

Chapter 12

FLOODPLAIN, FLOODWAY, WATERCOURSE AND WETLAND PROTECTION*

- Art. I.** In General, §§ 12-1—12-30
Art. II. Use Permits, §§ 12-31—13-50
Art. III. Township Wetlands and Drainage Maps, §§ 12-51—12-70
Art. IV. Flooding and Flood Hazard Protection, §§ 12-71—12-90
Art. V. Watercourse and Wetland Protection, §§ 12-91—12-94

ARTICLE I. IN GENERAL

Sec. 12-1. Findings of fact.

The township board finds the rapid growth, the spread of development and increasing demands upon natural resources have increased the potential for the flooding, the filling or the drainage of lowlands and wetlands and have had the effect of encroaching upon, despoiling, polluting or eliminating many of the watercourses and wetlands within the township and have otherwise adversely affected desirable natural resources and processes.

(Ord. No. C-229, 9-18-89)

Sec. 12-2. Purposes

The purposes of this chapter are to provide for:

- (1) The protection, preservation, proper maintenance and use of township watercourses and wetlands in order to minimize or eliminate disturbance to them and to prevent damage from erosion, turbidity or siltation and to prevent a loss of fish or other beneficial aquatic organisms, a loss of wildlife and vegetation or the destruction of the natural habitat thereof;
- (2) The protection of the township's potable fresh water supplies from the dangers of drought, overdraft, contamination or mismanagement;

***Editor's note**—Ord. No. C-229, adopted Sept. 18, 1989, amended Ch. 12 in its entirety to read as herein set out. The substantive provisions of former Ch. 12, §§ 12-1—12-15, 12-31—12-36, 12-51—12-54, 12-71—12-74, and 12-91, 12-92, were derived from Ord. No. 97A-A, §§ 2.1—2.3, 3.1—3.5, 3.7—3.9, 4.1—4.6, 5.1—5.4, 6.1—6.4, 7.1, 7.2, 8.1, 8.2, and 9.1—9.3, adopted Mar. 7, 1983; Ord. No. 97A-B, §§ 2, 3, adopted May 19, 1986; and Ord. No. 97A-C, § 1, adopted Dec. 15, 1986.

Cross references—Buildings and building regulations, Ch. 8; parks and recreation, Ch. 16; subdivision and land division, Ch. 21; stormwater management, § 24-201 et seq.; waterways, Ch. 25; zoning, Ch. 26.

State law references—Water resources commission, MCL 323.1 et seq.; inland lakes and streams act, MCL 281.951 et seq.; soil conservation districts law, 282.1 et seq.; coastal beach erosion investigation and study, MCL 281.601; environmental protection act, MCL 691.1201 et seq.

- (3) The use of controls and regulations to secure safety from floods; to prevent loss of life, property damage and other losses and risks associated with flood conditions; to reduce the financial burdens imposed upon the community through rescue and relief efforts occasioned by the occupancy or use of areas subject to periodic flooding; to protect individual and community riparian rights; and to preserve the location, character and extend to natural drainage courses;
 - (4) The enforcement of this chapter and coordination of the enforcement of appropriate local, county and state ordinances and statutes with the corresponding county or state agency, including, but not limited to:
 - a. Soil Erosion and Sedimentation Control Act (Act No. 347 of the Public Acts of Michigan of 1972 (MCL 282.101 et seq., as amended) enforced by the county drain commission;
 - b. Inland lakes and Streams Act (Act No. 346 of the Public Acts of Michigan of 1972 (MCL 281.951 et seq., as amended) enforced by the state department of natural resources;
 - c. Goemaere-Anderson Wetland Protection Act (Act No. 203 of the Public Acts of Michigan of 1979, (MCL 281.701 et seq., as amended);
 - d. The National Flood Insurance Act of 1968, as amended;
 - e. The Flood Disaster Protection Act of 1973, as amended.
 - (5) The granting of use permits;
 - (6) A procedure for the appealing of decisions;
 - (7) Penalties for the violation of this chapter.
- (Ord. No. C-229, 9-18-89; Ord. No. C-360-E, § 1, 8-28-06)

Sec. 12-3. Validity.

The township board declares that this chapter is essential to the health, safety, economic and general welfare of the people of the township and is based upon reasonable standards.
(Ord. No. C-229, 9-18-89)

Sec. 12-4. Lands to which chapter applies.

This chapter shall apply to all lands within the jurisdiction of the township upon which any of the following conditions exist:

- (1) "Flood hazard area" or "flood hazard prone areas," as defined in the state construction code, and as identified on the Federal Emergency Management Agency (FEMA) flood insurance study (FIS) entitled "Flood Insurance Study, Oakland County, Michigan, and Incorporated Areas" and dated September 29, 2006, the flood insurance rate maps (FIRMS) panel numbers of 26125C0477F, 26125C0479F, 26125C0481F, 26125C0482F, 26125C0483F, 26125C0484F, 26125C0487F, 26125C0489F, 26125C0491F, 26125C0492F,

FLOODPLAIN, FLOODWAY, WATERCOURSE, WETLAND PROTECTION § 12-5

26125C0493F, 26125C0494F, 26125C0501F, 26125C0502F, 26125C0503F, 26125C0504F, 26125C0511F, 26125C0512F, 26125C0513F, 26125C0514F and dated September 29, 2006.

(2) "Watercourses" as defined in this chapter or as identified on the official watercourse and wetland map of the township.

(3) "Wetlands" as defined in this chapter.

(Ord. No. C-229, 9-18-89; Ord. No. C-229/C-360, § 1, 5-23-94; Ord. No. C-360-E, § 2, 8-28-06)

Sec. 12-5. Definitions.

Terms not specifically defined in this chapter shall have the meaning customarily assigned to them. The following terms, phrases, words, diagrams and their derivatives shall have the meaning respectively given in this section:

Administrative permit means a use permit that may be applied for and approved as provided in sections 12-32 and 12-33 for a minor project, as defined in this section, that complies with all of the environmental design criteria and standards in section 12-37 and includes all terms and conditions in section 12-38.

Applicant means the owner of record of affected property and/or his agents, designees or assigns applying for a permit pursuant to this chapter.

Bottomland means the land area of a lake, stream or watercourse which lies below the ordinary high water mark, and which may or may not be covered by water.

Canal means an artificial watercourse for navigation or for draining or irrigating lands.

Channel means the geographical area within the natural or artificial banks of a watercourse required to convey continuously or intermittently flowing water under normal or average flow conditions.

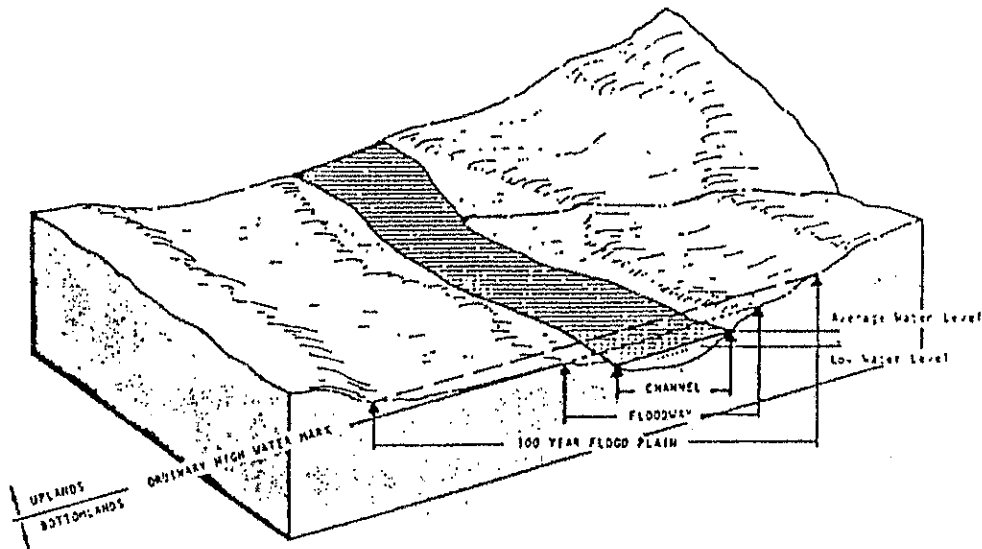
Contaminant means any material that exceeds the water quality criteria as described in this chapter.

Contiguous shall mean any of the following:

- (1) A permanent surface water connection or other direct physical contact with an inland lake, pond, river or stream.
- (2) A seasonal or intermittent direct surface water connection to an inland lake, pond, river or stream.
- (3) A wetland which is determined by the township to be located within the same watershed with, and functionally related to, an inland lake, pond, river or stream; a wetland which is located within one thousand (1,000) feet of the ordinary high water mark of an inland lake, pond, river or stream shall be deemed to be contiguous unless it is demonstrated by the property owner by clear and convincing evidence that there is no relation whatever between the wetland and the inland lake, pond, river or stream taking into consideration the purposes of this chapter, as set forth in section 12-2.

- (4) Two (2) or more areas of wetland separated only by barriers, such as dikes, roads, berms or other similar features, but with any of the wetland areas contiguous under the criteria described in paragraphs (1), (2) or (3) of this definition.

Cross section of a lake, stream or watercourse. See diagram below.



Deposit means to fill, place or dump.

Development means any man-made change to improved or unimproved real estate, including, but not limited to, buildings or other structures, mining, dredging, filling, grading, paving, excavation or drilling operations.

Director means the director of the township environmental department and/or such other persons as designated by the township board to perform the duties of the director under this chapter.

Discontinuance means cessation of present use.

Drainage course means a natural or an artificial waterway existing or constructed to control runoff so as to prevent flooding of or creation of floodlands.

Flood or flooding means:

- (a) A general and temporary condition of partial or complete inundation of normally dry land from:
 - (1) The overflow of inland tidal waters;

FLOODPLAIN, FLOODWAY, WATERCOURSE, WETLAND PROTECTION § 12-5

- (2) The unusual and rapid accumulation or runoff of surface waters from any source;
or
- (3) Mudflows; and
- (b) The collapse or subsidence of land along the shore of a lake or other body of water as a result of erosion or undermining caused by waves or currents of water exceeding anticipated cyclical levels or suddenly caused by an unusually high water level in a natural body of water, accompanied by a severe storm, or by an unanticipated force of nature, such as flash flood or an abnormal tidal surge, or by some similarly unusual and unforeseeable event which results in flooding.

Flood hazard area means the greater of the following areas:

- (1) The area within a floodplain subject to a one (1) percent or greater chance of flooding in any year;
- (2) The area designated as a flood hazard area on a community's flood hazard map, or otherwise legally designated.

Floodplain means any land area susceptible to being inundated by water from any source.

Floodplain (100-year) means the relatively flat area or lowlands adjoining the channel of a watercourse or a body of standing water which has been or may be covered by 100-year floodwater.

Floodway means the channel of a river, creek, or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height.

Floodway (100-year) means the calculated channel and area adjacent to the channel necessary to carry and discharge the 100-year flood.

Floor area means the sum of the horizontal areas of each story of the building, measured from the exterior faces of the exterior walls. The floor area measurement is exclusive of areas of basements, unfinished attics, attached garages, breezeways, and enclosed and unenclosed porches.

