

भवन एवं निर्माण कार्य समिति की  
बाईसवीं बैठक का कार्यवृत्त

**MINUTES OF THE 22<sup>nd</sup> MEETING  
OF THE BUILDING & WORKS COMMITTEE**

**18<sup>th</sup> MAY 2009**



भारतीय प्रौद्योगिकी संस्थान रुड़की  
रुड़की – 247 667 (भारत)

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



Lt Col A K Srivastava (Retd)  
Registrar

भारतीय प्रौद्योगिकी संस्थान रुड़की

रुड़की - 247 667, उत्तरांचल, भारत

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No.IITR/MS/22<sup>nd</sup> B&WC / 2641

Dated 25<sup>th</sup> May 2009

**Subject: Recommendations (Minutes) of the 22<sup>nd</sup> meeting of the Building and Works Committee held on 18<sup>th</sup> May 2009.**

Enclosed herewith please find a copy of the recommendations (minutes) of the 22<sup>nd</sup> meeting of the Building & Works Committee of this Institute held on 18<sup>th</sup> May 2009 for favour of information of the members and record. Members who attended the meeting are requested to kindly offer their comments, if any, within a week. 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.

Yours faithfully,

(A.K. Srivastava)

Lt. Col. (Retd.)

Registrar

& Member Secretary, B&WC

27 MAY 2009

To:

1. Prof. S.C. Saxena  
Director, IIT Roorkee  
(Chairman)
2. Prof. H.K. Verma  
Dy. Director  
Indian Institute of Technology Roorkee
3. Prof. V.K. Gupta  
Chairman, Estate & Works  
Indian Institute of Technology Roorkee

4. Ms. Seema Raj  
Director (T), Govt. of India  
Department of Secondary & Higher Education  
Ministry of Human Resource Development  
Shastri Bhawan,  
New Delhi 110 001
5. Er. P.K. Jain  
R-13/83, Raj Nagar  
Ghaziabad
6. Er. M.S. Chandola  
Dy. General Manager,  
Uttaranchal Power Corporation Ltd.,  
Roorkee - 247 667
7. Prof. Akhilesh Gupta  
Department of Mechanical & Indl. Engg.  
Indian Institute of Technology Roorkee
8. Prof. S.P. Gupta  
Department of Electrical Engineering  
Indian Institute of Technology Roorkee
9. Prof. G. Ramasamy  
Department of Civil Engineering  
Indian Institute of Technology Roorkee
10. Er. Salek Chand  
Institute Engineer  
Indian Institute of Technology Roorkee
11. Prof. Surendra Kumar  
Dean, Finance & Planning  
Indian Institute of Technology of Roorkee  
- Special Invitee
12. Lt. Col. (Retd) A. K. Srivastava  
Registrar  
Indian Institute of Technology Roorkee  
- Member Secretary

# INDIAN INSTITUTE OF TECHNOLOGY ROORKEE

## ROORKEE 247 667



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## INDIAN INSTITUTE OF TECHNOLOGY, ROORKEE ROORKEE - 247 667

**Minutes of the 22<sup>nd</sup> Meeting of the Building & Works Committee held  
on 18<sup>th</sup> May 2009 at 12.00 Noon in the Board Room of the Institute.**

The following were present:

- |  |                    |
|--|--------------------|
| 1. Prof. S.C. Saxena, Director                           | - Chairman         |
| 2. Prof. H.K. Verma, Dy. Director                        | - Member           |
| 3. Prof. V.K. Gupta, Chairman (Estate & Works)           | - Member           |
| 4. Er. P.K. Jain, Chief Engineer, UPPWD (Retd.)          | - Member           |
| 5. Prof. S.P. Gupta, Electrical Engineering Department   | - Member           |
| 6. Prof. Akhilesh Gupta, Mechanical & Indl. Engg. Deptt. | - Member           |
| 7. Prof. G. Ramasay, Civil Engineering Department        | - Member           |
| 8. Er. Salek Chand, Institute Engineer                   | - Member           |
| 9. Prof. Surendra Kumar, Dean (Finance & Planning)       | - Special Invitee  |
| 10. Lt. Col. (Retd) A.K. Srivastava, Registrar           | - Member Secretary |

The Chairman, Building & Works Committee (B&WC), extended a hearty welcome to the members and special invitee attending the 22<sup>nd</sup> meeting of the B&WC, before taking up the agenda. The Building & Works Committee thanked the under mentioned outgoing members and recorded its appreciation for their valuable contribution in the meetings of the Committee: -

1. Chief Engineer,  
Central Public Works Department (CPWD)  
Kendriya Bhawan, 3<sup>rd</sup> Floor,  
Sector 'H', Aliganj  
Lucknow (U.P.)
2. Prof. P.K. Jain  
Department of Mechanical & Industrial Engg.  
Indian Institute of Technology Roorkee
3. Prof. H.O. Gupta  
Department of Electrical Engineering  
Indian Institute of Technology Roorkee
4. Prof. M.N. Viladkar  
Department of Civil Engineering  
Indian Institute of Technology Roorkee



27 MAY 2009

The Building & Works Committee also welcomed the following new members and solicited their valuable contribution and active participation in its functioning:

1. Er. P.K. Jain  
Chief Engineering, UPPWD (Retd.)  
R-13/83, Raj Nagar  
Ghaziabad
2. Prof. Akhilesh Gupta  
Department of Mechanical & Indl. Engg.  
Indian Institute of Technology Roorkee
3. Prof. S.P. Gupta  
Department of Electrical Engineering  
Indian Institute of Technology Roorkee
4. Prof. G. Ramasamy  
Department of Civil Engineering  
Indian Institute of Technology Roorkee

**Deliberations:**

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

**Item No. 22.1.1: To confirm the minutes of the 21<sup>st</sup> meeting of the Building & Works Committee held on 4<sup>th</sup> December 2008.**

Having received no comments, the minutes of the above meetings as recorded and circulated, were confirmed.

**Item No. 22.2.1 To receive a report on the action taken to implement the decisions of the 21<sup>st</sup> meeting of the Building & Works Committee held on 4<sup>th</sup> December 2008.**

Action taken to implement the decisions of the 21<sup>st</sup> meeting of the Building & Works Committee held on 4<sup>th</sup> December 2008, as given on pages 2-3 of the agenda note were noted.

  
27 MAY 2009

**Item No. 22.3.1: To consider the revised cost of the Multistoried Boys Hostel being constructed by the CPWD.**

The B&WC considered the revised estimate submitted by the CPWD on the basis of actual cost of work for construction of the Multistoried Boys Hostel being constructed by the CPWD at the Roorkee Campus. The Institute Engineer apprised the B&WC that the revised estimate is within the approved plinth area rates of the CPWD. The B&WC decided that the revised estimate of Rs.30,10,96,633.00 as given at **Appendix 'A'** be recommended to the Finance Committee, and the Board of Governors for according administrative approval and expenditure sanction.

**Item No. 22.3.2: To consider the preliminary estimate of Rs.2619.40 lacs for construction of a Technology Block at the Saharanpur Campus.**

The B&WC considered the preliminary estimate submitted by the National Buildings Construction Corporation (NBCC) Ltd. for construction of a Technology Block at the Saharanpur Campus, which is as per the approved plinth area rates of CPWD. The B&WC decided that the work be assigned to the NBCC Ltd. at the estimated cost of Rs.2619.40 lacs (**Appendix 'B'**). The issue be placed before the Finance Committee and the Board of Governors for according administrative approval and expenditure sanction.

Further decided that the details of cost for Green Building Features be obtained from the National Buildings Construction Corporation Ltd. and placed before the Finance Committee and the Board of Governors for approval.

**Item No. 22.3.3: To consider the preliminary estimate of Rs.1777.00 lacs for construction of multistoried 'A' Category residences (54 Nos.) at the Roorkee Campus.**

The B&WC considered the preliminary estimate submitted by the National Buildings Construction Corporation (NBCC) Ltd. for construction of Multistoried 'A' Category residences (54 Nos) at the Roorkee Campus, which is as per the approved plinth area rates of the CPWD. The B&WC decided that the work be assigned to



the NBCC Ltd. at the estimated cost of Rs.1777.00 lacs **(Appendix 'C')**. The issue be placed before the Finance Committee and the Board of Governors for according administrative approval and expenditure sanction.

**Item No. 22.3.4: To consider the preliminary estimate of Rs.603.67 lacs for construction of 64 nos. residences for 'B' & 'C' category staff at Roorkee Campus.**

The B&WC considered the preliminary estimate submitted by the U.P. Rajkiya Nirman Nigam Ltd. for construction of 64 Nos. residences for 'B' and 'C' category staff at the Roorkee Campus, which is as per the approved plinth area rates of the Uttarakhand PWD. The B&WC decided that the work be assigned to the UP Rajkiya Nirman Nigam Ltd. at the estimated cost of Rs.603.67 lacs **(Appendix 'D')**. The issue be placed before the Finance Committee and the Board of Governors for according administrative approval and expenditure sanction.

**Item No. 22.3.5: To consider the preliminary estimate for construction of 64 nos. residences for 'D' category & mess staff at Roorkee Campus.**

The B&WC considered the preliminary estimate submitted by the U.P. Rajkiya Nirman Nigam Ltd. for construction of 64 Nos. residences for Category 'D' staff and Mess staff at the Roorkee Campus, which is as per the approved plinth area rates of the Uttarakhand PWD. The B&WC decided that the specifications for the Category 'D' staff residences should be the same as for the Category 'B' & 'C' Staff residences, hence the modified preliminary estimate may be obtained from the UPRNN and the work be assigned to the UP Rajkiya Nirman Nigam Ltd. The modified preliminary estimate **(Appendix 'E')** be placed before the Finance Committee and the Board of Governors for according administrative approval and expenditure sanction.



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**Item No. 22.3.6: To consider the preliminary estimate of Rs.122.08 lacs for the extension of the Community Centre.**

The B&WC considered the preliminary estimate submitted by the U.P. Rajkiya Nirman Nigam Ltd. for extension of the Community Centre at the Roorkee Campus, which is as per the approved plinth area rates of the Uttarakhand PWD. The B&WC decided that the work be assigned to the UP Rajkiya Nirman Nigam Ltd. at the estimated cost of Rs.122.08 lacs (**Appendix 'F'**). The issue be placed before the Finance Committee and the Board of Governors for according administrative approval and expenditure sanction.

**Item No.22.3.7: To consider the preliminary estimate of Rs.510.83 lacs for extension of GP Hostel (80 suites) at the Roorkee Campus.**

The B&WC considered the preliminary estimate submitted by the U.P. Rajkiya Nirman Nigam Ltd for extension of GP Hostel (80 suites) at the Roorkee Campus, which is as per the approved plinth area rates of the Uttarakhand PWD. The B&WC decided that the work be assigned to the UP Rajkiya Nirman Nigam Ltd. at the estimated cost of Rs.510.83 lacs (**Appendix 'G'**). The issue be placed before the Finance Committee and the Board of Governors for according administrative approval and expenditure sanction.

**Item No. 22.3.8: To consider the preliminary estimate of Rs.201.99 lacs for extension of Govind Bhawan at the Roorkee Campus (76 rooms).**

The B&WC considered the preliminary estimate submitted by the U.P. Rajkiya Nirman Nigam Ltd. for extension of Govind Bhawan at the Roorkee Campus (76 rooms); which is as per the approved plinth area rates of the Uttarakhand PWD. The B&WC decided that the work be assigned to the UP Rajkiya Nirman Nigam Ltd. at the estimated cost of Rs.201.99 lacs (**Appendix 'H'**). The issue be placed before the Finance Committee and the Board of Governors for according administrative approval and expenditure sanction.

**Item No. 22.3.9: To consider the preliminary estimate of Rs.27.24 lacs for the extension of Ganga Bhawan: addition of one floor on top of the existing Ganga Bhawan Canteen for opening Cyber Café and a Common Room.**

The B&WC considered the preliminary estimate submitted by the U.P. Rajkiya Nirman Nigam Ltd for the extension of Ganga Bhawan: addition of one floor on top of the existing Ganga Bhawan Canteen for opening a Cyber Café and a Common Room, which is as per the approved plinth area rates of the Uttarakhand PWD. The B&WC decided that the work be assigned to the UP Rajkiya Nirman Nigam Ltd. at the estimated cost of Rs.27.24 lacs (**Appendix 'I'**). The issue be placed before the Finance Committee and the Board of Governors for according administrative approval and expenditure sanction.

**Item No.22.3.10: To consider the preliminary estimates for extension of the Departments of Metallurgical & Material Engineering, Chemical Engineering, Civil Engineering and Institute Instrumentation Centre.**

The B&WC considered the preliminary estimates submitted by the U.P. Rajkiya Nirman Nigam Ltd. for extension of the Departments of Metallurgical & Material Engineering, Chemical Engineering, Civil Engineering and Institute Instrumentation Centre and decided that the estimate of Rs.129.50 lacs for extension of the Institute Instrumentation Centre (**Appendix 'J'**), which is as per the approved plinth area rates of the Uttarakhand PWD be recommended to the Finance Committee and the Board of Governors for according administrative approval and expenditure sanction.

The B&WC further decided that issue related to the extension of the Departments of Metallurgical & Material Engineering, Chemical Engineering and Civil Engineering be routed through the existing committee under the Chairmanship of Prof. H.O. Gupta.

**Item No.22.3.11: To consider the preliminary estimate of Rs.1159.00 lacs for construction of a Boys Hostel at the Saharanpur Campus (400 rooms, Phase-II).**

The B&WC considered the preliminary estimate submitted by the U.P. Rajkiya Nirman Nigam Ltd for construction of a Boys Hostel at the Saharanpur Campus (400 rooms, Phase-II), which is as per the approved plinth area rates of the Uttarakhand PWD. The B&WC decided that the work be assigned to the UP Rajkiya Nirman Nigam Ltd. at the estimated cost of Rs.1159.00 lacs **(Appendix 'K')**. The issue be placed before the Finance Committee and the Board of Governors for according administrative approval and expenditure sanction.

**Item No.22.3.12: To consider the preliminary estimate of Rs.66.79 lacs for the construction of an Overhead Water Tank 500 KL capacity at the Saharanpur Campus.**

The B&WC considered the preliminary estimate submitted by the U.P. Rajkiya Nirman Nigam Ltd for construction of an Overhead Water Tank 500 KL capacity at the Saharanpur Campus, which is as per the approved plinth area rates of the Uttarakhand PWD. The B&WC decided that the work be assigned to the UP Rajkiya Nirman Nigam Ltd. at the estimated cost of Rs.66.79 lacs **(Appendix 'L')**. The issue be placed before the Finance Committee and the Board of Governors for according administrative approval and expenditure sanction.

**Item No.22.3.13: To consider the demolition of old dilapidated residences.**

The B&WC considered the proposal for demolition of old dilapidated and unsafe residences which are coming in the layout of the proposed new buildings.

After discussion, the Committee decided that the demolition of the under-mentioned old dilapidated and unsafe residences, which are more than 100 years old, be recommended for consideration by the Board of Governors for specific approval:

1. **Category 'D' Mess Staff residences (10 Nos.):**

Residence No.71/1 to 71/10 Govindpuri.

