



Date: September 16, 2016

To: CRA Board

From: Tom Evans, Executive Director

CC: Cambridge Planning Board

RE: MXD Infill Development Concept Plan and 145 Schematic Design

The Cambridge Redevelopment Authority (CRA) staff and design review consulting team, alongside City of Cambridge (City) staff, have reviewed the Infill Development Concept Plan submission (IDCP) from Boston Properties along with a schematic design review packet for the first phase of proposed development at 145 Broadway. The IDCP is a new form of planning document designed to fulfill the Special Permit requirements under Article 14 of the Planning Code, Chapter Five of the Kendall Square Urban Renewal Plan (KSURP), and the Concept Plan requirement under the Development Agreements for Cambridge Center. For each of these requirements, the IDCP is intended to provide the City and the CRA with a thorough review of the MXD District as context to evaluate the proposal for additional development within the district. The IDCP therefore goes well beyond the requirements of previous Cambridge Center Concept Plans.

The CRA staff review is focused on the adequacy of the IDCP submission toward meeting the KSURP objectives and evaluating the proposal through the design principles of the KSURP. Attached to this memo are design review notes from the CRA's urban design consultants Larry Bluestone and Charles Redmon. City staff will also distribute a set of initial comments related to numerous topics including traffic and transportation, infrastructure, environmental sustainability as well as urban design, which will be presented to the Planning Board and the CRA Board at the upcoming Joint Meeting on September 20, 2016.

In order to implement the IDCP, the CRA will need to amend the Development Agreements for Parcel Two and Parcels Three and Four of the KSURP to accommodate addition Gross Floor Area (GFA) as well as revise the design review procedures. There may be other elements of the agreement that should be modified in order to better implement the project, which will be explored with Boston Properties. It is the goal of CRA staff to bring forward an amended Development Agreement for consideration concurrently with final approval of the IDCP.

Overview

The IDCP, submitted by Boston Properties, proposes over one million square feet of new commercial and residential development within the lower density portion of the MXD District, primarily within Parcel Two. Through three phases of development, Boston Properties plans to build 613,000 square feet (SF) of office development and 420,000 SF of multi-family residential. The project includes active retail space within new

buildings along Broadway and Binney as well as potential locations for ground floor retail retrofits to existing buildings. The IDCP also proposes re-positioning a significant portion of the 255 Main Street building as Innovation Space. Finally the IDCP reserves 14,000 SF of GFA to be utilized by the Broad Institute at 75 Ames Street to convert mechanical space within their occupied floors of the building into office space.

The phasing and massing proposed in the IDCP is notably different than the project described in the 2015 Environmental Impact Report (EIR). The CRA sponsored a Notice of Project Change to analyze this revised project arrangement, the marginal increase in density that reflect revisions to the MXD Zoning made late in 2015, and to advance the Kendall Square Transit Enhancement Program (KSTEP). The IDCP design has undergone various refinements over the course of 2016 through numerous CRA Board meetings and community forums including a pre-submittal meeting of the Planning Board and a community open house this summer. The CRA staff has reviewed the new urban design proposal extensively and believes that the urban design presented in the IDCP is a significant improvement over the 2015 EIR Plan.

Overall, the IDCP conforms with the KSURP goals and requirements and the Article 14 MXD Zoning regulations, and addresses many of the concerns presented by the community over the past two and half years of planning for the MXD District. Many revisions to the land use program were made to meet modification to the KSURP Amendment and MXD zoning petition, which included enhanced affordable housing and innovation space requirements. The CRA staff is generally supportive of the proposal, and offers the comments below as refinements to the proposal for the benefit of the Project Area. Staff looks forward to hearing from the CRA Board, the Planning Board and City staff to provide additional comments and direction to assist with the review of the proposal.

Urban Design

The IDCP submission benefits from the involvement of a diverse design team. Staff believes the use of three individual architecture teams at this point in the design process, with the coordination of an overall master plan team, has created a correspondingly diverse set of building designs within the MXD District. As described above, CRA staff find the evolution of the proposal highly beneficial to the urban design of the area and responsive to feedback thus far in the project. Particularly noted was the revision to maintain the open space on Broadway. Concerns had been raised regarding the bulk of the original garage building proposal and the shadow impact of a new building along Main Street upon the Green Garage Roof Garden on Parcel Four. The IDCP proposes a set of more articulated building masses that include vertical elements, major massing shifts, and articulated ground floor treatments that overall present a richer design framework. Consistent with the MXD Zoning, the location of the tallest buildings on the north side of the Broadway Park and Broadway on Parcel Two limit their solar impact on the key public spaces of the block.

