



**BLUE
PRINT**

COLUMBUS

Clean streams.
Strong neighborhoods.

**BLUEPRINT COLUMBUS:
MILLER KELTON
60% DESIGN MEETING**

Blueprint Miller Kelton Agenda

- I. **What is Blueprint?** *A brief refresher*
- II. **Today's Focus: Green Infrastructure**
- III. **Your Neighborhood Plans**
 - I. Types of Green Infrastructure Design
 - II. Changes from plans presented in 2018
 - III. Additional Neighborhood Impacts
- IV. **Next Steps, General Q&A**
- V. **Open House with Design Engineers**

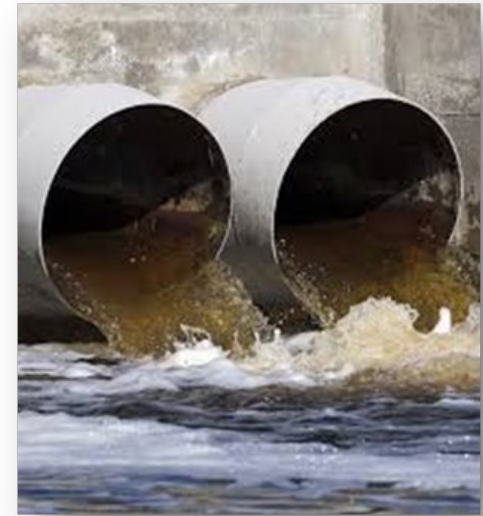
WHAT'S THE PROBLEM?

Rain water can enter the sanitary sewers through leaky joints, cracks, roof gutters, old sewers, and foundation drains. This causes:

- **Sewer Overflows** into our rivers and streams
- **Basement Backups** (sewage coming up from floor drain)

ALSO:

- **Pollutants** found on the street (dirt, oil, trash, etc.) get carried to our rivers and streams by the storm sewers

