

Michigan DEQ LAND AND WATER MANAGEMENT DIVISION
INLAND LAKES AND STREAMS
(Section 301 Rules)

(By authority conferred on the department of environmental quality by sections 30103, 30105, and 30110 of Act No. 451 of the Public Acts of 1994, as amended, being " 324.30103, 324.30105, and 324.30110 of the Michigan Compiled Laws)

R 281.811 Definitions. Rule 1.

(1) As used in these rules:

(a) "Act" means Act No. 451 of the Public Acts of 1994, as amended, being S324.101 et seq. of the Michigan Compiled Laws.

(b) "Applicant" means a person applying for a permit under the act.

(c) "Bottomland dredging" means dredging of channels and canals and the removal of any rock, stone, soil, or other material from bottomlands.

(d) "Bottomland filling" means the placement of rock, stone, soil, or other material on bottomlands.

(e) "Enlarge or diminish an inland lake or stream" means the dredging or filling of bottomlands, or the dredging of adjacent shore lands, to increase or decrease a body of water's surface area or storage capacity or the placement of fill or structures, or the manipulation, operation, or removal of fill or structures, to increase or decrease water levels in a lake, stream, or impoundment.

(f) "Placement of structures on bottomlands" does not mean the installation of clear span overhead utility wires if they do not restrict navigation for watercraft that typically ply the waterway and if they provide equal or greater clearance than other permanent overhead restrictions in the immediate area or utility lines installed as an integral part of a bridge superstructure and above the elevation of the low beam or utility lines immediately above the top of a culvert.

(g) "Public trust" means all of the following:

(i) The paramount right of the public to navigate and fish in all inland lakes and streams that are navigable.

(ii) The perpetual duty of the state to preserve and protect the public's right to navigate and fish in all inland lakes and streams that are navigable.

(iii) The paramount concern of the public and the protection of the air, water, and other natural resources of this state against pollution, impairment, and destruction.

(iv) The duty of the state to protect the air, water, and other natural resources of this state against pollution, impairment, or destruction.

(h) "Reasonable sanding of beaches to the existing water's edge" means placing a layer of sand which is free of organic or other pollutant materials and which does not shift the location of the existing ordinary high watermark or shoreline contour.

(2) "Riparian rights," as defined in the act, means all the rights accruing to the owners of riparian property, including the following rights, subject to the public trust:

(a) Access to the navigable waters.

(b) Dockage to boatable waters, known as wharfage.

(c) Use of water for general purposes, such as bathing and domestic use.

(d) Title to natural accretions.

(3) Terms defined in the act have the same meanings when used in these rules.

History: 1979 AC; 1982 AACs; 1985 AACs; 1998-2000 AACs.

R 281.812 Permit applications. Rule 2.

- (1) An application for permit shall be made on a form as prescribed and provided by the department. Application forms may be obtained from the land resource programs division of the department of natural resources or from any designated field office of the department.
- (2) An application for a permit shall not be deemed as received or filed with the department until all information requested on the application form, the application fee, and any other information requested by the department have been received by the department. For purposes of determining when the period for granting or denying a permit begins, an application shall not be deemed to be filed with the department until all information requested by the department has been received.
- (3) Application fees shall be submitted to the department with the initial submittal of an application form. The fee shall be paid by check, money order, or draft made payable to: "State of Michigan."
- (4) After receipt of an otherwise complete application, the department may request such additional information, environmental assessments, waterway design calculations, records, or documents as are determined to be necessary to make a decision to grant or deny a permit.
- (5) An application shall be considered to be withdrawn and the file for the application shall be closed if an applicant fails to respond to any written inquiry or request from the department within 30 days of the request.
- (6) An application for a permit to construct or replace a bridge or culvert shall include complete plans and specifications describing the proposed work.
- (7) When the proposed project includes activities at multiple locations or numerous lakes or streams, the applicant may submit a preliminary site plan showing the proposed work and all lakes or streams involved. After completing a timely field investigation, the department shall advise the applicant of those activities which require a permit.
- (8) An application to construct a new marina or expand the watercraft handling capacity of an existing marina shall include documentation as to how the facility will provide watercraft sanitary holding tank pump out services as required under section 5 of Act No. 167 of the Public Acts of 1970, as amended, being S323.335 et seq. of the Michigan Compiled Laws.

History: 1979 AC; 1982 AC; 1985 AACS.

R 281.813 Permit conditions.

Rule 3.

- (1) A permit shall provide that the work authorized in the permit shall be completed within a specified term, normally not more than 1 year from the date of issuance, or as otherwise determined by the department. For long- term projects, the department may authorize a permit for up to 5 years. The department may grant an extension of time. The department shall not require an administrative fee for processing requests for an extension of time.
- (2) The department shall ensure that a permit that authorizes a project which involves a lake or stream crossing by pipelines or utilities specifically conditions the activity to be subject to the requirements and specifications of R 281.832.
- (3) A permit does not obviate the necessity of receiving approval from the Drinking Water and Radiological Protection Division of the department or a local unit of government when applicable, including a local unit of government responsible for administering parts 91 and 323 of the act and the United States army corps of engineers, where applicable.
- (4) The department shall not issue a permit, except for a conditional permit or a permit under a minor project category, until 20 days after the mailing of the list to each eligible subscriber as provided for in section 30105(1) of the act.
- (5) Upon request, the department shall provide any person with a copy of a permit application and supporting documents under Act No. 442 of the Public Acts of 1976, as amended, being S15.231 et seq. of the Michigan Compiled Laws.

