October 30, 2020

Secretary Stephanie Pollack Massachusetts Department of Transportation 10 Park Plaza, Room 4160 Boston, MA 02116

Dear Secretary Pollack:

The decade of construction and final result of the Allston Multimodal Project will have lasting impacts on every community between Boston and Worcester. It will change how people travel on the Commuter Rail, on I-90, and on local streets and paths. It will also change the quality of life and health for nearby residents, and the ecology and accessibility of the Charles River.

We recognize the significant challenges and complexities this project presents and your urgency to move forward. In this spirit, we recommend that you advance the project for environmental review in the following ways:

1. Select the <u>Modified All At-Grade Option</u> as the <u>Preferred Alternative</u> because it works for all modes of transportation and yields long-term benefits for the adjacent community, for commuters, for the river and parks, and the environment.

We reiterate our opposition to the Highway Viaduct, both the no-build option to repair the existing viaduct or the build option to construct a new Modified Highway Viaduct. We agree with the September 23 letter from BPDA Director Golden and Chief Osgood that the All At-Grade option is the right choice to leave a lasting positive legacy for Boston and the region. The All At-Grade option merits the most focus over the year ahead with detailed analyses about ways to minimize impacts to the Charles River.

The <u>Modified All At-Grade Option</u> has many advantages over the other alternatives, including the following:

- Only the All At-Grade option relieves the toll payers on the Mass Pike and the taxpayers across the State from the very expensive burden of maintaining, repairing and eventually replacing a lengthy viaduct—a cost we are all bearing today.
- While each option seeks to address the noise from the thousands of cars and trucks that can
  be heard across sections of Allston, Brookline, and Cambridge, only the All At-Grade option
  eliminates the additional noise generated by cars and especially trucks accelerating up and
  braking down the slope of an elevated viaduct, and takes away the raised platform from
  which this noise is projected.

• It is the best choice to connect Boston and Brookline to the Charles River. It improves the urban design and development potential of the entire project area and it has the most support of any option under consideration both from the Allston residents who are most impacted by the highway and the hundreds of people from across the region who have voiced a preference during years of comment periods and public meetings.

#### 2. Prioritize transit-centered mitigation and build for a transit-centered future.

A strong mitigation plan will benefit Metrowest residents and people living and working in Allston, Brookline, and Cambridge as well. A construction mobility plan focused on improved rail and bus services, with increased parking at suburban locations, is needed to provide realistic alternatives for the commuters who will be impacted by the reduction in turnpike capacity during construction and reduce cut-through traffic that threatens to overwhelm roads in Allston, Brighton, Newton, Cambridge, Brookline, and beyond if drivers seek routes around the Allston interchange during construction. MassDOT should identify when I-90 lane closures will begin and what transit improvements can be implemented before this impact occurs. Additionally, it is important to ensure that two Worcester Line tracks and six Turnpike lanes are available for peak travel throughout construction. Increased transit service during and after construction, along with other mitigation measures, must be binding and not subject to negotiation with the contractor.

Transit enhancements are supported by and benefit all stakeholders. We strongly recommend building a four track, three platform West Station as soon as possible in the construction process. In this project, MassDOT is currently not planning to include reconstruction of the Grand Junction Rail Bridge crossing the Charles River to accommodate two-track service. Extension of passenger service to Cambridge and beyond using the Grand Junction corridor is an important future project that will serve the Commonwealth's economic development, climate change, and mode shift goals. Completion of a two-track bridge over Soldiers Field Road for the Grand Junction (Little Grand Junction Bridge) as part of this project is an important next step toward implementing this service, while also providing space for extension of the Paul Dudley White Path under the rail bridge and removing a segment of the path out of the narrow river channel.

### 3. Take a holistic approach to resilient design to fortify the Charles River, Allston neighborhood, and beyond from the impacts of climate change.

Recent comments by MassDOT suggest the agency views the highway viaduct as the most resilient option because of its elevation above future stormwater flooding. However, flooding is only one component of the many interrelated effects of climate change. The biggest contribution the Allston Multimodal project can make toward the Commonwealth's ambitious carbon reduction goals and climate resilience is to encourage commuters to reduce single-occupancy vehicle trips by prioritizing high-functioning, affordable mass transit options during and after construction.

A resilient design for the I-90 Multimodal project is one that prioritizes the health and needs of neighboring environmental justice communities that have been disproportionately affected by the

existing I-90 highway, provides access to parkland to neighboring communities to support neighborhood health, maximizes tree canopy and minimizes impervious surface to mitigate heat effects, improves the water quality and ecology of the Charles River, considers the carbon footprint to build and maintain transportation infrastructure, and address flooding by providing green stormwater infrastructure storage and treatment. These objectives are best achieved by the Modified All At-Grade Option.

To explore how all of these elements can be achieved within the Modified All At-Grade plan, several of the below signed organizations have been working with landscape architects and urban planners at Perkins&Will and CBT (please see the attached document for more details about the variety of strategies and design approaches that should be evaluated to find the best solution). The ecological restoration strategies suggested by Perkins&Will and CBT for the I-90 project build off the Charles River Riverbank Vegetation Management Plan (RVMP) that has been adopted by other state agencies. If MassDOT adopts similar strategies for this project it will lead to a healthier river system and a more holistic rejuvenation of the river and river banks.

The river and public access must be protected during construction to safeguard the incredible public and private investment in the river over the last three decades. Mitigation measures must be thoroughly and transparently considered for each alternative in the Draft Environmental Impact Statement to ensure the least harm and most benefit to this important regional resource.

The existing Allston neighborhoods north and south of the Pike and the new neighborhood that will rise in Beacon Park must be walkable and bikeable neighborhoods with better connections to the Charles River. This can be accomplished with:

- Footbridges to the river at Agganis Way and at the Commonwealth Ave and Boston University Bridge nexus.
- A linear buffer park that connects the Agganis Footbridge and a new Franklin Street Footbridge.
- A widened Paul Dudley White Path with separate biking and walking paths that are integrated as part of the reconstituted river's edge and potentially on a boardwalk or elevated path where necessary.
- Improved conditions for the edge of the river esplanade complementing the Magazine Beach across the river, and remediation of the current degraded condition of the river bank, and contaminated runoff that now flows untreated into the Charles River.
- The new local streets being designed as part of this project should be designed for the City of Boston speed limit with as few lanes as possible to accommodate projected traffic, cycling, and parking requirements.

All of these improvements are essential mitigation for the highway elements of the project, and must receive a firm commitment as integral components of the Allston Multimodal Project.

#### 4. Continue, expand, and improve the project's advisory process.

While not always a perfect process, the existing Task Force has been an invaluable outlet for community members, impacted stakeholders, and MassDOT to communicate directly with each other about this project. An advisory process should be established and maintained for the entire duration of the project in the following ways:

- Continue the Allston Multimodal Project Task Force through the completion of the Final Environmental Impact Statement, the certification by the Secretary of Energy and Environmental Affairs and Massachusetts Environmental Policy Office that the project meets all state environmental requirements, the completion of all environmental permitting, and the filing of the federal Record of Decision.
- Convene a Construction Mitigation Group immediately. Such a committee is essential for this
  project to provide guidance on the mitigation plan; oversight of construction mitigation
  measures, including noise, air, and vibration impacts; traffic disruption; and interim public
  transportation measures during the lengthy construction period. This group should include
  stakeholders from MetroWest as well as members of the Allston, Brookline and Cambridge
  communities, and those focused on the interests of the river.
- Establish an Environmental and Design Oversight Committee for the duration of construction. The Big Dig had an effective oversight committee throughout the construction phase, ensuring that environmental project commitments were accomplished substantially as approved. Allston and Brookline contain state-designated environmental justice populations. The advisory committee should include a majority of individuals from the environmental justice population and representatives who are most directly impacted by the project.
- Create a Working Group on Charles River Restoration and Climate Resiliency. Effective rebuilding and restoration of the edge of the Charles River that considers climate change impacts will require significant involvement of agencies outside of MassDOT, including the Department of Conservation and Recreation, the Department of Environmental Protection, including its Waterways and Wetlands Sections, and the Army Corps of Engineers. In addition, advocacy organizations and private groups representing the boating community, park and pathway users, and the health and ecology of the river and its watershed should be an integral part of this Working Group, which will have a major set of tasks to identify, analyze, and decide on the best future of this valuable regional resource.

Taking a comprehensive approach that begins with an All At-Grade throat that minimizes impacts to the Charles River, ensures a strong mitigation plan for the Allson and MetroWest communities, and repairs the damage the highway and viaducts have caused to the nearby residents and the Charles River over the last 50 years is necessary and achievable.

We look forward to continuing to work with you to ensure the success of this project.

#### Sincerely,

350 MA Transportation Working Group

A Better City

Allston Brighton CDC

Allston Civic Association

Allston Brighton Health Collaborative

**Boston Cyclists Union** 

Boston Society for Architecture

Brookline GreenSpace Alliance

Cambridge Redevelopment Authority

Cambridgeport Neighborhood Association

Charles River Conservancy

Conservation Law Foundation

Friends of Leverett Pond, Brookline

Kendall Square Association

LivableStreets Alliance

Massachusetts Bicycle Coalition

Massachusetts Sierra Club

MASSPIRG

Pioneer Institute

Transit Matters

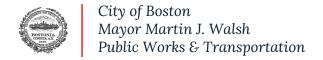
WalkBoston

Worcester Chamber of Commerce

Harry Mattison, Allston resident and I-90 Task Force Member Jessica Robertson, Allston resident and I-90 Task Force Member Fred Yaloris, Cambridge resident and I-90 Task Force Member

#### Attachments:

- City of Boston letter
- Boston City Council resolution
- City of Cambridge letter
- Cambridge City Council resolution
- Town of Brookline letter
- I-90 Allston Interchange Riverfront Analysis and Design Exploration Presentation



September 23, 2020

Secretary Stephanie Pollack Massachusetts Department of Transportation 10 Park Plaza, Suite 4160 Boston, MA 02116 Stephanie.Pollack@dot.state.ma.us

Dear Secretary Pollack,

We want to reiterate the City's strong desire that the All-At-Grade option be selected as the preferred design alternative for the Allston Multimodal Project and our opposition to the selection of the Highway Viaduct option. We believe that the All-At-Grade option has the highest potential to leave a lasting positive legacy for Boston and the region, and thus it merits the most design focus over the year ahead.

While the early indications are that each Throat option is roughly equivalent in cost to build, only the All-At-Grade option relieves the toll payers on the Mass Pike and the taxpayers across the State from the very expensive burden of maintaining, repairing and eventually replacing a lengthy viaduct -- a cost we are all bearing today.

While each option proposes the same number of rail lines and travel lanes today, the All-At-Grade option best preserves flexibility to redesign this corridor as the travel needs of our residents -- and the strategies we use to achieve a carbon free Commonwealth -- evolve. From repurposing travel lanes for bus priority to traffic calming on Soldiers Field Road, a number of compelling ideas have been raised about the future of this corridor. A legacy provided by the All-At-Grade would be the choice for future generations to more easily adapt this corridor to their needs.

While each option seeks to address the noise from the thousands of cars and trucks that can be heard across sections of Allston and Cambridge, only the All-At-Grade option eliminates the sound of cars and trucks gearing up to climb an elevated viaduct and takes away the raised platform from which this noise is projected.

Finally, while each option holds the promise of a pedestrian bridge, only the All-At-Grade option takes down the visual barrier that has stood between our residents and the river for

generations, daylighting a section of our city as MassDOT has already done to great acclaim in Forest Hills and along the Greenway -- albeit and necessarily without creating equivalent open space in this case.

The All-At-Grade option is not without its challenges. In particular, while no travel lanes would be in the river, it requires that the space for pedestrians, joggers and cyclists be on a boardwalk in the Charles River, and that the shoreline restoration of the Charles likely takes place where there is river and riprap today. These impacts should not be taken lightly. We believe, however, that the community, financial, and long term environmental and transportation benefits of the All-At-Grade option merit this option being selected as the preferred alternative.

To your great credit, you have taken the time to get this transformative project right and are driving this process to a necessary decision point. The MassDOT team and your independent review team have devoted significant effort to this; and you have welcomed, embraced and enhanced ideas from the public -- best illustrated by the All At Grade option itself.

Knowing that all options of the Throat will be carried forward but that one option -- the preferred alternative -- will get the most design attention, we ask that you select the option for that additional attention that is in the best long term interests of the City and, we believe, the region; we ask that you select the All-At-Grade.

Sincerely,

Chris Osgood Chief of Streets

This Organi

Brian Golden Director

Boston Planning & Development Agency



#### CITY OF BOSTON IN CITY COUNCIL

#### A RESOLUTION REGARDING THE ALLSTON MULTIMODAL IMPROVEMENT PROJECT

- WHEREAS. Since 2014, the Massachusetts Department of Transportation (MassDOT) has been planning the Allston Multimodal Improvement Project, which will transform road, railway, and land use patterns along Interstate 90, and create new planning opportunities; and,
- WHEREAS. The Secretary of the Massachusetts Department of Transportation has formally requested the substitutions of the Modified All At-Grade Option in place of the at-grade throat option presented in the Scoping Summary Report.
- WHEREAS, The Modified All At-Grade Option contains a wider version of the Paul Dudley White Path on a boardwalk, as well as a wider "living shoreline" at the edge of the Charles River.
- WHEREAS. It is of utmost importance to continue to create a walkable and bikeable neighborhood well-connected with footbridge access to the Charles River with a linear buffer park, cycle track, and new city streets designed for low speed traffic by building a majority of new streets with three or fewer lanes; and,
- WHEREAS, Any design elements should improve the Charles River riverbank and parkland in a manner consistent with the I-90 Riverfront Analysis; and,
- WHEREAS. Building decking above I-90 and all tracks would better knit the neighborhoods together with the consistent goal of achieving true transit-oriented development, and minimizing the noise pollution and air pollution impacts on the abutting residential neighborhoods; and,
- WHEREAS, The public comment period for the Allston Multimodal Improvement Project ends on October 30, 2020.

#### NOW THEREFORE BE IT RESOLVED,

That the Boston City Council urges the Massachusetts Department of Transportation (MassDOT) to offer due diligence and serious consideration to design elements which prioritize a livable, walkable, and bikeable riverbank and parkland for all, including an all At-Grade "Throat" design.

Filed in City Council: October 21, 2020



# City of Cambridge Executive Department

**LISA C. PETERSON**Deputy City Manager

October 28, 2020

Stephanie Pollack
Secretary and Chief Executive Officer
Massachusetts Department of Transportation
10 Park Plaza, Suite 4160
Boston, MA 02116-3969

Dear Secretary Pollack,

Thank you for the opportunity to comment on the current status of the Allston I-90 project and provide Cambridge's view of current options for the "Throat" section of the project. Cambridge continues to have great interest in this project given its scale and importance for both regional and local mobility as well as its impacts on the Charles River and adjacent neighborhoods in Cambridge and Boston.

I appreciate MassDOT's efforts in recent months to work with the City of Boston and advocates to expand the range of options for the Throat to include a Modified At-grade Alternative that better meets the project's goals and the project's intended Purpose and Need as laid out in prior permitting actions. In contrast to the most recent Highway Viaduct Alternative, the Modified At-grade, in the view of the City of Cambridge, is preferred since it meets many more project and community goals.

As always, Cambridge is also focused on the larger project context as well as specific design alternatives. Cambridge continues to value the following as core project elements that should be considered in reviewing the Modified At-grade grade option:

- Priority and expansion of sustainable transportation including bus and rail passenger service and pedestrian and bicycle circulation.
- Providing additional parkland as a space for people, watershed ecosystem, shade trees and climate resilience measures.
- Noise mitigation of both existing and future transportation noise, including during construction, as well as buffering facilities with landscaping to reduce visual impacts and provide environmental benefits.

