

Cape Town Stadium

Green Point, Cape Town

The image of Cape Town is uniquely characterised by the interaction of Table Mountain, Signal Hill and the surrounding Atlantic Ocean. Cape Town Stadium is situated as a solitary body embedded in Green Point Common at the foot of Signal Hill and is ordered respectfully into the landscape.

The exterior veil of the stadium was designed as an abstract, linearly arranged membrane construction. Its unique undulating silhouette, which is the result of the geometry of the stadium body, transforms the structure into a sculptural object and intensifies its integration with the existing landscape.

The light membrane is composed of expansive concave elements that form a cohesive, flowing façade which follows the stadium's undulating shape. The light-coloured glass fibre tissue emphasises this effect, since its colour creates a sense of depth and animation, and the translucent

surface absorbs and reflects the effect of the existing daylight. At sunset, the stadium possesses a reddish glow, a blue one on a bright summer day and a grey appearance on a stormy day in winter.

The stadium, designed to accommodate mainly soccer and rugby games, provides seating for approximately 55 000 spectators divided over three tiers. Of these seats, 4 800 are business and VIP seats. Thanks to their inclination, all seats have excellent visibility of the field, with a maximum viewing distance of 190m to the furthest point of the pitch.

The interior of the stadium is designed in such a way that its entire focus is directed onto the playing field, creating an intense and exciting atmosphere. The roof construction is a combination of a suspended roof with a radial truss structure. The undulating roof is outfitted with laminated safety glass elements and its interior is faced with

Architects: Stadium Architects JV – GMP Architects, Louis Karol, Point Architects & Urban Designers, Jakupa Architects & Urban Designers, Cornie Wilkinson Architects (Cape) & Urban Designers, Munnik Visser Architects, Paragon Architects

Structural Engineers: Green Point Stadium 2010 Structural Services JV – Schlaich, Bergermann & Partners, Stuttgart, BKS, Iliso Consulting, Henry Fagan & Partners, KFD Wilkinson Consulting Engineers, Arcus GIBB, Goba Consulting

Mechanical Engineers: Green Point Stadium 2010 JV – WSP Consulting Engineers, BMDS Consulting Engineers, Bramley & Associates, Integra Consulting Engineers, Ubunye Engineering Services

Electrical Engineers: Green Point Stadium 2010 Electrical Services JV – BKS, WSP Consulting Engineers, Arcus GIBB, S Ismail Consulting Electrical Engineers

Environmental: Mark Sasman, Ecosense
Landscaping: Johan van Papendorp, Darryl Pryce-Lewis (OxP Associates Landscape Architects)

Quantity Surveyor: Green Point OS Association – Davis Langdon, MLC, Abakali, Henry & Petersen

Contractor: Murray & Roberts/WBHQ Construction JV





Moses Mabhida Commuter Station

Isaiah Ntshangase Road, Durban

Moses Mabhida Station fulfils a node and mode function in Durban's transport network, carrying commuters into the city and spectators to the central sports hub. Designed by Arup Interchange Design, the station is expected to catalyse long-term socio-economic development in the area.

The building retains its place and personality in the shadow of the new stadium. The architecture merges craft and tradition with the scale and energy that defines South Africa's assertive, confident aspirations. The team applied international best practice principles of station architecture to a design that directly references the site's contextual requirements.

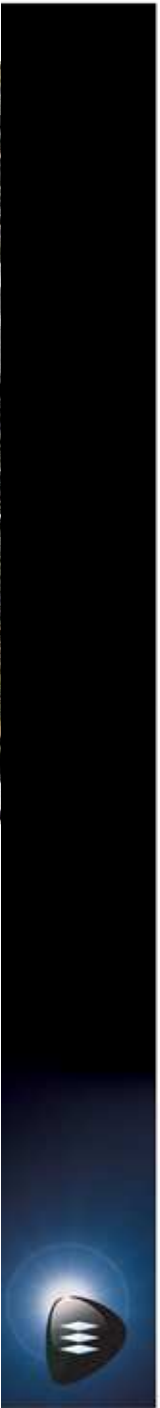
Tethered to its surroundings by a central pedestrian bridge, the free-standing design is based on a pragmatic two-level arrangement and multi-layered geometry. The station's location and design provides a seamless transition from the stadium,

