77 Massachusetts Avenue Cambridge, Massachusetts 02139–4307

campusplanning.mit.edu

May 26, 2021

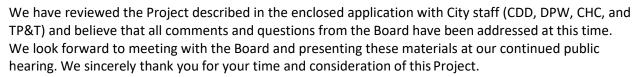
City of Cambridge Planning Board Community Development Department Attn: Swaathi Joseph 344 Broadway Cambridge, MA 02139

RE: Supplemental Materials Submission for Special Permit Application PB#371, MIT West Campus Graduate Student Dormitory at 269-301 Vassar Street

Dear Chairperson Preston Connolly and Members of the Board,

The Massachusetts Institute of Technology (MIT) is pleased to submit the enclosed supplemental materials in support of the Special Permit Application PB#371 for MIT's West Campus Graduate Student Dormitory being proposed at 269-301 Vassar Street:

- 1) Supplemental narrative in Support of Special Permit PB#371
- 2) Revised Graphic Materials, May 25, 2021



Regards,

Jon Alvarez, AIA
Director
MIT Office of Campus Planning



MIT West Campus Graduate Student Dormitory

Planning Board Special Permit Submission

Supplemental Narrative

May 26, 2021



OVERVIEW

On February 16th, 2021 the Massachusetts Institute of Technology presented in front of the Planning Board at a public hearing with plans for a proposed ground-up graduate student dormitory along Vassar St. During this hearing, Planning Board members voted to continue the hearing of the applicant's submission, and provided feedback on the proposed project, which has been summarized below.

- The façades and exterior appearance for both buildings: key concerns were materiality, coloration, and general "weight" of the façade along the length of the massing. We were asked to explore options other than all brick, alternatives to thin-brick, lighter colors, and strategies to break up the massing.
- Questions and feedback on the open space and the relationship and connectivity to Fort
 Washington Park and the surrounding points of access. Comments were made that the
 Central Plaza should be welcoming to the broader community and should not feel like a part
 of campus.

Based on this feedback, MIT and its consultant team have prepared revisions and supplemental material to the application to address each of these issues. These changes are summarized below

- 1. The following key changes have been made to the façades of the building:
 - a. Precast with thin-brick cladding on both east and west building towers has been eliminated in favor of a folded metal panel rainscreen in a lighter and more reflective finish. Ground floor level base has been changed to brick. The windows in residential areas of the towers have been increased in size to achieve a vertical proportion.
 - b. Brick palette on the five / six story low bars has been lightened. The window and infill composition has been refined.
 - c. Increased extent of curtainwall glazing, particularly at elevator lobbies, corridors, and stairs. Each tower now features multiple 'fissures' which increase transparency at

- active interior spaces and break down the mass of each tower.
- d. Interior common spaces have been refined and their presence at the street level has been enhanced.
- 2. The landscape and streetscape design have been further refined to improve wayfinding clarity, public access, mobility, and programming potential for all publicly accessible exterior spaces on the project. Particular focus has been placed on the Central Plaza where the primary circulation path between Vassar Street and the Fort Washington rail crossing has been widened and clarified in its organization. It is now also more directly connected to the lawn and elevated deck to promote a stronger sense of public access.

For narrative changes please refer to original Project Special Permit application dated December 17th, 2020. All text from the original Special Permit Filing Volume 1 remains applicable, with the exception of the following excerpted changes. *Text that is changed or added from the original submission is italicized and highlighted in gray.*

REVISIONS TO COVER SHEET

*The only change to the cover sheet is the list of requested special permits to include the request for a Special Permit to reduce the required Green Roof Area pursuant to section 22.35.3 of the Ordinance.

CITY OF CAMBRIDGE, MASSACHUSETTS

PLANNING BOARD

CITY HALL ANNEX, 344 BROADWAY, CAMBRIDGE, MA 02139

SPECIAL PERMIT APPLICATION • COVER SHEET

In accordance with the requirements of the City of Cambridge Zoning Ordinance, the undersigned hereby petitions the Planning Board for one or more Special Permits for the premises indicated below.

Location of Premises: 269-301 Vassar St.

Zoning District: Special District 6 and Special District 11

Applicant Name: Massachusetts Institute of Technology

Applicant Address: 77 Massachusetts Ave., NW23-100, Cambridge MA 02139

Contact Information: 617-293-6380 kbrown@mit.edu

Telephone # Email Address Fax #

List all requested special permit(s) (with reference to zoning section numbers) below. Note that the Applicant is responsible for seeking all necessary special permits for the project. A special permit cannot be granted if it is not specifically requested in the Application.

