



BLUE
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COLUMBUS

Cleaner streams.
Stronger neighborhoods.

Hilltop 4 (Highland/Harris)

Final Design Meeting-Virtual

March 30, 2023



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Welcome

Moderator

ELYAS INGRAM
Outreach Team
D&D Policy Works

Presenters

TIFFANY CONN
Community Relations Coordinator
City of Columbus

JEREMY CAWLEY, P.E.
Project Manager
City of Columbus

DANIEL BIRU, P.E.
Project Manager
Korda

JOE TRIBBLE, P.E.
Deputy Project Manager
Korda



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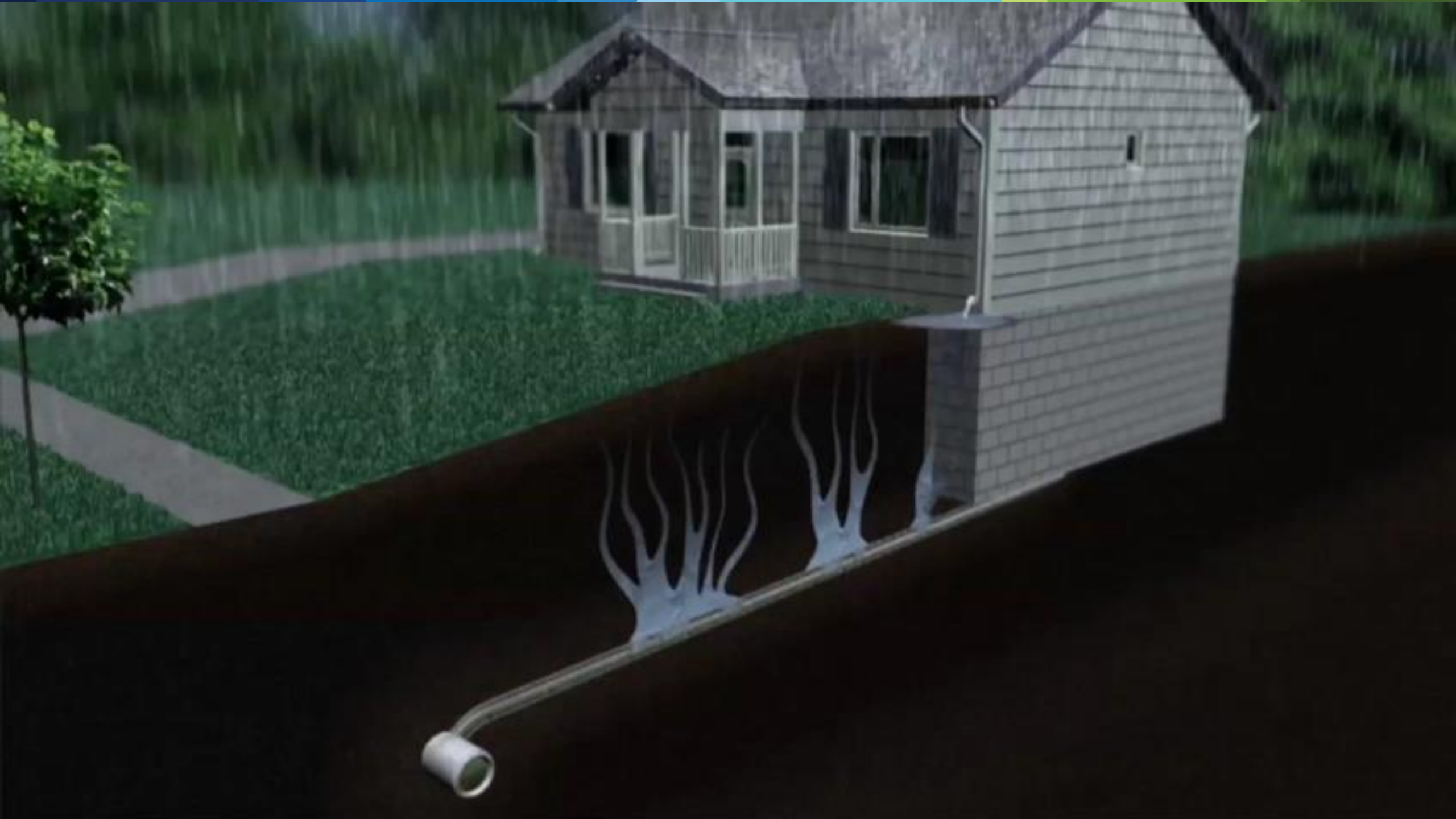
Cleaner streams.
Stronger neighborhoods.

