



PROJECT PROFILE

Sears Crosstown

Condition Assessment of Building Facade | Memphis, TN



CLIENT

Looney Ricks Kiss

BACKGROUND

The Sears Crosstown was constructed in 1927 as a warehouse and catalog distribution center. Several additions were completed through 1965 and increased the building to 1.4 million square feet. The facade in the older portions of the building consists of mass brick masonry infill walls, while brick veneer with concrete masonry back-up walls are provided in the newer additions. The floor slab edge of the concrete-framed structure is partially exposed and forms the header for the window openings. Limestone accents are provided at window sills, parapets, and the top of masonry piers.

To understand the extent of deterioration and scope of repairs required to restore the facade, the client sought a facade assessment specialist to complete a condition survey of the Sears Crosstown building. Years of neglect produced a building exterior exhibiting spalled concrete, corroded embedded reinforcing, and masonry distress consisting of cracked and displaced masonry and deteriorated mortar joints. Corrosion of steel window frames, widespread glass breakage, staining, and graffiti also detracted from the appearance of the building.



SOLUTION

By using boom lifts and specialized rope access techniques, WJE engineers provided an economical solution to access critical facade elements for close-up evaluations and visual surveys. WJE engineers also performed destructive and nondestructive testing to evaluate concealed conditions within the masonry walls.



Using information gathered during the assessment, WJE engineers determined the extent and causes of deterioration to the brick masonry, stone accents, exposed concrete elements, and window assemblies. Engineers recommended repairs including patching of concrete, repointing of masonry joints, installation of horizontal and vertical expansion joints in the brick masonry, repair and replacement of window assemblies, masonry cleaning, and supplemental anchoring of brick veneer.

WJE's comprehensive condition assessment provided the information necessary for Looney Ricks Kiss to make long-term recommendations for the building facade.