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**REPORT ON THE SIGNIFICANCE OF OCEAN
TERMINAL BUILDING IN THE PORT OF DURBAN**



For: Transnet National Ports Authority

Project Name: Expansion for RoRo Terminal, Point
Port of Durban

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EXECUTIVE SUMMARY

This report endeavours to provide the architectural and historical significance of the Ocean Terminal Building (OTB) that was completed in 1962 in the Port of Durban. The OTB as it is commonly referred to today, is the old passenger terminal for ocean liners and is one of the buildings in the Ocean Terminal Complex.



Figure 1 : Durban Ocean Terminal Complex (1963)
<https://www.coldlinkafrica.co.za/index.php/features/import-and-export/237-another-link-in-the-chain-part-1>

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1 GENERAL

1.1 BACKGROUND TO THE PROJECT

Transnet National Ports Authority (TNPA) in the Port of Durban is investigating options of increasing cargo-handling space in the port. The planning strategy is to keep operational activity along the quayside and omit non-operational activities like administration to areas in the port that unsuitable for cargo handling. TNPA have recognised that OTB which currently accommodates their administration personnel, is in the midst of prime operational space. They are therefore considering the relocation of the administration offices to other sites in the port.

1.2 OBJECTIVE OF THIS DOCUMENT

The purpose of this report is to provide the historical and architectural significance of the Ocean Terminal Building (OTB).

1.3 APPROVAL BY OTHERS

Prior to any building works, it is understood that the following approvals shall be required

- The Municipality shall be issued with copies of the proposed work with necessary drawings and application forms, for their further consideration and approval.
- AMAFA shall be issued with the proposal, drawings and reports required to review and consider any alteration or demolition, as the building may be over 60 years old.

1.4 GOVERNING CODES, STANDARDS AND SPECIFICATIONS

The development, design and or demolition shall comply with the requirements of the National Building Regulations (NBR), South African National Standards (SANS) codes and standards as well as any local, regional and national laws and bylaws.

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2 LOCALITY, SITE AND SERVICES

The Ocean Terminal Building is located in the Port of Durban in the Point precinct of central Durban.

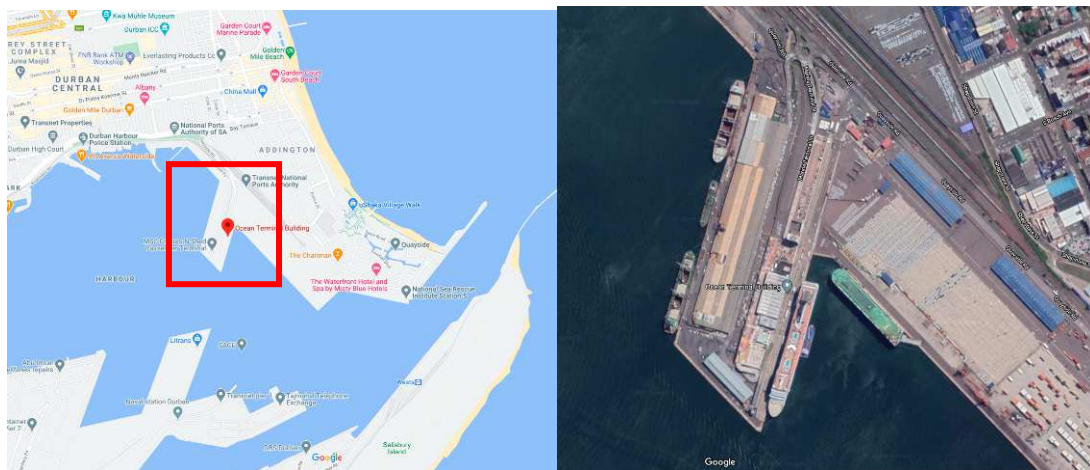


Figure 2: Locality map showing Ocean Terminal Building (Google.com/maps)

2.1 SITE AND ZONING

The Ocean Terminal Building (OTB) is located in the port operational area and is surrounded by Car Terminal and fruit terminal operations. The building currently accommodates the TNPA regional office personnel.

The site is zoned as “Harbour Zone” under the eThekweni Town Planning Ordinance. This zone prescribes a height restriction of twenty five metres (25m). The permitted activities in the “Harbour Zone” are limited to port related activities only.

