Model Shoreland Zoning Permit Forms

State Planning Office Community Assistance Team

December 1997

MODEL SHORELAND ZONING PERMIT FORMS

The attached **model** Shoreland Zoning permit forms have been developed by the State Planning Office's (SPO) Community Assistance Team in coordination with the Department of Environmental Protection (DEP) to assist municipalities with the administration and enforcement of local ordinances adopted pursuant to the Mandatory Shoreland Zoning Act. Municipalities are encouraged to modify these forms to fit the specific requirements of local ordinance provisions and administrative procedures.

In addition, although these forms have been designed for the Shoreland Zoning permitting process, they can be modified to serve as the general building permit application forms for a municipality. To modify the forms in this way, a municipality would need to add sections requesting applicants to provide information related to locally adopted building codes (e.g. information on structural specifications; electrical, plumbing, heating systems; chimneys; etc.). Assistance in tailoring these forms to meet local needs may be obtained from your Regional Council or the Office of Comprehensive Planning.

The role of local planning boards and code enforcement officers in the review of Shoreland Zoning permit applications varies from town to town. For instance, in some municipalities the planning board is responsible for reviewing and approving certain types of land use activities in the Shoreland Zone, such as a commercial development project or construction of a permanent dock, while the code enforcement officer is responsible for residential structures and other uses. In other municipalities, it may be the code enforcement officer and not the planning board that reviews and approves all shoreland development projects. Municipalities should note that these model forms have been designed based on the assumption that the local code enforcement officer will be responsible for issuing all Shoreland Zoning permits. If necessary, the forms should be modified to meet the requirements for issuing permits specified in the local Shoreland Zoning Ordinance.

The following discussion describes each section of the model permit forms. The forms are divided into four parts: the Model Shoreland Zoning Permit Application (white pages); Appendix 1 - Shoreland Zoning Permit Checklist (yellow page); Appendix 2 - Special Permit Form (blue page); and Appendix 3 - Shoreland Zoning Permit (green page).

Model Shoreland Zoning Permit Application (white pages)

<u>General Information (page 1)</u> - This section requests basic information about the location and type of project proposed. Included here is a brief written description of the project. Note that site plans and other sketches are required in subsequent sections of the application form.

If a project is approved, a small box at the top right hand corner of page 1 provides space for the code enforcement officer or other appropriate municipal official to fill in the permit number, the date of issue, and the fee amount. Shoreland and Property Information (page 2) - This section requests more specific information about the proposed project. In particular, the applicant is asked to provide information that will assist the code enforcement officer and planning board in determining whether the project meets Shoreland Zoning requirements. For example, the applicant must provide information on the size of the lot, the amount of the lot to be covered by nonvegetated surfaces (e.g. buildings, driveways, etc.), and the frontage along the waterbody.

Questions 24 and 25 are intended to help the code enforcement officer and the applicant calculate whether a proposed expansion of a portion of a structure which is less than the required setback meets the requirement in the Mandatory Shoreland Zoning Act that limits such expansions to 30% (in floor area and volume). The 30% limitation is applicable to any proposed construction since January 1, 1989 and applies over the lifetime of a structure.

Determining whether an expansion meets the 30% limitation is a four-step process:

A. First, the floor area (sq. ft.) and volume (cu. ft.) of that portion of the structure which is less than the required setback as of <u>January 1</u>, <u>1989</u> must be determined (this is "baseline" information);

- B. Second, the floor area and volume of any expansions of that portion of the structure which is less than the required setback constructed <u>between January 1</u>, 1989 and the time the pending application is submitted must be determined;
- C. Third, the floor area and volume of the expansion of that portion of the structure which is less than the required setback proposed in the pending application must be determined; and
- D. Fourth, the percent increase in floor area and volume of all expansions of that portion of the structure which is less than the required setback since January 1, 1989 must be calculated. This is done by -
- 1. Adding the numbers calculated for B. and C. above;
- 2. Dividing that number by the number calculated for A. above;

and

3. Multiplying the final figure by 100.

To ensure that the 30% limitation is applied properly, municipalities must clearly define the terms "structure", "floor area", and "volume" and apply these definitions uniformly when calculating the size of existing structures and proposed expansions. Moreover, municipalities must also take care to establish a record-keeping system so that records of expansions of structures in the shoreland zone are kept over the lifetime of a structure.

