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Chapter 90.400.2 Alignment and 90.400.4 Cross Sections and Right of Way widths

City of Tontitown

3-24-2021

90.400.2 ALIGNMENT.

(A) Horizontal curves shall be circular curves with a minimum centerline radius of not less than ~~100~~ 150 feet for local streets, and 200 feet for collector streets. Curves on streets with higher classifications shall be designed on an individual basis. A tangent of at least 100 feet shall separate reverse curves.

(B) All vertical curves shall be parabolic type curves. Minimum vertical curve lengths (L) shall depend on the design speed and shall be equal to K times A where K equals the coefficient as shown in the table below, and A equals the algebraic difference in grades when the grades are expressed as a percentage. ($L_{min}=KxA$)

| Vertical Curve Coefficient (K) Speed (mph) | K Values | |
|---|----------|-----|
| | Crest | Sag |
| 25 | 20 | 30 |
| 30 | 30 | 40 |
| 35 | 40-50 | 50 |

(Ord. 2009-11-347, passed 11-3-09; Am. Ord. 2010-06-356, passed 6-1-10; Am. Ord. 2018-11-816, passed 11-6-18)

90.400.4 CROSS-SECTIONS AND RIGHT-OF-WAY WIDTHS.

(A) Skewed street sections will not be allowed without specific approval of the City Engineer.

(B) The minimum right-of-way shall be as follows:

| Street Type | Required Right-of-Way Width | Typical Cross-Section |
|--------------------|--|--|
| Principal Arterial | 100 feet | 59 feet unless listed below: Highway 412 Arterial/ Boulevard section - 66 feet |
| Minor Arterial | 95 feet unless listed below: May be reduced to 90 feet if the Planning Board Commission approves a non-boulevard section ROW section allows for two additional driving lanes if necessary | 44 feet unless listed below: May be reduced to 37 feet if the Planning Board Commission approves a non-boulevard section ROW section allows for two additional driving lanes if necessary |

| | | |
|-----------|---------|---|
| Collector | 70 feet | 44 feet unless listed below: May be reduced to 37 feet if the Planning Board Commission approves a non-boulevard section |
| Local | 50 feet | 29 feet with parking on one side. Delineated parking is preferred. 23 feet with no parking |

(C) Pavement cross slopes for local streets shall be 3% and for collector and arterial streets shall be 2%, unless otherwise approved by the city. Gutters shall be sloped to match the street cross slope.

(D) On the elevated side of a uniform cross slope or super-elevated street, the gutter may slope toward the street centerline, provided the gutter cross slope does not exceed the cross slope of the adjacent lane. Transitions from normal crowns to uniform cross slope or super-elevated sections shall provide for minimum longitudinal grades. Super-elevated sections shall conform to the ARDOT standard drawings.

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