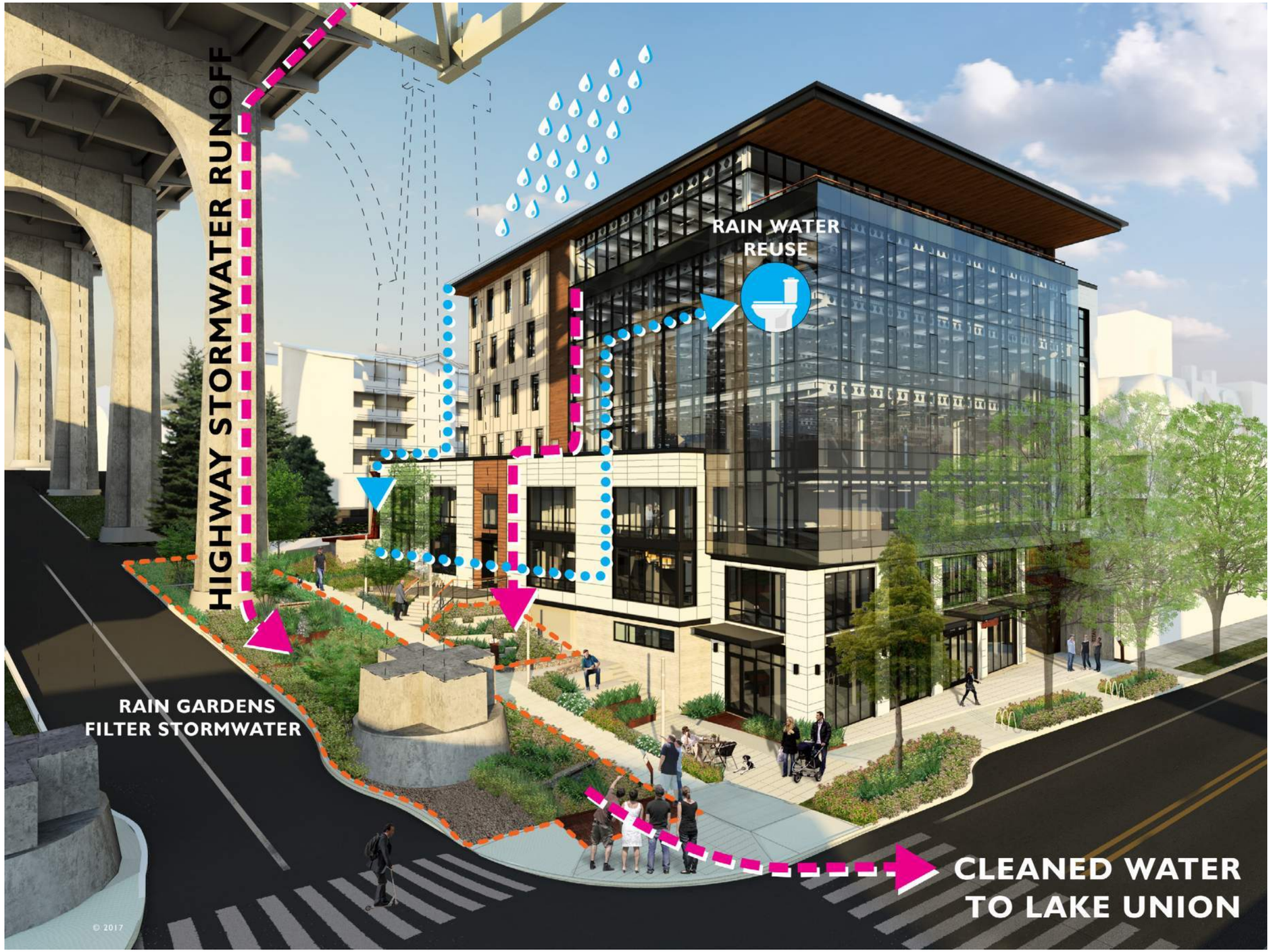
THE SWALES ARE BUILT ADJACENT TO THE AURORA BRIDGE, AN HISTORIC STRUCTURE IN SEATTLE WHERE ALL FIVE OF THE REGIONS' SALMON SPECIES SWIM TO REACH THE NETWORK OF RIVERS AND STREAMS WHERE SPAWNING OCCURS EACH YEAR.

