



## PROJECT PROFILE

# WaterFord Condominium

Roofing, Sundeck, and Mechanical Equipment Replacement | Chicago, IL



### CLIENT

WaterFord Condominium Association

### BACKGROUND

The WaterFord Condominium building is a twenty-five-story reinforced concrete-framed structure that was constructed in 1972. A pool is located on the roof and is enclosed by a large penthouse, which divides the main roof into east and west roof areas. The roofs are low-sloped roofs that slope to internal drains and scuppers. Prior to the roofing projects, the roof areas were covered with granular-surfaced modified bitumen roofing systems.

In 2014, the City of Chicago required that the building remove wood materials that framed the previous sundeck in the west roof area to comply with fire regulations. In 2015, WJE performed a roofing condition assessment and recommended replacement of the west roof prior to installation of a new sundeck. In 2017, WJE designed the roofing replacement for the west roof, which included the addition of a new concrete paver sundeck. In 2019, WJE designed the roofing replacement for the east roof, which included the replacement of four HVAC units by helicopter airlift.



### SOLUTION

WJE performed the following services to assist the Association with the roofing, sundeck, and mechanical equipment replacement projects:

- Submitted a FOIA request to the City of Chicago and obtained original structural permit drawings for the building
- Performed a roofing condition assessment, including review of roofing inspection openings, to document and assess existing roofing conditions and inform repair recommendations and budgetary pricing
- Performed a structural analysis of the roof structure to support a new sundeck to meet the structural and egress requirements specified by the Chicago Building Code; provided options and budgetary cost estimates for roofing and sundeck replacement, including options for a green roof and planter boxes
- Designed and prepared construction documents for the new roofing systems and sundeck, including structural strengthening details for the roof structure to support the higher design live load in the sundeck area' engaged a subconsultant to specify the replacement HVAC units
- Bid the project to qualified contractors and summarized the bids for review and contract award by the Board of Directors
- Provided construction period services during installation of the new roofing, sundeck, and mechanical equipment, including submittal and RFI review, site visit observations, payment application review, and project closeout; obtained a twenty-year roofing warranty for the new systems, including wind rider for wind speeds up to 115 mph