

PROJECT GOAL & SCOPE

The vision for Pretoria should be to build a City for all, a City in which no- one is left out. The objective of this thesis is to achieve integrated and efficient land use. The emphasis that planning is not only about physical development but also socio- economical institutional and environmental aspects must also be considered. It is important to create opportunities for people to live close to job opportunities. The area around the chosen site is full of job opportunities as it is located within the inner city, which is well connected with areas around the city. It is necessary to take cognisance thereof that resource are limited and that the best possible use must



Figure 5 -1

be made of investments regarding land developments. In other words where existing infrastructure can be shared to facilitate new developments it should be done. Infrastructure is present for this development, such as roads, transportation, sewer, water and electricity and no new infrastructure needs to be added. A further objective is to move away and discourage dispersed low- density urban sprawl. The infill nature of this development makes this accord with the objective of the development. The proposed development must be viable to last in the long term from a physical, social and economical perspective in contrast to most of the hotel developments in and around the city of Pretoria. As a baseline criteria the Sustainable Building Assessment Tool (SABT) will be used to measure the successes of the project. One of the main goals, to a large extent, is to be self-sufficient and not to place unreasonable demands on the capacity on the local authority over the long term. It will also try to reduce the need for car journeys and increase the competitiveness and attractiveness of urban centres against peripheral developments.

It is clear that the proposed land use as set out in the problem statement is necessary and that the development of a luxurious hotel will contribute to tourism and the enhancement of job opportunities as well as achieving a high level of wellness in the area. This will stimulate economic growth in and around the area because of the output it provides to the city in the end.

CLIENT

The intended client would be one of the main hotel groups, national or international that will be interested in becoming the stakeholder of the property as well as the development on the remaining portion of Sammy Marks Square in Pretoria's inner city. They can make decisions around the hotel involving different investors to buy or rent from them.

- This can include offices for embassies where different nationalities can be approached to have the luxury of owning or renting space in this new international hotel development within the CBD of Pretoria.
- The new trend in hotel business can be followed and that is to sell apartments to the public and give them the option to live there or to rent it out on a timeshare basis. This will give the public the chance to own accommodation in the hotel which will create public interest in the hotel.
- Establishing relationships with surrounding hospitals and travel agencies (for international visitors who find it a lot cheaper for operations in South Africa than in their own countries) for patients to be recuperated from nearby hospitals after as well as accommodating them before operations.

BASELINE REQUIREMENTS

DESIGN CHALLENGES

- Separate different layers of activities and movement- to fluently co-ordinate them as a whole.
- To allow for separate circulation for different functions and people.
- To integrate horizontal and vertical circulations well as services.
- To accommodate the existing column layout into the structure of hotel keeping in mind robustness and adaptability for future users.
- Creating panoptical spaces where people will feel secure through observation from the public; security through observation and activity
- Integrating the public into the design by moving the hotel reception higher up into the development preventing another island type of building.

- Encourage diversity and interaction of users.
- Respecting historic buildings and landmarks by having a greater understanding of the surrounding context.
- To accommodate the movement and functions of neighbouring buildings.
- To design a hotel of international standards.
- To design the East and Western facades to be attractive while preventing unwanted heat gain.
- Improve the street edge
- To have an architectural character and scale that is suitable for the CBD and the surrounding context.

1 Performance Prioritisation

Refer to site analysis, brief and client / Builder User Priorities

	Criteria	No Requirement 1	Low Requirement 2	Medium Requirement 3	High Requirement 4	Essential 5
SO	Social					
SO1	Occupant Comfort					X
SO2	Inclusive Environments				X	
SO3	Access to Facilities				X	
SO4	Participation and Control			X		
SO5	Education Health and Safety				X	
EC	Economic					
EC1	Local Economy			X		
EC2	Efficiency of Use					X
EC3	Adaptability and Flexibility				X	
EC4	Ongoing Costs				X	
EC5	Capital Costs			X		
EN	Environmental					
EN1	Water				X	
EN2	Energy				X	
EN3	Waste				X	
EN4	Site			X		
EN5	Materials and Components				X	

