

**TOWN OF PINE LAKE
ONEIDA COUNTY**

**MINIMUM HIGHWAY DESIGNS STANDARDS
ORDINANCE #06-02**

Whereas, it is in the public interest for the Town of Pine Lake, Oneida County, Wisconsin, to establish minimum highway design standards for highways being constructed and improved in the Town to accommodate anticipated traffic and afford satisfactory access to police firefighting, snow removal, sanitation, and road maintenance equipment.

The Town of Pine Lake, Oneida County, Wisconsin, does ordain as follows:

The following definitions shall apply and control this Ordinance. Words or phrases not defined specifically below, but used in this Ordinance, shall be interpreted so as to give them the same meaning as they have at common law and to give this Ordinance its reasonable application.

- A. Base Course – the supporting base material of the roadway, including shoulder, generally gravel.
- B. Drainage – the gradual drying of highway by system of ditches, trenches, channels. Etc.
- C. Grade – the rate of ascent or descent of roadway along the centerline.
- D. Highway – the road or way over which the public generally has a right to pass, to include the complete right-of-way. Road and highway are used interchangeably in this ordinance.
- E. Roadbed – the whole material laid in place and ready for gravel.
- F. R.O.W. – right-of-way
- G. Cross slope – drop of the pavement perpendicular to the centerline for drainage purposes as expressed in feet per foot.
- H. Centerline – the middle of the paved portion of the highway.
- I. Stopping sight distance – the distance at which a 2.0 foot high object on the road is visible to a driver's eye 3.5 feet above the pavement.
- J. Reconstruction – roadwork in which the centerline is moved down or laterally any distance, or moved up more than six (6) inches.
- K. Resurfacing – providing a new paved riding surface on an existing road.

SECTION 2. APPLICABILITY

This Ordinance shall be applicable to all highways laid out by the Town Board after adoption of this Ordinance, including any highways dedicated in plats for proposed subdivisions submitted for review pursuant to Chapter 236 of Wisconsin Statutes and Town of Pine Lake Land Division and Subdivision Control Ordinance No. 05-01, any reconstruction or resurfacing work done by the Town, and any private highways being donated to the Town.

SECTION 3. MINIMUM DESIGN STANDARDS FOR NEW ROADS

The following minimum design standards shall apply under this Ordinance. All town highways shall be classified as local roads unless designated by the Town Board as collectors. The classifications of all roads under Ordinance 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 local be the lowest traffic count, with access to private property as principal function. Collector highways are intended to be highways acting as collectors from local roads to higher priority roads or developed areas.

As of the date of this Ordinance, the following Pine Lake roads are determined to be collectors:

<u>ROAD</u>	<u>FROM</u>	<u>TO</u>
N. Birchwood Drive	CTH W	STH 17
Cross Country Road	Pine Lake Road	STH 17
Lake Shore Drive	CTH C	Stella Town Line
Lake Thompson Road	Pelican Town Line	CTH C
Manor Road	Manor Loop Road	River Road
Pine Lake Road	CTH W	Sugar Camp Town Line
River Road	CTH W	Newbold Town Line
Shepard Lake Road	STH 17	Lakeshore Drive
Trails End Road	Riverview Drive	River Road

All others are local roads.

GEOMETRIC ELEMENTS

Typical Section

The slopes, dimensions, and details shown on the approved drawing of _____, titled "Typical Section for Pine Lake Town Roads" are incorporated herein by reference.

Minimum R.O.W. 66'

Maximum Grade (percent)

Local**	8%
Collector**	6%
Minimum Grade**	5%

Minimum Radius of Horizontal Curve (in feet)

Local	100'
Collector	100'

Corner Radius at Intersections 30'

Minimum Length of Vertical Curve

Local – 100', but not less than 20' for each 1% algebraic difference in grade.

Collector – 200', but not less than 50' for each 1% algebraic difference in grade.

Minimum Length of Tangents between Reverse Curves

Local 100'

Collector 200'

Minimum Stopping Sight Distance (in feet)

Collector 250'

CUL-DE-SACS

Maximum Length

Maximum desirable length of roads with cul-de-sacs is 1000 feet. Thru roads are the most desirable.

Minimum R.O.W. Diameter at Cul-de-sacs

Local 86'

Minimum Base Course Diameter

Local 42'

Minimum Pavement Diameter

Local 40'

SECTION 4. IMPROVEMENT OF EXISTING ROADS

- A. Reconstruction.** Improvement work on existing town roads in which the proposed shift in centerline meets the definition for reconstruction shall be designed and built to the standards for new roads given in Section 3 of this Ordinance. Plans meeting all the requirements of Section 8 of the Ordinance must be approved by the Town Board prior to the start of work.
- B. Resurfacing.** Improvement work on existing town roads in which the centerline does not shift laterally at all or down or shift more than six (6) up shall be termed resurfacing. This type of project shall conform to WisDots Administrative Rule Trans 204 (Existing Town Road Improvement Standards). Only the lane width and cross slope provisions of the Typical Section shall apply. In those cases where the existing surface is disturbed as part of the work, the cross slope shall be reconstructed to .020. Although the town may call for improvements in addition to a new riding surface, the specified improvements do not have to meet the criteria of Section 3 for geometry, except for lane width and cross slope.

