CHILD AND YOUTH DEVELOPMENT CENTER, NEW DELHI

A Thesis Submitted

In Partial Fulfillment of the Requirements

For the Degree of

BACHELOR OF ARCHITECTURE

in

ARCHITECTURE

by

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Under the Supervision of

Prof.- K.K.Dixit

To the

SCHOOL OF ARCHITECTURE

BABU BANARASI DAS UNIVERSITY

LUCKNOW

June, 2020

CERTIFICATE

I hereby recommend that the thesis, entitled **"CHILD AND YOUTH DEVELOPMENT CENTER",** prepared by MR. PRANJAL SRIVASTAVA under my supervision, is the bonafide work of the student and can be accepted as a partial fulfillment for the award of Bachelors Degree in Architecture, School of Architecture, BBDU, Lucknow.

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8. The contents of the thesis have been organized based on the guidelines.	YES ☐	NO ☐
9. The thesis has been prepared without resorting to plagiarism.	YES ☐	NO ☐
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Roll No ……

Enrollment No.:……

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INDEX

The main hope of a nation lies in education of the youth

IT IS CENTER OF DEVELOPMENT OF CHILDREN INCUDING YOUTH IN ALL ASPECTS.THE WHOLE CENTER WILL BE SET UP TO FUNCTION AS RESOURCE AGENCY AS WELL AS A THINK TANK FOR CHILD AND YOUTH PROGRAMS,POLICIES AND IMPLEMENTATION STRATIGIES.

-THE BASIC FUNCTION ARE DESIGN, DEVELOP AND CONDUCT APPROP RIATE TRAINING AND ORIENTATION PROGRAMES.CONDUCT SEMINARS-WORKSHOPS AND CONFERENCES ON CHILD AND YOUTH REALED ISSUES.

AIM

WORK AS AN ADVANCE CENTRE AND APEX BODY FOR ALL THE IDENTIFIED CENTRES OF TRAINING AND ORIENTATION OF CHILD AND YOUTH PROVIDING GUIDANCE CENTRE AND RECREATIONAL FACILITIES OF CHILDREN AND YOUTH.

OBJECTIVES

THE OBJECTIVES OF THE THESIS IS TO QUESTION HOW ARCHITECTURE CAN EFFECT THE LIFE OF A -YOUNG PERSON BY CREATING LEARNING ENVIRONMENT.
THROUGH ARCHITECTURE THE ENVIRONMENT WOULD BE SHAPED IN ORDER TO BECOME A MOTIVATION FOR THESE CHILDREN, THAT HELPS THEM TO GROW UP WITHOUT THE PROBLEMS THAT ARE NORMALLY ASSOCIATED WITH VARIOUS INSTITUTION.

3.AIM

-To design an academy which will cater all the needs of construction skill training programs under one umbrella.

-The design will promote a high level of sustainability based on intelligent use of natural building resources grafted with modern technologies and passive design mechanisms, which motivates through a strong, modern architecture.

-The Building will show the way to create a high quality and sensitively adapted building with an effective, cost-neutral and economically efficient planning concept to focus on the energy efficiency, especially through architectural design, as well as on social and cultural aspects of the building design

4. OBJECTIVES

STUDY OBJECTIVES

- Study of spaces required

-Study of training programs

-study of long span structures

-services required for an institution

-Acoustic study for classrooms, lecture halls, auditoriums ,seminar halls, conference rooms,etc

-Study of standards of different spaces.

-Study of energy efficiency methods.

DESIGN OBJECTIVES

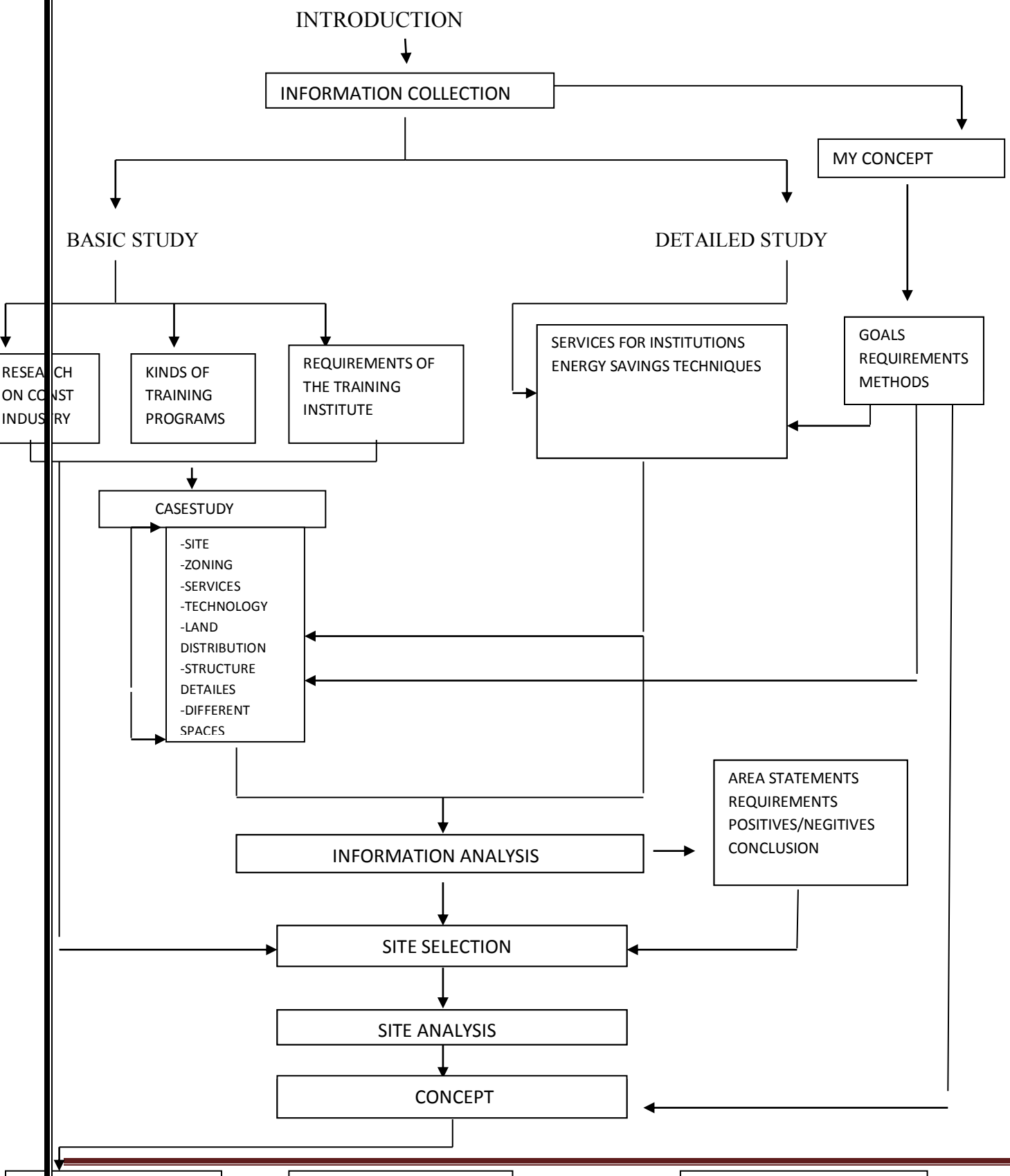
-To design a campus which will focus on energy efficiency.

-To provide spaces which will full fill all the needs of the training.

-To create spaces where trainees can socialize.

-To design a space which will be a show and tell object for the construction education.

5.Methodology



6.SCOPE

unemployment is increasing day by day in construction section due to unskilled workers.Skilled workers needed by 2022 is 7.3 million.Trainees will develop their skills which can help them in wage enhancement.These academies will help government deal with problems of unemployment, fast track completion of projects, skilled workers, wage enhancement, etc.It will act as show-and-tell object for the education(eg: architectural materials, building techniques, etc). This will help to design other institutions.

7.Limitations

-To limit the intake batch of the trainees so as to provide better training and facilities.

-No of courses are limited.

-Detailed structures are not provided.

OVERVIEW ON CONSTRUCTION INDUSTRY

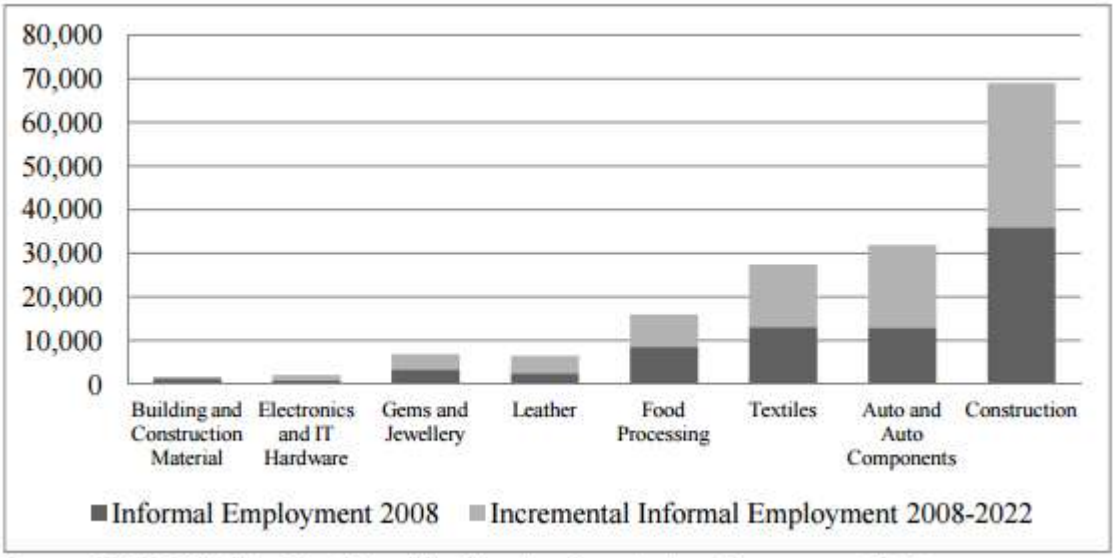
India's three crore construction workers are literally the builders of modern India. They build the roads and highways, the railway tracks and airports and ports that connect the vast sub-continent and make India one country, spanning all its distances and diversities. Construction workers are the backbone of the economy as they create the infrastructure necessary for industrial growth. In a globalising economy, it is they who are constructing the new economic zones, the IT cities, the call centres and mega malls that are creating new forms of wealth today. It is they who are laying the cables for a rapidly expanding country-wide telecommunications network. Yet these workers, who are creating the base of the new economy, themselves live in a time warp, trapped in low skilled, low paid, insecure working conditions, bound by feudal working relationships, often literally in bondage. About one-third of these workers are women and children.

By 2025, it is estimated that 70 per cent of Indians will be of working age. This ‘demographic dividend’ could give India an edge over the developed countries where a larger segment of the population would by then be past retirement. However, this demographic dividend can easily turn into a demographic disaster if a majority of the working age population remains unemployable due to a lack of skills. Even today, one hears of a shortage of skilled workers across industries, which does not augur well for sustaining India’s economic growth. For instance, the construction industry lacks sufficient plumbers and construction machine operators, resulting in a slowing of construction activity and increasing the overall cost of projects, posing a major challenge to India’s infrastructure development plans (Heikkila 2012).

In the light of this situation, skill development has gained an impetus in India’s policy-making circle headquartered in New Delhi. The central government’s concern with this shortage of skilled workers is best described in the words of the Indian Prime Minister, Manmohan Singh, ‘As our economy booms and as our industry grows, I hear a pressing complaint about an imminent shortage of skilled employees. As a country endowed with huge human resources, we cannot let this be a constraint’ (Government of India 2011a). Towards this end, the government of India has set for itself a task of creating a skilled workforce of 500 million by 2022. A National Skill Development Council has been

created under the Prime Minister's auspices. Of the 500 million, over two-thirds of the target has to be met by existing vocational training initiatives offered by 17 central government ministries. For the remaining one-third, a private-public partnership based National Skill Development Corporation (NSDC) has been set up. Given the policy focus and ambitious targets for scaling up vocational training and skill development efforts, it is important to first explain why a shortage of labour still exists despite ongoing initiatives to improve training

Figure 1: Projected Employment in Sectors with a Significant Casual Workforce



Source: NSDC, XIth Five Year Plan of the Planning Commission, Government of India

Vocational Training in India

As in many developed countries, vocational training in India is offered outside the formal schooling structure and caters to people with minimum secondary school education. India's VET system for skill building is complex with responsibilities distributed across multiple ministries and various levels of government. To limit the scope of this paper, the focus is only on the vocational training initiatives provided by the Indian Ministry of Labour and Employment, which has a mandate to train over 100 million people of the government's target to skill 500 million people by 2022 (Government of India 2011b). The Ministry of Labour and Employment provides vocational training through over 8,000 government-aided Industrial Training Institutes (ITIs, government run) and Industrial Training Centres (ITCs, self-financed).3 Being on the concurrent list of the Indian Constitution, both central and state governments share legislative powers and responsibilities over vocational training.4 The Directorate General of Employment and Training (DGE&T) under the Ministry of Labour and Employment is the main organisation that forms vocational training policies and certification norms at the national level, while the state governments are responsible for the programmes and their implementation. The industry or the private sector plays only an advisory role in the existing training system. Training programmes on 128 trades are mainly offered under the Craftsmen Training and Apprenticeship Training schemes. 5 Table 1 highlights the complex division of responsibilities between the central and state governments; and the peripheral role of the private sector. Put together, all ITIs across India have the capacity to train only a million people annually, whereas close to 13 million people are

being added to the workforce each year. Moreover, placement outcomes post-training from these institutes have also remained poor over the years.6 The Planning Commission of

India has attributed this to a mismatch between training delivered and required, a quantitative shortage of capacity, lack of private sector participation and outdated syllabi. Subsequent reforms by the central government have aimed to address these quantitative and qualitative challenges and therefore have been directed towards upgrading capacity and aligning the curriculum and training provided to meet market needs. Dependence on private participation for such reforms has increased in recent years. In his budget speech for the year 2004-2005, the then Finance Minister, P. Chidambram, announced a scheme to upgrade 500 ITIs into specialised centres of excellence with World Bank funding. Further, in 2007, the Ministry of Labour and Employment announced a scheme to upgrade another 1,396 ITIs by engaging private partners under the Eleventh Five Year Plan by 2012. However, lack of coordination arising from the complex distribution of powers between government levels has restrained implementation of these schemes.

The Shortage of Skilled Construction Workers

The Indian construction industry comprising infrastructure and real estate sectors employs over 26 million casual workers and is the country's second largest employer after agriculture. The Planning Commission of India has projected that the construction sector will require another 47 million people in the workforce over the next decade (FICCI 2010:13). Despite such significance to the Indian economy, there is no specific policy for skill building in the construction sector.10 The current pool of the construction workforce in India comprises mainly unskilled workers

Table 2: Employment in Construction Sector by Education Level of Workers

Category	Percentage of employment	Total Employment
Unskilled workers	83%	25.6 million
Skilled workers	10%	3.3 million
Engineers	3%	0.8 million
Technicians and foremen	2%	0.6 million
Clerical	2%	0.7 million

Source: Report of the Working Group on Construction for the Eleventh Five Year Plan, *Planning Commission*, Government of India

Most of these unskilled workers are seasonal, migrant workers from poorer agricultural states and they lack education and formal training11 and usually pick up skills on the job, informally from peers or supervisors, resulting in inefficient performance on the job. Among the 10 per cent skilled construction workers, emigration to overseas countries - Gulf countries in most cases - for higher wages is common.12 Emigration worsens the shortage of skilled workers and creates an upward pressure on domestic wages13 leading to a situation where Indian firms have to import workers to meet their requirements. In 2008, DLF, one of India's leading real estate developers, reportedly brought in skilled carpenters, steel fixers and electricians from China, Indonesia and Philippines as they were cheaper and more productive than their Indian

counterparts (Dhall 2008). Reliance Industries, a major Indian business conglomerate, reportedly brought in 4,000 Chinese construction workers for the construction of India's largest oil refinery at Jamnagar district in the state of Gujarat (Choudhary 2007). Large firms in the construction business have been vocal about the negative

impact of the lack of skilled carpenters and masons on quality and delivery of projects (Pearson and Sharma 2011). The need for skilled construction workers becomes more pressing for India as the increasing use of technology and mechanisation is expected to reduce the requirement of unskilled workers on individual construction sites. For instance, the time in laying two consecutive slabs has been reduced from 18-20 days to 7-8 days due to the use of pre-fabricated parts and modular structures.14 Therefore, in order to remain employable, construction workers will have to upgrade their skills. Realising the severity of the shortage of skilled construction workers, the government of India had conducted a skills mapping study and identified carpentry, electrician, painter, welder, masonry, crane operations and plumbing as key roles which will be in demand until 2022 and the level of skills required (Table 3). Together, these key roles will require 7.3 million vocationally trained workers by 2022.15

Table 3: Incremental Requirement for Key Skills in the Construction Sector in India by 2022

Profile	Incremental Requirement ('000)	Skill Level
Project managers and engineers	473	Specialised
Supervisors	473	Specialised
Surveyors	47	Specialised
Foremen	946	Specialised
Crane operators	7	Vocationally Trained
Electricians	473	Vocationally Trained
Welders	473	Vocationally Trained
Plumbers	1,183	Vocationally Trained
Carpenters	1,892	Vocationally Trained
Others (including painters, equipment operators)	459	Vocationally Trained
Steel fixers	1,419	Vocationally Trained
Masons	1,419	Vocationally Trained
Minimally educated	38,038	
Total	47,302	

Source: Report on 'Human Resource and Skill Building Requirements in the Building, Construction and Real Estate Services,' *National Skill Development Corporation.*

However, the total current annual training capacity of vocational training institutes across India is one million (FICCI 2010:8). Given that there are 8,477 industrial training institutes (ITIs) offering 41,423 courses, of which 12,132 are related to key construction roles, 16 and assuming that all courses have equal enrolment, the total existing training capacity for key construction skills is 300,000 (0.3 million) per annum. It will only be enough to train three million people by 2022, less than half of the demand of 7.3 million. It should be noted that the minimally educated workforce in the sector (38 million) will also need to be continually upgraded at the national level. Besides the quantitative limitation of the existing training

structure, there is an obvious mismatch between the training offered and required in two major Indian states, UP and Maharashtra, that drive construction activity and employment.

CHALLENGES BEFORE CONSTRUCTION INDUSTRY IN INDIA

The construction industry is the second largest industry of the country after agriculture. It makes a significant contribution to the national economy and provides employment to large number of people. The use of various new technologies and deployment of project management strategies has made it possible to undertake projects of mega scale. In its path of advancement, the industry has to overcome a number of challenges. However, the industry is still faced with some major challenges, including housing, disaster resistant construction, water management and mass transportation. Recent experiences of several new mega-projects are clear indicators that the industry is poised for a bright future. It is the second homecoming of the civil engineering profession to the forefront amongst all professions in the country.

1. CONSTRUCTION INDUSTRY AND NATIONAL ECONOMY

Presently, the annual expenditure budget of India is Rs.438,795 Crores against the backdrop of the total Gross National Product (GNP) of the country of about Rs.2200,000 Crores or more (www.indiabudget.nic.in, 2004). Over the years, more than half of the expenditure budget is spent on civil engineering works. Table 1 shows the investments made in the industry over the past years. The construction industry sets in motion the process of economical growth in the country; investment in this sector contributes 6.5% of Gross Domestic Product (GDP) growth (Das, 2003). Every Re.1 investment in the construction industry causes an Rs.0.80 increment in GDP as against Rs.0.20 and Rs.0.14 in the fields of agriculture and manufacturing industry, respectively. Statistics over the period have shown that compared to other sectors, this sector of economic activity generally creates 4.7 times increase in incomes and 7.76 times increase in employment generation potentiality. Sustained efforts by the Indian construction industry and the Planning Commission have led to assigning the industry status to construction today. This means formal planning and above board financial planning will be the obvious destination of the construction sector in the country, with over 3.1 Crore persons employed in it.

Table 1. Investment in the Construction Industry (Swarup and Mahajan, 2001)

	Amount *(in multiples of Rs.100 Crores)*				
	1998	**1999**	**2000**	**2001**	**2002**
Residential Construction					
Public	43	46	65	75	77
Private	47	49	85	100	103
Total	***90***	***95***	***150***	***175***	***180***
Non-residential Construction					
Public	56	58	55	60	65
Private	104	107	95	110	120
Total	***160***	***165***	***150***	***170***	***185***
Civil Engineering Construction					
Public	1350	1480	1690	1900	2155
Private	500	530	640	755	880
Total	***1850***	***2010***	***2330***	***2655***	***3035***

2. NEW MEGA-PROJECTS

In the recent times, India has stepped up its development agenda. One explicit indicator of this is the aggressive pace of construction activity in the country. The honorable President of India, Dr. A. P. J. Abdul Kalam, has set the goal of 2020 for India to become a developed nation. However, economists and development analysts of the country have a different perception. They believe that if the current national level initiatives are consistently supported along with a few new initiatives in the areas of education, health and labour, this country will be in the driving seat and on a one-way street of growth. The particular emphasis on infrastructure development will put India on a road map with Brazil, China and Russia towards becoming a developed nation by 2050. The following are some of the physical infrastructure related projects that the country has undertaken or is poised to undertake in the near future.

2.1 Delhi Metro Rail Project

This project is developing a Mass Rapid Transit System (MRTS) in Delhi. The first phase of the project is presently under operation. It aims to provide 68.3 km of MRTS by September 2005. The estimated completion cost of this phase alone Rs.10,500 Crores. It involves construction of 10.5 km of surface lines, 45.6 km of elevated routes and 12.2 km of underground routes. The construction of underground segments involves tunneling through hard rock strata. Special giantsize (6m diameter).

2.2 Highway Projects

Until recently, India lacked proper highway network across the length and breadth of the country, which severely affected the pace of growth. The development agenda of the nation and the projected industrial growth demanded world-class road network for safer, faster and efficient movement of men and material. A detailed assessment of needs was done and ambitious plans were prepared to undertake a mega-project for highways as part of the Ninth Five Year Plan.

2.3 River Inter-Linking Project

This project of developing a mega-network of canals linking major Indian rivers is a long-term, multi-Crore solutions of Country's drought, flood, inter-state water dispute, chronic power shortage and pollution. It would open-up windows of opportunities like water transport and tourism, which have ample geo-political and socio-economic benefits. The total project is expected to cost Rs.560,000 Crores, which is expected to irrigate an additional 15,00,00,000 hectares land (NWDA, 2003). Presently, out of the total geographic area of 32,80,00,000 hectares of the country, 14,20,00,000 hectares is irrigated.Thus, with the implementation of this project, the irrigated land in the country would double covering almost the entire nation. The project is also expected to generate 35,000 MW of electricity. This would increase the power generating capacity of the nation by 33% of the present capacity of 104,918 MW.

Proposed River Links

1. Mahanadi-Burhabalang
2. Mahanadi-Godavari
3. Indravati-Wainganga
4. Wainganga-Krishna
5. Krishna (Srisailam)-Pennar (Prodattur)
6. Pennar (Gandikotta)-Palar-Cauvery
7. Cauvery-Vaigai
8. Godavari (Inchampalli)-Krishna (Nagarjunasagar)
9. Krishna (Nagarjunasagar)-Pennar (Somasila)

9.A Krishna (Almatti)- Pennar

10. Pennar (Somasila)-Palar-Cauvery (Coleroon)
11. Godavari (Inchampalli)-Krishna (Pulichintala)
12. Godavari (Polavaram)-Krishna (Vijaywada)
13. Par-Tapi-Narmada
14. Damanganga-Tansa/Pinjal
15. West Flowing Rivers of Kerala and Karnataka (Bedti-Varda; Netravati-Hemavati; Pamba-Anchankovil-Vaippar)
16. Ken-Betwa
17. Parbati-Kalisindh-Chambal

2.4 Sea-Ports Project

This project of upgrading existing ports along the gigantic coastline of the country will be an invitation to traders from all directions to conduct business with India; the project is therefore called as the Saagar Mela Project and sometimes as the Necklace Project. With an total outlay of about Rs.60,000 Crores, this project is also expected to relieve the pressure on the rail, road and air traffic systems, by allowing the ship and ferry services between various port cities. The project entails improvement of harbour structures, developing advanced navigational inventory systems for small and large vessels, and adding a few smaller ports to facilitate offloading of cargo at points where the rail or road traffic is not already too congested.

2.5 Air-Taxi Project

Another mega-project that is under plan preparation is one that will enhance air connectivity between various places in the country. It is expected that the enhancement of existing airports to higher standards and capacity, and addition of new airports at critical locations will lead to more hubs for traffic exchange, in contrast to just Delhi and Bombay currently. It is also proposed to have a high capacity airport at Nagpur, which will off load and carry passengers from any corner of the country to another such destination without having to necessarily reach one of the already busy airports of Delhi and Bombay. This project along with other national level initiatives of the Central Government is expected to result in a sharp drop (by about 70-80%) in the current air travel cost in the country. The financial outlay for this project is expected to far exceed some of the ongoing mega-projects like the highways project or the sea-ports project.

TECHNICAL HUMAN RESOURCE and EMPLOYMENT POTENTIAL

In India, traditionally the construction industry has been labour intensive as the labour is cheap and easily available. In 1995-96, approximately 1.50 Crores people were employed in this industry which is expected to be 3.26 Crores by the year 2004-2005 (Das, 2003). There are three categories of

manpower involved in this industry consisting of the artisan level, the supervisory level and managerial level. It has been observed that every Rs.1 Crore, investment on construction project, generates employments of 22,000 unskilled man-days, 23,000 skilled or semiskilled man-days and 9,000 managerial and technical man-days approximately. With only 3% of total teaching in the country addressing the direct needs of the construction engineering and management aspects required in the construction industry, the 14th Engineering Congress on Human Capital Development in January 2002 observed that "in time to come, India will not have sufficient quality civil engineers even to undertake basic infrastructure work." Urgent steps are to be initiated to reverse this trend of severe shortage of technical manpower.

SKILL DEVELOPMENT IN CONSTRUCTION SECTOR

Sr No	Country	2010 Share of World Gross VA (2005 US $ Bn) %
1	US	18
2	Japan	9
3	Brazil	2
4	India	4
5	Russia	2
6	China	11
7	Spain	5
8	UK	5
9	Italy	4
10	France	5
11	Germany	4
12	Others	31

Structure of Construction Sector in India

• Second largest economic activity. Multidimensional, spans several sub sectors of economy. Mix of organized and unorganized players in all sub sectors

• The share of construction in GDP is around 8 % and in employment generation it is 14 % of employable citizens.

• Growth rate of 8 % in last 5 years, due to strong emphasis on physical infrastructure. Accounts for 45 % of total investment in infrastructure

• Firms engaged in construction encompass all sizes : Large, medium and Small in unorganized and unorganized sectors

Year 2000	Enterprise	
	Number	%
1 – 200 persons	26700	96.15
200 – 500 persons	850	3.06
> 500 persons	220	0.79
Total	27770	100.00

DISTRIBUTION OF CONTRACTORS BY EMPLOYMENT

LINKAGES IN MANPOWER

• Construction has high backward linkages in employment, specially in rural areas :

– Absorbs rural / seasonal labour

– Absorbs unskilled labour

– Permits large scale participation of women workers

– Supplements the workers' seasonal income from farming

– High percentage of migrant labour

Year	Projected GDP, Rs. Billion
2008	2,263
2012	3,427
2018	5,833
2022	7,925

PROJECTED GDP IN CONSTRUCTION SECTOR

Sector In Infrastructure	% Economic Activity
Electricity	32.4
Roads & Bridges	15.3
Telecommunications	12.6
Railways (including MRTS)	12.7
Irrigation	12.3
Water Supply & Sanitation	7.0
Ports	4.3
Airports	1.5
Others	1.9

SHARE OF ECONOMIC ACTIVITY IN INFRASTRUCTURE DEVELOPMENT

Sr No	Occupation	Employment in 1995 (000s)	Employment in 2005 (000s)
1	Engineers	687 (4.70%)	822 (2.65%)
2	Technicians & Foremen	359 (2.46%)	573 (1.85%)
3	Clerical	646 (4.42%)	738 (2.38%)
4	Skilled Workers	2,241 (15.35%)	3,267 (10.54%)
5	Unskilled Workers	10670 (73.08%)	25,600 (82.58%)
6	Total	14,600 (100%)	31,000 (100%)

EMPLOYMENT

Sr No	Function	Distribution %
1	Operations	70
1.1	Project Managers	2.3
1.2	Engineers / Supervisors	23 – 25
1.3	Foremen (shuttering, steel, concrete, finishing, etc)	8 -10
1.4	Accounts / Billing / Stores	7 -8
1.5	Planning	1 – 2
1.6	Surveying	1 – 2
1.7	Quality / Lab	3 – 4
1.8	Safety	5 – 6
1.9	Support functions (mechanics, electricians, security)	9 – 10
2	Projects (Design, overall planning & scheduling, procurement, etc)	15
3	Admin, Finance, Communications, IT	15

FUNCTIONAL DISTRIBUTION OF EMPLOYMENT

Sr No	Educational Qualification	Distribution %
1	Ph.D / Research / CA / MBA	1
2	Engineers	2
3	Diploma / Equivalent Certification By Other Agencies)	2
4	ITI and Other Vocational Courses	13 – 14
5	10 th Standard or Below	81

EDUCATIONAL QUALIFICATION BASED DISTRIBUTION OF EMPLOYMENT

Sr No	Job	Profile
1	Project Managers	Graduate engineers / post graduate engineers (with relevant field experience)
2	Engineers	Mainly graduate civil engineers, some graduate mechanical / electrical engineers
3	Supervisors	Diploma engineers / it is with experience
4	Skilled workmen	Mainly it is (can be own / contractual employees)
5	Unskilled workmen	Minimally educated (mainly contractual employees)

EDUCATIONAL PROFILE OF PEOPLE EMPLOYED

EMERGING TRENDS IN SKILL REQUIREMENTS

Technology And Mechanization

• Introduction of mechanization in the form batch plants, plastering techniques, heavy duty cranes, slipform construction, prefabricated and pre cast modular construction, RMC, etc

• Reduction in slab to slab time from 18 -20 days to 7-8 days. Expected to go down to 4 -5 days by 2022

Sector	2008	2012	2018	2022	Incremental
Infrastructure	25,177 (0.70)	33,868 (0.70)	48,280 (0.70)	58,289 (0.70)	33,111 (0.70)
Real Estate	10,790 (0.30)	14,515 (0.30)	20,692 (0.30)	24,981 (0.30)	14,191 (0.30)
Total	35,968 (1.00)	48,383 (1.00)	68,972 (1.00)	83,270 (1.00)	47,302 (1.00)

PROJECTED HUMAN RESOURCE REQUIREMENTS ACROSS SECTORS

Sr No	Activity	Total Requirement 2022	Incremental Requirement 2008 -2022
1	Real estate – Housing & Buildings	24,981 (30.0%)	14,191 (30.0%)
2	Electricity	19,717 (23.67%)	11,201 (23.67%)
3	Roads & Bridges	8,947 (10.74%)	5,082 (10.74%)
4	Railways (Incl MRTS)	7,745 (9.30%)	4,400 (9.30%)
5	Irrigation	10,681 (12.83%)	6,068 (12.83%)
6	Water Supply & sanitation	6,061 (7.28%)	3,443 (7.28%)
7	Ports	2,551 (3.06%)	1,449 (3.06%)
8	Airports	889 (1.07%)	505 (1.07%)
9	Others	1,698 (2.14%)	964 (2.14%)
10	Total	83,270 (100%)	47,302 (100%)

SEGMENT WISE EMPLOYMENT

Sr No	State	% Employment
1	Maharashtra	10.94
2	TamilNadu	9.06
3	Uttar Pradesh	8.22
4	Kerala	7.86
5	West Bengal	7.81
6	Rajasthan	7.01
7	Andhra Pradesh	6.52
8	Gujarat	4.95
9	Karnataka	4.59
10	Haryana	4.49
11	Delhi	4.37
12	Punjab	3.43
13	Others	20.74

STATES THAT WILL DRIVE EMPLOYMENT

Sr No	Education Level	Number Projected (000s)
1	Ph.D/Research/Design	473 (1%)
2	Engineers	946 (2%)
3	Diploma	946 (2%)
4	ITI & Other Vocationally Trained	5,953 (12.60%)
5	Other Graduates	473 (1%)
6	CA/MBA/etc	473 (1%)
7	10th Std & below/ Dropouts	38,038 (80.40%)
8	Total	47,302 (100%)

EDUCATION WISE PROJECTED HR REQUIREMENT

Sr No	Profile of People	Number Projected (000s)
1	Project Managers & Engineers	473 (1%)
2	Supervisors	473 (1%)
3	Foremen	946 (2%)
4	Crane Operators	7
5	Electricians	473 (1%)
6	Welders	473 (1%)
7	Bar Benders	1419 (3%)
8	Masons	1419 (3%)
9	Plumbers	1183 (2.5%)
10	Carpenters	1892 (4%)
11	Surveyors	47
12	Others (quality, glazers, painters, eqpt optrs)	459 (0.97%)
13	Minimally Educated	38,038 (80.40%)
14	Total	47,302 (100%)

Sr No	Skill Level & Description	% In The Skill Mix
1	Level 1 – Can be acquired with short/ modular and focused intervention, enhance employability of those with minimal education	80 – 81%
2	Level 2 – require technical training inputs, knowledge of complex operations and machinery, skills of supervision	14 – 15%
3	Level 3 – Require long drawn preparation as demonstrated by acquisition of degrees, involve highly technical or commercial operations	3 – 4%
4	Level 4 – Highly specialized involving research and design	1 – 2%

SKILL PYRAMID FOR CONSTRUCTION INDUSTRY

Construction Materials And Equipment Sector

• Cement

• Steel

• Construction Equipment

• Paints & Chemicals

• Petroleum Products And resins

• Fixtures & Fittings (Incl Electrical Wiring)

• Aggregates such as concrete and asphalt

• Timber

• Tiles & ceramics

• Aluminium, Glass and Plastics

Construction Materials And Equipment Sector

• Almost 100 % cement is consumed in construction

• About 40 -60 % steel is consumed in construction

• Manpower estimates are mainly w.r.t. cement, steel and construction equipment.

