



TOWN OF MANCHESTER-BY-THE-SEA
WETLANDS REGULATIONS
FOR ADMINISTERING
GENERAL BY-LAW ARTICLE XVII
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1. Statement of Authority.

1.1 **Authority.** These Wetlands By-Law Regulations ("Regulations") are promulgated by the Manchester-by-the-Sea Conservation Commission ("Commission") pursuant to authority granted in Section 3 of the Town of Manchester-by-the-Sea ("Town" or "MbtS") General Wetlands By-Law Article XVII ("By-Law") as adopted at Town Meeting on April 5, 2010 and effective May 24, 2010.

1.2 **Purpose.** These Regulations are intended to effectuate the provisions of the By-Law and to establish guidelines for submission of applications and the Commission's review of proposed activities within the Resource Areas and Resource Area Buffer Zones (as both are hereinafter defined). These Regulations shall have the force of law and are intended for use in administering the By-Law and nothing contained herein shall be construed as preempting or precluding more stringent protection of wetlands or other natural resource areas by federal or state law or their respective regulations.

1.3 **Interpretation.** These Regulations shall be interpreted and applied so as to be consistent with the By-Law. Except as specified herein, all of the standards, requirements, procedures, definitions and performance standards set forth in the Massachusetts Wetlands Protection Act, M.G.L. c. 131, §40 ("Act") and the regulations promulgated thereunder by the Massachusetts Department of Environmental Protection (MA DEP), currently found at 310 C.M.R. 10.00 et seq. ("MA Regulations"), are incorporated and made part of these Regulations as if restated herein. Where these Regulations are more stringent than the MA Regulations these Regulations shall apply and those provisions shall supersede the MA Regulations for the purposes of implementing the By-Law. In the event of any inconsistency in or between the By-Law and these Regulations, the more stringent provision will control.

1.4 **Revisions.** These Regulations may be revised from time to time by the Commission after public notice and hearing as required by the By-Law.

2. Definitions. In addition to the definitions found in the MA Regulations, the following terms shall have the meanings as set forth in the By-Law and in these Regulations:

2.1 "Abutter" means an owner of land sharing a common boundary or corner with the site of the proposed activity, including any land located:

- 2.1.1 directly across a street, way, river, stream, brook, channel, pond;
- 2.1.2 diagonally across from an intersection of roads; or
- 2.1.3 within 300 feet of the property line of the proposed activity, although an owner of land more than 300 feet across a body of water shall not be considered an abutter.

2.2 “Alter” or “Alteration” means that as defined in Section 2.2 of the By-Law.

2.3 “Alternatives Analysis” means an evaluation provided by an Applicant demonstrating that there are no Practicable Alternatives and substantially equivalent economic alternatives to the proposed activity that are consistent with the provisions of the By-Law and these Regulations and that would have a less Significant Immediate or Cumulative Adverse Effect to the Resource Area or the Resource Area Buffer Zone. The Alternatives Analysis shall include, at a minimum;

- 2.3.1 an alternative that does not alter the Resource Area or Resource Area Buffer Zone, and which will provide baseline data for evaluating other alternatives; and
- 2.3.2 an assessment of alternatives to both temporary and permanent impacts to Resource Area or Resource Area Buffer Zone, including configurations that would avoid, minimize, and mitigate disturbance and Alteration including:
 - 2.3.2.1 Moving the proposed project outside of or farther away from the Resource Area or Resource Area Buffer Zone; and
 - 2.3.2.2 Reducing the size of the proposed project.

2.4 “Applicant” means any person who files an Application.

2.5 “Application” means a Request for Determination of Applicability (“RDA”), Abbreviated Notice of Resource Area Delineation (“ANRAD”), Request for Letter Permit (“RLP”), Notice of Intent (“NOI”), or Request for a Certificate of Compliance (“RCOC”) in a form prescribed by Appendix A of these Regulations, together with all plans or other documents provided by the person seeking a determination or permit for an activity subject to the By-Law.

2.6 “Bank” means that as defined in Section 2.3 of the By-Law.

2.7 “Clean Fill” means soil, sediment, stones, sand and rocks in all cases unaffected by the release of a contaminant or contaminated substance and free of debris, construction materials and substantial quantities of organic material.

2.8 “Clear and Convincing Evidence” means that the Credible Evidence presented is substantially more likely true, than not.

2.9 “Coastal Bank” means the seaward face or side of any elevated landform, other than a coastal dune, which lies at the landward edge of a coastal beach, land subject to tidal action, or other coastal wetland. See definition for “Top of Coastal Bank” in Section 2.31.

2.10 “Credible Evidence” means factual information from a competent source and developed using acceptable scientific methodology or best available reliable practices or which is based on personal knowledge. A competent source includes, but is not limited to, the MA DEP, Commission members, the Commission Administrator, or from a professionally qualified individual.

