

# *Town of Berwick*

*Where Tradition Meets Tomorrow*



## **Subdivision Regulations**

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Berwick, Maine

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[berwickmaine.org](http://berwickmaine.org)

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# ARTICLE 1 - PURPOSES

The purposes of these regulations are:

- 1.1** To provide for an expeditious and efficient process for the review of proposed subdivisions;
- 1.2** To clarify the approval criteria of the state Subdivision Law, found in Title 30-A M.R.S.A., §4404;
- 1.3** To assure new development in the Town of Berwick meets the goals and conforms to the policies of the Berwick Comprehensive Plan;
- 1.4** To assure the comfort, convenience, safety, health and welfare of the people of the Town of Berwick;
- 1.5** To protect the environment and conserve the natural and cultural resources identified in the Berwick Comprehensive Plan as important to the community;
- 1.6** To assure that a minimal level of services and facilities are available to the residents of new subdivisions and that lots in subdivisions are capable of supporting the proposed uses and structures;
- 1.7** To minimize the potential impacts from new subdivisions on neighboring properties and on the municipality; and
- 1.8** To promote the development of an economically sound and stable community.

## **ARTICLE 2 - AUTHORITY AND ADMINISTRATION**

### **2.1 Authority.**

- A. These standards have been prepared in accordance with the provisions of Title 30-A M.R.S.A., §4403.
- B. These standards shall be known and may be cited as “Subdivision Regulations of the Town of Berwick, Maine.”

### **2.2 Administration.**

- A. The Planning Board of the Town of Berwick, hereinafter called the Board, shall administer these regulations.
- B. The provisions of these regulations shall pertain to all land and buildings proposed for subdivision within the boundaries of the Town of Berwick.

### **2.3 Amendments.**

- A. These regulations may be amended by:
  - 1. The Legislative Body of the Town of Berwick as specified in Title 30-A M.R.S.A., §4403 §§2.
  - 2. The Planning Board if the Legislative Body has not adopted or amended the standards.
- B. A public hearing shall be held prior to the adoption of any amendment. Notice of the hearing shall be provided at least seven days in advance of the hearing.

## ARTICLE 3 - DEFINITIONS

In general, words and terms used in these regulations shall have their customary dictionary meanings. More specifically, any word or term defined in the Berwick Land Use Ordinance shall have the definition contained in that ordinance, unless defined differently below; other words and terms used herein are defined as follows:

**Affordable Housing:** Housing units, which will meet the sales price and/or rental targets established by the comprehensive plan for housing affordability.

**Applicant:** The person applying for subdivision approval under these regulations.

**Average Daily Traffic:** The average number of vehicles per day that enter and exit the premises or travel over a specific section of road.

**Buffer Area:** A part of a property or an entire property, which is not built upon and is specifically intended to separate and thus minimize the effects of a land use activity (e.g. noise, dust, visibility, glare, etc.) on adjacent properties or on sensitive natural resources.

**Capital Improvements Program:** The municipality's proposed schedule of future projects listed in order of construction priority together with cost estimates and the anticipated means of financing each project.

**Certified Soil Scientist:** As registered, licensed and/or certified by the appropriate licensing and registration boards in the State of Maine.

**Common Open Space:** Land within or related to a subdivision, not individually owned or within an individual lot, which is designed and intended for the common use or enjoyment of the residents of the development or the general public. It may include complementary structures and improvements, typically used for maintenance and operation of the open space, such as for outdoor recreation.

**Common Scheme of Development:** A plan or process of development which 1) takes place on contiguous or non-contiguous parcels or lots in the same immediate vicinity; and 2) exhibits characteristics of a unified approach, method, or effect such as: (a) unified ownership, management, or supervision; (b) sharing of common equipment or labor; or (c) common financing.

**Complete Application:** An application shall be considered complete upon submission of the required fee and all information required by these regulations, or by a vote by the Board to waive the submission of required information. The Board shall issue a written statement to the applicant upon its determination that an application is complete.

**Comprehensive Plan:** A document or interrelated documents adopted by the Legislative Body, containing an inventory and analysis of existing conditions, a compilation of goals for the development of the community, an expression of policies for achieving these goals, and a strategy for implementation of the policies.

**Conservation Easement:** A nonpossessory interest in real property imposing limitations or affirmative obligations, the purposes of which include retaining or protecting natural, scenic or open space values of real property; assuring its availability for agricultural, forest, recreational or open space use; protecting natural resources; or maintaining air or water quality.

**Density:** The number of dwelling units per acre of land.

**Developed Area:** Any area on which a site improvement or change is made, including buildings, landscaping, parking areas, and streets.

**Direct Watershed of a Great Pond:** That portion of the watershed which drains directly to the great pond without first passing through an upstream great pond. For the purposes of these regulations, the watershed boundaries shall be as delineated in the comprehensive plan. Due to the scale of the map in the comprehensive plan there may be small inaccuracies in the delineation of the watershed boundary. Where there is a dispute as to exact location of a watershed boundary, the Board or its designee and the applicant shall conduct an on-site investigation to determine where the drainage divide lies. If the Board and the applicant can not agree on the location of the drainage divide based on the on-site investigation, the burden of proof shall lie with the applicant to provide the Board with information from a registered land surveyor showing where the drainage divide lies. The great ponds in the Town of Berwick are Hatfield Lake and Beaver Dam Pond.

**Driveway:** A vehicular accessway serving two or less dwelling units.

**Dwelling:** See Land Use Ordinance.

**Dwelling Unit:** See Land Use Ordinance.

**Engineered Subsurface Waste Water Disposal System:** A subsurface waste water disposal system designed, installed, and operated as a single unit to treat and dispose of 2,000 gallons of waste water per day or more; or any system designed to be capable of treating waste water with higher BOD<sub>5</sub> and total suspended solids concentrations than domestic waste water.

**Final Plan:** The final drawings on which the applicant's plan of subdivision is presented to the Board for approval and which, if approved, may be recorded at the Registry of Deeds.

**Freshwater Wetland:** Areas which are inundated or saturated by surface or ground water at a frequency and for a duration sufficient to support, and which under normal circumstances do support, a prevalence of wetland vegetation typically adapted for life in saturated soils; and are not part of a great pond, coastal wetland, river, stream or brook. Freshwater wetlands may contain small stream channels or inclusions of land that do not conform to the above criteria.

**Great Pond:** See Land Use Ordinance.

**High Intensity Soil Survey:** A map prepared by a Maine Certified Soil Scientist, identifying the soil types down to one-eighth ( $\frac{1}{8}$ ) acre or less at a scale equivalent to the subdivision plan submitted. The soils shall be identified in accordance with the National Cooperative Soil Survey. The map shall show the location of all test pits used to identify the soils, and shall be accompanied by a log of each sample point identifying the textural classification and the depth to seasonal high water table or bedrock at that location. Single soil test pits and their evaluation for suitability for subsurface waste water disposal systems shall not be considered to constitute high intensity soil surveys.

**High Water Mark, Inland Waters:** That line which is apparent from visible markings, changes in the character of soils due to prolonged action of the water or changes in vegetation, and which distinguishes between predominantly aquatic and predominantly terrestrial land. In the case of wetlands adjacent to rivers, streams, brooks, or ponds, the normal high-water mark is the upland edge of the wetland, and not the edge of the open water

**Homeowners Association:** An organization for the purpose of owning, managing and/or maintaining all drainage and erosion control measures constructed in the common areas, in a specified development, and for levying and collecting assessments and other charges against members of said Association.

**100-Year Flood:** The highest level of flood that, on the average, has a one percent chance of occurring in any given year.

**Level of Service:** A description of the operating conditions a driver will experience while traveling on a particular street or highway calculated in accordance with the provisions of the *Highway Capacity Manual*, current edition, published by the National Academy of Sciences, Transportation Research Board. There are six levels of service ranging from Level of Service A, with free traffic flow and no delays to Level of Service F, with forced flow and congestion resulting in complete failure of the roadway.

**Multifamily Dwelling:** See Land Use Ordinance.

**Municipal Engineer:** Any registered professional engineer hired or retained by the municipality, either as staff or on a consulting basis.

**Net Residential Acreage:** The total acreage available for the subdivision, as shown on the proposed subdivision plan, minus the area for streets or access and the areas that are unsuitable for development.

**Net Residential Density:** See Land Use Ordinance.

**New Structure or Structures:** Includes any structure for which construction begins on or after September 23, 1988. The area included in the expansion of an existing structure is deemed to be a new structure.

**Person:** Includes a firm, association, organization, partnership, trust, company, or corporation, as well as an individual.

**Planning Board:** The Planning Board of the Town of Berwick.

**Play Area:** An area set aside for passive recreation for a particular subdivision owned in common by homeowners in the subdivision.

**Preliminary Plan:** The preliminary drawings indicating the proposed layout of the subdivision to be submitted to the Planning Board for its consideration.

**Professional Engineer:** A professional engineer, registered in the State of Maine.

**Professional Land Surveyor:** As registered, licensed and/or certified by the appropriate licensing and registration boards in the State of Maine.

**Public Water System:** A water supply system that provides water to at least 15 service connections or services water to at least 25 individuals daily for at least 30 days a year.

**Recording Plan:** An original of the Final Plan, suitable for recording at the Registry of Deeds and which need show only information relevant to the transfer of an interest in the property, and which does not show other information presented on the plan such as sewer and water line locations and sizes, culverts, and building lines.

**Reserved Affordable Housing:** Affordable housing which is restricted by means of deed covenants, financing restrictions, or other binding long term methods to occupancy by households making 80% or less of the area median household income.

**Sight Distance:** The length of an unobstructed view from a particular access point to the farthest visible point of reference on a roadway. Used in these regulations as a reference for unobstructed road visibility.

**Sketch Plan:** Conceptual maps, renderings, and supportive data describing the project proposed by the applicant for initial review prior to submitting an application for subdivision approval.

**Stream:** See Land Use Ordinance.

**Street:** See Land Use Ordinance.

## **Street Classification:**

**Arterial Street:** A major thoroughfare which serves as a major traffic way for travel between and through the municipality. The following roadways shall be considered arterial streets: Route 9, Route 4, and Route 236.

**Collector Street:** A street with average daily traffic of 200 vehicles per day or greater, or streets which serve as feeders to arterial streets, and collectors of traffic from minor streets.

**Cul-de-sac:** A street with only one outlet and having the other end for the reversal of traffic movement.

**Minor Residential Street:** A street servicing only residential properties and which has an average daily traffic of less than 200 vehicles per day.

**Private Right-of-Way:** An area or strip of land at least 50 feet in width, described in a deed, and dedicated to the purpose of providing access to a parcel or parcels of land abutting it and indicating responsibility for maintaining said right-of-way. No land in the deeded right-of-way may be used to meet any dimensional requirements of these regulations.

**Subdivision:** The division of a tract or parcel of land into three or more lots within any five-year period, that begins after September 23, 1971. This definition applies whether the division is accomplished by sale, lease, development, buildings or otherwise. The term “subdivision” also includes the division of a new structure or structures on a tract or parcel of land into three or more dwelling units within a five-year period, the construction or placement of three or more dwelling units on a single tract or parcel of land and the division of an existing structure or structures previously used for commercial or industrial use into three or more dwelling units within a five-year period.

In determining whether a tract or parcel of land is divided into three or more lots, the first dividing of such tract or parcel shall be considered to create the first two lots and the next dividing of either of the first two lots, by whomever accomplished, unless otherwise exempted herein shall be considered to create a third lot, unless:

- a. Both divisions are accomplished by a subdivider who has retained one of the lots for the subdivider’s own use as a single-family residence that has been the subdivider’s principal residence for a period of at least 5 years immediately preceding the 2nd division; or
- b. The division of the tract or parcel is otherwise exempt under this definition.

A lot of 40 or more acres shall be counted as a lot.

A division accomplished by devise does not create a lot or lots for the purposes of this definition, unless the intent of the transferor is to avoid the objectives of this definition.

A division accomplished by condemnation does not create a lot or lots for the purposes of

this definition, unless the intent of the transferor is to avoid the objectives of this definition.

A division accomplished by order of court does not create a lot or lots for the purposes of this definition, unless the intent of the transferor is to avoid the objectives of this definition.

A division accomplished by gift to a person related to the donor of an interest in property held by the donor for a continuous period of 5 years prior to the division by gift does not create a lot or lots for the purposes of this definition, unless the intent of the transferor is to avoid the objectives of this definition. If the real estate exempt under this paragraph is transferred within 5 years to another person not related to the donor of the exempt real estate as provided in this paragraph, then the previously exempt division creates a lot or lots for the purposes of this subsection. "Person related to the donor" means spouse, parent, grandparent, brother, sister, child, or grandchild related by blood, marriage, or adoption. A gift under this paragraph cannot be given for consideration that is more than ½ the assessed value of the real estate.

A division accomplished by gift to a municipality if that municipality accepts the gift does not create a lot or lots for the purposes of this definition, unless the intent of the transferor is to avoid the objectives of this definition.

A division accomplished by the transfer of any interest in land to the owners of land abutting that land that does not create a separate lot does not create a lot or lots for the purposes of this definition, unless the intent of the transferor is to avoid the objectives of this subchapter. If the real estate exempt under this paragraph is transferred within 5 years to another person without all of the merged land, then the previously exempt division creates a lot or lots for the purposes of this definition.

The grant of bona fide security interest in an entire lot that has been exempted from the definition under this paragraph, or subsequent transfer of that entire lot by the original holder of the security interest or that person's successor in interest, does not create a lot for the purposes of this definition, unless the intent of the transferor is to avoid the objectives of these regulations.

In determining the number of dwelling units in a structure, the provisions regarding the determination of the number of lots shall apply, including exemptions from the definition of a subdivision of land.

**Subdivision, Major:** Any subdivision containing more than four lots or dwelling units.

**Subdivision, Minor:** Any subdivision containing four lots or dwelling units or less.

**Substantial Completion:** The application of the base layer of pavement as approved by the Town Engineer. If the subdivision is to consist of individual lots to be sold or leased by the subdivider, the cost of construction of buildings on those lots shall not be included. If the subdivision is a multifamily development, or if the applicant proposes to construct the buildings within the subdivision, the cost of building construction shall be included in the total costs of proposed improvements.

**Tract or Parcel of Land:** All contiguous land in the same ownership, provided that lands located on opposite sides of a public or private road shall be considered each a separate tract or parcel of land unless such road was established by the owner of land on both sides thereof.

**Usable Open Space:** That portion of the common open space which due to its slope, drainage characteristics and soil conditions can be used for active recreation, horticulture or agriculture. In order to be considered usable open space, the land must not be poorly drained or very poorly drained, have ledge outcroppings, or areas with slopes exceeding 10%.

## **ARTICLE 4 - ADMINISTRATIVE PROCEDURE**

In order to establish an orderly, equitable and expeditious procedure for reviewing subdivisions and to avoid unnecessary delays in processing applications for subdivision review, the Board shall prepare a written agenda for each regularly scheduled meeting. The agenda shall be prepared no less than one week in advance of the meeting, distributed to the Board members and any applicants appearing on the agenda, and posted at the municipal offices. Applicants shall request to be placed on the Board's agenda at least ten days in advance of a regularly scheduled meeting by contacting the Planning Office.

Applicants who attend a meeting but who are not on the Board's agenda may be heard only after all agenda items have been completed, and then only if a majority of the Board so votes. However, the Board shall take no action on any application not appearing on the Board's written agenda.

# **ARTICLE 5 - PREAPPLICATION MEETING, SKETCH PLAN AND ON-SITE INSPECTION**

## **5.1 Purpose.**

The purpose of the preapplication meeting and on-site inspection is for the applicant to present general information regarding the proposed subdivision to the Board and receive the Board's comments prior to the expenditure of substantial sums of money on surveying, soils identification, and engineering by the applicant.

## **5.2 Procedure.**

- A. The applicant shall present the Preapplication Sketch Plan and make a verbal presentation regarding the site and the proposed subdivision.
- B. Following the applicant's presentation, the Board may ask questions and make suggestions to be incorporated by the applicant into the application.
- C. The date of the on-site inspection is selected.

## **5.3 Submission.**

The Preapplication Sketch Plan shall show in simple sketch form the proposed layout of streets, lots, buildings and other features in relation to existing conditions. The Sketch Plan, which does not have to be engineered and may be a free-hand penciled sketch, should be supplemented with general information to describe or outline the existing conditions of the site and the proposed development. It will be most helpful to both the applicant and the Board for site conditions such as steep slopes, wet areas and vegetative cover to be identified in a general manner. It is recommended that the sketch plan be superimposed on or accompanied by a copy of the assessor's map(s) on which the land is located. The Sketch Plan shall be accompanied by:

- A. A copy of a portion of the U.S.G.S. topographic map of the area showing the outline of the proposed subdivision unless the proposed subdivision is less than ten acres in size.
- B. A copy of that portion of the county soil survey covering the proposed subdivision, showing the outline of the proposed subdivision.
- C. If the project will be connected to the Berwick Sewer District municipal sewer the applicant will submit conceptual plans to the Berwick Sewer District and receive conceptual approval prior to the submittal of the preliminary application to the Town.

