

Chassell Township Centennial Park Preliminary Engineering Study

Chassell, MI 49916



Aerial photo of Centennial Park in Chassell Township, MI. (n.d.). VisitKeweenaw.com

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Chassell Township,
Houghton County, Michigan

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VII. References

- A. 2023 Chassell Township Michigan Master Plan
- B. 2023 Chassell Township Recreation Plan
- B. 2010 ADA Standards for Accessible Design, September 2010
- C. MDNR-Parks and Recreation Division: Harbor Development Standards Guide
- D. MDNR Parks and Recreation Division: Facilities Design Guide
- E. Shoreline Protection Manual, USACE, 1984

I. INTRODUCTION

A. PURPOSE

The purpose of creating a Preliminary Engineering Plan is to document the existing conditions at Centennial Park and establish a long-term vision to guide future improvements. This plan evaluates the current facilities within Chassell Township, Houghton County, Michigan, and provides recommendations for potential upgrades and additions that will effectively serve the needs and demands of the community.

B. COMMUNITY DESCRIPTION

Chassell Township is located in Houghton County in Michigan's Upper Peninsula, bordered by Portage Lake, Chassell (Pike) Bay, South Portage Entry to the canal, and parts of Keweenaw Bay. The Sturgeon River flows through the township and empties into Portage Lake. The community consists primarily of rural agricultural land with a more concentrated residential area located near Centennial Park. According to the 2020 census, Chassell Township is home to 1,875 residents. Local governance is led by the Township board, with input from the Chassell Township Planning Commission, who oversee maintenance, improvements, and financial decisions of the township. Township staff and volunteers continually seek out grant funding to improve parks, recreation facilities, and community amenities.

C. SCOPE OF STUDY

The study includes an evaluation of the existing park facilities, identification of current challenges, a review of community priorities, and a proposal of improvements. The objective of the report is to develop a guidance document to assist in the strategic long-term planning and community development of Centennial Park. The Preliminary Engineering Report provides recommendations for the township to consider for potential marina development and expansion projects to ensure that the marina can continue to effectively serve the needs of the community.

D. PUBLIC INVOLVEMENT

Chassell Township has actively engaged with the community through the development of its 5-yr Township Recreation Plan and Chassell Master Plan. Both planning documents were reviewed as part of this study to better understand the communities' priorities, needs, and desired improvements. The feedback and goals identified in these plans helped to inform the proposed upgrades and long-term vision for Centennial Park.

II. EXISTING SITE CONDITIONS

The first step in developing the Preliminary Engineering Report is to gather inventory of the existing facilities and to evaluate their condition. All existing facilities and amenities were documented, recorded, and inspected and the findings of the observations are summarized below. Location and site maps are provided in **Appendix A**.

A. SITE DESCRIPTION

Centennial Park is located along the western end of Chassell (Pike) Bay in Chassell. Chassell Bay, also known as Pike Bay, is a sheltered portion of Portage Lake. The Bay is generally calm and has abundant vegetation, making it a popular spot for fisherman in both the summer and winter. Centennial Park serves as an important hub for Chassell Township, hosting events such as the Strawberry Festival, Farmers Market, and Michigan Tech's K-Day, among many more events. Families and community members enjoy the parks many amenities such as the beach, playgrounds, basketball court, pickleball court, and in the winter an ice-skating rink. Boaters and fisherman utilize the boat launches, trailer parking, and fish cleaning station. On the south side of the park is a fenced-off dog park and the trailhead to the Chassell Historical Trail. A site plan showing the existing park amenities is provided in **Appendix A (Figure 1)**.

B. BOAT LAUNCH

The existing boat launch is one of the most heavily used amenities provided at Centennial Park. The boat launch provides a convenient access point for recreational boaters and anglers to access Chassell Bay and Portage Lake. The park boat launch is a double boat launch separated by a small dock. Each launch is approximately 25 feet wide. The boat launch can become crowded at times, especially during the prime fishing season and hot summer days when boat traffic typically peaks. The boat launch is now free for all users. While there is no charge, voluntary donations to the township are gratefully accepted. This replaces the previous \$40 annual and \$5 daily launch fee.

C. PARKING LOT

Centennial Park provides on-site parking for both regular passenger vehicles and boat trailers, with multiple designated parking areas located throughout the park. The first lot is found on the left as visitors enter the park and is ideal for those using the bike trail, playground, or pavilion. This area provides 43 standard vehicle spaces and one designated accessible space. The second parking lot is located near the

boat ramps and is designed to accommodate boat trailers, with about 14 long trailer parking spaces, including pull-through options in the center of the lot. The third parking area is located south of the pavilion. This lot has approximately 24 standard spaces and 5 designated accessible spaces.

With multiple lots and types of parking centennial park has proper capacity on a typical day. Tight turning areas and heavy boat trailers often lead to issues keeping the flow of traffic moving. However, there is no clear better configuration than already exists.

D. TRAILS AND BOARDWALKS

Centennial Park offers visitors a natural setting with multiple different trail options for walking, running, and other recreational activities. The park is bordered by the Michigan DNR snowmobile trail. This trail is utilized by snowmobiles in the winter but serves as a multipurpose trail in the summer months and is used by bikers, walkers, and runners. Within the park, a paved trail loops around the perimeter of the main green space and between park amenities.

The Chassell Historic Trail is a 0.4-mile-long loop consisting of boardwalks and informational signage on historic uses of the land. This boardwalk tells the history of lumbering within Chassell and was funded by a \$55,000 grant from the John and Melissa Besse foundation. During construction, invasive Buckthorn plants were removed with the help of the group, Keweenaw Invasive Species Management Area (KISMA). Access to the Chassell Historic Trail can be found off the southern end of Centennial Park, however a majority of the trail is located off park property.

Another boardwalk is located south of the boat launch and follows the shoreline between Chassell Bay and the adjacent wetlands. This boardwalk was previously damaged and has recently been replaced with support from a \$495,000 MI DNR Spark Grant.

E. BEACH AND GREENSPACE

Centennial Park is an important waterfront and green space that provides recreational opportunities for community members and visitors. The Park features a sandy beach with a designated swimming area and a floating swim platform. Inland from the beach there is an open green space that supports a variety of activities. This area includes a basketball court in need of improvements, a sand volleyball court, newly constructed pickleball courts, horseshoe area, and a playground with swings.

F. DOG PARK

The Chassell Bark Park is in the woods on the southern side of Centennial Park. Access to the dog park is found by following a gravel path located off the parking lot south of the pavilion. The park was added in 2019 and is about 0.34 acres of land with fenced off small and large dog areas. Here dogs can run around off leash. The dog park was made possible with support from the Chassell recreational millage and the help of volunteers, including a local Scout troop. An Eagle Scout Project constructed a gazebo, cleaned up the park, and created a few new play features for the dogs. In total 26 volunteers put in a combined 251 hours to create and improve the dog park.

G. OTHER AMMENITIES

A large pavilion is located near the entrance of Centennial Park. During warmer months the pavilion hosts a variety of events and can be rented out by community members. In the winter, the pavilion is converted into an ice-skating rink that is free to the public. The pavilion has indoor restroom facilities that are open year-round. The existing pavilion restrooms were renovated to provide better ADA accessibility and access from outside the building with funding from the MI DNR Spark Grant and the Lions Club. Additional nearby amenities include stand-alone restroom facilities and a fish cleaning station. This restroom facility is open seasonally. The fish cleaning station offers a location for fisherman to clean and process their catches, helping to contain the waste into a central area. Some parking lot circulation issues have been caused by the fish cleaning station as vehicles occasionally park near the station and block access to the parking lot.