Sr No	Earthmoving & Construction Equipment (ECE)	% Share
1	Concrete Equipment – concrete breaker, paver finisher, batching plants, concrete pumps, concrete mixers, hot mix plants	12
2	Material Handling Equipment – telescopic handlers, crawler cranes, mobile cranes, truck cranes, forklifts, pick and carry cranes, slew cranes, tower cranes, conveyors	13
3	Material Preparation Equipment – crushing plants, jaw crushers	7
4	Tunneling and Drilling Equipment – Rotary / DTH drilling, hammer track drills, boring equipment, demolition equipment	5
5	Road Construction Equipment – Compaction equipment, vibratory rollers, pavers	6
6	Earth Moving Equipment – backhoe loaders, excavators, bulldozers, skid steer loaders, wheeled loaders, motor graders, scrapers, dump trucks, wheel dozers, draglines	57

KEY SEGMENT AND SHARES OF ECE INDUSTRY

Sector	Employment, Millions	% Total
Cement	0.14	12
Steel	0.50	44
Construction Equipment	0.50	44
Total	1.14	100

EMPLOYMENT IN CONSTRUCTION MATERIALS AND EQUIPMENT-2008

Sr No	Education	Profile in ECE	Profile in Cement	Profile In Steel
1	Manager	Graduate engrs/PG with 7- 8 yrs exp, some diploma engrs with 10-12 years exp	Graduate engrs/PG with 7- 8 yrs exp, some diploma engrs with 10-12 years exp/ PG in geology, geochemistry with 7-8 yrs exp	Graduate engrs/PG with 7- 8 yrs exp, some diploma engrs with 10-12 years exp + metallurgy bckgrnd
2	Supervisor	Diploma engrs with 3-4 yrs exp, some graduate engrs	Diploma engrs with 3-4 yrs exp, PG or graduates in geology, geochemistry with 4-5 yrs exp	Diploma engrs with 3-4 yrs exp; some ITI trained with exp
3	Workmen	ITIs/below 12 th with/without exp, some diploma engrs	ITIs/below 12 th with/without exp	ITIs/below 12 th with/without exp

PROFILE OF HUMAN RESOURCES IN ECE, CEMENT AND STEEL SECTOR

Emerging Trends Driving Skill Requirements

• Consolidation and concentration in cement industry in India

• Rising share of blended cement in India

• Outsourcing support functions

• Ergonomic design of construction equipment

• Hybrid and electric drives for construction equipment

• Integrated / transformable construction equipment

Emerging Trends Driving Skill Requirements

• Acquisitions in steel sector

• Move towards semi automatic and automatic operations for long product manufacture

• Further automation in steel processing

• Increasing complexity of operating and maintenance of equipment

Year	Cement, 000s	Steel, 000s	ECE, 000s
2008	140	500	500
2012	155	544	768
2018	175	620	1,278
2022	195	659	1,643
Incremental	55	159	1,143

TOTAL INCREMENTAL REQUIREMENT FOR ALL SECTORS =1.356 MILLION

Sr No	Education	Cement	Steel	ECE	Total
1	Ph.D / M tech/ Specialized	0.5	1.6	69	71
2	CA / MBA	0.5	1.6	23	25
3	Graduate Engineers	5.5	15.9	137.1	158
4	Graduates	1.6	4.8	57.1	64
5	Diploma	8.2	23.8	171.4	203
6	ITI / ITC)	8.2	23.8	171.4	203
7	Minimally Educated, Vocationally Skilled	30	87	514	632
8	Total	55	159	1,143	1,356

EDUCATION WISE REQUIREMENT OF HR IN ECE, CEMENT, AND STEEL SECTOR

What Do We Need To Do ?

• Model guidelines and an appropriate framework for setting up institutions devoted to skill training development. Need to define broad contours of what such an Institute in terms of – trainer faculty, physical infrastructure, number of trainees to be admitted, etc.

• Range, breadth and depth of skills vary considerably across various skill categories. Need to focus such institutes on a given sets of skills. Not to spread too thin across too many skill categories.

• Create suitable business model for such institutes to ensure their long term viability and sustenance :

• What are the ways for revenue generation for such institutes?

• How should the future development and expansion of such institutes be funded?

• What is the role of Sector Council ?

• Will the institutes be able to fund their funding requirements through internal resources alone?

• If not what will be the external funding mechanism?

• For each such proposed institute, develop :

• Profile in terms of skills to focus

• the number of persons to be trained in a year

• Type of faculty and technical personnel needed for such institutes

• Type of laboratories / workshops/equipment/other training aids

• Other logistics associated with management of such institutes

Link up with appropriate skill certification agency/agencies so that the trainees could be certified for specific skills.

• Need to set up such sectoral skill certification bodies in the country. In their absence, develop partnerships with well known international skill certification bodies.

• Define legal status of such institutes to be eligible for state funding, autonomous management and effectively linked with user requirements. Will these institutes be legal entities by themselves or will they be set as part of some other legal entities? What will be the governance structure for such institutes? If for example, there are governing boards, who creates these boards? How will be the internal governance of the institutes be managed?

• Evolve one or more model frameworks for setting up such institutes, to facilitate the task of mobilizing resources and fast tracking setting up of such institutes.

A Calculation

• Incremental skills required in Real Estate and Infrastructure Sectors until 2022 = 47, 302 million

• Requirement / year = 4.7 million

• Of these, minimally educated = 38, 038 million

• Requirement of minimally educated / year = 3.8 million

• These resources will need short term modular training to make them employable.

SITE STUDY

SITE ANALYSIS

ABOUT THE SITE

LOCATION- SITE IS SITUATED AT KALINDIKUNJ , NEW DELHI NEAR YAMUNA RIVER & OKHLA BARRAGE & BRIDGE .

DISTANCE-

4KM. FROM JASOLA APPOLO METRO STATION.
2KM. FROM SARITA VIHAR METRO STATION .
.21KM. FROM ANAND VIHAR ISBT.
22KM. FROM IMIRI GATE ISBT.
20.62KM. FROM FDAR JUNG AIRPORT.
19.3KM. FROM NEW DELHI RAILWAY STATION.

CLIENT NAME - DELHI DEVELOPMENT AUTHORITY.

AREA OF SITE - 13.61 ACRES OR 540665 SQ.MT

GOOGLE IMAGE

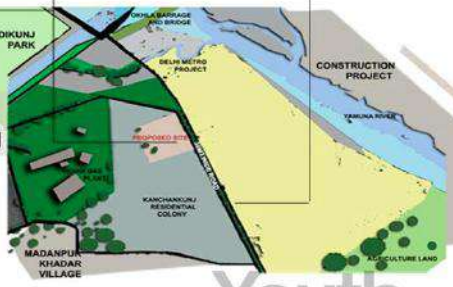
APPROACH ROAD TO THE SITE

PROPOSED SITE

Delhi

N

SITE PLAN



CHILD AND YOUTH DEVELOPMENT CENTRE NEW DELHI

GUIDE: PROF. K.K. DIXIT

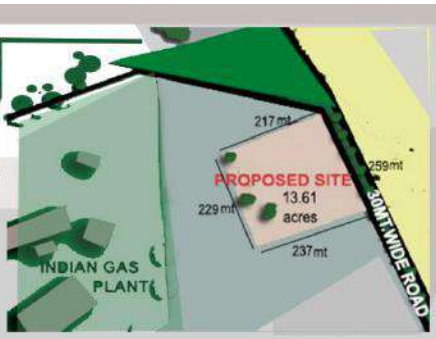
PRANJAL SRIVASTAVA
1150101054
B.ARCH A
2019-2020

SITE ANALYSIS

ABOUT THE SITE

LATITUDE- 28 DEGREE NORTH.
LONGITUDE- 77 DEGREE EAST.
DIMENSION- N-217MT , E-229MT. , S-237MT , W-259MT.
NORTH POSITION- TOWARDS OKLA BRIDGE & YAMUNA RIVER .
TOPOGRAPHY- ALMOST FLAT LAND .
SLOPE- GENERAL SLOPE OF SITE IS TOWARDS RIVER.
SHAPE- RECTANGULAR .

N



ON - SITE CONSIDERATION

APPROACH- SITE IS APPROVED BY A 30 MT. WIDE ROAD GOING TO MADANPUR KHADAR COMING DIRECTLY FROM KALINDIKUNJ INTERACTION.

TOPOGRAPHY- SITE IS ALMOST FLAT & HAVING NATURAL SLOPE TOWARDS THE RIVER [N-W] SIDE.

EXISTING VEGETATION- MOST OF THE GROUND COVERED WITH GRASS BUSHES AND SMALL SHRUBS.

SOIL CONDITION- SOIL IS ALLUVIAL & SANDY.

EXISTING VIEWS- OKHLA BARRAGE & BRIDGE TO THE NORTH , YAMUNA RIVER TO NORTH -EAST , AGRICULTURE LAND TO SOUTH - EAST , MADANPUR KHADAR VILLAGE TO SOUTH , KANCHAN KUNJ & INDIAN GAS PLANT TO SOUTH -WEST , KALINDI KUNJ TO NORTH - EAST.

WATER SUPPLY- WATER SUPPLY IS PROVIDED FROM DELHI JAL BOARD.

DRAINAGE- THERE ARE OPEN DRAINS ARE RUNNING MIDDLE ON THE ROAD & ALL DRAINS IS TOWARDS THE YAMUNA RIVER , WHERE A SEPRATE SEWERLINE IS RUNNING ALONG THE MADANPUR KHADAR ROAD .

ELECTRICAL SUPPLY- ELECTRICAL SUPPLY IS FROM BADARPUR SUBSTATION , LINES ARE RUNNING ALONG WITH THE ROAD BUT THERE ARE ONLY BLANK POLES PRESENT AT THE SITE.

EXISTING LANDMARKS- OKHLA BARRAGE & BRIDGE , YAMUNA RIVER .

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SITE ANALYSIS

OFF - SITE CONSIDERATION

ABOUT THE SITE

ACCESS- SITE IS ALMOST RECTANGULAR & HAVING 2 ACCESS FROM ROAD SIDE. ONE FROM SARTING AND & ONE FROM END.

SURROUNDING ROAD NETWORKS- MAJOR ROADS ARE KALINDIKUNJ, AMRAPALI MARG, OKHLA BRIDGE & SECONDARY ARE RESIDENTIAL COLONIES.

TRAFFIC MOVEMENT- TRAFFIC IS HEAVY ON MADANPUR KHADAR ROAD DUE TO NARROWNESS HAVING BOTH LIGHT & HEAVY VEHICLES.

NALA , STREAMS & BODIES- AN ABUL FAZAL DRAIN IS LOCATED NEAR THE YAMUNA RIVER.

LOCAL FACTORS AFFECTING CLIMATE- THE RIVER , WASTE OF INDUSTRIAL MATERIALS, INDIAN OIL GAS PLANT & CREMATION.

SITE INFERENCES

1. DECIDIOUS TREES SHOULD BE PLANTED ON SOUTH-WEST SIDE BECAUSE THEY PROVIDE SHADE IN SUMMERS DURING PEAK HOURS & SUNLIGHT IN SUMMER.
2. BECAUSE THE WIND IS AN IMPORTANT FACTOR HERE SO ANY RECREATIONAL OPEN SPACE LIKE PARKS,PLAYGROUNDS CAN BE PROVIDED HERE.
3. THE MAIN PROBLEM WITH SITE IS VERY TOUGH TO REACH HERE ALSO FACING THE POLLUTION OF YAMUNA RIVER.
4. ADJUSTABLE LOUVERS WITH BLOCK SOLAR RADIATION & UNDISERABLE WINDS.
5. WATER PRESENT HERE SHOULD BE USED AS A DESIGN FEATURE.


INDIAN GAS PLANT


OKHLA BARRAGE


DELHI METRO PROJECT


MADANPUR KHADAR VILLAGE


KALINDIKUNJ PARK


KANCHANKUNJ COLONY


YAMUNA RIVER


AGRICULTURE LAND

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SITE ANALYSIS

CLIMATIC ANALYSIS

LOCATION- DELHI , INDIA
LATITUDE- 28 DEGREE
LONGITUDE- 77 DEGREE
COUNTRY- INDIA

CLIMATE IS ONE OF THE BASIC ELEMENT IN NATURE .IT EFFECT LANDFORMS SOIL TYPE & VEGETATION. IT INFLUENCE ON MAN IS VERY GREAT

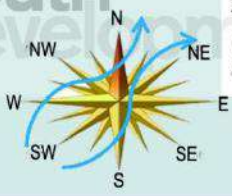
TYPE OF CLIMATE - **COMPOSITE CLIMATE**

CLOUD COVER - MORE IN MONTHS OF JULY AND AUGUST

TEMPERATURE - SUMMER [MAX. 45 & MIN. 29 DEGREE]
WINTER [MAX. 22 & MIN. 4 DEGREE]

RAINFALL - MAXIMUM 211MM IN JULY
MINIMUM 1MM IN NOVEMBER

RELATIVE HUMIDITY - EXTREME MAX. 60%-70% JULY - SEP
EXTREME MIN. 10%-12% APRIL - MAY



WIND SPEED-
1.83 TO 4.11 M/S.
ANNUAL AVERAGE- 3.07 M/S.

WIND DIRECTION - THE WIND SPEED IS GENERALLY HIGH IN THE MONTH OF AUGUST AND DURING MONSOON SEASON. IT IS FROM EAST OR SOUTH EAST DIRECTION AND DURING OTHER SEASON. IT IS FROM WEST OR NORTH WEST DIRECTION.

FOR DELHI

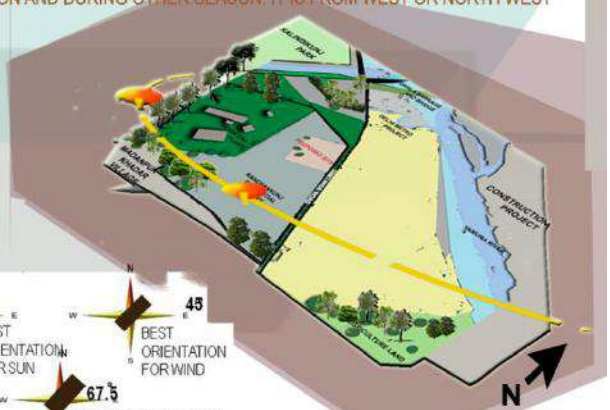
DELHI IS SITUATED ON THE BANKS OF RIVER YAMUNA IN THE NORTHERN PART OF INDIA. ONCE A PART OF THE ARAVALLIES, TODAY DELHI HAS GOT A RIDGE AREA TO TELL THE STORY OF THE GREENERY THIS PLACE ONE HAD, HIMALAYAS ARE IN THE NORTH OF DELHI.

IN COMPOSITE CLIMATE PLACE LIKE DELHI -

HOT AND DRY IN SUMMER [FROM APRIL TO MAY]
WARM AND HUMID IN MONSOON [FROM JUNE TO SEPTEMBER]
COLD IN WINTER [FROM NOVEMBER TO FEBRUARY]

SUNLIGHT - SUNLIGHT HOURS IN JANUARY TO MARCH IS 11 TO 13 HOURS IN APRIL TO MAY IT IS 14 TO 15 HOURS, IN JUNE TO JULY IT IS AT MAX. 15 HOURS, DECREASE TO 11 TO 12 HOURS.

WIND - HOT & DUSTY DURING SUMMER STRONG WIND INMONSOON FROM S-E, DRY, COLD WINDS IN WINTER FROM N-E.



SUN MOVEMENT AND ORIENTATION

CHILD AND YOUTH DEVELOPMENT CENTRE NEW DELHI

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SITE ANALYSIS

PROJECT BRIEF

INTRODUCTION TO THE PROJECT

IT IS CENTER OF DEVELOPMENT OF CHILDREN INCUDING YOUTH IN ALL ASPECTS THE WHOLE CENTER WILL BE SET UP TO FUNCTION AS RESOURCE AGENCY AS WELL AS A THINK TANK FOR CHILD AND YOUTH PROGRAMES, POLICIES AND IMPLEMENTATION STRATEGIES. THE BASIC FUNCTIONS ARE DESIGN, DEVELOP AND CONDUCT APPROPRIATE TRAINING AND ORIENTATION PROGRAMES. CONDUCT SEMINARS, WORKSHOPS AND CONFERENCES ON CHILD AND YOUTH RELATED ISSUES

HOPE FOUNDATION WORKS TO BRING A CHANGE IN THE LIVES OF CHILDREN, YOUNG PEOPLE AND VULNERABLE CHILDREN. THEY EDUCATE CHILDREN, PROVIDE HEALTH CARE AND TRAIN YOUNG PEOPLE FOR SKILLS FOR LIVELIHOOD

MOTIVATION

YOUTH WORK" MEANS A PLANNED PROGRAME OF EDUCATION DESIGNED FOR THE PURPOSE OF PROVIDING AND ENHANCING THE PERSONAL AND SOCIAL DEVELOPMENT OF YOUNG PERSONS THROUGH THEIR VOLUNTARY PARTICIPATION AND WHICH COMPLIMENTS THEIR FORMAL, ACADEMIC, VOCATIONAL EDUCATION AND TRAINING AND IS PROVIDED PRIMARILY BY VOLUNTARY YOUTH WORK ORGANIZATION

YOUTH WORK IS HISTORICALLY SAID TO FOCUS ON FIVE AREAS INCLUDING

- A focus on young people
- An emphasis on voluntary participation and relationship
- Commitment to association by youth and adults
- Friendly and informal atmospheres
- Acting with integrity

The main hope of a nation lies in education of the youth

OBJECTIVES OF THE PROJECTS

- THE OBJECTIVES OF THE THESIS IS TO QUESTION HOW ARCHITECTURE CAN EFFECT THE LIFE OF A YOUNG PERSON BY CREATING BETTER LEARNING ENVIRONMENT
- THROUGH ARCHITECTURE THE ENVIRONMENT WOULD BE SHAPED IN ORDER TO BECOME A MOTIVATION FOR THESE CHILDREN, THAT HELPS THEM TO GROW UP WITHOUT THE PROBLEMS THAT ARE NORMALLY ASSOCIATED WITH VARI OUS INSTITUTION

REQUIREMENTS

- CONFERENCE HALL
- LIBRARY
- PRAYER HALL
- AUDITORIUM
- LIBRARY
- ACTIVITY ROOM
- LEARNING CENTRES
- RECREATIONAL SPACES
- OPEN AIR THEATRE
- DORMITORY

It is a social and recreational center intended primarily for use by youths up to 20 yrs. The center supports opportunities for youth to develop their physical, social, emotional and cognutive abilities and to experience achievement, leadership, employment, recognition

AIMS OF THE PROJECT

- WORK AS AN ADVANCE CENTRE AND APEX BODY FOR ALL THE IDENTIFIED CENTRES OF TRAINING AND ORIENTATION ON CHILD AND YOUTH
- HELP IN ORIENTATION AND UPGRADING PROFESSIONAL SKILLS OF YOUTH FUNCTIONARIES
- PROVIDE TECHNICAL ADVICE AND CONSULTANCY FOR FORMULATION OF YOUTH RELATED POLICIES

PROVIDING GUIDANCE CENTRE AND RECREATIONAL FACILITIES OF CHILDREN AND YOUTH

CHILD AND YOUTH DEVELOPMENT CENTRE

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SITE ANALYSIS

CLIMATIC ANALYSIS

EXTREME TEMPERATURE, RAINFALL AND WIND SPEED-

Extreme Maximum and Minimum Temperature over Delhi (M.O. Safdarjung)

Month	Extreme Maximum Temperature (deg. Celsius)	Extreme Minimum Temperature (deg. Celsius)	Extreme Maximum Rainfall (MM)
January	30	-0.6	173.2
February	34.1	1.6	153.4
March	40.6	4.4	78.2
April	45.6	10.7	183.5
May	47.2	15.7	126.3
June	46.7	18	414.8
July	45	18.4	632.2
August	42	21.2	563.3
September	40.6	17.3	492.3
October	39.4	9.4	283.3
November	36.1	3.9	100.1
December	29.3	1.1	134.4

HIGHEST WIND SPEED RECORDED AT DELHI IS 159 KMPH.
MAXIMUM RAINFALL RECORDED IN AN HOUR AT DELHI IS 117.7MM.

BYE LAWS

LAND USE DISTRIBUTION-

ACCORDING TO MASTER PLAN OF DELHI BY DDA, LAND IN THE URBAN EXTENSION IS PROPOSED TO BE BROADLY DISTRIBUTED IN DIFFERENT LANDUSES IN THE FOLLOWING MANNER -

LAND USE	% OF LAND
Residential	45-55
commercial	4-5
Industrial	4-5
Green / recreational	15-20
Public and semi public facilities	8-10
Circulation	10-12

This does not include green area within the various gross land use categories.

INFERENCES-

- MINIMIZATION OF SOLAR HEAT ENTERING ROOM IN WINTER.
- PROTECTION AGAINST RAIN AND WIND.
- PROVISION OF ADEQUATE VENTILATION AT ALL WINTER.
- CONTROL OF INSECTS, DIRT AND DUST.
- PROVIDING PRIVACY WHEN NEEDED.
- ADEQUATE EXTERIOR VISION.

SUN PENETRATION CONTROLLING DEVICES -

NATURAL - ORIENTATION , TREES , SHRUBS.
INTERNAL- CURTAINS , BLINDS ETC.

BUILDING CLASSIFICATION-

THE BUIDING COMES UNDER PUBLIC AND SEMI-PUBLIC FACILITIES AREA.

PERMISSIBLE GROUND COVERAGE-

MAX. GROUND COVERAGE WILL BE 35% OF TOTAL PLOT AREA.

PERMISSIBLE F.A.R-

FOR PUBLIC AND SEMI-PUBLIC FACILITY BUILDING. IT WILL BE 1.5.

MAXIMUM PERMISSIBLE HEIGHT-

..IT WILL BE 37MT.
MAX. HEIGHT OF THE BUILDING SHALL NOT EXCCED MORE THAN 1.5 TIMES THE SUM OF FRONT SETBACK AND FRONT ROAD WIDTH.

H= 1.5*[FRONT SETBACK + ROAD WIDTH]

SET BACKS-

THE MINIMUM FRONT SET BACK IS OF 15MT. AND OTHER SIDES IT IS 12M.

Table 17.1: Minimum Setbacks (Other than Residential Plotted Development)

S.No.	Plot size (in sq.m)	Minimum Setbacks			
		Front (m)	Rear (m)	Side (m) (1)	Side (m) (2)
1	Upto 60	0	0	0	0
2	Above 60 & upto 150	3	1.5 (avg.)	-	-
3	Above 150 & upto 300	4	2 (avg.)	-	-
4	Above 300 upto 500	4	3	3	-
5	Above 500 upto 2,000	6	3	3	3
6	Above 2,000 upto 10,000	9	6	6	6
7	Above 10,000	15	12	12	12

CHILD AND YOUTH DEVELOPMENT CENTRE

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CASE STUDY-1

VISHWA YUVAK KENDRA, DELHI

CASE STUDY-1

ABOUT THE CENTRE

A PIONEERING ORGANISATION IN THE FIELD OF YOUTH DEVELOPMENT , THE KENDRA WAS SET UP BY THE INDIAN YOUTH CENTRES TRUST WITH A VIEW TO.

- ORIENT THE YOUTH TO THE DEVELOPMENTAL PROCESS AND ENABLE THEM TO PARTICIPATE IN THE PROCESS OF NATION BUILDING.
- ENABLE YOUTH TO AQUIRE SUCH KNOWLEDGE, SKILLS AND TECHNIQUES WHICH WILL HELP THEM IN THEIR PERSONAL AND SOCIAL GROWTH AS WELL AS FOSTER THEM IN SENSITIVITY TOWARDS PROBLEMS IN THE COMMUNITY.

LOCATION: LOCATED INFRONT OF CHANAKYAPURI POLICE STATION AT TEEN MURTI MARG NEAR CIRCULAR ROAD,NEW DELHI.

SITE AREA : 2.2 ACRES OR 8900 SQ.M.

BUILDING TYPE: PUBLIC OR SEMI-PUBLIC.

BUILDING DESIGNER: GERMAN ARCHITECT MR.KOHIL AND LATER FINISHED BY ANIL ASSOCIATES AND DESAI ASSOCIATES.
NEW BLOCK DESIGNED BY VIVIAN VICKERS.

OBJECTIVES

- TRAINING IN YOUTH WORK.
- RESEARCH AND DOCUMENTATION.
- PROMOTION OF INTERNATIONAL UNDERSTANDING.

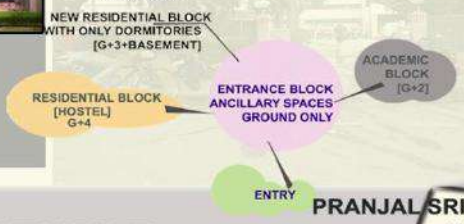
DISTANCE

- 15km. FROM INDIRA GANDHI INTERNATIONAL. AIRPORT,NEW DELHI.
- 11km. FROM NEW DELHI RAILWAY STATION
- 3km. FROM RACE COURSE METRO STATION.
- 3km. FROM [CITY CENTRE] CONNAUGHT PLACE.

LOCATION MAP

PLANNING

THE BUILDING HAS BEEN FUNCTIONALLY DIVIDED INTO THREE DISTINCT ZONES LATER ON 4th IS ADDED



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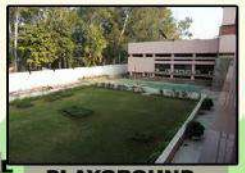
VISHWA YUVAK KENDRA, DELHI

CASE STUDY-1

ELECTRICAL

NEW RESIDENTIAL BLOCK



PLAYGROUND

LANDSCAPE COURTYARD

LAWN

LAWN

SITE PLAN

ACADEMIC BLOCK

FOUNTAIN LAWN

MAIN ENTRANCE

ENTRANCE BLOCK

- THE ENTRANCE BLOCK PLACED IN THE MIIDDLE OF TWO BLOCKS.THIS BLOCK GOVERN THE OVERALL ACTIVITIES OF THE CENTRE.
- THE HOSTEL BLOCK LIES ON THE LEFT HAND SIDE OF THE ENTRANCE HALL.
- THE ACADEMIC BLOCK PLACED AT THE RIGHT SIDE OF THE ENTRANCE HALL.
- THE NEW RESIDENTIAL BLOCK IS COMPLETED IN 2003, ALONG WITH HOSTEL BLOCK.

STAFF PARKING

CHILD AND YOUTH DEVELOPMENT CENTRE NEW DELHI

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CASE STUDY - 1

GROUND FLOOR

THE ACADEMIC BLOCK IS PLANNED AROUND A BEAUTIFULLY LANDSCAPE COURTYARD
CORRIDOR 2.5M WIDE ACCESS THROUGH THE UPPER FLOOR BY ASPIRAL STAIRCASE WHICH IS BEAUTIFULLY DESIGNED AND PLACED AT THE RIGHT SIDE OF THE ENTRANCE FROM THE LOBBY.


CORRIDOR


LANDSCAPE COURTYARD

LIBRARY AND AUDITORIUM ARE DOUBLE HEIGHTED LIBRARY IS WELL PLANNED BOTH TH FACES IS ALONG CENTRAL COURTYARD.

THE LIBRARY IS LIGHTED BY NATURAL LIGHTENING BY COURTYARD AND APPROACHED BY WOODEN STAIRCASE.


AUDITORIUM

THE AUDITORIUM IS PLANNED IN A HALL WITHOUT SLOPPED, WITH NO PERMANENT SEATING ARRANGEMENT.

CAPACITY-450 PERSON
TWO GREEN ROOMS


PANTRY


DINNING HALL


SPIRAL STAIRCASE


LIBRARY

ACADEMIC BLOCK

RECEPTION ON THE LEFT WITH SOME WAITING SPACE ON THE RIGHT OF THE ENTRANCE LOBBY LEFT SIDE OF RECEPTION OFFICES OF DIRECTORS OF HOSTEL & DIRECTORS FROM THE ENTRANCE BLOCK.

AFTER ENTERING THE MAGNIFICANT FACADE IS RICHLY DECORATED OF DINNING HALL IS SEEN IN FRONT.

ENTRANCE BLOCK


CORRIDOR


RECEPTION


WAITING SPACE

CHILD AND YOUTH DEVELOPMENT CENTRE
NEW DELHI

PROF. K. K. DIXIT

PRANJAL SRIVASTAVA
1150101054
B.ARCH .AR
2019-2020

CASE STUDY - 1

FIRST FLOOR

VISHWA YUVAK KENDRA, DELHI

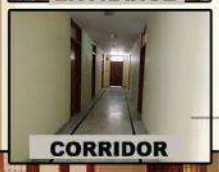
THE HOSTEL BLOCK,LIES ON THE LEFT HAND SIDE OF THE OF THE ENTRANCE HALL,AS G+4 BLOCK.
IT HAS DORMITRIES ,DOUBLE ROOMS ETC.APART FOR PROVIDING RESIDENTIAL ACCOMODATIAN TO ITS TRAINEES, HOSTEL PROVIDE CLEAN AND INEXPANSIVE FOOD AND ACCOMODATION TO VISITORS, SPECIALLY YOUNG VISITORS.