(6) The department may consider a mitigation plan submitted by the applicant and incorporate the mitigation actions as permit conditions for the improvement of the existing resources or the creation of a new resource to offset resource losses resulting from the proposed project, if acceptable.

(7) The department may reissue a permit for an expired permit without an additional fee if a written request is made within 1 year of the expiration date of the expired permit. The department must find that the basis for issuing the original permit is still valid before reissuing an expired permit.

History: 1979 AC; 1982 AACS; 1985 AACS; 1998-2000 AACS.

R 281.814 Environmental assessment.

Rule 4. In each application for a permit, all existing and potential adverse environmental effects shall be determined and the department shall not issue a permit unless the department determines both of the following:

(a) That the adverse impacts to the public trust, riparian rights, and the environment will be minimal.

(b) That a feasible and prudent alternative is not available.

History: 1979 AC; 1998-2000 AACS.

R 281.815 Structure maintenance.

Rule 5. The following structures may be maintained in accordance with section 30103(j) of the act:

(a) Seawalls, if the repair is only of the seawall facing or sheeting or support piling and if the maintenance does not encompass more than 25% of the permitted seawall length. Cap maintenance or replacement can be done for 100% of permitted seawalls.

(b) Riprap shore protection structures, if original materials have been displaced by erosion or ice damage and the placement of earthen fill will not be required as part of the maintenance and if retrieval of the riprap will not cause disruption of adjacent bottomland.

(c) Noncommercial docks, boat hoists, and pilings.

(d) Boat ramps if the maintenance does not require dredging.

(e) Bridges and culverts, if the maintenance is of an existing in-place structure and does not involve removal of the structure or alteration of the watercourse, streambed, or adjacent banks.

(f) Dams and lake level control structures, if the maintenance will be conducted without drawing down the lake or impoundment and is limited to minor surface repairs; the repair or replacement of stop logs, racks, and gates; or surface stabilization of earthen embankment-type structures where the work is above the existing water surface.

(g) Docks and pilings of a marina that has a current operating permit from the department.

(h) Lake level control structures, if the temporary variance (winter-summer) is established by court order or previously permitted by the department as an impoundment operational variation from the crest elevation if adverse environmental impacts have not occurred.

History: 1982 AACS; 1985 AACS; 1998-2000 AACS.

R 281.816 Minor project categories.

Rule 6. (1) Upon receipt of an application for a permit for any of the following minor projects, the department may act upon the application as provided in section 30105(6) of the act:

(a) Noncommercial piers, docks, and boat hoists that meet all of the following design criteria:

(i) The length or size of the proposed structure is not greater than the length or size of similar structures in the vicinity and on the watercourse and will not unreasonably interfere with the navigability or boatability of the water involved.

(ii) Free littoral flow of water and drift material is provided for.

(iii) Clean, nonpolluting materials will be used for the construction.

- (iv) The structure is a single pier or dock appurtenant to the applicant's upland or is an added boat hoist, minor pier, or extension to the existing boat hoist, pier, or dock.
- (b) Spring piles and pile clusters that meet all of the following design and purpose criteria:
 - (i) The location, number, and purpose for placement is usual for such projects in the vicinity and watercourse involved.
 - (ii) All piles and other materials used in their placement are clean, nonpolluting materials.
 - (iii) The location and placement will not create an obstruction to navigation.
- (c) Seawalls, bulkheads, and other permanent revetment structures that meet all of the following purpose and design criteria:
 - (i) The proposed structure fulfills an identifiable need for erosion protection, bank stabilization, or the protection of, or improvements on, uplands.
 - (ii) The structure will be constructed of suitable materials free from pollutants, waste metal products, debris, or organic materials.
 - (iii) The structure is not more than 300 feet in length and is located in an area on the body of water where other similar structures already exist. However, the department shall provide written notification to the adjoining riparian property owners for structures more than 200 feet in length. The department shall not complete action upon applications for such structures that are more than 200 feet in length for a period of 7 days from the mailing of the notification to allow adjoining riparian owners the opportunity to comment.
 - (iv) The placement of backfill or other fill associated with the construction does not exceed an average of 2 cubic yards per running foot along the shoreline and a maximum of 300 cubic yards.
 - (v) The structure or any associated fill will not be placed in a wetland area or placed in any manner that impairs surface water flow into or out of any wetland area.
- (d) Filling for the creation and improvement of swimming areas and beaches, the restoration of existing permitted fills, fills placed incidental to construction of other structures, and fills that do not exceed 300 cubic yards as a single and complete project that meet both of the following design criteria:
 - (i) The fill is of suitable material free from pollutants, waste metal products, debris, or organic materials.
 - (ii) Fill for the improvement of swimming areas or beaches, utilizing clean sand or gravel, will not exceed a blanket depth of 6 inches and will not be placed in a water depth exceeding 4 feet.
- (e) Dredging for the maintenance of previously dredged areas or dredging of not more than 300 cubic yards as a single and complete project when both of the following criteria are met:
 - (i) No reasonable expectation exists that the materials to be dredged are polluted.
 - (ii) All dredging spoils will be removed to an upland site exclusive of wetland areas.
- (f) Construction of bridges and culverts, whether new, replacement, or temporary, and the removal of bridges or culverts with the restoration of the crossing site that meet all of the following criteria:
 - (i) The bridge or culvert structure proposed is of a type and design, including certifications, described by 1 of the following:
 - (A) A clear span bridge that has the lowest bottom of beam elevation at or above the natural ground elevations on either bank and the approach fill sloping to natural ground elevations is within 10 feet on either end of the bridge.
 - (B) A culvert which has an effective waterway opening that equals or exceeds the cross-sectional area of the channel, which has fill over the culvert that is not more than 1.5 feet, and which has approach fill that slopes to natural ground elevations within 10 feet of either side of the culvert.
 - (C) The proposed structure is a replacement stream crossing which fully spans the bottomlands and the owner or the owner's engineering consultant certifies that the proposed structure is of equal or greater

