Floodplain Development Ordinance

Town of Raymond, New Hampshire
This Ordinance, adopted pursuant to the authority of RSA 674:16, Grant of Power, RSA 674:21, Innovative Land Use Controls, and RSA 674:56, Floodplain Ordinances shall be known as the Town of Raymond Floodplain Development Ordinance. The regulations in this Ordinance shall overlay and supplement the regulations in the Town of Raymond Zoning Ordinance, and shall be considered part of the Zoning Ordinance for purposes of administration and appeals under state law. If any provision of this ordinance differs or appears to conflict with any provision of the Zoning Ordinance or other ordinance or regulation, the provision imposing the greater restriction or more stringent standard shall be controlling. (03/97)

Certain areas of the Town of Raymond, New Hampshire are subject to periodic flooding, causing serious damage to properties within these areas. Relief is available in the form of flood insurance as authorized by the National Flood Insurance Act of 1968. Therefore, the Town of Raymond, New Hampshire chose to become a participating community in the National Flood Insurance Program, and agreed to comply with the requirements of the National Flood Insurance Act of 1968 (P.L. 90-488, as amended) as detailed in this Floodplain Development Ordinance.

The purpose of this ordinance is to protect the health and safety of residents by promoting the use of land in Special Flood Hazard Areas in a manner consistent with the following criteria:

1) Uses will result in no increase in base flood levels, flows, peaks or velocity;

2) Uses which will not increase the potential for flood damage to the owner's property or that of others;

3) Uses which will protect the benefits provided to the community by the floodplain;

4) Uses which will result in no increase in erosion and/or sedimentation or other degradation of water quality for applicant or public at large;

5) Uses which will not increase the risk to public safety, or to emergency personnel during flood events, or result in an increase in the cost of public services above costs incurred when not in a floodplain.

The requirements of this ordinance are designed to ensure that any permit for proposed development in any special flood hazard area shall comply with the objectives and purposes of this ordinance as stated herein. These requirements are considered reasonable for regulatory purposes based on building and engineering considerations. However, neither the requirements contained herein nor the issuance of a permit can provide complete assurance against larger floods or assurance that actual flood heights will not be increased by man-made or natural causes.

The following regulations in this ordinance shall apply to all lands designated as Special Flood Hazard Areas by the Federal Emergency Management Agency (FEMA) in its "Flood Insurance Study for Rockingham County, New Hampshire" dated May 17, 2005 or as
amended, together with the associated Flood Insurance Rate Map Panels numbered 0170, 0178, 0180, 0185, 0186, 0187, 0190, 0191, 0192, 0193, 0194, 0335, 0355, 0360 of 0681 and index sheets 1 of 2 and 2 of 2 on Map number 33015CINDA2A dated May 17, 2005 or as amended, which are declared to be a part of this ordinance and are hereby incorporated by reference.

ITEM I – DEFINITION OF TERMS

AREA OF SPECIAL FLOOD HAZARD is the land in the floodplain within a community subject to a one-percent or greater chance of flooding in any given year. The area is designated on the FIRM as Zones A and AE.

BASE FLOOD means the flood having a one-percent possibility of being equaled or exceeded in any given year. [See also 100-year flood]

BASEMENT means any area of a building having its floor subgrade (below ground level) on all sides.

BUILDING see "structure".

COMPENSATORY FLOOD STORAGE means the replacement for any loss of existing flood storage caused by development within the floodplain.

DEVELOPMENT means any man-made change to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavating or drilling operation or storage of equipment or materials.

FEMA means the Federal Emergency Management Agency.

FLOOD OR FLOODING means a general and temporary condition of partial or complete inundation of normally dry land areas from:
   a) the overflow of inland or tidal waters; or
   b) the unusual and rapid accumulation or runoff of surface waters from any source.

FLOOD INSURANCE RATE MAP (FIRM) means an official map of a community, incorporated with this ordinance, on which the Federal Emergency Management Agency has delineated both the special flood hazard areas and the risk premium zones applicable to the community.

FLOOD INSURANCE STUDY means an examination, evaluation and determination of flood hazards and, if appropriate, corresponding water surface elevations, or an examination, evaluation and determination of mudslide (i.e. mudflow) and/or flood-related erosion hazards.

FLOOD PLAIN OR FLOOD-PRONE AREA means any land area susceptible
to being inundated by water from any source.