Free of contaminants means, in addition to any material prohibited by any federal, state or township legislation, that fill material or existing soils shall not exceed water quality criteria:

WATER QUALITY CRITERIA

	<i>(milligrams/liter)</i>
Total dissolved solids	180
Sulfate	24
Total Kjeldahl nitrogen (as N)	1.0
Total phosphorus (as P)	0.05
Ammonia nitrogen (as N)	0.02

	<i>(milligrams / liter)</i>
Oil and grease	0.01
pH	6.5 - 9.0
Total lead	0.1
Total mercury	0.0005
Total zinc	1.0
Total manganese	1.0
Total nickel	1.0
Total hexavalent chromium	0.3
Total copper	1.0
Total iron	5.0
Total arsenic	1.0
Total cyanide	0.025
PCB	0.001
Percentage passing #200 U.S. sieve	10%

Inland lake or pond, a river or stream means any of the following:

- (1) A river or stream which has definite banks, a bed, and visible evidence of a continued flow or continued occurrence of water.
- (2) A natural or permanent artificial inland lake or impoundment that has definite banks, a bed, a visible evidence of a continued occurrence of water, and a surface area of water that is more than five (5) acres. This does not include lakes constructed by excavating or diking dry land and maintained for the sole purpose of cooling or storing water and does not include lagoons used for treating polluted water.
- (3) A natural or permanent artificial pond that has permanent open water with a surface area that is less than five (5) acres. This does not include ponds constructed by excavating or diking dry land and maintained for the sole purpose of cooling or storing water and does not include lagoons used for treating polluted water.

Lagoon means the shallow sound, channel or pond near or linked to a larger body of water.

Material mean soil, sand, gravel, clay, peat, debris and refuse, or any other material, organic or inorganic.

Michigan Department of Natural Resources means the Michigan Department of Environmental Quality or such other State of Michigan department or agency that administers the State's Wetland Protection Act, Act No. 203 of the Public Acts of 1979, as amended.

Minor project means a proposed operation that is on or in connection with the lawful use of a single-family residential property that has received and is or will be in compliance with the conditions of all other required township permits or approvals and that does not involve, include or propose any of the following as determined by the director upon reviewing a use permit application:

- (1) Operations by or on behalf of a public agency or utility for purposes other than maintenance or repair of existing structures.

- (2) Operations that require site plan approval under the zoning ordinance.
- (3) Operations that involve filling, dredging or activities that would alter the shape, condition or function of a wetland or watercourse.
- (4) New home construction in a wetland or the environmental features setback.
- (5) Placement of new structures in a wetland.
- (6) Wetland impacts that are not for enhancement, improvement or the removal of invasive species.
- (7) More than twenty-five (25) percent impact on the existing environmental features setback area.
- (8) A net loss of the function or value of a resource protected by this chapter.
- (9) Operations that have already been commenced, meaning that after the fact permits may not be approved administratively.
- (10) Property that exists in violation of township or state laws or ordinances or upon or for which there are unsatisfied township permit or approval conditions.
- (11) Operations allowed but not commenced and/or completed under a prior use permit approval that has expired in the last six (6) months.

Mitigation means actions designed to compensate for or offset impacts from operations to or in the area for which a use permit is requested.

Nonconforming location means location of an operation, obstruction or structure which lawfully existed upon the waters, bottomlands, floodlands or 100-year floodplain at the time of adoption of the ordinance from which this chapter was derived or amendments thereto, and which does not conform to the requirements of this chapter.

Nonconforming operation means an operation or use which lawfully occupied an obstruction, structure or land at the time of adoption of the ordinance from which this chapter was derived or amendments thereto, and which does not conform to the requirements of this chapter.

Noncontiguous wetland means a wetland which is other than "contiguous," as defined in this chapter.

Notification— Where notice is required pursuant to this ordinance, written notice sent by first-class mail shall be sufficient notice for all purposes hereunder.

Obstruction means any object, natural or otherwise, which impedes the flow of water, changes the direction of the flow of water, or increases the flood height either in itself or by catching or collecting debris.

Official maps means the official watercourse and wetland map and official flood and drainage map of the township, as amended or updated from time to time, and the flood boundary map and the Federal Emergency Management Agency (FEMA) flood insurance study (FIS) entitled "Flood Insurance Study, Oakland County, Michigan, and Incorporated

Areas" and dated September 29, 2006, and the flood insurance rate maps (FIRMS) panel numbers of 26125C0477F, 26125C0479F, 26125C0481F, 26125C0482F, 26125C0483F, 26125C0484F, 26125C0487F, 26125C0489F, 26125C0491F, 26125C0492F, 26125C0493F, 26125C0494F, 26125C0501F, 26125C0502F, 26125C0503F, 26125C0504F, 26125C0511F, 26125C0512F, 26125C0513F, 26125C0514F and dated September 29, 2006.

100-year flood means a flood having an average frequency of occurrence in the order of once in one hundred (100) years, although the flood may occur in any year.

Operation means depositing or engaging in any construction, use or activity, or a combination thereof, which in any way modifies the conditions of watercourses or lands subject to this chapter as they exist on the effective date hereof.

Ordinary high water mark means the line between upland and bottomland which persists through successive changes in water levels, below which the presence and action of the water is so common or recurrent that the character of the land is marked distinctly from the upland and is apparent in the soil itself, the configuration of the surface of the soil, and the vegetation. On an inland lake which has a level established by law, it means the high established level. Where water returns to its natural level as the result of the permanent removal of or abandonment of a dam, it means the natural ordinary high water mark. (Diagram on file in the offices of the township planning department.)

Owner means any person or agency who has dominion over, control of or title to an obstruction, natural obstruction or to wetland properties.

Permit means a use permit as required pursuant to article II hereunder. Permits shall be issued by the township planning and environment department upon compliance with the requirements and standards of article II and must be posted on the site in clear view prior to the commencement of work on the site and continued throughout the duration of the project.

Person means any owner of land or anyone acting on behalf of owner, agent of the owner, individual, firm, partnership, association, corporation, company, contractor, organization or legal entity of any kind, including governmental agencies conducting operations within the township.

Planning department, department of planning and environment and planning and environment department means the township environmental department.

Pollution means damage or injury from discharge or organic and/or inorganic substances in excess of water quality criteria as herein before described.

Precipitation means the deposit on a property of rain, snow, sleet, hail or mist.

Previously permitted for purposes of fast track permits means an operation for which a use permit was approved by the wetland review board after a public hearing and issued no more than five (5) years before a fast track permit application.

Remove includes to dig, dredge, suck, pump, bulldoze, dragline or blast.

Runoff means surface discharge of precipitation to a watercourse or low area. Delayed runoff can occur from sudden warming winter precipitation accumulated as snow and ice.

Seasonal means any intermittent or temporary operation which occurs annually and is subject to interruption from changes in weather, water level or time of year, and may involve annual removal and replacement of an operation, obstruction or structure.

Soil erosion protection means physical means of preventing soil erosion in accordance with the Soil Erosion and Sedimentation Control Act of 1972, 347 of the Public Acts of 1972, as amended. Temporary and permanent erosion and sedimentation control measures include, but are not limited to:

- (1) Geotextile silt fence on exposed, bare or unstabilized areas to prevent erosion of steep banks;
- (2) Cofferdams of sand bags, straw bales or sheet pilings; and
- (3) Stabilizing vegetation, including seeding and/or sodding with mulch as necessary for long-term erosion prevention of unstabilized surfaces.

For the above techniques to be effective, soil erosion protection must be installed pursuant to the most current "Michigan Guidebook for Soil Erosion and Sedimentation Control" available from the land and water management division of the department of natural resources.

Soil/material certification means that soil or materials brought to a site for use in the wetlands on the upland fringe of a wetlands or within a watercourse or within a floodplain shall be certified to be free of contamination and not cause pollution. Such certification shall be provided by the applicant to whom a permit has been issued to the satisfaction of the township wetland consultant or township environmental staff.

Structure means any assembly of materials, permanent or temporary, above or below the surface of the land or water, including, but not limited to, houses, buildings, plants, bulkheads, piers, docks, rafts, landings, dams or waterway obstructions.

Temporary means a time period as specified in the use permit, or, if unspecified, means an uninterrupted time period of less than one (1) year's duration.

Upland means the land area adjoining a lake, stream or watercourse above the ordinary high water mark, uses for which are essentially nonaquatic.

Water table means the top level of an aquifer defined as the locus of points where the water pressure is equal to the atmospheric pressure.

Watercourse means any waterway or other body of water having well-defined banks, including rivers, streams, creeks, and brooks, whether continually or intermittently flowing, and lakes and ponds, and/or as shown on the official township watercourse and wetland map, and the flood boundary-floodway map and flood insurance map which accompanies the flood insurance study for the township, dated September, 2, 1982.

Watershed means a region or area bounded peripherally by a water divide and draining ultimately to a particular watercourse or body of water.

Wetland means land characterized by the presence of water at a frequency and duration sufficient to support and that under normal circumstances does support wetland vegetation or aquatic life and is commonly referred to as a bog, swamp or marsh. Consistent with the definition of "wetland" under Act 203 of the Public Acts of 1979, as amended, and the administration of such definition by the Michigan Department of Natural Resources, where a wetland is less than two (2) acres in size, but is contiguous, the wetland shall be subject to regulation without regard to its size.

Wetland/environmental mitigation manual means a written document that is maintained and available to the public at the environmental department containing definitions of terms and detailed or technical lists, descriptions, characteristics, methods and other information referred to in this chapter that have been recommended by the director and approved by resolution of the township board for use and reference in the administration and enforcement of this chapter.

Wetland permit and *wetland application* as used in sections 12-33 and 12-35 means a use permit and use permit application.

(Ord. No. C-229, 9-18-89; Ord. No. C-229/C-360, § 2, 5-23-94; Ord. No. C-360-C, § 1, 6-20-05; Ord. No. C-360-E, § 3, 8-28-06; Ord. No. C-360-F, §§ 1, 2, 6-18-07)

Cross reference—Definitions and rules of construction generally, § 1-2.

Sec. 12-6. Incorporated maps.

The township maps which designate wetlands, watercourses, natural and artificial floodplains and other drainage courses in the township, including amendments that may be made from time to time, and which are on file with the township, are incorporated into this chapter and made a part of this chapter by reference.

(Ord. No. C-229, 9-18-89)

Sec. 12-7. Compliance mandatory.

No operation, structure or land shall be used and no structure shall be located, extended, converted, or structurally altered without full compliance with the terms of this chapter and other applicable regulations which apply to uses within the jurisdiction of this chapter.

(Ord. No. C-229, 9-18-89)

Sec. 12-8. Rules of construction.

The following rules of construction apply to the text of this chapter.

- (1) In case of a difference of meaning or implication between the text of this chapter and any caption or illustration the text shall control.
- (2) Particulars provided by way of illustration or enumeration shall not control general language.
- (3) This chapter shall be construed liberally in favor of protecting the natural resources of the township.

(Ord. No. C-229, 9-18-89)

Sec. 12-9. Disclaimer of liability.