1-ALL ROOMS ARE DOUBLE SEATED.
2-ALL ROOMS EXCEPT GROUND FLOOR ROOMS HAVE AN ATTACHED TOILET.

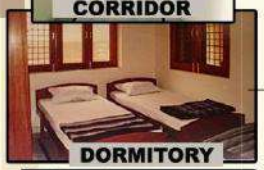

ENTRANCE


TOILET


RAMP


CORRIDOR


FOOT OVER BRIDGE


DORMITORY


DOUBLE ROOM


PARABOLIC ROOF

3-BLOCK CONSIST OF 38 ROOMS AND 2 DORMITORIES FOR[1 LADIES AND 1 FOR GENTS AT 4th FLOOR].

4-THE CAPACITY OF THE 1 DORMITORY IS 20 BED.

5-ROOMS AT EACH FLOOR
GROUND FLOOR - 5
FIRST FLOOR - 10
SECOND FLOOR - 8
THIRD FLOOR - 10
FOURTH FLOOR - 5
+2-DORMITORIES

NEW RESIDENTIAL BLOCK

THE NEW RESIDENTIAL BUILDING IS COMPLETED IN 2003,ADDING THE ALONG WITH HOSTEL BLOCK,HAVING ONLY DORMITORIES.

1- 2.5M WIDE CORRIDOR.
2- DORMITORIES 23
ON GROUND FLOOR,
6 ON EACH FLOOR.

3-A FOOT OVER BRIDGE IS PROVIDED FROM THE FIRST FLOOR TO THE DINING AREA OF ENTRANCE BLOCK FOR EASE OF TAKING FOOD TO THE PEOPLE

4- RAMP IS PROVIDED AT THE ENTRY OF THE BLOCK FOR HANDICAPPED PEOPLE.

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CASE STUDY - 1

VISHWA YUVAK KENDRA

LOWER GROUND

YOUTH CAFE

SEMINAR ROOM

IN THE ENTRANCE BLOCK AFTER ENTRANCE LOBBY SEMINAR HALL,YOUTH CAFE PROVIDED BELOW THE DINING HALL.

THEY WERE VERY LIGHT AS THEIR ONE PHASE IS PHASING OUTSIDE IS FULLY GLAZED.

KITCHEN

WAY TO NEW RESIDENTIAL BLOCK

ART GALLERY

CORRIDOR

LIBRARY

1500 BOOKS AVAILABLE HAS A MEZZAINE FLOOR.

LIFT

HAVING A CAPACITY 5 PERSON.

AREA

DORMITORIES - 4300X6500
LIBRARY - 25300X12000
CONFERENCE - 8000X10000 HALL
SENIOR OFFICER - 4000X4000
MANAGER OFFICE - 4000X4000
RECORD ROOM - 4000X4000
DIRECTOR OFFICE - 4000X8000
SECRETRAIT - 4000X8000
ACCOUNT SECTION - 3600X4000
DIRECTOR ROOM - 4000X5115
DIRECTOR OFFICE - 4000X5800 OF HOSTEL
DIRECTOR OFFICE - 4000X5800 OF ACDEMIC BLOCK
DORMITORIES - 4300X6500
DOUBLE ROOM - 3500X5400
ATTACHED TOILET-1800X1500
COMMON TOILET - 4000X3500
LANDSCAPE - 14000X8000 COURTYARD
LIFT - 2000X2000
BALCONY - 2000MM WIDE

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CASE STUDY - 1

SERVICES

VISHWA YUVAK KENDRA

WATER SUPPLY

- WATER IS SUPPLIED BY PUMP HOUSE WITH AN UNDERGROUND WATER STORAGE TANK LOACTED NEAR BACKYARD GREEN AREA.
- FOR COOKING PURPOSE MOTOR PUMP LOCATED AT THE REAR OF THE HOSTEL BLOCK.
- A BOILER SYSYEM PLACED AT THE TOP OF THE BLOCK FOR THE HOT WATER.
- 5 WATER STORAGE TANK ARE PLACED AT THE ROOF OF EACH FLOOR.

RAMP,LIFT, FIRE ESCAPES

- A RAMP IS SITUATED AT THE ENTRANCE OF MAIN BLOCK& NEW RESIDENTIAL BLOCK FOR DISABLE PEOPLE.
- LIFT HAVING CAPACITY FOR 6 PERSON,EACH LOCATED AT THE HOSTEL BLOCK & NEW BLOCK.
- FIRE ESCAPE IS AT REAR OF NEW BLOCK.

FIRE PREVENTION

ELECTRICAL SUPPLY

- A BUS FEEDER BAR, GENERATOR WITH A CONTROL PANEL IS SITUATED AT THE CORNER OF RESIDENTIAL BLOCK FROM WHICH ALL ELECTRICITY IS SUPPLIED.

- THE UNDER GROUND WATER STORAGE TANK ADJACENT TO THE PUMP HOUSE ACT AS A FIRE FIGHTING WATER TANK.
- FIRE FIGHTING EQUIPMENTS INCLUDING FIRE PIPES, FIRE EXTINGUISHER, FIRE ALARM, FIRE CONTROL PANEL SITUATED ALMOST EVERYWHERE.

CHILD AND YOUTH DEVELOPMENT CENTRE

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CASE STUDY-1

SERVICES

VISHWA YUVAK KENDRA

PARKING

- 4 WHEELER, 2 WHEELER MAIN PARKING IS AT FRONT ROAD
- ONLY STAAF VEHICLES WHICH ARE PARKED NEAR ENTRANCE PORCH AND AT EXIT ROAD

LANDSCAPING

- BUILDING CONSIST OF REST AREA, GREEN AREA AND PLAYING AREAS
- PATHWAYS, FOUNTAIN ARE PROVIDED TO INCREASE THE LAND--SCAPING EFFECT
- LANDSCAPE COURTYARD IS PROVIDED. VARIOUS PLANTS AND SHRUBS ARE PROVIDED
  ASHOK, NEEM, BLACKBERRY, MARIGOLD, ROSE ETC

AIR CONDITIONING

- WINDOW OR SPLIT AC PROVIDED THROUGH OUT THE BUILDING
- NO PROVISION FOR AHU & PLANT ROOM

OTHER TECHNIQUES

- LPG SUPPLY SYSTEM FROM COOKING -OVIDED NEAR THE REAR ENTRY OF THE HOSTEL BLOCK
- SOILER BOILER SYSTEM IS USED FOR HOT WATER

CONSTRUCTION TECHNIQUES

- POST AND LINTEL SYSTEM USED
- STONE CLADDING WITH EXPOSED BRICK IS DONE AT FACADES OF ENTIRE OLD BLOCKS

CHILD AND YOUTH DEVELOPMENT CENTRE

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CASE STUDY-1

PLANNING

VISHWA YUVAK KENDRA

STUDY AND INFERENCES FROM CASE STUDY

PLACEMENT OF EVERY BUILD FORM IS SO AS TO ENHANCE THE FEELING OF AN ENCLOSURE WHILE OPEN AND GREEN SPACES PLAYING A PIVOTAL ROLE IN LAYOUT OF THE SCHEME SCHEME.

1-THE BUILT STRUCTURE IS PLANNED IN A CONTINUOUS 3 BLOCKS NAMELY HOSTEL,ENTRANCE,AND TRAINING LATER FOURTH RESIDENTIAL BLOCK IS MADE ABOVE THE HOSTEL BLOCK, AND ONLY DIRECTLY CONNECTED TO ENTRANCE BLOCK

2-PLACING OF PARABOLIC ROOF IS SUCH THAT AMPLE SUNLIGHT COME THROUGH AND ILLUMINATE ENTIRE ENTRANCE BLOCK INCLUDING DINING.

SERVICES

1-A SOLAR BOILER SYSTEM IS PROVIDED FOR HOT WATER,SO THERE IS NO NEED OF GYESER.

2-AVAILABILITY OF DIESEL & LPG GAS & SUPPLY FOR COOKING OPERATING PUMPS.

3-FIRE EXIT AND FIRE EQUIPMENTS ARE ARE PROVIDED AT THEIR DESIRED POSITION WITH ENOUGH QUANTITY.

4-RAMPS ARE PROVIDED FOR HANDICAPPED PEOPLE TO REACH EVERYEHERE AS WELL AS LIFT.

PARKING

- NOT ENOUGH PARKING SPACE.
- SO VISITORS HAVE TO PARK THEIR VEHICLE OUTSIDE THE ROAD,INSIDE MANY VIEW THERE IS AN ENOUGH SPACE BETWEEN HOSTEL BLOCK AND NEW BLOCK.

FACILITIES

- LACK OF FACILITIES LIKE GYM & OTHER HEALTH AND SPORTS FACILITIES.
- DINING FACILITIES ARE OUTSTANDING.

LANDSCAPE

- THE LANDSCAPE IDENTITY IS SO STRONG,ALMOST EVERY TREE IS THERE, PROVIDING LOTS OF GREEN SPACES, SURROUNDING OF HEAVY VEGETATION AND THE PARK AT THE FRONT.

DESIGN ATTRACTION

- FOOT OVER BRIDGE,PARABOLIC ROOF OVER ENTRANCE BLOCK,LANDSCAPPED COURTYARD ARE THE MAJOR DESIGN ATTRACTION.
- ELEVATED DINING HALL HAS A MAGNIFICANT ENTRANCE FAÇADE WITH WELCOMING AND RISING STAIRS.

CIRCULATION

- EVERYONE FLOWLY MOVES FROM AN AREA TO ANOTHER AREA WITHOUT ANY KIND OF HINDRANCE.

CHILD AND YOUTH DEVELOPMENT CENTRE

NEW DELHI

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CASE STUDY-1

VISHWA YUVAK KENDRA

GROUND FLOOR

CHILD AND YOUTH DEVELOPMENT CENTRE NEW DELHI

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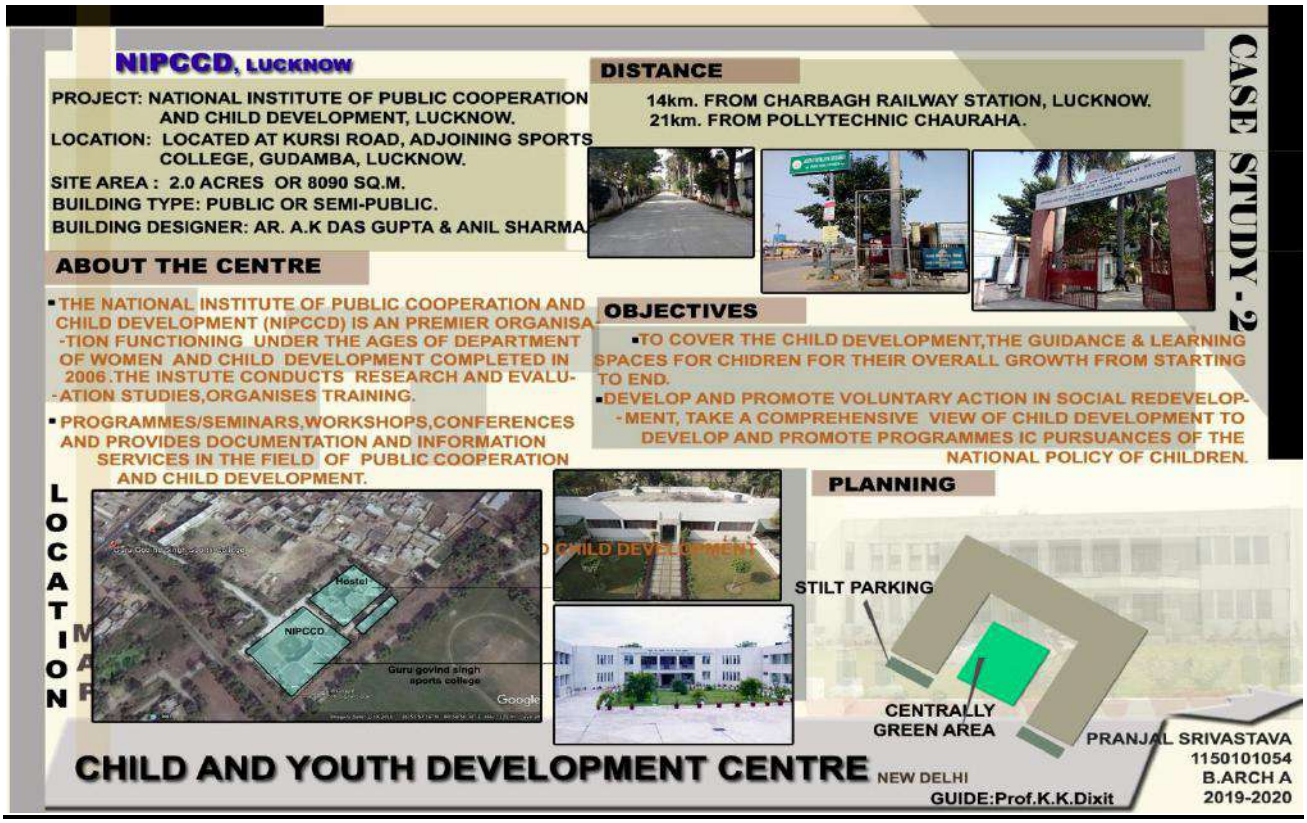
SITE STUDY-2


CASE STUDY - 2
NIPCCD, LUCKNOW
PROJECT: NATIONAL INSTITUTE OF PUBLIC COOPERATION AND CHILD DEVELOPMENT, LUCKNOW.
LOCATION: LOCATED AT KURSI ROAD, ADJOINING SPORTS COLLEGE, GUDAMBA, LUCKNOW.
SITE AREA : 2.0 ACRES OR 8090 SQ.M.
BUILDING TYPE: PUBLIC OR SEMI-PUBLIC.
BUILDING DESIGNER: AR. A.K DAS GUPTA & ANIL SHARMA.
DISTANCE
14km. FROM CHARBAGH RAILWAY STATION, LUCKNOW.
21km. FROM POLLYTECHNIC CHAURAHA.
ABOUT THE CENTRE
▪THE NATIONAL INSTITUTE OF PUBLIC COOPERATION AND CHILD DEVELOPMENT (NIPCCD) IS AN PREMIER ORGANISA-TION FUNCTIONING UNDER THE AGES OF DEPARTMENT OF WOMEN AND CHILD DEVELOPMENT COMPLETED IN 2006.THE INSTUTE CONDUCTS RESEARCH AND EVALU-ATION STUDIES,ORGANISES TRAINING.
▪PROGRAMMES/SEMINARS,WORKSHOPS,CONFERENCES AND PROVIDES DOCUMENTATION AND INFORMATION SERVICES IN THE FIELD OF PUBLIC COOPERATION AND CHILD DEVELOPMENT.
OBJECTIVES
▪TO COVER THE CHILD DEVELOPMENT,THE GUIDANCE & LEARNING SPACES FOR CHIDREN FOR THEIR OVERALL GROWTH FROM STARTING TO END.
▪DEVELOP AND PROMOTE VOLUNTARY ACTION IN SOCIAL REDEVELOP-MENT, TAKE A COMPREHENSIVE VIEW OF CHILD DEVELOPMENT TO DEVELOP AND PROMOTE PROGRAMMES IC PURSUANCES OF THE NATIONAL POLICY OF CHILDREN.
LOCATION MAP
Hostel
NIPCCD
Guru govind singh sports college
Google
PLANNING
STILT PARKING
CENTRALLY GREEN AREA
CHILD AND YOUTH DEVELOPMENT CENTRE
NEW DELHI
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CASE STUDY - 2
NIPCCD, LUCKNOW
STAFF PARKING
MAIN BLOCK
GREEN AREA
STAFF QUARTERS
HOSTEL BLOCK
GREEN AREA
MAIN ENTRY
RESIDENCE
PLAYING AREA
KURSI ROAD
SITE PLAN
N
STAFF QUARTER
HOSTEL BLOCK
MAIN BLOCK
PARKING
GREEN AREA
REG.RESIDNCE
MAIN BLOCK
-U- SHAPED PLAN HAVING A GREEN AREA CENTRALLY.
- 2 FLOOR HIGH
CHILDREN FACILITIES
YOUTH FACILITIES
HOSTEL BLOCK
- A YOUTH HOSTEL SEPERATELY BUILT FOR ACCOMODATION PUR-POSE FOR TRAINEES & OFFICIAL.
- 3 FLOOR HIGH
- 65 ROOMS + GUEST ROOM
MESS/ DINNING
BOYS
GIRLS
RECEPTION / WAITING
STAFF QUARTERS
- LOCATED REAR OF THE HOSTEL BLOCK.
-TYPE A - 6 NOS [3 BHK]
- TYPE B - 6 NOS [2 BHK]
- REGIONAL DIRECTOR RESIDENCE IS INDIVISUALY BUILT AT MAIN APPROACH ROAD.
CHILD AND YOUTH DEVELOPMENT CENTRE
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GROUND FLOOR
NIPCCD, LUCKNOW
IT IS U -SHAPED BUILDING HAVING A GREEN AREA CENTRALLY IN WHICH AUD--ITORIUM & DINNING AREA TAKE CORNER MUTUALLY.
AUDITORIUM
- IT IS OCTAGONAL IN SHAPE SITTING CAPACITY- 110 PERSON
- SITTING- IN FORM OF 7 ROWS AND APPROACHE THROUGH 2 AISLES.
- 2 EXIT AND 2 ENTRY.
DINNING AREA
- IT IS OCTAGONAL IN SHAPE, FOR 50 PEOPLE WITH ATTACHED KITCHEN IS PROVIDED AT GROUND FLOOR.
CHILDREN GUIDANCE CENTER IS PROVIDED ESPECIALLY FOR THOSE CHILDREN WHO NEED ASSISTANCE IN THEIR CAREER AND SOCIAL LIFE
- SEPRATE ENTRY PROVIDED FOR THE CHILDREN GUIDANCE CENTRE.
DINNING
KITCHEN
RECEPTION& WAITING
AUDITORIUM
3MT.WIDE CORRIDOR
ENTRANCE LOBBY
ELECTRICITY ROOM
STAIRCASE
STILT PARKING
CHILDREN PLAY ROOM
CHILDREN GUIDANCE CENTRE
CHILD AND YOUTH DEVELOPMENT CENTRE
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FIRST FLOOR
NIPCCD, LUCKNOW
LIBRARY
- LIBRARY ON FIRST FLOOR HAVING PROVISION OVER 1000 BOOKS.
- AT ENTRANCE RIGHT SIDE IN RECEPTION & LEFT SIDE IN OFFICE AND READING ROOM.
- WHOLE FACADE IS OF GLASS WINDOW THAT FACILITATES CLEAR VISIBILITY OF LANDSCAPE AND ALLOWING NATURAL DAY LIGHT.
- 2 CONFERENCE HALL PROVIDED FOR OFFICIAL CONFERENCES.
- CAPACITY- 40 PERSONS 25 PERSONS
AREA
ENTRANCE LOBBY- 5865 X 4700
WAITING + RECEPTION- 12000 X 5000
ADMIN SECTION - 4500 X 4000
ACCOUNT SECTION - 4500 X 4200
DEPUTY DIRECTOR ROOM - 4500 X 6000
DIRECTOR ROOM - 4500 X 4000
ASSISTANT DIRECTOR - 4500 X 4000
AUDITORIUM - 500SQ.M
DINNING HALL - 500SQ.M
CHILDREN GUIDANCE CENTRE - 6000 X 10000
SEPROGRAPHIC ROOM - 6000 X 9000
PLAY ROOM - 4500 X 3000
ELECTRICAL ROOM - 6000 X 4000
FACULITY ROOM - 500SQ.M
CLASS ROOM - 4500 X 6800
CONFERENCE ROOM - 4500 X 7000
LIBRARY - 150 SQ.M
TOILET - 4500 X 2500
3MT.WIDE CORRIDOR
WAITING AREA
FACULITY ROOM
CLASS ROOM
CONFERENCE HALL
LIBRARY
READING ROOM
LIBRARIAN OFFFICE
3MT.WIDE CORRIDOR
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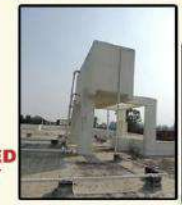
CASE STUDY - 2

SERVICES

NIPCCD, LUCKNOW

DRAINAGE

WATER SUPPLY



- PUMP HOUSE SITUATED NEAR STILT PARKING,THERE IS ANOTHER PUMP HOUSE SITUATED NEAR AT STAFF QUARTERS & ONLY USED IN EMERGENCY.
- ALL SEWAGE THROUGH KURSI ROAD & A DRAIN AT REAR.

FIRE PREVENTION

- ONLY FIRE EXTINGUISHER HERE, FURTHER NO PROVISION FOR THIS EXCEPT A FIRE ALARM CONTROL PANEL SITUATED OUT OF THE AUDITORIUM.

ELECTRICAL SUPPLY

- IT IS THROUGH MAIN SUBSTATION LOCATED AT APPROACH ROAD.
- CONTROL PANEL IS SITUATED AT THE MAIN BUILDING BLOCK FROM WHICH ELECTRICITY IS SUPPLIED.

PARKING

- ALL VISITORS AND STAFF PARKING IS PROVIDED AS STILT PARKING.
- THERE IS A COVERED PARKING SPACE NEAR THE GENERATOR ROOM FOR OFFICIAL STAFF.

LANDSCAPING

- A LOTS OF NO.DECIDIOUS TREES ARE PRESENT. FOUNTAIN INCREASE THE LANDSCAPING EFFECT.

VARIOUS PLANTS & SHRUBS ARE PROVIDED.

CONSTRUCTION TECHNIQUES

- ACOUSTICAL WOOD PANELS ON WALLS ARE USED IN THE AUDITORIUM TO INCR-EASE SOUND INSULATION PROPERTY.
- EXPOSED BRICK USED IN THE HOSTEL BLOCK.

AIR CONDITIONING

- ONLY WINDOW OR SPLIT AC IS USED.

CHILD AND YOUTH DEVELOPMENT CENTRE NEW DELHI

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CASE STUDY - 2

PLANNING

NIPCCD, LUCKNOW

STUDY AND INFERENCES FROM CASE STUDY

- THE EXPANDED PLAN PATTERN, EVERYONE GOES FREELY THROUGH CORRIDORS AND THERE IS NO CONFUSION TO LEARN THE SPACE WHILE MOVING.

FACILITIES

- THE HARMONY BETWEEN SPACES AT THE CAMPUS IS OUTSTANDING.
- THERE IS VERY CLEANINESS AT THE SITE,THE LIBRARY IS WELL EQUIPPED WITH THE COLLECTION OF BOOKS.
- SEPARATE COMPUTER LAB IS NOT PROVIDED
- LESS SPORTS PITS AND PLAYGROUND ARE PROVIDED, ABSENCE OF SWIMMING POOL.

PARKING

- THE FACILITY OF PARKING SPACE PROVIDED DIRECTLY BELOW THE FLOOR AS STILT PARKING, IT ACTS AS A SHADED PARKING WHERE THE VEHICLES ARE PROTECTED FROM SUNLIGHT AND DUST PARTICLES.
- SEPARATE QUARTARS AND PARKINGS ARE PROVIDED FOR STAFF.

SERVICES

- LOOKING AT THE WIDENESS OF THE BUILDING,THE LACK OF EFFECTIVE FIRE PREVENTION SYSTEM IS FOR BOTH INCLUDING HOSTEL ALSO AND HOLDS POOR, THERE ARE FEW EXTENGUISHERS AND ALARM CONTROL PANEL.
- NO RAIN WATER HARVESTING FACILITY IS PROVIDED.
- NO FIRE ESCAPE IS PROVIDED.

LANDSCAPE

THE LANDSCAPE IDENTITY IS SO STRONG,ALMOST EVERY TREE IS THERE, PROVIDING LOTS OF GREEN SPACES.

HOSTEL BLOCK

RECEPTION/WAITING

HOSTEL ROOM

WASHROOM

DINNING/MESS

PHOTO GALLERY

LANDSCAPE

CHILD AND YOUTH DEVELOPMENT CENTRE NEW DELHI

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LITERATURE STUDY

LITERATURE STUDY - 1

SCOTT RAKOW YOUTH CENTRE, MIAMI FLORIDA [U.S]

LOCATION: SCOTT RAKOW YOUTH CENTRE,MIAMI BEECH, MIAMI-DADE COUNTRY,FLORIDA.
PERIOD OF CONSTRUCTION : COMPLETED IN 1976
BUILDING TYPE: PUBLIC BUILDING.
SITE AREA : 5.0 ACRES
BUILDING DESIGNER: FERENDINO , GRAFTON , SPILLIS & CANDELA.

LOCATION MAP

ABOUT THE CENTRE

- THE SCOTT YOUTH CENTRE WAS BUILT IN 1976 TO SERVE THE TEENS OF MIAMI BEECH. IT HAS NOW GROWN TO SERVE CHILDREN AND ADULTS OF ALL AGES WITH A VARIETY OF RECREATIONAL ACTIVI--TIES.
- VARIETY OF CLASSES FOR CHILDRENS OF ALL AGES, ADULTS AND SENIORS THAT INCLUDE SWIMMING, ICE SKATING,HOCKEY AND SPORTS LEAGUE.
- FAMILIES ARE ENCOURAGED TO ENJOY A DAY OF FUN EVERY SATURDAY AND SUNDAY.

FACILITIES

- PATIO
- FITNESS CENTER
- GAME ROOM
- BOWLING LANES
- ICE SKATING
- GYMNASTICS
- PROGRAM
  ACTIVITIES
  CLASSES
  CLUB
- INDOOR BASKETBALL COURT

CONCEPT

- LANDSCAPE CONCEPTUAL DESIGN.
- THE EXTERIOR SPACES INCLUDED OUTDOOR PATIOS, PARKING, SPORTS FIELD PEDESTRIAN AND VEHICULAR CIRCULATION, ANS THE CREATION OF A STRONG LANDSCPAE BUFFER ALONG ONE OF THE ROADWAYS.
- THE LANDSCAPE AREA APPROXIMATELY 3.5 ACRES.

New parking lot - 44 cars
Existing parking lot - 45 car

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LITERATURE STUDY - 1

SCOTT RAKOW YOUTH CENTRE, MIAMI FLORIDA [U.S]

SITE

N

APPROACH ROAD

PARKING AREA

LOUNGE

ICE SKATING RINK

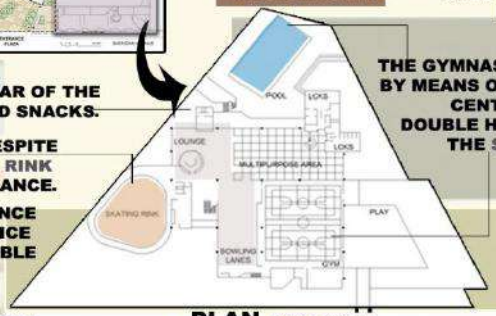
OTHER ACTIVITIES IN THE GYMNASIUM ARE ACCOMODATED IN SPACES THAT CAN BE OPEN TO THE OUTDOORS OR ENCLOSED DEPENDING UPON THE NORMALLY TEMEPRATE.

THE GYMNASIUM WALLS THAT CAN BE OPENED BY MEANS OF ROLLING STEEL DOORS AND THE CENTER'S MAIN GATHERING PLACE IS A DOUBLE HEIGHTED OPEN "PORCH" BETWEEN THE SWIMMING POOL AND GYMNASIUM.

A LOUNGE TOWARDS THE REAR OF THE BUILDING HAS ABLES FOR STUDY AND SNACKS.

THE ARCHITECT POINT OUT THAT- DESPITE THE PRESENCE OF AN ICE SKATING RINK TO THE LEFT OF THE ENTRANCE.

BLOWING LANES NEAR THE ENTRANCE A MEZZANINE ACCOMODATES PRACTICE ROOMS,PINBALL MACHINES AND TABBLE FOR BILLIARDS AND PADDLE TENNIS.



PLAN

75 FOOT SWIMMIMG POOL

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ACADEMIC SPACES

1. CLASS ROOMS

SITE AND SPATIAL RELATIONSHIPS

Classrooms should be placed on the lower floors of buildings to provide better student access and more convenient instructional support services. A building with mixed functions (classrooms, offices, and/or laboratories) should separate the classroom core from other functions. Classrooms should be separated from noise-generating activities inside or outside the building. To reduce external noise, sound buffers must separate classrooms from areas such as streets, parking lots, housing areas, plazas or other areas where students gather, recreation sites, athletic fields, trash pickup sites, and loading docks. To reduce internal noise, classrooms should be isolated from building mechanical systems, elevators, restrooms, vending areas, and other noise generating areas.

BUILDING ENTRANCES

To reduce the impact of exterior noise and temperature differences, all building entrances should have two sets of doors, one from the outside into a vestibule and a second from the vestibule into the building. The main criterion in determining where to locate building entrances should be the direction(s) from which students and other pedestrians approach the building. Entrances should be near classrooms to limit the distance students must travel through non-instructional areas to reach classrooms. Large numbers of students walking through hallways can disturb classes already in session. Larger capacity classrooms should be located closest to the building entry. Local building codes should be only one of several criteria that should

determine the number and location of building entrances. Equally important is to plan for a flow of students between classes that is double the capacity of the rooms served by an entrance. Students often arrive for class at the same time students are leaving the classroom. If classrooms must be located on upper floors, the stair towers and the doors into stair towers must accommodate the number of students who may leave and arrive at the same time.

DOORS

All classroom and lecture hall doors should be a minimum of three feet wide and should have a vision panel in order to prevent injury when being opened. Vision panels should contain shatter-resistant glass that is tinted to reduce light transmission. The area of the glass should not exceed 100 square inches. The base of the vision panel should be no higher than 42 inches above the floor, and the top of the vision panel should extend at least 62 inches above the floor. All classroom doors should have levers (not knobs) for easier use by people with disabilities.

VENDING AREAS

Vending machines should not be located in the lobby area outside a lecture hall. Vending areas should be placed in remote locations away from classrooms, preferably in an alcove or other similar location that will minimize congestion and noise when students use the machines. The vending area should have trash/ recycling containers in the immediate area of the vending machines. Any trash/recycling containers in the lobby area should complement the interior decor of the lobby area.

FINISHES

Color and Reflectance Values

The selection of color and the reflectance values of finish materials must be considered for all classrooms. Painted surfaces should be a light color, and should have a durable finish to allow washing. A soft matte finish marks easily, is difficult to clean, and, therefore, should be avoided.

Floors

The floor in the general classroom should be vinyl or rubber tile and should have a smooth surface. Industrial grade, stain resistant carpet is rapidly becoming in classrooms because it provides valuable acoustical properties to the room, and because it is increasing durable. If carpet is installed, consideration should be given to its effect on the acoustics in the room. Where movable seating is to be used, acoustical advantages of carpet should be weighed against the maintenance costs produced by the wear and tear resulting from the moving furniture. The floor covering should be a medium to light color and should contain some kind of subdued pattern or fleck to break the monotony and to make it less likely to show dirt and stains. A four-inch cove base should be installed around all of the walls.

