

"A STUDY IN AWARENESS"

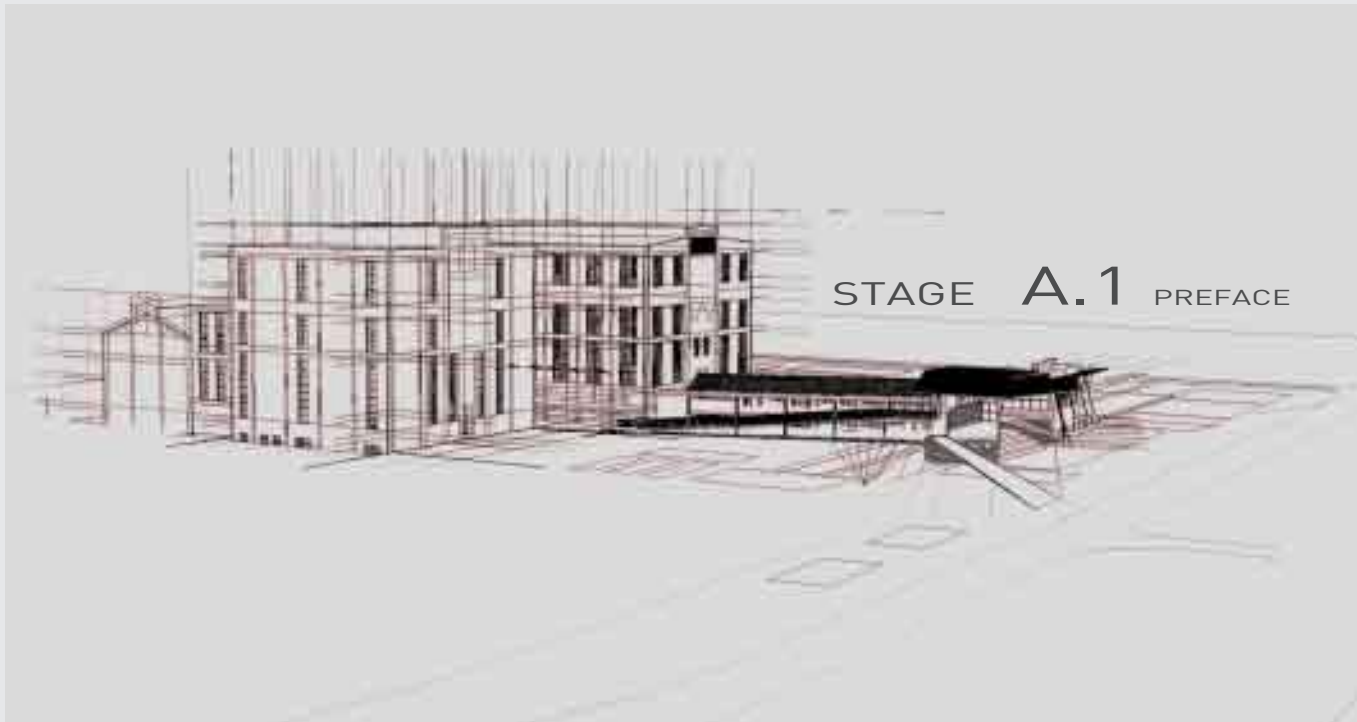
Eskom's value based conference facility

shawn hopkins 22188607

Figure A.1.1
South East perspective

ECO-SYSTEMIC AWARENESS

WITHIN
EXISTING
CONFERENCE
EDUCATIONAL
GREEN EXCHANGE
WASTE SORTING ENVIRONS ENVIRONS



“ONCE YOU KNOW, YOU CAN NEVER TURN BACK.”
 BEN HARPER 2003

Think of one word that has had the most impact on you this year [2003]?

That word for me would have to be ‘Awareness’. The essence of all understanding of a specified subject lies in ones awareness of the details related to that specific topic.

Definition

Aware:

- Having knowledge or perception of a situation or fact;
- Concerned and well informed about a particular situation or development;

‘Everyone needs to become more environmentally aware.’

Derivatives ----- Awareness [Noun]

Origin ----- Of West Germanic origin, related to German ‘Gewahr’.

Oxford dictionary 1998: 117.

This study has led me to new directions of thought and created a greater understanding, or awareness, as I prefer, of my personal approach towards conceptualising design responses. It has left me excited by the idea of sharing with readers, my growing awareness of the links between architecture and many of the environmental and social issues that face many of the world’s cities, and us as individuals in them. It has helped me gain a greater awareness of the importance of architecture in my life and the different realms it has driven me to explore. It has helped me create a personal theory of architecture, namely:

That within meeting the functional requirements of a building, the concept through to the design has a duty

of creating awareness. From making people aware of different spaces for different uses or people, the selection of correct construction techniques for specific climates, to the energy use and management systems required to meet environmentally sustainable standards. These and many other diverse issues can be theorised about in this challenge of using a conceptualised structure as an awareness tool. This may lead me to making as bold a statement as - all designs or buildings within the architectural realm, are in some bold or underlying form, an awareness centre.

The proposed concept within this discourse is that of an ‘awareness centre’. The challenge lies in explaining what it is that the proposed concept is aiming to create an awareness of and the methods in which I chose to achieve it.

“AS THE CENTURY DRAWS TO A CLOSE, ENVIRONMENTAL CONCERNS HAVE BECOME OF PARAMOUNT IMPORTANCE. WE ARE FACED WITH A WHOLE SERIES OF GLOBAL PROBLEMS WHICH ARE HARMING THE BIOSPHERE AND HUMAN LIFE IN ALARMING WAYS THAT MAY SOON BECOME IRREVERSIBLE.”
 CAPRA 1996: 3

Capra’s statement best explains the reason for the necessity to create an environmental awareness. The proposed concept investigates this aspect and attempts to create an environmental awareness within different groups of our society. This is achieved by allowing a shared response to the requirements of the client [i.e. different functions to attract these selected typologies of people]. It stems from a deep concern of the lack of infrastructure within South African Cities and the Environmental impacts generated by these City system insufficiencies.

The project proposed is aimed at generating opportunity through creating this awareness, with many of the concepts or proposals having the possibility of being somewhat optimistic or arguably idealistic.

The book is divided into four stages:

Stage A -

This part should give the reader a full understanding of the proposed concept and the theorised awareness tools used within the project.

Stage B -

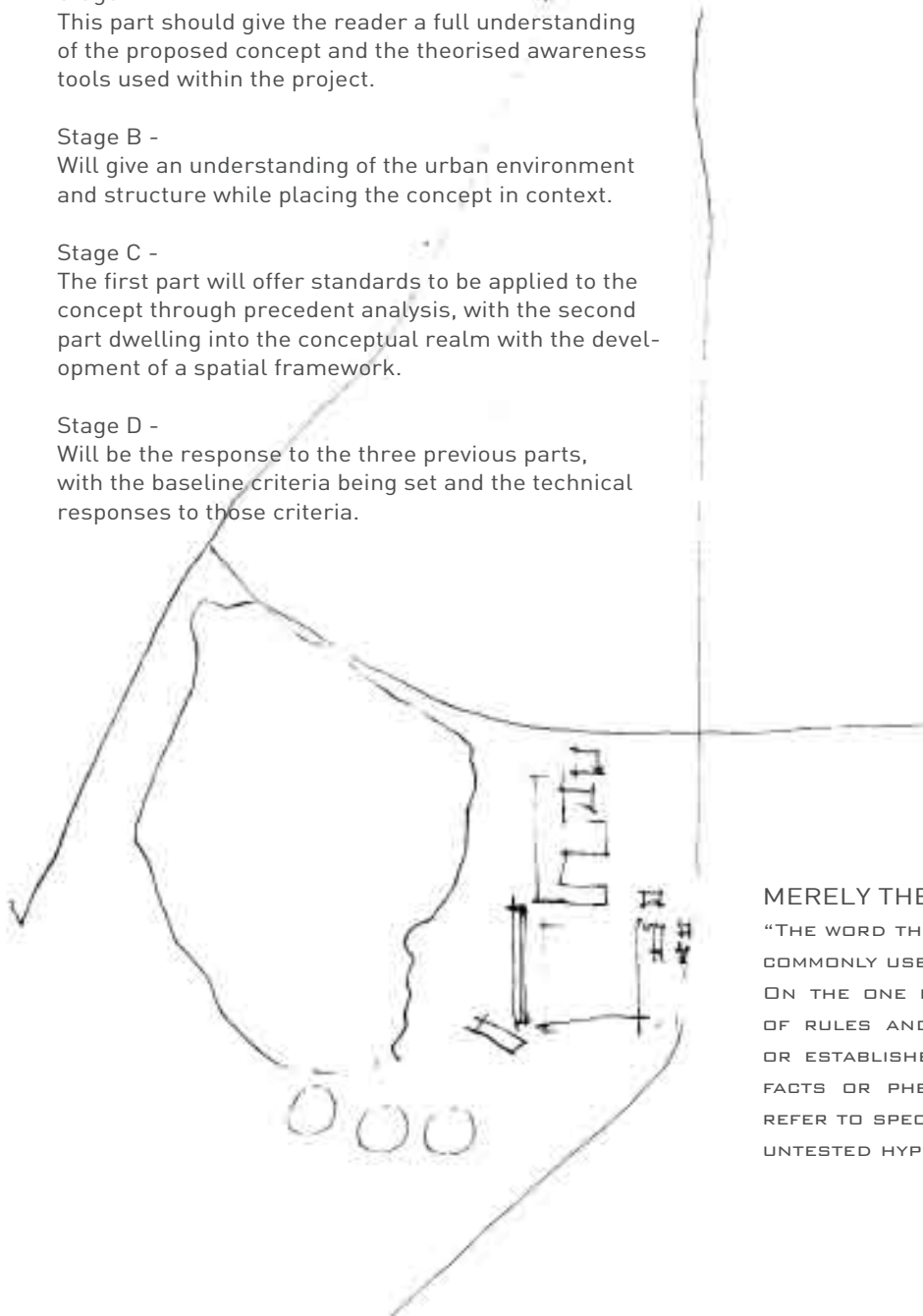
Will give an understanding of the urban environment and structure while placing the concept in context.

