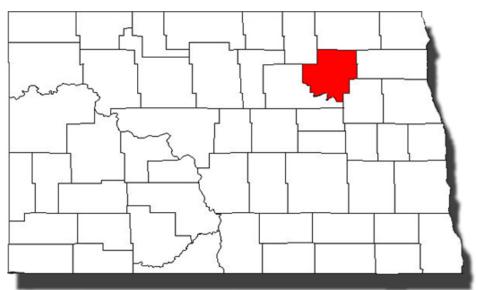
Project Introduction

Project Location

Located in central North Dakota, the Devils Lake area provides a scenic escape from the surrounding farmland and prairie. Enclosed by gentle rolling hills and lush green forests, the lake is the largest natural body of water in the state. The settlement around the lake was first started in the 1880's and continues to flourish today. The region is known throughout the country for its outdoor opportunities, especially hunting and fishing. The lake has recently gone through a very dramatic and ongoing flood. Most of the development along its shores was devastated by the high water and has been removed. The current solution to the lakes flooding problem is to create an outlet to the south. When an outlet gets constructed and the lake level becomes stable, people will once again start developing along its edges. The need for a public recreation area will be one of the first priorities in creating a new waterfront.



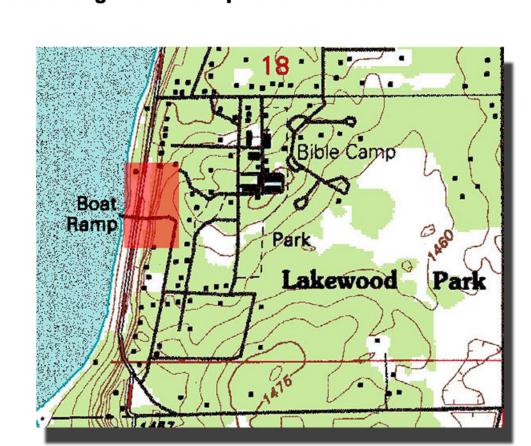


Location of Ramsey County

Devils Lake Region

The city of Devils Lake is located 90 miles to the west of Grand Forks and about 120 miles to the east of Minot on Highway 2. The area plays an important role in the recreational opportunities for central North Dakota. The proposed site for the design thesis is the Lakewood Beach area located along Creel Bay of Devils Lake. Located in Ramsey County just a few miles to the southwest of the city of Devils Lake, the site has been a historic access point for years. The site includes the lakefront and several hundred yards of greenspace. The site has direct access from the town along County Highway 1. A connection to the town is already in place with a permanent pedestrian path to the site. Currently a small boat launch inhabits the site along with a few public facilities.





Site location from town

Site location

Project Description

In this project the conflict between human settlement and natural systems was studied and analyzed. Historical information was used to help understand a lake with fluctuating water levels and changing shorelines. It also explored the opportunities and constraints that affect the city of Devils Lake and the surrounding communities. The idea that the lake is the cornerstone of the entire Devils Lake community is accepted and must be upheld to provide future generations with similar visions. The new recreation area, combined with the cities many open spaces; will provide the area with a sense of pride in their outdoor opportunities.

The primary goal of the project consisted of the development of a recreational landscape, which will recreate the sense of place that surrounded the Devils Lake community during the early twentieth century. The revitalization of the waterfront will create a permanent link with the city of Devils Lake, which was lost due to the flooding that plagued the area for so long. The secondary goal is to reconnect the community to the lake, the current flood has the community distanced from the lake and an important connection is needed for a successful project.

The spaces that the project will incorporate into the design are essential for a safe and successful recreation area. The marina is the largest and most important to the design, it includes docks and a pier constructed on the lake. A public beach and public open space are also very important to the design, they are designed with all age groups in mind. Public facilities are necessary for any public area and should add to the design. The last idea for a successful space is the connection made to the town and surrounding communities.







Natural Disasters





Historical Overview

The history of the Devils Lake Basin settlement has a unique and important part in the current layout of the region. The central location of the basin along with the constant availability of water, food, and game on the shores of Devils Lake provided a focal point for prehistoric and early inhabitants of North Dakota.

White explorers and traders first visited what is now north- central North Dakota in the early 1800's. At that time tribes of Sioux and Chippewa inhabited the area, primarily to the south of the lake. The first known white settler to inhabit the area was Captain Duncan Graham, a fur trader. He settled in what today is known as Graham's Island shortly after the War of 1812. In 1839 the area was explored by a federally sponsored expedition led by Lt. John C. Fremont and French scientist Jean Nicollet. Fremont wrote "Enchanted Waters is a beautiful sheet of water, the shores being broken into pleasing irregularity by promontories and many islands". Enchanted Waters came to be called Devils Lake, probably a misconception of the lake's Indian name, Minnewaukan, which referred to the brackishness of the water.





Early Hunters

Early Recreation

Settlers filtered into the area and by 1883 Graham's Island was permanently settled. Most of its settlers were of Irish and Scottish descent. In 1882 the city of Devils Lake was founded by H.M. Creel and was respectively called Creelsburgh. July of 1883 saw the arrival of the first passenger train to the city and the maiden voyage of the Minnie H, a large steamboat that hauled passengers and mail between towns on the lake.

Following the expansion of the railroad and the use of the Minnie H, the U.S Land Office was opened up in town. All of these events helped launch an influx of settlers to the region, at that time the lake level was 1434 feet above sea level. An 1898 brochure for the area called the lake a "picturesque inland sea". The lake supported a commercial fishery that helped economic activity in the area. Devils Lake was also very popular as a hunting area and resort lake and continues to be so today.





Historic Devils Lake

The Minnie H.

Another important part of the areas settlement was the Fort Totten military fort. Although military expeditions had explored the basin earlier, the first permanent occupation did not occur until 1867. The fort was established on the south side of the lake and was abandoned by the military in 1890. The fort was converted to an Indian boarding school until 1960 when it was turned over to the state as a state historic site. The following picture shows the historic Fort Totten military fort.

The Devils Lake Indian Reservation was also formed in 1867 under provisions of a treaty signed that with the Sisseton and Wahpeton bands of the Sioux Indian Tribe. Agency buildings and structures soon began appearing in the early 1870's near the military post. The Devils Lake Indian Reservation still exists today and has played an important role in the area's tourism industry. It provides the area with a casino, marina, natural game preserve and many historic sites.

