

DRAFT

The following model bylaw for Earth Removal was developed for the Plymouth-Carver Aquifer Advisory Committee (PCAAC) by Horsley Witten Group, Inc., under contract with the Executive Office of Energy and Environmental Affairs (EEA). This model bylaw represents one of a larger suite of local regulations developed for this project to address the highest priority issues identified by PCAAC and other committee meeting attendees.

The model provided below is presented as a General Bylaw and deals with all significant earth removal activities within a community. This approach is different from two other models developed for this project in that those other models separate small scale “excavation” activities from larger scale “commercial operations”. Although dealing with those activities separately may be a desirable approach for some communities, discussions with PCAAC and a review of draft earth removal bylaw provisions from the Town of Carver demonstrate a strong regional need to take a more focused approach to large scale earth removal that may be occurring as incidental to agricultural operations.

In some cases, HW incorporated language directly from other bylaws in the region, especially the drafts provided by the Town of Carver. These provisions were used where HW recognized clear and concise treatment of a particular topic or where the language addressed issues specific to this region. The most significant difference between this bylaw and other materials developed for the project (and other bylaws in the region) is the use of a “minor” and “major” permit approach. Similar to what many communities use with Site Plan Review, this approach would allow for smaller activities to require a less intensive permitting process than large scale removal or mining.

The final significant difference with this bylaw is the use of Rules and Regulations to cover administrative processes and plan requirements. Discussions with members of PCAAC revealed that there were several different types of “Major” operations that will necessitate the need for flexibility with plan requirements. For example, the stormwater standards associated with a cranberry bog operation will be different than those associated with a sand and gravel mining operation. Using Rules and Regulations will allow the administering authority to waive or alter plan requirements in a way that is more sensitive to each application on a case by case basis.

It is important to note that the following document is a *model* bylaw and regulations and, therefore, cannot be adopted “as is”. Communities that may be interested in adopting a bylaw of this nature will need to address several policy issues that will inevitably shape the standards listed below. Throughout the document, HW has provided commentary sections that will help the reader identify these policy issues and weigh the relative “pros and cons” for employing different standards. Where numeric standards may be changed to suit local needs, these standards have been placed in [brackets]. Also very important,

no community should consider adopting any bylaw language without first receiving review from Town Counsel or other legal resource.

MODEL EARTH REMOVAL BYLAW (“Combined Approach w/ Regulations”)

1. PURPOSE

- A. To leave land in a safe and convenient condition for appropriate reuse without requiring excessive and unreasonable maintenance or resulting in damage to public and private property;
- B. To ensure that earth removal activities shall be conducted in a safe manner with due regard to safety and with minimal detrimental effect upon environment of the district in which the activities are located; and
- C. To ensure the protection of groundwater resources throughout the community including, but not limited to wellhead protection areas and the Plymouth-Carver aquifer.

2. DEFINITIONS

- A. Agricultural Excavation: The process of removing earth or other materials that are necessary and incidental to prepare a site for specific agricultural use. Agricultural excavation may include the creation of wetland resource areas such as ponds, canals, cranberry bogs, and land subject to flooding as defined under the M.G.L. c. 131 §40 and as defined in Massachusetts Wetlands regulations 310 CMR 10.00.
- B. Commercial Mining: The business of extracting ore, earth or minerals from the ground for sale or profit.
- C. Earth: All forms of soil, including but not limited to clay, gravel, hard pan, loam, peat, rock, or sand.
- D. Lot/land: A single parcel of land lying in a single body and separated from the owner's or other party's contiguous land by property lines described in a recorded plan or deed.
- E. Removal: Stripping, excavating, commercial mining, agricultural excavation, excavation due to construction or blasting earth and rearranging it on the same lot or carrying it away from that lot.
- F. Restoration: After an earth removal activity is completed, returning the land contours to safe and usable condition, restoring drainage patterns and planting appropriate vegetation.

