NEW ENGLAND DEVELOPMENT

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February 23, 2023

### **VIA ELECTRONIC DELIVERY**

Chair Mary T. Flynn and Members of the Cambridge Planning Board 344 Broadway Cambridge, MA 02139 sjoseph@cambrigema.gov

Re: CambridgeSide 2.0 Project – Canal Park Design Review

Dear Chair Flynn:

We are pleased to submit the enclosed supplemental design review materials for the proposed improvements to Lechmere Canal Park ("<u>Canal Park</u>"), which is located between the Lechmere Canal Basin and the CambridgeSide 2.0 Project (as defined herein). As you know, in the Special Permit Decision for PB #364 dated February 17, 2021 (as amended, the "<u>Decision</u>"), the Planning Board approved the redevelopment of the CambridgeSide site in Cambridge, Massachusetts into a premier mixed-use development including a combination of residential, retail, office, laboratory and restaurant uses (the "<u>CambridgeSide 2.0 Project</u>"). Construction of the Canal Park improvements is to be completed as part of the Initial Phase of the CambridgeSide 2.0 Project.

After a robust engagement process with City departments, the CambridgeSide Open Space and Retail Advisory Group and residents of nearby condominiums, we submitted a design review package for the proposed Canal Park improvements, and the Planning Board considered such package at its meeting on January 31, 2023. We received very helpful feedback from CDD staff, summarized in a memorandum dated January 26, 2023 (the "CDD Staff Memo"), and from Planning Board members at that January 31<sup>st</sup> meeting, which we further discussed with Erik Thorkildsen at a meeting on February 13, 2023. Accordingly, we revised our proposal in response to such feedback and the enclosed supplemental design review materials detail the current proposal for the Canal Park improvements and replace entirely the package that was previously submitted.

A majority of the comments from CDD staff and the Planning Board focused on the following topics: (i) pathway materials / curbing; (ii) accessibility; (iii) trees and planting details; (iv) performance area capability; (v) bicycles and Blue Bike stations; (vi) play area features; (vii) art; (viii) lighting; and (ix) railing details. In order to facilitate your review of the enclosed materials, the following list summarizes the edits made to the previously-filed design review package, including where and how we responded to comments received from CDD staff and the Planning Board.

### 1. Pathway materials / curbing

- a. UNIVERSAL: In response to feedback received from the Conservation Commission, as well as City staff and residents, it has been determined that integral colored bituminous concrete is the preferred replacement surface material for the lower canal walk. All exhibits (and accompanying narrative) have been updated to reflect this selection.
- b. **EXHIBIT 11A, Page 14**: In response to concerns about proposed granite curbing within the park, we have updated this exhibit to clarify the extent of new and existing granite curbing. We have also included notes and details to illustrate that new curbing will match

in kind and finish to existing granite (which will be power washed to ensure consistency throughout the park).

### 2. Accessibility

a. EXHIBIT 15B, Page 22: In response to a request for clarity on the extent of modifications to the accessible ramp and stairs near the gazebo, we have updated this exhibit to identify specific improvements, which include resetting bricks as needed to meet ADA compliant slopes, modifying existing ramp and stair handrails for ADA compliance, and power washing granite curbing.

### 3. Trees and planting details

- a. **EXHIBIT 11B/C, Pages 15/16**: In response to a request to clarify existing and proposed plantings, we have prepared a diagram highlighting that new plantings will be incorporated primarily at the reconstructed stairs/ramps at the mall entry and Thorndike Way.
- b. **EXHIBIT 15A, Page 21**: In response to concerns about preserving the existing tree in the Great Lawn as part of regrading the area, we have provided a more detailed illustration of the grading intent noting existing and proposed contouring. The existing evergreen tree will be preserved. Additionally, we have noted the extent of railing removal and preservation at the north edge of the Great Lawn.

### 4. Performance area capability

a. **EXHIBIT 15A, Page 21**: In response to a request to identify the capability to support performance areas, we have noted the incorporation at the Great Lawn of an electrical service box for A/V use during scheduled events.

### 5. Bicycles and Blue Bike Stations

- a. **EXHIBIT 50, Page 64**: In response to concerns about the visibility of the proposed Blue Bike station, we have updated the location and orientation by shifting and rotating the station towards Two Canal Park. This shift also increases the pedestrian circulation adjacent to the Great Lawn as previously shown.
- b. **EXHIBIT 50A, Page 65**: In response to a request to better understand the locations studied for placement of the Blue Bike station, we have included the analysis diagram that served as the guide for selecting a preferred location. Study Area 2 was the preferred location for the Vendor and CDD staff based on the analysis; as such, Study Area 2 is the proposed location for the Blue Bike station.
- c. EXHIBIT 50B, Page 66: In response to concerns about Blue Bike parking in the Otis Street view corridor, we have prepared an exhibit illustrating that the proposed Blue Bike station location (shown diagrammatically in blue) is outside of the view corridor defined by the allee of trees. The axial view of the Great Lawn and Nevergreen Tree sculpture are preserved.

### 6. Play area features

a. **EXHIBIT 20A, Page 28**: In response to a request for clarification of seating locations within the playground and near the playground entry, we have updated the graphics to note specific locations. There are four (4) bench seating locations inside the park and two (2) bench seating locations outside the playground near the entry gate. In response to concerns regarding securing the play area, the updated graphics also illustrate the design intent for securing the playground by adding to the existing perimeter railing architectural mesh infill panels as well as a new swing gate of similar design.

### 7. <u>Art</u>

a. In response to comments for clarity on intended art enhancements, our intention is to engage with the Cambridge Arts Council and DCR for work under the bridge. We will also work with the Cambridge Arts Council to identify potential improvements to the existing sculptures. Additionally, the historic art graphics on the Gazebo glass will be restored.

### 8. Lighting

a. **EXHIBIT 28A, page 41**: In response to a question about the lighting intent under the bridge, we have updated this exhibit to clarify that the proposed LED strip light fixture will cast light both up and down the abutment wall.

### 9. Railing details

- a. EXHIBIT 25A, Page 36: In response to comments about the new guardrail matching the existing post spacing, we have updated the illustration to accurately represent the intention to reuse the existing post spacing as part of the update to achieve ADA code compliance. We confirmed that horizontal pickets are an acceptable solution by current code. The horizontal pickets are spaced to ensure openings of less than 4". The existing rail design will be replicated at a 42" height (from existing 36" height) as required by code.
- b. EXHIBIT 25B, Page 37: In response to comments about the new guardrail, this exhibit has been updated to clarify design intent to reuse all stair handrails where possible. Modifications include the grab rail connection to the post and extending the top and bottom rails at stair landings to meet code. All newly constructed stair rails will match the detail shown on this exhibit for parkwide consistency.

As detailed in the enclosed materials, the Canal Park improvements have been designed to be consistent with the Decision, comply with the applicable design review criteria set forth in Condition 4 and respond to feedback received from the public, City staff and the Planning Board. As noted in the Decision, the improvements must be completed prior to issuance of a final certificate of occupancy for the 20 CambridgeSide building. In order to meet this timeline, we anticipate commencement of construction in Spring 2023. Accordingly, we respectfully request that the Planning Board schedule the continued Canal Park design review for the Board's earliest available meeting so that we may order materials in the very near term to remain on track with the mitigation schedule set forth in the Decision.

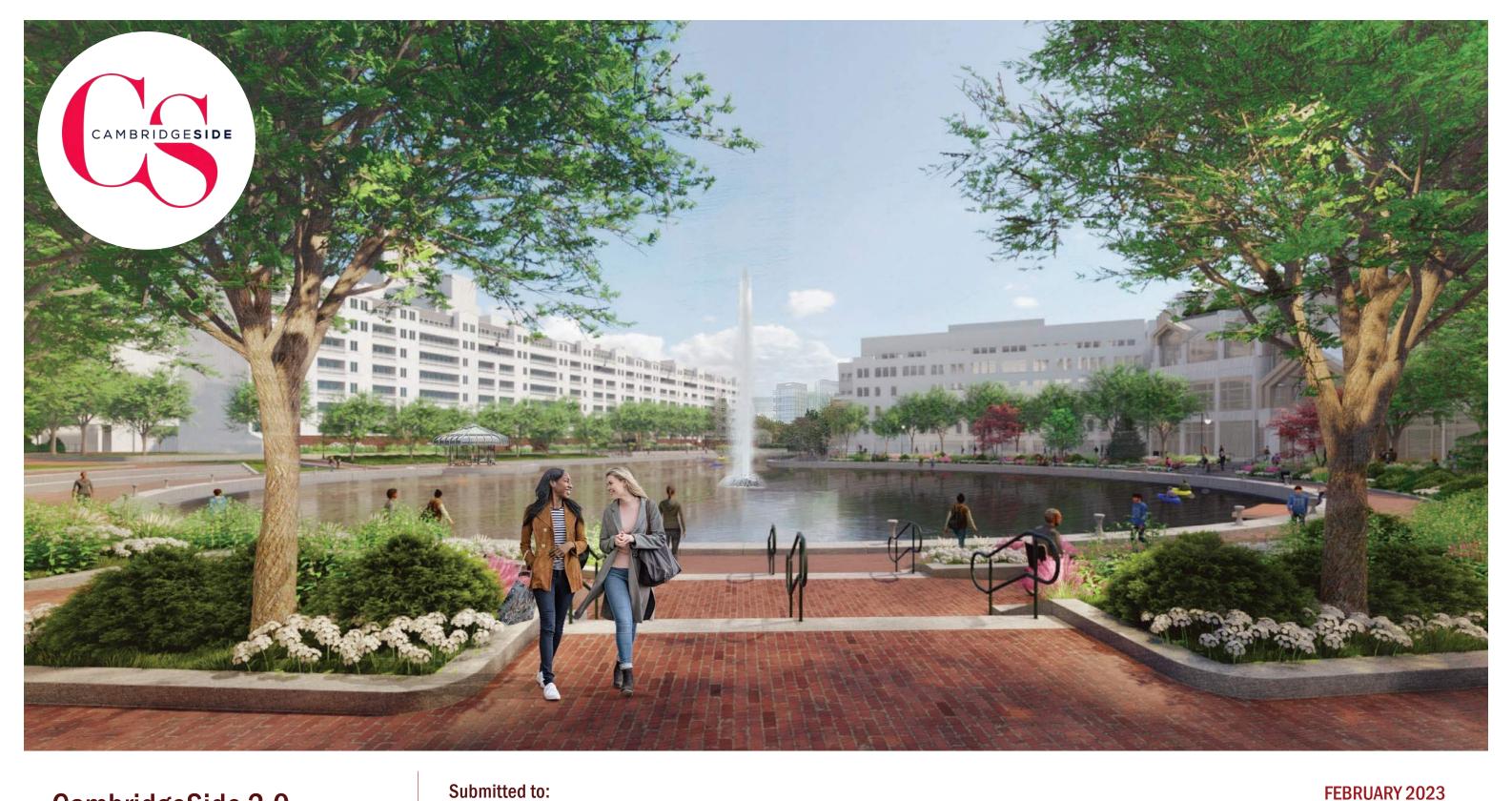
Thank you for your consideration of the enclosed supplemental design review materials. We look forward to presenting to the City of Cambridge Planning Board.

Very truly yours,

MEW ENGLAND DEVELOPMENT

John E. Twohia

**Enclosures** 



**CambridgeSide 2.0** Canal Park Design Review Supplement

Submitted to: **City of Cambridge** 

Prepared by:

Submitted by:

**NEW ENGLAND** DEVELOPMENT

**New England Development** 75 Park Plaza. Boston, MA 02116











# Canal Park Design Review Summary of Response to Comments

A majority of the comments from CDD staff and the Planning Board on the proposed Canal Park improvements focused on the following topics: (i) pathway materials / curbing; (ii) accessibility; (iii) trees and planting details; (iv) performance area capability; (v) bicycles and Blue Bike stations; (vi) play area features; (vii) art; (viii) lighting; and (ix) railing details. In order to facilitate review of the enclosed materials, the following list summarizes the edits made to the previously-filed design review package, including where and how we responded to comments received from CDD staff and the Planning Board. For the avoidance of doubt, the enclosed supplemental design review materials detail the current proposal for the Canal Park improvements and replace entirely the package that was previously submitted.

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# Canal Park Design Review Narrative

The following narrative and attached graphic materials and reports are provided in accordance with Condition 4 of the Special Permit Decision for PB #364 (CambridgeSide 2.0) dated February 17, 2021 (as amended, the "Decision"), which addresses the design review requirements for improvements to Lechmere Canal Park pursuant to the Decision. As detailed throughout this narrative, the proposed Lechmere Canal Park improvements are designed to be consistent with the Decision, which incorporates the approved Final Development Plan for the CambridgeSide 2.0 Project.

Over the last three years of the rezoning and special permit process, the development team has met numerous times with City departments and staff, including: Community Development Department (CDD); Traffic, Parking and Transportation (TP&T); Housing Division (Housing); Department of Public Works (DPW); and the Water Department. These meetings have also included informal meetings most recently with CDD design staff to review detailed aspects of the Lechmere Canal Park. Materials presented herein reflect CDD design staff input. Additional detail regarding the development team's coordination with other City committees, abutters and the general public is provided below in the "Process and Engagement" section of this narrative.

# **History of the Project**

Carol R. Johnson was commissioned to design Lechmere Canal Park in 1983. According to Carol, the design and open space was to be of the highest quality, an urban open space to support large volumes of users and be a catalyst of growth for mixed-uses and vibrant activity within the neighborhood. Carol's vision was to create a park with a colorful and lively focus. Supporting vibrancy, events and new places for people to shop, live, and work, as well as bridging a connection between the City of Cambridge and its riverfront. Our team's objective is to refresh the park: to respond to current codes; create safe environments for users; implement new uses around the park perimeter that did not exist during the original construction of the park; and continue to provide welcoming open space for the residents of Cambridge and visitors.

It is the team's objective to propose improvements to the park that maintain the overall aesthetic and vision of Carol R. Johnson. Carol's original design was based on the history of East Cambridge and the cultural and ethnic diversity of its residents. She believed the incorporation of historical elements into the site was considered essential to the achievement of the original objectives of the park. The original park design program included the representation of past historic events, artifacts, illustrations and information into the fabric of the park. It was not intended, however, to replicate a uniform period setting in the details of the park because by nature of this approach, the element of change becomes negated. Instead, Carol sought to design the park strictly as a contemporary urban setting whereby images and symbols of the area's past are a subtle recollection standing in contrast to the new setting. To carry out this approach, it was important for the design team to avoid placing historic elements on a pedestal. Instead, the diverse historic elements chosen for display would be carefully incorporated into the spaces and surfaces proposed

within the park. These elements were to be subtly integrated to "evoke a Cambridge vernacular environment" where history, materials, color, surfaces and plantings are overlaid, none of which are overstated. When describing the park vision, Carol wrote:

Lechmere Canal Park is conceived of as a traditional urban space in that it will bring together a variety of people and provide them with a variety of experiences. Shoppers coming to the new commercial center, residents of the new housing components, daily users of the proposed Lechmere transit station, and residents of East Cambridge who wish to walk to the Charles River will all mingle in the park. Their presence and the park itself should attract more people if the park space provides the richness of experience presently envisioned.

The original park design was conceived as being made up of two interrelated types of areas. First, the formal plazas and malls immediately adjacent to and associated with the commercial and residential uses offer an architecturally neutral environment for the buildings. The understanding is that pedestrian circulation, comfort, orientation, and service access were the primary determinants of these spaces. Movable tables and chairs, kiosks, newsstands and furnishing supporting adjacent activities would be abundant in these areas. Second, the public park areas and canal edges form a contrasting environment whose chief function was for play, relaxation and to be within nature and near the water. The design of the canal and seawall was intended to emphasize accessibility to the water by providing the lower level stone dust walk. Carol believed the more informal design and materials of the lower walk would contrast with the more active retail area. Benches with backs and armrests were provided to promote longer duration sitting, lighting levels had lower intensity, and its more passive nature would be reinforced by visual separation from the upper level through the grading and planting.

# **Process and Engagement**

In accordance with the Decision, the development team worked closely with the CambridgeSide Open Space and Retail Advisory Group to establish the framework of improvements for Canal Park. The Group met four times and provided helpful feedback of proposed park improvements. During 2021 and 2022, the development team also met with the residents at Thomas Graves Landing, One First residents, East Cambridge Planning Team (ECPT), Commissions for Persons with Disabilities, Transportation and Mobility, Historical Commission, Cambridge Community Development and the City Arborist. We will continue to collaborate with DPW, Department of Conservation and Recreation (DCR) and MassDOT in the upcoming months.

The robust engagement process shaped the outcome of this proposal. There was a consistent focus on safety, accessibility improvements, and restoration. It was recognized that the park required selective improvements combined with thoughtful repair and replacement in kind of existing materials.

The most common comments that directed the design include:

Lighting improvements should prioritize

- » safety under the bridge and throughout the park,
- » removal of the flood lights,
- » restoration of the historic lighting, and
- » seamlessly adding new lighting.

Refresh landmarks such as

- » the gazebo,
- » the "Never Green Tree" sculpture, and
- » the existing seating

Refresh walking surface by improving drainage and repairing brick and concrete paving.

Providing a new material for the lower canal walk surface that provides year-round accessibility: integral colored bituminous concrete

Redesign the playground to

- » address accessibility, sound and trash issues, and
- » keep (but supplement) the existing play structure.

Add seasonal color and maintain year-round greenery.

Provide support for activities and charity events, seating with backs and prioritize pedestrians throughout the park.

# **Objectives**

Over time, some of the elements within the park have become degraded or adjacent uses have changed. The project proposes to maintain the park's original design intent by carefully and subtly improving areas that need repair or replacement, bringing areas up to code and responding to new uses and users. A successful metric for this improvement, as Carol would say, if you were here 20 years ago, and revisited today, you wouldn't really be able to notice any changes. Therefore, the objectives include increased accessibility, preservation of the original design intent, improvements to the hardscape and softscape, refreshing site amenities, upgrades to lighting, restoration of art, increased connectivity and sustainability measures.

# **Universal Accessibility**

The original Canal Park predates the Americans with Disabilities Act (ADA). Our primary objective is to ensure the park is compliant with the current codes and provides accessibility throughout the park. The park improvements will provide compliant stairs, handrails and guardrails where needed throughout the park. New railings will be designed to mimic the original design intent of the park and adhere to ADA specifications. These improvements will assist the mobility where users can access the lower canal walk from the upper park area. Additionally, a major goal of the park improvements is to regrade and reconstruct surfaces for areas that are not code compliant or have drainage issues. The proposed improvements have been designed to provide for four-season accessibility for all users through the implementation of the following:



- Replace/refurbish existing non-compliant stairs, ramps and handrails to code-compliant conditions where required.
- Replace/enhance some planter curbs/path edges with granite curbing.
- Brick paving to be salvaged and reset to create level and code compliant walkways. If new pavers are needed, the City standard brick paver and color blend will be used.
- Repair broken panels of concrete sidewalk where needed under the Land Boulevard bridge.
- Reconstruct the lower canal walk with integral colored bituminous concrete and a new drainage system, providing ADA compliance and year-round accessibility for all users.

## **Preservation**

The overall intent of the proposed improvements is to maintain the original park design and preserve the park character. Proposed interventions are intended to refresh and enhance Carol R. Johnson's original vision of a successful urban space. Along with the CambridgeSide Open Space and Retail Advisory Group, we have identified six areas of improvement within the park that are detailed in the package of Exhibits attached behind. Improvements to these areas primarily consist of hardscape and softscape refresh, seating updates and lighting.

# Hardscape

There are two primary circulation systems within the park, the upper walk and the lower canal walk. Over time, some of the brick pavers in the upper walk area have settled creating low points and non-compliant surfaces.

The original park design used brick patterning and articulation within the upper active use areas of the park. In these areas the brick pattern was changed to a different bond pattern that subtly contrasts overall field pattern. Primary pedestrian walkways maintain a continuous linear pattern reflecting this movement. At major intersections, building entries and plazas the patterning has a more intricate articulation and more formal definition. It is our intent, where required, to remove and reset the brick to create compliant walkways. If new material is needed, we will provide the same City standard brick.

The lower canal walk is currently stone dust and, over time, the material has silted over and become an irregular surface condition creating areas where ponding occurs. In order to improve safety and accessibility, and based on strong community feedback, we propose to remove the existing stone dust path material and substrate and install a full depth replacement with a new, integral colored bituminous concrete. Additionally, to support the long-term durability of the walk, a slot drain will be constructed along the edge of the walk adjacent to the canal seawall. Surface water will be moved to this slot drain and captured below and moved to the stormwater drainage system. This drainage system along with the integral colored bituminous concrete will provide year-round accessibility for all users while maintaining the original design intent of the park and responding to neighborhood feedback.

# **Softscape**

Originally, the planting theme for the park was linked to the program objective of integrating the park and retail activities. There were two planting conventions Carol employed. The first was planting associated with the most active pedestrian areas at the time: major entries, pedestrian retail areas and plazas. These areas were designed in a more formal fashion and with trees within tree grates. The intent was to create a formal arrangement and provide a continuous canopy with spatial definition to the more architecturally defined public areas. Understory plantings were considered to provide views to the canal, solar exposure, color, texture and seasonal interest. The second planting convention was more of a strategic placement of materials. These planting materials were located in informal groupings to; soften and obscure edges of the park, provide accents of flowering trees, create screening and/or open views to specific park elements and emphasize grade changes.

Today, the park is a respite that provides a robust tree canopy within the urban setting. We are working closely with the City Arborist to monitor trees that are in poor health, in decline or candidates for replacement as part of our improvement plan. Where possible, the intent is to create more robust soil volumes for existing and proposed trees to support healthy growth in the urban environment. Understory plantings have also been evaluated based on health, lifespan, current adjacent use, and safety. Some of the materials will be removed and replaced with similar characteristics (evergreen or shrub) and others may be replaced to create a safer environment for pedestrians. The intent is to create seasonal variety and continued lushness, while staying mindful of water consumption and keeping the original design intent of the "two planting conventions."