#### Sustainable Transportation

In order for the region to continue to grow and to meet our goals for reducing greenhouse gas emissions from transportation, transit, walking and biking infrastructure must be given the highest priority. The Modified At-grade Option includes reconstructing the little Grand Junction Bridge over Soldiers Field Road which is essential to connecting the Grand Junction multi-use path, currently in design, to the Charles River path network and to enabling a future two-track transit connection between West Station



and North Station, as laid out in RailVision. Both are top priorities for Cambridge. It also includes more feasible and attractive connections to Commonwealth Avenue/Boston University and the Allston neighborhood.

#### **Parkland**

While space does not exist to create significant parkland in the Throat for any option, the Modified Atgrade Alternative includes a long-sought goal of a restored, living shoreline which will help improve water quality and support native trees and shrubs. A widened Paul Dudley White Path in this alternative is a very positive addition to help people enjoy the river and enhanced shoreline.

#### Mitigation of Current and Future Noise and Transportation Impacts

Noise mitigation of existing and future transportation noise is a priority for Cambridge and most important in the Throat since the river sheet easily conveys all noise from the Turnpike, Soldiers Field Road and the railroad across to Cambridgeport, and Magazine Beach, the second largest open space in Cambridge. Both the existing viaduct and Modified Highway Viaduct require trucks and other vehicles to climb and descend the viaduct which creates substantial noise, in addition to being elevated so noise carries further. The Modified At-grade, by staying level, immediately reduces overall noise and how far it travels. Cambridge is committed to seeing that any chosen alternative mitigates noise to levels below current levels and does not contribute to additional noise pollution in such a dense urban environment. The Modified At-grade has the additional benefit that since no facilities are on structures, at some point in the future when transportation patterns or environmental changes occur, lane reductions on roadways could be more easily be achieved, creating space for other needs.

Thank you for your consideration of the City of Cambridge's comments on the Modified At-grade Alternative. We look forward to working with Federal Highway and MassDOT during this permitting process. If you have any questions, please do not hesitate to contact me or Bill Deignan in the Community Development Department at <a href="wdeignan@cambridgema.gov">wdeignan@cambridgema.gov</a>, or at 617-349-4632.

Sincerely.

Louis A. DePasquale

City Manager

Cc:

Susanne Rasmussen, Director of Environmental & Transportation Planning

Mothces



Media

«Back to Main Site

🕯 <u>Print This Page</u>



Welcome

#### **Cambridge City** MA

Boards+

**Policy Order** POR 2020 #243

That the City Council go on record in full support of the All-At-Grade Alternative as the Preferred Alternative in the next phase of state and federal environmental process and in urging MassDOT to further revise the All-At-Grade Alternative to narrow Soldiers Field road lanes to existing parkway standards and make other roadway modifications to maximize space for parkland and pathways in the throat area and to avoid intrusion into the Charles River,

#### Information

**Department:** City Clerk's Office Councillor Patricia Nolan, Sponsors:

Councillor Quinton Zondervan, Councillor Dennis J. Carlone, Councillor Jivan Sobrinho-Wheeler, Councillor Marc C. McGovern

Policy Order

**Attachments** 

Category:

(Upload New Attachment)

Body

The Allston Multimodal I-90 Project, managed by MassDOT, will transform road, WHEREAS:

railway, pathway, parkland, and shoreline of the Charles River; and

WHEREAS: The Project will create a new neighborhood across the river from Cambridge and has the

potential to provide great benefits, though it will increase traffic and noise for Cambridge

during construction; and

WHEREAS: The City Council on October 5, 2020, unanimously supported a policy order urging

Secretary Pollack to consider a lane reduction and an at-grade design; and

WHEREAS: MassDOT has presented three alternatives for the narrow area between Boston University

and the river known as the "throat"; and

WHEREAS: Cambridge previously supported the "Hybrid" alternative that would rebuild Soldiers

Field Road on a viaduct but withdrew its support when MassDOT said the Hybrid would require building a "temporary" bridge far out into the Charles River to hold Soldiers Field Road and the Paul Dudley White Pathway for the 8-10 years of construction – a

completely unacceptable intrusion; and

WHEREAS: One of the three alternatives is the All-At-Grade Alternative which will align the

Massachusetts Turnpike, Soldiers Field Road, the Worcester commuter rail line, the Grand Junction railroad, and the Paul Dudley White Path all at ground level; and

WHEREAS: The All-At-Grade Alternative provides:

- For a quieter Cambridge and Magazine Beach Park (the 17-acre park across from "the throat," Cambridge's second largest park). Trucks will no longer need to jake break as they go up and down the elevated turnpike;
- A rebuilt Grand Junction bridge over Soldiers Field Road that will make possible future transit and safe pathway for walkers and bikers on the Grand Junction

RESOLVED:

That the City Clerk be and hereby is requested to send a suitably engrossed copy of this Resolution to Secretary of Transportation Stephanie Pollack on behalf of the entire City

Council.

Powered by Granicus

the Charles River; and be it further



TRANSPORTATION BOARD CHRISTOPHER DEMPSEY, CHAIR JONATHAN KAPUST, PE VICE CHAIR NANCY MOORE LINDA OLSON PEHLKE ALI TAL, PE

LEN WHOLEY

#### Town of Brookline

Massachusetts

#### **Department of Public Works**

**Engineering & Transportation Division** 

October 29, 2020

Stephanie Pollack Secretary & Chief Executive Officer Massachusetts Department of Transportation Ten Park Plaza, Boston, MA 02116-3973

#### Dear Secretary Pollack:

The Town of Brookline appreciates the opportunity to comment on the Allston I-90 Interchange Improvement project as presented at the virtual MassDOT Public Information Meeting on October 20, 2020. In consultation with Gustaaf Driessen, the Transportation Board liaison to the project, the Transportation Board has requested that I reiterate and reaffirm their previously communicated support of the following design elements of the project, as they promise to fulfill the Town's goals of creating a healthy and sustainable transportation system that promotes and prioritizes alternative modes:

Modified All At-Grade Option best meets the stated project purpose to address roadway deficiencies and safety concerns, and the stated project need to address the multimodal deficiencies within the broader transportation system. We concur with the Select Board's Climate Action Committee that the Modified All At-Grade Option provides the following additional climate benefits including: 1) the flattened and straightened highway will yield an overall reduction in vehicles emissions; 2) this option reduces the use of materials such as steel and concrete which, when manufactured create significant climate related impacts; 3) the potential for a living river bank brings storm water management and ecosystem benefits.

North-South Connections via Malvern, Babcock, and Agganis Way will provide an important travel link between North Brookline, Allston, and the New District. The crossing at Malvern should allow bus transit access to and egress from West Station, the proposed commuter rail station on the Boston to Worcester line. A well-designed, true roadway would also allow pedestrians and bicyclists to more conveniently reach the Station from the south, as well as the commercial and residential areas on both sides of the Station and beyond. Allowing vehicles other

333 Washington Street • Brookline, Massachusetts 02445-6863 Telephone: (617) 730-2177 Facsimile: (617) 264-6450 than buses and shuttles to use the roadway could have substantial traffic consequences in North Brookline and around Boston University, however, so at this time we do not favor allowing all-vehicle access. Babcock Street and Agganis Way will compliment this access with important pedestrian, bicycle, and micro-mobility connections. All three of these connections should be part of phase 1 of construction, and not delayed to future years, to ensure the project provides the best multi-modal transportation benefits to the abutting communities to achieve both the Town's and the Commonwealth's climate goals around greenhouse gas emission reductions from the Transportation sector.

West Station will provide improved commuter rail access to other stations to the east and west. It could also create a new light rail connection to Kendall Square in Cambridge and to North Station via the "Grand Junction" line. Similarly, the construction of West Station should be part of phase 1 of construction, and not delayed to future years, to ensure the project provides the best multi-modal transportation benefits to the abutting communities to achieve both the Town's and the Commonwealth's climate goals around greenhouse gas emission reductions from the Transportation sector.

We appreciate you taking the time to consider these comments and we strongly urge MassDOT to move beyond the Highway outlook of this project and toward implementing a truly multi-modal approach that priorities and promotes alternative modes, seeks to induce mode shift away from single occupant vehicles, and works toward achieving the Governor's ambitious climate goal of net-zero greenhouse gas emissions by 2050.

Warmest Regards,

Todd M. Kirrane

Transportation Administrator

Town of Brookline

CC: Honorable Cynthia Creem, Ed Coppinger, Nika Elugardo, Michael Moran, Thomas Vitolo

Brookline Select Board

Ton 1. 2

**Brookline Transportation Board** 

Melvin Kleckner, Town Administrator

Erin Chute Gallentine, Commissioner – Department of Public Works

Alison Steinfeld, Director – Department of Planning & Community Development

Kara Brewton, Director – Economic Development

Nathaniel Cabral-Curtis, Howard/Stein-Hudson

Gustaaf C.M. Driessen, PE



# Acknowledgements

This study was a collaborative effort by CBT and Perkins&Will to synthesize stakeholder concerns, and analyze the environmental and climate change impacts along the diverse riverfront edge conditions. The process involved stakeholder input from a diverse group of advocacy, neighborhood and community groups. Charles River Conservancy, Charles River Watershed Association, Conservation Law Foundation, and A Better City provided critical input, data and support in developing a series of strategies that outlines a regenerative approach to creating a resilient riverfront.

We thank our stakeholders for their valuable input, advocacy and support.

- Allston Civic Association
- Boston Cyclists Union
- Boston Society for Architecture
- Charles River Conservancy
- Conservation Law Foundation

- A Better City
- Livable Streets
- MassBike
- Walk Boston
- Weston & Sampson

- Allston Brighton Community Development Corporation
- Allston Village Main Streets
- Boston Society of Landscape Architects
- Charles River Watershed Association
- 495/MetroWest Corridor Partnership

## Building on years of great advocacy...

**BSA Beacon Yards Charette** | Sep 2014

A Better City At-Grade | Dec 2014 (see attached), renderings by NBBJ (early 2018)

**Beacon Yards: DeNovo Urbanism** | Dec 2014 By Northeastern School of Architecture / Tim Love

**Elevated Grand Junction by Ari Ofsevit** | Jul 2015

**I90 Allston Placemaking Study** | Dec 2015 - Oct 2016 By The Cecil Group/Harriman with Nelson Nygaard and Stantec (funded by MassDOT with oversight by MassDOT/Harvard/BPDA)

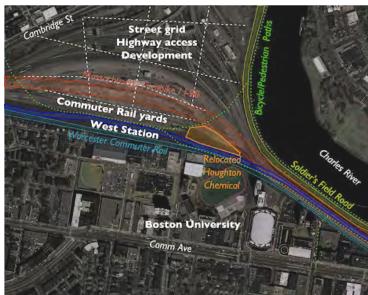
**River Remarkable Work Group** | starting in 2016 John Shields, Skip Burck, Frank M. Costantino, etc

**Unchoke the Throat design** | Feb 2018 work by Sasaki for WalkBoston and Charles River Conservancy

**BSA Allston Esplanade charette |** Apr 2019

**Riverfront Analysis + Design Exploration |** Sep 2020 By CBT / Perkins + Will







# Goals

Establish a cohesive, pragmatic and variable strategy that responds to challenge along the length of the corridor

Effectively connect PDW to the urban system and neighborhoods BU Bridge/Aggannis/ Grand Junction/ Cambridge - N/Harvard Street

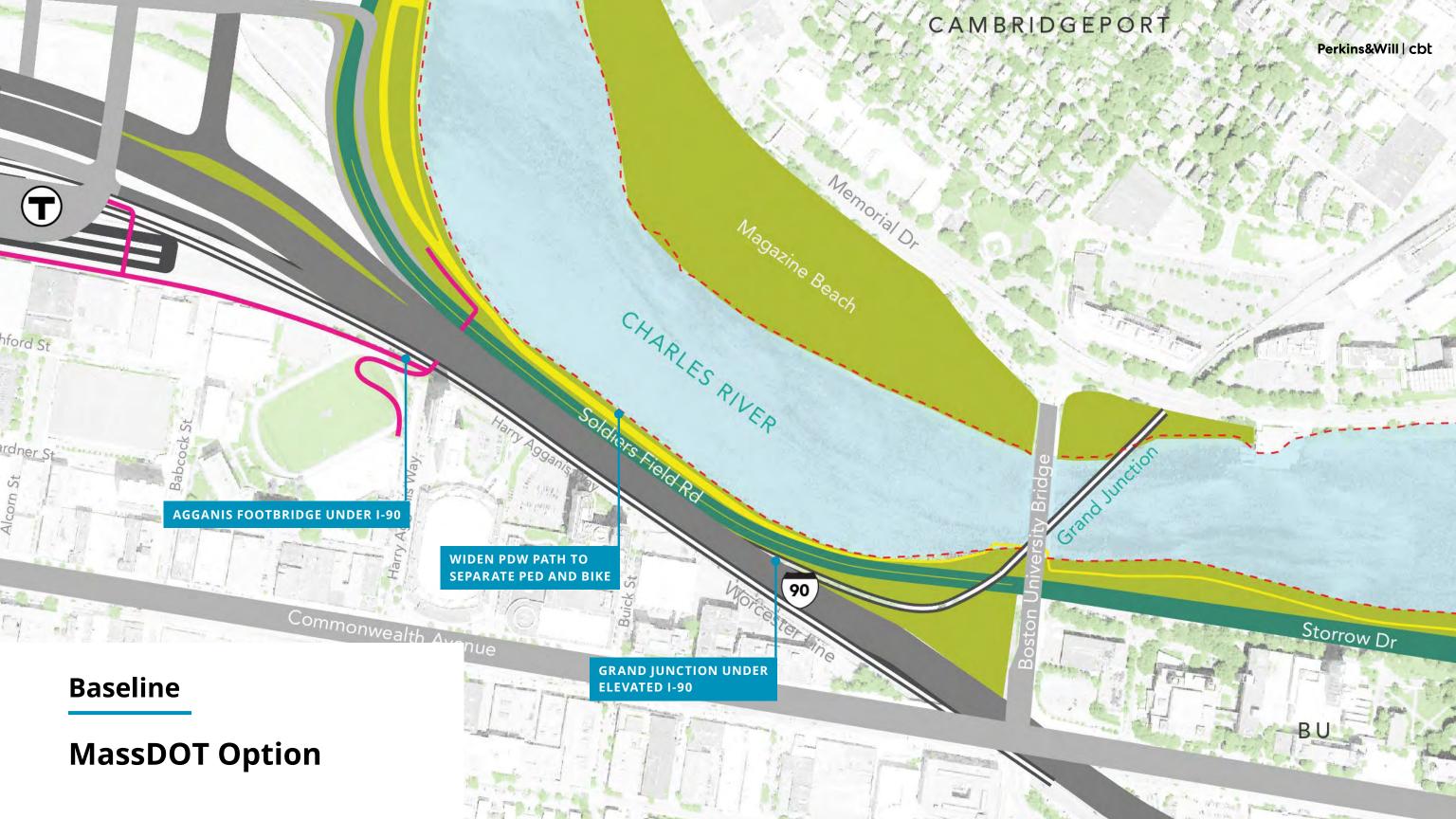
Balance the transportation needs with multiple variables including pedestrian, bicycles, river users, ecology and aquatic life