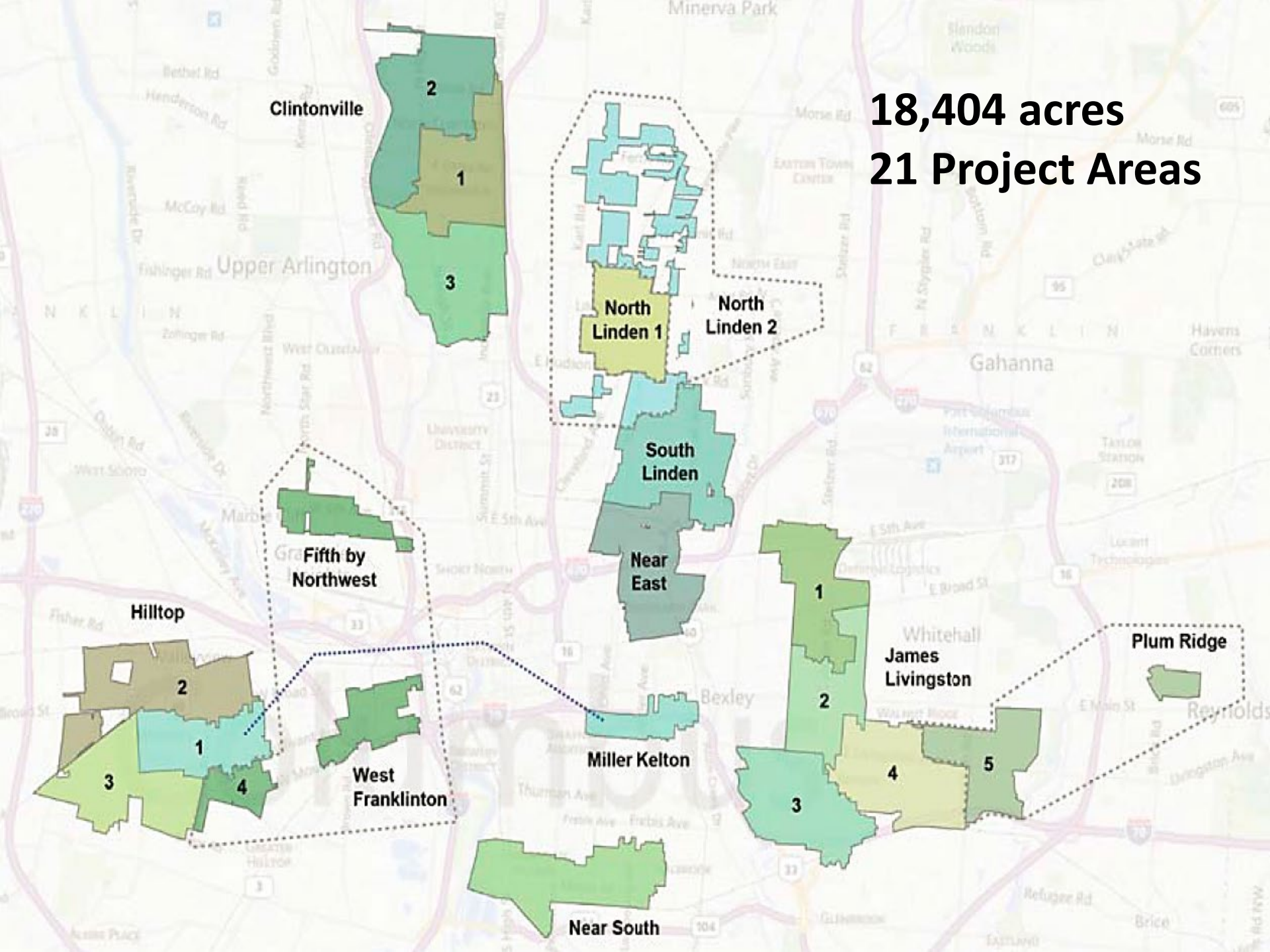


SOLUTION: BLUEPRINT COLUMBUS

- Instead of building more infrastructure, **invest in fixing our existing infrastructure**
- Create opportunities to **improve stormwater discharges**
 - Route water away from houses to streets
 - Treat with green infrastructure before discharging
- **Improve rivers, neighborhoods, local economy**



18,404 acres
21 Project Areas





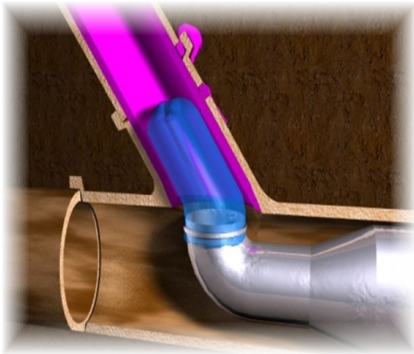
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THE BLUEPRINT APPROACH

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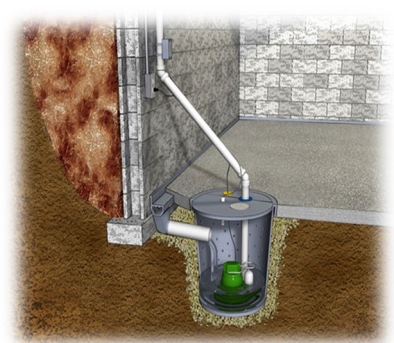
GOAL: Keep rain water out of sanitary sewers



Lateral Lining



**Roofwater
Redirection**



Sump Pumps

LATERAL LINING

- Line home sewer lateral with waterproof material
- Seals cracked and loose laterals
- Improves property value
- Prevents root intrusion

[Watch the Video!](#)

**Coming in
2023!**



ROOF WATER REDIRECTION

- Rainwater can settle around the foundation of your home, seeping into the lateral joint
- The City can redirect the downspout to road
- Keeps roof water from foundation drain
- Can tie into green infrastructure

[Watch the Video!](#)



SUMP PUMPS

- Stops foundation drain from directly connecting to sanitary sewer
- The City can redirect the discharge to road
- Can tie into green infrastructure
- City provides installation, sump pump, and back-up battery

[Watch the Video!](#)

