



TRANSPORTATION TRANSFORMATIONS

*How Highway Conversions Can Pave
the Way for More Inclusive
and Resilient Places*

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ULI Healthy Places Initiative

SELECTED RECENT HEADLINES

The New York Times
Highways Have Sliced Through City
After City. Can the U.S. Undo the
Damage?

Detroit Free Press

I-375 replacement project in Detroit
moves closer to reality, gets OK from
feds

The Philadelphia Inquirer

Work is officially underway on 'Park at Penn's
Landing' over I-95 in Philadelphia

BRONX Times

Exclusive: City to begin community engagement
for transformation of Cross Bronx Expressway

The Seattle Times

Feds award money to study removing Highway 99 in one Seattle
neighborhood

**The
Guardian**

Could the US highways
that split communities
on racial lines finally fall?

Transportation Transformations

How Highway Conversions Can Pave the Way for More Inclusive and Resilient Places

ULI RESOURCE

Highlights **connections among transportation infrastructure and health, resilience, and real estate**

Makes the case for leveraging public and private funds to support efforts to reconnect communities divided by automobile-oriented infrastructure

Shares **promising examples of efforts to reconnect communities** through multimodal transportation investments, parks, and **equitable development**

uli.org/transportationtransformations

HIGHWAY ROUTING IN THE UNITED STATES

Planners of the interstate highway system routed many highways directly through Black and brown communities— often deliberately.

In many cases, the government took homes and businesses by eminent domain.

Some neighborhoods were targeted for new highway routes when other, more logical locations were available.



HARMFUL EFFECTS OF URBAN HIGHWAYS



RESIDENTIAL DISPLACEMENT

RACIAL AND ECONOMIC SEGREGATION

EXACERBATED EXTREME WEATHER EVENTS

LOWER TRANSIT INVESTMENT

REDUCED LAND VALUES

NEGATIVE HEALTH OUTCOMES

PHYSICAL BARRIERS

REDUCED PEDESTRIAN SAFETY

CONTRIBUTING TO CLIMATE CHANGE

HIGHWAY CONVERSION APPROACHES

An aerial photograph of a city, likely San Francisco, showing a highway and various urban areas. The image is overlaid with four semi-transparent white boxes, each containing text describing a different highway conversion approach. The background shows a mix of urban buildings, green spaces, and a body of water in the distance.

STITCHES

Enhanced crossings over highway rights-of-way that often include widened sidewalks, bike lanes, seating areas, art installations, and green spaces

CAPS

Full structural covers over highway rights-of-way that include features such as green space, parks, crossing streets, and buildings

REMOVALS

Turning limited-access roadways into lower-capacity surface-level boulevards, green spaces, or waterways to increase safety, reduce traffic, and improve the built environment

PUBLIC SPACE BENEATH ELEVATED ROADWAYS

Creating parks, enhanced public realms, and trails beneath active roadways

POTENTIAL BENEFITS OF HIGHWAY CONVERSIONS



Enhanced equitable development opportunities



Increased access to parks and green space



Opportunity to incorporate green infrastructure and nature-based solutions



Reduced greenhouse gas emissions



Enhanced resilience to the impacts of extreme weather events



Incorporation of community-serving retail



Potential for equitable economic development



Safer and more convenient pedestrian and bicyclist infrastructure



Improved air quality



More social gathering spaces



Reconnecting communities



Undoing past harms of racially motivated transportation investments



FUNDING OPPORTUNITIES AND CONSTRAINTS

Funding Opportunities

- Reconnecting Communities
- Neighborhood Access and Equity Grants
- Rebuilding American Infrastructure with Sustainability and Equity (RAISE)
- Flexible federal highway programs
- Private development

Constraints

- **87 percent** of federal funds that state departments of transportation (DOTs) receive are **formula funds**, which can be used for almost all types of transportation projects.
- Only **2.1 percent** of federal transportation funds was designated for **walking and biking projects** between 2012 and 2016

