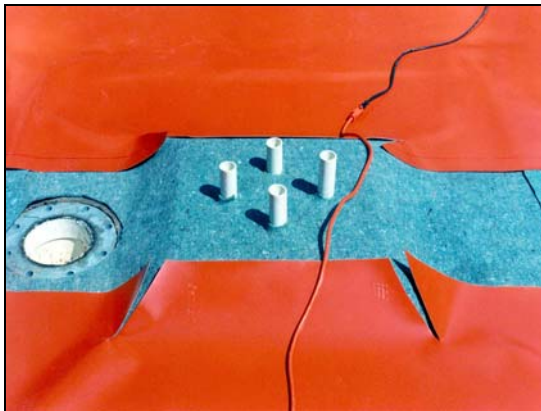


135 East 57th Street

Waterproofing Repairs for Fountains, Plaza and Sub-grade Area

New York, New York



CLIENT

GE Capital Investment Advisors

STRUCTURE

135 East 57th Street is an office building constructed circa 1985. The front of the building incorporates a large plaza containing several fountains, raised plant beds, seating areas, and a tempietto. The plaza surfacing, fountain walls, raised plant beds, and tempietto are a polished and thermally finished granite. The plaza is located directly above two sub-grade levels of retail space and mechanical space for the building. The Lexington Avenue Subway Line is directly east of the sub-grade areas of the building.

CHALLENGE

Post construction, sub-grade areas of the building experienced water leakage. Water entered from leaks in the plaza, predominantly from the fountains, and also from ground water infiltration. Budgetary constraints prohibited removal of the large stone units at the fountain to access and repair the underlying waterproofing.

SCOPE OF SERVICE

- Investigate source(s) of water infiltration
- Create a design repair plan for the fountains, raised plant beds, and ground water, in order to correct the water infiltration of the sub-grade areas
- Construction observation for the duration of the project

SOLUTION

- Designed a new PVC waterproofing system which was loose-laid over the existing stone within the fountains, and covered the PVC membrane with pavers to minimize the aesthetic impact
- Designed a cold applied, modified bitumen waterproofing system for the planters
- Designed negative side waterproofing repairs, consisting of expanding polyurethane grout and cementitious grout for sub-grade areas of the building