Agenda

- Blueprint 101: A Refresher
 - Today's focus: Green infrastructure
 - Schedule
- Highland/Harris Neighborhood update
 - Highlighting specifics
 - Other impacts
- What's Next?
- Opportunities to Weigh In

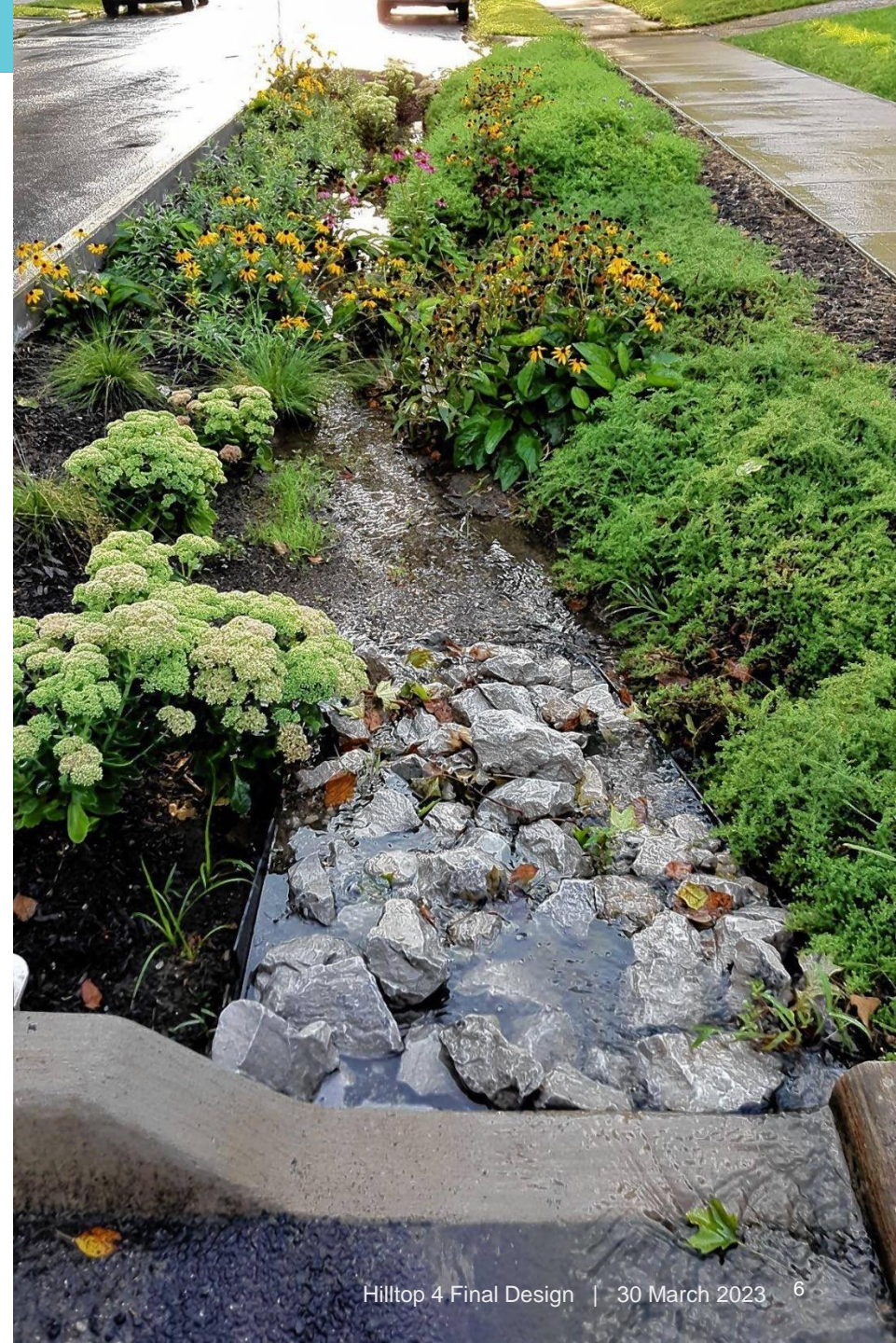
Blueprint 101: A Refresher

TIFFANY CONN
Community Relations Coordinator
City of Columbus



Blueprint: An Innovative, Green Solution

- Invests in fixing our existing infrastructure
- Uses local materials, native plants
- Creates opportunities to improve stormwater discharges
- Adds permanent local jobs
- Engages neighborhoods, residents
- Addresses consent order requirements

