

# DOUGLASS COMMUNITY CENTER STORMWATER RETROFIT PROJECT

## PUBLIC STAKEHOLDER CONSTRUCTION KICKOFF MEETING

---

December 9, 2020

**PETER NOHRDEN**

Landscape Architect

Capital Projects, Planning and Design

Department of Parks and Recreation

[peter.nohrden@dc.gov](mailto:peter.nohrden@dc.gov)

**CECILIA LANE**

Environmental Protection Specialist

Watershed Protection Division

Department of Energy & Environment

[cecilia.lane@dc.gov](mailto:cecilia.lane@dc.gov)

**ERICA CARLSSON**

Environmental Protection Specialist

Watershed Protection Division

Department of Energy & Environment

[erica.carlsson@dc.gov](mailto:erica.carlsson@dc.gov)



GOVERNMENT OF THE  
DISTRICT OF COLUMBIA  
MURIEL BOWSER, MAYOR

# AGENDA

- Project Area & Background
- Existing Conditions
- Project Objectives
- Restoration Approach
- Construction Details
- Timeline
- FAQs
- Q&A

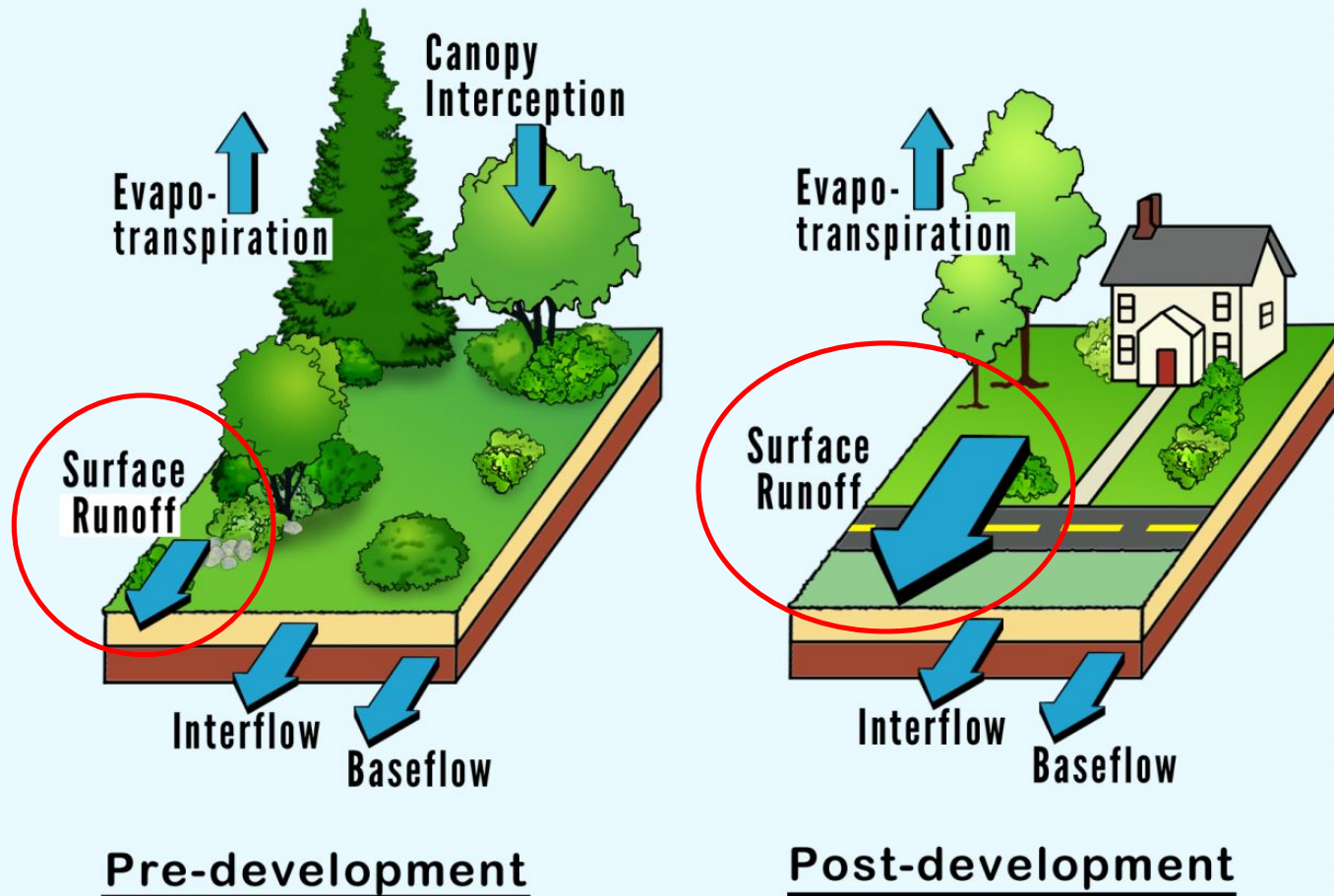
# PROJECT LOCATION



# BACKGROUND

---

Figure 1.1 Water Balance at a Developed and Underdeveloped Site  
(Source: Schueler, 1987)

