



CONNECT KENDALL SQUARE FRAMEWORK PLAN: EXECUTIVE SUMMARY

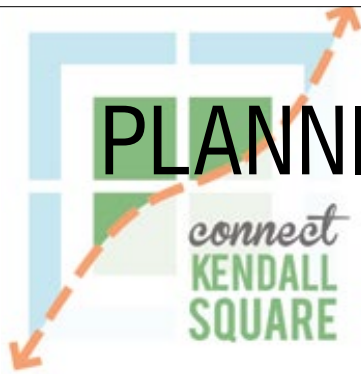
RICHARD BURCK ASSOCIATES, INC.
July 17, 2015

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1 INTRODUCTION



PLANNING & DESIGN GOALS

To achieve the Project Vision, the following Planning & Design Goals have been established to guide the participants in their work and to provide the Jury with the criteria to evaluate the work of the Teams.

1. DETERMINE A COHESIVE FRAMEWORK: Tie together existing and future open spaces throughout the Kendall Square/Eastern Cambridge area and provide connections to the Charles River. Define the relationship between public and private open spaces, the programmatic diversity to serve the evolving nature of the area, and the connectivity between each facility—enabling a systemic approach to open space design and creating a city-wide asset.

2. PROVIDE INCREMENTAL FLEXIBILITY: Recognize the changing needs and demands placed upon open spaces through programming and design that offer flexibility in use and evolution over time. Flexibility in use requires consideration of demands placed on spaces by adjacent uses, and that each open space does not have to provide everything in a singular location.

3. PROMOTE COMPLEMENTARY UNIQUENESS: Identify the role that new public open spaces to be developed in the near future will play in promoting community gathering, recreational opportunities, healthy lifestyles, and a better quality of urban life. Each open space should be recognized as an individual facility as well as a contributing part of the open space network.

4. CONNECT PUBLIC AND PRIVATE SPACES: Develop strategies for how future public and private open spaces will be integrated into the open space network over time as redevelopment plans are carried out. Provide guidelines that will allow future open spaces to best complement and enhance existing spaces in their design and function.

5. ESTABLISH ACTIVATION STRATEGIES: Establish programming and activation strategies that support the daily use of open space venues. Consider the rhythms of the day, seasons of the year, and extended use.

6. CELEBRATE COMMUNITY INCLUSIVITY: Consider concepts and access features that will be inclusive of community members from a wide variety of backgrounds, including residents, workers and visitors, of all ages and of differing levels of physical and cognitive ability.

7. INTEGRATE SAFETY, OPERATIONS, AND MAINTENANCE: Consider security, safety, and operational facilitation as essential issues to be incorporated in the Framework and open space programming and design.

8. CREATE A SUSTAINABLE FUTURE: Promote sustainable design and operation of open spaces—economically, culturally, and environmentally.

9. BUILD AN IDENTITY: Celebrate the uniqueness of the Kendall Square/Eastern Cambridge area through signage and way finding, public art, historic interpretation, and identity as a center of innovation.

10. ELEVATE THE USER EXPERIENCE: Create a rich experience for users based on the quality of open spaces and programming to promote social and cultural well being.

CONNECT KENDALL PROJECT VISION

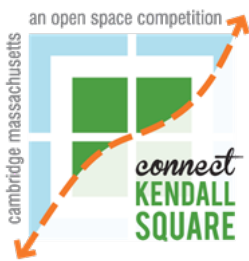
Kendall Square and Eastern Cambridge should be a destination, where the main attraction is the area itself, rather than employment, transit or any one particular building, space, structure, or event. Its identity is defined just as much by quality experiences, as it is by physical attributes, and geographic location. The public realm is a critical link between the growing industries in Kendall Square and the surrounding community, and represents a special opportunity for new types of interaction. The public realm should feel inviting and connected, and reflect both the innovative character of activities that happen within buildings and the open space needs of the existing and emerging community of residents, employees, and visitors. The public realm should be guided by a comprehensive framework that integrates common elements and features such as the history of the area, interactive public art and the significance of water in the area, and particularly the Charles River, which is a key contextual component of the open space system.

Open space in the area should include a range of unique experiences including different levels of interaction, gathering and community events, recreational opportunities, nature, water, public art, and history. There should also be a range of physical environments including revealing landscapes and views, natural features, paths and promenades, quiet reflective spaces, innovative parks and open spaces and vibrant, lively areas. New and existing open spaces should facilitate expanded programming hours for community events and gatherings, particularly after typical work hours and on evenings and weekends. Creative wayfinding tools should be used to connect open spaces within the public realm, including to better connect the Charles River to the area, both figuratively as well as through potential streetscape improvements. All connections should be safe, accessible and pedestrian and bicycle friendly.

- PAGE 5, CONNECT KENDALL COMPETITION MANUAL

This document represents the combined efforts of the citizens of Cambridge, Massachusetts, the City of Cambridge Community Development Department, and a diverse team of designers and public space analysts engaged **to reimagine the neighborhood of Kendall Square** in eastern Cambridge.

KENDALL SQUARE



Despite its name, Kendall Square today is best understood as a neighborhood, as the exact location of the “Square” is a long-standing subject of debate. Encompassing a broad business district, a significant portion of the Massachusetts Institute of Technology campus, and a mixture of low-rise residences and new, taller residential towers, Kendall Square is a diverse and thriving district for living, working, and learning. Kendall is optimally positioned between central Cambridge and downtown Boston, and is currently connected to other areas of Metro Boston by MBTA rapid transit, buses, and a complex network of shared vehicular and pedestrian streets that includes the Longfellow Bridge and Memorial Drive.

ECKOS AND CONNECT KENDALL SQUARE COMPETITION

Beginning in the spring of 2013, the City of Cambridge pioneered efforts toward developing a comprehensive open space plan for the neighborhood, which was called the Eastern Cambridge Kendall Square Open Space (ECKOS) Planning Study. An ECKOS committee was formed, “comprised of community and stakeholder representatives appointed by the City Manager to work with the larger community, city staff, and consultants to plan for the network of open spaces in the area” [City of Cambridge website: <http://www.cambridgema.gov/kendallopenspace>]. Regular, public committee meetings and a special session for community input helped the City identify opportunities for improvements to Kendall Square and eastern Cambridge’s parks, open spaces, and transportation routes and laid the groundwork for a nationwide design competition: “Connect Kendall Square: An Open Space Competition.”

The competition aimed to generate creative ideas and thinking on strategies to use open space and the public realm to better connect Kendall Square to surrounding neighborhoods, and also create a sense of place and identity. Coordinated by STASTNY: Architect and administered by the City of Cambridge the competition was organized into three graduated stages that spanned eight months. A diverse, five-member jury of experts with 1 alternate juror, narrowed the numerous initial applicant design teams to four finalists at Stage III. With guidance from City officials across a variety of departments, each of the four finalist teams produced Framework Plan reports laying out recommendations and creative visions for establishing a stronger network of open spaces in Kendall Square and its surrounding communities.

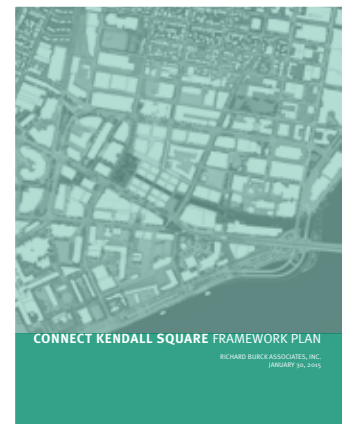
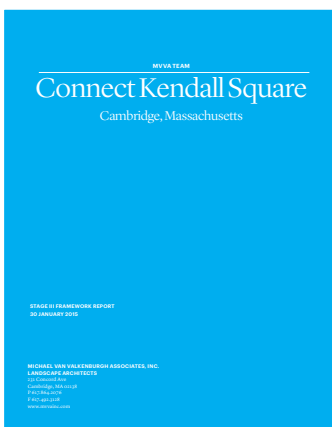
THE SELECTED FRAMEWORK

From the four Stage III finalists, the jury selected the Framework Plan written by a team led by the landscape architecture firm Richard Burck Associates (RBA). As described by the City, the selected Framework Plan “is structured on better connecting the Charles River to Kendall Square, and then better connecting Kendall Square to its surrounding parks, neighborhoods and MIT. This layered effort encompasses organizing new urban form to feature open space connectedness, connecting a series of sustainable stormwater strategies, and developing strong pedestrian connections throughout the project area” [Press

release; City of Cambridge website: <http://www.connectkendallsquare.com/wordpress1/wp-content/uploads/2015/04/Cambridge-Competition-Press-Release-Winner-FINAL.pdf>]]

The RBA team is a collaborative group of experts in the areas of landscape architecture, urban planning, economic development, watershed protection, public arts, civil engineering, learning through play, traffic engineering, and environment and soils. As outlined in the initial Competition Manual, the RBA-team set out to connect four new or renewed park parcels identified by the City. The selected Framework Plan delivers clear design goals also emphasizes that the City must work cooperatively across property lines to create highly functional, meaningful, and innovative open spaces and to establish an enriched identity for Kendall Square.

In the words of the City of Cambridge: “The winning framework plan will serve as a means of informing park designs, the character and role of both public and private open spaces in the area, and even decisions regarding infrastructure, city policy and future development.” [City of Cambridge website: <http://www.cambridgema.gov/kendallopenspace>]



THIS DOCUMENT

Following the City’s selection of the Framework Plan, the RBA team was engaged to continue work on their Framework Plan. For a period of two months, the RBA team held meetings and received critical feedback from City Departments (including Traffic, Parking and Transportation) and also presented their progress to the ECKOS Committee in a public meeting. This document may be thought of as the product of a “Stage IV” effort, and the goals of this final report are to distill, clarify, and further develop Framework Plan concepts to be most useful and implementable to the government and citizens of Cambridge.

It is the hope of the authors of this document that, as parklands are designed and built in Kendall Square, private parcels are developed or redeveloped, and transportation and infrastructure projects are undertaken in the future, designers, engineers, developers, and City officials alike look to this document for guidance and inspiration.



GRAND JUNCTION PORTAL

BROAD WETLAND

BROAD MARKETPLACE

BROAD SQUARE

POINT P

WEBSTER STREET

HAMPSHIRE STREET

CARDINAL MEDEIROS AVENUE

BINNEY STREET

FULKERSON STREET

SIXTH STREET

FIFTH STREET

BROADWAY

HARVARD STREET

PORTLAND STREET

WASHINGTON STREET

GALLEO GALLET WAY

LOUGHREY WALK

AMES STREET

BROADWAY

MAIN STREET

MAIN STREET

ALBANY STREET

VASSAR STREET

AMES STREET

DEACON STREET

HAYWARD STREET

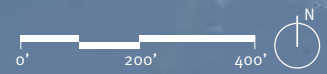
WADSWORTH STREET

AMHERST STREET

MEMORIAL DRIVE

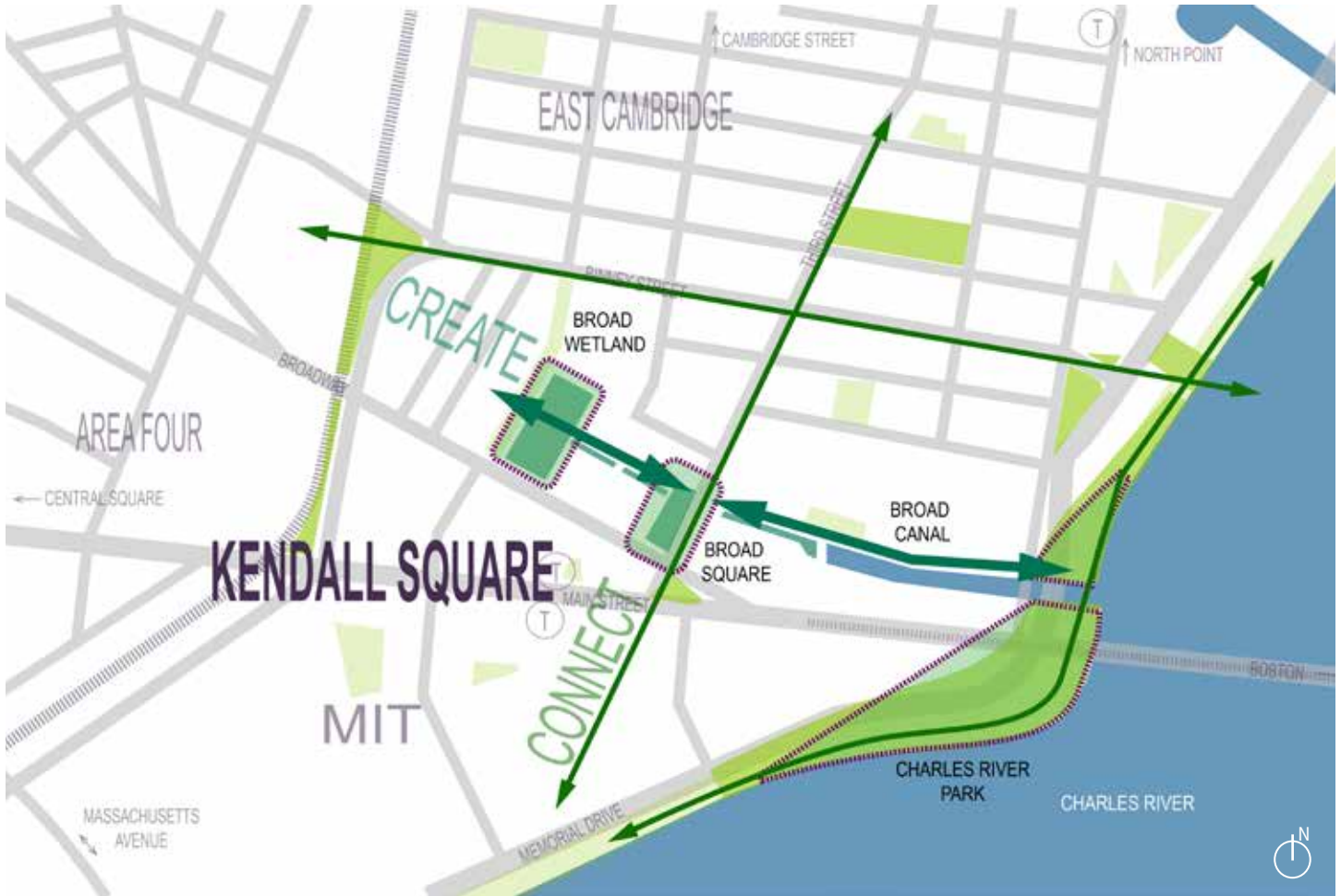


CONNECT KENDALL FRAMEWORK PLAN



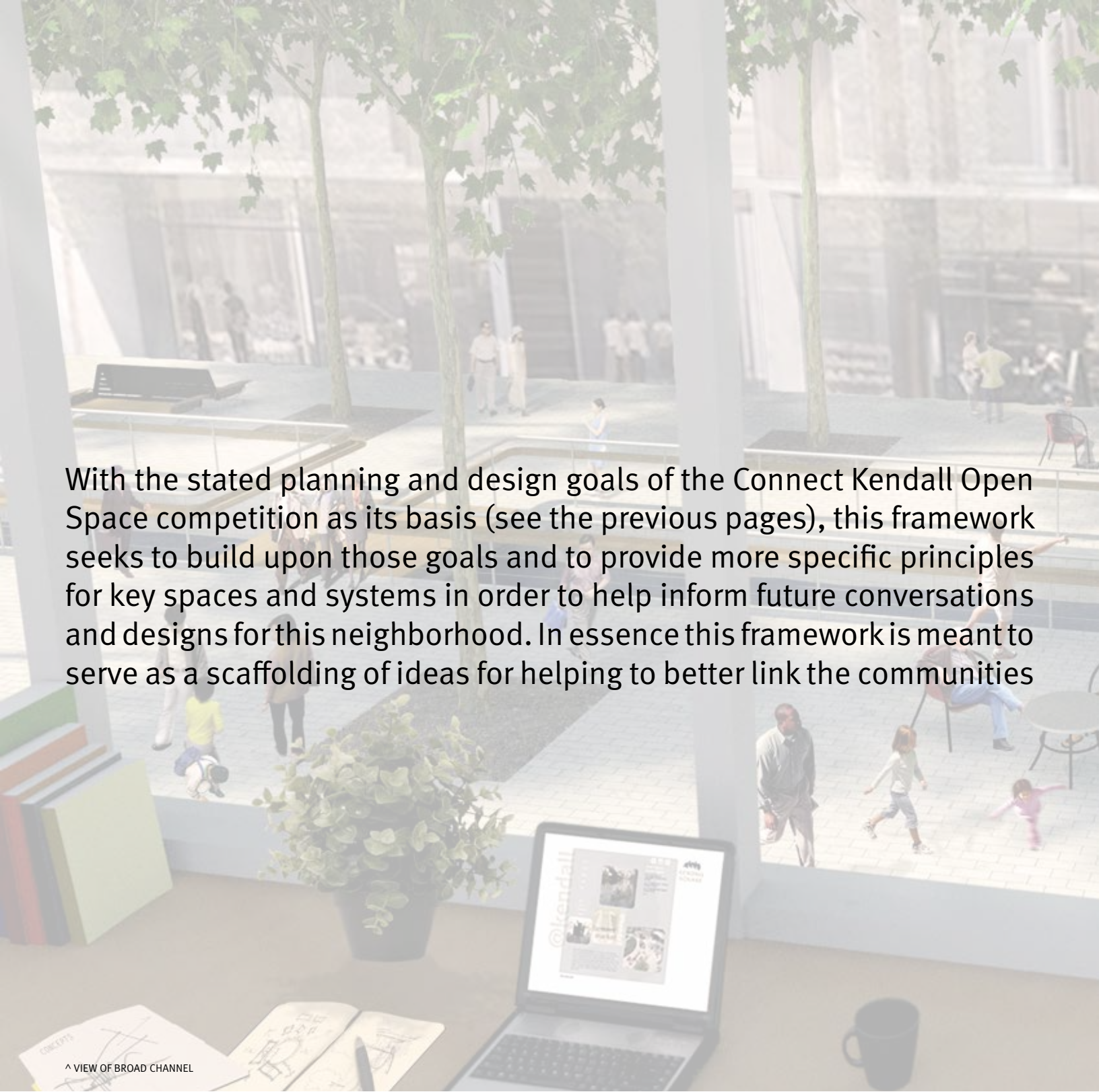


2 FRAMEWORK PRINCIPLES




^ CONNECT & CREATE FRAMEWORK PRINCIPLES

We propose to reestablish water as a basis of both sustainability and circulation while at the same time, seeking to weaken the scar tissue of super blocks and allowing finer grained circulation patterns to emerge through them. Our design framework is a combination of two related design efforts, the first being to **CREATE** Kendall Square and the second, to **CONNECT** Kendall Square.



