

Digital EGLE/USACE Joint Permit Application (JPA) for Inland Lakes and Streams, Great Lakes, Wetlands, Floodplains, Dams, Environmental Areas, High Risk Erosion Areas and Critical Dune Areas

version 1.13

(Submission #: HNV-C7Y0-9YD91, version 4)

Details

Submission ID HNV-C7Y0-9YD91

Submission Reason New

Form Input

Instructions

[To download a copy or print these instructions. Please click this link \(recommended\).](#)

The EGLE/USACE "Joint Permit Application" (JPA)

READ THOROUGHLY BEFORE STARTING THE FORM

It is recommended to download a pdf of this page at www.michigan.gov/jointpermit for reference while filling out the form. Please also refer to this website for additional information regarding this form, including a glossary and other helpful resources on information required to be submitted in this form.

This is the Joint Permit Application (JPA) for construction activities where the land meets the water. This application covers permit requirements derived from state and federal rules and regulations for activities involving:

Wetlands
Floodplains
Marinas
Dams
Inland Lakes and Streams
Great Lakes Bottomlands
Critical Dunes
High Risk Erosion Areas

This application prevents duplication of state and federal forms for these activities and provides concurrent review under all pertinent state and federal laws. In the case of U.S. Army Corps of Engineers (USACE) jurisdiction, the Michigan Department of Environment, Great Lakes, and Energy will also send a copy of this Joint Permit Application to the USACE for simultaneous processing. The Michigan Department of Environment, Great Lakes, and Energy will provide coordination between state and federal agencies during the application review.

This application form is set up with the following sections to be completed by the applicant (note that it is recommended to gather all this information prior to starting this form):

Contact Information:

Applicant, Property Owner(s), Consultant(s), and any other Authorized Representative(s)

Authorizations are required from the property owner for:

- when the applicant is not the owner,
- when there is a consultant/representative for the applicant,
- when spoils disposal locations are not on site,

- when other permissions are necessary based on project specifics and are identified by the form.

Project Location Information:

Address, coordinates, and directions to the site, etc.

Background Information:

Existing site conditions, other related permits, existing easements/encumbrances, other related application numbers (pre-application meetings, Wetland Identification Program, etc.)

Permit Application Category and Public Notice Information:

This section asks what permit application category you believe fits your project. While this is not required to submit the application, knowing this will also help you submit the right permit application fee and avoid a correction request and processing delays.

The choices of permit application categories to select in the form are:

General Permit, \$50 fee (https://www.michigan.gov/documents/deq/wrd-general-permit-categories_555828_7.pdf)

Minor Project, \$100 fee (https://www.michigan.gov/documents/deq/wrd-minor-project-categories_555829_7.pdf)

Public Notice Individual Permit, range from \$500-\$4,000 depending on type of activity. For High Risk Erosion Areas and Critical Dune Areas fees for Public Notice individual permit applications can range from \$50-\$4000. Additional fees may be applied for some special project requirements such as hydraulic analysis, dam projects, and a special exception application in a critical dune area. See Fee Schedule on website for more information.

Unsure, select this and the permit reviewer will make the determination on permit type after the application is submitted based on the project details. However, some fee is required to be submitted with the application. If an additional fee is required, the Michigan Department of Environment, Great Lakes, and Energy will send a correction request that will show the remaining amount required. The application will not be considered complete without the proper fee.

Adjacent Landowner contact information for Public Notice projects is required by law. This includes any parcels touching the project parcel and parcels across the street.

Project Description:

Information on the Proposed Use and Purpose of the project (who and what the project is intended for and why is it needed). This includes a written summary of the project as well as a list of project uses and types to select from as follows:

Project Use Selections:

- Private
- Commercial
- Public/Gov/Tribal
- Federal/State funded
- Non-Profit
- Other

Project Type Selections:

- Agriculture
- Airport
- Development- Condo/ Subdivision/Residential
- Development-Commercial/ Industrial
- Drain-County
- Drain-Private
- Drawdown
- Lake, Drawdown
- Wetland Forestry
- Landfill
- Marina/Mooring Facility
- Marine Railway
- Mining-Mineral,
- Mining-Sand and Gravel
- Private Residence
- Restoration-Wetland
- Restoration-Stream
- Transportation
- Septic System Surveying or Scientific Measuring Device
- Utility-Electrical, Fiber optic
- Utility-Oil and gas pipelines
- Utility-Sewer/water line
- Other

Construction Details including sequencing, timeframes, SESC measures, etc.

Alternatives Analysis detailing all options considered and why this is the least impactful feasible and prudent proposal. The depth of this analysis is typically commensurate with the size and purpose of the project and at minimum should include variables such as alternate locations (including other properties), configurations and sizes (layout and design), and methods (construction technologies), and other constraints (local regulations, resource issues). Discussion should also include why the do nothing alternative is not feasible or prudent.

Project Compensation:

Narrative of how proposed impacts will be compensated (mitigated or other minimization measures), including amount, location, and method; or why mitigation should not be required. This can be traditional mitigation and/or other techniques used to minimize overall loss of functions.

Resource and Activity Type. This section is intended to determine what additional sections of the application are generated (as seen on the left side of the screen) for further information gathering. This includes questions regarding what Resource feature is involved (e.g., wetland, stream, floodplain, pond, dam, critical dune, etc.) and if there are identified Special Activities (i.e., activities requiring a specific series of questions to be answered). Be sure to choose all that apply to your project. If your activity is not listed, choose None of the Above and move on to the next question. More specific activity questions will appear later based on the resource section answers.

Resource Information and Impacts Sections (Multiple Sections). These are a series of sections that will appear on the left side of the screen based on your answers to the Resource and Activity Types section. You will input further information on the existing resources to be impacted (e.g., wetland type, permanent or temporary impact, water elevation data, drainage area, etc.) and all proposed Project Activities with their Dimensions (e.g., length, width, depth, square footage). For example, when Wetland is selected as a resource that your project will involve, a Wetland Project Information and Impacts section will appear on the left side of the screen that includes questions specific to gathering information about the wetland.

For projects including Floodplains, Marinas, Dams, Critical Dunes, or High Risk Erosion Areas individual sections will appear on the left side of the screen that include different sets of specialized questions as required by those programs. These sections do not share a specific format. Help tips will guide you in filling out these sections.

For projects including wetlands, ponds, inland lakes, streams, or the Great Lakes resources, individual sections will appear on the left side of the screen that are similar in format to each other. Each of these resource sections asks initial general information and then has additional questions regarding the Types of Activities proposed for each resource. The outline for these resource activity impacts questions is Activity Type, Dimensions Table, and Special Questions.

There are four overall Types of Activities groups for wetlands, ponds, inland lakes, streams or the Great Lakes:

- Fill Activities
- Dredge Activities
- Structure Activities
- Other Activities

Under each of these Types of Activity questions, specific activity lists will be shown that are typical for that type (fill, dredge, structure, other) and resource (wetland, lake, stream, etc). Follow these steps to accurately fill out the Activity Type Questions:

1. Start with the Fill question and choose any activities on the list that is included in your project. If your activity is not shown, then select None of the Above and move to the next question.
2. When you select an activity listed under Fill, Dredge, Structure, or Other, a dimensions table will appear under that question. This table is where you enter EACH activity OF THE TYPE YOU SELECTED and associated dimensions. Be sure that all the activities you selected are also listed in the table with the dimensions. Multiple activities covering the same footprint may be combined on one line in the table (for example, riprap on slopes of driveway fill can be entered on the same impact dimensions line and does not necessarily need to be broken out).
3. Continue to answer the Activity Type questions (Fill, Dredge, Structure, Other) until all have been answered with either a specific Activity listed under that Type or None of the Above. If you did not find your activity in any list then select Other, Other and provide a description of your activity in the space that appears. Please be as descriptive as possible.

Proposed mitigation questions may appear within specific resource types sections based on your answers. Enter any proposed mitigation in the appropriate section (wetland, stream, etc.) and if no mitigation is proposed you must provide commentary with an explanation as to why it is not required. Mitigation plans according to the mitigation checklist (link) are required for a complete application. When mitigation is proposed be sure to also select mitigation in the Permit Application Type section under the second question.

In the above sections, uploads will be prompted as required by the answers to questions. These should be uploaded in these location (ex, mitigation plans should be uploaded in the mitigation section). Please do not wait to upload one large document with all plans combined at the end. Note that each individual upload is limited to 10M.

Upload of Proposed Site Plans.

Any plans or explanatory narratives not requested in previous sections should be uploaded in this section. Construction Plans

including overhead view, cross sections, and profiles showing each impact either to-scale or with dimensions are required and typically would be uploaded here. Plan labels should correspond with labels entered in the form for each activity selected. The application will not be complete without the proper site plans. If drawings are not received with all required dimensions and resources identified, then the Michigan Department of Environment, Great Lakes, and Energy will send a correction request and your application processing will be delayed. However, please limit drawings, plans, and narratives submitted to the items necessary for permit review. For example, entire bid package documents and CAD drawings are often not helpful for permit review and may cause delays from wading through extraneous information. Plans, profiles and cross sections specific to the resource impacts are the most helpful.