2. **06 'B' Category residences:**

Residence No.154/1, 154/2, 155/1, 155/2, 156/1, 156/2, Vikas Nagar (Old Hutments).

3. **Out houses of Old Hutments (18 Nos):**

Out House No.153/1 to 153/5, 154/1 to 154/5, 155/1 to 155/5 & 156/1 to 156/3 Vikas Nagar.

**UNDER ANY OTHER ITEMS:**

**Item No.22.3.14: Progress report of the on going/completed Major Works.**

The B&WC took a note of the progress report in respect of the ongoing/completed major works as given at **Appendix 'M'**.

**Item No.22.3.15: To consider the concept Project Reports and Preliminary Estimates for Sewerage Systems and Sewage Treatment Plants for Roorkee and Saharanpur Campus of the Institute.**

The B&WC consider the proposals received from National Building Construction corporation (NBCC) Ltd. vide their letter No.NBCC/IITR/CL/2009/292 dated 14<sup>th</sup> May 2009 costing Rs.1414.42 lacs for Sewerage Systems and Sewage Treatment Plants for Roorkee and Saharanpur Campus of the Institute (**Appendix 'N'**) and decided that a presentation in this regard be made by the NBCC before the Building & Works Committee. Further, decided that a special meeting of the B&WC be convened for this purpose.



**Item No.22.3.16: Report on activities of IIT Mandi.**

Reported that IIT Roorkee, the oldest technical institution in the country with a glorious history of more than 160 years has been given the responsibility by the Government of India to mentor a new IIT at Mandi (Himachal Pradesh). The first batch of 120 students will be admitted in July 2009 through the JEE for IIT Mandi. Initially, the new institute will start with three B.Tech. Programmes in Electrical, Mechanical and Computer Science & Engineering. The intake in each branch is 40.

For the new students, teaching will be organized at IIT Roorkee campus in the first year. They will reside in the campus in the students hostels and their grooming will be initiated with the state-of-art facilities of IIT Roorkee. The development of IIT Mandi as a world class institution has also been initiated at Kamand, about 12 kms from Mandi town. The foundation stone was laid on 24<sup>th</sup> February 2009. The main campus at Kamand is spread over 531 acres of mountainous land. A preliminary project report has been prepared which draws a road map for development of the main campus.

IIT Roorkee has created a Cell named 'IIT Mandi Cell' to steer the functioning of IIT Mandi in its beginning years. The Cell is working like a department and is currently engaged in finalizing teaching arrangements for the first batch of students of IIT Mandi. The Cell is also taking up issues related to diversion of forest land at Kamand to IIT Mandi and for this purpose the forest land is to be (a) demarcated by providing fencing poles spaced at 3 meters interval around the perimeter of about 26 Kms and (b) the land use plan indicating the location of various facilities at the Kamand Campus is to be prepared on the basis of the existing data i.e. tope sheets of HP Forest Department by hiring the services of a retired Chief Architect of HPSEB, who has considerable experience in similar projects.

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



भारत सरकार  
केन्द्रीय लोक निर्माण विभाग

पत्राक : डी.बी.(33)/दे.के.मं.-II/ 65

दिनांक : 15-01-09

सेवा में,

संस्थान अभियन्ता,  
भारतीय प्रौद्योगिक संस्थान  
रुड़की, उत्तराखण्ड ।


विषय : Construction of Multistoried Boy's Hostel for I.I.T., Roorkee.

कृपया Dean (finance & planning) के कार्यालय में हुई Meeting का संदर्भ ले, जिसमें अधोहस्ताक्षरी, Chairman (Estate & works) एवं संस्थान अभियन्ता शामिल थे । Meeting में हुई वार्ता के अनुसार वांछित सूचना इस पत्र के साथ संलग्न है ।

अतः आपसे अनुरोध है कि कार्य की बड़ी हुई शेष राशि इस कार्यालय को शीघ्र प्रेषित करें ताकि कार्य बिना रुकावट के पूरा किया जा सकें ।

संलग्न : उपरोक्तानुसार ।

कार्यपालक अभियन्ता,  
देहरादून केन्द्रीय मंडल-II,  
के.लो.नि.वि., देहरादून ।

  
27 MAR 2009

# Revised Breakup of PE for Multistoried Boys Hostel IIT Roorkee (Civil Work)

S. No	Description	As per Original Sanction	Amount as per Awarded/Executed	Additional requirement Sanction required	Justification
1	Foundation work	39,54,517/-	3,20,90,280/-	2,81,35,763/-	Provision of raft foundation has been taken in P.E. Due to less soil bearing capacity at site pile foundation has to be made at the time of construction of building.
2	Building work & Services	16,87,49,352/-	21,21,06,520/-	4,43,57,168/-	P.E. was submitted on the basis of proportionate estimate prepared for 400 seated hostel but later on while approving the drawing by IIT the area of building increased from 18696 sqm to 20721 sqm.
3	Development of site	14,97,600/-	55,70,061/-	40,72,461/-	Originally the provision of development of site has been taken on lump sum basis as the area of plot was not known. Now the estimate has been prepared on the basis of actual area available at site.
4	OHT & U.G Sump	12,82,500/-	49,81,800/-	36,99,300/-	Initially the OHD has been taken for 70000 litre only. Now capacity of tank has been increased to 180000 litre due to provision of fire tanks also.
		17,54,83,969/-	25,57,48,661/-	8,02,64,692/-	
		Add 3% contingencies		24,07,941/-	
		Total Rs.		8,26,72,633/-	

Executive Engineer  
Dehradun Central Division-II,  
C.P.W.D., Dehradun.

Sanctioned P.E. 21.84.24.000/-  
Grand Total 301096633/-

27 MAY 2009



भारत सरकार  
केन्द्रीय लोक निर्माण विभाग

पत्रांक: 54(116)/दे०के०म०-II/15

दिनांक: 2-6-12-08

सेवा में,

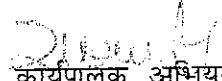
संस्थान अभियन्ता  
भारतीय प्रौद्योगिकी संस्थान  
रूड़की - 247667

**विषय: Construction of Multistoried Boys Hostel at IIT Roorkee.**

**संदर्भ:** आपका पत्रांक सं० एवं कार्य/23/स०अ० दिनांक: दिसम्बर 23, 2008

उपरोक्त संदर्भित पत्र के सम्बन्ध में कार्य का संशोधित प्रारम्भिक अनुमान मुख्य अभियन्ता (उत्तरी अंचल-II) लखनऊ द्वारा निदेशक, भारतीय प्रौद्योगिकी संस्थान को भेजा गया था। जिसकी प्रति आपको आवश्यक कार्यवाही हेतु प्रेषित है। आपसे अनुरोध है कि संशोधित प्रशासनिक अनुमोदन एवम व्यय स्वीकृति जारी करने की कृपा करें तथा बकाया निक्षेप राशि इस कार्यालय में अविलम्ब जमा कराने की कृपा करें।

संकेत: उपरोक्तानुसार

  
कार्यपालक अभियन्ता

प्रतिलिपि:

1. कुलशासक, वित्त एवं प्लानिंग को सूचनार्थ प्रेषित।
2. अध्यक्ष, कार्य एवं सम्पदा को सूचनार्थ प्रेषित।

कार्यपालक अभियन्ता



सत्यमेव जयते

भारत सरकार  
केन्द्रीय लोक निर्माण विभाग  
कार्यालय मुख्य अभियन्ता (उ०अं०-११)  
केन्द्रीय भवन "तृतीय तल",  
अलीगंज, लखनऊ

कार्यपालक अभियन्ता  
की केन्द्रीय मण्डल  
डायरी संख्या...२२१६...  
दिनांक...१५/११/०८...

पत्रांक - 23(345)/अ०अभि० (नि०)/उ०अं०-११/पी०-११/ ११३२८-३३

दिनांक: १०/११/०८

सेवा में,

निदेशक

आई०आई०टी०

रूड़की (उत्तरांचल)।

**विषय : C/o Multistoried Boys Hostel for IIT, Roorkee.**

महोदय,

उपरोक्त कार्य का संशोधित प्रारम्भिक प्राक्कलन रू० ३१,७७,५८,९००/- (रू० इकतीस करोड़ सत्तर लाख अठ्ठावन हजार नौ सौ मात्र) आपको सक्षम अधिकारी द्वारा प्रशासनिक अनुमोदन एवं व्यय स्वीकृति प्रदान करने हेतु दो प्रतियों में भेजा जा रहा है।

संलग्नक: संशोधित प्रा०प्रा० की दो प्रतियां।

कार्यपालक अभियन्ता (यो०-११)  
उ०अं०-११, के०लो०नि०वि०, लखनऊ

प्रतिलिपि संलग्नक सहित:-

१. अधीक्षण अभियन्ता, देहरादून केन्द्रीय परिमण्डल, के०लो०नि०वि०, देहरादून।
२. अधीक्षण अभियन्ता(वैद्युत), लखनऊ केन्द्रीय वैद्युत परिमण्डल, के०लो०नि०वि०, लखनऊ।
३. वरिष्ठ वास्तुक(उ०अं०-११), के०लो०नि०वि०, लखनऊ।
४. कार्यपालक अभियन्ता, रूड़की केन्द्रीय मण्डल, के०लो०नि०वि०, रूड़की।
५. कार्यपालक अभियन्ता(वैद्युत), देहरादून केन्द्रीय वैद्युत मण्डल, के०लो०नि०वि०, देहरादून।

कार्यपालक अभियन्ता (यो०-११)

केन्द्रीय लोक निर्माण विभाग  
पत्रांक: लो० (३)/सं०अं०-११/१८५६ दिनांक: २४/११/०८  
प्रतिवेदि  
१. कार्यपालक अभियन्ता, देहरादून केन्द्रीय परिमण्डल, के०लो०नि०वि०, देहरादून।  
२. कार्यपालक अभियन्ता(वैद्युत), लखनऊ केन्द्रीय वैद्युत परिमण्डल, के०लो०नि०वि०, लखनऊ।  
३. वरिष्ठ वास्तुक(उ०अं०-११), के०लो०नि०वि०, लखनऊ।  
४. कार्यपालक अभियन्ता, रूड़की केन्द्रीय मण्डल, के०लो०नि०वि०, रूड़की।  
५. कार्यपालक अभियन्ता(वैद्युत), देहरादून केन्द्रीय वैद्युत मण्डल, के०लो०नि०वि०, देहरादून।

13-

27 MAY 2009



भारत सरकार

GOVERNMENT OF INDIA

मुख्य अभियन्ता (उ०अं०-॥)

केन्द्रीय लोक निर्माण विभाग

अलीगंज, लखनऊ— 226 024

CHIEF ENGINEER (NZ-II)

CENTRAL PUBLIC WORKS DEPARTMENT

ALIGANJ, LUCKNOW- 226 024

संशोधित प्रारंभिक प्राक्कलन

REVISED PRELIMINARY ESTIMATE

कार्य का नाम :

NAME OF WORKS: Construction of Multistoried Boys Hostel for  
I.I.T., Roorkee

अनुमानित लागत

ESTIMATED COST

Total Rs. 31,77,58,900.00

**GOVERNMENT OF INDIA  
CENTRAL PUBLIC WORKS DEPARTMENT**

State :- Uttarakhand

Division :- R.C.D.

Branch :- B & R.

Name of work :- Construction of Multistoried Boys Hostel for I.I.T., Roorkee

**FUNDS**

Major Head

Minor Head

Detailed Head

Estimate framed by Er. R.P.S. Chouhan, Executive Engineer, Roorkee Central Division, C.P.W.D., Roorkee processed by Er. H.C. Soni, Executive Engineer (P & A), Dehradun Central Circle, C.P.W.D., Dehradun and further processed by Er. A.K. Pandey, Executive Engineer(P-II), O/o CE (NZ-II), CPWD, Lucknow for the probable cost of Rs. 31,77,58,900.00 i/c 3% contingencies.

**REPORT**

**History:-** This modified preliminary estimate amounting to Rs. 31,77,58,900.00 including 3% contingencies has been framed to cover the probable cost of above mentioned work and to obtain of the revised Administrative Approval and Expenditure Sanction of the competent authority. Initially the Institute Engineer, IIT, Roorkee vide No. E&W/281/IE dated 01-06-2005 requisitioned preliminary estimate for 400 seater boys hostel. The estimate was submitted for an amount Rs. 8,35,66,000/- and was placed before Board of Governors in the meeting held on 30-07-2005. The work was, however, kept pending as the site of construction was not finalized. In the meeting of Building and Work Committee held on 30-04-2006, it was decided to modify the preliminary estimate for 375 seats. Later on, the Institute Engineer vide letter No. स. एवं का./357/स.अभि. दिनांक 04-06-2006 requisitioned estimate for 700 rooms. On this Chief Engineer(NZ-II) vide letter No. 23(345)/SE(P)/NZ-II/P-II/8920-23 dated 18-08-2006 sent a fresh estimate for amount of Rs. 21,84,24,000/- with cost index 230 approved for 01-03-2006 on the basis of plinth area. At the time of preparing the estimate the soil bearing capacity of the site was assumed as 10 T/M<sup>2</sup> as per Institute Engineer's letter No. स. एवं का./357/स.अभि. दिनांक 04-06-2006

The Administrative Approved & Expenditure Sanction for the above noted work was received vide Institute Engineer letter No. E&W 167/IF dated 01-09-2006 for Rs. 21,84,24,000/- After receiving the A/A & F S Senior Architect (NZ-II).



CPWD, Lucknow gave a presentation of detailed drawings in the meeting held on 20-09-2006. The committee of IIT, Roorkee suggested some changes in the drawings in their meetings held on 27-09-2006 and 06-10-2006. Accordingly the drawings were changed and matter communicated under letter No. SA(NZ-II)/181/2006/373-76 dated 18-10-2006 and the SA(NZ-II), CPWD, Lucknow presented the revised architectural drawings to IIT, Roorkee for approval. The drawings were approved by the client with some terms and conditions vide their letter No. E&W/189/IE dated 20-10-2006. The Senior Architect (NZ-II), Lucknow did not fully agree with the terms and conditions and this was informed by him to IIT, Roorkee while presenting the revised drawings vide his letter No. SA(NZ-II)/181/2006/384-87 dated 02-11-2006. At last the approval for the same was given vide client's letter No. E&W/204/IE dated 21-11-2006.

In the meantime the testing at the site of work was conducted and it was found that the soil bearing capacity of the site is very low which is not suitable for the eight storeyed structure even if raft is provided. This was brought to the notice of IIT authorities by Executive Engineer, Roorkee Central Division vide his letter No. DB(33)/RCD/2245 dated 14-11-2006 and for the purpose of saving time and money it was advised to change the site of work. But after discussion, IIT, Roorkee vide their letter dated 21-11-2006 informed that there will be no change of site and advised to construct the building at the same site by adopting suitable technique and design. After this decision of IIT, Roorkee the matter was discussed with the Central Designing Organization, CPWD, New Delhi and it was decided to provide Bored Cast -in-situ pile foundation instead of raft foundation. Accordingly the structural drawings have been prepared with pile foundation and issued by CDO, CPWD, Nirman Bhawan, New Delhi.

