

Temporary Sediment Control in Urban Areas

Design Manual
Chapter 10
Roadside Development and Erosion Control
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Temporary sediment control in urban areas can present difficulties for designers because often few, or even no, areas are available for temporary storm water detention. This could be a result of right-of-way constraints, risks associated with the potential for ponding water on private property, or a variety of other reasons.

Temporary Sediment Control Options

Several details are available for designers to use in urban areas to address temporary sediment control. These devices (Standard Road Plan [EC-602](#) and Design Details [570-5](#) and [570-7](#)) are discussed Section [10C-4](#). Designers can also look into the use of vegetated buffers (see Section [10C-3](#)). Designers don't do storage calculations for these practices because they aren't designed to store storm water – only to filter it. Other best management practices, such as sodding, may also be used. Contact the [Agronomist](#) for assistance with temporary sediment control in urban areas.

Note: For urban projects, bonded fiber matrix is used instead of straw mulch.

Designers should first look to using storm water detention. If that is not an option, look to using the above design details and/or vegetated buffers. In some cases, designers may have a combination of storm water detention, the above mentioned design details, and/or vegetated buffers. For these projects, follow the procedures of Section [10C-2](#) for disturbed areas filtered through detention basins. Indicate in Tabulation [100-34](#) which areas are filtered using the design details and/or vegetated buffers, and the size of these areas, see example below. In other cases, drainage all goes to existing or proposed intakes and the only options are the above mentioned details.



If storm water detention is not possible, include Standard Note [281-3](#) in the plans to indicate which best management practices (design details, vegetated buffers, etc.) are being used in place of storm water detention. Do not use Standard Note 281-03 without permission of the [Agronomist](#).

Example for a Transitional Area

A project is located in a transitional area. Part of the cross section is rural with ditches, while the remainder is urban curb and gutter with no storage areas available. Some of the runoff in the rural section runs through vegetation. Tabulation 100-34 might look something like:

STORMWATER DRAINAGE BASIN AND STORAGE													
Drainage Basin Location				Summary of Stormwater Storage									
Basin No.	Station to Station		Side	Discharge Point		Total Disturbed Area Acres	Disturbed Area with Storage Provided Acres	Disturbed Area without Storage Provided Acres	Best Management Practice	Total Storage	Total Storage	Storage	Remarks
	Station	Station		Station	Side					Volume Provided	Volume Required	Volume Met?	
									CF	CF	Yes/No		
1	01+52.00	88+55.00	Right	88+49.00	Right	1.7	1.3	0.4	Silt Fence for Ditch Check (EC-281)	3448.0	5480.0		
									Silt Basin (E4-483)	2350.0			
									Vegetated Buffer	0.0		Yes	
									Total	5498.0			
2	01+52.00	88+55.00	Left	88+41.00	Left	1.8	1.6	0.2	Silt Fence for Ditch Check (EC-281)	3325.0	5652.0		
									Silt Basin (E4-483)	2350.0			
									Vegetated Buffer	0.0		Yes	
									Total	5675.0			
3	88+55.00	122+04.00	Right			0.9	0.0	0.9	Erosion Control for Intake or Manhole Well (578-5)	0.0	0.0		
									Open-Throat Curb Intake Sediment Filter (EC-682)	0.0			
4	88+55.00	122+04.00	Left			9.8	0.0	9.8	Erosion Control for Intake or Manhole Well (578-5)	0.0	0.0		
									Open-Throat Curb Intake Sediment Filter (EC-682)	0.0			

Standard Note 281-3 might look like:

281-3 10-17-17
STORM WATER BEST MANAGEMENT PRACTICES
When the following best management practices are used, they are intended to account for disturbed areas where storage volume cannot be provided: Erosion Control for Intake or Manhole Well (570-5) Open-Throat Curb Intake Sediment Filter (EC-602) Vegetated Buffer

Chronology of Changes to Design Manual Section:

010C-005 Temporary Sediment Control in Urban Areas

8/9/2018	Revised Changed reference to Design Detail 570-6 to Standard Road Plan EC-602. Revised sample Tabulation 100-34 and Standard Note 281-3.
5/9/2017	Revised Revised to reflect changes to Tabulation 100-34. Tabulation 100-35 has been deleted.
2/23/2017	NEW New