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July 31, 2008

Ms. Kathy A. Spiegelman, Chief Planner Allston Development Group Harvard University Holyoke Center 912 1350 Massachusetts Avenue Cambridge, MA 02138

Re:

Harvard University Allston Campus

Institutional Master Plan Scoping Determination

Dear Ms. Spiegelman:

Please find enclosed the Scoping Determination for Harvard University's proposed Allston Campus Institutional Master Plan. The Scoping Determination describes information required by the Boston Redevelopment Authority in response to the Institutional Master Plan Notification Form, which was submitted under Article 80D of the Boston Zoning Code on January 11, 2007. Additional information may be required during the course of the review of the proposals.

If you have any questions regarding the Scoping Determination or the review process, please contact me at (617) 918-4438.

Sincerely

Gerald Autler

Senior Project Manager/Planner

CC:

John Palmieri, BRA Kairos Shen, BRA Jim Tierney, BRA Brenda McKenzie, BRA Michael Glavin, BRA Jansi Chandler, BRA

Jay Walsh, Mayor's Office of Neighborhood Services

BOSTON REDEVELOPMENT AUTHORITY SCOPING DETERMINATION

FOR

HARVARD UNIVERSITY ALLSTON CAMPUS INSTITUTIONAL MASTER PLAN

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I. INTRODUCTION AND PREAMBLE

In May 2005, the BRA published the North Allston Strategic Framework for Planning ("NASFP" or "Strategic Framework"). The NASFP contains a conceptual vision for the future of the area between the Massachusetts Turnpike and the Charles River. Although it is clear that, given the conceptual nature of the NASFP, many of the specific elements of the vision will not be realized in the form that they appear in the document, the vision is based on planning goals and principles that enjoy broad support from North Allston residents, businesses, institutions, and community groups. Other existing plans, including the Boston Bicycle Plan, Access Boston, and the Boston Open Space Plan, also suggest ideas and strategies relevant to Allston. These documents constitute the foundation upon which future planning must build.

On January 11, 2007, Harvard University ("Harvard" or the "University") submitted an Institutional Master Plan Notification Form ("IMPNF") to the Boston Redevelopment Authority ("BRA") pursuant to the provisions of Section 80D of the Boston Zoning Code (the "Code"), in order to initiate the process for review and approval of an Institutional Master Plan ("IMP"). The IMPNF outlines a 50-year master plan and requests approval for a 20-year program of development and associated infrastructure investments for the Allston campus.

Due to the review of Harvard's proposed amendment to an existing IMP (this existing IMP covers the University's institutional land in Allston, used by the Harvard Business School and Harvard Athletics), which was ongoing at that time and which resulted in the approval of the Harvard Allston Science Complex, the decision was made in the spring of 2007 to delay the Article 80 process for review of the proposed new IMP. Following approval of the IMP Amendment and conclusion of related discussions, the BRA, Harvard, and the Task Force resumed discussions of the IMPNF in early 2008. Notice of the reopening of the comment period on the IMPNF was published in the Boston Herald on March 12, 2008, and the comment period remained open formally through April 25, 2008. During that period, scoping meetings were held with public agencies, the Task Force, and the public at large.

Following these meetings and based on the BRA's review of public comments, comments from public agencies, and the IMPNF, the BRA hereby issues its written Scoping Determination ("Scope") pursuant to Section 80D-4.3 of the Code. Comments from public agencies, elected officials, and the public, found in Appendixes 1, 2, and 3, respectively, are incorporated as a part of this Scope.

Review of the IMP will occur in the context of a number of related ongoing processes.

- First, implementation of the community benefits associated with the approved IMP Amendment.
- Second, formulation of a community benefits package to be associated with the IMP.
- Third, review of infrastructure elements that require review and approval by state agencies and a variety of other entities beyond the BRA or the City of Boston, or that otherwise do not fit into the formal Article 80 process (e.g. roadway and intersection design, Charles River crossings).

• Fourth, planning for areas of North Allston/North Brighton that are not included in the proposed IMP Area and that, despite significant Harvard landholdings, may not be devoted to institutional uses.

This last process is being conducted under the auspices of the BRA's Community-Wide Plan ("CWP") initiative, which is intended to build on the NASFP and help identify a wide range of planning and development strategies for the North Allston/North Brighton neighborhood, including strategies for properties owned by Harvard outside the IMP. As the CWP process continues, the major concerns and recommendations that begin to emerge are expected to inform the development of the proposed Institutional Master Plan by placing the IMP in a broader neighborhood planning context. It is expected that the CWP will yield specific implementation strategies for the area outside the IMP Area.

Although many of the recommendations that emerge from the CWP process will ultimately require significant involvement from Harvard to ensure their implementation, it is understood that the IMP is not the appropriate mechanism for permitting or reviewing changes to the area outside the IMP Area and that the review of the IMP is a distinct and separable action by the BRA that is not dependent upon completion of the CWP. Nevertheless, it is expected that through the IMP process Harvard will support the CWP process and provide an overview of how the university intends to advance proposals to support the neighborhood and City vision for areas outside the IMP Area, particularly in the Barry's Corner area, and in such thematic areas as housing. Therefore, in many cases this Scope sets forth expectations for Harvard's planning and development outside its IMP Area, as well as expectations for Harvard's participation in overall neighborhood, citywide, and regional planning goals related to open space, housing, retail, transportation, economic development, and other key topics. The IMP should be seen as a key component of the overall planning effort for the North Allston/North Brighton neighborhood.

Moreover, the development of the master plan for Harvard in Allston provides an opportunity to examine comprehensively Harvard's presence in the City of Boston. While Harvard's presence in other areas of the City, most notably the Longwood Medical Area, may require largely separate physical planning processes, the clear need for transportation connections and functional linkages between the two areas offers the opportunity to look comprehensively at such topics as education, workforce housing, economic development, and other realms in which Harvard as an entity (rather than as a collection of physical plans) can build on its partnership with the City of Boston as its presence expands. Throughout the IMP process Harvard should assist the BRA and other public agencies to understand the full scope of Harvard's current presence in Boston and to explore ways that that presence can be leveraged in ever more creative ways as it continues to grow.

It is the BRA's expectation that Harvard will continue to engage with public agencies and the public at large in advance of the submission of the IMP. Indeed, the period leading up to submission is the appropriate time for much of the presentation, discussion, and evaluation of alternatives and options, which by nature must occur in a collaborative and iterative manner.

In an effort to create clarity about expectations at each stage of the process, most chapters of this Scope are divided into three main sections. The first section contains a series of comments, principles, and goals that set forth the city's general expectations with regard to

Harvard's campus master planning and planning for the North Allston/North Brighton neighborhood. The second section provides more concrete direction and describes the BRA's expectations for interim steps in advance of the submission of the IMP document. The third section sets forth specific submission requirements and deliverables for the IMP document.

This means that the content of the IMP document itself will focus on the preferred development scenario for Harvard's academic campus, rather than serving as the primary product of the overall planning process in North Allston/North Brighton, or as a compendium of all the alternatives examined in discussions leading to the preferred alternative. Nevertheless, for all the reasons described above, the BRA will make its determination of the adequacy of the IMP within the overall context of planning in the North Allston/North Brighton neighborhood, and based on the totality of information presented by Harvard and discussed over the course of development of the final submission.

The Scope requests information required by the BRA for its review of the proposed IMP in connection with the following:

- 1. Approval of the Harvard University Institutional Master Plan pursuant to Article 80 and other applicable sections of the Code; and
- 2. Recommendation to the Zoning Commission for approval of the Harvard University Institutional Master Plan.

The IMP should be documented in a report of appropriate dimensions and in presentation materials which support the review and discussion of the IMP at public meetings. With Harvard's cooperation, the BRA will facilitate distribution as widely as possible in electronic (.pdf) format, whether on CD-ROM or online. However, the BRA will require some hard copies of the document (exact number to be determined on filing), and additional copies of the document should be available for distribution to the Harvard-Allston Task Force, community groups, and other interested parties in support of the public review process. The IMP should include a copy of this Scoping Determination.

II. CAMPUS-WIDE DEVELOPMENT PROGRAM AND CONCEPT PLAN

Principles and Strategic Goals

The following overarching goals and principles will inform the comprehensive neighborhood planning exercise currently underway, and should also guide the development of the future campus and Harvard's contributions to the overall planning work in the North Allston/North Brighton neighborhood. Moreover, Harvard's existing facilities in Allston—Harvard Business School and various athletic facilities—will become an integral part of the larger campus and these principles should apply equally to those existing facilities. Additional principles and strategic goals are provided in some later chapters.

- Model Campus and Neighborhood. Harvard's planning, in conjunction with the ongoing planning being undertaken by the City of Boston, should yield a blueprint for a model 21st-Century campus and a model 21st-Century neighborhood. The North Allston/North Brighton area should set a new standard for its innovation and attainment in the areas of architecture, sustainability, open space, housing, technology, and quality of life.
- Relationship Between Campus and Community. The campus and the neighborhood, while creating and retaining distinct identities, should both benefit from a close relationship in all the areas in which Harvard's expansion into North Allston/North Brighton will be felt, most notably employment, housing, public realm, transportation, academic programming, and economic/business development. Just as Harvard's resources should be leveraged to help create the best possible neighborhood, the presence of a vibrant, diverse neighborhood should be an integral part of Harvard's strategic and physical planning.
- **Permeability.** The campus plan should serve to create connections through the campus to key open spaces, transportation opportunities, and other key destinations and components of regional infrastructure. Building placements, configurations, and massings should convey a welcoming relationship for non-Harvard members of the Allston community and for visitors. Beyond physical permeability, the campus should also be welcoming to the larger community through access to programs and resources of mutual benefit and through an active effort to bring the resources of the University out to the city at large.
- Connectivity. The campus plan, in conjunction with the broader neighborhood plan, should serve to link together more effectively the residential communities of North Allston to one another and to the academic community, as well as linking both the residential and academic communities to the larger region. The planning should yield more accessible, direct, and beautiful connections between the existing residential community and the recreational opportunities of the neighborhood's major open space resources, including in particular the Charles River and its embankment parks. All forms of transportation—vehicular, public, pedestrian, and bicycle—must be carefully thought through to ensure maximum accessibility and environmental sustainability.
- Environmental Sustainability. Harvard has shown itself to be a leader in campus sustainability efforts, and the creation of an entirely new campus provides the opportunity to raise the bar even higher, both for individual buildings and for master planning. Moreover, Harvard's sustainability efforts should support those of the city as a whole.
- Neighborhood Activity Centers. The campus plan, in conjunction with the broader neighborhood plan, should create strong centers of neighborhood activity combining residences, shops, recreation areas and parks, cultural venues, and places of employment at

- strategic locations along Western Avenue including Barry's Corner, Brighton Mills, and the eastern half of Western Avenue within the proposed IMP Area.
- Relationship to Charles River. The Charles River is the neighborhood's most prominent and most precious natural asset and should serve as armature for planning and for the creation of an open space system that contains a network of publicly accessible passive and active open spaces. Harvard's development should serve to enhance the quality of the Charles River and its associated parklands (for example, by improving the quality of stormwater runoff), to enhance public access to and enjoyment of those resources, and should respect and enhance the historic character of the river's parklands, associated structures (including bridges), and roadways.
- Relationship to Other Plans. Harvard's planning should acknowledge and build on the
 work already completed in previous planning exercises, including the Boston Open Space
 Plan, the Massachusetts Department of Conservation and Recreation's Master Plan for the
 Charles River Basin: The Second Century, and the NASFP. The IMP should also be
 developed in a way that it informs, and is informed by, the ongoing CWP process.
- Relationship to Other Institutional Development. Harvard's IMP should describe the important relationships between the Allston campus and its Cambridge campus and with the major Harvard-affiliated institutions in the Longwood Medical Area and elsewhere in Boston. Harvard should also describe the combined impacts of the expansion of these Harvard-affiliated institutions on the development of the Allston Campus and surrounding neighborhoods. Harvard should work cooperatively with the BRA to describe the cumulative impacts of both its development and the planned expansion of major institutions that are within close proximity to the Allston campus and the North Allston/North Brighton area.

Direction and Interim Steps

In preparing the IMP, Harvard shall consult with the BRA, the Harvard-Allston Task Force, and the neighborhood at large to explore options for campus plan that address the following issues.