H. WETLANDS

A portion of the land within Centennial Park is made up of wetlands. Here it is not feasible to have any major developments other than boardwalks. Some boardwalks exist in the area to allow visitors to interact with nature without disturbing the land. A wetland delineation will be needed to further determine the wetland boundaries in areas future developments.

I. ACCESSIBILITY

Centennial Park has features that support use of the park by visitors of all abilities. A recently constructed ADA-compliant paved trail, made possible by the \$495,000 MDNR Spark Grant and additional funding by the Chassell Lions Club, provides accessible connection between the pavilion and the boat launch. There is an accessible parking space located in the parking lot near the playground. The parking

lot near the pavilion has five accessible parking spaces. There is one designated accessible parking spaces located in the trailer lot near the boat launch.

J. MARKETING, EVENTS, AND PARTNERSHIPS

Centennial Park hosts several annual community events which are coordinated in conjunction with Chassell Township. Chassell is most known for the Copper Country Strawberry Festival which takes place at Centennial Park each year. Once a week between June and September, Centennial Park hosts Chassell's farmers market at the park pavilion. Michigan Technological University will often use Centennial Park to host large, outdoor events such as "K-day" for students. Multiple fishing tournaments take place at Centennial Park for summer fishing and winter ice fishing.

III. PROPOSED SHORT TERM PLAN

Chassell Township has ambitions to grow and improve Centennial Park. Community members have expressed an interest in the addition of a marina, campground, improved parking lot flow, and improved signage. Each improvement is detailed below, and the short-term site plan is shown in **Appendix A (Figure 3)**.

A. PROPOSED MARINA

Chassell Township and its residents have expressed strong interest in the addition of a marina at Centennial Park. Since marina development requires significant capital investment, Chassell Township should consider pursuing a public-private partnership with a marina developer and operator to help make the project financially feasible. Such a partnership would combine the Township's vision for the park and waterfront with the expertise, investment, and operational experience of a private partner, reducing the financial burden on the Township while creating a high-quality waterfront amenity for the community. By collaborating from the earliest stages of planning and design, the Township and a private partner can work together to develop a facility that meets the recreational needs of the community while creating a financially sustainable asset that supports long-term economic growth in the area.

This report provides ideas for a phased approach to marina construction. The short-term plan illustrates an initial phase of development consisting of a smaller marina. Each phase is designed to be expandable allowing for the development of additional docks and slips over time without requiring major modifications. The phased approach allows the marina design to remain flexible and scalable, allowing the project to accommodate the available funding and demand, and provides opportunities for continued public and private investment over time.

Chassell Bay is a relatively shallow and heavily vegetated body of water. Dredging will likely be required to reach adequate depths for the marina. Before dredging a review of NOAA depth charts, shown in **Appendix B**, and UPEA Bathymetry data, Shown in **Figure 2**, as well as an additional investigation will be required to confirm water depths, sediment conditions, and potential obstructions near the shoreline.

The proposed marina in the short-term plan includes the installation of new docks, to provide a total of 12 marina slips suitable for both larger and smaller watercrafts. The finger docks will connect to the existing boardwalk and extend off into the water. The proposed design features 10 slips with a 25-foot dock length and 2 slips with a 30-foot dock length, however the final number and size of the slips may be adjusted to fit the needs of the community. The short-term figure illustrates one option for marina layouts. An additional scalable marina design is shown in the long-term plan.

As an initial step in evaluating the feasibility of a marina at Centennial Park, representatives of Chassell Township met with EGLE staff in a pre-application meeting to discuss the permitting requirements. During this meeting EGLE indicated that a joint permit application (JPA) between EGLE and the United States Army Corps of Engineers (USACE) will be needed prior to construction of a marina. A summary of the pre-application meeting is provided in **Appendix C**.

B. PARKING LOT IMPROVEMENTS

Centennial Park currently faces two primary parking-related challenges: insufficient parking capacity and congestion in key areas. The following section outlines potential solutions to improve parking within the park.

Congestion is common within the boat trailer parking lot are related to the bottle neck design at the entrance. Vehicles using the fish cleaning station often park directly in front of the station, which blocks the flow of traffic. Several simple improvements could be implemented to try and resolve this issue. These include widening the entrance, improving pavement markings, and installing features to help direct traffic.

As shown in **Figure 3**, the parking lot entrance is proposed to be widened up to the existing ADA-compliant pathway, providing up to 20 feet of additional width. In addition, the curb along that entrance should be painted red to clearly indicate that parking is prohibited in this area. Two removable buffer islands are proposed on either side of the trailer parking located in the center of the lot. Buffers could consist of large portable planters or removable precast concrete. These buffers will create clearer sightlines, direct the flow of traffic, and discourage parking in undesirable

places. If congestion issues continue, parking spaces located nearest to the fish cleaning station could be designated specifically to those who are using the station.

The township would also like to increase the number of parking spaces available. These spaces often fill up during large gatherings, especially during the strawberry festival. Multiple locations are available to expand parking. As shown in **Figure 3**, proposed additional parking #1 is located to the east of the pavilion and would expand the existing parking lot located there. This expansion could be as large as 0.65 acres which creates around 70 additional parking spaces. The second location labeled additional parking #2 is located to the north of the existing recreational parking lot. This expansion would increase the lot by around 0.14 acres which creates around 20 additional parking spaces.

C. SIGNAGE IMPROVEMENTS

Chassell's community members expressed a desire for improved wayfinding signage throughout Centennial Park, along with the addition of an information kiosk. Wayfinding will help ensure that all visitors to the park can locate park amenities. Features such as the dog park and Chassell Historic Trail are off the beaten path and may otherwise go unnoticed. Wayfinding can serve a broader purpose by pointing out other recreational assets located in Chassell such as the cross-country ski trails and kayak launches.

To support these goals, an informational kiosk with a large park map is proposed near the parking lot adjacent to the MDNR trail. A bike repair station could be installed next to the kiosk to serve those who ride the DNR trail. Together the kiosk and bike repair station serve as a trailhead to the DNR trail as well as an access point to Centennial Park.

D. BOAT LAUNCH IMPROVEMENTS

A recent addition to the boat launch included the addition of an adjustable boat ramp to improve water access for smaller watercraft such as kayaks or canoes. The adjustable boat ramp installation was engineered with funding from the MDNR Spark Grant with the acquisition funded by the Chassell recreation millage.

A planned improvement includes installing educational signage near the boat launch to inform the public about preventing the spread of invasive species, which are often transported on boats and equipment. This signage will be developed by KISMA and strategically installed near the boat launch.

E. PARK LANDSCAPING

Minor landscaping improvements would have a positive impact on Centennial Park. The addition of shade trees in the open lawn offers a place to escape the sun during warmer months. Along the parks perimeter path sections of overgrown vegetation block views of the water. Selective clearing and pruning of brush near the shoreline would enhance the visibility and improve the overall appearance of the shoreline. An emphasis on removing invasive species while protecting existing native plants and habitat should be considered during any brush removal. Benches could then be placed in the cleared areas, offering visitors a relaxing place to sit and enjoy the views, while picnic tables can be distributed throughout the park. In addition, planting flowering perennials near the information kiosk or other key amenities would elevate the parks appearance. Given the community's strong interest in recycling, recycling receptacles should be installed next to any trash containers throughout the park.

F. OTHER IMPROVEMENTS

Minor improvements, including the maintenance of existing buildings and pavement, are needed throughout the park. One of the initial improvements that could be addressed is the replacement of the curtains at the pavilion. These curtains are currently utilized as a wind barrier during events, and the township wants to find a more durable and effective curtain.

