

## Project Profile



Originally designated as One Museum Park West, The Grant is a 56-story concrete framed structure with 294 residential condominium units. The construction of the building was completed in 2009. The property includes 2 separate parking garages housing a total of approximately 294 deeded parking spaces. The 40,000-square-foot upper garage is located on the 2<sup>nd</sup> through 4<sup>th</sup> floors. The 120,000-square-foot lower parking garage is located on Basement Levels 1 through 5. Secant piles form the perimeter walls of the lower garage.

The Association expressed concerns about numerous water leakage issues within the parking garages. As such, BTC was retained to evaluate the causes of the reported water leaks and to design repairs to address them. Significant cracking in the elevated reinforced concrete slabs was contributing to water penetration into the concrete and through to the floors below. In some cases, the leaks resulted in damage to vehicles. Slope and drainage issues were contributing to ponding water at numerous locations throughout the garage and standing water inside garage elevator lobbies. Leaks were also emanating from joints between secant wall piles.

The design included miscellaneous concrete repairs and the application of a traffic bearing membrane (TBM) to minimize water penetration into the slab, and protect embedded reinforcing steel against accelerated deterioration. The design also included the addition of strategically placed floor drains to alleviate some of the ponding water conditions, and to minimize the amount of water that could reach the elevator lobbies. Negative side secant wall repair options were developed to address leaks at joints between secant piles.

Bidding assistance and construction contract administration services were also provided by BTC to ensure repairs were performed in accordance with the design. Project Name: Parking Garage Repairs The Grant Condominium Building

**Project Location:** 1201 South Prairie Avenue Chicago, Illinois

Client: One Museum Park West Condominium Association; Related Midwest

Approximate Construction Cost: \$800,000

Year Completed: 2015

Nature of Services: Evaluation, Design of Miscellaneous Concrete Repairs, Bidding Assistance, and Construction Contract Administration