2.11 “Determination” means a written finding by the Commission, in a form prescribed by these Regulations, as to whether or not a proposed activity or Alteration to a Resource Area or Resource Area Buffer Zone:

2.11.1 is subject to the Act or the By-Law;

2.11.2 is significant to one or more of the interests identified in the Act or the By-Law; or

2.11.3 is not significant to one or more of the interests identified in the Act or the By-Law.

2.12 “Freshwater Wetlands” means wet meadows, marshes, swamps and bogs, and areas where the topography is low and flat and where soils are annually saturated such that groundwater, flowing or standing surface water or ice provides a significant part of the supporting substrate for a plant community. Freshwater Wetlands may border creeks, Rivers, Streams, Ponds, Lakes or other bodies of water or wetlands, or they may be isolated. Freshwater Wetlands also include that portion of any Bank, which touches any inland waters. The boundary of Freshwater Wetlands is the line within which the vegetation community is substantially characterized by wetland indicator plants, as defined in the Act and the MA Regulations and within which Hydric Soils (as hereinafter defined) or other indicators of wetland hydrology are present.

2.13 “Hydric Soils” means a soil which, in its undrained condition, is saturated, flooded or ponded long enough during the growing season to develop anaerobic conditions which favor the growth and regeneration of hydrophytic (wetland) vegetation. Specific identification of Hydric Soil conditions are based on the most current version of “*Field Indicators for Identifying Hydric Soils in New England*” issued by the New England Hydric Soils Technical Committee.

2.14 “Letter Permit Activity” means:

2.14.1 Maintenance;

2.14.2 Routine Stream or Brook Clearance;

- 2.14.3 Routine Tree Removal;
- 2.14.4 an activity which is more than 50 feet from a Resource Area and which does not:
 - 2.14.4.1 include the excavation or disturbance of soil;
 - 2.14.4.2 include the addition of fill material;
 - 2.14.4.3 increase impervious surfaces; or
 - 2.14.4.4 remove native vegetation
- 2.14.5 The following activities meeting the requirements of 2.14.4 above, including but not limited to:
 - 2.14.5.1 Unpaved pedestrian walkways for private use;
 - 2.14.5.2 Fencing, provided it will not constitute a barrier to wildlife movement; stonewalls; stacking of cordwood;
 - 2.14.5.3 Vista Pruning;
 - 2.14.5.4 planting of native trees and shrubs; but excluding turf lawns;
 - 2.14.5.5 the conversion of impervious to vegetated surfaces, provided erosion and sedimentation controls are implemented during construction;
 - 2.14.5.6 activities that are temporary in nature, have negligible impacts, and are necessary for planning and design purposes (e.g., installation of monitoring wells, exploratory borings, sediment sampling and surveying)

2.15 “Maintenance” means the work or activity of keeping a structure in proper condition but not moving, enlarging, or substantially changing, either by physical structures, additional structures, landscaping, or usage.

2.16 “Minor Activity” means activities that are temporary in nature and which have a negligible impact on the Resource Area Buffer Zone, including:

- 2.16.1 Seasonal storage of boats or floats;
- 2.16.2 Fencing, maintenance of existing stone walls, and stacking of cordwood, provided it will not constitute a barrier to wildlife movement;
- 2.16.3 Plantings of native noninvasive species of trees, shrubs, or groundcover, but not turf lawns;
- 2.16.4 Mowing and maintenance of existing turf lawns;
- 2.16.5 Seasonal placement of lawn furniture or temporary erection of event tents;
- 2.16.6 Vista Pruning provided the activity is located more than 50 feet from:
 - 2.16.6.1 the mean annual high water line within a Riverfront Area;
 - 2.16.6.2 a Resource Area, excluding the Resource Area Buffer Zone;

2.16.7 Pruning of existing landscaped areas.

2.17 “No Build Zone” means the fifty (50) feet horizontally landward of those Resource Areas included in Sections 2.17.1 and 2.17.2 in which there shall be no construction or installation of any Structures. The No Build Zone includes the area fifty (50) feet horizontally landward of:

2.17.1 the edge of any salt marsh, freshwater wetland or vernal pool; or

2.17.2 the top of coastal bank, or the top of the bank of any stream or river

2.18 “No Disturb Zone” means the thirty (30) feet horizontally landward of those Resource Areas included in Sections 2.18.1 and 2.18.2 in which there shall be no Alteration. The No Disturb Zone includes the area thirty (30) feet horizontally landward of:

2.18.1 the edge of any salt marsh, freshwater wetland or vernal pool; or

2.18.2 the top of coastal bank, or the top of the bank of any stream or river

2.19 “Permit” means the document, in a form prescribed by these Regulations that authorizes work or activity subject to the jurisdiction of the Act and/or the By-Law. The Permit includes any findings of fact and conclusions of law, which the Commission may make, and any conditions imposed by the Commission to preserve the values protected by the Act or the By-Law.

