Introduction to the brief

Specifications for Zone-A:

1. Conference center (to be designed conceptually)
2. Amphitheater (to be designed conceptually)
3. Jamaat Khana (to be designed conceptually)
4. Cultural exhibition center (to be designed in detail)
   A. In terms of functional requirements
   B. In terms of the overall framework
   C. In terms of space, form and character
   D. In terms of more technical aspects
   E. In more cultural terms
   F. In terms of a general overview

Overall framework criteria applicable to Zone-A

Accommodation schedule
Introduction to the brief:
For the purposes of a proposal to the client, a generalized framework for Zone-A should be presented. (Please refer to Section A, Component one, Category-8, pg. 11, for more details). From the required four structures of this zone, the Cultural Exhibition Center should be given priority, and designed in detail. Its relationship to the generalized framework should be carefully analyzed and suitably incorporated into the scheme.

Specifications for Zone-A:
Zone-A should consist of the following four structures, and adequately cater for their functional requirements, as depicted below:

1. **Conference Center:** (To be designed conceptually)
   - Should be in close proximity to the client’s house
   - Should cater seating for 600 people
   - Should provide an eating hall for 600 people within the same structure, or a structure adjacent to it.
   - The preparation and services area of the dining hall should be allocated within the boundaries of the client’s personal dwelling area, since the client wishes to personally manage this component of the proposed development.
   - Should have independent services areas for both itself and the dining hall areas respectively.

2. **Amphi-theatre:** (To be designed conceptually)
   - Should cater seating for 400 people
   - Should have a scenic backdrop
   - Should accommodate its own services areas
   - Should relate to the conference center

3. **Jamaat-khana:** (To be designed conceptually)
   - Should be centrally located to all three zones
   - Should cater for both males and females separately
   - Should accommodate its own services area

**Definition of a Jamaat Khana:**
A Jamaat Khana essentially has the same functions as a Mosque. The difference is usually attributed to the level of responsibility each one adopts:

- A Mosque essentially carries a lot of responsibility. Once a structure or piece of land is declared a Mosque, then that structure or land can never have another purpose. It is bound by Islamic law that the Mosque is the property of Allah, and will be the responsibility of the community to ensure that it remains a Mosque. However, a Jamaat Khana, can be owned by private individuals and can also be converted to have another purpose, be it residential or commercial.

- A Mosque demands that five times daily prayers have to be performed. If the prayers are not performed, then the community will be held responsible for this, in view of the Shari’at. A Jamaat Khana is however not bound to this, and prayers can be performed whenever possible by the community. However, it would be preferable to have the five daily prayers performed in a Jamaat Khana as well.

- A Mosque is also bound to have people to sit in I’tikaaf. This takes place in the month of Ramadan, a holy month in the Islamic calendar, when it is necessary for at least one person of the community to stay in the Mosque for a period of a minimum of ten days. A Jamaat Khana is not bound to this, but it would be preferable for someone to perform the I’tikaaf.

- It is thus clear from the above that it would be safer to have a Jamaat Khana instead of a Mosque, because it is not yet certain whether the rights of a Mosque will be fulfilled by the proposed village. Once it is certain that the rights of a Mosque can be fulfilled, then it would be possible to declare the Jamaat Khana a Mosque.
4. Cultural exhibition center: to be designed in detail.

A. In terms of functional requirements:

1. In general:
   • An interactive general entrance foyer with an information desk for general queries
   • A special entrance foyer for the exhibition center proper, with an independent point of arrival
   • A small library in order to further illustrate explanations of the exhibition spaces in particular. The library should comprise of:
     - An entrance lobby
     - A reception area for the library staff
     - A storage area for files and records
     - Services for staff and library users
     - A reading area
     - An informal lounge area
     - A room to cater for thirty people seated. This room could have a multi-purpose function of being a computer room and a debating room.
   • A refreshment area, preferably river-facing along the south western edge of the proposed structure
   • Adequate change room facilities for both staff and public requirements
   • Services rooms for general services and maintenance of the structure, as well as its for its immediate surroundings

