



Design Road Standard



Road

Effective date:
March 10, 1979
Amended March 12 2005

Road Design Standards of the Town of Bowdoin

Section 1: Title and Legal References

This Ordinance shall be known as "Road Design Standards of the Town of Bowdoin" and will be referred to herein as this "Ordinance". This Ordinance is adopted under powers granted the Town by Title 30 M.R.S.A. Sections 1917 and 2151.

Section 2: Purpose

Roads built in conjunction with new subdivisions or other developments can have a major effect upon safety, municipal services, and the environment of the town. The design and construction of such roads will also effect soil erosion and water quality; the severity of periodic flooding; police and fire protection; safety conditions and traffic congestion; the visual character of the neighborhood and the town; the future use of surrounding land; and maintenance costs and requirements. It is the purpose of this Ordinance to promote the health, safety, and general welfare of the residents of the town by setting standards for design, layout, and construction of all new roads intended for use by the public, and to further the goals set out in the Comprehensive Plan of the Town of Bowdoin.

Section 3: Application

The provisions of this Ordinance shall apply to all roads intended for use by the public within the Town of Bowdoin. This Ordinance shall serve as a guide to, but shall not be binding upon, any state, county, or municipal body or authority, which may layout, alter, widen, or improve any public way in accordance with applicable statutes. This Ordinance shall not apply to any existing roads, which are being used by the public as of the effective date of this Ordinance.

Section 4: Administration

The Road Commissioner and the planning Board where appropriate shall administer this Ordinance.

Section 5: Definitions

In this Ordinance the present tense includes the future tense, the singular includes the plural and the plural includes the singular, "shall" is mandatory and "may" is permissive, and the following words shall have the following meanings:

- A. Construct: Includes build, place, move upon, pave, grade, or make other physical improvement operations on land. Excavation, fill, drainage and the like shall be included in this definition.
- B. Person: Any individual, firm, partnership, association, organization, trust, company, corporation, or other legal entity.

- C. Road: A public or private way for vehicular traffic in which the public has an easement or it is intended that the public have an easement.
- D. Standard Specifications: Refer to the "Standard Specifications Highways and Bridges" of the Maine State Highway Commission Revision of June 1968 and as amended.

Section 6: Written Approval

Before constructing any road, a person shall submit to the Planning Board and the Road Commissioner layout plans, grading plans, road profiles, cross sections, erosion and sedimentation control plans, and such other information as may be necessary to show compliance with this Ordinance. No person shall construct or cause to be constructed any road without written approval of the plans from the Planning Board. The Planning Board shall consult with the Road Commissioner prior to making its determination of compliance with this Ordinance. No road plans shall be approved by the Planning Board unless they meet the provisions of this Ordinance.

Section 7: Road Design Standards

- A. No road shall have a right-of way width less than 50 feet.
- B. All roads shall be designed so that they will provide safe vehicular travel and traffic patterns. Insofar as possible, roads shall conform to existing topography, and excessive cuts and fill shall be avoided.
- C. No road names shall be used which will duplicate or be confused with the names of existing town roads. Road names shall be subject to the approval of the Road Commissioner.
- D. At the intersections and common boundaries of subdivisions, roads shall be continuous and in alignment with existing roads where possible. Roads shall be laid out to intersect at right angles wherever possible; under no circumstances shall a road intersect with any other road at less than a 60 degree angle
- E. "T" intersections formed on opposite sides of the same road shall not be closer than 200 feet center line to center line.
- F. Right-of way lines at intersections shall be laid out to provide for a paved turning radius of not less than 25 feet.
- G. Road intersections and curves shall be designed to permit adequate visibility for both pedestrian and vehicular traffic. At all changes in alignment road sidelines shall be connected by horizontal curves. All changes in slope shall be connected by vertical curves.
- H. A dead end street or cul-de-sac shall be provided with a suitable turnaround at the closed end. When turning circle is used, it shall have a minimum outside radius of 40 feet.

- I. Guardrails shall be installed in dangerous situations at the direction of the Road Commissioner. Guardrail shoulders shall be an additional three feet wider than normal shoulders, with the face of the posts set one foot back from the normal shoulder width.
- J. Grades of all roads shall be reasonably minimal but shall not be less than 6 inches per 100 feet (.5%) or more than 8 feet per 100 feet (8%) unless specifically approved by the Road Commissioner and the Planning Board. Maximum grade within 100 feet of all intersections shall be 3 feet per 100 feet (3%).
- K. Drainage shall be designed to prevent standing water on the paved surface or the shoulder. No surface drainage shall be conveyed or diverted across a paved surface or shoulder.
- L. Where ditches are required to remove storm and surface water they shall have side slopes no greater than 3:1 and longitudinal slopes no less than 2% unless otherwise permitted by the Road Commissioner.
- M. Roads may only be located in areas known to flood if they are so designed so as to keep the road surface above water levels known or anticipated for a 25 year storm.
- N. The surface of all roads shall have a 4 inch crown from the center line to the edge of the pavement.
- O. Side slopes in either cut or fill situations shall not be graded steeper than 3:1. All embankments shall be loamed to a depth of not less than 4 inches, fine graded, fertilized, limed, and seeded to establish a good cover of grass.
- P. Culvert sizes shall be determined on the basis of estimated runoff from the total area served. Minimum culvert size shall be 15 inches diameter.
- Q. A monument shall be set at each point of curvature and angle point on both sides of every road. Monuments shall be of granite, 6 inches square and at least 4 feet long, or of concrete, 6 inches diameter with a ½ inch steel pin protruding from the center. The top of the monument shall be 3 inches above finished grade. Written certification by a registered land surveyor that monuments shown on the plans have been accurately set shall be required prior to road approval.
- R. Paved widths of roads shall be a minimum of 20 feet. Shoulders shall be 3 feet on each side of the paved surface, and graded to drain water away from the pavement. A five foot wide utility strip shall be cleared of all brush and evergreen trees between the shoulders and the right-of-way line.