# Lighting

Proposed architectural and landscape lighting systems will create a cohesive nighttime luminous environment that will express the original intent of the park design with a welcoming and timeless elegance that is harmonious with the unique spirit of the surrounding neighborhood. This will be accomplished through the use of luminaires integrated within hardscape and landscape expressions.

The terminus of the canal is illuminated by four tall light masts that, due to their elevation and design to broadcast light across a wide area, have had the unintended consequence of creating nuisance light and glare. These masts will be removed and replaced with lighting at a lower level and more even distribution.

### Art

Carol aspired that public art was one of many elements planned for, which would provide an environment that was secure, comfortable and exciting. Trees, flowers, furnishings, lights, water, paving patterns, and other landscape elements, along with public art installations, provide an integrated and curated experience for all users to enjoy. Along with the improvements of surfaces and vegetation, the project will refresh existing art and offer new opportunities for art under the Land Boulevard

bridge. The graphics which once adorned the central gazebo will be recreated and installed. Additionally, the Applicant is exploring opportunities to refresh the Never Green Tree sculpture.

# Connectivity

The park is currently a conduit connecting the East Cambridge neighborhood to the riverfront. An overarching goal of the project is to preserve and enhance connectivity of all user types to the park and the park to adjacent neighborhoods. Improving uneven brick surfaces and implementing the new durable surface along the canal will provide connectivity year-round throughout the park. Additionally, stairs and ramps from the upper walking area to the lower canal walk will be reconstructed to be code compliant and will create safer connections in key areas in the park. Visual connectivity will be enhanced by pruning low branching trees, adjusting lighting levels and providing lighting and activation for safer connection under the Land Boulevard bridge to the river.

# Sustainability

The sustainability improvement objectives for the park are to maintain and add to the robust urban tree canopy, provide plant materials that benefit pollinators and habitats, decrease the current water consumption, add planting areas, reduce light pollution and reuse existing materials. Additionally, improvements to the park will contribute to the health and wellness of users by creating or maintaining walking loops, areas for gathering, green space for the enjoyment of retail, office, and residential inhabitants.

# Technical Standards and Public Improvement Requirements

In accordance with the Decision, the development team has met numerous times with various City Departments regarding the more technical standards and proposed public infrastructure associated with the Canal Park project. Specifically, the development team has met and had ongoing correspondence with the Conservation Commission, Department of Public Works and Transportation and Mobility.

The existing stormwater management system, which will be maintained, currently consists of areas drains, and associated pipes that discharge into the Lechmere Canal. In addition to maintaining the existing system the overall drainage of the park will be improved upon. Drainage improvements include resetting existing brick pavers to provide positive drainage, adding additional area drains to prevent puddling and replacing the existing stone dust path material and substrate with a new, integral colored bituminous concrete with a perforated underdrain system that includes an integrated slot drain. The slot drain will discharge into the perforated underdrain system, and runoff generated from small storm events will fill the voids in the 8-inch layer of crushed stone below the perforated underdrain. The voids in the 8-inch layer of crushed stone provide approximately 700 cubic feet of storage where runoff will be trapped and infiltrate into the subgrade.

The project will not generate an increase in stormwater runoff or volume. In addition, the lower canal walk perforated underdrain system will promote groundwater recharge and improve upon water quality to the maximum extent practicable. The Applicant will continue to work with City Departments to coordinate utility and site improvements as the construction of the Canal Park project commences.

### Conclusion

As detailed throughout this application and demonstrated by the graphics included within the same, the Canal Park improvements have been designed to conform to the applicable design review standards set forth in Condition 4 of the Decision, including with respect to the input from various community groups and City of Cambridge departments. Outcomes from this intensive engagement process provided design guidance of park improvements such as:

- Replacing/refurbishing existing non-compliant stairs and ramps to be code-compliant where required;
- Limiting the removal of existing ground plane plant material whenever possible;
- Enhancing the site lighting to provide improved performance, visual comfort and safety;
- Updating existing non-compliant railings to be codecompliant where required while retaining the original park character;
- Providing a refreshed play area while maintaining the existing structure in an aesthetic similar to the original park design:
- Preserving and restoring, where necessary, the trees, art and structures within the park;
- Refurbishing existing furnishings and using materials, finishes and designs consistent with the original design; and
- Reconstructing the lower park walk with integral colored bituminous concrete and drained surface, allowing for year-round accessibility for all users.

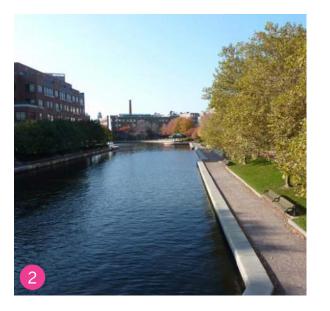
Accordingly, we respectfully request that the Planning Board find that the Canal Park improvements and design as described and shown in this application maintain the original park character consistent with the planning and design goals set forth in the Decision and grant Design Review approval for such improvements.

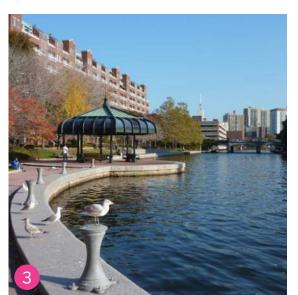


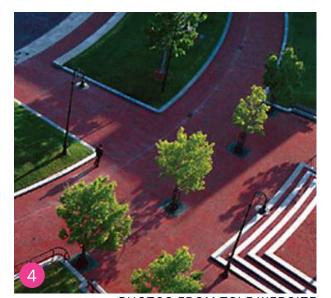
# **DESIGN REVIEW CANAL PARK EXISTING CONDITIONS PHOTOS**











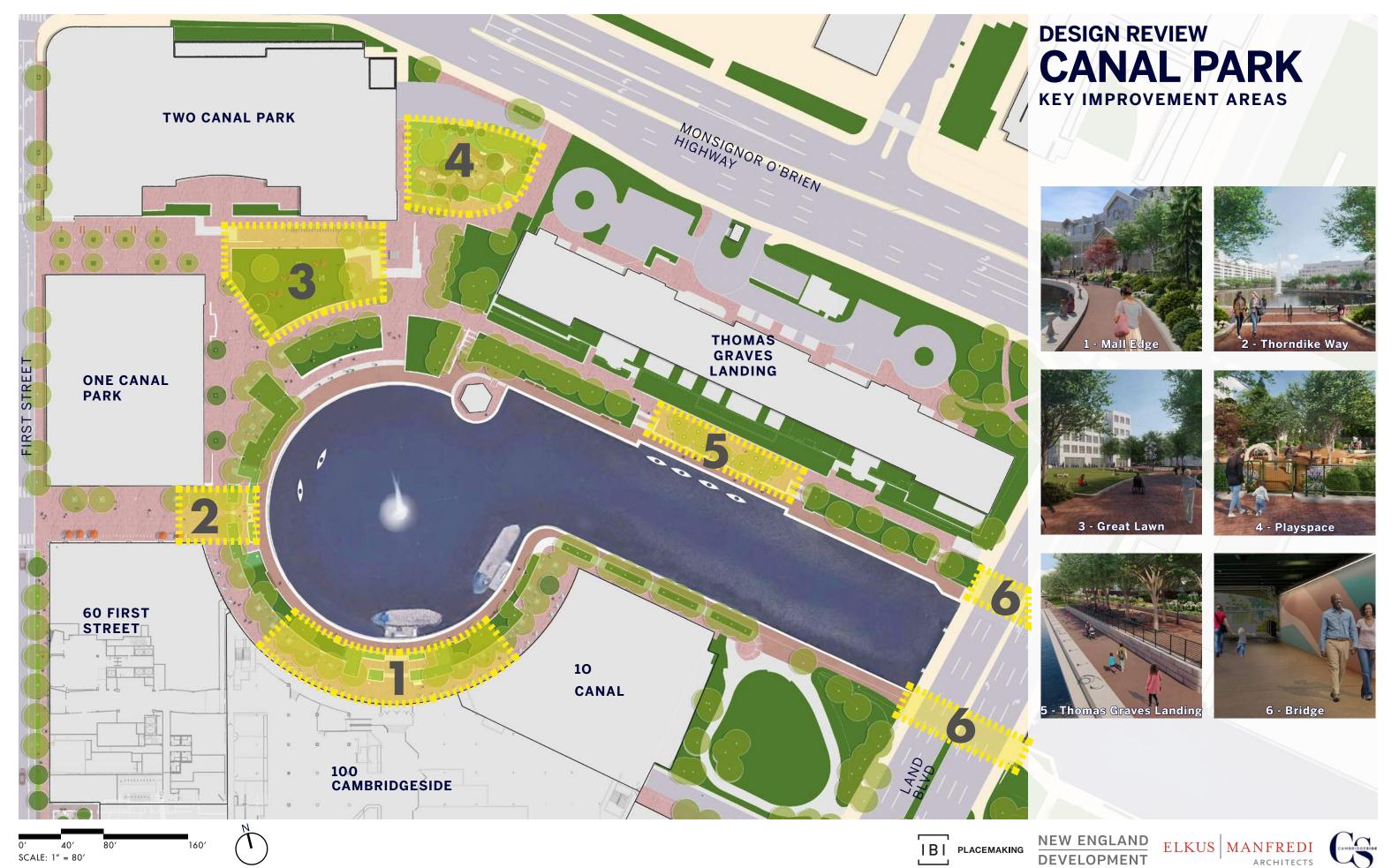
PHOTOS FROM TCLF WEBSITE

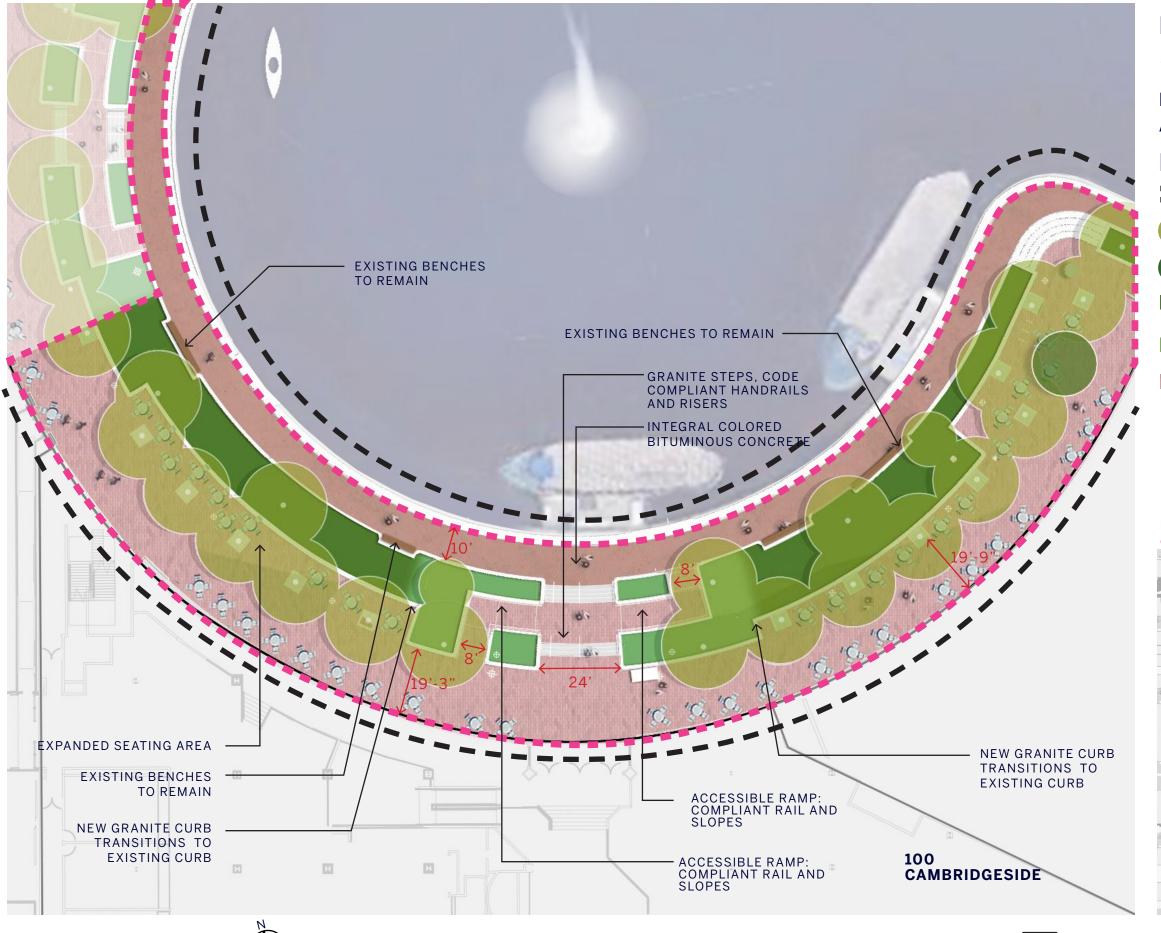












**PROPOSED PLAN AREA ONE: MALL EDGE** 

# Legend

PROJECT SITE

**EXISTING TREE** 

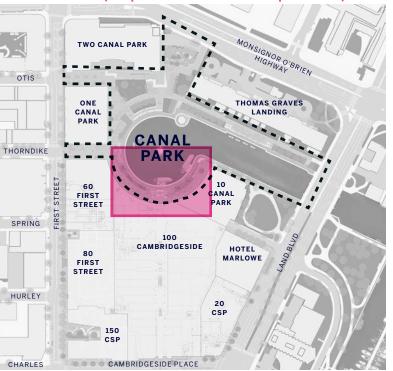
**NEW TREE** 

EXISTING PLANT MATERIAL TO REMAIN (INFILL BARE SPOTS WITH NEW MATERIAL)

PROPOSED PLANT MATERIAL

BRICK WALKWAYS REFURBISHED

Note: The pathways are existing; dimensions will be unchanged from current conditions (except for certain stairs and ramps as shown)

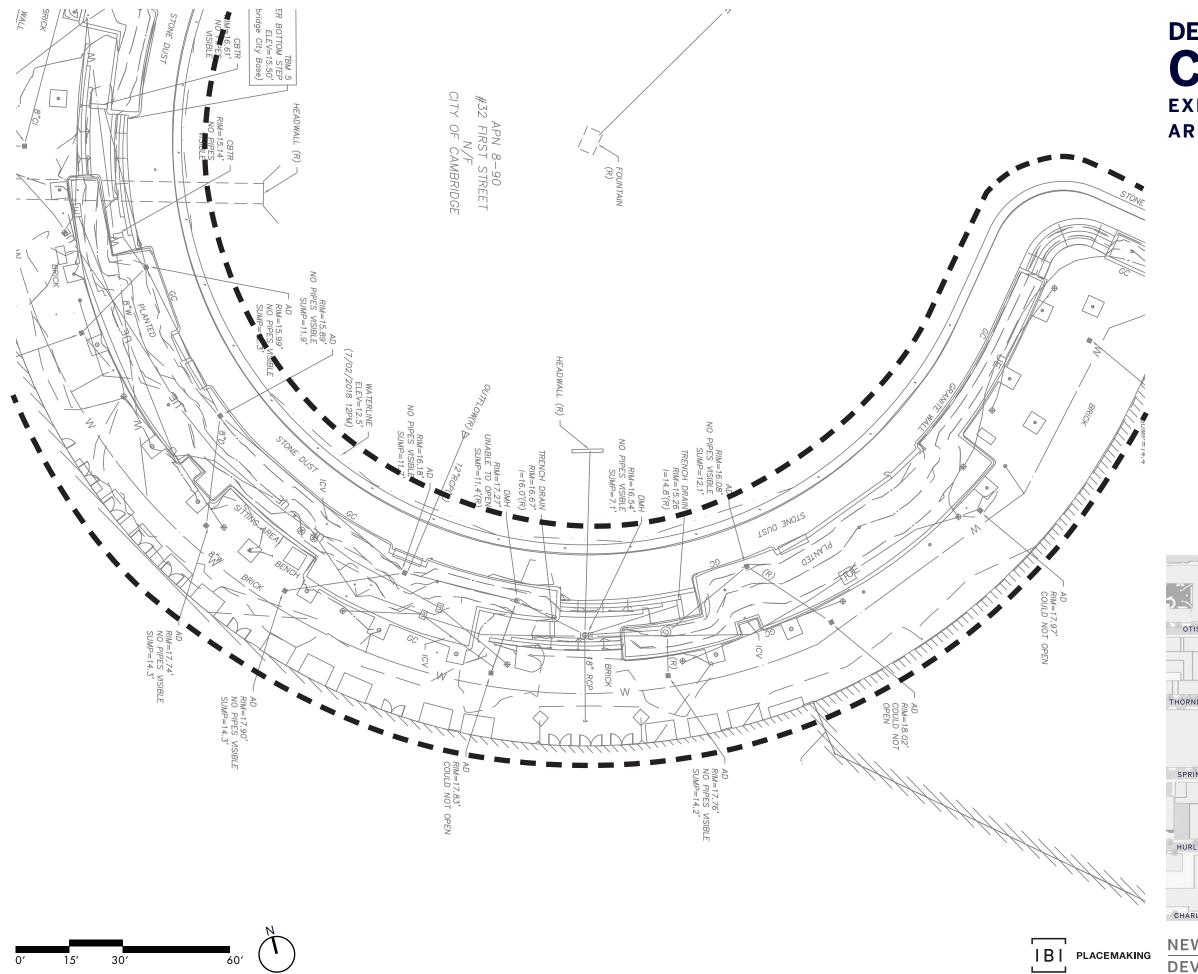


NEW ENGLAND **DEVELOPMENT** 

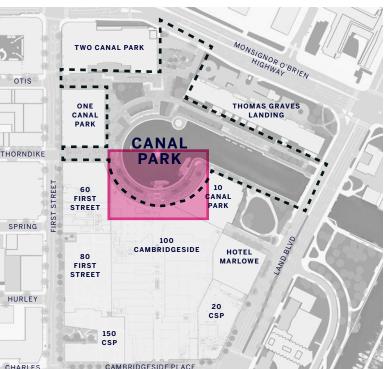
|B| PLACEMAKING

ELKUS MANFREDI





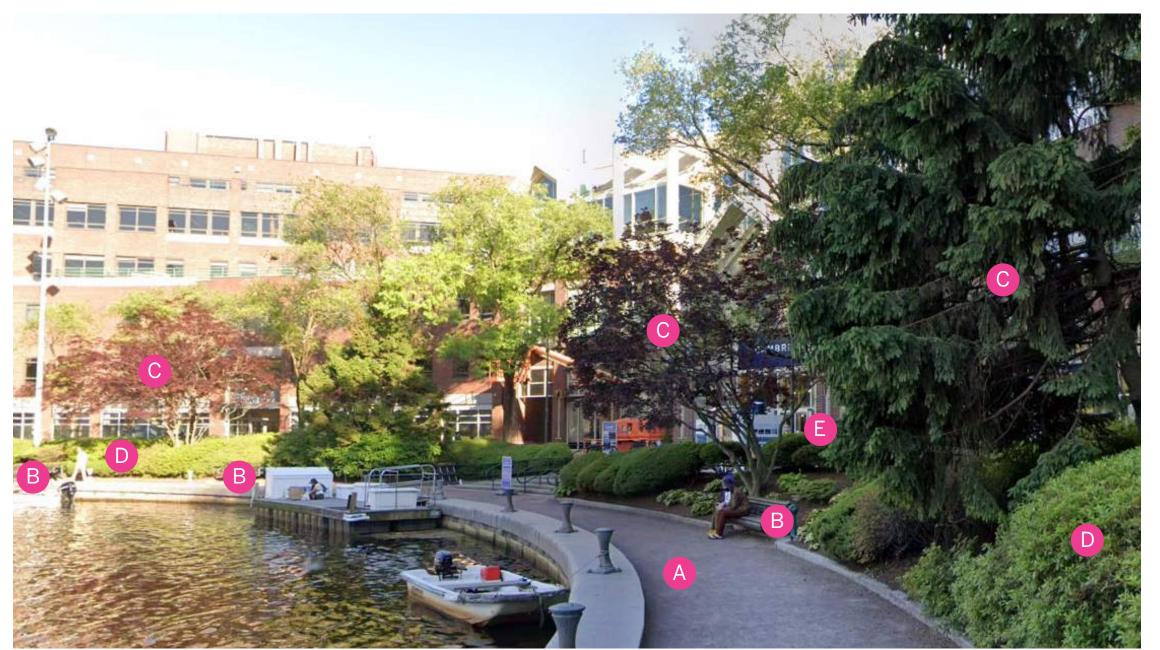
**EXISTING CONDITIONS PLAN AREA ONE: MALL EDGE** 



NEW ENGLAND DEVELOPMENT

ELKUS MANFREDI ARCHITECTS



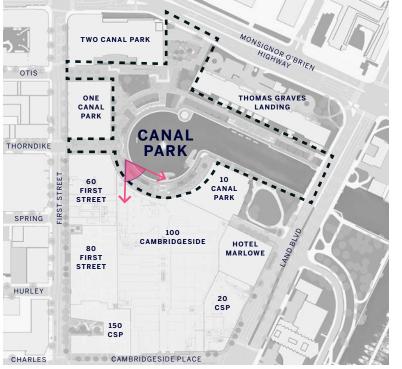






**EXISTING CONDITIONS AREA ONE: MALL EDGE** 

- **EXISTING STONE DUST PATH**
- EXISTING BENCHES WITH BACKS TO REMAIN (5 TOTAL IN THIS IMPROVEMENT AREA)
- EXISTING TREES TO REMAIN (TYPICAL)
- EXISTING UNDERSTORY PLANTING TO BE RETAINED WHERE POSSIBLE, AND SUPPLEMENTED WITH NEW PLANTING
- EXISTING UPPER SEATING AREA

