REGULATIONS ADOPTED BY THE ANDOVER CONSERVATION COMMISSION PURSUANT TO THE TOWN OF ANDOVER'S GENERAL BYLAW FOR WETLAND PROTECTION EFFECTIVE APRIL 13, 2002 REVISED THROUGH APRIL 1, 2014

SECTION 1: INTRODUCTION

This Andover Conservation Commission has adopted the following regulations in order to assist in the preparation for filings under the Town of Andover's Wetlands Protection bylaw (hereafter referred to as the bylaw).

SECTION 2: PURPOSE

The purpose of the regulations is to effectuate the purposes of the bylaw, including, but not limited to, establish definitions in addition to those established in the bylaw; design standards; and to clarify the process by which activities affecting areas subject to protection under the bylaw are to be regulated in order to contribute to the interests of the bylaw.

SECTION 3: JURISDICTION

(1) Areas Subject to Protection

The following areas are subject to protection under the bylaw: any bank, freshwater wetland, isolated vegetated wetland, marsh, wet meadow, bog, swamp, vernal pool, reservoir, pond, creek, river or stream, or any land under said waters, or any land within 100 feet of the aforesaid resource areas, or land subject to flooding, or within 200 feet of the extent of mean annual high water of any river (collectively, the "resource areas protected by this bylaw").

(2) Areas Subject to Regulation Under the Bylaws

(a) Activities within Areas Subject to Protection under the Bylaw

Any activity proposed or undertaken within an area specified in Section 3(1) above, which will remove, fill, dredge or alter that area is subject to regulation under the bylaw and requires formal review by the Conservation Commission.

(b) Exceptions

The application and permit required by this bylaw shall not be required for the activities summarized below. For a complete description of the criteria and requirements for these activities, please refer to Section 3 of the bylaw.

- Maintenance, repair or replacement of public utilities, or the installation of new municipal utilities:
- 2. Normal maintenance or improvement of land in agricultural use;
- 3. Emergency projects necessary for the protection of the health and safety of the public;
- 4. Ordinary maintenance or improvement of a single- or two-family home for which a building permit had been issued on or before January 1, 1999; except for the construction of free standing structures which have a footprint greater than 500 square feet ¹⁶;

¹⁶ Revised 11/07/06

5. Maintenance and repair of buildings, other structures, driveways, roads, parking areas, drainage structures and basins, lawns or athletic fields in existence on January 1, 1999.

(c) Activities Outside the Areas Subject to Protection Under the Bylaw

Any activity proposed or undertaken outside the resource areas is not subject to regulation under the bylaw and does not require the filing of a Notice of Intent unless and until that activity actually alters an area subject protection under the bylaw.

In the event that the Conservation Commission determines that such activity has in fact altered an area subject to protection under the bylaw, it shall impose such conditions on the activity or any portion of as it deems necessary to contribute to the protection of the interests identified in the bylaw.

<u>Commentary:</u> The Conservation Commission has determined that activities within areas subject to protection under the bylaw are so likely to result in the removing, filling, dredging or altering of those areas that preconstruction review is always justified. Therefore a preapplication meeting with the Conservation Agent is recommended to determine whether a Notice of Intent, Request for Determination of Applicability or other appropriate form is necessary. It is the Conservation Commission's discretion as to whether a Notice of Intent, Request for a Determination of Applicability, or other appropriate application form should be filed for activities.

SECTION 4: GENERAL PROVISIONS

(1) Burden of Proof

The permit applicant has the burden of proving by a preponderance of credible evidence that the proposed work will not have unacceptable significant or cumulative effect upon the values protected by the bylaw. Failure to provide adequate evidence to the Commission is sufficient cause for the Commission to deny the permit or to grant a permit with conditions.

(2) Vegetative Buffer Zone

There shall be no removal of vegetation, excavation or filling within 25 feet of any bank, bordering vegetated wetland, isolated vegetated wetland, marsh, wet meadow, bog, swamp, reservoir, pond, creek, river or stream, or any land under said waters, or within 50 feet of resource areas located within Town of Andover Watershed Protection Overlay District any within 75 feet of any vernal pool, except as permitted with an Order of Conditions for a limited project, wetland crossing or water dependent structure. Activities regulated by this vegetative buffer strip include the piling of natural material such as leaves, brush, grass clippings and manure or storage of manmade materials such as but not limited to trash, scrap metal, garbage etc.¹⁷

Vegetative non-disturbance buffer zones as marked on the plan(s) referenced in an Order of Conditions or Determination of Applicability shall be marked in the field with permanent markers as approved by the Commission affixed to concrete or granite bounds or approved equal. The plans referenced in such an Order of Conditions or Determination of Applicability shall be recorded with the Order of Conditions or Determination of Applicability and cross referenced thereto in the Essex County Registry of Deeds and/or the Essex County Registry District.

¹⁷ Revised 2/1/05

All Orders of Conditions or Determination of Applicability approving a project with a vegetative buffer zone shall contain language requiring any Deed (as defined below) for all or any portion of the property subject to such an Order of Conditions or Determination of Applicability to contain the following language "This property is subject to a non-disturbance zone in which no alteration of land or vegetation may occur. The non-disturbance zone is shown on the plans entitled "___(title of plans)_____ recorded at the Essex County Registry of Deeds, North District, at Book ____, Page ____, and/or registered with the Land Registration Office of the Essex County Registry District as Document No._____ and as described in the Order of Conditions or Determination of Applicability recorded in the same Registry at Book _____, Page ____, and/or in the same Registry District as Document ____. In accordance with said Order of Conditions or Determination of Applicability, this language shall be incorporated in full into all future deeds, easements, mortgages, leases, licenses, occupancy agreements or any other instrument of transfer, whereby an interest in and/or a right to use the property or a portion thereof is conveyed (a "Deed")."

(3) Building/Structure Setbacks¹⁸

The following setbacks are established for buildings/structures placed adjacent to;

- A: Any bank, bordering vegetated wetland, isolated vegetated wetland, marsh, wet meadow, bog, swamp, reservoir, pond, creek, river or stream, or any land under said waters,
- B: Areas located within Town of Andover Watershed Protection Overlay District,
- C: Any vernal pool

Except as permitted with an Order of Conditions for a water dependent structure or if no practicable alternative is determined to be available after completion of an alternatives analysis.

¹⁸ Revised 02/07/06

Building/Structure		Area A	Area B	Area C
1.	Buildings/Structures that require a building permit except as listed below.	50	75	100
2.	Structures that are exempt from building permits except as listed below.(The distances are the same as those required for Buffer Strips)	25	50	75
3.	Swimming Pools & Pool decks	35	60	85
4.	Parking Lots for 3 or fewer vehicles	30	55	80
5.	Parking Lots for 4 or more vehicles	50	75	100
6.	Access Roads except those allowed as a limited project.	35	60	85
7.	On grade patios and similar impervious surfaces ¹³	30	55	80
8.	Fences under 7' ht., landscape walls, and landscaping. (The distances are the same as those required for Buffer Strips)	25	50	75
9.	Retaining walls	30	55	100
10.	Sports Courts	35	60	85
11.	Driveways	30	55	80
12.	Solar panels supported by columns with an open and vegetated area beneath them *19	30	55	80
13.	Solar panels with an other than vegetated area, or with an enclosed area beneath *20	50	75	100

^{*} Size, spacing and density of solar panels in the buffer zone will be regulated to protect the wetland interests hereunder.

(4) Limited Projects

Notwithstanding the provisions of Section 7 of these regulations and 310 CMR 10.54 through 10.58 and 10.60, as may be amended, the Conservation Commission may issue an Order of Conditions or Determination of Applicability and impose such conditions as will contribute to the interests identified in the bylaw permitting limited projects listed in 310 CMR 10.53, as may be amended, (although no such project may be permitted which will have any adverse effect on specified habitat sites or rare vertebrate or invertebrate species, as identified by procedures established under 310 CMR 10.59, as may be amended). In reviewing proposed limited projects, the Conservation Commission shall consider the magnitude of the alteration and the significance of the project site to the interests identified in the bylaw, the availability of reasonable alternatives to the proposed activity, the extent to which mitigation measures, including replication or restoration, are provided to contribute to the protection of the interests identified in the bylaw.