2. Exhibition spaces, which should:
   • Introduce God from an Islamic perspective
   • Create a general understanding of the basic articles of the faith
   • Explain the fundamental aspects of the life of the Prophet Muhammad (SAW) in a series of spaces
   • Create a marked distinction or segregation between the spaces allocated to God, His noble Messengers, and the life of the Prophet Muhammad (SAW)
   • Characterize simplicity, abstractness, practicality and minimalism

3. Staff requirements, which should cater for:
   • A reception area
   • A small office area, which should have an outside link for maintenance staff to clock in
   • A small storage area for files and records
   • Services for staff

B. In terms of the overall framework:

1. Location and orientation:
   • Should be located in close proximity to the Jumaat-khana (almost similar to the function of a Mosque).
   • Should be centrally located along an axial route
   • Should have an overall link to the garden and amphitheater
   • Should be placed upon an easily identifiable route or axes upon arrival
   • Should aspire to adapt itself along the qibla axes

a quest of the spirit
C. In terms of space, form and character:

1. Geometry and the design rationale:
   - Geometry and geometric patterns should influence the overall design rationale, and geometry should take an architectural form.
   - The pure geometric forms of the circle, triangle and square should be used as the underlying grid to determine overall proportion, symbolism, meaning and scale.
   - Geometric forms should flow and relate to each other in a harmonious manner.
   - Rhythm and repetition of geometric forms should be implemented.
   - There should be an easy interrelation between the different elements employed in the design.
   - The structure and form of traditional activities should be preserved and reinforced by the architecture.

2. Height:
   - Height should only be used to portray an Islamic identity, such as in the case of minarets and domes.
   - In general, Islam promotes humility, therefore the structure should be kept low in height, with a maximum height restriction of three levels.
   - Adopting low-rise buildings would also avoid the utilization of lifts, which create complications and difficulties of energy and maintenance, and would further perpetuate a human-scale to the surroundings.

3. External facades and walls:
   - Should typically by characteristic of ‘wall’ architecture, and should therefore:
     - Be characterized by heavy external walls, thereby depicting a play with volume and mass. Massing is to be used advantageously to insulate the thermal environment thereby combating local climatic conditions.
     - Be designed from the inside, outwards: the external façade should be the product of an internalized design.
     - Exclude the external world, thereby enhancing an inward celebration of space.
     - Preferably be characterized by small glazed openings. In the event of larger glass spans, these should be in the form of strip-glass facades to enhance the lighting quality of the internal environment, or to create suction-pockets for better ventilation control.
     - Be bland, and preferably decorated with a regular geometric pattern, either in brickwork, cladding or plaster molding.
   - ‘Wall’ architecture is typically criticized for its hiding of structural elements. In the new spirit of Islamic form, there should be interplay of concealing structural elements via wall decoration, as well as revealing fundamental structural components, thereby creating a harmonious balance between the two.
   - Spaces required to interact with the external as well as internal environments, such as the refreshment area, should be adequately glazed to enhance inside-outside interaction. This might however adversely affect the overall theme of the ‘wall’ architecture, and therefore it should be implemented by carefully playing with massing and volumes, so as to further emphasize its stark contrast to the overall solid masses of wall.
   - Such type of glazing should preferably be done on the southern facades of the building, thereby creating a link with the view towards the river below.
   - Walls in general should be used to define spaces and critical axes in a manner to celebrate the qibla, or the making of ‘special’ places.
   - The use of arches should not be emphasized, but rather its repetitive spirit inducing rhythm into the design framework.

4. Circulation:
   - Within the general framework, the pathways leading towards the exhibition center are to be clearly identifiable upon arrival.
   - The general circulation route within the exhibition center to be simple and easily identifiable via a special floor finish.
   - As per classification of a Class C2 structure, the overall circulation within exhibition rooms to be approximately 10m² per person at minimum, (includes area for minimal displaying) (NAD, 2000).
• Circulation route should be disabled friendly

5. Gender:
• Since the exhibition center falls into the Zone A category, (the public belt), the exhibition center should welcome both males and females into the space, without any separation of the sexes. (Please refer to gender criteria for Zone-A, pg. ).
• If more stringent gender separation is later required by the local ulema, time slots should be allocated to separate the sexes.

D. In terms of more technical aspects:

1. Materials:
• Materials should preferably be of a renewable resource
• Local materials and construction methods should be adopted
• Specialized components locally not available, should be attained from the nearest possible distance, thereby reducing embodied energy levels.

