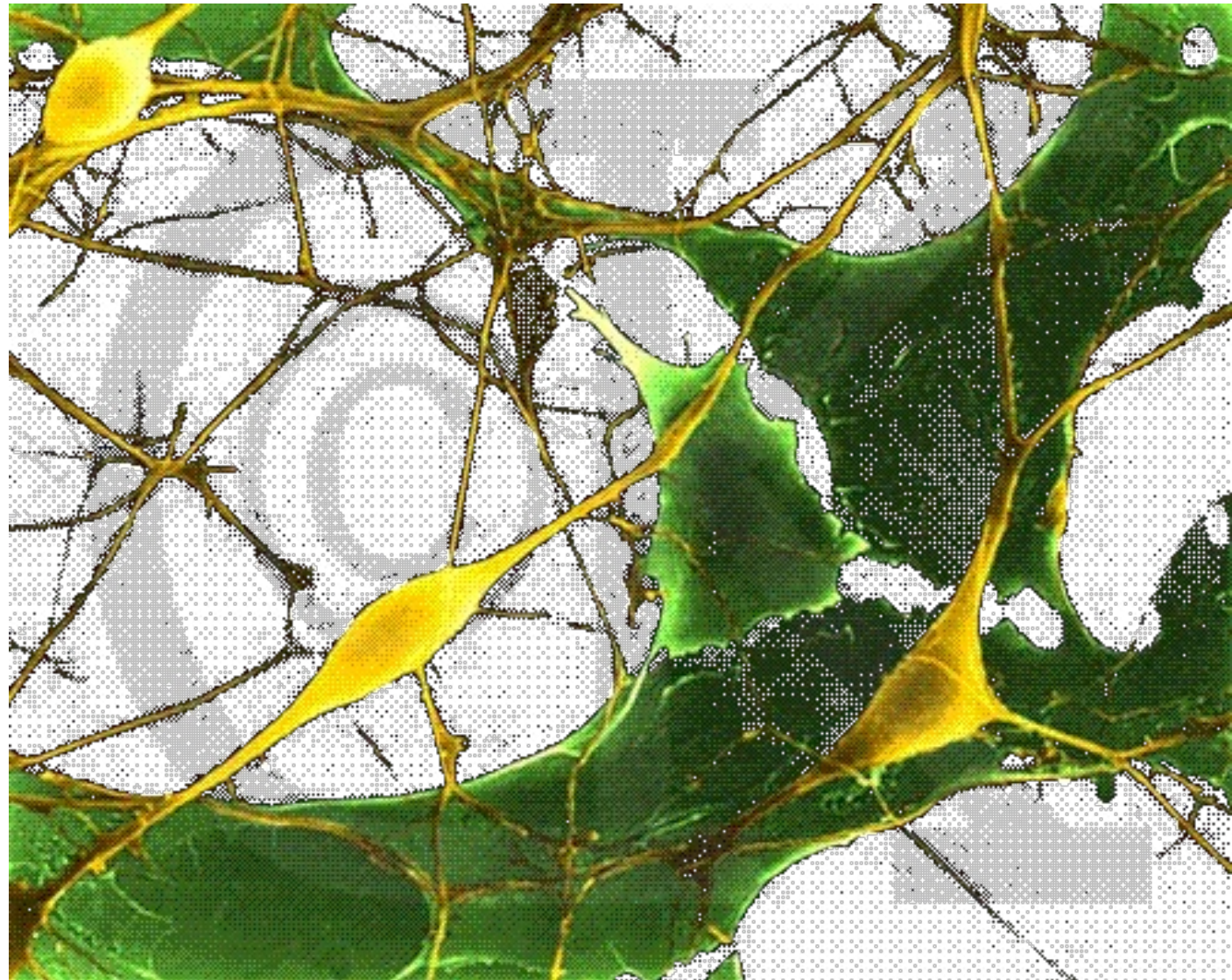


Baseline Criteria



How we go about it



Fig. 2a. Pyramidal Neurons and glial cells.

Baseline Criteria

This report will set out the criteria for the design. It will attempt to ensure a quality product that will fulfil the needs of the client as well as the larger community. It will take account of the social, economic and environmental aspects of building and attempt to strike an optimal balance.

The criteria in the report make use of the Sustainable Building Assessment Tool (SBAT) as promoted by Jeremy Gibbert, and refer to the work of, among others, Christopher Day and Tony Buzan.

All design decisions are considered to have an impact on financial, ecological and social concerns. This is the major deviation from the criteria set out by Gibbert. While the sequence of the discussion broadly follows the form as set out by Gibbert, cross referencing and referral is used throughout to link aspects that are related.

