



CITY OF CAMBRIDGE, MASSACHUSETTS

# PLANNING BOARD

CITY HALL ANNEX, 344 BROADWAY, CAMBRIDGE, MA 02139

## NOTICE OF DECISION

Case No: PB # 198

Address: Acorn Park Drive

Zoning: Project Review (Section 19.20); Flood Plain Overlay District (Section 20.73); Special District 4 yard reduction (Section 17.42.2); Special District 4 height increase (Section 17.42.3); Parkway Overlay District (Section 20.60)

Owner: BHX. LLC, Trustee of Acorn Park Holdings Realty Trust

Permittee: BHX. LLC, Trustee of Acorn Park Holdings Realty Trust

Application Date: August 26, 2004

Public Hearing: September 21, 2004

Decision Date: October 19, 2004

Filing of Decision: November 4, 2004

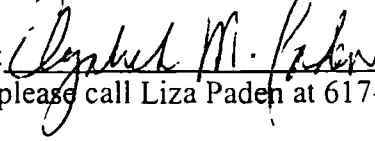
Application: Request for approval of Building 100, Garage A and related improvements and the Cambridge Discovery Park Master Plan to include up to 819,916 square feet of office/research space and 380,059 square feet of structured parking on 26.5 acres, including:

1. Article 19.000 Project Review Special Permit for Building 100, Garage A and related improvements and for the Cambridge Discovery Park Master Plan;
2. Section 17.42.2 Special District 4 Special Permit for reduced yards for Building 100, Garage A and for Cambridge Discovery Park Master Plan;
3. Section 17.42.3 Special District 4 Special Permit for 85 foot building height for Building 100 and for Cambridge Discovery Park Master Plan;
4. Section 20.73 Flood Plain Overlay District Special Permit for Building 100, Garage A and for Cambridge Discovery Park Master Plan; and
5. Approval of restoration plan for the MDC Lot and South Parcel.

Decision: GRANTED with conditions

Appeals, if any, shall be made pursuant to Section 17 of Massachusetts General Laws, Chapter 40A, and shall be filed within twenty (20) days after the filing of the above referenced decision with the City Clerk. Copies of the complete decision and final plans, if applicable, are on file with the Office of the Community Development Department and the City Clerk.

Authorized Representative of the Planning Board:



For further information concerning this decision, please call Liza Paden at 617-349-4647. TTY: 617-349-4621

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### Application Documents

1. "Cambridge Discovery Park, 20 Acorn Park Drive, Cambridge, MA 02140, Application to Cambridge Planning Board for Project Review Special Permit, Flood Plain Overlay District Special Permit, and Special District 4 Special Permit and Parkway Overlay District Design Review," submitted by BHX, LLC, Trustee of Acorn Park Holdings Realty Trust, c/o The Bulfinch Companies, Inc., 250 First Avenue, Suite 200, Needham, MA 02492, dated August 26, 2004.

- a. Volume I—Narrative Materials, including Special Permit Application, Appendix I—Dimensional Form for Building 100 Project; Appendix II—Dimensional Form for Overall Master Plan; Appendix III—Flood Plain Overlay District Special Permit Supporting Materials; Appendix IV—Cambridge Discovery Park Master Plan Design Guidelines, Appendix V—MDC Lot Restoration Plan, Ownership Certificate;
- b. Volume II—Flood Storage Report dated August 26, 2004 by BSC Group, Inc.;
- c. Volume III—Drainage Report, dated August 26, 2004 by BSC Group, Inc.;
- d. Volume IV—Special Permit Plan Set, dated August 26, 2004, by ADD Inc.;
- e. Volume V—Flood Storage Plan Set, dated August 26, 2004, by BSC Group, Inc.;
- f. Volume VI—Graphics and Renderings, dated August 26, 2004, by ADD Inc.;
- g. Volume VII—Transportation Impact Study dated July 2004, revised September 1, 2004, by Vanasse and Associates, Inc.

2. Project Review Special Permit application certified complete by Elizabeth Paden and filed

with the City Clerk on August 26, 2004.

3. Letter to F. Giles Ham, P.E., from Jason Schrieber dated September 15, 2004 certifying the completeness of the Traffic Study.

**Supplemental Application Documents**

1. Expanded Environmental Notification Form and Request for Phase One Waiver for Cambridge Discovery Park, dated July 15, 2004.

2. Certificate of the Secretary of the Massachusetts Secretary of Environmental Affairs dated October 1, 2004, granting a Phase One Waiver under the Massachusetts Environmental Policy Act.

3. Answers to Frequently Asked Questions/Responses to Comments, dated September 21, 2004, submitted by applicant.

4. Cambridge Discovery Park Supplemental Filing--Responses to Planning Board Questions from September 21, 2004 Hearing, dated October 13, 2004 and October 19, 2004

**Other Documents**

1. Letter to Barbara Shaw from Robert Schlager dated June 27, 2004

2. Letter to Scott Thornton, Vanasse and Associates, from Jason Schrieber, TP&T Department, dated June 29, 2004

3. Letter to the Planning Board from the BSC Group, Inc. dated July 15, 2004

4. Letter to Scott Thornton, Vanasse and Associates, from Jason Schrieber, TP&T Department, dated August 12, 2004

5. Certificate of the Secretary of Environmental Affairs on the expanded Environmental Notification Form dated August 30, 2004

6. Draft Record of Decision, Phase I Waiver, dated August 30, 2004

7. Memo to the Planning Board from Susan E. Clippinger, TP&T Department, dated September 21, 2004

8. Legal notice of public hearing of the Cambridge Historical Commission at the September 9, 2004 meeting of the Commission.

9. Letter to Robert Schlager from Charles Sullivan, Cambridge Historical Commission, dated September 15, 2004

10. Memo to the Planning Board from Susan E. Clippinger, TP&T dated October 13, 2004, re: Discovery Park Mitigation Measures.

11. Memo to Barbara Shaw from Owen O'Riordan, City Engineer, dated October 19, 2004

### Findings

Based on the application documents submitted, testimony taken at the public hearing, staff comments, and discussions of the application undertaken by the Planning Board, the Board makes the following findings.

#### I. Compliance with General Special Permit Criteria – Section 10.43

Section 10.43 of the Cambridge Zoning Ordinance provides that special permits will normally be granted where specific provisions of the Ordinance are met, except when particulars of the location or use, not generally true of the district or of the uses permitted in it, would cause granting of such permit to be to the detriment of the public interest because:

**a. It appears that requirements of this Ordinance cannot or will not be met, or**

With the issuance of the special permits requested, the proposed redevelopment of Cambridge Discovery Park conforms to the requirements of the Ordinance. Special District 4 was created to encourage the construction of an office and research campus on the north and west side of Acorn Park Drive, in conjunction with the removal of buildings and parking on the south side of the road and to the east in the MDC Lot. The redevelopment of Special District 4/Cambridge Discovery Park as herein approved is consistent with that which the recent rezoning envisions and mandates. The Permittee will be returning the MDC Lot and the area of Building 20A to natural conditions well in advance of what would be required by the Ordinance.

**b. Traffic generated or patterns of access or egress would cause congestion, hazard, or substantial change in established neighborhood character, or**

As detailed in the application documents, the full development of Cambridge Discovery Park is expected to be associated with a manageable increase in vehicle trips to and from the site with the mitigation measures required by this Decision. The majority of project traffic is expected to be oriented to and from the west on Route 2, with smaller percentages expected from Alewife Brook Parkway north and south of Route 2. It is anticipated that a number of project related trips would be made by transit, bicycling, walking, or other alternative transportation, taking advantage of the site's proximity to the Alewife MBTA Red Line station and the bicycle facilities available in the area.

Review of the Article 19.000 Project Review Special Permit Criteria for evaluation of adverse traffic impacts indicates that the project exceeds all trip generation criteria, level-of service (LOS) criteria at three locations, the queue criteria at one location and the pedestrian LOS at five locations. These exceedences may be attributed in part to that fact that the traffic generation for multiple buildings proposed in the final build-out of the Master Plan has been evaluated in granting this permit rather than the traffic generated for each individual building separately.

The principal tenant of Building 100, Smithsonian Institution Astrophysical Observatory (Smithsonian), currently employs a variety of measures to reduce the use of single-occupant vehicle trips (SOV), such as subsidies for employees who do not drive alone to work. The nearby presence of the Alewife MBTA Station and bus lines will provide an attractive alternative to single-occupancy vehicle commuting.

The recent rezoning that created Special District 4 limits the total number of parking spaces at Cambridge Discovery Park to the currently existing number – one thousand fifty-two (1,052). Nevertheless, as a condition of this Decision, as the Master Plan is implemented over the next several years, the parking space ratios for Cambridge Discovery Park will remain relatively constant as the build-out of the project proceeds to an eventual size of approximately 819,916 square feet of gross floor area. Constraining the parking supply will work to limit the amount of vehicle trip generation by the site.

However, even under the aggressive assumptions made in the Traffic Study about the use of non single-occupancy-vehicle modes of travel to the site, demand for parking may exceed the supply of parking permitted in the District, as the Gross Floor Area (GFA) authorized in the Master Plan nears full built-out. Nevertheless, the Planning Board is prepared to approve the Master Plan GFA with the expectation that changes in driving behavior, improved public transportation service, additional transportation demand management measures, infrastructure improvements, or other events will assure adequate adjustment to the current parking demand in the district over the fifteen years the project is anticipated to be constructed. Furthermore, required monitoring of vehicle trips to the site over the life of the Master Plan build-out will provide ample opportunity for the Permittee and the Planning Board to develop adequate responses to any reasonably expected eventuality.

All vehicular access to and from Cambridge Discovery Park is via Acorn Park Drive, which runs between Frontage Road in Belmont and the Alewife MBTA Station off-ramp from Route 2, in Arlington. No other public ways of Cambridge (or any other municipality) connect to Acorn Park Drive; the road serves only Cambridge Discovery Park. As part of the Massachusetts Environmental Policy Act (MEPA) process, the proponent will work with the Massachusetts Highway Department to explore alternatives for reducing congestion, increasing capacity, and improving safety at these intersections.

**c. The continued operation of or the development of adjacent uses as permitted in the Zoning Ordinance would be adversely affected by the nature of the proposed use, or**

Neither the Building 100 Project nor the full Master Plan build-out will have any adverse effect on the continued operation or development of the adjacent Martignetti properties to the north, between Cambridge Discovery Park and Route 2. The new internal access roadway will be screened from the Martignetti properties by two new parking garages and extensive landscaping. The garages will be lower than other proposed buildings in the Master Plan (not exceeding 60 feet in height) while the taller office/research buildings will be set along Acorn Park Drive, away from the Martignetti property. When the Martignetti's properties eventually are redeveloped, the Cambridge Discovery Park Master Plan will allow for the creation of pedestrian and emergency vehicle access between the adjacent uses and Acorn Park Drive.

There will be no adverse affects on the uses permitted by the Ordinance on adjacent land to the east, south, or west of the project. The Ordinance prohibits the future development of the

adjacent land to the east and west of the project. To the east, the MDC Lot will be restored to natural conditions in conjunction with the project as permitted and directed by the Department of Conservation and Recreation (DCR), the owners of the property. This area was rezoned to Open Space in conjunction with the creation of Special District 4. To the west, the Large Wetland Area (also owned by the applicant) extends 880 feet eastward from the Belmont-Cambridge municipal boundary, and was designated a no-build area by the Special District 4 rezoning.

The project will improve the quality of stormwater reaching the Large Wetland Area from Cambridge Discovery Park and from off-site sources. To the south, the Ordinance requires the phased demolition of existing buildings and restoration of those areas to natural conditions as redevelopment proceeds. Thus the project will replace a sprawling, dated collection of buildings with a compact campus that will have reduced impacts on the use of adjacent natural and recreational properties.

**d. Nuisance or hazard would be created to the detriment of the health, safety and/or welfare of the occupant of the proposed use or the citizens of the City, or**

No nuisance or hazard will be created by the redevelopment of Cambridge Discovery Park. The existing collection of buildings and surface parking lots, while less dense in some areas, sprawl over twice the area that ultimately will remain developed under the Master Plan. The restoration of surrounding areas to Green Area Open Space will enhance the health, safety, and welfare of occupants of the proposed use, and of the citizens of the City who use the adjacent Alewife Reservation area.

**e. For other reasons, the proposed use would impair the integrity of the district or adjoining district, or otherwise derogate from the intent and purpose of this Ordinance, and**

The redevelopment of Special District 4/Cambridge Discovery Park as proposed in the Master Plan fulfills the detailed intent of the recent rezoning. The Permittee will return the MDC Lot and the area of Building 20A to natural conditions well in advance of that which would be required by the Ordinance, a major objective of the rezoning.

**f. The new use or building construction is inconsistent with the Urban Design Objectives set forth in Section 19.30.**

As detailed below, the proposed Building 100 Project and the Cambridge Discovery Park Master Plan are fully consistent with the Urban Design Objectives set forth in Section 19.30. In addition, a set of Master Plan Design Guidelines adopted by the Planning Board will ensure that the full build-out of Cambridge Discovery Park will continue to fulfill the Urban Design Objectives in the future.

