



Project: 55 Wheeler Street
Cambridge, Massachusetts

WESTBROOK PARTNERS
REDGATE

Residential Building
Supplement to the Special Permit Application
Volume 1: Responses to Comments
October 6, 2017

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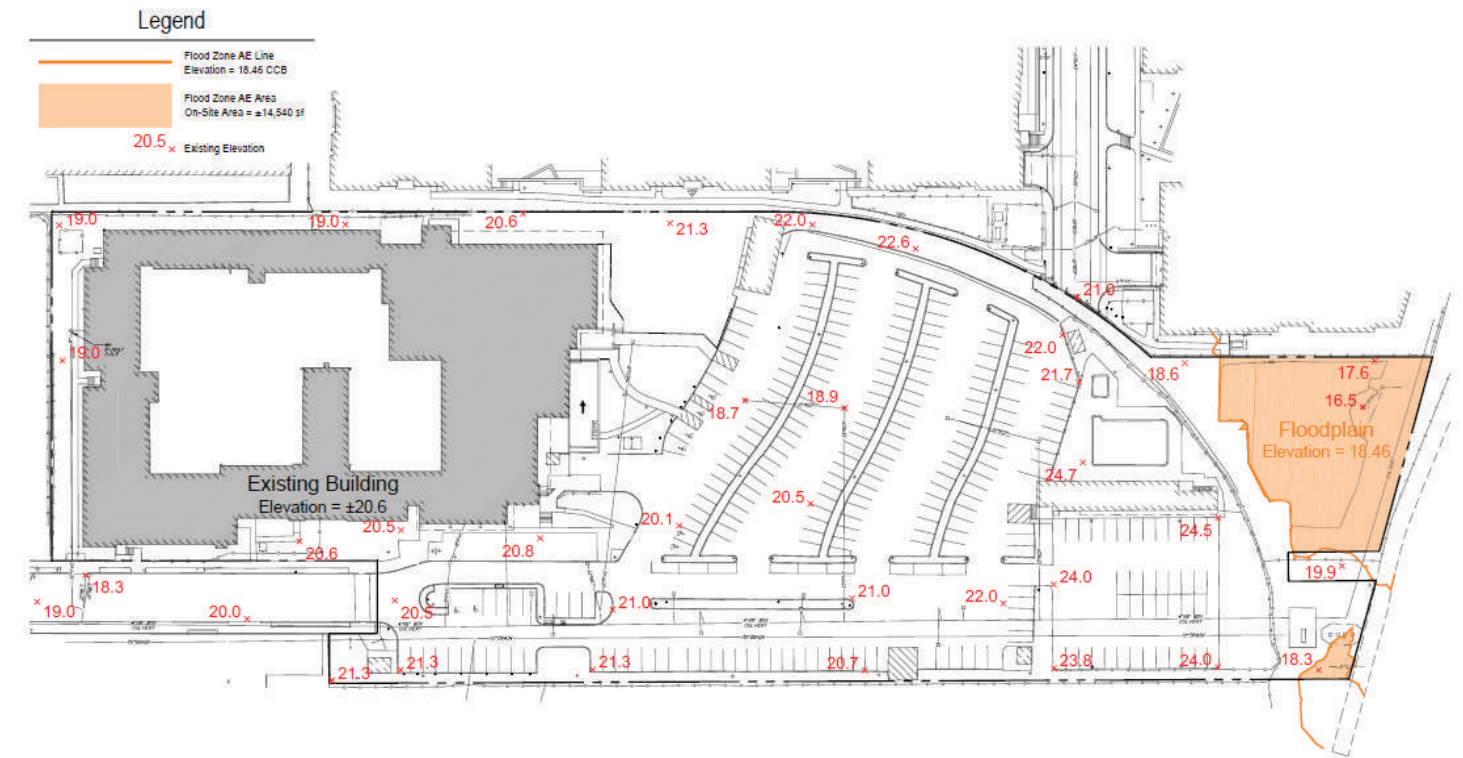
A. Resiliency

Question 1: Explain more thoroughly the flood plain and resiliency condition at the site. Are the transformers above the 2070 level? Would like a cross sections of the grading, streets and buildings.

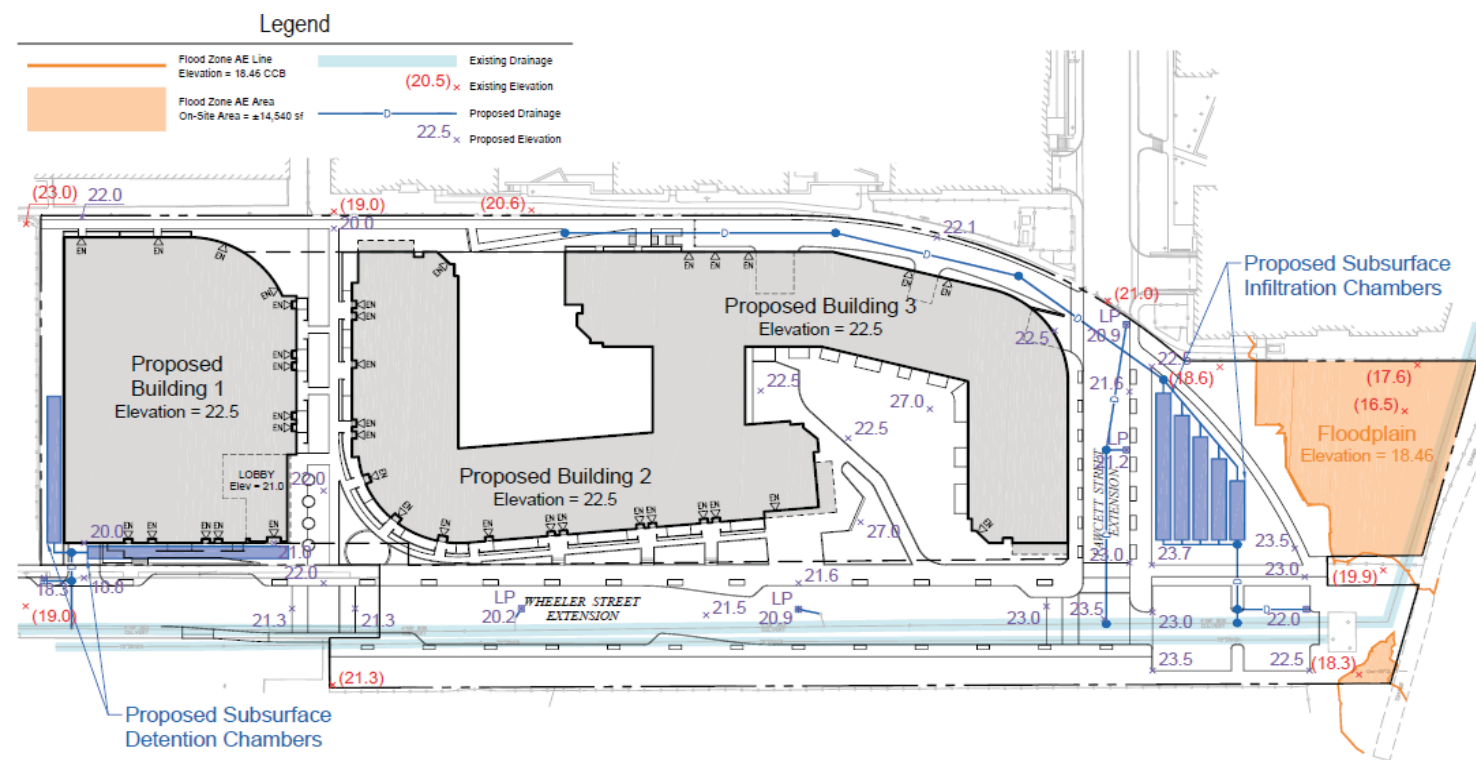
Answer: The 55 Wheeler Street property is nearly six acres of which only approximately 1/3 acre at the northernmost edge is situated within the 100-year flood plain and requires the issuance of a Flood Plain Overlay District Special Permit (*Resiliency – Existing Conditions*). The Applicant does not propose to build any structure in the 100-year flood plain but rather this area will be designed as public open space. This public open space design will require earthmoving and landscaping for which relief is being sought as part of the Special Permit.

