CHAPTER 8: LOCATION AND GEOMETRY OF STREETS, SIDEWALKS, CROSSWALKS, DRIVEWAYS, STREET NAMES AND SIGNAGE, ALLEYS AND PARKING

8.00 Streets

8.01 Sidewalks and Crosswalks

8.02 Street Names and Signage

8.03 Alleys (reserved)

8.04 Parking (reserved)

8.05 Standard Attachments
8.00 STREETS

A. Street Location:

1. The following factors shall be considered when determining street layout and location:
   a. Location of existing and proposed streets.
   b. Topographical/drainage conditions.
   c. Public safety and convenience.
   d. Anticipated land use.
   e. Conformance with the City of Peoria Comprehensive Plan.
   f. Peoria Pekin Urbanized Area Transportation Study (PPUATS).

2. No street shall be located less than 250 ft. from the edge of any parallel street, measured from the straight-line portion of the right-of-way for each street.

3. No lot shall have direct access to an arterial roadway. See also Chapter 9: Vehicular Access Control Standards

4. Private streets are discouraged and are only permitted or located in special circumstances, by agreement.

B. Street and Right-of-Way Geometry:

1. Street and Right-of-Way Geometry General: The required right-of-way dedication and street geometry is as shown in the attached tables and drawings in Standard Attachments 8.01 (Table A), 8.02, and 8.03.

2. Horizontal curves shall be gradual and shall be designed for a minimum speed of 35 mph. Lesser radii shall only be allowed if, in the opinion of the City Engineer and the Fire Chief, a lesser radius is deemed safe and adequate for anticipated conditions. Street curve radii of less than 300 ft. are not permitted and superelevation is not allowed. Special design criteria may apply for traffic calming systems and will require case-by-case review. When necessary to provide continuity between perpendicular streets in a confined area, 90-degree corners are permitted with a standard centerline radius of 55 ft.

3. Street intersections shall be designed to intersect as close to a 90-degree angle as possible, and no two streets shall intersect at an angle of less than 80 degrees.

4. Streets shall have a minimum longitudinal slope of 0.4%. Vertical curves shall not be used when the local tangent slope of the curve is less than 0.3% for a length of 20 ft. or more, as this will create a flat portion of the curve that may not be feasible to construct with positive drainage. This is an issue of concern when the incoming tangent gradient and outgoing tangent gradient are of opposite signs, and can generally be avoided in all cases when the absolute value difference between the gradients is three or greater. A detailed check shall be performed on curves when the difference is less than 3%. When vertical curves are not used, the intersection of the two straight-line longitudinal slopes shall be “warped” together over a distance of 15 to 20 ft.

5. Streets shall have a minimum transverse slope of 3/16 in. per ft.

6. See also this Manual — Chapter 10: Pavement Standards.
C. Dead End Streets:

1. **Permanent Turnarounds:** When a street in a new subdivision is intended to be a permanent dead end street, the street shall be designed with a permanent turnaround – cul-de-sac bulb, the right-of-way of which shall not be less than 100 ft. in diameter. Turnaround pavement shall not be less than 80 ft. in diameter, unless approved by the City Engineer. Cul-de-sacs shall have a maximum length of 400 ft., measured from the centerline of the intersecting street to the center of the turnaround unless approved by the City Engineer and Fire Chief. Transition between the straight-line portion of the pavement and the curvilinear portion of the pavement turnaround shall be accomplished via a 25 ft. return radius, i.e. transitions shall be smooth and continuous.

2. **Commercial / Industrial Turnarounds:** In the case of cul-de-sacs serving commercial and industrial subdivisions, the developer shall be required to present data to show that the length, radius, pavement and right-of-way of the cul-de-sac street and turnaround are adequate to assure safe access given the type and volume of traffic which may be anticipated when the subdivision is fully developed.

3. **Temporary Dead ends:** When streets temporarily dead end, but are intended to be extended with further development, the following temporary construction requirements shall apply:
   
   a. If the dead end street is not planned to be extended within one calendar year, then a temporary turnaround shall be constructed within the existing right-of-way or a temporary easement. A minimum of four end-of-roadway markers shall be installed marking the back of the turnaround. All end of roadway markers shall be manufactured and installed in accordance with the Manual on Uniform Traffic Control Devices (MUTCD) (2009 Edition, Section 2C.66 “Object Markers for Ends of Roadways”). As per the MUTCD, the minimum mounting height shall be 4 ft. and appropriate advance warning signs shall be used.