With the stated planning and design goals of the Connect Kendall Open Space competition as its basis (see the previous pages), this framework seeks to build upon those goals and to provide more specific principles for key spaces and systems in order to help inform future conversations and designs for this neighborhood. In essence this framework is meant to serve as a scaffolding of ideas for helping to better link the communities

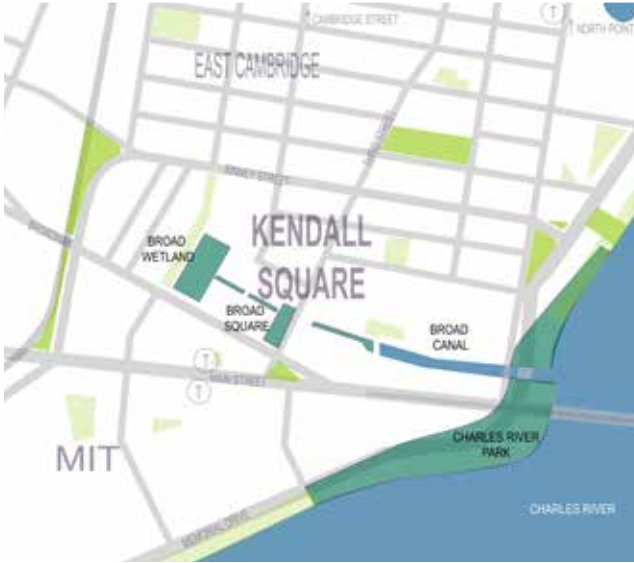
^ VIEW OF BROAD CHANNEL

An architectural rendering of a public square. The scene is viewed from an elevated perspective. In the foreground, a paved plaza with a brick pattern is visible. A woman in a red jacket sits on a red metal chair on the left. A large, red, triangular canopy is positioned near a tree. In the middle ground, a family of three (a man, a woman, and a child) is walking. A man in a wheelchair is also present. To the right, a group of people is sitting on a long, dark-colored bench. In the background, a multi-story building with large windows and a stone facade is visible. More people are scattered throughout the square, some sitting on other benches or chairs. The overall atmosphere is one of a vibrant, accessible public space.

and open spaces of Kendall Square. The ideas contained within this document represent the distillation of those developed and presented throughout the competition process as well as the making explicit of previously implicit design thinking. From this process we have developed a list of principles, noted on the following pages, that serve **to create and to connect Kendall Square.**

CREATE KENDALL SQUARE

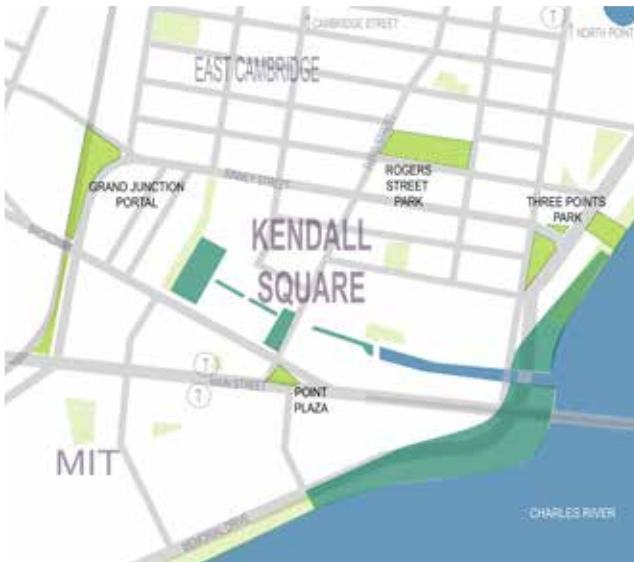
Implicit in the Framework Plan is the establishment of a sequence of connected open spaces that aim to generate a greater sense of place for Kendall Square – spaces that are civic, ceremonial, sustainable, vital in their programming and authentic to the neighborhood. Drawing upon the history of the place, the plan aligns a central pedestrian corridor with the Broad Canal and Channel, connecting key spaces to a corridor animated by water, art, retail and lighting with the goal of creating an enhanced public realm core for Kendall Square. It should be noted that these spaces are not owned by the City.



Key spaces:

- Broad Wetland
- Broad Square
- Broad Canal
- Charles River Park

^CREATING OPEN SPACE



Critical to the Framework Plan is the creation of a series of parks that are compelling and complementary. These parks are meant as local resources for their immediate and the larger community. They are intended to bring people together. The parks should be created from natural materials to support play that is inventive and adventurous allowing discovery and growth. They should be multi-generational and multi-seasonal.

Key parks:

- Grand Junction Portal
- Rogers Street Park
- Three Points Park
- Point Plaza

^CREATING A SERIES OF PARKS

CONNECT KENDALL SQUARE

Making a stronger and more visible connection between Kendall Square and the Charles River allows the history of the Canal and the River to re-enter the district; to extend and strengthen the Broad Canal connects the interior of Kendall Square to a greatly improved Charles River Esplanade.



Key connections:

- **Extend the Broad Canal to Third Street**
- **Create Broad Channel from Third Street to Broad Wetland**
- **Create Broad Wetland adjacent to Sixth Street pedestrian walk**

Connect Circulation through Kendall Square – increase integration of all modes of circulation throughout Kendall Square.

- **Create Grand Junction Bicycle / Pedestrian Path as conceived**
- **Work with DCR to greatly improve pedestrian / Bicycle circulation along the esplanade**
- **Work with developers, building tenants, the MBTA, and City agencies to greatly improve pedestrian T passageway through Marriott Hotel**

^ CONNECTING TO THE CHARLES RIVER



Connect Kendall Square's Stormwater System – employ an integrated, sustainable and intelligible stormwater system.

- **Use the Broad Wetland to collect rain water from its immediate catchment area, to address water quality issues through landscape measures.**
- **Collect from the proposed Volpe development and adjacent parcels roof run-off to re-use it for site irrigation, and proposed water features**
- **Reduce imperviousness through pavements and plantings.**
- **Encourage stormwater infiltration within the parks.**
- **Integrate Best Management Practices, such as bioswales, within the streets wherever possible.**

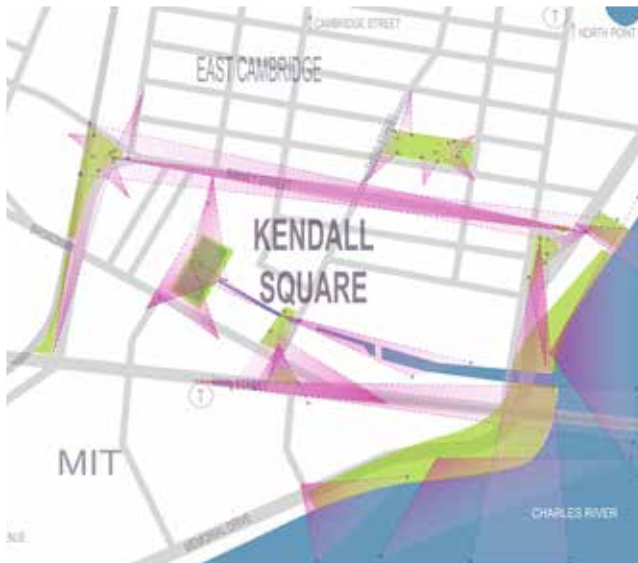
^ CONNECTING TO STORMWATER SYSTEM

Connect Kendall Square Visually – by first, associating new open spaces with key circulation corridors so that their visual presence is maximized and secondly, by developing the Volpe Center as a pedestrian-centered district, integrating art with daily circulation and through the strategic use of lighting design.



- Extend Broad Canal to Third Street to increase its visibility closer to the heart of Kendall Square
- Step back the proposed massing at the Volpe at the corner of Third and Broadway to frame Broad Square
- Visually link Point Plaza to the new open space at Volpe to provide a more expansive gateway into Kendall Square and Cambridge

^INCREASE VISIBILITY



- Make a visual connection through the Volpe to the Broad Canal through the Broad Channel corridor
- Locate the Broad Wetland at the Sixth Street pedestrian corridor and Broadway to make a strong visual and physical connection for pedestrians and drivers alike
- Integrate art and special lighting with daily circulation routes to enliven those spaces

^VISUAL CONNECTION

Connect Kendall Square to its Open Spaces – As a key component to providing a greater sense of connectivity, a “dendritic pattern” is overlaid onto the Framework Plan to establish a rich open-space network throughout Kendall Square. The dendritic pattern, a formation that can be observed in nature from the scale of neurons to tree roots to continental river systems, is not just an artistic move. Overlaying this pattern would accomplish multiple goals and function on many levels that will be discussed in the following chapters: pedestrian connectivity, economic development, stormwater mitigation, play and learning, public art, and wayfinding.



- Seek to make these routes pedestrian and cyclist friendly and places of learning and exploration wherever possible.
- Connect these routes to residential neighborhoods and nodes of commercial activity wherever possible so as to encourage the mixing of the various communities.
- Create routes that are eventful, providing spaces that may include stormwater storage and other sustainable features, sculpture, special lighting, small play elements, special paving and seating.

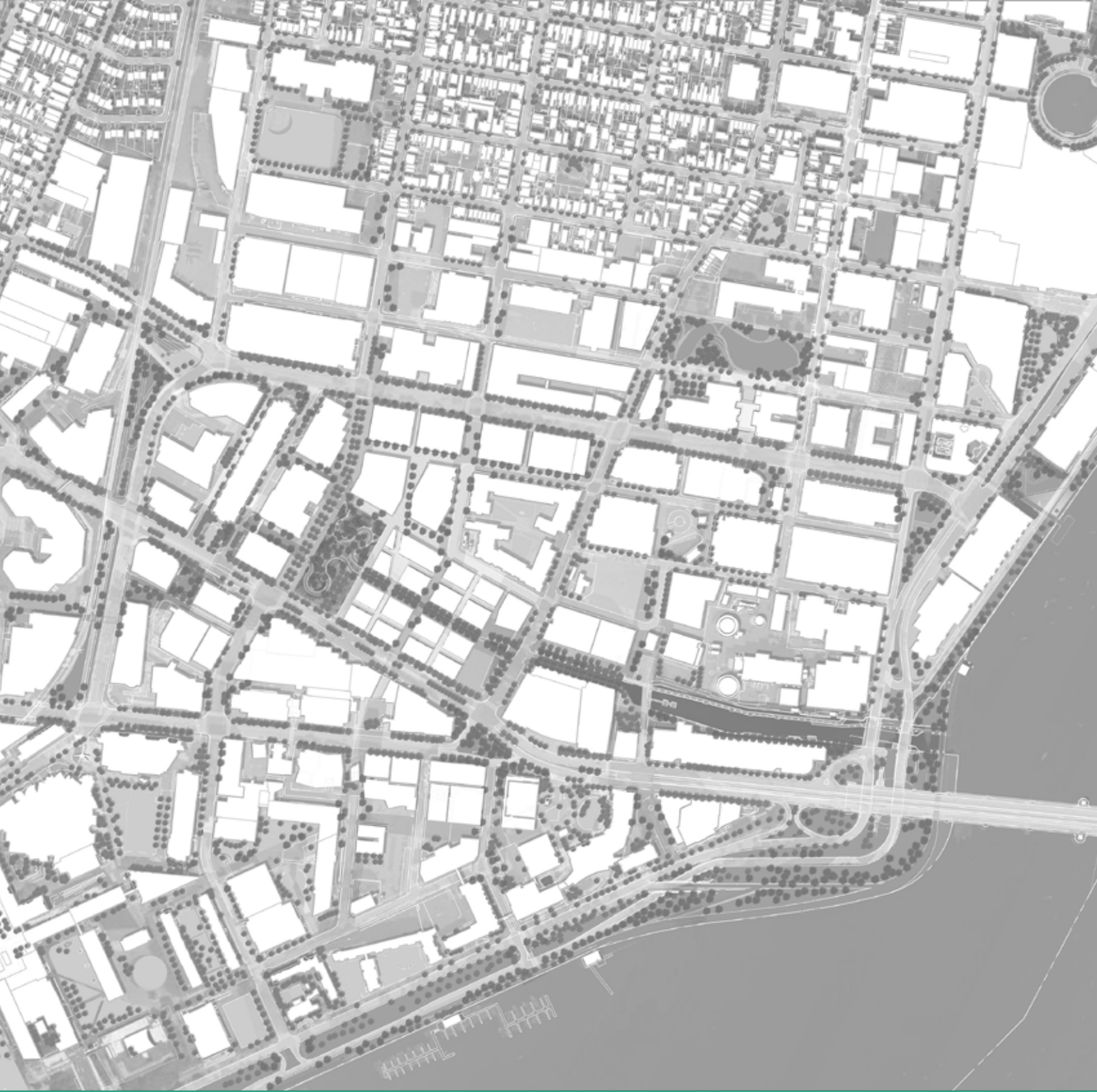
^A DENDRITIC PATTERN ESTABLISHES CONNECTION

Connect Kendall Square to Itself – make Kendall Square a resource for its larger population.



- Create a destination marketplace for food including groceries, restaurants, cafes, and farmer’s markets.
- Provide opportunities to promote and enhance local retail.
- Create a destination marketplace of ideas including start-up, incubator, and hive spaces with shared resources to encourage entrepreneurialism throughout the District.

^CREATE A DESTINATION MARKETPLACE



3 CONNECTING WITH HISTORY

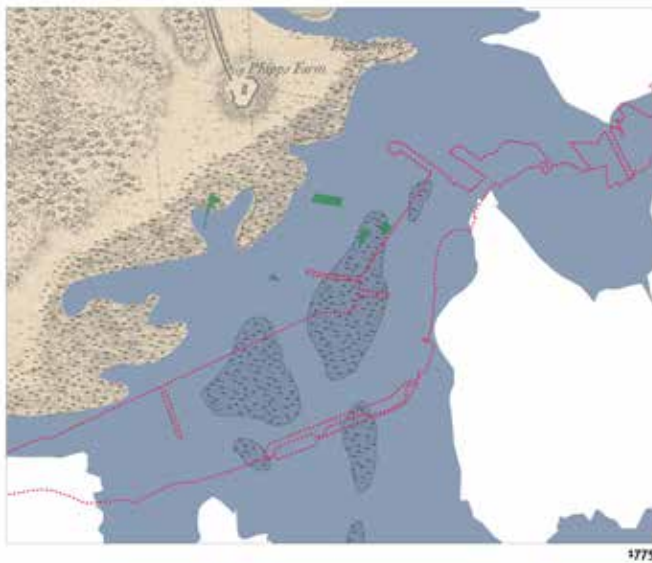
The history of Cambridge and Boston is an extensive story of geologic, environmental, and human change, and Kendall Square is no exception. The Framework Plan looks to the future of Kendall Square, but does so with a firm understanding of the neighborhood's topographic, hydrologic, economic, and social roots. From cultural migrations to industrial revolutions and a legacy technological innovation, Kendall Square's history is far too complex to be addressed explicitly within this report, **but perhaps the most relevant component of its history – a distinct and defining thread that runs through the neighborhood's history – is the relationship Kendall Square has had with water.**

THE ‘GREAT MARSH’

In the thousands of years between the final retreat of Ice Age glaciers and the arrival of European settlers, the area now known as “Kendall Square” was a naturally occurring wetland ecosystem. Appearing on the first known maps of the area with names like “The Great Marsh,” the territory “between Captain’s Island [now Magazine Beach] and East Cambridge” was “one continuous unbroken marsh” [History of Cambridge, Massachusetts. 1630-1877. With a genealogical register by Paige, Lucius R.; published 1877]. The marsh’s brackish soils and tidal waters would have been home to native grasses and perennial plant species and a range of birds, small mammals, and aquatic species including oysters and fishes.

EUROPEAN SETTLEMENT

People of European origin were certainly not the first humans to settle in the area, but it has been their pattern of development that has most dramatically altered the native condition. With the founding of Charlestown in 1628 and Boston and Cambridge in 1630, the region began to undergo great change: to support the growing needs of a growing population, forests were cleared for agriculture and hills were flattened and lowlands were filled for the building of structures and routing of roads. Initially, the impact of these changes was clustered around the three neighboring areas of the Charlestown Peninsula, Boston’s Shawmut Peninsula, and central Cambridge, but in eastern Cambridge, isolated homes and farms began to spring up and a fledging network of cart paths and roads began to grow through the 1700s.