Some aspects dealt with are not criteria as such, but rather commitments to explore particular aspects of the design problem.

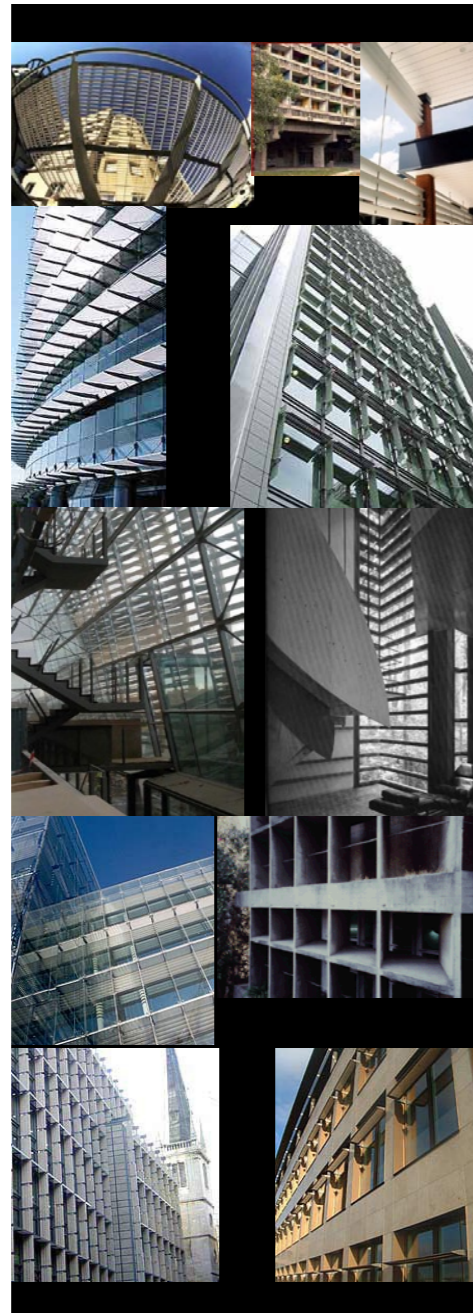
1.) Occupant Comfort

It is clear from the literature surveyed that comfort is an important aspect in mental functioning. In everyday situations, discomfort causes stress, which activates survival instincts and interferes with 'productive' thinking. Day states it quite simply: "...what feels better is better." (1990:20)

Comfort addresses a broad spectrum of criteria, from the physical to the social and psychological environments.

The importance of environment on comfort can be seen by looking at examples such as individuals suffering from vertigo or claustrophobia. The environments created for the purpose of torture or brainwashing also serve as examples.

Related to comfort is the impact a building has on mental state. Great religious buildings make use of this atmosphere to aid



worshippers in achieving a spiritual state. Appropriate principles should be developed to use potential positive influences of the building on the mind in the design.

1.1.) Lighting

Lighting is of particular importance in a building. Sighted people require it to do their everyday tasks. It influences the atmosphere of a space. If it is provided in the wrong way, people have to strain their eyes to see or have to squint against the glare. Even blind people can enjoy the touch of the sun on their skin, or experience discomfort from its heat.

1.1.1.) Natural light

Natural light has many benefits over artificial lighting. It is supplied free of charge, reducing the capital and running costs of the building. It does not flicker as fluorescent lighting often does. Colours appear natural and ultra-violet radiation has a disinfecting effect.

Natural light should be used wherever possible. Where views are appropriate or required, this should be combined with the light source. When it is inappropriate to provide views, natural light should still be used in an appropriate manner.

Although South African law does not yet make provision for solar rights (Holm 1996:88), the massing of the building should be considerate in terms of solar access for neighbouring buildings. A recent case in the Natal High Court, regarding view rights, could set a precedent for the growing acceptance of environmental rights in the built environment.

The centres' open or garden areas will require solar access and light. Their placing and the massing of the building should keep this into account.

Solar control devices (Fig. 2.1.-2.10.) shall be provided where needed. These should be functional and not mere aesthetic expression. Horizontal as well as vertical solar angle is to be considered. The design of windows should keep in mind that

Fig. 2.1-2.10 Various solar control devices.

heat is gained and lost through glazing. Diffuse and reflected radiation should be kept in mind.

1.1.2.) Artificial light

Artificial light will be required for areas where adequate daylight is not available as well as at night. The nature and placing of these have to be carefully considered. Artificial lighting affects maintenance as well as running costs. Fittings should therefore be energy efficient and accessible for maintenance.