## **5.4 Contour Interval and On-Site Inspection.**

Within thirty days of the preapplication meeting, the Board shall hold an on-site inspection of the property and inform the applicant in writing of the required contour interval on the Preliminary Plan, or Final Plan in the case of a Minor Subdivision. The applicant shall place “flagging” at the centerline of any proposed streets, and at the approximate intersections of the street centerlines and lot corners, prior to the on-site inspection. The Board shall not conduct on-site inspections when there is more than one foot of snow on the ground.

**5.5 Rights Not Vested.**

The preapplication meeting, the submittal or review of the sketch plan or the on-site inspection shall not be considered the initiation of the review process for the purposes of bringing the plan under the protection of Title 1 M.R.S.A., §302.

**5.6 Establishment of File.**

Following the preapplication meeting the Board shall establish a file for the proposed subdivision. All correspondence and submissions regarding the preapplication meeting and application shall be maintained in the file.

## ARTICLE 6 - MINOR SUBDIVISION

### 6.1 General.

The Board may require, where it deems necessary to make a determination regarding the criteria for approval from Title 30-A M.R.S.A., §4404, or the performance standards from Article 11 of these regulations, that a Minor Subdivision comply with some or all of the submission requirements for a Major Subdivision.

### 6.2 Procedure.

A. Within six months after the on-site inspection by the Board, the applicant shall submit an application for approval of a final plan. Applications shall be submitted by mail to the Board in care of the municipal office or delivered by hand to the Code Enforcement and Planning Office. Failure to submit the application within six months shall require resubmission of the Sketch Plan to the Board. The final plan shall approximate the layout shown on the Sketch Plan, plus any recommendations made by the Board.

B. All applications for final plan approval for a Minor Subdivision shall be accompanied by a non-refundable application fee of \$200 plus \$50 per lot or dwelling unit, payable by check to the Town of Berwick or by cash.

In addition, the applicant shall pay a fee of \$50, payable by check to the Town of Berwick or by cash, per lot or dwelling unit to be deposited in a special account designated for that subdivision application, to be used by the Board for hiring independent consulting services and/or legal services to review the application.

In addition to other fees for subdivision reviews, the following fees are hereby established to defray the cost for inspection of all public improvements and the inspection of roads and streets: An amount equal to a minimum of 6% of the estimated costs of construction of streets, sidewalks, drainage, detention ponds, recreation areas, playgrounds, sewer lines, water lines, or other utility or use requiring underground construction. This fee is to be paid by the developer, by check payable to the Town of Berwick or by cash, within 5 business days of the final approval of the subdivision. Any remaining funds plus interest will be refunded to the applicant at the completion of the project.

C. The applicant, or his duly authorized representative, shall submit the final plan to the Code Enforcement and Planning Office.

D. Upon receipt of an application for final plan approval of a minor subdivision the Code Enforcement and Planning Office shall:

1. Issue a dated receipt to the applicant.
2. Notify in writing all owners of abutting property that an application for subdivision approval has been submitted, specifying the location of the proposed subdivision and including a general description of the project.

3. Notify the clerk and the review authority of the neighboring municipalities if any portion of the subdivision abuts or crosses the municipal boundary.
  4. Submit the application to the consulting planner for review for completeness.
- E. Within 30 days of the receipt of the final plan application, the Board or its consulting planner shall determine whether the application is complete and notify the applicant in writing of its determination. If the application is not complete, the Board or its consulting planner shall notify the applicant of the specific additional material needed to complete the application.
  - F. Upon a determination that a complete application has been submitted for review, the Board or its consulting planner shall notify the applicant in writing of that determination. At the next regularly scheduled Planning Board meeting, the Board shall determine whether to hold a public hearing on the final plan application.
  - G. If the Board decides to hold a public hearing, it shall hold the hearing within 30 days of determining that it has received a complete application, and shall publish a notice of the date, time and place of the hearing in a newspaper of general circulation in the municipality at least two times, the date of the first publication to be at least seven days prior to the hearing. A copy of the notice shall be mailed to the applicant and abutters. If a public hearing is deemed necessary by the Board, all costs incurred in advertising and notifying abutters of a public hearing shall be borne by the applicant.
  - H. Within 30 days from the public hearing or within 60 days of determining a complete application has been received, if no hearing is held, or within another time limit as may be otherwise mutually agreed to by the Board and the applicant, the Board shall make findings of fact, and conclusions relative to the criteria contained in Title 30-A M.R.S.A., §4404 and the performance standards of Article 11. If the Board finds that all the criteria of the Statute and the performance standards of Article 11 have been met, they shall approve the final plan. If the Board finds that any of the criteria of the statute or the standards of Article 11 has not been met, the Board shall either deny the application or approve the application with conditions to ensure all of the criteria and standards will be met by the subdivision. The Board shall issue a written notice of its decision to the applicant, including its findings, conclusions and any reasons for denial or conditions of approval.

### **6.3 Submissions.**

The final plan application shall consist of the following items.

- A. Application Form.
- B. Location Map. The location map shall be drawn at a size adequate to show the relationship of the proposed subdivision to the adjacent properties, and to allow the Board to locate the subdivision within the municipality. The location map shall show:

1. Existing subdivisions in the proximity of the proposed subdivision.
2. Locations and names of existing and proposed streets.
3. Boundaries and designations of zoning districts.
4. An outline of the proposed subdivision and any remaining portion of the owner's property if the final plan submitted covers only a portion of the owner's entire contiguous holding.

C. Final Plan. The subdivision plan for a Minor Subdivision shall consist of two plans on 20 pound white paper, one to be recorded at the Registry of Deeds, the other to be filed at the municipal office, and three copies of one or more maps or drawings drawn to a scale of not more than one hundred feet to the inch.

The plans shall be embossed with the dated seal and signature of the individual(s) responsible for preparation of the plan. Plans for subdivisions containing more than one hundred acres may be drawn at a scale of not more than two hundred feet to the inch provided all necessary detail can easily be read.

Plans shall be no larger than 24 by 36 inches in size, and shall have a margin of two inches outside of the border lines on the left side for binding and a one inch margin outside the border along the remaining sides. Space shall be provided for endorsement by the Board. Four copies of all information accompanying the plan shall be submitted.

D. Application Requirements.

The application for approval of a Minor Subdivision shall include the following information. The Board may require additional information to be submitted, where it finds necessary in order to determine whether the criteria of Title 30-A M.R.S.A., §4404 are met.

1. Proposed name of the subdivision, or identifying title, and the name of the municipality in which it is located, plus the assessor's map and lot numbers.
2. Verification of right, title, or interest in the property.
3. A standard boundary survey of the parcel, giving complete descriptive data by bearings and distances, made and certified by a Maine professional land surveyor. The corners of the parcel shall be located on the ground and marked by monuments. The plan shall indicate the type of monument found or to be set at each lot corner.
4. A copy of the most recently recorded deed for the parcel. A copy of all deed restrictions, easements, rights-of-way, or other encumbrances currently affecting the property.

5. A copy of any deed restrictions intended to cover all or part of the lots or dwellings in the subdivision. The deed restrictions must specify that maintenance of privately owned stormwater management facilities will be conducted and certified to the Town in accordance with Article 7.22 of the Town's Land Use Ordinance.
6. An indication of the type of sewage disposal to be used in the subdivision.
  - a. When sewage disposal is to be accomplished by connection to the public sewer the following shall be provided or accomplished:
    1. The Berwick Sewer District shall certify that providing service to the proposed subdivision is within the capacity of the system's existing collection and treatment system or improvements planned to be completed prior to the construction of the subdivision.
    2. The Berwick Sewer District shall review and approve the construction drawings for the sewerage system. The size and location of laterals, collectors, manholes, and pump stations shall be reviewed and approved in writing by the Berwick Sewer District.
  - b. When sewage disposal is to be accomplished by subsurface waste water disposal systems, test pit analyses, prepared by a Maine Licensed Site Evaluator shall be provided. A map showing the location of all test pits dug on the site shall be submitted.
7. An indication of the type of water supply system(s) to be used in the subdivision.
  - a. When water is to be supplied by public water supply, a written statement from the Berwick Water Department shall be submitted indicating that there is adequate supply and pressure for the subdivision and that the department approves the plans for extensions where necessary. Where the department's supply line is to be extended, a written statement from the fire chief, stating approval of the location of fire hydrants, if any, and a written statement from the department approving the design of the extension shall be submitted.
  - b. When water is to be supplied by private wells, evidence of adequate ground water supply and quality shall be submitted by a well driller or a hydrogeologist familiar with the area. Evidence shall also be submitted that adequate fire protection for fire fighting purposes is available to serve the site. If adequate fire protection is not available then a water storage tank or an automatic sprinkling system shall be included in the plan, and a written statement from the Fire Chief shall be submitted indicating the department has reviewed and approved the fire protection system design.
8. The date the plan was prepared, north point, and graphic map scale.

9. The names and addresses of the record owner, applicant, and individual or company who prepared the plan, and adjoining property owners.
10. A high intensity soil survey by a Maine Certified Soil Scientist. Wetland areas shall be identified on the survey, regardless of size.
11. The number of acres within the proposed subdivision, location of property lines, existing buildings, vegetative cover type, and other essential existing physical features. On wooded sites, the plan shall indicate the area where clearing for lawns and structures shall be permitted and/or any restrictions to be placed on clearing existing vegetation.
12. The location of all rivers, streams and brooks within or adjacent to the proposed subdivision. If any portion of the proposed subdivision is located in the direct watershed of a great pond, the application shall indicate which great pond.
13. Contour lines at the interval specified by the Board, showing elevations in relation to mean sea level.
14. The zoning district in which the proposed subdivision is located and the location of any zoning boundaries affecting the subdivision.
15. The location and size of existing and proposed sewers, water mains, culverts, and drainage ways on or adjacent to the property to be subdivided.
16. The location, names, and present widths of existing streets and highways, and existing and proposed easements, building lines, parks and other open spaces on or adjacent to the subdivision. The plan shall contain sufficient data to allow the location, bearing and length of every street line, lot line, and boundary line to be readily determined and be reproduced upon the ground. These lines shall be tied to reference points previously established.
17. Size, type and locations of all existing and proposed overhead and underground utilities, to include but not be limited to street lighting, electricity, telephone, and cable television. The Board may require street lighting if there is a sufficient public safety need in accordance with the Town Street Lighting Policy.
18. The location of any open space to be preserved and a description of proposed improvements and its management.
19. All parcels of land proposed to be dedicated to public use and the conditions of such dedication. Written offers to convey title to the municipality of all public open spaces shown on the plan, and copies of agreements or other documents showing the manner in which open spaces to be retained by the applicant or lot owners are to be maintained shall be submitted. If open space or other land is to be offered to the municipality, written evidence that the municipal officers are satisfied with the legal sufficiency of the written offer to convey title shall be included.

20. If any portion of the subdivision is in a flood-prone area, the boundaries of any flood hazard areas and the 100-year flood elevation, as depicted on the Town of Berwick's Flood Insurance Rate Map, shall be delineated on the plan.
21. A hydrogeologic assessment prepared by a Maine Certified Geologist or Maine Registered Professional Engineer, experienced in hydrogeology, when the subdivision is not served by public sewer and

- a. Any part of the subdivision is located over a sand and gravel aquifer, as shown on a map entitled “Hydrogeologic Data for Significant Sand and Gravel Aquifers,” by the Maine Geological Survey, 1985, Map No. 1; or
- b. The subdivision has an average density of more than one dwelling unit per 100,000 square feet.

The Board may require a hydrogeologic assessment in other cases where site considerations or development design indicate greater potential of adverse impacts on ground water quality. These cases include extensive areas of shallow to bedrock soils; or cluster developments in which the average density is less than one dwelling unit per 100,000 square feet but the density of the developed portion is in excess of one dwelling unit per 80,000 square feet; or proposed use of shared or common subsurface waste water disposal systems.

The hydrogeologic assessment shall be conducted in accordance with the provisions of Section 11.12.A.1 below.

22. An estimate of the amount and type of vehicular traffic to be generated on a daily basis and at peak hours. Trip generation rates used shall be taken from *Trip Generation Manual*, current edition, published by the Institute of Transportation Engineers. Trip generation rates from other sources may be used if the applicant demonstrates that these sources better reflect local conditions.
23. For subdivisions involving 40 or more parking spaces or projected to generate more than 400 vehicle trips per day, a traffic impact analysis, prepared by a Maine Registered Professional Engineer with experience in traffic engineering, shall be submitted. The analysis shall indicate the expected average daily vehicular trips, peak-hour volumes, access conditions at the site, distribution of traffic, types of vehicles expected, effect upon the level of service of the street giving access to the site and neighboring streets which may be affected, and recommended improvements to maintain the desired level of service on the affected streets.
24. A storm water management plan, prepared by a Maine Registered Professional Engineer in accordance with the *Stormwater Management for Maine* manual, published by the Maine Department of Environmental Protection, January 2006. The Board may not waive submission of the storm water management plan unless the subdivision is outside the watershed of a great pond, the proposed subdivision does not involve grading which changes drainage patterns, or does not involve the addition of impervious surfaces such as roofs and driveways less than 5% of the area of the subdivision.

The storm water management plan shall be prepared in accordance with the provisions of Article 11.

25. An erosion and sedimentation control plan prepared in accordance with the manual *Maine Erosion and Sediment Control BMP's* published by the Maine Department of Environmental Protection, March 2003. The Board may not waive submission of the erosion and sedimentation control plan unless the subdivision is outside the watershed of a great pond, the proposed subdivision does not involve grading which changes drainage patterns, or does not involve the addition of impervious surfaces such as roofs and driveways less than 5% of the area of the subdivision.
26. Areas within or adjacent to the proposed subdivision which have been identified as high or moderate value wildlife habitat by the Maine Department of Inland Fisheries and Wildlife or within the comprehensive plan. If any portion of the subdivision is located within an area designated as a critical natural area by the comprehensive plan or the Maine Natural Areas Program the plan shall indicate appropriate measures for the preservation of the values which qualify the site for such designation.
27. If the proposed subdivision is in the direct watershed of a great pond, a phosphorus control plan.
  - a. For subdivisions which qualify for the simplified review procedure as described in Section 11.17.A.2, the plan shall indicate the location and dimensions of vegetative buffer strips or infiltration systems.
  - b. For subdivisions which do not qualify for the simplified review procedure as described in Section 11.17.A.2, the following shall be submitted.
    1. A phosphorus impact analysis and control plan conducted using the procedures set forth in *Volume II – Phosphorus Control in Lake Watersheds: A Technical Guide for Evaluating New Development*, of the *Stormwater Management for Maine* manual dated January 2008, published by the Maine Department of Environmental Protection.
    2. A long-term maintenance plan for all phosphorus control measures.
    3. The contour lines shown on the plan shall be at an interval of no less than five feet.
    4. Areas with sustained slopes greater than 25% covering more than one acre shall be delineated.
28. All areas within or adjacent to the proposed subdivision which are either listed on or eligible to be listed on the National Register of Historic Places, or have been identified in the comprehensive plan as sensitive or likely to contain such sites.
29. The location and method of disposal for land clearing and construction debris.

30. If the owner of the parcel to be subdivided has owned the parcel for less than five years, a narrative describing any timber harvesting operations since the owner obtained the parcel. If harvesting has occurred, a copy of the Forest Operations Notification and a written determination of the harvest's compliance with Maine Forest Service's Timber Harvesting Standards to Substantially Eliminate Liquidation Harvesting certified by a licensed forester shall be submitted.

# ARTICLE 7 - PRELIMINARY PLAN FOR MAJOR SUBDIVISION

## 7.1 Procedure.

- A. Within six months after the on-site inspection by the Board, the applicant shall submit an application for approval of a preliminary plan at least ten days prior to a scheduled meeting of the Board. Applications shall be submitted by mail to the Board in care of the municipal offices or delivered by hand to the municipal offices.

Failure to submit an application within six months may require resubmission of the Sketch Plan to the Board. The preliminary plan shall approximate the layout shown on the Sketch Plan, plus any recommendations made by the Board.

- B. All applications for preliminary plan approval for a Major Subdivision shall be accompanied by an application fee of \$200 plus \$50 per lot or dwelling unit, payable by check to the Town of Berwick or by cash. In addition, the applicant shall pay a fee of \$250 per lot or dwelling unit for subdivisions with ten lots or more, and \$400 per lot for subdivisions with fewer than ten lots, payable by check to the Town of Berwick or by cash, to be deposited in a special account designated for that subdivision application, to be used by the Board for hiring independent consulting services and/or legal services to review the application. If the balance in this special account is drawn down by 75%, the Board shall notify the applicant, and require that an additional \$125 per lot or dwelling unit be deposited by the applicant, payable by check to the Town of Berwick or by cash. The Board shall continue to notify the applicant and require an additional \$125 per lot or dwelling unit be deposited as necessary, payable by check to the Town of Berwick or by cash, whenever the balance of the account is drawn down by 75% of the original deposit. If a public hearing is deemed necessary by the Board, an additional fee shall be required, payable by check to the Town of Berwick or by cash, to cover the costs of advertising. Any balance including any interest in the account remaining after a decision on the final plan application by the Board shall be returned to the applicant.
- C. The applicant, or the applicant's representative, shall attend the meeting of the Board to present the preliminary plan application. Failure to attend the meeting to present the preliminary plan application shall result in a delay of the Board's receipt of the plan until the next meeting that the applicant attends.
- D. Within 30 days of the meeting at which an application for preliminary plan approval of a major subdivision is initially presented, the Code Enforcement and Planning Office shall:
1. Issue a dated receipt to the applicant.

