

Ε

# DESIGNPROPOSAL

This chapter deals with the examination of the final built structure as an end product. The various movement routes, access points and servicing issues are examined as final solutions to the various design related problems identified through this document.

The final design speaks on both the theoretical ideas and the necessary functional responses to the project requirements and context.

Т

PARKING AND APPROACH

The investigation into on-site parking was been discussed previously with the resolution to have all necessary parking requirements fulfilled by the newly planned parking garage to be constructed on the adjacent northern city block. The route thus from the parking garage to the facility will follow Paul Kruger street south to the site.

Additional approaches to the facility are through pedestrian and public transport routes.



S

The main bus stop serving the northern areas of Church Square is located opposite the eastern entrance to the CUBE building. Large volumes of people will gain access to the project through this public transport point.

On the southern edge of the site facing Vermuelen Street there are a number of public taxi stops and an additional bus stop which serves the flow of people from east to west.

Private vehicle parking around Church Square will enable visitors to find nearby parking within easy walking distance of the facility.

Pedestrian flow through the city will remain confined to the sidewalks. With the incorporation of the public arcade however, this movement around the edges of the site is given an alternative route to follow. One which welcomes the public into the built fabric rather than exclusion to the edge.

#### ENTRANCES

The various flows of public movement centre along the southern and eastern edges and through the length of the arcade. Each of these points have been provided with access into the building.

The eastern main entrance will face onto the pedestrianised Paul Kruger Street in the future where the majority of visitors and users will enter the structure.

The southern entrance is secondary and provides easier access to visitors arriving by the east-west bus and taxi routes. Facing onto Vermuelen Street, movement is restricted to the sidewalk adjacent to the road and as such does not make an ideal pedestrian friendly experience.

The arcade entrance into the courtyard provides quick access to the public facilities within the building. The movement of people along this route also allows the CUBE facility the opportunity to inform people on issues related to the built environment of the city.

#### P A T H W A Y S

Movement through the building on a large scale is centered about the main atriums and acts in a similar manner to the arcade with the availability of natural light and the central line of movement.

Each floor is examined with regards to movement between the spaces to examine the ability of the user to use the building in a safe, secure and functional manner.

