Prof Narendra S Chaudhari
VICE CHANCELLOR
Mobile No. 7637076370 (O)
9981439671 (P)
9422802961 (P)
Email : vc@astu.ac.in
nsc0183@yahoo.com
nsc@iiti.ac.in

ASSAM SCIENCE AND TECHNOLOGY UNIVERSITY
(A State University of Government of Assam constituted by "Assam Science and Technology University Act, 2009")
Tetelia Road, Near Assam Engineering College,
Jalukbari, Guwahati-781013, Assam
Website: www.astu.ac.in

No. ASTU/Acctt./9(Plan)/12/Vol-VI/ 10258 Date: 10/7/2023

To : The Director of Technical Education,
Govt. of Assam, Kahilipara, Guwahati -19

Sub : Request for funding towards submission of Concept Paper for augmenting Academic Infrastructure Development of ASTU Campus – II

Ref: ASTU/Finance/NEC/2020/48/8790 dated 14/03/2023 (copy enclosed)

Sir,

Greetings from Assam Science and Technology University!!

I am forwarding herewith the proposal submitted to North Eastern Council vide this office letter No. ASTU/Finance/NEC/2020/48/8790 dated 14/03/2023 towards submission of Concept Paper for augmenting Academic Infrastructure Development of ASTU Campus – II at Tetelia Road, Jalukbari, Guwahati-781013, Assam to cope up with the NEP 2020 challenges and to benefit the North – East region, this proposal is initiated.

The objective and the estimated cost of the project along with the justification has been enclosed for your ready reference. The funding support will help to strengthen the research – relevant infrastructure in the field of science and technology to carry out research in north eastern region.

In this regard, I would like to request you for your necessary action favouring financial and Administrative Sanction for the Concept Paper for augmenting Academic Infrastructure Development of ASTU Campus – II for the requirement of fund towards sanction & release of the fund.

Thanking you.

Yours faithfully

NSChaudhari
Vice Chancellor

No. ASTU/Acctt./9(Plan)/12/Vol-VI/ 10259-64 Date: 10/7/2023

Copy to :-

1. The PPS to the Hon'ble Chief Minister, Govt. of Assam, Dispur, Guwahati-781006 with a request to appraise the Hon'ble Chief Minister.
2. The Secretary to the Govt. of Assam, Higher Education, Department, Govt. of Assam, Dispur, Guwahati-781006.
3. The Joint Secretary to the Govt. of Assam, Higher Education (Technical) Department, Govt. of Assam, Dispur, Guwahati-781006.
4. The Secretary, North Eastern Council, NEC Secretariat, Nongrim Hills, Shillong-793003.
5. The HRD section, North Eastern Council, NEC Secretariat, Nongrim Hills, Shillong-793003.
6. Office file.

RECEIVED
Chief Minister's Secretariat
(Link Section)
Dispur, Guwahati-781006
Encls Ref Letter

NSChaudhari
Vice Chancellor

Prof. Narendra S Chaudhari
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Tetelia Road, Near Assam Engineering College, Jalukbari, Guwahati-781013, Assam
Website: www.astu.ac.in

No. ASTU/Finance/NEC/2020/48/8790 Date: 14.03.2023

To : The Secretary
North Eastern Council
NEC secretariat, Nongrim Hills, Shillong-793003

Sub : Request for funding towards submission of Concept Paper for augmenting Academic Infrastructure Development of ASTU Campus – II

Sir,

Greetings from Assam Science and Technology University!!

In inviting to the subject cited above kindly find the concept paper for augmenting Academic Infrastructure Development of ASTU Campus – II at Assam Science and Technology University, Guwahati, Assam.

Assam Science and Technology University (ASTU) is the only Government University in the area of Science and Technology in the North-East region. It is established in 2010. For improvement and strengthening its infrastructure to cope up with the NEP 2020 challenges and to benefit the North – East region, this proposal is initiated.

The objective and the estimated cost of the project along with the justification has been enclosed for your ready reference. The funding support will help to strengthen the research – relevant infrastructure in the field of science and technology to carry out research in north eastern region.

May I, therefore, request you to do the needful at your end for incorporation of the above proposal and release the fund accordingly.

Thanking you.

Yours faithfully

Vice Chancellor

No. ASTU/Finance/NEC/2020/48 Date: 14.03.2023

Copy to :-

1. The HRD Section, North Eastern Council, Shillong for kind information.
2. Office file.

Vice Chancellor

CONCEPT PAPER

<table>
<tr><td>A</td><td>ITEMS</td><td>Detailed Information</td></tr>
<tr><td></td><td colspan="2">General Information about the Project</td></tr>
<tr><td>i.</td><td>Name of Project</td><td>Augmentation of Infrastructure of ASTU Campus – II</td></tr>
<tr><td>ii.</td><td>Objectives of the Project</td><td>The main objectives of the project is to fill up the academic infrastructure gap with the other State Universities of Assam by augmenting the infrastructure development for inter disciplinary research Centre, Library and Guest House, hostels, Quarter academic persons and officers, water treatment plan, solar lighting system for street and campus, Bio – diversity park etc. in the permanent site measuring 15B-2K- 0L covered by Dag No.380 and land measuring 21B-2K-10L covered by Dag No.382, (total being 36B-4K-10L) of village Maj Jalukbari under Jalukbari mouza as allotted by Govt. of Assam letter No. KRS.651/2019/1648-49/A dated 17.11.2022 (copy enclosed)</td></tr>
<tr><td>iii.</td><td>Estimated cost of project.</td><td>
<table>
<tr><td>Title</td><td>Drg. No</td><td>Cost in Rs. (crore)(approx.)</td></tr>
<tr><td colspan="3">Sector - 1</td></tr>
<tr><td>Academic Block of Sector -I</td><td>ASTU/ACADEMIC BLOCK/01</td><td rowspan="5">Rs. 91 crore</td></tr>
<tr><td>Academic Block of Sector - I</td><td>ASTU/ACADEMIC BLOCK/02</td></tr>
<tr><td>Academic Block and Workshop of Sector – I</td><td>ASTU/ACADEMIC BLOCK/03</td></tr>
<tr><td>Boys Hostel of Sector – I</td><td>ASTU/B.H./SEC-1/01</td></tr>
<tr><td>Girls Hostel of Sector - I</td><td>ASTU/G.H./SEC-1/01</td></tr>
<tr><td>Sector - 2</td><td></td><td></td></tr>
<tr><td>Residential Building of Sector - II</td><td>ASTU/RESIDENTIAL BUILDING/01</td><td rowspan="2">Rs. 49 crore</td></tr>
<tr><td>Residential Building of Sector - II</td><td>ASTU/RESIDENTIAL BUILDING/02</td></tr>
<tr><td>Total</td><td></td><td>Rs. 140 crore (approx.)</td></tr>
</table>
</td></tr>
<tr><td>iv.</td><td>Indicate sources and shares of funding (NEC, State share and other sources wherever applicable).</td><td>(100% NEC Funding is sought)</td></tr>
<tr><td>v.</td><td>Availability of land and land size. Indicate clearly whether owned by Govt./leased/ donated/ community owned etc.</td><td>1) 15B-2K- 0L covered by Dag No.380 and
2) 21B-2K-10L covered by Dag No.382,
Total : 36B-4K-10L of village Maj Jalukbari under Jalukbari mouza as allotted by Govt. of Assam letter No. KRS.651/2019/1648-49/A dated 17.11.2022. (attached sketch of the proposed projects)
In addition to existing 10 bighas of land in Jalukbari mouza as allotted by Govt. of Assam letter No. ATE.221/2011/28-A dated 22.06.2023.(attached sketch of the completed projects)</td></tr>
<tr><td>vi.</td><td>Location of project.</td><td>N-26.141244485582874, E-91.66697329367977 at the address: Assam Science and Technology University, Tetelia Road, Jalukbari, Guwahati-781013.</td></tr>
</table>

vii.	Name of District and Sub- Divisional/ Block where proposed project will be located.	Kamrup Metro District, Sub-Division : Guwahati
viii.	Proposing/ implementing Department.	Assam Science and Technology University (A State University of Government of Assam constituted by "Assam Science and Technology University Act, 2009")
ix.	Name of the executing Department/ Agency.	Assam Science and Technology University (A State University of Government of Assam constituted by "Assam Science and Technology University Act, 2009")
x.	Whether the project falls within the Thrust Area of NEC, vision 2020 or Working Group recommendation, Specify.	Yes, Thrust Areas identified in the NER Vision 2020 document, and Working Group recommendations for setting up of separate university for science and technology in Five Year Plans of Govt. of India agenda.
xi.	If project is of regional nature, give name of states which would also	Assam
xii.	If State specific project, give reasons why it cannot be funded from State Plan.	The Assam Science and Technology University is registered under section 2(f) of UGC Act, 1956. Therefore, the University is not getting central assistance/UGC Funding. Moreover, State Government support is also in appropriate to develop this infrastructure. Hence, a suitable package from NEC is sought for.

	ITEMS	**Detailed Information**
xiii.	If project is covered under any CSS/ Central scheme, name the CSS/ Central scheme and give reasons why funding has not been obtained /sought from	NA
xiv.	Give details of synergy built into the State schemes/CSS /CS built into the project. If not, State why.	NA
xv,	Give details of synergy built into the project with other Govt. schemes (e.g. technical and professional assistance).	NA
xvi.	Give details of the existing infrastructure and facilities available in the proposed project location and also in the district and sub-division/ block.	List of the infrastructure in 10 bighas plot of land (in Jalukbari mouza as allotted by Govt. of Assam letter No. ATE.221/2011/28-A dated 22.06.2023) is presented in Annexure I.
B	**Justification/Rationale for the Project**	
i	State the nature and magnitude of the problem faced or the potential to be tapped. Elaborate the problems to be addressed or benefits that will accrue through the project. For social infrastructure project, also give the baseline of socio-economic parameters/ indicates to justify the proposal.	• Promoting external collaboration to boost research and innovation by providing infrastructure to accommodate visiting academicians and researchers. • For security of the Campus. • In preparation of the master plan the density of population within the campus and intensity of development has been considered. • Hierarchy of roads has been considered.

<table>
<tr><td></td><td></td><td>

Topography of the site has been studied and natural drainage system suggested. (ref site analysis)
Adequate vehicular & pedestrian access has been provided.
Land has been reserved for open landscape spaces including space for parking, parks & playground and exclusive area for existing oil pipeline network.
Adequate space for social & physical infrastructure has been provided.
A plot shape and sizes have been considered to permit consolidation.
Accessibility standards and GMDA byelaws (amended 2020) have been adhered to for campus planning (Public & Semi- Public and Educational zone usage), Allowable FAR 1.75 and Allowable Ground coverage 30%.
Building design is such that it can hold cutting edge research & development facilities.
Introduction Eco-park park with sustainable plantations, medicinal plants, natural aquatic cultures, waterbody, greenhouse and floriculture.
Rain water harvesting / Ground water recharging.
Cleaning and desilting of inflow and outflow feeder channels to and from the waterbody to maintain the water quality and quantity.
All building blocks shall have its individual Wet risers fitted with instantaneous landing valves, Hose reels, RRL Hose Pipes with Short Branch pipes connected to the campus hydrant ring as well as manual call points with addressing facility for pin point location in a campus area for prompt identification.

</td></tr>
<tr><td>ii</td><td>The development objectives proposed to be achieved.</td><td>Promoting research, innovation and entrepreneurship in identified thrust areas.
Establishment of research activity and development of a data bank for natural resources.</td></tr>
<tr><td>iii</td><td>Indicate the sections and number of population</td><td>Section: Science and Technology
Number of students enrolled college wise for academic session 2022-23:
<table>
<tr><th>Sl. No.</th><th>College Name</th><th>No. of Students</th></tr>
<tr><td>1</td><td>Assam Engineering College</td><td>571</td></tr>
<tr><td>2</td><td>Jorhat Engineering College</td><td>415</td></tr>
<tr><td>3</td><td>Jorhat Institute of Science and Technology</td><td>391</td></tr>
<tr><td>4</td><td>Bineswar Brahma Engineering College</td><td>211</td></tr>
<tr><td>5</td><td>Barak Valley Engineering College</td><td>207</td></tr>
<tr><td>6</td><td>Golaghat Engineering College</td><td>175</td></tr>
<tr><td>7</td><td>Dhemaji Engineering College</td><td>146</td></tr>
<tr><td>8</td><td>Netes Institute of Technology and Science, MIRZA</td><td>27</td></tr>
</table>
</td></tr>
</table>

		9	Girijanada Chowdhury Institute of Management and Technology, zaraA	353
		10	Girijanada Chowdhury Institute of Pharmaceutical Science, Azara	144
		11	Guwahati College of Architecture	13
		12	Assam Institute of Management	42
		13	Netes Institute of Pharmaceutical Science	96
		14	Assam Science and Technology University	13
		15	NERIM GHY	4
		16	Scholars Institute of Technology and Management	145
		17	Pratiksha Institute of Pharmaceutical Science	45
		18	NERIWALM	12
		19	PUB KAMRUP College	63
		20	Rahman Institute of Pharmaceutical Sciences and Research	58
		21	CT COLLEGE	27
		22	Girijanada Chowdhury Institute of Pharmaceutical Science, Tezpur	63
		23	North East Institute of Management and Science, Jorhat	31
		24	SILAPATHAR Science College	25
		25	National Institute of Electronics & Information Technology, Guwahati	25
		26	DHSK College, Dibrugargh	21
		27	TOCKLAI Tea Research Institute	39
		28	DONA International Institute of Assam	4
		29	DAFFODIL College of Horticulture	10
		30	Seva Bharati Purbanchal (Seva Bharati Institute of Fire, Safety and Disaster Management)	10

	ITEMS	**Detailed Information**
iv	For income generating activities/ skill development, indicate the number of beneficiaries targeted and the methodology for selection of beneficiaries. Indicate Nos. of female and male beneficiaries separately.	NA
C.	**Project description & Main Activities.**	
i	Sector under which project is proposed	Science and Technology
ii	Project description (provide a brief write up on the project).	The Assam Science and Technology University (ASTU) is located in Tetelia, Guwahati, Assam. The ASTU a land measuring approximately 45 Bighas (6.03 hectares) as mentioned earlier, becomes a very important specifically being adjacent to a designated Ramsar Site, the Deepor Beel for being the habitat of exotic aqua-flora, auafauna and avifauna of migratory nature. The significance of Deepor Beel, being a store house of ecological assets, is well established worldwide. It therefore becomes mandatory on part of the government to

		ensure protection of such ecological assets, and the onus lies with the neighborhood establishments and dwellers. It is therefore only right that the ASTU, takes the initiative not only to preserve but also to support the process of natural regeneration of the ecological assets with the perception of perpetual sustainability. Sustainability must take into account not only the environmental aspects but also economic aspects and man nature interaction which becomes very significant in achieving the balance while designing the architectural vocabulary.
iii	Project component and Estimated cost.	As mentioned above in point no. A (iii)
iv	List out basic indicates for measuring education.	NA

D.	**Physical details**	
	Year-wise phasing & time frame for completion	Phasing of physical target is 3 years as indicated below: of Project.

	Year	Physical
Phased -I	2023-24	30%
Phase-II	2024-25	40 %
Phase- III	2025-26	30%
Total		100 %

E.	**Financial details**	
	Year-wise phasing	Phasing of financial target is 3 years as indicated below:-

	Year	Physical	Amount (Rs.)
Phased -I	2023-24	30% of Rs. 140 crore	42 crore
Phase-II	2024-25	40 % of Rs.140 crore	56 crore
Phase- III	2025-26	30% of Rs.140 crore	42 crore
Total		100 % of Rs.140 crore	140 crore

F.	Indicate if any statutory clearances including Forest and Environmental Clearances etc. are required.	No clearance from forest & environment Department is required as the Project itself is a surface flow diversion scheme requiring no storage reservoir in the upstream section of the project. Besides adequate measures for soil erosion control has been provided in the upstream or downstream of the weir forestation have been provided in the project.

Registrar
Assam Science and Technology University

Finance (& Accounts) Officer
Assam Science and Technology University

Vice Chancellor
Assam Science and Technology University

List of the infrastructure in 10 bighas plot of land (in Jalukbari mouza as allotted by Govt. of Assam letter No. ATE.221/2011/28-A dated 22.06.2023)

				
Administrative Building	**Academic Block**	**Annex Building**	**Evaluation Building**	**School of Engineering**
				
Seminar Cum Guest House Building	**VC Residence**	**Conference Hall**	**Canteen**	**Container**
				
Waste Management Disposal Plant	**IC Engine Research Hub**	**Security Room**	**D G Installation**	**Research Laboratory**

Natural Water Resever Pond

SECTION I

1. Introduction:

PROFILE OF THE UNIVERSITY

1	**a. Name and complete address of the University including Pin Code**		Assam Science and Technology University, Guwahati, Assam
	b. Campus with address:		Tetelia Road, Near Assam Engineering College, Jalukbari, Kamrup (M), Guwahati, Assam, PIN: 781013
	c. Website address		https://astu.ac.in/
	d. Nature of the University		Provide Affiliation, In house interdisciplinary courses, Established research infrastructure to carryout research activities.
2	**Status of the University**		Registered under section 2(f) of the UGC Act, 1956.
3	**Name of the Vice Chancellor**		Prof. Narendra S Chaudhari
	Phone number	**Office**	0361-2732002 / 8811079300
		Residence	+91-9981439671
		Fax	0361- 2632079 (P.P)
	E- Mail address		vc@astu.ac.in / nsc0183@yahoo.com
4	**Year of Establishment**		2011
5	**Administrative Information (as on 31.03.2014)**		
	a. Whether situated in urban/ rural/ backward/ small town/ tribal/ hilly/ border area: (Yes/No) (Please indicate the total population of the town.)		**Yes** **Population above 15 lacs**

	b. Whether there is a planning accredited by NAAC or NBA (Yes/No)	**Yes**
	c. Whether eligible for re-accreditation, if yes, whether reaccredited by NAAC, if so the ranking.	**Yes, Process is going on.**
	d. Actual office hours in last 3 years	**09:30 A.M. – 05:00 P.M.**
	e. Is University following norms of 40 hours of workload per week, if yes, the percentage of faculty/Supporting Staff having workload of 40 hours per week	**Yes, 100%**
	f. Is the University following UGC/AICTE code of Professional Ethics? (Y/N)	**Yes**
	g. Is the University maintaining Annual Performance Appraisal of employees?	**Yes**
	h. Is the University getting maintenance grant from Central/State Government (please indicate the Source.)	**State Government** **(Capital & Revenue Budget)**
	i. Proposed Teaching : Non Teaching ratio	**1:4**
	j. Proposed Teacher: Student ratio	**1:10**

Introduction:

Assam Science and Technology University is established on 4th January, 2010 by the Act, 2009 and notified by the Govt. of Assam vide letter No. ATE.222/2008/48, dated 26th Feb, 2010 that the "Assam Science and Technology University Act 2009" shall come into force with immediate effect. It aims to provide education and research in the field of science & technology and other professional courses in Assam. ASTU is the premier and only technical university in the North Eastern Region of India. The university is responsible for academic regulation of all undergraduate and post-graduate programs in engineering, and pharmaceutical sciences and a few professional courses in science and management sectors.

1.1 Status of Affiliation:

All the Engineering colleges (Govt and private) of entire Assam state are affiliated under the University. Apart from the engineering colleges, few Basic Science, Pharmaceutical science and management colleges of Assam are also under ASTU.

Since its inception, ASTU has been undertaking high quality teaching and research in frontier areas of science & technology continuously upgrading the syllabi and creating environment for international standard research and emphasizing in bridging the ancient wisdom of the region with modern technology. The course curriculum has been designed at par with some of the prestigious universities of National and International repute.

1.2 Location of Assam Science and Technology University:

The permanent campus of the university is located at Tetelia Road, Near Assam Engineering Colege, Jalukbari, Guwahati, Assam 781013. The University is located in a naturally beautifully location at the bank of Deepor Beel (26.1407° N, 91.6673° E) which is a permanent freshwater lake, in a former channel of the Brahmaputra River, to the south of the main river. The distance of the university from LGB International Airport, Guwahti is around 15.0 km and from Paltan Bazar railway station is around 12.0 km.

SECTION II

2. VISION AND MISSION OF ASTU THE UNIVERSITY FOR THE NEXT FIVE YEARS

2.1 Vision of the University:

Assam Science and Technology University has been established with a vision to

- Give synchronized strategic and operational leadership to science & technical education of Assam through a unified structure.
- Create state of the art infrastructure and train excellent academic personnel to be with the international peers.

2.2 Mission of the University:

With the vision in mind the university put forward the mission to

(a) organize undergraduate and post-graduate programs in basic and applied sciences, engineering, and technology and in such other branches of knowledge as the University may deem fit, especially with a view to producing scientists, technologists and managers of a high calibre, capable of contributing towards not only for the growth of academic institutions but also for the development of industries based on modern technologies.

(b) develop centres of excellence for higher studies and research in basic and applied sciences, engineering, technology and management education.

(c) organize distance education programs.

(d) organize continuing education programs for updating the knowledge and skills of working professionals.

(e) organize and offer consultancy services to the industry and other organisations desiring such assistance.

(f) undertake such other activities as may be necessary, to fulfil the mission of sustaining the emerging areas of science and technology. The teaching staff would include, beside the core faculty, visiting faculty, faculty members and distinguished visitors from the industry and front line academic and research institutes of country and abroad. In addition, there will be doctoral fellows attached to the University.

(g) **have an IRC (Inter disciplinary research centre**), which include different researcher both from academic (Engineering and Science) and people from industries. Student can also be enrolled for PhD programme in this centre.

(h) have an International Centre to organise national and international seminars, as well as, conferences and lectures by International experts in different fields of science and technology.

(i) organise appropriate programs to generate resources for development of the university.

2.3. Existing Research Infrastructure of Assam Science and Technology University:

To improve the quality of education, ASTU has initiated different research activities in frontier areas of Science and Technology. ASTU has successfully completed the TEQIP III project of World bank and MHRD, New Delhi. Under the project, ASTU has established a Central Research Hub at university campus. The ASTU Central Research Hub (CRH) was initiated in 2018 under the TEQIP-III, MHRD. It aims to create the best possible environment with state-of-the-art facilities for research and innovation to flourish within the region. Under the Centre, four different laboratories namely Multi-Disciplinary Experimental and Testing Accessible Laboratory, Energy laboratory, Material science laboratory, Tribology

laboratory and Computational Laboratory are already established under the TEQIP III project. In Multi-Disciplinary Experimental and Testing Accessible Laboratory, different R & D works related to the industrial plasma technology are under progressed. The university has established a plasma pyrolysis laboratory for safe disposal of municipal solid waste and to study the potentiality of the MSW for energy conversion. Some images of the existing R&D facilities at ASTU are shown below;

In addition to the above works, the university has planned to start some research activity on "Weather Study and Simulation for Rivers". For successful completion and review the research activities, a Consultative Research Committee (CRC) has been already formed by the university. The university has planned to start some joint research activities with some Nationally and Internationally expert research group in near future. A good number of MoU has signed by the university with different national and international organizations. Four experienced faculty members are appointed for planning and execute the different R&D activities of CRH.