3. EARTH REMOVAL COMMITTEE

Commentary: The following text regarding the establishment of an Earth Removal Committee (ERC) is adapted directly from draft Carver bylaw material that was being

reviewed during the course of this project. This committee provides an example of how a town can go beyond simply assigning the responsibility of this permit to an existing agency. This approach can be more complicated to administer but provides clear political advantages by assuring a diverse set of interests within the administering authority. The make-up of a committee could easily change from one community to another depending on the resources and local needs. This approach can be viewed in contrast with the other earth removal bylaws developed for this project which vest authority in a pre-existing municipal agency such as the Board of Selectmen or Conservation Commission.

- A. There is hereby established a seven (7) member Earth Removal Committee (ERC). All members must be residents of the Town of [insert Town name].
- B. When the ERC is first established, two members shall be appointed for a term of one year, two members for a term of two years, and three members for a term of three years. Their successors shall be appointed thereafter for terms of three years.
- C. The ERC shall consist of three (3) representatives of the Board of Selectmen, no more than two (2) of said members shall be actual members of the Board of Selectmen, and four (4) additional members to be appointed by the Town Administrator. The membership of the ERC shall be made up as follows:
 - (1) Three (3) representatives from the Board of Selectmen;
 - (2) Two (2) members from the agricultural community;
 - (3) One (1) member from nominees submitted by the Board of Health; and
 - (4) One (1) member of the trucking industry, nominated by the ERC.

Commentary: The makeup of the ERC listed above was adapted from the Carver material provided during this project. This committee membership can certainly vary from one community to another. Other groups that may be represented include the Conservation Commission, Planning Board, the Chamber of Commerce, and any local “aquifer” or “water quality” committee, etc.

- D. In the absence of nominees from one or more of these groups, the Town Administrator shall choose members without designation. In no case shall more than two of the appointed members represent the same trade, profession, occupation, or business interest. All members shall serve without compensation and must be endorsed by the Board of Selectmen.
- E. No committee action shall be taken without a quorum of four (4) members, (except to continue a hearing in the absence of a quorum), and no decision shall be made without the vote of a majority of the members present.

- F. The committee shall meet, at a minimum, once a month at a place and time to be determined by the committee.

4. EARTH REMOVAL REGULATIONS

The ERC may adopt, and periodically amend, rules and regulations relating to the terms, conditions, definitions, enforcement, fees (including application, inspection, and/or consultant fees), procedures and administration of this Earth Removal Bylaw by majority vote of the ERC, after conducting a public hearing to receive comments on any proposed revisions. Such hearing dates shall be advertised in a newspaper of general local circulation, at least seven (7) days prior to the hearing date. After public notice and public hearing, the ERC may promulgate rules and regulations to effectuate the purposes of this Bylaw. Failure by the ERC to promulgate such rules and regulations or a legal declaration of their invalidity by a court shall not act to suspend or invalidate the effect of this Bylaw.

5. MINOR AND MAJOR EARTH REMOVAL PERMIT STATUS DETERMINATION

Activities requiring a permit under this bylaw shall be categorized as “Minor” or “Major” in accordance with the provisions below.

A. Minor Earth Removal Permit

- (1) Earth removal in existing [or proposed] residential development greater than [200 cubic yards but less than 1,000 cubic yards] on any individual lot.

Commentary: The inclusion of the word “proposed” may depend on whether this bylaw will exempt activities approved under a Definitive Subdivision Plan. If these are exempted, then the word “proposed” can be omitted.

- (2) Earth removal on existing [or proposed] non-residential or mixed use lots greater than [500 cubic yards and less than 2,000 cubic yards] per aggregate site area.

Commentary: The thresholds listed above represent a range of values that can be adjusted depending local needs. If adjustments are made to these “Minor” thresholds, practitioners must also ensure that the “Major” thresholds (below) are adjusted accordingly.

B. Major Earth Removal Permit

- (1) Earth removal in existing [or proposed] residential development greater than [1,000 cubic yards] on any individual lot.
- (2) Earth removal on existing [or proposed] non-residential or mixed use lots greater than [2,000 cubic yards] per aggregate site area.

C. Determination of Applicability and Public Hearing

Applicants for any Earth Removal Permit shall indicate to the ERC whether their project shall be reviewed as a Minor or Major project as part of the application submittal, as described in the Rules and Regulations associated with this Bylaw. The ERC shall confirm or refute the applicant's claim in writing with a Letter of Determination within fourteen (14) days of receiving an application. Such confirmation shall not restrict the ERC from later remanding the plan to a different status if revised information is presented during the review process indicating that the status should be changed.

