



05

Location

The Apollo Centre (fig.6.1) is located on the corner of Church and Du Toit Street on Erf (1111) Arcadia.

Background

The Apollo Centre was originally built in 1969 by the Architectural firm Ivan B. Sive May von Langenau. It has since undergone alterations on the first floor level which includes; the addition of a mezzanine level in a double volume on the western side of the structure and different cladding added to the north- and western facades.

Current Use

The Apollo Centre is currently managed by the City Property Group and being used for a variety of functions which include; retail space on ground floor, a vacant first floor, a caretakers residence on the second floor and a variety of office and educational spaces on the upper floors. It has to be mentioned that the building is approximately 50% occupied at present. The majority of interior spaces, excluding the ground floor, are formed by drywall partitioning.

Condition

The general condition of the Apollo Centre is very good. No structural damage is visible, and the structure as a whole is visibly well maintained.

Architectural Significance

The Apollo Centre contributes to the Architectural quality of the area as it is one of the most visible buildings in the precinct second to the Reserve Bank. Prominent columns on all facades as well as a tinted glass envelope gives the building a character of stature.

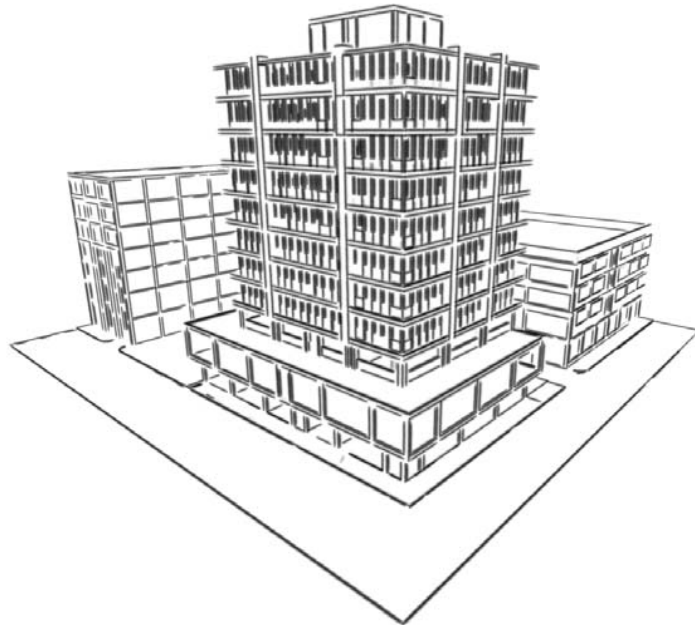


fig.5.1. Bird's Eye view of the Apollo Centre from the north-western direction



fig.5.2. The Apollo Centre on the corner of Church and Du Toit Street



fig.5.3. Vehicle orientated Church street forms the northern boundary

Chapter 5

Existing Structure

Site Boundaries



fig.5.4. Du Toit Street (western boundary)



fig.5.5. Service road and vacant warehouse (southern boundary)

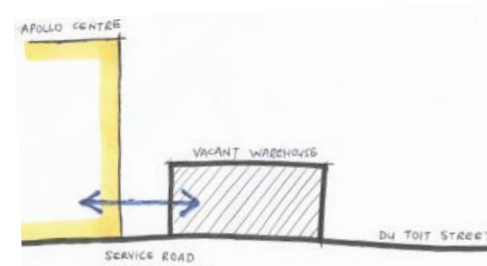


fig.5.6. Possible future connection

South and West Boundary

The western boundary is formed by Du Toit Street. It is a single, two way road which offers parallel parking bays on its sides (fig.5.4). It is predominantly used by pedestrians moving in a north-south direction.

The southern boundary is formed by a vacant warehouse structure that is separated by means of a derelict service road (fig.5.5). Both of the structures are built on one stand.

It is proposed that the vacant warehouse type structure be adaptively re-used as an educational institution. The possibility exist that the two structures be linked on the southern side, enabling the sharing of resources (fig.5.6)



fig.5.7. Church Street (northern boundary)



fig.5.8. Two-storey educational structure (eastern boundary)

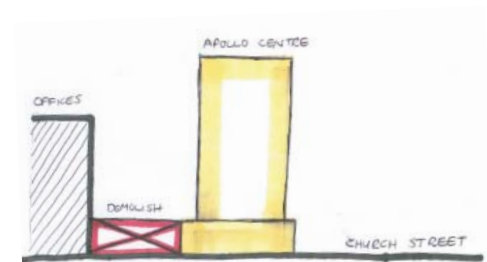


fig.5.9. Proposed demolition and creation of pedestrian walkway

North and East Boundary

The northern boundary is formed by Church Street. It is a four lane, one way road which offers parallel parking on its sides (fig.5.7). It is predominantly used by vehicles moving in an east-west direction.