Then the tenders were invited and a competent agency was selected with the help of Pre-qualification system and the work was awarded to Contractor on 25-08-2007. At the time of sending preliminary estimate cost index was taken as 230 on PAR 1992 which increased to 276 at the time of start of work. Provision of pile foundation has to be made instead of raft foundation taken in the preliminary estimate, provision for 6 lifts has been made in place of 4 lifts and the area of the building has also increased from 18896 sqm. to 20721 sqm. Due to the above factors the total cost of the works out to Rs. 31,77,58,900/-.

**Design and Scope :-** The building will be 8 storeyed RCC framed structure with floor height 3.05 mtrs. and filler walls 230/115 mm thick. Due to shortage of time, preliminary drawings for the proposed 700 students hostel could not be developed. The preliminary estimate was prepared based on the plinth area of 374 capacity hostel. The proportionate area based on drawings submitted to IIT, on 24-07-2006 for 374 capacity now has been taken for 700 capacity plus 5% additional area extra for lift block and fire escape staircase etc. This hostel will have 632 rooms. Kitchen and dining hall, TV cum reading room, IT room, Cyber café room etc. has been taken in this estimate. Total plinth area for the proposed hostel building is 20721 sqm. The area of the plot of land is 11025 sqm. (105x105m.)

Soil bearing capacity of site is 8 T/m<sup>2</sup> in front side and 6.8 T/m<sup>2</sup> in back side right corner.

The building has to be constructed based on the following Architectural drawings:-

1	SA/NZ-II/3363/181/05/19	Site plan
2	SA/NZ-II/3363/181/05/20	Cement line plan
3	SA/NZ-II/3363/181/05/23	Part CL plan block' C
4	SA/NZ-II/3363/181/05/24	Part CL plan block' D
5	SA/NZ-II/3363/181/05/25	Part CL plan block' E
6	SA/NZ-II/3363/181/05/26	Ground floor plan
7	SA/NZ-II/3363/181/05/27	First floor plan
8	SA/NZ-II/3363/181/05/28	Second floor plan
9	SA/NZ-II/3363/181/05/29	Third floor plan
10	SA/NZ-II/3363/181/05/30	Fourth floor plan
11	SA/NZ-II/3363/181/05/31	Fifth floor plan
12	SA/NZ-II/3363/181/05/33	Seventh floor plan
13	SA/NZ-II/3363/181/05/34	Terrace plan
14	SA/NZ-II/3363/181/05/35	Front and rear elevation
15	SA/NZ-II/3363/181/05/36	Left and right elevation
16	SA/NZ-II/3363/181/05/37	Section 1-1 and 2-2
17	SA/NZ-II/3363/181/05/38	Section 3-3 and 4-4

**Specifications :-** The work will be carried out as pre C.P.W.D. Specification 1996 Vol. I to VI and with upto date correction slip and revised Specification 2002 for CC and RCC shall be applicable.

**Cost :-** Rs. 31,77,58,900.00 including 3% contingency.

**Rates :-** PAR 1992 enhanced by approved cost index @276 for Roorkee.

**Land :-** Available with client department

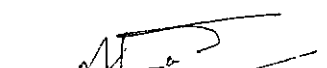
**T & P :-** No special T& P is required. Normal T& P required to execute the work shall be arranged by the contractor.


**Method :-** By contract after call of tenders.


**W.C. Estt. :-** Shall be met out of 3% contingencies.

**Time :-**

- i) Pre construction stage 6 Months after receipt of A/A & E/S
- ii) Construction stage 18 Months after availability of land free from all encumbrance or receipt of funds whichever is later.
- iii) At present the building is under construction.

  
Asstt. Engineer (P) NZ-II, CPWD, Lucknow

  
Executive Engineer (P)-II NZ-II, CPWD, Lucknow

  
Superintending Engineer (P) NZ-II, CPWD, Lucknow

## Brief Specification

**Name of work :- Construction of Multistoried Boys Hostel for I.I.T., Roorkee**

### **Brief Specification and Provisions:**

- |   |                              |  |
|---|------------------------------|--|
| 1 | Foundation & Superstructure  | Eight storeyed RCC framed structure with pile foundation. Design mix of grade M-25 and M-30 with filler wall 230 mm thick of brick work with bricks of class designation 75 in cement mortar 1:6 (1 cement : 6 coarse sand) and partition walls 115 mm thick in cement mortar 1:4 (1 cement : 4 coarse sand) |
| 2 | Doors & windows frames       |  |
|   | i) Windows Frames            | Pressed steel frames made out of corrosion resistant coated 1.6 mm thick sheet with double rebate  |
|   | ii) Door frames              | Pressed steel frames made out of corrosion resistant coated 1.6 mm thick sheet with single rebate for internal door and double rebate for external door, MS T-iron frame for cupboard and mummy door.  |
| 3 | Door Shutters & Fittings     | All doors shutters shall be 35 mm thick flush door shutter, 30 mm thick flush door with T-iron frame for WC and bath, Godrej type shutter for cupboards, aluminium door fittings and powder coated MS windows fittings.  |
| 4 | Windows/ventilators Shutters | MS tubular box section corrosion resistant coated glazed shutter and MS grill with MS fittings.  |
| 5 | Flooring                     | Marble chips flooring/precast terrazzo tiles and skirting with ordinary cement in all rooms. In remaining areas i/c toilet, circulation area, dining, kitchen, TT room, TV lounge etc. kota stone flooring shall be provided. Ceramic glazed tiles dado in WC and bathroom shall be provided.                |
| 6 | External finishing           | Exterior weather coat (Snowcryl) paint over cement plaster.  |
| 7 | Internal finishing           | Cement plaster, oil bound washable distemper in all areas except kitchen, WC and bath and all ceiling, which shall be done with white wash.  |



- Synthetic enamel paint on wood work and steel work.  
Standard CP brass fittings.
- 8 Sanitary fittings
- 9 Misc. building works Provision of plinth protection, brick edging and CC 1:2:4 pavement. Granite slab facia in lift block.
- 10 Electrical Works Provisions have been kept for internal electrical installations with copper wiring, power plugs, telephone and internal conducting etc.
- 11 Development work (Civil) Provision has been kept for internal roads and paths, sewer/septic tanks, horticulture developments.
- 12 Development work (Elect.) Provision has been kept for street / compound lighting
- 13 Bulk service (Civil) Provision has been kept for OHT on terrace, underground tank.
- 14 Bulk service (Elect.) Provision has been kept for 6 Nos., lifts, DG set (125 KVA), pump power cabling, electrical panels and Manual fire alarm.





27 MAY 2009

# GENERAL ABSTRACT


Name of Work:- C/o Multistoried Boys Hostel at IIT, Roorkee

Sl. No.	Description of items	Original Estimate			Modified Estimate		
		Civil	Elect.	Total	Civil	Elect.	Total
1	Building Work	172703870.00	25698024.00	198401894.00	245196799.00	32125169.00	277321968.00
2	Development Work	1497600.00	500000.00	1997600.00	5570061.00	500000.00	6070061.00
3	Bulk Services	1282500.00	10380000.00	11662500.00	4981800.00	20130000.00	25111800.00
Total		175483970.00	36578024.00	212061994.00	255748660.00	52755169.00	308503829.00
Add contingencies 3%		6361860.00			9255115.00		
Total		218423854.00			317758944.00		
Say Rs.		218423900.00			317758900.00		

  
SE(P)  
CPWD, Lucknow

  
EE(P)-II  
CPWD, Lucknow

  
Chief Engineer (NZ-II)  
CPWD, Lucknow

  
AE(P)  
CPWD, Lucknow

# Revised Preliminary Estimate

me of Work:- C/o Multistoried Boys Hostel at IIT, Roorkee

No.	Description of Item	As per Original			As per Revised			
		Quantity	Rate	Unit	Amount	Quantity	Rate	Unit
		3	4	5	6	7	8	9
								10
1	2							
1	Building Work	18896.00	2740.00	sqm	51775040.00	20721.00	2603.00 (*)	sqm
1	RCC framed structure upto six storeys (Floor height 2.90 mtrs.)	18896.00	346.00	sqm	6538016.00	20721.00	346.00	sqm
2	Add for revised specifications	18896.00	62.50	sqm	1181000.00	20721.00	62.50	sqm
3	Extra for every 0.3 mtr. Additional height of floor above normal floor height of 2.90 mtr. Upto 3.05 mtrs. (0.15/0.30)x125	18896.00	100.00	sqm	1889600.00	20721.00	100.00	sqm
4	Extra for every additional storeys over six storeys upto nine storeys	2988.00	135.42	sqm	404635.00	---	---	---
5	Extra for every 0.30 mtr. Deeper foundation over normal depth 1.20 mtr.	18896.00	250.00	sqm	4724000.00	20721.00	250.00	sqm
6	Extra for resisting earthquake forces	2988.00	440.00	sqm	1314720.00	---	---	---
7	Extra for RCC raft foundation	648.00	220.00	sqm	142560.00	648.00	220.00	sqm
8	Extra for larger modules over 35 sqm				67969571.00			Total
								5393676.00
B	Service (Civil)	51775040.00	10%	%	5177504.00	53936763.00	10%	%
9	Internal water supply & Sanitary installation	51775040.00	3.75%	%	1941564.00	53936763.00	3.75%	%
10	External service connections				75088639.00			Total
					97615231.00			2022629.00
	Add cost index @130% for Roorkee				172703870.00			77212507.00
								135894012.00
								213106519.00
								32090280.00
								245196799.00
C	Add for pile foundation as per Actually executed at site							

Add cost index 176% for Roorkee

As per Annex. (1)

(\*) to be less 5% for foundation

ame of Work:- C/o Multistoried Boys Hostel at IIT, Roorkee

No.	Description of Item	As per Original			As per Revised		
		Quantity	Rate	Unit	Quantity	Rate	Unit
1	2	3	4	5	6	7	8
	Internal electrical work						
a	Internal electrical installation and fans	51775040.00	12.50%	%	6471880.00	53936763.00	12.50%
							%
							6742095.00
b	Extra for FRLS copper wiring	51775040.00	2.50%	%	1294376.00	53936763.00	2.50%
							%
							1348419.00
c	Extra for power wiring & plug	51775040.00	4.00%	%	2071002.00	53936763.00	4.00%
							%
							2157471.00
d	Extra for lightening conductor	51775040.00	0.33%	%	170858.00	53936763.00	0.33%
							%
							177991.00
e	Extra for telephone/internet conducting	51775040.00	1.00%	%	517750.00	53936763.00	1.00%
							%
							539368.00
f	Services connection	51775040.00	1.25%	%	647188.00	53936763.00	1.25%
							%
							674210.00
							11639554.00
	Add cost index @ 130% for Roorkee				14524970.00	Add cost index 176% for Roorkee	20485615.00
							32125169.00
							25698024.00

27 MAY 2009

# Revised Preliminary Estimate

Name of Work:- C/o Multistoried Boys Hostel at IIT, Roorkee

Sl. No.	Description of Item	As per Original			As per Revised			
		Quantity	Rate	Unit	Amount	Quantity	Rate	Unit
1	2	3	4	5	6	7	8	9
								10
	Development of Site (Civil Work)							
	Plot size = 105x105= 11025 sqm)							
i	Levelling	---	---	---	---	11025.00	10.95	sqm
ii	Internal roads & paths and SW drains			LS	300000.00	11025.00	33.95	sqm
iii	Sewer			LS	500000.00	11025.00	24.45	sqm
iv	Filter water supply distribution line 100 mm dia and below	---	---	---	---	11025.00	17.90	sqm
v	Horticulture operations			LS	100000.00	11025.00	18.25	sqm
vi	Septic tank 700 users (including students & Mess staff) (15x4.00x1.5) 2x1000=180000				0.00	180000.00	4.75	sqm
vii	Rain water harvesting	2988.00	200.00	sqm	597600.00		Not being done	
				Total	1497600.00		Total	
						Add cost index 176%		
						Total		
								2018138.00
								3551923.00
								5570061.00
	Development of Site (Electrical Work)							
i	Street / Compound lighting with SV fittings	50.00	10000.00	Job	500000.00	50.00	10000.00	Job.
				Total	500000.00		Total	
								500000.00
								500000.00

ame of Work:- C/o Multistoried Boys Hostel at IIT, Roorkee

I. No.	Description of Item	As per Original			As per Revised				
		Quantity	Rate	Unit	Amount	Quantity	Rate	Unit	Amount
1	2	3	4	5	6	7	8	9	10
Bulk Services (Civil Work)									
1	Over head tank without independent staging	70000.00	4.75	ltrs.	332500.00	180000.00	4.75	ltrs.	855000.00
2	Under ground sump	200000.00	4.75	ltrs	950000.00	200000.00	4.75	ltrs	950000.00
				Total	1282500.00			Total	1805000.00
						Add cost index 176%			3176800.00
								Total	4981800.00
Bulk Services (Electrical Work)									
1	Passenger lift for 16 passenger (G+7)	4.00	1800000.00	job	7200000.00	6.00	1900000.00	job	11400000.00
2	i) DG set of 125 KVA for lifts & common lights	1.00	1250000.00	job	1250000.00	---	---	---	---
	ii) DG set of 250 KVA	---	---	---	---	1.00	2000000.00	job	2000000.00
3	Pumps					2.00	100000.00	job	200000.00
	a) Supplying, installation, testing & commissioning	2.00	100000.00	job	200000.00				
	Fire fighting system			LS	150000.00			LS	150000.00
	a) Power cabling i/c control cable etc.	1.00	200000.00	each	200000.00	1.00	200000.00	each	200000.00
	b) Electrical panel i/c pressurisation switch.								
	c) Supplying & laying of MS pipe 100 mm dia on surface.	300.00	1000.00	mtrs	300000.00	300.00	1000.00	mtrs	300000.00
	d) Valves i/c NRV's of various sizes.			LS	100000.00			LS	100000.00

ESTIMATE FOR TECHNOLOGY BUILDING FOR IIT ROORKEE AT SAHARANPUR CAMPUS			
SUMMARY OF ESTIMATE			
Sl. No.	Item	Amount (in Rs.)	Remarks
1	Cost of Technology Building	2,223.20	Annexure-I
2	Cost of Green Building Features	290.80	Annexure-II
3	Cost of Canteen Block	105.40	Annexure-III
	GRAND TOTAL	2,619.40	

  
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## ESTIMATE FOR TECHNOLOGY BUILDING FOR IIT ROORKEE AT SAHARANPUR CAMPUS