COLUMBUS

I-70/71 LONG STREET BRIDGE

CONNECTS KING-LINCOLN AND NEAR EAST SIDE NEIGHBORHOODS TO DOWNTOWN

CREATES A MULTIMODAL CONNECTION AND GATHERING SPACE

INCLUDES "CULTURAL WALL DESIGNED BY TWO LOCAL ARTISTS TO CELEBRATE THE COMMUNITY'S PEOPLE & HISTORY

FEATURES A GREEN CAP PARK AND PANELS TO BLOCK HIGHWAY NOISE, WIND, AND SPRAY



PITTSBURGH

I-579/FRANKIE PACE PARK

3-ACRE PARK THAT SPANS I-579 AND
RECONNECTS LOWER HILL DISTRICT
TO DOWNTOWN

INCLUDES PERMEABLE LAWNS AND
OPEN TRENCH DRAINS TO CAPTURE
STORMWATER, RAIN GARDENS, &
ADDITIONS TO THE URBAN TREE
CANOPY

FEATURES PUBLIC ART AND DESIGN
CREATED WITH CURRENT AND PAST
COMMUNITY MEMBERS





LESSONS LEARNED

Understand and acknowledge the current and historical context to build trust

Create a community-centered process

Enhance resilience

Leverage public and private funding

Embrace nature

Integrate local storytelling and art



**PENN'S
LANDING
PARK**



DELAWARE RIVER WATERFRONT – 1920s





BEFORE I-95



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I-95 CONSTRUCTION



© City of Philadelphia, Department of Records



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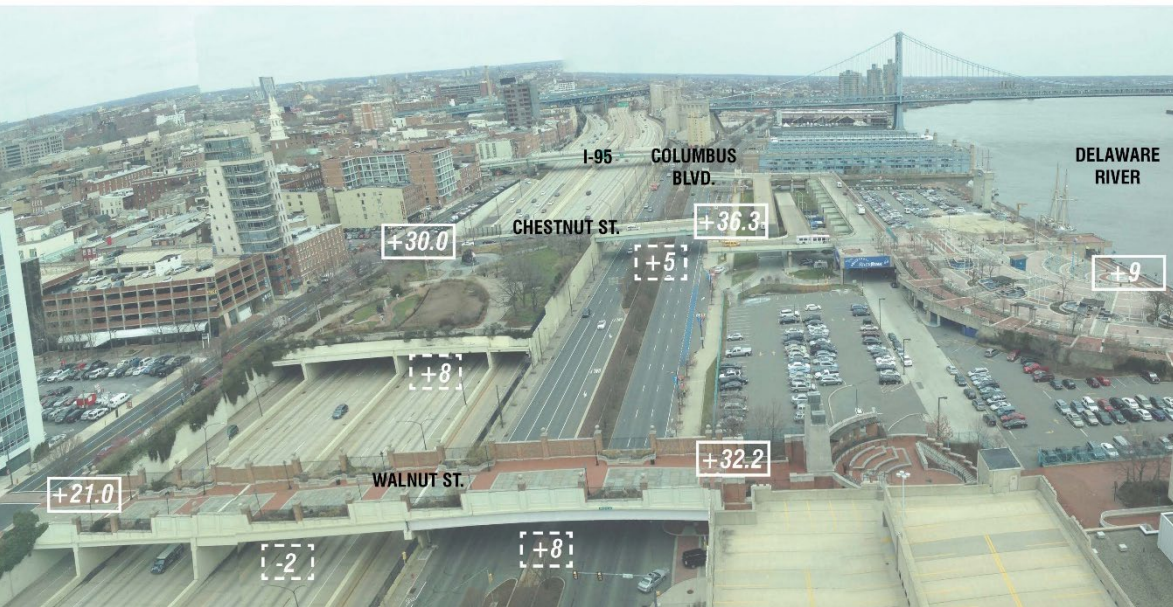