The purpose of the space should be considered when selecting light fittings. Compact fluorescent lights are energy efficient when they are left burning over long periods. When being switched on, the capacitor needs to be charged and this consumes large amounts of energy, while the same is true of leaving the light switched on needlessly. Furthermore, the life expectancy of a compact fluorescent is reduced by regularly switching it on and off. In some cases, it will be appropriate to use other forms of lighting.

Artificial lighting contributes significant amount of heat to the building. Ways should be explored in which this heat can be dispersed and re-used.

1.2.) Ventilation

We need to breathe, as does most living organisms. Air is needed for growth, health, metabolism, and thinking.

The quality of the air we breathe impacts greatly on us. Too little oxygen makes us dizzy while too much acts as a euphoric drug. Excessive carbon dioxide causes lethargy and exhaustion. We are vulnerable to disease and to chemical attack through our breathing.

Through respiration, we use up oxygen in the air and release carbon dioxide. Materials and processes used inside buildings often release toxins that are dangerous to us. All these processes affect our performance and health.

Good ventilation is a basic requirement in a good building.



Fig. 2.11. Openable Louvres.



Fig. 2.12. Water feature at Sony Centre by Peter Walker.



Fig. 2.13. Jasmine



Fig. 2.14. Music powerfully influences mood.

1.2.1.) Natural ventilation

Natural ventilation is to be used wherever possible. Where natural ventilation is inadequate, convection towers and other passive means should be employed to augment it. The layout and placing of air-intakes should ensure that air is let in at desirable points, and not merely drawn from the cooler toilet and service areas.

Windows should be openable wherever possible (Fig. 2.11). Active systems shall be considered where necessary, but should be restricted to mechanical ventilation. Air conditioning should be avoided, except in those cases discussed in section 1.6.2.

Artificial reverse circulation should be used in winter, to move warm air from higher floors to those below.

1.2.2.) Water features and gardens

These should be used to cool down, humidify and increase the negative ion content of the air (Fig. 2.12). See planting and landscaping section 1.4. below.

1.2.3.) Sense of smell

The sense of smell is connected directly to the brain. It has a powerful ability to influence mood and create a sense of place (Fig. 2.13). Air inlets and windows should pick up the smell of fragrant plants in the centre. Other smells should also be utilised to heighten the sensual experience of the building.

1.3.) Noise

Noise has conscious and unconscious influences on mental state. The power of music to influence the brain wave patterns has been scientifically shown.

A complete absence of sound is not possible in the presence of life. When the environment is very quiet, the ears adjust and one starts to hear things like one's heartbeat and blood circulation, which is disconcerting.

The human brain seems to be hardwired to tune in to verbal sounds, drawing attention away from other activities. Different

activities have different thresholds for noise, and noise at different frequency and volume has different effects. The elimination of sound is not the answer.

1.3.1.) Noise emission

Noise emitted by the building has to be limited. Noisy plant should be placed in such a way as not to affect the functions in the building or that of neighbouring buildings. Sound insulation for particularly noisy functions should be used.

1.3.2.) Background sounds

These should be suited to the environment. Reading rooms and libraries require grey noise at an acceptable level to mask the sounds of activity (Fig. 2.15). Quiet, meditative spaces can benefit from the sound of running water. Social areas like the cafeteria benefits from the buzz of people, while open plan offices should be designed to facilitate dampening of (particularly verbal) sound.

1.3.3.) Layout

The layout of the building should allow less sensitive functions to be placed close to noise sources like the street. Where this is not possible, double-glazing and sound insulation should be used.

1.4.) Planting/ greenery and water features

Plants use carbon dioxide, give off oxygen, have a cooling effect (mentally and physically), and increases the negative ion content in the air (particularly ferns). Day (1990:35 and 52) and Holm (1996:6) refer to the beneficial effect of negative ion content in the air for human functioning.

Water features have the same benefits, as well as providing soothing background noise.

Further benefit of planting is that the beds absorb rainwater and slow down surface run-off.

1.4.1.) Open-air spaces

Open-air spaces should be created and extensive planting used



Fig. 2.15. An airconditioner diffuser can be used to generate grey noise at the required level.

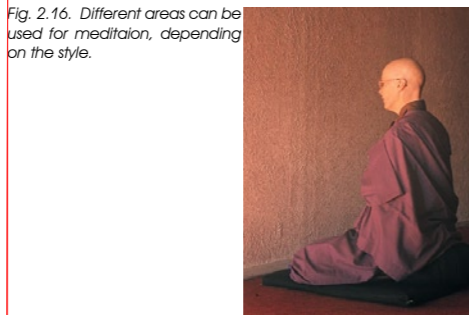


Fig. 2.16. Different areas can be used for meditation, depending on the style.



