

3.8 Environmentally Sensitive Areas Supplemental Standards

- A. **STATEMENT OF INTENT.** The intent of this Section is to regulate property near or within environmentally sensitive areas in order to:
1. Prevent physical harm, impairment, or destruction of or to such wetlands, water bodies, and watercourses. It has been determined that, in the absence of such a minimum setback and supplemental regulations, intrusions in or on to such areas would occur, resulting in harm, impairment or destruction of the same contrary to the public health, safety and general welfare.
 2. Protect wildlife habitat and habitat transition, including, without limitation, feeding, nesting, resting, and traveling areas for aquatic and terrestrial numerous animals.
 3. Minimize surface water run-off and protect water quality by implementing Low Impact Development (LID) and Best Management Practices (BMPs) for the purpose of preventing pollution, nutrient enrichment and ecological harm; and assistance in beneficial ground water recharge for drinking, irrigation, and other purposes.
 4. Provide water storage area during storm events.
 5. Preserve aesthetic views and areas for the human enjoyment of natural resources.
 6. Preserve unique, rare, threatened, and endangered species habitat, including upland species.
 7. Reduce the need for on-site and off-site storm water storage capacity based upon the availability of a greater area of absorption and a smaller impervious area.
 8. Stabilize and protect soil resources, including the prevention of erosion and prohibition of the loss due to moving water resulting in destruction of upland, structures and infrastructure on the upland, and prevention of the alteration of the course of moving waters.
 9. For floodplains, the purpose of the regulations are two-fold. One intent is to protect the health and safety of both the public and individuals, and to reduce the financial burden imposed upon the public and individuals by flood damage to property. To accomplish this the regulations are designed to protect the storage capacity of the floodplain and to assure retention of sufficient floodway area to convey flood flows. A second intent is to preserve environmental quality, to include the protection of wildlife habitat, natural vegetation, and water resources.
 10. Maintain the general site topography and any natural landforms unique to the property as much as possible to preserve the natural character.
 11. Balance the protection of the features of this Section with future development, where appropriate.
 12. Promote the goals of the East Bay Charter Township Master Plan.

B. RIPARIAN SETBACK AREAS.

1. Permitted Structures.

- a. No structure is permitted to be built within a required riparian setback area, except the following:
 - i. Retaining walls. Retaining walls landward of the ordinary high water mark shall require the Township Engineer to review to determine the retaining wall is integral to prevent an imminent loss to the principal structure or other critical facilities; otherwise, retaining walls are prohibited.
 - ii. Footbridges over streams, which shall comply with subsection G, Bridge Crossings.
 - iii. A maximum 5 feet wide staircase, path, or ramp, with a railing of maximum 4 feet in height is permitted and subject to the following requirements:
 - (A) Staircase, path, or ramp shall be constructed in a location and manner to avoid soil or slope failure, as verified by the Township Engineer.
 - (B) Stairways shall comply with all applicable building codes. Stairways shall not exceed 9 inches in height except when necessary to scale the slope they are meant to provide access along.
 - (C) Staircase, path, or ramp shall be constructive of a non-reflective material.
 - (D) Numerical requirements:
 - (1) Lots with less than 200 feet of water body or watercourse frontage may have one staircase, path, or ramp.
 - (2) Except for lots abutting the Boardman River, lots with 200 feet or greater of water body or watercourse frontage may have one additional staircase, path, or ramp. Except for lots abutting the Boardman River, lots with 200 feet or greater of water body or watercourse frontage with multiple units may have one staircase, path, or ramp per unit.
 - iv. One (1) uncovered temporary dock or temporary boat lift complying with the following standards:
 - (A) Dock shall not exceed 200 square feet in gross area. However, a larger square footage may be permitted if required to extend for sufficient water depth, as demonstrated by the applicant, so long as the extension does not interfere with navigable rights-of-way.
 - (B) Dock shall meet the accessory building side setback requirements, measured from the side lot line extended, pursuant to law.
 - (C) Railing height of such dock shall not exceed 4 feet.
 - (D) Only one dock is permitted per lot, with an additional dock permitted for lots with greater than 200 feet of water body or watercourse frontage.
 - (E) Dock shall be connected to the staircase, path, or ramp in by logical connection with a landing space designed and sized to the minimal extent possible.
 - (F) Temporary canopies of a lightweight material to cover a boat from precipitation are permitted.
 - (G) Dock or boat lift shall be constructed of a non-reflective material.

