



MEMO

Date: 1/13/2017
To: CRA Board
From: Tom Evans, Executive Director
RE: 145 Broadway Schematic Design

BACKGROUND

Title: 145 Broadway Schematic Design (SD), MXD District of the Kendall Square Urban Renewal Plan
Applicant: Boston Properties
Prepared by: Pickard Chilton
Original SD Submission: 8/9/2016
Joint Planning Board / CRA Board Hearing: 9/20/2016
CRA Design Review Committee Meeting: 10/19/2016
Revised 145 Broadway Submission: 11/22/2016
Second Planning Board Hearing: 12/20/2016
Joint Planning Board / CRA Board Hearing: 1/17/2017

CRA STAFF ANALYSIS OF DESIGN REVIEW RESPONSE

In August, the Schematic Design (Design Review) submission for 145 Broadway was submitted with the Infill Development Concept Plan for the MXD District. On 11/22/2016 the Applicant submitted a revised Schematic Design (SD) document with substantial updates responding to feedback from the CRA Board and Planning Board during the September joint meeting and October Design Review Committee Meeting, and work sessions with CRA and CDD Staff throughout fall 2016. The CRA requested a review of the new submission by its design consultant Charles Redmon, who provided the attached design review memorandum.

CHAPTER 1: CORE & SHELL

The Applicant provided clarifying exhibits regarding the differentiation of each individual façade type and corresponding material selection. Further exhibits detailing an updated ground floor façade treatment and canopies more clearly articulate material types and the overall ground floor scaling. As discussed at the CRA Design Review Committee meeting in October, the updated location of the underground garage shuttle elevators allows for greater façade transparency facing the future Broadway Park and the reduction of the previous overhang on the service drive results in a new angle for the cantilevers at the southeast corner to make up the lost interior space. At that meeting, after a thorough exploration of options, a consensus found that one push through on the western façade was preferable.

Lobby: The Applicant has expressed interest in maintaining the basic lobby size and outline but modifying the interior layout such as fireplace and furniture zones. The CRA finds the current Lobby configuration and size to be acceptable, with feedback that the westward extension of the service corridor south of the freight elevator blocks the view of the retail deeper in the lobby. The Applicant has conveyed the interest of their tenant for a dynamic or interactive display within the lobby related to Internet activity, and CRA staff are encouraged by this effort to activate the interior lobby.

Retail Signage: The CRA will work with the Applicant on the design of future signage when retailers are chosen for ground floor spaces. This will require a separate approval of the CRA Board, and may be subsequent to building occupancy if retailers are not identified by that time.

Entry Canopy: The additional canopies at the ground floor are welcome and elegant, however the geometry and complexity of the entry canopy seems over-designed. The CRA finds the canopy generally acceptable but further refinement of the entry canopy may occur with CRA Staff during the DD phase.

Soffit Material on Cantilevers in SE corner: The most dramatic elements of the form of 145 Broadway are the cantilevers at the SE corner and facing Broadway. Each cantilevered piece causes multiple large soffit exposures that will be highly visible to the eye of everyone at the ground level. Therefore, the soffit treatment is one of the defining visual aspects of the building, and a unique opportunity in Kendall Square to engage the street and future Broadway Park from height. While the soffit materials presented in the revised submission (metal or an engineered wood) are acceptable in the context of Cambridge and Kendall Square, the Applicant has expressed an interest in potentially exploring more unique and interesting visual art options. The CRA would support options for landmark visual art on these soffits, and anticipates further exploration of concepts with CRA Staff during the DD and CD phases of the project.

Transparency / Spandrels on Cantilevers: In the original 3D model, the façade materials in the cantilevered portions of the building at the SE corner suggested a higher level of transparency and significantly fewer painted aluminum caps and panels. This provided a compelling differentiation of these building elements that seems diminished in the current submission. While the CRA staff find the revised façade treatment on these cantilevers to be acceptable, especially if the vision glass is maximized in Wall Type E, it would be interested in further exploring options for increasing the transparent of the façade materials.

Final Exterior Material Selection: The Applicant has presented a range of ground floor materials. Concerns have been raised about the proposed terra cotta panels in the CRA Design Review Committee Meeting. A preference for warmer materials at the ground level has been expressed to serve as a transition from the landscaped areas to the contemporary metallic tower material. Final exterior material selection will occur after a scale mock-up is built and located on-site, per the CRA's Design Review and Document Approval Procedures (DRDAP).