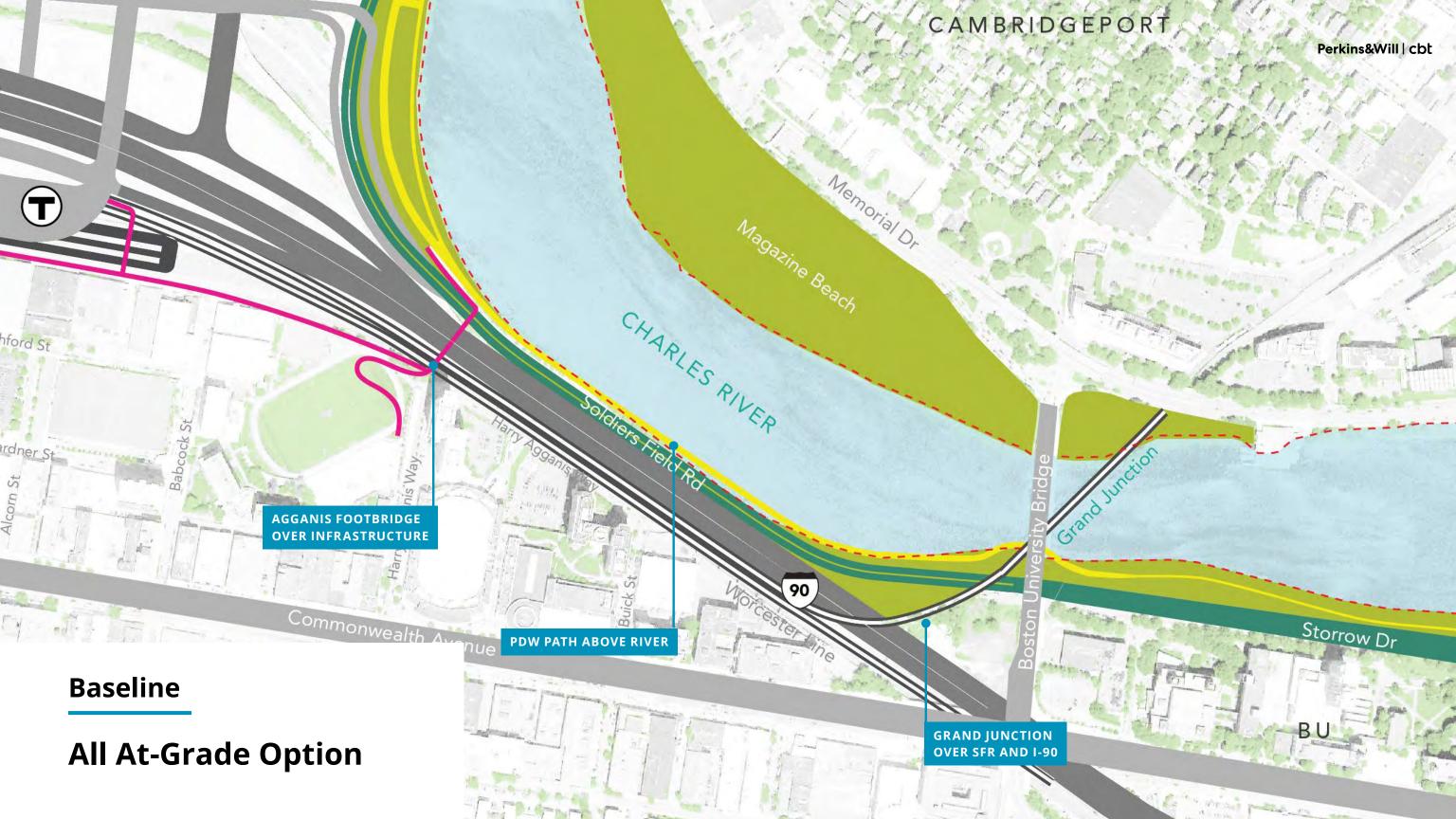
# Baseline for this study

MassDOT Option



All At-grade Option





### **The Concern**

# **Existing Conditions**





**Disconnected from the city**Bike and ped cannot connect back to the city through BU Bridge



Multi-model Transportation

BU Bridge, Grand Junction and the PDW path stack up each other



**PDW Path Adjacent to SFR**Narrow path (no separation of peds and cyclists) with inadequate buffer from the road

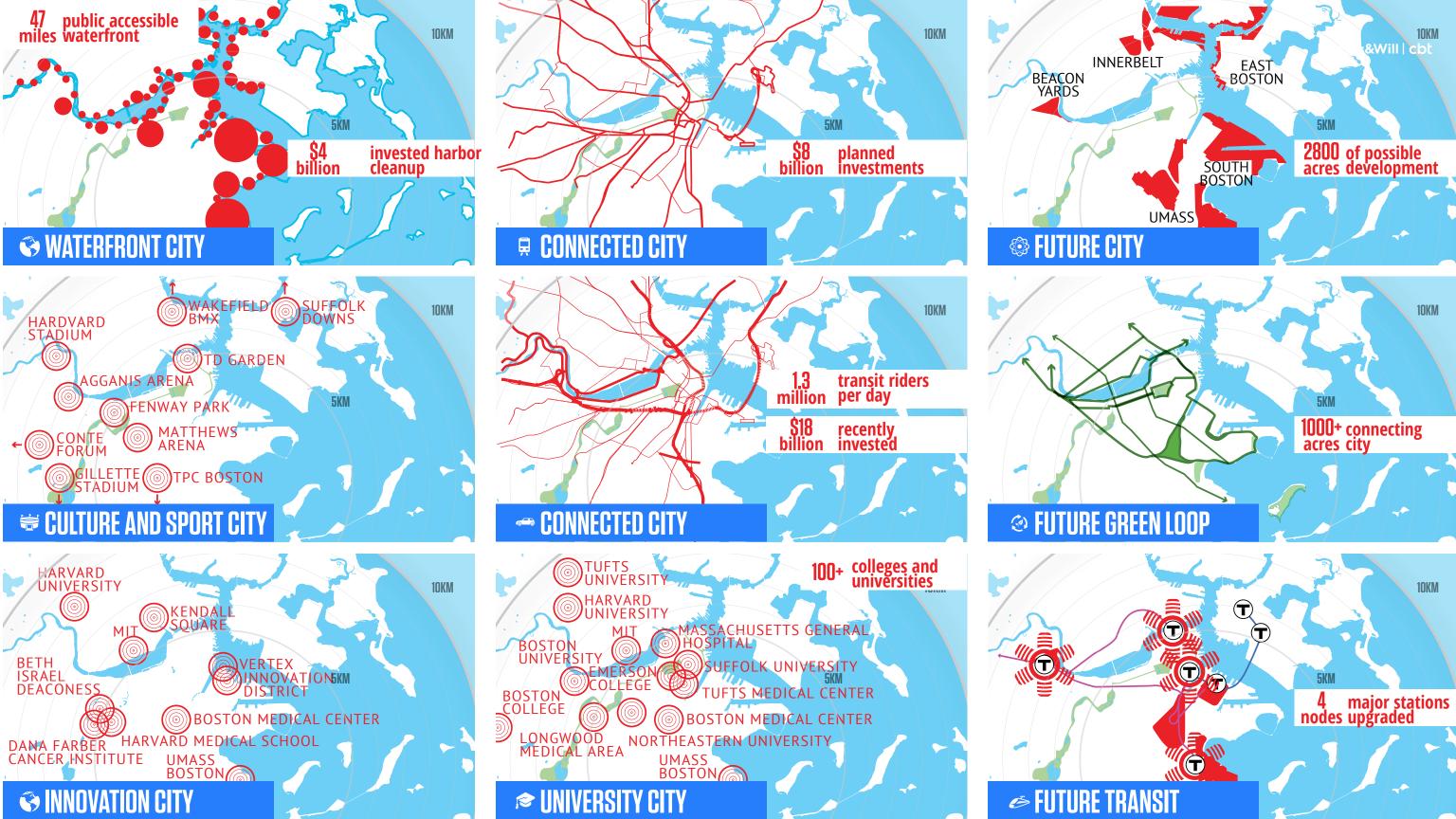


There are scattered lookout where people can stop



**Hard Edge Close to Western Ave**River edge becomes quay walls as it gets closer to Western Ave

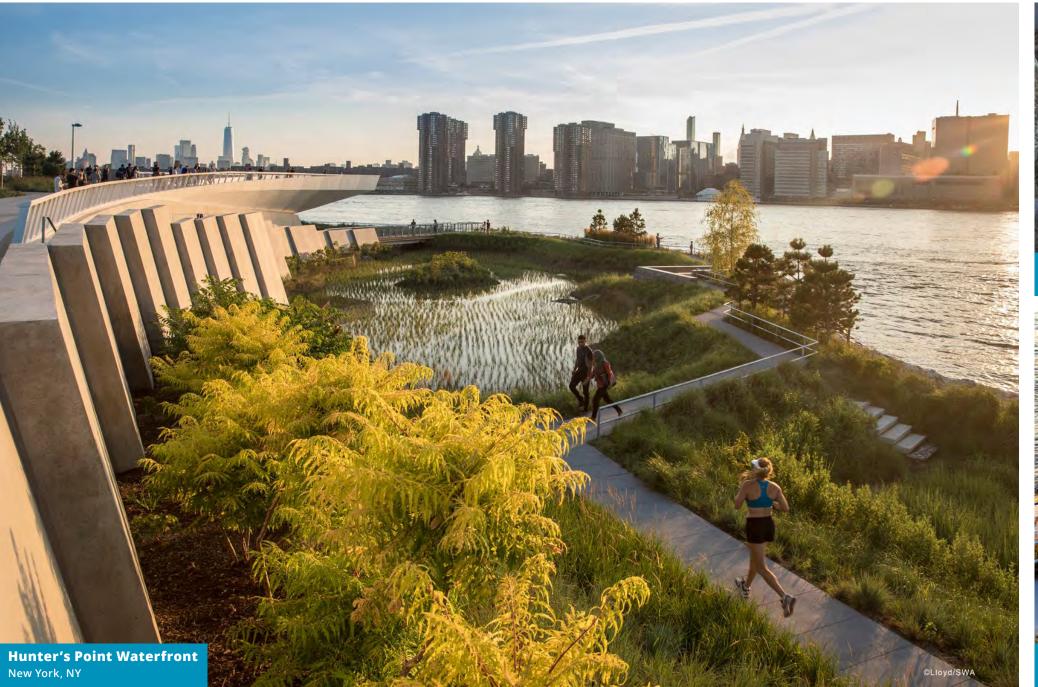
# **Nature of Opportunity**



# Complete the challenging link along Charles River



# **Restore the Rivers's Edge Ecology**







# **Connect to the City**







## **Build 21st Century Infrastructure**







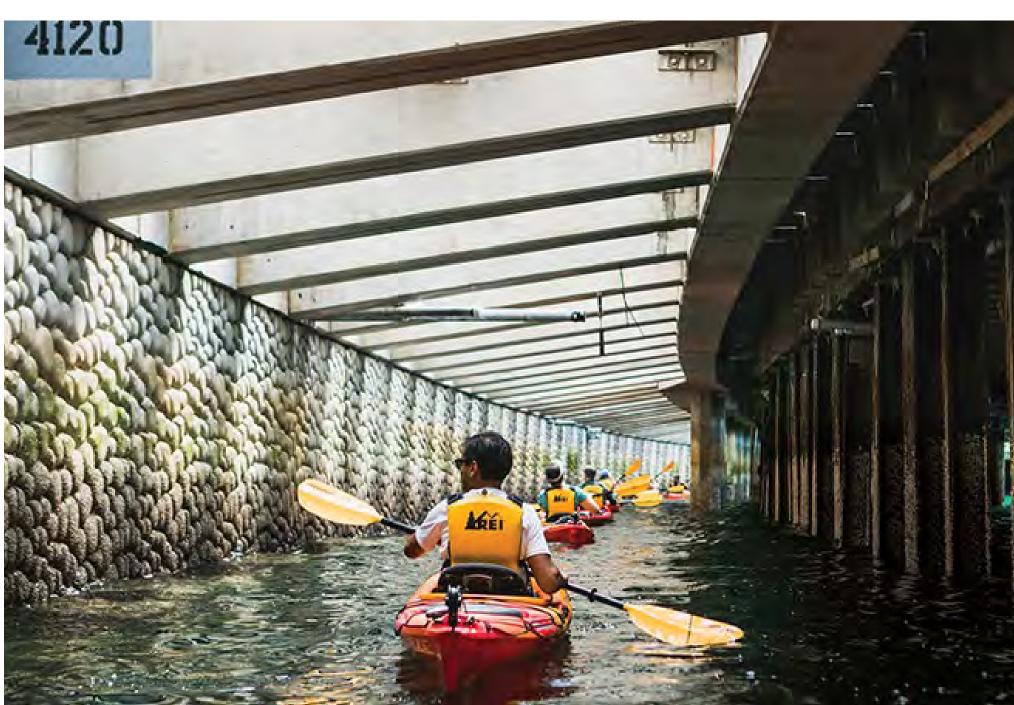




# **Transportation and Ecology can co-exist**







# Restoring River's Edge Ecology

# **Analysis**



- Evaluate existing natural systems
- Challenges of existing infrastructure systems
- Impacts of climate change
- Diverse edge conditions

# **Strategies**

- Tool kit of natural strategies
- Case studies

# **Exploration**

- Framework of guiding principles
- Propose natural strategies for diverse edge conditions
- Framework for connectivity
- Establish ecosystems that promote biodiversity and enhance ecology

### **Plans**

- Understand environmental issues and evaluate existing natural systems
- Challenges and opportunities to enhance ecology and establish aquatic habitat
- Understand the limitations and challenges of existing infrastructure
- Evaluate the impact of climate change
- Analyze the diverse edge conditions and experential qualities

## **Bathymetry**

### **Challenges + Opportunities**

- Identify shallow areas in the river bed to establish aquatic habitats
- Understand natural topography and drainage patterns
- Identify areas with steep slopes that casuse erosion and sedimentation in the river bed

### Isobaths (f)





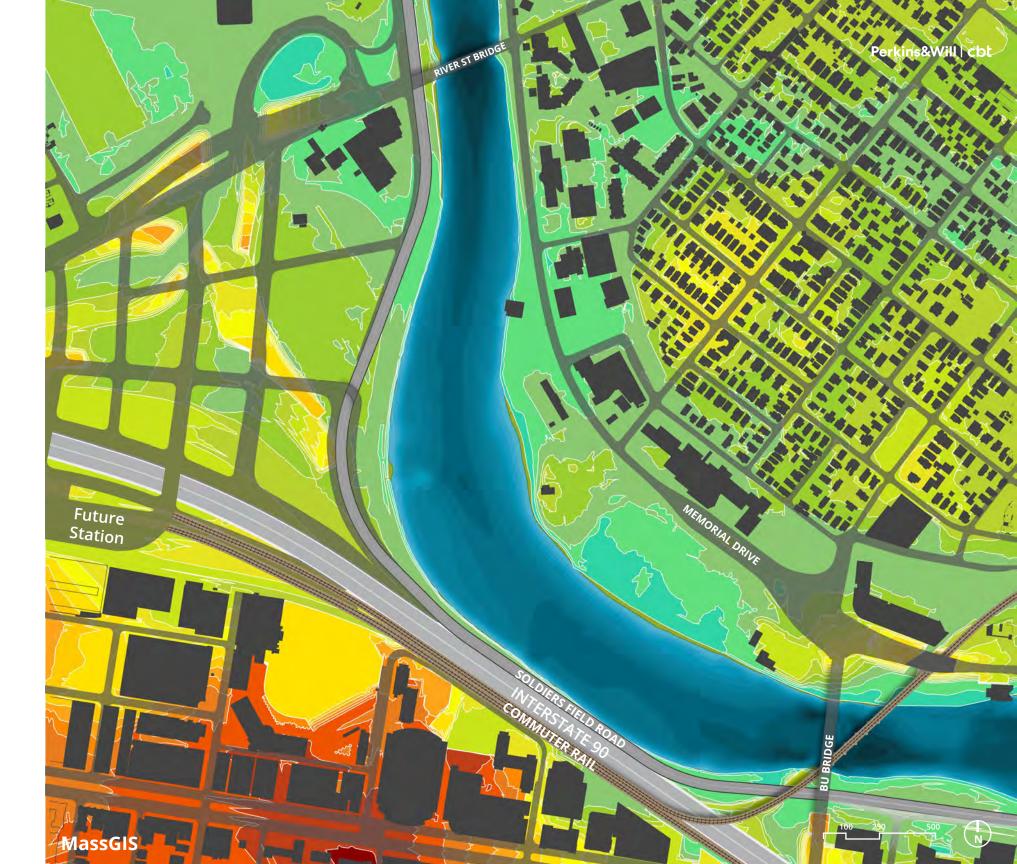
## **Topography**

### **Challenges + Opportunities**

- Identify ideal locations to propose BMPS to mitigate stormwater and flooding issues
- The low-lying areas of Allston Landing and the Enterprise Research Campus are vulnerable to flooding
- Identify areas that are vulnerable to flooding and projected flod elevations

