

TYPICAL SECTION THROUGH STRUCTURE

PROJECT: MAHAICA RECREATION GROUND
LOCATION: MAHAICA, POINT FORTIN
OWNER: SPORTS COMPANY OF TRINIDAD & TOBAGO
CLIENT: ASSOCIATED SERVICES LIMITED
SECTOR: INFRASTRUCTURE/INSTITUTIONAL
PROJECT VALUE: TT\$13m
PROJECT COMPLETION: Ongoing

Project Description

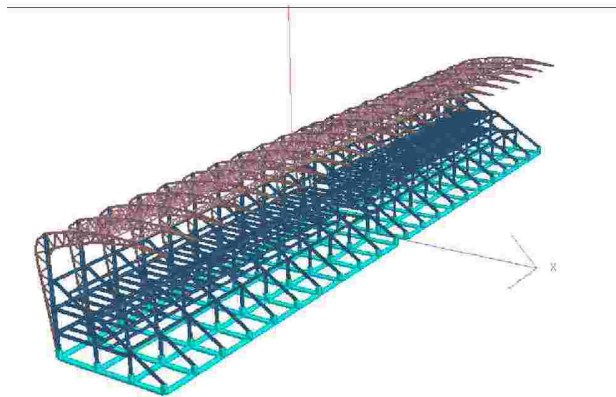
This recreation ground was one of many aimed at improving the sporting infrastructure within Trinidad & Tobago. The structure was designed to provide viewing and sporting support facilities to a recently refurbished regional recreation ground covering over 2.1 ha. Key project details were:

- Seating capacity for 3,200 spectators
- Facilities Media, Equipment storage and Building services
- Cafeteria and Concessionary spaces
- Sick-Bay and First Aid stations
- Change rooms and locker rooms
- Gym and Physio facilities
- Overall dimensions 114m long x 16m high x 23m wide
- 4-storey stepped structure

Rivelin Consultants Limited was appointed by the Client as the Structural Engineering Consultant to carry out the full analysis and design of the building frame and structure from foundation to roof.

Our role

- Planning and working with the Project Architect in the development of the overall shape and frame envelope
- Structural analysis of the frame including sway and dynamic loading to ASCE07-05
- Application of seismic and hurricane design codes, UBC, ASCE07-05
- Structural design of major members such as a 15m arch-framed cantilever, column trusses and piled foundations
- Multi-code design to ensure global conformance (British and American) Design Codes
- Structural analysis, design and modeling carried out using STAAD



STRUCTURAL MODEL DEVELOPED FOR ANALYSIS AND DESIGN