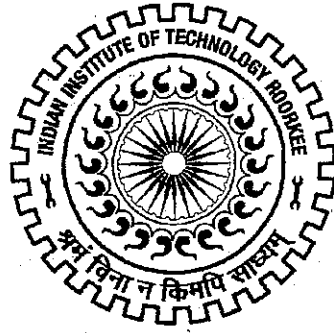


भवन एवं निर्माण समिति की प्रथम बैठक का कार्यवृत्त

**MINUTES OF THE 1<sup>ST</sup> MEETING OF THE  
BUILDING AND WORKS COMMITTEE**

**27.03.2002**



भारतीय प्रौद्योगिकी संस्थान रुड़की  
रुड़की – 247 667 (भारत)

**INDIAN INSTITUTE OF TECHNOLOGY ROORKEE  
ROORKEE-247 667 (INDIA)**

INDIAN INSTITUTE OF TECHNOLOGY ROORKEE  
ROORKEE

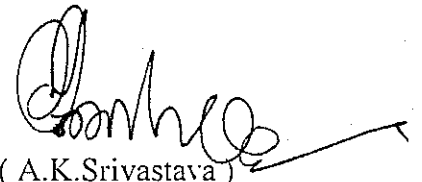
No. MS/IITR/B&WC/1<sup>st</sup>/2002/488(ii)

Dated

Subject: Recommendations (Minutes) of the 1<sup>st</sup> meeting of the Building & Works Committee held on 27.3.2002.

Enclosed herewith please find a copy of the recommendations (minutes) of the 1<sup>st</sup> meeting of the Building & Works Committee of this Institute held on 27.3.2002 for favour of information of the members and record. Members who attended the meeting are requested to kindly offer their comments, if any, within 20 days. If no comments are received, it will be presumed that they have no comments to offer and approve of the minutes as recorded.

Encl: as above



( A.K.Srivastava )  
Lt. Col. (Retd)  
Secretary Building &  
Works Committee

To,

1. Prof. Prem Vrat  
Director  
IIT Roorkee

Chairman

2. Sri S.P.Singh  
Chief Engineer,  
C.P.W.D.  
Kendriya Bhawan  
III Floor, Sector K, Aliganj  
Near Purana Chauraha  
Lucknow



Minutes of the 1<sup>st</sup> meeting of the Building and Works Committee held on 27.3.2002 at 12 Noon

The following were present:

- |  |                     |
|--|---------------------|
| 1. Prof. Prem Vrat                               | - Chairman          |
| 2. Sri S.P.Singh, Chief Engineer, CPWD, Lucknow  | - Member            |
| 3. Sri R.C.Mittal, Chief Engineer, PWD, Dehradun | - Member            |
| 4. Sri Salek Chand, Institute Engineer           | - Member            |
| 5. Prof.S.K.Kaushik, Chairman (E & W)            | - Permanent Invitee |
| 6. Prof.K.G.Ranga Raju, Dy. Director             | - Permanent Invitee |
| 7. Lt. Col. A.K.Srivastava                       | - Secretary         |

Mr. Pawan Agarwal, Director, MHRD, New Delhi and Mr.R.S.Prasad, Jt. Secretary (Finance) and Financial Advisor, Ministry of Urban Development, New Delhi could not attend the meeting due to their pre-occupation elsewhere.

The Chairman, B&WC welcomed the members to the first meeting of B & W C of the IIT Roorkee and extended a warm welcome to the external members viz. Mr. S.P.Singh, Chief Engineer, C.P.W.D., Lucknow and Mr.R.C.Mittal, Chief Engineer, P.W.D., Dehradun. The Chairman, in his opening remarks, said that after becoming an IIT, we have a Board of Governors and the two important Sub-committees of the Board, the Building and Works Committee and the Finance Committee. Any major project and major policy decisions concerning the finances, campus planning and building construction requires deliberation in these Bodies before the Board of Governors considers these issues. This Committee has, indeed, an extremely challenging task before it in view of the fact that the MHRD would give Rs. 110 crores to the Institute over the next three years, for upgradation, modernisation of the infra-structure, purchase of new support services equipment, renovation, extension and construction of buildings, so that the campus of IIT Roorkee compares favourably with the other IITs. During the next three years, there will be a large number of new construction projects, major modifications, renovation of buildings etc. Hence, the Building and Works Committee has a very major role to play in this direction.