hydraulic capacity, that deletion of auxiliary waterway openings is not planned, and that available information does not indicate the presence of a harmful interference.

(D) The proposed structure is a new stream crossing structure that fully spans the bottomlands. The design of the structure is certified by a registered professional engineer to pass the 100-year flood, as determined by the department, without causing harmful interference. The certification includes hydraulic waterway design calculations.

(E) The proposed structure is a new or replacement structure to be placed on an upland channel or similar artificially constructed waterway where consideration for the passage of flow is not a significant design factor.

(F) The proposed structure is an extension of an existing bridge or culvert where the total extended length does not exceed 24 feet.

(ii) The structure will provide sufficient under clearance to facilitate passage of watercraft that could be expected to navigate the waters involved.

(iii) The total volume of fill to be placed below the ordinary high watermark for placement of the structure does not exceed 200 cubic yards.

(iv) The removal of existing structures will be conducted without dropping demolition materials in the watercourse, and haul roads, work pads, or other structures to facilitate the removal will not be placed below the ordinary high watermark.

(v) The structures will be designed and placed to assure that any increase in stream erosion or down cutting is prevented.

(g) Watercourse crossings by utilities, pipelines, cables, and sewer lines that meet all of the following design criteria:

(i) A minimum of 30 inches of cover will be maintained between the top of the cable or pipe and the bed of the stream or other watercourse on buried crossings.

(ii) The method of construction proposed is the least disturbing to the environment employable at the given site.

(iii) Any necessary backfilling will be of washed gravel.

(iv) The diameter of pipe, cable, or encasement does not exceed 20 inches.

(h) Dredging and construction or enlargement of ponds, lagoons, ditches, storm water management basins, and similar artificial waterways if the proposed activity meets both of the following criteria:

(i) The artificial watercourse will have a surface area of less than 5 acres and have no direct connection to an existing inland lake or stream.

(ii) The resulting spoils will be placed on an appropriate upland site in a manner that will not impair flood flows or be eroded into public waters.

(i) Structural repair of man-made structures that meets all of the following design and purpose criteria:

(i) The repair will not alter the original use of a currently serviceable structure.

(ii) The repair will not adversely affect public trust values or interests, including navigation, fish migration, and water quality.

(iii) Any materials used for repair will be made of nonpolluting materials.

(j) Fish or wildlife habitat structures that meet all of the following criteria:

(i) The structures are placed so as not to impede navigation or create a navigational hazard.

(ii) The structures are anchored to the bottomlands.

(iii) The structures are constructed of nonpolluting materials.

(iv) The structure placement has the written authorization of the riparian owner and the appropriate department district fisheries or wildlife biologist, or both.

(k) Scientific structures, such as staff gauges, water monitoring devices, water quality testing devices, survey devices, and core sampling devices, that meet all of the following design and purpose criteria:

(i) The structures do not impede navigation or create a navigational hazard.