Stage C -

The first part will offer standards to be applied to the concept through precedent analysis, with the second part dwelling into the conceptual realm with the development of a spatial framework.

Stage D -

Will be the response to the three previous parts, with the baseline criteria being set and the technical responses to those criteria.



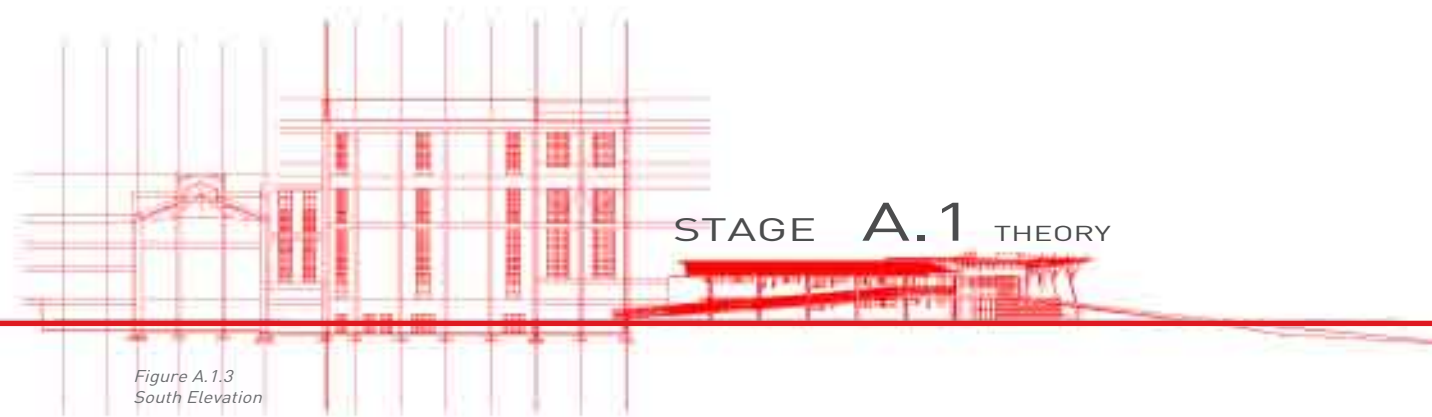
MERELY THEORETICAL

“THE WORD THEORY IS COMMONLY USED IN TWO DISTINCT WAYS: ON THE ONE HAND, IT CAN MEAN A COHERENT SYSTEM OF RULES AND PRINCIPLES, A MORE OR LESS VERIFIED OR ESTABLISHED EXPLANATION ACCOUNTING FOR KNOWN FACTS OR PHENOMENA. ON THE OTHER HAND, IT CAN REFER TO SPECULATION, A GUESS OR CONJECTURE, OR AN UNTESTED HYPOTHESIS, IDEA, OR OPINION.”

GELL-MANN 1994: 90



*Figure A.1.2
Existing cooling tower*



SAVING FACE

“IS CLIMATIC CHANGE A PROBLEM OF EMISSIONS OR IS IT A PROBLEM ABOUT OUR PRODUCTION AND CONSUMPTION PATTERNS? IN MANY WAYS IT IS BOTH. IT CAN BE DEFINED NARROWLY AS A PROBLEM ABOUT EMISSIONS, BUT WHEN THE EMISSIONS NEED TO BE REDUCED AS DRASTICALLY AS SUGGESTED BY THE KEY SCIENTIFIC REPORTS, INEVITABLY THIS MEANS THAT IT IS A PROBLEM ABOUT OUR PRODUCTION AND CONSUMPTION PATTERNS AND OUR VERY LIFESTYLES.”

GUPTA, J 2001: 147

The above statement directs me to discuss the terminology - ‘Our Ecological Footprint.’ Although discussion of lifestyles and ideologies tends to be extremely sensitive, it is important to mention these points, as the way people of different classes within our society live is significant to the awareness concept.

“WHAT IS AN ECOLOGICAL FOOTPRINT?”

ECOLOGICAL FOOTPRINT ANALYSIS IS AN ACCOUNTING TOOL THAT ENABLES US TO ESTIMATE THE RESOURCE CONSUMPTION AND WASTE ASSIMILATION REQUIREMENTS OF A DEFINED HUMAN POPULATION OR ECONOMY IN TERMS OF A CORRESPONDING PRODUCTIVE LAND AREA.”

WACKERNAGEL, M AND REES, W, 1996:8

Two of the selected precedent studies indicate how ‘Ecological Footprint awareness’ can influence design proposals - on an urban scale [Stage C.1.1] or a residential scale [Stage C.1.4]. The waste assimilation requirements [The requirements of waste recycling or re-use systems] within the urban precedent, has inspired part of the proposed ‘Awareness concept’. The lack of efficient waste programs within our South African cities, gives rise to opportunity to empower the unemployed individuals or families of our societies through offering waste collection on ‘Green exchange’ programs.

How does one get someone to relate to their ‘Ecological footprint’ when they are fighting for survival or when they believe money can be the fix for any personal environmental impact?

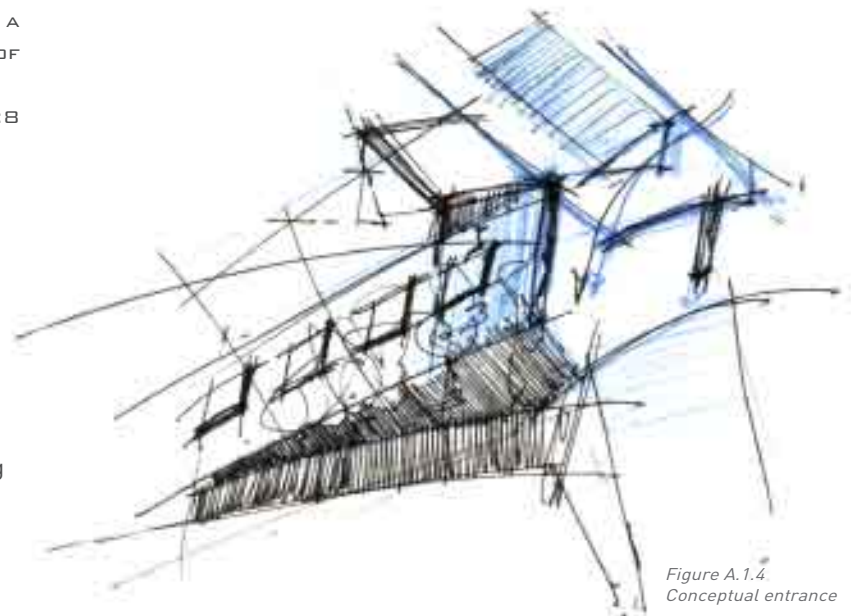


Figure A.1.4.
Conceptual entrance

TOOL - COLLECTIVE INSIGHT

Now that it has been decided that an approach to making an insight of the environmental impact of humans as individuals, or as the world's population, a 'collective insight', is of paramount importance so as to allow equal opportunity for future generations.

The fundamentals of 'Collective Insight' are put into context in the case study resourced from Hanh's writings of Anger.

Basic criteria:

- The insight should be based on being mindful, not arrogant or overbearing;
- In sharing, it requires non-passive but intelligent approaches;
- The insight needs to be direct and not just an idea (show the environmental implications);
- With skilful action, you can win a large victory;
- Insight gives rise to compassion and a willingness to act in making an insight a collective one;
- Create the conditions so that others can realise the same insight - through their own experience.

Although the selected case study is unrelated to the 'Environmental Awareness concept', the understanding of the principles is of importance.

THERE IS A YOUNG MAN WHO IS A VEGETARIAN NOT BECAUSE HE IS FANATIC OR DOGMATIC, BUT OUT OF MINDFULNESS. HE DOES NOT EAT THE FLESH OF ANIMALS BECAUSE HE DOESN'T HAVE THE HEART TO EAT THEM. HIS FATHER WAS VERY UNHAPPY ABOUT THIS, AND SO THERE WAS NO HARMONY OR JOY IN HIS HOME. THE YOUNG MAN KNEW THAT HE COULD NOT STOP BEING VEGETARIAN, BECAUSE HE WOULD BE MISERABLE IF HE HAD TO EAT ANIMALS. HE COULD NOT CHANGE JUST TO PLEASE HIS FATHER, BUT HE DID NOT WANT THIS TENSE ATMOSPHERE TO CONTINUE. HE USED HIS INTELLIGENCE; HE DID NOT REMAIN PASSIVE.

ONE DAY HE CAME HOME WITH A VIDEOTAPE, AND SAID, "DAD, HERE'S A WONDERFUL DOCUMENTARY FILM." HE THEN SHOWED A VIDEO ABOUT THE SLAUGHTER OF ANIMALS TO HIS FATHER AND THE WHOLE FAMILY. HIS FATHER EXPERIENCED SO MUCH SUFFERING IN WATCHING ANIMALS BEING SLAUGHTERED THAT AFTER HAVING SEEN THAT FILM, HE DID NOT WANT TO EAT MEAT ANYMORE. THE INSIGHT WAS DIRECT; IT WAS NOT AN IDEA. INSTEAD OF USING ANGER, INSTEAD OF LETTING SUFFERING OVERWHELM HIM, THE YOUNG MAN ACTED OUT OF LOVING-KINDNESS, WISDOM, AND INTELLIGENCE. HE WAS ABLE TO CONVINCE THE WHOLE FAMILY NOT TO EAT ANIMALS SO THAT COMPASSION COULD BE NOURISHED WITHIN EACH ONE OF THEM. THE ACT OF SHOWING THAT DOCUMENTARY FILM WAS VERY SKILFUL, AND FULL OF LOVE. WITH SKILFUL ACTION, YOU CAN WIN A VERY BIG VICTORY.