Deliberations:

All the items of the Agenda were discussed and the deliberations/ recommendations are summarized as under:

Item No. 1: Report on the constitution of the Building and Works Committee of the IIT Roorkee:

The Committee noted the constitution. Arising out of this, Mr. S.P.Singh, Chief Engineer, C.P.W.D. suggested that in the composition of the Committee, there should be a person with an E/M background and field experience, so as to have his valuable input in the matters of E&M services for the existing and the new Buildings. The Chairman accepted this suggestion.

Item No. 2: List of the Works sanctioned by the MHRD:

The Committee approved the proposal, for the renovation, extension and construction of the Buildings with their preliminary estimate of Rs. 5245 lacs, as given in Appendix 'A' and recommended the works to the B.O.G. for according Administrative Approval and Expenditure Sanction.

As suggested by Mr. R.C.Mittal, Chief Engineer, P.W.D., Dehradun, construction and premixing of roads should cater for adequate bituminous carpet layers considering the life cycle cost of the roads.

Item No. 3: List of works proposed to be assigned to Companies of National Repute:

The Committee recommended that the following major construction works may be assigned to the Companies of National repute through an open advertisement:

Sl. No.	Name of the Work	Approx. Cost
1.	Construction of Guest House and Conference complex	Rs. 186 lacs
2.	Construction of Air-conditioned Auditorium (capacity 1000 + 500 in second phase)	Rs. 350 lacs
3.	Construction of Workshop/ Lab. Block in Chemical and Metallurgical Engineering Departments.	Rs. 193 lacs
4.	Reconstruction of Workshop Building	Rs. 104 lacs
5.	Construction of Building for Information Technology	Rs. 99 lacs
6.	Construction of Boys Hostel of 400 capacity and Girls Hostel of 200 capacity, both of four floors.	Rs. 539 lacs

7. Renovation of Main Building by providing mezanine floor Rs. 107 lacs

The pre qualification clause should be kept for contractors. Modalities may be checked from IIT Kanpur.

- Item No. 4: Progress Report of the on-going works for the consideration of the Committee:

The committee noted with satisfaction the progress of works as indicated against each item.

- Item No 5: Proposal of Institute Engineer prepared on the request of residents of Niti Nagar for purpose of security:

The Committee accepted the proposal for raising the existing boundary wall along the main road in the Niti Nagar area, and providing internal approach roads for the residents, as per Sketch 'P', and recommended the same to the BOG for consideration.

- Item No. 6: Proposal for expansion of the Construction Division of the Institute:

The Committee recommended that the following additional staff be provided to the Construction Division to cope up with the increased construction and maintenance work of the Institute, and their salary be charged to the works till the regular posts are filled:

1. Asstt. Engineer (Civil) -1 On deputation from any Engineering Deptt.
2. Asstt. Engineer -1 On deputation/ on contract basis  
(Horticulture & Sanitary)
3. Junior Engineer (Civil) -3 On deputation/ on contract basis.

- Item No7: Proposal for Financial and Administrative powers of various Functionaries of the Construction Division of the Institute:

The Committee accepted the proposal for delegating Financial and Administrative powers of the various Functionaries of the Construction Division, as given in Appendix 'B', and recommended the same to the BOG for consideration.

Item No. 8: Report of Prof. P.C. Jain Committee regarding demolition of old residences for the construction of new residences:

The Committee accepted the Report of Prof. P.C. Jain's Committee and recommended the demolition of the following very old and dilapidated residences to the BOG, so that construction of the new residences could be started on the vacated sites:

'D' Class Residences: 147/32 to 147/53	= 22 Nos.
147/80 to 147/82	= 03 nos
M.P.Hutments: 153/1 to 153/2	= 2 Nos.