The applicant shall submit information to describe the work and affected resource areas both for the proposed location and alternative site locations and configurations sufficient for a determination by the Conservation Commission. The scope of alternatives to be considered shall be commensurate with the scale and purpose of the proposed activity, the impacts of the proposed activity, and the uses and functions of the existing resource areas. The scope of alternatives should include, but is not limited to, the following:

¹³ Revised 05/06/08

¹⁹ Revised 04/01/14

²⁰ Revised 04/01/14

- (a) detailed explanation justifying the project's "limited project" status;
- (b) documentation from other agencies and/or boards (i.e. planning board, zoning board of appeals) regarding relief from minimum requirements (e.g. roadway widths at crossing areas) if available:
- (c) demonstration of the use of best available technology and/or construction methodology; and
- (d) plans, specifications, details, field data, methods, and materials incorporated into the design of the proposed project and alternatives which will minimize impacts to wetland resource areas (i.e. retaining wall versus graded/geotechnical slope).

Where an applicant identifies an alternative that can be summarily demonstrated not to be practicable, an evaluation is not required.

The purpose of evaluating project alternatives is to locate activities so that impacts to resource areas are avoided to the extent practicable. Projects must be evaluated to determine whether alternatives are practicable. As much of a project as feasible shall be sited outside the resource areas. If siting a project entirely outside resource areas is not practicable, alternatives shall be evaluated which locate the project as far as possible from resource areas.

SECTION 5: DEFINITIONS

<u>Abutter</u> – the owner of any land within 100 feet of the property line of the land where the activity is proposed, as determined by the most recent assessors records including any land located directly across a street, way, river, stream, or pond. When an activity is on a parcel of land that is fifty acres or larger, or for linear projects such as roadways, pipelines and other linear utilities, "abutter" shall be defined as the owner of any land within 1000 feet from the limits of the proposed activity that is subject to the Wetlands Protection Act.

<u>Activity</u> means any form of draining, dumping, dredging, damming, ponding, discharging, excavating, filling or grading; the erection, reconstruction or expansion of any building or structures; the driving of pilings; the construction or improvement of roads and other ways; the changing of run-off characteristics; the intercepting or diverging of ground or surface water; the installation of drainage, sewage and water systems; the discharging of pollutants; the destruction of plant life; and any other changing of the physical characteristics of land.

Alter means to change the condition of any Area Subject to Protection under M.G.L. c. 131, § 40 and the bylaw. Examples of alterations include, but are not limited to, those specified in Section 17 of the bylaw.

Alternatives analysis shall mean an on-site analysis conducted to avoid, minimize and mitigate impacts to resource areas and shall include items (a) - (d) of Section 4 (4), as is appropriate to the project.

<u>Applicant</u>, as used in these regulations, shall mean a person giving notice of intention to remove, fill, dredge, build upon, or alter, or a person on whose behalf such notice is filed.

Bank is defined in 310 CMR 10.04, as may be amended.

Bordering land subject to flooding is defined in 310 CMR 10.57(2), as may be amended.

<u>Breeding areas</u> are areas used by wildlife for courtship, mating, nesting, or other reproductive activity, and rearing of young.

<u>Bordering vegetated wetland</u> is an area that borders on creeks, rivers, streams, intermittent streams, reservoirs, ponds and lakes or other waterways or waterbodies. The types of bordering vegetated wetlands include, but are not limited to, wet meadows, marshes, swamps and bogs. Bordering vegetated wetland are further defined in section 7 of these regulations.

Building see structure.6

<u>Cumulative effect</u> – an effect that is significant when considered in combination with other activities that have occurred, are going on simultaneously, or that are likely to occur, whether other activities have occurred or are contemplated as a separate phase of the same project, such as the build-out of a subdivision or an industrial park, or unrelated but reasonably foreseeable actions, including other development projects that are currently under construction, under review, or that may be expected to come forward.

Freshwater wetland, marsh, wet meadow, bog or swamp - any area bordering a water body, or, if not bordering a water body, consisting of at least five thousand (5000) square feet, where surface or ground water, or ice, at or near the surface of the ground support the presence of hydric soils and/or a plant community dominated (at least 50 percent) by wetland species. To avoid inconsistencies in the delineation of such wetland resource areas, the method for determining the edge of any such wetland shall be the same as that approved by the Massachusetts Department of Environmental Protection for delineating the edge of bordering vegetated wetlands under the Wetlands Protection Act.

<u>Groundwater</u> is all subsurface water contained in natural geologic formations or artificial fill, including soil water in the zone of aeration. Activities in or within 100 feet of resource areas shall not significantly alter the existing quality or elevation of naturally occurring ground water.

<u>Isolated land subject to flooding</u> is defined in 310 CMR 10.57(2), as may be amended.

<u>Isolated vegetated wetlands</u> are bordering vegetated wetlands, as defined in these regulations, which do not border on creeks, rivers, streams, ponds, and lakes or other waterways or waterbodies. Isolated wetlands are further defined in section 7 of these regulations.

Lake is defined in 310 CMR 10.04, as may be amended.

Land subject to flooding is defined in 310 CMR 10.57, as may be amended.

<u>Land subject to inundation</u> means the same as land subject to flooding or isolated land subject to flooding.

Limited project is as defined in 310 CMR 10.53 (3), as may be amended.

<u>Maintenance and Repair</u> of buildings, other structures, driveways, roads, parking areas, drainage structures and basins, lawns or athletic fields shall not include activities resulting in the substantial enlargement of such structures nor shall it include a change of use, as defined by the Andover Zoning Bylaws.

Majority of conservation commissioners (or quorum) is defined as a majority of members then in office.

⁶ Revised 02/07/06

<u>Maximum extent practicable</u> means all reasonable efforts to meet the performance standards, including evaluation of best management practices and best available technology.

Ordinary Maintenance and Improvement shall be as defined in Section 3 of the bylaw when pertaining to single- or two-family houses, but shall not include additions which more than double the gross floor area in existence on or before January 1, 1999. Ordinary maintenance and improvement shall also not include demolition of an existing single- or two-family structure for purposes of constructing a new and larger house.

<u>Person</u> means any individual, group of individuals, association, partnership, corporation, business organization, trust, estate, the Commonwealth of Massachusetts when subject to town bylaws, any public or quasi-public corporation or body when subject to the town bylaws, or any other legal entity, including the Town of Andover or its legal representatives, agent, or assigns.

<u>Point source discharge</u> means any discernable, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, vessel or other floating craft, from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture.

Pond is defined in 310 CMR 10.04, as may be amended.

<u>Practicable alternative</u> – an alternative which is reasonably available and capable of being done after taking into consideration the proposed use of the property, the overall project purpose (e.g. residential, institutional, commercial, or industrial purpose), logistics, existing technology, and costs; provided that reduced profit or reasonably increased cost shall not solely make an alternative not available and capable of being done.

<u>Private water supply</u> – any source or volume of surface or ground water demonstrated to be in private use or shown to have potential for private use, including ground or surface water in the zone of contribution around a private well. Activities in or within 100 feet of a resource area shall not have a significant effect on the quality of a private water supply.

<u>Project cost</u> means the estimated, entire cost of the project including, without limitation, building construction, site preparation, landscaping, and all site improvements, but excluding land acquisition. Projects shall not be segmented to avoid being subject to a consultant fee.

<u>Public water supply</u> – any source or volume of surface or ground water demonstrated to be in public use or approved for water supply pursuant to G.L. c. 111 Section 160 by the DEP Division of Water Supply, or demonstrated to have a potential for public use, in addition to all surface and ground water in zones of contribution. Activities subject to the Commission's jurisdiction under this bylaw shall not have a negative effect on the quality of a public water supply.