   b. If the dead end is planned to be extended within one calendar year, then a turnaround is not required, but a minimum of four end-of-roadway markers shall be installed marking the end of the stub street, (as per Section 2C.66 of the 2009 MUTCD).

   c. In all cases of temporary or permanent dead ends a ‘Dead End’ or ‘No Outlet’, whichever is appropriate, sign shall be installed on the block of the dead end, per City of Peoria sign standards and the MUTCD.

   d. Use IDOT standard Type III Road Closed Barricades with appropriate advanced warning signs for all dead end streets where construction is ongoing or imminent for the continuation of that street. Type III barricades are not permitted for the medium or long term dead end streets.

   e. During construction, Type III Road Closed Barricades shall be maintained at all times.

   f. In all cases when the adjacent tract is developed and the dead end street continued, the temporary dead end construction (including signage) shall be removed and the area landscaped by the developer responsible for the continuation.
8.01 SIDEWALKS

A. Sidewalk Construction Required:

1. Sidewalks shall be constructed, in areas zoned or planned for residential or commercial development, along both sides of every street within the subdivision and along the subdivision side of streets which lie adjacent to the subdivision, except where not required by City of Peoria Code, Appendix A Subdivisions, Article 5-201.

2. Sidewalks shall be constructed in areas zoned and/or planned for industrial development, along one side of every local street within the subdivision and along the subdivision side of streets which lie adjacent to the subdivision, except where not required by City of Peoria Code, Appendix A Subdivisions, Article 5-201.

3. The type, size and location of sidewalks within the parkway shall be as required by this Manual — Chapter 11: Sidewalk Standards.

B. Mid-Block Sidewalks: When the average length of a block exceeds 700 ft. and at locations deemed essential to provide circulation to schools, playgrounds, shopping areas and other community facilities, public sidewalks within a dedicated right-of-way or permanent easement of at least 10 ft. in width, shall be required at the discretion of the City Engineer and Planning Director. Such walks shall be designed so that the entire walkway is visible from the adjacent street(s). The sidewalk shall be located in the center of the sidewalk right-of-way, and be a minimum of 5’ in width.


8.02 STREET NAMES AND SIGNAGE

A. Street names and traffic control system shall be approved by the City Engineer as outlined in this Manual — Chapter 12: Traffic Control and Traffic Regulatory Signage.

B. Traffic control and traffic regulatory signage information for all new subdivisions shall be submitted as part of the subdivision construction plans in the manner outlined in this Manual — Chapter 12: Traffic Control and Traffic Regulatory Signage.

C. As outlined in Chapter 12, the developer shall request that the City construct and install the signs per the approval of the Public Works Director. Such City preparation of signage will be subject a fee per intersection as stated in the City’s Subdivision Code.

8.03 ALLEYS

(RESERVED)

8.04 PARKING LOTS

A. Required Number of Parking Spaces: Refer to City of Peoria Municipal Code, Appendix B, Zoning Ordinance.

B. Stall and Aisle Dimensions: Parking stall dimensions shall be a minimum of 8.5 feet wide by a minimum of 18.5 feet in length, or as otherwise demonstrated to be in accordance
with Table 2 of the *Guidelines for Parking Facility Location and Design*, published by ITE.

C. **Parking Lot Pavement:** All parking lots constructed in the City of Peoria must have a durable, dustless surface.

D. **Drainage:** Storm sewers which serve parking lots shall be designed to accommodate the 10-year storm event without surcharging out of the rim. The maximum depth of ponding in parking lots is 1 foot. This applies where parking lots are used for stormwater detention and for other lots in the event that all storm sewers are blocked and surface overflows must be used to drain the lot. Parking lots may not drain directly across the public right-of-way.

E. **Lighting:** Parking lot lighting adjacent to residentially zoned property may not exceed one foot-candle measured at the adjoining property line.

F. **Pedestrian Access:** All commercial sites shall be designed so that sidewalks or other accessible, delineated pedestrian routes are available to provide pedestrian access continuity between the public sidewalk adjacent to the site and the main entrance to the building.

G. **Landscaping:** Parkway landscaping, perimeter landscaping, parking lot landscaping and refuse area screening shall be required as specified in the City of Peoria Municipal Code, Appendix B, Zoning Ordinance.

H. **Barrier-Free Accessibility:** All commercial sites shall comply with the accessibility requirements of the Illinois Accessibility Code, as amended, and the City of Peoria Municipal Code, as amended. To ensure compliance with the requirements referenced above, the following guidelines should be considered in the site design for new construction of commercial projects (and may not apply for additions, alterations, or historic preservation):

1. An accessible route should be provided from accessible parking and passenger loading zones to an accessible entrance. Accessible routes shall be constructed with a minimum slope (< 2%) and be free from obstacles.