If an application is determined to be a Minor project by the ERC, the ERC shall inform the applicant of whether a public hearing procedure shall be required. In determining whether a public hearing is required, the ERC shall consider the nature of the Minor project activity and, at a minimum, the following factors:

- (1) Potential noise or infrastructure impacts to surrounding neighborhoods;
- (2) Proximity of the proposed activity to property boundaries; and
- (3) Duration of proposed activity.

D. Segmentation

Except for agricultural operations, applicants for any Earth Removal permit that hold contiguous undeveloped land potentially subject to future earth removal activities shall provide information to the ERC detailing the nature of future activities to the greatest extent practicable. Successive Minor Earth Removal applications may not be filed for the same lot or contiguous lots in common ownership within a [five (5) year period]. Between [five (5)] and [ten (10)] years of a previously issued earth removal permit, any future earth removal activity on the same lot or contiguous lots in common ownership that would otherwise qualify as a Minor project shall be deemed a Major project by the ERC.

Commentary: The provisions above are designed to discourage project segmentation, where an applicant will purposefully phase his/her activities to avoid higher permitting burdens. The timeline thresholds can be adjusted in accordance with what a community

feels is reasonable.

6. ACTIVITIES EXEMPT

The following activities shall be exempt from permitting requirements under this Bylaw:

- A. Removal necessary for the reconstruction of existing streets and the installation of utilities;
- B. Removal necessary for normal agricultural uses as defined under M.G.L. c131, s 40, 310 CMR 10.04 (a) land in agricultural use, (b) normal maintenance of land in agricultural use, and (c) normal improvement of land in agricultural use. This agricultural-related work is further defined as earth necessary to maintain or improve the applicant's/owner's contiguous or non-contiguous land for agricultural purposes, and does not include the removal of earth for sale, trade or other considerations. This practice must use best management practices as outlined in the Natural Resources Conservation Service (NRCS) Conservation Practice Standard "Land reclamation, Currently Mined Land", Code 544 or the NRCS Conservation Practice Standard "Critical Area Planting" Code 342, as determined by the ERC.

Commentary: The regulatory citation above references the explicit definition of "normal maintenance of land" in agricultural use provided as part of the regulations associated with the Massachusetts Wetlands Protection Act. NRCS standards for restoration provide an objective "third party" industry standard that will allow for a more uniform approach to plan development and enforcement.

- C. Removal performed in connection with any state and/or federal projects;
- D. Activities approved as part of an approved Definitive Subdivision Plan regardless of the volume of earth excavated or filled;
- E. Activities approved as part of a Special Permit under the Zoning Bylaw regardless of the volume of earth excavated or filled;
- F. Activities approved as part of a Site Plan Review submittal under the Zoning Bylaw regardless of the volume of earth excavated or filled;

Commentary: The Town will want to carefully consider exemptions "D" through "F" above. The advantage of these sections is that they streamline the permitting process by assuming that groundwater protection and drainage will be properly reviewed under other permitting processes. In order to achieve an equal level of protection, however, the review and approval standards for these other processes must address excavation and filling. With subdivision review, for example, excavation and drainage will certainly be part of the review process. However, with Site Plan Review and certain Special Permit uses, excavation and filling issues may simply not be part of the process. The Town will want to review the general "Findings" and standards associated with Special Permits

and Site Plan Review to make sure excavation and filling are properly addressed before using the exemptions above.

- G. Any activities on land owned or operated by the Town of [insert Town name]; and
- H. Activities approved as part of an application for Open Space Residential Design.

7. MINOR AND MAJOR EARTH REMOVAL PERMIT PROCEDURES AND APPLICATION CONTENTS

Applicant for any Earth Removal Permit shall follow the procedures and provide the information specified by the Rules and Regulations associated with this Bylaw.