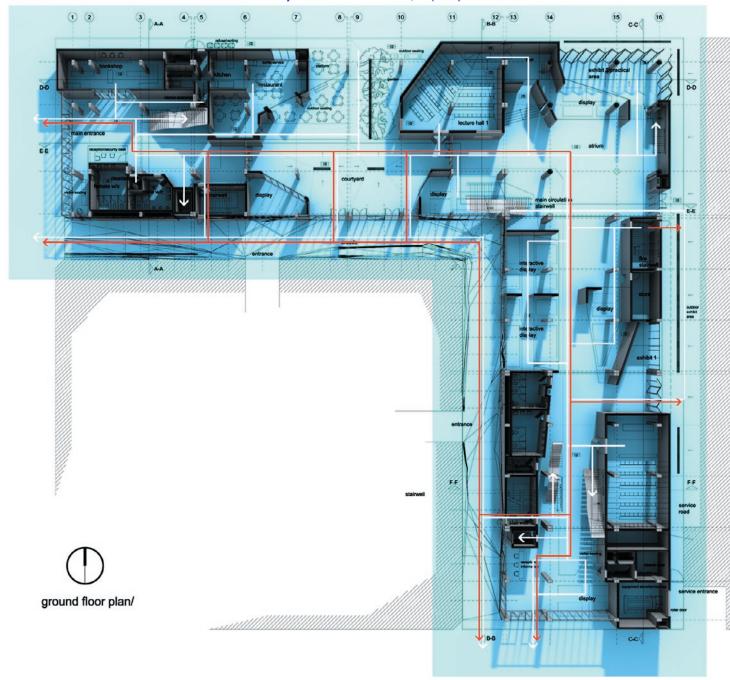
# FIREROUTES

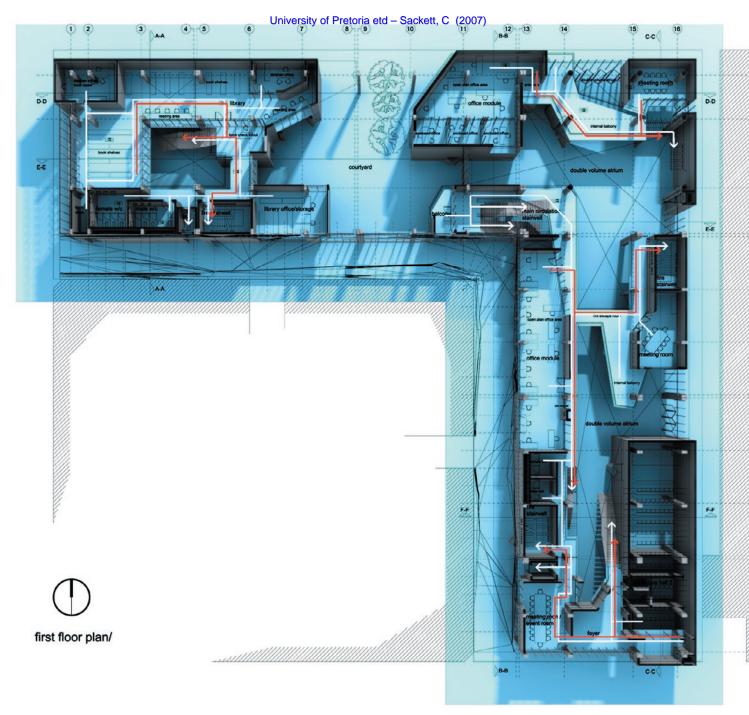
The general fire escape movement principal as discussed earlier is now implemented through the design and is indicated in red in the diagrams.

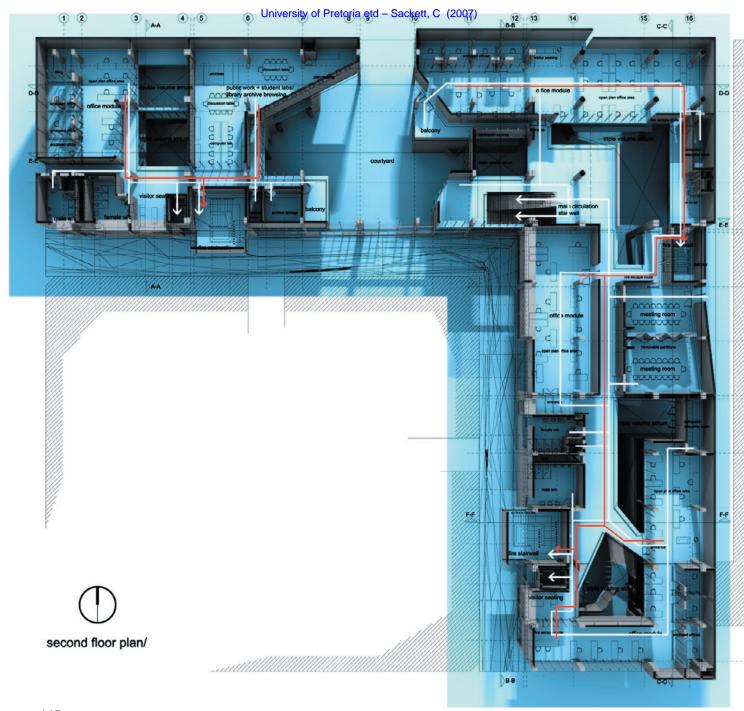
### SERVICING

The central servicing spine which runs below the arcade provides the necessary services at any point along the buildings length. Through the use of dropped ceiling construction systems and vertical ducts, the services can be brought up to the top floor and spread to serve the individual spaces.

The plant rooms located on the roof operate in a similar manner. Both provide the necessary heating and cooling equipment to stabilise the air temperature within the building to suit the users comfort. The two plant rooms work together to extract air from the outside environment and push the air downwards into the building.







