

Question 9: Please provide additional detail on the landscape, particularly for the public open space which will be the first of its kind in the neighborhood.

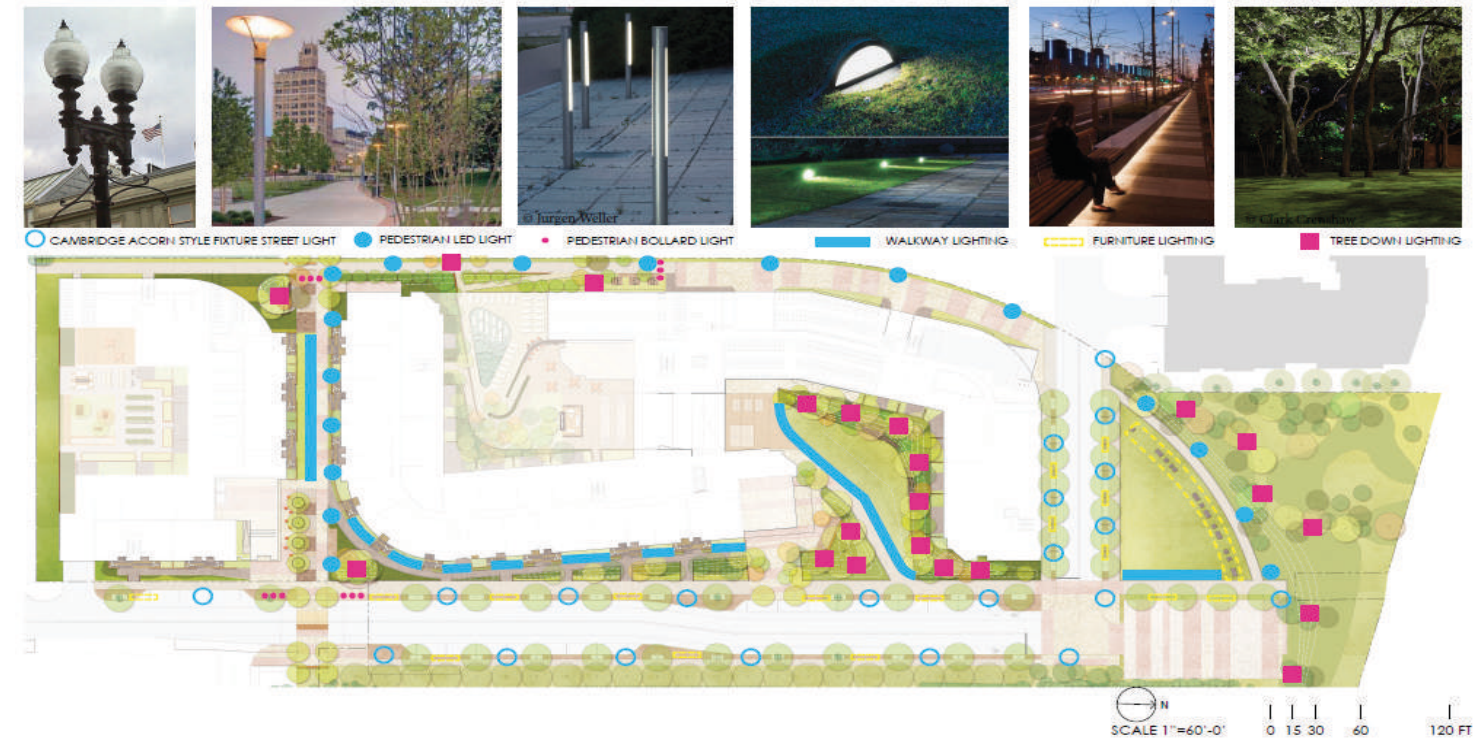
Answer: The team has developed an integrated landscape plan that carefully considers the details of materials, lighting and seating and links them to the activities anticipated in the spaces. These are shown in the *Materials Plan*, *Furniture Plan* and *Lighting Plan* shown on this page and in larger format on pages 53-55 of Volume 2 of this submission.



Furniture Plan (Vol. 2 - Page 53)



Materials Plan (Vol. 2 - Page 52)



Lighting Plan (Vol. 2 - Page 54)

E. Building Design

Question 10: Metal is not a typical residential material; Show other examples.

Answer: Metal has a long history in residential architecture. We can think of a number of examples such as the Lustron prefabs and the case study houses of the 50's. Phillip Johnson's glass house and Mies's Farnsworth house are famous metal houses. Right here in Cambridge, Loft 23 in University Park with its iconic copper skin complimenting the brick context that surrounds it is one of the most popular rental buildings in the city where people rent a one bedroom apartment to wait for a two bedroom unit to open up. Robert Campbell of the Boston Globe noted, "You can forget, in such a parade of competing pizzazz, just how satisfying a work of plain old fashioned modernism can be. As much as anything, Loft 23 is a work of modernist sculpture. It is an elegant work of abstract art. Copper and glass are brought together by means of details that are as crisply articulated as an architectural language can be."