**FLOOD PROOFING** means any combination of structural and non-structural additions, changes, or adjustments to structures which reduce or eliminate flood damage to real estate or improved real property, water and sanitary facilities, structures and their contents.

**FLOODWAY** see "Regulatory Floodway".

**FUNCTIONALLY DEPENDENT USE** means a use that cannot perform its intended purpose unless it is located or carried out in close proximity to water. The term includes only docking and port facilities that are necessary for the loading/unloading of cargo or passengers, and ship building/repair facilities but does not include long-term storage or related manufacturing facilities.

**HIGHEST ADJACENT GRADE** means the highest natural elevation of the ground surface prior to construction next to the proposed walls of a structure.

**HISTORIC STRUCTURE** means any structure that is:

a) Listed individually in the National Register of Historic Places (a listing maintained by the Department of Interior) or preliminarily determined by the Secretary of the Interior as meeting the requirements for individual listing on the National Register;

b) Certified or preliminarily determined by the Secretary of the Interior as contributing to the historical significance of a registered historic district or a district preliminarily determined by the Secretary to qualify as a registered historic district;

c) Individually listed on a state inventory of historic places in states with historic preservation programs which have been approved by the Secretary of the Interior; or

d) Individually listed on a local inventory of historic places in communities with historic preservation programs that have been certified either:
   1) By an approved state program as determined by the Secretary of the Interior, or
   2) Directly by the Secretary of the Interior in states without approved programs. (03/95)

**LOWEST FLOOR** means the lowest floor of the lowest enclosed area (including basement). An unfinished or flood resistant enclosure, usable solely for parking of vehicles, building access or storage in an area other than a basement area is not considered a building's lowest floor; provided, that such an enclosure is not built so as to render the structure in violation of the applicable non-elevation design requirements of this ordinance.

**MANUFACTURED HOME** means a structure, transportable in one or more sections, which is built on a permanent chassis and is designed for use with or without a permanent foundation when connected to the required utilities. For flood plain management purposes the term "manufactured home" includes park trailers,
travel trailers, and other similar vehicles placed on site for greater than 180 consecutive days. This includes manufactured homes located in a manufactured home park or subdivision.

**MANUFACTURED HOME PARK OR SUBDIVISION** means a parcel (or contiguous parcels) of land divided into two or more manufactured home lots for rent or sale.

**MEAN SEA LEVEL** means the National Geodetic Vertical Datum (NGVD) of 1929 or other datum, to which base flood elevations shown on a community’s Flood Insurance Rate Maps are referenced.

**NEW CONSTRUCTION** means, for the purposes of determining flood insurance rates, structures for which the “start of construction” commenced on or after the effective date of an initial FIRM or after December 31, 1974, whichever is later, and includes any subsequent improvements to such structures. For floodplain management purposes, new construction means structures for which the start of construction commenced on or after the effective date of a floodplain management regulation adopted by a community and includes any subsequent improvements to such structures.

**100 YEAR FLOOD** see "base flood"

**RECREATIONAL VEHICLE** means a vehicle which is:

a) built on a single chassis;

b) 400 square feet or less when measured at the largest horizontal projection;

c) designed to be self-propelled or permanently towable by a light duty truck; and

d) designed primarily not for use as a permanent dwelling but as temporary living quarters for recreational, camping, travel or seasonal use. (03/94)

**REGULATORY FLOODWAY** means the channel of a river or other watercourse and the adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than a designated height.

**RIVERINE** means relating to, formed by, or resembling a river (including tributaries), stream, brook, etc.

**SPECIAL FLOOD HAZARD AREA** see "Area of Special Flood Hazard"

**START OF CONSTRUCTION** includes substantial improvement, and means the date the building permit was issued, provided the actual start of construction, repair, reconstruction, placement, or other improvement was within 180 days of the permit date. The actual start means either the first placement of permanent construction of a structure on site, such as the pouring of slab or footings, the installation of piles, the construction of columns, or any work beyond the stage of excavation; or the placement of a manufactured home on a foundation. Permanent construction does
not include land preparation, such as clearing, grading and filling; nor does it include
the installation of streets and/or walkways; nor does it include excavation for a
basement, footings, piers, or foundations or the erection of temporary forms; nor
does it include the installation on the property of accessory buildings, such as garages
or sheds not occupied as dwelling units or part of the main structure.