The design for 'Commercial Building A' at the corner of Broadway and Galileo Way presents an interesting, dynamic massing proposal. The building addresses the Broadway Park with a series of multi-level interlocking bays creating multiple façade angles facing the open space and street. This intersecting massing element along with a distinct vertical building element has been well received in public discussions to date. Staff has heard feedback that the Galileo façade does not address the intersection

enough, and instead may be felt as a symbolic wall toward the neighborhood. While the strong vertical treatment does create a landmark, it could be modified with another puncture or two of the interlocking bars into the façade to break up the shear element of the building facing west. The CRA staff looks forward to the discussion of the Board regarding this building design, which is detailed in a separate design submission and further reviewed in the accompanying memos from Charles Redmond and Larry Bluestone.

'Commercial Building B' uses the triangular shaped parcel to create an interesting building shape without simply extruding the lot dimensions vertically. The massing proposal reflects a human-scale toward the Sixth Street Walkway, but perhaps to the detriment of the broader east facing elevation. The north elevation presents three distinct façade elements that break down the scale of the building facing Binney Street. Suggestions have been made that the massing could include deeper, more dramatic stepbacks on the upper floors. Additionally the positioning of an overhang above the retail façade may limit the success of that space. The northern portion of the west elevation faces the small pocket park and future Binney Street Park, and should present an opportunity to emphasize the visual link between these public spaces and the building.

The southern residential building has a slim profile over the garage, and utilizes the 350-foot height limit to present a vertically oriented façade to Broadway. In early reviews, CRA Board members had questioned the design of a housing project sitting in isolation on top of a parking garage. The IDCP has responded to these concerns by removing a significant portion of the garage to bring residential uses down through all the floors facing Broadway. Staff also recognizes the proposal to create a roof top amenity space as an interesting concept to explore. CRA staff would ask the design team to incorporate individual balconies as well, to take advantage of the GFA exemption for such space, to contribute toward the project's open space requirements under the KSURP, and to introduce recognizable human scale elements to the building elevation.

The design of the northern residential building picks up the vertical slots of the taller southern residential structure to provide a relationship between the buildings. In further design review, the visual relationship between the two buildings through the façade articulation and the treatment of the buildings skin materials should be evaluated. The northern residential building includes a small retail element that would complement the pocket park and work to build a node of activity in this area of Binney. Staff will look for more details regarding the treatment of the northern facade, as the IDCP presents some seemingly conflicting information regarding how much parking versus residential uses make up the frontage on Binney Street.

Innovation Space, Retail and Housing Plans

The first phase of the IDCP at 145 Broadway seeks to meet its Innovation Space requirement, and further utilize the square footage exemption in the MXD District, by providing Innovation Space in 255 Main Street. The CRA staff believes this is an exciting opportunity to enliven the corner of Main and Third Street at Galaxy Park. The CRA requests more information regarding the Innovation Space proposal to accompany the submission including any entryway or façade renovations, programmatic organization of the Innovation Space, and details on the below market program. The

programmatic restriction and oversight of the innovation space performance may be a topic to be considered within the Development Agreement.

The Retail Plan provides a very comprehensive overview of ground floor conditions in the Kendall neighborhood. The illustration of potential retail locations within existing buildings is a helpful step towards filling gaps along the key existing retail corridor on Main and in the future, Broadway. The description of existing conditions would benefit from clarifying geographic boundaries between the market analysis, the maps, and the composition analysis from Graffito SP. The attached design discussions explore design options to enhance the retail footprint location within 'Commercial Building A'. The Retail Plan should also provide details or a cross-reference to other sections of the document, describing how the active street frontage requirement in the MXD Zoning is being met, how retrofitting existing buildings may contribute to that requirement, and whether the proposed retail spaces are to be designed and programmed as exempt commercial space. The description of retail retrofits does not provide a written update on the Main Street retail opportunity illustrated in the plan document, which could become a synergistic redevelopment opportunity with the innovation space.

Consistent with the goals of the recent KSURP Amendment, the IDCP adds to the intensity of neighborhood activity in the MXD District and increases the portion of housing within the project area. The IDCP proposal will deliver significant below market housing opportunities to Kendall Square and outlines the potential range of housing unit distribution that would meet the housing requirements of the KSURP and MXD Zoning. CRA staff is encouraged by the early delivery of a significant portion of the housing program, including the home ownership opportunities. The additional residents will provide significant activation of the project area, especially in evenings and weekends. This should help support existing and new retail. The new residents will also require a more diverse retail portfolio to meet more of their regular daily needs.

Open Space

The open space enhancements presented in the IDCP have been an item of extensive discussion over the past year. The addition of the bicycle path along the Sixth Street Walkway, the addition of seating areas and the east/west connections to the walkway have been for the most part well received. Multiple schemes of the Broadway Park have been reviewed as Boston Properties seeks to create a more engaging public space. The current proposal reflects feedback to increase porosity through the park and to create a distinct transition between the residential building and the publicly accessible park space. The water feature is a welcomed element, proposed to create a functional link between the residential building and the public space. The play structure in the northern park near Binney is an interesting activation concept that fulfills the goal of adding play into a broad spectrum of public spaces. Final concepts for the park designs, especially related to materials and furnishing are expected to be an element of future design review along with the corresponding phase of vertical development.