2. Notify in writing all owners of abutting property that an application for subdivision approval has been submitted, specifying the location of the proposed subdivision and including a general description of the project.
  3. Notify the clerk and the review authority of the neighboring municipalities if any portion of the subdivision abuts or crosses the municipal boundary.
- E. Within 30 days of the receipt of the preliminary plan application, the Board or its consulting planner shall determine whether the application is complete and notify the applicant in writing of its determination. If the application is not complete, the Board or its consulting planner shall notify the applicant of the specific additional material needed to complete the application.
- F. Upon determination that a complete application has been submitted for review, the Board or its consulting planner shall notify the applicant in writing of its determination. The Board shall determine whether to hold a public hearing on the preliminary plan application.
- G. If the Board decides to hold a public hearing, it shall hold the hearing within 30 days of determining that it has received a complete application, and shall publish a notice of the date, time and place of the hearing in a newspaper of general circulation in the municipality at least two times, the date of the first publication to be at least seven days prior to the hearing. A copy of the notice shall be mailed to the applicant.
- H. Within 30 days from the public hearing or within 60 days of determining a complete application has been received, if no hearing is held, or within another time limit as may be otherwise mutually agreed to by the Board and the applicant, the Board shall make findings of fact on the application, and approve, approve with conditions, or deny the preliminary plan application. The Board shall specify in writing its findings of facts and reasons for any conditions or denial.
- I. When granting approval to a preliminary plan, the Board shall state the conditions of such approval, if any, with respect to:
1. The specific changes which it will require in the final plan;
  2. The character and extent of the required improvements for which waivers may have been requested and which the Board finds may be waived without jeopardy to the public health, safety, and general welfare; and
  3. The construction items for which cost estimates and performance guarantees will be required as prerequisite to the approval of the final plan.

- J. Approval of a preliminary plan shall not constitute approval of the final plan or intent to approve the final plan, but rather it shall be deemed an expression of approval of the design of the preliminary plan as a guide to the preparation of the final plan. The final plan shall be submitted for approval by the Board upon fulfillment of the requirements of these regulations and the conditions of preliminary approval, if any. Prior to the approval of the final plan, the Board may require that additional information be submitted and changes in the plan be made as a result of further study of the proposed subdivision or as a result of new information received.

## **7.2 Submissions.**

The preliminary plan application shall consist of the following items.

- A. Application Form.
- B. Location Map. The location map shall be drawn at a size adequate to show the relationship of the proposed subdivision to the adjacent properties, and to allow the Board to locate the subdivision within the municipality. The location map shall show:
  - 1. Existing subdivisions in the proximity of the proposed subdivision.
  - 2. Locations and names of existing and proposed streets.
  - 3. Boundaries and designations of zoning districts.
  - 4. An outline of the proposed subdivision and any remaining portion of the owner's property if the preliminary plan submitted covers only a portion of the owner's entire contiguous holding.
- C. Preliminary Plan. The preliminary plan shall be submitted in four copies of one or more maps or drawings which may be printed or reproduced on paper, with all dimensions shown in feet or decimals of a foot.

The preliminary plan shall be drawn to a scale of not more than one hundred feet to the inch. Plans for subdivisions containing more than one hundred acres may be drawn at a scale of not more than two hundred feet to the inch provided all necessary detail can easily be read.

- D. Application Requirements.

The application for preliminary plan approval shall include the following information. The Board may require additional information to be submitted, where it finds necessary in order to determine whether the criteria of Title 30-A M.R.S.A., §4404 are met.

- 1. Proposed name of the subdivision and the name of the municipality in which it is located, plus the assessor's map and lot numbers.

2. Verification of right, title or interest in the property.
3. A standard boundary survey of the parcel, giving complete descriptive data by bearings and distances, made and certified by a Maine registered land surveyor. The corners of the parcel shall be located on the ground and marked by monuments.
4. A copy of the most recently recorded deed for the parcel. A copy of all deed restrictions, easements, rights-of-way, or other encumbrances currently affecting the property.
5. A copy of any deed restrictions intended to cover all or part of the lots or dwellings in the subdivision. The deed restrictions must specify that maintenance of privately owned stormwater management facilities will be conducted and certified to the Town in accordance with Article 7.22 of the Town's Land Use Ordinance.
6. An indication of the type of sewage disposal to be used in the subdivision. When sewage disposal is to be accomplished by connection to the public sewer, the Berwick Sewer District shall certify that providing service to the proposed subdivision is within the capacity of the system's existing collection and treatment system or improvements planned to be completed prior to the construction of the subdivision.

When sewage disposal is to be accomplished by subsurface waste water disposal systems, test pit analyses, prepared by a Maine Licensed Site Evaluator or Maine Certified Soil Scientist shall be provided. A map showing the location of all test pits dug on the site shall be submitted.

7. An indication of the type of water supply system(s) to be used in the subdivision.  
  
When water is to be supplied by public water supply, a written statement from the Berwick Water Department shall be submitted indicating there is adequate supply and pressure for the subdivision.
8. The date the plan was prepared, north point, and graphic map scale.
9. The names and addresses of the record owner, applicant, and individual or company who prepared the plan and adjoining property owners.
10. A high intensity soil survey by a Maine Certified Soil Scientist. Wetland areas shall be identified on the survey, regardless of size.
11. The number of acres within the proposed subdivision, location of property lines, existing buildings, vegetative cover type, and other essential existing physical features
12. The location of all rivers, streams and brooks within or adjacent to the proposed subdivision. If any portion of the proposed subdivision is located in the direct watershed of a great pond, the application shall indicate which great pond.

13. Contour lines at the interval specified by the Board, showing elevations in relation to Mean Sea Level.
14. The zoning district in which the proposed subdivision is located and the location of any zoning boundaries affecting the subdivision.
15. The location and size of existing and proposed sewers, water mains, culverts, and drainage ways on or adjacent to the property to be subdivided.
16. The location, names, and present widths of existing streets, highways, easements, building lines, parks and other open spaces on or adjacent to the subdivision.
17. Size, type and locations of all existing and proposed overhead and underground utilities, to include but not be limited to street lighting, electricity, telephone, and cable television. The Board may require street lighting if there is a sufficient public safety need in accordance with the Town Street Lighting Policy.
18. The proposed lot lines with approximate dimensions and lot areas.
19. All parcels of land proposed to be dedicated to public use and the conditions of such dedication.
20. The location of any open space to be preserved and a description of proposed ownership, improvement and management.
21. The percentage of area on each lot where existing forest cover will be permitted to be removed and converted to lawn, structures or other cover and any proposed restrictions to be placed on clearing existing vegetation.
22. If any portion of the subdivision is in a flood-prone area, the boundaries of any flood hazard areas and the 100-year flood elevation, as depicted on the Town of Berwick's Flood Insurance Rate Map, shall be delineated on the plan.
23. A hydrogeologic assessment prepared by a Maine Certified Geologist or Maine Registered Professional Engineer, experienced in hydrogeology, when the subdivision is not served by public sewer and
  - a. Any part of the subdivision is located over a sand and gravel aquifer, as shown on a map entitled "Hydrogeologic Data for Significant Sand and Gravel Aquifers," by the Maine Geological Survey, 1985, Map No. 1; or
  - b. The subdivision has an average density of more than one dwelling unit per 100,000 square feet.

The Board may require a hydrogeologic assessment in other cases where site considerations or development design indicate greater potential of adverse impacts on ground water quality. These cases include extensive areas of shallow to bedrock soils; or cluster developments in which the average density is less than one dwelling unit per 100,000 square feet but the density of the developed portion is in excess of one dwelling unit per 80,000 square feet; or the proposed use of shared or common subsurface waste water disposal systems.

The hydrogeologic assessment shall be conducted in accordance with the provisions of Section 11.12.A.1 below.

24. An estimate of the amount and type of vehicular traffic to be generated on a daily basis and at peak hours. Trip generation rates used shall be taken from *Trip Generation Manual*, latest edition, published by the Institute of Transportation Engineers. Trip generation rates from other sources may be used if the applicant demonstrates that these sources better reflect local conditions.
25. For subdivisions involving 40 or more parking spaces or projected to generate more than 400 vehicle trips per day, a traffic impact analysis, prepared by a Maine Registered Professional Engineer with experience in traffic engineering, shall be submitted. The analysis shall indicate the expected average daily vehicular trips, peak-hour volumes, access conditions at the site, distribution of traffic, types of vehicles expected, effect upon the level of service of the street giving access to the site and neighboring streets which may be affected, and recommended improvements to maintain the desired level of service on the affected streets.
26. Areas within or adjacent to the proposed subdivision which have been identified as high or moderate value wildlife habitat by the Maine Department of Inland Fisheries and Wildlife or within the comprehensive plan. If any portion of the subdivision is located within an area designated as a unique natural area by the comprehensive plan or the Maine Natural Areas Program the plan shall indicate appropriate measures for the preservation of the values which qualify the site for such designation.
27. If the proposed subdivision is in the direct watershed of a great pond, and qualifies for the simplified review procedure for phosphorus control as described in Section 11.17.A.2, the plan shall indicate the location and dimensions of vegetative buffer strips or infiltration systems and the application shall include a long-term maintenance plan for all phosphorus control measures. For subdivisions which do not qualify for the simplified review procedure, a phosphorus impact analysis and control plan shall be submitted using the procedures set forth in *Volume II – Phosphorus Control in Lake Watersheds: A Technical Guide for Evaluating New Development*, of the *Stormwater Management for Maine* manual dated January 2008, published by the Maine Department of Environmental Protection.

28. All areas within or adjacent to the proposed subdivision which are either listed on or eligible to be listed on the National Register of Historic Places, or have been identified in the comprehensive plan as sensitive or likely to contain such sites.
29. If the owner of the parcel to be subdivided has owned the parcel for less than five years, a narrative describing any timber harvesting operations since the owner obtained the parcel. If harvesting has occurred, a copy of the Forest Operations Notification and a written determination of the harvest's compliance with Maine Forest Service's Timber Harvesting Standards to Substantially Eliminate Liquidation Harvesting certified by a licensed forester shall be submitted.
30. A storm water management plan, prepared by a Maine Registered Professional Engineer in accordance with the *Stormwater Management for Maine* manual, published by the Maine Department of Environmental Protection, January 2006. The Board may not waive submission of the storm water management plan unless the subdivision is outside the watershed of a great pond, the proposed subdivision does not involve grading which changes drainage patterns, or does not involve the addition of impervious surfaces such as roofs and driveways less than 5% of the area of the subdivision.
31. An erosion and sedimentation control plan prepared by a Maine Registered Professional Engineer in accordance with the manual *Maine Erosion and Sediment Control BMP's* published by the Maine Department of Environmental Protection, March 2003. The Board may not waive submission of the erosion and sedimentation control plan unless the subdivision is outside the watershed of a great pond, the proposed subdivision does not involve grading which changes drainage patterns, or does not involve the addition of impervious surfaces such as roofs and driveways less than 5% of the area of the subdivision.
32. A common scheme of development shall be shown for all contiguous or non-contiguous parcels or lots in the same immediate vicinity. The common scheme of development shall include the timing and sequencing of development, types of land uses, anticipated roadways and access locations, number of lots, and open space to be preserved.

# ARTICLE 8 - FINAL PLAN FOR MAJOR SUBDIVISION

## 8.1 Procedure.

- A. Within six months after the approval of the preliminary plan, the applicant shall submit an application for approval of the final plan at least ten days prior to a scheduled meeting of the Board. Applications shall be submitted by mail to the Board in care of the municipal offices or delivered by hand to the Code Enforcement and Planning Office. If the application for the final plan is not submitted within six months after preliminary plan approval, the Board shall require resubmission of the preliminary plan, except as stipulated below. The final plan shall approximate the layout shown on the preliminary plan, plus any changes required by the Board.

If an applicant cannot submit the final plan within six months, due to delays caused by other regulatory bodies, or other reasons, the applicant may request an extension. Such a request for an extension to the filing deadline shall be filed, in writing, with the Board prior to the expiration of the filing period. In considering the request for an extension the Board shall make findings that the applicant has made due progress in preparation of the final plan and in pursuing approval of the plans before other agencies, and that municipal ordinances or regulations which may impact on the proposed development have not been amended.

- B. All applications for final plan approval for a major subdivision shall be accompanied by a nonrefundable application fee of \$250 payable by check to the Town of Berwick. If a public hearing is deemed necessary by the Board, an additional fee shall be required to cover the costs of advertising and postal notification.
- C. Prior to submittal of the final plan application, the following approvals shall be obtained in writing, where applicable:
1. Maine Department of Environmental Protection, under the Site Location of Development Act.
  2. Maine Department of Environmental Protection, under the Natural Resources Protection Act or if a storm water management permit or a waste water discharge license is needed.
  3. Maine Department of Human Services, if the applicant proposes to provide a public water system.
  4. Maine Department of Human Services, if an engineered subsurface waste water disposal system(s) is to be utilized.
  5. U.S. Army Corps of Engineers, if a permit under Section 404 of the Clean Water Act is required.
- D. If the preliminary plan identified any areas listed on or eligible to be listed on the National Register of Historic Places, in accordance with Section 7.2.D.27, the

applicant shall submit a copy of the plan and a copy of any proposed mitigation measures to the Maine Historic Preservation Commission prior to submitting the final plan application.

- E. The applicant, or the applicant's duly authorized representative, shall attend the meeting of the Board to discuss the final plan. Failure to attend the meeting to present the final plan application shall result in a delay of the Board's receipt of the plan until the next meeting which the applicant attends.
- F. At the meeting at which an application for final plan approval of a major subdivision is initially presented, the Board shall issue a dated receipt to the applicant.
- G. Within 30 days of the receipt of the final plan application, the Board shall determine whether the application is complete and notify the applicant in writing of its determination. If the application is not complete, the Board shall notify the applicant of the specific additional material needed to complete the application.
- H. Upon determination that a complete application has been submitted for review, the Board shall issue a dated receipt to the applicant. The Board shall determine whether to hold a public hearing on the final plan application.
- I. If the Board decides to hold a public hearing, it shall hold the hearing within 30 days of determining it has received a complete application, and shall publish a notice of the date, time and place of the hearing in a newspaper of local circulation at least two times, the date of the first publication to be at least seven days before the hearing. In addition, the notice of the hearing shall be posted in at Town Hall.
- J. The Board shall notify the road commissioner, school superintendent, police chief, and fire chief of the proposed subdivision, the number of dwelling units proposed, the length of roadways, and the size and construction characteristics of any multi-family, commercial or industrial buildings. The Board shall request that these officials comment upon the adequacy of their department's existing capital facilities to service the proposed subdivision.
- K. Before the Board grants approval of the final plan, the applicant shall meet the performance guarantee requirements contained in Article 13.
- L. Within 30 days from the public hearing or within 60 days of receiving a complete application, if no hearing is held, or within another time limit as may be otherwise mutually agreed to by the Board and the applicant, the Board shall make findings of fact, and conclusions relative to the criteria for approval contained in Title 30-A M.R.S.A., §4404 and the standards of these regulations.

If the Board finds that all the criteria of the statute and the standards of these regulations have been met, they shall approve the final plan. If the Board finds that any of the criteria of the statute or the standards of these regulations has not been met, the Board shall either deny the application or approve the application with conditions to ensure all of the standards will be met by the subdivision. The reasons for any conditions shall be stated in the records of the Board.

## 8.2 Submissions.

The final plan shall consist of one or more maps or drawings drawn to a scale of not more than one hundred feet to the inch. Plans for subdivisions containing more than 100 acres may be drawn at a scale of not more than two hundred feet to the inch provided all necessary detail can easily be read. Plans shall be no larger than 24 by 36 inches in size, and shall have a margin of two inches outside of the border line on the left side for binding and a one-inch margin outside the border along the remaining sides. Space shall be reserved on the plan for endorsement by the Board. Two plans on 20-pound white paper, one to be recorded at the Registry of Deeds, the other to be filed at the municipal office, and three copies of the plan shall be submitted.

The final plan shall include or be accompanied by the following information.