IV. PROPOSED LONG TERM PLAN

The long-term plan establishes a vision for the future of Centennial Park that builds upon the proposed short-term improvements. This plan looks beyond the immediate needs and identifies opportunities for future development and expansion of park amenities. Implementation of Long-term improvements may occur through a combination of grant funding and potential public-private partnerships with the Township. Long-term concepts are illustrated in Appendix A, Figures 4 through 7, with each figure presenting different design options.

A. PROPOSED MARINA EXPANSION

Once the initial marina is constructed and operating successfully, Chassell may consider expanding the marina. Due to the large upfront installation costs the proposed design is scalable to the current available funds. Future expansion of the marina can occur through the addition of one or more docks until the available footprint is full.

The short-term marina plan includes the installation of 12 marina slips designed for a range of watercraft sizes. The layout consists of one long dock that branches off the

existing boardwalk. The short-term plan remains consistent with the overall long-term layout Option A. Proposed Option A for the marina includes a total of 26 slips. As shown in the proposed site plan, **Figure 4**, this option includes 11 slips measuring 25 feet and 15 slips measuring 30 feet. At the time of installation, the amount and size of the slips can be altered to meet the demand of the community. As mentioned in the short-term plan, dredging will most likely be necessary to achieve appropriate depths of a marina.

Proposed long term plan Option B shown in **Figure 5**, consists of finger docks that branch off the existing boardwalk. Each finger dock can be added separately from each other allowing this option was designed to be scalable to the current demand and budget. Proposed Option B for the marina includes a total of 83 slips. This option includes 24 slips measuring 25 feet, 47 slips measuring 30 feet, and 12 slips measuring 45 feet. The figure shows a potential for the marina to start out with two finger docks as the short-term plan allowing for easy future expansion.

If Chassell Township chooses to operate a full-service marina, additional amenities must be added. These include electricity and water hookups at each slip, as well as shared facilities such as a pump-out services, and a larger bathhouse with showers. Alternatively, if the Township prefers to operate a more basic marina, implementing these additional facilities would be optional. Operation of these services may be carried out by a private business in partnership with the township.

B. RV PARK AND CAMPGROUND

Due to initial interest and demand, the addition of an RV park and campground at Centennial Park was explored. Centennial Park has limited space, making the addition of RV and tent campsites challenging. The addition of an RV park and campground is not currently a high priority for Chassell due to potential developments of a similar facility nearby.

C. POTENTIAL FUTURE DEVELOPMENT

Chassell community members have expressed interest in a variety of creative opportunities to further improve Centennial Park. In addition to the concepts presented in this report, several additional ideas were discussed but not fully developed into formal designs. These include the potential for a waterfront dining option, which could take the form of a small restaurant accessible by foot and boat, or a designated area for rotating food trucks. **Figures 4 and 5** illustrate a conceptual food truck area consisting of two designated vendor pads with electrical hookups, and picnic tables for customers. This flexible space allows for a rotation of different food vendors in the park.

Another concept incorporated into the long-term plan is a band shell, strategically located to take advantage of the natural slope to the east of the pavilion. This space could serve as a community gathering area for live music, events, educational programming, and outdoor movie nights. The band shell could be designed to reflect the site's rich logging history by incorporating timber construction and other elements into the design.

Fishing is very important to the Chassell community. To enhance fishing opportunities the plan includes the installation of fish habitat structures in the water between the boardwalk and the marina. These habitat enhancements would provide shelter and spawning areas for the fish and encourage healthy fish populations. To complement these improvements, dedicated fishing piers are proposed along the marina access docks and provide safe and convenient locations for people to fish.

Overall, Chassell Township is open to exploring a range of improvement options, if they align with community goals and contribute to the park's functionality.

D. PARK LANDSCAPING

As stated in the short-term plan, improving tree coverage and beautifying the park is important. The long-term plan showcases a greenspace strip that spans the length of the park closest to the water. This green space is important to those enjoying the views and relaxing in the park. Currently greenspace by the water does not exist in a solid line and is instead broken up between basketball courts and volleyball courts. The addition of more shade trees would allow for more shaded areas for visitors to relax under. As the park facilities grow, benches, picnic tables, recycling bins, and trash cans should be added to these new areas. Recycling bins should always be accompanied by a trash bin to avoid contamination

C. MAINTENANCE AND REPLACEMENT

When looking at the site as a whole, it is important to preserve areas closest to the water for passive recreation, scenic views, and relaxation. Visitors arriving to participate in activities such as pickleball or basketball are generally more focused on the activity than the proximity to the water. Therefore, as amenities reach their end of life and need replacement, new replacements can be relocated towards the back of the park along the MDNR trail. Shifting the courts and other active amenities to the western edge of the park would free up a continuous strip of strip of green space along the shoreline.

The proposed expansion of the Centennial Park Pavillion would support both the marina and campground operations. It could serve as a centralized check-in area for

visitors as well as a restroom facility with showers for overnight guests. Expanding the existing pavilion to create a larger restroom facility will cut down on building costs and not increase the number of buildings on the property. Alternatively, the existing building could be replaced with a new larger center, however that would likely be more expensive.

V. PHASING OF IMPROVEMENTS

Chassell Township would benefit from pursuing and obtaining grant funding to assist with improvements at Centennial Park. Pursuing a grant that provides at least a 50/50 grant to local funding match would significantly increase the feasibility of Chassell's larger projects. Breaking the projects down into smaller phases makes it more feasible to complete and fund each individual project.

A. PHASING

A phased improvement approach provides Chassell Township with flexibility when planning, funding, and implementing improvements to Centennial Park. By breaking the overall vision into manageable phases, the township can prioritize projects based on their needs and available funding. The phased improvement estimate options are presented in greater detail in **Appendix D**. The project estimates, including engineering and contingency, for each phase are as follows:

• Phase I – Parking Lot Improvements:	\$110,000
• Phase II – Signage Improvements:	\$50,000
• Phase III – Park Landscaping:	\$110,000
• Phase IV – Initial Marina:	\$1,608,000
• Phase V – Marina Expansion:	\$2,340,000

ESTIMATED TOTAL PLAN COST = \$4,119,000

The utilization of township funding may be dependent on potential grant opportunities in order to complete future improvement projects to best serve the needs and demands of the community, while still maintaining a positive township budget.

B. GRANT OPPORTUNITIES

Chassell Township is anticipated to be eligible for several potential grant opportunities that are available for public entities and rural communities. Grant funding assistance is critical for marina development and park improvement projects and will likely be the key factor that determines the scope and schedule for

development projects. The grant availability and eligibility requirements are subject to change and may vary from the opportunities that are currently available at the time of this study. **Table 1** below provides a brief summary of potential grant options for Chassell Township when seeking funding assistance for Centennial Park improvement projects.

TABLE 1: POTENTIAL GRANT OPPORTUNITIES

Potential Grant	Description
US Fish and Wildlife Service (MI DNR) Boating Infrastructure Grant Program	Provides funding for infrastructure improvements at harbors for transient boaters
United States Department of Agriculture Rural Development Grant	Provides funding for infrastructure that benefits rural communities
Michigan Economic Development Corporation - Public Spaces Community Places	Provides funding for strategic projects in local communities
Copper Shores Community Foundation	Provides funding towards improving local recreational activities and access

*MI DNR Waterways Grant is not an option due to Chassell's proximity to other grant recipients.

Chassell Township is encouraged to actively seek grant funding assistance to support future improvements to Centennial Park. The local community has identified a need for improvements and additional amenities such as a marina, which are anticipated to be addressed over a multi-phased construction schedule based on project funding. Seeking grant funding from different sources could help to optimize township funding to complete the proposed marina improvements in a timely and cost-effective manner.