CRA staff recognizes the complex layers of open space requirement within the combination of the MXD Zoning and the KSURP. Staff will need to review the open space calculations related to the KSURP requirements with Boston Properties in more detail. Of on-going consideration in discussions to date is the utilization of the green roof on the North garage as open space, and how public that space may become versus utilized as an amenity for the residents. The CRA would like to explore with Boston

Properties, and other property owners in the MXD District, options to enhance the public realm throughout the district as presented in some earlier design discussions.

Parking and Transportation

The CRA staff encourages Boston Properties to assess the need for five floors of below grade parking in both buildings, even though this increase in 804 spaces is less than the maximum allowance under the zoning. The potential approval of the IDCP by the City could allow for a vehicular parking reduction if future conditions warrant it. On the other hand, the CRA is aware that demand for transient parking may increase at a rate greater than permanent commuter spaces as these users are more difficult to shift to other modes. Staff expects that maintaining a portion of visitor parking for the district be reflected in final parking management plans.

The IDCP describes bicycle parking locations in significant detail for the proposed buildings. Further study should be undertaken to improve the transportation routes for bicyclists to and from the designated long-term parking areas within each structured parking facility. Notably, CRA staffs believe the residential building should find a significant area on the ground floor for regular bike users to avoid extensive demand for the designated bike elevator and/or bicyclists riding through multiple levels of the garage.

The IDCP site plan services all the proposed buildings off the existing service drives which is tremendously beneficial to the streetscape of the surrounding public streets. The IDCP mentions improvements to the east and west service drives for pedestrian travel, and greater detail of these accommodations should be provided within future landscape designs. These service drives should be carefully planned to accommodate all roadway users, safely as they access parking and building entries.

The CRA has led the multi-jurisdictional effort to develop and fund the Kendall Square Transit Enhancement Program, described in the IDCP as an element of the TDM plan. The CRA appreciates the suggestion, as described in the MOU, that parking prices could provide other funding mechanism for transportation mitigation costs. The IDCP should also recognize the commitment of the CRA to continue to monitor and report traffic and transportation data as described in the MEPA documents. The CRA expects to work closely with the City to refine the transportation improvements, originally outlined in the EIR and described in broad terms in the IDCP. Finally the open space illustrations and circulation plans should conceptually acknowledge the streetscape planning effort current underway for Binney St, Galileo Way and Broadway.

Conclusions

The Staff review thus far finds the IDCP to be a very informative and well-designed document. The format allows the reader to clearly understand the new development proposal and includes a broad range of design and environmental analysis along with clear descriptions of the development program and phasing. The concepts for new development proposed reflect extensive discussions to date in various forums that have contributed to an evolved and improved plan. With the addition of a few submission elements discussed above and the clarification of some of the design materials, Staff feel that the IDCP will have fulfilled the IDCP requirements in the MXD. There is certainly enough information in the submission for the Board to actively review the major

project concepts and discuss the projects contributions to and impacts on the community.

Although not substantially affecting the implementation of the development project, CRA staff note that the History section of IDCP would benefit from a short discussion of the K2 Planning Process and the evolution of the Kendall Square area as a mixed-use district over the past decade. It should also describe the amendment to the KSURP and the MXD zoning petition which allowed the increase development envelope, created the Infill Development Concept Plan procedure, and strengthen many public benefit requirements within the MXD including retail requirements, increased affordable housing, expansion of innovation space, and enhanced sustainability thresholds.

Staff expects that the CRA Board should reflect on the 145 Design submission along side the IDCP as the submission provides a proposed template for the level of schematic design materials expected during future design review within the MXD. As the architectural design for this building has advanced ahead of the other buildings in the IDCP, the CRA and Planning Boards has the benefit of reviewing more detailed information for this massing treatment. Refinements to the ground floor program have been a focal point of design review thus far. The need to look closely at the more advanced design for some of this discussion provides a measure of what level of design resolution can be expected from the IDCP and what refinements should be made at the next phase of review. As the integrated review procedure is a new and unique element of the MXD District, CRA staff will look to the Board to provide some guidance on the process as well as the material substance of the proposal.