CHAPTER 2: LANDSCAPE

The landscaping has been revised along the west and south edges of the building to eliminate any obstructions for pedestrian access to the future retail facades. Bicycle parking has been better distributed across the edges of the building where the future retail will be, and as a result the east-west connector behind the building has been redesigned. The CRA offers the following remarks:

EZ Ride Bus Stop: EZ Ride bus stop as labeled has landscaping at the curb edge, which is not appropriate for a bus stop. However, the EZ Ride bus stop location may change with the CRA's ongoing streetscape design effort, which may not determine a final bus stop location until March 2017, and bus stop design details until later in the spring of 2017. The CRA expects to work with the Applicant to design details of the EZ Ride bus stop configuration, pavement treatments, and shelter during spring 2017.

6th Street Walkway: The CRA as the owner of the 6th Street Walkway, and as an agency working in the public interest will continue to have responsibility for the stewardship and integrity of the trees on the 6th Street Walkway. The continuing evolution of the Applicant's proposed 6th Street Walkway bike path designs will occur

directly in collaboration with the CRA and move forward with the guidance of the City Arborist. Likewise the CRA will collaborate closely with CDD, TPT, and DPW in the design of this important link the City's Bicycle Plan, and its integration with the streetscape designs. Due to these improvements being on CRA-owned land, the CRA Board will approve the final design of the 6th Street Walkway.

Service Road Edge: The CRA supports the flush pavement condition across to the new future Broadway Park, however the exact detailing of that condition is expected to be further reviewed in the DD phase. The site plan on R2.2 does not clearly show the furniture discussed in the narrative along the length of the service drive that is supposed to act as a passive vehicle barrier. The type of edge provided is also unclear – whether slightly rolled concrete curb, pavers, tactile plates, stormwater grates, or another material. Material details and creative vehicle barriers using furniture or other solutions will be further reviewed with CRA Staff in the DD phase.

Occupied Roofs: In the original September 2016 submission, each of the roofs above each cantilever near the SE corner of the building was labeled as occupiable terraces. The Applicant had requested that within their Special Permit an exemption for commercial balconies and roof spaces similar to that already found in the Article 14 MXD Zoning for residential balconies and terraces. Upon further review, the GFA exemption can only be granted if the area is designed as Functional Green Space under specific parameters of Article 22 of the Zoning Code. The CRA would like to see some of these roof spaces become occupiable terraces for the wellness benefits of employees and vertical activation of the building edge, but acknowledges the constraints of the zoning restrictions on GFA utilization.

Movable Furniture: The Applicant has stated a desire to provide outdoor movable furniture in the nook on the ground floor on Broadway especially if a restaurant tenant moves into part of the retail space. If a restaurant tenant is selected for this area, the CRA looks forward to reviewing their proposed movable seating plan in the future. As described in the design guidelines accompanying the original submission and the IDCP, outdoor movable seating is encouraged and may include umbrellas and other placemaking elements to help create an ambiance that encourages lingering especially in nice weather. It is expected that such an outdoor seating plan will match the boldness of the building form and the Kendall Square innovation ethos.

Landscaping Materials and Planting Schedule: The original 145 Broadway submission from September 2016 outlines proposed species for plantings and landscaping materials palette. The CRA will want to review the final planting schedule and hardscape materials during the DD and CD phases.

CHAPTER 3: SUSTAINABILITY PLAN

The revised submission included an updated LEEDv4 scorecard, a Resiliency Plan, a Pathway to Net Zero Plan and a Ground Source Heat Pump Analysis. CRA has no additional comments in this subject area.

CHAPTER 4: ENVIRONMENTAL IMPACTS

The revised submission shows desktop wind studies and proposed canopies that may be added near the ground floor to mitigate wind conditions depending on the results of the more accurate wind tunnel testing. On 12/15/2016 the Applicant submitted more accurate wind tunnel testing for review.

Wind: A wind tunnel analysis of the proposed 145 Broadway building was submitted to the CRA on 12/15/2016 and shows a single “uncomfortable” zone in the southwest corner of the building near the corner of Galileo and Broadway. CRA expects the Applicant to continue to exhaust all possibilities for wind mitigation in order to find a solution to this condition. While the CRA expects the Applicant to preserve the London Plane trees at this corner,

trees are not considered the best wind mitigation for winter impacts. CRA expects further refinement of the 145 Broadway wind mitigation issue will be pursued during the Design Review process.