Review:

This section allows you to see the entire form with the answers you entered. Please review for accuracy prior to hitting the submit button. A print option is provided on this screen (print to PDF is recommended). Once the application is submitted you may not make changes to it until the application has been assigned to a staff person.

Certify & Submit:

This is the final section of the application form. The **Submit Form** button selection certifies that all information in the application is true and accurate and that you have the authority to apply for the permit as indicated. This application will become part of public record.

We recommend that you have the above information ready prior to starting this application. You will be able to save in-progress applications and come back later, but all required uploads and questions are necessary before the system will allow submittal of the application. Some sections of this application form load faster than others depending on the complexity of the questions.

Thanks for your patience while you work through the application. For assistance with this form visit:

<https://www.michigan.gov/jointpermit>

[Click here for additional information on maps, drawings, and other attachment](#)

Contact Information

Applicant Information (Usually the property owner)

First Name	Last Name	
Jerry	Tarpley	
Organization Name		
Traver Lakes Community Maintenance Association		
Phone Type	Number	Extension
Business	7346758943	
Email		
treasurer@traverlakes.com		
Address		
2255 Placid Way		
Ann Arbor, MI 48105		

Is the Property Owner different from the Applicant?

No

Has the applicant hired an agent or cooperating agency (agency or firm assisting applicant) to complete the application process?

Yes

Upload Attachment for Authorization from Agent

TraverLakes_LOA_20191023_Signed.pdf - 02/05/2020 02:30 PM

Comment

NONE PROVIDED

Agent Contact

First Name **Last Name**

Ryan Roggie

Organization Name

Spicer Group, Inc.

Phone Type **Number** **Extension**

Mobile 8147902635

Email

ryan.roggie@spicergroup.com

Address

125 Helle Blvd Suite 2

Suite #2

Dundee, Michigan 48131

Are there additional property owners or other contacts you would like to add to the application?

No

Project Location

DEQ Site Reference Number (Pre-Populated)

8226092764881574082

Project Location

42.3104,-83.7143

Traver Blvd., Ann Arbor, MI

Project Location Address

Traver Blvd.

Ann Arbor, MI 48105

County

Washtenaw

Is there a Property Tax ID Number(s) for the project area?

Yes

Please enter the Tax ID Number(s) for the project location

09-09-15-202-001, 09-09-15-201-001, 09-09-15-101-003, 09-09-15-101-002

Is there Subdivision/Plat and Lot Number(s)?

No

Is this project within Indian Lands?

No

Local Unit of Government (LUG)

Ann Arbor

Directions to Project Site

The point of beginning is approximately 1,000' SW of the Traver Blvd. and Tuebingen Pkwy. The point of ending is approximately 2,500' South and 270' West of the Dhu Varren Rd. and Nixon Rd.

Background Information

Has the Michigan Department of Environment, Great Lakes, and Energy (EGLE) and/or United States Army Corps of Engineers (USACE) conducted a pre-application meeting/inspection for this project?

Yes

Provide the date of the pre-application meeting/inspection

5/7/2019

Pre-application File Number:

HNE-R6QM-XM82V

EGLE and/or USACE staff person involved in the pre-application meeting/inspection:

Melissa Letosky

Has the project scope or design changed since the pre-application meeting/inspection?

No

Has the EGLE completed a Wetland Identification Program (WIP) assessment for this site?

No

Environmental Areas are coastal wetlands on the shorelines of the Great Lakes. Enter this number only if a designated Environmental Area is in the proposed project area. Environmental Areas are designated locations along the Great Lakes shoreline. If you don't know whether there is an environmental area within the project area, leave blank. Additional information on Environmental Areas can be found by clicking the following link:

[Click Here for Link](#)

Environmental Area Number (if known):

NONE PROVIDED

Has the United States Army Corps of Engineers (USACE) completed either an approved or preliminary jurisdictional determination for this site?

No

Were any regulated activities previously completed on this site under an EGLE and/or USACE permit?

No

Have any activities commenced on this project?

No

Is this an after-the-fact application?

No

Are you aware of any unresolved violations of environmental law or litigation involving the property?

No

Is there a conservation easement or other easement, deed restriction, lease, or other encumbrance upon the property?

No

Are there any other federal, interstate, state, or local agency authorizations associated with this project?

No

Permit Application Category and Public Notice Information

Project Category Selection:

The Permit Application Category you apply under is dependent on the type and scope of activities you are undertaking and the resources affected. There is a three-tier permitting process to aid in expediting permits for regulated activities that occur on wetlands, inland lakes and streams, and the Great Lakes (Parts 301, 303, and 325): General Permit, Minor Project, and Individual Permit.

Additionally, Minor Project categories exist for floodplains under the authority of Part 31.

General Permit and Minor Project categories generally meet specific Best Management Practices criteria that have been shown to minimize impacts to resources if followed correctly. If you select a General Permit or Minor Project Category you must select the specific category(ies) that your project fits under. Any project that does not fit a General or Minor Category are Individual Permit projects. All projects in Critical Dunes, High Risk Erosion Areas, or Dam Safety projects will be Individual Permit Projects.

Indicate the type of permit being applied for.

Individual Permit for all other projects

This type of permit application requires that you include contact information for the adjacent landowners to this project. If you are only entering in a small number of bordering parcel owners contact information, please select "Enter list of recipients". If there is a rather large number of affected property owners such as a project that significantly affects lake levels, please upload a spreadsheet of the property owners. Please include names and mailing addresses.

Upload a list.

Uploads/Attachments

Adjoining Properties.xlsx - 04/15/2020 03:09 PM

Comment

NONE PROVIDED

[Link to General Permit Categories with Descriptions](#)

[Link to Minor Permit Categories with Descriptions](#)

[Link to Minor Project Category descriptions for Floodplain Only projects \(See R323.1316\)](#)

Project Description

Project Use: (select all that apply - Private, Commercial, Public/Government/Tribal, Receiving Federal/State Transportation Funds, Non-profit, or Other)

Private

Project Type (select all that apply):

Other: Stream and lake restoration on apartment complex and condominium land

Drain - Private

Drawdown - Lake

Please enter your answers in the text box for the next four questions. If you have a long description, please use the document upload at the end of the section. Please make every effort to enter your information directly into the application text boxes. If the answer is in an attachment, please identify that in the text box below.

Project Summary (Purpose and Use): Provide a summary of all proposed activities including the intended use and reason for the proposed project.

The Traver Lakes Community Maintenance Association (TLCMA) has been experiencing significant erosion issues within a series of private channels and ponds located within a residential development. Erosion has impacted site features such as pedestrian pathways, open space, and threatens adjacent residential structures. Hydrology for the system is primarily driven by stormwater inputs from a city storm sewer that drains properties from the surrounding residential area. The contributing volume of stormwater runoff from the surrounding areas, steep gradients, and ice pressure due to freeze and thaw cycles during the winter have resulted in significant shoreline and channel erosion. The primary purpose of this project is to address erosion concerns and protect the adjacent residential properties. Unfortunately, controlling stormwater input (e.g. off-site detention, etc.) from the City's storm sewer system is not an option and given site conditions (water volume/velocity and gradient), the solution requires an approach that looks at the overall channel/pond system and corresponding corrective and protective actions at multiple locations. While some minor impacts are necessary, the project is designed to minimize wetland and surface water impacts while improving stability and water quality of the system. Specific activities for which the TLCMA is requesting a permit are identified on the project plans by project area (Project Areas I through V), and are detailed below.

Project Area I The outlet for the western pond requires rehabilitation and the channel banks surrounding the downstream headwall of the outlet culverts are severely eroded. Proposed rehabilitation and erosion protection include: ♦ Relining the existing pipes to increase strength and integrity. ♦ Placing approximately 15 cubic yards (20 square yards) of riprap at the downstream outlet to protect it from erosion.

Project Area II Downstream of the Tuebingen Parkway crossing, an existing wooden retaining wall has failed, and bank erosion is endangering the foundations of nearby condominiums. Due to the threat to adjacent condominiums and steep channel gradient, changes to the crossing outlet are required. Specifically, the proposed work includes: ♦ Removal of the failed wooden retaining wall. ♦ Installation of a manhole drop structure and 24 lineal feet of 48-inch diameter RCP with a flared end section, to dissipate flow energy and direct flows away from existing residential structures. ♦ Place 25 cubic yards (35 square yards) of riprap at the outlet.