As part of the City of Cambridge’s Climate Change Vulnerability Assessment recommendations from February 2017, the City has concluded that planning for resiliency should include designing buildings to withstand flood water elevations projected for a hundred year storm in the year 2070. The projected flood water elevation for 2070 at 55 Wheeler Street is 22.49’, a full two feet higher than the flood water elevations projected for the year 2030 of 20.49’ which has been the requirement for most Cambridge projects reviewed to date. As shown on the figure *Resiliency – Proposed Conditions*, the grade around the residential buildings will be raised through the strategic use of landscaping and plantings so that the ground floors (including all residential units and lobbies) will be above the projected 2070 flood water level. The transformers are also at this 2070 level.

In addition, the new Wheeler Street and Fawcett Street extensions are predominantly above the 2030 flood level of 20.49’.



Resiliency - Existing Conditions (Vol. 2 - Page 69)



Resiliency - Proposed Conditions (Vol. 2 - Page 70)

Question 2: Please discuss how the buildings will perform in a storm event, including access and egress. Please provide plans and cross sections of the grading, streets and buildings.

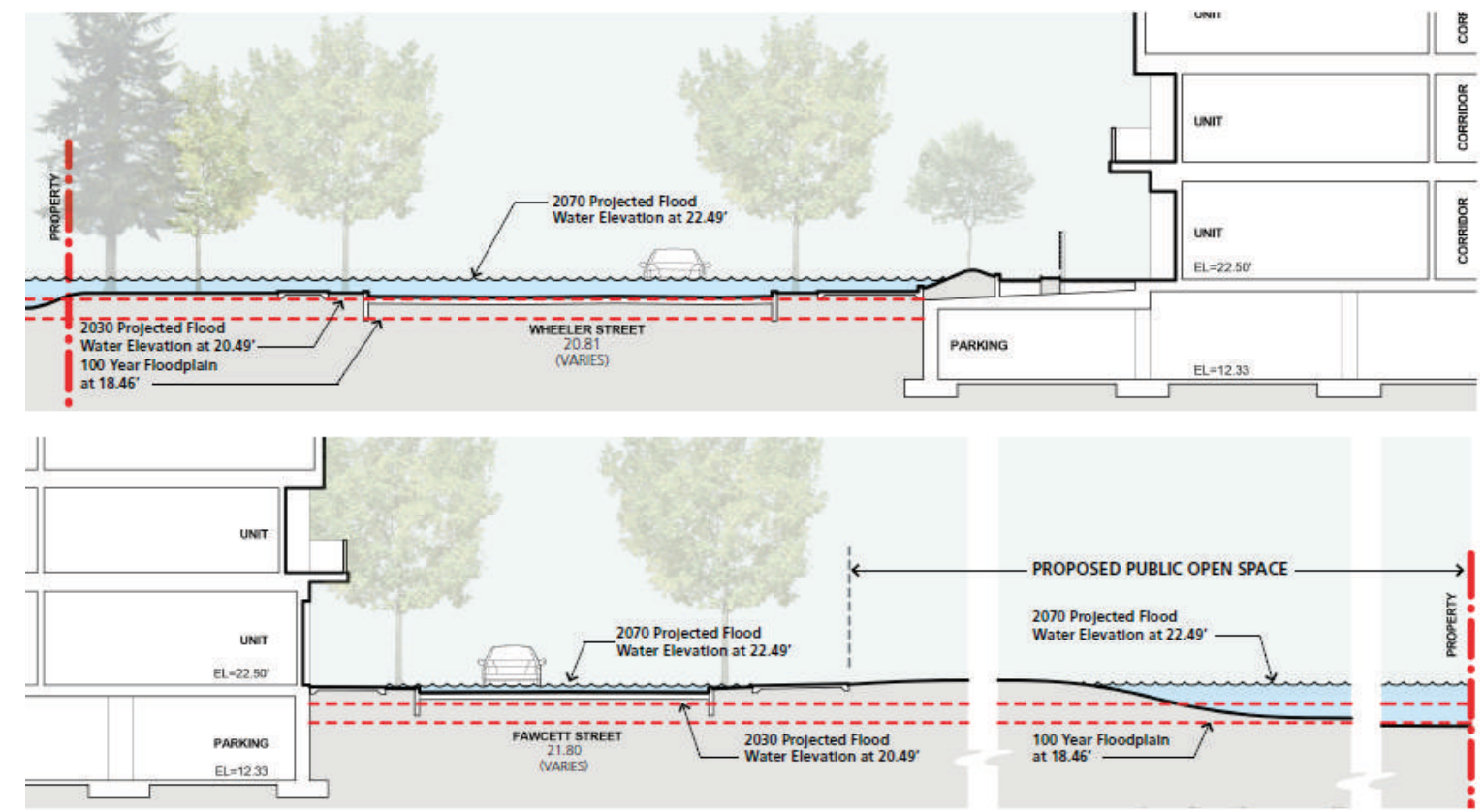
Answer: As shown on the graphic *Resiliency Sections*, residences and lobbies are located above the year 2070 flood water elevation of 22.49 and well above the prior planning datum (Year 2030, 20.49') and the 100 year flood plain (18.46'). Therefore, residences and lobbies will be fully protected from flooding for any storm event with flood water levels up to those projected for a 100-year storm in the year 2070.