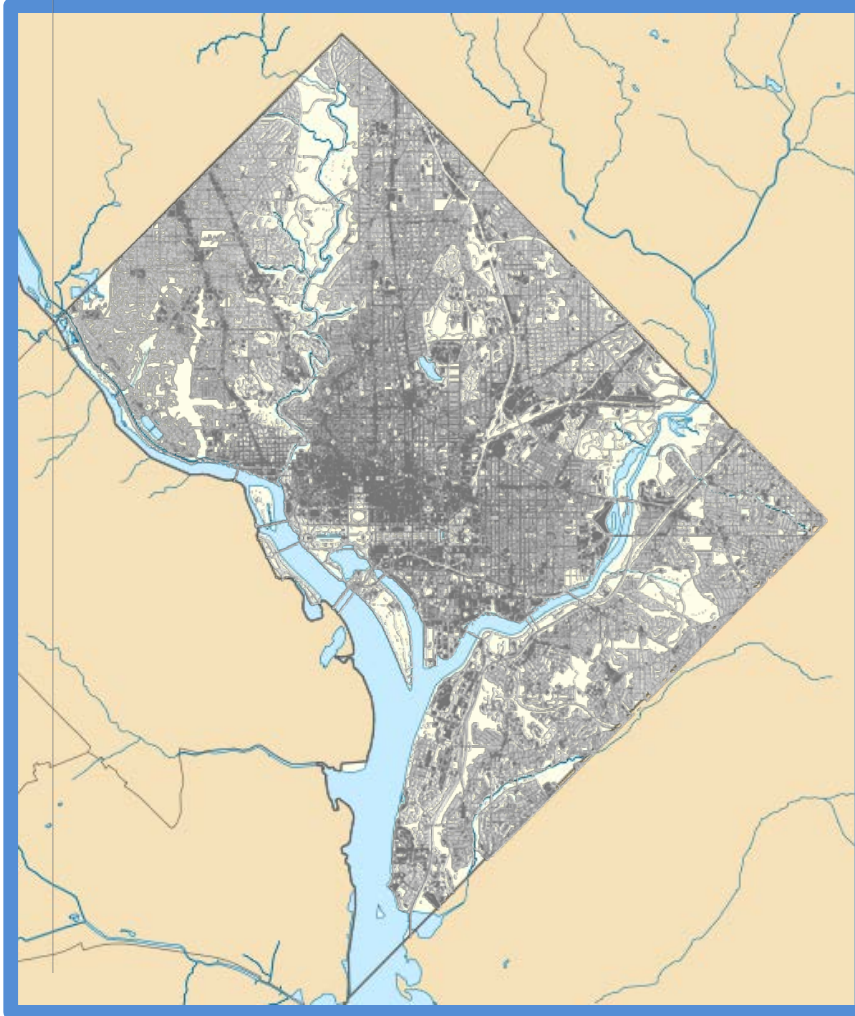


Surface runoff is minimal in an undeveloped site, but dominates the water balance at a highly impervious site.