Attachments:

- MXD Infill Development Concept Plan Review by Larry Bluestone
- 145 Broadway, Commercial Office A, Design Review Submission by Charles Redmon

To: Tom Evans (CRA), Jason Zogg (CRA)

From: Lawrence Bluestone, BPG

Re: Design Review of 'MXD Infill Concept Development Plan', North Parcel, issued 9 August 2016
[Submitted by Boston Properties; Prepared by Sasaki and VHB]

Date: 12 September 2016

Introduction

Boston Properties is proposing a phased infill development project on The MXD District's North Parcel for two new significant residential buildings, two new commercial office/lab buildings, and additional retail space. These four new North Parcel buildings, together with the Broad Institute conversion of some mechanical space to office space on Ames St., will add a net new 1,066,500 GFA, (or 940,000 net GFA once certain exempt GFA uses are taken into account) to the Kendall Square MXD District. This project will also add a net new 809 of underground parking spaces.

These significant new development projects, together with enhanced public open spaces, plazas and walkways, promise to bring significantly more opportunities for needed rental and ownership housing (including 20% affordable), commercial activity and jobs, and start-up innovation incubator space. Importantly, this project will also significantly increase enlivened ground-level street frontages and pedestrian activity around the North Parcel by providing more retail spaces, improved programmed open spaces, walkway/bikeway, and a public plaza.

The addition, in particular, of a significant amount of new housing will continue to contribute to the positive evolution of the MXD District and Kendall Square as a whole from a primarily business and research center into a genuine neighborhood.

The submitted Infill Development Concept Plan largely conforms to a decade of new planning guidelines for the area – including the City's K2 Plan and Guidelines, the revised Kendall Urban Renewal Plan (KSURP), recently-approved Zoning Amendments, and the approved KSURP SEIR.

Below is provided a planning and design review of the Infill Concept Plan.

Building Program and Compliance with Regulations

Based on the information and calculations provided in the Infill Concept Development Plan submitted by Boston Properties, the current development proposal appears to comply with square footages and maximum heights allowed by the recent MXD zoning amendments, the amended KSURP, and SEIR approval. [See calculations provided on pages 24-27 of the Infill Concept Development Plan.]

In summary:

Project GFA: 1,207,712

Less Existing GFA: (141,212)

Less Exempt GFA: (126,500)

Net New Infill GFA: 940,000

North Parcel - Overall Building Scale, Massing, Heights and District Gateways

The new infill buildings proposed for the North Parcel will bring a new intensification of scale and new building heights to Kendall Square - all in accordance with the newly approved provisions of the amended KSURP, MXD Zoning Amendments, SEIR and K2 Study Guidelines.

Of the four new buildings proposed, the two tallest buildings are appropriately located along Broadway on the southern edge of the site, thereby minimizing the length of shadows cast northward on East Cambridge. The new proposed buildings also reinforce and strengthen the street lines along Broadway and Binney (with the setback exceptions of the Blue Garage and the North and South Residential Buildings atop it which are provided to create enlivened public parks on both Broadway and Binney) in order to create well-defined urban street edges. It is likely that the tall slender 350 foot high South Residential Building will become a landmark on the skyline of Kendall Square.

Recognizing the importance of the newly enhanced Sixth Street Walkway / Bikeway as a major pedestrian connection and valuable passive open space amenity, the new Commercial Building B building adjoining this Walkway, scales or steps down in terraces to lower building heights on the Walkway side.

The massing, scale and architectural design of the proposed new Commercial Building A at the gateway intersection of Broadway and Binney is innovative. However, it should also better reflect this major 'western gateway entry' to the entire Kendall Square redevelopment area as seen by visitors, residents, and workers approaching Kendall Square down Broadway from the west. (Comments will follow about Commercial Building A's design as a suitable gateway.)

Additionally, the upper floors massing of Commercial Building A appear to cantilever out over a portion of the West Service Drive on some drawings but not others. This discrepancy should be clarified.

North Parcel Architectural Building Articulations, Design, Context, and Materials

The preliminary building designs for the North Parcel are generally taller than their surroundings in accordance with dimensions and densities allowed and encouraged by newly-adopted zoning and urban renewal plan amendments. They are intended to be well articulated, well proportioned, and made visually interesting. The South Residential Building, for example, due to its successful articulations and tall height appears elegant and slender. Commercial Building B along Binney St. is articulated to properly scale down in stepped heights and terraces on its east façade as it adjoins the pedestrian Sixth Street Walkway. These two examples succeed on these points.

The all glass design of Commercial Building A at the western entry gateway to Kendall Square from Broadway, is boldly and interestingly articulated to reflect its possible corporate headquarters tenancy status. It potentially promises to be a distinguished addition to Kendall Square. However, it can perhaps be even further improved to both better reflect this key gateway location as experienced from the west, as well as better relate to the scale of its established context of nearby adjacent existing buildings. The K2 design guidelines suggest means by which newer larger buildings, even such distinctively designed ones as Commercial Building A, can be designed to better relate to the existing context of adjacent buildings as well. These Guidelines should be referred to again in order to help better articulate new building designs such as this one.