- BRA Neighborhood-Wide Concepts. The BRA has offered three conceptual approaches
 for achieving the basic civic goals described above. Harvard should show how each of these
 approaches could be realized and supported through campus development, as well as any
 hybrid of one or more of the three approaches and/or additional approaches that
 accomplish the same goals.
 - Creating a network of tree-lined streets in the Brighton Mills, Barry's Corner, and Harvard master plan areas that would be similar in size and scale to the existing blocks in the North Allston residential neighborhood to tie together the communities, the neighborhood centers, and the river.
 - Developing a sequence of traditional mixed-use neighborhood squares to provide an urban focus at three locations along Western Avenue replacing and consolidating the diffused array of existing activities that contribute little to social interaction and civic life.
 - Providing large bands of public landscape, surrounded by streets to ensure their public character, connecting the residential and academic communities together, to the centers of neighborhood activity, and to the Charles River.
- Street and Block Plan. Harvard shall present its proposal for a street and block plan that acknowledges the dramatic difference between the scale of the existing Allston residential

- neighborhood and the Harvard-owned property while creating multiple complementary circulation systems and appropriate open spaces and landscaped areas. The IMP is an opportunity to create the infrastructure that should be necessary to serve the new development over the next 20 years and beyond, to connect the existing streets with the new infrastructure, and to create a smooth transition between the two scales.
- Interface with Neighborhood. The BRA is particularly interested in seeing options for how the plan will take advantage of the placemaking opportunities of the areas of the campus that interface with adjacent neighborhoods, public streets, historic resources, and public open spaces. In developing its preferred plan, Harvard should describe the qualitative and quantitative attributes of these new mixed-use areas of the campus and their relationship to the existing Harvard campus as well as the adjacent neighborhood. In conjunction with the CWP process, Harvard should describe how the development of its campus has the potential to support appropriate places within the adjacent neighborhood where the mix of residential, retail, recreational, and cultural activity when enhanced with public spaces and connections to other key destinations can create civic centers of community life. Such places include:
 - Barry's Corner, where new retail, cultural and residential space can become the primary focus of North Allston activity.
 - Holton Street Corridor on Western Avenue between Everett, Telford, and Litchfield Streets, because of its adjacency to the most active part of the riverbank parks.
 - Western Avenue as a main street with buildings that define a street wall and include a
 mix of uses, with particular attention paid to Western Avenue near Hague Street, where
 a new multi-use facility could potentially be the connector to a new transportation center
 for commuter rail and the Urban Ring transit system.
- Phasing. Harvard shall present its proposed phasing scenarios for implementing the IMP, including proposed timeframes for each project and phase. The scenarios shall describe the way in which, in intervals no longer than five years, the IMP will implement development in service of the university's needs and public realm improvements that enhance the neighborhood and the new community that will emerge as both the University and residential communities grow.

Submission Requirements

The submission requirements outlined below constitute standard IMP submission requests as well as the required presentation of the overall master planning framework. More detailed principles and strategic goals, as well as additional submission requirements, are presented in later sections.

Background Information

• Institutional Mission and Goals. The IMP should provide a statement with basic background information on Harvard University and Harvard's institutional mission and goals, particularly those aspects of the mission that are driving the University's expansion in Allston.

• Goals for Allston Development. The IMP should describe the role of the Allston campus in fulfilling the University's strategic goals, as well as a statement of the ways that the IMP and the specific projects proposed therein will advance Harvard's mission and goals.

Existing Conditions and Uses

The IMP should present maps, tables, and site plans clearly displaying the following information:

- Existing Conditions. The IMP should include a description and analysis of existing conditions in Allston and Harvard's goals for the Allston academic campus and the Allston neighborhood including all the land between the Massachusetts Turnpike and the Charles River.
- Area Demographics. Harvard shall collaborate with the BRA to analyze the existing demographics and housing characteristics of the North Allston/North Brighton area, as well as relevant adjacent areas. Although this analysis will be carried out primarily under the auspices of the CWP process, the IMP should clearly reference the findings.
- Cambridge and Longwood Campuses. Given the goal of creating functional linkages between Harvard's existing campuses in Cambridge and the Longwood Medical Area, the IMP should present baseline information on Harvard's facilities in those areas, with particular reference to those academic units and other functions that are expected to relocate to or expand in Allston.
- **Description of Property Holdings.** Describe all of Harvard's property holdings in Allston and Brighton, whether or not part of the existing or proposed Institutional Master Plan Area. For all buildings and lots, the tables and maps should provide the square footage, height in feet and number of floors, including floors below grade, uses and area devoted to each use, footprint, age, condition, a description of off-street parking and loading areas and facilities, including a statement of the approximate number of parking spaces in each area or facility and proposed action (rehabilitation, demolition, replacement, or other) during the term of the proposed IMP. For non-institutional uses, a basic classification system such as industrial, office, retail, vacant may be used. For vacant properties, information on the last use to occupy the building should be provided.
- Additions to Institutional Master Plan Area. Describe specific parcels and land areas
 to be added to Institutional Master Plan Area through the IMP process, with sufficient
 information to facilitate amendment of the relevant zoning maps by the Boston Zoning
 Commission.
- **Underlying Zoning.** Provide a description of the zoning in effect in the areas to be added to the Institutional Master Plan Area through the Proposed IMP.

Campus Planning Goals and Objectives

- Institutional Needs and Objectives. The IMP should define specific program needs and objectives for the Allston campus and should describe the current and anticipated trends that are impacting Harvard and shaping these needs and objectives.
- **Planning Objectives.** The IMP should include a discussion about Harvard's planning objectives for the Harvard Business School, Cambridge and Longwood campuses.
- Consistency of Allston Planning With Other Planning Frameworks. The IMP should include a statement of the goals of Harvard's planning with regard to ensuring the broad

consistency of Harvard's planning with the existing planning frameworks for the neighborhood and the City, and with regard to ensuring that Harvard's development in Allston generates benefits for the host community and the City of Boston at large in a way that is consistent with Harvard's goals and mission.

Campus Demographics

- **Student Population.** The IMP should provide data on the current Harvard student body size, broken down by undergraduate/graduate, field of study and other characteristics as appropriate, as well as projections of future students in Allston. These data should be referenced as appropriate in other sections, e.g. the housing chapter.
- Current Employment. Provide information on Harvard's employee population, disaggregated by faculty/staff, full-time/part-time, academic unit, Zip Code or town of residence, and principal place of employment (i.e. Cambridge, Allston, Longwood, etc.)
- Future Employment. Describe projected future employment needs and the number of projected new jobs in Allston and University-wide (all geographic areas) in as much detail is known, given the term of the master plan. Projections should disaggregate jobs by activity or occupation (teaching, research, administrative, etc.) and should distinguish between net new jobs and relocated jobs. Harvard shall consult with the BRA on specifications for this information in order to ensure compatibility of data with the BRA's Labor Market Assessment Tool (LMAT).

Development Program, Concept Plan, and Phasing

- Overall Development Program. The IMP should describe the projected development plan for the 50-year term set forth in the IMPNF, with approximate square footage by type of use, planned projects, and infrastructure components. The chapter on Proposed Future Projects below will request more detailed information on the projects to be built within the 20-year term of the IMP.
- Concept Plan. The IMP shall present a campus planning framework with proposals for the 5-year, 10-year, and 20-year futures showing in graphic form the intended size, location, and character of new and existing buildings (location, size, and use), open space improvements, streets, blocks, major pedestrian paths, and other major elements of the physical infrastructure. The concept plan should include the following:
 - Articulation of campus districts based on use, density, and/or physical features.
 - The proposed street and block pattern, including the uses and intended hierarchy of the streets their relationship to existing and proposed blocks and their uses.
 - Identification of the open space and circulation system and its objectives and guidelines.
 - Definition of design principles which will serve as overall guidelines for campus development (district principles to be described elsewhere).
 - A discussion of the process by which the proposed concept plan was developed.
- **Phasing.** The IMP shall describe the anticipated timeframe for each project and phase and describe which infrastructure projects are associated with each building project.
- Barry's Corner Contingency. Redevelopment of the land in and around Barry's Corner is a central component of the NASFP and other expressions of the shared vision for the neighborhood, yet there are a number of factors potentially outside Harvard's control that

- could impede timely redevelopment of the area. The IMP shall present a contingency plan that shows how modifications to the proposed development program or phasing plan could accelerate the realization of goals for Barry's Corner even in the event of delays.
- Properties Not Included in IMP. Harvard owns a large number of properties that are not included in the land areas covered in the Proposed IMP. While it is understood that there are currently no proposed institutional uses for these properties, the IMP shall discuss the ongoing coordination with the CWP process, as well as Harvard's internal planning process, for identifying both interim and permanent uses for these properties. This discussion shall include both properties in North Allston/North Brighton and Harvard-owned properties in Watertown. With regard to the latter, the focus should be on the prospective future role of Harvard's Watertown functions in supporting Allston campus operations (and vice versa), and the ensuing transportation and traffic effects.

III. LAND USE, ACTIVITY, PLACEMAKING, AND URBAN DESIGN

The existing North Allston neighborhood suffers in its physical form from the absence of true civic spaces, although churches, schools, and the Honan Library serve some of the needs of the community for nodes of social cohesion. There is no clear neighborhood center, and retail and other services are either absent or scattered through the neighborhood (or in auto-oriented "big box" formats).

This stands in contrast to other nearby areas, including Harvard Square, Brighton Center, and Coolidge Corner, all of which provide a mix of uses in a walkable urban environment. All serve a mix of nearby residents, regional residents, employees, and various types of schools and institutions. The NASFP envisions a North Allston community that is vital and active with a varied mix of land uses, but the IMPNF focuses primarily on the university's needs over the next 50 years and only to a much lesser extent on the needs and desires of the surrounding residential community now and in the future.

In Harvard Square the intimate scale of the largely residential buildings bordering Harvard Yard contribute positively to the overall human scale of the neighborhood. Where larger buildings are programmatically required they are frequently set back from the street behind green spaces or smaller buildings. For the most part, buildings are limited to heights that allow the top floors still have a close visual and audible relationship with the street. The building types are varied – dorm, classrooms, studio, museum, laboratory, theater – and the kinds of activity they accommodate bring vitality during a 16-hour day to the neighborhood and draw community residents, the Harvard population, and visitors to the area.

Achieving a similarly successful environment in an area to be redeveloped in a comparatively short time—rather than evolving organically over time—will require careful attention to the placement and mix of uses, the creation of key destinations ("placemaking"), the pedestrian infrastructure, the open space system, and the massing, height, and design of buildings. The following sections set forth recommendations and submission requirements for generating a neighborhood-wide framework for land use, placemaking, and urban design, as well as district design and use guidelines, that can achieve the goals described above.

Principles and Strategic Goals

- Land Use and Vitality. Increase the diversity of land uses and the vitality of the neighborhood by taking the best elements of Cambridge and other examples of mixed-use areas in Boston and around the region and finding the right model of placemaking for the North Allston/North Brighton neighborhood.
- Variety and Scale. Create buildings with variety and human scale despite the fact that Harvard's programs for North Allston/North Brighton anticipate buildings with substantially more floor area and volume than the University's older buildings in Cambridge. The Science Complex effectively meets this challenge, but the buildings illustrated in the IMPNF lack variety in the height and floor plate size. There is currently a wide range of building heights and massings in the neighborhood, including the Harvard Stadium, One Western Avenue, the Genzyme building, Shad Hall, and 176 Lincoln Street (the former "Boston Tech Center"). The varied conditions in the neighborhood—residential districts, industrial/commercial zone,

- the Harvard campus, the Western Avenue corridor, and Soldiers Field Road and the Charles River—suggest the opportunity for buildings that include a wide variety of heights and massing configurations. The same challenge applies to the courtyards, quadrangles and other "outdoor rooms," which should also embody human scale and variety.
- **Retail Base.** Retail development plays multiple roles: it provides key services and amenities for those who live in, work in, and visit the neighborhood; it serves as a key component of placemaking by providing destinations; and it plays an economic development role in the form of employment, business development, and tax generation. The IMP, in conjunction with the CWP, should support the creation of a vibrant, healthy retail base to serve the increased daytime and resident population of the neighborhood.
- Technological Elements of Placemaking. In addition to the more traditional urban design approach to placemaking, newer technologies may represent additional placemaking opportunities. Certain building elements and street furniture could be used to inform and communicate with pedestrians about local events and information about the activities occurring within Harvard's buildings (for example, information on ongoing research). By combining ambient digital displays, ubiquitous wireless connectivity and data-feeds from information providers, such a system could be built using bus shelters, bike racks, and portions of building façades. The Infrastructure chapter provides additional information on possible information technology elements that could be integrated into future development.

Direction and Interim Steps

- **District Definitions.** Harvard's significant landholdings run the gamut from areas that will be in the interior of the future campus to others that are adjacent to existing residential areas, major streets, or significant open spaces and public realm opportunities. The diversity of existing and future conditions across all these areas means that in addition to an overall planning framework, each portion of the future campus will require a unique approach in order to achieve the goals outlined in this Scope. In coordination with the BRA, Harvard shall define districts of its campus that can be treated in detail in accordance with the language on design and use guidelines below.
- Placemaking Opportunities. Harvard shall work with the BRA and the North Allston/North Brighton neighborhood to identify key locations for creating a strong sense of place that can be shared by the University community and the residential community as both sectors of the population merge over the coming decades.
- Design and Use Guidelines. Harvard shall, in consultation with the BRA and other appropriate City agencies, develop design and use guidelines for the campus as a whole, as well as for individual districts, buildings, and open spaces. Principles for developing these guidelines include:
 - Campus-Wide Use Guidelines. To avoid "lights out" at six, each district should contain a mix of activities including, in selected locations, housing. The IMP should provide information on the anticipated hours of occupancy of different buildings and types of uses and how those uses will be located so as to ensure activity throughout the day at key locations. For example, retail and cultural uses can create a more "public" face to buildings, activate the public realm, and help draw the public through the campus, whereas large-scale athletic facilities may not accomplish these goals and may not be appropriate uses for the key intersections of campus and neighborhood, in particular Barry's Corner.