The eastern boundary is formed by a two-storey structure that is being used for educational purposes (fig.5.8). This structure is contextually out of scale.

It is proposed that this structure be demolished and make way for a pedestrian walkway that will not only connect Church and Pretorius Streets, but also give access to various public spaces within the proposed urban educational campus (fig.5.9).

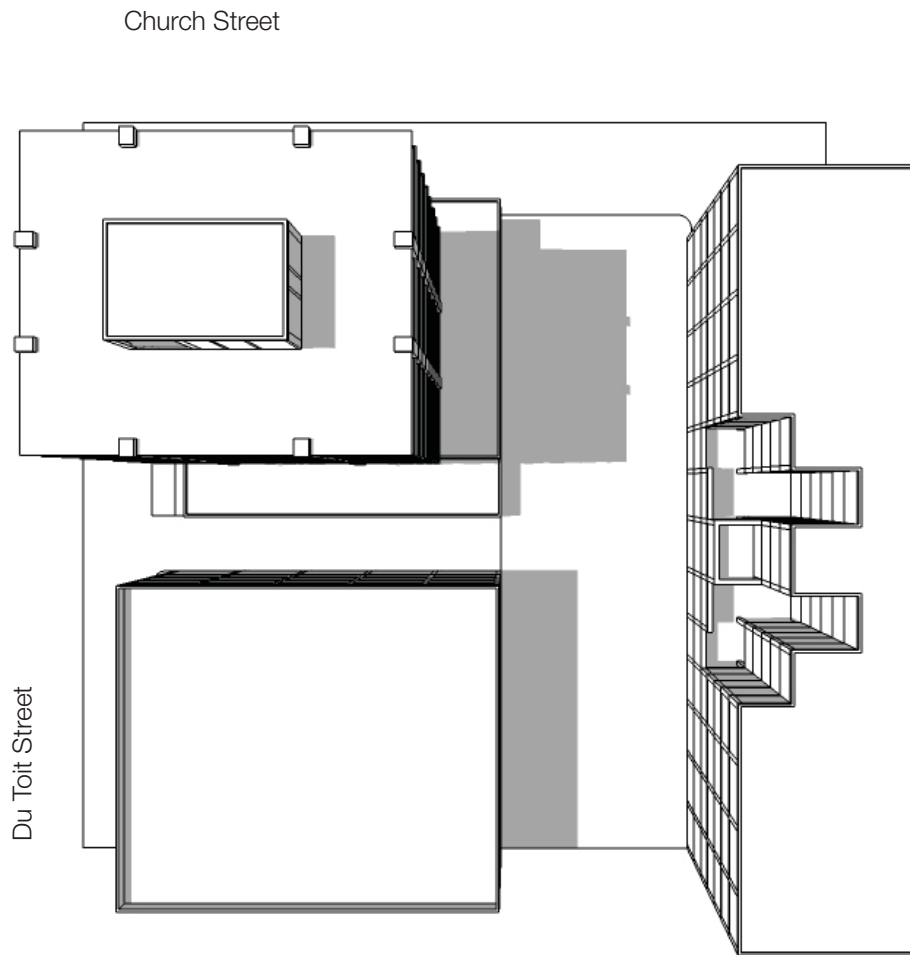


fig.5.10. Birds-eye view of site boundaries from above

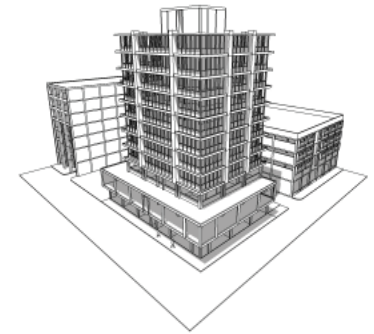


fig.5.11. Birds-eye view of site boundaries from the north-western direction

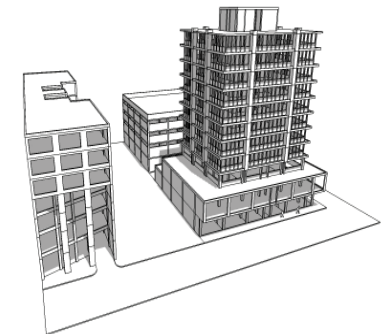


fig.5.12. Birds-eye view of site boundaries from the north-eastern direction

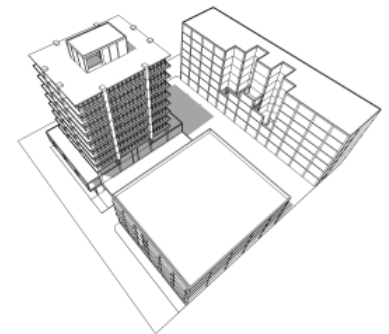


fig.5.13. Birds-eye view of site boundaries from the south-western direction

Structural Analysis

The Apollo Centers' structure is composed of a concrete core, concrete column, beam and slab structure.

The building consists of 2 basement levels, a ground floor, and a first floor that is partially double volume, cantilevers over the sidewalks below, and 8 floors on top that adds to a total number of 12 floor levels.

Levels 3-10 consist of in-situ concrete slabs with structural columns and beam on the perimeter supporting its weight.

Brickwork has been expressively used on all four the facades to create eight prominent columns.

The rooftop houses the elevators' motor room. This room is one-and-half storeys high, the reason being that rest rooms are built on each landing of the main staircase within the central service core of the structure.

Three elevators service the Apollo Centre. They are located in the central service core of the structure. Two staircases run the full height of the structure and are located within the central service core of the structure.