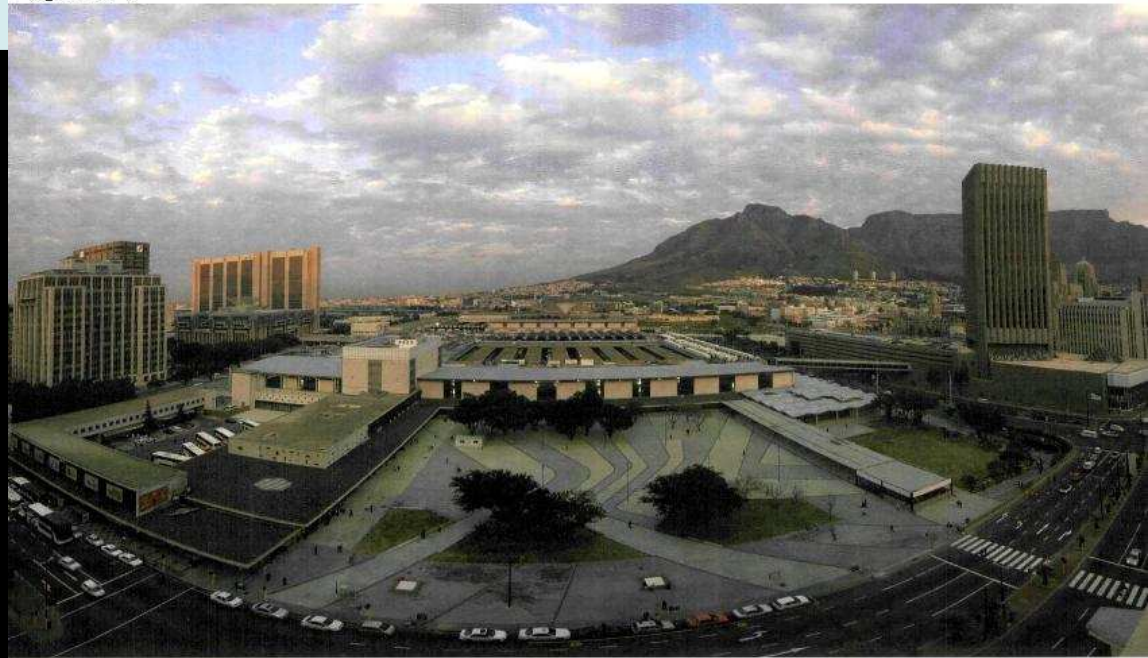
the adjacent public areas and the station entrance. The main station deck comprises two concrete shells which appear to float over the rails. The entrance, visitor reception, staff and security facilities lie at a high level. Stairs and lifts lead to low-level platforms.

Technical equipment, public announcement systems, signage and furniture are integrated into the design language, minimising clutter and maintenance while aiding movement. Inspired by KwaZulu-Natal's basket-weaving craft culture, spatial lines embedded in the floor are woven throughout the structural fabric and wrap around the concourse ceiling. This simple device harnesses sunlight, creating a spatial dynamic with diverse visual perspectives.

The base material is concrete, encapsulating the technical areas at concourse level and the waiting area seating visitors at platform level. The layered

Architects: ARUP Interchange Design
Project Team: Leszek Dobrovilsky (Director), Caroline Sohe (Associate Director), Elaine Lamb (Project Leader)
Project Manager: Arcus GIBB
Structural Engineers: Iliso Consulting
Mechanical Engineers: Arcus GIBB
Electrical Engineers: Arcus GIBB
Fire Consultant: Arcus GIBB
Quantity Surveyor: LDM Consulting
Contractor: Grimaker-LTA, Building East
Health & Safety: C & M Safety
Dynamic Modelling: GOBA
Photographer: Russell Cleaver, Daniel Clements
Text: Hilary Alexander, ARUP





Cape Town Station 2010 Revitalisation

Corners of Strand Street, Adderley Street and Old Marine Drive, Cape Town

Rail is the backbone of public transport in the Western Cape, comprising 59 percent of the various modes of public transport. Accordingly, train stations are critical anchor points in the movement of people and communities.

Acting as a steadfast example of modernist-inspired apartheid planning, Cape Town Station, which was built in 1962, has seen decades of historic under-investment and declining rail patronage. The architectural strategy involved the advocacy of the civic role and responsibility of transport facilities.

The design team outlined a number of concerns which needed to be addressed in order for the station to reclaim a dignified civic purpose and to assist in its business transformation towards a 21st century transport facility. Due to time and capital constraints, the design intervention was an exercise in restraint and editing, driven by the evolution of the station into a destination in its own right. Integration with the public realm and pedestrian routes worked in tandem with a deliberate effort to blend the city into the station,

and vice versa. The necessity of maintaining a viable and reliable rail service throughout the construction period required a phased construction management approach, which is expected to be completed in the third quarter of 2011.

The ticket-selling facilities have been consolidated and relocated to the main entrances of the station, opening up the city concourse to the station forecourt. Surfaces conducive to neglect were rejected in favour of planes of reflective light, enhancing the sense of space while promoting intolerance for visual and physical clutter. Discoloured glazing panels were replaced with clear glazing, allowing the city vista to become an integral part of the station experience.

The station forecourt has been re-imagined as a grand urban plaza served by multiple entrances across the main concourse, making the transition from train to CBD seamless and flexible. The station deck has been redesigned as a destination market, offering opportunity for informal traders through a carefully proportioned series of lock-up-and-go

Architects: Archstation Joint Venture – Makeka Design Lab, dlk Architects, Corrie Wilkinson (Cape) Architects & Urban Designers, Jakupa Architects & Urban Designers

Project Team: Mokena Makeka, Khalid Jacobs, Henri Corrie, Paul Kryntauw, Holger Deppa, Martin Martinovic, Neil Marcussen, Pieter Swanepoel

Structural Engineers: Aki Consulting Engineers, Mahong & Associates
Mechanical Engineers: Ubunye Engineering Services

Electrical Engineers: Arcus Gibb
Civil Engineers: Arcus Gibb, Mahong & Associates

Traffic Engineers: Arcus Gibb Environmental, Arup

Landscaping: OVP Associates
Landscape Architects:

Quantity Surveyors: LDM, Henry & Petersen Quantity Surveyors, Ngweni & Associates

Contractor: Boshard, Civils 2000, Superway Construction, Exco, Mark Darius Civils