**Begins
Spring
2020!**



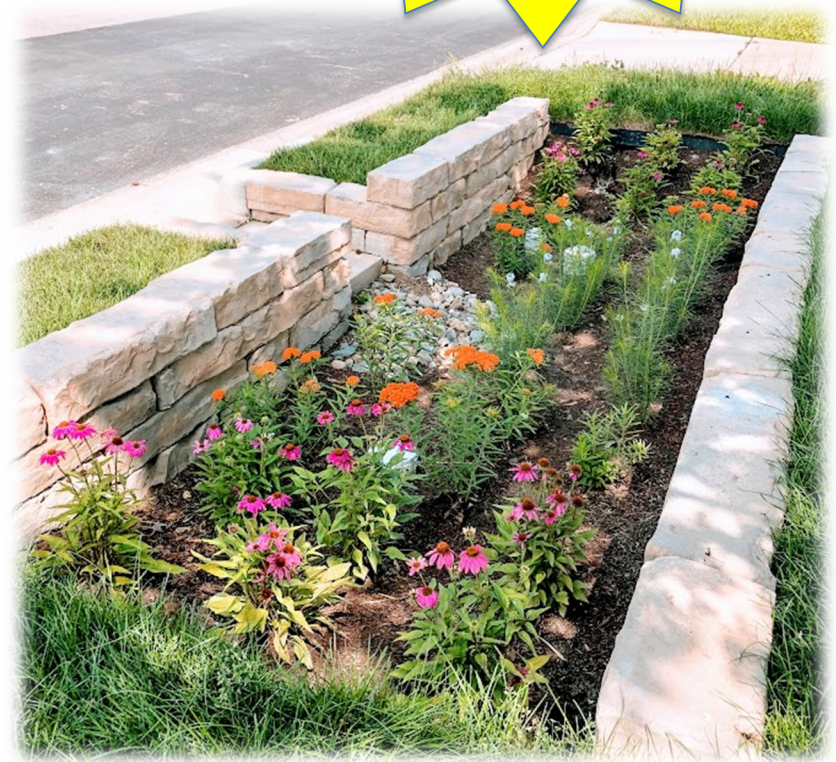
THE BLUEPRINT APPROACH

GOAL: Improve stormwater discharges

**Begins
Winter 2020!**



[Watch the Video!](#)





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GREEN INFRASTRUCTURE

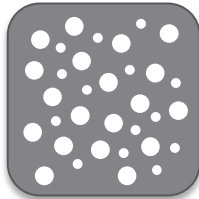
WHAT DOES GREEN INFRASTRUCTURE DO?



