

Date: 06.08.2018

To  
The Chairman  
State Level Environmental Impact Assessment Authority (SEIAA),  
C/o AP Pollution Control Board,  
Vijayawada

Sir,

Sub: Submission of additional data for our project M/s. AIIMS Guntur- Reg.

Ref: 1) TOR issued by SEIAA, A.P. on 12.10.2017  
2) SEAC Meeting held on 12.05.2018  
3) Clarification Sought vide Lr. No. SEIAA/AP/GNT/CON/09/2017/405

With reference to the above subject, we have attended the SEAC meeting held on 12.05.2018 for our project M/s. All India Institute of Medical Sciences & Research Institute located at Sy. No: 372, 232/5 & 6, 403 of Tadepalli, Mangalagiri, Atmakuru village, Mangalagiri mandal, Guntur District, Andhra Pradesh. The committee asked to submit additional information for further appraisal vide Lr. No. SEIAA/AP/GNT/CON/09/2017/405.

In this regard, we hereby submit revised Conceptual Plan, Form - IA & EMP Budget duly furnishing the details of proposed construction project.

Hence, request you to please consider our proposal and issue EC order at the earliest.

Thanking You

Yours Faithfully,

For ALL INDIA INSTITUTE OF MEDICAL SCIENCES

Authorized Signatory 06/08/18  
S.K.SHARMA  
D.G.M (Civil)  
HSCC (INDIA) LTD.  
AIIMS-GUNTUR

# CONCEPTUAL PLAN

of

## ALL INDIA INSTITUTE OF MEDICAL SCIENCES (AIIMS),

(Construction of Medical college & Super Specialty Hospital with Residential accommodation)  
Sy. No 372, 232/5 & 6, 403,  
Tadepalli, Mangalagiri, Atmakuru village, Mangalagiri Mandal,  
Guntur District, Andhra Pradesh.

Prepared by

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Recognized by Govt of India, MOEF, New Delhi & QCI No. 143

## **The Background**

Creating a country imbued with a scientific culture was Jawaharlal Nehru's dream, and immediately after independence he prepared a grand design to achieve it. Among the temples of modern India which he designed, was a centre of excellence in the medical sciences. Nehru's dream was that such a centre would set the pace for medical education and research in Southeast Asia, and in this he had the wholehearted support of his Health Minister, Rajkumari Amrit Kaur.

The health survey and development committee, chaired by Sir Joseph Bhore, an Indian Civil Servant, had in 1946 already recommended the establishment of a national medical centre which would concentrate on meeting the need for highly qualified manpower to look after the nation's expanding health care activities. The dreams of Nehru and Amrit Kaur and the recommendations of the Bhore Committee converged to create a proposal which found favor with the government of New Zealand. A generous grant from New Zealand under the Colombo Plan made it possible to lay the foundation stone of All India Institute of Medical Sciences (AIIMS) in 1952. The AIIMS was finally created in 1956, as an autonomous institution through an Act of Parliament, to serve as a nucleus for nurturing excellence in all aspects of health care.

All-India Institute of Medical Sciences was established as an institution of national importance by an Act of Parliament with the objects to develop patterns of teaching in Undergraduate and Post-graduate Medical Education in all its branches so as to demonstrate a high standard of Medical Education in India; to bring together in one place educational facilities of the highest order for the training of personnel in all important branches of health activity; and to attain self-sufficiency in Post-graduate Medical Education.

The Institute has comprehensive facilities for teaching, research and patient-care. As provided in the Act, AIIMS conducts teaching programs in medical and para-medical courses both at undergraduate and postgraduate levels and awards its own degrees. Teaching and research are conducted in 42 disciplines. In the field of medical research AIIMS is the lead, having more than 600 research publications by its faculty and researchers in a year. AIIMS also runs a College of Nursing and trains students for B.Sc.(Hons.) Nursing post-certificate) degrees.

Twenty-five clinical departments including four super specialty centres manage practically all types of disease conditions with support from pre- and Para-clinical departments. However, burn cases, dog-bite cases and patients suffering from infectious diseases are not entertained in the AIIMS Hospital. AIIMS also manages a 60-bedded hospital in the Comprehensive Rural Health Centre at Ballabgarh in Haryana and provides health cover to about 2.5 lakh population through the Centre for Community Medicine.

### **Objectives of AIIMS:**

- To develop a pattern of teaching in undergraduate and postgraduate medical education in all its branches so as to demonstrate high standard of medical education to all medical colleges and other allied institutions in India.
- To bring together in one place educational facilities of the highest order for the training of the personnel in all important branches of the health activity.
- to attain self sufficiency in postgraduate in medical education

### **Functions of AIIMS:**

- Undergraduate and postgraduate teaching in medical and related physical biological sciences.
- Nursing and dental education
- Innovations in education.
- Producing medical teachers for the country.
- Research in medical and related sciences.
- Health care: preventive, promotive and curative; primary, secondary & tertiary.
- Community based teaching and research

As per Government Policy under Pradhan Mantri Swasthya Suraksha Yojana (PMSSY) , it is proposed to establish **ALL INDIA INSTITUTE OF MEDICAL SCIENCES** consisting of Medical College along with 960 bedded Super Specialty Hospital with residential accomodation in Sy.no. 372, 232/5 & 6, 403, Tadepalli, Mangalagiri, Atmakuru Villages, Mangalagiri Mandal, Guntur District, Andhra Pradesh.

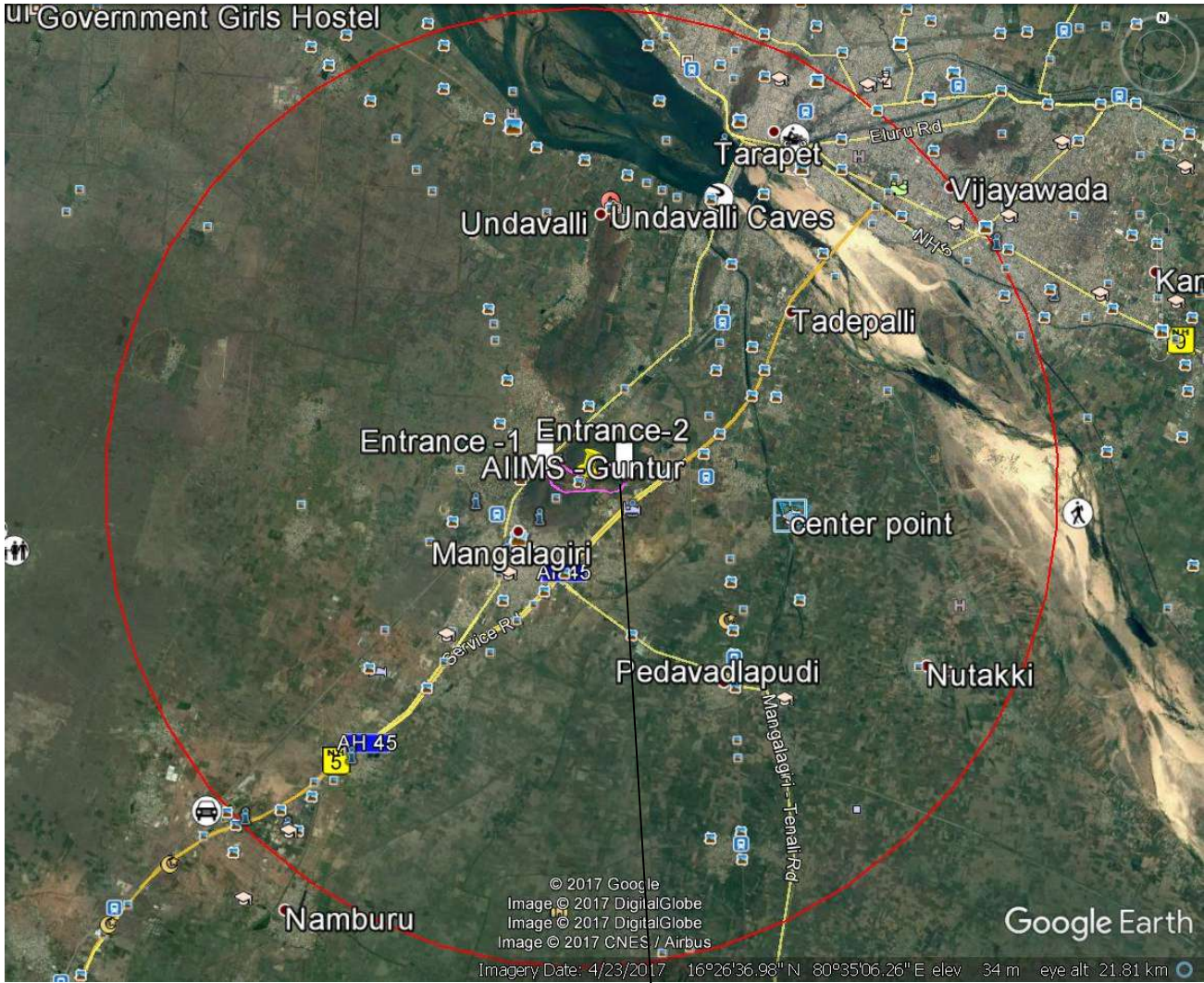
## ABOUT THE PROJECT:

**ALL INDIA INSTITUTE OF MEDICAL SCIENCES (AIIMS)** is proposed to construct a Medical college and 960 bedded Hospital building with residential accomodation at 372, 232/5 & 6, 403, Tadepalli, Mangalagiri, Atmakuru Villages, Mangalagiri Mandal, Guntur District, Andhra Pradesh which is in an area of 183.11acres.