- Campus-Wide Design Guidelines. In the IMP, Harvard should provide a clear rationale for its approach to the height and massing of buildings in its campus area. There is ample room within the campus area for a diversity of building types, heights, and massing within each district, particularly along main streets, to ensure vitality, security, and economic viability. Generally, building designs should reflect the scale of nearby buildings and taller buildings should be in keeping with the heights of apartment buildings traditionally found throughout the Allston/Brighton area. Greater building heights may be particularly relevant where the greater height of the buildings help achieve the population density required to sustain active mixed-use centers. Western Avenue, in particular, can accommodate buildings of generally greater height and massing than in the existing residential neighborhoods. In locations within close proximity to the river, opportunities to help bring river views beyond the river edge and into the campus and community should be strongly considered in determining the height and/or massing of buildings. For example, in some locations it may be appropriate for the height of buildings to generally decrease as they get closer to the river.
- Building Design Guidelines. Buildings should not be designed to face inward toward the
 campus, turning their backs toward the neighborhood; instead, most campus buildings,
 especially those that abut courtyards and other public or semi-public spaces, should
 contain multiple façades to accept "outsiders" and "insiders." Instead of packaging all
 building components (e.g. laboratory, office, lounge, reception, cafeteria, health club,
 and day care center) into one large mass, divide the program into smaller components
 and design each component as a separate element in space and as an individualized
 form.
- *Supporting Information.* Design guidelines options shall be presented with the following supporting information:
 - Qualitative comparison to existing Harvard campus and North Allston-Brighton community.
 - o Quantitative assessment of building height and massing.
 - o Qualitative assessment of the form and quality of the courtyards, "outdoor rooms," and other spaces between buildings, both internal to campus and on the edges.

Submission Requirements

In addition to the overall campus concept plan, the IMP shall present more detailed analysis and guidelines on the following:

- **Key Placemaking Opportunities.** The IMP shall highlight the key placemaking opportunities previously identified and shall present strategies for activating these places through the inclusion of retail, other active uses, public realm infrastructure, technology, and other elements.
- **District Design and Use Guidelines.** The IMP shall present design and use guidelines for each area or district of the campus, including both buildings and public realm components, with particular focus on the placemaking opportunities identified above, as well as design guidelines for the principal existing or planned streets that traverse the campus area. Guidelines should support the overall planning and placemaking goals.

- **View Corridors.** The IMP shall include renderings that reflect the location and scale of proposed structures and those that depict associated view corridors should be provided.
- **Retail Supply and Development.** Harvard shall work closely with the BRA and other City agencies, particularly through the CWP process, to develop a detailed plan for retail development with the following components:
 - An inventory of existing retail supply, competitive supply within the area (e.g. Watertown, elsewhere in Allston-Brighton), and key sectors with unmet demand.
 - An estimate of the total amounts and types of retail viable in the neighborhood during each phase of development based on projected residents, employees, and other potential customers.
 - An understanding of key impediments to those types of retail that are deemed not viable (e.g. lack of sufficient customer base, lack of suitable real estate).
 - A summary of achievable retail goals for neighborhood that respond to the needs of both Harvard affiliates and residents at large.
 - An implementation plan showing how key retail goals can be achieved during appropriate phases of development of the Harvard campus and of other parcels of Harvard-owned land, including a description of possibilities for reconfiguring existing retail in the neighborhood into new locations, formats, and building types that support the overall planning and placemaking goals described above.
 - Proposed retail square footage, anticipated types, and locations within IMP Area.
 - Potential strategies for small business development that will maximize the potential for locally-owned retail establishments and for entrepreneurial activity by residents of the neighborhood.

IV. CONNECTIVITY AND CONTEXT

North Allston/North Brighton currently suffers from its "island" condition. Cambridge Street and the Massachusetts Turnpike are physical barriers to pedestrian and bicycle connections between the southern portions of Allston-Brighton to North Allston/North Brighton and beyond. On the north, Soldier's Field Road presents a similar barrier between the neighborhood and the river, and Cambridge beyond. The existing pedestrian/bicycle connections along major existing streets are inadequate, and there is a lack of alternative connections between the residential areas of the neighborhood and the Charles River.

Within the neighborhood as well, existing connectivity with key destinations is inadequate. The North Allston community has recreation space at the Charles River, Smith Field, and the Portsmouth Street and Sorrento Street Playgrounds. Other key destinations include the Honan-Allston Library, Brighton Mills (and future retail concentrations), and local schools. Views toward the parks and other destinations are also obstructed by structures which for the most part do not enhance the views. None of these routes is attractively designed and welcoming to pedestrians. None has the basic urban amenities of trees, pedestrian lights, or wide sidewalks.

Harvard's IMP, together with the CWP process, has the potential to address these issues and to implement the principles and strategic goals described below, which relate equally to the CWP process as to the IMP.

Principles and Strategic Goals

- Reduce Barriers to North Allston/North Brighton. There is a potential to improve connections to the neighborhood by making Cambridge Street more pedestrian and bicycle friendly through traffic calming, wider sidewalks, street trees, bike lanes, etc. There is also potential to improve the pedestrian bridge over the Turnpike in terms of actual and perceived safety. The IMP offers opportunities to create enhanced connections between the neighborhood and areas to the north as well as the rest of Allston-Brighton to the south.
- Reduce Barriers Within North Allston/North Brighton. In conjunction with the CWP, the IMP offers the opportunity to improve connections within the neighborhood. Residential areas, neighborhood centers, retail concentrations, schools and other civic buildings, transportation nodes, and major open spaces should be seamlessly knit together. This goal should play a significant role in decisions regarding street and block patterns, street design, open space systems, and building and courtyard placement and design.
- Create a Redundancy and Variety of Connections. The Science Complex offers one model of the variety of connections that should be developed across the campus and the neighborhood: the building contains a more private internal courtyard with pathways and bridges connecting the buildings; the Western Avenue façade will create one of the public faces of the building, inviting the neighborhood in at a variety of points through the use of design elements and retail spaces; new roadways will provide vehicular access that complements the pedestrian- and bicycle-only circulation elements; Rena Park will begin to create a circulation system that serves as an alternative to Western Avenue for east-west travel; and Academic Way will begin to define a type of landscape connection that is largely new to the neighborhood. This same diversity of connections that serve different modes of

transportation and different types of users while creating a variety of different experiences should characterize the system of campus and neighborhood circulation as a whole.

Direction and Interim Steps

- Connectivity. Harvard shall present for consideration its preferred plan for achieving the
 goals related to connectivity stated above. The analysis shall include both a palette or
 typology of different types of connective elements (e.g., pedestrian pathways, shared
 bicycle and pedestrian connections, landscaped streets that accommodate a variety of
 transportation modes) and specific proposals for a hierarchy of connections through and
 within the campus, connecting the neighborhood and key placemaking opportunities as
 defined earlier.
- Landscape Connections. Harvard shall present its preferred plan for landscape connections based on the three neighborhood-wide concepts described earlier and consistent with the open space and landscape chapter below. These connections should link the existing community, the academic campus, the proposed commuter rail/Urban Ring stations and potential transportation center, and other major neighborhood destinations. The existing campus open spaces and courtyards should connect with the larger network that integrates the community parks and the river. For example, Rena Park offers the opportunity for extension through the south campus to the river.
- Street Connections. Harvard shall present its preferred plan to improve access, both visually and physically, for pedestrians, bicyclists, and motorists. Potential solutions include the introduction of new rights-of-way between Western Avenue and Soldiers Field road to the west of Barry's Corner and improved access through the Business School campus connecting Western Avenue and the river. Specific suggestions for new street opportunities are defined in the Transportation and Streets chapter.
- Permeability of Harvard Business School Campus. In the Business School and adjacent area, Harvard shall explore ways to promote greater permeability for neighborhood residents and establish and maintain public access on both new and existing streets and pedestrian paths. Harvard shall, in collaboration with the BRA and BTD, evaluate patterns that more closely replicate the pattern of the existing streets and blocks in the zone to the south of Western Avenue. On the north side of Western Avenue Harvard should evaluate the manner in which the pedestrian ways, private streets, and the blocks they define transition into a system that enhances circulation through the district and provides greater public access between the existing residential community and the major landscapes on the Harvard campus and on the river. In the area of the Harvard athletic fields Harvard shall evaluate the potential for new connections that enhance public access for local residents.
- Improved Access Across Soldier's Field Road. The proposed depression and decking of Soldier's Field Road is a bold idea that offers the opportunity to address many of the goals described herein while also raising many questions and concerns. Harvard has indicated since filing the IMPNF that it is unlikely to pursue this approach to improving access across Soldier's Field Road. In the event that Harvard does propose such an approach, specific impact study requirements are set forth below. In the event that the proposal is abandoned, Harvard shall continue to work with the BRA and other relevant public agencies to explore strategies for accomplishing the goal of improved access to the river across this major roadway.

Submission Requirements

The IMP shall provide the following information and serve as an opportunity for Harvard to engage with relevant public agencies, including the City of Boston, the City of Cambridge, the MBTA, the Executive Office of Transportation, and the Department of Conservation and Recreation, to study potential improvements to the existing system of connectivity and transportation.

Baseline Information

• Existing Connectivity Deficiencies. Identify key missing connections, pedestrian barriers, etc. and key opportunities for improvements that advance the goals and principles outlined above.

Neighborhood and Regional Connectivity

- Campus Landscape Connections. The IMP should show the proposed system of campus landscape connections and demonstrate how the campus master plan integrates Library Park, Rena Park, and other key elements of the open space system with the system of proposed Harvard greens and courtyards and other key destinations.
- Neighborhood Landscape Connections. The IMP should show how the proposed campus landscape connections are integrated with a neighborhood-wide set of improved connections to the Charles River, other key destinations in North Allston/North Brighton, and improved crossings of Soldier's Field Road.
- **Street Connections.** The IMP shall propose street connections consistent with the language on street and block patterns (above) and new streets (below) that further the goals of enhancing connectivity to, within, and through the future campus.
- **Wayfinding**. The IMP shall propose measures to help establish gateways, connections and nodes of pedestrian activity, and to reinforce North Allston's sense of place.

Campus Relationship to Charles River

The redevelopment of land long occupied by impermeable industrial and transportation uses, as well as the possibility of reconfiguring existing portions of the Harvard campus in the context of a master planning effort, offers opportunities to enhance connections between the North Allston/North Brighton neighborhood and the river, and in so doing to also contribute to the above goals of enhanced neighborhood and regional connectivity. Harvard must work closely with city and state agencies to ensure that the development of the campus abutting the Charles River and its Parklands, including the potential decking of Soldiers Field Road, are in concert with regional needs and requirements.

- Improved Connections to the Charles River through the Campus. The IMP shall make clear the way in which the campus master plan will create and enhance connections through the campus to the river, including improved connections across Soldier's Field Road. The BRA reserves the right to issue additional scoping requirements if necessary depending on the nature of any proposals.
- **Depression and Decking of Soldier's Field Road.** The IMPNF describes one strategy for enhancing access across Soldier's Field Road. Should Harvard propose as part of the

IMP the depression and decking of any portion of Soldier's Field Road, the IMP should provide the following information:

- An alternatives analysis describing both the proposed decking configuration and alternatives that may provide a more equal balance of benefits to Harvard and the public at large. For example, the current proposal does not include the intersection of North Harvard Street and Soldier's Field Road, yet that location offers a clear public benefit since it is at the nexus of a major north-south pedestrian, bicycle, and transit connection and the Charles River parks and pedestrian/bicycle path. While the proposal would inevitably be more complex given the need to accommodate automobile access between Soldier's Field Road and North Harvard Street, the IMP should study its feasibility and implications. For each alternative, the IMP should provide the following:
 - o The amount of parkland that would be altered or impacted in order to depress Soldiers Field Road and discuss the issue of the taking of public land. The square footage of land, watersheet and land under the water should be reported as separate measures.
 - A description of the anticipated public benefits.
 - o Estimated cost and proposed contribution by Harvard to that cost.
 - o A description of the consistency with the Charles River Master Plan.
 - o Additional watershed-related issues, including:
 - The potential hydrologic impacts, specifically the effect of the proposed action on stormwater velocity and quantity and the contribution to stormwater discharge and water quality goals.
 - The effect of walling off the roadway on groundwater.
 - The effect of stormwater on the depressed roadway.
 - Compliance with the Wetlands Protection Act.