AS AN INDIVIDUAL, YOU MAY HAVE SOME INSIGHT, AND THAT INSIGHT GIVES RISE TO COMPASSION AND A WILLINGNESS TO ACT. BUT AS AN INDIVIDUAL, YOU CAN ONLY DO SO MUCH. IF OTHER PEOPLE DO NOT HAVE THE SAME INSIGHT, YOU HAVE TO DO YOUR BEST TO MAKE YOUR INSIGHT A COLLECTIVE ONE. YET YOU CANNOT FORCE YOUR INSIGHT ON OTHERS. YOU MAY FORCE THEM TO ACCEPT YOUR IDEA, BUT THEN IT IS SIMPLY AN IDEA, NOT A REAL INSIGHT, INSIGHT IS NOT AN IDEA. THE WAY TO SHARE YOUR INSIGHT IS TO HELP CREATE THE CONDITIONS SO THAT OTHERS CAN REALIZE THE SAME INSIGHT - THROUGH THEIR OWN EXPERIENCE, NOT JUST BELIEVING WHAT YOU SAY. THIS TAKES SKILFULNESS AND PATIENCE.

Figure A.1.5
Awareness so as to avoid



The 'Fresh Kills Landfill' covers 2,100 acres, and is so large it can be seen with the naked eye from space. First opened as a 'temporary' facility, today Fresh Kills is the largest landfill in the world.

Breathing Cities 2000:67

The user participation, through a response to the value based requirements of the client, is the tool the proposed concept intends to use in making an environmental insight a collective one. The challenge of this insight lies in creating awareness amongst the different income groups of our society. The management of this program will be through the control of the delivered items, and through this, subtly enforcing methods of environmentally more beneficial waste management systems within these communities.

The facility aims to raise environmental awareness amongst the more privileged individuals of our society. To achieve this, the client is offered an opportunity to have a living example of what their personal commitment to our developing country is, by providing a conference facility within a waste-sorting environment. This presents an awareness experience through creating conditions so that others can gain an environmental insight - through their own experience of the 'cradle to grave' process of the products utilised in their daily activities.

CLIENT RESPONSE

Eskom [stage A.2.2] are the hypothetical client of this design response. They require that their selected site, the Pretoria West power station, be re-used to create an awareness of the history of their functions through utilising the decommissioned power station that once served the publics and industrial energy requirements.

A conference facility within a value based project for the benefit of the selected community and their own company profile.



Figure A.1.6
Existing fabric

The awareness centre within the proposed concept, is approached through three main criterion divisions:



I - FUNCTIONS WITHIN PROPOSED STRUCTURES

(Enviro-canteen, info centre, overnight accommodation)

The construction of a new structure will include the entrance or linkage element of the public space and the awareness spaces, and increase the public amenity within the existing urban fabric.



II - INTERVENTIONS WITHIN EXISTING STRUCTURES

(Waste sorting arenas, segregated awareness environs - conference, auditorium)

The use of the existing structures will accommodate the functions of the awareness elements of the concept, which involves exposing people to the realities of their ecological footprint through a visual experience of the existing structures and the waste sorting arenas.



III - FUNCTIONS WITHIN EXISTING STRUCTURES

(Bio-diesel centre, retail centre)

Further functions within the existing structures, will include the production of bio-diesel and the retail of energy-efficient products. As well as bi-products from the bio-diesel process and the sale of products to be recycled or re-used.

It is important to note that this is a FUTURE CONCEPT

URBAN GENERATORS

The awareness centre element of the framework is of a destination typology within the precinct spatial concept. It is believed that, due to the aesthetic nature of the site, its existing function and access to existing public transport infrastructure, proves it to be an appropriate location for an urban intervention that will benefit local and surrounding communities - through offering a location to deliver waste on a "green exchange" program.

This urban design conceptual proposal [stage C.2.5], advocates that the existing 'Electro' rail station must be upgraded, involving the Metro rail organization. This is to ensure the circulation of people past the conceptualised centre and through the precinct. Importantly, this public transport facility will extend past the needs of the facility utilisers only.

APPROACH

With the criteria of a conference facility housed within the selected historic fabric being set by the client, the initial approach to the scheme is that of a historic analysis [stage B.5.2 / D.2] in conjunction with a conceptual analysis of the value based requirements of the client. Only once this survey information has been fully researched and the existing structures fully surveyed, can the intervening conference facility concept begin to develop.

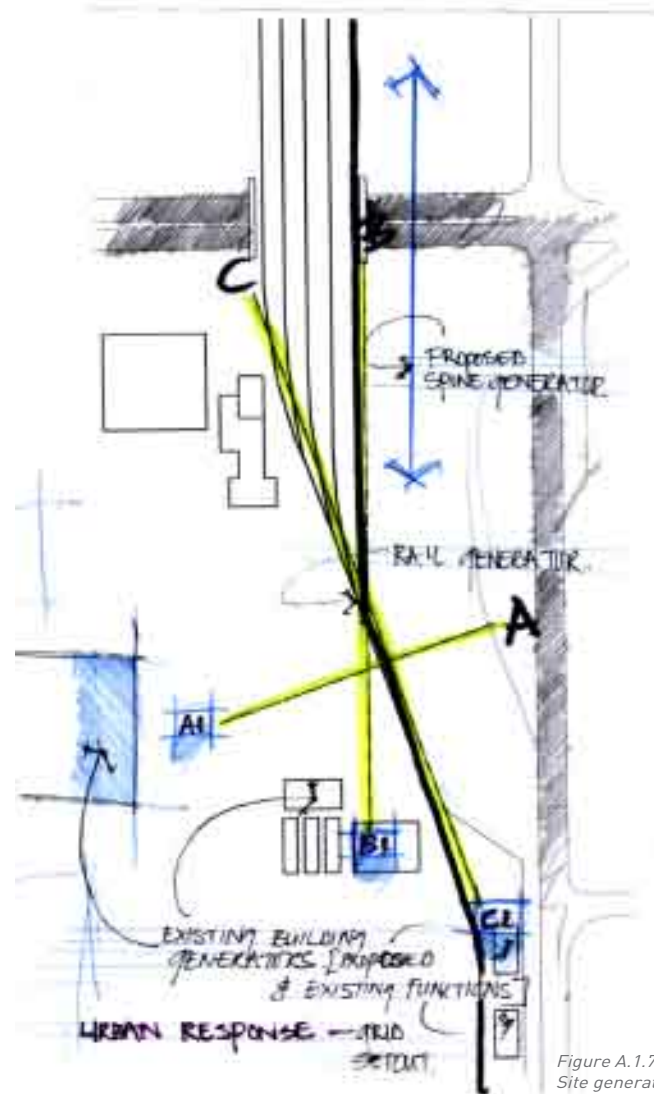


Figure A.1.7
Site generations



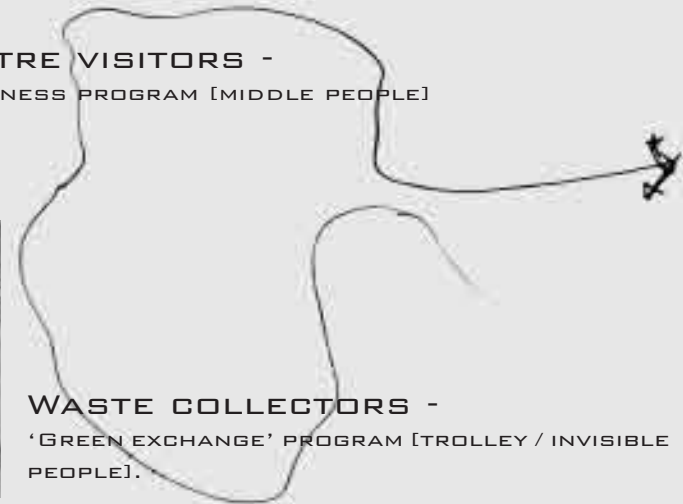
**E n t e r
s t a k e -
h o l d e r
g r o u p s:**

REFER TO **STAGE D.8.1** PAGE 133

FACILITY UTILISERS -
CONFERENCE FACILITY [SUIT PEOPLE]



CENTRE VISITORS -
AWARENESS PROGRAM [MIDDLE PEOPLE]



WASTE COLLECTORS -
'GREEN EXCHANGE' PROGRAM [TROLLEY / INVISIBLE
PEOPLE].

REFER TO DRAWINGS NO: 006 / 0M-01
007 / 0M-07

AWARENESS THROUGH CONFLICT:

"THAT WE LIVE IN A POLITICALLY SIMMERING PLANET IS MORE THAN EVIDENT. WHETHER THE CLIMATE IS ALSO SIMMERING IS LESS EVIDENT TO THOSE WHO LIKE LINEAR AND STRAIGHTFORWARD CASUAL REASONING AND CANNOT COPE WITH NON-LINEARITY, UNCERTAINTY, COMPLEX FEED-BACK EVENTS AND FEAR."

GUPTA, J 2001: 144

Conflict:

- A state of mind in which a person experiences a clash of opposing wishes or needs.
- A serious incompatibility between two or more opinions, principles, or interests.