[Note: Municipalities have the option of prohibiting any expansions of structures or portions of structures within the required setback, thereby eliminating the need to keep expansion records over the lifetime of a structure and calculate whether a proposed expansion meets the 30% limitation. Alternatively, municipalities can specify that only a one-time expansion of portions of structures within the required setback be allowed (consistent with the 30% limitation).]

<u>Site Plan (page 3)</u> - To assist the code enforcement officer and planning board in reviewing a proposed project, the applicant is asked to sketch a site plan, including the position of any structures with setback distances from the shoreline, all property lines, areas to be cleared of trees and other vegetation, areas and amounts to be filled or graded, and the location of proposed wells, septic systems, and driveways. Applicants are also requested to provide a scale for the site plan and distinguish the proposed expansion from the existing structure.

<u>Front and Side Elevations (page 4)</u> - Like the site plan, these simple sketches of the front (or rear) and side elevations of existing and proposed structures are intended to give the code enforcement officer and planning board a clear picture of the proposed project.

Additional Permits, Approvals and/or Reviews Required (page 5) - This section advises applicants to consult with the code enforcement officer and other appropriate state and federal agencies to determine whether additional permits (local, state, and/or federal) are needed. All required permits, approvals, and/or reviews should be checked in the boxes provided.

<u>Applicant's Signature (page 5)</u> - The applicant must sign and date the completed application form before it is submitted to the code enforcement officer. Note that the applicant's statement includes an agreement to allow future inspections by the code enforcement officer.

Approval or Denial of Application (page 6) - This page is completed by the code enforcement officer indicating whether the Shoreland Zoning Permit is approved (with or without conditions) or denied. A copy of this page should be provided to the applicant along with the actual Shoreland Zoning Permit (See Appendix 3). In approving a permit, the code enforcement officer (and planning board as appropriate) must find that the proposed use complies with the purposes and requirements of the local Shoreland Zoning Ordinance. If a permit is either denied or approved with conditions, the reasons or conditions must be stated in writing. The box at the bottom of the page contains a checklist for the Code Enforcement Officer and space to note the permit number and fee amount.

Appendix 1 - Shoreland Zoning Permit Checklist (yellow page)

This checklist is intended as a tool to assist the code enforcement officer in tracking a Shoreland Zoning permit application through the review process. Like the permit application form, this checklist may be modified to meet any additional local requirements or procedures.

Appendix 2 - Special Permit Form (blue page)

Upon initial review of the Shoreland Zoning permit application, the code enforcement officer will determine whether a variance, conditional use approval or special exception is required. If such a special permit is required for a project in the Shoreland Zone, the applicant must first apply to the appropriate local board for a special permit. If the request for a variance, conditional use, or special exception is approved, then this form should be completed by the appropriate local board and submitted to the code enforcement officer along with the Shoreland Zoning permit application.

Note that the Board of Appeals is the only local body with statutory authority to grant zoning variances. In reviewing a request for a variance, Boards of Appeal must apply the "undue hardship" criteria set forth in Title 30-A M.R.S.A. Section 4353(4). Generally, the Planning Board is responsible for granting conditional uses or special exceptions. In some instances, however, the Board of Appeals may be the designated body. In reviewing such requests, Planning Boards or Boards of Appeal must apply the standards of review provided in the applicable local ordinance.

Appendix 3 - Shoreland Zoning Permit (green page)

Once a project in the Shoreland Zone is approved, the code enforcement officer should provide this permit to the party responsible for the project and request that it be posted in a conspicuous location at the construction site. The site inspection schedule printed on the permit is for use by the code enforcement officer. Although this model form indicates four key inspection points in the construction process, code enforcement officers may modify and add to these times as appropriate. Modifications will be needed if a municipality has a building code that it enforces in addition to the Shoreland Zoning Ordinance.