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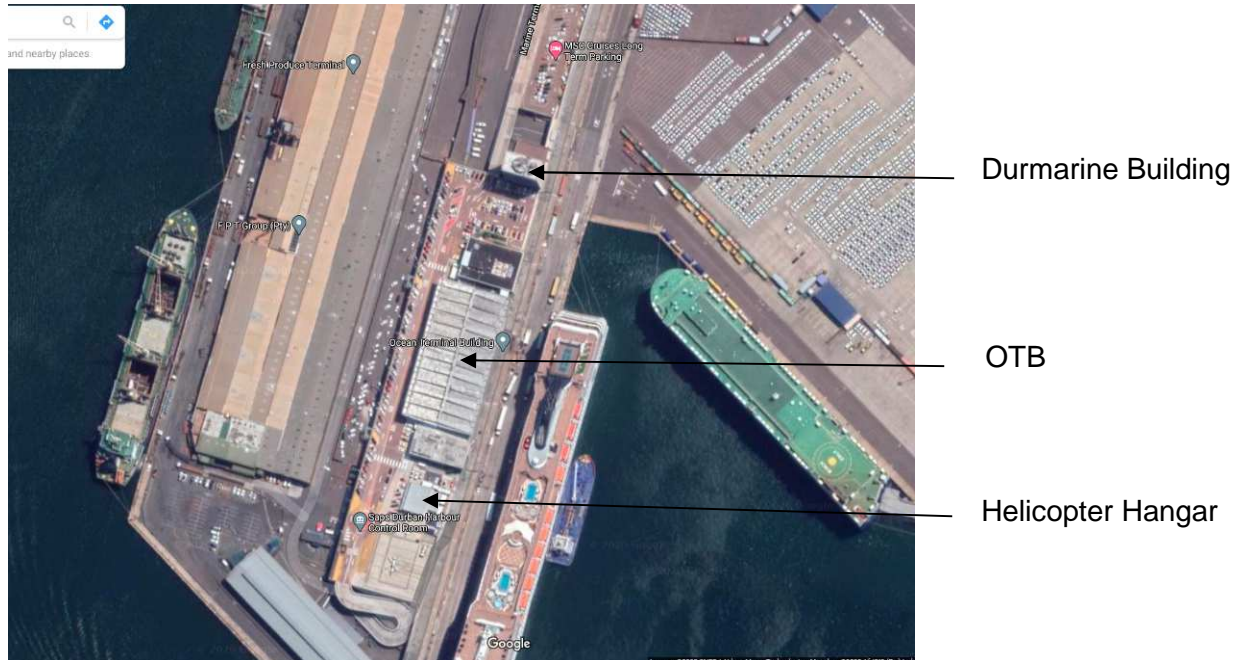


Figure 3: Aerial View (Google.com/maps)

2.2 EXISTING STRUCTURES

A summary of the Ocean Terminal Complex is as follows:

Ground floor

- Car Terminal Parking (for Transnet Port Terminal)

First Floor

- General staff parking

Roof deck:

- Staff and visitor Parking
- 8 Storey Durmarine office building
- Double-volume Ocean Terminal Building (OTB)
- TNPA Helicopter Hangar facility

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3 SIGNIFICANCE: OCEAN TERMINAL COMPLEX IN THE PORT OF DURBAN



Figure 4: Ocean Terminal Complex: 1963
<https://www.tias.com/durban-south-africa-ocean-terminal-postcard-cs12741->

3.1 ORIGINAL DATE OF CONSTRUCTION

The design of the Ocean Terminal Complex began in 1958 and the construction was completed in March 1962.

3.2 HISTORICAL SIGNIFICANCE

T-Jetty in the Port of Durban was built from 1939 to 1950 to provide 5 extra deep water berths in the Point area. This included road and rail access with bridges and rail yards.

In re-assessing its importance of the Port of Durban as a major port of entry to South Africa and, in particular, to the industrial activity in and around Johannesburg, the South African Railways and Harbours (SAR&H) embarked on the construction of a new Ocean Terminal Complex. The complex located at Berths L and M was to provide a large multi-storey marine terminal with passenger terminal hall for cruise liners, cargo areas, precooling stores, storage sheds, port control offices and restaurants. In 1958, the SAR&H awarded the contract for a new Ocean Terminal Complex to Zakrzewski & Partners Consulting Engineers.