# PROBLEM OF STORMWATER POLLUTION



# DISTRICT OF COLUMBIA LAND USE



Total Area  
68.3 mi<sup>2</sup>

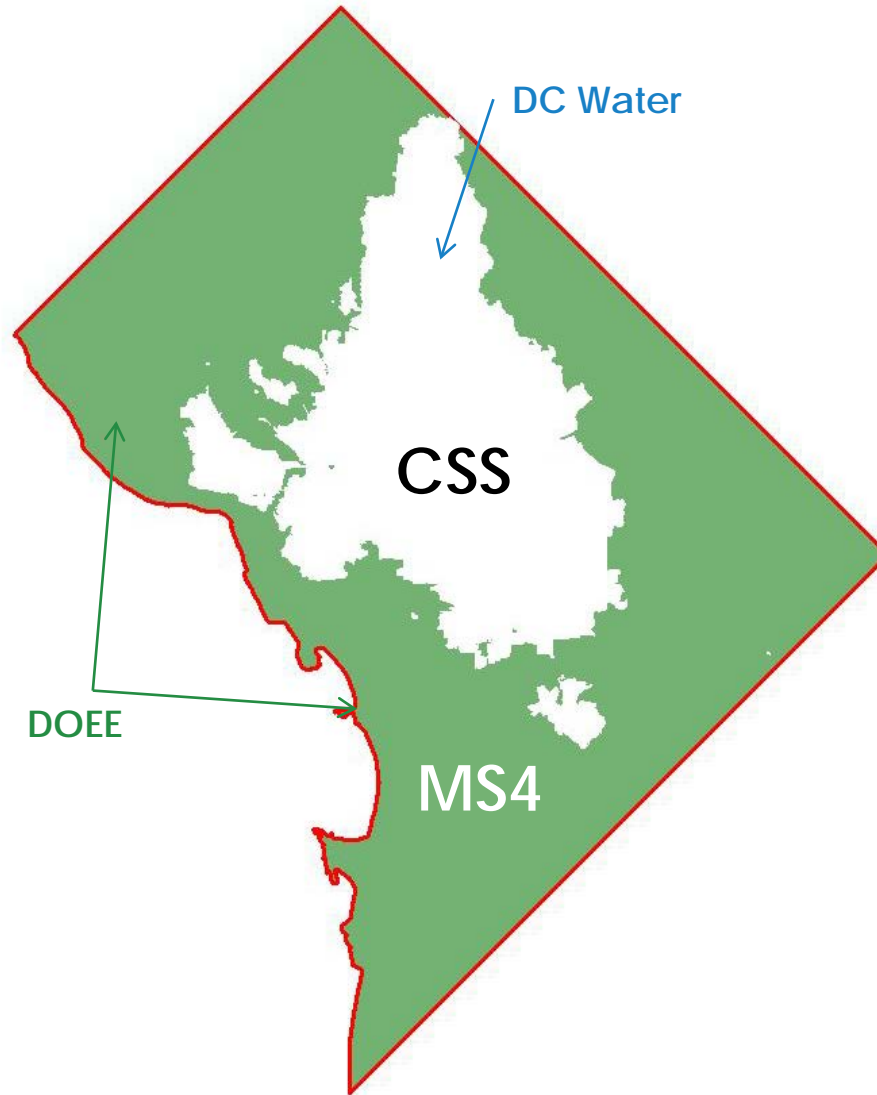
Land Area  
61.3 mi<sup>2</sup>

Impervious Area  
26.6 mi<sup>2</sup>  
*Approx 43%  
of Land Area*

*A single 1.2 inch storm falling on this area produces about 525 million gallons of stormwater runoff.*

# DC'S RESTORATION APPROACHES

---







# EXISTING CONDITIONS

---









# 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



# RESTORATION APPROACHES

---



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).

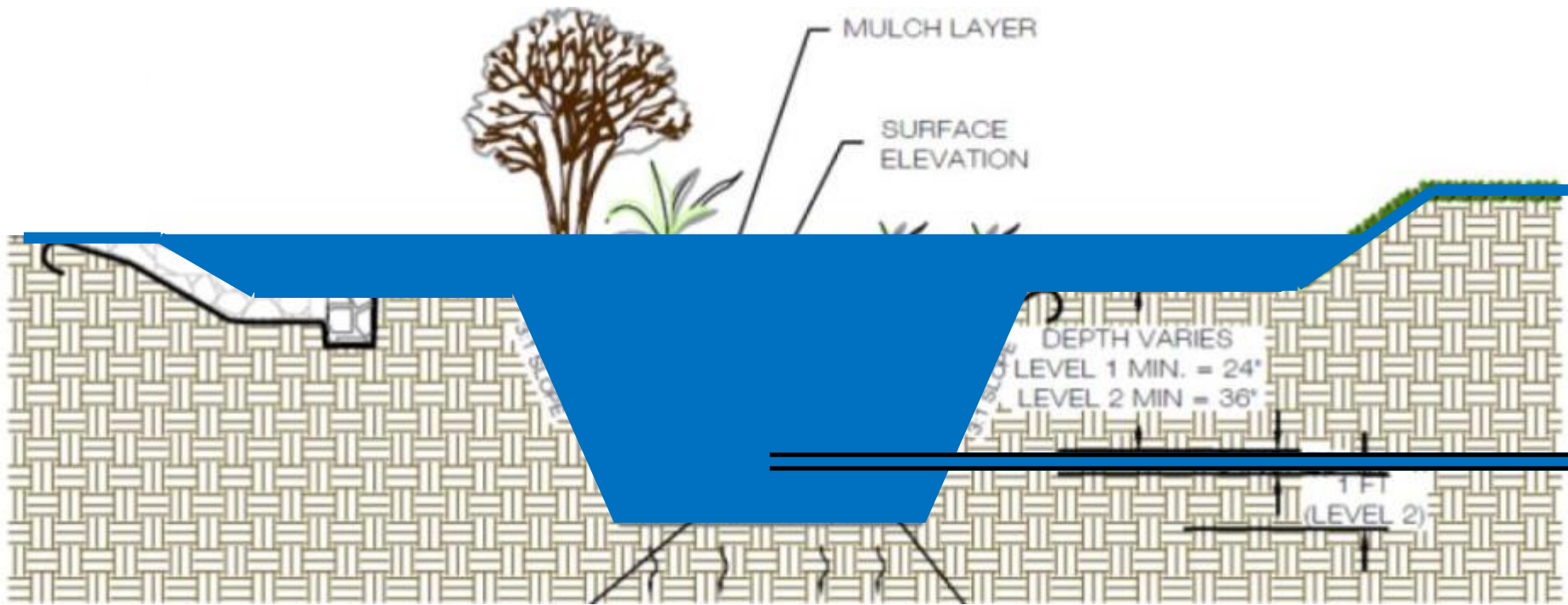
*Slow it down, Spread it Out, Soak it In!*