- (ii) The devices are constructed of nonpolluting materials.
- (iii) The placement of any scientific structure has the written authorization of the riparian owner.
- (l) Navigational aids that meet either of the following criteria:
 - (i) The aids are approved by the United States coast guard.
 - (ii) The aids are approved under part 801 of the act.
- (m) Extension of a project under a current permit that will not result in any damage to natural resources.
- (n) Physical removal of man-made structures or natural obstructions that meet all of the following criteria:
 - (i) The debris and spoils shall be removed to an upland site in a manner that will not impair flood flows or be eroded into public waters.
 - (ii) The stream bank or shoreline and bottom contours shall be restored to an acceptable condition.
 - (iii) Upon completion of structure removal, the site does not constitute a safety or navigational hazard.
 - (iv) Department staff shall consider fisheries and wildlife resource values when evaluating applications for natural obstruction removal.
- (o) Lake or impoundment draw downs or the associated re-flooding, or both, that meet the following design and purpose criteria:
 - (i) The purpose of the drawdown is described by 1 of the following criteria:
 - (A) The drawdown is temporary in nature for the purpose of inspection to determine the integrity of the impounding structure.
 - (B) The drawdown is associated with the routine operations of fish or wildlife floodings, ponds, or impoundments where the purpose of the drawdown is the enhancement or production of fish, wildlife, or associated habitat.
 - (C) A drawdown authorized by court order under the provisions of part 307 of the act if the court has incorporated the department requirements into the court order or concurred in department recommendations to address environmental concerns under part 301 of the act.
 - (ii) The potential adverse environmental effects of the drawdown have been determined to be minimal under R 281.814.
 - (p) Seismic cables across lakes and streams which are temporary in nature and which will be clearly identifiable by recreationists normally expected to use the body of water.
 - (q) Aquatic weed bottomland barriers that do not exceed 1600 square feet singly or in combination and that are installed with an anchoring system to assure permanent placement.
 - (r) Dry fire hydrant installations where the intake line will not interfere with navigability of the water involved.
 - (s) Storm water outlet structures where the activities do not exceed criteria of the designated minor project criteria for filling or dredging.
 - (t) Off line storm water basins constructed for storm water management that provide retention/detention and sediment settling or filtration before discharge.
 - (u) Boat ramps designed for single-family, private usage where the installation will not involve more than 10 cubic yards of dredging, with upland disposal, or filling.
 - (v) Aquatic plant removal with mechanical equipment designed to operate by air or water pressure or by raking or rolling actions if the treatment areas are 1600 square feet or less, if the water depth is 4 feet or less, and if the uprooted floating debris is removed and disposed of within upland areas.
 - (w) Recreational mineral (gold) prospecting by mechanical methods, such as portable (backpack) suction dredges or sluice boxes, if the activity is for recreational reasons only and if all of the following conditions are met:

- (i) Individual prospecting areas are 300 square feet or less per location.
- (ii) The intake nozzle for suction dredges is 2 inches in diameter or less.
- (iii) Prospecting will not be done before July 1 or after August 31.
- (iv) Stream bank excavation will not occur.
- (v) The stream bottom is predominately gravel.

(x) Ditch plugs with or without water flow controls if the purpose is to reestablish the hydrology to previously drained areas, if all impacted parties acknowledge and provide their written authorizations, and if the proposed activities do not exceed other minor project criteria.

(2) The department shall process applications determined not to meet the minor project criteria of sub rule (1) of this rule in accordance with section 30105 (2) of the act.

History: 1982 AACS; 1985 AACS.

R 281.817 Minor drainage structures and facilities.

Rule 7. All of the following structures are minor drainage structures and facilities that do not require a permit under section 30103(f) of the act:

- (a) Cross road culverts that serve only to equalize the existing water surfaces at the ends of the culvert.
 - (b) Cross road culverts constructed to continue the existence of drainage courses other than inland lake and streams.
 - (c) Roadside ditches which serve to convey storm water runoff from the highway right-of-way and which do not serve as a stream.
 - (d) Standard appurtenances, including riprap or other shore protection, for storm water runoff facilities, such as manholes, catch basins, headwalls, and outlets from off-line water retention/detention systems.
- History: 1982 AACS.

R 281.818 Mainstream portions of natural watercourses.

Rule 8. The following legally established drains are deemed to be mainstream portions of natural watercourses and are not subject to permit exemption pursuant to section 4(g) of the act:

- (a) Grand River basin (Jackson county). Point of beginning: The intersection of Liberty and Milwaukee streets in the city of Jackson. Point of ending: The west line of Rives township, Jackson county, 1,165 feet south of the northwest corner of section 7, T1S, R1W.
- (b) Rogue River basin (Newaygo and Kent counties). Point of beginning: At its intersection with the south line of section 2, T10N, R12W, Tyrone township, Kent county. Point of ending: At Ransom lake in section 12, T11N, R12W, Grant township, Newaygo county.
- (c) Shiawassee river trunk drain (Saginaw county). Point of beginning: At the junction of the Shiawassee river and the Flint river in section 9, T11N, R4E, James township, Saginaw county. Point of ending: At a point in mid-channel of said river in section 34, T10N, R3E, Charles township, Saginaw county, approximately 0.2 mile from the south line of the section.
north line of section 32, T3N, R10E, city of Pontiac. Point of ending: At the intersection with Auburn road on the east line of section 27, T3N, R10E, city of Pontiac.
- (e) Black river drain (Sanilac county). Point of beginning: At the south line of section 6, T10N, R16E, Lexington township, Sanilac county. Point of ending: At the north line of section 1, T12N, R14E, Custer township, Sanilac county.
- (f) Maple river drain (Gratiot and Shiawassee counties). Point of beginning: At Highway US-27, section 28, T9N, R2W, Washington Township, Gratiot county. Point of ending: At its upper terminus in section 3, T6N, R3E, Shiawassee township, Shiawassee county.
- (g) Little Thornapple river drain (Barry and Ionia counties). Point of beginning: At the south line (M-43) of section 13, T4N, R8W, Carlton township, Barry county. Point of ending: At the outlet from Tupper lake where the outlet enters Jordan lake in section 34, T5N, R7W, Odessa township, Ionia county.