2.20 “Person” means that as defined in Section 2.5 of the By-Law.

2.21 “Pond” means that as defined in Section 2.6 of the By-Law.

2.22 “Practicable Alternative” means that as defined in Section 2.7 of the By-Law and shall be demonstrated by an Alternatives Analysis.

2.23 “Preponderance of Credible Evidence” means that the Credible Evidence presented is more likely true, than not.

2.24 “Resource Area” means that as defined in Section 4.1 of the By-Law.

2.25 “Resource Area Buffer Zone” means that as defined in Section 4.2 of the By-Law.

2.26 “Routine Stream or Brook Clearance” means the removal, by hand using non-powered tools, of accumulated debris to restore the natural water flowage, which removal does not change width, depth, or direction of flow as it existed prior to accumulation of the debris, provided that the work does not impair surface water or groundwater quality. Routine Stream or Brook Clearance cannot occur without:

2.26.1 prior notification to the Commission Administrator;

- 2.26.2 a prior site visit by the Commission Administrator, if required; and
- 2.26.3 strict compliance with any protocols, restrictions and conditions issued by the Commission Administrator.

2.27 “Routine Tree Removal” means the removal of not more than four dead or diseased trees. Routine tree removal cannot occur without:

- 2.27.1 prior notification to the Commission Administrator; and
- 2.27.2 strict compliance with any protocols, restrictions and conditions issued by the Commission Administrator.

2.28 “Significant Immediate or Cumulative Adverse Effect” means an impact that would under reasonable assumptions result in a measurable decrease in the function of a Resource Area protected by the By-Law at the site or proximal to the site, taking into consideration past losses, current conditions and the projected impacts of reasonably foreseeable future work resulting in similar, comparable, or other discernible impact and disturbance, as determined by the Commission. When an activity that may not be significant in and of itself, or incremental activities that may not be significant in isolation, but cumulatively have an adverse impact, that activity may have a Significant Immediate or Cumulative Adverse Effect. Determination of Significant Immediate or Cumulative Adverse Effect shall be made on case by case basis, considering all relevant evidence presented and which shall include but not be limited to attritional loss and history of activities within Resource Areas.

2.29 “Stream” means that as defined in Section 2.8 of the By-Law.

2.30 “Structure” means a building, deck, porch, pool (in-ground and above-ground), shed, fence, hardscaping (patios, stone walls, terraces and steps, etc.) or any construction requiring a building permit.

2.31 “Top of Coastal Bank” means:

- 2.31.1 The seaward face or side of any elevated landform, other than a coastal dune, which lies at the landward edge of a coastal beach, land subject to tidal action, or other wetland" as defined in MA DEP Wetland Program Policy 92-1 (DWW Policy 92-1, issued: March 3, 1992 and as revised).
- 2.31.2 The Commission may require that the Applicant provide evidence of a top of coastal bank delineation by supplying transect analyses of slopes along the coastal bank as prescribed in MA DEP Wetland Program Policy 92-1. The Commission may reject

delineations that use selective points along the coastal bank to define the top of the coastal bank rather than points that are representative of the entire landform.

(See definition for “Coastal Bank” in Section 2.9.)

2.32 “Vernal Pool” means that as defined in Section 2.9 of the By-Law.

2.33 “Vista Pruning” means the selective thinning of tree branches or understory shrubs to establish a specific "window" to improve visibility. Vista pruning does not include the cutting of trees which would reduce the leaf canopy to less than 90% of the existing crown cover and does not include the mowing or removal of understory brush.

2.34 “Wetland Indicator Species” means, but not necessarily be limited to, those plant species identified in the Act. Wetland Indicator Species are also those classified in the indicator categories of Facultative, Facultative+, Facultative Wetland-, Facultative Wetland, Facultative Wetland+, or Obligate Wetland in the most current version of the *“National List of Plant Species That Occur in Wetlands: Massachusetts”*, Fish & Wildlife Service, U.S. Department of the Interior.

3. Jurisdiction. Except as permitted by the Commission pursuant to these Regulations or as otherwise allowed by the By-Law, no person shall commence to alter a Resource Area or Resource Area Buffer Zone.

4. General Provisions

4.1 **Exemptions and Exceptions.** Exemptions and exceptions to the filing of a NOI shall be governed by Section 5 of the By-Law.