Conflicted:

- Having or showing confused and mutually inconsistent feelings.

Oxford dictionary 1998:

ENTER STAKEHOLDER GROUPS:

Conflict is used in the 'Awareness Centre' as the tool to achieve awareness. This conflict will be experienced on a psychological level between the selected users of the centre, or stakeholders.

Awareness factors:

Through the use of the exposition process of the awareness concept, the centre hopes to achieve levels of awareness concerning:

- Time:
 - Passed - Historic lifestyles;
 - Present - Empowering opportunity [peoples varying life circumstances and how to improve them];
 - Future - Environmentally and culturally aware way of life.
- Comfort zones:
 - Stakeholder group's personal comfort zones and the impact of them on the interacting groups [The waste collectors and the circumstances that face

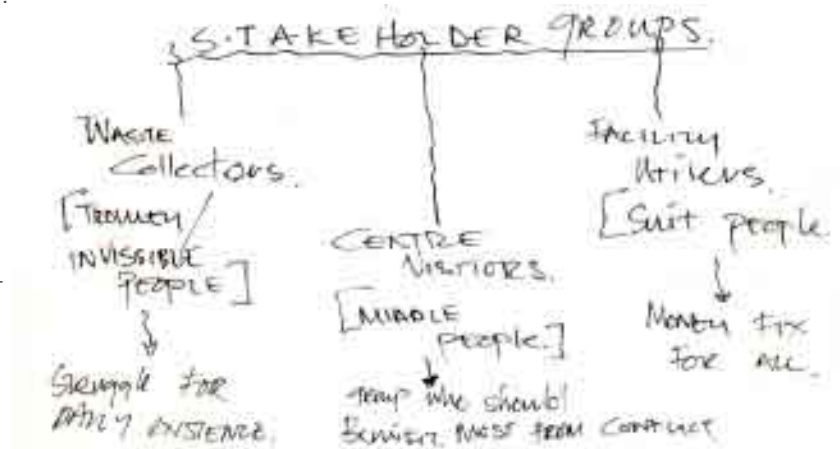
them - do we accept their way of life and assist or complicate their process]. Being aware of the 'green exchange' program will hopefully allow the different groups to assist in the waste collection process [through offering access for the waste collectors to waste paper, plastic, glass and tin].

- Ecological footprint:

The cities 'ecological footprint' - Viewing a cities non-degradable waste and provoking thought of ones personal footprint and the varying benefits of clean lifestyles.

- Environmental impact:

Human impact on the earth - awareness through an emotional experience [the shock of being exposed through audio visual means, to stir emotion and raise questions].



STAKEHOLDER GROUP ARTICULATION

Within this approach of 'conflict awareness', it is important for the design to respond to the requirement of stakeholder articulation.

"ARTICULATION REFERS TO THE MANNER IN WHICH THE SURFACES OF A BUILDING COME TOGETHER TO DEFINE ITS SHAPE AND VOLUME."

MATHEWS, P 2003:21

The concept responds to this requirement by offering a zone common to all the stakeholder groups.

This coming together of the different classes so to speak, will offer a varying psychological experience by the three groups respectively:

- Facility utilisers:
Conflict of interest is achieved through being forced to confront, or share a space with 'so-called' lower members of our society [people normally invisible to other groups or classes].
- Centre visitors:
Conflict of interest established through being stuck in the middle of the conflict between the higher and lower classes [suit and trolley people].
A further conflict could arise in that they are directed to the awareness elements, that follows the facility utilisers circulation route.
- Waste collectors:
Conflict of interest achieved through the spatial sharing with other groups, and through the use of trolley rails, an almost forced segregation down [the ramp] from the other groups.

This emotion provoking zone, or conflict space, is therefore conceptualised on the approach that while within this space, all the stakeholder groups share and experience the space and each other with equal opportunity. This experience will be on all sensory [aesthetic] levels, before circulating to their specific functional requirements within the centre.

Sensory experience:

Aesthetic:

[Relating to perception by the senses]

Adjective - concerned with beauty or appreciation of beauty.

Noun - A set of principles underlying and guiding the work of a particular artist or artistic movement.

Derivatives - Aesthetically

Origin - Late 18th century, from the Greek 'Aisthētikos', from 'Aisthēta', perceptible things, from 'Aisthēthai' perceive.

It was coined in German in the mid 18th century and adopted into English in the early 19th century, but its use was controversial until much later in the century.

Aesthetics:

Plural noun - as a set of principles concerned with the nature and appreciation of beauty, especially in art [is Architecture art?].

- The branch of philosophy, which deals with questions of beauty and artistic taste.

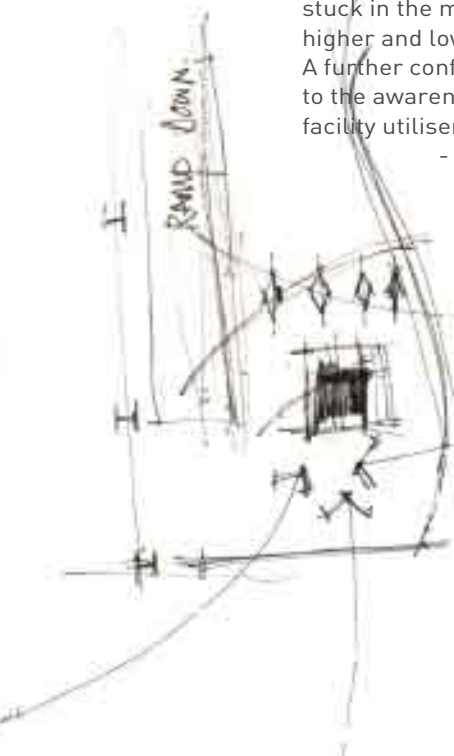
Oxford dictionary 1998:28

The use of the word aesthetics remains somewhat controversial. The term has been somewhat over used without a true understanding of its meaning. For too long now people have assumed an aesthetic experience is a visual experience. There is no doubt that it is a sensory experience, but the sensors have five realms, not just a visual realm. It is time that we should be directed to specifying on what sensory level we are discussing and experiencing aesthetics. This concept of 'conflict' through the different stakeholder groups interacting with each other is on all five sensory levels. This is before the respective groups are segregated and only a visual link, or visual aesthetic is maintained.

Aesthetics = sensory experience of all sensory realms.