Fig. 2.17. UV disinfection can be used to clean water without the environmentally detrimental effects of chemicals.

there. The surfacing material should be permeable. Where hard landscaping is required, it should be done in a way that reduces run-off speed, lowering the demand placed on the storm water system.

1.4.2.) Nature in and out

All spaces should be in visual contact with planting or sky-views, except where the function dictates that this is inappropriate.

1.4.3.) Meditative space

Quiet, meditative spaces should contain features that would enhance the nature and atmosphere of the place.

1.4.4.) Wildlife

External areas should accommodate the habitation and migration of animal life as appropriate to the environment. Also, see section 4.3.3.

1.4.5.) Planting

All planting is to be indigenous and preferably local.

1.4.6.) Water feature hygiene

Provision should be made for water disinfection by environmentally responsive technology like UV disinfection (Fig. 2.17).

1.5.) Accessibility and inclusivity

1.5.1.) Transport

The site is located close to Church Square, which is the central bus terminus for the city. Taxi ranks and the train station are available within walking distance. (See context study). The centre is easily accessible by motorcar, with ample provision for parking in the vicinity. Parking currently provided on the site should be replaced in the design.

1.5.2.) Pedestrians

A pattern of sidewalk canopies exists in Church Street. Conforming to this will make the building more pedestrian friendly. Accessibility

of the building during storms and the harsh summer weather will also be increased in this way.

1.5.3.) Cyclists

Safe storage for bicycles should be provided. Showers and dressing rooms will further encourage participants and employees to use bicycles for transport.

1.5.4.) Childcare

A nursery school/ childcare centre is available close by (see fig. 2.18) for the children of employees. A partnership between the centre and the nursery can be created to accommodate the children of participants.

1.5.5.) Financial services

Some banks are available in the vicinity. A greater range of Automatic Teller Machines could be provided in the area.

1.5.6.) (Dis)ability considerations

The building should allow for use by all persons, regardless of physical ability.

1.5.7.) Changes in level

Changes in level should make accommodation for wheelchair users. The edges of levels should be provided with tactile surfaces and contrasting colours. Ambulant disabled persons often have trouble navigating ramps. Because of this, ramps should not replace other forms of vertical circulation.

1.5.8.) Toilet facilities

Toilet facilities should be provided for disabled persons and special consideration should be made for areas where work with small children might be done.

1.5.9.) Obstructions

Care should be given to door and window swings and other object that might obstruct circulation routes. The placing of switches, taps, window controls and similar devices should be



Fig. 2.18. Childcare facilities close to the site.

sensitive to the needs of both disabled and able-bodied building users.

1.5.10.) Multi-Culturality

The function of the building implies users from a variety of backgrounds. The building and exhibits should avoid features that might give offence to some user groups. Effort should be made to encourage inclusivity (e.g. in sanitary provisions). It is important to ensure that content of display is appropriate for children.

1.6.) Participation and Control

Providing users with the ability to control their environment immediately provides a sense of empowerment and comfort in a building. It is also recognised that users often will not go to the effort of exercising this control (Holm 1996: 87). Accommodation should thus be made for user and centralised control.

The centre includes some very specific functions. In the experimental areas, it is necessary to create particular conditions. In these places participant control would be inappropriate.

1.6.1.) Meditation spaces and offices

In these areas user comfort and control is important. Wherever possible, openable windows should be provided and as much as possible control can be left to users. Music could be provided in these areas and left to user control.

1.6.2.) Comfort Experimentation

Where experimentation is conducted to determine which environmental conditions is preferred for different tasks and to measure personal and cultural preferences, user customisation should be provided in as great a manner as possible. This customisation should be measurable. In these areas, it would even be appropriate to provide facilities like HVAC, in order to ascertain attitudes towards this and measure the impact it has.

1.6.3.) General areas

Employees should be able to adjust blinds and partitions to establish personal comfort. The building should, through its design, encourage participants to interact with and explore it: "What does this button do?"

1.7.) Social areas

Social interaction is very important in the creation and study of collective mind. The research conducted in the centre is of a multi-disciplinary nature, necessitating interaction between people from different fields.

Rogers refers to the unquantifiable expansion of the human brain through the networking of thinking (1997:148). It is very important that good social spaces are provided in the building and that contact between people is encouraged in the design.

1.7.1.) Circulation spaces

These should be designed in ways that encourage social meeting and interaction. Functions and departments that would not normally come into contact should be connected in a way that encourages interaction. Circulation space should be explored as multi-functional spaces and should serve a dendritic function.

1.7.2.) Amenities

Along with the circulation, amenities such as vending machines, kitchens and coffee bars should be provided and utilised in a way that would encourage interaction between people. This should also be done with shared facilities, like photocopying machines.