Section 8: Road Construction Standards

- A. Subgrade. All trees, stumps, roots and organic matter shall be removed to the full width of the paved surface and the shoulders. The subgrade shall be carefully graded and compacted as required by the Road Commissioner. Subgrade fills shall be constructed of material approved by the Road

Commissioner. In no case shall any roots, stumps, trees or organic matter be used in the subgrade fills.

B. Gravel Base. The gravel base course shall be at least 18 inches deep and shall be compacted to the satisfaction of the Road Commissioner. 24 inches of gravel or more may be required in cut sections if earth or ledge are encountered or in wet or swampy areas. Gravel shall be spread in layers not over 6 inches deep and each layer shall be thoroughly compacted before the next is laid. The top 6 inches of gravel shall conform to the Standard Specifications, Section 703.06 (a) Aggregate base. Below the top 6 inches the gravel shall conform to the Standard Specifications, Section 703.06 (b) Aggregate Sub-base. All gravel used shall be approved by the Road Commissioner prior to placement.

C. Pavement. All roads shall be paved with bituminous concrete or other material acceptable to the Road Commissioner. The width of the pavement shall be 20 feet minimum. At street intersections the paving shall have a radius of at least 25 feet unless otherwise approved by the Road Commissioner. Bituminous Concrete paving shall conform to the Standard Specifications, Section 403 "Hot Bituminous Pavement". Aggregate for bituminous concrete shall be Grading B for the binder course and Grading C for surface course, conforming to the Standard Specifications Section 703.09. The compacted thickness of the binder course shall be 2 inches, the compacted thickness of the surface course shall be 1 inch, for a total pavement thickness, after compaction, of 3 inches.

Section 9: Variance

~~Where the Planning board finds that undue hardship may result from strict~~
compliance with this Ordinance, it may vary the requirements of this Ordinance in favor of a proposed alternative. To constitute 'undue hardship' each of the following conditions must be met:

- a. The land in question cannot yield a reasonable return unless a variance is granted, or the proposed alternative will provide a more varied and imaginative road layout and design;
- b. the safety of the public is not being compromised by the proposed alternative;
- c. the need for the variance is due to the unique circumstances of the property and not to the general conditions of the neighborhood;
- d. granting of a variance will not alter the essential character of the locality; and
- e. the hardship is not the result of action being taken by the applicant or a prior owner.

Applicants for a variance must submit a written request to the Planning Board which:

- a. locates and describes the lot;
- b. states the variance being sought;
- c. details all reasons for seeking the variance together with any relevant documentation;
- d. lists by names and addresses all owners of land within 1000 feet of the lot lines; and
- e. contains such other information as may be required by the Planning Board.

Before deciding on any application for a variance, the Planning Board shall notify

the owners of land within 1000 feet of the lot lines and shall give the applicant, abutters and other interested members of the public an opportunity to be heard..

Section 10: Conflict with Other Requirements

This Ordinance shall not repeal, annul, or in any way impair or remove the necessity of compliance with any other regulation, permit, ordinance, or statute. Where this Ordinance imposes greater restriction upon the use of land or structures, the provisions of this Ordinance shall control.

Section 11: Enforcement

- a. Nuisance. Any violation of this Ordinance shall be deemed a nuisance.
- b. Notice. If the Planning Board, after consultation with the Road Commissioner, finds that any provision of this Ordinance is being violated at any time, before, during, or after construction, the Planning Board shall notify in writing the person responsible for such violation, indicating the nature of the violation and ordering the action necessary to correct it, including discontinuation of construction, removal of unacceptable fill, gravel, or pavement, regrading, and recompaction, and abatement of any nuisance conditions. A copy of such notice shall be maintained as a permanent record.
- c. Legal Action. When the Planning Board's notice does not result in prompt action to correct or abate the violation, the Selectmen, on their own or after notice from the Planning Board, are hereby authorized and directed to institute any and all actions and court proceedings, either legal or equitable, including the seeking of injunctions of violations and the impositions of fines, that may be appropriate or necessary to enforce the provisions of this Ordinance in the name of the Town.
- d. Fines and Attorneys' Fees. Any person who fails to take prompt action to correct or abate the violation after receiving written notice of such violations shall be subject to a fine of up to \$50.00. Each day such violation exists after notice shall constitute a separate offense. If in any action brought in the name of the Town under this Ordinance, the Town prevails against the person violating the Ordinance, then such person shall be liable and responsible for the Town's legal fees and court costs and any other costs involved in bringing such Suit or action.

Section 12: Adoption of Amendments

An Amendment to this Ordinance, if in proper form, may be adopted by:

- a. a majority vote at a regular or special Town meeting if the proposed amendment is recommended by the Planning Board or
- b. two-thirds (2/3) majority vote at a regular or special Town meeting if the proposed amendment is not recommended by the Planning Board.

Section 13: Validity and Severability

Should any section, clause, or provision of this Ordinance be declared by the courts to be invalid or invalid as applied, such decision shall not invalidate any other section, clause, or provision of this Ordinance.

Section 14: Effective Date

The effective date of this Ordinance is March 10, 1979. On March 12th, 2005 this Ordinance was amended in Section 7 R and Section 8 C.

515/055
Registry of Deeds Sagadahoc
Dated: March 19, 1979 10:30 AM.

A True Copy Attested:
Melanie R. Page
Bourbon Town Clerk