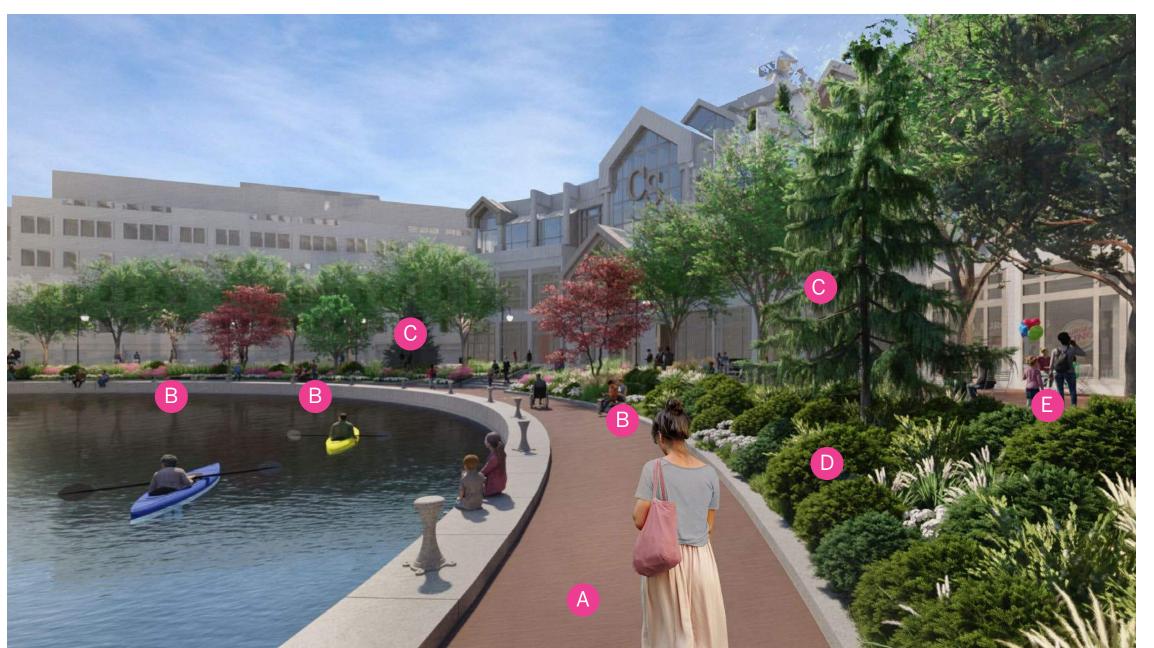


| B | PLACEMAKING

NEW ENGLAND DEVELOPMENT

ELKUS MANFREDI



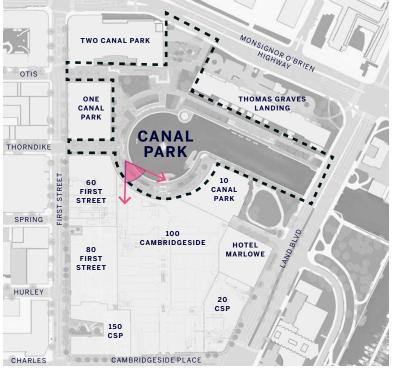


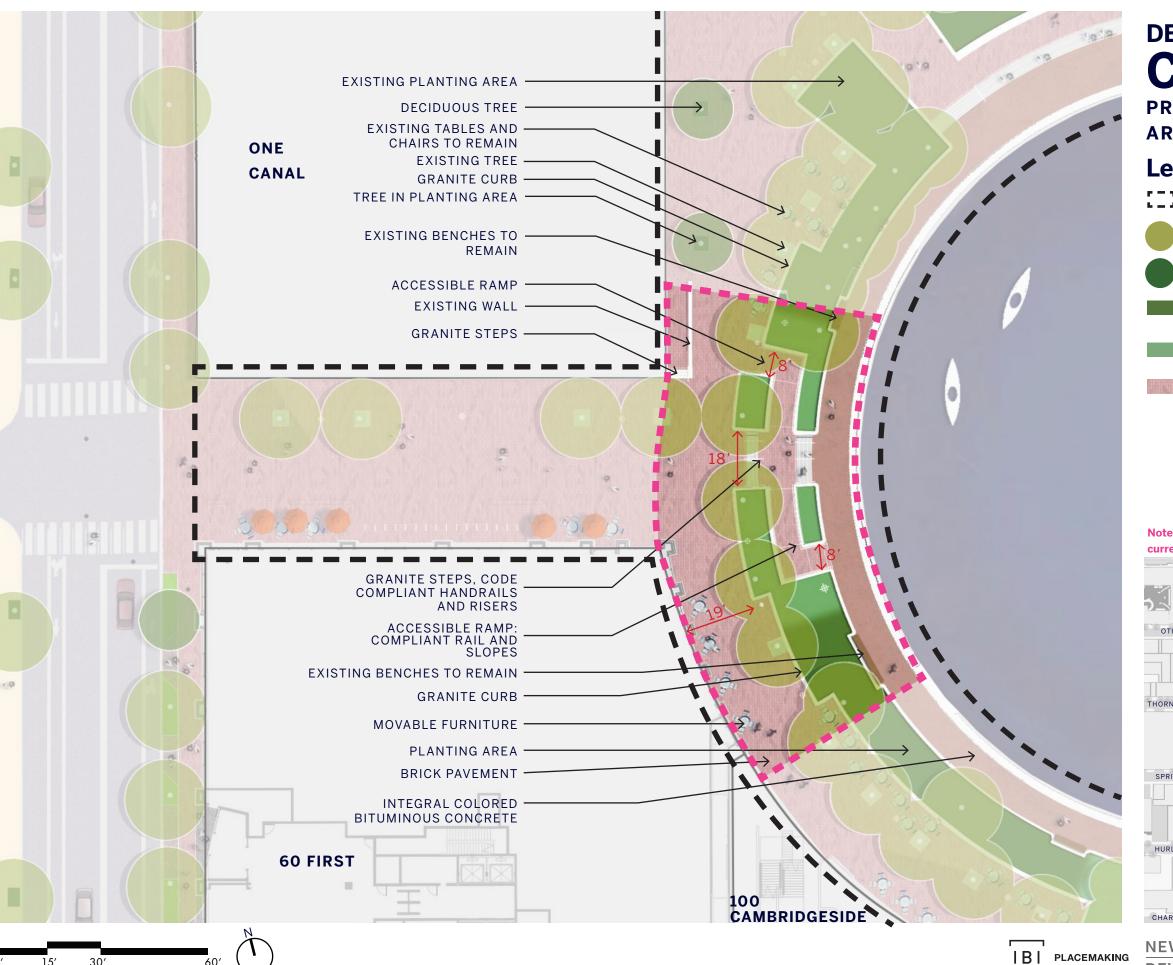




**PROPOSED IMPROVEMENTS AREA ONE: MALL EDGE** 

- INTEGRAL COLORED BITUMINOUS CONCRETE WITH DRAINAGE
- EXISTING BENCHES TO REMAIN (5 TOTAL) REFURBISHED
- EXISTING TREES TO REMAIN (TYPICAL)
- EXISTING UNDERSTORY PLANTING TO BE RETAINED WHERE POSSIBLE, AND SUPPLEMENTED WITH NEW PLANTING
- EXPANDED UPPER SEATING AREA



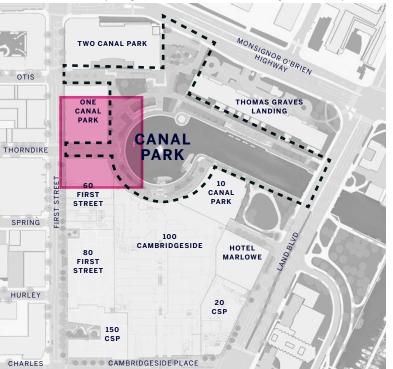


**PROPOSED PLAN AREA TWO: THORNDIKE WAY** 

# Legend

- PROJECT SITE
- **EXISTING TREE**
- **NEW TREE**
- EXISTING PLANT MATERIAL TO REMAIN (INFILL BARE SPOTS WITH NEW MATERIAL)
- PROPOSED PLANT MATERIAL
- BRICK WALKWAYS REFURBISHED

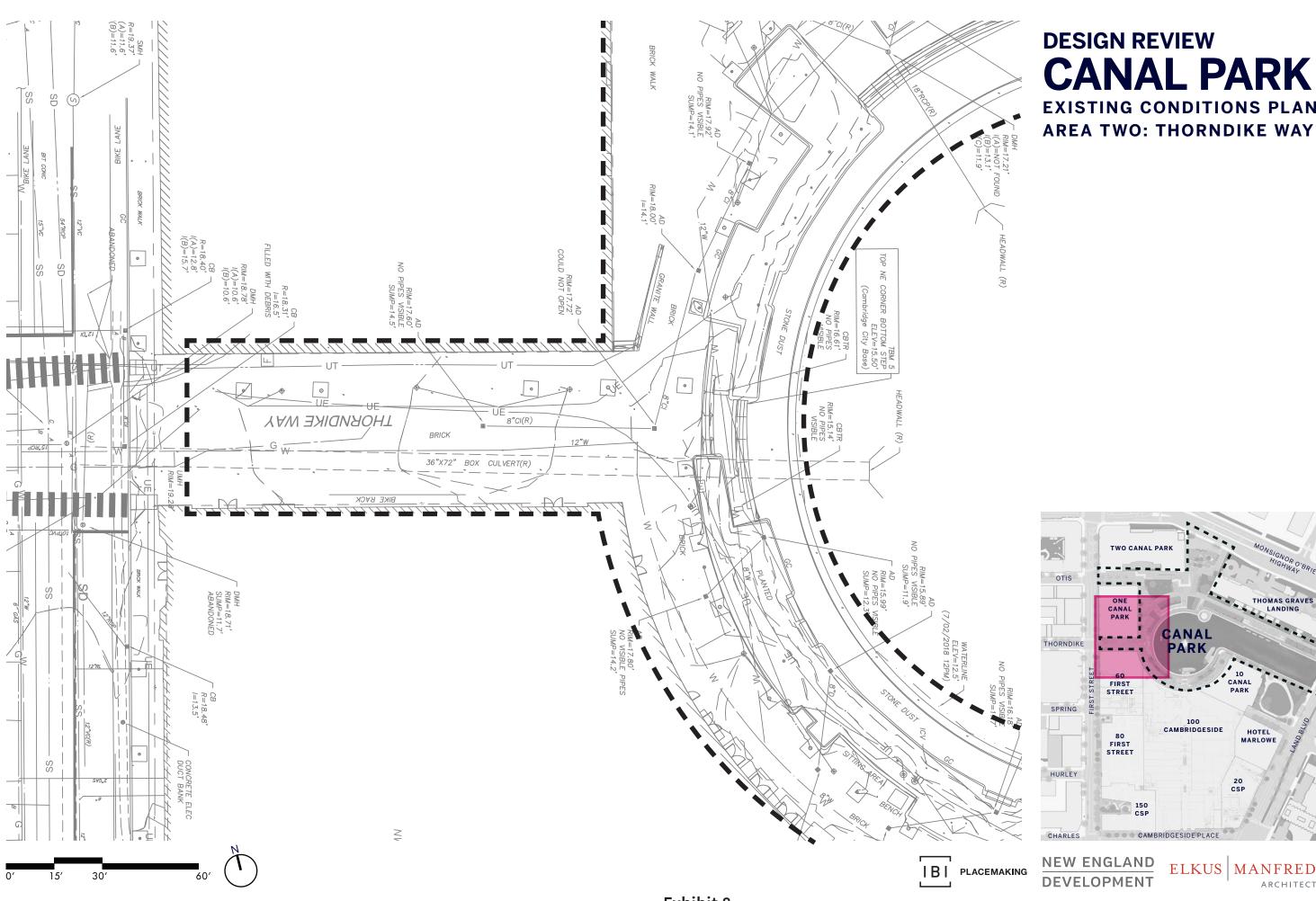
Note: The pathways are existing; dimensions will be unchanged from current conditions (except for certain stairs and ramps as shown)



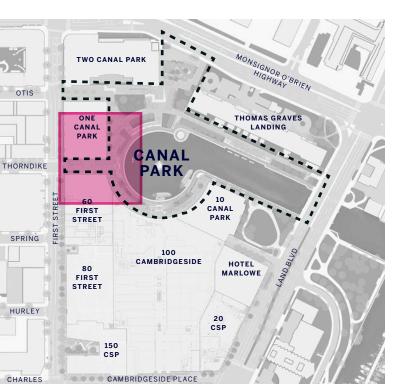
**NEW ENGLAND DEVELOPMENT** 

ELKUS MANFREDI





# **DESIGN REVIEW CANAL PARK EXISTING CONDITIONS PLAN**



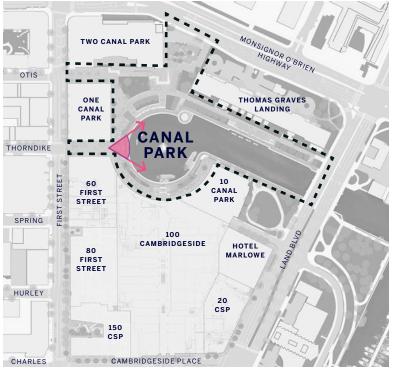
NEW ENGLAND ELKUS MANFREDI ARCHITECTS





**EXISTING CONDITIONS AREA TWO: THORNDIKE WAY** 

- EXISTING RAMP (NON-COMPLIANT)
- **EXISTING STEPS**
- EXISTING RAILS (NON-COMPLIANT)
- EXISTING BRICK WALKWAYS
- EXISTING STONE DUST PATH
- EXISTING TREES TO REMAIN (TYPICAL)
- **EXISTING MAST LIGHTING**







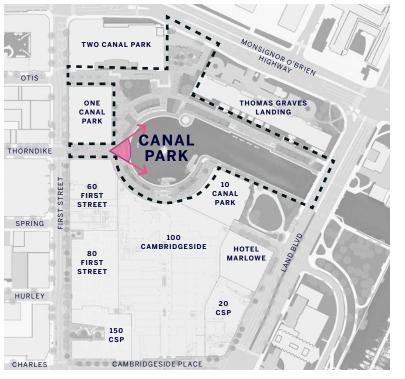






**PROPOSED IMPROVEMENTS AREA ONE: THORNDIKE WAY** 

- ACCESSIBLE RAMP: COMPLIANT RAIL AND RAMP SECTIONS
- GRANITE STEPS, CODE COMPLIANT HANDRAILS AND RISERS
- CODE COMPLIANT HANDRAILS
- BRICK WALKWAYS REFURBISHED
- INTEGRAL COLORED BITUMINOUS CONCRETE
- EXISTING TREES TO REMAIN (TYPICAL)



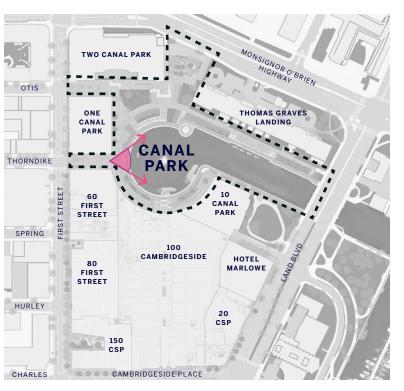
NEW ENGLAND ELKUS MANFREDI ARCHITECTS





PROPOSED IMPROVEMENTS **AREA TWO: THORNDIKE WAY** (EVENING)