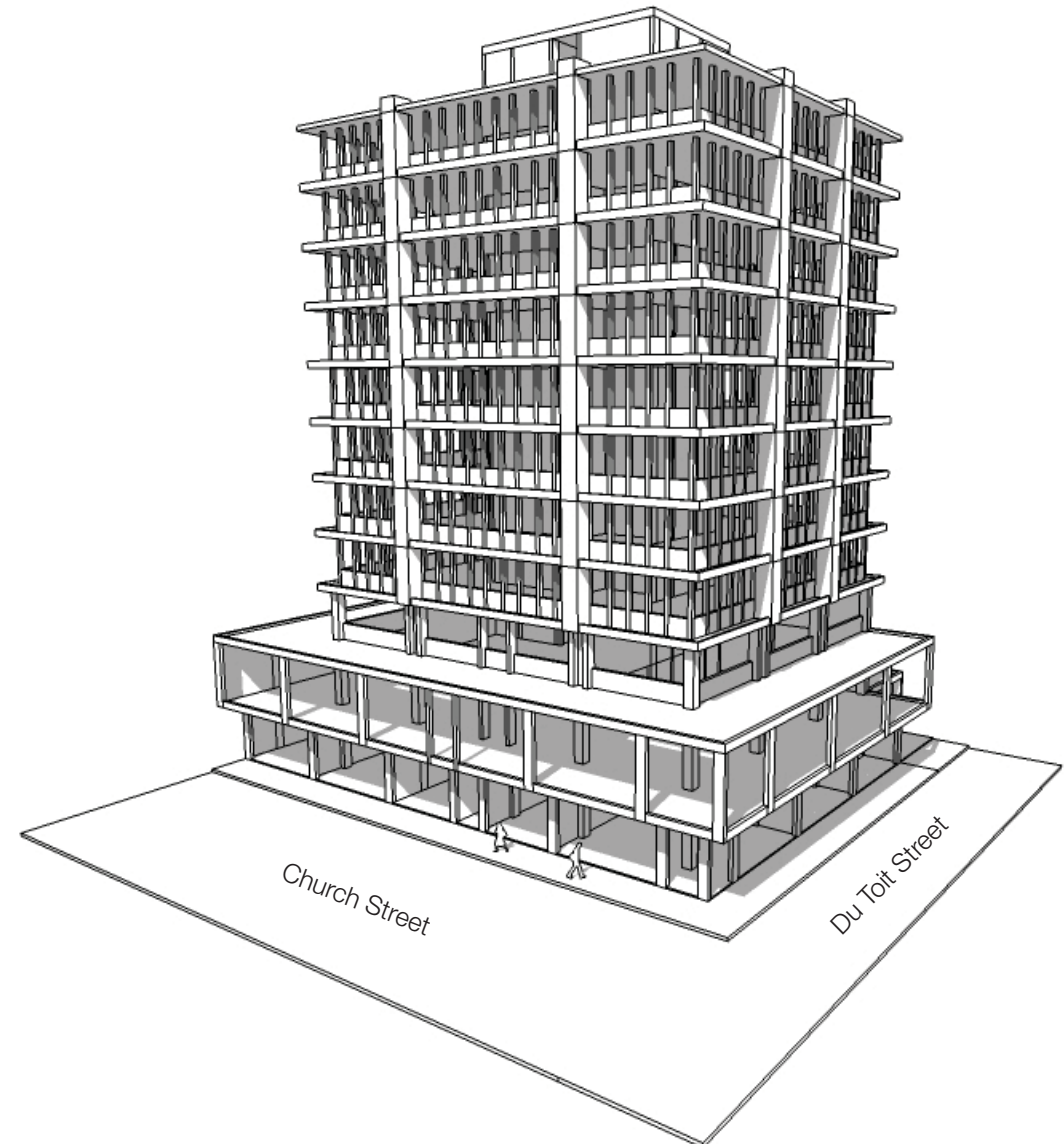


fig.5.14. 3-Dimensional structural composition of the Apollo Centre

Existing Ground Floor

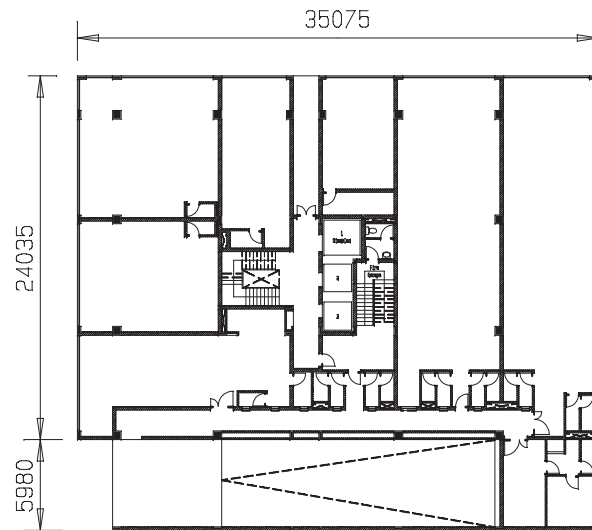


fig.5.15. Ground Floor Plan (Scale 1:500)

The existing ground floor of the Apollo Centre is located on the corner of Church and Du Toit Street. The main pedestrian entrance to the building is from Church Street (fig.5.17). Various retail functions are located on the ground floor with direct access from the pedestrian walkways (fig.5.18).

The main vehicular entrance to the Apollo Centre is from Du Toit Street (fig.5.19). A ramp that goes down to two basement levels can be directly accessed from the street.

