

## Culvert with a Professionally Engineered Design General Application Instructions

### Determine eligibility for this general permit:

- Choose an activity decision module on web, <http://dnr.wi.gov/topic/waterways>, **or**
- Review the eligibility criteria below
  - If the project does not meet all of the eligibility standards, apply for an Individual Permit

### To apply:

- Apply online using our online ePermitting System at <http://dnr.wi.gov/permits/water>
- Include all required attachments. Each document must be less than 15 megabytes and our online system offers a help guide to reduce file sizes,
- Permit processing review times begin when all of the required application materials are received by the DNR. The department may require additional information to evaluate the project.
- If you have questions regarding your application, contact the local Water Management Specialist for your county <http://dnr.wi.gov/topic/Waterways/contacts.html#county>.

### Please note, prior to starting any work at the project site, you are responsible for:

- Obtain all necessary local (e.g. city, town, village or county) permits.
- Obtain U.S. Army Corps of Engineer permits or approvals, <http://www.mvp.usace.army.mil/Missions/Regulatory.aspx>.
- Any other applicable state permits

### Required attachments - Forms or documents you upload in our online ePermitting System

1. **Application form** - A complete, signed application form "Water Resources Application for Project Permits (WRAPP)" (Form 3500-053).
2. **Application fee** - Payment must be submitted through the ePermitting System as part of the application process. A list of fees can be found at <http://dnr.wi.gov/topic/waterways/documents/PermitDocs/feesheet.pdf>.
3. **Ownership documentation** - (i.e. copy of deed, land contract, current property tax statement/receipt)
4. **Photographs** that clearly show the on-the-ground conditions of the existing project areas. Remember that too much snow cover or vegetation may obscure important details. If possible, have another person stand near the project area for size reference. Color images are preferred.
5. **Site maps** that clearly illustrate the location and perimeter of the project site, and its relationship to nearby water resources (e.g. lakes, rivers, streams or wetlands), major landmarks and roads. Provide copies of relevant maps (e.g. wetland, aerial, topographical, soil, floodplain, or zoning maps), with the project location clearly identified. The department offers a web mapping tool to assist in creating these maps at <http://dnr.wi.gov/topic/surfacewater/swdv/>.
6. **Plans and specifications** that show what you intend to do. Plan drawings should be clear and to scale. Be sure to draw all plans as accurately and detailed as possible. The department reserves the right to require additional information to evaluate the project. Please refer to this sample drawing for assistance developing your plans and specifications, [http://dnr.wi.gov/topic/Waterways/sample\\_drawings/Culvert-ProfEngineer.pdf](http://dnr.wi.gov/topic/Waterways/sample_drawings/Culvert-ProfEngineer.pdf).

7. **Narrative description** of your proposal on a separate page. Please include:
- What the project is, purpose of project, and need for the project
  - How you intend to carry out the project, including methods, materials, and equipment
  - Your proposed construction schedule and sequence of work
  - What temporary and permanent erosion control measures will be used
  - The location of any disposal area for dredged or excavated materials
  - For disturbances or fill, provide a description of type, composition, and quality of materials
  - How you plan to avoid, minimize and mitigate impacts to waterways
  - Area (e.g. linear feet) impacted

8. **Culvert area and sizing worksheet** - This can be found at [http://dnr.wi.gov/topic/waterways/factsheets/culvert\\_placement\\_worksheet.pdf](http://dnr.wi.gov/topic/waterways/factsheets/culvert_placement_worksheet.pdf), but is completed within the ePermitting System.

9. **Endangered and threatened resources** - The applicant is not required, but is encouraged to request an endangered resources (ER) review letter before applying for the permit. Information on how to obtain a review can be found by visiting the website at <http://dnr.wi.gov/topic/ERReview/Review.html>. The applicant can also visit the NHI Public Portal, <http://dnr.wi.gov/topic/ERReview/PublicPortal.html>, to determine if a full ER Review is required. Read the 'What is an ER Preliminary Assessment and what do the results mean?' section to determine follow-up steps.

10. **Historical and cultural resources** - If you are aware there is a historical or cultural resource present, you are **required** to contact the Wisconsin State Historical Society to verify and receive documentation that the activity will not result in an adverse impact to these resources.