Appendix 4

- i. Standard Conditions for Approval of All Projects (page 12)
- ii. Standard Clearing Conditions (page 13)
- iii. Guidelines for Soil Stabilization (page 14)

ACKNOWLEDGEMENTS

A number of individuals contributed to this project. Thomas Ford, as a contractor with SPO, prepared the original draft of these permit forms. Francine Rudoff and Tamara Risser of SPO and Rich Baker and Dan Prichard of DEP's Shoreland Zoning Unit reviewed and edited several working drafts. Additional thanks for reviews and comments go to Dan Soule and Linda Boothby of SPO, Becky Seel of the Maine Municipal Association, Dan Fleischman of the Southern Maine Regional Planning Commission, and Paula Thomson of the North Kennebec Regional Planning Commission.

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FOR OFFICE USE ONLY:	
PERMIT NO.:	
ISSUE DATE:	
FEE AMOUNT:	

TOWN OF ____ELIOT ___ SHORELAND ZONING PERMIT APPLICATION

GENERAL INFORMATION

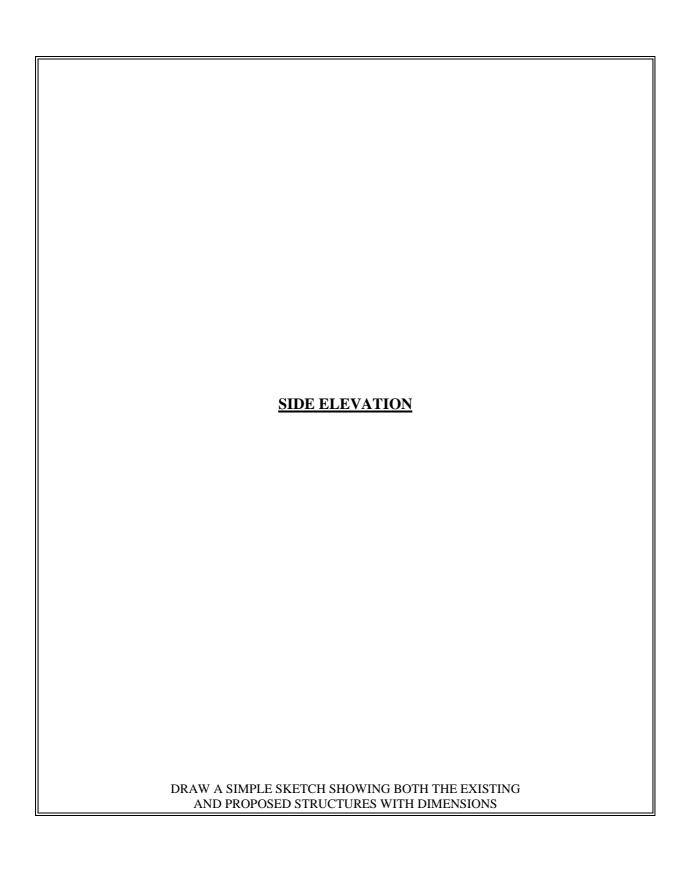
1. APPLICANT	2. APPLICANT'S ADDRESS		3. APPLICANT'S TEL. #		
4. PROPERTY OWNER	5. OWNER'S ADDRESS		6. OWNER'S TEL. #		
7. CONTRACTOR	8. CONTRAC	CTOR'S ADDRESS	9. CONT	'RACTOR'S TEL. #	
10. LOCATION/ADDRESS OF PROPERTY 11. TAX MAP/PAGE & LOT # AND DATE LOT WAS CREATED 12. ZONING DISTRICT					
13. DESCRIPTION OF PROPERTY INCLUDING A DESCRIPTION OF ALL PROPOSED CONSTRUCTION, (E.G. LAND CLEARING, ROAD BUILDING, SEPTIC SYSTEMS, AND WELLS - PLEASE NOTE THAT A SITE PLAN SKETCH IS REQUIRED ON PAGE 3).					