**STRUCTURE** means for floodplain management purposes, a walled and roofed
building, including a gas or liquid storage tank that is principally above ground, as
well as a manufactured home.

**SUBSTANTIAL DAMAGE** means damage of any origin sustained by a structure
whereby the cost of restoring the structure to its before damaged condition would
equal or exceed 50 percent of the market value of the structure before the damage
occurred.

**SUBSTANTIAL IMPROVEMENT** means any combination of repairs,
reconstruction, alteration, or improvements to a structure in which the cumulative
cost equals or exceeds fifty percent of the market value of the structure. The market
value of the structure should be:

1) the appraised value prior to the start of the initial repair or improvement; or
2) in the case of damage, the value of the structure prior to the damage
occurring.

For the purposes of this definition, "substantial improvement" is considered to occur
when the first alteration of any wall, ceiling, floor, or other structural part of the
building commences, whether or not that alteration affects the external dimensions
of the structure. This term includes structures that have incurred substantial damage,
regardless of actual repair work performed. The term does not, however, include
any project for improvement of a structure required to comply with existing health,
sanitary, or safety code specifications which are solely necessary to assure safe living
conditions or any alteration of a "historic structure", provided that the alteration will
not preclude the structure's continued designation as a "historic structure."

**VIOLATION** means the failure of a structure or other development to be fully
compliant with the community’s flood plain management regulations. A structure or
other development without the elevation certificate, other certifications, or other
evidence of compliance required under Item V, Item VIII(2)(b), Item VII(C) or Item
VII(D) of this ordinance is presumed to be in violation until such time as that
documentation is provided.

**WATER SURFACE ELEVATION** means the height, in relation to the National
Geodetic Vertical Datum (NGVD) of 1929, (or other datum, where specified) of
floods of various magnitudes and frequencies in the floodplains.
ITEM II
All proposed development in any special flood hazard area shall require a permit.

ITEM III
The Building Inspector shall review all building permit applications for new construction or substantial improvements to determine whether proposed building sites will be reasonably safe from flooding. If a proposed building site is located in a Special Flood Hazard Area, all new construction or substantial improvements shall:

a. be designed (or modified) and adequately anchored to prevent floatation, collapse, or lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy;

b. be constructed with materials resistant to flood damage;

c. be constructed by methods and practices that minimize flood damages; and

d. be constructed with electrical, heating, ventilation, plumbing, and air conditioning equipment, and other service facilities that are designed and/or located so as to prevent water from entering or accumulating within the components during conditions of flooding.

ITEM IV
Where new or replacement water and sewer systems (including on-site systems) are proposed in a special flood hazard area the applicant shall provide the Building Inspector with assurance that these systems will be designed to minimize or eliminate infiltration of flood waters into the systems and discharges from the systems into flood water, and on-site waste disposal systems will be located to avoid impairment to them or contamination from them during periods of flooding.

ITEM V
For all new or substantially improved structures located in Zones A and AE, the applicant shall furnish the following information to the Building Inspector:

a. the as-built elevation (in relation to NGVD) of the lowest floor (including basement) and include whether or not such structures contain a basement;

b. if the structure has been flood proofed, the as-built elevation (in relation to NGVD) to which the structure was flood proofed; and

c. any certification of flood proofing.

The Building Inspector shall maintain the aforementioned information for public inspection, and shall furnish such information upon request.
ITEM VI
The Building Inspector shall not grant a building permit until the applicant certifies that all necessary permits have been received from those governmental agencies from which approval is required by federal or state law, including Section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U. S. C. 1334.

ITEM VII
A. In riverine situations, prior to the alteration or relocation of a watercourse the applicant for such authorization shall notify the Wetlands Bureau of the New Hampshire Department of Environmental Services and submit copies of such notification to the Building Inspector, in addition to the copies required by RSA 482-A:3. Further, the applicant shall be required to submit copies of said notification to those adjacent communities as determined by the Building Inspector, including notice of all scheduled hearings before the Wetlands Bureau.

B. The applicant shall submit to the Building Inspector, certification provided by a registered professional engineer, assuring that the flood carrying capacity of an altered or relocated watercourse can and will be maintained.

