
MDEQ Transportation Agency Permitting

Frequently Asked Questions

11/17/2009

THE PERMIT APPLICATION

1. Permit Application Basics

- [1.1](#) Where are the instructions and basic information for filling out a permit application and learning which activities need a permit?
- [1.2](#) What does the DEQ look for when evaluating a permit

2. Permit Coverage

- [2.1](#) Does the joint permit cover all DEQ permitting?
- [2.2](#) Could federal level permits/approvals also be required for the project? How are they handled?
- [2.3](#) How long does it take to get a permit?

3. Original Permits

- [3.1](#) Are permits valid as long as work is in progress?
- [3.2](#) If work was performed under an old permit, can I continue to maintain and/or replace the structure in the future?

4. Permit Extensions

- [4.1](#) When should I request an extension?
- [4.2](#) How many times can a permit be extended?

5. Permit Revisions

- [5.1](#) When do changes in the project require a permit revision or even a new permit?
- [5.2](#) Under what conditions would a permit revision request be re-public noticed?
- [5.3](#) If the bridge or culvert size is being revised, will a hydraulic analysis need to be performed and submitted?

6. Emergency Permit Situations

- [6.1](#) How are emergencies handled?
- [6.2](#) What is a true emergency situation?
- [6.3](#) In a true emergency situation, can I go ahead and replace the failed structure and then inform the DEQ?

7. Permit Exemptions

- [7.1](#) Do county drain crossings require a permit?
- [7.2](#) Do ditches require a permit?
- [7.3](#) What is considered a ditch?
- [7.4](#) Are storm water outfall pipes exempt if the outlet is above the Ordinary High Water Mark (OHWM)?

8. Questions on the Application

- [8.1](#) What do we mean by average stream width?
- [8.2](#) When is riprap used/required?
- [8.3](#) When cleaning out a stream or drain, what information is required?
- [8.4](#) When filling or dredging a wetland, what information is needed?
- [8.5](#) When a contractor or consultant is signing the application, what is needed?
- [8.6](#) On the signature page, do I mark Property owner, Agent Contractor, or Corporation title?
- [8.7](#) If there is more than one culvert/bridge, do I need to fill out more than one application?
- [8.8](#) If my project involves a lake, should I include the name and address of the lake association in the application?
- [8.9](#) What is the definition of bankfull width?

9. Permit Application Fees

[9.1](#) When do fees need to be submitted?

10. Incomplete Applications

[10.1](#) Is there a time limit for submitting missing information?

[10.2](#) If something is missing from the application does it take longer to get a permit?

11. Checking Permit Application Status

[11.1](#) How can I check the status of a permit on the internet?

12. Including a Hydraulic Analysis with the Application

[12.1](#) Where can I obtain a flood discharge estimate?

[12.2](#) Can applicants or their agents use their own flow determination?

[12.3](#) Who should perform a hydraulic analysis and how should the results be presented?

[12.4](#) When should hydraulic calculations be submitted with a permit application?

[12.6](#) How much of a flood elevation increase is allowed?

[12.7](#) What are the ramifications if the proposed structure including an increased road grade causes an increase to upstream flood elevations when compared to existing conditions?

[12.8](#) What are acceptable methods to compare existing and proposed hydraulic conditions?

[12.9](#) Where can I find a good reference to determine the Manning Coefficient's (N-Value)?

PROJECT TYPES AND COMPONENTS

13. Minor Projects

[13.1](#) Who determines whether a project is minor?

[13.2](#) What is meant by fully spanning the bottomlands?

[13.3](#) How do minor projects get treated differently from regular projects?

[13.4](#) If a project is minor, who needs to be notified?

[13.5](#) What information is required to be submitted with an application for a minor permit?

[13.6](#) Is a hydraulic analysis required for minor projects?

14. Working Conditions

[14.1](#) Who is responsible for the disposal of spoils from a job site?

[14.2](#) How much fill/dredging is allowed within the stream to be considered a minor project?

[14.3](#) What is meant by working "in-the-dry"?

[14.4](#) What is meant by "no work in the water"?

[14.5](#) What is the preferred method of dewatering?

[14.6](#) Is there a no in-stream work date at every bridge or culvert project within a stream?

15. Public Notice/Public Hearings

[15.1](#) Who needs to be notified for Public Notices?

[15.2](#) What determines if a project is a Section 404/redfile?

[15.3](#) How long after a Public Hearing does the DEQ have to grant or deny a permit?

16. Boardwalks

[16.1](#) When does a boardwalk project go to the Transportation Review Unit vs. PCU?

[16.2](#) What are the typical requirements for boardwalks/pathways in wetlands?

17. Safety Projects

[17.1](#) Can the Transportation Review Unit (TRU) require less than the current AASHTO standards?

18. Construction Staging

[18.1](#) What is the difference between temporary and permanent Soil Erosion and Sediment Control (SESC) measures?

[18.2](#) How does staging save money and reduce environmental impacts?

19. Wetlands

[19.1](#) Why are wetlands important?

[19.2](#) What are the applicant's responsibilities when working in wetland areas?

[19.3](#) Why is it important to protect adjacent, non-work wetland areas?

- [19.4](#) What determines if wetland fill/dredging is a minor project?
- [19.5](#) What land owners need to be notified if the project is public noticed?
- [19.6](#) When filling/dredging more than 1 wetland complex, does the total fill/dredge include all wetland complexes?
- [19.7](#) Can I work in a regulated wetland within the ROW without obtaining a DEQ permit?

