

TOWN OF HAWTHORNE, DOUGLAS COUNTY, WISCONSIN

An Ordinance establishing road specifications.

The Town Board of the Town of Hawthorne on recommendation of its Planning Commission. DO HEREBY ORDAIN AS FOLLOWS:

Section 1. ROADS

1. The Town road system shall be designed to meet the following objectives to permit the safe, efficient, and orderly movement of traffic; to meet the needs of the present and future population with a simple and logical pattern; to respect natural features and topography and to present an attractive appearance
2. In the course of a subdivision review ,the Planning Commission may designate roads as arterial collector or local roads. This decision shall be based upon County or Town plans for road networks. The Planning Commission may require any road to be constructed to the boundary of the subdivision .Other requirements may consist of special setbacks, screening and other buffers along roads and may limit access along such roads. The Planning Commission shall require proof that the sub divider has given written notice of the proposed locations of the roads to owners of all adjoining lands.
3. The number of intersection along arterial roads shall be held to a minimum. Wherever practicable the distance between such intersections shall not be less than 1000 feet.
4. Road jogs with center line off sets of less than 150 feet shall be avoided.
5. Not more than two roads shall intersect at one point.
6. Any standards not described here will follow State and County laws as a minimum.
7. Roads shall be designed and constructed in accordance with the following minimum standards:
 - a. 66' minimum right-of-way width; 33' from road center
 - b. 26' minimum road width before gravel or base course;
 - c. 24' road width after base course;
 - d. 20' surface excluding shoulders;

- e. 12" sub base of sand, measured after being compacted;
- f. 6" base of crushed limestone or 6" base of Wisconsin Class 5 gravel, measured after being compacted;
- g. Decomposable materials shall not be used for construction;
- h. The intersection angle of a driveway to a road, and a road to a road, should not be less than 75 degrees;
- i. The Planning Commission may require vision clearances;
- j. Roads at the perimeter of the subdivisions shall extend to the subdivision boundary. Narrow strips of lands shall not be permitted unless conditions under which the adjacent parcel can be connected to the road are established:
- k. A dead end road shall not exceed 1000 feet in length. The Planning Commission may require that a provision be made for the extension of the dead-in-road to the boundary of the subdivision. This will be in addition to the requirements that arterial and collector roads be built to the boundary of the subdivision;
- l. A dead-end road serving three or more lots shall have a cul-de-sac turn-around with a minimum right-of-way radius of 80'. The traveled way within the cul-de-sac shall have a minimum radius of 49'. Appropriate arrangements shall be made for those parts of a temporary turn-around outside of a road right-of-way to revert to the abutting lot owners at such time as the road shall be extended. Where cul-de-sacs are provided the right-of-way line connecting the road right-of-way with the 80' cul-de-sac bulb radius shall be 80 feet in radius;
- m. The planning location and designations of roads in an area shall not allow the continuation of traffic from residential developments directly into commercial or industrial developments or vice versa;
- n. A road serving two or more lots must be designed and constructed according to the above standards. A road serving three or more lots must be dedicated to the town as well as being designed and built to the above standards.

Section 2. ROAD NAMES

1. The Town Board must approve the naming and Douglas County Zoning the numbering of roads.
2. Where a road maintains the same general direction except for curvilinear changes for short distances the same name shall be used for the entire length of the road.

3. A road which is not presently a through road due to intervening land over which a road extension is planned shall use the same name for existing and planned sections.
4. The name of the projection of a road shall use the same prefix as the road even if the projection terminates in a cul-de-sac.

Section 3. PAVEMENT

1. All roads being paved must meet Wisconsin DOT Superpave design Mix Type E-1.
2. Roads shall have asphalt paving thickness of 3".
3. Pavement to be installed at two 1/2" lifts, second lift to be installed within one year or after the first full freeze thaw cycle.

Section 4. ROAD CROWN

1. The center of the road on paved surfaces should be 2 1/2" higher than the shoulder;
2. On gravel roads the crown shall be 5" to 6" higher than the shoulder;
3. Steep roads shall require a higher crown as determined by the Town Board due to water running down hill.

Section 5. SHOULDERS

1. Shoulders shall extend 2' beyond pavement or gravel;
2. Shoulders shall be excavated to the same depth as roads and use the same sub base as roads.
3. Gravel or crushed rock that drains well shall be used.
4. There shall be shoulder slopes of a 3:1 ratio on fills to 3 feet; there shall be a 2:1 maximum below the upper 3 feet
5. Back slopes of a 3:1 ratio or flatter shall be preferred there shall be a 2:1 maximum back slope ratio.