Item No. 9: Formation of a Committee consisting of the Chairman E&W, Institute Architect and Institute Engineer for approving the plans of the various Buildings:

The committee has recommended as under:

- (i) The plans for renovation/ extension works to be approved by a Committee of Chairman E & W, Institute Architect, Institute Engineer and the concerned Head .
- (ii) New plans for construction works upto Rs. 50.00 lacs be approved by a committee consisting of Chairman E&W, Institute Architect, Institute Engineer and one Professor each from Mechanical/ Civil /Electrical/Architecture & Planning Deptts. with the concerned HOD as a special invitee .
- (iii) Plans of new construction costing above Rs. 50.00 lacs be approved by Building and Works Committee on the recommendations of the Committee at serial No. (ii) . above.

Other Issues:

Item No. 10 : Master Plan - 2020

The committee took the note of the concept of the Institute's Master Plan, which was presented by Prof. Najamuddin and Prof. S.Y.Kulkarni and expressed its satisfaction on the work being done in this regard. The final Master Plan will be placed before the Committee in its next meeting.

The meeting ended with a vote of thanks to the Chair.

Table XXIV.4 Financial Requirements for Renovation/ Extension of Buildings

Appendix-2 A

Sl. No.	Name of Work	Plinth Area in M <sup>2</sup>	Rates in Rs.	Estimated Cost (Rs. in Lacs)	Remarks
(A)	Academic and Administrative Buildings				
1.	Renovation of old Academic/ Administrative Buildings				Most of the buildings are more than 50 years old. Hence renovation of these buildings is essential.
(i)	Renovation of Main Building by-relaying roof and floors etc. and providing Mezanine Floor.	4105	2600	107	
(ii)	Renovation of Lab Block in Hydrology Department by relaying of roof and floor	230	2600	6	
(iii)	Renovation of Library, Computer room, Training Lab by relaying roof and floor in Humanities Department.	230	2600	6	
(iv)	Renovation of I.C. Engine Lab, Steam Engg. Lab by relaying roof and floor in Mech. Engg. Deptt.	541	2600	14	
(v)	Renovation of Refrigeration Building, Foundary Shop, Tools room in workshop building by relaying roof and floor.	1875	2600	49	
(vi)	Renovation of Survey Store, Field Lab, Model Lab in Civil Engg. Deptt. by relaying roof and floor.	1800	2600	47	
(vii)	Renovation of workshop, multimedia, Lecture/ Tutorial room by relaying roof and floor in E&CE Deptt.	397	2600	10	
(viii)	Renovation of Toilets blocks in Arch. & Plann., Humanities, Mech. & Ind., E&CE, Electrical, Earth Sciences, Chemical, Met. & Mat., Physics, Chemistry and Mathematics Deptts.	60Nos.	50000 each.	30	
(ix)	Roof treatment in Mechanical, Chemical, Civil, Workshop and Bio Sciences Deptt.	14000	200	28	
2.	Replacement of very old Academic/ Administrative Buildings				Most of the Buildings are more than 70 years old hence replacement of these buildings is essential
(i)	Replacement of Workshop/ Lab block of Chemical Engg. Deptt.	1900	5200	99	
(ii)	Replacement of Workshop/ Lab block and old diploma building of Met. & Mat. Deptt.	1810	5200	94	
(iii)	Replacement of Carpentry Shop, Foundry Lab in Workshop Building.	2000	5200	104	
(iv)	Replacement of Lab Block in Bio. Sciences Deptt.	480	5200	25	