I-95 AND CREATION OF PENN'S LANDING – 1970s





EXISTING CONDITIONS





MASTER PLAN FOR THE CENTRAL DELAWARE





PENN'S LANDING IN THE MASTER PLAN





PENN'S LANDING FEASIBILITY STUDY





PENN'S LANDING FEASIBILITY STUDY





PENN'S LANDING FUNDING COMMITMENT





PROJECT TEAM + MAJOR STAKEHOLDERS

PennDOT

DRWC

The City of
Philadelphia

Commonwealth/
FHWA

Philanthropic Funders
(WPF, Knight, Pew, etc.)

Capital Budget

District 6/
I-95 Portfolio

DRWC Staff
& Board

oTIS

Design Team

Pennoni, Engineer/Team Lead
HargreavesJones, Landscape Architect
Kieran Timberlake, Architect
+ others

Specialty Consultants

Cost Estimator, Ice Rink,
Water Feature, Playground
Equipment, etc.

Artists +
Office of Arts Cultural &
Creative Economy,
Public Art

PUBLIC OUTREACH + COMMUNITY ENGAGEMENT



PENN'S LANDING PARK ENGAGEMENT

PENN'S LANDING



...ALREADY
A BELOVED
CIVIC SPACE

WHY IS PENN'S LANDING CHANGING?

- To improve the physical connection between city and river
- To provide all Philadelphians with more room, amenities and programming
- To encourage and increase your visits, day-to-day and year-round
- To invest in the existing beauty of our waterfront with more green space - and incredible views

HOW CAN WE MAKE IT EVEN BETTER?

... AND MAKE IT YOURS



EXPERIENCE OF DELAWARE RIVER PARKS



PIER 68



WASHINGTON AVE PIER



SPRUCE STREET HARBOR PARK



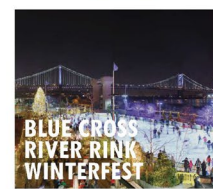
IRISH & SCOTTISH MEMORIALS



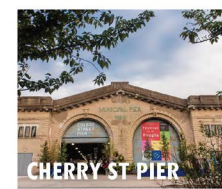
BLUE CROSS RIVER RINK SUMMERFEST



PENN TREATY PARK



BLUE CROSS RIVER RINK WINTERFEST



CHERRY ST PIER



RACE ST PIER

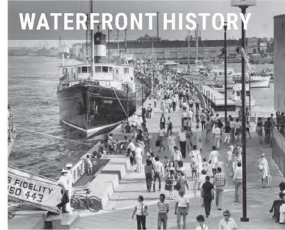


DELAWARE RIVER TRAIL

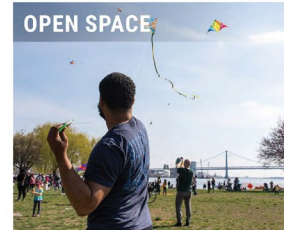


PENN'S LANDING PARK ENGAGEMENT

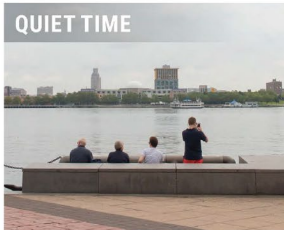
ENTREPRENEURSHIP + CULTURAL CELEBRATIONS



INTERGENERATIONAL PLAY



BRING YOUR OWN ACTIVITIES



FOOD AS COMMUNITY BUILDING





PENN'S LANDING PARK ENGAGEMENT





PENNDOT CENTRAL ACCESS PHILADELPHIA (CAP)





