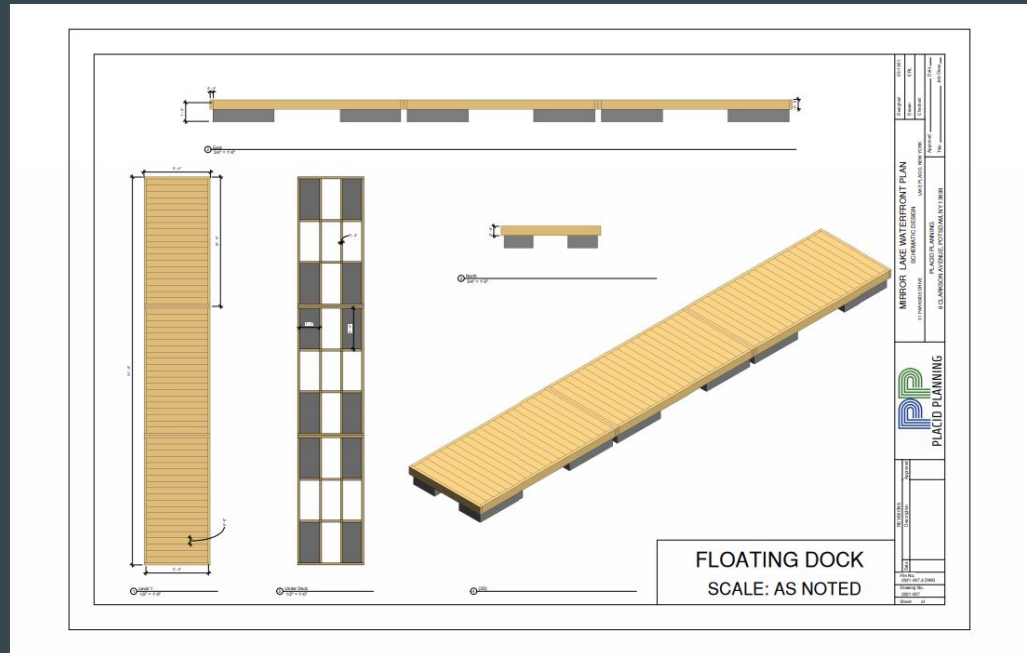
# Bill of Materials and Construction Schedule

<b>Boat Launch</b>	<b>121-123 days</b>	Non-ADA: \$5,340.00 ADA Accessible: \$2,827.00 Total: \$8,167.00	Cost is dependent on type of stone pathway used and total excavation time
Excavation	2-3 days		
Apply Crushed Stone	1 day		
Construct Timber Portion of Launch	100 - 120 days		
Lay Stone Pathway	1 day - 4 days		



# Dock

- Two design ideas
  - Decking and railing salvaged from the original but the foam was removed
  - Complete replacement
- Three 10 foot sections
- Various types of decking
- Removal of foam