	Extension of buildings of academic departments				Some departments are already facing shortage of space and some other departments and IPT propose to start new programmes
	(i) ✓ Extension of Lecture Theatre and faculty room in Hydrology Deptt.	500	5200	26	
	(ii) ✓ Extension of Library, Lecture room, Computer Lab and Investigation Lab in AHEC Deptt.	288	5200	15	
	(iii) Construction of Space for Servo Controlled closed loop Universal Testing machine 1000 KN Capacity with heavy duty floor and special specifications	500	8000	40	
	(iv) ✓ Extension of Lecture Theatres, Seminar rooms etc. in Chemistry Deptt.	759	5200	40	
	(v) ✓ Extension of Auditorium, Studios, Museum, Lecture Theatre in Arch. & Plann. Deptt.	770	5200	40	
	(vi) Extension of Lecture Theatre in Humanities Deptt.	270	5200	14	
	(vii) ✓ Extension of Rail Vehicle Dynamic Lab, Smart Structure Lab, Tribology Lab, Solar Energy Lab, I.C. Engine Lab in Mech. Engg. Deptt.	600	5200	31	
	(viii) Extension of Library and Lecture Hall in E&CE Deptt.	824	5200	43	
	(ix) Extension of Lecture Hall in Physics Deptt.	308	5200	16	
	(x) Extension of Lecture Hall in Electrical Engg. Deptt.	250	5200	13	
	(xi) Extension of Faculty rooms, class rooms in Bio. Sciences Deptt.	288	5200	15	
	(xii) Extension of Class rooms and Studio in Continuing Education Deptt.	576	5200	30	
	(xiii) Extension of Lecture Theatre in Met. & Mat. Engg. Deptt.	200	5200	10	
	(xiv) Extension of New Polymer Lab, Central Instrumentation Lab at IPT Saharanpur	1192	5200	62	
	(xv) ✓ Extension of faculty block in WRDTC	210	5200	11	
	(xvi) ✓ Extension of faculty block, class room and lab block of Chemical Deptt.	1150	5200	60	
4.	Extension of buildings of Central Facilities				Up-gradation of University Hospital and extension of Central Library, UCC and USIC is necessary.
	(i) Extension of Central Library Building	1500	5200	78	
	(ii) Extension of USIC Building	700	5200	36	
	(iii) Extension of University Hospital	900	5200	47	

	Construction of buildings for new Departments				Some new departments/centres are being introduced for which new buildings will be required
	(i) Construction of building for Management Studies	1830	5200	95	
	(ii) Construction of building for Disaster Mitigation Centre	1000	5200	52	
	(iii) Construction of building for Information Technology.	1900	5200	99	
	(iv) Construction of building for Industrial Design Deptt.	450	5200	23	
	(v) Construction of building for Placement Cell	175	5200	9	
6.	Construction of Virtual class rooms	675	5200	35	There is no virtual class room in the University. Some new rooms will be constructed and some existing class rooms will be converted into virtual class rooms.
7.	(a) Construction of a Air conditioned Multipurpose Hall (1000 persons capacity Auditorium of double height	2500	7000	175	There is no 1000 persons capacity auditorium. Since long need of such auditorium is being experienced.
	(b) Chairs for 1000 persons, furniture for dias and furnishing as carpet, curtains etc.	1000 nos.	7500	75	
	(c) Air conditioning 200 T Capacity	1 Job		100	
8.	Air Conditioning of Civil Engg. Auditorium 40 T Capacity	1 Job		40	Most of the functions are being organised in this two hundred and fifty persons capacity auditorium. Hence its Air conditioning is proposed.
9.	Central Air conditioning of UCC Building 20 T Capacity	1 Job		25	Central Air-conditioning of newly constructed first floor of UCC building is necessary.
10.	Renovation of convocation Hall including replacement of damaged chairs	1 Job		40	Convocation Hall, being very old is in bad shape hence its renovation is essential.
		Total (A)		2014	