2.3. Degree and courses offered by Assam Science and Technology University :

The University has started its undergraduate and post graduate programs in its affiliated colleges. The details of the programs are as

List of Undergraduate Engineering Courses:

1. Mechanical Engineering
2. Chemical Engineering
3. Civil Engineering
4. Computer Science and Engineering
5. Electrical Engineering
6. Electronics and Communication Engineering
7. Electronics and Telecommunication Engineering
8. Instrumentation Engineering
9. Industrial and Production Engineering
10. Power Electronics and Instrumentation Engineering
11. Electrical and Electronics Engineering

List of Post Graduate Engineering Courses:

1. M.Tech in Computer Science and Engineering
2. M.Tech in Electronics and Communication Engineering
3. M.Tech in Instrumentation and Control Engineering
4. M.Tech in Thermal and Fluid Engineering
5. M.Tech in Civil Engineering (Water Resources and Engineering)
6. M.Tech in Civil Engineering (Geotechnical Engineering)
7. M.Tech in Electrical Engineering (Power System)
8. M.Tech in Electrical Engineering (Instrumentation and Control Engineering)
9. M.Tech in Mechanical Engineering
10. M.Tech in Energy Engineering
11. M.Tech in Water Resources Management

Other Undergraduate Courses:

1. Bachelor of Architecture (B.Arch)
2. Bachelor of Computer Application (BCA)
3. Bachelor of Business Administration (BBA)
4. Bachelor of Pharmacy (B.Pharm)
5. Bachelor of Pharmacy (B.Pharm) Practice
6. Bachelor of Science in Physics
7. Bachelor of Science in Chemistry
8. Bachelor of Science in Zoology
9. Bachelor of Science in Mathematics
10. Bachelor of Science in Information Technology
11. Bachelor of Science in Applied Physics
12. Bachelor of Science in Computer Science
13. Bachelor of Science in Electronic Science
14. Bachelor of Tourism Management
15. Bachelor of Science (Hons) in Horticulture

Other Postgraduate Courses:

1. Master of Business Administration (MBA)
2. Master of Computer Application(MCA)
3. M.Pharm in Pharmaceutics
4. Master of Planning (M.Plan)
5. M.Tech in Water Resources Management
6. MSc in Computer Science,
7. MSc in Physics
8. MSc in Mathematics
9. MSc in Chemistry
10. MSc in Zoology
11. MSc in Applied Physics
12. MBA Trimester
13. M.Voc in Software Design
14. M.Voc in Food Processing
15. Master of Tourism Management
16. Integrated M.Sc in Bio Physics
17. M.Pharm in Pharmacology
18. M.Pharm in Pharmaceutical Chemistry

Diploma Courses:

1. Diploma in Pharmacy
2. Diploma in Tea Management
3. Advance Diploma in Occupational Safety, Health & Environment

Doctoral Programmes:

1. Ph.D in Computer Science and Engineering
2. Ph.D in Electronics and Communication Engineering
3. Ph.D in Mechanical Engineering
4. Ph.D in Instrumentation Engineering
5. Ph.D in Electrical Engineering
6. Ph.D in Civil Engineering
7. Ph.D in Computer Application
8. Ph.D in Business Administration
9. Ph.D in Mathematics
10. PhD in Chemistry
11. PhD in Pharmacy

****Ph.D:**

Minimum Three years (full time) --- Course work and research.
Minimum Five Years (part time) ---- Course work and research.
Full time employee from Academic institution and Industries (sponsored candidates) only.

The entry qualification and the period of the programme of these courses will be as per AICTE/UGC as notified from time to time.

List of Courses in Affiliated colleges under Assam Science and Technology University

1. Girijananda Chowdhury Institute of Management and Technology, Guwahati

Under Graduate Courses		
Sl No	Branches	Intake
1	B.Tech in Mechanical Engineering	60
2	B.Tech in Civil Engineering	60
3	B.Tech in Electrical Engineering	30
4	B.Tech in Computer Science and Engineering	60
5	B.Tech in Electronics and Communication Engineering	30
6	Bachelor of Computer Application	45
7	BBA	60
8	B.Sc in Physics	30
9	B.Sc in Chemistry	30
10	B.Sc in Mathematics	30
Post Graduate courses		
Sl No	Branches	Intake
1	M.Tech in Computer Science and Engineering	18
2	M.Tech in Electronics and Communication Engineering	9
3	M.Tech in Thermal and Fluid Engineering	18
4	MBA	60
5	MCA	30
1	Ph.D (CSE, ME, ECE, Business Administration)	

2. Girijananda Chowdhury Institute of Pharmaceutical Science - Azara

Courses		
Sl No	Branches	Intake
1	B.Pharm	100
2	M.Pharm	15
3	D.Pharm	60
4	B.Pharm (Practice)	40
5	M.Pharm in Pharmacology	15
6	M.Pharm in Pharmaceutical Chemistry	15
7	PhD Pharmacy	

3. **Guwahati College of Architecture and Planning**

Courses		
Sl No	Branches	Intake
1	B. Arch	40
3	M. Plan	20

4. **Assam Institute of Management, Guwahati**
   a) MBA – Intake 70 Nos
   b) PhD

5. **NERIM Guwahati**
   a) MSc in Computer Science – Intake 60 numbers

6. **NERIM Mangaldai**
   a) BSc in Zoology – Intake 30 Nos
   b) BSc in Physics – Intake 30 Nos
   c) BSc in Chemistry – Intake 30 Nos

7. **Bineswar Brahma Engineering College (BBEC), Kokrajhar**
   a) B.Tech in Chemical Engineering - Intake 60 Nos
   b) B.Tech in Electrical Engineering – Intake 60 Nos
   c) B.Tech in Civil Engineering - Intake 60 Nos
   d) B.Tech in Mechanical Engineering - Intake 60 Nos

8. **Netes Institute of Pharmaceutical Science (NIPS)**
   a. B.Pharm – Intake 60 Nos
   b. M.Pharm Pharmacology
   c. M.Pharm Pharmacognosy
   d. M.Pharm Pharmaceutical Chemistry
   e. M.Pharm Pharmaceutics

9. **Pratiksha Institute of Pharmaceutical Science**
   a. B.Pharm - 60 numbers

10. **Assam Engineering College**
    a. Civil Engineering - 90
    b. Mechanical Engineering - 60
    c. Electrical Engineering - 90
    d. Chemical Engineering - 60
    e. Electronics and Telecommunication Engineering - 60

f. Computer Science & Engineering - 20
g. Instrumentation Engineering - 20
h. Industrial & Production Engineering – 20B.TECH TOTAL INTAKE - 420
i. MCA – 30
j. M.Tech (Civil Engineering)- 18+18
k. M.Tech (Electrical Engineering) – 18
l. M.Tech (Mechanical Engineering) – 18M.TECH TOTAL INTAKE - 54

11. Jorhat Engineering College

a. Civil Engineering - 75
b. Mechanical Engineering - 90
c. Electrical Engineering - 60
d. Computer Science & Engineering - 60
e. Instrumentation Engineering– 30B.TECH TOTAL INTAKE - 315
f. MCA – 30
g. M.Tech Civil (Design of Civil Engineering Structure)- 18
h. M.Tech Electrical Engineering (Instrumentation and Control Engineering) – 18
i. M.Tech Mechanical Engineering (Production and Industrial Engineering) – 15
j. PhD (CSE,ME, IE, Civil Engg, EE, MCA) M.TECH TOTAL INTAKE - 52

12. Jorhat Institute of Science and Technology

a. B.TechCivil Engineering - 60
b. B.TechMechanical Engineering – 60
c. B.TechPower Electronics and Instrumentation – 60
d. B.TechETE – 60
e. BSc in Physics - 60
f. BSc in Chemistry - 60
g. BSc in Information Technology - 60
h. BSc in Mathematics - 60
i. MSc in Chemistry - 22
j. MSc in Physics - 20
k. MSc in Mathematics – 30
l. PhD (Mathematics and chemistry)

13. Barak Valley Engineering College

a. B.TechCSE – 60
b. B.TechETE –60
c. B.TechCivil Engineering - 60
d. B.TechMechanical Engineering - 60

14. Scholars Institute of Management and Technology

a. C.E – 120
b. M.E – 120
c. CSE – 60

d. EEE – 60
e. ECE – 60B.TECH TOTAL INTAKE - 420
f. BCA - 40

15. Golaghat Engineering College

a. Civil Engineering - 60
b. Mechanical Engineering - 60
c. Chemical Engineering – 60

16. NERIWALM , Tezpur

a. M.Tech in Water Resources Management -18

17. Rahman Institute of Phamaceutical Sciences and Research (RIPSR)

a. B.Pharm : 60
b. D.Pharm : 60

18. North East Institute of Management Science(NEIMS), Jorhat

a. Master of Social Work (MSW): 30
b. Bachelor of Tourism Management (BTM): 60
c. Master of Tourism Management (MTM): 30

19. Silapathar Science College, Silapathar

a. M.Sc in Botany: 25
b. M.SC in Zoology: 15

20. CT College, Tinsukia

a. BBA: 30
b. BCA:20

21. Daffodil College of Horticulture, Khetri

a. B.Sc in Horticulture: 25

22. Dhemaji Engineering College

a) B.Tech in Civil Engineering
b) B.Tech in Mechanical Engineering
c) B.Tech in Computer Science Engineering

23. National Institute of Electronics and Information Technology (NIELIT), Guwahati

a. BCA: 40
b. M.Sc Computer Science: 20’

24. Pub Kamrup College, BaihataChariali

a. M.Sc in Zoology: 25
b. M.Voc in Food Processing: 15
c. M.Voc in Software Development and System Administration: 30
d. Integrated M.Sc in Biophysics – 20
e. M.Sc in Biophysics - 15
f. M.Sc computer Science – 30
g. M.Sc Physics - 27

25. Girijanada Institute of Pharmaceutical Science – Tezpur

a. D.Pharm – 60
b. B.Pharm– 60

26. DHSK, Dibrugargh

a. M.Sc in Anthropology - 20
b. M.Sc in Mathematics –30

27. Tocklai Tea Research Institute

a. Diploma in Tea management –40

28. NITS Mirza

a. Masters in Hospital Administration – 30

29. Dona International Institute of Assam

a. B.Sc in Interior Design – 40

30. Seva Bharati Purbanchal (Seva Bharati Institute of Fire, Safety and Disaster Management)

a. Advance Diploma in Occupational Safety, Health & Environment– 20

31. National Power Training Institute

a. M.Sc in Power – 18

32. <u>Asian Mission Institute of Pharmaceutical Sciences</u>

a. Diploma in Pharmacy

Concept Document for Assam Science and Technology University (ASTU) Campus II

PROJECT INTRODUCTION AND BACKGROUND

The Assam Science and Technology University was established on 4th January, 2010 by the Act, 2009 and notified by the Govt. of Assam vide letter No. ATE.222/2008/48, dated 26th Feb, 2010 that the Assam Science and Technology University Act 2009 shall come into force with immediate effect.

The aim of ASTU is to bring all existing Engineering Colleges/Institutions in a common platform to follow same course curriculum. The course curriculum has been designed as per guidelines of AICTE and at par with some of the prestigious universities of National and international repute. This will help our students to compete with other students anywhere.

The aims of the University are:

1. To Provide for instructions and research through its affiliated colleges and institutions, in the science technology education and other professional subjects and in other spheres of learning and knowledge of a standard and thoroughness required and expected of a University of the highest standing, and to secure the advancement, diffusion and extension of knowledge in all sphere of learning.
2. To hold examinations and to grant and confer degrees, diplomas, certificates or other academic distinctions and to deprive of any degrees, diplomas, certificate or distinctions previously granted to or conferred upon them by the University for good and sufficient causes.
3. To institute and award fellowships, scholarships, exhibitions and prizes.
4. To affiliate and recognize colleges imparting education of the line of study as mentioned in point no 1 and to withdraw any such recognition or affiliation as the case may be.
5. To regulate and enforce discipline among employees of the University and to take such discipline measures in this regards as may be deemed necessary.
6. To determine and provide for examinations for admission into the colleges affiliated to the University.
7. To affiliate with it or admit to any of its privileges or to recognize for any purpose either in whole or in part, any college or institution or members or student thereof, on such terms and conditions as may from time to time, be prescribed, and to withdraw such affiliation, privileges and recognition previously granted, for good and sufficient reasons.
8. To co-operate with any other University, Authority or Association or any other Public or Private body having in view the promotion of purposes and objects similar to those of the University to act upon any such body, Authority or Association for such purposes as may be agreed upon, on such terms and conditions as may, from time to time, be prescribed
9. Demand receive payment of such fees and other charges as may be prescribed from time to time.
10. To acquire, hold, manage and dispose of any property movable or immovable, including must or endowed property within or outside the University area, for the purposes or objects of the University, and to invest any funds representing such property in such manners as the university thinks fit.
11. To borrow the approval of State Government, on the security of the University property, money for the purposes of the university.

Concept Document for Assam Science and Technology University (ASTU) Campus II

VISION OF THE ASTU CAMPUS II DEVELOPMENT

The vision envisaged for the proposed development for the Assam Science and technology University Campus, Guwahati, Assam are stated below:

I. Introduction of cutting edge research & development facilities.

II. To make optimum utilization of the north-eastern regions natural resources by protecting the environment.

III. Introduction of Bio-diversity Park / Eco Park with native and naturalized plantations, medicinal plants, natural aquatic cultures, mini bird sanctuary, data bank for Natural resources.

IV. Rain water harvesting/ Ground water recharging.

V. 1eMW capacity solar harvesting firm (Grid connection and roof).

VI. Introductory courses and research facilities in the field of

a) Engineering and Technology

b) Agri-business (Food processing, preservation, marketing, logistics etc)

c) Mini IT park

d) Forensic Science

e) Pharmacology

f) Livestock managements etc.

VII. Creating a campus vocabulary that will be visually pleasing and at the same time will blend with the campus surrounding and environment.

The overall vision envisaged is to convert opportunity to reality, and to tackle the pitfalls inherent in the process, the north eastern region requires an efficient and wide pool of specialized human resources. The proposed University of Science and Technology will achieve these goals through resource development, by providing specialized M, Tech programmes, making possible advanced research activity, and by stringent regulation of technical education and training in its affiliated colleges and institution.

SUMMARY OF PROJECT

2.1 SITE: Regional Context

Figure 1: Administrative Map of Assam

Figure 2: Assam Science and Technology University campus location in Guwahati

The North Eastern Region forms a distinctive geographical zone in the country, and is Unique in its physical base with plans, plateaus, mountains and hills, a treasure house of biodiversity and home to more than 225 tribal communities. Though the region is endowed with abundant natural resources, it is still economically backward and industrial development is very limited. The State of Assam is the gateway to North-Eastern part of India and is located south of the eastern Himalayas.

The administrative and district map illustrates Guwahati (Pragjyotishpura in ancient Assam) being the largest city of Assam and also the largest urban area in North-east India. A major riverine port city and one of the fastest growing cities in India, Guwahati is situated on the south bank of the Brahmaputra. Dispur, the capital of Assam, is in the circuit city region located within Guwahati and is the seat of the Government of Assam. The Guwahati Municipal Corporation(GMC), the city's local government, administers an area of 328 square kilometres, while the Guwahati Metropolitan Development Authority (GMDA) is the planning and development body of greater Guwahati Metropolitan Area.

In recent times, many private engineering colleges have been established in Assam, primarily to arrest the flight of students from the region to institutions in other states search of technical education. But these technical institutes urgently need proper regulation by a competent Technical University and modern infrastructure to cater to cutting edge research and development facilities.

The few of the educational institutions functioning in Guwahati are:

- The Gauhati University
- Assam Science and Technology University
- Cotton University
- Srimanta Sankaradeva University of Health Sciences

Figure 3: Site proximity to Deepor Beel

Figure 4: Location of Site (ASTU Campus –II)

The Assam Science and Technology University is located in Tetelia, Guwahati, Assam. **The Assam Science and Technology University** (ASTU) a land measuring approximately 45 Bighas (6.03 hectares) as mentioned earlier, becomes a very important specifically being adjacent to a designated **Ramsar Site**, the Deepor Beel, for being the habitat of exotic aqua-flora, aquafauna and avifauna of migratory nature.

The significance of **Deepor Beel**, being a store house of **ecological assets**, is well established worldwide. It therefore becomes mandatory on part of the government to ensure protection of

such ecological assets, and the onus lies with the neighbourhood establishments and dwellers. It is therefore only right that the Assam Science and Technology University, takes the initiative not only to preserve but also to support the process of natural regeneration of the ecological assets with the perception of perpetual sustainability. Sustainability must take into account not only the environmental aspects but also economic aspects and man-nature interaction which becomes very significant in achieving the balance while designing the **architectural vocabulary** with harmony with nature.

SITE: Background

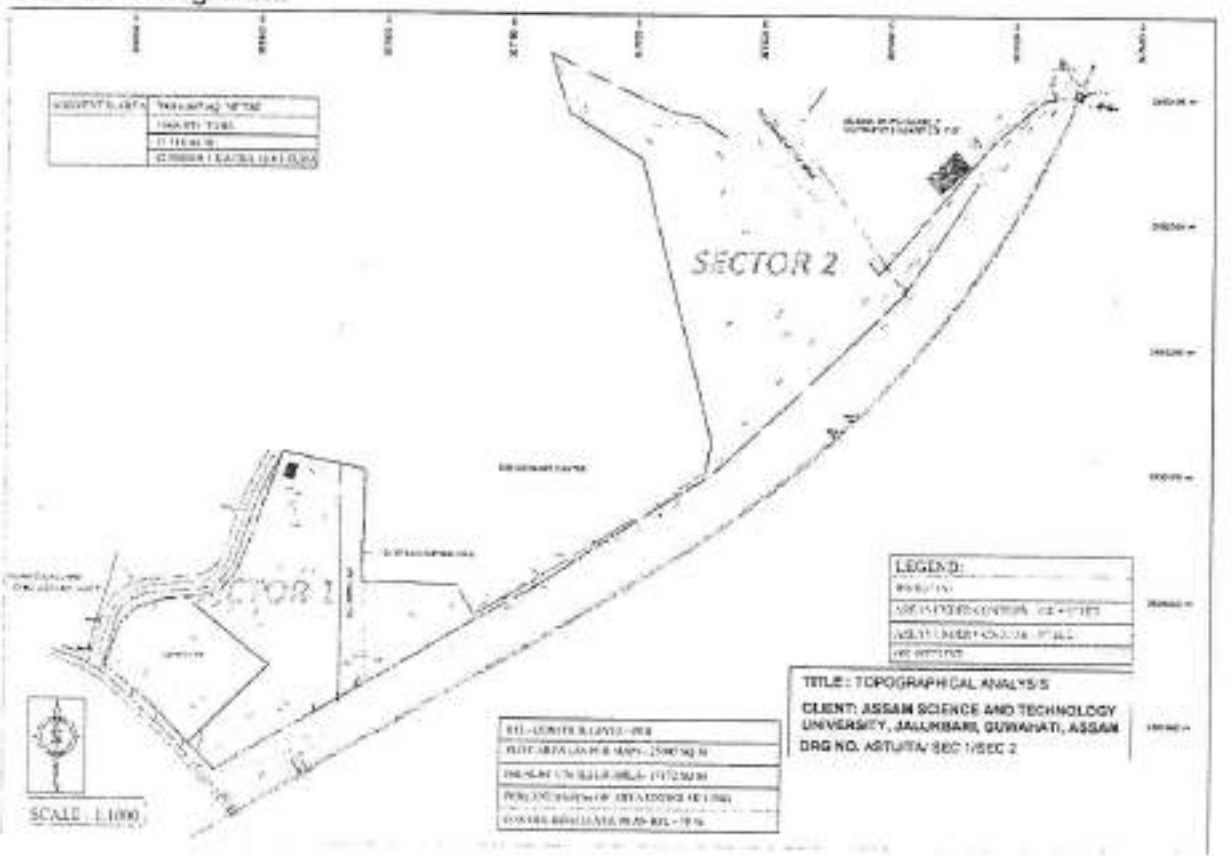


Figure 5: Site Topography analysis ((Refer attached drawing No 11. ASTU/ TA /SEC 1/SEC 2 in Chapter 9)

The total available land area for the proposed Assam Science and Technology University Campus-II development is around 45 Bighas 5.3 Lessas.= 6.029 HA (as per survey map) The Assam Science and Technology campus is envisaged within two designated development zones (as indicated in the site plan), namely Sector 1 & Sector 2. **Sector 1** covers an area of 19 Bighas 1 Katha 15.68 Lessas and Sector-2 covers an area of 25 Bighas 7.75 Lessas. The campus sectors are both irregular and are connected with a strip of land at the south-eastern portion of the plot which provides a linkage strip between the two sectors. The Connecting linkage strip of land is 3 Kathas 18.6 Lessas.

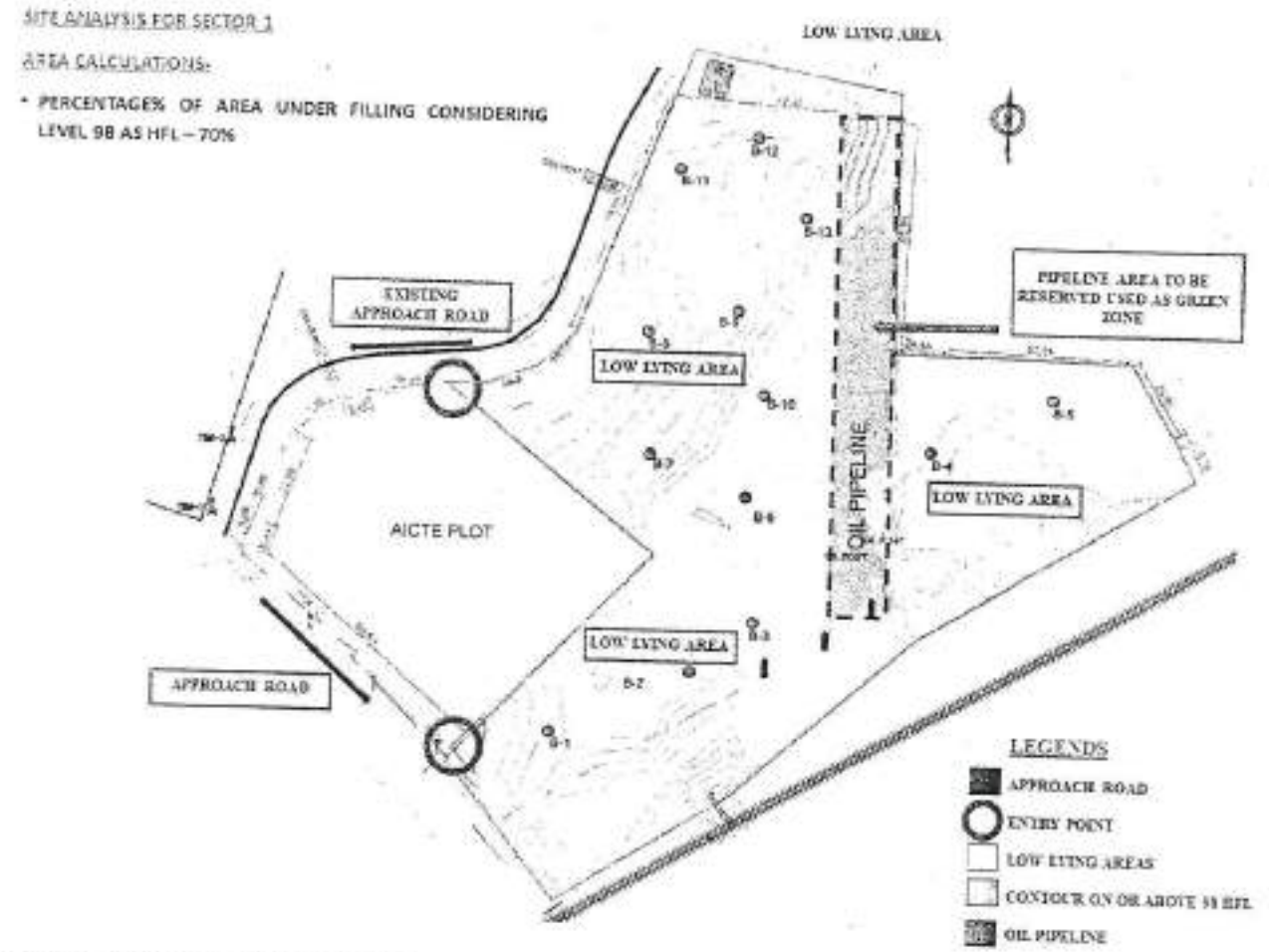


Figure 6: Site Analysis for Sector 1

Both the sites are low lying and swampy which gets flooded during the monsoons. The topography is a mix of low lying and high ground with most site areas being 3-4m below the existing approach road level. It was observed that the approach road to the two sectors of the campus is flooded during the monsoons. One major constraint in the approach in the master plan planning to be considered is that the oil pipeline area is to be a no-construction zone and can be only used as a buffer green zone.

SITE ANALYSIS FOR SECTOR-1 AND SECTOR 2

The site of sector-1 is accessible directly from the main road however sector-2 is approachable only through sector-1. Sector-2 can also be approached from behind the Sanskrit college after the railways have demarcated the new track. Both sites are low lying and require a minimum of average 3m filling. Further the highest flood level is indicated on the existing road level. Hence, additional filling of 1.5m will be required to adequately drain the water from the site to the railway culvert. Water bodies can be created by not filling predominantly in the sector-2. Soil condition: The geotechnical report of nearby site has identified the presence of sandy soil at the site and hence pile foundation are recommended.

SITE PHOTOS

Photo1: Rear approach road

Photo 2: View from AICTE campus with marshy land and railway culvert

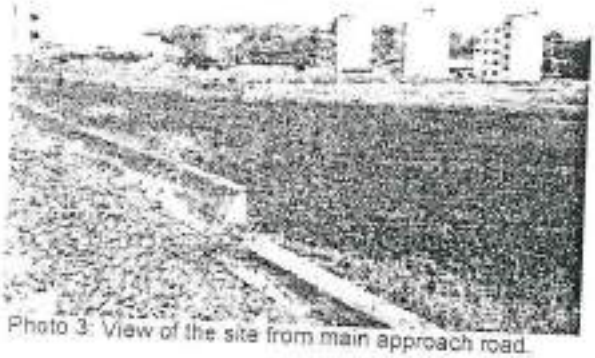


Photo 3: View of the site from main approach road.