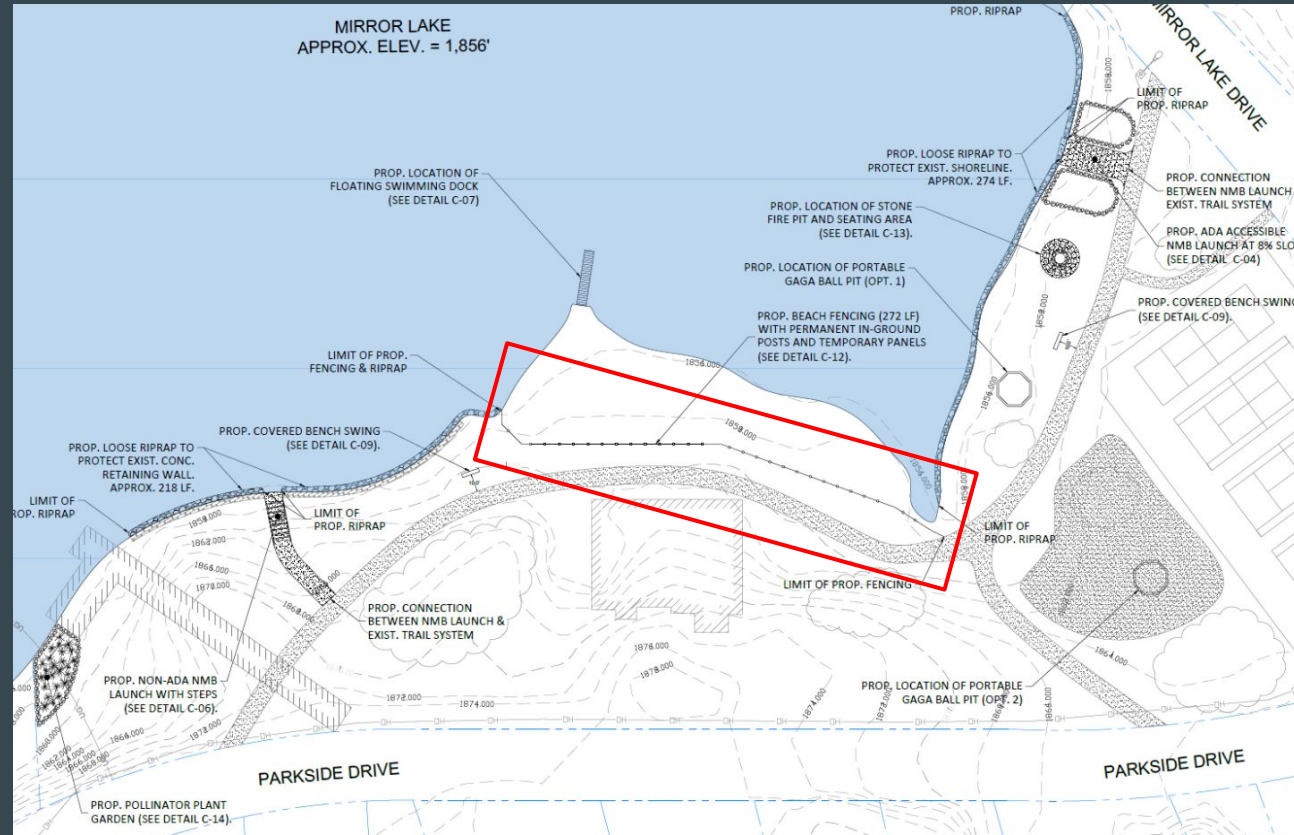


# Bill of Materials and Construction Schedule

<b>Dock</b>	5 days	\$1000-\$1400	Cost of raw materials
Dock removal	1 day		
Reinforce framing	2 days		Salvaging existing materials
Apply foam replacement	1 day		Labor cost contingent on contractor

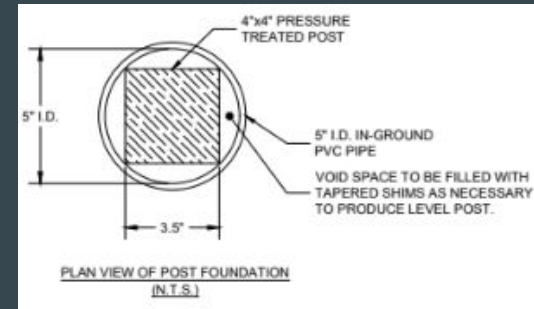
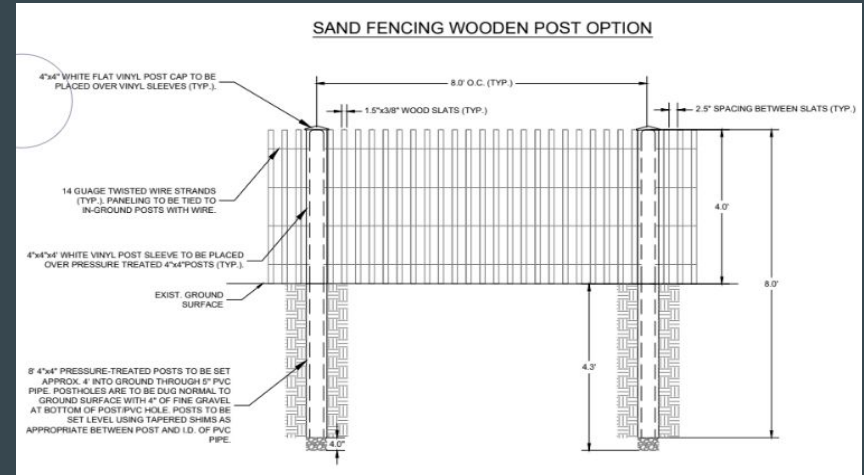
# Fencing