River is defined in 310 CMR 10.04 and 10.58(2), as may be amended.

Significant is defined in 310 CMR 10.04, as may be amended, unless utilized in relation to Riverfront Area (310 CMR 10.58, as may be amended) jurisdiction where it is defined in relation to the No Significant Impact Performance Standard.

Stream and Intermittent stream are defined in 310 CMR 10.04, as may be amended.

<u>Structure</u> shall mean any combination by man of matter composed of parts or materials assembled and joined or mixed together in some definite manner or pattern at a certain location for whatever purpose or use, whether or not affixed to the land. "Structure" shall include, but not be limited to, shelter or enclosure of persons, animals or property of any kind, parking areas, swimming pools, tennis courts, and courts for athletic and recreational activity and the equipment and paraphernalia associated with any court, paved areas, driveways, roadways, fences, or walls.

Vernal pool is defined in section 7 of these regulations.

<u>Water dependent structures</u> shall mean one or more water-dependent or accessory uses as specified at 310 CMR 9.12(1), as may be amended.

<u>Wildlife habitat</u> – an area that provides breeding and nesting habitat, shelter, food and water to animal species. It includes areas identified as containing rare, threatened or endangered species as listed by the Massachusetts Natural Heritage Program. Structures and activities in any resource area shall not have a significant adverse effect on wildlife.

Work - see activity.

SECTION 6: PROCEDURES

(1) Time Periods

All time periods of ten days or less specified in the bylaw and regulations shall be computed using business days only. In the case of a Determination or Order, such period shall commence on the first day after the date of issuance and shall end at the close of business on the tenth business day thereafter. All other time periods shall be computed on the basis of calendar days, unless the last day falls on a Saturday, Sunday or legal holiday, in which case the last day shall be the next business day following.

(2) Request for a Determination of Applicability

Any person who desires a determination as to whether the bylaw applies to land or to work to be performed may submit a written Request for Determination of Applicability to the Andover Conservation Commission. The request shall be sent by certified mail or hand delivered, and shall be in the form required under M.G.L., c. 131, § 40 and 310 CMR 10.00, as may be amended, and shall include such additional information as the Conservation Commission may require to aid in the evaluation.

(a) Public Meeting

Within 21 days of receipt of the complete request, the Conservation Commission shall issue a Determination of Applicability. Notice of the time and place of the public meeting at which the determination will be made shall be given by the Conservation Commission at the expense of the person making the request not less than 5 days prior to such meeting by publication in the newspaper of general circulation in Andover, and by mailing a notice to the person making the request and to the owner.

(b) Determination of Applicability

The Conservation Commission reserves the right to impose such conditions as are necessary to meet the performance standards set forth in Section 7 of these regulations and such additional conditions as are necessary for the protection of the interests identified in the bylaw.

Upon receipt of the application materials (Appendix A and B), the Conservation Commission shall issue a file number. The designation of a file number shall not imply that the plans and supporting documents have been judged adequate for the issuance of a Determination, but only that copies of the minimum submittal requirement contained in Appendix A and B have been filed.

Said Determination shall be signed by a majority of the Conservation Commission, and copies thereof shall be sent by the Conservation Commission to the person making the request and to the owner. Said determination shall be valid for 3 years from the date of the issuance.

Prior to the commencement of any work permitted or required by the Determination, the Determination shall be recorded in the Essex County North District Registry of Deeds or Land Court within the chain of title of the affected property. If the Commission has determined that the work or area is not subject to regulation under this bylaw, of if no conditions have been placed on the Determination of Applicability, the Determination need not be recorded in the Registry of Deeds.

If recording is required, and in the case of recorded land, the Determination shall also be noted in the Registry's Grantor Index under the name of the owner of the land upon which the proposed work is to be done. In the case of registered land, the final Determination shall also be noted on the Land Court Certificate of Title of the owner of the land upon which the proposed work is to be done. Certification of recording shall be promptly sent to the Conservation Commission. If work is undertaken without the applicant first recording the Determination, the Conservation Commission may revoke the Determination, may issue an Enforcement Order or may itself record the Determination.

The decision of the Conservation Commission may be appealed according to the provisions of applicable state laws.

(c) Certificate of Compliance with Determination of Applicability

Upon written request by the applicant, a Notification of Satisfactory Completion of Work with Determination of Applicability shall be issued by the Conservation Commission within 21 days of receipt thereof, and shall certify that activities or portions thereof described in the Request for Determination of Applicability and plans have been completed in compliance with the Determination. The Notification of Satisfactory Completion of Work with Determination of Applicability shall be signed by a majority of the Conservation Commission. If the Commission, pursuant to Section 6. (2) (b) above, had determined that the work or area was not subject to regulation under this bylaw, of if no conditions were placed on the Determination of Applicability, this section does not apply.

Prior to the issuance of a Notification of Satisfactory Completion of Work with Determination of Applicability, a site inspection shall be made by the Conservation Commission or the Conservation Agent in the presence of the applicant or the applicant's agent.

If the Conservation Commission determines, after review and inspection, that the work has not been done in compliance with the Determination, it may refuse to issue a Notification of Satisfactory Completion of Work with Determination of Applicability. Such refusal shall be issued within 21 days of receipt of a request for a Notification of Satisfactory Completion of Work with Determination of Applicability, shall be in writing and shall specify the reasons for denial.

If a project has been completed, an as-built plan, stamped by a registered professional engineer, architect, landscape architect or land surveyor, shall be submitted as proof of completion in accordance with plans referenced in the Determination. A written statement by such professional person, certifying substantial compliance with the plans and setting forth what deviation, if any, exists from the plans

approved in the Determination shall accompany the request for a Notification of Satisfactory Completion of Work with Determination of Applicability.

The Notification of Satisfactory Completion of Work with Determination of Applicability shall be recorded in the Land Court or Registry of Deeds, whichever is appropriate. Certification of Recording shall be promptly sent to the Conservation Commission. Upon failure of the applicant to record, the Conservation Commission reserves the right to itself record the Notification of Satisfactory Completion of Work with Determination of Applicability.

(3) Notices: Abbreviated Notice of Resource Area Delineation and Notice of Intent

(a) Abbreviated Notice of Resource Area Delineation

The Abbreviated Notice of Resource Area Delineation (ANORAD) provides a procedure for a project applicant to confirm the precise boundaries of Bordering Vegetated Wetlands (BVW). The applicant may also use the ANORAD to seek confirmation of the boundaries of other resource areas that have been delineated, if the other resource area boundaries are identified on the plans that accompany the BVW boundary delineation. The ANORAD shall be sent by certified mail or hand delivered, and shall be in the form required under M.G.L., c. 131, § 40 (WPA Form 4A), as may be amended, and shall include such additional information as the Conservation Commission may require to aid in the evaluation, as set forth in Appendix A and B of these regulations.

The filing of an ANORAD is optional. However, any work within an area subject to the jurisdiction of the Wetlands Protection Act of the bylaw may not proceed until either a Negative Determination of Applicability or a final Order of Conditions has been issued. The applicant may also file a Notice of Intent or, in limited circumstances, an Abbreviated Notice of Intent and, as part of that permitting process, seek confirmation from the conservation commission of delineated wetland resource area boundaries.

(b) Notices of Intent

Any person who proposes to do work that will remove, fill, dredge or alter any Area Subject to Protection under the bylaw shall submit to the Conservation Commission a Notice of Intent, consisting of application materials required for a Notice of Intent under M.G.L., c. 131, § 40, 310 CMR 10.00, as may be amended, and Appendix A and B of these regulations and containing such additional material as the Conservation Commission may require to fully describe the proposed activity and its effect on the environment. As described above in subsection (3)(a), an Abbreviated Notice of Intent may be submitted for some projects that are likely to result in limited impacts to wetland resource areas. Each such notice shall be accompanied by the applicable filing fee.