- CODE COMPLIANT HANDRAILS
- TREE MOON LIGHTING
- FOUNTAIN LIGHTING (REFURBISHED)
- REFURBISHED GAZEBO LIGHTING

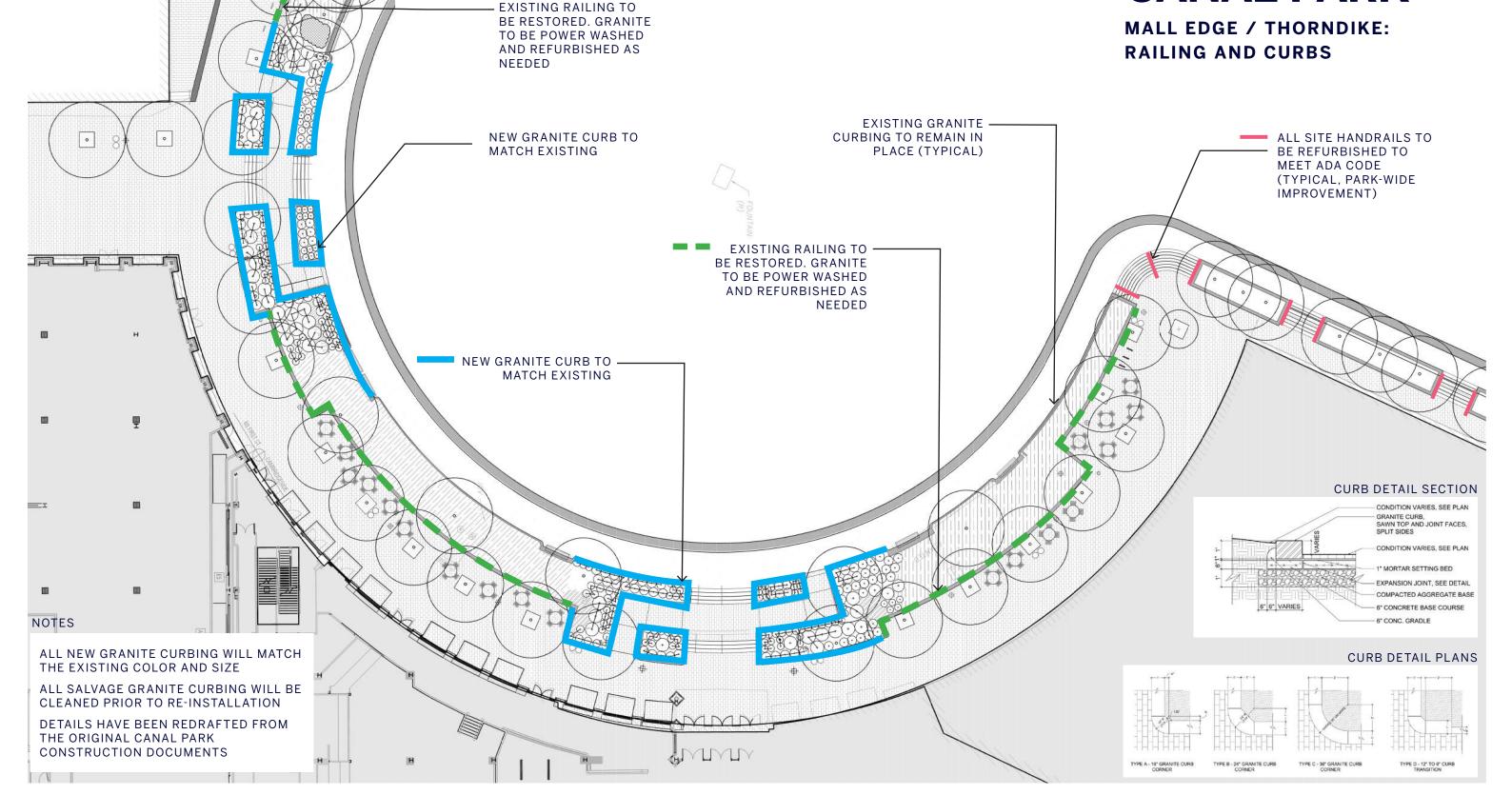








# DESIGN SUPPLEMENT CANAL PARK



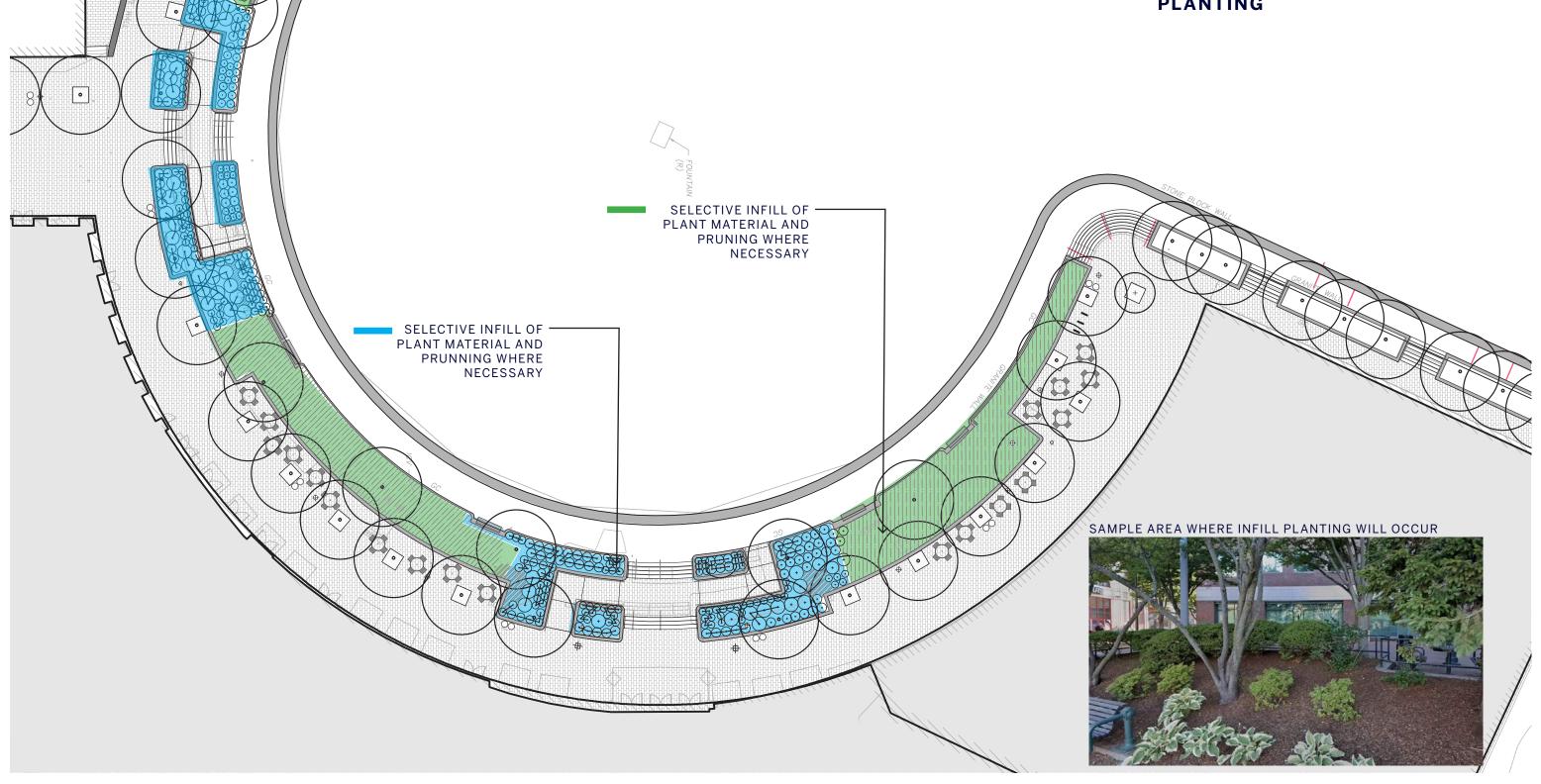


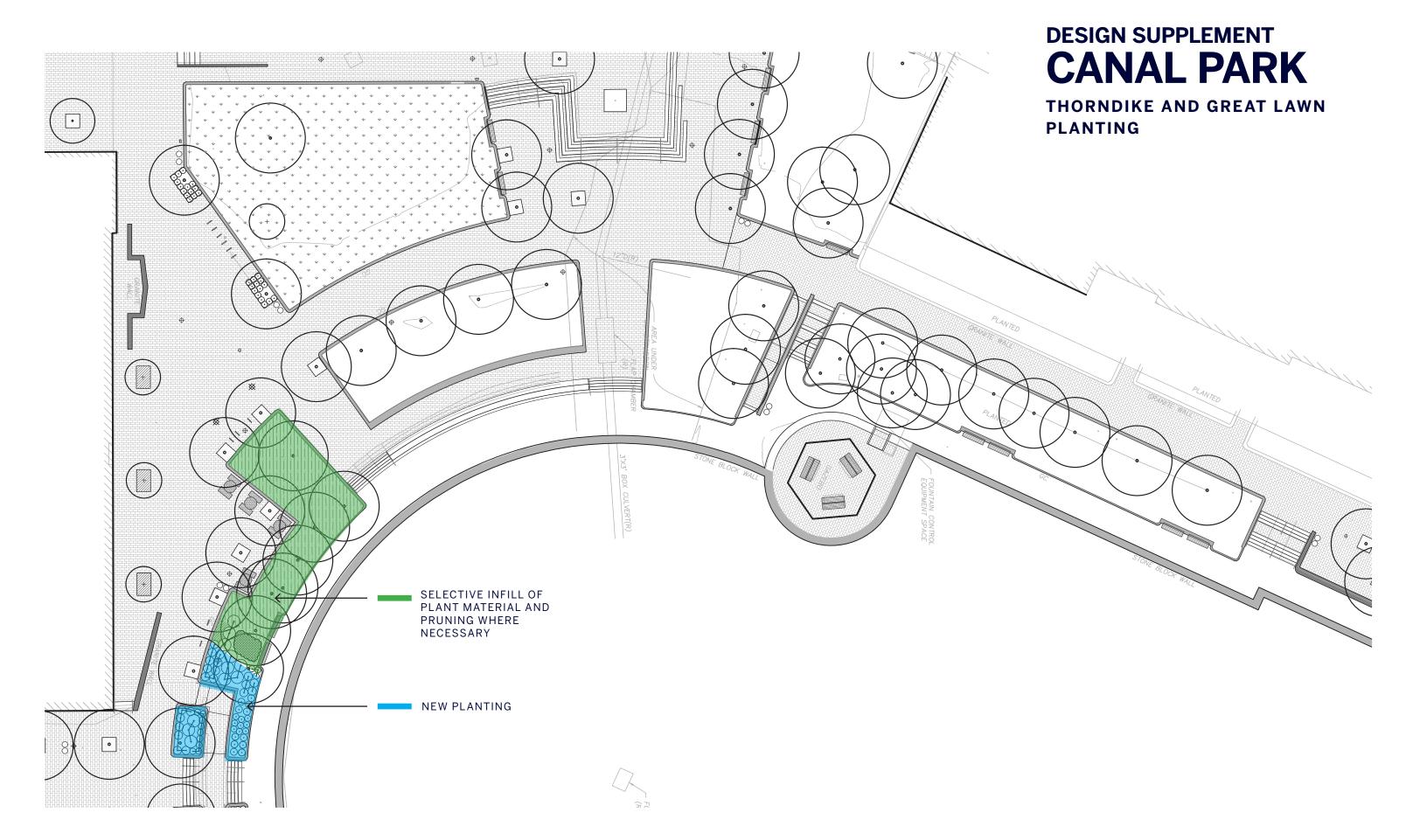




# **DESIGN SUPPLEMENT CANAL PARK**

MALL EDGE / THORNDIKE: **PLANTING** 







**PROPOSED PLAN AREA THREE: GREAT LAWN** 

# Legend

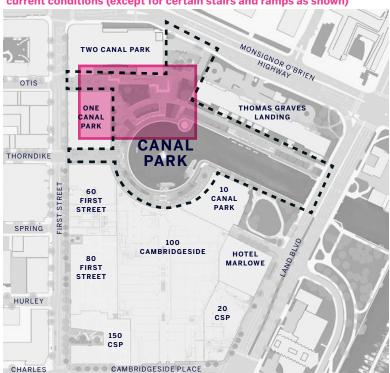
PROJECT SITE

**EXISTING TREE** 

**NEW TREE** 

BRICK WALKWAYS REFURBISHED

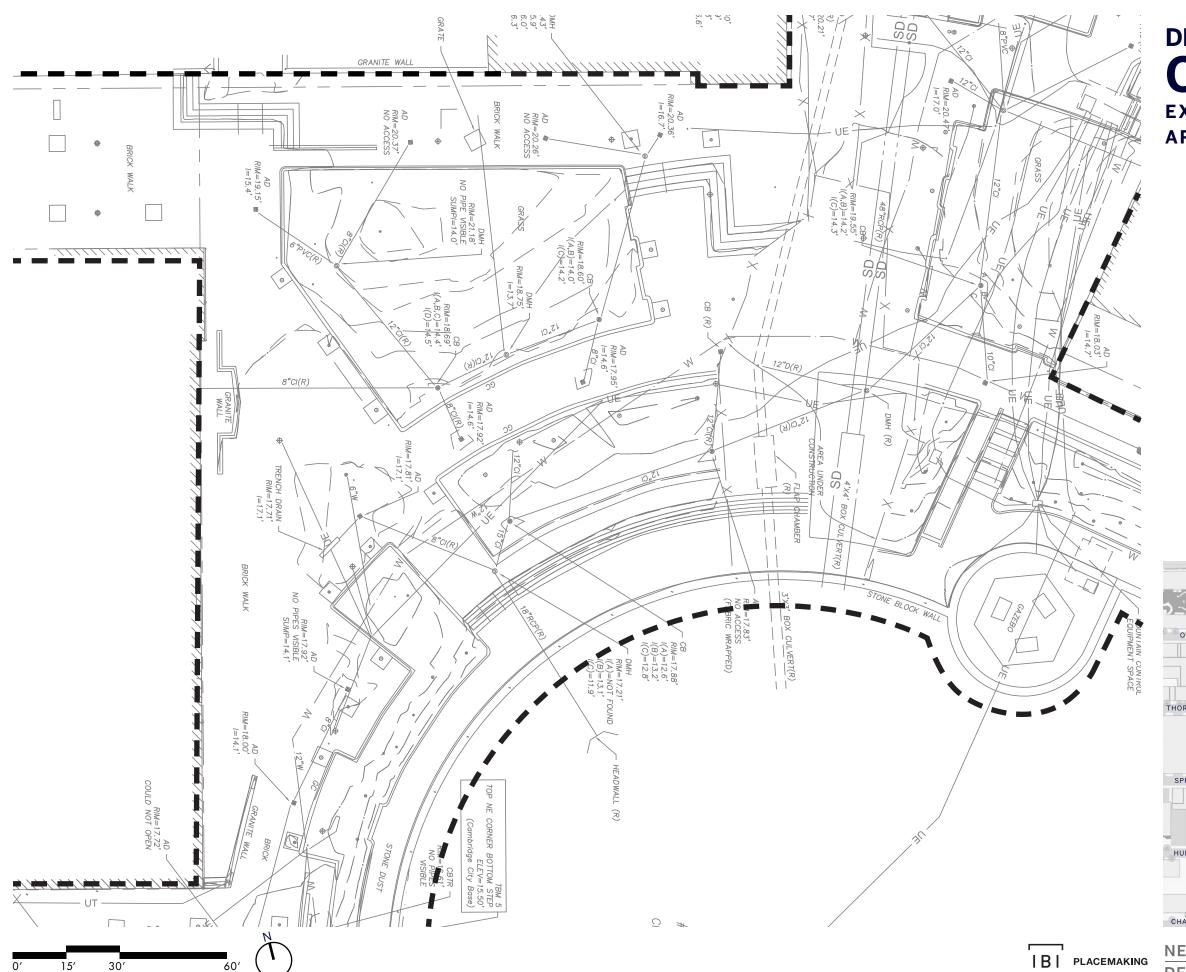
Note: The pathways are existing; dimensions will be unchanged from current conditions (except for certain stairs and ramps as shown)



NEW ENGLAND DEVELOPMENT

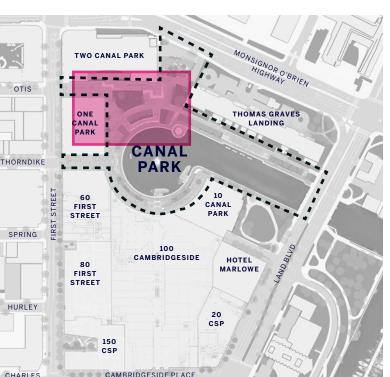
ELKUS MANFREDI





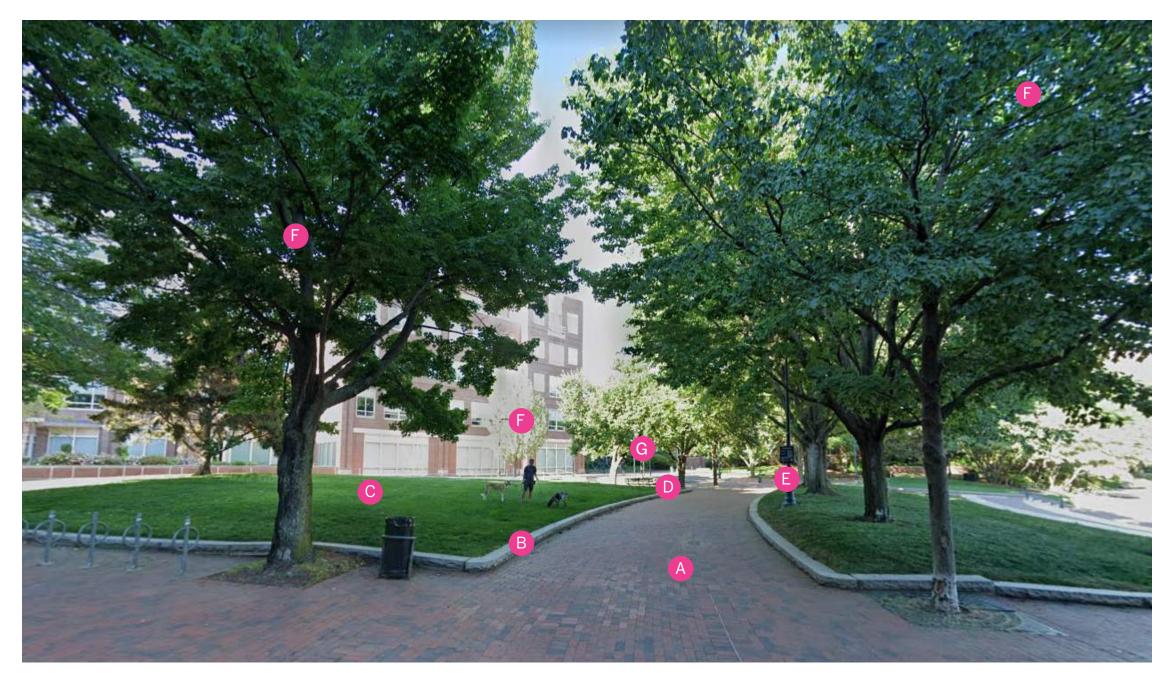
# **DESIGN REVIEW**

**EXISTING CONDITIONS PLAN AREA THREE: GREAT LAWN** 



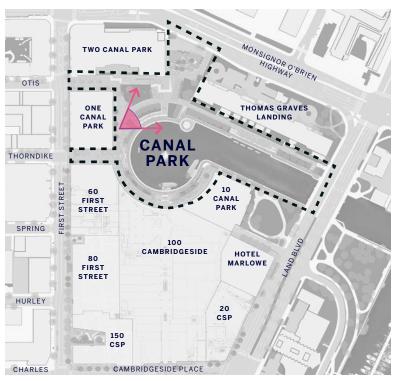
NEW ENGLAND ELKUS MANFREDI ARCHITECTS





**EXISTING CONDITIONS AREA THREE: GREAT LAWN** 

- EXISTING BRICK WALKWAYS
- B EXISTING GRANITE CURB
- EXISTING MOUNDED GREAT LAWN
- EXISTING BENCHES TO REMAIN(2 TOTAL) REFURBISHED
- EXISTING PARK LIGHT TO BE REFURBISHED
- EXISTING TREE TO REMAIN (TYPICAL)
- EXISTING SCULPTURE TO REMAIN



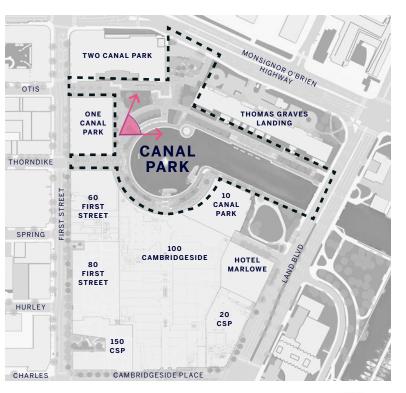
NEW ENGLAND ELKUS MANFREDI ARCHITECTS





**PROPOSED IMPROVEMENTS AREA THREE: GREAT LAWN** 

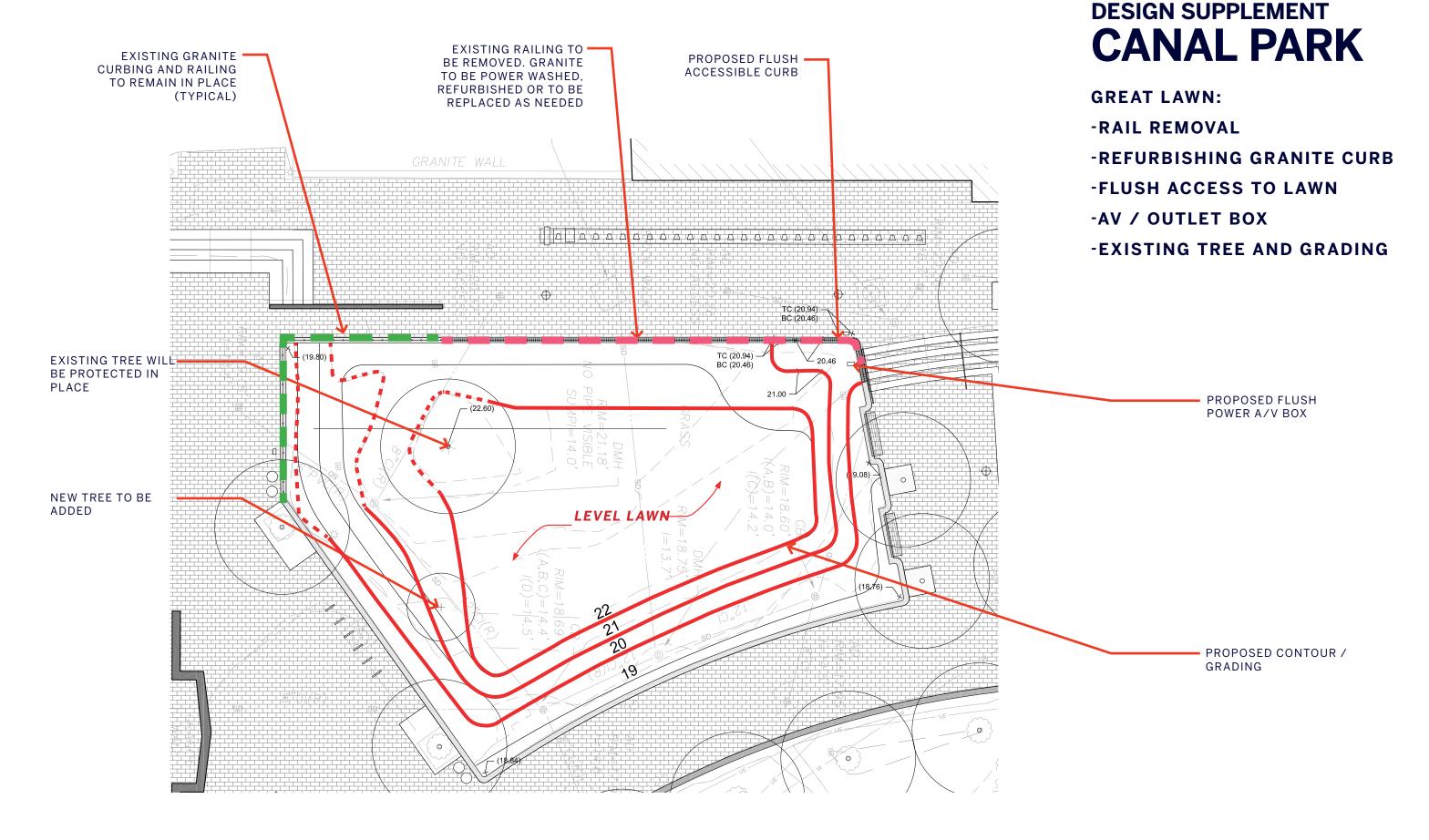
- EXISTING BIKE RACK
- LAWN (REGRADED TO PROVIDE MORE USE OPPORTUNITIES)
- BRICK WALKWAYS REFURBISHED (WHERE NECESSARY)
- EXISTING EVERGREEN TREE TO REMAIN
- EXISTING PARK RAIL













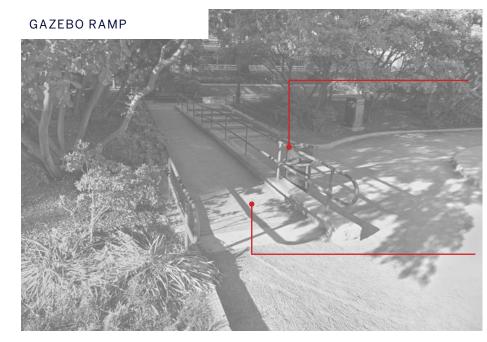


# THOMAS GRAVES LANDING 0 GAZEBO CANAL HANDRAILS WILL BE RETROFITTED TO MEET ADA COMPLIANCE GRANITE WALLS WILL BE POWER WASHED AND REFURBISHED AS REQUIRED BRICK LANDINGS AND BRICK RAMP WILL BE RESET TO MEET ADA

**COMPLIANT SLOPES** 

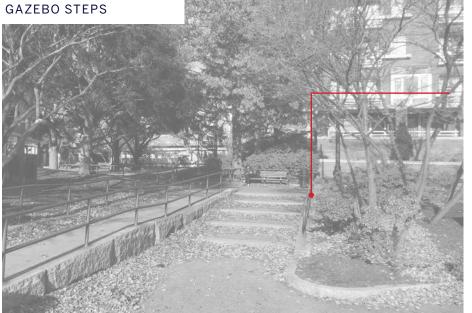
# DESIGN SUPPLEMENT CANAL PARK

GAZEBO RAMP
RAILING AND CURBS



REFURBISH RAILS TO MEET CODE

UPDATE SLOPES TO MEET CODE



REFURBISH RAILS TO MEET CODE









**LANDMARKS NARRATIVE** 

# Gazebo

- Restore the historic color and historic etchings
- Provide new lighting that will enhance without detracting from the original design
- The gazebo will be cleaned, repainted, updated LED lighting, and install vinyl etchings.

