FORT STEVENS
STORMWATER RETROFIT PROJECT

PUBLIC STAKEHOLDER CONSTRUCTION KICKOFF MEETING

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AGENDA

• Project Area & Background
• Existing Conditions
• Project Objectives
• Restoration Approaches
• Construction Details
• Timeline
• FAQs
• Q&A
PROJECT LOCATION
BACKGROUND
Figure 1.1 Water Balance at a Developed and Underdeveloped Site
(Source: Schueler, 1987)

Pre-development

Surface Runoff
Interflow
Baseflow

Evapotranspiration
Canopy Interception

Post-development

Surface Runoff
Interflow
Baseflow

Evapotranspiration

Surface runoff is minimal in an undeveloped site, but dominates the water balance at a highly impervious site.
PROBLEM OF STORMWATER POLLUTION
A single 1.2 inch storm falling on this area produces about 525 million gallons of stormwater runoff.
DC’S RESTORATION APPROACHES
EXISTING CONDITIONS
EXISTING CONDITIONS
EXISTING CONDITIONS (athletic field)
PROJECT OBJECTIVES

- Treat maximum amount of stormwater from the site in the most cost-effective way
- Work only on District land
- Minimal impacts to the community
- Development of a community amenity
- Educational opportunities
Most stormwater practices all work the same way: “they collect stormwater runoff and use or mimic natural processes that result in the infiltration, evapotranspiration or use of stormwater in order to protect water quality and associated aquatic habitat” (EPA).

Slow it down, Spread it Out, Soak it In!
BIO RETENTION
BIO RETENTION: HOW IT WORKS
FINAL DESIGN

HILLSIDE STABILIZATION
CONSTRUCTION DETAILS
GENERAL INFORMATION

• All work to occur on weekdays (M-F)
• Work hours are 7AM–5 PM
• Construction vehicles on site:
  – Up to 2 dump trucks
  – 1 track excavator
  – 1 bobcat
  – 2 powered dump buggies
  – Several crew pick-up trucks

• DOEE Community Point of Contact:
  Cecilia Lane
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SITE ACCESS / BMP-1: VAN BUREN ST
CONSTRUCTION ACCESS - BMP 1

SOCCER FIELD

BMP-1 CONSTRUCTION & STAGING AREA
NO PUBLIC ACCESS

COMMUNITY CENTER

VAN BUREN ST

CONTRACTOR ACCESS & PARKING - DURATION OF BMP-1 WORK (~ 3 WEEKS)
CONSTRUCTION
ACCESS - triangle park
SITE ACCESS / TENNIS COURTS

TENNIS COURTS STEPS NO ACCESS ~ 1 WEEK
USE ALTERNATIVE ENTRANCE
SITE ACCESS / BMP-2: ALLEYWAY
CONSTRUCTION ACCESS - Alley

- ALLEYWAY CLOSED DURING WORK HOURS FOR BMP-2 (~ 2 WEEKS)
- DRAIN SHALL BE 12" LONG (EXTENDS ACROSS ALLEY TO PARK BOUNDARY)
- BMP-2 CONSTRUCTION & STAGING AREA
- NO PUBLIC ACCESS
PROJECT TIMELINE

• May 2019: contract awarded
• May – August 2019: field assessment (topographic survey, geotechnical investigations etc.)
• August – January 2020: design development
• 3 public meetings:
  – Concept designs on 9/10/19
  – Semi-final designs (~65%): 12/17/19
  – Second Semi-final designs (~65%): 1/13/21
  – Construction kickoff meeting (timeline): 9/21/2021
• December 2021: construction complete
• DOEE responsible for ongoing maintenance
FAQs

• How do we find our project sites?
  – Enthusiastic landowners!
  – Funding sources
  – Large areas of untreated impervious cover
  – More impactful locations

• What can I do?
  – RiverSmart Homes
    • Rain Gardens
    • Permeable Pavers
    • Rain Barrels
    • Tree Planting
    • “BayScaping”

https://www.riversmarthomes.org/
QUESTIONS