2005 Annual Town Gown Report

Massachusetts Institute of Technology

December 9, 2005

Massachusetts Institute of Technology
2005 Annual Town Gown Report Update

I. EXISTING CONDITIONS 1

A. FACULTY & STAFF 1

B. STUDENT BODY 2

C. STUDENT RESIDENCES 3

D. FACILITIES & LAND OWNED. 4

E. REAL ESTATE LEASED 7

F. PAYMENTS TO CITY OF CAMBRIDGE: 8

II. FUTURE PLANS NARRATIVE 9

A. INTRODUCTION 9

B. CAMPUS PLANNING CONSIDERATIONS 9

C. MIT STAFF, FACULTY AND STUDENTS 10

D. HOUSING 10

E. NORTHEAST AND EAST CAMPUS REDEVELOPMENT 11

III. LIST OF PROJECTS 13

A. ENHANCED ACADEMIC FACILITIES 13

B. HOUSING 15

C. PUBLIC IMPROVEMENT PROJECTS 15

D. UTILITY INFRASTRUCTURE AND PARKING 16

IV. MAPPING REQUIREMENTS 17

V. TRANSPORTATION DEMAND MANAGEMENT 19

VI. INSTITUTION SPECIFIC INFORMATION REQUESTS 21

MAP 1: MIT PROPERTY IN CAMBRIDGE
MAP 2: CAMPUS DEVELOPMENT OPPORTUNITIES
MAP 3: MIT PROJECTS
MAP 4: PARKING ALTERNATIVES

2005 Annual Town Gown Report

Massachusetts Institute of Technology

2004-2005 term (7/1/04 – 6/30/05)[1]

Submitted December 9, 2005

I. EXISTING CONDITIONS

A. FACULTY & STAFF

	2002	**2003**	**2004**	**2005**	**2015 (projected)**
Cambridge-based Staff					
Head Count:	7,820	7,881	7,911	**8,173**	7,500-8,500[2]
FTEs:	6,793	6,971	6,823	**7,145**	
Cambridge-based Faculty					
Head Count:	955	965	962	**970**	~1,000
FTEs:	948	958	952	**963**	
Number of Cambridge Residents Employed at Cambridge Facilities:	1,369	1,338	2,082[3]	**1,827**	~2,000

[1] Information is accurate for these dates except where otherwise noted.

[2] MIT has no planned initiatives that would increase the number of staff.

[3] The change reflects a new system of record and the ability of employees to update their own biographical information.

B. STUDENT BODY

	2002	2003	2004	2005	2015 (projected)
Total Undergraduate Students:	4,213	4,173	4,109	**4,132**	4,000-4,200
Day:	4,213	4,173	4,109	**4,132**	
Evening:	N/A	N/A	N/A	**N/A**	
Full Time:	4,150	4,107	4,069	**4,077**	
Part Time:	63	66	40	**55**	
Total Graduate Students:	5,667	5,864	5,963	**5,953**	6,000-6,200[4]
Day:	5,667	5,864	5,963	**5,953**	
Evening:	N/A	N/A	N/A	**N/A**	
Full Time:	5,501	5,687	5,819	**5,813**	
Part Time:	166	177	144	**140**	
Non-Degree Students:	217	185	158	**150**	
Day:	217	185	158	**150**	
Evening:	N/A	N/A	N/A	**N/A**	
Total Students Attending Classes in Cambridge (inclusive of all categories below)	10,097	10,222	10,230	**10,235**	10,000-10,400
Non-resident students not included	107	95	110	**85**	

[4] Graduate student enrollment is restricted by the availability of research funding as well as the ability of international students to enroll. International students account for 36 percent of the graduate population. MIT anticipates that increased competition for international students in the U.S. and abroad, along with visa restrictions may slow the growth of the graduate student population.

C. STUDENT RESIDENCES

	2002	**2003**	**2004**	**2005**	**2015 (projected)**
Number of Undergraduate Students residing in Cambridge:					
In Institute-approved housing (includes dormitories, fraternities, sororities and independent living groups):	3,185	3,324	3,253	**3,281**	3,200-3,400
In off campus housing owned and managed by MIT:	8	5	6	**4**	
In off campus non-MIT housing:	103	37	91	**88**	
Number of Graduate Students residing in Cambridge:					
In Institute-approved housing (includes dormitories, fraternities, sororities and independent living groups):	1,458	2,048	2,207	**2,148**	2,100-2,500
In off campus housing owned and managed by MIT:	279	265	191	**195**	
In off campus non-MIT housing:	1,649	1,712	1,747	**1,736**	
Student Parking					
Number of parking spaces maintained for undergraduate and graduate students (including resident and commuter parking)	1,103	1,103	1,103	**1,103**	1,103

D. FACILITIES & LAND OWNED.[5]

	2002	2003	2004	2005	2015 (projected)
Acres:					
Tax Exempt	157	157	157	**157**	
Taxable	83	86	84	**84**	
Number of Buildings:	123	125	125	**126**	
Dormitories:					
Number of Buildings:	26	26	26	**26**	
Number of Beds:	5,274	5,274	5,274	**5,248**[6]	
Size of Buildings (gross floor area):					
Institutional/Academic			5,897,549	**5,898,196**	
Student Activities/Athletic			1,845,344	**1,845,681**	
Dormitory/Nontaxable Residential			2,687,681	**2,681,280**	
Commercial[7]	3,863,505	4,632,163	4,632,163	**4,625,434**	
Taxable Residential[8]	172	172	172	**172**	

[5] MIT and the City agreed that sub-area divisions are unnecessary in this section.

[6] The change in number of beds between 2004 and 2005 is due to a change in reporting methodology.

[7] MIT's commercial properties are measured by rentable square feet.

[8] MIT's taxable residential properties are measured by rental units.