20. Wetland Mitigation

- [20.1](#) Where can I find a list of what the DEQ expects for mitigation and monitoring?
- [20.2](#) When I am going to fill or dredge a wetland, when and what compensating mitigation will be required?
- [20.3](#) When is the wetland mitigation plan required?
- [20.4](#) When and why is a financial assurance bond or letter of credit required when it comes to wetland mitigation?
- [20.5](#) At what point in the entire process should I begin getting the financial assurance bond and conservation easement together?

21. Floodplain Cut and Fill

- [21.1](#) When is compensating excavation required?
- [21.2](#) Can floodplain compensating cut take place in an adjacent wetland?
- [21.3](#) Can we create a wetland as part of a floodplain compensating cut?

NATURAL RESOURCES

22. Fish

- [22.1](#) Why should the direct discharge of storm water to water bodies be avoided?
- [22.2](#) How does increased sediment affect fish habitat?
- [22.3](#) Does the project absolutely have to address fish habitat or is that just “recommended?”
- [22.4](#) Why do I have to recess my structure?
- [22.5](#) Why don't fish like long enclosures?
- [22.6](#) What does andromonous mean?
- [22.7](#) I don't see fish. Why is this stream important?

MDEQ Transportation Agency Permitting

Frequently Asked Questions

THE PERMIT APPLICATION

1. Permit Application Basics

1.1 Where are the instructions and basic information for filling out a permit application and learning which activities need a permit?

Use the following links to find information on various permit application topics:

- **Joint permit application** includes instructions and sample drawings.
[Michigan.gov/JointPermit](https://www.michigan.gov/JointPermit)
- **The Joint Permit Application Instructions**
[Michigan.gov/JointPermit](https://www.michigan.gov/JointPermit)
- **Instructions and sample application for Public Transportation Agencies**
[Michigan.gov/EgleTransportationReview](https://www.michigan.gov/EgleTransportationReview)
- **Hydraulic Report Guidelines**
[Michigan.gov/EgleTransportationReview](https://www.michigan.gov/EgleTransportationReview)
- **Permit Guidelines for Public Transportation Agencies**
[Michigan.gov/EgleTransportationReview](https://www.michigan.gov/EgleTransportationReview)

1.2 What does the DEQ look for when evaluating a permit

- Generally the DEQ is evaluating whether the proposed project is potentially going to impact any of the natural resource values associated with a stream, lake, wetland, sand dunes, or floodplain. If there are going to be any impacts the applicants should demonstrate whether there are any alternatives to avoid the impacted area. If the area cannot be avoided the applicant should then demonstrate the impacts will be minimized to the extent practicable. Finally there likely will be a requirement to mitigate for the wetland and stream impacts that could not be avoided. A general description on bridge and culvert concerns can be found at: [Michigan.gov/EgleTransportationReview](https://www.michigan.gov/EgleTransportationReview), then click on Bridge and Culvert Guidelines in the information box.

The DEQ must also determine whether the proposed structure causes any additional backwater impacts to upstream property owners.

2. Permit Coverage

2.1 Does the joint permit cover all DEQ permitting?

No, there are other DEQ permits related to storm water, air quality, water and wastewater facilities, land development, and other activities that could pertain to transportation projects. To find out whether you need other DEQ permits, see the DEQ web page on Environmental Permits, Licenses, and Certifications at <https://www.michigan.gov/egle/regulatory-assistance/permits>.

2.2 Could federal level permits/approvals also be required for the project? How are they handled?

In Michigan, a federal permit from the U.S. Army Corps of Engineers (USACE) is only required for work proposed in Section 10 navigable waters of the United States. This is in addition to the DEQ permit. For most projects only the DEQ permit is needed.

If a USACE permit is required, our office will send copy of the permit application to the Detroit District Office for processing at the federal level or you may send a copy directly to the USACE. The USACE may ask for additional information other than what the DEQ requires.

If the proposed work requires review and approval by the U.S. Environmental Protection Agency (EPA), the DEQ will coordinate with that agency. A separate EPA permit is not required. Coordination between the DEQ and EPA will be handled with the DEQ permit process.

[2.4](#) How long does it take to get a permit?

Generally it will take 30 to 60 days from the time you submit a complete application until your permit is issued or denied. Factors impacting the length of the processing time include:

- The size and complexity of your project. Larger files are sent to the USEPA for review and comment and may take up to 90 days.
- Whether the project requires Public Noticing or a Public Hearing.
- The season of the year, with construction season being the busiest. Applications submitted in the winter may also be delayed due to snow cover and not being able to see the site.
- Whether or not the preliminary review process was used prior to application. The preliminary review process generally results in a shorter process time.

If the application is not complete when it is first submitted, the review process can be significantly delayed. Be sure to submit all of the required information and plans with your application package.

3. Original Permits

[3.1](#) Are permits valid as long as work is in progress?

A permitted project must be completed before the expiration date of the permit. If work is not completed by the expiration date the you must re-apply.

[3.3](#) If work was performed under an old permit, can I continue to maintain and/or replace the structure in the future?

A new permit must be obtained to replace the structure in the future. You can maintain the originally permitted structure without a permit provided the maintenance is in kind with no design or materials modification and provided the watercourse, streambed and adjacent banks are not altered

4. Permit Extensions

[4.1](#) When should I request an extension?