For example:

- *Base, Middle, Top Guidelines:* The K2 Guidelines suggest that new buildings be designed with a vertically tri-partite articulation of base, middle and top. The scale and height of the base portion of a new building, in particular, can help tie a new building into its street context, relate to less tall surrounding building cornice or roof heights, and reinforce the street wall.

Commercial Building A's articulated and jutting wedge forms - particularly on its Broadway façade on the lower floors - do not at present relate in scale or height to nearby existing buildings.

Contextual Base Height Datum Line: A base datum street wall height of about 70 to 85 feet would relate better to the 105 Broadway building to the east side of Broadway Park and the adjacent building to the north on Binney Street. If this base datum height were adhered to, a common building base height for a row of buildings would begin to emerge on both Broadway and Binney, thereby better relating new to old. Above the base height, the strong building articulated forms of Commercial Building A could still be utilized. [See previous Sasaki axonometric massing drawings entitled Adaptations to Article 14 – Approaches A, B and C to see where such an 85 foot base height datum line (or base cornice line) is suggested along Broadway.]

- *Corner Gateway Design:* The glass western façade of Commercial Building A on the Binney St. side is largely flat, unarticulated, tall and wide. It is perhaps designed to be a calm counterpoint and mass to the strong jutting forms on the Broadway façade. However, the Binney Street façade at the key intersection with the corner of Broadway, is the 'gateway' location and 'front door' to the entire new development for motorists and pedestrians approaching from the west on Broadway. As such, its broad flat and minimally articulated facade now visually reads as a large wall that that does not signal 'welcome' or signify 'gateway'.

Therefore, this western façade, and particularly the corner of this facade at Broadway and Binney, needs to be increasingly articulated to read as a significant gateway. Perhaps, additional form articulations on the Binney façade, such as the one that is now provided at upper levels, can be repeated down the full length of the façade. This would help the corner read more as a gateway corner. Other design options are of course possible as well to read as 'gateway'.

- *Exterior Building Materials Palette:* The new North Parcel buildings primarily appear to utilize glass as their primary exterior building material. This helps signal 'new' and 'modern'. However, the architects of these new buildings may want to consider adding-in a mix of masonry materials (tile, terra cotta, stone, etc.) as well to the largely glass material palette, particularly at the base portion of these buildings. Such addition of masonry materials would help better visually relate to existing adjoining or nearby masonry-clad structures, to provide street continuity, and to add warmth, color and richness. [See the Broad Institute's Ames Street building for its mix of glass, masonry and terra cotta, as one example.]

District-Wide and North Parcel Retail Strategy

From the beginning of the development of Cambridge Center and Kendall Square in the late 1970s, Main St. was identified as the primary retail destination, particularly near Kendall Station. To date, the strongest retail use activity has been food service destinations. As the Kendall Square neighborhood has matured, Ames St. and Third St. have also begun to flourish as significant retail / food destination corridors. And, portions of Broadway have slowly developed some retail potential. To date, retail activity on Binney Street has been minimal.

With the planned infill development of the North Parcel, and the eventual redevelopment of the Volpe site, Broadway also has a good chance of redeveloping as a strong retail corridor. And, even Binney Street, with all the office/R&D redevelopment activity there in recent years, has future potential.

Ultimately, the increase of housing supply in the area will allow and support significant additional retail growth.

Ultimately, the goal of new ground floor uses provided at the base of new buildings at the North Parcel, urbanistically speaking, should be to maximize retail / food service activity both directly along street frontages and around the perimeter edges of both Broadway Park and Binney Park, to the extent feasibly possible. Building entry lobbies, while also providing some degree of activity flow, contribute less to street life and are perhaps more limited in their operating hours.

Boston Properties is now proposing to enhance retail / food service activity along Broadway by providing new ground level space in Commercial Building A, largely along the western edge of Broadway Park, along approximately half the length of Broadway itself, and turning the corner along Binney Street. These new retail spaces will increase activity along Broadway and Binney, and support a more lively edge to Broadway Park and Binney Park.

BP is also proposing some new retail activity along Binney St. at the base of both the North Residential Building and Commercial Building B. The retail space in Commercial Building B will turn the corner from Broadway and also adjoin the Sixth St. Walkway as well. These are all welcomed additions to the MXD District's street life.

