



MIT

KENDALL SQUARE LANDSCAPE

DESIGN SUBMISSION
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Introduction/ Overview

This current area of focus for the MIT Kendall Square Landscape design extends from Main Street to Amherst Street, and from Wadsworth Street to Carleton Street, with a small section along Charlotte's Way (f/k/a Deacon's Way) as shown on Page 2 of the following Landscape Design Materials. The landscape vision for the space is total transformation from surface parking lots to a highly active open space, mixing students, neighbors, workers and tourists, with an evolving calendar of programmed activities and events. Above all, this landscape will offer a welcoming and inclusive urban atmosphere for the community to mix, engage, and grow together.

The project's principal goal is 'Connection': continuing the 'Infinite Corridor' -- the spine of the campus -- from MIT's west campus eastward towards Wadsworth Street and the MIT Sloan School of Management; pulling in visitors arriving from Boston & beyond via the 'T' and the Longfellow Bridge; encouraging Cambridge neighbors to use the open space and activating building ground floors -- which spill out into that open space; and drawing on the ecology of the Charles River, bringing the Memorial Drive urban forest deeper into the MIT campus. As the landscape integrates existing buildings and streets, the open space strategically weaves into the city fabric, leveraging and enhancing the existing urban networks of Cambridge.

Architectural Design of Landscape

The landscape offers a diversity of destinations and program opportunities for the broad range of anticipated users: residents, neighbors, workers, and students. Building activity spills out into the open space at the ground floor, including the MIT Forum and Welcome Center; the MIT Press; the MIT Museum; graduate student housing; and a variety of public active/retail spaces. The primary open spaces -- the 'Gateway' below Main Street; the 'Core Open Space' stretching from Carleton Street to Wadsworth Street; and surface parking to the south -- work with reconfigured streets and streetscapes to pull users into and through the landscape.

The 'Gateway' landscape links into the recent Main Street streetscape improvements. The paving field intention-

ally runs from building face to building face, allowing for daily patterns of movement and maximum flexibility for setup of seasonal events -- acknowledging also the growing volume of MBTA ridership. Movable tables and chairs spill out on both sides of the reconfigured MBTA station alongside the MIT Forum and Welcome Center; the MIT Museum; the MIT Press and ground floor retail. Multi-headed light poles illuminate and mark the Gateway, while allowing for uninterrupted flow; and trees connect the space down towards the core open space.

In the 'Core Open Space', doorways open onto the central treed landscape. A strong urban canopy is formed by rows of contrasting tree species, below which linear bands of lawn, urban garden, and richly textured paving shift to allow for ease of pedestrian circulation. The configuration of the ground plane and trees for both daily circulation as well as active programming, including markets, performances, or outdoor exhibitions. Permeable paving above the tree trenches emphasizes this East-West flow, including a broad 30' wide promenade marked by in-ground feature lighting, which extends the 'Infinite Corridor' eastward through the center of the space. The lawns and paved program 'Rooms', designated by stone paving and striking wood platforms, are prime areas for daily congregation or activities. In the evening, these illuminated platforms and the subtle in-ground lighting down the 'Infinite Corridor' enliven and bring identity to the space. The lawn to the south is ideal for throwing a Frisbee or the location for outdoor movies in the summer, projected against the garage headhouse.

Along Amherst Street, the temporary surface parking lot offers a similar play with contrasting bands of hardscape and softscape, including porous paving and a centralized bioswale. Accessed via a curb cut on Amherst Street, this lot accommodates a maximum of 60 spaces. Food trucks are located along the east side of Carleton Street, and two Hubway stations have been situated to serve the area.

The distribution of understory planting and paving, carved into this urban forest, creates a space that is both flexible for diverse programming, but also comfortable as a neighborhood destination. In addition to reinforced event

lawns for heavy use, plantings will include urban gardens with a mix of fruiting and flowering woody shrubs; grasses to provide winter structure; as well as perennials for spring/summer interest. Bioswales planted with woody groundcovers and herbaceous perennials will further contribute to site softscape and stormwater management. Street tree species are configured with the objective of mitigating wind to achieve the best ground level conditions – as well as providing an appropriate range of species for biodiversity. Some trees offer broad shade, while others are columnar for tight streetscapes and visual porosity across the open space. Species for all plantings are both native and adapted – focusing on selections that will be resilient based on urban conditions of soil, salt, and micro-climate.

The landscape includes five different paving types, all rated for vehicular access, and selected for their pedestrian scale and texture. These paving assemblies range from stone and concrete unit pavers to concrete and asphalt, some permeable. Custom wood decking platforms frame the program 'Rooms', serving for seating or performances. Other seating elements include monolithic stone seatwalls and backed wood benches. Trash/recycling receptacles, bike racks, and bollards offer additional fixed furnishings.