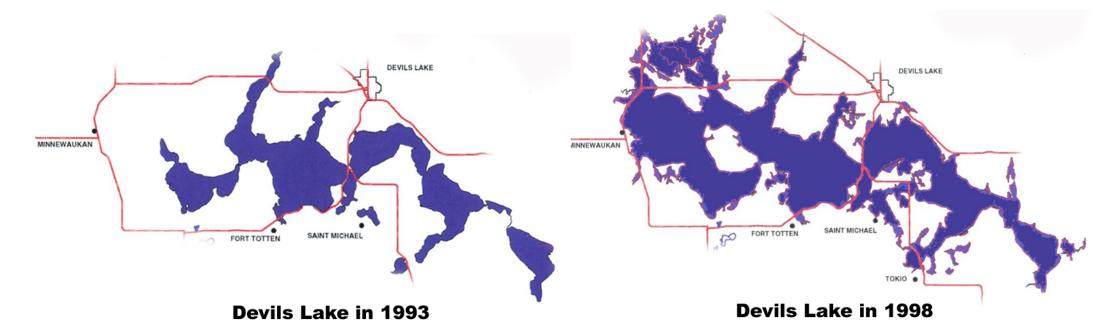


Historic Fort Totten

Devils Lake

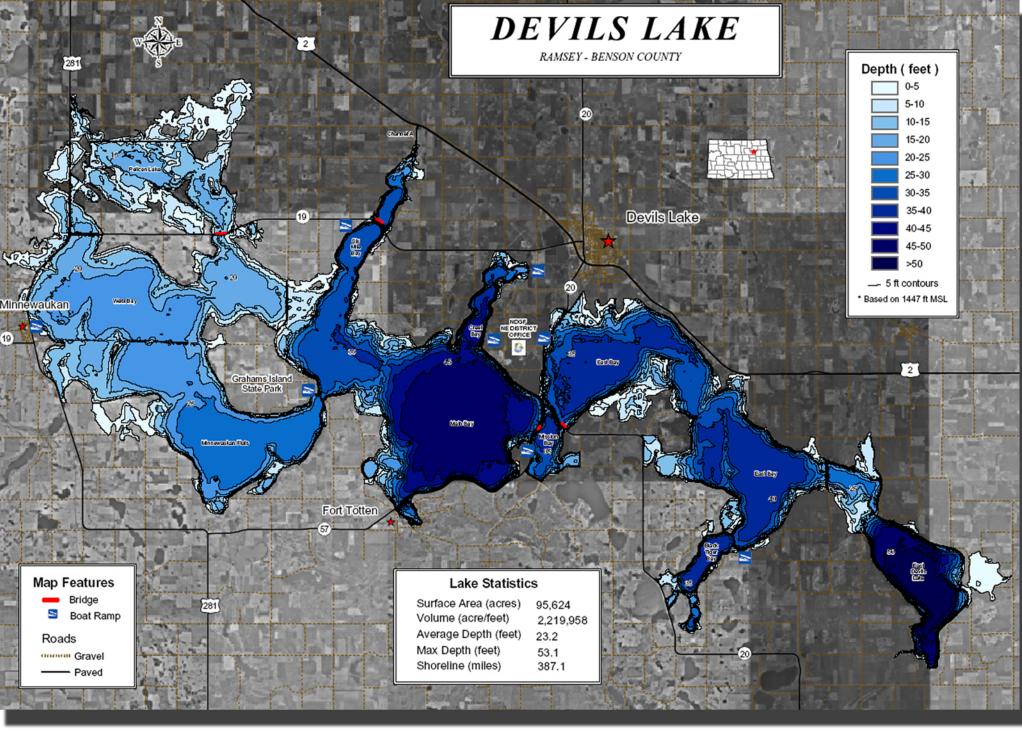
Devils Lake is the largest natural lake in the state of North Dakota. The lake was formed by glacial processes that took place over 12,000 years ago. One of the most common observations made of the lake over the past one hundred and fifty years has been its constantly changing water level. Water levels have fluctuated between about 1459 feet above mean sea level to 1398. The first recorded lake elevation level was 1446 msl taken in 1830. The original land surveys taken in 1887 indicate a level of 1441msl. After the turn of the century the lake level began to drop rapidly and the resort trade diminished. The lake reached it lowest recorded level in 1940 at which time it was only 1402 feet above sea level. Generally, lake levels rose from 1940 to 1956, declined from 1956 to 1968, rose and peaked at 1428 msl in 1983 until the current cycle. The current cycle started with a decline from 1987 to 1992 then started to rise to its current level of 1447 feet above sea level.

Along with the changing water levels the surface area has changed dramatically. At its lowest level, the surface area of the lake was around 6,400 square acres. It was reduced to small isolated pools surrounded by sterile alkaline flats. At its current level the lake takes up more than 130,000 square acres and has a current depth of 45 feet.



With the rising water levels come environmental changes. The high level of water in the lake affects water quality, aquatic life, recreation, transportation and development. The lake has freshened as it has risen, being a closed basin it has always contained high levels of salts and minerals. The decreasing salinity of the water has increased the productivity of aquatic plants and algae. Conditions for waterfowl and fish have also improved dramatically. Stocked sport fish have better chances of survival and improves recreation.

The past tens years of lake level increases has caused millions of dollars in damage and forced the community to create a large dike to protect the city. The current strategy to handle the flood is one that has been around for 40 years, create an outlet. Historically, low water levels have been more of a concern than high water levels. Past planners have seen the need for an outlet since the 1920's. The Dust Bowl years of the 1930's led to the formation of the Missouri River Diversion Association. The completion of the Garrison Dam in 1953 prompted Congress to authorize the Garrison Diversion project. The plan was to utilize the water backed up by the dam to help agricultural, municipal, industrial and recreational needs. Another part of the project included the stabilization of water levels and improvement of water quality in Devils Lake. The plan was in place, but was never carried out.



Current Lake Depth and Surrounding Area

The rising water has had a terrible effect on the site for this project. One of the major roads to the site is now underwater and can no longer be used. Most of the vegetation has been flooded and some stumps and logs exist just off shore. The heavy wave action has eroded a large piece of the shoreline and rocks were used to try and stabilize it.

Inventory and Analysis

Opportunities

For the site to be used year round and provide lake access in summer and in winter months.

- •To connect the project site to other important lake destinations and provide a means of getting to them.
- To connect the project site to the city of Devils Lake and raise awareness of its existence and construction.
- •To provide critical lake amenities that are available to the public and not just restricted to a private resort.
- •To incorporate the regions rich and unique history into modern design.
- •To protect and restore the shoreline from erosion and wave action.
- •To provide recreation facilities that incorporate outdoor enjoyment as there driving factor.
- To provide an unforgettable outdoor experience for all those who visit.

Constraints

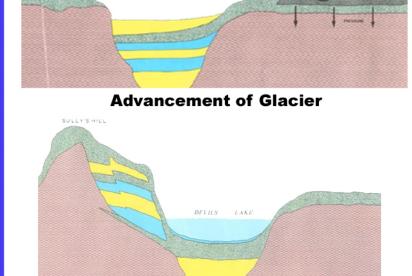
•The changing water level and the issues dealing with it.

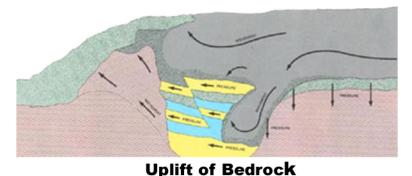
 The international politics involved with creating an outlet whose water will cross international borders.

- The ability of the community to raise enough funds necessary for such a project.
- •The horrible condition the flood has left the shoreline in and the high water table.
- Designing the site for snow removal which plays a key role in the sites winter use.
- Finding a business to incorporate in the site, along with the marina and a possible retail store.
- The high amount of salts in the water and the alkaline soils around the lake.
- Directing users through a residential community to the site with not upsetting residents.

Geology and Soils

The Devils Lake Basin was created in the last glacial advance in North America. Today we call the event the Wisconsinan glacial period. The basin is a classic example of what today is termed a thrust moraine. As the glacier advanced nearly straight south over the Devils Lake area it overrode the Spiritwood Aquifer. The aquifer was filled with already pressurized water and the heavy, moving glacier only added to it. As a result the high pressure forced the more porous materials up and into the way of the advancing glacier. The area to the south known as Sully's Hill is the remains of the large piece of land moved.