### **Elevation (f)**





### **Infrastructure**

### **Challenges + Opportunities**

- Improve overall water quality to support aquatic habitat & biodiversity
- Collect and treat discharge from CSO and remove pollutants prior to entering the Charles River
- Introduce BMPS to treat stormwater runoff from roadways and reduce pollution discharge into the river

### Key

- BWSC Outfalls
- CSO Outfalls
- DCR Outfalls
- Monitoring Station
- Sub-watersheds
- Underground Culverts
  - Pollution + Sediment

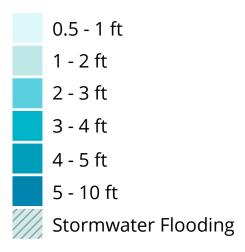


### **1% Annual Flooding**

### **Challenges + Opportunities**

- Limited storage capacity to capture and treat 1"-5" storm events
- Inland flood issues anticipated due to climate change impacts
- Address the impacts of climate change and make the river resilient by increasing flood storage along riverbanks

### 2070 0.1% Inundation Depth





### **Ecology & Habitat**

### **Challenges + Opportunities**

- Limited width for trees and shrubs that prevent erosion along steep slopes
- Invasive and nuisance species such as Japanese knotweed that do not enable biodiversity
- Historically important fish habitat has been drastically reduced
- Richness of species is constrained by compacted, barren soils
- Promote a stable tree canopy to provide shade and mitigate the heat island effect

### Key

Developed Open Space

Tree Cover

Shrub Cover



# **Surface Temperature**

#### **Challenges + Opportunities**

- Roadways immediately adjacent to river intensify the heat island effect
- Additional pavement, hardscape, and buildings developed for Allston Landing will exacerbate temperatures
- Higher river temperatures can stress the ecosystem, resulting in toxic algal blooms and fish die-off

#### Modeled Air Temperature (F)

July / August 2019





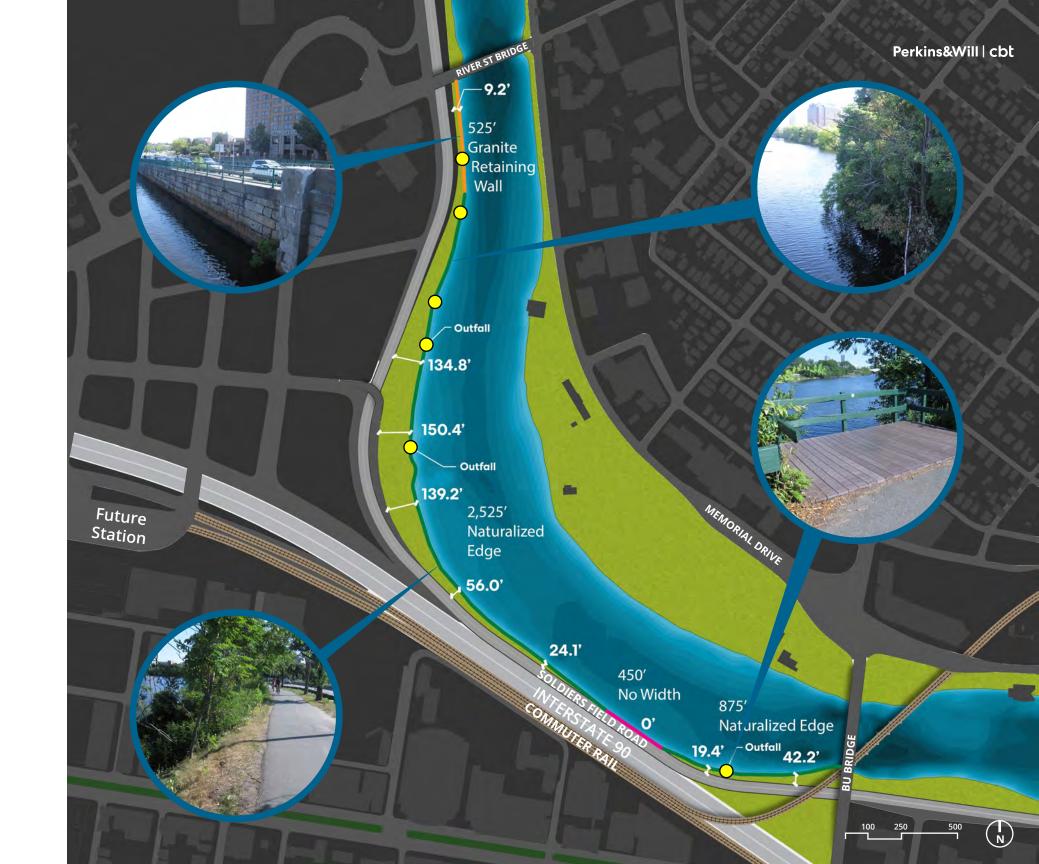
# **Edge Conditions**

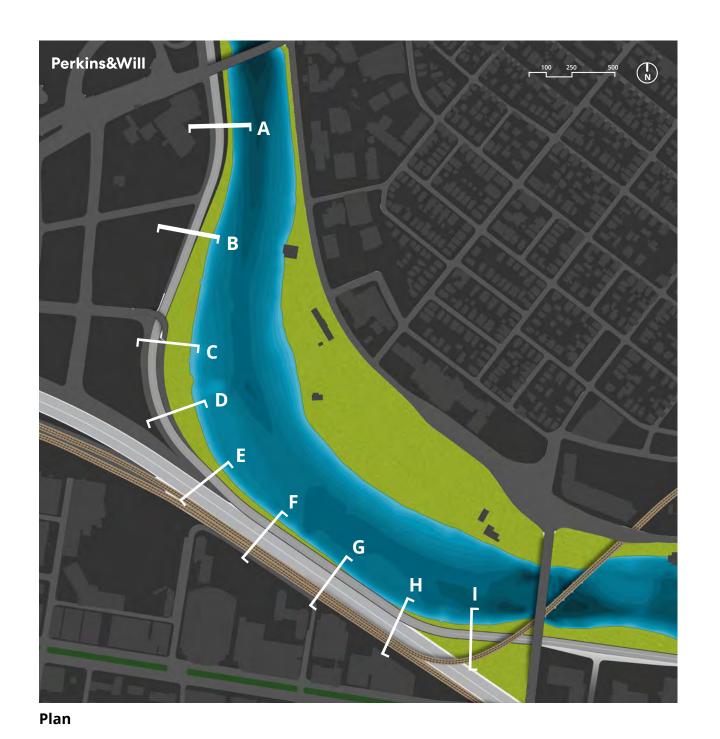
#### **Challenges + Opportunities**

- Significant erosion issues along rip rap edge, mixed in with asphalt pavement
- Steep riverbanks & lack of plants with strong roots increase erosion issues
- Limited width to incorporate multimodal pathways and stormwater treatment strategies
- High volumes of untreated pollution discharge directly into the river bed

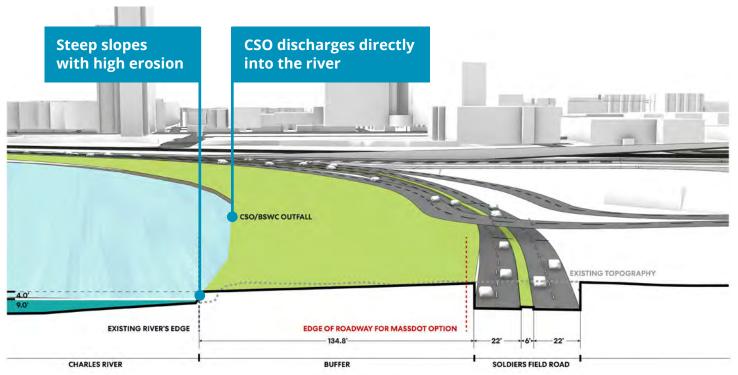
#### Key

- Granite Retaining Wall
- Eroded Naturalized Edge
- Road Immediately Adjacent
- BSWC Outfalls

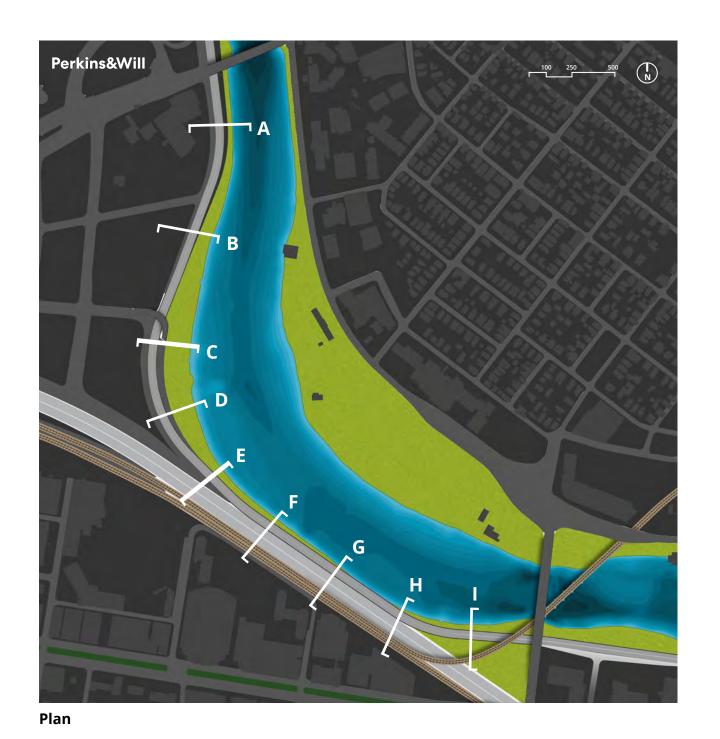




Section A



Section B



Opportunities for pretreatment and floor storage for resiliency

EXISTING RIVER'S EDGE

EXISTING RIVER'S EDGE

EDGE OF ROADWAY FOR MASSDOT OPTION

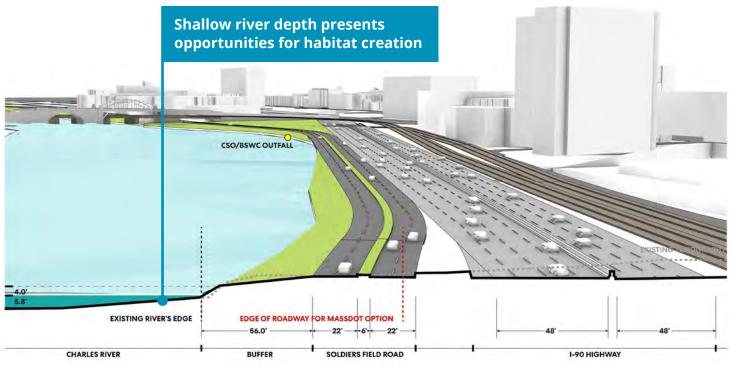
22' 22' 6' 22'

