



DEPARTMENT OF TRANSPORTATION


Marc Elrich
County Executive

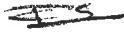
Christopher R. Conklin
Director

MEMORANDUM

November 18, 2019

TO: Hadi Mansouri, Acting Director
Montgomery County Department of Permitting Services

FROM: Christopher Conklin, Director 
Montgomery County Department of Transportation

VIA: Deepak Somarajan, Engineer III 
Director's Office, Department of Transportation

SUBJECT: Requirements for Stormwater Management Practices and Allowable Spread in the Public Right-Of-Way

Increasingly, stormwater management best practices are including surface-fed, vegetated treatment facilities. This memorandum shall be used as a guidance for the minimum requirements for the following:

- A. Horizontal placement of a surface fed stormwater management (SWM) facilities adjacent to certain site features such as bike lanes, sidewalks, shared use paths, and parking spaces.
- B. Maximum allowable spread for roadways crowned on both sides of the median with stormwater management facilities.

A. Horizontal placement of a surface fed stormwater management (SWM) facilities adjacent to certain site features such as bike lanes, sidewalks, shared use paths, and parking spaces:

The safe placement of the SWM facilities within the public right-of-way shall depend on many factors such as proximity to site features, side slopes, depth, and type of required maintenance. So, each situation will be different. Example practices include structural bio-filters, swales, and micro-bioretenion.

Office of the Director

101 Monroe Street, 10th Floor • Rockville, Maryland 20850 • 240-777-7170 • 240-777-7178 Fax
www.montgomerycountymd.gov/mcdot

The following should be considered when establishing the grades and locations of these facilities.

1. Facilities with Side Slopes \leq 3:1:

a. Adjacent to sidewalks, shared use paths and bike paths: A SWM facility located adjacent to pedestrian uses such as sidewalks, shared use paths and bike paths must have a flat area (\leq 2% cross slope) buffer of two (2) feet to create a safe refuge between the edge of the pavement/sidewalk/shared use path and the top of the slope of the facility.

NOTE: Additional vertical barriers may be required depending upon the nature (number of pedestrian and bike riders) of sidewalk use.

b. Adjacent to travel lanes or bike lanes: A SWM facility located adjacent to a travel lane or curb and gutter must have two (2) feet minimum between the edge of pavement/face of curb and the top of the slope of the facility.

c. Adjacent to on-street parking spaces: A SWM facility located adjacent to a parking space must have a step-out zone (\leq 2% cross slope) of two (2) feet minimum between the edge of pavement/face of curb and the top of the slope of the facility.

NOTE: A pedestrian path connectivity from the parking space to the sidewalk shall be provided every 40- feet (approximately two parking spaces) between SWM facilities.

2. Facilities with Vertical Drop:

a. Adjacent to sidewalks, shared use paths and bike paths: A SWM facility located adjacent to pedestrian uses such as sidewalks, shared use paths and bike paths must have a minimum of six (6)-inch high curb or an alternative barrier around the facility. The 6-inch curb or alternative barrier at the edge of the pavement should be structurally supported and shall be approved by DPS right-of-way. Please see attached detail.

NOTE: Additional vertical barriers may be required depending upon the nature of sidewalk use.

b. Adjacent to travel lanes or bike lanes: A SWM facility located adjacent to a travel lane or bike lane must have a minimum of six (6)-inch high curb or an alternative barrier around the facility and a buffer of two (2) feet as shown in the detail below.

c. Adjacent to on-street Parking Spaces: A SWM facility located adjacent to a parking space must have a minimum of six (6)-inch high curb or an alternative barrier around the facility and have a step-out zone (\leq 2% cross slope) of two (2) feet. Please see attached detail.

NOTE: A pedestrian path connectivity from the parking space to the sidewalk shall be provided every 40-feet (approximately two parking spaces) between SWM facilities.

GENERAL NOTES:

- I. The maximum vertical depth of the SWM facilities should be 18-inches-preferred, limited to 24-inches measured from the adjacent grade of the wall/curb to the top of the media in the public right-of-way.
- II. SWM facilities with side slopes of 2:1 are not allowed in the public right-of-way.

