PAUL BROWN STADIUM
Cincinnati, OH

JUROR'S COMMENTS
The structure appears light and airy and belies the size and mass of this type of facility. The imagery of stadium as coliseum is recaptured and enhanced by the flowing shape of the structure and the skillful combination of materials and design details.
Soon or later, someone was going to reach out for a tailor-made and innovative design...It’s going to take the NFL stadium to a new level—the changes will be dramatic.” In this statement, NFL Commissioner Paul Tagliabue endorses the successful design of this new 65,000-seat stadium.

The elegant swooping roof is the signature feature for the building’s spectacular design, diffusing sunlight, creating intimacy within the bowl and focusing attention towards the field. The goal was to create a sensual line as the roof meets the sky; by applying intricate geometry, structural steel clad with translucent fabric enabled full expression of the canopy’s sophisticated design.

Exposed steel, fabric and pre-cast concrete work in concert with perforated steel and glass skins, provided tactile elements that blend with the cityscape, creating mood-enhancing environments with the changing light.

Cantilevers 85 feet-long, supported by twin box-section boomerang columns were stiffened by rear tie members, prestressed to enable them to resist load reversal from wind uplift on the roof. This trussing action increased the efficiency of the steel structure while adding dramatic form and visual dynamics. Judicious application of the prestress halved the maximum bending moments in the boomerangs. Key
parameters, such as sight lines, helped generate raker beam and boomerang column positions.

Elimination of the end zones breaks up the massing of the bowl and invites passers-by to glimpse stadium action. The 60’ cantilevered design for the last two bays of the exposed upper seating bowl achieves column-free sightlines, elegant aesthetics and acceptable vibration levels for foot-stomping, dancing crowds.

PROJECT TEAM

ARCHITECT:
NBBJ Sports & Entertainment,
Marina del Rey, CA

OWNER:
Hamilton County, Department of Public Works, Cincinnati
Cincinnati Bengals, Cincinnati
National Football League, New York City

STRUCTURAL ENGINEER:
Arup, Los Angeles

STEEL FABRICATOR:
Southern Ohio Fabricators, Batavia, OH (AISC member)

STEEL ERECTOR:
SOFCO Erectors, Inc., Cincinnati
Ben Hur Construction Co., Fairfield, OH (NEA member)

STEEL DETAILER:
T&T Structural, Inc, Rocky Hill, CT
Dowco Consultants Ltd, Burnaby, British Columbia (AISC & NISD members)
PHOTOMASTER:
Tim Griffith,
NBBJ Sports & Entertainment

SOFTWARE:
SAP 2000, and FLOOR (& ETABS for the concrete frames supporting the 60’ cantilevers). Additional design programs include: RISA 3D, ADOSS, PCACOL, ENERCALC

GENERAL CONTRACTOR:
Tuner Construction, Cincinnati
Barton Malow Company, Baltimore
DAG Construction Company, Cincinnati