PHASE I

PHASE 2

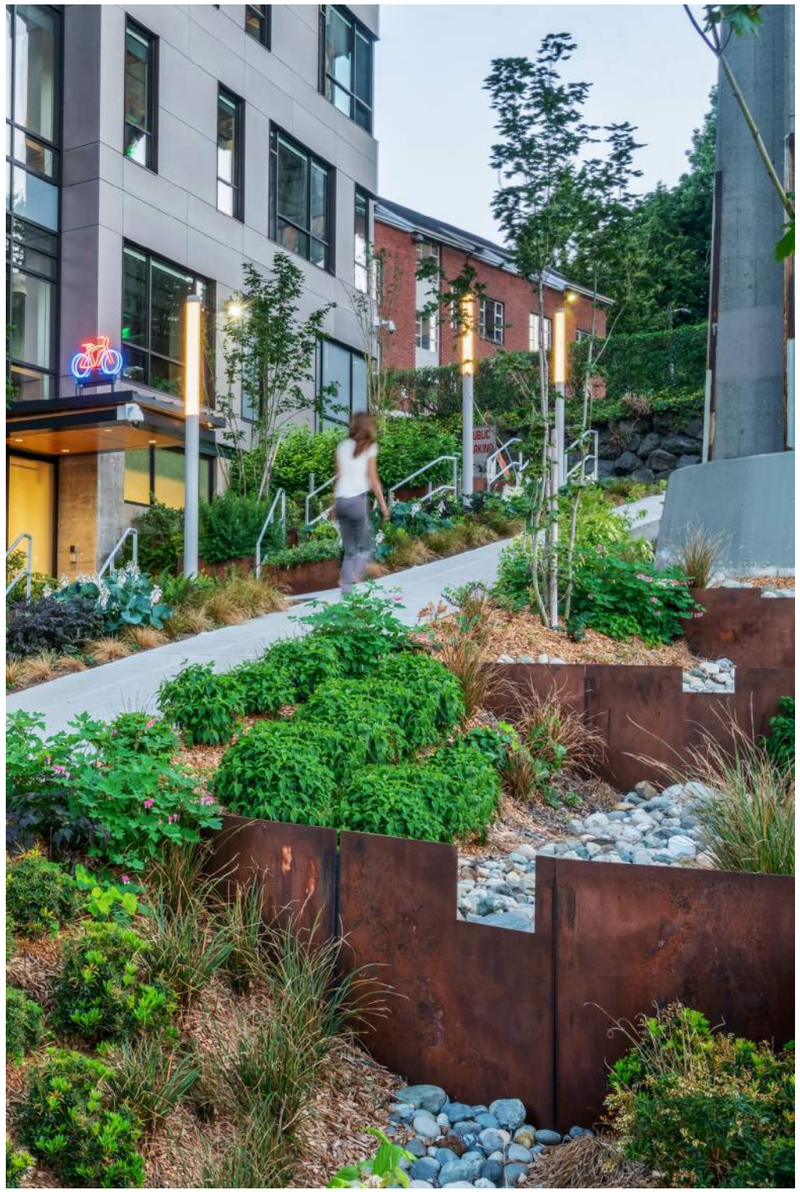
PHASE 3

RENDERED SITE PLANS

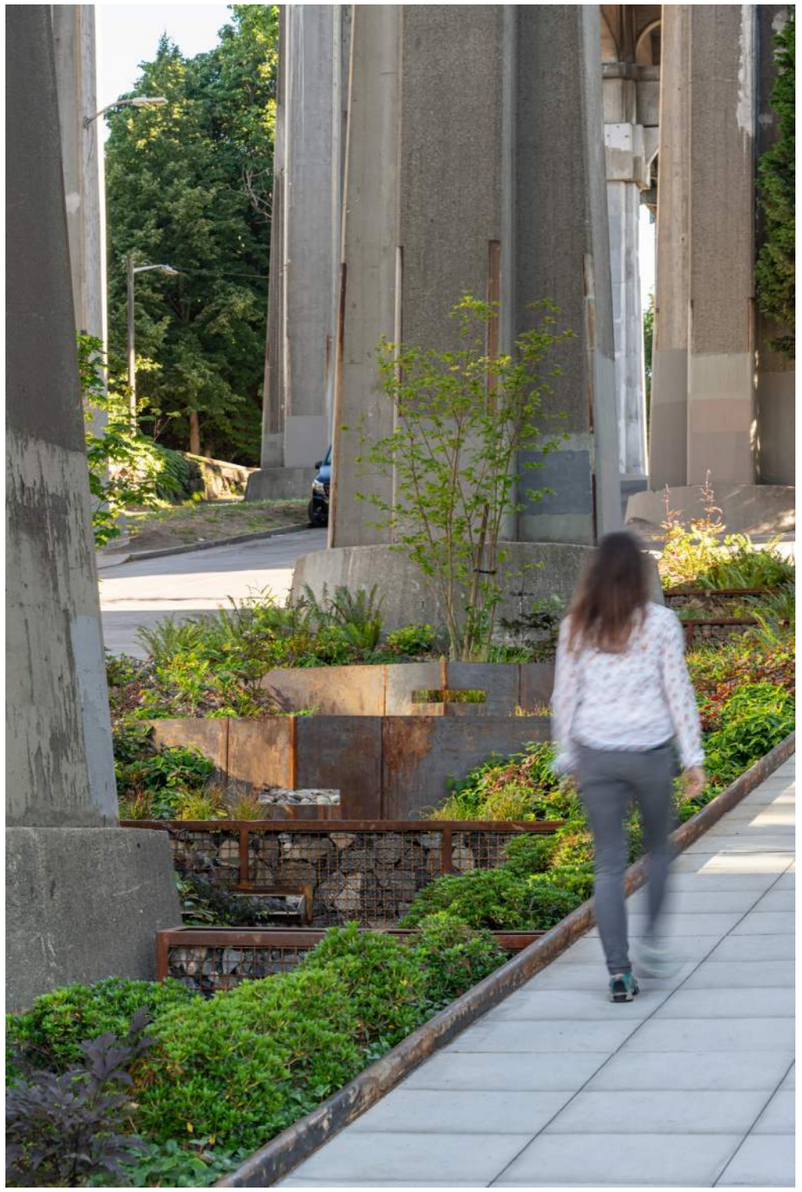


DURING PHASE TWO, IN ADDITION TO TREATING MORE OF THE BRIDGE'S STORMWATER RUNOFF, THE AWARD WINNING WATERSHED BUILDING INSTALLED A 20,000 GALLON CISTERN TO COLLECT ROOF RUNOFF FOR REUSE. THE SWALES PROVIDE MITIGATION FOR BOTH THE BRIDGE AND THE BUILDING.