V. TRANSPORTATION AND STREETS

The magnitude of Harvard's anticipated future development in Allston, the neighborhood's poor traffic conditions and paucity of existing transit connections, the need to connect Harvard's emerging Allston campus with its existing Cambridge and Longwood campuses, and the potential to develop significant new transportation connections based on existing rail and roadway infrastructure all speak to the need for an ambitious and comprehensive transportation vision for North Allston.

A successful transportation plan will depend on the creation of the same type of multiplicity of connections that Harvard's existing campus in Cambridge and other urban areas enjoy. While automobiles will be part of the mix of transportation modes, so will pedestrians, bicycles, and transit. The transportation goals and strategies discussed here are intimately related to the connectivity goals discussed above, but this chapter focuses primarily on more traditional transportation themes. Nevertheless, the IMP should present a fully integrated transportation strategy that achieves the goals of this chapter as well as the broader connectivity goals.

The creation of a comprehensive transportation vision is a complex and ongoing endeavor, and much of the existing and potential future infrastructure is not under Harvard's direct control. Nevertheless, Harvard has presented many concepts that could be incorporated into a comprehensive transportation system. The BRA and BTD expect to continue to work with Harvard as these concepts are further developed and as implementation strategies and timelines are discussed.

Principles and Strategic goals

The following shall guide Harvard's planning, to be undertaken collaboratively with the BRA and other city and state agencies.

- Integrated Transportation Planning. Harvard's planning should ensure full coordination and integration between Harvard's multi-modal transportation plan for its campus and the Community Wide Plan. The IMP should take full account of ongoing planning around major transportation investments, such as the Executive Office of Transportation's (EOT) work on alternative alignments for the proposed Urban Ring, and the ongoing exploration of the concept of an intermodal station serving the neighborhood on the Worcester/Framingham commuter rail station. Campus and neighborhood planning together should yield a plan for a comprehensive transportation system that encompasses a pedestrian/open space system, a bicycle network, public transportation and shuttle routes, campus and neighborhood parking, and a hierarchy of roadways that includes both a regional road network, roads that collect and distribute travelers to and from the neighborhood and campus, and smaller neighborhood and campus streets. The system's elements should all fit together and support one another as part of an integrated system that serves residents of the neighborhood, commuters, and visitors alike.
- Emphasis on Alternatives to the Automobile. The transportation system should be designed to minimize the use of private automobiles and maximize the transportation alternatives for both Harvard affiliates and neighborhood residents. Improved shuttle service, enhanced public transportation, bicycle infrastructure, car-sharing, and other

elements should all be considered. This goal should be supported by aggressive transportation demand management programs. Develop short- and long-term strategies to ensure that transit and other non-auto mode shares on the Allston campus are commensurate with transit and other non-auto mode shares achieved on the Cambridge campus. Develop parking strategies which maximize parking efficiency (such as shared parking, car sharing, and pricing strategies) and which promote transit, pedestrian, and bicycle transportation.

- Streets With Multiple Roles. In some cases the system will entail giving new uses to existing roadways and in others the creation of new public ways. As collector/distributor roadways, Western Avenue, North Harvard and Cambridge Streets play important roles in the movement of cars throughout the area. They must also support a number of other network goals, from providing better pedestrian and bicycle connections to, from, and within the neighborhood to accommodating increased transit service and supporting pedestrian movement. New streets should also be conceived not only for their vehicular roles, but for their contribution to the transit and pedestrian networks.
- Streets and Paths as a Development and Land Use Framework. In addition to providing a multiplicity of attractive routes for pedestrians, bicyclers and motorists, the proposed transportation network should be conceived as the framework for the IMP's land use and urban design proposals. The nature of each street and the grain formed by the network's intersecting public ways will be integral to the character of each sector and place within the IMP area, as well as to the nature of its interpenetration with the Allston neighborhood. Main streets in North Allston like Western Avenue and North Harvard Street should be vital neighborhood corridors and not just transportation routes. New streets, paths, and transit and shuttle routes should be organized so that they network's pedestrian and transit components serve the place-making centers along these main streets as well as within the campus, and bring them to life.

Direction and Interim Steps

- Mode Share. Harvard shall work with BTD and the BRA to develop mutually agreeable assumptions regarding future mode share to be used in calculating traffic impacts, as well as assumptions regarding the relationship between changing mode share and the phased implementation of new transportation infrastructure.
- Traffic Impact Study Scope and Methodology. Harvard shall work with BTD and any other public agencies named by the BRA (e.g. City of Cambridge, Department of Conservation and Recreation) to develop an appropriate scope and methodology to study traffic impact scenarios based on future buildout phases, mode share assumptions, and phasing in of new transportation infrastructure. Impact analysis shall assess all Harvard related travel in the impact area regardless of origin or destination.
- Existing Pedestrian Network. In conjunction with the BRA and other public agencies, Harvard shall identify the key "missing links" and other problem areas in the existing pedestrian system that serves North Allston/North Brighton for internal pedestrian travel as well as for pedestrian travel to surrounding areas.
- Existing Bicycle Network. In conjunction with the BRA and other public agencies, Harvard shall identify the key deficiencies in the existing bicycle network that serves North Allston/North Brighton for internal travel as well as for travel to surrounding areas. Of equal interest to vehicular/bicycle and vehicular/pedestrian conflicts are those locations where

- pedestrians and bicycles may not be compatible, or that may present challenges as more comprehensive pedestrian and bicycle networks are constructed in the future.
- Transportation Network Options. Harvard shall work with the BRA and BTD to develop a proposed transportation network options addressing the connectivity and development framework goals identified elsewhere in this scope. Harvard should articulate how its proposal supports the land use and urban design approaches it develops for its Campus-Wide Development Program and Concept Plan, and specifically how they support its approaches to placemaking; the reduction of barriers to circulation to and within North Allston/North Brighton; the creation of landscape connections throughout North Allston/North Brighton; and the implementation of Harvard's sustainability agenda.
- New and Enhanced River Crossings. The IMPNF suggests several alternatives for improved and/or additional river crossings. Harvard shall work with the BRA, BTD, and other public agencies to develop a proposal for improving existing river crossings and creating additional crossings in ways that meet transportation goals while respecting the character of the Charles River parklands and the associated bridges.
- Improved Bus and Shuttle Service. North Allston/North Brighton is served by a number of bus lines that connect the neighborhood to key destinations and transit lines. For example, the 66 bus from Harvard Square to Dudley Square is one of the busiest in the system, yet is notoriously off-schedule and often times full to capacity. There is an opportunity to improve the service of Route 66 and other routes through dedicated bus lanes, better signalization at intersections, and other strategies. Harvard shall work with the BRA, BTD, and the MBTA to explore ways to improve bus service in conjunction with improved shuttle service.
- Western Avenue. Design work for Western Avenue from the Charles River at the eastern end to Barry's Corner is already underway. The IMP should show how the proposed redesign of that section of Western Avenue supports the comprehensive network established for the campus and its relationship to the larger neighborhood. Harvard will be expected to collaborate with public agencies to evaluate and implement designs for the portion of Western Avenue from Barry's Corner west towards Watertown.
- **North Harvard Street**. Likewise, design work for the northern portion of North Harvard Street is already underway. Harvard shall work with public agencies to develop a plan that unifies the portion of North Harvard Street north of Barry's Corner with the section between Barry's Corner and Cambridge Street by means of streetscape improvements.
- Soldiers Field Road. Soldiers Field Road is a parkway and part of a significant open space
 resource for the community and the region. In addition to the decking alternatives analysis
 described above, the IMP shall present other treatments of Soldiers Field Road that
 accomplish the overall planning objectives related to connectivity without depression and
 decking.
- Cambridge Street. Harvard shall collaborate with any effort on the part of public agencies to evaluate strategies for making Cambridge Street more of a local street in character through reconfiguring Cambridge Street and the Turnpike infrastructure to bring Cambridge Street down to the grade of the surrounding land, the relocation of the Mass Pike ramps, the introduction of active uses, including the possibility of residential use, to both sides of the street, and other related strategies. Such a process may yield important considerations for the IMP.
- Everett Street. Only Everett Street and Cambridge Street connect North Allston with the rest of Boston between the two ends of Soldiers Field Road. While the evaluation of this important traffic issue will be a focus of the CWP process, the IMP shall discuss the potential

- of Everett Street becoming a more visually attractive and active link between the river, the Brighton Mills area, and greater Allston, including the bridge over the Turnpike.
- Lincoln Street. Identification of the role of Lincoln Street within the neighborhood's transportation network will be an important outcome of the CWP process that should be better informed as a result of the interaction between Harvard's IMP and the wider neighborhood planning effort. Among Lincoln Street's potential roles are the provision of a truck by-pass route, the location of an Urban Ring route serving both the neighborhood and the campus, and as a connection to a new development center in the Holton Street area. In addition to reflecting its transportation responsibilities, Harvard should explore the potential of landscape improvements and the siting of new buildings to enhance the physical form of the community and to better define its boundaries.
- **Stadium Way.** The new street connecting Cambridge Street with North Harvard Street (and potentially with Soldiers Field Road) is a major contribution to the street network that is sparse in the south campus area as compared with the network in the residential and commercial areas of North Allston. Its design should reflect its role in the comprehensive network, and Harvard shall present an analysis of the potential Soldiers Field Road connection as an early phase project.
- Rena Street. Although the community raised concerns about Rena Street in its short-term configuration because it appeared to draw delivery traffic through the residential neighborhood, a version of Rena Street along with Rena Park connecting North Harvard Street through the campus to the river would encourage better integration of the existing neighborhood with the life of the campus while providing much improved access to Soldiers Field Road and the river for residential areas on both the east and west sides of North Harvard Street south of Western Avenue.
- **Seattle Street**. Evaluate the opportunity to provide an extension of Seattle Street from Cambridge Street through the general area of the Science Complex, across Western Avenue to North Harvard Street and thence to Smith Park. This would create a strong link between the neighborhood south of Western Avenue and the south campus to North Allston's largest public playing fields and to the banks of the Charles River at Herter Park.
- New Streets. Harvard has the opportunity to create a truly integrated system of streets that not only provides access to university facilities but also extends the scale and character of the existing residential neighborhood into some of the areas still to be developed. The site plan included in the IMPNF shows few public streets within the Business School campus between Spangler Student Center and Western Avenue or in the area between Western Avenue and Cambridge Street. Effectively this site plan reduces permeability between the river's edge between North Harvard Street and Cambridge Street and other portions of the neighborhood. In developing its comprehensive circulation plan, Harvard shall assess the potential for additional streets and other connections in the south campus that would help establish public access from the residential community to the Charles River.
- **Bicycle-Sharing Program.** In conjunction with the City, Harvard shall explore the feasibility of a shared-bike program for the community and Harvard that is accessed via a swiped card or comparable security system, similar to the SmartBike DC program in Washington, DC. Given the emphasis on bicycle transportation in Harvard's planning to date, the potential for a public service subsidized by advertising seems strong.

Submission Requirements

Baseline Information

- Existing Transportation Conditions and Infrastructure. The IMP shall present a complete inventory of the existing multi-modal transportation system serving the campus and neighborhood, including roads, bridges, ramps, and other roadway infrastructure, transit, private shuttles, and pedestrian and bicycle facilities (including bicycle parking). This inventory should include at minimum such information as ownership; physical description; general conditions; chief trip characteristics; transit ridership; transit levels of service; truck routes and travel patterns. It should set for the operating characteristics of each system and highlight their chief deficiencies. In addition, it should set forth any major work recently completed or scheduled for the immediate future.
- Pedestrian Counts. The IMP should provide AM and PM peak hour pedestrian counts at significant locations in the proposed IMP area and should present estimates of future pedestrian volumes at those locations based on the mode share assumptions discussed above, overall future campus population, and assumptions about pedestrian circulation between different campus buildings and districts.
- Bicycle Counts. The IMP should provide AM and PM peak hour bicycle counts at significant locations in the proposed IMP Area and should present estimates of future pedestrian volumes at those locations based on the mode share assumptions discussed above, overall future campus population, and assumptions about bicycle circulation between different campus buildings and districts.
- Parking Inventory. The IMP should present the number of parking spaces in Allston leased, owned, occupied and controlled by and on behalf of Harvard, and an inventory of on- and off-street parking throughout the proposed IMP Area. This should include an analysis of unused and underutilized on- and off-street opportunities. Identify problem areas, including but not limited to areas where there may be inadequate parking regulation or management.
- Transportation Demand Management. The IMP should describe the existing TDM program and report the number of students, faculty, staff and contract employees (reported in actual numbers, not full-time equivalents, and as a percentage of the whole for each category) who participate in each major element of the TDM program, both campus-wide and for Allston specifically.
- Relationship to the LMA, Cambridge Campus, Watertown Properties. Since Harvard activities in the Longwood Medical and Academic Area (LMA) and its Cambridge campus will affect transportation to and from the Allston campus, the IMP shall outline current and projected uses in each area, and set forth the transportation services Harvard intends to provide to make these connections, as well as the Transportation Demand Management (TDM) measures it offers to employees, faculty and staff of each area that would reduce automobile pressures on the Allston campus. The IMP should include a discussion of any existing or planned transportation connections between Harvard's Watertown properties and the Allston campus.