Sl. No.	Item	Area in Sqm.	Rate (in Rs.)	Amount (in Rs.)	Reference
<b>I</b>	<b>TECHNO BUILDING WORKS</b>				
<b>1.0</b>	<b>CIVIL WORKS</b>				
<b>1.1</b>	<b>R.C.C.FRAME STRUCTURE</b>				
<b>1.1.1</b>	Area (Height 3.35M)				
(i)	Ground Floor	1104.00			
(ii)	First Floor	968.00			
(iii)	Second Floor	1104.00			
(iv)	Third Floor	1104.00			
(v)	Fourth Floor	1104.00			
(vi)	Fifth Floor	1104.00			
(vii)	Sixth Floor	1104.00			
(viii)	Seventh Floor	1104.00			
	<b>Total</b>	8696.00	13,200.00	114,787,200.00	PAR 2007/1.1.1
<b>A</b>	<b>Total</b>			<b>114,787,200.00</b>	
<b>1.2</b>	<b>EXTRA FOR:</b>				
1.2.1	Every additional storey over six storeys upto nine storeys	2208.00	310.00	684,480.00	PAR 2007/1.2.1
1.2.2	Every 0.3mt. Additional height of floor above normal floor height of 3.35mt./2.9mts (gr.fl ht 4.2m)	1104.00	425.00	469,200.00	PAR 2007/1.2.2
1.2.2.1	Every 0.3mt. Additional height of floor above normal floor height of 3.35mt./2.9mts (Other floor ht 3.6m)	7592.00	125.00	949,000.00	PAR 2007/1.2.2
1.2.3	Extra for Resisting Earthquake forces	8696.00	630.00	5,478,480.00	PAR 2007/1.2.8
1.2.4	R.C.C. Raft Foundation	1104.00	3,560.00	3,930,240.00	PAR 2007/1.2.9
1.2.5	Larger modules over 35sqm (80% of Built up area considered)	6956.80	990.00	6,887,232.00	PAR 2007/1.2.12
<b>B</b>	<b>Total</b>			<b>18,398,632.00</b>	
	<b>TOTAL COST OF CIVIL WORKS AS PER PAR (A+B)</b>			<b>133,185,832.00</b>	



Sl. No.	Item	Area in Sqm.	Rate (in Rs.)	Amount (in Rs.)	Reference
<b>1.3</b>	<b>FIRE FIGHTING SYSTEM</b>				
1.3.1	With wet riser system	8696.00	300.00	2,608,800.00	PAR 2007/1.4.1
<b>1.4</b>	<b>FIRE ALARM SYSTEM</b>				
1.4.1	Automatic Fire Alarm system	8696.00	300.00	2,608,800.00	PAR 2007/1.5.2
<b>C</b>	<b>Total</b>			<b>5,217,600.00</b>	
<b>2.0</b>	<b>SERVICES</b>				
<b>2.1</b>	<b>PLUMBING</b>				
2.1.1	Internal Water Supply and Sanitary Installations	4% of A	0.04	4,591,488.00	PAR 2007/3.1
<b>D</b>	<b>Total</b>			<b>4,591,488.00</b>	
<b>3.1</b>	<b>ELECTRICAL WORKS</b>				
3.1.1	External Service Connection	5% of (A)	0.05	5,739,360.00	PAR 2007/3.2
3.1.2	Internal Electrical Installation	12.5% of (A)	0.13	14,348,400.00	PAR 2007/3.3
3.1.3	Internal Electrical Installations for Laboratories	15% of (A)	0.15	17,218,080.00	PAR 2007/3.4
3.1.3.4	Power Wiring Plugs	1% of (A)	0.01	1,147,872.00	
3.1.3.5	Lightening conductor Upto 4 storeyed Building	0.5% of (A)	0.01	573,936.00	PAR 2007/3.6.3.1
	5 to 8 stores building	0.33% of (A)	0.00	378,797.76	PAR 2007/3.6.3.2
3.1.3.6	Telephone Conduits	0.5% of (A)	0.01	573,936.00	PAR 2007/3.6.4
3.1.3.7	Centralized Intercom	0.5% of (A)	0.01	573,936.00	PAR 2007/3.6.5
3.1.3.8	Computer conducting	0.5% of (A)	0.01	573,936.00	PAR 2007/3.6.6
<b>E</b>	<b>Total</b>			<b>41,128,253.76</b>	
<b>4</b>	<b>LIFTS</b>				
4.1.1	Passenger Lift, Speed 1m/sec, Travel G+7 (13 passenger)	3	2,070,000.00	6,210,000.00	PAR 2007/4.1.3
<b>F</b>	<b>Total</b>			<b>6,210,000.00</b>	
<b>5.0</b>	<b>WATER TANKS</b>				
5.1	Overhead tank without independent staging	51100	9.00	459,900.00	PAR 2007/5.1
5.2	Underground sump	26100	9.00	234,900.00	PAR 2007/5.2
<b>G</b>	<b>Total</b>			<b>694,800.00</b>	
<b>6.0</b>	<b>SITE DEVELOPMENT</b>				
	<b>Total Plot Area considered</b>	<b>2130.00</b>	SqM		
(i)	Levelling	2130.00	55.00	117,150.00	PAR2007/6.1
(ii)	Internal Roads and Paths	2130.00	83.00	176,790.00	PAR2007/6.2

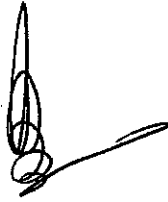
Sl. No.	Item	Area in Sqm.	Rate (in Rs.)	Amount (in Rs.)	Reference
iii)	Sewer	2130.00	63.00	134,190.00	PAR2007/6.3
iv)	Filter Water Supply-Distribution Lines 100mm dia & below	2130.00	46.00	97,980.00	PAR2007/6.4.1
v)	Unfilter Water Supply-Distribution Lines	2130.00	27.00	57,510.00	PAR2007/6.4.3
vii)	Horticulture operations	2130.00	47.00	100,110.00	PAR2007/6.6
ix)	Exit Sign Board	2130.00	50.00	106,500.00	PAR2007/6.7.4
<b>H</b>	<b>TOTAL</b>			<b>790,230.00</b>	
<b>7.0</b>	<b>EXTRA COST OF WORKS NOT INCLUDED IN PAR</b>				
<b>7.1</b>	<b>ELECTRONIC SYSTEM</b>				
<b>7.2</b>	LAN System:				Mkt. Rate
a)	Cabling jack switch etc. (Nodes)	200	10000.00	2000000.00	Mkt. Rate
b)	UPS system for 300 nodes x 0.30 KVA = 90 KVA	90	20000.00	1800000.00	Mkt. Rate
c)	Power sockets wiring for PCs (Point)	300	1000.00	300000.00	Mkt. Rate
d)	MCB, DBs etc. (Set) for above	10	10000.00	100000.00	Mkt. Rate
e)	Cables, earthing, Trays etc.		LS	200000.00	Mkt. Rate
<b>J</b>	<b>Total</b>			<b>4400000.0</b>	
	<b>GRAND TOTAL (A to J)</b>			<b>196218203.76</b>	
	Contingencies		3%	5,886,546.11	
	<b>Total</b>			<b>202,104,749.87</b>	
	Agency Charges		10%	20,210,474.99	
	<b>Total</b>			<b>222,315,224.86</b>	
	Say Rs. in Lacs			<b>2223.20</b>	



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# ESTIMATE FOR TECHNOLOGY BUILDING FOR IIT ROORKEE AT SAHARANPUR CAMPUS

Sl. No.	Item	Area in Sgm.	Rate (in Rs.)	Amount (in Rs.)	Reference
<b>II</b>	<b>GREEN BUILDING FEATURES</b>				
<b>1</b>	<b>BUILDING AUTOMATION SYTEM</b>	8696.00	2000.00	17392000.00	Mkt. Rate
	<b>Total</b>			<b>17392000.00</b>	<b>(X)</b>
<b>2</b>	<b>SOLAR ENERGY SYSTEM</b>				
<b>2.1</b>	<b>SOLAR HEATING SYSTEM</b>				
2.1.1	Supply and installation of Solar Water Heating System having capacity of 5000 litres per day (1NO)	1	250000.00	250000.00	Mkt Rate
	<b>Total</b>			<b>250000.00</b>	
<b>2.2</b>	<b>SOLAR LIGHTING SYSTEM</b>				
2.2.1	Common Area Lighting (points)	140	38000.00	5320000.00	Mkt Rate
	<b>Total</b>			<b>5570000.00</b>	<b>(Y)</b>
<b>3</b>	STP (capacity 30cum / day)			<b>2700000.00</b>	Mkt Rate <b>(Z)</b>
	<b>GRAND TOTAL(X+Y+Z)</b>			<b>25662000.00</b>	
	Contingencies		3%	769860.00	
	<b>Total</b>			<b>26431860.00</b>	
	Agency Charges		10%	2643186.00	
	<b>Total</b>			<b>29075046.00</b>	
	<b>Say Rs. in Lacs</b>			<b>290.80</b>	



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					Annexure-III
<b>III</b>	<b>CANTEEN BUILDING</b>				
<b>1.0</b>	<b>CIVIL WORKS</b>				
1.1.1	RCC Framed Structure (Height 3.35m)	400	13200	5280000.00	(A)
1.2.3	Every 0.3mt. Additional height of floor above normal floor height of 3.35 mt. (Floor Ht. 3.6 mt.)	400	125	50000.00	
1.2.8	Resisting Earth quake Forces	400	630	252000.00	
1.2.9	RCC Raft Foundation (Ground Area only)	400	3560	1424000.00	
1.2.12	Layer Modules over 35 Sqm.	400	990	396000.00	
	<b>TOTAL Cost of Civil works</b>			<b>7402000.00</b>	<b>(B)</b>
<b>2.0</b>	<b>SERVICES</b>				
2.1.1	Internal Water Supply & Sanitary Installations @ 5%	%	5% of A	264000	(C)
<b>3.0</b>	<b>ELECTRICAL WORKS</b>				
3.1.1	External Service Connection	%	5% of A	264000	
3.1.2	Internal Electrical Installation	%	12.5% of A	660000	
3.1.3	Power Wiring & Plugs	%	4% of A	211200	
3.1.4	Lightening Conductor upto 4 storey Building	%	0.05% of A	2640	
	<b>TOTAL</b>			<b>1137840</b>	<b>(D)</b>
<b>4.0</b>	<b>WATER TANKS</b>				
4.1.1	Overhead Tank with independent staying	20000	9	180000	(E)
<b>5.0</b>	<b>SITE DEVELOPMENT</b>				
	Total Plot Area Considered	1000 Sqm			
i	Levelling	1000	55	55000	
ii	Internal Roads & Paths	1000	83	83000	
iii	Server	1000	63	63000	
iv	Filter Water Supply Distribution 100 mm dia & below	1000	46	46000	
v	Unfiltered water supply lines- distribution lines	1000	27	27000	
vi	Horticulture operations	1000	47	47000	
	<b>TOTAL (Ext. Development)</b>			<b>321000</b>	<b>(F)</b>
	<b>GRAND TOTAL (B+C+D+E+F)</b>			<b>9304840.00</b>	
	Contingencies Total		3%	279145.20	
	Agency Charges Total		10%	958398.52	
	<b>Say Rs. in Lacs</b>			<b>10542383.72</b> <b>105.40</b>	



PROPOSAL  
OF  
FLUIDIZED BED REACTOR

FOR  
SEWAGE TREATMENT PLANT

AT  
I.I.T., SAHARANPUR

- CLIENT -  
NBCC LTD.

BY:-


***futuristic water solutions.***

B850C, SANGAM VIHAR

NEW DELHI - 110062

Tel:- 9812699276

e-mail: futuristicwatersolutions@gmail.com

  
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# FLUIDISED BED REACTOR (FBR)



### SALIENT FEATURES

- ❖ Least area required in comparison to other conventional technologies.
- ❖ Least power consumption in comparison to other conventional technologies.
- ❖ Based on principal of Moving Bed Bio reactor attached growth Aerobic process.
- ❖ The process of treatment is in presence of oxygen to avoid odour & fast reaction.
- ❖ Environment friendly- No odor during operation.
- ❖ No generation of foul gases like methane,  $H_2S$  in the treatment process
- ❖ Less retention time of sewage in the process – The sewage is treated very quickly hence that the retention of sewage in the process is less.
- ❖ Few moving mechanical equipments – Less operating & maintenance cost.
- ❖ No sludge recycling required – the process produces digested (no smell) sludge, hence it is not require further treatment, which minimize operating & maintenance cost.
- ❖ Monitoring of MLSS, MLVSS, SVI (sludge volume index) / F M ratio, etc. not required.
- ❖ E-Coli reduction from  $10^6 - 10^7$  MPN to less than  $10^4$  MPN at the outlet, with very nominal dosage of chlorine.
- ❖ Low sludge generation (Not more than 4% of Sludge) – Sludge handling is itself a tedious job & hence reduce further handling cost.



## DESIGN BASIS

The sewage treatment plant has been designed on the following basis:

BOD	:	250 mg/lit
COD	:	450 mg/lit
SS	:	250 mg/lit
O&G	:	10 mg/l
pH	:	6 - 8

Treated sewage characteristics will be as follows:

SS	:	< 30 mg/lit
BOD	:	< 20 mg/lit
COD	:	< 100 mg / lit.
O&G	:	< 10 mg/l
Ph	:	7 - 8

## OTHER CONSIDERATIONS

1. All other pollutants (in the raw sewage) are considered to be within the norms if present in the sewage continuously or occasionally.
2. The plant design does not account for any toxic contamination and industrial effluents.
3. The plant shall function in aerobic condition only. Formation of any anaerobic / septic condition in the bio-reactor shall be prevented, under normal operating conditions.
4. We have considered the flow generation period as 8 hours.
5. Invert level of incoming sewer is assumed at 1.5 m.





## PROCESS

The treatment scheme proposed to treat the raw sewage is described as under:

### 1) PRE-TREATMENT & COLLECTION

The raw sewage is collected in a Raw Sewage Equalization Tank after passing through bar screen & Oil/Grease trap before pumping to process reactor on average flow basis.

Bar Screen is provided for removal of floating matter. The screens are made of MS flats, placed at equal intervals. The inclination of bars is kept such that manual raking becomes easy.

In Oil & Grease trap free floating oil & grease is trapped & then cleaned manually.

Equalization tank is provided to equalize the irregular flow of sewage so that average flow can be pumped to the process reactors to maintain the regular flow in the plant.

### 2) TREATMENT

The aerobic treatment is provided for reduction of main pollutants in the raw sewage which are represented in the form of Bio-chemical Oxygen Demand (BOD) and Chemical Oxygen Demand (COD). The bacterial ability to synthesize the organic matter to harmless end-products like carbon di-oxide and water molecules is utilized to treat the raw sewage.

The bio-reactions are carried out in controlled environment in the FBR. The FBR comprises of a tank, fitted with aeration grid. The bacterial activity needs dissolved oxygen, to synthesize the organic matter. This is supplied by passing air in form of small bubbles. The air is passed at the bottom of the tank, so that complete volume of tank is utilized. Oxygen dissolves in liquid, which can now be used by the bacteria. The bacterial population is present on the media, which forms an integral part of the reactor system. The media is made of small plastic elements. Millions of such pieces are present in the reactor.

A very large surface area is available for the bacterial population to grow. The bacteria grow on the plastic media, by using the organic content in the raw sewage, and the dissolved oxygen available. Due to constant aeration, the media is set in whirling motion, so that continuous mixing takes place.

The bacterial layer growth on the media surface increases to a certain extent, and then gets sloughed off after a specific period. This phenomena is called sloughing. This creates new surface for further bacterial growth. Sloughing takes place only after complete growth and subsequent dying off of the bacterial layer and hence the sloughed off material is completely digested. Ammoniacal nitrogen is completely converted into nitrate nitrogen, in the bacterial synthesis. About 50 - 60% of the phosphates are also assimilated in the organic synthesis. (Nitrogen and phosphorous are utilized as micronutrients in the bacterial activity.) The bacterial reaction is carried out in two stages, for maximizing the BOD removal efficiency. Hence, two such reactors are provided in series. Within the reactors, arrangements are made to retain the plastic media in place.



