Agenda & Notes

FC NO. 10th

2008-09: Special Meeting *of the*

Finance Committee

Venue of the Meeting

Office of the Secretary, Ministry of Textiles,
Udyog Bhawan, New Delhi

Date and Time of the Meeting

January 05, 2009 at 14.30 Hrs

PDPM
Indian Institute of Information Technology, Design and Manufacturing Jabalpur

Agenda & Agenda Notes

for

the Special Meeting of the Finance Committee, 2008-09

to be held on January 05, 2009

in the office of the

Chairman, Board of Governors

Udyog Bhawan, New Delhi

AGENDA

FC/2008-09: 03.01 **Opening Remarks by the Chairman**

Remarks by the Chairman will be made in the meeting itself.

FC/2008-09: 03.02 **Overview Report of the Director**

Overview Report of the Director will be tabled in the meeting itself.

FC/2008-09: 03.03 **Confirmation of the Minutes of the FC/2008-09: 2nd Meeting Held on November 07, 2008**

Draft Minutes of the Finance Committee Meeting # FC/2008-09:02 held on November 07, 2008 in the Office of the Chairman at Udyog Bhawan, New Delhi, were circulated to the members through e-mail and are also attached herewith as **Annexure 1** [Page 3 - 5]. The Finance Committee is requested to confirm the same.

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Minutes of the
2nd Meeting of the Finance Committee 2008-09

held on November 07, 2008

Members Present:

1)	Shri AK Singh Chairman, Board of Governors	Chairman
2)	Shri Ashok Thakur Additional Secretary MHRD, New Delhi	Member
3)	Prof Sanjeev Bhargava Director, PDPM IIITDM, Jabalpur	Member
4)	Shri Anurag Jain Secretary, Technical Education Government of Madhya Pradesh, Bhopal	Member
5)	Shri S Mohan Deputy Under Secretary (Finance) MHRD, New Delhi	Member (MHRD Nominee representing FA, MHRD)
6)	Prof Amit Ray Professor Incharge Planning PDPM IIITDM Jabalpur	Member Secretary

Leave of Absence:

	Prof Manoj K Harbola Board Nominee	Member

At the outset, the Director and other members of the Committee congratulated and welcomed Shri AK Singh on his assuming the charge of the new Chairman of the Board of Governors of the Institute. The Committee also expressed its hope that the newly established Institute would use Mr Singh's immense and very rich administrative experience and would be benefited by the same in terms of streamlining its various administrative procedures and activities which are very critical for its growth. With these initial comments and remarks the Committee took up its agenda items. Decisions taken on them are given below:

FC/2008-09: 02.01 Opening Remarks by the Chairman

1. The Chairman welcomed all the members of the Committee. He expressed satisfaction on the possibility of the Institute running itself from its own campus from the forthcoming semester. However, he advised that the Institute should not hurriedly vacate its current premises, i.e. the Jabalpur Engineering College, even after starting its activities from the new campus at Dumna. He suggested that, in view of the bigger batch of students to be admitted in the next academic session, it would be prudent to retain its existing premises as well as hostels which may still have their requirements under the changed situation. He emphasized that shifting of students to the new isolated campus should be done only after making proper arrangements for several common necessities in the hostel. He also insisted that before shifting students to the campus, the Institute must make necessary and

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reasonable transport arrangements so that students do not face unnecessary hurdles in going to Jabalpur city for meeting out their various needs. Institute should also make sure that some faculty/staff also stay in the campus along with students and necessary security arrangements for their safety are made in advance.

The Director expressed concurrence with the concerns shown by the Chairman and assured the members that all the needed steps would be undertaken before shifting Institute's activities from the new campus.

2. In terms of the vision of the Institute regarding its academic programmes, the Chairman desired that the Director goes through the Detailed Project Report (DPR), EFC Note and the associated Cabinet decision for the establishment of the Institute. If required, the Institute should take necessary steps to incorporate the desirable changes.

