

IMPROVING OUR COMMUNITIES with Natural Drainage Systems (NDS)

What are they & why do we need them?

When it rains in the Delridge and Westwood neighborhoods, pollution from our streets runs into Longfellow Creek untreated. This is not healthy for the creek or for people. **The good news is: there is something we can do.**

Natural Drainage Systems consist of shallow depressions in the public right-of-way, or “planter strip,” filled with deep-rooted plants and spongy soils that temporarily hold and clean polluted stormwater from streets and sidewalks. These features capture and clean pollutants before they can reach the creek.

Seattle Public Utilities (SPU) is planning to build natural drainage systems in your neighborhood in 2020-2021.



What is the NDS Partnering Program?

The **2016-2025 Natural Drainage Systems Partnering Program** is a Seattle Public Utilities multi-year capital improvement program focused on Longfellow, Piper’s, and Thornton Creek watersheds.

The program’s goal is to construct street-side natural drainage systems that filter and manage stormwater and improve neighborhoods with street trees, traffic calming, and, in some cases, a limited number of sidewalks.

We are partnering with **Seattle Department of Transportation (SDOT)**, **Office of Arts & Culture 1% for the arts**, and **King County Flood Control District**.

Community benefits

Natural Drainage Systems offer multiple benefits to local neighborhoods and ecosystems, including:

- Greener, more attractive neighborhoods
- Lower risk of flooding
- Creation of habitat along our streets
- Healthier creek ecosystems
- Calmer traffic patterns
- More street trees

LONGFELLOW CREEK

Watershed Boundary



Seattle
Public
Utilities



NOTES

- All blue-shaded areas flow into Longfellow Creek
- The dashed line of Longfellow Creek indicates where the creek is in a pipe



City of Seattle



JULY 2019
30% DESIGN PHASE

WHERE WE ARE NOW

...and where we're going

The Longfellow Creek Natural Drainage System (NDS) Project has completed preliminary planning and field investigations.



At the **30% Design Phase** we present potential street and drainage improvements to the community, answer questions, and gather community concerns as we work toward finalizing the project scope based on regulatory requirements and project funding.

30% INPUTS

- Neighborhood priorities
- Current drainage conditions
- Location of utilities
- Local topography + mature trees
- Rainfall runoff patterns along the street
- Soil testing + analysis
- Location of homes + paths
- Location of driveways
- On-street parking patterns
- City right-of-way impacts
- Zoning code
- Projected construction costs
- Maintenance of NDS
- Permitting
- Community concerns

60% INPUTS

- Neighborhood priorities
- Local ecosystem needs
- Detailed utility locations + impacts
- Planting palettes & new street trees
- NDS sizing adjustments
- Refinements to design dimensions + details
- City right-of-way impacts
- Balance of costs with budget
- Maintenance of NDS
- Permitting
- Community concerns

FINAL INPUTS

- Accessibility impacts
- Construction costs + impacts
- Ongoing maintenance costs + responsibility
- Permitting requirements
- Construction questions

A Healthier & Safer
Longfellow Creek!