### Details about Project Site as per table:

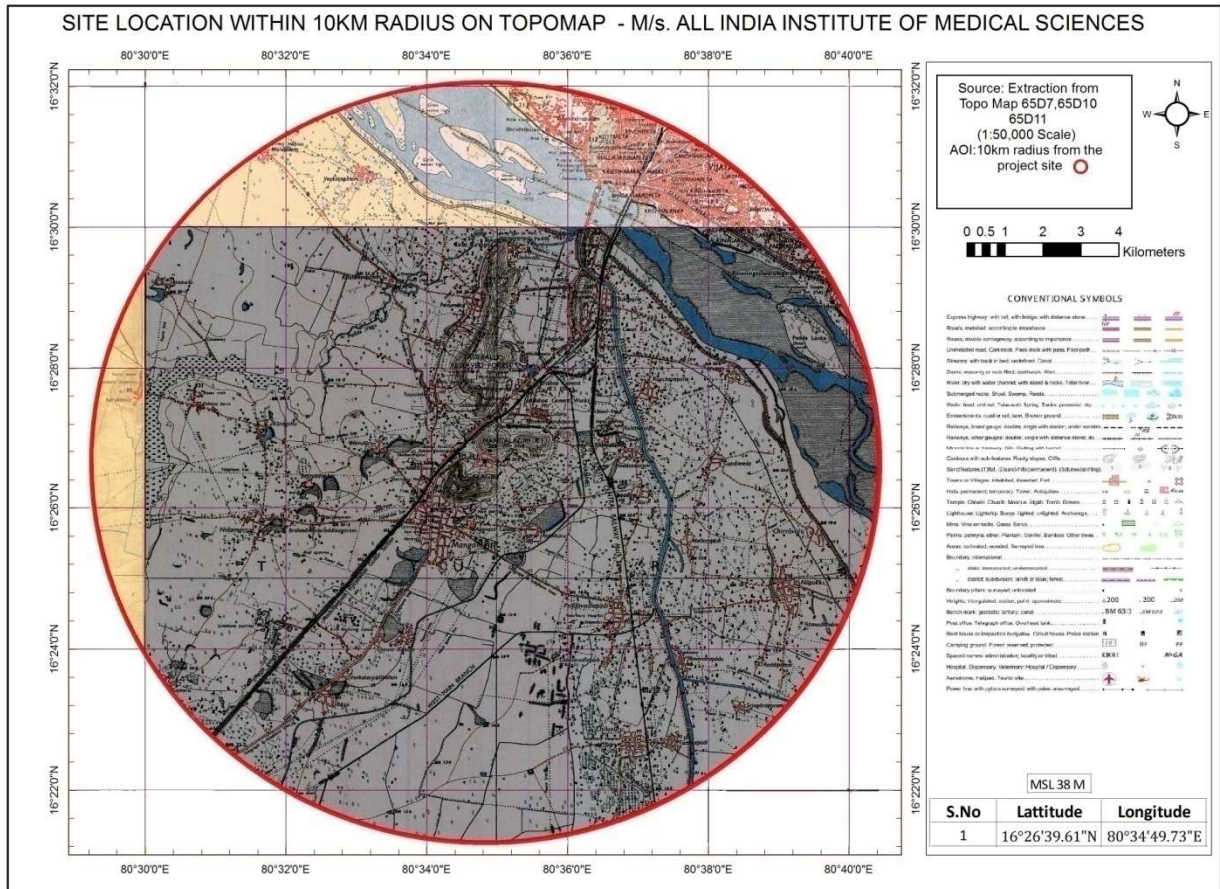
Longitude	80°34'49.73"E
Latitude	16°26'39.61"N
Annual rainfall	103cm
Min and max temp.	20 <sup>0</sup> C and 47 <sup>0</sup> C
Avg. relative humidity	78%
Avg. wind speed	8-10 KMPH
Predominant wind direction Summer Winter Monsoon	SE N & NE SE & NW
Nearest highway	NH-5 at 0.35 Kms
Nearest railway station	Mangalagiri Railway Station at 1.23 km
Nearest Airport	Gannavaram Airport at 25 Kms
Nearest human settlement	Ambati Nagar at 0.30 Km
Nearest town	Mangalagiri
Nearest seaport	Kakinada seaport at 200km
Nearest water body	Buckingham Canal at 3.0Kms River Krishna at 5.80Kms
Nearest reserved forest	None with in 10 km
Nearest National park	None with in 10 km
Nearest barrage	Praksam Barrage at 6.23Kms

# Google Image of 10Km Radius



# ALL INDIA INSTITUTE OF MEDICAL SCIENCES

## TOPO MAP OF 10 KM RADIUS



# PROJECT DESCRIPTION

## Project Description

The company intends to construct a 960 bedded Super Specialty Hospital comprising of Medical college, U.G & P.G Hostels (Male, Female & Married), Nursing Hostels (Male & Female), Staff Housing, Guest house, Directors Bunglow, Amenities block in PHASE –I. In PHASE –II, Hospital block, Ayush block, Logistics, Admin & Library block, Nursing labs & Offices, Medical college labs & offices, Skill training centre, Student common area, Research Block, Animal house, auditorium, staff housing, Dharamshala block, guest house expansion, community hall/shopping centre, student activity, utility block in AIIMS at Sy. No. 372, 232/5 & 6, 403 of Tadepalli, Mangalagiri, Atmakuru Village, Mangalagiri Mandal, Guntur District, Andhra Pradesh. The Hospital is proposed to construct in a land admeasuring 183.11acres standing in the name of the campus in Guntur. The proposed construction will be undertaken on a plot of land after having approval of the authorities.

## Project Scenario

The AIIMS is the pioneer of integrated healthcare delivery in India. This vision led the group to earmark time and resources to strengthen each vital cog in the process of healthcare delivery. As a result of these efforts, the group today is in a unique position to exponentially increase its healthcare cover. This will be critical in order to meet future requirements.

In addition, the group's service offerings include healthcare at the patient's doorstep, clinical & diagnostic services, medical business process outsourcing, third party administration services and health insurance. To enhance performance and service to customers, the company also makes available the services to support business, telemedicine services, education, training programs & research services and a host of other non-profit projects.

TOTAL SITE AREA	-	741046.17 SQ.MTS OR 183.11 ACRES OR 74.10HA
TOTAL BUILTUP AREA	-	271029.414SQ.MTS

**TOTAL LAND DETAILS**

<b>BUILDINGS</b>	<b>FLOORS</b>	<b>TOTAL GROUND COVERAGE AREA (SQ.MTS)</b>	<b>TOTAL FLOOR AREA (SQ.MTS)</b>
<b>PHASE -I</b>			
OPD BLOCK –PHASE -1	B+G+5	7685.9	30701.15
U.G HOSTEL (MALE)	G+12	417	4910.7
U.G HOSTEL (FEMALE)	G+5	417	2334.1
P.G HOSTEL (MALE)	G+13	575	7012
P.G HOSTEL (FEMALE)	G+11	351.5	3427.5
P.G HOSTEL (MARRIED)	G+13	570.8	6640.9
NURSING HOSTEL (FEMALE)	G+12	569.9	6628.5
NURSING HOSTEL (MALE)	G+12	346	3778.3
AMENITIES BLOCK -1	G	363	393
AMENITIES BLOCK -2	G	915.107	915.107
AMENITIES BLOCK -3	G	489.317	489.317
STAFF HOUSING TYPE -2	G+8	997	4368.4
(2 BLOCKS)	G+8	997	4368.4
STAFF HOUSING TYPE -3	G+2	581.3	1686.541
STAFF HOUSING TYPE -4	G+5	616.9	3196.7
STAFF HOUSING TYPE- 5	G+6	860.3	5047.012
DIRECTORS BUNGLOW	G+1	315	436.5
GUEST HOUSE	G+1	2114.4	3067.777
STP -1	G	800	800
UGT -1	G	360	360
ELECTRICAL SUBSTATION -1	G	170	170
ELECTRICAL SUBSTATION -2	G	150	150
ELECTRICAL SUBSTATION -3	G	150	150
ELECTRICAL SUBSTATION -4	G	150	150
ELECTRICAL SUBSTATION -5	G	150	150

ELECTRICAL SUBSTATION -6	G	150	150
<b><i>SUB TOTAL (A)</i></b>		<b><i>20265.424</i></b>	<b><i>91481.904</i></b>
<b>PHASE -2</b>			
HOSPITAL BLOCK	G+6	19562.74	108090
AYUSH BLOCK	G+1	1746.89	2912
LOGISTICS (UTILITY)	G+5	4814.82	7796
ADMIN & LIBRARY	G+1	1841.53	3662
NURSING LABS BLOCK	G+3	2040.02	8128
NURSING OFFICES BLOCK	G+3	1075.4	4540
MEDICAL COLLEGE LABS BLOCK	G+3	2040.02	8128
MEDICAL COLLEGE OFFICES	G+3	1075.4	4540
SKILL TRAINING CENTRE	G+1	1135.35	2270
STUDENT COMMON AREA	G+1	2043.63	4086
RESEARCH BLOCK	G+1	1364.71	2724
ANIMAL HOUSE	G	585	585
AUDITORIUM	G+1	2555	3336
STAFF HOUSING TYPE -6 (6BLOCKS)	G+1	178.63	1707.33
DHARAMSHALA BLOCK	G+4	1319.01	6090.9
GUEST HOUSE EXPANSION	G+5	--	2700
COMMUNITY HALL/SHOPING CENTRE	G	864	864
STUDENT ACTIVITY	G+2	1264	1264
UTILITY BLOCK	G	3125	3125
ELECTRICAL SUBSTATION -7	G	210	210
HSD STORAGE YARD	G	240	240
FIRE STATION	G	1519.8	1519.8
MARKET PLACE AMENITIES	G	1029.48	1029.48
<b><i>SUB TOTAL (B)</i></b>		<b><i>51630.43</i></b>	<b><i>179547.51</i></b>
<b>TOTAL (A+B)</b>		<b>71895.854</b>	<b>271029.414</b>

**PARKING AREA:**

<b>DESCRIPTION</b>	<b>AREA IN SQ.M</b>
PARKING -1	5742.74
PARKING - 2	7070.96
PARKING -3	3681.35
PARKING -4	21585.33
PARKING -5	1630.91
PARKING -6	5394.1
PARKING -7	6673.33
PARKING -8	3769.01
PARKING -9	4158.57
PARKING -10	2225.55
PARKING -11	2051.04
PARKING - 12	1944.5
PARKING - 13	3371.46
<b>TOTAL PARKING AREA</b>	<b>69298.85</b>

As per GO MS NO: 119, 20% of total built up area is required for parking.