EXPLANATION

ACTIVE GLACIER

GLACIAL TILL (IMPERMEABLE LAYER)

SILT AND CLAY (IMPERMEABLE LAYER)

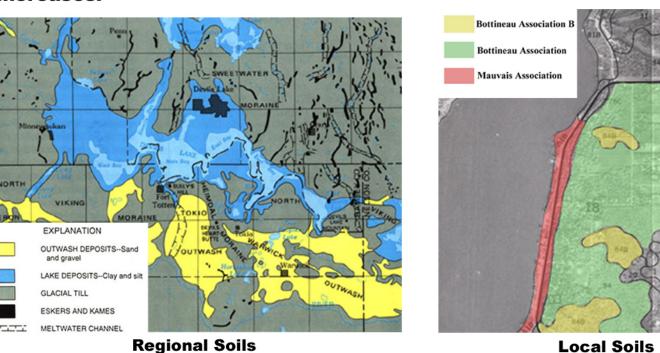
SAND AND GRAVEL (PERMEABLE LAYER)

SHALE

A unique glacial combination helped create the basin as we know it today. The ground being frozen before the glacier moved in, the glacial advance over a large pressurized aquifer and the fact that the glacier stopped immediately after creating the large thrust moraine all contributed to the formation and characteristics of the Devils Lake Basin.

The glaciers and their outwash created a variety of soils around the lake. Farthest from the lake, glacial till is the dominant type of soil. Closer to the lake and including the town, clay and silt lake deposits compose most of the soil. To the south of the lake outwash deposits composed of sand and gravel are found.

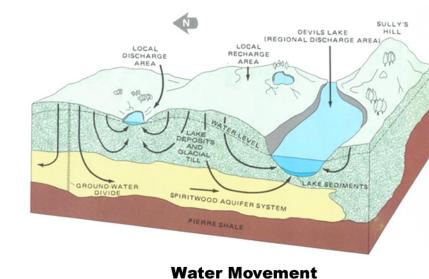
The area is primarily composed of the Bottineau Association soil type. They consist of deep, well-drained, moderate slowly permeable soils on glacial till plains. Typically the surface layer of the Bottineau soils is black loam about nine inches thick. The subsoil is clay loam about twenty-one inches thick. The substratum, which runs about sixty inches deep, is grayish brown clay loam. The ph varies from 6.1 to 7.8 and increases as depth increases.



Hydrology

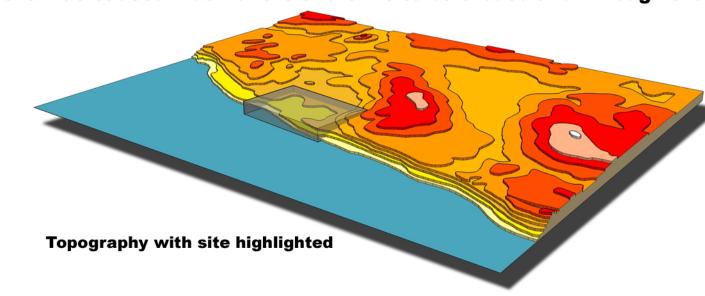
The Devils Lake Basin is a 3,810 square mile closed drainage basin located in central North Dakota. The basin is often referred to as a sub-basin of the Red River of the North Basin, due to the fact that scientific evidence suggests the two systems were connected several times in the past. Due to the fact that it is a closed basin and has been for the past 110 years, the amount of salts and other minerals in the water is relatively high. The Devils Lake Basin itself is broken into nine different sub-basins. All of which contain smaller lakes and rivers that ultimately drain into the lake.





Topography

The project is located on a relatively flat part of the shoreline. There is some level change on the south end of the site, but it is only a slight elevation change of only a few feet. The slopes on the site range from three to six percent and present a minimal change in drainage. The site is primarily sloped towards the lake to the west and all drainage follows this slope. The site does have a somewhat important topography change along the shoreline, which was caused by wave action and rising water levels. The high water level has caused much of the shoreline to be eroded and in rough shape.



Vegetation

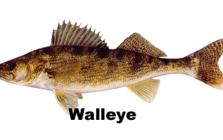
The shores of the lake are heavily vegetated and have a steady supply of water. Deciduous trees and shrubs are plentiful and evergreens also do fairly well. Some of the main types of vegetation include oak, ash and elm species. Some other species that are found but do not comprise a majority of the vegetation include aspen, lindens, dogwood and chokecherry. Cottonwood and willows dominate the beach and sandy areas, which are found closer to the waters edge. All species that grow in the region must be able to tolerate very cold, harsh winters and hot dry summers. They must also be able to survive in USDA Zone 3 and be able to handle the area's alkaline soils.

Climate

The climate in the Devils Lake region is characterized as a continental climate. A continental climate usually has long cold winters and short hot summers with minimal precipitation. The temperature around Devils Lake has one of the largest ranges in the United States. Winter temperatures can get as cold as 40 to 50 degrees below zero and summer temperatures can reach 100 degrees Fahrenheit. The precipitation in the region is relatively low and primarily falls between April and September. Annual averages range from between 17 to 22 inches per year. The Devils Lake Basin gets hit by thunderstorms and blizzards regularly, which can sometimes drop huge amounts of precipitation at one time. Another important part of the climate around the region is the wind speed and direction. The wind in the winter prevails from the northwest and can become very strong at times. In the summer the wind shifts and comes from the south. The wind plays an important role in the direction and strength of wave action as well.

Ecology

The ecology of the Devils Lake area plays a critical role to the regions tourism industry. A key item in the county is fishing, which brings outdoorsman from all over the country. Some of the areas primary aquatic species include walleye, perch, northern pike, white bass and sunfish. Devils Lake hosts several large fishing tournaments every year, several in the summer on open water and one large ice fishing tournament.





Existing Conditions

The current site has very little to offer its users. The circulation is unorganized and dangerous and there is no pedestrian paths or circulation system. The lakeshore has a small and rocky beach area that does not get used and is eroding away. The shoreline right next to the beach is overgrown by weeds and is very unattractive to look at. The parking is currently where ever you wish, but most people tend to park on the grass in the middle of the site. The main focal point currently is the boat launch area, it is a two sided launch that is way to small for the number of users. Right beside the boat launch is a small restroom that is locked half the time and in pretty rough shape. A smelly and unattractive fish cleaning station is located east of the restroom.







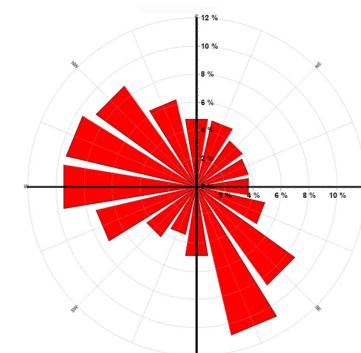






Physical Analysis

The physical attributes of the site are important to the final design of the project. The beach area is to steep and the sand is eroding into the water. To the south of the beach an overgrown patch of weeds has taken over. The winter winds are out of the northwest and summer winds are from the south. The waves can come from any direction and tend to follow wind patterns. The trees and grass are in good condition and similar types are used in the design. The shoreline is lined with rock and is a possible hazard for anyone entering the water. Two docks currently inhabit the site which are old and run down.