City of Seattle

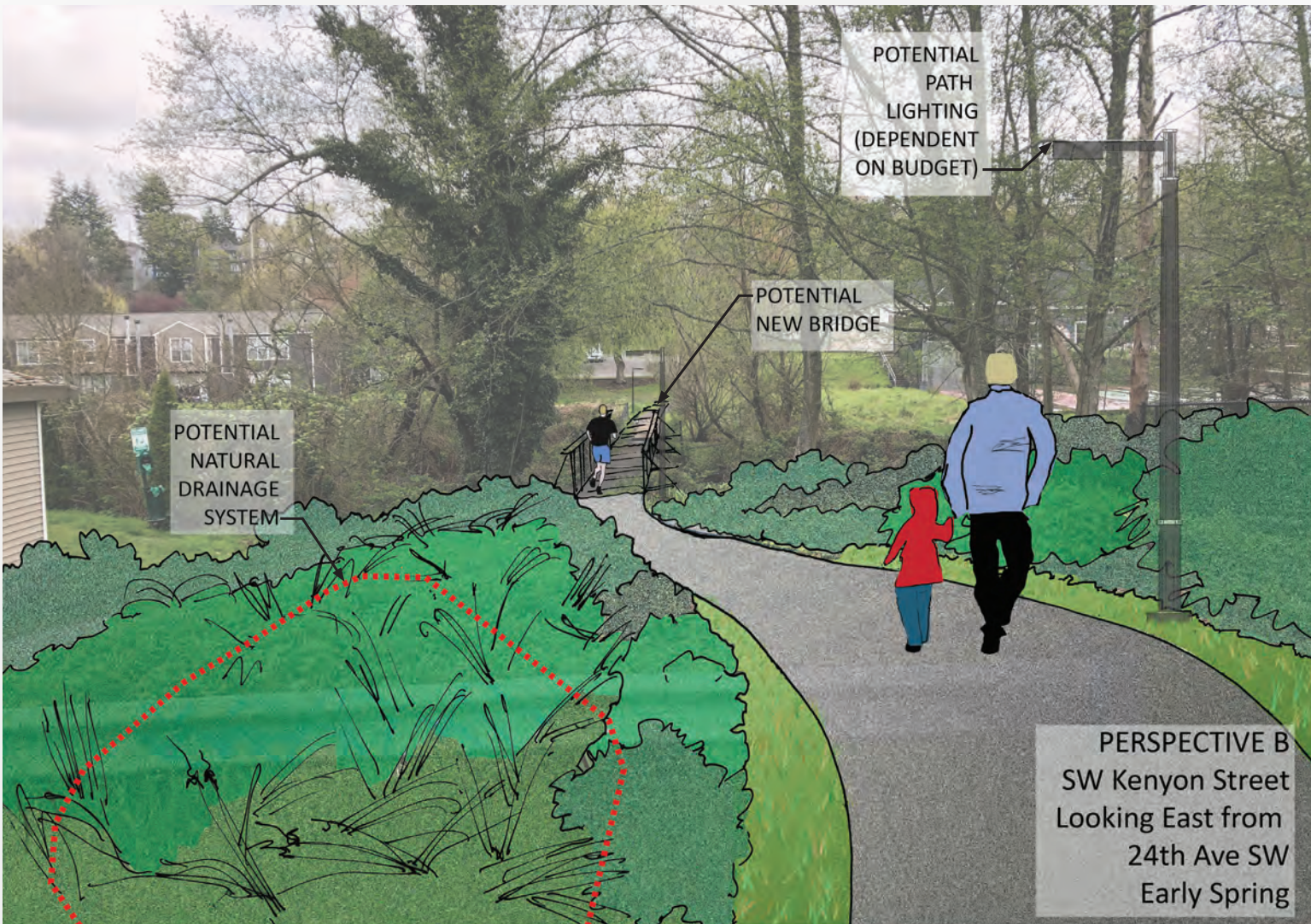


JULY 2019
30% DESIGN PHASE