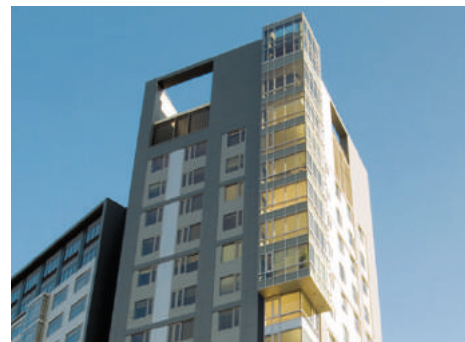
Residential architecture does not often get spoken of in such terms or even reviewed by an architectural critic. Also in University Park is 100 Lansdowne, another all metal residential building. The new Ink Block in downtown Boston uses the same siding material proposed for 55 Wheeler but in a horizontal orientation rather than a vertical one. The Janelia Farms scholar housing at the Howard Hughes Medical institute also uses the same material vertically but does not stagger it by floor as we are proposing to do giving the building a one-story scaling device.



Lustron Prefab



Loft 23



100 Lansdowne



Ink Block

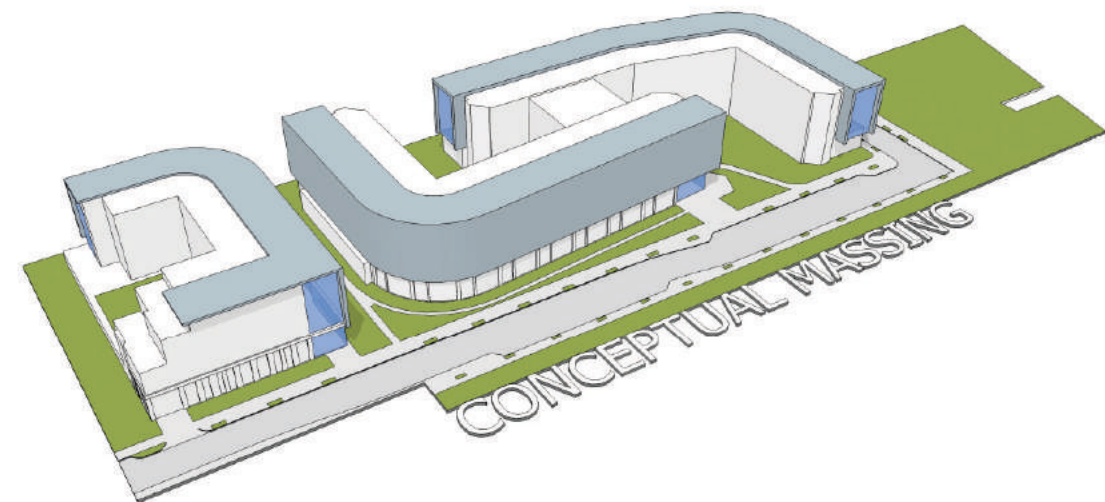


Janelia Farms Scholar House

Materials typically used in 5 over 1 residential buildings are themselves only representative of the original materials used in residential construction for the reason that they must be noncombustible. They often don't achieve the articulation and detail of the originals. The typical Hardie siding is thin and wavy on long facades and not like the full thickness clapboards (used on the Fuse project in Cambridge) that allowed the mitering of the corners as was traditionally done. In addition, using a material that was historically appropriately scaled for a two-story house sometimes visually increases the scale of these buildings. A hundred rows of 6" exposure clapboards for instance. Carrying Brick on the wood frame is structurally dubious long term so it is usually limited to the podium levels.

The goal of the design at 55 Wheeler is to develop a creative and honest expression that achieves its residential qualities from front doors, different size windows that respond to the function behind them, balconies that show inhabitation with flowers and tables and chairs. This is complimented by a desire to use perception to communicate a level quality through a material expression related to the massing that expresses volumetric character and depth such as shown in the tubular forms (conceptual massing diagram) and in the lower two levels with brick returns, depth to the structural members, and warm wood details in the fences and front doors.

The 55 Wheeler project uses a vertical metal panel with three or four various combinations of flat and corrugated sections, which allows us to achieve a highly textured façade reminiscent of board and batten, but something new. By staggering the pattern by floor it reinforces the a single story scale and combined with the overall wall scaling of 5 over 2 and then balconies that create dashes on the façade we get multiple scales to the wall. Windows are grouped in a number of different configurations that give tremendous variety to the wall occasionally revealing the white liner or the wood colored accents. In addition window trim and projected flashings at the floor line create shadows and animate the facades. In Building One, two story brick townhouses are capped by a visually structural beam that allows the true depth clapboard columns that are grouped in two story increments to bear on it. Honestly expressing the structural change that occurs as the building changes from the concrete podium to wood bearing walls above.



Conceptual Massing Diagram (Vol. 2 - Page 7)

Question 11: Make us comfortable with color balance. We understand appeal of vertical integrity but believe the color may be too dark.