8. PERFORMANCE STANDARDS AND DETERMINATION

The following performance standards shall apply to Minor or Major Earth Removal Permits as specified below and as they are applicable to the earth removal operation. The ERC shall use these performance standards as the basis for any determination to approve, approve with conditions, or deny a permit application. The ERC may summarily condition a Permit approval to meet these standards by referencing this section of the Bylaw. The ERC may also modify any of the following performance criteria as part of a conditional approval in order to ensure that operations will not be injurious, dangerous, obnoxious or offensive to people in the general vicinity by reason of the emission of odor, fumes, dust, smoke, vibration, noise, heat, glare, or other nuisances observable at the lot lines or the immediate neighborhood. Where waivers have been provided for certain procedures or plan requirements as part of a formal petition under the Rules and Regulations associated with this Bylaw, associated performance standards shall not apply.

- A. Minimum Performance Standards for All Permits.
 - (1) Operation hours, including warm-up and repairs of equipment shall be only between [7 A.M. and 3 P.M., Monday through Friday], and loaded trucks may leave prescribed premises only within such hours. All loaded vehicles shall be suitably covered to prevent dust and contents from spilling and blowing from the vehicle;
 - (2) The operation shall not require the transportation of materials over particular public streets on which undue congestion or hazards will be created, or on which undue injury to the roadway surfaces will be sustained;

Commentary: Determining the applicability of this standard will likely require input from the DPW and Police Department. An alternative approach developed in Carver allows for the applicant to potentially negotiate a mitigation plan where any damage to

roads will be repaired as necessary.

- (3) The permit holder shall be responsible for necessary cleaning of spillage of materials on all public ways as a result of operation;
- (4) The maximum depth of the excavation shall be [five (5) feet] above the highest water level as determined by the monitoring wells installed pursuant to the Rules and Regulations associated with this Bylaw except where excavation is specifically designed to provide improvements to surface or groundwater quality through the use of structural Best Management Practices;
- (5) For activities other than those associated with agriculture, excavations shall not be permitted at an elevation which is lower than the street or below the lowest existing elevation on the site, whichever is higher;

Commentary: Provisions for numbers 4 and 5 above should be carefully considered. Applying this separation to groundwater distance would make several activities extremely difficult or costly to accomplish. For example, expansion of cranberry bogs would be difficult to accomplish in many instances with this standard. Communities should carefully consider the separation distance they may require and may also wish to consider exemptions to this activity. Furthermore, this standard may be difficult to enforce depending on the separation distance required. With regard to excavation below street level, the same situation applies. These restrictions would make certain types of stormwater management or agricultural operations challenging.

- (6) When the depth of excavation is [five (5) feet] or less as measured from grade through the entire width of the cross section, earth may be removed to within [twenty-five (25) feet] of an abutting residential property line and shall be restored to a maximum [3:1] grade up to this setback;
- (7) When the depth of excavation is greater than [five (5) feet], as measured through the entire width of the cross section, earth may be removed to within [fifty (50) feet] of abutting residential property lines and shall be restored to a maximum [2:1] grade up to this setback;
- (8) For any depth of excavation, earth may be removed to within [twenty-five (25) feet] of abutting non-residential property lines and shall be restored to a maximum [3:1] grade up to said property line. These standards shall not necessarily apply to adjacent lots in common ownership or where deviations from these standards will provide for complementary design between properties;

Commentary: Standards 6 and 7 above attempt to provide minimum performance standards for slope restoration. Many extraction operations will dig as close as they are

allowed to adjacent property lines and care needs to be taken to make sure the perimeter of earth removal operations are safely restored. Standard 8 is designed to address those activities that may occur on one lot, but are part of the operations on an adjacent lot.

- (9) No area shall be excavated so as to cause accumulation of free standing water unless free standing water is integral to the post-construction purpose of the activity and acceptable to the ERC. Permanent drainage and siltation control shall be provided as needed in accordance with good conservation practices. Drainage shall not lead directly into streams or ponds;
- (10) No excavation or associated activities shall be allowed closer than one hundred (100) feet to any water resource within the jurisdiction of the Conservation Commission, except for existing bogs, also subject to their approval. Natural vegetation shall be left and maintained on the undisturbed land; and
- (11) All debris, stumps and boulders shall be disposed of at a facility specifically designed to perform this type of disposal unless re-used on-site as part of future operations in a manner acceptable to the ERC.