   The Director assured that this would be done at the earliest.

3. The Chairman desired that the plans for constructing new buildings must be in consonance with the requirements of growth of Institute's activities in forthcoming years.

   The Director informed that the buildings to be constructed are indeed being taken up with such a view. He also promised that the plan for constructing new buildings in coming years vis-à-vis the increase in students' strength and that of the associated faculty and the non-academic staff would be presented in the next meeting.

FC/2008-09: 2.02 Overview Report of the Director

Progress of the Existing Construction Work

The Committee expressed satisfaction on the progress of the ongoing construction work. It suggested that the future construction works may be taken as per advice of the Chairman as given in Point # 3 above.

Services

The Committee expressed satisfaction over the laying of 33 KVA line to the campus. However, it desired that the necessary steps for the external electrification systems in the campus should also be simultaneously taken up by the Institute.

The Committee noted the procedure adopted by the Institute in awarding the contract of the Sewage Treatment Plant to fulfill its needs. It also approved the award of the STP Plant to M/s Wockoliver Ltd.

Academic and Non-Academic Staff

The Committee noted the situation regarding the sanctioned positions of the academic and the non-academic staff to the Institute. It also appreciated the special requirements which the Institute has with respect to the non-academic staff. It hoped that the requirements shall be met by sanctioning of the required number of additional positions by the Ministry. However, the Committee expressed concern on the posts which were still lying vacant in spite of giving clearance for converting them to equivalent posts in its last meeting in July 2008. The Director informed that the advertisement seeking applications for them had already been published and work on the short listing of candidates who had applied against it was under progress. He assured that work on filling the vacant positions would soon be completed.

Audit of the Institute Accounts

The Committee noted the schedule of visit of the AG (MP) Gwalior team to the Institute and expressed hope that the exercise would be satisfactorily completed within the proposed time schedule.

FC/2008-09: 02.02 **Confirmation of the Minutes of the FC/2008-09: 1st Meeting Held on July 22nd, 2008**

Minutes of the meeting were confirmed without any change. However, members expressed concern on their circulation after a lapse of long time. They desired that their circulation must be done within a reasonable time frame after conducting the meeting.

FC/2008-09: 02.03 **Revised Budget Estimates of 2008-09 and Budget Estimates of 2009-10**

The Committee noted the Revised Budget Estimates which were circulated with the Agenda Notes. The Chairman suggested that in view of the arrears to be given to employees against the VI Pay Commission recommendation within the current financial year, the figures presented in the Revised Budget Estimates may require corrections. He asked the Director to present the same in the next meeting which should be convened soon. Except these corrections, the REs were accepted by the Committee.

FC/2008-09: 02.04 **Recommendations of the 2008 - 09: 1st Meeting of the Building & Works Committee held on 13th October, 2008**

The Committee noted the Preliminary Estimates (PEs) for the construction of (i) the first Triple-Seated Hall of Residence (TSH1) and (ii) the Lecture Halls & Tutorial Rooms Complex amounting to Rs 1690 lacs and Rs 2409 lacs respectively. The Committee decided to recommend the same to the Board of Governors for granting administrative and financial approval for their construction.

FC/2008-09: 02.05 **Policy for Medical Attendance and Treatment – Eligibility Criteria for Institute Employees**

This Agenda Item was deferred to the next meeting. However, Mr Mohan suggested that the Institute must go through the Medical Policy adopted by IIT Kharagpur or any other IIT and make the proposal by ensuring that the Institute's Policy is in concurrence with it/them.

With no other Agenda Item brought for discussion, the meeting ended with a vote of thanks to the Chair.

