

## SUDAS Revision Submittal Form

**Status Date:** As of 5/7/2021      **Topic:** Cul-de-sac length  
**Manual:** Design      **Manual Location:** Section 5C-2, O

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### Requested Revision:

#### O. Cul-de-sacs

A local street open at one end only should have a cul-de-sac constructed at the closed-end. The 2018 International Fire Code stipulates a minimum cul-de-sac radius of 48 feet however some jurisdictions allow lesser radii due to the size of their fire apparatus. The minimum radius for cul-de-sacs is 45 feet, which may be increased in commercial areas or if significant truck traffic is anticipated. The border area around the cul-de-sac should be the same as the approach street. The transition radius with the approach street will be 50 feet for residential streets and 75 feet for commercial and industrial streets.

The length of a cul-de-sac determines how many people are impacted by maintenance operations, traffic accidents, and other incidences that may stop traffic flow. Many Iowa cities limit the length of a cul-de-sac to 500 to 600 feet. Studies indicate the longer the cul-de-sac, the higher the vehicular speeds along it. The 2018 edition of the International Fire Code recommends the length of the cul-de-sac be less than 750 feet unless additional steps such as intermediate turnarounds are implemented. ITE, the Urban Land Institute, and ASCE indicate cul-de-sacs should be less than 1,000 feet long or the length that generates less than 200 trips per day according to the adjacent land use. For single family dwellings that generate 8 to 10 trips per day, the 200 trips per day would be produced by about 20 parcels.

**Reason for Revision:** Added discussion points about the length of cul-de-sacs from International Fire Code and ITE perspectives.

**Comments:** None.

<b>District:</b>	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input checked="" type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6
<b>Comments:</b>	None.					
<b>Action:</b>	<input type="checkbox"/> Deferred		<input type="checkbox"/> Not Approved		<input checked="" type="checkbox"/> Approved	
<b>District:</b>	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input checked="" type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6
<b>Comments:</b>	None.					
<b>Action:</b>	<input type="checkbox"/> Deferred		<input type="checkbox"/> Not Approved		<input checked="" type="checkbox"/> Approved	
<b>District:</b>	<input type="checkbox"/> 1	<input checked="" type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6
<b>Comments:</b>	Add language about intermediate turnaround. <i>Note - done.</i>					
<b>Action:</b>	<input type="checkbox"/> Deferred		<input type="checkbox"/> Not Approved		<input checked="" type="checkbox"/> Approved	
<b>District:</b>	<input checked="" type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input type="checkbox"/> 6
<b>Comments:</b>	None.					
<b>Action:</b>	<input type="checkbox"/> Deferred		<input type="checkbox"/> Not Approved		<input checked="" type="checkbox"/> Approved	
<b>District:</b>	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input checked="" type="checkbox"/> 5	<input type="checkbox"/> 6
<b>Comments:</b>	None.					
<b>Action:</b>	<input type="checkbox"/> Deferred		<input type="checkbox"/> Not Approved		<input checked="" type="checkbox"/> Approved	
<b>District:</b>	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5	<input checked="" type="checkbox"/> 6
<b>Comments:</b>	None.					
<b>Action:</b>	<input type="checkbox"/> Deferred		<input type="checkbox"/> Not Approved		<input checked="" type="checkbox"/> Approved	

**Final District Action Summary:** All 6 districts approved; see comments above.

**Board of Directors Action:** Approved.