Ground Level Activation

The open space anticipates and encourages spill out of ground level building activity into the landscape, by providing flexible zones along building faces. Multiple doors and windows at the ground floor emphasize the connection to the public realm and a transparency between inside and outside. Special events and daily activities can spill out from buildings into the open space. The over-arching objective is to blur the distinction between in and out, by maximizing clear glass and operable glazing; and leveraging opportunities to occupy both ground floor and immediate exterior space to facilitate a diverse range of programming.

Pedestrian and Bicycle Accommodations

The project converts existing parking lots and streets into a cohesive and pedestrian-oriented open space, connected by upgraded streetscapes to adjacent properties and neighborhoods. Hayward Street is closed to thru vehicular traffic, the north and south sections serving only as access for building-specific service and loading; a key

section of Carleton Street is converted into a shared street; and raised crossings at all streets prioritize the pedestrian experience, signaling cars and bicycles to proceed with caution. Pedestrian circulation is broadly facilitated to and from various locations, and across the open space – serving students, workers, neighbors, visitors – with an emphasis on the 'Infinite Corridor' and the 'T'. Strong links are made to the Main Street Corridor, and pedestrian circulation along Amherst Street and Wadsworth Street as it connects to the Charles River.

On-street bicycle facilities will include sharrows (on streets with low traffic volumes) and bike lanes (where space permits). Cyclists will be encouraged to walk their bikes through the open space, recognizing that mixing cyclists and pedestrians will require both to be attentive to density and speed of movement. Signage would alert bicyclists to ride slowly, yielding to pedestrians; they would also provide direction to the nearest on-street bicycle route.

Ample and distributed bike storage integrate this project into the greater bike infrastructure of Cambridge. Short-term bike racks are provided at buildings as required. Significantly expanded long-term bike storage is provided in the garage, with clear signage to direct users. Proposed locations for 2 Hubway bike rental stations further encourage biking as a preferred and convenient mode of transportation.

Lighting and Signage Strategies and Plans

As a vibrant urban destination in Cambridge, the landscape will include appropriate vehicular and pedestrian lighting to ensure a safe, public environment, 24-hours a day. Lighting levels will achieve the standards required for safety and comfort, while remaining below levels that will contribute to light pollution for adjacent properties or users or produce unnecessary energy consumption. Simple vehicular lighting is provided along the streets and within the surface parking lot. Pedestrian pole-mounted lights are distributed through the space, with several taller multi-headed poles in the core open space and highlighting the Gateway.

Feature lighting of the landscape will also importantly contribute to wayfinding, district identity, and public realm activation. Linear accent lights highlight the monolithic stone seat walls and custom wood platforms, while In-ground LED uplights, compliant with the City lighting regulations, distinctively yet subtly mark the Infinite Corridor. These

uplights will run on a limited program between the hours of 12am and 6am daily.

All exterior lighting will comply with the requirements of the proposed City of Cambridge Lighting Ordinance, which stipulates that projects in Lighting Zone 3 (“LZ3”) achieve LEED v4.0 BD+C Light Pollution Reduction.

The wayfinding strategy for the site focuses on providing clear orientation for pedestrians, bikers, and drivers, while keeping the signage minimal and simple. Signs are located at key decision points, with a mix of pedestrian wayfinding, including campus directories; and vehicular wayfinding to clarify shared street conditions and parking or loading locations. This family of signs – currently being developed by Pentagram, a firm with a broad range of environmental graphics experience – clarified the scale and form anticipated for the signage.

All signage complies with the City of Cambridge Signs and Illumination Ordinance.

Site Sustainability

MIT’s Kendall Square Initiative is designed to be a leader in urban sustainability revitalization and renewal. MIT has made sustainability an integral part of the Kendall Square design process and is committed to developing a District that is sustainably designed, energy efficient, environmentally conscious and healthy for the occupants and visitors that enhance the community.

MIT has led an integrated process that includes technical experts who are actively engaged in the design process of overall SoMa District. This comprehensive view allows the development to incorporate sustainability best practices in design and operation, stormwater capture and reuse, transportation and landscape strategies.

MIT has established a minimum commitment to Leadership in Energy and Environmental Design (LEED) Gold under the more stringent v4 system. MIT’s Kendall Square Initiative will be one of the largest LEED v4 collections of projects on the east coast that incorporates the latest energy standards and new sustainability initiatives such as material content disclosure to encourage healthy buildings and indoor environments.

As required by Special Permit #303 included in this submission are a LEED Checklist and Narrative for the SoMa District consistent with Article 22.20. These materials address the sustainability standards contained in Section 13.89.4 and the sustainability strategies and guidelines set forth in Appendix D of Special Permit #303.