Total Parking Required = 54205.8Sq.m

Parking area provided = 69298.85Sq.m

**Table: 2.1 Parking space provision of the project**

<b>Description</b>	<b>As per GO MS. 119</b>	<b>As per NBC</b>	<b>Compliance</b>
Notification	Parking area required as per GO MS 119 (@ 20% of total built up area)	For Institutional Medical, One car parking space for every 25beds public hospitals in an area of population between 50000 to 200000. Parking area provided as per NBC 1 car parking in open areas – 18Sq.m, 2Wheeler parking -1.25Sq.m	Compl ied as per GO & NBC
Parking area required	<b>54205.88Sq.mts</b> (20% of 2,71,029.414Sq.mts)	4 wheelers (for 39 no's) $39 \times 18 = 702$ 2 wheelers (app. 1000 no's) = $1000 \times 1.25 = 1250$ Ambulances (app. 10 no's) of 9x 3m = 27 Sq.mts/ambulance) $10 \times 27 = 270$ Parking area required – <b>2222Sq.mts</b>	
<b>Parking area provided</b>	<b>69289.85Sq.mts</b>	<b>69289.85 Sq.mts</b>	

**As per NBC norms, open parking area is required as follows:**

For 1 Car Parking - 18.0 sq.mts

For 1 two Wheeler Parking- 1.25 sq.mts

**TOT-LOT AREA:**

<b>DESCRIPTION</b>	<b>AREA IN SQ.M</b>
TOT LOT AREA -1	3456.03
TOT LOT AREA -2	2751.49
TOT LOT AREA -3	1361.82
TOT LOT AREA -4	1084.53
TOT LOT AREA -5	5951.67
TOT LOT AREA -6	2351.27
TOT LOT AREA -7	3137.69
TOT LOT AREA -8	5029.88
TOT LOT AREA -9	4589.49
TOT LOT AREA -10	273.96
TOT LOT AREA -11	4683
TOT LOT AREA -12	7711.68
TOT LOT AREA -13	4457
TOT LOT AREA -14	7120
TOT LOT AREA -15	3405.16
TOT LOT AREA -16	17000.35
TOT LOT AREA -17	18843.12
TOT LOT AREA -18	377.42
TOT LOT AREA -19	11463.14
TOT LOT AREA -20	1082.08
<b>TOTAL</b>	<b>106130.78</b>

**As per GO Ms NO: 168, 10% of plot area is left for Tot-Lot area**

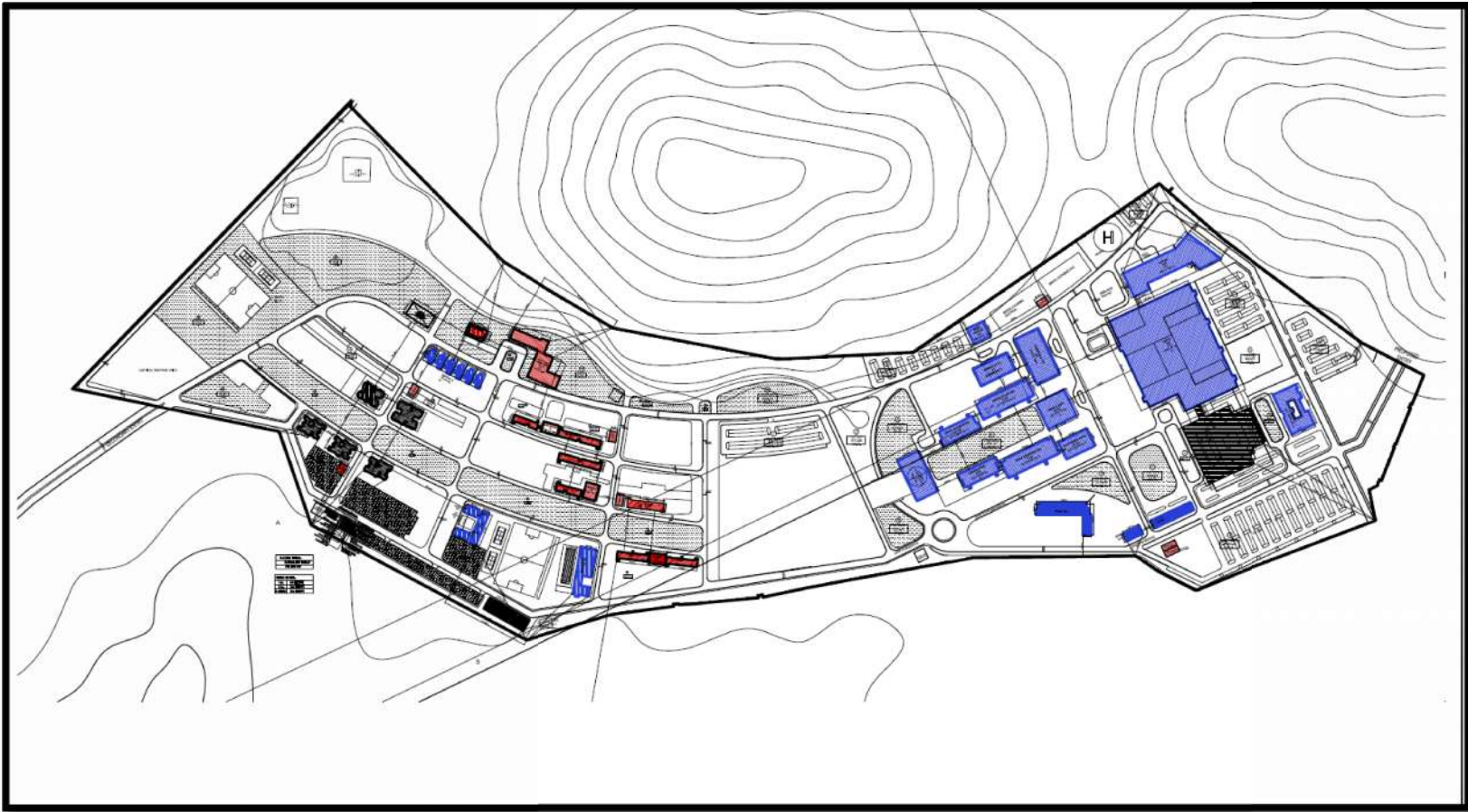
Total Tot lot required = 74104.61Sq.m

Tot Lot area provided = 106130.78 Sq.m

## TOTAL AREA STATEMENT

<b>S. No</b>	<b>Description</b>	<b>Area</b>
1	<b>Total Site area</b>	<b>741046.17Sq.m or 183.11Acres</b>
2	Plinth area	71895.854 sq. m
3	Parking area (open area)	69298.85 Sq. m 17.12Acres
4	Tot-Lot area	106130.78 Sq. m or 26.22Acres
5	Open area	493720.686 Sq. m or 122.0 Acres
6	<b>Total Built up area</b>	<b>271029.414Sq.m</b>

## LAYOUT SHOWING INFRASTRUCTURES



## WATER AVAILABILITY

Water is required for the construction as well as during occupation stage as the same is an important resource.

The source of water is by Municipal authorities and bore well.

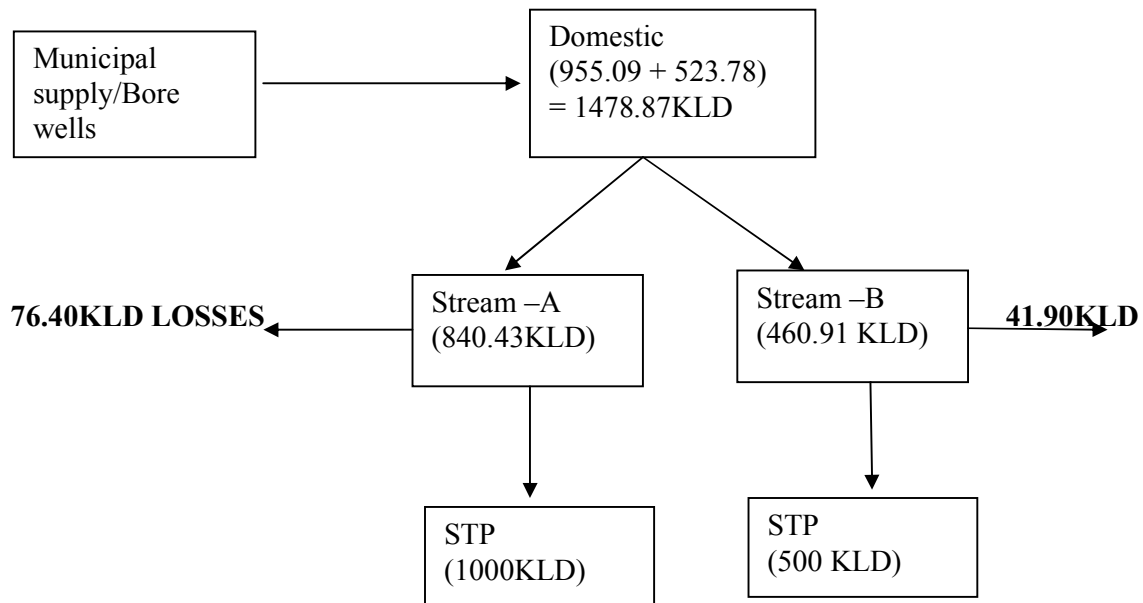
## FRESH WATER REQUIREMENT

S.NO	STREAM – A IN KLD		STREAM – B IN KLD	
1.	Hospital (OPD, Ayush, Logisitics)	851.58	UG, P.G, Nursing Hostels	187.78
2.	Nursing & Medical college labs	65.04	Staff housing, guest house, bungalow, dharamshala block	255.13
3.	Skill Training centre, Research block, student common area	27.31	College, Office, Library, auditorium	44.29
4.	Animal house, Utility block	11.16	Community hall, Student activity, fire station, market place, Amenities Blocks	36.58
<b>Total</b>		<b>955.09</b>	<b>Total</b>	<b>523.78</b>

## WASTE WATER GENERATION

S.NO	STREAM – A IN KLD		STREAM – B IN KLD	
1.	Hospital (OPD, Ayush, Logisitics)	681.26	UG, P.G, Nursing Hostels	150.22
2.	Nursing & Medical college labs	52.03	Staff housing, guest house, Bungalow, Dharamshala block	204.10
3.	Skill Training centre, Research block, student common area	21.84	College, Office, Library, auditorium	35.43
4.	Animal house, Utility block	8.9	Community hall, Student activity, fire station, market place, Amenities Blocks	29.26
<b>Total</b>		<b>764.03</b>	<b>Total</b>	<b>419.01</b>
Losses @10%		76.40	Losses @10%	41.90
<b>Grand Total</b>		<b>840.43</b>	<b>Grand Total</b>	<b>460.91</b>

## FLOW CHART FOR WATER CONSUMPTION



### TREATMENT:

Hospital surgical waste & Residential sewage will be routed through Stream -A (hospital, labs waste) and Stream -B (Staff Quarters, Hostel & etc) respectively.