The degree of flood protection required by this chapter is considered reasonable for regulatory purposes and is based on engineering and scientific methods of determination.

Larger floods may occur on rare occasions. Flood heights may be increased by manmade or natural causes, such as ice jams and bridge openings restricted by debris. This chapter does not imply that areas outside the floodplain districts will be free from flooding or flood damages. This chapter shall not create liability on the part of the township or any officer or employee thereof for any flood damage that results from reliance on this chapter or any administrative decision lawfully made under this chapter.

(Ord. No. C-229, 9-18-89)

Sec. 12-10. Abrogation and conflict authority.

Nothing in this chapter shall be interpreted to conflict with present or future state statutes in the same subject matter; conflicting provisions of this chapter shall be abrogated to, but only to, the extent of the conflict. Moreover, the provisions of this chapter shall be construed, if possible, to be consistent with and in addition to relevant state regulations and statutes. The provisions of this chapter shall be held to be minimum requirements and shall be liberally

construed in favor of the township and shall not be deemed a limitation or repeal of any other powers granted by state statutes. This chapter shall not repeal, abrogate or impair any existing easements, covenants or deed restrictions. However, where this chapter imposes greater restrictions, the provisions of this chapter shall prevail. All other township ordinances inconsistent with this chapter are hereby repealed or amended to the extent of the inconsistency only.

(Ord. No. C-229, 9-18-89)

Sec. 12-11. Property inspections.

The township board, its agents, surveyors or other employees of the township, may make reasonable entry upon lands and waters within the township for the purpose of making any investigation, survey or study contemplated by this chapter.

(Ord. No. C-229, 9-18-89)

Sec. 12-12. Ordinance and map amendments.

The township board from time to time may amend this chapter in both map and text, subject to the following:

- (1) *Map amendments.* The township board shall direct the wetlands review board to hold a public hearing and make a recommendation on proposed map changes. Notices of such a public hearing shall be given by the township clerk by publishing in a newspaper of general circulation in the township at least fifteen (15) days prior to the hearing. Copies of the proposed map changes shall be available for public inspection at the office of the township clerk. In lieu of sending and/or publishing copies of the proposed map, reference may be made to the material on file with the clerk. The wetland review board shall respond in writing to any written comments that are received by the clerk prior to the public hearing regarding the contents of the proposed map. Upon adoption of the wetlands map or any subsequent amendments by the township board, the township notify each record owner of property on the property tax roll of the township that the watercourse and wetlands map exists or has been amended. The notification shall include the location where the map may reviewed and state the following:
 - a. That the owner's property may be designated as a wetland on the inventory map.
 - b. That the township has an ordinance regulating wetlands.
 - c. That the inventory map does not necessarily include all of the wetlands within the township that may be regulated under this chapter.
- (2) *Text amendments.* The township board may request the wetlands review board to make recommendation on proposed text amendments which shall not require a public hearing.

(Ord. No. C-229, 9-18-89; Ord. No. C-229/C-360, § 3, 5-23-94)

Sec. 12-13. Wetlands review board.

(a) The township board shall, by resolution, establish and appoint members to a wetland review board.

(b) The wetlands review board will make decisions as provided in sections 12-33 and utilizing the standards outline in articles IV and V of this chapter.

(c) The wetlands review board shall establish its own rules of procedure.
(Ord. No. C-229, 9-18-89)

Cross references—Administration, Ch. 2; boards and commissions generally, § 2-126 et seq.

Sec. 12-14. Continuance of lawful nonconforming uses.

(a) A lawful nonconforming operation shall be permitted to continue subject to the requirements of article II of this chapter. The burden of proof of establishing the existence of a nonconforming use shall be upon the petitioner.

(b) A lawful nonconforming operation may not be:

- (1) Changed to another nonconforming location or operation;
- (2) Re-established after having been discontinued for one (1) year;
- (3) Expanded, except in conformity with this chapter; nor
- (4) Rebuilt or repaired after complete or partial destruction, when the destruction exceeds fifty (50) percent of the fair market immediately prior to damage or exceeds fifty (50) percent of the area or operation in question.

(Ord. No. C-229, 9-18-89; Ord. No. C-229/C-360, § 4, 5-23-94)

Sec. 12-15. Penalties and enforcement.

(a) Any person found guilty of violating any of the provisions of this chapter shall be punished as provided in section 1-10, and may be cited for each day of violation. The township, in addition to other remedies, may institute any appropriate action or proceeding to prevent, abate or restrain the violation.

(b) The grant or denial of a permit shall not have any affect on any remedy of any person at law or in equity; provided, that where it is shown that there is a wrongful failure to comply with this chapter, there shall be a rebuttable presumption that the obstruction was the proximate cause of the flooding of the land of any person bringing suit.

(c) Any person violating the provisions of this chapter shall become liable to the township for any expense or loss or damage occasioned by the township by reason of such violation.

(d) In addition to the provisions contained here and above, the wetlands board at a formal board meeting, shall have the authority to direct the environmental staff and/or planning staff to notify the supervisor that a stop work order shall be issued upon any project for

development, with concurrence of the supervisor, when it is determined that a violation has occurred. And if it is not issued, the supervisor shall notify the wetland board in writing within forty-eight (48) hours of the reason for nonissuance.

(Ord. No. C-229, 9-18-89)

Secs. 12-16—12-30. Reserved.

ARTICLE II. USE PERMITS

Sec. 12-31. Required.

Pursuant to the terms of this chapter, all operations affecting floodplains and floodways, watercourses and wetlands shall require the filing and approval of a use permit application and the issuance of a use permit.

(Ord. No. C-229, 9-18-89)

Sec. 12-32. Application—Submittal; fee, required information.

For each lot, outlot or parcel for which a use permit is sought, a fee shall be submitted to the township planning and environment department along with a permit application to be completed in full which shall contain all information requested on the application form provided by the Michigan Department of Natural Resources, and include, without limitation, the following:

- (1) A detailed description and purpose of the proposed operation or development;
- (2) Amount and type of material to be removed or deposited;
- (3) A dimensioned site plan showing the legal description, zoning classification (including zoning on adjacent parcels), existing features and the size and location of all parts of the proposed operation or development;
- (4) Where removal, depositing or grading is proposed, an accurate topographical map of these disturbed areas should be drawn to scale not less than 1:360 (1 inch = 30 feet) and shall be prepared and certified by a registered landscape architect, land surveyor or civil engineer. Preparation of plans by a licensed professional may not be required for permits reviewed by the planning department. The topographical map shall contain:
 - a. Name and address of the owner of record of the affected property and of applicant, if other than owner; location and dimensions of all boundary lines; names of the owners of record of adjoining properties and of properties directly across any road; graphic scale, north arrow and date;
 - b. Existing contour data for the entire property with a vertical contour interval of no more than five (5) feet, and vertical contour data at an interval of no more than

FLOODPLAIN, FLOODWAY, WATERCOURSE, WETLAND PROTECTION § 12-33

two (2) feet for all areas to be disturbed by the proposed operation, extending for a distance of at least fifty (50) feet beyond the limits of such areas. Indicated elevations shall be based on United States Geological Survey datum.

- c. Specification of the extent of all areas to be disturbed, the depth to which removal or deposition operations are proposed, and the angle of repose of all slopes of deposited materials and sides of channels or excavations resulting from removal operations;
- d. An area map at a scale of not less than 1:2400 (1 inch = 200 feet), showing property lines, the ordinary high water mark and elevation, proposed changes in location and extent of existing watercourses, the 100-year floodplain and drainage courses.

(5) *Administrative permit applications.*

- a. For minor projects an applicant may request an administrative permit by including the following in or with an application that also satisfies the requirements in subsections (1)–(4):
 - 1. Agreement to all of the permit terms and conditions in section 12-38.
 - 2. All plans, documents, agreements and information necessary to establish compliance with all of the environmental design criteria and standards in section 12-37.
 - 3. Agreement to the standards and procedures in section 12-33, including the director's discretion to deny an administrative permit and refer the application to the wetland review board as a new use permit application for purposes of the time period for decisions under subsection 12-33(1)f.
 - 4. A copy of any contract for the work that identifies the cost and contractor and if there is no contract, an accurate cost estimate for the work and identification of the contractor who will be performing it.
 - 5. An acknowledgment and agreement by the owners of the property to the recording with the register of deeds of a preservation notice for the areas of the property subject to regulation under this chapter.
 - 6. An acknowledgement and agreement by the owners of the property that prior to issuance of the administrative permit, the property must be posted as being the subject of a pending permit request, that the proposed work and mitigation areas must be accurately staked and marked and that photographs of the property will be taken and available for public inspection at the environmental department.
- b. A complete application for an administrative permit shall be reviewed and acted upon as provided in subsections 12-33(1)f and 12-33(5).

(Ord. No. C-229, 9-18-89; Ord. No. C-229/C-360, § 5, 5-23-94; Ord. No. C-360-C, § 1, 6-20-05; Ord. No. C-360-F, § 1, 6-18-07)

Sec. 12-33. Same—Method of review.

The method of review of the use permit application shall be determined by the extent of the proposed operation or development as follows:

(1) *Receipt and initial processing of application:*

- a. An application for a township wetland permit shall be made on the form supplied by the Michigan Department of Natural Resources.
- b. Each person applying for a township wetland permit shall make application directly with the township, through the department of planning and environment.
- c. Upon receipt, the township department of planning and environment shall forward a copy of each application to the Michigan Department of Natural Resources.
- d. The failure to supply complete information with a permit application shall be reason for denial of a permit.
- e. The department of planning and environment shall initially review the application in accordance with the wetland application checklist approved by resolution of the township board and shall have authority to reject an incomplete application. If an applicant, in writing, disagrees with the department's determination that the application is incomplete, the department shall forward the application as submitted to the wetlands review board or planning commission, whichever body is undertaking review in accordance with the provisions set forth below. The wetlands review board or planning commission, as the case may be, shall initially determine whether the application is complete. If the application is complete, review shall proceed and be completed in accordance with this section. If the application is determined to be incomplete, the application shall be denied. In addition, during the course of an application review, the wetland review board or planning commission, as the case may be, may require the submission of additional information found to be necessary or appropriate as part of the deliberations leading to a decision on the application.
- f. A complete application shall be modified, approved or denied within ninety (90) days after receipt, subject to the provisions of subsection g. of this section. For purposes of this time period, an application for an administrative permit that is not approved is a denial, with the referral of such application to the wetland review board to be treated as a new use permit application.
- g. The applicant for an approval in cases where the planning commission or township board is the final approval authority shall, at the time of submission, elect to in writing to have the application processed under either subsection 1. or subsection 2. below:
 1. The wetland application shall be reviewed immediately, either prior to or concurrent with the review of the site plan, plat or other proposed land use

FLOODPLAIN, FLOODWAY, WATERCOURSE, WETLAND PROTECTION § 12-33

submitted by the applicant, with the understanding that the land use review may not be completed at the time the decision is rendered on the wetland application. Election of this alternative may require a reopening of the wetland application if the land use approval is inconsistent with the wetland approval; or

2. The wetland application shall be reviewed and acted upon concurrent with the review of the site plan, plat or other proposed land use submitted by the applicant, and the ninety-day review period limitation specified in section 6(6) of Act 203 of the Public Acts of 1979, as amended, shall thereby be extended accordingly.

h. The denial of a permit shall be accompanied by a written reason for denial.