14. PR	14. PROPOSED USE OF PROJECT		ESTIMATED COST OF CONSTRUCTION
	SHORELAND AND PRO	OPEI	RTY INFORMATION
16. LC	OT AREA (SQ. FT.)	17. F	RONTAGE ON ROAD (FT.)
	O. FT. OF LOT TO BE COVERED BY ON-VEGETATED SURFACES	19. E	ELEVATION ABOVE 100 YR. FLOOD
20. FR	RONTAGE ON WATERBODY (FT.)	21. H	HEIGHT OF PROPOSED STRUCTURE
22. EX	KISTING USE OF PROPERTY	23. F	PROPOSED USE OF PROPERTY
	Questions 24 & 25 apply only to expansions of portions TOTAL FLOOR AREA OF PORTION OF STRUCTURE WHICH IS LESS THAN	of exist	ing structures which are less than the required setback. A) TOTAL VOLUME OF PORTION OF STRUCTURE WHICH IS LESS THAN
	REQUIRED SETBACK AS OF 1/1/89:		REQUIRED SETBACK AS OF 1/1/89:
B)	FLOOR AREA OF EXPANSIONS OF PORTION OF STRUCTURE WHICH IS LESS THAN REQUIRED SETBACK FROM 1/1/89 TO PRESENT:	B)	CUBIC FT. VOLUME OF EXPANSIONS OF PORTION OF STRUCTURE WHICH IS LESS THAN REQUIRED SETBACK FROM 1/1/89 TO PRESENT:
_	SQ. FT.		CUBIC FT.
C)	FLOOR AREA OF PROPOSED EXPANSION OF PORTION OF STRUCTURE WHICH IS LESS THAN REQUIRED SETBACK:	C)	VOLUME OF PROPOSED EXPANSION OF PORTION OF STRUCTURE WHICH IS LESS THAN REQUIRED SETBACK:
_	SQ. FT.		CUBIC FT.
D)	% INCREASE OF FLOOR AREA OF ACTUAL AND PROPOSED EXPANSIONS OF PORTION OF STRUCTURE WHICH IS LESS THAN REQUIRED SETBACK SINCE 1/1/89:	D)	% INCREASE OF VOLUME OF ACTUAL AND PROPOSED EXPANSIONS OF PORTION OF STRUCTURE WHICH IS LESS THAN REQUIRED SETBACK SINCE 1/1/89:

(% INCREASE = $\frac{B+C}{A}$ x 100)	$(\%INCREASE = \frac{B+C}{A} \times 100)$
%	%

NOTE: IT IS IMPERATIVE THAT EACH MUNICIPALITY DEFINE WHAT CONSTITUTES A STRUCTURE, FLOOR AREA, AND VOLUME AND APPLY THOSE DEFINITIONS UNIFORMLY WHEN CALCULATING EXISTING AND PROPOSED SO. FT. AND CU. FT.

SITE PLAN
PLEASE INCLUDE: LOT LINES; AREA TO BE CLEARED OF TREES AND OTHER VEGETATION; THE EXACT POSITION OF PROPOSED STRUCTURES, INCLUDING DECKS, PORCHES, AND OUT BUILDINGS WITH ACCURATE SETBACK DISTANCES FROM THE SHORELINE, SIDE AND REAR PROPERTY LINES; THE LOCATION OF PROPOSED WELLS, SEPTIC SYSTEMS, AND DRIVEWAYS; AND AREAS AND AMOUNTS TO BE FILLED OR GRADED. IF THE PROPOSAL IS FOR THE EXPANSION OF AN EXISTING STRUCTURE, PLEASE DISTINGUISH BETWEEN THE EXISTING STRUCTURE AND THE PROPOSED EXPANSION.
NOTE: FOR ALL PROJECTS INVOLVING FILLING, GRADING, OR OTHER SOIL DISTURBANCE YOU MUST PROVIDE A SOIL EROSION CONTROL PLAN DESCRIBING THE MEASURES TO BE TAKEN TO STABILIZE DISTURBED AREAS BEFORE, DURING AND AFTER CONSTRUCTION (See attached guidelines)
guidennes)
SCALE: = FT.
FRONT OR REAR ELEVATION