### TREATMENT SYSTEM CAPACITIES:

The following treatment system capacities are proposed:

Stream -A (Hospital surgical waste) – 1000KLD

Stream -B (Domestic sewage) – 500 KLD

### Disposal:

After treatment, treated water will be used for the following

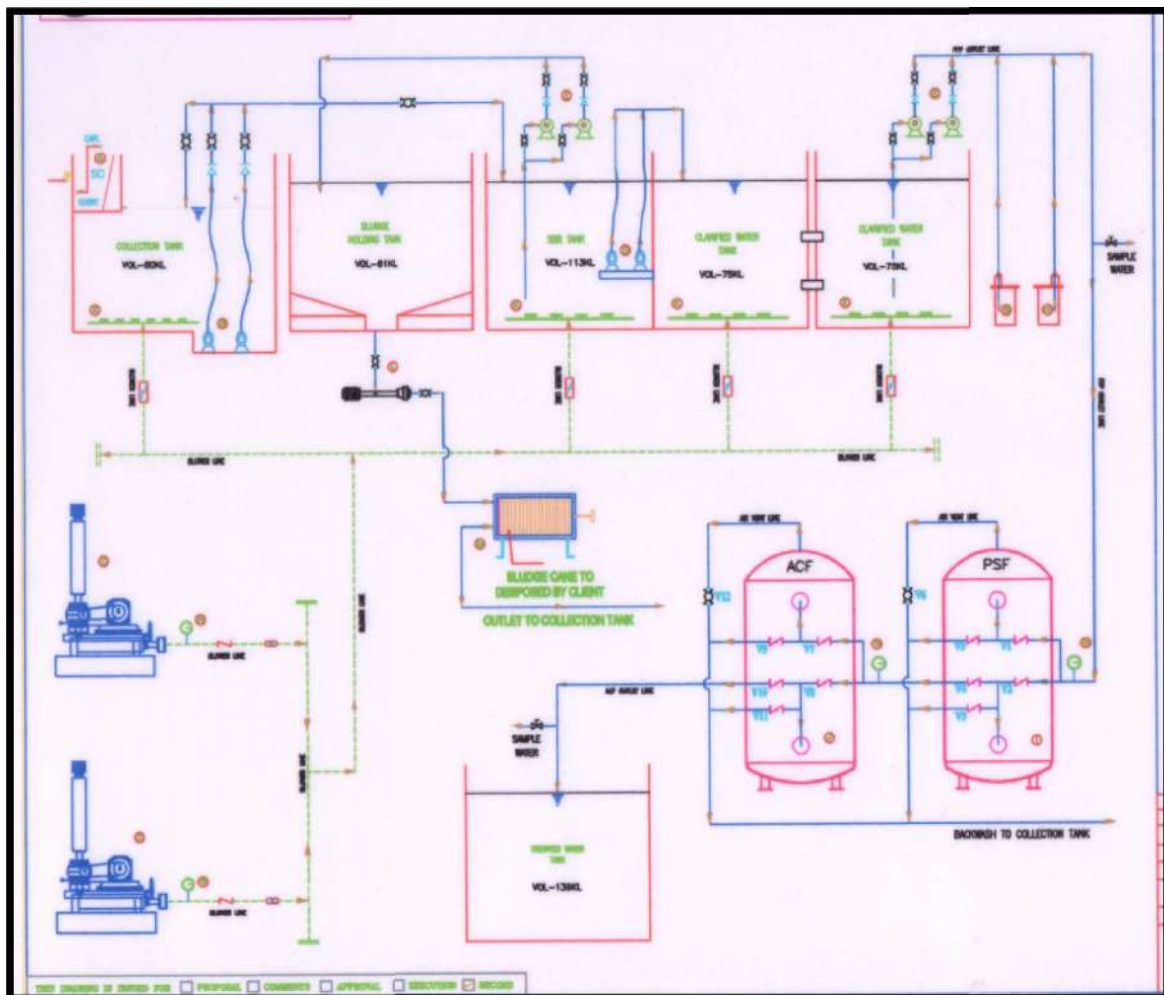
- Green Belt Development
- Toilet flushing
- HVAC

## TREATMENT SYSTEM

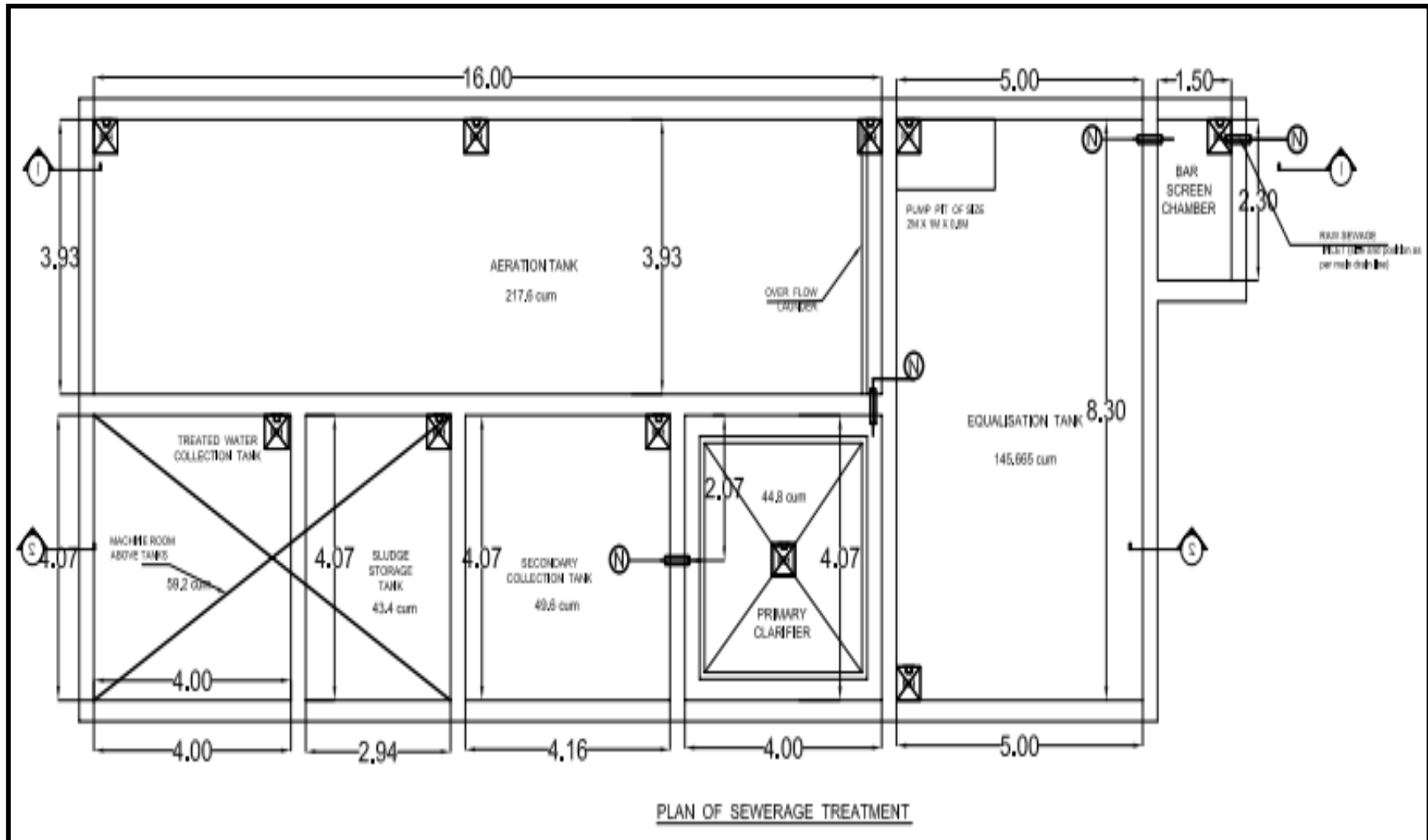
### Design Parameters:

ETP Capacity	Stream -A = 1000KLD  Stream -B = 500 KLD
Mode of Disposal	Greenbelt development – 260.0 KLD  Toilet flushing – 423.0 KLD  HVAC – 500.0 KLD
Location of ETP	Shown in Site Plan

**Fig. 2.1 - FLOW DIAGRAM FOR STREAM –A (Hospital Waste)**



**Fig: 2.2 FLOW DIAGRAM FOR STREAM – B (Domestic Waste)**



### 2.12 Solid Waste Generation:

The solid wastes anticipated during occupation stage include garbage's, sludge from STP, hazardous waste of used oils and batteries from generators. During operation regular training will be given for staff on Bio Medical Waste Management and display of boards etc will be done for prevention of mixing of MSW in Biomedical waste.

Disposal method will be followed as per the BMW rules, 2016 and MSW rules, 2016.

**Table: 2.2 Estimation of Solid Waste Generation and their disposal**

S. No.	Description of the waste	Type of waste	Quantity	Disposal
1.	Garbage	Solid waste	2700Kgs/day	Convert to manure through composting
2.	Bio-medical Waste	BMW waste	385Kgs/day	Disposed to common bio medical waste treatment disposal facility authorized by agencies
3.	STP Sludge	Solid waste	100Kgs/day	Sent to Authorized agencies
4.	Used Batteries	Hazardous waste	15 nos. year	Sent to Authorized recyclers or returned to seller
5.	Used Lubricant	Hazardous waste	50 l/year	Sold to authorized recyclers
6.	Waste oil	Hazardous waste	200 LPA	Sold to authorized Contractors
7.	E-waste	E-waste	100Kgs/year	To authorized agencies

### 2.13 BIO-MEDICAL WASTE MANAGEMENT AS PER BMW RULES, 2016

The following are the key consideration in planning and designation of the biomedical waste management system:

#### Identification of Bio-medicals waste:

Biomedical waste is generated primarily from the operation theaters, ICU and laboratories, wards and other departments.

#### Bio-medical waste management systems:

The Bio-medical waste management system process will cover the following aspects.

**Table: 2.3 Process of BMW Management System**

Waste identification, segregation collection	Identification of the Bio-medical waste, segregate the BMW from general waste at the point of its generation.
Waste transportation	Safely transportation of the Bio-medical waste for treatment in closed/covered trolleys.
Waste treatment/Decontamination disposal	Treatment/Decontamination of the Bio-medical waste and disposal of the de-contaminated waste.

The system is elaborated as under:

**Waste identification:**

Areas identified from where Bio-medical waste generated are identified as:

- Operation theatres/Labour rooms
- Pathological labs and other laboratories
- ICU
- OPD
- Wards
- Casualty/emergency
- Diagnostic areas
- Other treatment areas and in the hospital

**Waste segregation and collection:**

Segregation and collection of wastes is the first and the most important pre-requisite in the process of waste management in order to minimize quantities of hazardous waste and preventing cross contamination with non-hazardous waste. Different colored collection bags and containers will be provided for collection of bio-medical waste as follows:

**Table: 2.4 Colour coding and type of container for disposal of bio-medical waste**

<b>Colour coding</b>	<b>Type of container</b>	<b>Waste category</b>	<b>Treatment/Disposal option</b>
Yellow	Plastic bag	Human anatomical waste, animal waste, microbiology and biotechnology waste (infectious wastes from laboratory)	Incineration/Deep burial
Red	Disinfected container/plastic bag	Microbiology and Biotechnology wastes, soiled wastes and solid wastes	Autoclave/Microwave/chemical treatment
White translucent	Plastic bag/Puncture proof container	Waste sharps and solid wastes	Autoclave/Microwave/chemical treatment/Destruction and shredding
Blue	Plastic bag	Discarded medicines, Cytotoxic drugs, Incineration ash and chemical waste	Disposal in secured landfills

**Waste collection Bags:**

The yellow colored poly bags provided for waste collection will be made on non-chlorinated polythene which can be safely incinerated without having to open the bag. The bags will be of colors as per recommendation of Ministry of Environment & Forests. Each bag can be easily tied up when it is full without touching the contaminated waste. The bags will have bio-hazard symbol and inscription of type of waste to be collected into it.

