Project Name:
3800 North Lake Shore Drive Exterior Facade Repairs

Project Location:
Chicago, Illinois

Client:
Lieberman Management Services, 230 West Monroe Street, Suite 1550 Chicago, Illinois 60606

Approximate Construction Cost:
$750,000

Year Completed:
2008

Nature of Services:
Evaluation, Repair Design, Bidding Assistance, and Construction Phase Services

The 3800 North Lake Shore Drive Building is a 17-story high rise completed in 1927. The building is concrete framed and clad in architectural terra cotta, brick, and limestone. The limestone units on the building are not original. They were used to replace terra cotta during previous repair projects. The mansard roofs include terra cotta clad chimneys and dormers with large finials.

The evaluation and repair phases of this project were spread over a 3-year period. Evaluation of the exterior facade indicated that it was generally in good condition due to proactive maintenance over the life of the building. However, some deterioration of the terra cotta and brick masonry was observed. Deterioration of the terra cotta was primarily due to corrosion of the steel hardware used to support, anchor, and hang the terra cotta units. A significant portion of the brick mortar joints were also severely weathered.

During the repair project, extensive deterioration of a corner concrete column was identified after removal of cracked and displaced brick. The concrete had delaminated and spalled due to corrosion of the embedded reinforcing steel. The deteriorated concrete was removed, existing reinforcing steel was cleaned and painted, supplemental reinforcing steel was installed, and concrete repair material was placed to reinstate the structural integrity of the column.

The evaluation phases of the project included removal of sample terra cotta units for use in modeling new units. Approximately 75 deteriorated units were removed and replaced, and 150 loose units were removed and reset with stainless steel anchors.