**II. Compliance with Project Review Special Permit Criteria – Section 19.20**

Section 19.23.2 of the Ordinance provides that the Planning Board may grant a Project Review special permit for “a phased project to be built over an extended period of time, which period shall be defined in the permit, provided [that] sufficient information is available in the application to permit the Board to make the findings required.” The Board finds that there is sufficient information provided to allow the Board to approve a phased development, and that

the phased development in the form of the Master Plan of the application documents is in compliance with the conditions for issuance of a Project Review Special Permit.

**a. Traffic Impact Findings**

The Planning Board finds that, with the implementation of the traffic mitigation measures and other conditions of this Decision, the approved Master Plan will have no substantial adverse impact on city traffic

**b. Conformance to Urban Design Policy Objectives Section 19.30**

A project need not meet all the objectives of this Section 19.30. Rather the Board is directed to find that on balance the objectives of the city are being served. The Board finds that on balance the Master Plan is consistent with the Urban Design Objectives as set forth in Section 19.30 and as enumerated below.

**19.31 New projects should be responsive to the existing or anticipated pattern of development. Indicators include:**

*(1) Heights and setbacks provide suitable transition to abutting or nearby residential zoning districts that are generally developed to low scale residential uses.*

There are no abutting or nearby residential districts. The abutting Special District 4A envisions the eventual redevelopment of the adjacent Martignetti properties for high-density, multi-family residential and office use at a scale similar to that proposed in the Master Plan. Future development on the western portion of the Martignetti properties will overlook the applicant's Large Wetland Area, a natural area that will remain undisturbed. The project is designed to minimize negative impacts on eventual redevelopment of the eastern portion of the Martignetti properties and to encourage cooperative development of amenities like open space and pedestrian connections between the two developments. The closest low-scale residential area is across Route 2 approximately 700 feet away in Arlington, northeast of the development site. The nearest North Cambridge residences are more than one thousand feet away, east and south of the Permittee's site, across Alewife Brook Parkway, in the new high-density residential development on Cambridgepark Drive, and slightly further away, the Cambridge Highlands neighborhood.

*(2) New buildings are designed and oriented on the lot so as to be consistent with the established streetscape on those streets on which the project lot abuts. Streetscape is meant to refer to the pattern of building setbacks and heights in relationship to public streets.*

The intent of the Master Plan is to establish a new built environment more compatible with the recreational and environmental resources so important in this area of Cambridge. The Master Plan will establish a new streetscape along Acorn Park Drive, with a consistent building edge along the northern and western sidelines and with restored natural areas along the eastern and southern sidelines. The location of new buildings will allow the retention of many existing street trees. The Master Plan and the Master Plan Design Guidelines will establish a consistent pattern of building setbacks and heights in



relationship to Acorn Park Drive, and in relationship to Route 2 where it abuts the site's northeastern boundary. The proposed buildings will establish a well defined building edge along the north and west sides of Acorn Park Drive that will act as an urban counterpoint to the expanded urban wilds across the street. Building entries will be oriented directly toward the public way and toward a new internal roadway.

*(3) In mixed-use projects, uses are to be located carefully to respect the context, e.g. retail should front onto a street, new housing should relate to any adjacent existing residential use, etc.*

The Master Plan envisions a primarily office environment; residential development is not anticipated and most retail uses are not permitted here by zoning. Active use components in the Master Plan program will be oriented to the public way with parking structures located behind. Active tenant communal uses associated with the research and development, office, and life science principal uses, like a cafe, day care facilities, and a health club, will be located on the first floors of buildings overlooking the urban wilds and Acorn Park Drive.

*(4) Where relevant, historical context is respected, e.g. special consideration should be given to buildings on the site or neighboring buildings that are preferably preserved.*

None of the buildings on the site or in the area have been designated as preferably preserved significant buildings by the Cambridge Historical Commission. The two buildings to be demolished as part of the Building 100 Project (Buildings 20A and 35) were constructed in 1962 and 1957, respectively; both of these buildings subsequently were expanded and altered, so that neither retains its original configuration.

As the Master Plan proceeds, each proposed demolition will be reviewed by the Cambridge Historical Commission and a determination as to its preservation status made. Preliminary review by the Commission suggests that there will be no significant historic preservation impediment to execution of the Master Plan in the future.

**19.32 Development should be pedestrian and bicycle-friendly, with a positive relationship to its surroundings. Indicators include:**

*(1) Ground floors, particularly where they face public streets, public parks, and publicly accessible pathways, consist of spaces that are actively inhabited by people, such as retail stores, consumer service businesses and restaurants where they are allowed, or general office, educational or residential uses and building lobbies.*

The Building 100 lobby will face a plaza extending toward Acorn Park Drive. Where possible, the ground floor areas will have windows facing this public street; Smithsonian's need for absolute darkness in certain laboratory spaces will preclude windows in some areas. Future buildings will include animated ground floors (as detailed in the proposed Master Plan Design Guidelines). Likely tenant communal uses, including a cafe, health club, and day care, will be located on building first floors overlooking the urban wilds, improved pedestrian pathways and Acorn Park Drive. These uses are consistent with the more passive character of the surrounding urban wilds.

*(2) Covered parking on the lower floors of a building and on-grade open parking, particularly where located in front of a building, is discouraged where a building faces a public street or public park, and publicly accessible pathways.*

Active, occupied buildings will screen all parking along all open space frontage and most of the Route 2 frontage. Covered parking associated with Building 100 will be in a garage located behind the building, which will not face directly onto a public street or park, or any pathways on a public street. Over time, as the surrounding parcels are developed on this and adjacent sites, this garage will be substantially screened from view from any public street, although in the interim it will be visible at a distance from Route 2 over the adjacent Martignetti parking lot. The second parking garage also will be located away from Acorn Park Drive, near the northeast corner of the site. Although this garage will be adjacent to Route 2, and a public sidewalk, it will be set back from those areas by a wide landscaped buffer and will be designed to ensure its compatibility with the public realm it faces.

The Board is concerned that adequate attention be paid to lighting in the interior of the garages. They are located immediately adjacent to Martignetti parcels that might be redeveloped in the future to residential use. It is important that the lighting within the garage be carefully designed and adequately managed so that it is not an annoyance or serious imposition on any future adjacent development. To that end the Board has required that, as a condition of this Permit, a section be developed in the adopted Design Guidelines outlining the standards by which lighting in the garages will be reviewed when the Board approves their final designs.

*(3) Ground floors should be generally 25-50% transparent. The greatest amounts of glass would be expected for retail uses with lesser amounts for office, institutional or residential use.*

The Master Plan and Building 100 Project architecture are consistent with this indicator. The ground floor of Building 100 has been made as transparent as possible, given the Smithsonian's requirement that certain laboratory spaces be capable of being rendered absolutely dark. To the extent practicable, these spaces will be located on the north side of Building 100 away from Acorn Park Drive. Building 200 is intended to be very transparent adjacent to the lobby entrance, at the outdoor terrace and other ground floor areas facing Acorn Park Drive and the South Parcel beyond. The Master Plan Design Guidelines reflect the requirement for ground floor transparency.

*(4) Entries to buildings are located so as to ensure safe pedestrian movement across streets, encourage walking as a preferred mode of travel within the city and to encourage the use of public transit for employment and other trips.*

Building entries and crosswalks are aligned to connect directly with proposed pedestrian/bicycle paths in new open space to be created on the Permittee-owned South Parcel and on the MDC Lot. The entries to the proposed building have been designed to ensure safe pedestrian movement between the buildings and the proposed parking garages, as well as between the buildings and the nearby Alewife MBTA Red Line station. The Master Plan includes sidewalks within the campus to provide direct pedestrian connections between all the proposed buildings and the parking garages.

Crosswalks have been designed to be raised to favor pedestrian movement across loading areas, driveways, and the new internal roadway.

*(5) Pedestrians and bicyclists are able to access the site safely and conveniently; bicyclists should have secure storage facilities conveniently located on-site and out of the weather. If bicycle parking is provided in a garage, special attention must be paid to providing safe access to the facilities from the outside.*

The first parking garage will have a secure, covered storage facility for 65 bicycles. The second parking garage will have a secure, covered storage facility for 48 additional bicycles. Bicycle access to the garages will be adjacent to the automobile and pedestrian access areas and it is assumed will permit direct bicycling access to the facilities. The secure storage areas will be located on the first floors of the garages, in visible and accessible locations. Bicycle lanes will be provided along the Cambridge portion of Acorn Park Drive, connecting to multi-use paths running through the restored MDC Lot and South Parcel.

Pedestrian and bicycle access to the site will be made safer, more convenient, and more attractive by the creation of multi-use pathways through the restored MDC Lot and South Parcel to the extent permitted by regulating authorities having jurisdiction over these areas as the designs of those spaces advance. The pedestrian environment within the campus will be made friendlier by the creation of new landscaping and paved areas such as an outdoor eating terrace facing the South Parcel and seat wall planters.

The Board finds that the circulation within the interior courtyard space in the Master Plan (i.e. that entire irregular area contained by and located behind all of the buildings and parking garages that constitute the Master Plan) through which pedestrians and bicyclists will be passing, along with automobiles going to the various parking facilities and trucks heading to the several loading bays, is not resolved in a satisfactory way. The areas paved exclusively for vehicular traffic are too extensive and the green areas devoted to landscaping and pedestrian circulation too amorphous and "residual" in feeling rather than convincing the observer that they are consciously designed. The geometry of the spaces appears cluttered and awkward. More attention needs to be paid to the design of this space with consideration given to reducing the area devoted to vehicular paving, possible consolidation of loading facilities, design of more dual-use pedestrian/vehicle areas, etc.

*(6) Alternate means of serving this policy objective 19.32 through special building design, siting, or site design can be anticipated where the building form or use is distinctive such as freestanding parking structures, large institutional buildings such as churches and auditoriums, freestanding service buildings, power plants, athletic facilities, manufacturing plants, etc.*

The freestanding parking structures will be designed to serve the objectives of this section.

**19.33 The building and site design should mitigate adverse environmental impacts of a development upon its neighbors. Indicators include:**

*(1) Rooftop mechanical equipment that is carefully designed, well organized or visually screened from its surroundings and is acoustically buffered from neighbors.*

Mechanical equipment will be appropriately screened and sound attenuated. Currently, the closest residential area is approximately 700 feet away, in Arlington, and the closest North Cambridge residential area is the recently developed Oaktree apartment complex, which is over one thousand feet from the proposed location of Building 100. The design of visual and acoustic screening of rooftop mechanicals will take into consideration the potential redevelopment of the adjacent Martignetti properties for multi-family residential uses. Where visible from adjacent spaces, rooftop mechanical equipment and screening will be designed to enhance building architecture.

*(2) Trash that is handled to avoid impacts (noise, odor, and visual quality) on neighbors, e.g. the use of trash compactors or containment of all trash storage and handling within a building is encouraged.*

Building 100 will have a trash compactor located in the loading dock area. This area will be screened from Acorn Park Drive by the front portion of the building, and from the Martignetti properties by Garage A and, when constructed, the Giant Magellan Telescope addition.

The Master Plan envisions that each future building will be provided with a trash compactor, located in the building's loading area or otherwise screened.

*(3) Loading docks that are located and designed to minimize impacts (visual and operational) on neighbors.*

Building 100's loading dock will be screened from Acorn Park Drive by the front portion of the building, and from the Martignetti properties by Garage A and, when constructed, the Telescope addition. The new internal roadway and loading bay design for Building 100 will allow trucks to maneuver into, park in, and maneuver out of the loading area without blocking pedestrian or drive aisles, and without maneuvering on the public way.

The Master Plan envisions that loading docks for future buildings will face toward the internal roadway, so that the buildings will screen the loading areas from Acorn Park Drive and from the surrounding area. These loading areas also have been located so that trucks using them will not block pedestrian or drive aisles, nor require maneuvering on the public way.

While the Board finds that the loading facilities are appropriately located off of the public way and screened from public view, their number, size and design is one contributing factor in the unsatisfying design of the interior courtyard space created by the Master Plan buildings. As indicated above, the Board directs the Permittee to further explore alternate designs and strategies for making this space more pedestrian friendly and more coherent as an architectural and landscape feature. By contrast, the Acorn Park Road frontage associated with Building 100 is an example of such a well-designed and pedestrian friendly communal space.

