Section 15 - Circulation

A. Planning Standards

1. Street/Road Standards: Plans for streets/roads shall be prepared in accordance with the Jefferson County Transportation Design and Construction Manual and shall be approved by Planning and Zoning prior to plat recordation. (am. 7-12-05; am. 5-20-08; am.11-24-15)

   a. Rights-of-Way for public streets/roads, easements for private streets/roads, and emergency access easements shall be granted, conveyed and transferred in accordance with the following: (reloc. 7-12-05; am. 7-17-18)

      (1) Public Street/Road System:

         (a) The fee simple property owner shall be required to dedicate rights-of-way for the following: (am. 7-12-05; am. 7-17-18)

            (a-1) Streets/roads shown on the current Major Thoroughfare Plan within or adjoining the subdivision. (reloc. 7-12-05)

            (a-2) Proposed public streets/roads within the subdivision. (reloc. 7-12-05)

            (a-3) Proposed public streets/roads that connect the subdivision to existing County, state or city maintained streets/roads. (reloc. 7-12-05)

            (a-4) Existing public streets/roads, not previously dedicated, that are within or adjoining the subdivision. The dedication requirement for adjoining streets shall be for the adjoining one-half of the street, and for any portion of the opposite one-half of the street which is under the ownership of the developer. (reloc. 7-12-05; am. 7-17-18)

            (a-5) Turn lanes, speed change lanes and tapers along adjoining property or properties required for construction and safe operation of intersections and new street/road facilities for the proposed subdivision. (reloc. 7-12-05)

         (b) Rights of way for public streets/roads within the boundaries of the subdivision shall be dedicated to Jefferson County in accordance with the Dedication Certificate provisions in the Final Plat Section of this regulation. (orig. 7-17-18)

         (c) Rights of way for public streets/roads exterior to the subdivision boundaries shall be conveyed to the County of Jefferson, in fee simple by general warranty deed, or another type of deed in a form acceptable to the Office of the County Attorney. Unless otherwise approved by the Office of the County Attorney, rights of way shall be free of all encumbrances, including, without limitation, liens, easements, and deeds of trust. (orig. 7-17-18)

      (2) Private Street/Road Systems:

         (a) The provision of access by private streets/roads shall only be permitted if the following applies: (reloc. 7-12-05)

            (a-1) The developer has taken all actions necessary to ensure perpetual access for the benefit of each lot, tract or parcel, and to ensure that the private street/road system within the subdivision is maintained. (reloc. 7-12-05; am. 5-20-08)

            (a-2) The developer has acquired sufficient rights, title, and interest in adjoining property to construct an exterior street/road system to connect the subdivision to public streets/roads to ensure perpetual access to each lot, tract or parcel, and establish permanent maintenance of the private streets/roads. (reloc. 7-12-05)

            (a-3) Access to adjoining properties is not necessary unless required pursuant to A.1.c.(5). (am. 7-12-05; am. 7-17-18)

         (b) Each private street/road within the subdivision boundary shall be designated as a "Utility, Drainage and Emergency Access Easement" on the plat. This Utility, Drainage and
Emergency Access Easements will be dedicated to Jefferson County in accordance with the Dedication Certificate provisions in the Final Plat Section of this regulation. (orig. 7-17-18)

(3) Exterior Emergency Access Easements:

(a) Emergency Access Easements shall be conveyed to Jefferson County for required exterior emergency access connections where the developer does not have the necessary rights to ensure perpetual access for the benefit of each lot, tract or parcel within the development boundary. (am. 7-17-18)

(b) Emergency Access Easements shall be conveyed to Jefferson County by easement deed in a form acceptable to the Office of the County Attorney. The following shall apply to the dedication of the Emergency Access Easements: (am. 7-17-18)

   (b-1) The easement shall be for emergency and service vehicle access, and drainage and utility purposes. (orig. 7-17-18)