Table 5 -1 Performance Prioritisation

Target Setting

Refer to site analysis, brief and client / Builder User Priorities		
	Criteria	Target Set
SO1	Occupant Comfort	
SO.1.1	Ventilation	Large openings with cross ventilation
SO.1.2	Thermal Comfort	High Mass
SO.1.3	Views	Maximum views for Public & private Spaces
SO.1.4	Indoor / Outdoor connection	Gradual transition-integrate natural environment
SO2	Inclusive Environment	
SO.2.1	Transport	Centralised Transport Access
SO.2.2	Entrance	Civic space
SO.2.3	Circulation	Hierarchal
SO.2.4	Public Space	Integrated and Defined Public Space
SO3	Access to Facilities	
SO.3.1	Childcare	Maintain
SO.3.2	Culture	References to cultural history
SO.3.3	Retail	Dual: Formal & Informal System
SO.3.4	Communications	Public Space
SO.3.5	Work / Residential	Integrated-not segregated
SO4	Participation & Control	
SO.4.1	Environmental Control	Community Participation
SO.4.2	Training	Developmental
SO.4.3	Social Spaces	To a high degree
SO.4.4	Amenity	Of a high quality
SO.4.5	Local Community	Control entirely local
SO5	Education, Health, Safety	
SO.5.1	Education	Multi-use facilities
SO.5.2	Safety and Security	Passive Surveillance
SO.5.3	Information	Easy access, INC. existing library
SO.5.4	Health	4 Pillars of wellness
SO.5.5	Recreation	Integrate into Defined Public Space
EC1	Local Economy	
EC.1.1	Local Contractors	Skills training for community
EC.1.2	Local Building Material	Use site Specific / lowest cost
EC.1.3	Local Components	Recycle
EC.1.4	Repairs & Maintenance	Community Responsibility
EC.1.5	SMME support	Initiate community based projects

EC2	Efficiency of Use	
EC.2.1	Space Use	Medium Density Development
EC.2.2	Occupancy Schedule	Hotel & Mixed Use
EC.2.3	Management of Space	Multi-Purpose and Mixed Used
EC.2.4	Use of Technology	Active & Passive Systems of highest standards
EC3	Adaptability & Flexibility	
EC.3.1	Vertical Dimension	Lower floors- Public; higher floors- Private
EC.3.2	Internal Partitions	Few
EC.3.3	Structure of settlement	Specific boundaries
EC4	Ongoing Costs	
EC.4.1	Maintenance	Community based & labour intensive
EC.4.2	Cleaning	Individual Delegation
EC.4.3	Security / care taking	Optimal
EC.4.4	Shared Costs	Investments- Hotel, offices, retail, health
EC.4.5	Cost Monitoring	On a regular basis- Separately
EC5	Capital Costs	
EC.5.1	Use of Existing	Local Resources
EC.5.2	Shared Costs	Private Investments
EC.5.3	Capital: Cost Ratio	1:3
EC.5.4	Cost: Size Proportion	2:1 Shared Facilities & Reduce Materials
EN1	Water	
EN.1.1	Rainwater	Storage and irrigation
EN.1.2	Water Use	Personal- excluding irrigation
EN.1.3	Grey water	Recycled & filtered for irrigation
EN.1.4	Runoff	Gradual release
EN.1.5	Planting	Restricted exotics- inc. and match existing
EN2	Energy	
EN.2.1	Transport	Internal-Pedestrian, Long distance-vehicular
EN.2.2	Ventilation	Maximize natural potential
EN.2.3	Environmental Control	Passive systems
EN.2.4	Recycling	Low voltage; automated timers
EN.2.5	Renewable Energy Resources	Solar & thermal inertia
EN3	Waste	
EN.3.1	Organic Waste	Used for Fertilising etc.
EN.3.2	Inorganic Waste	Recycled and removed
EN.3.3	Toxic Waste	Removed from site- educate community
EN.3.4	Sewerage	Processed for reuse
EN.3.5	Construction Waste	Recycle and use

Table 5 -2 Target setting

EN4	Site	
EN.4.1	Brown field site	On a remaining portion of unfinished developm.
EN.4.2	Neighbouring buildings	Try as far as possible to incorporate
EN.4.3	Ecosystems	Conserve
EN.4.4	Landscape Inputs	Best practice
EN.4.5	Construction Processes	Local material and Labour
EN5	Materials & Components	
EN.5.1	Source	70% Local; 20% Recycled; 10% Other
EN.5.2	Embodied energy	Low: natural materials, raw state
EN.5.3	Manufacturing Process	Recycle & labour intensive
EN.5.4	Recycle & reuse materials	Yes
EN.5.5	Modular Coordination	Components designed for minimum space waste