ADDITIONAL PERMITS, APPROVALS, AND/OR REVIEWS REQUIRED

CHECK IF REQUIRED:	
PLANNING BOARD REVIEWAPPROVAL (e.g. Subdivision, Site Plan Review)	
BOARD OF APPEALS REVIEWAPPROVAL	
FLOOD HAZARD DEVELOPMENT PERMIT	Γ
EXTERIOR PLUMBING PERMIT (Approved HHE 200 Application Form)	
INTERIOR PLUMBING PERMIT	
DEP PERMIT (Site Location, Natural Resources Protection Act)	
ARMY CORPS OF ENGINEERS PERMIT (e.g. Sec. 404 of Clean Waters Act)	
OTHERS:	
NOTE: APPLICANT IS ADVISED TO CONSULT W AND APPROPRIATE STATE AND FEDERAL AGE ADDITIONAL PERMITS, APPROVALS, AND REVI	NCIES TO DETERMINE WHETHER
I CERTIFY THAT ALL INFORMATION GIVEN IN PROPOSED USES SHALL BE IN CONFORM THETOWN OF ELIOTSHORELAND ZON INSPECTIONS BY THE CODE ENFORCEMENT OF	IANCE WITH THIS APPLICATION AND NING ORDINANCE. I AGREE TO FUTURE
APPLICANT'S SIGNATURE	DATE
AGENT'S SIGNATURE (if applicable)	DATE

APPROVAL OR DENIAL OF APPLICATION	_ MAP	_LOT#
(For Office Use Only)		
THIS APPLICATION IS:APPROVEDDENIED		
IF DENIED, REASON FOR DENIAL:		

IF APPROVED, THE FOLLOWING CONDITIONS	ARE PRESCRIBED:
NOTE: PERMIT, THE PROPOSED USE SHALL REQUIREMENTS OF THE SHORELAND OFELIOT	ZONING ORDINANCE FOR THE TOWN
CODE ENFORCEMENT OFFICER	DA
×	

SHORELAND ZONING PERMIT CHECKLIST

CHECKOFF FOR ALL STRUCTURES:

- ---- COMPLETE SHORELAND ZONING PERMIT APPLICATION
- ---- PAY APPROPRIATE FEE
- ---- LOT AREA
- --- % OF LOT COVERED BY NON-VEGETATED SURFACES
- --- HEIGHT OF STRUCTURE
- ---- SETBACK FROM HIGH WATER LINE
- --- ELEVATION SETBACK FROM SIDE AND REAR LOT LINES
- ---- % INCREASE OF EXPANSIONS OF PORTION OF STRUCTURE WHICH IS LESS THAN REQUIRED SETBACK
- ---- COPY OF INTERIOR AND EXTERIOR PLUMBING PERMITS
- --- COPY OF DEED
- ---- ELEVATION OF LOWEST FLOOR TO 100 YEAR FLOOD ELEVATION
- ---- COPY OF ADDITIONAL PERMIT(S) AS REQUIRED (See Page 5 of Application Form)
- ---- SOIL EROSION CONTROL PLAN PROVIDED

CHECKOFF FOR FURTHER REVIEW:

- ---- COPY OF FILE TO BOARD OF APPEALS IF VARIANCE OR SPECIAL EXCEPTION IS REQUIRED
- ---- COPY OF FILE TO PLANNING BOARD IF PLANNING BOARD REVIEW IS REQUIRED

CHECK OFF FOR SITE VISITS BY CEO:

- ---- PRIOR TO CLEARING AND EXCAVATION
- ---- PRIOR TO FOUNDATION POUR
- ---- PRIOR TO FINAL LANDSCAPING
- ---- PRIOR TO OCCUPANCY

NOTE: WHERE THE SHORELAND ZONING ORDINANCE REQUIRES A VARIANCE, A CONDITIONAL USE, OR SPECIAL EXCEPTION BY THE BOARD OF APPEALS OR THE PLANNING BOARD, THEN THIS SPECIAL PERMIT SHALL BE COMPLETED BY THE APPROPRIATE BOARD AND ATTACHED TO THE SHORELAND PERMIT APPLICATION.

