



The 3950 North Lake Shore Drive Buildings consist of 3 concrete framed high-rise buildings, all connected at the ground floor by lobby and parking garage areas. The buildings were constructed in the mid-1950s and are all 23 stories tall. Built-in concrete planter boxes line the north and south elevations adjacent to the storefront entrances. These planters are located above storage lockers in the basement level of the building.

Overhead concrete near the basement level storage lockers was exhibiting significant deterioration and leaks were also occurring. BTC performed systematic water testing at the storefront entrances and planter boxes to identify sources for the leaks in the storage units below. Exploratory excavations revealed that there was no waterproofing membrane to protect the planter floor slabs and walls.

BTC developed details and specifications for a new waterproofing system in the planter boxes. Repairs included incidental concrete patch repairs on the topside and undersides of the planter boxes. New drain assemblies were also included in the scope of work. The waterproofing system consisted of a 2-ply modified-bitumen waterproofing membrane, protection layer, and drainage mat, with compressible expanded polystyrene insulation lining the walls of the planters. The top of the waterproofing membrane along the walls of the planters was secured with a termination bar and aluminum counterflashings were installed to protect the termination.

BTC also provided bidding assistance and performed field observation services during the construction phase of the project. Hydrostatic flood testing was performed to verify the effectiveness of the waterproofing system prior to backfilling with soil and vegetation. No leaks were observed during or following the testing.

**Project Name:**  
3950 North Lake Shore Drive  
Planter Waterproofing Repairs

**Project Location:**  
Chicago, Illinois

**Client:**  
Chicagoland Community  
Management, Inc.  
3950 North Lake Shore Drive  
Chicago, Illinois 60613

**Approximate Construction Cost:**  
\$110,000

**Year Completed:**  
2021

**Nature of Services:**  
Evaluation of Water Infiltration,  
Waterproofing System Repair Design,  
Bidding Assistance, and Construction  
Phase Services