Parking Spaces Maintained in Cambridge

Sub-Area Name	**Number of parking spaces maintained for students (include resident and commuter parking):**	**Number of parking spaces maintained for faculty, staff and visitors:**	**Sub-Area Total**
Northeast	200	876	1,076
Northwest	280	909	1,189
Southeast	141	1,665	1,806
Southwest	482	219	701
Displaced[9]	0	42	42
Campus Total	1,103	3,711	4,814

MIT is currently in discussions with the City of Cambridge regarding its parking inventory.

Housing

2002	**Tax Exempt: MIT-Owned and Managed Housing**	**Tax Exempt: Other Housing**	**Taxable: MIT-Owned and Managed Housing**	**Taxable: Other Housing (Univ. Park & 100 Mem. Dr. Ground Leases)**
Number of Units:	none	none	172[10]	676
Number of Buildings:	none	none	12	5

2003	**Tax Exempt: MIT-Owned and Managed Housing**	**Tax Exempt: Other Housing**	**Taxable: MIT-Owned and Managed Housing**	**Taxable: Other Housing (Univ. Park & 100 Mem. Dr. Ground Leases)**
Number of Units:	none	none	172[11]	676
Number of Buildings:	none	none	12	5

[9] Displaced by construction. Planned for new parking locations.

[10] 5 units were occupied by non-MIT residents.

[11] 5 units were occupied by non-MIT residents.

2004	Tax Exempt: MIT-Owned and Managed Housing	Tax Exempt: Other Housing	Taxable: MIT-Owned and Managed Housing	Taxable: Other Housing (Univ. Park & 100 Mem. Dr. Ground Leases)
Number of Units:	none	none	172[12]	676
Number of Buildings:	none	none	12	5

2005	Tax Exempt: MIT-Owned and Managed Housing	Tax Exempt: Other Housing	Taxable: MIT-Owned and Managed Housing	Taxable: Other Housing (Univ. Park & 100 Mem. Dr. Ground Leases)
Number of Units:	none	none	172[13]	727
Number of Buildings:	none	none	12	6

2015 Projected	Tax Exempt: MIT-Owned and Managed Housing	Tax Exempt: Other Housing	Taxable: MIT-Owned and Managed Housing	Taxable: Other Housing (Univ. Park & 100 Mem. Dr. Ground Leases)
Number of Units:	none	none	172	930
Number of Buildings:	none	none	12	7

Property Transfers:

Please list Cambridge properties purchased since filing your previous Town Gown Report:

251 Albany Street

Please list Cambridge properties sold since filing your previous Town Gown Report:

None

Please describe any planned dispositions or acquisitions:

None

[12] 12 units are occupied by non-MIT residents.

[13] 12 units are occupied by non-MIT residents.

E. REAL ESTATE LEASED

Use	Leased Location[14]	Square Feet[15]
Institutional/Academic	1 Cambridge Center	4,063
Institutional/Academic	3 Cambridge Center	41,760
Institutional/Academic	5 Cambridge Center	36,197
Institutional/Academic	320 Charles Street	98,513
Institutional/Academic	One Kendall Square	22,506
Institutional/Academic	One Hampshire Street	23,899
Institutional/Academic	185 Albany Street	45,000
Institutional/Academic	304 Vassar Street	61,638
	TOTAL	**333,576**

[14] Leased on behalf of MIT by the MIT Real Estate Office.

[15] The square footage will, in some cases, only be a portion of the entire building.

F. PAYMENTS TO CITY OF CAMBRIDGE:

	FY 01	FY 02	FY 03	FY 04	FY 05
Real Estate Taxes Paid[16]:	$11,927,466	$15,229,701	$18,930,865	$23,487,606	**$25,514,865**
Payment in Lieu of Taxes (PILOT)	$1,137,000	$1,164,000	$1,193,000	$1,223,000	**$1,504,000**
Water & Sewer Fees Paid	$3,649,629	$3,715,171	$4,739,167	$4,235,501	**$4,343,079**
Other Fees & Permits Paid	$2,501,324	$3,829,294	$2,909,611	$1,753,585	**$347,959**
TOTAL PAYMENTS	**$19,215,419**	**$23,938,166**	**$27,772,643**	**$30,699,692**	**$31,709,903**
Cambridge First Purchasing Policy	$37,890,431	$41,387,889	$34,940,041	$39,519,046	**$40,357,966**

[16] Includes real estate taxes paid on MIT-owned property, taxes paid on MIT-owned property by University Park and 100 Memorial Drive, and real estate taxes generated by Independent Living Groups.

II. FUTURE PLANS NARRATIVE

A. Introduction

Beyond the Evolving Campus

The projects of the Evolving Campus campaign are drawing to a close. The brain and cognitive sciences project is complete. (See Map #3 – MIT Projects.) Other projects were conceived or designed in the first half of this decade, but will only be built in the second half. The western Vassar Street redevelopment is planned to begin construction. The East Campus Project (Sloan School and School of Humanities, Arts and Social Sciences) is back in design. The Media Lab Extension (renamed the Media Arts and Sciences Project) is ready to begin construction pending final funding. Fundraising is proceeding in support of all of these projects. The Physics, Department of Material Science and Engineering, Spectroscopy Laboratory and Infrastructure (PDSI) project started in the summer of 2004 and is scheduled for completion in 2007.

New Leadership

President Susan Hockfield has been in office for one year. A new Provost, Rafael Reif, has been appointed. An interim Executive Vice President, Sherwin Greenblatt is in place and search for a permanent replacement is underway.

The changes in leadership provide an opportunity to reflect and adjust to new circumstances. New academic priorities are emerging under the leadership of President Hockfield, and new and renewed facilities will be needed to accommodate them.

Despite pressures to enhance academic and student life facilities, a new wave of projects similar in scale to the capital program of the past few years is unlikely. There will be some projects approved that bring new resources and provide strategic academic and student life opportunities, but in the near term there will be a limited number of such projects.