Recommendations to further strengthen retail activity:

- BP should consider reconfiguring and expanding its retail space layout in Commercial Building A and adding a small retail space at the base of the South Residential building. (See discussion in the next section.)
- The provision of new retail space along Binney Street and the Sixth Street Walkway's edge is to be supported and encouraged, but, if built today, may be difficult to lease. Therefore, these proposed retail spaces should be designed and built to accommodate retail uses, but may first have to be leased for other purposes.
- For many years, there has been an expression of need for a grocery store and CVS-like pharmacy in Kendall Square. Apparently, MIT is seeking such tenants for its proposed development south of Main St. Therefore, BP suggests that it will not try to provide retail spaces of sufficient size for these uses so as not to compete with MIT's leasing strategy. However, MIT's eventual success in attracting such retailers is not necessarily assured. Therefore, BP, in its North Parcel retail plan, should identify where these type of larger retailers may be accommodated, if possible, should MIT's retail leasing efforts fall short. If such larger retail spaces are not needed on the North Parcel due to MIT's success, they can be subdivided into smaller retail spaces.
- As suggested in the Infill Plan, eventually ground level space in the existing 105 Broadway building adjacent to the east side of Broadway Park should be eventually re-purposed for retail space as well as ground floor space on the south side of Broadway in the 150 Broadway (Akamai headquarters) building. In both these buildings, because of elevated first floor grade levels, accessibility ramps from the sidewalk may be necessary to convert them to active street edge storefronts.
- [Although *not* part of this Infill Concept Development submission, the block of Main Street, between Ames Street and Binney, has never fulfilled its retail or activity potential because of the relatively inactive uses installed on the ground floors of the Broad Institute, MIT's Koch Center, and the setback of the Whitehead Institute. Now that Whitehead plans to expand out

to Main Street, the CRA should reopen discussions with the Whitehead, the Broad Institute, and MIT to add retail space to their respective ground floors.]

North Parcel Ground Level Pedestrian Activation and Pedestrian Network Plan

With planned new walkways, bikeway, enhanced parks/plaza, and east-west pedestrian connections, together with increased retail opportunities, street level activity, particularly along Broadway, will be greatly enhanced and will contribute to the conversion of Broadway and Binney St. sidewalks to more lively street environments.

As described in the Infill Concept Design submission, the main components of this more lively street and open space environment will be: 1) the revitalized Sixth Street walkway and new separated Bikeway; 2) the three improved east-west pedestrian connections through the North Parcel; and of course 3) the new renovated Broadway and Binney Parks which will become much more lively and programmed - by the park designs themselves and by increased surrounding activity.

Even more importantly however, the newly provided retail spaces on 1) Broadway and adjoining the western edge of Broadway Park, 2) Binney Street and adjoining Binney Park, and 3) the Walkway will all significantly enhance the pedestrian experience.

However, there may be even greater opportunities to use retail space to activate both Broadway and the edges surrounding Broadway Park:

- First, BP may want to reconsider the layout of retail spaces at the base of Commercial Building A. If the office lobby is moved to the center of the Broadway frontage instead of at the southeast corner of the building where it is now illustrated, that southeast building corner adjoining Broadway Park and Broadway could become active retail space as well, thereby providing a greater perimeter of retail space along both the western edge of Broadway Park and Broadway street itself. To achieve this, the size of the office lobby can be reduced in size, or it can be designed to incorporate food service activity within it along the Broadway street edge.
- There may also be greater opportunity to include a new small retail space in the South Residential Building adjoining the northern edge of Broadway Park where there is none now – thereby providing a more activated park space. As currently illustrated, the South Residential Building is accessed by two separate residential lobbies adjacent to the park – one for tenant residents and one for owner residents. Presumably, these two lobbies are provided for marketing reasons. However, this marketing strategy may not be necessary – given the high prices for both ownership and rental units, and the fact that many ownership units may be bought by investors who will rent them in any case – thereby creating a distinction without difference. Therefore, a strong argument may be made to consolidate these two lobbies into one, thereby providing additional room for a new small retail space.

North Parcel Public Open Space Plan and Area-Wide Open Space Network Linkages

The North Parcel's publicly-accessible open space and pedestrian linkage plan consists of: Broadway Park, Binney Park, Sixth St. Walkway pedestrian and bike path, activated street sidewalks, three improved east-west pedestrian through-block connectors, and the pedestrian sidewalks along the two north-south Service Roads. All these new or improved amenities enhance the North Block, but also link with the surrounding areas open space and pedestrian network. The change along Broadway from a previously proposed enclosed 'Winter Garden' to a new outdoor Broadway Park is particularly welcomed since the Winter Garden could have easily been perceived by the public as privatized space.

Additionally, a privately accessible Green Roof/Amenity Deck will be provided atop the Blue Garage to serve residents of the South and North Residential Buildings.