Photo 4: view of sector 2

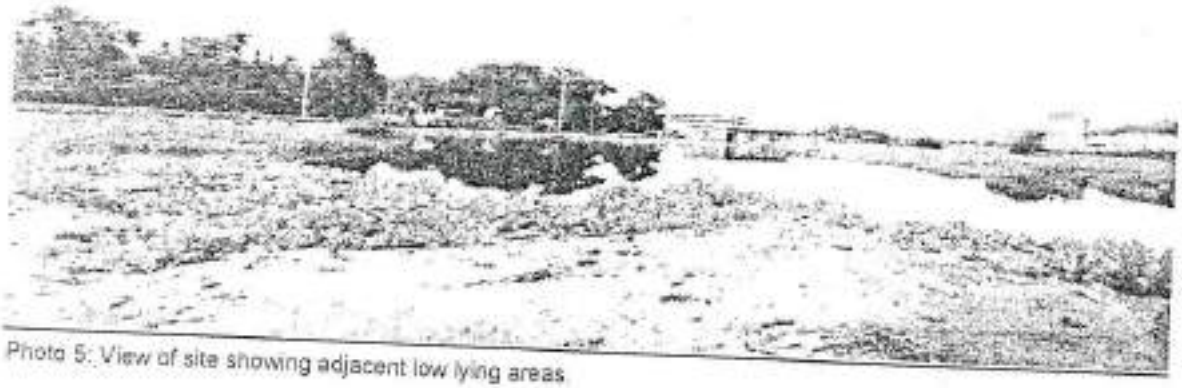


Photo 5: View of site showing adjacent low lying areas

MASTERPLAN DESIGN PROPOSAL

MASTERPLAN CONCEPT AND CRITERIA

The master plan concept has been derived from the principles of neighborhood planning.

A planned campus with a character and vision that would bring about a balance development. The master plan criteria are based in the following:

1. In preparation of the master plan the density of population within the campus and intensity of development has been considered.
2. Hierarchy of roads has been considered.
3. Topography of the site has been studied and natural drainage system suggested.(ref site analysis)
4. Adequate vehicular & pedestrian access has been provided.
5. Land has been reserved for open landscape spaces including space for parking, parks &playground and exclusive area for existing oil pipeline network
6. Adequate space for social & physical infrastructure has been provided.
7. A plot shape and sizes have been considered to permit consolidation.
8. Accessibility standards and GMDA byelaws (amended 2020) have been adhered to for campus planning (Public & Semi- Public and Educational zone usage), Allowable FAR 1.75 and Allowable Ground coverage 30%.
9. Building design is such that it can hold cutting edge research & development facilities.
10. Introduction Eco-park park with sustainable plantations, medicinal plants, natural aquatic cultures, waterbody, greenhouse and floriculture
11. Rain water harvesting/ Ground water recharging.

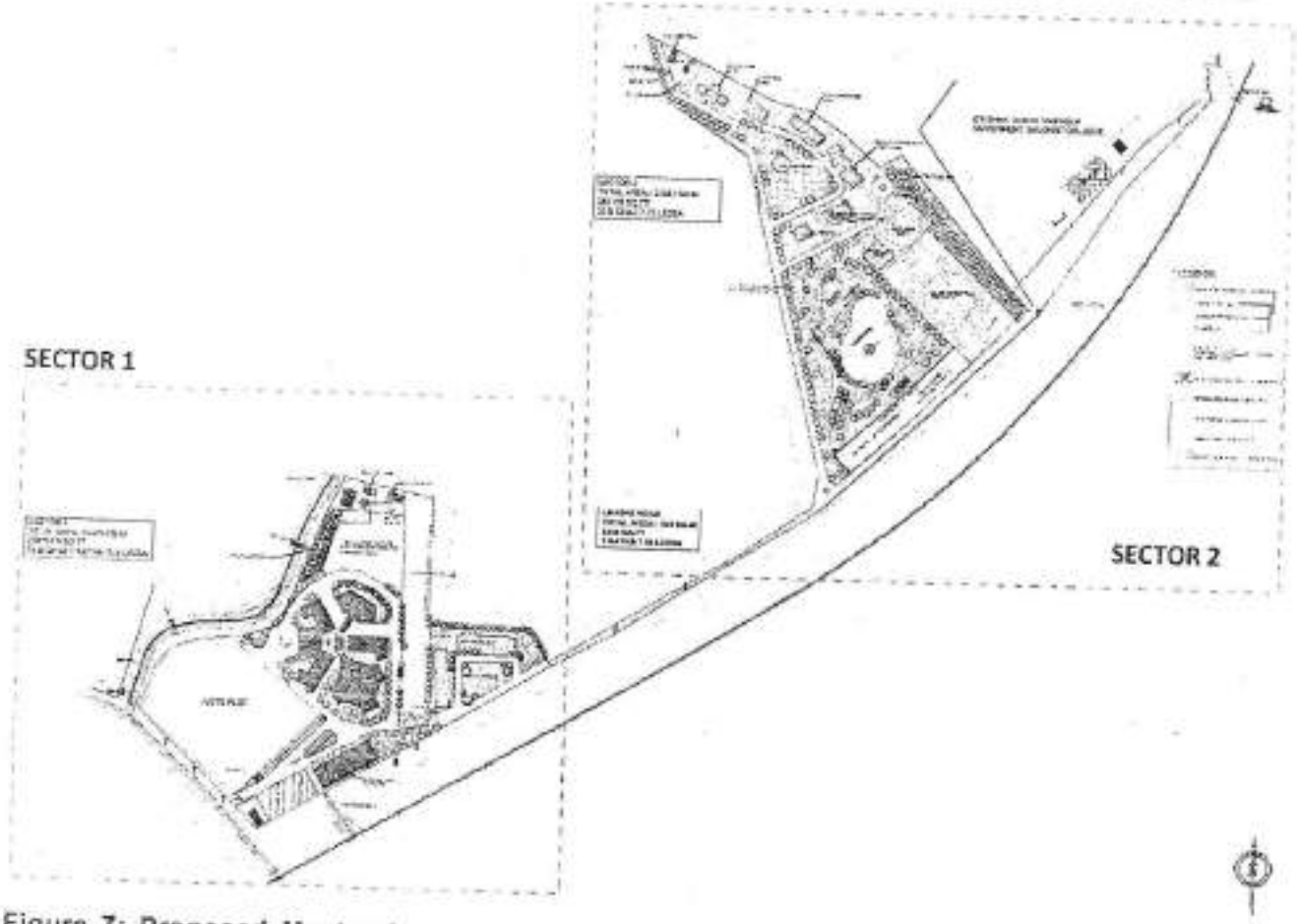


Figure 7: Proposed Masterplan (Refer attached drawing No 10. ASTU/ COMBINED MP/SEC-1/SEC in Chapter 9)

ZONING PLAN FOR SECTOR 1

The proposed zones of Sector-1 of Campus –II, consists of the following: Institutional Zone, Residential Zone, Recreational Zone, Oil pipe line-Green Buffer Zone, Landscaped Zone, Circulation Zone, Parking Zone , Services & other utility Zone, Future expansion and techno park . A peripheral 9m road network connects all the zones.

- **Academic/Institutional zone:** This zone is centrally located within sector 1 and directly approached from the main entrance. This zone is the largest zone comprising of the Academic block, Auditorium, Library, Workshop, and Health care Centre. The institutional zone is designed in one compact building with provision for car parking below the building. This zone is provided with adequate open and landscaped spaces.
- **Residential zone:** This zone is located towards the eastern side of the sector which includes the boys' and girls' hostel building having a capacity of 120 students each. This zone is also provided with adequate social and green infrastructure. The oil pipeline area acts as a buffer green zone between the residential and the institutional zone. This zone is interlinked with a bridge from the institutional zone.

- **Oil pipe line zone:** This zone is exclusively reserved for protection of the oil pipeline. Only

a bridge crossing has been provided towards the southern end of the oil pipeline to connect the interlinking roads and proposed buildings.

- **Services zone**: This zone comprises of the deep tube well, overhead and underground tanks, pump house, firefighting tank, and space for water supply and filtration plant.
- **Waste water treatment zone**: This zone is marked for waste water treatment and rain water harvesting space.
- **Future expansion zone:** This zone has been proposed to accommodate the future expansion of the academic building along with adequate space for a techno-park. The Techno Park will be designed as a *recreation and educative* ground through *landscaping, providing walkways, injecting scientific outlook through incorporation of outdoor educative dynamic science models in form of sculptures* such as models of perpetual motion/machine, conservation of energy, formation of whirlpools, models of renewable energy generation devices etc.
- **Green landscaped zone and open spaces:** This zone covers formal landscape areas, play areas and incidental open spaces.
- **Road and parking zone:** Parking has been provided under the building wherever possible. Additional external parking bays have been exclusively provided within this sector 1.A peripheral 7-9m road network has been provided for interlinking all zones within this sector.

Figure 8: Sector 1- Zoning plan

MASTER PLAN FOR SECTOR 1

The Sector-1 of Campus-II, comprises of an area of 25905sqm/19bighas 1katha 15.6 lessa is accessible from the main road leading to the TISS campus and secondary entry has been provided from the south western portion of the plot. This sector has been provided with academic building, workshop, and hostel for boys and girls, medical centre, service zone for overhead tank, underground tank, water source, and water treatment plant. One portion of the plot has been earmarked for proposed techno - park and space for future expansion. The circular road entry connects all blocks. The oil pipe line area has been earmarked as an exclusive green open space. The site has also been provided with a space for waste water treatment and rain water harvesting. Parking has been provided below the academic building and other off-street parking areas have been provided adjacent to the building. The drainage of the site will be provided to the south eastern side through the railway culvert. Since the area is flood prone and low lying the site earth filling will be considered with a level 1.5m above the existing road level. The plot usage has been provided as per the following chart-

PLOT USAGE: SECTOR-1			
S.No-	Name	Area in sqm.	Percentage (%)
1	Incidental open space	993 sqm.	3.9%
2	Oil line	3176 sqm.	12.2%
3	Road network	5528 sqm.	21.3%
4	Service zone	1277 sqm.	4.9%
5	Parking	680 sqm.	2.6%
6	Formal green (including play area)	5206.5 sqm.	20.0%
7	Built spaces a) Academic + workshop b) Residential building (hostels)	4731 sqm.	18.26%
8	Waste water treatment and rain water harvesting	860 sqm.	3.31%
9	Proposed area for future extension (including medical centre)	3453 sqm.	13.3%

Total plot area of Sector-1 = 25905 sq.m/ 19bigha 1katha 15.68lessa.

Ground coverage = 18.5%

FAR = 0.742

GROUND COVERAGE CALCULATION

SECTOR-1 **PLOT AREA = 25905 SQM.**

S.No-	TITLE OF THE BUILDING	GROUND FLOOR AREA	GRAND TOTAL	GROUND COVERAGE
1	BOY'S HOSTEL & RESEARCH.	527.5 SQM.	4803.0 SQM.	4803.0 X 100 / 25905.0 =18.5 %
2	GIRL'S HOSTEL & RESEARCH.	527.5 SQM.		
3	ACADEMIC BLOCK	2956.0 SQM.		
4	WORKSHOP	792.0 SQM.		

F.A.R. CALCULATION

SECTOR-1 **PLOT AREA = 25905 SQM.**

S.No	TITLE OF THE BUILDING	TOTAL AREA (AFTER DEDUCTION)	GRAND TOTAL	F.A.R
1	BOY'S HOSTEL & RESEARCH.	2973.0 SQM.	19240.0 SQM.	19240.0/25905.0 =0.742
2	GIRL'S HOSTEL & RESEARCH.	2973.0 SQM.		
3	ACADEMIC BLOCK	11796.0 SQM.		
4	WORKSHOP	1498.0 SQM.		

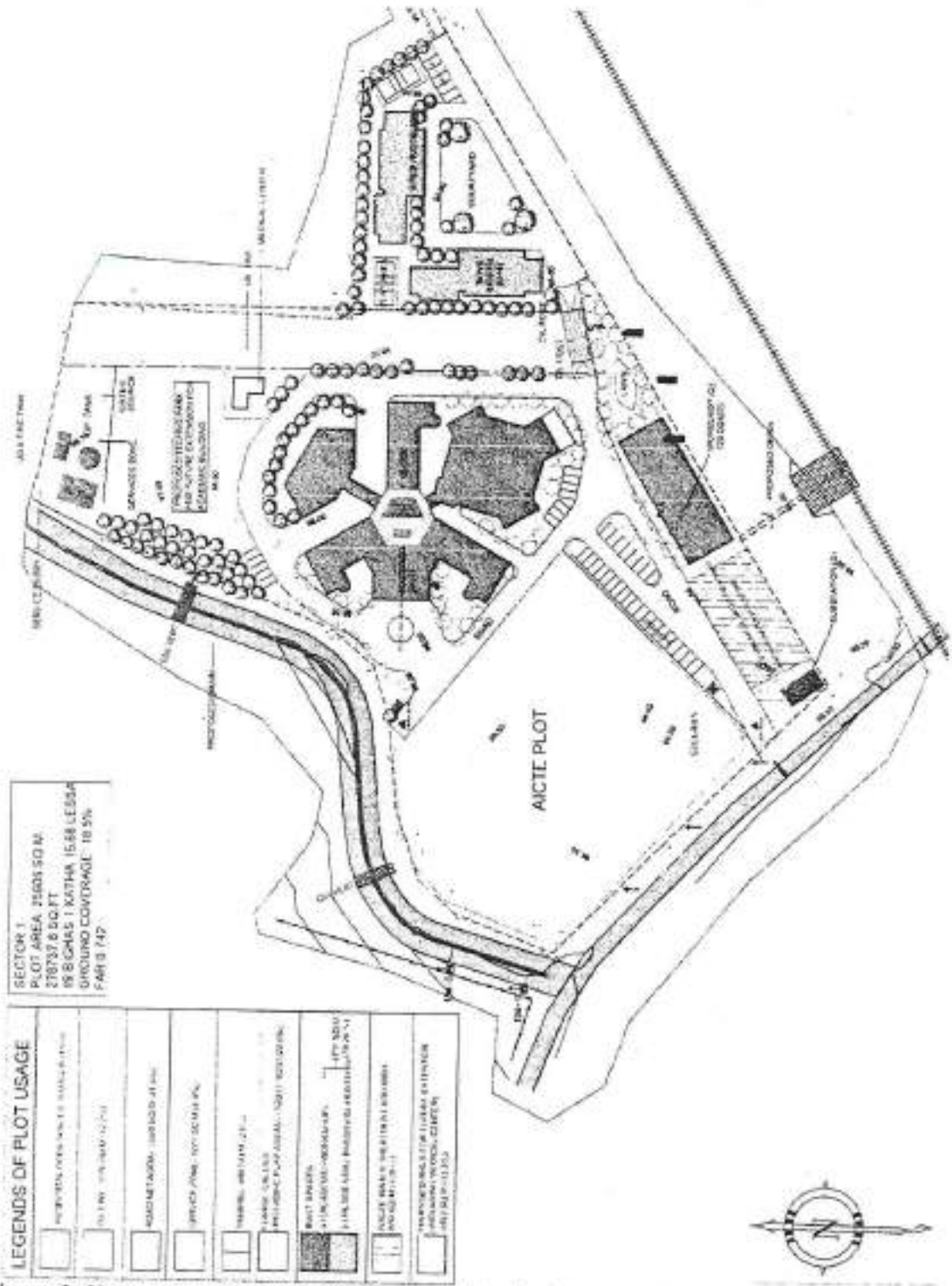


Figure 9: Master plan of Sector 1 (Refer attached drawing No 8: ASTU/ MASTERPLAN/SEC-1 in Chapter 9)

ZONING PLAN FOR SECTOR 2

The proposed zones of Sector 2 of Campus-II comprises of the following:
Residential Zone, Bio - Diversity Park/Eco Park Zone, Green Landscaped Zone, Play area with Multipurpose court Zone, Service Zone and Parking Zone.

- **Residential zone:** This zone is proposed towards the northern end of Sector-2 of the comprising of the Director's quarters, Guest House, Registrar's quarters, Professor's quarters, Assistant professor's quarters, Associate Professor's quarters, Staff quarters, and grade IV quarters, along with provision of adequate social and physical infrastructure. This Zone of residential areas have been provided with its own green and children play areas. The Residential zone is interlinked with roads with adequate provision of parks & playground and parking spaces.
- **Biodiversity Park/ Eco park zone:** An exclusive Park has been proposed in the central part of sector 2 covering and area of about 17,000 sqmts. This zone comprises of waterbody with fountain, flower/aromatic garden, healing garden with a butterfly garden, orchid house, jogging/cycling track and a solar park.
- **Recreational Zone**. This zone comprises of sports fields, volley ball, tennis court and badminton court.
- **Services Zones**: One zone is provided with, overhead and underground tanks, pump house for Firefighting, adequate space for water treatment and water supply and filtration. The second zones is provided for waste water treatment and rain water harvesting.
- **Landscape Zone**: Designated areas have been proposed for fruit orchards, herbal/medicinal garden and native tree plantation.

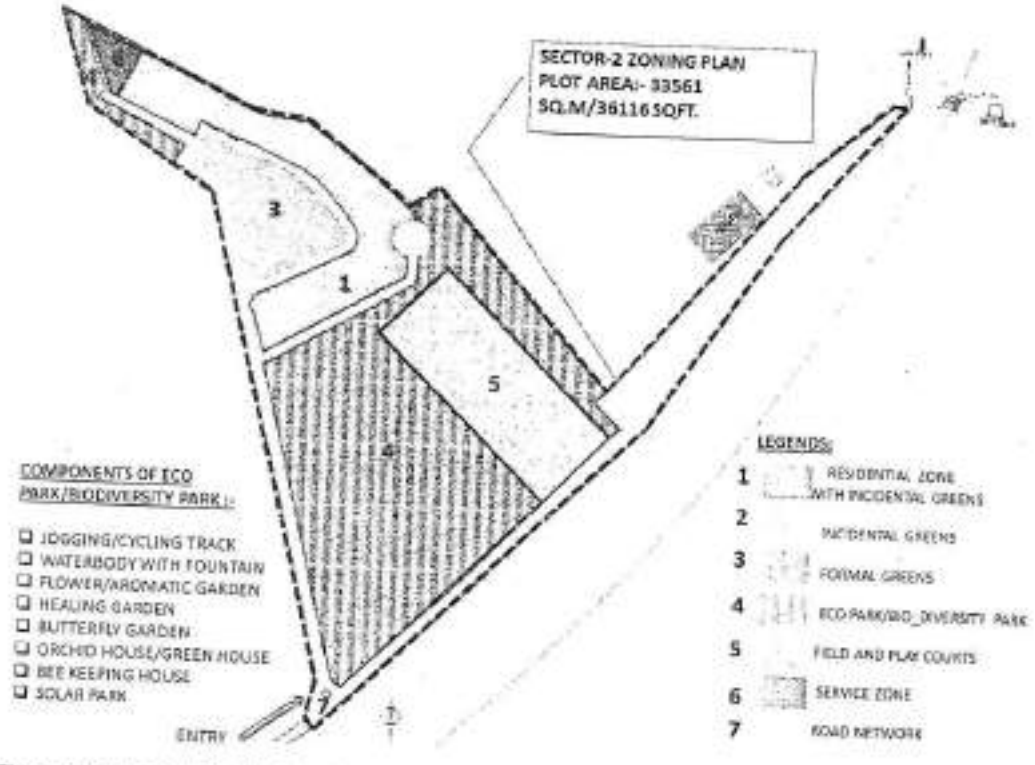


Figure 10: Sector 2 – Zoning plan

MASTERPLAN FOR SECTOR -2

The Sector-2 of proposed Campus-II, comprises of an area of 33561sqm /25bighas 7.75lessa. It is accessible from a strip of land behind the Sanskrit college and through the linking road between Sector-1 and Sector-2. Since the site is 2m below the road level and hence it is proposed to develop the northern portion of the site as a residential area along with provision for the service zone. The remaining area is to be designed as a Bio-diversity Eco park and portion of it to be used as multipurpose/play fields. A road is proposed along the western boundary of the plot to lead directly to the residential zone comprising of all quarters and space for a guest house.

The central part of the Sector-2 has been designed as an Eco Park/ Bio-Diversity Park. The concept adopted in designing the Eco-park is economically and environmentally sustainable as well as socially attractive. This can only be achieved through integration of large number of interrelated and interdependent activities with human interaction.

The Eco/ Biodiversity Park will have a plantation of medicinal, aromatic and Horticultural plants. *Plantation of medicinal, aromatic and Horticultural plants*, floriculture on the embankment, fringe areas selected appropriately creating a Mini-botanical garden with identification of species with local and botanical names. Revenue earning through sustainable seasonal harvesting of the produces. Floriculture with Bee- keeping and butterfly garden will not only render scenic beauty but will also generate significant financial returns and monitor the environmental parameters.

Ecological Aspect considerations in Sector-2 are as follows:

A. To rejuvenate the waterbody to enhance ecological productivity by desilting, removal of floating flora causing eutrophication (vegetative growth), uprooting of rooted flora caused by excessive fertility of bed soil, thereby damaging the productivity of aquafauna , degrading water quality and generation of greenhouse gases.

B. Clearing and desilting of inflow and outflow feeder channels to and from the waterbody to maintain the water quality and quantity.

C. Creation of embankment with the retrieved soil (which is extremely fertile) and plantation with medicinal, aromatic as well as fruit bearing plants climatically suitable for the site. Floriculture can also be adopted which will enhance the scenic beauty as well as render economic sustainability.

D. Integrating aeration mechanisms, for increasing dissolved oxygen in the water, such as wind driven aerators or even installing fountains will improve the water quality, enhance ecological productivity and also beautify the waterbody.