<b>Eligibility criteria:</b>	
Projects that do not meet all criteria are not eligible for this general permit. If your project does not qualify for this general permit, you may apply for an individual permit.	
The culvert area <b>will not</b> exceed 40 square feet as calculated in the Culvert Sizing Worksheet, which is part of this packet and is also described in ch. NR 320.07(1), Wis. Admin Code. The culvert Sizing Worksheet can be found at: <a href="http://dnr.wi.gov/topic/Waterways/factsheets/Culvert_Placement_Worksheet.pdf">http://dnr.wi.gov/topic/Waterways/factsheets/Culvert_Placement_Worksheet.pdf</a>	
<b>Note:</b> The Culvert Sizing Worksheet must be included with the plans and specifications portion of the permit application.	
The culvert <b>will not</b> be placed in a public rights feature as described in ch. NR 1.06	
<b>Note:</b> To determine if a waterway is a public rights feature (PRF) you may use the Designated Waters theme on DNR's Surface Water Data Viewer: <a href="http://dnr.wi.gov/topic/surfacewater/swdv/">http://dnr.wi.gov/topic/surfacewater/swdv/</a>	
The culvert <b>will not</b> be placed in a lake system.	
The culvert placement and installation will mimic the natural streambed and gradient above and below the culvert channel.	
If flow conditions require the use of a multiple culvert arrangement, culverts shall be placed at varying elevations, one in the bed and the other at 4 inches to 8 inches higher, to facilitate base and low flows as well as larger rain or snowmelt events.	
Both ends of the culvert shall be installed so a minimum of 4 inches and a maximum of 8 inches for a round culvert and 6 inches for a pipe arch culvert lie below the bed of the waterway.	

<p>New culverts or replacements of existing culverts spanning navigable waterways shall maintain a clearance of not less than 5 feet.</p> <p><b>Note:</b> The department may require clearance of more than 5 feet when it is likely the waterway will be navigated above its ordinary high water mark elevation or if it is used by watercraft or snowmobiles requiring greater clearance.</p> <p><b>Note:</b> The department may allow less than 5 feet clearance when <u>all</u> the following apply: waterway is known to have little or no navigation or snowmobile use; the waterway is not anticipated to have navigational use by other than lightweight craft; the owner provides a portage over or around the culvert; the reduced clearance would not be detrimental to the public interest.</p>	
<p>Culvert inlets may not be capped with screens, bars or any other means, with the exception of beaver control procedures, which prevent movement of fish or wildlife or collect debris.</p>	
<p>Culverts shall be designed to prevent washout. Culverts shall be long enough so road fill does not extend beyond the ends of the culvert. The culvert shall extend at least one foot beyond the fill. The channel shall be protected with variable-sized riprap extending horizontally at least 2 times the culvert diameter or height of arch culvert from the end of the culvert. Riprap placement shall include an adequate filter layer or filter fabric.</p>	
<p>Clean fill material shall be firmly compacted around the culvert. Multiple culvert crossings shall have a minimum of 2 feet clearance between adjacent culverts to allow adequate compaction of fill material. The culvert shall be designed or protected to prevent crushing.</p>	
<p>Dredging and deposition of sand, gravel or stone on the streambed may be associated with the placement of a culvert provided that the dredging is limited to the volume necessary to bury the culvert as required in this section and the deposit is limited to the area immediately underneath or within 2 feet of the culvert.</p>	
<p>Approach fill shall be a maximum of one foot deep at the bank and 0 feet at 15 feet landward of the bank. If depth of greater than one foot of approach is required or the approach must be located in a wetland, it shall be of an open ramp style that does not impede flow.</p>	
<p>During the placement of the structure, the removal of trees, shrubs and other shoreline vegetation above the ordinary high water mark will be minimized to the greatest extent possible.</p>	
<p>Accumulated brush, debris or other obstructions that are trapped in or underneath the structure will be regularly removed to prevent upstream flooding and to maintain structural integrity.</p>	
<p>Submit a series of photographs to the department within one week of placing the structure on this site and within one week of stabilizing disturbed areas on the site after the removal of the structure. The photographs shall be taken from different vantage points and depict all work authorized by the permit.</p>	
<p>Erosion control measures shall meet or exceed the technical standards for erosion control approved by the department under subch. V of ch. NR 151. Any area where topsoil is exposed during placement, repair or removal of a structure shall be immediately seeded and mulched to stabilize disturbed areas and prevent soils from being eroded and washed into the waterway. These standards can be found at: <a href="http://dnr.wi.gov/topic/stormwater/standards/">http://dnr.wi.gov/topic/stormwater/standards/</a></p>	
<p>The plans ensure that any area where topsoil is exposed during the placement, repair or removal of the structure will be immediately seeded and mulched to stabilize disturbed areas and prevent soils from being eroded and washed into the waterway.</p>	
<p>Unless part of a permanent storm water management system, all temporary erosion and sediment control practices will be removed upon final site stabilization. All areas disturbed during removal of temporary erosion and sediment control practices will be restored.</p>	
<p>All equipment used for the project shall be designed and properly sized to minimize the amount of sediment that can escape into the water.</p>	