   (b-2) The easement shall not obligate the County to provide maintenance services. (am. 7-17-18)

   (b-3) The easement deed shall expressly state that it conveys to the County an easement for each of the following purposes: (i) passage of service vehicles and passage of all vehicles and pedestrians during an emergency; (ii) drainage; and (iii) utilities. (am. 7-12-05; am. 7-17-18)

   (b-4) The easement shall be from the fee simple property owner or the owner of a prior easement that expressly provides that it can be assigned or conveyed to the County. (orig. 7-17-18)

(4) Public street/road right-of-way widths and private street/road easement widths shall be provided in accordance with the templates in the Transportation Design and Construction Manual. Additional rights-of-way/easements may be required at locations such as, but not limited to, roundabouts, interchanges, acceleration, deceleration, turn or climbing lanes, cut and fill slopes, sidewalks, trails, medians, traffic signs, and drainage structures, and for maintenance. (reloc. 7-12-05; am. 11-24-15; am. 7-17-18)

b. Street/Road Design

(1) Streets/roads, whether public or private, shall be designed in accordance with the current American Association of State Highway and Transportation Officials (AASHTO) Standards unless modified by the Jefferson County Transportation Design and Construction Manual. (reloc. 7-12-05; am 11-24-15)

(2) Paving of streets/roads within the proposed development and streets/roads connecting the proposed development with other County, state or city paved streets/roads shall be in accordance with the following: (reloc. 7-12-05; am. 12-5-06)

   (a) New street/roads to be maintained by the County, state or city shall be constructed to the appropriate public street/road template standard, which includes paving. (orig. 12-5-06)

   (b) Existing unpaved County maintained streets/roads shall be constructed to the appropriate public template standard (which includes paving) for a length that is equal to the development impact on the street/road system. For residential development, the development impact shall not exceed a maximum of 4% per lot. If the development impact to a street/road exceeds 80%, then paving for the entire length will be required. The impact on a street/road system will be determined using the following formulas. (reloc. 7-12-05; am. 12-5-06)

\[
\text{Development Impact (\%)} = \frac{\text{Proposed ADT}}{\text{Existing ADT} + \text{Proposed ADT}}
\]

\[
\text{Paving Requirement} = \text{Length of Unpaved Section} \times \text{Development Impact (\%)}
\]

- Length of Unpaved Section is the distance from the development access point(s) to the paved street/road. (orig. 12-5-06)
- Proposed ADT is the number of trips generated by the proposed development. (orig. 12-5-06)
• Existing ADT is the number of actual trips on the street/road. Existing ADT shall be determined using a traffic counting device located on the gravel portion of the street/road immediately adjacent to the paved section. (orig. 12-5-06)

(c) Should the County choose to accept a cash-in-lieu of construction payment for the paving requirement, the required paving contribution shall be calculated using following:

- Appropriate public street/road template width
- Minimum 5” full depth asphalt surface
- Current County cost for asphalt in place at the development location

The County shall use the cash-in-lieu of construction monies for any improvement on the street/road as deemed necessary or desirable by the County. (orig. 12-5-06)

(d) All private roads and all non-maintained roads in County right-of-way shall be paved if the sum of the existing and proposed ADT on the roads exceeds 150. The paving requirement will apply to that portion of the roads that exceeds 150 ADT (reloc. 7-12-05; am. 12-5-06)

(e) All private streets shall be paved. (orig. 7-17-18)

c. Patterns: Street/road patterns shall be planned consistent with the dedication and design requirements and the following: (reloc. 7-12-05)

(1) Street/road patterns shall induce traffic flow appropriate to the function of the streets/roads. Long, straight and other local street alignments conducive to speeds in excess of 30 M.P.H. shall be avoided. In areas where that is not possible traffic calming measures such as bump outs, neckdowns shall be incorporated at approved intervals to effectively slow down design speeds. (reloc. 7-12-05; am. 7-17-18)

