

Image information:

[06][02] DESIGN DEVELOPMENT

Fig. 6.2_ perspectives of proposal 1, indicating free form

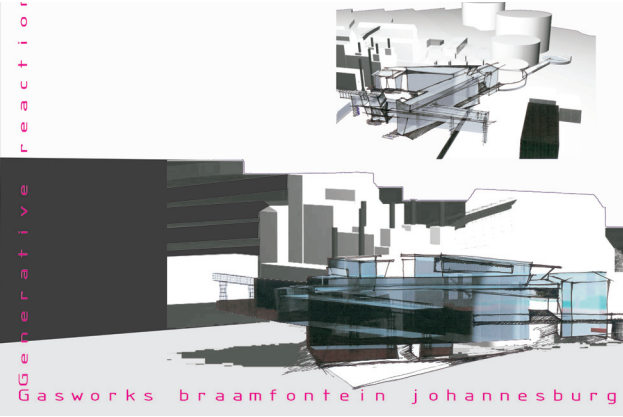


Fig. 6.1_ section showing placement of cinema in gas tank remain

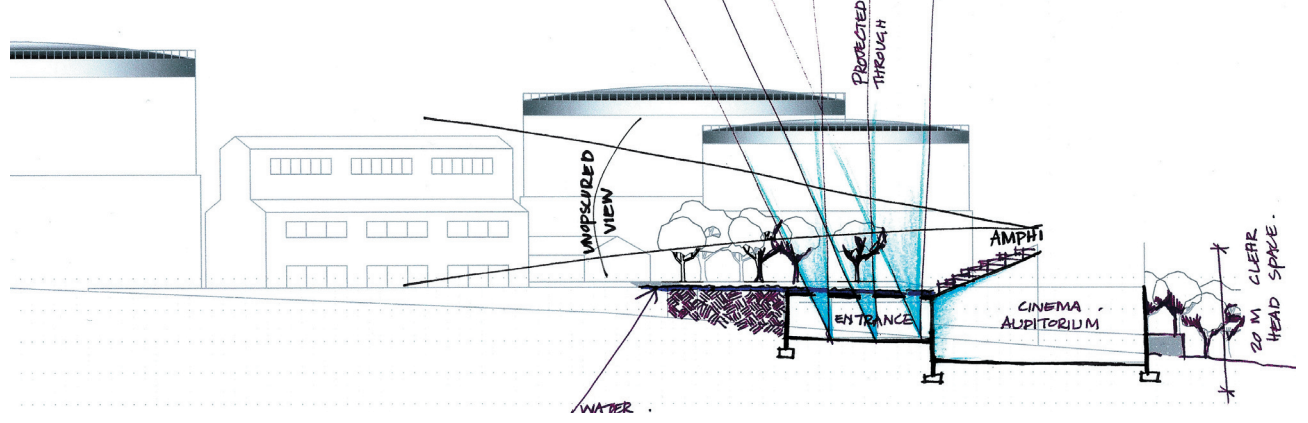
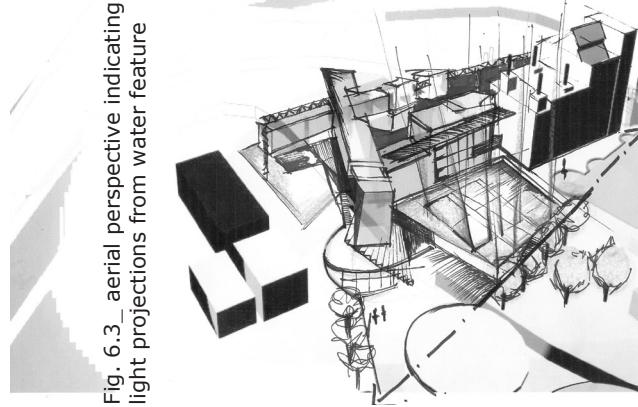


Fig. 6.3_ aerial perspective indicating light projections from water feature



[06][02][01] PROPOSAL 001

The brief explored the function of a cinema complex and film studios. The concept explored form as a generator for design. It was soon realised that free form as if resisting gravity did not fit the context of the site or enhanced the form of existing buildings. Proposal 1 investigated the concept of placing the cinema spaces within remain of a gas tank. Light projections came from within the cinema entrance creating a play of light projected through the water. It was later decided to rather connect the cinema auditoriums directly with the urban landscape, and not hiding them under the ground. Besides the re-used gas ruin, other ruins around the building were treated as marked hard landscaped circles showing the layering of the historical context.

Fig. 6.4_ aerial computer rendering showing placement of building

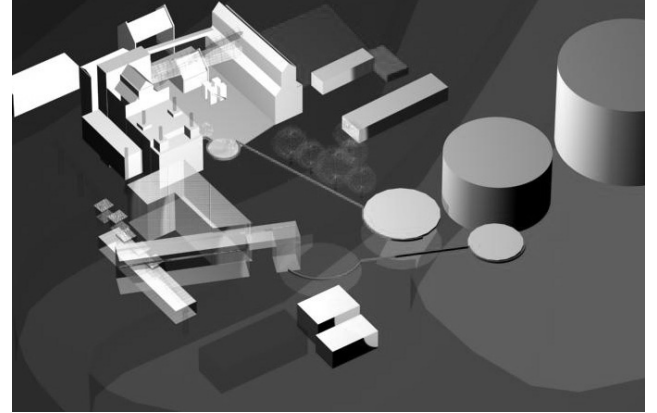


Fig. 6.5_ plan development

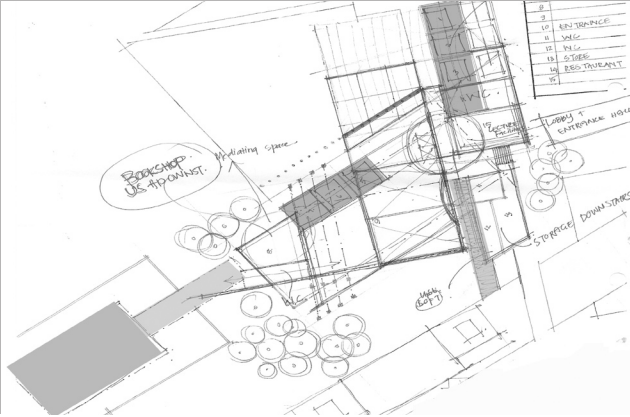
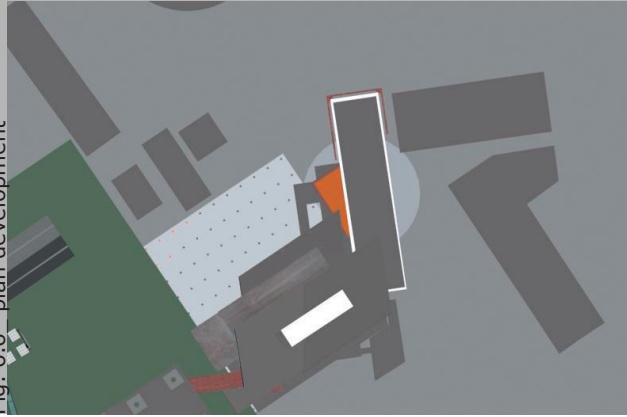


Fig. 6.6 plan development

**[06][02][02] PROPOSAL 002**

After a investigation of proposal 001, it was decided to replace the film studios(which will not communicate with the urban landscape) with a interactive film museum. The reason, the buildings design had to accommodate the public, and a museum will be better suited, since the building is placed in the entertainment hub. This proposal shows the re-use of the existing concrete footings on the old purification platform. The grids of the concrete footings are superimposed onto the site. The design proposal respects this grid by extending it into the museum building. The use of gas tank ruins as landscaping feature remained a feature.