(B)	Residential Buildings				
	Renovation of old residential buildings (i) Toilets, baths and kitchen in 'A' class residences (ii) Toilets, baths and kitchen in 'B' & 'C' class residences (iii) Roof treatments in 'A', 'B', 'C' class residences (iv) Renovation of 101/1,2,3, 102/1,2,3,4,5 and 97 A & 97 B Vigyan Kunj including relaying of roof and floor etc.	400nos. 220nos. 8000 1800	25000 15000 200 2600	100 33 16 47	Most of the residential buildings are more than 50 years old. Renovation of a large number of houses is essential.
2.	(a) Replacement of very old residential buildings (i) ✓ 'A' class residences in Vikas Nagar (5), Govind Puri (6), Nitinagar (6), Ravindra Lok (3) = 20 nos. (ii) 'B' class residences in DB qtrs.(20), Sheel Kunj (5), E.P.Hostel and Govind Puri (25)= 50 nos. (iii) 'D' class residences in Vikas Nagar 'D' colony, Govind Puri =117 nos. (b)Extension of very old residential buildings (i) Extension of IIIrd Bed room in A class residences Block No.209 to 215 (42 residences in Saraswati Kunj ) (ii) Extension of Baths, W.C. and Cooking platform in Kitchen of D class residences (iii) Extension of Store in A class residences of Niti Nagar	3800 4250 4680 500 100nos. 20nos.	5200 5200 5200 5200 10000cach 35000cach	198 221 243 26 10 7	Most of the residential buildings are more than 50 years old. Replacement of a large number of houses is essential.  Most of the residential buildings are more than 50 years old. Extension of a large number of houses is essential.
3.	Construction of new Residences in Roorkee and Saharanpur Campuses  ✓ A Type - 16 B & C Type - 8 D Type - 24	3040 680 960	5200 5200 5200	158 35 50	There is a shortage of A,B,C,& D Category residences. Hence new residences are required.
4.	Construction of visiting faculty houses 10 nos.	1000	5200	52	There is a shortage of visiting faculty furnished residences for visiting/ guest faculty.
5.	Construction of Garages - 40 Nos.	600	4000	24	There is an acute shortage of garages. Number of vehicles have been considerably increased in the campus

	(i) Construction of new tube wells both in Roorkee & Saharanpur campuses (ii) Replacement of very old water pipe lines with valves fittings 50 mm dia G.I. Pipe Line 80 mm dia G.I. Pipe Line 100 mm dia G.I. Pipe Line	- 5 Nos. 1500rm 1000rm 2000rm	70000each 200 600 750	35 3 6 15	Due to expansion of campus, construction of new tubewells and laying of pipe lines is essential. Damaged pipe lines requires immediate replacement
7.	Laying of 11 KV under ground cable in Roorkee campus	8000m	1500	120	Replacement of old 11 KV O.H. lines by UG cables is essential to avoid any damage by storm etc.
8.	Strengthening of existing L.T. overhead lines in Roorkee Campus	15000m	100	15	Strengthening of very old LT overhead lines is essential.
9.	11 KV/415 V Substation and 11 KV cable feeder for Saharanpur Campus	1 Job		21	Supply to Saharanpur campus is very erratic which frequently disturbs teaching & lab classes
10.	Extension of draining system (Nala)	2400 rm	2000	48	Due to expansion of campus drainage system is to be extended.
11.	(i) Construction and widening of Roads (ii) Premixing of Existing roads	30000m <sup>2</sup> 80000m <sup>2</sup>	155 65	47 52	Due to increased in traffic some of the roads needs widening and some new roads will have to be constructed
12.	(i) Rewiring of residential buildings including replacement of old meters by electronic meter A -Type B & C - Type D- Type (ii) Replacement of very old Ceiling fans	50Nos. 200Nos. 100Nos. 500Nos.	16000 10000 5000 1000	8 20 5 5	Being very old and unsafe rewiring is necessary. <i>Fans are</i> Very old and not repairable hence replacement is necessary
		Table (B)		1620	

Student's Hostels and Amenities						
	(i)	Construction of New Girls hostel	4300 m <sup>2</sup>	5200	224	Due to increase in intake of girl students new girl's hostel is required.
	(ii)	Furniture for rooms, messes and club for 250 seats	250 Seats	10000	25	
2.	(i)	Construction of Boy's hostel	6900 m <sup>2</sup>	5200	359	Due to increase in intake, hostel accommodation for boys both at Roorkee and Saharanpur campuses is needed.
	(ii)	Furniture for rooms and messes, club for 400 Seats	400 Seats	10000	40	
3. ✓	(i)	Construction of hostel for Foreign Students	6900 m <sup>2</sup>	5200	359	Due to increase in quota of foreign students, construction of new foreign students hostel is essential
	(ii)	Furniture for rooms and messes, club for 400 Seats	400Seats	10000	40	
4.	(i)	Renovation of Hostel and Messes Renovation of Toilet Blocks of Boys/ Girls Hostels and Messes	84Nos.	50000	42	Most of the buildings of Hostels and Messes are very old and their renovation is required ..
	(ii)	Renovation of Toilets & Kitchen of Married Student Hostels	120Nos.	25000	30	
	(iii)	Roof treatment of Hostels and Messes	15500m	200	31	
	(iv)	Replacement of worn out Shutters	800nos.	3500	28	
5.		Repair of wiring of Students hostel at Saharanpur campus	1Job		10	Wiring in Students hostel at Saharanpur campus is in very bad shape & needs urgent repair.
6.		Construction of Mess Staff residences (20 Nos.)	800	5200	42	There is an acute shortage of Mess staff residences. Hence construction of these residences is essential
7.	(i)	Renovation of UG/PG Students club building including reroofing etc.	1050	2600	27	These buildings are very old, renovation / replacement of these buildings is necessary.
	(ii)	Replacement of very old Hobbies club building	1250	5200	65	