Generally permits are issued for 5 years and cannot be extended.

[4.2](#) How many times can a permit be extended?

A permit may be extended beyond five years from the original date of issuance.

5. Permit Revisions

5.1 When do changes in the project require a permit revision or even a new permit?

Any changes to the project that are within a regulated watercourse, wetland or floodplain that were not included in the original permit would require the applicant to ask for a permit revision. This also applies to instances where the contractor proposes a different method of construction over what was originally permitted. If the changes cause more environmental impacts than were originally permitted, the project may also have to be re-public noticed.

If the changes are minor and do not cause additional environmental impact then a permit revision can be granted in a timely manner.

Request for permit revisions can only be made by the applicant or their authorized agent and not the contractor.

5.2 Under what conditions would a permit revision request be re-public noticed?

Re-public noticing is required if the revised activity results in additional environmental impacts that are considered more than minor or there are impacts to different adjacent property owners.

5.3 If the bridge or culvert size is being revised, will a hydraulic analysis need to be performed and submitted?

If the new bridge or culvert is not an obvious hydraulic improvement, then a hydraulic analysis will likely be required on streams/drains with a drainage area of two square miles or more. All of the following would likely require a hydraulic analysis: the waterway opening of the structure or cross-sectional area of the channel is being reduced; or if the culvert is lengthened; or if the culvert material type is being changed; or if the skew angle of the bridge or culvert is being changed.

6. Emergency Permit Situations

6.1 How are emergencies handled?

Depending on how important it is to re-open the road (e.g., is it a primary road, is there a school or hospital nearby, is continuous emergency vehicle access needed, etc.), an emergency letter permit or verbal approval can be given ASAP. Before granting the approval however, the Public Transportation Agency (PTA) should submit the EMERGENCY INFORMATION SHEET FOR BRIDGE OR CULVERT FAILURE form along with a site location map. The PTA's must prepare the actual permit application and submit it to the DEQ within 30 days. The DEQ will process the application and, if there are no concerns, will issue a final permit.

If the road doesn't have to be re-opened right away, the PTA should submit the regular permit application and plans, and upon approval, a Conditional Permit can be granted. The Conditional Permit allows the PTA to order and construct the new structure prior to expiration of the public notice period. The PTA is notified that even though a Conditional permit authorizes them to conduct the work, if any issues or concerns are raised during the Public Notice period, the PTA is responsible to address them.

If the bridge or culvert fails after hours, on weekends or holidays, the PTA does have some latitude to use their discretion to re-open the road. If the DEQ Transportation

Specialist cannot be reached, the PTA is responsible for notifying the Transportation Specialist the next workday.

[6.2](#) What is a true emergency situation?

When the road is closed and must be re-opened right away. See the first paragraph in 6.1 above.

[6.3](#) In a true emergency situation, can I go ahead and replace the failed structure and then inform the DEQ?

Yes. See the last paragraph in 6.1.

7. Permit Exemptions

[7.1](#) Do county drain crossings require a permit?

Yes, county drain crossings (i.e., bridges and culverts), and drain relocations that are not installed as part of a formerly petitioned drain project require a permit from the DEQ. A separate permit may also be required from the county drain office.

[7.2](#) Do ditches require a permit?

Maintenance and installation of a roadside ditch generally does not require a permit provided they are not part of a stream, and do not affect adjacent wetlands.

[7.3](#) What is considered a ditch?

A ditch is a roadside feature that only flows during and immediately after a rain event.

[7.4](#) Are storm water outfall pipes exempt if the outlet is above the Ordinary High Water Mark (OHWM)?

No, new stormwater outlet pipes that are discharging to regulated stream/drain, lake or wetland require a permit. Repairs of existing outlets are exempt, and the riprap at the outlet is also exempt even if it extends below the OHWM.

8. Questions on the Application

[8.1](#) What do we mean by average stream width?

The average stream width is the average width from permanent vegetation line on one bank to the permanent vegetation line on the other bank (this line is also known as the Ordinary High Water Mark). Several measurements can be used to determine an average stream width. Measurements should be taken outside the influence of a structure (i.e. 50-100 feet upstream or downstream).

[8.2](#) When is riprap used/required?

Riprap is often used to stabilize/protect road slopes, and around bridges and culverts to minimize damages caused by moving water. Standard permit conditions generally require riprap to be placed to above the ordinary high water mark. Riprap should be placed over geotextile fabric, and be clean, well graded, and free of protruding re-bar. Broken concrete when allowed should also be well graded and no larger than 24 inches in any one dimension.

Riprap will also be required along the waterward side of a seawall/retaining wall to help prevent undermining of the structure and provide habitat for aquatic organisms.

8.3 When cleaning out a stream or drain, what information is required?

The following information will be required:

1. Overall site plan showing existing water bodies, wetlands, and features
2. Property boundaries and easements
3. Location of the proposed cleanout
4. Cross-sections of existing and proposed conditions showing quantities of cut and fill
5. Proposed slopes and water levels
6. Proposed disposal site if contaminated soils are being dredged.

8.4 When filling or dredging a wetland, what information is needed?

The following information will be required:

1. Overall site plan showing existing water bodies, wetlands, and features
2. Property boundaries and easements
3. Proposed dredge and fill areas with dimensions
4. Cross-section views of both existing and proposed conditions
5. Quantities of material filled and dredged
6. Proposed disposal site if contaminated soils are being dredged.