B. Maximum allowable spread for roadways crowned on both sides of the median with stormwater management facilities:

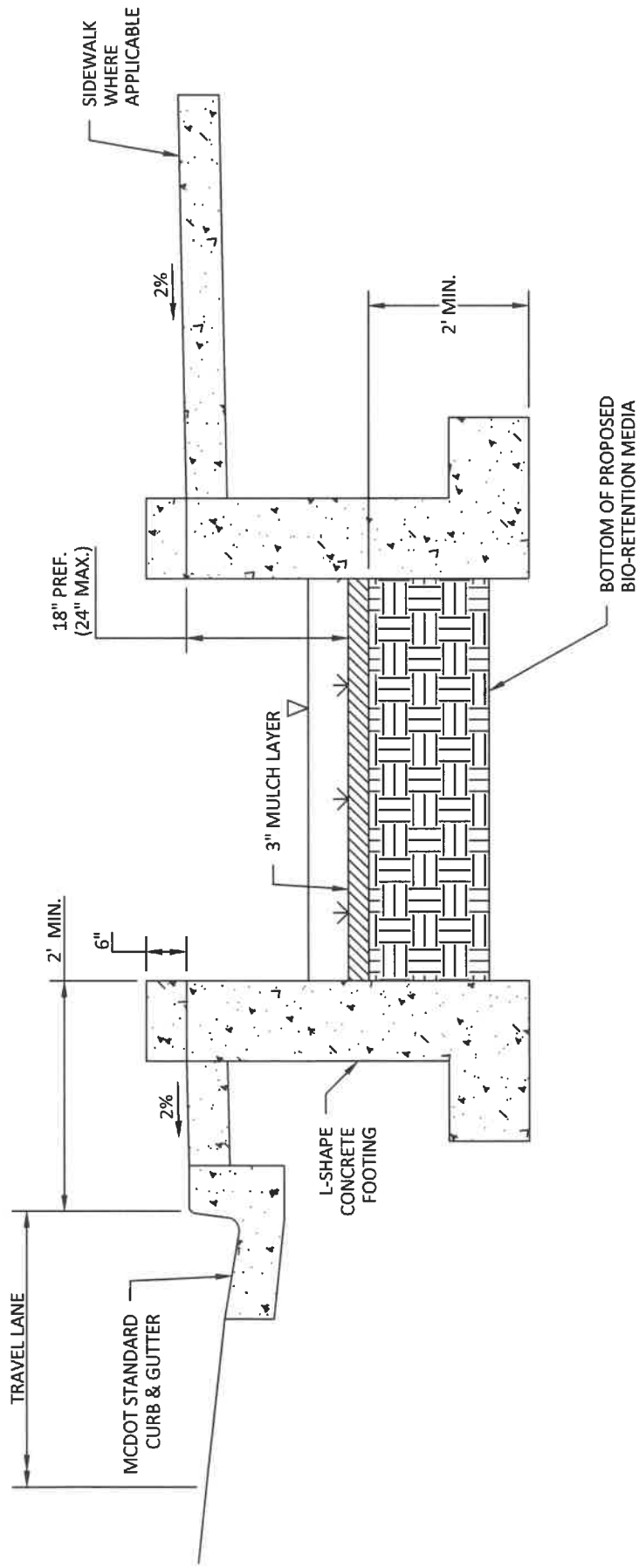
The allowable spread (10-yr frequency storm) from the curb along the median for a roadway draining to the median shall be a maximum of 4-feet.

Thank you for cooperation and assistance. If you have any questions regarding this memo, please contact me at deepak.somarajan@montgomerycountymd.gov at your earliest convenience.