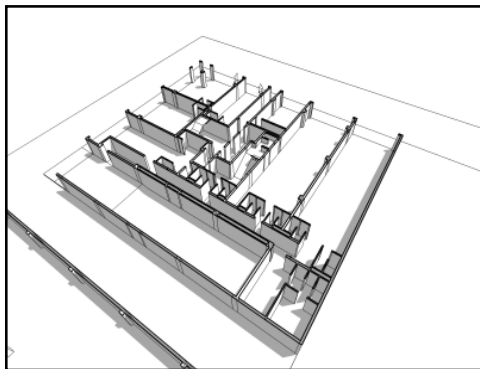


fig.5.16. Birds-eye view of Ground Floor



fig.5.17. Main entrance to the Apollo Centre from Church Street



fig.5.18. Various retail functions located on the Ground Floor



fig.5.19. Vehicular entrance to the Apollo Centre from Du Toit Street

Existing Basement Floors

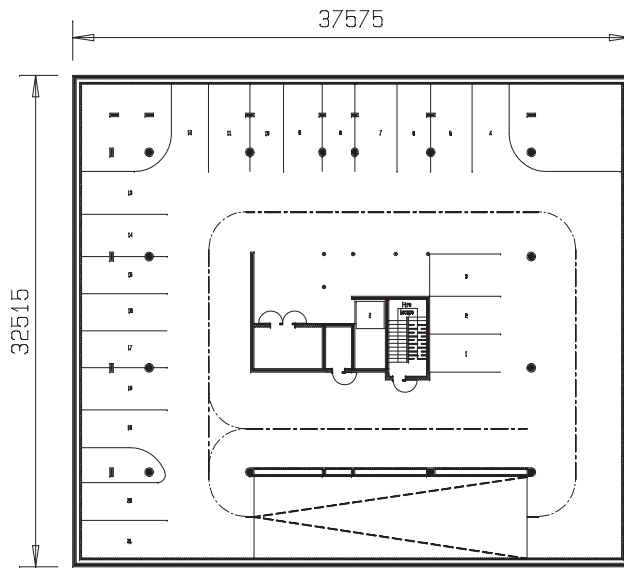


fig.5.20. Upper Basement Floor Plan (Scale 1:500)

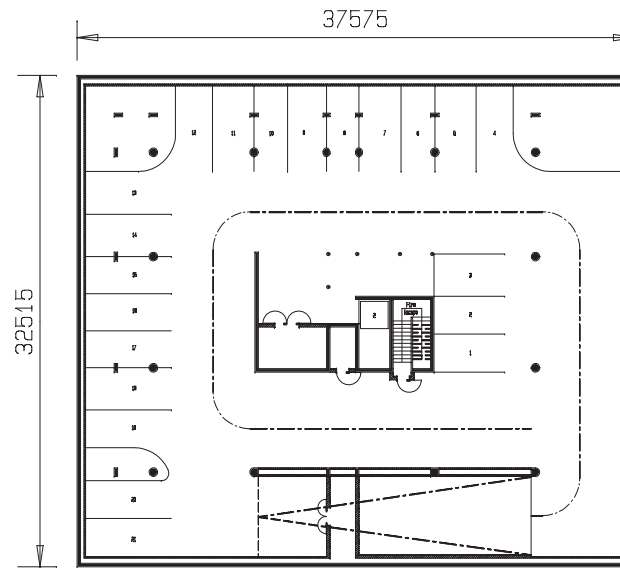


fig.5.21. Lower Basement Floor Plan (Scale 1:500)

The existing basement floor levels can be accessed from Du Toit Street. A concrete ramp connects the ground, upper and lower basement levels. Parking bays are located in-between existing columns (fig.5.23). The position of the driveway and parking bays are not effective, but will not be altered.