It is very likely that such well-maintained water spread area will attract the migratory birds for resting and nesting. Hence caution which must be considered, is to prevent any transmission of diseases to/from resident-avifauna from/to migratory species. Hence, the segregation or zoning needs to be created through natural and native camouflaging planting. **The Eco-park can also be integrated with demonstrative renewable energy generating units functional to the extent of being a contributor from economic sustainability such as : solar lights for street and environmental lighting, solar pump and hot water generator, Biogas generator from organic (also food) waste .**

A central green space is provided in the residential zone as a community space. The entire plot will have to be filled up to 1.5m from the road level. Hence, compounds walls will have to be partially retaining walls since the topography of this sector is low lying and prone to flooding. The following chart shows the proposed plot usage:

PLOT USAGE :SECTOR-2			
S.No	name	Area in sqm.	Percentage (%)
1	Eco-park/Bio-Diversity Park a) Flower garden/Aromatic garden b) Water body with fountain c) Healing garden d) Butterfly garden e) Jogging/ cycling track f) Gazebos g) Orchid house h) Solar park	17289 sqm.	51.50%
2	Multipurpose field Basketball court Badminton court	5120 sqm.	15.25%
3	Incidental open space	2762 sqm.	8.22%
4	Formal green(including guest house)	2375 sqm.	7.07%
5	Road network	4283 sqm.	12.76%
6	Service zone	512 sqm.	1.52%
7	Residential buildings	1220 sqm.	3.63%

Total plot area of Sector-2 = 33561 Sq.m

= 25 bigha 7.75lessa

Ground coverage = 3.48%

FAR = 0.159

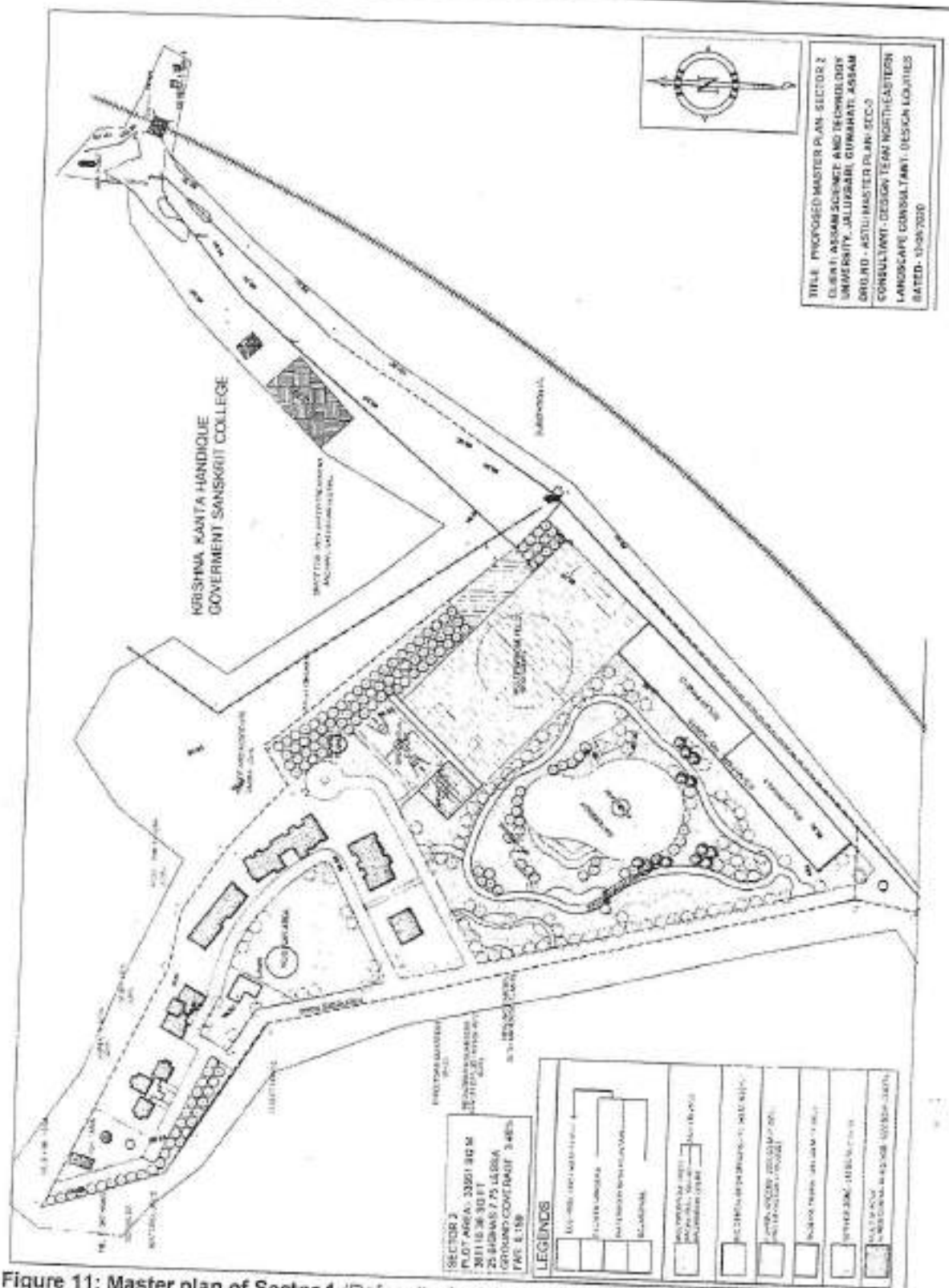


Figure 11: Master plan of Sector 1 (Refer attached drawing No 9: ASTU/ MASTERPLAN/sec-2 in Chapter 9)

GROUND COVERAGE CALCULATION

SECTOR -2 PLOT AREA = 33561 SQM.

S.No.	TITLE OF THE BUILDING	TOTAL AREA	GRAND TOTAL	GROUND COVERAGE
1	ASSISTANT PROFESSOR Quarter	220.0 SQM.	1171.1 SQM.	1171.1 X 100 / 33561.0 =3.48 %
2	GRADE-IV Quarters	172.0 SQM.		
3	DIRECTOR'S Quarters	110.8 SQM.		
4	REGISTRAR & PROF. Quarters	203.0 SQM.		
5	ASSOCIATE PROF. & PROF.	289.6 SQM.		
6	STAFF Quarters	175.7 SQM.		

F.A.R. CALCULATION

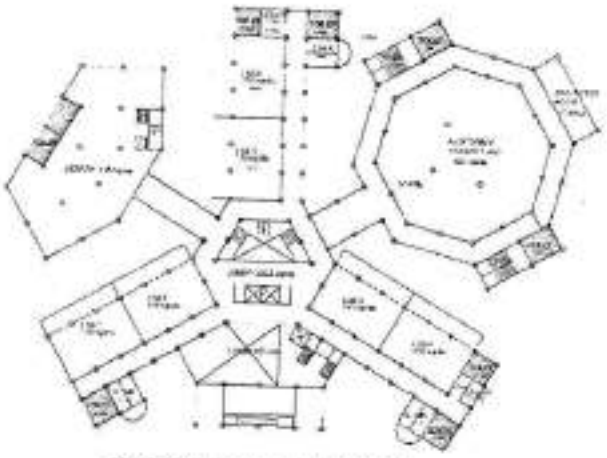
SECTOR-2 PLOT AREA = 33561 SQM.

S.No	TITLE OF THE BUILDING	TOTAL AREA (AFTER DEDUCTION)	GRAND TOTAL	F.A.R
1	ASSISTANT PROFESSOR Quarter	1075.0 SQM.	5353.7 SQM.	5353.7/33561.0 =0.159
2	GRADE-IV Quarters	785.0 SQM.		
3	DIRECTOR'S Quarters	259.2 SQM.		
4	REGISTRAR & PROFquarters	960.0 SQM.		
5	ASSOCIATE PROF & PROF.	1561.0 SQM.		
6	STAFF Quarters	713.5 SQM.		

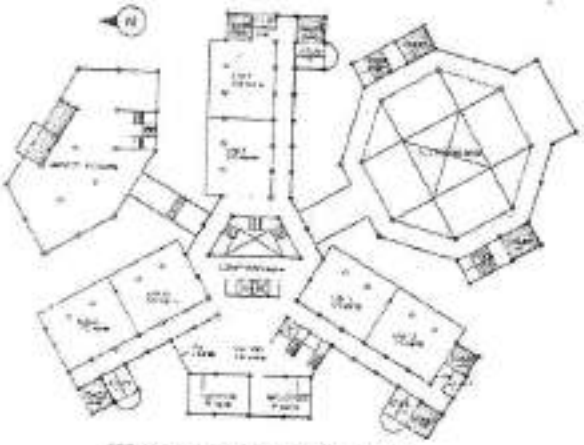
SOLAR PARK:

A solar plant is proposed in sector 2, having of capacity of 547 KwP. (Roof top plants for both sectors 357 Kwp and 190 Kwp from Solar Park have been proposed.)

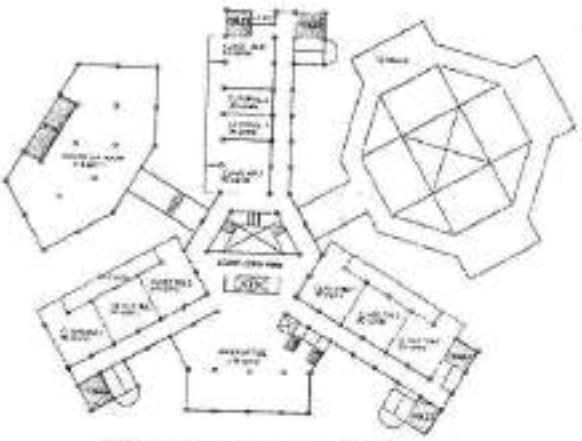
TOTAL AREA AT GROUND FLOOR =2356 SQM



TOTAL AREA AT FIRST FLOOR= 3136 SQM



TOTAL AREA AT SECOND FLOOR= 3139 SQM



TOTAL AREA AT THIRD FLOOR= 2193 SQM

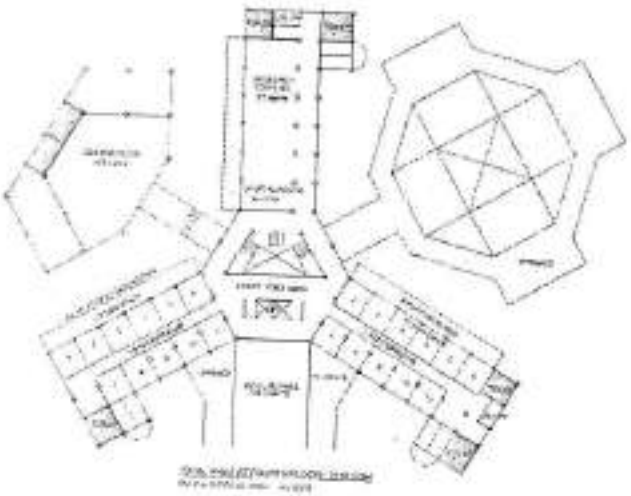


Figure 12: (Refer attached drawing No 1, 2, 3: ASTU/ ACADEMIC BLOCK/01 in Chapter 9)

SECTOR 1

1. ACADEMIC BUILDING- a) Total area of the building including services-13594 sqm
   b) Total amount of the building- 402099560.00
   c) Total amount/total area= rate per sqm i.e, 29579.19

2. BOYS HOSTEL- a) Total area of the building including services-3168 sqm
   b) Total amount of the building- 104461685.00
   c) Total amount/total area= rate per sqm i.e, 32974.02

3. GIRLS HOSTEL- a) Total area of the building including services-3168 sqm
   b) Total amount of the building- 104469209.00
   c) Total amount/total area= rate per sqm i.e, 32976.39

4. WORKSHOP- a) Total area of the building including services- 1171
   b) Total amount of the building- 37481080.00
   c) Total amount/total area= rate per sqm i.e, 32007.75

5. UNDERGROUND TANK- a) Total LTRS-100000
   b) Total amount - 1800000
   c) Total amount/total ltr= rate per ltr i.e, 18

6. OVERHEAD TANK AND PUMP HOUSE- a) Total LTRS-100000
   b) Total amount - 9200000
   c) Total amount/total ltr= rate per ltr i.e 92

7. ROADS- a) Total RM of the road- 805
   b) Total amount of the road- 26410226
   c) Total amount/total running meter= rate per rm i.e, 32807.73

8. DRAINAGE- a) Total RM of the drain-2776
   b) Total amount of the drain- 14430682
   c) Total amount/total rm= rate per rm i.e, 5198.37

9. CULVERT- a) Total nos of culverts-3
   b) Total amount of the culverts- 557959
   c) Total amount/total nos= rate per nos i.e, 185986.33

10. COMPOUND WALL- a) Total RM of the compound wall-487
    b) Total amount of the compound wall- 26423455
    c) Total amount/total rm= rate per rm i.e,54257.61

11. EARTH FILLING- a) Total CUM- 30910
b) Total amount-4636500
c) Total amount/total CUM= rate per cum i.e, 150

12. PARKING AREA- a) Total area - 711
b) Total amount - 4521571.00
c) Total amount/total area= rate per sqm i.e, 6359.45

13. MEDICAL CENTRE- a) Total area - 280
b) Total amount - 8949422.00
c) Total amount/total area= rate per sqm i.e, 31962.22

14. CC TV & WI-FI/SOUND SYSTEM- a) Total nos-3
b) Total amount - 255000
c) Total amount/total Nos= rate per nos i.e, 85000

15. INTERIOR WORKS OF ACADEMIC BUILDING &HOSTEL -
a) Total area 4062.50-
b) Total amount - 6500000
c) Total amount/total area= rate per sqm i.e,1600

16. SOIL INVESTIGATION- a) Total nos of bore hole-10
b) Total amount - 150000
c) Total amount/total nos= rate per nos i.e, 15000

17. SOLAR STREET LIGHTING- a) Length of the road-1283m
b) Providing solar lights @10m c/c = 1283/10 = 128 nos
c) 128 nos @ 39500 =Rs.5056000

18. WATER TREATMENT PLANT- a) 30 cum/hr water treatment plant- Rs.5400000
b) cost/cum- 5400000/30 = Rs.180000

19. SEWERAGE TREATMENT PLANT- a)Cost of 50 KLD MBR-HF is 9876000
b) Add civil works for foundation and piping –2500000
c) Total= 9876000 + 2500000 = 12376000
cost/kld = 12376000/50 = 247520

COST ESTIMATE OF PROJECT

A. COST ESTIMATE FOR SECTOR – 1

All Item, rates and specifications considered in the Estimates are based on Assam PWD schedule of rates 2013 -2014 (covering Civil, Sanitary , waters supply, finishes and Electrical works) with an escalation of 30%- 40%(were applicable) due to increase in the price of labour and materials so as to bring it to present market rate.

ASSAM SCIENCE AND TECHNOLOGY UNIVERSITY
CAMPUS-II
ABSTRACT OF COST

Sl.No	SECTOR-I Description		Amount(Rs)	
1	Cost of Academic Building.		402,099,560.00	
	a. Cost of AC for Academic Block.		19,373,200.00	
2	Cost of Boys Hostel.		104,461,685.00	
3	Cost of Girls Hostel.		104,469,209.00	
4	Cost of Workshop.		37,481,080.00	
5	Cost of Common Services of Services.			
	I. Cost of Underground Tank.	1,800,000.00		
	II. Cost of Overhead Tank and Pump House.	9,200,000.00		
	III. Cost of Water Treatment Plant (30 cum/hr).	5,400,000.00		
	IV. Cost of External Water Supply Works.	2,015,565.00	18,415,565.00	
6	A. Cost of Roads.	26,410,226.00		
	B. Cost of Drainage.	14,430,682.00		
	C. Cost of Culvert.	557,959.00		
	D. Cost of Compund Wall.	26,423,455.00		
	E. Earth Filling.	4,636,500.00		
	F. Parking Area.	4,521,571.00	76,980,393.00	
7	Cost of Medical Centre		8,949,422.00	
8	Cost of Campus Lighting for Campus. (2.5 % of Civil cost of Building)		8,592,364.00	
9	Cost of Solar Street Lighting for Campus.		3,160,000.00	
10	Cost of Swarage Treatment Plant Scheme (MBR 50KLD).		12,376,000.00	
11	Cost of Fire Fighting & Hydren System		2,845,177.00	
12	Cost of Landscaping for Campus.		3,037,770.00	
13	Cost of Bridge (composite RCC/ Steel).		7,933,319.00	
14	Micellaneous.			
	I. CC TV & WI-FI / Sound system	255,000.00		
	II. Acnstical Treatment For Auditorium.	4,500,000.00		
	III. Interoir works of Academic Building & Hostel.	6,500,000.00	11255000.00	
15	Cost of Soil Investigation for 10 nos of Bore Hole		200000.00	
16	Cost of Test For Water Quantity & Quality		35,000.00	
17	Cost of Topographical Survey		36,000.00	
	TOTAL		821,700,744.00	A
	ADD: Architect's Fees @ 2.5 % of A		20,542,518.60	B
	ADD: Tendering &Award of Work and Project Approval & sanction		1,080,000.00	C
	ADD: Contingency Fees @ 2% of A		16,434,014.88	D
	ADD: Project Management Consultant (PMC) @ 5% of A		41,085,037.20	E
	GRAND TOTAL (A+B+C+D+E)		900,842,314.68	

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SECTOR 2

1. ASSISTANT PROFESSOR QTRS- a) Total area of the building including services-1596 sqm
   b) Total amount of the building- 55688191.00
   c) Total amount/total area= rate per sqm i.e, 34892.35
2. ASSOCIATE PROFESSOR & PROFESSORS QTRS -
   a) Total area of the building including services-1903 sqm
   b) Total amount of the building- 60662890.00
   c) Total amount/total area= rate per sqm i.e, 31877.50
3. DIRECTORS QTRS- a) Total area of the building including services-308.4 sqm
   b) Total amount of the building- 9955094.00
   c) Total amount/total area= rate per sqm i.e, 32279.81
4. GRADE-IV QTRS -
   a) Total area of the building including services- 1020
   b) Total amount of the building- 35913648.00
   c) Total amount/total area= rate per sqm i.e, 35209.46
5. REGISTRAR PROFESSOR BLOCK- a) Total area of the building including services-1218 sqm
   b) Total amount of the building- 41477710
   c) Total amount/total area= rate per sqm i.e,34053.95
6. STAFF QTRS- a) Total area of the building including services-1054.2sqm
   b) Total amount of the building- 35900748
   c) Total amount/total area= rate per sqm i.e, 34054.97
7. GUEST HOUSE- a) Total area of the building including services-280 sqm
   b) Total amount of the building- 8949422
   c) Total amount/total area= rate per sqm i.e, 31962.22
8. UNDERGROUND TANK- a) Total LTR-100000
   b) Total amount - 1800000
   c) Total amount/total ltr= rate per ltr i.e, 18

9. OVERHEAD TANK - a) Total LTR-100000
   b) Total amount - 9200000
   c) Total amount/total ltr= rate per ltr i.e, 92

10. ROADS- a) Total RM of the road- 1286
    b) Total amount of the road- 31619063
    c) Total amount/total running meter= rate per rm i.e, 24587.14

11. DRAINAGE- a) Total RM of the drain-2818
    b) Total amount of the drain- 16319656
    c) Total amount/total rm= rate per rm i.e, 5791.22

12. CULVERT- a) Total nos of culverts-3
    b) Total amount of the culverts- 557959
    c) Total amount/total nos= rate per nos i.e, 185986.33

13. COMPOUND WALL- a) Total RM of the compound wall-1341
    b) Total amount of the compound wall- 82909616
    c) Total amount/total rm= rate per rm i.e, 61826.71

14. EARTH FILLING- a) Total CUM- 20606
    b) Total amount-3090900
    c) Total amount/total CUM= rate per cum i.e, 150

15. PARKING AREA- a) Total area – 962 sqm
    b) Total amount - 4292119.00
    c) Total amount/total area= rate per sqm i.e, 4461.66

16. CC TV & WI-FI/SOUND SYSTEM- a) Total nos-3
    b) Total amount - 255000
    c) Total amount/total nos= rate per nos i.e, 85000

17. INTERIOR WORKS RELATED TO QTRS -
    a) Total area- 3437.5 sqm
    b) Total amount - 5500000
    c) Total amount/total area= rate per sqm i.e,1600

18. SOIL INVESTIGATION-
    a) Total nos of bore hole-10
    b) Total amount - 150000

c) Total amount/total nos= rate per nos

i.e,15000

19. SOLAR STREET LIGHTING- a) Length of the road-805m
b) Providing solar lights @10m c/c = 805/10 = 80 nos
c) 80 nos @ 39500 =Rs.316000

20. WATER TREATMENT PLANT- a) 15 cum/hr water treatment plant- Rs.4229870
b) cost/cum- 4229870/15 = Rs.281991

21. SEWERAGE TREATMENT PLANT- a) Cost of 50 KLD MBR-HF is 9876000
b) Add civil works for foundation and piping –2500000
c) Total= 9876000 + 2500000 = 12376000
cost/kld = 12376000/50 = 247520

B. COST ESTIMATE FOR SECTOR – 2:

All Item, rates and specifications considered in the Estimates are based on Assam PWD schedule of rates 2013 -2014 (covering Civil, Sanitary , waters supply, finishes and Electrical works) with an escalation of 30%- 40%(were applicable) due to increase in the price of labour and materials so as to bring it to present market rate.

ASSAM SCIENCE AND TECHNOLOGY UNIVERSITY(ASTU)
CAMPUS-II
ABSTRACT OF COST

Sl. No	SECTOR-II Description	Amount	Amount(Rs)	
1	Cost of Assistant Professor QTRS		55,688,191.00	
2	Cost of Associate Professor & Professors QTRS		60,662,890.00	
3	Cost of Directors QTRS		9,955,094.00	
4	Cost of Grade-IV QTRS		35,913,648.00	
5	Cost of Registrar Professor Block		41,477,710.00	
6	Cost of Staff QTRS		35,900,748.00	
7	Cost of Guest House		8,949,422.00	
8	Cost of Common Services of Campus.			
	I. Cost of Underground Tank	1,800,000.00		
	II. Cost of Overhead Tank	9,200,000.00		
	III. Cost of Water Supply Work	1,298,764.00	12,298,764.00	
9	Cost of Exeternal Water Treatment Plant		4,229,870.00	
10	A. Cost of Road	31,619,063.00		
	B. Cost of Drainage	16,319,656.00		
	C. Cost of Culvert	557,959.00		
	D. Cost of Compound Wall	82,909,616.00		
	E. Cost of Earth Filling	3,090,900.00		
	F. Cost of parking	4,292,119.00	138,789,313.00	
11	Cost of Campus Lighting of Campus. (2.5 % of Civil cost of Building)		3,003,143.00	
12	Cost Of Solar Street Lighting System		5,056,000.00	
13	Cost of Solar Power Plant of Campus		11,210,000.00	
14	Cost of Swerage Treatment Plant (MBR-50 KLD)		12,376,000.00	
15	Cost of Fire Fighting & Hydren System		1,422,588.00	
16	Cost of Bio Diversity Park for Campus		8,912,770.00	
17	Micellaneous			
	I. CC TV & WI-FI / Sound system Item 3 Nos @ 85000	255,000.00		
	II. Cost of Interior Works Related to QTRS	5,500,000.00	5,755,000.00	
18	Cost of Soil Investigation for 10 nos of Bore Hole		200,000.00	
19	Cost of Test For Water Quantity		35000.00	
20	Cost of Topographical Survey		46800.00	
	ADD: Architect's Fees @ 2.5% of A	Total	451,882,951.00	A
	ADD: Tendering &Award of Work and Project Approval & sanction		11,297,073.78	B
	ADD:Contingency @ 2% of A		1,080,000.00	C
	ADD: Project Management Consultant (PMC) @ 5% of A		9,037,659.02	D
	GRAND TOTAL(A+B+C+D+E)		22,594,147.55	E
			495,891,831.35	

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IMPLEMENTATION STRATEGY AND SCHEDULE

Project Implementation

The architectural designs of a university minimizes the strict pre-determination of the patterns of future development. Hence the design aims in flexibility to incorporate appropriate changes yet maintaining coherence and sense of completeness at each stage of development.

The implementation and scheduling of such a project demands well-coordinated efforts not only from the promoters but also from all the departments and financing agencies. The stage wise completion must be with effective functionality. Creation of facilities before demand will only lead to functional shortcomings when the scarce finance is being released phase wise. Accordingly, the concept of modular design has been adopted.

During the first stage of investment and implementation it is envisaged to provide the basic necessities namely communicable road network, electrical power connectivity, water supply system in well secured premises. For the efficacy of investment, construction of buildings will be undertaken phase wise such as for Academic blocks, students' hostel, residential accommodation to faculty members and essential staff.

The implementation schedule of the ASTU project is envisaged to be completed in three phases of investment spread over a period of six years as detailed hereunder:

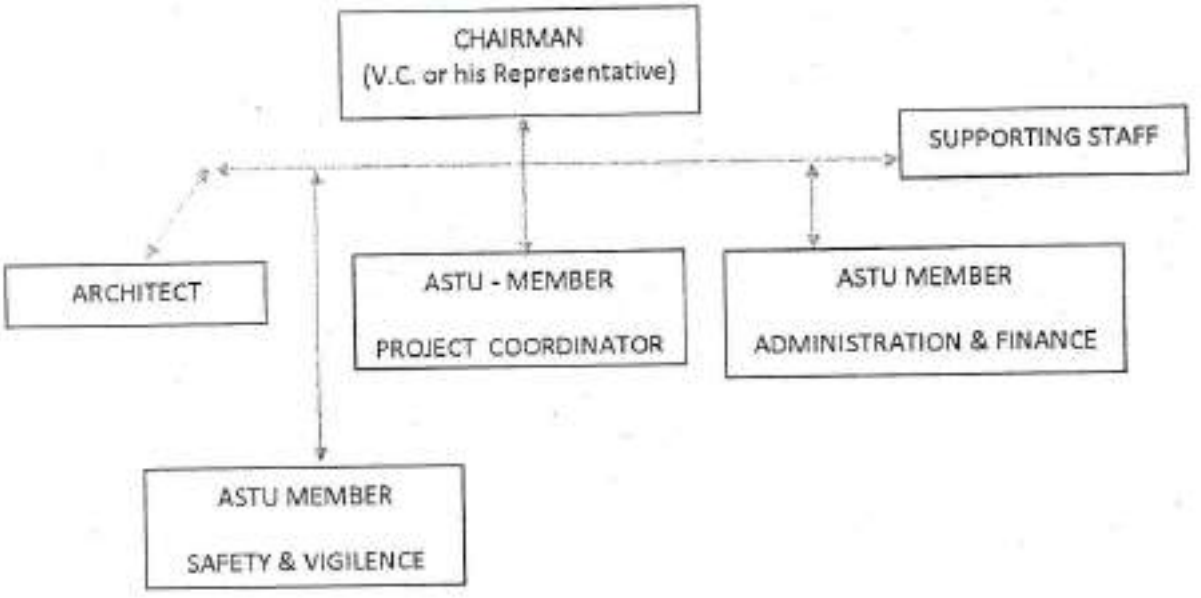
The work is envisaged to be implemented in three phases of funding spread over a period of 6 years. In context to the implementation of the project, the authorities of the Assam Science and Technology University (ASTU) cannot be expected to be involved with the day to day supervision of construction works. They are not only busy with their regular works but are also not experienced in project execution. Their role hence be defined to overall guidance in execution, mobilisation of funds, monitoring of progress of works and other administrative aspects of the project. Further, in order to ensure timely completion of the works with desired quality, and within the allotted budget it is also recommended to implement the project through competitive bidding through open tenders by competent and experienced contractors. From the earlier experiences, the implementation of the project should not be handed over to a nominated implementation agency such as Assam Public Works Department (APWD) for the very reason that they will also execute through sub-contractors with an over-riding fees of over 20-25%. Further, there is no guarantee of timely completion or of budget control.