The streets are at or above the projected 2030 flood water level so in a storm event that exceeds projections for the year 2030 there could be some street flooding. In recent years, the City of Cambridge has invested in the storm drain capacity in this area, primarily along Concord Avenue, and the Wheeler and Fawcett Street extensions will include new drains in the roadways that will be constructed as part of the Project. Therefore, any street flooding on Wheeler Street or the Fawcett Street extension should be accepted into the system and short in duration allowing emergency access on those streets.

The entries to the garages within the Project transition between the street grade and the proposed 2070 grade of the buildings. They will include a “hump” at the 2070 level in order to prevent water from infiltrating the garage through the entrances.

The Project has been designed with a common room that can be accessed by residents in the event that power is lost in the building. This room will be powered by emergency generators and will be climate controlled. It can be utilized for comfort and to maintain communications through the ability to charge cell phones and other devices until such time as the waters recede, power is restored and/or emergency personnel arrive. In addition, the white roof and roof exhaust fans will help keep the building cooler longer in the summer months.

In the event of a storm in which flood waters rise to the level projected for year 2030 there should be no flooding outside of the open space located in the flood plain.



Resiliency Sections (Vol. 2 - Page 36)

B. Site Planning/Operations

Question 3: The service drive does not include a turnaround, requiring trucks to back out and potentially trapping them if more than one truck is present. Please address this and provide additional detail on operations including move-ins, deliveries and trash removal.

Answer: Since the September 5, 2017 presentation to the Planning Board the project team has revised the site plan to widen the service road located to the west of Buildings 2 and 3 from 12 feet to 18 feet. As shown on the figure *West Service Road and Vicinity*, the team has also provided a truck turnaround inside Building 2/3 that can also accommodate a truck substantially inside. This will enable trucks to turn around, to be out of the way of other functions of the service road or to be loaded or unloaded within this area.

All building moving and loading functions will be managed by a loading dock manager who will be a member of the property management team. Move-ins and move-outs, trash hauling, deliveries and truck access will be scheduled and coordinated.

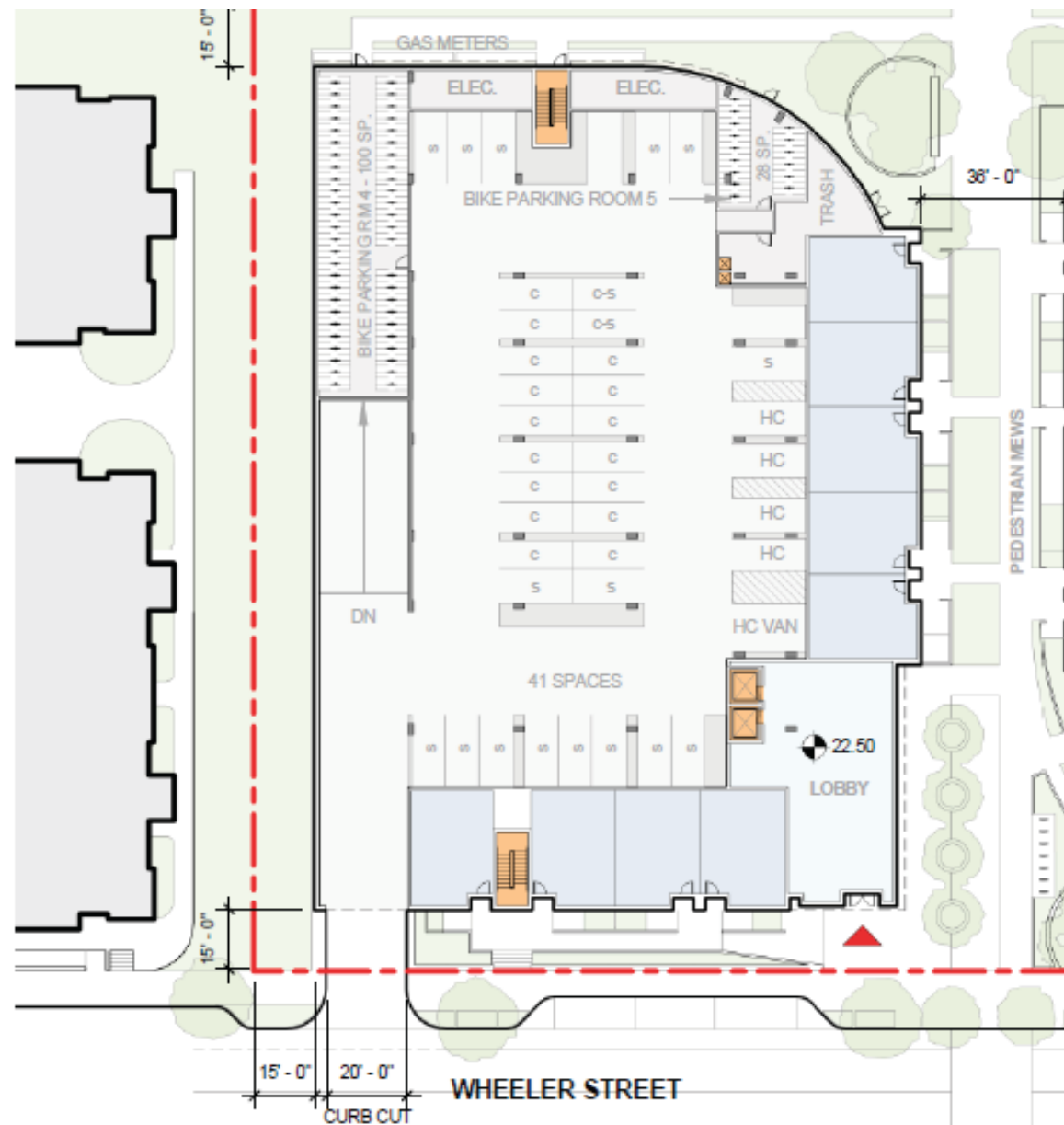
All trash removal will occur from the Building 2/3 trash room which will be located along the service road. This includes trash removal from Building 1 which will be collected in the central trash room for that building and hand trucked to the Building 2/3 pick-up location. Trash removal is expected to occur once a day.