*(4) Stormwater Best Management Practices and other measures to minimize runoff and improve water quality are implemented.*

The project's proposed stormwater management systems have been designed to treat stormwater in accordance with the provisions of the DEP's Stormwater Management Policy. In addition, the Permittee will coordinate with the City of Cambridge in an effort to integrate into the design of the initial Building 100/Garage A project and the overall Master Plan creative storm management systems, such as open swales and ecological stormwater management practices. The proposed Best Management Practices (BMP) for the Building 100 Project include water quality swales, a water quality basin, a stormwater wetland, and other natural treatment features to treat all associated stormwater before discharge to the wetlands or the Little River. Additionally, the Building 100 Project includes measures to treat stormwater that currently is conveyed from offsite locations to the north (from Route 2, the Martignetti properties, and the Mugar properties across Route 2) beneath the site and discharged without treatment to the Little River. The proposed BMP for the Building 100 Project will remove total suspended solids at a rate better than 80%, *i.e.*, at a rate better than would be required for new construction on an undeveloped site.

*(5) Landscaped areas and required Green Area Open Space, in addition to serving as visual amenities, are employed to reduce the rate and volume of stormwater runoff compared to pre-development conditions.*

The Master Plan includes the eventual creation of a stormwater management/treatment basin south of Acorn Park Drive, as part of the transformation of the South Parcel to Green Area Open Space. This will take the form of one or more natural looking detention ponds with native vegetation. Much of the South Parcel will become open meadow with shared bicycle/pedestrian paths and possibly a viewing deck. The restoration of the South Parcel will have several positive effects on stormwater runoff. First, runoff will be minimized by removing impermeable structures and paving. Second, the water quality enhancement areas will promote groundwater recharge. Third, the water quality enhancement areas will "polish" stormwater that does finally outlet to the river by providing further sediment removal. Similar reductions in the rate and volume (and increases in the quality) of stormwater runoff will result from the removal of pavement from the MDC Lot and restoration of that area to Green Area Open Space.

*(6) The structure is designed and sited to minimize shadow impacts on neighboring lots, especially shadows that have a significant impact on the use and enjoyment of adjacent open space.*

All new development is located due north of much of the urban wilds open space. Early morning shadows will fall over the Permittee-owned Large Wetland Area to the west and late afternoon shadows will cover the northern portion of the present MDC Lot planned open space. Buildings closest to the adjacent Martignetti property are also the lowest buildings proposed, the 60 foot parking garages.

*(7) Changes in grade across the lot are designed in ways that minimize the need for structural retaining walls close to property lines.*

The need to keep the first floors of new buildings above the 100-year flood elevation (anticipated to soon be revised upwards) means that the ground floor slabs for the new buildings will be elevated several feet above the existing average ground elevation.

Notwithstanding these design constraints, the project has been designed to minimize the need for structural retaining walls close to property lines. Continuous planters around building perimeters will be used to break up the otherwise solid-wall look of the ground level building facades. Transitions between existing and new grade elevations will incorporate a harmonious combination of seat walls, planters, retaining walls, walkways, and graded landscaping, all designed to enrich the visual and natural appearance of the new buildings, starting with the Building 100 Project.

*(8) Building scale and wall treatment, including provisions of windows, are sensitive to existing residential uses on adjacent lots.*

The only residential use on an adjacent lot is the existing hotel on the Martignetti property (technically a residential use in the Cambridge Zoning Ordinance; no residential homes are located on the adjacent lots). Garage A has been kept as far from the lot line in this area as practicable. The buildings have been located and will be designed in the future to be compatible with any future residential construction on the adjacent Martignetti site.

In more general terms, the Board suggests that warmer tones be chosen when making the final selection of materials for Building 100.

*(9) Garage Lighting.*

As described above, it is important that the interior lighting of the garage be designed so that it will not have a significant, negative impact on future development on the adjacent Martignetti parcel.

**19.34 Projects should not overburden the City infrastructure services, including neighborhood roads, city water supply, and sewer system. Indicators include:**

*(1) The building and site design are designed to make use of water-conserving plumbing and minimize the amount of stormwater run-off through the use of best management practices for stormwater management.*

Water-conserving plumbing including low-flow toilets, sinks, showers, and irrigation will be used throughout the redevelopment project, beginning with the Building 100 Project. Sinks and lavatory faucets and showerheads will be equipped with flow restriction devices. Extensive best management practices for stormwater run-off will be implemented.

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

The existing systems are adequate to support the full build-out of the Master Plan (as well as anticipated build-out of adjacent properties).

*(3) Buildings are designed to use natural resources and energy resources efficiently in construction, maintenance, and long-term operation of the building. Compliance with Leadership in Energy and Environmental Design (LEED) certification standards and other evolving environmental efficiency standards is encouraged.*

The project is close to meeting LEED certification requirements (and includes a number of the additional credit items): The project stacks the building program, consolidates parking, and shares upgraded utilities with its neighbors. Customary sediment and erosion control methods will be employed. The site's location within ½ mile of rail transportation and within ¼ mile of several bus routes confers significant advantages to the project as does the zoning requirement that secure bicycle storage areas be provided for tenants to encourage bicycle use.

The project will create a substantial amount of open space on a site that currently has little, restoring degraded areas to a more natural state. Much of the proposed planting will consist of native plant species to minimize irrigation requirements over the lifetime of the project. Light-colored ground materials will help to decrease the heat absorption, a prime LEED certification criterion. The project also will include a high level of occupant control over the interior environment, exterior orientation to maximize daylight and views, and rooftop mechanicals shielded to protect neighboring properties from noise and visual impacts.

The Planning Board encourages the Permittee to make fundamental building design choices that will make this complex of buildings an outstanding example of efficient and environmentally friendly design. New construction, in particular, offers a great opportunity to advance the objectives of the LEED certification process. The project name, "Cambridge Discovery Park," suggests that environmental innovation will be a watchword for the future as the Master Plan unfolds. Among other approaches, the Board would encourage the Permittee to consider such things as: reflective roofs; green power renewable energy certificates; efficient building envelopes; ground source heat pumps; energy modeling; photo voltaics; efficient lighting; certified wood; low emitting materials for floor coverings, paints and adhesives; recycled content in carpets ceiling tiles, steel, wallboard, etc; recycling of construction waste, and hiring of LEED accredited professionals.

**19.35 New construction should reinforce and enhance the complex urban aspects of Cambridge as it has developed historically. Indicators include:**

*(1) New educational institutional construction that is focused within the existing campus.*

Not applicable.

*(2) Where institutional construction occurs in commercial areas, retail, consumer service enterprises, and other uses that are accessible to the general public are provided at the ground (or lower) floors of buildings.*

Not applicable.

*(3) In large, multiple-building non-institutional developments, a mix of uses, including publicly accessible retail activity, is provided where such uses are permitted and where the mix of uses extends the period of time the area remains active throughout the day.*

Retail uses generally are not permitted; however, lunchrooms and restaurants are permitted and are encouraged by the Board where appropriate. As mentioned above, tenant communal uses, such as a cafe, health club and day care, will be located on the first floor of buildings overlooking the urban wilds, restored natural areas, improved multi-use pathways and Acorn Park Drive.

*(4) Historic structures and environments are preserved.*

The Master Plan envisions the creation of a new complex of buildings on a site that is substantially suburban in character now. In combination with further construction on adjacent sites in the future, development of Cambridge Discovery Park holds out the possibility for the establishment of a distinctive enclave of buildings that will act as a physical counterpoint to the existing and future wild lands that are the most significant environmental feature of this area.

*(5) Preservation and provision of facilities for start-up companies and appropriately scaled manufacturing activities that provide a wide diversity of employment paths for Cambridge residents as a component of development.*

The two existing tenants, Tiax, LLC and Nuvera Fuel Cells, Inc., spin-offs of former divisions of Arthur D. Little, remain as tenants of the campus. Both companies are engaged in high technology research. Smithsonian will assemble and test telescope components, on a special project basis, but not as part of an overall manufacturing operation. Future buildings are intended for office and research uses, some of which may involve accessory manufacturing. Tenants whose activities would be heavily dependent on trucking for supply and distribution are not anticipated.

**19.36 Expansion of the inventory of housing in the city is encouraged. Indicators include:**

*(1) Housing is a component of any large, multiple building commercial development.*

No residential development is proposed.

*(2) Where housing is constructed, providing affordable units exceeding that mandated by the Ordinance.*

Not applicable.

**19.37 Enhancement and expansion of open space amenities in the city should be incorporated into new development in the city. Indicators include:**

*(1) On large-parcel commercial developments, publicly beneficial open space is provided.*



The Permittee-owned South Parcel (3.76 acres) and the MDC Lot (4.2 acres) will be returned to Green Area Open Space as an integral part of the Master Plan. The Permittee-owned 10.78-acre Large Wetland Area to the west of the development site will remain a protected open space.

*(2) Open space facilities are designed to enhance or expand facilities or to expand networks of pedestrian and bicycle movement within the vicinity of the development.*

Pedestrian and bicycle access to the site will be made safer, more convenient, and more attractive through the creation of pathways through the restored MDC Lot and South Parcel, as plans are developed and approved by the Planning Board and the MDC. The pedestrian environment within the campus will be made friendlier by the creation of new landscaping and of hardscape spaces such as an outdoor eating terrace facing the South Parcel and seat wall planters. Bicycle lanes will be provided along the Cambridge portion of Acorn Park Drive, connecting to multi-use paths running through the restored MDC Lot and South Parcel, to the extent that such facilities will be permitted by those regulatory agencies having jurisdiction.

The Planning Board is requesting that the Permittee explore the options available to install a pedestrian link along Acorn Park Road to the Belmont town line and report back the Board on a regular basis as to the Permittee's most current thinking on the matter and the timing for such an installation.

*(3) A wider range of open space activities than presently found in the abutting area is provided.*

The MDC Lot and the South Parcel areas will be restored to Green Area Open Space, increasing the amount of abutting open space area and providing areas for a wider range of open space activities. The character of the use of existing and to-be-created open space will be decided by an extensive process through the auspices of the Department of Conservation and Recreation and interested citizen groups.

### **III. Compliance with Special District 4 Special Permit Criteria – Section 17.40**

The Master Plan conforms to all requirements of Section 17.40 with the granting of the special permits requested in the application.

#### **a. Reduction of Yard Requirements**

Section 17.42.2 of the Ordinance provides that the minimum yards required in the Special Districts 4 and 4A Districts may be waived by the Planning Board by Special Permit (with the exception of the minimum front yard in the Parkway Overlay District)

Section 17.40 does not establish special criteria for the waiver of yard requirements. The Planning Board must therefore find that the reduction in required yards as proposed results in a development scheme that is consistent with the general standards for the issuance of a special permit, including the Urban Design Guidelines of Section 19.30.

Throughout these findings the Board has indicated that the Master Plan as presented is fully consistent with the Urban Design Objectives of Section 19.30 and the general special permit criteria of 10.43. In addition, the subject lot presents special challenges because of its very irregular shape and because the unique provisions of Special District 4 require that significant portions of the lot not be building sites. The requested waiver of the yard requirements permits efficient use of those portions of the site for new buildings, allows for a reasonable relationship between those buildings to be constructed, provides reasonable protection to existing and future buildings on adjacent property, and facilitates the protection and restoration of new natural areas and open space.

The Permittee has requested the Planning Board to waive prospectively yard requirements that might be created in the future should the project area be further subdivided and new lot lines be created. The Board finds such a waiver acceptable, as the creation of new lot lines will not alter the disposition of buildings, open space, parking or other elements of the Master Plan as it is herein approved. However, it shall be a condition of this permit that any new lot lines to be created shall be approved by the Planning Board prior to their recording in the Registry of Deeds.

**b. Increased Maximum Building Height**

The maximum height in the Special Districts 4 and 4A may be increased to eighty-five (85) feet for nonresidential uses and ninety (90) feet for residential uses by special permit from the Planning Board. The special permit is to be granted where the applicant demonstrates to the satisfaction of the Board that the additional height will better serve the objectives of this Section 17.40 to increase the amount of open space in the district and to limit the extent to which building and other hard surfaces cover the ground.

Should the 819,000 square feet proposed in the Master Plan for occupied space and the 390,000 square feet proposed for parking garages (both numbers being less than the maximum allowed in the district) be accommodated in buildings no higher than sixty feet (the as-of-right height), the inevitable result would be an increase in the footprint of buildings and a loss of green area and permeable ground to hard surfaces and buildings.

While it may be that an acceptable Master Plan could be fashioned with construction no higher than sixty feet, the Board finds that buildings at eight-five feet, as illustrated by the detailed design for Building 100, are acceptable both for the added open space that will result and because the additional height can be accommodated without introducing significant negative urban design consequences.

It is understood by the Planning Board that the final height of buildings, consistent with applicable provisions of the Zoning Ordinance, will be measured from final grades that will be altered and raised by the use of fill in order to ensure that the first occupied floor of future buildings will be above the established 100-year floor elevation.

**IV. Compliance with Flood Plain Overlay District Special Permit Criteria – Section 20.70**

Section 20.75 of the Cambridge Zoning Ordinance provides that the Planning Board shall grant a Special Permit for development in the Flood Plain Overlay District if the Board finds that such development has met all of the following criteria in addition to other criteria specified in Section 10.40 (the project's compliance with the general special permit criteria is discussed above).