4.2 **Minor Activity.** In addition to the exemptions and exceptions contained in Section 5 of the By-Law, a Minor Activity shall be permitted within the Resource Area Buffer Zone or Riverfront Area, provided the activity is not within any other Resource Area.

4.3 **Advice from Town Staff.** Any advice, opinion or information given to an Applicant by a Commission member, the Commission Administrator, or by a department, commission, officer or employee of the Town shall be considered advisory only and shall not be binding on the Commission.

4.4 **Resource Area Review Periods.**

4.4.1 Resource Area boundary delineations, however requested, shall be reviewed only between April 15 and October 1 of each year, unless the Commission grants a waiver

due to low probability of error on a particular site. Delineations may be reviewed at the sole discretion of the Commission between October 2 and April 14, and shall be reviewed only when site conditions are such that the Commission believes they can adequately review the relevant resource area indicators (e.g., soils, vegetation, topography, hydrology). Where the Commission finds that the Wetland Indicator Species cannot be accurately evaluated because of recent or ongoing disturbance, the Commission may require that site soils and hydrology be examined, or that the delineation be postponed until such time that the natural plant community has regenerated and grown or until the end of the next growing season.

4.4.2 Vernal Pool Determinations shall be tied explicitly to the appropriate periods during which the evidence is most likely to be available, in that many of the indicators of vernal pool habitat are seasonal. In response to any challenge to the presumption of vernal pool habitat, the Commission may require that the determination be postponed until the appropriate time period consistent with the evidence being presented and may also require site visits as necessary to confirm the evidence.

5. Applications and Plans

5.1 **Filing of Application.** Except as provided in Section 4 of these Regulations, any Person who desires a Determination under the Act or the By-Law shall submit an Application in accordance with the specifications outlined in Appendix A of these Regulations. The Application shall be filed with and acted upon by the Commission prior to commencing or performing any activity affecting a Resource Area or Resource Area Buffer Zone.

5.2 **Receipt and Acceptance of an Application.** Where the Commission receives an Application, confirmation of that receipt may be given by the Commission, its Administrator, or individual designated by the Commission to receive an Application.

5.2.1 The Application must be complete as described in Section 5.3 of these Regulations.

5.2.2 The Application shall be inspected for completeness in accordance with the requirements of these Regulations, the Act and the MA Regulations.

5.2.3 Where the Application is deemed incomplete, the Application shall not be accepted, and the Application shall be returned within seven (7) business days of receipt with a written reason for the non-acceptance.

5.3 Complete Applications. An Application shall be deemed filed and complete pursuant to the By-Law if it includes the forms, data, plans, fees, requisite copies and other requirements as then set forth in Appendix A and as directed by the Commission and the Conservation Administrator.

5.4 Publication. The Applicant shall be responsible for paying, in advance, for the publication of the legal notice of the public meeting in a newspaper of general circulation in the Town, to be arranged by Conservation staff unless otherwise directed, and shall certify to the Commission that the owner of the area subject to the request, if the Applicant is not the owner, has been notified that a determination is being requested.

5.5 Plans. All plans, drawings, sketches and calculations submitted in accordance with the requirements set forth in Appendix A shall describe the proposed activity and its effect on the environment and be legible, dated and signed by the persons responsible for their preparation.

5.5.1 Plans and drawings involving the practice of surveying or engineering shall be stamped and signed by a properly licensed professional surveyor or engineer. Septic system design plans shall be stamped and signed by a properly licensed professional surveyor, engineer or a Registered Sanitarian.

5.5.2 Plans shall be consistent with those submitted to other Town boards and departments.

5.5.3 The plan content requirements specified in Appendix A, are not definitive or exclusive and the Commission may, in its sole discretion:

5.5.3.1 waive any of the submission standards if it considers the standards inapplicable or not necessary to reach a Determination; or

5.5.3.2 require the submittal of additional information deemed necessary to reach a Determination.

5.5.4 Any request for a waiver from these requirements from an Applicant must be submitted to the Commission in writing at the time of application.

5.6 Timely Submittal of Additional Information. In order to provide sufficient review time the Commission may continue a public hearing or meeting if new information is submitted by the applicant or applicant's agent, less than 7 business days before the scheduled public hearing or meeting.

6. Fees.

6.1 Application Fees. At the time of filing an Application the Applicant shall pay a filing fee as specified in the Fee Table contained in Appendix B, which is in addition to that required by the

MA Regulations. All fees are not refundable and failure to pay the applicable filing fees when due shall cause the Application to be deemed incomplete. The Commission may, in its sole discretion, waive the filing fee for an Application filed by a town, state or federal entity or by any Applicant that demonstrates significant financial hardship.

6.2 Consultant's Fees. The Commission may impose reasonable fees upon Applicants for the purpose of securing outside consultants in accordance with Sections 6.5 through 6.10 of the By-Law.