B. Campus Planning Considerations

Capital Renewal

An expanded program of capital renewal has been initiated. A number of programs have or will move into the Stata Center and the brain and cognitive sciences project, and, potentially, into the Media Arts and Sciences Project and the East Campus Project. These relocations provide opportunities for improved and consolidated space for a number of departments, laboratories, and centers. Because there are relatively large spaces being vacated, the backfill of the buildings can be supplemented with building system and envelope renewal at the scale of a whole building or major parts of a building.

Utility Program

Another issue is how best to serve the utility requirements of the campus. The utility program has been closely tied to individual capital projects in the recent past. A broader

assessment of campus-wide supply and demand combined with a more far-reaching view of the future needs of the campus is underway and, in fact, nearing conclusion. This strategic planning exercise should lead to a more comprehensive and efficient utility program. There are opportunities on both the supply and demand side to implement high-performance "green" solutions and to achieve substantial savings.

Site Improvements

The western portion of the Vassar Streetscape project is the largest improvement planned, but smaller and incremental improvements that re-knit the campus – new and more uniform walkway surfaces and pathway furniture, improved lighting and planting, better bicycle amenities, and installation of a wayfinding system – will leverage the investments in new buildings and promote a more seamless and attractive campus.

C. MIT Staff, Faculty and Students

Since 1980, the total number of students has grown by about 1,000, to 10,235 in total, a ten percent increase in 24 years. This is a growth rate of less than one half of one percent per year. The number of undergraduates has dropped by 110 from 1983 to 1994 and then another 377 from 1994 to 2005, a total reduction in undergraduates of 487.

The growth in the number of graduate students has been more uneven, as it is contingent on a large number of factors, including research funding, economic conditions, and visa availability for foreign students. After increases in the number of graduate students of just below three percent annually from 2000 to 2003, growth in 2004 fell to 1.6% and, in 2005, the number of graduate students was virtually unchanged.

The number of faculty members has been stable at just under 1,000 for many years. Staff growth has been low in the early years of this decade, but there was growth of 3.3% in staff head count in the last year. This reflects, in part, the addition of the Broad Institute personnel, many of whom have initially been transferred from the Whitehead Institute.

D. Housing

Since 1981, MIT has created an additional 1,410 beds of student housing, providing housing for every additional student admitted and making progress in increasing the percentage of its students housed in MIT-approved housing. MIT houses all but a few of its undergraduates in Institute-approved housing. The number of graduate students living in off-campus housing in Cambridge did not change significantly compared with last year. MIT houses 57% of its graduate students who live Cambridge.

Last year, the Institute discussed options for housing with the various campus constituencies. The emerging plan is to build approximately 400 to 500 beds of graduate student housing on the corner of Pacific and Albany Streets, between 70 Pacific Street and 224 Albany graduate residences. (See Map #3 – MIT Projects). It is anticipated that some older campus residential

buildings will be vacated for rehabilitation as a result of this project. For more on this project, see Section III.

70 Pacific and 224 Albany Street graduate residences have demonstrated the viability of the area north and west of the MIT Main Campus as a housing location. Complaints about connections to campus, the unattractive character of Albany Street, and worries about safety continue to be issues of concern. The commercial and industrial buildings in the area further to the west (many of which are not owned by MIT, and a number of which have been recently constructed or renovated) make it difficult to create the kind of lively, mixed-use community with retail and 18-hour activity that would be most desirable in this part of Cambridge.

It is hoped that the densities of the graduate student residences, combined with the recent additions to University Park housing in the area, will support public and private improvements to the surrounding streets.

E. Northeast and East Campus Redevelopment

The East Parking Lot

The East Parking Lot and the space in front of the Biology Building (Building 68), fronting on Main Street and opposite 7 Cambridge Center – the new home of the Broad Institute – is a future development site. (See Map #2.) Plans for a Center for Cancer Research are taking shape. This use builds on the activity in this area, including the adjacent Biology Building, the brain and cognitive science complex, is a perfect complement to the adjacent Biology Building, the Broad Institute, the Whitehead Institute and the many biotechnology and pharmaceutical companies nearby. The Center would physically strengthen this corner of the campus, screening or potentially eliminating the last large surface parking lot on Main Street and creating an active street edge that continues the connection of Technology Square with Kendall Square. The development of this site would also create an opportunity for a major courtyard between the Stata Center and the Biology Building. The schedule for the project is not yet established.

Hayward Garage Block

The area between Hayward and Wadsworth Streets, behind the 238 Main Street building, has long been seen as a redevelopment area, but no specific program has yet emerged to make use of it. As noted in the List of Projects section below, MIT is planning the demolition of the Hayward Garage and is considering its temporary replacement with surface parking or a parking garage. The long term use of this parcel has yet to be determined, although it is expected to be an academic science or engineering building. It is bracketed by the Muckley Building (Building E40) and 238 Main Street (Building E48) with frontage only on the smaller Wadsworth and Hayward Streets.

E32/E33/E34 and Medical Parking Lot Block

The other significant academic opportunity is behind the MIT Press Bookstore (Building E38) and the adjacent MIT-owned commercial building (Building E39), between Carleton,

Amherst, and Hayward Streets. The current occupants of Buildings E32, E33, and E34 will be relocated elsewhere on campus, and these buildings will be demolished. Because of the substantial academic density existing and planned for the area, as well as the substantial amount of surface and garage parking that exists in and around this location, an underground parking structure is being considered. This garage would be tied to the development of an academic project in this location, expected to be a new engineering building.

