The Union Square Condominium Association consists of a 5-story building completed in 1998 and a 10-story building converted from an existing factory at the same time. During the conversion, an additional 4 stories were added to the existing 6-story factory that was originally constructed in 1918 and expanded in 1938 and 1946.

BTC’s initial investigation was performed to evaluate ongoing water leakage at several units, primarily below the 7th floor parapet wall extending above the original factory structure. BTC’s evaluation revealed several deficiencies, including deteriorated mortar joints, deteriorated sealant joints, lack of suitable through-wall flashing below parapet coping caps, and lack of through-wall flashing within the parapet wall at the top of the concrete slab and shelf angle location.

Significant deterioration of brick masonry was also observed at masonry piers and was attributed to corrosion of existing steel shelf angles. In addition, deterioration of numerous other building components were observed, including terra cotta window head units, sealant joints, mortar joints, and corrosion of the steel balcony framing components.

BTC developed details and specifications for repairs including miscellaneous masonry repairs, the complete rebuilding of the 7th floor parapet, application of traffic bearing membrane on balconies, and coating of the steel balcony framing.

BTC also provided bidding assistance and performed field observation services and contract administration during the construction phase of the project.