- Fencing will stretch through the beach from south of the dock to the outlet
  - approx. 285 ft
- Temporary to remove during winter months and events



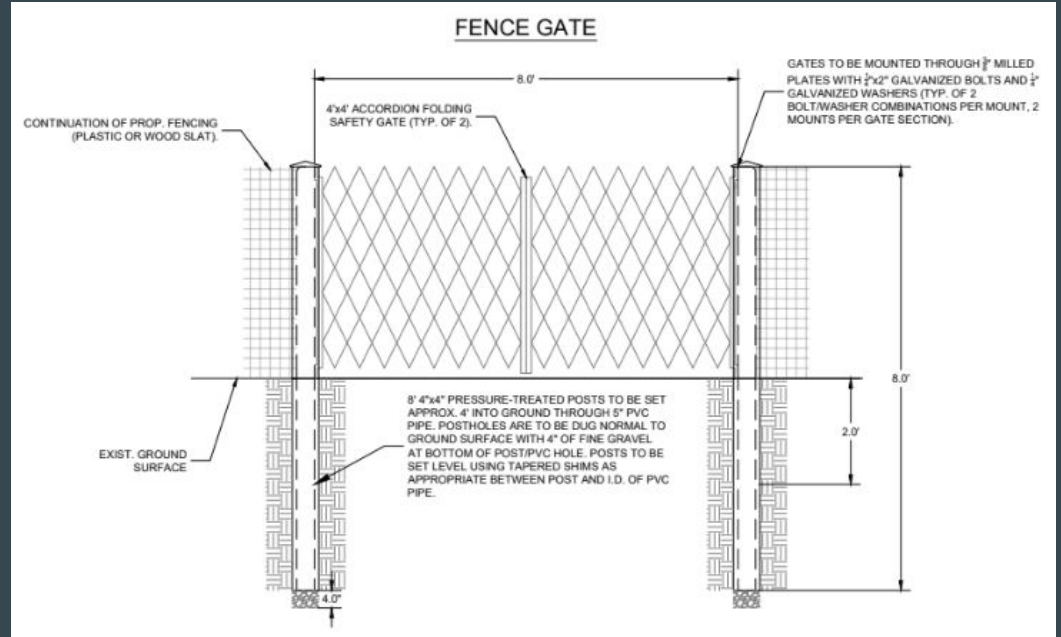
# Fencing

- Wood and Wire Fence
  - 4 ft wood and wire slat fence
  - 4 in x 4 in x 8 ft wooden posts with vinyl sleeves and caps
  - 5 in PVC pipe



# Fencing

- Gate available for both fence types
  - 4 ft x 4 ft safety gate
  - 4 in x 4 in x 8 ft wooden posts with vinyl sleeves and caps
  - 5 in PVC pipe



# Bill of Materials and Construction Schedule

<b>Fence</b>	2 days		
<i>Wood &amp; Wire Fence (approx. 285 ft)</i>		\$3077.22	Cost of raw materials
Drill holes into beach	1 day		
Install fence posts and body	1 day	\$1500-\$3000	Labor cost for complete fence installation depending on contractor



# Details of the Retention Wall

- Non-grouted rip rap
- Repair and reinforcement for the southern section
  - From the outlet to Mirror Lake Drive (approx. 274 ft)
- Addition of riprap to the northern wall
  - Begins at the toboggan chute and extends to the beach (approx. 218 ft)
  - Removable stairs
- Dimensions of the rip rap
- Acquisition of the permit