- A. Proposed name of the subdivision and the name of the municipality in which it is located, plus the assessor's map and lot numbers.
- B. The number of acres within the proposed subdivision, location of property lines, existing buildings, watercourses, and other essential existing physical features.
- C. An indication of the type of sewage disposal to be used in the subdivision. When sewage disposal is to be accomplished by connection to the public sewer, a written statement from the Berwick Sewer District indicating the district has reviewed and approved the sewerage design shall be submitted. The Berwick Sewer District shall review and approve the construction drawings for the sewerage system. The size and location of laterals, collectors, manholes, and pump stations shall be reviewed and approved in writing by the Berwick Sewer District
- D. An indication of the type of water supply system(s) to be used in the subdivision.
  1. When water is to be supplied by an existing public water supply, a written statement from the Berwick Water Department shall be submitted indicating the department has reviewed and approved the water system design. A written statement shall be submitted from the Fire Chief approving all hydrant locations or other fire protection measures deemed necessary.
  2. When water is to be supplied by private wells, evidence of adequate ground water supply and quality shall be submitted by a well driller or a hydrogeologist familiar with the area. Evidence shall also be submitted that adequate fire protection for fire fighting purposes is available to serve the site. If adequate fire protection is not available then a water storage tank shall be included in the plan, and a written statement from the Fire Chief shall be submitted indicating the department has reviewed and approved the fire protection system design.
- E. The date the plan was prepared, north point, graphic map scale.

- F. The names and addresses of the record owner, applicant, and individual or company who prepared the plan.
- G. The location of any zoning boundaries affecting the subdivision.
- H. If different than those submitted with the preliminary plan, a copy of any proposed deed restrictions intended to cover all or part of the lots or dwellings in the subdivision.
- I. The location and size of existing and proposed sewers, water mains, culverts, and drainage ways on or adjacent to the property to be subdivided.
- J. The location, names, and present widths of existing and proposed streets, highways, easements, buildings, parks and other open spaces on or adjacent to the subdivision. The plan shall contain sufficient data to allow the location, bearing and length of every street line, lot line, and boundary line to be readily determined and be reproduced upon the ground. These lines shall be tied to reference points previously established. The location, bearing and length of street lines, lot lines and parcel boundary lines shall be certified by a Maine professional land surveyor. The original reproducible plan shall be embossed with the seal of the professional land surveyor and be signed by that individual.
- K. Street plans, meeting the requirements of Section 12.2.B.2.
- L. All parcels of land proposed to be dedicated to public use and the conditions of such dedication. Written offers to convey title to the municipality of all public ways and open spaces shown on the plan, and copies of agreements or other documents showing the manner in which open spaces to be retained by the developer or lot owners are to be maintained shall be submitted. If proposed streets and/or open spaces or other land is to be offered to the municipality, written evidence that the municipal officers are satisfied with the legal sufficiency of the written offer to convey title shall be included.
- M. The boundaries of any flood hazard areas and the 100-year flood elevation as depicted on the municipality's Flood Insurance Rate Map, shall be delineated on the plan.
- N. If any portion of the proposed subdivision is in the direct watershed of a great pond, and does not qualify for the simplified review procedure for phosphorus control under Section 11.17.A.2, the following shall be submitted or indicated on the plan.
  - 1. A phosphorus impact analysis and control plan conducted using the procedures set forth in *Volume II – Phosphorus Control in Lake Watersheds: A Technical Guide for Evaluating New Development*, of the *Stormwater Management for Maine* manual published by the Maine Department of Environmental Protection, January 2008. The analysis and control plan shall include all worksheets, engineering calculations, and construction specifications and diagrams for control measures, as required by the above-referenced manual.

2. A long-term maintenance plan for all phosphorus control measures.
  3. The contour lines shown on the plan shall be at an interval of no less than five feet.
  4. Areas with sustained slopes greater than 25% covering more than one acre shall be delineated.
- O. A list of construction items, with cost estimates, that will be completed by the applicant prior to the sale of lots, and evidence that the applicant has financial commitments or resources to cover these costs.
- P. The location and method of disposal for land clearing and construction debris.
- Q. Homeowners Association Documents where applicable must be reviewed by the Town's Attorney at the expense of the applicant.

### **8.3 Final Approval and Filing.**

- A. No plan shall be approved by the Board as long as the applicant is in violation of the provisions of a previously approved plan within the municipality.
- B. Upon findings of fact and determination that all standards in Title 30-A M.R.S.A., §4404, and these regulations have been met, and upon voting to approve the subdivision, the Board shall sign the final plan. The Board shall specify in writing its findings of facts and reasons for any conditions or denial. One copy of the signed plan shall be retained by the Board as part of its permanent records. One copy of the signed plan shall be forwarded to the tax assessor. One electronic version of the final plan shall be provided in a format suitable for the Town Mapper. One copy of the signed plan shall be forwarded to the code enforcement officer. Any subdivision not recorded in the Registry of Deeds within 90 days of the date upon which the plan is approved and signed by the Board shall become null and void.
- C. At the time the Board grants final plan approval, it may permit the Plan to be divided into two or more sections subject to any conditions the Board deems necessary in order to ensure the orderly development of the Plan. If any municipal or quasi-municipal department head notified of the proposed subdivision informs the Board that their department or district does not have adequate capital facilities to service the subdivision, the Board shall require the plan to be divided into two or more sections subject to any conditions the Board deems necessary in order to allow the orderly planning, financing and provision of public services to the subdivision. If the superintendent of schools indicates that there is less than 20% excess classroom capacity existing in the school(s) which will serve the subdivision, considering previously approved but not built subdivisions, the Board may require the plan to be divided into sections to prevent classroom overcrowding.
- D. No changes, erasures, modifications, or revisions shall be made in any final plan after approval has been given by the Board and endorsed in writing on the plan,

unless the revised final plan is first submitted and the Board approves any modifications, except in accordance with Article 10. The Board shall make findings that the revised plan meets the criteria of Title 30-A M.R.S.A., §4404, and the standards of these regulations. In the event that a Plan is recorded without complying with this requirement, it shall be considered null and void, and the Board shall institute proceedings to have the plan stricken from the records of the Registry of Deeds.

- E. The approval by the Board of a subdivision plan shall not be deemed to constitute or be evidence of any acceptance by the municipality of any street, easement, or other open space shown on such plan. When a park, playground, or other recreation area shall have been shown on the plan to be dedicated to the municipality, approval of the plan shall not constitute an acceptance by the municipality of such areas. The Board shall require the plan to contain appropriate notes to this effect. The Board may also require the filing of a written agreement between the applicant and the municipal officers covering future deed and title dedication, and provision for the cost of grading, development, equipment, and maintenance of any such dedicated area.
- F. Failure to achieve substantial completion of a subdivision within 3 years of the date of approval and signing of the plan shall render the plan null and void. Phased subdivisions must complete the first phase within 3 years and each phase thereafter within 3 years of the completion of the previous.
- G. A copy of the as-built plans shall be submitted to the Board and shall be retained by the Board as part of its permanent records.

## **ARTICLE 9 - REVISIONS TO APPROVED PLANS**

### **9.1 Procedure.**

An applicant for a revision to a previously approved plan shall, at least ten days prior to a scheduled meeting of the Board, request to be placed on the Board's agenda. If the revision involves the creation of additional lots or dwelling units, the procedures for preliminary plan approval shall be followed. If the revision involves only modifications of the approved plan, such as moving a lot line, without the creation of additional lots or dwelling units, the procedures for final plan approval shall be followed. The cost related to the Town's review of the revision will be \$100 borne by the applicant.

### **9.2 Submissions.**

The applicant shall submit a copy of the approved plan as well as three copies of the proposed revisions. The application shall also include enough supporting information to allow the Board to make a determination that the proposed revisions meet the standards of these regulations and the criteria of the statute. The revised plan shall indicate that it is the revision of a previously approved and recorded plan and shall show the title of the subdivision and the book and page or cabinet and sheet on which the original plan is recorded at the Registry of Deeds.

### **9.3 Scope of Review.**

The Board's scope of review shall be limited to those portions of the plan which are proposed to be changed.

# ARTICLE 10 - INSPECTIONS AND ENFORCEMENT

## 10.1 Inspection of Required Improvements.

- A. At least five days prior to commencing construction of required improvements, the subdivider or builder shall:
1. Notify the Town Manager and the Planning Office in writing of the time when (s)he proposes to commence construction of such improvements, so that inspections by the Town Engineer can be arranged for, to assure that all municipal specifications, requirements, and conditions of approval are met during the construction of required improvements, and to assure the satisfactory completion of improvements and utilities required by the Board.
  2. Deposit with the municipal officers a check for the amount of 6% of the estimated costs of the required improvements to pay for the costs of inspection. If upon satisfactory completion of construction and cleanup there are funds remaining, the surplus shall be refunded to the subdivider or builder as appropriate. If the inspection account shall be drawn down by 90%, the subdivider or builder shall deposit an additional 1% of the estimated costs of the required improvements.
- B. If the inspecting official finds upon inspection of the improvements that any of the required improvements have not been constructed in accordance with the plans and specifications filed by the subdivider, the inspecting official shall so report in writing to the municipal officers, Board, and the subdivider and builder. The municipal officers shall take any steps necessary to assure compliance with the approved plans.
- C. If at any time it appears necessary or desirable to modify the required improvements before or during the construction of the required improvements, the inspecting official is authorized to approve minor modifications due to unforeseen circumstances such as encountering hidden outcrops of bedrock, natural springs, etc. The inspecting official shall issue any approval under this section in writing and shall transmit a copy of the approval to the Board. Revised plans shall be filed with the Board. For major modifications, such as relocation of rights-of-way, property boundaries, changes of grade by more than 1%, etc., the subdivider shall obtain permission from the Board to modify the plans in accordance with Article 9.
- D. At the close of each summer construction season the Town may, at the expense of the subdivider, have the site inspected by a qualified individual. By October 1 of each year during which construction was done on the site, the inspector shall submit a report to the Board based on that inspection, addressing whether storm water and erosion control measures (both temporary and permanent) are in place, are properly installed, and appear adequate. The report shall also include a discussion and recommendations on any problems which were encountered.

- E. Prior to the sale of any lot, the subdivider shall provide the Board with a letter from a Registered Land Surveyor, stating that all monumentation shown on the plan has been installed.
- F. Upon completion of street construction and prior to a vote by the municipal officers to submit a proposed public way to a town meeting, a written certification signed by a professional engineer shall be submitted to the municipal officers at the expense of the applicant, certifying that the proposed public way meets or exceeds the design and construction requirements of these regulations. If there are any underground utilities, the servicing utility shall certify in writing that they have been installed in a manner acceptable to the utility. "As built" plans shall be submitted to the municipal officers.
- G. The subdivider shall be required to maintain all improvements and provide for snow removal on streets and sidewalks until acceptance of the improvements by the municipality or control is placed with a lot owners' association. The subdivider shall pay for any street lighting until acceptance of the improvements by the municipality or control is placed with a lot owners' association. The subdivider shall file a performance guarantee with the town upon completion of the public improvements in an amount and form acceptable to the municipal officers assuring that this obligation shall be met. The performance guarantee shall remain in force as long as the subdivider retains this maintenance responsibility.

## **10.2 Violations and Enforcement.**

- A. No plan of a division of land within the municipality which would constitute a subdivision shall be recorded in the Registry of Deeds until a final plan has been approved by the Board in accordance with these regulations.
- B. A person shall not convey, offer or agree to convey any land in a subdivision which has not been approved by the Board and recorded in the Registry of Deeds.
- C. A person shall not sell, lease or otherwise convey any land in an approved subdivision which is not shown on the plan as a separate lot.
- D. No public utility, water district, sanitary district or any utility company of any kind shall serve any lot in a subdivision for which a final plan has not been approved by the Board.
- E. Development of a subdivision without Board approval shall be a violation of law. Development includes grading or construction of roads, grading of land or lots, or construction of buildings which require a plan approved as provided in these regulations and recorded in the Registry of Deeds.
- F. No lot in a subdivision may be sold, leased, or otherwise conveyed before the street upon which the lot fronts is substantially completed in accordance with these regulations up to and including the entire frontage of the lot. No unit in a multi-family development shall be occupied before the street upon which the unit is accessed is completed in accordance with these regulations.

G. Violations of the above provisions of this section are a nuisance and shall be punished in accordance with the provisions of Title 30-A M.R.S.A., §4452.

# ARTICLE 11 - PERFORMANCE STANDARDS

The performance standards in this article are intended to clarify and expand upon the criteria for approval found within the subdivision statute (Title 30-A M.R.S.A., §4404). In reviewing a proposed subdivision, the Board shall review the application for conformance with the following performance standards and make findings that each has been met prior to the approval of a final plan. Compliance with the design guidelines of Article 12 shall be considered to be evidence of meeting the appropriate performance standards. Proposed subdivisions not in compliance with the design guidelines of Article 12 may be considered, but the applicant shall provide clear and convincing evidence that the proposed design will meet the performance standard(s) and the statutory criteria. In all instances the burden of proof shall be upon the applicant to present adequate information to indicate all performance standards and statutory criteria for approval have been or will be met.

## 11.1 Pollution.

- A. The proposed subdivision shall not discharge waste water to a water body without a license from the Maine Department of Environmental Protection.
- B. Discharges of storm water shall be treated to remove oil, grease, and sediment prior to discharge into surface waterbodies. When the subdivision is within the watershed of a great pond, the storm water shall be treated in order to remove excess nutrients.

## 11.2 Sufficient Water.

- A. Water Supply.
  - 1. Any subdivision within the area designated for future public water supply service shall make provisions for connection to the public system.
  - 2. When a subdivision is to be served by a public water system, the complete supply system within the subdivision include
  - 3. ng fire hydrants, shall be installed at the expense of the applicant. The size and location of mains, gate valves, hydrants, and service connections shall be reviewed and approved in writing by the Berwick Water Department and the fire chief.
  - 4. When a proposed subdivision is not within the area designated for public water supply service, water supply shall be from individual wells or a private community water system.
    - a. Individual wells shall be sited and constructed to prevent infiltration of surface water, and contamination from subsurface waste water disposal systems and other sources of potential contamination.
    - b. Lot design shall permit placement of wells, subsurface waste water disposal areas, and reserve sites for subsurface waste water disposal areas in compliance with the Maine Subsurface Wastewater Disposal Rules and the Well Drillers and Pump Installers Rules.

- c. If a central water supply system is provided by the applicant, the location and protection of the source, the design, construction and operation of the system shall conform to the standards of the Maine Rules Relating to Drinking Water (10-144A C.M.R. 231).
- d. In areas where the comprehensive plan has identified the need for additional water storage capacity for fire fighting purposes, the applicant shall provide adequate water storage facilities. Facilities may be ponds with dry hydrants, underground storage reservoirs or other methods acceptable to the fire chief. An easement shall be granted to the municipality granting access to and maintenance of dry hydrants or reservoirs where necessary. The Board may waive the requirement for water storage only upon submittal of evidence that the soil types in the subdivision will not permit their construction or installation and that the fire chief has indicated in writing that alternate methods of fire protection are available.

**B. Water Quality.**

Water supplies shall meet the primary drinking water standards contained in the Maine Rules Relating to Drinking Water. If existing water quality contains contaminants in excess of the secondary drinking water standards in the Maine Rules Relating to Drinking Water, that fact shall be disclosed in a note on the plan to be recorded in the Registry of Deeds.

**11.3 Impact on Existing Water Supplies.**

In meeting the standards of Section 11.2.A, a proposed subdivision shall not generate a demand on the source, treatment facilities or distribution system of the Berwick Water Department beyond the capacity of those system components, considering improvements that are planned to be in place prior to occupancy of the subdivision. The applicant shall be responsible for paying the costs of system improvements to the department's system as necessary to alleviate existing deficiencies.

**11.4 Soil Erosion.**

- A. The proposed subdivision shall prevent sediment resulting from soil erosion from entering waterbodies, wetlands, and adjacent properties.
- B. The procedures outlined in the erosion and sedimentation control plan shall be implemented during the site preparation, construction, and clean-up stages.
- C. Topsoil shall be considered part of the subdivision and shall not be removed from the site except for surplus topsoil from roads, parking areas, and building excavations.

**11.5 Traffic Conditions.**

- A. In general, provision shall be made for vehicular access to the subdivision and circulation within the subdivision in such a manner as to:

1. Safeguard against hazards to traffic and pedestrians in existing streets and within the subdivision;
  2. Avoid traffic congestion on any street; and
  3. Provide safe and convenient circulation on public streets and within the subdivision.
- B. More specifically, access and circulation shall also conform to the following standards.
1. The vehicular access to the subdivision shall be arranged to avoid through traffic use of existing streets which are classified as residential access streets.
  2. The street giving access to the subdivision and neighboring streets and intersections which can be expected to carry traffic generated by the subdivision shall have the capacity or be suitably improved to accommodate that traffic and avoid unreasonable congestion. No subdivision shall reduce the Level of Service (LOS) of the street giving access to the subdivision and neighboring streets and intersections to “E” or below, unless the comprehensive plan has indicated that Levels of Service “E” or “F” are acceptable for that street or intersection.
  3. Where necessary to safeguard against hazards to traffic and pedestrians and/or to avoid traffic congestion, provision shall be made for turning lanes, traffic directional islands, frontage roads, sidewalks, bicycleways and traffic controls within existing public streets.
  4. Accessways to non-residential subdivisions or to multifamily dwellings shall be designed to avoid queuing of entering vehicles on any street. Left lane storage capacity shall be provided to meet anticipated demand. A study or analysis to determine the need for a left-turn storage lane shall be done.
  5. Where topographic and other site conditions allow, provision shall be made for street connections to adjoining lots of similar existing or potential use within areas of the municipality designated as growth areas in the comprehensive plan; or in non-residential subdivisions when such access shall be provided if it will:
    - a. Facilitate fire protection services as approved by the fire chief; or
    - b. Enable the public to travel between two existing or potential uses, generally open to the public, without need to travel upon a public street.
  - 6.. Street Names, Signs and Lighting.