The basement walls consist of an outer concrete layer, an cavity, and an inner brick layer with weeping holes provided. The cavity in-between the concrete and brick layer is mechanically ventilated (fig.5.24).

The upper and lower basement levels also house the transformer room, meter room and high-tension room (fig.5.25).

Building services can be seen suspended from the basement soffits.

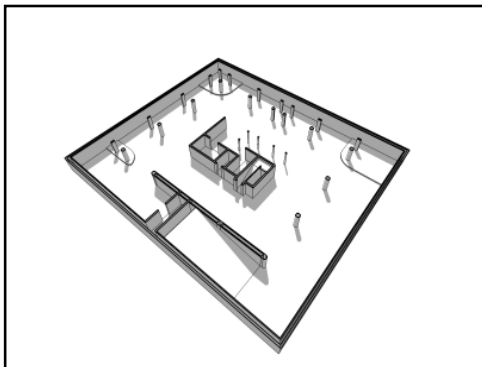


fig.5.22. Birds-eye view of Lower Basement Floor



fig.5.23. Parking bays located in-between existing columns



fig.5.24. Mechanically ventilated basement cavity walls



fig.5.25. Transformer room

Existing First Floor

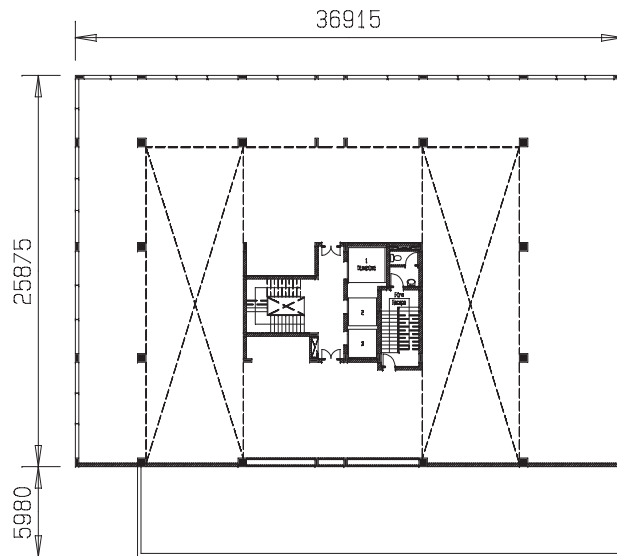


fig.5.26. First Floor Plan (Scale 1:500)