INDUSTRY, LAND DEVELOPMENT & THE CANALS

In the mid-1800s, the most consequential changes began. As a product of the Industrial Revolution, undulating tidal flats began to be drained and flattened for development and land speculation. Serving the dual purpose of establishing shipping corridors and providing valuable excavated fill for adjacent land owners, a campaign of canal-building began. Though only two canals still be recognized today, a half-dozen canals were cut through the marshland of eastern Cambridge. Most notably for Kendall Square, on the approximate alignment of a native estuary, “Little Cove,” the stone-edged waterway known as the Broad Canal was constructed. In the decades that followed, the Charles River Embankment was constructed to provide a reinforced edge along the Charles River and provide more land ready for development. By the early 1900s, the canals and road network had enabled Kendall to grow, and maps show a tight urban street pattern bridging the canals and connecting factories, warehouses, shops and homes.

URBAN REDEVELOPMENT

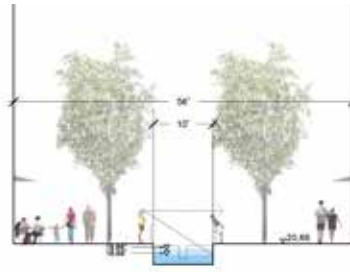
In the mid-1900s, the majority of Kendall Square’s slow-grown urban fabric was wiped clean. With the arrival of new technology, the increased popularity of the personal automobile, and post-war prosperity, “urban redevelopment” meant the creation of large “superblocks,” tall towers with excessive setback from local streets, and the erasure of two-thirds of the Broad Canal. Development continued for the remainder of the century in this pattern; an automobile-scale pattern of “office parks” turned their backs on the once-valued waterfront of Charles River and the remaining vestige of the Broad Canal.



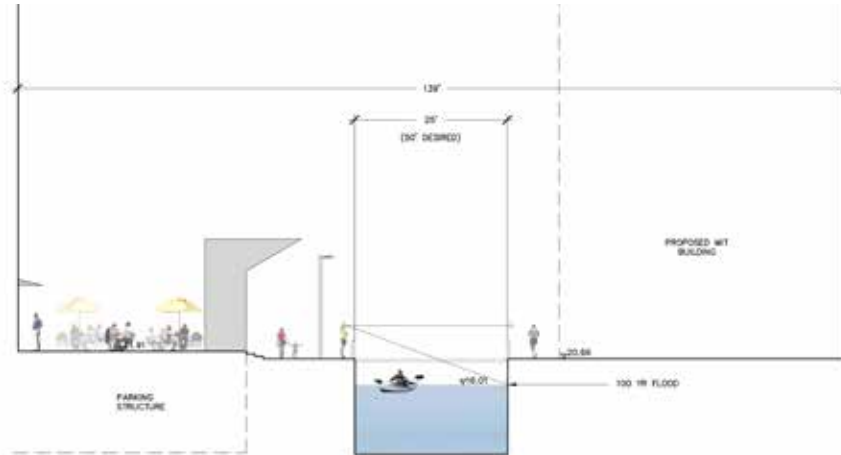
KENDALL SQUARE TODAY

Today, Kendall Square is a place of thriving development and is densifying into a livable, more walkable neighborhood. Over the last decade, the City of Cambridge has worked cooperatively with developers and other agencies to restore the sense of identity that was obscured by mid-century redevelopment.

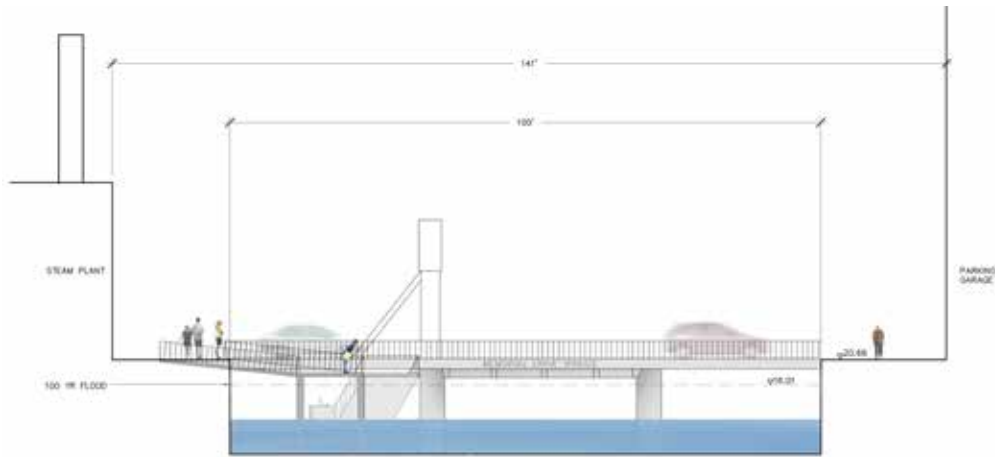
Some of the most successful steps taken by the City and private developers over the last few years are the implementation of bike infrastructure, the improvement of streetscapes to give priority to walking and other modes of transportation, and the construction of the Broad Canal Walk along the remaining piece of the Broad Canal. The Framework Plan strives to greatly expand and accelerate the recent strategies that have turned Kendall Square into more of a destination than a thoroughfare and have, quite importantly, re-established the neighborhoods critical, historical relationship with water.



A. BROAD CHANNEL: THROUGH MARKETPLACE

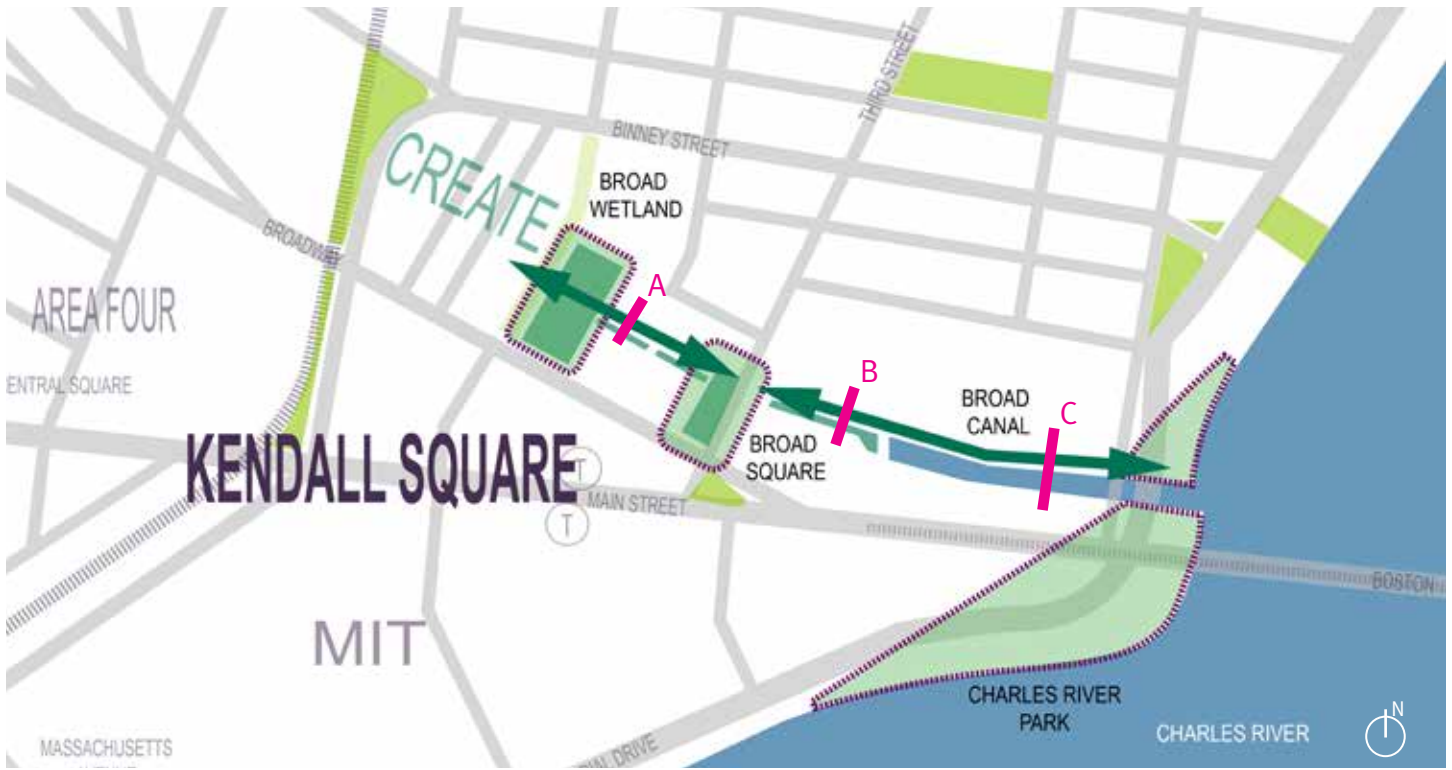


B. BROAD CANAL: RECONSTRUCTED



C. BROAD CANAL: EXISTING (WITH SUNKEN BRIDGE BEYOND)

^ SECTIONS OF THE PROPOSED WATER SEQUENCE



^ OPEN SPACES CREATED ALONG A CENTRAL PEDESTRIAN SPINE

CREATE KENDALL SQUARE: LINKING THE FUTURE WITH THE PAST

Looking to the future, the Framework Plan recommends a series of open spaces connected along a central pedestrian spine. This overall spatial pattern, as well as the proposed character of each of its key spaces, is inspired and informed by the history of water in Kendall Square. The relationships between the key spaces and their hydrologic histories:

BROAD WETLAND

Before human development filled and drained this land about two centuries ago, the native condition of this specific site was that of a wetland ecosystem. Harkening back to the historic Great Marsh shown on historic maps, Broad Wetland would reestablish a natural visual aesthetic over the site, and the constructed wetland would have ecological benefits, both measurable and immeasurable. For hundreds of wildlife species – plants, fish, amphibians, birds, and mammals – Broad Wetland would offer approximately 2 acres of rich, balanced habitat. From the perspective of stormwater, the constructed wetland would allow for some retention for aquatic species and would aim to restore natural infiltration patterns to help improve water quality for the area and its tributary, the Charles River.



^ BROAD WETLAND PROVIDES HABITAT





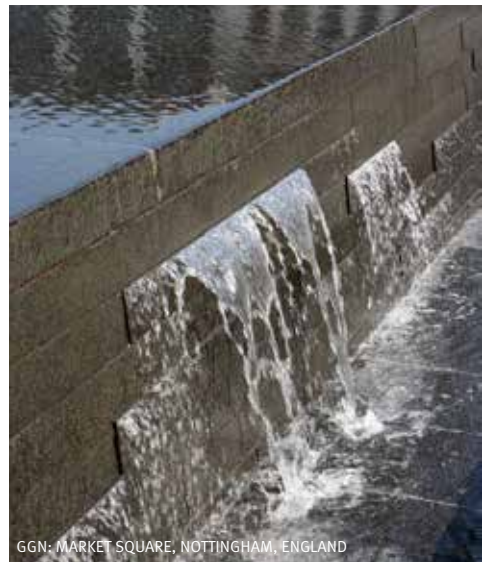
TOWNSEND LANDSCAPE ARCHITECTS: LONDON, ENGLAND



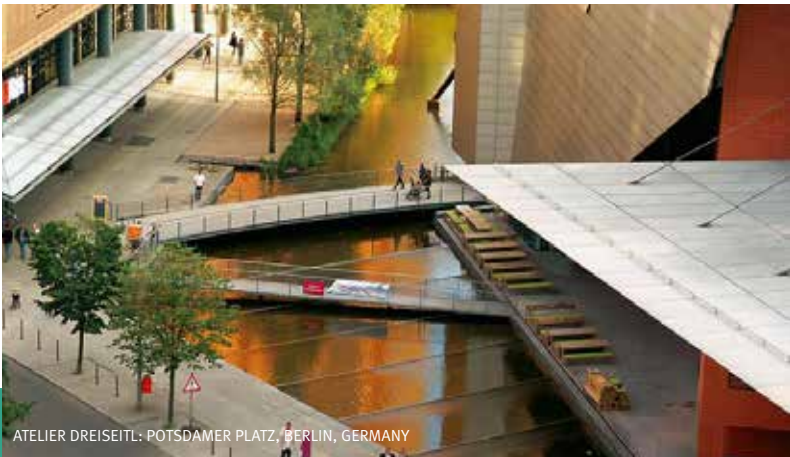
GUSTAFSON GUTHRIE NICHOLS: MCCA HALL, SEATTLE, WASHINGTON



MÁS ARQUITECTES: BANYOLES, SPAIN



GGN: MARKET SQUARE, NOTTINGHAM, ENGLAND



ATELIER DREISEITL: POTSDAMER PLATZ, BERLIN, GERMANY



EUROPEAN WATER CONVEYANCE CHANNEL

^ PRECEDENT IMAGES

BROAD CANAL

Currently extending roughly one thousand feet from the Charles River, the alignment of the historic Broad Canal appeared on multiple maps from the 17th and 18th centuries and reached into Cambridge nearly three quarters of a mile to meet the Grand Junction rail line. Though now only one vestigial segment of the Broad Canal remains, the Framework proposes to reconnect Kendall Square to this waterway by pulling water back into the neighborhood, tracing its historic path, and using it to link key spaces along its route. The design of the Canal as it moves back into the neighborhood would be carefully modulated based on site conditions and would serve to connect the proposed large open spaces of the Broad Wetland, Broad Square, and Charles River Park to one another. Beginning at the Broad Wetland and moving back towards the River, the Canal is described in four parts, these being:

- **Broad Channel** - The Framework acknowledges that it is unfeasible to restore the entire length of the Broad Canal as a full-depth, navigable waterway. With this in mind, the section west of Third Street, is seen as an opportunity to interpret, or “trace,” the historic footprint of Broad Canal in a way that complements the development of open spaces and private development in Kendall Square. Emulating the ancient hydrologic pattern of Little Cove, the shallow, linear Broad Channel would drain stormwater away from Broad Wetlands and direct flows toward the Charles River.
- **Broad Weir** – Just west of Third Street, the shallow Broad Channel would fall over a weir into the full-depth Broad Canal. The created waterfall, perhaps only a few feet in height, would be a visual and acoustic celebration of water’s presence in Kendall Square and illustrate the direction and changing volume of stormwater flows in the days and hours following a storm event. The elevation and engineering of the weir would ensure that there is no increased flood risk to surrounding businesses.
- **Broad Canal (reconstructed segment)** – Water drained from the Broad Wetland would fall from the Broad Channel into a restored section of the Broad Canal. While the requirements for this segment would not have to be as stringent as a true historic “restoration” [http://www.nps.gov/history/local-law/arch_stnds_10.htm], the reconstructed section should have the general proportions, navigable depth, and character of the Broad Canal that once existed on this site.
- **Broad Canal (existing segment)** – The existing section of the original Broad Canal should maintain the character it has today. Improved recreational access, including a ramped, sunken bridge, would bring people of all ages and physical abilities into closer contact with the Canal and Charles River. From the variety of conditions described above, stormwater flows departing this segment would have had increased opportunities for infiltration, biofiltration, cooling, and aeration, all of which are expected to improve water quality and promote healthy aquatic habitats in the Canal and beyond.

CHARLES RIVER PARK

At the mouth of the Broad Canal, Charles River Park is designed to add significant open space for the residents of Cambridge. The Charles River is an incredible city-wide asset, and one that is currently underutilized. The new park is intended to become a destination for Kendall Square, to provide environmental and social benefits for the City and the region. Wetland habitat edges may provide additional biofiltration opportunities for Charles River water as it flows toward Boston Harbor. (Please refer to pages 54-55 for an extensive description of Charles River Park.)