7. Notice and Hearings.

7.1 Notices. Any person filing an Application with the Commissions shall comply with the notice requirements of Sections 7.1 through 7.3 and Section 8 of the By-Law.

7.2 Public Hearing. The Commission:

- 7.2.1 shall conduct a public hearing on any Application in accordance with the Act and Sections 7.4 through 7.7 of the By-Law;
- 7.2.2 determines the order of the presentations and public participation at the public hearing;
- 7.2.3 shall conduct the public hearing in an orderly fashion and may stop a hearing for cause;
- 7.2.4 Chair may delegate the responsibility for conducting any public hearing to any other Commission member; and
- 7.2.5 when taking action, shall have said action to be taken by more than half the members present at a meeting of at least a quorum, a quorum being a majority of the members then in office.

8. Burden of Proof.

8.1 General Standard. Except as set forth in Section 8.2 of these Regulations, an Applicant shall have the burden of proving by a Preponderance of the Credible Evidence that any work or activity proposed in an Application will not have a Significant Immediate or Cumulative Adverse Effect upon the wetland values protected by the By-Law.

8.2 Specific Standard. An Applicant shall have the burden of proving by a Clear and Convincing Evidence that any work or activity proposed in a Resource Area (other than land subject to flooding or inundation by groundwater, or surface water or coastal storm flowage or flooding) or

a No Disturb Zone, will not have a Significant Immediate or Cumulative Adverse Effect upon the wetlands values protected by the By-Law.

8.3 Failure To Meet Burden. An Applicant's failure to provide Credible Evidence to the Commission in accordance with the applicable burden of proof shall be sufficient cause for the Commission to:

- 8.3.1 determine that progress is not being made to procure the information it has requested, close the public hearing, with or without the consent of the Applicant, and vote on the information currently in the record;
- 8.3.2 request permission to continue the hearing in order that the Applicant or others may present additional information;
- 8.3.3 grant a Permit with conditions; or
- 8.3.4 deny a Permit.

9. Performance Standards.

9.1 General Performance Standards. Except as otherwise specifically provided in these Regulations, the Commission shall apply the performance standards contained in the MA Regulations, and all presumptions of significance contained therein, shall extend to the Resource Area, Resource Area Buffer Zone and values protected by the By-Law.

9.2 Additional Performance Standards. In addition to the performance standards contained in the MA Regulations, and all presumptions of significance contained therein, the performance standards set forth for the Resource Areas referenced in Sections 9.3 through 9.8 shall be additionally applied, and shall also carry a presumption that any proposed Alteration shall have a Significant Immediate or Cumulative Adverse Effect.

9.3 Salt Marsh. Prior to the issuance of a permit for work or activity which Alters or potentially Alters a Salt Marsh, the Applicant shall demonstrate by Clear and Convincing Evidence as set forth in an Alternatives Analysis that there is no Practicable Alternative to the work or activity proposed. Any Alteration which blocks sunlight so as to likely result in a loss of underlying vegetation in a salt marsh will require a minimum replacement standard of not less than 150% as specified under "Mitigation" in Section 12.4. The Commission, in its sole discretion, may require replacement with an area greater than the 150% minimum standard. In exercising this discretion, the Commission shall consider the nature and significance of the salt marsh, the topography and other characteristics of the locus, the difficulty of replacement, the area of land available, and other such factors as the Commission may determine to be relevant in a particular

case. The Commission, in its sole discretion, may not require replacement, even to the minimum standard, when the alteration is temporary and complete restoration and function of the salt marsh disturbed area can be achieved.

Small projects proposed in a Salt Marsh, such as elevated walkways, docks, piers, or floats, which have no adverse effects other than blocking sunlight from the underlying vegetation for a portion of each day, may be permitted but at a minimum shall follow those standards as described in MA DEP's "Small Docks & Piers" (November 2003 and as revised). The Commission, in its sole discretion, may require that additional or more stringent standards than those described in this document be used if conditions warrant.

9.4 Freshwater Wetlands. Prior to the issuance of a permit for work or activity which Alters a Freshwater Wetland, the Applicant shall demonstrate by Clear and Convincing Evidence as set forth in an Alternatives Analysis that there is no Practicable Alternative to the work or activity proposed. Any Alteration which diminishes the surface area of a Freshwater Wetland will require a minimum replacement standard of not less than 150% as specified under "Mitigation" in Section 12.4. The Commission, in its sole discretion, may require replacement with an area greater than the 150% minimum standard. In exercising this discretion, the Commission shall consider the nature and significance of the Freshwater Wetlands, the topography and other characteristics of the locus, the difficulty of replacement, the area of land available, and other such factors as the Commission may determine to be relevant in a particular case. The Commission, in its sole discretion, may not require replacement, even to the minimum standard, when the alteration is temporary and complete restoration and function of the Freshwater Wetlands disturbed area can be achieved.

