

TITLE 12  
PUBLIC WORKS IMPROVEMENTS

SUBJECT	CHAPTER
COMMERCIAL FRONTAGE ROADS	1
RURAL STREET STANDARDS	2

## TITLE 12 PUBLIC WORKS IMPROVEMENTS

## CHAPTER 1

## COMMERCIAL FRONTAGE ROADS

SECTIONS:

- 12-1-1 Intent
- 12-1-2 Developer's Responsibilities
- 12-1-3 Design Standards
- 12-1-4 Final Plans

12-1-1 Intent. The purpose of a commercial frontage road is to provide access to real estate located along and adjacent to existing and proposed arterial streets and limited access highways. All proposed commercial frontage roads shall be aligned parallel and adjacent to the existing right-of-way of either the arterial street or limited access highway.

All proposed commercial frontage roads shall be initially reviewed by the Planning and Zoning Commission. The Planning and Zoning Commission shall make a recommendation to the City Council on the proposed lay out. The City Council will make the determination of whether the proposed frontage road will be accepted as a public street.

All commercial frontage roads providing access to laid out lots of record shall be constructed in accordance with the specifications of the City Engineering Department. Upon completion of the construction and inspection approval by the City Engineering Department, the frontage road shall be dedicated to the City as a laid out public street.

12-1-2 Developer's Responsibilities. The developer shall file a duly completed and executed bond, escrow agreement, or other collateral, the amount to be determined by the City Engineering Department, certified by the City's Corporate Council as valid and enforceable by the City, with the Finance Director at the time of filing final construction plans with the Engineering Department. This performance guarantee shall be retained by the City Clerk until the improvements have been satisfactorily completed in accordance with the specification of the City Engineering Department.

Prior to proceeding with the construction, the developer must show evidence of contractors and public liability insurance for both personal injury and property damage (the amount of such insurance shall be determined by the City Engineering Department), by filing a current certificate of such insurance with the City Clerk. A maintenance bond guaranteeing workmanship and materials for a period of two (2) years from the date of acceptance is required.

12-1-3 Design Standards. All designs shall be based on accepted engineering practices and sound planning principles. The developer shall provide a complete set of reproducible drawings to the City Engineering Department. The design of all proposed frontage roads submitted for approval shall be prepared by a Professional Engineer registered in the State of Iowa. All costs associated with required construction inspections performed by the City Engineering Department shall be paid by the developer. In the event that the workload of the City Engineering Department does not permit timely construction inspections, the inspection may be completed by a qualified independent inspector approved by the City, however, the final inspection and acceptance will be made by the City Engineer.

12-1-4 Final Plans. The following criteria shall be incorporated in the final plans:

- (A) The minimum right-of-way for frontage roads shall be fifty feet (50') (15.25 meters), as designated by the Iowa Department of Transportation.
- (B) The paved width shall be a minimum of twenty-four feet (24') (7.3 meters), with a surface consisting of seven inches (7") (17.8 centimeters) of concrete, as specified by Iowa DOT standards relating to C-3 mix.
- (C) The shoulder adjacent to an existing arterial or limited access highway shall be stabilized for a width of ten feet (10') (3 meters) from the pavement according to Iowa DOT specifications - Class A three-fourths inch (3/4") stone six inches (6") (15.25 centimeters) thick. Normally underground power and/or telephone utilities will be installed within the right-of-way on this side of the pavement, on or established rear/side lot line easements.
- (D) The paved portion of the frontage road adjacent to commercial oriented establishments shall be curbed. Normally water lines shall also be installed within the right-of-way on this side of the pavement.

- (E) The maximum number of curb cuts per commercial lot fronting on a commercial frontage road is two (2). The maximum width of the cut at the property line shall be twenty-five feet (25') (7.6 meters), the maximum width of the cut at the paved frontage road shall be determined by the City Engineer.
- (F) Based on existing and projected development of the general vicinity, sidewalk construction or a surety bond guaranteeing installation 'at a future specified date may be required at the discretion of the City Council.

As applicable, the following criteria may be incorporated in the final plans and shall be installed by the developer:

- (A) The final plan should indicate the location of all sanitary sewer installations within the right-of-way.
- (B) The final plan should indicate any street lighting fixtures which may be required.
- (C) Clearing, grading, replacement of top soil, final seeding, and landscaping will be the responsibility of the developer.
- (D) The final plan should indicate any required storm sewers/ culverts for the purpose of handling surface runoff.
- (E) A turn around radius shall be provided on dead end frontage roads.

## TITLE 12 PUBLIC WORKS IMPROVEMENTS

## CHAPTER 2

## RURAL STREET STANDARDS

SECTIONS:

- 12-2-1 Intent
- 12-2-2 Area of Impact
- 12-2-3 Design Standards

12-2-1 Intent. The purpose of this amendment to the City Code is to establish reasonable rural residential street standards consistent with safe, convenient vehicle and pedestrian circulation. Consideration of appropriate balance among initial construction costs, amortization costs, operating and maintenance costs, and replacement costs were considered in formulating these rural residential street design standards. The adoption of a consistent standard based on rural residential traffic load, subgrade soil, surface drainage and climatic conditions in this area will contribute toward promoting the quality of our residential neighborhoods. Commercial and industrial subdivision streets will be reviewed on a case-by-case basis by the City Engineer.

12-2-2 Area of Impact. The design standards are applicable to new residential streets for the Muscatine Island area, specifically for that portion within the corporate limits west of Highway 61 and south of Sampson Street and east of Highway 61 and south of Maple Grove Road as extended from its intersection at Latham Street toward Highway 61; and for those rural areas outside the corporate limits but within two (2) miles thereof, which are subject to subdivision review by the City of Muscatine as provided by the Code of Iowa, Section 409.14.

12-2-3 Design Standards. For the appropriate locations as specified above, the following minimum design standards shall apply as follows:

- (A) The right-of-way width shall be sixty-six feet (66'), except that at the end of a cul-de-sac diameter shall be one hundred feet (100').
- (B) Two (2) twelve foot (12') travel lanes are to be provided to serve

the residential area. This twenty-four foot (24') travel surface width shall have a four foot (4') stabilized shoulder on each side. The hard surfaced turning radius at the end of a cul-de-sac shall consist of forty feet (40') to the outside of the travel surface.

- (C) Drainage shall be provided for by grader ditching parallel to each roadway shoulder. Driveway culverts shall be provided and maintained by the property owner, the diameter of which shall be determined by the City Engineer.
- (D) The surface material for travel lanes shall have an equivalent to a structural number (SN) of 4.0. The thickness and type of material for the travel lanes shall be reviewed by the City Engineer for a determination of the SN. This method allows for the substitution of material, such as asphalt, flyash mixtures, and concrete, along with a type of roadway base, to achieve a strength and service life acceptable for rural residential area. NOTE: SN = 4.0, equivalent strength is equal to eight inches (8") concrete.
- (E) In the rural residential area defined above, sidewalks shall be installed within the right-of-way on both sides of streets and cul-de-sacs. The subdivider shall install sidewalks according to the following specifications, or as may otherwise be required by the city.
  - 1. An excavation shall be made a full five feet (5') in width to a depth of four inches (4") below the finished grade of the walk; the subgrade shall be thoroughly compacted by a mechanical means or hand tamping, and in such excavation shall be placed a concrete mix reaching four thousand (4,000) psi compressive strength in twenty-eight (28) days according to ASTM-39. Concrete sidewalks shall be a minimum of four feet (4') wide and four inches (4") thick.
- (F) In the rural residential area defined above, a pipe storm sewer system is not required.