West Service Road and Vicinity (Vol. 2 - Page 35)

Question 4: Please describe how Ubers, taxis and deliveries will interface with the Building lobbies. It does not appear that Building 1 has a place for short term loading and unloading activities.

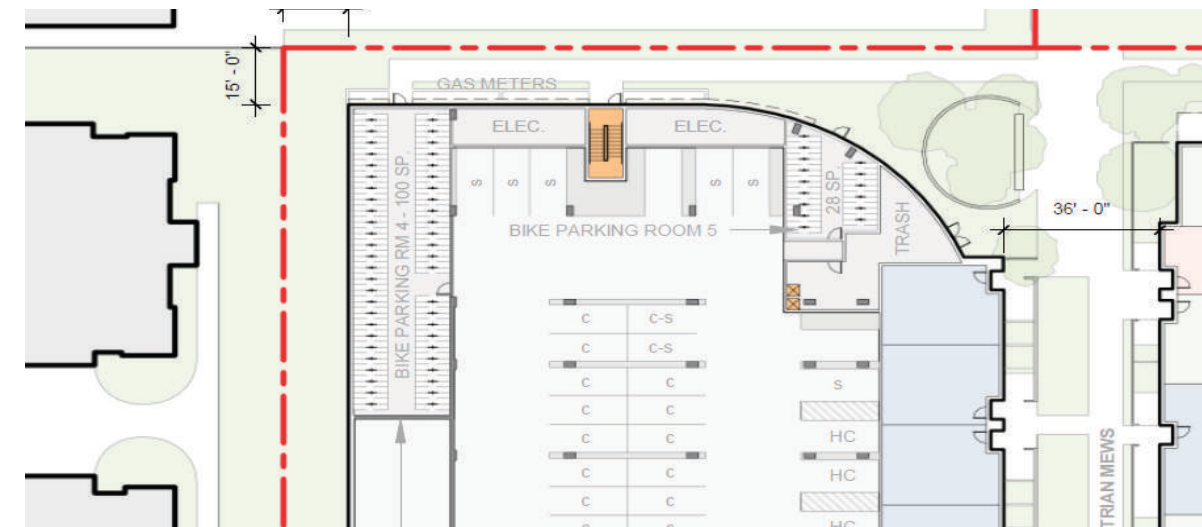
Answer: Since the September 5, 2017 presentation to the Planning Board the project team has revised the site plan to add space for three new parking spaces on the west side of Wheeler Street near the lobby entrance for Building 1. There are also 8 spaces on the west side of Wheeler Street in front of the entrance of Buildings 2 and 3. Although Wheeler will be a City street and the City of Cambridge will control how the curbs are managed, these spaces have been designed and located to facilitate delivery and taxi/Uber pick up and drop off.



New Parking Spaces at Building 1 Entry (Vol. 2 - Page 11)

Question 5: Please explain the long-term bike parking location, access and egress.

Answer: The Project will include 555 secure and covered long term bicycle parking spaces on the ground level of each of the buildings. As shown in the figures Long Term Bike Parking – Building 1 and Long Term Bike Parking – Building 2/3, the bike spaces have been located in a number of rooms on the ground level of each building at the west side of the building. This ground level location enables direct at-grade access to the service road with connections to the bike network by way of dedicated lanes along Wheeler Street or the bicycle/pedestrian path at the Mews. Locating the bicycle storage at the ground level also provides the ability for bicycle owners to access the ground floors, elevators, and lobbies without having to bicycle or walk through the garage. All rooms have door access to both the outside and the building interior and the team continues to explore opportunities for using automatic doors.



Long Term Bike Parking - Building 1 (Vol. 2 - Page 11)



Long Term Bike Parking - Building 2/3 (Vol. 2 - Page 11)

C. Consistency with Alewife Planning

Question 6: Please describe the project’s consistency with citywide and Alewife specific zoning and planning Cambridge process for Alewife.

Answer: The Alewife neighborhood has been the subject of several planning efforts. Density is governed by the underlying zoning and the Alewife Overlay District. This zoning reflects the goals and requirements of the Concord-Alewife plan. In this District, the residential use proposed for 55 Wheeler Street is allowed as of right. The density proposed for the Project is significantly below what is allowable for residential development on a six-acre site in this District.

The Envision Alewife process builds on the Concord Alewife plan and envisions Alewife to be a sustainable, resilient mixed-use district with convenient and safe connections within the neighborhood and to the rest of the city, along with amenities that support interaction and social ties among its residents. The Applicant and project team members have attended nearly all of the Alewife Working Group meetings since they began in the summer of 2016 and have embraced the goals and plans as they have evolved.

The key objective of the Envision Alewife process is “to create an identity and sense of place for the whole Alewife District.” The Project is consistent with the strategies to meet this goal as noted in Envision Alewife in the following ways:

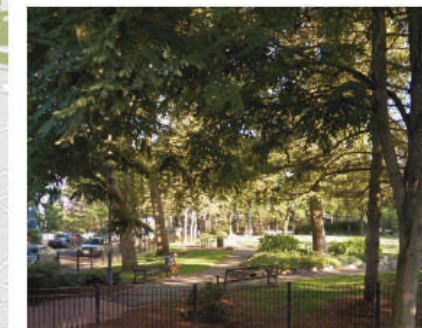
Better integrate the district with the rest of the city through new walking and bike paths, streets and open spaces.

As shown, the Project adds new streets, open space, sidewalks, dedicated bike lanes and offstreet pedestrian/bikepaths wholly consistent with the Envision Alewife plan. The construction of the Wheeler Street and Fawcett Street extensions as complete streets (roadway, dedicated bikelanes and sidewalks) will connect Wheeler Street, which is now a dead end, into the greater quadrangle and beyond. Historically, the area has been characterized by large blocks with little opportunity for east-west connection. The introduction of roadways and a midblock pedestrian and bicycle path at the Mews provides this connection at two points for the benefit of residents and workers in the quadrangle to better connect with the amenities along Alewife Brook Parkway.

The Project also plans for potential future connections that will serve to better integrate the quadrangle with the rest of the City. The midblock crossing at Wheeler Street is located and designed to facilitate connection between the east-west Mews bicycle/pedestrian path with a potential future extension of Terminal Road. In addition, the public open space has been designed to rationalize pedestrian access to/from and accept a landing for a potential pedestrian bridge over the MBTA tracks to the north of the site to provide better connection to the MBTA Alewife Station. These improvements would occur off of the 55 Wheeler property and require the collaboration and coordination of adjoining property owners, the City of Cambridge and state agencies such as the MBTA.