C. Until a Regulatory Floodway is designated along watercourses, no new construction, substantial improvements or other development (including fill) shall be permitted within Zone AE on the FIRM, unless it is demonstrated by the applicant and certified by a registered professional engineer that the effect of the proposed development, will not increase the water surface elevation of the base flood at any point within the community.

D. Along watercourses with a designated Regulatory Floodway no encroachments, including fill, new construction, substantial improvements, and other development are allowed within the floodway unless it has been demonstrated through hydrologic and hydraulic analyses performed in accordance with standard engineering practices that the proposed encroachment would not result in any increase in flood levels within the community during the base flood discharge.

E. The Building Inspector shall obtain, review, and reasonably utilize any regulatory floodway data available from Federal, State, or other sources as criteria for requiring that all development located in Zone A meet the following floodway requirement:

"No encroachments, including fill, new construction, substantial improvements, and other development are allowed within the floodway that would result in any increase in flood levels within the community during the base flood discharge."
ITEM VIII

1) In Special Flood Hazard Areas the Building Inspector shall determine the 100-year flood elevation in the following order of precedence according to the data available:
   a) In Zone AE, refer to the elevation data provided in the community's Flood Insurance Study and accompanying FIRM.
   
   b) In Zone A the Building Inspector shall obtain, review, and reasonably utilize any 100 year flood elevation data available from Federal, State or other sources including data submitted for development proposals submitted to the community. (i.e. subdivisions, site approval, etc.).

2) The Building Inspector's 100-year flood elevation determination will be used as criteria for the requirements set forth below in Zones A and AE. The purpose of such requirements is to reduce the risk of flood damage based upon recommendations of FEMA and the New Hampshire Office of Energy and Planning, and to increase the possibility of lower flood insurance rates for all Raymond policyholders.
   a) All new construction of residential structures shall have the lowest floor (including basement) elevated to at least 1.5 feet above the 100-year flood level. All substantial improvements to existing residential structures are recommended to have the lowest floor (including basement) elevated to at least 1.5 feet above the 100-year flood level, but, at minimum, shall be required to have the lowest floor (including basement) at the 100-year flood level.
   
   b) That all new construction or substantial improvements of non-residential structures have the lowest floor (including basement) elevated to at least 1.5 feet above the 100-year flood level; or together with attendant utility and sanitary facilities, shall:
      i. be floodproofed to at least 1.5 feet above the 100-year flood elevation so that below that elevation, the structure is watertight with walls substantially impermeable to the passage of water;
      
      ii. have structural components capable of resisting hydrostatic and hydrodynamic loads and the effects of buoyancy; and
      
      iii. be certified by a registered professional engineer or architect that the design and methods of construction are in accordance with accepted standards of practice for meeting the provisions of this section.
   
   c) All manufactured homes to be placed within special flood hazard areas shall be elevated on a permanent foundation such that the lowest floor of the manufactured home is at least 1.5 feet above the base flood level; and be securely anchored to resist flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of
over-the-top or frame ties to ground anchors. This requirement is in addition to applicable state and local anchoring requirements for resisting wind forces. All substantial improvements to existing manufactured homes within the special flood hazard areas are recommended to have the lowest floor (including basement) elevated to at least 1.5 feet above the 100-year flood level, but, at minimum, shall be required to have the lowest floor (including basement) at the 100-year flood level.

d) For all new construction and substantial improvements, fully enclosed areas below the lowest floor that are subject to flooding are permitted provided they meet the following requirements: (1) the enclosed area is unfinished or flood resistant, usable solely for the parking of vehicles, building access or storage; (2) the area is not a basement; (3) shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or must meet or exceed the following minimum criteria: A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding shall be provided. The bottom of all openings shall be no higher than one foot above grade. Openings may be equipped with screens, louvers, or other coverings or devices provided that they permit the automatic entry and exit of floodwater.

c) All recreational vehicles placed on sites within Zones A and AE shall either: (I) be on the site for fewer than 180 consecutive days; (ii) be fully licensed and ready for highway use; or (iii) meet all standards of Item II of this ordinance and the elevation and anchoring requirements for "manufactured homes" in Item VIII (2) (c) of this ordinance.
**ITEM IX**

Any encroachment, including fill, new construction, substantial improvement or other development within a special flood hazard area shall provide compensatory floodplain storage equal to or greater than the amount of the encroachment.