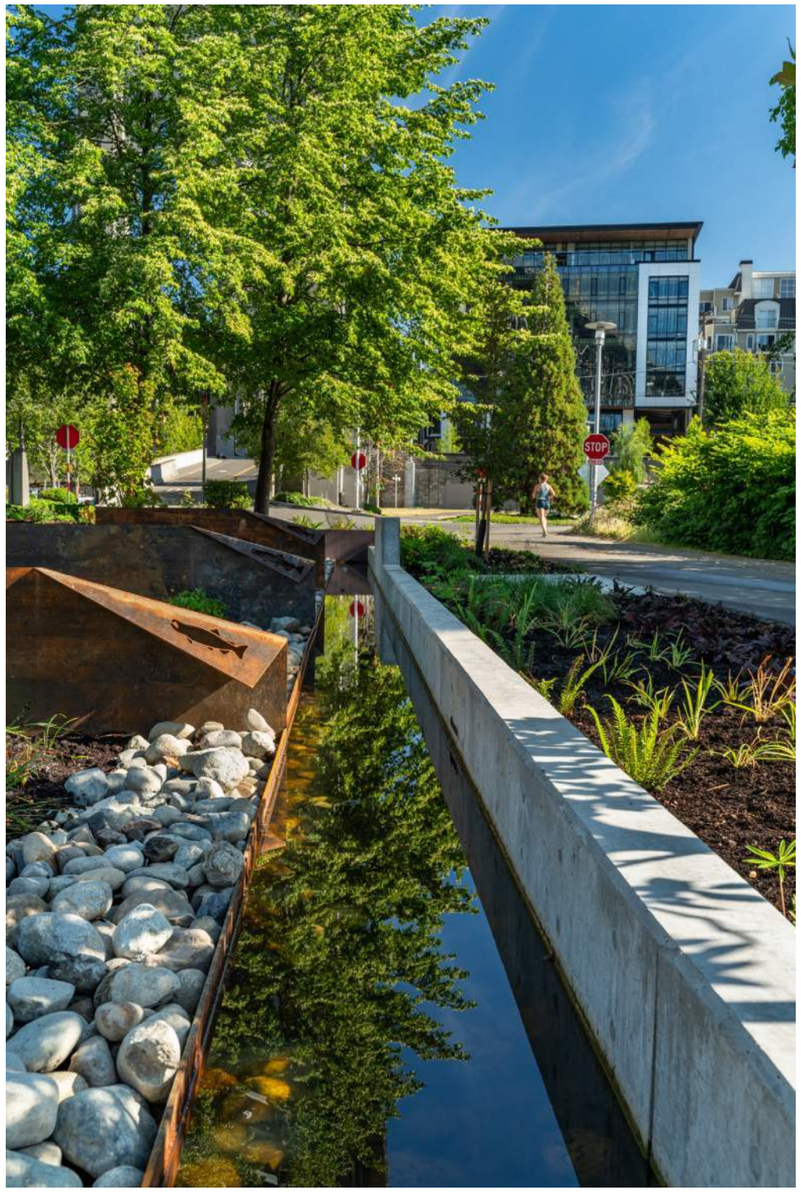
MEASURABLE TESTING CONFIRMS THAT AS THE WATER FILTERS DOWN THE SWALES IT BECOMES CLEANER AND LESS CONTAMINATED.