(2) Cul-de-sacs may be used when meeting the following criteria:

(a) Does not exceed 1 mile in length and serves no more than 30 existing plus proposed single family residential units (including platted lots) or obtain approval from the fire protection district for alternate standards that provide acceptable fire protection and safety mitigation measures concerning access and water. (orig. 11-24-15; am. 7-17-18)

(b) Serves no more than 100 multi-family units or obtain approval from the fire protection district for alternate standards that provide acceptable fire protection and safety mitigation measures concerning access and water. (orig. 11-24-15; am. 7-17-18)

(c) Cul-De-Sac length is measured from the maximum street/roadlength of the developable lot within the proposed subdivision to the beginning of the cul-de-sac. (orig. 7-17-18)

(3) Streets/roads shall be planned and designed to minimize grading and scarring of the terrain, and not create erosion and drainage problems. (reloc. 7-12-05)
(4) Streets/roads shall be continuous and conform in alignment and grade with existing, planned or platted streets/roads with which they are to connect. (reloc. 7-12-05)

(5) Streets/roads shall extend to the subdivision boundary lines as deemed necessary by Planning and Zoning for the connection with adjacent lands. Public streets/roads so extended shall be dedicated as collector streets/roads unless a template for a local street/road is approved by Planning and Zoning. Private streets/roads may be extended to the subdivision boundary provided said private streets/roads are equivalent to public streets/roads for the connection with adjacent lands, if approved by Planning and Zoning (reloc. 7-12-05; am. 5-20-08; am. 7-17-18)

(6) Streets/roads that extend to the boundary line shall be provided with a turn-around. Temporary portions of the turn-around shall be labeled as tracts to facilitate the ultimate reversion of the same. If lots are not dependent upon the extended streets/roads for access, the right-of-way, not including a turn-around, shall be dedicated, but construction of the extended street/road will not be required. (reloc. 7-12-05)

(7) Streets/roads shall intersect one another at right angles or as nearly at right angles as topography and other limiting factors permit. (reloc. 7-12-05)

(8) Intersection spacing shall conform to the Jefferson County Transportation Design and Construction Manual. (am. 7-12-05; am. 5-20-08; am. 11-24-15; am. 7-17-18)

(9) Traffic calming physical devices, such as speed bumps and raised crosswalks shall require approval from the fire protection district and conform to current County policies and procedures. All other traffic calming devices are considered non-physical devices, such as bumpouts, pedestrian refuges and the like, are allowed subject to approval by Planning and Zoning. (orig. 11-24-15)

(10) Subdivisions shall have a street/road system that provides primary and secondary access to existing County, state or city maintained streets/roads, except that secondary access is not required for developments with access provided it meets the cul-de-sac requirements as set forth in this Section. The minimum distance between the centerlines of the primary and secondary access streets/roads shall be in accordance with the spacing provision. The provision of emergency access in-lieu of secondary access shall only be permitted if the following applies: (am. 7-12-05; am. 11-24-15)

(a) Secondary full-time access is not needed for transportation operations and maintenance and level of service to provide appropriate vehicular access and circulation control. (am. 7-12-05; am. 7-17-18)

(b) The developer has taken or agrees to take all actions necessary to ensure that an emergency access has been dedicated to the County and that an emergency access system is maintained. (reloc. 7-12-05)

(c) The developer has taken or agrees to take all actions necessary to ensure that the emergency access will be closed always, except during emergency situations, to vehicle traffic. (reloc. 7-12-05)

(d) The applicable fire protection district has approved the plans for the emergency access facilities and appurtenances thereto. (reloc. 7-12-05)

(e) Access to adjoining properties is not required pursuant to A.1.c.(5) of this Section. (am. 7-12-05; am. 7-17-18)

(f) The emergency access street/road is designated as an "Emergency Access Easement" on the plat and the developer has complied with A.1.a.(2)(b) and A.1.a.(3) of this Section for any portion of the emergency access system exterior to the subdivision. (am. 7-12-05)

d. Names: Streets/roads shall be named in accordance with the following: (reloc. 7-12-05)