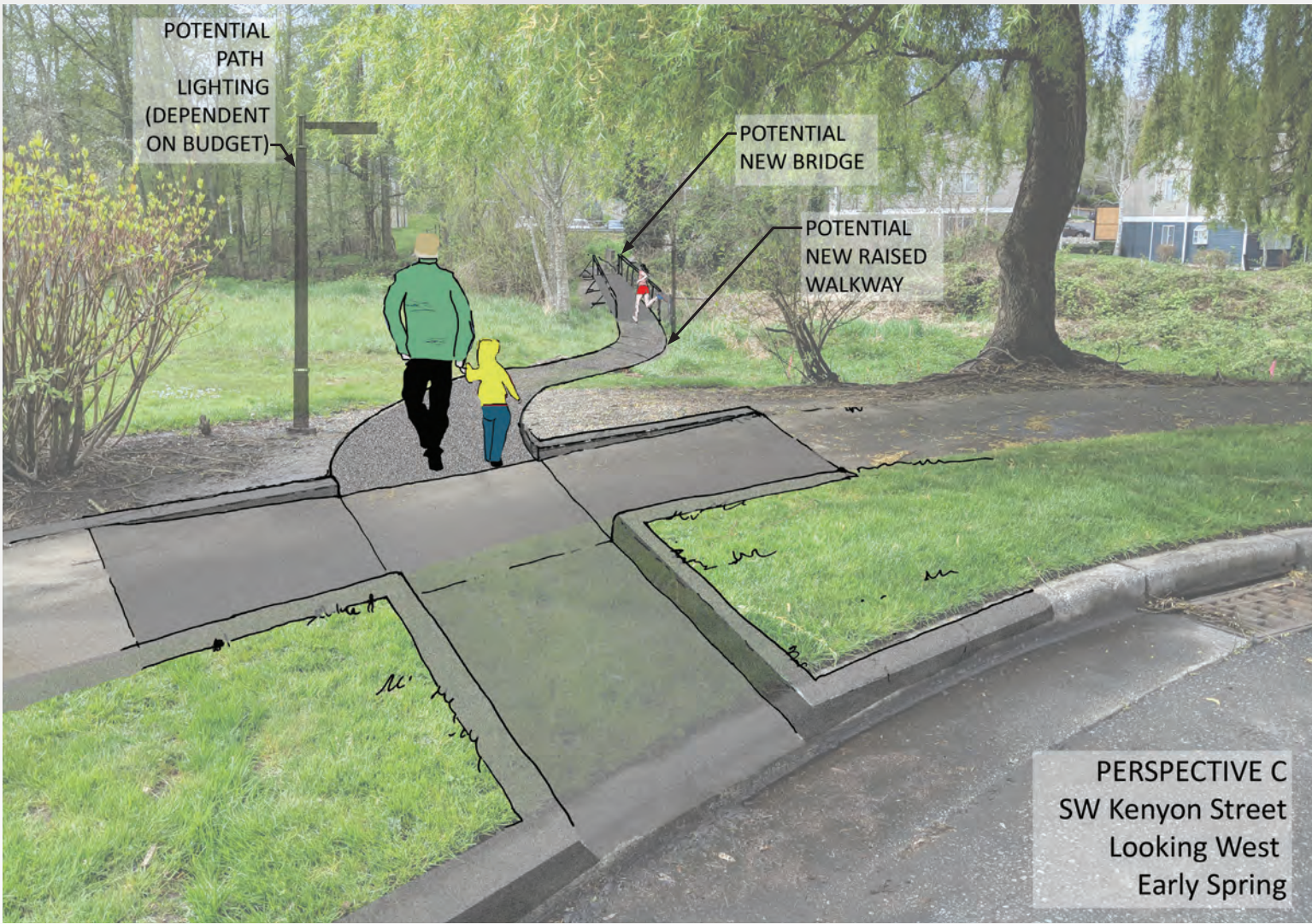
you'd like to incorporate in NDS and path design