The red, blue/white translucent poly bags used for collection of plastic and other solid waste are safe for autoclaving. The bags are specially designed to withstand high temperatures during autoclaving.

**Waste collection containers:**

The Poly bags should be placed inside the collection containers which in turn will be placed at locations where waste is actually generated so that its segregation and collection is possible at the source itself.

The collection containers are specially designed with following features:

- Foot operated lid
- Sturdy construction
- Arrangement for holding non-chlorinated poly bags
- Steel construction with epoxy power coating for durability

The collection container (s) will be with or without caster wheels depending on the location of its placement.

The waste collection containers will be of different colors for easy identification of waste that is to go into it.

**Waste Transportation:**

Easily movable trolleys with large castor wheels will be provided for collection of waste from different areas of the hospital and transportation the waste to the waste management yard. The trolleys will have large containers with foot operated covers, mounted on the base framework. The trolleys will be of sturdy construction and provided with castor wheels to easily move through various areas of the hospital.

Poly bags will be tied and taken out from the waste collection containers, which will be put into the transportation trolleys and then taken to the waste treatment yard for treatment and disposal. Persons handling poly bags will be provided with protective gloves.

**Waste Treatment:**

Bio-medical waste will be taken to the waste treatment plant for its treatment/shredding & autoclaving/incineration and thereafter waste will be disposed off to the common biomedical waste facility of the local municipality. The liquid waste of the hospital will be drained into the ETP and STP of the hospital. The radioactive liquid will be treated in delay tanks to cover its half life as per AERB and then to be drained to the sewer drain of the municipality.

**Bio-Medical waste treatment plant will be equipped as following:**

- Waste Autoclave/Micro-oven
- Shredder/Volume converter
- Needle Destroyer
- Incinerator \*

\*If incinerator is not allowed by the State Pollution Control board, then the segregated waste will be packed in a different coloured poly packet and the infectious biomedical waste will be packed after autoclaving and shredding for handover to the local municipality/local authority to avail Common Biomedical Waste Treatment Facility.

**2.14 SOLID WASTE MANAGEMENT AS PER MSW RULES, 2016:**

- As we are having total Built-up area 2, 70,999.414 sq. mts which is > 5,000 sq.mts, based on notification, we will segregate the waste in separate streams at source, hand over recyclable material to the authorized waste pickers or recyclers as per the MSW rules, 2016.
- The bio-degradable waste shall be processed, treated and disposed off through composting within the premises.
- The residual waste shall be given to the waste collectors or agency as directed by the local body.

**Collection and Segregation of waste:**

1. Collection system will be provided for collection of domestic waste in plastic bags from each block
2. The local vendors will be hired to provide separate colored bins for dry recyclables and bio-degradable waste.
3. For waste collection, adequate number of colored bins (Green, blue and dark grey separate for Bio-degradable and non bio-degradable) are proposed to be provided at the strategic locations.
4. Litter bin will also be provided in open areas like parks etc.

**2.15 RAIN WATER HARVESTING/Storm Water Management**

The storm water disposal system for the premises shall be self-sufficient to avoid any collection/stagnation and flooding of water. The amount of storm water run-off depends upon many factors such as intensity and duration of precipitation, characteristics of the tributary area and the time required for such flow to reach the drains. The drains shall be located near the carriage way along either side of the roads. Taking the advantage of road chamber, the rainfall run off from roads shall flow towards the drains. Storm water from various plots/shall be connected to adjacent drain by a pipe through catch basins. Therefore, it has been calculated to provide 35 rainwater harvesting pits at selected locations, which will catch the maximum run-off from the area.

1. Since the existing topography is congenial to surface disposal, a network of storm water pipe drains is planned adjacent to roads. All building roof water will be brought down through rainwater pipes.
2. Storm water system consists of pipe drain, catch basins and seepage pits at regular intervals for rainwater harvesting and ground water recharging.

Rain water harvesting has been catered to and designed as per the guideline of CGWB. Peak hourly rainfall has been considered as 0.03m/hr. The recharge pit of adequate diameter and depth is constructed for recharging the water. Inside the recharge pit, a recharge bore is constructed having adequate diameter and depth. At the bottom of the recharge well, a filter media is provided to avoid choking of the recharge bore. Design specification of the rain water harvesting plan are as follows:

- Catchments/roofs would be accessible for regular cleaning

- The roof will have smooth, hard and dense surface which is less likely to be damaged allowing release of material into the water. Roof painting has been avoided since most paints contain toxic substances and may peel off.
- All gutter ends will be fitted with a wire mesh screen and a first flush device would be installed. Most of the debris carried by the water from the rooftop like leaves, plastic bags and paper pieces will get arrested by the mesh at the terrace outlet and to prevent contamination by ensuring that the runoff from the first 10-20minutes of rainfall is flushed off.
- No sewage or sullage would be admitted into the system

No sullage from areas likely to have oil, grease or other pollutants has been connected to the system.

**Table: 2.5- Calculations for Storm water load**

Type of Area	Area (in Sq. m)	Coefficient of run-off	Peak rainfall intensity during one hour of rainfall (in m)	Rainwater harvesting potential/hour (in M <sup>3</sup> )
Green area	106130.78	0.1	0.03	318.39
Roof Area	71895.854	0.9	0.03	1941.18
Road & paved area	493720.68	0.7	0.03	10368.13
Parking area (Open)	69298.85	0.9	0.03	1871.06
Total Storm water load on the site with per hour retention is				14498.76
Considering 15 minutes retention time, total storm water load				3624.69
Volume of a RWH pit ( $\pi r^2h$ ) = 3.14 x 3.5 x 3.5x 3				115.395
Hence no. of pits required in approx=Total storm water load considering 15 minutes retention time/Volume of a RWH pit				31.41 Say 31

**Discharge = C x I x A/360**

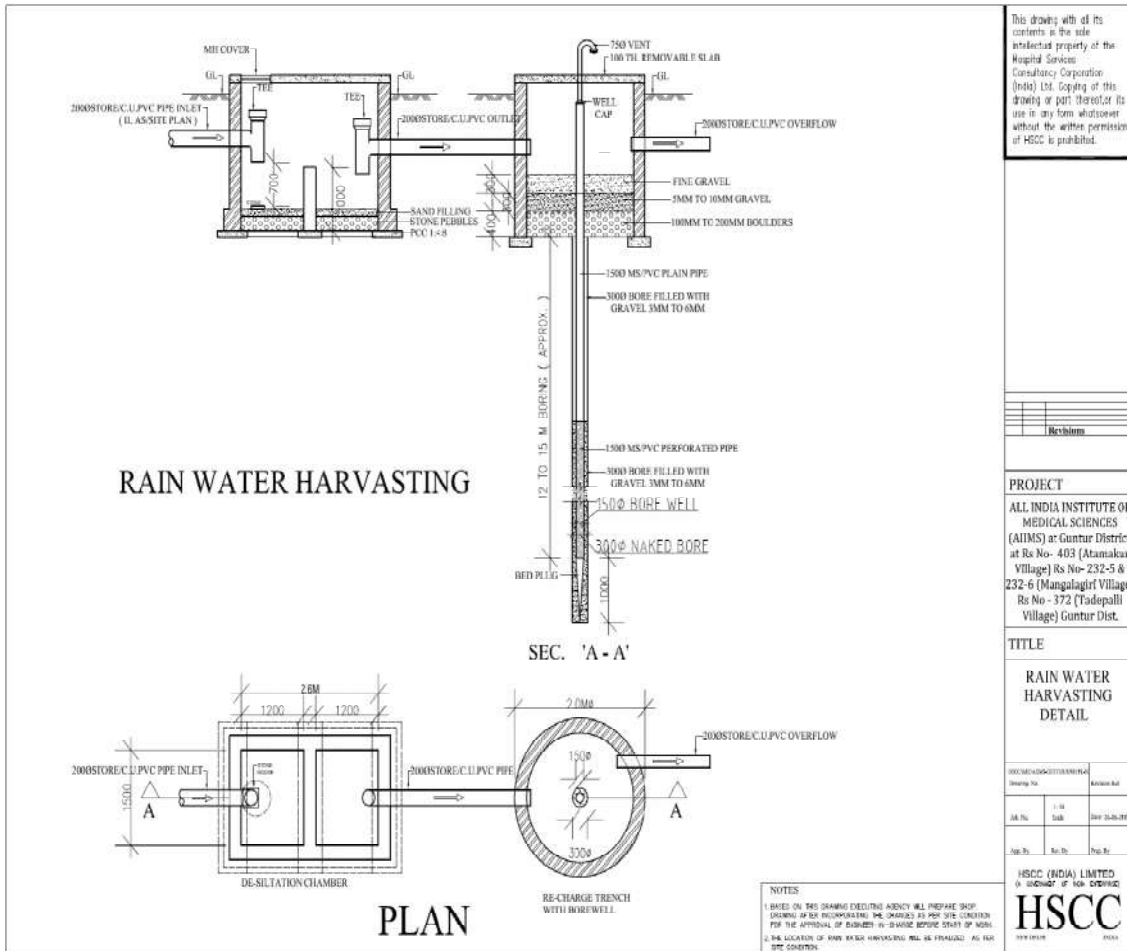
**A = Area of Catchment**

**C = Runoff Coefficient**

**I = Maximum Intensity of Rainfall**

As per the above water requirement calculation 31 nos of harvesting pits are required.

But we proposed to provide 35nos Harvesting Pits more than requirement.