Pathogens



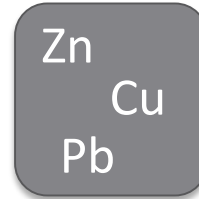
Nutrients



Sediment



Trash



Metals

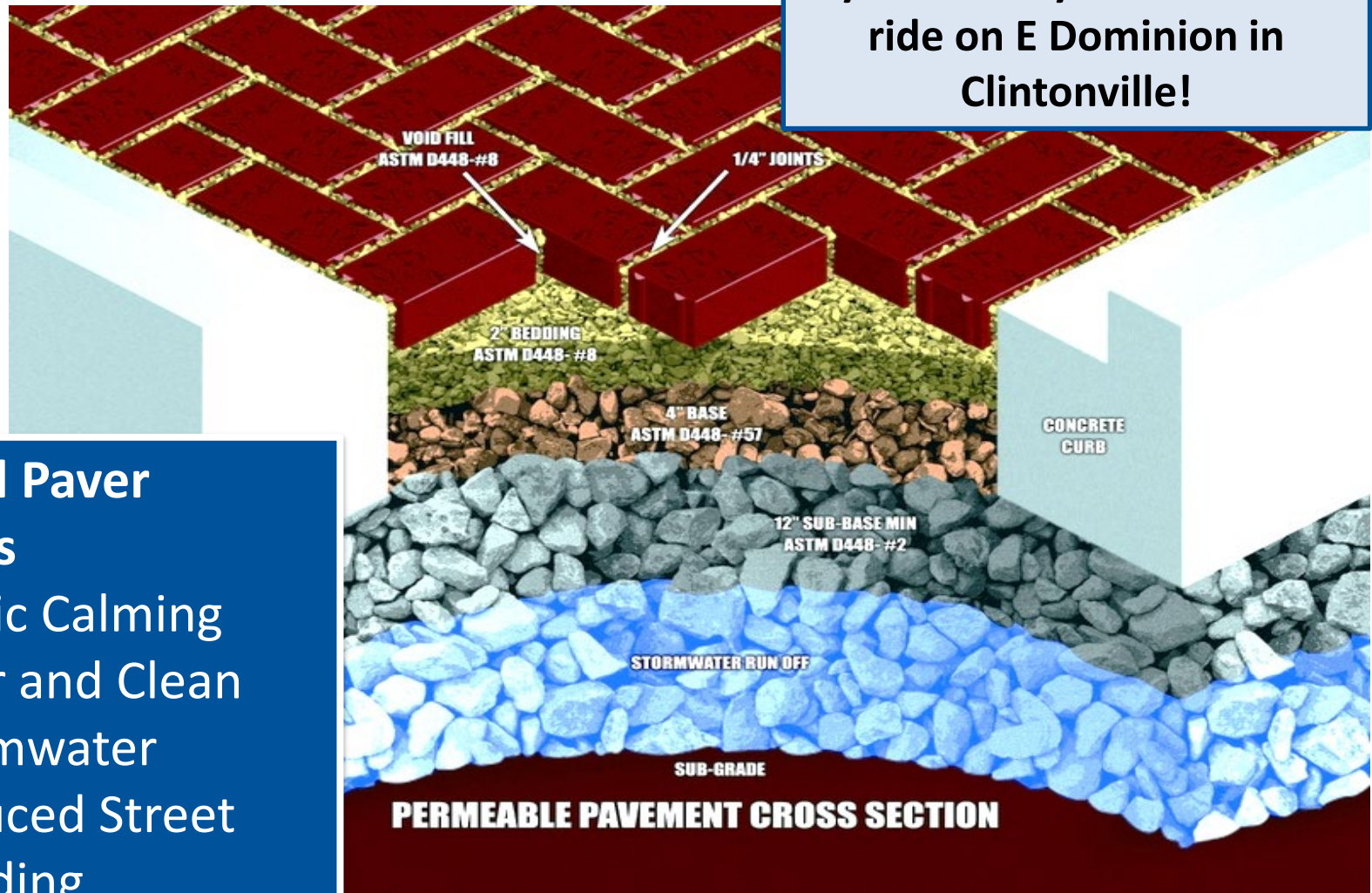


Flow



Permeable Pavement

Try it out for yourself! Take a ride on E Dominion in Clintonville!



General Paver Benefits

- ✓ Traffic Calming
- ✓ Filter and Clean Stormwater
- ✓ Reduced Street Flooding
- ✓ Less Maintenance Required

Permeable Pavers

- Permeable Pavers have an underdrain located under several layers of rocks: **water drains faster, which means less issues with freeze/thaw cycles causing heaving, buckling, or other maintenance issues**
- Paver bricks are beveled on edges: **smoother ride for motorists and cyclists**
- Permeable Pavers feature an interlocking design (not single bricks): **less chance of holes/bricks coming loose**



The City is Responsible for All Maintenance

All Green Infrastructure installed by the City is a component of the storm sewer system. Regular maintenance keeps it functioning!