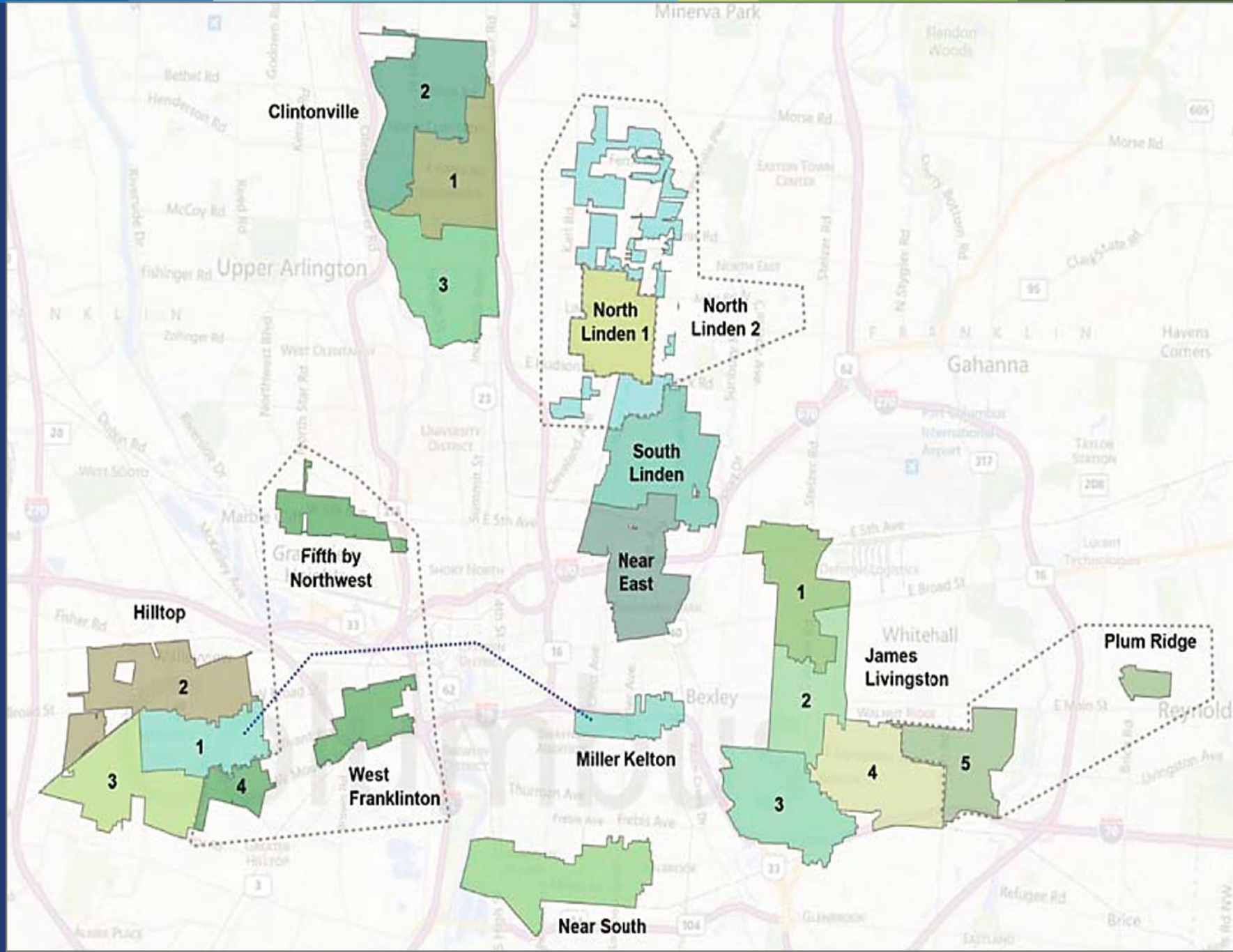


Blueprint Columbus

18,404 acres &
21 project areas
throughout
Columbus

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DEPARTMENT OF
PUBLIC UTILITIES



Four Pillars



Lateral Lining

- Keeps rainwater out of sanitary sewer
- Seals cracks and small breaks in pipe that carry rain away from your home to sewers



Roof Water Redirection

- Redirects rainwater away from your home and to the street, so that it can't enter the sewer through connection joints around your home



Sump Pumps

- Collects rainwater around your home's foundation
- Discharges rainwater into a pipe that discharges to the street



Green Infrastructure

- Filters rainwater from the street
- Removes pollutants and trash
- Makes rainwater cleaner when it reaches rivers and streams

Deeper Dive: Lateral Lining



Home sewer lateral is lined with waterproof material, which:

- Seals cracked and loose laterals
- Prevents root intrusion
- Improves property value



Deeper Dive: Roof Water Redirection



Downspout (and rainwater) is redirected to the street, which:

- Keeps roof water from foundation drain
- Reduces water settling around your home
- Prevents seeping into the lateral joint
- Can tie into green infrastructure



Deeper Dive: Sump Pumps



A sump pump and back-up battery is installed, which:

- Redirects rainwater discharge to the street
- Stops the foundation drain from directly connecting to sewer
- Can tie into green infrastructure



Green Infrastructure Goal



Leaves and debris carried by rainwater rush down the street



Green Infrastructure filters rainwater of debris, leaves, etc.