2. Modular co-ordination should be implemented since:
• It promotes the Islamic heritage of rhythm and repetition
• It reduces costs
• It allows for easier construction and material specification
• It promotes flexibility in the overall design

3. The following should assist in enhancing thermal comfort:
• Architecture should be used as a means of controlling the environment
• Adequate ventilation systems, mechanically operable, and manually adjustable
• Appropriate material choosing and placement
• Strategically placed insulation especially on roof planes. The insulation properties of various materials should be exploited
• Appropriate sun control and strategically placed glazing and openings
• Strategic placement of hot and cold water sources.
• Evaporative cooling principles.
• Twenty-four hour monitoring of thermal environment via advanced thermal equipment and accessories, independently operable.
• Manual adjustments to the thermal environment should be easily operable and accessible.
• A thermal guidelines manual should be given to all staff in charge.

4. Ventilation:
• Passive ventilation systems should be adopted. Where necessary, passive systems should be assisted via mechanical means to ensure adequate ventilation.
• The use of low-energy air conditioning system to be implemented where mechanical means are required
• Mechanical equipment should be easily operable and accessible.

• A ventilation manual should be given to all staff in charge.
• The structure should be airtight, with access doors to open only upon arrival. Access doors to be electronically operable, or rotating doors should be implemented.

5. Use of technology:
• Technological equipment to be utilized to enhance overall sustainable usage in terms of long term energy savings, or considerably decreasing the energy cycle of the building
• The use of photovoltaic cells should be implemented
The use of exposed solar geysers should be implemented. The architecture should be technologically appropriate in terms of choice of materials and techniques of construction.

6. **Renewable energy sources**
   - Overall energy consumption to be reduced by using renewable energy sources as far as possible

7. **Space use**:
   - Spaces to be used more than 30 hours per week
   - Areas not in use should be shut down after hours
   - The ratio of the floor to external wall surface should not exceed 0.4. This would thereby enhance simplicity of design and the use of modulation and repetition in order to maximize floor space.

8. **Lighting quality**:
   - Natural lighting within the exhibition spaces to penetrate subtly, thereby creating a soothing atmosphere for contemplation and meditation of the spaces
   - Natural lighting penetration within the more public spaces to be brighter, thereby promoting interaction
   - Majority of the natural lighting source to be from the roof, thereby symbolically illustrating the countenance of God as the supreme source of assistance and guidance
   - Lighting from glazed facades should be in the form of small openings or large strip-glass spans. Larger glass spans, where needed, should typically be allocated along the southern facades, thereby allowing subtle daylight penetration
   - In order to promote maximum use of space, artificial lighting should create a striking atmosphere within the exhibition center, thereby promoting night visits, in order to experience the exhibition spaces in a uniquely different manner

9. **Sound**:
   - Sound should be used to further enhance the experience within the exhibition spaces
   - All forms of musical sounds should be avoided
   - Unwanted sound filtration towards the more conservative areas should be prevented via suitable buffers or distance, or via acoustics, or thick sound-repellent insulated walls, or double glazing and or double entrance doors, depending upon the location of the library in relation to the exhibition spaces.

10. **Furniture and fittings should**:
    - Be locally manufactured
    - Be made in parts, to allow for easy disassembling
    - Be of a hard-wearing nature and to be treated against wearing
    - Have low energy values
    - Be easily replaceable
    - Be easily recyclable
    - Opt for energy saving options such as low energy light fittings

11. **Toilet facilities**:
    - Toilets should not be allowed to face the qibla
    - Toilets to cater for both staff and public needs, as per building-type specifications
    - All sanitary fittings and fixtures to be of a hard-wearing nature
    - To be well ventilated passively, if possible. If this is not so, then to be mechanically ventilated
    - Paraplegic toilets to be located according as per NBR specifications

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12. Service areas
- Service blocks should as far as possible, align or juxtapose with each other, in order to minimize on wasted space and costs.
- Service areas not to be more than 20% of built structure
- To be independently and easily accessible
- To be guarded by surveillance camera and alarms
- To be discreetly tucked away
- To accommodate all technical elements
- To adequately cater for all services needs