CHARLES RIVER

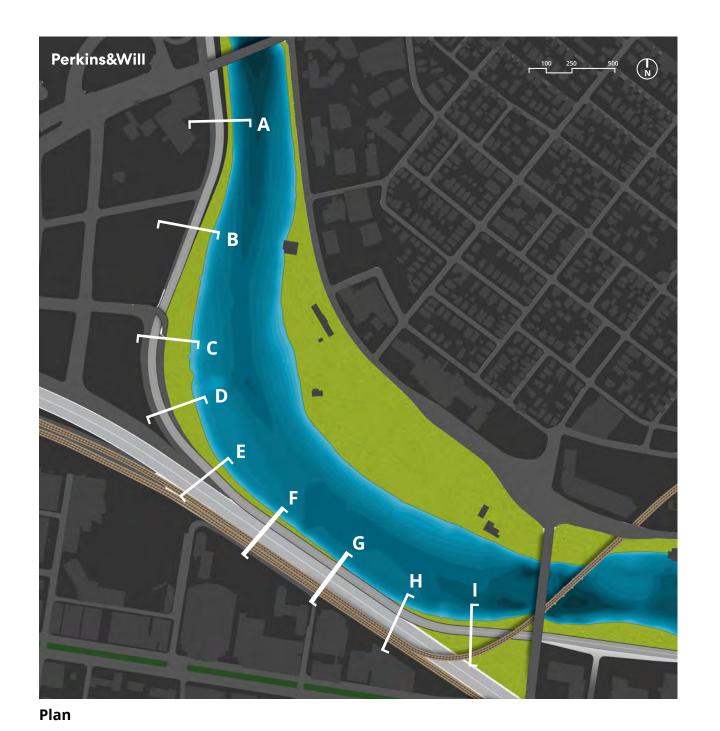
BUFFER

SOLDIERS FIELD ROAD

Section C



Section E

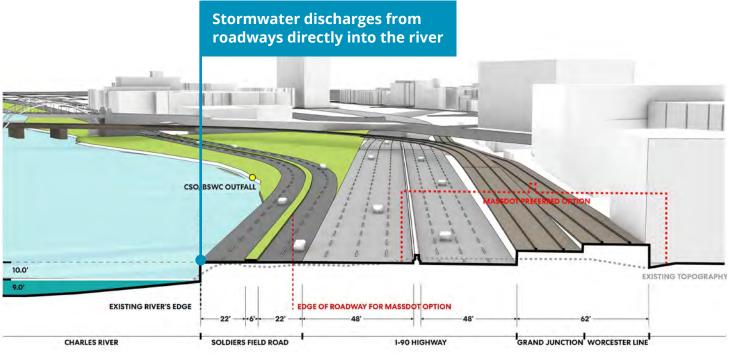


Lack of armored edge to prevent erosion and stabilize slope

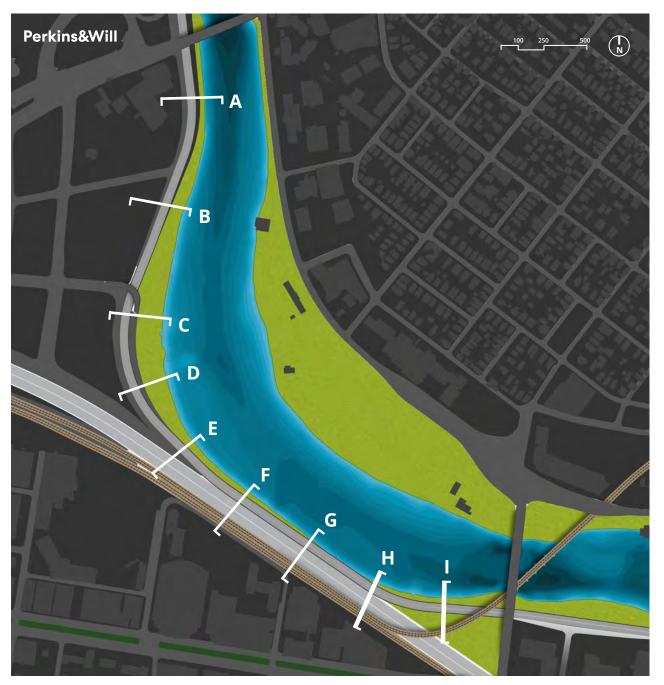
cso/BSWC OUTFALL

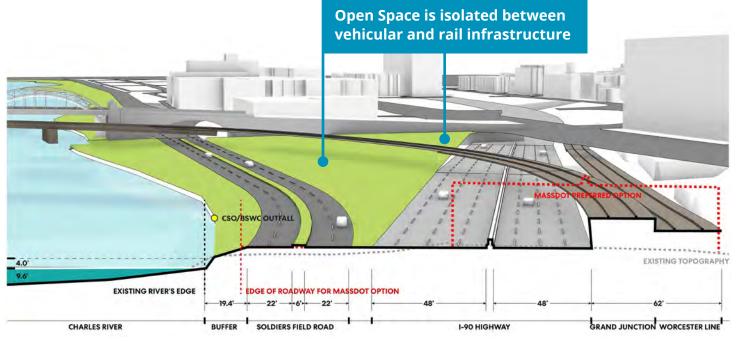
CSO/B

Section F

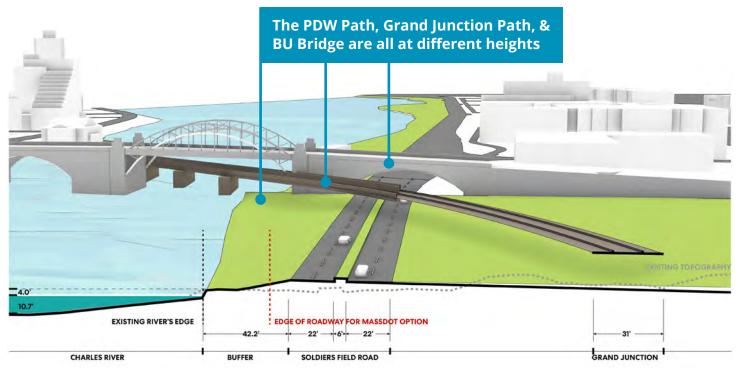


Section G





**SECTION H** 



Plan

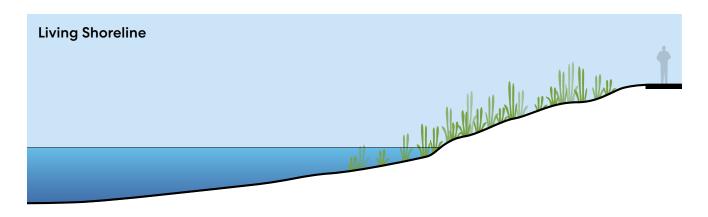
# Strategies

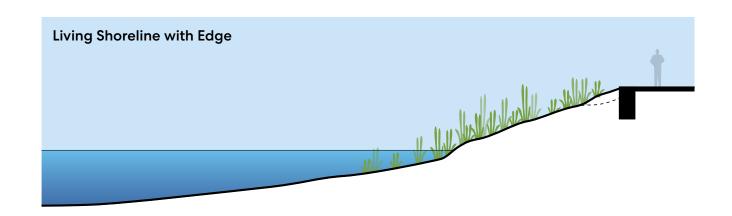
# **Tool Kit**

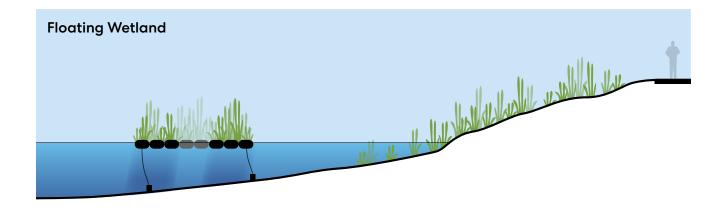
- Create a toolkit of landscape strategies to create a living shoreline
- Understand the comparative benefits and impacts of each intervention
- Draw upon knowledge gained from preexisting examples and precedents

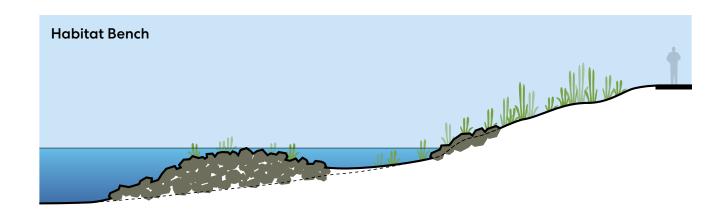
#### **Tool Kit**

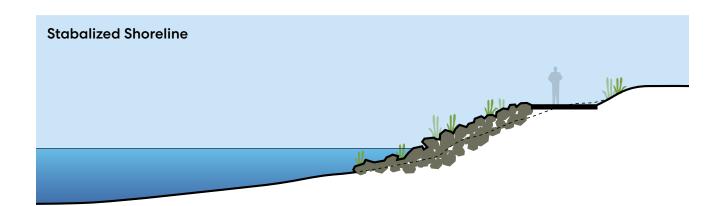
# **Naturalized Edges**

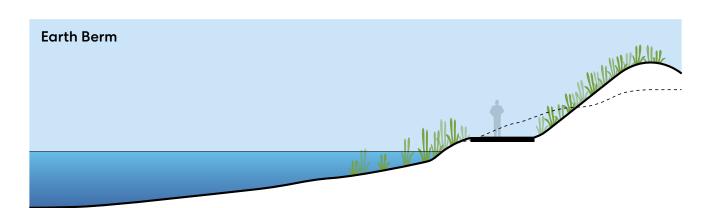






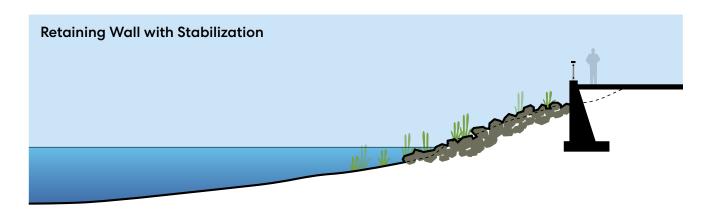


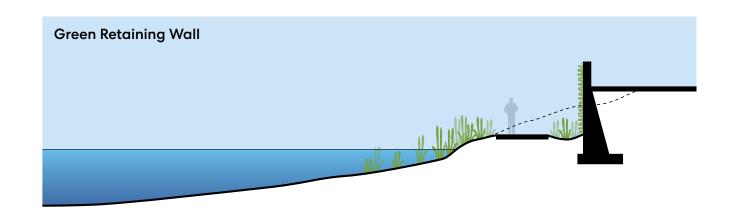


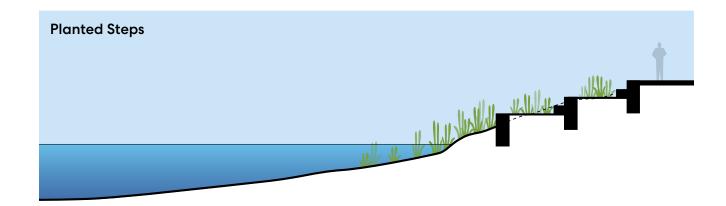


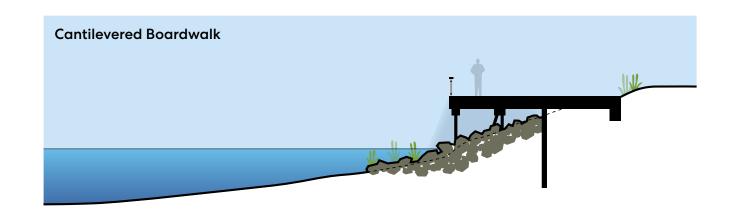
#### **Tool Kit**

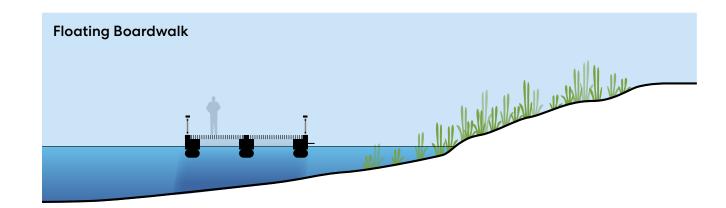
# **Constructed Edges**

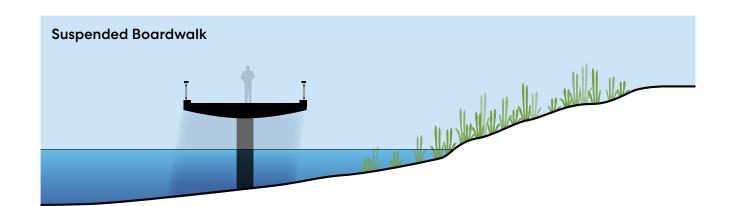








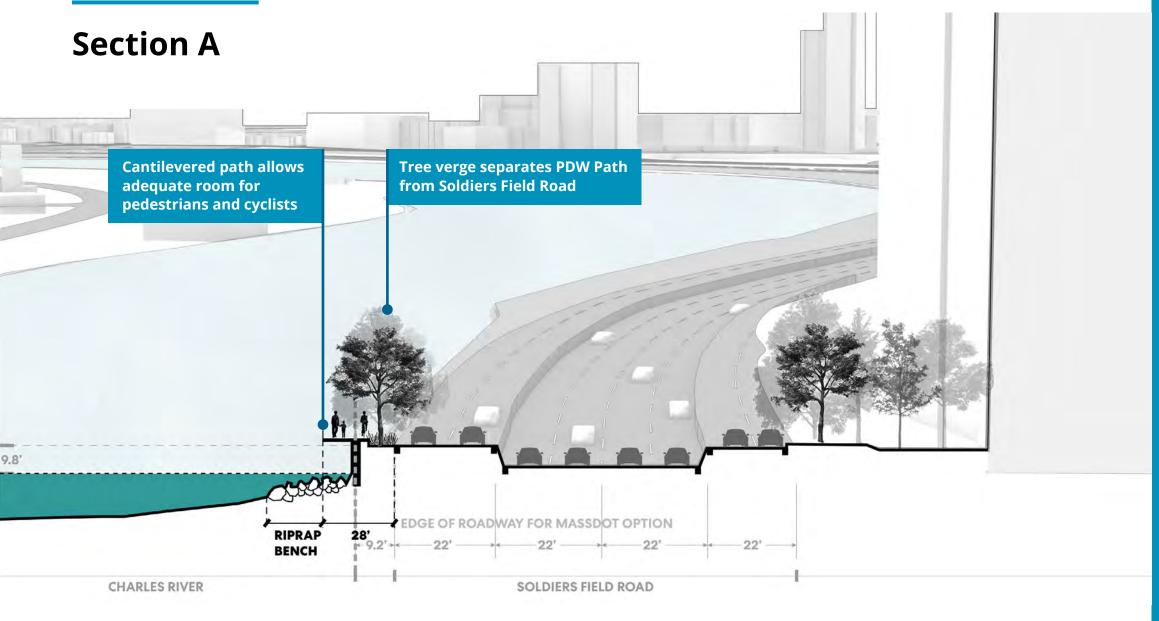


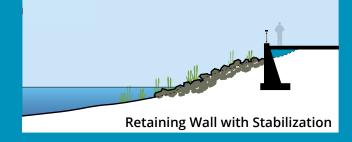


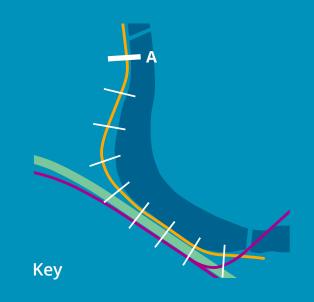
# Exploration

# Sections

- Propose a series of landscape systems that mitigate the impacts of pollution discharge and improve environmental conditions
- Address the impacts of climate change to create a resilient riverfront
- Re-imagine the river's edge as a natural living shoreline of rich and diverse ecosystems
- Introduce robust circulation systems and open spaces connecting surrounding communities to the riverfront





