

SUDAS Revision Submittal Form

Status Date: As of 5/18/2022 **Topic:** Street flow criteria
Manual: Design **Manual Location:** Section 2A-3, Tables 2A-3.01 & 2

Requested Revision:

Section 2A-3 Stormwater Management Criteria

C. Street Flow Criteria

1. Street Capacity for Minor Storms:

- a. Pavement encroachment for minor design storm should not exceed the limitations set forth in Table 2A-3.01.

Table 2A-3.01: Allowable Pavement Encroachment and Depth of Flow for Minor Storm Runoff

Street Classification	Maximum Encroachment ¹
Local/ Roundabouts	No curb overtopping. Flow may spread to crown of street.
Collector/Minor Arterial/ Roundabouts	No curb overtopping. Flow spread must not encroach to within 8 feet of the centerline of a two-lane street. The flow spread for more than two-lane streets must leave the equivalent of two 12 foot driving lanes clear of stormwater; one lane in each direction. For one-way streets, a single 12 foot lane is allowed clear of stormwater is required. For single lane roundabouts, maintain 8 feet clear of stormwater.
Major Arterials/ Roundabouts (4 lanes or greater)	No curb overtopping. Flow spread must not exceed 10 feet from the face of the curb of the outside lane. The flow spread for streets with more than two lanes must leave the equivalent of two 12 foot driving lanes clear of water; one lane in each direction. For multi-lane roundabouts, maintain one 12 foot lane clear of stormwater. For one-way streets, two 12 foot lanes are required. For special conditions, when an intake is necessary in a raised median, the flow spread should not exceed 4 feet from the face of the median curb for an inside lane.

¹ Where no curbing exists, encroachment should not extend past property lines.

- b. The storm sewer system will commence upstream from the point where the maximum allowable encroachment occurs. When the allowable pavement encroachment has been determined, the theoretical gutter carrying capacity for a particular encroachment will be computed using the modified Manning's formula for flow in a small triangular channel as shown in [Section 2B-3, Figure 2B-3.01](#). An "n" value of 0.016 will be used unless special considerations exist.

2. Street Capacity for Major Storms: The allowable depth of flow and inundated area for the major design storm should not exceed the limitations set forth in Table 2A-3.02.

Table 2A-3.02: Allowable Pavement Encroachment and Depth of Flow for Major (100 Year) Storm Runoff

Street Classification	Allowable Depth and Poned Area
Local and Collector/ Roundabout	The ponded area should not exceed the street right-of-way and the depth of water above the street crown should not exceed 6 inches. There may be situations where other restrictions are necessary.
Major and Minor Arterial/ Roundabout	A 12 foot lane is the minimum travel lane to be passable in the center of the street.

Reason for Revision: Street flow criteria for roundabouts is not currently addressed.

Comments: None.

District: 1 2 3 4 5 6

Comments: None.

Action: Deferred Not Approved Approved

District: 1 2 3 4 5 6

Comments: In Table 2A-3.01, 2nd row, separate the last sentence into two. Clarify that one-way streets should have a single 12 foot lane clear of stormwater. Add a new sentence for roundabouts requiring 8 feet clear of stormwater. *Note - done.*

Action: Deferred Not Approved Approved

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

Board of Directors Action: Approved.