PHASE 1



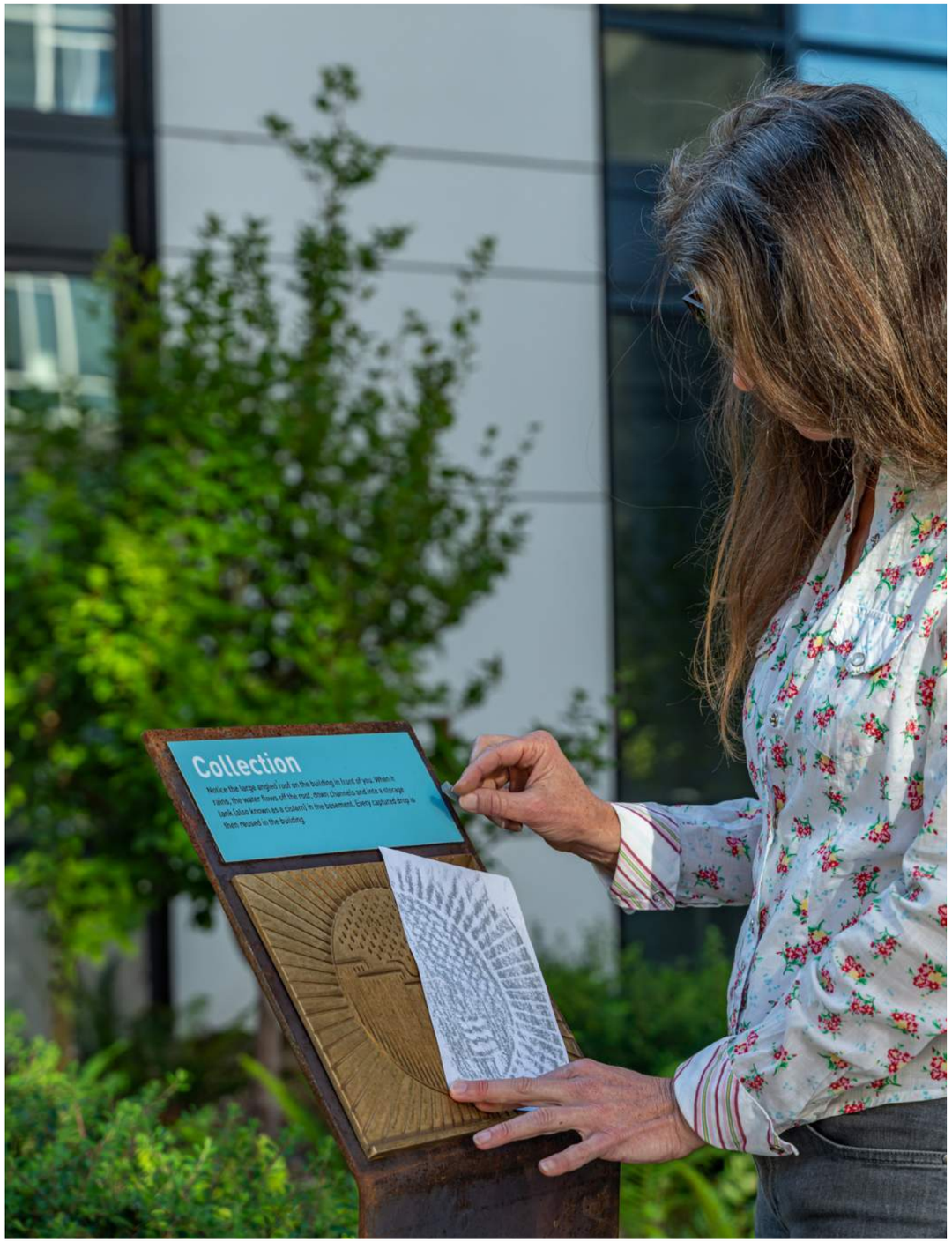
PHASE 2

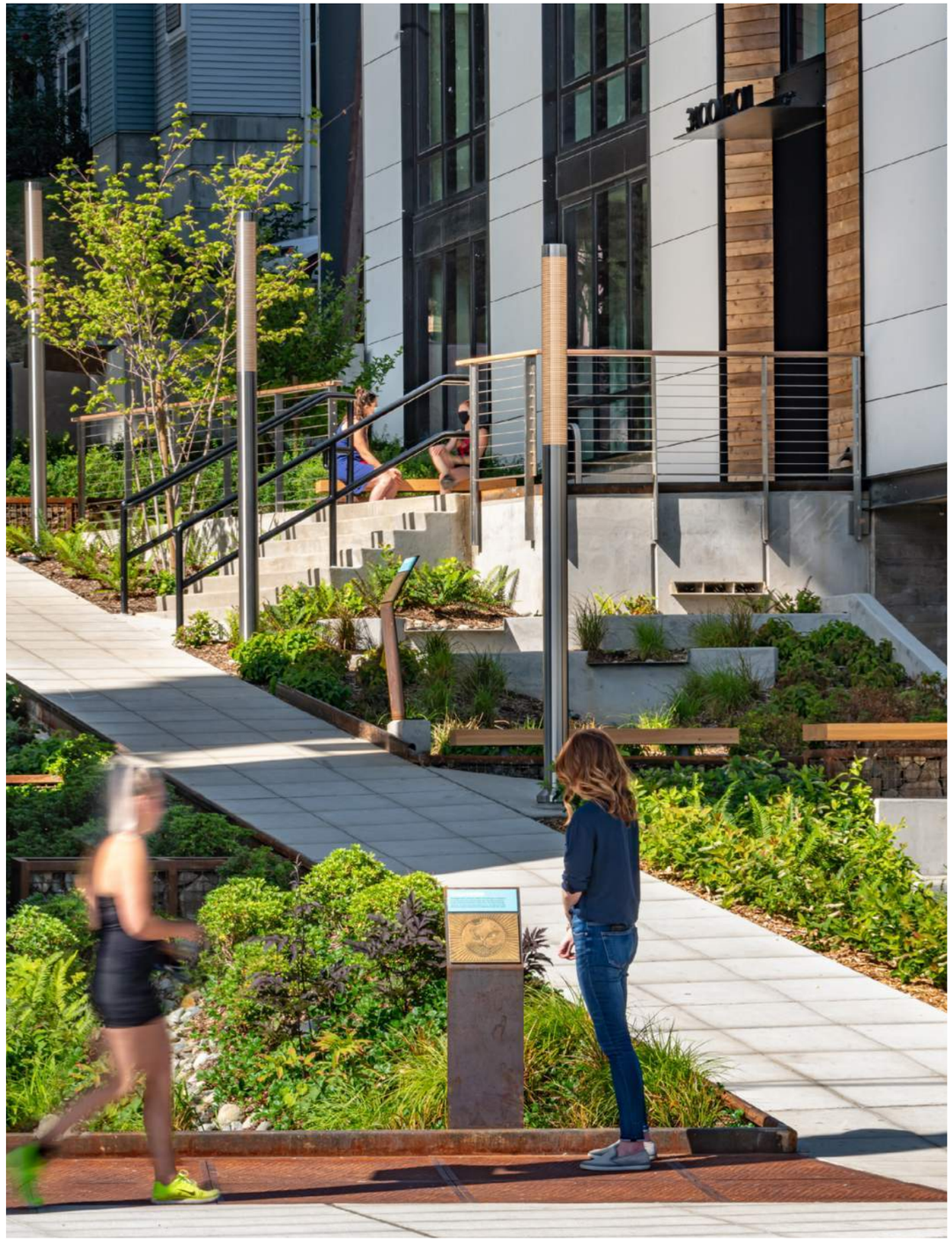


PHASE 3

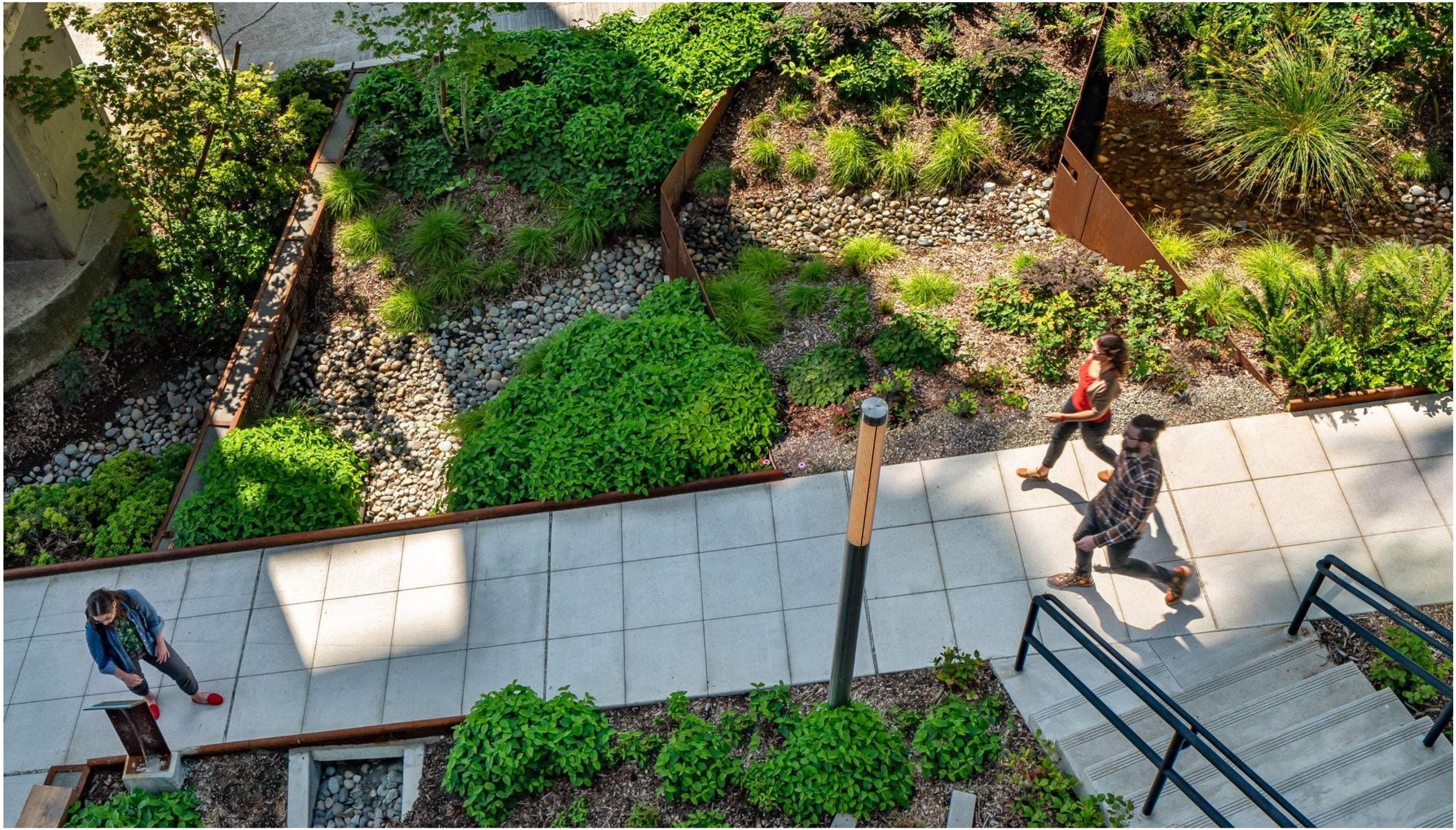
WITH A CLEARER PATH FOR PERMITTING, EACH PHASE BUILT UPON THE PRIOR'S SUCCESS CLEANING MORE WATER AND INCREASING PUBLIC AWARENESS.

THE AURORA BRIDGE SWALES PIONEERED THE USE OF GREEN INFRASTRUCTURE BY PRIVATE DEVELOPMENT TO IMPLEMENT ENVIRONMENTAL RESTORATION ON A LARGER SCALE.





PUBLIC AWARENESS OF THESE STRATEGIES IS REINFORCED THROUGH A COMMITMENT TO PUBLIC SIGNAGE THAT HAS TAKEN ON MANY FORMS. BRASS PLAQUES ILLUSTRATE THE MANY BENEFITS OF THE STRATEGIES EMPLOYED IN A RELIEF THAT CAN PRODUCE RUBBINGS.