(h) Kawkawlin river drain (Bay county).Point of beginning: Mouth of river on Saginaw bay, in section 33, T15N, R5E, Bangor township, Bay county. Point of ending: At the intersection with Euclid avenue on the west side of section 5, R14N, R5E, Bangor township, Bay county.

(i) St. Joseph river drain (Hillsdale county).Point of beginning: At the intersection of the line between sections 8 and 9, T8S, R4W, Camden township, Hillsdale county. Point of ending: At a point 715 feet southeast of the line between sections 25 and 26, T8S, R4W, Camden township, Hillsdale county.

(j) East Branch of St. Joseph river drain (Hillsdale county).Point of beginning: At the intersection of the line between sections 33 and 34, T7S, R1W, Pittsford township, Hillsdale county. Point of ending: At the intersection with the state line.

(k) Pigeon river drain (Huron county). Point of beginning: At the mouth of the Pigeon River on Saginaw bay in the village of Caseville, including the mouth of the Pigeon river cut-off drain. Point of ending: At a point 3/4 of a mile south of Kinde road in section 1, T17N, R10E, Caseville township, Huron county. History: 1982 AACCS.

R 281.819 Marina operating permit application; criteria for processing.

Rule 9. (1) In acting upon an application for marina operating permit, the department shall not issue a permit unless the department determines that the facility meets all of the following criteria:

(a) The facility does not unreasonably affect the public trust or riparian interests.

(b) Ingress and egress are within the riparian owner's interest area written authorization is secured from the adjacent owner whose riparian property interest is or may be affected.

(c) The increased use brought about by the marina, and the increased attributable to the marina will not create congestion or safety problems aggravate existing recognized congestion or safety problems.

(d) Operation of the facility will not destroy or adversely impair the use or use of the waters or natural resources of the state.

(e) The facility is not aesthetically displeasing and conforms to similar structures and activities in the area on similar watercourses.

(f) The facility has adequate parking space to accommodate anticipated users.

(g) The facility is in compliance with local zoning ordinances. If the facility is not in compliance and if the local unit of government having proper jurisdiction notifies the department at the time of public notice objecting to the issuance of a permit, the department shall withhold permit issuance for 30 days from the date of the expiration of the public notice. If the local unit of government does not file an action to restrain operation of the facility in a public forum within the specified 30-day time frame, then the department may issue a permit for marina operation if all other criteria are met.

(h) The structures do not constitute a safety or navigational hazard and are in good repair.

(i) The potential adverse environmental effects of operating a marina have been determined under R 281.814.

(2) If the marina facility meets the criteria specified in sub rule (1) and is constructed in accordance with the plans, specifications, and terms and conditions of the department construction permit, and is otherwise lawful, then the department shall issue the marina operating permit for a period of up to 3 years. The marina operating permit is subject to review and renewal by the department.

(3) The department shall use the following procedure for applications to renew marina operating permits:

(a) In October of the year that the marina operating permit expires, department staff send the marina owner/operator the application for renewal together with a copy of the authorized site plan for the facility.

(b) The permittee shall complete the marina operating permit renewal application, sign and date the site plan verifying that the site plan represents the current marina configuration, and return the plan, marina renewal application, and the required fee to the department.

(c) Upon submittal of the information specified in subdivision (b) of this sub rule, and upon a site inspection, if necessary, the department shall renew the marina operating permit for the facility for a period of 3 years, with the date of the expiration at the end of the calendar year.

(d) If the requested information specified in subdivision (b) of this sub rule is returned and is determined to be incomplete, then department staff shall return the forms to the permittee identifying the required information to make the renewal application complete. Upon submittal of the required information, the department shall review the marina operating permit under subdivision (c) of this sub rule. If the forms are not returned, then the department may initiate appropriate action to bring the facility into compliance.

History: 1982 AACS; 1985 AACS. BRIDGE CONSTRUCTION

R 281.821 Conditional permits.

Rule 11. (1) The department may issue a conditional permit when emergency conditions warrant a project to protect property or the public health, safety, or welfare.

(2) Conditional permits shall be issued only under emergency conditions. Upon a determination by the department that a project would be in the best interest of both the applicant and the public, the department may declare an emergency condition to exist and issue a conditional permit. Physical and economic factors shall be considered in determining whether an emergency condition exists.

(3) Bridge or culvert repairs or replacements may be made under emergency conditions upon submitting an application and receiving a conditional permit. A written report which includes details of the needed emergency repairs shall accompany the application. The department shall give such applications timely response.