Answer: The goal has always been to create a warm building with lots of texture and is why the design team settled on a bronze color for the direction of the metal siding. Past projects have shown us that these metallic finishes have a lot of life to them changing color as the light changes throughout the day. Moving from the color we are familiar with to almost white at the top of the building as the sun glints off the wall. The design team understands that the first rendition of this was too gray. The new views show our intention that it is slightly redder and lighter in color. Since the September 5, 2017 Planning Board hearing, the design team has looked at a number of options and are exploring using a slightly different shade on each of the three buildings or at least vary it from building one to two and three. As the color warms up you could think of it like tree bark or cedar in color and texture. This material clads the curved massing like the chocolate on a candy bar. Where the windows and balconies are cut out we see the white liner and caramel colored wood accents make for an interesting composition. Staggering the pattern by floor reinforces a single story scale on the bar and combined with the overall wall scaling of 5 over 2 and then balconies that create dashes on the façade we get multiple scales to the wall.

When the whole palette of materials is taken into consideration, it is quite warm in character even though a large part of it is metal. We begin with a warm bronze color more saturated and redder than our initial renderings showed. The metallic color will reflect the light changing throughout the day and turning a warm orange in the yellow light of the setting sun. This is complimented by expanded wood accents, a limestone colored stucco on the frames of the first two levels of buildings 2 and 3. These materials are then reinforced by the landscape materials of wood privacy screens, pavers, and corten steel accents.



Question 12: Is there enough variety?

Answer: The strategy from the beginning was to create variety while maintaining a family resemblance to the whole. It is our observation that the block and local context is visually chaotic. From the multi-colored complex building form on the corner of Wheeler street and Concord Ave. to the eight different tops and multiple facades of Atmark. Our design is the antidote to this visual chaos, more calm but not without variety. Building 1 was seen as the transition from the Reservoir Lofts project in both scaling and materials. A brick base of townhouses supports a clapboard façade to relate the materials of our neighbor. The design team is using Artisan siding – similar to that on the Fuse project -- that is full depth and gives great shadow lines. The façade is grouped in two-story sections to further scale the wall with a setback top floor. A vertical element signals the entry with is glass and transparent. As the building moves down the block towards building 2 the bronze shell provides an overhanging roof and clads the upper stories of the Mews. This gives building one a different expression than buildings 2 and 3 which is appropriate because its scale and potential use as an ownership property relate it to Reservoir Lofts.

The design team has created a dynamic form of curved buildings that are inspired by the railroad spurs. This serves to do several things in terms of making space, reducing the bulk at the corners, and giving logic to the material choices. The curved forms are further broken down into exterior shell and interior liner. As noted above we have chosen a warm bronze for the shell and white for the liner to reflect light into the courtyards which all face different solar orientations to further animate them with changing light. We have already discussed the highly textured façade created by the random vertical siding. Layered on to this is a composition of windows and balcony elements. We have noted that one thing residential buildings have in common is a variety of window types that reflect whether there is a living room, bedroom, or bathroom behind the glass. The design team has used this variety to make groupings of approximately eight different compositions of materials and window sizes just along Wheeler Street between the curve and the entry. The cornice is broken in approximately 30 foot increments like the townhouses of the Back Bay. These are then treated with varying combinations of materials, openings, and balconies. The result is variety with a visual calmness that allows one to discover more about the building, the more one studies it.



Fuse Apartments, Cambridge



Question 13: Skyline could be bolder if possible. Consider whether an upper level setback, projecting bays or other architectural elements might help to create additional variety.

Answer: There is the danger that if every building creates its own skyline then it gets too visually busy. New York is made up of individual buildings that combine to make a skyline. On the Wheeler/ Fawcett block, Atmark has enough tops for several blocks of a city. The corner building at Concord and Wheeler also has many tops and multiple colors and is relatively blank at the street except for some canopies. This is the opposite of what is proposed for 55 Wheeler where the ground floors are really interesting and the top is simpler. We have created views that show how the massing of our building creates a dramatic skyline from a number of places on the site without resorting to creating false front like a western stage set. Our experience walking the neighborhood is that you don't experience the top of Atmark on Fawcett Street, but from farther away like on the bridge over the railroad tracks where the foreground of the substation makes for too much visual chaos.

Since the September 5, 2017 Planning Board hearing the design team has enlarged the parapet breaks and developed an alternative on the curved part of Building 2 that sets back the top floor five feet and exposes the wood material creating balconies for those units and allowing sky to be seen through the frame visually lightening this curved portion of the façade. It is important to us to keep the bronze frame intact so the conceptual massing is kept intact and can be expressed in the hoods that clad the building ends.



Building 2 Study: 7th Floor Setback (Vol. 2 - Page 34)



