SPINE & BRAIN DISEASE REHABILITATION WELLNESS CENTRE

KAKKANAD, KOCHI, KERALA

Location: The proposed site is located in Infopark, Smart city situated in Kakkanad, Kochi in Kerala.

Access: The major access to the site is from the Infopark Expressway from the Seaport - Airport Road.

Geographical location: Latitude:10°0'4.29"N ; Longitude:76°21'44.85"E

Climatic Conditions:

Climate: Tropical monsoon climate.

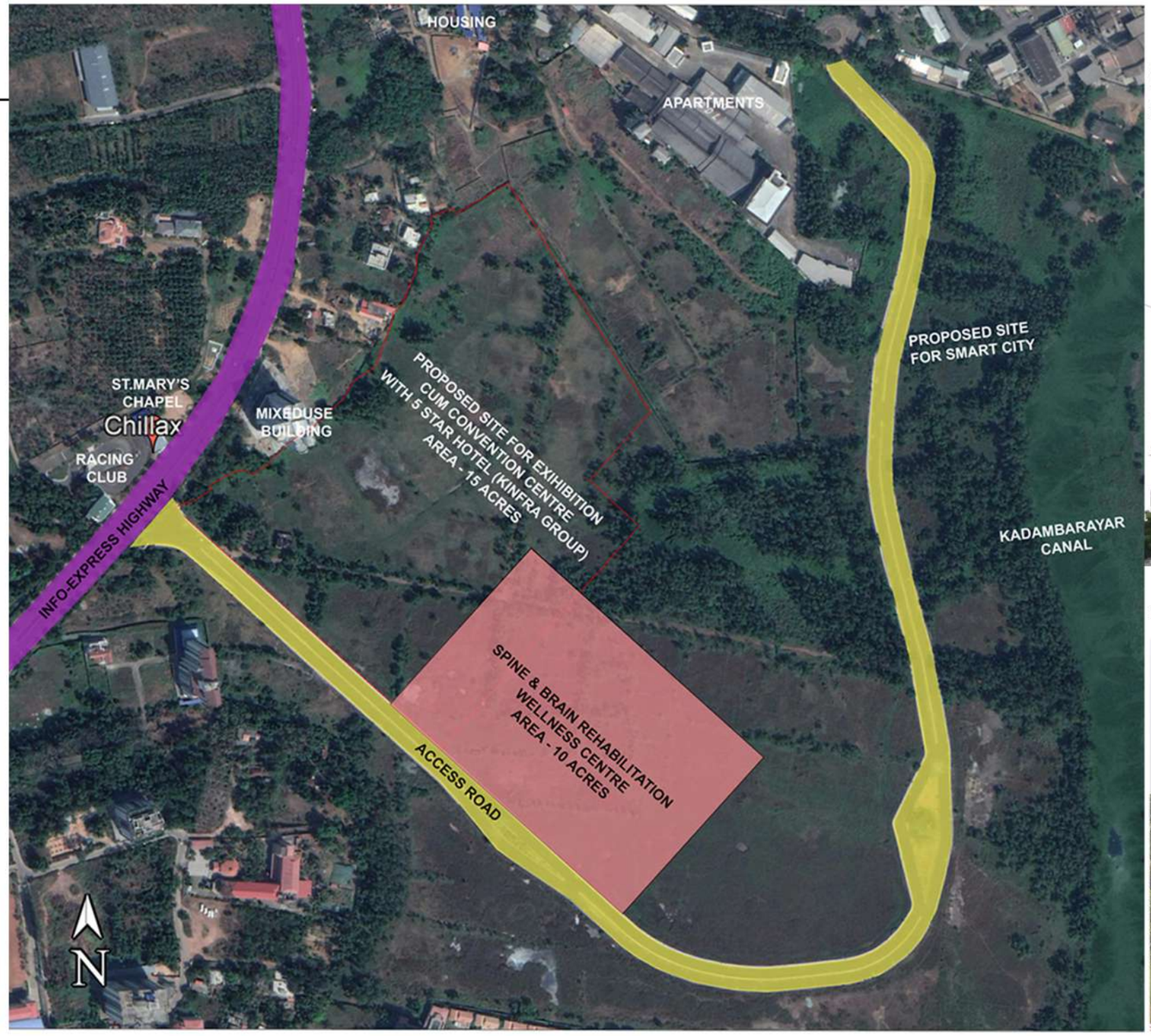
Humidity: The humidity ranges from 68 to 89% during morning hours and 64 to 87% during evening hours.
The maximum humidity is observed during May to October months.

Annual temperature: Range between 23 and 31 °C with the record high being 36.5 °C, and record low 16.3 °C. Average beingg 27.3°C.

Rainfall: June to September- the south-west monsoon brings in heavy rains as it lies on the windward side.
October to December- it receives lighter rain from the northeast monsoon, as it lies on the leeward side. Average annual rainfall is 2,978.0 mm , with an

Wind speed: The wind speed ranges from 6.7 to 10.9 km/hour with mean speed of 9.1 km/hour. The wind speed is high during the period from March to September

	January	February	March	April	May	June	July	August	September	October	November	December
Avg. Temperature (°C)	27	27.7	28.8	29.2	28.6	26.6	25.9	26.1	26.5	27	27.3	27.1
Min. Temperature (°C)	22.2	23.1	24.6	25.4	25.1	23.8	23.1	23.5	23.6	23.7	23.7	22.6
Max. Temperature (°C)	31.9	32.4	33.1	33.1	32.1	29.5	28.8	28.8	29.5	30.3	30.9	31.6
Avg. Temperature (°F)	80.6	81.9	83.8	84.6	83.5	79.9	78.6	79.0	79.7	80.6	81.1	80.8
Min. Temperature (°F)	72.0	73.6	76.3	77.7	77.2	74.8	73.6	74.3	74.5	74.7	74.7	72.7
Max. Temperature (°F)	89.4	90.3	91.6	91.6	89.8	85.1	83.8	83.8	85.1	86.5	87.6	88.9
Precipitation / Rainfall (mm)	15	29	47	144	379	765	723	419	303	313	161	40



Site neighborhood:

Sunpaul Dezira blueberry mixeduse building.

Apartments:

Chillax Racing:

Housing:

Main Entry to site

SITE ANALYSIS

SPINE & BRAIN DISEASE REHABILITATION WELLNESS CENTRE

KAKKANAD, KOCHI, KERALA

Demographics:

Has A population of 25,531 of which 12,750 are males while 12,781 are females as per report released by Census India 2011. Population of Children with age of 0-6 is 2552 which is 10.00 % of total population of Kakkanad

Topography:

It is located at an altitude of 9 m above the sea level, and can be divided geographically into highland, midland, and coastal area.

Proximity:

The proposed site is located about 20 KM from the Cochin International Airport
12KM from the Railway station
15 KM from Kochi Port.
3 KM from Kakkanad Bus

Infopark-express highway

Main entry to site

Access road view

Noise level:

A few metres away from the main road and surrounded by residential area. Hence the noise level is minimal.

Soil type:

The soil consists mainly of recent sediments (Alluvium, Teri's, Brown sands etc.). The major rock types are Archaean-basic dykes, Charnockites and Gneisses.

East side view

Existing building near the site

SPINE & BRAIN DISEASE
REHABILITATION WELLNESS CENTRE

KAKKANAD, KOCHI, KERALA

MASTERPLAN
SCALE _ 1:250

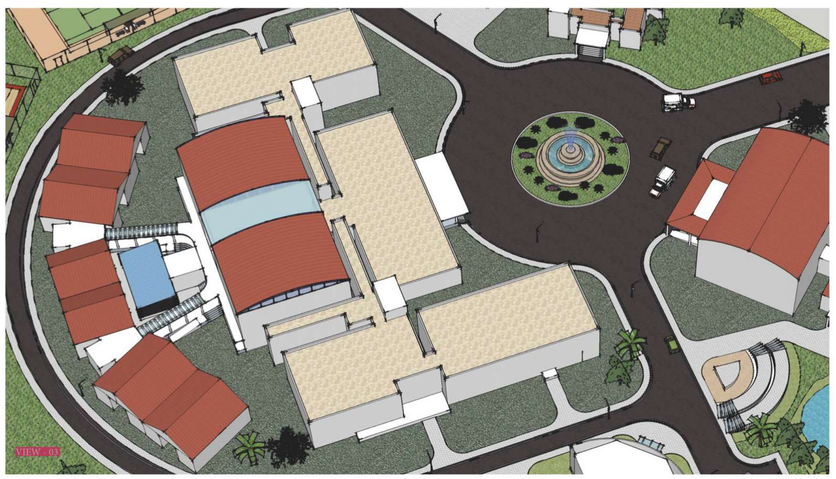
MASTER PLAN LEGEND

TOTAL SITE AREA - 40468.6 SQ.M (10 ACRES)
TOTAL BUILD UP AREA - 7967 SQ.M

01. CONSULTATION BLOCK
02. THERAPY AREAS
03. HYDROTHERAPY UNIT
04.HIGH-DEPENDENCY UNIT, PAEDIATRIC AND GERIATRIC DEPARTMENT WITH GENERAL WARDS
05. GENERAL WARDS - SPINE & STROKE
06. SEMI-PRIVATE WARDS
07. PRIVATE WARDS
08. AUDITORIUM BLOCK
09. ADMINISTRATION BLOCK
10. COTTAGE WARDS
11. EXECUTIVE COTTAGE WARDS
12. SINGLE ROOM EXECUTIVE SUIT
13. DOUBLE ROOM EXECUTIVE SUIT
14. PILOT UNIT FOR COTTAGE WARDS WITH HYDROTHERAPHY
15. KITCHEN AND DINING
16. STAFF HOSTEL
17. INSTITUTION BLOCK
18. COMMERCIAL UNIT , CAFETERIA, GENERAL STORE ATM, INTERNET CAFE, ETC
19. PUBLIC TOILET
20. SPIRITUAL CENTRE
21. OPEN- AIR THEATRE
22. TENNIS COURT
23. BASKET BALL COURT
24. FOOTBALL COURT
25. SPA CENTRE
26. LANDSCAPE FEATURE
27. KITCHEN GARDEN
28. STP