8.5 When a contractor or consultant is signing the application, what is needed?

A letter from the property owner authorizing the contractor or consultant to sign the application on their behalf.

8.6 On the signature page, do I mark Property owner, Agent Contractor, or Corporation title?

Mark whoever is signing the application. If you are not the owner you must include a letter from the owner authorizing you to sign on their behalf.

8.7 If there is more than one culvert/bridge, do I need to fill out more than one application?

No, provided they are in the same general area and for the same project. However, you need to make copies of the appropriate pages and submit them along with the plans for each location.

8.8 If my project involves a lake, should I include the name and address of the lake association in the application?

Yes, if the project is located on a lake with an established lake board or association.

8.9 What is the definition of Bankfull width?

Bankfull width is the width of the stream that corresponds to the depth where water fills a main channel to the point of overflowing. Bankfull width is generally measured at a riffle within the stream channel and should be measured outside the influence of the stream crossing. In instances where the applicant is unsure of the bankfull width, it is recommended that they contact the DEQ staff person and request a pre-application meeting. Applicants are strongly encouraged to install structures that at a minimum span the bankfull width. For structures with a bottom, they should be recessed 1/6 of the bankfull width up to 2 feet maximum. The structure should also be set on the proper slope which can be measured by doing a stream profile that connects a riffle upstream and downstream of the structure.

9. Permit Application Fees

[9.1 When do fees need to be submitted?](#)

Under a Memorandum of Understanding (MOU) between the Public Transportation Agencies (PTA) and the Michigan Department of Environmental Quality no fees are charged to those agencies eligible to receive Act 51 funds for projects that qualify as a public transportation facility.

Please note that fees are charged for after-the-fact applications, and the fees and mitigation ratios are double. Additional fees and penalties can also be charged for violations of any of the statutes.

10. Incomplete Applications

[10.1 Is there a time limit for submitting missing information?](#)

- If the additional information requested from you is not received within 30 days, we will consider your application as withdrawn, and we will close your file. If you submit a response to us indicating a time frame in which we will receive the information then we will keep the file until the information is received.

[10.2 If something is missing from the application does it take longer to get a permit?](#)

Yes, we can not start to process your application until it is administratively complete. If during the application review process your application is determined to be incomplete for any reason, you will be contacted by phone, email or letter in a timely manner. Once an application is complete, approximately 70% are processed in 60 days or less.

11. Checking Permit Application Status

[11.1 How can I check the status of a permit on the internet?](#)

All applications are entered into [MiEnviro](#). This system provides an on-line service that allows you to follow your application through the review process.

12. Including a Hydraulic Analysis with the Application

[12.1 Where can I obtain a flood discharge estimate?](#)

The DEQ' Water Resources Division's, Hydrologic Studies and Dam Safety Unit (HSDSU) provides the official estimate of the flood discharge for projects that have a drainage area of 2 square miles or more. There is no charge for this service.

An online request form can be found at Michigan.gov/EgleTransportationReview. Under [Related Links](#), chose [Request a Flood Discharge](#), and follow the instruction to fill out the request form. You must also send in a location map to the HSDSU. The HSDSU will respond to you by e-mail.

[12.2 Can applicants or their agents use their own flow determination?](#)

Yes, the flows must be either computed or approved by the DEQ's HSDSU for streams/drains with a drainage area of 2 square miles or more. If the applicant or their agent computes their own flow values for a project we will ask the HSDSU to verify and approve the flow values. The computed flows must conform to HSDSU approved methodologies.

A project with a drainage area less than 2 square miles is exempt under Part 31 and the HSDSU will not compute a flood discharge. If the applicant needs a design discharge they can go to the web address at Michigan.gov/Hydrology, click on Computing Flood Discharge for Small Ungaged Watersheds, for a calculation spreadsheet. For watersheds with a time concentration less than 1 hour, the TR-55 method is recommended.

[12.3 Who should perform a hydraulic analysis and how should the results be presented?](#)

The applicant or their agent should conduct the hydraulic analysis. The analysis should be summarized in a hydraulic report which compares the existing and proposed water surface profile computations as a result of the proposed project for a range of discharges up to and including the 100-year flood discharge. The report shall be prepared and sealed by an engineer licensed in Michigan. The requirements for the report can be found on the website at Michigan.gov/EgleTransportationReview, then click on Hydraulic Report Guidelines under the information box.

[12.4 When should hydraulic calculations be submitted with a permit application?](#)

If the proposed project has a drainage area of 2 square miles or more and one or more of the following conditions exist, then a hydraulic analysis comparing proposed and existing conditions for a range of flows up to and including the 100-year peak flow value should be submitted:

- Increased road grade, unless available data shows there is no weir flow over top of the existing road.
- Reduced structure effective end area.
- Reduced structure span, or rise even when the total end area is equal or larger.
- Change in the proposed structure material resulting in an increase in the Manning's (N) coefficient, (i.e., going from concrete to corrugated metal).
- Change in the structure entry type that increases the entry loss.
- Higher structure invert or stream bed elevation.
- Increased length of the proposed structure, or adding extensions that total more than 24 feet.