**a. No filling or other encroachment shall be allowed in Zone A areas or in the floodway which would impair the ability of these special flood hazard areas to carry and discharge flood waters, except where such activity is fully offset by stream improvements such as, but not limited to, flood water retention systems as allowed by applicable law.**

The project will not involve any filling in Zone A floodway areas. The project will involve demolition of existing buildings and construction of new buildings within a Zone A5 area. Building 100 and each subsequent stage of construction through the completion of the Master Plan are being designed so as not to reduce the flood storage capacity at the site.

**b. Displacement of water retention capacity at one location shall be replaced in equal volume at another location on the same lot, on an abutting lot in the same ownership, on a noncontiguous lot in the same ownership, or in accordance with the following requirements.**

As detailed in the application documents, neither construction of Building 100 and its attendant demolition of Buildings 20A and 35, construction of parking Garage A and related utility and site improvements, nor the full build-out of the Master Plan will result in any net loss in flood storage capacity. The Building 100 project will increase flood storage capacity at several incremental elevations. This certification shall be made in each instance in the future when specific designs for future buildings are presented to the Board for approval. At all times it shall be demonstrated that there is no net loss of flood storage capacity, which shall be calculated based on the entire site, compared to the current 2004 conditions.

**c. All floodwater retention systems shall be suitably designed and located so as not to cause any nuisance, hazard, or detriment to the occupants of the site or abutters. The Planning Board may require screening, or landscaping of floodwater retention systems to create a safe, healthful, and pleasing environment.**

The floodwater retention systems will consist of vaults beneath Building 100 (and future buildings) and beneath the parking garages. As such, no screening or landscaping will be required. Appropriate measures will be taken to prevent unauthorized access to these floodwater retention areas.

**d. The proposed use shall comply in all respects with the provision of the underlying zoning district, provisions of the State Building Code, State Inland Wetland Act, and any other applicable laws.**

All proposed buildings and site improvements will comply fully with the State Building Code, the Massachusetts Wetlands Protection Act, and other applicable laws.

**e. Applicants for development in the Alewife Revitalization area shall be familiar with the Community Development Department's Alewife Revitalization's Alewife Urban Design Study Phase II, April 1979, and shall demonstrate how their plan meets the spirit and**

intent of such study, particularly “Appendix One, District Development Policies”, in conjunction with the requirements of this Section 11.70 Flood Plain Overlay District.

Appendix One to the Alewife Urban Design Study Phase II identifies seven distinct Alewife Development Districts, No. 5 of which was the Acorn Office Park. The development principles set forth in Appendix One for this district are:

*Create a prestigious office, research and development park in the district.*

*Screen parking from view from Alewife Reservation.*

*Insure a gradual transition from new development to Alewife Reservation to prevent visual intrusion.*

*Discourage development on wetland areas.*

While City policy for this area has slowly evolved from those articulated in the 1979 Alewife document, particularly with the greater emphasis on the creation of housing, the project nevertheless complies fully with those principles, as set forth in these Findings, even as city policy has evolved from that time and is now more directly embodied in the provisions of the recently adopted Special Districts 4 and 4A and the establishment of the Open Space district on the MDC Lot.

Appendix One to the Alewife Urban Design Study also sets forth the following Design Guidelines for the Acorn Office Park area:

*Uses:*

*Promote high quality office, research and development activity.*

*Prohibit highway commercial activity.*

*Allow residential uses under special conditions.*

*Scale:*

*Limit the floor area ratio in the district to 2.0.*

*Limit building height to a maximum of 85 feet.*

*Limit building height to 45 feet within 100 feet of Alewife Reservation.*

*Maintain a minimum building and parking lot setback of 50 feet from Alewife Reservation.*

Again, while these policy statements have been superceded by more contemporary expressions of public policy, with which the Mater Plan is consistent, those older principles are respected in the Master Plan as approved.

**f. The requirement of Section 20.74(3) has been met, *i.e.*, the applicant has submitted a certification and supporting documentation by a Massachusetts registered professional engineer demonstrating that the proposed structures, buildings, filling, and other activities within the flood plain will not result in any increase in flood levels during the occurrence of the 100-year flood.**

The required certification for the Building 100 Project and for the full Master Plan, with supporting calculations, signed and stamped by a Massachusetts registered professional engineer from BSC Group is included in the application documents. Similar certifications will be provided to the Superintendent of Buildings with respect to each future building as the Master Plan is built out over time.

A communication from the City Engineer, referenced above, has certified that the project is providing adequate flood storage for an estimated flood elevation of 10.8. While the current flood elevation of 8.2 is expected to be revised in the near future, and an elevation of 10.8 may be the new benchmark, that cannot be known conclusively at this time. The City Engineer and the Board are confident that the project has been designed conservatively to meet the most likely flood storage requirements at the time of the issuance of the first building permit for a structure at the site, or can be easily adjusted to meet such requirement should it be different than assumed in the application documents.

#### **V. Compliance with Parkway Overlay District Regulations and Guidelines**

The Cambridge portion of Cambridge Discovery Park within one hundred fifty (150) feet of the southwestern street line of the Concord Turnpike, a/k/a State Route 2 is located within the Parkway Overlay District. The triangle of land that forms the northeastern corner of Cambridge Discovery Park is in Arlington and thus outside the Overlay District, even though it is within one hundred fifty feet of the Route 2 street line.

##### **a. Compliance with Alewife Revitalization Study**

Section 20.63.5 of the Ordinance provides that in reviewing applications for any special permit in the Parkway Overlay District, the Planning Board shall consider compliance with the recommendations made in the Cambridge Community Development Department's 1979 report entitled *Alewife Revitalization*, as well as the general special permit criteria specified in Section 10.43. As discussed above, the Building 100 Project and the full build-out Master Plan both comply with the specific district development policy recommendations for the project site set forth in the *Alewife Revitalization* report.

##### **b. Compliance with the Parkway Overlay District Development Standards**

The Master Plan has been designed to meet all requirements of the Parkway Overlay District, where it is applicable.

### *(1) Front Yards*

Section 20.64.1 of the Ordinance requires that front yards should be of sufficient size and appropriately landscaped so as to increase public safety and to positively contribute to the visual and environmental quality of the district. To that end, four standards are specified:

*(i) The minimum front yard setback for the principal front wall plane for any structure is twenty-five (25) feet measured from the street line. For corner lots, only the front yard oriented toward the Concord Turnpike is required to provide this minimum setback. The other front yard, e.g., the yard along Acorn Park Drive, is subject to the underlying base zoning.*

The proposed designs and locations for the only two buildings within the Parkway Overlay District comply with the district's minimum front yard requirements.

*(ii) Required front yards must consist entirely of Green Area Open Space, with the exception of paving necessary for vehicular access.*

The Master Plan envisions that all of the area between the facades of Garage B and Building 600 facing Route 2 and the street sideline will be Green Area Open Space.

*(iii) Front yards must contain at least one three (3) inch caliper tree for every twenty-five (25) feet of linear street frontage.*

The approved Master Plan landscaping design includes these required trees.

*(iv) Front yards may contain fences along front and side lot lines in accordance with the provisions of Subsection 20.65.*

The Master Plan does not envision fences within the Parkway Overlay District.

### *(2) Maximum Building Height*

Section 20.64.2 of the Parkway Overlay District provides that the maximum building height of the principal front wall plane of buildings within the Parkway Overlay District is limited to fifty-five (55) feet. Portions of buildings may be allowed to extend to eighty-five (85) feet in height provided that any portions in excess of fifty-five (55) feet in height are set back from the principal front wall plane by at least ten (10) feet and from one or more sixty (60) degree building bulk control planes. The heights of the proposed Garage B and the portion of proposed Building 600 within the Parkway Overlay District comply fully with these requirements.

### *(3) Building Facades*

Section 20.64.3 of the Ordinance provides that building facades within the Parkway Overlay District should be designed to enhance the visual quality of the district. To that end, three standards are specified:

*(i) Principal building entrances shall face the parkways and boulevards that serve to define the district.*

The proposed Master Plan orients the entrances to Building 600 and Garage B in a manner that maximizes Green Area Open Space within the Parkway Overlay District, and provides direct pedestrian access from Garage B to Building 600 and the other Cambridge Discovery Park buildings and adjacent sidewalks. The proposed Building 600 will have principal entrances facing toward Acorn Park Drive and toward Route 2, consistent with this requirement.

*(ii) Building facades and rooflines shall be articulated and expanses of unbroken wall planes shall be limited to thirty-five feet for those facades facing public open space and/or public roadways.*

The designs of these buildings will conform to this requirement as they are developed in more detail in the future.

*(iii) Ground floor levels shall include a minimum of thirty (30) percent transparency to enliven and enrich the public environment.*

The facades of Garage B and Building 600 will conform to these requirements when the buildings are designed in detail.

*(iv) Section 20.65 of the Ordinance establishes special requirements for fences within the Parkway Overlay District.*

The current Master Plan does not envision the construction of fences within this area.

#### *(4) Parking Standards*

Section 20.66.1 limits curb cuts in the Parkway Overlay District. The Master Plan does not contemplate any curb cuts along Route 2. The curb cuts along Acorn Park Drive that are envisioned as part of the Master Plan are outside the overlay district.

Section 20.66.2 provides that no parking areas may be located within the front yard required for any lot in the Parkway Overlay District, and that enclosed parking facilities are encouraged. As discussed above, no parking areas will be located within the front yard along Route 2, and the proposed Garage B will be located outside the required front yard.

Section 20.66.3 establishes general landscaping requirements for on-grade, open parking within the Parkway Overlay District. Section 20.66.4 establishes tree requirements for the landscaping of on-grade, open parking within the overlay district. The Master Plan does not envision any on-grade, open parking within the Parkway Overlay District.

#### *(5) Mechanical Equipment and Refuse Storage Areas*

Section 20.67 of the Parkway Overlay district prohibits the location of refuse storage areas or mechanical equipment areas in a front yard within the Parkway Overlay District. This section also establishes screening requirements for such areas that are located outside a front yard, but still within the overlay district. The Master Plan does not envision the location of any refuse storage areas or mechanical equipment areas within the Parkway Overlay District.

*(6) Development Consultation Procedure*

The Parkway Overlay District is an area of special planning concern, for which the Development Consultation Procedure of Section 20.68 is generally applicable. However, Section 20.68.1 (as well as Section 19.45) provides that any development proposal requiring a special permit shall not be subject to the Development Consultation Procedure. Because the redevelopment of Cambridge Discovery Park requires several special permits, it is not subject to the Development Consultation Procedure of Section 20.68.

**Decision**

Based on a review of the application documents, comments made at the public hearings, and based on the above findings, the Planning Board GRANTS the requested relief (Article 19.000 - Project Review Special Permit, Section 17.42.2 - Special District 4 Special Permit for reduced yards, Section 17.42.3 - Special District 4 Special Permit to permit a building height of 85 feet, Section 20.73 - Flood Plain Overlay District Special Permit, and Section 20.60 - Parkway Overlay District Design Review) subject to the following conditions and limitations. For purposes of this Decision, Permittee shall mean BHX, LLC, Trustee of Acorn Park Holdings Realty Trust and any successors in interest as owners of the Site or any portion thereof.

1. All use, building construction, and site plan development shall be in substantial conformance with the plans and application documents submitted to the Planning Board as referenced above and dated August 26, October 13, and October 19, 2004. Appendix I summarizes the dimensional features of Building 100 and the Master Plan as approved. More specifically the Planning Board approves the following:

- (i) Gross Floor Area: Subject to any further limitations set forth in Section 17.40, at no time shall gross floor area located within the North Parcel exceed 819,916 square feet of building area and 390,000 square feet of parking garages, except on a temporary basis as set forth in Section 17.46.1.
- (ii) Height: Building heights shall be as shown on the approved plans but in no case shall exceed 85 feet and garage heights shall not exceed 60 feet, except that within the Parkway Overlay District applicable lower building height limitations pursuant to Section 20.64.2 shall apply.
- (iii) Setbacks: Setbacks shall be as shown on the application documents unless otherwise approved by the Planning Board as part of the review of the design of individual buildings: a minimum front yard setback of at least 40 feet from the existing centerline of Acorn Park Drive shall be provided. Parking Garage A shall be set back from the westerly side and rear property lines adjacent to it, by not less than twenty (20) and fifteen (15) feet, respectively. Parking Garage B shall have an average setback from the westerly property line adjacent to it of at least twenty (20) feet. No setback from the Cambridge-Arlington municipal boundary along Route 2 is required. Inter-building spacing shall be generally as shown on the application documents, but shall be determined definitively as a building's final design is approved by the Planning Board.



(iv) Circulation and Access: Vehicle access shall be as shown on the application documents unless otherwise approved by the Planning Board as part of the review of the design of individual buildings. In any case, the internal service roadway shall connect to Acorn Park Drive in at least two but no more than four locations. The design and locations of internal roadways, bicycle connections and pedestrian connections shall be approved by City staff and subject to design review by the Planning Board.

