

Opposite page: View from the beach.

Professional team

Architect: Coetzee Campbell & Associates

Consulting Engineers:

Structural & Civil: Coetzee Campbell & Associates

Electrical: Gibb Africa

Quantity Surveyors: C P de Leeuw (Stellenbosch)

Developer: Green Oaks Properties

Marketing Agents: Omnicron

Main Contractor: Grinaker Building (Cape)

The Architect

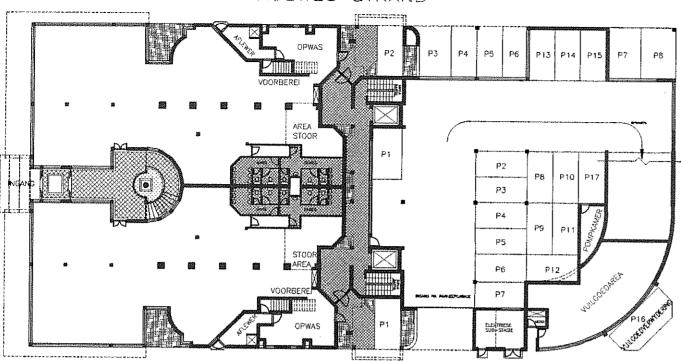
n architect utilises people's resources but always remains accountable to the developer and society in general. Coetzee Campbell & Associates strive to meet all reasonable needs of society in all their design solutions while maintaining their integrity.

Although the architect takes final responsibility for the success or failure of a project, the Metropole Plaza project was a true team effort. Without the assistance and support of the entire professional team, the developer and the contractor the Metropole Plaza project would not have materialised.

Design development

The shape and size of the erf itself proved to be the only real restrictions on the design development, together with the required parking. The developer decided to provide at least two parking bays per apartment, in a parking garage.