Air supply is done through perforated stainless steel pipes. Use of stainless steel pipes ensures that no maintenance is required.

The sludge is separated in tube settler chamber where rise in velocity is used for settling of solids and clear water overflows to further disinfection.

### 3) DISINFECTION

The treated sewage is then added with chlorine in the form of hypo solution in contact tank through constant head box.

### 4) TERTIARY TREATMENT UNIT

For reuse of water for horticulture purpose, the water after chlorination is to be passed through the dual media filters & Activated carbon filters to achieve the parameters mentioned in the offer suitable for reuse of water.

For the process disinfected water is stored in filter feed tank and then pumped to DMF and ACF before collecting in treated water tank.

### 5) SLUDGE

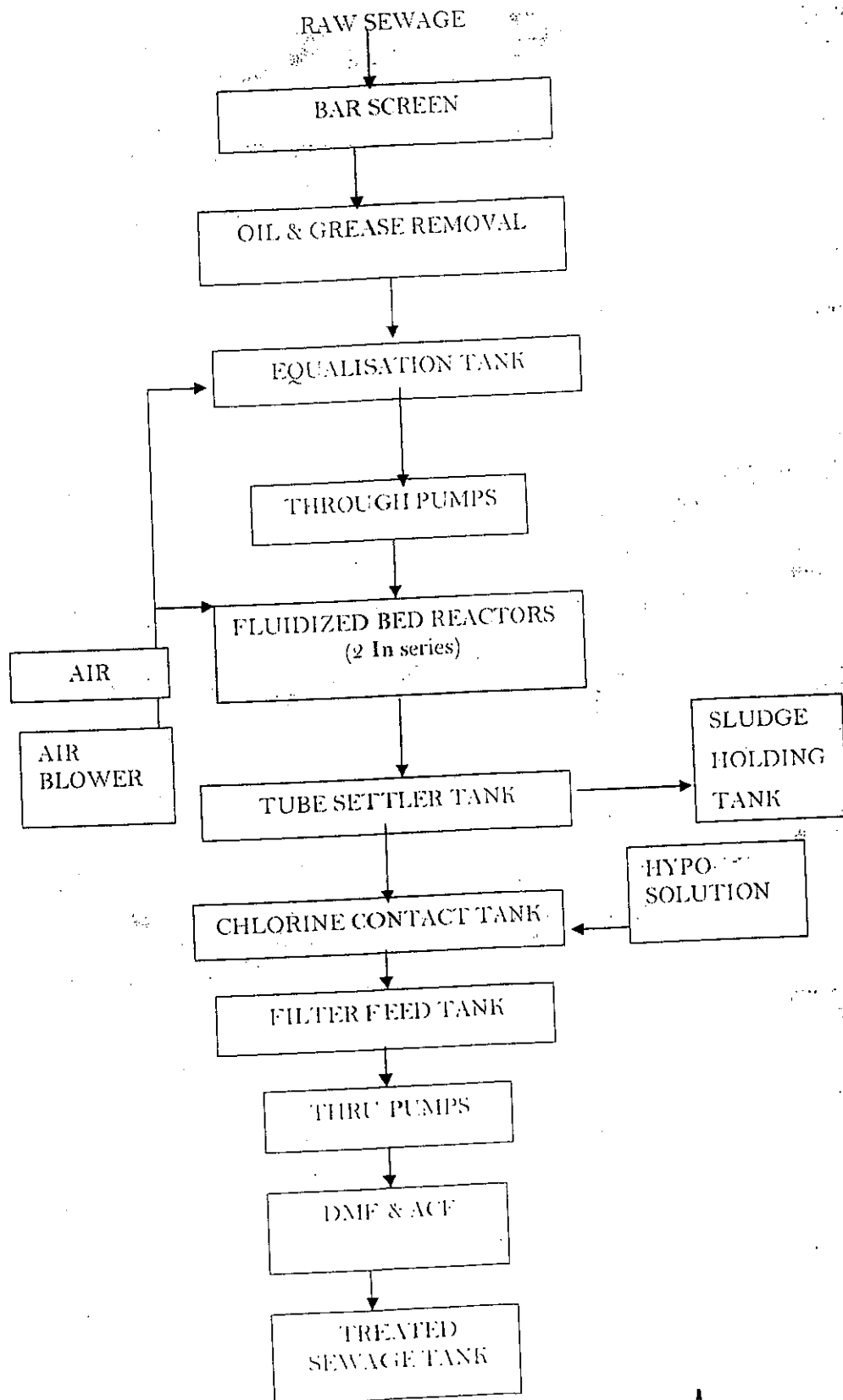
The sloughed biomass removed from the treated sewage can be disposed off. Hence a tube settler is provided. The tube settler is equipment in which the Bio-mass removed & suspended solids are settled under action of gravity.

The sludge formed in the process of bio-degradation, is send to the Sludge holding tank for storage and air is provided in the bottom so that desired oxygen level should be maintained.

The stored sludge to be removed after 10 days from the tank through suitable means.



## PROCESS BLOCK DIAGRAM



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### TECHNICAL SPECIFICATIONS

Sr. No.	Name of the equipment	Details
1	Bar screen	Material of construction: MS Flat Clearance : 10 mm Qty: 1 no. Chamber Size: 0.9 x 1.9 x 0.9 m water level Chamber construction: RCC in M25 Grade Qty: 1 No.
2.	Oil & Grease removal	Chamber: 1 No. Chamber construction: RCC in M25 Grade Size: 1.3 x 2.5 x 1.0 m water level
3.	Raw Sewage Equalization Tank	Tank: 1 No. Material of Tank: RCC in M25 Grade Size: 2.9 x 2.9 x 2.0m water level
4.	Raw Sewage Pumps	No. of pumps : 2 (1 Working + 1 Standby) Material of Construction: Cast Iron Type : Centrifugal, Capacity : 1.7 m <sup>3</sup> /hr Head : 14 m
5.	Sewage Treatment unit (Fluidized Bed Reactor with integral tube settler)	Foot print Dimension: 1.7 m x 1.7m Tank: Mild Steel with internal Epoxy painted Fluidized Bed Reactor Tank: 2 No. FBR Media: Fluidized, Type : Carrier type MOC : Polypropylene Air Grid : Stainless Steel Tube settler - 1 no. Type : Square Tube type Material of constructions of tube: PVC.
6	Air blowers for Reactors	No. of blowers: 2 (1 Working + 1 Standby) Type: Positive displacement roots type Material of Constructions: Cast Iron Drive : Belt Driven



7.	Chlorination @ 7ppm of sodium hypo chloride of 6% concentration	Tank: Mild Steel with internal Epoxy painted Size: 0.6 x 3.4 x 0.9 m Qty - 1 No. Baffles: 2 Nos. Dosing tank: HDPE Dosing system: Constant head dosing box. Capacity of dosing Tank: 100 lit/ day Qty: One each
8.	Tertiary Treatment Unit	Filter feed Tank: 1 No. Material: Mild Steel with internal Epoxy painted Size: 0.6 x 3.4 x 0.9 m Filter feed pumps: Centrifugal, monoblock Qty - 2 Nos. (1 Working + 1 Standby) Material of Constructions: Cast Iron Capacity : 2.0 m <sup>3</sup> /hr Head: 26m Dual Media Filter: 1 No. Material of Construction: Mild Steel Dimension : 300 Dia x 1200 HOS Activated carbon filter: 1 No. Material of Construction: Mild Steel Dimension : 400 Dia x 1200 HOS Treated water tank: 1 No. Material: Mild Steel with internal Epoxy painted Size: 1.2 x 3.4 x 0.9
9.	Sludge Holding tank	Qty: 1 No. Location: Under ground Size: 2.0 x 2.9 x 1.0 m sludge level. Air grid : For air bubbling
10.	Electrical	Panel for plant operation: 1 No. Cubical type Cables: as per rating
11.	Interconnecting piping & valves	Pipes : Mild Steel Chlorine dosing pipe: HDPE Valves: Cast Iron



## TECHNICAL NOTES

### CIVIL:-

- a. Grade of concrete for water retaining structure in M-25.
- b. All reinforcing steel shall be HYSD FE-415 confirming to IS 1786 and that no special anticorrosive treatment considered.
- c. Lead for all excavation shall be 100 m from anywhere within the battery limits.
- d. We have considered that the site is free from any type of vegetation and hence we have not considered any type of site clearance in our scope such as deforestation, demolition of existing structures etc. We have considered that well graded approachable site at finished ground level should be made available to us.
- e. We have considered safe bearing capacity of soil as 17 T / M<sup>2</sup> at a depth 1.2 M from finished ground level (FGL).
- f. We have considered no uplift in our design and considered that the ground water table will not be encountered at site.

### ELECTRICAL:-

#### CONTROL PANEL

Control Panel shall be as per the following brief specification:

1. Non - compartmentalised, floor mounting
2. Non-drawout (fixed type)
3. Single front
4. Sheet thickness - 14/16 gauge CRCA
5. Location - Out door
6. Cable entry - Bottom
7. Busbars - Aluminium
1. Earth busbar - Aluminium
9. Incomer - 1 no.
10. DOL starter (upto 7.5 kW)
11. Star,delta starter (above 7.5 kW)
12. Control Supply  
SPMCBs - as required for instrument supply.
13. Capacitors- Not considered
14. Power wiring - minimum 2.5 sq.mm PVC insulated copper wire.  
Control wiring - 1.5 sq. mm PVC insulated copper wire
15. Control supply - 3ph, 230 VAC obtained from phase and neutral.

#### CABLES

- a. Power cables - PVC insulated, PVC sheathed, GI armoured, Aluminium conductor cables as per IS 1554. Minimum power-cable size shall be 3c x 4-sq. mm
- b. Control cables - PVC insulated, PVC sheathed, GI armoured, solid copper conductor cables as per IS 1554. Control cable size shall be 4.5 sq.mm.

#### OUTDOOR CABLE-ROUTING

Cables shall be run buried underground in pre-constructed excavated and back-filled trenches up to individual equipment.



## SCOPE OF WORK

### A. DESIGN & ENGINEERING

Following drawings / documents only shall be submitted for approval after award of order

1. P&I diagram
2. Sewage treatment plant layout

### B. SUPPLY

1. Equipments as specified under "Technical Specifications" and electrical/ instruments as per attached list.

2. Required piping, valves within the battery limits of treatment plant.

### C. CONSTRUCTION

All Civil units as specified in offer and foundations for mechanical equipments wherever required.

### D. ERECTION & COMMISSIONING

Erection and commissioning of the plant as per offer

### E. EXCLUSIONS

The following items are not included in scope of work.

1. All piping beyond the termination points.
2. Incoming supply cables up to our panel, including termination.
3. Electricity & water during erection & commissioning
4. Commissioning consumable
5. Area lighting & lightening protection.
6. Disposal of sludge, screenings & grit, treated sewage.
7. Site development, site grading, compound wall, gate etc.



## PRICED SCHEDULE OF WORK

S. No.	Description	Unit	Qty	Rate	AMOUNT
1.	Design, Supply, installation & commissioning of Sewage Treatment Plant based on aerobic attached growth process sewage treatment plant (FBR) having capacity 30 m <sup>3</sup> /day including all civil works for STP on turnkey basis, including the following as specified in our offer & as shown on drawings:	Job	1	2692000/-	Rs.26,92,000.00
a.	One Bar screen chamber with bar screen				
b.	One oil & Grease removal chamber				
c.	One equalization tank complete with HDPE air grid				
d.	2 nos. Raw sewage centrifugal pumps				
e.	Process Reactor module with 2 compartments for process and one as tube settler for sludge separation including of media, air grid & riser pipes.				
f.	2 nos. Air blower of suitable capacity & head.				
g.	1 no. electrical control panel for STP operation with cable from panel to different drives.				
h.	Chlorination system comprising of tank, dosing tank and constant head box.				
i.	Tertiary Treatment unit comprising of 2 nos. centrifugal monoblock pumps One Filter Feed tank One Dual Media filter One Activated Carbon filter One Treated water tank				
j.	One no. sludge holding tank complete with air grid				
k.	One lot of necessary valves & piping.				
l.	One set of electrical cabling from panel to various electrical equipments				
m.	Necessary foundations for EXM equipments				





## TERMS & CONDITION OF SALE

Price are Ex-Site basis, inclusive of all prevailing taxes, any change in tax structure before supply of equipment shall be charged extra.

Necessary form required to enter the material in the state shall be provided by you, free of cost.

### DELIVERY PERIOD

The each plant shall be designed, supplied, erected and commissioned within the period of 4 months from the date of start of contract period i.e. 10 days from the date of order, under normal operating environment.

### COMMISSIONING

It will be responsibility of the Purchaser to make arrangements and provide sewage & electricity for carrying out pre-commissioning tests before the date of readiness for such tests as intimated by us. In the event of delay on the other part of purchaser in making these arrangements and consequent delay in commissioning of equipment, the purchaser will release all such payment, which could have been due to us on commissioning of equipment.

### VALIDITY

Our offer is valid till 60 days only.

### OPERATING PERSONNEL

The purchaser will ensure that his operating personnel is made available before pre-commissioning to enable them witness all commissioning tests and satisfy themselves about all guarantee parameters.

### VARIATION/ADDITION IN SCOPE OF WORK

The scope of supply is restricted to supply of equipment as specified in the proposal. Any subsequent additions or alterations will be acceptable to us provided it is convenient to do so and the prices and delivery period are suitably revised.

### ACCEPTANCE OF THE TREATMENT PLANT

In case the plant is not commissioned after the supply within a period of 30 days due to the non-availability of effluent or any other reason whatsoever, the plant will be deemed as successfully commissioned

### PAYMENT TERMS

Mobilization interest free advance	25%
Against material at site.	65%
Civil Work completion	10%
Installation of F&M equipments	03%
Commissioning of the plant	02%

### WARRANTY FOR EQUIPMENT

All our equipment is thoroughly inspected before dispatch and therefore can be depended upon for long and trouble free service. Our liability in respect of any defect or failure in the equipment supplied and commissioned by us or any loss, injury or damage attributable therefore shall be limited to making good by replacement or repairs, provided the equipment is operated and maintained in accordance with our instructions and arise totally from proven faulty design, materials or workmanship.



This warranty shall be valid for a period of 15 months from the erection or 12 months from the date of commissioning of the equipment, whichever is earlier.

Our liability in no case shall exceed the contract value, and we shall not be liable for any consequential damage or loss such as loss of profits, loss of business opportunities, damage to goodwill or business reputation or any other contractual liability or loss suffered by the Purchaser to third parties. All warranties other than title either express or implied whether arising under law or equity including warranties of merchantability and fitness for a particular purpose are excluded from the contract. This is the essence of the contract.

This warranty is valid subject to the following conditions:

Bought out components are guaranteed by us only to the extent of guarantees given to us by our suppliers. Electrical components such as heaters, motors, contactors, etc., rubber components and instruments such as pressure gauges, etc. are however not covered under this warranty.