- BP and the CRA should attempt to communicate and coordinate with the GSA and USDOT to align future east-west pedestrian linkages or streets across the Volpe site, if possible, with the east-west pedestrian walkway alignments across the North Parcel.
- BP and the Authority should, as the Infill Plan suggests, work with the City to provide a pedestrian crossing across Broadway linking Broadway Park to the Danny Lewin Park on the south side of Broadway.
- The north-south Service Roads and their adjoining sidewalks will continue to be utilized as north-south through-block pedestrian connectors. However, the existing trees immediately abutting the Blue Garage facades will be removed due to their poor condition, and are not planned to be replaced. These trees have helped visually soften or screen the appearance of the garage facades along these pathways, thereby making these service roads more visually friendly to pedestrians. Although enhanced tree plantings and landscaping are proposed for the 'outer' sides of these Service Roads, BP should also consider other means to soften the visual appearance of the Blue Garage facades. Perhaps intermittent 'green walls' on the facades of the garage, as previously contemplated for the stair towers of the Green Garage should be considered, or perhaps mesh screens.
- There may be an opportunity to provide limited public access and usage of at least the center portion of the upper level Green Roof/Amenity Deck atop the Blue Garage, such as is done on the existing garage roof deck on Parcel 4. This public portion of the Green Roof would have to be designed and managed (e.g. daytime hours access only, etc.) to provide privacy for residents in the two adjoining Residential Buildings. However, such designs could be accomplished. This option should be discussed with BP. To attract the public to the rooftop, perhaps a seasonal coffee bar or other programmed activity(ies) may have to be provided.

North Parcel Auto Circulation, Drop-Offs, and Parking Access Plan

- Proposed auto circulation around the North Parcel, and particularly vehicular access to the Blue Garage, continues to rely on the long-established one-way circulation system of a dual North and South Service Road system.
- Parking access to the new underground garages beneath Commercial Buildings A and B also will rely on access from the existing North and South Service Roads. As designed, they are relatively well hidden from adjacent pedestrian areas.
- Although there is a net increase in total parking spaces on the North Parcel, there will be a reduction of spaces in the Blue Garage itself, which is now used for public parking as well as tenant parking. Therefore, public visitor parking will probably become less available. Although auto trips to Kendall Square are discouraged as public policy, BP should clarify whether all three North Parcel garages will be open for public parking as well as tenant parking. And if so, will the Commercial A and B Building garages be available for public parking at night. Also, BP should clarify how many spaces in the three garages will be solely dedicated to tenants (residential or commercial) to gain a sense of how much public parking will remain available.
- BP should clarify how passenger, visitor, and taxi drop-offs and delivery drop-offs will be provided, particularly to the residential building lobbies on both Broadway and Binney. Will curb drop-off or pull-off spaces be provided on the adjacent streets, or provided along the two Service Roads?

- It is not entirely clear where Blue Garage patrons, as pedestrians, enter the Blue Garage on the Broadway or Binney Street sides. On the South Residential Building site, there appears to be a garage access elevator lobby entrance off to the side of the residential elevator lobby and accessed from the eastern Service Road. Is that correct? It is not clear how patrons enter the garage from the North Residential Building site.

North Parcel Service / Loading Plan

The proposed servicing and loading plans for all of the new infill buildings planned for the North Parcel continue to utilize the existing North and South Service Roads to provide access to loading ramps and docks. In all cases, the proposed loading docks are located so as to be the least possibly visible from nearby pedestrian pathways and building entrances.

- Operationally, BP should eventually submit a service / loading management plan to minimize daytime delivery times and to keep loading dock rolling doors closed for as much of the day as possible to avoid unattractive views into open loading dock areas.

Sustainability Plan

The Infill Plan discusses many laudable measures for providing sustainable designs to the highest level. For example, all buildings will seek to attain LEED Gold certification. Also, the inclusion of a Green Roof atop the Blue Garage, as well as other smaller rooftop planted terraces will also help reduce urban heat island effects.

- The Infill Concept Development Plan mentions exploring District Energy generation sources as well as support for the recently established Kendall Eco District. Despite differences in adjoining ownerships, and some reported reliability issues of energy supply, District Energy plans should be diligently pursued, if feasible.

Potential Design / Environmental Impacts on Neighbors

Four factors in particular have the potential to negatively impact neighbors, particularly to the north. These factors are building shadows, wind, rooftop mechanical equipment noise, and cornice or rooftop night lighting. All of these factors are addressed in the Infill Plan by shadow impact studies, wind analyses, and city ordinances addressing noise and building top lighting.

Construction Period Operations

During building construction, particularly for the residential buildings over the Blue Garage, how will pedestrian access to the garage be maintained at Binney St. and Broadway?

Charles Redmon, FAIA/Urban Design

DESIGN REVIEW NOTES: 145 Broadway, Commercial Office A, Design Review Submission 8/9/16

Date: September 2, 2016

Specific Comments

I reviewed one set of drawings prepared by Pickard Chilton and its consultants for Boston Properties. It was the Design Review Submission, dated August 9, 2016.