To establish the extent of resource areas on land subject to protection under M.G.L., c. 131, § 40, applicants may use the Abbreviated Notice of Resource Area Delineation for the confirmation of a delineated boundary of vegetated wetland and other resource areas on the site, prior to filing a Notice of Intent for proposed work.

Upon receipt of the application materials (Appendix A and B), the Conservation Commission shall issue a local bylaw file number. The designation of a file number shall not imply that the plans and supporting documents have been judged adequate for the issuance of an Order, but only that copies of the minimum submittal requirement contained in Appendix A and B have been filed.

In the event that only a portion of the proposed project or activity lies within an Area Subject to Protection under the bylaw, and the remainder of the project or activity lies outside those areas, only that

portion within those areas must be described in the Project Description called for by the Appendix A and B; provided, however, that in such circumstances the Notice of Intent shall also contain a description and calculation of peak flow and estimated water quality characteristics of discharge from a point source (both open and closed channel) when the point of discharge falls with an area subject to protection under the bylaw.

If the Notice of Intent is deemed by the Conservation Commission to be insufficient to fully describe the proposed activity and its effect on the environment, the Conservation Commission may, at its discretion, notify the applicant, by certified mail within 14 days of receipt of the notice, of the additional information that will be necessary to render the notice sufficiently complete for acceptance. If required by the Applicant, the filing fee shall be returned and the 21-day review period shall not begin until a complete application is submitted. Alternatively, the Conservation Commission may inform the applicant at or prior to the public hearing of the additional information required, and offer the applicant the opportunity to continue the public hearing so that the additional information can be submitted for review.

(c) Abbreviated Notice of Intent

The Abbreviated Notice of Intent (WPA Form 4) simplifies filing requirements for projects that are likely to result in limited impacts to wetland resource areas. This form may be used when:

- the proposed work is within the Buffer Zone as defined in 310 CMR 10.04 (if the filing of a Notice of Intent is required), or within Land Subject to Flooding, as defined in 310 CMR 10.57(2), or within the Riverfront Area, as defined in 310 CMR 10.58; and
- the proposed work will disturb less than 1,000 square feet of surface area within the Buffer Zone and/or Land Subject to Flooding or less than 1,000 square feet of Riverfront Area, provided the work conforms to the requirements of 310 CMR 10.58(4)(c)2.a. pertaining to analysis of alternatives; and
- neither a Department of Army permit nor a Chapter 91 Waterways license from DEP is required.

(d) Public Hearing

A public hearing shall be held by the Conservation Commission within 21 days of the receipt of said Notice. Notice of the time and place of said hearing shall be given by the Conservation Commission at the expense of the applicant not less than 5 days prior to such hearing by publication in a newspaper of general circulation in Andover.

Public Hearings may be continued as follows:

- 1. Without the consent of the applicant to a date, announced at the hearing, within 21 days of receipt of the Notice of Intent;
- 2. With the consent of the applicant, to an agreed-upon date, which shall be announced at the hearing; or
- 3. With the consent of the applicant for a period not to exceed 21 days after the submission of a specified piece of information or the occurrence of a specified action. The date, time and place of said continued hearing shall be publicized in accordance with M.G.L., c. 131, § 40.

(e) Orders of Conditions and Orders of Resource Area Delineation

Within 21 days of the close of the public hearing or within such further time as the Conservation Commission and the applicant shall agree on, the Conservation Commission shall:

- make a determination that the area on which the work is proposed to be done, or which the proposed work will remove, fill, dredge, or alter, is not significant to one or more of the interests identified in the bylaw, and shall so notify the applicant; or
- 2. make a determination that the area on which the work is proposed to be done, or which the proposed work will remove, fill, dredge, or alter, is significant to one or more of the interests identified in the bylaw, and shall issue an Order of Conditions for the protection of said interest(s); or
- 3. make a determination that wetland resource areas subject to jurisdiction have been identified and delineated according to the definitions in the bylaw and shall issue an Order of Resource Area Delineation to confirm or modify the delineations submitted. The Order of Resource Area Delineation shall be effective for three years.

The Order of Conditions shall impose such conditions as are necessary to meet the performance standards set forth in Section 7 of these regulations and such additional conditions as are necessary for the protection of the interests identified in the bylaw. The Order shall impose conditions setting limits on the quantity and quality of discharge from a point source (both closed and open channel), when said limits are necessary to protect the interests identified in the bylaw. The Order shall prohibit any work or any portion thereof that cannot be conditioned to meet said standards. The Order shall impose conditions to control erosion and sedimentation within resource areas. The Commission may require that the performance and observance of the conditions imposed by the Order be secured by (1) a bond or a deposit of money or negotiable securities, and/or (2) a conservation restriction, easement, or other covenant enforceable in a court of law.

Notwithstanding the foregoing, when the Conservation Commission determines than an activity outside Areas Subject to Protection under the bylaw will have a direct impact on Areas Subject to Protection, it shall impose such conditions on any portion of the activity as are necessary to contribute to the protection of the interests identified in the bylaw.

The Order shall be signed by a majority of the Conservation Commission. The Order shall be valid for a period of 3 years, provided, however, that the Conservation Commission may issue an Order for as little as 1 year or as much as 5 years where special circumstances warrant and where those special circumstances are set forth in the Order.

Prior to the commencement of any work permitted or required by the Order, the Order shall be recorded in the Essex County North District Registry of Deeds or Land Court within the chain of title of the affected property. In the case of recorded land, the final Order shall also be noted in the Registry's Grantor Index under the name of the owner of the land upon which the proposed work is to be done. In the case of registered land, the final Order shall also be noted on the Land Court Certificate of Title of the owner of the land upon which the proposed work is to be done. Certification of recording shall be promptly sent to the Conservation Commission. If work is undertaken without the applicant first recording the Order, the Conservation Commission may revoke the Order of Conditions, may issue an Enforcement Order or may itself record the Order of Conditions.

(f) Extensions

The Conservation Commission may extend an Order for one or more additional periods of up to 3 years each. The Conservation Commission shall specify the circumstances to support the extension period. The request for an extension shall be made to the Conservation Commission at least 30 days prior to expiration of the Order.

The Conservation Commission may deny the request for an extension and require the filing of a new Notice of Intent for the remaining work in the following circumstances:

- 1. where no work has begun on the project within a period of 3 years from the date of issuance of the Order, except were such failure is due to unavoidable delays, such as appeals, or in the obtaining of other necessary permits;
- 2. where new information, not available at the time the Order was issued, has become available and indicates that the Order is not adequate to protect the interests identified in the bylaw
- 3. where incomplete work is causing damage to the interests identified in the bylaw;
- 4. where work has been done in violation of the Order or the bylaw.

The Extension Permit shall be signed by a majority of the Conservation Commission.

The Extension Permit shall be recorded in the Land Court or the Registry of Deeds, whichever is appropriate. Certification of recording shall be sent to the Conservation Commission. If work is undertaken without the applicant so recording the Extension Permit, the Conservation Commission may issue an Enforcement Order or may itself record the Extension Permit.

(g) Certificate of Compliance

Upon written request by the applicant, a Certificate of Compliance shall be issued by the Conservation Commission within 21 days of receipt thereof, and shall certify that activities or portions thereof described in the Notice of Intent and plans have been completed in compliance with the Order. The Certificate of Compliance shall be signed by a majority of the Conservation Commission.

Prior to the issuance of a Certificate of Compliance, a site inspection shall be made by the Conservation Commission or the Conservation Agent in the presence of the applicant or the applicant's agent.

If the Conservation Commission determines, after review and inspection, that the work has not been done in compliance with the Order, it may refuse to issue a Certificate of Compliance. Such refusal shall be issued within 21 days of receipt of a request for a Certificate of Compliance, shall be in writing and shall specify the reasons for denial.

If a project has been completed, an as-built plan, stamped by a registered professional engineer, architect, landscape architect or land surveyor, shall be submitted as proof of completion in accordance with plans referenced in the Order of Conditions. A written statement by such professional person, certifying substantial compliance with the plans and setting forth what deviation, if any, exists from the plans approved in the Order shall accompany the request for a Certificate of Compliance.