Project Area III An existing weir is located in the channel near the wooden footbridge crossing between Tuebingen Parkway and Lancashire Drive. The existing weir has a head of 3 feet and was likely installed due to the steep channel gradient, in order to manage flow velocities. In addition, a stormwater outfall with a broken concrete splashpad is located immediately upstream of the weir on the south bank. A small area of emergent wetland (0.1 acres) has developed behind the existing weir as a result of the impoundment of stormwater. Specifically, the proposed work includes: ♦ Removal of the existing weir and footbridge. ♦ Install riprap riffle and pool structures system (as part of a series of channel improvements described later) to stabilize the channel. ♦ Remove existing broken concrete pad and install 5 cubic yards (10 square yards) for a riprap splashpad to dissipate stormwater flows from the stormwater outlet. ♦ Install a new 36-foot long clear span wooden footbridge crossing the channel. An in-stream pond is located approximately 180 feet downstream of Lancashire Drive that has erosion along the north bank. The work proposed includes: ♦ Place 15 cubic yards (135 lineal feet) of riprap for slope protection of the north bank of the pond. Immediately downstream of the Lancashire Drive crossing, a 60-inch diameter RCP City stormsewer outlet, and a 48-inch diameter RCP crossing have created a plunge pool. Due to the volume and velocity of the stormwater discharges from the outlets, protection at the outlet and downstream of the outlet is required. Specifically, the work includes: ♦ Place 15 cubic yards (30 square yards) of heavy riprap within the existing pool and along the channel banks to prevent erosion.

Project Area IV An existing stormwater outlet is present on the south bank, approximately 200 feet upstream of Lancashire Drive. The stormwater outlet is located near the existing pedestrian walkway at the upslope of the top of bank and has created a gully erosion channel from the outlet. The TLCMA proposes to protect the erosional gully by: ♦ Place 12 cubic yards of riprap for a riprap spillway at the outlet. Near the location of the stormwater outlet mentioned above, sediment has accumulated in the channel causing a restriction of flow. Sediment has accumulated to the point that a defined channel is no longer present and a small stand of narrow-leaved cattail has established (0.04 acres). The TLCMA proposes to remove the sediment within the channel to restore flow from east to west. Proposed work specifically includes: ♦ Excavate approximately 15 cubic yards of material from 0.04 acres of emergent wetland to restore the previously existing channel.

Project Area V The easternmost pond is experiencing significant bank erosion, primarily from ice pressure from freeze and thaw cycles during the winter. Erosion is impacting the adjacent commons areas and an existing pedestrian path. The TLCMA proposes to protect the existing banks with riprap, remove the existing control structure, and install a new control structure that provides for manipulation of water levels during the winter to reduce ice pressure on the banks. Specifically, the proposed work includes: ♦ Install a total of 75 cubic yards of riprap at two locations (north and east bank); each 200 feet in length. ♦ Remove the existing control structure (two 24-inch diameter concrete culverts). ♦ Install a new control structure consisting of a single 36-inch diameter concrete pipe and a stop log structure. The purpose of the stop log structure is to provide for a 6-inch drawdown during the winter to reduce ice pressure on the pond banks and the level restored to the existing water level during the summer.

Project Areas II - V The existing channel is severely eroded due to high flow velocities and the significant elevation change across the site. Previously installed soft grade control measures have failed, indicating that additional and more resilient measures are needed. A series of riprap riffle and pool structures will be used to stabilize the channel, along with cross-vanes at key locations. These activities will result in improvements to the existing two-stage channel; allowing for stormwater conveyance at lower velocities. Specifically, we are requesting a permit to: ♦ Install 32 cubic yards of riprap to create 6 cross-vanes and riffle zones to protect the channel. ♦ Place a total of 407 cubic yards of riprap to construct 1,100 lineal feet of riprap riffles

Project Construction Sequence, Methods, and Equipment: Describe how the proposed project timing, methods, and equipment will minimize disturbance from the project construction, including but not limited to soil erosion and sedimentation control measures.

This project will most likely be completed in the fall or winter months when the vegetation is dormant, to reduce the impact to the site. When replacing the east pond outlet control structure and installing the drop structure, temporary check dams and pumping will be required to dewater the work location and minimize soil erosion impacts. Silt fence will be used to prevent existing wetland areas from being disturbed by the project. The riprap riffles/pools proposed are being installed with the expressed purpose of reducing erosion in the channel.

Project Alternatives: Describe all options considered as alternatives to the proposed project, and describe how impacts to state and federal regulated waters will be avoided and minimized. This may include other locations, materials, etc.

The existing channel and pond complex constitute a private, man-made and altered system driven primarily by stormwater inputs. The upper (eastern) portions of the system originates with a large City of Ann Arbor storm sewer discharge that drains properties from the surrounding residential area. The outlet at the western pond discharges to a splash pad in disrepair. Flow velocities, steep gradients, erosion at existing stormwater inputs, high water during flood events, and ice pressure have resulted in significant channel erosion, sediment input, channel obstructions, and bank erosion that threatens the foundation of adjacent residential structures, as well as common areas and pedestrian pathways. Ideally, managing stormwater upstream (enclosed system) could address some of the erosion issues. However, the TLCMA has no control over these inputs, and even if they did, costs would prohibit retrofitting the City's stormsewer system. The TLCMA is therefore restricted to on-site improvements to address their erosion issues. Past attempts to control erosion using weir structures and soft engineered protection have failed, including installation of geogrid in the channel. In addition, past protection measures attempted to address single-site issues as opposed to the entire system. Therefore, the alternative chosen requires a more holistic approach that provides the protection necessary, while improving the stability and resource features of the channel and pond shorelines. Alternatives associated with the three stormwater discharges and the western pond outlet are self-evident. The proposed work will result in improvements to the channel and ponds; reducing sediment input by removing broken splash pads and installing appropriate erosion control measures that follow best management practices for properly engineered discharges. Alternatives associated with removal and replacement of the footbridge are also self-evident. Removal of the bridge is necessary to access the weir, and the proposed bridge replacement is a clear span structure that does not result in negative impacts to the channel. The gradient upstream and downstream of Tuebingen Parkway is steep, and the existing headwall downstream is failing. This failing headwall, coupled with steep slopes, poses a serious safety concern for residents. In addition, the direction of the flow at the downstream outlet is not aligned with the existing channel, resulting in bank erosion that threatens the adjacent residential structures. Several alternatives were considered as follows: 1. Installation of a riprap plunge pool was considered downstream of the Tuebingen Parkway crossing. This would address erosion; however, steep slopes would remain, which pose a safety hazard to children (and adults) living in the condominium complex. In addition, this would not resolve the issue with misalignment of flows with the downstream channel, resulting in continued erosion along a steep bank, adjacent to the residential structures. 2. Riprap bank protection was also considered; however, the same issue, as noted above regarding steep slopes and misalignment of flows would remain. 3. Another alternative considered was raising the channel bottom to help flatten adjoining slopes. Based on the elevation of the existing culvert, the channel could be raised at most 2 feet. This would only make a marginal improvement in slope safety and stability. Further, it would not address the existing misalignment of flows. Lastly, it would require a substantial amount of fill below the ordinary high-water mark and overbank areas, as well as grade control measures to stabilize the newly created channel. 4. Replacement of the existing wooden retaining wall with a concrete retaining wall was considered; however, the steep slopes and safety hazard would remain, as would the misalignment of flow. 5. The last option considered was installation of a drop structure. This option addresses all issues noted. It would allow energy in the flow to be safely dissipated in the structure, without causing additional erosion. It would also correctly align flow in the existing channel, further reducing erosion in the channel. Lastly, this option would allow the banks to be sloped more gradually to address safety concerns. The drop structure described in item #5 above is the only feasible and prudent option. This is the only option that would address the erosion, flow alignment, and safety issues at this location and is therefore, the selected alternative. The gradient of the system (upper to lower pond) is approximately 1.5% (30-foot drop over 2000 feet), and the gradient within the proposed riffle zone is approximately 2% (15-foot drop over 770 feet). Past attempts to control erosion using a weir structure, 1 to 2-inch riprap, and installation of geogrid in the channel have failed. In addition, past protection measures attempted to address single-site issues as opposed to the entire system. Therefore, the alternative chosen requires a more holistic approach that provides the protection necessary, while improving the stability and resource features of the channel and pond shorelines. Removal of the existing weir structure and installation of riprap is necessary, from an engineering perspective, to manage the steep gradients and high flow velocities. This is clearly evident, looking at the stream profile and observed erosion on site. As previously identified, past attempts to control erosion utilizing softer methods have failed. As opposed to simply lining the existing channel with heavy armor, a series of riffle/pool zones are proposed to create bedform diversity, while still accomplishing the project purpose. Improvements also include the placement of larger stones for habitat improvement. While, from a fisheries perspective, this is a private, isolated system (fish movement into this system from downstream is not possible) without a public (and likely private) fishery, we expect some fish species and aquatic macroinvertebrates may be present and the alternative chosen provides improvements for both aquatic organisms and stability of stream morphology. Similarly, bank erosion along the center and eastern pond cannot be controlled with soft engineering. Ice pressure during the winter will simply result in continued shoreline erosion. Installation of stone is necessary to attempt to control erosion during the winter. It is also our opinion that the installation of riprap at these locations will not result in negative impacts to the aquatic resources of these ponds and may provide additional habitat for the aquatic organisms that inhabit the ponds. Evidence on-site, and observations during the winter indicate that ice pressure on the larger, easternmost pond is severe, resulting in difficulty controlling bank erosion. Therefore, the TLCMA is proposing a control structure that allows for minor manipulation of water elevations; proposing a drawdown of six inches during the winter. Additionally, riprap will be placed along the shoreline at locations where erosion is adjacent to residential buildings and pedestrian pathways. As opposed to lining the entire shoreline with riprap, small winter drawdown will provide assurances that erosion will be controlled. It is our opinion that the small drawdown will not result in negative impacts to the aquatic resources of this pond. Wetland impacts, although minor, are required to restore and stabilize the channel and pond system at two locations. All wetlands within the project area are small with very low plant diversity, dominated by adventive plant species, and are a result of backwater and stormwater discharges (see wetland delineation report). At the location of the existing weir and adjacent stormwater discharge, backwater and stormwater discharge have created emergent wetland upstream of the weir. The total wetland area at this location is 0.11 acres. Hydrology of these wetlands will be altered, particularly due to the removal of the weir. The second wetland impact area contains 0.04 acres of emergent wetland, also with low plant diversity and dominated by