1. Purpose & Intent

2. Definitions

3. Zoning Districts

4. Use Standards

5. Site Standards

6. Development Procedures

7. Administration & Enforcement

- v. One (1) waterside deck shall be permitted per lot meeting the following requirements:
 - (A) The maximum area of a waterside deck shall be two hundred (200) square feet.
 - (B) Such waterside deck shall be mounted on pillars or posts with the deck surface placed at an elevation of at least six (6) inches and not more than sixty (60) inches above the mean grade beneath such deck.
 - (C) Such waterside deck shall be located not less than ten (10) feet from any side lot line.
 - (D) Such waterside deck shall be located not less than ten (10) feet from the ordinary high water mark
 - (E) Such waterside deck shall not have a roof or other permanent impervious surface. This section shall not be interpreted to prohibit roll-up canopies, umbrellas, or other temporary shade-providing furnishings.
 - (F) Such waterside deck shall be constructed of a non-reflective material.
 - (G) No walls or fences are built in conjunction with such waterside deck.
 - (H) Waterside decks within a riparian setback abutting Boardman River shall be limited to maximum 4' by 10' in area and shall be parallel with the river bank, but not extending over the edge of the river bank.
- 2. **Vegetative Buffer Strip.** Excepting a permitted structure per subsection B(1) above, the remaining portion of the required riparian setback area shall consist of a vegetative buffer strip. The vegetative buffer strip is intended to stabilize the riparian area, prevent erosion, absorb nutrients in water runoff from adjacent land, provide shading for the water body or watercourse to maintain cool temperatures, and screening of adjacent man-made structures. The following regulations apply:
 - a. **Size.** The vegetative buffer strip shall be a minimum 75' measured from the Boardman River ordinary high water mark or stream bank. For all other waterbodies and watercourses the vegetative buffer strip shall be a minimum 50' as measured from the ordinary high water mark or by stream bank.
 - b. **Composition.** Only trees, shrubs, and vegetation native to northern Michigan are permitted within the vegetative buffer strip.
 - c. When a new structure or alteration to an existing structure is proposed within the vegetative buffer strip, the entire vegetative buffer strip along the parcel's shoreline shall be restored, replanted, and renewed, even if the vegetative buffer strip was previously removed or nonexistent due to prior alterations or development at the site. An existing non-conforming structure is permitted to remain subject to Section 7.2 Nonconformities.
 - d. **Tree removal.**
 - i. The removal of live trees within the vegetative buffer strip without prior approval shall be deemed a violation of this section. A tree may be removed for emergency purposes to protect the health and safety of the public, but in those instances a minimum three (3) foot high stump shall remain.
 - ii. Replacement of the removed tree(s) shall be completed within 60 days, weather permitting, with a native species of tree measuring a minimum three (3) inches caliper for deciduous trees and six (6) feet in height for evergreens, in approximately the same location as the removed tree.