(v) Interior Lot Lines on the North Parcel. To permit separate ownership and/or financing of the buildings to be constructed on the North Parcel, no setbacks shall be required from existing or future interior lot lines (i.e. lot lines other than those along Acorn Park Drive, Route 2 and the present Martignetti properties). Nevertheless, the Planning Board shall approve, prior to recording, the location of any new lot and its constituent lot lines that are proposed to be created, subdivided and held in separate ownership within the Master Plan area.

**2. Design Review.** This Decision approves the Master Plan with general size, massing, and locations of buildings and uses established at a conceptual level as described in the application documents. As a prerequisite to the issuance of a building permit, each new building shall be subject to design review by the Planning Board to determine conformance to the Design Guidelines, attached as Appendix II to this decision, and the conditions of this permit. The following conditions and limitations shall apply.

(i) Design approval shall be granted by the Planning Board for development consistent with the Design Guidelines, the conditions of this Decision, and the applicable requirements of the Zoning Ordinance. Design Review approval by the Planning Board shall constitute the Planning Board's determination that the proposed project is consistent with this Decision. The Community Development Department shall certify to the Superintendent of Buildings that the requirements of this condition have been met before issuance of the first building permit for any building.

(ii) The Permittee is encouraged to present the design of any building, including any "green" building features to the Planning Board at an early schematic stage to permit adequate opportunity to refine and modify the design. Subsequent submissions to the Board shall be made at appropriate stages of design development to ensure that the Board has an adequate opportunity to track the evolution and change of the design and the responsiveness of the Permittee to its comments.

(iii) In each instance that a building is presented to the Planning Board, after Building 100, the Permittee shall address the Board's concern, as set forth in the Findings above, that the interior courtyard space in the Master Plan, as illustrated in the application documents, is too heavily dominated by vehicular circulation and delivery functions, poorly defined as an urban space, and inadequate to the needs of pedestrians and bicyclists who will be traversing it.

The Permittee is requested to explore ways to minimize the vehicular functions (through elimination or consolidation); make the structure and shape of the open spaces more coherent, better detailed, and with a stronger identity; and make the pedestrian

environment more welcoming by devoting more space exclusively to pedestrians or by more clearly designing and defining shared vehicle/pedestrian facilities.

Furthermore the Permittee shall report to the Planning Board on a periodic basis on the opportunities for the provision of pedestrian access from Belmont to the site, either along Acorn Park Drive or Concord Turnpike, preferably in cooperation with abutting and similarly impacted landowners. The Permittee shall report no later than 180 days after the issuance of a Building Permit for Building 100 in the first instance, and at the time of initial design review for each new building thereafter (or at the time of reporting to the Planning Board in the absence of any new building construction, as required in Condition 5 below), on the progress made toward providing such access until such a pedestrian path is constructed or until the Planning Board determines that such a path is unnecessary. The design and location of such facilities will be reviewed and approved by the Board, subject to receipt of any necessary permits and approvals, including but not limited to the consent of other impacted landowners.

(iv) With regard to lighting in the above grade parking garages, the Permittee shall submit to the Planning Board an additional section of the adopted Design Guidelines outlining the standards by which lighting in those garages shall be designed. Such language shall be submitted to the Planning Board for approval no later than 180 days after the issuance of a Building Permit for Garage A.

(v) Each time a building is initially presented to the Planning Board for design review, the Permittee shall summarize how construction in the Park to date has employed natural and energy resources efficiently in the construction, maintenance and long-term operation of buildings already constructed and report how such efforts will be employed in the building currently under consideration. Reference to LEED or other equivalent standards is encouraged.

**3. Design Review of Building 100 and Garage A.** The Planning Board hereby approves the construction of Building 100, Garage A and associated site improvements shown on the Special Permit Plan Set dated August 26, 2004, by ADD, Inc., as amended by supplemental material filed and dated October 13 and October 19, 2004, subject to final design review by the Community Development Department. The construction authorized by this condition is not subject to condition 2 above. In making its final selection of building materials, the Board requests the selection of tones and shades in the warmer range than were presented in the application documents and in the presentation materials presented to the Board. The Community Development Department shall specifically review those materials and approve them. Where agreement cannot be reached between the Department and the Permittee, the Planning Board shall make the final determination.

**4. Master Plan.** The Planning Board approves the Master Plan as illustrated in the Special Permit Plan Set dated August 26, 2004, by ADD Inc., entitled Volume IV, as amended by supplemental material filed and dated October 13 and October 19, 2004, to be developed over a 15-year period.

**5. Schedule of Construction.** This Special Permit shall be governed by the provisions of Chapter 40A and Section 10.46 of the Cambridge Zoning Ordinance, which establish the time within which construction authorized by the Special Permit must commence. The Planning Board grants to the Permittee the right to start construction of Building 100 and Garage A within two years of the date of filing of this Decision with the City Clerk. Commencement of construction under a building permit issued for Building 100 or Garage A shall be deemed commencement of construction of the entire Master Plan for purposes of Chapter 40A and Section 10.46 of the Ordinance.

The Planning Board hereby determines that the public interest will be served by implementation of the Master Plan over a period of fifteen years; no specific requirement shall be established by the Planning Board for the commencement of construction of any building subsequent to the commencement of construction of Building 100 and/or Garage A. Because of the size of the Master Plan and the length of time it will take to be fully implemented, no precise schedule can reasonably be determined with confidence for the commencement of construction of any individual building beyond that of Building 100 and Garage A. Therefore, there exists good cause to grant an extension of time for commencement of construction of the remaining buildings covered by the Master Plan so that this special permit shall not lapse with respect to any construction for which a building permit is issued during the fifteen year duration of the Master Plan special permit.

If, during the fifteen year duration of this Master Plan special permit, the Permittee does not seek design approval for a building for a period of two years from the last design approval, the Permittee shall make a report to the Planning Board at the end of that two year period updating the Board on the anticipated schedule for future construction, difficulties encountered in executing the Master Plan, anticipated schedule of construction in the future, and whether the Permittee believes that the entire Master Plan can be fully constructed within the fifteen years provided, and if not, how much additional time might be required.

**6. Restoration Plan.** The Restoration Plan attached as Appendix I to the Supplemental Filing made on October 13, 2004 is approved. The work called for in the Restoration Plan with respect to the MDC Lot shall be completed prior to the expiration of 180 days after the later of (i) issuance of any certificate of occupancy for Building 100, or (ii) receipt of all necessary consents (including DCR consent as landowner), permits and approvals for such work, provided that such 180-day period shall be deemed extended as necessary due to weather or construction conditions.

The work called for in the Restoration Plan with respect to the location of Building 20A, which is to be demolished, shall be completed prior to the expiration of 180 days after the later of (i) issuance of any certificate of occupancy for Building 100, or (ii) receipt of all necessary permits and approvals for such work, provided that such 180-day period shall be deemed extended as necessary due to weather or construction conditions. Where such extension is proposed a report shall be made to the Planning Board explaining the delay.

The work called for in the Restoration Plan with respect to remaining portions of the South Parcel as the remaining buildings are demolished, shall be completed not later than one (1) year after the later of (i) such demolition, or (ii) receipt of all necessary permits and approvals for

such work. The Permittee may seek a Minor Amendment altering the restoration plans for the South Parcel in the event that the Restoration Plan for that area becomes outdated.

**7. Traffic Mitigation and Monitoring.** The Planning Board adopts as a condition of this permit the recommendations of the Traffic, Parking and Transportation Department with regard to management of parking spaces, physical improvements on the site and off site, and implementation of traffic mitigation measures as set forth in the memorandum to the Planning Board from Susan E. Clippinger, dated October 13, 2004, summarized below and in Appendix III:

- (i) A cap on the Phase I ( As defined in the Traffic Study, up to 426,000 square feet of total building space.) parking supply at 830 spaces;
- (ii) Report to the Board on the status of the parking demand before commencement of any construction on Phase III buildings ( As defined in the Traffic Study, any construction exceeding 526,000 square feet of total building space).
- (iii) Improvements of pedestrian and bicycle access to the Alewife T station.
- (iv) Require that in all future leases employees be directly charged market rates to park on site.
- (v) Implementation of the enumerated TDM measures.
- (vi) Coordination with abutting communities on area-wide transportation issues.

**8. Flood Storage.** There shall be no net loss of flood storage capacity within the Master Plan area at any stage of construction of the authorized construction. The Permittee shall confirm compliance with this requirement to the Planning Board and the Inspectional Services Department, as determined by the City Engineer, in connection with the application for any building permit in the Master Plan area. Any surplus flood storage capacity created by an earlier phase of development may be carried forward and credited to the flood storage capacity required for a subsequent phase of development under the Master Plan.

**9. Parkway Overlay District.** That part of the development located in the Parking Overlay District shall conform to the dimensional requirements of that overlay district, unless the Planning Board grants a special permit in the future altering those requirements pursuant to Section 20.63.7 of the Ordinance.

**10. Subdivision of the Master Plan Area.** Separate buildings constructed in accordance with this decision may be separately owned and/or financed. The property subject to this decision may be subdivided without limit as to the number of individual lots so long as no separate building is located on more than one zoning lot; the Planning Board has prospectively waived any setback requirements that may be generated by the creation of any new lot lines necessary to accomplish a subdivision of the zoning lot as set forth in Condition 1, Paragraph (v) above.

Nothing herein shall prohibit party or other walls along internal lot lines if approved by the Planning Board.

Upon subdivision, each lot shall be subject to only those terms and conditions of this decision as apply Park-wide or to buildings or other matters physically located within such lot, and no others. In approving any new lot and lot lines, the Planning Board may attach conditions related to the responsibility of the owners of that lot in the future with regard to elements of the Master Plan impacted by the subdivision.

**11. Amendments to the Decision.** Changes to the Master Plan that do not constitute a substantial deviation from the overall project concept approved in this Decision, as determined by the Planning Board with guidance from Section 12.37 of the Zoning Ordinance, may be allowed as a Minor Amendment to this Decision at a regularly scheduled Planning Board meeting, upon an affirmative vote of five members of the Board; unless otherwise indicated in this Decision, all other changes shall be considered a Major Amendment to this Special Permit, subject to the requirements of Section 10.40 for the issuance of a new special permit.

If the Master Plan has not been fully implemented during the term of this Special Permit, the Planning Board may extend the term of this Special Permit as a Major Amendment to the permit.

## **12. Consistency with the City Noise Ordinance**

All authorized development shall conform to the requirements of the City of Cambridge *Noise Control Ordinance*, Chapter 8.16 of the City Municipal Code.

Voting in the affirmative to **GRANT** the Special Permit relief requested were W. Tibbs, J. Hrabchak, T. Anninger, H. Russell, P. Winters, constituting at least the two thirds of the members of the Board necessary to grant a special permit.

For the Planning Board,

  
Hugh Russell, Vice Chair

Appendices:

- I. Dimensional Forms
- II. Design Guidelines
- III. Traffic Mitigation and Monitoring
- IV. TP&T Letter
- V. Illustrations/Maps
- VI. Proposed Phasing

A copy of this decision #198 shall be filed with the Office of the City clerk. Appeals, if any, shall be made pursuant to Section 17, Chapter 40A. Massachusetts General Laws, and shall be filed within twenty (20) days after the date of such filing in the Office of the City Clerk.

ATTEST: A true and correct copy of the above decision filed with the Office of the City Clerk on November 4, 2004, by Elizabeth M. Paden, authorized representative of the Cambridge Planning Board. All plans referred to in the decision have been filed with the City Clerk on said date.

Twenty (20) days have elapsed since the filing of the decision.  
No appeal has been filed.