# Images of Retention Wall



Toboggan slide in the winter with temporary stairs over the wall



Part of the Northern wall under the toboggan slide



Wall on the tennis court side of the beach area

# Non-Grouted Retention Wall



Link: <https://wisconsinpws.com/shoreline-rip-rap/>



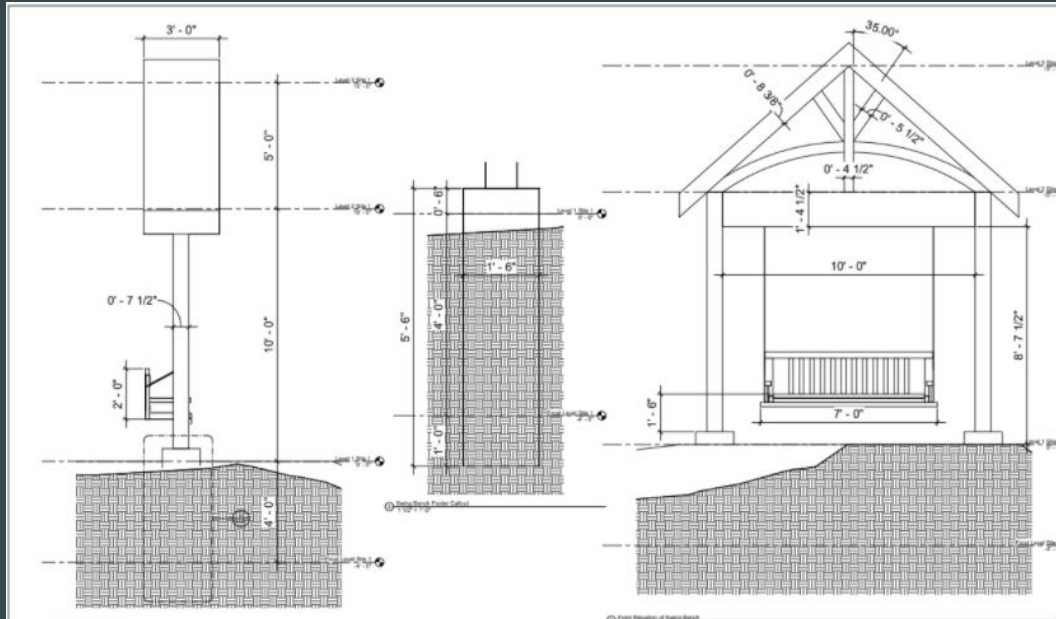
Link: <https://lakeshoreguys.com/decorative-border-riprap-shoreline/>

# Bill of Materials and Construction Schedule

			Approx. 2 weeks after contact with the contractor has been made
<b>Retaining Wall</b>	16 days	Non Grouted Rip Rap	
<i>South Wall (approx. 274 ft)</i>		\$840-1286	
Excavation/Repair	2 days		
Installation of Fabric	1 days		
Lay Rip Rap down	5 days		
<i>North Wall (approx. 218 ft)</i>		\$737-1139	
Excavation/Repair	2 days		
Installation of Fabric	1 day		
Lay Rip Rap down	5 days		

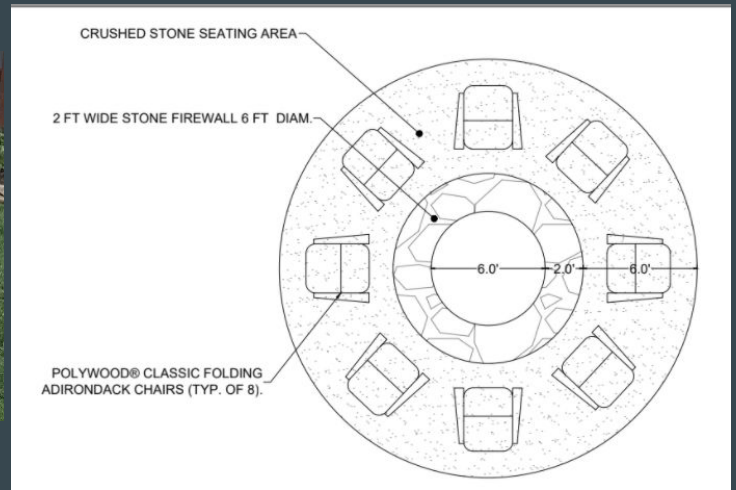
# Park Aesthetic: Swinging Benches

- Covered Structure is 5'6" long, 3' wide, 15' high
- Swing is 7' long, 2' tall
- Polywood

