

CHAPTER 27. ROAD CONSTRUCTION

06/27/88 adopted
06/10/03 amended

27.1 Authority/Purpose
27.3 Construction Standards
27.5 Construction
27.7 Inspection Fees

27.2 Standards from Subdivision
27.4 Pavement
27.6 Appeal

Article 27.1 Authority / Purposes

Section 27.1.1 This Ordinance is adopted pursuant to and in accordance with the provisions of Title 30, M.R.S.A., Chapter 201-A, Section, 1917 (Municipal Home Rule).

Section 27.1.2 The purpose of this Ordinance is to assure public safety and general welfare through regulation of the design and construction of all roads proposed to be built within the Town of Rangeley. The legislative body may accept no road unless it meets the requirements and standards of this Ordinance.

Section 27.1.3 No road may be accepted as a town way unless the Town of Rangeley receives title in fee simple.

Section 27.1.4 To assure that all roads built in the Town of Rangeley are constructed to acceptable standards.

Section 27.1.5 A “road” as used herein shall also mean a “street”.

Article 27.2.1 Street Design

Proposed streets shall be in harmony and conformance with existing and future streets. Street patterns shall give due consideration to contours and natural features. Every proposed street shall be laid out and constructed as required by the following minimum regulations.

- .1 Existing Streets Extended: Existing streets shall be extended at the same or greater width and in no case shall they be extended at less than the existing width.
- .2 Street Names: Street names require the approval of the Board of Selectmen. Streets that are obviously in alignment with street already existing and named, shall be given the name of the existing street. Names of new streets shall not duplicate or closely approximate those of existing streets.

- .3 Intersections: All street intersections shall be at angles as close as ninety (90°) degrees as possible. In no instance shall street intersections be at an angle less than sixty (60°) degrees.
- .4 Curb Line Radius: The curb line radius at street intersections shall be at least 25 feet. Where the angle of the street intersection is less than ninety (90) degrees, a longer radius may be required.
- .5 Dead End Streets: In addition to the design standards above, dead end streets shall be constructed to provide a cul-de-sac turnaround with the following requirements for radii: property line 60 feet; outer edge of pavement 50 feet. The use of a hammerhead turnaround may be permitted as an alternative to a cul-de-sac turnaround. In the case of a hammer-head turnaround, it shall be 30 feet wide and 60 feet long as measured from the center line of the abutting street and shall be located at least 50 feet from the end of the travel way. **All hammerhead turns must be installed as right hand turns.**
- .6 Catch Basins: Catch basins (of standard design) shall be built where necessary. Provisions must be made for natural watercourses. Culverts of proper size and capacity will be installed at all watercourses with necessary headers.
- .7 Sidewalks: The Planning Board or Road Commissioner shall have the authority to designate whether sidewalks shall be required.
- .8 Utilities: Longitudinal runs of water and/or sewer mains shall be laid outside of the travel lanes and clear of any present or designated sidewalks. Utility poles shall be so placed that any present or designated sidewalks may be contained within the boundaries of the street or way without obstructions by poles or appurtenances. **Utility poles and electrical underground utility boxes shall be placed at minimum seven (7) feet from the edge of the shoulder.**
- .1 All new streets shall be classified as follows:
 - .1 The classification shall be based upon the projected volume of traffic to be carried by the street, stated in terms of the number of trips.
 - .2 The number of dwelling units to be served by the street may be used, as a useful indicator of the number of trips, but is not conclusive.
 - .3 Whenever a new street continues an existing street or is expected to be continued at some future time, the classification of the street will be based upon the street in its entirety.

- .2 The classification of streets shall be as follows:
- .1 Local: A Street whose sole function is to provide access to abutting properties. It serves or is designed to serve not more than 45 dwelling units and is expected to or does handle not more than 450 trips per day.
 - .2 Collector: A Street whose principle function is to carry traffic between local streets or between local streets and arterial streets, but that may also provide direct access to abutting properties.