VIEW - 01 AERIAL VIEW OF SITE FROM WEST

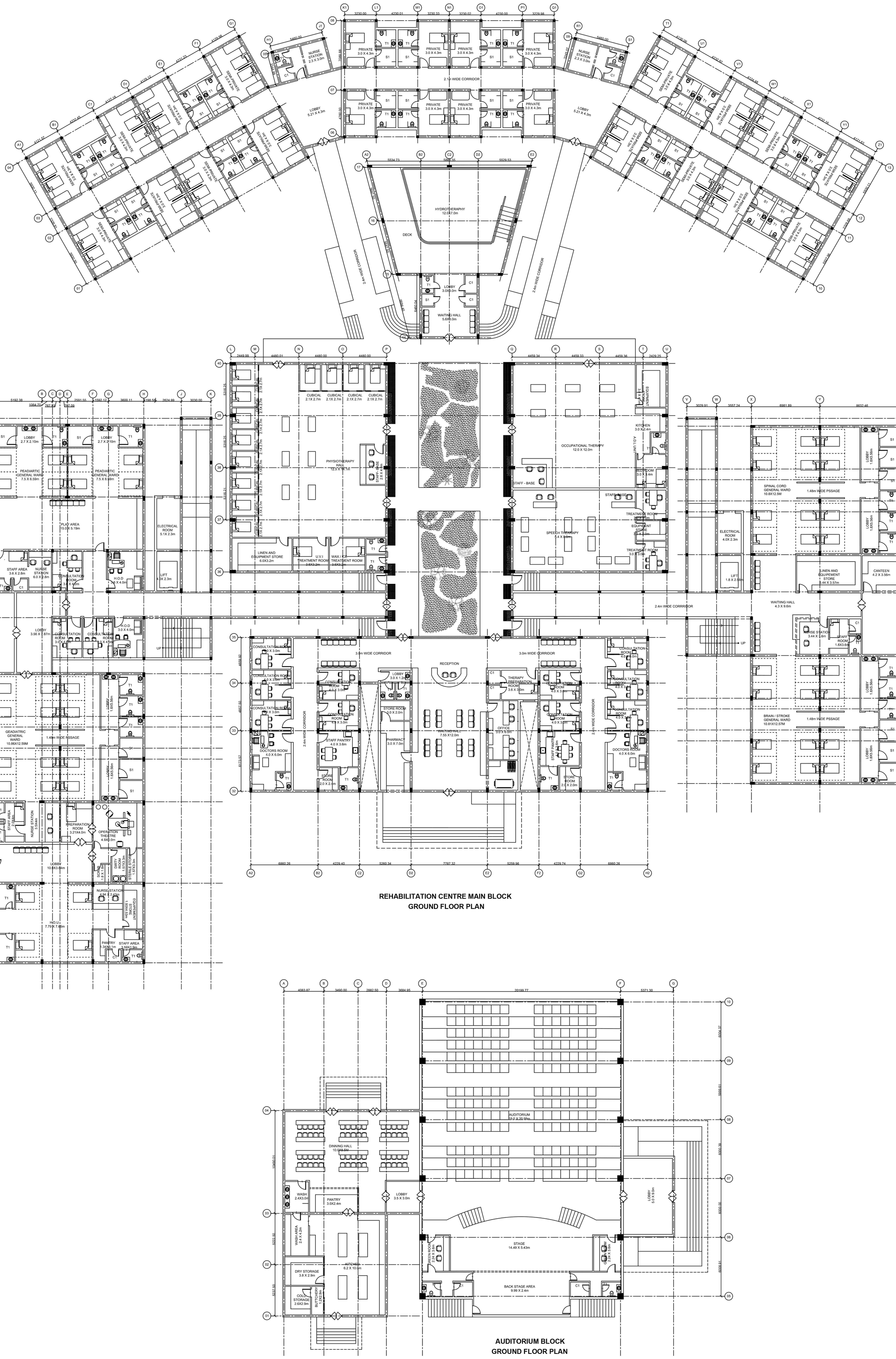
VIEW - 02



VIEW - 03

VIEW - 04

PROPOSED SITE & BUILDING LAYOUT



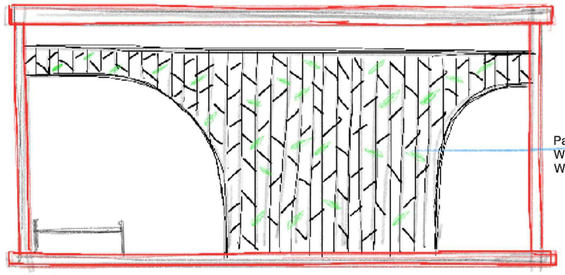
REHABILITATION CENTRE MAIN BLOCK
GROUND FLOOR PLAN

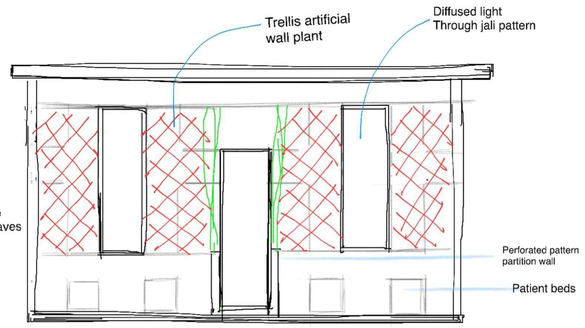
AUDITORIUM BLOCK
GROUND FLOOR PLAN

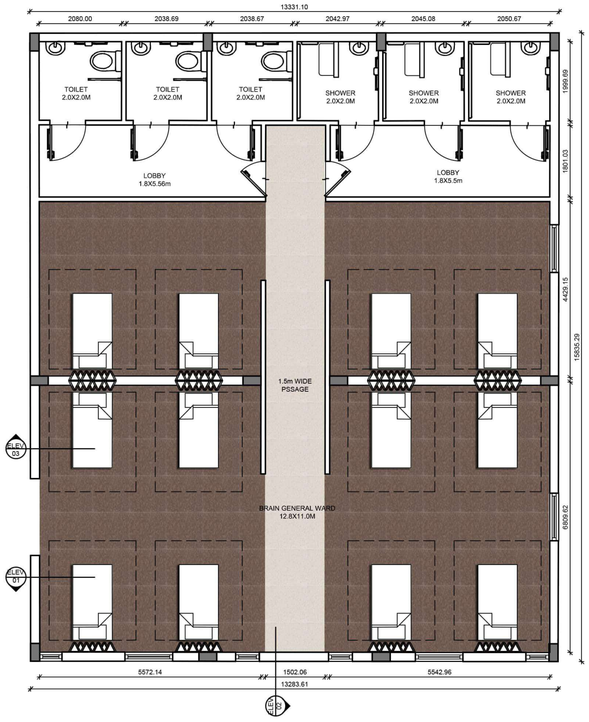
SPINE & BRAIN DISEASE
REHABILITATION WELLNESS CENTRE

SPACE 01 - BRAIN GENERAL WARD

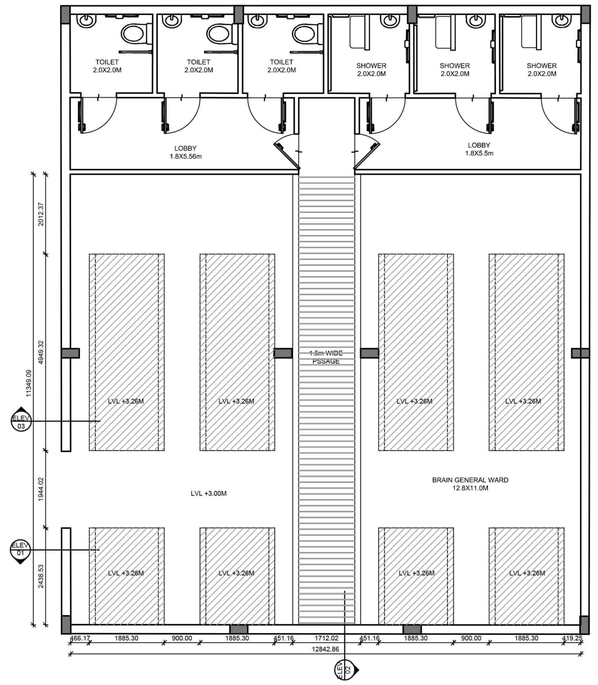
CONCEPTUAL SKETCHES



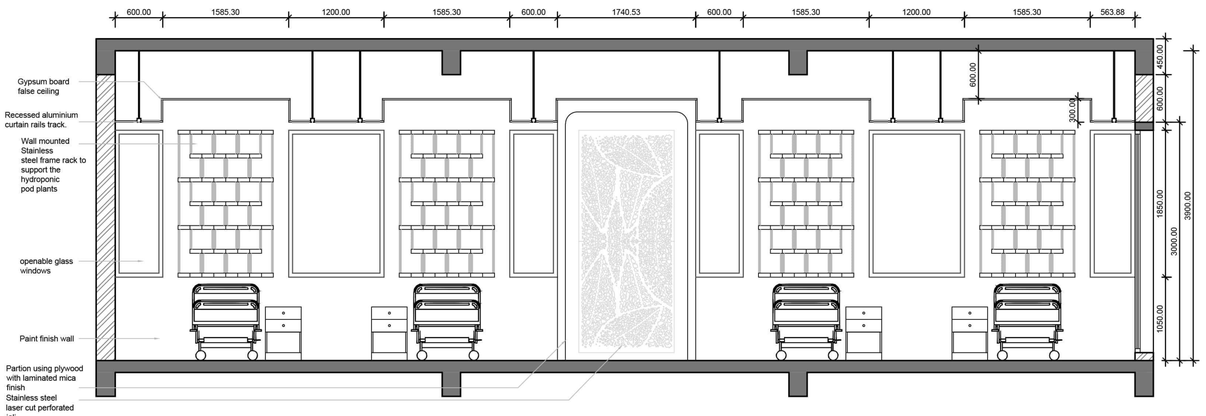




BRAIN WARD FLOOR PLAN_SCALE 1:100



BRAIN WARD FALSE CEILING PLAN_SCALE 1:100



WALL ELEVATION- 01 _ SCALE 1:50

Matte finish brushed black metal stainless steel jali

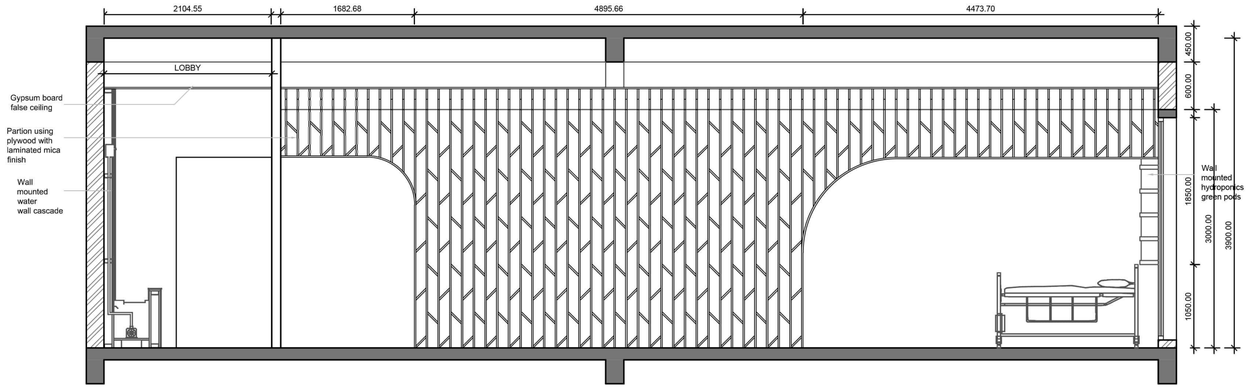
Paint finish

Matte laminate finish

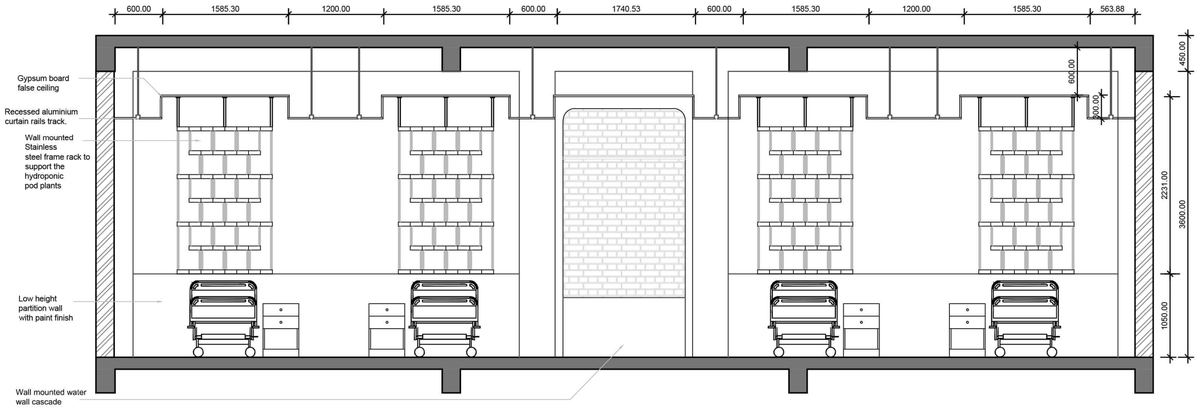
Curtain fabric

Linoleum flooring 01

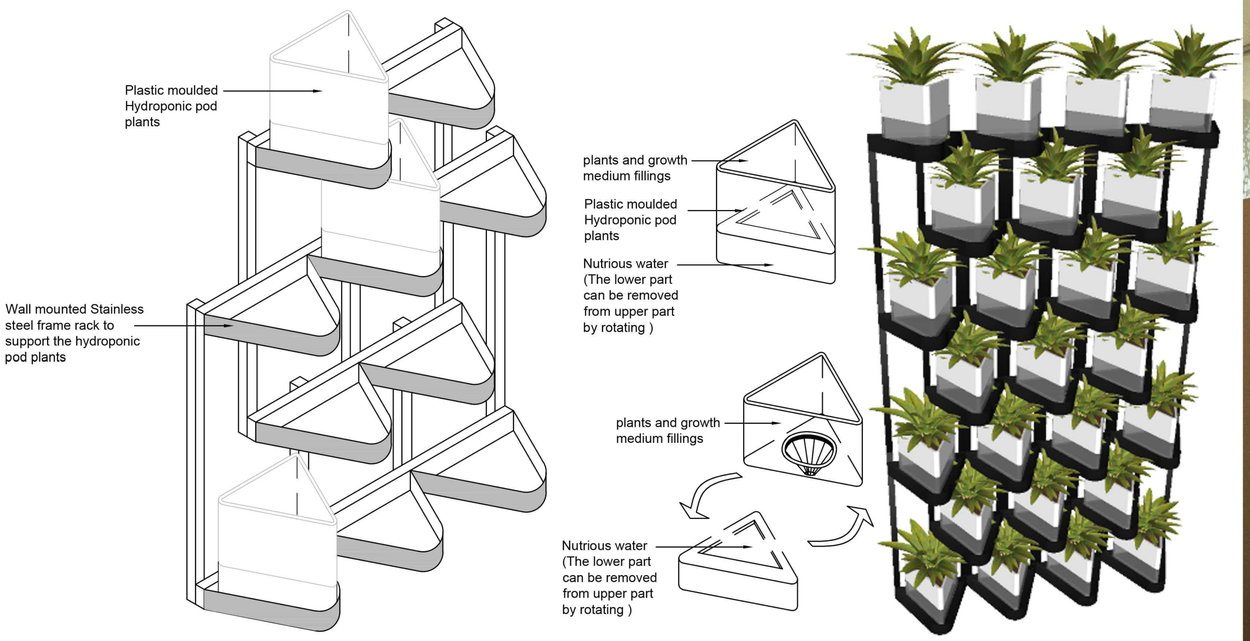
Linoleum flooring 02



WALL ELEVATION- 02 _SCALE 1:50

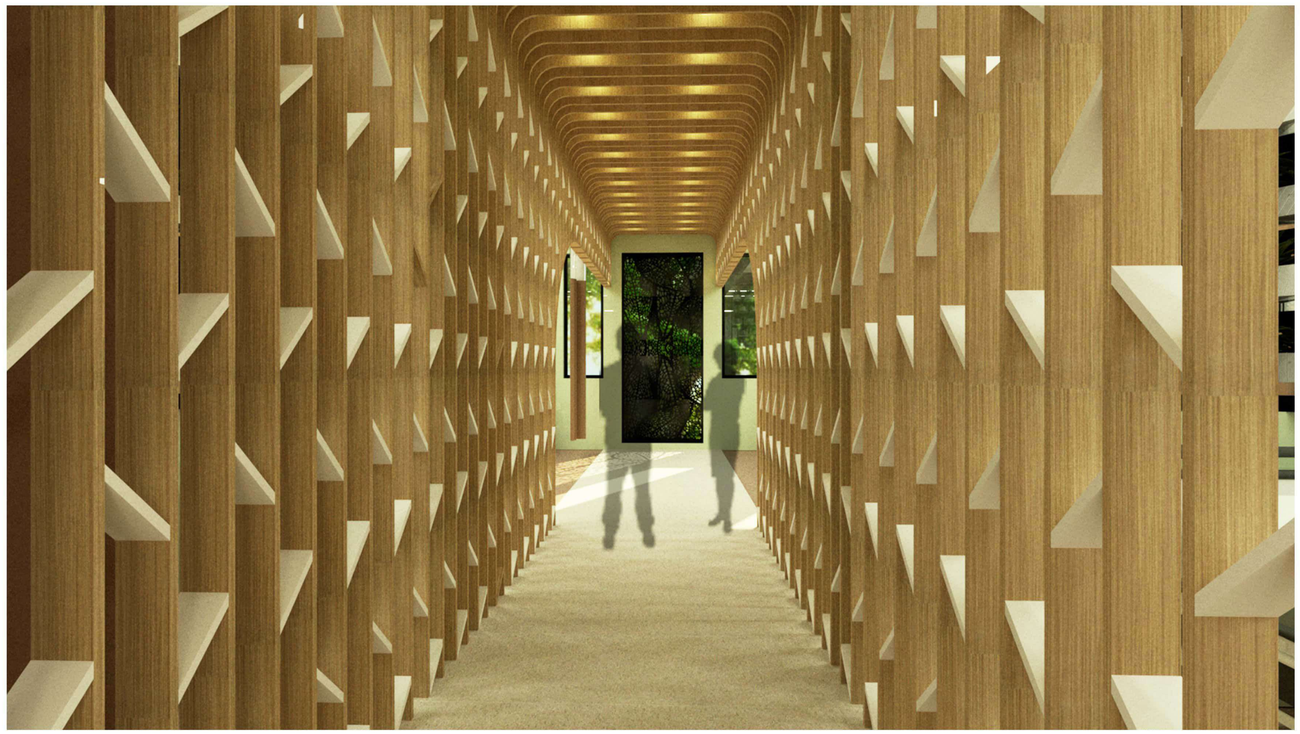


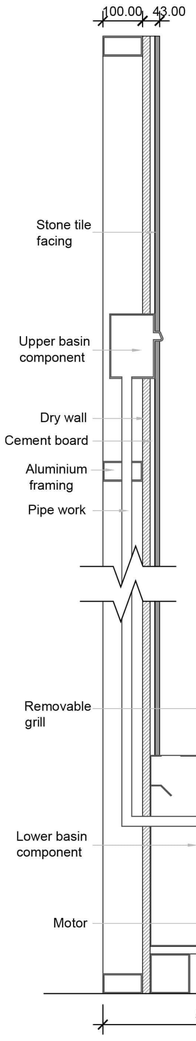
WALL ELEVATION- 03 _SCALE 1:50



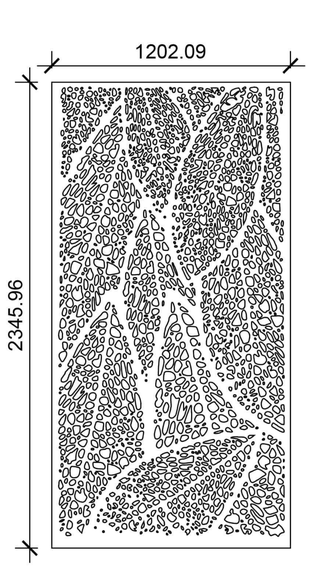
WALL MOUNTED HYDROPONICS GREENPOD DETAIL_SCALE 1:10

COLOUR SCHEME

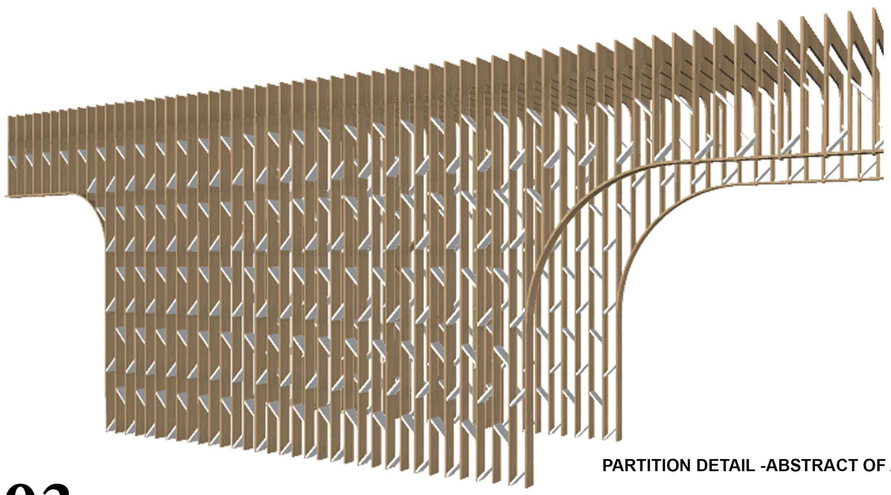




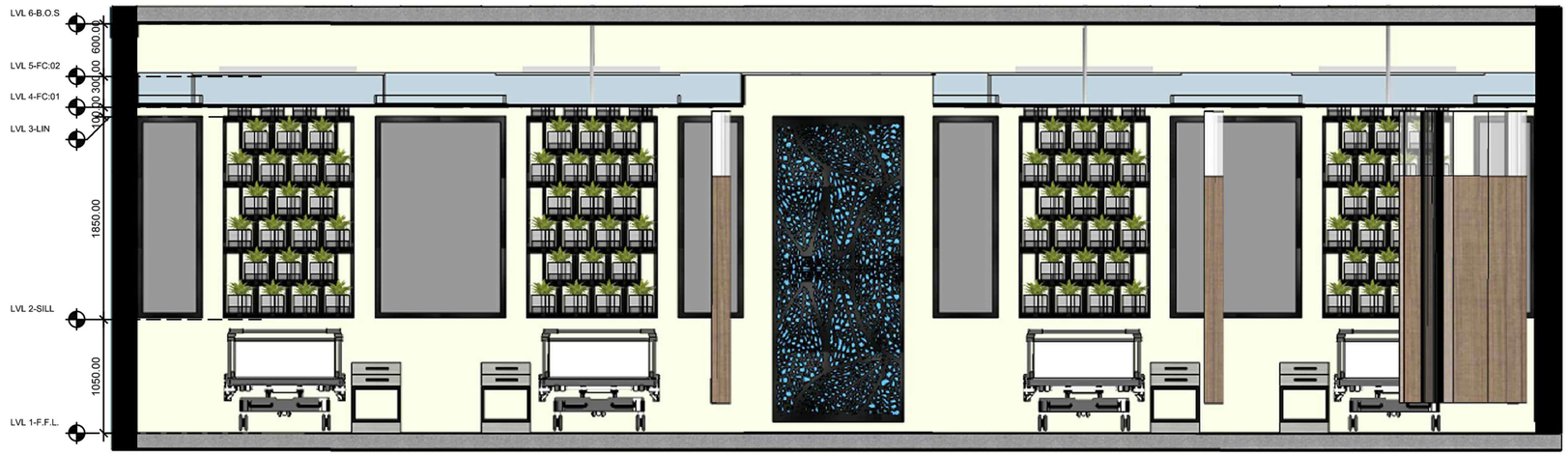