Fig. 6.7_ rendering showing re-use of concrete footings in water-feature

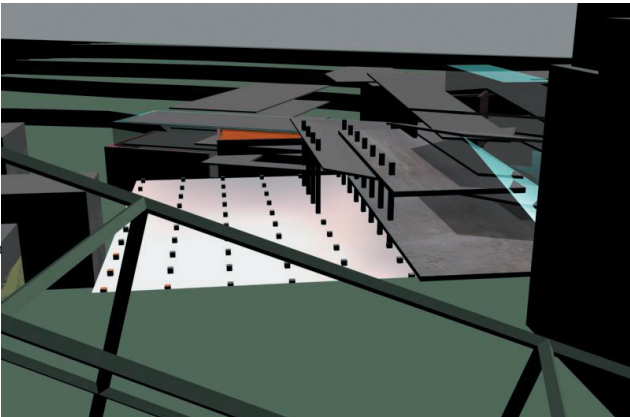


Fig. 6.8_ rendering indicating view from North-East

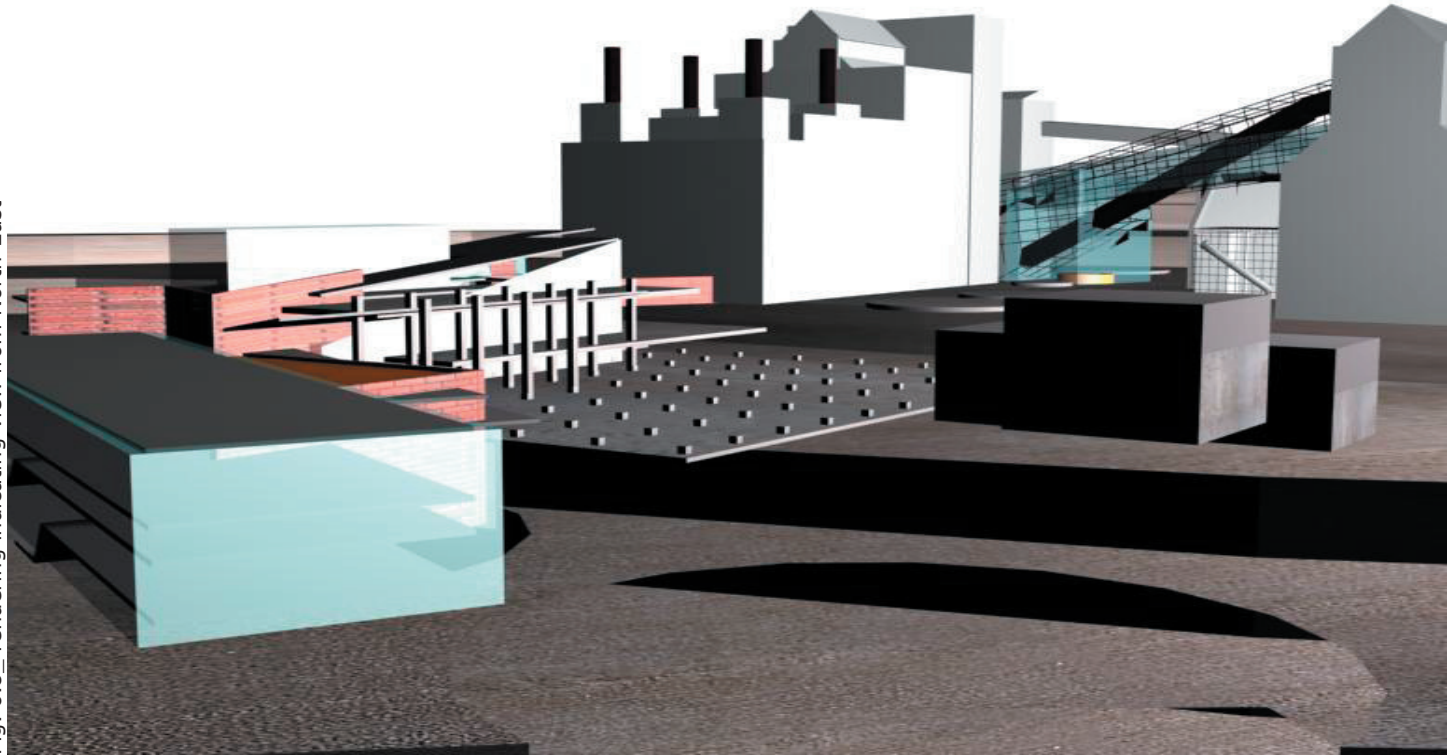


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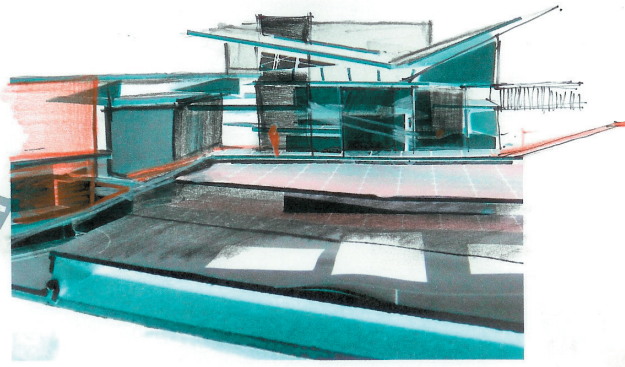
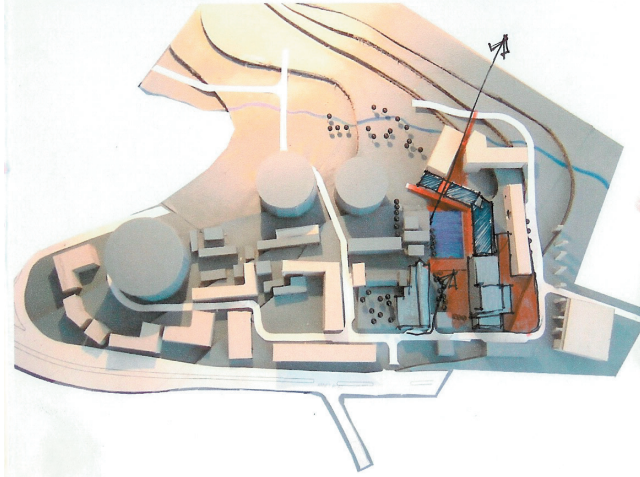
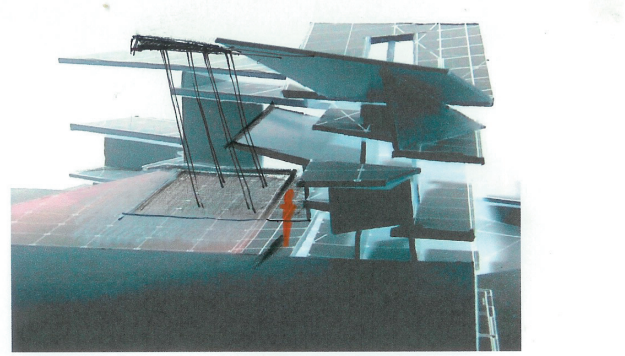
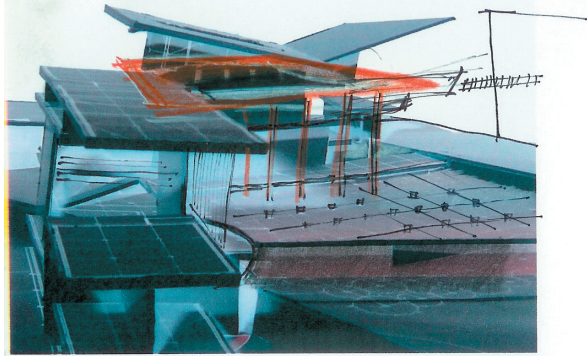


