

## Chapter 16.142

### Street Design Standards

#### Sections:

- 16.142.010 Purpose**
- 16.142.020 Authority**
- 16.142.030 Public Roadway Functional Classifications**
- 16.142.040 General Street Design Standards**

#### 16.142.010 Purpose

The purpose and intent of this chapter is to establish minimum standards for public and private streets constructed or improved in the City of Ripon. This chapter sets forth the minimum standards for improvements within the right-of-way, including but not limited to street material, curb and gutter, sidewalk improvements, landscaping, acoustic walls, and right-of-way dedication for the development or improvement of property abutting City streets. (Ord. 824 §1, 2015)

#### 16.142.020 Authority

All design and construction of public and private streets addressed by this chapter will be in accordance with the City of Ripon's Standard Specifications and Standard Details, the City of Ripon's Master Circulation System, the City of Ripon's General Plan Circulation and Transportation Element and as defined in this chapter. The City Engineer and/or designee is responsible for maintaining appropriate policies and procedures for the implementation of the City's Master Circulation System. Unless specified elsewhere, the City Engineer and/or designee is responsible for administering and interpreting the provisions of this chapter. (Ord. 824 §1, 2015)

#### 16.142.030 Public Roadway Functional

#### Classifications

A. Purpose. The purpose of a system of functional classifications and street types is to facilitate the safe and efficient movement of people and goods while preserving residential areas and maintaining the economic vitality of commercial and industrial areas. The system classifies transportation facilities according to an appropriately integrated network, emphasizing the movement of all modes of transportation through a network of streets in a safe, logical and efficient manner. The classification system organizes streets according to the land-use designations they serve (or are intended to serve) and is based on a number of features including existing and projected traffic volumes, expected growth based on land-use patterns, the nature of vehicle traffic, and present and future connectivity and circulation needs. The system is also intended to link land use development activities with transportation facilities for the optimum utilization of both. Existing and proposed expressways, arterials and collectors are shown on the City of Ripon's adopted Master Circulation System.

B. Functional Classifications and Street Types. Subsections 1-7 below provide a broad general description of the purpose and function of street types. Required design specifications for each street type are set forth in Table 16.142.040 and in later sections of this chapter for each street type.

1. Expressway - These streets are designed as high capacity, high-speed corridors with the primary purpose of improving local and regional mobility. Expressways should meet the following criteria:

- a. Multi-lane facilities including center medians.
- b. Provide limited access from abutting properties and intersections that are generally located no less than ½ mile intervals.
- c. Right-in/right-out movements may be more frequently allowed but may also involve acceleration and deceleration lanes.
- d. Have a minimum design speed of 45 mph.
- e. Turn lanes included at intersections.

- f. Preference for traffic signals at major intersections, and may include roundabouts where appropriate.
2. Major Arterial - These streets are designed primarily to carry a heavier traffic pattern providing continuity throughout the contiguous urban area. Access control is typically maintained towards limiting access to intersections with other roads, or right-in/right-out movements.
3. Minor Arterial - These streets are designed to collect and distribute traffic from major arterials to streets of lower classifications and may allow traffic to access destinations directly. Minor arterials serve through traffic and provide direct access to large commercial, industrial, office, and some residential areas.
4. Collector - These streets are primarily designed to provide land access and circulation within and between residential neighborhoods and commercial and industrial areas. Collector streets are meant to convey traffic from local streets to minor and major arterials, as well as expressways and freeway. Even though this street may carry some through traffic, its primary function is to feed traffic to the arterial streets and to provide local access.
5. Local - These streets provide direct access to adjoining properties within a neighborhood. These streets connect local streets within a neighborhood to Collector streets and to the Arterial street network. Through trips are discouraged and parking is allowed.
6. Cul-de-Sacs - These streets are a maximum of 500 feet long and parking is allowed.
7. Alleys - These secondary accesses to the back sides of lots allow the streets at the fronts of properties to remain unencumbered with driveways. Alleys are an alternative to frontage access.