- Regular weeding, mulching, plant care
- Removing trash
- Checking underdrains
- Sediment removal



Vacuum truck for permeable pavement





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BLUEPRINT - MILLER KELTON

Types of Green Infrastructure Designs

“Regional” Rain Gardens



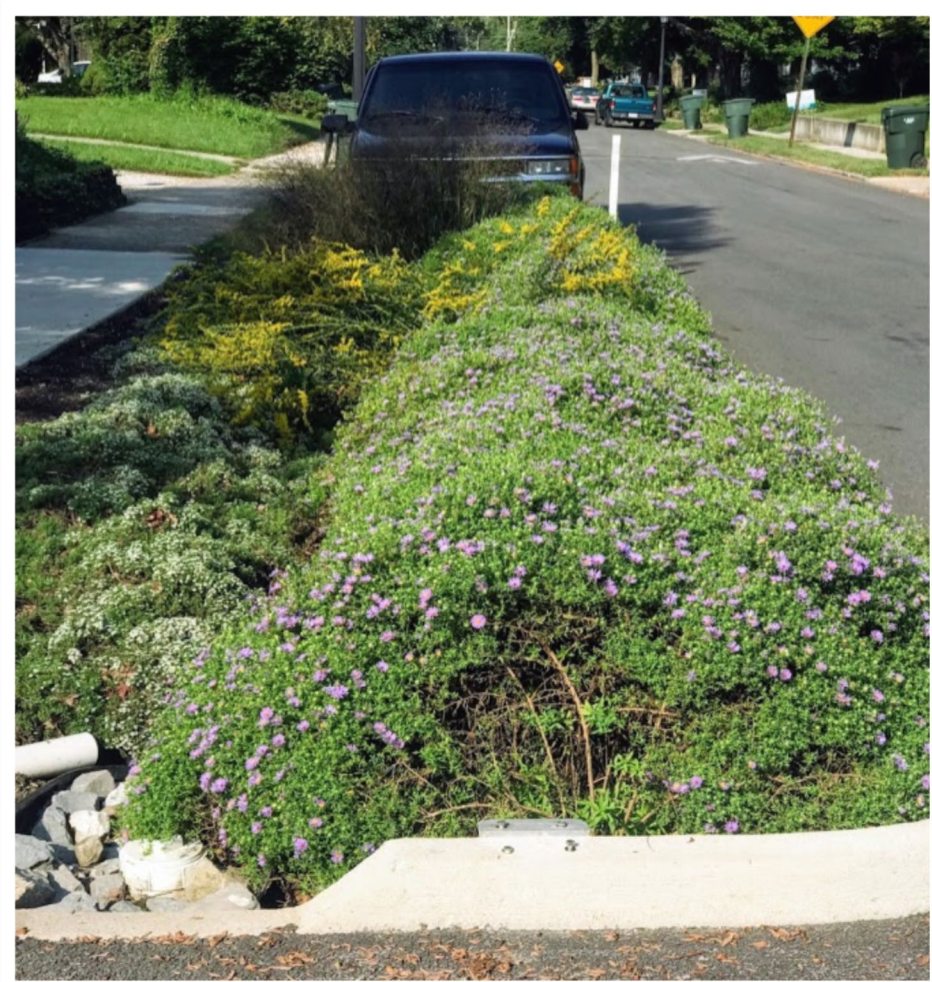
Types of Green Infrastructure Designs

Hardscaped “Walled” Gardens



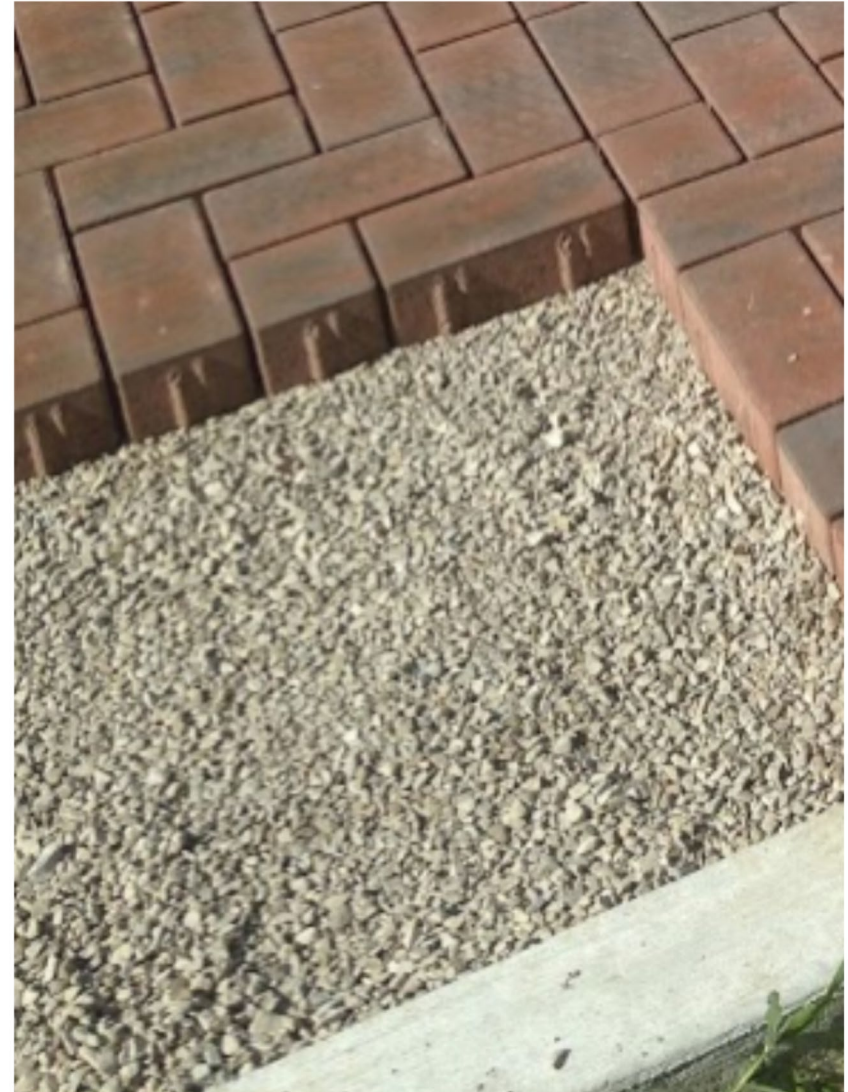
Types of Green Infrastructure Designs

“Bump out” Rain Gardens



Types of Green Infrastructure Designs

Permeable Pavement



Changes from 2018 plans

- Permeable Pavement added to Kimball; removed from Miller, Oakwood
- Existing tree lawns maintained
- 4 “regional” basins removed
- Some additional storm sewer inlets
- Some design and dimension changes to individual basins (see team for more info!)



Miller Kelton Neighborhood – Other Impacts

- Some additional sidewalk installation (filling gaps if sidewalk present)
- Old water mains will be replaced during permeable pavement installation; consolidated on Bide-a-Wee
- Some new curb additions
- Some impacts to retaining walls, fences
- Some trees will be impacted from sidewalk construction, waterline replacement, and storm pipe installations →

Removed Tree's Trunk Diameter	Tree Replacement Ratio
≤ 12"	1:1
12"- 18"	2:1
18"- 24"	3:1
24"- 30"	4:1
≥ 30"	5:1




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Next Steps

Project Milestones

PROJECT STAGE		OUTREACH ACTIVITIES
Initial Surveying		<i>Letter Notification Residents questions/concerns provided to designers as input</i>
30% Design		<i>Public Meeting Initial concept proposals shared with residents for feedback</i>
 60% Design		<i>Designation Order Public Comment Period (Letter Notification) Individual site reviews with residents of preferred locations</i>
90% Design	Q1 2020	<i>Locations and designs finalized Resident planting selections due</i>
Construction	Spring 2021	<i>Pre-Construction Public Meetings with Contractors Hi-level schedules and order of operations</i>

GOALS FOR TODAY

1. Talk to the team for more detailed information on design and locations of Green Infrastructure.
2. [Sign up](#) for email/text message notifications to stay informed!
3. [Get on the waiting list](#) for your free sump pump!
4. Grab a magnet with our contact info – call us with any questions or concerns!

BLUEPRINT COLUMBUS OUTREACH TEAM



Blueprint Hotline

(614) 645-1253



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