9.5 Stream. Prior to the issuance of a permit for work or activity which Alters a Stream, the Applicant shall demonstrate by Clear and Convincing Evidence as set forth in an Alternatives Analysis that there is no Practicable Alternative to the work or activity proposed. Any Alteration which may adversely affect the water quality of a stream (as measured by sediments, nutrients, bacteria, temperature, dissolved oxygen, and toxic chemicals) or its ability to support fish and other aquatic life shall be presumed to have a Significant Immediate and Cumulative Adverse Effect to the Stream and values protected by the By-Law.

9.6 Coastal Bank. Prior to the issuance of a permit for work or activity which Alters a Coastal Bank, the Applicant shall demonstrate by Clear and Convincing Evidence as set forth in an Alternatives Analysis that there is no Practicable Alternative to the work or activity proposed.

The preferred stabilization methods for coastal banks include, but are not limited to, protective plantings and other non-structural stabilization techniques. Any Alteration which includes new, or the expansion of existing, coastal engineering structures such as, but not limited to, bulkheads, revetments, seawalls, or groins shall not be permitted without Clear and Convincing Evidence that:

- 9.6.1 the structure can be constructed to maintain structural integrity and stability for at least twenty-five (25) years at the locus; and
- 9.6.2 there is no other technically feasible method of protecting a building or property other than the proposed coastal engineering structure and that any such structure shall not have an adverse impact on adjacent or nearby coastal banks, beaches or dunes.

9.7 Vernal Pool. Prior to the issuance of a permit for work or activity which Alters a Vernal Pool, the Applicant shall demonstrate by Clear and Convincing Evidence as set forth in an Alternatives Analysis that there is no Practicable Alternative to the work or activity proposed. Any Alteration which impacts the topography, soil structure, plant community composition, vegetation canopy or understory, hydrologic regime, drainage patterns, migratory paths of Vernal Pool species and/or water quality of a Vernal Pool shall be presumed to have a Significant Immediate and Cumulative Adverse Effect to the Vernal Pool and the wetlands values protected by the By-Law.

9.8 Lands Under Any Water Body, specifically Land Under Ocean. Prior to the issuance of a permit for work or activity which alters Land Under Ocean, the Applicant shall demonstrate by Clear and Convincing Evidence as set forth in an Alternatives Analysis that there is no Practicable Alternative to the work or activity proposed. Any Alteration, other than improvement or maintenance dredging for navigational purposes, which alters water circulation; destroys any plant(s), including eelgrass (*Zostera marina*) or widgeon grass (*Ruppia maritima*) beds; alters the distribution of sediment grain size; changes water quality, including, but not limited to, other than natural fluctuations in, the level of dissolved oxygen, temperature or turbidity, or the addition of pollutants; or alters shallow submerged lands with high densities of polychaetes, mollusks or macrophytic algae, shall be presumed to have a Significant Immediate and Cumulative Adverse Effect to Land Under Ocean and the wetlands values protected by the By-Law.

10. Establishment of the No Build Zone and the No Disturb Zone within the Resource Area Buffer Zone.

10.1 Resource Area Buffer Zones. Resource Area Buffer Zones are essential for protection of Resource Areas in that they reduce adverse impacts to the wetland functions and values from nearby activities and a naturally vegetated Resource Area Buffer Zone functions to protect the wetland values included in the By-Law. In order to protect the Buffer Zone and its adjacent Resource Area(s), a 30 (thirty) foot No Disturb Zone and a 50 (fifty) foot No Build Zone have been established to limit the types of activities that are permitted in the first 50 feet of the Buffer Zone to the edge of any saltmarsh, freshwater wetland, vernal pool, the top of a coastal bank or the top of any bank of any stream or river.

10.1.1 No Build Zone. When an activity involving construction or installation of Structures is proposed in the No Build Zone, the Commission shall presume that such activity will have a Significant Immediate or Cumulative Adverse Effect on the Resource Area and wetland values protected by the By-Law. The Commission's presumption is rebuttable, and may be overcome:

10.1.1.1 upon the Applicant's demonstration, by a Preponderance of Credible Evidence as set forth in an Alternatives Analysis, that there is no Practicable Alternative to the proposed activity which would have a materially less Significant Immediate or Cumulative Adverse Impact to the Resource Area. Any proposals for new Structures in the No Build Zone shall be accompanied by a Waiver Request as defined in Section 12.1.

