

FAIRFIELD INN

Fort Worth, Texas



Completed



During Construction

COMPLETION DATE

Fall 2017

CONSTRUCTION COST

\$12 million

SERVICES

Forensic Engineering

ARCHITECT

Mayse & Associates

GENERAL CONTRACTOR

Muckleroy & Falls

PROJECT DESCRIPTION

RLG Consulting Engineers provided strengthening engineering services to The Marriott Fairfield Inn & Suites, located opposite the Fort Worth Convention Center, in Fort Worth, Texas. The transformation of the former Park Central Hotel into this 114-room hotel was a significant undertaking, prompted by the growing demand for accommodations in Fort Worth's city center, as well as the Convention Center's increasing popularity.

In order to convert the Park Central Hotel into a Fairfield Inn, strengthening methods such as the addition of steel beams and post-installed connections were needed to support the modified load-bearing concrete and CMU walls above. The restoration consisted of converting the former motel into a

hotel, which included the creation of a new inner corridor in the building through existing load-bearing concrete/CMU walls. To achieve this, RLG's team of Structural Engineers cut new openings in the load-bearing walls and transferred out the load with a new post-installed steel frame at level 2. The new steel beams were supported by new steel columns that were post installed into the existing concrete columns. Key features of the restoration include the addition of a new staircase, design of a new rooftop element, and the transformation of an existing stair shaft into an elevator shaft.

Challenges in the design included the post-installed connections and a shallow water table. Post-installed connections may require modification due to unexpected field conditions. Despite these challenges, the design approach allowed RLG's Structural Engineers to achieve the client's vision by maximizing the use of the existing building, and minimizing demolition and new material requirements.