13. Local aspects:
- “The history of Mosque development clearly reveals the open-mindedness of Muslims toward their architecture. They had synthetic attitudes and could accommodate to and integrate foreign influences. They made these foreign elements their own, and did not suffer from any conflicts.” (Lari: 1990).
- Local architecture should where possible and practical, be merged with traditional Islamic design concepts.
- The overall design and layout criteria should gain approval from the local community as well as from the local ulema
- The project should be aimed to be as labor intensive as possible
- Local contractors should be used as far as possible
- Repairs and maintenance to be given to local contractors as far as possible

14. Safety and security:
- Exhibition center and refreshment area to be accessible 24-hourly, with security at entrance and exit points only
- Entire structure to be under strict camera surveillance
- Library to have an adequate alarm system

15. Fire:
- Early fire detection system to be implemented. This would include early smoke detectors and fire alarm, operable on a back-up system in terms of workability and electrical supply
- Ventilation system to adequately conform to standard fire regulations criteria, thereby allocating for smoke extracting in the event of a fire.
- Fire hoses and hydrants to be implemented as per standard fire regulation criteria
- Escape routes to be within allowable distance as per standard fire regulation criteria
- Sprinkler system to be avoided, (in order to minimize costs), via the compartmentalization of fire zones, where possible.

16. Water:
- Water should be used to further enhance the surroundings
- Water bodies to be constantly in motion, by the usage of fountains and jets, in order to prevent stagnation, and to create a pleasant environment.
- The use of borehole water should be incorporated in conjunction with local municipal supply, which will serve as a backup system
- All rain water to be efficiently collected and stored. Access rainwater to be channeled along natural water course, terminating at the bank of the river
- Low-water pressure systems to be installed to all appliances
- Water pipes should be strategically placed to efficiently cater for cold and hot water demands, and to play a role in thermal comfort
- Hot water storage to be strategically placed, within well-insulated black tanks, and exposed direct sunlight should be adopted, thereby reducing energy levels to heat water.
- Exposed, black solar geyser
E. In more cultural terms the exhibition center should:

- be as a bearer of meaning – link between man and God via faith
- be as a fountain and treasure of knowledge
- be as a synthesizer of collective identity
- be a system of human development
- serve as a guide to society
- become a place of cultural importance - to become a traditional center of pilgrimage
- as a landmark, generate a sense of pride; the message it conveys must be comprehensible to be understood; its functions must be coherent to be efficiently discharged; and the need it fulfills must be one which the population actually feels.

F. In terms of a general overview:

"All Muslim societies would like to achieve the spiritual and physical continuity of their traditional, present and future man-made environments. This cannot be achieved by copying past and traditional concepts or forms, or by completely breaking away from tradition and interpreting entirely new concepts using ultra-modern jargon – it can only be achieved by addressing ourselves to a more in depth philosophy, simple and clean like Islam itself, and by incorporating into the vital aspects of this tradition the new technological innovations of today." (Lari: 1990).

- Surface treatment should be applicable so as to de-materialize buildings through decoration and thereby deny the building as an icon or idol.
- Islam discourages excessive expenditure on buildings and encourages the judicious use of resources.
- A passive energy-conserving design should be implemented.
- There should be an overall respect for a human scale.
- There should be some form of historical and spiritual continuity.
- The architecture should be ecologically appropriate; embellish and reinforce the natural context; be energy-conserving and climatically sensible.
- The misinterpretation of what is ‘Islamic’ in architecture should be remedied.
- Outer shells using pseudo-Islamic motifs such as pointed arches should be avoided. Thus “instant-Islamic” architecture, (an architecture created by the mere application of certain elements on the facades), should be avoided.
- The essence of Islamic culture should be seen in its basic principles and spiritual conception, more than in the application of traditional artistic forms.
- A search for unique, yet traditional form should be aspired for.
- An excessive usage of architectural vocabulary could be misconstrued as a stifling orthodoxy of elements and should thus be avoided.
- The traditional architectural character should be respected and should not be demeaned by a mindless replication of details.
- As in traditional Muslim architecture, each component should be a part of the whole. As a holistic aesthetic, the geometry of the total plan, each building, each unit and each garden should be a variation of the basic geometry in keeping with the Islamic ethic and the past. Thus an impressive form and organization of the scheme as an intrinsic whole should be implemented.
- Simplicity of the architectural system and spatial organization should be implemented.
- Muslim tradition in form, materials and geometry should be taken into account.
- The aim to display a new Islamic character and spirit should be aspired towards.
- Local forms should perpetuate new meanings to the Islamic spirit.
- Respect and harmony with the past should act as a fundamental guide.
- Modernization of Islamic elements should be done in the spirit of being “sensitive in creating new forms that suit the new materials without losing touch with the established tradition, preserving the implicit and not overlooking the same spiritual and social virtues or the cultural values as in the past.” (Longetieg: 1985).
- The sacred and the mundane should be integrated through continuity and juxtaposition, yet differentiated by the character of space and form.
Simplicity, adaptability, participation, continuity, equality and a sense of stability should be implemented.

