To: Ordinance Committee and Planning Board  
From: Iram Farooq, Assistant City Manager for Community Development  
Date: November 9, 2015  
Re: Revisions to the Re-filed PUD-KS (Volpe Site) Zoning Proposal

Process Update

In June, the City Council and Planning Board began official consideration of a set of amendments to the PUD-KS zoning district regulations. The proposal was developed by CDD staff and the Planning Board based on the recommendations of the Kendall Square (K2) Planning Study conducted in 2011-2012. The majority of the PUD-KS district is owned by the Federal government and is home to the Volpe National Transportation Systems Center.

The City Council determined that additional outreach to inform residents about the petition and to gather input on the proposal would be beneficial. The original petition was not acted upon and the petition was re-filed to allow time for such outreach. Since June, CDD staff have received a feedback on the proposal through a number of discussions and processes, including the following:

- Joint Public Hearing of the City Council and Planning Board (June 29) and additional public hearings at the Planning Board (July 14 and October 20).
- Seven community “drop-in” discussions at neighborhood parks, public buildings and events throughout the summer and a workshop-style community forum in the fall.
- Visits to neighborhood organizations including Area 4/Port Neighborhood Coalition and East Cambridge Planning Team.
- Completion of the Connect Kendall Square open space planning and design process, with the publication of a Final Framework Plan by Richard Burck Associates.

Suggested Modifications to Proposal

These discussions have informed staff’s thinking on several key aspects of the proposal, leading to a set of suggested modifications for the Planning Board and Ordinance Committee to review and consider recommending as a substitute for the initial petition. The major revisions are explained further in this report. In addition, this package includes the following items:

- Revised zoning text, with a “clean” version (with deletions omitted) and “full mark-up” version.
- Draft “Urban Design Framework” intended to inform future development review, including a vision for desired site connections, public spaces, active ground floors and built form.
- Summary of community outreach process and feedback.
Overview of Major Proposed Revisions

- **Affordable Housing**: Requiring 15% low-moderate plus 5% middle income housing.
- **Open Space**: Clearer expectations for desired open space functions; limiting how much of the requirement can be met on a Federal site.
- **Height**: More flexibility in arrangement while limiting building bulk at taller elevations to manage shadows and other impacts.
- **Active Uses**: More explicit desired ground floor uses including grocery stores, spaces to serve families with children, and spaces for small independent operators; limitations on banks.
- **Urban Design**: Creation of an Urban Design Framework to inform future development review.

Background

The Kendall Square (K2) component of the “K2C2” Planning Study, which concluded in 2012, recommended zoning changes to four districts (see below). The K2 plan proposed increasing the overall capacity for development by approximately 5 million square feet above 2011 zoning limits, of which about 40% or more would be housing. The additional capacity would also support other public goals such as providing active uses on the street, public open space, increased sustainability requirements, reduced auto demand, innovation space to retain smaller companies, and funding to support public space programming, transit improvements and workforce readiness.

The PUD-KS zoning proposal, initiated by CDD and discussed at the Planning Board starting in January, follows the recommendation of the K2C2 study with some variations informed by discussions at the Planning Board and City Council. The timing of the proposal responds to the U.S. General Services Administration (GSA) announcing in 2014 that it would begin a process to select a development partner to construct a new Volpe facility in exchange for the ability to develop the remainder of the site for private uses in accordance with the City’s zoning. The GSA expects to complete the selection process in 2016.
Affordable Housing Requirements

Housing was one of the main issues raised in the public hearings and community discussions. The feedback received echoes the City’s longtime planning objectives to transform the character of the area from an office district to a mixed-use neighborhood, to add to the City’s housing stock in a sustainable way, and to provide new affordable housing opportunities.

The revised zoning proposal suggests increasing the minimum affordability requirement in a PUD-KS development plan from 15% of total housing to 20% of total housing, with a 15% low-moderate income component and a 5% middle-income component. The revised proposal is written with some flexibility in the occupancy limitations for the middle-income component, so it could be occupied by low, moderate or middle income households in order to adjust to changes in demand over time. The total of 20% affordable is more than has been required of any privately-funded residential project in Cambridge so far, and matches the zoning for the “Mass and Main” portion of Central Square adopted earlier this year. The expected result on the Volpe parcel would be about 200 or more affordable units.

The total housing expected on the Volpe parcel would remain the same at over one million square feet, which is about half of the residential development anticipated by the K2 study. This is still a minimum requirement, which allows for more housing to be included in a development plan with a commensurate decrease in commercial development and proportional increase in affordable housing. It is not unreasonable that a developer may seek a somewhat higher proportion of housing due to physical, economic or other factors related to the specific development plan.