History: 1979 AC; 1982 AACS.

R 281.822 Rescinded.

History: 1979 AC; 1982 AACS.

R 281.823 Bridge construction procedures.

Rule 13.(1) Each construction project shall be completed so as to prevent erosion and subsequent damaging siltation of streams or lakes. The area of erodible land exposed to the elements by the grading operations at any one time shall be controlled by the owner's engineer and the duration of such exposure before final trimming, finishing, or maintenance of the area shall be as short as practicable.

(2) Gravel or stone consisting of durable particles of rock and containing only negligible quantities of fines shall be used for construction pads, haul roads, and temporary roads in or across streams.

(3) When required by the department, a sedimentation basin shall be constructed downstream from the work site to trap silt and sediment resulting from construction operations. A detailed sketch of a sedimentation basin is available on request from the department. The collected silt and sediment shall be removed as directed by the owner's engineer and the sedimentation basin shall be removed on completion of the project if directed by the department. If found necessary, the department may assist the owner in the design of a sedimentation basin.

(4) The disturbance of lands and waters that are outside the limits of construction as staked shall be avoided.

(5) The owner shall give written notice 5 days before the start of work.

History: 1979 AC; 1985 AACS.

R 281.824 Specifications; bridge and culvert projects.

Rule 14. (1) The department of transportation standard specifications (1970 or later editions) listed in this rule are necessary for the protection of natural resources. These specifications are intended to cover all construction and related work as it affects natural resources found in and adjacent to work areas.

(2) General coverage in proposal or specifications as follows:

- (a) Protection and restoration of property.....Sec. 1.07.07 Std. Specs.
- (b) Forest protection.....Sec. 1.07.13 Specs.
- (c) Control of water pollution and siltation....Sec. 1.07.14 Specs.
- (d) Borrow areas.....Sec. 2.08.01 Std. Specs.
- (e) Borrow area restoration.....Supp. Specs.
- (f) Channel excavation.....Sec. 2.09.05 Std. Specs.

(3) The following are additional department of transportation standard specifications covering measures for prevention of erosion and siltation:

- (a) Topsoil surface.....Sec. 6.53 Std. Specs.
- (b) Mulching.....Sec. 6.54 Std. Specs.
- (c) Seeding.....Sec. 6.52 Std. Specs.
- (d) Fertilizing.....Sec. 6.52 Std. Specs.
- (e) Riprap (plain-heavy).....Sec. 6.01 Std. Specs.
- (f) Cobble gutter (plain-grouted).....Sec. 6.03 Std. Specs.
- (g) Slope planting.....Sec. 6.55 Std. Specs.
- (h) Dune grass planting.....Sec. 6.56 Std. Specs.
- (i) Sodding.....Sec. 6.51 Std. Specs.
- (j) Slope protection.....Sec. 6.01 Std. Specs.
- (k) Crushed limestone surface.....Supp. Specs.
- (l) Paved ditches.....Supp. Specs.
- (m) Rye seeding.....Sec. 6.52 & Supp. Specs.

(4) The state highway design office has information for the design engineer on control of erosion through sodding; water control by catch basins, downspouts, concrete shoulders, and spillways; borrow restoration, particularly adjacent to highway limits; and seeding, mulching, and plantings. The following standard plans are available:

- (a) Special outlet headwalls, etc.....E-4-A-9F.
- (b) Sodding, etc.....E-4-A-10D.
- (c) Paved ditches, etc.....E-4-A-110C.
- (d) Shoulder gutter and spillway.....E-4-A-128.

History: 1979 AC; 1982 AACS.

PIPELINE AND OTHER UTILITY WATER CROSSING

R 281.831 Rescinded.

History: 1979 AC; 1982 AACS.

R 281.832 Pipelines and conduits generally.

Rule 22.(1) In the planning stages for pipeline and other utility water course crossings, the applicant shall consider and evaluate the economic and environmental feasibility of using existing utility corridors for new installations. Applicants shall also consider and evaluate the economic and environmental feasibility of using directional drilling/boring technology and other available methods to conduct lake and stream crossings. Based on the applicant's evaluations, the applicant shall propose to use corridors and watercourse crossing methods that, with all factors considered, represent the least overall environmental impact while still allowing the project to be completed in a reasonable and cost effective time frame.

(2) The use of directional drilling/boring methods to conduct lake and stream crossings will not be regulated by part 301 of the act if all of the following provisions are satisfied:

(a) A minimum of 10 feet is maintained from the top of the conduit and the bottom of the lake or stream.

(b) The entry and exit points are located far enough away from the lake or stream banks to assure that bank disturbance does not occur.

(c) The drilling or boring sites (pits) are located outside of any applicable natural river designation setback requirements.

(d) The drilling or boring operations will not result in the eruption/release of any drilling fluids up through the ground and into the lake or stream. If, however, the eruptions/releases occur below the ordinary high watermark of the water body, then an after-the-fact permit application shall be submitted with a detailed description of how the crossing was completed, how the eruption was minimized, contained, and cleaned up, and how the site was restored.

