

CHAPTER 12 – CONSTRUCTION AND RECONSTRUCTION OF ROADWAYS AND BRIDGES

12.1 Purpose

The purpose of this ordinance is to establish Mills County's policy for the construction of roads, reconstruction of roads, construction of bridges, reconstruction of bridges and other roadway and drainage features associated with road and bridge construction.

12.2 Level of Service

The level of service shall be based on traffic counts, pavement type, roadway geometrics and other data used in accepted engineering design as established by the County Engineer, Iowa Department of Transportation and the Federal Highway Administration.

12.3 Design Criteria

In implementation, this policy shall set the minimum design standards that Mills County will follow in the construction or reconstruction of roads and bridges. These criteria shall be based on accepted engineering practices and standards established by the Iowa Department of Transportation and the Federal Highway Administration.

The County Engineer shall assure the minimum design standards established herein are adhered to in a uniform manner unless, in his or her professional judgment, a deviation from standards is warranted. Minimum design standards are not subject to discretionary enforcement. Any deviations must be documented as unreasonable and or impossible to implement by the County Engineer and/or the County Board of Supervisors.

12.3.1 Paved Routes

a. New Pavement

- (1) New pavement shall be constructed with a 24-foot-wide pavement and a minimum width of 2-foot granular shoulders. Intersections with non-paved roads shall have pavement extended back onto the intersecting road 50 feet beyond the end of the intersection radius.
- (2) Paved shoulders and edge line rumble stripes shall be constructed if crash data warrants based on accepted Highway Safety Improvement Program and Traffic Safety Improvement Program cost/benefit analysis and/or any Federal Program utilized. Paved shoulders will also be given consideration along routes that have been identified in the Mills County comprehensive recreational trail master plan.
- (3) Concrete rumble strips shall be installed on all approach stop situations.
- (4) The decision to specify Portland Cement Concrete or Hot Mix Asphalt pavement will be made at the concept design phase provided clear zone and shoulder widths can be maintained by design requirements.

b. Reconstruction of Pavement

- (1) Paved roads shall be reconstructed with a 24 feet wide pavement or to the previous pavement width, whichever is greater with granular shoulders.
- (2) Concrete rumble strips shall be installed on all approach stop situations.
- (3) The decision of pavement type, Portland Cement Concrete or Hot Mix Asphalt, will be made at the concept design phase provided clear zone and shoulder widths can be maintained by design requirements.

12.3.1.1 Unpaved Roads

a. Gravel Roads

- (1) New construction of a gravel road shall have a 28-foot finished top, including shoulders.
- (2) Reconstruction of a gravel road shall be to the previous width prior to reconstruction.

b. Level B & C Road Classifications

Level B and C classification roads will be built to the minimums as outlined by Iowa Code §309.57.

c. Seal Coat Surfaced Roads

- (1) New Construction. Presently, Mills County does not allow construction of new seal coat surfacing.
- (2) Reconstruction of seal coat surfacing shall include rebuilding of the base with a minimum of 1,000 tons of aggregate per mile and a base stabilizing treatment consisting of a bituminous product, portland cement, or fly ash. A double seal of the surfacing will complete the final process. The finished surface will be 24 feet wide with a minimum of 2-foot granular shoulders.

12.3.2 Bridges & Drainage Structures

a. Paved Routes

- (1) Bridges on paved routes shall be built with a minimum width of 30 feet. Wider structures will be installed when there are issues relating to oversized vehicles, pedestrian facilities, biking usage or other issues where the additional width is felt to be warranted.
- (2) Culverts under paved roads shall be concrete.
- (3) Pipe culverts larger than 54 inches in diameter may be substituted with reinforced box culverts.
- (4) Design for drainage structures will be governed by accepted hydraulic design standards. Input from Iowa Department of Natural Resources (IDNR), Corps of Engineers, Iowa Department of Transportation (DOT), Natural Resources Conservation Service (NRCS), or United States Geologic Survey (USGS) may impact the size and type of the structure to be placed.

(5) Water and livestock will use separate structures whenever possible.

b. Unpaved Routes

- (1) Bridges will normally be a minimum of 24 feet on gravel roads. Numbered routes, any road on the farm to market or federal aid system, or the scenic byway system shall be a minimum width of 30 feet. Dead end roads may be narrower at the discretion of the County Engineer
- (2) Culverts may be metal or concrete. Pipe culverts larger than 54 inches in diameter may be substituted with reinforced box culverts.
- (3) Design for drainage structures will be governed by accepted hydraulic design standards. Input from IDNR, Corps of Engineers, Iowa DOT, NRCS, or USGS may impact the size and type of the structure to be placed.
- (4) Water and livestock will use separate structures whenever possible.

c. Class B & C Roads

Level B and C classification roads will be built to the minimums as outlined by Iowa Code.

d. Entrance Bridges

Any and all bridges/drainage structures that are fully or partially in the road right-of-way that serve as entrances to private property from the public roadway shall be considered the jurisdiction and responsibility of the County. If a structure does not sit fully or partially in the road right-of-way it will be considered a private structure and not under the jurisdiction of the county.

12.4 Repealer

All ordinances and resolutions, or parts thereof, in conflict herewith are hereby repealed.

12.5 Severability Clause

If any section, provision, or part of this ordinance shall be adjudged invalid or unconstitutional, such adjudication shall not affect the validity of the ordinance as a whole or any section, provision, or part thereof not adjudged invalid or unconstitutional.