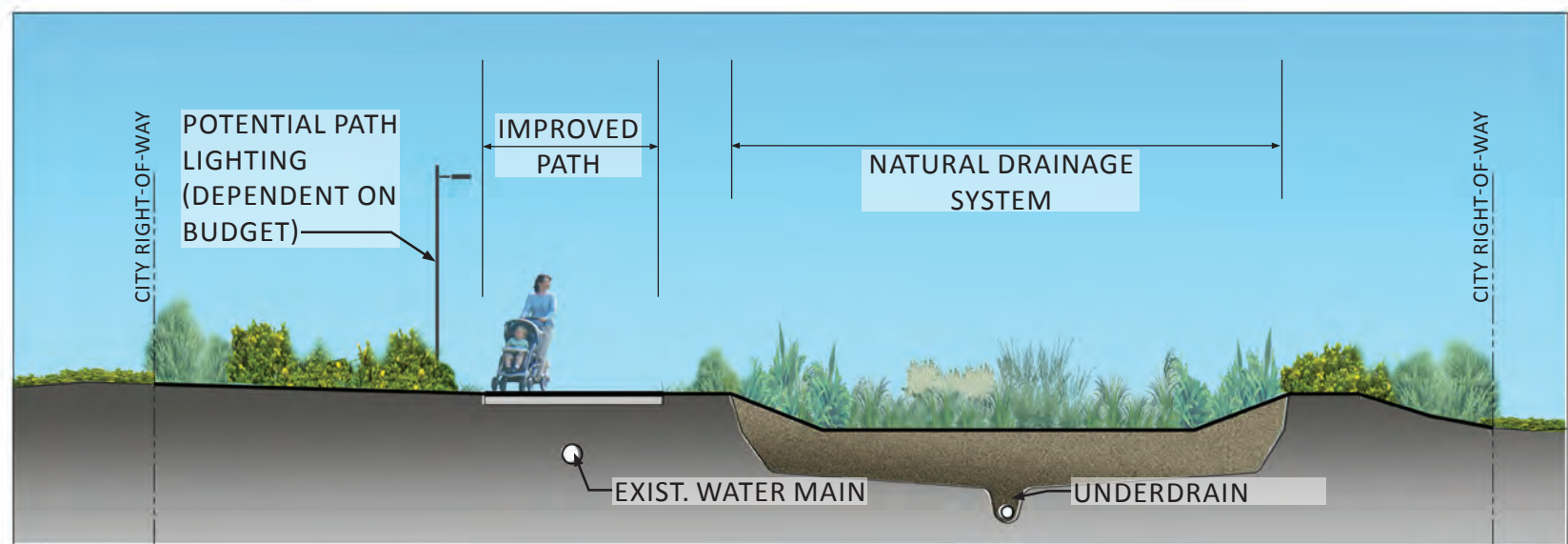
LONGFELLOW VIEW LOOKING EAST



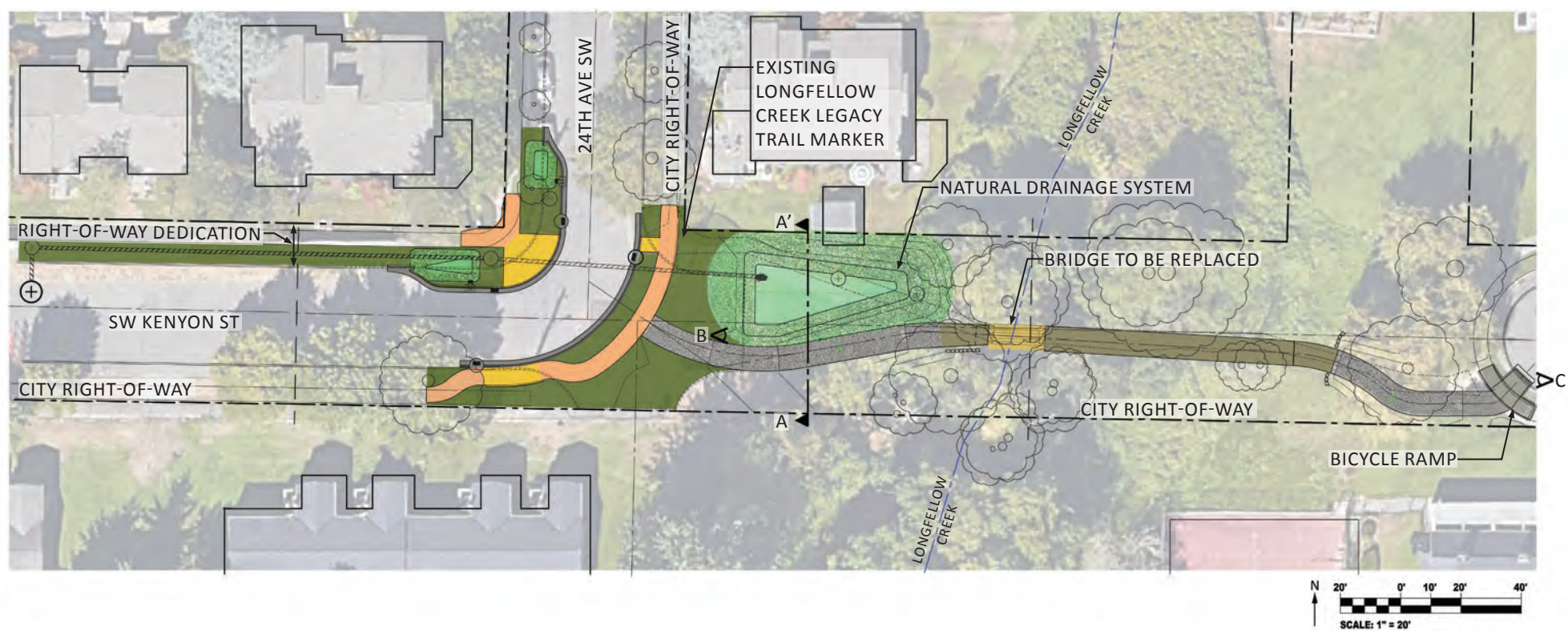
LONGFELLOW VIEW LOOKING WEST









Potential NDS and Pathway Improvements SW Kenyon St and 24th Ave SW



SECTION A-A'



KEY

- | | | | |
|---|---|---|--|
|  NEW ACCESSIBLE CURB RAMPS |  NEW SIDEWALK |  IMPROVED PATH |  RAISED WALKWAY |
|  NATURAL DRAINAGE SYSTEM (NDS) |  PLANTING STRIP/LAWN RESTORATION | | |