(Sanjeev Bhargava)
Director

Approved

(AK Singh)
Chairman, Finance Committee

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FC/2008-09: 03.04 **Revised Budget Estimates of 2008-09 and Budget Estimates of 2009-10**

In the 2nd FC Meeting 2008-09 of the Finance Committee held on November 07, 2008 it was desired that the Institute reworks its Revised Budget Estimates 2008-09 in view of the commitments towards VI Pay Commission recommendations. The Revised Budget Estimates of 2008-09 as well as Budget Estimate for 2009-10 are given in **Annexure 2** [Page 7 - 11]. The Finance Committee is requested to recommend the same to the Board for their adoption.

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PDPM INDIAN INSTITUTE OF INFORMATION TECHNOLOGY, JABALPUR

Statement of Head Wise Expenditures (Plan)

A. Recurring					
Sl No.	Account Head	Expenditure as on 26-12-2008	Budget Estimate 2008-09	Revised Budget 2008-2009	Budget Estimates 2009-2010
a. Salary Component					
1	***Pay & Allowances***	**74.53**	**246.00**	**190.00**	**240.00**
	a) Salary& Wages -Contractual Employees	14.05	240.00	190.00	240.00
	b) Salary & Wages -Regular Emlpyees	59.08			
	c)Leave Salary contribution		1.00		
	d) Medical Aid & Staff Welfare	1.40	5.00		
b. Non Salary Component					
2	***Student Scholarship***	**2.76**	**25.00**	**8.00**	**25.00**
3	***Administrative Expenses***	**68.64**	**154.75**	**102.60**	**156.00**
	a) Office / Miscellaneous Expenses	2.68	10.00	4.00	8.00
	b) PostageTelephone & Communication Charges	5.18	15.00	12.00	15.00
	c) Printing & Stationary	4.14	10.00	5.00	10.00
	d) Advertisement & Publicity	12.73	30.00	20.00	30.00
	e) Rent Rate & Taxes	4.32	8.00	5.00	6.00
	f) Repair & Maintenace	0.68	10.00	3.00	8.00
	g) Travelling & Conveyance	15.46	30.00	20.00	30.00
	h) Honorarium	8.33	15.00	10.00	15.00
	i) Hospitality Expenses	3.29	6.00	4.00	5.00
	j) Insurance and Bank Charges	0.17	1.00	0.50	1.00
	k) Book Grant to Faculties	0.04	4.00	3.00	4.00
	l) News Paper & Periodicals	0.15	0.75	0.10	0.75
	m) Consumables	5.33	6.00	3.00	8.00
	n) Work Shop/ Seminar Expenses	1.14	6.00	6.00	6.00
	o) Professional Charges	3.00	3.00	3.00	3.25
	p) Membership Charges	2.00		4.00	6.00

Sl No.	Account Head	Expenditure as on 19-10-2008	Budget Estimate 2008-09	Revised Budget 2008-2009	Budget Estimates 2009-2010
4	*Departmental Operating Expenses*	1.89	5.00	4.00	6.00
5	*Library Services*		85.00*		
6	*Computer Consumables*	3.33	5.00	5.33	5.00
7	*Student Support Services*	6.75	10.00	8.00	10.00
8	*Hiring of Hostel/ Hall Subsidy*	14.25	25.00	20.00	15.00
9	*Transport Facility*	10.13	15.00	15.00	15.00
10	*Health Facility (Students)*	1.04	2.00	2.00	2.00
11	*Water & ElectricityCharges*	15.00	25.00	25.00	30.00
12	*House Keeping & Maintenance*	17.18	20.00	20.00	35.00
	Total (Recurring)	215.50	617.75	399.93	539.00

* Budget amount shifted from recurring (Library Services) to non-recurring (Fixed Asset)