SBAT Report

Develop with reference to 1. Performance Prioritisation and 2. Target Setting and Assessment (above)

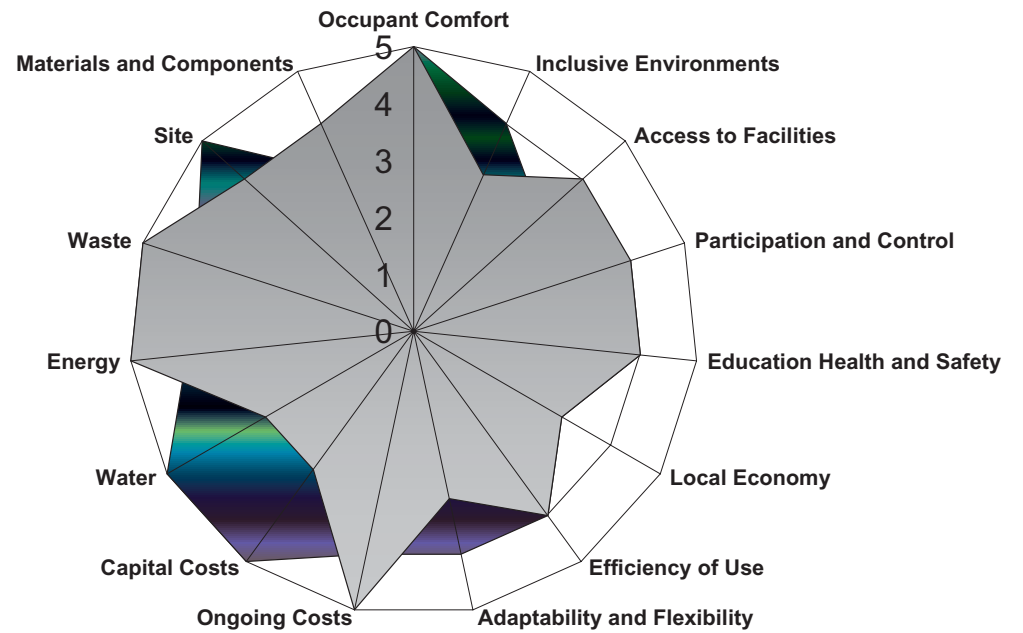


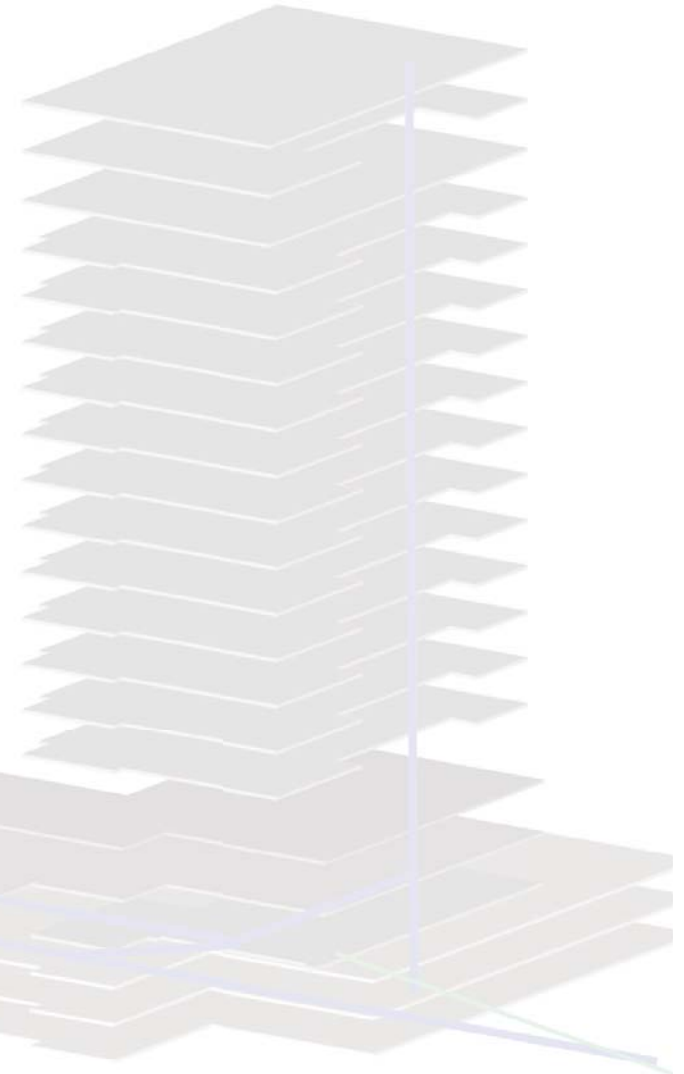
Figure 5 -2 SBAT Report

SCHEDULE OF ACCOMMODATION

Floor Level	Component	Facility	Function	Area
Basement 2	Mechanical & Electrical	Engineering	Ken fix-it Workshop and store	140m2
		Chillers plant		40m2
		Hot water generator & cylinders		72m2
		Sprinkler pump room. Transformer & switch room		61m2 160m2
	Parking	xx Bays		