If the final Order contains conditions that continue past the completion of the work, such as maintenance or monitoring, the Certificate of Compliance shall specify which, if any, of such conditions shall continue. The Certificate shall also specify to what portions of the work it applies, if it does not apply to all the work regulated by the Order.

The Certificate of Compliance shall be recorded in the Land Court or Registry of Deeds, whichever is appropriate. Certification of Recording shall be promptly sent to the Conservation Commission. Upon failure of the applicant to record, the Conservation Commission may itself record the Certificate of Compliance.

(4) Plan Changes

The Conservation Commission may issue a finding of insignificance for changes to plans approved under an Order of Conditions, Extension Permit, or Determination of Applicability in the following circumstances:

- (a) the applicant's request must be made prior to implementation of the proposed change, and shall include a notice to the public, abutters, and town boards, and a public hearing.
- (b) the proposed change must not reduce the separation between the resource area and the activity;
- (c) the Order of Conditions, Extension Permit, or Determination of Applicability must not be expired, revoked, or suspended at the time of such consideration; and
- (d) the activities must otherwise be in compliance with existing permit conditions at the time of such consideration.

A request for plan change must be submitted in writing, with the exception of changes necessary to avoid damage to resource areas, in which case changes must be submitted in writing to the Conservation Commission within 36 hours of the change being implemented.

(5) Coordination with Other Boards

Any person filing a permit application or a request for determination of applicability shall provide notice by certified mail or hand delivery to the Planning Board, the Board of Health and Board of Selectmen. If a permit is required from the Board of Appeals, the applicant shall also furnish a copy to that board.

The Commission shall, to the extent practicable, coordinate with any other Board reviewing the project, and have similar authority to recover its consulting fees from the applicant, in an effort to avoid duplication of consulting services.

(6) Fees (Effective June 18, 2013)¹⁴

(a) Administrative Fees

Each application filed with the Andover Conservation Commission pursuant to the Town of Andover's Wetland Protection bylaw shall be accompanied by a filing fee in the amount specified below.

¹⁴ Revised 06/18/13

Request for Determination of Applicability \$250.00

A Notice of Intent shall be accompanied by a filing fee consisting of one or more of the categories defined below. The fee for work proposed under a single Notice of Intent that involves more than one activity shall be determined by adding the fees for each proposed activity.

Category 1 (\$110.00 per activity):

- (a) work on single family lot: addition, pool, etc.;
- (b) site work without a house;
- (c) control vegetation;
- (d) resource improvement;
- (e) work on septic system separate from house;
- (f) monitoring well activities minus roadway;
- (g) new agricultural or aquacultural projects.

Category 2 (\$500.00 per activity):¹⁵

- (a) construction of a single family house (SFH);
- (b) parking lot;
- (c) beach nourishment;
- (d) electric generating facility activities;
- (e) inland limited projects, minus road crossings and agriculture;
- (f) each crossing for driveway to SFH;
- (g) each point source (storm drain) discharge;
- (h) control vegetation in development;
- (i) water level variation;
- (i) any other activity not in Category 1,3,4,5 or 6;
- (k) water supply exploration.

Category 3 (\$1,050.00 per activity):¹⁶

- (a) site preparation (for development) beyond NOI scope;
- (b) each building(for development) including site;
- (c) road construction not crossing or driveway;
- (d) hazardous cleanup;
- (e) water supply development.

Category 4 (\$1,450.00 per activity):¹⁷

- (a) each crossing for development or commercial road;
- (b) dam, sluiceway, tidegate (safety) work;
- (c) landfills operation/closures;
- (d) sand and gravel operation;
- (e) railroad line construction;
- (f) bridge;
- (g) hazardous waste alterations to resource area;
- (h) dredging;
- (i) package treatment plant and discharge;
- (j) airport tree clearing;

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¹⁵ Revised 06/18/13

¹⁶ Revised 06/18/13

¹⁷ Revised 06/18/13

(k) oil and/or hazardous material release response actions.

Category 5 (\$4.00 per linear foot. Minimum \$100.00. Maximum \$2,000.00)⁷ & ¹⁸

(a) work on docks, piers, revetments, dikes, etc. (coastal or inland)

Category 6⁸ & ¹⁹

(a) boundary delineations for Wetland Resource Areas

The filing fee for the ANORAD equals \$2.00 per linear foot (less 250 ft.) of Delineated Bordering Vegetated Wetland. There is a maximum fee of \$200 established for applications involving single-family homes or \$5,000 for all other activities. There is no additional fee for delineations of other resource areas which may be present on site.

Each site visit performed by the Conservation Agent in order to follow-up on a construction violation, including but not limited to the improper installation of erosion control or erosion control fabric, or the sloughing of slopes will require a separate fee of \$25.00.

(b) Consultant Fees are established in bylaw.

(c) Waiver/Non-Applicability of Fees

No application or consultant fees shall be due from the Town of Andover or the Commonwealth of Massachusetts in connection with any project performed by the Town or on its behalf.

(6) **Enforcement Orders**

When the Conservation Commission determines that an activity is in violation of the bylaw, these regulations, or a Final Order or Determination of Applicability, the Conservation Commission may issue an Enforcement Order. Violations include, but are not limited to:

- (a) failure to comply with a Final Order or Determination of Applicability, such as failure to observe a particular condition or time period specified in the Order or Determination of Applicability: or
- (b) failure to complete work described in a Final Order or Determination of Applicability, when such failure causes damage to the interests identified in the bylaw.

The members, officers, employees and agents of the Conservation Commission may enter upon privately owned land for the purpose of performing their duties under the Order or Determination of Applicability, M.G.L. c. 131 S. 40 and the bylaw.

An Enforcement Order shall be signed by a majority of the Conservation Commission. In a situation requiring immediate action, an Enforcement Order may be signed by a single member or agent

⁷ Revised 03/07/06

¹⁸ Revised 06/18/13

⁸ Revised 03/07/06

¹⁹ Revised 03/18/13

of the Conservation Commission, if said Order is ratified by a majority of the members at the next scheduled meeting of the Commission.

SECTION 7: PERFORMANCE STANDARDS

(1) Incorporation of the State Standards

The standards of 310 CMR 10.00, as may be amended, are incorporated herein by reference. The Conservation Commission finds that the protection of the interests identified in the bylaw requires that applicants also meet the following additional standards. Failure to meet these standards will result in the Conservation Commission's denial of an application.

(2) Cumulative Impact

All components of a single project shall be treated together as constituting one single and complete project for the determination of cumulative impacts to wetland resource areas. All planned phases of multi-phased projects shall be treated together as constituting one single and complete project for the determination of cumulative impacts to wetland resource areas. Permits may only be issued for single and complete projects and shall not be issued for piecemeal work, unless permits are issued for discrete project phases, in accordance with a Master Plan.

Separate projects proposed within the same subwatershed region shall take the following into consideration when preparing plans and permit applications under the bylaw: recent or anticipated changes to drainage patterns, wildlife corridors, direct impacts to Areas Subject to Protection under the bylaw and total impervious cover. To the extent practicable, the projects shall accommodate changes to the subwatershed by incorporation of but not limited to the following: contiguous wildlife corridor, wetland buffer enhancement, use of best management practices and best available technologies.

(3) Bordering Vegetated Wetlands

(a) Preamble

Bordering vegetated wetlands are likely to be significant to public or private water supply, ground water supply, flood control, storm damage prevention, prevention of pollution, and the protection of fisheries and wildlife habitat.

The plant communities, soil, and associated low, or sometimes sloping topography, of bordering vegetated wetlands remove or detain sediments, nutrients (such as nitrogen and phosphorus), and toxic substances (such as heavy metal compounds) that occur in runoff and flood waters.

Some nutrients and toxic substances are detained for years in plant root systems or in the soils. Others are held by plants during the growing season and released as the plants decay in the fall and winter. This latter phenomenon delays the impacts of nutrients and toxins until the cold weather period, when such impacts are less likely to reduce water quality.