Section 27.2.3 Construction Specifications

Item	Collector	Local	Mobile Home Park
1. Minimum width of Right of Way	60 ft.	50 ft.	50 ft.
2. Minimum width of pavement	24 ft.	20 ft.	20 ft.
3. Minimum grade.	.5%	.5%	.5%
4. Maximum grade	8%	12%	12%
5. Maximum grade at intersections	3% L	3% L	3% L
6. Minimum angle of intersections	60°	60°	60°
7. Width of shoulders	6 ft.	3 ft.	3 ft.
8. Minimum center line radii of curves	200 ft.	200 ft.	150 ft.
9. Minimum tangent length between reverse curves	100 ft.	50 ft.	50 ft.
10. Road base (minimum)	18 in.	18 in.	18 in.
11. Surface leveling course	4 in.	4 in.	4 in.
12. Road crown (minimum)	¼ in./ft.	¼ in./ft.	¼ in./ft
13. Sidewalks width (where required)	4 ft.	4 ft.	
14. Property line radii (intersections)	15 ft.	10 ft.	10 ft.
15. Curb radii at intersections (90°)	25 ft.	25 ft.	25 ft.
Less than 90° intersections	30 ft.	30 ft.	30 ft.
16. Minimum distance between intersections	200 ft.	200 ft.	200 ft.
17. Bituminous hot top			

Highlighted amendments passed at a Special Town Meeting on September 8, 2005

Total Thickness	3 in.	3 in.	3 in.
Surface Course	1 in.	1 in.	1 in.
Base Course	2 in.	2 in.	2 in.

Section 27.2.4 Gravel Surface Roads:

Certain local roads may be constructed with gravel surfaces. The Road Commissioner and Planning Board, shall review requests for gravel-surfaced roads. In reviewing requests for gravel surface roads, the following requirements shall be met, in addition to all other design standards. **Note: A road proposed to be accepted as a Town street must be paved prior to Town acceptance.**

- .1 Existing or projected traffic volumes shall not exceed 50 vehicles per day.
- .2 The area has a low development density.
- .3 Dust from the road surface will not adversely affect adjacent properties.
- .4 The surface materials must support the traffic loads without detrimental deformation.
- .5 The surface materials must be capable of withstanding the abrasive action of traffic.
- .6 The surface materials shall shed rain which falls on the surface.

Section 27.2.5 Privately Owned Roads

Private roads may be permitted within a subdivision provided the following are met:

- .1 Road Standards. All private roads shall be designed and constructed in accordance with this Chapter.
- .2 Private Road Services Single Development. No road intended to be private may be planned to be extended to serve property outside the subdivision.
- .3 Drainage. Adequate provisions are made for disposal of all surface water and underground water through ditches, culverts, underdrains, and/or storm water drainage systems. Provisions must be made for natural watercourses.
- .4 Maintenance. The subdivider shall demonstrate to the satisfaction of the Planning Board that the private road will be properly maintained.

Highlighted amendments passed at a Special Town Meeting on September 8, 2005

- .5 Deed Restriction. The subdivider shall cause each property deed to clearly state that the road is a private road, and the Town of Rangeley will not be responsible for maintaining or plowing.
- .6 Plan Condition. The recorded subdivision plan shall clearly state that such road is private.

FOR ALL STREET AND ROAD CONSTRUCTION, THE FOLLOWING STANDARDS ALL APPLY:

Section 27.3.1 The graded areas plus **five (5)** feet, or a minimum of **fifty (50)** feet width of Right of Way (R-O-W) shall be cleared of all stumps, roots, business, and perishable materials, including trees except those that do not interfere with travel or use and are deemed by the Road Commissioner to be desirable for shade or beautification.

Section 27.3.2 Excavation shall consist of removing and satisfactorily disposing of all materials encountered within the limits of work. Suitable material taken from excavation may be used in fill areas. Suitable material shall mean excavation that is free from all stumps, roots, business, grass turf or other objectionable material. In case the foundation material is soft or otherwise unsatisfactory, it may be necessary to excavate to a greater depth and backfill with a granular material.