[12.5 How much of a flood elevation increase is allowed?](#)

To obtain a Part 31 permit, an increase in flood elevation can not cause a harmful interference. Harmful interference is defined as not causing or not likely to cause damage to property; a threat to life; a threat of personal injury; and pollution, impairment, or destruction of water or other natural resources. There is no a specific limit as to what the allowable increase is. Each application has to be reviewed and determined case by case (see question #12.7).

12.6 What are the ramifications if the proposed structure, including an increased road grade, causes an increase to upstream flood elevations when compared to existing conditions?

- If the flood elevation increase is limited in the applicant's property, or the increase is beyond the applicant property but is below the stream bank, the design professional engineer (P.E.) must sign and submit a certification of "no harmful increase". Sample certification language can be found at www.michigan.gov/egletransportationreview then click on Hydraulic Report Guidelines.
- If the flood elevation increase is 0.01 feet or greater, and goes beyond the applicant's property, and is over the bank, the design engineer (P.E.) must sign and submit a certification of "no harmful increase". In addition, all property owners impacted by the proposed increase must be sent copies of the "Affected Property Owner Statement". The property owner statement can be found at Michigan.gov/EgleTransportationReview then click on Hydraulic Report Guidelines.

12.7 What are acceptable methods to compare existing and proposed hydraulic conditions?

- The U.S. Army Corps of Engineers' River Analysis System (HEC-RAS) is the preferred hydraulic model. It allows you to perform one-dimensional steady and unsteady flow river hydraulic computations.
- The U.S. Army Corps of Engineers' HEC-2 program can be used although it has been superseded by HEC-RAS. HEC-2 allows you to conduct a one-dimensional, steady flow water surface profiles analysis.
- The Federal Highway Administration's HY-8 program is also acceptable under certain conditions. This software optimizes the culvert size, shape and inlet configuration to minimize the culvert cost in highway drainage systems. It provides the headwater elevations for a range of flows through the culvert. It does not compute open channel water surface profiles.
- Properly performed hand calculations are acceptable.

12.8 Where can I find a good reference to determine the Manning Coefficient's (N-Value)?

You can find very useful information including pictures, descriptions and values from the following publications:

- Ven Te Chow: "Open-Channel Hydraulics", McGraw-Hill Book Company, New York, 1959. Page 98-123.
- U.S. Army Corps of Engineers: Hydraulic Reference Manual for HEC-RAS River Analysis System, Chapter 6.
- Guy B. Fasken: Guide for Selecting Roughness Coefficient "n" Values for Channels, Soil Conservation Service, USDA, Lincoln, Nebraska, 1963

PROJECT TYPES AND COMPONENTS

13. Minor Projects

13.1 Who determines whether a project meets the minor or general project category?

The minor project categories are spelled out in the respective statutes. These can also be found at Michigan.gov/JointPermit, click on minor project categories or general project categories. Your application is initially reviewed in our Lansing office to determine if it is

administratively complete and to determine whether it is a general or minor project or if it needs to be public noticed.

Some of the more common general project categories for transportation agencies include:

- Removal of headwalls, placement of new headwalls wing-walls or end sections
- Culvert or bridge extensions less than 24 feet.
- Culvert cleanouts where sediment is removed within the culvert and no more than 25 feet on either side of the culvert.
- A clear span bridge that spans 1.2 times the bankfull width.
- Soil borings where the outside diameter of the bore hole does not exceed 8 inches.

Some of the more common minor project categories for transportation agencies include:

- Public road safety improvement projects that impact no more than 1 acres of wetland with no more than 0.33 acres of impact per wetland complex and where all practical means have been taken to minimize the impact. These safety improvement projects include:
 - flattening of road slopes to meet the minimum safety standard
 - construction of standard shoulder widths
 - installation of guardrail flares
 - intersection improvements
 - elimination of roadside obstacles, such as sign platforms and utility poles
 - addition of a lane for safety reasons
 - equalizer culverts that extend beyond the existing toe of slope
 - open construction highway fencing elevated above the wetland on poles limited to 5 feet in height
 - wetland equalizer culvert extensions.
- Dredging that does not exceed 25 cubic yards and 1000 square feet where there is no reasonable expectation that the dredge spoils are polluted and where the dredge spoils are placed in an upland (non-wetland, non-floodplain) area
- Storm water outfall structures
- A clear span bridge, that spans the bankfull width with the lowest bottom of beam elevation at or above natural ground on either bank and the approach fill sloping to natural ground within 10 feet of the bridge
- A culvert or bridge that spans the bankfull width, is recessed 1/6 the bankfull width, and is set on the proper slope. If the drainage area is 2 square miles or greater the replacement structure must also provide equal or greater hydraulic capacity
- Wetland equalizer culverts where the minimum diameter is 18 inches and the culvert is buried 20% of its diameter
- Riprap shore protection that does not exceed 300 linear feet of shoreline and does not extend more than 5 feet below the ordinary high water mark and there is evidence of ongoing erosion.
- The placement of riprap for scour protection to meet scour protection requirements imposed by the Federal Highway Administration

- The replacement of the bridge superstructure including the deck and support beams where the existing abutments and piers are left in place and the low beam elevation is not lowered

[13.3 What is meant by fully spanning the bottomlands?](#)

Spanning the bottomlands means the structure opening of your bridge or culvert is at least as wide as the width of the stream width between the ordinary high water mark and there are no piers in the water.