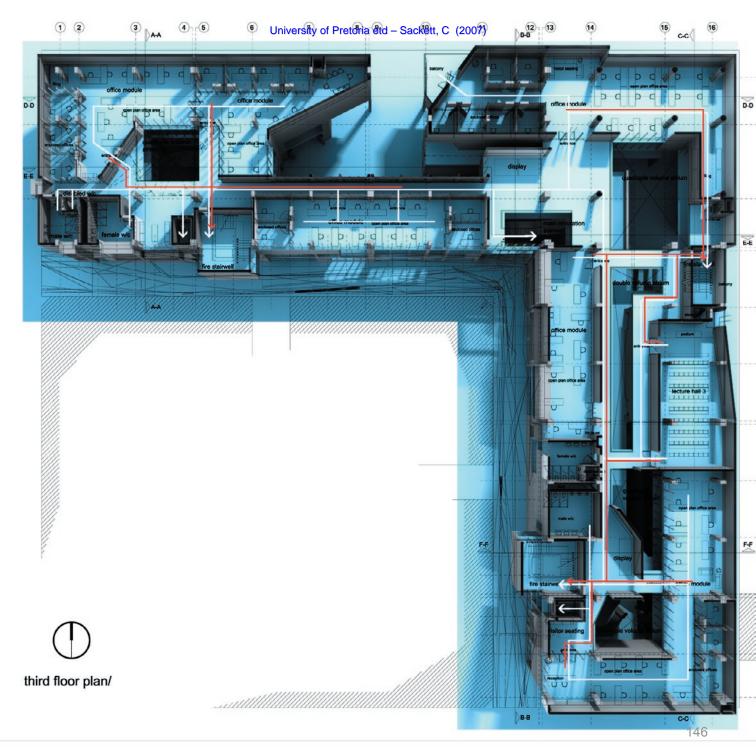




Fig.10\_02.View into arcade space west

# University of Pretoria etd – Sackett, C (2007)



Fig.10\_03.Internal arcade view north



Fig.10\_04.View of arcade from main stairwell

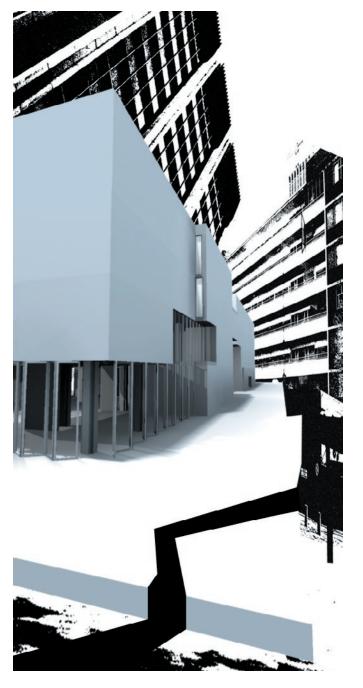


Fig.10\_05.North eastern external view

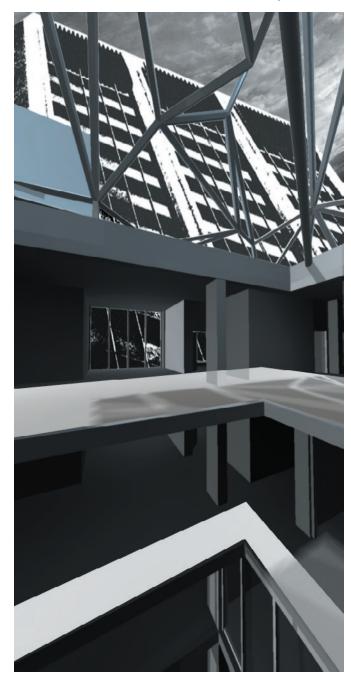


Fig.10\_06.Atrium space



Fig.10\_07.View over arcade



Fig.10\_08.Stairwell view over arcade