GOAL: Improve stormwater discharges

Types of Green Infrastructure



**Behind-the-curb
rain garden-
2 walls**



**Behind-the-curb
rain garden-
no walls**



**Bump-out rain
garden**

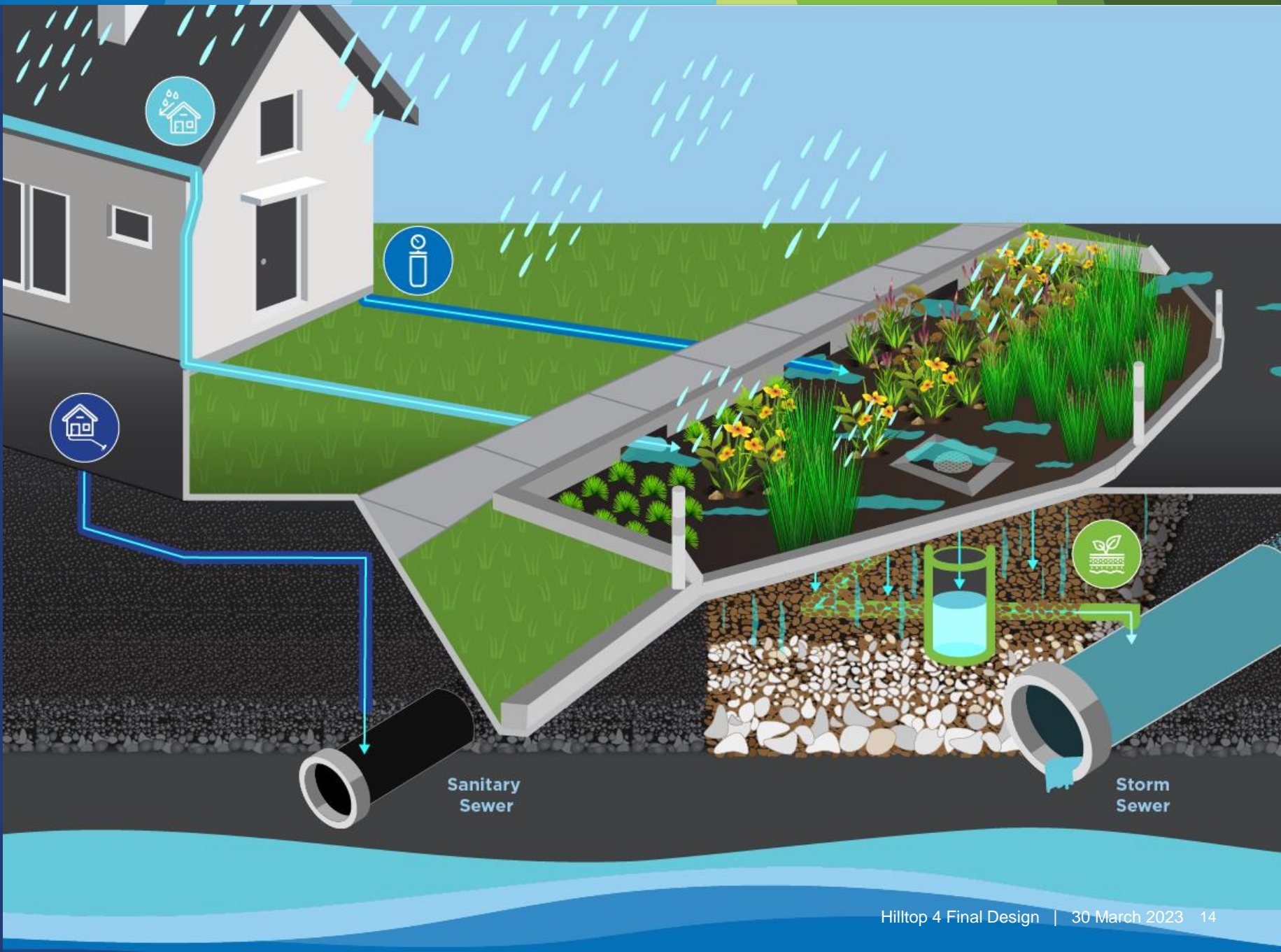


**Regional rain
garden**



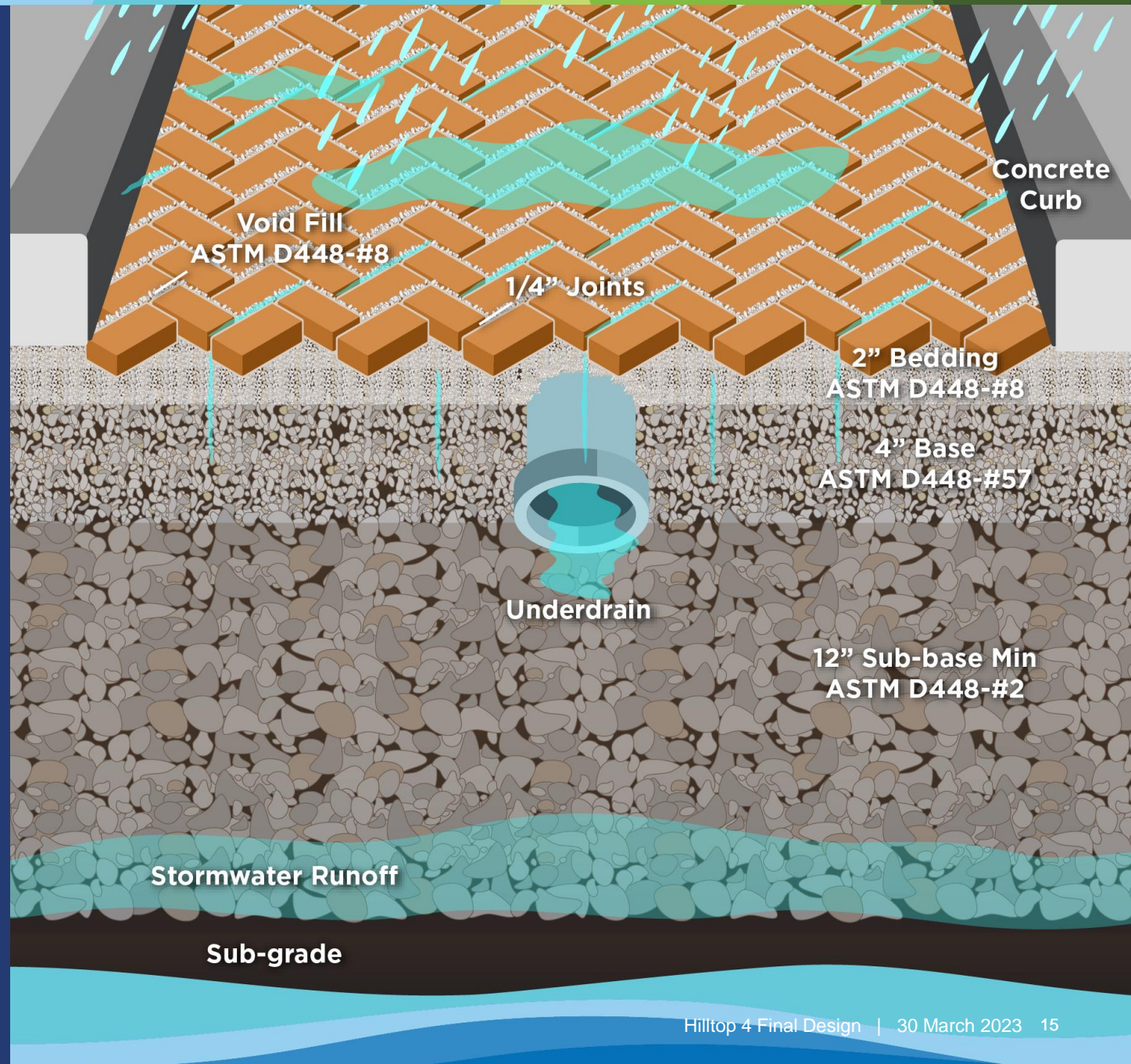
Pervious pavement

How Green Infrastructure Works



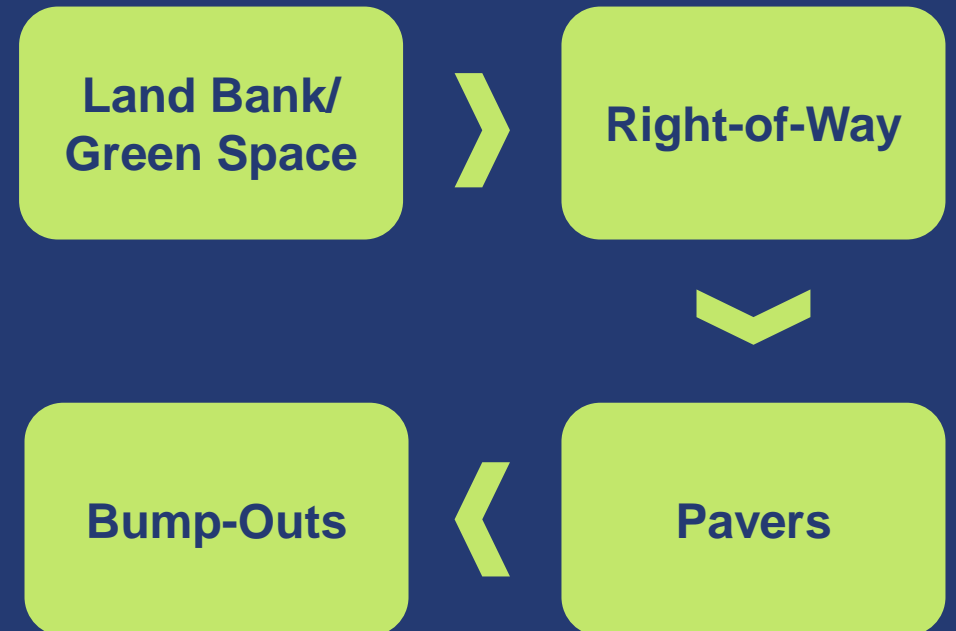
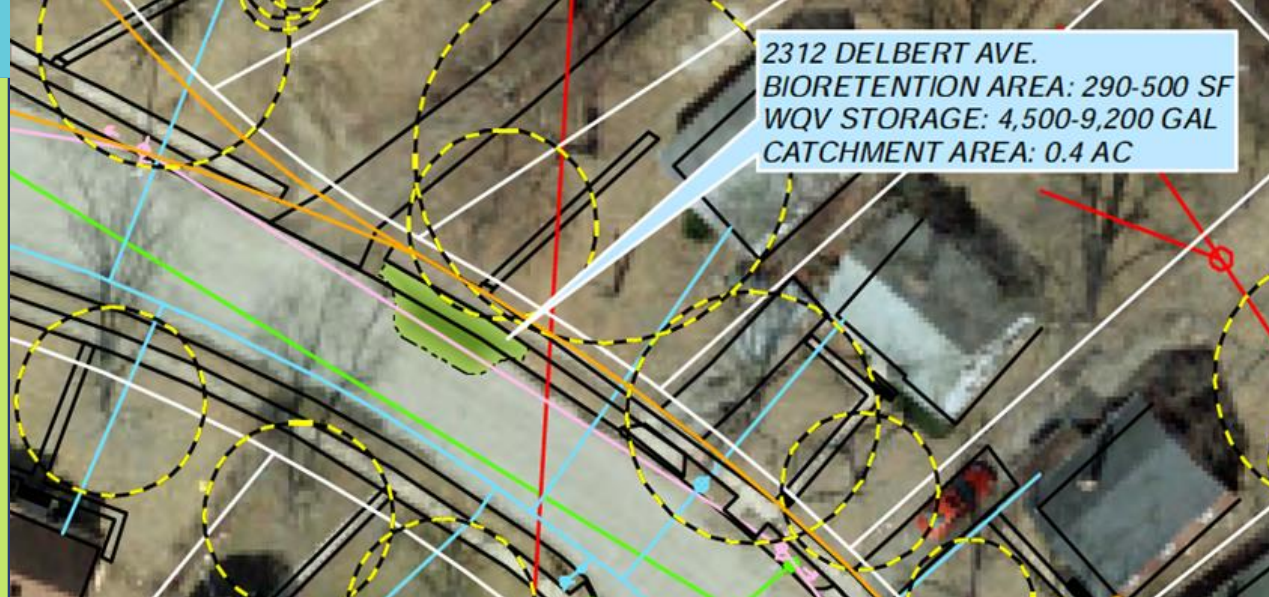
How Pervious Pavement Works

- Filters and cleans rainwater
- Reduces street flooding
- Calms traffic
- Reduces maintenance



How We Select Improvement Locations

1. Where are biggest problem areas?
2. How much water do we need to control?
3. Where does the water naturally flow?
4. What barriers exist?
5. What would improve the neighborhood?



The City is Responsible for All Maintenance!

Green infrastructure installed by the City is part of the storm sewer system

Regular maintenance keeps it functioning!

- Weeding, mulching, plant care
- Removing trash
- Checking underdrains
- Removing sediments



Neighborhood Plans

At this Final design phase, we are presenting plans including feedback from residents, other City departments, and stakeholders and seeking feedback from residents on planting preferences.