The existing first floor of the Apollo Centre is currently vacant. It partially cantilevers over the pedestrian walkways of Church and Du Toit Street below (fig.5.28). It is clad with light weight steel panels (fig.5.29). The first floor contains two double volume spaces on the eastern and western sides of the concrete service core (fig.5.30).

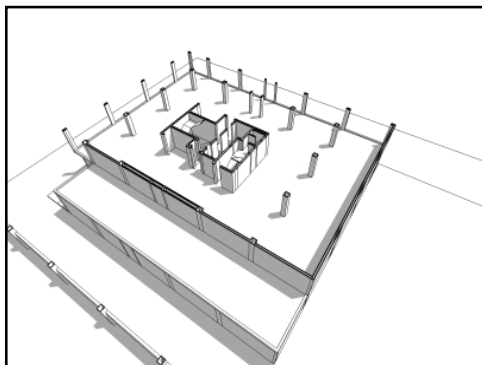


fig.5.27. Birds-eye view of First Floor



fig.5.28. First Floor partially cantilever over pedestrian walkways below



fig.5.29. Light weight steel cladding



fig.5.30. Double volume spaces on both sides of concrete service core

Existing Second Floor

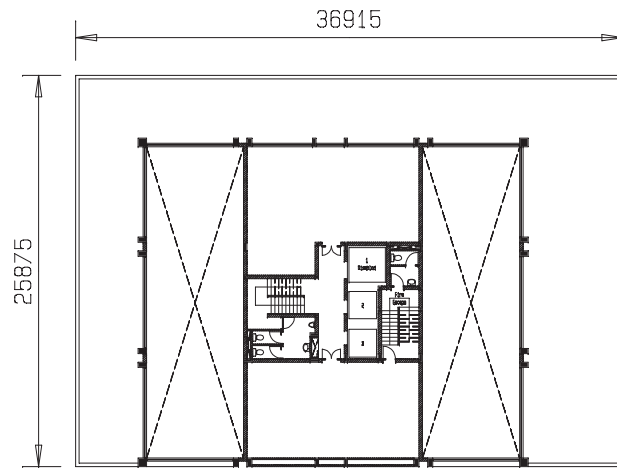


fig.5.31. Second Floor Plan (Scale 1:500)

The existing second floor of the Apollo Centre contains two double volume spaces on both the eastern and western sides of the concrete service core that are connected to the first floor below (fig.5.33). Two concrete platforms are situated on the northern and southern sides of the service core. The northern platform is where the mechanical ventilation motors are located (fig.5.34), and the southern platform is where the caretakers' residence is currently located.

The remainder of the second floor is located on the exterior (fig.5.35), which is essentially the rooftop of the first floor. These spaces are not being used but does allow for natural light to enter the double volumes and natural ventilation to cool the mechanical ventilation motor room.

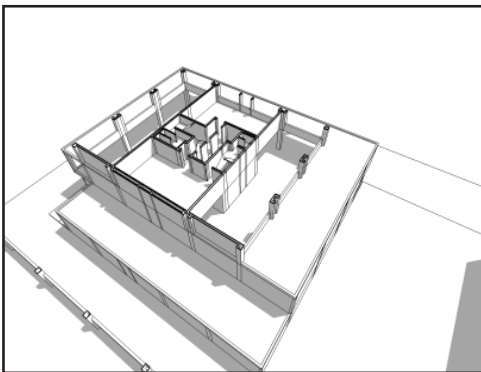


fig.5.32. Birds-eye view of Second Floor



fig.5.33. Double volume spaces that are connected to the first floor



fig.5.34. Mechanical ventilation room on northern platform



fig.5.35. Exterior second floor area (first floor rooftop)

Existing Upper Floors (3-10)