Section 17.63.2(b) - Special Permit to increase building height to approximately 105' within the SD-6 District

Section 17.203.2 - Special Permit to increase building height to approximately 100' within the SD-11 District

Section 6.35.1 - Special Permit to reduce the minimum parking requirements

Section 19.20 - Project Review Special Permit

Section 22.35.3 - Special Permit to reduce the required Green Roof Area

List all submitted materials (include document titles and volume numbers where applicable) below.

Volume I: Application forms, project narratives, and project certifications

Volume II: Plans and Illustrations

Signature of Applicant:

For the Planning Board, this application has been received by the Community Development Department (CDD) on the date specified below:

REVISIONS TO DIMENSIONAL FORM

*The only change to the dimensional form is an addition of 1050 sf of additional proposed GFA. All other figures on the dimensional form remain the same from the original Special Permit application dated December 17th, 2021

Project Address:

Application Date:

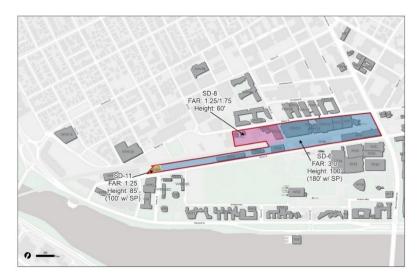
	Existing	Allowed or Required (max/min)	Proposed	Permitted
Lot Area (sq ft)	1		1	
Lot Width (ft)				
Total Gross Floor Area (sq ft)	1	1	1	
Residential Base				
Non-Residential Base				
Inclusionary Housing Bonus				
Total Floor Area Ratio	1	1	1	
Residential Base				
Non-Residential Base				
Inclusionary Housing Bonus				
Total Dwelling Units				
Base Units				
Inclusionary Bonus Units				
Base Lot Area / Unit (sq ft)				
Total Lot Area / Unit (sq ft)				
Building Height(s) (ft)			5	
Front Yard Setback (ft)			6	
Side Yard Setback (ft)	3 3	3 3	3 3	
Side Yard Setback (ft)	3	3	6 3	
Rear Yard Setback (ft)			6	
Open Space (% of Lot Area)			7	
Private Open Space			7	
Permeable Open Space			7	
Other Open Space (Specify)			7	
Off-Street Parking Spaces			4	
Long-Term Bicycle Parking				
Short-Term Bicycle Parking				
Loading Bays				

Use space below and/or attached pages for additional notes:

Refer to Footnotes on the following page

Footnotes to Dimensional Form

(1) Lot area, total GFA, and FAR for the lot as shown in the dimensional form are calculated across "Block 7", a contiguous multi-building lot owned by MIT. The figure and chart provided below shows the bounds of Block 7 and the associated aggregate calculations.



Zoning District	Zoning Block Area	FAR (Dorm)	Total Block Capacity (GFA)	Existing GFA on Block	Built Space to be Demolished	Remaining Block Development Capacity	New GFA
SD-6	608,466	3	1,825,398	968,481	n/a	n/a	
SD-8	143,206	1.75	250,611	135,441	n/a	n/a	
SD-11	13,434	2	26,868	14,909	14,909	n/a	
TOTAL	765,106	n/a	2,102,877	1,118,831	14,909	998,955	328,050

- (2) Where there are two numbers separated by a semicolon the first number pertains to the portion of the site within SD-11, and the second number pertains to the portion of the site within SD-6 (i.e. SD-11; SD-6). Where there are two numbers separated by a slash the first is the height allowed by right and the second is the increase allowed by Special Permit.
- (3) Per 5.13, distance between buildings on multi-building parcel calculations:
 - East Building (105 ft) + West Building (100 ft) = 205 ft/6 = 34.2 ft (Proposed = 127'6")
 - East Building (105 ft) + Simmons Hall (100 ft) = 205 ft/6 = 34.2 ft (Proposed= 50'1")
- (4) Subject to Special Permit to reduce minimum parking requirements per Section 6.35.1. This reflects a net loss of 136 surface spaces from the West Lot which is discussed in greater detail in the Transportation Access and Circulation Study included in the Appendix to this application.
- (5) Subject to receipt of Special Permit from the Planning Board to increase height per Section 17.63.2(b) and Section 17.203.2.
- (6) Subject to receipt of a variance from the Board of Zoning Appeal for relief on yard setback requirements.
- (7) Although not required, the Project is providing 30,100 sf of open space of which 15,390 sf is categorized as publicly beneficial open space. This is detailed on Exhibit 2.4 in Volume II of this application.