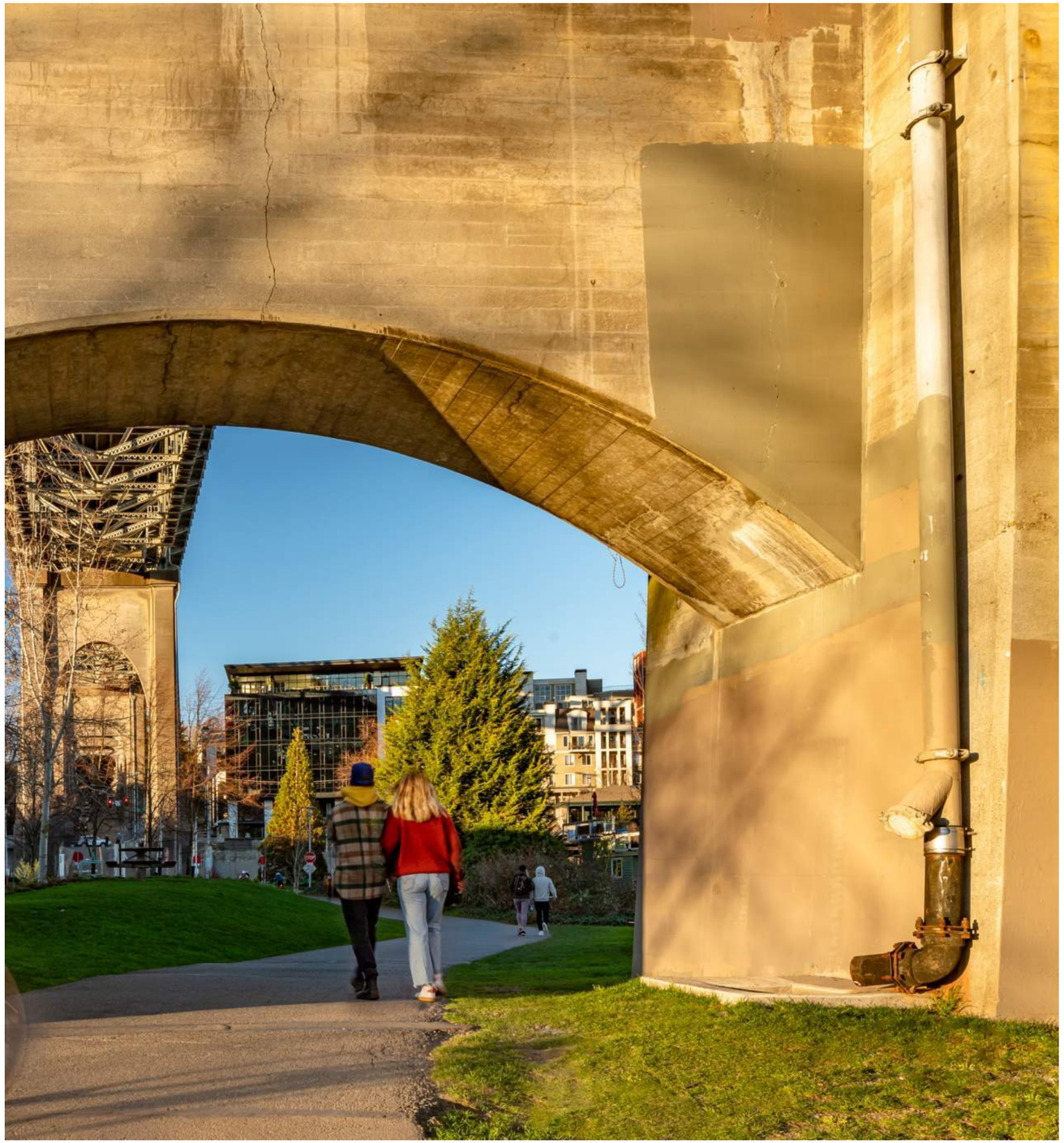


THIS PROJECT IS AN EXAMPLE OF HOW LANDSCAPE ARCHITECTURE CAN SERVE AS A CHANGE AGENT, PROVIDING COMMUNITIES A CALL TO ACTION TO IMPROVE THE HEALTH OF OUR WORLD.

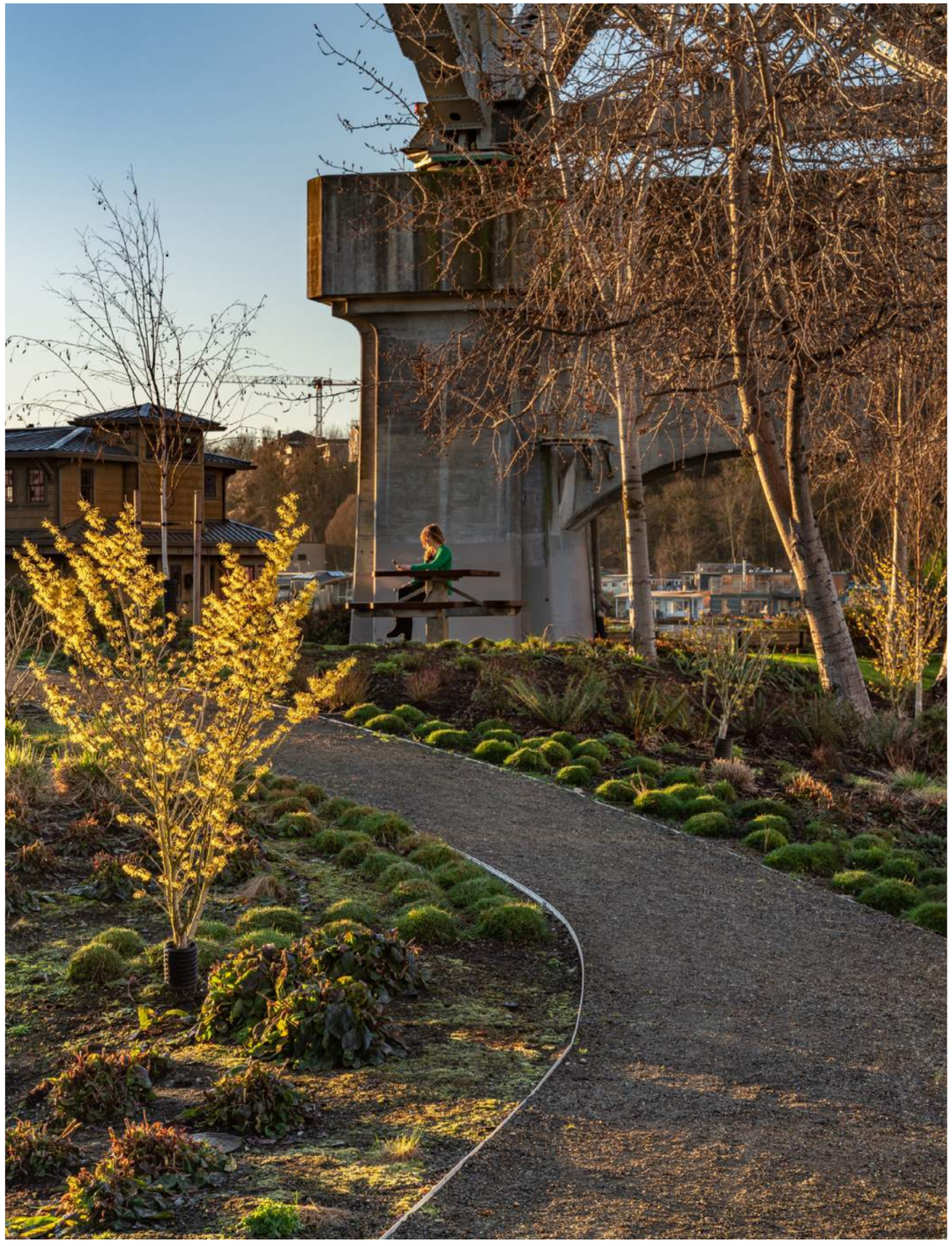
PHASE THREE INCLUDES A NEARBY PROPERTY WHERE FIVE ADDITIONAL DOWNSPOUTS COULD BE DIVERTED INTO A GRASSY AREA. THIS PHASE INCREASED THE VOLUME OF FILTERED BRIDGE WATER TO TWO MILLION GALLONS, EFFECTIVELY TREATING THE NORTH HALF OF THE ABOVE BRIDGE DECK.