DATE:  
City Clerk City of Cambridge

APPENDIX I – DIMENSIONAL FORM FOR BUILDING 100 PROJECT

Special Permit # 198

Address: 20 Acorn Park Drive

	Allowed/Required	Existing	Proposed	Granted
Total FAR				
Residential				
Non-Residential		0.36	up to 0.38 <sup>a</sup>	up to 0.38 <sup>a</sup>
Inclusionary bonus				
Total GFA in Sq. Ft.	900,000	416,000	up to 440,227 <sup>b</sup>	up to 440,227 <sup>b</sup>
Residential		0	0	0
Non-Residential		416,000	422,508-440,227 <sup>b</sup>	422,508-440,227 <sup>b</sup>
Inclusionary bonus	n/a	n/a	n/a	n/a
Max. Height	60/85 <sup>c</sup>			
Range of heights		13 – 67.2 ft.	13 – 85 ft.	13 – 85 ft.
Lot Size		26.5 acres 1,154,420 sf	26.5 acres 1,154,420 sq. ft.	26.5 acres 1,154,420 sq. ft.
Lot area/du	n/a	n/a	n/a	n/a
Total Dwelling Units	0	0	0	0
Base units		0	0	0
Inclusionary units		0	0	0
Min. Lot Width	50 ft	170 ft.	170 ft.	170 ft.
Min. Yard Setbacks				
Front		30.8 ft. <sup>d</sup>	40 ft. <sup>e</sup>	40 ft. <sup>e</sup>
Side. Left		8 ft. <sup>f</sup>	20 ft. <sup>g</sup>	20 ft. <sup>g</sup>

Side, Right		5.7 ft. <sup>h</sup>	20 ft. <sup>g</sup>	20 ft. <sup>g</sup>
Rear		7.4 ft. <sup>i</sup>	15 ft. <sup>j</sup>	15 ft. <sup>j</sup>
Total % Open Space		61%	67%	67%
Usable		61%	67%	67%
Other				
Off Street Parking	1.052	1.052	1,052	1,052
Min #	n/a	n/a	n/a	n/a
Max #	1.052	1.052	1,052	1,052
Handicapped		0	18	18
Bicycle Spaces		0	65	65
Loading Bays		5	7	7

**Notes to Building 100 Project Dimensional Form**

- <sup>a</sup> Not including structured parking, which is excluded from gross floor area calculations in Special District 4 under Section 17.40 of the Ordinance.
- <sup>b</sup> Including 5,810 square foot GMT Addition and 17,577 square feet of "ghost" floor area for missing portion of second floor.
- <sup>c</sup> Maximum as of right height in Special District 4 is 60 feet, which may be increased by special permit to 85 feet for nonresidential uses and 90 feet for residential uses.
- <sup>d</sup> Building 20A, measured to centerline of existing Acorn Park Drive; 8.5 feet to street line.
- <sup>e</sup> Distance from proposed Building 100 to centerline of existing Acorn Park Drive layout, 25 foot minimum setback from street lines. Buildings 20A and 35 to be demolished; front yard setbacks of other existing buildings to remain unchanged.
- <sup>f</sup> Building 20, southeast corner.
- <sup>g</sup> Minimum distance from Garage A to left side lot line; side yard setbacks of existing buildings to remain unchanged.
- <sup>h</sup> Building 46, west wall.
- <sup>i</sup> Building 20, southern wall.
- <sup>j</sup> Minimum rear yard for Garage A (north side); rear yard setbacks of existing buildings to remain unchanged.



**Dimensional Form for Overall Master Plan**

Special Permit #198

Address: 20 Acorn Park Drive

	Allowed/Required	Existing	Proposed	Granted
Total FAR	n/a		n/a	n/a
Residential				
Non-Residential		0.36	0.71 <sup>a</sup>	0.71 <sup>a</sup>
Inclusionary bonus				
Total GFA in Sq. Ft.	900,000	416,000	819,916 <sup>b</sup>	819,916 <sup>b</sup>
Residential		0	0	0
Non-Residential		416,000	819,916 <sup>b</sup>	819,916 <sup>b</sup>
Inclusionary Bonus	n/a	n/a	n/a	n/a
Max. Height	60/85 <sup>c</sup>			
Range of heights		13 – 67.2 ft.	55–85 ft.	55–85 ft.
Lot Size		26.5 acres 1,154,420 sf.	26.5 acres 1,154,420 sq. ft.	26.5 acres 1,154,420 sq. ft.
Lot area/du	n/a	n/a	n/a	n/a
Total Dwelling Units	0	0	0	0
Base units		0	0	0
Inclusionary units		0	0	0
Min. Lot Width	50 ft	170 ft.	170 ft.	170 ft.
Min. Yard Setbacks				
Front		30.8 ft. <sup>d</sup>	40 ft. <sup>d</sup>	40 ft. <sup>d</sup>
Side, Left		8 ft. <sup>i</sup>	20 ft. <sup>e</sup>	20 ft. <sup>e</sup>
Side, Right		5.7 ft. <sup>h</sup>	20 ft. <sup>e</sup>	20 ft. <sup>e</sup>
Rear		7.4 ft. <sup>i</sup>	15 ft. <sup>f</sup>	15 ft. <sup>f</sup>

Total % Open Space		61%	72%	72%
Usable		61%	72%	72%
Other				
Off Street Parking	1.052	1.052	1.052	1,052
Min #	n/a	n/a	n/a	n/a
Max #	1.052	1.052	1.052	1,052
Handicapped		0	22	22
Bicycle Spaces		0	113	113
Loading Bays		5	18	18

**Notes to Master Plan Dimensional Form**

- <sup>a</sup> Not including structured parking, which is excluded from gross floor area calculations in Special District 4 under Section 17.40 of the Ordinance.
- <sup>b</sup> Including 5,810 square foot GMT Addition and 17,577 square feet of "ghost" floor area for missing portion of second floor.
- <sup>c</sup> Maximum as of right height in Special District 4 is 60 feet, which may be increased by special permit to 85 feet for nonresidential uses and 90 feet for residential uses.
- <sup>d</sup> Building 20A, measured to centerline of existing Acorn Park Drive; 8.5 feet to street line.
- <sup>e</sup> Distance from Building 100 to centerline of existing Acorn Park Drive layout, 25 foot minimum setback from street lines.
- <sup>f</sup> Building 20, southeast corner.
- <sup>g</sup> Minimum distance from Garage A to left side lot line; minimum average distance from Garage B to left side lot line.
- <sup>h</sup> Building 46, west wall.
- <sup>i</sup> Building 20, southern wall.
- <sup>j</sup> Minimum rear yard for Garage A (north side).

## Appendix II

### CAMBRIDGE DISCOVERY PARK MASTER PLAN DESIGN GUIDELINES

#### SPECIAL DISTRICT 4 CAMBRIDGE DISCOVERY PARK 20 ACORN PARK DRIVE

#### Background

Cambridge Discovery Park, comprising approximately 26.5 acres, is located in Special District 4. As the name "Special District" suggests, the District is unlike any other in the City, for a number of reasons. Chief among its distinguishing characteristics are its proximity to the Alewife Reservation, its susceptibility to flooding, the historical use of the adjacent MDC land for parking, and the historical pattern of development within areas adjacent to the Little River. There is broad consensus that the solution to the problems and challenges presented here is to allow and facilitate new development and/or redevelopment in the portion of Special District 4 north and west of Acorn Park Drive, tied to the removal of buildings and paving south of Acorn Park Drive and in the MDC Lot and the return of those sections to Green Area Open Space, as is provided in Section 17.40 of the Cambridge Zoning Ordinance, the Special Permit Application and the Cambridge Discovery Park Master Plan.

The implications are noteworthy. The construction of Cambridge Discovery Park will transform the Reservation, reclaiming an urban wild and presenting a much more dynamic interaction between the built and unbuilt environment than is typical elsewhere in the City. This is literally true in that it is the development of significant amounts of new gross floor area that provides the means to remove inappropriate buildings and paving from more sensitive portions of the District. The concentration of all the development in one compact area means that the District will present an urban edge against a natural environment, a sharper contrast than appears elsewhere in the City and one that should be appropriately and creatively treated and celebrated. The susceptibility of the site to flooding due to regional forces requires compensating flood storage capacity and means that building ground floors must be elevated above flood levels, presenting additional design challenges and opportunities. These Design Guidelines are intended to provide a framework within which these issues can be addressed in an aesthetically and functionally appropriate manner that responds to the unique characteristics of the District.

#### Design Principles

The goal of the Cambridge Discovery Park Master Plan is to create a distinguished urban campus over time and in so doing to relocate all development to the north and west of Acorn Park Drive, returning substantial land to open space and forming an urban edge to expanded urban wild areas. An integral part of the multiple-phase Master Plan includes the demolition of six buildings to the south of Acorn Park Drive and the removal of 619 on-grade parking spaces (454 spaces in the MDC parking lot located east of Acorn Park Drive and 165 spaces in the parking lot located south of Acorn Park Drive); these areas (approximately 8 acres) will become Green Area Open Space. The campus will consist of handsome buildings that both express their

innovative uses (such as the Smithsonian Institution Astrophysical Observatory) and relate sensitively to their context.

Furthermore, the Master Plan and its new structures will create its own unique identity and at the same time be compatible with a recognizable Cambridge image, zoning and planning objectives, and flood plain requirements. The project seeks new buildings and landscapes that convey a sense of timelessness and elegance that will feel comfortable and inviting to all who work there while respecting and enhancing the experience of visitors to the adjoining Reservation. This will be achieved in part through the design of buildings with properly scaled windows, articulation, animated silhouettes, and the use of materials that are durable, high quality, inviting, appropriate to the context, and supportive of other Cambridge Discovery Park proposed buildings and the overall Master Plan. General guidelines are discussed below.

The campus should form a progressive setting that promotes intellectual pursuit and encourages cross-fertilization within and, where feasible, a sense of campus community on the ground floors overlooking the Reservation. In physical terms, the organization of the campus buildings and services should reflect a clean, ordered, and uncluttered environment friendly to pedestrians.

Building and site design should “use natural resources and energy resources efficiently in construction, maintenance, and long-term operation. Compliance with Leadership in Energy and Environmental Design (LEED) certification standards and other evolving environmental efficiency standards is encouraged.” (Cambridge environmental guideline)

Development in the public and private realms should be integrated in as positive, secure, and elegant a manner as possible. New buildings along public open space should be designed to complement and harmonize with it with respect to appropriate uses, scale, density, bulk and related cast shadows, landscaping, and screening. Appropriate and creative attention should be paid to the interaction between the built and unbuilt environments, to the connection with the landscape, and to the development of exterior gathering spaces, both hard and soft, that are comfortable, visible, and conducive to social interaction or just quiet enjoyment. Each new building should make a contribution to an overall sense of place that responds to the opportunity created by the juxtaposition of an urban edge with the urban wild, while complementing its immediate neighbors within Special District 4.

Attractive and inviting connections to and from adjacent areas and the Alewife T station are desired.

#### **a. Open Space and Circulation Design**

##### **1. Open Space**

Approximately 70% of the 26.5 acres will be open space — over 10.5 acres of which are protected wetlands to the west. Not including the wetland area site, publicly accessible and usable open space will be greater than 25% of the Cambridge Discovery Park land and consist of restored natural conditions (3.75 acres) directly connected to and integrated with the surrounding Alewife Reservation. Furthermore, the proponent will return the adjacent MDC-owned parking

lot (4.2 acres) to Green Area Open Space as required under Section 17.45 of the Zoning Ordinance.

Although Cambridge zoning and the applicant's master plan focus the majority of new open space on making the Reservation stronger and more contiguous, efforts should be taken to develop internal open spaces within the 10-acre development site. This should be approached so that applicant's proposed open space can integrate with adjacent owner plans resulting in the possibility of a further enlarged park setting.

Private development bordering public open space and public thoroughfares will have direct access to the public space, and should present inviting elevations and imagery, with special attention at the ground plane. Private open space bordering tenant communal spaces should be explored. Development should directly relate to, provide easy access to, and reinforce activity at the existing ground plane. Design will be coordinated to relate well to public open space and public/private passageways that connect with that open space.

## 2. Transit Shuttle

Given the overall limitation in Section 17.43.1 of the Zoning Ordinance to the historical number of 1,052 parking spaces present at the site, efforts to increase usage of the transit station should be explored thoroughly. This should include improved pedestrian/bicycle connections and, especially needed during inclement weather, a shuttle to the Alewife MBTA Station with as direct a route as possible.

## 3. Pedestrian and Bicycle Circulation

The District must have an integrated pedestrian and bicycle circulation system with particularly strong connections between Cambridge Discovery Park, Martignetti's adjacent properties, the Alewife MBTA Station, the Alewife Reservation and surrounding areas. A future extended path system through the Reservation with connections to the Minuteman Bike trail and the proposed (by MHD) Fitchburg Cutoff Bicycle Trail is possible, with build out on an incremental basis in order to enable any impacts on wildlife to be assessed and to inform any needed limitations.

Pedestrian, vehicular, and bicycle circulation should be organized, safe and efficient with minimal conflicts between modes. Roadway crossings must be made as safe as possible, by crosswalks and/or clearly delineated changes in paving. A bicycle path can be accommodated south and east of Acorn Park Drive on the Little River and MDC parking lot parcels.

Given the projected 100-year flood plain level for the general area and the significantly lower existing Acorn Park Drive elevation, well-designed handicapped accessible ramps will be carefully integrated in the landscape plan for the developed portions of the site. Where possible, sloped pathways will be used instead of ramps, to minimize handrails.

In the development of this multi-acre site, there will be multiple lobbies and other amenity entry points, each serving a particular section of the campus. Office/Research and Development/Life Sciences entrances will be directly located on Acorn Park Drive. They should be clearly

articulated and identifiable. The use of entry canopies, inviting and receptive plazas and/or other indicative architectural features should be explored.

#### 4. Parking and Service Facilities

Entry drive intersections directly off Acorn Park Drive will be limited in number. Entrances to parking facilities and service areas should be located carefully in relation to the Acorn Park Drive intersections and away from public open space corridors. Service docks should be integrated into the building forms, equipped with closeable overhead doors and screened architecturally and/or with landscaping to minimize visual and noise related impact.