Fig. 6.9_ model development

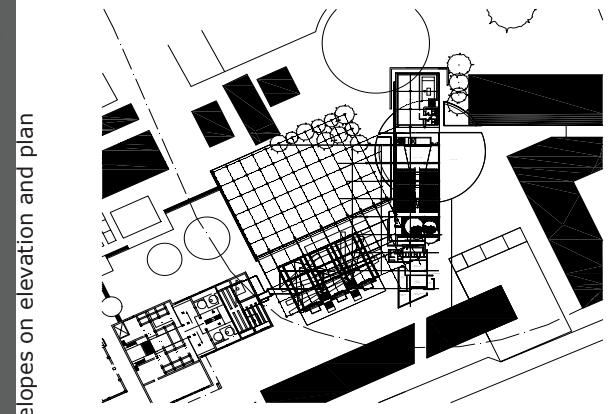


Fig. 6.10_ development of museum envelopes on elevation and plan

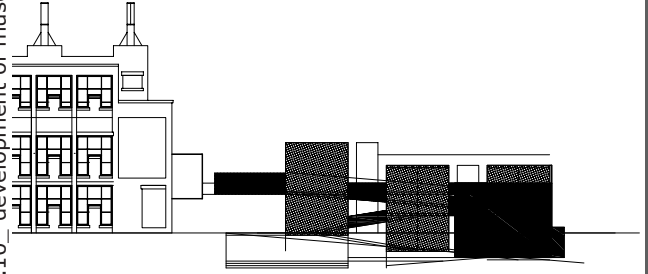


Fig. 6.11_ rendering of proposal 3



[06][02][03] PROPOSAL 003-004

Proposal 3 explored the idea of manipulating programme to create spaces of retreat and interaction throughout the design. The museum building was divided into three separate boxes with ramps interconnecting the spaces. Most of this proposal was brought forward into the final proposal, but the angled umbrella roof was replaced with a more elegant structure.



Fig. 6.12... rendered view of film centre from the North

[06][03] RESOLUTION/PROPOSAL 004

[06][03][01] PLAN DEVELOPMENT



Fig. 6.14_ the use if grids on site



Fig. 6.13_ site with surrounding grids superimposed

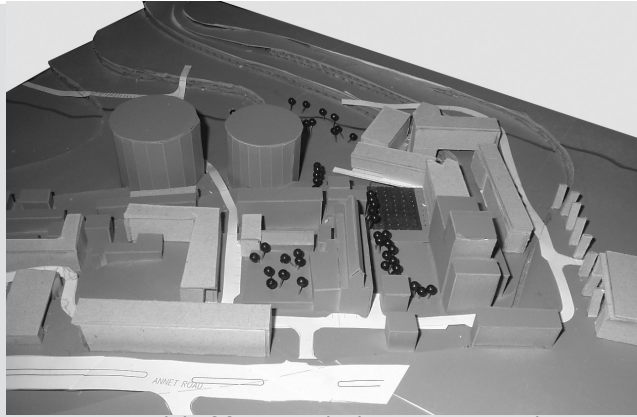


Fig. 6.15_ model of framework showing view to the east

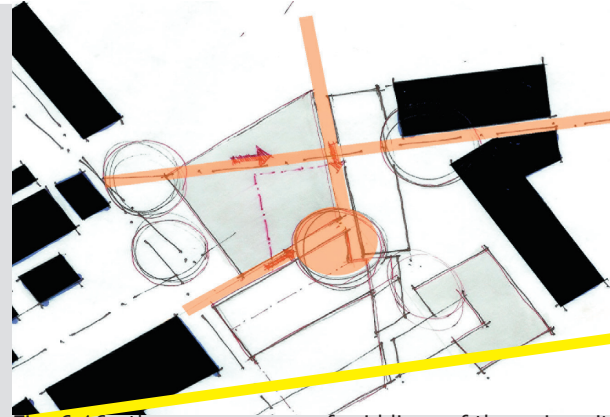


Fig. 6.16_ the convergence of grid lines of the university and gasworks create an axis for activity. It was decided to place the building entrance where the two wings coincide. Bubble diagram of ground floor program. Response to bubble diagram.



[06][03][02] MASSING / PROGRAMME

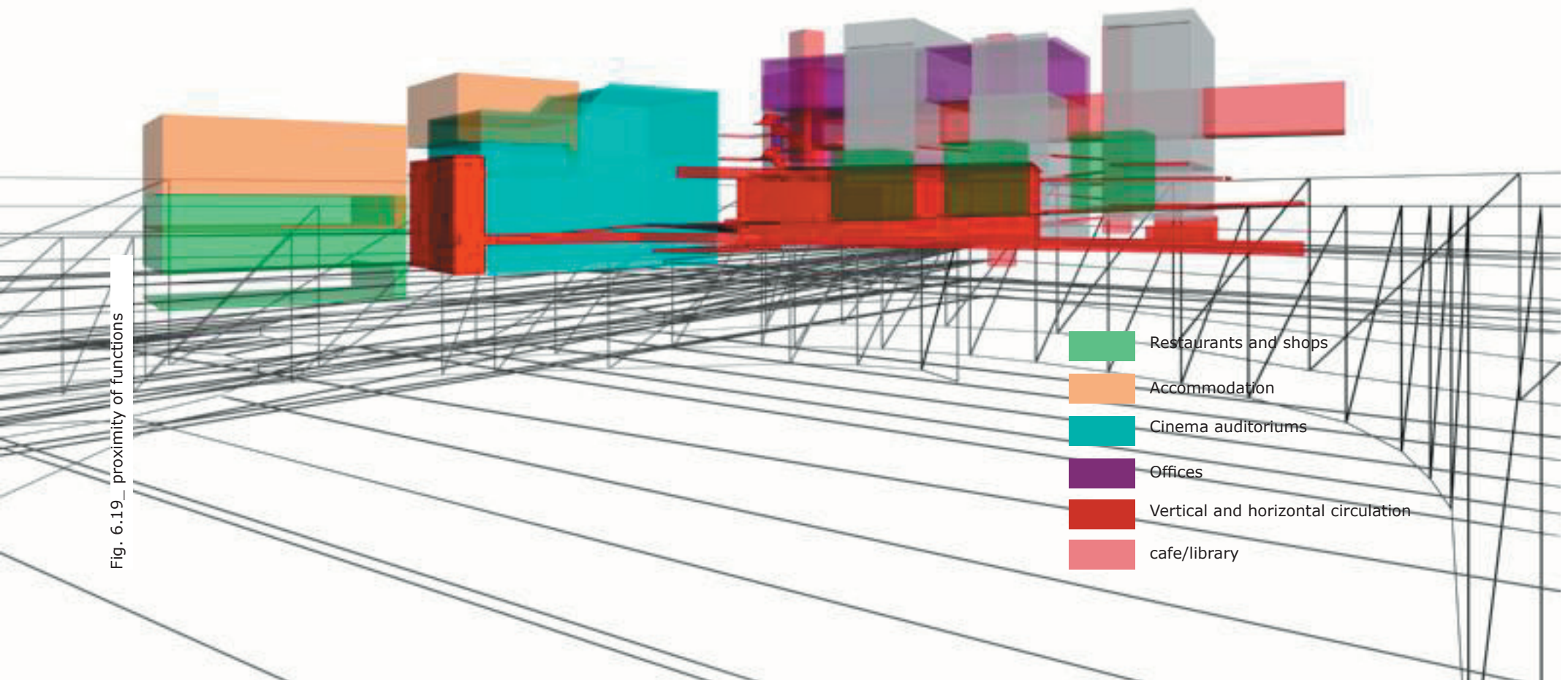


Fig. 6.19_ proximity of functions

Fig. 6.23 assessment of order rhythm of retort house #1



[06][03][03] THE MAKING OF FORM

"Form making is the core act of architecture... architectural form making should be an imaginative, inhibited investigation in three dimensions. Ultimately architecture is not just a social art." (Beck & Cooper, 10 essays, 10x10)

The architecture of the film centre tries to capture the realities of the digital age and film (moving image) in everything but its form. Formalistic architecture of 'gravity resistance', 'form as sculpture in the landscape' and 'the form-making of cyberspace' takes a back step to the influences posed by the historical edifices of the site.