CRA STAFF RECOMMENDATION

The CRA Staff recommend approval of the Schematic Design for 145 Broadway with the following conditions:

- The CRA Board will review and approve final schematic design of the Sixth Street walkway, after consultation with the Department of Public Works and Community Development Department staff regarding the final bike path design.
- The CRA Board will review and approve an Innovation Space Program Plan for the conversion of 255 Main Street to meet the Innovation Space Requirements for the GFA of 250 Binney.
- Staff will conduct ongoing review of the Design Development submissions for consistency with the Schematic Design and resolution of the design details described herein, including treatment of the cantilever areas (glass transparency, soffit,), service road materials, outdoor site furnishings, and entry canopy design.
- Staff will review final materials of the building façade, with particular attention to the ground plane, cantilever areas and soffit material treatments.
- Staff will review the selection of landscaping materials for open space around 255 Broadway and will require the coordination of this landscaping treatment and furnishings with the streetscape designs for Broadway and Galileo Galilee Way and proposed wind mitigation at the southwest corner of the building.

ATTACHMENTS

Attachment 1: 145 Broadway Revised Schematic Design Submission Review by Charles Redmond, CRA Design Review Consultant

Charles Redmon, FAIA/Urban Design

DESIGN REVIEW NOTES: 145 Broadway, Commercial Office A, Design Review Response Submission 11/22/16

Date: December 20, 2016

Specific Comments

I reviewed one set of edited drawings prepared by Pickard Chilton and its consultants for Boston Properties. It was the Design Review Response Submission, dated November 22, 2016.

In general, I found the responses to CRA and CDA to be very professional and complete and should form the basis for the project moving forward; however, I have the following comments:

1. Core & Shell

The Core & Shell discussion related to the following items:

R1.1 Tower Wall Topologies

Comments: dealt with confusion and over complexity in the number of wall types uses and their composition on the overall building massing.

R1.1.1 – R1.1.7:

- There still exist too many wall types. For example Wall types C, E and G are essentially the same, and should be shown as Wall type C. Also wall type A and B are very much alike, and I believe that wall type B should have the triple spandrel bands at the top on the penthouse screen to provide a cap for the building, therefore being a vertical extension of wall type A.
- The building has a very nice, articulated and rational massing, with the exception that the two south facing projections are divided with two different wall types: D and E. I would suggest only using wall type D to reinforce the building's massing.

R1.2 Ground Level Materials

Comments: dealt with the extent of terracotta on the first and second floors as well as comments about the ground floor experience and retail signage.

R1.2.1 – R1.2.3:

- The organization and use of terracotta on the ground and second floors is much simplified and improved, especially the five-course usage of terracotta for the third floor spandrel. On the other hand, the geometry and complexity of the entry canopy structure seems over done. The retail canopies sheltering the southwest corner are very elegant and seem appropriate.
- The ground floor scaling and canopies seem well developed and appropriate. The two perspectives need to be updated with the current design showing five terracotta bands at the third floor.
- The retail signage needs to be better presented to show specific zones for each signage type; especially signage on storefront glazing, etc. The architects should better apply the Kendall Square signage guidelines to this project.
- West façade massing is a very good improvement.
- R1.4 – Garage elevator location is big improvement over the previous plan location as it opens up more transparency to the ground floor. I would further suggest recessing the Parking Shuttle Lobby entry doors back to match the set back of the adjacent store front to the north.

Charles Redmon, FAIA/Urban Design

2. Landscape

Comments: *dealt with type of landscaping around the edges of the building and the overall visual porosity of the site, retail entrances and pedestrian connections.*

R2.1 – R2.3:

- Landscaping along the west, south and east edges of the project has been changed to be exclusively hardscape, with temporary bike parking racks divided into distinct pods. The north side includes the east-west pedestrian path.
- The 6th Street connector has been developed further although each of the different sheets should be titled as to their subject matter: layout, materials, landscaping, etc.

3. Sustainability Plan

Comments: *dealt with the need for further clarification as to the process and means for establishing LEED target goals and metrics.*

R3.1 – R3.3:

- These cover a proposed Resiliency Plan, a Pathway to Net Zero Plan and Ground Source Heat Pump Analysis.

4. Environmental Impacts

Comments: *dealt with the need for further clarification as to the scope of the wind study and potential suggested mitigation measures.*

R4.1 – R4.3:

- These cover details about the scope and process of the wind study and suggested mitigation measures, largely through extended pedestrian canopies at strategic locations.

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



Submitted by: Charles Redmon, FAIA, CR/UD
December 20, 2016