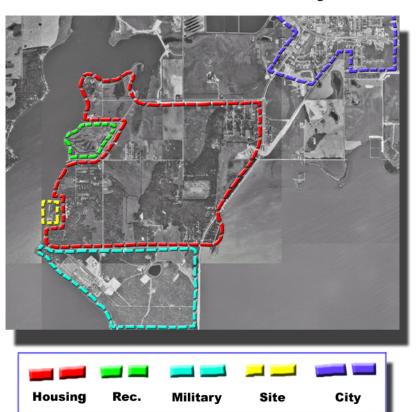


Wind and Wave Patterns

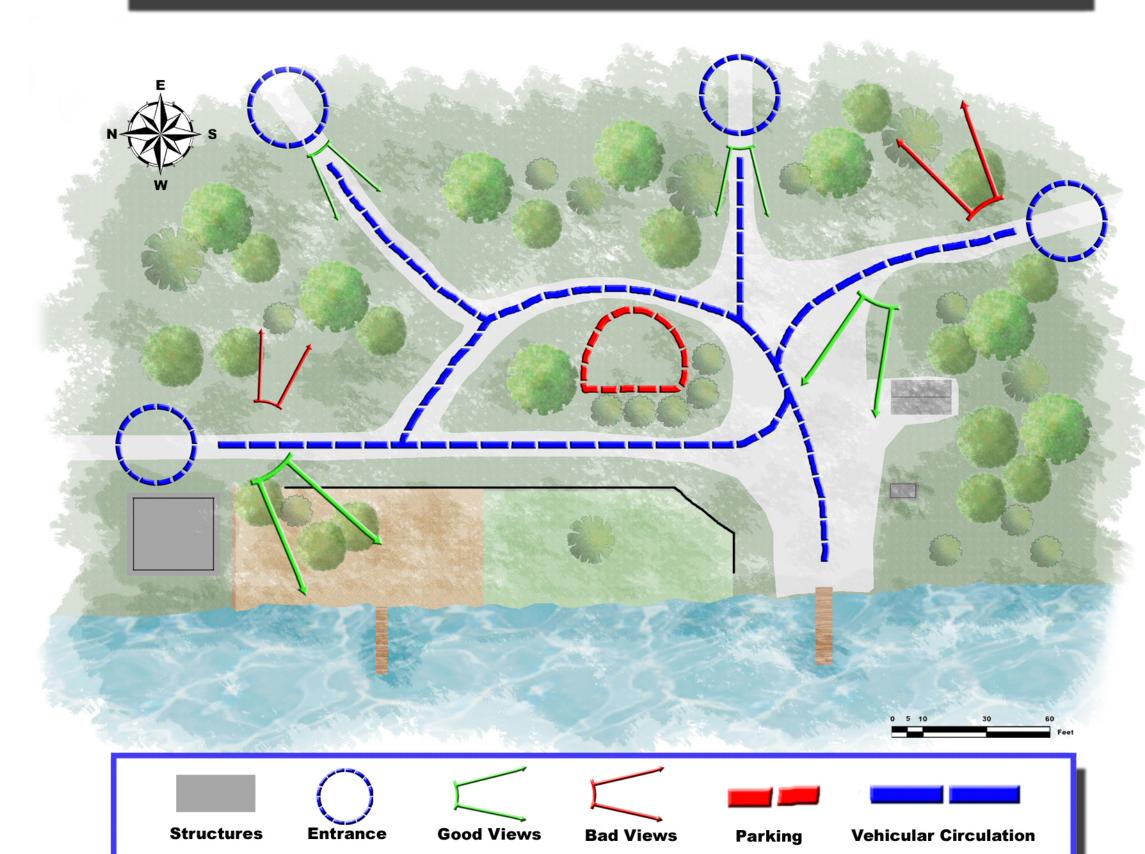
Beach Area Weedy Area Rock Edge Waves Erosion Winter Winds Summer Winds

Cultural Analysis

The cultural features of the site helped influence the design of the project and aided in the final layout. The site has four entrance points, all of which have good initial views. There are several poor views that are directed to the east where houses reside. The current circulation system is a mess and causes unsure driving. No pedestrian system exists on the site and presents a hazard to people's saftey. The parking is located in the middle of the site on the grass and has no restrictions. A chain link fence seperates the beach from the road and is an eyesore.



Regional Landuse

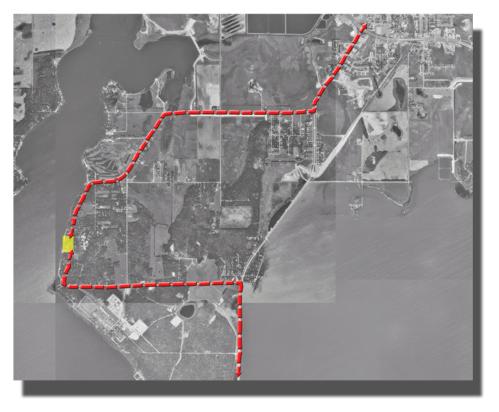


Connections

One of the most important parts of the project is connecting the site to surrounding cities, housing developments and other important landmarks around the lake. The ability for the site to be used to its potential relies on the public awareness of the project. To make these connections some large scale planning is needed and required. Besides making connections to municipal and residental areas the project is also going to make historical connections to important parts of the lake region's settlement. Four of these historical remnants remain in the region and are popular tourist attractions. The last part of connecting the site includes aquatic connections to heavily used sites located on the lake shore. To make these connections a new mode of aquatic transportation is needed.

Municipal Connections

The largest and most important municipal connection is to the city of Devils Lake. Currently vehicular access from the city to the site is available and in good shape. The roads are all paved and taken care of regularly. Access to the site is possible from Highway 2 to Highway 20 South, then to County Highway 1 and finally a small drive through the Lakewood development. Access is also available to the site from the south, from Highway 20 North to Camp Grafton Road to the Lakewood turn.

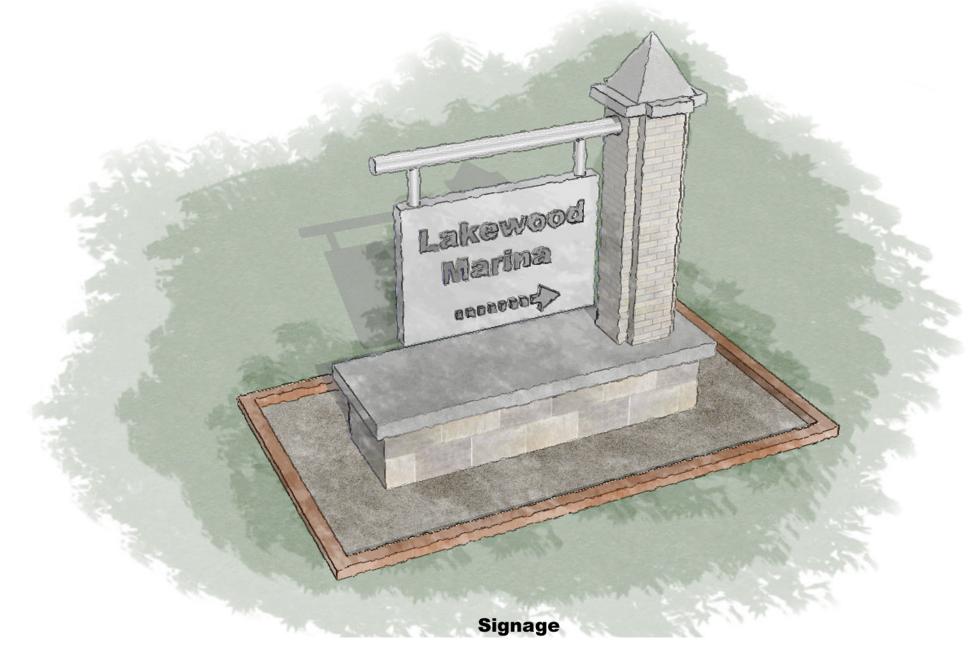




Current Vehicular Access

The City of Devils Lake

An important addition at the regional level is the design and implementation of signage that will guide people to the site. Three new masonry signs will be added at the important intersections connecting the site to major highways. The signs will act as a visual guide to the site and will raise the public awareness of the project.