B. Additional Performance Standards for Major Earth Removal Permits.

- (1) Access roads shall be constructed in a manner that precludes any trucks from turning more than 90 degrees to enter or leave the site. All access roads shall be properly secured during the non-operational hours of the excavating process and this security will remain in effect until the property has been restored and seeding and planting have begun growth;
- (2) All access roads leading to the public ways shall be paved in a manner suitable to the intended vehicle load for a distance of two hundred (200) feet back from said public ways unless such surfacing will impact adjacent resource areas or essential elements of on-site operations. On-site refueling of equipment shall be performed only on access roads to the greatest extent practicable;
- (3) Limits of excavation shall be set by stakes located every one hundred (100) feet with a minimum of [three (3)] feet exposed. A vertical control monument shall be installed in a readily accessible location;
- (4) Active earth removal operation shall not exceed a total of [five (5) acres] at any one time. Each [five (5) acre] section shall be restored prior to the beginning of the next [five (5) acre] section. No trees shall be removed from the next [five (5) acre] section until the first [five (5) acre] section has been appropriately restored, but allowing for reasonable access to the next [five (5)

acre] section. The extent and sequencing of phasing may be altered by the ERC where changes are deemed to be equally or more protective of the natural environment;

- (5) Any temporary shelters or buildings erected on the premises shall be screened from the public view. These structures shall be removed from the premises within thirty (30) days after termination of operation prior to the release of securities;
- (6) Within thirty (30) days following completion of operation, final grading shall be established and shown on the approved topographical plan; and
- (7) Stormwater management is compliant with all applicable state and local standards.

MODEL EARTH REMOVAL RULES AND REGULATIONS

1. PURPOSE AND INTENT

- A. To leave land in a safe and convenient condition for appropriate reuse without requiring excessive and unreasonable maintenance or resulting in damage to public and private property;
- B. To ensure that earth removal activities shall be conducted in a safe manner with due regard to safety and with minimal detrimental effect upon environment of the district in which the activities are located; and
- C. To ensure the protection of groundwater resources throughout the community including, but not limited to wellhead protection areas and the Plymouth-Carver aquifer.

2. DEFINITIONS

Definitions associated with terms in these Rules and Regulations shall be the same as those established as part of the Town's General Bylaw enabling these Regulations.

3. AUTHORITY

- A. The Rules and Regulations contained herein have been adopted by the ERC in accordance with the Town of [insert Town name] Earth Removal Bylaw. The ERC shall administer over all applications within the jurisdiction of this bylaw.
- B. These Rules and Regulations may be periodically amended by the ERC in accordance with the procedures outlined in Section 4 of the Town of [insert Town name] Earth Removal Bylaw.

4. MINOR EARTH REMOVAL PERMIT PROCEDURES AND APPLICATION CONTENTS

- A. Procedures
 - (1) Submittal. An applicant for a Minor Earth Removal Permit shall submit [ten (10)] copies of a complete application to the ERC and [one (1)] copy to the Town Clerk. The ERC shall distribute these plans to the Planning Board, Agricultural Commission, Conservation Commission, Board of Health, Board of Selectmen, Fire Department, Police Department, Department of Public Works and other officers and official boards of the Town for review and comment, as the ERC may direct.

Commentary: The Boards included in the review process may change from one

community to another depending on the administrative capacity of each Town. Local practitioners considering the use of this bylaw need to make sure that the number of plans required is commensurate with the number of agencies that will receive copies.

- (2) Hearing. Within [forty-five (45)] days of issuing a Letter of Determination, the ERC may hold a public hearing, which may be continued as necessary to review the information in the application.
- (3) Abutter Notification. In the event that a public hearing is required, the applicant shall notify all abutters and other parties in interest of the hearing by certified mail within fourteen (14) days of the hearing and present receipts to the ERC. Advertising and related expenses shall be borne by the applicant, in addition to filing fees.
- (4) Request for Waivers. Any applicant may formally request waivers for elements of the Application Contents (Section 4.B) to the ERC as part of the application submittal. Requests for waivers shall include a detailed list of those requirements for which a waiver is being requested and a brief justification for that request. Where a public hearing is held, requests for waivers shall be considered at the opening of that process. The ERC shall determine whether a waiver is granted through a simple majority vote. Should the substance of an application change during the course of a public hearing, the ERC may reconsider this decision through a simple majority vote.