The architecture should portray simplicity and anonymity, and solutions designed with humility

The architecture should be expressive and understandable to all. It should employ a form of language which for immigrant Muslims evokes a sense of belonging in their present and hope in their future. To indigenous Muslims it should present a linkage with Muslims from other parts of the world, and should underscore the universality of Islam. To non-Muslims it should take the form of clearly identifiable buildings which are inviting and open, or at least not secretive, closed and forbidding.

The Qur’an preaches simplicity, a moderate social life, equity in public life, privacy, respecting religious ideals and obligations, and proper maintenance. The architecture should be characterized by simple structures, with moderate finishes and levels of comfort aspiring towards local Islamic injunctions, thereby portraying:

- “Unity as its existence: one God, one Truth;
- The Qur’an as its message;
- The Prophetic traditions and Islamic law as its path.” (Lari: 1990).

Overall framework criteria applicable to Zone-A:

1. Parking requirements:
   - Adequate drop-off zones and provision for tourist busses to be implemented
   - Adequate parking bays to cater for entire cultural village
   - Catering for paraplegic parking as per regulation
   - Parking area to be either bordered by a belt of vegetation, or one in every three parking bays to have a vegetation box.

2. Approach:
   - The approach should be easy to understand, and should be characterized by easily identifiable axes, characterized by covered pathways or specified floor finishes
   - Major axial routes should preferably be allocated to provide easy circulation and access to the various components
   - An emphasis primarily towards the exhibition center should be distinguishable, with easily identifiable subsidiary branches to the Jamiat Khana should be implemented

3. Geometry:
   - The entire framework should be based upon a harmonious geometric layout so as to imbue a link to tradition
   - The geometry should be informed by the site and the basic requirements of the brief, and should not be forced onto the site

4. Qibla
   - A major axial route should preferably be allocated along the qibla axes
   - All structures are to relate or orientate themselves to the qibla axes
   - Other major routes to orientate themselves perpendicular or parallel to the qibla axes
   - The qibla axes should be easily identifiable and suitably punctuated across the site
5. Hierarchy
- A hierarchy of the structures should be implemented, with primary importance given to the Cultural Exhibition Center and the Jamaat Khana, and secondary importance given to the amphitheatre and conference facilities.
- A hierarchical sequence should be implemented, taking the user through a procession of spaces.

6. Existing excavation
- The existing excavation currently on the north western sector of the site should be suitably incorporated into the scheme. (Please refer to Section B, pg for more details)

7. Pathways and circulation
- A definite grid of geometric pathways should be implemented to cater for easy public circulation.
- Easy circulation in different directions should be implemented.
- All circulation routes and overall access to accommodate paraplegics.
- Suitable resting points to be allocated along route, with water and waste disposal provisions.

8. Water and Electrical supply; sewage and wastes:
- (For the above categories, please refer to the details already outlined in Section-B, pg’s 10-11).

9. Landscape inputs:
- General landscape layout to be determined in proposed framework.
- Landscaper to design detailed character of landscape.
- Existing indigenous fauna and flora to be preserved. Where plants are removed due to construction purposes, these should be strategically planted elsewhere within the site parameters.
- New plants to be of an indigenous, low-water-requirement type.

10. Safety and security
- Local people should be employed.
- Strategically placed open spaces would assist in security.
- Adequate location of surveillance cameras.
- Adequate security at entrances.
- Adequate boundary security.
- Twenty-four hour, independent surveillance crew.