2.) Welfare

2.1.) Safety and Security

In the light of the central city location, security in the building is important. This is verified by the access control at other buildings in the area (see fig. 2.19).

2.1.1.) Entrances

A central, controlled entrance should be provided to the street. Ground floor functions should look out onto the street in order to monitor potentially dangerous activities.

2.1.2.) Links with neighbours

Entrances giving onto other buildings (The HSRC and the parking garage) could be controlled through unmanned doors with access cards.

2.1.3.) Good Neighbouring

Floors above ground should look out onto the street. Occupants should be encouraged to report and act on suspicious activity across the street (The pavement not being visible due to the

The dendrites are the arms that radiate from the neuron (brain cell) and facilitate the contact between different brain cells, creating the pathways along which thoughts pass. The better a brain is used, the more dendrites and connections there are. The better a cell is connected, the better able it is to contribute to new thoughts and memories.



Fig. 2.19. Access control at neighbouring buildings.

canopy). Contact with neighbours could lead to this policy being expanded to other buildings, providing protection for the development.

2.1.4.) Safety Issues

The building must comply with the National Building Regulations and other statutory standards in order to ensure the safety of the building. Where function requires deviation from these regulations, alternative standards and procedures have to be developed to ensure the safety of users and property.

2.2.) Health

The health of workers and occupants is important to the functioning of the building. Sickness leads to costs due to days off from work. Some health problems might lead to litigation and bad publicity.

2.2.1.) Emergency

First Aid kits should be located on every floor and be positioned close to the emergency exit routes. First Aid officers should be appointed and trained for every floor. Fire Captains should also be selected for every floor.

2.2.2.) Smoking

In order to protect the rights of smokers (Fig.2.20) and non-smokers, smoking areas are to be provided in the building.

These areas are to be provided away from doors, windows or air inlets. Smoking will not be permitted in any public areas.

Designated smoking areas should be fitted with warnings in prominent positions. These should counsel on the dangers of smoking and provide contact details for organisations that help one to give up the habit.

Smoking areas should be designed in a way that will allow for easy conversion to other functions, should the need for smoking areas disappear.



Fig. 2.20. Smoking needs to be designed for.

3.) Local Economy and Financial aspects

Buildings can benefit the local economy on the short and long term. Any advantage resulting from this should be maximised

3.1.) Contractors and Labour

3.1.1.) Local Contractors

Contractors from the Tshwane area should be used for general construction work. Specialised work can be sourced from further a-field, but preferably within a 200km radius.

3.1.2.) Small and Medium Enterprises/ Emerging Contractors

Where appropriate skill and capacity exist, small and medium enterprises should be used.

According to Bruce (2003), the South African construction industry does not have a fraction of the necessary capacity to deal with the expected rise in construction. In order to develop this capacity, experienced contractors should be encouraged to enter into partnerships with emerging contractors.

Such a partnership can be used to increase the feasibility of these small businesses through the transfer of management skills and other necessary experience.

3.1.3.) Labour Intensive Design

The design should allow for labour intensive construction to take place. This should not be taken to mean that people should be given jobs that a machine can do better, but rather the choice of technologies and techniques that require a human touch.

Workers should feel free to make suggestions regarding

the design and construction, and leave their stamp on their work.

It is not economically feasible to construct the entire building in this way. Existing possibilities should be identified and, particularly in the public and visible aspects of the building, opportunity should be created for this type of work.

Working in this way, adds more depth to the building and serves to create more meaning and connections in the centre.

3.1.4.) Unskilled Labour:

Unskilled labour should be sourced from unemployed people resident near the development, preferably within walking distance.

The process can be managed in collaboration with local charities, housing associations, churches, the local council and others who work with and among the unemployed. Empowerment projects can be the aim of such an approach. The objective of this should be to transfer skills and knowledge to a level that will allow involved persons to continue in a similar capacity.

3.2.) Materials

3.2.1.) Local Materials

The design should make use of materials that are available within a 100km radius and the use of these should be insisted on during the tender process.

This aids the local economy and reduces the environmental impact through transport. It also results in materials and expertise being readily available for repairs and maintenance.

3.2.2.) Health aspects

See section 5.1.2.) below.

3.3.) Efficiency

3.3.1.) Unproductive Space

Space occupied by plant, circulation and WC's should not exceed 20% of the floor area. See section 1.7.1.) above.

3.3.2.) Use Time

Ways should be explored to use the building for as many hours a day. This will result in a more efficient application of capital outlay.

Using a building in this way reduces the need for separate buildings for every function and decreases the amount of total land that needs to be built upon.