(3) As part of the permit application other than as specified in sub rule

(2) of this rule, an applicant shall submit to the department 5 copies of general construction plans, including, but not limited to, a complete route map that identifies each lake, stream, and wetland crossing, soil erosion control plans, if a soil erosion and sedimentation control permit from the state is required, and an explanation, together with plans and specifications, of the methods to be used to complete all crossings. Before solicitation of bids and acquisition of rights-of-way, a permit applicant may submit an application to the department for review and permit issuance under part 301 of the act.

(4) If either the department or the applicant deem it necessary, a preconstruction meeting shall be held in order to thoroughly acquaint all concerned parties with the measures that must be taken to minimize erosion and siltation and properly protect the natural resources in the project area.

(5) A permittee shall give the department 10 days' written notice before beginning work.

(6) A permittee shall take all necessary steps to prevent damage to fish and game habitat and to preserve the natural resources of the state. A permittee shall carry out excavation so as to minimize the discharge of damaging material into any stream, lake, or reservoir.

(7) A permittee shall complete the work of clearing, scalping, grading, slope erosion protection, ditching, backfilling, and final cleanup within 50 feet of streams, lakes, and reservoirs within as short a period as reasonably possible, but not more than 24 hours, in order to minimize erosion occurring from wind and precipitation.

(8) A permittee shall complete final site stabilization measures within 3 days of completing the final site grading and final site cleanup.

(9) A permittee shall stop trench excavation on any 1 spread when 10,000feet remain open, except as authorized in the permit issued by the department.

(10) A permittee shall accomplish replacing bank plugs and grading stream banks within 50 feet immediately after laying pipe.

History: 1998-2000 AACS.

R 281.833 Rescinded.

History: 1998-2000 AACS.

R 281.834 Sedimentation basins and cofferdams.

Rule 24.(1) A permittee shall construct sedimentation basins or cofferdams, where required by permit condition, before any other work is performed at the site crossing. The permittee shall maintain sediment removal efficiency of sediment basins during the development period by regular cleaning of sediment from the basins and proper spoil disposal. A detail sketch of a sediment basin is available on request from the department.

(2) A permittee shall remove temporary weirs or cofferdams, including any materials trapped by them in the control of siltation, within 2 weeks of final cleanup. The department may require the intermittent removal of silt or sand by the permittee during construction for proper operation of sedimentation basins. In any event, a permittee shall clean the sedimentation basins before removal of weirs and coffer dams.

(3) A permittee shall construct weirs of continuous interlocking steel sheeting, except where the department authorizes other substitute materials. When specified by the department, a permittee shall furnish a detail sheet of the weir installation.

(4) A applicant is responsible for securing the necessary approval of private land owners where temporary additional right-of-way or easement is necessary to construct and operate a settling basin. An easement is not required in locations where the crossing is made on state-owned lands.

History: 1998-2000 AACS.

R 281.835 Haul roads.

Rule 25.(1) The method for crossing streams where temporary haul roads are being constructed shall involve technologically available clear span structures, such as bailey bridges or flat beds or, alternatively, haul roads shall be constructed of coarse aggregate with culverts or logs, or both, laid parallel to the stream. A permittee may use only coarse aggregate or metal or wood mats as a running surface on log construction. A permittee shall protect the side slopes with permanent riprap, as specified in R 281.837, up to a level 2 rows above the normal water level and over the ends of the culverts.

(2) A permittee shall ensure that permanent haul roads crossing streams, that is roads that are to be left in place at the request of the property owner comply with part 31 of the act. The property owner shall submit plans and specifications for the crossing to the department together with his application for a permit to construct the facilities.

(3) A permittee shall ensure that both temporary and permanent haul roads have adequate top width to permit passage of all construction equipment without sloughing of side slopes.

(4) A permittee shall ensure that culverts which are of an adequate size and length and which are approved by the department are utilized in the construction of both temporary and permanent haul roads.

(5) The fording of streams which causes only minimal disturbance of stream banks or bottomland and which results in no more than momentary sedimentation or siltation is not regulated by this rule. Where temporary fording areas are potentially available to the public, such as along utility easements, a permittee shall place vehicle barriers to deter continuous use by the public for reasons other than the original purpose of the ford.

History: 1998-2000 AACS.

R 281.836 Trench excavation.

Rule 26.(1) All pipe trenches shall be excavated to a depth which will provide a minimum cover of 30 inches from the bed of the stream to the top of the pipe. This minimum cover shall control except where special conditions at certain water crossings may warrant a lesser or greater depth of cover.

(2) Appropriate trench excavation methods shall be employed to minimize material from the pipe trench flowing into the stream, giving due consideration to the soil, terrain, cover, side slopes and weather conditions involved.

(3) The pipe trench excavation shall stop some distance from the stream to leave a protective plug of 10 to 20 feet of unexcavated material at each bank. The plugs shall be left in place until the pipe-laying operation across the stream has begun. Bypassing of water in the trench to the side by diversion ditches or by pumping may be required at certain water crossings.

