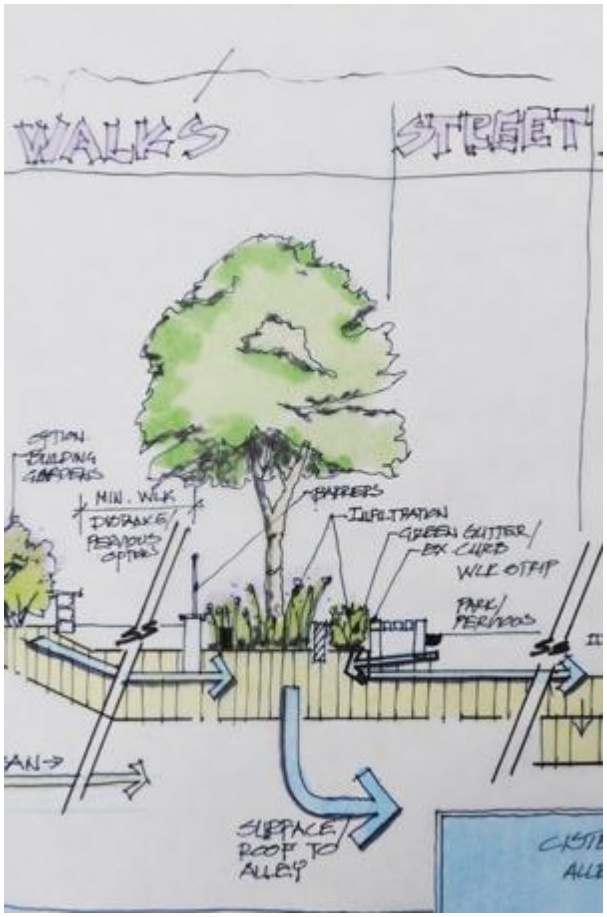
Reconstruction of Existing Public Right-of-Way (PROW)

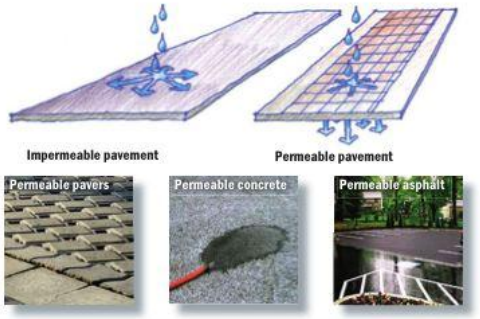
MEP tailored to the streetscape portion of a Major Regulated Project


AVEDA
BED BATH &
BEYOND


capital bikeshare

Rain gardens will reduce runoff from storms.





NPDES MS4 Permit

- Performance Standard for Stormwater Discharges from Development
  - On-site Retention through evapotranspiration, infiltration, and/or harvest and use for,
    - 5,000 sf or greater land disturbances provide 1.2 inches
    - Substantial improvements regulated but at a lower standard
    - Provide option of off-site mitigation or fee-in lieu above baseline requirements
    - District-owned transportation right-of-way disturbances that participate in a stringent performance review process need not conduct off-site mitigation or pay fee-in-lieu to compensate for difference

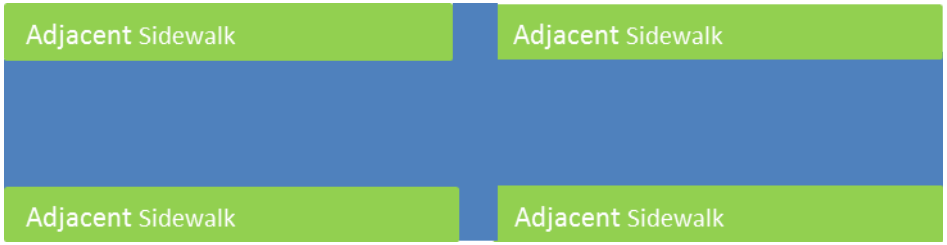
When PROW MEP does **not** apply…

- A major regulated project that does not disturb the adjacent public right-of-way
- Voluntary retrofits of existing PROW
- PROW disturbance that is limited to
  - Trenches for utility work that do not require the reconstruction of the roadway except
    - from curb to curb
    - from centerline to curb

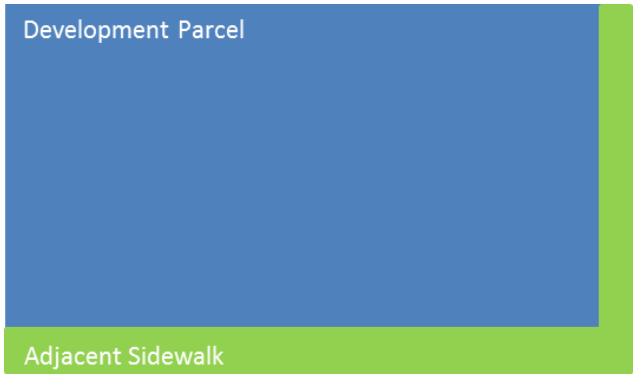
When PROW MEP applies…

Reconstruction of existing public right-of-way

- Type 1: federal or municipal
  - roads, alleys, sidewalks, trails, etc.



- Type 2: private development
  - adjacent sidewalks and alleys



Principles of PROW MEP include…

- Maximize BMP placement
- Maximize BMP sizing
- Innovate the integration of “green” with “grey” infrastructure
- Minimize impervious widths
- Maximize land cover types with little stormwater runoff
- Maximize tree canopy
  - planting or preserving trees, amending soils, increasing soil volumes and connecting tree roots with stormwater runoff
- Use impervious surface disconnection strategies
  - e.g., draining sidewalk area to continuous tree planting strip
- Manage comingled stormwater runoff
  - prioritize the conveyance and control of roadway runoff
  - over-control the roadway runoff beyond LOD to compensate for less retention elsewhere
- Use porous pavement or pavers for low traffic roadways, on-street parking, shoulders or sidewalks
- Integrate BMPs into traffic calming measures

Type 2 MEP steps include…

- Calculate SWRv
- Prioritize managing roadway runoff inside the curb line
- Place, size and design PROW BMPs to maximize retention
  - Stormwater Management Guidebook Chapter 3 BMP specifications
  - Stormwater Management Guidebook Appendix B BMP priorities and limitations
  - General Retention Calculator Spreadsheet
  - DDOT LID Standards and Specifications
    http://dc.gov/DC/DDOT/Projects+and+Planning/Environment/Low+Impact+Development
- AWDZ requires WQTv

Minor Disturbance in PROW

- Part of larger major regulated project
- PROW disturbance that is limited to
  - Minor disturbance less than 500 SF (e.g.) Driveways, Aprons
  - May include multiple 500 SF disturbances if not adjacent (i.e. not along same side of building or divided by a road)

Two options:

- MEP limited to attempting to plant trees. If trees not possible, adjacent landscaping. Then no remaining volume.
- Manage 1.2” SWRv for PROW disturbance elsewhere on the parcel.

Limitations on Maximizing Retention

- Low infiltration rate, low head, topography
- Minimal surface area, or CDA, for BMP type
- High volume usage for BMP type or land cover conversion
- Building egress and exit demands
- Utilities, above & below ground
- Hotspots
- Safety issues, view lines
- Existing shade trees in good condition
- DDOT standards and guidelines

Parcel PROW MEP review process?

- Appendix B & E: follow the memo format with supporting documentation
  - Tables and charts
  - Maps, plan view
  - Narrative
- Submitted after the 65% design to ensure sufficient documentation to support claim if less then the full performance standard is anticipated.