Therefore, the strategy proposed is as under:

The project implementation shall be carried out by the **Project Implementation Committee (PIC)** constituted by the University with the architects' representative as a member. The Vice Chancellor or his representative shall be the Chairman of **PIC.** The Implementation Committee **(PIC)** will appoint a **Project Management Consultants (PMC)** experienced in the field and having adequate experienced engineers and supervisory level personals for day to day supervision and monitoring. The Implementation Committee will be responsible for inviting tenders award of contract and release of payments to the Contractors' bills duly certified by the **PMC.** The Architect who is appointed by ASTU shall prepare all architectural, structural, utility services, environmental designs and estimates on approval of which shall also prepare all tender documents in consultation with the University. Architect shall provide all technical guidance and clarifications to the **PIC** which may include preparation of bidders' qualification requirement, bidding methodology, evaluation of tender offers, acquiring clarification from bidders if needed and assisting in preparing Work orders. The PIC will also undertake random inspection of works for ensuring quality and performance of PMC. A detailed charter of responsibilities of the **PIC** may be drawn prior to commencement of the works. The construction works of the project shall be executed under a Project Management Consultant **(PMC)**. The responsibilities of the PMC shall include:

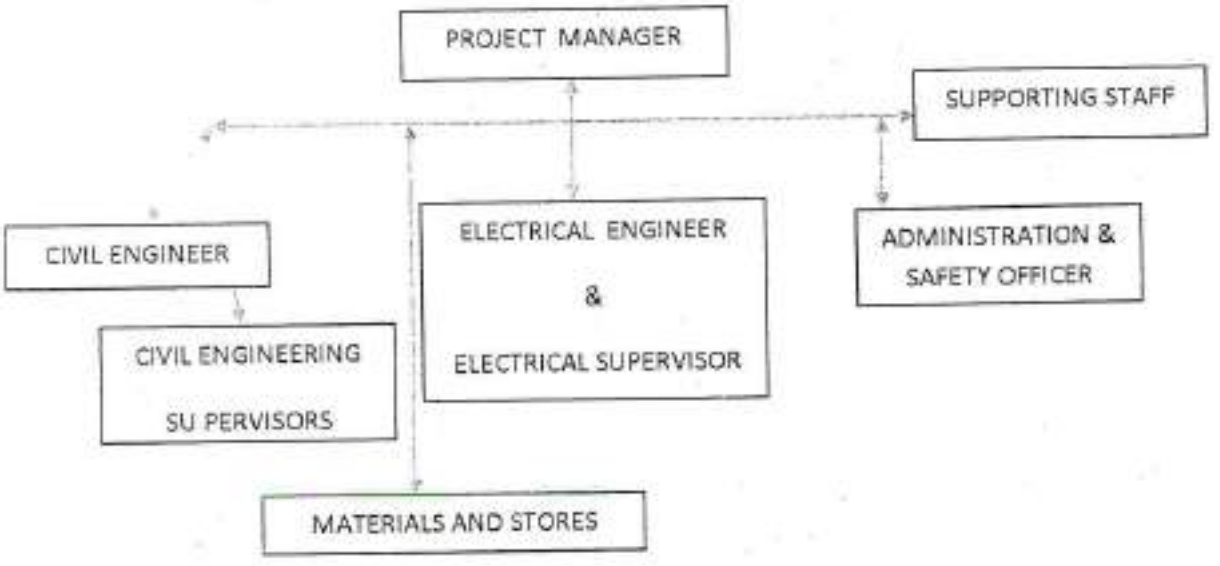
a. Day to day supervision of workmanship, quality of materials used, adherence to design and procedures of construction, ensuring all safety measures, compliance of environmental norms and standards.
b. Record and Monitor the inventory of contractors' construction materials and ensure availability for works.
c. Monitor and record the daily workforce engaged workwise.
d. Take measurement of the works completed by contractor for the purpose of evaluation of performance and for billing.
e. Record any variation from the tender and record the reasons for alternative decision. Also record any instruction received from the **PIC** for any change of design, specification or schedule of implementation.
f. The PMC will engage qualified diploma engineers with at least three years' experience for the supervision of the specific works. The PMC will also provide services of specialized technical persons where required at the time of testing and commissioning.

ORGANOGRAM FOR PIA



The **PMC** will take all directions from PIC and/or representative in writing and shall report all matters to **PIC.** All detail responsibilities, terms of reference shall be defined in detail while inviting the tender for appointment of PMC and incorporated in the work order to the selected **PMC.**

ORGANOGRAM FOR PMC



POST IMPLEMENTATION OPERATION AND MAINTENANCE

The post implementation maintenance is envisaged to be carried on Annual Maintenance Contract (AMC). The AMC will commence immediately after completion of the first phase of implementation. Although the PMC shall be responsible for their services for a period of one year after completion of the work so as to cover the defect liability period of one year from the date of completion for each of the work, the maintenance on handing over after completion shall have to be undertaken by a different agency. The term for the PMC shall be for one year from the date of completion of the last work order.

While the implementation is underway, a detail annual operation and maintenance tender document be prepared for inviting open tenders for various works such as for:

a) Security Services
b) Electrical cum solar power system operation and Maintenance.
c) Pump and other operators
d) Lifts and Lift-operators (if required)
e) Internal House keeping
f) Hostel Mess and canteen services.
g) Environmental Housekeeping services
h) Civil maintenance and repair.
i) Medical clinical services
j) Safety and Emergency services.

In order to coordinate all the services a team of officers and support staff (forming the estate department) will be necessary for coordinating , supervising, monitoring and for purpose of billing for the services. Having covered all operation and services, there is still and emergency and ire safety service, for which ultimate responsibility must rest with an officer of the university. The university authority must ensure that adequately competent and trained persons are engaged by the AMC team. Periodic training of these persons under AMC will need to be undertaken with Mock-drills for safety and emergency services.

PROJECT OUTCOME: BENEFITS AND JUSTIFICATION

The institution is envisioned to facilitate cutting edge technologies and state-of-art researches to the aspiring young graduates and researchers of the entire North-eastern part of the nation. Although the region has several engineering and science institutions, including an IIT and central universities, the research and initiative for the promotion of science and technology in the emerging fields are minimal. In the private sector institutions, the research facilities are grossly inadequate and obsolete. Government support schemes such as under MODROB also could not promote any research infrastructure. Moreover, these institutions have not been able to motivate significant researches in the fields of environmental science, ecological economics, natural

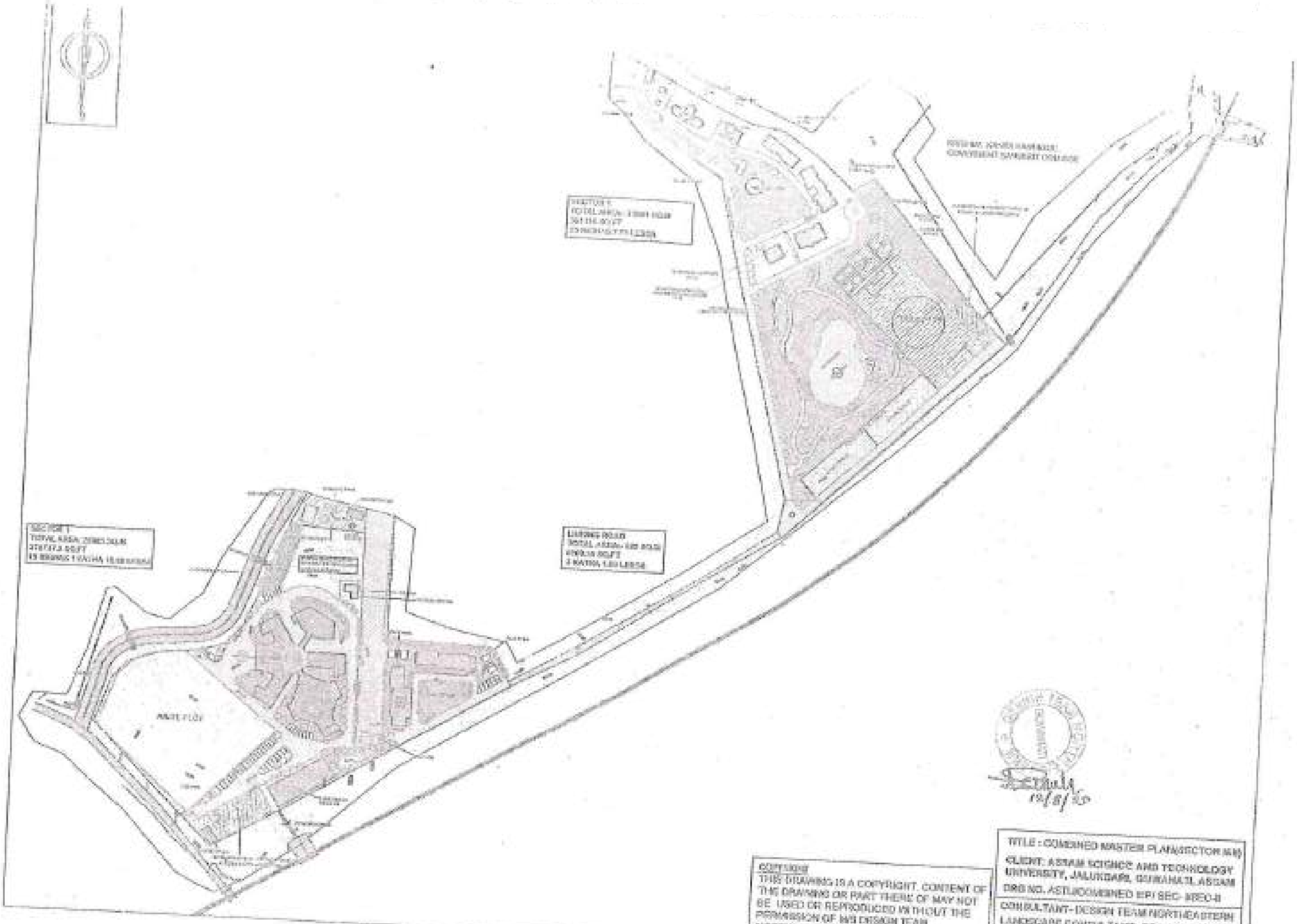
resource management, extraction technologies of medicinal and aromatic plants, and or emerging sciences. Even natural resource like bamboo with the potential to alter the economy of many regions of Mizoram, Nagaland, Assam, and Arunachal has remained unaddressed. Although there are immense opportunities to process bamboo to high-value products like activated carbon and carbon filters, no research is known to have been undertaken. North East is a storehouse of biodiversity, and hence a great deal of research is necessary for wise-use of such resources. Study, more particularly in the fields of environmental science and ecological economics, generating large arrays of dependent and independent variables, demand use of emerging science like Machine or Deep Learning and Data Analytics, which this institute is envisaged to promote.

The location of the institution being adjacent to Deepor Beel, a famous wetland and a designated Ramsar site, is a natural habitat for resident and migratory birds. Together with the aquatic flora and fauna, Deepor Beel itself is an immense opportunity for scientific research and development. Including the dependent population in the surrounding fringe areas, provide opportunities for generating **Environmental Value Reference Inventory (EVRI)** for the nation, and in developing working models for sustainable preservation or development of natural resources like wetlands, forests, land, etc. through the adoption of various valuation techniques explicitly applicable to the valuation of natural resources, disaster management, disaster damage assessment and in Contingent Valuation of Non-market services and benefits.

In the field of Nanoscience or Nanotechnologies, no research is known to have been undertaken other than in IIT Guwahati and in Guahati University. Here too, the focus is on the application of already developed technology. No break-through research outcome is known to have been achieved. The reasons for such stagnation are primarily for lack of research facilities and exposure.

The proposed institution, which promises to provide these opportunities with an interactive approach to the researchers, will be of immense benefit not only to the researches in particular and the people of the region general but to the nation as a whole. The institution will provide employment opportunities to many local educated youths not only through direct employment but also through opportunities for rendering support services.

It can grossly be summarised that the costs in establishing the proposed institution are insignificant in comparison to the benefits envisaged to be derived from the proposed institution.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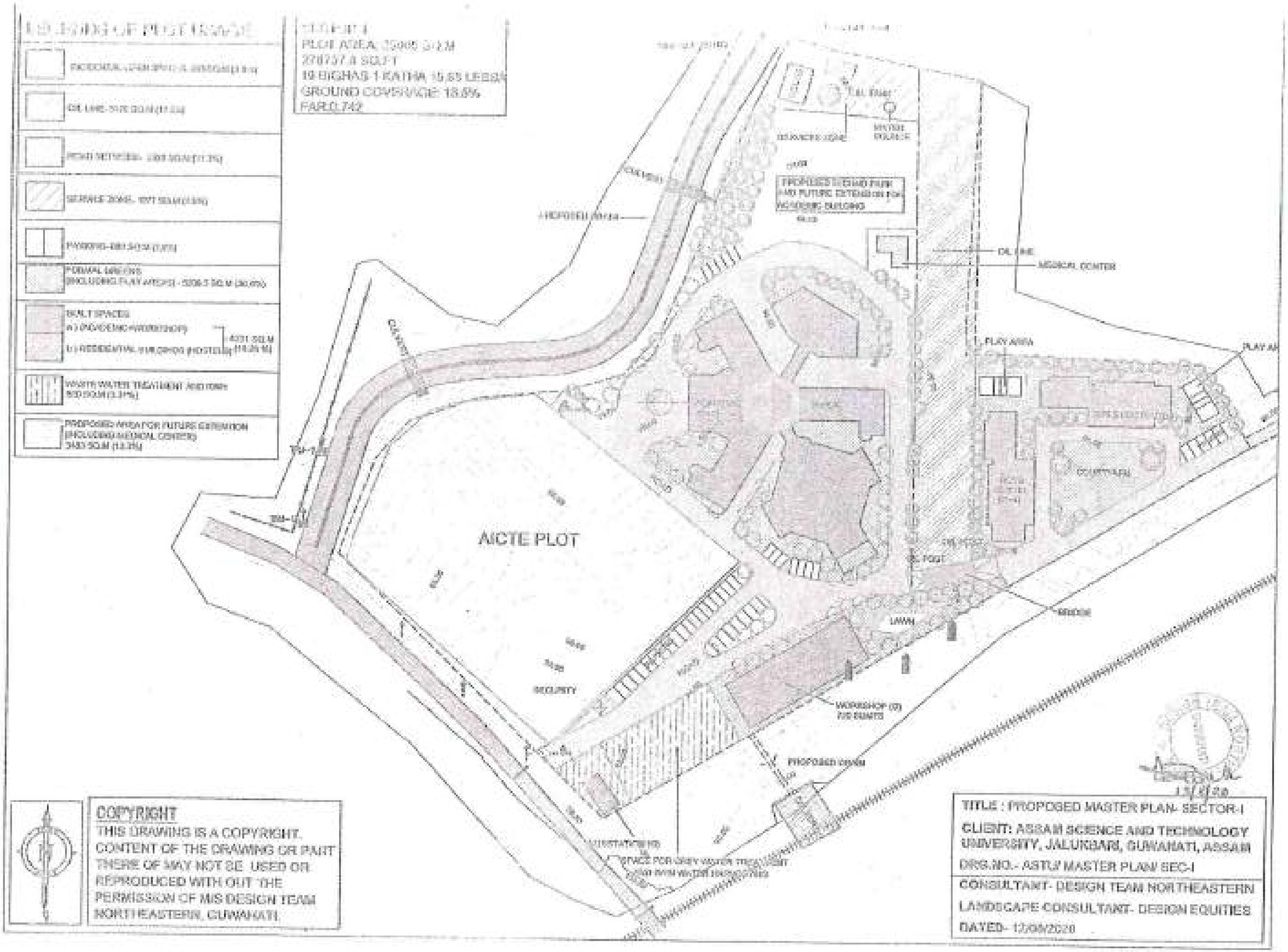
TITLE : COMBINED MASTER PLAN/SECTOR B(B)
CLIENT: ASSAM SCIENCE AND TECHNOLOGY UNIVERSITY, JALUKBARI, GUWAHATI, ASSAM
DRG NO. ASTU/COMBINED MP/ SEC-III/ECO-II
CONSULTANT- DESIGN TEAM NORTHEASTERN
LANDSCAPE CONSULTANT- DESIGN EQUATES
DATED: 12/08/2020


PLOT AREA 25905 SQ.M
278737.8 SQ.FT
19 BIGHAS 1 KATHA 15.65 LESSA
GROUND COVERAGE: 18.8%
FAR:0.742
BUILT SPACES
WASTE WATER TREATMENT AND RAIN
PROPOSED AREA FOR FUTURE EXTENSION
AICTE PLOT
SECURITY
LAWN
BRIDGE
PLAY AREA
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TITLE : PROPOSED MASTER PLAN- SECTOR-I
CLIENT: ASSAM SCIENCE AND TECHNOLOGY UNIVERSITY, JALUKBARI, GUWAHATI, ASSAM
DRG.NO.- ASTU/ MASTER PLAN/ SEC-I
CONSULTANT- DESIGN TEAM NORTHEASTERN
LANDSCAPE CONSULTANT- DESIGN EQUITIES
DATED- 12/08/2020


KRISHNA KANTA HANDIQUE
GOVERMENT SANSKRIT COLLEGE
SECTOR 2
PLOT AREA:- 33581 SQ.M
361116.38 SQ.FT
35 BIGHAS 7.75 LESSA
GROUND COVERAGE: 3.48%
FAR: 0.159
LEGENDS
COPYRIGHT
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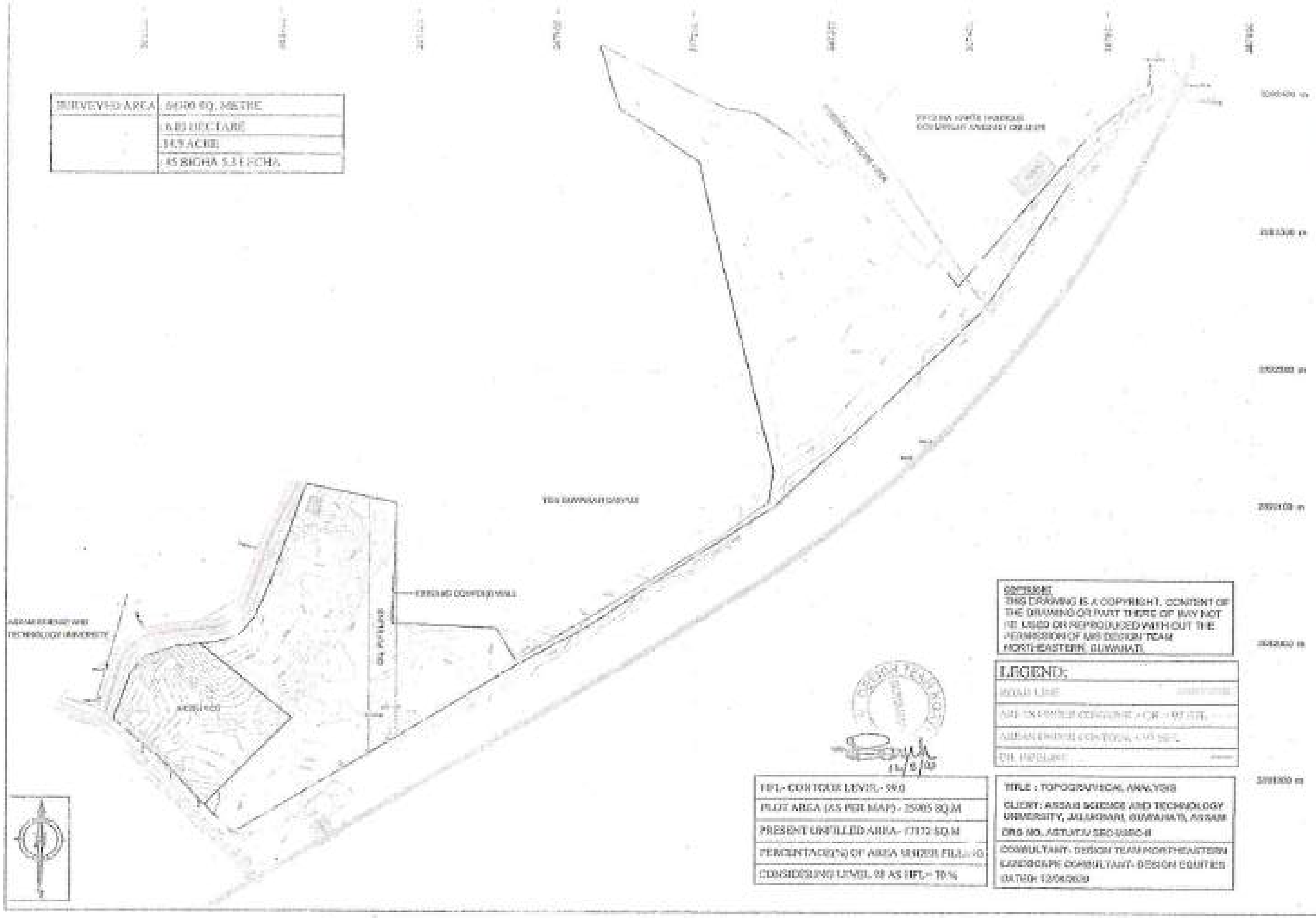
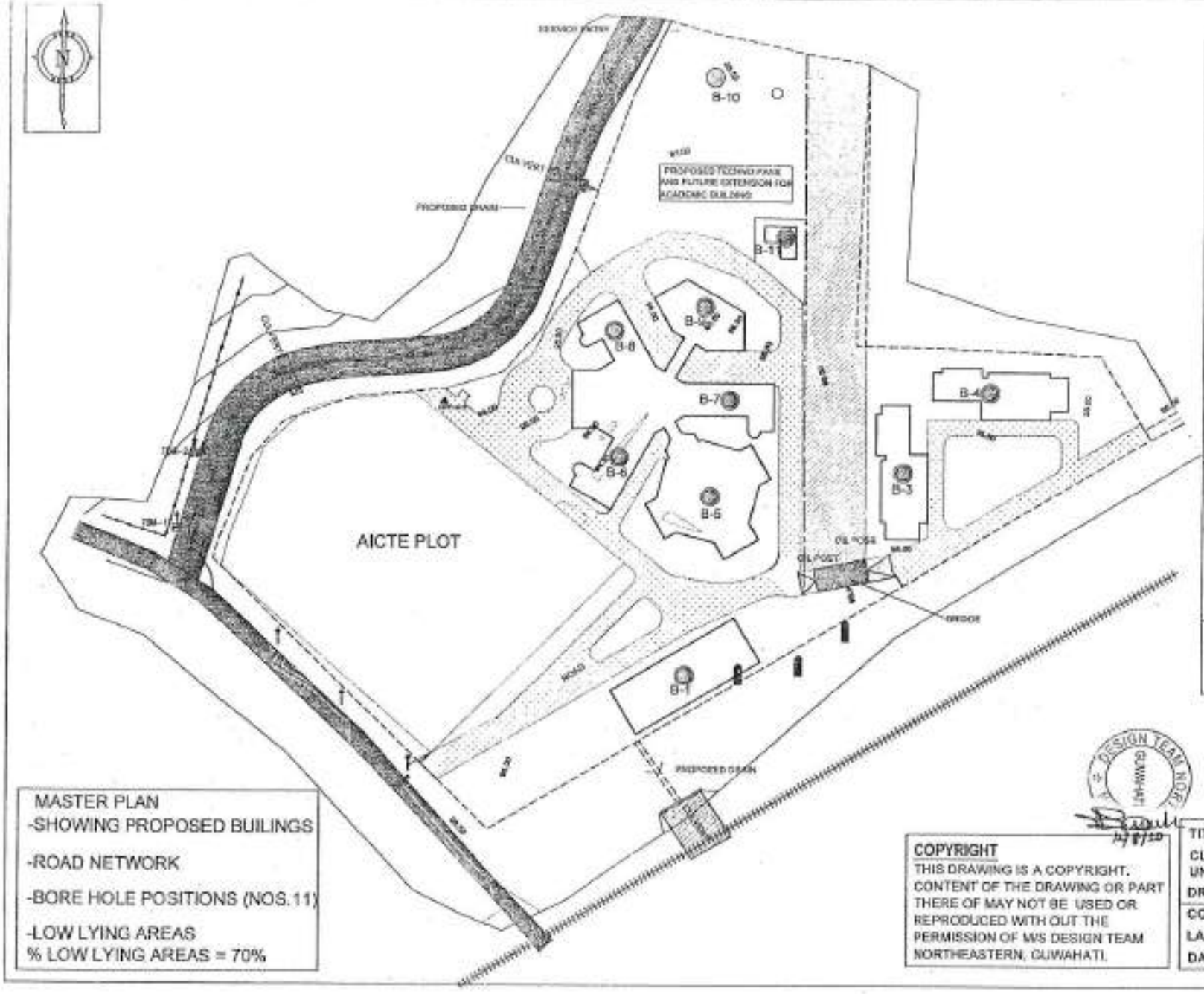
TITLE : PROPOSED MASTER PLAN- SECTOR-II
CLIENT: ASSAM SCIENCE AND TECHNOLOGY UNIVERSITY, JALUKBARI, GUWAHATI, ASSAM
DRG.NO.- ASTU MASTER PLAN/ SEC-II
CONSULTANT- DESIGN TEAM NORTH EASTERN
LANDSCAPE CONSULTANT- DESIGN COUNTRIES
DATED- 12/09/2020