Streets which join and are in alignment with streets of abutting or neighboring properties shall bear the same name. Names of new streets shall not duplicate, nor bear phonetic resemblance to the names of existing streets within the municipality, and shall be subject to the approval of the requirements of the addressing ordinance. No street name shall be the common given name of a person. The developer shall either install street name, traffic safety and control

signs meeting municipal specifications or reimburse the municipality for the costs of their installation. Street lighting shall be installed as approved by the Board.

7. Clean-up.

During street construction, the developer or contractor shall conduct a thorough clean-up of stumps and other debris from the entire street right-of-way. If on-site disposal of the stumps and debris is proposed, the site shall be indicated on the plan, and be suitably covered with fill and topsoil, limed, fertilized, and seeded.

## **11.6 Sewage Disposal.**

### **A. Public System.**

1. Any subdivision located within 2500 feet of a public sanitary sewer line and within the area designated in the comprehensive plan for future public sewage disposal service shall be connected to the Berwick Sewer District.
2. When a subdivision is proposed to be served by the Berwick Sewer District, the complete collection system within the subdivision, including manholes and pump stations, shall be installed at the expense of the applicant.
3. The Berwick Sewer District shall certify that providing service to the proposed subdivision is within the capacity of the system's existing collection and treatment system or improvements planned to be completed prior to the construction of the subdivision.
4. The Berwick Sewer District shall review and approve the construction drawings for the sewerage system. The size and location of laterals, collectors, manholes, and pump stations shall be reviewed and approved in writing by the Berwick Sewer District.

### **B. Private Systems.**

1. When a proposed subdivision is not within the area designated for public sewage disposal service in the comprehensive plan, connection to the public system may not be permitted. Sewage disposal shall be private subsurface waste water disposal systems or a private treatment facility with a licensed surface discharge.
2. The applicant shall submit evidence of site suitability for subsurface sewage disposal prepared by a Maine Licensed Site Evaluator in full compliance with the requirements of the State of Maine Subsurface Wastewater Disposal Rules.
  - a. The site evaluator shall certify in writing that all test pits which meet the requirements for a new system represent an area large enough for a disposal area on soils which meet the Disposal Rules.

- b. On lots in which the limiting factor has been identified as being within 24 inches of the surface, a second site with suitable soils shall be shown as a reserve area for future replacement of the disposal area. The reserve area shall be shown on the plan and restricted so as not to be built upon.
- c. In no instance shall a disposal area be on a site which requires a New System Variance from the Subsurface Wastewater Disposal Rules.

**11.7 Solid Waste.**

The proposed subdivision will not cause an unreasonable burden on the municipality's ability to dispose of solid waste.

**11.8 Impact on Natural Beauty, Aesthetics, Historic Sites, Wildlife Habitat, Rare Natural Areas or Public Access to the Shoreline.**

**A. Preservation of Natural Beauty and Aesthetics.**

- 1. The plan shall, by notes on the final plan and deed restrictions, limit the clearing of trees to those areas designated on the plan.
- 2. Except in areas of the municipality designated by the comprehensive plan as growth areas, the subdivision shall be designed to minimize the visibility of buildings from existing public roads.
- 3. The Board may require the application to include a landscape plan that will show the preservation of any existing trees larger than 24 inches diameter breast height, the replacement of trees and vegetation, and graded contours.
- 4. When a proposed subdivision street traverses open fields the plans shall include the planting of street trees.

**B. Retention of Open Spaces and Natural or Historic Features.**

- 1. If any portion of the subdivision is located within an area designated by the comprehensive plan as open space or greenbelt, that portion shall be reserved for open space preservation.
- 2. If any portion of the subdivision is located within an area designated as a unique natural area by the comprehensive plan or the Maine Natural Areas Program the plan shall indicate appropriate measures for the preservation of the values which qualify the site for such designation.
- 3. If any portion of the subdivision is designated a site of historic or prehistoric importance by the comprehensive plan or the Maine Historic Preservation Commission, appropriate measures for the protection of the historic or prehistoric resources shall be included in the plan.
- 4. The subdivision shall reserve sufficient undeveloped land to provide for the recreational needs of the occupants. The percentage of open space to be reserved shall depend on the identified needs for outdoor recreation in the portion of the municipality in which the subdivision is located according to the

comprehensive plan, the proposed lot sizes within the subdivision, the expected demographic makeup of the occupants of the subdivision, and the site characteristics.

5. Land reserved for open space purposes shall be of a character, configuration and location suitable for the particular use intended.
6. Reserved open space land may be dedicated to the municipality.

C. Protection of Significant Wildlife Habitat.

If any portion of a proposed subdivision lies within:

1. 250 feet of the following areas identified and mapped by the Department of Inland Fisheries and Wildlife or the comprehensive plan as:
  - a. Habitat for species appearing on the official state or federal lists of endangered or threatened species;
  - b. High and moderate value waterfowl and wading bird habitats, including nesting and feeding areas;
  - c. Shorebird nesting, feeding and staging areas and seabird nesting islands;
  - d. Critical spawning and nursery areas for Atlantic sea run salmon as defined by the Atlantic Sea Run Salmon Commission; or
2. 1,320 feet of an area identified and mapped by the Department of Inland Fisheries and Wildlife as a high or moderate value deer wintering area or travel corridor;
3. Or other important habitat areas identified in the comprehensive plan, the applicant shall demonstrate that there shall be no adverse impacts on the habitat and species it supports. A report prepared by a wildlife biologist certified by the Wildlife Society with demonstrated experience with the wildlife resource being impacted shall be submitted. This report shall assess the potential impact of the subdivision on the significant habitat and adjacent areas that are important to the maintenance of the affected species and shall describe appropriate mitigation measures to ensure that the subdivision will have no adverse impacts on the habitat and the species it supports.

- D. Any existing public rights of access to the shoreline of a water body shall be maintained by means of easements or rights-of-way, or should be included in the open space with provisions made for continued public access.

**11.9 Conformance with Zoning Ordinance and Other Land Use Ordinances.**

All lots shall meet the minimum dimensional requirements of the zoning ordinance for the zoning district in which they are located. The proposed subdivision shall meet all applicable performance standards or design criteria from the zoning ordinance.

### **11.10 Financial and Technical Capacity.**

#### **A. Financial Capacity.**

The applicant shall have adequate financial resources to construct the proposed improvements and meet the criteria of the statute and the standards of these regulations. When the applicant proposes to construct the buildings as well as the subdivision improvements, the applicant shall have adequate financial resources to construct the total development. In making the above determinations the Board shall consider the proposed time frame for construction and the effects of inflation.

#### **B. Technical Ability.**

1. The applicant shall retain qualified contractors and consultants to supervise, construct and inspect the required improvements in the proposed subdivision.
2. In determining the applicant's technical ability the Board shall consider the applicant's previous experience, the experience and training of the applicant's consultants and contractors, and the existence of violations of previous approvals granted to the applicant.

### **11.11 Impact on Water Quality or Shoreline.**

Cutting or removal of vegetation along waterbodies shall not increase water temperature, result in shoreline erosion or sedimentation of waterbodies.

### **11.12 Impact on Ground Water Quality or Quantity.**

#### **A. Ground Water Quality.**

1. When a hydrogeologic assessment is submitted, the assessment shall contain at least the following information:
  - a. A map showing the basic soils types.
  - b. The depth to the water table at representative points throughout the subdivision.
  - c. Drainage conditions throughout the subdivision.
  - d. Data on the existing ground water quality, either from test wells in the subdivision or from existing wells on neighboring properties.
  - e. An analysis and evaluation of the effect of the subdivision on ground water resources. In the case of residential developments, the evaluation shall, at a minimum, include a projection of post development nitrate-nitrogen concentrations at any wells within the subdivision, or at the subdivision boundaries; or at a distance of 1,000 feet from potential contamination sources, whichever is a shortest distance.

- f. A map showing the location of any subsurface waste water disposal systems and drinking water wells within the subdivision and within 200 feet of the subdivision boundaries.
  2. Projections of ground water quality shall be based on the assumption of drought conditions (assuming 60% of annual average precipitation).
  3. No subdivision shall increase any contaminant concentration in the ground water to more than one half of the Primary Drinking Water Standards. No subdivision shall increase any contaminant concentration in the ground water to more than the Secondary Drinking Water Standards.
  4. If ground water contains contaminants in excess of the primary standards, and the subdivision is to be served by on-site ground water supplies, the applicant shall demonstrate how water quality will be improved or treated.
  5. If ground water contains contaminants in excess of the secondary standards, the subdivision shall not cause the concentration of the parameters in question to exceed 150% of the ambient concentration.
  6. Subsurface waste water disposal systems and drinking water wells shall be constructed as shown on the map submitted with the assessment. If construction standards for drinking water wells or other measures to reduce ground water contamination and protect drinking water supplies are recommended in the assessment, those standards shall be included as a note on the final plan, and as restrictions in the deeds to the affected lots.
- B. Ground Water Quantity.
1. Ground water withdrawals by a proposed subdivision shall not lower the water table beyond the boundaries of the subdivision.
  2. A proposed subdivision shall not result in a lowering of the water table at the subdivision boundary by increasing runoff with a corresponding decrease in infiltration of precipitation.

### **11.13 Floodplain Management.**

When any part of a subdivision is located in a special flood hazard area as identified by the Federal Emergency Management Agency:

- A. All public utilities and facilities, such as sewer, gas, electrical and water systems shall be located and constructed to minimize or eliminate flood damages.
- B. Adequate drainage shall be provided so as to reduce exposure to flood hazards.
- C. The plan shall include a statement that structures in the subdivision shall be constructed with their lowest floor, including the basement, at least one foot above the 100-year flood elevation. Such a restriction shall be included in any deed, lease, purchase and sale agreement, or document transferring or expressing an intent to transfer any interest in real estate or structure, including but not limited to

a time-share interest. The statement shall clearly articulate that the municipality may enforce any violation of the construction requirement and that fact shall also be included in the deed or any other document previously described. The construction requirement shall also be clearly stated on the plan.

**11.14 Identification of Freshwater Wetlands.**

Freshwater wetlands shall be identified in accordance with the *1987 Corps of Engineers Wetland Delineation Manual*, published by the United States Army Corps of Engineers.

**11.15 Storm Water Management.**

- A. Adequate provision shall be made for the management of the quantity and quality of all storm water generated within the subdivision, and any drained ground water through a management system of swales, culverts, underdrains, storm drains and best management practices equivalent to those described in the *Stormwater Management for Maine manual*, published by the Maine Department of Environmental Protection, January 2006, in conformance with the policies of the comprehensive plan. The storm water management system shall be designed to meet the standards in the Town of Berwick’s Appendix A – Storm Water Runoff Design Criteria of the Subdivision Regulations.
- B. Where necessary to achieve the above standards, there shall be provided easements or drainage rights-of-way with swales, culverts, catch basins or other means of channeling surface water within the subdivision and over other properties. Wherever the storm drainage system is not within the right-of-way of a public street, perpetual easements shall be provided to the municipality allowing maintenance and improvement of the system.

**11.16 Reservation or Dedication and Maintenance of Open Space and Common Land, Facilities, Play Areas & Services.**

- A. All open space common land, facilities and property shall be owned by:
  - 1. The owners of the lots or dwelling units by means of a lot owners’ association;
  - 2. An association which has as its principal purpose the conservation or preservation of land in essentially its natural condition; or
  - 3. The municipality.
- B. Further subdivision of the common land or open space and its use for other than non-commercial recreation, agriculture, or conservation purposes, except for easements for underground utilities, shall be prohibited. Structures and buildings accessory to non-commercial recreational or conservation uses may be erected on the common land. When open space is to be owned by an entity other than the municipality, there shall be a conservation easement deeded to the municipality prohibiting future development. The size of common play areas to be required in Major Subdivisions shall be at the discretion of the Planning Board.

- C. The common land or open space shall be shown on the final plan with appropriate notations on the plan to indicate:
  - 1. It shall not be used for future building lots; and
  - 2. Which portions of the open space, if any, may be dedicated for acceptance by the municipality.
  - 3. The specific common property and/or facilities that the developer, subdivider or homeowners' association is responsible for maintaining
  - 4. The developer or subdivider shall maintain control of the common property, and be responsible for its maintenance until two thirds (2/3) of the entire subdivision has been occupied.
- D. The final plan application shall include the following:
  - 1. Covenants for mandatory membership in the lot owners' association setting forth the owners' rights, interests, and privileges in the association and the common property and facilities, to be included in the deed for each lot or dwelling.
  - 2. Draft articles of incorporation of the proposed lot owners' association as a not-for-profit corporation; and
  - 3. Draft by-laws of the proposed lot owners' association specifying the responsibilities and authority of the association, the operating procedures of the association and providing for proper capitalization of the association to cover the costs of major repairs, maintenance and replacement of common facilities.
- E. In combination, the documents referenced in paragraph D above shall provide for the following.
  - 1. The developer or subdivider shall maintain control of the common property, and be responsible for its maintenance until two thirds (2/3) of the entire subdivision has been occupied.
  - 2. The homeowners' association shall have the responsibility of maintaining the common property or facilities. The deed restrictions must specify that maintenance of privately owned stormwater management facilities will be conducted and certified to the Town in accordance with Article 7.22 of the Town's Land Use Ordinance.
  - 3. The association shall levy annual charges against all owners of lots or dwelling units to defray the expenses connected with the maintenance, repair and replacement of common property and facilities and tax assessments.
  - 4. The association shall have the power to place a lien on the property of members who fail to pay dues or assessments.

#### **11.17 Phosphorus Impacts on Great Ponds.**

A. Phosphorus Export.

1. Any subdivision within the watershed of a great pond shall limit its post development phosphorus export to the standards contained in Table 11.17-1, dependent on the great pond in whose watershed the subdivision is located.

Table 11.17-1. Post Development Phosphorus Export

<u>Lake</u>	<u>Water Quality Protection</u>		<u>Projected Watershed Development (50 yr.)</u>		<u>Allowable Phosphorus</u>
	<u>Category</u> <u>Export/Acre (lbs.)*</u>	<u>Level</u>	<u>(%)</u>	<u>(acres)*</u>	
Beaver Dam	moderate/sensitive	medium	25%	182	.034
Hatfield Lake	moderate/sensitive	medium	25%	175	.063

\*If the proposed development is greater than 25% of the projected area of watershed development, the allowable phosphorus export per acre must be adjusted using appendix F, of the Department of Environmental Protection manual *Phosphorus Control in Lake Watershed: A Technical Guide for Evaluating Development*, revised September 1992.

The Board shall keep an accurate record of permits issued by watershed and shall notify the comprehensive planning committee of the actual development rates at five year intervals, as the comprehensive plan is revised. The above table shall be amended as required by amendments to the comprehensive plan, reflecting changes in expected development rates.

2. Simplified Phosphorus Review.

The simplified review may be used for a

- a. Proposed subdivision of three or four lots with less than 200 feet of new or upgraded street with a cumulative driveway length not to exceed 450 feet for a three lot subdivision or 600 feet for a four lot subdivision;
- b. Proposed subdivision of three or four lots with no new or upgraded street with a cumulative driveway length not to exceed 950 feet for three lot subdivisions or 1,100 feet for four lot subdivisions; or
- c. Proposed subdivision consisting of multi-family dwellings that have less than 20,000 square feet of disturbed area including building parking, driveway, lawn, subsurface waste water disposal systems, and infiltration areas, and new or upgraded streets not exceeding 200 linear feet.

A proposed subdivision which creates lots which could be further divided such that five or more lots may result shall be subject to the standard review procedures unless there are deed restrictions prohibiting future divisions of the lots.

3. Standard Review.

This section shall apply to proposed subdivisions which do not qualify for the simplified review. Phosphorus export from a proposed development shall be calculated according to the procedures in *Volume II - Phosphorus Control in Lake Watersheds: A Technical Guide for Evaluating New Development*, of the *Stormwater Management for Maine* manual published by the Maine Department of Environmental Protection, January 2008. When a proposed subdivision creates lots which are more than twice the required minimum lot size and there are no deed restrictions proposed to prohibit future divisions, the applicant shall either calculate phosphorus loading based on the maximum feasible number of lots, and shall design controls adequate to limit the resulting phosphorus loading, or shall reserve a portion of the permitted phosphorus export for future divisions.