See able / hear able / touchable / smell able / taste able

Visible / audible / tactility / olfactory / palatable



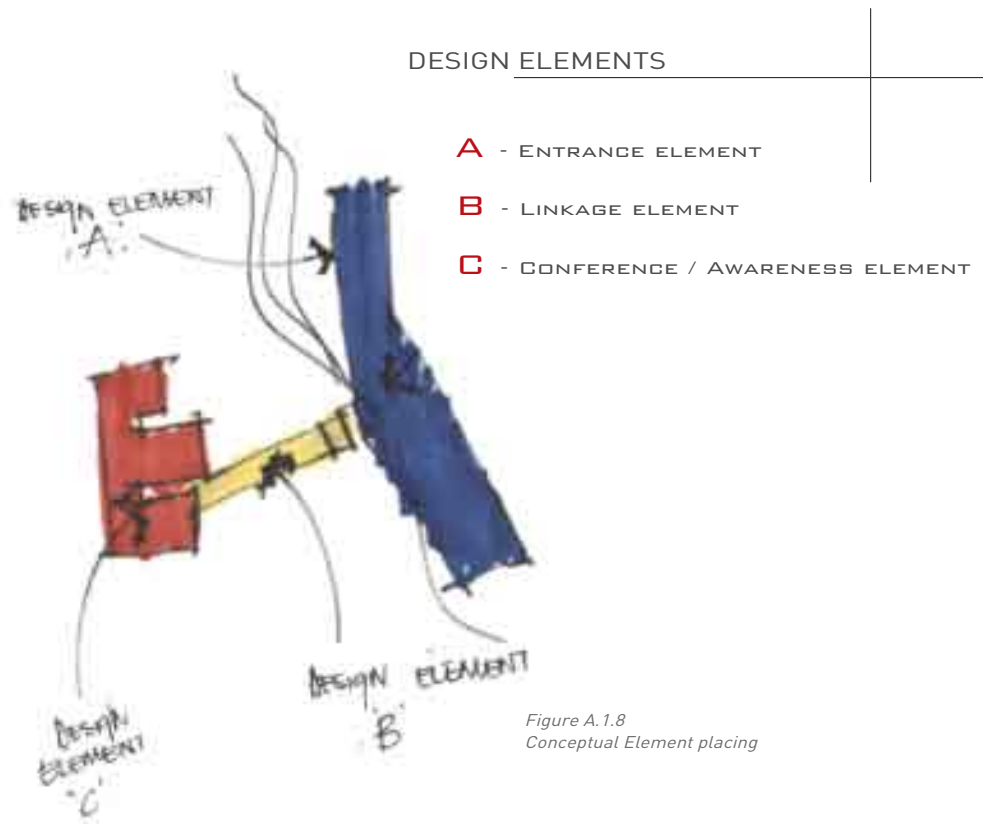


Figure A.1.8
Conceptual Element placing

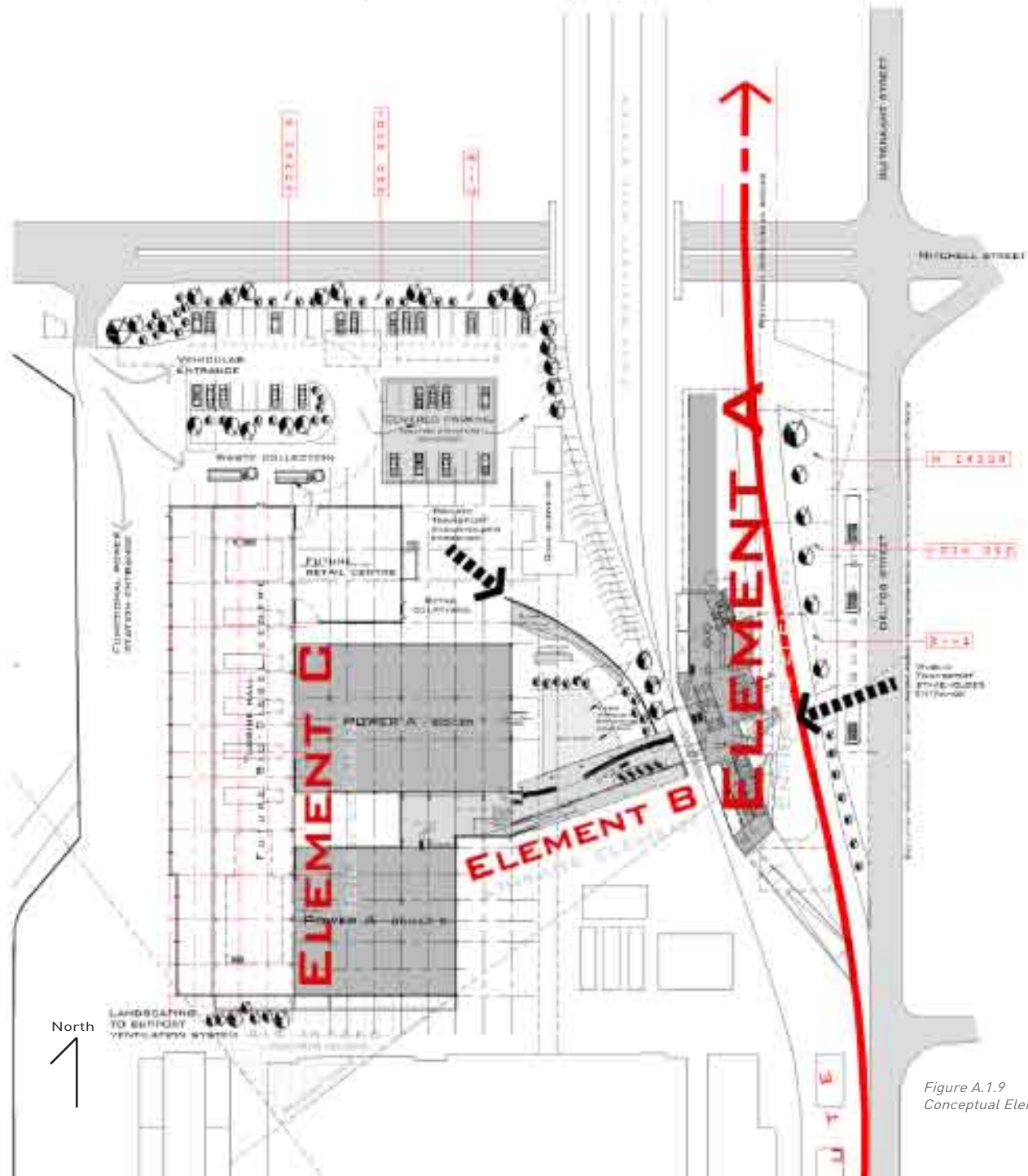


Figure A.1.9
Conceptual Element location

A - ENTRANCE ELEMENT

With the design element being exposed to the street front, it is undoubtedly the 'signature' element or structure of the whole concept. This building therefore needs to incorporate, through the use of its functions, materials and design, the fundamental principle of the concept as a whole - Awareness through community involvement.

It should be observed that the conceptual use of **conflict** discussed in the awareness through conflict theory, begins within the urban approach to the entrance element A [stage C.2]. Where separate entrances have been conceptualised for the different stakeholder groups, with the dominating separation being between users of centre making use of public transport and the others, who make use of private transport.

FUNCTIONS / MATERIALS / DESIGN

The major function of element A is to offer an entrance to the awareness concept as a whole. The entrance will be primarily for public transport users and a link across the 'coal delivery' railway line.

[A ramp system is required for the waste collector's trolleys, so as to introduce the three stakeholder groups into a common space on first floor level, within the linkage element B].

Further functions at first floor level within the conceptualised element A, will offer an informal 'coffee drinking' type environment, giving the opportunity for members of the public to overlook the unfolding conflict.

The lower level of element A, includes facilities dedicated to the **Green Exchange** program for the benefit of the Waste Collectors. These facilities incorporate a canteen - offering a nutritional meal, shower / ablution facilities and overnight accommodation for individuals who travel long distances or are homeless. The overnight accommodation element is divided into two typologies:

1. Formalised accommodation;
2. Transformable accommodation - this will be a 'Green exchange' building program, where people seeking temporary accommodation, will utilise the provided roof structures on a raised surface bed, to further develop these temporary dwellings - informal although controlled.

[The reason for this is to present the opportunity for signature elements to develop for the scheme as a whole. Where the use of collected materials are not specified within the proposed structures, but rather given a platform for a living model of what can be done with various waste materials. This can be used as a research model of what conditions, people seeking a dwelling are willing to live in, as well as introducing this group of people to specific construction techniques with various materials].

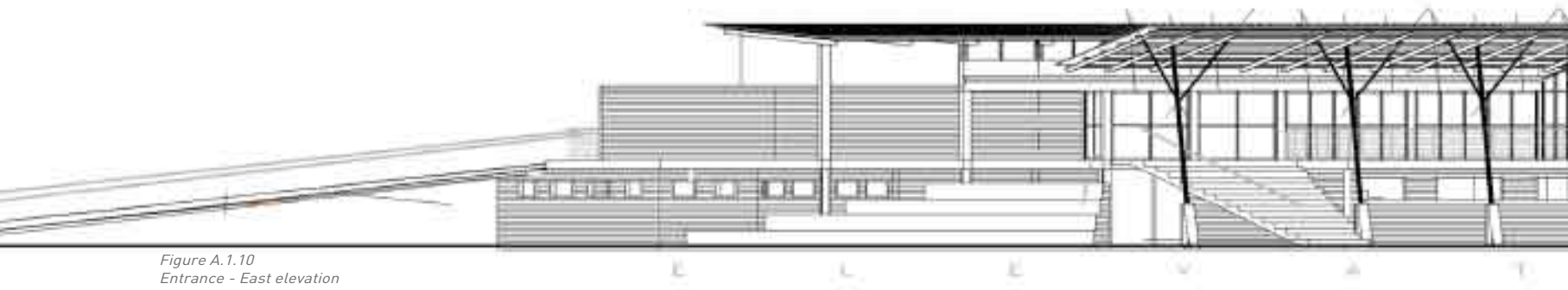


Figure A.1.10
Entrance - East elevation

TRANSFORMABLE ACCOMMODATION

Planning in controlled transformation is critical; with design decisions looking at economic, social and cultural reality before implementing any form of building technology.

The proposed accommodation responds to this by implementing a built form that provides the basic structural elements of a residential unit - a structurally sound platform on which to build, a roof structure and mezzanine floor levels where applicable - providing the opportunity for individuals to design to their own requirements through using collected 'waste that is not waste' as cladding elements. It is important for the proposed structures not to restrict choice, but rather provide opportunity.

Are there buildings in the city that can become partners?

e.g. Units for short-term living, or units to inspire further financial ventures [Informal trading units to cater for the pedestrian route utilisers], payable on the 'green exchange' program:

- # Husband - waste collector;
- # Wife - Informal trader within transformable unit.

The proposed temporary / transformable accommodation within the 'awareness concept', is an empathetic (forceful compassion) response to the needs of those who cannot afford to choose. The awareness of this situation, brought about by force or circumstance - either through necessity, caused by forced homelessness in exile, or through the growth of outer-urban regions, shanty towns and slums, has led to a 'self-help' mechanism as an ethical response.

PRECEDENT

The space frame.

"THE NEED TO UNDERSTAND THE SOCIOLOGICAL ISSUES AT PLAY IN ARCHITECTURE GENERALLY AND HOUSING PROVISION PARTICULARLY, WAS OF CRITICAL IMPORTANCE IN THE WORK OF YONA FRIEDMAN"

ARCHITECTURE DESIGN 2000:37

Friedman published a manifesto, 'L'Architecture mobile', in the 1960's, setting out details of what he called 'La Ville spatiale' - These were huge superstructures within which habitants were allowed to construct their own homes.

"FRIEDMAN'S L'ARCHITECTURE MOBILE EPITOMISED THE LATE MODERNIST FASCINATION WITH PHYSICAL STRUCTURES, SOCIAL HOUSING AND THE DEVELOPING OF AWARENESS OF AND CONCERN FOR GLOBAL ISSUES SUCH AS RISING POPULATION AND POVERTY."