WATER WALL CASCADE DETAIL _ SCALE 1:10



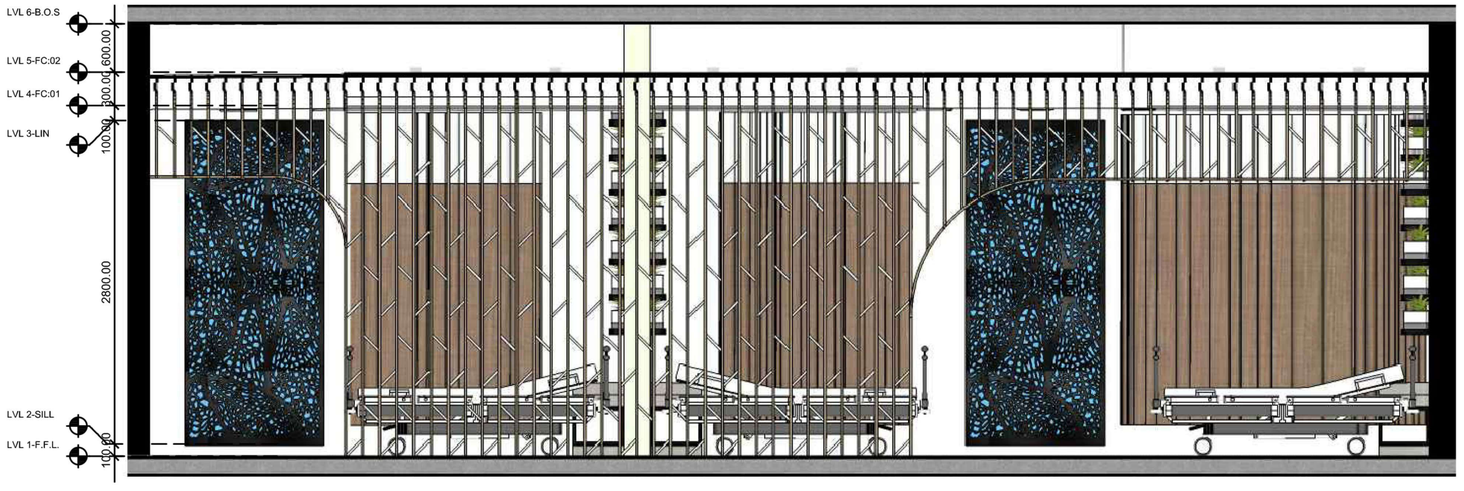
S.S JALI DETAIL _ SCALE 1:20



PARTITION DETAIL -ABSTRACT OF A TREE



WALL ELEVATION -01

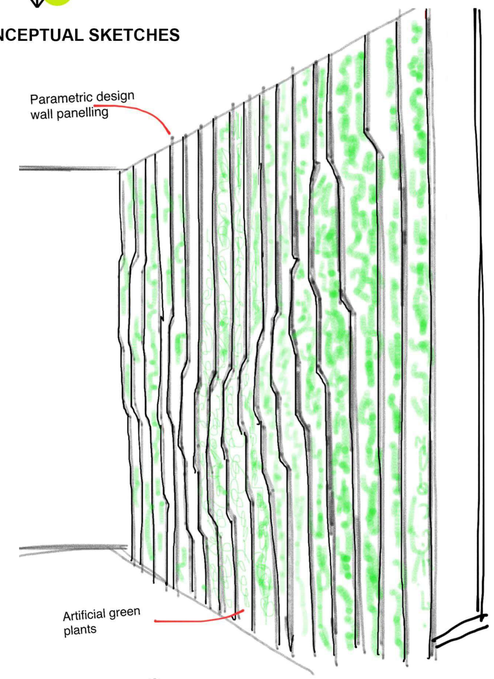


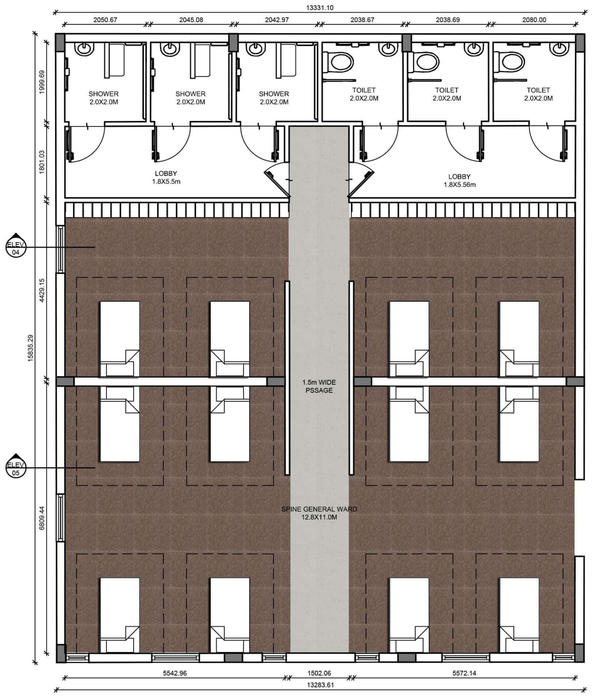
WALL ELEVATION -02

WALL ELEVATION -03

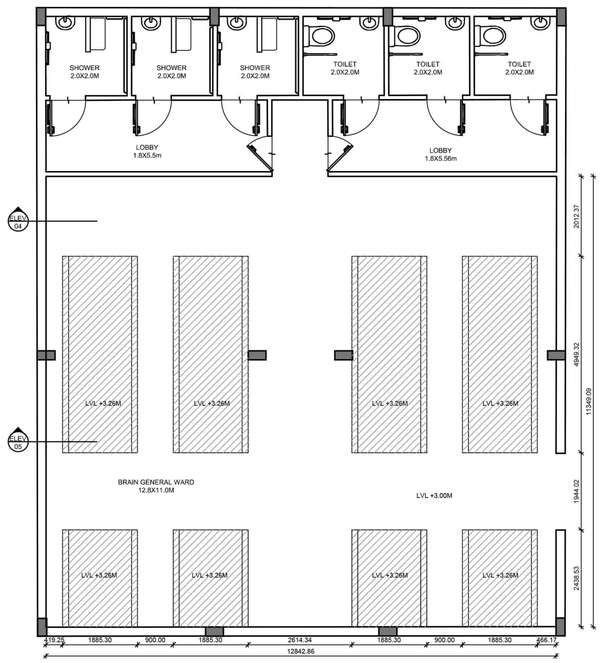
SPACE 02 - BRAIN GENERAL WARD

CONCEPTUAL SKETCHES





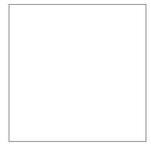
SPINE WARD FLOOR PLAN_SCALE 1:100



SPINE WARD FALSE CEILING PLAN_SCALE 1:100

Matte finish brushed black metal stainless steel jali

Paint finish

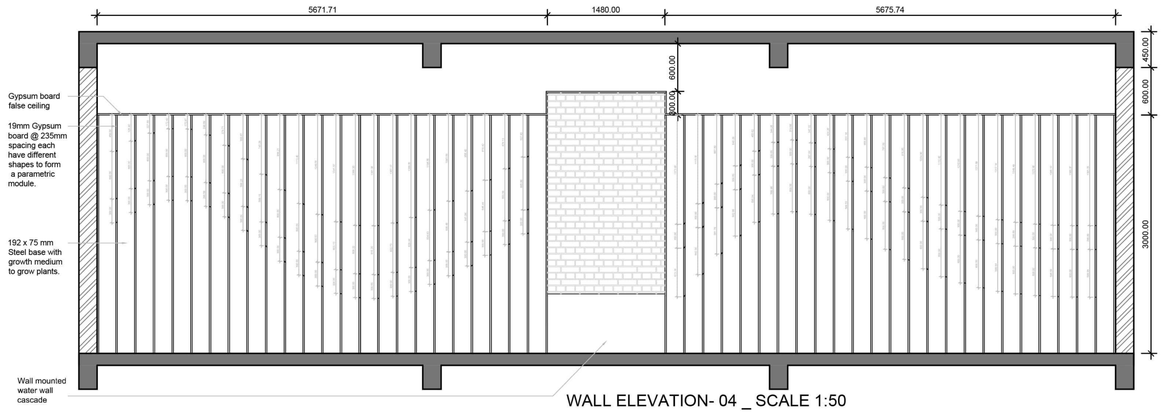


Glossy laminate finish

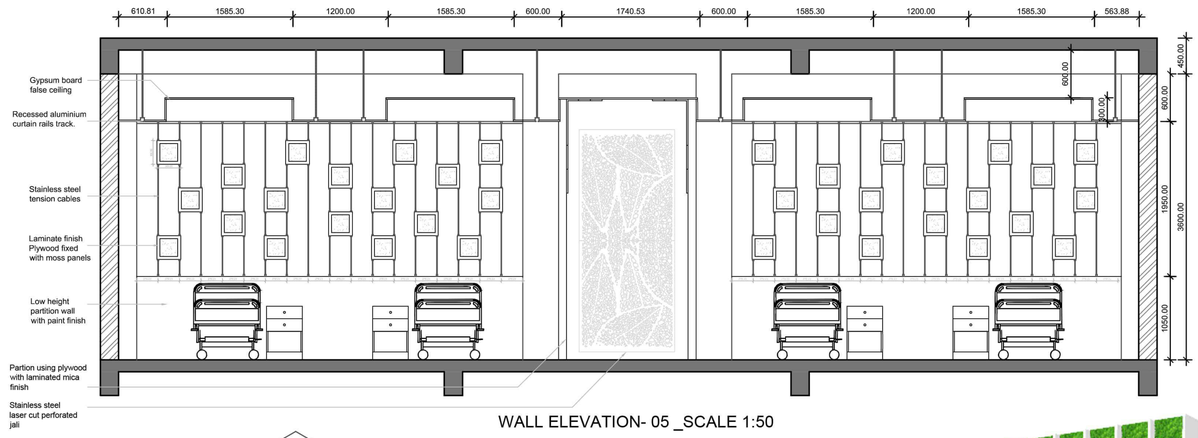
Curtain fabric

Linoleum flooring 01

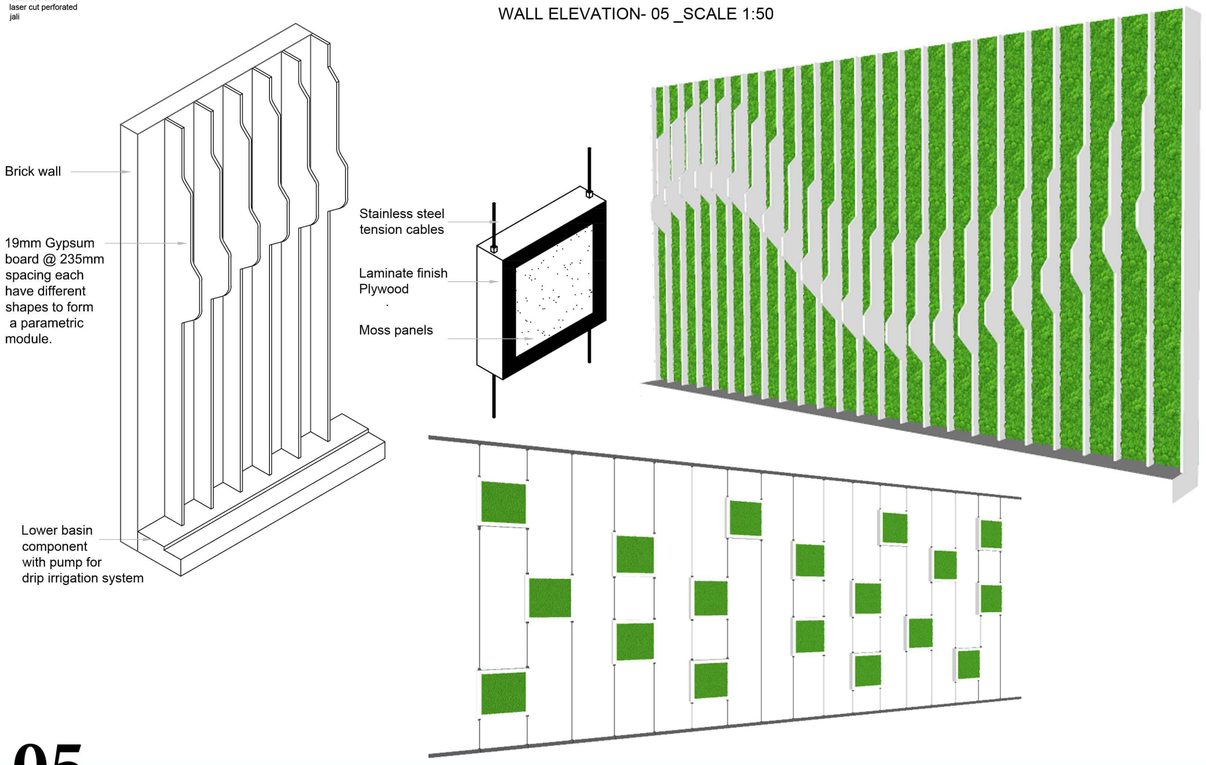
Linoleum flooring 02



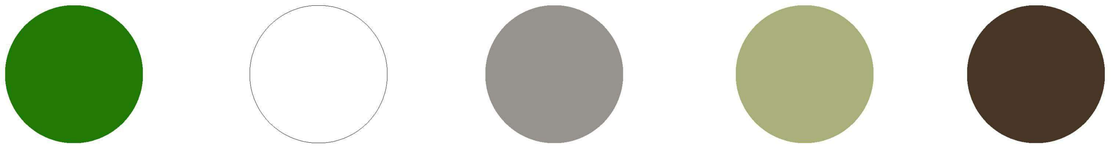
WALL ELEVATION- 04 _ SCALE 1:50



WALL ELEVATION- 05 _SCALE 1:50

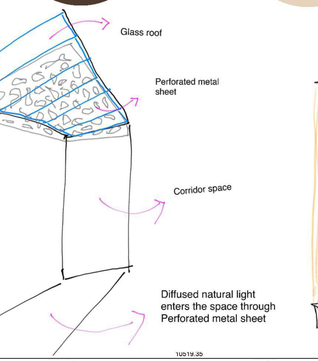


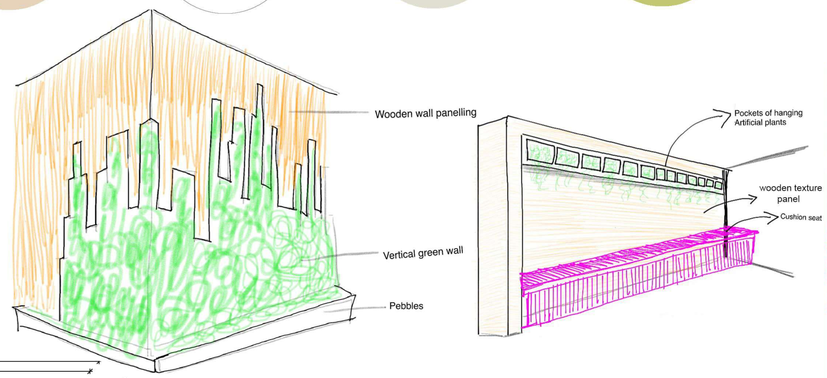
COLOUR SCHEME

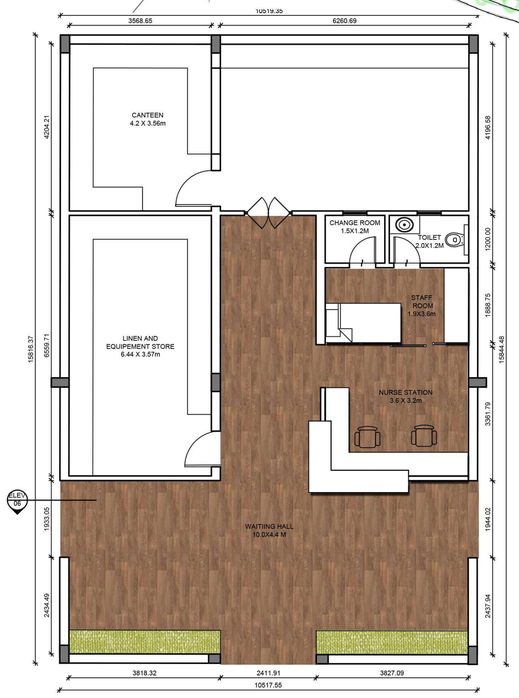


SPACE 03- NURSE STATION & CORRIDOR

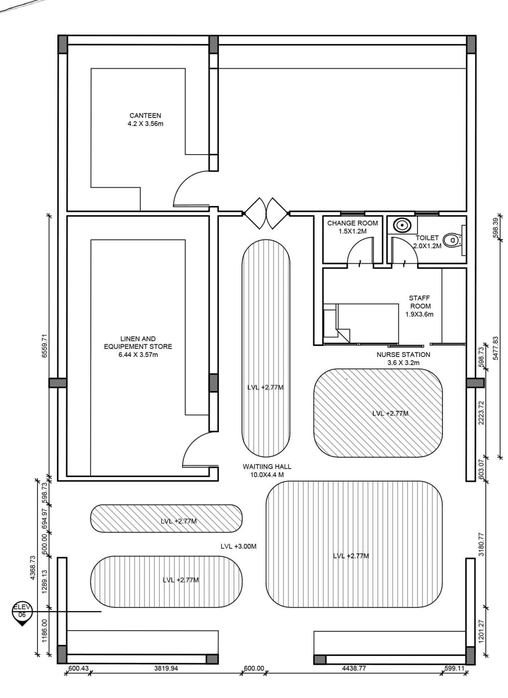
CONCEPTUAL SKETCHES



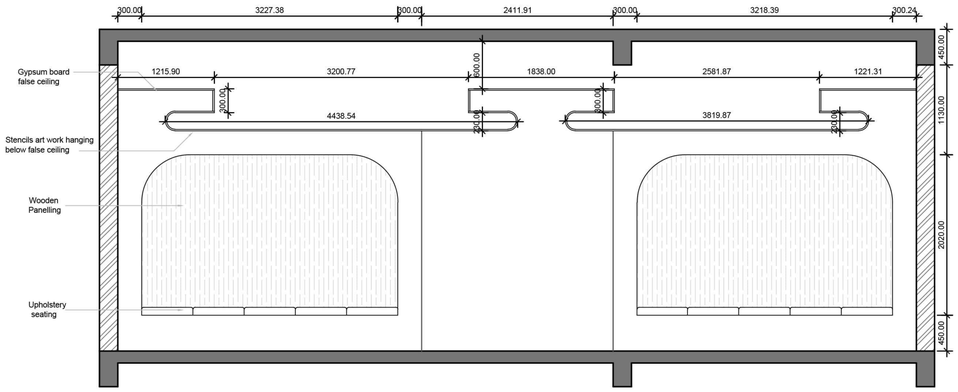




WAITING HALL FLOOR PLAN_SCALE 1:100



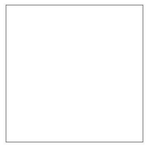
WAITING HALL FALSE CEILING PLAN_SCALE 1:100