# BIORETENTION





# BIORETENTION: HOW IT WORKS



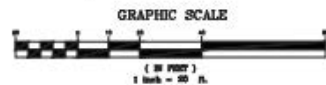
# BIOSWALES



# FINAL DESIGNS



**DOUGLASS  
COMMUNITY CENTER**  
1922 Frederick Douglass Ct. SE  
Washington, DC



**DRAINAGE AREAS**  
SCALE: 1" = 20'

# PLANTING PLAN



Ilex Glabra 'Shamrock'



Viburnum nudum 'Winterthur'



Cephalanthus occidentalis



Ilex verticillata 'Sparkleberry'



Panicum virgatum 'Shenandoah'

## DOUGLASS PLANT SCHEDULE

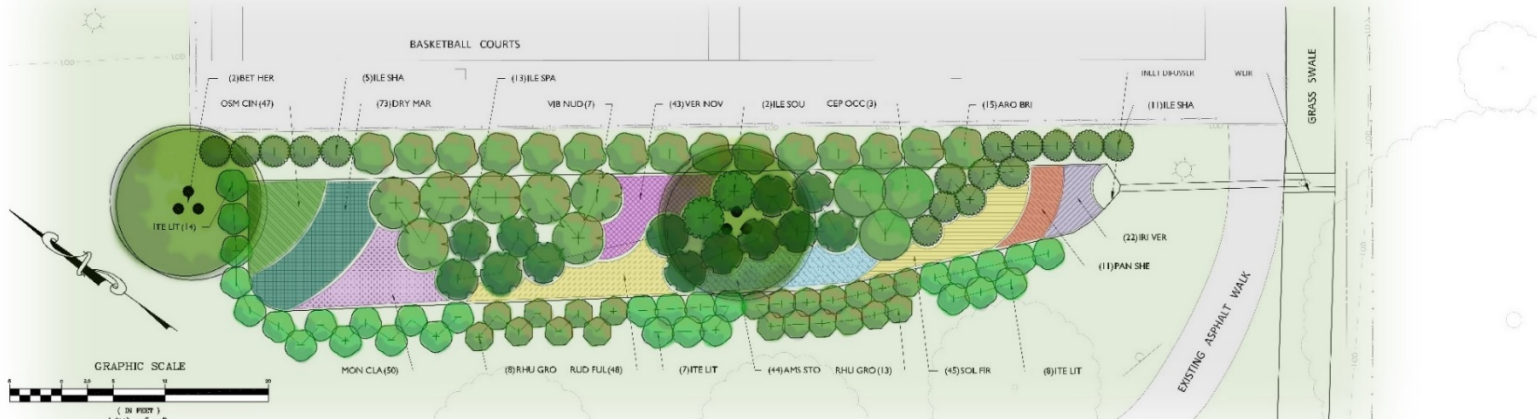
TREES	QTY	BOTANICAL / COMMON NAME	SIZE	CONDITION	REMARKS
BET HER	2	Betula nigra 'Heritage' / Heritage River Birch	8'-10'	B&B	3-5 Stems