Attachments:

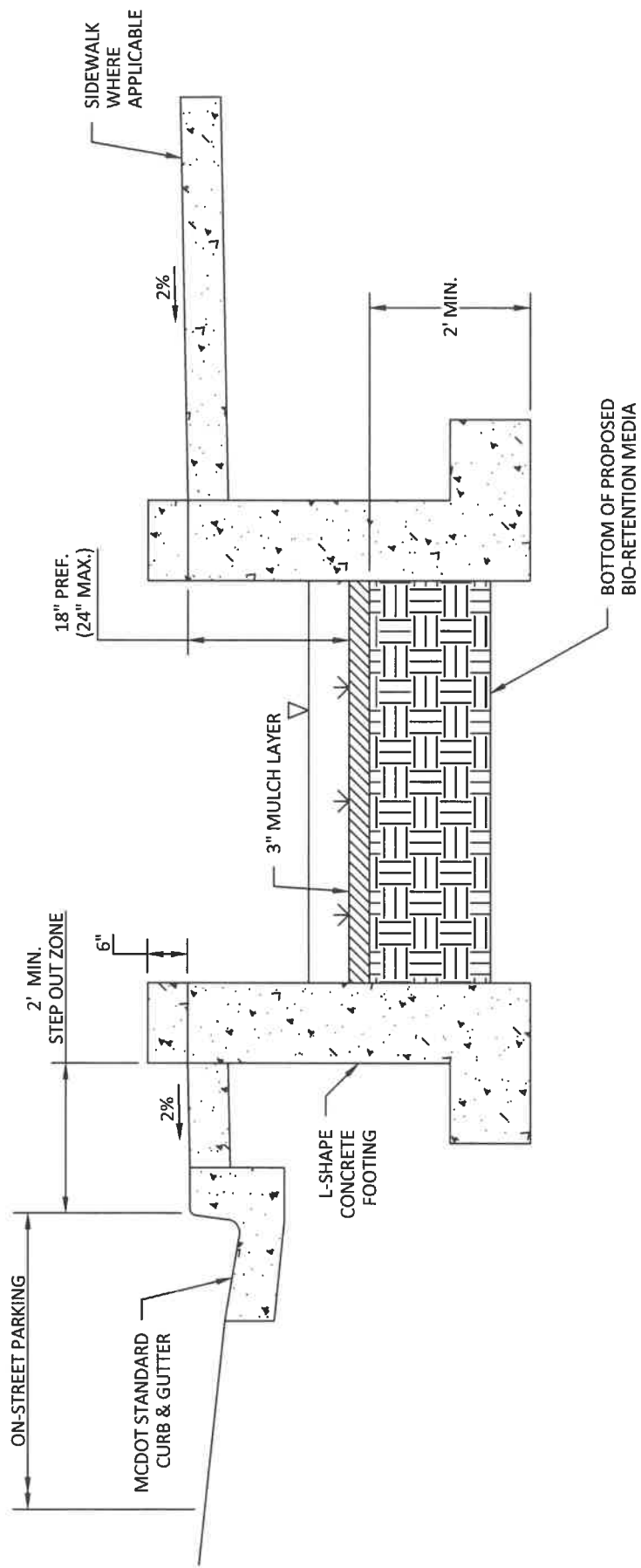
- 1: Typical Section for Micro-Bioretention Facilities Adjacent to the Roadway
- 2: Typical Section for Micro-Bioretention Facilities Adjacent to On-Street Parking

cc-e: Rebecca Torma, MCDOT OTP
Mark Etheridge, MCDPS WRS
Atiq Panjshiri, MCDPS RWP
Tim Cupples, MCDOT DTE
Daniel Sheridan, MCDOT DTE
Gene Gopenko, MCDEP SWFMP
Paul Bogle, MCDEP SWFMP
Sam Farhadi, MCDPS RWP
Yee Mei Tse, MCDPS RWP
William Whelan, MCDOT OTP
Brenda Pardo, MCDOT OTP
Deepak Somarajan, MCDOT OTP



TYPICAL SECTION FOR MICRO-BIORETENTION FACILITIES ADJACENT TO THE ROADWAY

SCALE: N.T.S.



TYPICAL SECTION FOR MICRO-BIORETENTION FACILITIES ADJACENT TO ON-STREET PARKING

SCALE: N.T.S.