

## PROJECT EXPERIENCE

# THE M-LINE TOWER

DALLAS, TEXAS



**COMPLETED:**

August 2017

**SQUARE FOOTAGE: :**

317, 980 SF

**OWNER:**

Trammell Crow Company

**ARCHITECTURAL FIRM**

GFF

**CONTRACTOR**

Andres Construction

**RLG SERVICES:**

Structural Engineering

**PROJECT DESCRIPTION /SCOPE:**

RLG Consulting Engineers in partnership with Andres Construction and GFF Architects provided structural engineering services to M-Line Tower, a luxury apartment community located in Dallas’ Uptown neighborhood. The tower built on the site of Café Express at Bowen and McKinney Avenue features a amenity deck and pool, four stories of underground parking, and houses the McKinney Avenue Transit Authority (MATA) museum.

RLG’s team of structural engineers designed the post-tensioned slabs and girders below the amenity deck. In addition to the two-way mild slab located beneath the residential tower. A level two podium was needed to support five stories of wood apartments and the pool amenity deck with a PT 2-way slab. The 22-story tower required a PT 2-way slab to support the residential units. The four-story below grade parking wing required a two-way mild flat plate and one-way plate slab and girder. RLG’s team of structural engineers performed a detailed finite element analysis to understand how the lateral earth pressures were being resolved in the basement. The design for the pool located on level two required a pour strip down the middle in order to separate the wood construction and the tower’s concrete construction and to shorten the tower’s columns. The LEED Silver Certified building opened in August 2017.