

Tampa International Airport Parking Garage

Location: Tampa, Florida

Submitted by: Walter P. Moore

Owner: Tampa International Airport

Architect(s): Gresham Smith and Partners

Engineer(s): Walter P. Moore

Contractor: Clark Construction Company

P/T Supplier: Suncoast Post Tension, Ltd.



Overview:

In order to increase parking capacity, the Tampa International Airport (TPA) constructed a six-level garage to add 5,600 parking spaces. The 5,000-psi cast-in-place concrete, post-tensioned beam and slab structure has five elevated levels and is supported by an ordinary moment frame consisting typically of 28-inch by 28-inch columns, 16-inch-wide by 33-inch-deep post-tensioned beams, and 7-inch-thick post-tensioned slabs. Post-tensioning allowed the structure to have a well-lit and open environment that increases the safety and usability of the garage. Without post-tensioning, additional columns would have been required to support the structure, resulting in interrupted drive aisles, fewer usable parking spaces and interrupted visibility.