Having the building occupied for longer times also increases the security of the building and increases potential revenue.

This need is further enforced by the Pretoria Inner City Development Framework when it calls for housing in the city to extend the time that there is activity in the city (p.12).

3.4.) Capital Costs

3.4.1.) Value for Money

The selection of materials and construction should be based on a value for money approach. A high quality and standard should be a requirement, while paying a premium for the best products should be avoided.

3.4.2.) Consultants

Consultant fees should reward reduced capital cost with bonuses. The contracts with consultants should ensure that standards are not compromised by lowered cost.

3.4.3.) Adaptability and flexibility

Buildings often have to be adapted during their lifetime.

It is also true that very good adaptations have been done on buildings that have not been designed with alteration in mind.

Rogers draws a relationship between the flexibility of a building and the thinking that can happen there – “Inflexible buildings hinder the evolution of buildings by inhabiting new ideas.” (1997:79).

The centre has a very particular function and might lose its effectiveness if too much focus is placed on future occupation.

The neighbouring buildings are in a somewhat unkempt state. The design of the building should keep in mind that these buildings might be replaced in future (or that the current building could be expanded onto these properties.)

These factors call for design decisions that will not prevent future adaptation, rather than trying to anticipate and prepare for it. The design should also keep in mind the effect of construction on organisation and passive environmental features.

Partition walls are to be non-structural. Where structural walls are used, they are to be legible as such.

Services should be easily accessible and maintainable yet discourage tampering. Maintenance should not interfere with building use and occupation.

Vertical Dimensioning: Within the constraints imposed by the need to join with floors in neighbouring buildings, particularly on ground and first floor level, the following vertical dimensions should be used:

Total:	28 000mm (The height restriction on the site)
Ground Floor:	4 000-4 500mm
Higher Floors:	3 000mm

3.5.) On-going costs and management

The expenses of a building are not finished when the final accounts are signed off. Energy, maintenance and other operational costs all contribute to these continuing costs. An increase in capital cost that reduces operational costs can be offset many times over the lifetime of the building.

3.5.1.) Materials and building techniques

These should generally be selected to be low maintenance. The maintenance that is required should be available locally.

A building manual should be supplied to the facilities manager. This will ensure that the building is well and correctly maintained and prevent management from making adaptations that will cripple systems in the building.

This manual should include information on the following:

- the types of fittings,
- suppliers and maintenance workers,
- maintenance cycles,
- the use of passive systems
- design decisions that might not be understood by the non-professional and affects the functioning of the building.

3.5.2.) Energy

Energy is a major on-going cost of a building, and has a major impact on the environment. Passive technologies should be used to reduce energy use.

Light fittings should be low energy as discussed in section 1.1.2. above. Movement sensors or timer switches can

be used in areas that are seldom used.

Heat: Solar water heating should be used to supply hand washbasins and showers.

Ways to harvest and use waste heat should be explored. Heat exchangers and convection towers are possible applications. Where heating is required during the winter, waste heat should be the primary source. If this does not provide adequate heating, radiated heat is preferred, but a balance should be struck between financial and environmental cost.

During summer months, nighttime cooling can be used to chill the building. This still uses electricity, but directs it to times of low demand on the supply network, reducing the cost.

Ventilation: See section 1.2.) above.

Alternative energy generation through solar panels, wind turbines or even hydroelectric energy should be investigated and used if appropriate and feasible. These should only be used where they will be effective and should not be applied as gestures.

Water: See section 3.6. below.

3.5.3.) Cleaning

The building should allow for cleaning functions to be outsourced, and accommodation should be provided for this.

Windows and floor areas should be easy to clean. Hard to reach places should be provided with suitable cleaning equipment.

3.5.4.) Measurement of costs

The building management system should allow for continuous measurement of running costs. These should be accessible over the intranet of the centre

and is to be reported at meetings.

3.6.) Water

South Africa is a dry country and relatively poor, resulting in the need for reduced water consumption. Money can be better applied than on building water supply; storm water and sewerage infrastructure.

Using potable water for flushing toilets and washing cars seems excessive when others are dying and getting diseased through the lack of drinkable water.

3.6.1.) Rain

Rainwater is to be harvested and stored in tanks at roof and basement level. Ways should be explored in which rain can be used to wash dirt and dust off windows and walls, minimising the need for cleaning and other cosmetic maintenance.

3.6.2.) Grey Water

Grey water is to be captured and re-used, particularly for watering plants and flushing toilets. Filtering should be provided where necessary.

4.) Site

The location of a building has certain benefits and liabilities.