B. DEVELOPMENT PARTNERSHIP OPPORTUNITIES

Chassell Township has several ambitious goals for the future of Centennial Park and is open to exploring partnerships with private entities to help bring these improvements into fruition. In particular the Township is interested in partnering with a developer to design, construct, and operate a marina on park property. Given the significant capital investment this project requires, pursuing a public-private partnership presents a practical and financially viable path forward.

This Preliminary Engineering Report is intended to communicate the vision and priorities of the local community and provide a flexible framework for future development. The report outlines multiple design concepts and phasing options that can be adapted based on the available funding, demand, and developer input. The concepts are intended to serve as a starting point for further discussion and

refinement. Through collaboration, Chassell Township and a private partner can work together to develop a marina that enhances Centennial Park, supports local recreation, and strengthens the local economy.

C. CONCLUSION

Centennial Park in Chassell Township is a highly valued community resource that provides access to Chassell Bay and supports numerous recreational opportunities for residents and visitors. Through background research on the community, site inspection and evaluation, and conceptual planning, this report brings together a phased Master Plan for Centennial Park, outlining short-term and long-term visions for the park. Centennial Park currently provides many amenities for its visitors, including a boat launch with trailer parking, a fish cleaning station, restroom facilities, playground and recreational courts, a swimming beach and green space areas. Community members would enjoy the addition of a marina, food trucks, increased fishing opportunities, and increased parking areas at the park. Proposed designs for the marina include a short-term and long-term vision to show the marina can be scaled up if there is proper funding. A public-private partnership between Chassell Township and a private developer represents a practical approach to making the proposed marina financially feasible. By combining public vision with private investment, a valuable waterfront amenity could be created for the community. Although many of the current facilities are generally in good condition and used on a regular basis, it is important to plan for future upgrades. The proposed long-term plan outlines optimal locations where amenities can be rebuilt once in need of repairs. Together, these recommendations provide a clear roadmap to enhance Centennial Park as a destination for residents and visitors seeking a variety of outdoor recreational activities.

