

YOUTH BUILD - ONE LENOX STREET BOSTON, MASSACHUSETTS

- OWNER

Caritas Communities, Inc.

- ARCHITECT

Russell, Scott, Steedle & Capone Architects

- CONSTRUCTION COST

\$2,600,000



Rendering by RSSC

PROJECT DESCRIPTION

One Lenox is owned by YouthBuild Boston and is a mixed use project with half of the first floor fronting on Washington Street providing open retail space. The rear portion of the first floor contains a common room, manager's apartment, and a handicapped apartment. 24 low income studio apartments occupy the upper three floors. The building is a four (4) story wood framed structure with dimensional lumber joists for the floor and roof framing.

To minimize excavation of the urban fill, a "hybrid" foundation combining strip footings and grade beams was utilized. The supporting footings were held back from the face of the building on the two sides abutting streets and the side abutting an adjacent property. A structural slab was placed over the foundation walls and grade beams. This foundation also eliminated the need to underpin the adjacent building and reduced the excavation along the two streets, including the recently reconstructed Washington Street side.

The first floor was 14'-0" tall so that the upper floors aligned with the neighboring structures as dictated by the Boston Redevelopment Association. Due to the high first floor height, the retail space utilized interior steel columns and double 2x8 exterior wall studs, while the rear portion required an intermediate structural diaphragm to reduce the unbraced height of the exterior and interior bearing walls so that standard 2x6 studs could be utilized. Due to the open plan requirements of the retail space, three of the interior shear walls that occur on the upper floors had to be transferred to the rear half of the building at the second floor. This was accomplished with drag tie connections between the engineered beams over the retail space to the shear walls between the four first floor rooms. Simpson's Anchor Tiedown System (ATS) was utilized for overturning restraint of the shear walls. Due to the height of the first floor, engineered lumber posts had to be used to each side of the ATS rods instead of the usual built-up studs.

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