SECTION 5. HIGHWAY CONSTRUCTION

Base course gravel shall meet the applicable standards of Wisconsin Department of Transportation.

Clearing and Grubbing:

All trees, stumps and brush shall be cleared from the entire R.O.W. No stumps, trees, brush or large rocks shall be disposed of within the R.O.W.

All marsh, swamp, muck and peat material shall be removed from under the area of the roadway to insure a stable foundation for the roadway fill. All excavated organic material shall be disposed of either by placing a six (6) inch maximum depth layer on the side slope of the cut or fill sections or disposed off of the R.O.W.

Roadway Fill

Roadway fill shall be free of large rocks, muck, peat or other organic material. The fill material shall be placed in lifts to insure maximum compaction and prevent differential settlement.

Base Course

Gravel for the base course shall be a compacted depth of eight (8) inches. The gravel base course shall be placed to a minimum width of thirty-two (32) feet.

Surface Course

The surface course must consist of bituminous concrete composition suitable for anticipated traffic loads. The minimum amount of bituminous concrete necessary for acceptance must be placed to a compacted depth of three (3) inches laid in two (2) courses. The first course of bituminous concrete shall be placed to a compacted depth of 1.5 inches. The top (finish course) must be compacted to a depth of one (1.5) inch. The minimum pavement width shall be in accordance with the Pine Lake Typical Section.

Bituminous pavement shall not be constructed between October 15th and May 15th without prior approval of the Town Board or their engineering representative.

Each phase of road construction (rough grading, gravel base course) must be approved by the Town Board or their engineering representative prior to commencing the next phase of construction.

Roadway Drainage

The ditching of the roadway in accordance with the Pine Lake Typical Section must be complete and have proper elevation to provide for adequate drainage. Any culverts necessary for drainage shall be installed at the proper elevation and location. The minimum length of any culvert installed in a roadbed shall be at least two (2) 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. In no case shall the culvert be less than 18 inches in diameter.

SECTION 6. BRIDGES AND CULVERTS

All bridges and culverts shall meet the minimum requirements of Wisconsin state law. The necessary hydraulic and structural design calculation shall be certified by a Wisconsin registered professional engineer and made available to the Town upon request. The design engineer must certify that all necessary Department of Natural Resources and Corp of Engineers permits have been secured. Copies of these permits shall be furnished to the Town.

SECTION 7. AUTHORITY FOR HIGHER STANDARDS

The road design standards in Section 3 as stated above are intended to be minimum design standards. The Town 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.

SECTION 8. APPLICATION TO DONATE A PRIVATE HIGHWAY TO THE TOWN

Any person may apply to the Town Board to donate a proposed private road to the town to be used as a town public highway. The person must give a description of the proposed highway including the proposed location, a plan view and a typical section of the proposed road.

Plan View

1. Location of the centerline of the proposed road relative to the right-of-way.
2. Size, type and location of drainage structures.
3. Centerline length.
4. Areas of marsh, swamp or peat.

Profile View

1. Existing ground profile on centerline.
2. Roadway centerline profile.
3. Proposed grades and vertical curve.
4. Elevation of drainage structures.
5. Depth of marsh, swamp or peat.

The highway plan must be stamped by a Wisconsin registered engineer certifying compliance with the requirements of this Ordinance.

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 signed by the Town Board.

SECTION 9. FINAL INSPECTION, ACCEPTANCE BY TOWN BOARD, AND WARRANTY

Upon completion of the proposed highway, the Town Board will proceed to make final inspection, accepting or rejecting the highway as the case may 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 necessary to convey free and clear title to the Town of Pine Lake for the highway.

The subdivider must warranty the entire highway for a period of twenty-four (24) months from the date of acceptance by the Town.

SECTION 10. EFFECTIVE DATE

This Ordinance shall take effect and be in force from and after the day after adoption and posting/publication as required by law.

Adopted this 15th day of March, 2006.

James J. Berard
James Berard, Chairman

Timothy K. Oestreich
Timothy Oestreich, Supervisor

Brian Gehrig
Brian Gehrig, Supervisor

Jim Flory
Jim Flory, Supervisor

Richard Hunter
Richard Hunter, Supervisor

ATTEST:

Cindy Skinner
Cindy Skinner, Clerk