10.1.2 No Disturb Zone. When a proposed activity involves an Alteration in the No Disturb Zone, the Commission shall presume that such activity will have a Significant Immediate or Cumulative Adverse Effect on the Resource Area. The Commission's presumption is rebuttable, and may be overcome:

10.1.2.1 upon the Applicant's demonstration, by Clear and Convincing Evidence as set forth in an Alternatives Analysis, that there is no Practicable Alternative to the proposed activity which would have a materially less Significant Immediate or Cumulative Adverse Impact to the Resource Area. Any proposals for Alteration in the No Disturb Zone shall be accompanied by a Waiver Request as defined in Section 12.1.

11. Construction/Demolition Methods and Stormwater Management.

11.1 Construction/Demolition Methods. An Applicant shall provide the Commission with a description of construction and/or demolition methods and, in particular, measures to minimize erosion, pollution, and damage to the biological environment and Resource Areas by activities both within and beyond the actual construction area, including, at a minimum, the:

- 11.1.1 establishment and maintenance of erosion control during construction/demolition, including sedimentation ponds and slope protection;
- 11.1.2 protection of stripped and/or cleared areas of the site during extended shutdown due to weather, economic conditions, or any other cause;
- 11.1.3 stockpiling of excavated wetland spoil on the site or the transportation to offsite locations, as applicable;
- 11.1.4 proposed sequence of construction/demolition of retaining basins, vegetation clearing and filling, grading or excavating;
- 11.1.5 prevention of construction/demolition vehicles or equipment from transporting or depositing mud, dirt or debris on roadways as they enter or leave the site;
- 11.1.6 timely removal of erosion control measures after the site has been stabilized; and
- 11.1.7 installation of any Clean Fill to be placed or utilized during construction/demolition, including the identification of the source of the Clean Fill and an affirmation that the material meets the definition of Clean Fill.

11.2 Stormwater Management. The provisions of the Stormwater Management Standards as set forth in the MA Regulations, shall apply to all projects or activities subject to the By-Law, except those defined in Sections 11.2.1 through 11.2.3, including all industrial, commercial, institutional, residential, and roadway projects and shall consider site preparation, construction, redevelopment, and on-going operations. At its sole discretion, the Commission may waive Stormwater Management Standards for small residential projects with the exception of “Standard 1” which requires that no new stormwater conveyances (e.g. outfalls) discharge untreated stormwater directly to or cause erosion in wetlands or waters of the Commonwealth. Small residential projects that may qualify for waivers are:

- 11.2.1 Septic system upgrades where no other work is proposed;
- 11.2.2 Projects that clearly improve the Resource Areas and buffer zones capacity to infiltrate stormwater such as removal of paved surfaces, the use of low impact design or the planting of native vegetation;
- 11.2.3 Projects in the outer 50 (fifty) feet of the buffer zone to a Resource Area or the outer 100 (one-hundred) feet of the Riverfront Area that increase impervious areas by less

than 600 (six-hundred) square feet. If the cumulative increase of impervious areas on the property and contiguous land of the same owner (now or previously) exceeds 600 (six-hundred) square feet, the waiver from the standards shall not be granted.

12. Waiver Requests and Required Mitigation.

12.1 Waiver Request requirements. Requests for waivers shall be made in writing and submitted with the NOI application. The request shall include, at a minimum, the information listed in Sections 12.1.1 through 12.1.4 and identification of all provisions of the By-Law and these Regulations from which a waiver is requested.

12.1.1 An Alternatives Analysis as defined in Section 2.3;

12.1.2 A description of the mitigating measures, as set forth in Section 12.4 to be used to contribute to the protection of the wetland values protected by this By-Law;

12.1.3 Evidence that an overriding public interest is associated with the project which justifies modifying one or more performance standards in these Regulations, if applicable; and

12.1.4 Evidence that the decision regarding the permit application would so restrict the use of the land that it constitutes an unconstitutional taking without compensation, if applicable. For the purposes of these Regulations, a regulatory taking is defined as the elimination of all, or almost all, of a property's economic value.

12.2 Action by the Commission on Waiver Requests. The Applicant shall have the burden of proving, to the satisfaction of the Commission, that all of the waiver requirements listed in this Section have been satisfied. The Commission may impose conditions, safeguards, and limitations in a waiver to protect further the values and interests protected by the By-Law or the intent or purpose of the By-Law.

12.3 Reasons for Denial of a Waiver

12.3.1 The cumulative alteration of wetlands on the property and contiguous land of the same owner (now or previously) exceeds five thousand (5000) square feet or five (5%) percent (whichever is less);

12.3.2 Subdivision of the land has left the property without upland access, or another prior action of the current or previous owner has created the need for the proposed project to require a waiver; or

12.3.3 The judgment of the Commission is that the mitigation proposed is insufficient, or unproven, to protect the values and interests of the By-Law.