Section 6. DITCHES

1. The ditch should be at least one foot below the bottom of the gravel base;
2. Use a smooth transition to the ditch;
3. Side slopes of 4:1 are desirable while the maximum slope should be 2:1;
4. Ditches with 1% gradient are desirable (1/2% minimum) for proper water flow;
5. Use rubble, riprap or fabric to slow water flow on steep slopes.

Section 7. ROADWAY CULVERTS

1. A culvert must be strong enough to support the fill material above it and the traffic that moves over it and must meet WISDOT minimum specifications.
2. Culverts should be covered with at least 12 inches of soil from the top of the pipe to the bottom of the sub grade.
3. A culvert must have sufficient hydraulic capacity to carry away a predetermined quantity of water in a given time;
4. For roadway cross culverts the minimum recommended size is 18 inches;
5. Culvert should slope enough so water will flow at about 2 1/2 feet per second with a minimum drop of 6 inches across the road;
6. Place culverts so they match existing contours or in the existing channel, if possible;
7. Culverts should be installed so as to not create an erosion problem, see Section 6:28 of the State of Wisconsin DOT standard specifications of road and bridge construction.

Section 8. DRIVEWAY, LAND ACCESS AND CULVERT INSTALLATION ONTOWN ROAD RIGHT-OF-WAY

Statue 86.05 provides that “Whenever it is necessary, in making any highway improvement to cut or fill or otherwise grade the highway in front of any entrance to abutting premises, a suitable entrance to the premises shall be constructed as a part of the improvements; and if the premises are divided by the highway, then one such entrance shall be constructed on each side of the highway. *Thereafter each entrance shall be maintained by the owner of the premises.* During the time the highway is under construction, the state, county, city, village or town shall not be responsible for any damage that may be sustained through the absence of an entrance to any such premises.”

Statue 86.07 (2) provides that “No person shall make any excavation or fill or install any culvert or make any other alteration in any highway or in any manner disturb any highway or bridge without a permit therefore from the highway authority maintaining the highway. Such permit shall contain the statement and be subject to the condition that the work shall be constructed subject to such rules and regulations as may be prescribed by said authority and performed and completed to its satisfaction.”

These requirements apply to new building construction or alteration in existing access roads or driveways. The requirements include residential, commercial and industrial buildings.

1. Land access and driveway construction or alterations requires a permit issued by the Town.
2. Land access and driveways must:
 - a. Have a minimum side to side width clearance of 20 feet.
 - b. Have a minimum road base width of 14 feet.

- c. Have a minimum driving surface of 12 feet.
 - d. Have a minimum height clearance of 15 feet.
 - e. Have a slope no greater than 1/2 unless documentations obtained stating that the slope will not affect public safety in providing emergency services.
 - f. Have the first 20 feet from the edge of the highway be near level, but slightly lower than the highway to allow for water drainage.
 - g. Have a minimum of 6 inches of crushed rock.
 - h. Intersect with town roads at right angles, except inside cul-de-sacs.
 - i. The sight distance must be acceptable to Town.
 - j. Be at least 100 feet from any intersection.
 - k. Be placed no closer than 15 feet from the plot line, as measured from the plot line to the nearest edge of the shoulder or the ditch, whichever is nearest. Exception is shared driveways.
 - l. Driveways must be cut in and tracking pads installed prior to starting construction on site..
3. Contact must be made with local fire departments for determining turning radius and clearances for emergency vehicles. Prior to occupancy the driveway must be finished with either road gravel, stone, or asphalt.
 4. Access road and driveways that are over 300 feet in length that end in a dead end, must have an area sufficient for a turnaround of a tandem axle truck.
 5. All land access, or an access road which connect a driveway to a public road, must also adhere to these rules.
Culverts in road right-of-way must:
 - a. Have a minimum diameter of 15 inches.
 - b. Be installed at the same grade as preexisting.
 - c. Be adequate for drainage.
 - d. Be able to carry a weight load of at least 25 tons.
 - e. Have a minimum length of 30 feet.
 - f. Culverts must be 16 gauge up to 24-inch diameter culverts must be 14 gauge from 25 inches to 36 inches in diameter.
 - g. Culverts must be constructed of new material.

Section 9 . This Ordinance shall take effect upon passage.