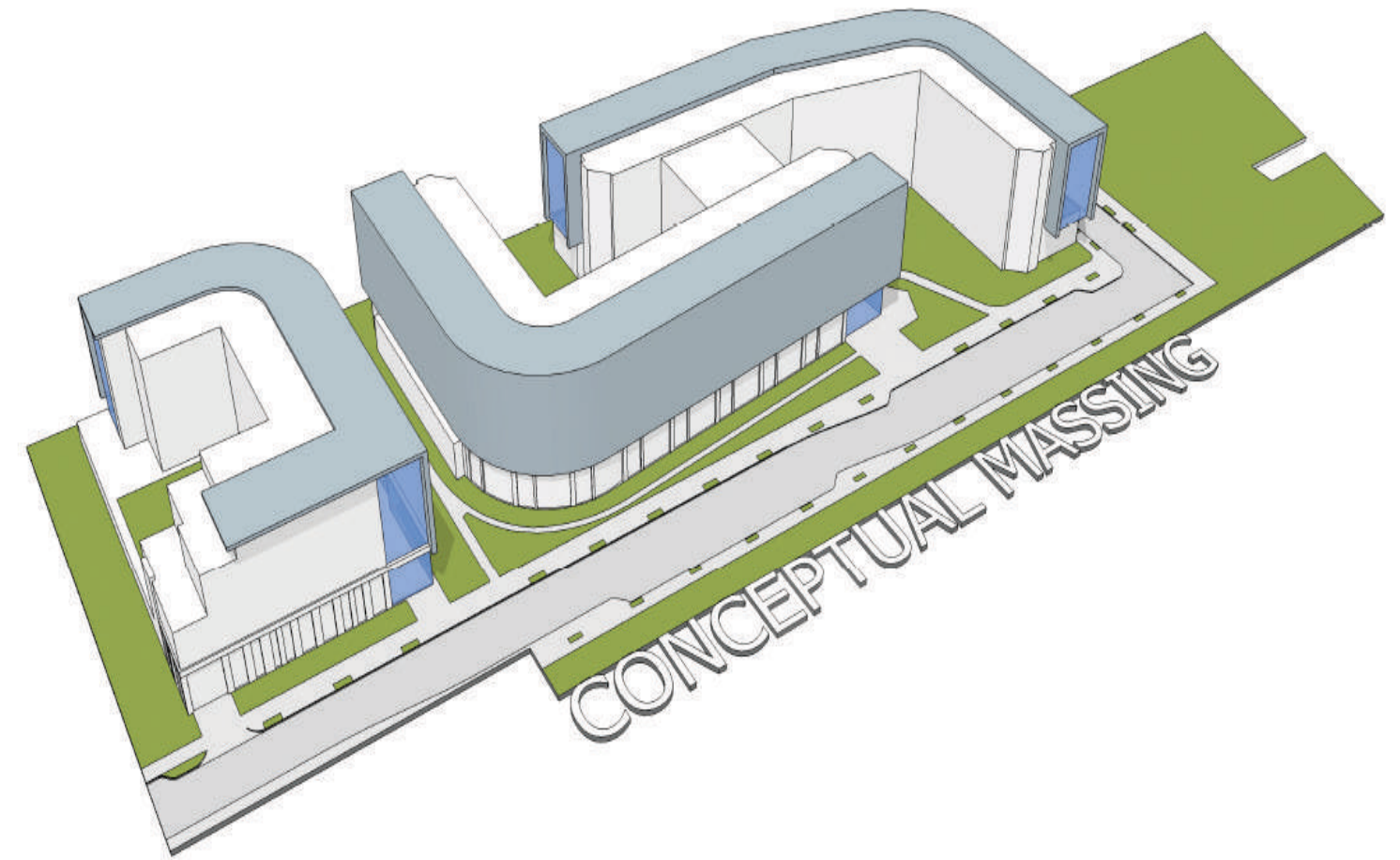
Building Skylines (Vol. 2 - Page 37)

Question 14: The columns don't go to the ground; upper stories floating.

Answer: This needs to be understood in the context of the construction of the building where a concrete frame comes from the below grade garage to the third floor slab. This is the podium and is a flat slab supported by columns that must work with the parking grid, allow for site features such as the Mews and bending of building two away from the street. Beginning with the third floor slab, there are five floors of wood framed structure with bearing walls. The third floor slab is structured so that these walls can land anywhere on the slab as best served by the unit layout. We have chosen to express this honestly on the exterior by creating the bronze form that acts like a curved bronze beam sitting on the concrete columns. This makes for a visually stable composition because the depth of the beam (5 floors of bronze) can span from column to column. Similarly in Building 1 the beam above the brick piers is sized to visually carry the clapboard columns which are spanning shorter distances.

However, if you look carefully the entrance to Building 1 is carried fully up the façade as a window and white composition and is not set back as it is on the left hand side. Also, in places along the Mews and near the parking entrance on Fawcett Street the bronze cladding comes to the ground allowing the large carve outs for the entrances.

This building has a modern expression in the tradition of Cambridge being a place of innovation of architecture. It is one of the few places in the US that has an Aalto building, Baker House at MIT and Le Corbusier's Carpenter Center at Harvard, Ben Thompson's Design Research Building, the skip stop residential building at 100 Memorial drive and our own Loft 23. It is in this tradition that we aspire to put 55 Wheeler Street and make a place not a project. It is a project with "style" not of a "style."