adventive species. This area has formed within the channel as a result of sediment input through erosion from an adjacent stormwater discharge. Re-establishing the channel at this location is necessary to re-establish flows through this section.

Project Compensation: Describe how the proposed impacts to state and federal regulated waters will be compensated, OR explain why compensatory mitigation should not be required for the proposed impacts. Include amount, location, and method of compensation (i.e., bank, on-site, preservation, etc.)

Wetland impacts for this project total less than 0.15 acres of low-quality wetland. Therefore, wetland mitigation is not proposed. In addition, the project has been designed to improve the form and function of the stream, creating additional habitat, removing barriers to the movement of aquatic organisms, and reducing or eliminating erosion and sediment input. These improvements are proposed even though this is essentially a closed system where aquatic organisms cannot enter from up or downstream. Therefore, stream mitigation is not proposed.

Upload any additional information as needed to provide information applicable to your project regarding project purpose sequence, methods, alternatives, or compensation.

NONE PROVIDED

Comment

NONE PROVIDED

Resource and Activity Type

Important! Answer all questions completely. Properly identifying your project in this section generates the proper application sections. Incomplete applications will require corrections before they can be fully processed.

SELECT THE ACTIVITIES from the list below that are proposed in your project (check ALL that apply). If you don't see your project type listed, select "Other Project Type". These activities listed require additional information to be gathered later in the application.

Bridges

Culverts - Stream Only

Shore Protection such as Seawalls, RipRap, and Bioengineering

Other Project Type

Drawdown

The Proposed Project will involve the following resources (check ALL that apply).

Stream or River

Wetland

Pond (open water less than 5 acres in size)

Pond Information

What is the surface area of the pond? (acres)

4.3

Identify all resources impacted by the proposed pond.

Pond located within 500 feet of a lake or stream

Major Project Fee Calculation Questions

Is filling of 10,000 cubic yards or more proposed (cumulatively) within wetlands, streams, lakes, or Great Lakes?

No

Is dredging of 10,000 cubic yards (cumulatively) or more proposed within streams, lakes, or Great Lakes? (wetlands not included)

No

Is new dredging or adjacent upland excavation in suspected contamination areas proposed by this application?

No

Is a subdivision, condominium, or new golf course proposed?

No

Wetland Project Information and Impacts

PLEASE READ

This section is for entering information regarding the impacts to Wetlands only. Do not input information that pertains to other resources (inland lakes, streams, floodplains, etc.). The initial questions are related to wetlands on the project site in general. The Proposed Activities questions are grouped into Fill, Dredge, Structures, Other and are only for wetland impacts related to these activities.

[Click HERE for more information on Wetlands Protection Program.](#)

Has a professional wetland delineation been completed for this site?

Yes

Attach a copy of wetland delineation report with data form.

Traver Lakes Wetland Delineation Report.pdf - 04/14/2020 02:48 PM

Comment

NONE PROVIDED

Total acres of wetland affected by this project.

Category	Affected area (acres)
Permanent	0.15
Temporary	0
	Sum: 0.15

Is filling or draining of 1 acre or more (cumulatively) of wetland proposed?

No

Select all wetland types that will be affected by this project:

Emergent

The following questions gather information on the specific Types of Activities your project includes that will impact WETLANDS. There are four overall Types of Activities: Fill, Dredge, Structure, Other. Under each of the Activity Type questions, specific activity lists will be shown. If the activity is not shown in the list given, select None of the Above and move to the next question. When you select an activity under Fill, Dredge, Structure, or Other, a table will appear under that type. Only enter the dimensions of the activity that are within wetland. Multiple activities covering the same footprint may be combined on one line in the table. Continue to answer the Activity Type questions (Fill, Dredge, Structure, Other) until all have been answered with either a specific Activity listed under that Type or None of the Above. If you did not find your activity in any list then select Other, Other and provide a description of your activity.

If your project includes placing fill in wetland then select the proposed activities from the following list. If your activity is not shown, then select None of the Above and move to the next question. Only enter an impacted area in one of the impact tables (do not duplicate impact entries):

Riprap

Complete this table for projects involving Fill. Enter each activity/ location that corresponds with each activity selected in the previous question and enter the dimensions. Activities may be entered in one line of the table if they occupy the same impact footprint and cannot be broken out separately (Example: Activity - Driveway and Riprap slope). Multiple activities in different locations should be listed on different lines of the table.

Activity	Length (feet)	Width (feet)	Depth (feet)	Area (square feet)	Volume (cubic feet)	Volume (cubic yards)	Corrected value for complex impact AREAS (square feet)
Wetland Area 2 (Rock Riffles/Pool System)	32	12	1	384	384	14	NONE PROVIDED
Wetland Area 3 (Rock Riffles/Pools System)	78	12	1	936	936	35	NONE PROVIDED
Wetland Area 3 (Riprap Spillway)	5	8	1	40	40	1	NONE PROVIDED
				Sum: 1360	Sum: 1360	Sum: 50	Sum: NaN

CORRECTION REQUEST (APPROVED)

Is the riprap spillway the splashpad associated with Wetland Area 1?

Please modify the name to make this impact easier to identify on the project plans.
Created on 7/30/2020 1:55 PM by **Melissa Letosky**

1 COMMENT

Kristopher Koko (kristopherk@spicergroup.com) (8/25/2020 3:07 PM)

The riprap spillway has been renamed to Wetland Area 3 (Riprap Spillway)

Source of Fill Material:

Off-site

Please Describe

Riprap for a riprap spillway and rock riffle/pool system

Type of Fill.

Other: 4" - 12" plain riprap

Type of riprap

Angular rock

Will material be installed under the riprap?

Yes

Type of material installed under riprap:

Filter fabric

Select from the following list for Excavation/Dredge Activities (if your proposed project is primarily a structure enter the impact as a structure. Only enter an impacted area in one of the impact tables in one impact section):

Excavation (wetlands)

If your project includes EXCAVATION/DREDGE IN WETLAND then select all of the proposed activities in the following list. If your activity is not shown, then select None of the Above and move to the next question. Only enter an impacted area in one of the impact tables (do not duplicate impact entries):

Activity	Length (feet)	Width (feet)	Depth (feet)	Area (sq. feet)	Volume (cubic feet)	Volume (cubic yards)	Corrected value for complex impact AREAS (square feet)
Remove Channel Restriction (Sediment)	32	8	1.5	256	384	14	NONE PROVIDED
				Sum: 256	Sum: 384	Sum: 14	Sum: NaN

Spoils Disposal

Will the excavation/dredge spoils be disposed of on site or off site?

On site

Describe any measures used to retain sediment:

Silt fence will be used around wetland areas not to be disturbed to prevent sediment loss from the wetland areas.

If your project includes STRUCTURES IN WETLAND then select all of the proposed activities in the following list. If your activity is not shown, then select None of the Above and move to the next question. Only enter an impacted area in one of the impact tables (do not duplicate impact entries):

None of the above

If your project includes Other Activities in WETLAND not listed in this section, then select from the proposed activities in the following list. If your activity in Wetland has not been listed in this Wetland Section, then select **Other** and enter a description of your activity. Only enter an impacted area in one of the impact tables (do not duplicate impact entries). If you selected a Fill, Excavation/Dredging, or Structure activity above in this section, but do not have an activity listed as Other, then select None of the Above for this question.