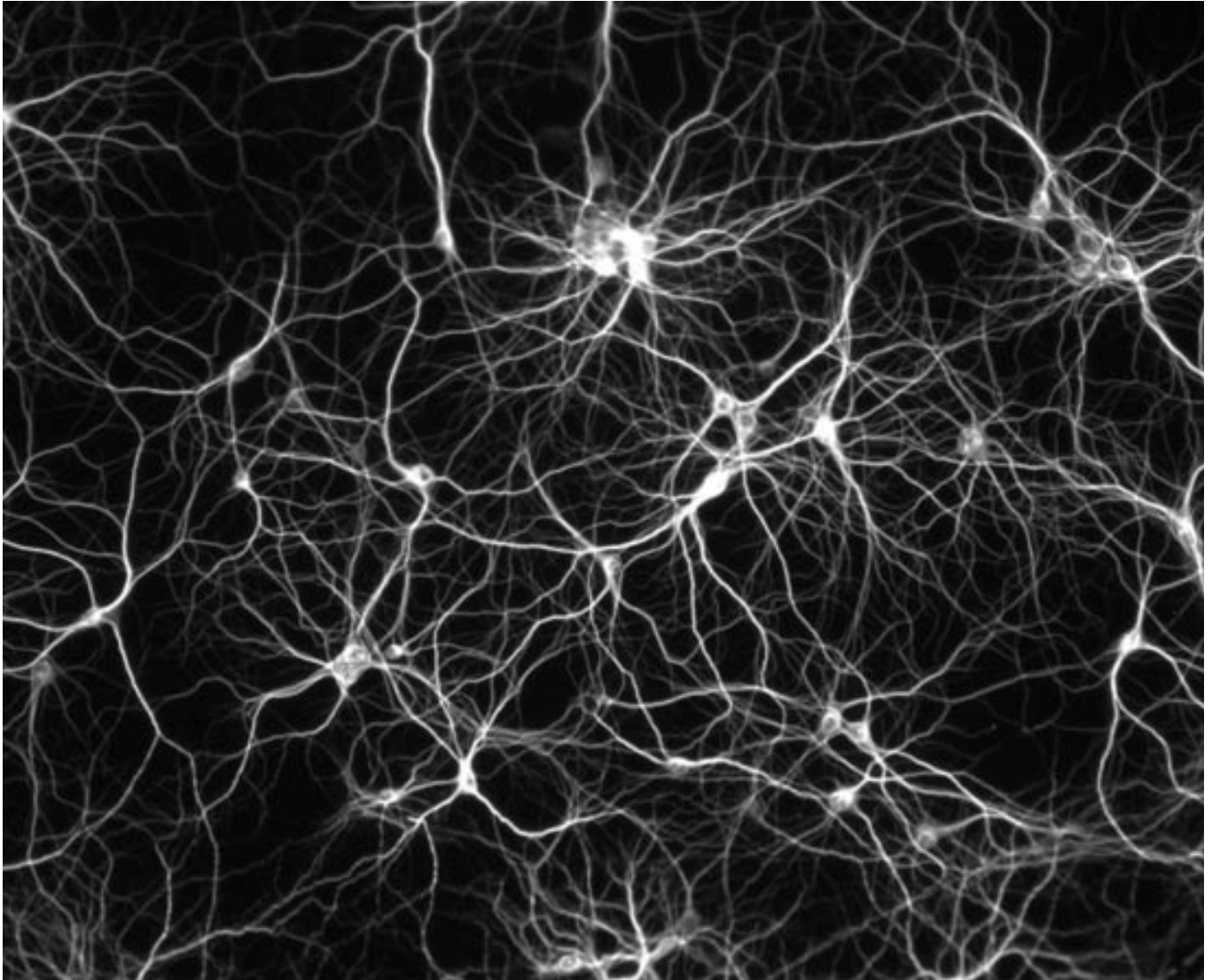


^ PROPOSED SUNKEN WALKWAY ALONG THE BROAD CANAL TO THE CHARLES RIVER





4 CONNECTING WITH CIRCULATION



^ Hippocampal neurons. Scale approximately 700 microns. Image courtesy of Paul de Koninck, Université Laval.

In developing a strong circulation framework the needs of pedestrians, cyclists, vehicles, and buses should be integrated into and reinforce the creation of a successful neighborhood center. This requires: strong links to and from the city center and its immediate surrounding context; a fine urban grain to encourage walking and cycling; a legible layout within the site to support wayfinding; and public spaces located at strategic points in the pedestrian movement network. The proposed Framework achieves these spatial qualities by creating **an integrated and legible street network between the four open spaces and by breaking down currently impenetrable blocks with a finer scale network and a walkable urban environment.**

Spatial accessibility **Multi-scale Proposed**



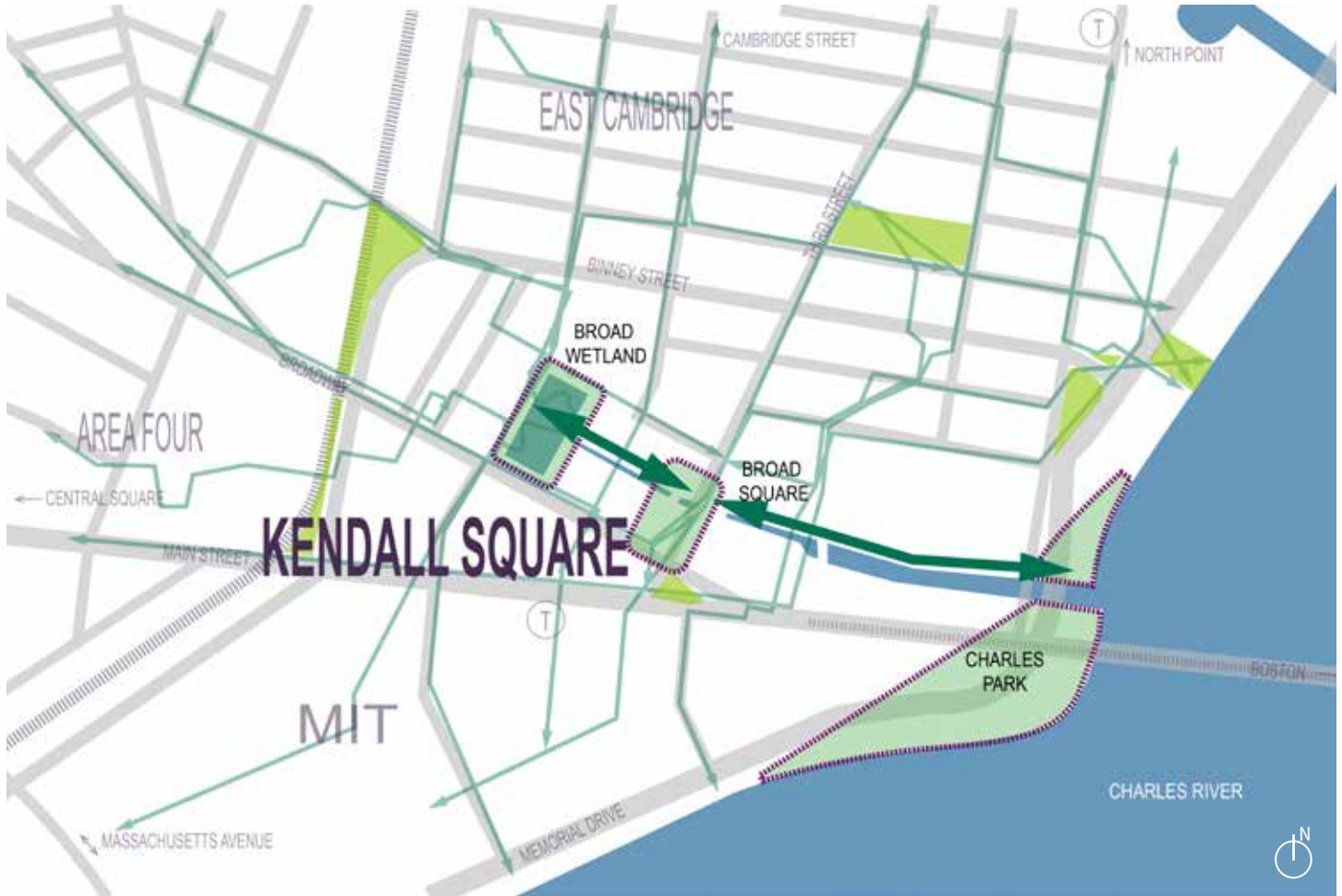
Cities are foremost places of social, cultural and economic transactions between people. They function at their best when they are made up of a legible route network with a fine urban grain, distributing movement conveniently into the surrounding context and creating a clear hierarchy of continuous, busy main roads with key attractors and more quiet side streets attached to them. Frequently, the same parts of the network are used on short- and long-distance journeys. Land use analysis shows that these multi-scale places are typically successful commercial locations, thus demonstrating the importance of promoting opportunities for retail in these corridors. A good city center supports a network of interlinked open and green spaces connected by streets lined with continuous, active frontages.

Currently the street network, particularly between Binney Street and Main Street, is fragmented and with very low degree of permeability. The lack of a finer local grid structure within this zone reinforces the adverse impacts of super-block planning by reducing route choices and increasing walking distances between local destinations. At the same time, Kendall Square does not fully exploit its potential to link to the waterfront, with the majority of the neighborhood cut off from the Charles River by fast moving north-south traffic and hazardous pedestrian crossings.

In order to create a more successful Kendall Square neighborhood, the plan recommends:

- **Provide strong links to the center through the Volpe site to create better access to and from the T as well as its immediate surrounding context.**
- **Establish a fine urban grain of paths and bikeways to break down the super blocks, to encourage walking and cycling, and to generate a greater flexibility of movement throughout the neighborhood.**
- **Create a legible layout that is easily navigable and strengthened by clear wayfinding strategies.**
- **Provide public spaces that are located at strategic points (such as Broad Square and the Broad Channel) in the pedestrian movement network i.e. the intersections of important pedestrian movement routes.**
- **Encourage active and continuous retail along both sides of Main and Third Streets to reinforce the existing businesses along these vital corridors.**

PEDESTRIAN CIRCULATION



^THE DENDRITIC PATTERN

As a key component to providing a greater sense of connectivity, a “dendritic pattern” is overlaid onto the Framework Plan to establish a rich open-space network throughout Kendall Square. In its current state, Kendall Square leaves its mix of inhabitants - residents, families, students, and daily office workers - in surprising isolation from one another. The proposed dendritic circulation pattern would implement one of the most promising interventions that can be made in such a situation: allowing people to more easily come together in the public realm. Regardless of ethnicity, age, or other demographics, the proposed tendril-like connections are an opportunistic, flexible and hidden circulation network that inhabitants and visitors alike can share. Like rivulets of water finding their way through small cracks in a large boulder, these tendril paths would carry pedestrians through superblocks, along neglected easements, and beyond existing obstructions.

This dendritic structure weaves its way through underutilized alleys and along street edges, and engaging existing and proposed parklands. It not only links the proposed open-space parcels within the project site, but also unites all open spaces into a legible, imageable system. Each route is based on field observation of existing conditions and use, as well as anticipated development. The success of the organic form lies in its flexibility. If unanticipated obstructions to implementation emerge, a path may be rerouted as necessary. These pathways are envisioned to have a recognizable and consistent design language through repetition of colors, paving materials, furnishings, and plantings. They promote travel by foot and, in many places, bicycles. These routes are to be designed so that they in many places they are safe enough for a young child to let go of their guardian’s hand and explore.

This approach strategically privileges the pedestrians and cyclists over the car and employs the following principles:

- **Create numerous and fine grained tendril-like patterns that merge and concentrate at Broad Wetland and pedestrian spine within the Volpe site.**
- **Employ the dendritic pattern strategy opportunistically as a means to break down the super-block pattern between Cardinal Meideros, Binney, Third, and Broadway and provide more direct routes throughout the neighborhood.**
- **Use pathways to express the unique character, history and mission of current land uses through Public Arts programming; lighting; and wayfinding measures.**
- **Establish a recognizable and consistent design language through repetition of colors, paving materials, special lighting, sustainable features, furnishings, and plantings**



This sequence of images describes one of the dendritic branches of the Framework Plan. This particular path seeks to link the residential neighborhoods of Area Four, through the existing commercial areas of Kendall Square, to the proposed new center at the Broad Canal marketplace.





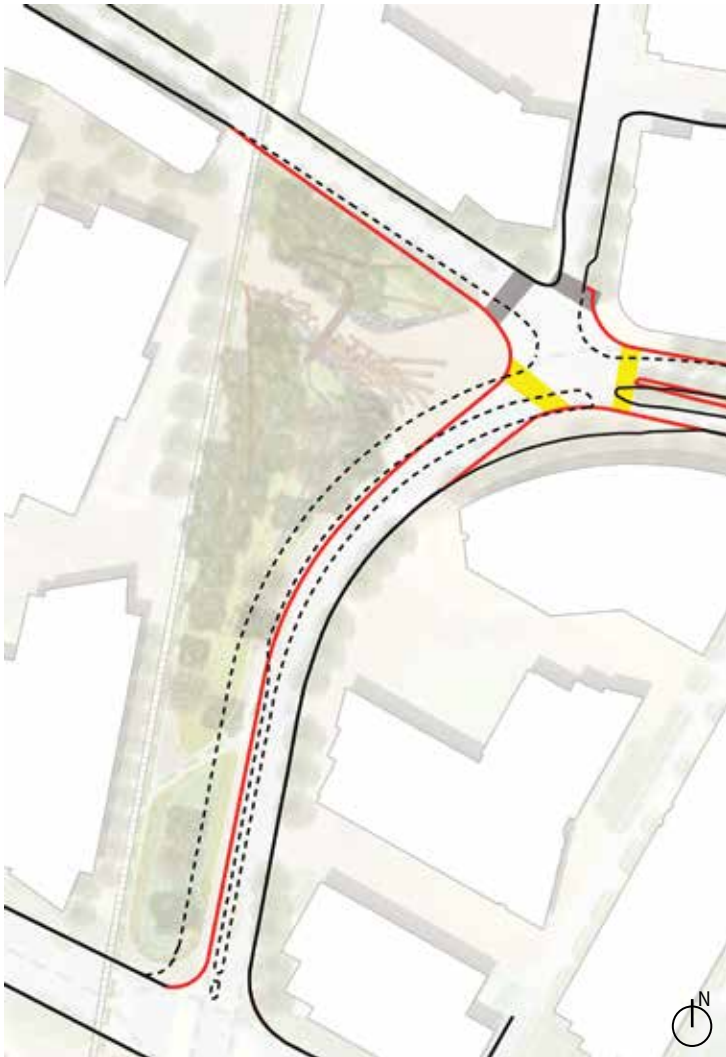
By using a consistent language of trees and site furnishings, the design of the path strives to create a pedestrian friendly environment. Through strategic insertions of public arts programming and/or interactive play elements, the path fosters a sense of playfulness and exploration.



ROAD GEOMETRIES

This Framework Plan spells out complex improvements for Kendall Square and East Cambridge, and a key part of this document makes site-design recommendations for each of the new/renovated open-space parcels. Each of the four parklands – Grand Junction Portal, Rogers Street Park, Three Points Park, and Point Plaza – is bounded on all sides by vehicular routes. Across the four sites, the design team has proposed a range of changes, from significant alterations of the site boundaries and curb-lines to minimal changes. The diagrams that follow clarify the changes from existing condition to that which is proposed for each park and plaza. The goals for each re-alignment are:

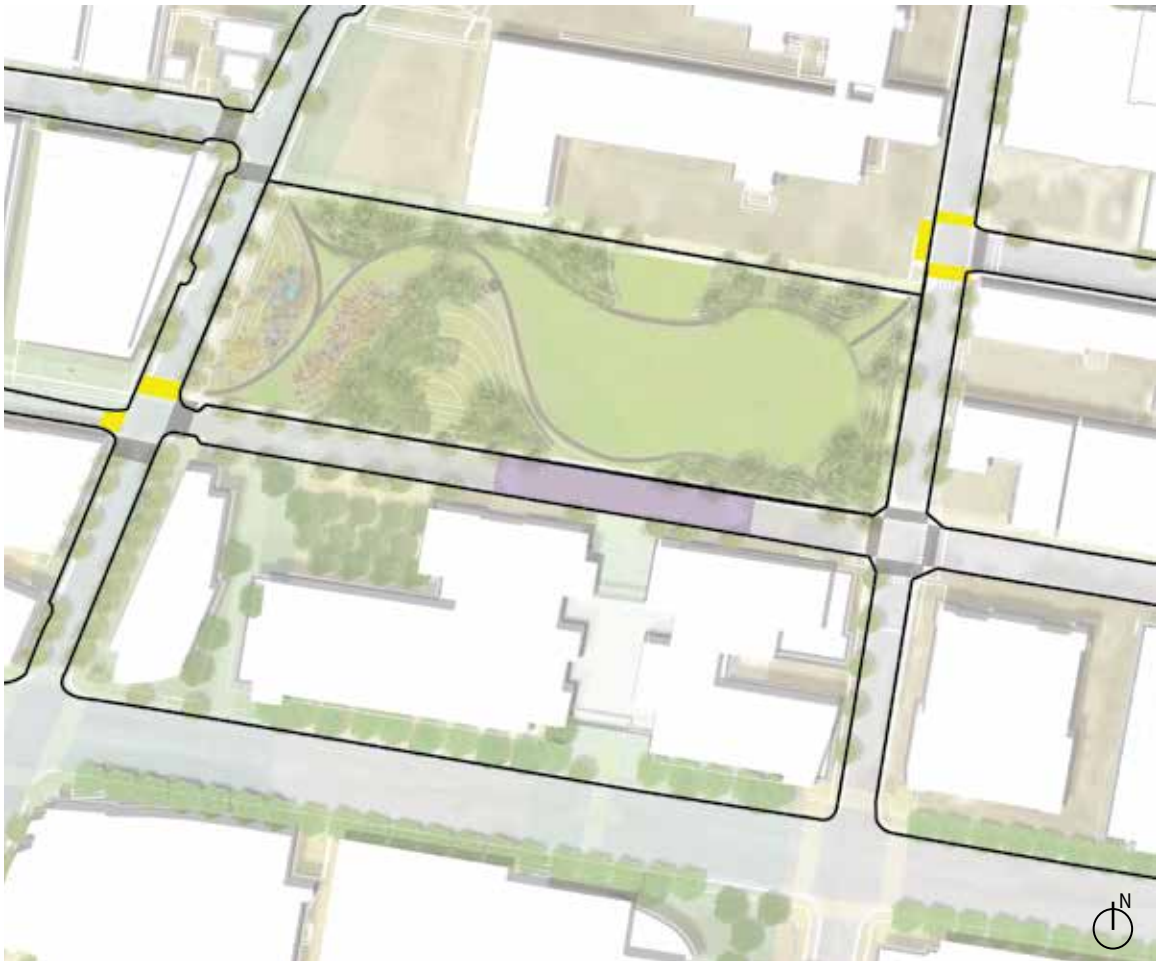
- **To encourage freer and safer pedestrian crossings**
- **To link, whenever possible, open spaces more closely to programmed ones, such as cafes, restaurants, and other public amenities.**



^GRAND JUNCTION PEDESTRIAN IMPROVEMENTS

GRAND JUNCTION PORTAL

- Roadway - A “road-diet” is proposed for Galileo Galilei Way between Binney Street and Broadway. The design team recommends, at a minimum, the removal of the median and subsequent compression of travel lanes to the east to create more parkland and reduce the effective width of the roadway at pedestrian crossings. (It is recommended that the City consult with a transportation engineer to determine if it is appropriate to reduce the quantity of lanes at Galileo Galilei Way, and to determine if a road-diet strategy can be carried southward to the intersection with Main Street.)
- Crosswalks – A simplified intersection with Binney Street and Fulkerson Street is recommended, which will require reworking of two pedestrian crossings as shown



^ROGERS STREET PEDESTRIAN IMPROVEMENTS

ROGERS STREET PARK

- Portions of Rogers Street, between Second and Third Street, should be “tabled” where vehicular passage must yield to park users walking or wheeling at any location along its length. Street pavement in these tabled areas is to run flush from curb to curb to allow continuous level, accessible crossing. Vehicle speed along this segment of Rogers Street must be limited to human walking speed (roughly 5 mph) even at times pedestrians are not in sight. Tables are encouraged to link Rogers Street Park to the housing and Winter Gardens within the Alexandria development.
- Crosswalks – Freedom and priority of pedestrian movement is appropriate at all intersections adjacent to the park. The installation of five additional pedestrian crosswalks with clearly markings is required on Second and Third Streets.