(1) Plains: Names of all streets shall be in full conformance with the metropolitan grid system as shown on the Official Jefferson County Base Maps. (reloc. 7-12-05)

(2) Mountains: Names of all roads shall be sufficiently different from previously adopted road names. (reloc. 7-12-05)
e. Street/Road Improvements: Street/road improvements shall be provided for the following: (reloc. 7-12-05)

   (1) Streets/roads interior to the development. (reloc. 7-12-05)

   (2) The adjoining one-half of contiguous collector and local streets/roads including streets/roads adjoining park and school lands created by the plat. (reloc. 7-12-05; am. 7-17-18)

   (3) If existing pavement on the opposite one-half of the street/road does not match with and tie to the required pavement section on the adjoining one-half, then a pavement overlay on part of the opposite one-half shall be required. If the existing pavement cross section is higher than the approved pavement cross section, then the existing pavement on the opposite one-half shall be adjusted or reconstructed to the approved height. (reloc. 7-12-05; am. 7-17-18)

   (4) If the opposite side one-half of the street/road is not paved to current Jefferson County standards or does not exist, the developer shall be responsible for a 24-foot total pavement width plus the opposite side shoulder. If existing pavement on the opposite one-half of the street/road does not match with and tie to the required pavement section on the adjoining one-half, then a pavement overlay on part of the opposite one-half shall be required. If the existing pavement cross section is higher than the approved pavement cross section, then the existing pavement on the opposite one-half shall be adjusted or reconstructed to the approved height. (reloc. 7-12-05; reloc. 7-17-18)

   (5) Street(s)/road(s) connecting the subdivision with existing Jefferson County, state or city maintained street(s)/road(s). The pavement width of the connecting street/road shall be the same as the street(s)/road(s) within the subdivision with which they connect. Shoulders shall be provided if curb/gutter and sidewalks are not required. (reloc. 7-12-05)

   (6) ADA ramps shall be provided including the appropriate receiving ramp even if the entire construction is not adjoining the property. (orig. 7-17-18)

f. Applicants shall not be required to comply with A.1.e.(2), A.1.e.(3) and A.1.e.4 regarding adjoining street/road improvements when: (am. 7-12-05; am. 7-17-18)

   (1) The proposed ADT is less than 50 where access is proposed to an existing paved street/road. (reloc. 7-12-05)

   (2) The sum of the existing ADT plus the ADT from the proposed development will not exceed 150 where access is proposed to an existing gravel street/road. (reloc. 7-12-05)

2. Driveway Standards: Access from a street/road to 1 residential lot, tract, parcel or structure, or to 1 nonresidential lot, tract, parcel or structure shall meet or exceed the standards set forth below. Access to 2 or more residential or nonresidential lots, tracts, parcels or structures shall be provided by a street/road that conforms to the requirements of this Regulation. (am. 7-12-05; am. 5-20-08; am. 11-24-15)

   a. Driveways within the lots/tracts shall be provided from the property line to the building site without:

      (1) Creating erosion or drainage problems. (reloc. 7-12-05)

      (2) Crossing sewage disposal leaching fields. (reloc. 7-12-05)

   b. Driveway design shall facilitate all emergency vehicle movement. (reloc. 7-12-05)

   c. Access shall be provided within residential and nonresidential areas to adjoining residential and nonresidential areas respectively as required by Planning and Zoning when such provisions would reduce or limit access onto a street/road. (am. 7-12-05; am. 4-4-06; am. 5-20-08; am. 12-21-10)