ACOUSTICS

Good listening conditions (i.e. a quiet room) depend on four basic factors:

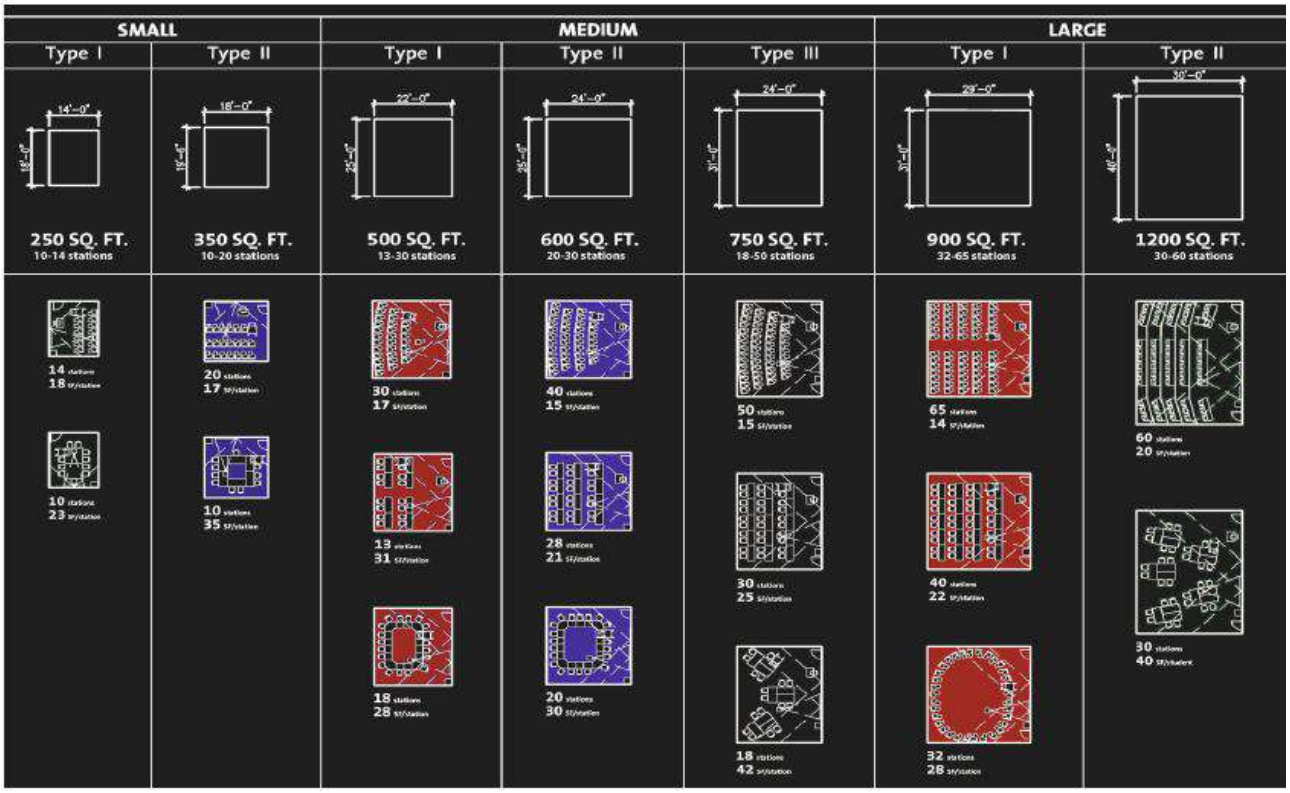
- the amount of noise entering the room from outside sources
- the loudness of various sound sources within the room (with or without amplification)
- the distribution of sound to all parts of the room
- the fidelity and clarity of the sound (lack of reverberation, distortion, etc.)

Perhaps the single most important factor related to good acoustics is the absence of noise from external sources since this interferes with sound created within the room. Even a room with good internal acoustical properties and sound systems can't overcome extensive noise infiltration.

Ceiling

Sound must be loud enough to be heard by people sitting in the rear of the room as well as those in the front. The ceiling is the most critical element inside the room in assuring effective distribution and appropriate volume of sound throughout the room. The ceiling should act as a sound mirror, reflecting sound downward

to blend with the direct sound. This is why the ceiling should include significant amounts of hard surfaced material. Too many classrooms and lecture halls have ceilings composed entirely of sound absorbing acoustical tile that offer little or no sound reflection. This leads to a significant and undesirable difference in volume and distribution of sound within the room.



SEATING ARRANGEMENT

SEMINAR HALLS

A lecture hall (or lecture theatre) is a large room used for instruction, typically at a college or university. Unlike a traditional classroom with a capacity from one to four dozen, the capacity of lecture halls is typically measured in the hundreds. Lecture halls almost always have a pitched floor, so that those in the rear are sat higher than those at the front, allowing them to see the lecturer

The three (3) fundamental requirements, to see visual material, to hear without noise or distortion, and to be physically comfortable, are of special concern in lecture halls. Larger lecture halls require more entrances and exits, larger projection screen images,greater voice amplification, more complex lighting and audiovisual control, special acoustical design, and greater control of the environment by Instructor. Problems which occur during a large lecture class are magnified to a greater degree as a result of decreased flexibility in the arrangement of the learning environment and the teaching strategies that can be used.

SITE AND SPACE RELATIONSHIPS FOR THE SEMINAR HALL

A. Lecture halls should be located to facilitate the movement of large numbers of students to and from the lecture halls. Further, lecture halls should be located so that students can enter or exit the building without passing through major portions of the building that contain other classrooms or spaces for other functions.

B. Entrances/Exits:

1. The principal determinant of the location of these entrances should be the flow of student traffic to and from the building. Entrances/exits should be located as conveniently as possible to these patterns of traffic.

DIMENSIONS

A. Large lecture halls (those seating more than 100 students) should be a modified fanshape. Ideally, no student should be more than 45º off the center axis of the room. The depth of the room should not be greater than one and one-half times the width of the room, measured at the midpoint of the seating area

B. If the lecture hall has a sloped floor, the incline should be no more than 1:12. If there is a difference of four (4) inches or less between each row, then the seating should be staggered to permit clear visibility to the front of the room. Small lecture halls (under 100 – student capacity) may or may not have a sloped floor. If the floor is flat, a teaching station platform should be installed in the front of the room to improve sight lines between the instructor and the students. In most instances, a six-inch high platform is sufficient. The platform should be wheelchair accessible and be large enough to accommodate necessary instructor furniture and equipment.

C. Aisles in a lecture hall should be laid out to provide the maximum of prime viewing locations for the audience. Generally, this will mean no center aisle. Building codes must be consulted in determining the number of seats in a continuous row and the distance between rows allowed in the location where the lecture hall is being built.

D. There should be no posts or other obstructions anywhere inside a lecture hall that would obstruct the view from any seat.

E. Special attention should be given to the amount of space available at the instructor area or chalkboard/markerboard and for other visual presentations. This emphasis, particularly in large lecture halls, should be on the use of projection tools in the place of the chalkboard/markerboard in order to provide for maximum visibility to students throughout the lecture hall.

F. Ceiling heights will vary, depending upon the size of the room. The following are recommended minimum ceiling heights, based on the number of student stations within the lecture hall. Higher ceilings may be needed if the lecture hall will have video projectors that are ceiling mounted.

ENTRANCE AND EXITS

A. At-grade access should be provided to the front area of large lecture halls which have sloped floors. This access is to facilitate entering/exiting of wheelchair users as well as the movement of equipment.

B. The principal entrances/exits for large lecture halls should be in the rear section of the room.

C. Entrances and exits should facilitate the easy access of people with disabilities.

D. Locks should be key-activated only with classroom function hardware.

FLOOR

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C. Entrances and exits should facilitate the easy access of people with disabilities.

D. Locks should be key-activated only with classroom function hardware.

SEATING

1. Fixed seating:

A. It is recommended that rooms seating more than 75 have fixed seating. There may be special occasions when a small lecture hall, 75-100 students, would best be served by the use of movable seating. This is the

exception, however, and will present operational problems because of the difficulty of keeping a large number of movable seats in reasonable order.

B. Whenever possible, it is recommended that continuous tables with fixed chairs be installed in lecture halls. This provides the student with the maximum work area.

C. When fixed chairs with tablet arms are used, the tablet arm should have a minimum of 150 square inches of writing surface. The arm also should fold to facilitate passage of students through the rows of seats. Fixed tables and chairs attached directly to the floor should have exposed bolt heads covered.

D. Since the number of seats in each row and the relationship of this number to the aisles are often covered by code requirements, these should be consulted in determining the layout of a room.

2. Left- Handed Seating:

A minimum of ten percent left-handed tablet arms is needed.

3. Wheelchair Stations:

Seating for mobility-impaired students should be provided in lecture halls at approximately four percent of the capacity of the room. To accommodate students in wheelchairs, a table 30 inches deep, 31 inches high (with 29 inches clearance), and 36 inches wide is recommended

ACOUSTICS

A. Acoustical characteristics of a lecture hall are among the most critical elements in the design of the facility. Care must be exercised in isolating the facility from exterior noise as well as controlling the background noise level in the room, especially that generated by the mechanical systems. Ambient sound levels measured at four (4) feet above the floor at all points throughout the room must have a Noise Criterion (NC) rating of more than 35. **B.** The mix of sound-reflectant and sound-absorbent materials must be carefully calculated to control reverberation without creating a sound-deadened room. It is strongly recommended that an acoustical consultant be included in the design team for lecture halls **C.** Walls: Walls should have a Sound Transmission Coefficient (STC) rating of no less than 50. Walls must extend to the floor above or to the roof construction, and not stop at the ceiling.

D. Ceilings:

1. Ceilings should be sloped or stepped and primarily of a hard surface. If it is determined that some acoustical treatment is needed as part of the ceiling, it should be installed around the perimeter of the sides and rear in the form of a U, with the front and middle sections of hard-surfaced, sound-reflectant materials. Acoustical treatment normally will not exceed 40-50 percent of the ceiling surface. **2.** Partial wall-surface treatments should be considered as an alternative to ceiling treatment. The back wall may need to be 50-100% covered with acoustical absorption materials.

BARRIER FREE ENVIRONMENT

Barrier Free Environment is one which enables people with disabilities to move about safely and freely and to use the facilities within the built environment. The goal of barrier free design is to provide an environment that supports the independent functioning of individuals so that they can get to, and participate without assistance, in every day activities such as procurement of goods and services, community living, employment, and leisure. The fundamental principles which have been followed in developing standards / norms for various facilities to meet disabled people's standards for safety, convenience and usability. Barrier

free design standards should satisfy anyone who is hampered in his mobility or functioning (as compared with a nondisabled person) as a result of obstacles put in his way by the design of a building, the choice of hardware and equipment, and the arrangement of outside space.

TYPES OF DISBILITIES Various, disabilities which have been considered while preparing the guidelines for barrier free built environment are broadly classified under four categories:

1. Non-Ambulatory : Impairments that, regardless of cause or manifestation, for all practical purposes, confine individuals to wheel & chairs. 2. Semi-Ambulatory : Impairments that cause individuals to walk with difficulty or insecurity. Individual using braces or crutches, amputees, arthritics, spastics &those with pulmonary & cardiac ills may be semi-ambulatory.
3. Sight : Total blindness or impairments affecting sight to the extent that the individual functioning in public areas is insecure or exposed to danger. 4. Hearing : Deafness or hearing handicaps that might make an individual insecure in public areas because he is unable to communicate or hear warning signals.

MOBILITY DEVICES

Adequate space should be allocated for persons using mobility devices, e.g. wheelchairs, crutches and walkers, as well as those walking with the assistanceof other persons
* The range of reach (forward and side; with or without obstruction) of a person in a wheelchair should be taken into consideration. * Attention should be given to dimensions of wheelchairs used locally. Standard size of wheel chair has been taken as 1050mm x 750mm (as per ISI).

CONSTRUCTION AND MAINTENANCE STANDARDS

A. NON-AMBULATORY DISABILITIES
Persons restricted on wheel chair should use the facilities within the built environment alone without a Helper's assistance.
Wheelchair Users
A wheelchair may be operated by the user alone or with a helper's assistance. However, wheelchair design must assume that the user should be able to operate the wheelchair without help. The width and length of the wheel chair, its control and the diameter of the casters decide the following:
Width of entrances and exists (clear 900mm)
Width of the passage / corridor (min. 900mm)
Slope of the climbing (min. ramp slope 1:12)
Passing over different levels and grooves (Grating with narrow slots in the direction of movement and level difference to limit to 2cm or less
Range of reach
Transfering from wheel chair (adequate space is required to transfer from wheel chair to toilet seat and bed.
Lift size
Toilet size
B. SEMI-AMBULATORY DISABILITIES

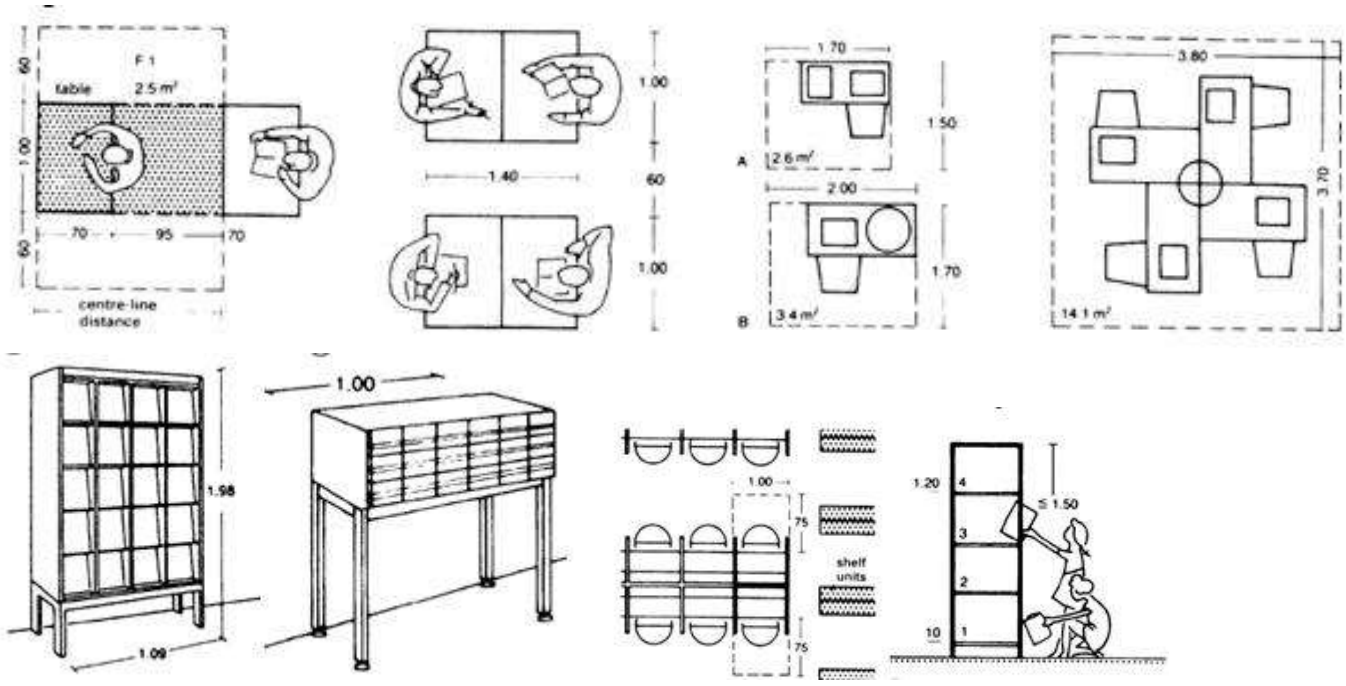
Persons with impaired walking Persons in this category who use walking aids such as crutches or canes, who are amputees, who have chest ailments or heart disease. The persons in this category include those who can not walk without a cane and those who have some trouble in their upper or lower limbs although they can walk unassisted.

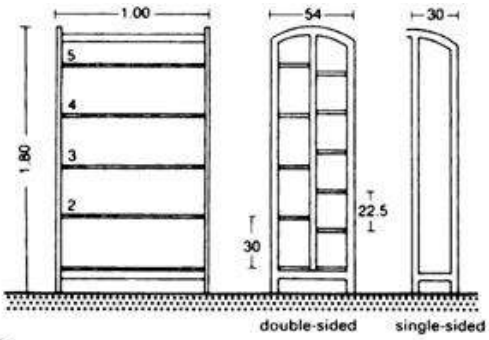
Design requirements

* Width of passage for crutch users (min. 900 mm)
* Finishes of floor surface with non slip floor material.
* Installation of handrail to support the body weight at the critical places e.g. staircase, toilet, ramp, passage with a change of level (800-850 mm).
* Extension of handrail on the flat landing at the top and bottom of the stairs (300mm).
* To prevent slipping off the cane or crutch from the side of the stairs or ramps (20mm high lip on the exposed edge).

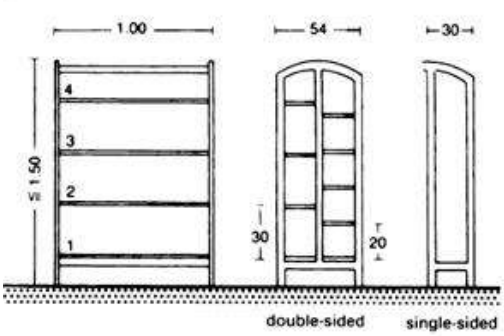
LIBRARY

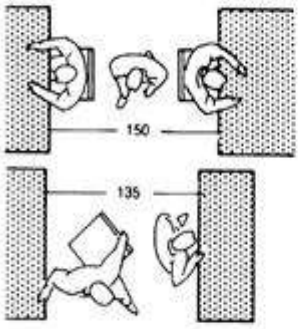
libraries perform a range of functions in society. academic libraries, for example, obtain, collect and store literature for education and research purposes, and are usually open to the general public. public libraries provide communities with a wide choice of more general literature and other information media with as much as possible displayed on open shelves. the function of academic and public libraries are often combined in a single library in larger towns.

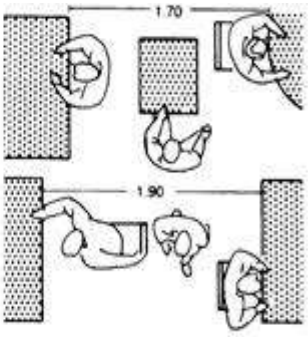


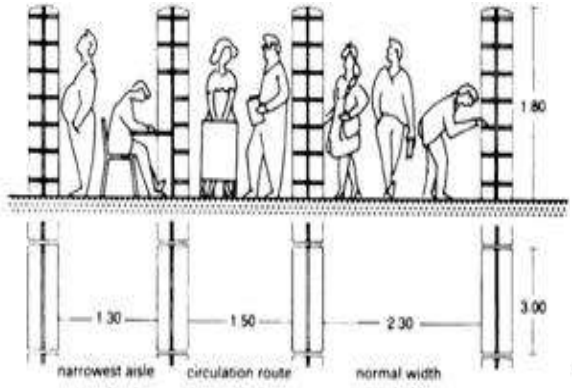


(14) **Shelf units: for adults, 5--6 shelves; for children**



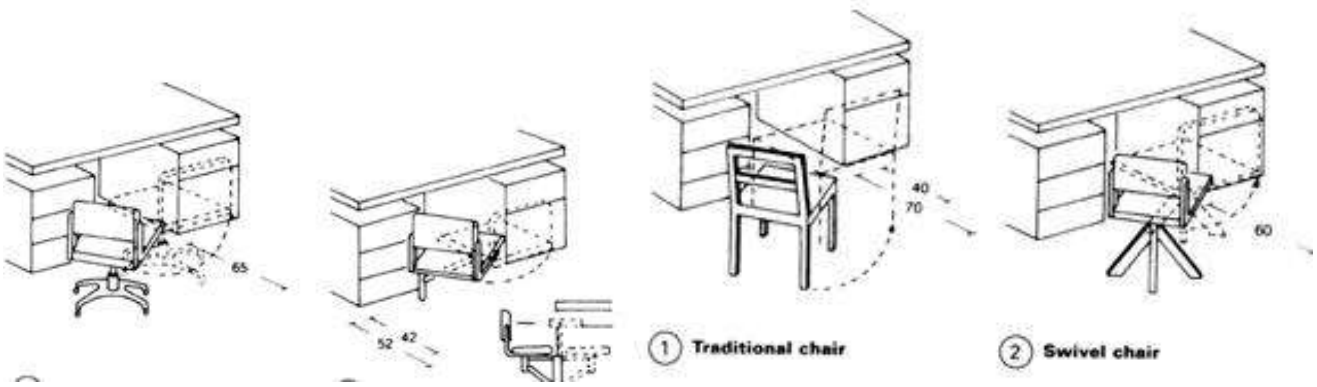


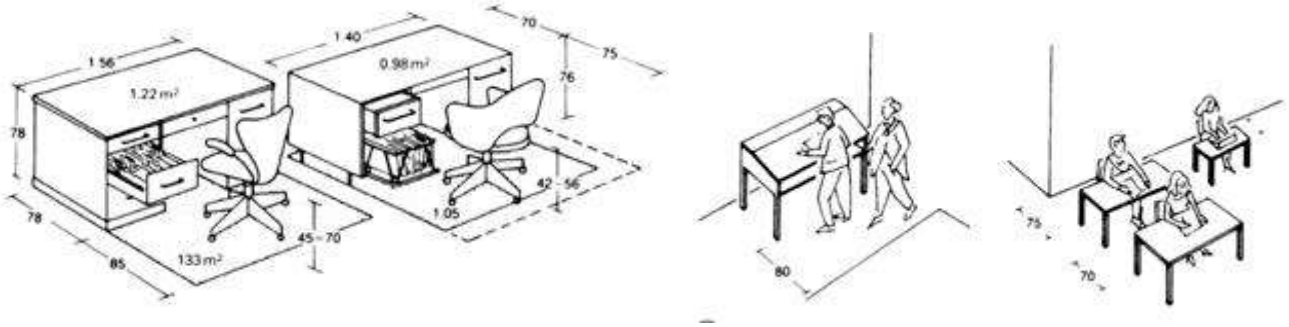


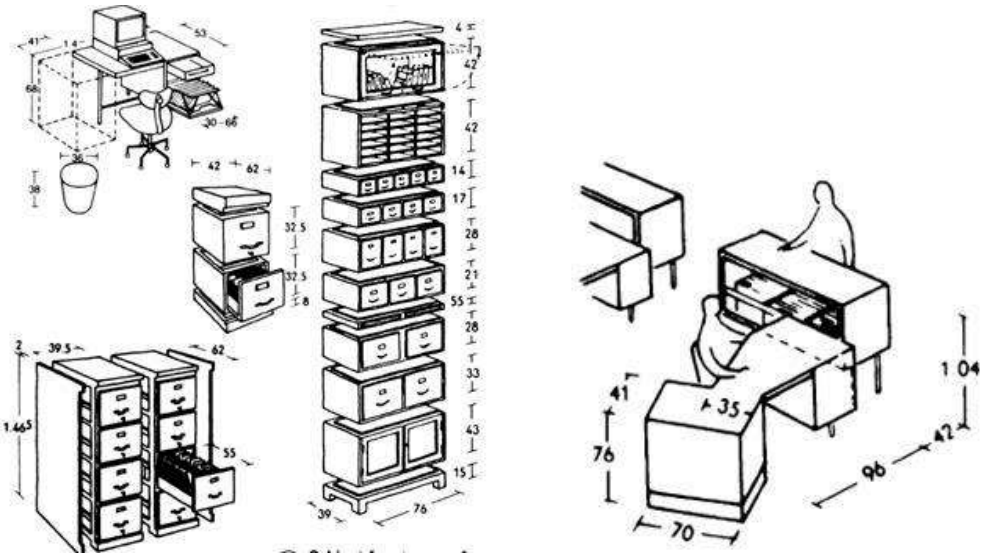


OFFICE SPACES

THUMB RULES FOR PLANNING THE OFFICE SPACES: Width of the primary circulation path within the space must not be less than 2m, the secondary and tertiary paths must not be less than 1.5m ans 0.75m respectively. the planning and the layout must satisfy a particular functional need, such as screening, divisions(partitions) stacking or storage etc. furniture arrangement must be such that the people at their work station must have clear visibility and adequate space around their desk.


65
52
42
40
70
60
1 Traditional chair
2 Swivel chair


1 56
1 40
0 98 m²
1 22 m²
70
75
76
78
42 - 56
1 05
78
45 - 70
85
133 m²
80
75
70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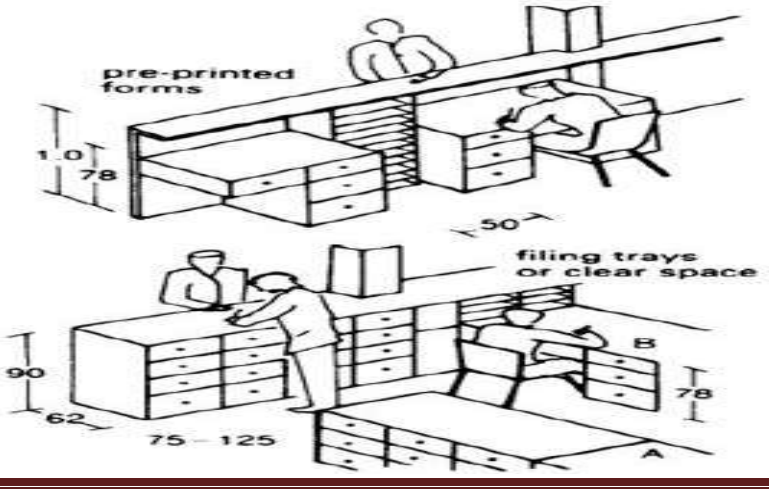
pre-printed forms
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filing trays or clear space
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62
75 – 125
B
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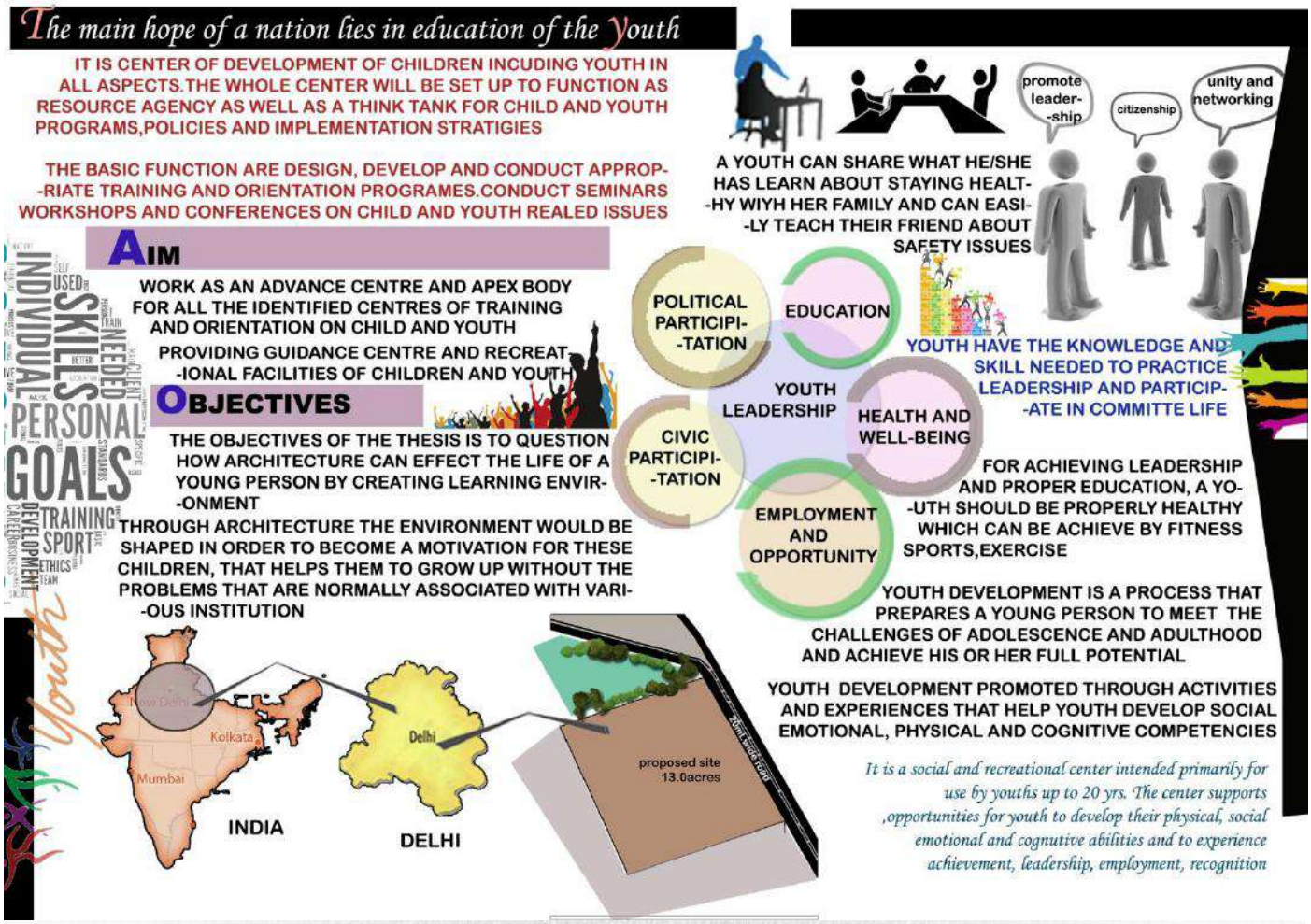
A

CONCEPT


The main hope of a nation lies in education of the youth
IT IS CENTER OF DEVELOPMENT OF CHILDREN INCUDING YOUTH IN ALL ASPECTS.THE WHOLE CENTER WILL BE SET UP TO FUNCTION AS RESOURCE AGENCY AS WELL AS A THINK TANK FOR CHILD AND YOUTH PROGRAMS,POLICIES AND IMPLEMENTATION STRATIGIES
THE BASIC FUNCTION ARE DESIGN, DEVELOP AND CONDUCT APPROP--RIATE TRAINING AND ORIENTATION PROGRAMES.CONDUCT SEMINARS WORKSHOPS AND CONFERENCES ON CHILD AND YOUTH REALED ISSUES
promote leader--ship
citizenship
unity and networking
A YOUTH CAN SHARE WHAT HE/SHE HAS LEARN ABOUT STAYING HEALT--HY WIYH HER FAMILY AND CAN EASI--LY TEACH THEIR FRIEND ABOUT SAFETY ISSUES
AIM
WORK AS AN ADVANCE CENTRE AND APEX BODY FOR ALL THE IDENTIFIED CENTRES OF TRAINING AND ORIENTATION ON CHILD AND YOUTH
PROVIDING GUIDANCE CENTRE AND RECREAT--IONAL FACILITIES OF CHILDREN AND YOUTH
OBJECTIVES
THE OBJECTIVES OF THE THESIS IS TO QUESTION HOW ARCHITECTURE CAN EFFECT THE LIFE OF A YOUNG PERSON BY CREATING LEARNING ENVIR--ONMENT
THROUGH ARCHITECTURE THE ENVIRONMENT WOULD BE SHAPED IN ORDER TO BECOME A MOTIVATION FOR THESE CHILDREN, THAT HELPS THEM TO GROW UP WITHOUT THE PROBLEMS THAT ARE NORMALLY ASSOCIATED WITH VARI--OUS INSTITUTION
POLITICAL PARTICIPI--TATION
EDUCATION
YOUTH LEADERSHIP
HEALTH AND WELL-BEING
CIVIC PARTICIPI--TATION
EMPLOYMENT AND OPPORTUNITY
YOUTH HAVE THE KNOWLEDGE AND SKILL NEEDED TO PRACTICE LEADERSHIP AND PARTICIP--ATE IN COMMITTE LIFE
FOR ACHIEVING LEADERSHIP AND PROPER EDUCATION, A YO--UTH SHOULD BE PROPERLY HEALTHY WHICH CAN BE ACHIEVE BY FITNESS SPORTS,EXERCISE
YOUTH DEVELOPMENT IS A PROCESS THAT PREPARES A YOUNG PERSON TO MEET THE CHALLENGES OF ADOLESCENCE AND ADULTHOOD AND ACHIEVE HIS OR HER FULL POTENTIAL
YOUTH DEVELOPMENT PROMOTED THROUGH ACTIVITIES AND EXPERIENCES THAT HELP YOUTH DEVELOP SOCIAL EMOTIONAL, PHYSICAL AND COGNITIVE COMPETENCIES
New Delhi
Kolkata
Mumbai
INDIA
Delhi
DELHI
proposed site
13.0acres
It is a social and recreational center intended primarily for use by youths up to 20 yrs. The center supports ,opportunities for youth to develop their physical, social emotional and cognutive abilities and to experience achievement, leadership, employment, recognition