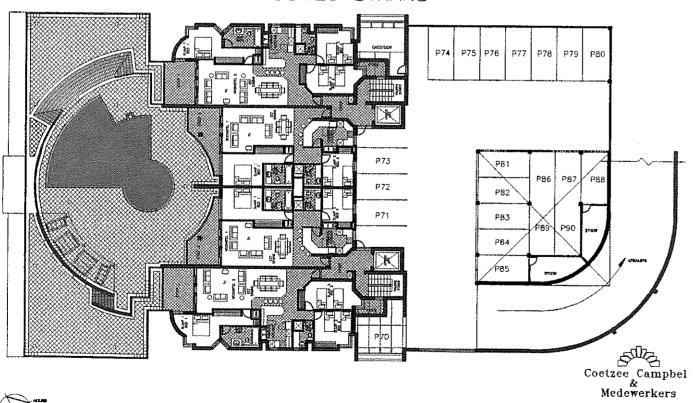




Coetzee Campbel & Medewerkers

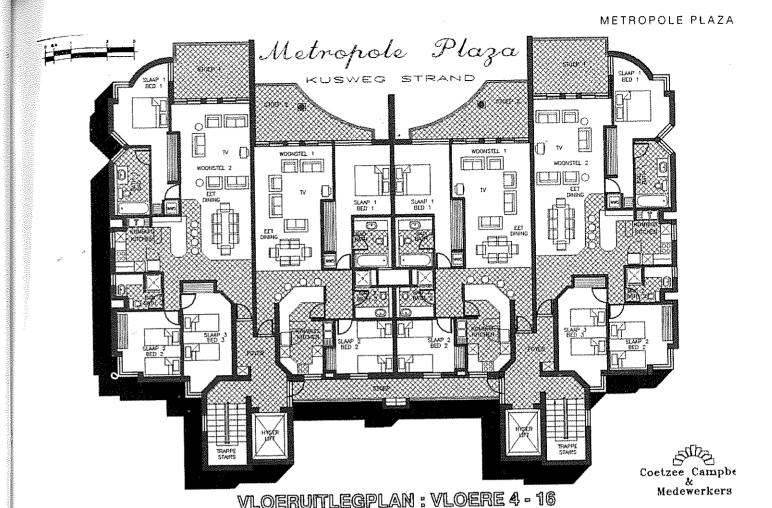


Metropole Plaza

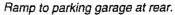




DERDEVLOERPLAN: WOONSTELLE, SWEMBAD, PARKEERGARAGE



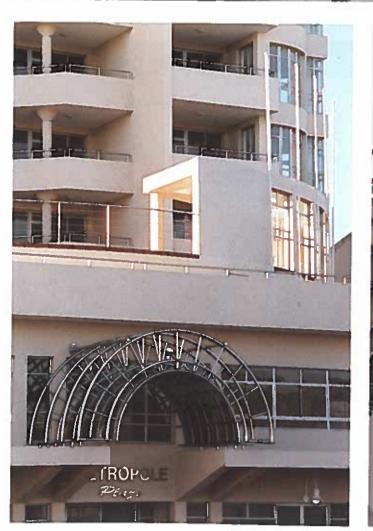




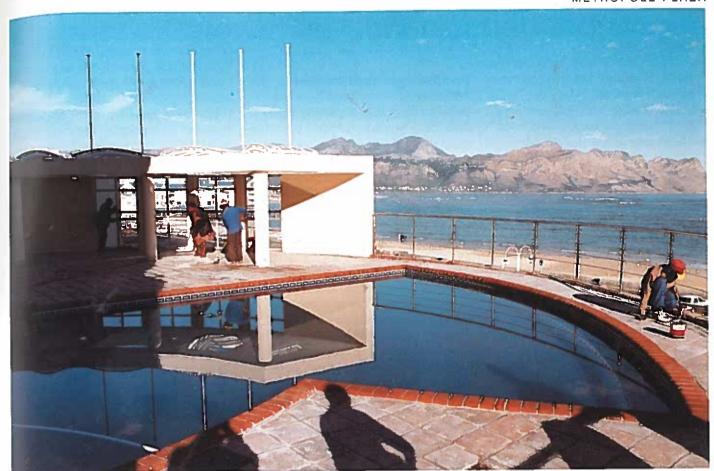


Pool pergola.











The shape and size of the erf which was only 31,5 meter wide, allowed no more than 4 flats with a view over the bay.

The Western sun creates a problem if the sea view is maximised.

The architects initial solution proposed a tower block, with four flats per floor in the middle of the site.

A typical floor would consist of four two-bedroomed flats.

- First and second floor restaurants would be constructed on Beach Road on the sea front.
- A parking garage would be situated at the rear of the block.
- An indoor arcade would be allowed for on the roof of the restaurants and the parking garage.

Facing page:

Top: Barrel vault detail.

Left: Main entrance from Beach Road with swimming pool

pergola and flag poles.

Right: Main entrance and tower block.

Top: Swimming pool above restaurants. Left: Tower block above business podium.

This proposal was accepted but a few amendments were required, namely:

- A typical floor was to consist of two two-bedroomed and two threebedroomed flats.
- There was to be roof parking on the parking garage.
- There was to be no walk-through arcade.

The final solution ruled out the following design attributes of the proposed solution.

- A North-Western view of Table Mountain from the living space of the north western flats.
- The kitchens and bathrooms of the three-bedroomed units had to be located in a middle core instead of on the outside skin of the structure.
- The walk-through from the flats to Beach Road in the inside arcade was discarded.

 Recreational facilities and the area on the parking garage with a view of the mountains fell away.

Positive aspects of the final solution

More parking was provided and the originally planned arcade became available as commercial space. Security control was much simplified by these changes. The three-bedroomed units proved to be the fastest sellers.

Construction technology

The structural system for the tower block comprises reinforced concrete walls and columns on the line of the dividing walls of the apartments. The floor slabs are 220mm flat slabs spanning the full 7,8m width of the apartments with unbonded prestressing cables. The provision of supports only along the apartment dividing walls gives complete flexibil-

ity for apartment layouts. The lift/stair shafts are of conventional reinforced concrete with precast concrete stair flights which allowed the shaft core to be constructed ahead of the floor slabs.

The parameters adopted for the design of the water supply (both domestic and fire fighting) were fail-safe reliability and efficiency. The materials used, such as copper piping and stainless steel booster pumps, were selected to minimise maintenance costs (monthly levies) and risk of downtime.

The fire fighting system was designed to accommodate failure of power supply and municipal water supply, separately or simultaneously. This was achieved by a control system of electrical circuits, control valves and flow and pressure sensors which activate pumps, close off domestic supply lines and accommodate external pressure boosting. In the case of simultaneous power and municipal water supply failure, the system will draw the reserve domestic water supply from the roof tank and pressurise the fire fighting supply lines while a standby diesel generator kicks in.

Result of the final design

More than 90% effective use of space was achieved in the Metropole Plaza project. If architecture is 'art with a responsibility' we hope that the Metropole Plaza will not only be an effectively designed building but that it will also fit the 'art' portion of the definition.

The final word will belong to the users of the created space. If they love it the reward will be complete. If the observer recognises a particular style or signature, it will be a bonus.

Kobus Coetzee

Advertisers on this project:

Cobra Watertech: Suppliers and manufacturers of water control fittings.

Hulett Aluminium: Specialist aluminium suppliers. Fibreprod: Fibreglass lining of the pool shell was chosen for its durability and ease of use.

Pool Doctor: Suppliers of pumps, filters, chlorinators, pool cleaners and chemicals.

Marmoran: Resin Bonded Plaster applied directly to all surfaces. This saved the cost of plaster, is an ideal coating in severe salt laden atmosphere, offering substrate protection, hiding shutter joints and other imperfections in the substrate.

Schneider-Bruce: 7 000m² of Marmoran Resin Bonded Plaster applied.



Tower block detail of private balconies and screen walls.