SURVEYED AREA
56500 SQ. METRE
6.03 HECTARE
14.9 ACRE
45 BIGHA 5.3 LECHA
ASSAM SCIENCE AND TECHNOLOGY UNIVERSITY
EXISTING BOUNDARY WALL
OIL PIPELINE
THIS DRAWING IS A COPYRIGHT. CONTENT OF THE DRAWING OR PART THERE OF MAY NOT BE USED OR REPRODUCED WITH OUT THE PERMISSION OF M/S DESIGN TEAM NORTHEASTERN, GUWAHATI.
LEGEND:
OIL PIPELINE
HFL- CONTOUR LEVEL- 59.0
PLOT AREA (AS PER MAP) - 25005 SQ.M
PRESENT UNFILLED AREA- 17172 SQ.M
CONSIDERING LEVEL 59 AS HFL- 70 %
TITLE : TOPOGRAPHICAL ANALYSIS
CLIENT : ASSAM SCIENCE AND TECHNOLOGY UNIVERSITY, JALUKBARI, GUWAHATI, ASSAM
CONSULTANT- DESIGN TEAM NORTHEASTERN



LEGENDS:

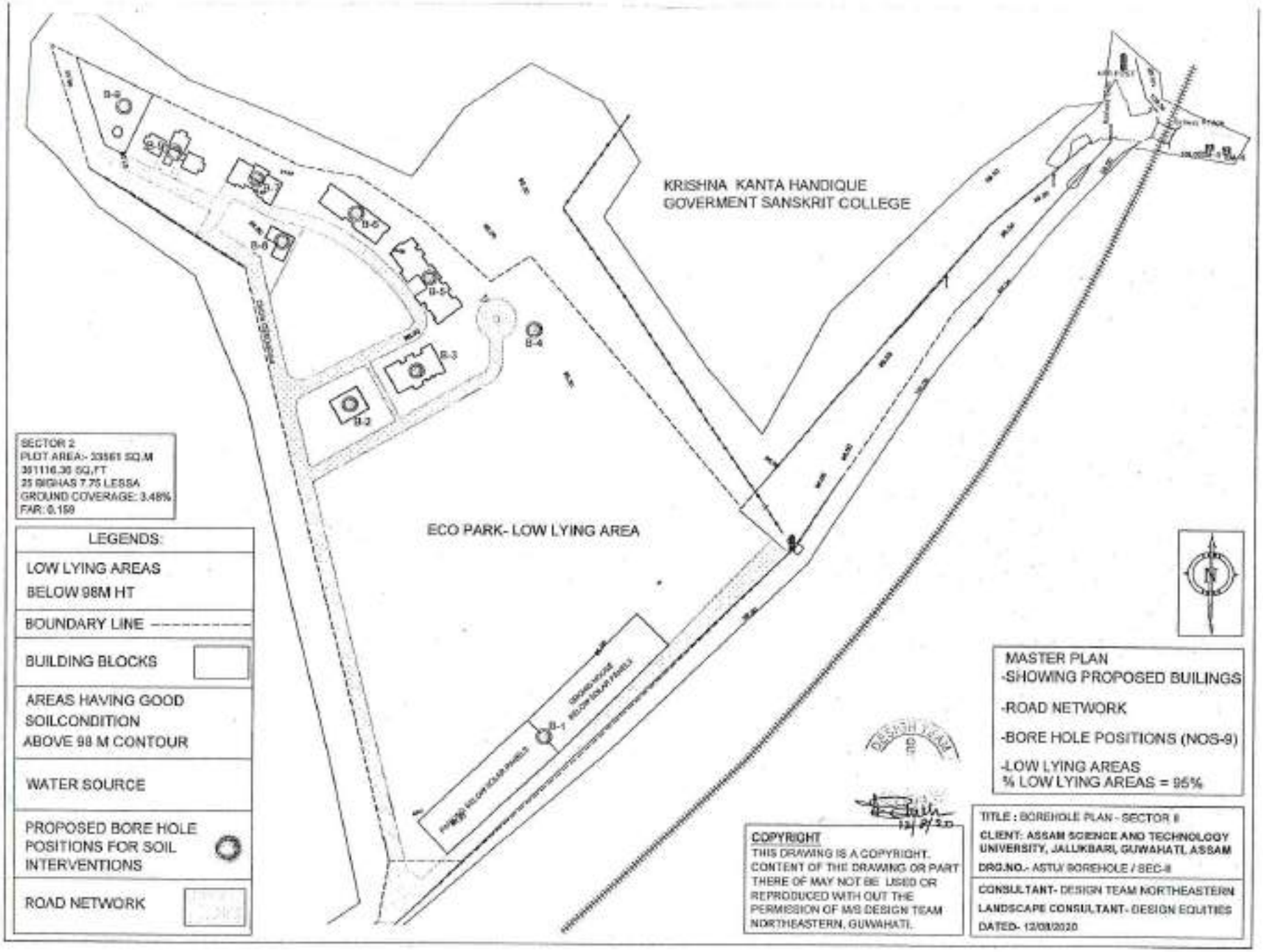
- LOW LYING AREAS BELOW 98M HT
- BOUNDARY LINE
- BOUNDARY WALL
- BUILDING BLOCKS
- AREAS HAVING GOOD SOILCONDITION ABOVE 98 M CONTOUR
- OIL LINE
- WATER SOURCE
- PROPOSED BORE HOLE POSITIONS FOR SOIL INTERVENTIONS
- ROAD NETWORK

MASTER PLAN
-SHOWING PROPOSED BUILINGS
-ROAD NETWORK
-BORE HOLE POSITIONS (NOS.11)
-LOW LYING AREAS
% LOW LYING AREAS = 70%

SECTOR 1
PLOT AREA: 25905 SQ.M
278737.8 SQ.FT
19 BIGHAS 1 KATHA 15.68 LESS/
GROUND COVERAGE: 18.5%
FAR:0.742

DESIGN TEAM NORTHEASTERN GUWAHATI

TITLE : BOREHOLE PLAN- SECTOR-I
CLIENT: ASSAM SCIENCE AND TECHNOLOGY UNIVERSITY, JALUKBARI, GUWAHATI, ASSAM
DRG.NO.- ASTUV BOREHOLE / SEC-I
CONSULTANT- DESIGN TEAM NORTHEASTERN
LANDSCAPE CONSULTANT- DESIGN EQUITIES
DATED- 12/08/2020


KRISHNA KANTA HANDIQUE
GOVERMENT SANSKRIT COLLEGE
ECO PARK- LOW LYING AREA
B-1
B-2
B-3
B-4
B-5
B-6
B-7
B-8
B-9
SECTOR 2
PLOT AREA:- 33561 SQ.M
361116.30 SQ.FT
25 BIGHAS 7.75 LESSA
GROUND COVERAGE: 3.48%
FAR: 0.159
LEGENDS:
LOW LYING AREAS BELOW 98M HT
BOUNDARY LINE
BUILDING BLOCKS
AREAS HAVING GOOD SOILCONDITION ABOVE 98 M CONTOUR
WATER SOURCE
PROPOSED BORE HOLE POSITIONS FOR SOIL INTERVENTIONS
ROAD NETWORK
MASTER PLAN
-SHOWING PROPOSED BUILINGS
-ROAD NETWORK
-BORE HOLE POSITIONS (NOS-9)
-LOW LYING AREAS
% LOW LYING AREAS = 95%
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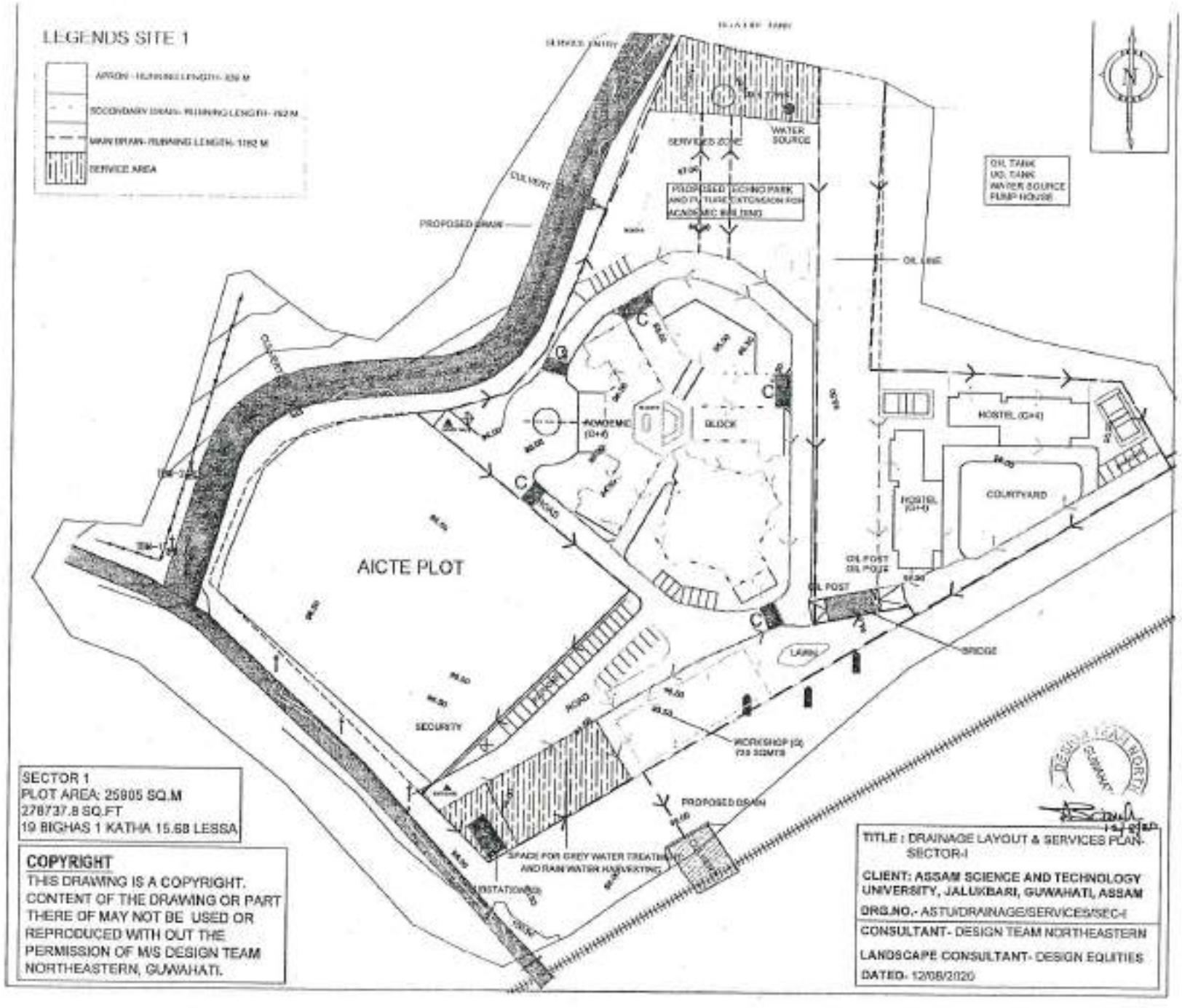
TITLE : BOREHOLE PLAN - SECTOR II
CLIENT: ASSAM SCIENCE AND TECHNOLOGY UNIVERSITY, JALUKBARI, GUWAHATI, ASSAM
DRG.NO.- ASTU/ BOREHOLE / SEC-II
CONSULTANT- DESIGN TEAM NORTHEASTERN
LANDSCAPE CONSULTANT- DESIGN EQUITIES
DATED- 12/08/2020


LEGENDS SITE 1
APRON - RUNNING LENGTH- 639 M
SECONDARY DRAIN- RUNNING LENGTH- 1521M
MAIN DRAIN- RUNNING LENGTH- 1192 M
SERVICE AREA
SERVICES ZONE
WATER SOURCE
OIL TANK
WATER SOURCE
PUMP HOUSE
PROPOSED DRAIN
OIL LINE
ACADEMIC (G+4)
BLOCK
HOSTEL (G+4)
COURTYARD
HOSTEL (G+4)
AICTE PLOT
OIL POST
OIL POST
OIL POST
BRIDGE
SECURITY
ROAD
WORKSHOP (G)
PROPOSED DRAIN
SPACE FOR GREY WATER TREATMENT AND RAIN WATER HARVESTING
SUBSTATION
SECTOR 1
PLOT AREA: 25805 SQ.M
278737.8 SQ.FT
19 BIGHAS 1 KATHA 15.68 LESSA
COPYRIGHT
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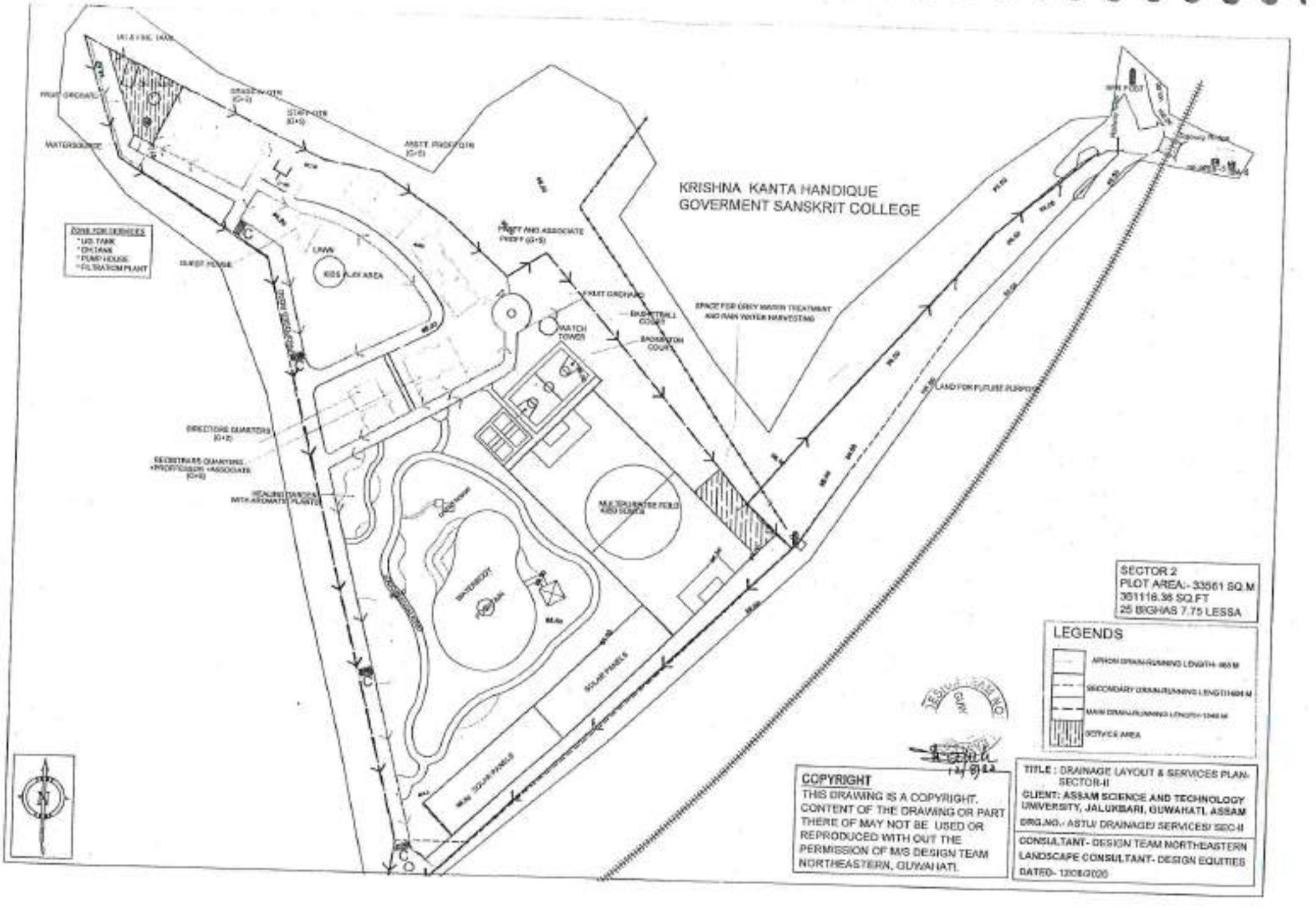
TITLE : DRAINAGE LAYOUT & SERVICES PLAN- SECTOR-I
CLIENT: ASSAM SCIENCE AND TECHNOLOGY UNIVERSITY, JALUKBARI, GUWAHATI, ASSAM
DRG.NO.- ASTU/DRAINAGE/SERVICES/SEC-I
CONSULTANT- DESIGN TEAM NORTHEASTERN
LANDSCAPE CONSULTANT- DESIGN EQUITIES
DATED- 12/08/2020


KRISHNA KANTA HANDIQUE
GOVERMENT SANSKRIT COLLEGE
WATER SOURCE
FRUIT ORCHARD
GUEST HOUSE
LAWN
KIDS PLAY AREA
WATCH TOWER
BASKETBALL COURT
BADMINTON COURT
SPACE FOR GREY WATER TREATMENT AND RAIN WATER HARVESTING
LAND FOR FUTURE PURPOSE
SOLAR PANELS
SOLAR PANELS
SECTOR 2
PLOT AREA:- 33561 SQ.M
361116.35 SQ.FT
25 BIGHAS 7.75 LESSA
LEGENDS
SECONDARY DRAIN(RUNNING LENGTH=1404 M
SERVICE AREA
COPYRIGHT
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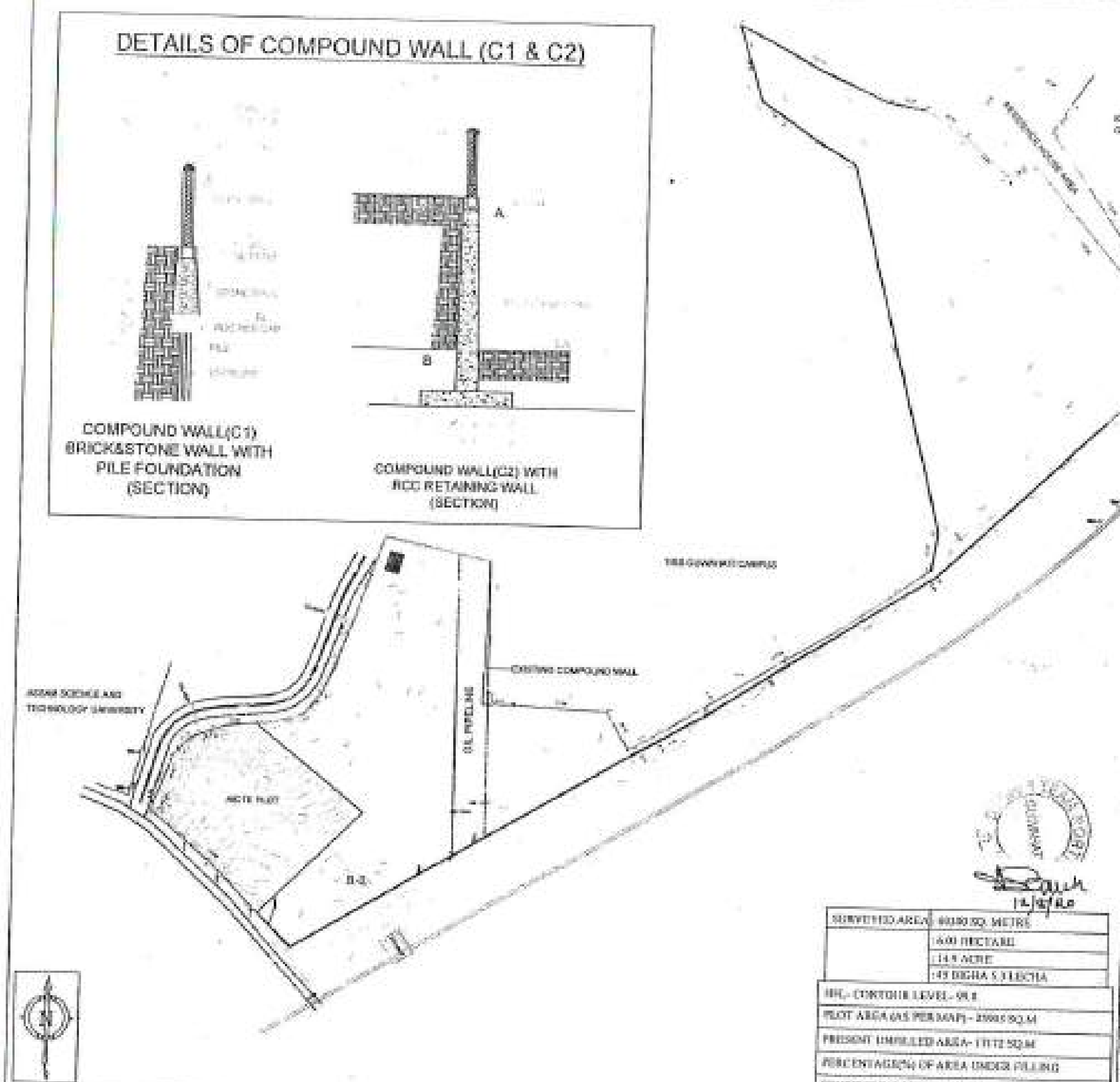
TITLE : DRAINAGE LAYOUT & SERVICES PLAN- SECTOR-II
CLIENT: ASSAM SCIENCE AND TECHNOLOGY UNIVERSITY, JALUKBARI, GUWAHATI, ASSAM
DRG.NO.:- ASTU/ DRAINAGE/ SERVICES/ SEC-II
CONSULTANT- DESIGN TEAM NORTHEASTERN
LANDSCAPE CONSULTANT- DESIGN EQUITIES
DATED- 12/08/2020



LEGEND:

ROAD LINE	
SECTOR-1 [illegible]	—
SECTOR-2 [illegible]	—
AREAS UNDER CONTOUR [illegible]	
AREAS UNDER CONTOUR [illegible]	
OIL PIPELINE	—
EXISTING WALL	—

SURVEYED AREA	60000 SQ. METRE
	6.00 HECTARE
	14.9 ACRE
	45 BIGHA 5 LECHA
HFL- CONTOUR LEVEL- 98.8	
PLOT AREA (AS PER MAP) - 25005 SQ.M	
PRESENT UNFILLED AREA- 17172 SQ.M	
PERCENTAGE(%) OF AREA UNDER FILLING	
CONSIDERING LEVEL 98 AS HFL= 70 %	

TITLE : COMBINED COMPOUND WALL LAYOUT AND DETAILS (SECTOR I & II)