A. No permit for development within a special flood hazard area shall be issued unless it can be demonstrated to the satisfaction of the Building Inspector that the development will result in no reduction in the net flood storage capacity of the floodplain. In the event that the proposed development falls within the jurisdiction of the Planning Board, such as a site plan or subdivision review, then the Planning Board will determine to its satisfaction that the proposed development will result in no reduction in the net flood storage capacity of the floodplain.

1. A licensed professional engineer shall prepare the floodplain storage site plan and/or certify that the proposed compensatory storage is properly designed and that the floodplain storage capacity is of adequate volume to accommodate the water displaced by the proposed development. Peer review may be required, and will be done at the applicant’s expense.

2. At the completion of the project the applicant must provide survey certification stamped by a licensed land surveyor that the volumes depicted in the field are as computed on the floodplain storage plan and a written certification from a qualified registered engineer that any compensatory storage required has been provided so as to ensure no net loss of flood storage. If the site conditions do not meet the approved design volumes, the Certificate of Occupancy will not be issued. Peer review may be required, and will be done at the applicant’s expense.

B. Compensatory storage will be allowed only under such circumstances:

1. Where it can be demonstrated to the satisfaction of the Planning Board that the project will result in no reduction in the net flood storage capacity of the floodplain; and,

2. Where it can be demonstrated that properties adjacent to the compensatory storage site and the fill site will not experience increased flooding as a result of a 25-year storm event or as a result of drainage characteristics of the subject site(s) and/or adjoining properties.

C. Compensatory excavation must be in close proximity to the area where flood storage capacity is being reduced.

D. Compensatory storage will not be accepted at a higher elevation but it may be provided at a lower elevation (up to three feet lower) if approved by the Code Enforcement Officer and if the applicant provides written
certification from a qualified licensed engineer that the proposed compensation will meet both the objective of 100-percent compensatory storage and the other objectives and requirements of ITEM IX.

E. Compensatory excavation must avoid disruption of wetlands, natural wetland buffers, must comply with any Town wetland regulations and must obtain any required federal and state permits.

F. Designer shall demonstrate that the compensatory storage will not intercept the seasonal groundwater table with test pits witnessed by a Town representative and that the separation to groundwater shall meet the Town requirements for mining and excavation.

G. The designer shall include a plan for re-vegetation of the site excavation.

H. Compensatory storage must be done on a per cubic foot by per cubic foot contiguous basis.

I. The applicant must provide certification that any proposed fill is free of hazardous or toxic substances.

J. Exception for minor fill projects: A project which involves less than 30 cubic yards of fill shall be considered a minor fill project. If a minor fill project can be shown by the applicant to comply in all aspects with the performance standards of ITEM IX above, as well as with all other standards of the floodplain ordinance, the Code Enforcement Officer may issue a building permit without requiring the detailed submittal and review requirements specified in above. However, it is the intent of this section to prevent attempts to avoid full flood hazard review by submitting a project in increments of less than 30 cubic yards. For this reason, the Code Enforcement Officer shall not issue more than one minor fill project permit per site in any 48 month period.
ITEM X – VARIANCES AND APPEALS (03/14/95)

A. Any order, requirement, decision or determination of the Building Inspector made under this ordinance may be appealed to the Zoning Board of Adjustment as set forth in RSA 676:5.

B. If the applicant, upon appeal, requests a variance as authorized by RSA 674:33, I (b), the applicant shall have the burden of showing in addition to the usual variance standards under state law that:
   1. the variance will not result in increased flood heights, additional threats to public safety, or extraordinary public expense;
   2. if the requested variance is for activity within a designated regulatory floodway, no increase in flood levels during the base flood discharge will result; and
   3. the variance is the minimum necessary, considering the flood hazard, to afford relief.

C. The Zoning Board of Adjustment shall notify the applicant in writing that: (I) the issuance of a variance to construct below the base flood level will result in increased premium rates for flood insurance up to amounts as high as $25 for $100 of insurance coverage; and (ii) such construction below the base flood level increases risks to life and property. Such notification shall be maintained with a record of all variance actions.

D. The Community shall:
   1. maintain a record of all variance actions, including the justification for their issuance, and
   2. report such variances issued in its annual or biennial report submitted to FEMA’s Federal Insurance Administrator.