DRAWINGS

CHILD AND YOUTH DEVELOPMENT CENTER, DELHI

THESIS-2019-2020

NAME- PRANJAL SRIVASTAVA

ROLL NO.- 1150101054

GUIDE- PROF. K.K. DIXIT SIR

SACHOOL OF ARCHITECURE AND PLNNING

B.B.D.U, LUCKNOW

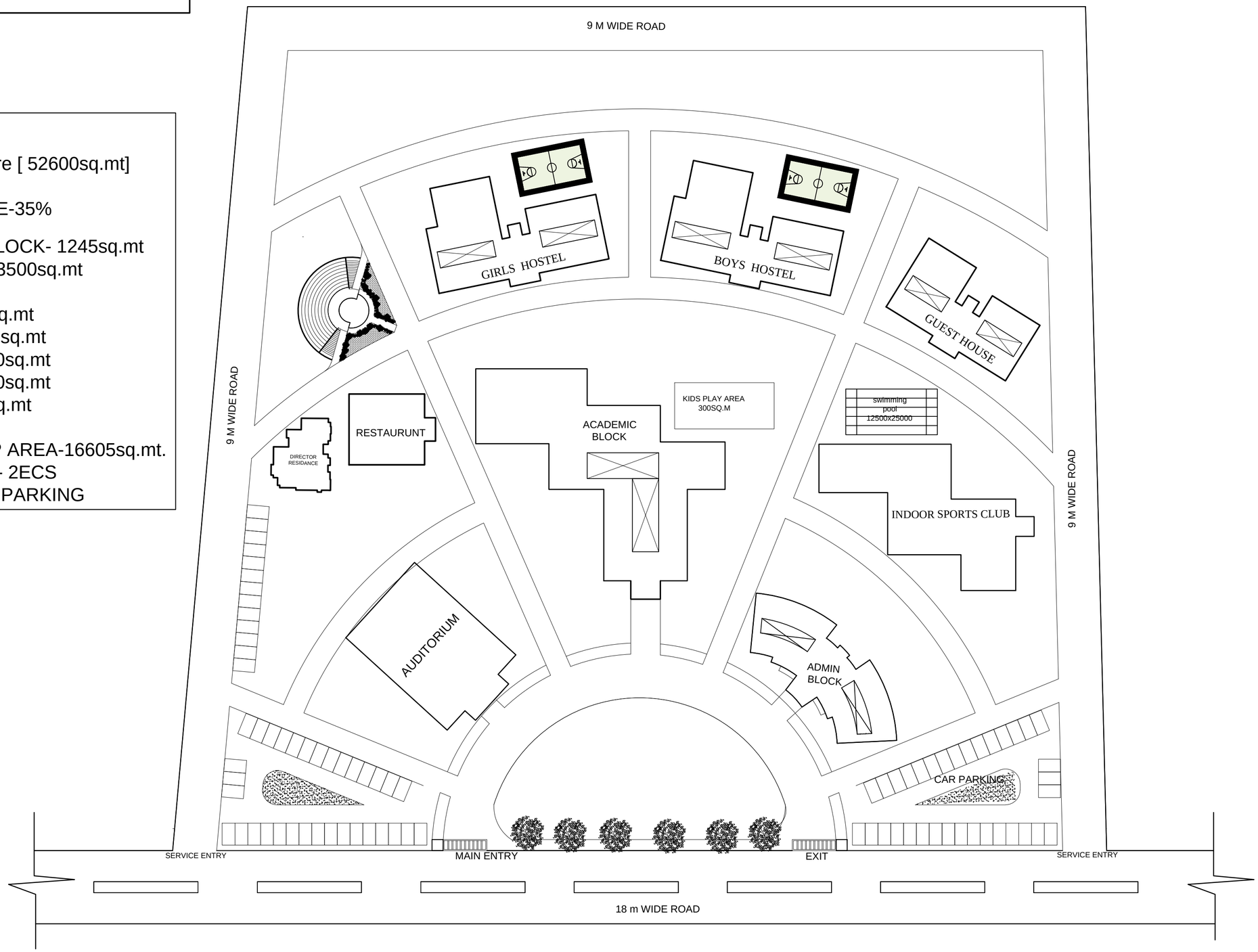
SITE PLAN

AREA STATEMENT

SITE AREA- 13.00 acre [52600sq.mt]
F.A.R - 1.5
GROUND COVERAGE-35%

ADMINISTRATION BLOCK- 1245sq.mt
ACADEMIC BLOCK- 3500sq.mt
CLUB- 1800sq.mt
AUDITORIUM- 1200sq.mt
BOYS HOSTEL- 3080sq.mt
GIRLS HOSTEL- 3080sq.mt
GUEST HOUSE- 2300sq.mt
RESTAURUNT- 400sq.mt

ACHIEVED BUILT UP AREA-16605sq.mt.
PARKING 100Sq.mt- 2ECS
300CAR FOR OPEN PARKING



CHILD AND YOUTH DEVELOPMENT CENTER, DELHI

SCALE - 1:750
ALL DIMENSIONS ARE IN MM

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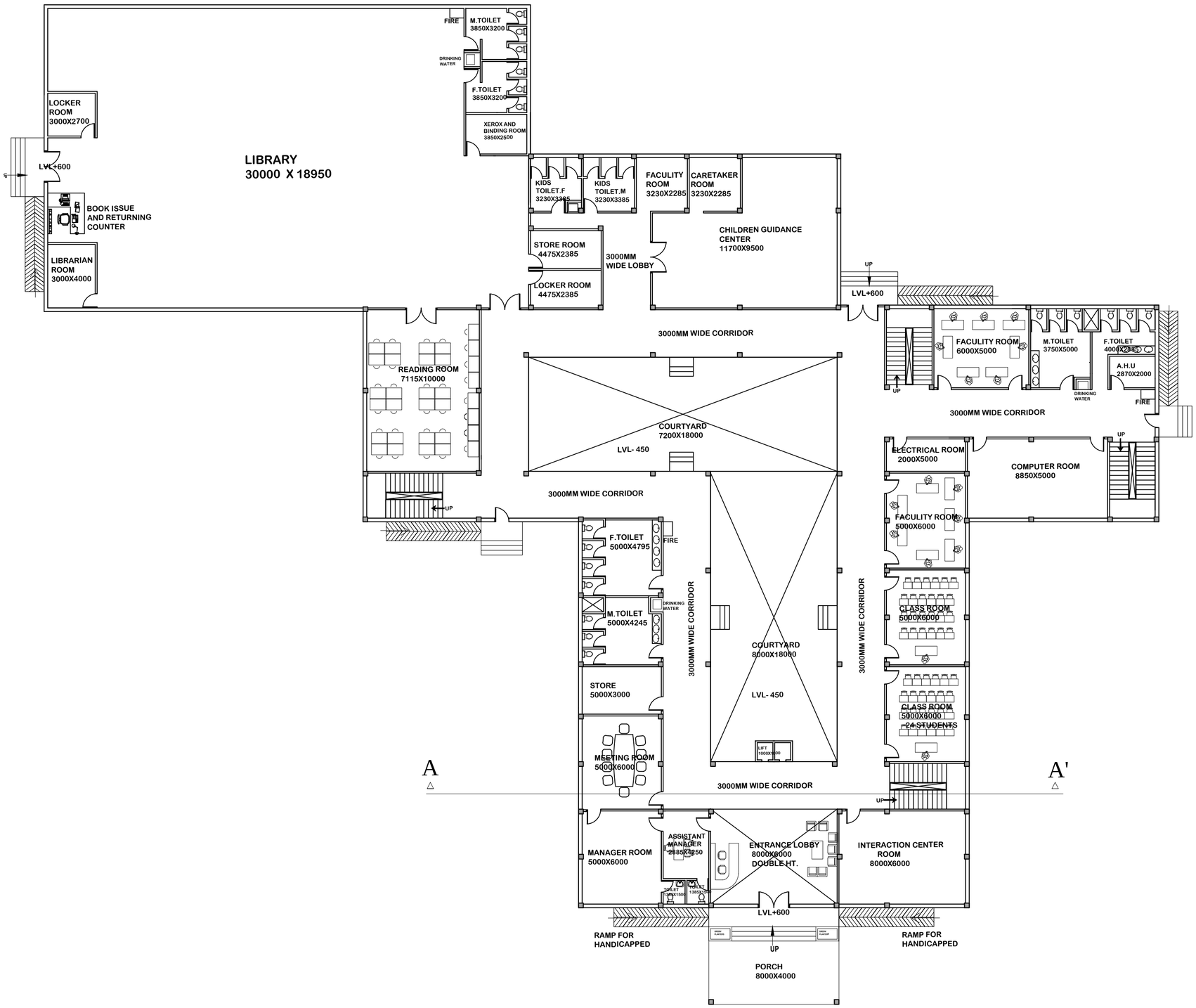
GUIDED BY - Prof. K.K. Dixit

ACADEMIC BLOCK



GROUND FLOOR PLAN

CHILD AND YOUTH DEVELOPMENT CENTER, DELHI

SCALE - 1:150
ALL DIMENSIONS ARE IN MM

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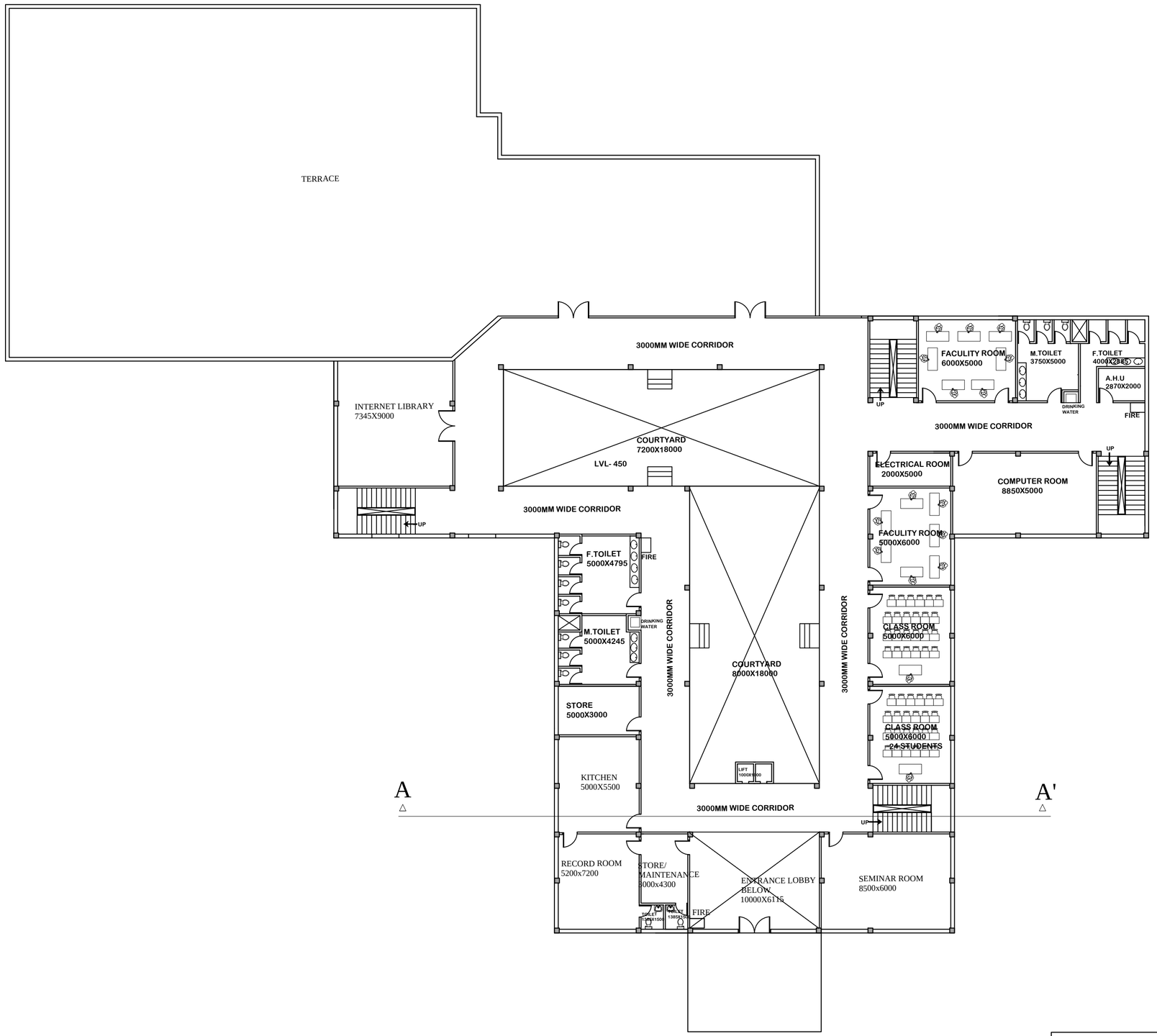
ACADEMIC BLOCK



FIRST FLOOR PLAN

CHILD AND YOUTH DEVELOPMENT CENTER, DELHI

SCALE - 1:150
ALL DIMENSIONS ARE IN MM

PRANJAL SRIVASTAVA
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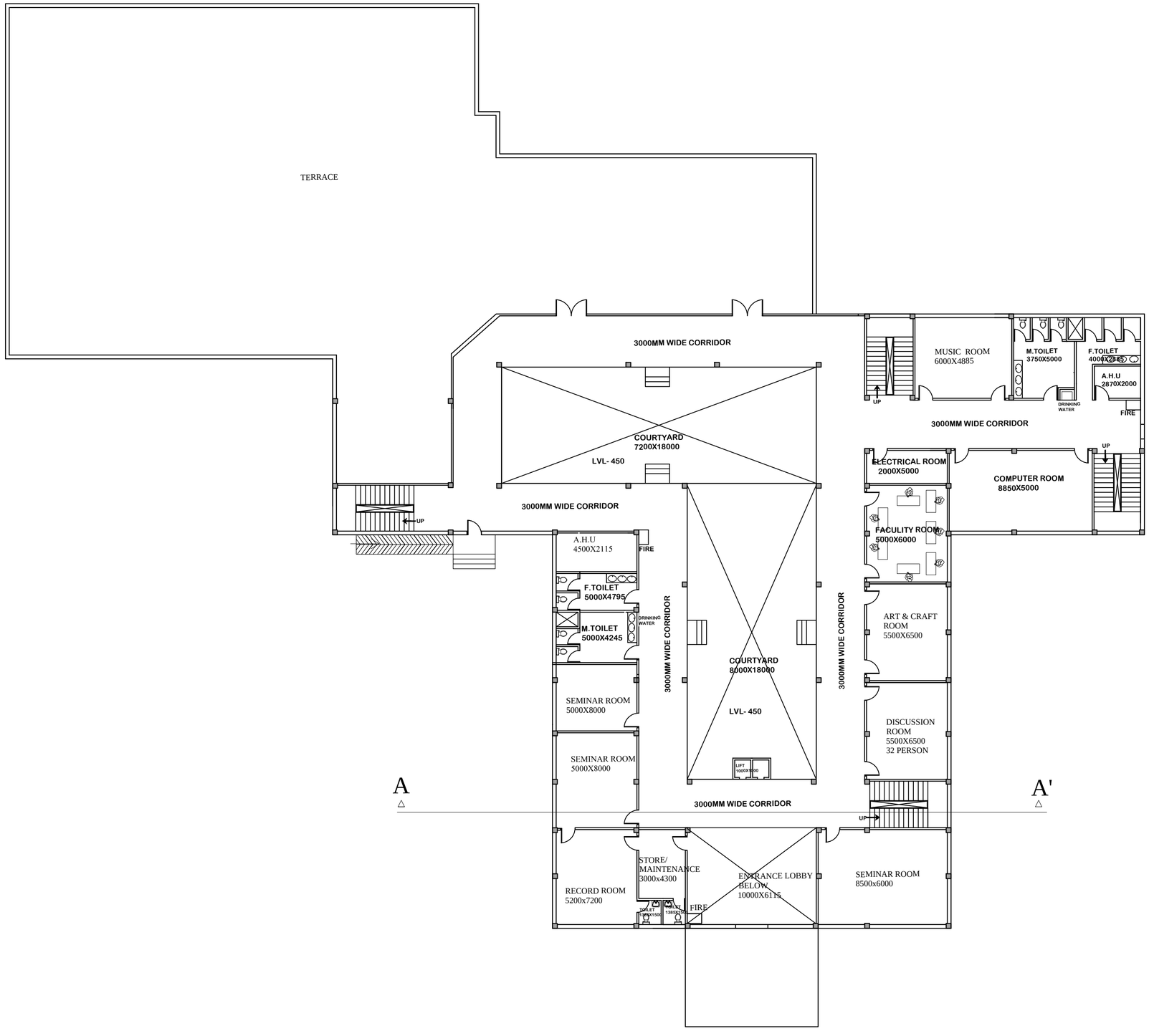
ACADEMIC BLOCK



SECOND FLOOR PLAN

CHILD AND YOUTH DEVELOPMENT CENTER, DELHI

SCALE - 1:150
ALL DIMENSIONS ARE IN MM

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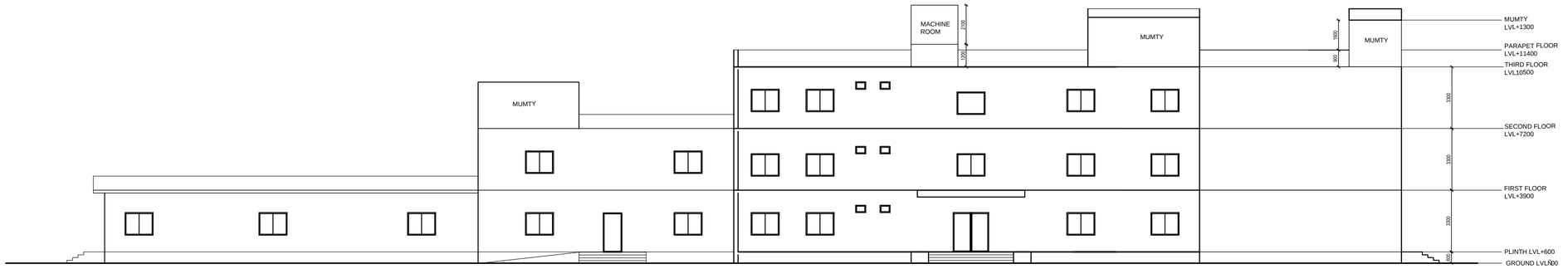
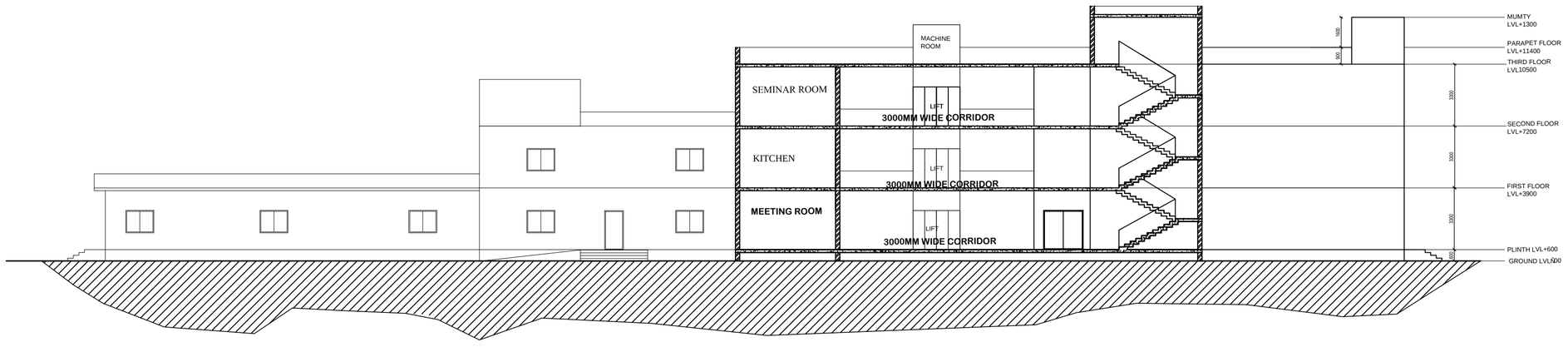
ACADEMIC BLOCK



FRONT ELEVATION



SECTION AA'

CHILD AND YOUTH DEVELOPMENT CENTER, DELHI

SCALE - 1:150
ALL DIMENSIONS ARE IN MM

PRANJAL SRIVASTAVA
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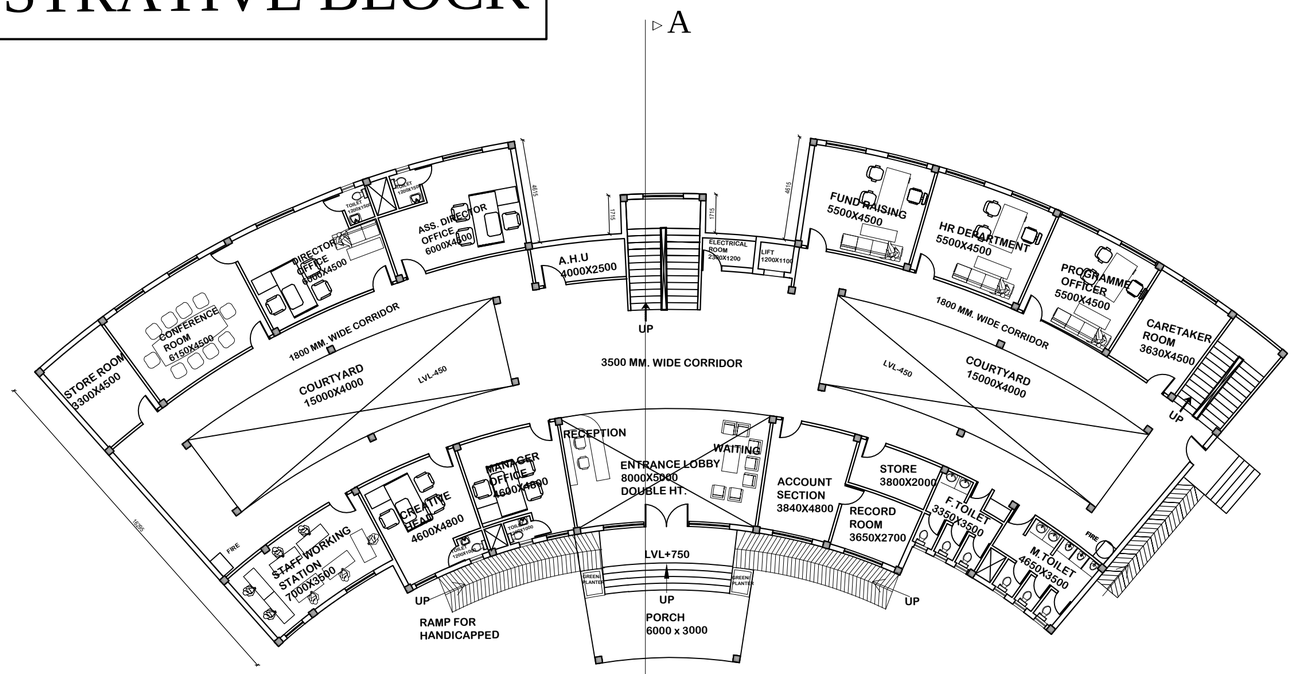
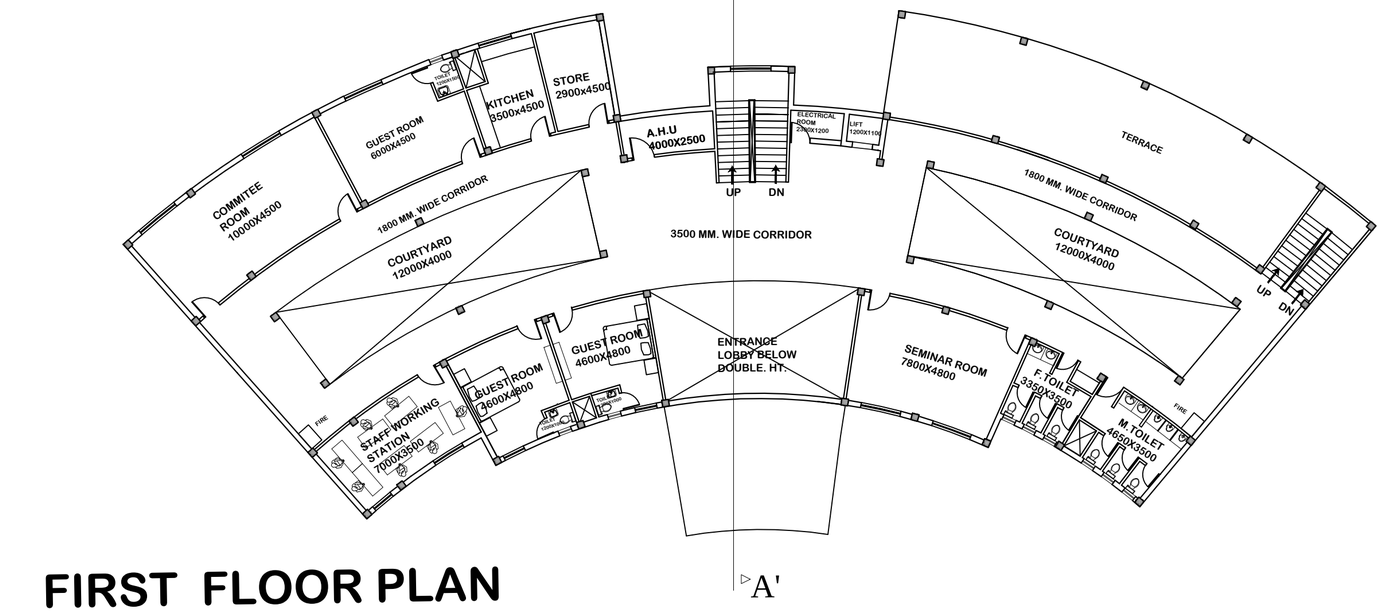
ADMINSTRATIVE BLOCK



GROUND FLOOR PLAN



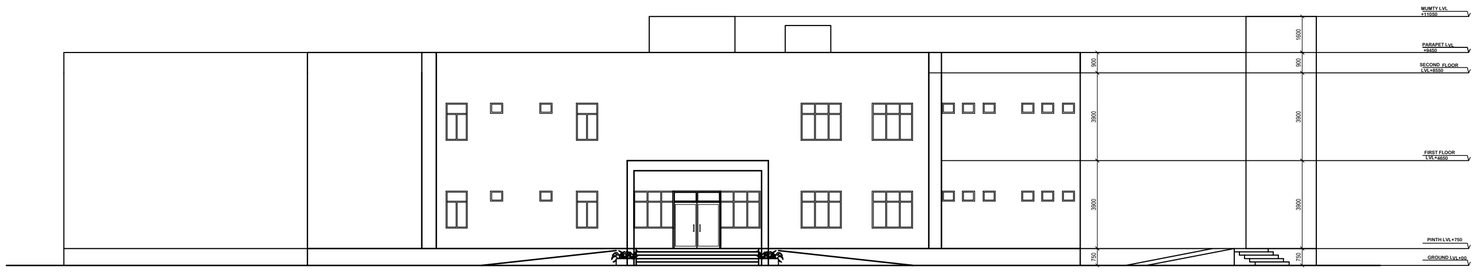
FIRST FLOOR PLAN

CHILD AND YOUTH DEVELOPMENT CENTER, DELHI

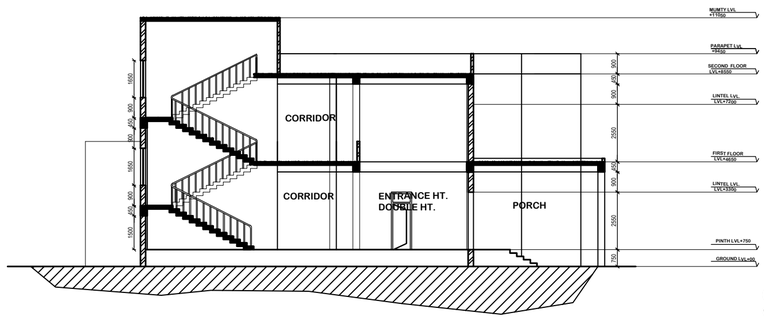
SCALE - 1:150
ALL DIMENSIONS ARE IN MM

PRANJAL SRIVASTAVA
1150101054
B.B.D.U, LUCKNOW
GUIDED BY - Prof. K.K. Dixit

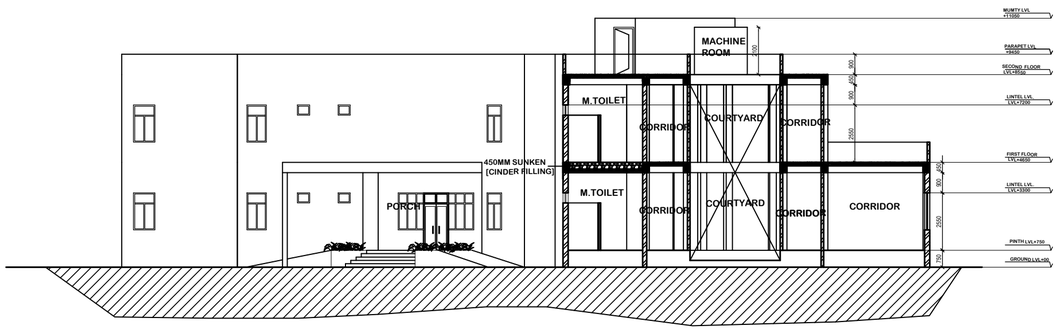
ADMINSTRATIVE BLOCK



FRONT ELEVATION



SECTION AA'