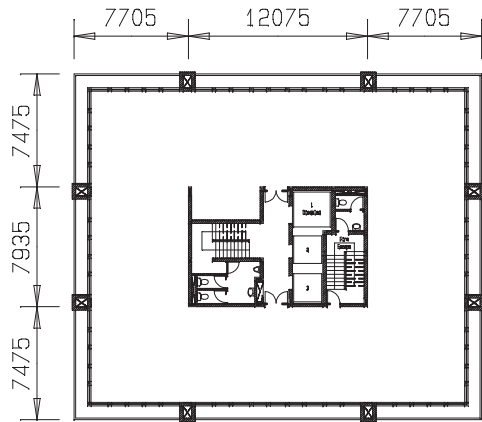


fig.5.36. Upper Floor Plans (Scale 1:500)

The existing upper floors of the Apollo Centre runs from floors three to ten of the structure. Its structure consists of concrete slabs that are supported on its periphery by concrete columns and a beam that connects them all (fig.5.38). The openings in-between the columns are filled with waist high walls and glazing upwards. No beams exist that connect the periphery to the concrete service core. An open plan layout is created that is currently divided by means of dry walling into office spaces. A suspended ceiling exists throughout the floor plan (fig.5.39), with mechanical ventilation ducts serving the floors above by means of openings in the concrete slab structure on the periphery. On the exterior of each floor a small concrete overhang exist. Tinted, glazed sunscreen panels (fig.5.40), which act as a second skin to the building, are fixed to these overhang areas. Eight hollow brick columns surround the floor plan in a geometric manner. These hollow brick columns are expressively used on the facades of the structure and currently being used as storage areas. The possibility exists that these columns may have been originally used as ventilation ducts.

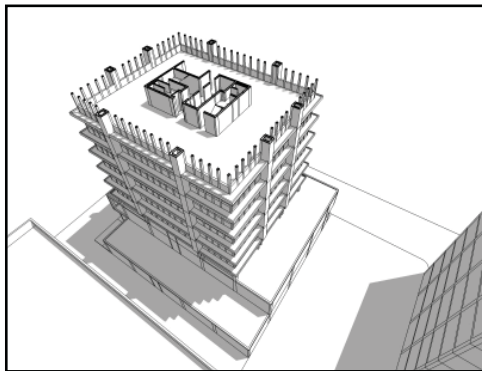


fig.5.37. Birds-eye view of Upper Floors



fig.5.38. Concrete columns periphery



fig.5.39. Suspended ceilings



fig.5.40. Tinted, glazed sunscreen panels fixed to concrete overhangs

Existing Rooftop

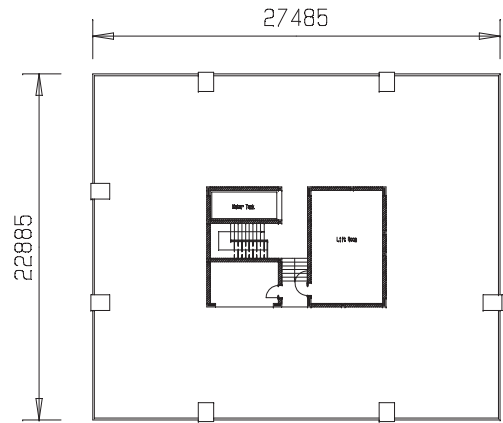


fig.5.41. Rooftop Floor Plan (Scale 1:500)

The existing rooftop space of the Apollo Centre consist of an open concrete surface area with a one-and-a-half storey elevator motor room located above the concrete service core (fig.5.43). A generator room is located opposite the elevator motor room. The hollow brick columns end with stubs on the periphery (fig.5.44). The periphery is not safeguarded. Views to some of the most prominent landmarks in Pretoria can be observed from the rooftop space (fig.5.45).