SOUTH STREET PEDESTRIAN BRIDGE





SOUTH STREET PEDESTRIAN BRIDGE



Penn



SOUTH STREET PEDESTRIAN BRIDGE



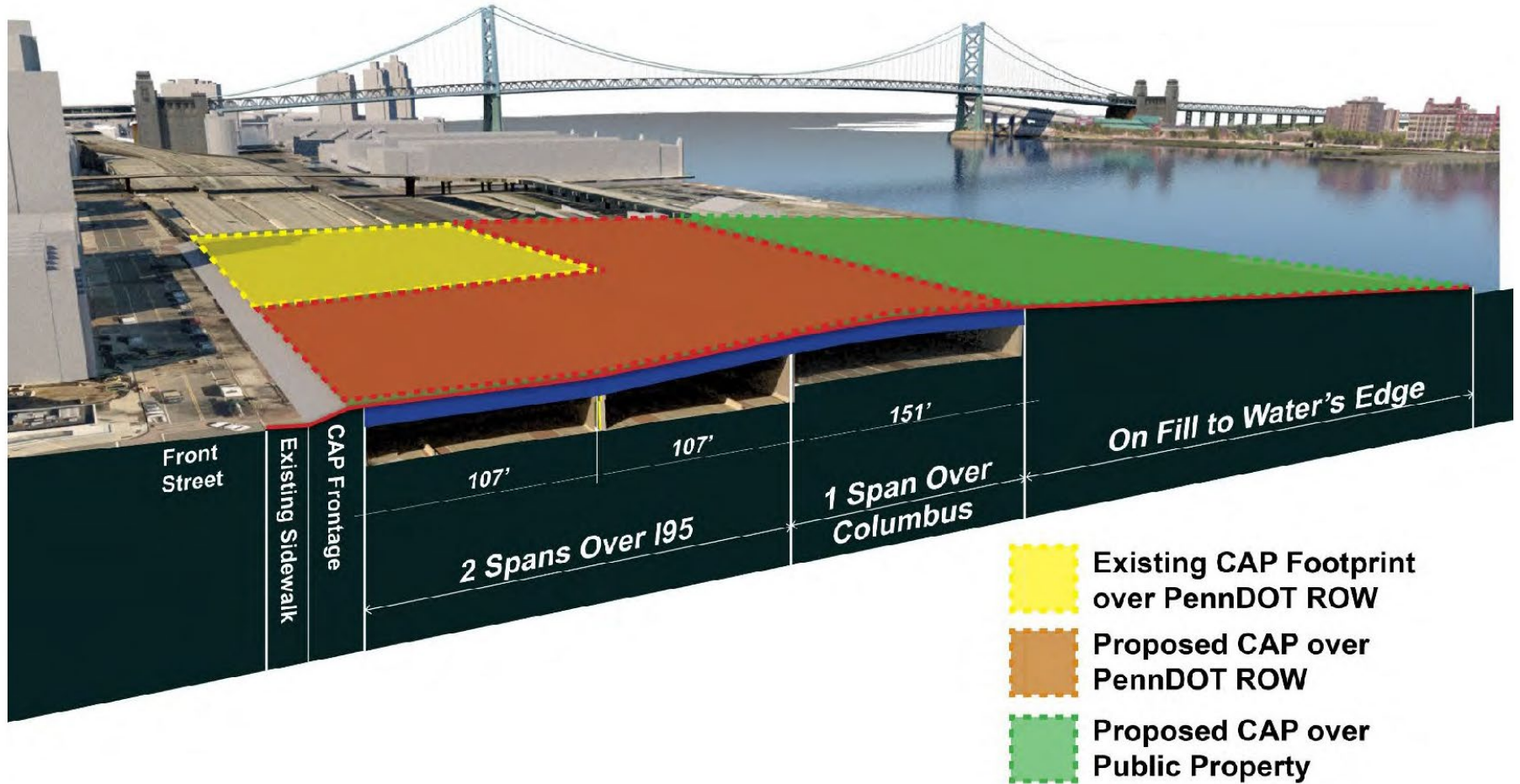


PENN'S LANDING PARK



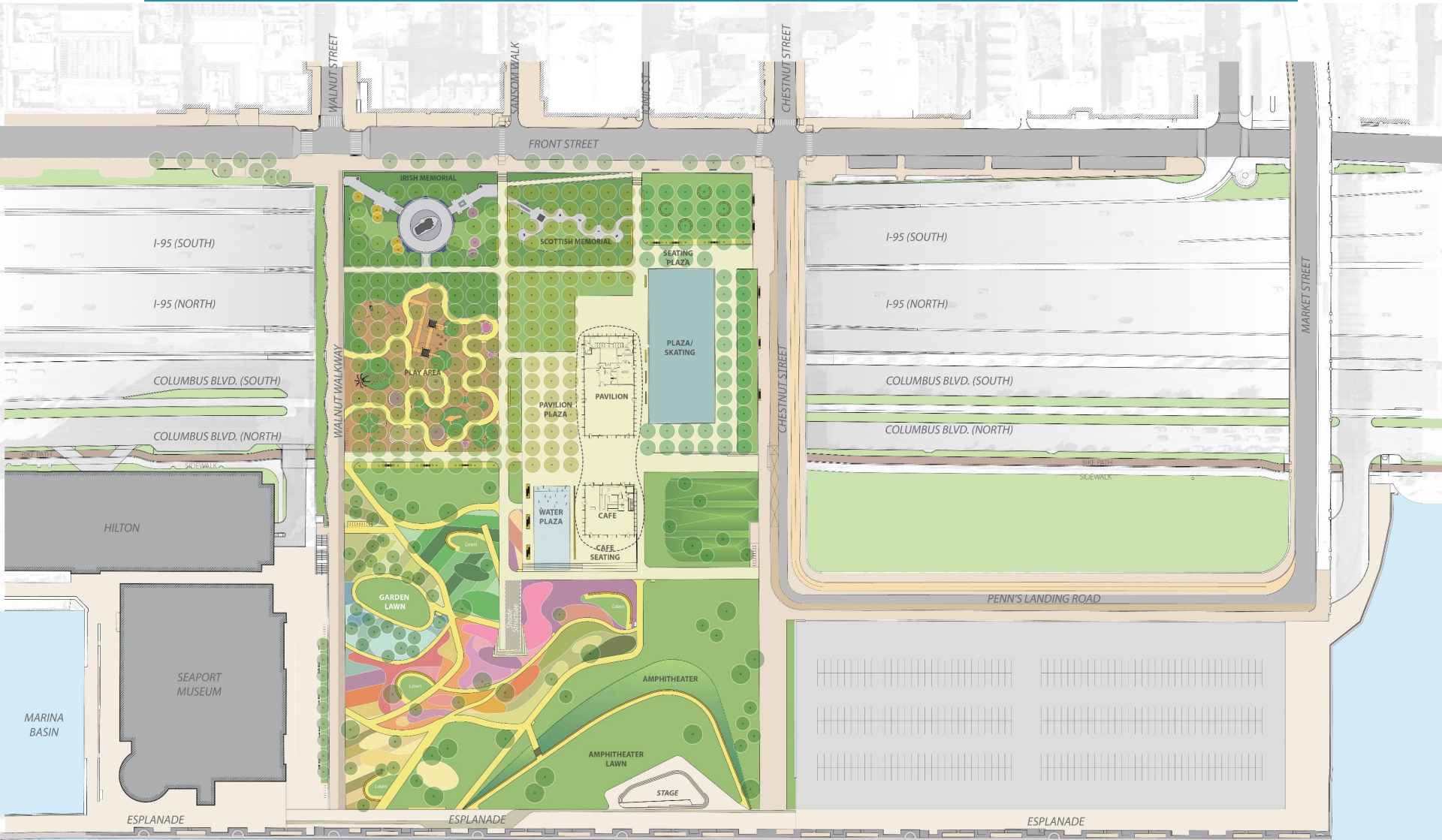


PENN'S LANDING PARK