[13.3 How do minor projects get treated differently from regular projects?](#)

A minor project is not public noticed meaning there is no formal comment period from the general public. Copies of the application are not sent to the riparian/adjacent property owners. It should be noted that the DEQ reserves the right to public notice any file even if it meets a minor project category. This may be done if a project is expected to be controversial.

[13.4 If a project is minor, who needs to be notified?](#)

Copies of the project are sent to the local unit of government, the county drain commission and county health department where applicable, the DNR- Fisheries and Wildlife Divisions and the applicable DEQ staff..

[13.5 What information is required to be submitted with an application for a minor permit?](#)

Generally the same information should be provided with the application. The riparian/adjacent property owners are not needed; however, if you are not sure whether the project is a minor project of public notice project, you should send the names and addresses to avoid any delays in processing.

[13.7 Is a hydraulic analysis required for minor projects?](#)

Generally, the criteria that enables a project to be classified as a minor project does not necessitate that a hydraulic analysis be performed. However, there may be situations where erosion is occurring or there are homes upstream that could be affected where a hydraulic analysis would be required to demonstrate that the proposed structure does not increase stream velocities or flood elevations when compared to the existing structure.

14. Working Conditions

[14.1 Who is responsible for the disposal of spoils from a job site?](#)

The permittee is responsible for making sure the conditions of the permit are followed. Therefore, the permittee has the responsibility to ensure that the spoils are disposed of legally. If a contractor for the applicant illegally disposes the spoils in a wetland, floodplain, etc., it will be the applicant's responsibility to immediately remove the spoils. It is possible that fines and penalties could also be imposed on the applicant.

[14.2 How much fill/dredging is allowed within the stream to be considered a minor project?](#)

Dredging in a stream of 25 cubic yards or less impacting 1000 square feet or less. There is no applicable minor project category for filing in a stream.

[14.3](#) What is meant by working “in-the-dry”?

"Working in the dry" means that the work is being done within an area which has been isolated from the stream flow or the rest of the waterway via the use of cofferdams, a flume, pump-around, or some other method of isolating the work area to prevent the release of soil or demolition materials to the waterway.

[14.4](#) What is meant by “no work in the water”?

No work in the water means that construction activities are not allowed in the water during specified dates. These dates are generally set to protect critical fish spawning or migration periods or other resources. Work may be allowed within cofferdams provided they were installed prior to the no work dates. Not all streams have no work dates.

[14.5](#) What is the preferred method of dewatering?

The preferred method of dewatering depends upon site conditions such as site topography, soil type, and water volume. The use of filter bags with discharge to a vegetated area is commonly approved method. Contact your local Water Resources Division staff representative for site specific review and recommendations.

[14.6](#) Is there a no-instream work date at every bridge or culvert project within a stream?

No it depends on the quality of the stream or drain. Input is provided from the Michigan Department of Natural Resources Fisheries Division as to what the no work dates may be for a given stream or drain. It is usually permissible to work behind cofferdams during the no in-stream work dates.

15. Public Notice/Public Hearings

[15.1](#) Who needs to be notified for Public Notices?

The following receive copies of the Public Notice, which includes the Public Notice cover sheet summary, the administratively complete application along with pertinent plans:

- Applicant
- Agent/Contractor
- Adjacent Property Owners
- City or Township Clerk
- County Clerk
- County Health Department
- County Soil Conservation District
- County Drain Commission
- Watershed Council
- Applicable DEQ staff
- DNR – Fisheries Division staff
- DNR - Wildlife Division staff

Additionally, depending on the project, copies of the public notice may be sent to the U.S. Army Corps of Engineers if a project falls within Section 10 waters; the U.S. Environmental Protection Agency and U. S. Fish and Wildlife Service for major activities under Section 404 of the Clean Water Act; the Michigan Historical Center; Michigan Department of Transportation; or Michigan Department of Agriculture and Rural Development, as well as other various DEQ programs.

[15.2 What determines if a project is a Section 404/redfile?](#)

The U.S. Army Corps of Engineers (USACE) has been regulating activities in the nation's waters since 1890. Until the 1960's, the primary purpose of the regulatory program was to protect navigation. Since then, as a result of laws and court decisions, the program has been broadened so that it now considers the full public interest for both the protection and utilization of water resources. The regulatory authorities and responsibilities of the USACE are based on the following federal laws:

- Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403) prohibits the obstruction or alteration of navigable waters of the United States without a permit from the USACE.
- Section 404 of the Clean Water Act (33 U.S.C. 1344) prohibits the discharge of dredged or fill material into all waters of the United States, including wetlands, both adjacent and isolated, without a permit. The State of Michigan has assumed from the U.S. Environmental Protection Agency (USEPA), the authority to regulate the placement of fill material in waterways and wetlands under provisions of Section 404 g (1) of the Clean Water Act of 1977 (33 U.S.C. 1251 et seq.). However, since Section 10 of the Rivers and Harbors Act does not provide for similar transfer to states, the USACE retains Section 404 jurisdiction within those waters that are navigable waters of the U.S. and adjacent wetlands. The discharge of any fill materials must comply with state water quality standards consistent with Sections 301, 307, and 401 of the Clean Water Act.

The following major projects will typically require federal review by the US EPA. This review normally takes a minimum of 90 days to process.

- Projects that impact 1 or more acres of wetland.
- New stream enclosures of 300 feet or more.
- Re-channelization or re-location of 1000 feet or more of a stream/drain.
- Projects which involve special federal/state lands or rivers (For example: these would include federally designated wild and scenic rivers, federal parks, national lake shores, wildlife sanctuaries, etc.).
- Projects that would impact federal threatened or endangered species.