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From 1958 to 1962 design and construction began on the buildings and Janusc Warunkiewicz was appointed in 1959 as the project architect by Zakrzewski & Partners. It was a multilevel complex approximately 600m in length and 80m in width, accessible to vehicles with bridge access, ramps, stairways and roof level parking. The massive concrete structure stretched from H-bridge to the decorative staircase on the corner of T- Jetty and accommodated general cargo and pre-cooling facilities for export of fruit.

T-jetty, L and M sheds, OTB and Durmarine formed a complex of civil works, engineering and architectural structures. The architecture was strongly influenced by modernist architects, Le Corbusier and Oscar Niemeyer.

On the roof deck of the cargo sheds the Ocean Terminal Building and Durmarine Office block were built.

- The 8 storey Durmarine building provided office accommodation for the port captain's staff with 180 degree views of the harbour activities.
- The OTB was the passenger terminal, 140m long x 40m wide, is basically a double volume concrete and glass hall, which was for arrivals and departures, baggage handling, customs, with restaurants on each end (one for Europeans and one for non-Europeans). The adjacent roof decks provided parking. At the passenger terminal, various passenger liners berthed, which was served by baggage and passenger galleries running the full length of L and M berths, complete with telescopic gangways to link to the ships.

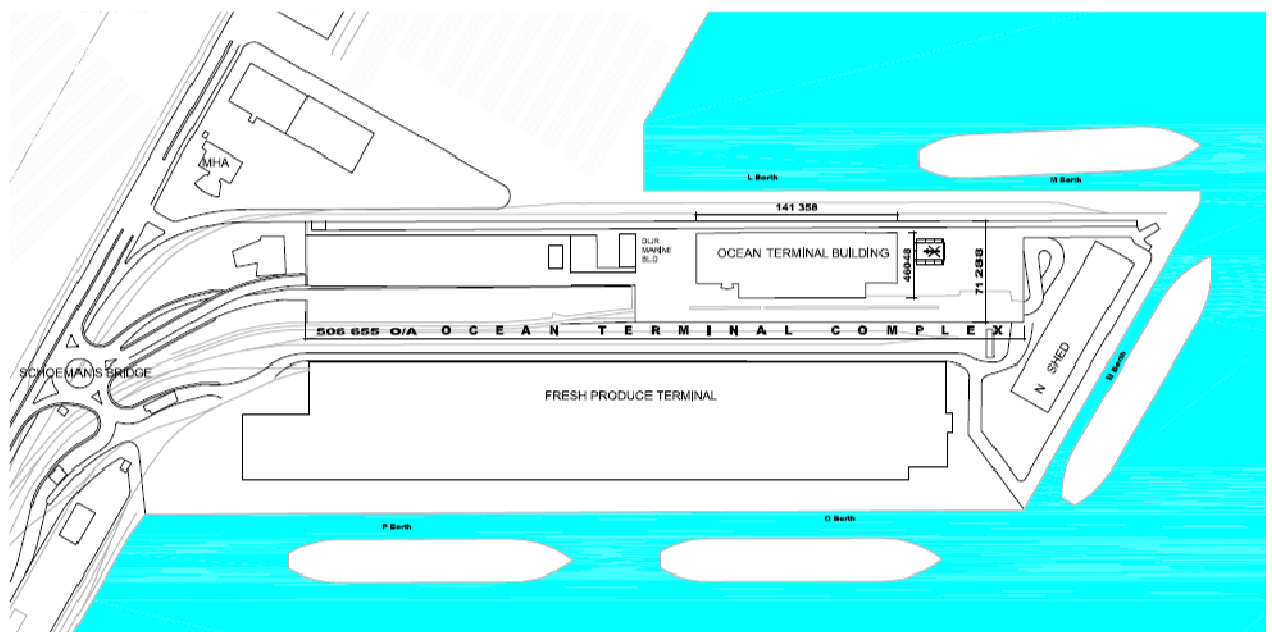


Figure 5: Site Plan of the Ocean Terminal Complex

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Figure 6: Exterior of the passenger Terminal , OTB: 1963

<https://atom.drisa.co.za/index.php/durban-1962-ocean-terminal-at-durban-harbour-interior-2>



Figure 7: Interior of the passenger terminal, OTB: 1963

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Figure 8: Interior of passenger terminal, OTB: 1964

With the demise of the mail-ships and ocean liners, the passenger terminal was underutilised. The surge and development in air travel had made the ocean liners unviable, and the passenger terminal was obsolete. Maintenance was costly and it soon became a white elephant and a reminder of the bygone era.

