

https://dspace.org/

Carlton Centre Limited. Statistics and General Information Relating to Carlton Centre

Johannesburg PD/MGS/GSF

1970-09-11

Johannesburg City Coucil, City Engineer.
http://hdl.handle.net10539/13648
Johannesburg. 1970. Carlton Centre Limited. Statistics and General Information Relating to Carlton Centre.

Downloaded from a DSpace repository. https://dspace.org/

CARLTON CENTRE LIMITED

STATISTICS AND GENERAL INFORMATION RELATING TO CARLTON CENTRE

1. PROMOTERS

The promoters of Carlton Centre are the Anglo American Corporation of South Africa, Limited and The South African Breweries Limited.

2. AREA OF SITE AT GROUND LEVEL

The total area of the site at ground level amounts to 260,000 square feet or 6½ acres.

3. AREA OF CONSTRUCTION

Below ground	1.6 million square feet
Above ground	1.9 million square feet
Total area of construction	3.5 million square feet

4. GROUND COVERAGE ON MAIN BLOCK

Surface area of main block	196,339 square feet
Area covered by buildings	55,140 square feet
Percentage covered	28%
Area of open space	3½ acres

5. COMPONENTS

The five principal components of the project are :-

(a) The Office Tower.
(b) An Hotel of international standard.
(c) The Shopping Centre.
(d) An Exhibition Hall.
(e) Basement and above ground parking facilities.

6. OFFICE TOWER

(a)	Number of floors	-	50
(b)	Height	-	660 feet (higher than the Hertzog Tower)
(c)	Gross area per floor	-	21,875 square feet (over ½ acre)
(d)	Gross area of Tower	-	1,053,459 square feet

... /2

(e) Total net rentable area in Tower, exclusive of Observation Platform - 714,872 square feet.

(f) Working population of Tower - approximately 6,000.

(g) Number of passenger lifts - 18 lifts arranged in three banks of six serving different sections of the Tower. In addition, one express lift serving the Observation Platform.

(h) Speed of "High-rise" lift bank - 1,400 feet per minute.

(i) Speed of present fastest lift in South Africa - Hertzog Tower, 700 feet per minute.

(j) The design of the building contains all services within the central "core" and virtually eliminates the presence of structural columns on all floors.

(k) The large floor areas introduce the concept of deep-space office layouts for the first time in South Africa.

(l) The 50th Floor of the Tower will be a spacious Observation Platform which is expected to attract over 300,000 visitors a year.

7. INTERNATIONAL HOTEL

(a) Number of rooms - 603, the largest hotel in the Southern Hemisphere (the old Carlton Hotel had 275 rooms).

(b) Bed capacity - approximately 1,200.

(c) Number of floors - 31.

(d) Number of restaurants - 4.

(e) Number of cocktail lounges - 5.

(f) Capacity of Ballroom - 1,000 people.

(g) Capacity of additional 8 function rooms - 500 people.

(h) The top floor of the building will provide an open-air roof-garden with heated swimming pool.

(i) The Hotel can be regarded as the first hotel in South Africa to be built to international standards for conventions.

(j) The management of the Hotel will be provided by Western International Hotels of Seattle, the third largest hotel chain in the world.

(k) Approximate total number of staff - 800.

... /3

8. SHOPPING CENTRE

(a) The Shopping Centre is located on the first two floors below ground level across the entire main site, beneath Main Street and beneath the block south of Main Street.

(b) The total area of the Shopping Centre is approximately 14 acres. Excluding the pedestrian mall areas and courts and the separate storage areas, the total net rentable area of shops is 392,588 square feet. This exceeds the area of the Rosebank Shopping Centre.

(c) The Shopping Centre will consist of two major department stores and 200 other shops to provide a fully comprehensive retail facility in the Johannesburg central city area.

(d) Escalators, lifts and stairs will link the shopping levels with the garden plaza at street level and three open courts will alleviate any sensation of being "under ground".

(e) The largest court contains a pool that will operate as an open-air ice rink during the winter months and as a fountain during the balance of the year.