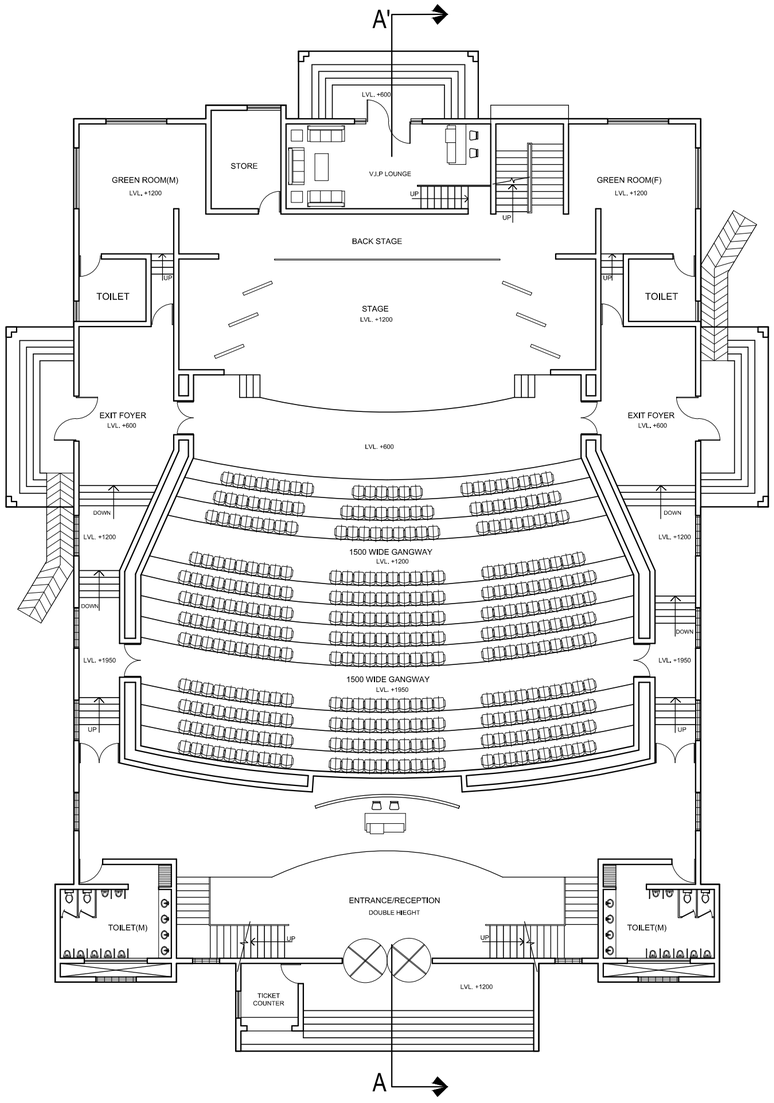
SECTION BB'

CHILD AND YOUTH DEVELOPMENT CENTER, DELHI

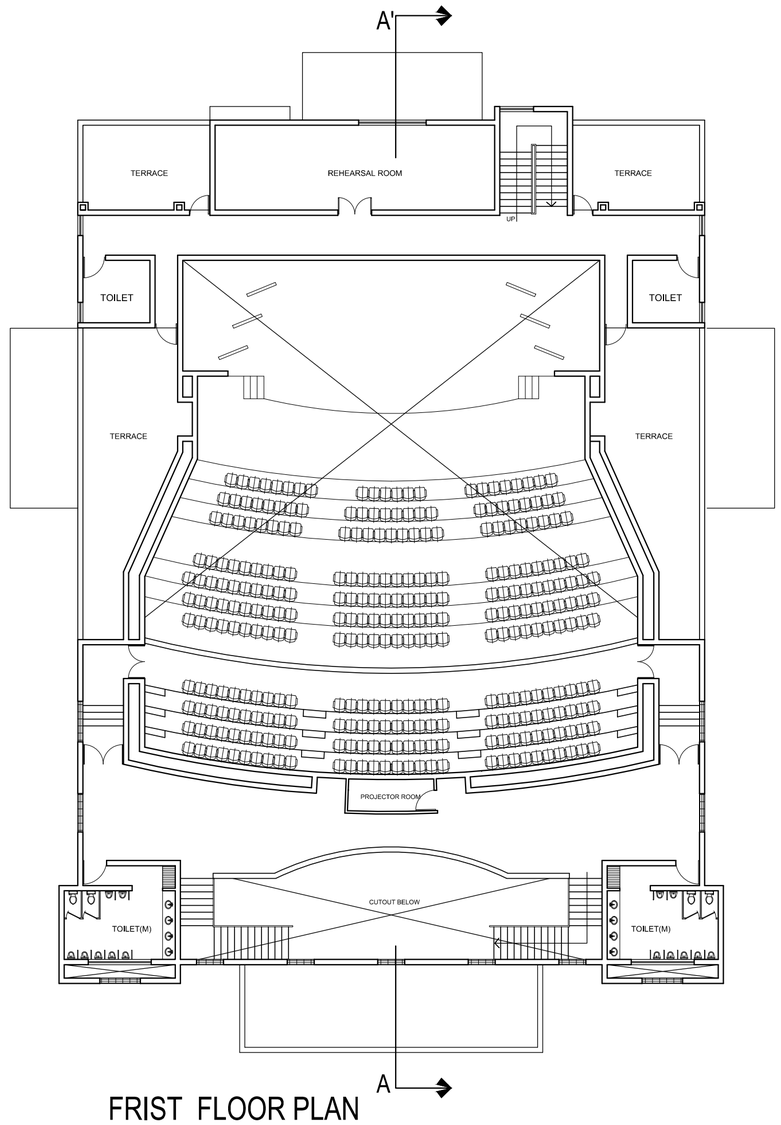
SCALE - 1:150
ALL DIMENSIONS ARE IN MM

PRANJAL SRIVASTAVA
1150101054
B.B.D.U, LUCKNOW
GUIDED BY - Prof. K.K. Dixit

AUDITORIUM BLOCK



GROUND FLOOR PLAN



FRIST FLOOR PLAN

CHILD AND YOUTH DEVELOPMENT CENTER, DELHI

SCALE - 1:150
ALL DIMENSIONS ARE IN MM

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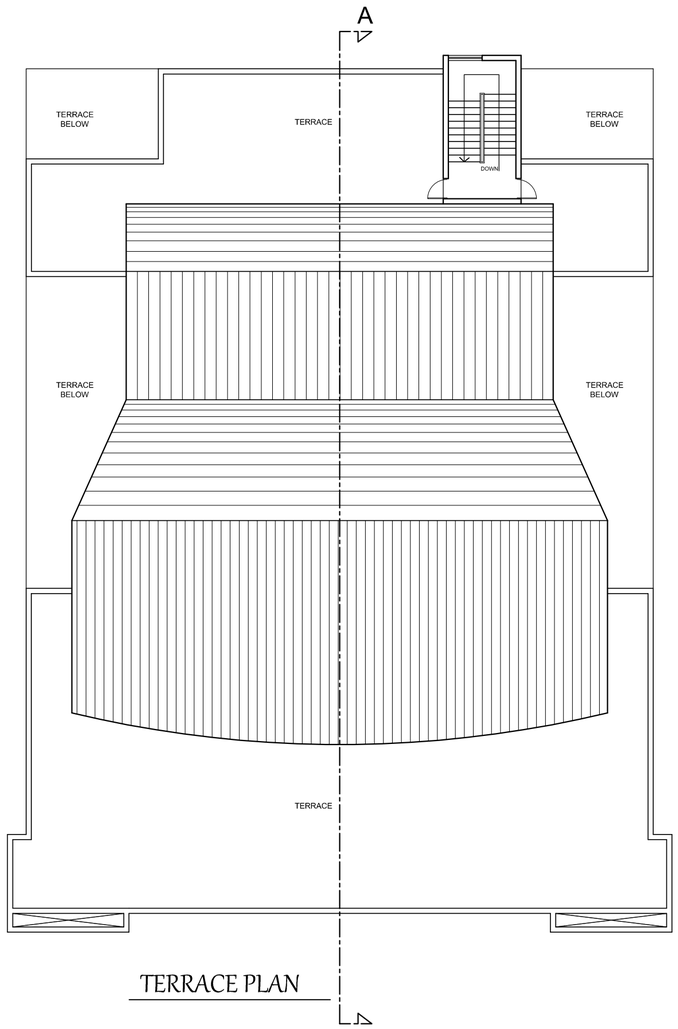
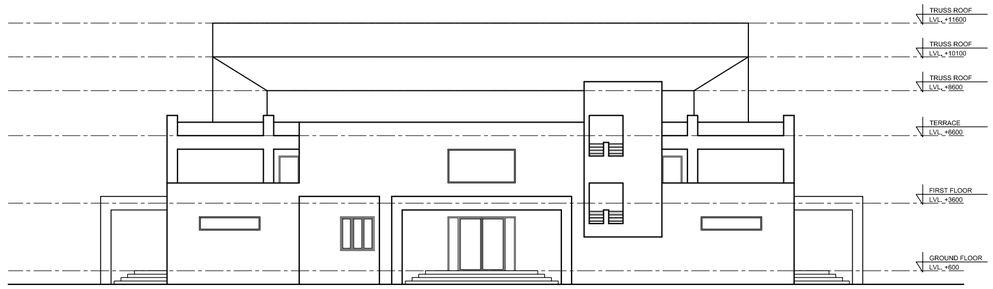
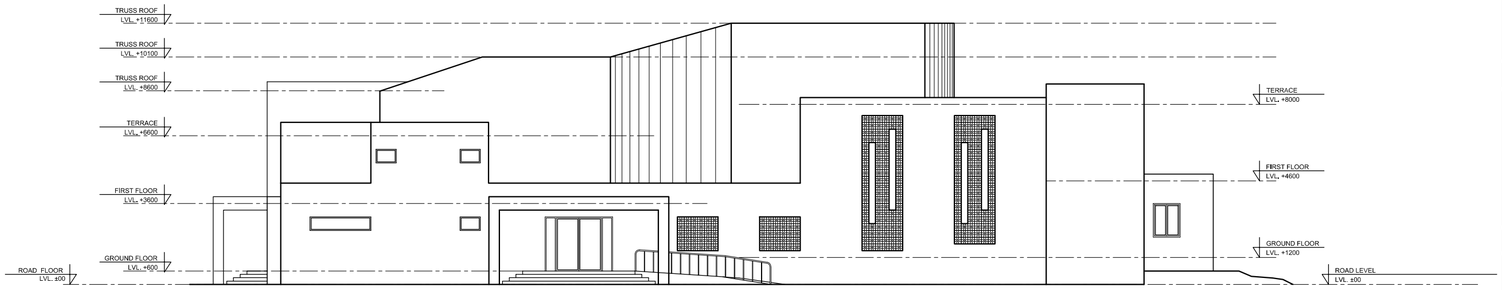
AUDITORIUM BLOCK



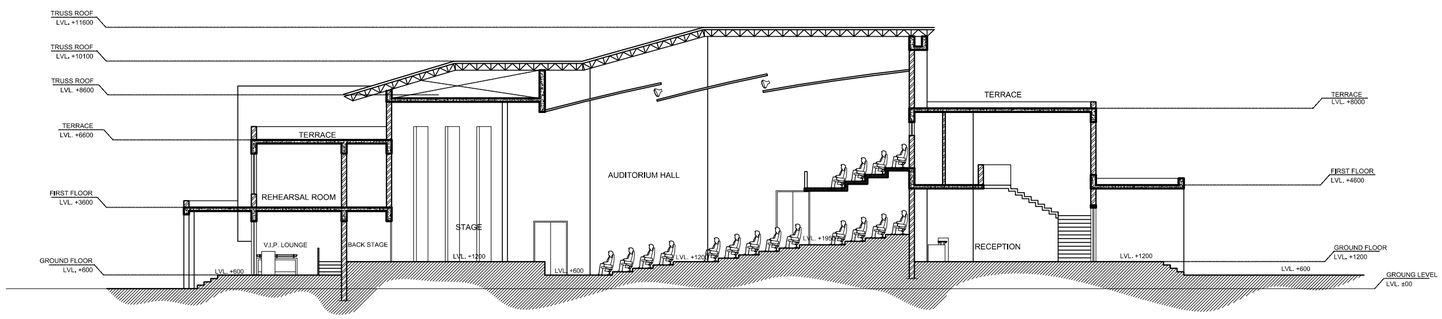
TERRACE PLAN



ELEVATION C



ELEVATION B



SECTION AA'

CHILD AND YOUTH DEVELOPMENT CENTER, DELHI

SCALE - 1:150
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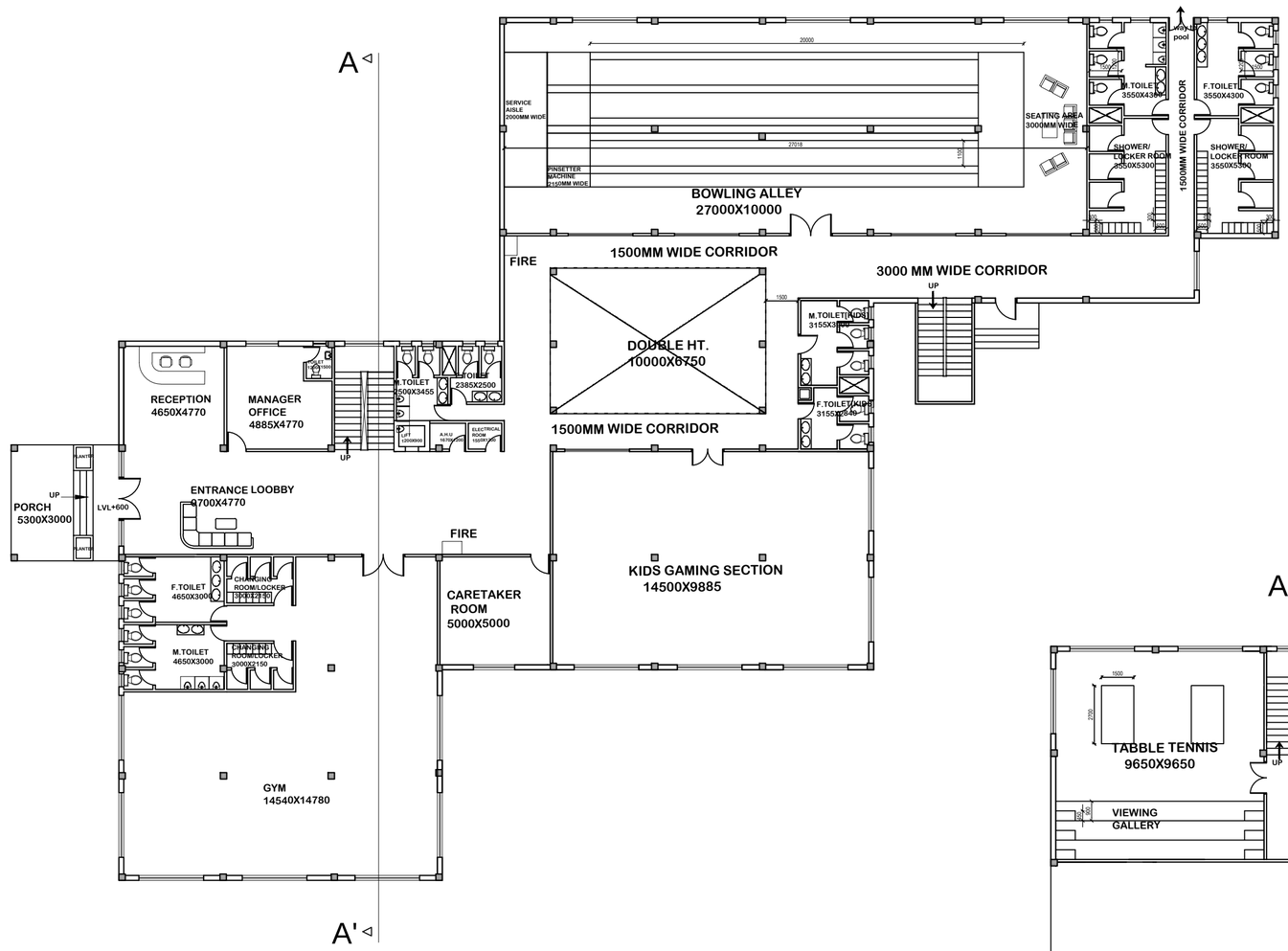
INDOOR SPORTS CLUB



GROUND FLOOR PLAN

FIRST FLOOR PLAN

CHILD AND YOUTH DEVELOPMENT CENTER, DELHI

SCALE - 1:150
ALL DIMENSIONS ARE IN MM

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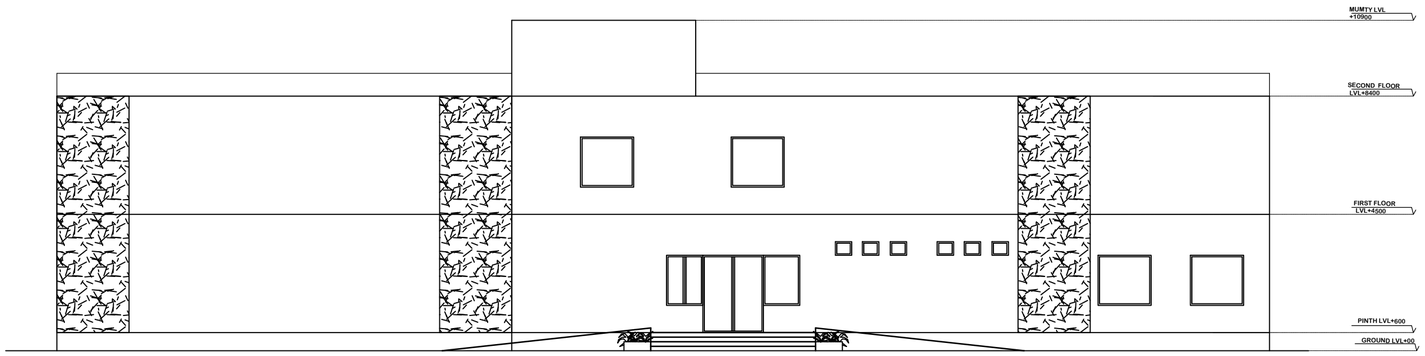
INDOOR SPORTS CLUB



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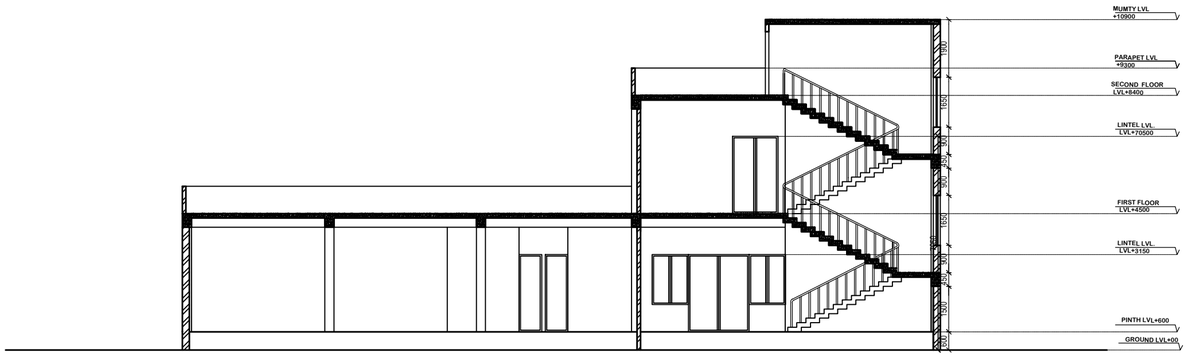

SECTION AA'

CHILD AND YOUTH DEVELOPMENT CENTER, DELHI

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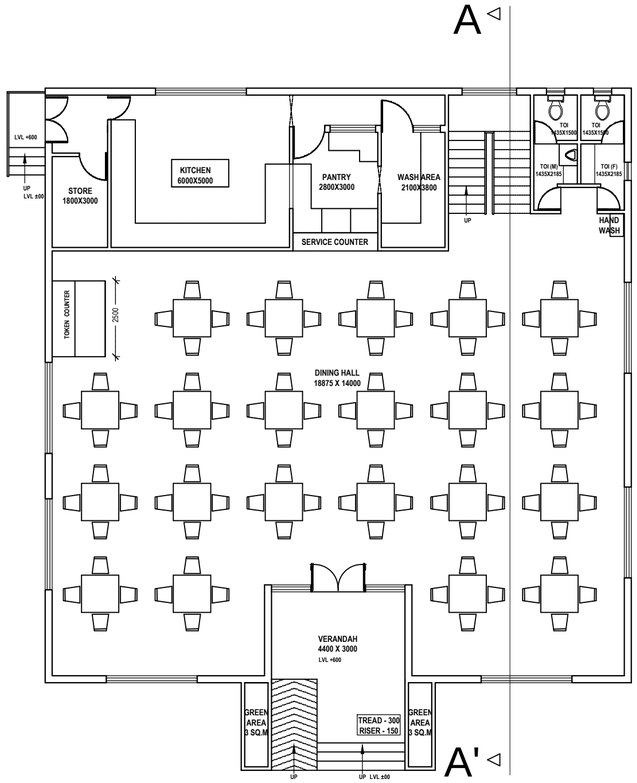
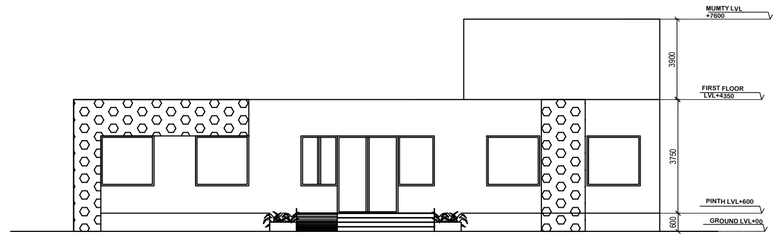
RESTAURANT



GROUND FLOOR PLAN



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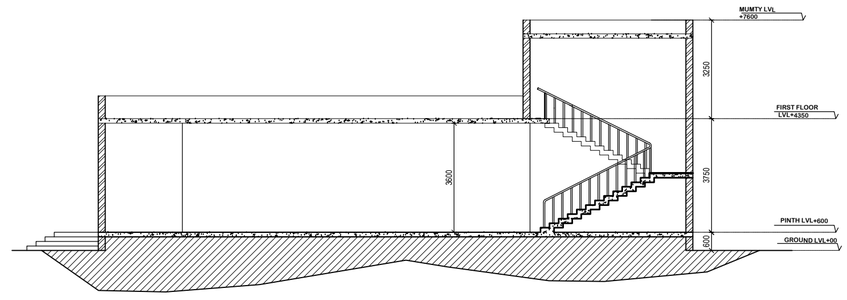

SECTION AA'

CHILD AND YOUTH DEVELOPMENT CENTER, DELHI

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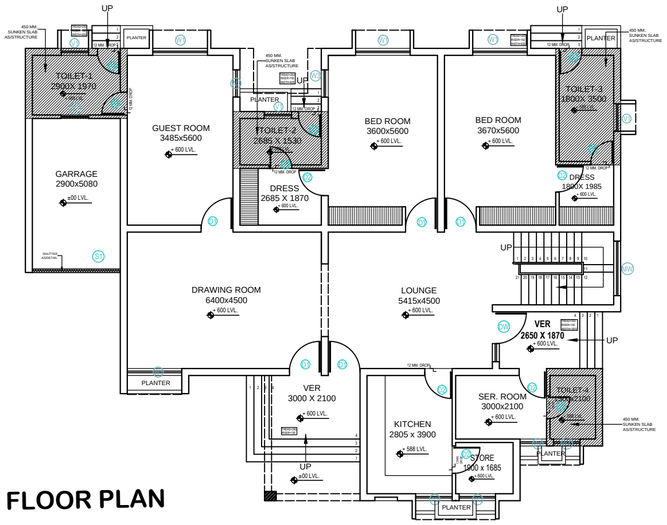
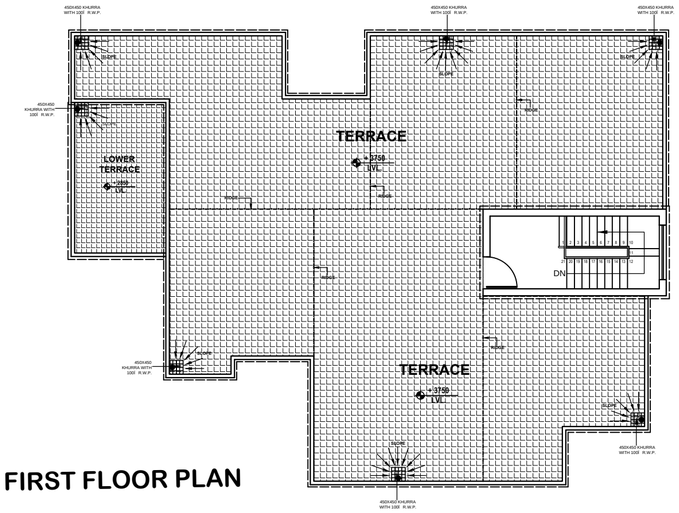
INDOOR SPORTS CLUB



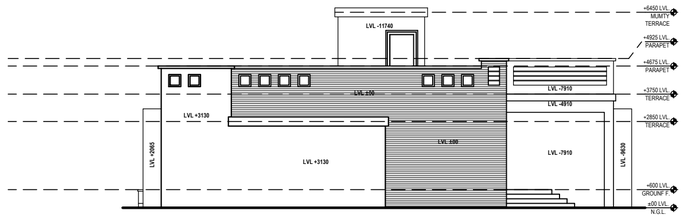
GROUND FLOOR PLAN



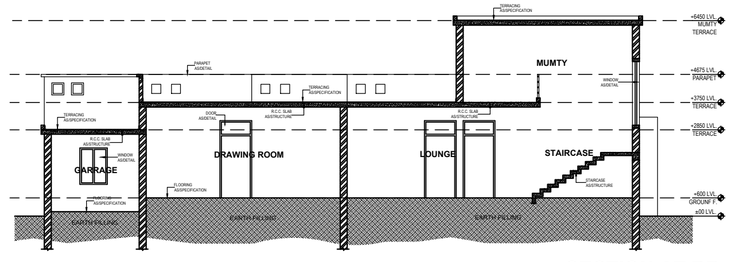
FIRST FLOOR PLAN

FRONT ELEVATION

SECTION AT AA



LEFT SIDE ELEVATION



SECTION AT BB

CHILD AND YOUTH DEVELOPMENT CENTER, DELHI

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ALL DIMENSIONS ARE IN MM

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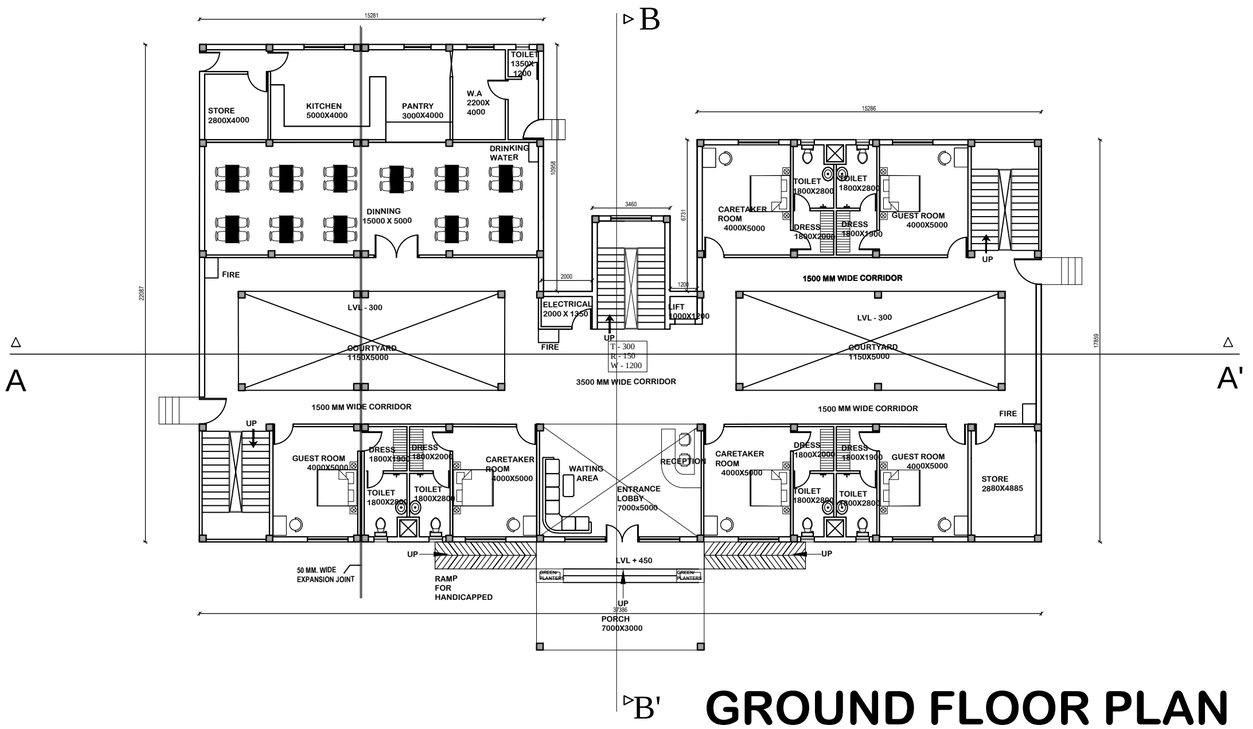
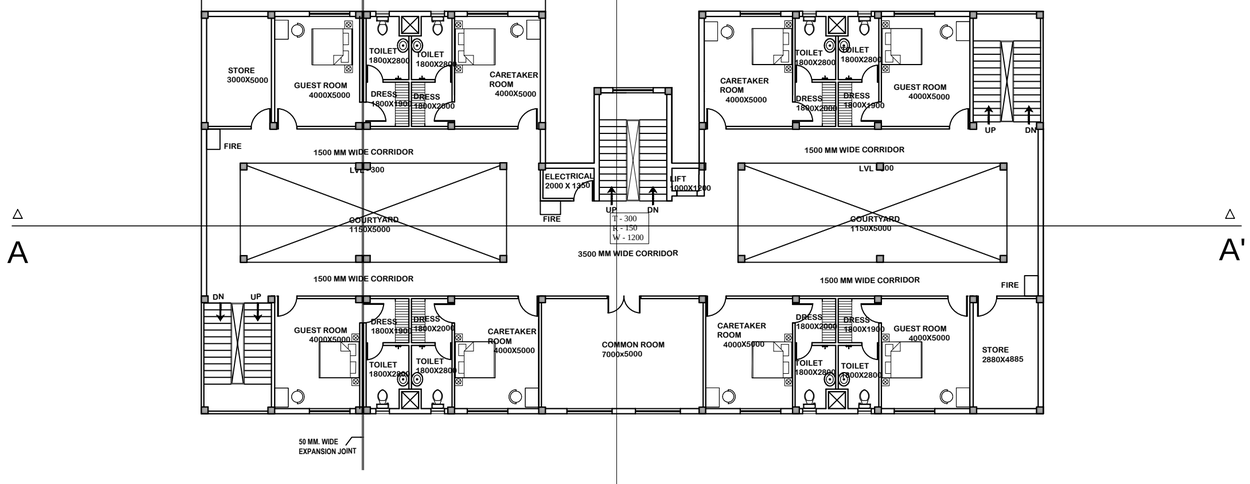
GUEST HOUSE