By 1987, Portnet's Port Engineers decided that OTB should either be demolished and the space be used for cargo handling; or converted to offices for the Portnet staff. In 1988, the decision was taken to convert the underutilized OTB into offices for 300 Portnet staff. The passenger terminal operation was moved to N-Shed and the passenger terminal hall was converted into offices.

Transnet appointed their in-house architects, Protekon, to undertake the conversion of the passenger terminal to offices. The port image was further reflected the nautical themed interior. A lightweight mezzanine floor was constructed with new timber and steel staircases and bridges to maximise space and light into the offices. A portion of the existing terrazzo floor was maintained in an internal street. The offices and boardroom areas were partitioned and carpeted. This discreet yet bold office conversion brought renewed life into the underutilised passenger terminal building. Air-conditioning was added to cool the office areas as the large glazed areas and concrete roof increased heat gain.

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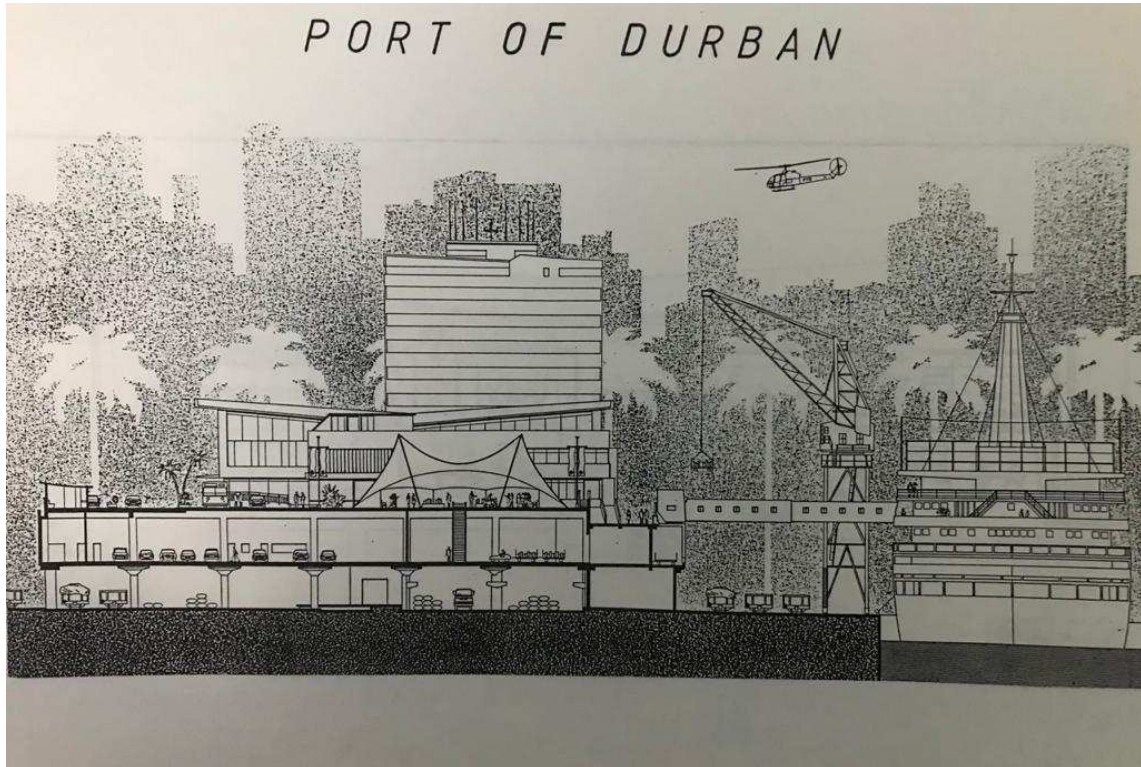