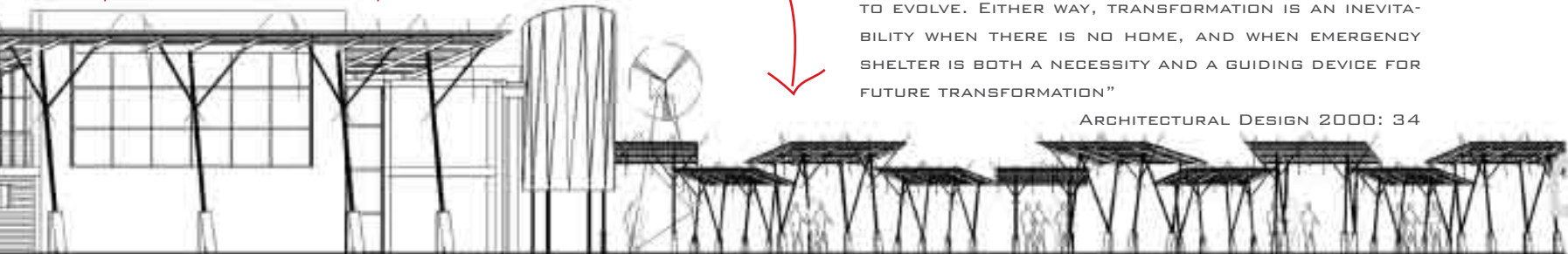
ARCHITECTURE DESIGN 2000:38

The hollow supports or skeletons raised above ground level would contain services such as wiring and water.

The occupants of the frames could then make any spatial arrangement through the placement of mobile partitions, walls and floor slabs. The space frame in the sky is analogous to society, and the dwellings therein the products of individuality.

"TRANSFORMABLE DWELLINGS FOR THE HOMELESS CAN BE DIVIDED ROUGHLY INTO TWO KINDS - THOSE THAT ARE DESIGNED TO TRANSFORM, AND THOSE THAT ARE ALLOWED TO EVOLVE. EITHER WAY, TRANSFORMATION IS AN INEVITABILITY WHEN THERE IS NO HOME, AND WHEN EMERGENCY SHELTER IS BOTH A NECESSITY AND A GUIDING DEVICE FOR FUTURE TRANSFORMATION"

ARCHITECTURAL DESIGN 2000: 34



LINKAGE ELEMENT B

The prime function of this element is to offer a circulation link between the entrance elements A and the proposed functions within the existing fabric. The element introduces the start of the sensory experience, by introducing the curved sensory component into the functional realm and through offering a visual aesthetic experience of the historic structures.

1ST FLOOR LEVEL

The stakeholder groups are introduced into the linkage element through separate entrances, into what has been conceptualised as a **Conflict space**, incorporating the theory of **Conflict awareness** [stage A.1 theory].

Once this thought provoking process has been initialised - through conflict, the trolley stakeholder group [waste collectors] are circulated down to the waste weighing zone and the other groups across to their conceptualised destinations at first floor level. This route at first floor level, directs the Facility Utiliser and Centre Visitor groups through an information centre. This function will provide an opportunity to have displays, in which the local community can participate, with feedback from them is of importance [through seminars or comment boxes].

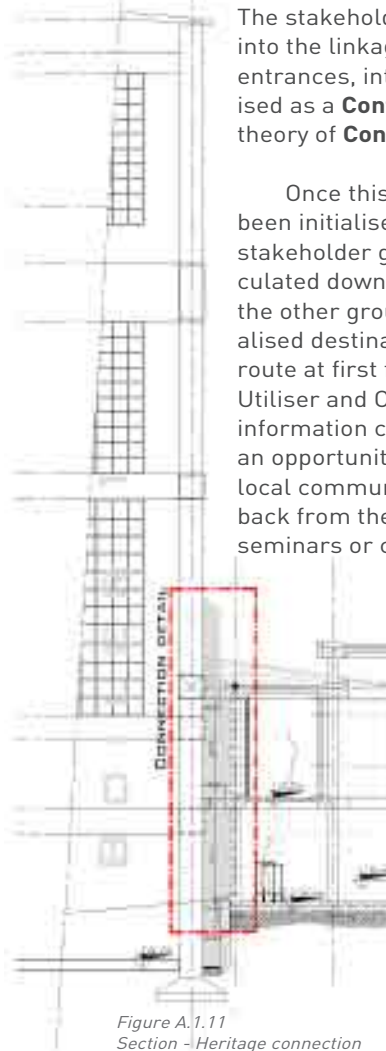


Figure A.1.11
Section - Heritage connection

An essential process within the proposed concept will be that of the **heritage process** [stage D.2] and how the scheme as a whole uses the existing fabric. With the main point of interest being where the linkage element links into the existing 'Power Station A' structures giving the opportunity to move into the existing spaces.

This heritage approach is a simple one. The only sections of the proposed linkage element B that come into contact with the existing fabric are at the specified entrances into the boiler houses. The rest of the structure will be constructed a specified distance from the existing fabric, offering full exposure or visual appreciation of these structures and allowing the structure to continue the ageing process evenly [i.e. Exposure of the building to the elements will continue in case of further change of use]

The upper level will introduce the Conference Facility group into the existing boiler house 1 and the Awareness Facility group into the existing boiler house 2 structure.

GROUND FLOOR LEVEL:

The lower level of the Linkage element B will be devoted to the 'waste collector' stakeholder group - operating on a functional level, with the exception of the sensory experience.

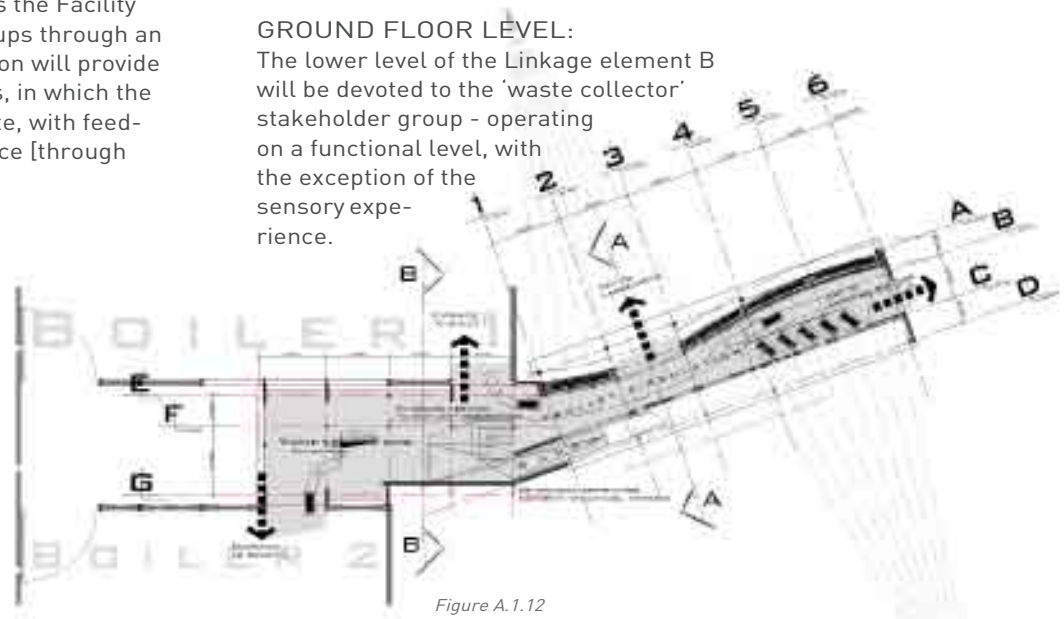


Figure A.1.12
Linkage - Ground floor plan

The visual links from the segregated environs down to the waste centre functions, form part of the **conflict awareness** process, in that the higher stakeholder groups are forced to view what is effectively, their own waste. This ground floor zone within the linkage element B will be utilised as the waste-weighing zone, where the management of the exchange process will require a logistical approach. These management systems give rise to the opportunity to introduce various companies into the waste collection process, that will partake in the waste sorting and later the waste recycling programs:

- Nampak;
- Sappi;
- Mondi;
- Reclam.

Once this weighing process has been completed, the 'waste collectors' are directed into the waste sorting arenas, within the existing boiler houses, through the selected links between the two space typologies.

The waste weighing zone will furthermore accommodate the return of the 'waste collectors' and circulation back through the ground level of the linkage element B. This is before introducing them to the benefits of the 'Green exchange' program - accommodated within the lower level of the Entrance element A:

- Canteen;
- Accommodation;
- Cleaning facilities;
- Cash [Although coupons for groceries, etc. should be granted. This is to avoid the full expenditure of the funds on additions, e.g. Alcohol.]

This lower level of the linkage element B, will offer a sensory experience by continuing the **curved sensory component** [design component page 24] down from the first floor. This component will allow natural lighting through selected openings through the timber cladding system of the sensory component at ground level. Access to a landscaped arena in front of the existing boiler house 1 will be promoted, to allow a full aesthetic experience of the historically significant structures.

Lockable components will be supplied, to secure the currently, most prized possession of this stakeholder group, their trolleys. This will allow this group to partake in the opportunities and full benefits of the 'Green Exchange' program.