The design takes a structural approach towards the making of form. Assessed basic underlying structures of the ordered 'framework' of the context instil the innovation of a complex layered design image.

The Buildings form react to the following ordering systems on site; axis, symmetry, hierarchy, rhythm, datum, and Modernism' abstraction where the architecture is stripped of all decoration.

The building's mass, form and order is derived from the clustered spatial organization of structures on site, placing envelopes face-to-face and edge-to-edge. Linear spatial organization around the retort houses is preserved by aligning the new museum wing of the film centre with retort house #1. The cinema wing is kept parallel with the university's grid adding to the linear sequencing of the gas tanks and gas tank remains. The cinema wing enables the formation of a barrier enclosure for the public space.

The hierarchy of pure scale and size of the retort buildings is preserved by lowering the film centre, creating basement spaces. The film centre's height is reduced by lowering the building 2m below the square (between 2 retort houses) onto the coordinated grid purification platform. Difference in level and the introduction of a water feature on the edge of the square both provide a definite threshold between the new development and the original retort houses.

Fig. 6.24_ plan indicating position of film centre

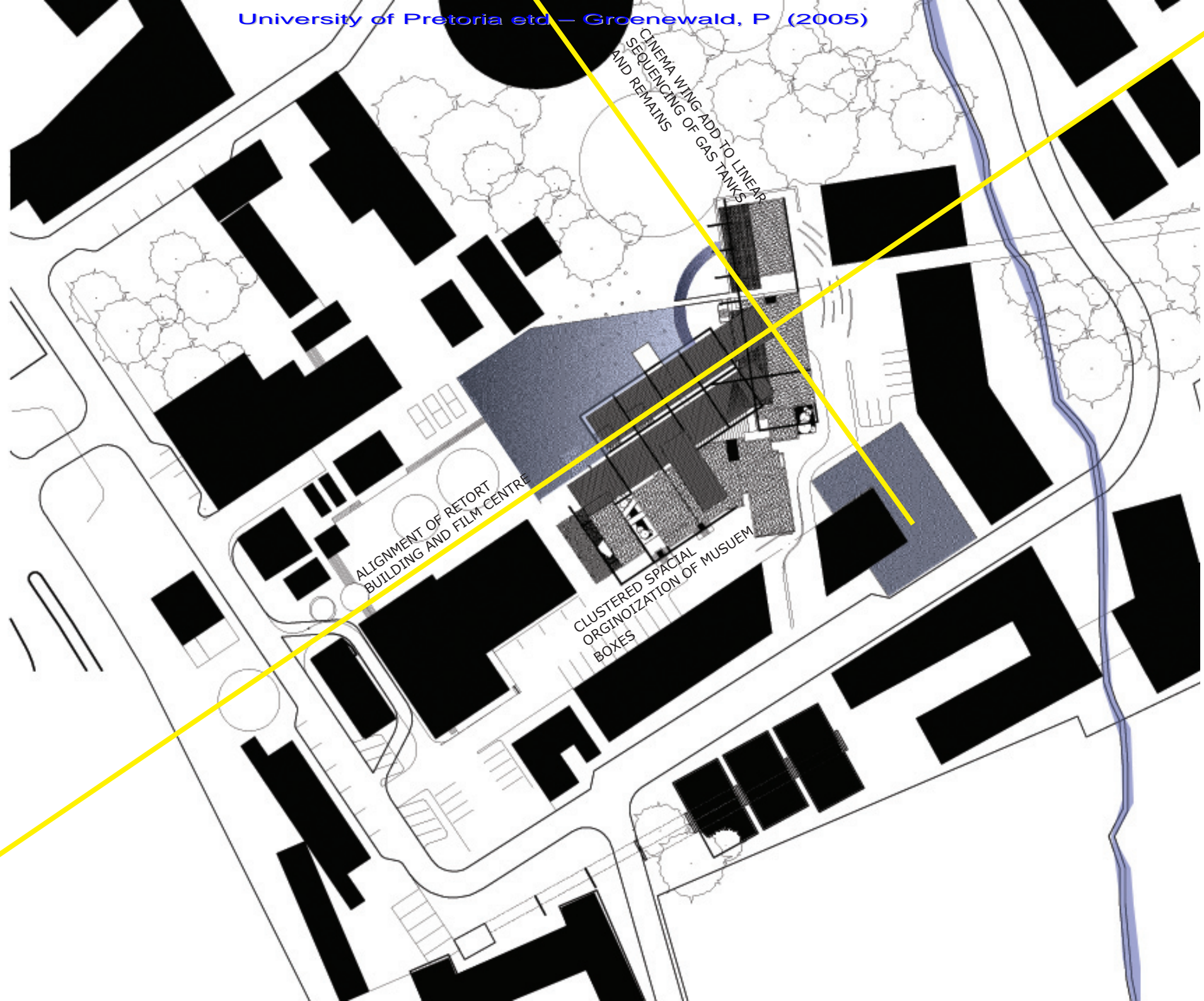
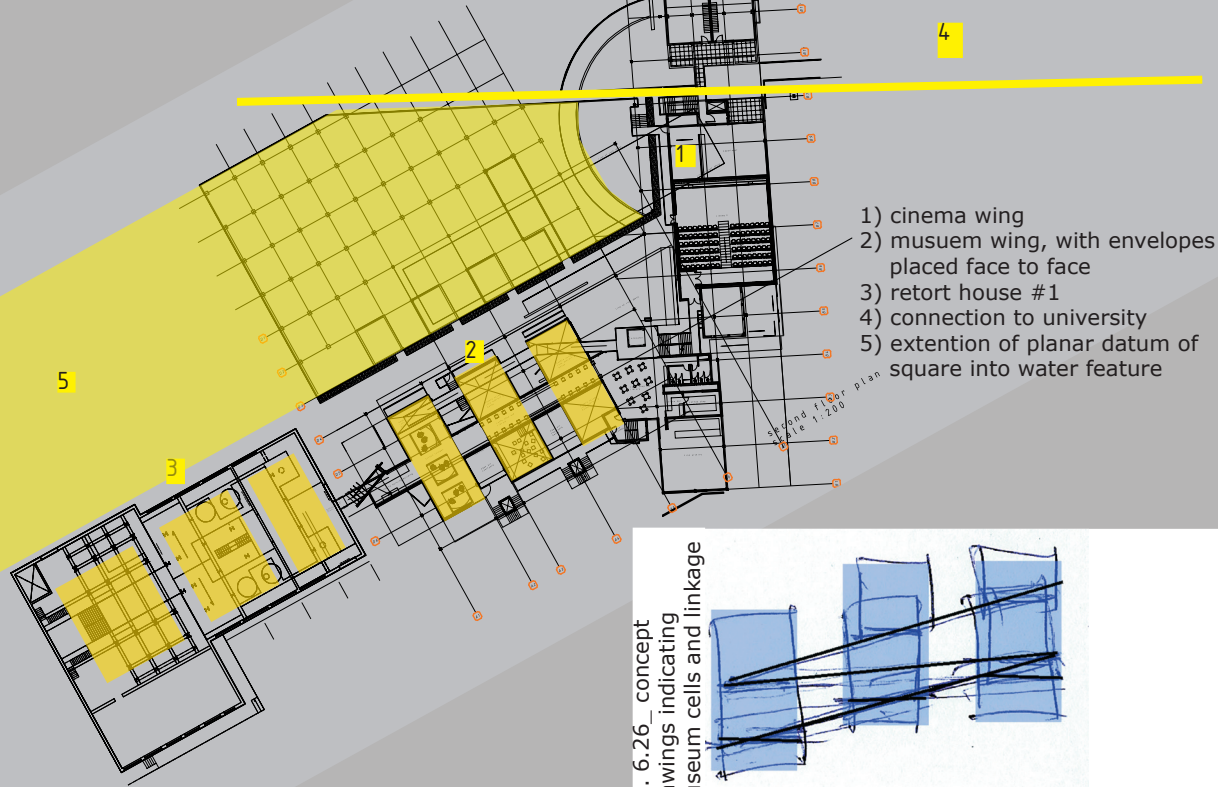