None of the above

Wetland Mitigation

EGLE may impose as a condition of any wetland permit, other than a General permit, a requirement for compensatory mitigation. The wetland mitigation requirement may be waived for projects affecting less than one-third of an acre of wetland if no reasonable opportunity for mitigation exists.

Mitigation plans according to the mitigation checklist ([link](#)) are required for a complete application
[Wetland Mitigation Information](#)

Is Wetland Mitigation being proposed as part of this proposed project?

No

Explain why no mitigation is proposed.

Wetland impacts for this project total less than 0.15 acres of low-quality wetland. Therefore, wetland mitigation is not proposed. In addition, the project has been designed to improve the form and function of the stream, creating additional habitat, removing barriers to the movement of aquatic organisms, and reducing or eliminating erosion and sediment input.

Stream Project Information (1 of 1)

Stream Information

This section is for entering information regarding the impacts to a stream only. Do not input information that pertains to other resources (inland lakes, Great Lakes, floodplains, etc.).

If there are multiple streams associated with the project impacts, or different Ordinary High Water Mark (OHWM) elevation data on the stream reach, provide the information in duplicate stream project information tabs by clicking on DUPLICATE at the top right or bottom of this screen.

Elevation data must include a description of the reference point or benchmark used and its corresponding elevation. If elevations are from still water provide the observation date and water elevation. Include information in this section only as it pertains to proposed project activities in regards to impacts to streams.

This section is for entering information regarding the impacts to Streams only. Do not input information that pertains to other resources (Great Lakes, streams, floodplains, etc.).

Elevation data must include a description of the reference point or benchmark used and its corresponding elevation. If elevations are from still water provide the observation date and water elevation. Information provided in this section should pertain only to proposed activities in regards to Inland Lake impacts.

An OHWM can be determined by either surveyed information or through measurements taken in reference to a static benchmark such as an observed water level or base of a tree, etc. The following information indicates how to determine the OHWM in different situations:

OHWM for Inland Lakes (Part 301) is the line between upland and bottomland identified by the presence of a distinct change in character of the land caused by successive changes in water levels.

In Section 10 regulated waters, the U.S. Army Corps of Engineers (USACE) regulates activities below the USACE Great Lakes OHWM elevation.

See EGLE's YouTube Series for OHWM video tutorials, and the sample OHWM drawing for more information.
[Determining the Ordinary High Water Mark \(OHWM\) - Video](#)

Please provide a name for the stream, river, channel:

Traver Creek

Stream Water elevation reference* (show elevation on plans with description):

Other: flow line of channel

Ordinary High Water Mark (OHWM) elevation (feet):

1

Date of observation (M/D/Y)

2/21/2020

What length (feet) does the project activity(ies) extend waterward of the OHWM?

5

What length (feet) does the project activity(ies) extend landward of the OHWM?

10

Is the drainage area upstream of the proposed project area greater than 2 sq. miles?

No

What is the the width (feet) of the stream where the water begins to overflow its banks. This is called the Bankfull width.

10

CORRECTION REQUEST (CORRECTED)

The bankfull width measurement differs throughout your application.

The bankfull width measurement should be consistent. Bankfull width should be measured in riffles and outside of the "zone of influence" of any structures. There may be no areas where accurate bankfull measurements can be taken on-site due to the number of stream crossings. In instances where bankfull cannot be measured on site, regional reference curves or a nearby reference reach (or both) can be used. Please provide the data used to determine bankfull width.

Created on 7/30/2020 2:12 PM by **Melissa Letosky**

3 COMMENTS

Kristopher Koko (kristopherk@spicergroup.com) (10/5/2020 5:12 PM)

The cross-sections on Sheet 11 of the attached plans were revised to show the bankfull width for cross-sections outside the influence of existing structures. Based on the surveyed cross-sections, the bankfull width of the channel varies between eight (8) and 13 feet, depending on location.

Melissa Letosky (LetoskyM@michigan.gov) (10/2/2020 10:33 AM)

Bankfull widths should not be measured near structures as structures can impact stream morphology and cause those bankfull measurements to be larger or smaller than what is accurate for the stream. Accurate bankfull measurements are necessary to appropriately design in-stream structures. The cross-sections provided show bankfull measures taken near existing structures within the stream.

Kristopher Koko (kristopherk@spicergroup.com) (8/25/2020 3:10 PM)

The bankfull widths shown on the plans are based upon field measurements. As with any stream, the cross-section and bankfull width vary. In this system, the variation in bankfull width is driven primarily by changes in channel slope (see profile drawing Sheet 5). We have added dimensions on the cross-section sheet (Sheet 11) to label the bankfull width.

Will a turbidity curtain be used during the proposed project?

No

If there are multiple streams associated with the project impacts, or different Ordinary High Water Mark (OHWM) elevation data on the stream reach, provide the information in duplicate stream project information tabs by clicking on DUPLICATE or ADD NEW below. This adds a new section where you will enter the information about additional project impacts.

Inland Lakes, Great Lakes and Stream Impacts (1 of 2)

PLEASE READ

This section will collect information regarding Inland Lakes, Great Lakes, and Streams impacts and activities only. The initial questions are related to which waterbody the impacts pertain to. When there are multiple waterbodies (e.g., some impacts are on an inland lake and some impacts are on a stream), fill out a DUPLICATE tab for each waterbody impacted. For each waterbody, questions will be asked regarding the proposed activities. Proposed Activities questions are grouped into Fill, Dredge, Structures, Other and are only for the impacts related to these groups. Click [HERE](#) for more information on the Inland Lakes and Streams Protection Program.

[Link to information on Inland Lakes and Streams Permitting](#)

The following impact description applies to: (select only one at a time, duplicate this entire section if there are impacts to multiple waterbody types):

Stream

Linear feet of stream affected by your project

Category	Affected linear feet (ft)
Permanent	1170
Temporary	0
	Sum: 1170

The following questions gather information on the specific Types of Activities your project includes that will impact INLAND LAKES, STREAMS, AND GREAT LAKES. There are four overall Types of Activities: Fill, Dredge, Structure, and Other. Under each of the Activity Type questions, specific activity lists will be shown. If the activity is not shown in the list given, select None of the Above and move to the next question. When you select an activity under Fill, Dredge, Structure, or Other, a table will appear under that type. Only enter the dimensions of the activity that are within INLAND LAKES, STREAMS, or GREAT LAKES. Multiple activities covering the same footprint may be combined on one line in the table. Continue to answer the Activity Type questions (Fill, Dredge, Structure, Other) until all have been answered with either a specific Activity listed under that Type or None of the Above. If you did not find your activity in any list then select Other, Other and provide a description of your activity.

Select from the following list all Fill Activities (select all that apply to this waterbody impacted):

- Riprap
- Grading or Mechanical Land Clearing
- Spoils Disposal

Complete this table for projects involving Fill below the Ordinary High Water Mark. Enter each activity/ location that corresponds with each activity selected in the previous question and enter the dimensions. Activities may be entered in one line of the table if they occupy the same impact footprint and cannot be broken out separately (Example: Activity - Driveway and Riprap slope). Multiple activities in different locations should be listed on different lines of the table.

Activity	Length (feet)	Width (feet)	Depth (feet)	Area (square feet)	Volume (cubic feet)	Volume (cubic yards)	Corrected Value for complex impact Area (square feet)
Heavy Riprap Plunge Pool & Slope Protection - Project Area III	20	10	2	200	400	15	NONE PROVIDED
Plain Riprap Spillway - Project Area IV	8	2	1	16	16	1	NONE PROVIDED
Rock Riffle/Pool System - Project Areas II - V	1100	10	1	11000	11000	407	NONE PROVIDED
Cross-Vanes (6) - Project Areas II - V	96	3	3	288	864	32	NONE PROVIDED
Heavy Riprap Splash Pad & Slope Protection, Sta. 10+00 - Project Area II	30	8	2	240	480	18	NONE PROVIDED
Heavy Riprap Slope Protection, Sta 1+20 - Project Area I	20	8	2	160	320	12	NONE PROVIDED
Footbridge Piers (4) - Project Area III	4	3	7	12	84	3	NONE PROVIDED
				Sum: 11916	Sum: 13164	Sum: 488	Sum: NaN

Type of Fill

Other: Riprap

Source of Fill

Off-site

Is riprap proposed?

Yes

Indicate size range of riprap:

4"-8" for plain riprap, 8"-16" riprap and 18-30" for heavy riprap

Type of riprap

Angular rock

Will material be installed under the riprap?