WALL ELEVATION- 06_ SCALE 1:50

Matte laminate finish

Matte laminate finish



Paint finish

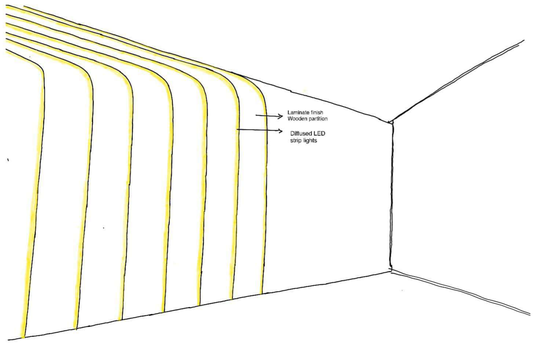
Cushion fabric

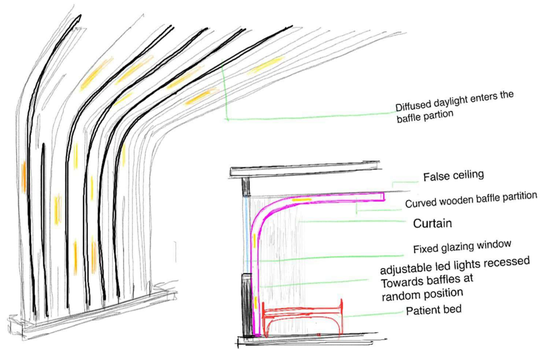
Paint finish

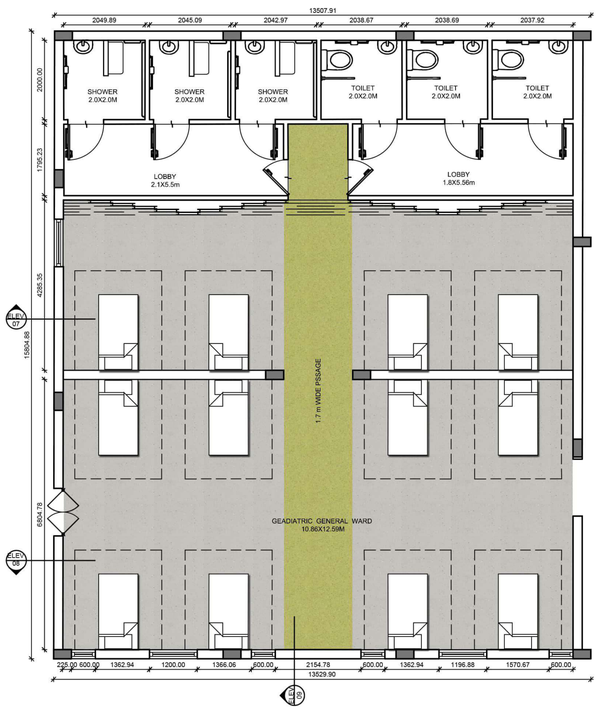
Wooden tile flooring

SPACE 04 - GAEDIATRIC GENERAL WARD

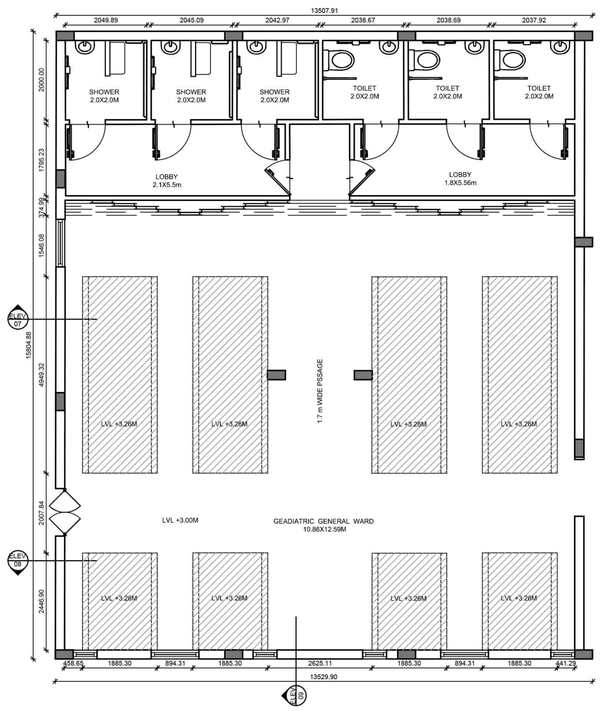
CONCEPTUAL SKETCHES



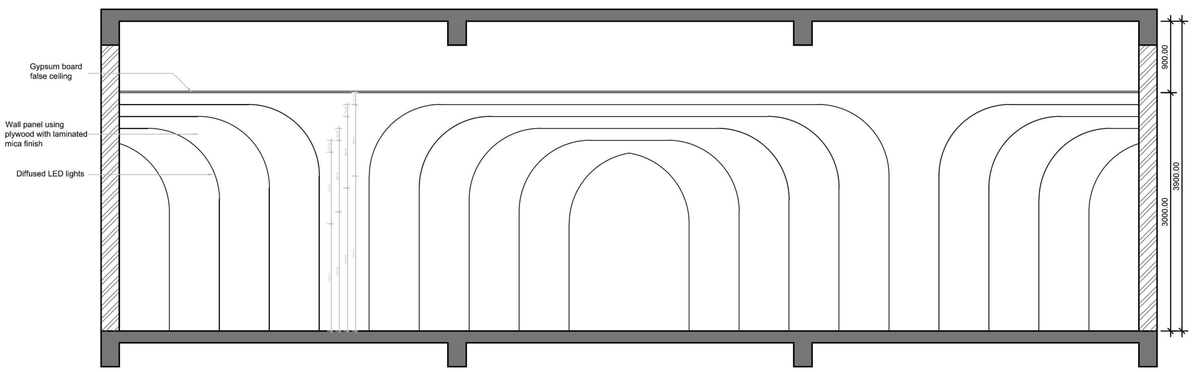




GAEDIATRIC WARD FLOOR PLAN_SCALE 1:100



GAEDIATRIC WARD FALSE CEILING PLAN_SCALE 1:100



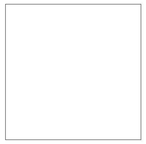
WALL ELEVATION- 07_ SCALE 1:50

Matte finish brushed black metal stainless steel jali

Paint finish

Matte laminate finish

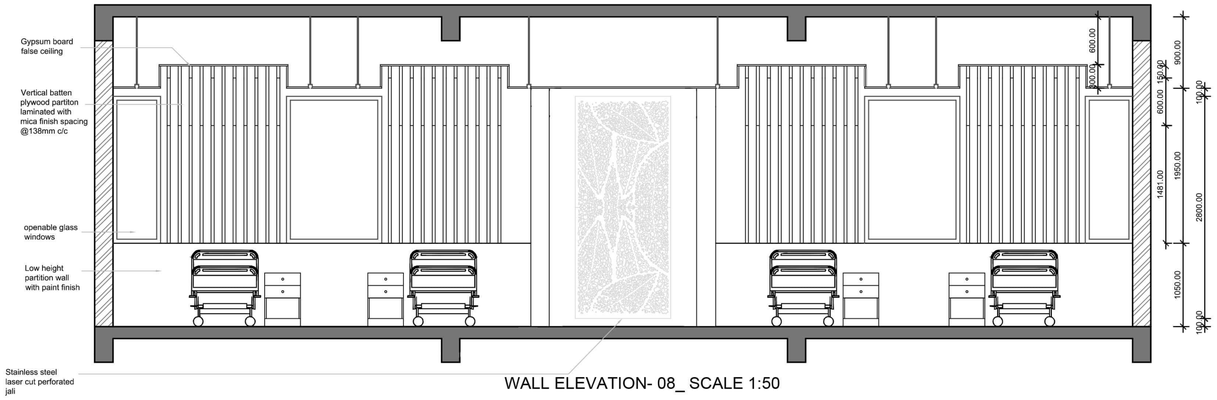
Curtain fabric



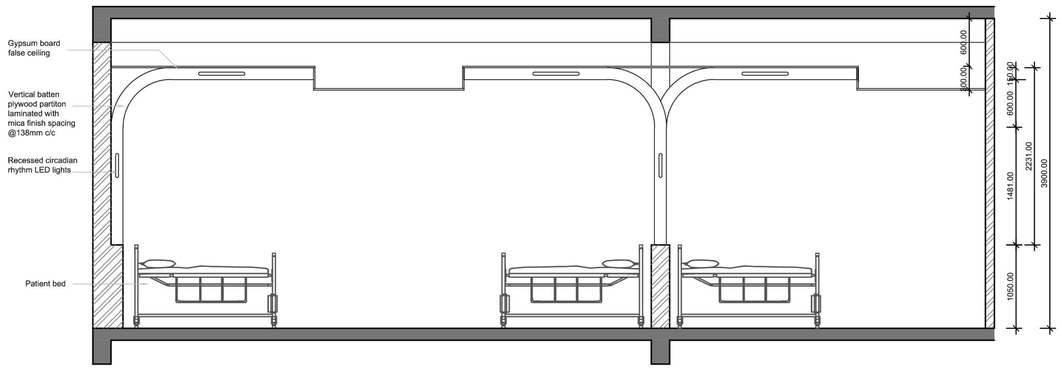
glossy laminate finish

Linoleum flooring 01

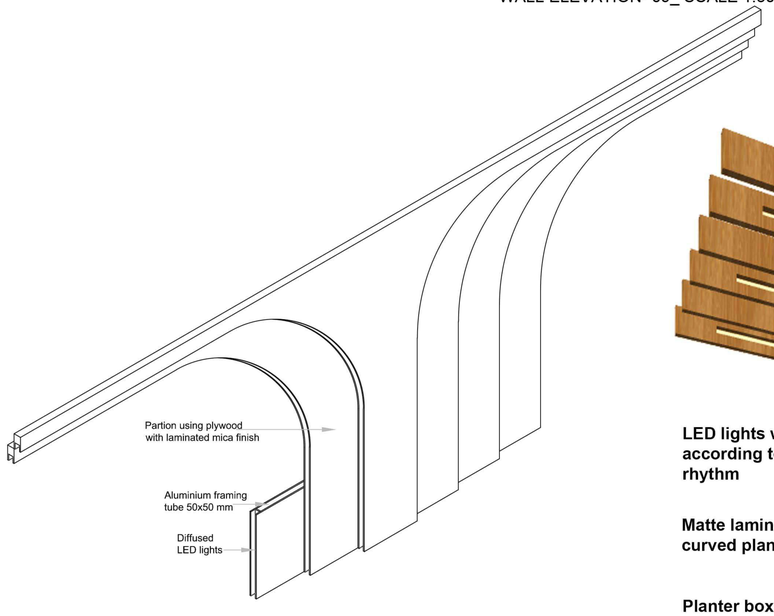
Linoleum flooring 02



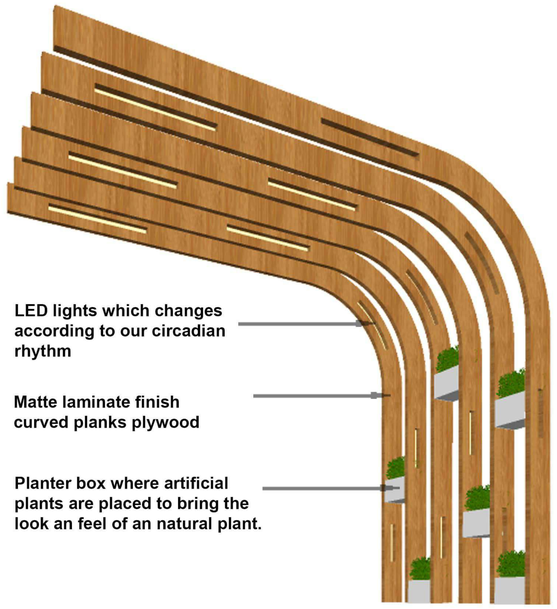
WALL ELEVATION- 08_ SCALE 1:50



WALL ELEVATION- 09_ SCALE 1:50



Accent wall detail which mimic the abstract of an tree

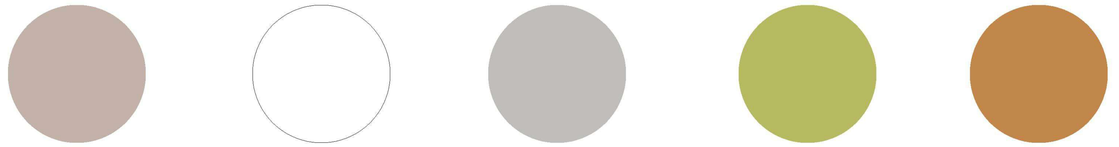


LED lights which changes according to our circadian rhythm

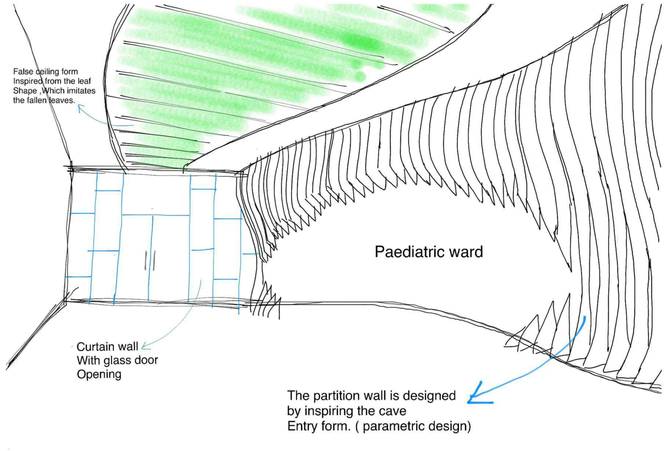
Matte laminate finish curved planks plywood

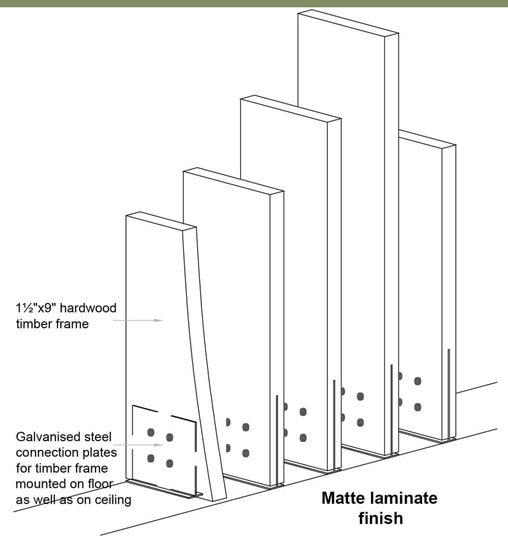
Planter box where artificial plants are placed to bring the look an feel of an natural plant.

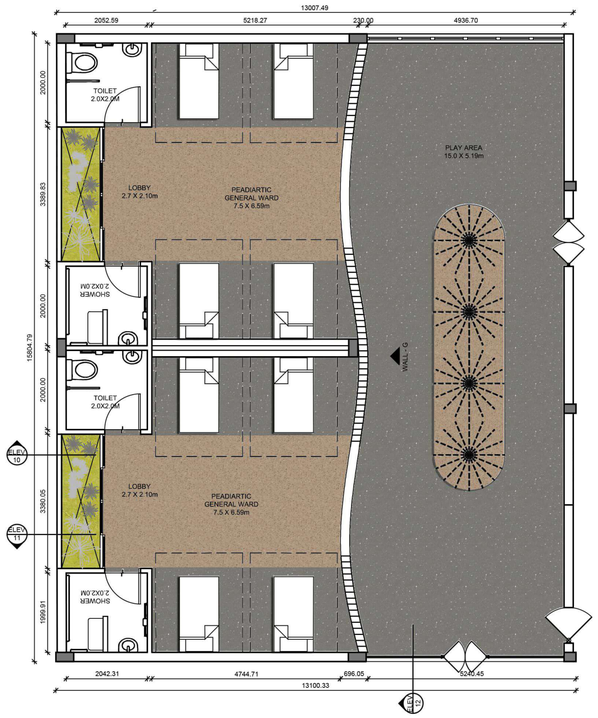
COLOUR SCHEME



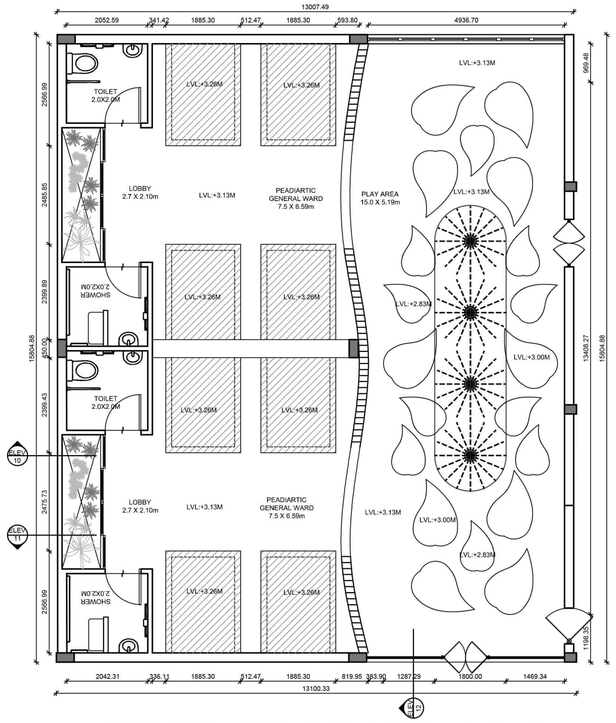
CONCEPTUAL SKETCHES



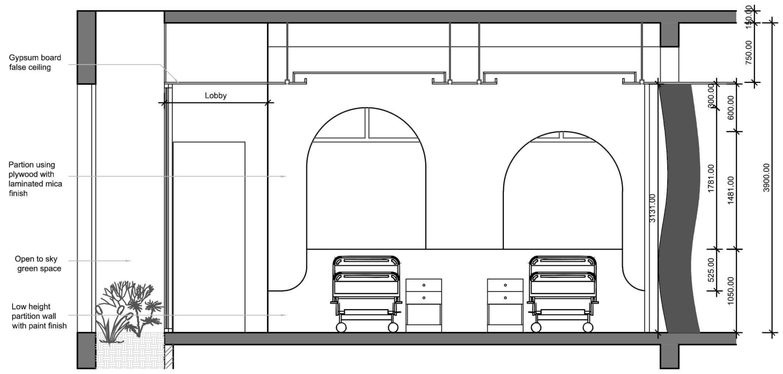




PAEDIATRIC WARD FLOOR PLAN_SCALE 1:100



PAEDIATRIC WARD FALSE CEILING PLAN_SCALE 1:100



WALL ELEVATION- 10_ SCALE 1:50

Glossy laminate finish

Matte laminate finish

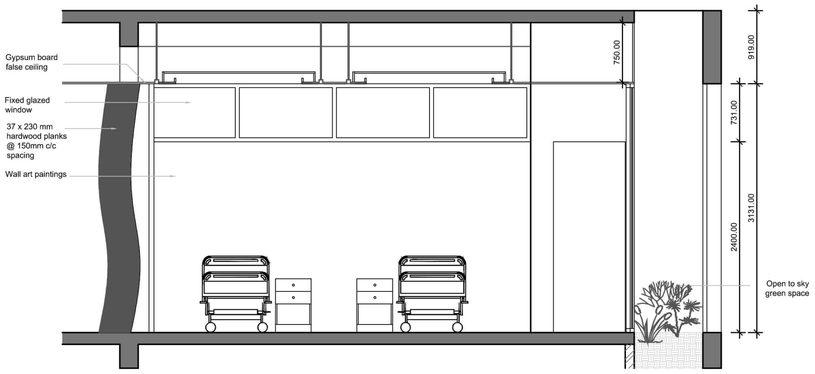
Matte laminate finish

Wall paper

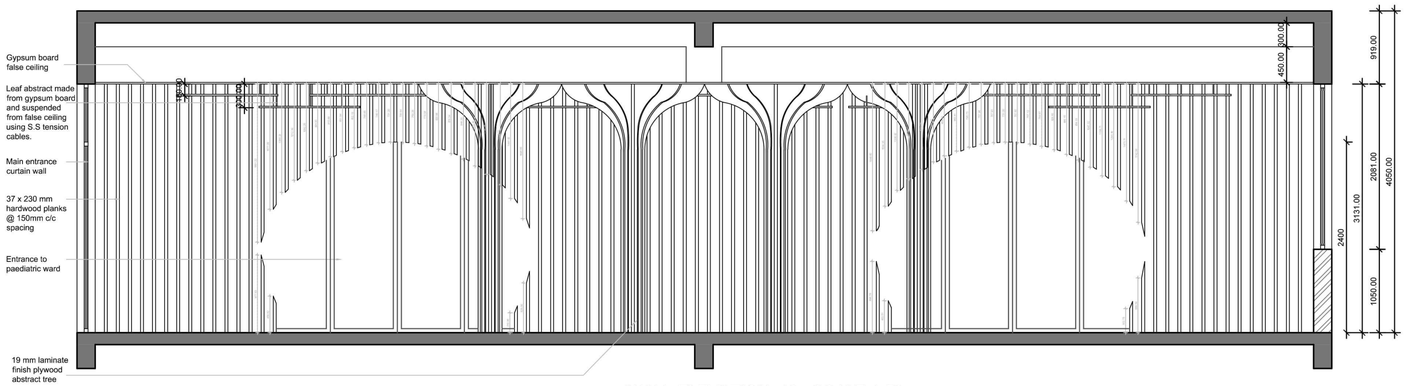
Linoleum flooring 01

Linoleum flooring 02

Glossy laminate finish

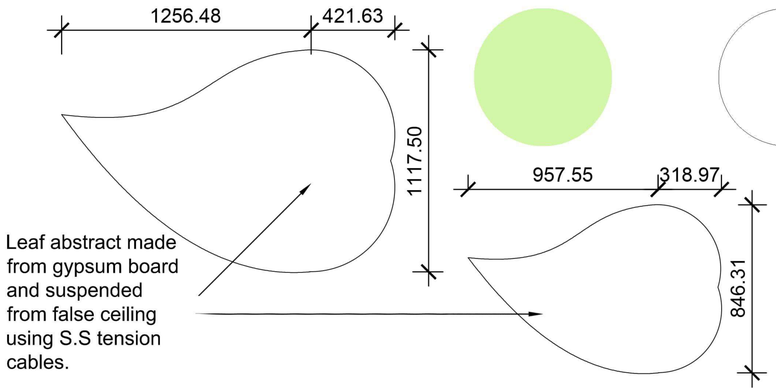


WALL ELEVATION- 11_ SCALE 1:50

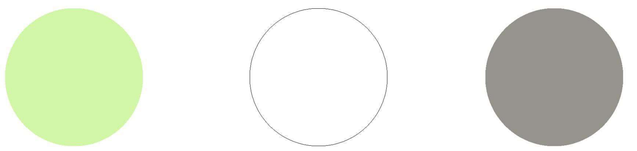


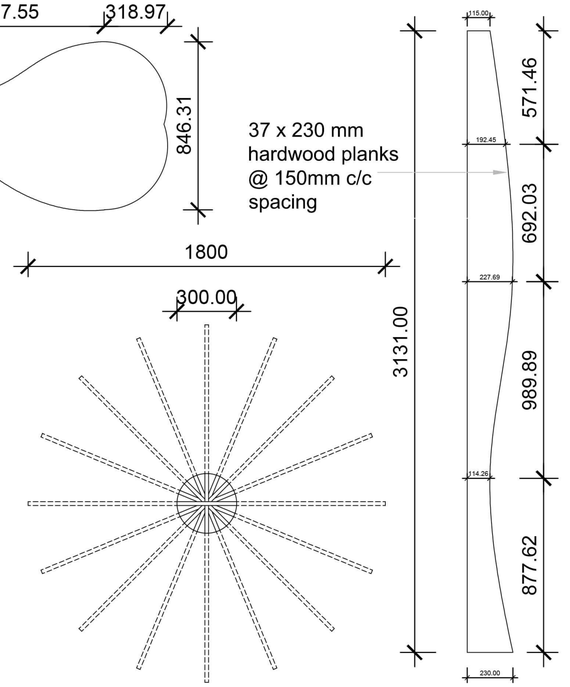
WALL ELEVATION- 12_ SCALE 1:50

COLOUR SCHEME

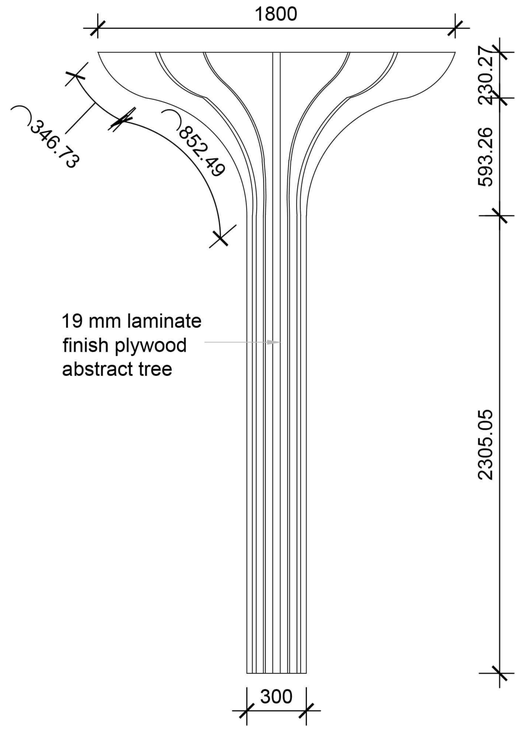


Leaf abstract made from gypsum board and suspended from false ceiling using S.S tension cables.



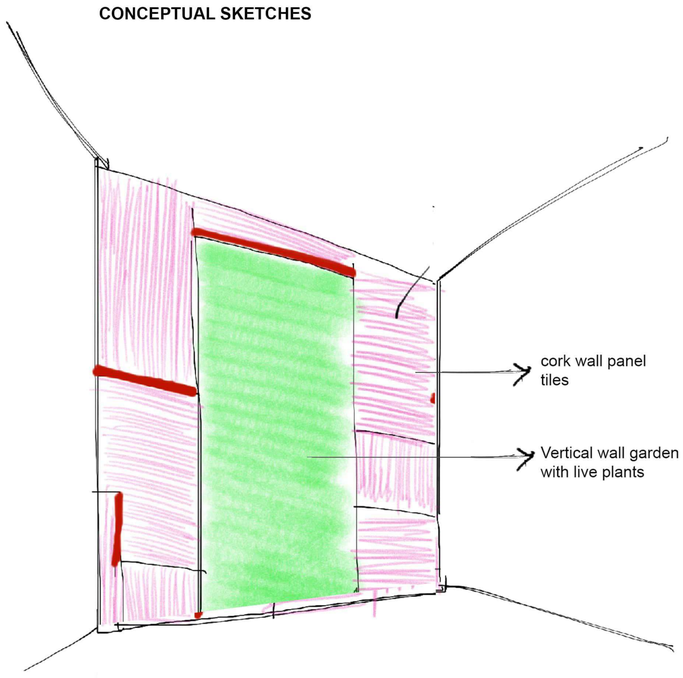


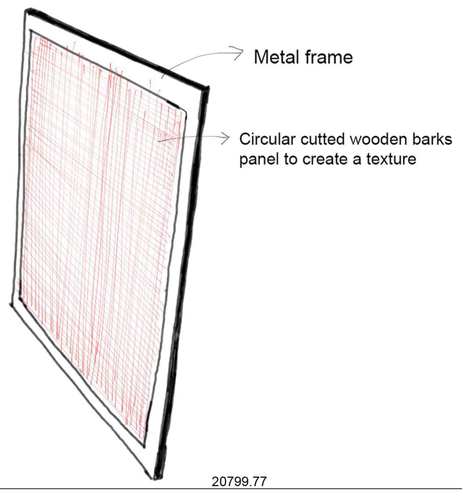
37 x 230 mm hardwood planks @ 150mm c/c spacing

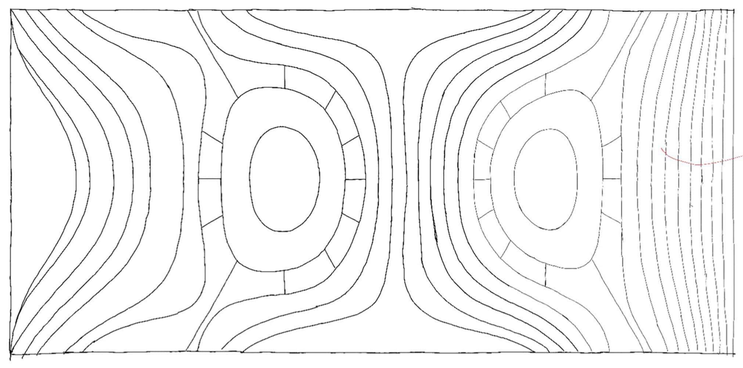


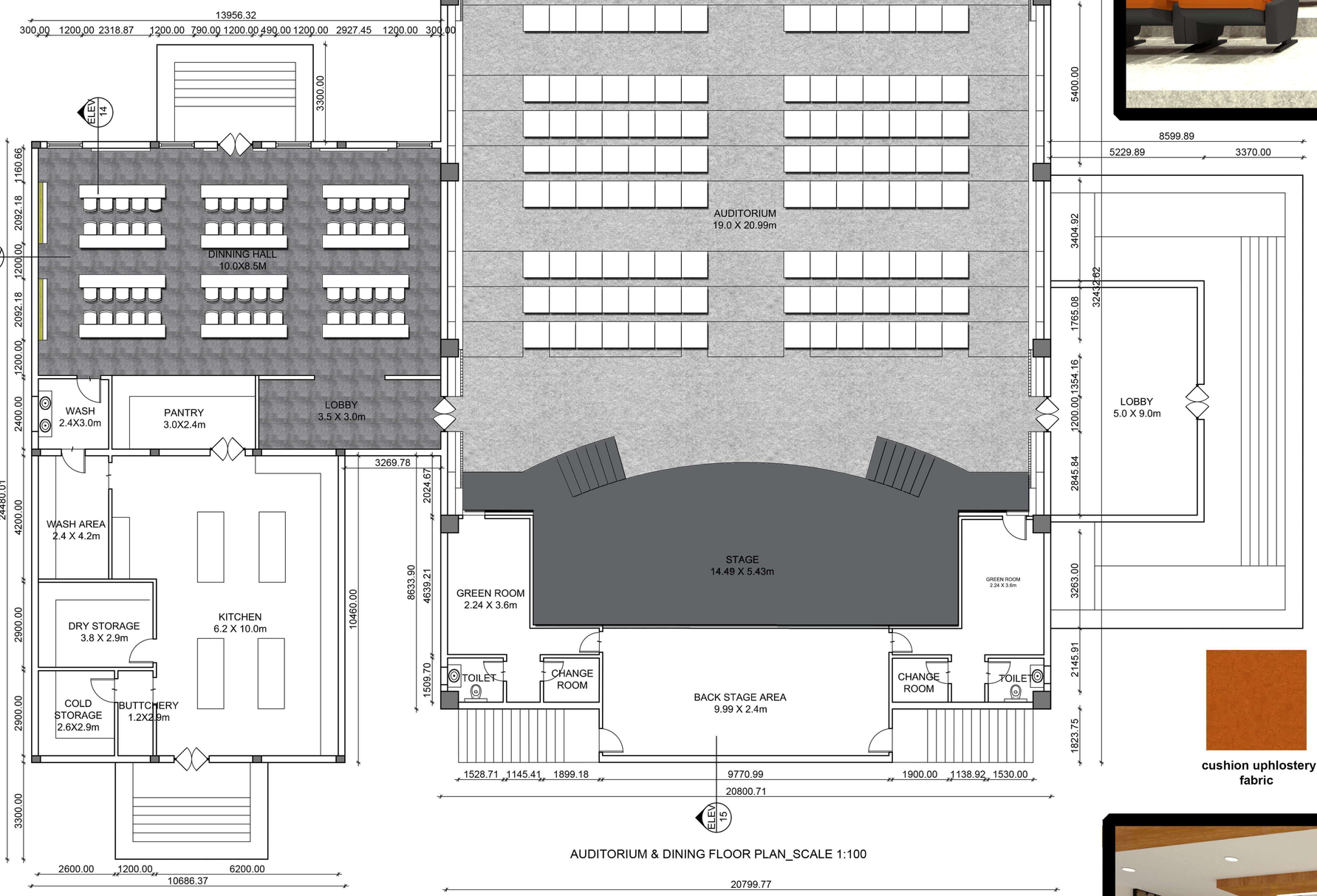
19 mm laminate finish plywood abstract tree