Work in Section 10 waters will require a review by the U.S. Army Corps of Engineers.

The USEPA has the authority to ask to review any project.

[15.3 How long after a Public Hearing does the DEQ have to grant or deny a permit?](#)

If a public hearing is held under Part 301 the MDEQ has 120 days from when the file was determined to be administratively complete to make a decision to grant or deny a permit. If a public hearing is held under Part 303 or Part 325, the MDEQ has 150 days from when the file was determined to be administratively complete to make a decision to grant or deny a permit.

16. Boardwalks

[16.1 When does a boardwalk project go to the Transportation Review Unit vs. the WRD district staff?](#)

Applications for boardwalks are submitted to the Transportation Review Unit if state or federal transportation funds of any type are being utilized for any portion of the project. If projects are completely funded with private or local funds, the applications go through the DEQ's WRD's district staff..

[16.2](#) What are the typical requirements for boardwalks/pathways in wetlands?

Boardwalks should be used when paths impact wetlands/water bodies. Where possible boardwalks and paths should be designed to avoid or minimize wetland impacts and be kept to minimum acceptable standards within wetland areas.

17. Safety Projects

[17.1](#) Can the Transportation Review Unit (TRU) require less than the current AASHTO standards?

For state and federally funded projects, the TRU would expect that the current AASHTO standards are being met. However, if there is an environmental concern associated with a project designed to AASHTO standards, the TRU could request that a design exception be requested from the Federal Highway Administration or the Michigan Department of Transportation to allow certain aspects of the project to be designed to specifications less than the AASHTO standards.

There are situations where it may be appropriate to design to specifications that do not meet the standards, particularly to reduce natural resource impacts, however, this should be reviewed and discussed by all agencies involved in the project.

18. Staging

[18.1](#) What is the difference between temporary and permanent Soil Erosion and Sedimentation Control (SESC) measures?

Temporary SESC measures should be used during construction to control soil erosion and prevent the loss of soil from the site or into wetlands or other waterways. Examples include properly trenched silt fence, stone check dams used in swales to slow water velocity over raw construction areas or other approved barriers between raw construction areas and waterways. Hay or straw bales are generally not acceptable. Temporary measures are removed at the completion of construction.

Permanent SESC measures are used at project completion and remain in place. Examples of permanent soil erosion and sedimentation control measures are high velocity mulch blankets, riprap, seed and mulch, sod, earthen berms, and rock check dams to slow water velocity in a vegetated ditch.

[18.3](#) How does staging save money and reduce environmental impacts?

Staging saves money and environmental damage by limiting the exposure of raw work areas so that only a portion of the overall construction area is bare at any one time. When construction on the area is complete, permanent SESC measures should be put in place as the construction activity moves to the next work area.

19. Wetlands

[19.1](#) Why are wetlands important?

Wetlands are home to many animals, reptiles, amphibians, birds, fish and other aquatic species. Emergent/ponded wetlands may serve as spawning areas for various fish species. Wetlands contribute in the ecological transpiration cycle. Wetlands also store runoff, which can prevent flooding of downstream properties, provide for ground water recharge and act as a natural filter to protect adjacent lakes, rivers and streams from sediment, fertilizers, and pesticides.

[19.2](#) What are the applicant's responsibilities when working in wetland areas?

Applicants are required to avoid wetland impacts where feasible, minimize impacts to the extent practical when wetlands cannot be avoided, and provide compensating mitigation for unavoidable wetland impacts. Applicants must justify the purpose and need for the project and describe the various alternatives that were explored (including the no-build option) to avoid the impacts.

[19.3](#) Why is it important to protect adjacent, non-work wetland areas?

Construction equipment should not enter the adjacent non work areas. The equipment could cause rutting and damage to those wetland areas. Any temporary work in wetland areas needs to be included in your application package. It would be a violation if sediment from your work site eroded and was deposited into adjacent no-work wetlands, streams or lakes. If the filling, dredging, or draining of the non-work wetland were to occur, the responsible parties should contact the DEQ ASAP.

[19.4](#) What determines if wetland fill/dredging is a minor project?

The following types of transportation projects would qualify as a minor project under Part 303, Wetlands Protection.

- Public road safety improvement projects that impact no more than 1 acre of wetland with no more than 0.33 acres of impact per any single wetland complex and where all practical means have been taken to minimize the impact. These safety improvement projects include:
 - flattening of road slopes to meet the minimum safety standard
 - construction of standard shoulder widths
 - installation of guardrail flares
 - intersection improvements
 - elimination of roadside obstacles, such as sign platforms and utility poles
 - addition of a lane for safety reasons
 - open construction highway fencing elevated above the wetland on poles limited to 5 feet in height
 - wetland equalizer culvert extensions

[19.5](#) What land owners need to be notified if the project is public noticed?

Property owners adjacent to the impacted wetland, stream or lake should be notified.

[19.6](#) When filling/dredging more than 1 wetland complex, does the total fill/dredge volumes include all wetland complexes?

Yes, the total wetland fill/dredge volumes should be listed in the application. In addition, each individual impacted wetland should be listed for its particular fill or dredge amounts.

[19.7](#) Can I work in a regulated wetland within the ROW without obtaining a DEQ permit?