In respect of the equipment where dispatch after readiness is delayed due to specific instructions or lack of instructions from you, the warranty will be limited to 18 months from the date of readiness for dispatch of equipment as notified by us.

No repairs or replacements, unless authorised by us in writing, will be carried out by any other party on our equipment during the warranty period.

The warranty period does not cover the following:

- a. Normal wear and tear
- b. Damages/defects arising out of mal-operation of the plant by the purchaser and accidents.
- c. The equipment or part thereof being subject to accident, alteration, abuse or misuse.
- d. The equipment not being operated and maintained as per Operation and Maintenance Instructions.

#### EXCESS MATERIALS

Since we shall be sending to site a number of items in spare for smooth and uninterrupted erection and commissioning, such items, which remain unused, will be our property and will be removed by us.

#### GENERAL

Any condition or other matters pertaining to this offer not expressly stipulated will be a matter of mutual discussions and agreement at the time of accepting the order.



ग्राहक की खुशी के लिए प्रतिबद्ध  
Committed to Customers' Delight

नेशनल बिल्डिंग्स कन्स्ट्रक्शन कॉर्पोरेशन लिमिटेड  
(भारत सरकार का उद्यम)

NATIONAL BUILDINGS CONSTRUCTION CORPORATION LIMITED  
(A Government of India Enterprise)



An IS/ISO 9001  
Company  
(For Consultancy &  
Project Management Division)

**DELHI ZONAL OFFICE :**

NBCC Place, Bhisham Pitamah Marg,  
Pragati Vihar, New Delhi-110003  
Tele-fax : 24369644  
E-mail : nkshah\_1961@hotmail.com

No.NBCC/GM/DZ/IIT-ROORKEE/2009/ 5714

Date: 06.05.2009

**The Institute Engineer**

Estate & works  
Main Building  
Indian Institute of Technology,  
Roorkee

**Kind Attn: Shri Salek Chand**

**Sub : Construction of 03 Nos. Staff Accommodation Blocks at site-2, IIT,  
Roorkee**

Dear Sir,

With reference to the subject cited above, enclosed please find herewith a preliminary estimate amounting to Rs. 17.77 crore for the construction of 03 Nos. Ground + Six storey blocks of staff accommodation and a site plan showing layout of Buildings.

The estimate is based on CPWD PAR-2007 rates and also includes site development.

It is requested that the estimate may kindly be approved at the earliest to take further action in the matter by NBCC.

Thanking you,

Yours faithfully,

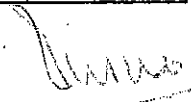
(NEELESH SHAH)  
GENERAL MANAGER (DZ)

Encl: As above

27 MAY 2009

ESTIMATE FOR STAFF ACCOMMODATION AT SITE 2 BASED ON PAR 2007					
S. No.	Item	Area in Sqm.	Rate (in Rs.)	Amount (in Rs.)	Reference
<b>A</b>	<b>BUILDING WORKS</b>				
<b>1.0</b>	<b>CIVIL WORKS</b>				
	Estimate for one Block:				
<b>1.1</b>	<b>R.C.C.FRAMED STRUCTURE</b>				
	Builtup Area Details:				
	Stilt floor	270.00			50% of 540 Sqm
	First floor	540.00			
	Second Floor	540.00			
	Third Floor	540.00			
	Fourth Floor	540.00			
	Fifth Floor	540.00			
	Sixth Floor	540.00			
	<b>TOTAL BUILTUP AREA</b>	<b>3510.00</b>			
<b>1.1.1</b>	Cost of Construction for Floor height 2.9 m	3510.00	9,000.00	31,590,000.00	PAR 2007/1.1.2
<b>1.2</b>	<b>EXTRA FOR</b>				
<b>1.2.1</b>	Every additional storey over six storeys (One additional storey)	540.00	310.00	167,400.00	PAR 2007/1.2.1
<b>1.2.4</b>	Extra for Resisting Earthquake forces	3510.00	630.00	2,211,300.00	PAR 2007/1.2.8
<b>1.2.5</b>	R.C.C. Raft foundation (ground floor only)	540.00	3,560.00	1,922,400.00	PAR 2007/1.2.9
	<b>Total</b>			<b>4,301,100.00</b>	
	<b>TOTAL COST OF CIVIL WORKS AS PER PAR (1.1.1+1.2)</b>			<b>35,891,100.00</b>	<b>1</b>
<b>2.0</b>	<b>FIRE FIGHTING</b>				
<b>2.1.1</b>	With wet riser system	3510.00	300.00	1,053,000.00	PAR 2007/2.9.1
<b>2.1.2</b>	<b>FIRE ALARM SYSTEM</b>				
<b>2.1.2.1</b>	Manual Fire alarm System	3510.00	155.00	544,050.00	PAR 2007/2.10.1
	<b>TOTAL COST OF FIRE FIGHTING &amp; FIRE ALARM</b>			<b>1,597,050.00</b>	<b>2</b>
<b>3.0</b>	<b>SERVICES</b>				
<b>3.1</b>	<b>PLUMBING</b>				
<b>3.1.1</b>	Internal Water Supply and Sanitary Installations	12% of (1.1.1)	12.00%	3,790,800.00	PAR 2007/3.1
<b>3.1.2</b>	External Service connections	5% of (1.1.1)	5.00%	1,579,500.00	PAR 2007/3.2
<b>3.2</b>	<b>ELECTRICAL WORKS</b>				
<b>3.2.1</b>	Internal Electrical Installations	12.5% of (1.1.1)	12.50%	3,948,750.00	PAR 2007/3.3
<b>3.2.3</b>	Lightening conductor				
	5 to 8 storeyed Building	0.33% of (1.1.1)	0.33%	104,247.00	PAR 2007/3.6.3.2
<b>3.2.4</b>	Extra for Telephone Conduits	0.5% of (1.1.1)	0.50%	157,950.00	PAR 2007/3.6.4
<b>3.2.5</b>	Centralised Intercom System	1% of (1.1.1)	1.00%	315,900.00	PAR 2007/3.6.5
	<b>TOTAL COST OF SERVICES</b>			<b>9,897,147.00</b>	<b>3</b>

S. No.	Item	Area in Sqm.	Rate (in Rs.)	Amount (in Rs.)	Reference
<b>4.0</b>	<b>LIFTS</b>				
4.1	Passenger lifts 13 passengers, 2 Nos. (Gr+6) Speed 1m/sec	2.00	1,980,000.00	3,960,000.00	PAR 2007 4.1.3
	<b>TOTAL COST OF LIFTS</b>			3,960,000.00	
<b>5.0</b>	<b>WATER TANKS</b>				
5.1	Over Head Water Tank without independent staging	43225.00	9.00	389,025.00	PAR 2007/5.1
5.5	Underground Sump	27500.00	9.00	247,500.00	PAR 2007/5.5
	<b>TOTAL COST OF WATER TANKS</b>			636,525.00	5
	<b>TOTAL COST FOR 1 BLOCK AS PER PAR 2007(1+2+3+4+5)</b>			51,981,822.00	6
	<b>TOTAL COST OF BUILDING WORKS FOR 3 BLOCKS (6*3)</b>			155,945,466.00	(A)
<b>B</b>	<b>COST OF DEVELOPMENT OF SITE</b>				
	<b>Total Area of the Plot (Sq. M):</b>	<b>8098.00</b>			
	<b>Cost of:</b>				
(i)	Levelling	8098.00	55.00	445,390.00	PAR 2007/6.1
(ii)	Internal Roads and Paths	8098.00	83.00	672,134.00	PAR 2007/6.2
(iii)	Sewer	8098.00	63.00	510,174.00	PAR 2007/6.3
(iv)	Filter Water Supply	8098.00	46.00	372,508.00	PAR 2007/6.4.1
v)	Unfiltered Water Supply-Distribution Lines	8098.00	27.00	218,646.00	PAR 2007/6.4.3
vi)	Storm Water Drains	8098.00	50.00	404,900.00	PAR 2007/6.5
vii)	Horticulture operations	8098.00	47.00	380,606.00	PAR 2007/6.6
viii)	Street Lighting with HPSV Lamps	8098.00	95.00	769,310.00	PAR 2007/6.7.2
ix)	Exit sign board i/c electric signage	8098.00	50.00	404,900.00	PAR 2007/6.7.4
	<b>TOTAL COST OF SITE DEVELOPMENT WORKS</b>			4,178,568.00	(B)
	<b>TOTAL COST AT PAR 2007 FOR BUILDING WORKS AND SITE DEVELOPMENT FOR 3 TOWERS (A+B)</b>			160,124,034.00	(X)
<b>D</b>	<b>CONTNGENCIES</b>	1% over (X)	1.0%	1,601,240.34	(Y)
<b>E</b>	<b>NECC's Agency Charges</b>	10% over (X)	10%	16,012,403.40	(Z)
	<b>GRAND TOTAL(X+Y+Z)</b>			177,737,677.74	
			<b>SAY</b>	<b>Rs. 17.77 Cr.</b>	

  
 Rajesh Arora  
 AGM (Engg.)  
 National Buildings Const. Corp. Ltd.  
 IIT Works  
 58/1, Ravindra Lok, IIT Campus  
 Roorkee (Uttarakhand)-247667

# उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड

(राज्य सरकार का उपक्रम)

(ISO 9001:2000 CERTIFIED)

कैम्प कार्यालय,  
आई०आई०टी० परिसर,  
गंगा भवन होस्टल,  
रुड़की (हरिद्वार)



कार्यालय इकाई प्रभारी  
87/26 उत्तरी सिविल लाइन  
रोडवेज बस स्टैंड के सामने,  
मुजफ्फरनगर

## U.P. Rajkiya Nirman Nigam Ltd

*Name of work: - Construction of C Type residence 64No at I.I.T Campus Roorkee  
Distt Haridwar (U.K)*

*Cost of Preliminary Estimate:- Rs 603.67 lacs only*

*Name of Unit:-*

U.P.R.N.N. LTD  
I.I.T. Campus  
Cautley bhawan Hostel Campus  
Roorkee [Distt: Haridwar]

*G.M. Office:-*

U.P. Rajkiya Nirman Nigam Ltd  
Officers Colo Officers Hostel Campus  
Delhi road saharanpur (U.P.)

*Head Office:-*

U.P. Rajkiya Nirman Nigam Ltd  
Vishwaria bhawan, Vibhuti khan  
Comantinagar Lucknow (U.P.)

**U.P. Rajkiya Nirman Nigam Ltd Muzaffarnagar Unit Muzaffarnagar ( U.P )**  
**Name of work : - Construction of C Type Residence 64 No at I.I.T Campus**  
**Roorkee Distt Haridwar ( U.K )**

**Analysis of rate**

**(A) Ground floor Plinth area ( Per Square meter )**

(1) Plinth area rate as per U.A P.W.D vide Letter No 369/55 Bhawan -2008 dated 12-03-2008	Rs 5760.00
(2) Add Extra height for 0.30M beyond 2.90M height is 3.20M 1x160.00Per M2	Rs 160.00
(3) Add for Provision for R.C.C Framed structure @ 12 % on amount Rs 5760.00	Rs 691.20
(4) Add Internal water supply & sewage system of work @ 11 %	Rs 633.60
(5) Add External water supply & sewage system of work @ 5 %	Rs 288.00
(6) Add Internal Electrification work @ 10 %	Rs 576.00
(7) Add for Ant termite treatment of work	Rs 180.00
(8) Add for Earthquake Provision	Rs 370.00
(9) Add for Power wiring 3%	Rs 172.80
(10) Add for provision for Ceiling Fan 3%	Rs 172.80
(11) Add for Contingencies 4%	Rs 230.40

**Rs 9,234.60**

**Per Square meter**

**(B) First floor Plinth area ( Per Square meter )**


(1) Plinth area rate as per U.A P.W.D vide Letter No 369/55 Bhawan -2008 dated 12-03-2008	Rs 5180.00
(2) Add Extra height for 0.30M beyond 2.90M height is 3.20M 1x160.00Per M2	Rs 160.00
(3) Add for Provision for R.C.C Framed structure @ 12 % on amount Rs 5180.00	Rs 621.60
(4) Add Internal water supply & sewage system of work @ 11 %	Rs 569.80
(5) Add External water supply & sewage system of work @ 5 %	Rs 259.00
(6) Add Internal Electrification work @ 10 %	Rs 518.00
(7) Add for Earthquake Provision	Rs 370.00
(8) Add for Power wiring 3%	Rs 155.40
(9) Add for provision for Ceiling Fan 3%	Rs 155.40
(10) Add for Contingencies 4%	Rs 207.20

**Rs 8,196.40**

**Per Square meter**

  
**A.R.E**  
**U.P.R.N.N.Ltd**

  
**Project Manager**  
**U.P.R.N.N.Ltd**

  
**27 MAY 2009**

**U.P. Rajkiya Nirman Nigam Ltd Muzaffarnagar Unit Muzaffarnagar ( U.P )**  
**Name of work :- Construction of C Type Residence 64 No at I.I.T Campus**  
**Roorkee Distt Haridwar ( U.K)**

**Analysis of rate**

**(C) Second Floor Plinth area ( Per Square meter )**

(1) Plinth area rate as per U.A P.W.D vide Letter No 369/55 Bhawan -2008 dated 12-03-2008	Rs 5760.00
(2) Add Extra height for 0.30M beyond 2.90M height is 3.20M	1x160.00Per M2 Rs 160.00
(3) Add for Provision for R.C.C Framed structure @ 12 % on amount Rs 5760.00	Rs 691.20
(4) Add Internal water supply & sewage system of work @ 11 %	Rs 633.60
(5) Add External water supply & sewage system of work @ 5 %	Rs 288.00
(6) Add Internal Electrification work @ 10 %	Rs 576.00
(7) Add for Earthquake Provision	Rs 370.00
(8) Add for Power wiring 3%	Rs 172.80
(9) Add for provision for Ceiling Fan 3%	Rs 172.80
(10) Add for Contingencies 4%	Rs 230.40

**Rs 9,054.80**  
**Per Square meter**

**(D) Third Floor Plinth area ( Per Square meter )**

(1) Plinth area rate as per U.A P.W.D vide Letter No 369/55 Bhawan -2008 dated 12-03-2008	Rs 6340.00
(2) Add Extra height for 0.30M beyond 2.90M height is 3.20M	1x160.00Per M2 Rs 160.00
(3) Add for Provision for R.C.C Framed structure @ 12 % on amount Rs 6340.00	Rs 760.80
(4) Add Internal water supply & sewage system of work @ 11 %	Rs 697.40
(5) Add External water supply & sewage system of work @ 5 %	Rs 317.00
(6) Add Internal Electrification work @ 10 %	Rs 634.00
(7) Add for Earthquake Provision	Rs 370.00
(8) Add for Power wiring 3%	Rs 190.20
(9) Add for provision for Ceiling Fan 3%	Rs 190.20
(10) Add for Contingencies 4%	Rs 253.60