Yes

Type of material installed under riprap:

Filter fabric

Activities Involving Dredging or Excavation: Select from the following list for Excavation/Dredge Activities (select all that apply to this waterbody impacted):

Other: Excavation to install rock riffles and grade channel to proposed flow line

Projects involving Excavation/Dredging below the Ordinary High Water Mark:

Activity	Length (feet)	Width (feet)	Depth (feet)	Area (square feet)	Volume (cubic feet)	Volume (cubic yards)	Corrected value for complex impact Areas (square feet)
Heavy Riprap Plunge Pool & Slope Protection - Project Area III	20	10	2	200	400	15	NONE PROVIDED
Plain Riprap Spillway - Project Area IV	8	2	1	16	16	1	NONE PROVIDED
Rock Riffle/Pool System - Project Areas II - V	1100	10	1	11000	11000	407	NONE PROVIDED
Cross-Vanes (6) - Project Areas II - V	96	3	3	288	864	32	NONE PROVIDED
Heavy Riprap Splash Pad & Slope Protection, Sta. 10+00 - Project Area II	30	8	2	240	480	18	NONE PROVIDED
Existing Wier Removal - Project Area III	30	20	1	600	600	22	NONE PROVIDED
Footbridge Piers (4) - Project Area III	4	3	7	12	84	3	NONE PROVIDED
Heavy Riprap Slope Protection, Sta 1+20 - Project Area I	20	8	2	160	320	12	NONE PROVIDED
				Sum: 12516	Sum: 13764	Sum: 510	Sum: NaN

Has this area been previously dredged?

No

Is long-term maintenance dredging proposed?

No

What is the method used to be dredged?

Mechanical

Has the dredge material been tested?

No

Spoils Disposal

Will the excavation/dredge spoils be disposed of on site or off site?

On site

If your project includes **STRUCTURES** then select all of the proposed activities in the following list. If your activity is not shown, then select **None of the Above** and move to the next question. Only enter an impacted area in one of the impact tables (do not duplicate impact entries):

- Outfall Structure
- Water control structure
- Bridge
- Culvert

Projects involving Structures constructed below the Ordinary High Water Mark:

Activity	Length (feet)	Width (feet)	Depth (feet)	Area (square feet)	Volume (cubic feet)	Volume (cubic yards)	Corrected value for complex impact AREAS (square feet)
Drop Structure & Proposed Grading - Project Area II	65	15	3	975	2925	108	NONE PROVIDED
Existing Weir Removal - Project Area III	30	20	1	600	600	22	NONE PROVIDED
Rehabilitate Outlet (Heavy Riprap Slope Protection) - Project Area I	20	5	3	100	300	11	NONE PROVIDED
Rehabilitate Outlet (Proposed Grading) - Project Area I	35	3	1	105	105	4	NONE PROVIDED
Footbridge Piers (4) - Project Area III	4	3	7	12	84	3	NONE PROVIDED
				Sum: 1792	Sum: 4014	Sum: 148	Sum: NaN

If your project includes **Other Activities** not listed in this section, then select from the proposed activities in the following list. If your activity has not been listed in this Section, then select **Other** and enter a description of your activity. Only enter an impacted area in one of the impact tables (do not duplicate impact entries). If you selected a **Fill, Excavation/Dredging, or Structure** activity above in this section, but do not have an activity listed as **Other**, then select **None of the Above** for this question.

- Restoration
- Structure removal (except dam removal)

Projects involving All other activities below the Ordinary High Water Mark:

Activity	Length (feet)	Width (feet)	Depth (feet)	Area (square feet)	Volume (cubic feet)	Volume (cubic yards)	Corrected value for complex impact AREAS (square feet).
Existing Weir Removal - Project Area III	30	20	1	600	600	22	NONE PROVIDED
				Sum: 600	Sum: 600	Sum: 22	Sum: NaN

Does the proposed project include mitigation?

none

If there are multiple waterbodies associated with the project impacts, or different Ordinary High Water Mark (OHWM) elevation data on the waterbody, provide the information in duplicate stream project information tabs by clicking on **DUPLICATE** or **ADD NEW** below. This adds a new section where you will enter the information about additional project impacts.

Inland Lakes, Great Lakes and Stream Impacts (2 of 2)

PLEASE READ

This section will collect information regarding Inland Lakes, Great Lakes, and Streams impacts and activities only. The initial questions are related to which waterbody the impacts pertain to. When there are multiple waterbodies (e.g., some impacts are on an inland lake and some impacts are on a stream), fill out a **DUPLICATE** tab for each waterbody impacted. For each waterbody, questions will be asked regarding the proposed activities. Proposed Activities questions are grouped into Fill,

Dredge, Structures, Other and are only for the impacts related to these groups. Click [HERE](#) for more information on the Inland Lakes and Streams Protection Program.

[Link to information on Inland Lakes and Streams Permitting](#)

The following impact description applies to: (select only one at a time, duplicate this entire section if there are impacts to multiple waterbody types):

Inland Lake

Acres of Inland lake/Great Lake affected by your project below the Ordinary High Water Mark:

Category	Acres
Permanent	0.15
Temporary	0
	Sum: 0.15

The following questions gather information on the specific Types of Activities your project includes that will impact INLAND LAKES, STREAMS, AND GREAT LAKES. There are four overall Types of Activities: Fill, Dredge, Structure, and Other. Under each of the Activity Type questions, specific activity lists will be shown. If the activity is not shown in the list given, select None of the Above and move to the next question. When you select an activity under Fill, Dredge, Structure, or Other, a table will appear under that type. Only enter the dimensions of the activity that are within INLAND LAKES, STREAMS, or GREAT LAKES. Multiple activities covering the same footprint may be combined on one line in the table. Continue to answer the Activity Type questions (Fill, Dredge, Structure, Other) until all have been answered with either a specific Activity listed under that Type or None of the Above. If you did not find your activity in any list then select Other, Other and provide a description of your activity.

Select from the following list all Fill Activities (select all that apply to this waterbody impacted):

Grading or Mechanical Land Clearing
Riprap
Backfill

Complete this table for projects involving Fill below the Ordinary High Water Mark. Enter each activity/ location that corresponds with each activity selected in the previous question and enter the dimensions. Activities may be entered in one line of the table if they occupy the same impact footprint and cannot be broken out separately (Example: Activity - Driveway and Riprap slope). Multiple activities in different locations should be listed on different lines of the table.

Activity	Length (feet)	Width (feet)	Depth (feet)	Area (square feet)	Volume (cubic feet)	Volume (cubic yards)	Corrected Value for complex impact Area (square feet)
Riprap Bank Protection (East Pond) - Project Area V	400	3	1	1200	1200	44	1200
Riprap Bank Protection (Central Pond) - Project Area III	135	3	1	405	405	15	NONE PROVIDED
				Sum: 1605	Sum: 1605	Sum: 59	Sum: 1200

Type of Fill

Other: Riprap, angular rock for riprap shoreline protection

Source of Fill

Off-site

Is riprap proposed?

Yes

Indicate size range of riprap:

4"-12" Plain riprap

Type of riprap

Angular rock

Will material be installed under the riprap?

Yes

Type of material installed under riprap:

Filter fabric

Activities Involving Dredging or Excavation: Select from the following list for Excavation/Dredge Activities (select all that apply to this waterbody impacted):

Excavation for toestone installation

Projects involving Excavation/Dredging below the Ordinary High Water Mark:

Activity	Length (feet)	Width (feet)	Depth (feet)	Area (square feet)	Volume (cubic feet)	Volume (cubic yards)	Corrected value for complex impact Areas (square feet)
Riprap Bank Protection (East Pond) - Project Area V	400	3	1	1200	1200	44	NONE PROVIDED
Riprap Bank Protection (Central Pond) - Project Area III	135	3	1	405	405	15	NONE PROVIDED
				Sum: 1605	Sum: 1605	Sum: 59	Sum: NaN

Has this area been previously dredged?

No

Is long-term maintenance dredging proposed?

No

What is the method used to be dredged?

Mechanical

Has the dredge material been tested?

No

Spoils Disposal

Will the excavation/dredge spoils be disposed of on site or off site?

On site

If your project includes STRUCTURES then select all of the proposed activities in the following list. If your activity is not shown, then select None of the Above and move to the next question. Only enter an impacted area in one of the impact tables (do not duplicate impact entries):

Outfall Structure

Projects involving Structures constructed below the Ordinary High Water Mark:

Activity	Length (feet)	Width (feet)	Depth (feet)	Area (square feet)	Volume (cubic feet)	Volume (cubic yards)	Corrected value for complex impact AREAS (square feet)
East Pond Outlet Control Structure - Project Area V	32	20	1.5	640	960	36	3560
				Sum: 640	Sum: 960	Sum: 36	Sum: 3560

If your project includes Other Activities not listed in this section, then select from the proposed activities in the following list. If your activity has not been listed in this Section, then select **Other** and enter a description of your activity. Only enter an impacted area in one of the impact tables (do not duplicate impact entries). If you selected a Fill, Excavation/Dredging, or Structure activity above in this section, but do not have an activity listed as Other, then select None of the Above for this question.