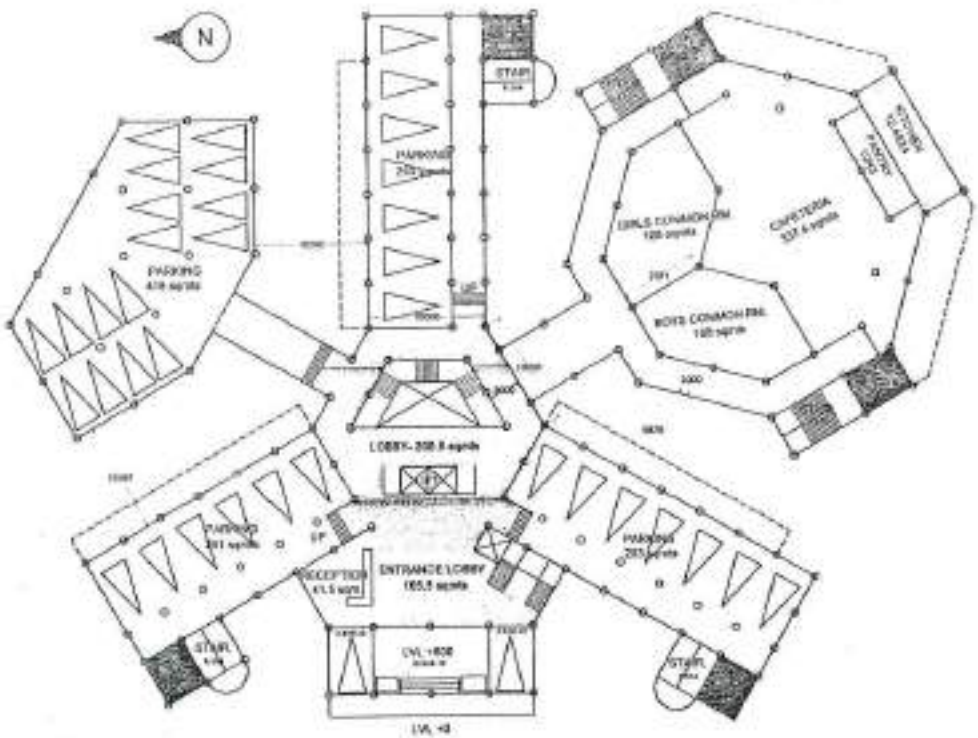
CLIENT: ASSAM SCIENCE AND TECHNOLOGY UNIVERSITY, JALUKBARI, GUWAHATI, ASSAM

DRG NO. ASTU/COMBINED CWL/ SEC-I/SEC-II

CONSULTANT- DESIGN TEAM NORTHEASTERN

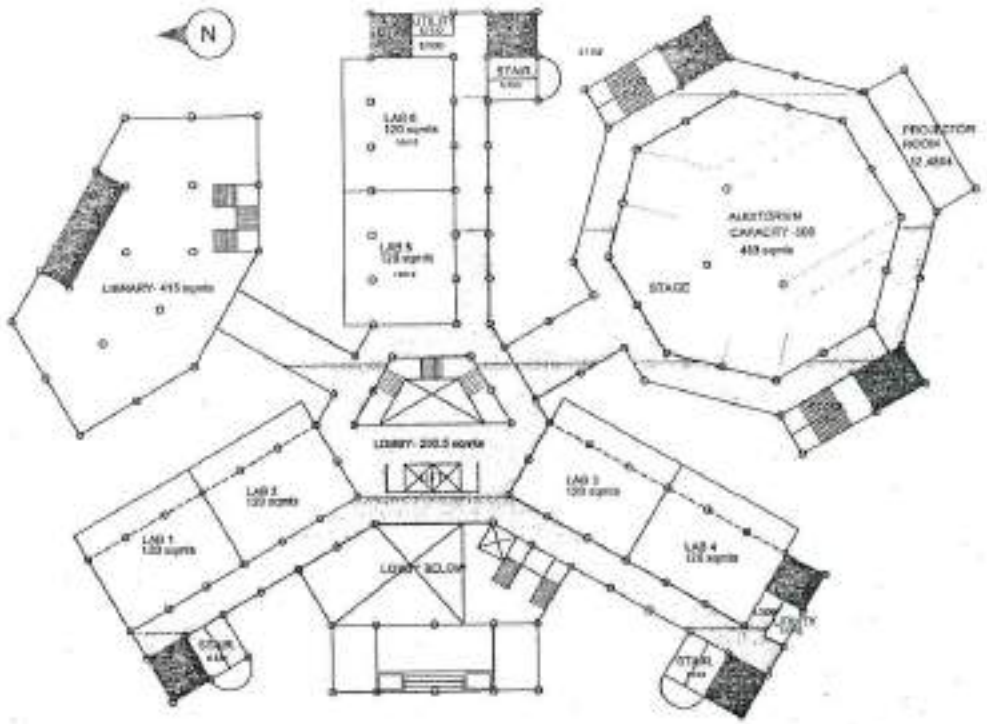
LANDSCAPE CONSULTANT- DESIGN EQUITIES

DATED: 12/08/2020



TOTAL AREA AT GROUND FLOOR =2956 SQM

GROUND FLOOR PLAN WITH PARKING AND ENTRANCE LOBBY
CAFETERIA, KITCHEN, BOYS- GIRLS COMMON ROOM.

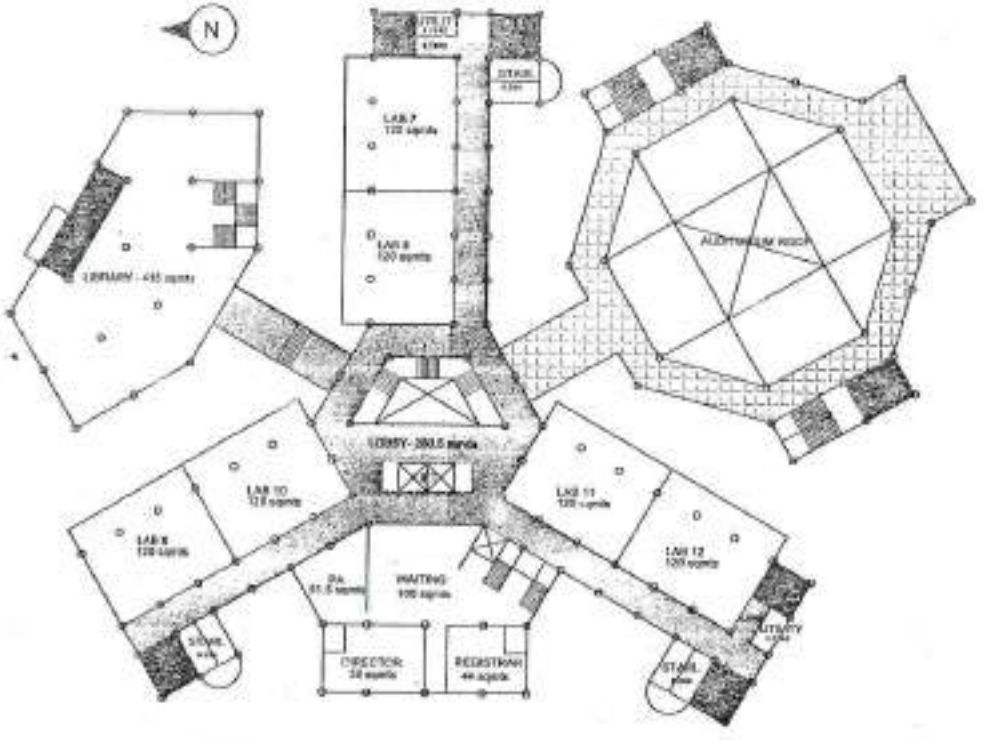


TOTAL AREA AT FIRST FLOOR= 3136 SQM

IT INCLUDES 6 LABORATORY WITH SEPARATE TOILET BLOCKS
IT ALSO INCLUDES LIBRARY AND AND AN AUDITORIUM OF 500 CAPACITY
VERTICAL MOVEMENTS WHILE LIBRARY HAS INDIVISUAL STAICASE AND
AUDITORIUM HAS 2 STAIRCASES WITH SEPARATE TOILET BLOCKS

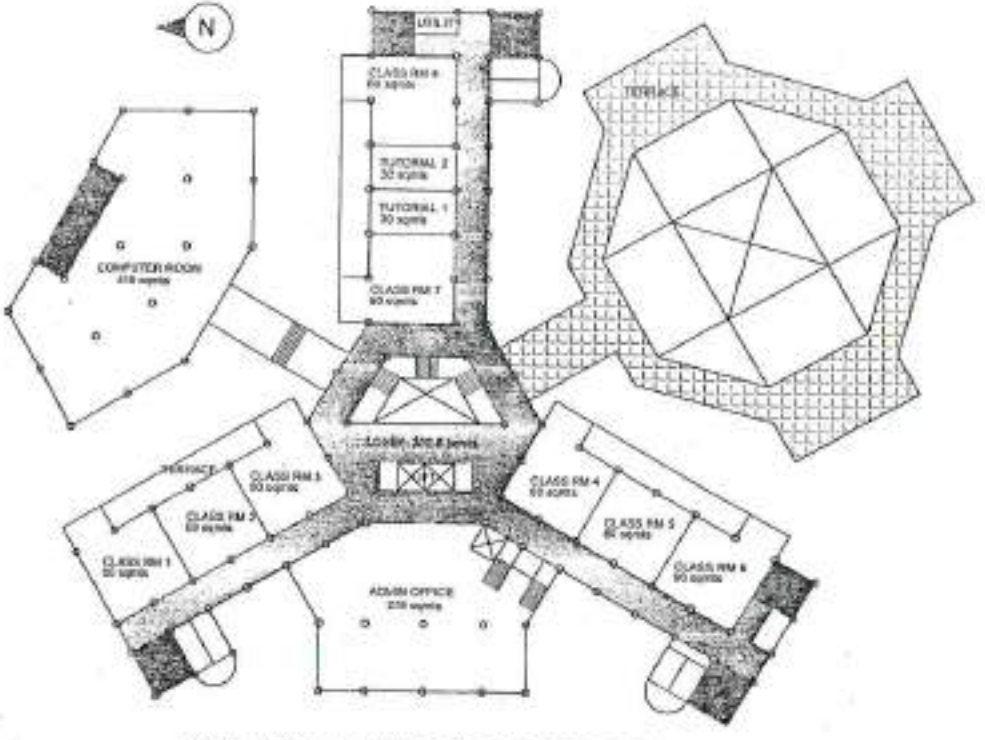
12/8/20

CLIENT : ASSAM SCIENCE AND TECHNOLOGY UNIVERSITY, JALUKBARI, GUWAHATI, ASSAM.	TITLE : ACADEMIC BLOCK OF SECTOR-1	CONSULTANT : DESIGN TEAM NORTHEASTERN	DATED : 12/08/2020
	DRG.NO : ASTU / ACADEMIC BLOCK / 01	LANDSCAPE CONSULTANT : DESIGN EQUITIES	



TOTAL AREA AT SECOND FLOOR= 3136 SQM

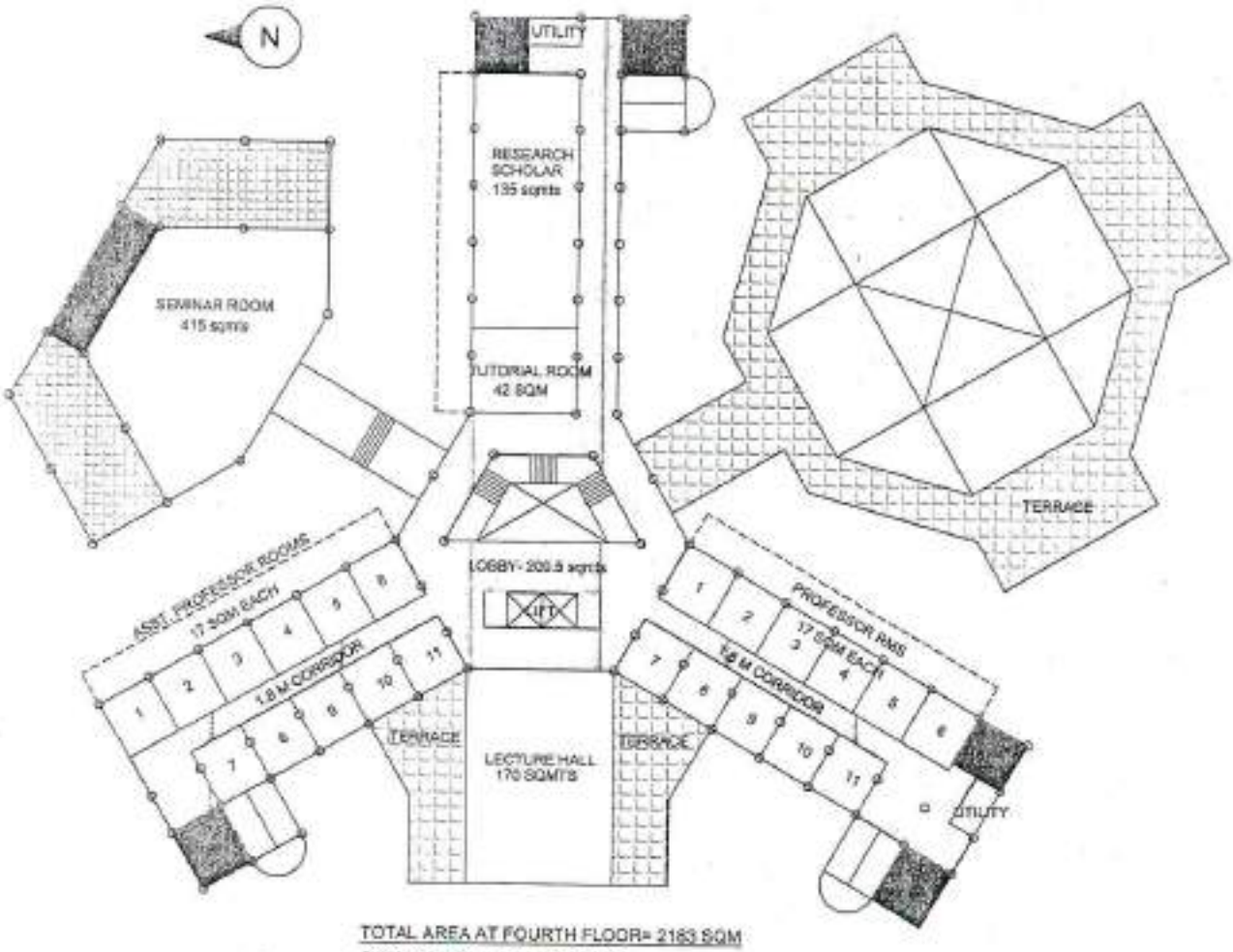
THIS FLOOR HAS PROVISION OF DIRECTOR, REGISTRARS, 6 LABORATORY ROOMS WITH SEPARATE TOILET BLOCKS



TOTAL AREA AT THIRD FLOOR= 2183 SQM

THIS FLOOR INCLUDES 8 CLASS ROOMS, 2 TUTORIAL ROOMS, COMPUTER ROOM AND ADMINISTRATIVE OFFICE WITH SEPARATE TOILET BLOCKS.
ONLY AUDITORIUM AREA = 862 SQM

CLIENT : **ASSAM SCIENCE AND TECHNOLOGY UNIVERSITY, JALUKBARI, GUWAHATI, ASSAM.**	TITLE : ACADEMIC BLOCK OF SECTOR-1	CONSULTANT : DESIGN TEAM NORTHEASTERN	DATED : 12/08/2020
	DRG.NO : ASTU / ACADEMIC BLOCK / 02	LANDSCAPE CONSULTANT : DESIGN EQUITIES	



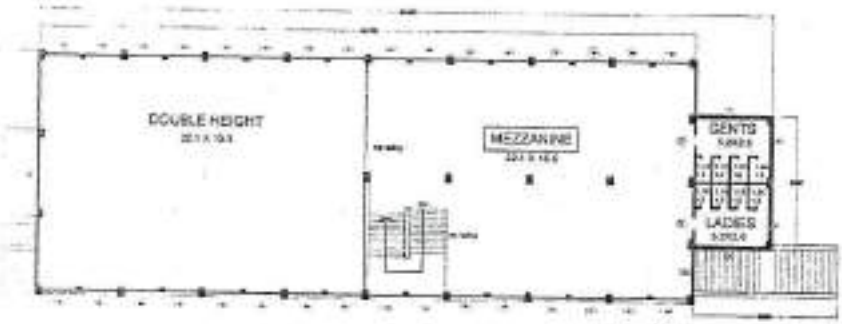
TOTAL AREA AT FOURTH FLOOR= 2163 SQM

ONLY AUDITORIUM AREA = 562 SQM

WORKSHOP BUILDING

GROUND FLOOR PLAN OF WORKSHOP BUILDING

TOTAL AREA=792 SQM



MEZZININE FLOOR PLAN OF WORKSHOP BUILDING

TOTAL AREA=792 SQM

DESIGN TEAM NORTHEASTERN GUWAHATI

TITLE : ACADEMIC BLOCK & WORKSHOP OF SECTOR-1

CLIENT : **ASSAM SCIENCE AND TECHNOLOGY UNIVERSITY, JALUKBARI, GUWAHATI, ASSAM.**

DRG.NO : ASTU / ACADEMIC BLOCK / 03

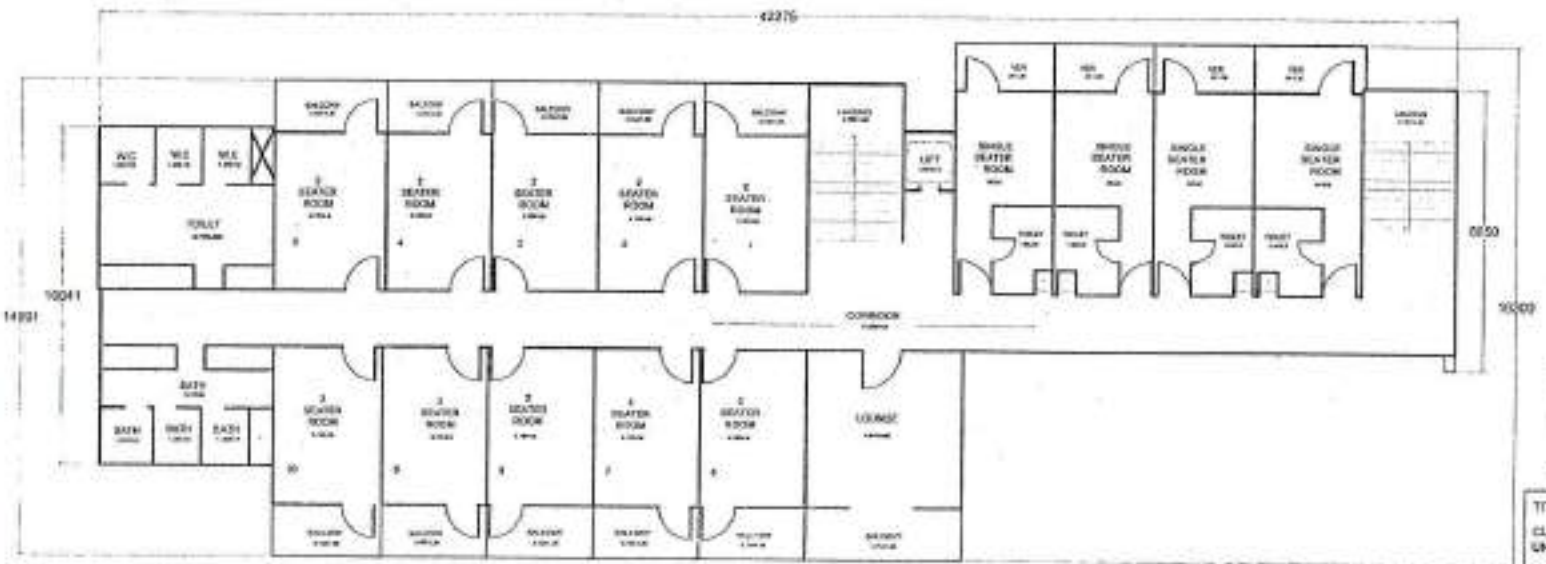
CONSULTANT : DESIGN TEAM NORTHEASTERN

LANDSCAPE CONSULTANT : DESIGN SQUITIES

DATED : 12/08/2020

GROUND FLOOR PLAN OF GIRLS HOSTEL & RESEARCH SCHOLAR ROOM

TOTAL FLOOR AREA=627.5 SQM



TYPICAL 1ST,2ND,3RD,4TH,& 5TH FLOOR PLAN OF GIRLS HOSTEL & RESEARCH SCHOLAR ROOM

TOTAL FLOOR AREA=627.5 SQM X 5 = 3137.5 SQM

DESIGN TEAM NORTH EAST GUWAHATI

12/5/20

TITLE: GIRLS HOSTEL OF SECTOR-1

CLIENT: ASSAM SCIENCE AND TECHNOLOGY UNIVERSITY, JALUKBARI, GUWAHATI, ASSAM.

DRG.NO: ASTU / G.H / SEC-1 /01

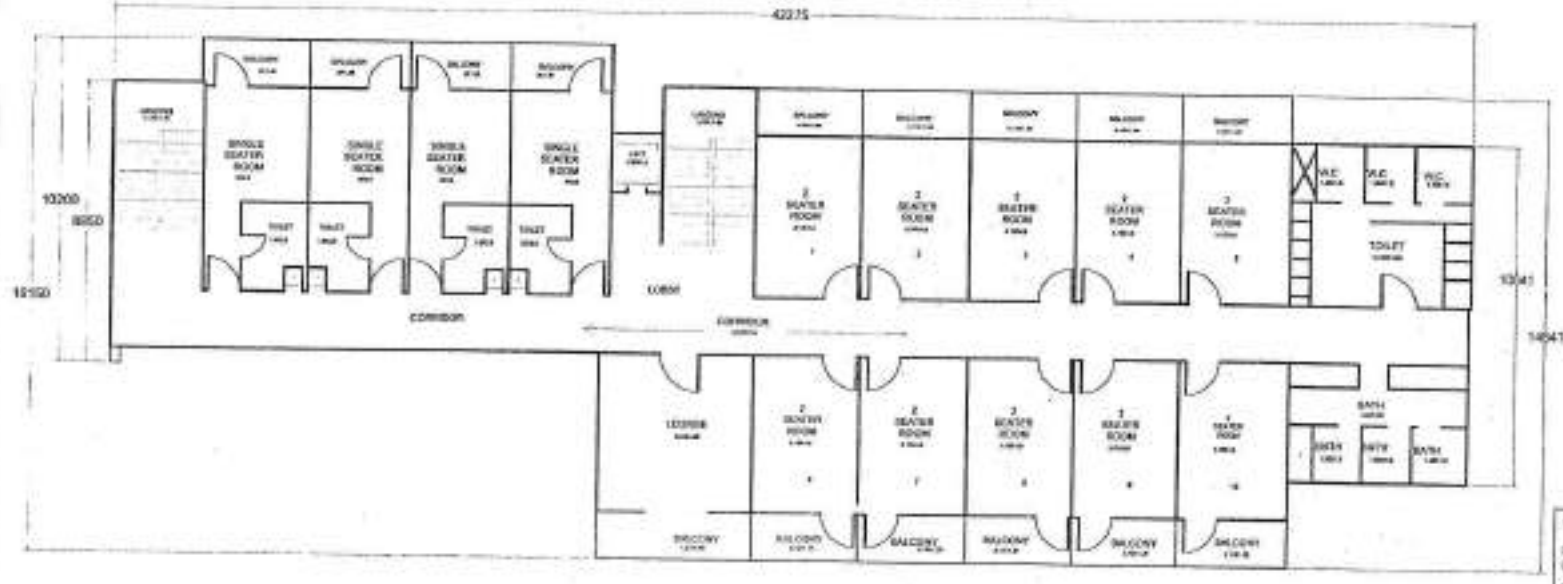
CONSULTANT: DESIGN TEAM NORTHEASTERN

LANDSCAPE CONSULTANT: DESIGN EQUITIES

DATED : 12/05/2020

GROUND FLOOR PLAN OF BOYS HOSTEL & RESEARCH SCHOLAR ROOM

TOTAL FLOOR AREA=627.5 SQM



TYPICAL 1ST,2ND,3RD,4TH & 5TH FLOOR PLAN OF BOYS HOSTEL & RESEARCH SCHOLAR ROOM

TOTAL FLOOR AREA=627.5 SQM X 5 = 2637.5 SQM

DESIGN TEAM NORTHEASTERN GUWAHATI

12/15

TITLE: BOYS HOSTEL OF SECTOR-1

CLIENT: ASSAM SCIENCE AND TECHNOLOGY UNIVERSITY, JALUKBARI, GUWAHATI, ASSAM.