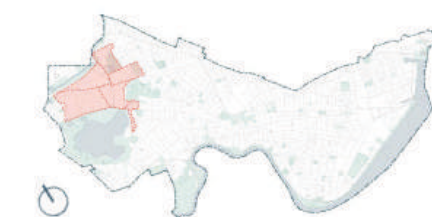
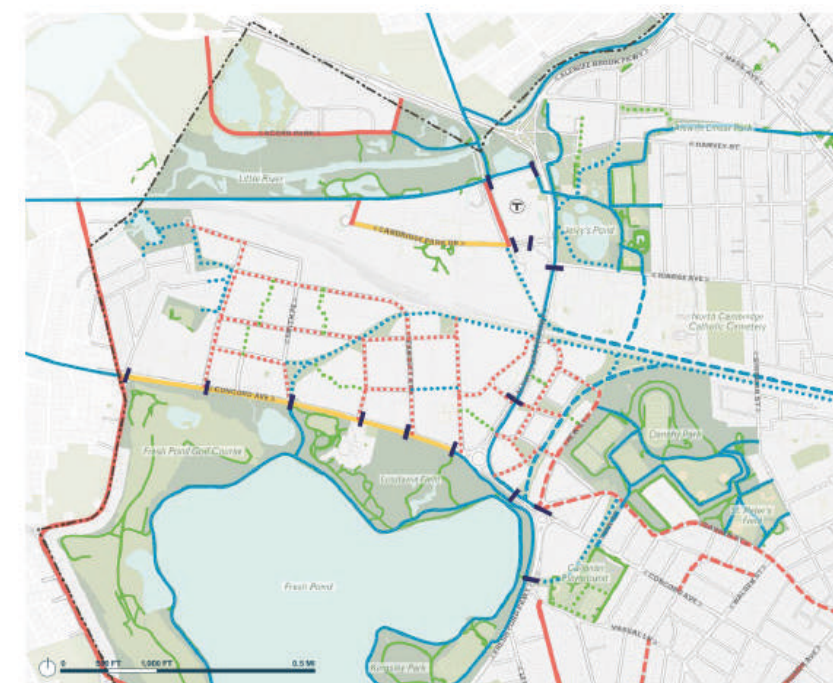
The proposed public open space, as well as the entrance courtyard at Building 2/3, is designed to connect to the open space network anticipated in Envision Alewife. The park is strategically located to connect to the rail path that leads to the diagonal open space shown in the Envision Alewife plans.

Alewife Urban Design Framework
Alewife: Proposed Open Space Network



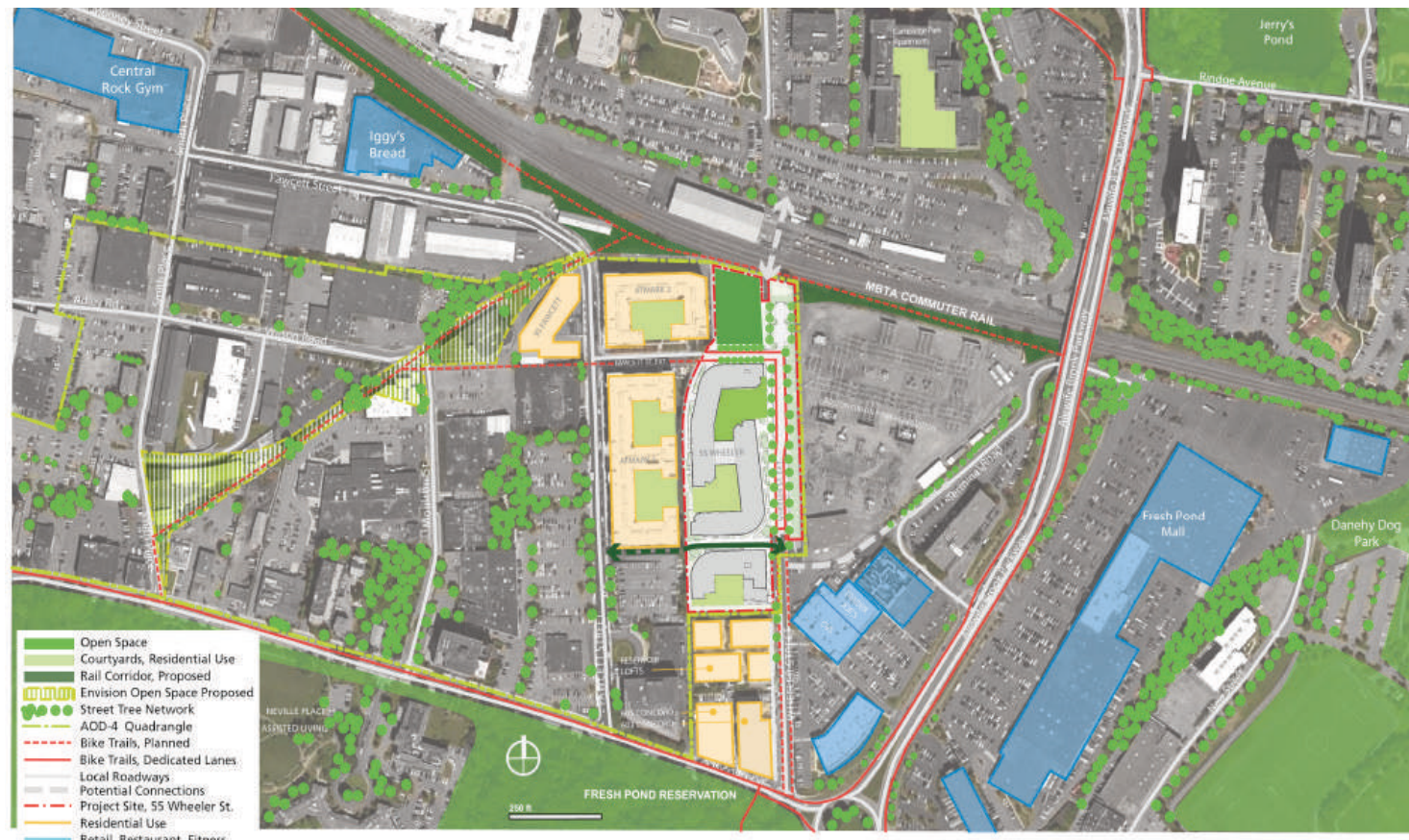
Envision Alewife - Proposed Open Space Network