- iii. Oak trees shall not be trimmed or removed between April 15th through October 1st to avoid the spread of oak wilt.
 - iv. The Planning and Zoning Department shall approve the removal of a tree or trees associated with a proposed permitted structure as provided in subsection B(1) above, with the finding that the proposed structure is planned for in the most logical location reasonably possible, and:
 - (A) The removal of a tree or trees in such location prevents further removal of more mature, healthy, or environmentally or ecologically beneficial trees; or
 - (B) The removal of a tree or trees in such location prevents further shoreline or shoreland degradation; or
 - (C) The structure that causes the removal of a tree or trees is built or installed to the minimum scale necessary to achieve the goal of the structure (i.e. access to water body or water course, boat, or the extents of the subject property).
 - (D) The applicant provides evidence from a certified arborist that the removal of any applicable oak trees will not cause spread of oak wilt.
 - e. No disturbance to the vegetative buffer strip area is permitted, including but not limited to gardening, mowing, cutting, and soil tilling, unless part of a required vegetative buffer strip restoration in accordance with subsection B(2). Tree pruning is allowed so long as the pruning does not damage the tree's health and that a filtered view of the water remains. No structure shall be constructed or installed within the vegetative buffer strip, except the structures permitted by subsection B(1):
- 3. **Prohibitions.** The following structures, land uses, and designs are prohibited within a required riparian setback.
 - a. Artificial beaches.
 - b. Turf grass.
 - c. Chemical control and/or fertilization of vegetation.
 - d. Fences, except in the IND district.
 - e. Outdoor showers.
 - f. Storage of vehicles or motorized boats.
- 4. **Keyholing and Funneling.** Keyholing and funneling is prohibited.
- C. **EAST GRAND TRAVERSE BAY SETBACK.** No principal or accessory structures shall be permitted within 50 feet of East Grand Traverse Bay, as measured by the Ordinary High Water Mark, set at 580.5 feet above the International Great Lakes Datum 1985, as established by the U.S. Army Corps of Engineers and defined by the Michigan Natural Resources and Environmental Protection Act, as amended, with the following exceptions:
 - 1. Docks shall be permitted if permitted by the U.S. Army Corps of Engineers.
 - 2. Minor accessory buildings without permanent foundations are permitted so long as they meet all other setback and dimensional standards of this Ordinance."

1. Purpose & Intent

2. Definitions

3. Zoning Districts

4. Use Standards

5. Site Standards

6. Development Procedures

7. Administration & Enforcement

- D. **WETLAND BUFFER AREA.** A 25-foot undisturbed vegetative buffer strip shall be preserved around the boundary of any state-regulated wetland which is intended to remain on site. No structures are permitted within the 25-foot undisturbed vegetative buffer strip. Wetlands may be incorporated into a storm water management strategy provided that the wetland values will not be impaired and provided further that incorporation of the wetland will provide a net ecological benefit to groundwater and surface water.

E. **FLOOD HAZARD ZONES.**

1. **Flood Hazard Zone Boundaries.** Flood hazard zone boundaries shall coincide with the boundaries of the areas (i.e. the elevations) indicated within the limits of the 100-year flood boundary, which are termed "Special Flood Hazard Areas (SFHAs)," in the report entitled "The Flood Insurance Study East Bay Charter Township, Grand Traverse County, Michigan" with accompanying Flood Insurance Rate Maps (FIRM maps). If the SFHA designation is in dispute, or determined to be incorrect, the procedures for Flood Insurance Map amendment located in subsection E(3) below shall control.
2. **Permitted Uses Within Flood Hazard Zones.** Only the following uses and designs may be permitted in those portions of the flood hazard zones which are not a floodway, provided they are permitted within a given zoning district and compliant with the dimensional regulations of this Ordinance:
 - a. Residential and nonresidential structures provided that the building official certifies to the Planning Commission that the proposed provisions for flood resistant construction, flood proofing or elevation meet or exceed the standards set forth in the latest building code in effect in the Township.
 - b. Recreational uses such as parks, swimming areas, picnic grounds, ball fields, hiking or biking trails, and wildlife and nature preserves.
 - c. Residential support uses such as lawns, gardens, play areas, and parking areas which do not result in the filling in of floodplain areas.
 - d. Industrial and commercial support uses which are open in nature such as loading areas or parking areas which do not result in the filling in of any floodplain areas.
 - e. Utility facilities such as power plants, transmission lines, pipelines not crossing a lake or waterway, lighting facilities, and navigational and drainage aids.
 - f. Piers, boat ramps, bridges, and other such water related uses subject to approval by the water resources commission of the Michigan Department of Natural Resources.
 - g. Fencing of any type, provided that such fencing shall not be located in that portion of the floodplain that is a floodway or other areas essential to the conveyance of floodwaters.
 - h. Sidewalks, driveways, patios, and similar structures when constructed at grade.
 - i. Streets, railroads, and other rights-of-way.
 - j. Pavilions, open amphitheaters, detached garages, raised patios and decks, and other accessory structures provided they are properly anchored and made flood resistant and are not located in a floodway or other area essential to the conveyance of floodwaters.
 - k. Facilities for the storage and detention/retention of storm water.