GROUND FLOOR PLAN



FRIST FLOOR PLAN

CHILD AND YOUTH DEVELOPMENT CENTER, DELHI

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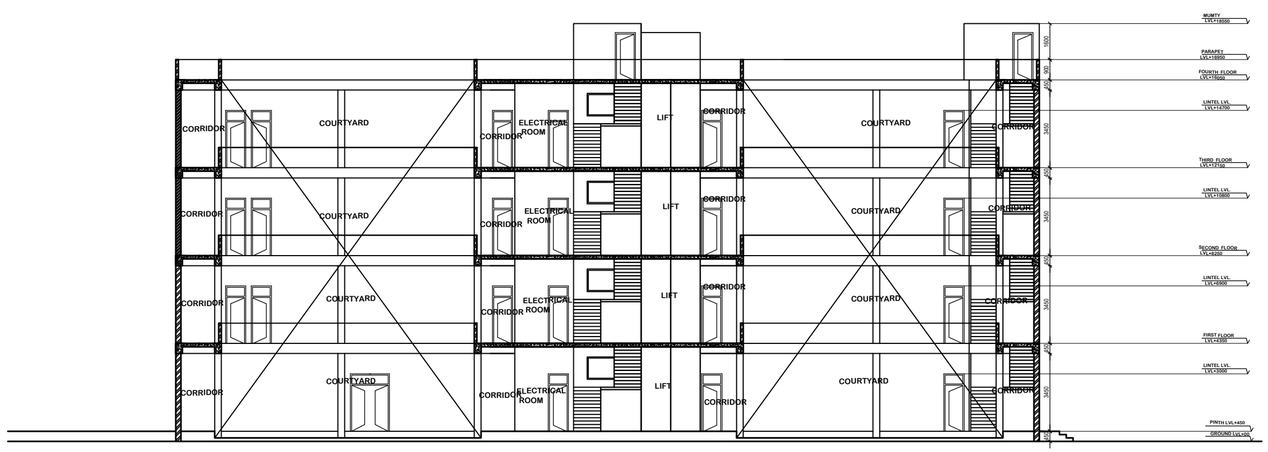
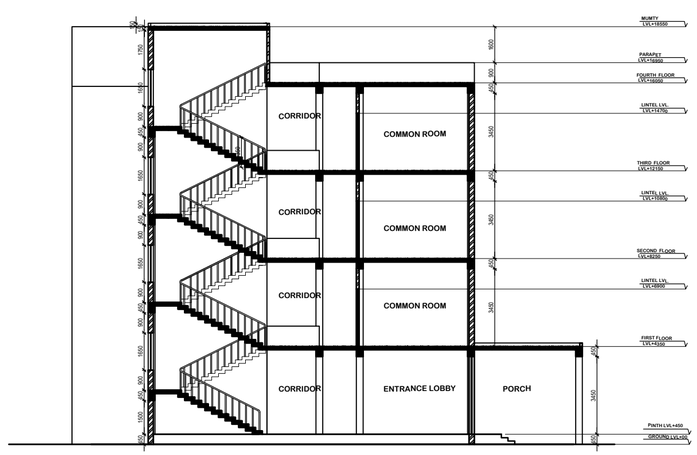
GUEST HOUSE

FRONT ELEVATION



SECTION AA'



SECTION BB'

CHILD AND YOUTH DEVELOPMENT CENTER, DELHI

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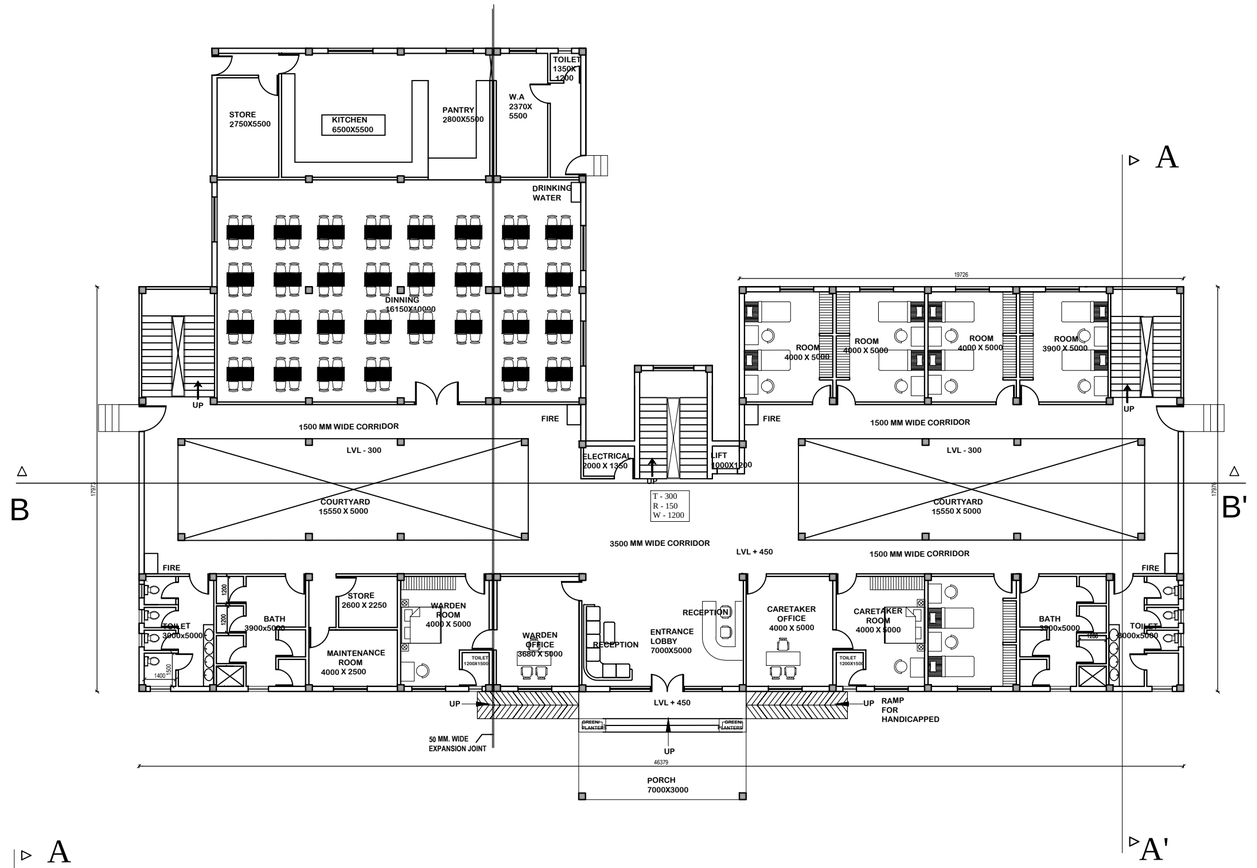
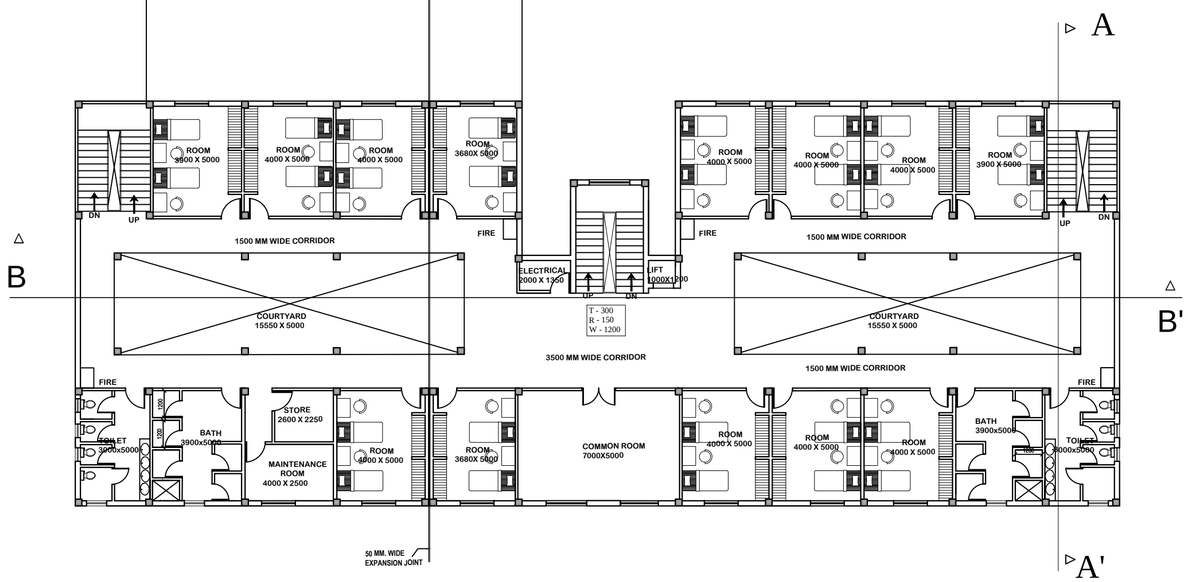
GIRLS HOSTEL



GROUND FLOOR PLAN



FRIST FLOOR PLAN

CHILD AND YOUTH DEVELOPMENT CENTER, DELHI

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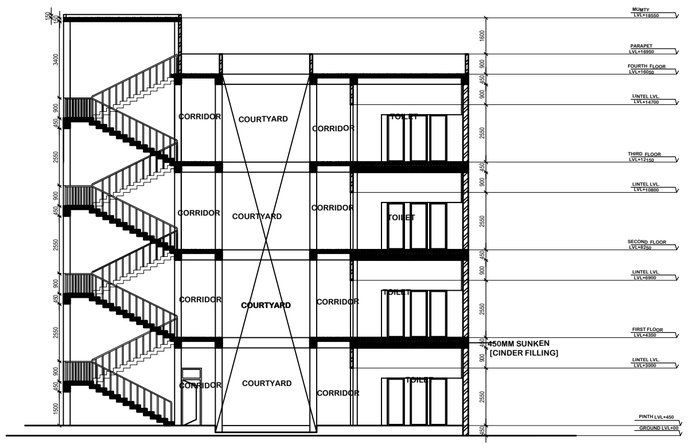
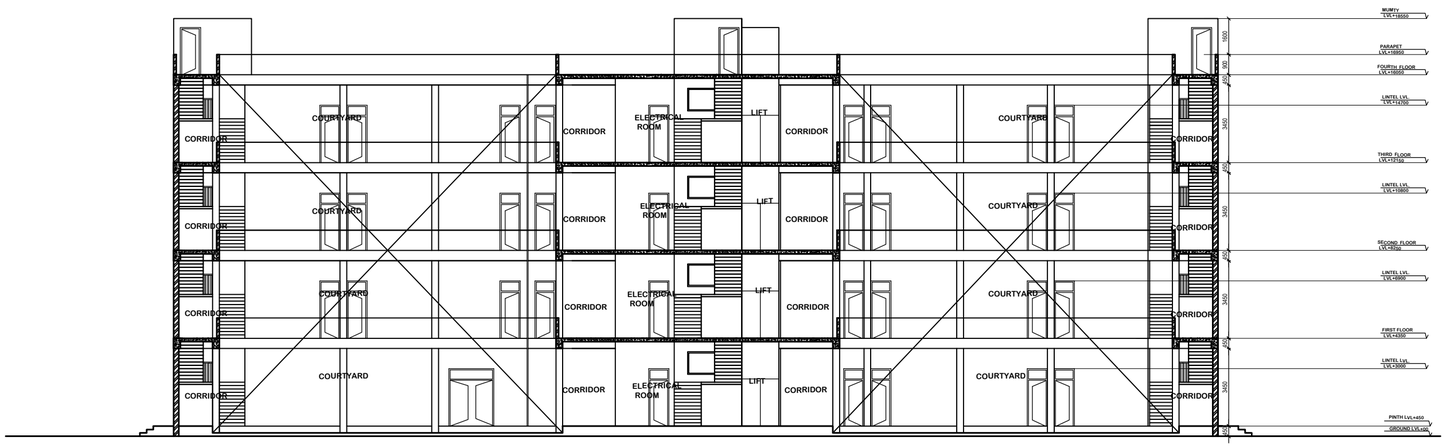
GIRLS HOSTEL

FRONT ELEVATION



SECTION AA'



SECTION BB'

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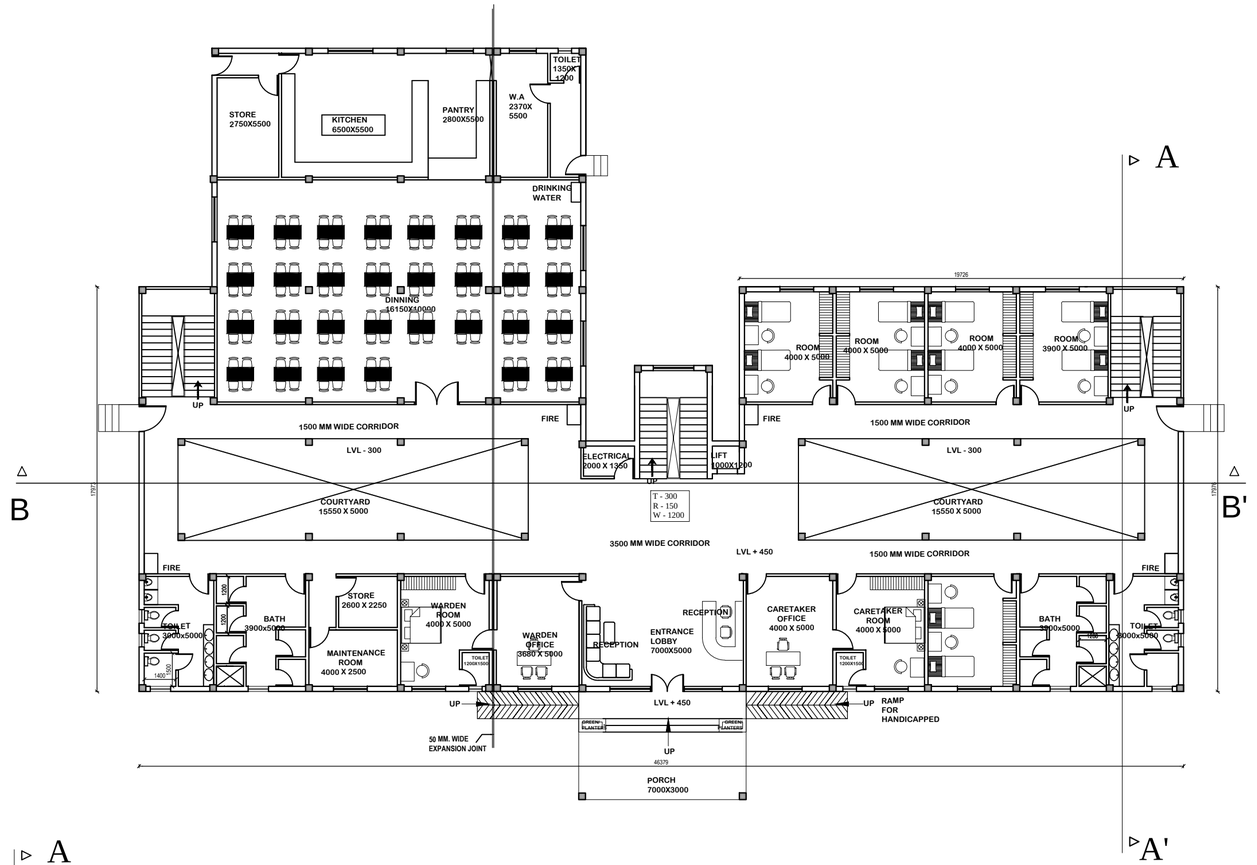
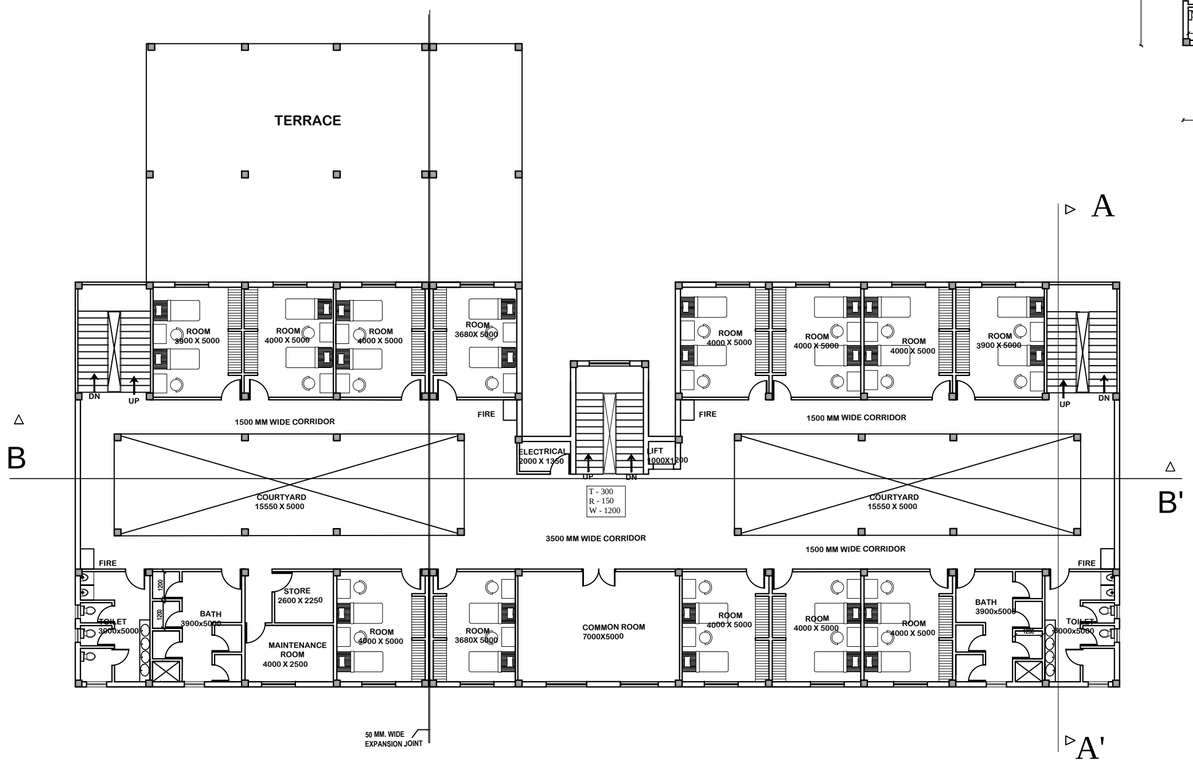
BOYS HOSTEL



GROUND FLOOR PLAN



FRIST FLOOR PLAN

CHILD AND YOUTH DEVELOPMENT CENTER, DELHI

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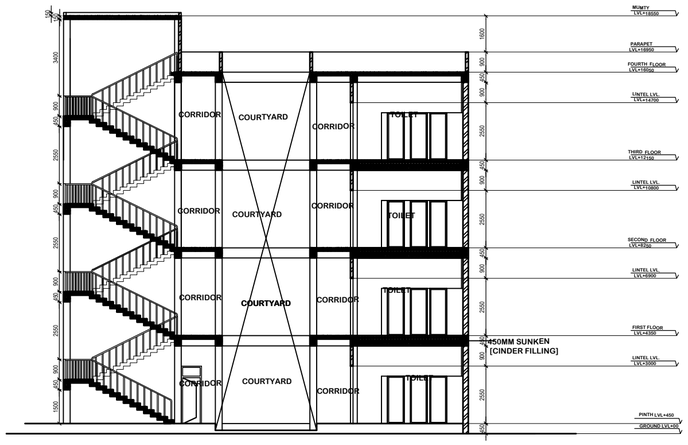
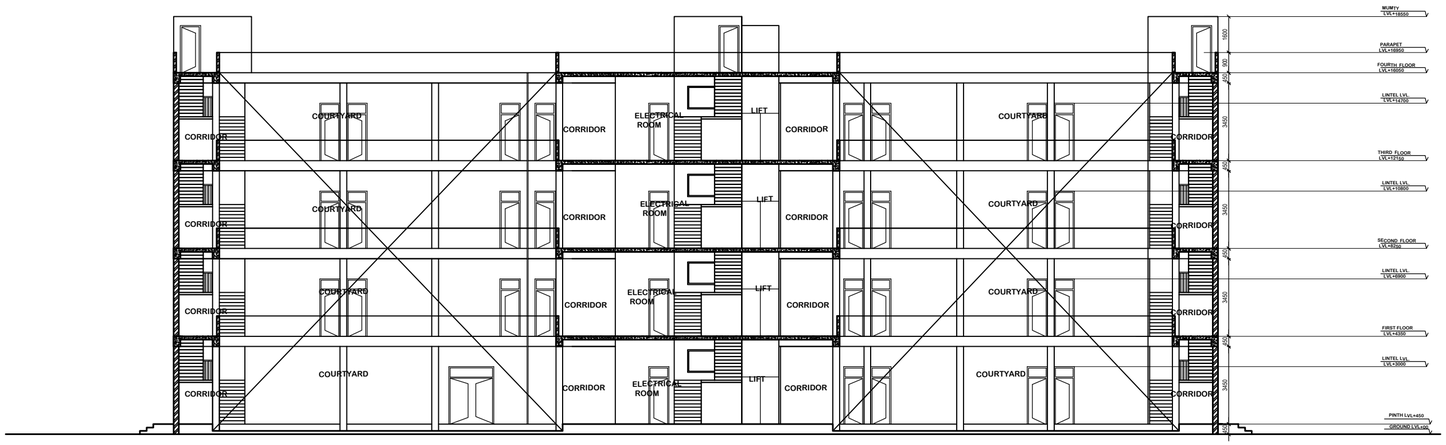
BOYS HOSTEL

FRONT ELEVATION



SECTION AA'



SECTION BB'

CHILD AND YOUTH DEVELOPMENT CENTER, DELHI

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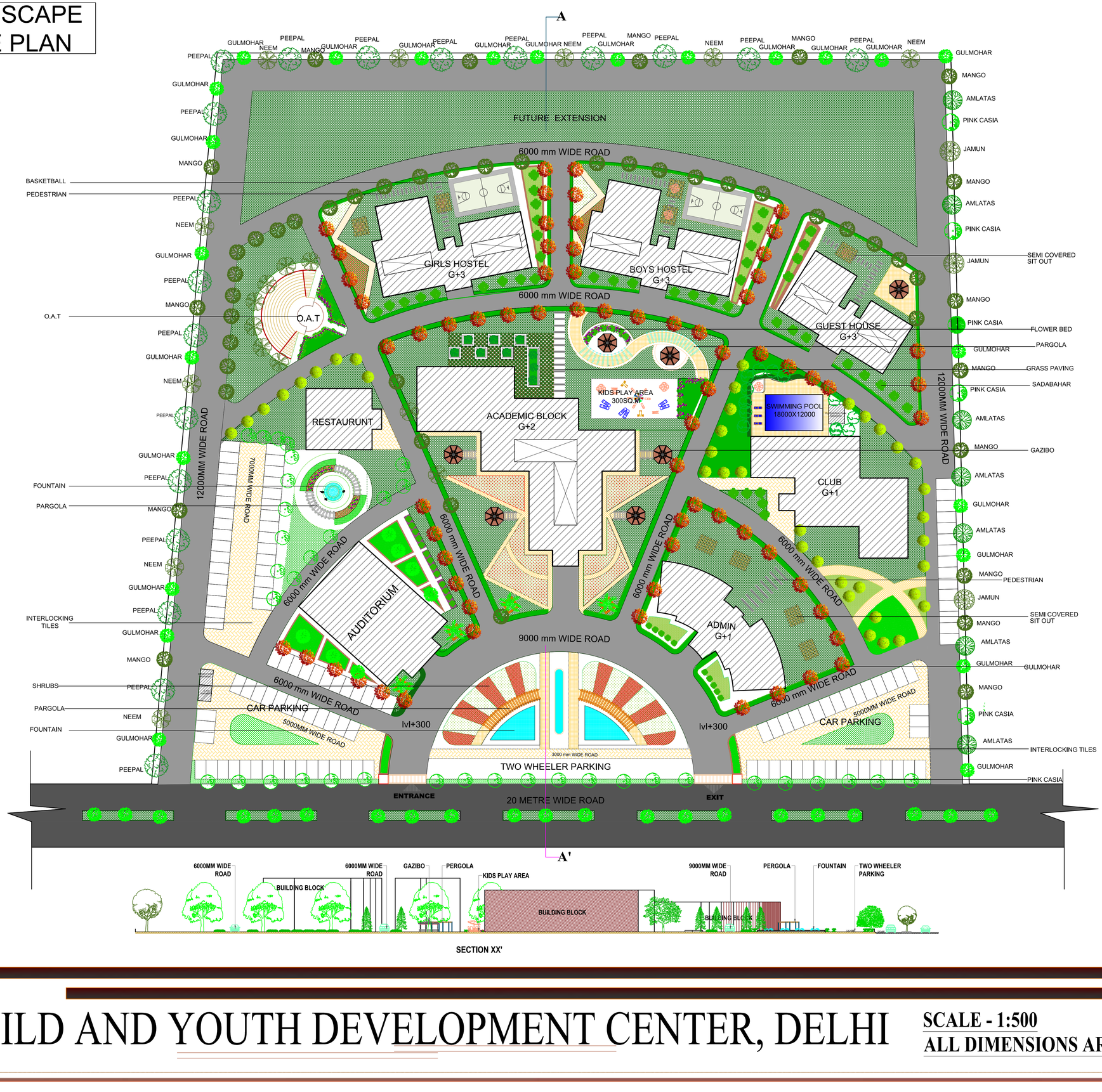
ELECTIVE-1 (LANDSCAPE)

- YOU CAN HAVE A PROFESSION YOU LOVE. BEING AN ARCHITECT HAS A LOT TO DO WITH YOUR CREATIVITY.
- FINANCIAL BENEFITS FOR SURVIVIORS...
- YOU CAN EORK ON A VARIETY OF PROJECTS. ...
- ENVIRONMENTAL CLEANERS
- PARKS AND TREE CANOPIES HELP REDUCE NOISE
- MENTALLY SUPPORT.

ELECTIVE-2 (WORKING DWG. AND CONSTRUCTION DETAILS)

- THE COST-EFFECTIVE APPROACH
- SAVING THAT EXTRA TIME AND MONEY
- DRAWINGS HELP TO VISUALIZE THE FINAL STRUCTURE. ARCHITECTS FACE A CHALLENGE WHEN IT COMES TO MANAGING AND RECORDING THEIR DRAWINGS BECAUSE MAJORITY OF THE IDEAS ARE CREATED ON PAPER. THEY HELP TO PROPOSE A DESIGN IDEA IN A BUSINESS PITCH. THEY ALLOW ARCHITECTS TO COMMUNICATE IDEAS AND DESIGNS.

LANDSCAPE SITE PLAN



SECTION XX'

S.NO.	BOTINCAL NAME	LOCAL NAME	HEIGHT / SHAPE	FOLIAGE	FLOWERING	SPECIAL	USES
1.	DELONIX REGIA	GULMOHAR	10 TO 15M, UMBRELLA SHAPED	LIGHT FEATHERY 15 TO 20 CM PINNACHE	SCARLET RED, ORANGE, WRINKLED AT TIP, APR-JUN	EVERGREEN, QUICK GROWING	EAST PERSPHERY ALONG AUDITORIUM
2.	SPATHODEA CAMPANULATA	AMALTAS	6 TO 10M HIGH	LIGHT FEATHERY 15 TO 20 CM PINNACHE	SCARLET RED, ORANGE, WRINKLED AT TIP, APR-JUN	EVERGREEN, QUICK GROWING	ALONG NORTH PERSPHERY
3.		NEEM	20MT COLUMNAR	LARGE, 50 TO 60 CM, LEAFLET 4 TO 6 CM LONG	WHITE FRAGRANCE, FLOWERING IN AUTUMN AND SPRING	EVERGREEN, QUICK GROWING	ALONG NORTH WEST PERSPHERY OF PREMISES
4.		QUEEN OF NIGHTS	LARGE SHAPE	LEAVES ALTERNATE OVATE, UPLONG 15-40CM LONG	CREAMY WHITE LIGHTLY SCENTED, AT NIGHTS, JUN TO AUG, FLOWER BLOOM IN SUMMER AND RAIN	EVERGREEN	OVER EARTH MOUNDS
5.	AZADIRACHTA INDICA	NEEM	10 TO 16MT SPHERICAL	DELICATE, 20 CM TO 40 CMS, SCENTED	YELLOW IN MAR-APR	MEDICINAL PURPOSE, SLOW GROWING	SHADE FOR SITOUT
6.	SYZYGIUM CUMIN	JAMUN	25 TO 30MT OVAL	BARK GREEN, GLOSSY, REMAIN LEAVES	SMALL DIRTY WHITE IN FEB-MAY, FRUIT OBLONG, FLESH RED PURPLE PLS	BARK IS ASTRIGENT AND USED IN SOME THROATS, ASTHMA ETC.	SHADE FOR SITOUT AT YOGA HALL
7.	HIBISCUS ROSA SINENSIS	CHINA ROSE	1 TO 3M	OVATE COARSELY TOOTHED	LARGE WHITE/ RED/ PINK/ ORANGE COLOURED	USED AS HEDGE	AROUND SWIMMING POOL
8.	CHRYSANTHIUM	SADABAHAR	40 TO 60 CM	DULL GREEN SMALL	WHITE / YELLOW PINK / PURPLE IN WINTER, NUMEROUS PETALS		ALONG EMERGENCY ROAD
9.	CASSIA NODOSA	PINK CASSIA	12 TO 16M HT, UMBRELLA	20 TO 30 CM LONG LEAFS DENSE	BRIGHT PINK IN CRET DECORA, DURIN MAR-APR	EVERGREEN	SHADE FOR PARKING
10.	DELONIX REGIA	GULMOHAR	12M		IT IS A TREE THAT IS LARGELY GROWN FOR ITS BEAUTY. THE WOOD WHICH IS WHITE AND SOFT IS USED FOR MAKING ORNAMENTS, AND CAN BE VERY HIGHLY POLISHED. THE FLOWERS AND BUDS ARE USED AS A HERB FOR FLAVOURING FOOD.		