Impact Projections

- **Traffic Impacts.** The IMP shall present traffic impact projections based on alternative assumptions regarding future buildout phases, mode share assumptions, and phasing in of new transportation infrastructure.
- **Mode Share.** The IMP shall explain the methodology underlying the mode share projections used in calculating the traffic impacts and shall explain the measures to be taken to ensure that mode share targets are achieved.

Parking and Transportation Demand Management

- **Parking Demand.** The IMP should present projections for parking demand for each phase of development and should describe the methodology for estimating parking demand.
- Parking Plan. The IMP should provide the number of parking spaces proposed for each phase of development based on projected demand and a clarification of the number and locations of existing spaces to be lost. The parking plan should present alternative parking strategies that maximize parking efficiency (such as shared parking, car sharing, and pricing strategies) and which promote transit, pedestrian, and bicycle transportation. The IMP should present alternative parking scenarios (distributed vs. district parking, intercept garages, etc.) and discuss the relative merits of each.
- Transportation Demand Management. The IMP shall present proposed transportation demand management (TDM) programs that can be implemented to achieve the mode share projections described earlier.

Vehicular, Pedestrian, and Bicycle Infrastructure

- Proposed Street Network. The IMP shall show the proposed street network and explain, for each existing, reconstructed, or proposed street, the role it will play in the overall street network from both the perspective of vehicular transportation and relative to the goals of placemaking and connectivity set forth earlier. Harvard shall consult with the BRA and BTD on the appropriate level of detail to be presented for each street.
- Enhanced and New River Crossings. The IMP shall show proposed new and enhanced river crossings as determined through consultation with relevant public agencies, as well as proposed financing arrangements, timeline for implementation, and relationship to overall transportation plans and improvements.
- Improved Pedestrian Conditions and Infrastructure. The IMP shall show proposed improvements to existing pedestrian infrastructure and proposed additions, with particular attention to identified problem areas and key "missing links."
- Improved Bicycle Connections and Facilities. Both Harvard and the City of Boston are placing strong emphasis on improving the conditions for bicycle transportation and increasing the role of bicycles in the local and regional transportation mix. The development of Harvard's Allston campus offers extraordinary opportunities to create a model for improved bicycle transportation in Boston. The IMP shall propose bicycle infrastructure as follows:
 - Improvements to regional bicycle network.
 - Improved connections to regional bicycle network.
 - Opportunities for new bicycle connections.

- Planned covered and uncovered bicycle parking.
- A potential automated bicycle-sharing program consistent with the analysis described earlier.
- Improved Bus and Shuttle Service. The IMP shall present proposals to improve bus and shuttle service in the neighborhood in a way that serves both Harvard affiliates and neighborhood residents. The IMP should clearly indicate the elements of both the short-term and long-term shuttle and bus connections to the Cambridge and Longwood campuses and other destinations. For example, attractive facilities for shuttle and bus patrons should be incorporated into planned development and street reconstruction projects. The IMP shall outline current assumptions about the routes, number of shuttles and buses, times of day, and headways of transit services projected to use dedicated rights-of-way.
- Harvard Shuttle Service. The proposed IMP should also include preliminary analyses
 regarding the effect of an expanded system on North Allston residents and the potential
 impacts of making all shuttles routes available for residents in the most convenient way
 possible. The IMP should outline anticipated characteristics of shuttle vehicles, including
 capacity and type of fuel.

Major Regional Transportation Investments

A number of major new transportation infrastructure investments are either under consideration or should be taken into consideration as part of Harvard's planning. The IMP should show how the following potential infrastructure improvements could be integrated with proposed streets and land uses and the relative merits of alternative locations and scenarios for both Harvard affiliates and other residents and commuters.

- **Urban Ring.** The IMP should take into account the fact that alternative Urban Ring alignments serving the Allston campus and the North Allston/North Brighton communities are under consideration. The BRA expects Harvard to actively participate with the City and the Executive Office of Transportation in the development of alternative alignments and implementation strategies that achieve the best balance between servicing key destinations along the Urban Ring (including Harvard's North Allston campus) and servicing, in conjunction with other potential transportation improvements, the larger North Allston/North Brighton community.
- New Station on the Framingham/Worcester Commuter Rail Line. EOT is currently studying one or more potential intermodal transportation centers incorporating stations on the Framingham/Worcester Commuter Rail Line. Such facilities could incorporate commuter rail service, "Fast Track" service, the Urban Ring, Harvard shuttles, and parking with direct Turnpike access. Their siting should balance the goal of increased transit access for the neighborhood with the transportation needs of Harvard and other major destinations along the rail line. The BRA expects Harvard to participate actively with the City and EOT in the consideration of alternative locations and configurations of such a facility and to incorporate its findings into the IMP.
- Other Potential Investments. The IMP shall include proposals to improve vehicular circulation and other suggested changes that would help resolve the conflict between pedestrian and vehicular movement at the Allston interchange of the Massachusetts Turnpike, Cambridge Street, Soldiers Field Road, and the river crossings. The BRA expects

Harvard to participate actively with the City, EOT, and other appropriate state, federal, and local agencies to help resolve this area of concern.

Phasing and Implementation Strategies

Infrastructure improvements must be implemented in conjunction with development if the target mode shares are to be achieved. The Harvard projects shall include as integrated components significant contributions to the creation and improvement of regional infrastructure.

- **Phasing.** The IMP shall present proposed phasing of infrastructure improvements over the 20-year term of the IMP, including roadway and intersection improvements and reconstructions, introduction of new infrastructure components (e.g. dedicated rights-of-way, new river crossings).
- Implementation. The IMP should outline all current and future coordination with BTD, the MBTA, DCR, and all other relevant public agencies on analysis, assessment, permitting, and financing of proposed transportation solutions.

VI. HOUSING

Successful growth and development of North Allston depends on growth of the full-time, committed residential community. Moreover, in the long run the development of Harvard's Allston campus and the creation of a range of new and improved amenities in the North Allston/North Brighton neighborhood can be expected to contribute to upward pressure on the housing market. The North Allston/North Brighton of the future should provide housing for a variety of income levels and household types, and for both Harvard affiliates and others.

The conceptual master plan as currently configured segregates housing from other uses and Harvard affiliate housing from other housing, and generally lacks a description of Harvard's potential role in an overarching housing strategy for the North Allston/North Brighton neighborhood. As a major landowner and developer, Harvard should use its IMP to address its housing needs in the context of the broader North Allston/North Brighton neighborhood housing needs and goals as identified in the NASFP and the ongoing CWP process.

Principles and Strategic Goals

- Diversity of Housing Types. Harvard's student and affiliate housing should complement
 the broader neighborhood planning effort to ensure a range of housing types that can
 accommodate a variety of income levels, ages, and household types, both Harvard affiliates
 and others, as well as current neighborhood residents who may wish to move within the
 neighborhood and newcomers.
- Harvard Housing as a Part of the Neighborhood. In the spirit of the goal of creating a
 campus and neighborhood that intersect and interact in a variety of ways, Harvard-affiliate
 housing should not be limited to separate enclaves, but rather integrated into the larger
 neighborhood plan both through choice of location and by including Harvard's housing as a
 component of mixed-use development and street activation that supports the planning
 objectives discussed earlier.

Direction and Interim Steps

Harvard shall examine alternative housing strategies beyond those presented in the IMPNF, including:

- Existing Housing Policies. Harvard should clarify its existing housing policies, e.g. the goal of providing housing for 50 percent of graduate students and any existing housing or housing programs available to faculty and staff.
- Housing Impact. In conjunction with the CWP process, Harvard shall provide an estimate
 of the direct and indirect impact of the University's proposed development in Allston on
 housing demand and related market characteristics. The data on projected University
 demographics requested earlier in this Scope should serve as a key input into this estimate,
 along with Census data, demographic projections, and other information deemed relevant
 through consultation with the BRA's Research Department and the CWP process generally.
- Location for Harvard Affiliate Housing. In conjunction with the CWP process, Harvard shall describe a variety of housing types that serve Harvard affiliates in accordance with the demand estimates, identifying opportunities to mix university housing more closely with

other uses, both institutional uses and non-institutional uses such as community housing and neighborhood retail. Harvard shall explore the inclusion of housing in the following locations:

- Barry's Corner, as part of a mixed-use development.
- The site of the current Charlesview housing, which was indicated in the Strategic Framework as a potential site for graduate student housing.
- Rena Park and its extension through the south campus where it would broaden the population mix at the university and strengthen the existing residential neighborhood to the south-east of Barry's Corner. Specifically, Harvard shall examine alternative siting of housing within that area (including siting housing on the northern edge of the future park in order to make the park more of a neighborhood element and less of a campus element). Harvard shall also examine an alternative that places NO housing in the Rena Park area.
- Western Avenue east of Barry's Corner, at a new center of university and community life
- Brighton Mills, where new housing in addition to the proposed Charlesview relocation would mitigate some of the impacts to the residential community that resulted from the insertion of the shopping center in its super-block configuration.
- Other locations along Western Avenue.
- Community Housing. In concert with the BRA, Harvard shall also explore ways to achieve residential development beyond that intended for students and university affiliates and options for the location and size of community housing. This task should include the exploration of a variety of models for housing development and ownership, including models that achieve a mix of Harvard affiliate residents and other residents. In addition to options for creating an appropriate amount of affordable housing, this process will consider opportunities for Harvard's involvement in the development of special-purpose housing such as artist live-work space and housing that serves populations with special needs (e.g. assisted living).

Submission Requirements

- **Housing Program.** The IMP shall present an overall housing plan describing the populations that Harvard intends to serve with housing (students, faculty, staff, others), the anticipated demand for each of these housing types, and the number and locations of housing units proposed, along with an explanation of the overall methodology and rationale underlying the proposed housing program. The IMP shall also present implementation measures and schedules for the housing program.
- **Undergraduate Housing.** The IMP should explain the rationale behind any inclusion of undergraduate housing in the master plan for Allston, and its relationship to existing undergraduate housing in Cambridge.
- School-Age Children. Based on employment projections and reasonable estimates of the number of net new Harvard employees who might choose to live in the City of Boston as a result of Harvard jobs to be located there in the future, the IMP should estimate the number of school-age (i.e., K-12) children of Harvard affiliates who would be eligible for enrollment in the Boston Public Schools.

VII. OPEN SPACE, RECREATION, AND PUBLIC REALM

The North Allston/North Brighton neighborhood enjoys significant areas of open space; however, as stated above, access is often limited and the quality is impaired in many cases (most notably in the case of portions of the DCR parklands along the Charles River). Harvard's development, in conjunction with the CWP, offers opportunities to improve existing parklands, improve access, and create new open spaces of a variety of types. Library Park, currently under design, is just the first example of a way in which Harvard can contribute to an improved open space system for the neighborhood.

Given the inadequacies of the current open space system, the role that parks and other open space and public space can play in supporting the goal of enhanced connectivity within the neighborhood and to nearby areas, and the open space needs that will be created by the significantly increased employment and residential populations of the neighborhood, it is imperative that Harvard work closely with the neighborhood and key public agencies to develop and implement a comprehensive open space plan that achieves the following goals.

Principles and Strategic Goals

- More and Better Open Space. Improve both quantity and quality of open space and recreational opportunities with the dual aims of mitigating the impact of the increased daytime and residential population of the neighborhood and of providing a world-class open space system. Connections to existing open space resources must be improved.
- **Regional and Local Resources.** The Charles River parklands are part of a regional resource. While the neighborhood needs improved access to this resource, it also needs better open space and recreation resources that serve primarily local needs.
- Variety of Open Space Types. As with buildings, open spaces and landscapes should be of varied size and shape, their functions accommodating multiple activities, often at the same time, and their purpose clearly to bring together the diverse elements of the North Allston community. North Allston/North Brighton should enjoy a range of different types of open space and other public spaces, e.g. active, passive, landscaped, hardscaped, "urban" and more natural. The campus should contain a range of open spaces, some with a more pronounced "campus" character and others with a more "public" character, regardless of landownership. Finally, tree-lined streets that create a comfortable atmosphere for pedestrians and bicyclists, while not a substitute for parks and other open space, should be considered an integral part of the overall open space system. Open space considerations and objectives should be taken into account when designing the street system as a whole as well as individual streets.
- Multiple Functions of Open Space. The open space system should not serve simply as a set of destinations, but should be an integral component of local and regional systems of connectivity and transportation as described above. Some have suggested a neighborhood-scale "Emerald Bracelet" that should be explored as one option for meeting this goal. Open space can also have a restorative effect on the natural environment and should be treated as an integral component of an overall sustainability plan. The open space system should also be designed to support such goals as reduced stormwater runoff, increased runoff quality, and an increased number of trees and "urban forests." Finally, open space systems have an important public health role by providing opportunities for exercise.