^THREE POINTS PEDESTRIAN IMPROVEMENTS



^POINT PLAZA PEDESTRIAN IMPROVEMENTS

THREE POINTS PARK

- Roadway – The Framework Plan calls for the realignment of Binney Street from First Street to Edwin H. Land Boulevard. This change will create a “T” intersection at Binney Street and Land Boulevard and create an intermediate “stepping stone” parcel to assist in uniting Front Park with Three Points Park.
- Woonerf – In an effort to create a strong relationship between the proposed Alexandria project and Three Points Park, First Street between Binney Street and Land Boulevard should be rebuilt as a woonerf or narrowed to one lane of traffic moving south.
- Crosswalks – A new crosswalk should be installed on the southern end of the intersection of Binney Street and Land Boulevard.

POINT PLAZA

- Roadway – The site design anticipates the completion of the current construction, including the Third Street connector.
- Woonerfs – To enlarge the sense of public space and slow vehicular traffic around this small island-like parcel, the design team strongly recommends that Main Street between Point Park and MIT be pedestrianized. This woonerf will encourage free pedestrian movement and better activate the park and the proposed commercial edge along the south side of Main Street.
- Crosswalks – An additional pedestrian crosswalk is recommended at the eastern end of Point Plaza. This may be accomplished by the hawk signal currently planned by City Transportation department.

BICYCLE CIRCULATION



^BICYCLE NETWORK WITH EXISTING HUBWAY LOCATIONS



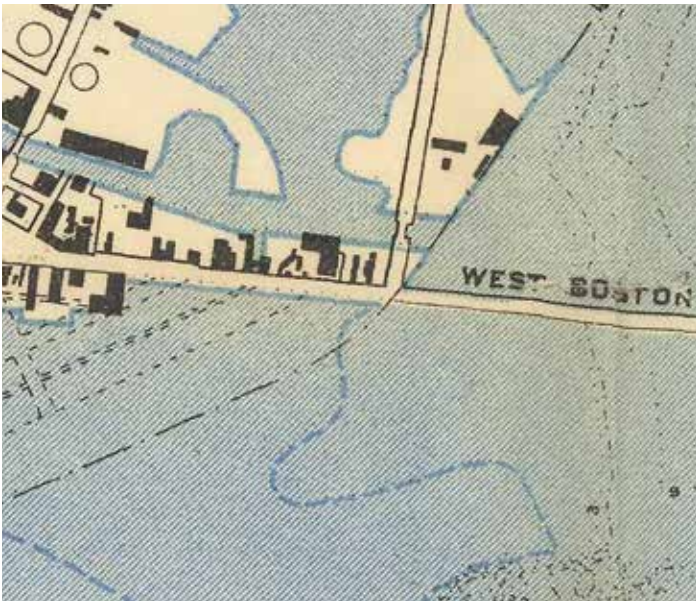
^BICYCLE NETWORK | www.cambridgema.gov/

^MBTA TRAIN

With more attention being paid to health and well-being, as well as to climate change, cycling has become the preferred mode of transportation for all generations. The increasing popularity of the Boston-based Hubway bike-share system suggests that more and more people are looking to bicycles as an alternative to more traditional transportation. Walking through Kendall Square, it is common to come across empty Hubway stations and bike racks filled to capacity.

In emphasizing increased connectivity, the Framework Plan follows the Cambridge Bicycle Network Plan and encourages the expansion of the network wherever feasible. Bicycle parking will be provided within all of the parks and other key spaces. Other suggestions include:

- **Make additional connections to the proposed Grand Junction Trail where possible, with a particular emphasis in increasing connectivity between the East Cambridge and Wellington-Harrington neighborhoods and their schools.**
- **Make clear connections and crossings between the expanded Charles River Park Esplanade and the Museum of Science to connect North Point to the River.**
- **Integrate shared paths into the proposed dendritic system where spatial constraints will allow. Add bicycle parking areas where it will not.**
- **Provide a bicycle lane on the westernmost edge of the Volpe site, parallel to the pedestrian walkway and its allée of trees. Use the trees as a natural separation between pedestrian and fast-moving cyclists.**
- **Consider adding another Hubway station at Three Points Park or elsewhere along Binney Street to respond to increased development along that corridor.**



^Metropolitan Park Commission, and The State Board of Health. "Plan of the Charles River." Boston: Heliotype Printing, April 1894



^Shurcliff, A. & Special Commission on The Charles River Basin. "Lower Charles River Basin: Proposed Future Development." Boston: Walker Lith. & Pub Co., November 1928.

MEMORIAL DRIVE

A CRITICAL SITE

As explained earlier in this document, Cambridge’s river shoreline has been in a constant state of evolution since the first human settlement. There are few sections of the Charles River frontage where the human manipulation is so pronounced as at the river bend where this Framework Plan proposes the creation of “Charles River Park.”

Today, the site is located at the crux of many regional transportation systems, and it has been for hundreds of years. In about 1,500 feet of shoreline, one of Metropolitan Boston’s busiest vehicular bridges crosses and interchanges with one of the city’s most critical parkways. This same stretch of riverfront also includes the mouth of the now-recreational Broad Canal and is, most notably, one of the iconic river bends rounded by the kayaks, rowboats, sailboats, and small motorized boats that travel the Charles River. Squeezed into the margins of both of these intersecting routes, local and regional paths carry bicyclists, pedestrians, and rollerbladers. On the outside edge of Memorial Drive, the sidewalk doubles as a section of the popular 14-mile “Paul Dudley White Charles River Bike Path” that connects Boston, Charlestown, and Cambridge to all points upstream. For those thinking on a greater scale, the same segment serves as one of the officially recognized piece of the 2,900-mile “East Coast Greenway” that connects the state of Maine to Florida [<http://www.greenway.org/explore/designated-trail-list>].
Shurcliff, Eliot & the Olmsted Firm



^Google Earth Image. "Broad Canal Inlet." 42°21'43.66"N 71°04'46.77"W. Cambridge, MA. July 2015.



^Charles River Park Proposal, Connect Kendall

Beginning around the 1890's, multiple proposals for the Charles River Basin were produced by the landscape architecture office founded by Frederick Law Olmsted. Later, more developed and specific plans were drawn by Charles Eliot and Arthur Shurcliff, two landscape architects who themselves came out of the Olmsted office. The earliest plans placed focus on the more famous segments of the Charles River parklands such as Charlesbank, Boston's Esplanade, and Charlesgate, but at the edges of these plans, lines of proposed trees suggest the "Charles River Park" site as being part of a contiguous system of riverfront parkland. In the decades that followed, iterative plans for various park sites around the Charles River Basin became more detailed and developed, and many were even implemented.

It was not until 1928 that a fully-fledged plan (shown) had emerged for the site where Longfellow Bridge lands on the river's bend in Cambridge. Arthur Shurcliff, who had worked on landscape architecture projects "on both sides of the river" for the three decades since he first entered the Olmsted office as an apprentice, drew up an inspiring -- and aspirational -- plan showing the river bend site built out with generous, verdant banks [Karl Haglund, *Inventing the Charles River*, p188]. Pedestrian walks and roadways gently curved through park vegetation and underpassed the spans of the Longfellow Bridge.



^ Memorial Drive viaduct (Eric Hill/Pearbiter Photography)

THE SITE TODAY

Around the same time Arthur Shurcliff was designing these “park”-ways, he also penned a warning. Shurcliff wrote that in the “epoch of the revolution of vehicular transportation” he was working, there was a “powerful temptation to overdevelop the parkways ‘as a matter of immediate relief and instant economy’” [Karl Haglund, *Inventing the Charles River*, p224]. Unfortunately, Shurcliff’s 1928 vision shown was never truly implemented. A visitor to this site today will see that, on the contrary, it was his prophetic warning that was fulfilled. In the name of “instant economy,” the “ways” were built but the “park” was not. This section of Memorial Drive, also known as Route 3, carries east- and west-bound traffic over the river and under the Longfellow Bridge on two elevated roadways totaling about 65 feet in width. Instead of a park, there is simply a void; the surface of the Charles River is several feet below and inaccessible. The bicyclists and pedestrians are pressed against the roadway and forced to share less than 10 feet of sidewalk.

“CHARLES RIVER PARK”

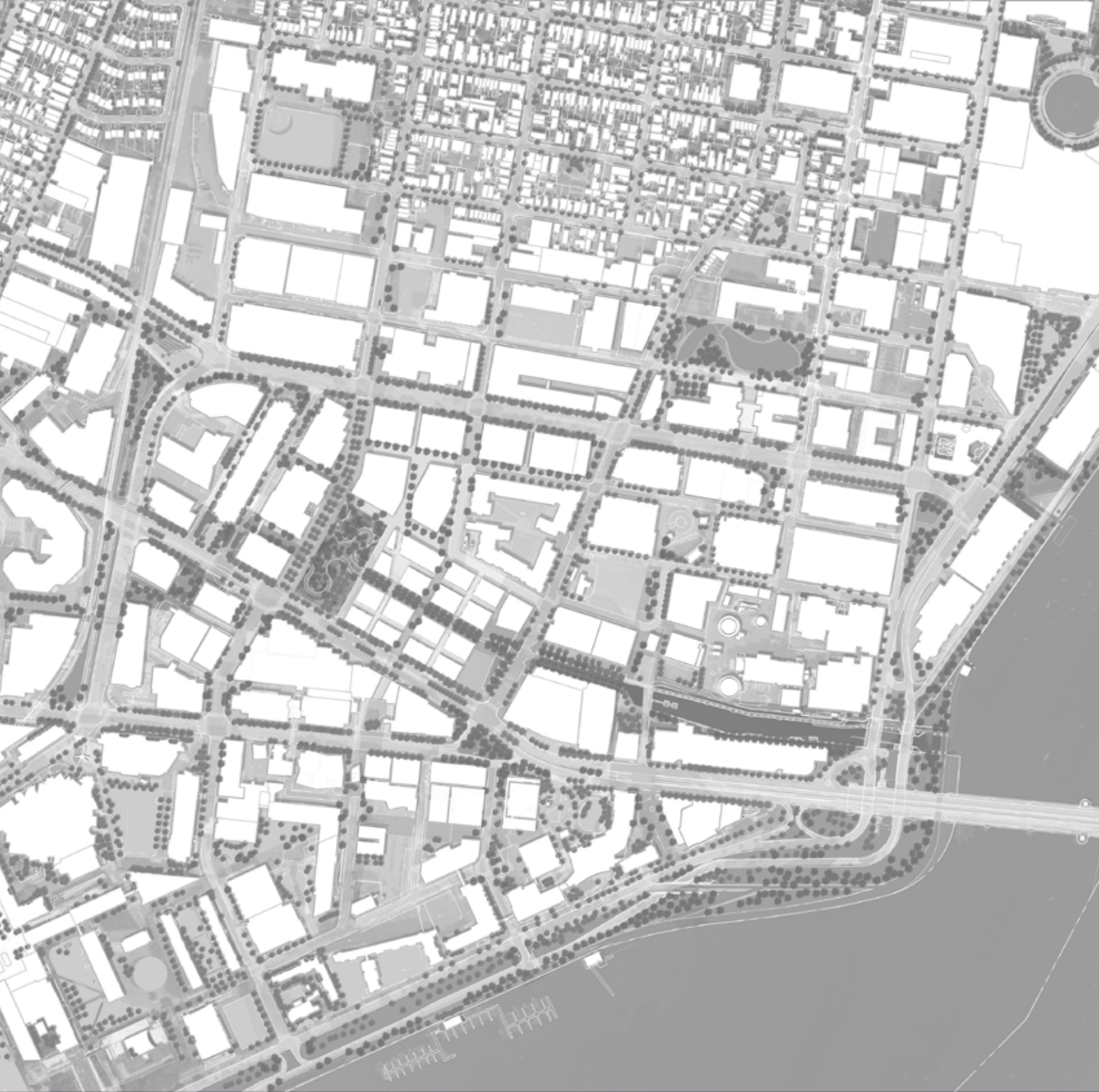
The vision for “Charles River Park” (shown) is to detangle the tight knot of cars, trucks, bikes, and boats and, most importantly, to reinvent this site as a place for people. What is now 1,500 linear feet of thoroughfare should become almost 10 acres of new parkland that balances the priorities of circulation, environment, and sense of place.

- **Vehicular Circulation – Without deleting traffic lanes or access ramps, the realignments proposed (shown in red) could feasibly consolidate automobile traffic through the site. Some structures (shown in black) could be explored for reuse or adaptation.**
- **Alternative Transportation – Charles River Park emphasizes safe and comfortable bicycle and pedestrian routes. Pedestrians and cyclists might pass over two lanes of Memorial Drive on a dedicated overpass, and may cross beneath First Street and Land Boulevard bridges on a sunken bridge. These moves connect Kendall Square to Newton and Charlestown as well as to farther reaches, like the state of Florida.**
- **Environment – Charles River Park would be a public park that functions as a balanced ecosystem. By adding land as shown, the plan allows a more naturalized riparian habitat and provides a much needed buffer across which stormwater runoff and pollutants from Memorial Drive can filter before reaching the river. From the long term perspective of climate change and sea-level rise, there are certain benefits to this naturalized, “soft” river edge.**
- **Sense of Place – By building out the park as recommended, last century’s aspirations for parkland on this site would be fulfilled. Not only would Shurcliff’s 1928 vision be implemented, but Cambridge would have a new and iconic public open space. Charles River Park could be thought of as a picturesque welcome mat for those entering Cambridge by bicycle, MBTA train, or car from Boston, and the extended park edge would celebrate the Charles River. The sunken bridge allows safe and accessible passage from the regional White Charles River Bike Path to the existing Broad Canal Walk, and in doing so, stitches the Charles River to the heart of Kendall Square along the dendritic trunk.**



^ CHARLES RIVER PARK





5 CONNECTING THROUGH INFRASTRUCTURE



^ DENDRITIC DRAINAGE PATTERN, YEMEN | <http://www.solarviews.com/cap/earth/yemen.htm>

Creating a cohesive and interconnected open space framework also means addressing the neighborhood's infrastructure to meet the challenges of developing within the context of global climate change. With increasing urgency and intensity, cities world-wide are taking measures to employ green infrastructure to ease the pressure off overburdened and/or outdated systems. Within this context, Connect Kendall means not only physical and social connections, but sustainable ones as well. The framework seeks to link stormwater infrastructure within parcels and streets in functional and expressive ways to help **affirm Kendall Square's identity as a true EcoDistrict.**

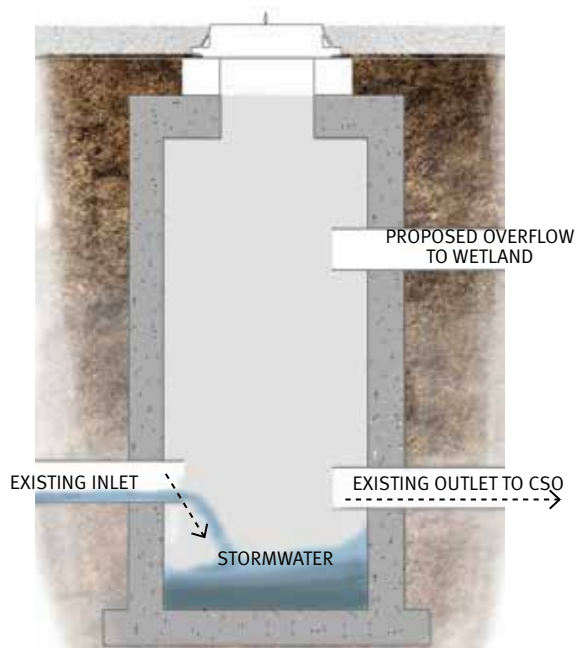
WATERSHED



^ WATERSHED DIAGRAM

At present, rain falling on the local watershed for Kendall Square follows two distinct paths: moving either into the combined sewer system for treatment at the Deer Island facility, or into the separated stormwater system into the Charles River. In addressing ways to connect the spaces of Kendall Square, the framework relies on the concept of water as a catalyst for change. In the case of Kendall's infrastructure, here the focus is on capturing, collecting, and re-using rain water in functional but also expressive ways. What is currently hidden within pipes underground can become a feature of a more ecologically-based landscape, where parks and plazas are designed with porous surfaces, and urban sites may transform into wetland habitat.