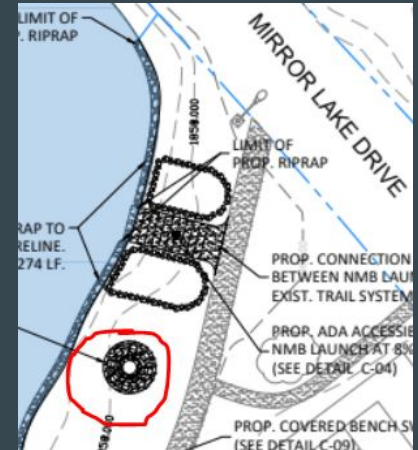
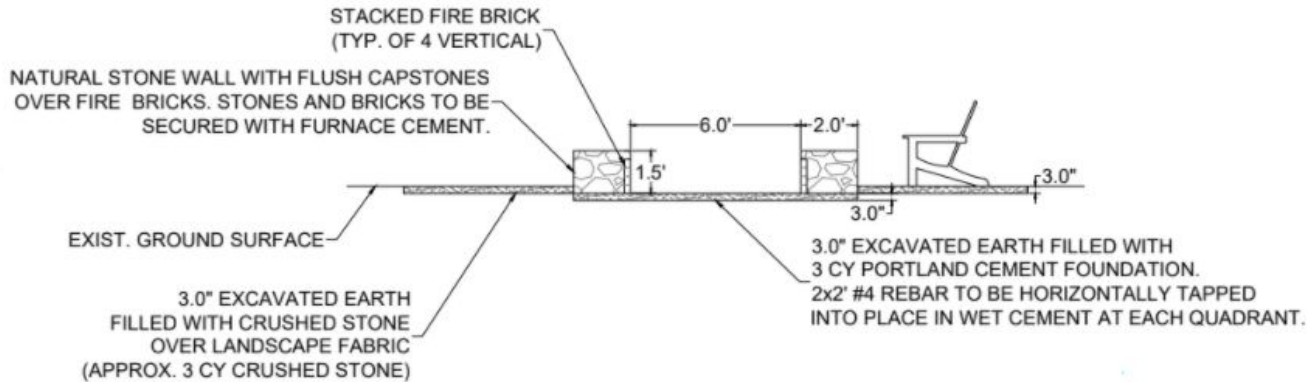


# Fire Pit

- 22' diameter
- Polystyrene ADK chairs

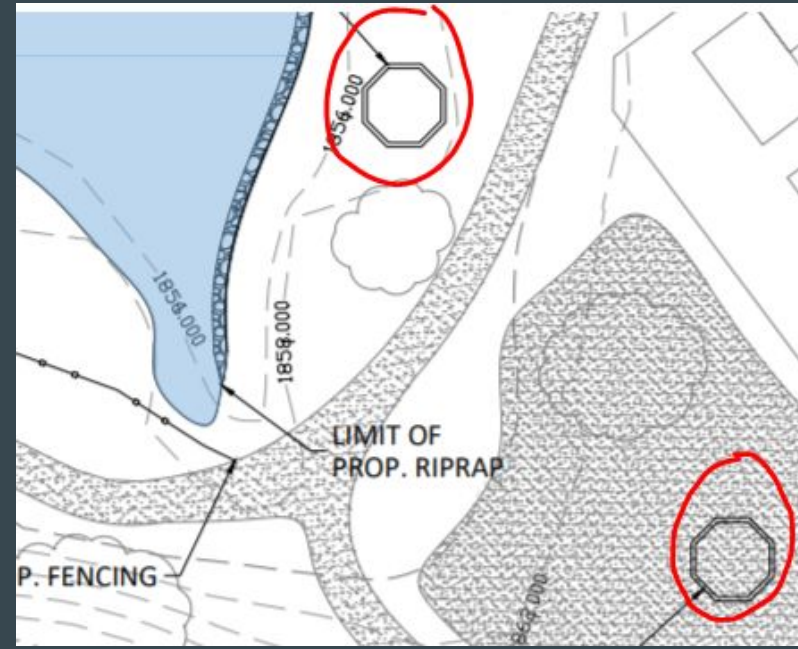


## FIRE PIT AND SEATING AREA PLAN VIEW



# Gaga Ball pit

- Recreational activity in park
- 8, 3'x8' removable plywood panels
- 20' diameter