Public	Lift lobby x2	Entrance to hotel & Restaurants	20m2	
Services	Service ducts Fire escapes x3 Service lobby	Services pipes/cables	16m2	

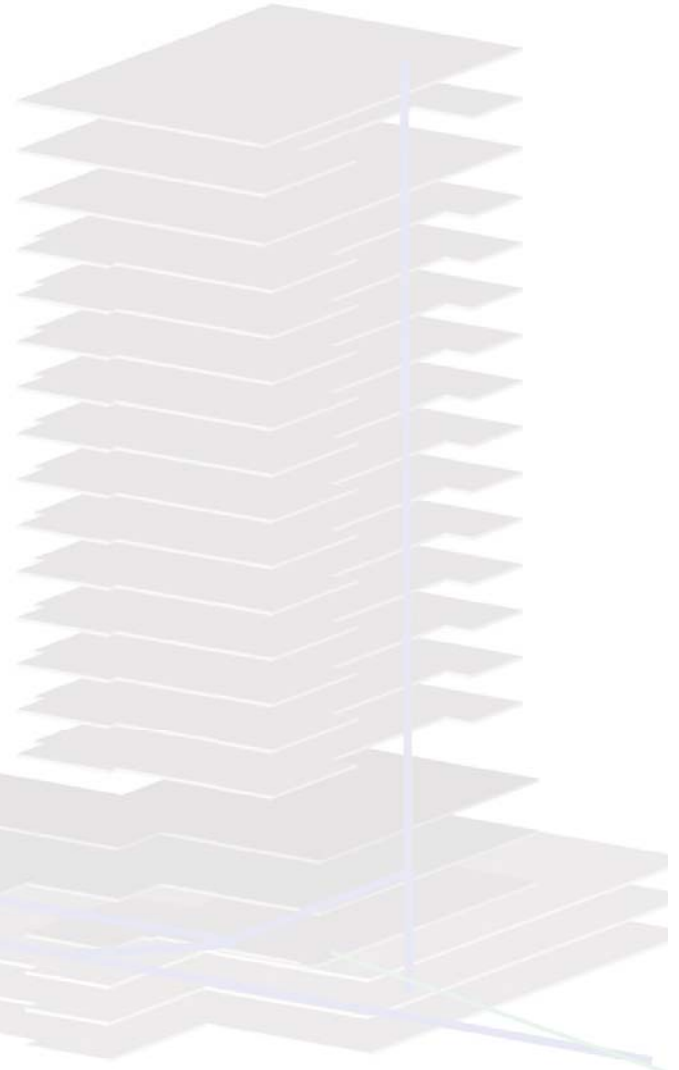
Floor Level	Component	Facility	Function	Area m2
Basement 1	Mechanical & Electrical	Plant room		35m2
		Water tanks		95m2
		Pump room		35m2
		Grease trap		6m2
	Parking	xx Bays		
	Public	Lift lobby x2	Entrance to hotel & Restaurants	20m2
	Services	Car rental & shuttle service Service ducts Fire escapes x3 Service lobby Store rooms		90m2 16m2 25m2