	Extension of sports facilities				To upgrade the sports facilities in the campus, extension of some of its buildings is needed.	
(i)	Extension of Gymnastic Hall, Yoga Bhawan	405	5200	21		
(ii)	Renovation of Boat House, Badminton Hall and Squash Courts Building including reroofing	1115	2600	29		
(iii)	Replacement of Sports Pavillion Building	175	5200	9		
		Table (C)		1381		
(D)	Guest House & Conference Complex					
I.	(i)	(a) Construction of New Guest House having 20 suits.	1800	5200	94	Due to conversion into IIT there is a need of big Guest House and Conference Complex
		(b) Furniture and Furnishing	20 suits	120000	24	
		(c) Window type AC 1.5 T for rooms dinning hall and waiting room	48 Nos.	33000	16	
	(ii)	(a) Construction of Air Conditioned conference complex having Auditorium (200 seats), 2 conference rooms(50 seats each), Committee Room (30 seats)	1000	5200	52	
		(b) Furniture and Furnishing	1 Job		20	
		(c) Air conditioning 40 T capacity	1 Job		24	
		Total (D)			230	
		Grand Total			5245	

[C:\neelstruc22]

**APPENDIX – 'B'**  
**(Item No. 7)**

**PROPOSED POWERS OF VARIOUS FUNCTIONARIES OF THE  
CONSTRUCTION DIVISION**

Sl. No.	Works	Officer	Proposed	Remarks
1.	P.W.A	A.E.	Rs. 2500/- without quotation on scheduled rates.	Acceptance letter & bond will be signed by I.E.
2.	W.O.	A.E.	Rs. 10000/- with quotation on appd. Estimates.	
3.	W.O.	I.E.	Rs. 20,000/- against quotations on approved estimates	
4.	Technical Sanction of Estimate	I.E. C.H.E & W.	Upto Rs. 40.00 lacs. Above Rs. 40.00 lacs.	
5.	Acceptance of Tender	I.E. C.H.E & W.	Upto Rs. 40.00 lacs. Above Rs. 40.00 lacs.	
6.	Variation	I.E. C.H.E & W.	Full on bond upto Rs. 2.00 lacs. 20% on bond above Rs. 2.00 lacs. Full on bond above Rs. 2.00 lacs.	
7.	Extra Items.	I.E. C.H.E & W.	Full on bond upto Rs. 40.00 lacs. 20% on bond above Rs. 40.00 lacs. Full on bond above Rs. 40.00 lacs.	
8.	Time Extension	I.E. C.H.E & W.	Full on bond upto Rs. 2.00 lacs. 50% on bonds above Rs. 2.00 lacs. Full on bond above Rs. 2.00 lacs.	
9.	To rescind the Bond.	C.H.E & W.	Full Power	
10.	Agreement by Selection	I.E. C.H.E & W.	Upto Rs. 2.00 lacs. Above Rs. 2.00 lacs.	
11.	To implement new/revised schedule of rates. Sanction of rates of non schedule items	C.H.E & W.	Full Power	
12.	Publication of tenders in news papers.		Upto 5 lacs. only tender notice to be issued for wide publicity and above 5 lacs to be published in one national and local daily news paper.	