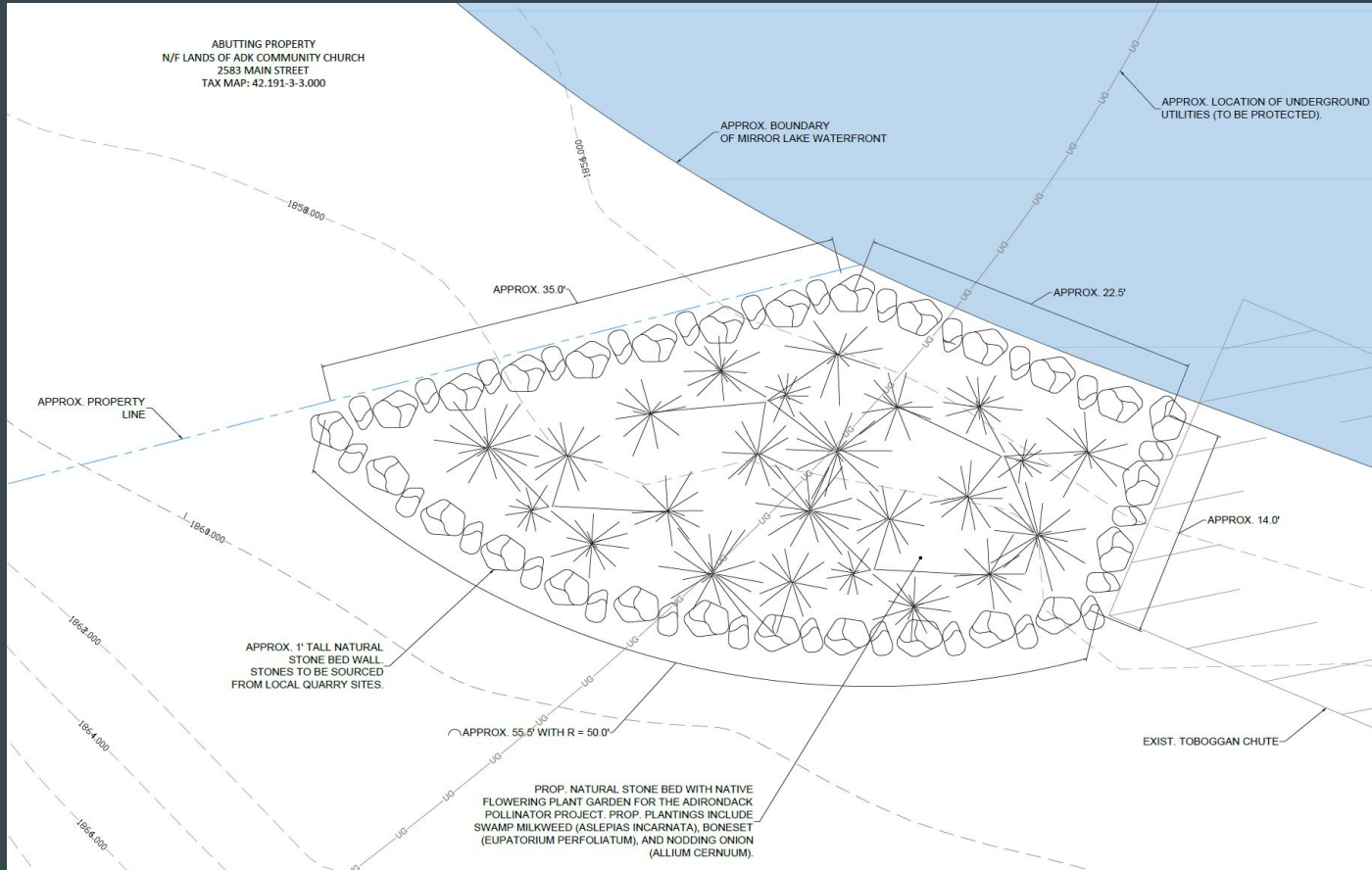


# Arts Alliance and Signage

- Kiosk to display art
  - Custom built for different sizes
- Educational signage around park
  - Invasive species, road salt, local history