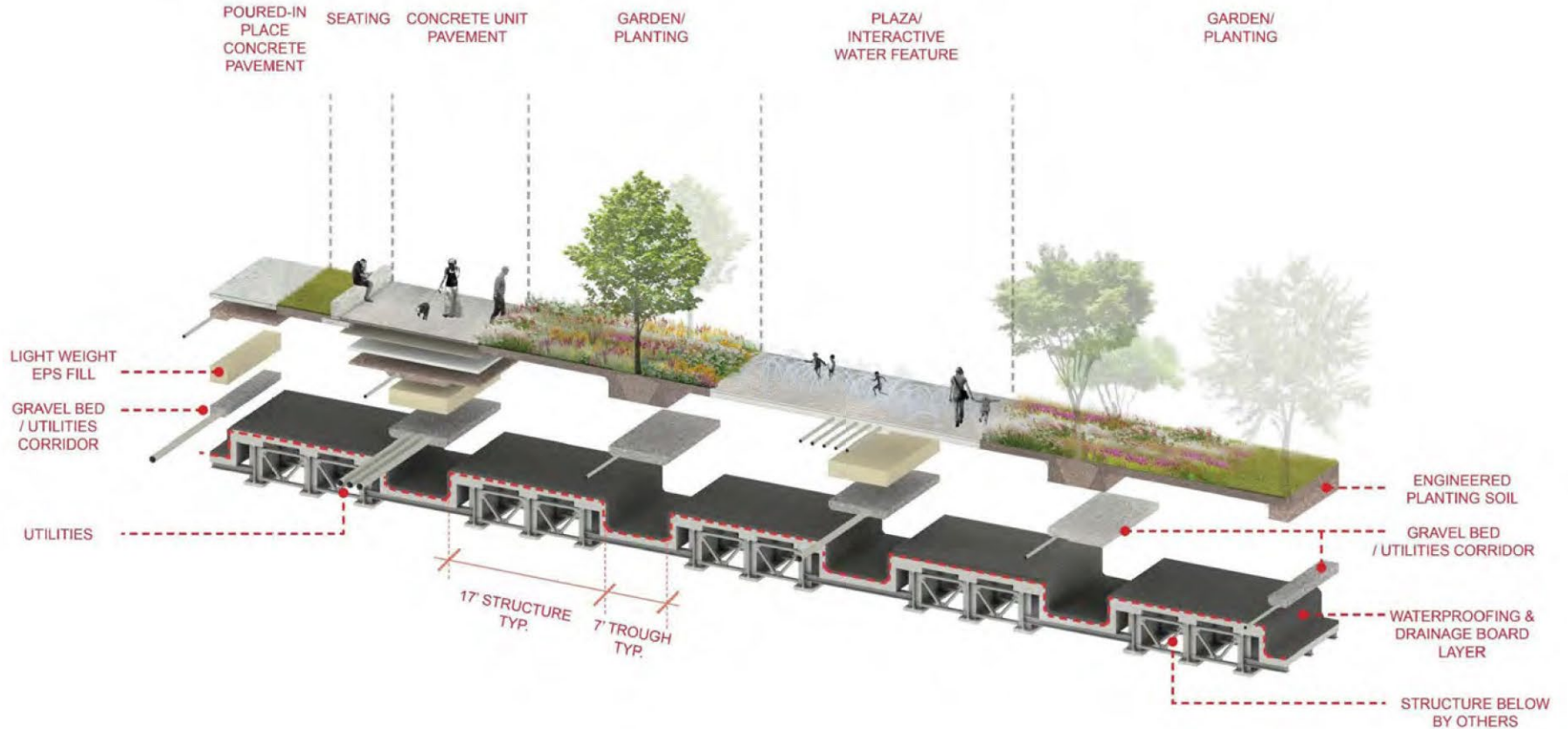
PENN'S LANDING PARK



DELAWARE RIVER

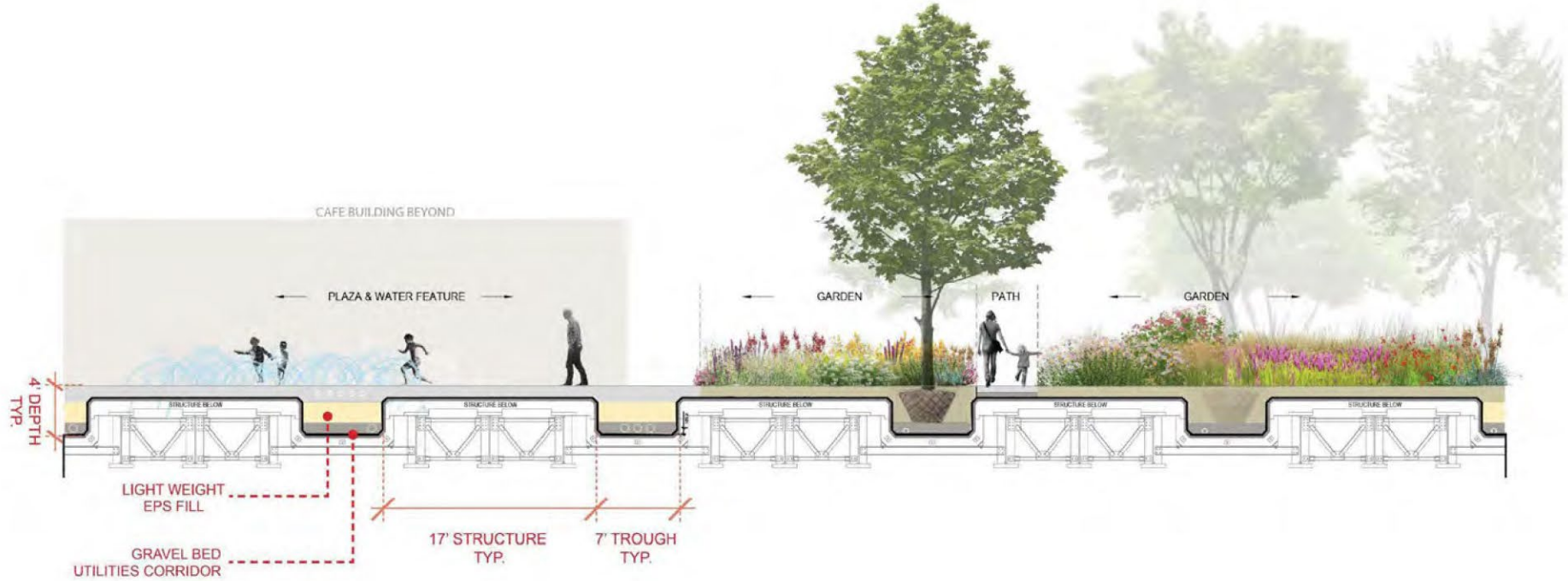


STRUCTURAL DESIGN





STRUCTURAL DESIGN





PENN'S LANDING PARK – PAVILION & CAFÉ





PENN'S LANDING PARK – PAVILION & CAFÉ





PENN'S LANDING PARK – PAVILION & CAFÉ

Pavilion

Café with lower-level utility rooms

Breezeway

20'-0"



I-95 NB

Christopher Columbus Boulevard

Delaware River Trail



PENN'S LANDING PARK: IRISH AND SCOTTISH MEMORIALS





PENN'S LANDING PARK: IRISH AND SCOTTISH MEMORIALS





PENN'S LANDING PARK: THE KNIGHT COMMONS & GARDENS





PENN'S LANDING PARK: PLAYGROUND





PENN'S LANDING PARK: SUMMER PLAZA





PENN'S LANDING PARK: WINTER PLAZA & ICE RINK





THANK YOU!