



NOTES TO DESIGNER

- This design detail should be adapted to the specific engineered design and its respective installation.
- Reducing the minimum offset from the face of the street curb to the stormwater planter may be appropriate in non-parking lane and non-loading zone conditions but must be reviewed and approved by the City on a case-by-case basis. Reduction of this offset will require additional design considerations regarding the street-side stormwater entrance and area protection design.
- 3. Stormwater planter walls may be precast or cast-in-place concrete. For any structural components, including but not limited to planter walls, structural design must be prepared by the designer. At a minimum, designer should consider planter wall depth, footer/foundation for walls, concrete mix, concrete strength, reinforcing steel design (as required), joint placement and design, and design load condition.
- Designer should be aware that properly aligning the invert of trench drain with opening through planter wall can be challenging when precast construction is used.
- Notches in the planter wall should be sized and spaced as required to prevent ponding on the sidewalk adjacent to the planter. It is recommended that notches be cast-in-place rather than saw-cut.
- 6. All exposed concrete edges shall be beveled.
- Designer should evaluate whether top of curb reveal should follow slope of surrounding grades or be level based on desired appearance and site conditions.
- 8. The lowest planting media surface in stormwater planters should be level along the alignment of the street. A mild slope no greater than 1 percent is acceptable but a level surface is recommended. If surrounding slopes are steep, impermeable barriers such as surface check dams can help maintain a level surface. Note this does not apply to the cross-grading, if used, from the perimeter of the planter down to the lowest planting media surface.
- 9. Designer should consider the height of vegetation both at installation and anticipated maturity. Both heights should be considered in the context of the stormwater planter's plan dimensions, depth, and surrounding area protection and vegetation selected accordingly. It has been found that if a planter is deep and/or has high area protection, very low vegetation at installation tends to give a stormwater planter an excessively deep appearance. Note that with the exception of trees, maximum vegetation height at maturity should be no greater than 36-inches above the surrounding sidewalk elevation. Also, plant selection and placement should be done to prevent encroachment of plants outside of the limits of the stormwater planter and in consideration of maintaining adequate sight lines based on the placement of the stormwater planter.
- 10. The ponding depth of water in the stormwater planter is correlated to a variety of site specific factors such as surrounding grades, offsets between stormwater entrance elevations and top of planting media, offsets between stormwater entrance and overflow elevations, desired freeboard, the vegetation selected for the stormwater planter, and the design depth of the stormwater planter. The designer should evaluate site specific conditions such as those mentioned in order to set the design ponding depth in the stormwater planter. As a point of reference, ponding depths for PWD's Green Street stormwater planters have typically been between 2-inches and 6-inches.

APPLICABLE DESIGN COMPONENTS

(AP) Area Protection

(ED) Energy Dissipation

(L) Landscaping

- **☑** 5.3.1 Mulch

MS) Media Separation

■ 8.1.1 Geotextile

☑ 8.2.1 Sand Filter

P) Piping

✓ 9.2.2 Anti-seep Collar

(PM) Planting Media

SE) Stormwater Entrance

SM) Storage Media

☑ 7.1.1 Stone

City of Philadelphia