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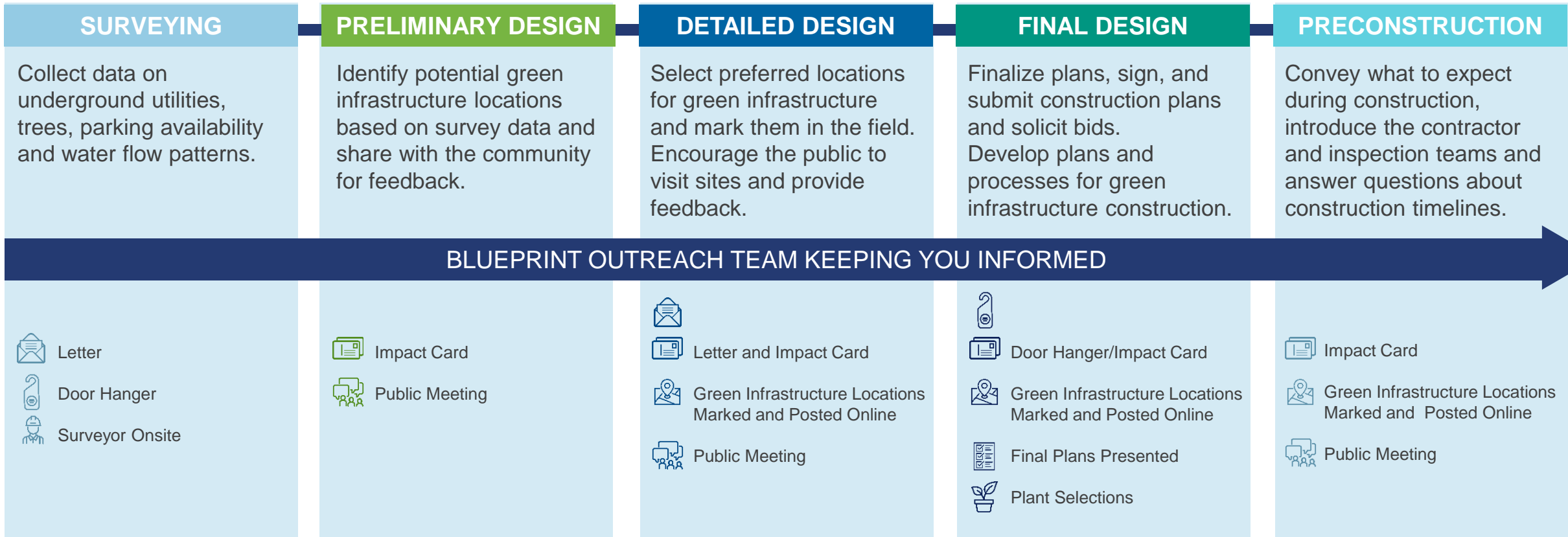