4.1.) Heritage

The building is near several sensitive buildings, like the Kruger house museum, the Pretoria *Gereformeerde Kerk* and Church Square. The massing and treatments should be sensitive to this and where possible contribute to the cohesion of the area.

4.2.) Location and nature

The building is a Brownfield site. Virgin land does not need to be disturbed for its construction. Its central

location makes it more accessible and public transport is more available.

Creating a high-density building eliminates the need for several low-density buildings outside the city. There is also potential to contribute to the revitalisation of a run-down part of the city.

4.3.) Site Influences

4.3.1.) Height and density

The site is situated between low-rise structures on the sides. Other buildings in this part of Church Street and behind the site range from six to thirty-three storeys.

The assumption is made that the building will be flanked by taller buildings in future. The detailing of the flanks should keep in mind that this is not the case yet.

4.3.2.) Roofscape

Building on a Central Pretoria tradition, the roof should be habitable. A ‘pergola’ visible from the street can be used as a ‘pediment’ element to the building. This roof should be landscaped.

4.3.3.) Vermin

This close to Church Square, pigeon problems are likely. Possible solutions would be to create a ‘sacrificial’ pigeon area, thereby limiting pigeons to predetermined areas. The building could also incorporate functional habitat design that encourages birds of prey to nest on it and control the pigeon population. See section 1.4.4..

5.) Construction

Many aspects of the construction process contribute to the health, cost, comfort and ecological responsibility of the building.

5.1.) Reduce, Re-cycle and Re-use

The construction process is often wasteful. A substantial percentage of material that is brought onto site is removed again as waste. This is an expensive and unnecessary expense. It also takes up large amounts of space in landfill sites.

5.1.1.) Modular Systems

Modular systems and brick dimensioning should be used to reduce the amount of off cutting. This decreases material wastage, and speeds up the construction process.

5.1.2.) Material selection

This should focus on renewable materials. If appropriate recycled material is available in the area, it should be used. The danger of materials to workers (during manufacture, construction and dismantling), to users, and during accidents (e.g. fire) should be kept in mind when selection is done. The toxic, carcinogenic and electrostatic properties of materials are important considerations during this process.

5.1.3.) Recycling

The construction policies should incorporate a recycling policy. This should include not only construction materials, but also incidentals like the waste that results from the meals that workers have on site.

5.1.4.) Dismantling of Building

The building should be designed in such a way as to allow the components to be re-used when the building is taken apart at the end of its useful life

5.2.) Considerate Contractors

The contractors should endorse ‘considerate contractor’ principals. This regulates noise, waste and storage of

building materials during construction. The aim is to prevent obstruction and nuisance to existing businesses and residents and prevent accidents.

5.3.) Phasing

The construction should allow subsequent processes to start as soon as possible.

Functions that operate semi-independently from the rest of the building, for instance the parking garage, should be completed as soon as possible. This will allow these areas to go into operation as soon as possible, earning revenue for the project. It also reduces the disruption to those currently using the site for parking.

6.) Communications

As the brain works on links, it is important for a building of this nature to be provided with good communication, internally and externally.

6.1.) Information

The building should be well linked up via internet, intranet, fax, telephone, even radio and television. "New technologies are enabling us to expand the use of our most valuable and most particularly human resource: creative imagination, or brain power. The increase or even prolific consumptions of this resource is subject to no limiting factors and has no downside; it is people- and environment-friendly." (Rogers 1997:147)

6.2.) Neighbouring

The building should link with other buildings and organisations. These links can be cooperation agreements, physical links, or merely the support of local businesses by the users of the building.

6.3.) Art

Day believes that art brings us to a threshold experience

of inner change that sets in motion healing connections (1990:25). According to De Bono, "One of the purposes of art is to help us stock our mind with further patterns" (1989:50). Art connects us with our feelings, with worlds and experiences outside ourselves, and with life and people outside our circumstances. Art establishes relationships. This makes the extensive use of art in the building appropriate and the design should accommodate it.