3. **Revisions to the Floodplain Map.** All requests for changes or corrections to the FEMA floodplain map boundaries, flood elevations and other information shown on the map must be made by the applicant in accordance with FEMA procedures. The Township shall not approve uses, buildings or structures on the floodplain except in conformance with this Section, until FEMA officially notifies the Township of any revision.
 4. **Disclaimer of Liability.**
 - a. The degree of flood protection required by this Section is considered reasonable for regulatory purposes and is based upon engineering and scientific methods of study. Approval of the use of land under this Section shall not be considered a guarantee or warranty of safety from flood damage.
 - b. This Section does not imply that areas outside the flood hazard area overlay zone will be free from flood damage. This Section does not create liability on the part of the East Bay Charter Township or any officer or employee thereof for any flood damages that result from reliance on this Section or any administrative decision lawfully made thereunder.
 5. **Compliance with Subsection B Riparian Areas.** If the subject area is also regulated by subsection B, Riparian Setback Areas, the regulations of subsection B, Riparian Setback Areas, shall override conflicting regulations of this ordinance.
- F. **STEEP SLOPES PROTECTION.**
1. Land areas containing slopes of fifteen percent (15%) or greater are defined as steep slope areas.
 - a. No site disturbance shall be allowed on a steep slope area, except under the following circumstances:
 - i. Grading for a portion of a driveway accessing a single family dwelling unit when it can be demonstrated that no other routing which avoids slopes exceeding fifteen (15%) percent is reasonably possible.
 - ii. A maximum 5-foot wide staircase, path, or ramp, with a railing of maximum 4 feet in height is permitted.
 - iii. Upon submission of a report by a certified soil or geotechnical engineer indicating that the steep slope may be safely developed and execution of a provision agreeing to hold East Bay Charter Township harmless from any claims of damages due to approval of such development. If development is allowed to proceed under this subsection, no more than twenty (20%) percent of such areas must be developed and/or regraded or stripped of vegetation.
 - b. Areas containing existing steep slope areas shall be included as open space and not be a part of a building site. Such areas do not need to be activated for recreational open space, but 50% of such area shall count for any such recreational open space calculations in this Ordinance.
 2. The most significant slopes and ridgelines shall be maintained in their natural state by clustering development when possible.
 3. Large lots that will be developed in phases shall be graded in workable units following a scheduled timeline so that construction does not result in large areas left bare and exposed to seasonal runoff.