4. Maintenance and Use Restrictions for Phosphorus Control Measures.

Provisions for monitoring, inspections, and maintenance of phosphorus control measures shall be included in the application.

a. Vegetative Buffer Strips.

Individual lot owners shall be required to maintain buffer areas on their individual lots in accordance with the following standards, to be specified in recorded deed restrictions and as notes on the plan. Where a vegetative buffer strip is to be owned in common by property owners in the subdivision, documentation establishing the lot owners' association shall include the following standards.

i. Wooded Buffers.

Maintenance provisions for wooded buffers shall provide for either of the following two options.

(a) No Disturbance.

Maintenance and use provisions for wooded buffer strips which are located on hydrologic soil group D soils and within 250 feet of the great pond or a tributary, or which are located on slopes over 20% shall include the following.

[1] Buffers shall be inspected annually for evidence of erosion or concentrated flows through or around the buffer. All eroded areas must be seeded and mulched. A shallow stone trench must be installed as a level spreader to distribute flows evenly in any area showing concentrated flows.

[2] All existing undergrowth (vegetation less than four feet high), forest floor duff layer, and leaf litter must remain undisturbed and intact, except that one winding walking path, no wider than six feet, is allowed through the buffer. This

path shall not be a straight line to the great pond or tributary and shall remain stabilized.

- [3] Pruning of live tree branches that do not exceed 12 feet above the ground level is permitted provided that at least the top two-thirds of the tree canopy is maintained.
- [4] No cutting is allowed of trees except for normal maintenance of dead, wind blown, or damaged trees.
- [5] Buffers shall not be used for all-terrain vehicle or vehicular traffic.

(b) Limited Disturbance.

Maintenance and use provisions for other buffer strips may include the following:

- [1] There shall be no cleared openings. An evenly distributed stand of trees and other vegetation shall be maintained.
  - [2] Activity within the buffer shall be conducted to minimize disturbance of existing forest floor, leaf litter and vegetation less than four feet in height. Where the existing ground cover is disturbed and results in exposed mineral soil, that area shall be immediately stabilized to avoid soil erosion.
  - [3] Removal of vegetation less than four feet in height is limited to that necessary to create a winding foot path no wider than six feet. This path shall not be a straight line to the great pond or a tributary. The path must remain stabilized.
  - [4] Pruning of live tree branches that do not exceed 12 feet in height above the ground level is permitted provided that at least the top two-thirds of the tree canopy is maintained.
  - [5] Where the removal of storm-damaged, diseased, unsafe, or dead trees results in a cleared opening, those openings shall be replanted with native trees at least three feet in height unless existing new tree growth is present.
  - [6] Buffers shall not be used for all terrain vehicle or vehicular traffic. ii. Non-wooded Buffers.
- (a) Non-wooded buffers may be allowed to revert or to be planted to forest, in which case the standards above shall apply.
  - (b) A buffer must maintain a dense, complete and vigorous cover of “non-lawn” vegetation which shall be mowed no more than once a year. Vegetation may include grass, other herbaceous species, shrubs and trees.

- (c) Activity within the buffer shall be conducted so as to prevent damage to vegetation and exposure of mineral soil. Burning of vegetation shall be prohibited.
- (d) Buffers shall not be used for all-terrain vehicles or other vehicular traffic.

b. Infiltration Systems.

Individual lot owners shall be responsible for maintenance of individual infiltration systems according to the standards specified in Article 7.22 of the Town's Land Use Ordinance. Requirements for maintenance shall be included in deed restrictions and as noted upon the plan. As an alternative to maintenance by individual lot owners, the applicant may designate some other entity to be contracted to take the responsibility, and shall include the above referenced maintenance provisions in any contractual agreement. Where infiltration systems serve more than one lot, a lot owners' association shall be established and the above referenced maintenance provisions shall be referenced in the documentation establishing the association.

c. Wet Ponds.

A lot owners' association shall be established to maintain wet ponds, unless the municipality or some other public entity agrees to assume inspection and maintenance duties. Documentation establishing the association or establishing an agreement with a public entity shall include the maintenance standards specified in Article 7.22 of the Town's Land Use Ordinance.

## **ARTICLE 12 - DESIGN GUIDELINES**

This article is intended to provide an example of design guidelines, which if followed will result in meeting the appropriate performance standards of Article 11. Compliance with these guidelines shall be considered evidence of meeting those standards. Proposed subdivisions not in compliance with the design guidelines of this article may be considered, but the applicant shall provide clear and convincing evidence that the proposed design will meet the performance standard(s) and the statutory criteria. In all instances the burden of proof shall be upon the applicant to present adequate information to indicate all performance standards and statutory criteria for approval have been or will be met.

### **12.1 Sufficient Water.**

#### **A. Well Construction.**

1. Due to the increased chance of contamination from surface water, dug wells for potable water shall be prohibited on lots smaller than one acre. On lots one acre or smaller, the applicant shall prohibit dug wells for potable water by deed restrictions and a note on the plan.
2. Wells shall not be constructed within 100 feet of the traveled way of any street, if located downhill from the street, or within 50 feet of the traveled way of any street, if located uphill of the street. This restriction shall be included as a note on the plan and deed restriction to the effected lots.

#### **B. Fire Protection.**

1. Fire hydrants connected to a public water supply system shall be located no further than 500 feet from any building.
2. Fire Protection must be provided in all subdivisions whether on water services or outside of water services. All proposals for Fire Protection will be reviewed by the Berwick Fire Chief.
3. Hydrants or other provisions for drafting water shall be provided to the specifications of the fire department. Minimum pipe size connecting dry hydrants to ponds or storage vaults shall be six inches.
4. Where the dry hydrant or other water source is not within the right-of-way of a proposed or existing street, an easement to the municipality shall be provided to allow access. A suitable accessway to the hydrant or other water source shall be constructed.

### **12.2 Traffic Conditions.**

- A. All lots in a subdivision shall have frontage on streets designed and constructed in accordance with the Berwick Subdivision Regulations, or on existing town streets.
- B. Access Control.

1. Where a major subdivision (more than four lots) abuts or contains an existing or proposed arterial street, no residential lot may have vehicular access directly onto the arterial street. This requirement shall be noted on the plan and in the deed of any lot with frontage on the arterial street.
2. Where a lot has frontage on two or more streets, the access to the lot shall be provided to the lot across the frontage and to the street where there is lesser potential for traffic congestion and for hazards to traffic and pedestrians. This restriction shall appear as a note on the plan and as a deed restriction to the affected lots.
3. Subdivision Access Design for Subdivisions Entering onto Arterial Streets.

When the access to a subdivision is a street, the street design and construction standards of Section 12.2.B below shall be met. Where there is a conflict between the standards in this section and the standards of Section 12.2.B, the stricter or more stringent shall apply. The following roadways shall be considered arterial streets: Route 9, Route 4, and Route 236.

a. General.

Access design shall be based on the estimated volume using the access classification defined below. Traffic volume estimates shall be as defined in the *Trip Generation Manual*, current edition, published by the Institute of Transportation Engineers.

1. Low Volume Access: An access with 50 vehicle trips per day or less.
2. Medium Volume Access: Any access with more than 50 vehicle trips per day but less than 200 peak hour vehicle trips per day.
3. High Volume Access: Peak hour volume of 200 vehicle trips or greater.

b. Sight Distances.

Accesses shall be located and designed in profile and grading to provide the required sight distance measured in each direction. Sight distances shall be measured from the driver's seat of a vehicle standing on that portion of the exit with the front of the vehicle a minimum of ten feet behind the curblineline or edge of shoulder, with the height of the eye 3½ feet, to the top of an object 4¼ feet above the pavement. The required sight distances are listed by road width and for various posted speed limits.

Two Lane Roads.

A minimum sight distance of ten feet for each mile per hour of posted speed limit shall be maintained or provided.

c. Vertical Alignment.

Accesses shall be flat enough to prevent the dragging of any vehicle undercarriage. Accesses shall slope upward or downward from the gutter line on a straight slope of 3% or less for at least 75 feet. The maximum grade over the entire length shall not exceed 8%.

d. Low Volume Accesses.

1. Skew Angle.

Low volume accesses shall be two-way operation and shall intersect the road at an angle as nearly 90° as site conditions permit, but in no case less than 60°.

2. Curb Radius.

The curb radius shall be between ten feet and 15 feet, with a preferred radius of 15 feet.

3. Access Width.

The width of the access shall be between 20 feet and 24 feet, with a preferred width of 20 feet.

e. Medium Volume Accesses.

1. Skew Angle.

Medium volume accesses shall be either one-way or two-way operation and shall intersect the road at an angle as nearly 90° as site conditions permit, but in no case less than 60°.

2. Curb Radius.

Curb radii will vary depending if the access has one-way or two-way operation. On a two-way access the curb radii shall be between 25 feet and 40 feet, with a preferred radius of 30 feet. On one way accesses, the curb radii shall be 30 feet for right turns into and out of the site, with a five foot radius on the opposite curb.

3. Width.

On a two-way access the width shall be between 24 and 26 feet, with a preferred width of 26 feet, however where truck traffic is anticipated, the width may be no more than 30 feet. On a one-way access the width shall be between 16 feet and 20, with a preferred width of 16 feet.

4. Curb-Cut Width.

On a two-way access the curb-cut width shall be between 74 feet and 110 feet with a preferred width of 86 feet. On a one-way access the curb-cut width shall be between 46 feet and 70 feet with a preferred width of 51 feet.

f. High Volume Accesses.

1. Skew Angle.

High volume accesses shall intersect the road at an angle as nearly to 90° as site conditions permit, but in no case less than 60°.

2. Curb Radius.

Without channelization islands for right-turn movements into and out of the site, the curb radii shall be between 30 feet and 50 feet. With channelization islands, the curb radii shall be between 75 feet and 100 feet.

3. Curb Cut Width.

Without channelization, curb-cut width shall be between 106 feet and 162 feet with a preferred width of 154 feet. With channelization, the curb-cut width shall be between 196 feet and 262 feet with a preferred width of 254 feet.

4. Entering and exiting accesses shall be separated by a raised median which shall be between six feet and ten feet in width. Medians separating traffic flows shall be no less than 25 feet in length, with a preferred length of 100 feet.

5. Width.

Access widths shall be between 20 feet and 26 feet on each side of the median, with a preferred width of 24 feet. Right turn only lanes established by a channelization island shall be between 16 feet and 20 feet, with a preferred width of 20 feet.

6. Appropriate traffic control signage shall be erected at the intersection of the access and the street and on medians and channelization islands.

g. Access Location and Spacing.

1. Minimum Corner Clearance.

Corner clearance shall be measured from the point of tangency for the corner to the point of tangency for the access. In general the maximum corner clearance should be provided as practical based on site constraints. Minimum corner clearances are listed in Table 12.2-1, based upon access volume and intersection type.

Table 12.2-1. Minimum Standards for Corner Clearance

<u>Access Type</u>	<u>Minimum Corner Clearance (feet)</u>	
	<u>Intersection Signalized</u>	<u>Intersection Unsignalized</u>
Low Volume	150	50
Medium Volume	150	50
High Volume	500	250

2. Access Spacing.

Accesses and street intersections shall be separated from adjacent accesses, streets and property lines as indicated in Table 12.2-2, in order to allow major through routes to effectively serve their primary function of conducting through traffic. This distance shall be measured from the access point of tangency to the access point of tangency for spacing between accesses and from the access point of tangency to a projection of the property line at the edge of the roadway for access spacing to the property line.

Table 12.2-2. Minimum Access Spacing

<u>Access Type</u>	Minimum Spacing to Property Line (Dpl) <sup>1</sup> (feet)	Minimum Spacing to Adjacent Access by Access Type <sup>2</sup> (Dsp) <sup>3</sup>		
		Medium (feet)	High w/o RT* (feet)	High w/RT** (feet)
Low Volume	5			
Medium Volume	10	75		
High Volume (w/o RT)*	75	75	150	
High Volume (w/ RT)**	75	75	250	500

<sup>1</sup> Distance to Property Line (Dpl) measured from point of tangency of access to projection of property line on roadway edge

<sup>2</sup> For two more accesses serving a single parcel, or from a proposed access from an existing access

<sup>3</sup> Spacing between Driveways (Dsp) measured from point of tangency of access to point of tangency of adjacent access

\* High volume access without right turn (w/o RT) channelization

\*\* High volume access with right turn (w/ RT) channelization

h. Number of Accesses.

The maximum number of accesses on to a single street is controlled by the available site frontage and the table above. In addition, the following criteria shall limit the number of accesses independent of frontage length.

1. No low volume traffic generator shall have more than one two-way access onto a single roadway.
  2. No medium or high volume traffic generator shall have more than two two-way accesses or three accesses in total onto a single roadway.
- i. Construction Materials/Paving.
1. All accesses entering a curbed street shall be curbed with materials matching the street curbing. Sloped curbing is required around all raised channelization islands or medians.
  2. All accesses shall be paved with bituminous concrete pavement within the street right-of-way. All commercial accesses, regardless of access volume, shall be paved with bituminous concrete pavement within 30 feet of the street right-of-way.

C. Street Design and Construction Standards.

1. General Requirements.
  - a. The Board shall not approve any subdivision plan unless proposed streets are designed in accordance with the specifications contained in the Berwick Subdivision Regulations. Approval of the final plan by the Board shall not be deemed to constitute or be evidence of acceptance by the municipality of any street or easement.
  - b. Applicants shall submit to the Board, as part of the final plan, detailed construction drawings showing a plan view, profile, and typical cross-section of the proposed streets and existing streets within 300 feet of any proposed intersections. The plan view shall be at a scale of one inch equals no more than 50 feet. The vertical scale of the profile shall be one inch equals no more than five feet. The plans shall include the following information:
    1. Date, scale, and north point, indicating magnetic or true.
    2. Intersections of the proposed street with existing streets.
    3. Roadway and right-of-way limits including edge of pavement, edge of shoulder, sidewalks, and curbs.
    4. Kind, size, location, material, profile and cross-section of all existing and proposed drainage structures and their location with respect to the existing natural waterways and proposed drainage ways.
    5. Complete curve data shall be indicated for all horizontal and vertical curves.

6. Turning radii at all intersections.
  7. Centerline gradients.
  8. Size, type and locations of all existing and proposed overhead and underground utilities, to include but not be limited to water, sewer, electricity, telephone, lighting, and cable television.
- c. Upon receipt of plans for a proposed public street the Board shall forward one copy to the municipal officers, the road commissioner, and the municipal engineer for review and comment. Plans for streets which are not proposed to be accepted by the municipality shall be sent to the municipal engineer for review and comment.
  - d. Where the applicant proposes improvements within existing public streets, the proposed design and construction details shall be approved in writing by the road commissioner or the Maine Department of Transportation, as appropriate.
  - e. Where the subdivision streets are to remain private roads, the following words shall appear on the recorded plan.

“All roads in this subdivision shall remain private roads to be maintained by the developer or the lot owners and shall not be accepted or maintained by the Town, until they meet the municipal street design and construction standards. If this development is located in the R2, R3, AP zone and has a cul-de-sac or dead-end design, it shall not be accepted as a public way except if the road is part of a subdivision approved before the year 2019 and is still considered active by the Planning Department.”

## 2. Street Design Standards.

- a. These design guidelines shall control the roadway, shoulders, curbs, sidewalks, drainage systems, culverts, and other appurtenances associated with the street, and shall be met by all streets within a subdivision, unless the applicant can provide clear and convincing evidence that an alternate design will meet good engineering practice and will meet the performance standards of Article 11.
- b. Reserve strips controlling access to streets shall be prohibited except where their control is definitely placed with the municipality.
- c. Adjacent to areas zoned and designed for commercial use, or where a change of zoning to a zone which permits commercial uses is contemplated by the municipality, the street right-of-way and/or pavement width shall be increased on each side by half of the amount necessary to bring the road into conformance with the standards for commercial streets in these regulations.

- d. Where a subdivision borders an existing narrow street (not meeting the width requirements of the standards for streets in these regulations), or when the comprehensive plan indicates plans for realignment or widening of a road that would require use of some of the land in the subdivision, the plan shall indicate reserved areas for widening or realigning the road marked “Reserved for Road Realignment (Widening) Purposes.” Land reserved for such purposes may not be included in computing lot area or setback requirements of the zoning ordinance.
- e. Any subdivision expected to generate average daily traffic of 200 trips per day or more shall have at least two street connections with existing public streets or streets on an approved subdivision plan for which performance guarantees have been filed and accepted. Any street with an average daily traffic of 200 trips per day or more shall have at least two street connections leading to existing public streets or streets on an approved subdivision plan for which performance guarantees have been filed and accepted.
- f. The design standards of Table 12.2-3 shall apply according to street classification.