Commentary: The Letter of Determination is a direct reference to Section 5.C in the Earth Removal Bylaw.

B. Application Contents

The following materials and information shall be provided to the ERC as part of a Minor Earth Removal application. Information provided for Minor Earth Removal activities does not require preparation by a Massachusetts Registered Professional Engineer, but must be provided in a manner that allows for the ERC to adequately review the proposed activities.

Commentary: The list of plan requirements provided below represent the full range of information that would be required to make an informed decision regarding a Minor Earth Removal activity. One of the goals of this section is to require information that would not result in a significant expense to the applicant. As such, communities must make sure that they are comfortable with the “margin of error” that may be associated with some of these requirements and the scale of the activity specified as “Minor”.

- (1) Legal name and address of the owner(s) of the property for which the permit is requested;
- (2) Name and address of the applicant and the address that shall be sufficient for any notice required under the Bylaw;
- (3) Statement clearly indicating the activity as a “Minor Earth Removal” activity;
- (4) Application fee;
- (5) Property lines, names and addresses of all abutters, including those across any way or water resource. Property boundary surveys are not required for this submittal. Such information shall be obtained from the most recent list and maps as certified by the Board of Assessors;
- (6) The names, approximate location, and widths of adjacent streets;
- (7) Approximate existing drainage area delineations on the site;
- (8) Map of soils using NRCS soils mapping. (Copies of the existing relevant SCS Soils Survey shall be adequate);
- (9) All applicable on-site local, state, and federal regulatory resource boundaries and buffer zones. Where activities do not fall within the jurisdiction of the Conservation Commission, USGS quadrangles or data readily available in GIS format shall be adequate. Where activities do fall within the jurisdiction of the Conservation Commission, an Abbreviated Notice of Resource Area Delineation (ANRAD) may be provided as part of the application;
- (10) Status of the site relative to Natural Heritage and Endangered Species Protection Act (NHESP) jurisdiction;
- (11) Approximate location and extent of parking, landscaping, stormwater management, water supply and wastewater management service areas that would be required to accommodate the use;
- (12) If available, the location and results of any test pit investigations for soil profiles, percolation rates and determination of seasonal high ground water levels;
- (13) Area and limits of work;
- (14) Proposed date of excavation and/or filling activity termination;
- (15) Description of excavation method and fate of excavated material including boulders and stumps;
- (16) Hours of operation;
- (17) Routes for transporting excavated material through the Town;
- (18) Type and location of any accessory structure(s) associated with the activity; and
- (19) Restoration plans consistent with best management practices as outlined in the Natural Resources Conservation Service Conservation Practice Standard “Land Reclamation, Currently

Mined Land”, Code 544 or the Natural Resources Conservation Service Conservation Practice Standard “Critical Area Planting” Code 342, as determined by the ERC.

5. MAJOR EARTH REMOVAL PERMIT PROCEDURES AND APPLICATION CONTENTS

A. Procedures

- (1) Submittal. An applicant for an Excavation or Filling Permit shall submit [ten (10)] copies of a complete application to the ERC and [one (1) copy] to the Town Clerk. The ERC shall distribute these plans to the Planning Board, Agricultural Commission, Conservation Commission, Board of Health, Board of Selectmen, Fire Department, Police Department, Department of Public Works and other officers and official boards of the town for review and comment, as the ERC may direct.
- (2) Hearing. Within [forty-five (45)] days of receiving a complete application, the ERC shall hold a public hearing, which may be continued as necessary to review the information in the application.
- (3) Abutter Notification. The applicant shall notify all abutters and other parties in interest of the hearing by certified mail within fourteen (14) days of the hearing and present receipts to the ERC at the first hearing. Advertising and related expenses shall be borne by the applicant, in addition to filing fees.
- (4) Request for Waivers. Any applicant may formally request waivers for elements of the Pre-Submittal Analysis (Section 5.B) or the Application Contents (Section 5.C) to the ERC as part of the application submittal. Requests for waivers shall include a detailed list of those requirements for which a waiver is being requested and a brief justification for that request. Where a public hearing is held, requests for waivers shall be considered at the opening of that process. The ERC shall determine whether a waiver is granted through a simple majority vote. Should the substance of an application change during the course of a public hearing, the ERC may reconsider this decision through a simple majority vote.