No. Just because a regulated wetland is inside the ROW, does not preclude the necessity of obtaining a DEQ permit. Any work in wetlands that is outside of the existing road footprint would require a permit.

20. Wetland Mitigation

General wetland information can be found at Michigan.gov/Wetlands.

[20.1](#) Where can I find a list of what the DEQ expects for mitigation and monitoring?

Go to Michigan.gov/Wetlands, then click on Wetland Mitigation in the information box then scroll down to Mitigation Plan.

[20.2](#) When I am going to fill or dredge a wetland, when and what compensating mitigation will be required?

Mitigation will be required if wetland impacts exceed 0.1 acres. For wetland impacts between 0.1 and 0.33 acres that meet the minor project category under Part 303 impacts will need to be mitigated at a 1.0 to 1.0 ratio and can be any type and anywhere. Wetland impacts that exceed 0.33 acres per wetland complex and that do not meet the minor project categories will need to be mitigated at the following ratios within the watershed:

- 1.5 to 1.0 for impacts to emergent and scrub/shrub wetlands
- 2.0 to 1.0 for impacts to forested wetlands, coastal wetlands and wetlands that border an inland lake
- 5.0 to 1.0 for impacts to wetland types that are rare or imperiled on a statewide basis.

[20.3](#) When is the wetland mitigation plan required?

If you know that mitigation is likely to be required, you are required as a minimum to submit a conceptual mitigation plan with the application, otherwise the application will be considered incomplete.

[20.4](#) When and why is a financial assurance bond or letter of credit required when it comes to wetland mitigation?

A financial assurance bond or letter of credit is required when the mitigation site will not be completed prior to the start of any other permitted activities. The financial assurance should include the cost of the land acquisition, mitigation design, construction and mitigation monitoring. The purpose of the financial assurance is to assure that the mitigation site is built by the applicant. If the applicant does not build the mitigation site then the DEQ will pull the letter of credit or bond and pay to have the mitigation completed.

[20.6](#) At what point in the entire process should I begin getting the financial assurance bond and conservation easement together?

You should start the process as soon as you determine that mitigation will likely be required. Permitted construction activities cannot begin until the financial assurance is received and approved by the DEQ. The conservation easement can be submitted with the application or within 60 days of approval of the final mitigation plan.

21. Floodplain Cut and Fill

[21.1](#) When is compensating excavation required?

Compensating excavation is required when placing more than 300 cubic yards of fill within the floodplain of a stream or drain with a drainage area of two square miles or more.

Generally, compensating cut will not be required for fill volumes of less than 300 cubic yards as a single and complete project, unless there is evidence that the fill will cause a harmful interference. The applicant also has the option to analyze the impacts of the fill in combination with future similar works and determine whether the fill will cause a harmful interference to flood flows. This requires a detailed hydrologic and hydraulic analysis.

[21.2 Can floodplain compensating cut take place in an adjacent wetland?](#)

Probably not, but floodplain compensation could be used to create a wetland which in turn may be used to offset wetland mitigation requirements. If there is an adjacent existing wetland, a detailed examination would be required to determine what impacts the cut would have on the existing wetland.

[21.4 Can we create a wetland as part of a floodplain compensating cut?](#)

Yes. See 21.2

NATURAL RESOURCES

22. Fish

[22.1 Why should the direct discharge of storm water to water bodies be avoided?](#)

Storm water potentially contains pollutants that impact the environment of the stream, including possible heavy metals, grease and oil, salts and sediment. Increased amounts of storm water could also impact stream dynamics resulting in bank and bed scouring, increased erosion and sediment deposits.

[22.2 How does increased sediment affect fish habitat?](#)

Increased sediment acts as a blanket covering the stream substrate, suffocating benthic communities (organisms that live in the water) and burying eggs and spawning areas.

[22.3 Does the project absolutely have to address fish habitat or is that just “recommended?”](#)

Section 324.30106 of Part 301, Inland Lakes and Streams of the Natural Resources Protection Act, PA 1994, as amended, states, in part, that “. . . the structure or project will not adversely affect the public trust or riparian rights. . . . including uses for recreation, fish and wildlife . . .”. Therefore, stream habitat, water quality and “fish concerns” must be addressed.

[22.4 Why do I have to recess my structure?](#)

Culvert inverts should generally be recessed 1/6 of the bankfull width to provide natural substrate within the structure. Recessing also reduces the risk of a culvert becoming perched, blocking fish passage and increasing scouring of the substrate and stream banks. The recessed area is subtracted out of the effective waterway area for the purposes of hydraulic computations.

[22.5 Why don't fish like long enclosures?](#)

Fish avoid any area that is completely dark because they can't see predators, prey, or additional habitat. Undersized structures can also increase velocities within a structure, making it too difficult for fish to pass.

22.6 What does anadromous mean?

Anadromous is a species that requires the sea or lake for one portion of its life history and a stream for another part. Salmon are an example where they require the Great Lakes for most of their life and migrate upstream to spawn

22.8 I don't see fish. Why is this stream important?

Streams contain benthic species such as sculpins and darters that are nearly impossible to spot. However, these species are extremely important as food for other animals and fish. Streams also provide critical habitat for amphibians and reptiles and mammals. Streams and stream corridors are used as migratory routes for fish and wildlife. Water quality and quantity must be regulated to maintain and balance our delicate ecological systems.