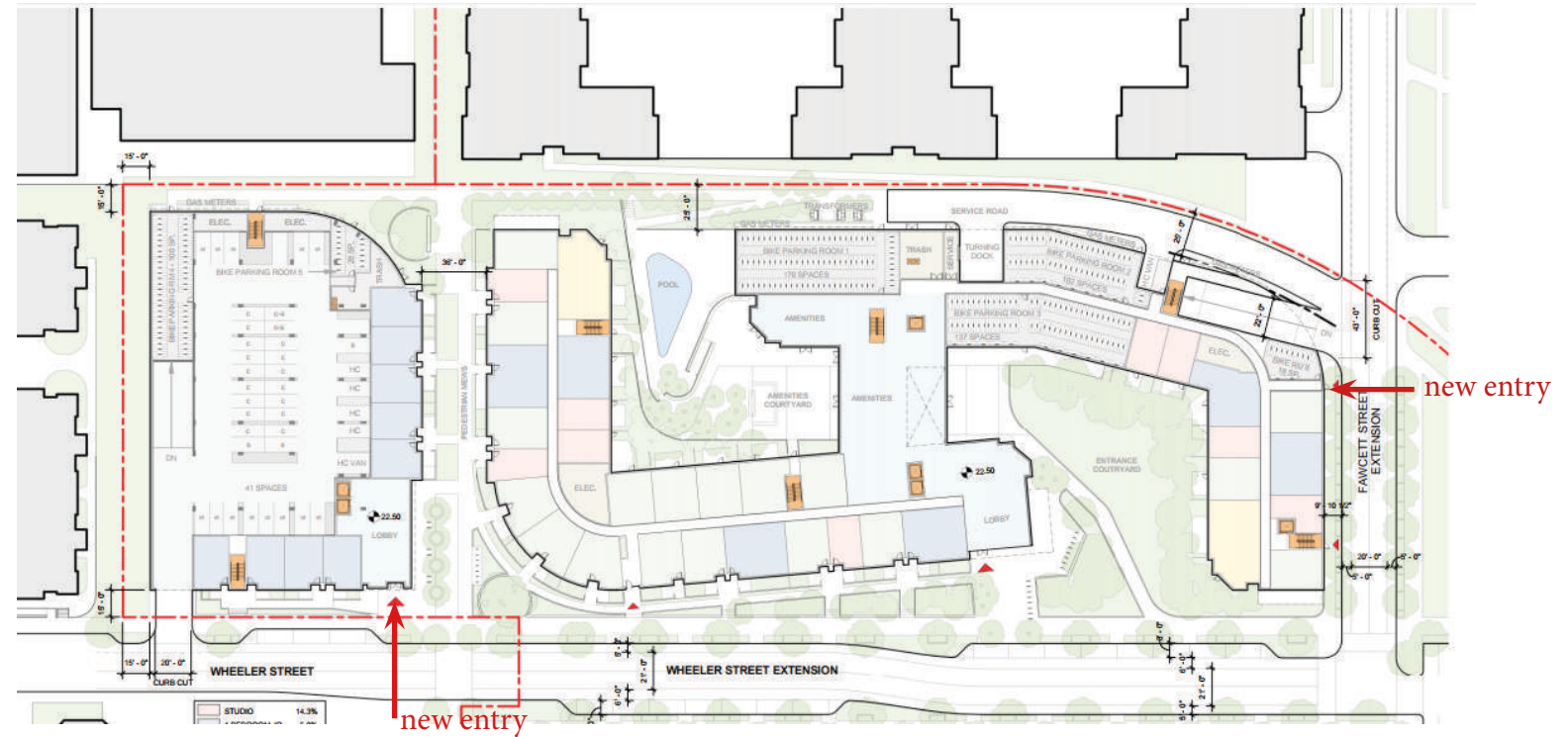
Conceptual Massing Diagram (Vol. 2 - Page 7)

Question 15: The entrance to Building 2 seems distant. Please study the provision of an additional entrance closer to Building 1. There does not appear to be a main entrance for Building 3. Providing such would help give that building its own sense of identity and would also activate Fawcett Street.

Answer: Buildings 2 and 3 share a main entrance in service of activating the entry courtyard and creating destination around amenities and public facilities. However, the suggestions of additional entries for each of these buildings for both street activation and resident convenience are important. Since the September 5, 2017 Planning Board hearing the design team has studied locations for a potential second entrances for both Buildings 2 and 3 and propose including them at the location shown.

Question 16: Given the noise created by the substation, consider additional soundproofing for tenants.

Answer: The Applicant will conduct further acoustical investigation and, if needed, explore using windows with higher level of soundproofing in relevant portions of the building to extent deemed appropriate.



Ground Level Plan (Vol. 2 - Page 11)

F. Transportation

Question 17: Will visitors be able to park in the parking garage?

Answer: Visitors will be allowed to park in the garage. However, the small surface lot at the northeasterly side of the site will also be available for short term visitor parking as well as convenience parking for maintenance workers and others who have short-term business with residents.

Question 18: Should parking be reduced? Is the parking ratio appropriate if Building 1 units are owner occupied?

Answer: The parking ratio of .85 is on the low end of other multifamily projects that have been permitted in the area which have had parking ratios in the range of .85 to 1.0. There is a desire by the proponent, neighbors and the City that the approximately 100 units in Building 1 be ownership units. Generally purchasers of units are more heavily weighted as car owners at a rate of 1 per unit. That will bring the effective ratio for the rental units to .82. Although this is a lower ratio than other projects permitted in the area, the City's Traffic and Parking Department reports that automobile utilization continues to fall and therefore the project team believes that this number of spaces achieves the right balance for the Project.

Question 19: Will the sections of Wheeler and Fawcett Streets to be constructed as part of the project be public ways?