12.4 Mitigation. In cases where a waiver is granted, the Commission shall require mitigation measures to be implemented to offset potential impacts to the Resource Areas and the Resource Area Buffer Zones. The mitigation must maintain or improve the natural capacity of a Resource Area and the buffer zones to achieve the values protected by the By-Law. The mitigation shall be commensurate with the scope of the project's impacts and shall be implemented to offset potential impacts to Resource Areas. In its discretion, the Commission may require that mitigation be implemented and demonstrated to be functioning before alterations permitted by the waiver may implemented.

12.4.1 Fresh Water and Salt Marsh Wetlands. The Commission strongly discourages any plan that requires resource replication as scientific reviews conclude that, for the most part, replications fail to reproduce the range of values – in quantity and quality – of the resource areas they ostensibly replace. Alteration may be allowed when said areas are replaced or restored according to the following criteria:

- 12.4.1.1 Wetlands replacement of at least a 1.5:1 ratio (replicated wetland to altered wetland);
- 12.4.1.2 Wetlands restoration (the removal of invasive plant species, debris, and poor soils and the planting of native wetland species in a degraded wetland) must be at least a 2:1 ratio (restored wetland to altered wetland);
- 12.4.1.3 Replicated wetlands shall be made contiguous to existing wetlands unless the applicant is able to demonstrate that another location (adjacent to other resource areas) would have a greater ability to protect the interests of the Act and the By-Law;
- 12.4.1.4 Replicated areas must be constructed prior to other construction activity on site. The applicant shall have the burden of proving where this requirement may not be appropriate to the interests of the Act and the By-Laws in certain instances;
- 12.4.1.5 Wetland soils from the altered wetland shall be excavated and kept intact to the greatest extent possible and used for the replicated wetland when these soils are suitable for such purpose;

- 12.4.1.6 A combination of natural re-seeding, transplanting, and new plantings shall be used to reestablish a vegetated community and structural diversity similar to the disturbed area;
 - 12.4.1.7 At least 75% of the surface area of the replicated area must be established with native wetland plant species within two (2) growing seasons. If this condition is not met, the applicant must propose and implement corrective steps to be approved by the Commission;
 - 12.4.1.8 Colonization of invasive species shall be documented and controlled. Evidence of the spread of invasive species within a replication area shall require the development and implementation of a management/control plan;
 - 12.4.1.9 A qualified wetland scientist chosen by the Commission, and hired at the applicant's expense shall monitor replicated wetlands twice a year for a total of three years and submit written reports to the Commission (May and October unless otherwise required by the Commission); and
 - 12.4.1.10 Any replication or restoration work that creates a resource area on abutting properties shall require an easement from the abutting property owner covering the full extension of the resource area on that property prior to commencement of the work.
- 12.4.2 No Disturb Zone. The Commission strongly discourages any plan that requires mitigation of proposed alteration to a No Disturb Zone. Alteration may be allowed when:
- 12.4.2.1 Mitigation is proposed in the form of the abutting Resource Area replication or restoration according to the criteria set forth in Sections 12.4.1.1 through 12.4.1.10, or
 - 12.4.2.2 Mitigation is proposed by reclaiming and restoring all or part of a No Disturb Zone which is currently turf grass (lawn), contains invasive species, or otherwise is disturbed to an area that is naturally vegetated with native species at a ratio of at least 2:1 (restored area to disturbed area).
- 12.4.3 No Build Zone. The Commission strongly discourages any plan that requires mitigation of proposed alteration to a No Build Zone. Alteration may be allowed when:

- 12.4.3.1 Mitigation is proposed in the form of the abutting Resource Area replication or restoration according to the criteria set forth in Sections 12.4.1.1 through 12.4.1.10, or
- 12.4.3.2 Mitigation is proposed by reclaiming and restoring all or part of a No Build Zone which is currently turf grass (lawn), contains invasive species, or otherwise is disturbed to an area that is naturally vegetated with native species at a ratio of at least 1.5:1 (restored area to disturbed area).

13. Permits. The granting or denying of Permits by the Commission shall be in accordance with Section 9 of the By-Law.

14. Security. The Commission shall post or establish any security in accordance with Section 10 of the By-Law.

15. Enforcement and Fines. The Commission shall enforce the provisions of the By-Law and these Regulations in accordance with Section 11 of the By-Law.

16. Appeals. A decision of the Commission may be appealed in accordance with Section 13 of the By-Law.

17. Severability. The invalidity of any section or provision of these Regulations shall not invalidate any other section or provision thereof, nor shall it invalidate any Permit or determination which previously has been issued.

18. Effective Date. After public notice, public hearing, and upon passage or approval of any changes thereto, the Regulations shall take effect when filed with the Town Clerk in accordance with the By-Law.