**Fig: 2.3 Rainwater Harvesting Structure**

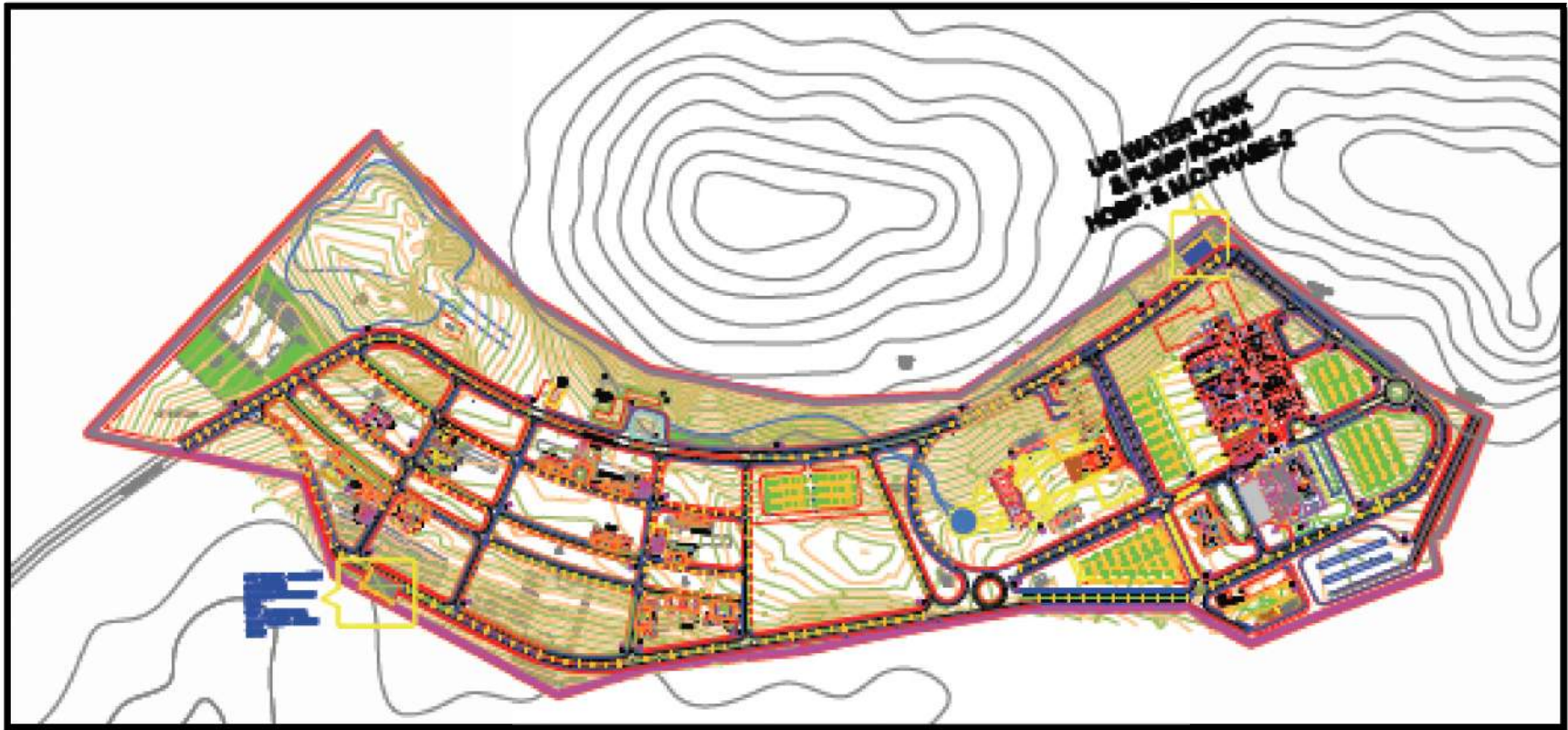
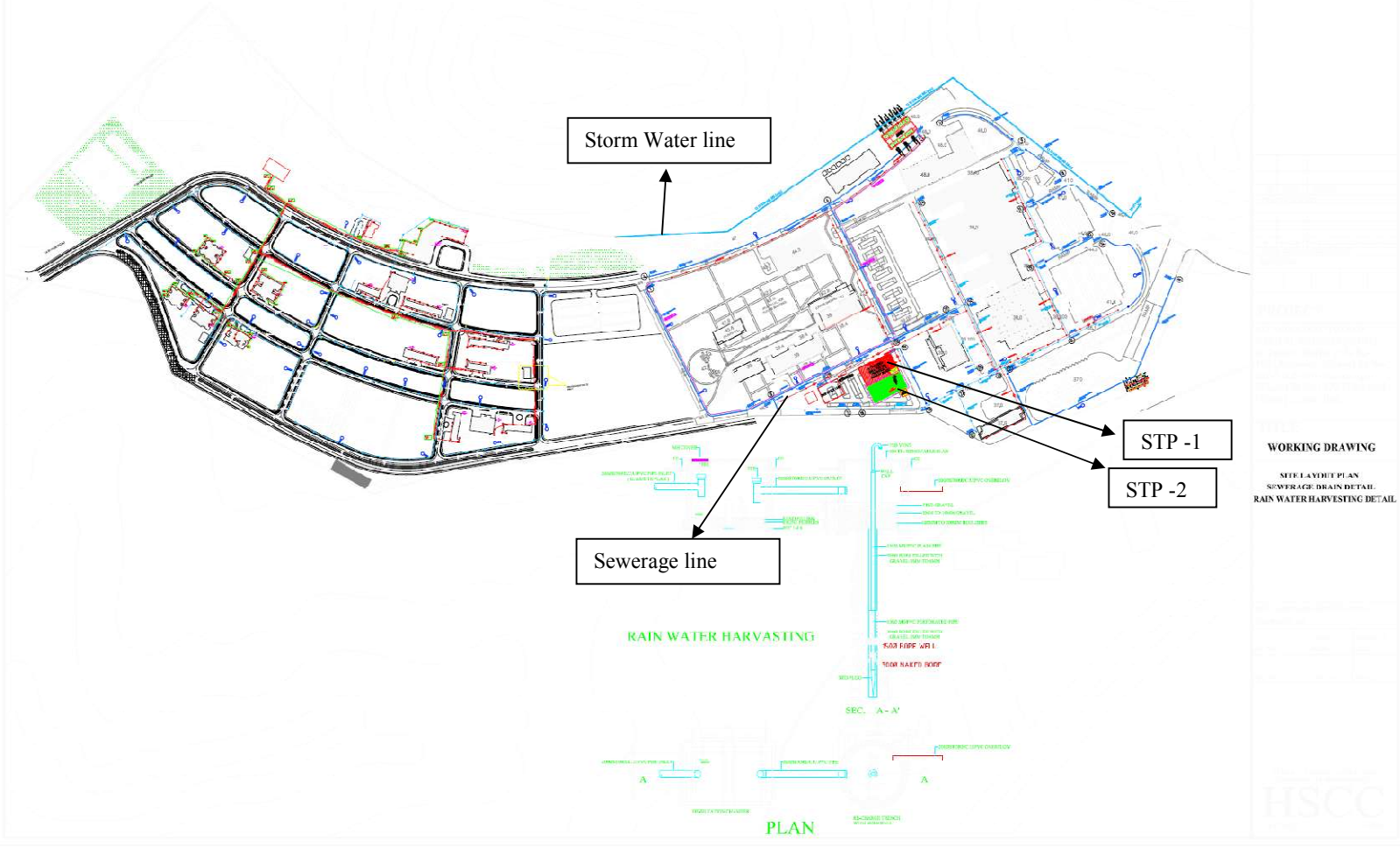


Fig: 2.4 Contour plan and Rainwater harvesting plan

# SEWERAGE AND STORM WATER PLAN



WORKING DRAWING  
SEE LAYOUT PLAN  
SEWERAGE-RAIN DETAIL  
RAIN WATER HARVESTING DETAIL

HSCC

## 2.16 Man Power Requirement

The maximum peak man power required for the development of proposed project during construction and occupation stage is given in below table:

**Table: 2.6 Manpower Requirement**

S.no	Phase	Number	Remarks
1	Construction Phase	500	Skilled, unskilled, supervisors etc
2	Operation Phase	250	Doctors, Staff nurse, Security guards, STP operators, gardeners, electrician, plumber etc

## 2.17 Solar Energy:

Solar power – 150KwP

The area requirement on roof top has been calculated @12Sq.m per 1KwP as suggested by Ministry of New and Renewable energy.

Hence an area of 150KwP x 12sq.m = 1800Sq.m is required for roof top area for installation of Solar Photo voltaic power plant.

## 2.18 Green area:

### Landscaping and Green Belt Development Plan

It is proposed to develop landscape and greenbelt around the periphery of the project. The implementation for development of greenbelt is of immense importance, as it not only acts as a pollution sink for dust emissions, gaseous pollutants and noise pollution but also enhances the visual appearance of the developed site.

The species to be grown on the site will be fast growing native species having broad leaf base so that a permanent greenbelt is created in a short period. The effective plantation will also stabilize the soil and reduce any nuisance during windstorm, if any, in future. These together in the long term will improve the local ecology of the

site. Besides this, the visual aesthetic of the proposed site will be enhanced by developing lawn with local ornamental plants in the open spaces.

Total Tot lot/Greenbelt area provided – 106130.78sq.mts

- As per norms : 74104.617 required
- **Provided : 106130.78 sq.mts**

Source: As per GOMS No: 119

- Greenbelt area – 1) 10% of site area &
- 2) Minimum 2 mt width continuous plantation

**Table 2.7: Species are chosen for planting of greenbelt**

Botanical name	Habit	Family	Local name
<i>Aeglemarmelos</i>	T	Rutaceae	Maredu
<i>Albizialebeck</i>	T	Mimosaceae	Dirisena
<i>Alstoniascholaris</i>	T	Apocynaceae	Edakulapala
<i>Areca catechu</i>	T	Arecaceae	Vakka
<i>Anthocephaluscadamba</i>	T	Rubiaceae	Kadamba
<i>Cassia fistula</i>	T	Caesalpinaceae	Rela
<i>Bauhinia purpurea</i>	T	Caesalpinaceae	Peddari
<i>Bauhinia variegata</i>	T	Caesalpinaceae	Devakanchanamu
<i>Cassia siamea</i>	T	Caesalpinaceae	Cassod tree
<i>Peltoferrumpterocarpum</i>	T	Caesalpinaceae	Kondachinta
<i>Polyalthialongifolia</i>	T	Annonaceae	Naramamidi
<i>Azadirachtaindica</i>	T	Meliaceae	Vepachettu
<i>Mimusopselengi</i>	T	Sapotaceae	Pogada
<i>Nyctanthusarbortristics</i>	T	Oleaceae	Parijathamu
<i>Neriumodorum</i>	S	Apocynaceae	Ganneru
<i>Tecomastans</i>	T	Bignoniaceae	Swarnaganneru
<i>Tectonagrandis</i>	T	Verbenaceae	Teku
<i>Delonixregia</i>	T	Caesalpinaceae	Turai
<i>Micheliachampaca</i>	T	Magnoliaceae	Sampangi
Other Ornamental Plants			

