

RETROFITTING PROJECTS

SAMPLING

BOB'S STORE - FRANKLIN, MASSACHUSETTS

Former Ame's retail store approximately 56,600 square feet with standard steel joist and beam roof construction with perimeter concrete masonry unit bearing walls. Renovation included loading dock area with depressed ramp, selective demolition of existing mezzanines, removal and replacement of new front canopy and facade. Roof reinforcement for new HVAC roof top equipment and additional structure to address snow drift loading.

BOB'S STORE - NEWINGTON, CONNECTICUT

Existing 48,800 square foot one-story retail space constructed with steel joist and beam roof, exterior concrete masonry unit bearing walls and slab on grade. Structural renovations were limited to a review of existing structural documents for adapting the framing to support seven new roof top HVAC units.

BOSTON MEDICAL CENTER - BCD BUILDING - BOSTON, MASSACHUSETTS

This 3-story structure is one of the few remaining original buildings from the Boston City Hospital campus, built in the 1860's. Named for wards B, C, & D, the building has been vacant for nearly 30 years. The wood floor and masonry bearing wall structure is slated to be renovated to create a new home for the Boston Medical Center's IT department. To meet programming requirements, two new mezzanine levels will be constructed, and their floor systems will consist of concrete slabs on metal deck with structural steel framing. In addition, the entire structure will be retrofitted to meet current code requirements for seismic forces, and this will include the construction of steel braced frames and moment frames along with tube steel wall bracing. The design process included much coordination to maximize floor heights, integrate mechanical requirements, and minimize costs while maintaining the historic integrity of the original building.

BOSTON SCIENTIFIC CORPORATION - MARLBOROUGH, MASSACHUSETTS

Three existing multi-story steel framed buildings on campus-type grounds with enclosed linked walkways. Proposed renovations include adapting the existing facility for new executive offices, laboratory research, and manufacturing. Structural renovations addressed new mechanical systems consisting of roof reinforcing for HVAC equipment, relocation and addition of chilled water equipment, emergency generators, and processed piping support. Structural design required review of existing facilities documents. Design of new support elements and creation of new floor and roof openings for the revised mechanical systems.

190 EVERETT STREET (CHELSEA BRICKYARD) - CHELSEA, MASSACHUSETTS

This site consisted of six structures constructed in 1908 of wood timber and exterior brick bearing wall. The development of the site required the removal of one structure and future renovation to the others. The existing main mill building was to be renovated and prepared for today's market. Our work involved design of a new steel beam, joist and deck, roof structure with provision for new HVAC equipment. The perimeter bearing walls required enhancement by design of a backup structural frame to conform to today's building code wind force design requirements. The final major redesign was to address the existing floor structure by repair and supplement framing to increase the live load capacity.



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