Alewife Urban Design Framework
Alewife: Connectivity - Proposed

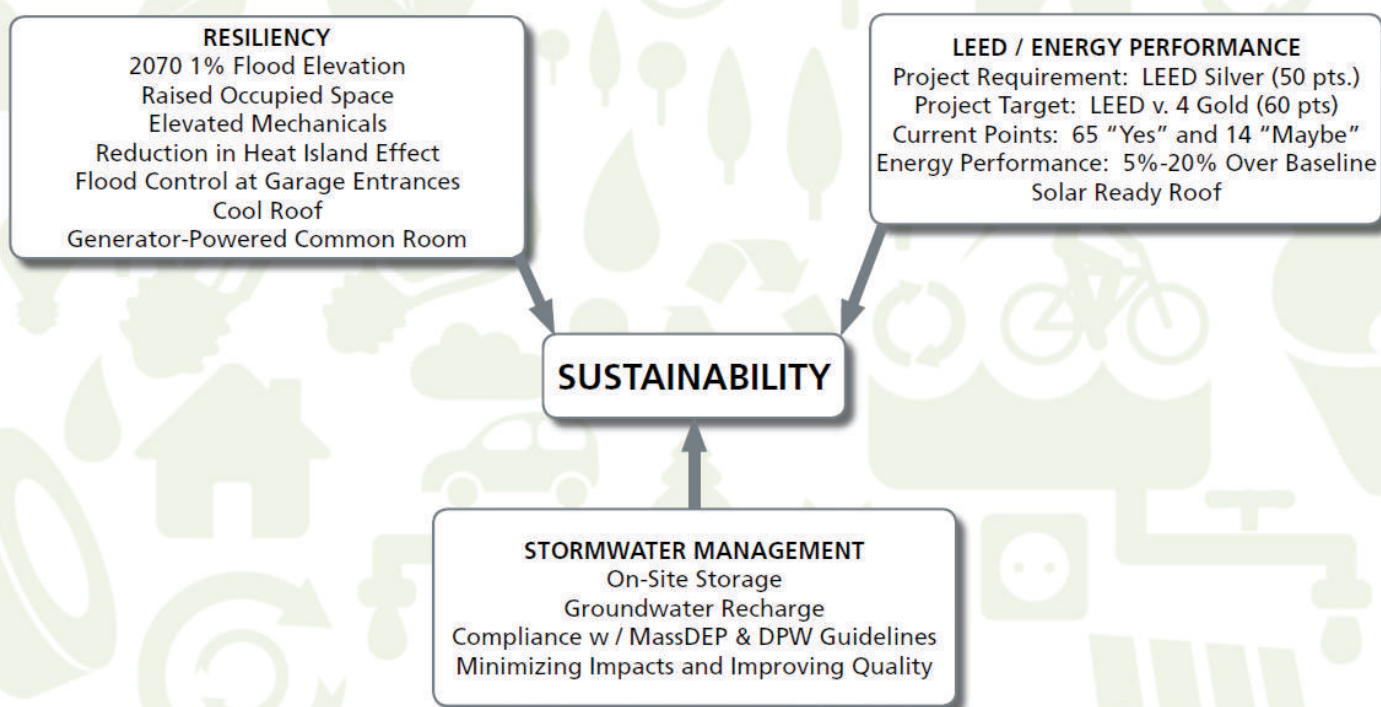


- | Existing | Proposed | Planned | |
|----------|----------|---------|-----------------------------|
| | | | Off-street Pedestrian Paths |
| | | | Off-street Multi-use Paths |
| | | | On-street Bike Connections |
| | | | Separated Bike Paths |
| | | | Crosswalks |

Envision Alewife - Proposed Connectivity



Open Space Network/Consistency with Envision Alewife (Vol. 2 - Page 39)



Ensure that both new development and existing infrastructure, neighborhoods, and community resources are prepared for climate change, in particular the challenges of flooding and heat.

Resiliency has been a central focus of the planning for 55 Wheeler Street from the initiation of design. The project team includes New Ecology, a consulting firm focused on sustainability, as well as design team members with experience designing buildings with an acknowledgement of changing climate conditions. As discussed in *Section A. Resiliency* of this document, 55 Wheeler Street is one of the first projects to be designed to a flood water level projected for the year 2070 (the prior planning threshold was the year 2030.) The Envision Alewife team is considering design strategies and has recommended for raising podiums and sidewalks above the 2070 project flood level. The design team for 55 Wheeler has developed a site specific strategy of elevating the grade and the building ground floor above the 2070 level that is consistent with the envision Alewife strategies.

Encourage forms of development, a mix of uses, and a range of improvements that will facilitate and encourage walking, biking and transit use and reduce the growth of vehicular trips.

Planning a six acre section of the Quadrangle at one time provides significant opportunity to design more broadly than would be the case if there were several developments on the same land area. For example, the public open space aggregates area that otherwise may be diffused throughout several projects, losing the opportunity to create a meaningful civic destination. Likewise, a single project allows the parking plate to be more efficient than it would be for several smaller projects which enables it to be located below grade and allowing for the ground level to activate the street with direct entry units, thereby enhancing the streetscape and encouraging walking. Lastly, the large moves in service of connectivity, including bicycle connectivity, of the complete streets at Wheeler Street and Fawcett Street extensions and the mid block connection at the Mews are possible because the large site enables flexibility of design to balance these public amenities (generous sidewalks, dedicated bike lanes) with buildable residential floorplates. Construction sequencing has not been finalized and delivery of the units could occur in phases. However, the planning of the entire site by a single owner is an advantage to realizing these benefits.

Ensure that new development benefits the adjacent residential neighborhoods by introducing new amenities and services and creating neighborhood destinations.

The Envision Alewife process acknowledges the lack of public open, civic spaces and destinations in the Quadrangle. It also recognizes that the parcel ownership structure in the Quadrangle is nearly 100% private, making it a challenge to realize these important spaces. As described in *Section D. Landscape and Recreation* of this document, the 55 Wheeler project provides new amenities to the neighborhood in the form of a network of open spaces that accommodates structured and unstructured play for people of all ages. In addition to daily utilization of these spaces, public open space and adjacent flexible parking lot have been designed to provide an opportunity for the community and/or property managers to program special events such as farmers markets, food truck festivals or movie/concerts.

For the quadrangle, Envision Alewife recommends a mix of uses, including innovation industries and increased residential living. Envision Alewife consistently anticipates residential use at the 55 Wheeler Street location. With the development of Atmark and the Reservoir Lofts and other residential communities in recent years, the Wheeler/Fawcett block is primarily residential in nature. A residential project at 55 Wheeler will add to the strength of neighborhood and contribute amenities that can be used by all residents.