As a basis for the design, the Framework Plan draws upon historical natural water movement in the area and interprets it in multiple layers:



STORMWATER ON THE STREET

COMBINED SEWER WATERSHED

Wherever possible, open spaces within or adjacent to the combined sewer section of the study area -- such as Grand Junction Portal, Rogers Street Park and Three Points -- would promote opportunities for infiltration/storage and treatment of stormwater such that the overall volume of stormwater leaving the neighborhood and entering the combined system would be significantly reduced. This improvement in the combined watershed system may be accomplished by designing overflows for target storm events to allow stormwater runoff to be treated or stored outside of overflowing to the Charles River or to Deer Island.

BROAD CANAL DRAINAGE-WATERSHED

A combination of strategies are being proposed for the separated drainage watershed that outflows into the Broad Canal. Starting at Grand Junction Portal, treatment systems are proposed along Broadway. Stormwater runoff will be collected from streets, sidewalks, and any other tributary areas and directed to small bio-retention areas within the public right-of-way for treatment. Additionally, any stormwater surcharge above a base flow from the existing infrastructure along Broadway will be directed to a stormwater management bio-retention Broad Wetland proposed at the intersection of Broadway and Loughrey walkway.

LECHMERE CANAL DRAINAGE WATERSHED

Bio-retention areas are also proposed along Charles Street and First Street to capture and treat stormwater runoff from the streets, sidewalks and other tributary surfaces before it is conveyed into the separated pipe network connected to the outfall into the Lechmere Canal. These retrofits would not only help reduce the amount of polluted runoff flowing into the canal and improve the overall capacity and function of the existing infrastructure, but also improve the quality of the streetscape along the two corridors.

SEPARATED DRAINAGE-WATERSHEDS SOUTH OF MAIN STREET

Although owned by MIT, it is recommended that each drainage-watershed tied to outfall locations along Memorial Drive be individually retrofitted with a variety of strategies - ranging from treatment swales to bio-retention areas to other potential Low Impact Development (LID) techniques deemed suitable for the individual sites, most of which are in the MIT Campus. Opportunities for end-of-pipe treatment (potentially structural due to site limitations) should also be explored along the underutilized medians along Memorial Drive.

WETLAND

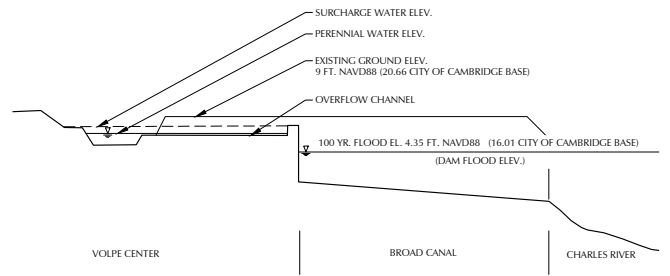


BROAD WETLAND - TYPICAL CONDITION

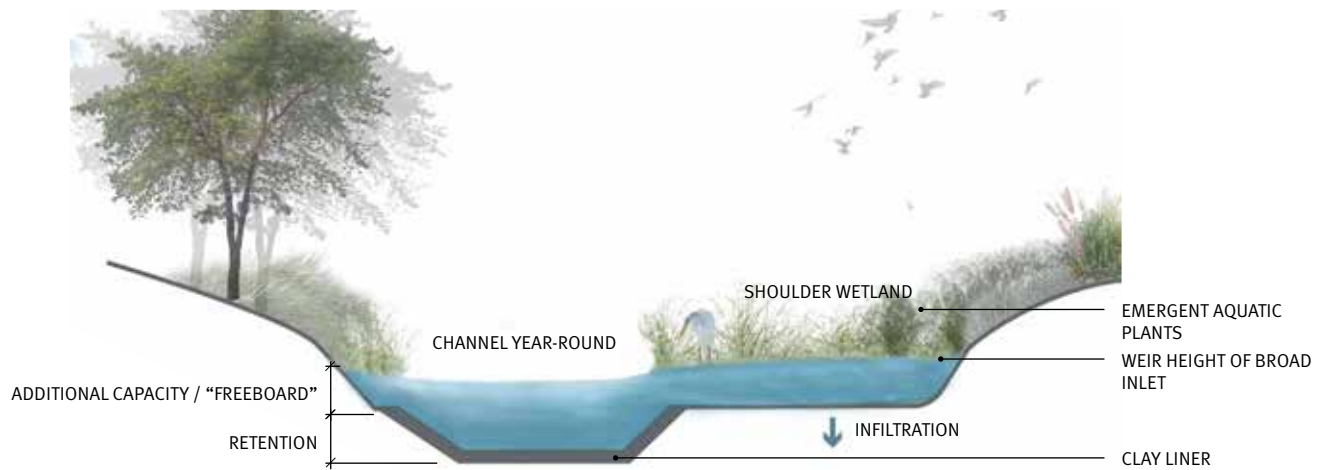
VOLPE CENTER STRATEGY

The proposed future redevelopment of the Volpe Center suggests an opportunity to rethink the current open-space configuration, and to layer onto the site green infrastructure strategies that, much like the Genzyme project has demonstrated, could become icons for the Eco-District.

The Framework Plan envisions a stormwater management park located at the terminus of the extended Broad Canal, which incorporates a variety of LID strategies as part of the landscape design of the site. A linear water channel ties the park to the extension of the Canal, and in addition to providing a significant visual and physical link for access alongside, connects the two systems hydrologically.



^PROPOSED SCHEMATIC BROAD CHANNEL PROFILE (SAMIOTES CONSULTANTS)



BROAD WETLAND - INUNDATION CONDITION

The Volpe Center redevelopment roof leaders should be directed to underground storage cisterns and re-used for irrigation or other non-potable water uses; the stormwater strategy for paved and landscaped areas within the new development should direct runoff to Broad Wetland. To balance year-round habitat for wetland plant and animal species with the handling of large stormwater volumes during significant storm events, Broad Wetland is designed with two-stages. With a clay liner, the lowest stage would maintain a permanently flooded retention channel. At a higher elevation the unlined second stage of the constructed wetland could temporarily detain significantly higher volumes of stormwater promoting infiltration.

Broad Wetland, the proposed stormwater management park at the Volpe Center, is designed to not only manage stormwater from the redevelopment site but also provide additional capacity and treat overflow from the separated flows above the low flow/baseline in existing pipes along neighborhood streets like Broadway, Ames, Loughrey Walkway/6th Street, etc. The park is thus conceptualized as an opportunity to treat both on- and off-site run off and improve water quality in the Broad Canal (and the Charles River beyond) while providing an adaptive landscape that promotes discovery in an outdoor living laboratory and provide educational value in real time.



STREETScape: FAYETTEVILLE, ARKANSAS



PERMEABLE PAVERS



NELSON BYRD WOLTZ: ST. LOUIS, MISSOURI



THIRD STREET SE, WASHINGTON DC (GOOGLE MAPS)



PORTLAND GREEN STREETS

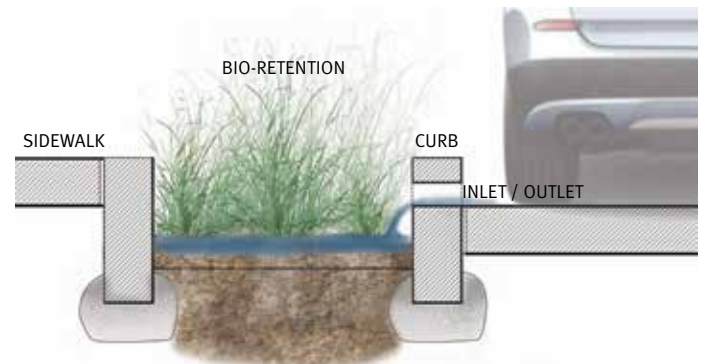
^ PRECEDENT IMAGES

STREETS

1. Use existing stormwater infrastructure in the separated (or dedicated drainage-only) systems strategically for opportunities for incorporating treatment, additional storage/overflow capacity, and retention or detention practices based on current conditions.
2. Volpe Center redevelopment roof leaders should be directed to underground storage cisterns, with the stormwater strategy for paved and landscaped areas within the new development directing runoff to Broad Wetland.
3. Stormwater on the street plan, section 1, and section 2 drawings visualize proposed retrofits on existing stormwater infrastructure which will help reduce the amount of polluted runoff flowing into the canal and improve the overall capacity and function of the current system. Furthermore, this strategy will improve the quality of the streetscape along street corridors.
4. Any stormwater surcharge above a base flow from the existing infrastructure along Broadway will be directed to a stormwater management bio-retention wetland garden proposed at the intersection of Broadway and Loughrey walkway.



STORMWATER ON THE STREET: SECTION 1



STORMWATER ON THE STREET: SECTION 2



6 CONNECTING THROUGH PARKS



^ QT LUONG TERRAGALLERIA.COM DENDRITIC PATTERN OF TREE BRANCHES AGAINST RED CLIFFS, ZION NATIONAL PARK, UTAH USA

Four park spaces, nearly five acres in total, were identified through the competition planning process as key components of the open space framework plan. Considered solely as individual spaces, each one faces its own challenges in circulation and in creating a sense of place. Considering each as part of the larger framework allows for a more holistic approach and suggests opportunities for establishing a stronger identity and character for Kendall Square. The recommendations within this section outline basic conceptual principles for each space, principles that are intended to inform future designs for the parks.



^ THREE POINTS PARK DAYTIME



^ THREE POINTS PARK ACTIVE AT NIGHT

THREE POINTS PARK

This park is a sequence of three open spaces that connect the Binney Street corridor to the Charles River and help **realign this district with the natural, infrastructural and recreational resources of the Charles River Basin**, which is a principal goal of Connect Kendall Square plan. These three parks create a walk to and from the Charles River that is a stage for the quotidian aspects of daily life and the special gatherings of the seasonal round of events in Cambridge.



PARK ENTRY POINTS



IMPORTANT CONNECTIONS



SUGGESTED PARK PROGRAMS



SUSTAINABLE FEATURES



CHARACTER

THREE POINTS PARK

Three Points Park (“Triangle Park”) sits at the eastern edge of the Kendall Square study area, and is bounded by Edwin H. Land Boulevard, Binney Street, and First Street. Currently the site reads as a sort of traffic island and temporary construction yard for the new developments across the street. Front Park, an existing public park between Land Boulevard and the Charles River, is in close proximity but due to a challenging pedestrian crossing, feels disconnected from Triangle Park. The principles for Three Points Park serve to establish stronger pedestrian and visual connections between Front Park and Triangle and to link the spaces into a more cohesive whole. Given its proximity to the fast moving traffic of Land Boulevard, the Park is envisioned primarily as a place for teens and adults.

IMPORTANT CONNECTIONS

- The redesign of the Binney Street, Edwin H Land Boulevard as a 90-degree intersection creates a triangular stepping stone park on the north side of Binney Street linking the park parcel to the south of Binney with Front Park located on the east side of the Boulevard.
- A proposed one-way section of First Street south of Binney Street. This reduces vehicular traffic on this road and allows greater pedestrian movement to and from the restaurants and cafes located in the adjacent buildings and the park.
- Topographic mounding and planting to buffer the inland park from the steady traffic and noise on Edwin H Land Boulevard.
- Connect the renovated Front Park to the Charles River.

SUGGESTED PARK PROGRAMS

- An outdoor sculpture gallery where the art works and their placement orient and guide visitors through the three spaces. They form directional beacons guiding circulation through the three parks and also provide interactive play opportunities with the works.
- A plaza and lawn providing flexible spaces for relaxation and play.
- Outdoor seating area to take advantage of the adjacent restaurant in the new building and also Le Cordon Bleu College of Culinary Arts on First Street.
- Parking for food trucks is encouraged along First Street.
- Summer outdoor cinema on the lawn, with views of Boston’s Back Bay in the background.
- Front Park equipped with a floating deck platform in the Charles River, for sunbathing, boat landing and canoe launch. The platform is intended to provide the public with closer access to the Charles.

SUSTAINABLE FEATURES

- Porous paving.
- Water retention profile of lawn to retain rainwater in the root zone and minimize summer irrigation.
- Rainwater re-charge garden to manage the infiltration of rainwater recharge.

CHARACTER

- An environment of three parks linked by undulating topography, an art program and sculptural beacons that punctuate the passage from land to water and water to land.
- Protective mounds and plantings embrace the spaces of the inland park and ameliorate the traffic disturbance on Edwin Land Boulevard.
- The intersection of Binney Street and Edwin H Land Boulevard is a gateway. It is an open portal eastward to the river and westward to the Binney Street corridor.
- Front Park is a window to the Charles River. A river edge and water sheet transformed into an active recreational environment.



^ THREE POINTS PARK PLAN



Reconfigured lawn area with new paths

“Stepping stone” corner

Iconic beacon elements to visually link parks together

Overlook / Sunbathing Platform
Kayak dock

Landforms to provide buffering from Land Boulevard

Potential area for infiltration



^ A VIEW FROM THE RECONFIGURED FRONT PARK, LOOKING TOWARDS A PROPOSED SUN DECK ON THE CHARLES RIVER





^ ROGERS STREET PARK PLAY STRUCTURES



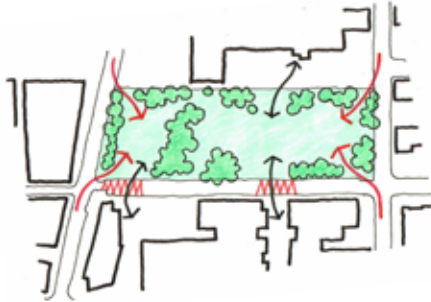
^ ROGERS STREET PARK PLAY STRUCTURES

ROGERS STREET PARK

Rogers Street Park is a landscape set apart from the commercial life of Kendall Square, but it is also a gathering place that is integral with and accessible from its surrounding residential neighborhoods and business constituencies. It is a landscape that is shaped as an accommodating stage for the daily recreational life of the communities it serves and **a gathering place where diverse groups can celebrate the yearly round of seasonal events** and the unique happenings unfolding in the district of the City of Cambridge.



POINTS OF ENTRY



IMPORTANT CONNECTIONS



SUGGESTED PARK PROGRAMS



SUSTAINABLE FEATURES



CHARACTER

ROGERS STREET PARK

A park newly formed and opened in the summer of 2013, Rogers Street Park exists as a 2 acre plane of lawn. As an open field within a relatively dense neighborhood, the Park currently attracts local residents, dog-walkers, musicians, nearby office workers, and children, all presumably drawn to the green, open, and flexible space there now. In conceiving of how this existing park might evolve, the proposed design principles stated below rely on maintaining a large proportion of flexible open green space as well as multiple points of entry. A play area and dog run are envisioned as programmatic elements intended to bring people together in ad-hoc meeting spaces, at all times of day and throughout the year.

IMPORTANT CONNECTIONS

- Provide open, inviting corner entrances.
- Create a strong opening and visual connection across Rogers Street to link the residents of the housing to the south with the playgrounds in the park.
- A raised table across Rogers Street at mid-block to connect to the Winter Garden, the proposed café, and public toilets in the Winter Garden.
- Access to the park from the office building to the north.
- Provide entries from the north to invite residents of the East Cambridge neighborhoods access from Second and Third Streets.

SUGGESTED PARK PROGRAMS

- A water play and adventure playground, employing principles of natural play.
- A winter sledding hill and summer playfield.
- A flexible open field accommodating a range of sports and community activities.
- A bike, roller blade, and skate board loop around the perimeter of the open field.
- A tricycle loop as a safe place for residents to teach their children how to ride bicycles.
- A fenced dog park with small and large dog facilities with an open shelter for dog owners to informally meet while their dogs play.

SUSTAINABLE FEATURES

- Porous paving.
- Water retention profile of lawn to retain rainwater in the root zone and minimize summer irrigation.
- Rainwater infiltration gardens.

CHARACTER

- An environment of distinct but linked landscape green out-door rooms shaped by canopy trees accented with groves of flowering understory trees.
- An undulating topography that shapes an inward looking park space. This sense of partial seclusion is enhanced with perimeter trees that mediate the presence of the surrounding buildings and streets and spatially define the park but do not create a separation between the interior of the park and its surroundings.



^ ROGERS STREET PARK PLAN



Fenced dog park area

Tricycle and scooter loop

Open field intended to provide flexible recreation space and an area for local gatherings

Sledding and play hill

Landforms with deciduous trees to soften park edges and provide screening where needed

Speed table to connect to the Park to the Winter Garden, its cafe, and public facilities



^ SLEDDING HILL AT ROGERS STREET PARK





GRAND JUNCTION PORTAL

Grand Junction Portal is a crossroads, a gateway and a destination created by a geologically inspired “ridge and valley” landform set within the level topographic plane of the Kendall Square district of Cambridge. With key adjacencies to the Grand Junction shared use trail as well as to the vibrant commercial development of One Kendall Square, this park can become **an important entry point into the heart of the Square.**



KEY ENTRY POINTS



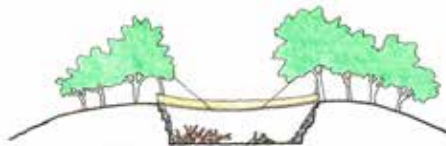
IMPORTANT CONNECTIONS



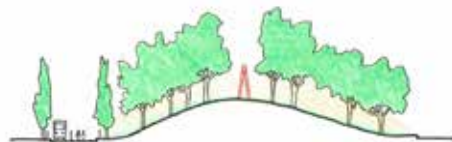
SUGGESTED PARK PROGRAMS



SUSTAINABLE FEATURES



CHARACTER



GRAND JUNCTION PORTAL

Grand Junction Portal Is one of two existing open spaces between the Grand Junction rail line and Galileo Galilei. These spaces currently feel cut off from much of the neighborhood, largely in part due to the four lanes of traffic and median that pose challenges to pedestrian connectivity as well as the fence lines associated with the train tracks. With the proposed shared Grand Junction trail, the parks will soon tie into a larger pedestrian and cycling network. Additionally, as a means to slow traffic, shorten pedestrian crossings, and gain space for the parks, the Framework Plan calls for the narrowing down of Galileo Galilei and for the removal of the medians in order to gain that land for the open space. Planned improvements by the Cambridge Redevelopment Authority for the open space south of Broadway are already in the works and should be integrated into future designs for Grand Junction Portal as well.