Appendix A
Existing and Proposed
Site Plan

A

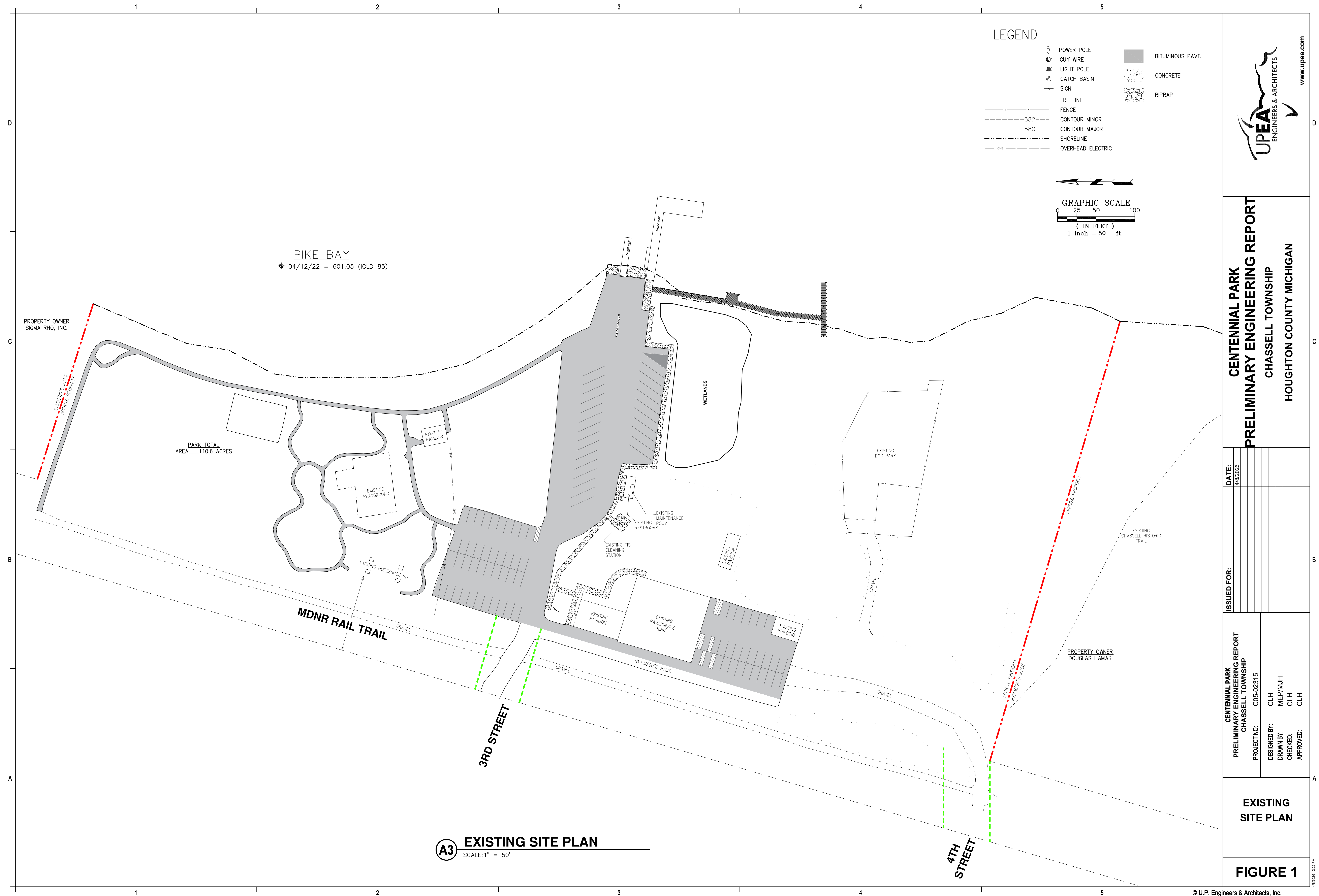


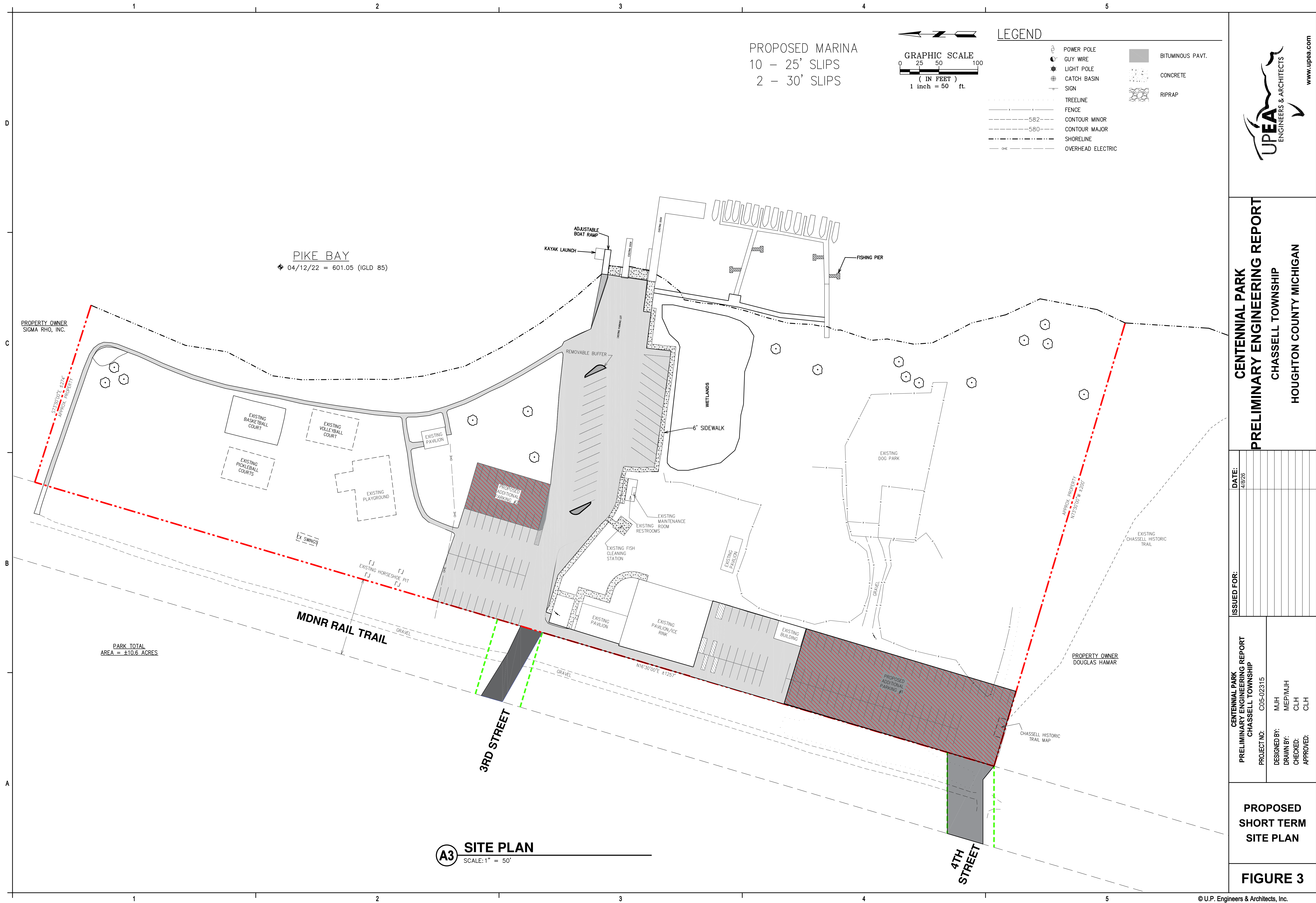
NO SCALE



G001







LEGEND

-  POWER POLE

 GUY WIRE

 LIGHT POLE

 CATCH BASIN

 SIGN
-  BITUMINOUS PAVT.