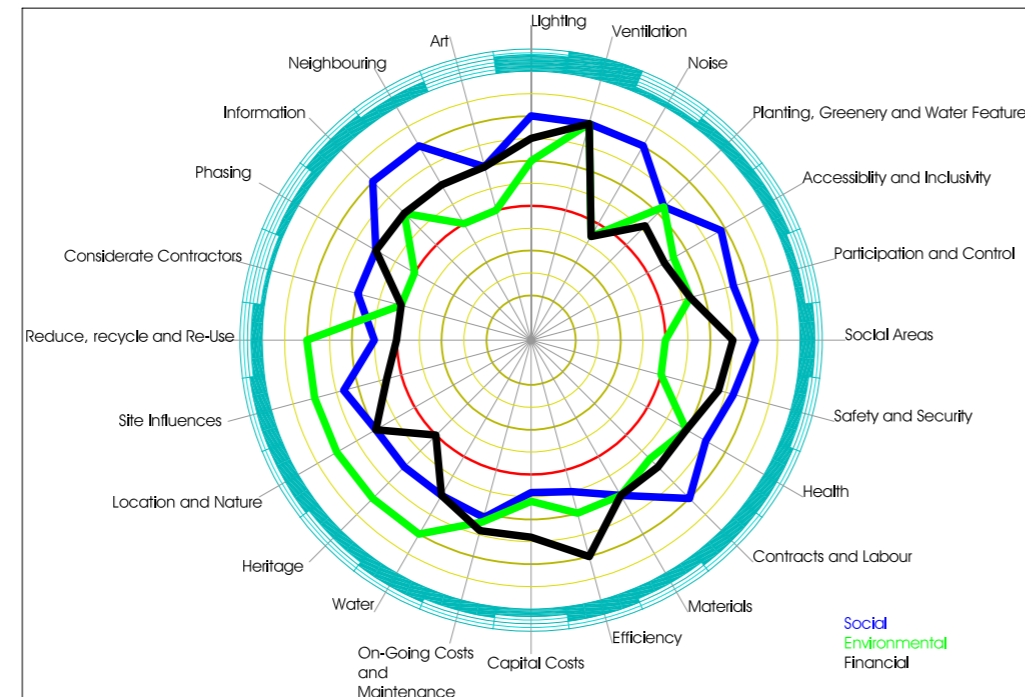
7.) Table quantifying priorities for baseline issues

The table indicates the different issues given in the baseline document. To each aspect a value is accorded, indicating whether it is beneficial (>0 to 2), detrimental (<0 to -2) or neutral (0) to the economic, environmental or social aspects.

These three aspects are totalled up to provide a priority. The higher the priority, the more important this particular technique is.

Each heading is allocated the average values for the items under it.

Fig. 2.21. Baseline graph. The graph indicates the influence each decision (on the outside of the wheel) has on environmental, social and financial aspects. The red circle is the zero-line: anything inside has a detrimental effect, anything outside is positive. The outer blue circle indicates the priority of each decision as a total of the priorities in social, environmental and financial aspects.



Item	Relative cost				Priority
	Economic	Environmental	Social	Priority	
1	Occupant Comfort				
1.1	Lighting				4.50
1.1.1	2	2	2	6	
1.1.2	1	0	2	3	
1.2	Ventilation				6.00
1.2.1	2	2	2	6	
1.2.2	Water features and gardens (see 1.6.2)				
1.3	Noise				1.33
1.3.1	-1	-1	2	0	
1.3.2	0	0	2	2	
1.3.3	0	0	2	2	
1.4	Planting, greenery and water features				3.00
1.4.1	1	1	1	3	
1.4.2	0	1	2	3	
1.4.3	0	0	2	2	
1.4.4	Wildlife (See 5.3.3)				
1.4.5	1	2	1	4	
1.4.6	1	2	0	3	
1.5	Accessibility and inclusivity				3.00
1.5.1	1	2	2	5	
1.5.2	2	1	2	5	cost savings

1.5.3	Cyclists	2	2	2	6	
1.5.4	Childcare	0	0	2	2	
1.5.5	Financial Services	0	0	1	1	
1.5.6	(Dis)ability Considerations					
1.5.6.1	Changes in level	-1	0	2	1	
1.5.6.2	Toilets	-1	0	2	1	
1.5.6.3	Obstructions	0	1	2	3	
1.5.7	Multi-Culturality	1	0	2	3	
1.6	Participation and Control				2.00	
1.6.1	Meditation Spaces and Offices	1	2	2	5	
1.6.2	Comfort Experimentation	0	-1	0	-1	
1.6.3	General Areas	1	1	0	2	
1.7	Social Areas				3.50	
1.7.1	Circulation Spaces	2	0	2	4	
1.7.2	Amenities	1	0	2	3	
2	Welfare					
2.1	Safety and Security				3.00	
2.1.1	Entrances	1	0	1	2	
2.1.2	Good Neighbouring	1	0	2	3	
2.1.3	Safety Issues	2	0	2	4	
2.2	Health				3.50	
2.2.1	Emergency	1	0	2	3	
2.2.2	Smoking	1	2	1	4	
3	Local Economy and Financial Aspects					
3.1	Contracts and Labour				3.75	
3.1.1	Local Contractors	1	1	2	4	
3.1.2	Small and Medium Enterprises/ Emerging Contractors	0	0	2	2	

Baseline Criteria

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Baseline Criteria

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