**Rs 9,913.20**  
**Per Square meter**

**(E) Fourth Floor Plinth area ( Per Square meter )**

**Same rate as per third floor Plinth area rate**

**Rs 9,913.20**  
**Per Square meter**







## **U.P.R.Ltd Muzaffarnagar Unit Muzaffarnagar (U.P)**

**Name of work:- Construction of C Type residence 64 No at I.I.T Campus Roorkee Distt Haridwar ( U.K)**

### **Plinth area Measurement**

**(1) Ground Floor Plinth Area for one Block**

Building Area	$1 \times 20.56 \times 20.52 = 421.89M^2$
Balcony	$1 \times 4 \times 1/2 \times 4.12 \times 1.60 = 13.18$
Staircase	$1 \times 1/2 \times 2.06 \times 0.61 = 0.63$
Deduction	$1 \times 4 \times 1.71 \times 1.20 = (-) 8.19$
	$1 \times 2 \times 2.93 \times 1.22 = (-) 7.15$
	$2 \times 5.13 \times 3.90 = (-) 40.01$
	$1 \times 5.11 \times 2.06 = (-) 10.52$

**369.83M<sup>2</sup>**

**(a) Ground Floor Plinth**

**Area for 04 No of Block  $4 \times 369.83 = 1479.32M^2$**

**(b) First Floor Plinth Area**

**Quantity same as G.F Plinth area  $1479.32M^2$**

**(c) Second Floor Plinth area**

**Quantity same as first floor Plinth area  $1479.32M^2$**

**(d) Third Floor Plinth Area**

**Quantity same as second Floor Plinth area  $1479.32M^2$**

**(e) Fourth Floor Plinth Area**

**Staircase Mumty for 04 No of Block  $4 \times 6.95 \times 2.52 = 70.88M^2$**

**(2) Brick coba Treatment over roof of**

**100mm thick average depth with i/c  
costing of all materials lab our T&P  
etc complete**

**Quantity same as G.F Plinth Area  $1479.32M^2$**

**(3) Extra for provision of 35mm thick**

**Shisham wood wire gauge Jali Door**

**Shutter with fitting etc complete**

**Door**

**For 04 No Block**

**G.F to Third Floor  $4 \times 3 \times 16 \times 1.00 \times 2.10 = 403.20M^2$**

**(4) Extra for provision of Steel ward rope**

**Shutter with locking arrangement system**

**Etc complete**

**G.F to third Floor  $3 \times 64 \times 1.200 \times 2.00 = 460.80M^2$**

  
**A.R.E**

**U.P.R.N.N.Ltd**

**U.P.R.N.N.Ltd Muzaffarnagar Unit Muzaffarnagar (U.P)**  
**Name of work:-Construction of 'C' Type residence 64 No at I.I.T Campus Roorkee**  
**Distt Haridwar ( U.K)**

**Abstract of Cost**

S.No	Particular of Item	Plinth Area	Rate	Amount
(1)	Construction of 'C' Type of Residence 64 No at I.I.T Campus Roorkee			
(a)	Ground Floor Plinth Area	1479.32M <sup>2</sup>	Rs 9,234.60	Rs 1,37,94,067.27
(b)	First Floor Plinth Area	1479.32M <sup>2</sup>	Rs 8,196.40	Rs 1,21,25,098.45
(c)	Second Floor Plinth Area	1479.32M <sup>2</sup>	Rs 9,054.60	Rs 1,33,94,650.87
(d)	Third Floor Plinth Area	1479.32M <sup>2</sup>	Rs 9,913.20	Rs 1,46,64,795.02
(e)	Forth Floor Plinth Area	70.88M <sup>2</sup>	Rs 9,913.20	Rs 7,02,647.62
(2)	Extra for provision of 35mm Thick Shisham wood wire gauge Jali Door Shutter with fitting etc complete	403.20M <sup>2</sup>	Rs1950.00	Rs7,86,240.00
(3)	Extra for provision of Steel ward rope Shutter with locking arrangement system etc complete	460.80M <sup>2</sup>	Rs 2165.00	Rs 9,97,632.00
(4)	Brick coba Treatment over roof of 100mm thick average depth with i/c Costing of all materials lab our T&P etc complete	1479.32M <sup>2</sup>	Rs 355.00	Rs 5,25,158.60
				Rs 5,69,90,269.83
(5)	Less 5 % Due to U.P.R.N.N.Ltd Working	(--)		Rs 28,49,514.49
				Rs 5,41,40,755.34
(6)	Add 11.5 % U.P.R.N.N.Ltd Centage Charges	(+)		Rs 62,26,186.87
				Rs 6,03,66,942.21
				<b>Say Rs 603.67 Lacs</b>

  
**A.R.E**  
**U.P.R.N.N.Ltd**

  
**Project Manager**  
**U.P.R.N.N.Ltd**

***U.P.R.N.N.Ltd Muzaffarnagar Unit Muzaffarnagar (U.P)***

***Name of work:-Construction of 'C' Type residence 64 No at I.I.T Campus Roorkee  
Distt Haridwar ( U.K)***

<i>S.No</i>	<i>Particular of Item</i>	<i>Cost</i>
(1)	Construction of 'C' Type of residence 64 No at I.I.T Campus Roorkee	Rs 603.67 Lacs

  
***A.R.E***  
***U.P.R.N.N.Ltd***

***Project Manager***  
***U.P.R.N.N.Ltd***

## उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड

(राज्य सरकार का उपक्रम)  
(ISO 9001:2000 CERTIFIED)

कैम्प कार्यालय,  
आई०आई०टी० परिसर,  
गंगा भवन होस्टल,  
रुड़की (हरिद्वार)



कार्यालय इकाई प्रभारी  
87/26 उत्तरी सिविल लाइन  
रोडवेज बस स्टैंड के सामने,  
मुजफ्फरनगर

## U.P. Rajkiya Nirman Nigam Ltd

*Name of work: - Construction of 'D' Type residence 64No(32No of Residence for Mess Employee & 32No of Residence for D Type Category Staff) at I.I.T Campus Roorkee. Distt Haridwar (U.K)*

*Cost of Preliminary Estimate:- Rs 375.18 lacs only*

*Name of Unit:-*

U.P.R.N.N. LTD  
I.I.T. Campus  
Cautley bhawan Hostel Campus  
Roorkee [Distt: Haridwar]

*G.M. Office:-*  
U.P. Rajkiya Nirman Nigam Ltd  
Officers Colo Officers Hostel Campus  
Delhi road saharanpur (U.P.)

*Head Offic:-*  
U.P. Rajkiya Nirman Nigam Ltd  
Vishwaria bhawan, Vibhuti khan  
Comantinagar Lucknow (U.P.)

**U.P. Rajkiya Nirman Nigam Ltd Muzaffarnagar Unit Muzaffarnagar ( U.P )**  
**Name of work : - Construction of D Type Residence 64 No at I.I.T Campus**  
**Roorkee Distt Haridwar ( U.K )**

**Analysis of rate**

**(A) Ground floor Plinth area ( Per Square meter )**

(1) Plinth area rate as per U.A P.W.D vide Letter No 369/55 Bhawan -2008 dated 12-03-2008	Rs 5760.00
(2) Add Extra height for 0.30M beyond 2.90M height is 3.20M 1x160.00Per M2	Rs 160.00
(3) Add for Provision for R.C.C Framed structure @ 12 % on amount Rs 5760.00	Rs 691.20
(4) Add Internal water supply & sewage system of work @ 11 %	Rs 633.60
(5) Add External water supply & sewage system of work @ 5 %	Rs 288.00
(6) Add Internal Electrification work @ 10 %	Rs 576.00
(7) Add for Ant termite treatment of work	Rs 180.00
(8) Add for Earthquake Provision	Rs 370.00
(9) Add for Power wiring 3%	Rs 172.80
(10) Add for provision for Ceiling Fan 3%	Rs 172.80
(11) Add for Contingencies 4%	Rs 230.40

**Rs 9,234.60**

**Per Square meter**

**(B) First floor Plinth area ( Per Square meter )**

(1) Plinth area rate as per U.A P.W.D vide Letter No 369/55 Bhawan -2008 dated 12-03-2008	Rs 5180.00
(2) Add Extra height for 0.30M beyond 2.90M height is 3.20M 1x160.00Per M2	Rs 160.00
(3) Add for Provision for R.C.C Framed structure @ 12 % on amount Rs 5180.00	Rs 621.60
(4) Add Internal water supply & sewage system of work @ 11 %	Rs 569.80
(5) Add External water supply & sewage system of work @ 5 %	Rs 259.00
(6) Add Internal Electrification work @ 10 %	Rs 518.00
(7) Add for Earthquake Provision	Rs 370.00
(8) Add for Power wiring 3%	Rs 155.40
(9) Add for provision for Ceiling Fan 3%	Rs 155.40
(10) Add for Contingencies 4%	Rs 207.20

**Rs 8,196.40**

**Per Square meter**

  
**A.R.E**  
**U.P.R.N.N.Ltd**

  
**Project Manager**  
**U.P.R.N.N.Ltd**

**U.P. Rajkiya Nirman Nigam Ltd Muzaffarnagar Unit Muzaffarnagar ( U.P )**  
**Name of work :- Construction of D Type Residence 64 No at I.I.T Campus**  
**Roorkee Distt Haridwar ( U.K.)**

**Analysis of rate**

**(C) Second Floor Plinth area ( Per Square meter )**

(1) Plinth area rate as per U.A P.W.D vide Letter No 369/55 Bhawan -2008 dated 12-03-2008		Rs 5760.00
(2) Add Extra height for 0.30M beyond 2.90M height is 3.20M	1x160.00Per M2	Rs 160.00
(3) Add for Provision for R.C.C Framed structure @ 12 % on amount Rs 5760.00		Rs 691.20
(4) Add Internal water supply & sewage system of work @ 11 %		Rs 633.60
(5) Add External water supply & sewage system of work @ 5 %		Rs 288.00
(6) Add Internal Electrification work @ 10 %		Rs 576.00
(7) Add for Earthquake Provision		Rs 370.00
(8) Add for Power wiring 3%		Rs 172.80
(9) Add for provision for Ceiling Fan 3%		Rs 172.80
(10) Add for Contingencies 4%		Rs 230.40

**Rs 9,054.80**  
**Per Square meter**

**(D) Third Floor Plinth area ( Per Square meter )**

(1) Plinth area rate as per U.A P.W.D vide Letter No 369/55 Bhawan -2008 dated 12-03-2008		Rs 6340.00
(2) Add Extra height for 0.30M beyond 2.90M height is 3.20M	1x160.00Per M2	Rs 160.00
(3) Add for Provision for R.C.C Framed structure @ 12 % on amount Rs 6340.00		Rs 760.80
(4) Add Internal water supply & sewage system of work @ 11 %		Rs 697.40
(5) Add External water supply & sewage system of work @ 5 %		Rs 317.00
(6) Add Internal Electrification work @ 10 %		Rs 634.00
(7) Add for Earthquake Provision		Rs 370.00
(8) Add for Power wiring 3%		Rs 190.20
(9) Add for provision for Ceiling Fan 3%		Rs 190.20
(10) Add for Contingencies 4%		Rs 253.60

**Rs 9,913.20**  
**Per Square meter**

**(E) Fourth Floor Plinth area ( Per Square meter )**  
**Same rate as per third floor Plinth area rate**

**Rs 9,913.20**  
**Per Square meter**





**U.P.R.N.N.Ltd Muzaffarnagar Unit Muzaffarnagar (U.P)**  
**Name of work:-Construction of 'D' Type residence 64 No(32 No for Mess Employee& 32No of Residence for Mess Employee) at I.I.T Campus Roorkee Distt Haridwar ( U.K)**

**Measurements**

**(1) Ground Floor Plinth Area for one Block**

Building Area	$1 \times 19.97 \times 14.90 = 297.55M^2$
Balcony	$1 \times 4 \times 1/2 \times 3.40 \times 1.50 = 10.20$
Deduction	$1 \times 4 \times 1.90 \times 2.40 = (-) 18.24$
	$1 \times 2 \times 4.30 \times 0.40 = (-) 3.40$
	$1 \times 2.40 \times 2.00 = (-) 9.60$
	$2 \times 8.80 \times 2.70 = (-) 47.52$
	<b>228.99M<sup>2</sup></b>

**(a) Ground Floor Plinth**

Area for 04 No of Block  $4 \times 228.99 = 915.96M^2$

**(b) First Floor Plinth Area**

Quantity same as G.F Plinth area **915.96M<sup>2</sup>**

**(c) Second Floor Plinth area**

Quantity same as first floor Plinth area **915.96M<sup>2</sup>**

**(d) Third Floor Plinth Area**

Quantity same as second Floor Plinth area **915.96M<sup>2</sup>**

**(e) Fourth Floor Plinth Area**

Staircase Mumty for 04 No of Block  $4 \times 5.80 \times 2.50 = 58.00M^2$

**(2) Extra for provision of 35mm thick**

Shisham wood wire gauge Jali Door

Shutter with fitting etc complete

Door

For 04No Block

G.F to Third Floor  $4 \times 2 \times 16 \times 1.00 \times 2.10 = 263.80M^2$

**(3) Extra for provision of Steel ward rope**

Shutter with locking arrangement system

Etc complete

GF to third Floor  $2 \times 64 \times 1.20 \times 2.00 = 307.20M^2$

**(4) Brick coba Treatment over roof of**

100mm thick average depth with i/c

costing of all materials lab our T&P

etc complete

Quantity same as G.F Plinth Area **915.96M<sup>2</sup>**

  
A.R.E

U.P.R.N.N.Ltd



**U.P.R.N.N.Ltd Muzaffarnagar Unit Muzaffarnagar ( U.P )**  
**Name of work:-Construction of 'D 'Type residence 64 No(32 No for Mess Employee&**  
**32No of Residence for Mess Employee) at I.I.T Campus Roorkee Distt**  
**Haridwar ( U.K )**

**Abstract of Cost**

S.No Particular of Item	Plinth Area	Rate	Amount
(1) Construction of 'D 'Type Residence 64No of residence ( 32 No for Mess Employee&32No of Residence for D Type Category Staff)			
(a) Ground Floor Plinth Area	915.96M <sup>2</sup>	Rs 9,234.60	Rs 84,58,524.22
(b) First Floor Plinth Area	915.96M <sup>2</sup>	Rs 8,196.40	Rs 75,07,574.54
(c) Second Floor Plinth Area	915.96M <sup>2</sup>	Rs 9,054.80	Rs 82,93,834.61
(d) Third Floor Plinth Area	915.96M <sup>2</sup>	Rs 9,913.20	Rs 90,80,094.67
(e) Forth Floor Plinth Area	58.00M <sup>2</sup>	Rs 9,913.20	Rs 5,74,965.60
(2) Extra for provision of 35mm thick Shish am wood wire gauge Jali Door Shutter with fitting etc complete	263.80M <sup>2</sup>	Rs 1950.00	Rs 5,14,410.00
(3) Extra for provision of Steel ward rope Shutter with locking arrangement system etc complete	307.20M <sup>2</sup>	Rs 2165.00	Rs 6,65,088.00
(4) Brick coba Treatment over roof of 100mm thick average depth with i/c Costing of all materials lab our T&P etc complete	915.96M <sup>2</sup>	Rs 355.00	Rs 3,25,165.50
			Rs 3,54,19,657.14
(5) Less 5 % Due to U.P.R.N.N.Ltd Working	(--)		Rs 17,70,982.86
			Rs 3,36,48,674.28
(6) Add 11.5 % U.P.R.N.N.Ltd Centage Charges	(+)		Rs 38,69,597.54
			Rs 3,75,18,271.82
			Say Rs 375.18 Lacs