In general, I found the drawings to be very professional and complete and should form the basis of an outstanding project design; however, I have the following comments:

Compliance with Kendal Square Design Guidelines:

Architectural Identity

The project's design fulfills these elements:

- A distinctive building identity is created through the use of a unique composition of materials, colors and shapes different from adjacent buildings.
- It helps to reinforce street walls and frame new open spaces with adjacent buildings. It also provides for active ground floor uses and defines major building entry points.
- It conveys the spirit of innovation through its creative building configuration and massing. It also allows for multiple view points into the building that should convey the potential innovative clients inside and has the potential for many multi-media displays.

Scale and Massing

The project clearly displays an interesting hierarchy of building form:

- It has a clearly expressed base, middle and top in its massing.
- It emphasizes the lower first two floors with a different façade treatment to respond to the pedestrian areas around the project.
- Its overall massing strategy is designed to distinguish to four different sides of the building with vertical breaks in the facades. The Broadway façade, in particular, projects a very innovative massing expressing layered building floors defined by offsetting angular forms.
- The east side of the building has been angled to open up sunlight into the adjacent park on Broadway in front to the existing garage.
- Its visual interest is heightened through well-planned vertical façade breaks and the angular over lapping of floors facing Broadway.
- It has a well articulated massing with the potential for multiple usable and/or green roofs.
- The verticality of the building is achieved through multiple distinctive façade materials and treatments.

Ground Floor Design Guidelines

The planning and layout of the ground floor skillfully supports active ground floor uses:

- Active ground floor uses are proposed at the corner of Broadway and Galileo Way.
- A two-story building lobby occupies the building's corner facing Broadway and the adjacent park. It might accommodate additional retail for continuity along Broadway.
- Additional retail and public access to the parking garage and long-term bicycle parking are located facing the park east of the project.
- Multiple exterior public spaces for eating and gathering are located around the ground floor.

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- Concealed parking access ramps, and service areas along north side of the project.
- Canopies over major entries and seating areas could be more generous.
- An additional entry point off Broadway might be provided to the retail space located at the corner of Broadway and Galileo Way.

Comments of Design drawings

These comments relate to the various pages numbered in the submittal:

Pages 7-10: These street level perspectives clearly illustrate the project in its context and shows strong commitment to defining and preserving street wall continuity along Broadway and Galileo Way. However, the image of page showing the building's corner at Broadway and Galileo Way seems to miss an opportunity to help create a "gateway" experience as one enters the Kendall Square area from the west.

Page 11: The top two images show how the project dramatically splays to open up the mini park toward Broadway. They also indicate mini atria located in the southeast projecting floor plates; they serve to further animate the building. However, no atria can be found in the floor plans and sections. This should be clarified.

Pages 12 and 13: Building elevations show a great variety of façade treatments and perhaps introduce a too overly complex composition of façade types. This may want to be revisited. The west elevation could potentially form a "gateway" with the massing of the hotel across Broadway. In doing that, one might consider providing additional cut outs in the façade to both add interest here and pick up the rhythm of the slipped floor plates facing Broadway.

Pages 15 and 16: Basement parking garage is compactly organized; however, the garage elevators could be more centrally located on the floors.

Page 17: Ground level plan provides active pedestrian uses and edges along three of the four sides of the building. However, one might consider adding another retail strip, facing Broadway, where the building lobby entrance is shown and shifting the building entrance to the wider bay under the overhang of the extended office floors above. Building services and parking access ramps to the basement garage seem well screened. An additional retail entrance off of Broadway might be provided to allow for more flexibility for the layout of the large retail area along Galileo way and Broadway. Generous areas for outside seating are provided along Broadway; additional seating areas might also be considered facing the park.

Pages 27-32: Multiple façade types are presented. Again as stated earlier, there may be too many types, thus compromising the simplicity of the overall design. Also the locations of façade types D and E could not be found; this should be clarified.

Pages 33 and 34: Ground level façade treatment. Generally, the expressed two-story base works very well with the overall massing and design; however, the horizontal terra cotta band at the third floor line seems too thin in relationship to visually supporting the overall massing above. This might be studied further. The materials pallet for the above façade treatments is rich and interesting.

Page 35: Ground level circulation paths for pedestrian and vehicles are clear and well organized.

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Page 36: Lighting concepts seem to have great potential for adding to the interest and character of the overall project. They should be integrated with the concepts for street level and landscape lighting.

Page 67-78: Site development and landscape treatment presents a simple, bold concept that is richly developed with soft and hardscape materials and site furnishings

There are no signage drawings describing general building signage and other way finding signs. Also signage guidelines for retail signage should be developed.

BP and its designers should provide material sample boards showing all exterior building and landscape materials as the design process advances.

Overall, I was very impressed with the exciting design of 145 Broadway as presented and look forward to it more detailed development.

A handwritten signature in black ink, appearing to read 'Charm', with a long horizontal flourish extending to the right.

Submitted by: Charles Redmon, FAIA, CR/UD
September 2, 2016