(2) *Wetlands review board as final approval authority:*

a. Whenever a permit is required for a use or operation that would not otherwise require the review and approval by the planning commission or township board, the planning and environment director shall refer to the wetlands review board the wetlands permit application. After reference by the planning and environment director, the wetlands review board shall hold a public hearing as expeditiously as possible and shall modify, approve or deny the application. The denial of a permit shall be accompanied by a written reason for denial.

b. Before forwarding the use permit application to the wetlands review board, the planning and environment director shall verify that all required supporting material is available. After reviewing the documentation, the wetlands review board may request additional data or expert opinions, provided all such additional submission and follow-up review shall occur within the required ninety-day period.

c. Prior to making a determination on the use permit application for a use or operation that would not otherwise require review and approval by the planning commission or township board, the wetlands review board shall hold a public hearing. Notice of such hearing shall be sent by first class mail to the property owners and occupants according to the current tax rolls of the four (4) occupied parcels, lots or outlots which are on either side of or within three hundred (300) feet of the property on which the requested construction and/or operation is to take place, whichever is greater. Such notice shall also be sent to all subdivision associations and lake associations registered with the township that are immediately adjacent to the property and/or floodplain, wetland or watercourse affected. The notice shall be sent not less than fifteen (15) nor more than thirty (30) days prior to the hearing, and shall include a copy of the permit application form and the time, date and location of the public hearing. Further, a synopsis of the notice shall be published in a legally approved newspaper of general circulation in the township.

- (3) *Planning commission or township board as final approval authority:*
- a. For those developments and operations where the planning commission or township board is the final approval authority as defined in chapter 21 (Subdivision and Land Division) or chapter 26 (Zoning), the planning and environment director shall refer the wetland permit application to the planning commission, which, in accordance with the procedure specified in subparagraph (4) of this section, shall recommend action to the township board where the township board is the final approval authority or where the planning commission is the final approval authority, the planning commission shall modify, approve or deny the application. In the absence of a reversal or modification by the township board, a recommendation or determination of the planning commission shall be final.
 - b. Prior to making a recommendation or determination on the use permit application, the planning commission shall hold a public hearing. Notice of such hearing shall follow the same procedure as outlined in subsection (2)c. above. A copy of the notice shall also be provided to the members of the wetlands review board. In addition, for any project or operation involving a use permit request to develop a site plan or subdivision, the property under consideration shall be posted with a sign in a conspicuous place along the abutting roadway not less than fourteen (14) nor more than thirty (30) days before the hearing and shall contain adequate information regarding the hearing.
 - c. For those plats, developments and operations where the township board is the final approval authority, the recommendation of the planning commission, made following public hearing, shall be referred to the township board. The township board may authorize the issuance of a wetlands/floodplain use permit by the planning and environment director with or without specific conditions attached or deny the issuance of the use permit.
- (4) In connection with the public hearing to be conducted by the planning commission under subsection (3) of this section above, the wetlands review board shall receive notice of the hearing. The members of the wetlands review board shall appear and be entitled to participate fully in the deliberations of the planning commission. While the planning commission shall be the decision-making body at and for all purposes of the hearing, the wetlands review board shall, prior to planning commission action, separately vote to provide its recommendation to the planning commission. The vote of the wetlands review board shall be recorded in the planning commission minutes. The planning commission shall follow the recommendation of the wetlands review board unless there is clear and convincing information presented at the hearing that the recommendation of the wetlands review board is clearly erroneous based upon the application of the review criteria provided in articles IV and V of this chapter, as applicable. If the planning commission does not follow the recommendation of the wetlands review board, the planning commission shall include in its minutes the reasons why the wetlands review board recommendation was not followed.

FLOODPLAIN, FLOODWAY, WATERCOURSE, WETLAND PROTECTION § 12-33

(5) *Administrative permit review and approval.*

- a. The director shall review an application for an administrative permit to determine if it is complete, and if it is not, shall provide written notice to the applicant of the additional requirements. If upon receiving and confirming an application to be complete, the director determines that an administrative permit should be issued, he shall proceed as provided in subsection (5)b. If upon receiving and confirming an application to be complete, the director determines that the proposed operations warrant a broader review or believes that feasible and prudent alternatives exist, he shall provide written notice to the applicant that the administrative permit is denied and refer the application to the wetland review board as a new use permit application for review and decision as provided in subsection (2).
- b. Upon determining that an administrative permit should be issued, the director shall provide written notice of that determination by first class mail to all persons and associations entitled to notice of a public hearing under subsection (2), and to the members of the wetland review board in the manner they designate. The notice shall also be given to the public by posting on the township's cable television station and web site and the director shall cause the property to be posted with a notice that it is the subject of a pending administrative permit request. In addition to the applicant's name, property address and description of the proposed operation, the notice shall also indicate:
 1. That the application is available for inspection at the environmental department during hours the township offices are open.
 2. The date on or after which director may issue the administrative permit which shall be at least twenty-one (21) days after the date the notice is given.
 3. Explain the right of persons, associations and wetland review board members entitled to the notice, to file written objections or challenges to the administrative permit on or before the date of intended permit issuance and that such objections or challenges must be based on and include some substantiation for claims that the director has not properly interpreted and/or applied this chapter in determining that the permit should be issued, that the proposed operations warrant a broader review by the wetland review board for specified reasons, or that specified feasible and prudent alternatives exist.
- c. If no objections or challenges described in subsection b.(iii) are filed within the time allowed, the director shall approve the administrative permit for issuance subject to the appeal period under subsections 12-34 and 12-35(j).

- d. If objections or challenges described in subsection b.(iii) are filed within the time allowed, the director shall provide copies to the applicant and may:
 1. Approve the administrative permit for issuance subject to the appeal period under subsections 12-34 and 12-35(j), and shall provide written notice to all persons or associations that filed objections or challenges of the decision and their appeal rights; or
 2. Upon determining that the challenges or objections may have merit, provide written notice to the applicant that the administrative permit is denied and refer the application to the wetland review board as a new use permit application for review and decision as provided in subsection (2).
 - e. An administrative permit shall include a deadline for performance of the operations and mitigation established by the director and shall not be issued until the applicant has provided a cash bond, irrevocable letter of credit, secured promissory note or other form of performance guarantee approved by the township board, for one hundred twenty-five (125) percent of the cost of the work to assure the satisfactory and timely completion of the operations and mitigation and which shall be available to and enforceable by the township for that purpose upon the applicant's default.
 - f. The appeal and stay provisions in subsections 12-34 and 12-35(j) shall apply to approval and issuance of administrative permits.
- (Ord. No. C-229, 9-18-89; Ord. No. C-360, § 1, 7-1-92; Ord. No. C-229/C-360, § 6, 5-23-94; Ord. No. C-360-C, § 1, 6-20-05; Ord. No. C-360-D, § 1, 2-21-06; Ord. No. C-360-F, § 1, 6-18-07)

Sec. 12-34. Appeal of approval or denial.

(a) A recommendation and/or determination of the planning commission or wetlands review board regarding any residential or nonresidential use permit application reviewed under section 12-33 may be appealed only to the township board and provided such appeal is received in writing by the township clerk within twenty-one (21) days of such recommendation and/or determination.

(b) Notice that a timely appeal has been made shall be sent by first-class mail by the township clerk to property owners and occupants within three hundred (300) feet of the property on which the requested construction and/or operation is to take place. Such notice shall also be sent to all subdivision associations and lake associations registered with the township that are contiguous to the property and/or floodplain, wetland or watercourse affected and members of the wetlands review board. The notice shall indicate that an appeal hearing has been requested, use permit being appealed, the appellant's name and address, and the time, date and location of the hearing. A synopsis of the notice shall also be published in a legally approved newspaper of general circulation in the township.

FLOODPLAIN, FLOODWAY, WATERCOURSE, WETLAND PROTECTION § 12-35

(c) Approval of an administrative permit may be appealed to the township board in the same time and manner and subject to the same process as provided in subsections (a) and (b) by a property owner or occupant or subdivision or lake association that would be entitled to receive notice under subsection (b).

(Ord. No. C-229, 9-18-89; Ord. No. C-229/C-360, § 7, 5-23-94; Ord. No. C-360-D, § 1, 2-21-06; Ord. No. C-360-F, § 1, 6-18-07)

Sec. 12-35. Conditions of issuance.

(a) All operations permitted or approved by use permits shall be conducted in such a manner as will cause the least possible damage and encroachment or interference with natural resources and natural processes within the watercourses and wetland areas in the township, as defined in this chapter.

(b) Except as provided in subsection (j) of this section below, following the approval of the wetland application by the wetlands review board, the planning commission or the township board, as the case may be, a wetland permit shall be issued upon determination that all other requirements of ordinance and law have been met, including site plan, plat or land use approval, as applicable, and including issuance of a permit by the Michigan Department of Natural Resources if required under Act 203 of the Public Acts of 1979, as amended, and/or issuance of a permit by the county. In cases where a Michigan Department of Natural Resources or county permit allows activities not permitted by the wetland approval granted under this chapter, the restrictions of the approval granted under this chapter shall govern. At no time shall the township issue a use permit which allows a more extensive alteration than permitted by the state and/or county.

(c) Unless the final permit approval by the wetland review board, planning commission or township board specifically decides otherwise, all of the standards, terms and conditions contained in sections 12-38 and 12-39, if applicable, shall apply and be considered a part of every use permit approved and issued under this chapter. In addition, a use permit approval by the township may:

- (1) Impose such conditions on the manner and extent of the proposed operation/development use or structure or use activity as are necessary to ensure that the intent of this chapter is carried out;
- (2) Fix a reasonable time for the undertaking and completion of all operations; and
- (3) Require a cash bond or irrevocable letter of credit in such form and amount as determined necessary by the township to ensure compliance with the use permit.

(d) The review and approval of a use permit application may be done concurrently with the review and approval of site plans or subdivision plats. Use permits approved under section 12-33 shall expire within twenty-four (24) months of approval of such permit by the planning and environment director, the wetlands review board or the township board, whichever shall have final authority, the date of issuance of such permit notwithstanding.

(e) Prior to commencement of work on the site and continuing throughout the duration of the project, a copy of the approved use permit which contains the conditions of issuance shall be posted on the site in a conspicuous manner such that the wording of the permit will be available for public inspection.

(f) Use permits for seasonal operations need not be renewed annually unless otherwise stated in the permit.

(g) Any change which increases size, scope, use or hours of operation must be examined as a new operation and shall require the filing of a new use permit application.

(h) Any temporary, seasonal or permanent operation which is discontinued for one (1) year or one (1) season shall be considered terminated and the use permit automatically voided.

(i) A use permit shall be obtained prior to the issuance of building permits necessary for construction.

(j) Where a timely appeal is made under section 12-34, the department of planning and environment shall not issue a permit until and unless the township board completes its review and authorizes the issuance of the permit.