THE AURORA BRIDGE SWALES PROJECT DEMONSTRATES THE URGENT NEED FOR EVERY URBAN DEVELOPMENT TO CHALLENGE CONVENTIONAL SOLUTIONS AND IDENTIFY OPPORTUNITIES TO RESTORE THE NATURAL ENVIRONMENT.

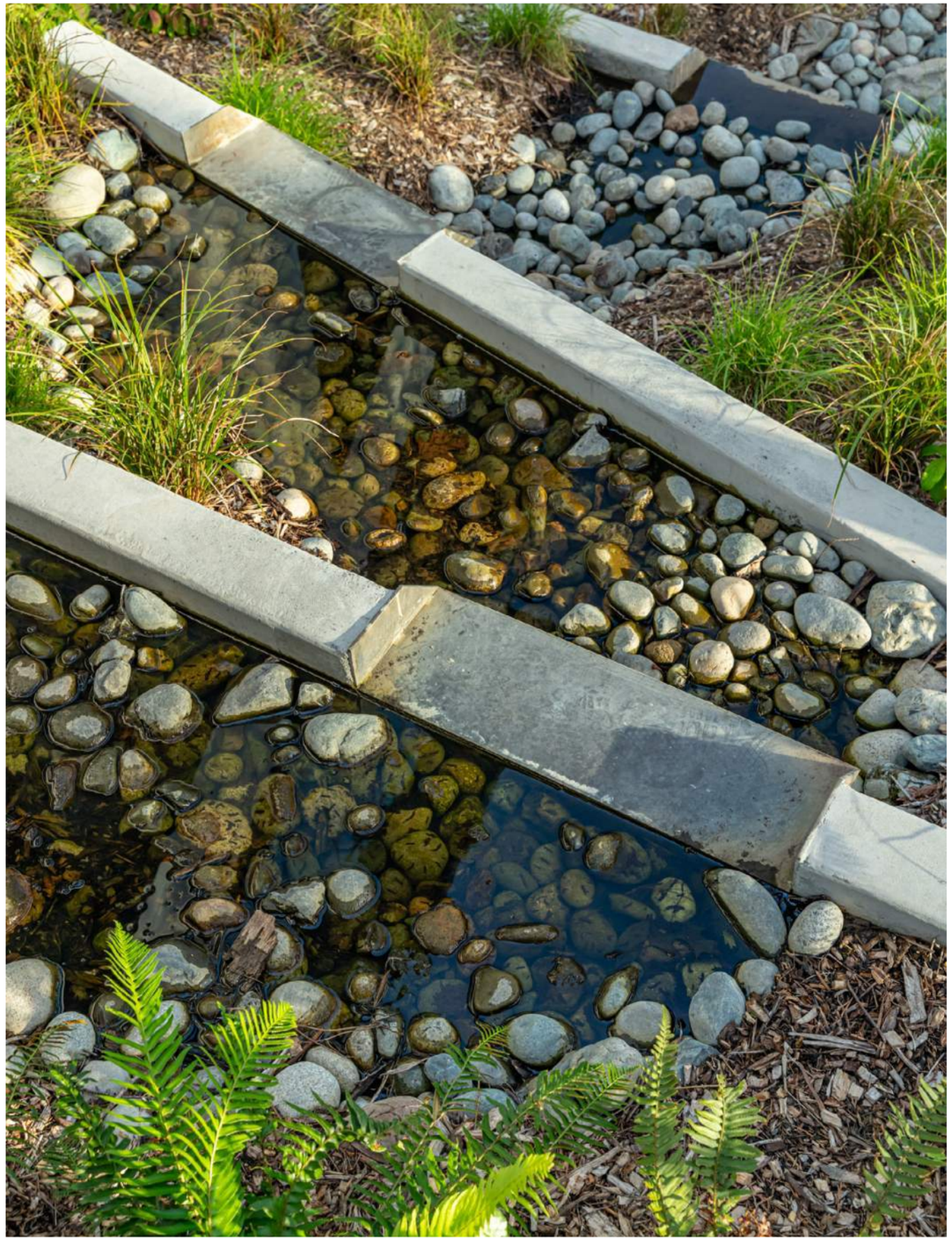
THE SWALES RAISE AWARENESS TO THE REGION’S STORMWATER QUALITY ISSUES BY ENGAGING THE ONE MILLION PEOPLE THAT USE THE ADJACENT BURKE-GILMAN TRAIL ANNUALLY.



THIS PROJECT HAS TURNED FUNCTIONAL DRAINAGE INFRASTRUCTURE INTO AN ENGAGING BENEFIT FOR THE COMMUNITY. WHIMSICAL DETAILS, SUCH AS THE LASER SILHOUETTE CUTOUTS OF THE REGION’S FIVE SALMON SPECIES CUE PEDESTRIANS TO THE CONNECTION BETWEEN THE SWALES AND THE AQUATIC ENVIRONMENT.