11. Eco-systems:
- The biodiversity of the area is to be further preserved by:
  - Disturbing the natural site as little as possible during the construction process.
  - Carefully monitoring construction and construction wastes.
  - Creating more green spaces so as to further encourage new eco-systems in the area.

12. Water use and ethics:
- Water should be used to further enhance the surroundings.
- Water bodies to be constantly in motion, by the usage of fountains and jets, in order to prevent stagnation, and to create a pleasant environment.
- The use of borehole water should be incorporated in conjunction with local municipal supply, which will serve as a backup system.
- All rain water to be efficiently collected from all structures, stored, and utilized in watering the gardens.
- Minimize storm water runoff by using absorbent surfaces so as to maximize ground water. Hard surfaces to be at a minimal.
• French drains and servitudes to be implemented
• Paving should take precedence over concrete or tar, so as to allow for water penetration where applicable

13. Viewing: Framework
• A general grading of views should be implemented, thereby enhancing junctures of arrival.
• Strategic viewing platforms should be implemented.
• Viewing towards restricted areas should be prevented by the use of screens, stone walls and trees.
• Axial visual access should be selectively admitted or denied, and integration with nature would be required.

14. Gender:
• For the framework of Zone-A in particular, the zone should be open to both sexes, in order to promote easy interaction with other cultures.
• The gender separation for the other zones should be enforced in light of the Shari'at, but these sectors fall out of the scope of the brief, and therefore deem no further explanation.

15. Garden maintenance strategies to be implemented:
• Special emphasis on gardens as places for entertainment should be adopted
• A processional route through the main garden should be clearly demarcated and implemented.
• A precisely geometrical layout of the garden area should be implemented in keeping with the importance of geometry within Islamic philosophy.
• A hierarchy of garden spaces should be created, based upon the above-mentioned geometry.
• Garden areas should be defined by containing them via the usage of stone, vegetation, water and other natural elements.
• Large garden areas and dense greenery should be implemented and incorporated throughout the scheme.
• Rain water is to be utilized in the maintenance of the garden areas.
• A sprinkler system based upon passive pressure techniques should be implemented
• The monthly water supply from the dam, together with the collected rain water should be the only water used for the maintenance of the garden.
• Since most of the alien vegetation has already been removed by the council due to the recent floods in the area, the problem of removing alien vegetation has been mostly resolved. New plants introduced should be of an indigenous nature.
• Plants and trees deemed necessary to uproot due to planning and building constraints should be replanted in other suitable areas of the site.
• New plants of an indigenous nature with low water requirements should be implemented