In 2017 the Cambridge City Council passed an amendment to Article 11.200 that requires 20% of the Gross Floor Area of residential units, in the aggregate, to be available as affordable housing (the “Inclusionary Amendment”). Although design of this project commenced before that Ordinance was adopted, the Applicant has embraced the goals of the Inclusionary Amendment and the Project will be the first 20% affordable project under the Inclusionary Amendment, which will provide 100 units for households earning up to 80% of the area median income.

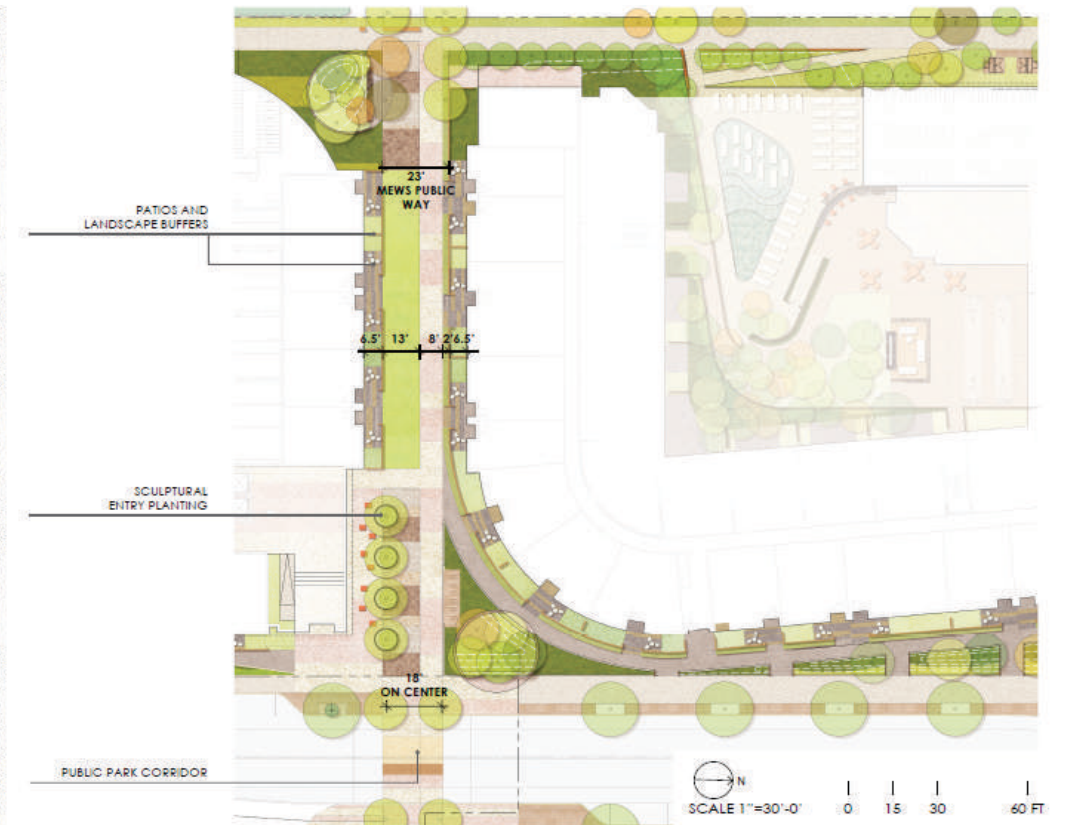
55 Wheeler Program

Studio:	14.3%	75
1 JR:	5.0%	26
1 BR:	48.8%	256
1+ BR:	3.8%	20
2 BR:	23.2%	122
3 BR:	5.0%	26
Total		525

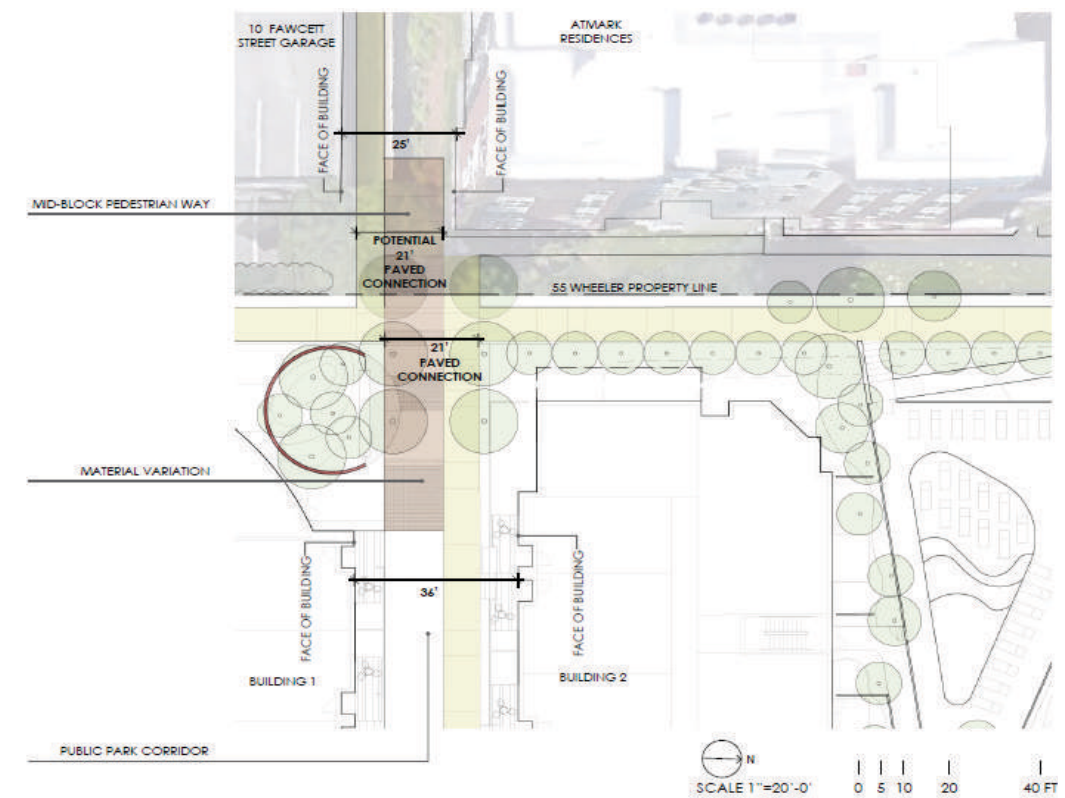
The Project will include 525 units in a range of sizes. The number and unit mix has changed slightly since the September 5 Planning Board hearing due to the addition of a truck turnaround at the Service Road and a second building entry for Building 2 that is located near the Mews, which changes were requested by City staff and Planning Board members.