• Relationship to Boston Open Space Plan and NASFP. Harvard's open space plans should be consistent with and supportive of the city's 2008-2012 Open Space Plan and the open space recommendations of the NASFP, as well as the goals of the ongoing Community-Wide Plan process.

Direction and Interim Steps

- Open Space System. Harvard shall present its preferred plan for a proposed (for the short-, middle-, and long-term futures) system of improved public, semi-public, and private open spaces clearly indicating the character of each and how the function(s) help meet the needs as determined by the impact assessment outlined above. The system should recognize the opportunity for streets and boulevards to enhance the landscape system by connecting, for example, parks and plazas by tree-lined streets.
- Landscape. Harvard shall present its preferred plan for well-designed landscapes and open spaces that contribute to the public realm, assist with connectivity, and contribute to overall sustainability. In addition to more traditional landscape element such as parks and green corridors, the campus and surrounding neighborhood provide opportunities to create landscapes that both enhance both the aesthetic experience of the public realm and contribute to overall sustainability goals. The winter gardens in the Science Complex are an excellent example of the incorporation of natural elements into areas that are not traditional parks or components of an open space system, and this concept can be extended to other part of the campus and neighborhood. The IMP should present concepts and plans for landscape features guided by the following principles:
 - Landscape elements adjacent to green spaces can enhance those spaces.
 - Landscape elements can help make connections between neighborhoods, neighborhood centers, and other landscapes (including the Charles River Basin), as well as between campus greens and communal streets and parks.
 - Landscapes can be incorporated into the streets that connect important public spaces and buildings.
 - Landscapes should support the overall sustainability agenda by contributing to the creation of functioning ecosystems, by assisting with stormwater goals, and by teaching about the natural environment.

Submission Requirements

Existing Conditions

• **Inventory.** The IMP should provide an inventory of existing open space and recreational resources in the North Allston/North Brighton neighborhood, referencing the Boston Open Space Plan as well as providing information on the university's facilities.

Open Space and Landscape Plan

• Open Space Impact Assessment. The IMP shall provide an impact assessment that takes into account projected population and projected open space supply throughout the 20-year term of the IMP. Please find attached the document titled "Impact Assessment"

Method: Open Space," developed by the Parks and Recreation Department for projects that involve greater than one typical city block. If the proponent requires further information regarding this method, they may contact staff of the City of Boston Parks and Recreation Department.

- Coordination of Impact and Needs Assessment. The above impact assessment must be coordinated with the ongoing assessment of open space needs in the neighborhood being conducted as part of the survey/needs assessment and work being done under the auspices of the CWP. Collectively, these assessments must include both the current needs of the neighborhood and the impact of development on land outside of Harvard's proposed IMP area, in particular, but not limited to, Harvard-owned land elsewhere in North Allston/North Brighton.
- Open Space System and Landscape Plan. The IMP shall describe the proposed open space and landscape system in its entirety, as well as the proposed phasing of improvements. The plan should discuss the relationship of Harvard's campus open space system with the broader neighborhood open space and public realm systems, and should present any intended programming of open spaces and "outdoor rooms" as well as their relationships to adjacent buildings.
- **Grow Boston Greener.** Trees are an integral part of many landscapes and streetscapes and an important element of an overall sustainability plan. Last year, Mayor Menino announced Grow Boston Greener, a campaign to plant 100,000 trees by 2020. For the city to achieve that goal, it is important for both private residents and large institutions to plant and maintain the bulk of those trees. The IMP should describe opportunities for Harvard to assist with the Grow Boston Greener campaign as part of an overall landscape plan, including the following information:
 - Number of new trees, both street trees and trees in landscaped areas, to be planted with a maintenance commitment by Harvard. The IMP should show the locations and types of trees proposed, at the level of detail appropriate for each campus district based on the proposed phasing of development for that district.
 - Strategies for a demonstration "street tree forest" with assistance from the Arnold Arboretum of Harvard University.
 - Commitments for maintenance assistance with existing trees on streets and other public land.
 - Possibilities for Harvard to support the Grow Boston Greener effort with a GIS database
 of tree inventories and locations, similar to the inventory of campus trees maintained as
 a GIS layer by Harvard Facilities Maintenance.

VIII. UTILITIES AND INFRASTRUCTURE

A well-planned infrastructure and utility network is essential to orderly campus development and to achieving a range of sustainability goals. In addition, the extensive redevelopment of the North Allston/North Brighton area, particularly with the involvement of Harvard, presents the opportunity to include next-generation technologies and infrastructure as part of an overall master plan.

Principles and Strategic Goals

• System-Wide Approach. A system-wide approach to planning infrastructure and utilities can yield efficiencies in construction and operation as well as sustainability benefits. Harvard should ensure that infrastructure planning is coordinated with other elements of campus planning, as well as infrastructure investments by other entities, in a way that will reduce the need for new infrastructure investments and maximize the efficiencies and synergies resulting from those investments that do take place. For example, the open space plan can be designed in such a way that it contributes to stormwater goals, roadway construction and reconstruction can be coordinated with major utilities work, and the coordinated development of systems can yield opportunities for harnessing energy that would otherwise be wasted.

Direction and Interim Steps

Harvard's expansion provides the opportunity to extend the benefits of wi-fi and other technologies to the broader neighborhood while exploring new technologies and new applications of existing technologies. In particular, Harvard should consult with the City to explore the following possibilities. See comments from the City of Boston MIS Department for more specific information.

- Wi-Fi. Boston is evaluating a variety of models for a citywide wireless platform. As
 Harvard builds out, there may be a wireless system that it is considering for students,
 faculty and staff that can be extended to the residents in the area. Harvard should work
 with the City of Boston MIS office and Open Air Boston to explore opportunities to improve
 internet connectivity.
- Wireless-Based Technologies. There are opportunities to build on the presence of a ubiquitous local wireless network (3G, Wifi, WiMax, etc) that interconnects many systems to create a new online, informational service to the community.

Submission Requirements

Background

- Existing Utility and Infrastructure Systems. The IMP should present relevant information on the existing infrastructure systems, both publicly owned and owned by Harvard, and the capacity of those systems to accommodate the proposed development.
- Overall Approach to Infrastructure and Utilities. The IMP should clarify Harvard's overall approach to infrastructure and utilities, including coordination with utilities providers,

relationship between infrastructure and utilities development and the overall development program, and a description of the required investments along with phasing information and plans for the long-range maintenance and upkeep of infrastructure improvements.

Energy

- **Distributed Energy Systems.** The development of a new and expanded campus offers an opportunity to provide for district energy needs in a comprehensive and sustainable manner. The IMP should describe the ways that energy issues, and sustainable energy and district energy planning in particular, are being integrated with other components of the planning framework. Electricity distribution planning and the role of planning in congestion relief and distributed generation contribute to modern grid challenges. The IMP shall provide the following:
 - A description of the load forecasting methodology.
 - A description of the capacity planning methodology.
 - System design criteria.
 - Planning schedules.
 - Planning assumptions regarding distributed generation (DG), including renewables and combined heat and power (CHP).
 - Planning assumptions regarding emerging technologies incentives.
- Alternative Energy. Harvard should evaluate opportunities for the inclusion of renewable energy generation in all construction (e.g., solar-ready design, electronic distribution systems, other emerging technologies). To this end, the IMP and/or building-specific Article 80 filings should contain the following:
 - An accurate description of the nature of the proposed use and anticipated fill-in rates.
 - A characterization of the Local Distribution Company (LDC) infrastructure supporting the site, including the substation feeding the site, the circuits serving the site, where they originate and how the circuits are loaded.
 - An accurate estimation/projection of connected load (inclusive of lighting, electric heat, air conditioning, refrigeration, process equipment, motors, servers, etc.).
 - Projected load diversification along with load factor and power factor.
 - Documentation of the substance of its interaction with the LDC at and after the conceptual stage of the project.

Water and Stormwater

- **Stormwater Goals.** The IMP should provide a statement of Harvard's goals related to stormwater retention and treatment and to water quality, as well as a comprehensive plan for all of Harvard's North Allston property developed at the sub-watershed scale that is designed to integrate stormwater control systems into the open space system and urban infrastructure.
- Stormwater Strategies. The IMP should articulate the ways in which the planning and design work related to water, sewer, and stormwater issues are being integrated with other

infrastructure issues, the sustainability agenda, and any other relevant components of the planning framework. The IMP should provide detail on specific stormwater strategies/Best Management Practices (BMPs) and should provide project-wide mitigation commitments, timetables for those commitments, and estimated cost.

Phasing and Implementation

- **Phasing.** The IMP shall present proposed phasing of infrastructure and utilities investments over the 20-year term of the IMP.
- **Implementation.** The IMP should outline all current and future coordination with the BRA and other public agencies, as well as with private utility providers, on analysis, assessment, permitting, and financing of proposed infrastructure investments.

IX. SUSTAINABILITY

The City of Boston expects a high level of commitment to principles of sustainable development from all developers and institutions. Harvard has shown a commitment to sustainability in many of its development projects and campus operations, but the Allston campus requires a different approach. The construction of a largely new campus by a leading institution provides exciting opportunities for innovation and excellence not only in individual buildings, but across the campus as a whole. A sustainable campus, just like an effective transportation network, must function as an integrated system. Although the City's sustainability goals are most clearly articulated in this section, they should be considered and addressed at every stage of the planning process and in conjunction with every topic in order to ensure that the overall campus components and framework further the goal of sustainability as much as any individual element or initiative.

Principles and Strategic Goals

- **Model of Sustainability.** Build on Harvard's track record in the area of sustainability to create a campus and community that is a model for the City of Boston and beyond.
- Sustainability as a Core Planning Principle. Incorporate sustainability considerations into all aspects of master planning from the "ground up."
- Contributions to Citywide Goals. Harvard will leverage its resources to assist with advancing sustainability initiatives in North Allston/North Brighton and throughout the City of Boston.
- Energy and Climate Change. In 2000, Mayor Menino recognized that "carbon dioxide and other greenhouse gases (GHG) released into the atmosphere will have a profound effect on the Earth's climate" and that "the City of Boston can take important steps to reduce greenhouse gas emissions and increase energy efficiency." Harvard's planning should set ambitious goals in the area of climate change, aiming for a significantly lower level of carbon emissions than the existing campus, or even carbon neutrality. High-performance buildings, conservation techniques, use of renewable fuel sources (wind, solar, geothermal, thermal energy from sewer lines, biomass), combined heat and power generation, and carbon sequestration should all be considered as part of the campus planning process.
- Infrastructure and Utilities. As the chapter on infrastructure and utilities makes clear, sustainability considerations should be integrated throughout Harvard's approach to planning and developing these systems, and the approach should be coordinated with other planning efforts in a way that generates maximum opportunities for efficiencies and synergies.
- Transportation. The transportation sector, particularly the use of private automobiles, is a major generator of negative environmental impacts, including degraded air quality and greenhouse gas emissions. Harvard's transportation planning should strive not only to minimize and mitigate transportation impacts attributable to its development, but should incorporate ambitious transportation-related goals from the beginning. Planning should emphasize minimizing vehicular traffic (both passenger cars and trucks) while maximizing alternative transportation options. Strategies include enhanced public transportation options, the design of an open space/transportation framework that facilitates and encourages walking and bicycling, careful land-use planning to ensure critical adjacencies or

- otherwise facilitate alternatives to the automobile, and the use of clean energy technologies, e.g. electric vehicles for on-campus and car-sharing use. Although the Transportation chapter above presents specific goals and priorities, the IMP should also integrate the discussion of transportation impacts and planning with the discussion of sustainability.
- Stormwater Management and the Charles River. Harvard's planning and development should go beyond the minimum requirements related to stormwater runoff with the goal of reducing the pollution flowing to the Charles River. Individual building design, site design, and street-level interventions should all maximize the opportunities for stormwater retention and treatment through innovative approaches. To the extent possible, the systems put in place should strive to work with the natural hydrology of the area.
- **Air Quality.** Harvard's future campus development should seek to minimize negative air quality impacts stemming from the transportation system or building mechanical systems, and to mitigate air pollution through the use of urban forests and other techniques.
- **Solid Waste**. Campus master planning should set the goal of reducing the level of solid waste generation from the baseline level of comparable facilities. This goal should apply to both construction and operation of buildings.
- Environmental Restoration. Harvard's planning and design work should commit to the principle of restoring environmental health and natural systems to the greatest extent possible. This includes committing to the highest possible standard of environmental remediation for any sites that are determined to be contaminated and, when feasible and compatible with other goals, pursuing the restoration of the historic functioning of the landscape with regard to hydrology and other natural functions.
- Landscape and Ecology. A well-considered program of landscape design can not only create a high-quality aesthetic realm but can also enhance regional biodiversity, help mitigate air pollution, reduce heating and air conditioning costs and associated energy consumption, reduce water consumption, and reduce stormwater runoff and water pollution. Sustainability should be a primary consideration in the design of the campus open space system as a whole as well as the design of individual spaces and the design of the roadway network. The Open Space and Recreation chapter references the Grow Boston Greener and other landscape approaches that should be integrated with sustainability goals.
- Human Health. Pedestrian and bicycle networks, parks and recreation areas, urban
 forests, and healthy buildings should be considered as part of a broad sustainability agenda
 related to human health. The proposed relocation of Harvard School of Public Health and
 the health-related mission of many of the scientific units on the future Allston campus
 strongly suggest that the design of the new campus should support the mission of public
 health as much as the activities of the academic units that will locate there.