# Art

# Opportunities:

- Restore the Never Green Tree sculpture located near the Great Lawn
- Under the bridge along **Lechmere Canal**
- Improve fountain lighting





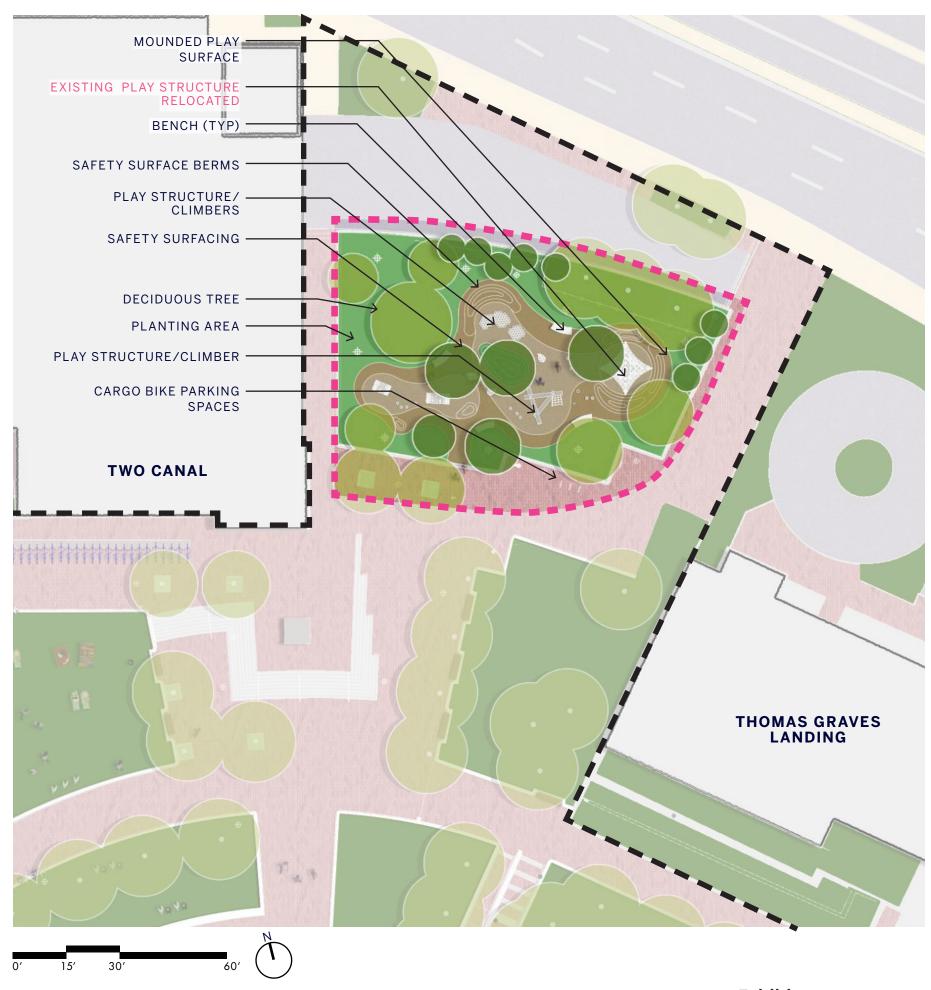






IBI PLACEMAKING NEW ENGLAND ELKUS MANFREDI ARCHITECTS





# CANAL PARK

PROPOSED PLAN
AREA FOUR: PLAY AREA

# Legend

PROJECT SITE

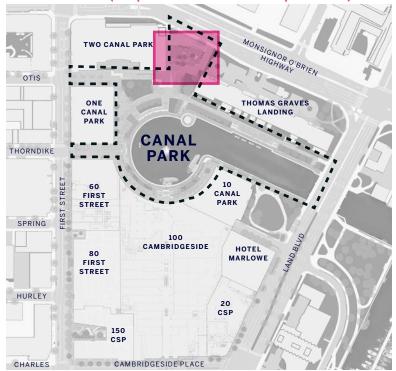
EXISTING TREE

NEW TREE

BRICK WALKWAYS REFURBISHED

SAFETY SURFACING NEW

Note: The pathways are existing; dimensions will be unchanged from current conditions (except for certain stairs and ramps as shown)





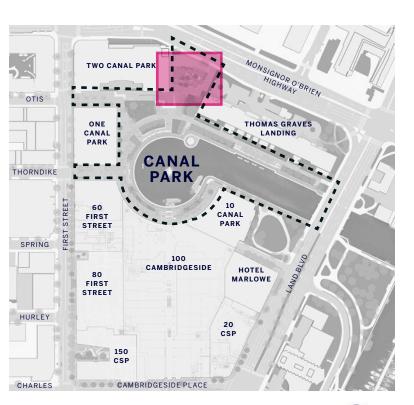






# RIM

# **DESIGN REVIEW CANAL PARK EXISTING CONDITIONS PLAN AREA FOUR: PLAY AREA**





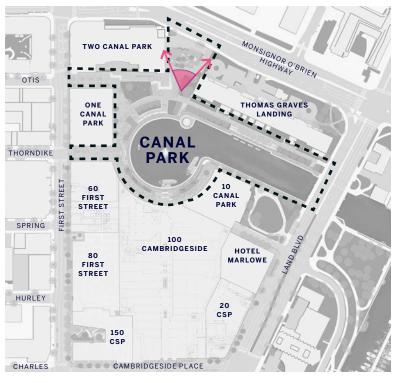






**EXISTING CONDITIONS AREA FOUR: PLAY AREA** 

- EXISTING BRICK WALKWAYS
- EXISTING CURB
- EXISTING PLAY STRUCTURE
- **EXISTING RAILS**
- EXISTING TREES TO REMAIN (TYPICAL)
- EXISTING WATER FOUNTAIN





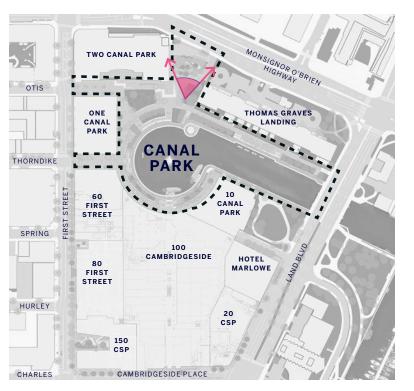






**PROPOSED IMPROVEMENTS AREA FOUR: PLAY AREA** 

- BRICK WALKWAYS REFURBISHED
- GRANITE CURB
- SAFETY SURFACE BERM
- EXISTING PLAY STRUCTURE RELOCATED
- EXISTING TREES TO REMAIN (TYPICAL)
- PLAY STRUCTURE/CLIMBERS
- PERIMETER RAILING/GATE
- DRINKING FOUNTAIN









MULTIPLE BENCH SEATS -LOCATED WITHIN THE PLAY AREA

TWO EXISTING PARK

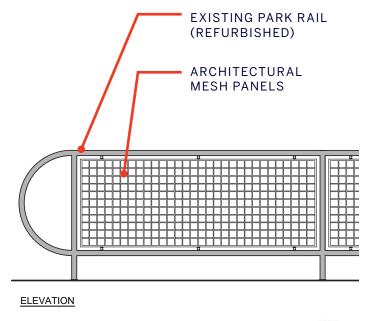
BENCHES ARE ADJACENT TO THE PLAY AREA ENTRY

# CANAL PARK

**PLAY AREA** 



SAMPLE DETAIL



IBI PLACEMAKING

NEW ENGLAND DEVELOPMENT

ELKUS MANFREDI



EXISTING RAILING TO BE RETROFITTED

ARCHITECTURAL MESH PANELS TO

PROVIDE MORE CONTAINMENT FOR CHILDREN. COLOR WILL MATCH THE EXISTING PARK GREEN STANDARD



# **DESIGN REVIEW CANAL PARK PLAY AREA - PLAY STRUCTURES**











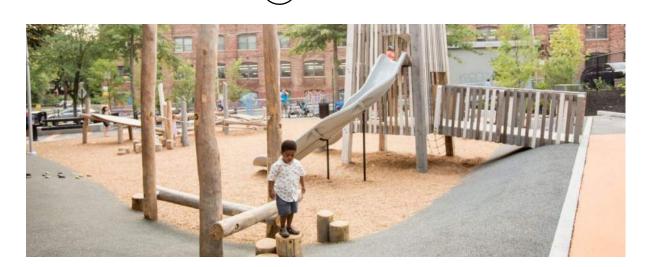




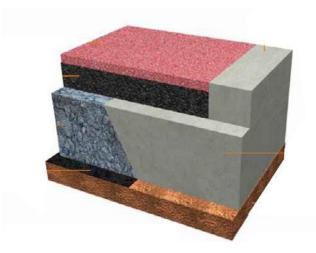








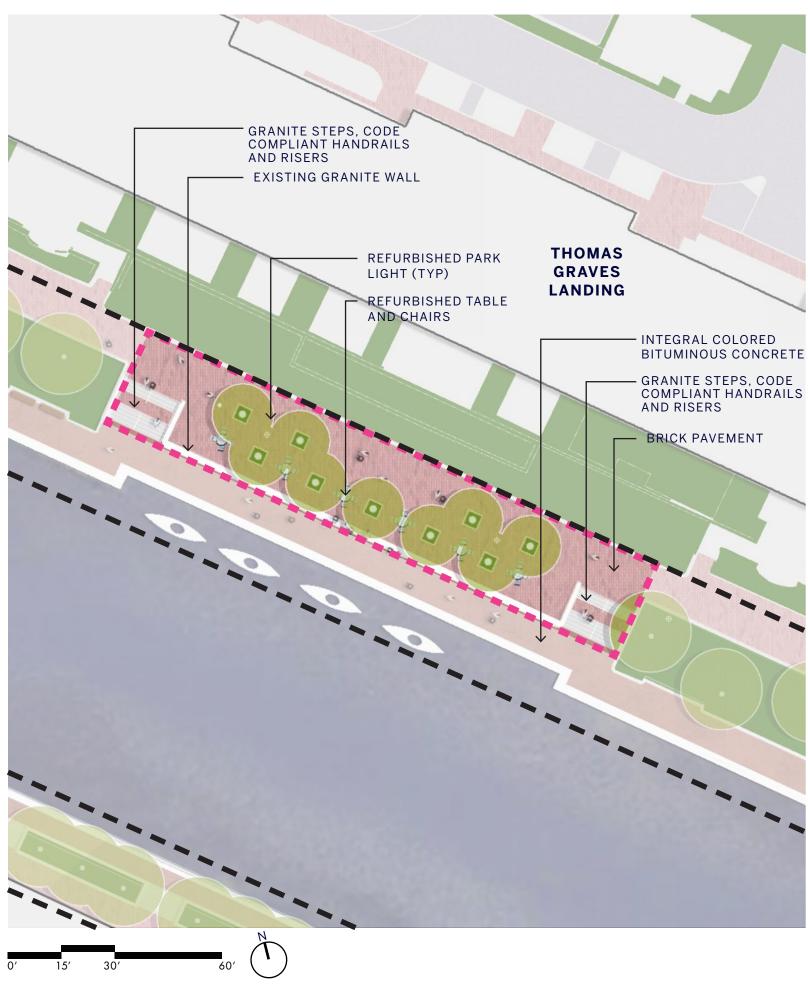












### CANAL PARK

PROPOSED PLAN
AREA FIVE: THOMAS GRAVES
LANDING

#### Legend

PROJECT SITE

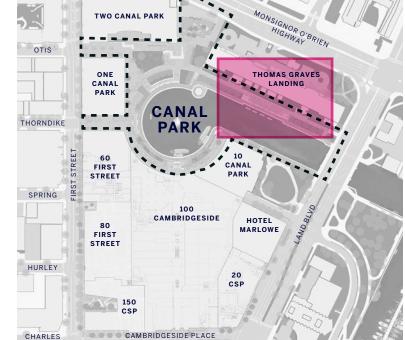




BRICK WALKWAYS REFURBISHED

Note: The pathways are existing; dimensions will be unchanged from current conditions (except for certain stairs and ramps as shown)

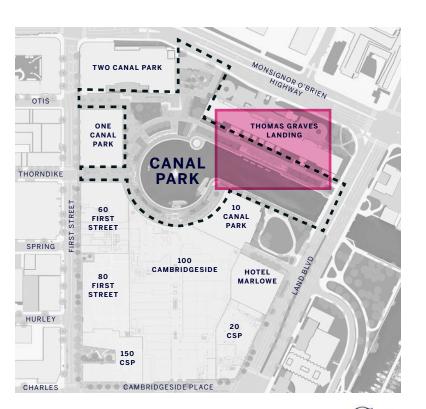








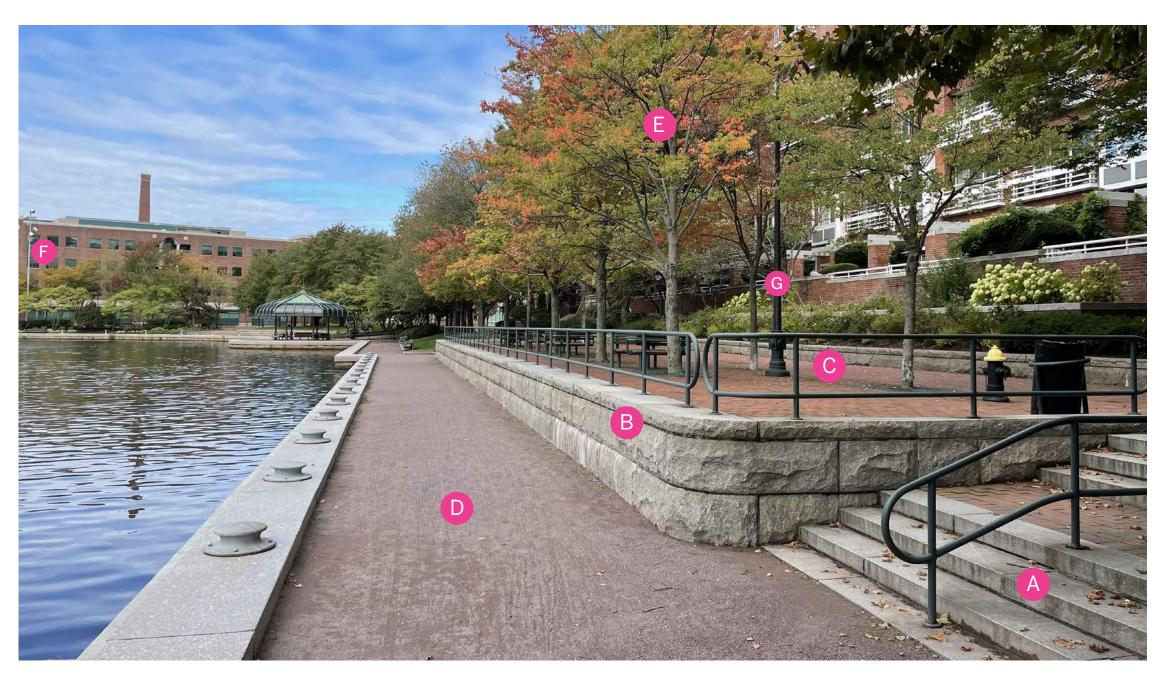
EXSISTING CONDITIONS PLAN AREA FIVE: THOMAS GRAVES LANDING



B | PLACEMAKING

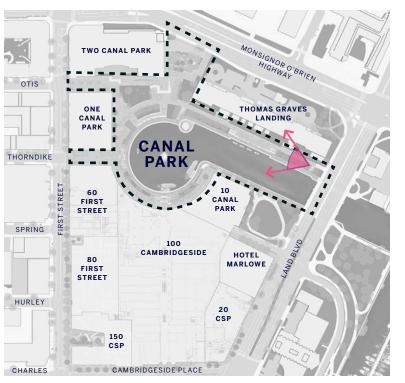
NEW ENGLAND DEVELOPMENT





**AREA FIVE: THOMAS GRAVES LANDING** 

- EXISTING STEPS AND HANDRAIL (NON-COMPLIANT)
- EXISTING GRANITE WALL TO REMAIN
- EXISTING BRICK WALKWAYS
- EXISTING STONE DUST CANAL WALKWAY
- **EXISTING TREES TO REMAIN**
- **EXISTING MAST LIGHT**
- EXISTING LIGHT TO REMAIN







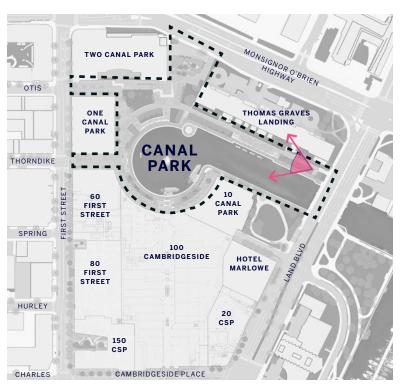






PROPOSED IMPROVEMENTS **AREA FIVE: THOMAS GRAVES LANDING** 

- GRANITE STEPS, CODE COMPLIANT HANDRAILS AND RISERS
- EXISTING GRANITE WALL TO REMAIN
- REFURBISHED TABLES AND CHAIRS (FIXED, NON-MOVEABLE)
- BRICK WALKWAYS REFURBISHED WHERE NECESSARY
- INTEGRAL COLORED BITUMINOUS CONCRETE
- CODE COMPLIANT GUARDRAIL
- KAYAK TETHER









#### **DESIGN SUPPLEMENT CANAL PARK**

**THOMAS GRAVES LANDING: GUARDRAIL DESIGN** 

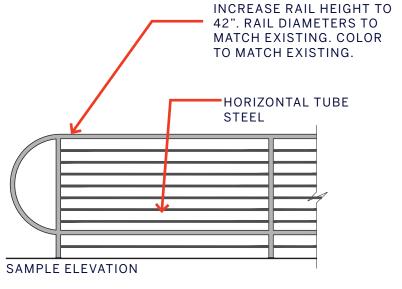
PROPOSED RAIL:

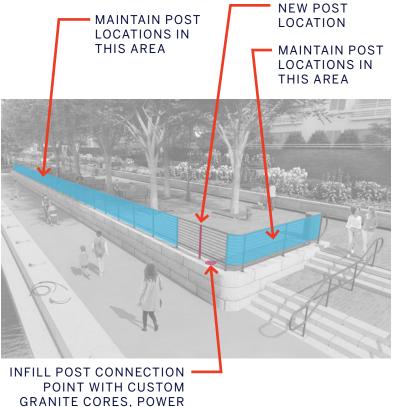
ROUNDED STEEL HORIZONTAL PICKETS

PAINT TO MATCH EXISTING

OVERALL HEIGHT INCREASED TO MEET **GUARDRAIL CODE** 







NEW ENGLAND ELKUS MANFREDI ARCHITECTS



WASH





REFURBISHED STAIR HANDRAIL. EXISTING RAIL

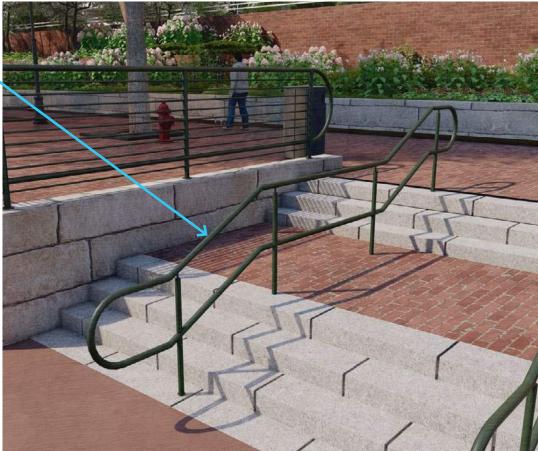
CODE COMPLIANCE.