Figure 9: Drawing of Ocean Terminal Complex: Protekon Architects: 1990

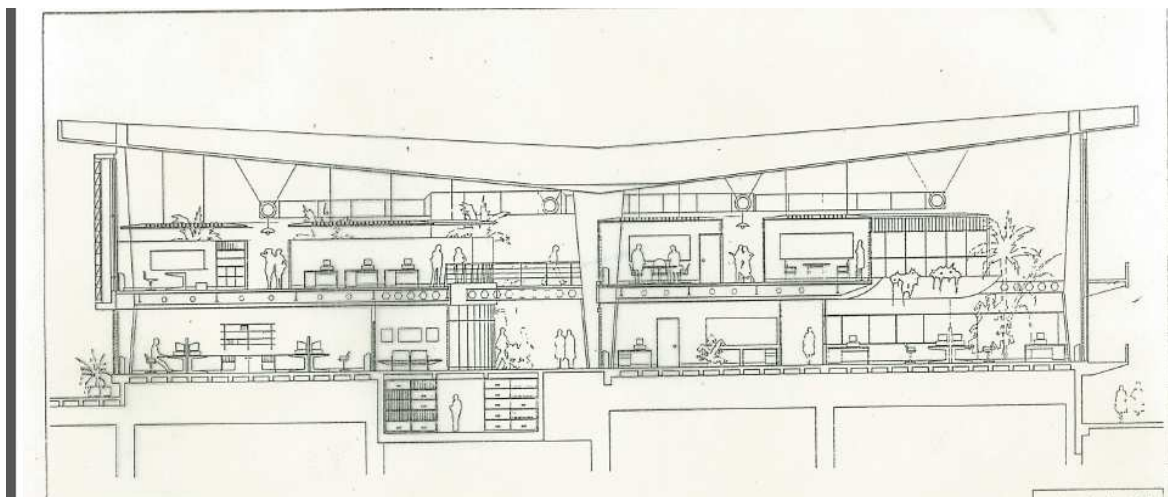


Figure 10: Section of the Ocean Terminal Building showing mezzanine and new offices: Protekon Architects: 1990

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Figure 11: OTB: Interior Office Conversion: 1992

From the 1990's to the present day, there have been numerous additions and alterations to the Ocean Terminal Building (OTB) and surrounds. The complex of buildings has responded to port management changes, dynamics of terminal operational and technological advances.

The vacant restaurant areas were converted to large boardrooms, visitors centre, and port security centre for use of the port authorities. The interior and exterior of the building has been painted many times to conform to corporate colour schemes. The off-shutter concrete finish on the exterior is now painted blue. Parking areas have been altered to increase the number of parking bays.

Following the aftermath of September 11 2001, the port security regulations worldwide have become increasingly stringent and access into the port areas is limited to port operational activities. The public have limited access into the port. Only authorized personnel are permitted into terminal operational areas.

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Figure 12: Ocean Terminal Interior: November 2020

Today, OTB is still being used as offices for TNPA. There have been numerous interior changes to offices, changes to interior colour schemes, the steel work has been repainted, and lifts added to accommodate people with mobility challenges.

In 2021, the passenger terminal at N-shed will be closed for operations and the new Cruise Terminal in the Point will be ready for occupation at A- berth.

The Transnet Port Terminal (TPT) operations at T-jetty and the Point terminal is now predominately for car terminal operation known as the RoRo Terminal and the Fruit terminal operations.

Adjacent OTB, is the TNPA Helicopter Hangar with associated helipad operations.

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Figure 13: TNPA Helicopter Hangar adjacent OTB

T jetty and City Terminal at the Point has changed and will continue to change in response to the port management, market trends, technology and the local demand for commodities.

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3.3 ARCHITECTURAL SIGNIFICANCE



Figure 14: Old Postcard showing Durbarine / Ocean Terminal entrance: 1963; and now in 2020

The Ocean Terminal Complex at T-Jetty, in the Port of Durbarine is an example of modern architecture that evolved in the 1950's and 60's. To embed this facility in the matrix of the city, elevated roadways were built, which, in turn, led to new sheds being designed to accommodate vehicular traffic and roof-level parking. One of the buildings was the customs hall (OTB) for embarking and disembarking and the administration tower (Durbarine).