It is important to note that while housing is a priority, Kendall Square is a leading economic center in the region and the district is best suited to accommodate future commercial growth in the city. Fundamentally, the demand for commercial space in Kendall Square is what makes complex redevelopment opportunities like the Volpe site possible.

<table>
<thead>
<tr>
<th>ALL FIGURES APPROXIMATE</th>
<th>Current Zoning</th>
<th>Initial Proposal</th>
<th>Revised Proposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Housing (SF)</td>
<td>967,000 (min.)</td>
<td>1,116,000 (min.)</td>
<td>1,116,000 (min.)</td>
</tr>
<tr>
<td>Affordable Requirement</td>
<td>11.5% low-mod. inc.</td>
<td>10% low-mod. inc. 5% middle inc.</td>
<td>15% low-mod. Inc. 5% middle inc.</td>
</tr>
<tr>
<td></td>
<td><strong>11.5% total</strong></td>
<td><strong>15% total</strong></td>
<td><strong>20% total</strong></td>
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<tr>
<td>Total Units</td>
<td>879 (approx.)</td>
<td>1,014 (approx.)</td>
<td>1,014 (approx.)</td>
</tr>
<tr>
<td>Low-Moderate Units</td>
<td>101 (approx.)</td>
<td>101 (approx.)</td>
<td>152 (approx.)</td>
</tr>
<tr>
<td>Middle Income Units</td>
<td>None required</td>
<td>51 (approx.)</td>
<td>51 (approx.)</td>
</tr>
<tr>
<td>Total Affordable Units</td>
<td>101 (approx.)</td>
<td>152 (approx.)</td>
<td>203 (approx.)</td>
</tr>
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</table>

*Assuming an average ratio of about 1,100 square feet of residential Gross Floor Area per dwelling unit.
Public Open Space

A variety of opinions have been elicited about future open space on the Volpe site. Some community members prefer one expansive public park while others have advocated for smaller, urban parks that are integrated with surrounding uses. People also expressed desires for active recreation, passive enjoyment, natural environments, public art, and indoor/outdoor spaces. While the ideas have been varied and sometimes conflicting, some common themes that emerged included the following:

- A space that performs a true civic function with a public feel.
- Spaces with active building edges.
- Enhancements to surrounding open spaces and connections such as Loughrey Walkway (Sixth Street extension) and the Broad Canal
- Minimal overshadowing by buildings.

The revised zoning proposal and the new Urban Design Framework incorporate these common themes.

The Connect Kendall Square competition process also informed discussions by allowing planners and designers to demonstrate different systemic approaches to open space. The competition winner, Richard Burck Associates, proposed a plan (below) with different public spaces on the Volpe site serving different functions, including a large natural wetland, an active civic plaza, and a connecting pathway extension of the Broad Canal corridor serving as a “marketplace” fronted by active ground floors. This concept, while not a finished plan, demonstrates how an integrated, contiguous open space system can serve varied needs. It also demonstrates how open spaces and buildings can complement each other.

Some discussion has centered on the quantity of public open space. The initial zoning proposal requires at least 25% of a development parcel to be public open space. While this quantity could be increased, either by increasing the zoning minimum or by approving a higher amount in the PUD permitting process, it would limit how buildings could be arranged on the site. Public discussions of the proposal, some of which have involved movable mock-ups of building forms, have revealed that flexibility is helpful in determining a successful balance of uses, buildings and public space where the uses complement and enhance each other, and undesired impacts like “dead” frontages, shadows and wind are minimized.
Therefore, at the present time, **the revised proposal does not recommend increasing the strict minimum from 25%**, though a greater amount could be provided through the development review process. This would remain the highest requirement for public open space in a redevelopment area and would result in over 3.5 acres of public open space on the Volpe site, the most in Kendall Square. This would also result in a percentage of open space similar to other large redevelopment projects like North Point, Alexandria and Cambridge Research Park. Moreover, while the **Connect Kendall Square** process did not focus on the amount of open space, the proposals have shown several attractive options for open space configurations that occupy approximately one quarter of the site or more.

The role of Federal land in the public open space system has also been discussed. If a new Volpe facility is built, then that site will include open space as is generally required for a Federal building. While the current Volpe site has limited public access to open space, it is more typical for new Federal facilities to have open spaces that are designed to allow pedestrian access while still meeting Federal security standards. The City cannot regulate how Federal land is used, but the City can encourage Federal open space to be usable to the public and integrated into the area-wide open space system by allowing it to fulfill some of the zoning requirement. This was the rationale behind the initial proposal.