Answer: The Applicant intends to convey an easement or fee interest to the City of Cambridge (and get the City to accept a dedication of same) in the new roadway, running from the present terminus of Wheeler Street to Fawcett Street immediately upon the Applicant substantially completing the construction of such roadway, in accordance with the provisions of that certain Reciprocal Easement Agreement dated September 27, 2001, entered into with the owner of the property situated at 70 Fawcett Street.

Question 20: Please describe how the trip generation relates to the existing use.

Answer: As a residential development with a low parking ratio and significant measures to encourage the use of alternative transportation, this project has been designed to have as minimal an impact to the roadway network as possible. The project adds fewer new trips than would be anticipated for a similar project because there are a significant amount of trips already existing at the site due to the existing operational commercial tenant. For example, although the project generates 116 trips in the morning peak hour it is offset by the number of existing trips created by the commercial tenant and is therefore reduced by nearly 60% to 40 new trips in the morning peak hour. In addition, this being a residential project the vehicle trip generation is much lower than it would be if this was a commercial building.

Question 21: Describe how the TMA effectively assists in encouraging residents to utilize transit?

Answer: The Alewife TMA runs a shuttle between Alewife Station and stops at 55 Wheeler, Fawcett Street, Moulton Street, Wilson Street and Concord Avenue. This shuttle runs approximately every half hour between 7:00 – 10:00 am and 3:30 – 7:00 pm. Residents having the option of both walking to the Red Line in nice weather and taking a shuttle which stops at the front door in poor weather are more likely to make transit their regular method of travel to work. The construction of Wheeler and Fawcett Street extensions will enable the shuttle to run more efficiently as it will no longer have to travel on Concord Avenue between its Fawcett and Wheeler stops.

Question 22: The location makes transportation difficult – what transportation demand management measures will be in place to encourage alternative means of transportation?

Answer: The City of Cambridge does not require a formal TDM program for residential developments but over the years a number of TDM measures have been identified as being effective in shifting residents of multifamily buildings to modes other than the car to get to work. The Applicant has consulted with the City’s Traffic, Parking and Transportation Department (“TP&T”) on effective measures and will commit to the following TDM measures as part of the special permit process.

a. Carsharing: The Project will provide at least two publicly accessible carsharing parking spaces on-site, if desired by a local carsharing organization. These may be located on-street and will initially be located in the small surface lot. This will be a benefit to the neighborhood and the residents of the Project and will discourage ownership and associated daily reliance on a car by providing access to a car for occasional use.

b. Transit Pass: To establish the habit of using public transit, the Project will offer each adult member of each household (up to 2) upon move-in a Charlie Card valued at the cost of 50% of a Monthly MBTA LinkPass (currently \$84.50/month, subject to fare increases) for 3 consecutive months. This requirement renews each time a new household moves in to incentivize new households to use public transit.

c. Bike Share: To encourage the habit of utilizing a bicycle, the Project will offer all eligible residents up to two per household, a Gold Level or equivalent Hubway annual membership upon move-in. This requirement renews each time a new household moves in to incentivize new households to use the Hubway bikeshare system.

d. TMA Membership: The Project will join the Alewife Transportation Management Association (TMA) to provide transportation benefits including shuttle to residents.

e. TMA Shuttle: To facilitate rapid transit utilization in all weather conditions, the Project will provide access to a shuttle to Alewife MBTA station, at current 30 minutes headways during the morning and afternoon peak hours, as offered by the Alewife TMA or equivalent service. As a member of the Alewife TMA Shuttle Service, the developer will participate in service improvement discussions that may include improvements to headways.

f. Real Time Transit Screen: To enable residents to make informed transportation choices, the Project will install a real-time multimodal transportation display screen to help people decide which mode to choose for each trip and/or post materials at a transportation information center in building lobbies.

g. Transportation Coordinator: The Project will designate a transportation coordinator (TC) for the site to manage the TDM programs including, compiling and distributing New Resident Packet about transportation options in the area.

h. Electric Vehicle Charging: To facilitate the adoption of concept cars and other cutting edge mobility solutions, the Project will provide a minimum of two Level 2 DC fast Charge electric vehicle charging station serving four designated parking spaces.

i. Bike Repair Station: To ease bicycle ownership and maintain utilization of bicycles, the Project will provide bike repair areas, including air pumps and other bike repair tools, in the bicycle storage areas.
j. Free Bicycle Parking: To facilitate bicycle ownership in an urban context, the Project will not charge residents additional fees for bicycle parking.

k. Separate Auto Parking Fees: To discourage automobile ownership and usage, the Project will charge fees for automobile parking separately from the rent to remind residents of the cost of owning a vehicle.

l. Transportation Monitoring: To assist the City in continually evaluating and promoting TDM measures, the Project will implement a monitoring program to be every year for the 1st 5 years and then every 2 years afterwards. It will include monitoring of mode split, counts of parking space utilization, and auto ownership.

Question 23: Who owns the Terminal Road property? Is there an advantage to just building Terminal Road just for pedestrians and bicycles?