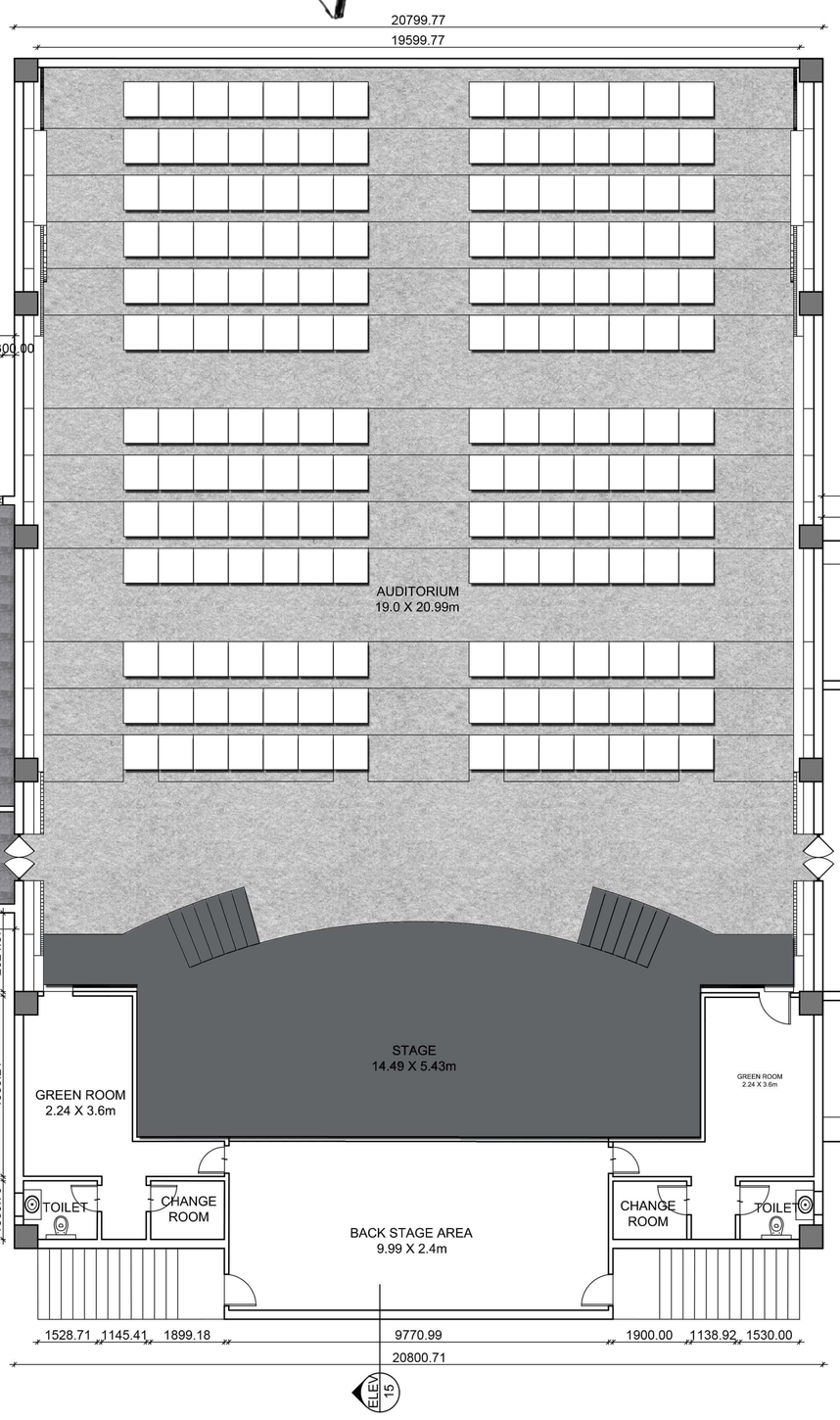
CONCEPTUAL SKETCHES



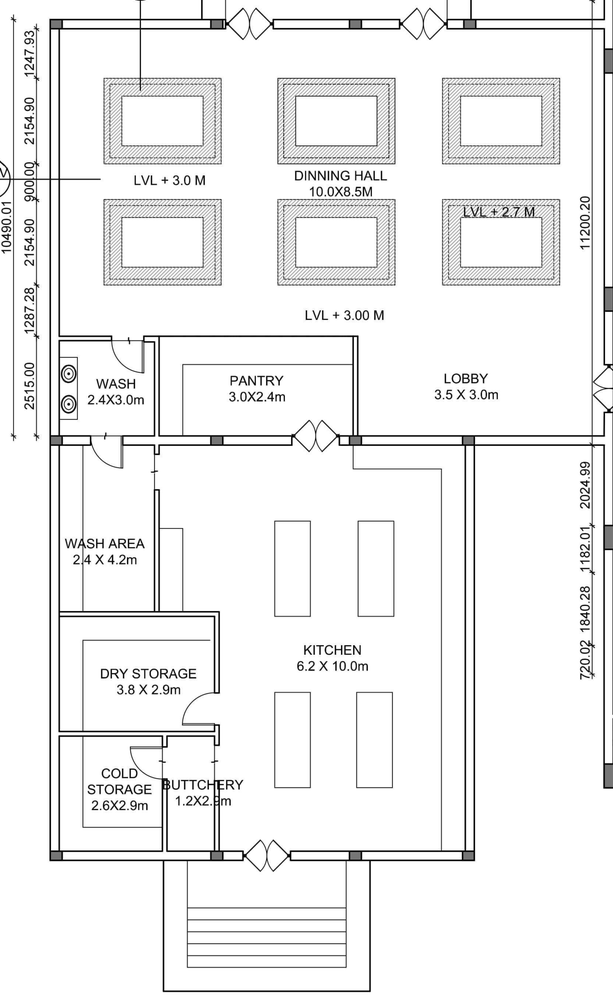


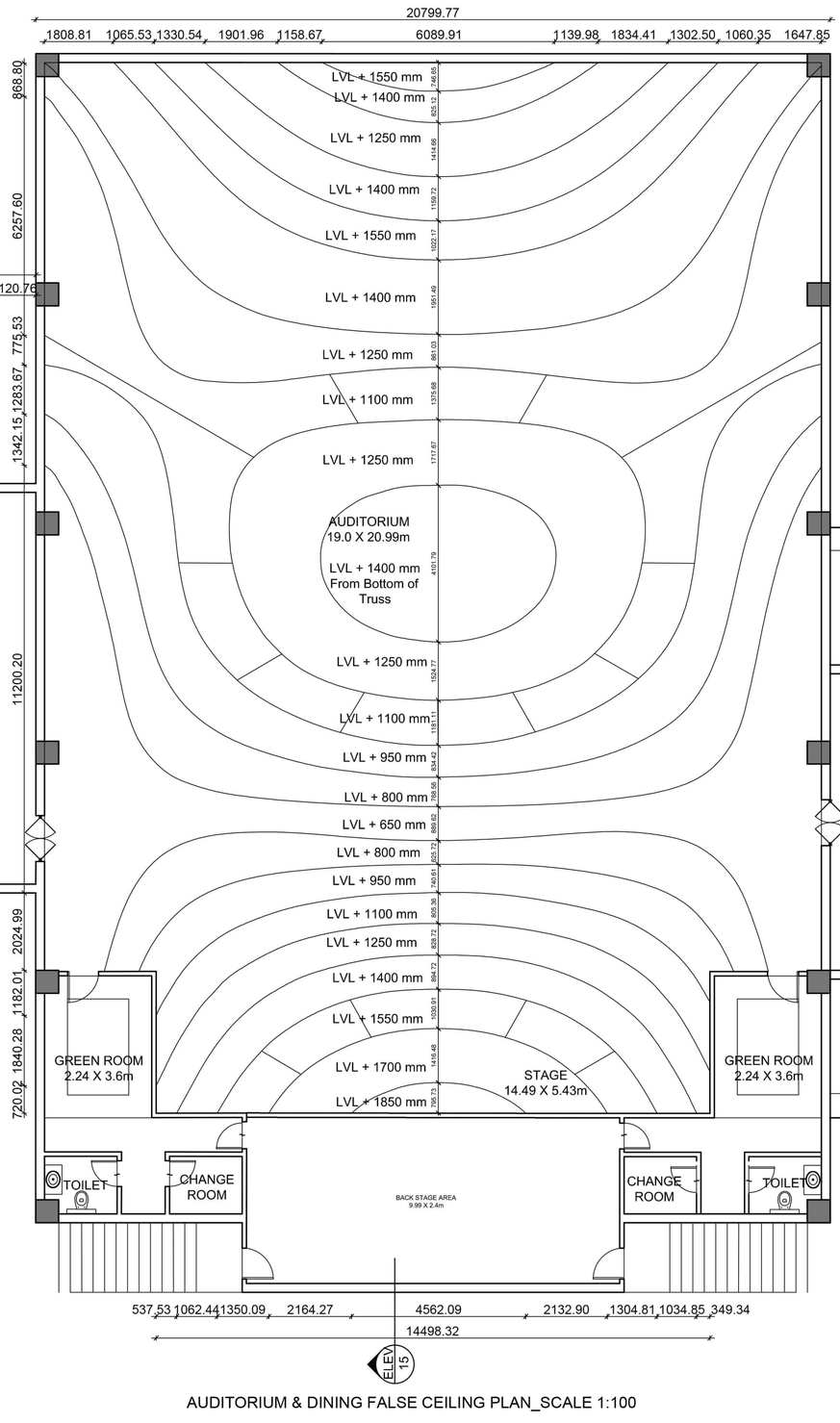


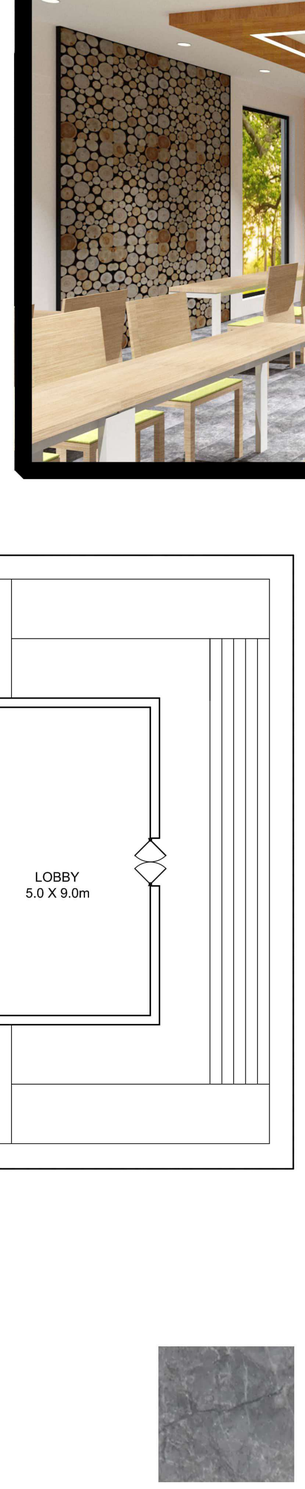




AUDITORIUM & DINING FLOOR PLAN_SCALE 1:100





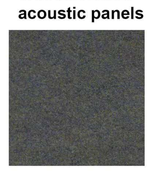


AUDITORIUM & DINING FALSE CEILING PLAN_SCALE 1:100

AUDITORIUM MATERIAL BOARD

Matte laminate finish

Wooden faced acoustic panels

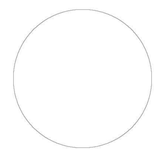


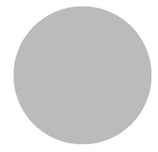
72mm thick Acoustic foam panels

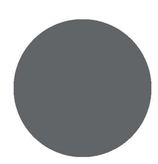
Carpet flooring

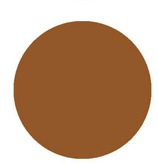
cushion uphlostery fabric

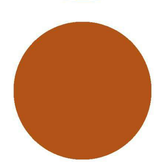
AUDITORIUM COLOUR SCHEME











DINING MATERIAL BOARD

Matte laminate finish

Matte laminate finish

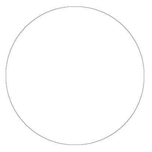
Chair upholstery fabric

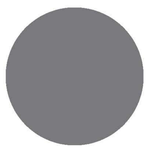
Cork wall panel 300mm x 600mm

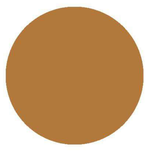
Matte laminate finish

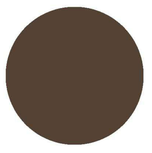
Ceramic flooring tile

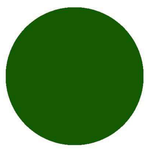
DINING COLOUR SCHEME

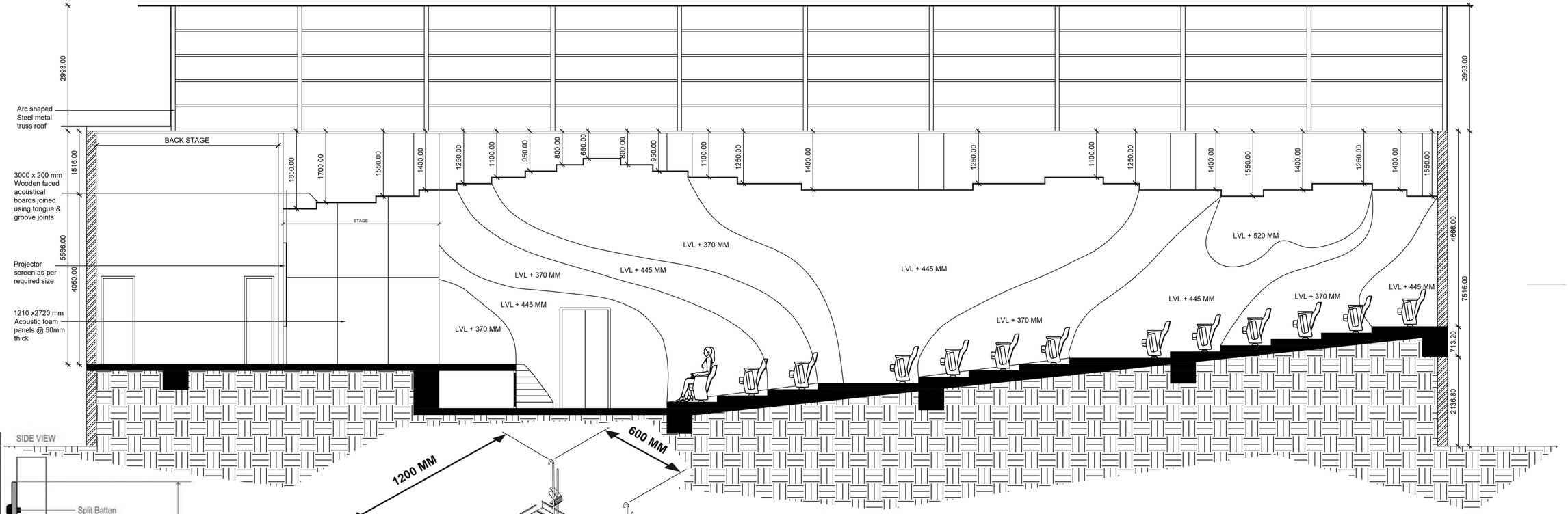




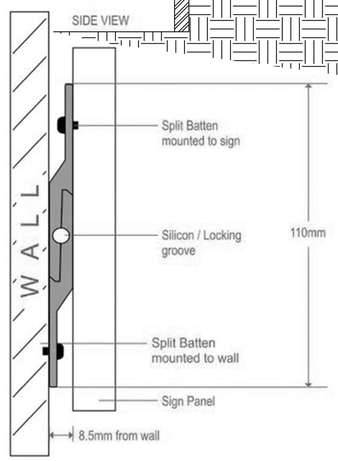




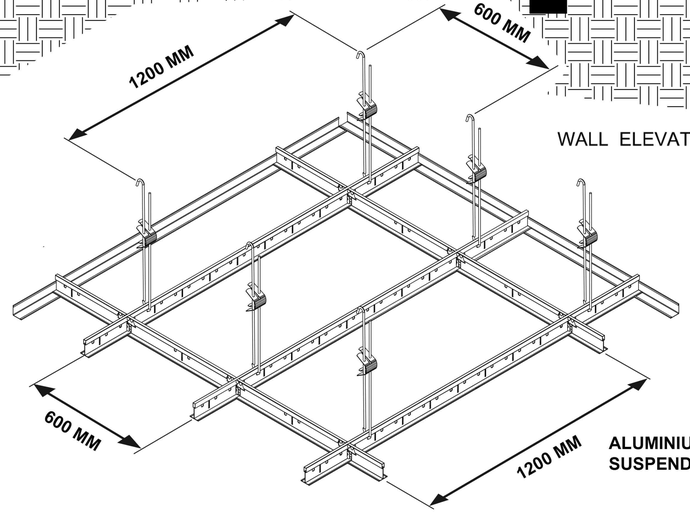




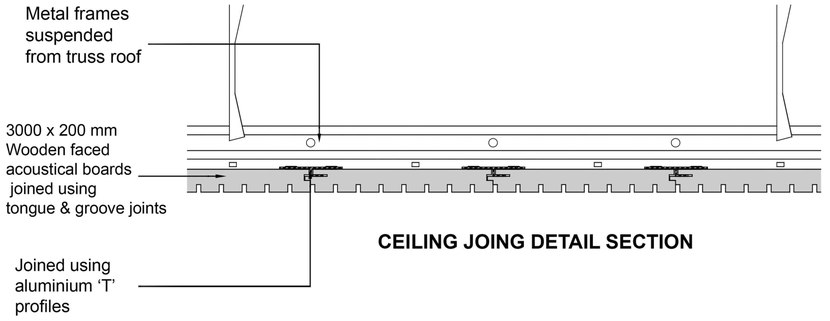
WALL ELEVATION - 15 _SCALE 1:50



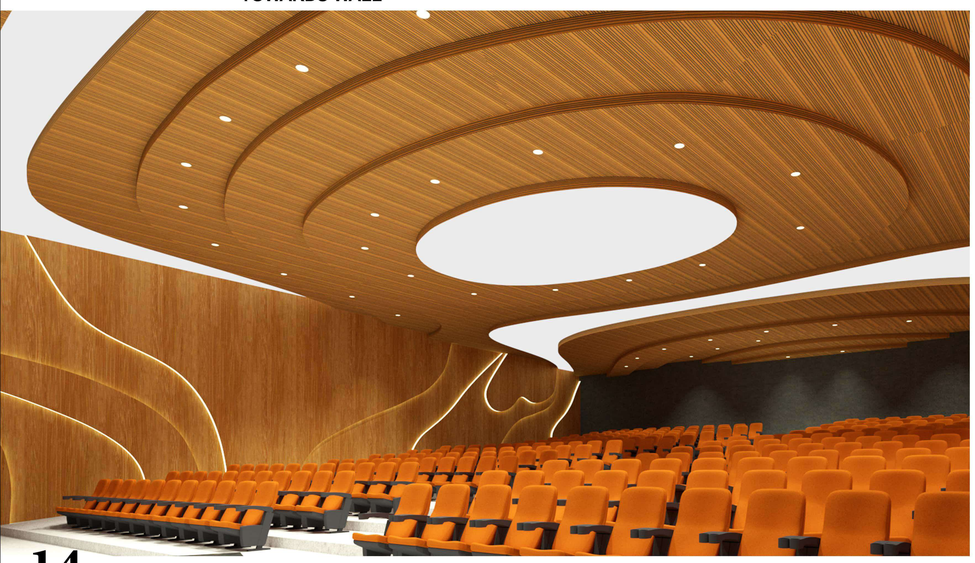