(Ord. No. C-229, 9-18-89; Ord. No. C-229/C-360, § 8, 5-23-94; Ord. No. C-360-F, § 1, 6-18-07)

Sec. 12-36. Fees.

Fees for permits and appeals required by this chapter shall be established by and may be changed from time to time by resolution of the township board. All fees shall be paid at the time of application to the township treasurer or in such manner as the board shall direct.

(Ord. No. C-229, 9-18-89)

Sec. 12-37. Environmental design criteria and standards.

Compliance with the design criteria and standards in this section, as determined by the director, shall be required for a minor project to be considered for approval by an administrative permit and may be required for other use permits by the entity with final approval authority in the absence of a demonstration by the applicant that compliance with a particular design criteria or standard is not feasible and prudent or is not necessary to assure that the operation will cause the least possible damage and encroachment or interference with natural resources and natural processes within the watercourse and wetland areas in the township.

- (1) The mitigation area is 0.5 acres or less in size and is to be on the same site as the proposed operation for which a permit is required. Off-site mitigation may not be approved by an administrative permit.
- (2) The minimum area or volume and location requirements for mitigation are as follows:
 - a. In an environmental features setback area, the mitigation area shall be at least as large as the area of disturbance (1:1 mitigation ratio).

FLOODPLAIN, FLOODWAY, WATERCOURSE, WETLAND PROTECTION § 12-37

- b. The mitigation volume of material to be removed from the floodplain shall be at least as large as the volume of fill (1:1 mitigation ratio) and the mitigation area shall be directly connected to the floodplain impacted.
 - c. For operations in a wetland, the mitigation area shall be at least twice as large as the area of disturbance.
 - d. If providing the wetland mitigation area required by subsection(c) is not feasible, the largest feasible mitigation area that is at least as large as the area of disturbance may be approved if there is an enhancement that increases the number of plant species in the wetland by thirty (30), with the new plant species to be planted required to be native/indigenous plants in accordance with the wetland/environmental mitigation manual.
- (3) In addition to information required in subsection 12-32(1)—(4), plans for mitigation are required and shall include all of the following:
- a. A description of the topography, soils, hydrology, and vegetation. Soil boring information and groundwater monitoring data should supplement this description.
 - b. The acreage to be restored, created, or preserved by ecological type.
 - c. Cut and fill volumes.
 - d. A description of the ecological types, hydrology, soils, and vegetation of the wetlands to be impacted.
 - e. A description of the functions provided by the wetlands to be impacted and the proposed mitigation wetlands.
 - f. Water budget of inputs and outputs to the proposed mitigation wetland (e.g., precipitation, groundwater, runoff, evapotranspiration).
 - g. Existing conditions plan that includes topographic information (one- or two-foot contour intervals), roads, trails, structures, property lines, directional arrows, scale, and the exact size and boundaries of existing environmental features setback, wetlands, streams, and 100-year floodplain.
 - h. Wetland mitigation plan that includes:
 - 1. A description of the sources of hydrology, the source and type of soil amendments, wetland vegetation establishment, and wildlife structures.
 - 2. A plan view showing all of the proposed conditions of the mitigation site including all contour elevations (at one-foot contour intervals), structures, the type and size of all proposed wetland areas, property lines, directional arrows, scale, the conservation easement area, and the proposed method of demarking the environmental features setback.
 - 3. Cross-sections showing the existing and proposed grades.

- i. Landscape plan which includes a plan view, installation methods, planting list that specifies plant type, species list with scientific and common names, size, and quantity as well as distribution within the mitigation areas in accordance with the wetland/environmental mitigation manual.
 - j. Schedule and construction methods: A schedule and methods for completion of the mitigation site must be provided (e.g., initiation, planting, completion). The site preparation and soil erosion/sedimentation control methods to be used during construction should be described.
 - k. Long-term protection plan: A preservation notice and an accompanying recordable size site plan showing the wetland, environmental features setback area, and 100-year floodplain must be provided.
- (4) Only native/indigenous trees, shrubs, grasses, sedges, forbs, vines and other herbaceous plants approved by the director pursuant to the wetland/environmental mitigation manual, may be planted in floodplains, floodways, wetlands, watercourses, woodlands/woodland preservation areas and environmental features setback areas.
 - (5) The location of structures (permanent or temporary) is not allowed within recorded and/or township established preservation areas or easements.
 - (6) No direct discharge of storm water, sump water or wastewater is permitted to wetlands, watercourses, woodlands/woodland preservation areas and environmental features setback areas.
 - (7) Seawalls must meet the following design standards:
 - a. Any type must be installed at or above the ordinary high water mark of a watercourse.
 - b. Existing vertical and horizontal contours of the shoreline shall be maintained.
 - c. Vertical seawalls (steel or vinyl) are not permitted where vertical walls do not currently exist.
 - d. Boulder seawalls will be installed on a 1:1 slope (forty-five (45) degree angle), approved geotextile fabric shall be installed behind the proposed seawall, and approved stone backfill shall be used to provide adequate drainage.
 - e. Four- to eight-inch diameter natural cobblestone must be placed (minimum width of twelve (12) inches) at the toe of the entire length of the seawall.
 - (8) Impervious surfaces within an environmental features setback area must be constructed such that runoff is directed away from watercourses and wetlands or to a native plant area to provide the maximum infiltration as possible.
 - (9) Impervious surfaces can not exceed twenty-five (25) percent of an environmental features setback area and shall be constructed in a way to increase infiltration of stormwater.

FLOODPLAIN, FLOODWAY, WATERCOURSE, WETLAND PROTECTION § 12-38

- (10) Trees within the environmental features setback can be trimmed to a height of twelve (12) feet and herbaceous and/or shrubs can be cut to a minimum height of four (4) feet for the creation of a viewshed.
 - (11) Beach sanding must meet the following design standards:
 - a. The purpose of the fill is for the creation, improvement, or restoration of swimming areas and beaches.
 - b. The fill is placed above the ordinary high water mark.
 - c. The fill is ten (10) cubic yards or less and is completed as one (1) complete project.
 - d. The material is from a source approved by the director and is clean, nonpolluting, free from debris, organic materials, and waste metal products.
 - e. The total area filled should not exceed twenty-five (25) percent of the environmental features setback.
 - (12) Driveways must meet the following design standards:
 - a. Any upland on the property or other alternatives, such as obtaining a permanent easement for access from adjacent upland if available or a shared driveway shall be utilized to the greatest degree possible.
 - b. The location of the driveway is at the least damaging place on the property and creates the minimum wetland impact.
 - c. The portion of the driveway in the wetland can have a maximum base width of sixteen (16) feet and paved width of twelve (12) feet. The maximum length of the driveway is fifty (50) feet.
 - d. No ditches may be placed in the wetland in association with the driveway.
 - e. The driveway must terminate at a buildable upland site.
- (Ord. No. C-360-F, § 1, 6-18-07)

Sec. 12-38. Permit terms and conditions.

The following terms and conditions shall apply and be considered a part of every use permit approved and issued under this chapter unless the final permit approval decision by wetland review board, planning commission or township board specifically decides otherwise. Administrative permits may not be approved without all these terms and conditions.

- (1) The following terms and conditions apply to all permits:
 - a. A preconstruction meeting between the petitioner and the director or director's designee and any contractors/subcontractors is required prior to any construction. A copy of the permit shall be posted in a visible location on-site.
 - b. At the time of the preconstruction meeting, the exact location of the request must be measured in the field by the director or director's designee and then field staked by the petitioner or any contractor prior to installation.

- c. Soil protection measures shall be installed prior to any construction and be inspected by the director or director's designee for proper location and installation.
- d. The petitioner and his/her contractor(s) shall be responsible for maintaining all soil erosion and sedimentation control measures throughout the duration of the project with daily inspections.
- e. No materials (organic or inorganic), spoils, and/or equipment shall be stored within the wetland, environmental features setback area, and 100-year floodplain during and after construction.
- f. No direct discharge of storm water, sump water, or wastewater unless pretreated is allowed to wetlands and/or watercourses. Any existing direct discharge must be eliminated and discharged in a location approved by the director or director's designee.
- g. No fill material beyond the request shall be deposited within any wetland, environmental features setback area and/or 100-year floodplain.
- h. Any and all fill utilized for installation shall be from an approved source.
- i. Any and all areas of mitigation, restoration, or planting within a wetland, environmental features setback area and 100-year floodplain shall be planted with native/indigenous plants (trees, shrubs, herbs, and/or vines) only in accordance with the wetland/environmental mitigation manual.
- j. Ongoing monitoring by the director or director's designee shall be conducted with inspection reports recorded in the case file.
- k. A final inspection by the director or director's designee shall be conducted with a report added to the case file.
- l. The petitioner shall be responsible for the integrity of all landscaping materials in the mitigation areas for a period of twenty-four (24) months, and replace any vegetation that dies.
- m. Invasive and noxious plant eradication by herbicide applications must be completed by a certified applicator with documentation of the work upon completion submitted to the environmental department.
- n. The petitioner shall be responsible for installation of department approved preservation signage.
- o. The property owner(s) shall be given a copy of the township's fertilizer ordinance.
- p. A preservation notice and an accompanying recordable size site plan showing the wetland, environmental features setback area, and 100-year floodplain shall be recorded for the property indicating that the preservation methods have been employed to protect the environmental features and cannot be disturbed without a permit.

FLOODPLAIN, FLOODWAY, WATERCOURSE, WETLAND PROTECTION § 12-39

- q. The petitioner shall place sufficient funds in an escrow account to cover the costs connected with the application, including consultant fees, issuance of a permit, and monitoring.
 - r. The initiation of any work on a permitted project confirms the permittee's acceptance and agreement to comply with all terms and conditions of the permit.
- (2) The following are additional conditions that apply to floodplain permits:
- a. No fill shall be placed within a designated floodway.
 - b. The placement of fill shall not fragment or create separation of 100-year floodplain areas.
 - c. There will be no loss of floodplain storage (i.e. mitigation volume of material to be removed from the floodplain shall be at least as large as the volume of fill (1:1 mitigation ratio)).
 - d. The mitigation area is directly connected to the floodplain impacted.
- (3) The following are additional conditions that apply to seawall permits:
- a. At the time of the preconstruction meeting, the exact location of the ordinary high water mark (OHWM) shall be measured and documented using benchmarks in the field by the director or director's designee prior to installation.
 - b. Existing vertical and horizontal contours of the shoreline shall be maintained.
 - c. Boulder seawalls will be installed on a 1:1 slope (forty-five (45) degree angle), approved geotextile fabric must be installed behind the proposed seawall, and approved stone backfill must be used to provide adequate drainage.
 - d. Four- to eight-inch diameter natural cobblestone must be placed (minimum width of twelve (12) inches) at the toe of the entire length of the seawall.
 - e. Any existing direct discharge to a wetland or watercourse must be eliminated and discharged in a location approved by the director or director's designee.

(Ord. No. C-360-F, § 1, 6-18-07)

Sec. 12-39. Wetland mitigation areas larger than 0.5 acres.