Fig. 6.25_ response to retort house #1's void and solid spaces



Placement of the building addresses the need of creating a human enclosed space. The cinema wing of the film centre is offset as far as possible from the open space between the retort buildings in order to preserve the visual line of site to these buildings

Elongated lift shafts of the film centre enhance and further accentuate the verticality of installations on site e.g. furnace chimneys.

Through an assessment it became apparent that the retort building #1 consists of three definite contained spaces, each with its own unique volume. A network of steel girders and columns define these spaces through the creation of perforated barriers intersecting and defining these volumes.

Museum envelopes were inspired by inverting the three volumes (voids) of the retort building. The solid barriers of the retort building are represented by void courtyard spaces connecting the 'solid' museum cells. Here solid becomes a void, causing the positive and negative of the retort building to be transposed.

By breaking the museum space up into three different envelopes, the envelopes have an ameliorative effect on the retort building. This museum wing acts as a perforated façade linking the cinema building with the retort building. These cells anticipate a certain progression to the retort building when observing it from east to west. If different envelopes were not created by treating the façade as one cell, the building would have ended bluntly against the retort building, obliterating its significance as historical edifice.

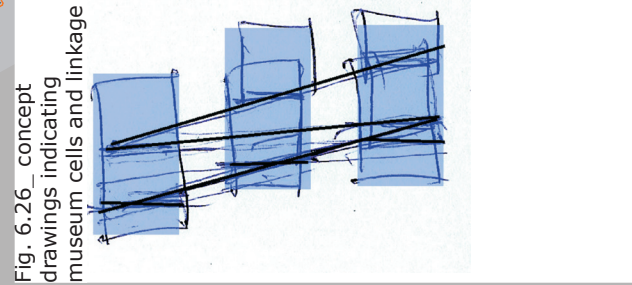


Fig. 6.26_ concept drawings indicating museum cells and linkage

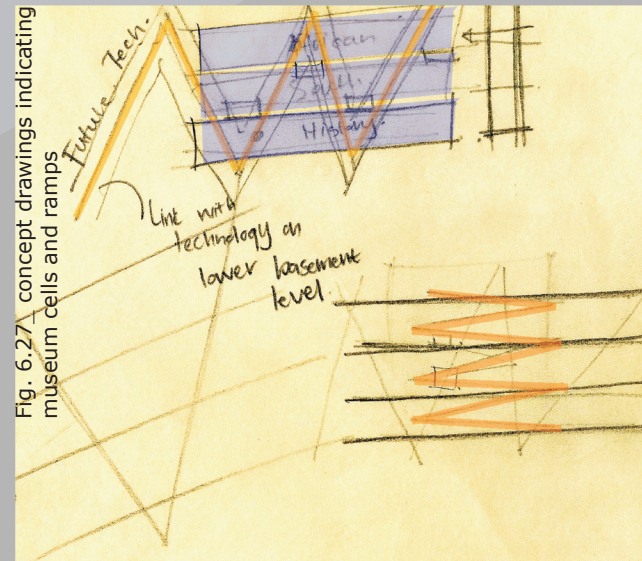
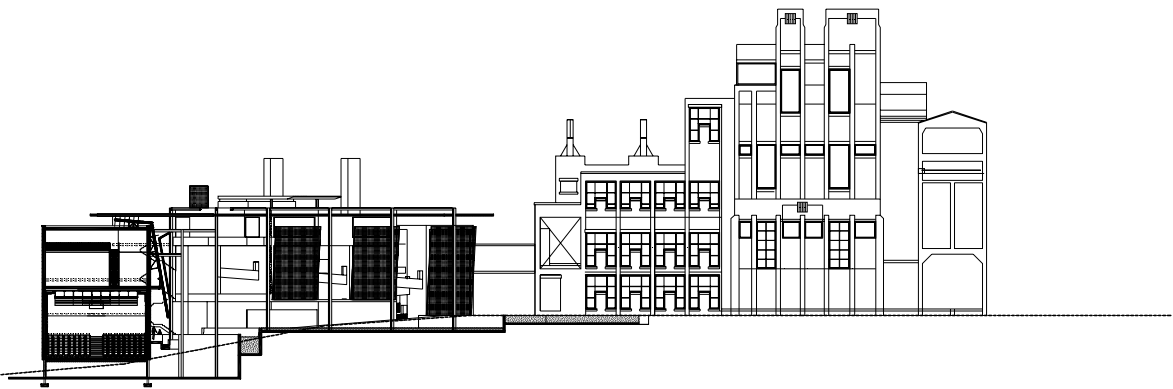