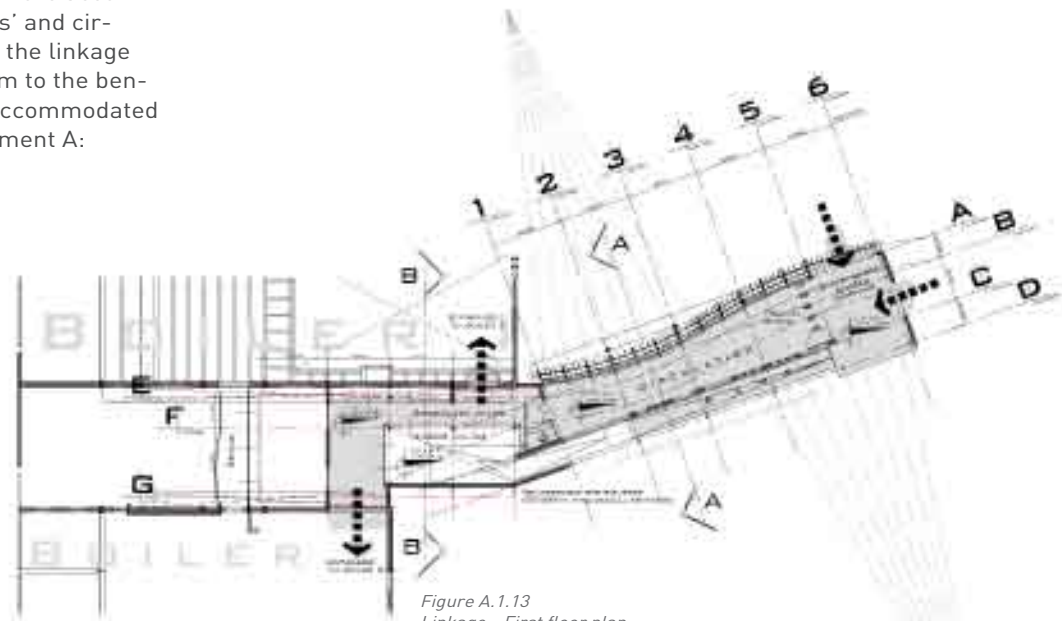
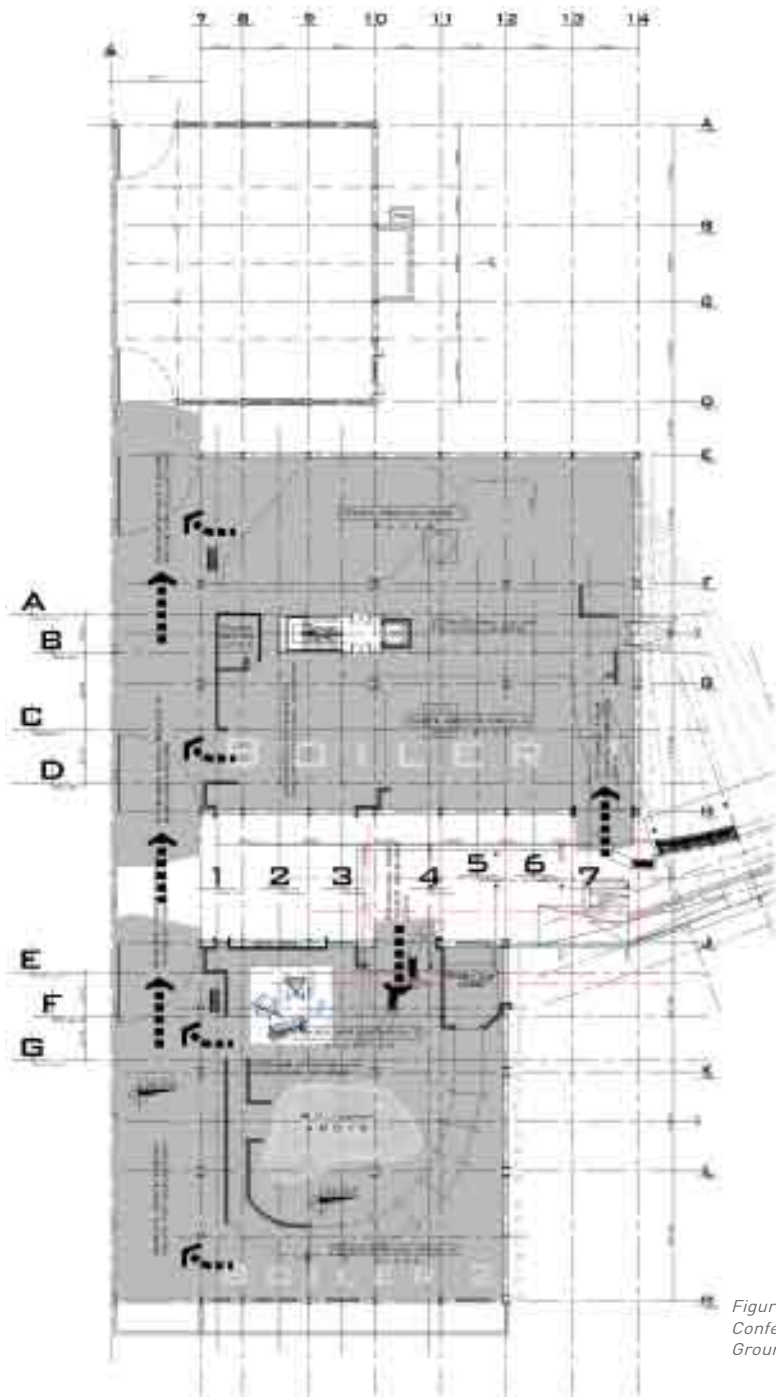


Figure A.1.13
Linkage - First floor plan

REFER TO DRAWINGS NO: 009 / 0B-01

010 / 0B-02



Conference / Awareness Element C - [Boiler houses]

This element is divided into 2 sections - that of the client response [a conference facility] and that of the awareness experience.

Both these functions are housed within the historic fabric of the existing boiler houses.

- Conference facility [boiler 1]
- Awareness experience [Boiler 2]

[The aesthetic experience is limited only to a visual link, due to the segregated nature of these environs. This will constitute the principle of these groups having to look at and be aware of what will effectively there own waste].

The initial approach towards the concept was that of suspending parts of the proposed interventions from the existing structure within the boiler houses. A design decision was taken - that none of the proposed interventions would rely on any of the existing boiler house's structural components. The majority of the existing structure will therefore remain in its current location, with proposed structural components passing through or around the existing fabric, being self-supporting.

CONFERENCE FACILITY - BOILER HOUSE 1

As previously discussed, the conference facility is in response to the client's requirements. The accommodation requirements are:

- Conference room;
- Administration offices;
- Auditorium to accommodate 100 people.

Figure A.1.14
Conference / Awareness -
Ground floor plan



AWARENESS FACILITY - BOILER HOUSE 2

The awareness facility within this element, is in response to the 'emotion through conflict' experience and is achieved through:

- The introduction of the various stakeholder groups;
- The segregation of the various stakeholder groups;
- The visual experience of being exposed to what is effectively our own non-degradable waste.

The awareness experience aims to give the centre visitors a clear understanding of, or clarify what and why there is an emotion conflict within them - by exposing them to the human impact on our planet and its systems.

The awareness corridor offers a visual link to:

- The waste sorting arena's below;
- The existing boiler house 2's internal fabric;
- The awareness morph.

The theoretical concept of the morphic shape is in response to the design components - in that the shape is part of the sensory experience. It aims to achieve a comforting visual link within this induced conflict [Inducing a relaxed state before entering the structure]. The Audio-visual display within this morphic element, will allow visitors to be seated, while being confronted with an 'in your face' experience of the full human impact on our planet.

[Visualise the image of a penguin in an oil spill -----



-----when there are less environmentally degrading replacement technologies available to totally replace [oil].