PDPM

Indian Institute of Information Technology, Design And Manufacturing, Jabalpur

B. Non Recurring

Sl. No.	Particulars	Expenditure as on 26-12-2008	Budget Estimate 2008-09		Revised Budget 2008-09		Budget Estimate 2009-10	
			On-going Work	New Construction	On-going Work	New Construction	On-going Work	New Construction
	Construction, Renovation and Devlopment works of the institue							
A	**Present Campus**							
	Addition/Alteration & Renovation works (Civil + Electrical Works)	**0.00**	**1.00**		**1.50**			
B	**New Campus**							
1	**Students Hostels**	**324.00**	**779.40**	**500.00**	**477.00**	**160.00**	**1600.00**	
1.1	Hall of Residence 1 (SH:Civil & Electrical)	324.00	779.40		477.00			
1.2	Triple Seated Hall of Residence 1 (TSH1) (SH:Civil & Electrical)			400.00		150.00	1230.00	
1.3	Girls Hostel Phase1			100.00		10.00	370.00	
2.0	**Core/ Research/ Design Studio (Labs of Electronics, Computer Science, Mechanical Engineering)**	**222.00**	**367.52**	**25.35**	**193.00**	**25.35**		**250.00**
2.1	Core Lab Complex (SH: Civil & Electrical)	222.00	367.52		193.00			
2.2	Core Lab Complex (SH: Low Side of HVAC)			25.35		15.35		
2.3	Workshop					10.00		
2.4	Design Studio (Phase I)							250.00
3.0	**Lecture Hall & Tutorial Complex**			**350.00**		**150.00**	**1500.00**	**360.00**
3.1	LH & TC (SH: Civil & Electrical)			350.00		150.00		
3.2	LH & TC (SH: Low side of HVAC)							360.00
4.0	**Service Block**	**4.39**	**17.00**		**11.68**			
5.0	**Library & Computer Center**		**25.00**					**25.00**
6.0	**Mess & Dining Hall 1**			**250.00**		**10.00**	**150.00**	

Sl. No.	Particulars	Expenditure as on 26-12-2008	Budget Estimate 2008-09		Revised Budget 2008-09		Budget Estimate 2009-10	
			On-going Work	New Construction	On-going Work	New Construction	On-going Work	New Construction
7.0	**Students Activity Center**			**100.00**		**10.00**	**250.00**	
8.0	**Convocation & Convention Hall**			**200.00**		**10.00**	**350.00**	**120.00**
	C& CH (SH: Civil & Electrical)			200.00		10.00	350.00	
	C & CH (SH: Low side of HVAC)							120.00
9.0	**Security Barrack 1**			**25.00**		**10.00**		
10.0	**Site Devlopment Works**	**16.75**	**147.00**	**285.00**	**36.00**	**621.00**	**270.00**	**0.00**
10.1	Over-head/Under-ground water tank			25.00		10.00	15.00	
10.2	External Water Supply (Phase - I)			50.00		10.00	30.00	
10.3	Electrical Sub-Station I (33KVA)			70.00		500.00	90.00	
10.4	External Electrification		45.00			5.00	60.00	
10.5	Sewage Treatment Plant & External Sewage Line			70.00		40.00		
10.6	Roads, Landscaping & Storm Water Drainage		80.00		30.00		50.00	
10.7	Playground, Courts			10.00		0.00	5.00	
10.8	Electrical Connection & HT line	16.00		50.00		46.00		
10.9	Land Contouring	0.75	1.00		1.00			
10.10	Main Gate Complex & Remaining work of Boundary Wall		21.00	10.00	5.00	10.00	20.00	
11	**Library Books & Journals**	**8.00**	**100.00**		**100.00**		**100.00**	
12.0	**Equipment & Furniture including Office Equipments, Lab Equipments , computers & Custom/freight Charges**	**131.00**	**400.00**	**0.00**	**600.00**	**0.00**	**400.00**	**0.00**
12.2	Lab Equipment	110.00	300.00		500.00		300.00	
12.3	Furniture	21.00	100.00		100.00		100.00	
12.4	IT infrastructure Devlopment	**16.47**	**150.00**		**150.00**		**180.00**	
a	Computer Peripherals & Networking	6.00	100.00		100.00		120.00	
b	Computer Software	10.47	50.00		50.00		60.00	