The following design standards, permit terms and conditions shall apply to all wetland mitigation areas that are greater than 0.5 acres in size:

- (1) *Wetland mitigation plans.* In addition to information required in subsections 12-32(1)—(4) and 12-37(3), plans for wetland mitigation of more than 0.5 acres must include all of the following:
- a. A map showing the location of the wetland mitigation site in relation to surrounding roads and other landmarks.

- b. Baseline conditions: Characterization of the existing conditions at the proposed wetland mitigation site including:
 - 1. A description of the topography, soils, hydrology, and vegetation. Soil boring information and groundwater monitoring data should supplement this description.
 - 2. A plan view that includes topographic information (one (1) or two (2) foot contour intervals), roads, trails, structures, property lines, directional arrows, scale, and the exact size and boundaries of existing wetlands, streams, and floodplain to the 100-year elevation.
 - 3. Typical cross-sections.
 - 4. An explanation of why the site was selected.
 - c. Monitoring plan: A monitoring plan is required as outlined in subsection 12-39(4). The locations of vegetative sampling transects, photo points, monitoring wells, and staff gauges for monitoring should be shown on a plan view.
- (2) *Wetland mitigation standards.* In addition to the environmental design criteria and standards in section 12-37, wetland mitigation areas greater than 0.5 acres must meet all of the following:
- a. Construction has been completed in accordance with plans and specifications.
 - b. The mitigation wetland is designed to have certain hydrological characteristics, such as water elevation, water depth, water level fluctuations, and frequency and duration of inundation, consistent with the ecological wetland types proposed as set forth below. Wetland design hydrology will be considered to be established when the director determines the following conditions are met for at least one (1) calendar year, based on monitoring of the mitigation site:
 - 1. Forested and scrub-shrub wetlands will be consecutively saturated within twelve (12) inches of the soil surface for at least fifteen (15) percent of the growing season and the water depth will not be more than two (2) inches above the surface for more than thirty (30) percent of the growing season.
 - 2. Emergent wetlands will be consecutively saturated within twelve (12) inches of the soil surface for at least fifteen (15) percent of the growing season and water depth will not exceed eighteen (18) inches over more than fifteen (15) percent of the emergent wetland.
 - 3. Water levels in wet prairie wetland types will be consecutively saturated within twelve (12) inches of the soil surface for at least fifteen (15) percent of the growing season, will have a minimum annual depth of saturation twelve (12) inches below the soil surface for at least fifteen (15) percent of the growing season, with maximum inundation to occur permanently at a depth of three (3) inches.
 - 4. The growing season is defined as April 21 through October 24.

FLOODPLAIN, FLOODWAY, WATERCOURSE, WETLAND PROTECTION § 12-39

- c. A layer of high quality soil, from the A horizon of an organic or loamy surface texture soil, exists over the entire mitigation wetland area at a minimum thickness of six (6) inches.
- d. The mitigation wetland is free of oil, grease, manmade debris, and all other contaminants.
- e. A minimum of six (6) habitat structures, consisting of at least three (3) types, will be placed per acre of mitigation wetland. At least fifty (50) percent of each structure will extend above the normal water level. The types of acceptable wildlife habitat structures are provided below:
 1. Tree stumps laid horizontally within the wetland area. Acceptable stumps will be a minimum of six (6) feet long (log and root ball combined) and twelve (12) inches in diameter.
 2. Logs laid horizontally within the wetland area. Acceptable logs will be a minimum of ten (10) feet long and six (6) inches in diameter.
 3. Whole trees laid horizontally within the wetland area. Acceptable whole trees will have all of their fine structure left intact (i.e., not trimmed down to major branches for installation) and be a minimum of twenty (20) feet long (tree and root ball) and a minimum of twelve (12) inches in diameter at breast height (DBH).
 4. Snags which include whole trees left standing that are dead or dying, or live trees that will be flooded and die, or whole trees installed upright into the wetland. A variety of tree species should be used for the creation of snag habitat. Acceptable snags will be a minimum of twenty (20) feet tall (above the ground surface) and a minimum of twelve (12) inches DBH. Snags should be grouped together so as to provide mutual functional support as nesting, feeding, and perching sites.
 5. Sand mounds at least eighteen (18) inches in depth and placed so that they are surrounded by a minimum of thirty (30) feet of water measuring at least eighteen (18) inches in depth. The sand mound will have at least a two hundred (200) square foot area that is eighteen (18) inches above the projected high water level and oriented to receive maximum amounts of sunlight.
- f. Mean percent cover of native wetland species, as specified in the wetland/environmental mitigation manual, in the herbaceous layer across the wetland area to achieve fifty (50) percent design cover is not less than:
 1. Eighty (80) percent for forested wetland;
 2. Eighty (80) percent for scrub-shrub wetland;
 3. Eighty (80) percent for wet meadow/prairie wetland; and
 4. Sixty (60) percent for emergent wetland.

- g. Extensive open water and submergent vegetation areas with little or no emergent or floating vegetation will not exceed fifteen (15) percent of the mitigation wetland area.
- h. Extensive areas of bare soil will not exceed five (5) percent of the mitigation wetland area. For the purposes of these performance standards, extensive refers to areas greater than 0.01 acre in size.
- i. No mitigation credit will be given for areas deeper than 2.5 feet.
- j. The total percent cover of wetland species in each plot will be averaged for samples taken in the same wetland type to obtain a mean percent cover value for each wetland type. Plots within identified extensive open water and submergent areas, bare soil areas, and areas without a predominance of wetland vegetation will not be included in this average. Wetland species refers to species listed as facultative and wetter in the wetland/environmental mitigation manual.
- k. The wetland supports a predominance of wetland vegetation (as defined in the wetland/environmental mitigation manual) in each vegetative layer and is represented by a minimum number of native perennial wetland species. The minimum number of native wetland species per wetland type will not be less than:
 - 1. Twenty (20) species within the forested wetland;
 - 2. Twenty (20) species within the scrub-shrub wetland; and
 - 3. Thirty (30) species within the emergent wetland.
- l. The total number of native wetland plant species (as listed in the wetland/environmental mitigation manual), will be determined by a sum of all species identified in sample plots of the same wetland type.
- m. The wetland supports a minimum of:
 - 1. Three hundred (300) individual surviving, established, and free-to-grow trees per acre in the forested wetland that are classified as native wetland species and consisting of at least three (3) different plant species.
 - 2. Three hundred (300) individual surviving, established, and free-to-grow shrubs per acre in the scrub-shrub wetland, that are classified as native wetland species and consisting of at least four (4) different plant species.
 - 3. For the purposes of this performance standard, *Fraxinus Pennsylvanica* (Green Ash) and *Populus* spp. (Aspen) are not acceptable species.
- n. The mean percent cover of invasive species including, but not limited to, *Phragmites Australis* (Common Reed), *Lythrum salicaria* (Purple Loosestrife), and *Phalaris Arundinacea* (Reed Canary Grass) and others listed in the wetland/environmental mitigation manual, will in combination be limited to no more than ten (10) percent within each wetland type. Invasive species will not dominate the vegetation in any extensive area of the mitigation area.

FLOODPLAIN, FLOODWAY, WATERCOURSE, WETLAND PROTECTION § 12-39

- o. If the mean percent cover of invasive species is more than ten (10) percent within any wetland type or if there are extensive areas of the mitigation wetland in which an invasive species is one of the dominant plant species, the owner will submit an evaluation of the problem to the director. If the owner determines that it is not feasible to reduce the cover of invasive species to meet the above performance standard, the director may approve an alternative invasive species standard. The owner must submit an evaluation of the problem, a control plan, and the percent cover that can be achieved to the director for review. Any alternative invasive species standard must be approved in writing by the director.
 - p. Any plantings or replantings must be completed at least one (1) calendar year before final approval of a fully functional mitigation site.
- (3) *Wetland mitigation construction conditions.* In addition to the environmental design criteria and standards in section 12-37, the owner must comply with all of the following mitigation construction conditions:
- a. The owner must notify the director in writing five (5) days before construction of the wetland mitigation area is commenced, and undertake construction in conformity with the terms and conditions specified in the permit, plans, specifications, and appendices that are part of the approved plans.
 - b. If during construction of the wetland mitigation area a previously unknown or unreported material and/or regulated condition, such as an archaeological or historic site, threatened or endangered species, waste, or contamination, is encountered, the owner will discontinue work, notify the director, and initiate contact with appropriate local, state, and federal agencies to determine what response the condition requires.
 - c. Construction methods, including water control structures, berms, and tile breaking, must be in accordance with the wetland/environmental mitigation manual.
 - d. The owner shall notify the director in writing within five (5) days after completing construction of the mitigation wetland so it may be inspected for conformity to the permit and approved plans.
 - e. Modification or adjustment of any water control structures, or manipulation of hydrology, may be made only with the written approval of the director.
- (4) *Mitigation monitoring conditions.* After the director or director's designee determines that construction is complete, the owner or his authorized agent will commence monitoring as provided in this subsection for a minimum of two (2) years. Monitoring will be required until the wetlands and environmental features setback areas are approved by the director as fully functional, meaning that they are in compliance and consistent with all of the standards in subsection (2). Once deemed fully functional no additional monitoring reports will be required and any performance guarantee that was required will be released.
- a. Measure inundation and saturation at all staff gauges, monitoring wells, and other stationary points to assess the periods and degree of inundation and saturation, according to the monitoring plan. A minimum of two (2) measurements are required during the growing season.

- b. Sample vegetation in plots located along transects once between July 15 and August 31. The owner will determine the number of sample plots necessary within each wetland type and environmental features setback area by use of a species-area curve or other approach approved by the director. If the wetland area is less than one (1) acre, then the minimum number of sample plots for each wetland type shall be no fewer than five (5). Sample plots shall be located on the sample transect at evenly spaced intervals or by another approach approved by the director. If additional or alternative sample transects are needed to sufficiently evaluate each wetland type, they must be approved in advance in writing by the director.
- c. The herbaceous layer (all non-woody plants and woody plants less than 3.2 feet in height) shall be measured with a 3.28 foot by 3.28 foot (one (1) square meter) sample plot. The shrub and tree layer shall be measured with a thirty-foot radius plot. The data recorded for each herbaceous layer sample plot shall include a list of all living plant species, and an estimate of percent cover in five (5) percent intervals for each species recorded, bare ground, and open water relative to the total area of the plot. (The total percent cover for the plot should exceed one hundred (100) percent.) The number and species of surviving, established, and free-to-grow trees and surviving, established, and free-to-grow shrubs shall be recorded for each thirty-foot radius plot.
- d. Provide plot data and a list of all the plant species identified in the plots and otherwise observed during monitoring. Data for each species must include common name, scientific name and wetland indicator category from the wetland/environmental mitigation manual.
- e. The location of sample transects and plots should be identified in the monitoring report on a plan view showing the location of wetland types and the environmental features setback areas. Sample transects shall be staked at a frequency sufficient to locate the transect in the field.
- f. Delineate any extensive (greater than 0.01 acre in size) open water areas, bare soil areas, areas dominated by invasive species, and areas without a predominance of wetland vegetation and provide their location on a plan view.
- g. Delineate any areas of the environmental features setback areas that are being mowed or are dominated by invasive species.
- h. Document any sightings or evidence of wading birds, songbirds, waterfowl, amphibians, reptiles, and other animal use (lodges, nests, tracks, scat, etc.) within the wetland noted during monitoring. Note the number, type, date, and hour of the sightings and evidence.
- i. Inspect the site during all monitoring visits and inspections for oil, grease, manmade debris, and all other contaminants and report findings. Rate (e.g., poor, fair, good, excellent) and describe the water clarity in the mitigation wetland.