(4) The trench in the stream bed may be backfilled if the material used does not cause excessive siltation. Stone, coarse aggregate or washed gravel shall be used where backfill is required and where use of existing material will cause excessive siltation.

(5) Pumping or draining from trench excavations shall be made on either side of the pipeline and not into the waters of the state. The owner shall secure the necessary approval of private landowners before discharging water from the trench excavation onto private lands.

History: 1979 AC.

R 281.837 Stream bank protection; pipeline and utility projects.

Rule 27.(1) Following the installation of the pipeline or cable, A permittee shall immediately restore all work areas along or across streams or lakes and shall stabilize the exposed beds and banks within 7 days, except where subsequent permission is provided for a pumping and testing operation.

(2) A permittee shall ensure that all disturbed stream banks have a finished slope not steeper than 1 vertical to 2 horizontal to prevent sloughing until stabilized by vegetative cover or riprap. A permittee shall ensure that the 1 on 2 slope is graded up and back to the high waterline. A permittee shall ensure that if the top of the natural bank is more than 3 feet above the high waterline, a minimum 10-foot long berm is constructed at the high water line and the remaining slope is constructed upward parallel with, or on a flatter slope than, the original natural bank.

(3) A permittee shall ensure that all raw soil exposed above the permanent riprap protection line is sodded, riprapped, or seeded, fertilized, and mulched. A permittee may use temporary riprap (sandbags).

(4) A permittee shall ensure that mulching, seeding, and fertilizing is done in accordance with natural resource conservation service standards and specific soil test analysis for appropriate fertilizer application rates.

(5) A permittee shall ensure that permanent riprap is placed from the bed of the channel to an elevation necessary to assure bank stabilization. A permittee shall ensure that permanent riprap is a 5-to-1 mix of sand to cement in burlap or canvas bags or biodegradable sacks, fitted broken concrete, properly sized rock, or other material approved by the department. A permittee shall ensure that riprap is free of protruding reinforcing metal.

(6) A permittee shall ensure that deflecting dikes, which are reinforced by 1 row of sandbags, are used to divert runoff and minimize slope erosion from steep slopes adjacent to water crossings where the contributing runoff could be great enough to cause slope erosion. A permittee shall ensure that water is diverted to undisturbed areas adjacent to the right-of-way.

(7) A permittee shall ensure that deflecting dikes are placed along the top of all stream banks where the entire slope is not protected with riprap. A permittee shall also place deflecting dikes at the top of, and at 100-foot intervals or less on, slopes greater than 20%.

History: 1979 AC; 1982 AACS; 1985 AACS.

R 281.838 Final clean-up.

Rule 28. Final clean-up shall consist of removing the temporary haul road across the stream; reshaping the stream as nearly as possible to its original configuration, width, depth and bottom material; protection of the stream banks as specified in R 281.837; and removing all construction material and

debris from the crossing site, including any material and debris downstream from the site as a result of the pipeline construction.

History: 1979 AC.

R 281.839 Rescinded.

History: 1979 AC; 1985 AACS; 1998-2000 AACS.

R 281.841 Rescinded.

History: 1979 AC; 1982 AACS; 1998-2000 AACS.

R 281.842 Notification of pending applications.

Rule 32. The list prepared and mailed by the department under section 6(1) of the act shall include permit applications received during each week. The department shall mail the list monthly to each subscriber. The list shall include all of the following information:

(a) Process number. (b) Applicant's name and address. (c) Watercourse. (d) Location of proposal by town, range, and section.

(e) Project description. History: 1979 AC; 1982 AACS; 1985 AACS; 1998-2000 AACS.

R 281.843 Hearings.

Rule 33.(1) The department may hold a public informational hearing when a proposed project appears to be controversial or when additional information is desired before action by the department.

(2) All other hearings shall be conducted under section 30110(2) of the act.

(3) All persons who receive notification under section 30105(1) of the act shall receive not less than 10 days' prior notification of any hearings held under the act.

(4) An aggrieved person requesting a formal hearing under section 30110(2) of the act shall request the hearing within 60 days of the department's decision on an application.

History: 1979 AC; 1982 AACS; 1985 AACS; 1998-2000 AACS.

R 281.844 Notification and inspection of completed project.

Rule 34. An applicant shall notify the land and water management division of the department within 10 days of completion of a project to facilitate scheduling a final inspection. An applicant need not notify the land and water management division of a minor project unless required as a permit condition.

History: 1979 AC; 1982 AACS; 1998-2000 AACS.

R 281.845 Special conditions.

Rule 35. Whenever vertically upward bottomland displacement, also called surcharge, results from filling or other activity immediately adjacent to the displacement area by the applicant, he shall be responsible for its timely removal at the direction of the department.

History: 1979 AC.

R 281.846 Rescission.

Rule 36. The rules of the department entitled "Inland Lakes and Streams" being R 281.801 to R 281.810 of the Michigan Administrative Code and appearing on pages 4120 to 4122 of the 1967 Annual Supplement to the Code, are rescinded.

History: 1979 AC.