Table 5 -3 Accommodation schedule



Floor Level	Component	Facility	Function	Area m2
Basement- Mezzanine	Mechanical & Electrical	Plant room		35m2
		Air handling rooms		52m2
		Fan & Exhaust		20m2
		Grease trap		6m2
	Parking	xx Bays		
	Services	Service ducts		
		Fire escapes x3 Service lobby Store rooms		16m2 25m2
Food & Preparation & storage	Main Kitchen	Bulk food processing	210 m2	
		Store rooms inc. c/r & d/f	130m2	
	Pastry & Bakery	Bakery for hotel	55m2	
		Staff services	26m2	
Cafeteria Kitchen	F&B manager & chef	18m2		
	Offices			
Employees	Change rooms (m&f)		130m2	
			35m2	
	Bathrooms (m&f)	Offices for training	75m2	
		For staff & Contract workers	95m2	
Administration	Staff clock in & out	15m2		
	Cafeterias inc. ent. Rm.			
Support	Loading areas Garbage disposal Ramps	Deliveries, loading & offices	290m2	
		Waste compacting & storage	100m2	
		Ent & exit from basement	165m2	
Housekeeping & Laundry	Laundry production	Office, storage & production area for hotel linen	90m2	
		Housekeeping	25m2	
		Uniform issue	18m2	

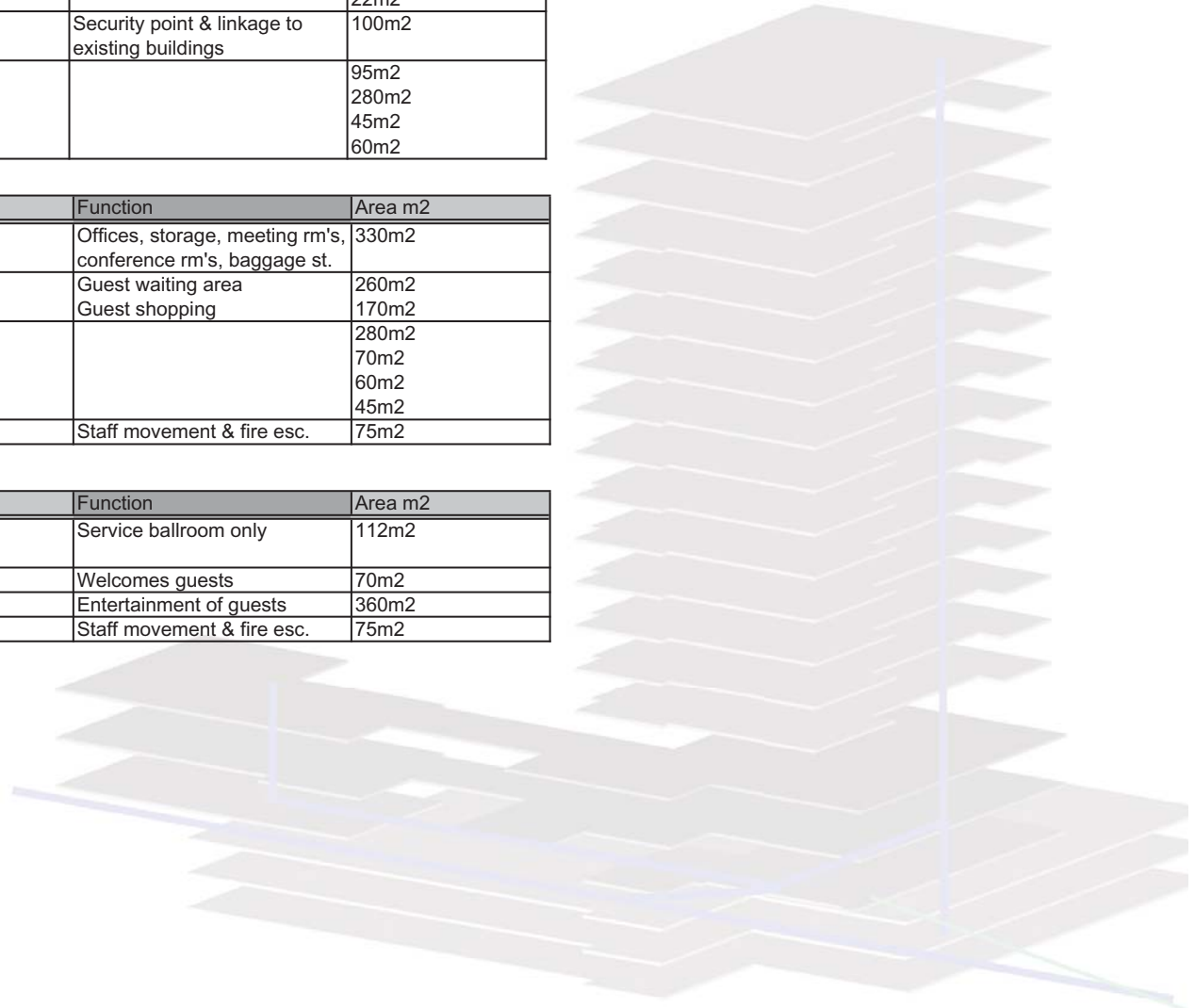
Floor Level	Component	Facility	Function	Area m2
Ground Floor Layout	Outdoor	Forecourt	Porte Cochere & parking	100m2
	Coffee shop			145m2
	Business centre	Pre- function Break away rooms Conference room Bathrooms (m/f)	Reception, foyer & exhibition	175m2
				45m2
				180m2
				72m2
	Service area & general public entrance	Entrances	Security point & linkage to existing buildings	100m2
	Public- hotel	Main foyer Reception check point Lobby		110m2
				30m2
			22m2	
Retail	Shops Offices	Public shopping	435m2	
		Staff work areas	45m2	
Entrance to restaurant	Lobby	Controlled entrance & exit	40m2	