FLOODPLAIN, FLOODWAY, WATERCOURSE, WETLAND PROTECTION § 12-51

- j. Provide annual photographic documentation of the development of the mitigation wetland and environmental features setback areas during vegetation sampling from permanent photo stations located within the mitigation wetland. At a minimum, photo stations shall be located on both ends of each transect. Photos must be labeled with the location, date photographed, and direction.
- k. Provide one-time photographic documentation of at least six (6) inches of high quality soil, from the A horizon of an organic or loamy surface texture soil, across the site during construction.
- l. Provide one-time photographic documentation of the preservation signage and/or demarcation of the environmental features setback areas.
- m. Provide the number and type of habitat structures placed and representative photographs of each structure type.
- n. Provide a written summary of data from previous monitoring periods and a discussion of changes or trends based on all monitoring including a calculation of the acres of each wetland type established.
- o. Provide a written summary of all the problems that have been identified and potential corrective measures to address them.
- p. Two (2) copies of a monitoring report which compiles and summarizes all data collected during the monitoring period shall be submitted annually by the owner. Monitoring reports shall cover the period of January 1 through December 31 and be submitted to the director prior to January 31 of the following year.

(Ord. No. C-360-F, § 1, 6-18-07)

Secs. 12-40—12-50. Reserved.

ARTICLE III. TOWNSHIP WETLANDS AND DRAINAGE MAPS

Sec. 12-51. Township flood and drainage map.

(a) The township shall prepare a flood and drainage map for the township showing the following:

- (1) Floodplain boundaries of a flood hazard area as determined by Federal Emergency Management Agency (FEMA) flood insurance study (FIS) entitled "Flood Insurance Study, Oakland County, Michigan, and Incorporated Areas" and dated September 29, 2006, the flood insurance rate maps (FIRMS) panel numbers of 26125C0477F, 26125C0479F, 26125C0481F, 26125C0482F, 26125C0483F, 26125C0484F, 26125C0487F, 26125C0489F, 26125C0491F, 26125C0492F, 26125C0493F, 26125C0494F, 26125C0501F, 26125C0502F, 26125C0503F, 26125C0504F, 26125C0511F, 26125C0512F, 26125C0513F, 26125C0514F and dated September 29, 2006, and an approved survey, by records of local, state and federal agencies.
- (2) Ordinary high water mark boundaries in current evidence.

(3) Established levels of lakes as regulated by the county and controlled by overflow.

(b) The township shall be empowered to change or alter the boundaries established by the flood and drainage map, except with respect to the information contained in the FEMA flood insurance study and flood insurance rate maps referenced above, after a public hearing, provided new and substantiated data shows a change in 100-year floodplain boundaries or ordinary high water mark boundaries. The public hearing shall be held in accordance with the procedures outlined in section 12-12. With respect to information contained in the FEMA flood insurance study and flood insurance rate maps, the township may petition FEMA for a letter of map revision in accordance with applicable state and federal regulations with respect to changes in the 100-year floodplain boundaries.

(Ord. No. C-229, 9-18-89; Ord. No. C-229/C-360, § 9, 5-23-94; Ord. No. C-360-E, § 4, 8-28-06)

Sec. 12-52. Interim determinations for floodplains.

(a) The township may adopt maps showing floodplains as prepared by county, state or federal agencies, as the means of determining location of floodplains, and prepared as follows:

- (1) Maps prepared from surveys or other data by local, state or federal agencies;
- (2) Maps prepared from aerial surveys, to a suitable scale, properly labeled and identified to show water and land features.

(b) Prior to determination of ordinary high water mark and of boundary locations for 100-year floodplains, the township shall, at the applicant's expense, authorize necessary investigations to determine these boundaries as applied to the applicant's property and proposed operations in accordance with proceedings as authorized by this chapter.

(Ord. No. C-229, 9-18-89)

Sec. 12-53. Township watercourse and wetlands map.

(a) The township shall prepare and make available to the public at a reasonable cost a watercourse and wetlands map for the township showing the following:

- (1) Ordinary high water mark boundaries for lakes, streams, watercourses and drainage courses;
- (2) Wetlands, low lands, swamps and other bottomlands.

(b) The township shall be empowered to change or alter the boundaries established by the watercourse and wetlands map at any time by order, after a public hearing, provided new and substantiated data shows a change in the watercourse and wetland boundaries or available county, state or federal maps or data show a change. The public hearing shall be held in accordance with procedures outlined in section 12-12.

(c) The adoption of the watercourse and wetland map by the township board shall not create any legally enforceable presumptions regarding whether property that is or is not included on the inventory map is or is not in fact a wetland.

(Ord. No. C-229, 9-18-89; Ord. No. C-229/C-360, § 10, 5-3-94)

FLOODPLAIN, FLOODWAY, WATERCOURSE, WETLAND PROTECTION § 12-54

Sec. 12-54. Interim determination for watercourse and wetlands locations.

(a) The township may adopt maps showing lakes, streams, watercourses and wetlands, as prepared by county, state or federal agencies, as the means of determining boundaries of bottomlands and prepared as follows:

- (1) Maps prepared from surveys or other data;

FLOODPLAIN, FLOODWAY, WATERCOURSE, WETLAND PROTECTION § 12-73

- (2) Maps prepared from aerial surveys, to a suitable scale, properly labeled and identified to show bottomland and upland features.

(b) Prior to determination of the ordinary high water mark and boundaries of watercourses and wetland areas, the township shall, at the applicant's expense, authorize necessary investigations to determine these boundaries as applied to the applicant's property and proposed operations in accordance with records and data currently available, or by field survey.

(Ord. No. C-229, 9-18-89)

Secs. 12-55—12-70. Reserved.

ARTICLE IV. FLOODING AND FLOOD HAZARD PROTECTION

Sec. 12-71. Obstructions declared public nuisance.

Any obstruction in any floodway is hereby declared to be a public nuisance unless a permit has been obtained for such obstruction from the township.

(Ord. No. C-229, 9-18-89)

Sec. 12-72. Prohibited improvements, structures.

It shall be unlawful to locate within a flood hazard area the following improvements or structures:

- (1) Any structure either public or private for the purpose of assembly.
- (2) Any new residential dwelling unless it complies with all applicable provision and regulations of the state construction code with respect to construction of residential dwellings in flood hazard area or flood hazard prone areas. Prior to a certificate of occupancy being issued for a new residential dwelling in a flood hazard area, a registered professional engineer or architect shall certify that the standards of this subsection are satisfied.

- (3) Mobile homes.

(Ord. No. C-229, 9-18-89; Ord. No. C-360-E, § 5, 8-28-06)

Sec. 12-73. Acts for which use permit required; application review criteria.

(a) A written use permit from the township is required to:

- (1) Alter the topography on lands in a flood hazard area.
- (2) Locate any operation, obstruction or structure within the floodway.
- (3) Allow any operation, obstruction or structure to remain within the floodway.
- (4) Locate any operation, obstruction or structure on lands in a flood hazard area.

- (5) Allow any operation, obstruction or structure to remain on lands in a flood hazard area.
- (6) Make alterations of any obstruction or structure within these floodways or floodplains, whether such obstruction or structure is located in the floodway or floodplain before or after the effective date of the ordinance from which this chapter was derived. Maintenance of an obstruction or structure existing prior to the effective date of the ordinance from which this chapter was derived shall not be construed to be an alteration.

(b) Subject to the provisions and requirements of the state construction code, appropriate uses in flood hazard area, excluding the floodways, may include railroad tracks, streets, utility lines, storage yards for equipment and nonhazardous material not subject to major damage or displacement by flood, provided such is accessory to a use permitted in an adjoining area.

(c) Subject to the procedural limitation of article II of this chapter, the township may issue use permits for location or alteration of obstructions and structures provided such use permits do not violate the purpose and intent of this chapter or of any applicable state statutes, including the state construction code.

(d) In reviewing any application for a use permit under subsection (a), criteria such as the following shall be considered:

- (1) The provisions and regulations of the state construction code pertaining to new construction and substantial improvements within flood hazard area or flood hazard prone areas;
- (2) Danger to life, health or property by water which may be backed up or diverted by such obstruction;
- (3) Danger that the obstruction will be swept downstream to the injury of others;
- (4) Danger of water pollution resulting from floods;
- (5) Possible alternatives;
- (6) Construction or alteration of the obstruction in such a manner as to lessen the danger;
- (7) Permanence of the obstruction;
- (8) Anticipated development in the foreseeable future of the area which may be affected by the obstruction, including maintaining the stability of the tax base by preventing improper development of floodprone areas; and
- (9) Other factors as are in harmony with the purpose of this chapter.

(e) A use permit shall not be issued unless it is shown that:

- (1) All provisions and requirements of the state construction code pertaining to new construction and substantial improvement in flood hazard area and flood hazard prone areas have been complied with.
- (2) Adequate storage capacity remains to control a flood hazard area.

FLOODPLAIN, FLOODWAY, WATERCOURSE, WETLAND PROTECTION § 12-91

(3) The proposed operation is primarily dependent upon being located in a floodplain or floodway.

(4) No feasible and prudent alternative is available.

(Ord. No. C-229, 9-18-89; Ord. No. C-360-E, § 6, 8-28-06)

Sec. 12-74. Act for which use permit not required.

Subject to the conditions of section 12-73, no use permit is required for use of a floodway or flood hazard area for:

(1) Cultivation and harvesting of crops according to recognized soil conservation practices.

(2) Pasture, grazing land, forestry, outdoor plant nursery, orchard, and harvesting of crops.

(3) Wildlife sanctuary, woodland preserves and arboretums.

(4) Recreational uses such as parks, day camps, picnic groves and golf courses, so long as a use permit was obtained for construction of any building or structure serving the park, day camp, golf course, or picnic grove and that those buildings or structures comply with the state construction code provisions and regulations pertaining to new construction and substantial improvement in floodprone and flood hazard prone areas.

(Ord. No. C-229, 9-18-89; Ord. No. C-360-E, § 7, 8-28-06)

Sec. 12-75. Reserved.

Editor's note—Ord. No. C-360-F, § 2, adopted June 18, 2007, repealed § 12-75, which pertained to fast track permits and derived from Ord. No. C-360-C, § 1, adopted June 20, 2005; and Ord. No. C-360-E, § 8, adopted Aug. 28, 2006.

Secs. 12-76—12-90. Reserved.

ARTICLE V. WATERCOURSE AND WETLAND PROTECTION

Sec. 12-91. Acts for which use permit required; application review criteria.

(a) *Fertilization restricted.* No fertilization shall be permitted within a wetland.

(b) *Acts requiring written use permits.* A written use permit from the township is required to:

(1) Deposit any material or structure within or upon any watercourse or wetland area.

(2) Remove or drain any material from any watercourse or wetland area.

