

PROJECT LOCATION: ROUND ROCK, TEXAS

PROJECT OWNER: ROUND ROCK ISD

ARCHITECT: HOK SPORTS FACILITIES OPUS 3 ARCHITECTS

PROJECT STRUCTURAL ENGINEER OF RECORD: DATUM ENGINEERS

GENERAL CONTRACTOR: AMERICAN CONSTRUCTORS

PROJECT COMPLETED: 2003



Round Rock ISD Football Stadium Complex

PROJECT DESCRIPTION:

Pickett, Kelm & Associates, Inc. provided structural design services for this 11,000 seat football stadium for Round Rock Independent School District. The stadium structure consists of concrete seating decks supported by precast concrete frames placed radially around the stadium. The seating decks consist primarily of precast concrete riser units, with a lower level plaza constructed of cast-inplace concrete. PKA was retained by the contractor to design the precast concrete frames and beams that support the stadium pressbox and seating decks, the precast beams and walls that provide the lateral and longtudinal stability, detail the various member connections, and analyze and design the members for lifting, handling and erection stresses. PKA also designed the precast concrete columns supporting the steel-framed press box structure, and the precast concrete stairs for the structure. The project included 712 precast members.



The precast concrete frames consist of fixed and pinned base columns supporting sloping, or raked, girders doweled and grouted to the tops of the columns. The cast-in-place column and pier at the lower edge of the seating deck resists lateral forces in the transverse direction. Moment connections between precast beams and the rear stadium columns, and precast wall panels and the precast columns at the front of the stadium provide stability in the longitudinal direction. The columns also support steel beams which are used to frame the roof of office, concession and locker areas located below the seating decks.

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