Floor Level	Component	Facility	Function	Area m2
First Floor Layout	Business centre	Double volume		160m2
		Break away rooms		210m2
		Conference room		180m2
		Bathrooms (m/f)		72m2
		Lobby		22m2
	Service area & general public entrance	Entrances	Security point & linkage to existing buildings	100m2
Restaurant	Lounge		95m2	
	Dinning		280m2	
	Service kitchen		45m2	
	Bathrooms		60m2	

Floor Level	Component	Facility	Function	Area m2
Second Floor Layout	Support	Administration	Offices, storage, meeting rm's, conference rm's, baggage st.	330m2
	Public- hotel reception	Lounge	Guest waiting area	260m2
		Shops	Guest shopping	170m2
	Restaurant	Dinning		280m2
		Bar & seating		70m2
Bathrooms (m/f)			60m2	
Service kitchen			45m2	
Service area	Service lobby	Staff movement & fire esc.	75m2	

Floor Level	Component	Facility	Function	Area m2
Ballroom Layout	Food & Preparation & storage	Service kitchen	Service ballroom only	112m2
	Entrance foyer	Reception	Welcomes guests	70m2
	Seating & dance area	Function space	Entertainment of guests	360m2
	Service area	Service lobby	Staff movement & fire esc.	75m2



Floor Level	Component	Facility	Function	Area m2
Guest Room Floors	Guest room types	Single	1 Bay	36m2
		Double	1 Bay	72m2
		Handicapped	1 Bay	36m2
	Suites	Duplex suites	One per floor	72m2
		Presidential	2	170m2
	Support	Housekeeping	Storage per floor	18m2
		Passenger lobby/ floor		30m2
		Guest foyer/ floor		55m2
		Service lobby/ floor		42m2
		Service shafts/ floor		15m2

Floor Level	Component	Facility	Function	Area m2	
Gym and Wellness Centre	Gym x2	Bathrooms (m/f)	Change rooms & toilets	115m2	
		Pool lounge	Drinks	90m2	
		Entrance foyer		65m2	
		Gym area- equipment		355m2	
		Offices	Staff	55m2	
	Wellness	Health bar			100m2
		Entrance foyer			60m2
		Aerobics			65m2
		Store rooms			30m2
		Wellness Centre	Mass. Rm's., staem rooms, changing rooms, toilets		310m2
	Service area	Service lobby	Service & general public ent.		80m2

