Steering the evolution of the campus

The new Office of Campus Planning—an enhanced resource for the MIT community

Administrative and Fiscal Officers Meeting
March 6, 2019
MIT: A small city within a city

COMMUNITY
23,000 people

BUILDINGS
140 + buildings

UTILITIES
15 + utilities

LAND & SITE SYSTEMS
166 acres
Campus development

1919
Innovation Ecosystem – today
Some current projects in construction

- Vassar Street Residence
- Central Utilities Plant Expansion
- Kendall Square Site 4 Graduate Housing
21 staff

- 4 architects
- 4 planners
- 2 landscape architects
- 7 facilities and geographic information system specialists
- 2 signage specialists
- 1 archivist
- 1 admin assistant
The Office of Campus Planning (OCP)

A central planning resource for the MIT community, offering practiced expertise in:

- Campus planning & urban design
- Data-driven mapping and analysis
- Space planning
- Landscape architecture
- Architecture
- Permitting & regulations

OCP serves as a source for information about the campus, and provides the services to plan the physical campus in support of the Institute’s mission and needs into the future.
What we think about

ARCHITECTURE

INNOVATION & RESEARCH

SUSTAINABILITY

SERVICING

TEACHING & LEARNING

LANDSCAPE & OPEN SPACE

ACTIVITIES

HOUSING

CONNECTIONS

PLACE MAKING
At different scales

Site/Project

Music Building

Sector

West Campus Commons

Campus

Historic Significance
For different needs, such as . . .

Teaching & Learning Spaces

Parking & Transportation

Service & Materials Handling
Over different timeframes

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Near-Term

< 2 Years

![Floor plans and aerial view of buildings with annotations for near-term projects](image-url)
Over different timeframes

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Near-Term

- < 2 Years

Mid- to Long-Term

- 5-Year Implementation
- 10-Year Capital Plan
- 20-Year Planning Horizon

Framework Plan

- Renovation
- New Construction
- Capital Renewal Strategies
- Development Concepts Under Consideration
- Academic Development Opportunity
Over different timeframes

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Map 1: MIT Property in Cambridge

Data: 2018 (Data as of June 30, 2018)
In a cycle of planning and projects

MIT Presidential Task Force on Student Life and Learning
Charged in 1998

The Campaign for MIT
1999-2005

MIT 2030: A Capital Planning Framework
2010-2030

Simmons Hall
Stata Center
Brain & Cog Sciences
Media Lab Complex

Maseeh Hall
Kresge Auditorium
Simons Building
Building 31

Institute-wide Task Force on the Future of MIT Education
Charged in 2013

MIT Campaign for a Better World
2016-2022

The Evolving Campus:
Framework for Campus Development - Olin Partnership
2000-2010

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Providing these types of services & deliverables

### Land & Outdoor Space
- **Campus Planning & Urban Design**
- **Landscape Architecture**

### Buildings & Indoor Space
- **Architecture**
- **Space & Facility Planning**

### Civic Engagement & Governance Support
- **Liaison Activity, Reporting & Permitting**
- **Committee Support & Internal Activities**

### Data, Graphics & Documentation
- **Archives**
- **Data & Mapping**
- **Space Accounting**
- **Signage**

**Trends, Need Assessment & Data Analysis**

**Existing Conditions, Mapping & Visualization**

**Scenario Development & Evaluation**
Providing these types of services & deliverables

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- Site Evaluation, Volume Analysis & Urban Campus Design
- Architect Selection
- Space Programming & Concept Design
We work with MIT to solve challenges, small and large
The North Corridor

An case study of a project from plan to pathway
Before and after
Context and sector plan

BICYCLE PARKING
a. Maintain parking of covered framework at buildings 24, 26, 16, as is now. 
   -16 spaces in 26 (someday 30)
   -40 of building 13 to open pedestrian access.
b. Introduce 2 new areas for bicycle parking:
   -20 spaces at 33 and 26 (add 20 spaces)
c. Total 140 new spaces, 755 total

VEHICULAR PARKING: Option 1
a. 8 spaces off drop-off near building 13 entry
b. 13-15 spaces in Main Block entry
   -6-8 ADA spaces
   -6-7 medical and loading only spaces
c. Feedback needed for other department dedicated ADA locations
d. All unnecessary parking removed

PLACES FOR PEOPLE
a. New gathering and seating spaces located near doors
b. Take advantage of solar aspect when possible
c. Multiple spaces for outdoor gathering focused around the North Corridor and Vassar Street entry

Lighting Scheme
Project, principles, and design
Landscape performance

Blue = water management
Green = heat reduction
Red = social space

- 65,000 sf landscape filter added
- 20,500 sf tree canopy coverage added
- 418 linear feet of benches added
- 172 bike parking spots provided
- 1.5 Acres Managed By Stormwater BMPs:
  - 65,000 sf of landscape filter plant beds
  - 56,200 gal of stormwater storage
  - 100% treatment of 2-year storm (3.3”)
  - Peak rate and volume reduced ~ 75%
    (for 2-year storm)
  - Phosphorus annual load reduced 70%
  - ~ 50 parking spaces relocated offsite
  - ~ 75 new trees planted

Cambridge Watershed

56,200 gal.
stormwater storage
(2-year outflow)

70% reduction in
phosphorus

1.05 lbs
annually

1.5 acres

lighter color
pavement installed to reduce island effect

100% treatment of
2-year storm (3.3”)
Building a landscape with performance
What we are thinking about today
Site/Project

Cherry Tree Grove

Museum Backfill Space

Sailing Pavilion Crossing Safety
Our OCP Team – Campus Planning

Jon Alvarez, AIA
Director of Campus Planning

Kelley Brown, AICP, LEED AP
Senior Campus Planner

Emma Corbalán, AIA, LEED AP BD+C
Project Manager for Sustainable Design & Construction

Amy Kaiser, AICP
Senior Campus Planner

Jennifer Marshall
Assistant Director

Vasso Mathes
Senior Campus Planner

Morgan Pinney, AIA
Senior Campus Planner

Todd Robinson, RLA, ASLA
Senior Campus Planner

Melissa Shakro Stopa, AICP
Senior Campus Planner

Laura Tenny, RLA, ASLA
Senior Campus Planner

Kitty Drexel, AA
Our OCP Team – Facility Information Systems

William Witts
Manager, FIS

Irina Arestova
Design Engineer

Vitaly Borodkin
BIM Assistant

Cindy Chu
GIS Specialist

Shauna Diersch
GIS Specialist

Ronald Filosa
Space Management Assistant

Bethany Frost
Graphics Assistant

Moira O’Connell-Morganstein
Archivist

Addison Wooles
CAFM Administrator

*Not pictured: Valerie Hinds, Signage Assistant
Whether MIT has a need that is simple or complex — we are here to help.