ACOUSTIC FOAM PANELS FIXING DETAIL TOWARDS WALL

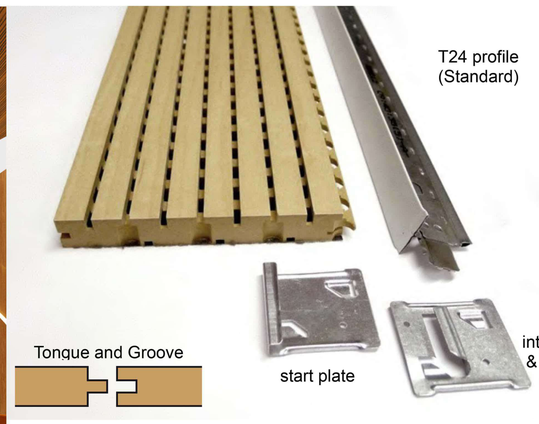


ALUMINIUM FRAMES SUSPENDED FROM CEILING

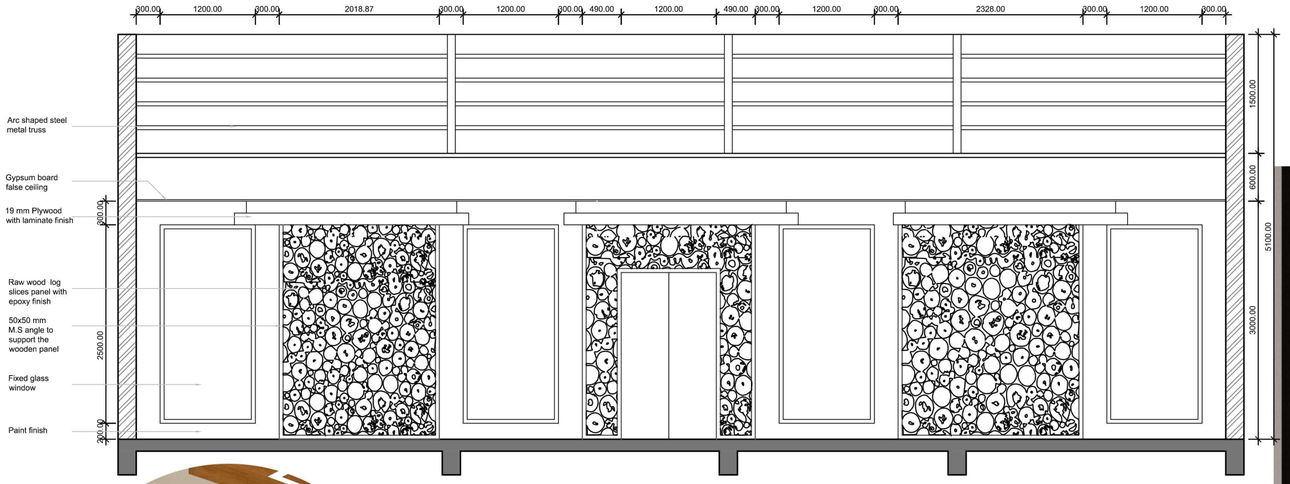


CEILING JOING DETAIL SECTION

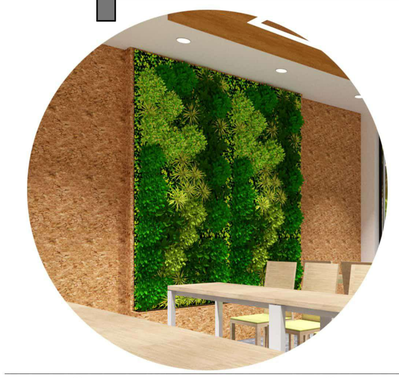


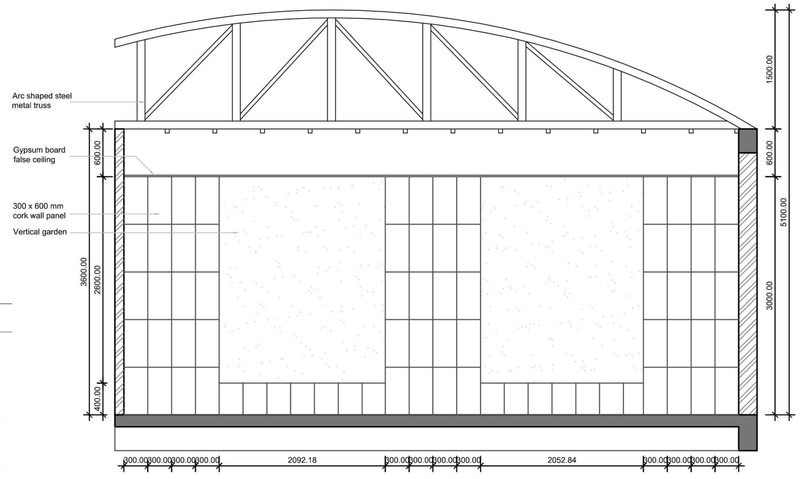


200 X 3000 MM WOODEN FACED ACOUSTICAL PANELS

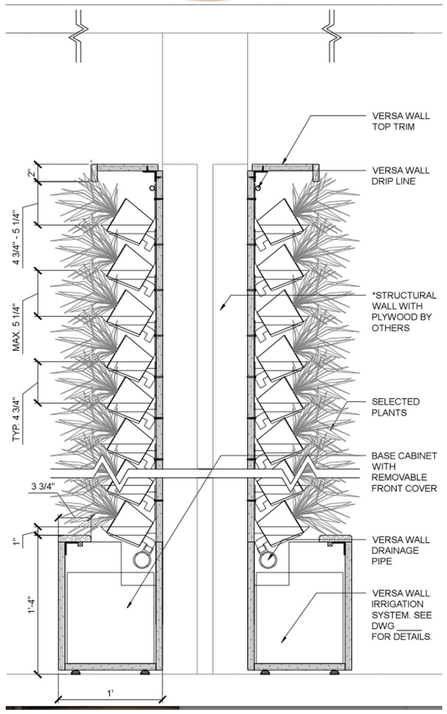


WALL ELEVATION - 13 _SCALE 1:50

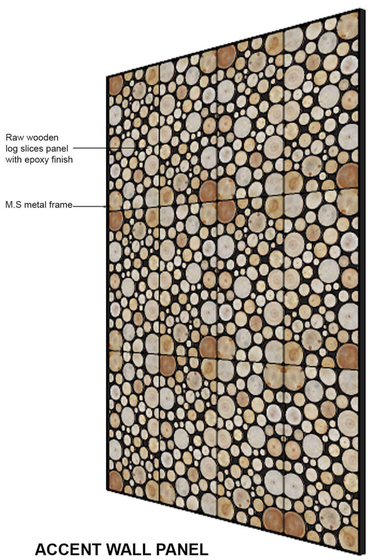




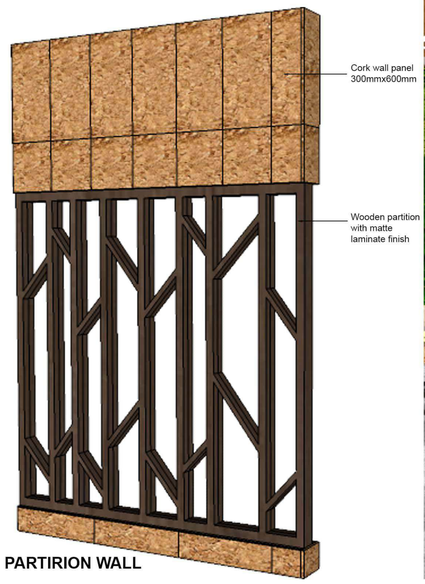
WALL ELEVATION - 14 _SCALE 1:50



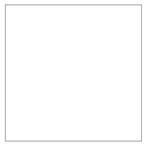
VERTICAL GARDEN
DETAIL OF WALL SECTION -Q



ACCENT WALL PANEL



PARTIRION WALL



Paint finish

Matte laminate finish

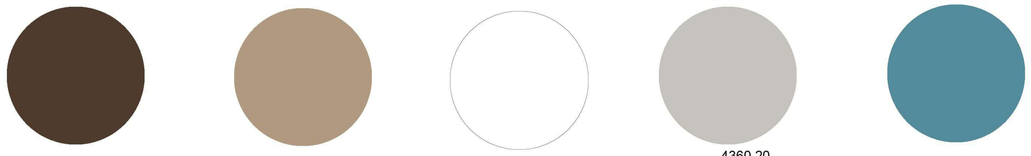
Matte laminate finish

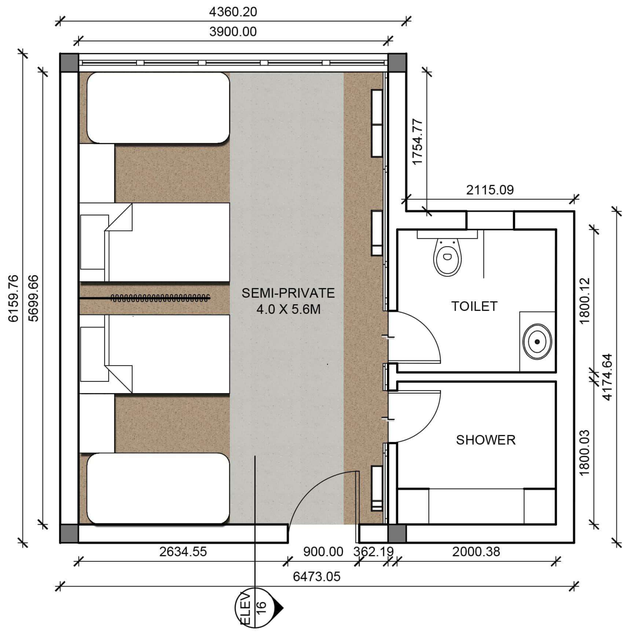
Matte laminate finish

Ceramic tile flooring

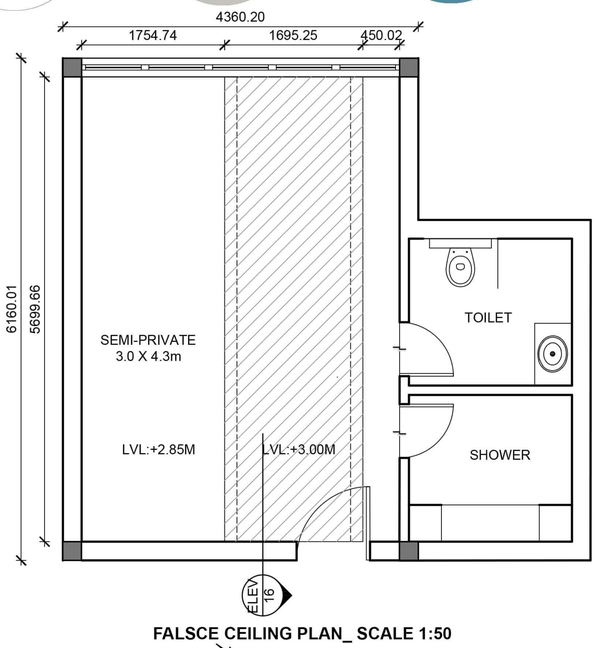
Cork wall panel 300mm x 600mm

Chair upholstery fabric

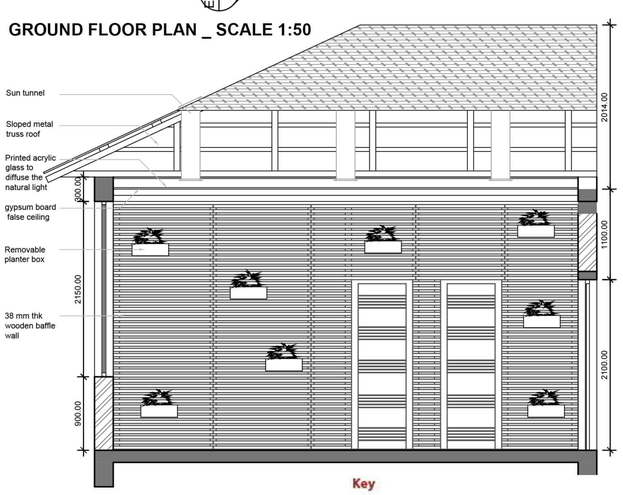


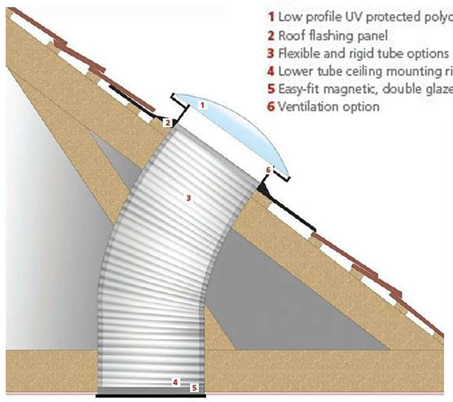


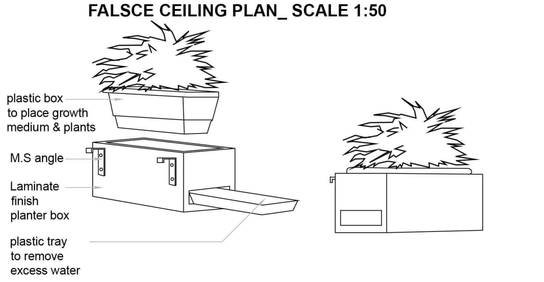
GROUND FLOOR PLAN _ SCALE 1:50



FALSCE CEILING PLAN_ SCALE 1:50





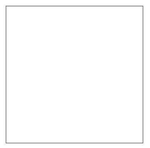


1. WOODEN BAFFLE WALL 38 MM THICK

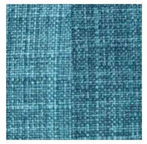
2. PLYWOOD WITH LAMINATE FINISH PLANTER BOX WITH PLASTIC CONTAINERS TO PLACE PLANT AND GROWTH MEDIUM