B. Pre-Submittal Analysis

- (1) For the purposes of establishing a depth to seasonal high groundwater, monitoring wells shall be installed and monitored every other week for the duration, beginning December 1st through March 30th. This monitored period shall be done in the season immediately preceding the filing of the application. These wells

- shall be a requirement and will be used as a basis for the renewal permit if the operation is not completed within one year. The number and location of monitoring wells shall be one (1) for every two (2) acres of land with a minimum of three (3) wells spaced at a relatively even interval on the site; and
- (2) Each of the wells established for this pre-submittal analysis shall be sampled once for water quality at least four (4) weeks after the well is established for Volatile Organic Compounds (VOCs), Total Nitrogen (TN), Total Dissolved Phosphorus (TP) and Total Suspended Solids (TSS).

Commentary: The language requiring basic water quality sampling above is designed to protect the Town and the property owner by providing a baseline water quality reading. If contamination occurs as a result of the earth removal operation, the Town will have some water quality data to use as a reference for pre-existing conditions. Likewise, if there is already some contamination present, the property owner will be protected against unfounded future allegations.

C. Application Contents

All applications submitted to the ERC for removal of earthen material shall be accompanied by the following information and/or plans:

- (1) The legal name and address of each owner of the property for which the permit is requested;
- (2) The name and address of the applicant and the address that shall be sufficient for any notice required under the Bylaw;
- (3) Statement clearly indicating the activity as a “Major Earth Removal” activity;
- (4) Application fee;
- (5) Map of soils using NRCS soils mapping. (Copies of the existing relevant SCS Soils Survey shall be adequate);
- (6) The property lines, names and addresses of all abutters, including those across any way, from the most recent tax list as certified by the Board of Assessors;
- (7) Existing contours at two-foot intervals;
- (8) Surface water resources including wetlands, the 100-year floodplain, and any other features under the jurisdiction of the Conservation Commission. An approved wetland resource area delineation, minimally an Abbreviated Notice of Resource Area Delineation, shall be provided as part of the application;
- (9) A topographical map showing drainage facilities, final grades, and proposed vegetation and trees;

- (10) Stormwater drainage plans showing catchment areas on the site, and off-site areas that either contribute or receive stormwater flow. Calculations may be required demonstrating that the peak rates of stormwater discharge from the site during removal and after restoration shall not exceed those under pre-removal conditions for the 10-, 25- and 100-year storm events;
- (11) Dust, erosion, and sediment-control plan for the site and trucks removing earth;
- (12) Estimated quantity of material to be removed and topsoil to be replaced and the method to be used, verified by a registered professional engineer;
- (13) The proposed form of bond;
- (14) An estimate of the number of truck trips, location of truck routes, hours of truck traffic; and vehicular entrances and exits from the site;
- (15) Location of fueling areas for construction and post-construction vehicles;
- (16) Where applicable, results of the monitoring well investigations including:
 - (a) Boring logs;
 - (b) Highest observed water level at each well;
 - (c) Water quality results; and
 - (d) Direction of groundwater flow.
- (17) Intended overall length of operation;
- (18) Proposed daily hours of operation;
- (19) A grid showing the order of excavation. The sequence of operation may be changed with the consent of the ERC;
- (20) Overall limits of excavation;
- (21) Contingency plan for fuel spills or any other accidental spilling of toxic or hazardous materials; and
- (22) A Land Restoration Plan(s) consistent with best management practices as outlined in the Natural Resources Conservation Service (NRCS) Conservation Practice Standard “Land reclamation, Currently Mined Land”, Code 544 or the NRCS Conservation Practice Standard “Critical Area Planting” Code 342, as determined by the ERC.

6. DECISION

- A. Decision. Where a public hearing is not required, the ERC shall decide whether to approve, approve with conditions or deny the application within [ten (10) business days] of filing a Letter of Determination with a

simple majority vote. Where applicable, within [ten (10)] days of the close of the public hearing, the ERC shall decide whether to approve, deny or approve with conditions based upon a simple majority vote. Upon approval of the application for a Major Earth Removal Permit, the ERC may issue a one-year (1) permit, renewable upon request by the applicant and favorable review by the ERC. A record of the decision shall be mailed to the applicant and filed with the Town Clerk. Permits issues for Minor Earth Removal operations need not be restricted to a one-year duration but shall be subject to the segmentation provisions of the bylaw.