IMPORTANT CONNECTIONS

- The crossing of the east west Binney Street Corridor and the north south Grand Junction Community Path is located at the heart of this park in the “play valley”. This recreational feature is a gateway and a pedestrian route that unites the existing restaurant, and entertainment venues of One Kendall, found on the west side of the Grand Junction corridor with the rapidly developing commercial and residential life of Kendall Square to the east.
- The One Kendall Square development to the west of the park is a hub of restaurant and commercial activity within the neighborhood. Connecting to this development is strongly encouraged.
- A bicycle lane portal located near the southern boundary of the park connects the Grand Junction regional bicycle route with the existing bicycle lanes on Galileo Galilei Way and Binney Street.

SUGGESTED PARK PROGRAMS

- A “play valley” equipped with a scatter of light movable timbers laid over tree stumps and fallen tree logs that afford the making of improvised play environments for children.
- The valley is shaped by rock climbing walls hung in places with climbing nets.
- A rope bridge spans the valley and is accessible by climbing the valley walls and by sloped ADA accessible paths.
- A zip line descends down the north south ridge of the park, intended for people of all ages.
- Hitching posts for hammocks and tightropes are scattered within the tree grove plantings of the park.

SUSTAINABLE FEATURES

- Porous paving in the play valley and all park paths.
- All park water runoff is conducted by surface swale and pipes to a rainwater retention and recharge garden located at the southern end of the park.

CHARACTER

- From the exterior the park is experienced as a tree-covered ridge rising from the surrounding level ground and cut through by a sheer walled valley.
- The rough rock walled play valley, its floor strewn with stumps and fallen logs that support ephemeral constructions of light timbers and spanned by the tendrils of a gently swaying rope bridge evokes a fluvial feature eroded out of the surficial geology by an onrush of water flowing eastward to the Charles River.
- The climbable rock walls of the valley are crowned by the light canopies of overhanging trees that enhance the vertical enclosure of the valley and scatter transitory shafts of sunlight and dappled shade on the play surface below.
- The tree covered topography of the park slopes away from the valley edges to the north and south. These tree groves are home to the multi-use posts and other informal recreational uses. A clearing in the trees follows the gentle southward slope of the ridgeline. This glade accommodates the zip line.



^ GRAND JUNCTION PORTAL PLAN



Park connection to Grand Junction Trail and One Kendall Square

Landforms with universally accessible paths

Bridge element - ADA compliant

Entry plaza with play timbers and climbing walls

Reconfigured Galileo Galilei Way

Landforms to structure the space and provide a sense of scale to the park against the neighboring larger buildings

Zip-line

Potential area for infiltration

Park connection to Grand Junction Trail and Broadway entry plaza



^ ZIP LINE AT GRAND JUNCTION PORTAL





^POINT PLAZA NIGHT TIME SWINGING BENCHES



^POINT PLAZA DAY TIME OCCUPATION

POINT PLAZA

Point Park is an iconic gateway landscape located at the eastern entry to Cambridge from Boston. Upon crossing the Charles River Basin on the Longfellow Bridge the western view along Broadway is of an open grove of trees, scaled to arrest the eye, harboring a dynamic wind vane that rises above the tree branches and whose motions count the changing weather and seasons. Within the grove, set among the trunks, are a contemporary family of swing benches accommodating individuals, couples and small groups. This place is **a live/work/relaxation out-door room for the 21st Century city** and the life styles of its participants – workers, researchers, students, residents and visitors.



KEY ENTRY POINTS



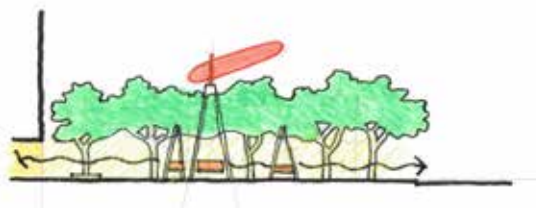
IMPORTANT CONNECTIONS



SUGGESTED PARK PROGRAMS



SUSTAINABLE FEATURES



CHARACTER

POINT PLAZA

The location and design of Point Park make it the principal place for residents, workers, students and visitors to orient themselves to the surrounding geography and life of the Kendall Square District. In its present form it acts as a popular meeting point for many people within the district. With the planned MIT East Campus expansion and the street improvements along Main already underway, Point Plaza can also act as a critical piece for setting the character and tone for Kendall Square. With this in mind, the space should be iconic and inviting at once. There should be a strong balance struck between fixed elements, such as seating, and flexible space so that this meeting place might also become a place for performance artists and other public art happenings.

IMPORTANT CONNECTIONS

The key connections that have been identified are:

- The pedestrian movement between the MBTA's Red Line Kendall T Station on Main Street and the commercial corridor of Third Street. This connection also links Point Park to the activities occurring on Broad Square, located off Third Street.
- Accommodating the dedicated vehicular route from Third Street to Main Street into the pedestrian character of Point Park.
- A woonerf connecting the plaza to the commercial ground floor activity on the adjacent buildings along the south edge of Main Street. The articulation of the vehicular route can be accomplished with street tree plantings in raised curbs with pedestrian crossings between the plantings, thus avoiding a series of bollards.
- Strategic views of Main Street and the Longfellow Bridge both of and from the Plaza.

SUGGESTED PARK PROGRAMS

- The Plaza is an outdoor living room that is occupied throughout the day and into the evening. It is a place to sit, relax, work or walk through on the way to office, laboratory, school, home or entertainment.
- Swing benches that can sit individuals, couples and small groups. The benches also function as integral lighting elements for the plaza.
- A wind vane sculpture that acts as a beacon for the plaza signaling its strategic location as an entry to Kendall Square. The wind vane rotation turns two facing carousel benches that encourage informal sociability or the spontaneous joy of a child.
- The plaza is Internet enabled to enhance its role as an outdoor room in a 21st century city.

SUSTAINABLE FEATURES

- Porous paving and a below grade rainwater temporary storage and infiltration to achieve net zero run off from the plaza.
- Deciduous tree canopy is encouraged to provide shade and a sense of urban refuge.

CHARACTER

A calm pedestrian environment set within the rush of traffic and activities of the surrounding Kendall Square formed by:

- A unified plane of unit paving supporting a light canopied grove of trees that grow out of the paving (with the exception of the raised curbed street trees defining the woonerf).
- A drift of seating elements distributed within tree grove with the naturalness of falling leaves but cognizant of the principal pedestrian routes through the plaza.
- The Wind Vane Sculpture as a sculptural icon that identifies Point Plaza within Kendall Square – “meet me at the Vane.”



^ POINT PLAZA PLAN



Broad Channel Weir

Broad Square:
A sun-lit public open space for gatherings, performance, food truck festivals, farmers' markets, and pedestrians

Berm edge with seating and planting elements to provide buffering from traffic and minimize headlights from southbound traffic Third Street

Swing seats / seating elements

Potential area for infiltration

Woonerf / shared pedestrian and vehicular way to provide more connectivity to adjacent retail and MIT East Campus



^ WOONERF AT POINT PLAZA





7 CONNECTING THROUGH THE VOLPE SITE



^ VIEW OF THE BROAD CHANNEL FROM A NEARBY OFFICE



^ THE BROAD CHANNEL AND BROAD SQUARE

THE VOLPE SITE

The Volpe site has become a central piece of the framework planning effort. At 14 acres, the site is centrally located and **a critical piece to providing greater connectivity** throughout the neighborhood. The redevelopment of the Volpe Center also may provide significant opportunities to create a sequence of new public realm open spaces; to enhance the larger identity of Kendall Square, and to implement stormwater treatment/management strategies at the heart of the study area. While it is understood that the future build out of the Volpe site will bring with it its own mix of users and residents, the site is seen as a critical piece in helping to unite the existing MIT, info/bio-tech, and residential communities. Providing a healthy mix of cafes, restaurants, and retail uses to frame the proposed open spaces will help activate the space and ensure their success.



KEY ENTRY POINTS



IMPORTANT CONNECTIONS



SUGGESTED PARK PROGRAMS



SUSTAINABLE FEATURES



CHARACTER

VOLPE SITE

Critical to the future redevelopment of the Volpe site is making the site more porous to pedestrians and cyclists. While development constraints and economic pressures will dictate much of the shaping of the site, the public realm and the open spaces must be carefully considered.

IMPORTANT CONNECTIONS

- The extension of Fifth Street into the site, either via a service road, or a purely pedestrianized and cyclist corridor allows increased circulation from the East Cambridge residential neighborhood into the Square.
- An entry point into the site directly across from the Marriott public corridor that creates a clear and direct path from the T station, through the Marriott, into the Volpe parcel.
- A proposed plaza - Broad Square - at the corner of Broadway and Third serves as a new potential gateway for Cambridge as well as to link it to and expand the reach of the Point Plaza.
- A strong water connection through the site connects the site to its history and to the Charles River.

SUGGESTED PARK PROGRAMS

- The Broad Wetland - a large water feature envisioned as a natural and educational resource for the public that would also play a vital role in stormwater management for the site.
- The Broad Channel - a key connecting element within the development designed to function as an internal promenade within the development.
- The Broad Square - at the corner of Third and Broadway this is seen as an important public gathering space for the neighborhood. With ample space to accommodate food trucks, markets, and/or performances, this square is imagined as a programmable and activated space, with day and night-time uses.
- The Broad Marketplace - a core principle for Volpe is the idea of the Broad Market, an architectural proposal for a central gathering place and incubator for the exchange of ideas, goods, and services that might be housed within a larger commercial tower. With a notable lack of sufficient restaurants and grocery stores within Kendall Square, the Broad Market has the potential to provide places for smaller and local vendors to be housed under the larger “roof” of a commercial building, similar to the Chelsea Market in New York City or other urban markets.
- The addition to the east of the existing 6th Street pedestrian corridor of a bike lane will help to increase circulation between Ames and MIT up towards Cambridge Street. The existing historic allée of trees will help to provide separation between the pedestrians and cyclists and provide increased safety for both.

SUSTAINABLE FEATURES

- The Broad Wetland and Channel will act as key pieces of stormwater infrastructure that together help manage the site’s hydrology, by addressing water quantity and water quality measures at the scale of the Volpe parcel.
- The Broad Wetland is intended to create habitat for birds, and small amphibians.
- Pervious and light colored pavements will be employed throughout the site to decrease imperviousness.
- Deciduous canopy trees to be used to help with passive cooling.

CHARACTER

- The public realm spaces envisioned for the Volpe site act as a clear spatial sequence but may vary in material character. For instance, while the Broad Wetland may feature boardwalks and native plantings, the Broad Channel and Squares are seen as more hardscaped spaces to engender greater flexibility in circulation and in programming.
- A consistent iconic pedestrian light fixture (or family of fixtures) helps to link the spaces within the block and provide a greater sense of identity for the parcel as a whole.
- Varying the proportion of hardscape and softscape across the site, as well allowing for some material variation within the groundplane will help to break down the scale of the parcel and prevent an overly monolithic appearance.



^ FRAMEWORK PLAN



ROGERS STREET PARK

Sixth Street Bicycle lane

SKATING RINK + SKY BOWL

Broad Wetland

Fifth Street connector: intended for providing service to proposed development as well as greater pedestrian and cyclist connectivity

Broad Channel

Broad Square: connected visually to Point Plaza, this is a public open space serving as an urban gateway into Cambridge; flexible programming is encouraged

BROAD CANAL

Broad Marketplace: a mix of ground floor food & market stalls, cafes, and incubator spaces intended for local and regional businesses and as a draw for East Cambridge, MIT, and tech communities (Assume commercial towers above)

MBTA REDLINE





^THE VOLPE SITE BROAD CHANNEL STREET VIEW





8 DISTRICT-WIDE STRATEGIES



^HORST KIECHLE, DENDRITIC TREE ROOTS IN BANGKOK

Just as a city is greater than its parts, a city's open space must be more than its parks. In establishing a **cohesive framework** and in **building an identity** for Kendall Square the proposal relies not only on spatial planning, but also on other critical, less tangible, but equally important urban layers. Public arts, wayfinding, lighting, and programming are each in their own way urban systems that may not be tethered to particular locations but yet can play key roles in establishing and enhancing a sense of place.



A PARKING GARAGE ON FIRST STREET



MOBILE ART GALLERY



DANCE PERFORMANCE AT RIVERFEST



A PAINTED MURAL AT MLK ELEMENTARY



THIRD STREET SE, WASHINGTON DC (GOOGLE MAPS)

^ CAMBRIDGE PUBLIC ARTS IN ACTION



A PEDESTRIAN UNDERPASS IN NORTH CAMBRIDGE

PUBLIC ARTS

Providing a sense of place through a vibrant and varied public arts program is a key approach to connecting the diverse network of communities in Kendall Square. Public art - be it visual, performative, or acoustic - is intended in this framework as a means to express the unique character of the district and the types of rich innovation and invention that occur daily within its boundaries.

There are a variety of ways that the City employs the work and thinking of artists at present. What is envisioned for the Kendall Square neighborhood is a public arts program that might more specifically address the existing neighborhood communities by targeting new ways to express what is currently hidden. As an Innovation District, Kendall Square is nationally recognized as an incubator for creative and intellectual out-of-the-box thinking. However, currently much of the workings of the place - whether in labs, garages, schools, or studios - are hidden from view, often enclosed within secure facilities and privately owned spaces. By engaging artists to find ways to express these hidden assets, the neighborhood might then better celebrate its constituents and the dynamism of their shared endeavors. Be it through performance, lighting installations, video projections, painting, sculpture, sound, or craft -- artists could serve as catalysts to help inform and connect the community.

Each of these strategies will complement the existing art that is integrated in the street level windows and lobbies of new mega-block developments by engaging pedestrians and celebrating the natural environment. In addition, the following elements and strategies can be employed:

- **The dendritic framework described in Connect Kendall Square provides strong pathways and visual connections throughout the district. These can be reinforced by employing artists to create streetscape elements including paving patterns, street furniture, lighting, and other visual cues that emphasize the sequence of movement through the area.**
- **Artists can be engaged to create the visual aspects of the stormwater recovery systems proposed, revealing the movement of water and celebrating its presence on the sites. Artist-designed elements can include downspouts and viewing platforms, earthworks, drain covers and other features.**
- **The lighting and pedestrian elements of the Volpe site can be artist-designed, adding whimsy and a unique visual character to this unique opportunity site.**
- **Artists and/or MIT alumni might work with the MIT community to find ways - perhaps sound, projection, or kinetic installations - to express the energy and vitality of the innovative research happening within its buildings; potentially allowing the life of the Infinite Corridor to be celebrated by the entire Kendall Square community.**
- **Streets and alleyways might become temporary performance venues or enlivened in other ways that help signal to visitors they are within an Innovation District**

One possible dendritic itinerary and how that route might be linked to public art installations:



^PUBLIC ARTS PROGRAMMING SEQUENCE



1. DAN CHEETHAM & MICHELLE TARSNEY, "PEACE CRANES"

2. WILLY DORNER, "BODIES IN URBAN"

3. LOOP.PH, "TREE LUNGS"

4. LANG BAUMANN, STREET PAINTING #5

5. JR, QUARTIERS DE MARSEILLES

6. STACY LEVY, DENDRITIC DECAY



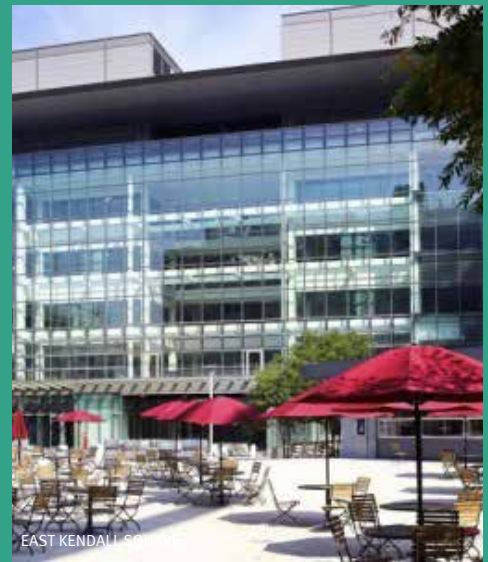
KENDALL SQUARE MBTA REDLINE STATION



THE GALAXY FOUNTAIN AT POINT PARK



KENDALL SQUARE CINEMA



EAST KENDALL SQUARE



KENDALL BOILER AND TANK CO. AT THE CORNER OF BINNEY AND THIRD.



ONE KENDALL SQUARE

^ KENDALL SQUARE

WAYFINDING

Where is Kendall Square? Emerging from the T station on Main Street, visitors often ask this question, and are likely receive a range of answers. That there are at least a couple of developments within a ten-minute walk radius that have Kendall Square in their title must only add to the confusion. Looking to their phones may provide yet another range of responses.