REVISIONS TO PROJECT NARRATIVE

2. PROJECT OVERVIEW

Second Paragraph:

In accordance with the above-described commitment and schedule for compliance, this is an application by MIT for Special Permits to enable the construction of two dormitory buildings at 269-301 Vassar Street (the "Site"), containing approximately 690 beds, including a large central plaza (the "Central Plaza"), two entry courts, and green space improvements along the Grand Junction Rail Line and future Grand Junction Multi-Use Path (the "Project"). The Site is situated on MIT's campus and includes parcels subject to Special District 6 and Special District 11 zoning, as well as the Fort Washington Historic District. The Project proposes approximately 328,050 square feet of Gross Floor Area ("GFA") across the two buildings described herein. The "West Building", as it will be referred to throughout this application, is approximately 168,000 square feet of GFA, containing approximately 355 beds. The "East Building", as it will be referred to throughout this application, is approximately 160,050 square feet of GFA, containing approximately 335 beds. MIT intends to engage a third-party student housing developer, American Campus Communities ("ACC"), to deliver the Project, a model that has proven successful with other higher educational institutions and may allow MIT the financial flexibility and resources necessary to expand bed capacity and expedite capital renewal improvements and deferred maintenance in the graduate housing system and overall residential property portfolio.

3. ZONING AND CONSISTENCY

i. Special Permits Requested

The Applicant respectfully requests the Planning Board grant the following Special Permits in favor of the Project:

- Special Permit to increase building height of a portion of the East Building within the SD-6 District to approximately 105', pursuant to Section 17.63.2(b) of the Ordinance;
- Special Permit to increase building height of a portion of the West Building within the SD-11 District to approximately 100', pursuant to Section 17.203.2 of the Ordinance;
- Special Permit to reduce the minimum parking requirements, pursuant to Section 6.35.1 of the Ordinance;
- **Project Review Special Permit**, pursuant to Section 19.20 of the Ordinance.
- Special Permit to reduce the required Green Roof Area, Biosolar Green Roof Area, or Salar Energy System, pursuant to Section 22.35.3 of the Ordinance

The basis for the above-listed special permit requests is provided in Section 3.iii of this application.

ii. Compliance with Zoning

The Project includes demolition of the existing MIT Police Station and construction of two dormitory buildings at the Site, referred to as the West and East Buildings, each to contain up to approximately 355 and

335 beds respectively for a total of up to approximately 690 beds. The Project is anticipated to comprise the construction of approximately 328,050 GFA of dormitory use and accessory uses (i.e., approximately 168,000 GFA in the West Building and approximately 160,050 GFA in the East Building). The West Building is proposed to range in height from approximately 60' to 100' and the East Building is proposed to rangein height from approximately 60' to 105'. Exhibit 2.1 in Volume II of this application shows the general dimensional parameters for each of the West and East Buildings.

• Maximum Floor Area Ratio (FAR). The Site is part of the multi-building Zoning Lot owned by MIT referred to as "Block 7", measuring 765,106 square feet in total as shown in Figure 1 below. Portions of the Zoning Lot are in the SD-6, SD-8, and SD-11 Districts, which districts have a maximum FAR for dormitory use of 3, 1.75, and 2, respectively. As detailed in Table 3, the total build capacity allowed on the Zoning Lot is 2,102,877 square feet of GFA. The existing buildings total approximately 1,118,831 square feet of GFA, allowing for approximately 998,955 square feet of additional development capacity, after the MIT Police Station is demolished. The Project proposes up to approximately 328,050 square feet of GFA, creating a total of 1,431,972 square feet of GFA on the entire multi-building Zoning Lot, which is within the available capacity. Accordingly, the Project complies with the maximum FAR requirement.