- B. Conditions. The ERC may condition their approval of the permit as they see necessary to accomplish the purpose of this bylaw and the Performance Standards listed in Section 8 of the Earth Removal Bylaw. Conditions may address, but shall not be limited to, operation standards, hours of operation, a schedule for restoration, a schedule for inspection, methods for erosion and sediments control and the routes and frequency of material transport from the site.
- C. Renewal. Operations of permitted Major Earth Removal activities may extend beyond one year only upon approval of a renewal from the ERC. Said approval shall follow written petition from an applicant. An administrative extension for one (1) year may be granted by the ERC if a site visit by their designee reveals complete adherence to the conditions of the original permit and no grievances or complaints have been registered as part of the operation. Where an administrative extension is not possible, a public hearing held with [forty-five (45) days] of petition. Criteria for approval of a renewal petition may include, but shall not be limited to, impacts to environment, adherence to permit conditions, number of permit violations and actions taken to remedy said violations, and proposed changes to operation of activity. The applicant's petition for renewal shall include the following:
- (1) Where applicable, updated water quality sampling from any monitoring wells installed pursuant to the Bylaw. If said wells are damaged or no longer exist, then sampling shall occur within fifty (50) feet downgradient of the previous well locations;
 - (2) A record of any violation of the existing permit and actions taken to remedy said violation;
 - (3) Any substantive changes in operations proposed for the coming year of activity; and
 - (4) Any additional information deemed necessary by the ERC to make an informed decision.

Commentary: Another way in which to handle the renewal process above would be to allow the ERC to extend the operation without a public hearing upon a site plan review.

7. SURETY

For any approved Major Earth Removal activities, a performance bond of fifteen thousand dollars (\$15,000) per acre or fraction thereof or such other amount as determined sufficient by the ERC shall be posted in the name of the Town, including an enforceable consent to entry easement, assuring satisfactory performance in the fulfillment of the requirements of the permit as the ERC may impose. The ERC may require, as a condition of issuing a Earth Removal Permit under this Bylaw, that the applicant record a license authorizing the Town, its agents or contractors, to gain access to the property for the purposes of performing the restoration work secured by the bond or guaranty posted under this paragraph.

8. PENALTIES

The penalty for the violation of this Bylaw or for earth removal activities without a permit hereunder, except as herein before provided, shall be as follows:

- A. For first offense, [fifty (50)] dollars.
- B. For the second offense, [one hundred (100)] dollars.
- C. For each subsequent offense, [two hundred (200)] dollars and/or revocation of the earth removal permit at the discretion of the ERC.
- D. Each [ten (10)] cubic yards of earth removed from the original site in a manner that constitutes a penalty shall be considered a separate offense under this Bylaw.
- E. In the event that an earth removal project has begun without a permit, the Town's engineer shall, at the property owner's expense, determine the number of cubic yards removed without a permit in order to assess the number of offenses. Such penalties shall be in addition to the existing rights of the Town to enforce its Bylaws.

9. ENFORCEMENT

The Town may take any or all of the enforcement actions prescribed in this Section to ensure compliance with this Bylaw, and/or when immediate danger exists to the public or adjacent property, as determined by the ERC and/or its designee. Sureties described in Section 7 above may be used by the Town in carrying out any necessary compliance or restoration work or enforcement actions.

- A. The [insert appropriate inspector designee] may post the site with a Stop Work Order directing that all earth removal activities not authorized under the Bylaw cease immediately. The issuance of a Stop Work Order may include remediation or other requirements which must be met before activities may resume.

- B. The Town may, after written notice is provided to the applicant, or after the site has been posted with a Stop Work Order, suspend or revoke the Earth Removal Permit issued by the Town.
- C. No person shall continue earth removal activities in an area covered by a Stop Work Order, or during the suspension or revocation of an Earth Removal Permit, except work required to correct an imminent safety hazard as prescribed by the Town.