## 2.18 Project Cost and EMP Budget

The Total project cost: 1090 Crores and budget allocated for EMP is Rs. 10.157

Crores

### EMP Budget Provisions

S.No	Heads of budget	Items	Recurring cost in lakhs	Capital cost in lakhs
1	Air pollution	Dust suppression through tankers	5.0	0
2	Water Pollution	STP	15	600
		RWH	0.5	100
3	Noise Pollution	Acoustic enclosure	0.2	4.0
4	Energy conservation/Renewable energy	Solar energy	6.0	100
5	Solid waste & Hazardous waste	Organic waste converter, Segregation of BMW	5.0	55.0
6	Environmental monitoring	Air, Domestic sewage, noise, soil Stack	3.0	0
7	Landscaping/Greenbelt development	Plantation	10.0	100
8	Occupational health and safety	PPE, Health check up	2.0	10.0
	<b>Total</b>		<b>46.7</b>	<b>969.0</b>

**SUBMISSION OF FORM – IA  
FOR OBTAINING  
ENVIRONMENTAL CLEARANCE (EC)**

**For**

**ALL INDIA INSTITUTE OF MEDICAL SCIENCES (AIIMS),  
(Construction of Medical College & Super Specialty Hospital with Residential Accomodation)  
Sy. No 372, 232/5 & 6, 403,  
Tadepalli, Mangalagiri, Atmakuru villages, Mangalagiri  
Mandal, Guntur District, Andhra Pradesh.**

**Submitted to**

**STATE ENVIRONMENTAL IMPACT ASSESSMENT AUTHORITY (SEIAA)  
O/o. AP POLLUTION CONTROL BOARD, HYDERABAD.**

**Prepared by**



**SV ENVIRO LABS & CONSULTANTS**

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**B.O:2-53, Mahipala St., Yanam-533464, Ph: 0884-2321528, Cell: 919440338628**

**QCI No – 143 & Recognized by MOE&F, New Delhi.**

## FORM- 1A

### 1. LAND ENVIRONMENT

S.No.	ITEM	COMPLIANCE
1.1	Will the existing land use get significantly altered from the project that is not consistent with the surroundings? (Proposed land use must conform to the approved Master Plan / Development Plan of the area. Change of land use if any and the statutory approval from the competent authority be submitted). Attach Maps of (i) site location, (ii) surrounding features of the proposed site (within 500 meters) and (iii) the site (indicating levels & contours) to appropriate scales. If not available attach only conceptual plans.	<p>The earmarked for Construction of Hospital Building &amp; medical college in an area of about 183.11 Acres owned by <b>All India Institute of Medical Sciences (AIIMS)</b>. A total of 183.11 acres of land and the built up area of 271029.414 Sq.mts will be sufficient for the construction activity.</p> <p>Further the above land is barren land. Therefore no change in land use / land cover / topography.</p>
1.2	List out all the major project requirements in terms of the land area, built up area, water consumption, power requirement, connectivity, community facilities, parking needs etc.	<p><b>Area statement</b></p> <p><b>Blocks</b> Super Specialty Hospital comprising of Medical college, U.G &amp; P.G Hostels (Male, Female &amp; Married), Nursing Hostels (Male &amp; Female), Staff Housing, Guest house, Directors Bungalow, Amenities block in PHASE –I. PHASE –II, Hospital block, Ayush block, Logistics, Admin &amp; Library block, Nursing labs &amp; Offices, Medical college labs &amp; offices, Skill training centre, Student common area, Research Block, Animal house, auditorium, staff housing, Dharamshala block, guest house expansion, community hall/shopping centre, student activity, utility block.</p> <p><b>Utilities</b></p> <p>1. Water supply: Required water for</p>

		<p>operation phase is 1478.87 KLD and will be met from Municipal supply and bore well</p> <p>2. The power requirement is 10 MVA and will be met from AP Transco. The connectivity is from nearby transformer.</p> <p>3. Adequate site has been provided Sewage treatment plant, road network and DG room.</p> <p>4. Light motor vehicles / car parking will be provided.</p>
1.3	What are the likely impacts of the proposed activity on the existing facilities adjacent to the proposed site? (Such as open spaces, community facilities, details of the existing land use, disturbance to the local ecology).	There is no impact on the various facilities adjacent to the complex.
1.4	Will there be any significant land disturbance resulting in erosion, subsidence & instability? (Details of soil type, slope analysis, vulnerability to subsidence, seismicity etc may be given).	<p>The land is essentially a leveled ground, free from erosion or subsidence.</p> <p>The terrain is highly stable and does not have possibility of erosion, subsidence or instability including vulnerability to city.</p>
1.5	Will the proposal involve alteration of natural drainage systems? (Give details on a contour map showing the natural drainage near the proposed project site)	There is no alteration of natural drainage.
1.6	What are the quantities of earthwork involved in the construction activity-cutting, filling, reclamation etc. (Give details of the quantities of earthwork involved, transport of fill materials from outside the site etc.)	<p>Earth work – 70000 m<sup>3</sup></p> <p>No fill material from out side</p> <p>The excavated earth will be used for filling the basement.</p>
1.7	Give details regarding water supply, waste handling etc during the construction period.	<p>The water for construction is being received from existing water sources.</p> <p>Waste handling:</p> <p>Construction waste will be disposed as per the C&amp;D rules, 2016</p>

1.8	Will the low lying areas & wetlands get altered? (Provide details of how low lying and wetlands are getting modified from the proposed activity)	The low lying and wetland do not exist.
1.9	Whether construction debris & waste during construction cause health hazard? (Give quantities of various types of wastes generated during construction including the construction labour and the means of disposal)	The site is a vacant land and contains no construction waste.

## 2. WATER ENVIRONMENT

S.No.	ITEM	COMPLIANCE
2.1	Give the total quantity of water requirement for the proposed project with the breakup of requirements for various uses. How will the water requirement met? State the sources & quantities and furnish a water balance statement.	<p><b>During operation</b> Domestic water – 1478.87 KLD</p> <p><b>Source of water</b> Ground water/Municipal Supply</p>
2.2	What is the capacity (dependable flow or yield) of the proposed source of water?	The source is ground water and consists of adequate ground water reserves.
2.3	What is the quality of water required, in case, the supply is not from a municipal source? (Provide physical, chemical, biological characteristics with class of water quality)	The quality of the ground water is good and potable. The physiochemical analysis of the ground water reveals all the parameters are well within the permissible limits.
2.4	How much of the water requirement can be met from the recycling of treated wastewater? (Give the details of quantities, sources and usage)	<p>100% of the waste water will be treated at the Sewage treatment plant and 40% will be used for green belt development.</p> <p>Water source: Bore well/Municipality</p>
2.5	Will there be diversion of water from other users? (Please assess the impacts of the project on other existing uses and quantities of consumption)	There is no diversion of water from other users.

2.6	What is the incremental pollution load from wastewater generated from the proposed activity? (Give details of the quantities and composition of wastewater generated from the proposed activity)	<p>The characteristics of the treated sewage will meet the on land for plantation limits as below:</p> <table border="1" data-bbox="846 107 1365 317"> <thead> <tr> <th>Parameter</th> <th>Raw</th> <th>Treated</th> </tr> </thead> <tbody> <tr> <td>pH</td> <td>6.8-7.2</td> <td>7.5-7.8</td> </tr> <tr> <td>BOD</td> <td>300-350</td> <td>&lt; 30</td> </tr> <tr> <td>COD</td> <td>400-500</td> <td>&lt; 50</td> </tr> <tr> <td>TSS</td> <td>200-600</td> <td>&lt; 0.5</td> </tr> <tr> <td>TDS</td> <td>1400-1700</td> <td>&lt; 1200</td> </tr> </tbody> </table> <p>All values expressed in mg/l except pH.</p>	Parameter	Raw	Treated	pH	6.8-7.2	7.5-7.8	BOD	300-350	< 30	COD	400-500	< 50	TSS	200-600	< 0.5	TDS	1400-1700	< 1200
Parameter	Raw	Treated																		
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TSS	200-600	< 0.5																		
TDS	1400-1700	< 1200																		
2.7	Give details of the water requirements met from water harvesting? Furnish details of the facilities created.	<p>Rain water harvesting will be implemented from rooftops, channeled to the harvesting pits through appropriate piping systems. It has been calculated to provide 35 rainwater harvesting pits at selected locations, which will catch the maximum run-off from the area.</p> <p>The storm water drains also would have recharging pits along the length of the drains for recharging the ground water.</p>																		
2.8	What would be the impact of the land use changes occurring due to the proposed project on the runoff characteristics (quantitative as well as qualitative) of the area in the post construction phase on a long term basis? Would it aggravate the problems of flooding or water logging in any way?	<p>There is no impact of the land use change on the runoff characteristics. Care has been taken to ensure that the built up area is as per the specifications of the municipal regulatory authorities and no way has it affected the surface runoff characteristics.</p>																		
2.9	What are the impacts of the proposal on the ground water? (Will there be tapping of ground water; give the details of ground water table, recharging capacity, and approvals obtained from competent authority, if any)	<p>There will not be any impact on ground water.</p>																		
2.10	What precautions/measures are taken to prevent the run-off from construction activities polluting land & aquifers? (Give details of	<p>The runoff from the construction activities are routed through water drainage network.</p>																		

	quantities and the measures taken to avoid the adverse impacts)	
2.11	How is the storm water from within the site managed?(State the provisions made to avoid flooding of the area, details of the drainage facilities provided along with a site layout indication contour levels)	The runoff from the construction activities are routed through water drainage network and disposed through water disposal system. The storm water line in the site layout is shown in the conceptual plan.
2.12	Will the deployment of construction labourers particularly in the peak period lead to unsanitary conditions around the project site (Justify with proper explanation)	Local manpower will be utilized for the construction work. Therefore no temporary site used for construction works.
2.13	What on-site facilities are provided for the collection, treatment & safe disposal of sewage? (Give details of the quantities of wastewater generation, treatment capacities with technology & facilities for recycling and disposal)	The sewage that collected from the blocks will be routed to sewage treatment plant and further to municipal sewerage network.
2.14	Give details of dual plumbing system if treated waste used is used for flushing of toilets or any other use.	A separate line will be installed in the water closet for operating with treated sewage.

### 3. VEGETATION

S.No.	ITEM	COMPLIANCE
3.1	Is there any threat of the project to the biodiversity? (Give a description of the local ecosystem with it's unique features, if any)	There is no threat the bio-diversity due to the project as the site is devoid of vegetation. The land is a degraded and unutilized land which does not consists of any specific/unique features of the eco-system.
3.2	Will the construction involve extensive clearing or modification of vegetation? (Provide a detailed account of the trees & vegetation affected by the project)	The proposed site consists of 256nos small and adult trees. The same to be removed and leaving the trees near the boundary wall.

