

CHAPTER 75. HIGHWAY DESIGN STANDARDS

[**HISTORY: Adopted by the Town Board of the Town of New Glarus 11-19-1999.**
Amendments noted where applicable.]

GENERAL REFERENCES

Land division and subdivision — See Ch. [75](#).

Road excavations and obstructions — See Ch. [181](#).

§ 75-1. Definitions.

In order to clarify this chapter the following definitions are applicable:

APPROACH

That portion of road extending 100 feet on each side of a culvert or bridge.

BASE COURSE

The supporting base material of the roadway, including shoulder.

GRADE

The rate of ascent or descent of roadway.

HIGHWAY

The road or way over which the public generally has a right to pass, to include the complete right-of-way.

ROAD BED

The whole material laid in place and ready for travel.

ROADWAY

The traveled portion of the highway.

SURFACE 1/2

The top of the roadway, or traveled surface.

§ 75-2. Applicability.

This chapter shall be applicable to all highways laid out by the Town Board after adoption of this chapter, including any highways dedicated in plats for proposed subdivisions submitted for review pursuant to Ch. 236, Wis. Stats., any private highways being donated to the Town, and any other highways being accepted by the Town as public highways in the Town.

§ 75-3. Minimum design standards.

The following minimum design standards shall apply under this chapter. All Town highways shall be classified as local roads unless designated by the Town Board as collector or arterial. The classification of all roads under this chapter shall be within the complete discretion of the Town Board considering such factors as traffic count, character of anticipated traffic, and relation of highway to traffic patterns within the Town and other highway systems. It is intended that the local roads be the lowest traffic count, with access to private property as the principal function. Collector highways are intended to be highways acting as collectors from local roads to higher priority roads or developed areas. Arterials are intended to serve as corridors through the Town serving interregional and inter-area traffic movement.

Improvement	Residential		Commercial/Industrial	
	With Curb/Gutter	Without Curb/Gutter	With Curb/Gutter	Without Curb/Gutter
Minimum	66	66	66	66

Improvement	Residential		Commercial/Industrial	
	With Curb/Gutter	Without Curb/Gutter	With Curb/Gutter	Without Curb/Gutter
right-of-way (feet)				
Minimum width of base course (including curb, gutter or shoulders) (feet)				
Local	30	30	32	32
Collector	32	32	40	50
Arterial	40	36	40	50
Minimum width of surfacing (feet)				
Local	30	20	32	24
Collector	32	22	40	30
Arterial	40	26	48	48
Maximum grade (percent)*				
Local	10	10	8	8
Collector	8	8	6	6
Arterial	6	6	6	6
Minimum radius of horizontal curve (feet)				
Local	100	100	200	200
Collector	100	100	200	200
Arterial	300	300	400	400
Corner radius at intersections				
All	15	30	15	30
Minimum length of tangents between reverse curves (feet)				
Local	100	100	200	200
Collector	100	100	200	200
Arterial	200	200	300	300
Minimum sight distance (feet)				

Improvement	Residential		Commercial/Industrial	
	With Curb/Gutter	Without Curb/Gutter	With Curb/Gutter	Without Curb/Gutter
Local	200	200	200	200
Collector	250	250	250	250
Arterial	300	300	300	300
Design speed (miles per hour)				
Local	30	30	30	30
Collector	35	35	35	35
Arterial	40	40	40	40

Notes:

* *Minimum grade is 0.5 on all classes of roadway.

A. Minimum length of vertical curve.

(1) Local: 100 feet, but not less than 20 feet for each algebraic difference in grade.

(2) Collector: 200 feet, but not less than 50 feet for each percent.

(3) Arterial: 300 feet, but not less than 50 feet for each algebraic difference in grade.

B. Culs-de-sac (permanent and temporary). Maximum desirable length of cul-de-sac roads designed to have one end permanently closed is 1,000 feet with a turnaround of not less than 120 feet in diameter and a roadway turnaround of 96 feet in diameter. Through roads are most desirable, and permanently dead-ended streets shall be prohibited.