3. Curb and Gutter Standards: Curb and gutters or ditches shall be provided for subdivisions in the plains areas in accordance with the Jefferson County Transportation Design and Construction Manual and the following: (reloc. 7-12-05; am. 11-24-15)

   a. 6" vertical curb and gutter (with detached sidewalk) or a 4-inch mountable curb and gutter (with attached or detached sidewalk) shall be provided along all local streets, unless otherwise approved by Planning and Zoning. (am. 7-12-05; am. 4-4-06; am. 12-21-10; am. 7-17-18)

   b. A 6-inch vertical curb and gutter shall be provided along all collector and arterial streets and along
all streets adjoining public and semipublic tracts and multifamily and nonresidential lots. (reloc. 7-12-05)

c. Ditches may be provided along streets in lieu of curb and gutters where all of the following criteria are met: (reloc. 7-12-05)
   (1) Streets are classified as local or collector (ADT less than 8,000). (reloc. 7-12-05; am. 7-17-18)
   (2) Street grades are no less than 2 percent and no greater than 4 percent. (reloc. 7-12-05)
   (3) Minimum lot frontage is 100 feet. (reloc. 7-12-05)

d. Planning and Zoning may approve roadside ditches in lieu of curb and gutter if it is determined that the curb and gutter cannot be designed to drain properly or if it will cause drainage problems in the area. (orig. 7-17-18)

4. Sidewalk Standards: Sidewalks shall be provided for developments in the Plains area in accordance with the Jefferson County Transportation Design and Construction Manual and the following: (reloc. 7-12-05; am 11-24-15; am. 7-17-18)
   a. A 5-foot wide sidewalk (with combination curb and gutter) or a 5-foot wide detached sidewalk or trail shall be provided along local streets adjoining residential developments, unless otherwise approved by Planning and Zoning. (am. 7-12-05; am. 4-4-06; am. 12-21-10; am 11-24-15; am. 7-17-18)
   b. A 5-foot attached or detached sidewalk shall be provided along all local and collector streets adjoining nonresidential and multifamily developments. (am. 7-12-05; am. 4-4-06; am. 12-21-10; am 11-24-15; am. 7-17-18)
   c. A 6-foot wide detached sidewalk shall be provided along all minor arterial and major collector streets. (orig. 11-24-15)
   d. An 8-foot wide detached sidewalk shall be provided along all principal arterial and parkway streets. (am. 7-12-05; am. 4-4-06; am. 11-24-15; am. 7-17-18)
   e. Curb ramps shall be provided at all intersections. Mid-block ramps shall be provided at all "T" intersections. Mid block pedestrian ramps should be considered where there is an adjacent pedestrian path. (reloc. 7-12-05; am. 7-17-18)
   f. Sidewalk easements shall be provided and dedicated when the sidewalk is not within a dedicated street right-of-way. (rel. 7-12-05)
   g. Adjacent bus stops shall be upgraded to comply with current RTD bus stop requirements. (orig. 7-17-18)

5. Traffic Signal Contributions:
   a. A contribution toward a future traffic signal will be required if the following conditions are met:
      (1) The development generates over 1000 average daily trips or 100 trips in a peak hour period; and (orig. 7-17-18)
      (2) The Transportation Study indicates that an intersection internal, adjacent or within 500 feet of the development will satisfy the MUTCD Peak Hour Warrant or Four Hour-Warrant within 20 years. (orig. 7-17-18)

      If the above conditions are met, then the applicant shall provide a contribution representing the proportional percentage of the site that is within 500 feet to the intersection requiring future traffic signal improvements. For illustrative purposes only, if the site is at the corner of one quadrant of the intersection the contribution shall be 25% of the traffic signal for the intersection. The contribution should be a cash-in-lieu payment, which will be returned to the applicant if conditions change or the traffic signal is no longer warranted within the original 20-year period. (orig. 7-17-18)

B. Construction Specifications

1. Street/Road and Curb/Gutter/Sidewalk Standards: Construction shall be in accordance with the approved Plans and meet the criteria of the Jefferson County Transportation Design and Construction Manual. (am. 7-12-05; am. 12-21-10; am. 11-24-15)