9. EXHIBITION HALL

(a) The Exhibition Hall is located on the top floor of the building on the block south of Main Street.

(b) It will provide column-free air-conditioned exhibition space of 57,000 square feet, more than double the size of the Empire Hall at Milner Park.

(c) It will be the first modern exhibition facility to be built in the Johannesburg downtown.

(d) The Hall will accommodate a year-round programme of exhibitions, on lines similar to Earls Court in London, consisting of both specialised trade exhibitions and shows of public appeal. The renaissance of a South African Motor Show is largely due to the creation of these exhibition premises.

(e) The Hall will be operated by Industrial Exhibition Organisers (Pty) Limited, a subsidiary of Carlton Centre Limited.

... /4

10. PARKING

(a) 2,000 car parking spaces will be provided of which 1,280 are below ground and 720 in the above ground "Parkade" comprising the six floors immediately below the Exhibition Hall on the block south of Main Street.

(b) Access to and egress from the parking levels is achieved through four pairs of ramps leading from three different streets surrounding the Centre.

(c) Of the four exit ramps, three emerge at street level at traffic light controlled intersections.

(d) The garage levels will be used by all-day parkers and by shoppers and other casual visitors to the Centre.

(e) Three of the below ground parking levels opened to the public for casual parking on 17th September, 1970.

11. EXCAVATION

(a) The excavation necessary to permit the construction of the below ground levels was one of the largest ever undertaken anywhere in the world for a commercial building project.

(b) The excavation covered five acres horizontally and was 95 feet in depth. The amount of soil and rock removed represented approximately 1 million tons.

(c) The maximum depth of the Office Tower foundations is 200 feet.

(d) The necessary lateral support for the surrounding streets was provided by means of a special reinforced concrete bracing grid across the site which will be entirely removed when the casting of the permanent below ground floors has been completed.

(e) The excavation entailed the de-watering of the site since the original water-table across the site was at a depth of approximately 40 feet. Before the de-watering was commenced a crack survey was undertaken of all buildings in the 14 city blocks surrounding the site.

... /5

12. ROAD CLOSING

(a) With the support of the City Council of Johannesburg, a successful application was made to the Administrator of the Transvaal for the closing of those portions of Fox and Smal Streets intersecting the site.

(b) In granting authority for the closure of the streets the Administrator stipulated that the closed portions of the roads and the four surrounding city blocks that comprised the project should be registered as one consolidated site.

(c) The total area of the roads that were closed amounts to 1.33 acres.

13. SERVICES

(a) Telephones: A new 10,000 line automatic telephone exchange will be sited on one of the basement levels of the project which will provide service to Carlton Centre and the surrounding area.

(b) Electricity: The power capacity of Carlton Centre is 25,000 K.V.A. to cope with anticipated consumption which is likely to exceed the consumption of the city of Kimberley, inclusive of mining operations.

(c) Air-Conditioning: The central system produces filtered air, cooling, heating and air-conditioning. The refrigeration plant has a capacity of 5,000 tons of refrigeration. This equals the capacity of approximately 50,000 domestic refrigerators of average size.

(d) Water: The inflow of water per 8 hour day has been estimated at 1,010,000 gallons. This means that the inflow per minute at Carlton equals the average weekly consumption of a suburban house.

(e) Gas: Carlton's gas consumption for cooking and other services totals 7,000,000 British Thermal Units per hour, the equivalent of 7,000 domestic gas ranges.

(f) Sewerage: There are 1,600 points discharging into the sewage system which can handle between 900,000 and 1,000,000 gallons of effluent per day, if worked to capacity.

(g) Refuse: It is estimated that a total of 150 cubic yards of dry refuse will be cleared from the complex per day, after compaction.

14. FINISH TO EXTERIOR OF BUILDINGS

The finish to the exterior concrete of all the buildings at street level and above will not involve the application of any other material. The stone in the concrete will be exposed by means of a special process to provide a rough textured finish over all exterior surfaces.

JOHANNESBURG
PD/MGS/GSF
11th September, 1970