<p>All grading, excavation and land-disturbance activities in the plans and specs documents will be confined to the minimum area necessary for the placement, repair or removal of the structure and will not exceed 10,000 square feet.</p> <p><b>Note:</b> If the project includes any grading, excavation or land-disturbance activity in excess of 10,000 square feet you may also need to receive approval under a Grading General or Individual permit in addition to this permit.</p>	
<p>The project plans minimize adverse impacts on fish movement, fish spawning, egg incubation periods and high stream flows, the project may not occur during the following time periods:</p> <ul style="list-style-type: none"> <li>✓ September 15 through May 15 for trout streams and navigable tributaries to trout streams.</li> <li>✓ March 15 through May 15 for ALL waters located south of state highway 29.</li> <li>✓ April 1 through June 1 for ALL waters located north of state highway 29.</li> </ul> <p><b>Note:</b> Per ch. NR 1.02(7), the department identifies and classifies trout streams to ensure adequate protection and proper management of this unique resource. To determine if a waterway is a trout stream, you may use the Designated Waters theme on the Wisconsin DNR's Surface Water Data Viewer: <a href="http://dnr.wi.gov/topic/surfacewater/swdv/">http://dnr.wi.gov/topic/surfacewater/swdv/</a></p> <p><b>Note:</b> The applicant may request that these time period restrictions be waived by the department on a case-by- case basis, by submitting a written statement signed by the local department fisheries biologist, documenting consultation about the proposed dredging project, and that the local department fisheries biologist has determined that the requirements of this paragraph are not necessary to protect fish spawning for the proposed project.</p>	
<p>All equipment used for the project including but not limited to tracked vehicles, barges, boats, hoses, sheet pile and pumps shall be de-contaminated for invasive and exotic viruses and species prior to use and after use.</p> <p>The following steps must be taken every time you move your equipment to avoid transporting invasive and exotic viruses and species. To the extent practicable, equipment and gear used on infested waters shall not be used on other non-infested waters.</p> <ul style="list-style-type: none"> <li>• Inspect and remove aquatic plants, animals, and mud from your equipment.</li> <li>• Drain all water from your equipment that comes in contact with infested waters, including but not limited to tracked vehicles, barges, boats, hoses, sheet pile and pumps.</li> <li>• Dispose of aquatic plants, animals in the trash. Never release or transfer aquatic plants, animals or water from one waterbody to another.</li> </ul> <p>Wash your equipment with hot (&gt;104° F) or high pressure water, steam clean or allow your equipment to dry thoroughly for 5 days.</p>	
<p>Follow the most recent department approved washing and disinfection protocols and department approved best management practices to avoid the spread of invasive species as outlined in NR 40, Wis. Adm. Code. These protocols and practices can be found on the Department website at <a href="http://dnr.wi.gov/topic/Invasives/bmp.html">http://dnr.wi.gov/topic/Invasives/bmp.html</a> Keyword: "equipment operator" and at <a href="http://dnr.wi.gov/topic/Invasives/documents/EquipOper.pdf">http://dnr.wi.gov/topic/Invasives/documents/EquipOper.pdf</a></p>	