Fig. 6.27_ concept drawings indicating museum cells and ramps

Fig. 6.28_ section-elevation showing level difference and water feature



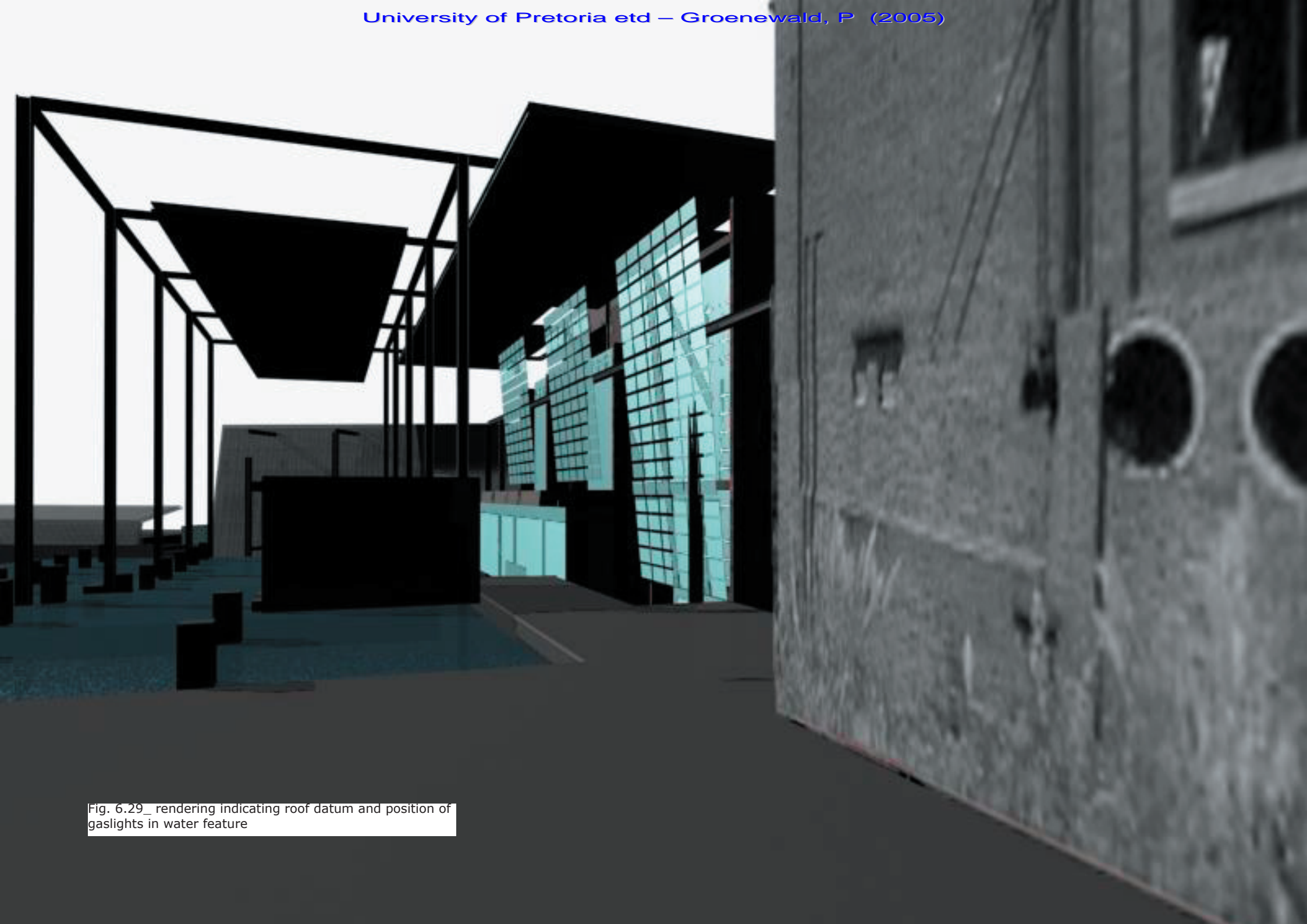


Fig. 6.29_ rendering indicating roof datum and position of gaslights in water feature

The water feature is an extension of the planer datum of the square between the two retort buildings. Both the umbrella roof and the water feature form planer datums, binding the film centre's clustered and linear forms together. The roof also serves as an element to define the urban space, making it more humane and enclosed. Structural steel column and beam 'scaffolding systems' tie all elements and envelopes of the building together, and the façade is read as a universal whole.

Heritage imprinted on the landscape is preserved by emphasising gas tank remain in the design of the water feature. The spill over of the water feature echoes the form of the ruin, where water disappear over the rim of the circle. Concrete footings on the purification platform are converted into new gas-lamps within the water feature. The use of gas further echoes the site's history as a Gasworks.

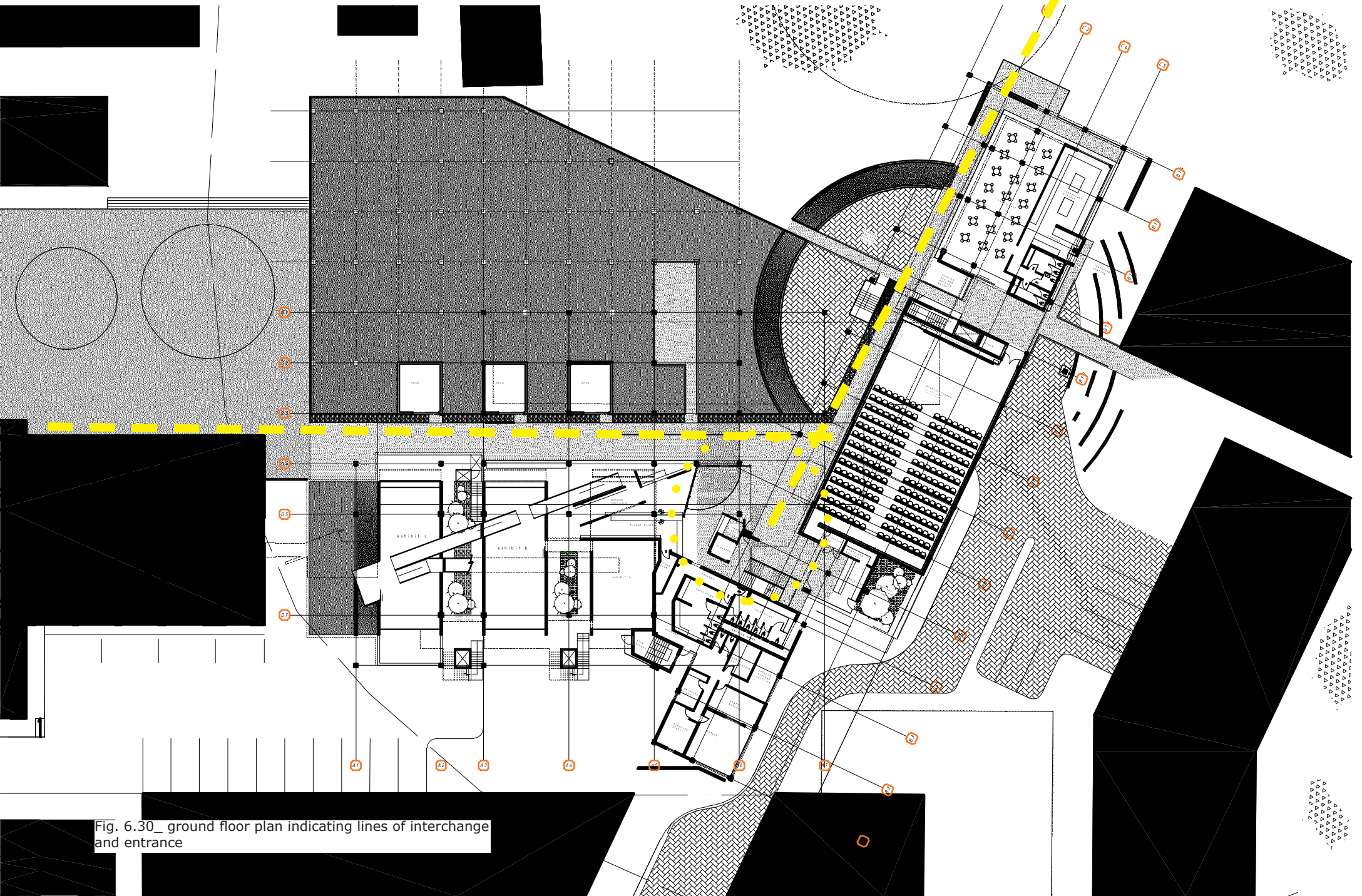


Fig. 6.30_ ground floor plan indicating lines of interchange and entrance

[06][03][04] LINES OF INTERCHANGE

"Some places are intended for our movement and exchange, others encourage withdrawal and isolation. The place always suggests an action or a pause, even if only mental. Its forms are associated with the events which it accommodates or which it has once accommodated, and with other similar places and events."
(VON MEISSE, 1990, p 135)

The urban lines of exchange from the new Film Centre are two intersecting linear walkways; one running parallel with retort house #1 and the other (when extended) connection to WITS university to the east. The energy of activity is created where these lines of urban exchange intersect creating the entrance of the film centre. The entrance serves as a communal entrance for both the museum and cinema wings acting as a gathering space. And observation deck is added within the water feature to accommodate bigger crowds. Strategically placed retail facilities along these linear path, draw people to the building entrance. No balustrades are provided along the west and southern boundaries of the water feature. A drainage pipe encased in a concrete box gutter covered with grating and pebbles is provided 510 mm below and all along the edge of walkways. This allows unobstructed views to the water and creates the formation of interactive recreational seating space.

Adapted re-used concrete footings spaced on an existing grid coordinate system are converted into gas lamps that protrude from the water feature. These light features add a certain rhythm, encouraging movement along the walkway spines.