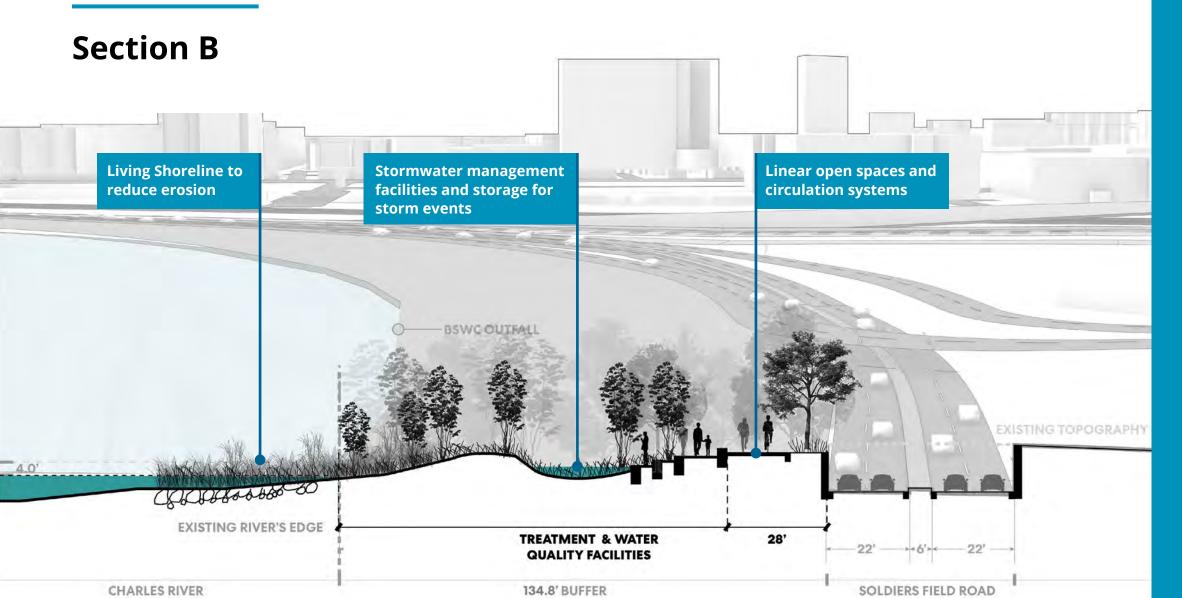










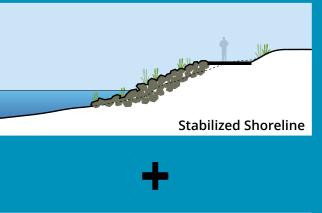


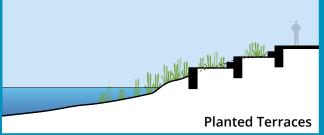


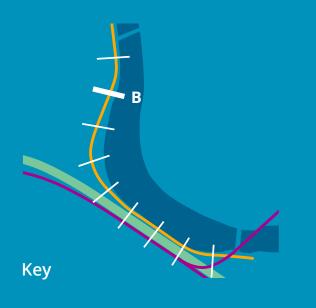






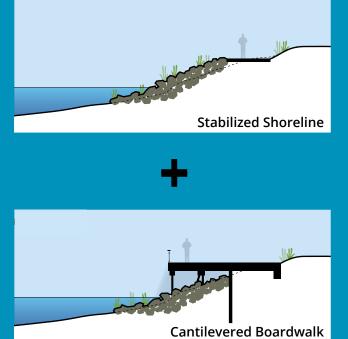


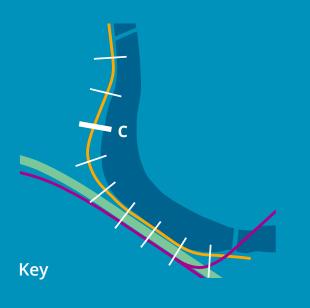


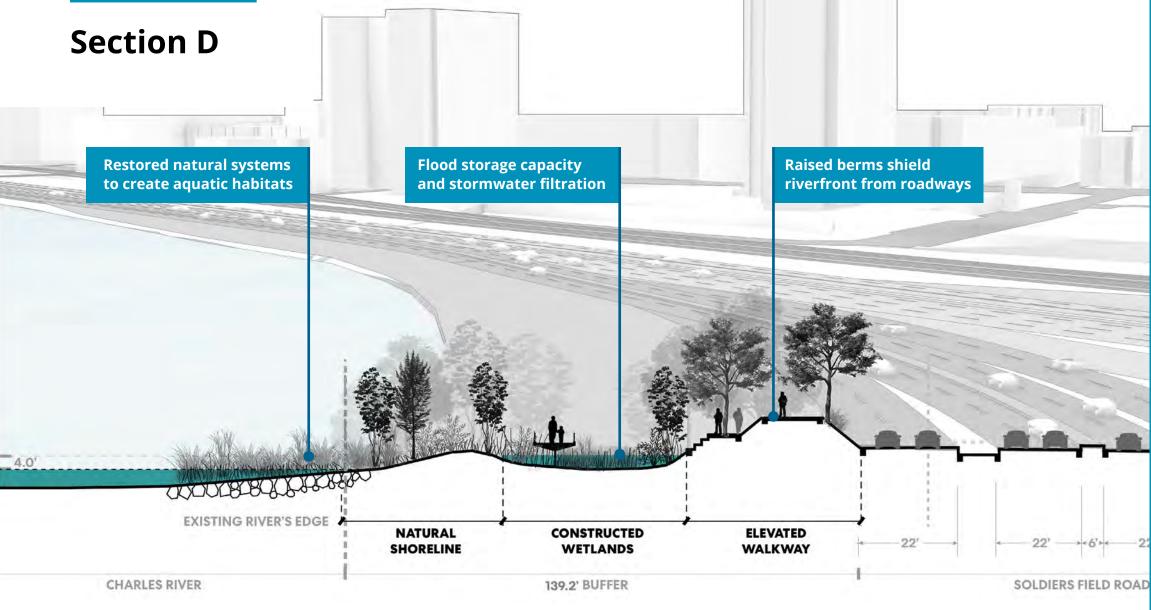


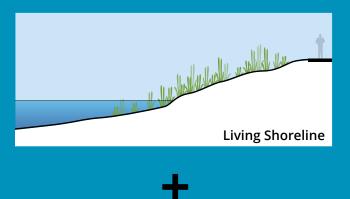
#### **Strategies**

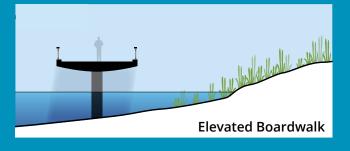


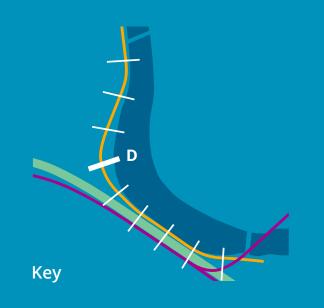








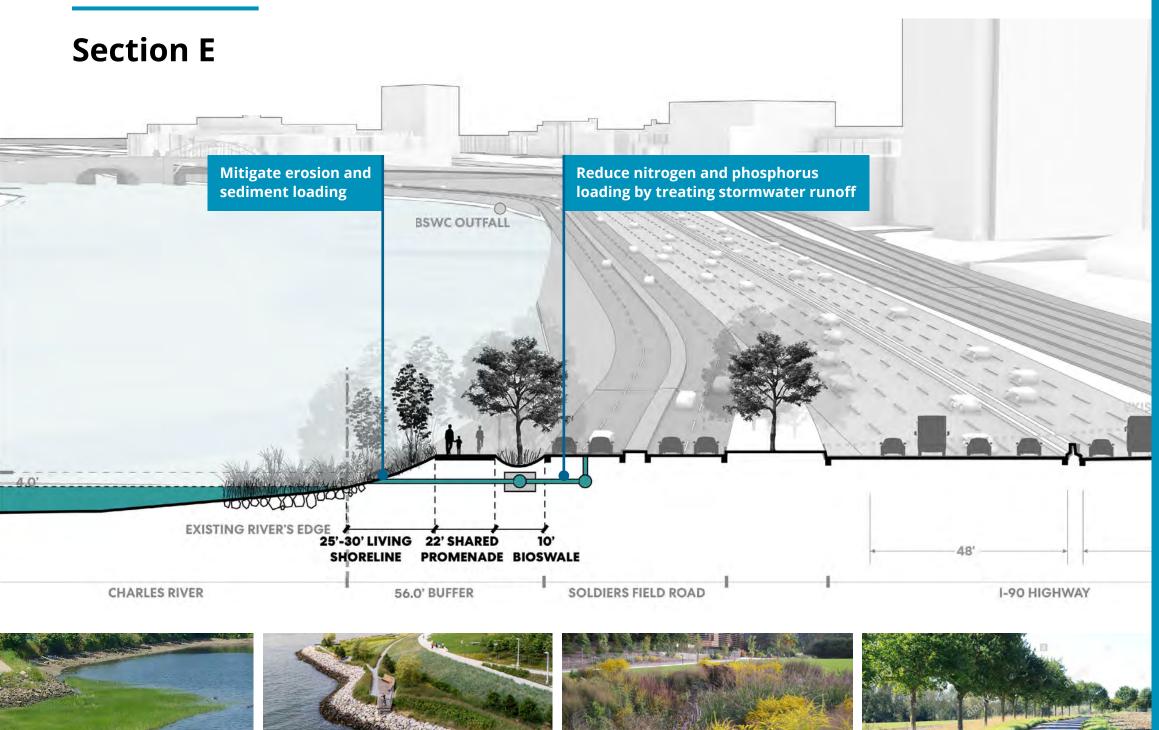


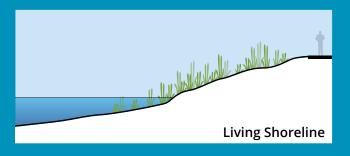




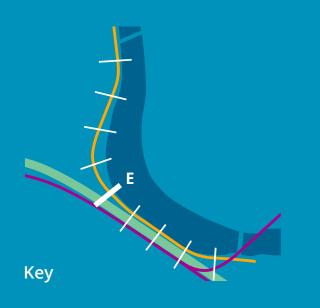








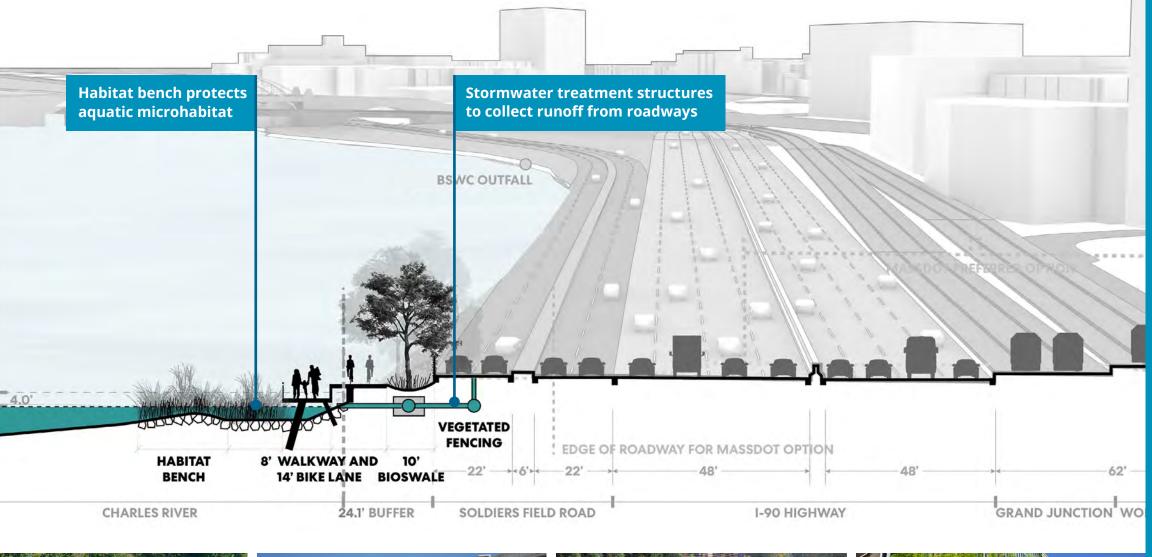


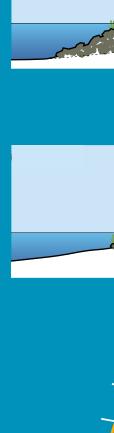


**Habitat Bench** 

Cantilevered Boardwalk

### **Section F**





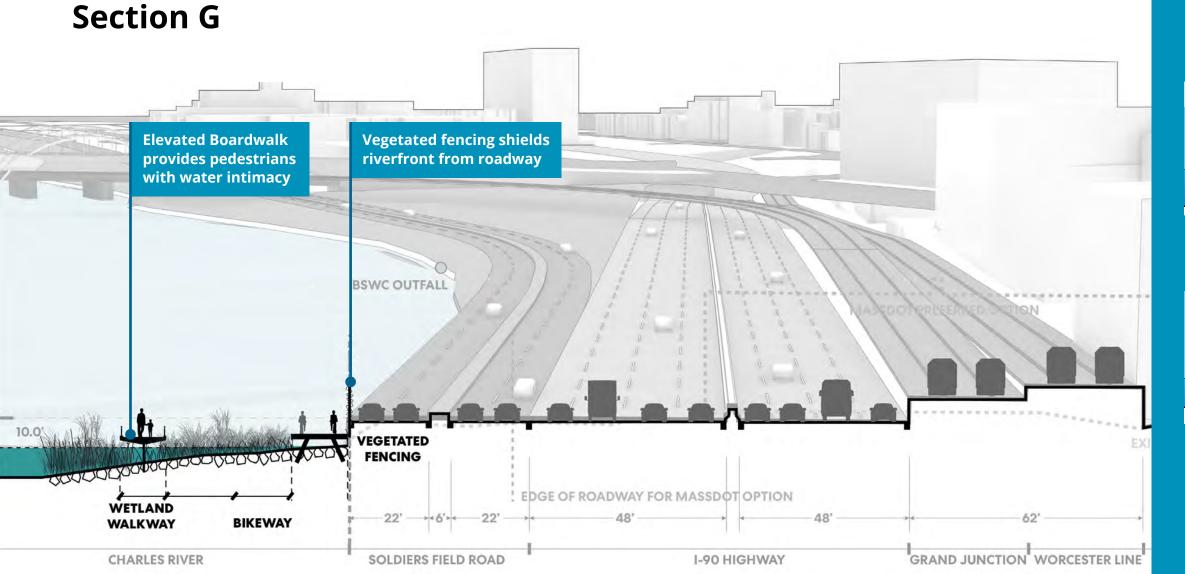
Key