Table 12.2-3. Street Design Guidelines

<u>Description</u>	<u>Type of Street</u>			
	<u>Arterial</u>	<u>Collector</u>	<u>Minor</u>	<u>Industrial/ Commercial</u>
Minimum Right-of-Way Width	80'	50'	50'	60'
Minimum Traveled Way Width	44'	24'	20'	30'
Minimum Width of Shoulders (each side)	5'	3'	3'	9'
Sidewalk Width	8'	5'	5'	8'
Minimum Grade	.5%	.5%	.5%	.5%
Maximum Grade*	5%	6%	8%	5%
Minimum Centerline Radius without superelevation	500'	280'	280'	400'
with superelevation	350'	175'	175'	300'
Roadway Crown**	1/4"/ft.	1/4"/ft.	1/4"/ft.	1/4"/ft.
Minimum angle of street intersections***	90°	90°	75°	90°
Maximum grade within 75 ft. of intersection	3%	3%	3%	3%
Minimum curb radii at intersections	30'	25'	20'	30'****
Minimum r/o/w radii at intersections	20'	10'	10'	20'

\* Maximum grade may be exceeded for a length of 100 feet or less.

\*\* Roadway crown is per foot of lane width.

- \*\*\* Street intersection angles shall be as close to 90° as feasible but no less than the listed angle.
- \*\*\*\* Should be based on turning radii of expected commercial vehicles, but no less than 30 feet

- g. The centerline of the roadway shall be the centerline of the right-of-way.
- h. Dead-End Streets.

1. Cul-de-sacs:

In addition to the design standards in Table 12.2-3, dead-end streets shall be constructed to provide a tear drop cul-de-sac turn-around in accordance with the design standards in Attachment B. Where the cul-de-sac is in a wooded area prior to development, a stand of trees shall be maintained within the center of the cul-de-sac. When not in a wooded area it shall be grassed, landscaped, or kept in a natural state. The Board shall require the reservation of a 20 foot easement in line with the street to provide continuation of pedestrian traffic or utilities to the next street. The Board may also require the reservation of a 50-foot easement in line with the street to provide continuation of the road where future subdivision is possible. The Board may require streets to be connected if cul-de-sacs are located less than 600 ft. apart as measured from the center of the cul-de-sac, or if the entrance to a dead-end street is within 600 ft. of another entrance to a dead-end street.

Revised Cul-de-sac design to be included with Subdivision Regulations.

2. Hammerheads:

Hammerheads shall be used as a temporary dead-end to a street that is built in phases. In addition to the design standards in Table 12.2-3, temporary dead-end streets shall be constructed to provide a hammerhead turn-around in accordance with the design standards in Attachment C. The hammerhead shall be located beyond the last lot in the phase, and no driveway entrance shall have access off of a hammerhead leg.

- 3. If the development is located in the R2, R3 or AP Zone, Dead end streets shall remain private until connectivity to other streets may occur except if the road is part of a subdivision approved before the year 2019 and is still considered active by the Planning Department. If the street is connected to another street making it a through way with a second means of egress to a public way and built to town standards it may be petitioned to become a public way.

i. Grades, Intersections, and Sight Distances.

- 1. Grades of all streets shall conform in general to the terrain, so that cut and fill are minimized while maintaining the grade standards above.

2. All changes in grade shall be connected by vertical curves in order to provide the following minimum stopping sight distances based on the street design speed.

Design Speed (mph)	20	25	30	35
Stopping Sight Distance (ft.)	125	150	200	250

Stopping sight distance shall be calculated with a height of eye at 3½ feet and the height of object at ½ foot.

- Where new street intersections or driveway curb-cuts are proposed, sight distances, as measured along the road onto which traffic will be turning, shall be based upon the posted speed limit and conform to the table below. Sight distances shall be measured from the driver’s seat of a vehicle standing on that portion of the exit with the front of the vehicle a minimum of ten feet behind the curbline or edge of shoulder, with the height of the eye 3½ feet, to the top of an object 4¼ feet above the pavement.

Posted Speed Limit (mph)	25	30	35	40	45	50	55
Sight Distance (ft.)	250	300	350	400	450	500	550

Where necessary, corner lots shall be cleared of all growth and sight obstructions, including ground excavation, to achieve the required visibility.

- Cross (four–cornered) street intersections shall be avoided insofar as possible, except as shown on the comprehensive plan or at other important traffic intersections. A minimum distance of 125 feet shall be maintained between centerlines of minor streets and 200 feet between collectors or a collector and minor street.

j. Sidewalks.

Sidewalks shall be installed within all subdivisions within areas designated as growth areas in the comprehensive plan. Where sidewalks exist adjacent to a proposed subdivision outside of growth areas, sidewalks shall be installed connecting to existing sidewalks. Where installed, sidewalks shall meet these minimum requirements.

1. Location.

Sidewalks may be located adjacent to the curb or shoulder but it is recommended to locate sidewalks a minimum of 2½ feet from the curb facing or edge of shoulder if the street is not curbed.

2. Bituminous Sidewalks.

(a) The “subbase” aggregate course shall be no less than 12 inches thick after compaction.

(b) The hot bituminous pavement surface course shall be MDOT plant mix grade D constructed in two lifts, each no less than one inch after compaction.

3. Portland Cement Concrete Sidewalks.

(a) The “subbase” aggregate shall be no less than 12 inches thick after compaction.

(b) The Portland cement concrete shall be reinforced with six inch square, number ten wire mesh and shall be no less than four inches thick.

j. Curbs shall be installed within all subdivisions within areas designated as growth areas in the comprehensive plan. Granite curbing shall be installed on a thoroughly compacted gravel base of six inches minimum thickness. Bituminous curbing shall be installed on the base course of the pavement. The specified traveled way width above shall be measured between the curbs.

k. Granite curbs shall be installed within all subdivisions within areas designated as growth areas in the comprehensive plan. Granite curbing shall be installed on a thoroughly compacted gravel base of six inches minimum thickness. The specified traveled way width above shall be measured between the curbs. The Planning Board may require vertical granite curb or sloped granite curb.

3. Street Construction Standards.

a. The minimum thickness of material after compaction shall meet the specifications in Table 12.2-4.

Table 12.2-4. Minimum Pavement Materials Thicknesses

<u>Street Materials</u>	<u>Arterial</u>	<u>Collector</u>	<u>Minor</u>	<u>Industrial/ Commercial</u>
<u>Aggregate Subbase Course (Max. sized stone 6")</u>				
Without base gravel	24"	18"	18"	24"
With base gravel	20"	15"	15"	20"
<u>Crushed Aggregate Base Course (if necessary)</u>	4"	3"	3"	4"
<u>Hot Bituminous Pavement</u>				
Total Thickness	3 3/4"	3 3/4"	3 3/4"	4"
Surface Course	1 1/4"	1 1/4"	1 1/4"	1 1/4"
Base Course	2 1/2"	2 1/2"	2 1/2"	2 3/4"

b. Preparation.

1. Before any clearing has started on the right-of-way, the center line and side lines of the new road shall be staked or flagged at 50 foot intervals.
2. Before grading is started, the entire area within the right-of-way necessary for traveled way, shoulders, sidewalks, drainage-ways, and utilities shall be cleared of all stumps, roots, brush, and other objectionable material. All shallow ledge, large boulders and tree stumps shall be removed from the cleared area.
3. All organic materials or other deleterious material shall be removed to a depth of two feet below the subgrade of the roadway. Rocks and boulders shall also be removed to a depth of two feet below the subgrade of the roadway. On soils which have been identified by the municipal engineer as not suitable for roadways, either the subsoil shall be removed from the street site to a depth of two feet below the subgrade and replaced with material meeting the specifications for gravel aggregate subbase below, or a Maine Department of Transportation approved stabilization geotextile may be used.
4. Except in a ledge cut, side slopes shall be no steeper than a slope of three feet horizontal to one foot vertical, and shall be graded, loamed, limed, fertilized, and seeded according to the specifications of the erosion and sedimentation control plan. Where a cut results in exposed ledge a side slope no steeper than one foot horizontal to four feet vertical is permitted.
5. All underground utilities shall be installed prior to paving to avoid cuts in the pavement. Building sewers and water service connections shall be installed to the edge of the right-of-way prior to paving.
6. Driveway culverts must be sized in consultation with the Berwick Road Commissioner and the Public Works Foreman.

c. Bases and Pavement.

1. Bases/Subbase.

Reference Section 304.02 of the Maine Department of Transportation Standard Specifications publication dated, December 2002 or current edition.

- (a) The Aggregate subbase course shall be sand or gravel of hard durable particles free from vegetative matter, lumps or balls of clay and other deleterious substances. The gradation of the part that passes a three inch square mesh sieve shall meet the grading requirements of Table 12.2-5.

Table 12.2-5. Aggregate Subbase Gradation Requirements

Reference MDOT Material Specification 703.06(b)(Type D). Refer to State of Maine Department of Transportation Standard Specifications publication dated, December 2002 or current edition.

<u>Sieve Designation</u>	<u>Percentage by Weight Passing Square Mesh Sieves</u>
1/4inch	25-70%
No. 40	0-30%
No. 200	0-7%

Aggregate for the subbase shall contain no particles of rock exceeding six inches in any dimension.

- (b) If the Aggregate Subbase Course is found to be not fine-gradable because of larger stones, then a minimum of three inches of Aggregate Base Course shall be placed on top of the subbase course. The Aggregate Base Course shall be screened or crushed gravel of hard durable particles free from vegetative matter, lumps or balls of clay and other deleterious substances. The gradation of the part that passes a three inch square mesh sieve shall meet the grading requirements of Table 12.2-6.

Aggregate for the base shall contain no particles of rock exceeding two inches in any dimension.

Table 12.2-6. Base Course Grading Requirements

Reference MDOT Material Specification 703.03(a)(Type A). Refer to State of Maine Department of Transportation Standard Specifications publication dated December 2002 or current edition.

<u>Sieve Designation</u>	<u>Percentage by Weight Passing Square Mesh Sieves</u>
1/2inch	45-70%
1/4inch	30-55%
No. 40	0-20%
No. 200	0-5%

## 2. Placing

Refer to the procedure given in Section 304.03 of the State of Maine Department of Transportation Standard Specifications publication dated December 2002 or current edition.

## 3. Shaping, Compacting, and Stabilizing

Reference Section 304.04 of the State of Maine Department of Transportation Standard Specifications publication dated December 2002 or current edition.

Compaction of each layer shall continue until a density of not less than 95% of the maximum density has been achieved for the full width and depth of the layer. The maximum density shall be determined in accordance with T180, Method C or D. Field density tests will be performed by a qualified independent testing company at the expense of the contractor or developer. Compaction test locations shall be designated by the Town or the inspecting engineering firm acting as the Town's representative. The surface, compaction and stability, shall be satisfactorily maintained until the pavement course has been placed. If required, additional water and fine material shall be applied to prevent checking, raveling or rutting.

Fine material added to the base shall be uniformly blended into the top 225 mm [9 in] of the course being stabilized. The blended material shall meet the requirements of Section 304.02 Aggregate.

If the top of any layer becomes contaminated by degradation of the aggregate or addition of foreign material, the contaminated material shall be removed and replaced with the specified material.

All layers of aggregate subbase course shall be compacted to the required density immediately after placing. As soon as the compaction of any layer has been completed, the next layer shall be placed unless otherwise authorized.

The Contractor shall bear full responsibility for and make all necessary repairs to the subbase course and the subgrade until the full depth of the subbase course is placed and compacted.

The top of any aggregate base or subbase course layer shall be scarified and loosened for a minimum depth of 25 mm [1 in] immediately prior to the placing of the next layer of aggregate base or subbase.

The surface of each layer shall be maintained during compaction operations in such a manner that a uniform texture is produced and the aggregate firmly keyed. The moisture content of the material shall be maintained at the proper percent to attain the required compaction and stability.

If voids remain on the surface after the subbase course has been constructed to grade, compacted, checked and approved, sand-leveling material shall be dumped and spread as directed. The quantity of sand leveling material shall be limited to the amount necessary to fill the voids and the minor low areas on the subbase surface. After the sand leveling material has been spread, it shall be completely rolled by a rubber-tired roller with water applied, if necessary. The surface of this material shall be maintained in its compacted and graded condition until the bituminous pavement has been placed. (revise following numbering)

#### 4. Pavement Joints.

Where pavement joins an existing pavement, the existing pavement shall be cut along a smooth line and form a neat, even, vertical joint.

#### 5. Pavements.

- (a) Minimum standards for the base layer of pavement shall be the Maine Department of Transportation specifications for plant mix grade B with an aggregate size no more than one inch maximum and a liquid asphalt content between 4.8% and 6.0% by weight depending on aggregate characteristics. The pavement may be placed between April 15 and November 15, provided the air temperature in the shade at the paving location is 35°F or higher and the surface to be paved is not frozen or unreasonably wet.
- (b) Minimum standards for the surface layer of pavement shall be the Maine Department of Transportation specifications for plant mix grade C or D with an aggregate size no more than  $\frac{3}{4}$  inch maximum and a liquid asphalt content between 5.8% and 7.0% by weight depending on aggregate characteristics. The pavement may be placed between April 15 and October 15, provided the air temperature in the shade at the paving location is 50°F or higher.

### **12.3 Wildlife Habitat, Rare Natural Areas or Public Access to the Shoreline.**

#### **A. Preservation of Natural Beauty and Aesthetics.**

1. Unless located in areas designated as a growth area in the comprehensive plan, a subdivision in which the land cover type at the time of application is forested shall maintain a wooded buffer strip no less than 50 feet in width along all existing public roads. The buffer may be broken only for driveways and streets.
2. Unless located in areas designated as a growth area in the comprehensive plan, building location shall be restricted from open fields, and shall be located within forested portions of the subdivision. When the subdivision contains no forest or insufficient forested portions to include all buildings, the subdivision shall be designed to minimize the appearance of building when viewed from existing public streets.
3. When a proposed subdivision contains a ridge line identified in the comprehensive plan as a visual resource to be protected, the plan shall restrict tree removal and prohibit building placement within 50 feet vertical distance of the ridge top. These restrictions shall appear as notes on the plan and as covenants in the deed.
4. When a proposed subdivision street traverses open fields, the plan shall include the planting of street trees. Street trees shall include a mixture of species. Trees shall be planted no more than 50 feet apart.

#### **B. Retention of Open Spaces and Natural or Historic Features.**

1. The subdivision shall reserve between 5% and 10% of the area of the subdivision as open space in order to provide for the recreational needs of the occupants of the subdivision and/or to maintain the scenic or natural beauty of the area. In determining the need for open space the Board shall consider the needs identified in the comprehensive plan or recreation plan for open space or recreation facilities in the neighborhood surrounding the subdivision and the policies of the plan for meeting those needs; the proximity of the subdivision to neighboring dedicated open space or recreation facilities; the type of development and the demographic characteristics of potential residents in the subdivision; and the density or lot sizes of the development.
2. Subdivisions with an average density of more than three dwelling units per acre shall provide no less than 50% of the open space as usable open space to be improved for ball fields, playgrounds or other similar active recreation facility. A site intended to be used for active recreation purposes, such as a playground or a play field, should be relatively level and dry, have a total frontage on one or more streets of at least 200 feet, and have no major dimensions of less than 200 feet.
3. Sites selected primarily for scenic or passive recreation purposes shall have such access or frontage as the Board may deem suitable.

4. Proposed subdivisions which include or are adjacent to buildings or sites on the National Register of Historic Places or which the comprehensive plan has identified as being of historical significance shall be designed in such a manner as to minimize the impacts on the historic features. When the historic features to be protected include buildings, the placement and the architectural design of new structures in the subdivision shall be similar to the historic structures. The Board may seek the advice of the Maine Historic Preservation Commission in reviewing such plans.

C. Protection of Significant Wildlife Habitat and Important Habitat Areas.

The following guidelines are designed to protect the significant wildlife resources identified in the municipality. The Board recognizes that wildlife management must take into account many site specific variables. Applicants proposing to subdivide land within identified wildlife resources must consult with the Maine Department of Inland Fisheries and Wildlife or a qualified wildlife biologist and provide their written comments to the Board. The guidelines of this section shall apply to only those subdivisions which include significant wildlife habitat or resources identified in Section 11.8.C.

1. Protection of Habitat of Endangered or Threatened Species.

- a. Habitat or species appearing on the official state or federal lists of endangered or threatened species shall be placed in open space.
- b. Deed restrictions and notes on the plan shall reflect standards from the Department of Inland Fisheries and Wildlife for removal of vegetation within 250 feet of the habitat for species appearing on the list of endangered or threatened species unless the Department of Inland Fisheries and Wildlife has approved cutting of vegetation in writing.

2. Protection of Waterfowl, Shorebird, and Wading Bird Habitat, Atlantic Salmon Spawning and Nursery Areas.

- a. There shall be no cutting of vegetation within the strip of land extending 75 feet inland from the normal high–water mark of the following habitat areas:
  1. High and moderate value waterfowl and wading bird habitats, including nesting and feeding areas;
  2. Other important habitat areas identified in the comprehensive plan.
- b. This restriction shall appear as a note on the plan and as a deed restriction to the affected lots.

3. Protection of Deer Wintering Areas.

The report prepared by a wildlife biologist, selected or approved by the Board, shall include a management plan for deer wintering areas.