**Table 16-142 - Street Design Table**

| Street Type                   | Minimum ROW Width (ft) | Design Speed (mph) | Design Volume (ADT) | Minimum Full Access Intersection Spacing (ft) | On-Street Parking Allowed | Side-walk   | Standard Detail |
|-------------------------------|------------------------|--------------------|---------------------|---|---------------------------|-------------|-----------------|
| Expressway                    | 140                    | 45                 | 44,400              | 2,640   | No                        | 6' / 12'    | ST-9            |
| Major Arterial                | 140                    | 40                 | 44,400              | 800   | No                        | 6' / 12'    | ST-9            |
| Minor Arterial – 4 Lane       | 102                    | 35                 | 27,000              | 600   | No                        | 6' / 12'    | ST-10           |
| Minor Arterial – 2 Lane       | 102                    | 35                 | 13,500              | 600   | Yes                       | 6' / 12'    | ST-10           |
| Collector                     | 82                     | 30                 | 10,500              | 275   | Yes                       | 6' / 6'     | ST-10a          |
| Local – (Low Density 2-5)     | 74                     | 25                 | <1000               | 125   | Yes                       | 6' / 6'     | ST-11           |
| Local – (Medium Density 5-8)  | 62                     | 25                 | <1000               | 125   | Yes                       | 6' / 6'     | ST-34           |
| Local – (Medium Density 5-11) | 54                     | 25                 | <1000               | 125   | Yes – 1 Side              | 6' / 6'     | ST-35           |
| Local – (Medium Density 8-11) | 48                     | 25                 | <1000               | 125   | Yes – 1 Side              | 6' - 1 side | ST-36           |
| Cul-de-Sac                    | 60                     | 25                 | 250                 | 125   | Yes                       | 6' / 6'     | ST-11           |
| Alley w/ Parking One Side     | 28                     | N/A                | N/A                 | N/A   | Yes - 1 Side              | N/A         | ST-37           |
| Alley – No Parking            | 20                     | N/A                | N/A                 | N/A   | No                        | N/A         | ST-38           |

**16.142.040 General Street Design Standards**

A. All streets shall be constructed in accordance with City of Ripon's Standard Specifications and Standard Details and are to include Concrete Pavers pursuant to City of Ripon Standard Detail ST-8A unless approved otherwise by the City Engineer.

B. Acoustic/Sound Walls and /or continuous residential fencing are prohibited along street rights-of-ways unless approved otherwise by the City Engineer and/or Planning Director. Use of walls along street corridors will only be considered in very limited and/or extreme circumstances.

C. Minor Arterials and Collector Streets through residential neighborhoods shall be designed to the extent possible using curvilinear designs to calm traffic and enhance aesthetic appeal within a residential neighborhood.

D. When residential properties front a 2-lane minor arterial, the residential units shall be designed to discourage the need for backing out of driveways onto the roadway. This may be accomplished by use of circular driveways, "hammer head" driveways, alley loaded residential units, or use of frontage roads.

E. When residential properties front or are adjacent to an expressway, major arterial or a 4-lane minor arterial, the residential units shall be designed so that no direct vehicular access is allowed onto those roadways from a residential unit. This may be accomplished by use of a frontage road or a landscaped buffer. All residential units adjacent to those roadways must include either a thirty four (34) foot wide minimum landscaped buffer or fifty (50) foot wide minimum frontage road.

F. Expressways, Major and Minor Arterials and Collector Streets located adjacent to residential areas should include design elements to buffer sight and sound impacts on adjoining properties including, but not limited to, street trees, open spaces, and grade differentials.

G. Local residential streets shall be designed with aesthetics of primary concern, subject only to considerations of function and public safety.

H. Sidewalks - All sidewalks shall be

constructed in accordance with the City of Ripon's Standard Specifications and Standard Details unless otherwise approved by the City Engineer.

I. Private streets shall be constructed in accordance with the City of Ripon's typical standard details as outlined in the City of Ripon's Standard Specifications and Standard Details, unless otherwise approved by the City Engineer.