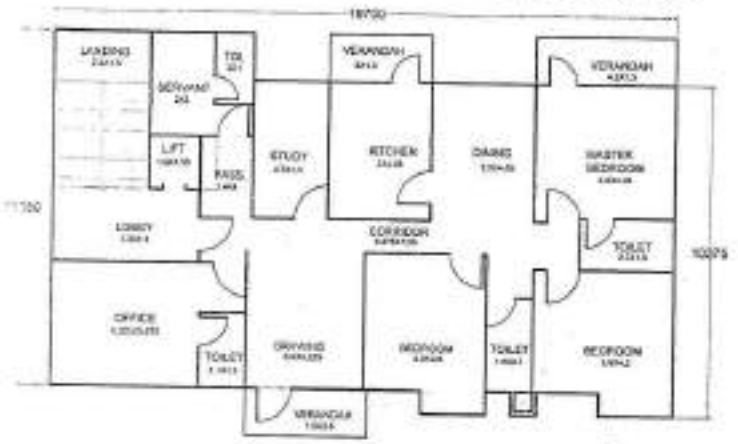
DRG.NO: AST/ / B.H / SEC-1.01

CONSULTANT: DESIGN TEAM NORTHEASTERN

LANDSCAPE CONSULTANT: DESIGN EQUITIES

DATED : 12/

REGISTRAR AND PROFESSOR & ASSOCIATE PROFESSOR QTR



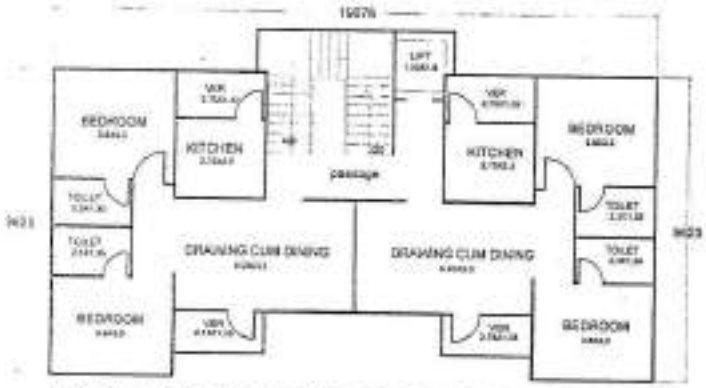
TYPICAL 1ST,2ND,3RD,4TH & 5TH FLOOR PLAN

TOTAL FLOOR AREA=220.2 SQM X 5 =1103 SQM.

GROUND FLOOR FOR PARKING

TOTAL AREA=203.0 SQM

STAFF QUARTERS



TYPICAL 1ST,2ND,3RD 4TH & 5TH FLOOR PLAN OF STAFF QUARTERS

TOTAL FLOOR ARE=175.7 SQM(5=878.5 SQM

GROUND FLOOR FOR PARKING

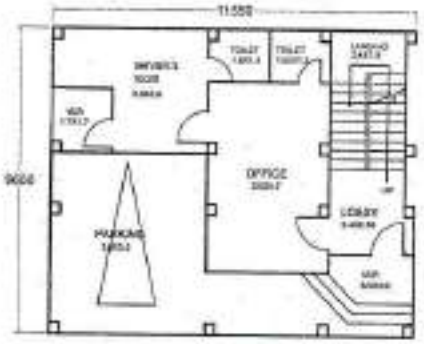
TOTAL AREA=175.7 SQM FOR PARKING.

GRADE IV QUARTER

TYPICAL GROUND,1ST,2ND, 3RD AND 4TH FLOOR PLAN OF GRADE-IV QTR

TOTAL FLOOR AREA=172.0 SQM X 5 = 860 SQM

DIRECTOR'S QTR

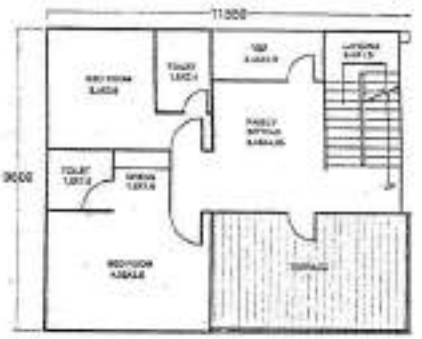


GROUND FLOOR PLAN

TOTAL AREA=113.8 SQM
FLOOR AREA=77.53 SQM
PARKING AREA=36.2 SQM

FIRST FLOOR PLAN

TOTAL AREA=113.8 SQM



SECOND FLOOR PLAN

TOTAL AREA=113.8 SQM

TITLE: RESIDENTIAL BUILDINGS OF SECTOR-2

CLIENT: **ASSAM SCIENCE AND TECHNOLOGY UNIVERSITY, JALUKBARI, GUWAHATI, ASSAM.**

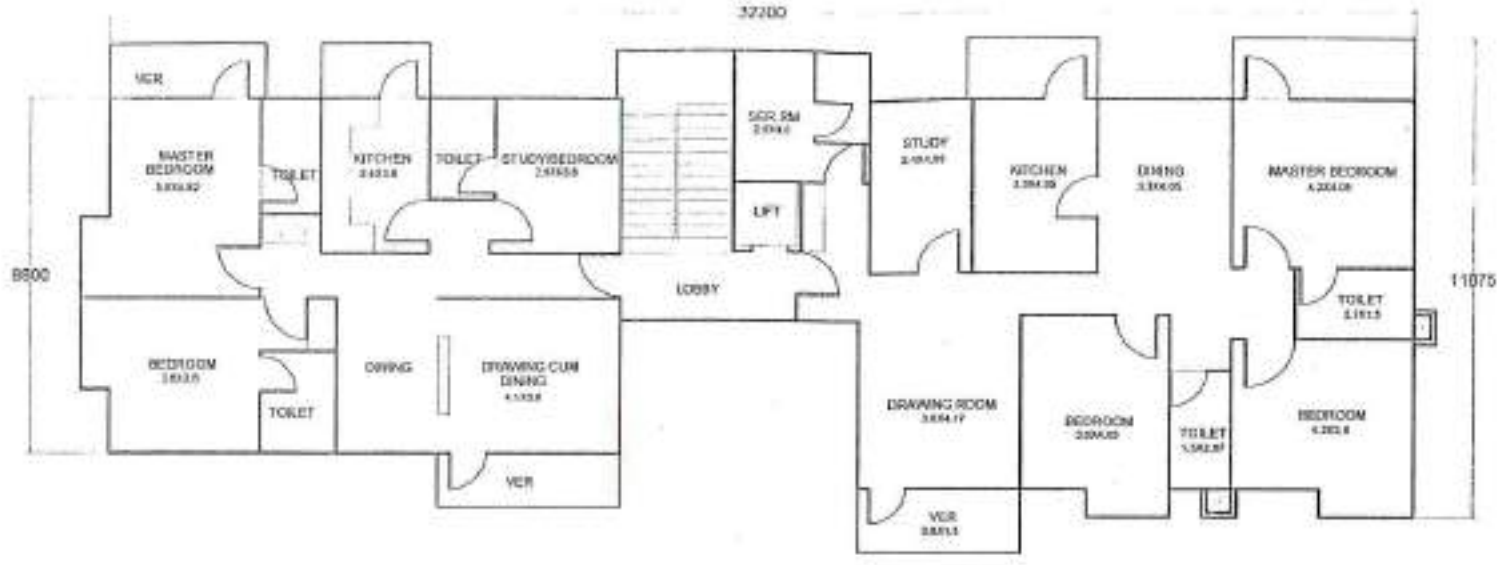
DRG.NO: ASTU / RESIDENTIAL BUILDINGS /01

CONSULTANT: DESIGN TEAM NORTHEASTERN

LANDSCAPE CONSULTANT: DESIGN EQUITIES

DATED : 12/08/2020

ASSOCIATE PROFESSOR AND PROFESSOR

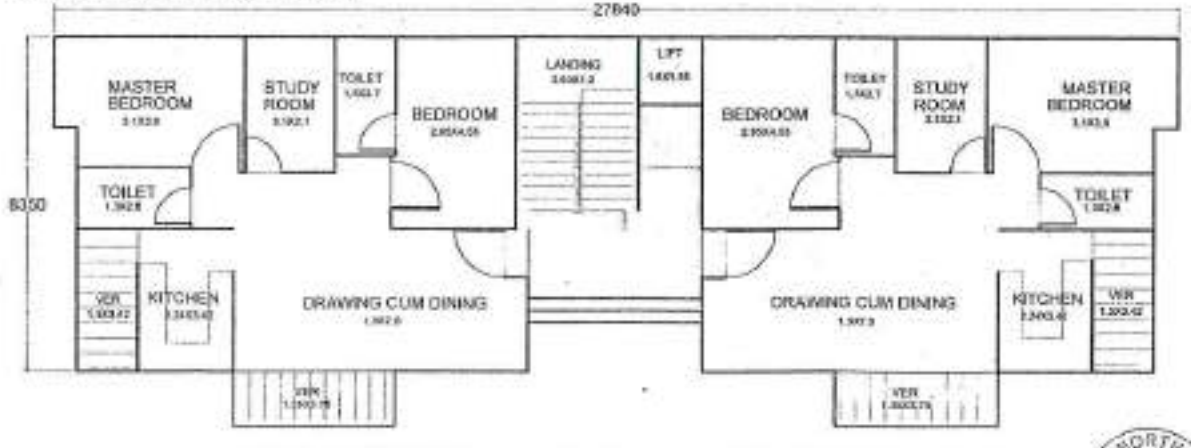


TYPICAL 1ST,2ND,3RD,4TH,& 5TH FLOOR PLAN OF ASSOCIATE PROF. & PROFESSOR

TOTAL FLOOR ARE=322.0 SQMX5=1610 SQM

GROUND FLOOR FOR PARKING TOTAL AREA=289.8 SQM

ASSISTANT PROFESSOR



TYPICAL 1ST,2ND,3RD,4TH,& 5TH FLOOR PLAN OF ASST. PROFESSOR

TOTAL FLOOR ARE=231 SQMX5=1155 SQM

GROUND FLOOR FOR PARKING TOTAL AREA=220.0 SQM.

TITLE: RESIDENTIAL BUILDINGS OF SECTOR-2

CLIENT: ASSAM SCIENCE AND TECHNOLOGY UNIVERSITY, JALUKBARI, GUWAHATI, ASSAM.

DRG.NO: ASTU / RESIDENTIAL BUILDING / 02

CONSULTANT: DESIGN TEAM NORTHEASTERN

LANDSCAPE CONSULTANT: DESIGN SOLITIES

DATED : 12/08/2020

GOVERNMENT OF ASSAM
HIGHER EDUCATION (TECHNICAL) DEPARTMENT
DISPUR, GUWAHATI – 6.

ORDERS BY THE GOVERNOR
NOTIFICATION

Dated Dispur, the 22nd June, 2012

No.ATE.221/2011/28 : The Governor of Assam is pleased to allot 10 (ten) Bighas of land in Jalukbari Mouza, Vill – Maj-Jalukbari, Dag No.151 of Kamrup (Metro) form the land reserved for Assam Engineering College to the Assam Science and Technology University, Guwahati for establishment of their Administrative building, Guest House, Vice Chancellor's residence, Staff quarter etc. This allotment is subject to the condition that the allottee shall not sell or transfer the land to anybody in any manner. If the allottee fails to establish the Institute for which the land has been allotted, the said land shall revert back to the Assam Engineering College, Guwahati.

Sd/- H.K. Sharma, IAS
Commissioner & Secretary to the Govt. of Assam
Higher Education (Technical) Department

Memo No.ATE.221/2011/28 – A Dated Dispur, the 22nd June, 2012

Copy to :-

1. The Vice Chancellor, Assam Science & Technology University, Assam, Guwahati for information.
2. The Director of Technical Education, Assam, Kahilipara, Guwahati – 19 for handing over the land to the Assam Science and Technology University, Guwahati.
3. The Principal, Assam Engineering College, Jalukbari, Guwahati – 13.
4. The Director, Printing & Stationery Department, Assam, Bamunimaidam, Guwahati – 21 for immediate publication the Official Gazette and send 10 (ten) copies of the undersigned.
5. P.S. to Commissioner& Secy. Higher Education, Assam.

By order etc.,

Under Secretary to the Govt. of Assam
Higher Education (Technical) Department

142543

PLOT BOUNDARY WALL

CENTRAL EVALUATION BLOCK

MEDICAL BLOCK

TECIP LAB

LANDSCAPE AREA

SEMINAR HALL AND GUEST HOUSE

FUTURE EXTENSION

49000

PLOT BOUNDARY WALL

5 M WIDE ROAD

6M WIDE ROAD

6 M WIDE ROAD

6 M WIDE ROAD

ACADEMIC BLOCK

EXISTING BUILDING

85102

V.C's RESIDENCE

6M WIDE ROAD

6M WIDE ROAD

GATE

GATE

PLOT BOUNDARY WALL

PLOT BOUNDARY WALL

MAIN ROAD

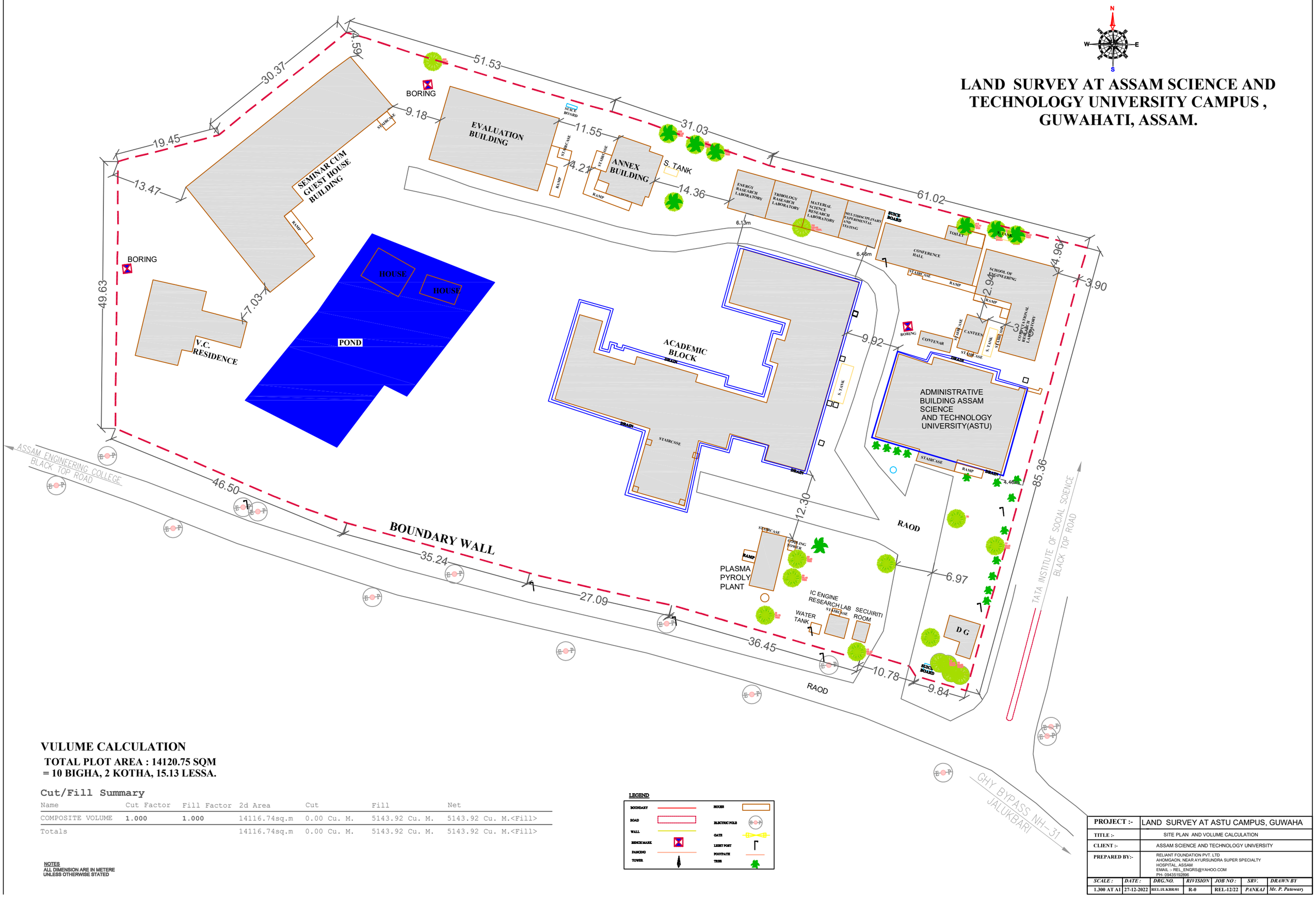
DIPAR BIL

N

PROPOSED
LAYOUT PLAN OF ASSAM SCIENCE AND TECHNOLOGY UNIVERSITY
AT JALUKBARI, GUWAHATI, ASSAM.

TITLE :- SITE PLAN			CONSULTANT:- GUWAHATI COLLEGE OF ARCHITECTURE JOGIPARA JORE ROAD, AZARA, GUWAHATI-15, ASSAM
SCALE :- 1:200	DATE:- 26-10-2017	DRN BY:-	DRG NO:- AR-01

LAND SURVEY AT ASSAM SCIENCE AND TECHNOLOGY UNIVERSITY CAMPUS , GUWAHATI, ASSAM.



VULUME CALCULATION

TOTAL PLOT AREA : 14120.75 SQM
= 10 BIGHA, 2 KOTHA, 15.13 LESSA.

Cut/Fill Summary

Name	Cut Factor	Fill Factor	2d Area	Cut	Fill	Net
COMPOSITE VOLUME	1.000	1.000	14116.74sq.m	0.00 Cu. M.	5143.92 Cu. M.	5143.92 Cu. M.<Fill>
Totals			14116.74sq.m	0.00 Cu. M.	5143.92 Cu. M.	5143.92 Cu. M.<Fill>

NOTES
ALL DIMENSION ARE IN METERE
UNLESS OTHERWISE STATED

LEGEND

BOUNDARY	HOUSE
ROAD	ELECTRIC POLE
WALL	GATE
BENCH MARK	LIGHT POST
FANCING	FOOTPATH
TOWER	TREE

PROJECT :-	LAND SURVEY AT ASTU CAMPUS, GUWAHA					
TITLE :-	SITE PLAN AND VOLUME CALCULATION					
CLIENT :-	ASSAM SCIENCE AND TECHNOLOGY UNIVERSITY					
PREPARED BY:-	RELIANT FOUNDATION PVT. LTD AHOMGAON, NEAR AYURSUNDRA SUPER SPECIALTY HOSPITAL, ASSAM EMAIL :- REL_ENGRS@YAHOO.COM PH:-09435192896					
SCALE :	*DATE :*	*DRG.NO.*	*RIVISION*	*JOB NO :*	*SRV.*	*DRAWN BY*
1.300 AT A1	27-12-2022	REL/JLKBR/01	R-0	REL-12/22	PANKAJ	Mr. P. Patowary

অসম চৰকাৰ

GOVERNMENT OF ASSAM
OFFICE OF THE DEPUTY COMMISSIONER
KAMRUP METROPOLITAN DISTRICT, GUWAHATI
(LAND SETTLEMENT BRANCH)

Telephone – 0361-2540149
Fax – 0361-2544452
E –mail – kamrupmetro@nic.in
Website – www.kamrupmetro.nic.in

No. KRS.651/2019/ Dated :

To

The Commissioner & Secretary to the Govt. of Assam,
Revenue & D. M. Department,
Dispur, Guwahati.

Sub : Regarding allotment of land in favour of Assam Science and Technology University for construction of Educational Institution.

Sir,

With reference to the subject cited above, I have the honour to submit herewith an allotment proposal of land measuring **15B-2K-0L covered by Dag No. 380 and land measuring 21B-2K-10L covered by Dag No. 382, (total being 36B-4K-10L) of village Maj Jalukbari under Jalukbari mouza** in favour of Assam Science and Technology University for construction of Educational Institution received from Circle Officer, Guwahati Revenue Circle vide letter No. G.C.19/2016/1078, dated 30/6/2021.

As per report of the Circle Officer, Guwahati Revenue Circle the proposed land is Govt. land and is marked as "Assam Engineering College" in the remarks column of hand Chitha.

The proposal has been approved by the SDLAC held on 19/05/2022 vide Resolution No. 9.

In this connection, the report submitted by the Circle Officer, Guwahati Rev. Circle vide his letter No. G.C.19/2016/1078, dated 30/6/2021, copy of the L.R. Staff report, chitha and trace map are enclosed herewith for favour of your kind necessary action.

Yours faithfully,

Enclo-As stated.

Deputy Commissioner,
Kamrup Metropolitan District
Guwahati.

Memo No. KRS.651/2019/1648-49/A Dated : 17.11.2022

Copy to:

The Vice Chancellor, Assam Science and Technology University for kind information and necessary action.

Deputy Commissioner,
Kamrup Metropolitan District
Guwahati.

Registrar
for Allan
up

1st Modification

LEGENDS

- INCIDENTAL OPEN SPACES- 993 SQ.M (3.9%)
- OIL LINE- 3176 SQ.M (12.2%)
- ROAD NETWORK- 5528 SQ.M (21.3%)
- SERVICE ZONE- 1277 SQ.M (4.9%)
- PARKING- 680 SQ.M (2.6%)
- FORMAL GREENS (INCLUDING PLAY AREAS) - 5206.5 SQ.M (20.0%)
- (ACADEMIC+WORKSHOP)
- RESIDENTIAL BUILDINGS (HOSTEL) — 4731 SQ.M (18.26 %)
- WASTE WATER TREATMENT AND RWH 860 SQ.M (3.31%)
- PROPOSED AREA FOR FUTURE EXTENTION 3453 SQ.M (13.3%)

UG & FIRE TANK
SERVICE ENTRY
O.H. TANK
WATER SOURCE
SERVICES ZONE
CULVERT
PROPOSED DRAIN
PROPOSED TECHNO PARK AND FUTURE EXTENSION FOR ACADEMIC BUILDING
OIL LINE
ACADEMIC (G+4) BLOCK
PLAY AREA
RESEARCH SCH
COURTYARD
ROAD
AICTE PLOT
SECURITY
PARKING
LAWN
WORKSHOP (G) 720 SQMTS
SUBSTATION (G)
TBM-1
TBM-2
O/L POST

DESIGN TEAM NORTHEASTERN GUWAHATI
31/7/20

SITE 1
PLOT AREA: 25905 SQ.M
19 BIGHAS 1 KATHA 15.6 LESSA
GROUND COVERAGE: 18.4%
FAR:0.712

TITLE : REVISED MASTER PLAN-SITE1
CLIENT: ASSAM SCIENCE AND TECHNOLOGY UNIVERSITYJALUKBARI,GUWAHATI,ASSAM.
DRG.NO.- MP/SITE-1
CONSULTANT:- DESIGN TEAM NORTHEASTERN
ASSOCIATE CONSULTANTS:DESIGN FORUM


UG & FIRE TANK
OH. TANK
FRUIT ORCHARD
SERVICES
WATERSOURCE
GRADE-IV QTR (G+5)
STAFF QTR (G+5)
ASSTT. PROFF QTR (G+5)
PROFF AND ASSOCIATE PROFF (G+5)
LAWN
KIDS PLAY AREA
PROPOSED ROAD
WATCH TOWER
FRUIT ORCHARD
REGISTRARS QUARTERS +PROFFESSOR +ASSOCIATE (G+5)
QUARTERS
BADMINTON COURT
BASKETBALL COURT
MULTIPURPOSE FEILD 4950 SQMTS
HEALING GARDEN WITH AROMATIC PLANTS
WATERBODY
FOUNTAIN
SOLAR PARK
ORCHID HOUSE BELOW SOLAR PANELS
PARKING BELOW SOLAR PANELS
KRISHNA KANTA HANDIQUE
GOVERMENT SANSKRIT COLLEGE
NFR POST
Railway Bridge
SUBSTATION (G)
N
LEGENDS
ECO PARK-17289 SQ.M (51.5%)
FLOWER GARDENS
WATERBODY WITH FOUNTAIN
SOLAR PARK
MULTIPURPOSE FIELD
BASKETBALL COURT
BADMINTON COURT
5120 (15.25%)
INCIDENTAL OPEN SPACES-2762 SQ.M (8.22 %)
FORMAL GREENS- 2375 SQ.M (7.07%)
ROAD NETWORK- 4283 SQ.M (12.76%)
SERVICE ZONE- 512 SQ.M- (1.52%)
RESIDENTIAL BUILDINGS- 1220 SQ.M- (3.63%)
DESIGN TEAM NORTH EASTERN
GUWAHATI
31/7/20

TITLE : REVISED MASTER PLAN-SITE 2
CLIENT: ASSAM SCIENCE AND TECHNOLOGY UNIVERSITYJALUKBARI,GUWAHATI,ASSAM.
DRG.NO.- MP/SITE-1
CONSULTANT:- DESIGN TEAM NORTHEASTERN
ASSOCIATE CONSULTANTS:DESIGN FORUM

SITE 2
PLOT AREA:- 33561 SQ.M
36116 SQ.FT
27 BIGHAS 7.75 LESSA
GROUND COVERAGE: 3.62%
FAR: 0.613