Matte finish brushed black metal stainless steel jali

Matte laminate finish



Paint finish

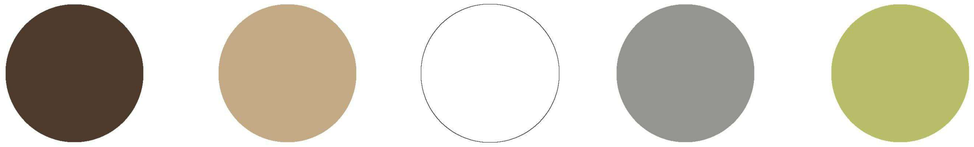


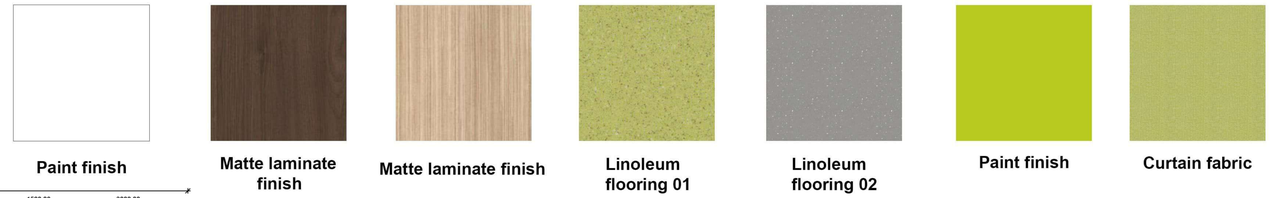
Curtain fabric

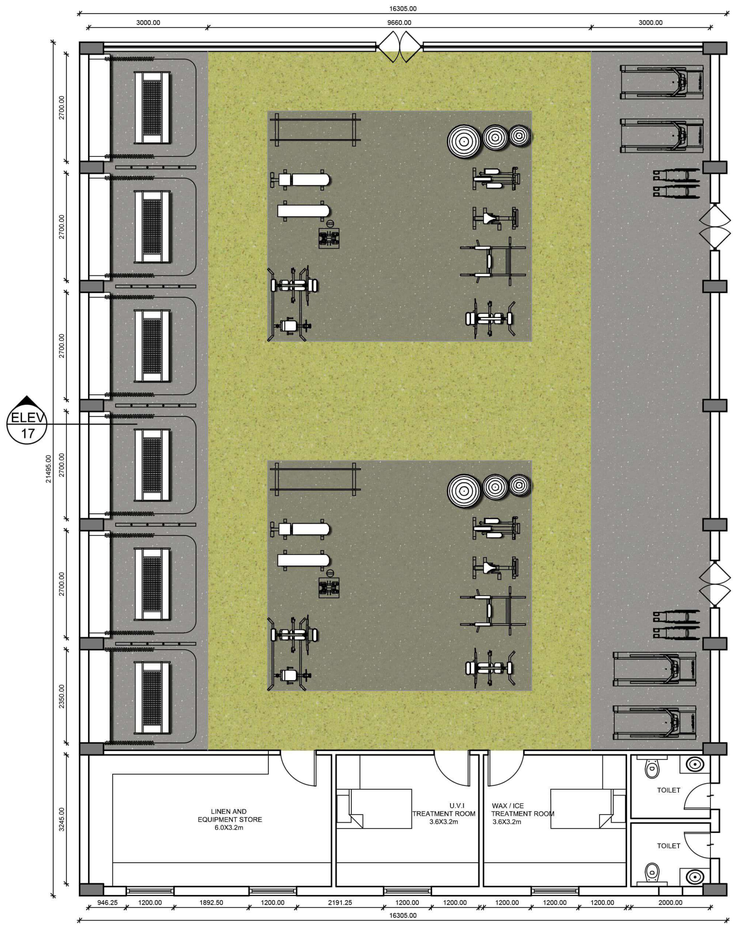
Linoleum flooring 01

Linoleum flooring 02

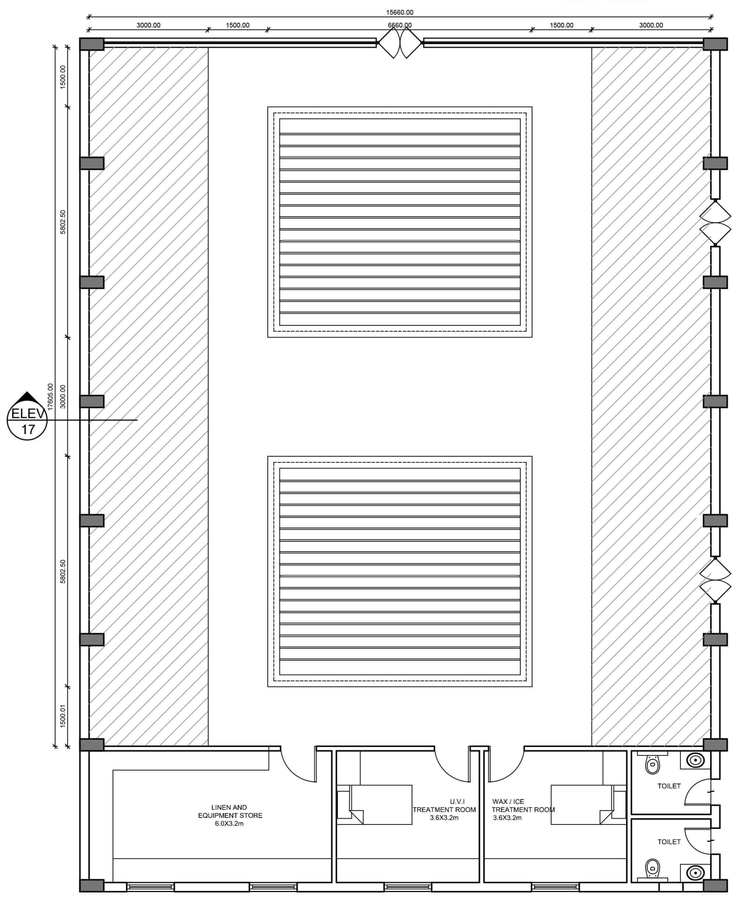
Printed acrylic glass



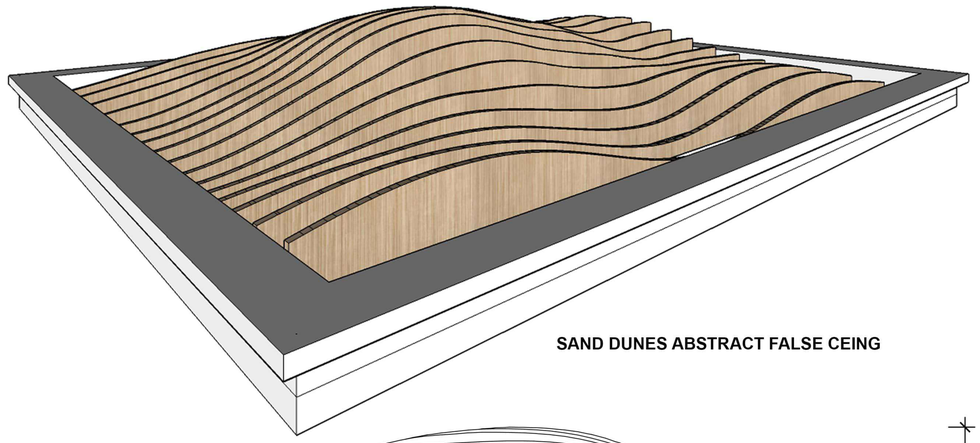




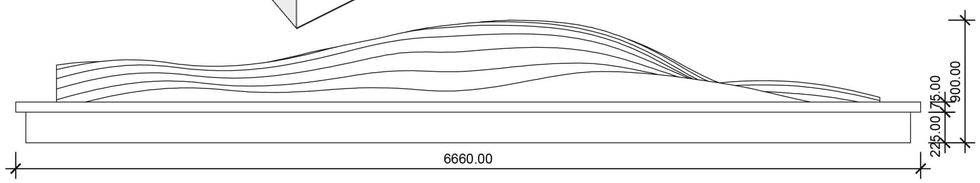
PHYSIOTHERAPY FLOOR PLAN_SCALE 1:100

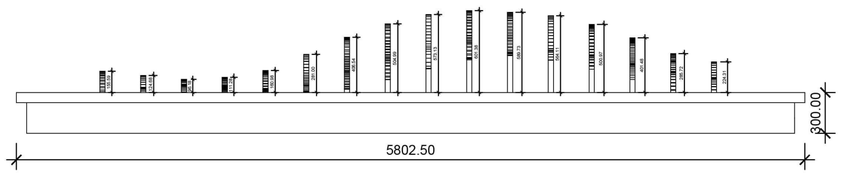


PHYSIOTHERAPY FALSE CEILING PLAN_SCALE 1:100

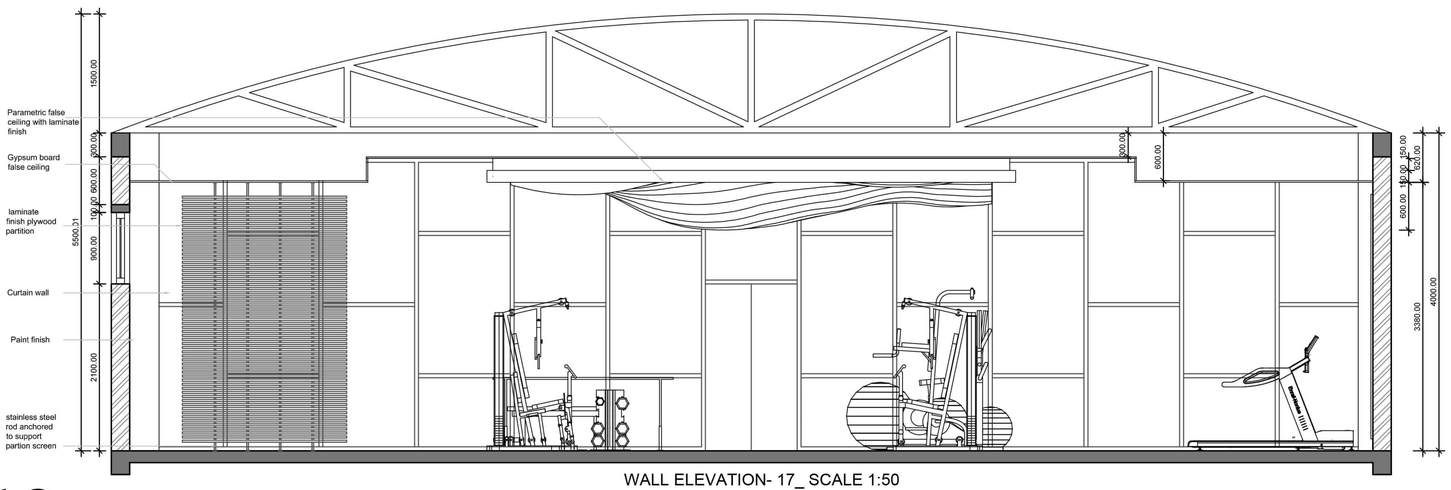


SAND DUNES ABSTRACT FALSE CEING

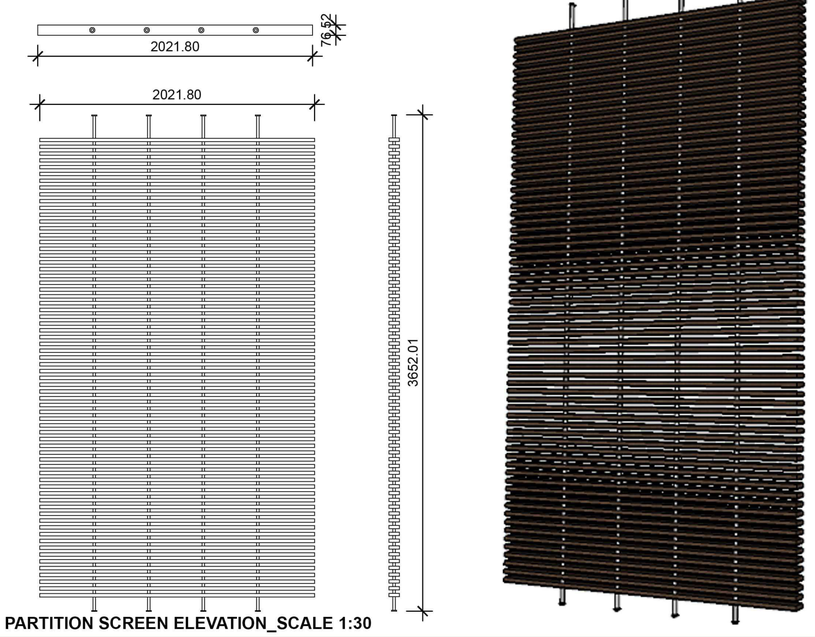




SAND DUNES ABSTRACT FALSE CEING ELEVATION_SCALE 1:30

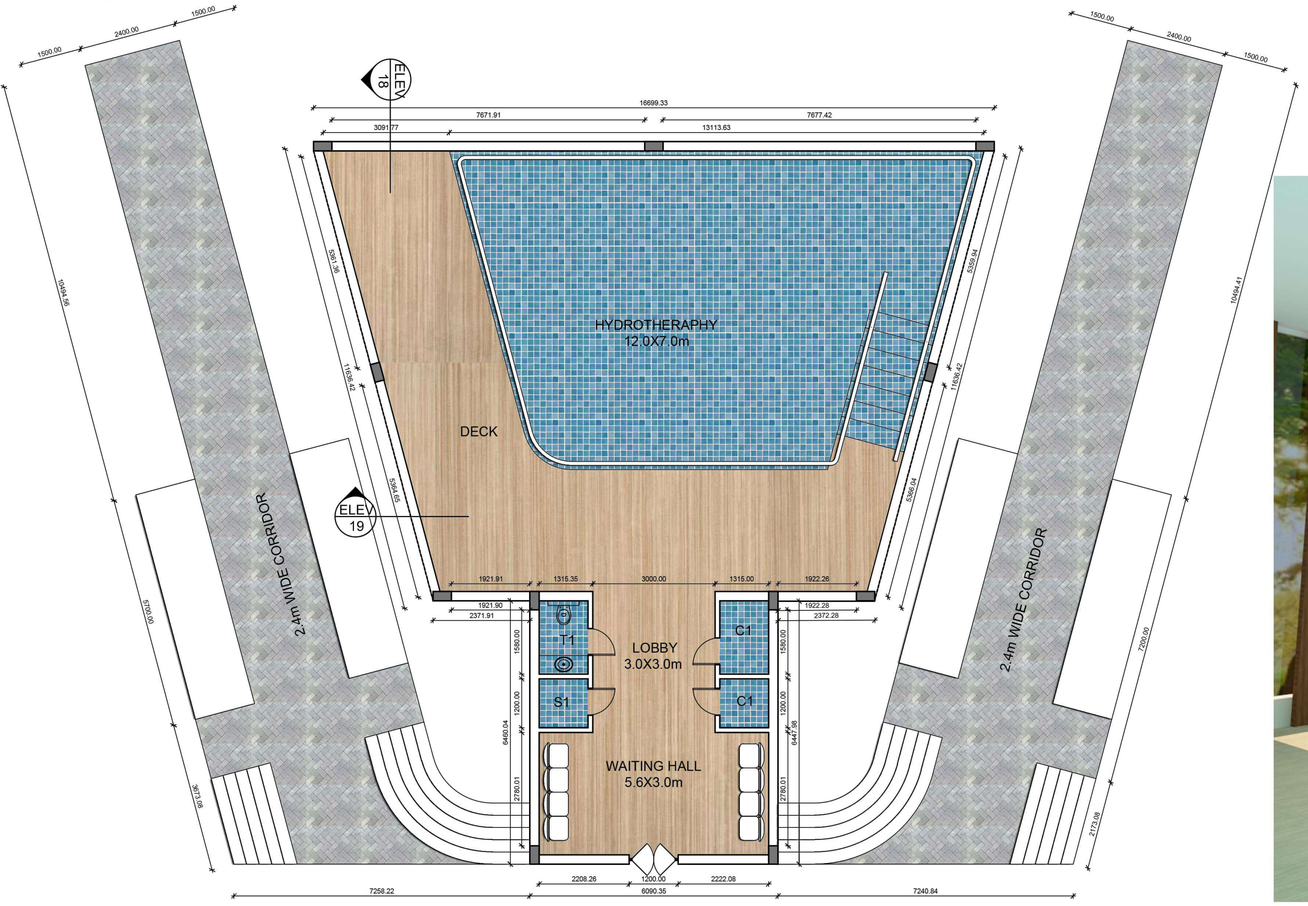


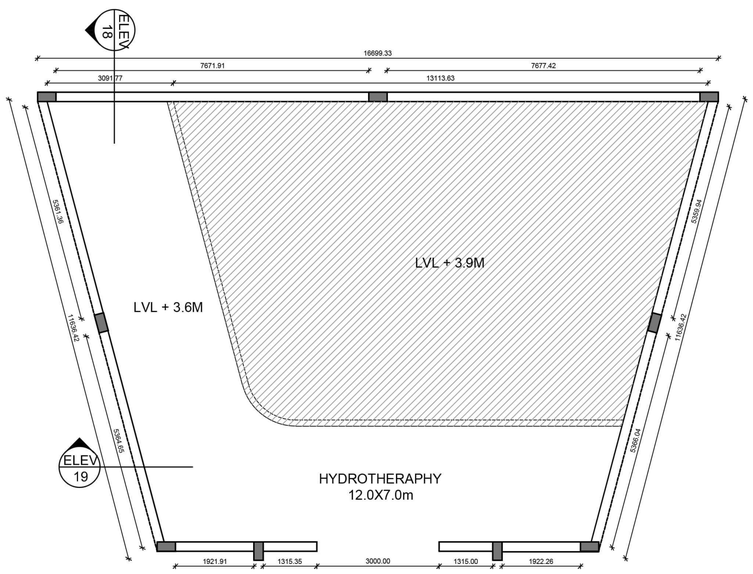
WALL ELEVATION- 17_ SCALE 1:50

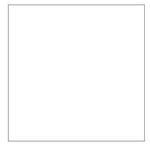


PARTITION SCREEN ELEVATION_SCALE 1:30

SPACE 06 - AUDITORIUM & DINING HALL







Paint finish

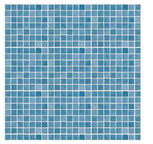
Matte laminate finish

Matte laminate finish

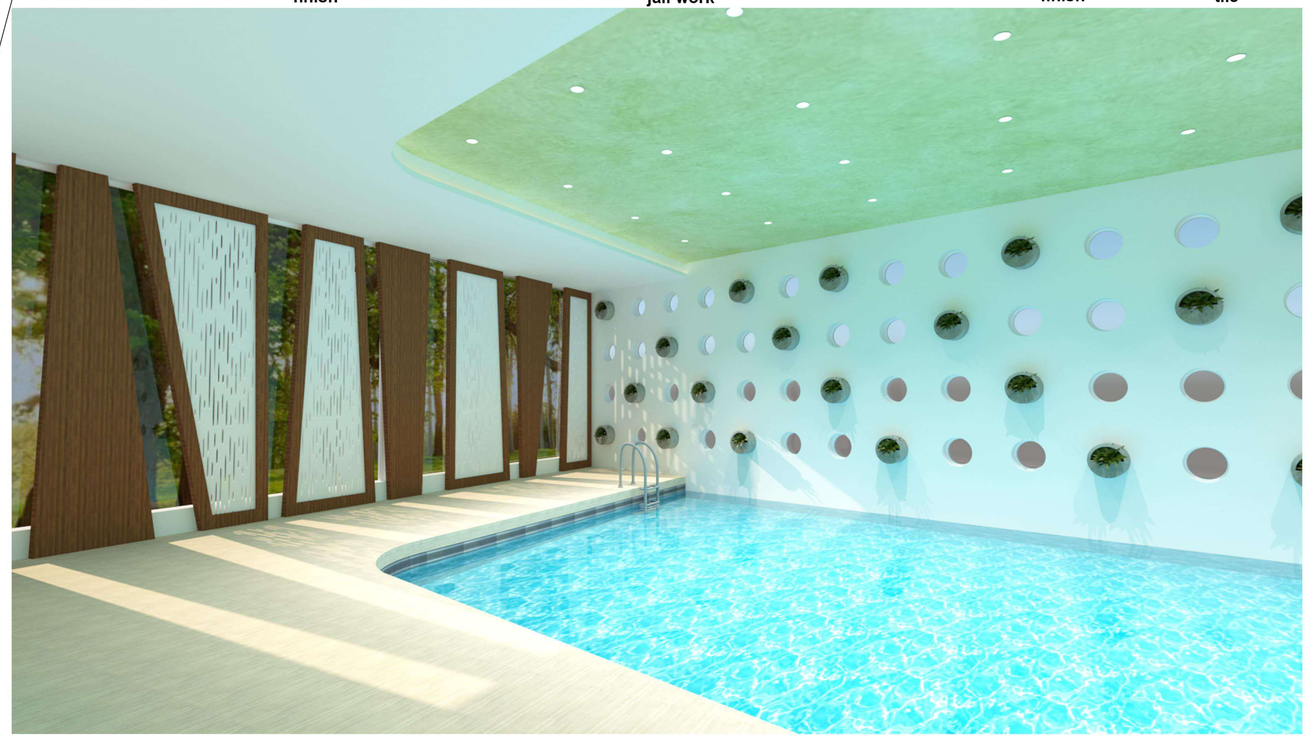
WPC Board for jali work

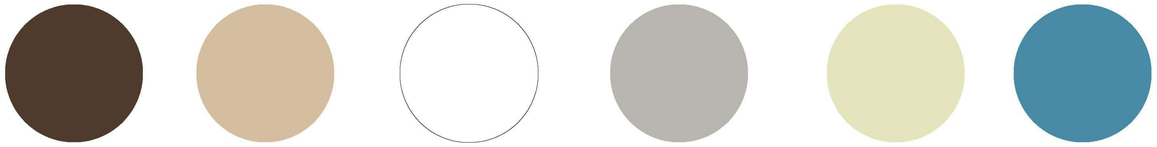
Concrete finish

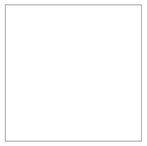
Texture paint finish



Pool flooring tile







Paint finish

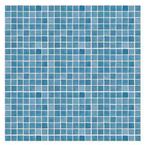
Matte laminate finish

Matte laminate finish

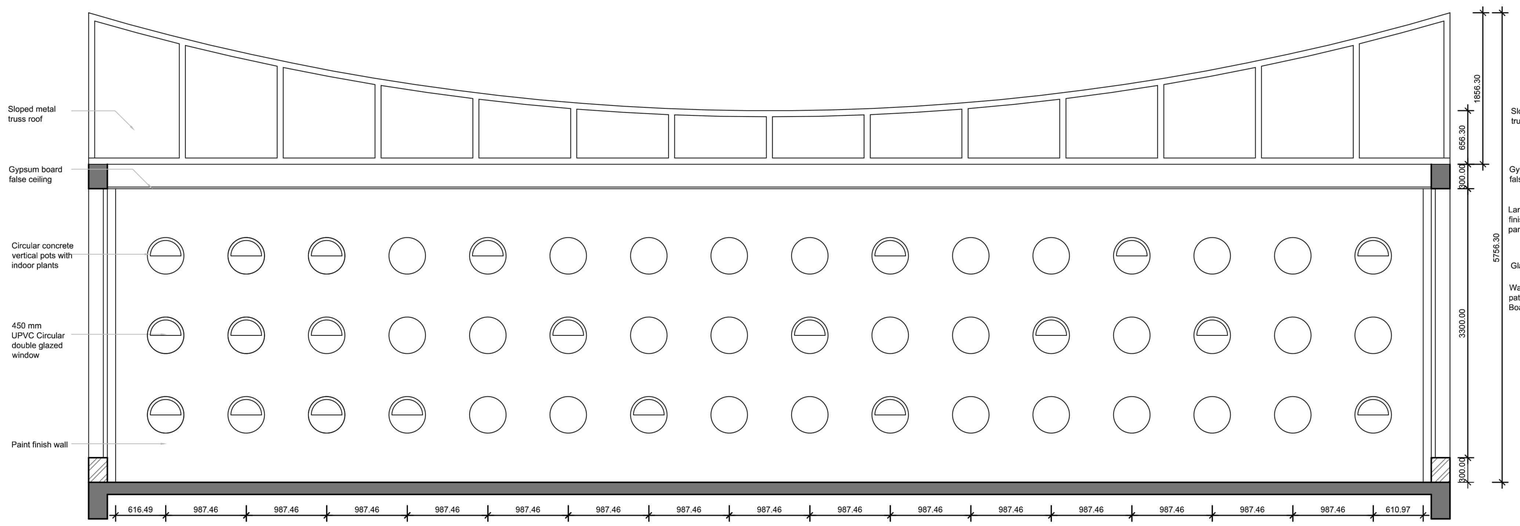
WPC Board for jali work

Concrete finish

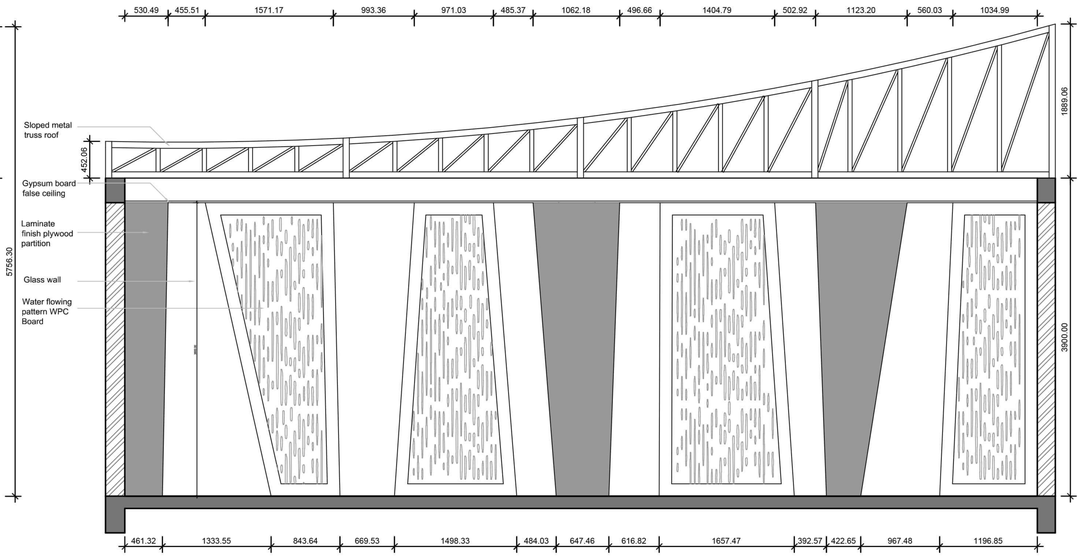
Texture paint finish



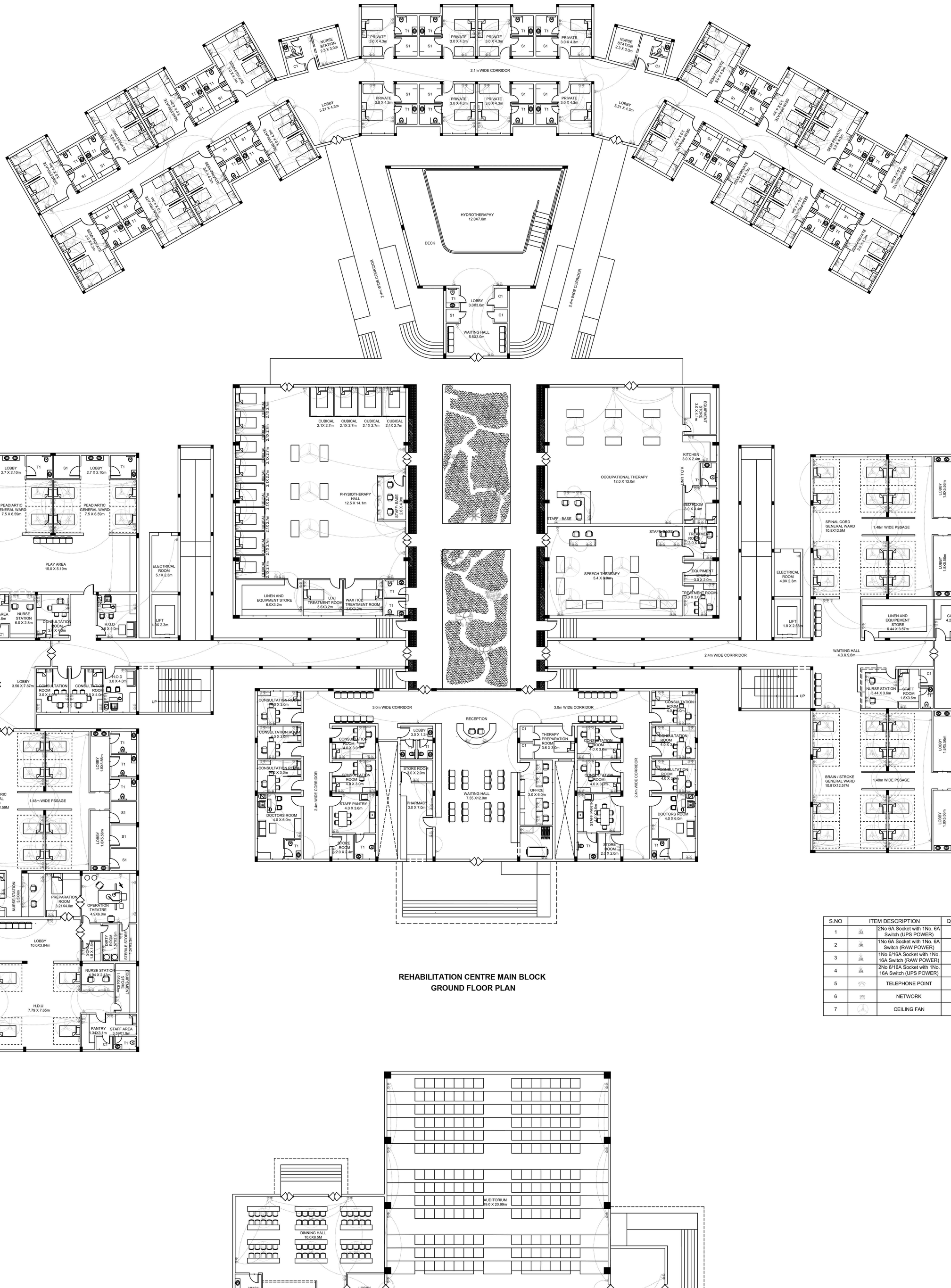
Pool flooring tile



WALL ELEVATION 19 _SCALE 1:50



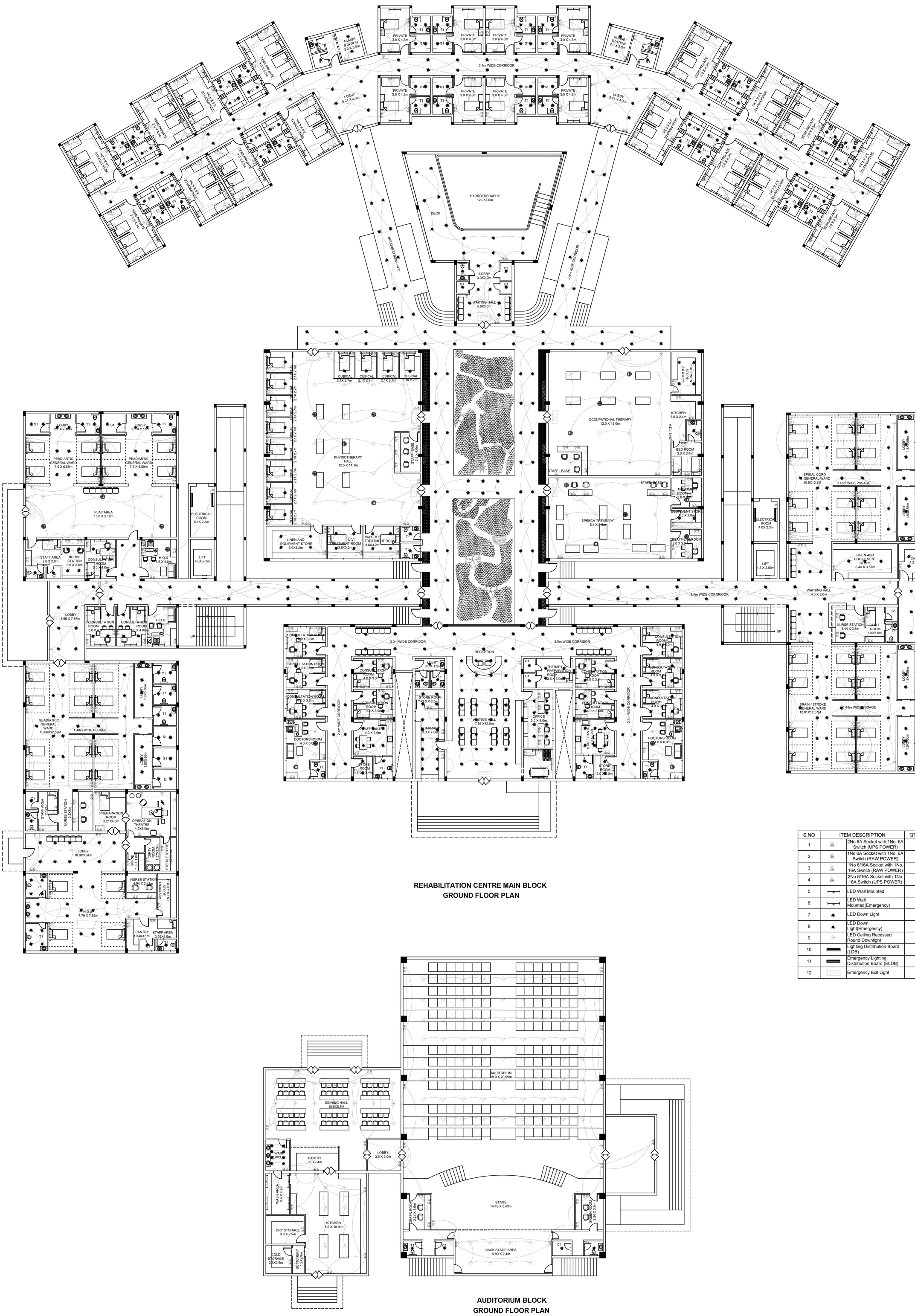
WALL ELEVATION 18 _SCALE 1:50



REHABILITATION CENTRE MAIN BLOCK
GROUND FLOOR PLAN

S.NO	ITEM DESCRIPTION	QTY
1	2No 6A Socket with 1No. 6A Switch (UPS POWER)	
2	1No 6A Socket with 1No. 6A Switch (RAW POWER)	
3	1No 6/16A Socket with 1No. 16A Switch (RAW POWER)	
4	2No 6/16A Socket with 1No. 16A Switch (UPS POWER)	
5	TELEPHONE POINT	
6	NETWORK	
7	CEILING FAN	

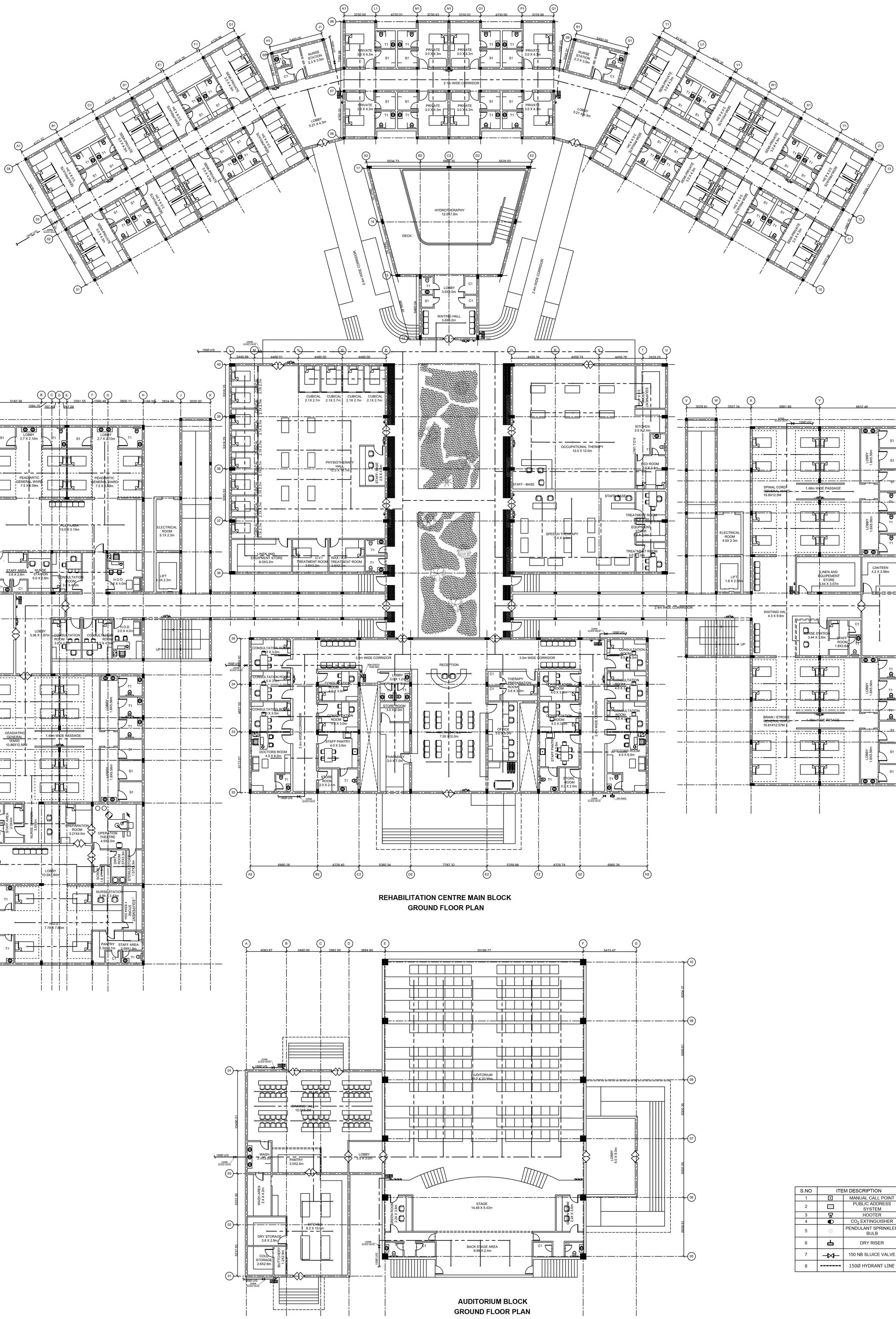
AUDITORIUM BLOCK
GROUND FLOOR PLAN

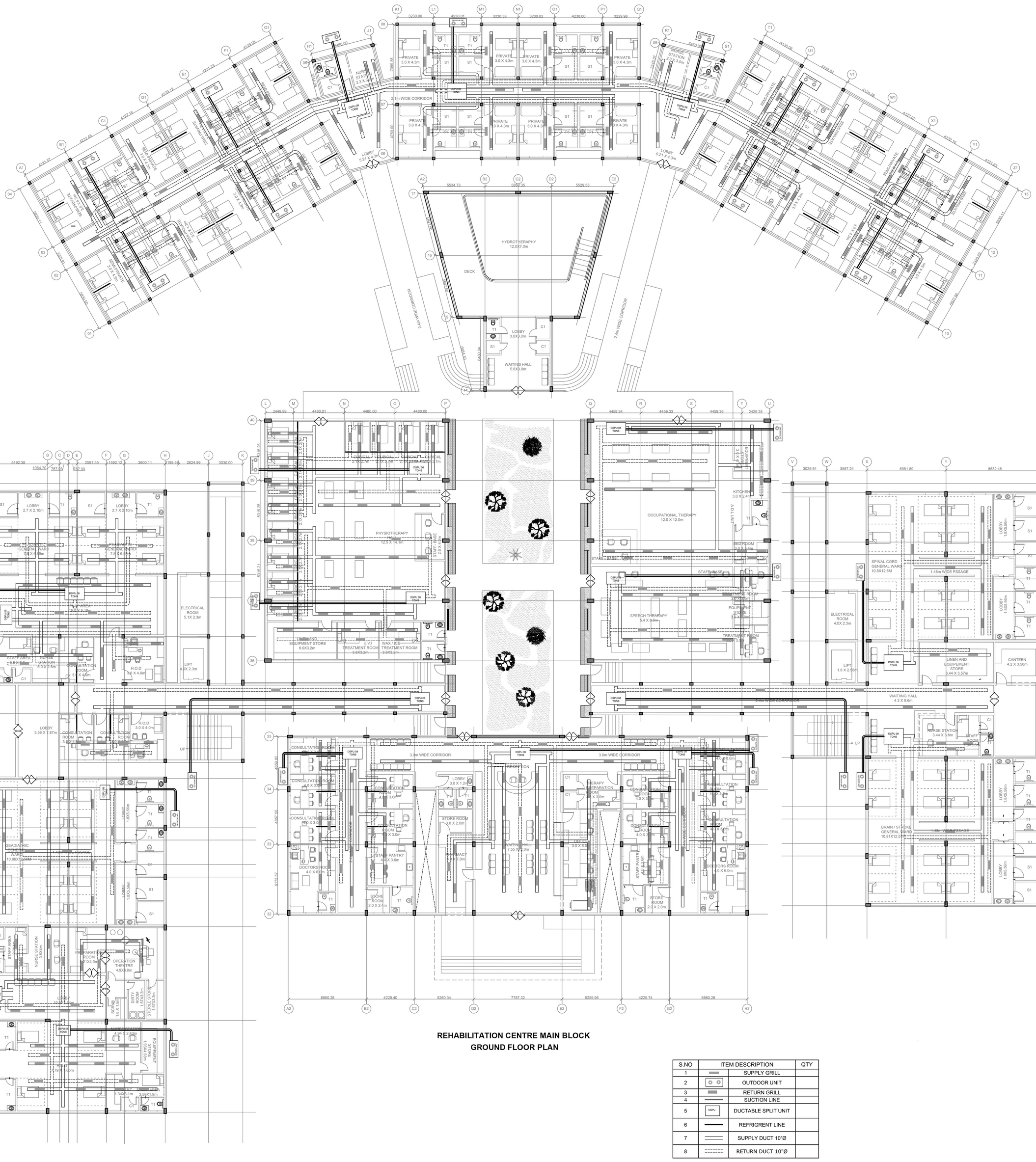


REHABILITATION CENTRE MAIN BLOCK
GROUND FLOOR PLAN

S.NO	ITEM DESCRIPTION		QTY
1	3kt	2No 6A Socket with 1No. 6A Switch (UPS POWER)	
2	3kt	1No 6A Socket with 1No. 6A Switch (RAW POWER)	
3	16A	1No 6/16A Socket with 1No. 16A Switch (RAW POWER)	
4	192	2No 6/16A Socket with 1No. 16A Switch (UPS POWER)	
5		LED Wall Mounted	