3.3	What are the measures proposed to be taken to minimize the likely impacts on important site features (Give details of proposal for tree plantation, landscaping, creation of water bodies etc along with a layout plan to an appropriate scale)	It is proposed to develop plantation along the boundary walls and tot lot area of 5000nos of samplings.
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#### 4. FAUNA

S.No.	ITEM	COMPLIANCE
4.1	Is there likely to be any displacement of fauna- both terrestrial and aquatic or creation of barriers for their movement? Provide the details.	The project area does not have any fauna both terrestrial and aquatic. There is no reporting of wild life. As such there is no impact on terrestrial & aquatic fauna. There are no water bodies in the site.
4.2	Any direct or indirect impacts on the avifauna of the area? Provide details.	There is no impact on the avifauna.
4.3	Prescribe measures such as corridors, fish ladders etc to mitigate adverse impacts on fauna	There is no such activity and as such these are not provided.

#### 5. AIR ENVIRONMENT

S.No.	ITEM	COMPLIANCE
5.1	Will the project increase atmospheric concentration of gases & result in heat islands? (Give details of background air quality levels with predicted values based on dispersion models taking into account the increased traffic generation as a result of the proposed constructions)	There is no source for emissions as this is not a processing industry. The emissions expected are from generators only. The generator will be operated whenever power fails and will be run on HSD.
5.2	What are the impacts on generation of dust, smoke, odorous fumes or other hazardous gases? Give details in relation to all the meteorological parameters.	There will not be any generation of hazardous gases.
5.3	Will the proposal create shortage of parking space for vehicles? Furnish details of the present level of transport infrastructure and measures proposed for	There is no shortage of parking place. Adequate space has been provided for parking lot exclusively for the usage of the proposed project site during

	improvement including the traffic management at the entry & exit to the project site.	construction as well as in operation phase.
5.4	Provide details of the movement patterns with internal roads, bicycle tracks, pedestrian pathways, footpaths etc., with areas under each category.	The internal roads would have pedestrian pathways and footpaths with adequacy to meet the requirement of the residential population.
5.5	Will there be significant increase in traffic noise & vibrations? Give details of the sources and the measures proposed for mitigation of the above.	There will be a marginal increase of traffic noise, but measures have been proposed for mitigation of this noise through an extensive plantation along the boundary wall.
5.6	What will be the impact of DG sets & other equipment on noise levels & vibration in & ambient air quality around the project site? Provide details.	The DG set will be housed in an acoustic enclosed room to reduce the noise levels and it will be mounted on anti-vibration mounting pads to reduce vibration levels.

## 6. AESTHETICS

S.No.	ITEM	COMPLIANCE
6.1	Will the proposed constructions in any way result in the obstruction of a view, scenic amenity or landscapes? Are these considerations taken into account by the proponents?	Care has been taken to improve the Aesthetics, particularly in respect of landscape and there is no obstructions are created.
6.2	Will there be any adverse impacts from new constructions on the existing structures? What are the considerations taken into account?	The impact of the proposed construction activity on the surroundings will be minimum as it away from the existing structures.
6.3	Whether there are any local considerations of urban form & urban design influencing the design criteria? They may be explicitly spelt out.	Not applicable
6.4	Are there any anthropological or archaeological sites or artefacts nearby? State if any other significant features in the	There are no sites of archeological importance within and around the site.

	vicinity of the proposed site have been considered.	
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## 7. SOCIO-ECONOMIC ASPECTS

S.No.	ITEM	COMPLIANCE
7.1	Will the proposal result in any changes to the demographic structure of local population? Provide the details.	There will not be any changes to the demographic structure of local populations, as it is a hospital building and the socio economic power of the surroundings will increase.
7.2	Give details of the existing social infrastructure around the proposed project.	Majority of the people are agricultural labour and marginal workers.
7.3	Will the project cause adverse effects on local communities, disturbance to sacred sites or other cultural values? What are the safeguards proposed?	There are no sacred sites or of cultural value sites within 10 km radius of the proposed hospital building.

## 8. BUILDING MATERIALS

S.No.	ITEM	COMPLIANCE
8.1	May involve the use of building materials with high-embodied energy. Are the construction materials produced with energy efficient processes? (Give details of energy conservation measures in the selection of building materials and their energy efficiency)	The construction materials like cement, bricks, concrete and sand will be procured from local authorized vendors.
8.2	Transport and handling of materials during construction may result in pollution, noise & public nuisance. What measures are taken to minimize the impacts?	The material will be transported through covered trucks and water sprinkling will be taken to suppress the dust arise from construction materials.
8.3	Are recycled materials used in roads and structures? State the extent of savings achieved?	Usage of fly ash for road development from the local power plant is being envisaged.
8.4	Give details of the methods of collection, segregation & disposal of the garbage	The municipal solid waste from the proposed project will be converted to

	generated during the operation phases of the project.	manure through composting.
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### 9. ENERGY CONSERVATION


S.No.	ITEM	COMPLIANCE
9.1	Give details of the power requirements, source of supply, backup source etc. What is the energy consumption assumed per square foot of built-up area? How have you tried to minimize energy consumption?	The proposed hospital building will utilize about 10MVA power for its utilities from APSEB.
9.2	What type of, and capacity of, power back-up do you plan to provide?	DG set of capacities: 10.0MVA Will be kept as standby to overcome the power failure if any.
9.3	What are the characteristics of the glass you plan to use? Provide specifications of its characteristics related to both short wave and long wave radiation?	Glazing with 2.64 sq.mts
9.4	What passive solar architectural features are being used in the building? Illustrate the applications made in the proposed project.	Passive features include special glass panels for absorption of solar radiation.
9.5	Does the layout of streets & buildings maximize the potential for solar energy devices? Have you considered the use of street lighting, emergency lighting and solar hot water systems for use in the building complex? Substantiate with details.	Solar energy system is considered for street lights.
9.6	Is shading effectively used to reduce cooling/heating loads? What principles have been used to maximize the shading of Walls on the East and the West and the Roof? How much energy saving has been effected?	External shading is being provided in the design.

9.7	Do the structures use energy-efficient space conditioning, lighting and mechanical systems? Provide technical details. Provide details of the transformers and motor efficiencies, lighting intensity and air-conditioning load assumptions? Are you using CFC and HCFC free chillers? Provide specifications.	ENERGY CONSERVATION Double Glazing It is decided to use double glazing to reduce the heat transmission through the glass.
9.8	What are the likely effects of the building activity in altering the micro-climates? Provide a self assessment on the likely impacts of the proposed construction on creation of heat island & inversion effects?	Microclimate betterment would be achieved through proper emission control as well as environmental greening programme.
9.9	What are the thermal characteristics of the building envelope? (a) roof; (b) external walls; and (c) fenestration? Give details of the material used and the U-values or the R values of the individual components.	The exposed roofs will be insulated with under deck insulation. Cellar areas in the basement and staircase are mechanically ventilated and with fire escape systems.
9.10	What precautions & safety measures are proposed against fire hazards? Furnish details of emergency plans.	Firefighting equipment <ul style="list-style-type: none"> <li>- Sand buckets</li> <li>- Fire alarm</li> <li>- Fire escape (Stair case)</li> <li>- Smoke detectors</li> <li>- Automatic water sprinklers</li> </ul>
9.11	If you are using glass as wall material provides details and specifications including emissivity and thermal characteristics.	No
9.12	What is the rate of air infiltration into the building? Provide details of how you are mitigating the effects of infiltration.	No air filtration into the building.
9.13	To what extent the non-conventional energy technologies are utilized in the overall energy consumption? Provide details of the renewable energy technologies used.	Solar energy will be used for street common facility lightings & for hot water.

### (III) ENVIRONMENTAL MANAGEMENT PLAN

S.No.	ITEM	COMPLIANCE
1	The Environment Management Plan would consist of all mitigation measures for each item wise activity to be undertaken during the construction, operation and the entire life cycle to minimize adverse environmental impacts as a result of the activities of the project. It would also delineate the environmental monitoring plan for compliance of various environmental regulations. It will state the steps to be taken in case of emergency such as accidents at the site including fire.	Environmental Management Plan will be implemented during the construction phase as well as during operational phase.

o/c

 सत्यमेव जयते	<p><b>State Level Environment Impact Assessment Authority (SEIAA)</b> <b>Andhra Pradesh</b> <b>Ministry of Environment, Forests &amp; Climate Change,</b> <b>Government of India</b> <u>D.No.33-26-14 D/2, Near Sunrise Hospital, Pushpa Hotel Centre,</u> <u>Chalamavari Street, Kasturibaipet, Vijayawada -520010</u></p>
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By Speed Post

Lr No. SEIAA/AP/GNT/CON/09/2017/405

Dt: .06.2018

To  
Sri Subhash Kumar Sharma, DGM (Civil),  
M/s. All India Institute of Medical Sciences (AIIMS),  
E-6(A) Sector-1, Noida - 201301  
Uttar Pradesh.

Sir,

Sub: SEAC - A.P. – Construction of Medical College and Super Specialty Hospital of M/s. All India Institute of Medical Sciences (AIIMS) at Sy. Nos. 372, 232/5 & 6, 403, Tadepalli, Mangalagiri, Atmakuru Villages, Mangalagiri Mandal, Guntur District, Andhra Pradesh – Environmental Clearance- Clarification Sought – Reg.

Ref: 1. TOR issued by SEIAA,A.P on 12.10.2017  
2. Your application received through online on 08.09.2017 (Proposal No.SIA/AP/NCP/20302/2017)

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In continuation of the above, it is to inform that your application was examined by the State Expert Appraisal Committee (SEAC) in its meeting held on 11.05.2018. *The representative of the project proponent and their Consultant M/s. SV Enviro Labs & Consultants, have attended the meeting.*

*The committee noted that the representative of project proponent and their consultant have not presented the complete details of their proposed construction project.*

*The committee recommended to deter the case and the project proponent shall submit the revised Conceptual Plan, Form I( A) & EMP budget duly furnishing the all details of the proposed construction project, for further appraisal.*



P.T.O

The issue was placed before the SEIAA in its meeting held on 02.06.2018 and the Authority noted the recommendations of the SEAC.

In view of the above, you are requested to submit the revised Conceptual Plan, Form I( A) & EMP budget to SEAC for further appraisal.

Yours faithfully,  
Sd/-  
MEMBER SECRETARY,  
SEAC, A.P.

//T.C.F.B.O//

*P. Mune Swamy Nayak*  
b SENIOR ENVIRONMENTAL ENGINEER (EC)  
(UH-III)