Appendix 2

SPECIAL PERMIT

PROPERTY OWNER	SHORELAND DISTRICT
ADDRESS OF PROPERTY	
FINDINGS OF FACT AND	
CONDITIONS OF APPROVA	\mathbf{AL}
BD. OF APPEALS	!
PLANNING BOARD	
	!
	!
CONDITIONS:	!
COMMITTORIS.	1. See standard conditions (attached)
	2. 3.
NOTE: The Findings of Fact and the Cond	litions of Approval should include the reasons why the special permit was
granted and specific conditions whic	ch clearly define the scope of the use. In reviewing a request for a variance,
for a conditional use or a special ex-	due Hardship" criteria printed on the back of this page. In reviewing a request ception, Planning boards shall apply the standards of review provided in the
local ordinance.	
APPROVED BY:	DATE
NOTICE TO APPLICANT:	
I HAVE READ AND ACCEPT T	THE CONDITIONS OF THIS SPECIAL PERMIT.
APPLICANT	DATE
"Undue Hardship" Crite	ria for Granting Variances

Under Title 30-A, M.R.S.A. Section 4353(4), a Board of Appeals may grant a variance only when strict application of the ordinance to the petitioner and the petitioner's property would cause "undue hardship." The term "undue hardship" is defined as:
 A. The land in question cannot yield a reasonable return unless a variance is granted;
 B. The need for a variance is due to the unique circumstances of the property and not the general condition in the neighborhood;
 C. The granting of a variance will not alter the essential character of the locality; and
 D. The hardship is not the result of action taken by the applicant or a prior owner.

DTE: THIS INSPECTION SCHEDULE IS NOT DESIGNED TO		RMIT NO	
SURE COMPLIANCE WITH BOCA/OTHER BUILDING CODES,		ATE OF ISSUE	
FRATHER TO ENSURE COMPLIANCE WITH THE	LAND USE	AP & LOT #	
ANDARDS CONTAINED IN THE			
DRELAND ZONING ORDINANCE.			
SHORELAND ZONING PERMIT			
SITE INSPECTION SCHEDULE			
STIE INSTECTION SCHEDULE			
PRIOR TO CLEARING AND EXCAVATION	DATE	CEO	
RIOR TO CLEARING AND EXCAVATION	DAIL	CLO	
	DATE	CEO	
PRIOR TO FOUNDATION POUR	DATE	CEO	
DDIOD TO FINAL LANDSCAPING	D.A.TIE	OF O	
PRIOR TO FINAL LANDSCAPING	DATE	CEO	
DDIOD TO OCCUPANCY	D.A.TIE	GEO.	
PRIOR TO OCCUPANCY	DATE	CEO	

Appendix 4

STANDARD CONDITIONS OF APPROVAL FOR ALL PROJECTS

- 1. A copy of this permit must be posted in a visible location on your property during development of the site, including construction of the structures approved by this permit.
- 2. This permit is limited to the proposal as set forth in the application and supporting documents, except as modified by specific conditions adopted by the Planning Board or Code Enforcement Officer in granting this permit. Any variations from the application or conditions of approval are subject to prior review and approval by the Planning Board or Code Enforcement Officer. Failure to obtain prior approval for variations shall constitute a violation of the ordinance.
- 3. A substantial start (30% of project based on estimated cost) of construction activities approved by this permit must be completed within one (1) year of the date of issue. If not, this permit shall lapse, and no activities shall occur unless and until a new permit is issued.
- 4. The water body and wetland setbacks for all principal and accessory structures, driveways, and parking areas must be as specified in the application, or as modified by the conditions of approval.
- 5. In the event the permittee should sell or lease this property, the buyer or leasee shall be provided with a copy of the approved permit and advised of the conditions of approval.
- 6. Once construction is complete, the permittee shall notify the Code Enforcement Officer that all requirements and conditions of approval have been met. Following notification, the Code Enforcement Officer may arrange and conduct a compliance inspection.

STANDARD CLEARING CONDITIONS

The following shall apply to vegetation clearing for all activities within the shoreland zone.