Drawdown

Structure removal (except dam removal)

Projects involving All other activities below the Ordinary High Water Mark:

Activity	Length (feet)	Width (feet)	Depth (feet)	Area (square feet)	Volume (cubic feet)	Volume (cubic yards)	Corrected value for complex impact AREAS (square feet).
Removal of Existing East Pond Outlet Structure - Project Area V	24	20	1.5	480	720	27	3560
				Sum: 480	Sum: 720	Sum: 27	Sum: 3560

Does the proposed project include mitigation?

none

If there are multiple waterbodies associated with the project impacts, or different Ordinary High Water Mark (OHWM) elevation data on the waterbody, provide the information in duplicate stream project information tabs by clicking on DUPLICATE or ADD NEW below. This adds a new section where you will enter the information about additional project impacts.

Shore Protection Project such as Seawalls, RipRap, or Bioengineering

Select all that apply to your project.

RipRap

Is a cumulative length of seawalls, bulkheads, or revetments of 500 feet or more in length proposed?

No

Is the proposed structure going to extend 150 feet or more into a lake or stream?

No

Distance from the project to the adjacent property lines

Distance from property line to the left (feet)	Distance from property line to the right (feet)
190	30

Distance of project from an obvious fixed structure (example - 50 ft from SW corner of house)

approximately 440' from the NW corner of Traver Ridge Apartments Pool & Clubhouse

Will any existing structures be removed as part of this project including walls or any other structure?

Yes

Please Describe.

Two concrete splash pads will be removed, and riprap will be installed to replace them. The eastern pond outlet control structure will be removed and replaced.

Drawdown

Type of drawdown:

Over winter

Annual event

Reason for drawdown:

The eastern pond has experienced erosion around the pond due to ice pressure. Riprap slope protection around the pond is proposed in only areas most impacted by the erosion. To reduce the impact of erosion elsewhere along the pond, an outlet control structure was designed that will allow the pond to be lowered during the winter months to alleviate pressure along the pond shoreline.

Has there been a previous drawdown?

No

Does the waterbody have established legal lake level?

No

Dam ID Number, if known:

NONE PROVIDED

Impoundment design head (feet)

NONE PROVIDED

Extent of vertical drawdown (feet):

0.5

Number of adjoining or impacted property owners:

88

Date drawdown would start:

11/14/2020

Date drawdown would stop:

11/14/2020

Rate of drawdown (feet/day)

0.5

Date refilling would start:

5/14/2020

Date refill would end:

5/14/2020

Rate of refill (feet/day)

0.5

Type of outlet discharge structure to be used:

Mid-depth

Impoundment area at normal water level (acres):

2

Sediment depth behind impoundment discharge structure (feet):

0

Bridges and Culverts (1 of 3)

Complete once for a single structure or add multiple sections when multiple structures are proposed.

Use the duplicate button to copy this section to enter information about each individual structure. If there are two or more you should duplicate for each one.

Unique Identifier:

Drop Structure with Storm Sewer

STREAM INFORMATION

Width of the stream

Upstream (feet)	Downstream (feet)
5	5

Cross-sectional area of primary channel (square feet):

12

The width of the stream where the water begins to overflow its banks. Bankfull width (feet):

10

Is there an existing structure?

Yes

Is the existing Structure perched?

No

Click the link below to view bridge profile sample drawings.

[Click here for link](#)

Help for the following Table

Structure Width: Enter the total width of culvert or bridge in feet.

Culvert Length or Bridge span: Enter the total length perpendicular or across the stream in feet.

Culvert Height Prior to any burying: Enter the total width of culvert in feet at this location as it measures on land. Do not subtract any depth the culvert may be buried. For bridges enter "0".

Depth culvert buried: Enter total feet the culvert bottom will be buried. Does not apply to bridges so enter "0".

Bottom of bridge beam (upstream) elevation (feet): For culverts enter "0".

Bottom of bridge beam (downstream) elevation (feet): For culverts enter "0".

Stream Invert Elevation (feet) Upstream: This is the elevation at the bottom of the culvert as it lies in place after installation on the upstream end of the culvert, not including any fill on the culvert bottom.

Stream Invert Elevation (feet) Downstream: This is the elevation at the bottom of the culvert as it lies in place after installation on the downstream end of the culvert, not including any fill on the culvert bottom.

Bridge rise from bottom of beam to streambed or culvert crown height (feet): This is the elevation at the top of the culvert as it lies in place after installation, for bridges this is from the bottom of the beam. Do not including any fill on top of the culvert or the bridge structure.

Total structure waterway area above streambed (square feet): This is the total square foot area that would allow passage of water through the structure opening.

Total structure waterway area below the 100-year elevation (square feet) (if known): This is the total square foot area that would allow passage of water that is below the 100-year flood elevation.

Elevation of road grade at structure (feet): Enter the elevation at the road above the structure.

Elevation of low point in road (feet): Enter the elevation of the lowest point in the road nearest the structure.

Distance from low point of road to mid-point of structure (feet): How far (in feet) from the structure does any fill used for the structure extend before it reaches the existing grade?

Length of approach fill from edge of bridge/culvert to existing grade (feet):

Existing and Proposed Bridge and/or Culvert Information

Question	Existing	Proposed
Bridge width or Culvert length (parallel to stream) (feet)	159	183
Bridge span or Culvert width/diameter (perpendicular to stream) (feet)	5	4
Height of culvert prior to burying (if bridge enter 0)	3.2	4
Depth culvert buried (feet) (if bridge enter 0)	.2	.2
Bottom of bridge beam (feet) upstream (if culvert enter 0)	0	0
Bottom of bridge beam (feet) downstream (if culvert enter 0)	0	0
Stream invert elevation at bridge (feet) upstream	880.18	880.18
Stream invert elevation at bridge (feet) downstream	875.19	872.44
Bridge rise from bottom of beam to streambed or culvert crown height (feet)	3.2	4

Question	Existing	Proposed
Total structure waterway opening above streambed (square feet)	12.56	12.56
Total structure waterway area below the 100-year elevation (square feet) (if applicable)	0	0
Elevation of road grade at structure (feet)	892.30	892.30
Elevation of low point in road (feet)	892.30	892.30
Distance from low point in road (feet)	60	60
Length of approach fill from edge of bridge/culvert to existing grade (feet)	24	24

Bridge Type

Existing	Proposed
Other: N/A	Other: N/A

Culvert Type

Existing	Proposed
Elliptical	Circular

Culvert Material

Existing	Proposed
Concrete	Concrete

Structure Entrance Design Type:

Existing	Proposed
Other: Concrete Headwall	Projecting

Certification Upload

NONE PROVIDED

Comment

NONE PROVIDED

Bridges and Culverts (2 of 3)

Complete once for a single structure or add multiple sections when multiple structures are proposed.

Use the duplicate button to copy this section to enter information about each individual structure. If there are two or more you should duplicate for each one.

Unique Identifier:

Crossing No. 4

STREAM INFORMATION

Width of the stream

Upstream (feet)	Downstream (feet)
8	9

Cross-sectional area of primary channel (square feet):

18

The width of the stream where the water begins to overflow its banks. Bankfull width (feet):

13

Is there an existing structure?

Yes

Is the existing Structure perched?

No

Click the link below to view bridge profile sample drawings.

[Click here for link](#)

Help for the following Table

Structure Width: Enter the total width of culvert or bridge in feet.

Culvert Length or Bridge span: Enter the total length perpendicular or across the stream in feet.

Culvert Height Prior to any burying: Enter the total width of culvert in feet at this location as it measures on land. Do not subtract any depth the culvert may be buried. For bridges enter "0".

Depth culvert buried: Enter total feet the culvert bottom will be buried. Does not apply to bridges so enter "0".

Bottom of bridge beam (upstream) elevation (feet): For culverts enter "0".

Bottom of bridge beam (downstream) elevation (feet): For culverts enter "0".

Stream Invert Elevation (feet) Upstream: This is the elevation at the bottom of the culvert as it lies in place after installation on the upstream end of the culvert, not including any fill on the culvert bottom.

Stream Invert Elevation (feet) Downstream: This is the elevation at the bottom of the culvert as it lies in place after installation on the downstream end of the culvert, not including any fill on the culvert bottom.

Bride rise from bottom of beam to streambed or culvert crown height (feet): This is the elevation at the top of the culvert as it lies in place after installation, for bridges this is from the bottom of the beam. Do not including any fill on top of the culvert or the bridge structure.

Total structure waterway area above streambed (square feet): This is the total square foot area that would allow passage of water through the structure opening.

Total structure waterway area below the 100-year elevation (square feet) (if known): This is the total square foot area that would allow passage of water that is below the 100-year flood elevation.

Elevation of road grade at structure (feet): Enter the elevation at the road above the structure.

Elevation of low point in road (feet): Enter the elevation of the lowest point in the road nearest the structure.

Distance from low point of road to mid-point of structure (feet): How far (in feet) from the structure does any fill used for the structure extend before it reaches the existing grade?