The first sign is located at the intersection of Hwy 20 and County Hwy 1



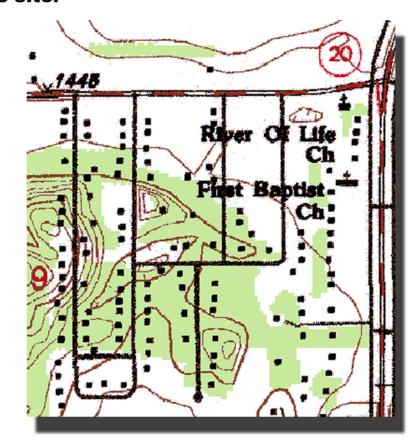
The second sign is located at the intersection of Hwy 20 and Camp Grafton Road



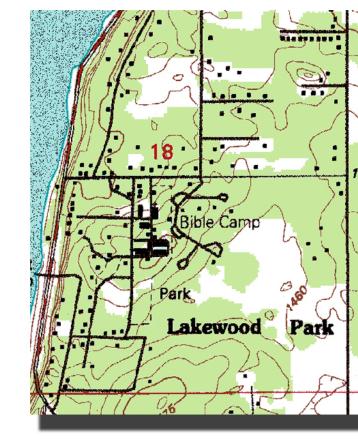
The third sign is located at the intersection of County Hwy 1 and the Lakewood turn

Residential Connections

Another important connection is the link to the housing developments in the area. Several of these developments are in close proximity to the site. The Freezon Addition is the largest and consists of around one hundred homes, it is located just one mile south of the city. The development has direct vehicular and pedestrian access to the site. Another important development is surrounding the project site and is referred to as Lakewood. The development contains around fifty homes, a park and a bible school. The development also has direct vehicular and pedestrian access to the site.



Freezon Addition



Lakewood

Pedestrian Connections

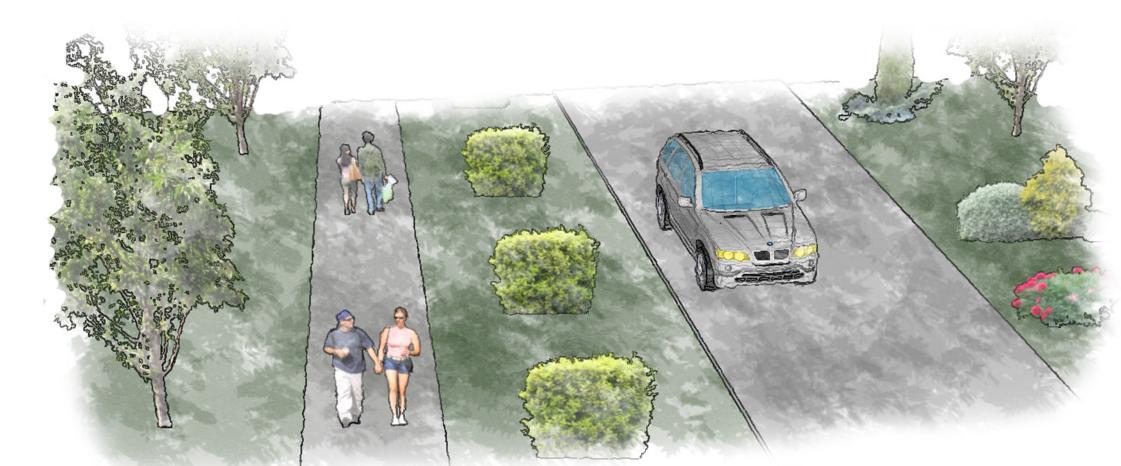
The city of Devils Lake has extensive bike paths that connect most of the cities parks and schools. The city has recently been adding to the system and has incorporated several new parks into the cities greenspace plan. These paths make a connection to the site along Highway 2 and are accessible to most of the cities citizens. There currently is a very nice bike path that runs from the town to the golf course where it currently ends. In order to completly connect the site to the city of Devils Lake an addition to the path is needed. The new addition runs from the golf course to the project site and also connects to Lakewood Park.



Existing and Proposed Paths



Existing View of Bike Path



Proposed Bike Path Extension

Lake Connections

An added feature that is incorporated in the site design is connecting to other popular tourist attractions on the lake. The lake has three other heavily visited sites on its shores, Spirit Lake Casino and Marina, Graham's Island State Park and Woodland Resort. In order to connect these landmarks to the project site a historic precedent is brought back to life. Modeled after the Minnie H. a new large cruise boat will connect to these attractions on weekends. The idea of the lake cruise is to bring tourists that are staying at these other popular sites to the project area.

The first connection is the Spirit Lake Casino and Marina, the casino is a very popular attraction with a hotel and indoor water park. The only thing that it is missing is something for younger people to do outside. Connecting to the casino will provide a chance for people to come and relax on the beach. The second connection is Graham's Island State Park, it is a campground that contains no public beach and, besides fishing, provides very little for people to do. A connection to the state park would benefit both the campground and the project site. The last connection is a connection to Woodland Resort, which is located just across the bay. The resort contains cabins and a tiny, rocky beach area also with very little to keep people busy.



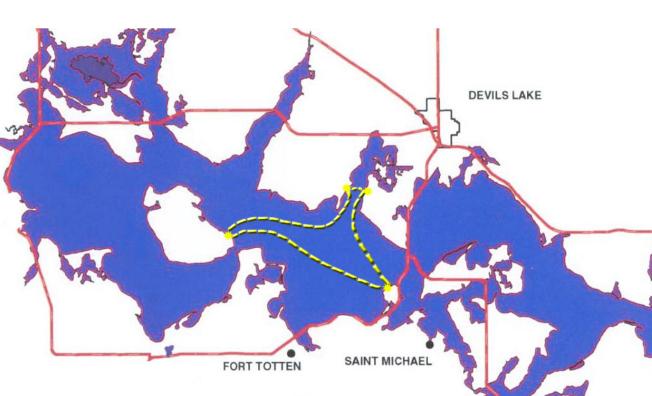


Woodland Resort

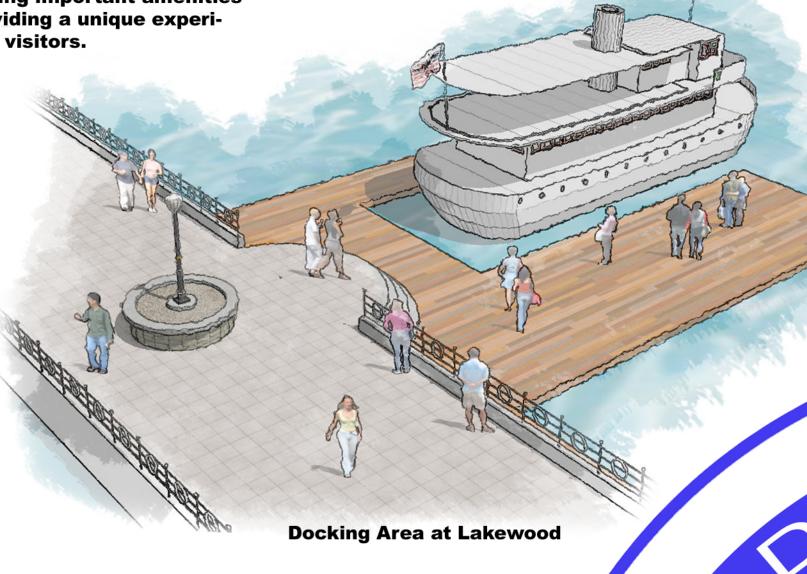
Graham's Island

Spirit Lake Casino

The lake cruise would greatly benefit the lake community. It would provided a link between popular attractions and give a wide range of things for people to participate in. With the agreement of all the sites to proceed with the plan, funding for the boat and equipment could be a joint venture by all the benfiting busicost around five dollars per person and one ticket would be good for all day. The time that the cruise would be most beneficial and most often used would be on weekends during the summer from 10:00 AM to around 10:00 PM. The cruise would be a way of connecting important amenities and providing a unique experience for visitors.