 CONCRETE

 RIPRAP
-  TREELINE

 FENCE

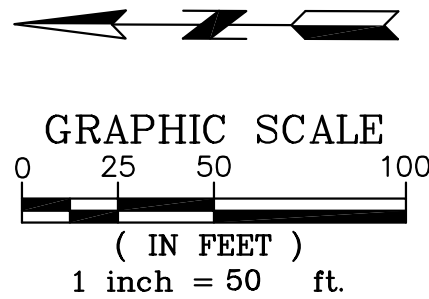
 CONTOUR MINOR

 CONTOUR MAJOR

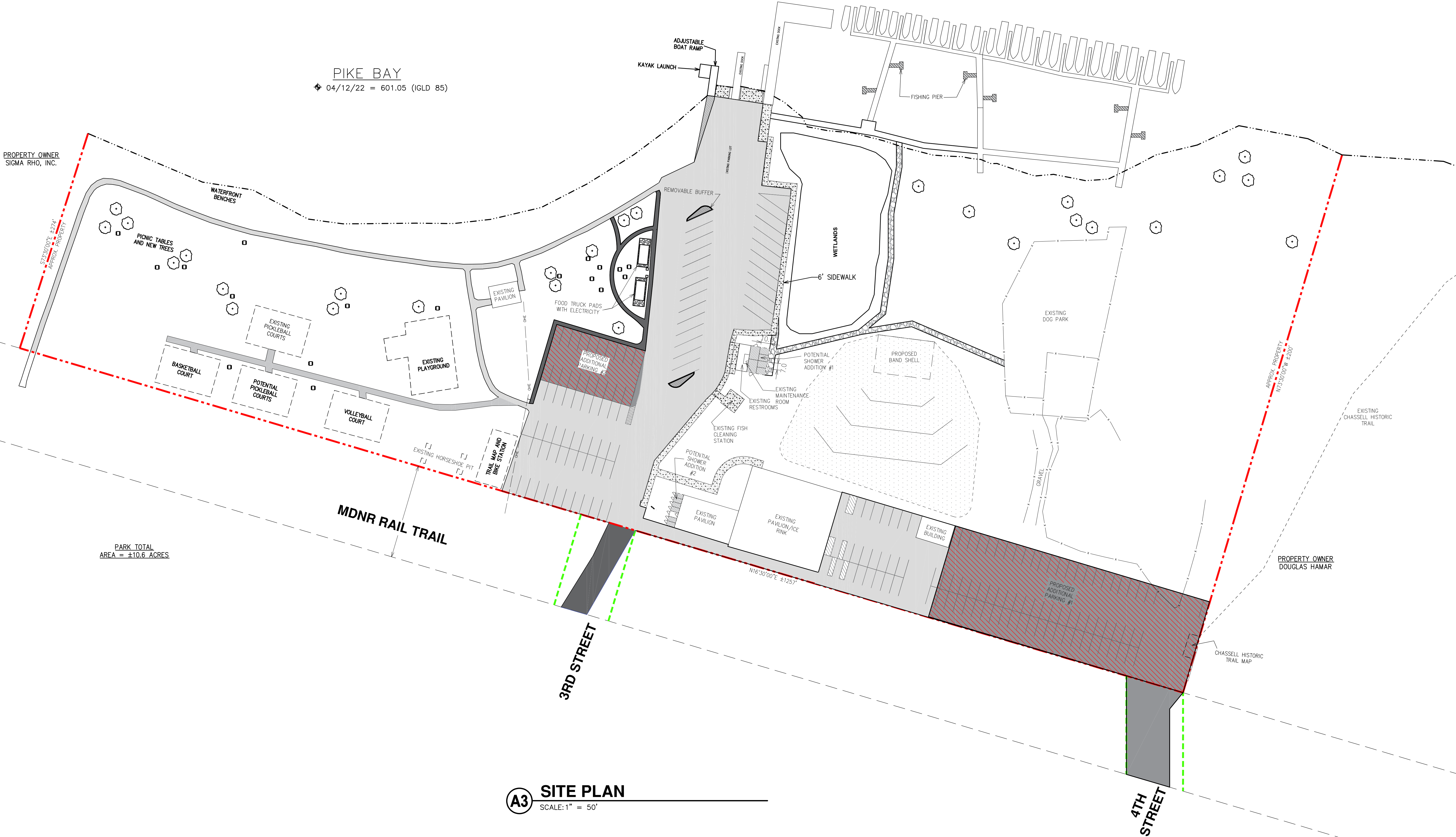
 SHORELINE

 OVERHEAD ELECTRIC

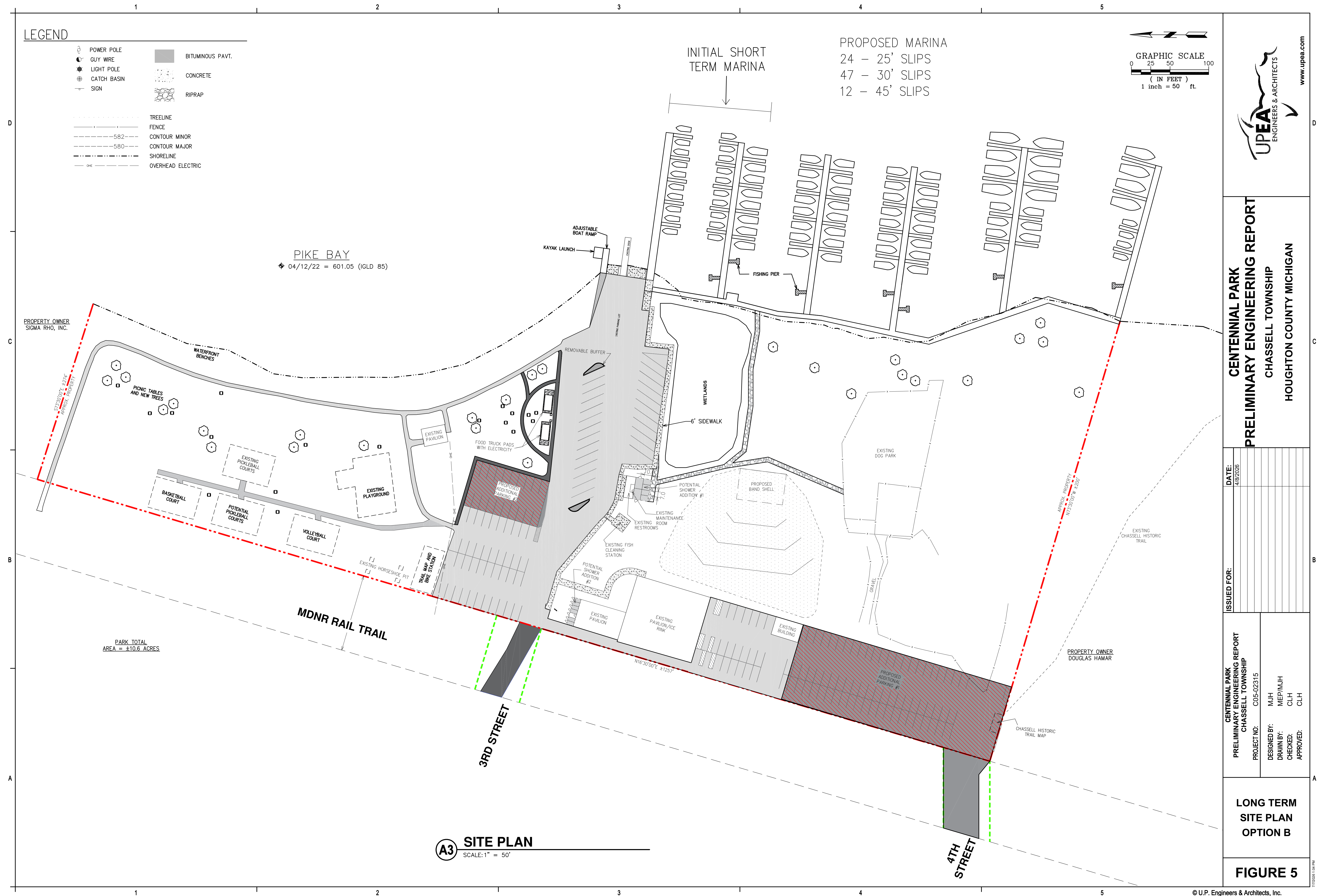
PROPOSED MARINA
11 – 25’ SLIPS
15 – 30’ SLIPS

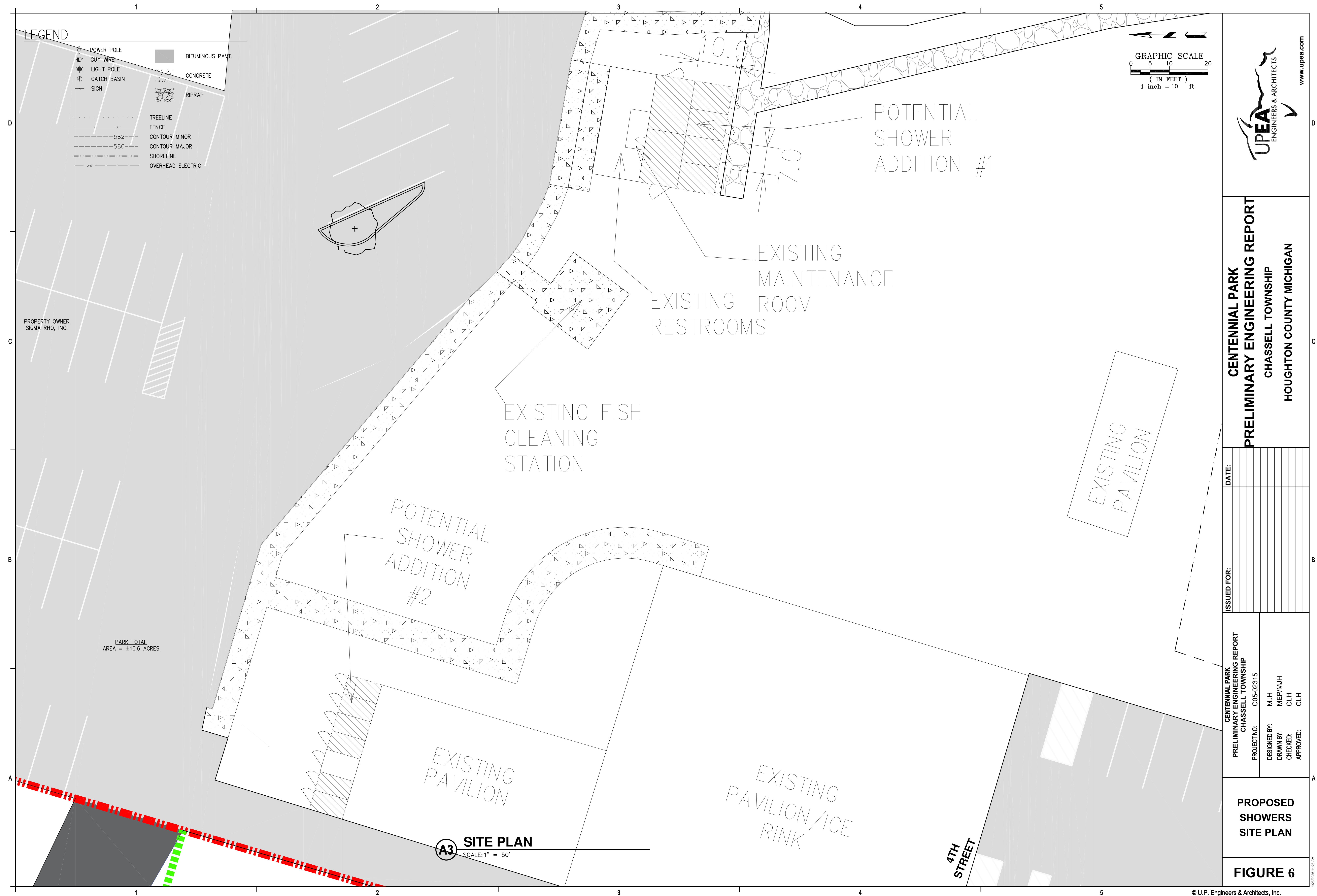


www.upea.com



A3 SITE PLAN
SCALE: 1" = 50'