Sl. No.	Particulars	Expenditure as on 26-12-2008	Budget Estimate 2008-09		Revised Budget 2008-09		Budget Estimate 2009-10	
			On-going Work	New Construction	On-going Work	New Construction	On-going Work	New Construction
13.0	Furniture & Fixture of Hall 1, Lecture Hall and Classroom Complex (Phase -I), Core Lab Complex, Dinning Hall, Eqipments (Kitchen & Cleaning etc.)		50.00		50.00		50.00	
14	Vehicle	0.00	5.00					
	Total	722.61	2041.92	1735.35	1619.18	996.35	4850.00	755.00

FC/2008-09: 03.05 **Recommendations of the Special Buildings & Works Committee Meeting held on January 05, 2008**

A. **Electric Supply & Management System Phase 1 (ES&MS 1)**

The next meeting of the Building & Works Committee (B&WC) is scheduled to be held on January 05, 2009. The Design Concept of the **Electric Supply & Management System of the Institute Phase 1 (ES&MS 1)** is given as **Annexure 3** [page 13 - 17.]. The work is estimated to cost Rs **726 Lacs** Recommendations of the Building & Works Committee arrived at in the meeting shall be placed in the meeting itself.

The Finance Committee is requested to consider and recommend to the Board of Governors the recommendations of the B&WC for Administrative approval and Expenditure Sanction for the above work.

B. **Cost Escalation Factor for the Preliminary Estimates of Buildings & Works Approved by the Board**

The Preliminary Estimates for building and works prepared by the architects are framed on CPWD Delhi Plinth Area Rates (DPAR) enhanced with prevalent cost index as applicable. Though in major cities these rates get updated frequently, in the city of Jabalpur, being an area with not much construction activities going on, CPWD index does not get updated for years.

In awarding earlier construction works, the Institute faced many problems due to the campus site being a remote area with a poor transport system and no facility of water and electricity. Further, skilled and specialized manpower for doing many jobs were also to be brought from outside. Enhanced costs to be met out by the contractors to overcome such site-related problems are not included in Delhi Plinth Area Rates followed by the CPWD.

Due to (a) the absence of timely updating of CPWD index in Jabalpur and (b) factors pertaining to the campus site being a remote area on the outskirts of Jabalpur, it is suggested that "in-principle" approval for provision of enhancement on the Preliminary estimate be given. The Institute proposes a maximum up to of 20% above the approved Preliminary Estimates be allowed. The decision taken may be also be considered applicable TSH1 and LHTC which were approved by the Board in its meeting held on November 07, 2007.

Recommendations of the Building & Works Committee arrived at in the meeting shall be placed in the meeting itself.

The Finance Committee is requested to consider the recommendations of the B&WC and recommend to the Board of Governors give its Administrative and Financial Approval for the same.

C. **Provision for Contingencies as per prevalent CPWD norms**

Provision for contingencies in the estimates the work was taken as per CPWD Manual 2003. The same has been revised to 3% in the CPWD Works Manual 2007. The BoG is requested to accord Administrative Approval and Financial Sanction for provision of contingencies for the works of TSH 1 and LH&TC

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Annexure 3

ELECTRIC SUPPLY & MANAGEMENT SYSTEM FOR PDPM IIITDM, JABALPUR

INTRODUCTION

The external power distribution system for the project has been conceptualized based on the International design standards to produce a concept which is an integrated whole. Conservation of energy, optimization of resources, fire-safety and eco-friendliness shall be the key factors in the design concept with State of Art Technology, to ensure minimum maintenance requirements.
Every effort will be made to design the layouts and installation of equipment in locations which will tend to encourage routine preventive maintenance by providing easy access for maintenance personnel. Manual isolation will be provided to enable servicing, expansion or renovation of any part of the system, without interrupting the services in adjacent areas.
Considering application, equipment selection shall be made which requires very less maintenance. All equipments shall be designed to cater and accommodate any future expansion in the system.