Submission Requirements

Background

University Sustainability Principles. The IMP should clearly state and explain Harvard's sustainability principles. In particular, the document should describe how Harvard's capital planning and approvals process for new construction and major renovation of existing campus facilities has been expanded to incorporate the sustainability principles in its review. For those principles that have not yet been applied, or not fully applied, the document should describe Harvard's commitment to and strategy for addressing them.

- Existing Sustainability initiatives. The IMP should summarize key existing sustainability initiatives; this summary should include an inventory of LEED-certified and other high-performance buildings.
- **Application of Sustainability Principles.** The IMP should describe how Harvard's sustainability principles have been applied throughout the development of the IMP and should discuss the aspects of the Proposed Projects and other investments that further those principles and the performance areas described above.

Key Topic Areas

- Performance Standards and Indicators. The IMP should go beyond broad sustainability principles to propose specific performance standards and a system of indicators and metrics to track performance, in line with the University's stated principle of "Developing planning tools to enable comparative analysis of sustainability implications and to support long-term economic, environmental and socially responsible decision-making."
- **Energy and Climate Change.** The IMP should discuss the relationship between Harvard's energy plans and GHG within the context of Mayor Thomas M. Menino's GHG-reducing policy (http://www.cityofboston.gov/climate/).
- **Green Building.** The IMP should describe how new campus buildings will achieve a superior level of performance in the areas of materials and resources (recycled content, construction waste management, local/regional materials), energy (energy performance, renewable energy), water management (water efficiency, stormwater management, graywater and stormwater recycling, etc.), indoor environmental quality, and other standard performance areas of high-performance or "green" buildings. Whenever possible, buildings should achieve a high level of certification through LEED or another appropriate system.
- Innovative Water Strategies. The IMP should present strategies for innovative approaches to water and stormwater management, e.g. rainwater capture, water use reduction strategies, reuse of graywater, and on-site or on-campus wastewater treatment. The Boston Water and Sewer Commission has stated that its letter dated March, 2007 (included in the Appendix) constitutes the comments of record and as such the IMP should respond to it in full.
- **Air Quality.** The IMP should discuss the potential for both short- and long-term effects on air quality as a result of traffic and use-related emissions generated by the proposed development. Known options for mitigation should be identified.
- **Site Contamination**. The IMP should indicate the presence of any contaminated soil or groundwater and any underground or aboveground storage tanks on land to be added to the Institutional Master Plan Area. As applicable, the IMP should summarize the results of any studies or findings, including types and concentrations of contaminants encountered, and should include appropriate tables and maps, as well as mitigation plans.
- **Solid Waste**. The IMP should quantify and describe the generation, storage, and disposal of all solid wastes from the construction and operation of the Proposed Projects. In addition, measures to promote the reduction of waste generation and recycling, particularly for paper, plastics, glass, metals, and other recyclable products, and compliance with the City's recycling program, should be described.

X. PUBLIC SAFETY

Given the planned increase in the both residential and commuter population in the area, as well as the development of facilities that could handle large scale events, it is important that the IMP anticipate and address the impact future development will have on the city's ability to respond to emergencies and ensure public safety.

Principles and Strategic Goals

• Enhancement of Emergency Response Capacity. Harvard's proposed development in Allston, as well as additional development expected in connection with Harvard's campus, will create significant new public safety needs, but an integrated planning effort that takes those needs into consideration can ensure that the City's emergency response capacity is enhanced through appropriate new facilities, equipment, capacity, and training.

Direction and Interim Steps

• Coordination With City Agencies. The City is preparing to conduct a study of existing emergency services in Allston/Brighton and future needs. Harvard should coordinate with city agencies to support the needs evaluation and to support efforts to meet those needs.

- **Fire.** The IMP shall provide all information requested by the Boston Fire Department (BFD) to help ensure that the city's infrastructure can serve future development overall as well as specific proposed facilities.
- **Police.** The IMP shall provide all information requested by the Boston Police Department (BPD) to help ensure proper coordination among BPD, the Massachusetts State Police, and Harvard Police.
- **Emergency Medical Services.** The IMP shall provide all information requested by the city's Emergency Medical Services to ensure that the city's infrastructure can serve future development overall as well as specific proposed facilities.
- **Biological Laboratory Safety.** The Boston Public Health Commission (BPHC) provides regulation and oversight of Biosafety Level 3 and 4 laboratories within the City of Boston. The IMP should specify the types of research proposed and the biosafety level of laboratories to be constructed, and should facilitate any other relevant information to the BPHC.

XI. ECONOMIC DEVELOPMENT

The City of Boston views its academic institutions as tremendous assets and as valuable partners in economic development. The development of Harvard's new campus in Allston provides important opportunities to collaborate with the University on key economic development goals.

Principles and Strategic Goals

The following areas have been identified as the primary opportunities for collaboration between Harvard and the City of Boston.

- Employment and Workforce Development. Harvard is already a major employer in the City of Boston, and the development of the Allston campus will only expand the number of Boston-based employees. At the same time, the development of the campus will be one factor leading to a shift in the types of employment available in the Allston-Brighton neighborhood. Harvard is an active partner in the City's workforce development efforts, and the City looks forward to working with Harvard to explore creative approaches to education, employment, and workforce development.
- Technology Transfer and Commercialization of Research. Harvard's planned major life sciences research holds great potential to yield economic benefits for the City of Boston. The IMP is an opportunity to explore the possibilities for a long-term plan that leverages academic research for business development, particularly in the realm of the life sciences.
- Business Development. In addition to supporting public realm and quality of life goals, retail is an important component of any economic development strategy. The Allston campus will yield important opportunities to support the local business sector by capturing spending from Harvard affiliates and visitors while helping to meet resident needs. As a major property owner and developer with academic resources in business administration and other key fields, Harvard can play an important role in the development of the local business community. In addition, many aspects of the IMP—from planned investments in arts and cultural facilities to the presence of sustainability as a guiding principle—suggest opportunities for collaboration with the City's existing economic initiatives focused on the creative economy, "green" business development, biotech, and more. Finally, the university's role as a major purchaser of goods and services suggests that there are untapped opportunities for Boston-based businesses to benefit from current University spending.

Direction and Interim Steps

• **Employment.** There is particular interest in exploring programs to recruit, train and promote the population of neighborhoods adjacent to the proposed development. Harvard shall collaborate with the BRA, in particular the Office of Jobs and Community Services, to create and implement a workforce development plan to prepare residents for employment opportunities at Harvard and at other employers with similar workforce needs, as well as a plan for disseminating information about employment opportunities and goals for local hiring.

• **Business Development.** Harvard should explore ways to collaborate with the City to leverage its investments to create employment in those sectors of specific interest to the City's existing economic initiatives. In addition to retail and biotech, these include the creative economy and "green" industries. Strategies should include but not be limited to the use of Harvard-owned real estate on an interim basis.

- **Harvard Employment.** The IMP should describe outreach and training initiatives designed to help Allston/Brighton residents and Boston residents generally gain access to employment opportunities at Harvard.
- Commercial Activity in Harvard-Owned Buildings. The IMP should provide information on existing employment by business type in real estate currently owned by Harvard, and an assessment of the likely impact of the proposed development program on that employment. The IMP should provide information on the amount of space proposed to be built by or leased to private business on Harvard-owned land, with information on the proposed uses and estimated employment.
- **Private Investment**. Harvard shall collaborate with the BRA to describe the potential for private investment by other landowners and developers in the vicinity of Harvard's proposed development.
- **Economic Impact of Construction.** To the extent that information is available at the time of the IMP submission, Harvard shall outline the overall cost of construction by building, use, and development phase, and other categories (e.g. infrastructure investments).
- Purchasing. The IMP should provide background information on the structure and scale of Harvard's purchasing activities, an estimate of purchases from Boston-based businesses, and current outreach activities to Boston-based businesses or other efforts aimed at increasing local purchasing and/or building the capacity of local businesses to provide goods and services to Harvard.
- Research Funding. The IMP shall describe the key relationships, expected sources, and short and long-range goals for the acquisition of additional research funding and other grants by Harvard for activities to be housed in the proposed Allston development.
- Life Sciences Business Development. The IMP should outline the role that the Office of Technology Development and other University entities currently play and will play in the future in promoting life sciences technology transfer and business development in Allston and Boston generally. The IMP should document Harvard's current and planned activities related to commercialization of research, support for start-up companies including development of incubator space and other commercial real estate, investment of capital in technology-related companies, and strategies for collaborating with the City of Boston to translate academic research directly into commercial economic activity.
- Other Business Development. The IMP should propose strategies to leverage Harvard's investments to create additional employment.
- Student, Staff, and Visitor Impact. The presence of thousands of Harvard employees and students in the neighborhood, as well as the visitors who will be drawn to the area, suggests the opportunity to leverage this presence and spending to enhance the local retail supply as well as to create a visitor-oriented segment of the local economy. Harvard shall collaborate with the BRA to develop an appropriate methodology for projecting the positive economic impacts of student, staff, and visitor spending and to develop (in conjunction with

- any retail analysis as appropriate) strategies for creating a locally supportive economy in the Allston/Brighton area that serves students, employees, visitors to Harvard facilities, and neighborhood residents.
- **Fiscal Impact and Impacts on City Services.** The IMP shall assess the fiscal impacts to the City and State of the proposed institutional development and other proposed development on Harvard-owned land in the North Allston/North Brighton area. In addition, the IMP shall identify other impacts on the delivery of city services anticipated as a result of the development of the campus. Elements of the analysis should include:
 - Current values and property tax generation of Harvard-owned properties in Allston.
 - Current generation of income and sales taxes to the state from Harvard-owned properties and employment.
 - Projected future net changes in property, sales, and income tax generation for each phase of the proposed development.
 - An assessment of potential public costs and investments related to this expansion whether it be small (minor road re-configurations, other utilities), or large (transit investments).
- Taxes and PILOTs. In the context of the master planning process, Harvard should meet with the City's Assessor to discuss property tax generation and PILOTs and to establish a plan or strategic approach to the payment of PILOTs acceptable to the City Assessor.

XII. HISTORIC RESOURCES

Preservation of existing historic resources must be an important component in development of the IMP. Although the area to be redeveloped contains few structures of historical significance, the presence of the Charles River, associated parks, roadways, and bridges, and the unique history of the neighborhood call for an approach to historic resources that is integrated into the overall planning approach.

Principles and Strategic Goals

 Respect and Enhance the Historic Character of the Area. Harvard's development should not only respect, but also enhance the historic character of the area through preservation combined with sympathetic new construction and stewardship of key resources. In general, Harvard's development should enhance the quality of such historic resources as the Charles River parklands, associated bridges and structures, and other buildings and structures.

Direction and Interim Steps

- Cooperation With Public Agencies. Harvard should work with the Boston Landmarks Commission, the Massachusetts Department of Conservation and Recreation, and the Massachusetts Historical Commission to ensure that impacts on historic resources are adequately studied and any adverse impacts appropriately avoided or mitigated.
- Stewardship of Historic Resources. In conjunction with key public agencies, Harvard should explore new models for stewardship of the area's key historic resources, in particular the Charles River parklands and the Charles River bridges. Harvard should work with relevant public agencies to ensure that these resources are protected, restored, enhanced, and maintained at a level commensurate with the scale and quality of development proposed by Harvard.
- Alternatives to Demolition. For structures identified in collaboration with the Boston Landmarks Commission, Harvard should present a thorough study of alternatives to demolition through rehabilitation or the incorporation of historic buildings into proposed development plans. Proposed demolition of campus buildings over 50 years of age requires Article 85 Demolition Delay review by the BLC.

Submission Requirements

• **Inventory.** The IMP shall present a full inventory and description of historic resources located within the impacted area, and a description of the effects of the proposed development on those resources. The IMP should also take into account the presence of these resources in its alternatives analysis, with the goal of avoiding, minimizing, and/or mitigating any impacts. Within the context of a 50-year master plan, such a survey should anticipate properties that may gain significance within the 20-year development period.

