

DESIGN CRITERIA

A. STREETS

TABLE 1. Street Criteria

STREET CLASSIFICATION	Min. ROW Width (ft.)	Min. Street Width (ft.)^(1,9)	Grade Max/Min (%)	Design Speed (mph)^(2,9,10)	Min. Curve Radius (ft.)⁽⁸⁾	Sidewalks/ Width (ft.)
Arterial 4-Lane, Divided	100 ⁽³⁾	28 (per side)	6/1	45	1039	Both Sides/ 5 ⁽⁴⁾
Collector 3-Lane	70	40	8/1	30-40	333-762	Both Sides/ 5
Collector 2-Lane	60	28	8/1	30-35	333-510	Both Sides/ 5
Residential Collector 2-Lane	50	26 ⁽¹⁾	8/1	30-35	333-510	Both Sides/ 5
Local 2-Lane	50	28 ⁽⁵⁾	10/1	25	198	One Side/ 4
Industrial Street / Business Park	60 ⁽⁶⁾	36	6/1	25-30	198-333	None ⁽⁷⁾

- ¹ Street width measured from curb back to curb back. Additional width may be required to accommodate turn lanes as necessary.
- ² Design speed criteria for horizontal and vertical alignment shall reasonably comply with the guidelines set out in the most recent edition of the AASHTO's *A Policy on Geometric Design of Highways and Streets*.
- ³ Minimum median width = 16 feet.
- ⁴ A multi-use trail with a width of 10 feet (typ.) shall be provided in lieu of one of the required 5-foot sidewalks in those locations designated for multi-use trails by the City Parks and Recreation Department.
- ⁵ 22' where approved by City Engineer. See Section 4-2-C-2(D) (13) of the City Code.
- ⁶ Right-of-way and paving width of 70' and 40', respectively, will be required where heavy truck traffic is anticipated.
- ⁷ A pedestrian circulation plan may be required where heavy truck traffic is anticipated.
- ⁸ Based on AASHTO's *A Policy on Geometric Design of Highways and Streets, Design for Low Speed Urban Streets*.
- ⁹ Superelevation will not be allowed, unless approved by the City Engineer.
- ¹⁰ The design speed as well as the posted speed shall be determined by the City Engineer. The posted speed shall not be more than the design speed.
- ¹¹ Parking will not be permitted on arterial, collector, or industrial/business park streets. On residential streets, parking will typically be permitted on both sides of 28' wide streets and on one side of 22' wide streets.

Streets shall be constructed in accordance with these criteria and in accordance with the City Standard Details. In addition to the criteria stated above, the following shall apply:

- Valley gutters shall not cross collector or arterial streets.

- A 6' minimum greenspace between the back of curb and the sidewalk/trail is required unless otherwise specified by the City Engineer.
- Utility easements with a minimum width of 10' shall be required on both sides.
- At locations where high volumes of truck traffic are anticipated, curb returns shall be designed to accommodate WB-67 vehicles.
- Reverse curves will not be permitted. For Local Roads, the minimum distance between curves shall be 100'. For all other road classifications, a minimum distance between curves shall be 2 times "Lr" for the appropriate radius and speed from AASHTO's *A Policy on Geometric Design of Highways and Streets*, titled "Minimum Length of Superelevation Runoff, Lr", and $e_{max} = 6\%$.
- A geotechnical report that provides site-specific recommendations for the construction of public streets must be submitted for all street classifications. See Section S-212 – SUBGRADE from the City of Lenexa's Technical Specifications.
- The lengths of right/left-turn lanes at entrances along arterial streets shall be designed according to Figure 1 and Table 2 below.

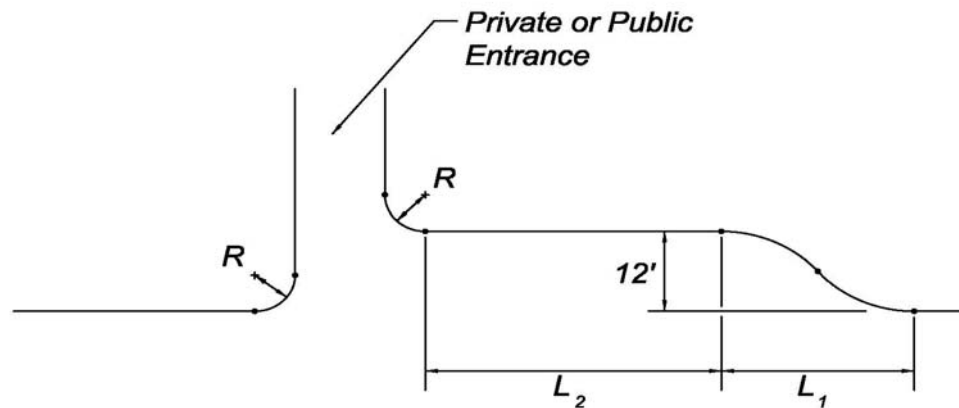


FIGURE 1. Access onto Arterial Streets

TABLE 2. Design Guide for Access onto Arterial Streets

Arterial Speed	L ₁	L ₂
45 mph – Desirable	120	250
45 mph – Limiting	100	130
40 mph – Desirable	120	190
40 mph – Limiting	90	100
35 mph – Desirable	90	120
35 mph – Limiting	60	60

NOTES:

1. The desirable dimensions shall always be used, unless significant extenuating circumstances exist. The City Engineer shall determine if limiting dimensions can be used.
2. Dimensions are for right and left-turn lanes. Because L₂ does not include any length for storage of vehicles, additional length will be required for left-turn lanes and may be required for right-turn lanes. The City Engineer shall determine the additional length

required. A traffic study or traffic analysis may be required to assist in determining the necessary additional length.