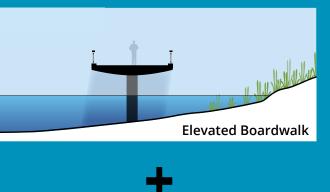


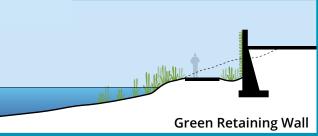


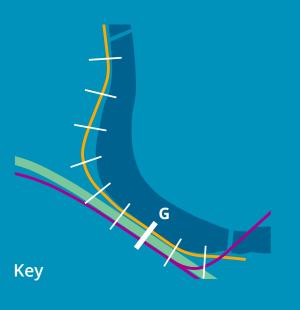




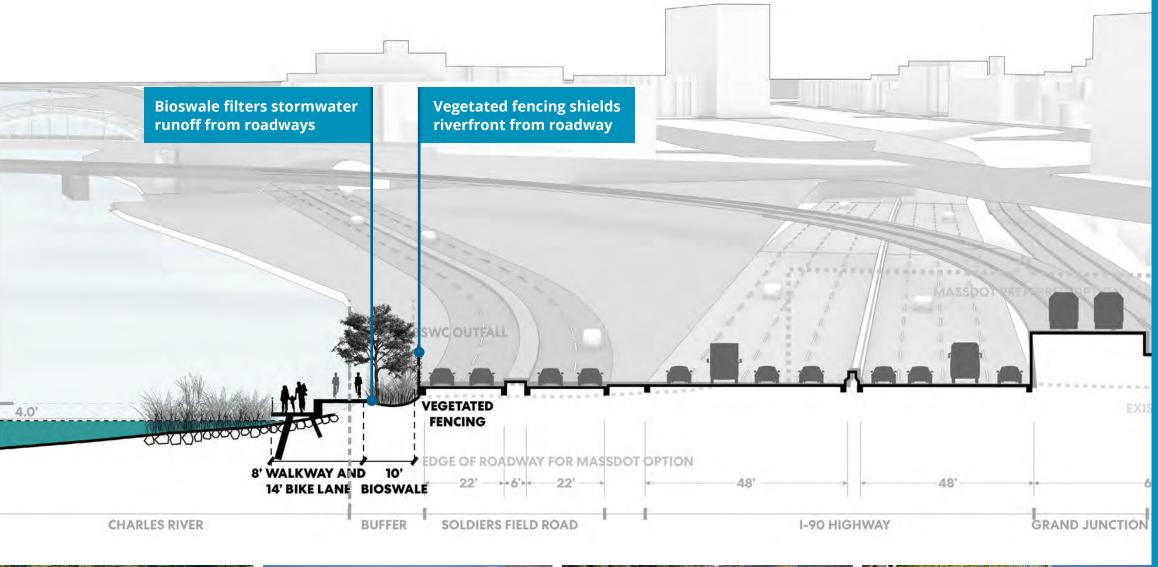








# Section H

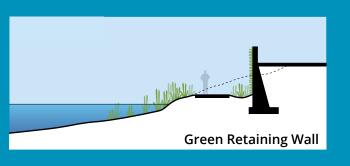


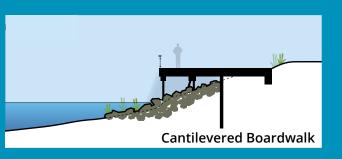


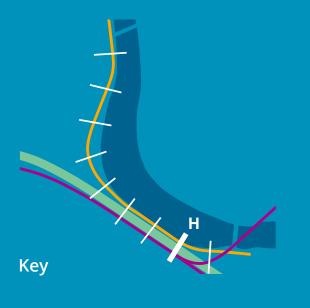








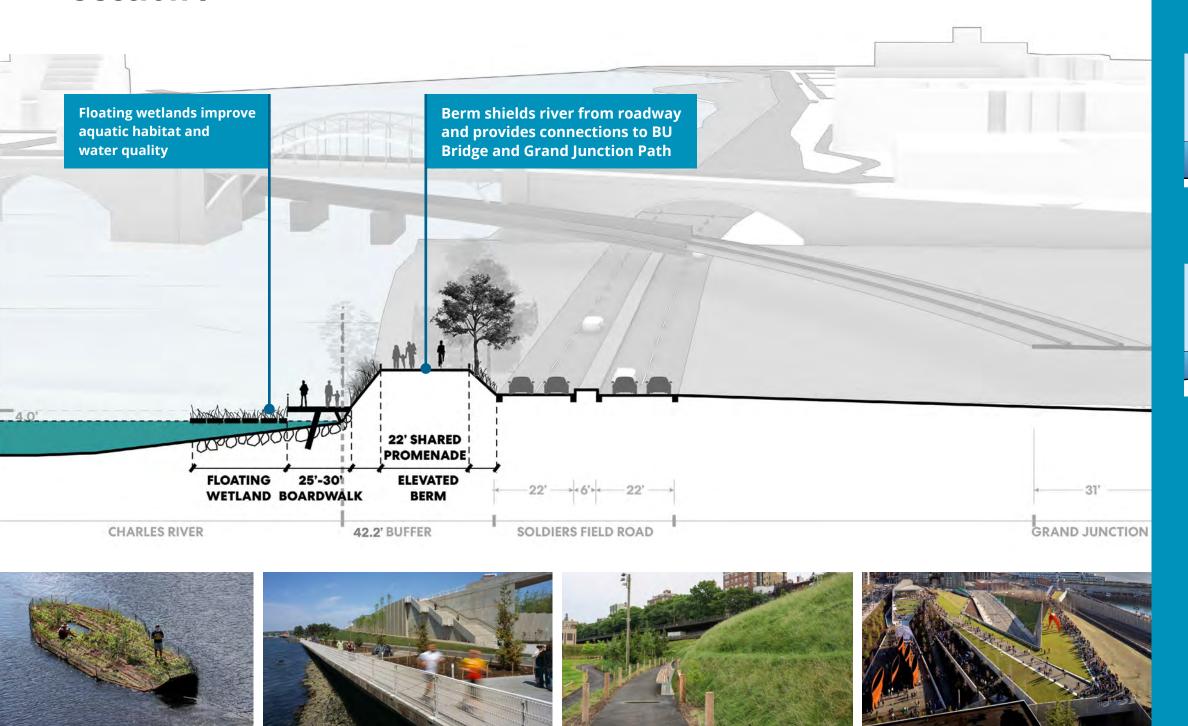


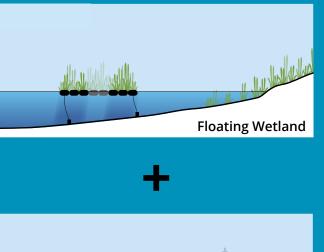


Stabilized Shoreline

#### **Exploration**

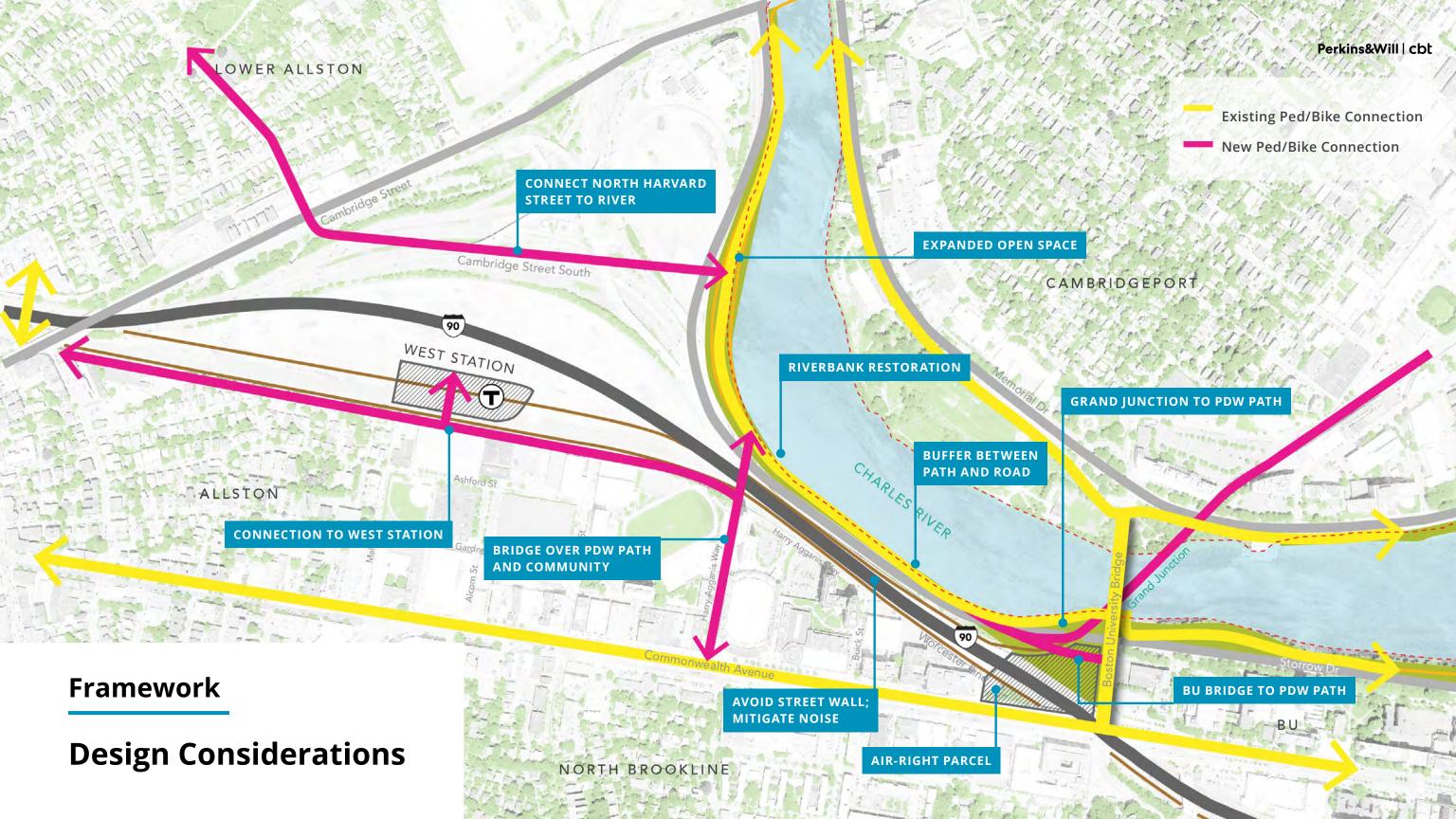
#### **Section I**







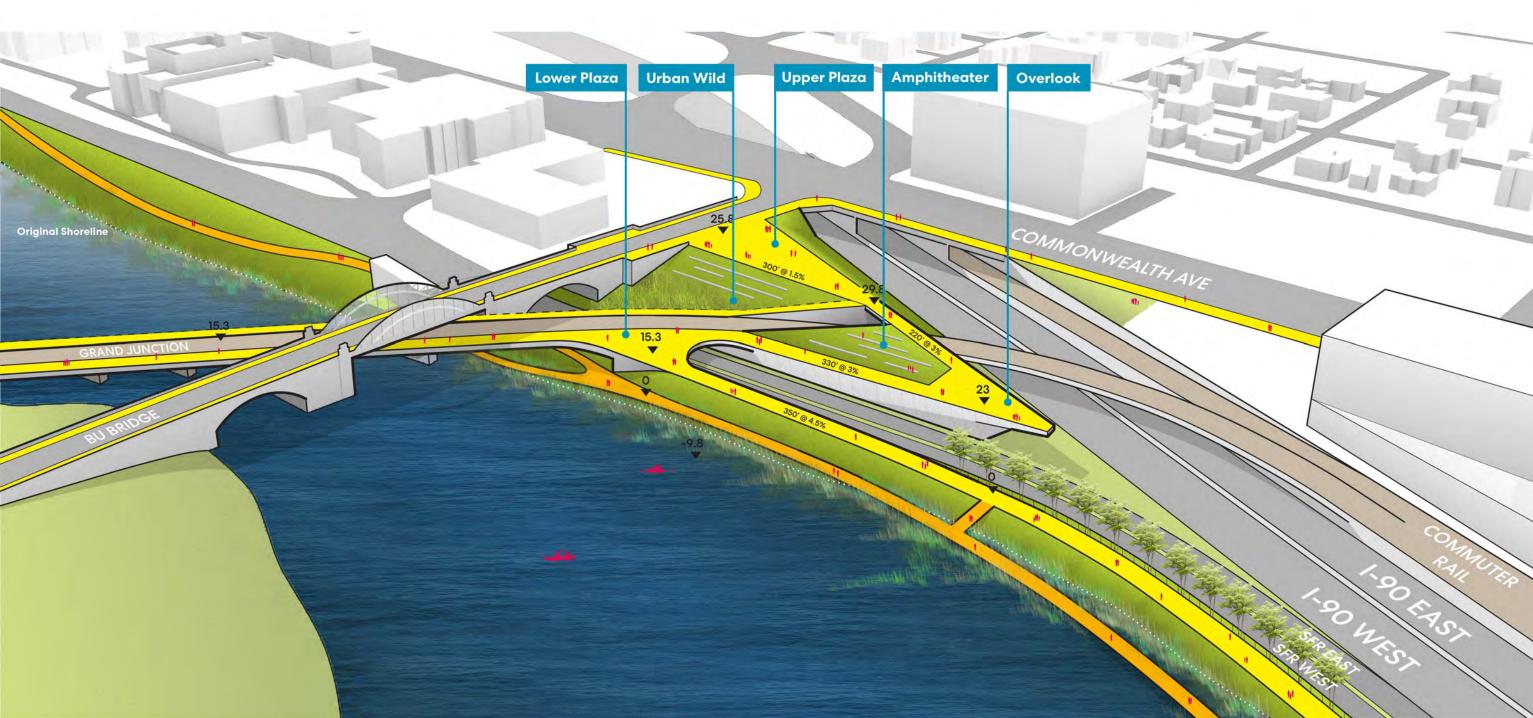
# **Connectivity Framework**



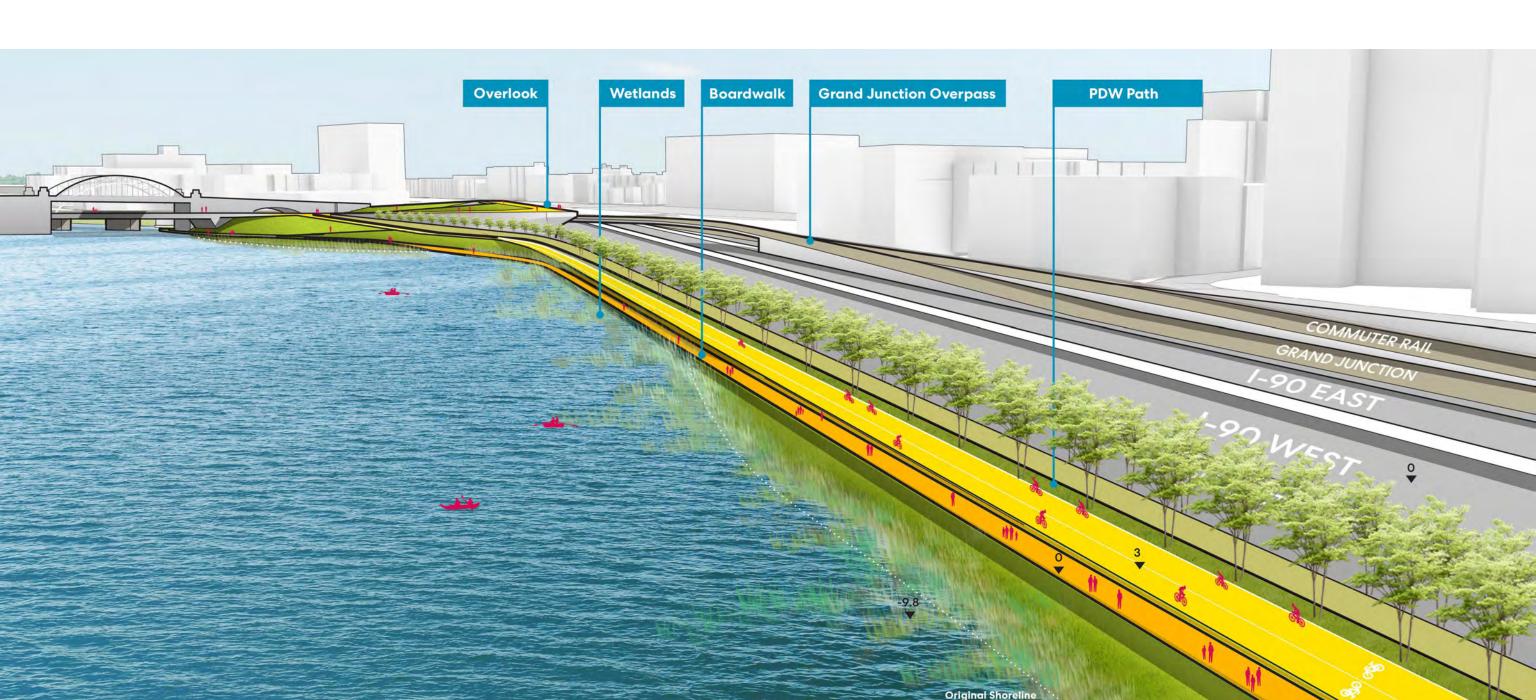




# **BU Bridge Open Space**



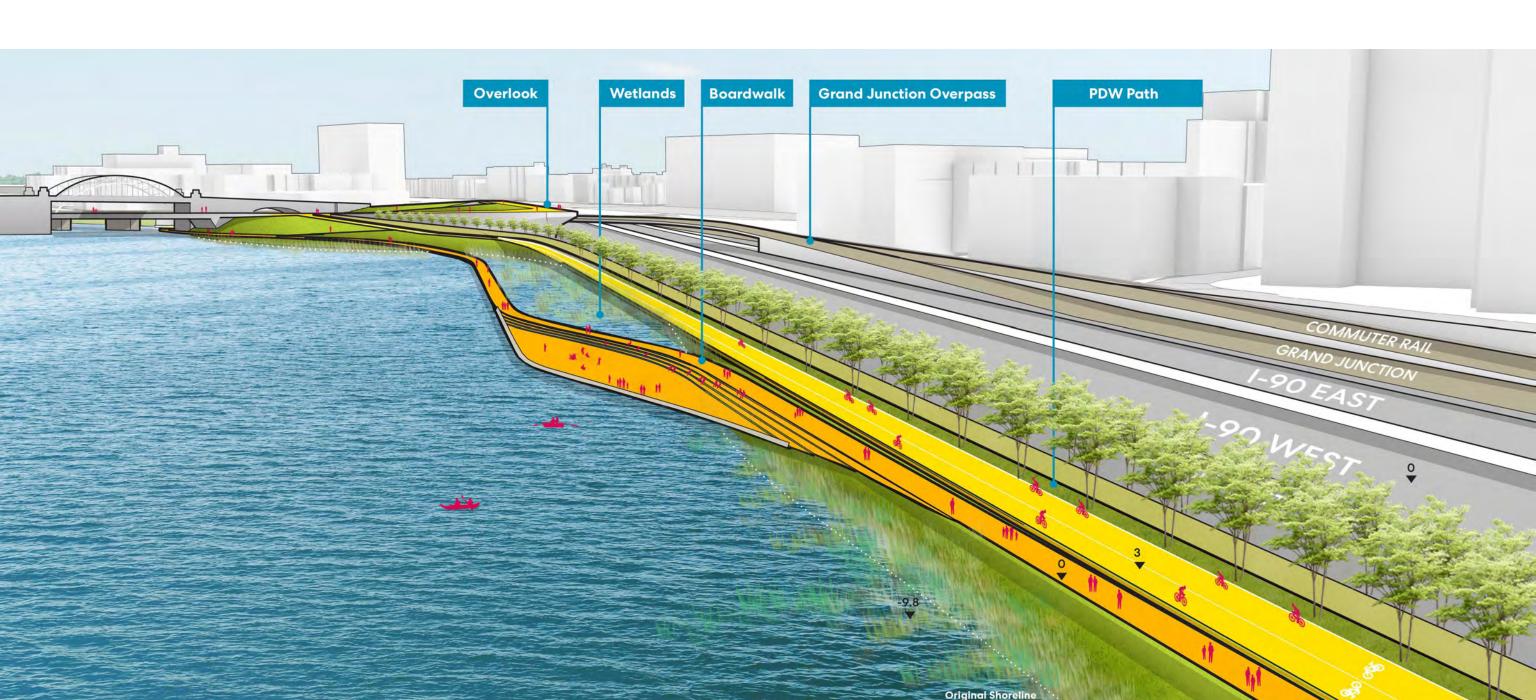
# **Throat Condition | Alternative 1A**



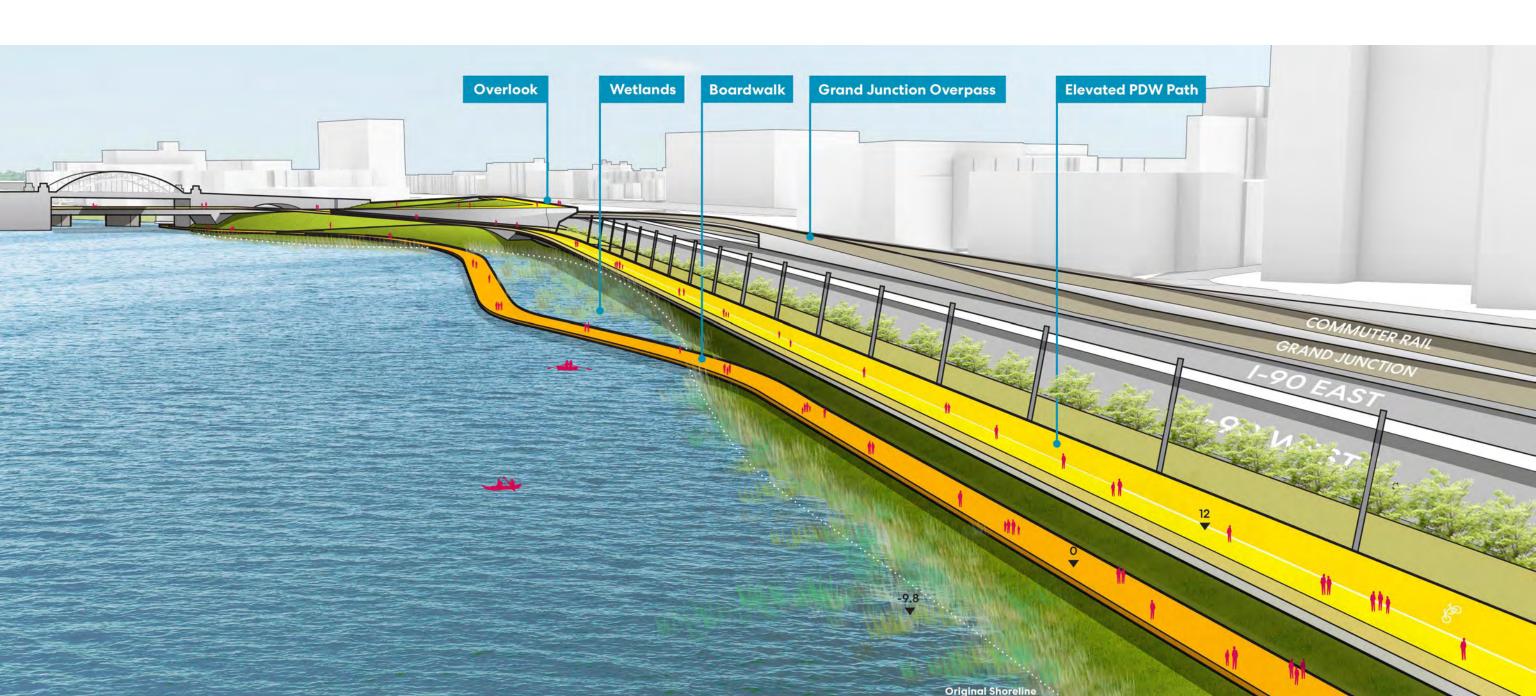