SHRUBS	QTY	BOTANICAL / COMMON NAME	SIZE	CONDITION	REMARKS
ARO BRJ	15	Aronia arbutifolia 'Brilliantissima' / Brilliant Red Chokeberry	24"-30"	Cont.	
CEP OCC	3	Cephalanthus occidentalis / Butterbush	24"-30"	Cont.	
ILE SHA	16	Ilex glabra 'Shamrock' / Shamrock Inkberry	24"-30"	Cont.	
ILE SOU	2	Ilex verticillata 'Southern Gentleman' / Southern Gentleman Winterberry Holly	24"-30"	Cont.	Alt: Apollo
ILE SPA	13	Ilex verticillata 'Sparkleberry' / Sparkleberry Winterberry	24"-20"	Cont.	
ITE LIT	29	Itea virginica 'Little Henry' TM / Little Henry Virginia Sweetpire	3 gal	Cont.	
RHU GRO	21	Rhus aromatica 'Gro-Low' / Gro-Low Fragrant Sumac	3 gal	Cont.	
VIB NUD	8	Viburnum nudum 'Winterthur' / Winterthur Smooth Withered	24"-30"	Cont.	

GROUND COVERS	QTY	BOTANICAL / COMMON NAME	SIZE	CONDITION	SPACING	REMARKS
AMS STO	44	Amsonia catherinaemontana 'Storm Cloud' / Storm Cloud Bluestar	1 qt.	Cont.	12" o.c.	
DRY MAR	73	Dryopteris marginalis / Marginal Wood Fern	1 qt.	Cont.	12" o.c.	
IRI VER	22	Iris versicolor / Blue Flag Iris	1 qt.	Pot	12" o.c.	
MON CLA	50	Monarda fistulosa 'Clare Grace' / Claire Grace Bergamot	1 qt.	Cont.	12" o.c.	
OSM CIN	47	Osmundastrum cinnamomeum / Cinnamon Fern	1 qt.	Cont.	12" o.c.	
PAN SHE	11	Panicum virgatum 'Shenandoah' / Switch Grass	1 qt.	Pot	18" o.c.	
RUD FUL	48	Rudbeckia fulgida fulgida / Black-eyed Susan	1 qt.	Pot	12" o.c.	Alt: 'Goldsturm'
SOL FIR	45	Solidago rugosa Fireworks / Fireworks Goldenrod	1 qt.	Pot	12" o.c.	
VER NOV	43	Vernonia noveboracensis / New York Ironweed	1 qt.	Cont.	12" o.c.	



CECILIA LAWE  
ENVIRONMENTAL PROTECTION SPECIALIST  
WATERBURY PROTECTION DIVISION  
STATE OF ENERGY AND ENVIRONMENT  
1300 FIRST STREET NE, 5TH FLOOR  
WASHINGTON, DC 20002  
PHONE (202) 896-3347  
CELL (202) 788-9227  
EMAIL: CECILIA.LAWE@DC.GOV



DPR II - 4 PARKS  
STORMWATER  
IMPROVEMENTS

DOUGLASS  
COMMUNITY CENTER  
1922 FREDERICK DOUGLASS CT. SE  
WASHINGTON, DC

Natural  
Resources  
Design  
an ecologically focused design firm  
Washington, DC

1009 SHEPHERD ST. NE  
WASHINGTON DC, 20017  
202.489.6214  
www.NaturalResourcesDesign.com  
CBE# LS90C160022C21



LANDSCAPING PLAN

Designed: G. FALCON  
Drawn: G. FALCON  
Checked: L. WISLICKI  
Date: APRIL 23, 2020  
Revision: OCTOBER 6, 2020

L100



# CONSTRUCTION DETAILS

---





# GENERAL INFORMATION

- All work to occur on weekdays (M-F)\*
- Work hours are 8AM–5PM\*
- Construction vehicles on site:
  - 1 skid steer loader
  - 1 track excavator
  - 1 stake body truck
  - 1 crew pick-up truck
- DOEE Community Point of Contact:  
Cecilia Lane  
[Cecilia.lane@dc.gov](mailto:Cecilia.lane@dc.gov)  
202-535-1961



# SITE ACCESS & PARKING RESTRICTIONS

---

- No public parking restrictions. Workers will be parking on site.
- Work area will be fenced off for security, no pedestrian through 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 9/16/19
  - Semi-final designs (~65%) ON 12/16/19
  - Construction kickoff meeting 12/9/2020
- ~6 weeks for construction
- One year of post-construction maintenance included in contract



# 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