TO BE MODIFIED TO MEET

FIELD CUT EXISTING RAIL, TYP

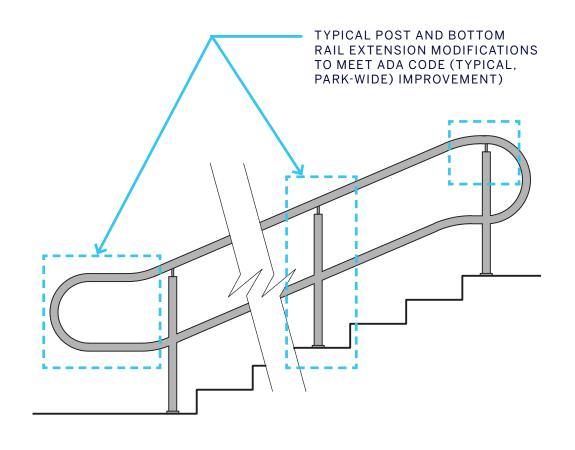


ALL SITE HANDRAILS TO BE REFURBISHED TO MEET ADA CODE (TYPICAL, PARK-WIDE IMPROVEMENT)



#### **DESIGN SUPPLEMENT CANAL PARK** SITE HANDRAILS

SAMPLE DETAIL



NEW ENGLAND ELKUS MANFREDI ARCHITECTS



## REPAIR DAMAGED **CONCRETE PANELS** WHERE NEEDED CATCH BASIN INLET-PROTECTION (TYP.) 0 / 25-FOOT RIVERFRONT AREA LIMIT OF WORK (TYP.) REPAIR DAMAGED CONCRETE PANELS WHERE NEEDED

### CANAL PARK

PROPOSED SITE PLAN AREA SIX: BRIDGE

#### NORTH BRIDGE UNDERPASS



SOUTH BRIDGE UNDERPASS



IBI PLACEMAKING NEW ENGLAI

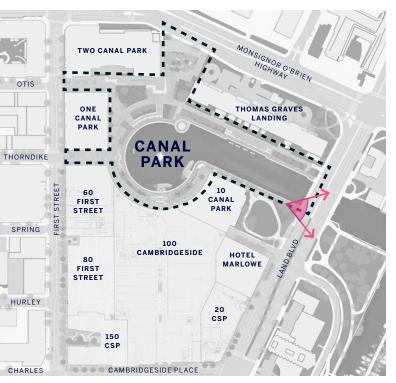






**EXISTING CONDITIONS AREA SIX: BRIDGE -ONLY SOUTH BANK ILLUSTRATED** 

- EXISTING CONCRETE PAVEMENT
- EXISTING CANAL WALL
- EXISTING BRIDGE EMBANKMENT WALL
- EXISTING BRIDGE STEEL





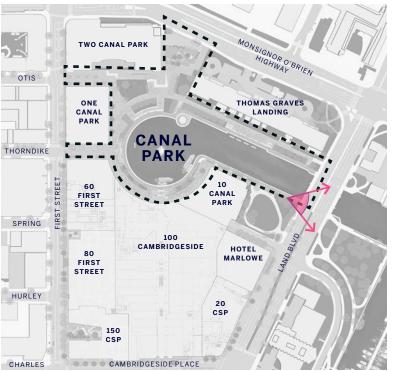






PROPOSED IMPROVEMENTS (WALL ART IN THIS PERSPECTIVE IS CONCEPTUAL ONLY)

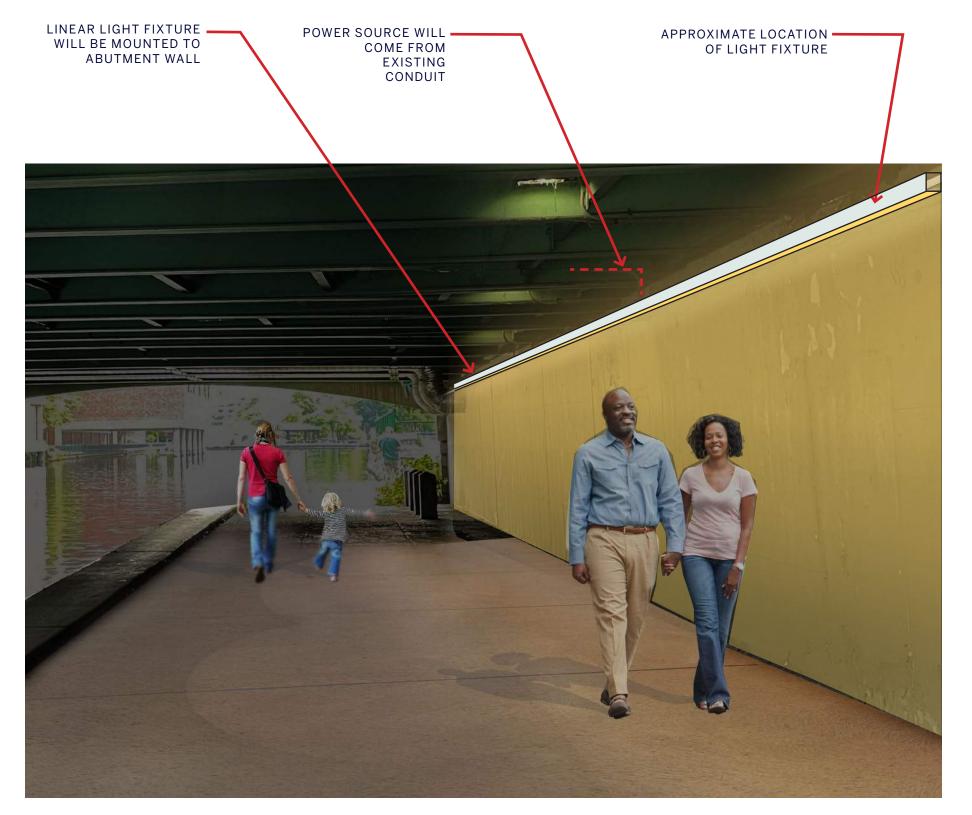
LAND BOULEVARD SOUTH ABUTMENT, LOOKING TOWARDS CHARLES RIVER (NORTH ABUTMENT SIMILAR)







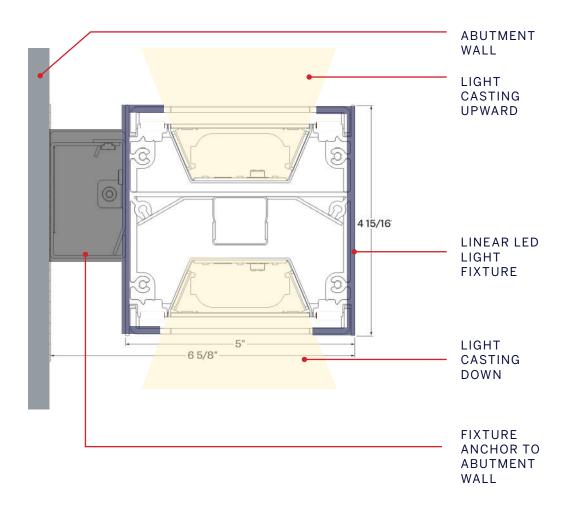




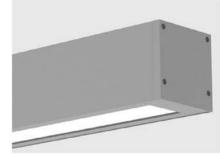
#### **DESIGN SUPPLEMENT CANAL PARK**

**BRIDGE WALKWAY:** 

#### LIGHT FIXTURE AND CONNECTION



#### IMAGE OF LINEAR LIGHT FIXTURE



DUAL SOURCE LIGHT FIXTURE

- MODEL NUMBER VSPLWDI
- LED FIXTURE CAST LIGHT DOWN ABUTMENT WALL AND UPDWARD TOWARD UNDERSIDE OF BRIDGE



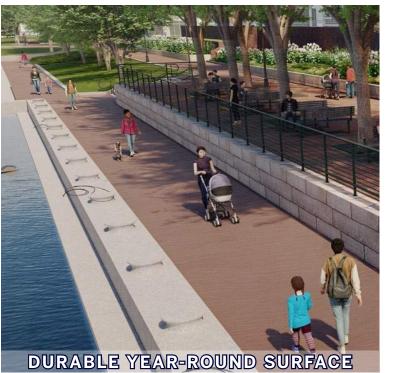
#### **DESIGN REVIEW** CANAL PARK SURFACES AND DRAINAGE **NARRATIVE**

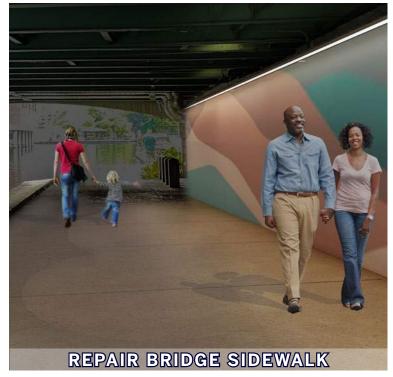
- Reset existing brick to reduce trip hazards
- Regrade lawn to provide a level surface for activities
- Integral colored bituminous concrete:

Provides 4 season use Improved ADA accessibility Increased durability Less annual maintenance Plowable

 Repair damaged bridge sidewalk panels where necessary



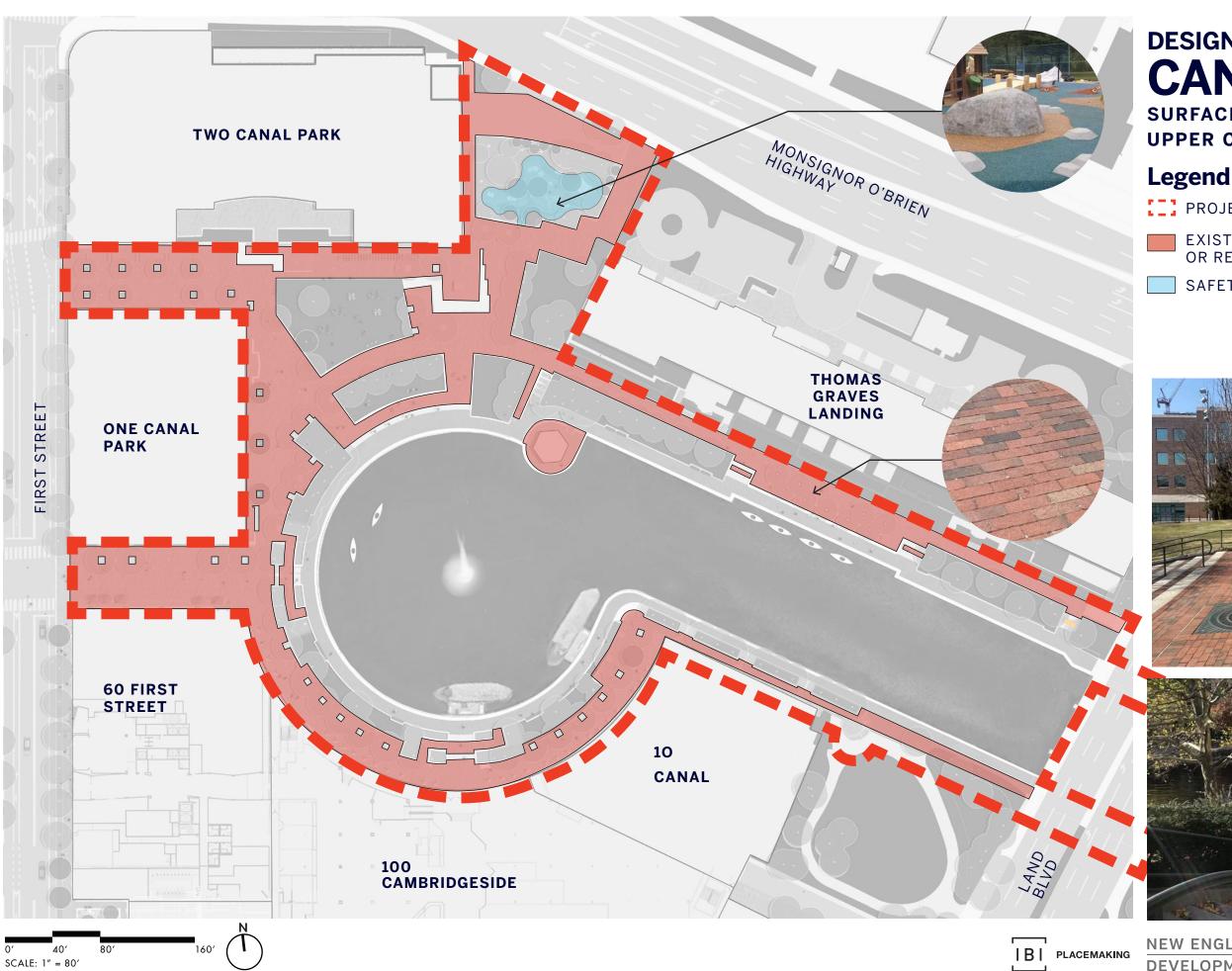




IBI PLACEMAKING NEW ENGLAND DEVELOPMENT ELKUS MANFREDI ARCHITECTS



Exhibit 29



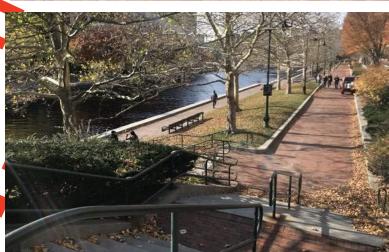
**SURFACES UPPER CANAL WALK** 

PROJECT SITE

EXISTING BRICK PAVEMENT TO BE RESET OR REFURBISH AS REQUIRED

SAFETY SURFACE NEW





NEW ENGLAND DEVELOPMENT



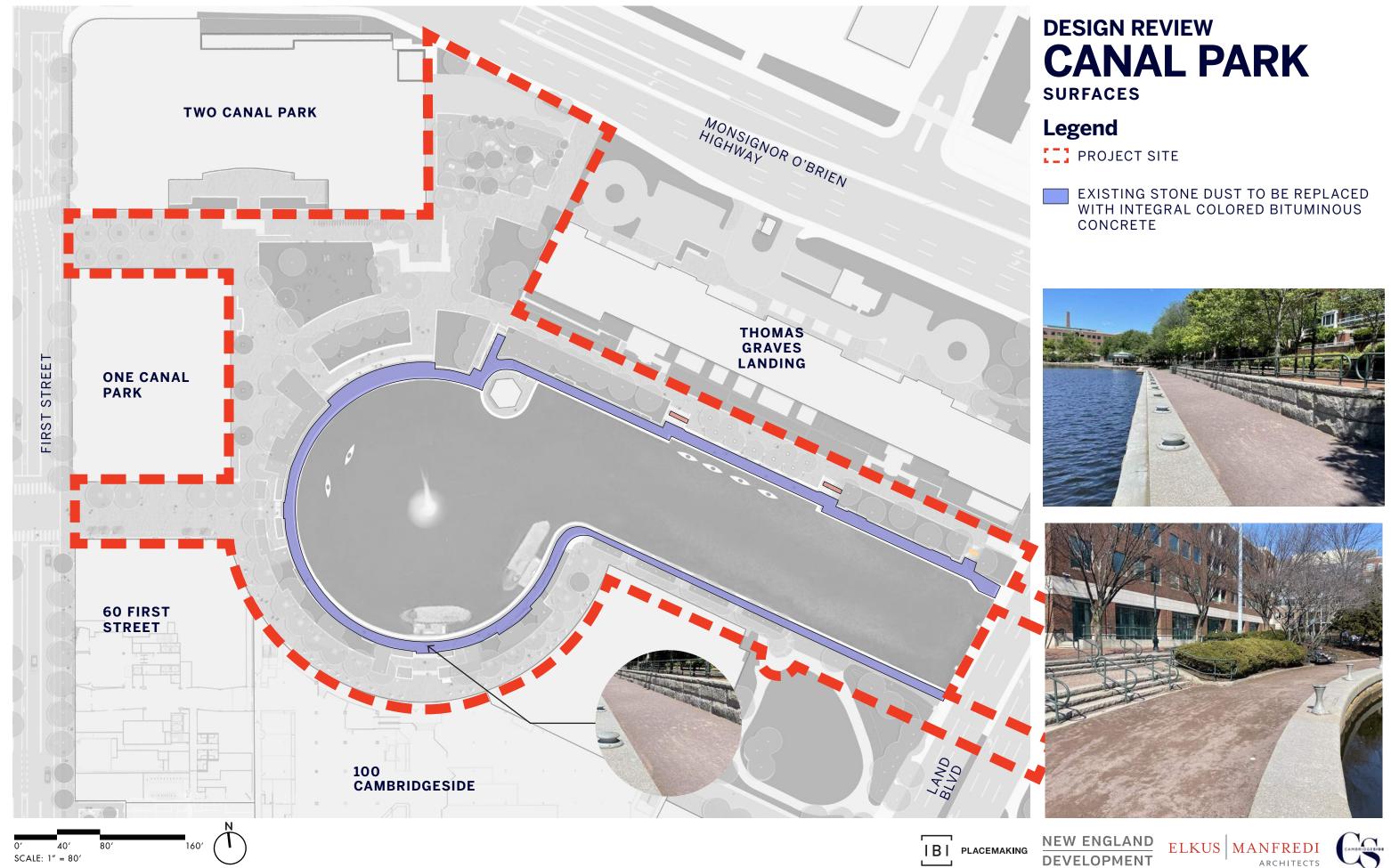
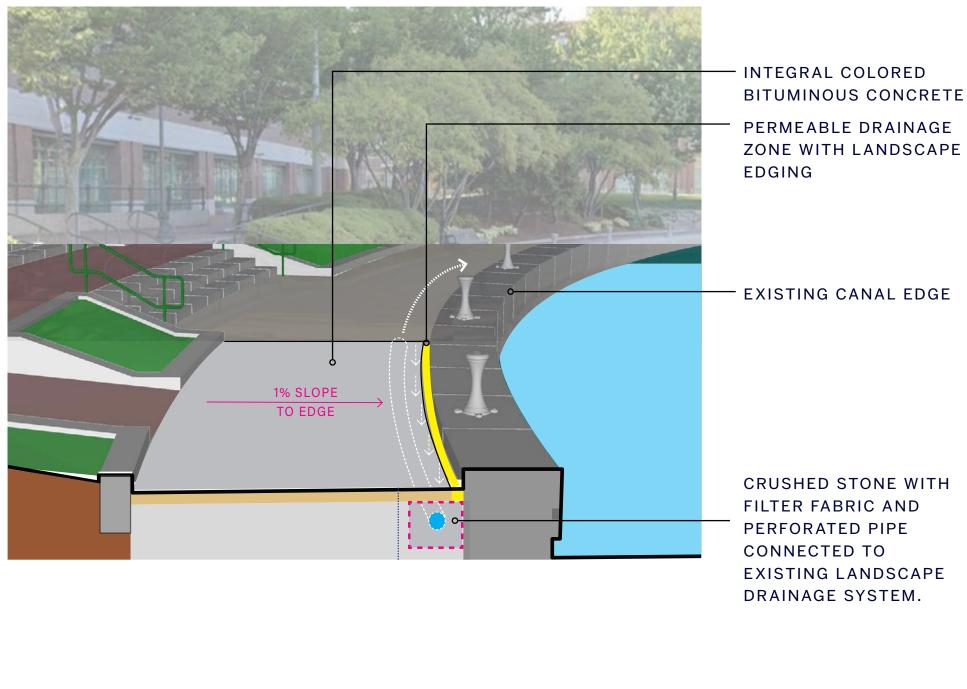


Exhibit 31

#### PROPOSED LOWER CANAL SURFACE SECTION

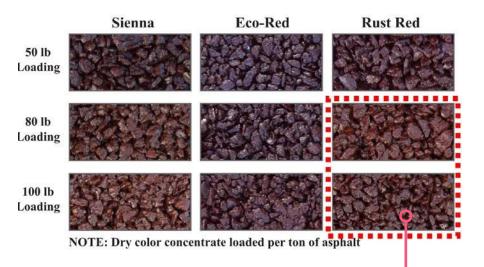


INTEGRAL COLORED **BITUMINOUS CONCRETE** 

COLOR —

#### **DESIGN REVIEW CANAL PARK SURFACES AND DRAINAGE** LOWER CANAL WALK DETAILS





NEW ENGLAND ELKUS MANFREDI ARCHITECTS



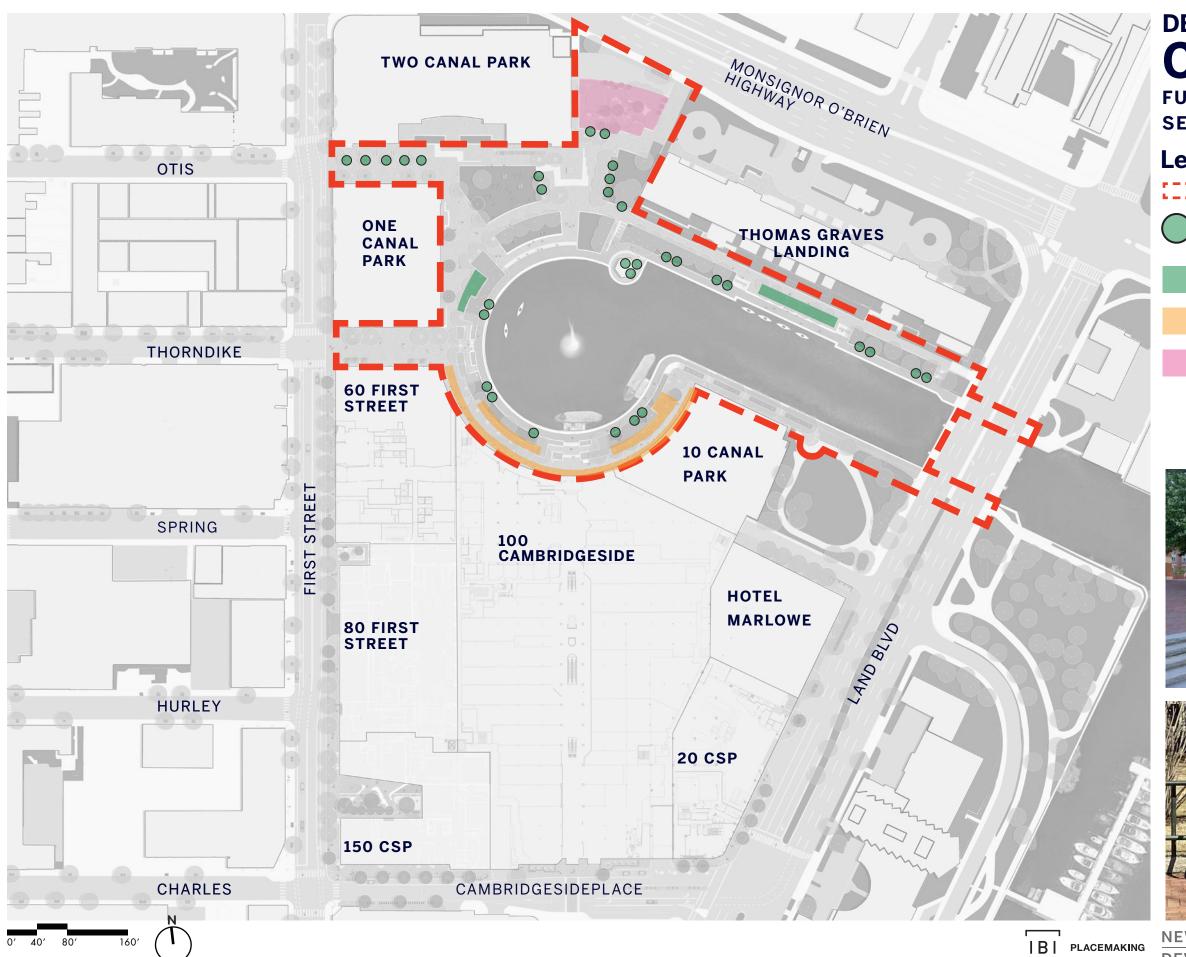
#### **DESIGN REVIEW CANAL PARK FURNISHINGS AND FIXTURES NARRATIVE**

- Refurbish the existing furniture, railings and lighting where possible
- Integrate new work seemlessly into the existing design language
- Retain and repair existing seating with backs









