



1021/1025 Massachusetts Avenue

Project Sustainability

February 22, 2023

The project will be designed to include the following sustainability related features:

LOCATION and TRANSPORTATION

- Project located in area with public transportation via bus lines serving the commuter rail at Porter Square and the red line at Harvard Station. There is a bus stop at the site and one across street.
- Project located within ½ mile walk to a full array of community resources, such as banking, dining and shopping.
- Site is currently developed and has been significantly degraded over the years.
- 5 story building height allows for greater density within building footprints
- Bicycle facilities are provided inside the building for residents, with exterior bike racks provided for visitors.
- Parking space counts have been reduced to the extent possible with all of the parking located within the building, limiting pervious area and heat island effect.
- Eleven EV charging stations will be provided, with provision for future EV stations by way of conduit provided within the parking garage

SUSTAINABLE SITES

- Project has a construction activity pollution prevention plan where an erosion and sedimentation plan will be followed (SWPPP)
- Significant amounts of contiguous open space are provided by way of the planted area at the north end of the site
- Stormwater runoff will be managed per state regulations/best practices as opposed to the existing condition with offsite untreated flows
- Complete new landscape plan featuring native/non-invasive/drought tolerant species is proposed including 54 deciduous trees, 60 tree seedlings, and 11 evergreen trees
- The planted areas will provide Improved habitat for birds and small animals
- The outdoor plaza at the second level will provide additional outdoor living area
- Green roof at the plaza area will reduce the heat island effect

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- White roofing (solar reflective index equal to or great than 82) at flat roof sections, combined with in-building parking will serve to reduce heat island effect
- All exterior lighting will be dark sky compliant and designed not to spill over onto adjacent sites

WATER EFFICIENCY

- Drought tolerant and native shrub and tree species will be watered by hand until established.
- Lawn areas planted with a native grass mix will receive a nominal amount of irrigation.
- Indoor water use will be limited to extent possible through use of low flow toilets and plumbing fixtures which will be WaterSense labeled
- Residents domestic hot water use will be individually metered, supporting water efficiency efforts by monitoring and benchmarking water usage over time

ENERGY and ATMOSPHERE

- Building design will meet the revised Massachusetts Stretch Energy Code (225CMR 23.00) requirements, with minimum R value as follows:

Roof: R-49

Walls: R-23.8 (5 + 19)

Foundation Perimeter below grade: R-10

Foundation Perimeter above grade: R-13.3

Slabs: R-10

- Building will have a continuous exterior insulation application
- Building will be designed to have a continuous air barrier and to limit thermal bridging
- Building roof areas will be structured to be solar-ready with conduit provided from an enlarged electrical room designed to accommodate solar equipment
- Motion sensor lighting will be installed in common hallways and stairways
- Units and common spaces will be heated and cooled by a high efficiency heat pump systems
- Units will have individual control and metering and be designed to be compartmentalized
- Unit appliances will be energy star rated
- Units design will be evaluated by a HERS rater, including blower door testing
- Units will be energy usage commissioned prior to occupancy (ASHRAE Standard 90.1-2010)

MATERIALS and RESOURCES

- Construction waste will be sorted to maximize level of recycling

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- Construction materials to be sourced locally to the extent possible
- Tile backer board to be non-paper faced

INDOOR ENVIRONMENTAL QUALITY

- No smoking will be allowed on site or in the building common areas
- All materials used will be no or low VOC emittance with a limited use of carpet
- Units and common areas to be served with energy recovery ventilation
- Project will employ continuously operating exhaust fans at bathrooms to minimize potential moisture problems
- All clothes dryers will be exhausted directly to the exterior
- Interior lighting to be low energy LED type
- All units will have a carbon monoxide detectors
- Window will be sized take advantage of daylight
- Unit wall and floor assembly separations will be acoustically engineered for privacy

END