6		LED Wall Mounted(Emergency)	
7		LED Down Light	
8		LED Down Light(Emergency)	
9		LED Ceiling Recessed Round Downlight	
10		Lighting Distribution Board (LDB)	
11		Emergency Lighting Distribution Board (ELDB)	
12	EXIT	Emergency Exit Light	

AUDITORIUM BLOCK
GROUND FLOOR PLAN


PRIVATE 3.0 X 4.3m
SEMI-PRIVATE 3.0 X 4.3m
2.1m WIDE CORRIDOR
NURSE STATION 2.3 X 3.0m
LOBBY 5.21 X 4.3m
HYDROTHERAPY 12.0X7.0m
DECK
LOBBY 3.0X8.0m
WAITING HALL 5.6X8.0m
2.4m WIDE CORRIDOR
PEADIATRIC GENERAL WARD 7.5 X 8.59m
PLAY AREA 15.0 X 5.19m
ELECTRICAL ROOM 5.1X 2.3m
LIFT 1.0X 2.3m
STAFF AREA 3.6 X 2.8m
NURSE STATION 6.0 X 2.8m
CONSULTATION ROOM 3.0 X 4.0m
H.O.D 3.0 X 4.0m
LOBBY 2.7 X 2.10m
LOBBY 3.56 X 1.87m
GEADIATRIC GENERAL WARD 10.86X12.59M
1.49m WIDE PASSAGE
LOBBY 1.8X5.56m
LOBBY 1.8X5.0m
CUBICAL 2.1X 2.7m
PHYSIOTHERAPY HALL 12.5 X 10.1m
STAFF BASE 2.6 X 4.0m
LINEN AND EQUIPMENT STORE 6.0X3.2m
U.V.I TREATMENT ROOM 3.6X3.2m
WAX / ICE TREATMENT ROOM 3.6X3.2m
OCCUPATIONAL THERAPY 12.0 X 12.0m
KITCHEN 3.0 X2.4m
A.C.U.UNIT
BED ROOM 3.0 X 3.4m
STAFF - BASE
SPEECH THERAPY 5.4 X 8.0m
TREATMENT ROOM 3.0 X 3.0m
EQUIPMENT STORE 3.0 X 3.0m
TREATMENT ROOM 3.0 X 3.0m
EXAMINATION 3.0 X 3.0m
2.4m WIDE CORRIDOR
SPINAL CORD GENERAL WARD 10.8X12.5M
1.48m WIDE PASSAGE
ELECTRICAL ROOM 4.0X 2.3m
LIFT 1.8 X 2.58m
LINEN AND EQUIPMENT STORE 3.44 X 3.57m
CANTEEN 4.2 X 3.56m
WAITING HALL 4.3 X 9.6m
NURSE STATION 3.44 X 3.6m
STAFF ROOM 1.8X3.6m
BRAIN / STROKE GENERAL WARD 10.81X12.57M
1.48m WIDE PASSAGE
CONSULTATION ROOM 4.0 X 3.0m
DOCTORS ROOM 4.0 X 6.0m
STORE ROOM 2.0 X 2.4m
STAFF PANTRY 4.0 X 3.6m
STORE ROOM 2.0 X 2.0m
3.0m WIDE CORRIDOR
RECEPTION
LOBBY 3.0X 1.2m
STORE ROOM 3.0 X2.0m
PHARMACY 3.0 X7.0m
OFFICE 3.0 X 6.0m
THERAPY PREPARATION ROOM 3.6 X 3.0m
CONSULTATION ROOM 4.0 X 3.6m
CONSULTATION ROOM 4.0 X 3.0m
PREPARATION ROOM 3.21X4.0m
OPERATION THEATRE 4.9X6.0m
DIRTY ROOM 2.0X2.0m
STERILE STORE 1.57X1.3m
SCRUB 1.8 X 1.0m
LOBBY 10.0X3.84m
NURSE STATION 4.94 X 2.45m
EQUIPMENT STORE 1.65X1.45m
H.O.D 7.79 X 7.65m
PANTRY 1.34X3.1m
STAFF AREA 3.59X1.9m
CONSULTATION ROOM 3.0 X 3.0m
DOCTORS ROOM 4.0 X 6.0m
STAFF PANTRY 4.0 X 3.6m
STORE ROOM 2.0 X 2.0m
CONSULTATION ROOM 4.0 X 3.0m
CONSULTATION ROOM 4.0 X 3.0m
CONSULTATION ROOM 4.0 X 3


PRIVATE 3.0 X 4.3m
SEMI-PRIVATE 3.0 X 4.3m
2.1m WIDE CORRIDOR
LOBBY 5.21 X 4.3m
NURSE STATION 2.3 X 3.0m
DSPU 08 TONS
HYDROTHERAPHY 12.0X7.0m
DECK
2.4m WIDE CORRIDOR
2.4m WIDE CORRIDOR
LOBBY 3.0X3.0m
WAITING HALL 5.6X3.0m
OUTDOOR GYM
OUTDOOR GYM
OUTDOOR GYM