G. **BRIDGE CROSSINGS.** A bridge crossing a stream shall meet all of the following standards and regulations:

1. The bridge shall only provide passage for individuals on foot, including their pets; unicycles, bicycles, or tricycles; electric bicycles or tricycles; scooters, skateboards, roller skates, or roller blades; electric segways, scooters, or skateboards; and similar modes of transportation customarily used on non-motorized trails. In the Agricultural District the bridge may also be used to provide passage for farm animals and equipment.
2. The bridge shall span the entire stream with no abutments within the stream and shall be anchored no less than five (5) feet upland from the ordinary high-water mark.
3. The bridge shall comply with all requirements of the Michigan Department of Environment, Great Lakes, and Energy (EGLE) and shall obtain all required permits from EGLE prior to placement.
4. The bridge shall be constructed to the greatest extent possible perpendicular to the stream.
5. The bridge shall comply with the side yard setback requirements of the zoning district in which it is located.
6. The deck of the bridge shall be no more than 14 feet in width.
7. The bridge shall be constructed in compliance with the applicable code requirements of the latest edition of the Michigan Building Code in effect within the Township at the time the bridge is constructed.
8. The deck of the bridge shall be constructed of porous, or non-reflective material, such as stainless steel, galvanize steel, aluminum, plastic, composite decking, vinyl, or wood with spaces between or within individual pieces or boards that will allow water to pass between or within the pieces or boards.
9. Any pathway and boardwalks leading to the bridge shall not abut the stream and shall not be parallel to the stream. In addition, no pathway or boardwalk shall be constructed of concrete or asphalt within fifty (50) feet of the stream.
10. There shall be no more than one (1) bridge for every 1,000 feet of stream frontage on the same lot. Provided, however, lots with stream frontage of less than 1,000 feet shall be allowed one (1) bridge.

H. **GRADING, REMOVAL, AND FILLING OF LAND.** In an environmentally sensitive area defined by this Section, any grading which changes site elevation by more than three (3) feet or the use of land for the excavation, removal, filling or depositing of any type of earth material, topsoil, gravel, rock, garbage, rubbish or other wastes or by-products, is not permitted except under a grading permit. Grading permits must be issued before any building permits are issued. The Planning and Zoning Department may require a performance bond subject to Section 7.6 Performance Guarantees before the grading permit is issued. The following items are required for a grading permit, which shall be approved by the Planning and Zoning Department, or when designated by the Planning and Zoning Department, the Township Engineer. A grading permit is not a substitute for a Township Storm Water Management Permit.

1. **Grading Plans.** At a minimum, grading plans shall provide the following information:
 - a. The Site Plan Review submittal information requirements of Section 6.1 Site Plan Review.
 - b. Name, address, and telephone number of applicant, surveyor, and engineer. Surveyor and engineer shall stamp and seal the plans.

- c. Existing ground elevations by contours on not greater than one (1) foot intervals, or such topographic information satisfactory to the Planning and Zoning Department.
 - d. Proposed ground elevations on the site by contours on not greater than one (1) foot intervals. Spot elevations must be provided at all corners of the proposed building(s) and pavement.
 - e. Proposed finished floor, brick ledge, and walkout grade, and the lowest opening in the foundation
 - f. The location of all existing water, sanitary and storm sewers in the abutting streets or on the property.
 - g. Indicate the proposed method of drainage or storm water management in all yards. The direction of drainage in yards must be indicated using arrow symbols clearly identifiable on plans. All proposed and existing swales or ditches shall be shown with direction of flow.
 - h. Evidence of proper grading and elevation relationships to adjacent properties, which shall be maintained. All necessary grading shall complement natural landforms.
 - i. Additional grades as required by the Planning and Zoning Department or Township Engineer.
2. **Grading Inspection.** A surveyor's certification by a licensed professional surveyor shall be provided to the Planning and Zoning Department stating that the foundation is in the proper location, the setbacks are lawful, and the finished floor and lowest openings in the foundation are set at the design elevation shown on the approved Grading Plan at the following intervals:
- a. At the time the foundation walls are installed; and
 - b. After the proposed building has been framed and before the final certificate of occupancy is issued. At this time, the surveyor will be required to state the final grade, including, drive ways, side walks, drainage sewers, and drainage direction, were completed as shown on the approved Grading Plan.
- I. **LAND USE PERMIT OR SITE PLAN REVIEW REQUIREMENTS FOR ENVIRONMENTALLY SENSITIVE AREAS.** Any proposed structure or site alteration proposed within an environmentally sensitive area that requires adherence to this Section shall comply with the standards within Section 6.4 Land Use Permits or Section 6.1 Site Plan Review for a land use permit application or a site plan review application, respectively.

1. Purpose & Intent

2. Definitions

3. Zoning Districts

4. Use Standards

5. Site Standards

6. Development Procedures

7. Administration & Enforcement