Bordering vegetated wetlands are areas where ground water discharges to the surface and where, under some circumstances, surface water discharges to the groundwater. The profusion of vegetation and the low topography of bordering vegetated wetlands slow down and reduce the passage of flood waters during periods of peak flow by providing temporary flood water storage, and by facilitating water removal through evaporation and transpiration. This reduces downstream flood crests and resulting damage to private and public property. During dry periods the water retained in bordering

vegetated wetlands is essential to the maintenance of base flow levels in rivers and streams, which in turn is important to the protection of water quality and water supplies.

Wetland vegetation provides shade that moderates water temperatures important to fish life. Wetlands flooded by adjacent water bodies and waterways provide food, breeding habitat and cover for fish. Fish populations in the larval stages are particularly dependent upon food provided by over-bank flooding, because most river and stream channels do not provide sufficient quantities of the microscopic plant and animal life required.

Wetland vegetation supports a wide variety of insects, reptiles, amphibians, mammals and birds that are a source of food for important game fish. Bluegills (*Lepomis macrochiru*), pumpkinseeds (*Lepomis gibbosus*), yellow perch (*Perca flavescens*), rock bass (*Ambloplites rupestris*) and all trout species feed upon nonaquatic insects. Large-mouth bass (*Micropterus salmoides*), chain pickerel (*Esox niger*) and northern pike (*Esox lucius*) feed upon small mammals, snakes, nonaquatic insects, birds and amphibians.

Bordering vegetated wetlands are an important component of the Town's habitat for wildlife. The hydrologic regime, plant community composition and structure, soil composition and structure, topography and water chemistry of bordering vegetated wetlands provide important food, shelter, migratory and overwintering areas, and breeding areas for many birds, mammals, amphibians and reptiles. A wide variety of vegetative wetland plants, the nature of which are determined in large part by the depth and duration of water, as well as soil and water composition, are utilized by varied species as important areas for mating, nesting, brood rearing, shelter, and (directly and indirectly) food. The diversity and interspersion of the vegetative structure is also important in determining the nature of its wildlife species during summer, winter, and migratory seasons.

(b) Definition, Critical Characteristics, Boundary

Bordering vegetated wetlands border on creeks, rivers, streams, intermittent streams, reservoirs, ponds and lakes and other waterways and waterbodies. The types of bordering vegetated wetlands are wet meadows, marshes, swamps and bogs. Bordering vegetated wetlands are areas where the soil is saturated and/or inundated such that they support a predominance of wetland indicator plants.

The boundary of the bordering vegetated wetland must meet at least two or more of the following requirements, however, if the boundary as defined in 310 CMR 10.55 (2), as may be amended, is more protective of the interests of the bylaw and the Massachusetts Wetlands Protection Act, such boundary determination shall apply:

- 1. Fifty percent or more of the vegetational community consisting of wetland indicator plants. Wetland indicator plants may include but not necessarily be limited to those plant species identified in the Act. Wetland indicator plants are also those classified in the indicator categories of Facultative, Facultative+, Facultative Wetland-, Facultative Wetland, Facultative Wetland+, or Obligate Wetland in the National List of Plant Species that Occur in Wetlands: Massachusetts (Fish and Wildlife Service, U.S. Department of the Interior, 1988) or plants exhibiting physiological or morphological adaptations to life in saturated or inundated conditions.
- 2. The presence of hydric soils, as illustrated in the most current version of *Field Indicators for Identifying Hydric Soils in New England* by New England Interstate Water Pollution Control Commission (NEIWPCC).

3. Indicators of hydrology, including but not limited to site inundation, water marks, drift lines, sediment deposits, drainage patterns, oxidized rhizospheres, and water-stained leaves.

In situations where the Conservation Commission determines that the natural vegetative community has been destroyed in violation of the bylaw, the Conservation Commission may itself elect to defer any determination of the presence or absence of, or the boundaries of, a bordering vegetated wetland until the natural vegetation has regrown, or, until that time, may determine the area to be bordering vegetated wetland on the presence of hydric soil or buried hydric soil alone.

Delineations of wetland boundaries will be reviewed only between April 1 and December 1. Any delineations between December 1 and April 1 will be considered solely at the discretion of the Commission or its agents when in their opinion site conditions are determined to be adequate to rely on the accuracy of the delineation.⁹

(c) Presumption

Where a proposed activity involves the removing, filling dredging or altering of a bordering vegetated wetland, the Conservation Commission shall presume that such area is significant to the interests specified in the Preamble 7 (3) (a). This presumption is rebuttable and may be overcome upon a clear showing that the bordering vegetated wetland does not play a role in the protection of said interests. In the event that the presumption is deemed to have been overcome, the Conservation Commission shall make a written determination to this effect, setting forth its grounds.

(d) General Performance Standards

- 1. Where the presumption set forth above is not overcome, any proposed work in a bordering vegetated wetland shall not destroy or otherwise impair any portion of said area.
- 2. Notwithstanding section 7(3) (d) 1. above, the Conservation Commission may issue a Permit allowing the work which results in the loss of up to 5,000 square feet of bordering vegetated wetlands after review of an alternatives analysis and when said area is replaced in accordance with the following general conditions and any additional, specific conditions the Conservation Commission deems necessary to ensure that the replacement area will function in a manner similar to the area that will be lost:
 - a. the surface of the replacement area to be created ("the replacement area") shall require up to 2:1 replication of the area that will be lost ("the lost area"), except where conditions warrant as determined by the Conservation Commission;
 - b. the distance between ground water elevation and surface elevation of the replacement area shall be approximately equal to that of the lost area.
 - c. the replacement area shall have an unrestricted hydraulic connection to the same water body or waterway associated with the lost area;
 - d. the replacement area shall be located within the same general area of the water body or reach of the waterway as the lost area;
 - e. at least 75% of the surface of the replacement area shall be reestablished with indigenous wetland plant species within two growing seasons, and prior to said vegetative reestablishment any exposed soil in the replacement area shall be temporarily stabilized to prevent erosion in accordance with standard US Natural Resource Conservation Service methods (formerly Soil Conservation Service); and

⁹ revised 2/15/05

- f. the replacement shall be provided in a manner which is consistent with all other General Performance Standards for each resource area described in these regulations.
- 3. Notwithstanding the provisions of (d) 1. and 2. above, no project may be permitted which will have any adverse effect on specific habitat sites of rare vertebrate or invertebrate species as identified on the Natural Heritage and Endangered Species Estimated Habitat Maps, as identified under section 310 CMR 10.59, as may be amended, ("Rare Species") of the Wetland Protection Act Regulations and/or correspondence provided by the Division of Fisheries and Wildlife, Natural Heritage Endangered Species Program.

(4) Isolated Vegetated Wetlands

(a) Preamble

Isolated vegetated wetlands are bordering vegetated wetlands that do not border on creeks, rivers, streams, ponds, and lakes. Isolated vegetated wetlands are likely to be significant to public or private water supply, to ground water supply, to flood control, to storm damage prevention, to prevention of pollution, and to wildlife habitat. Isolated vegetated wetlands may include vernal pools.

Isolated vegetated wetlands may be found either in areas with low flat topography or below sidehill seeps, in flood plains or in saddles at the base of slopes. These areas provide for the temporary storage of water that results from runoff, rising from water, or where ground water breaks out of a slope forming sidehill seeps. In this way they provide for flood control and prevention of flood damage. Alteration can result in the lateral displacement of retained water into contiguous properties, which may result in damage to said properties.

Isolated vegetated wetlands are areas where ground water discharges to the surface either by a rising water table or from a sidehill seep. Under some circumstances, these areas act as recharge wetlands, where surface water recharges to the ground, particularly where they are underlain by pervious material. Contaminants, pesticides or herbicides, may find easy access into the ground water or neighboring wells.

Where such areas are underlain by pervious material covered by a mat of organic peat or muck, they are likely to be significant to the prevention of pollution.