III. LIST OF PROJECTS

A. Enhanced Academic Facilities

Brain and cognitive sciences complex

This new facility is the home of the Department of Brain and Cognitive Sciences, the McGovern Institute for Brain Research, and the Picower Institute for Learning and Memory. It was designed by Charles Correa Associates and Goody, Clancy Associates and constructed by Turner Construction Company. These disciplines were housed in various locations, including some leased space. Construction started in April 2003 and was completed in September 2005. The research groups have now occupied the building, which was dedicated December 2, 2005.

The Broad Institute

The Broad Institute is a partnership among MIT, Harvard University and affiliated hospitals, and the Whitehead Institute for Biomedical Research. Its mission is to create the tools for genomic medicine, make them freely available to the world, and pioneer their application to the study and treatment of disease. The Broad was founded based on a $100 million gift of Eli and Edythe L. Broad announced in June 2003. Administration of the Broad collaborative is based at MIT. Currently located at One Kendall, 320 Bent Street and 320 Charles Street, the 490-person research staff comprises former Whitehead Institute personnel and new hires.

Boston Properties, the developer of Cambridge Center designated by the Cambridge Redevelopment Authority, broke ground in June 2004 on a 230,000-square foot, seven story research building at 7 Cambridge Center. This building, located adjacent to the Whitehead Institute and across the street from MIT's Biology Building, will be fully leased by MIT on the Broad's behalf. About 60 percent of the space at the new location will be dedicated to laboratory work. Besides laboratories and offices, the building will feature a publicly accessible first floor that includes gallery space and a restaurant. A parking garage has been constructed behind the building, as part of the Cambridge Center master plan. The Broad personnel are scheduled to begin moving in starting in February, 2006.

Media Arts and Sciences Project (formerly known as the Media Lab Extension)

This facility will include computer labs, student and faculty offices, meeting space, and exhibition spaces. The project required demolition of both E10 and E20 to accommodate a facility comprising three major research centers. The designer of the Media Arts and Sciences Project is architect Fumihiko Maki of Tokyo, with Leers Weinzapfel of Boston as associate architect. The facility will accommodate a growing educational program in media studies.

The project was ready for a building permit in the summer of 2002, when MIT determined that more funding needed to be in place before construction could begin. There have been substantial cost-saving changes to the interior of the building, including the elimination of an entire basement floor level. The exterior of the building is nearly unchanged, preserving the outstanding design created by Maki & Associates and Leers Weinzapfel Associates.

The Planning Board approved a minor amendment to the existing special permit in September 2003 allowing these design changes. In September 2005, the Board extended the expiration of the special permit for another year.

The Music and Theater Arts Teaching Laboratory

This proposed building is a long-desired teaching facility for musical and theatrical disciplines. This facility would be primarily for rehearsal and teaching and is not planned as a performance venue. The building program calls for approximately 36,000 gross square feet. A siting study, completed in 2003, concluded that the parking lot at the corner of Albany Street and Massachusetts Avenue, just north of the railroad tracks, would be the optimal location. It would act as a gateway to the campus and would be reasonably close to Kresge Auditorium, the primary performance space on campus. The project will be considered for further design work pending progress on fundraising.

PDSI

Through a new project involving space swapping with other departments, renovation, and new construction, the Physics Department will be able to consolidate its space, now spread throughout 13 buildings on campus. There is also substantial renovation of portions of Buildings 4, 6, and 8 for use by the Department of Material Science and Engineering, the Spectroscopy Laboratory and building Infrastructure, leading to the project name PDSI. About a third of the program space will be provided by new construction of an infill building (Building 6C) in the courtyard framed by Buildings 2, 4, 6, and 8. The demolition of a small building (6A) was allowed by the Historical Commission in July 2004 and a Memorandum of Agreement with the Massachusetts Historical Commission permitting the demolition was signed in July, 2005. Payette Associates and Imai Keller are the designers and Richard White Sons are the construction managers. The demolition and site work is complete. Construction is scheduled to be complete in early 2007.

Center for Cancer Research

As noted above, the Center of Cancer Research (CCR) is being planned for the end of the East parking lot and the corner of Main and Ames Streets. The initial program calls for 160,000 gross square feet. This project will require a substantial amount of gift funding. Its progress will be metered by the success of that effort. No designer has yet been selected for this project. The retention of parking or replacement of the parking lost as a result of this project and others is being studied.

East Campus Project

An addition to the Sloan School of Management and a renovation of facilities for the School of Humanities, Arts, and Social Sciences will accommodate the expanding needs of both schools on the East Campus in order to provide enhanced teaching and learning spaces. This project has been sited on the eastern-most block of the campus, adjacent to the existing Sloan facilities. After being on hold for a period, the project is being reconceived with a more modest program and cost. Schematic design on the revised project is expected to begin in 2006. The smaller project will permit some parking to remain in a surface parking lot, but

how and where to replace the balance of the parking is still under discussion. One consideration is underground parking at the site.

B. Housing

Graduate Residence at Pacific and Albany Streets

The proposed graduate student housing in this location is currently contemplated to be approximately 400 to 500 beds. The proximity of this residence to Edgerton (190 beds) on Albany Street, The Warehouse (120 beds) at 224 Albany, and 70 Pacific (696 beds) creates genuine graduate student district. Common facilities can be shared and the density provides an opportunity for a greater sense of safety through activity in and around the residences. The current thinking is to provide a unit mix of one-quarter one-bedroom efficiencies and three-quarters two bedrooms with kitchen and living area, no matter what the determination is for the final number of beds.

The graduate residence will require the replacement of parking and the MIT recycling center on the site currently. It has not been determined how much parking should be retained on site and how much can relocated nearby.

C. Public Improvement Projects

The City is making improvements to infrastructure throughout Cambridge. MIT is an active participant in several of these major projects. The capital contributions from MIT are substantial and reflect the Institute's interest in doing its part to improve the quality and safety of the common infrastructure.