XIII. PROPOSED INSTITUTIONAL PROJECTS

The BRA acknowledges that, given the scope and duration of activity contemplated by the IMPNF, the level of detail available at the time of the filing of the IMP will vary from project to project, and certain projects may be presented conceptually rather than with the level of specificity typically seen in an IMP. Nevertheless, for each Proposed Institutional Project for which final IMP approval is sought, the IMP should provide a project description at the level of definition required by Section 80D-3.4 of the Code, as outlined below. The BRA may, at its discretion, accept varying degrees of specificity in the IMP regarding some elements of the required information for certain projects that will receive zoning and regulatory relief through the Section 80D IMP approval process. Furthermore, while Future Proposed Projects may be outlined in the IMP, it is within the BRA's discretion to determine whether there is the need for further specificity and zoning relief for any such project in the form of a subsequent amendment to the IMP.

- New and Recycled Building Projects. For each Proposed Project for which final IMP approval is sought, the IMP should present at a minimum the following:
 - Site location and approximate building footprint.
 - Square feet of total gross floor area and principal subuses.
 - Gross floor area of space that is demolished or occupancy terminated.
 - Floor area ratio (FAR) for each lot.
 - Building height in approximate feet and stories.
 - Number of parking spaces.
 - Current zoning of site.
 - Total project cost.
 - Estimated development impact project payments.
 - Estimated month and year of construction start and completion.
 - As much detail as possible on the proposed program and uses, with the understanding that more detail will be provided as part of the project-specific review.
- Campus Improvements. The IMP should present a description of all proposed campus improvements, including the nature of the improvement, location, estimated cost, and estimated month and year of construction start and completion.
- **Development Program Context**. The context for the Proposed Projects should be presented as follows:
 - A series of context drawings should be prepared showing phase-by-phase the proposed developments in their larger surroundings for the campus. These items, with the exception of the study model, should be submitted in both printed form and as printable and duplicable digital files.
 - A series of neighborhood plans showing existing and proposed building heights, building uses, pedestrian circulation, open space, and vehicular circulation of cars, service vehicles, and ambulances; the area to be included in the plans should extend not less than 1,500 feet in all directions from the proposed project sites.

- Diagrammatic sections through the neighborhood cutting north-south and east-west at the scale and distance indicated above.
- True-scale three-dimensional graphic representations of the area indicated above either as aerial perspective or isometric views showing all buildings, streets, parks, and natural features in the district.
- A study model showing the proposal in the context of other buildings extending 500 feet in all directions from the project site.
- Rationale for Proposed Projects. In order to elucidate the rationale for the Proposed Projects, the IMP should present an analysis of the existing facilities in light of the identified program needs and objectives. The analysis should include a description of the site selection process and a summary of alternatives considered.

XIV. PUBLIC BENEFITS PLAN

Harvard University's expansion into Allston will have a tremendous impact on the Allston neighborhood, its residents, and the City of Boston and presents enormous opportunities to the University and to the City. That inevitable transformation will take many dimensions: physical, demographic, economic, and qualitative. In addition to developing its real estate, expectations are high that the University will also develop sustained partnerships with the community and the City that will bring the University's expertise, resources, and economic strength beyond its campus and into Allston and Boston. The scale of Harvard's anticipated development as well as the University's decades-long development schedule will require an ambitious and flexible approach to planning for the delivery of public benefits, the mitigation of development impacts, and the development of these partnerships.

In its IMPNF submission of December 16, 2006, Harvard stated that it ".... seeks to establish a comprehensive framework for providing ongoing community benefits that accompanies the University's proposed institutional development program and that reflects the comprehensive nature of this submittal." Further, Harvard stated that the following five major areas were to be the focus of that framework: Education and Lifelong Learning; Workforce Development; Community Housing; Community Services; and Physical Improvements.

In fulfilling its goal, Harvard University's IMP should respond to the major issues and recommendations that emerge from the development of what the Harvard Allston Task Force has called its "master plan of community benefits" that will address a wide range of identified development, neighborhood priorities: economic education, housing, neighborhood amenities/quality of life, public health, public realm and open space, public safety, transportation, and workforce development. That "master plan" will be an evolving vision for the neighborhood, much as Harvard's plans for the Allston campus will also take shape over the course of future decades. The results of the Survey/Needs Assessment (as agreed to in the cooperation agreement for Harvard's Science Complex) will further contribute to the "master plan of community benefits."

The new Harvard campus, emphasizing life sciences research, graduate-level education, and the arts will be an extraordinary addition to the city of Boston's educational and economic landscape. The BRA expects that Harvard will be an active partner with the City of Boston in developing new and creative strategies for leveraging this opportunity.

Principles and Strategic Goals

- Integration of Campus and Community. The BRA and Allston residents envision Harvard's new campus as one that enriches not only the university but the neighborhood as well. The IMP offers the opportunity to build a campus that blurs the traditional boundaries between campus and community through the creative planning of physical space, housing, employment, business development, and academic programming. Harvard's property holdings in the neighborhood west of the IMP area also provide a means to further this goal.
- Innovative, Quality Partnerships. Boston and Harvard can each benefit from the knowledge, experiences, and opportunities offered by the other. Institutional support for

programs and facilities that connect faculty and students with the community, and the community with campus life, are a neighborhood priority. Likewise, the University and the City of Boston can each profit by linking Harvard's intellectual capacities to the challenges and opportunities imbedded in the social and economic life of the city. Harvard's vision and support for these partnerships should set a new standard for civic engagement, befitting the University's reputation as one of the world's great academic institutions.

- **Economic Growth and Innovation**. Harvard should support the synergy that will result from its investment in new academic programs and facilities in Allston. The campus itself will bring new residents, employees, and students to Allston and the City, and with it potential to leverage that growth into new economic development. Harvard's academic enterprise will inevitably be a magnet to new business and investment, especially those which support innovation in emerging industries such as the life sciences.
- Transformative Project. Harvard acknowledges that the level of development proposed in the IMP will greatly change the existing N. Allston neighborhood. As a consequence, as part of Harvard's cooperation agreement for its new Science Complex, Harvard agreed that prior to its filing of the IMP and, in conjunction with the Harvard North Allston Task Force and the Authority, it would evaluate options for a commensurately transformative project in North Allston/North Brighton which might include any of the following: a community school, a university-assisted school, or a community center in the neighborhood. Further, Harvard acknowledged that it was fully committed to funding and continually supporting a public/private partnership that would result in a community-based transformative project.
- **Mitigation of Development Impacts.** The impact of Harvard's proposed development on the N. Allston neighborhood and the City of Boston brings with it a responsibility to help meet the increased demand for neighborhood services, housing, public safety, and other infrastructure needs that will be required to support the University's development.
- Opportunities for Early Implementation. The Allston-Brighton, Boston, and the Harvard communities will all benefit from the improvements that will come with Harvard's investment in the campus and neighborhood. When feasible, public benefits and public realm improvements—especially those outside the IMP area—should be implemented early within the timeframe of the IMP.

Direction and Interim Steps

- Planning for All Harvard-Owned Properties in Allston. There is a need for both a short- and long-term strategy for the management and development of University real estate in Allston, regardless of its status in the IMP or its location (i.e., within or outside the proposed IMP Area). This strategy should include uses, such as housing, retail, commercial, and open space.
- **Survey/Needs Assessment**. Harvard shall complete the Survey/Needs Assessment (S/NA) as agreed in the cooperation agreement for Harvard's Science Complex. The results of the S/NA will be a key component of the community's near- and long-term planning for its own "master plan of community benefits" and should inform the community benefits proposed in Harvard's IMP.
- Service and Infrastructure Requirements. Earlier sections of this scope instruct Harvard to coordinate with city agencies to assess the impact of Harvard's campus development. (See Sections: V. Transportation; VII. Utilities and Infrastructure; X. Public Safety). As part of this coordination, Harvard should develop a plan to meet the increased city service and infrastructure needs that the new Allston campus will generate.

• Partnership Proposals. Harvard shall initiate planning between City agencies and academic programs and offices within Harvard University to inform partnership proposals. It is the expectation of both the Authority and the various City agencies involved in the review of this proposed development that Harvard's engagement with the community and the City will require input and ideas from all sectors of Harvard's academic and applied programs. During the development of the IMP, Harvard should continue to reach broadly across its colleges and institutes to engage individuals with expertise in the full spectrum of neighborhood and City priorities. The results of these conversations should inform many of the partnership proposals that will be included in the IMP.

- Achievement of Principles and Strategic Goals in IMP. Identify how principles and strategic goals for Allston are accomplished through the proposed development in the IMP. Many neighborhood and city objectives for the N. Allston-Brighton—especially around open space, public realm, and transportation—will be addressed though the development of the campus within the IMP Area. Summarize how the IMP meets these goals, and provide detailed information of the deliverable public improvements or community benefits that are accomplished within the IMP.
- Achievement of Broader Principles and Strategic Goals. Identify how principles and strategic goals for Allston are accomplished by planning for Harvard properties west of the IMP area. The goal of the BRA's Community-Wide Planning (CWP) process is to identify a wide range of planning and development strategies for the Allston-Brighton neighborhood, including properties owned by Harvard outside the IMP. Describe Harvard's intentions for the short and long-range use of its properties in the Allston-Brighton neighborhood outside the IMP area and the extent to which the uses planned are consistent with the recommendations that emerge during the CWP process. Please provide more detailed information on any properties where Harvard wants its proposed uses to be considered part of the public improvements or community benefits associated with the IMP.
- Partnership Strategy. Propose strategy for implementing significant new partnerships with the Allston-Brighton community and the City of Boston. The IMP should articulate a strategic framework for engaging Harvard's academic expertise, economic strength, and human resources with both the neighborhood and the City. That framework should focus on meeting neighborhood needs and furthering key city priorities. For the neighborhood, partnership priorities can be found in this Section's preamble describing the community's "master plan for community benefits." City priorities include: economic growth (especially in the life sciences), K-12 education, housing, sustainability, public health, workforce development, and community-based learning and research. In addition, Harvard should identify the ways that it can enhance opportunities to link the local business community to the existing operational requirements of the university and to the expanded business and service needs that will result from future campus growth. The City is particularly interested in working with Harvard to develop city-wide strategies that could be piloted in Allston, or model partnerships that could be replicated with other universities across the city.
- Enterprise Campus. Describe Harvard University's role in developing an "enterprise campus" in Allston. Recognizing that the vision for Harvard's campus is long-term and its time frame extends well beyond this IMP, this first stage of development nonetheless provides the foundation for a future campus that reaches across academic and private research sectors. This IMP should describe the role of Harvard University during Phase I

and the potential impacts of the major components of the campus development that could support business development and incubation, public-private partnerships, and other innovative R&D models.

- Transformative Project. Fulfill the commitment to supporting a "transformative project" in the N. Allston neighborhood. As part of Harvard's cooperation agreement for the Science Complex, Harvard agreed to support a transformative project within the community. The IMP or associated documents (e.g. the Cooperation Agreement) should identify the proposed project and commitments by Harvard to developing and managing the project.
- Mitigation Strategy. Specify other mitigation strategies to meet increased needs in public safety, infrastructure, and transportation. For those neighborhood and city safety, infrastructure, or other obligations that will not be addressed directly through planned development of Harvard property or community partnerships, specify Harvard's intended strategy (i.e., financial contributions, maintenance agreements, etc.) for supporting the city's delivery of these services.
- **Implementation Plan.** Summarize full benefits implementation plan and schedule. Provide an outline for a proposed benefits and implementation plan which specifies:
 - Proposed commitments.
 - Implementation strategy (i.e., Harvard or CBO as developer, partnership with city, etc.).
 - Timeframe for delivery.
 - Preliminary resource plan in support of commitments.

For those items requiring additional consultation with the city or public process, provide a suggested process and timetable for resolving outstanding issues.

XV. CONSTRUCTION MANAGEMENT

The magnitude of construction anticipated in a relatively small area calls for a "construction management master plan" to guide implementation of the proposed development.

Principles and Strategic Goals

• Maximize Efficiency and Minimize Impacts. New development will bring benefits to North Allston/North Brighton, but residents, businesses, public and private infrastructure, and other key components of the neighborhood must be protected from undue construction impacts during all phases of implementation. A comprehensive "construction management master plan," to be complemented by project specific construction management plans, is an important tool for Harvard and the City of Boston to maximize the efficiencies of the construction process and minimize local impacts.

Submission Requirements

Comprehensive Construction Management Plan. The IMP shall describe, for each
phase of the development program, Harvard's anticipated construction management
protocols, including locations for construction worker parking and construction staging, truck
routes, anticipated road closures, and other key elements. The IMP shall describe outreach
mechanisms that build on the success of the construction management experience of the
Science Complex.

XVI. OTHER CONSIDERATIONS

• **Public Notice.** Harvard will be responsible for preparing and publishing in one or more newspapers of general circulation in the City of Boston a Public Notice of the submission of the IMP to the BRA as required by Section 80A-2. This Notice shall be published within five (5) days after the receipt of the IMP by the BRA. In accordance with Article 80, public comments on the IMP shall be transmitted to the BRA within sixty (60) days of the publication of this notice. A sample form of the Public Notice is attached as Appendix 3. Following publication of the Public Notice, Harvard shall submit to the BRA a copy of the published Notice together with the date of publication.