Isolated Wetlands providing seasonal wetland habitats may be essential breeding sites for certain amphibians that require isolated areas that generally flood in the spring and/or summer, and are free of fish predators. Many reptiles, birds, and mammals also depend upon such Isolated Wetland as a source of food.

(b) Definition, Critical Characteristics and Boundary

Isolated vegetated wetlands have the same characteristics and boundary of bordering vegetated wetlands, as defined in the bylaw, but do not border on creeks, rivers, streams, ponds, and lakes. Isolated vegetated wetlands may occur in a depression or closed basin in otherwise flat topography. In these areas, water may pool above the surface at least once a year or may be contained in the top 18 inches of the soil as displayed by the presence of hydric soil conditions. In addition, some isolated vegetated wetlands occur downslope of side hill seeps, depending on the topography, soils, and water regime.

The boundary of an isolated vegetated wetland must meet at least two or more of the following requirements

- 1. Fifty percent or more of the vegetational community consisting of wetland indicator plants. Wetland indicator plants shall include but not necessarily be limited to those plant species identified in the Act. Wetland indicator plants are also those classified in the indicator categories of Facultative, Facultative+, Facultative Wetland-, Facultative Wetland, Facultative Wetland+, or Obligate Wetland in the National List of Plant Species that Occur in Wetlands: Massachusetts (Fish and Wildlife Service, U.S. Department of the Interior, 1988) or plants exhibiting physiological or morphological adaptations to life in saturated or inundated conditions.
- 2. The presence of hydric soils, as illustrated in the most current version of *Field Indicators for Identifying Hydric Soils in New England* by New England Interstate Water Pollution Control Commission (NEIWPCC).
- 3. Indicators of hydrology, including but not limited to site inundation, water marks, drift lines, sediment deposits, drainage patterns, oxidized rhizospheres, and water-stained leaves.

In situations where the Conservation Commission determines that the natural vegetative community has been destroyed in violation of this bylaw, the Conservation Commission may itself elect to defer any determination of the presence or absence, or the boundaries of, an isolated vegetated wetland until the natural vegetation has regrown, and until that time may determine the area to be an isolated vegetated wetland on the presence of hydric soil alone.

(c) Presumption

Where a proposed activity involves removing filling, dredging, or altering an isolated vegetated wetland, the Conservation Commission shall presume that such an area is significant to the respective interests specified in section 7(4)(a). This presumption is rebuttable and may be overcome only upon a clear showing that said land does not play a role in said interests. In the event that the presumption is deemed to have been overcome, the Conservation Commission shall make a written determination to this effect, setting forth its grounds.

(d) General Performance Standards

- 1. Where the presumption set forth above is not overcome, any proposed work in a isolated vegetated wetland shall not destroy or otherwise impair any portion of said area.
- 2. Notwithstanding section 7(3) (d) 1. above, the Conservation Commission may issue a Permit allowing the work which results in the loss of isolated vegetated wetlands when said area is replaced in accordance with the following general conditions and any additional, specific conditions the Conservation Commission deems necessary to ensure that the replacement area will function in a manner similar to the area that will be lost:
 - a. the surface of the replacement area to be created ("the replacement area") may require 1:1 replication of the area that will be lost ("the lost area");
 - b. the ground water and surface elevation of the replacement area shall be approximately equal to that of the lost area;
 - c. the replacement area shall be located in a location approved by the Conservation Commission;

- d. at least 75% of the surface of the replacement area shall be reestablished with indigenous wetland plant species within two growing seasons, and prior to said vegetative reestablishment any exposed soil in the replacement area shall be temporarily stabilized to prevent erosion in accordance with standard US Natural Resource Conservation Service methods (formerly Soil Conservation Service); and
- e. the replacement shall be provided in a manner which is consistent with all other General Performance Standards for each resource area described in these regulations.

(5) Vernal Pools

(a) Preamble

Vernal Pools are isolated depressions or closed basins, devoid of fish populations, that serve as temporarily-flooded amphibian breeding habitat, as well as habitat for other wildlife. These pools are characteristically small; they rarely exceed 150 feet in width, however a given pool may vary in size from year to year depending on the amount of rainfall or snowmelt.

In addition, it should be noted that characteristics may be shared with other resource areas and therefore may be locally significant to other interests of the bylaw.

(b) Definition, Critical Characteristics and Boundary

Vernal Pools are isolated depressions or closed basins included within a resource area established in the bylaw which temporarily confine water during periods of high water table and high input from spring runoff or snowmelt or heavy precipitation, and support populations of non-transient microorganisms or serve as breeding habitat for select species of amphibians. In the absence of those habitat functions, the areas should be considered under section 7(4), isolated vegetated wetlands.

The boundary of a vernal pool is either the limit of the depression within which it is confined or the limit of the resource area within which it is located.

Any one of the following (1. through 5.) will verify the existence of a vernal pool:

- 1. Existence of (1) a confined basin depression and (2) evidence of breeding in standing water by any of the following amphibian species (these species breed only in vernal pools):
 - a. Wood Frog (Rana sylvatica);
 - b. Spotted Salamander (Ambystoma maculatum);
 - c. Blue-spotted Salamander (Ambystoma laterale);
 - d. Jefferson Salamander (Ambystoma jeffersonianum);
 - e. Silvery Salamander (Ambystoma "platineum");
 - f. Tremblay's Salamander (Ambystoma "tremblayi");
 - g. Marbled Salamander (Ambystoma opacum).

The presence of any of the following will be considered as acceptable proof that a vernal pool is utilized for breeding purposes by one or more of the above-named species:

- h. Breeding adults (wood frog breeding chorus and/or mated pairs; mole salamanders courting individuals and/or spermatophores);
- i. Two or more egg masses of any of the above-named species;
- j. Wood frog tadpoles or mole salamander larvae;

- k. Transforming juveniles (wood frog-tail stubs evident and/or mole salamanders gill remnants evident; or
- 2. Existence of (1) a confined basin depression and (2) the presence of fairy shrimp (Anostraca) or their eggs. These species spend their entire life cycles in vernal pool habitat; or
- 3. Existence of (1) a confined basin depression which (2) contains standing water that dries up during the year (or which for other reasons is free of adult fish population) and (3) the presence of two or more of the following in standing water (these species are not found in water that persists for less than two continuous months in the spring and/or summer):

Breeding spring peepers (*Hyla crucifer*)*; Breeding gray treefrogs (*Hyla versicolor*)*; Breeding green frogs (*Rana clamitans*)*; Breeding American toads (*Bufo americanus*)*; Breeding fourtoed salamanders (*Hemidactylium scatatum*)*; Adult red-spotted newts (*Notophthalum veridescens*); Spotted turtles (*Clemmys guttata*); Painted turtles (*Clemmys picta*); Snapping turtles (*Chelydra serpentina*); Water scorpions (Nepidae); Predaceous diving beetle larvae (Dytiscidae); Whirligig beetle larvae (Gyrinidae); Dobsonfly larvae (Corydalidae); Caddisfly larvae (Tricoptera); Dragonfly (Odonata, Anisoptera); Damselfly larvae (Odonata, Zygoptera); Leeches (Hirudinea)