Answer: The land required for construction of Terminal Road is composed of multiple properties that are owned by a combination of private landowners and Eversource. While it is the City’s decision, we think there is probably little, if any, financial or procedural benefit or efficiency to financing and constructing a Terminal Road for just bicycles and pedestrians rather than as a complete street.

Question 24: Will the project add a signal at Fawcett Street as part of its mitigation? Will there be any operational change to Wheeler Street?

Answer: The proponent is working through mitigation with Cambridge TP&T but expects that the installation of a new signal at Fawcett Street and Concord Avenue will be part of it. The Applicant will likely install a new traffic signal at the Concord Avenue/Fawcett Street intersection including real-time traffic and bike count station. The signal would be coordinated with existing equipment at other signals along Concord Avenue, as feasible.

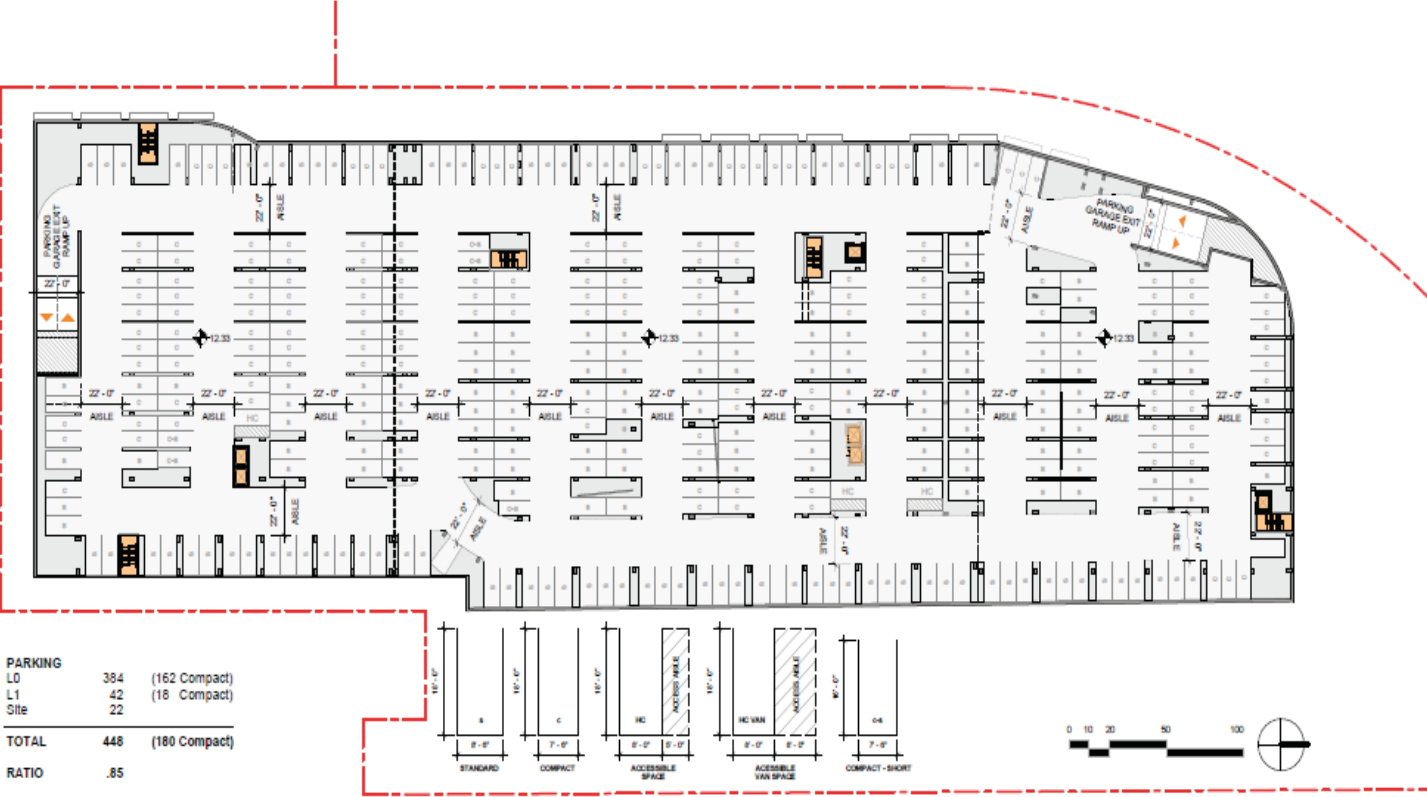
Although concepts for making Wheeler Street one way or for making it right in/right out only at Concord Avenue have been discussed over the years, it is recognized that the creation of a direct Wheeler to Fawcett connection through the roadway construction associated with this project, as well as the Project’s installation of a new signal at Concord Avenue/Fawcett Street, will change the traffic patterns for residents and shopping center related commercial vehicles. Therefore, there is no proposal to change the operation of Wheeler Street at this time. However, there is nothing in the 55 Wheeler Street proposal that precludes these changes from occurring at any point in the future.