However, subsequent discussions have raised a concern that all of the open space requirement might be met on Federal land, leaving no public space under the City’s control, which is not the intent. Therefore, **the revised zoning proposes that no more than half of the public open space requirement can be met on the Federal site**, which would avoid an outcome that would leave all public open space under Federal control, but would still encourage the Federal open space that is created to be integrated into the overall network of public open space in the district and the surrounding area.

**Heights**

Similar to open space, discussions around height have revealed that there may be benefits to greater flexibility in site design. The initial zoning proposal, like the current zoning, included a system of “height bands” allowing taller heights along Broadway, stepping down to lower heights along Binney Street. Some people suggested considering options with more dispersed heights, with some taller buildings away from Broadway in order to allow for open space with fewer shadows and less environmental impact on nearby residential uses. **As shown in the maps on the following page, the revised proposal makes slight modifications providing more flexibility in height between the extensions of Sixth Street and Fifth Street.** Any arrangement of building height and massing would still be subject to review and approval by the Planning Board, informed by applicable design guidelines.

The revised proposal also reframes but largely retains the limitations on building heights exceeding 250 feet. **Above 250 feet, the revised proposal would limit individual floor plate area to 15,000 square feet or less and total floor plate area to 10% of the development parcel (on the Volpe site, 10% would be approximately 62,000 square feet).** As in the initial proposal, only one building in the 350-500 foot range could be approved if it provides a distinctive, landmark building for Kendall Square. The new Urban Design Framework provides additional guidance and the zoning clarifies that the Planning Board could explicitly not allow any building to exceed 350 feet if a plan with a taller building is not found to provide the desired benefit.

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Above: Initial proposal (June, 2015). Below: Revised proposal, including current MXD proposal.
Active Ground Floors

One of the more interesting and revealing areas of discussion has been the desired variety of uses at the public-facing ground floors of new buildings. It is clear that the successful incorporation of uses that are accessible and inviting to a diverse set of community members across the city is crucial to ensuring that redevelopment in Kendall Square will meet the community’s goals.

The K2 plan provided a fairly simple formulation of the ground floor use requirements – most of the frontage along major streets would be required to be some type of retail or other public-facing use, with a Gross Floor Area exemption provided as an incentive for retail establishments of 5,000 square feet or less. More recent discussions have added nuance to these goals by identifying the types of activities that are desired, such as the following:

- Businesses that would provide convenient goods and services to the population at large, such as grocery stores, pharmacies, department stores and general merchandisers.
- Amenities and services for families, such as recreation and entertainment centers, indoor play spaces, family restaurants and child care facilities.
- Smaller spaces with lower start-up costs that could accommodate more independent and innovative retailers, such as indoor markets and retail co-sharing spaces;
- Civic indoor/outdoor spaces that could accommodate a variety of public programming.

The revised zoning proposal and Urban Design Framework more explicitly identify the types of desired uses noted above, with standards related to the amount of space dedicated to different types of ground floor activities. Some flexibility is still provided, with the understanding that in order for a plan to be successful, there must be business owners who can fill the space and thrive at that location. The revised proposal further clarifies that banks are not allowed to be included as active ground floor uses.

Urban Design

Throughout the preparation of the rezoning proposal, it was recognized that there are many potential urban forms that would meet the zoning requirements and comply with the K2 Study and Design Guidelines. While flexibility is key to enabling a successful outcome, it is also important to provide an urban design vision that describes and illustrates what a desirable outcome could look like.

The attached PUD-KS Urban Design Framework elaborates on the K2 Plan and Design Guidelines, the PUD-KS Site-Specific Guidelines that were presented in the initial proposal, the Connect Kendall Square process and the knowledge gained through community engagement. The framework addresses five main topics: Connections, Open Space, Active Ground Floors, Built Form and Housing for Families. Using statements, diagrams and illustrations, the framework connects the broad goals and policies found in the K2 Study to physical planning and urban design recommendations specific to the Volpe site.

Like the city’s urban design guidelines for various parts of the city, the Urban Design Framework would inform the city’s review process for development proposals. A development proposal may suggest alternative design approaches in order to fulfill the objectives described in the framework.
Current Status of Kendall Square Proposals

Discussions also have raised questions about the PUD-KS zoning proposal in relation to other proposals currently under review in Kendall Square, including the Cambridge Redevelopment Authority (CRA) rezoning proposal for the MXD district and the MIT “NoMa” and “SoMa” Planned Unit Development Proposals. As noted earlier, these are three of the main component areas of the Kendall Square (K2) Planning Study, and so the proposals are closely related.