2. The cross slope of sidewalks should be kept at a minimum (¼":1 foot) as necessary for drainage. This will make it easier for a person utilizing a wheelchair to move forward without veering left or right.

3. Sidewalks should be flush with grass areas on either side to help prevent wheelchairs from overturning should a wheel roll off the sidewalk.

4. Sidewalks should be 5 feet wide, minimum, to allow two wheelchairs to pass. In high pedestrian traffic areas, such as the Central Business District, sidewalks should be 8 feet wide, minimum.

5. Where passenger loading zones are provided, an adjacent access aisle should be provided where the sidewalks are flush with the pavement.

6. Entrance areas near the door should have a nearly flat area (allowing for proper drainage to avoid ponding and icing).
7. All power door pedestals with push plates should be clear of the door swing, typically 5 feet from the door.

8. Accessible entrances should be considered for secondary entrance points in addition to the main entrance.

9. Accessible parking stalls should be close to both the main and auxiliary entrances, to provide maximum access for persons with disabilities.

10. Accessible parking stalls should be constructed with minimal slopes (¼":1 foot) which provides a nearly flat surface for wheelchairs and minimum slopes necessary for drainage.

11. Concrete wheel stops should not be used in accessible parking stall loading areas, which would obstruct the accessible route from accessible parking to an accessible entrance.

12. The sidewalk adjacent to accessible parking stalls should be flush with the pavement to provide an accessible route to an entrance.

13. Accessible parking spaces shall be appropriately designated through signage and striping. Signs shall be vertically mounted on a post or wall at front center of the parking space, no more than 5 feet horizontally from the front of the parking space and set a minimum of 4 feet from finished grade to the bottom of the sign.

14. Speed bumps are discouraged. Speed bumps can create a hazard for low riding wheel chair vans.

8.05 STANDARD ATTACHMENTS

Standard Attachment Number 8.01—Table A (Street and ROW Requirements)
Standard Attachment Number 8.02—Standard Street Cross Sections
Standard Attachment Number 8.03—Additional ROW Dedications
### Table A

<table>
<thead>
<tr>
<th>Category</th>
<th>ROW Width (1)</th>
<th>Pavement Width (2)</th>
<th>Return Radius (3)</th>
<th>Design Speed</th>
<th>Minimum Curve R</th>
<th>Sidewalk Width (6)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Divided shoulder / ditch arterial</td>
<td>150'</td>
<td>IDOT</td>
<td>IDOT</td>
<td>55 mph</td>
<td>AASHTO</td>
<td>10' &amp; 5'</td>
</tr>
<tr>
<td>5 lane arterial</td>
<td>100'</td>
<td>64'</td>
<td>WB-65</td>
<td>45 mph</td>
<td>AASHTO</td>
<td>10' &amp; 5'</td>
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<td>4 lane arterial</td>
<td>90'</td>
<td>52'</td>
<td>WB-65</td>
<td>40 mph</td>
<td>AASHTO</td>
<td>10' &amp; 5'</td>
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<tr>
<td>Collector - Industrial</td>
<td>66'</td>
<td>37'</td>
<td>WB-65</td>
<td>35 mph</td>
<td>450'</td>
<td>5' &amp; 5'</td>
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<tr>
<td>Collector - Commercial</td>
<td>66'</td>
<td>37'</td>
<td>WB-65</td>
<td>35 mph</td>
<td>450'</td>
<td>5' &amp; 5'</td>
</tr>
<tr>
<td>Collector - Residential</td>
<td>66'</td>
<td>34'</td>
<td>35'</td>
<td>35 mph</td>
<td>450'</td>
<td>5' &amp; 5'</td>
</tr>
<tr>
<td>Commercial Boulevard (4)</td>
<td>72'+ M</td>
<td>2 @ 21'</td>
<td>35'</td>
<td>35 mph</td>
<td>450'</td>
<td>5' &amp; 5'</td>
</tr>
<tr>
<td>Local - Industrial</td>
<td>66'</td>
<td>34'</td>
<td>WB-65</td>
<td>35 mph</td>
<td>450'</td>
<td>5' (1 side)</td>
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<tr>
<td>Local - Commercial</td>
<td>66'</td>
<td>34'</td>
<td>35'</td>
<td>35 mph</td>
<td>450'</td>
<td>5' &amp; 5'</td>
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<td>Local - Residential</td>
<td>60'</td>
<td>28'</td>
<td>25'</td>
<td>30 mph</td>
<td>300'</td>
<td>5' &amp; 5'</td>
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<tr>
<td>Local Boulevard (4)</td>
<td>66'+ M</td>
<td>2 @ 18'</td>
<td>25'</td>
<td>30 mph</td>
<td>300'</td>
<td>5' &amp; 5'</td>
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<tr>
<td>Cul-de-sac bulb</td>
<td>100'+ dia.</td>
<td>80' dia</td>
<td>25'</td>
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<td>N/A</td>
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<td>90'</td>
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<tr>
<td>Private</td>
<td>(5)</td>
<td>20'</td>
<td>25'</td>
<td>(5)</td>
<td>(5)</td>
<td>(5)</td>
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</tbody>
</table>

