



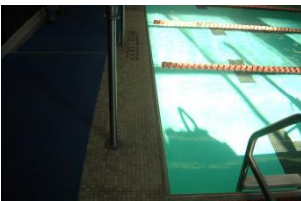
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Transportation Engineers

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City University of New York, Borough of Manhattan Community College Pool Deck Restoration, DASNY Project Number: 3128509999

New York, NY

PROJECT TYPE

Design

CONTRACT AMOUNT

\$43,000 fee

ROLE

Subconsultant to MP Engineers, P.C.
Structural Engineering, MEP Engineering,
Architecture

PROJECT OWNER/CLIENT

Dormitory Authority of the State of New York

START & END DATES

8/2012 – 12/2013

REFERENCE

Mahendra Patel, MP Engineers, P.C.
(212) 736-1100

PROJECT DESCRIPTION

SJH was a subconsultant to MP Engineers to provide DASNY with an initial investigation of repairs to an existing pool facility at CUNY Borough of Manhattan Community College (BMCC) in New York, New York. The team developed an Assessment and Prioritized Restoration Plan to restore the structural integrity of the pool deck and its support facilities. Schematic alternatives and estimates were provided. Based on the selected alternative, the team prepared design contract documents, demolition plans, and provided construction support services for the rehabilitation effort.

The facility and supporting elements were over 30 years old and were in desperate need of repair, maintenance and replacement. The scope of work includes the structural restoration of the 4,655 square foot indoor competition pool with elevated deck, MEP engineering for the drainage system, and mechanical improvements to the steam and pool filtration pump rooms. Architectural finishes on the inside of the pool and office walls are also being replaced. We checked structural drawings and details, reviewed mechanical and electrical design drawings, and provided architectural drawings for the \$1.5 million restoration.

During the initial investigation and abatement process, it was evident that replacement was needed due to severe cracking in the concrete floor slab and severe rust and corrosion found on the existing metal deck slab. Steam rooms and supporting mechanical equipment were placed below the pool deck and numerous ducts hung from the slab. After the fire-proofing was removed and the metal deck was exposed, a field survey was conducted to identify high risk areas. Crack survey and condition survey of structural supports and connection angles were carried out. We assisted with the preparation of a preliminary plan for sampling and coring, and met with the contractor during installation of scaffolding/shoring.

We provided a mechanical assessment for the existing environmental condition at the steam room and pool pump/filtration room. Problem areas included the condition of recirculation pumps and strainers, filter media, condition of buried piping, chemical treatment systems, valves and piping assembly within the surge tank, make-up water and water level control system, and the access ladder into the surge tank. We were also involved in the review of mechanical design/drawings of the drainage system and electrical design/drawings of the pool wiring. We provided design for a temporary system to protect all the mechanical equipment, steam pipes and AC ducts. In addition, SJH monitored the temporary supported area, and provided alternatives, cost estimates and an assessment report based on the core findings.

SJH Engineering, P.C.