#### **b . Land Use**

##### 1. Uses

Permitted uses under Section 17.41 include, by incorporation of use regulations for the Office 2 District, a variety of commercial and residential uses. It is anticipated that office, research and development and life science uses will predominate, occupying not more than 900,000 square feet of gross floor area. Where possible tenant amenities such as dining, day care and health club uses will be on the first floors of buildings. The inclusion of public rooms including a meeting space, reading room, and/or a teaching space dedicated to Alewife Reservation research or study, should also be explored. The communal facilities should where possible have an adjacent open space overlooking the urban wild areas.

##### 2. Parking

As noted above, the development site is limited to 1,052 parking spaces, the number that existed prior to new construction. In order to expand green space, existing surface parking located in the MDC parking lot and on the south side of Acorn Park Drive are to be relocated in stages to the north and west of Acorn Park Drive, ultimately to a great extent in parking structures that must be located above grade due to the high water table, flood plain issues, and the desire to minimize disturbance to wetland areas. Up to 400,000 square feet of gross floor area of above grade parking structures is allowed in the District. All structured parking shall be designed so as to minimize visual impact from Acorn Park Drive, Route 2 and the Reservation, and be located to limit inactive, unsecured areas. Appropriate landscaping and careful architectural treatment will be required to help make the structures good neighbors, and inviting for pedestrians along adjacent walk ways throughout the site. On-grade spaces are permitted north and west of Acorn Park Drive. At full build out only limited numbers of on-grade spaces are expected to be located between the parking garages and occupied buildings, providing space for landscaping.

#### **c. Elements of Form**

##### 1. Height

Although portions of the proposed buildings may be lower, the development generally requires a full height build-out. Section 17.42.3 of the Ordinance states that within Special Districts 4 and 4A, "The maximum height in the Districts shall be sixty (60) feet except that it may increased to

eighty-five (85) feet for nonresidential uses and ninety (90) feet for residential uses by special permit by the Planning Board. The special permit shall be granted where the applicant demonstrates to the satisfaction of the Board that the additional height will better serve the objectives of this Section 17.40 to increase the amount of open space in the district and to limit the extent to which building and other hard surfaces cover the ground.”

Areas within the Parkway Overlay District (Section 20.64.2) have stricter requirements as follows: “the principal front wall plane of buildings in the Parkway Overlay District shall be fifty-five (55) feet. Portions of the buildings may be allowed to extend to eighty-five (85) feet in height provided that these portions in excess of fifty-five (55) feet are set back from the principal front wall plane at least ten (10) feet and that those portions also set back from one or more sixty (60) degree building bulk planes.”

Exceptions to the limits of building height (Section 5.23) including chimneys, water towers, air conditioning equipment, elevator bulkheads, skylights, ventilators and other necessary features appurtenant to structures (plus building towers) which are usually carried over roofs and not used for human occupancy should be designed in a coordinated, distinctive manner in concert with the upper floors of the buildings.

Building grade (from which building height shall be measured) will be established based on the flood plain level through the use of sloped areas and raised planters.

## 2. Scale

Especially where bordering public open space, parkways, and important internal pedestrian ways, new development should relate to human dimensions and provide a sense of intimacy in all aspects of design from building concept development to construction details. Of particular importance is the treatment of the lower two floors for all new structures. Appropriate techniques shall be employed to break down the scale of buildings into a more human-scale elements. This does not require that buildings be lower than the maximum permitted height along the border of the urban edge with the urban wild, but does require that building facades not appear monolithic.

## 3. Massing

These guidelines are intended to create an architecturally integrated urban campus that responds to District 4 zoning, the needs of the Reservation and the requirements of the Parkway Overlay district. New development should be designed to maximize both pedestrian access to and hours of sunlight available to the bordering Reservation. Internal roads/entry drives will be located so as to create manageable blocks, and limited portions of the buildings will be setback from the principal building plane to prevent an overly monolithic appearance immediately adjacent to the Reservation and to provide for tenant communal open spaces. According to zoning, building facades in the Parkway Overlay District (presently Building 600 and Garage B in the Master Plan) “shall be articulated and expanses of unbroken wall planes shall be limited to thirty-five (35) linear feet for those facades facing public open space and/or public roadways.” In other areas, buildings should avoid continuous massing longer than two hundred (200) feet facing public open space and/or public roadways. If massing extends beyond these lengths, it should be

made permeable and visibly articulated as several smaller masses using different materials or colors, vertical breaks, bays or other architectural elements.

Over time, each development cycle (possibly as many as six) will build in an architecturally compatible manner — each with its own distinctive characteristics that foster a family of buildings.

#### 4. Setbacks

There should be a minimum 40-foot building setback from the existing centerline of Acorn Park Drive in order to create adequate landscaping transition. Exceptions to this setback would be those architectural/landscape elements that complement the urban wild area's edge. This might include, but is not limited to, seating or overlook areas.

#### 5. Street-Wall Patterning/Base, Middle and Top

Buildings should be of a tripartite architectural configuration consisting of base, middle and expressive top. Each Base will consist of the first or possibly the first 2 floors of each building and give the appearance of greater height than any single floor in the Middle. The Middle will consist of the largest number of floors, which will generally be similar to each other. The Top's architectural treatment should create a distinguished finish of the dominant architectural theme of the Middle of the building. This may be achieved through changes in material, window rhythm, setbacks (of the Top only), architectural detailing, or a combination of these elements.

The use of distinctive corners and entry treatment are encouraged to be different from, yet still coordinated with, the Base, Middle and Top to enrich building elevations and adjoining public and private exterior spaces.

In order to enrich building facade design it is anticipated that there will be multiple facade treatments (coordinated with typical structural bay widths), in which a particular architectural treatment would play a major and another a minor role in the facade design.

#### 6. Silhouette

Buildings should provide animated, varied silhouettes that create an appropriate identity and enrich views from the Reservation, nearby areas, and thoroughfares including Route 2/Concord Turnpike. This greater articulation should be an integral part and emphasis of the overall building concept.

#### 7. Color

These guidelines encourage the use of warm and inviting colors that complement the Alewife Reservation's natural range.

#### 8. Architectural Details

Development bordering the public domain should be rich in architectural details, paying special attention to the ground plane and silhouette, and convincingly incorporating appropriate imagery



depending on project location, *i.e.* open space, parkway and building use imagery. Overall form and individual elevations should be designed to emphasize human scale and presence through the use of properly proportioned features.

(i). Materials

All new buildings will be faced with an ordered combination of appropriate materials, which may include (but are not limited to) any of the following: brick, pre-cast concrete, stone, metal and/or glass. The guidelines encourage the use of materials that add warmth, richness and texture to the campus of buildings.

(ii) Awnings/Pergolas

New buildings may provide awnings or pergolas at first floor communal use areas, color coordinated with adjacent development, especially when overlooking public open space.

(iii) Transparency of Communal Uses at Ground Floor

Where possible communal, ground floor uses (cafeteria, day care, health club, etc.) should be designed to maximize visibility and transparency of those uses to the outside in an effort to animate the first floors of the structures.

(iv) Penthouses

All equipment, screens, and other roof projections visible from a public way should be set back from the principal building facade facing the public way or architecturally screened and integrated within the overall building form and individual elevations.

(v) Signs

All signage is subject to design review as part of the Special Permit or design review process. In general, signs should be designed to fit well on the buildings, to be legible but not overpowering, and to complement other elements applied to buildings, such as awnings, canopies, or possible artwork.

(vi) Lighting

Interior and exterior areas should limit light spill onto the Alewife Reservation. Appropriately designed Acorn Park Drive street lighting will be reviewed with the City.

## 9. Landscape Architectural Details

Landscape architectural design plays a very important role for Cambridge Discovery Park, given the desire to enhance the surrounding Reservation by expanding the urban wild areas (through improvements to the Little River parcel and MDC parking lot parcel), create an appropriately strong urban edge and strengthen a handsome tree-lined road.

(i) Materials

Plantings should be tolerant of drought (or wetland conditions as appropriate), salt, snow loading and should not require regular pruning. Plantings should generally be native species, which will be self-sustaining, non-invasive, and provide/enhance wildlife habitat and food sources. Planting will be used to frame views, to screen parking and mechanical elements, for wetland replication, if required, and for erosion control and embankment stabilization. Planting will not obstruct views into the site for security purposes.

A unified vocabulary of quality materials and construction details should be used for paving, curbing, walls, fencing, lighting, bollards, benches, trash receptacles, bike racks, etc. Chosen materials will help mediate between new buildings and the urban wild, require a minimum of maintenance and will discourage vandalism.

(ii) Reservation Sensitivity

Pathways in natural areas should avoid wetlands, vernal pools, large trees, and wildlife habitat.

(iii) Building Base Planters

Building planters and walls should employ attractive and coordinated materials. Where necessary, multiple stepped planters and sloped planted embankments should be used to minimize perceived wall heights.

## Appendix III – Traffic Mitigation and Monitoring Requirements

1. Parking Spaces. Of the permitted 1052 parking spaces, the proponent shall take 222 parking spaces physically off-line (*i.e.*, either not in existence, or, if in existence, roped off or otherwise not usable) before issuance of the first Certificate of Occupancy for Building 100. These spaces shall not be available until the first Certificate of Occupancy for building gross floor area in excess of 426,000 square feet is issued. The Planning Board may reduce the off-line number by Minor Amendment. The parking supply cap shall not apply to temporary spaces for construction workers.

2. TDM for Later Buildings. In advance of returning to the Planning Board for design approval for any new building that would make aggregate building gross floor area exceed 526,000 square feet, the proponent shall prepare a report for City staff based on the trip monitoring program (Item 5. below) that demonstrates whether TDM programs have reduced the maximum daily parking demand enough to have all parking demand accommodated on-site. If these goals are not being met, before construction of such new building begins the proponent must submit a detailed plan to the Board for its approval, which plan shall be scoped and reviewed by City staff, for how employee trips generated by the new building can be accommodated. The proponent shall consider a number of TDM and infrastructure measures, including, but not limited to: lighting and other improvements to existing paths & walkways; improved shuttle service; free car-sharing membership; increased parking rates; vanpool, carpool, walking and/or bicycling financial incentives; telecommuting programs; free employee bikes; on-site amenities to reduce trip-making; a bike station; new multi-use connections to the Belmont and Minuteman bike paths and/or Alewife station area; and additional reasonable measures as agreed upon by the proponent and the City. If the Board determines that the proponent's plan is inadequate, the Board may require additional TDM or infrastructure measures as a condition to its design approval of the proposed new building.

3. Infrastructure Improvements. The proponent shall make the improvements listed below, subject to the following: obtaining landowner consents where the required actions are not located on the Permittee's site; timely receipt of all necessary permits, consents and approvals; and unforeseen unplanned construction delays.

- a. The proponent will install a new intersection geometry, new sidewalks, and improved pedestrian crossings at the intersection of the Route 2 ramps and CambridgePark Place at the northwest corner of the Alewife station. Full design and construction documents should be completed and submitted to the City for approval within 120 days of receiving any building permit for Building 100, and construction should be complete prior to issuance of a certificate of occupancy for Building 100. The proponent should conduct any necessary coordination meetings of the City and the proponent with the Department of Conservation and Recreation (DCR) and the Massachusetts Highway Department (MHD).
- b. Before a Certificate of Occupancy for Building 100 is issued, the proponent shall complete a feasibility study for the installation of improvements or new facilities to

provide an adequate pedestrian and bicycle connection between the above intersection and the project site, designed with the goal of being at least 8 feet wide with 2-foot shoulders and meeting other AASHTO standards. As part of completing the feasibility study, the proponent must evaluate one or multiple facilities that will accommodate the volume of pedestrians and bicycles projected by the TIS during each phase of development. The study must include multiple coordination meetings of the City and the proponent with the DCR and MHD. The proponent is responsible for ensuring that one or more adequate facilities exist at each phase of development, including being responsible for design and construction if necessary.

- c. Before a Certificate of Occupancy for Building 100 is issued, the Permittee shall ensure that the existing sidewalk connection between the Alewife MBTA Station and the site is improved and maintained as much as possible. This shall include: new concrete surface material when and where repair or replacement is necessary; installation and maintenance of new and helpful pedestrian and bicycle signing; assurance and maintenance of adequate sidewalk lighting; regular clearance and maintenance of any intruding plant growth or objects; regular snow and ice clearance; and MAAB accessibility compliance. The Permittee's obligations in Paragraph 3c shall be null and void when and if the pedestrian and bike facilities called for in Paragraph 3b are completed and include new and helpful pedestrian and bicycle signing; assurance and maintenance of adequate lighting; regular clearance and maintenance of any intruding plant growth or objects; annual snow and ice clearance; and MAAB accessibility compliance.

4. Parking Charges: The proponent shall ensure that future leases require that all employees are directly charged market rates to park on-site.

5. Monitoring. The proponent shall begin a monitoring program in the spring of 2005 through the completion of full build-out of the Project with mode split surveys and driveway counts. Annual surveys shall determine the mode of travel for all trips of employees, patrons, visitors, etc. Driveway counts during the AM and PM peak hours as well as 24-hour counts for a one week period shall be conducted every two years. Parking space utilization counts shall be taken for two 24-hour weekday periods at hourly intervals during the counting week every two years. All required surveys and counts shall be designed and submitted for approval to the Community Development and Traffic, Parking and Transportation Departments in March 2005. All monitoring shall take place during the months of April or May (during a week with no holidays) and be tabulated & reported to the City no later than June 30.