G. Subsurface Construction

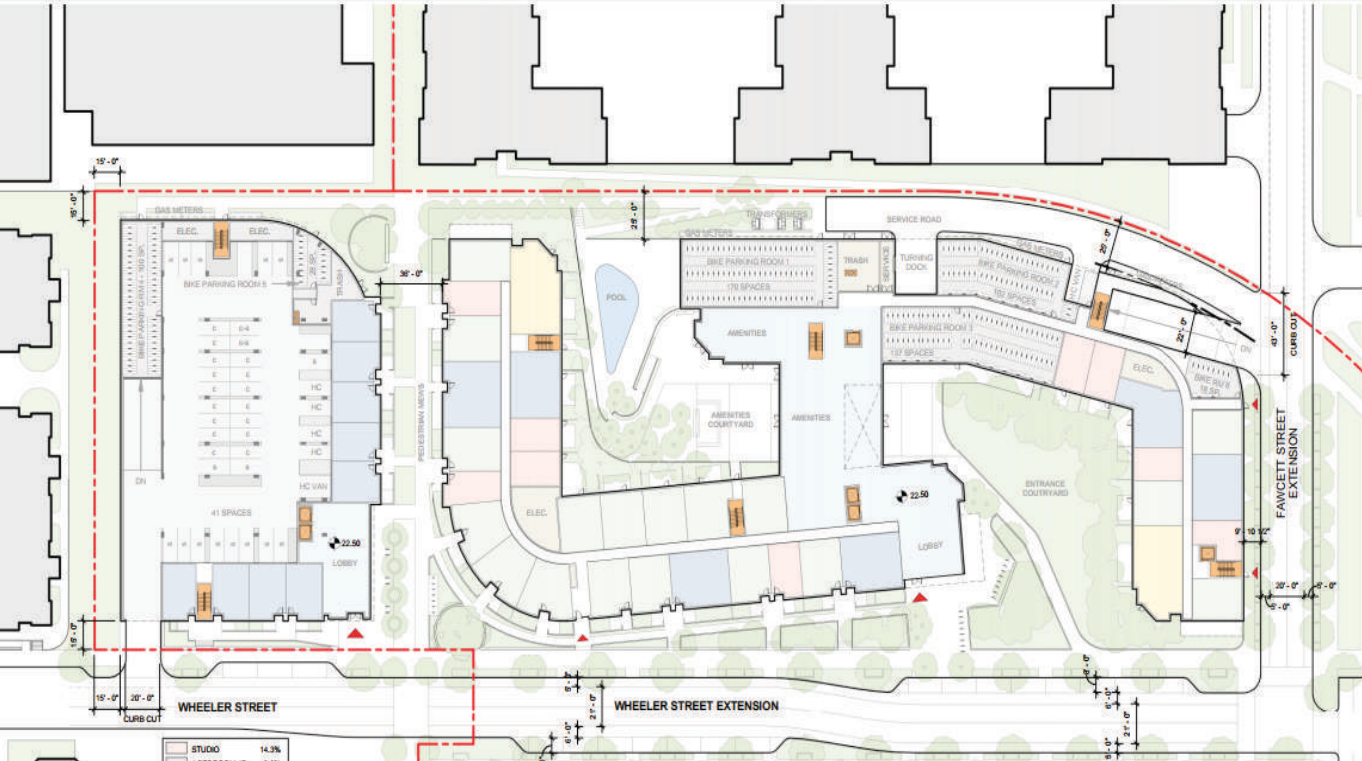
Question 25: How many feet of garage excavation? Please provide sections/elevations of garage construction. Is garage heated?

Answer: The parking garage will encompass one level below grade in a rectangular podium beneath the aggregated building 1, 2 and 3 building sites as well as 42 spaces on the first level of Building 1. As shown on Building Section Wheeler Street and Building Section Fawcett Street, construction of the garage and its footings will require approximately 8-10 feet of excavation from existing grade across the building site.

Unlike typical buildings of a similar typology, the majority of the parking is below grade, allowing for direct entry first level units throughout. At Building 1 there are 42 spaces on the ground level but they are located in the middle of the building and the building edges contain direct entry ground floor units along Wheeler Street and bike parking along the service road and southern property line. Elevations of each side of all three buildings are included in the updated building plans submitted in companionship with this document. The garage will not be heated.



Lower Level Plan (Vol. 2 - Page 10)



Ground Level Plan (Vol. 2 - Page 11)

Question 26: Interested in the general environmental characterization of soils on the site.

Answer: A Phase I environmental assessment has been conducted for the property. The property was subject to a Class B-1 Response Action Outcome (RAO) Statement filed with MassDEP in November 2008 (RTN 3-27850) which was closed with a finding of no significant risk. Contaminants detected above the RCS-1 reportable concentrations were cadmium, lead and benzo(a)pyrene, which are attributable to the historic placement of urban fill at the site in the 1940s prior to the construction of the existing buildings. Recent characterization of the soil has not been conducted. If necessary, characterization of excess material to be excavated and generated for offsite transport will be undertaken prior to removing any material from the property. Soil management will occur in accordance with applicable local, state and federal regulations.

No asbestos evaluation of the existing structures has been undertaken; however, it is possible that asbestos containing materials are present given the age of the existing building. An evaluation will be conducted prior to the commencement of demolition activities and should any hazardous material be encountered they will be handled and disposed of in accordance with all applicable local, state and federal regulations.