Lake Cruise Route



Arrivial 10:20 11:00 11:40 12:00 12:30 1:10 1:50 2:10

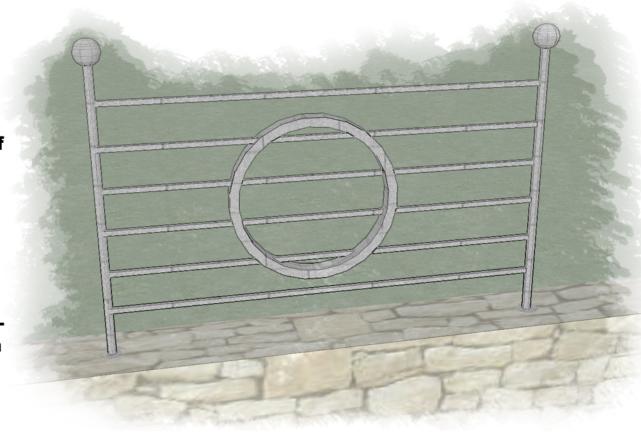
Departure 10:00 10:30 11:10 11:50 12:10 12:40 1:20 2:00 2:20

Sample Time Schedule

Design Development

Guard Rail

The guard rail is unique to the site. It is composed of painted aluminum and meets all safety requirements for a guard rail. The railing is integrated into all of the fences on the site and is also used on the pier and viewing platforms. The railing is designed to fit the sites character and has somewhat of a nautical theme.



Bronze Plaque

The eight bronze plaques that compose the lake paving are randomly placed. The plaques themselves are made of bronze and contain interesting facts about the lake and its constantly changing water levels. The writing on the plaques is raised one quarter of an inch to reduce the posibility of slipping or tripping on them.



Marina Sign

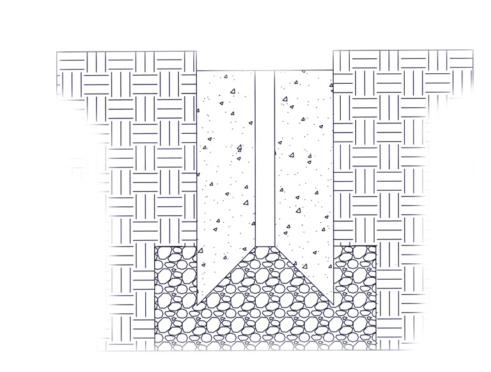
The sign in front of the marina is composed of the same rock that makes up all retaining walls and seating walls. The sign contains a lake map to help fisherman know where to go and what the lake looks like. The marina is highlighted and helps guide boaters around the lake. The middle section of the sign is composed of a solid piece of timber and the map painted on.



Recon

Farmers Market Footings

The tents that are to be used for the farmers market are anchored in the ground by small permanent footings. Each tent has four footings, one in each corner. The site allows up to six tents to be up at one time, with room for expansion if needed. Each tent could be set up and taken down with ease. Rented from the marina building, the main use of the market would be on weekends and would allow vendors to display goods for visitors. The vendors just slide the poles into the footings and an instant stand is born. The footings have an open base to allow water to drain through, which will prevent frost from shifting the footings.



Section of Retaining Wall

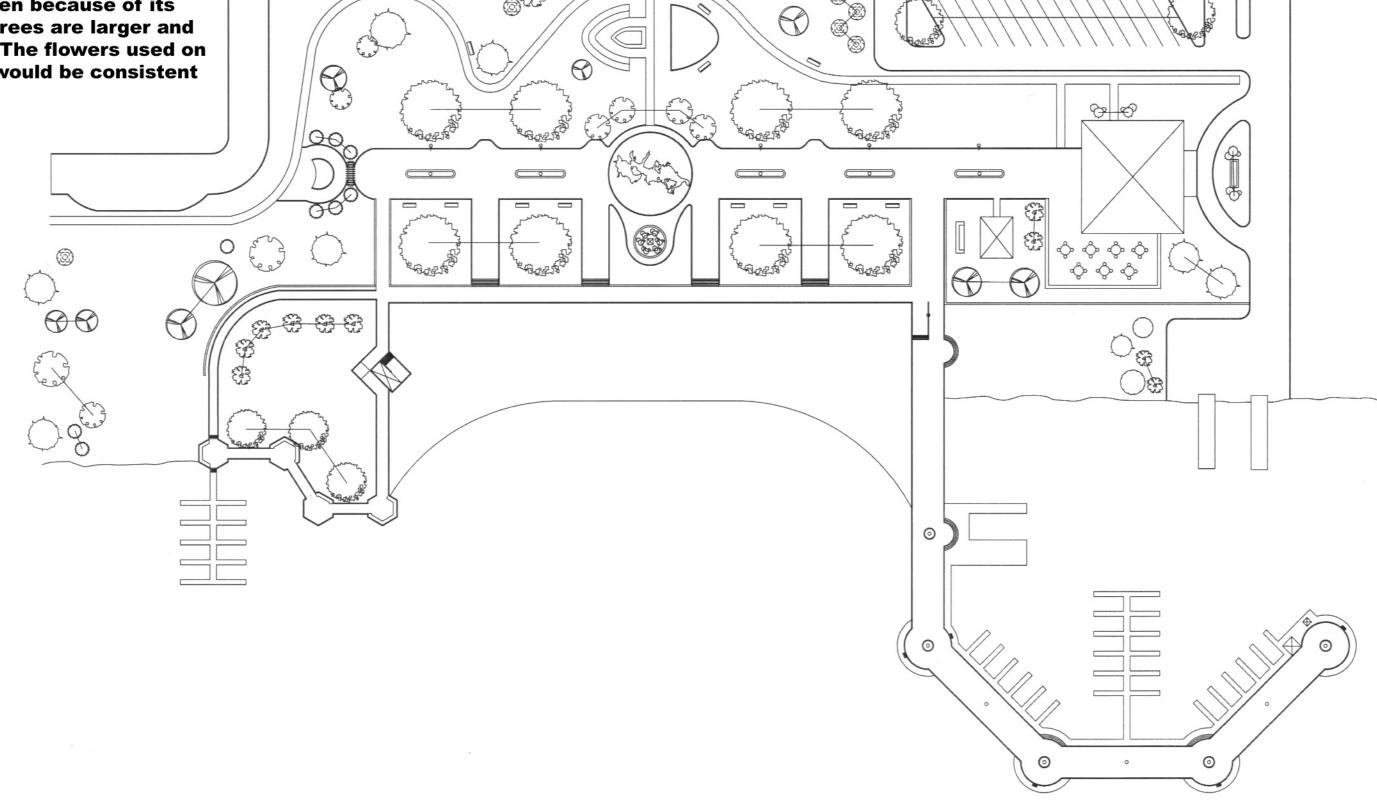
Materials

The materials used in the project all convey a naturalistic look and add to the rural look of the site. The promenade is paved with a rough granite paver and each square measures two feet by two feet. The main ground paving in the plaza is the same material, but the shapes are random and have a broken look. The entire promenade has a four inch concrete egde to show a struct change in material type. The retaining walls are all made of the same type of real stone, motared in. The stone has a lighter color and helps add a soft look to the site. The seating walls, signs and planters are also made of the same type of stone to project a consistency of materials. The sand used for the beach is a more course natural sand that exists around the lake, it has a darker look and is composed of larger particles that most beach sands. The pier is composed of a type IV concrete that is more resistant to the high level of salts in the water. The viewing platform is made of the same type of concrete. The bike path and other walkways are basic concrete walks with no edging. All the docks are composed of timber and are sealed up to prevent from rotting.