**FURNISHINGS AND FIXTURES SEATING** 

#### Legend

PROJECT SITE

REFURBISHED EXISTING BENCH WITH BACK

REFURBISHED TABLES AND CHAIRS

PROPOSED TABLES AND CHAIRS

PROPOSED BENCHES





**NEW ENGLAND** DEVELOPMENT

#### **DESIGN REVIEW CANAL PARK FURNISHINGS AND FIXTURES PROPOSED**

#### **EXISTING FURNISHINGS TO BE REFURBISHED**

#### **EXISTING BENCH**



TRASH RECEPTACLE



WATER FOUNTAIN



TABLES AND CHAIRS



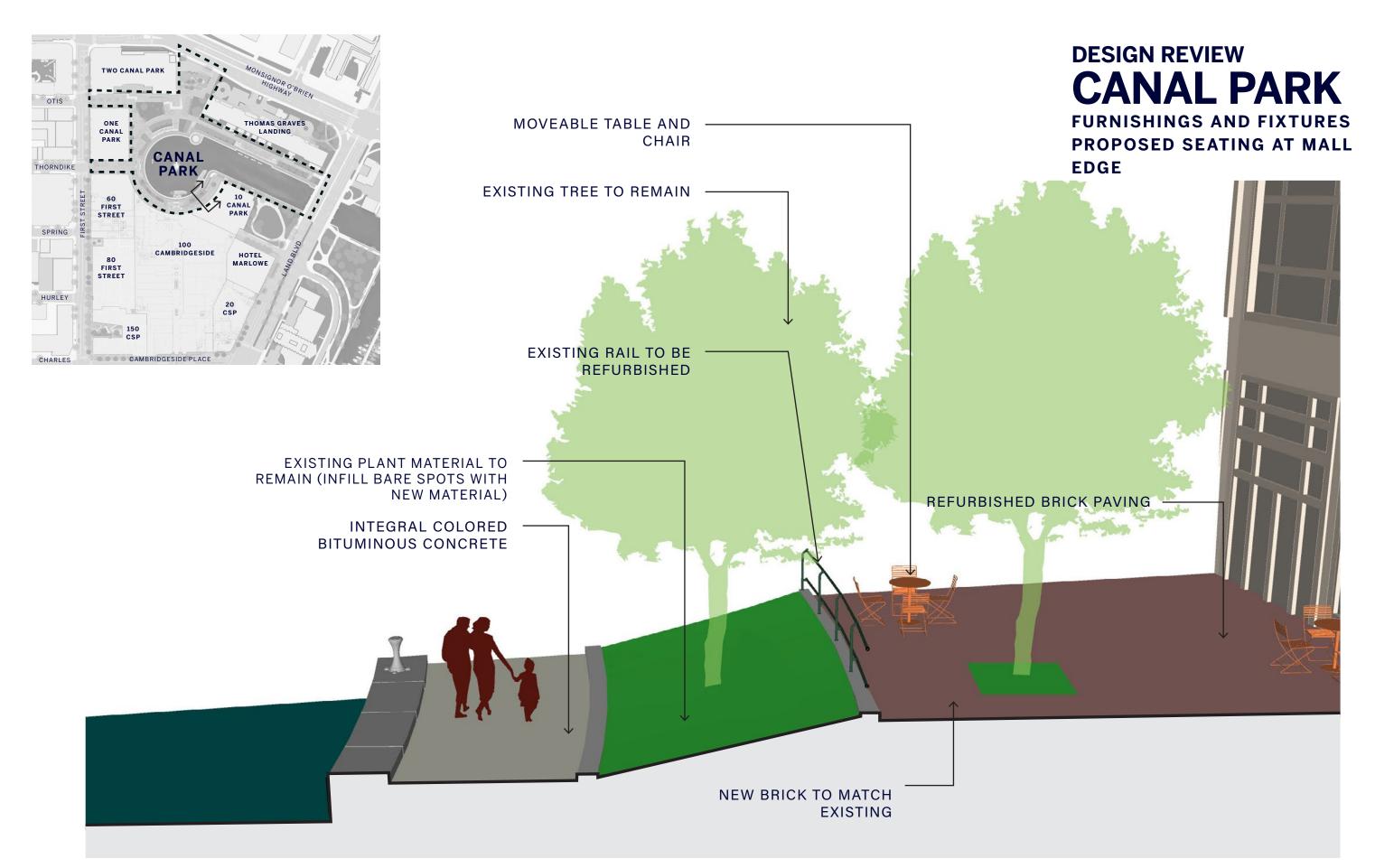
#### PROPOSED FURNISHINGS (PRIMARILY **NEAR THE MALL)**

TABLE/CHAIR AT MALL EDGE



**NEW HANDRAIL AND** GUARDRAILS WHERE REQUIRED







#### **DESIGN REVIEW CANAL PARK LANDSCAPE NARRATIVE**

- Prune existing trees and overgrown shrubs while maintaining existing evergreen plantings
- Work with the City Arborist to replace failed trees, shrubs and other plantings
- Improve soils for the existing trees and provide pruning of trees at the Thomas Graves Landing terrace
- Introduce seasonal plantings
- Maintain a diversity of plantings, including evergreens, throughout the park





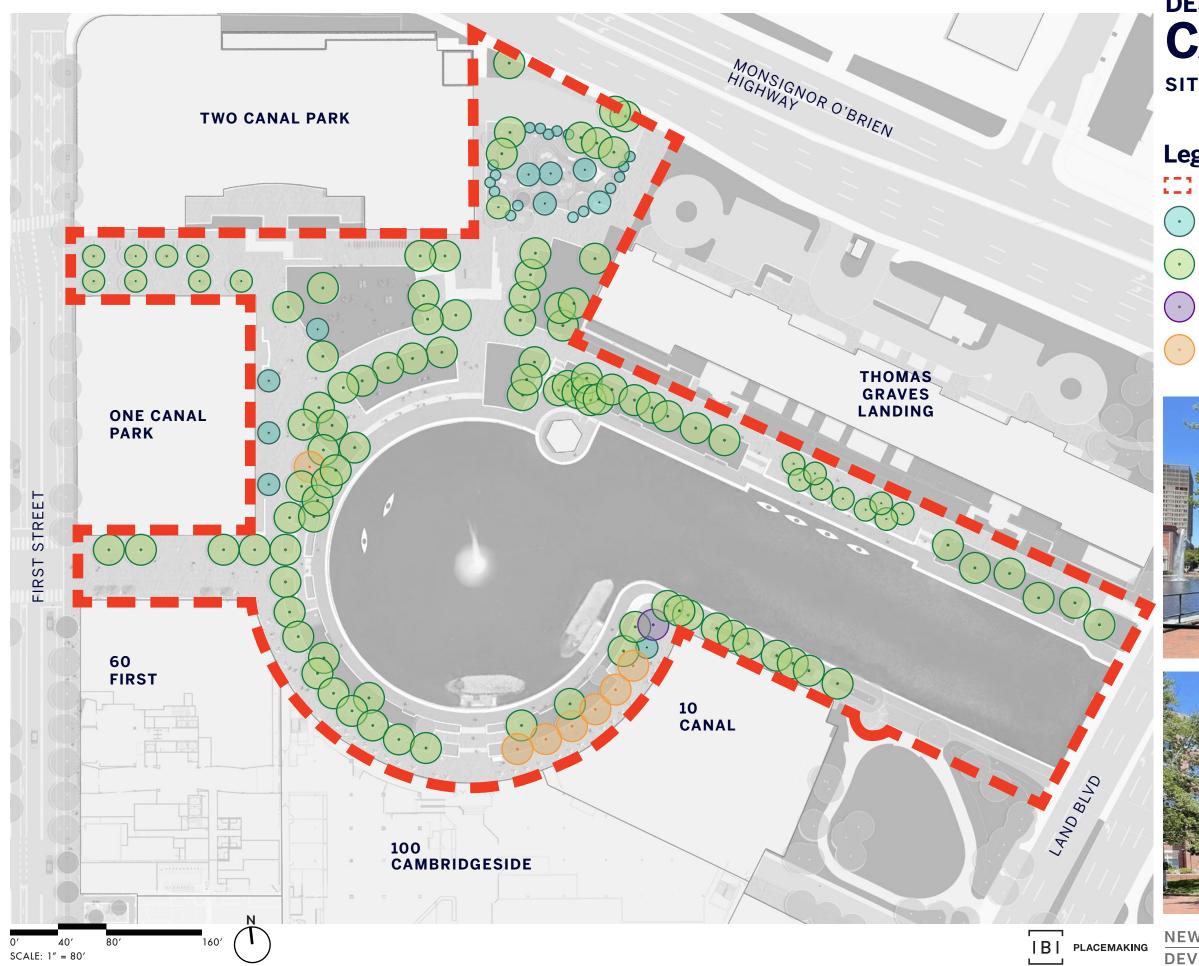












## DESIGN SUPPLEMENT CANAL PARK

SITE TREE PLAN

#### Legend

PROJECT SITE

NEW TREE

EXISTING TREE

EXISTING TREE TO BE REPLACED

EXISTING TREE TO MONITOR



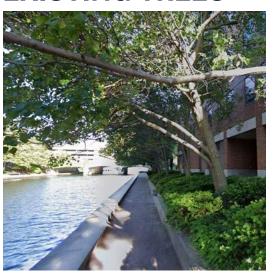


NEW ENGLAND DEVELOPMENT



#### **DESIGN REVIEW CANAL PARK** LANDSCAPE **PROPOSED TREES**

#### **EXISTING TREES**







#### **PROPOSED TREES**















#### **DESIGN REVIEW CANAL PARK LANDSCAPE** PROPOSED UNDERSTORY PLANTING

#### **EXISTING UNDERSTORY PLANTINGS**







#### **SAMPLE OF PROPOSED PLANT MATERIALS**





















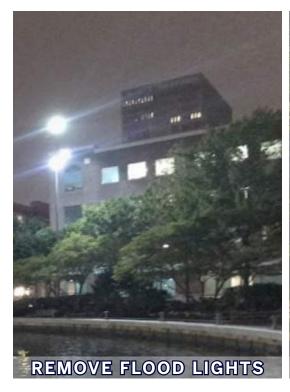


#### **DESIGN REVIEW** CANAL PARK **LIGHTING NARRATIVE**

- Restore existing historic lighting
- Add new lighting throughout the park and under the bridge
- Remove the flood lights to reduce nuissance and glare
- Install lighting in the tree canopy to even out the lighting around the canal



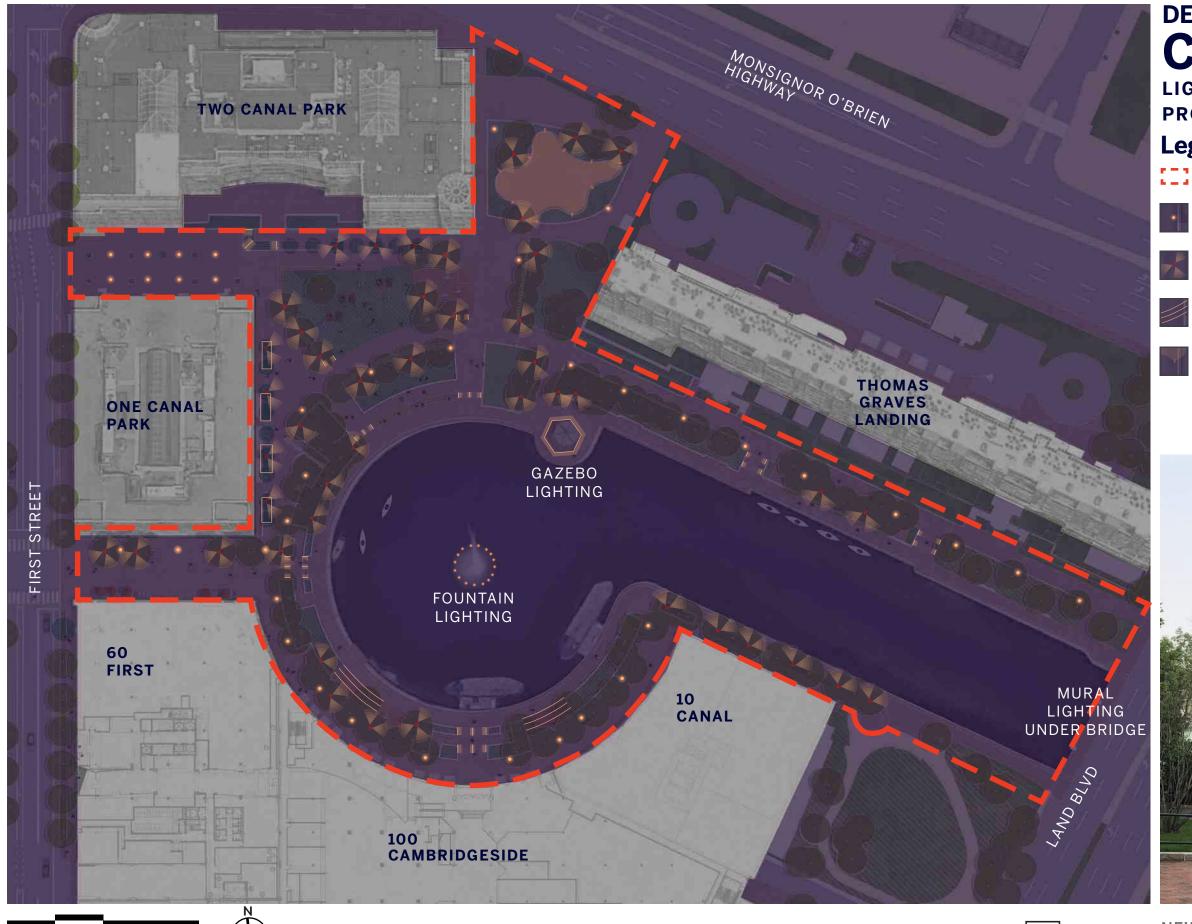






IBI PLACEMAKING NEW ENGLAND ELKUS MANFREDI ARCHITECTS





SCALE: 1" = 80'

#### **DESIGN REVIEW CANAL PARK**

**LIGHTING PROPOSED PLAN** 

#### Legend

PROJECT SITE

EXISTING REFURBISHED PEDESTRIAN POLE

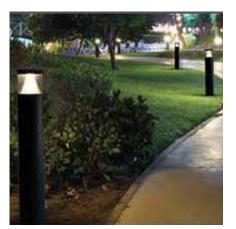
TREE "MOONLIGHTING"
DOWNLIGHTS IN TREE CANOPY

SEATING/PLANTER LIGHTING

BOLLARD LIGHTING AT PLAYGROUND







NEW ENGLAND DEVELOPMENT B | PLACEMAKING

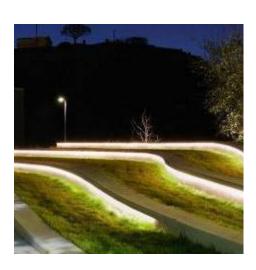


## CANAL PARK LIGHTING PROPOSED FIXTURES

**PEDESTRIAN POLE** 



SEATING/PLANTER LIGHTING



TREE MOONLIGHTING



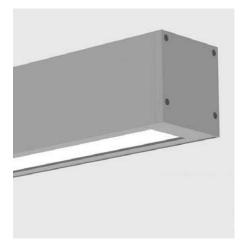
**BOLLARD** 



**FOUNTAIN LIGHTING** 



**MURAL LIGHTING** 



**GAZEBO LIGHTING** 



#### **DESIGN REVIEW** GRADING AND CIRCULATION **NARRATIVE**

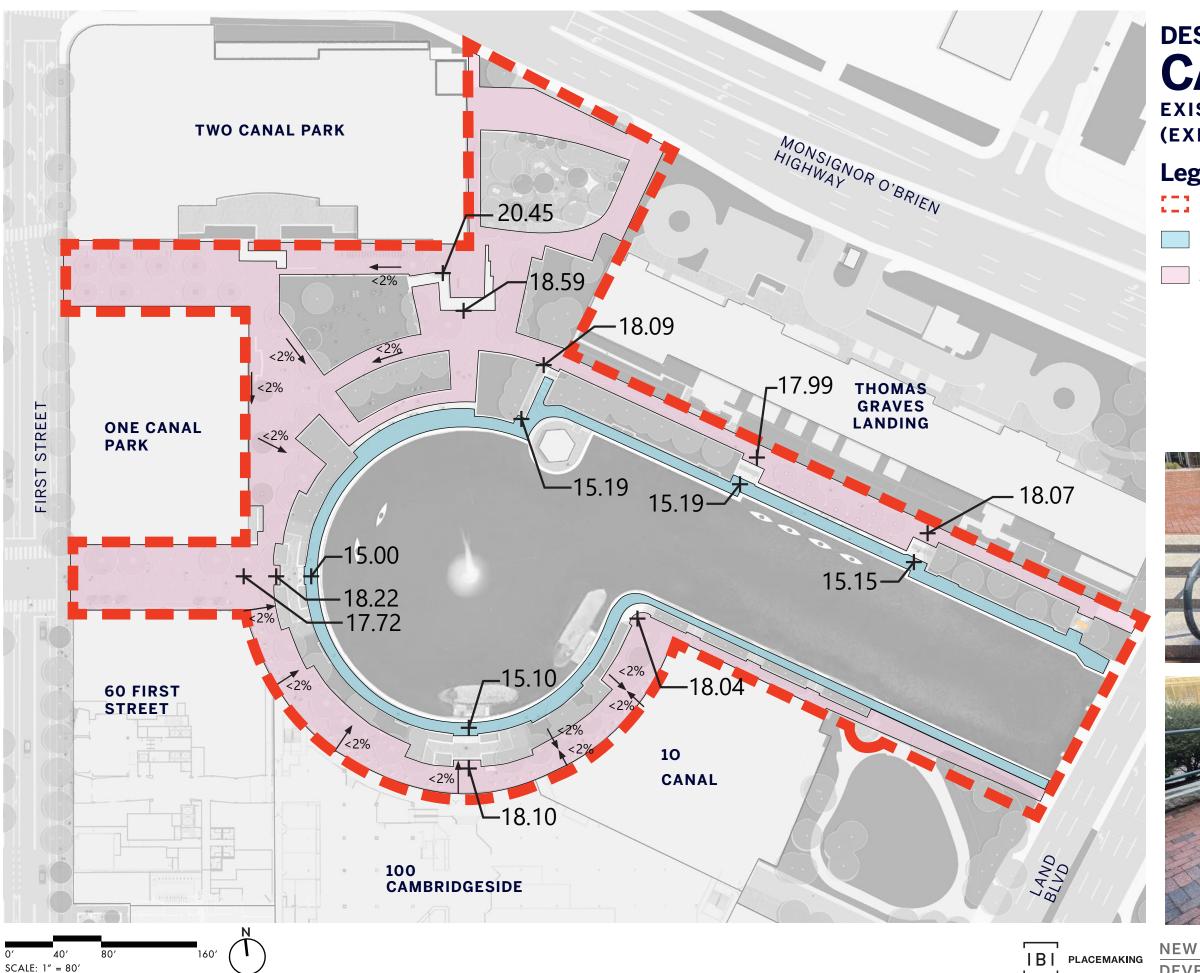
- Maintain existing seating around canal basin, repair and refurbish wood as needed to keep original design aesthetic
- Create level areas along the Canal, at the Playground and the Great Lawn to provide opportunity for activities and passive enjoyment of the park
- Rebuild ramps, railings and replace the existing stone dust path with a integral colored bituminous concrete surface





TBI PLACEMAKING NEW ENGLAND ELKUS MANFREDI ARCHITECTS





EXISTING GRADING DIAGRAMS (EXISTING GRADES TO REMAIN)

#### Legend

PROJECT SITE

FLAT

2% MAX SLOPE





NEW ENGLAND DEVELOPMENT

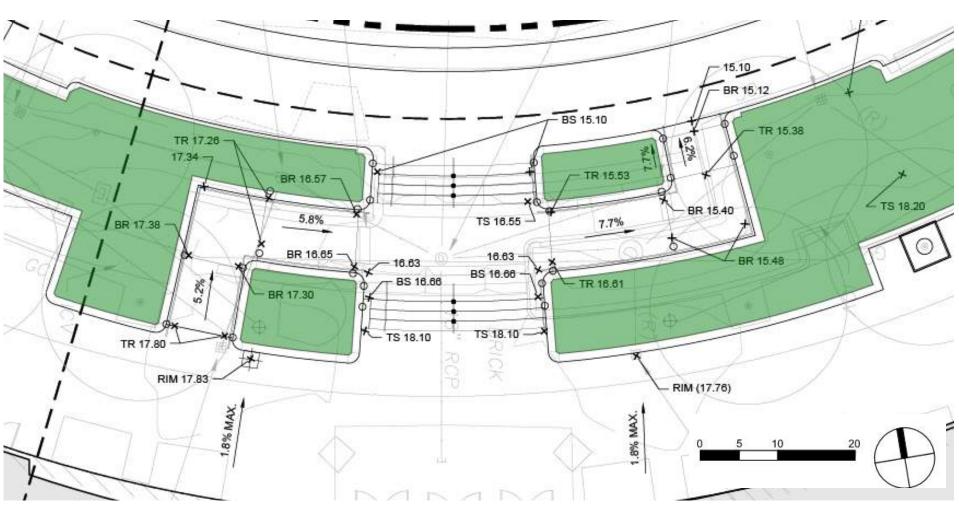
ELKUS MANFREDI
ARCHITECTS



#### TC 18.70 BC 18.18 - TW 20.20 BW 18.16 BR 17.73 TS 19.75 BS 18.20 (17.88) BS 15.00 TS 18.22 TS 16.56 BS 16.66 RIM (17.72) BS 16.66 BS 15.00 TS 16.56 TR 16.62 BR 15.12 BR 15.48