- * Evidence for breeding activity includes breeding adults, eggs, tadpoles or larvae, and transforming juveniles; or
- 4. Existence of (1) a confined basin depression which (2) lacks standing water or which contains standing water that dries up during the year (or is otherwise free of adult fish population) and (3) the presence of one or more of the following (these species are found only in areas that contain water for at least two continuous months in the spring and/or summer):
 - a. Cases of caddisfly larvae (Tricoptera);
 - b. Adults, juveniles or shells of either freshwater clams (Pisidiidae) or amphibious airbreathing snails (Basommatophora)
 - c. At least six of the following wetland plant species: Duckweeds (*Lemna* spp., *Spirodela* spp., *Wolffia* spp.); Fountain moss (*Fontinalis* spp.); False mermaid weeds (*Proserpinaca palustris* and *P. Pectinata*); Bur-reeds (*Sparganium androcladum* and *S. Chlorocarpum*); Buttonbush (*Cephalanthus occidentalis*); Pondweeds (*Potamogeton spp.*); Bladderworts (*Utricularia clandestina*, *U. gibba* nd *U. subulata*); Water-milfoils (*Myriophyllum humile* and *M. Tenellum*); Water plantain (*Alisma plantago-aquatica*); Yellow water-crowfoot (*Ranunculus flabellaris*); Featherfoil (*Hottonia inflata*); Water-starworts (*Callitriche spp.*); False pimpernels (*Lindernia anagallidea* and *L. Dubia*); Lance-leaved violet (*Viola lanceolata*); St. John's-worts (*Hypericum adpressum*, *H. Boreal*, *H. Canadense*; and *H. mutilum*); Smartweeds (*Polugonum amphibium*, *P. Hydropiper*, *P. Hydropiperoides*, *P. pensylvanicum*, *P. punctatum*); A rush (*Juncus pelocarpus*); Sedges (*Rhynchospora capitellata* and *R. fusca*); Grasses (*Agrostis scabra*, *Glyceria acutiflora*, *G. canadensis*, *G. fernaldii*, *G. pallida*, *Muhlenbergia uniflora*, *Panicum dichotomiflorum*, *P. meridionale*; *P. philadelphicum*, *P. rigidulum*; *Panicum tuckermanii*; *P. verrucosum*); or

5. Existence of all of the following:

- a. Documented presence of water in a confined basin depression for at least two continuous months in the spring and/or summer; and
- b. Confirmation that the vernal pool area becomes completely dry during a portion of the year (or other documentation proving the absence of adult fish populations); and
- c. Presence of any amphibians and/or reptiles in standing water within a confined basin depression.

The boundary of vernal pool habitat is that, for an uncertified vernal pool, determined by the Conservation Commission and that, for a state certified vernal pool, determined by the Massachusetts Division of Fisheries and Wildlife.

(c) Presumption

Where a proposed activity involves the removing, filling, dredging or altering of a vernal pool, the Conservation Commission shall presume that such an area is significant to the protection of wildlife habitat, particularly amphibian breeding habitat. This presumption is rebuttable and may be overcome upon a clear showing that the area does not play a role in the protection of wildlife habitat. In the event that the presumption is deemed to have been overcome, the Conservation Commission shall make a written determination to this effect, setting forth its grounds.

(d) General Performance Standards

- 1. Where the presumption set forth above is not overcome, such a project shall not be permitted to have any short or long-term adverse effects on the vernal pool of the local population of that species, as determined by the Conservation Commission.
- 2. If a project meets 7(4)(d)1., above, the Conservation Commission may issue a permit for activities within non-certified vernal pools provided that the project meets the performance standards of the resource areas within which it is located.
- 3. Habitat evaluations associated with activities which may have an impact on vernal pools may be conducted in accordance with Massachusetts DEP policy, as may be amended and approved by the Commission.
- 4. There shall be no removal of vegetation, excavation or filling within 75 feet of any vernal pool except as permitted with an Order of Conditions for a limited project, wetland crossing or water dependent structure.
- 5. Refer to section 4(3) for setback requirements to any vernal pool. Any exception shall be allowed only as permitted with an Order of Conditions for a water dependent structure or if no practicable alternative is determined to be available after completion of an alternatives analysis.¹¹

(6) Buffer Zones

It has been the Conservation Commission's experience that any project located in close proximity to a wetland has a high likelihood of resulting in alteration of that area, either immediately, as a consequence of construction, or over a longer period of time as a consequence of daily operation of the completed project. Accordingly, the bylaw and these regulations establish the buffer zone as a resource area and require that any person intending to perform work within 100 feet of any bank, bordering

¹⁰ revised 2/1/05

¹¹ revised 2/1/05

vegetated wetland, isolated vegetated wetland, marsh, wet meadow, bog, swamp, vernal pool, reservoir, pond, creek, river or stream, or any land under said waters must submit to the Conservation Commission either a Request for Determination of Applicability or a Notice of Intent, as determined by the Conservation Commission or the Conservation Agent.

(a) Definition, Critical Characteristics and Boundary

The buffer zone is the resource area extending 100 feet horizontally outward from the boundary of any bank, bordering vegetated wetland, isolated vegetated wetland, marsh, wet meadow, bog, swamp, vernal pool, reservoir, pond, creek, river or stream, or any land under said waters.

Vegetative cover and soils within the buffer zone may filter runoff and provide uptake of pollutants from surface water runoff. The vegetation and soils may slow surface water runoff and permit infiltration of precipitation, thus helping to maintain the hydrologic regime to which the resource area is adapted. Activities within the buffer zone must not result, either directly or indirectly, in significant alteration to the quality or elevation of groundwater within the buffer zone and/or associated wetland resource areas.

(b) Presumption

Based upon experience to date with projects within the buffer zone, the Conservation Commission shall presume that work within the buffer zone will result in alteration of the resource area. This presumption is rebuttable and may be overcome upon a clear showing that the nature of the proposed work, special design measures, construction controls, or site conditions will prevent alteration of the resource area. The Conservation Commission has established the following buffer strip and limit of structures

1. Buffer Strip: There shall be no removal of vegetation, excavation or filling (except as permitted with an Order of Conditions for a limited project, wetland crossing or water dependent structure) within 25 feet from any bank, bordering vegetated wetland, isolated vegetated wetland, marsh, wet meadow, bog, swamp, reservoir, pond, creek, river or stream, or any land under said waters. The activities listed above shall not be allowed within 50 feet the above listed resource areas located within Town of Andover Watershed Protection Overlay District and/or within 75 feet of any vernal pool. There shall be no piling of natural material such as leaves, brush, grass clippings and manure or storage of manmade objects or materials such as, but not limited to, boats, vehicles, trash or its container, scrap metal, garbage etc. within the buffer strip. ¹²

Refer to Section 4(3) for setback requirements of Buildings/Structures 13

(c) General Performance Standards

One of the following must apply:

- 1. Any work should not result in the alteration of any bank, bordering vegetated wetland, isolated vegetated wetland, marsh, wet meadow, bog, swamp, vernal pool, reservoir, pond, creek, river or stream, or any land under said waters or any land subject to flooding; or
- 2. a. If work within 100 feet of any bank, bordering vegetated wetland, isolated vegetated wetland, marsh, wet meadow, bog, swamp, vernal pool, reservoir, pond, creek, river or stream, or

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¹² Revised 02/07/06

¹³ Revised 02/07/06

any land under said waters which alters a resource area is permitted by the Conservation Commission, the alteration of the resource area shall comply with the applicable performance requirements for the altered resource area and any other conditions the Conservation Commission may require to enforce those performance requirements.

b. Loss of annual recharge to groundwater should be minimized through the use of infiltration measures to the maximum extent practicable. The annual recharge from the post-development site should approximate the annual recharge from the pre-development or existing site conditions. The prescribed stormwater runoff volume to be recharged to groundwater should be determined using existing site (pre-development) soil conditions (from a U.S. Natural Resources Conservation Service (NRCS) County Soils Survey, onsite soil evaluation, or other geologic information) and these rates:

Hydrologic Group	Volume to Recharge (x Total Impervious Area)
A	0.40 inches of runoff
В	0.25 inches of runoff
С	0.10 inches of runoff
D	waived

SECTION 8. SEVERABILITY

If any provision of any part of these regulations or the application thereof is held to be invalid, such invalidity shall not affect any other provision of these regulations.

SECTION 9. CONSULTANTS OBLIGATION TO INFORM. 14

A consultant providing any services to an applicant, including, but not limited to, plans, wetland delineations and design services, which form any part of any submission to the Conservation Commission, shall be familiar with the Conservation Commission's By-Law, regulations, rules and procedures and shall fully inform the applicant of the same, provide the applicant a written copy of the same and inform the applicant of their anticipated effect on the applicant's submission

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¹⁴ revised 8/20/02