Schedule

Current Phase



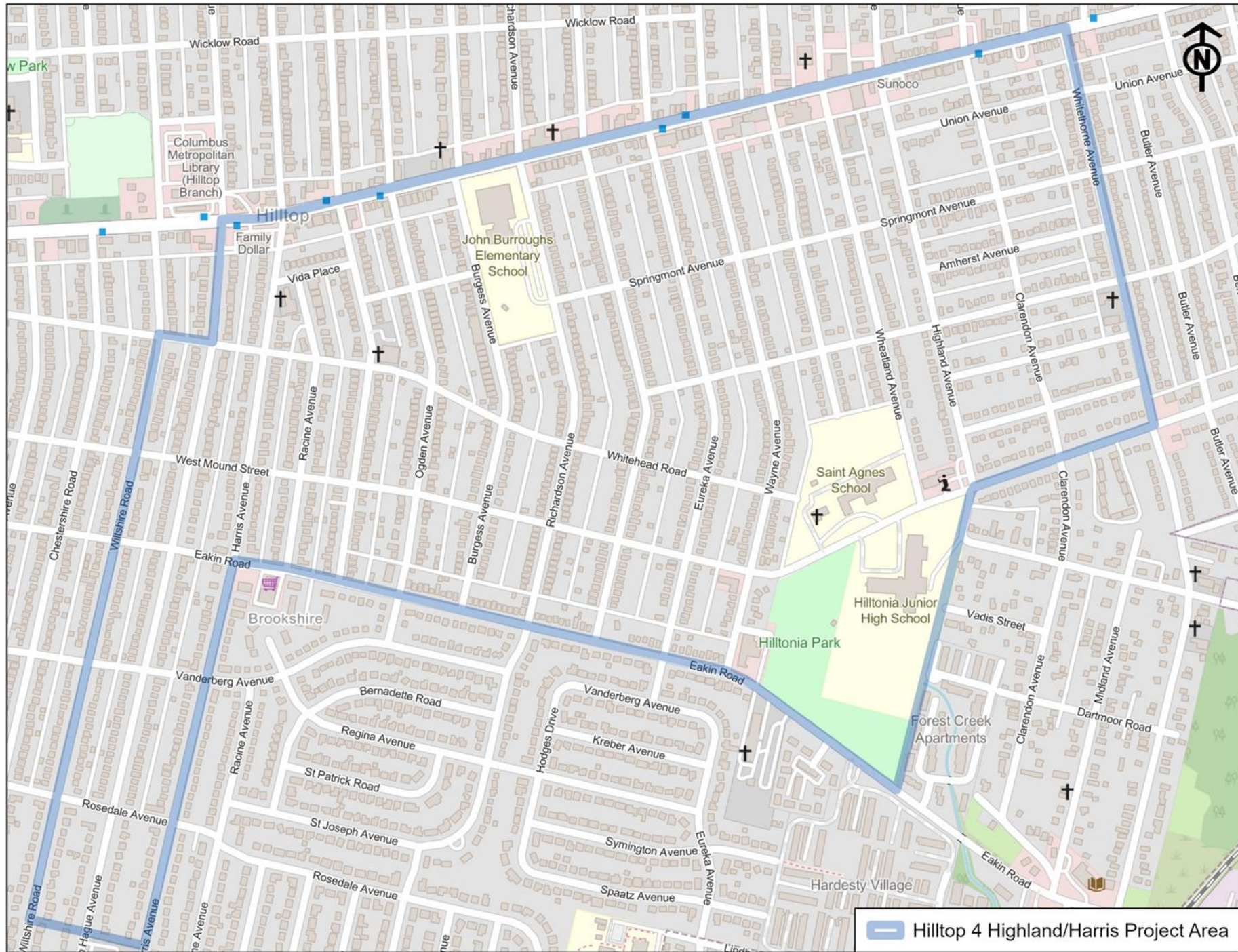
2023



Highland-Harris Neighborhood Map

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85 Green Infrastructure Improvements

- 75 right-of-way rain gardens
- 1 bump-out rain garden
- 7 regional rain gardens
- 2 pervious paver streets



Highland-Harris Green Infrastructure Locations



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Sloped Rain Gardens

Rosedale Avenue
Whitehead Road
Springmont Avenue
Safford Avenue
Clarendon Avenue



Curbside 2-walled Rain Gardens

Hague Avenue
Harris Avenue
Warren Avenue
Ogden Avenue
Burgess Avenue
Terrace Avenue
Eureka Avenue

Wayne Avenue
Wheatland Avenue
Highland Avenue
Whitethorne Road
Mound Street
Eakin Road



2-Walled Rain Gardens with Step-out

Hague Avenue
Harris Avenue
Eureka Avenue
Oakley avenue
Whitethorne Road
Mound Street

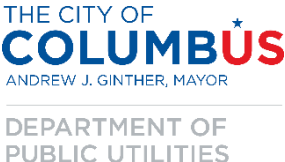


Bump-out Rain Gardens



Regional Rain Gardens

- Wayne Avenue
- Oakley Avenue
- Highland Avenue
- Mound Street and Wayne Avenue
- Safford Avenue and Oakley Avenue
- Whitehead Road and Eureka Avenue
- Sullivant Avenue and Clarendon Avenue



Pervious Pavement



Highland-Harris Green Infrastructure Locations



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Other Impacts

- Some curb, sidewalks, and driveway approaches will be replaced
- Some **waterlines** will be moved/replaced
- Some new storm pipes will be installed
- Some parking spots will be removed
- Some **trees** will be removed and replaced
- Some light poles and street signs will be moved or replaced
- Some **steps will be installed**
- Some handicap ramps will be installed/replaced
- Some **fences** will be removed

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

Plant Survey



CHAD KETTLEWELL, PWS, CERP

Coldwater Consulting

What's Next: From Final Design to Pre- Construction

- Review and digest feedback and refine planting plans
- Finalize plans, sign, and submit construction plans and solicit bids
- Develop plans and processes for green infrastructure construction
- Alert you when we are at pre-construction (green infrastructure locations will be marked again)
- **Residents who have a basement with no sump pump or a non-working sump pump are eligible for an inspection for a free sump pump!**



Questions & Input

Talk with our team

- Have property specific questions?
- Want to know more about Blueprint in general?
- Email blueprint@columbus.gov or call 614-645-1253 and we will get your questions answered!

Vote on plants

- Got a rain garden planned near you? Let us know your plant preferences!



Sign up for a Sump Pump

- Blueprint Columbus offers free sump pump installation for qualifying homeowners
- **Sign up today! Email blueprint@columbus.gov or call 614-645-1253.**

Your Outreach Team



614-645-1253

blueprintneighborhoods.com



@blueprintcbus

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