Question 7: Describe how the midblock connection at the Mews is consistent with Envision Cambridge and whether it should be better aligned with the adjacent Atmark building.

Answer: The Mews has been designed to provide an east-west midblock connection for pedestrians and bicyclists consistent with Envision Cambridge goals. The Mews connects with the service road to the west and Wheeler Street to the east. It has been aligned and designed to further connect to a future Terminal Road to the east. To the west, it is aligned with the existing 25' space between the Atmark residential building and the parking garage at 10 Fawcett Street. The Applicant does not control space beyond the property line. However, physically, this alignment will enable a through mid-block connection between Fawcett and Wheeler Streets at this location as early as completion of construction of the Project.



Mews Design (Vol. 2 - Page 43)



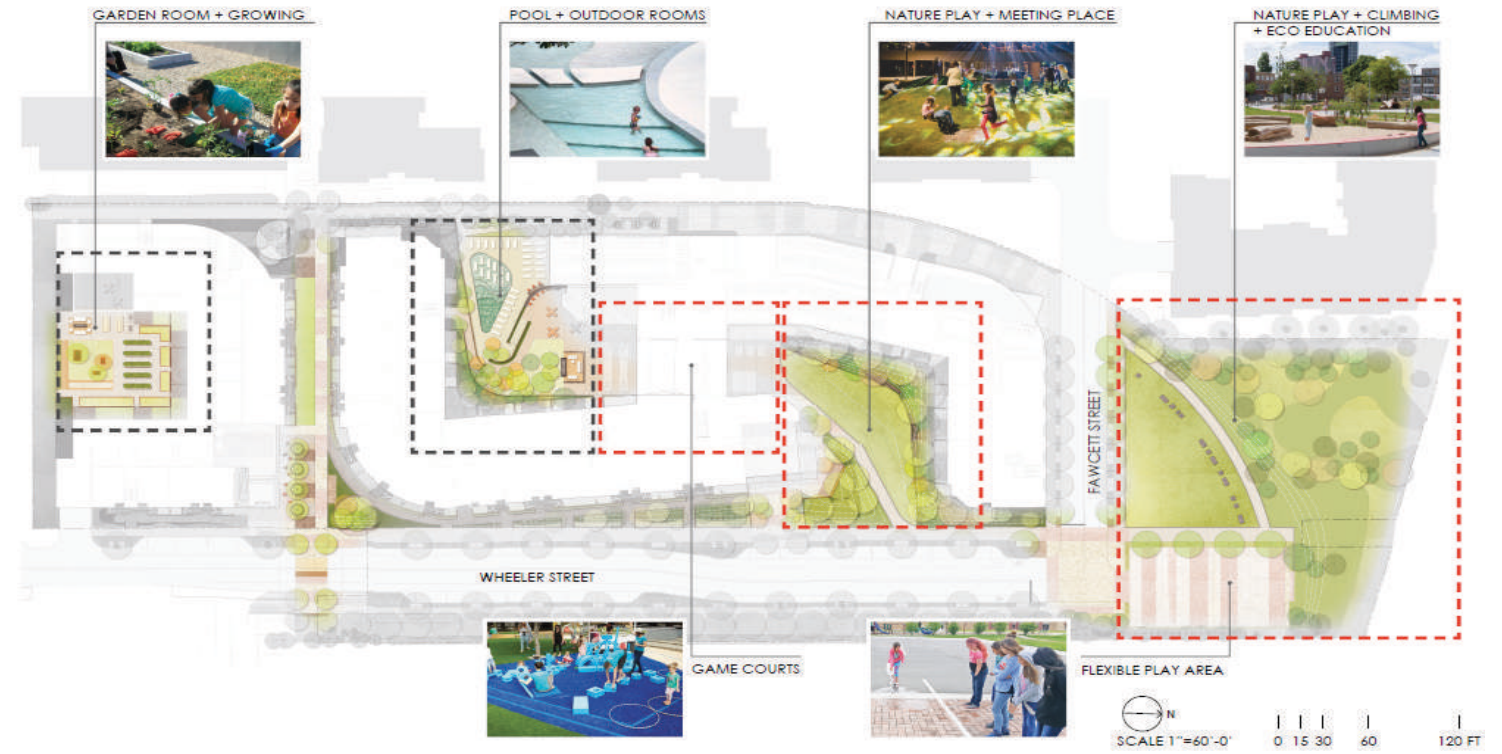
Alignment of Mews to Properties to the West, Atmark (Vol. 2 - Page 44)

D. Landscape & Recreation

Question 8: Please provide additional detail on features and amenities that will be provided within open spaces on the site, particularly for families with children.

Answer: The project team recognizes that more and more families have a preference for living in the neighborhoods like those in Cambridge and that this project will be desirable for families due to location, unit size and affordability. Therefore, the team has developed a network of open spaces that will provide opportunities for socializing, physical play and exploration for residents and the community. An overview of the Play Sequence and Landscape Benefits is shown on this page. Detail of the amenities in each of the outdoor spaces can be found on pages 47-51 of Volume 2 of this submission.

The private courtyard spaces will provide areas for children to play and include a toy storage to encourage this activity. In addition to exterior play opportunities the project will provide flexible interior spaces for children and families to gather as in typical in multifamily buildings in response to market demand.



Play Sequence (Vol. 2 - Page 45)

	PUBLIC	PRIVATE	
SITE	✓	✓	ALEWIFE PEDESTRIAN NETWORK -BREAKING DOWN BLOCK
	✓	✓	BIKE SHARE NETWORK NODES
	✓	✓	RESILIENCY ELEVATIONS - SITE CIRCULATION
	✓	✓	REDUCTION IN STORM WATER RUN-OFF
	✓	✓	STORM WATER TREATMENT
ELEVATED AMENITIES DECK		✓	VEGETABLE GARDEN ACCESS
		✓	INDOOR- OUTDOOR ROOMS -DINE, PLAY, RELAX
AMENITIES COURTYARD		✓	POOL
		✓	HAMMOCKS
ENTRANCE COURTYARD	✓	✓	GAME COURTS + LAWN PLAY
	✓	✓	MEETING PLACE
	✓	✓	NATURE PLAY
	✓	✓	OUTDOOR MOVIES
OPEN SPACE	✓	✓	HARDSCAPE BROWNFIELD TO GREEN OPEN SPACE
	✓	✓	LAWN PLAY
	✓	✓	FLEXIBLE PLAZA
	✓	✓	CHILDREN'S EXPLORATION

Landscape Benefits (Vol. 2 - Page 51)