Vassar Street Enhancements

The rebuilding of Vassar Street is intended to improve the pedestrian, bicycle and vehicular environment of the roadway from Audrey Street to Main Street. The Institute, with the support and cooperation of the City, is undertaking major improvements to form a residential street, including landscape and streetscape enhancements, pedestrian and bicycle paths, traffic calming strategies, and consolidated utility lines. This project east of Massachusetts Avenue has been completed.

Vassar West is planned to start in 2006, pending final design and cost estimation. The construction sequencing is being coordinated with utility changes and public works projects in and across Vassar Street.

Cambridgeport Roadways Project

MIT, in conjunction with the City and Forest City Enterprises, has contributed land and money for the construction of a new roadway through Cambridgeport that will facilitate the flow of vehicles from University Park and surrounding areas. This project is expected to be completed in 2006.

DCR Memorial Drive Historic Parkways Initiative

The DCR, in partnership with MIT and NSTAR, in the first phase of this project has removed a lane of eastbound traffic on Memorial Drive in front of MIT and most of the existing parking on the eastbound side to extend the riverside park and promenade area, made drainage improvements and completed the long-sought signalization of Massachusetts Avenue and the Memorial Drive off-ramps. The second phase of the project includes most of the landscape improvements to fully realize the expanded open space as a public amenity. The second phase is not funded or scheduled to start.

Cambridge Drainage Projects

There are three City drainage lines for the Cambridgeport district that are planned to cross MIT property. MIT constructed a storm water drainage connection from Vassar Street down Audrey Street (a private way) to two former river-water cooling pipes. In accordance with the Institute's Storm Drain agreement with the City, MIT is giving these improvements to the City without charge. The City will make some additional improvements in the manholes as soon as the property transfer takes place and make the new outfall operational.

The City has also proposed and designed a drain line to cross the West Parking Lot, run down Amherst Alley and then adjacent to Next House to Memorial Drive and the Charles River. MIT and the City will need to reach an agreement on a property transaction and appropriate mitigation methods. The City hopes to do the work in Vassar Street in the summer of 2006 to coordinate with the start of the Vassar West project.

D. Utility Infrastructure and Parking

MIT intends to maintain its parking inventory by replacing or rehabilitating aging garages and parking lots on valuable campus locations. The Institute also plans to expand and upgrade its utility infrastructure to keep pace with its building program.

Utility Expansion

The growth of demand for chilled water on campus requires development of additional cooling towers. Two temporary emergency boilers have been installed outside N16A, north of the railroad tracks, to provide back-up capacity in the event that one or more of the existing boilers in the Central Utility Plant goes off-line. In 2006, a temporary cooling tower will be built in the same location to provide an opportunity to make full use of existing chillers that make chilled water for the campus. These temporary boilers and cooling towers will be replaced during the implementation of a larger strategy to provide sufficient permanent steam and chilled water to serve the currently planned building projects.

Parking

MIT has not added any net new parking spaces in more than a decade. In recent years, large numbers of parking spaces have been either temporarily lost to construction or permanently displaced. In July 2004, the Cambridge Redevelopment Authority reclaimed 250 parking

spaces that had been rented to MIT for a decade. There has been a modest replacement of parking spaces as part of leased off-campus office and laboratory space.

MIT intends to restore parking spaces that are temporarily out of service, to relocate permanently displaced parking spaces and to reduce the number of more expensive leased parking where possible. Where possible and financially feasible, parking will be located underground, freeing up land for academic and campus development. Above ground garages and surface parking are also under consideration (see Map # 4 – Parking Alternatives). The Hayward Garage, containing 141 parking spaces, is slated for demolition in 2006, to be temporarily replaced by surface parking or a parking garage while planning for a new building takes place. Any building in this location will require design review by the Historical Commission.

The East Parking Lot and the space in front of the Biology Building (Building 68) is a site likely to be developed soon, as the Center for Cancer Research is currently being planned for this location. This will displace some or even all of the parking in the East Parking Lot.

The cleared sites of E32, E33, and E34, along with the surface parking lot serving MIT Medical between Carleton, Amherst, and Hayward Streets, would permit a large underground garage to be constructed in the future under a new academic development. This garage would absorb the 200-plus existing parking spaces that would be displaced and capture additional parking spaces displaced by the capital building program. Building E32 is being vacated and its demolition will be proposed to the Historical Commission in the coming months. The intention is to demolish E32 and the Hayward garage together over the summer.

Other parking considerations are to seek solutions in the West or Northwest campus areas, underground beneath playing fields, in structured parking or expanded surface parking. Some of these locations would require improved shuttle service. A strategic planning exercise is underway, to permit CCR, the East Campus and the Graduate Residence project to move forward with designs which either incorporate parking or not. If parking (other than residual surface parking) is not a part of these projects, the Institute will have to consider some the other alternatives mentioned above to provide the necessary replacement parking.

IV. MAPPING REQUIREMENTS

1. Map of all real estate owned in the City of Cambridge. Categorize properties by use as appropriate (e. g., institutional/academic, student activities/athletic, dormitory/nontaxable residential, investment, etc.).
   See Map #1 – MIT Property in Cambridge.
2. Map of real estate leased. Categorize properties by use as appropriate (e. g., institutional/academic, student activities/athletic, housing). This map can be combined with the one above.
   See Map #1 – MIT Property in Cambridge.

3. Map of development projects completed within the past year, now underway, proposed or planned within the next three years.
   See Map #3 – MIT Projects.

4. Map the sub-areas/precincts of your campus, indicating the location of future development areas and projects. If appropriate, include detailed maps of sub-areas/precincts where significant changes are anticipated to occur over the next five years.
   See Map #2 – Campus Development Opportunities.
   See Map #4 – Parking Alternatives.

V. TRANSPORTATION DEMAND MANAGEMENT

A. Results of surveys of commuting mode choice for faculty and/or staff and/or students.

The results of the most recent commuting survey were submitted with the 2004 Town-Gown Report.