1. POWER DISTRIBUTION

33 KV High voltage panel (VCB) shall receive the mains power from utility. This power shall be received near main gate of the campus. A small pole mounted substation shall be constructed and provision of utility metering shall be kept.
Power shall be transmitted through cable to central substation through 33KV (E) XLPE cable. This cable shall be housed in pucca trench.
Capacity of the cable and substation near entrance shall be considered such so that it can cater for future expansion and in case of future additions no changes are required. At central substation, power shall be received and controlled by pole mounted 33KV auto reclosure having numerical relays, battery, battery charger, control transformer and lightning arrestors etc.
The power shall be stepped down to 11KV through a 4 MVA (for Phase 1) outdoor oil cooled transformer. This transformer shall be having automatic voltage regulating relay and on load tap changer for better voltage output and un-interrupted operation. Tap steps shall be in 1.25% and cater for +5 to -15% of input voltage variation. Transformer shall have Buccholz and Surge relays apart from oil and winding temperature monitoring.
For standby power, in first phase 1000 KVA of DG set (silent type) has been envisaged, total standby power later shall be 2000 KVA supplied by 2x1000 KVA at 11 KV and 1x250 KVA generator 415 volts for critical services, charging of UPS, external lighting etc. This shall supply power at 11KV and supply the power to 11KV distribution Panel Board. Advantage of generation at 11 KV shall be advantageous because:

- It shall make distribution simpler because every building shall not need separate stand by need.
- Capacity of standby power shall be optimized because of central location. Otherwise each building shall have separate DG set.
- It shall reduce switchgear costs.
- Operation can be controlled and monitored from central substation.

11KV distribution board shall have provision of expansion to accommodate the later phases. Additional DG set and Transformers can be added to it in due course. Board shall be 630A 25KA VCB panel board with transformer incomer, DG Incomer, Buscoupler and outgoings. Sufficient spare feeders shall be provided for expansion and emergency need. All protection relays shall be microprocessor based numeric relays with facility for SCADA

communication. Busbars of panels shall be copper and VCB shall be horizontal draw out type.

2. DISTRIBUTION IN CAMPUS

11 KV power from the HT panel shall be distributed to the entire campus through 11KV (E) cable of size 3 CoreX 300 Sqmm. This cable shall be placed on cable racks in pucca trench. Power shall be fed to Compact substations in each building through ring feeders. Ring feeders shall enhance reliability of power many folds. In case of outage of one source of power (cable or switchgear), power can be resorted immediately through second route.

3. BUILDING SUBSTATIONS/ COMPACT SUB STATIONS:

Each building or group of building shall have its own 11 KV substation. For ease of maintenance, smaller size and compact design etc, we have envisaged compact substation of appropriate ratings. These prefabricated-compact secondary substations shall be designed for a) Compactness, b) fast installation, c) maintenance free operation, d) safety for worker/operator & public. Ratings of these substations shall be sufficient for building load. These substations shall have sufficient feeders on LT side for effective power distribution and easy fault identification.

All equipment and material for these substations shall be designed manufactured and tested in accordance with the latest applicable IEC standards. The 12KV Compact Substation Design must be as per IEC 61330.

Compact secondary Sub-station consisting of 11KV Non-Extensible SF6 Ring Main Unit + Transformer + Low Voltage Switchgear with all connection accessories, fitting & auxiliary equipment in an Enclosure to supply Low-voltage energy from high-voltage system as detailed in this specification. The complete unit shall be installed on a substation plinth (base) as Outdoor substation located at very congested places. 11KV Isolators controls incoming-outgoing feeder cables of the 11KV distribution system. The Vacuum Circuit Breaker shall be used to control and isolate the 11kV/433V Distribution transformer. The transformer Low Voltage side shall be connected to Low Voltage switchgear. The connection cables to consumer shall be taken out from the Low Voltage switchgear.

