TEXAS MEDICAL CENTER PARKING GARAGE, HOUSTON, TEXAS

OWNER:
Texas Medical Center

ARCHITECT:
Morris Architects

DESIGNER:
Walter P. Moore and Associates, Inc., Houston Texas

CONTRACTOR:
Gerhart/Vaughn Builders

An estimated 107,000 people-including more than 50,000 employees-come to the Texas Medical Center daily. This creates a very large gathering of people and automobiles. Most of the activity is in an area of 134 acres at the center of the campus. To provide additional parking, Texas Medical Center wanted to build a garage on a 130' by 233' site for as many cars as practical. The site was occupied by a six-story dormitory and surrounded on three sides by existing facilities.

The design team worked together with Texas Medical Center and the neighboring institutions to create a structure for 878 cars on 14% levels which meets their parking needs. At every step of the way, the team explored many design options to assure that the facility was functional, durable, flexible and economical. The result, now known as Texas Medical Center Parking Garage 7, is a balanced workable garage that was constructed 5% under budget, with a minimum of disruption to medical center operations. It has been very well-received by both user and the neighboring institutions.

The design team selected a post-tensioned, cast-in-place concrete structural system for the structure. The post-tensioned system was used to achieve economical long-span bays, and to assure a durable, virtually crack-free structure. In addition to providing durable, vibration resistant floors, the beam and slab framing system provided adequate lateral resistance to hurricane winds without shear walls or bracing. To provide an architecturally "clean" top for the garage, the stairs and elevator penthouses were concealed with a raised horizontal band of precast facing.