# Pollinator Garden





# Pollinator Garden

Native plants tolerant to moist-wet soil, part-shade



Swamp Milkweed



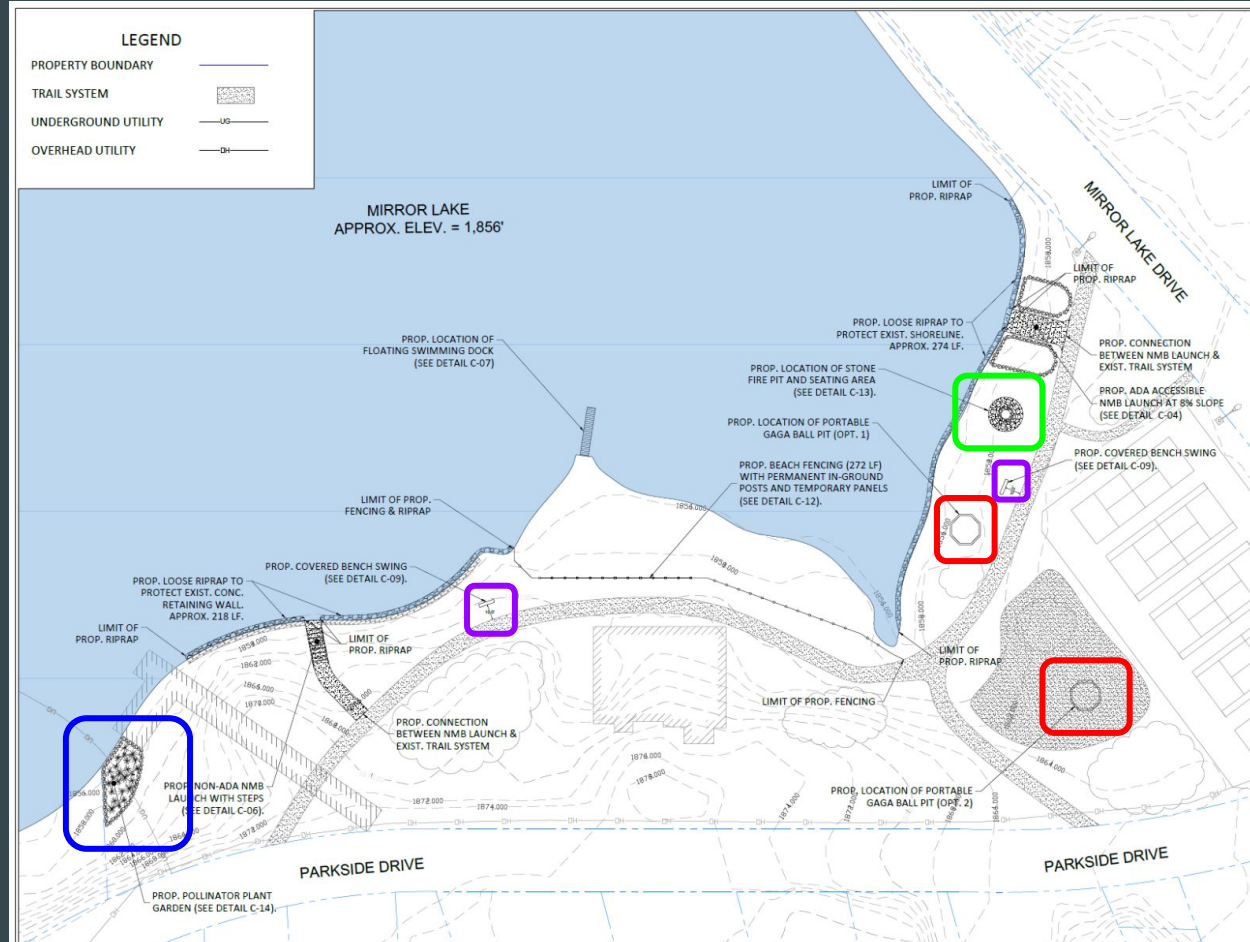
Boneset



Nodding Onion



# On Site Plan



# Bill of Materials and Construction Schedule

Park Aesthetic			
Project	Time for Completion	Cost	Notes
<b>Swinging Bench</b>	2 weeks total	\$953/chair	Rounded time up
Site Prep and Excavation	1 day		
Set Forms and Pour Concrete Foundations	1 day		
Cure Concrete to Half Strength	7 days		Can continue building bench and frame while concrete cures, but should not apply full weight right away
Assemble bench and swing frame	1 day		
Set frame and build roof	1 day		Only 55 sq ft of roof, so should be able to lay all the shingles in one day
<b>Adirondack Chair</b>	1 day for placement	\$239/chair	
<b>Fire Pit</b>	<b>1 week total</b>	\$3,820	
Clear Area	1 day		
Apply crushed stone cement foundation	1 day		
	4 days		
construct fire pit wall	1 day		
<b>Gaga Ball pit</b>	<b>3 days total</b>	\$80	
Clear Area	1 day		
Construct panels	2 days		
<b>Kiosk assembly</b>	1 day total	\$3,400	
<b>Polinator Garden</b>	<b>3 days</b>	\$2,614.65	
Clear area and apply soil	1 day		
Set stone wall	1 day		
Plant plants	1 day		



**Questions?**