11KV power shall be controller through RMU. The SF6 RMU shall be Sealed for life, the enclosure shall meet the "sealed pressure system" criteria in accordance with IEC: 298 (a system for which no handling of gas is required throughout service life of approximate 25 years.) There shall be no requirement to 'top up' the SF6 gas. In addition, manufacturer shall confirm that maximum leakage rate is lower than 0.1% per year. It shall provide full insulation, making the switchgear insensitive to the environment. Thus assembled, the active parts of the switchgear unit shall be maintenance free.

The CB shall be fitted with microprocessor based self powered relay inside the front cover to avoid any tampering. The relay should be 2 Over Current + 1 Earth Fault, self powered type, fed by protection CTs mounted in the cable box. The details of the buildings being fed by each CSS is as follows:-

a) CSS 1- Lecture hall & tutorial Complex (1250 KVA)

b) CSS 2- Core lab complex & Library cum Computer centre (1250 KVA)

c) CSS 3 – Boys Hostel and

d) CSS 4- Triple seater hostel 2 nos

e) CSS 5- Boys Hostel

f) CSS 6- Girls Hostel & Student Activity Centre

g) CSS 7- Convention & Convention Hall & Administration Building.

h) CSS 8- Design Studios

i) CSS 9- Staff Residential Area

j) CSS 10- Staff Residential Area

4. EARTHING SYSTEM

Distribution earthing shall be carried all along the HT distribution system, or through local earth station and effectively bonding the cables / equipment as the case may be Separate and distinct earth stations and electrodes shall be provided for Neutral of DG set and Transformer and Lightening arrestors. Resistance for clean earth & for electrical system earth shall be kept below one ohm. Copper electrode shall be considered for all neutral earth pits. GI earth plate shall be used for body and lightning arrestors. Earth strip sizing shall be considered for fault level and touch and step potential.