- In 2013, the City Council approved the creation of the PUD-5 zoning district for portions of Kendall Square owned by MIT. This zoning incorporated the requirements recommended in the K2 plan along with some specific elements tailored to the site. MIT is currently seeking approval from the Planning Board for development plans that follow the PUD-5 requirements.

- The MXD (CRA) and PUD-KS (Volpe) proposals are only at the rezoning stage. In either case, if the zoning is adopted, then future developers would likewise need to propose specific development plans that would require public hearings and special permit approval from the Planning Board.

The conceptual illustration below is a combination of the current MIT PUD development proposal, a potential development scheme shown by the CRA during consideration the MXD zoning proposal (including the approved Ames Street residential project, which is permitted under the current zoning), and an alternative site arrangement that follows the revised PUD-KS zoning proposal.
Cumulative Development

The K2 Planning Study suggested an increase in the capacity for development in Kendall Square of approximately 5 million square feet above 2011 zoning limitations, of which about three-fifths would be commercial (primarily office/lab) and two-fifths would be residential, resulting in a total of about 15 million square feet of development within the study area by 2030. The study assessed the opportunities and impacts of that new development and recommended requirements for public benefits, which form the basis of the zoning proposals. The development figures for each of the three major K2 development areas are summarized in the table below, as they are currently envisioned under the respective PUD and zoning proposals.

One note about the table below is that it calculates the “actual” aggregate floor area ratio (FAR) of the development areas. Because some uses are exempted from FAR limitations as a policy choice to incentivize preferred types of development, it is not unusual for the actual FAR to exceed the zoning-limited FAR. The PUD-KS district especially differs because the floor area of a Federal facility is exempt from FAR limitations, resulting in a higher “actual” FAR. This choice was made to encourage the Federal facility to be integrated into a master planned development rather than developed as a stand-alone site that would be divorced from the development review process.

Anticipated Net New Gross Floor Area (GFA)* – Cumulative

<table>
<thead>
<tr>
<th>District</th>
<th>Status</th>
<th>Residential</th>
<th>Office/Lab*</th>
<th>Retail</th>
<th>Other</th>
<th>Total</th>
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<tr>
<td>PUD-5 (MIT)</td>
<td>PUD Plans Under Review</td>
<td>285,000</td>
<td>871,000</td>
<td>87,000</td>
<td>207,000*</td>
<td>1,450,000</td>
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<tr>
<td>PUD-KS (Volpe)</td>
<td>Zoning Proposal Under Review</td>
<td>1,116,000</td>
<td>1,716,000</td>
<td>140,000</td>
<td>None *</td>
<td>2,972,000</td>
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<tr>
<td>MXD (CRA)</td>
<td>Zoning Proposal Under Review</td>
<td>400,000</td>
<td>660,000</td>
<td>30,000</td>
<td>None</td>
<td>1,090,000</td>
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Anticipated Total Gross Floor Area (GFA)* – Cumulative

<table>
<thead>
<tr>
<th>District</th>
<th>Land Area</th>
<th>Existing GFA*</th>
<th>Net New GFA*</th>
<th>Total GFA*</th>
<th>Total FAR*</th>
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<tbody>
<tr>
<td>PUD-5 (MIT)</td>
<td>1,150,000</td>
<td>2,571,000</td>
<td>1,450,000</td>
<td>4,021,000*</td>
<td>3.5</td>
</tr>
<tr>
<td>PUD-KS (Volpe)</td>
<td>620,000*</td>
<td>375,000</td>
<td>2,972,000</td>
<td>3,347,000</td>
<td>5.4</td>
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<tr>
<td>MXD (CRA)</td>
<td>890,000</td>
<td>3,288,000</td>
<td>1,090,000</td>
<td>4,378,000</td>
<td>4.9</td>
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* Notes: ALL FIGURES APPROXIMATE
• Figures include GFA that is exempt from zoning limitations. Innovation space is included within office/lab.
• Retail figures are estimates.
• “Other” GFA in PUD-5 includes academic and dormitory space.
• Figures include GFA that is exempt from zoning limitations.
• Land Area in PUD-KS is of the Volpe parcel only.
• Total GFA in PUD-5 district does not account for additional development capacity for future academic and dormitory uses.