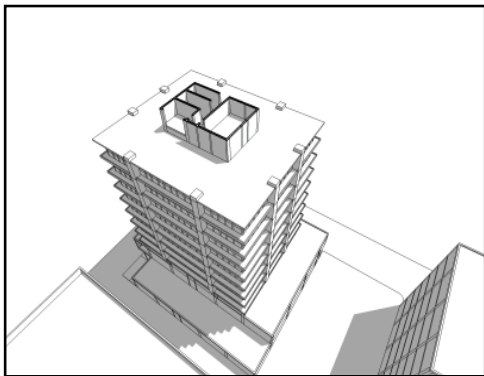


fig.5.42. Birds-eye view of Rooftop Floor



fig.5.43. One-and-a-half-storey elevator room above service core



fig.5.44. Unsafe periphery with hollow brick columns ending in stubs



fig.5.45. View down Church Street from the rooftop space

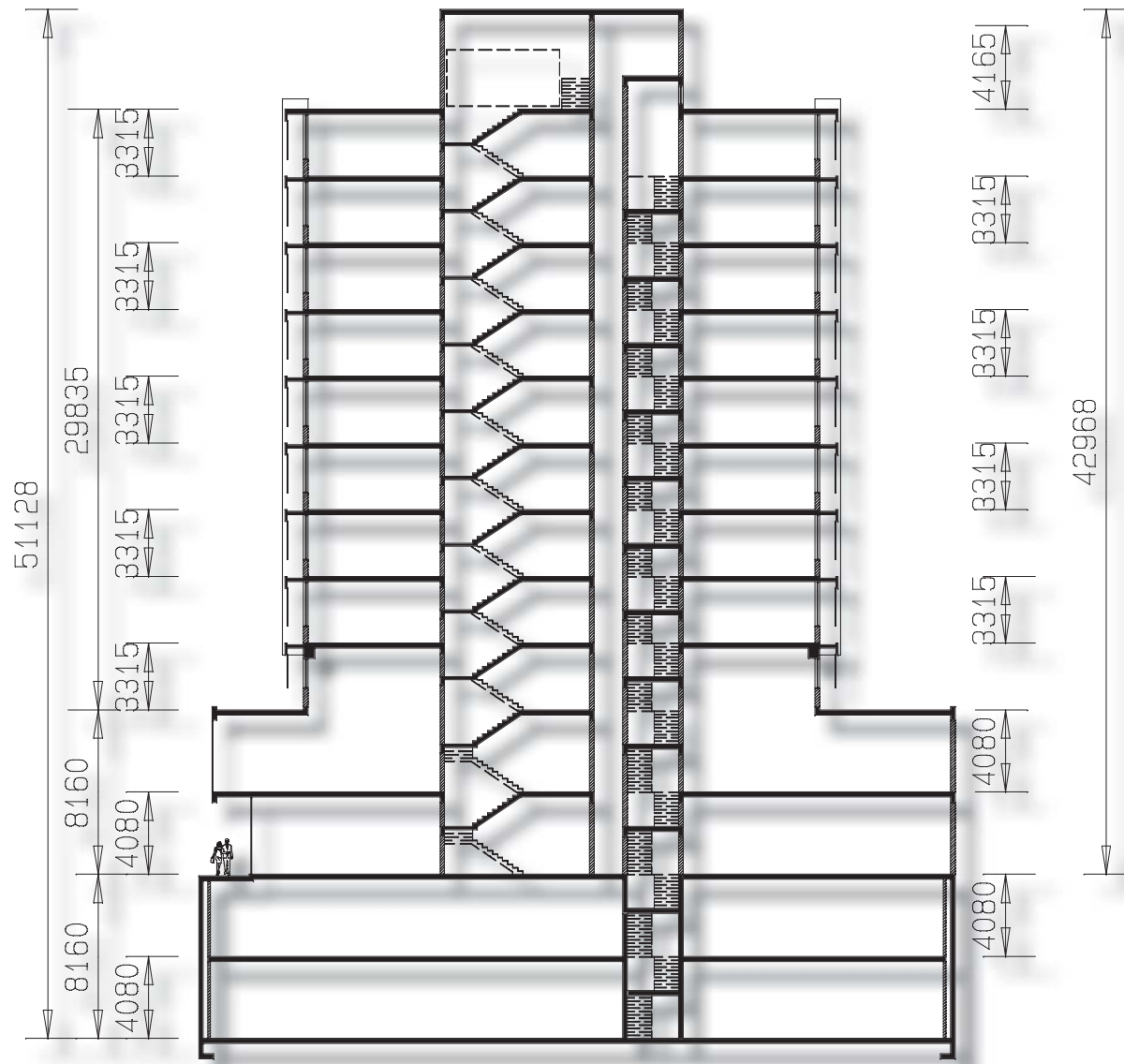


fig.5.46. Typical Section of the Existing Apollo Centre