B. Information on the point of origin of commuter trips to Cambridge for faculty and/or staff and/or students.

Home Location	Number of People working on the MIT Main Campus[17]	Percentage
Cambridge	1,856	19.4%
BOSTON	1,232	12.9%
SOMVERVILLE	684	7.2%
NEWTON	417	4.4%
ARLINGTON	361	3.8%
BROOKLINE	325	3.4%
BELMONT	217	2.3%
MALDEN	151	1.6%
LEXINGTON	136	1.4%
WATERTOWN	129	1.3%
WALTHAM	119	1.2%
WINCHESTER	105	1.1%
MELROSE	76	0.8%
WELLESLEY	67	0.7%
WESTON	41	0.4%
SOUTH OF BOSTON	370	3.9%
NORTH OF BOSTON	642	6.7%
OUTSIDE 128	1,221	12.8%
OUTSIDE 495	727	7.6%
CONNECTICUT	22	0.2%
NEW HAMSPSHIRE	124	1.3%
VERMONT	3	0.0%
RHODE ISLAND	46	0.5%
MAINE	23	0.2%
OUTSIDE NEW ENGLAND	307	3.2%
Unknown	163	1.7%
Count	9,564	100.0%

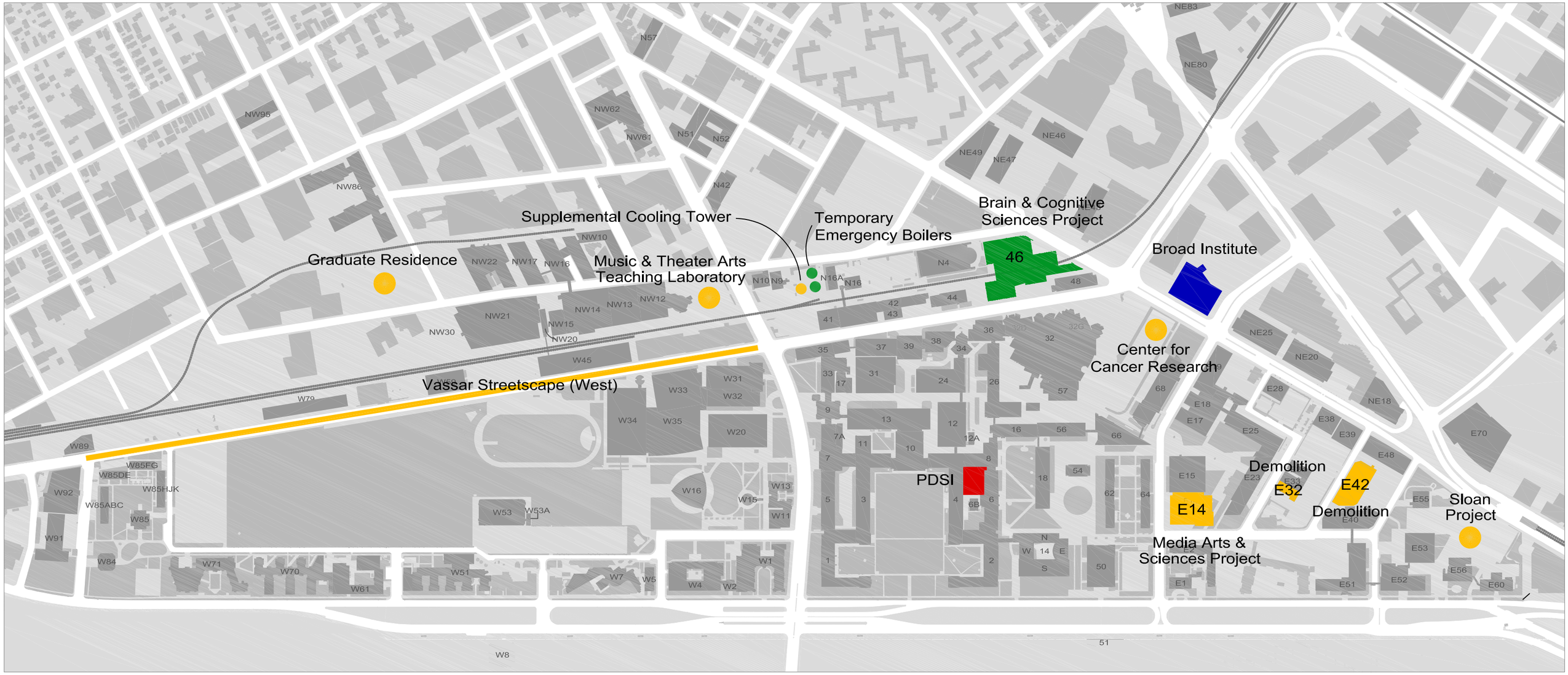
C. Have there been any changes in your TDM plan or strategy since submitting your 2004 Town Gown-report? If so, please describe briefly. (Your PTDM plan is on file at CDD.)

[17] Data is accurate as of October 31, 2005.

There have been no changes to MIT's TDM plan since our last Town-Gown Report submission.

VI. INSTITUTION SPECIFIC INFORMATION REQUESTS

1. Provide an update on long term planning for the main campus, including the Sloan School area.
   See Section II, Future Plans Narrative.
2. Provide information on any plans for additional housing and other uses under consideration for MIT owned parcels in Cambridgeport.
   See Section II, Future Plans Narrative, Section D and Section III, List of Projects, Section B
3. Provide information on plans for MIT owned parcels located along Massachusetts Avenue, with particular attention to ground floor retail uses.
   See 2004 Annual Town Gown Report, MIT Property in the Osborn Triangle and along Massachusetts Avenue, page 14
4. Provide information on plans for MIT owned parcels located along Main Street and in the Osborne Triangle (the area bounded by Massachusetts Avenue, Main Street and Osborne Street), including parcels acquired from Polaroid, with particular attention to ground floor retail uses.
   See 2004 Annual Town Gown Report, MIT Property in the Osborn Triangle and along Massachusetts Avenue, page 14
5. Provide an update on plans for the vacant parking lot located at the intersections of School and Cherry Streets.
   This parking lot is associated with the vacant industrial buildings at 730-750 Main Street that are being marketed for redevelopment. Tenant requirements must be known before any further plans can be made.