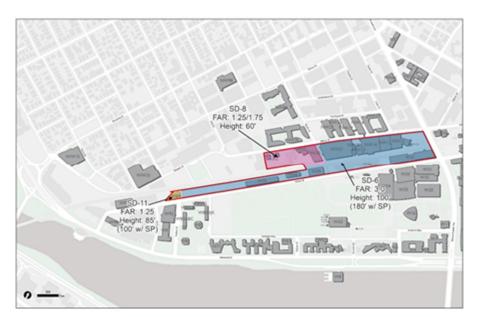


Figure 1 – Block 7 Man

Zoning District	Zoning Block	FAR (Dorm)		Existing GFA on Block		Remaining Block Development	New GFA
	Area				Demolished	Capacity	
SD-6	608,466	3	1,825,398	968,481	n/a	n/a	
SD-8	143,206	1.75	250,611	135,441	n/a	n/a	
SD-11	13,434	2	26,868	14,909	14,909	n/a	
TOTAL	765,106	n/a	2,102,877	1,118,831	14,909	998,955	328,050

iii. Compliance with Special Permit Criteria

3.iii.a Compliance with Criteria Specific to Special Permits being sought (if any)

• **Project Review Special Permit,** pursuant to Section 19.20 of the Ordinance allowing for the new construction of approximately 328,050 GFA of dormitory use and accessory uses (i.e., approximately 168,000 sf in the West Building and approximately 160,050 sf in the East Building).

- Special Permit to reduce the required Green Roof Area, Biosolar Green Roof Area, or Solar Energy System, pursuant to Section 22.35.3 of the Ordinance
 - The project team recognizes and acknowledges the recently amended Green Roof Ordinance (Section 22.30). The Ordinance requires incorporation of green roof or bio-solar coverage over 80% of the available roof area for all projects pursuing Special Permit approval after 1 June 2021. See Volume 2 Plans and Illustrations figure 2.12 for Green Roof Ordinance accounting information. The project includes 44,971 sf of total roof area. After excluding 21,425 sf of roof area dedicated to mechanical appurtenances and 1,462 sf of roof area dedicated to resident roof terraces, 22,084 sf of roof area remains subject to the Green Roof Ordinance. The project currently proposes 49.5% green roof area coverage (10,928 sf). We therefore request Special Permit exemption pursuant to 22.35.3 for the 30.5% of available roof area not currently proposed to be covered with green roof or bio-solar. As the project develops further and advances toward a building permit application, the project team will endeavor to increase the green roof coverage beyond 49.5% and evaluate the PV-ready areas of the roof to establish the highest performing roof possible.

iv. Urban Design Narrative – Conformance with City Wide Urban Design Objectives (Section 19.30)

<u>Section 19.31: New projects should be responsive to the existing or anticipated pattern of development.</u>
Indicators include:

- (5) Pedestrians and bicyclists are able to access the site safely and conveniently; bicyclist should have secure storage facilities conveniently located on-site and out of the weather.
 - i. Significant indoor bicycle storage is provided on the ground floors of both East and West Buildings, directly and securely accessible through doors adjacent to the Vassar Street sidewalk. Supplemental bicycle storage is located on the second floor of the West Building adjacent to the building elevators. Service areas are located on the extreme ends of each building, limiting potential conflicts between bicycles and pedestrians with service vehicles. The Project will replace in kind the existing cycle track for the majority of the Site's length. Additionally, the Project will convert the existing bike lane at the western end of the Site to a raised cycle track with landscape buffer as indicated in Exhibit 4.3 in Volume II of this application. The Project will also expand the existing Vassar Street Bluebikes Station by adding a new 27-dock Bluebikes Station at the Westgate Apartments.
 - ii. Multi-modal traffic will occur through the Central Plaza, as pedestrians and bicyclists share the access route connecting to Fort Washington Park and the future Grand Junction Multi-Use Path. The Central Plaza design includes approximately 17' wide spacing between trees in the paved portion of the plaza to allow adequate clearance for bikes, runners, and pedestrians, and provides additional edge zones, protected with trees and benches, intended for pedestrian use.

<u>Section 19.34; Projects should not overburden the City infrastructure services, including neighborhood roads,</u> <u>City water supply system, or sewer system</u>

2. The capacity and condition of drinking water and wastewater infrastructure systems are shown to be adequate, or steps necessary to bring them up to an acceptable level are identified.

i. Existing water infrastructure available to the Site includes a 12" water main within VassarStreet. The Project proposes a new 6" water service connection and an 8" fire protection service, both tapped off the Vassar Street main at the east side of the Site. The Project also proposes four new sewer connections to the main in Vassar Street, two each from the East and West Buildings. Please refer to the water service and sewer service infrastructure narratives in Section 4 of this application for additional information and detail.