6. TDM Measures.

- a. The proponent shall run a shuttle bus as proposed in the Traffic Study (TIS) between the Alewife Station and the site to accommodate mobility-impaired pedestrians especially and all pedestrians during inclement weather. A minimum of one shuttle bus on a fixed published schedule during peak commuting hours shall begin operation no later than when Building 100 is 50-percent occupied. Service frequency and number of buses shall increase based on employee demand, as determined through results of a question on the annual monitoring survey.
- b. The proponent shall become a member of a local transportation management association (TMA), as proposed in the TIS.

- c. As proposed in the TIS, the proponent shall market the availability of all non-SOV modes of transportation. This shall include posting MBTA and shuttle schedules, TDM program information, and bike route information at a centralized, prominent location in each building on site, as well as in any project newsletters, emails or websites.
- d. As proposed in the TIS, the proponent shall require that under future leases all tenants provide 100 percent of the cost of MBTA passes for all employees, up to the maximum allowable Transportation Fringe Benefit.
- e. The proponent shall work with MassRIDES to identify car/vanpool opportunities, as proposed in the TIS. All vanpools should receive free parking on site. Ten percent of the parking supply that is closest to building entrances shall be reserved and signed for HOV use only.
- f. The proponent shall supply ample secure and covered bicycle parking near building entrances, as well as ample shower and changing facilities. The number of secure bicycle parking spaces shall be based on the number of proposed bicycle commuters to the site rather than a strict reading of the zoning requirements. Spaces for visitors shall be added above and beyond that number. All bicycle racks must meet the performance standards in the zoning requirements and be reviewed for type and placement by City staff in advance of their installation.
- g. As proposed in the TIS, the proponent shall install bike lanes along Acorn Park Drive. These shall be installed in thermoplastic pavement markings with the approval of the TP&T Department before occupancy of the first building.
- h. Management of the property shall provide a current point of contact for transportation-related inquiries to the TP&T and CDD Departments.

## Appendix IV

Traffic, Parking and Transportation Department letter to the Planning Board dated October 13, 2004

# MEMORANDUM

To: Cambridge Planning Board  
From: Susan E. Clippinger, TP&T  
Date: October 13, 2004

RE: Discovery Park Mitigation Measures

Since our September 21<sup>st</sup> memo, this Department has met twice with the proponent of the redevelopment of Acorn Park in Cambridge. At our meetings and in subsequent conversations, Bullfinch Properties' representatives again committed to removing the parking lots on Department of Recreation and Conservation land; keeping the total parking supply in the district at 1,052 spaces; and making alterations to Acorn Park Drive that provide a sidewalk along its entire northern edge, bike lanes, and no turning lanes or medians that might increase cut-through traffic or pedestrian delay.

The proponent has also agreed to several mitigation measures designed to reduce the project's impact on traffic in Cambridge by encouraging the use of alternate modes of transportation to and from the site.

### Recommended Mitigation Measures:

Based on our Department's analysis of traffic impacts identified in the proponent's traffic impact study (TIS), we recommend that the proponent be asked to undertake the following mitigation measures:

1. Cap the Phase I parking supply.
2. Return to the Board before proceeding with Phase III.
3. Improve pedestrian & bicycle access to/from the Alewife Station area
4. Charge market rates for parking.
5. Implement TDM measures.
6. Coordinate with surrounding impacted communities.

Recommended detailed permit language is attached.

A representative from our Department will be available during your October 19<sup>th</sup> meeting.

Cc: Susan Clippinger, TP&T  
Rich McKennon  
Adam Weisenberg, Goodwin Procter LLP  
Eric Schlager, Bullfinch Properties  
Robert Schlager, Bullfinch Properties  
Scott Thornton, Vanasse & Associates, Inc.  
Beth Rubenstein, CDD

Susanne Rasmussen, CDD  
Roger Boothe, CDD  
Les Barber, CDD

**ATTACHMENT:**

Recommended Planning Board Special Permit Language  
Decision Number 198, Cambridge Discovery Park

- 1. Exceeded Trip Generation Impact Indicators:** As demonstrated by the proponent's traffic impact study (TIS), the full occupancy of Phase I of this project (up to 426,000 sq. ft. of building gross floor area or "GFA" on the site) will generate a parking demand of 988 parking spaces at the existing single-occupant-vehicle (SOV) mode share of 70-percent. The proponent expects that the Phase II (up to 526,000 sq. ft. of GFA on the site) parking demand, which would be 1,208 spaces at a 70-percent SOV share, will increase to only 1,015 spaces with an overall reduction to a 57-percent SOV share on the site. However, if Phase I employees are allowed to occupy 988 of the maximum 1,052 parking spaces on site, then even if Phase II employees meet the 57-percent SOV share goal, 121 cars will not be able to be accommodated on site unless the Phase I mode split suddenly drops to 57-percent as well. It will be a challenge to change the behavior of Phase I drivers this significantly. To arrive at an SOV mode share of 57-percent by full occupancy of Phase I, we recommend that the parking supply be consistent with the project parking demand. The proponent should take 222 parking spaces physically off-line before issuance of the first Certificate of Occupancy for Building 100. These spaces should not be available until the first Certificate of Occupancy for Phase II is issued.
- 2. Exceeded Trip Generation Impact Indicators:** The proponent's TIS shows that even at a 57-percent SOV mode share, parking demand for the full-build project will be over 1,595 spaces. With nearly all 1,052 parking spaces on site occupied by the end of Phase II, there will be almost no parking available for tenants of Phase III (over 526,000 sq. ft. of GFA on the site). Under today's conditions, this conflict may only be remedied through a further reduction in SOV mode share to below 45-percent or an increase in the available parking supply. Since Phase III is not expected to begin construction for several years, in advance of returning to the Planning Board for design approval of any new Phase III building, the proponent should prepare a report for City staff based on the trip monitoring program (Item 5.a. below) that demonstrates whether TDM programs have reduced the maximum daily parking demand enough to have all parking accommodated on-site. If these goals are not being met, the proponent must submit a detailed plan to the Board for their approval, scoped and reviewed by City staff, for how Phase III employee trips can be accommodated. The proponent should consider a number of TDM and infrastructure measures, including, but not limited to: lighting and other improvements to existing paths & walkways; improved shuttle service; free car-sharing membership; increased parking rates; vanpool, carpool, walking and/or bicycling financial incentives; telecommuting programs; free employee bikes; on-site amenities to reduce trip-making; a bike station; new multi-use connections to the Belmont and Minuteman bike paths and/or Alewife station area; and additional reasonable measures as agreed upon by the proponent and the City. If the Board determines that the proponent's plan is inadequate, the Board may require additional TDM or infrastructure measures.

3. **Exceeded PLOS and Trip Generation Indicators:** Non-automobile access is necessary to support both the existing and proposed mode shares at this location. To make sure this project achieves good use of transit, bicycling and walking, it will be necessary to have direct, attractive, and well-designed pedestrian and bicycle connections between the project and the Alewife MBTA Station & Minuteman Bike Path. All pedestrians and bicyclists must cross the Route 2 entrance and exit ramps today, which have difficult crossings with failing pedestrian level-of-service indicators. The proponent should improve existing connections and install new connections as needed that reduce walk & bike times as much as possible, significantly reduce conflicts with vehicles, and provide well-lit environments with adequate personal and transportation safety features. To meet these needs, the proponent should make the following improvements:
- a. The proponent should install a new intersection geometry, new sidewalks, and improved pedestrian crossings at the intersection of the Route 2 ramps and CambridgePark Place (at the northwest corner of the Alewife station). Full design and construction documents should be completed and submitted to the City for approval within 120-days of receiving any building permit for Building 100, and construction should be complete before a Certificate of Occupancy is issued, pending any necessary permit approvals. The proponent should conduct any necessary coordination meetings of the City and the proponent with the Department of Conservation and Recreation (DCR) and the Massachusetts Highway Department (MHD)
  - b. Before a Certificate of Occupancy for Building 100 is issued, the proponent should complete a feasibility study for the installation of improvements or new facilities to provide an adequate pedestrian and bicycle connection between the above intersection and the project site, designed with the goal of being at a minimum 8-foot wide with 2-foot shoulders and meeting other AASHTO standards. As part of completing the feasibility study, the proponent must evaluate one or multiple facilities that will accommodate the volume of pedestrians and bicycles projected by the TIS during each Phase of development. The study must include multiple coordination meetings of the City and the proponent with the DCR and MHD. The proponent is responsible for ensuring that an adequate facility(ies) exists at each Phase of development, including being responsible for design and construction if necessary, subject to receipt of all necessary permits and approvals, including but not limited to the consent of applicable landowners.
  - c. Before a Certificate of Occupancy for Building 100 is issued, the proponent should ensure that the existing connection between Alewife and the site is improved and maintained as much as possible, subject to receipt of all necessary permits and approvals, including but not limited to the consent of applicable landowners. This should include: new concrete surface material when and where repair or replacement is necessary; installation and maintenance of new & helpful pedestrian & bicycle signing; assurance and maintenance of adequate sidewalk lighting; regular clearance and maintenance of any intruding plant growth or objects; annual snow and ice clearance; and MAAB accessibility compliance.
  - d.
4. **Exceeded Trip Generation Impact Indicators:** One of the most effective tools to reduce auto-dependence is to charge for parking. We recommend that the proponent should ensure that future leases require that all employees are directly charged market rates to park on-site.



5. Exceeded Trip Generation Impact Indicators: Several travel demand management measures will be necessary in order to encourage the use of alternate modes as well as to manage the parking demand that is expected to exceed the available supply in Phase III:
- a. As proposed in the TIS, the proponent should begin a monitoring program in the spring of 2005 through the completion of Phase III with mode split surveys and driveway counts. Annual surveys should determine the mode of travel for all trips of employees, patrons, visitors, etc. Driveway counts during the AM and PM peak hours as well as 24-hour counts for one week should be conducted every two years. Parking space utilization counts should be taken for two 24-hour weekday periods at hourly intervals during the counting week every two years. All required surveys and counts should be designed and submitted for approval to the Community Development and Traffic, Parking and Transportation Departments in March 2005. All monitoring should take place during the months of April or May (during a week with no holidays) and be tabulated & reported to the City no later than June 30.
  - b. The proponent should run a shuttle bus as proposed in the TIS between the Alewife Station and the site to accommodate mobility-impaired pedestrians and all pedestrians during inclement weather.
  - c. The proponent should become a member of a local transportation management association (TMA), as proposed in the TIS.
  - d. As proposed in the TIS, the proponent should market the availability of non-SOV modes of transportation. This should include posting MBTA & shuttle schedules, TDM program information, and bike route information at a centralized, prominent location in each building on site, as well as in any project newsletters, emails or websites.
  - e. As proposed in the TIS, the proponent should require that under future leases, all tenants provide 100-percent of the cost of MBTA passes for all employees, up to the maximum allowable Transportation Fringe Benefit.
  - f. The proponent should work with MassRIDES to identify car/vanpool opportunities, as proposed in the TIS. All vanpools should receive free parking on site. Ten percent of the parking supply that is closest to building entrances should be reserved and signed for HOV use only.
  - g. The proponent should supply ample secure and covered bicycle parking near building entrances, as well as ample shower and changing facilities. The number of secure bicycle parking spaces should be based on the number of proposed bicycle commuters to the site rather than a strict reading of the zoning requirements. Spaces for visitors should be added above and beyond that number. All bicycle racks must meet the performance standards in the zoning requirements and be reviewed for type and placement by City staff.
  - h. As proposed in the TIS, the proponent should install bike lanes along Acorn Park Drive. These should be installed in thermoplastic pavement markings with the approval of the TP&T Department before occupancy of the first building.

i. Management of the property should provide a current point of contact for transportation-related inquiries to the TP&T and CD Departments.

6. **LOS, PLOS, and Queue Impacts in Other Communities:** We recommend that the proponent should approach the towns of Belmont and Arlington with the results of this traffic study prior to beginning any construction on the site. The proponent should work with these communities to find solutions to traffic problems and to improve bicycle facilities accessing the site, including continuous bike lanes on Acorn Park Drive.

## **Appendix V – Illustrations and Maps**

The following maps and illustrations are excerpts from the application documents referenced above. However, all submission materials continue to be relevant with regard to this Decision and its conditions and requirements.

1. Drawings A-001, A-002. Master Plan and Phase 1 Plan, Special Permit Plan Set, Volume IV.
2. Master Plan Images: Automobile Circulation, Pedestrian Circulation, Bicycle Circulation.
3. Building Images: View of 100/200 Plaza, Proposed View of 100/200 Entrance, New Plaza, Garage A elevations, Detail of Garage A West Elevation.