Length of approach fill from edge of bridge/culvert to existing grade (feet):

Existing and Proposed Bridge and/or Culvert Information

Question	Existing	Proposed
Bridge width or Culvert length (parallel to stream) (feet)	6	6
Bridge span or Culvert width/diameter (perpendicular to stream) (feet)	28.5	30
Height of culvert prior to burying (if bridge enter 0)	0	0
Depth culvert buried (feet) (if bridge enter 0)	0	0
Bottom of bridge beam (feet) upstream (if culvert enter 0)	895.65	897.07
Bottom of bridge beam (feet) downstream (if culvert enter 0)	895.72	897.07
Stream invert elevation at bridge (feet) upstream	893.51	889.41
Stream invert elevation at bridge (feet) downstream	890.68	889.39
Bridge rise from bottom of beam to streambed or culvert crown height (feet)	2.21	7.66
Total structure waterway opening above streambed (square feet)	44.2	148
Total structure waterway area below the 100-year elevation (square feet) (if applicable)	0	0
Elevation of road grade at structure (feet)	896.61	898.24
Elevation of low point in road (feet)	896.24	898.24
Distance from low point in road (feet)	10	10
Length of approach fill from edge of bridge/culvert to existing grade (feet)	10	10

Bridge Type

Existing	Proposed
Other: Existing Weir & Wooden Footbridge	Timber

Culvert Type

Existing	Proposed
Other: Existing Weir & Wooden Footbridge	Other: Wooden Footbridge

Culvert Material

Existing	Proposed
Other: Concrete Weir & Wooden Footbridge	Other: Wooden Footbridge

Structure Entrance Design Type:

Existing	Proposed
Other: Weir Headwall	Other: None, Wooden Footbridge

Certification Upload

NONE PROVIDED

Comment

NONE PROVIDED

Bridges and Culverts (3 of 3)

Complete once for a single structure or add multiple sections when multiple structures are proposed.

Use the duplicate button to copy this section to enter information about each individual structure. If there are two or more you should duplicate for each one.

Unique Identifier:

Crossing No. 6

STREAM INFORMATION

Width of the stream

Upstream (feet)	Downstream (feet)
NONE PROVIDED	10

Cross-sectional area of primary channel (square feet):

7.3

The width of the stream where the water begins to overflow its banks. Bankfull width (feet):

13

Is there an existing structure?

Yes

Is the existing Structure perched?

No

Click the link below to view bridge profile sample drawings.

[Click here for link](#)

Help for the following Table

Structure Width: Enter the total width of culvert or bridge in feet.

Culvert Length or Bridge span: Enter the total length perpendicular or across the stream in feet.

Culvert Height Prior to any burying: Enter the total width of culvert in feet at this location as it measures on land. Do not subtract any depth the culvert may be buried. For bridges enter "0".

Depth culvert buried: Enter total feet the culvert bottom will be buried. Does not apply to bridges so enter "0".

Bottom of bridge beam (upstream) elevation (feet): For culverts enter "0".

Bottom of bridge beam (downstream) elevation (feet): For culverts enter "0".

Stream Invert Elevation (feet) Upstream: This is the elevation at the bottom of the culvert as it lies in place after installation on the upstream end of the culvert, not including any fill on the culvert bottom.

Stream Invert Elevation (feet) Downstream: This is the elevation at the bottom of the culvert as it lies in place after installation on the downstream end of the culvert, not including any fill on the culvert bottom.

Bridge rise from bottom of beam to streambed or culvert crown height (feet): This is the elevation at the top of the culvert as it lies in place after installation, for bridges this is from the bottom of the beam. Do not including any fill on top of the culvert or the bridge structure.

Total structure waterway area above streambed (square feet): This is the total square foot area that would allow passage of water through the structure opening.

Total structure waterway area below the 100-year elevation (square feet) (if known): This is the total square foot area that would allow passage of water that is below the 100-year flood elevation.

Elevation of road grade at structure (feet): Enter the elevation at the road above the structure.

Elevation of low point in road (feet): Enter the elevation of the lowest point in the road nearest the structure.

Distance from low point of road to mid-point of structure (feet): How far (in feet) from the structure does any fill used for the structure extend before it reaches the existing grade?

Length of approach fill from edge of bridge/culvert to existing grade (feet):

Existing and Proposed Bridge and/or Culvert Information

Question	Existing	Proposed
Bridge width or Culvert length (parallel to stream) (feet)	24	24
Bridge span or Culvert width/diameter (perpendicular to stream) (feet)	2	3
Height of culvert prior to burying (if bridge enter 0)	2	2
Depth culvert buried (feet) (if bridge enter 0)	.2	.2
Bottom of bridge beam (feet) upstream (if culvert enter 0)	0	0
Bottom of bridge beam (feet) downstream (if culvert enter 0)	0	0
Stream invert elevation at bridge (feet) upstream	902	900.50
Stream invert elevation at bridge (feet) downstream	900.95	900.20
Bridge rise from bottom of beam to streambed or culvert crown height (feet)	2	3
Total structure waterway opening above streambed (square feet)	6.28	7.07
Total structure waterway area below the 100-year elevation (square feet) (if applicable)	0	0
Elevation of road grade at structure (feet)	904.54	904.54
Elevation of low point in road (feet)	904.52	904.52
Distance from low point in road (feet)	2	2
Length of approach fill from edge of bridge/culvert to existing grade (feet)	15	15

Bridge Type

Existing	Proposed
Other: N/A	Other: N/A

Culvert Type

Existing	Proposed
Circular	Circular

Culvert Material

Existing	Proposed
Concrete	Concrete

Structure Entrance Design Type:

Existing	Proposed
Projecting	Projecting

Certification Upload

NONE PROVIDED
Comment
 NONE PROVIDED

Upload of Proposed Site Plans

REQUIRED Application, maps, and drawings:

- *Overall Project Site Plan
- *Cross-Sectional Drawings

For Part 315 Dam Safety applications attach detailed signed and sealed engineering plans for a Part 315 dam repair, dam alteration, dam abandonment, or dam removal.

[Examples site plan and cross-sectional drawings](#)

[For additional information on maps, drawings, and other attachments visit michigan.gov/jointpermit](#)

Required on all Site Plan uploads. Please identify that all of the following items are included on your plans that you upload with this application.

Site Plan Features	Existing and Proposed Plan Set
Scale, Compass North, and Property Lines	Yes
Fill and Excavation areas with associated amounts in cubic yards	Yes
Any rivers, lakes, or ponds and associated Ordinary High Water Mark (OHWM)	Yes
Exterior dimensions of Structures, Fill and Excavation areas associated with the proposed project	Yes
Dimensions to other Structures and Lot Lines associated with the project	Yes
Topographic Contour Lines from licensed surveyor or engineer when applicable	Yes

CORRECTION REQUEST (APPROVED)

More detailed plans showing the location of in-stream structures are needed.

Attached is a guide detailing what information is needed on the plans.

Created on 7/30/2020 3:05 PM by **Melissa Letosky**

1 COMMENT

Kristopher Koko (kristopherk@spicergroup.com) (8/27/2020 1:58 PM)

We have added responses to each of the items listed in the provided draft example Word document that is attached as a supplementary document.

CORRECTION REQUEST (APPROVED)

Wetland impact details and cross sections are needed.

Created on 7/30/2020 2:55 PM by **Melissa Letosky**

1 COMMENT

Kristopher Koko (kristopherk@spicergroup.com) (8/25/2020 3:13 PM)

The wetland limits have been added to the cross-section sheet (Sheet 11). Please note that the proposed project will result in impacts only 0.15 acre of wetland. This is primarily due to improved flow and stream function and not filling of the wetlands.

Upload Site Plans and Cross Section Drawings for your Proposed Project

[Traver Lakes Preliminary Plans Permit_2020.10.05.pdf](#) - 10/05/2020 05:15 PM

Comment

NONE PROVIDED

Additional Required and Supplementary Documents

[Details needed for EGLE design review_edited.docx](#) - 08/25/2020 03:14 PM

[Narrative About Riffle Design .docx](#) - 03/01/2021 09:34 AM

[Traver Lakes Typical Cross-Sections.pdf](#) - 03/01/2021 09:35 AM

Comment

NONE PROVIDED

Fees

The application fee identified in this section is a calculation based on answers to the questions in this application. This calculation is an estimate of the total fee and will be reviewed by the application processor to determine if any additional fees are required for a complete application.

Individual Permit Fee:
+\$500.00

Total Fee Amount:

\$500.00

Is the applicant or landowner a State of Michigan Agency?

No

Revisions

Revision	Revision Date	Revision By
Revision 1	11/18/2019 10:53 AM	Kristopher Koko
Revision 2	8/25/2020 2:55 PM	Kristopher Koko
Revision 3	10/5/2020 5:11 PM	Kristopher Koko
Revision 4	3/1/2021 9:24 AM	Kristopher Koko