4. Protection of Important Shoreland Areas.

- a. Except as in areas described in Section 12.3.C.2, within all areas subject to the state mandated 250 foot shoreland zone:
    1. Tree removal shall be limited to no more than 40% of the volume of trees four inches or more in diameter measured at 4<sup>1</sup>/<sub>2</sub> feet above the ground level on any lot in any ten year period.
    2. Cleared openings for development, including but not limited to, principal and accessory structures, driveways and sewage disposal areas, shall not exceed in the aggregate, 25% of the lot area or 10,000 square feet, whichever is greater, including land previously developed.
  - b. These restrictions shall appear as notes on the plan and as deed restrictions to the affected lots.
5. If the proposed subdivision includes other important wildlife habitat as identified by the Department of Inland Fisheries and Wildlife or the comprehensive plan, the restrictions on activities in and around these areas shall be reviewed by the Department or a qualified wildlife biologist and their comments presented in writing to the Board.

#### **12.4 Storm Water Management Design Guidelines.**

- A. Design of best management practices shall be substantially equivalent to those described in the *Stormwater Management for Maine* manual, published by the Maine Department of Environmental Protection, January 2006. See Appendix A for the Town of Berwick's Storm Water Runoff Design Criteria.
- B. Drainage easements for existing water courses or proposed drainage ways shall be provided at least 30 feet wide, conforming substantially with the lines of existing natural drainage.
- C. The minimum pipe size for any storm drainage pipe shall be 15 inches for driveway entrances and 18 inches for cross culverts. Maximum trench width at the pipe crown shall be the outside diameter of the pipe plus two feet. Pipe shall be bedded in a fine granular material, containing no stones larger than three inches, lumps of clay, or organic matter, reaching a minimum of six inches below the bottom of the pipe extending to six inches above the top of the pipe.
- D. Catch basins shall be installed where necessary and when located within a street shall be located at the curb line.
- E. Storm Drainage Construction Standards.
  1. Materials.
    - a. Storm drainage pipes shall conform to the requirements of Maine Department of Transportation materials specifications Section 706 for non-metallic pipe and Section 707 for metallic pipe. Bituminous-coated steel pipes shall not be used.

- b. Where the storm drainage pipe is to be covered by ten feet or more of fill material, pipe material with a 50 year life shall be used. These materials include concrete pipe, polymer coated galvanized corrugated steel pipe, polyvinyl-chloride (PVC) pipe, and corrugated aluminum alloy pipe.
2. Pipe Gauges.

Metallic storm drainage pipe shall meet the thickness requirements of Table 12.4-1, depending on pipe diameter:

Table 12.4-1. Culvert Size and Thicknesses Material

<u>Inside Diameter</u>	<u>Galvanized CMP</u>	
	<u>Aluminum/Zinc Coated CMP</u> <u>Corrugated Aluminum Alloy</u>	<u>Aluminum Coated CMP</u> <u>Polymer Coated CMP</u>
15" to 24"	14 ga.	
30" to 36"	12 ga.	
42" to 54"	10 ga.	12 ga.
60" to 72"	8 ga.	10 ga.

- 3. Drain inlet alignment shall be straight in both horizontal and vertical alignment unless specific approval of a curvilinear drain is obtained in writing from the Board, after consultation with the municipal engineer.
  - 4. Manholes shall be provided at all changes in vertical or horizontal alignment and at all junctions. On straight runs, manholes shall be placed at a maximum of 300 foot intervals.
- F. Upon completion, each catch basin or manhole shall be cleaned of all accumulation of silt, debris or foreign matter and shall be kept clean until final acceptance.

**12.5 Impact on Water Quality or Shoreline.**

Within a strip of land extending 100 feet inland from the normal high-water line of a great pond or any tributary to a great pond, and 75 feet from any other water body or the upland edge of a wetland, a buffer strip of vegetation shall be preserved. The deeds to any lots which include any such land shall contain the following restrictions:

- A. 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. However, a footpath not to exceed ten feet in width as measured between tree trunks is permitted provided that a cleared line of sight to the water through the buffer strip is not created. Adjacent to a great pond, or a tributary to a great pond, the width of the foot path shall be limited to six feet.
- B. Selective cutting of trees within the buffer strip is permitted provided that a well distributed stand of trees and other vegetation is maintained. No more than 40% of the total volume of trees four inches or more in diameter, measured at 4½ feet above ground level may be removed in any ten year period.

- C. In order to protect water quality and wildlife habitat adjacent to great ponds, and tributaries to great ponds, existing vegetation under three feet in height and other ground cover shall not be removed, except to provide for a footpath or other permitted uses as described above.
- D. Pruning of tree branches, on the bottom third of the tree is permitted.

**12.6 Blocks.**

Where street lengths exceed 1,000 feet between intersections with other streets, the Board may require a utility/pedestrian easement, at least 20 feet in width, to provide for underground utility crossings and/or a pedestrian pathway of at least five feet in width constructed in accordance with design standards in Section 12.3.B.2.j. Maintenance obligations of the easement shall be included in the written description of the easement.

**12.7 Lots.**

- A. Wherever possible, side lot lines shall be perpendicular to the street.
- B. The subdivision of tracts into parcels with more than twice the required minimum lot size shall be laid out in such a manner as either to provide for or preclude future division. Deed restrictions and notes on the plan shall either prohibit future divisions of the lots or specify that any future division shall constitute a revision to the plan and shall require approval from the Board, subject to the criteria of the subdivision statute, the standards of these regulations and conditions placed on the original approval.
- C. If a lot on one side of a stream, road or other similar barrier fails to meet the minimum requirements for lot size, it may not be combined with a lot on the other side of the stream or road to meet the minimum lot size.
- D. The ratio of lot length to width shall not be more than three to one. Flag lots and other odd shaped lots in which narrow strips are joined to other parcels in order to meet minimum lot size requirements are prohibited.
- E. In areas served by a postal carrier, lots shall be numbered in such a manner as to facilitate mail delivery. Even numbers shall be assigned to lots on one side of the street, and odd numbers on the opposite side. Where the proposed subdivision contains the extension of an existing street or street approved by the Board, but not yet constructed, the lot numbers shall correspond with the existing lot numbers. The house numbering shall be reviewed by the Town of Berwick Addressing Committee/Clerk and his comments considered by the Board.

## **12.8 Monuments.**

- A. Stone or precast concrete monuments shall be set at all street intersections and points of curvature, but no further than 750 feet apart along street lines without curves or intersections.
- B. Stone or precast concrete monuments shall be set at all corners and angle points of the subdivision boundaries where the interior angle of the subdivision boundaries is 135° or less.
- C. Stone or concrete monuments shall be a minimum of four inches square at the top and three feet in length, and set in the ground at final grade level. After they are set, drill hole ½ inch deep shall locate the point or points described above.
- D. All other subdivision boundary corners and angle points, as well as all lot boundary corners and angle points shall be marked by suitable monumentation, as required by the Maine Board of Registration of Land Surveyors. Certification that all lot boundary monuments have been placed shall be presented to the Code Enforcement Officer prior to the issuance of any building permit.

## **12.9 Phosphorus Export.**

- A. When a proposed subdivision is within the direct watershed of a great pond and qualifies for the simplified review procedure, buffer strips shall be provided in accordance with the design criteria set forth in *Volume II – Phosphorus Control in Lake Watersheds: A Technical Guide for Evaluating New Development*, of the *Stormwater Management for Maine* manual dated January 2008 published by the Maine Department of Environmental Protection. Buffer strips shall be provided on the downhill side of all lots along all tributaries to great ponds and along the great pond.
- B. When the proposed subdivision is within the direct watershed of a great pond and does not qualify for simplified reviewed, the phosphorus control measures shall meet the design criteria set forth in *Volume II – Phosphorus Control in Lake Watersheds: A Technical Guide for Evaluating New Development*, of the *Stormwater Management for Maine* manual dated January 2008 published by the Maine Department of Environmental Protection.

# ARTICLE 13 - PERFORMANCE GUARANTEES

## 13.1 Types of Guarantees.

With submittal of the application for final plan approval, the applicant shall provide one of the following performance guarantees for an amount adequate to cover the total construction costs of all required improvements, taking into account the time-span of the construction schedule and the inflation rate for construction costs. In addition, the applicant shall deposit with the Town Escrow Agent or Planning Office an amount equal to a minimum of 6% of the estimated costs of construction of streets, sidewalks, drainage, detention ponds, recreation areas, playgrounds, sewer lines, water lines, or other utility or use requiring underground construction. This fee is to be paid by the developer to the Town of Berwick upon final approval of the subdivision. Any remaining funds plus interest will be refunded to the applicant at the completion of the project:

- A. Either a certified check payable to the municipality or a savings account or certificate of deposit naming the municipality as owner, for the establishment of an escrow account;
- B. A performance bond payable to the municipality issued by a licensed surety company, approved by the municipal officers, or town manager;
- C. An irrevocable letter of credit from a licensed financial institution establishing funding for the construction of the subdivision, from which the Municipality may draw if construction is inadequate, approved by the municipal officers, or town manager; or

The conditions and amount of the performance guarantee shall be determined by the Board with the advice of the municipal engineer, road commissioner, municipal officers, and/or municipal attorney.

## 13.2 Contents of Guarantee.

The performance guarantee shall contain a construction schedule, cost estimates for each major phase of construction taking into account inflation, provisions for inspections of each phase of construction, provisions for the release of part or all of the performance guarantee to the developer, and a date after which the applicant will be in default and the municipality shall have access to the funds to finish construction.

## 13.3 Escrow Account.

A cash contribution to the establishment of an escrow account shall be made by either a certified check made out to the municipality, the direct deposit into a savings account, or the purchase of a certificate of deposit. For any account opened by the applicant, the municipality shall be named as owner or co-owner, and the consent of the municipality shall be required for a withdrawal. Any interest earned on the escrow account shall be returned to the applicant unless the municipality has found it necessary to draw on the account, in which case the interest earned shall be

proportionately divided between the amount returned to the applicant and the amount withdrawn to complete the required improvements.

**13.4 Performance Bond.**

A performance bond shall detail the conditions of the bond, the method for release of the bond or portions of the bond to the applicant, and the procedures for collection by the municipality. The bond documents shall specifically reference the subdivision for which approval is sought.

**13.5 Letter of Credit.**

An irrevocable letter of credit from a licensed bank or other licensed lending institution shall indicate that funds have been set aside for the construction of the subdivision and may not be used for any other project or loan.

**13.6 Phasing of Development.**

The Board may approve plans to develop a major subdivision in separate and distinct phases. This may be accomplished by limiting final approval to those lots abutting that section of the proposed subdivision street which is covered by a performance guarantee. When development is phased, road construction shall commence from an existing public way. Final approval of lots in subsequent phases shall be given only upon satisfactory completion of all requirements pertaining to previous phases.

**13.7 Release of Guarantee.**

Prior to the release of any part of the performance guarantee, the Town Manager as Escrow Agent shall determine to its satisfaction, in part upon the report of the municipal engineer or other qualified individual retained by the municipality and any other agencies and departments who may be involved, that the proposed improvements meet or exceed the design and construction requirements for that portion or phase of the subdivision for which the release is requested.

**13.8 Default.**

If upon inspection, the municipal engineer or other qualified individual retained by the municipality finds that any of the required improvements have not been constructed in accordance with the plans and specifications filed as part of the application, he or she shall so report in writing to the code enforcement officer, the municipal officers, the Board, and the applicant or builder. The municipal officers shall take any steps necessary to preserve the municipality's rights.

**13.9 Improvements Guaranteed.**

Performance guarantees shall be tendered for all improvements required to meet the standards of these regulations and for the construction of the streets, storm water management facilities, public sewage collection or disposal facilities, public water systems, erosion and sedimentation control measures, and street lighting.

## **ARTICLE 14 - WAIVERS**

### **14.1 Waivers Authorized.**

Where the Board makes written findings of fact that there are special circumstances of a particular parcel proposed to be subdivided, it may waive portions of the submission requirements, unless otherwise indicated in the regulations, provided the applicant has demonstrated that the performance standards of these regulations and the criteria of the subdivision statute have been or will be met, the public health, safety, and welfare are protected, and provided the waivers do not have the effect of nullifying the intent and purpose of the comprehensive plan, the zoning ordinance, or these regulations.

### **14.2 Findings of Fact Required.**

Where the Board makes written findings of fact that due to special circumstances of a particular lot proposed to be subdivided, the provision of certain required improvements is not requisite to provide for the public health, safety or welfare, or are inappropriate because of inadequate or lacking connecting facilities adjacent to or in proximity of the proposed subdivision, it may waive the requirement for such improvements, subject to appropriate conditions, provided the waivers do not have the effect of nullifying the intent and purpose of the comprehensive plan, the zoning ordinance, or these regulations, and further provided the performance standards of these regulations and the criteria of the subdivision statute have been or will be met by the proposed subdivision.

### **14.3 Conditions.**

Waivers may only be granted in accordance with Sections 14.1 and 14.2. When granting waivers, the Board shall set conditions so that the purposes of these regulations are met.

### **14.4 Waivers to be Shown on Final Plan.**

When the Board grants a waiver to any of the improvements required by these regulations, the final plan, to be recorded at the Registry of Deeds, shall indicate the waivers granted and the date on which they were granted.

## **ARTICLE 15 - APPEALS**

### **15.1 Appeals to Superior Court.**

An aggrieved party may appeal any decision of the Board under these regulations to York County Superior Court, within thirty days of the date the Board issues a written order of its decision.

# APPENDIX A

## Town of Berwick's Storm Water Runoff Design Criteria

### **Drainage Calculation Methods**

The technique used for calculating storm drainage shall be the Soil Cover Complex Method (Better known as the SCS Runoff Curve Number Method). The only exception will be for calculating the flow to open channels or through the catch basin inlets and related closed drain system associated with street or parking lot runoff having less than 20 acres contributing drainage area. The designer may use either the SCS method or the Rational Method for these instances.

### **Streets With Curbing and Catch Basins**

Catch basin grate inlet spacing and capacity shall be analyzed to insure gutter spread (surface flooding) does not cause a hazardous situation for vehicle traffic. It is considered hazardous if the roadway grade and/or inefficient grate inlet capacity causes a surface water flow width (spread width) of more than 1/2 of the travel lane width. The normal design frequency to be used for inlet capacity and spacing shall be the 2-year frequency storm. Inlets placed at sump locations shall be checked for capacity and spread width using the peak discharge from a 10-year frequency storm event.

### **Pre- and Post-Development Runoff Comparison**

For developments that create less than one acre of disturbed area, the Basic Performance Standards specified in the Maine Department of Environmental Protection *Chapter 500: Stormwater Management, Appendix A-Erosion and Sedimentation Control* rules shall be utilized.

For developments that create one or more acres of disturbed area, the stormwater management provisions specified in Chapters 500 and 502 of the Maine Department of Environmental Protection Stormwater Management rules will apply.

### **Storm Water Management and Erosion and Sediment Control Best Management Practices (BMPs)**

The following table specifies the required design storm frequency for the various BMPs associated with Subdivisions and Site Plan Development in the Town of Berwick

Structure or BMP	Storm Frequency	Notes
<b>Ponds and Basins:</b> Detention, Retention, Extended Detention, and any Storm Water Storage Type Pond, Basin or Structure	2-Year, 25-Year and 50-Year, 24-Hour Duration Storms	Flood Routing using the SCS's Technical Release 20 (TR-20) or the equivalent is required. When applicable, State and Federal Regulations must be adhered to, including the Maine DEP manual <i>Stormwater Management for Maine, January 2006..</i>
<b>Channels:</b> Diversion, Waterways, Storm Water Conveyance Channels,	10-Year, 24-Hour Duration Storm	This does not apply to large streams or rivers where damage from flooding must be considered. Channels shall be designed in accordance with the Maine DEP manual <i>Stormwater Management for Maine, January 2006.</i>
<b>Culverts and Bridges:</b>	25-Year, 24-Hour Duration Storm	This does not apply to State and Federal Highways where the design is not regulated by the Town of Berwick.
<b>Streets With Curbing:</b> Catch Basin Inlet Grates	2-Year Storm, (10-Year Storm @ Sump Locations)	Either the SCS or the Rational Method may be used for design if the Drainage Area Less than 20 Acres.
<b>Streets, All:</b> Open Channel or Closed Drain Pipe System	10-Year Storm	Either the SCS or the Rational Method may be used for design with Drainage Area Less than 20 Acres. Pipes shall be either RCP or Dual- Walled Corrugated HDPE <sup>1</sup> .
<b>Driveway Culverts:</b>	2-Year	Minimum pipe diameter shall be 15 inches. Type may be CMP, RCP or HDPE.
<b>Other:</b>	10-Year, 24-Hour Duration Storm	Any Stormwater Management or Erosion and Sediment Control Measure requiring storm runoff calculations not covered in the above list.

<sup>1</sup> Dual-Walled Corrugated HDPE - High Density Polyethylene Pipe constructed with corrugated outside wall and smooth inner wall.