Developing a wayfinding program for the District is important to enhancing and strengthening the identity of Kendall Square. While some of this may be accomplished through signage, the true key to helping people navigate the neighborhood is to create a clear and legible sequence of spaces. Rather than pointing the way with signs and arrows, a strong spatial sequence can provide the visual cues that are necessary to help people find their own paths, and navigate in their own ways, towards the businesses and open spaces that are the true connective tissue within the neighborhood.

At present, Kendall's large superblocks and blank walls make wayfinding within the neighborhood challenging. Without a consistent cadence of storefronts and entries to help identify commercial activity, it can be difficult for a visitor to know which way to go in order to find a cup of coffee or a bite to eat. Existing fences and bollards also work against free-flowing pedestrian movement and often require circuitous routing through the neighborhood, generating longer trips that seem contrary to more intuitive orienteering. Finding ways to better link commercial spaces to residential ones is implicit within the Framework's dendritic circulation concept.

While the City may want to consider an environmental graphics consultant to advise on and design a signage program, in lieu of that, other options to consider are:

- **Continuing to strengthen the commercial corridors of Main and Third Streets through activating the street level spaces with additional retail, restaurants and cafes, and small-scale businesses.**
- **The use of iconic lighting and/or sculptures at key points along Binney and Land Boulevard as markers. These should be spaced and located in such a way that they can be seen from one space, thereby visually linking it to another one in the distance.**
- **Developing and implementing a consistent though varied family of materials and street furnishings that can provide a greater sense of continuity between open spaces.**
- **That public arts, mixed media, and interactive play equipment be encouraged along strategic routes to express the qualities of the Innovation District through more active narratives versus passive ones.**
- **Employ pattern and color on blank walls and the ground plane within the dendritic paths to link spaces together.**
- **Using high-branching trees to reinforce main circulation routes, whether on streets or within the blocks (in keeping with the 6th Street walkway) without visually obscuring adjacent buildings.**
- **Work with Kendall Square based info-tech firms to develop other layers of wayfinding for smartphones**



THE KENDALL HOTEL ON MAIN STREET



TREE LIGHTS AT EAST KENDALL SQUARE ICE RINK



CAMBRIDGE DANCE PARTY



AMGEN



HOWELER - YOON ARCHITECTS: "LIGHT DRIFT"

↑ KENDALL SQUARE



HOWELER - YOON ARCHITECTS AT MIT

LIGHTING

Lighting within the urban context plays an important role in enhancing the safety and comfort of pedestrians and drivers alike. Paths of travel are commonly defined by a cadence of lamp fixtures and their consistent glow. Within a commercial district such as Kendall Square, light spill from adjacent buildings greatly contributes to illumination of the public realm. Contrasted to a darkened alley or street, a well-lit one implies presence, occupation, activation. But in addition to safety, light also can help define the character of a place. In Cambridge's Innovation District, lighting could play a much more integral role in helping to express the creativity and industry of Kendall Square than it does currently.

While accent lighting has existed for some time, recent developments in LED and related technologies has inspired new urban expressions in light city and world-wide. The City has its own standards regarding street lights and the maintenance of appropriate light levels and these should be heeded. But in defining the identity of Kendall Square, lighting can play a large role in connecting spaces and even helping to create new ones. Recent projects, such as the Collier Memorial on MIT's campus and Boston's Illuminus Festival point to how lighting can be layered onto spaces to provide subtle messages or create event spaces in otherwise underutilized ones.

Other recommendations:

- **Use a consistent fixture or family of fixtures to illuminate the dendritic path system so that these paths can more easily be recognized as publically accessible.**
- **Wherever possible, light fixtures should be specified to have long life spans and low maintenance requirements and meet other current sustainable standards.**
- **Colored light should be used only sparingly and located strategically to complement the public realm rather than compete with it.**
- **Consider creating a lighting master plan for the district that would identify design principles, material preferences, and potentially, a family of fixtures and their key locations.**
- **Consider temporary lighting and projection as a means to activate underutilized spaces, such as blank walls, parking garages.**
- **Consider the importance of lighting in winter, where work days are often bracketed by morning and evening darkness.**



FOOD TRUCK FESTIVAL ON BROAD CANAL WAY



CROSS-COUNTRY SKIING ALONG THE CHARLES



LOCALS ENJOYING RIBFEST



GOOD EATS AT RIBFEST ON CAMBRIDGE STREET



CAMBRIDGE SCIENCE FAIR

^ KENDALL SQUARE



WATERFRONT CINEMA IN THE SYDNEY HARBOR, AUSTRALIA

PROGRAMMING

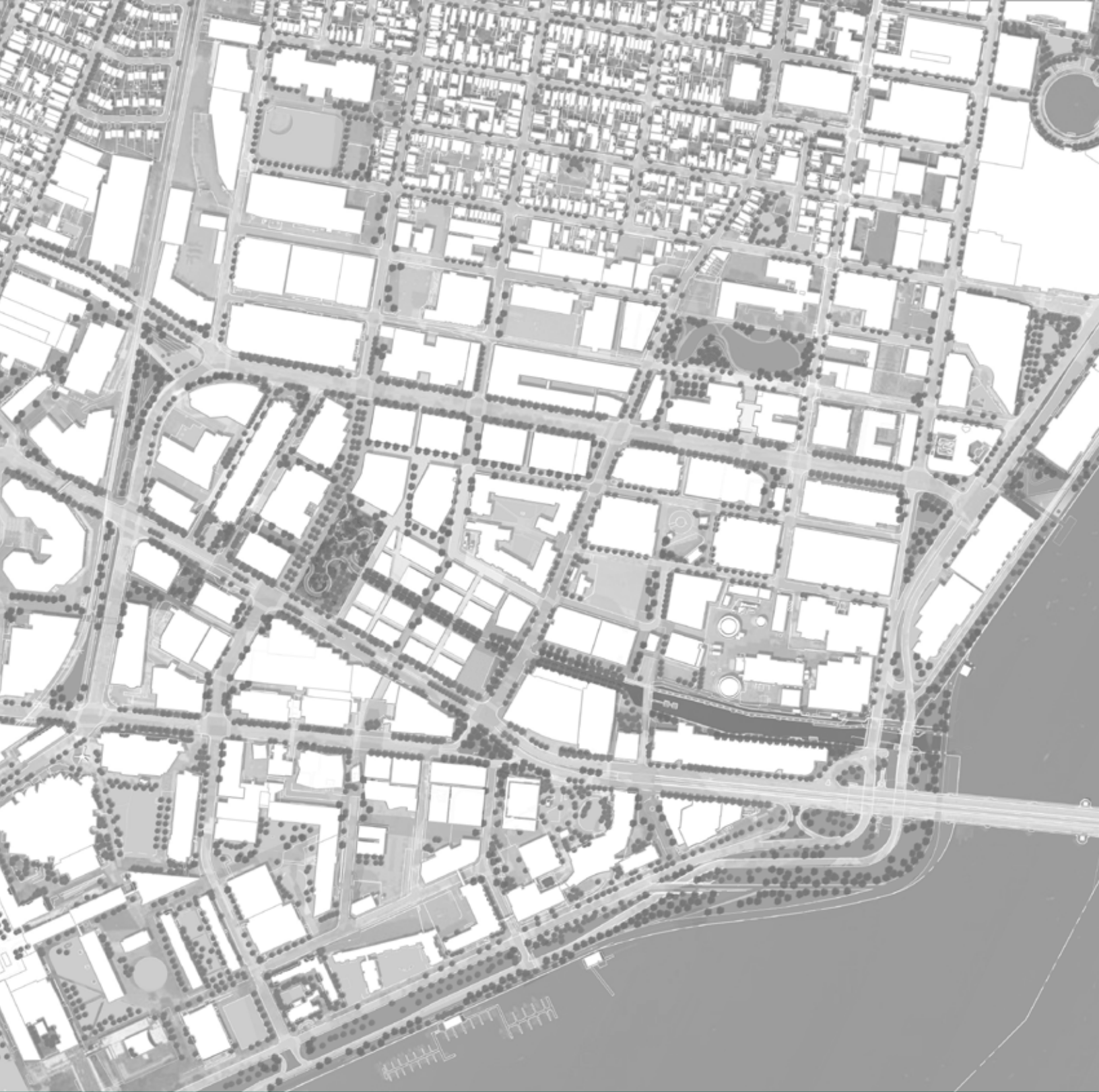
Where do you meet your neighbors? It seems that as our communities have become increasingly diverse and geographically fluid, meeting each other, making new connections has become more challenging. While many Cambridge residents meet through their academic programs, or through their jobs, the new influx of tech workers may not have cause to interact much less meet their East Cambridge or Area Four neighbors.

While parks are still often considered to be the lungs of a city -- providing much-needed respite and fresh air -- more and more they represent the places where we have the opportunity to come together. Whether it's sharing a bench while watching our kids play, learning the names of each other's dogs, or coming together for a large festival, the City's open spaces can provide the backdrop to social interaction and shared experiences.

Public programming and what is known as tactical urbanism can be useful tools for bringing communities together. In connecting Kendall, developing strategies for the various park spaces and streetscapes is an important factor in building an identity for Kendall that brings out the best of its people. While many of these strategies are event or seasonally based, planning for them and building the proper infrastructure into proposed spaces will increase flexibility and the functionality of each space. Providing the infrastructure for lighting and electrical power should be taken into account when developing Kendall's open space.

Programs and strategies to consider:

- Expanding the existing outdoor cinema series to locations such as Charles River Park and Three Points Park that take advantage of the backdrop of the river. Consider a possible partnership with the MIT and Harvard Film Archives to expand the series to include art films that may draw in other populations
- Encourage winter programs such as the sledding hill at Rogers Street Park or designating cross-country skiing paths throughout the area.
- Extend the Food Truck festival to include proposed spaces within the Volpe site, to draw more visitors from the T
- Consider building on Boston's Illuminus Festival and using Kendall as a Cambridge venue
- Develop more outdoor programming such as Tai Chi or yoga in the parks.
- Using the loop between Binney and Broadway, Third and Galileo Galilei to host Centurion bicycle races
- Consider MIT museum sponsored robot / go-cart races down Main Street
- Use the nearly 10 acres proposed for the Charles River Park as a space appropriate for outdoor concerts and music festivals.
- Encourage commercial owners to provide wi-fi to their adjacent outdoor spaces, to foster ad-hoc outdoor lunch rooms and work spaces.
- Emphasize the importance of food as a means to bring people from varying communities together.



9 KEY RECOMMENDATIONS



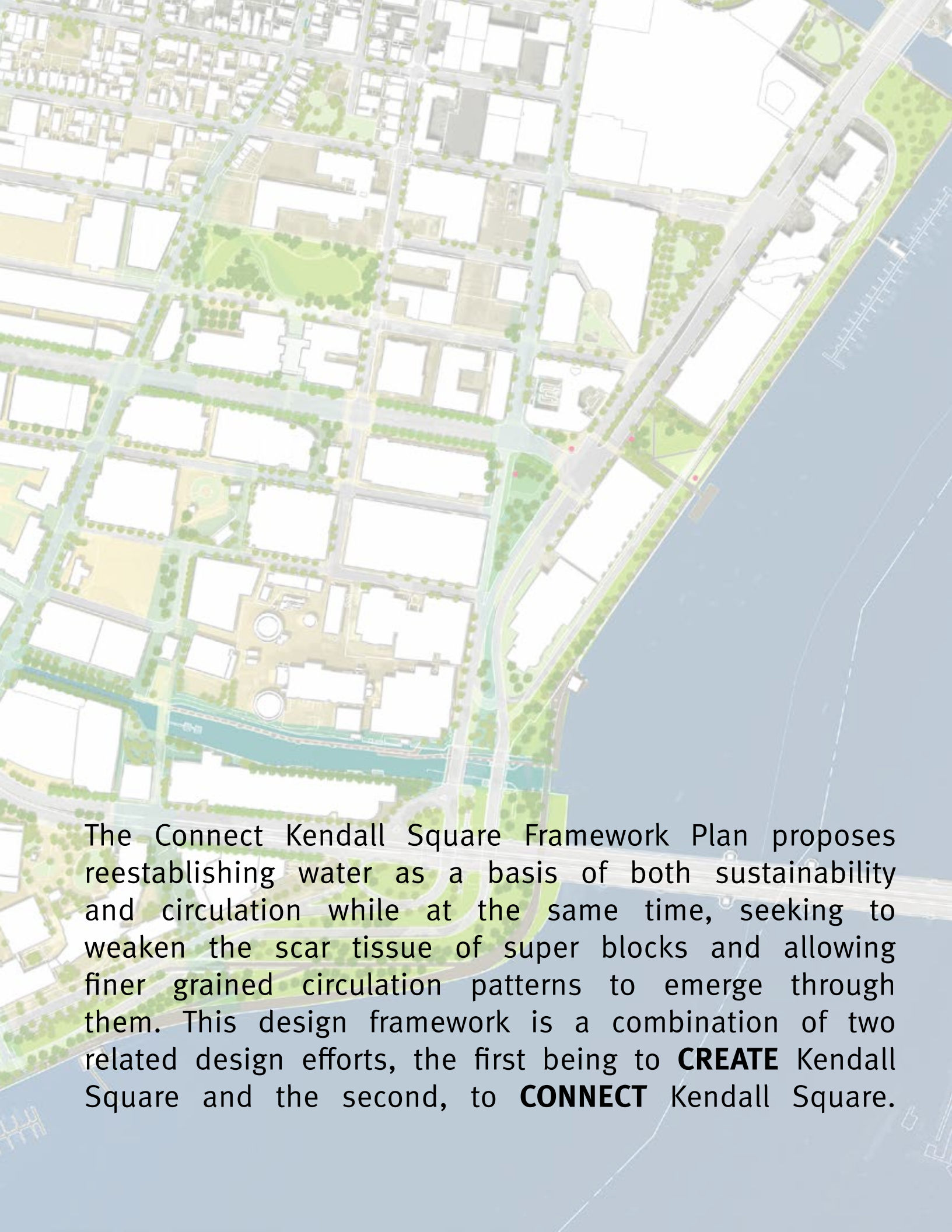
KEN DOUGLASS, THE FRACTAL FLOWS OF WATER SEEPING FROM SAND

The dendritic pattern, the central spatial concept of the Framework Plan, establishes functional and poetic connections to water, and does so in a way that acknowledges the neighborhood's unique hydrologic history. It was the building of canals that gave life to Kendall Square, and water is thus a prime component of the neighborhood's identity. This Framework Plan seeks **to celebrate this complex history of water** at Kendall Square as it builds an imageable and memorable open-space system for future generations.

- 1. EXTEND WATER INTO THE NEIGHBORHOOD TO MAKE A STRONG PHYSICAL AND PEDESTRIAN CONNECTION BETWEEN THE NEIGHBORHOOD AND THE RIVER.**
- 2. CREATE A LARGE GATHERING AREA ALONG THE CHARLES RIVER THAT CAN BECOME A DESTINATION SPACE AND BRING KENDALL SQUARE TO THE WATER.**
- 3. ADJUST STREET GEOMETRIES TO ENHANCE PEDESTRIAN CONNECTIVITY THROUGHOUT THE NEIGHBORHOOD.**
- 4. CREATE A CENTRAL SPACE OR SEQUENCE OF SPACES THAT CAN BECOME THE HEART OF KENDALL SQUARE.**
- 5. PROVIDE A BETTER PUBLIC “FRONT DOOR” TO THE MBTA T STATION ON BROADWAY TO PROVIDE GREATER CONNECTIVITY TO AND FROM THE EAST CAMBRIDGE NEIGHBORHOODS AND POINTS NORTH.**
- 6. CONTINUE TO EXPAND STREET LEVEL COMMERCIAL USES ALONG THE THIRD STREET CORRIDOR.**

- 7. CONTINUE TO EXPAND THE BICYCLE NETWORK TO FURTHER INCREASE FLEXIBILITY.**
- 8. ENCOURAGE MIT AND LOCAL DEVELOPERS TO THINK HOLISTICALLY AND STRATEGICALLY ABOUT STORMWATER MANAGEMENT STRATEGIES.**
- 9. EMBRACE THE INNOVATION AND ECO-DISTRICT DESIGNATIONS AND ALLOW THE NEIGHBORHOOD TO BECOME A NATIONAL MODEL.**
- 10. DESIGN SHARED SPACES TO BE MULTI-USE, MULTI-SEASONAL, AND MULTI-GENERATIONAL.**
- 11. FOSTER CREATIVITY, COMMUNITY BUILDING, AND LEARNING BY PROVIDING INTERACTIVE AND INVENTIVE PLAY FEATURES FOR ALL AGES.**
- 12. EMPLOY DENDRITIC STRATEGIES FOR EXPANDING THE PEDESTRIAN NETWORK WITHIN KENDALL SQUARE. REMOVE FENCES AND OTHER IMPEDIMENTS TO CONNECTIVITY WHEN POSSIBLE.**



An aerial architectural rendering of Kendall Square, Massachusetts. The image shows a dense grid of streets and building footprints. A prominent feature is a waterway, likely the Kendall River, which flows through the area. The rendering includes green spaces, trees, and a mix of building styles. The overall design aims to integrate water into the urban fabric and improve circulation patterns.

The Connect Kendall Square Framework Plan proposes reestablishing water as a basis of both sustainability and circulation while at the same time, seeking to weaken the scar tissue of super blocks and allowing finer grained circulation patterns to emerge through them. This design framework is a combination of two related design efforts, the first being to **CREATE** Kendall Square and the second, to **CONNECT** Kendall Square.

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ACKNOWLEDGEMENTS

In memory of Brian Murphy...

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