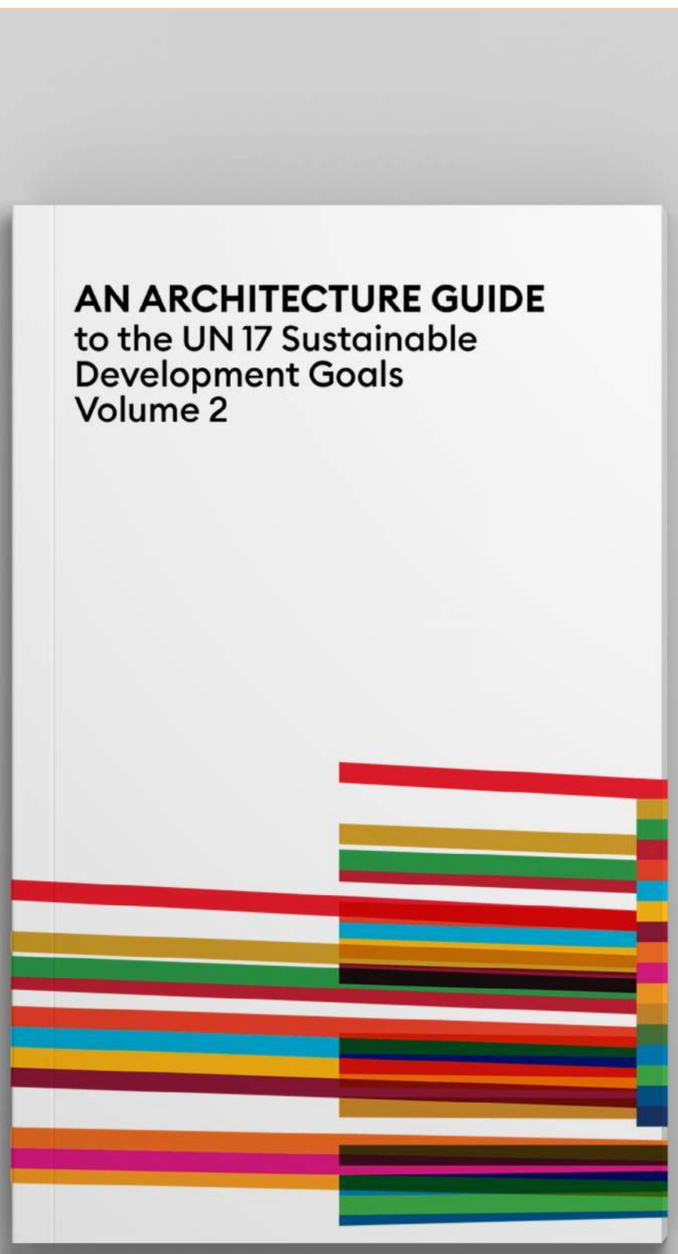


NATIVE PLANTS PROVIDE A ROBUST FOREST FLOOR BELOW THE OVERHEAD CANOPY THAT THE BRIDGE STRUCTURE AND COLUMNS SIMULATE. FLOWERING PLANTS WERE PRIORITIZED SUPPORTING MANY SPECIES OF POLLINATORS IN THE AREA.



THE USE OF STEEL IS ECHOED IN ALL PHASES, WITH CUSTOM DETAILS EXPRESSING THE WATER STORY THROUGHOUT.

AN ARCHITECTURE GUIDE
to the UN 17 Sustainable Development Goals
Volume 2



DATA 1
Seattle, Washington, USA

Challenge
In many cities, untreated stormwater from roads and highways runs into natural bodies of water. Brake dust, motor oil, gasoline, tire particles and heavy metals wash directly into lakes, rivers and streams where aquatic life consequently suffers from the accumulated toxins. Humans also suffer the consequences of polluted regional watersheds, which is the source for drinking water in many urban areas, as well as localised exposure to polluted recreation landscapes, as when swimming or boating.

Contribution
In Seattle, the heavily trafficked Aurora Bridge crosses Lake Union; a large freshwater lake within the city and a key point in the primary spawning route for salmon headed from Puget Sound to the rivers east of Lake Washington. The bridge's stormwater runoff flows directly into these spawning waters, and it is approximately eight times more polluted than average highway runoff. Researchers, developers, architects and engineers have designed a landscape with bioretention cells. The cells' biofiltration using soil, gravel and plants dramatically reduces the level of toxins in this runoff, resulting in healthier waterways and providing the dense city with a welcomed green public space.

The landscape now removes toxic contaminants from more than 750,000 litres of polluted stormwater each year by slowing the flow and acting like a filter before the remaining water ends up in the lake. A host of microbes in the soil break down the pollutants while plants uptake excess nutrients.

Tests show that not only are nearly 70% of contaminants removed from the stormwater, the majority of the water is also absorbed by the soil as it flows through the cells, meaning that much of the runoff does not make it to the lake at all. The bioretention cells thereby benefit in both improving the stormwater's quality and reducing the stormwater volume altogether. The solution is rooted in natural processes and could be replicated in other communities. During the process, an NGO was founded to raise awareness and funds to treat the many other stormwater outfalls and bridges around Lake Union, and it will eventually scale up to treat other waterways.

Team information and photography credit concealed per award submittal guidelines.

A CASE STUDY OF THE SWALES IS INCLUDED IN A UNITED NATIONS GUIDE FOR SUSTAINABLE PRACTICES AS A MODEL TO TEACH PROFESSIONAL DESIGNERS TO INCLUDE GREEN INFRASTRUCTURE AS STANDARD PRACTICE.