## CANAL PARK

GRADING DETAIL PLANS: AREAS ONE AND TWO



GRADING AT MALL ACCESSIBLE RAMP AND STAIRS





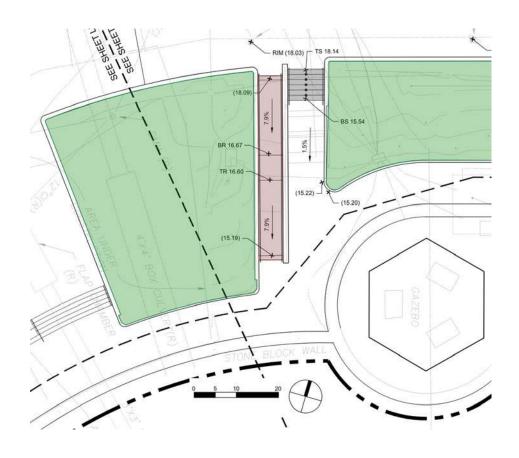
| B | PLACEMAKING

NEW ENGLAND DEVELOPMENT

ELKUS | MANFREDI
ARCHITECTS



## DESIGN REVIEW CANAL PARK GRADING DETAIL PLANS: GAZEBO RAMP

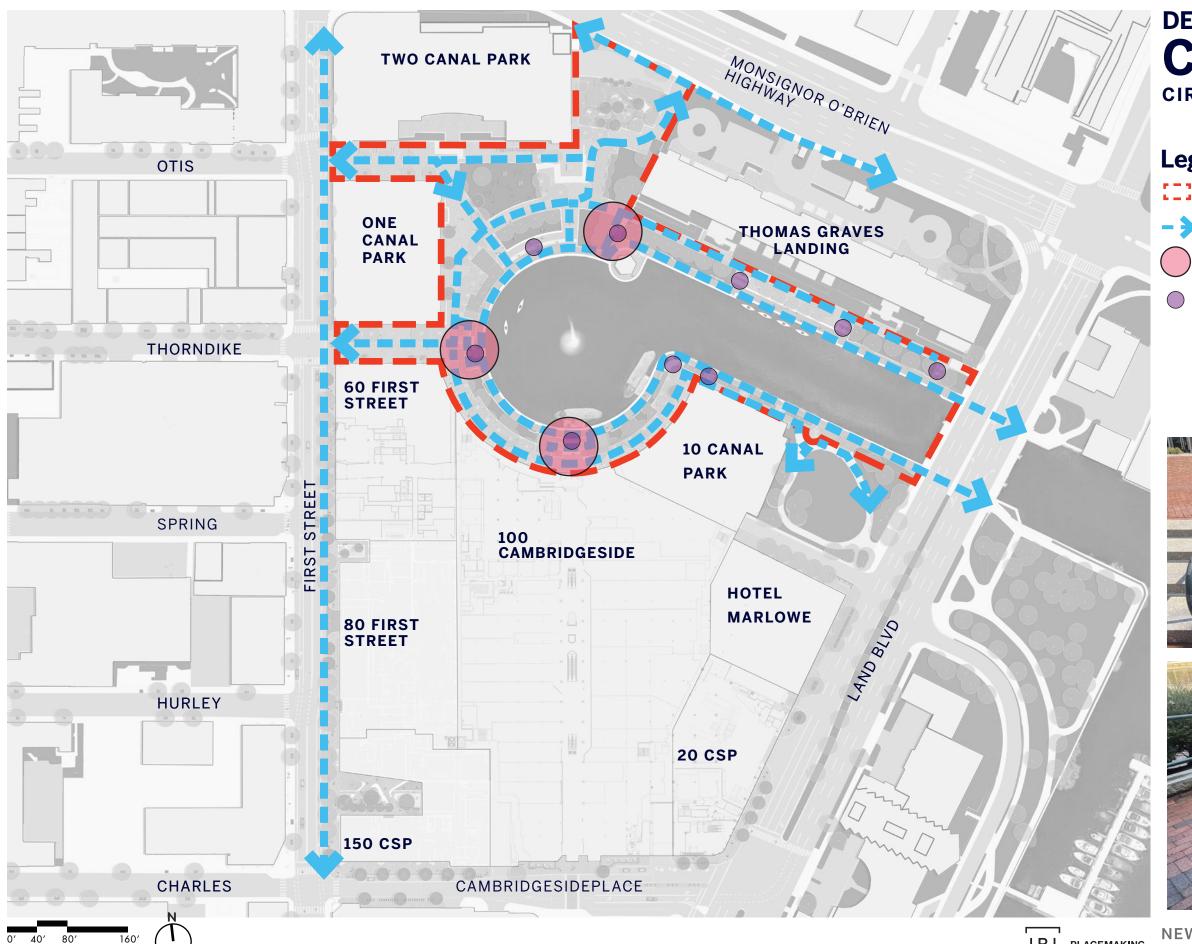


GRADING AT STAIR AND RAMP NEAR GAZEBO









#### **DESIGN REVIEW CANAL PARK CIRCULATION DIAGRAM**

#### Legend

PROJECT SITE





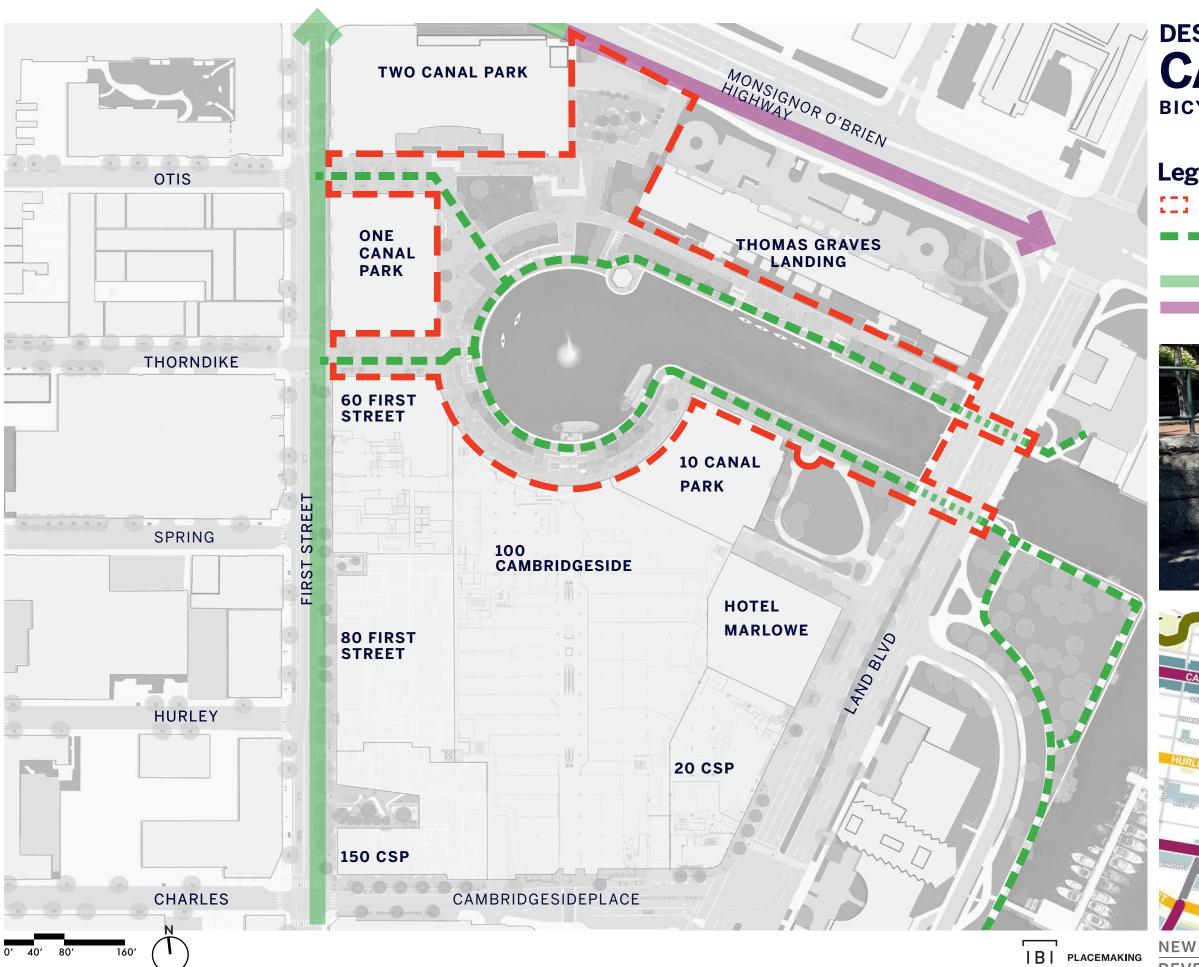
STAIR





NEW ENGLAND DEVELOPMENT |B| PLACEMAKING





#### **DESIGN REVIEW CANAL PARK BICYCLE CIRCULATION DIAGRAM**

#### Legend

PROJECT SITE

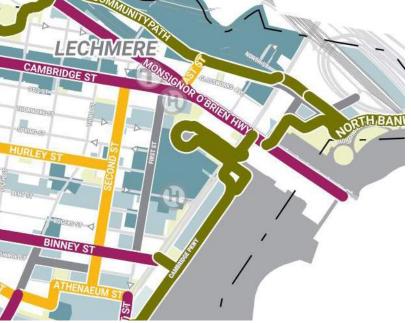
■ THE CAMBRIDGE BICYCLE PLAN:

"OFF-STREET PATH"

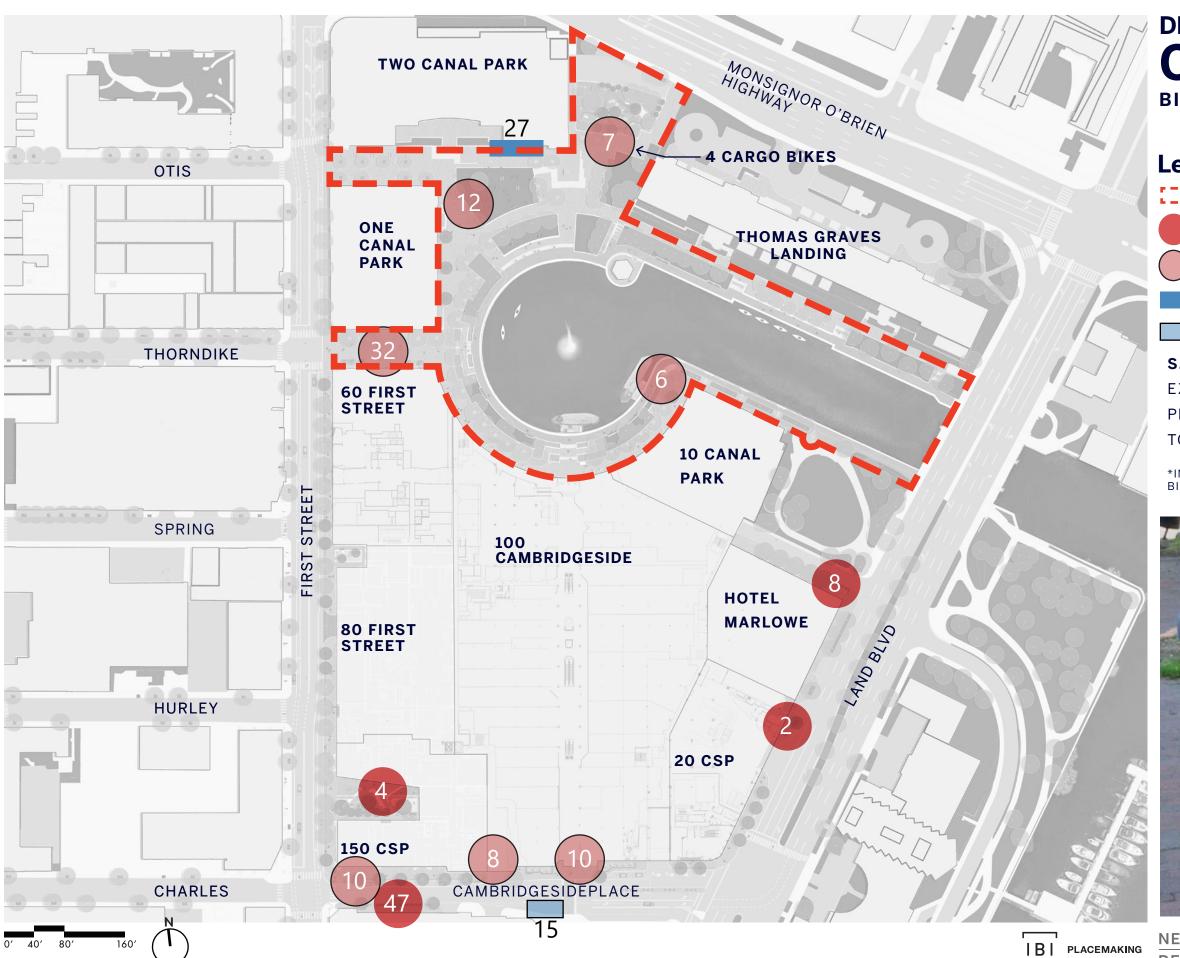
EXISTING BIKE FACILITY

EXISTING SEPARATED BIKE FACILITY





NEW ENGLAND DEVELOPMENT



**BIKE PARKING PLAN** 

#### Legend

PROJECT SITE

PROPOSED SHORT-TERM BIKE PARKING

EXISTING SHORT-TERM BIKE PARKING

PROPOSED BLUE BIKE LOCATION

EXISTING BLUE BIKE LOCATION

**S.T. BIKE PARKING:** 

**BLUE BIKE PARKING:** 

EXISTING = 85 PROPOSED = 61 EXISTING = 15 PROPOSED = 27

TOTAL = 146

TOTAL = 42

\*INCLUDING RELOCATED BIKE SPACES



DEVELOPMENT

ELKUS MANFREDI

Exhibit 49

#### **ENLARGEMENT PLAN**



## DESIGN REVIEW CANAL PARK

BLUE BIKE STATION LOCATION AND DIAGRAM

27 BLUE BIKE DOCK STATION

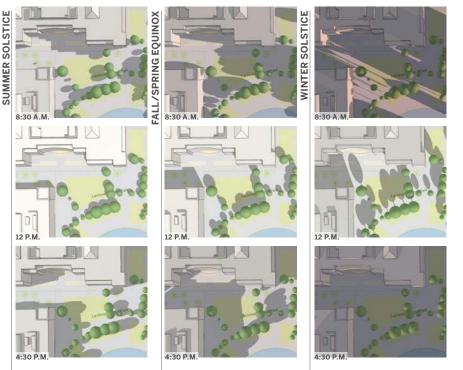
GOOD VISIBLE CONNECTION AND PHYSICAL PROXIMITY TO FIRST STREET

RELOAD AND MAINTENANCE ACCESS VIA LOADING AREA OFF O'BRIEN HIGHWAY

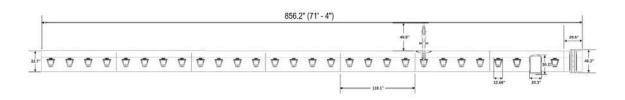
PROVIDES ACTIVITY AND ANIMATION TO THE OTIS STREET ALLEY

BLUE BIKE ACCESS FROM GREAT LAWN SIDE OF WALKWAY

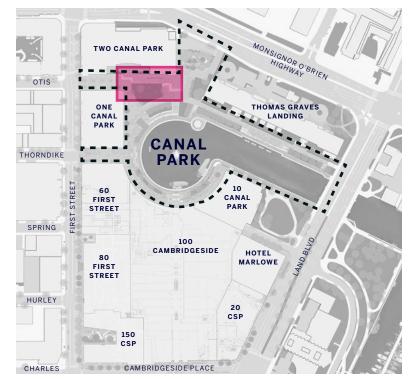
### SOLAR STUDY 80'



#### **BLUE BIKE STATION**



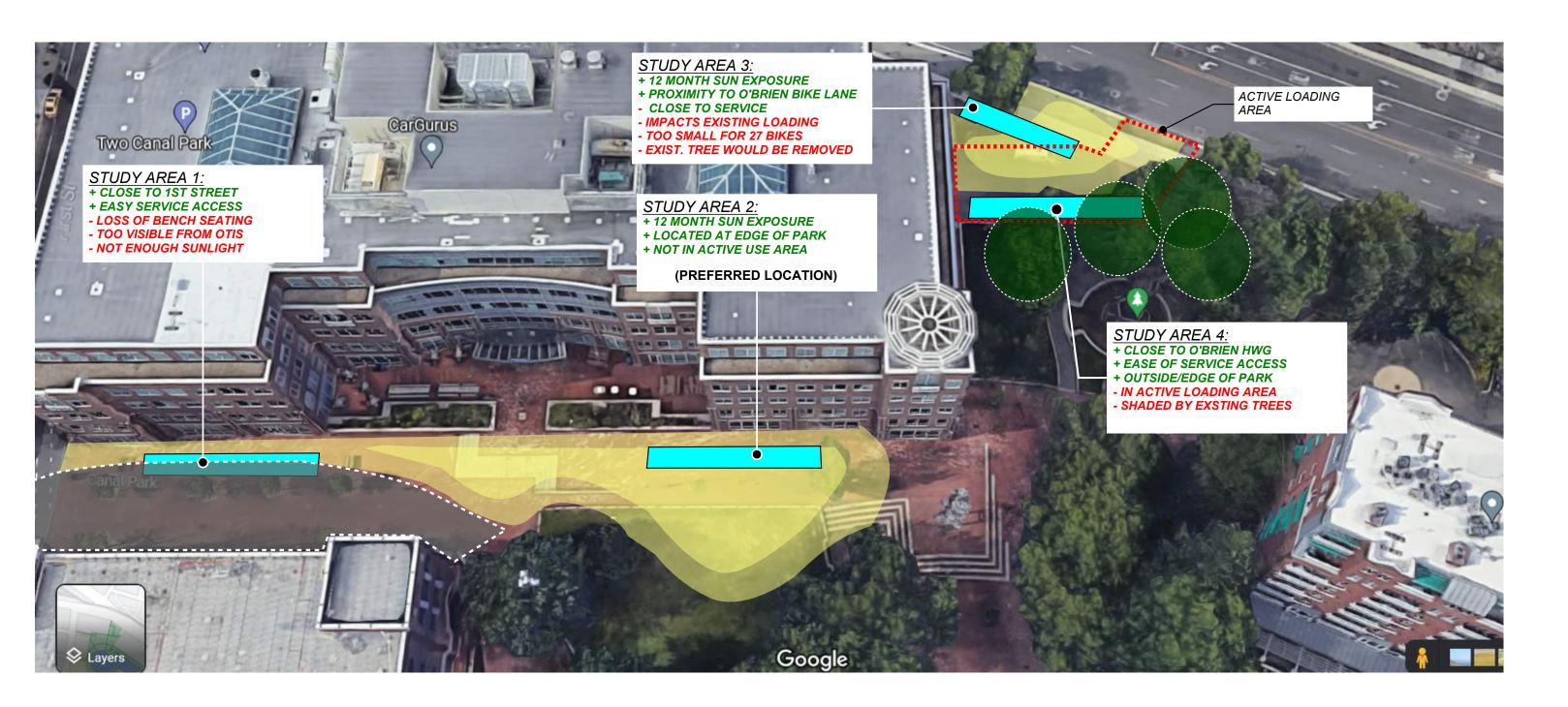




NEW ENGLAND DEVELOPMENT ELKUS MANFREDI
ARCHITECTS



#### **DESIGN SUPPLEMENT CANAL PARK BLUE BIKE STUDY AREAS**







#### **DESIGN SUPPLEMENT CANAL PARK**

**OTIS STREET BLUE BIKE LOCATION AND VIEW CORRIDOR** 



VIEW CORRIDOR AT OTIS STREET

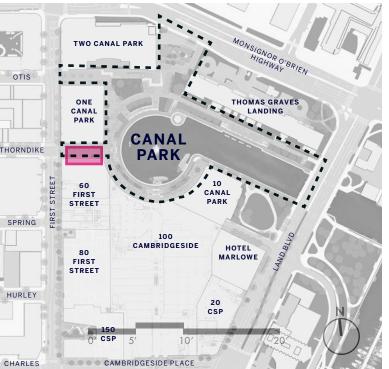
# EXISTING TO REMAIN 51' **60 FIRST STREET**

#### **DESIGN REVIEW CANAL PARK**

SHORT TERM BIKE PARKING **ENLARGEMENT PLANS** 

(32) THIRTY TWO BIKE PARKING SPACES





B | PLACEMAKING

NEW ENGLAND ELKUS MANFREDI ARCHITECTS

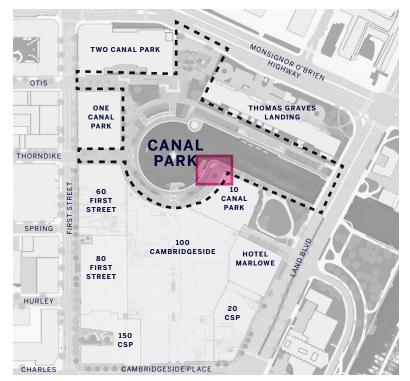




#### SHORT TERM BIKE PARKING **ENLARGEMENT PLANS**

(6) SIX BIKE PARKING SPACES





NEW ENGLAND ELKUS MANFREDI ARCHITECTS



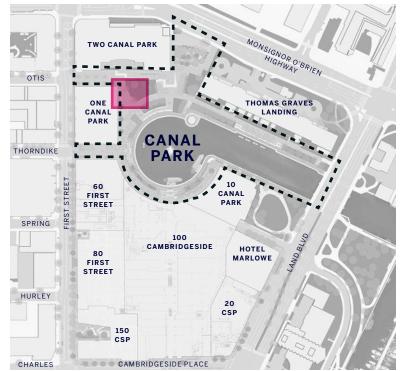
# **EXISTING TO REMAIN GREAT LAWN ONE CANAL**

#### **DESIGN REVIEW CANAL PARK**

SHORT TERM BIKE PARKING **ENLARGEMENT PLANS** 

(12) TWELVE BIKE PARKING SPACES





B | PLACEMAKING







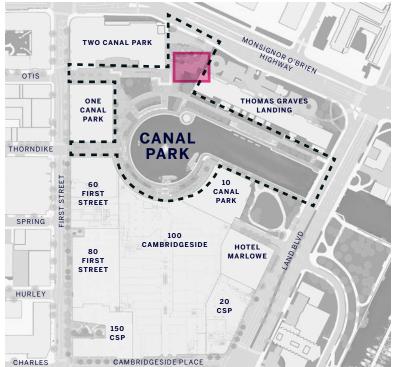
## RELOCATED EXISTING BIKE RACKS **THOMAS GRAVES LANDING**

#### **DESIGN REVIEW CANAL PARK**

SHORT TERM BIKE PARKING **ENLARGEMENT PLANS** 

(7) SEVEN BIKE PARKING SPACES





NEW ENGLAND ELKUS MANFREDI ARCHITECTS