- 1. A vegetative buffer strip shall be retained within 100 feet of a great pond or river flowing to a great pond, and within 75 feet of other water bodies, wetlands, and tributary streams.
- 2. Within the buffer strip(s) there shall be no cleared opening greater than 250 square feet in the forest canopy as measured from the outer limits of the tree crown. A winding footpath is permitted, provided it does not exceed ten (10) feet in width as measured between tree trunks, and does not provide a cleared line of sight to the water. Adjacent to great ponds and rivers flowing to great ponds, the width of the footpath is limited to six (6) feet.
- 3. Selective cutting of trees within the buffer strip(s) is permitted <u>provided that a well-distributed stand of trees and other vegetation is maintained.</u> Not more than 40% of the total volume of trees four (4) inches or more in diameter, measured at 4 1/2 feet above ground level, may be removed in any ten (10) year period.
- 4. Within the buffer strip(s) adjacent to great ponds, and rivers and streams flowing to great ponds, existing vegetation under three (3) feet in height and other ground cover shall not be removed, and the soil shall not be disturbed, except to provide for a footpath or other permitted use.
- 5. Within the buffer strip(s) pruning of tree branches is prohibited, except on the bottom 1/3 of the tree provided that tree vitality will not be adversely affected.
- 6. Within the buffer strip(s), in order to maintain a buffer strip of vegetation, when the removal of storm-damaged, diseased, unsafe, or dead trees results in the creation of cleared openings in excess of 250 square feet, these openings shall be replanted with native tree species. When removal of such trees appears necessary, the permittee is advised to consult with the Code Enforcement Officer prior to tree removal.
- 7. Within the shoreland zone, but outside the 75 feet or 100 foot buffer strip(s) described in Standard #1 above, not more than 40% of the total volume of trees four (4) inches or more in diameter, measured 4 1/2 feet above ground level, may be removed in any ten (10) year period. In no instance shall cleared openings exceed, in the aggregate, 10,000 square feet or 25% of the lot area, whichever is greater, including land previously cleared.
- 8. Legally existing cleared openings which exceed the above standards may be maintained, but shall not be enlarged except as permitted by the ordinance.
- 9. Where natural vegetation is removed it shall be replaced by other vegetation (except for areas to be built upon) that is effective in preventing erosion and retaining natural beauty.

GUIDELINES FOR SOIL STABILIZATION

Areas of disturbed soil, including but not limited to areas that are filled, graded, or otherwise disturbed during construction, must be stabilized according to the approved erosion control plan provided as part of the permit application, or as modified by specific conditions of approval. The following guidelines provide guidance for the landowner to consider in preparing and executing the soil stabilization portion of the erosion control plan. The goals to be achieved by proper stabilization are the avoidance of accelerated soil erosion and sedimentation of water bodies.

In General:

- 1. Sterile soils such as sands and gravels should be covered with a minimum of 4 inches of compacted topsoil to provide a growth medium for vegetation.
- 2. Disturbed areas which can be seeded between May 1 and September 15 should be prepared and seeded during that period. The best seeding dates are from May 1 to June 15. Mid-summer seeding will usually require significant watering.
- 3. Disturbed areas which can not be seeded between May 1 and September 15 should be heavily mulched with hay, straw, or some other suitable material to keep them as stable as possible over the winter, and particularly during the spring runoff the following year. Generally, one bale of hay for each 500 square feet of disturbed area provides a stabilizing mulch. For over-wintering, mulch must be tied down, as it is easily blown around on frozen ground, leaving areas of exposed soils. Mulched over-winter areas should be prepared and seeded the following spring as soon as conditions allow.
- 4. Seeding preparation, in addition to providing topsoil or loam if the site is sterile, includes the application of lime and fertilizer, which should be lightly raked into the soil prior to seeding. After the area is seeded, it should be lightly watered and then mulched to protect the seed, keep the site stable and moist, and allow the seed to germinate and grow.
- 5. Lime should be applied at a rate of approximately 138 pounds per 1000 square feet of area. This rate may vary depending on soil conditions, and it is recommended that soil be analyzed to determine specifically what additional nutrients are needed.
- 6. Fertilizers should be a "quick release" low phosphorus mixture. They should be applied at a rate of approximately 18.4 pounds per 1000 square feet. However, no more fertilizer than necessary should be added since any excess may be washed into the adjacent water body and contribute to lower water quality. Fertilizers should never be applied before thunderstorms or before spring runoff.
- 7. Minimize the areas of exposed soil during construction, and temporarily or permanently stabilize disturbed areas within one week of the time the area is actively worked. Runoff control features such as hay bales, silt fencing, and diversion ditching must be in place and functioning prior to the start of construction.