C. Base course standards. The minimum standard will be a roadway base of 10 inches of compacted in-place crushed aggregate base course of Gradation No. 2 in the top layer and Gradation No. 1 and No. 2 in the lower level. Base course must be of a quality, thickness, and composition suitable for the location and class of roadway.

D. Surface course standards.

(1) The surface source for local roads shall have a minimum of three-inch thick compacted hot-mix bituminous concrete composition, placed in two layers, a binder course of 1 1/2 inches thick and a surface course of 1 1/2 inches thick.

(2) The surface course for collector and arterial roads will be determined based on anticipated traffic loads but will at a minimum meet the standards outlined for local roads.

E. Ditching and culverts. The ditching of the roadway must be complete and have proper elevation to provide for adequate drainage. Any culverts necessary for proper drainage shall

be installed after elevation and location are obtained from the Town Board. The minimum length of culvert installed in a roadbed shall be two feet greater than the base course width. Apron end walls shall be used. The diameter and length will be subject to the approval of the Town Board, after the amount of flowage is determined. In no case shall the culvert be less than 18 inches in diameter.

F. Bridges. All bridges shall meet the minimum requirements of state and federal law. In the event that it is decided by the Town Board that the construction of a bridge would be of a size and cost that would create a hardship to the owner of the land required to build said bridge, then the Town Board may proceed to accept the road, complete as required above, except that part extending 100 feet on each side of said bridge. This portion of the road shall be known as the "approach." The approach will be accepted uncompleted, with the reservation that the Town will bill back to the owner a portion of the cost of the construction of the bridge. The Town will proceed to build said bridge and approach with the help of bridge aid, if available, and bill the balance not covered by the aid or portion to be billed back to the owner.

§ 75-4. Variances.

Editor's Note: Amended at time of adoption of Code (see Ch. 1, General Provisions, Art. I). The Town Board may grant variances from the minimum standards of § [75-3](#) in situations where strict application of the minimum standards is impractical or would impose undue hardship on the owner or developer of the road.

§ 75-5. Authority to impose higher standards.

The road design standards in § [75-3](#) as stated above are intended to be minimum design standards. The Board shall have the discretion to impose higher design standards where, in the opinion of the Town Board, local conditions require higher standards or anticipated traffic in quantity or quality will require higher standards.

§ 75-6. Determination of applicable standards; proposed highway design and erosion control plan.

A. Any person may apply to the Town Board to determine what design standards should apply in a particular location, giving the description of the proposed highway and the proposed design standards being requested to be approved for any proposed highway being proposed to be built. No person shall commence construction of any highway anticipated to be turned over to the Town without having written approval of the proposed highway design by the Town Board.

B. The proposed highway design shall be accompanied by an erosion control plan. Both the proposed highway design and the erosion control plan must be prepared by a professional engineer licensed by the State of Wisconsin. The Town Board shall base its written approval or denial of the proposed highway design and erosion control plan upon the opinion of an engineering firm designated by the Town Board. Such engineering costs shall be the expense of the applicant(s)

§ 75-7. Preliminary consultation and project costs.

All roadway surveys, engineering opinions, dedications, plans and specifications and construction of any highway to be dedicated to the Town will be at the expense of the applicant or applicants. This includes any expense incurred by the Town in the preparation of plans and review and inspection of plans and construction.

§ 75-8. Final inspection and acceptance.

Upon completion of the proposed highway, the Town Board will proceed to have its designated engineering firm make final inspection. Acceptance or rejection of the highway shall be based on the opinion of the designated engineering firm and shall be in the discretion of the Town Board. If the highway is rejected, then corrections must be made as stated by the Town Board before final inspection will be made again. If final acceptance is made by the Town Board, the owner or owners will turn over to the Town a warranty deed free and clear of any liens to convey free and clear title to the Town for the highway.