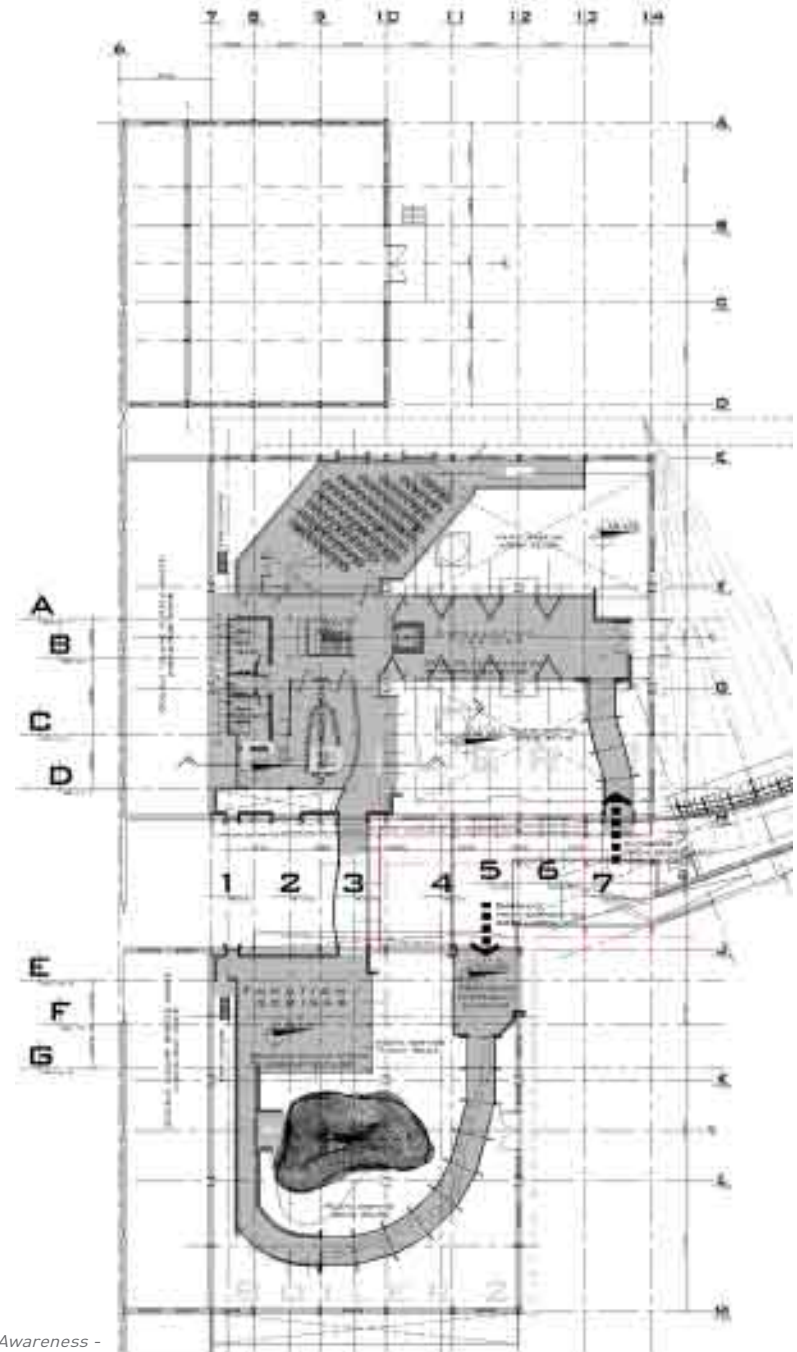


Figure A.1.15
Conference / Awareness -
First floor plan

REFER TO DRAWINGS NO: 011 / OC-01

012 / OC-02

013 / OC-03

DESIGN COMPONENTS - Design framework foundation

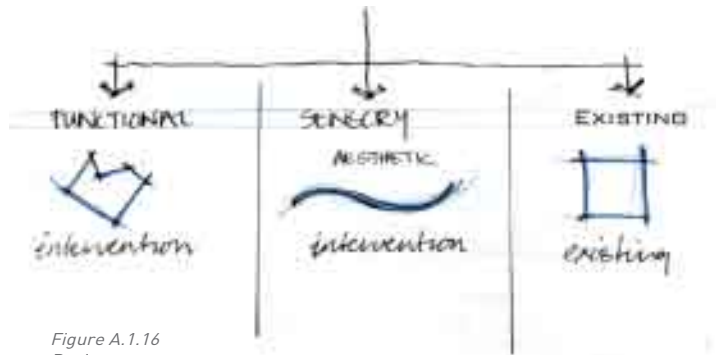


Figure A.1.16
Design components

The theory behind the design components:
through the use of selected shapes, the different experiences within the concept will be accentuated:

- Functional experience
- Sensory experience
- Existing fabric experience

The way these components are utilised within the concept, is through the integration of the:

FUNCTIONAL COMPONENTS:

- Entrance building
- Linkage building
- Conference facility

SENSORY COMPONENTS:

- Sensory component within the functional linkage element
- Awareness corridor and A.V. Morph elements within the existing boiler 2 fabric

EXISTING COMPONENTS:

- The boiler house 1 & 2 fabric

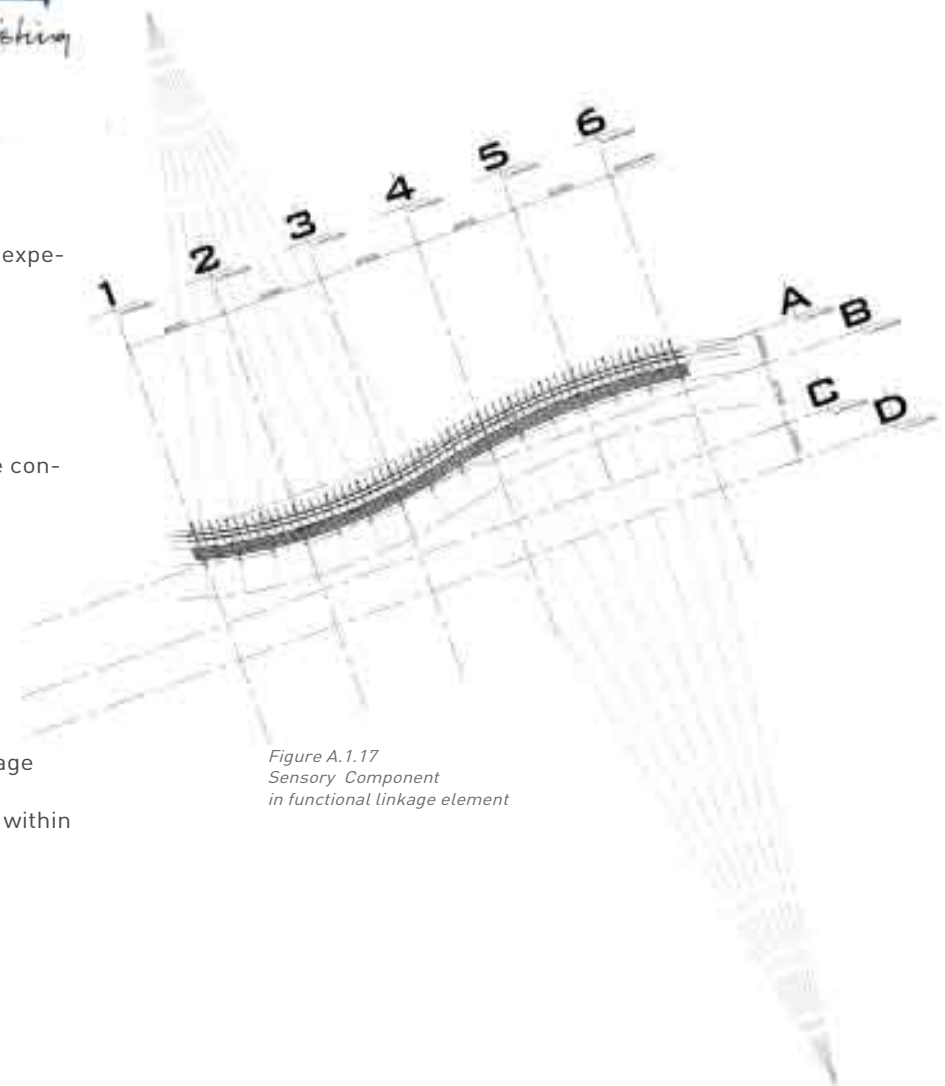


Figure A.1.17
Sensory Component
in functional linkage element

VENTILATION / COOLING SYSTEM

This system is a large requirement within the development of the intervening structures of the awareness concept. Generally within sustainable design, it is of high importance to utilise natural systems of ventilation and cooling [e.g. Cross-ventilation, thermal mass, etc].

The entrance and linkage elements make use of cross-ventilation - made possible by the prevailing winds [stage B.5.7.3]. The importance of the 'segregated environ' interventions within the existing structures, is to indicate to myself and the readers, that within sustainable design, one is not required to reduce ones comfort levels. It simply requires that we apply energy efficient means of environmental control within our buildings.

The applied system makes use of two systems:

- **Air supply** through a thermal mass rock store;
- **Air extract** through thermal buoyancy [stack effect] induced by solar heated hot water pipes through the existing boiler house chimney ducts.

[STAGE D.6.2.1]

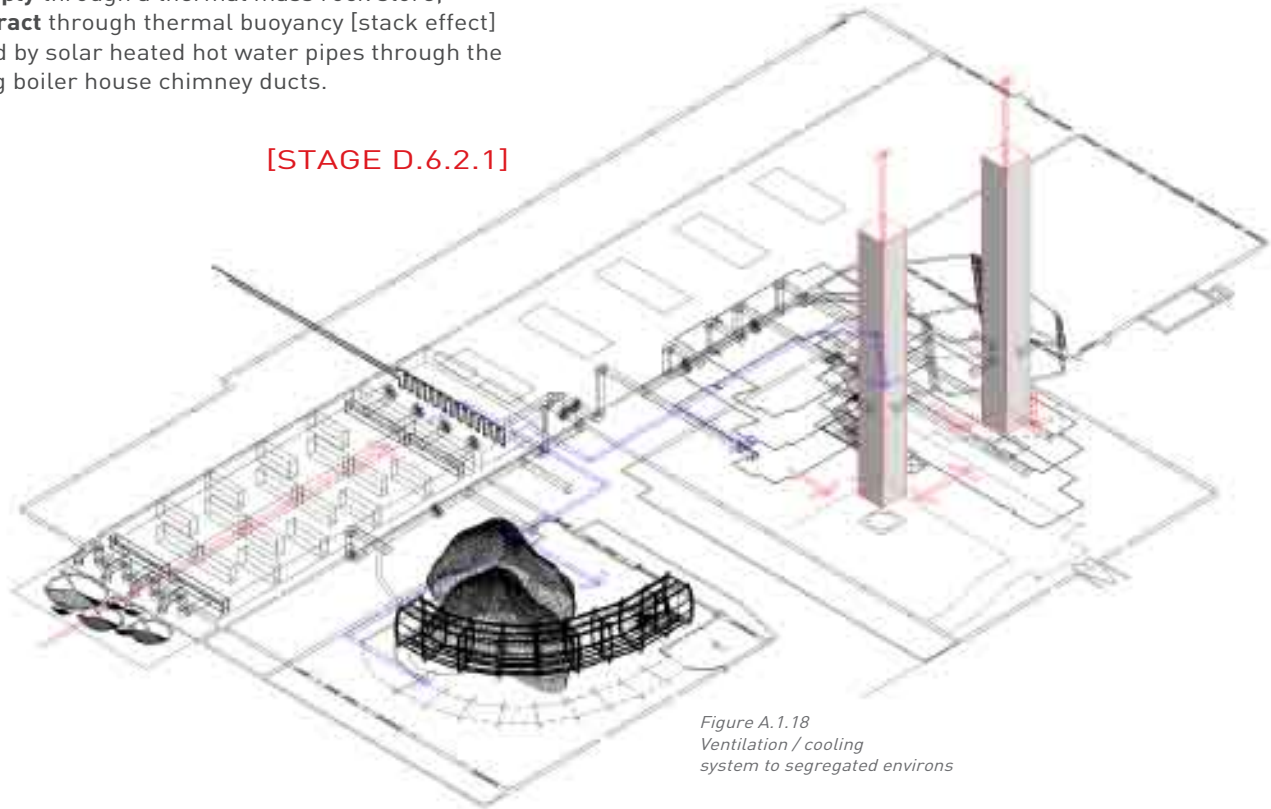


Figure A.1.18
Ventilation / cooling
system to segregated environs