Planting Plan

The vegetation used in the design is all hardy for USDA zone 3 and will do well on the site. Most of the vegetation used currently exists on the site and is able to handle the above average level of salts in the water. The main theme of the vegetation is diversity, with modern diseases and insect infestations the more diverse an area is the better chance it has not getting wiped out by a natural cause. Some of the vegetation was chosen because of its color and some because it attracts wildlife. Most of the trees are larger and more open to help direct peoples view towards the lake. The flowers used on the site are provided by the Devils Lake Park Board and would be consistent with the flowers used in Devils Lake parks.

Symbol	Common Name	Scientific Name	Qty.
A STANDARD OF THE STANDARD OF	Green Ash	Fraxinus pennsylvanica	13
	Bur Oak	Quercus macrocarpa	9
	Purpleleaf Sand Cherry	Prunus x cistena	12
	Common Chokecherry	Prunus virginiana	2
	Littleleaf Linden	Tilia cordata	10
	Common Lilac	Syringa vulgaris	7
	Quaking Aspen	Populus tremuloides	8
\$	Hedge Cotoneaster	Cotoneaster lucidus	20
0	European Mountain Ash	Fraxinus excelsior	9

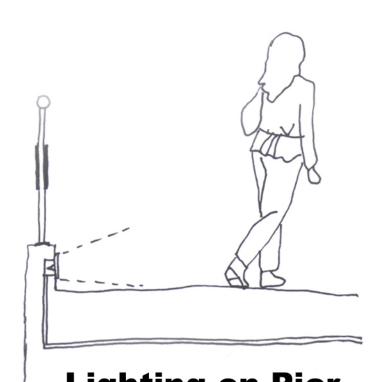


Project Lighting

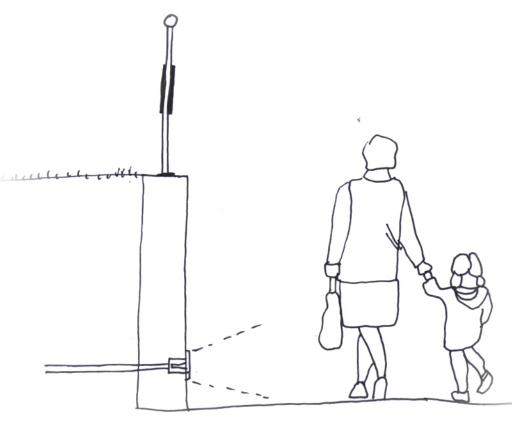
The lighting plan for the project is very simple. The upright lighting fixtures are located on the seating walls on the pier and on the promenade. Those lighting fixtures are a standard fixture with an antique look and stand about eight feet tall. The ground lighting used on the project is mainly to ensure safety for users after dark. There are three main types of ground lighting used in the project. The first type is located on the seating walls on the promenade, the light is used to brighten the path and allow a safe passage. The second type of ground lighting used is located in the retaining wall by the beach, this lighting helps provide a low glow on the beach at night. The last type of ground lighting used is on the pier and the viewing platforms, it is also used to light the path and as a safety measure. All of the types of ground lighting are low intensity and duller than



Seating Wall Lighting



Lighting on Pier

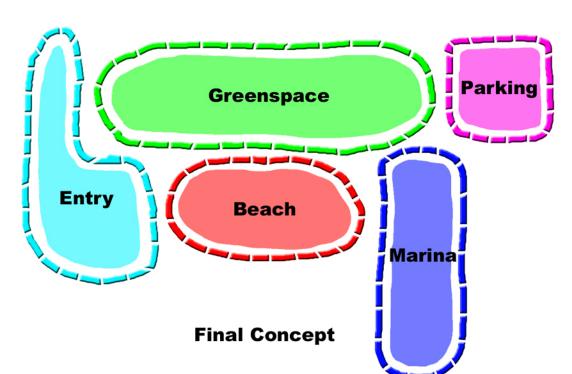


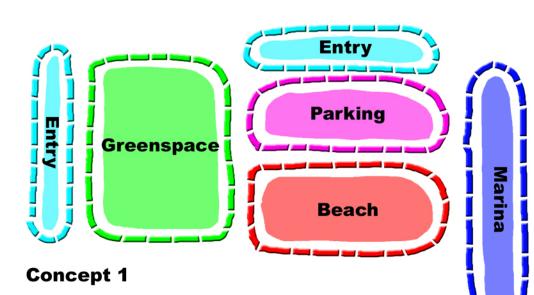
Retaining Wall Lighting

Master Plan

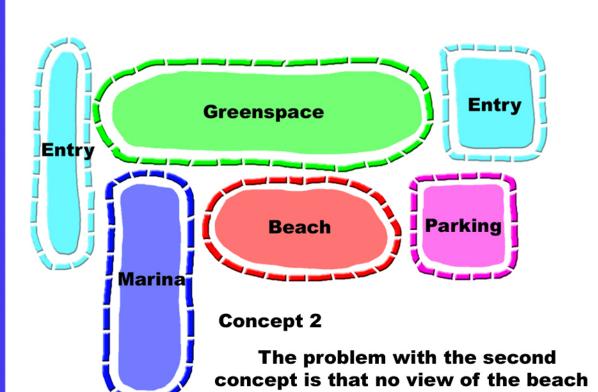
Concept

The final concept for the projects design was derived from several other ideas. The five main program elements were shuffled and adjusted until a unique combination created the current plan. The spatial relationships played a large role in the layout and connections between the program elements. The size and shape of each element was derived from the sites potential use and required needs of its users.