# **Throat Condition | Alternative 1A**



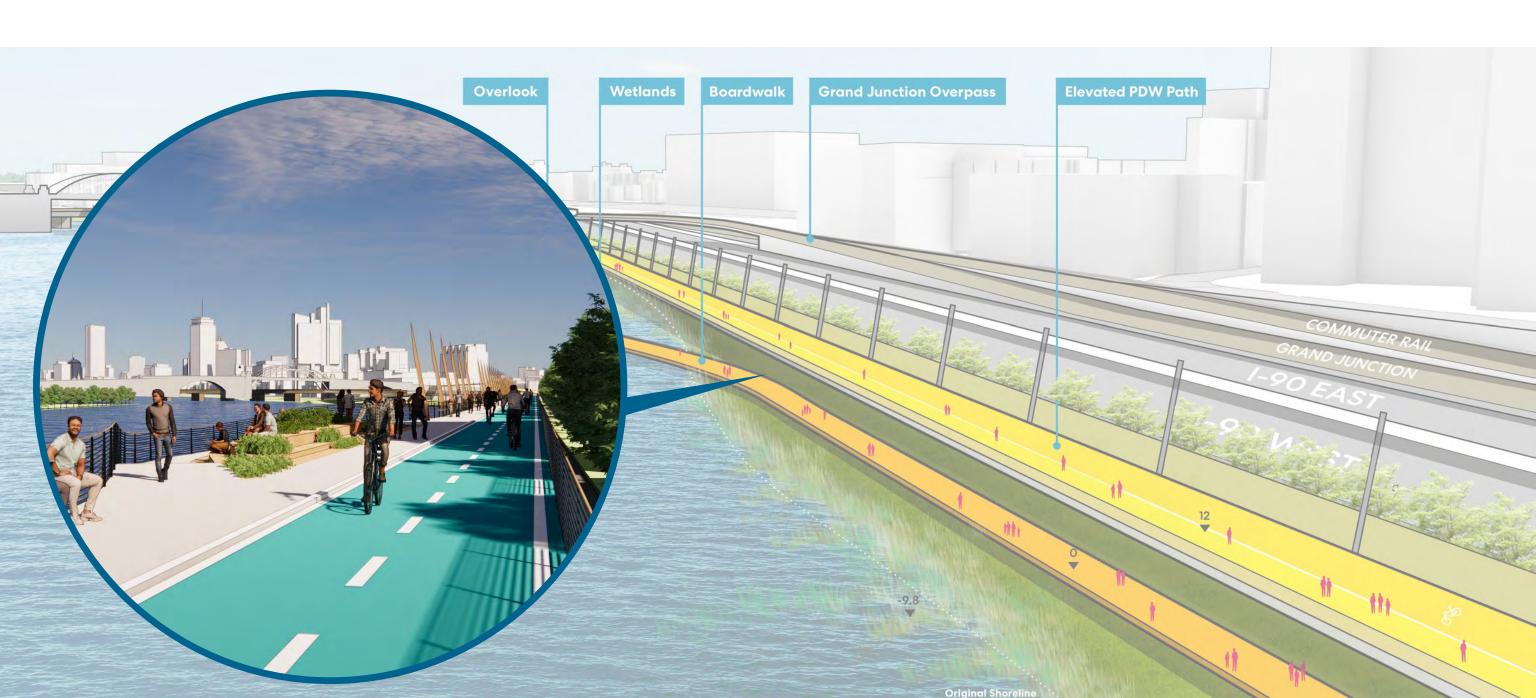
# **Throat Condition | Alternative 1B**



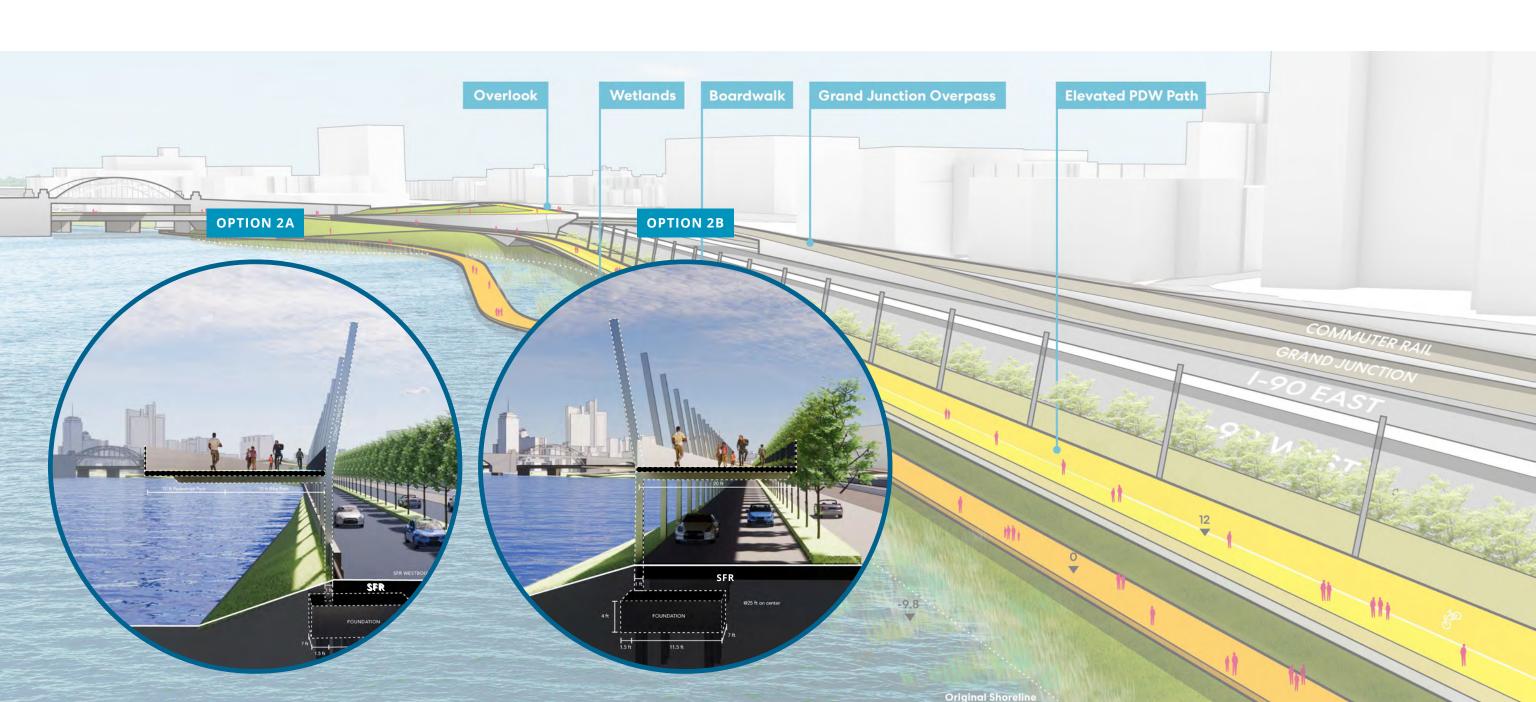
# **Throat Condition | Alternative 2**



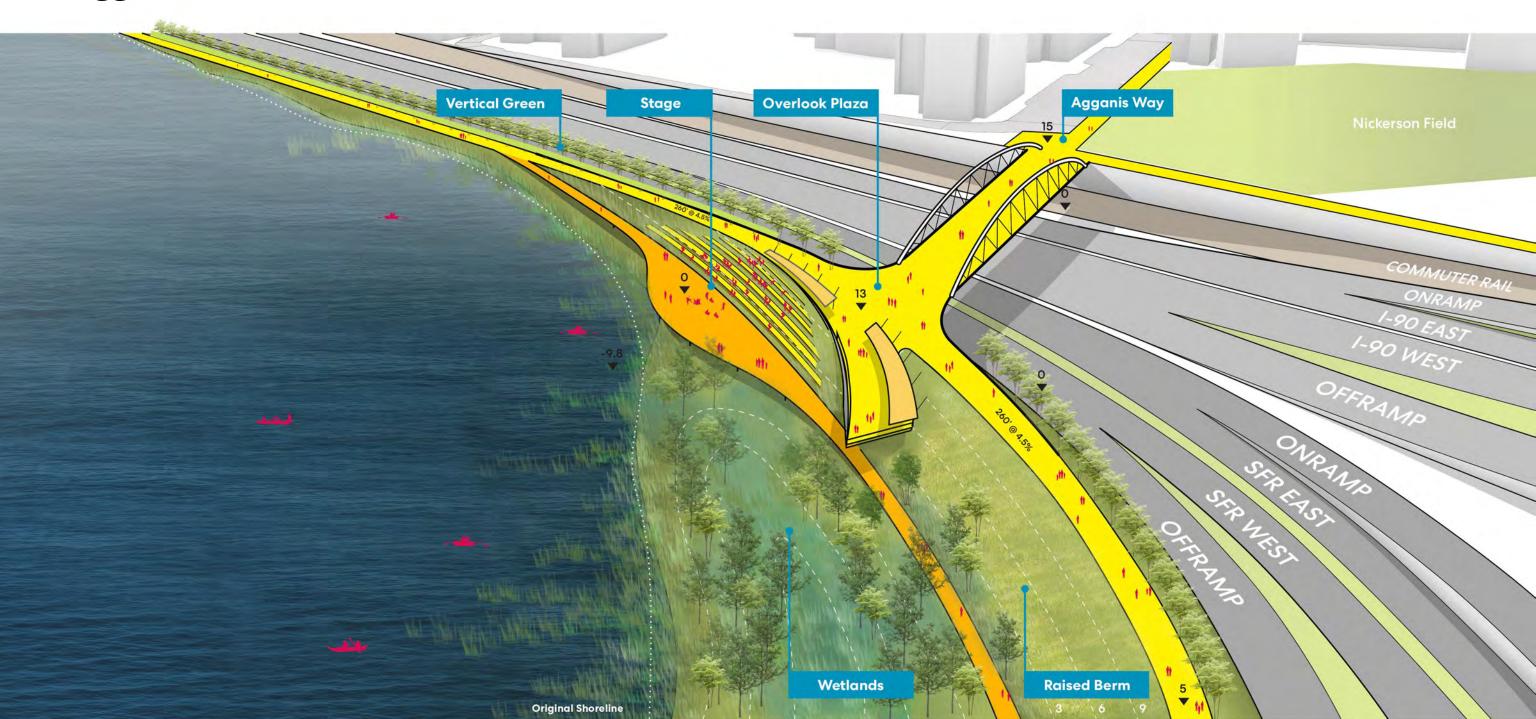
# **Throat Condition | Alternative 2**



### **Throat Condition | Alternative 2**



# **Agganis Connection**







# **Next Steps**

- Transparency in process: put all the variables, constraints, details on the table
- Trans-disciplinary approach: Instead of a siloed approach, holistic approach of a systems approach for a shared benefit
- Ownership: Amongst all stakeholders, City agencies have the opportunity to champion and create a unifying platform
- **Advocacy and Funding:** Allocating a committee and funds to support stakeholder groups to participate in the planning process