(1) See also Standard Attachments 8.02 & 8.03. Additional reservation of ROW may be required where design or pre-established standards dictate.

(2) Pavement width is measured from back of curb to back of curb.

(3) Return radius is measured to the face of curb. Shall accommodate the vehicle type listed.

(4) Median width may vary. Minimum for green median is 8'. All green (landscaped) medians shall have a maintenance agreement.

(5) As approved by City Engineer.

(6) 10' walk on one side of arterials is for bike-path / walk.

### Additional Notes:
- Type of arterial to be determined by Comp. Plan or study. Use 5 lane unless shown otherwise.
- Maximum grade is 5%, minimum grade is 0.4%.
- All curbs shall be IDOT B6-18, except in cul-de-sac bulbs.
- Curves shall be designed so as to not require super-elevation except on arterials.
- 2 way intersections (90 degree corners) shall have a 55’ centerline radius (local streets).
- City Engineer may authorize changes from these standards.
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COLLECTOR-COMMERCIAL & INDUSTRIAL ROADWAY

66' RIGHT-OF-WAY, 37' STREET, 5' SIDEWALKS
(INDUSTRIAL - SIDEWALK ON ONE SIDE ONLY)

LOCAL BOULEVARD ROADWAY

66' RIGHT-OF-WAY + MEDIAN WIDTH, 2 - 18 Lanes (Face To Face Of Curbs), 2 - 5' SIDEWALKS
IF MEDIAN IS TO BE GREEN (GROWING), MIN. WIDTH 8' - BACK TO BACK CURB
NO PARKING FOR COMMERCIAL / INDUSTRIAL LOCAL BOULEVARD
MAXIMUM MEDIAN HEIGHT - 18' ABOVE PAVEMENT IN AREAS OF
SIGHT DISTANCE 100' MINIMUM CONCERN (INCLUDES PLANTINGS)
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COLLECTOR BOULEVARD
74' RIGHT-OF-WAY + MEDIAN WIDTH, 2 - 21' LANES (BACK TO BACK OF CURBS), 2 - 5' SIDEWALKS
GREEN MEDIAN - MIN. WIDTH 8' BACK TO BACK CURB
NO PARKING FOR COMMERCIAL / INDUSTRIAL BOULEVARDS

4-LANE ARTERIAL ROADWAY
90' RIGHT-OF-WAY, 52' STREET, 10' BIKE PATH (ONE SIDE), 5' SIDEWALK (ONE SIDE)
### Standard Attachment 8.03c

City of Peoria Manual of Practice

September, 2012

## Chapter 8: Location and Geometry of Streets, Sidewalks, Crosswalks, Driveways, Street Names and Signage, Alleys and Parking

### Table 8.03c: Taper Length (Feet)

<table>
<thead>
<tr>
<th>Design Speed (MPH)</th>
<th>35</th>
<th>40</th>
<th>45</th>
<th>50</th>
<th>55</th>
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<tbody>
<tr>
<td>Taper Length (Feet)</td>
<td>165</td>
<td>180</td>
<td>200</td>
<td>225</td>
<td>250</td>
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</tbody>
</table>

### Diagram: Collector / Arterial Intersection

- **Collector**: Widen to 100' for length of required storage. Taper back to 90' at required rate of taper.
- **Arterial**: 45° corner triangles.
- **Collector - Arterial Row**: 45° corner triangles.

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**Note**: The diagram illustrates the geometry and tapering requirements for collector and arterial intersections, including the tapering of street curbs and the widening of Collector for storage needs. The table provides taper length calculations for different design speeds to ensure proper street design and safety.