Vehicular movement is kept to a minimum within the entertainment hub, suggesting a predominant pedestrian area. An access point is provided for delivery and services for the area south of the film centre with a road penetrating one of the gas tank remains under the cinema wing.

To the south of the film centre a green space is included for the exclusive use of apartments south of the museum. This space acts as a barrier linking public with private interfaces.



Fig. 6.31_ abstract lines

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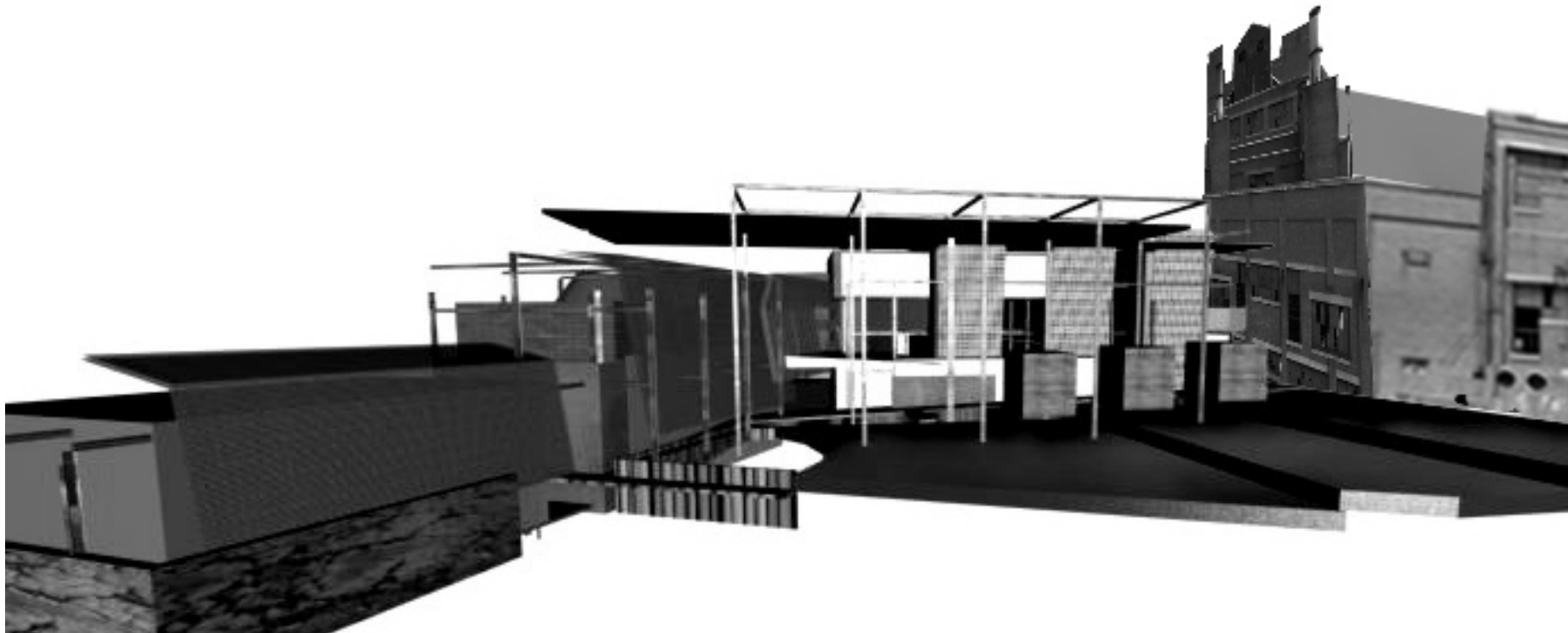
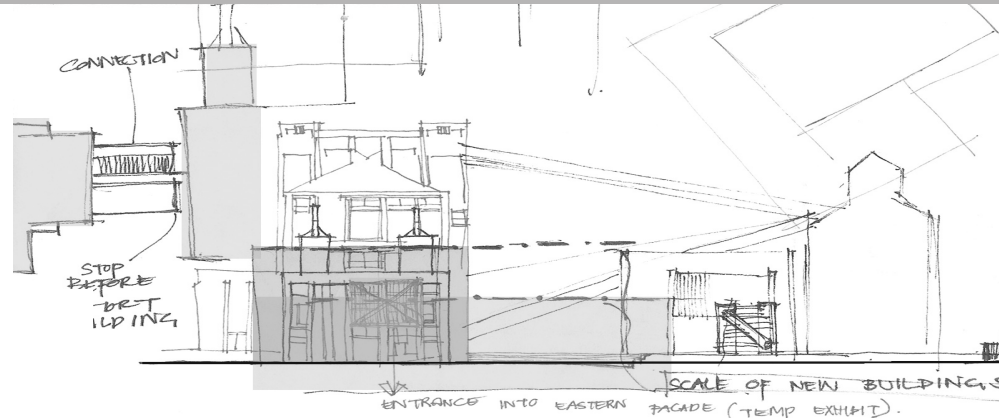


Fig. 6.32_ rendered view from the north

Fig. 6.33_ assessment of link between
retort house and museum



Objectives of identity and interaction of spaces are achieved by connecting the building directly with the urban landscape. The building is dually read, from outside in and from inside out. The inside and outside are reflected and exchanged in the eye of the observer.

- Void spaces between museums envelop address museum fatigue by providing spaces of interaction, retreat and contemplation on ground level. The cinema kiosk is also provided with an escape hatch to the outside landscape.
- screens turn the building façade inside out by projecting images of the interior events onto the outside walls.
- The premier cinema is provided with an opening, connecting it with the urban landscape. The performance inside the cinema becomes visually accessible to users passing by.

The idea of a public space is overwhelmed by the idea of visual 'accessibility' and physical accessibility. Urban space flows everywhere within the building. It penetrates the voids/courtyards between the museum boxes, it penetrates the entrance hall of the building and cuts through the cinema wing connecting the building to the university. The building becomes an event interacting with its surroundings. It does not





Fig. 6.34_ rendering of link between retort house #1 and museum



Fig. 6.35_ rendering of interior of link showing screen lounges and café/library



only providing a defined closed sequence of functional spaces but spaces of human interaction. Boundaries between inside and outside are blurred and the building offers spaces of contemplation, communication, catering for a multitude of perceptions.

All spaces open up onto the urban landscape, suggesting vistas to the old buildings and tanks. Covered ramps connecting events and exhibitions provide visual access to the historical landscape from different perspectives. The lightweight transparent glass walkways, of 'temporary' construction are installed in such a way that it suggests the idea of being additions added to the solid, permanent masses of the building at a later stage. This again links up with the symbolic meaning of a narrative path sculpted by the mind, finally tying all happenings or elements together.

A gabion 'boundary' wall placed around the restaurant act as a container or envelope for the space, defining its boundaries, providing a shelter against harsh western sun. Openings within the wall still make vistas available into the natural landscape towards the Braamfontein Spruit, and recreation facilities around the gas tanks.

It was felt that both the buildings; the film centre and the retort house (film studio) needed to augment one another on a public level. It is decided to convert the retort building into a film studio, enabling the preservation of the buildings cathedral like volumes. A link to the exiting retort building is proposed from the film centre on the second floor by adding a gallery space overlooking the converted retort building. Here the process of filmmaking

becomes a reality. Within the museum this space links up with the café and media library adding to the educational experience.

The link to the converted retort house needed to respect the eastern façade of this building. This is overcome by removing only one window within the façade and replacing it with a door. The proportion of the window is kept intact, and a concrete wall protrusion added to define the threshold between the old and the new.