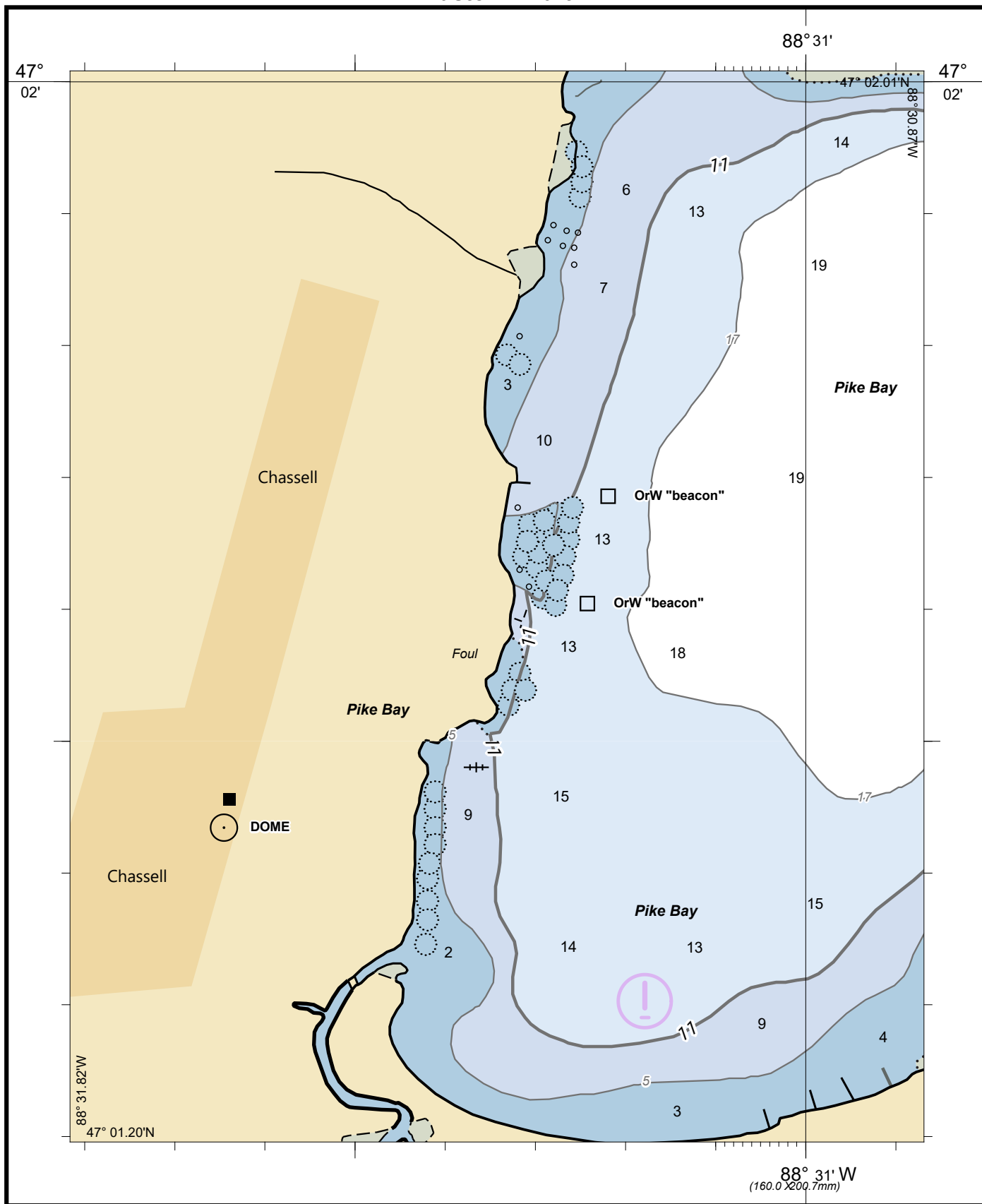


Appendix B
NOAA Depth
Chart

UNITS IN FEET

Custom Chart

WGS 84



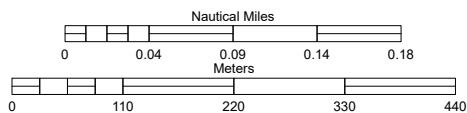
To ensure that this chart was printed at the proper scale, the line above should measure six inches (152 millimeters).

WGS 84

Generation Date: 12/17/2025
Page Size: Letter - 11 x 8.5 inch (Portrait)



Projection Information
WGS 1984 World Mercator (Calculated)
SCALE 1:7500 at Lat. 47°1.6'
GCS WGS 1984



UNITS IN FEET

Appendix C

Pre-application

Meeting



GRETCHEN WHITMER
GOVERNOR

STATE OF MICHIGAN
DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY
WATER RESOURCES DIVISION



PHILLIP D. ROOS
DIRECTOR

June 6, 2025

VIA EMAIL

Chassell Township
Attn: Keith Meyers
42908 Lakeshore Drive
Chassell, Michigan 95661

Dear Keith:

SUBJECT: Preapplication Meeting
Submission Number: HQB-J3T0-16T3T
MiEnviro Site Name: 31-Chassell Centennial Park-Chassell Twp
Chassell, Houghton County

This letter is a follow-up to our May 22, 2025, preapplication meeting regarding the proposed project in Chassell, Houghton County. The purpose of a preapplication meeting is to provide you with information that will clarify the permit process, answer preliminary questions about your specific project in order to avoid delays at a later date, and to determine, if possible, the need for wetland or inland lakes and streams permits.

During this meeting, we reviewed the need to obtain a permit under Part 301, Inland Lakes and Streams; and Part 303, Wetlands Protection, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA). The review was based on discussion of the proposed project and/or draft permit application, the proposed site, and potential modifications to the project discussed during our meeting.

During the review of the project site, the Michigan Department of Environment, Great Lakes, and Energy's (EGLE) Water Resources Division (WRD) made the following findings regarding the need for a permit under Part 301 and Part 303 of the NREPA:

- **A Part 301 permit is required for the project as proposed.**
- **It cannot be determined whether a Part 303 permit is required given the information presented at this time.**

This determination is based on the attached project plan prepared by U.P. Engineers & Architects, Inc. (including EGLE modifications in yellow), along with other information provided at the time of this meeting only. Provided that the proposed project and location are not altered, this determination is binding on EGLE for a period of two years from the date of this meeting.

During the review of the proposed project, the WRD noted activities that, as currently designed, would require authorization under Section 404 of the federal Clean Water Act and/or the federal Rivers and Harbors Act from the United States Army Corps of Engineers.

During the meeting, we also discussed several issues related to the project, including the following:

- Chassell Twp recently acquired a parcel (parcel ID number 003-132-074-00) south of the dog park that includes a single lane road to the shoreline. The preliminary plans were created before this parcel was acquired. Because the new parcel includes a road to the shoreline, we spent most of the meeting discussing options for creating a marina that included access from the new parcel.
 - The wetland boundary was very distinct on the new parcel, occurring immediately along the toe of the slope that was created when fill was historically added to the new parcel.
 - There did not appear to be enough upland on the new parcel to accommodate any trailer parking.
 - Old pilings and industrial debris were observed along the shoreline and into the lake. Removing these structures would require a Part 301 permit from EGLE. This part of the project should be designed to meet the criteria under GP U. Removal of Structures. For more information visit:
<https://www.michigan.gov/egle/-/media/Project/Websites/egle/Documents/Programs/WRD/Wetlands/General-Permit-Categories.pdf>
- The sawdust pile partially located within the dog park fence was not regulated wetland. An EGLE permit is not required to excavate or add fill to this area.
- We discussed expanding the existing parking lot that is south of the pavilion. The expansion area was proposed west of the existing parking lot boundary toward the railroad grade. The area immediately adjacent to the parking area was upland, transitioning to wetland as you head west. A Part 303 permit will not be required for this part of the project **if the parking lot expansion avoids wetland impacts.**
- We also discussed several topics related to permitting a new marina on Portage Lake.
 - The marina must extend from riparian property of the applicant and shall be configured so that all boat mooring under any wind condition will occur solely within the marina's riparian interest area. Additionally, boat mooring and ingress and egress for an outside slip shall require a minimum maneuvering distance of 1.5 times the length of the slip.
 - This did not appear to be an issue for the proposed project given the length of undeveloped shoreline Chassell Township owns at this site. The marina should be designed to avoid impacts near adjacent parcels.
 - The recently installed boardwalk should be considered as a potential access point to dockage as proposed in the attached plans. Any anchoring devices for the proposed dock should be designed to avoid wetland impacts if possible. Consider installing dock anchors lakeward of the wetland that occurs along a majority of the shoreline.
 - An application to construct a new marina or expand the watercraft handling capacity of an existing marina shall include documentation as to how the facility will provide watercraft sanitary holding tank pump-out services as required under section 5 of Act No. 167 of the Public Acts of 1970, as amended, being S323.335 et seq. of the Michigan Compiled Law.