Map 3 : MIT Projects

November 2005

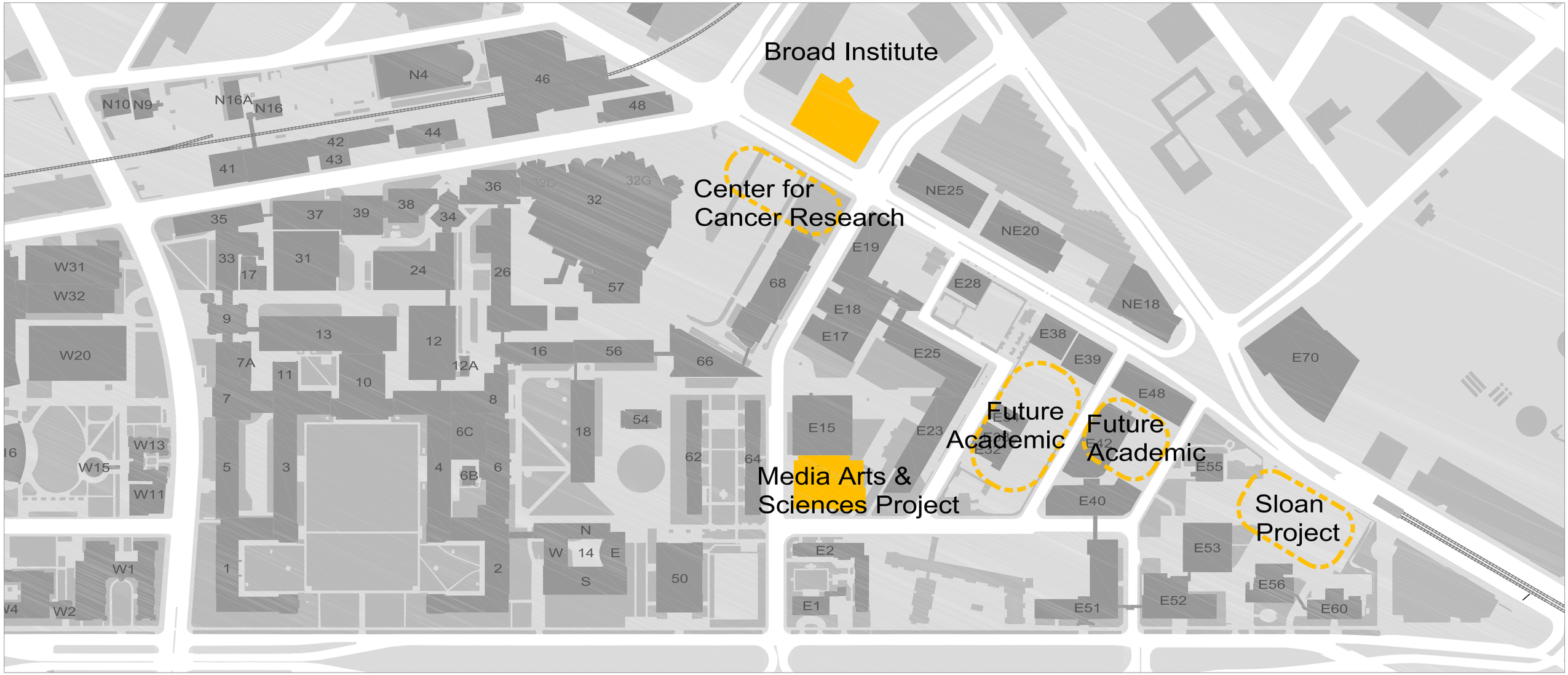
Planning / Design

Construction

Completed

Construction By Others

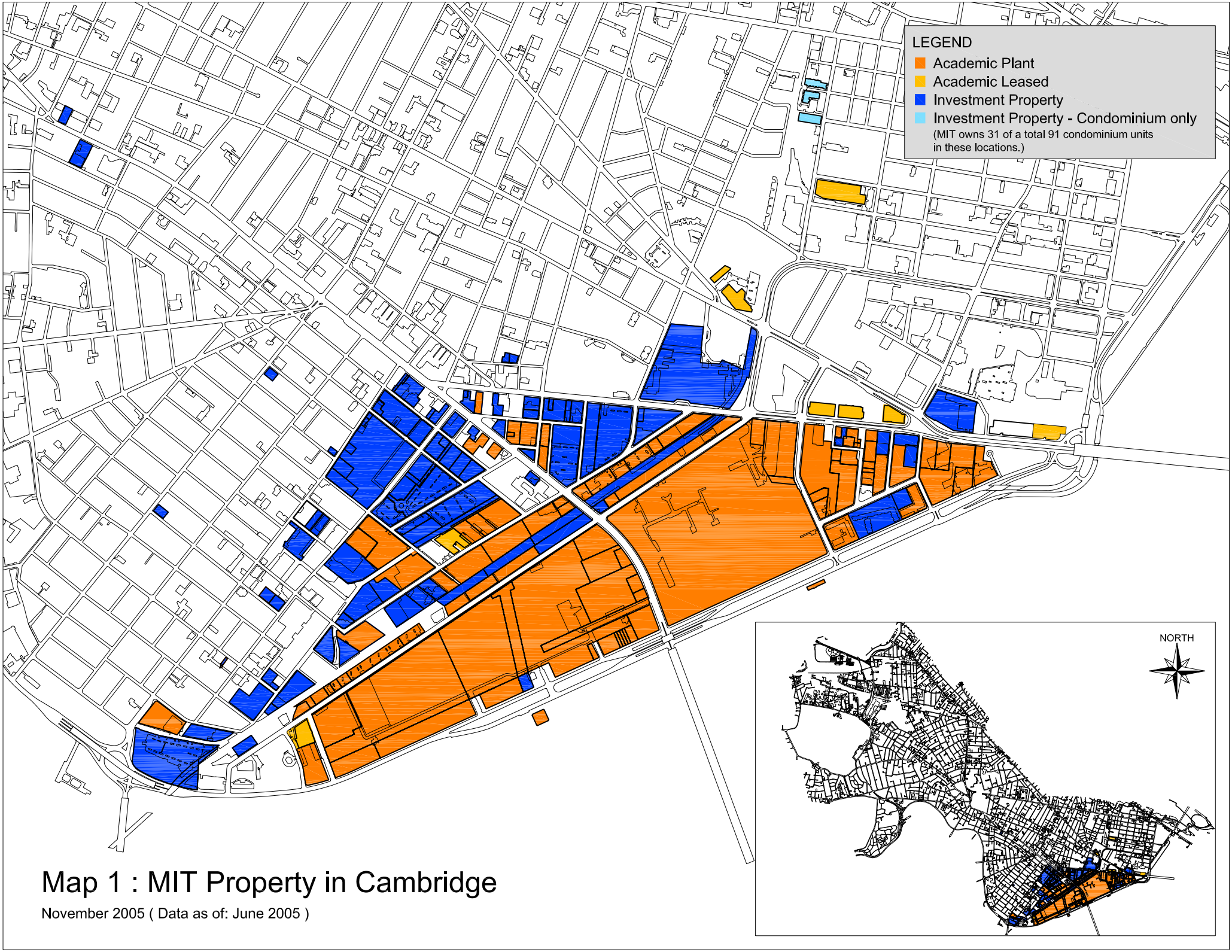
NORTH



Map 2 : Campus Development Opportunities

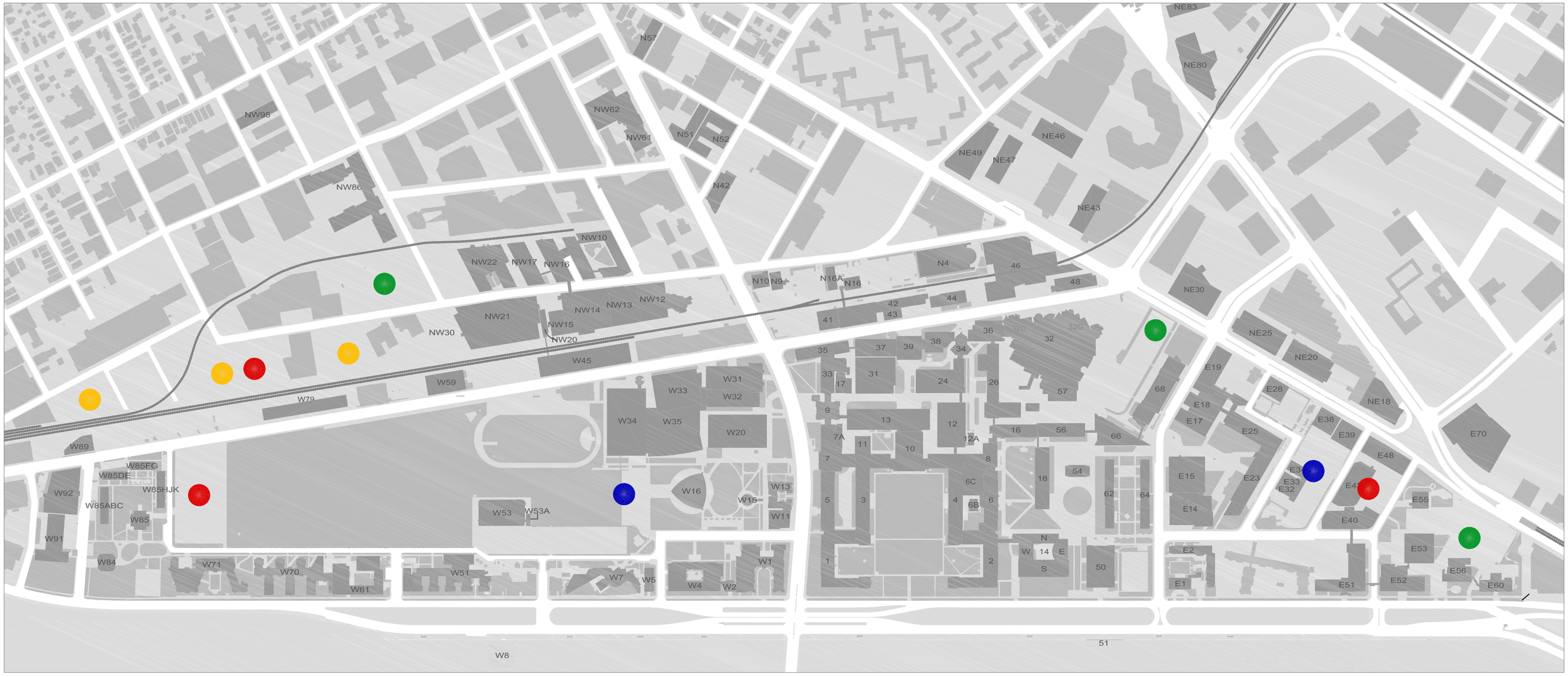
November 2005

NORTH



Map 1 : MIT Property in Cambridge

November 2005 (Data as of: June 2005)



Map 4 : Parking Alternatives

November 2005

- Surface Parking
- Above Ground Garage
- Distributed Underground Garage
- Central Underground Garage

NORTH