(3) Dredge, fill or land balance bottomlands or wetlands;

(4) Create, enlarge, diminish or change the course of any naturally occurring or constructed canal, channel, ditch, lagoon or other watercourse;

- (5) Construct, enlarge or operate any use or development on a watercourse or wetland except for noncommercial seasonal docks and other recreational facilities conforming to subsections 12-92(4) through (6);
 - (6) Construct, extend, enlarge or connect any conduit, pipe, culvert or open or closed drainage facility erected for the purpose of carrying stormwater runoff from any two (2) or more single-family residential sites, multiple residences, commercial sites, parking areas, paved or unpaved private or public roads, or any other land use permitting discharge of silt, sediment, organic or inorganic materials, chemical fertilizers, flammable liquids or any substance producing turbidity.
 - (7) Construct, enlarge, extend or connect any private or public sewage or waste treatment plant discharge to any canal, channel, ditch, lagoon or other watercourse;
 - (8) Pump surface water for irrigation or sprinkling of properties, other than for individually owned single family residences under two (2) acres, from any canal, channel, ditch, lagoon or other watercourse unless the water is wholly contained within the user's property.
- (c) *Criteria for use permit.* In reviewing any application for a use permit under subsection (b) above, criteria such as the following shall be considered.
- (1) The water quality, including filtering action;
 - (2) The fish and other wildlife, including their habitats;
 - (3) The probable impact if the use is permitted upon adjoining wetland or drainage areas and the cumulative effect of similar proposals on the watershed and water table;
 - (4) The economic value, both public and private, of the proposed change to the general area;
 - (5) The land use for which the property is zoned or planned;
 - (6) The recreational impact;
 - (7) The feasibility of alternatives;
 - (8) The size of the wetland where the use is proposed; and
 - (9) The remaining storage capacity is adequate to control a 100-year flood.
- (d) *Conditions for not issuing use permit.* A use permit shall not be issued if the affected wetland is contiguous to or drains directly into a watercourse or is over two (2) acres in size, unless it is shown that:
- (1) Adequate storage capacity remains to control a 100-year flood;
 - (2) The proposed activity is primarily dependent upon being located in the wetland; and

FLOODPLAIN, FLOODWAY, WATERCOURSE, WETLAND PROTECTION § 12-91

- (7) The feasibility of alternatives;
- (8) The size of the wetland where the use is proposed; and
- (9) The remaining storage capacity is adequate to control a 100-year flood.

(d) *Conditions for not issuing use permit.* A use permit shall not be issued if the affected wetland is contiguous to or drains directly into a watercourse or is over two (2) acres in size, unless it is shown that:

- (1) Adequate storage capacity remains to control a 100-year flood;
- (2) The proposed activity is primarily dependent upon being located in the wetland; and

FLOODPLAIN, FLOODWAY, WATERCOURSE, WETLAND PROTECTION § 12-91

(3) A feasible and prudent alternative does not exist.

(e) *Noncontiguous wetlands less than two acres in area.* A permit shall be approved with respect to a noncontiguous wetland less than two (2) acres in area unless the township determines that the wetland is essential to the preservation of the natural resources of the township. It shall not be the burden of the property owner to prove that the wetland is not essential to the preservation of the natural resources of the township.

(f) *Analyzation of noncontiguous wetland areas.* All noncontiguous wetland areas of less than two (2) acres which appear on the wetlands inventory map, or which are otherwise identified during a field inspection by the township, shall be analyzed for the purpose of determining whether such areas are essential to the preservation of the natural resources of the township. If there is to be a denial of a permit to dredge, fill, construct or otherwise alter or undertake an operation in a noncontiguous wetland area of less than two (2) acres, then, on the basis of data gathered by the township, findings shall be made in writing and given to the applicant stating the basis for the determination that such wetland is essential to the preservation of the natural resources of the township. In order to make such a determination, there shall be a finding that one (1) or more of the following exist within such wetland:

- (1) The site supports state or federal endangered or threatened plants, fish or wildlife appearing on a list specified in section 6 of the Endangered Species Act of 1974, Act No. 203 of the Public Acts of 1974, being section 299.226 of the Michigan Compiled Laws.
- (2) The site represents what is identified as a locally rare or unique ecosystem.
- (3) The site supports plants or animals of an identified local importance.
- (4) The site provides groundwater recharge documented by a public agency.
- (5) The site provides flood and storm control by the hydrologic absorption and storage capacity of the wetland.
- (6) The site provides wildlife habitat by providing breeding, nesting or feeding grounds or cover for forms of wildlife, waterfowl, including migratory waterfowl and rare, threatened or endangered wildlife species.
- (7) The site provides protection of subsurface water resources and provision of valuable watersheds and recharging groundwater supplies.
- (8) The site provides pollution treatment by serving as a biological and chemical oxidation basin.
- (9) The site provides erosion control by serving as a sedimentation area and filtering basin, absorbing silt and organic matter.
- (10) The site provides sources of nutrients in water food cycles and nursery grounds and sanctuaries for fish.

(g) *Data.* In connection with the determination whether the wetland is essential to the preservation of the natural resources of the township, the property owner may make an election and response under subsection (1) or (2) below, relative to each noncontiguous wetland area less than two (2) acres:

- (1) In lieu of having the township or its consultant proceed with the analysis and determination, the property owner may acknowledge that one or more of the criteria in subsections (f)(1) through (10) above exist on the wetland in question, including a specification of the one or more criteria which do exist; or
 - (2) An election to have the township or its consultant proceed with the analysis on whether each of the criterion in subsections (f)(1) through (10) exist or do not exist in the wetland in question, including specific reasons for the conclusion in respect to each criterion.
- (Ord. No. C-229, 9-18-89; Ord. No. C-229/C-360, § 11, 5-23-94; Ord. No. C-229/C-360-A, § 1, 10-17-94; Ord. No. C-360-B, § 1, 4-7-97)

Sec. 12-92. Acts for which use permits not required.

Subject to the conditions of section 12-91, no use permit is required for use of a watercourse or wetland for:

- (1) Conservation of natural habitats, soil, vegetation, water, fish and wildlife.
- (2) Outdoor recreation including play and sporting areas, field trails for nature study, hiking and horseback riding, swimming, skin diving, boating, trapping, hunting (other than firearms) and fishing where otherwise legally permitted and regulated.
- (3) Grazing of animals.
- (4) Farming, horticulture, silviculture, lumbering and ranching activities, including plowing, irrigation, irrigation ditching, seeding, cultivating, minor drainage, harvesting for the production of food, fiber and forest products, or upland soil and water conservation practices, where otherwise legally permitted and regulated. Wetlands altered under this subsection shall not be used for a purpose other than a purpose described in this subsection without a permit from the township.
- (5) Noncommercial, seasonally installed docks extending not more than fifty (50) feet from the ordinary high water mark; provided, the dock does not extend into or obstruct the reasonable boat traffic area of the waterway.
- (6) Noncommercial rafts and diving platforms not exceeding one hundred fifty (150) square feet of area located not more than one hundred fifty (150) feet from the ordinary high water mark; provided, that the facility does not create a safety hazard, extend into or obstruct the reasonable boat traffic area of the waterway.

FLOODPLAIN, FLOODWAY, WATERCOURSE, WETLAND PROTECTION § 12-92

- (7) Noncommercial seasonally installed slides, swings and other water recreational devices erected upon bottomlands with ordinary high water depth not exceeding four (4) feet; provided, that the devices do not create a safety hazard or obstruct the reasonable boat traffic area of the waterway.
- (8) Maintenance or operation of serviceable structures in existence on October 1, 1980, or constructed pursuant to the Goemaere-Anderson Wetland Protection Act (Act No. 203 of the Public Acts of Michigan of 1979 (MCL 281.701 et seq., as amended).
- (9) Construction or maintenance of farm or stock ponds;
- (10) Maintenance operation or improvement, including straightening, widening or deepening of the following that is necessary for the production of harvesting of agricultural products:
 - a. An existing private agricultural drain.
 - b. That portion of a drain legally established pursuant to the Drain Code of 1956, Act No. 40 of the Public Acts of 1956, as amended, being sections 280.1 to 280.630 of the Michigan Compiled Laws, which has been constructed or improved for drainage purposes.
 - c. A drain constructed pursuant to other provisions of Act 203 of the Public Acts of 1979, as amended.
- (11) Construction or maintenance of farm roads, forest roads or temporary roads for moving mining or forestry equipment if the roads are constructed and maintained in a manner to assure that any adverse effect on the wetland will be otherwise minimized.
- (12) Drainage necessary for the protection and harvesting of agricultural products if the wetland is owned by a person who is engaged in commercial farming and the land is to be used for the production and harvesting of agricultural products. Except as otherwise provided in this chapter, wetland improved under this subsection after October 1, 1980, shall not be used for nonfarming purposes without a permit from the township. This subsection does not apply to a wetland that is contiguous to a lake or stream, or to a tributary of a lake or stream, or to a wetland that the township has determined by clear and convincing evidence to be a wetland that is necessary to be preserved for the public interest, in which case a permit shall be required.
- (13) Maintenance or improvement of public streets, highway or roads within the right-of-way and in such a manner as to assure that any adverse effect on the wetland will be otherwise minimized. Maintenance or improvement does not include adding extra lanes, increasing the right-of-way or deviating from the existing location of the street, highway or road.
- (14) Maintenance, repair or operation of gas or oil pipelines and construction of gas or oil pipelines having a diameter of six (6) inches or less if the pipelines are constructed, maintained or repaired in a manner to assure that any adverse effect on the wetland will be otherwise minimized.

- (15) Maintenance, repair or operation of electric transmission and distribution power lines and construction of distribution power lines if the distribution power lines are constructed, maintained or repaired in a manner to assure that any adverse effect on the wetland will be otherwise minimized.
- (16) Operation or maintenance, including reconstruction, of recently damaged parts of serviceable dikes and levees in existence October 1, 1980, or constructed pursuant to the Goemaere-Anderson Wetland Protection Act (Act No. 203 of the Public Acts of Michigan of 1979, (MCL 281.701 et seq., as amended).
- (17) Construction of iron and copper mining tailings basins and water storage areas.
(Ord. No. C-229, 9-18-89; Ord. No. C-229/C-360, § 12, 5-23-94)

Sec. 12-93. Permit denial; request for revaluation of affected property.

The owner(s) of any lot, outlot or parcel of land for which a use permit under this chapter is applied for and denied by the township may request a revaluation by the township board of review of the affected property for assessment purposes to determine its fair market value under the use restriction. A landowner who is aggrieved by a determination, action or inaction under this section may protect and appeal that determination, action or inaction pursuant to the General Property Tax Act, Act No. 206 of the Public Acts of 1893, being sections 211.1 to 211.157 of the Michigan Compiled Laws.

(Ord. No. C-229, 9-18-89; Ord. No. C-229/C-360, § 12, 5-23-94)

Sec. 12-94. Reserved.

Editor's note—Ord. No. C-360-F, § 2, adopted June 18, 2007, repealed § 12-94, which pertained to fast track permits and derived from Ord. No. C-360-C, § 1, adopted June 20, 2005.