June 6, 2025

- The application fee. Please see the 'Marina Construction, Expansion, or Reconfiguration Projects under Parts 301 or 325' section within the JPA fee schedule via the following link: <https://www.michigan.gov/-/media/Project/Websites/egle/Documents/Programs/WRD/Wetlands/Joint-Permit-Application-Fee-Schedule.pdf?rev=1d22a810821c43728f854d8043f1db5a>
- Possible alternative design options to minimize project effects on aquatic resources; specifically: using the existing boardwalk and fishing pier to provide access to the proposed docks instead of creating new shoreline access points and avoiding wetland impacts.
- Information on completing an application form. Please submit the Joint Permit Application (JPA) using the same MiEnviro Portal site as was used for this preapplication meeting request (31-Chassell Centennial Park-Chassell Twp).

Please note that this is not a permit. The WRD cannot indicate during a preapplication meeting whether or not a permit will be issued. The WRD cannot make a decision regarding a permit until it has considered all of the information provided in the final permit application, and, in some instances, has also considered comments received in response to a public notice of the project. Therefore, the WRD cannot legally tell you whether the project will be permitted in advance of a permit application being submitted and reviewed.

The EGLE submission number assigned to this project is HQB-J3T0-16T3T. Please keep a record of this submission number and use it when submitting a final application or otherwise corresponding with our office on this project.

We appreciate the opportunity to meet with you or your representative to address these concerns. We have established a submission for this project, and the information submitted to date will be used to facilitate processing of the final application. If you should have follow-up questions before then, please contact me at Matt Lubejko; LubejkoM@Michigan.gov; or EGLE, Water Resources Division, Marquette District Office, P.O. Box 30458, Lansing, Michigan 48909-7958.

Sincerely,



Matt Lubejko
Water Resources Division
Marquette District Office

ML:SLS

attachment

cc: U.S. Army Corps of Engineers

Appendix D

Preliminary

Estimates

PRELIMINARY ESTIMATE
CHASSELL TOWNSHIP
CENTENNIAL PARK ENGINEERING STUDY



PHASE I - PARKING LOT IMPROVEMENTS				
<u>Item</u>	<u>Amount</u>	<u>Units</u>	<u>Cost</u>	<u>Total</u>
MOBILIZATION	1	LSUM	\$10,000	\$10,000
SITE DEMOLITION	1	LSUM	\$5,000	\$5,000
HMA SURFACE REMOVAL	275	SYD	\$20	\$5,500
AGGREGATE BASE	500	SYD	\$20	\$10,000
2.5" ASPHALT PAVING	500	SYD	\$35	\$17,500
CONCRETE SIDEWALK	250	SYD	\$100	\$25,000
CONCRETE CURB	100	FT	\$100	\$10,000
CURB PAINTING	1	LSUM	\$2,000	\$2,000
PAVEMENT MARKINGS	1	LSUM	\$5,000	\$5,000
			CONSTRUCTION SUBTOTAL	\$90,000
			10% CONTINGENCY	\$9,000
			10% ENGINEERING	\$11,000
			PHASE I TOTAL	\$110,000

PHASE II - SIGNAGE IMPROVEMENTS				
<u>Item</u>	<u>Amount</u>	<u>Units</u>	<u>Cost</u>	<u>Total</u>
MOBILIZATION	1	LSUM	\$10,000	\$10,000
WAYFINDING SIGNAGE	1	LSUM	\$7,500	\$7,500
KIOSK MAP	1	LSUM	\$10,000	\$10,000
BIKE REPAIR STATION	1	LSUM	\$12,500	\$12,500
			CONSTRUCTION SUBTOTAL	\$40,000
			10% CONTINGENCY	\$5,000
			10% ENGINEERING	\$5,000
			PHASE II TOTAL	\$50,000

PHASE III - PARK LANDSCAPING				
<u>Item</u>	<u>Amount</u>	<u>Units</u>	<u>Cost</u>	<u>Total</u>
MOBILIZATION	1	LSUM	\$10,000	\$10,000
TREE PLANTINGS	15	EA	\$3,000	\$45,000
PERENNIAL PLANTINGS	10	EA	\$1,500	\$15,000
CLEARING/GRUBBING	1	LSUM	\$2,000	\$2,000
MISC. IMPROVEMENTS (BENCHES, TABLES, GRILLS TRASH CANS, ETC.)	1	LSUM	\$13,000	\$13,000
			CONSTRUCTION SUBTOTAL	\$85,000
			10% CONTINGENCY	\$13,000
			10% ENGINEERING	\$12,000
			PHASE III TOTAL	\$110,000

PHASE IV - INITIAL MARINA UPGRADES				
<u>Item</u>	<u>Amount</u>	<u>Units</u>	<u>Cost</u>	<u>Total</u>
MOBILIZATION	1	LSUM	\$100,000	\$100,000
TURBIDITY CURTAIN, DEEP	500	FT	\$20	\$10,000
TIMBER DOCK REMOVAL	1	LSUM	\$75,000	\$75,000
MARINA DREDGING	4000	CYD	\$50	\$200,000
BARGE & PILE DRIVING EQUIPMENT, FURN	1	LSUM	\$100,000	\$100,000

12x53 H-PILES - MAIN DOCK	1400	FT	\$125	\$175,000
12x53 H-PILES - SLIP DOCK	1225	FT	\$120	\$147,000
MAIN DOCK	2450	SFT	\$80	\$196,000
SLIP DOCKS (INCL. POSTS, CLEATS, ETC.)	1420	SFT	\$100	\$142,000
MARINA LIGHTING	1	LSUM	\$75,000	\$75,000
UTILITY PEDESTALS	20	EA	\$6,000	\$120,000
			CONSTRUCTION SUBTOTAL	\$1,340,000
			10% CONTINGENCY	\$134,000
			10% ENGINEERING	\$134,000
			PHASE IV TOTAL	\$1,608,000

PHASE V - MARINA EXPANSION				
<u>Item</u>	<u>Amount</u>	<u>Units</u>	<u>Cost</u>	<u>Total</u>
MOBILIZATION	1	LSUM	\$100,000	\$100,000
TURBIDITY CURTAIN, DEEP	750	FT	\$20	\$15,000
MARINA DREDGING	6000	CYD	\$50	\$300,000
BARGE & PILE DRIVING EQUIPMENT, FURN	1	LSUM	\$100,000	\$100,000
12x53 H-PILES - MAIN DOCK	1720	FT	\$125	\$215,000
12x53 H-PILES - SLIP DOCK	2125	FT	\$120	\$255,000
MAIN DOCK	4000	SFT	\$80	\$320,000
SLIP DOCKS (INCL. POSTS, CLEATS, ETC.)	2600	SFT	\$100	\$260,000
MARINA LIGHTING	1	LSUM	\$100,000	\$100,000
UTILITY PEDESTALS	25	EA	\$6,000	\$150,000
SELF-SERVE FUEL PUMP	1	LSUM	\$15,000	\$15,000
BOARDWALK	400	FT	\$300	\$120,000
			CONSTRUCTION SUBTOTAL	\$1,950,000
			10% CONTINGENCY	\$195,000
			10% ENGINEERING	\$195,000
			PHASE V TOTAL	\$2,340,000

Appendix E
2023 Chassell
Township Michigan
Master Plan

Appendix F
2023 Chassell Township
Recreation Plan