T-jetty, L and M sheds, OTB and Durbarine buildings form a complex of civil works, bold engineering and architectural structures embracing the modernistic philosophy of less is more and form follows function. The buildings showcase an extensive use of reinforced concrete, large span precast concrete beams and concrete columns.

The architecture was strongly influenced by Le Corbusier and Oscar Niemeyer that aligned with Brasilia and Le Corbusier's Beton Brut of exposing materials and concrete structure. The style commonly makes use of exposed concrete or brick, angular geometric shapes and a predominantly monochrome colour palette; other materials, such as steel, timber and glass, are also featured.

The core of Brutalism was a reverence for materials, expressed honestly, stating "Brutalism is concerned with the quality of material" and "the seeing of materials for what they were: the woodness of the wood; the sandiness of sand. The concrete finish is exposed in the Ocean Terminal complex with Y and V columns and large span concrete beams and roof structure left unembellished.

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Brutalism is an architectural style striving to create simple, honest, and functional buildings that accommodate their purpose, inhabitants, and location.



Figure 154: Double volume interior with Y columns and concrete roof

The passenger terminal hall consists of precast, reinforced concrete columns supporting the huge keel-like concrete roof, with infill of aluminium framed glazing and sun control screen suspended over the long elevation. The strong horizontal lines of the buildings are typical of modern buildings, together with the use of exposed smooth concrete finishes.

Embellishment was limited to the interior and to accentuate the entrance areas. In order to resist sea-water corrosion, the terminal pioneered the use of aluminium windows.

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Figure 15: Sculpture at old entrance and external sun screens OTB: 1963

There is an emphasis on graphic expressions in the external elevations and in the whole-site architectural plan in regard to the main functions and people-flows of the buildings. This is seen in the abstract sculpture at the entrances to the building and clear definition of each building as an element.

Glass is used extensively in the south façade of OTB and the north façade glazing is protected from heat-gain using purpose-made aluminium solar screens.



Figure 16: Exterior exposed concrete : Nov. 2020

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Ocean Terminal Complex and buildings are constructed with reoccurring modular elements representing specific functional zones, distinctly articulated and grouped together into a unified whole.

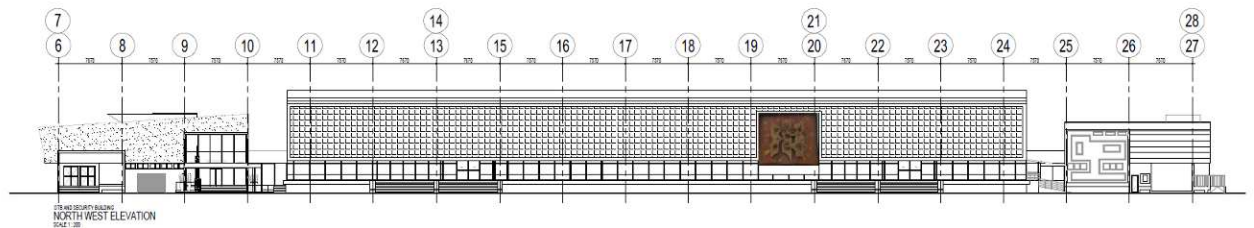


Figure 17: North West Elevation of OTB



Figure 18: Exterior OTB : Nov. 2020

The architect, Janusc Warunkiewicz not only designed the Ocean Terminal, but also did a lot of the artwork in it.

He made a fibreglass galleon that graced the front of the office tower which was called "the Cheesegrater" due to the way the front looked. The reason he made the front like that was that it was to create currents that air-conditioned the office.

There is also large mosaic patterned walls in colourful abstract designs in the interior.

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Figure 19: Exterior View of Ocean Terminal Entrance November 2020



Figure 20: OTB Entrance: November 2020



Figure 21: Interior Mosaic artwork

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Figure 22: Main Entrance upgraded in 2008

Nearly 60 years later, it is not surprising that there have been numerous additions and alterations to the exterior and interior of the building. Starting with the change from passenger terminal to offices in 1990. The exposed concrete has been painted due to staining and waterproofing problems. The concrete parking deck has been waterproofed and paved due to waterproofing problems. The sunscreen did not cool the building as envisaged and central air-conditioning was introduced. Ramps and hoists have introduced for accessibility.

The times have changed, port operations has changed, the building adapted and this modernist building has stood the test of time.

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