AREA STATEMENT

SITE AREA- 13.00 acre [52600sq.mt]
F.A.R - 1.5
GROUND COVERAGE-35%

ADMINISTRATION BLOCK- 1245sq.mt
ACADEMIC BLOCK- 3500sq.mt
CLUB- 1800sq.mt
AUDITORIUM- 1200sq.mt
BOYS HOSTEL- 3080sq.mt
GIRLS HOSTEL- 3080sq.mt
GUEST HOUSE- 2300sq.mt
RESTAURUNT- 400sq.mt

ACHIEVED BUILT UP AREA-16605sq.mt.
PARKING 100Sq.mt- 2ECS
300CAR FOR OPEN PARKING

CHILD AND YOUTH DEVELOPMENT CENTER, DELHI

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2019-2020

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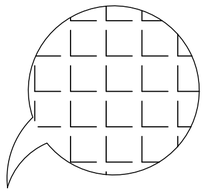
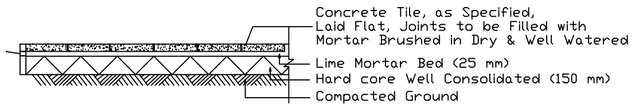
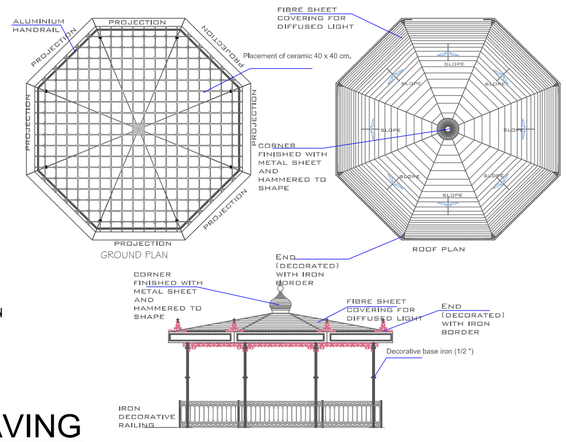
LANDSCAPE DETAIL



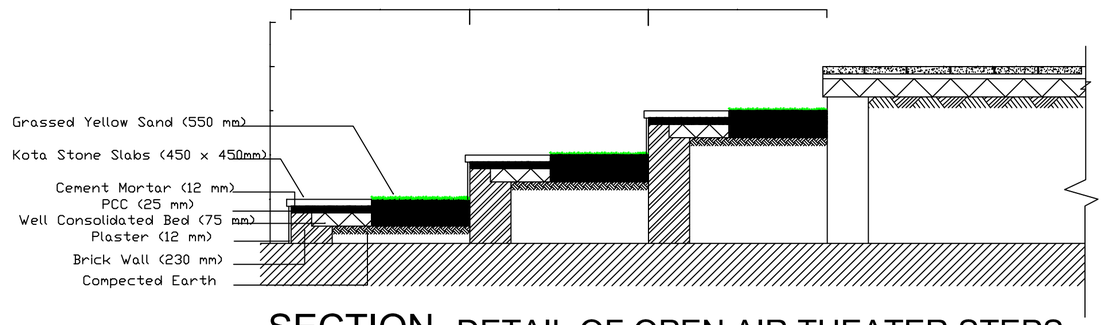
PLAN



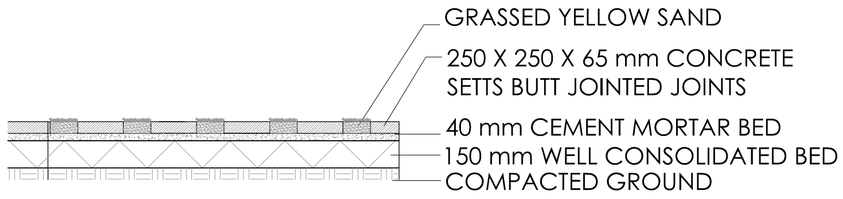
SECTION DETAIL OF PEDESTRIAN PAVING



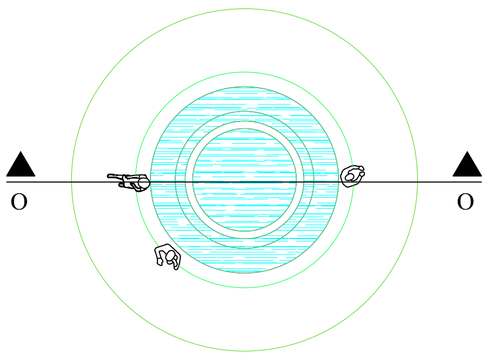
DETAIL AT GAZEBO



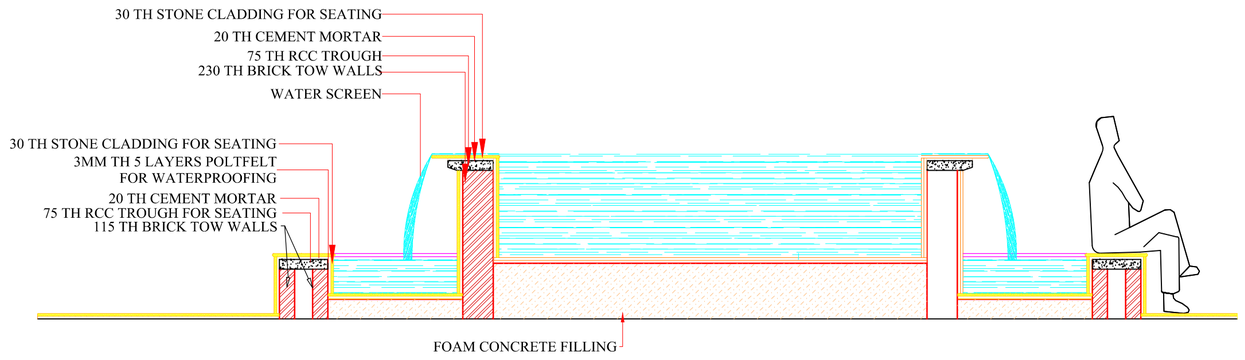
SECTION DETAIL OF OPEN AIR THEATER STEPS



SECTION - CONCRETE SETT PAVING



FOUNTAI DETAIL



SECTION OO

CHILD AND YOUTH DEVELOPMENT CENTER, DELHI

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2019-2020

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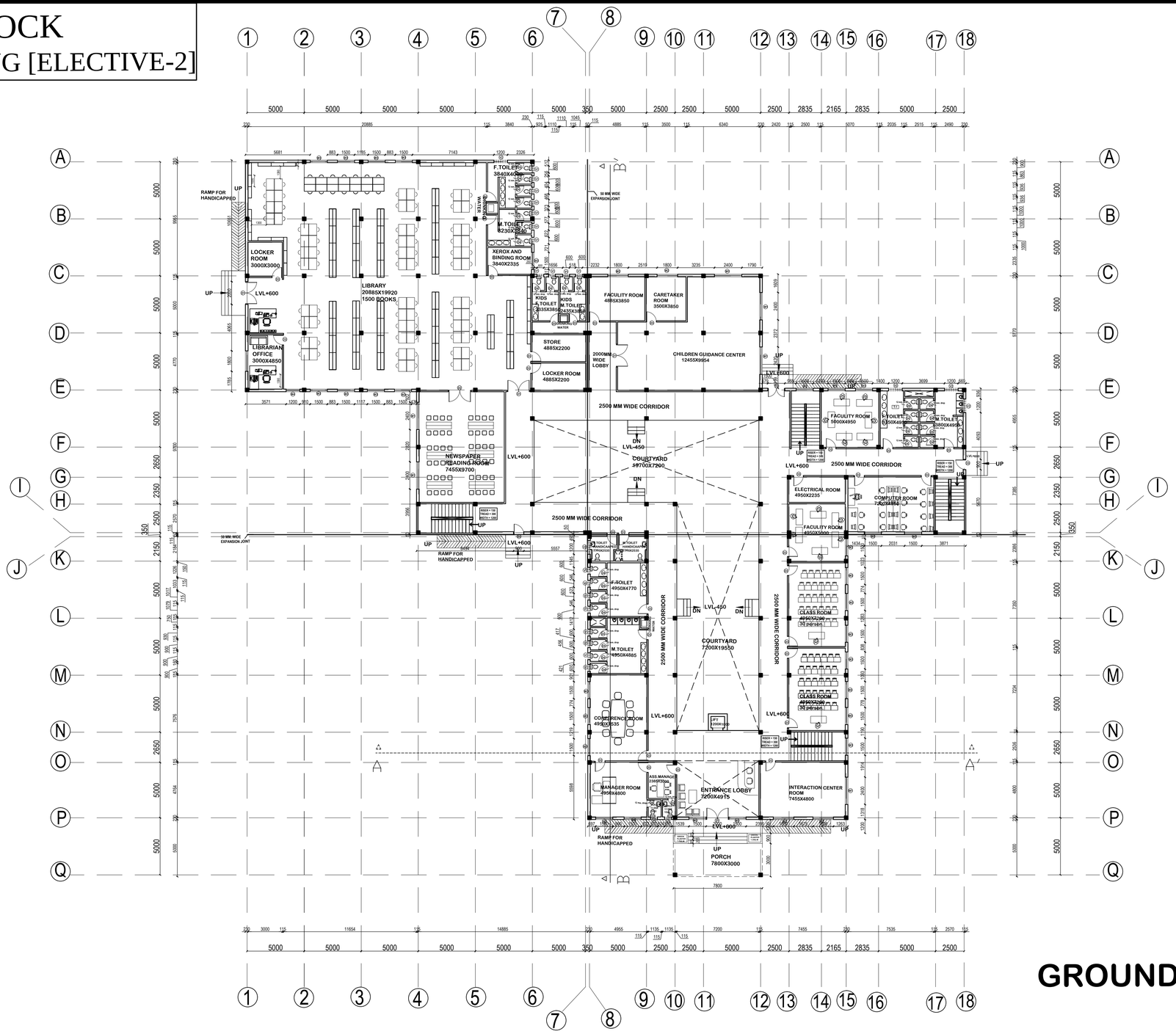
ACADEMIC BLOCK
WORKING DRAWING [ELECTIVE-2]



GROUND FLOOR PLAN

CHILD AND YOUTH DEVELOPMENT CENTER, DELHI

SCALE - 1:100
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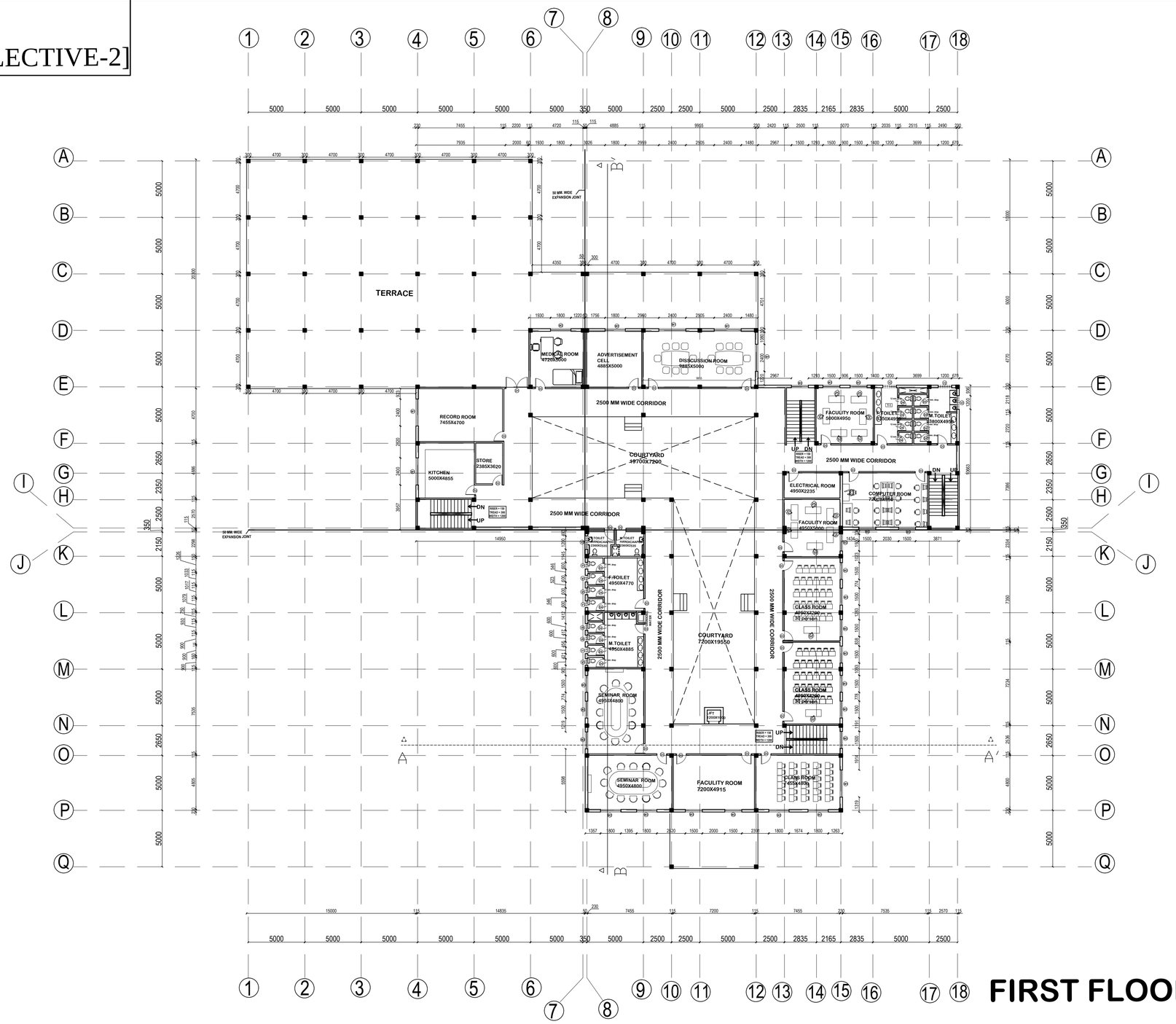
ACADEMIC BLOCK
WORKING DRAWING [ELECTIVE-2]



FIRST FLOOR PLAN

CHILD AND YOUTH DEVELOPMENT CENTER, DELHI

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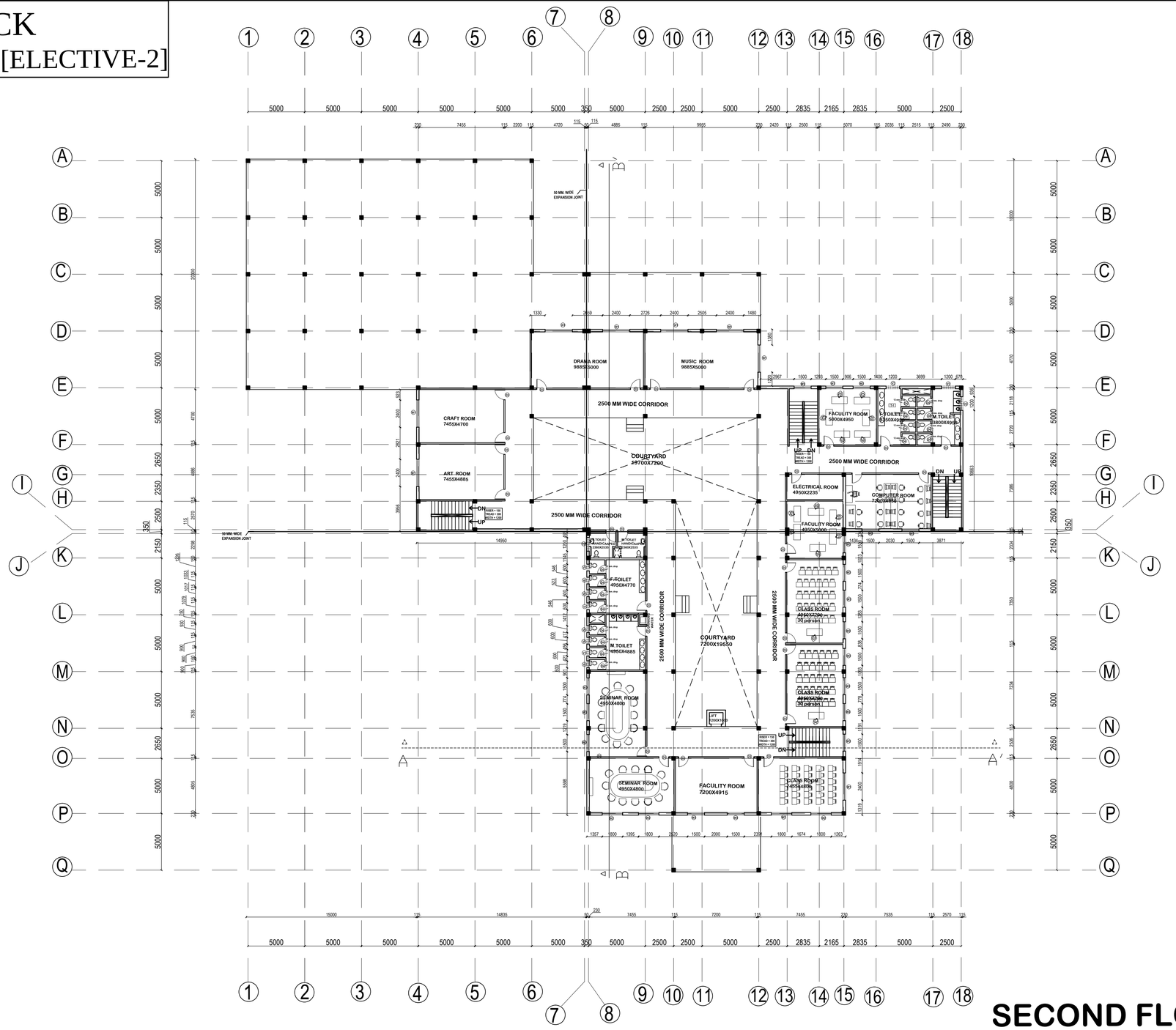
ACADEMIC BLOCK
WORKING DRAWING [ELECTIVE-2]



SECOND FLOOR PLAN

CHILD AND YOUTH DEVELOPMENT CENTER, DELHI

SCALE - 1:100
ALL DIMENSIONS ARE IN MM

PRNJAL SRIVASTAVA
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2019-2020

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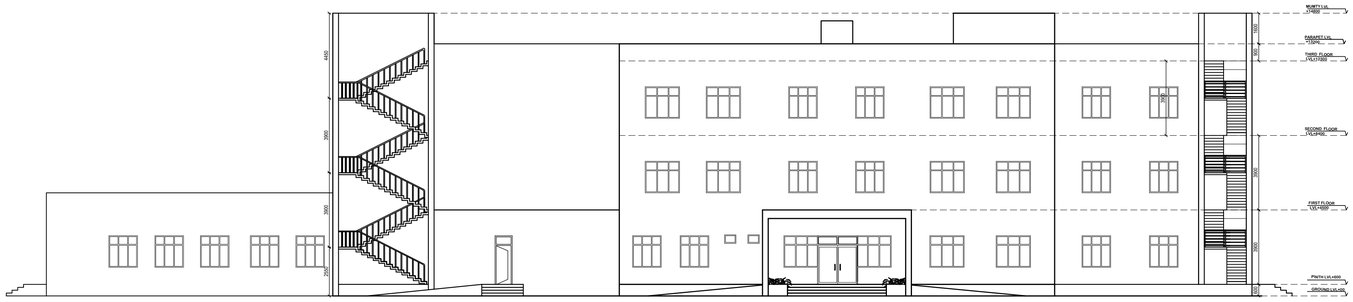
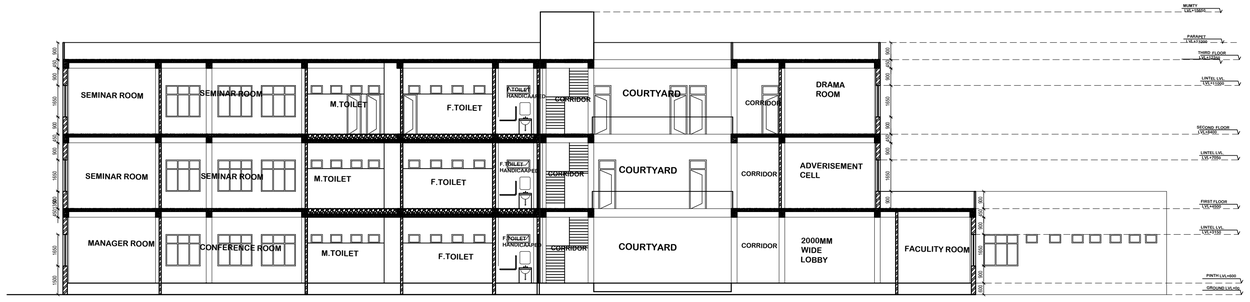
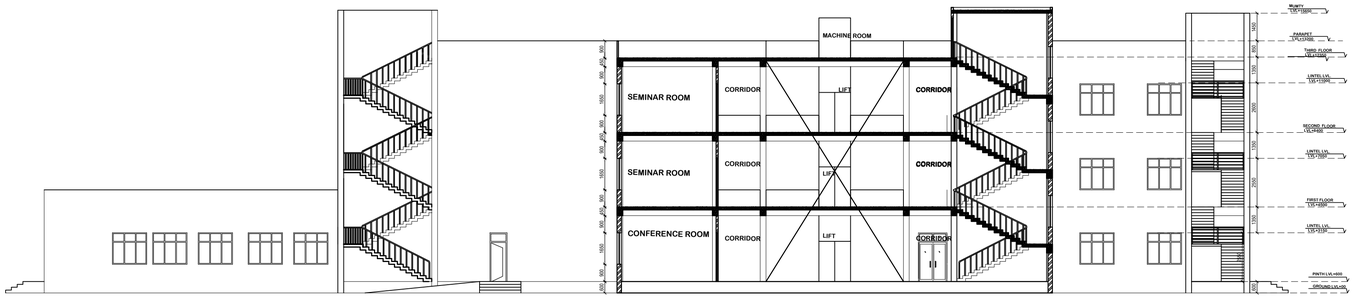
ACADEMIC BLOCK
WORKING DRAWING [ELECTIVE-2]



FRONT ELEVATION



SECTION BB'



SECTION AA'

CHILD AND YOUTH DEVELOPMENT CENTER, DELHI

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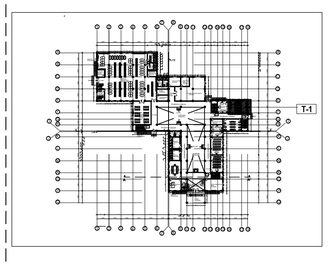
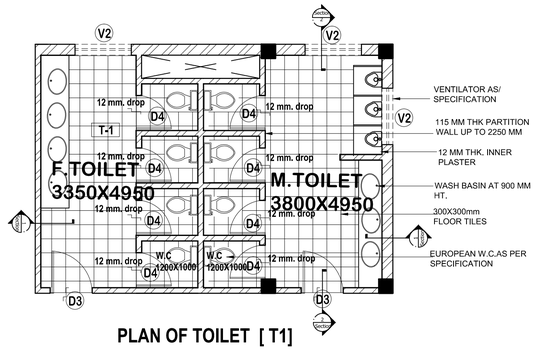
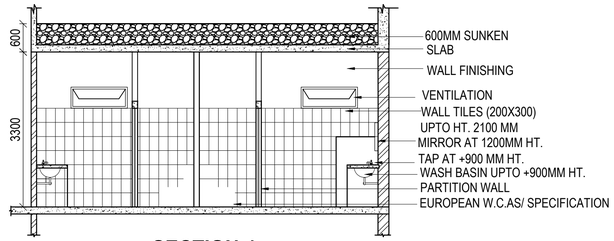
TOILET DETAIL

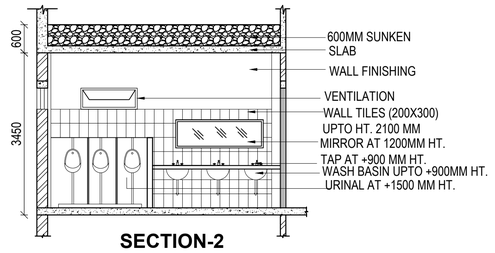




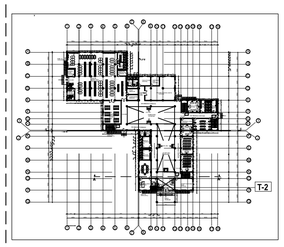
PLAN OF TOILET [T1]

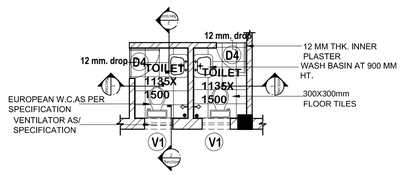


SECTION-1

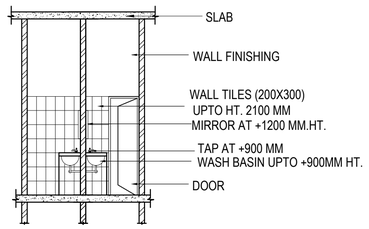


SECTION-2

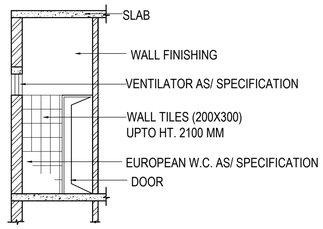




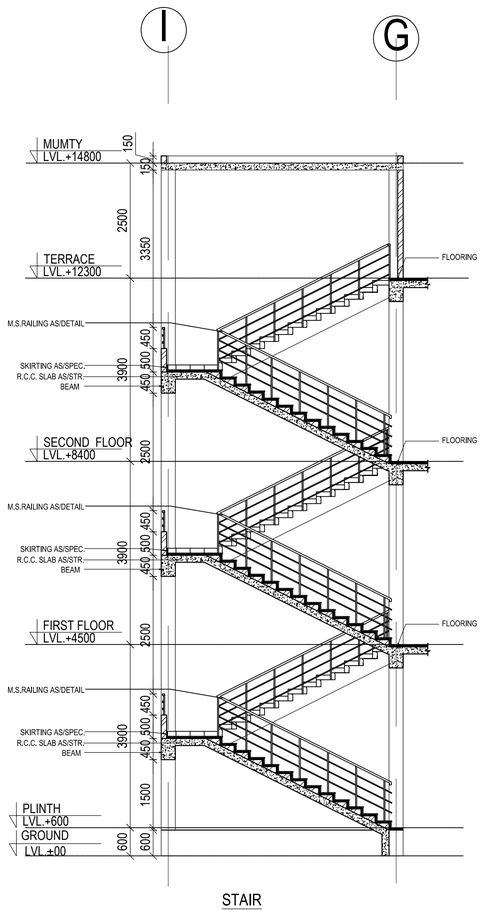
PLAN OF TOILET [T2]



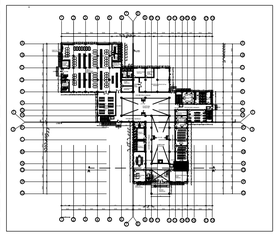
SECTION-1

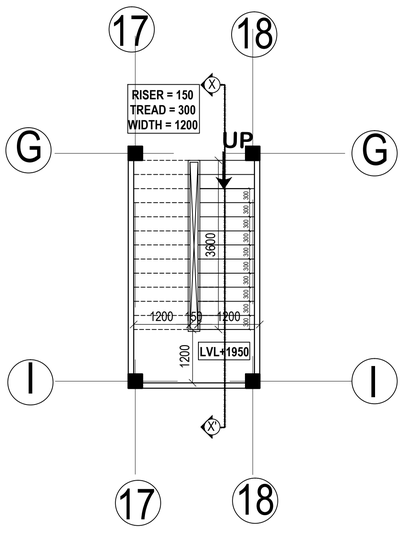


SECTION-2

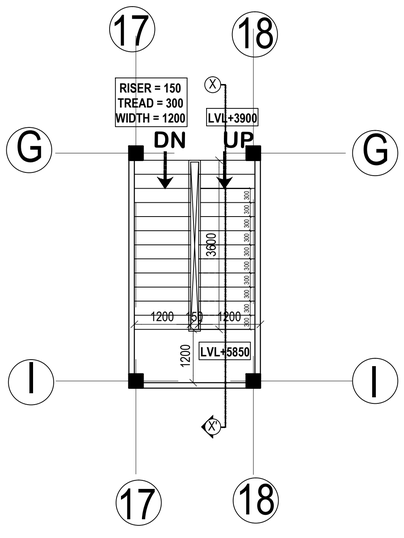


STAIR
SECTION X-X'

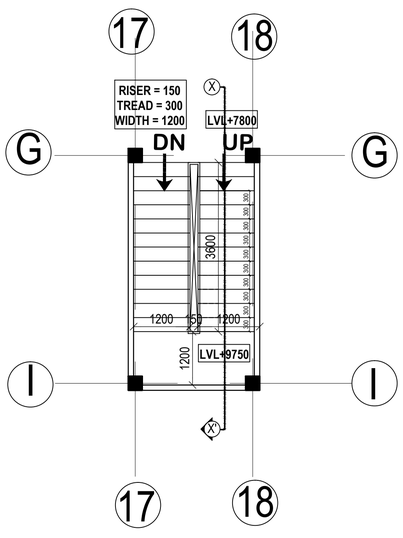




GROUND FLOOR PLAN



FIRST FLOOR PLAN



SECOND FLOOR PLAN

CHILD AND YOUTH DEVELOPMENT CENTER, DELHI

SCALE - 1:100

ALL DIMENSIONS ARE IN MM

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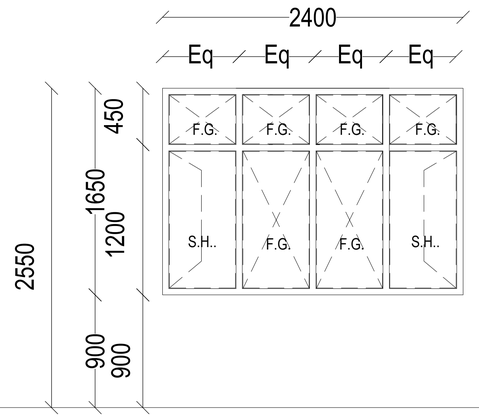
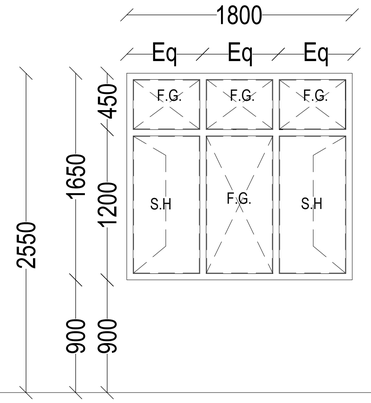
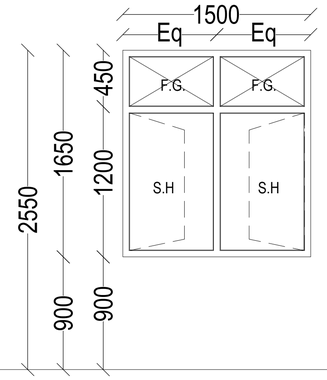
DOOR WINDOW SCHEDULE



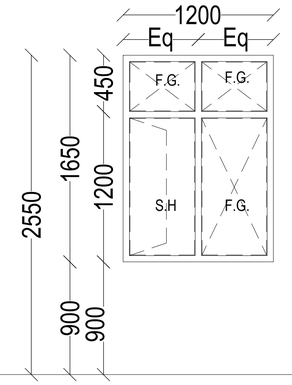
W1=2400X1650
G.F.= 7 NOS.
F.F.= 7 NOS.
S.F= 6 NOS.



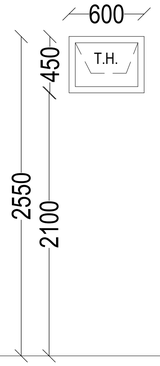
W2=1800X1650
G.F. =12NOS.
F.F. = 12 NOS.
S.F.= 10 NOS.



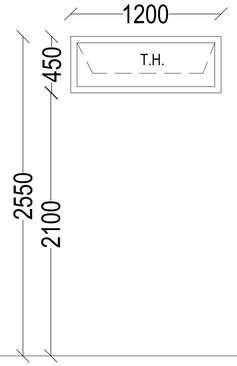
W3=1500X1650
G.F .=15 NOS.
F.F. = 15 NOS.
S.F.= 10 NOS.



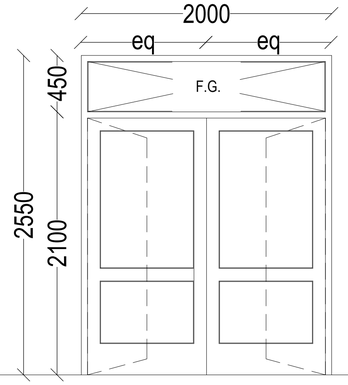
W4=1200X1650
G.F. =8NOS.
F.F .=8 NOS.
S.F. = 5 NOS.



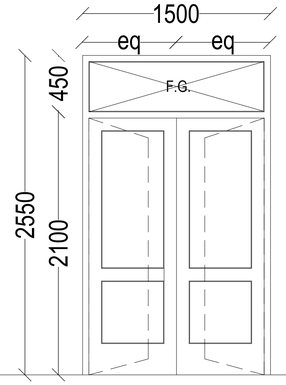
V1=600X450
G.F = 15 NOS.
F.F = 15NOS.
S.F = 10 NOS.



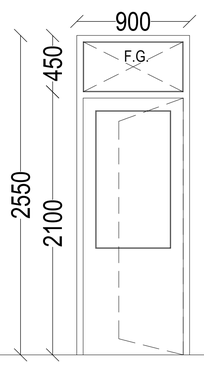
V2=900X450
G.F = 4 NOS.
F.F = 4NOS.
S.F = 4 NOS.



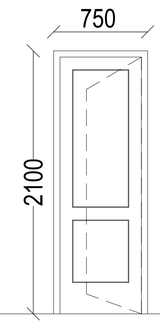
D1=2000X2550
G.F. =5NOS.
F.F.=3NOS.
T.F.=3NOS.



D2=1500X2550
G.F.=5NOS.
F.F.=4NOS.
T.F.=4NOS.



D3=900X2550
G.F.=14 NOS
F.F. = 10 NOS.
T.F. = 8 NOS.



D4=750X2100
G.F.=20 NOS
F.F. = 14 NOS.
T.F. = 14 NOS.

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