The café and interactive library/archive situated on the second floor in direct vertical adjacency to the museum entrance. This make after hour operation possible by providing access directly from the communal entrance to the café. Spatially the café/library consists of a linear passageway intersecting all museum exhibition cells, visually linking with library/café with the exhibitions using glass. Line of exchange occurs between both user of café/library and users of museum as well as exhibition itself. During evenings, the exhibitions still can be observed without physically entering the museum.

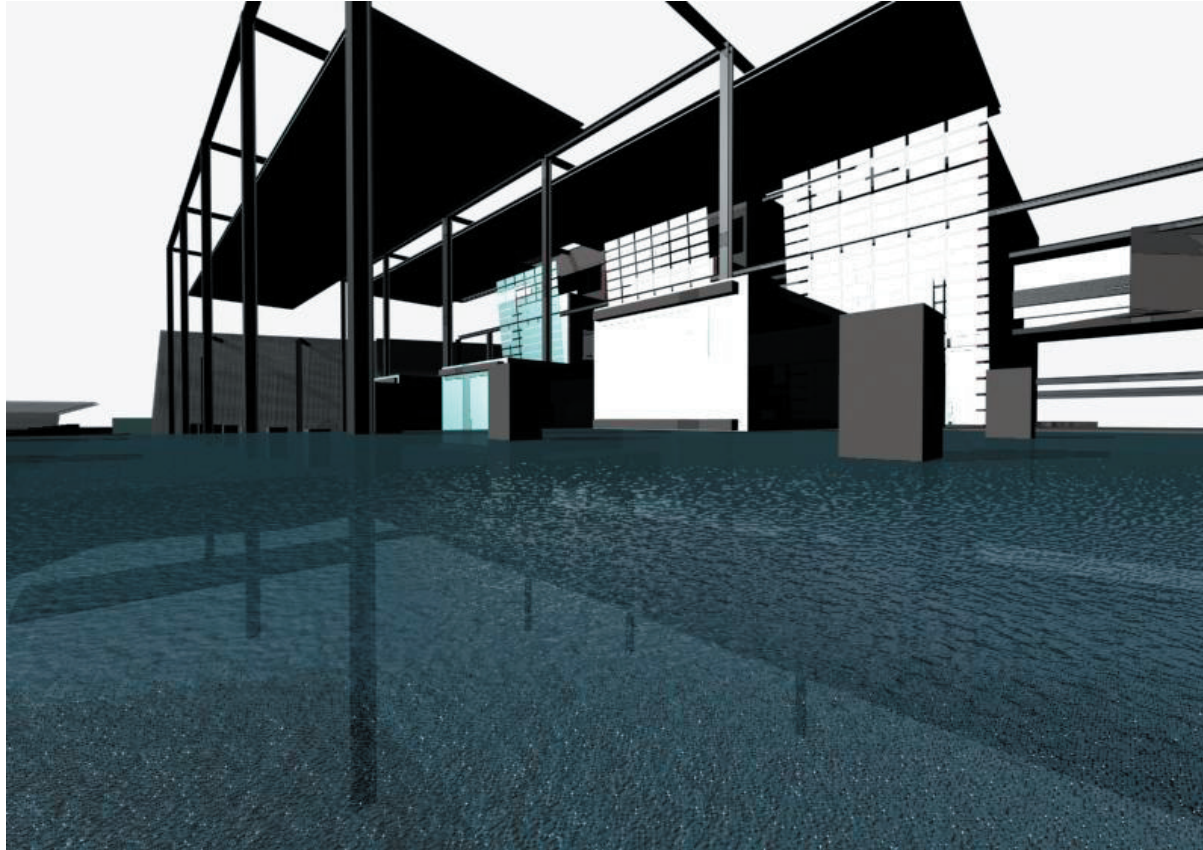


Fig. 6.36_ rendering showing museum spaces as precursory event to cinema

[06][03][05] TRANSFORMATION

F.D.K Ching describes transformation as "***the principle that an architectural concept, structure or organization can be altered through a series of discreet manipulations and permutations in response to a specific context or set of conditions without a loss of identity or context.***" (CHING, 1996, p 321)

The museum acts as precursory event of the film centre. It forms the basis to the anticipating event occurring in the cinema spaces. It is a link to the existing context with a hybrid of physical and symbolic layers acting as influences.

The museum spaces are enclosed black boxes, like the architectural type created by cinema. Apart from being formalistically inspired by the retort house these museum cells have a hybrid of symbolic meanings.

Solid museum exhibition cells and in-between courtyard spaces represent void and solid spaces in cinematography (negative and positive spaces). From the urban landscape activities can be observed between these cells, just like a film set taking place in its 'negative space'. The cells also represent film clips, bound together by a narrative script. The ramps of the museum form the narrative path linking the exhibit together. Columns-tie void and solid spaces together like a scaffolding system

Screens of sandblasted glass emerging from the museum boxes bring a new type of transformation to these static museum envelopes. These digitalized screens (projected images onto sandblasted glass panels) not only serve as elements against glare, but also turn the building inside out. The projections reflect the ever changing museum interior and people in conversation.

The images projected on the screens together with the void courtyard spaces with images of the human body in motion form a network of representations depicting foregrounds, backgrounds and visa versa

The display of light, material layering and movement of real people tend to dissolve the materiality of the building's form through a subtle combination of reflections, refractions, dilutions and moving colours.

The essence of the void spaces between the museum-exhibition cells are as follows:

I'm in a neon-soaked Miami. Tonight the light hangs in the air; everything feels hot and humid and diffuse. A light breeze whips in from the ocean. A good night to have some fun. Cruising down the seafront in a shimmering black SUV, I notice an empty drugstore. An opportunity. I hop out, flexing my fingers around a trigger and, in an instant, I'm holding up the guy behind the counter. He cowers, handing over the dollars. Alarms sound, I dive into the car, slamming the accelerator. It's only taken a few seconds and I'm being pursued by a surfeit of cop cars. I quickly lose two, ramming them into the canal. Gotta ditch the car for something more suitable. I head for heavy traffic. Hitting the highway, I hit pause; time for a breather and to lift off the Olympus Eye-trek goggles. Return to reality from the ever-more immersive hardware and software entertainment world.

(Hanson. M.2003, p 115)

Through this the appearance of built permanence is increasingly challenged by the immaterial representation of these abstract systems in the form of projections, electronic images and movement. This perpetual change reminds us that architecture once generated a static image of permanence; today it reveals architecture of transformation.

The western façade of the cinema wing is treated accordingly; layers of 'transparent' s/s steel mesh screens are added to create unity of the façade's clustered forms by providing a backdrop for the square. Environmentally the screens act as passive climate control systems, providing shade along this western edge. These screens are supplied with a misting system (fine water sprayed into the air) to be used during summer months. the screens also create a 'enclosed' walkway making the space friendly for human interaction. Transformation of the facade occurs due to the play of filtered light during day and night time. During the day light and sun rays are filtered through the screens, creating interesting pattern along the blank concrete walls of the western façade. In nighttime a display of light is projected upwards from up-lighters in the walkway, dissolving the clustered form and bringing the screens to the foreground.

The film centre only is 'symbolically transformable, but has the capacity to submit to evolutionary processes of architectural re-use.

Steward Brand the author of **HOW BUILDINGS LEARN: WHAT HAPPENS AFTER THEY ARE BUILT (NEWYORK, VIKING, 1994)** define adaptable structures as structures with modest scale, simple form, low density and height, generous interior and exterior open space, separable parts and durable 'patchable' construction.

Since the building consists of cellular form, its spaces can be shaped and scaled according to occupancy loads and uses. The building offers flexibility with spaces sharing open courtyards. It suggests a structure with spacious rooms which are not constrained by its particular function. The building is not limited to 'hard' separations and compartmentalization.