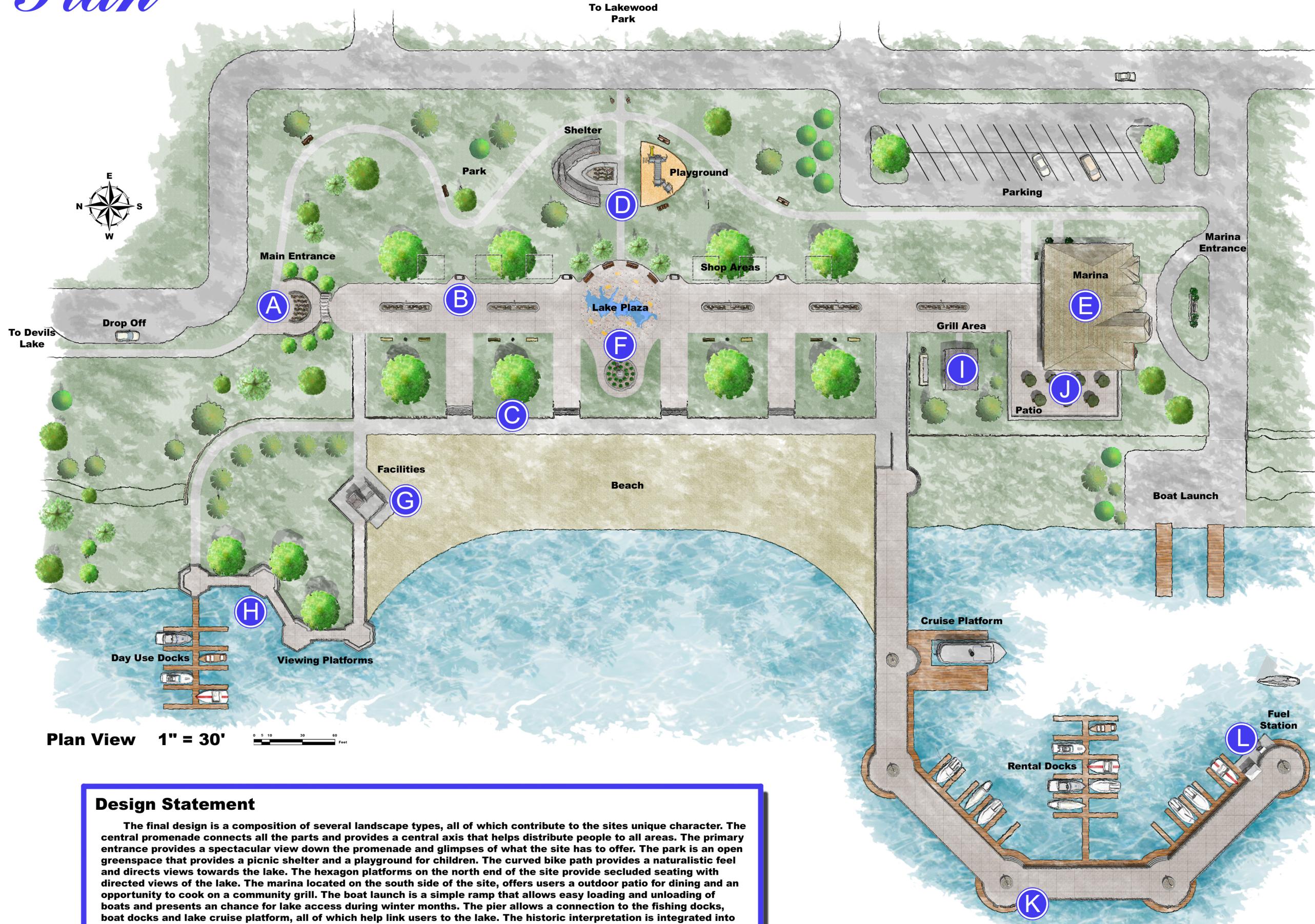


The first layout was lacking a common area for a promenade and contained two entry areas. The main problem was that a seperation between the beach and parking was needed.



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could be seen from either entry and the parking was close to the lake.



the ground paving on the promenade and as seperate educational entities along it. The beach has a curved shoreline to simulate a small bay, the building on the edge of the beach provides a life guard tower as well as public facilities.





A

Entry Area

The entry area provides a scenic view down the promenade and provides glimpses of what the site has to offer. The entry itself is modeled after the paddle wheel on the Minnie H. The raised walls help guide people into the site and the vegetation reinforces that thought. Since the entry is on the main axis all visitors entering from the north will be exposed to this entry. The entry is also connected to the bike path providing more exposure to pedestrians entering on foot.



B

Educational Signs

The educational signs provide visitors with a little bit of history about the areas settlement. There are four of these signs located along the promenade, all of which tie into the central ground paving. The signs contain flowers to attract people to them and are sloped for easier reading. The four signs include history about Fort Totten, The Minnie H., Graham's Island and the city of **Devils Lake. The signs are** composed of stone and the top reading surface from hardened plastic.



C

Level Change

The main purpose of the level change was to protect the eroding shoreline. This however provided an interesting chance to incorporate a raised platform for people to use. Each platform contains turf, a shade tree and benches. The raised platforms provide excellent views of the site and lake. Guard rails were integrated on the platforms and a four foot high retaining wall, made of natural stone, holds the platforms together. These features allow users to enjoy the beach without the mess of the sand.



Playground and Shelter

The playground and shelter are located in the middle of the park and along the east-west axis. The shelter provides people with a place to get out of the sun and picnic tables to eat at. In front of the shelter is a raised planter with a flag pole, which guides people to the shelter. The playground is a premade structure with several benches around it. The area around the playground is wide open which allows a safer environment for children to play in.



Marina Structure

The marina building provides the entire site with a base of operations. Besides having a bait and tackle shop, the building contains a business office that controls maintence and rentals. The building contains a concession area and indoor restrooms. The marina building has three main entrances that accomadate different users. The south end has a vehicle drive up for fisherman to stop at before launching a boat. The structure is approximately 3500 square feet.



The main plaza area is located at the intersection of the two main axes. The plaza incorporates the lake's history into a unique ground paving. The paving integrates bronze stars and historical tidbits about the lake. The two blue colors of the lake represent water levels in flood and drought conditions. The plaza also contains a clock tower which helps visitors keep track of time and provides seating. The paving around the lake is in chaos to simulate sudden flooding that

started in 1992.







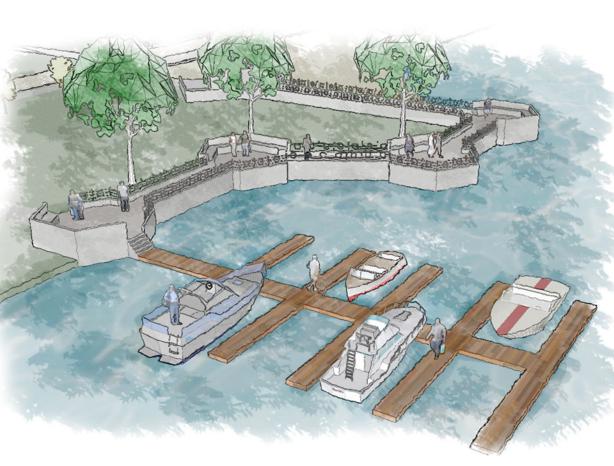
Beach Structure

The structure located on the north end of the beach provides public facilities for users. The lower level contains male and female restrooms and showers. The second level holds a life guard tower and small structure holding an emergency phone line. The life guard has easy access to the beach from a firemans pole that is located in the western corner. The raised platform allows the life guard to see the entire beach and provides a safer experience for users.



Viewing Platforms

The hexagon platforms located on the north end of the site provide a more secluded type of seating. Each platform has a different directed view and a unique seating wall. The platforms help link the day use docks to the site and are ADA accessible. The platforms are shaded in morning and exposed to sunlight later in the afternoon. Guard rails protect people from falling into the water and provide an edge that helps you move through the space.



The area located northwest of the marina building is a space that is reserved for grilling and eating. The space provideds a wooden structure with picnic tables and a directed view of the lake . Also located in the space is a large community grill. The grill is a stone object with room for charcoal underneath a large metal grill above that. The space could be reserved for large parties or gatherings and could also serve as a place for catering.





Patio Area

The patio area provides users with an outdoor eating experience. The patio directs the view of users towards the lake. The patio contains seven wooden tables and sets of chairs. Each table is covered by a large umbrella and provides shade during the hottest hours of the day. The patio is surrounded by a low wall that seperates the space from the adjacent areas. The patio area connects to the marina through a

covered entry area.





The pier helps connect

the lakeshore to the docks. It

contains several seating

islands that provide lighting

and resting places for visi-

tors. The pier contains the

the site, helping provide a

same guard rail as the rest of

unified character. The fishing

fish at will and are connected

docks allow users to be able

to the pier. The shape of the

tion from waves. The pier

pier allows maximum protec-

length allows the pier to work

with changing water levels.

Pier and Fishing Docks



The fuel dock is located at the end of the pier to allow easiest access. The fuel pump can only be turned on from inside the small building. The rental docks are also located on the same side of the pier. The docks are rented out to site users on a monthly basis. They would mainly be rented by those with larger harder to launch boats, such as sailboats or houseboats. Connected directly to the pier the docks height can be adjusted

depending on water levels.

Fuel Station and Rental Docks