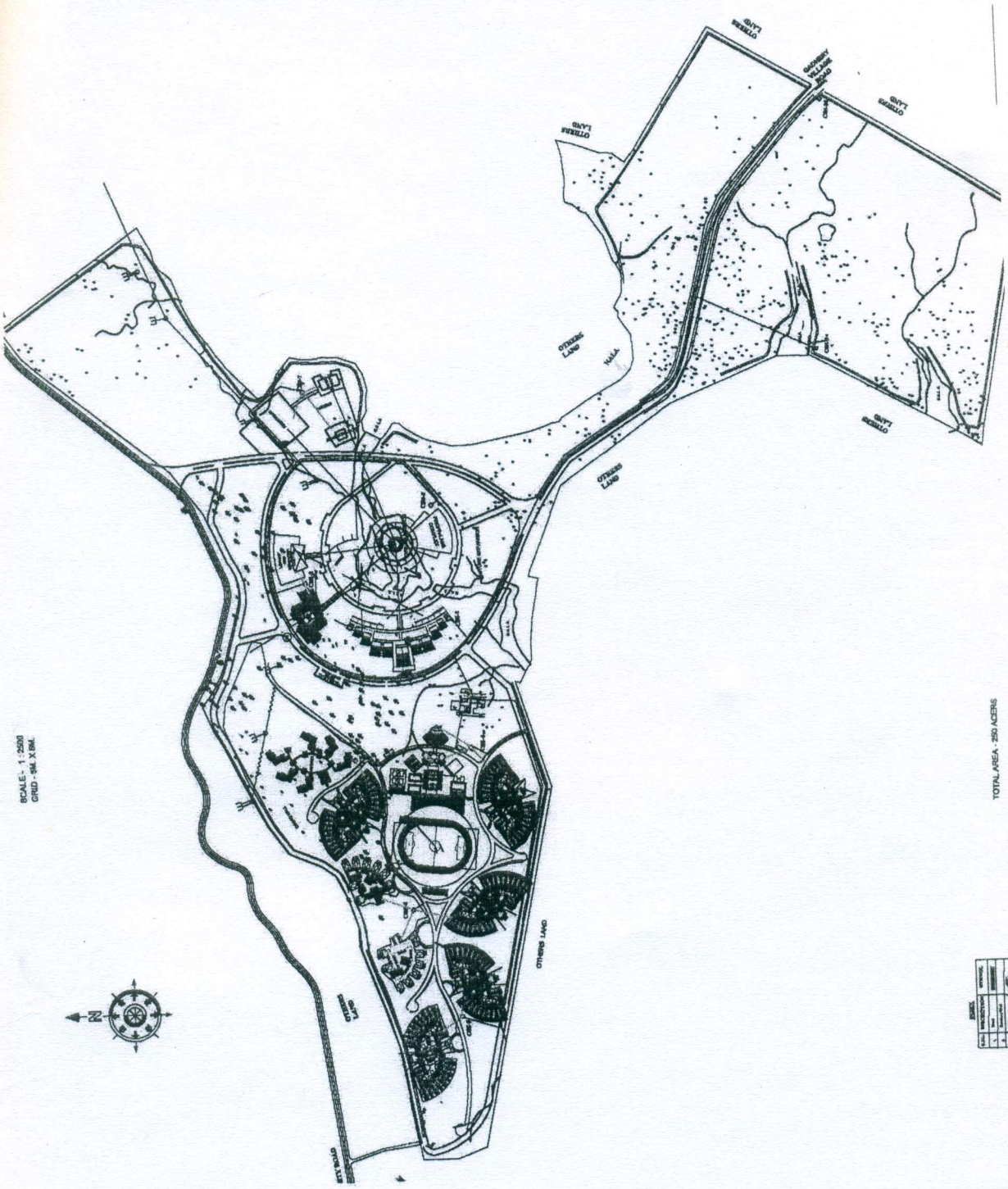
5. Automation

Power Distribution System shall be equipped with latest SCADA features. From central substation, it shall be possible to monitor and control parameters related to substation at Entrance, DG Sets, Compact substations of individual buildings and central substation.
Interlocking shall be mechanical as well as electrical. On power failure DG sets shall start automatically and control the load in pre-defined manner on the basis of criticality.

PHASE 1 OF THE ELECTRICAL SUPPLY & MANAGEMENT SYSTEM FOR THE CAMPUS

a)	**CTBT-**	Pole mounted VCB for termination of 33 KV supply from MP electricity board before internal transfer to main substation.
b)	**Main Substation**	33 KV 4 MVA with Automatic Voltage Regulator for High Tension 33 KV / 11 KV.
c)	**Diesel Generator**	1 No. of 1000 KVA of 11 KV supply.
d)	**CSS 1-**	1 No. of 250 KVA for essential services 1250 KVA for Lecture Hall & Tutorial complex.
e)	**CSS 2-**	1250 KVA for Core Labs & Library cum Computer Centre, but since the library will come up later the extra capacity shall be used for supply of LT to external street lighting.
f)	**CSS 3-**	1250 KVA for Single seated boys hostel 1 & 2, but since hostel 2 is not being built right now it shall supply LT to Triple seater hostel for now which shall later shift to CSS-4.
g)	**33 KV HT Cabling-**	Complete 33 KV HT cabling from the gate to the main substation of sufficient capacity to cater for future expansions.

h)	**11 KV HT cabling-**	Complete 11 KV HT cabling in trenches for the entire campus power distribution system as mentioned earlier to prevent excavation & trenching later on.
i)	**11 KV Main Panel**	Main panel for controlling the entire distribution of power to all the CSS. In Phase 1 the panel shall have switchgear for controlling the 3 CSS, 1 DG set and sufficient space for expansion to allow for future expansion.
j)	**Automation-**	Complete automation of the entire system for full functional running, efficient power distribution and energy conservation.
k)	**Earthing-**	The entire system has to be properly earthed including the cables that are running in trenches.


SCALE:- 1 : 2500
GRID - 5M. X 5M.
TOTAL AREA - 250 ACERS
N

FC/2008-09: 03.06 **Any other Item with the Permission of the Chair**