16. In relation to structures:
• The design should incorporate a hierarchy of spaces, elements and forms
• Traditional cultural values should be the essence of place-making
• The concept of a variety of building shapes and sizes which relate to the character of the land, to the content of the buildings and the urban fabric should be implemented.
• A rhythm and flow of spaces between buildings should be implemented
<table>
<thead>
<tr>
<th>Spatial entity</th>
<th>Number of spaces</th>
<th>Norms and standards</th>
<th>Determining space size</th>
<th>Area per m²</th>
<th>Unit Total</th>
<th>Overall Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>General entrance foyer (100 people)</td>
<td>1</td>
<td>Assume 5m² per person at min.</td>
<td>100 x 5</td>
<td>500m²</td>
<td>500m²</td>
<td>500m²</td>
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<tr>
<td>Small library:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>• Entrance lobby</td>
<td>1</td>
<td>Assume 10m² / Total capacity / (Hours = 78 / 8 = 10m²)</td>
<td></td>
<td>10m²</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Reception area (2 people)</td>
<td>1</td>
<td>Assume 15m² per person (including service areas)</td>
<td>15 x 2</td>
<td>30m²</td>
<td>30m²</td>
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</tr>
<tr>
<td>• Storage - records</td>
<td>1</td>
<td></td>
<td>3 x 2</td>
<td>6m²</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Reading area (30 people)</td>
<td>1</td>
<td>1.5 - 2m² per person (allow for fixtures and fittings) - (NAD, 2000)</td>
<td>30 x 2</td>
<td>90m²</td>
<td>90m²</td>
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<tr>
<td>• Informal lounge area (15 people)</td>
<td>1</td>
<td>2.3m² per person at min. (NAD, 2000)</td>
<td>15 x 2.3</td>
<td>34.5m²</td>
<td>34.5m²</td>
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<td>• Seminar room (30 people)</td>
<td>1</td>
<td>3m² per person (NAD, 2000)</td>
<td>30 x 3</td>
<td>90m²</td>
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<tr>
<td>• Toilets: (10 people)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>9.6m²</td>
</tr>
<tr>
<td>o Men</td>
<td>1</td>
<td>1 water closet; 1 hand basin</td>
<td></td>
<td>3.2m²</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o Women</td>
<td>1</td>
<td>1 water closet; 1 hand basin</td>
<td></td>
<td>3.2m²</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o Disabled</td>
<td>1</td>
<td></td>
<td></td>
<td>3.2m²</td>
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<td></td>
</tr>
<tr>
<td>• Store / Maintenance</td>
<td>1</td>
<td>2 x 2</td>
<td></td>
<td>4m²</td>
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<td>4m²</td>
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<tr>
<td>Refreshment area:</td>
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<td>197.7m²</td>
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<td></td>
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<tr>
<td>• Customer service area (50 people)</td>
<td>1</td>
<td>2.3m² per person at min. (NAD, 2000)</td>
<td>50 x 2.3</td>
<td>115m²</td>
<td>115m²</td>
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<tr>
<td>• Staff area</td>
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<td></td>
<td>3m²</td>
<td></td>
<td></td>
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<tr>
<td>• Storage area</td>
<td>1</td>
<td></td>
<td></td>
<td>15m²</td>
<td></td>
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</tr>
<tr>
<td>• Toilets: (60 people)</td>
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<td>38.7m²</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o Men</td>
<td>1</td>
<td>3 water closets; 3 urinals; 3 wash hand basins (SABS, 1990)</td>
<td></td>
<td>17.5m²</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o Women</td>
<td>1</td>
<td>5 water closets; 3 hand basins (SABS, 1990)</td>
<td></td>
<td>18m²</td>
<td></td>
<td></td>
</tr>
<tr>
<td>o Disabled</td>
<td>1</td>
<td></td>
<td></td>
<td>3.2m²</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Store / maintenance</td>
<td>1</td>
<td>(To cater for building as well as surrounding environment)</td>
<td></td>
<td>20m²</td>
<td></td>
<td>20m²</td>
</tr>
</tbody>
</table>
## Schedule of Accommodation

<table>
<thead>
<tr>
<th>Spatial entity</th>
<th>Number of spaces</th>
<th>Norms and standards</th>
<th>Determining space size</th>
<th>Area per m²</th>
<th>Unit Total</th>
<th>Overall Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exhibition Center proper:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3916.7m²</td>
</tr>
<tr>
<td>• Entrance foyer</td>
<td>1</td>
<td></td>
<td>6 x 5</td>
<td>30m²</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Reception area</td>
<td>1</td>
<td></td>
<td>10m²</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Staff office area</td>
<td>1</td>
<td></td>
<td>4 x 3</td>
<td>12m²</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Store-records</td>
<td>1</td>
<td></td>
<td>3 x 2</td>
<td>6m²</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Toilets (60 people)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>36.7m²</td>
</tr>
<tr>
<td>• Men</td>
<td>1</td>
<td>3 water closets; 3 urinals; 3 wash hand basins (SABS, 1990)</td>
<td></td>
<td>17.5m²</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Women</td>
<td>1</td>
<td>5 water closets; 3 hand basins (SABS, 1990)</td>
<td></td>
<td>18m²</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Disabled</td>
<td>1</td>
<td>3.2m²</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exhibition spaces (10 people)</td>
<td>10</td>
<td>20m² per person at minimum (includes minimal display units) (SABS, 1990)</td>
<td></td>
<td>3800m²</td>
<td></td>
<td>3800m²</td>
</tr>
<tr>
<td>General storage / maintenance</td>
<td>1</td>
<td>(To cater for building as well as surroundings)</td>
<td>5 x 4</td>
<td>20m²</td>
<td></td>
<td>20m²</td>
</tr>
</tbody>
</table>

**Sub-total**                           | 4888.5m²         |
**Plus 14% circulation**                | 684.4m²          |

**Total**                               | 5572.9m²         |

(please refer to section 1 for an explanation to the number of expected occupants within the exhibition space proper)