Section 27.3.3 In areas where fill is ten (10) feet or less, side slopes shall not be steeper than three (3) feet horizontal and one (1) foot vertical. Slopes in fill areas greater than ten (10) feet will require guardrails and shall be no steeper than two (2) feet horizontal and one (1) foot vertical. In-slopes and back-slopes in road areas susceptible to erosion, and in all lawn areas, shall be covered with two (2) inches of loam compacted, seeded, and adequately mulched. If the side slope extends outside the required right-of-way, the applicant shall expand the right-of-way to include the entire slope area.

Section 27.3.4 Adequate drainage/ditching shall be provided along all roads and streets. All drainage pipes except subsurface storm drainage systems shall be new corrugated metal or **corrugated plastic pipe** with a minimum diameter of fifteen (15) inches. Larger size pipe will be required where the potential flow of water dictates. Culverts shall be of sufficient length to reach from the center of ditches on each side of the roadway. Driveway culverts shall be new corrugated metal or **corrugated plastic** pipe with a minimum diameter of fifteen (15) inches and a minimum length of twenty-four (24) feet. Where the potential flow of water dictates, larger diameter culverts will be required.

Section 26.3.5 The sub grade shall be compacted and shaped to provide drainage before the application of the grave / **equivalent** base. The sub grade, depending upon the thickness of the **sub** base course, shall be a minimum **thirty-six (36)** feet in width for collector roads and minimum of **thirty-four (34)** feet in width for local roads.

Highlighted amendments passed at a Special Town Meeting on September 8, 2005

Section 27.3.6 **Sub** base course thickness shall be minimums of eighteen (18) inches on fill sections. A minimum of twenty-four (24) inches of **sub** base shall be used on cut sections of earth or ledge, except if the cut section is through existing clean, durable, well draining sand or gravel, the **sub** base thickness may be reduced to eighteen (18) inches.

Section 27.3.7 The roadway area shall be brought to the grade shown on the plan, profile and cross-section, by suitable gravel **or equivalent materials** as determined by the Road Commission. The gravel shall consist of hard, durable particles that are free from vegetable matter, lumps or balls of clay, and other deleterious substances. The gradation of the portion, which will pass a three (3) inch sieve, shall meet grading requirements that are commonly accepted as standard engineering practice in the State. **Sub base materials** shall contain particles or rock that will pass **through** the six (6) inch square mesh sieve. This **sub** base course shall be placed uniformly over the entire width of sub grade. The **sub** base will have a minimum width of **twenty-eight (28)** feet consisting of a **twenty (22)** foot roadway and two 3 feet wide shoulders for collector roads and a minimum of **twenty-six (26)** feet consisting of a **twenty (20)** foot roadway and two 3 foot wide shoulders for minor roads. All **sub** bases shall be placed in a minimum of two layers with the top layer not exceeding a compacted depth of nine (9) inches. The gravel base **or equivalent material** shall be thoroughly **compacted** one layer at a time.

Section 27.3.8 **Sub base materials may be gravel or blasted rock with the Road Commissioner's approval. Shale with friable edges or visible layering will not be considered acceptable as sub base materials. Sub base materials must pass the state requirements for road construction materials as denoted in Section 703.6 Materials may be subject to passing an abrasion (AASHTO T96) test prior to being accepted as equivalent materials.**

Section 27.3.9 A **four (4)** inch **compacted** leveling course of surface screened gravel with rock not to exceed 1-¹/₄" shall be placed over the gravel base course for grading purposes.

Article 27.4 Reserved

Article 27.5 Reserved

Article 27.6 Appeal

All construction shall be to the satisfaction of the Road Commissioner. Appeal of Road Commissioner decisions may be made to the Board of Selectmen.

Article 27.7 Inspection Fees

The Board of Selectmen will set inspection fees.

Highlighted amendments passed at a Special Town Meeting on September 8, 2005