  
**A.R.E**  
**U.P.R.N.N.Ltd**

  
**Project Manager**  
**U.P.R.N.N.Ltd**



**U.P.R.N.N Ltd Muzaffarnagar Unit Muzaffarnagar (UP.)**

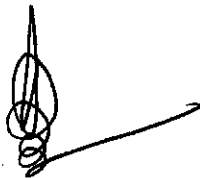
**Name of work :- Construction of 'D' Type residence 64 No (32 No for Mess Employee & 32 No of Residence for 'D' Type category Staff) at I.I.T Campus Roorkee Distt Haridwar (U.K)**

**Summary of Cost**

<b>S.No</b>	<b>Particulars of Item</b>	<b>Amount</b>
(1)	Construction of 'D' Type Residence 64 No (32 No for Mess Employee & 32 No of Residence For 'D' Type Category Staff)	Rs 375.18 Lacs

  
**A.R.E**  
**U.P.R.N.N.Ltd**

  
**Project Manager**  
**U.P.R.N.N.Ltd**



27 MAY 2009

# उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड

(राज्य सरकार का उपक्रम)  
(ISO 9001:2000 CERTIFIED)

कैम्प कार्यालय,  
आई०आई०टी० परिसर,  
गंगा भवन होस्टल,  
रूड़की (हरिद्वार)



कार्यालय इकाई प्रभारी  
87/26 उत्तरी सिविल लाइन  
रोडवेज बस स्टैंड के सामने,  
मुजफ्फरनगर

## U.P. Rajkiya Nirman Nigam Ltd

*Name of work: - Construction for Extension of Community Center Building at I.I.T  
Campus Roorkee Distt Haridwar ( U.K )*

*Cost of Preliminary Estimate:- Rs 122.08 lacs only*

*Name of Unit:-*

U.P.R.N.N. LTD  
I.I.T. Campus  
Cautley bhawan Hostel Campus  
Roorkee [Distt: Haridwar]

*G.M. Office:-  
U.P. Rajkiya Nirman Nigam Ltd  
Officers Colo Officers Hostel Campus  
Delhi road saharanpur (U.P.)*

*Head Office:-  
U.P. Rajkiya Nirman Nigam Ltd  
Vishwaria bhawan, Vibhuti khan  
Comantinagar Lucknow (U.P.)*

**U.P. Rajkiya Nirman Nigam Ltd Muzaffarnagar Unit Muzaffarnagar ( U.P )**

**Name of work : - Construction for Extension of Community Center Building at  
I.I.T campus Roorkee Distt Haridwar ( U.K )**

**Analysis of rate**

**(A ) Ground floor Plinth area ( Per Square meter )**

(1) Plinth area rate as per U.A P.W.D vide Letter No 369/55 Bhawan -2008 dated 12-03-2008	Rs 6180.00
(2) Add Extra height for 0.30M beyond 2.90M height is 3.20M	1x160.00Per M2 Rs 160.00
(3) Add for Provision for R.C.C Framed structure @ 12 % on amount Rs 6180.00	Rs 741.60
(4) Add Internal water supply & sewage system of work @ 12 %	Rs 741.60
(5) Add External water supply & sewage system of work @ 5 %	Rs 309.00
(6) Add Internal Electrification work @ 12 %	Rs 741.60
(7) Add for Ant termite treatment of work	Rs 180.00
(8) Add for Earthquake Provision	Rs 370.00
(9) Add for Power wiring 3%	Rs 185.40
(10) Add for provision for Ceiling Fan 4%	Rs 247.20
(11) Add for Contingencies 4%	Rs 394.26

**Rs 10,250.66  
Per Square meter**

**(B ) First floor Plinth area ( Per Square meter )**

(1) Plinth area rate as per U.A P.W.D vide Letter No 369/55 Bhawan -2008 dated 12-03-2008	Rs 5560.00
(2) Add Extra height for 0.30M beyond 2.90M height is 3.20M	1x160.00Per M2 Rs 160.00
(3) Add for Provision for R.C.C Framed structure @ 12 % on amount Rs 6180.00	Rs 667.20
(4) Add Internal water supply & sewage system of work @ 12 %	Rs 667.20
(5) Add External water supply & sewage system of work @ 5 %	Rs 278.00
(6) Add Internal Electrification work @ 12 %	Rs 667.20
(7) Add for Earthquake Provision	Rs 370.00
(8) Add for Power wiring 3%	Rs 166.80
(9) Add for provision for Ceiling Fan 4%	Rs 222.40
(10) Add for Contingencies 4%	Rs 350.35

**Rs 9,109.15  
Per Square meter**

  
**A.R.E**  
**U.P.R.N.N.Ltd**

  
**Unit Incharge**  
**U.P.R.N.N.Ltd**

**U.P. Rajkiya Nirman Nigam Ltd Muzaaffarnagar Unit Muzaaffarnagar ( U.P )**

**Name of work : Construction for extension of Community Center Building at I.I.T  
campus Roorkee Distt Haridwar ( U.K)**

**Analysis of rate**

**(C) Second Floor Plinth area ( Per Square meter )**

- |  |                |            |
|--|----------------|------------|
| (1) Plinth area rate as per U.A P.W.D vide Letter No<br>369/55 Bhawan -2008 dated 12-03-2008 |                | Rs 6180.00 |
| (2) Add Extra height for 0.30M beyond 2.90M<br>height is 3.20M                               | 1x160.00Per M2 | Rs 160.00  |
| (3) Add for Provision for R.C.C Framed<br>structure @ 12 % on amount Rs 6180.00              |                |            |
| (4) Add Internal water supply & sewage system of work @ 12 %                                 |                | Rs 741.60  |
| (5) Add External water supply & sewage system of work @ 5 %                                  |                | Rs 309.00  |
| (6) Add Internal Electrification work @ 12 %   |                | Rs 741.60  |
| (7) Add for Earthquake Provision   |                | Rs 370.00  |
| (8) Add for Power wiring 3%  |                | Rs 185.40  |
| (9) Add for provision for Ceiling Fan 4%   |                | Rs 247.20  |
| (10) Add for Contingencies 4%  |                | Rs 394.26  |

**Rs 10,063.46**

**Per Square meter**

**(D) 3<sup>rd</sup> Floor Plinth area ( Per Square meter )**

- |  |                |            |
|--|----------------|------------|
| (1) Plinth area rate as per U.A P.W.D vide Letter No<br>369/55 Bhawan -2008 dated 12-03-2008 |                | Rs 6180.00 |
| (2) Add Extra height for 0.30M beyond 2.90M<br>height is 3.20M                               | 1x160.00Per M2 | Rs 160.00  |
| (3) Add for Provision for R.C.C Framed<br>structure @ 12 % on amount Rs 6180.00              |                |            |
| (4) Add Internal water supply & sewage system of work @ 12 %                                 |                | Rs 741.60  |
| (5) Add External water supply & sewage system of work @ 5 %                                  |                | Rs 309.00  |
| (6) Add Internal Electrification work @ 12 %   |                | Rs 741.60  |
| (7) Add for Earthquake Provision   |                | Rs 370.00  |
| (8) Add for Power wiring 3%  |                | Rs 185.40  |
| (9) Add for provision for Ceiling Fan 4%   |                | Rs 247.20  |
| (10) Add for Contingencies 4%  |                | Rs 394.26  |

**Rs 10,063.46**

**Per Square meter**

  
**A.R.E**  
**U.P.R.N.N.Ltd**

  
**Project Manager**  
**U.P.R.N.N.Ltd**

  
27 MAY 2009

# **U.P.R.N.N.Ltd Muzaffarnagar Unit Muzaffarnagar (U.P)**

Name of work:-Construction for Extension of Community Center Building at I.I.T  
Campus Roorkee Distt Haridwar ( U.K )

## **Measurements**

### **(1) Plinth Area**

#### **(a) Ground Floor Plinth Area**

For Stair case  $1 \times 7.05 \times 3.00 = 21.15M^2$

#### **(b) First Floor Plinth Area**

Building Area  $1 \times 35.00 \times 10.90 = 381.50M^2$

$1 \times 1/2 \times 8.15 \times 6.25 = 25.47$

$1 \times 13.80 \times 7.05 = 97.29$

$1 \times 6.25 \times 2.70 = 16.88$

For Stair case  $1 \times 7.05 \times 3.00 = 21.15$

**542.29M<sup>2</sup>**

#### **(c) Second Floor Plinth area**

Quantity same as first floor Plinth area **542.29M<sup>2</sup>**

#### **(d) Third Floor Plinth Area**

For Stair case Mumty  $1 \times 7.05 \times 3.00 = 21.15M^2$

### **(2) Supply & Fixing Kota stone Flooring**

Over coarse sand Mortar with mix 1:4

Including supply of all materials lab our  
T&P etc complete

For Staircase

Landing

$1 \times 3 \times 4.00 \times 3.00 = 36.00M^2$

Tread

$1 \times 60 \times 1.20 \times 0.300 = 21.60$

Riser

$1 \times 60 \times 1.20 \times 0.150 = 10.80$

G.F

$1 \times 7.00 \times 3.00 = 21.00$

First Floor to second Floor

$1 \times 2 \times 41.10 \times 2.50 = 205.50$

$1 \times 3 \times 2 \times 2.25 \times 1.45 = 19.58$

$1 \times 2 \times 4.05 \times 3.70 = 29.98$

$1 \times 2 \times 4.00 \times 3.95 = 31.60$

$1 \times 2 \times 1/2 \times 8.15 \times 6.25 = 50.94$

$1 \times 2 \times 6 \times 2.75 \times 1.90 = 62.70$

$1 \times 2 \times 6 \times 3.25 \times 1.65 = 64.35$

**554.05M<sup>2</sup>**

### **(3) Extra for provision of 35mm thick**

Shisham wood wire gauge Jali Door

Shutter with fitting etc complete

with fitting etc complete

First to Second Floor  $2 \times 2 \times 6 \times 1.00 \times 2.10 = 50.40M^2$

### **(4) Brick coba Treatment over roof of**

100mm thick average depth with i/c

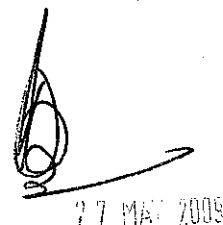
costing of all materials lab our T&P

etc complete

Quantity same as second Plinth Area **542.29M<sup>2</sup>**

  
A.R.E

U.P.R.N.N.Ltd

  
27 MAY 2009

**U.P.R.N.N.Ltd Muzaffarnagar Unit Muzaffarnagar (U.P)**  
 Name of work:-Construction for Extension of Community Center Building at I.I.T  
 Campus Roorkee Distt Haridwar ( U.K )

Measurement

- (3) *Supplying & Fixing Aluminum Glazing*  
*Open able Portion 1.5mm thick with rubber.*  
*,beading etc complete*

*First & Second Floor*

Door	$3 \times 2 \times 1.80 \times 2.10 = 22.68M^2$
	$2 \times 2 \times 1.20 \times 2.10 = 10.08$
	$1 \times 2 \times 1.00 \times 2.10 = 4.20$
	$2 \times 2 \times 0.90 \times 2.10 = 7.56$
Window	$2 \times 2 \times 4.00 \times 1.27 = 20.32$
	$2 \times 2 \times 2.50 \times 1.27 = 12.70$
	$2 \times 2 \times 1.00 \times 1.00 = 4.00$

81.54M<sup>2</sup>

- (4) *Supplying & Fixing Aluminum Glazing*  
*Fixed Portion 1.5mm thick with rubber.*  
*,beading etc complete*

*First Floor & Second Floor*

Window	$2 \times 2 \times 4.00 \times 0.55 = 8.80M^2$
	$2 \times 2 \times 2.50 \times 0.55 = 5.50$

14.30M<sup>2</sup>

- (5) *Supply & Fixing 12mm thick practical board*  
*In open able portion*

*First Floor to second Floor*

In Door	$3 \times 2 \times 1.80 \times 2.10 = 22.68M^2$
	$2 \times 2 \times 1.20 \times 2.10 = 10.08$
	$1 \times 2 \times 1.00 \times 2.10 = 4.20$
	$2 \times 2 \times 0.90 \times 2.10 = 7.56$

44.52M<sup>2</sup>

50% quantity of 44.52M<sup>2</sup> = 22.26M<sup>2</sup>

- (6) *Supply & Fixing door Floor spring*  
*with fitting etc complete*

*First Floor to Second Floor*     $2 \times 2 \times 5 = 20$  No of Floor Spring

  
 A.R.E  
 U.P.R.N.N.Ltd

  
 27 MAY 2009

# **U.P.R.N.N.Ltd Muzaffarnagar Unit Muzaffarnagar ( U.P )**

**Name of work:- Construction for Extension of Community Center Building at I.I.T  
Campus Roorkee Distt Haridwar ( U.K )**

## **Abstract of Cost**

<b>S.No</b>	<b>Particular of Item</b>	<b>Plinth Area</b>	<b>Rate</b>	<b>Amount</b>
(1)	Construction for Extension of Community Center Building			
(a)	Ground Floor Plinth Area	21.29M <sup>2</sup>	Rs 10,250.66	Rs 2,18,236.55
(b)	First Floor Plinth Area	542.29M <sup>2</sup>	Rs 9,109.15	Rs 49,39,800.95
(c)	Second Floor Plinth Area	542.29M <sup>2</sup>	Rs 10,063.46	Rs 54,57,313.72
(d)	Third Floor Plinth Area	21.29M <sup>2</sup>	Rs 10,063.46	Rs 2,14,251.06
(2)	Supply & Fixing Kota stone Flooring Over coarse sand Mortar with mix 1:4 Including supply of all materials lab our T&P etc complete	554.05 M <sup>2</sup>	Rs (680.00-240.00)	Rs 2,43,782.00
(3)	Supplying & Fixing Aluminum Glazing Open able Portion 1.5mm thick with rubber. beading etc complete	81.54 M <sup>2</sup>	Rs(2475-Rs1076.00)	Rs 1,14,074.46
(4)	Supplying & Fixing Aluminum Glazing Fixed Portion 1.5mm thick with rubber. ,beading etc complete	14.30M <sup>2</sup>	Rs 1669.00	Rs 23,866.70
(5)	Supply & Fixing 12mm thick practical board With fitting etc complete	22.26M <sup>2</sup>	Rs 322.00	Rs 7,199.92
(6)	Supply & Fixing door Floor spring with fitting etc complete	20 No	Rs 800.00	Rs 16000.00
(7)	Extra for provision of 35mm thick Shisham wood wire gauge Jali Door Shutter with fitting etc complete	50.40M <sup>2</sup>	Rs 1950.00	Rs 98,280.00
(8)	Brick coba Treatment over roof of 100mm thick average depth with i/c Costing of all materials labour T&P Etc complete	542.29M <sup>2</sup>	Rs 355.00	Rs 1,92,512.95
				Rs 1,15,25,318.29
(9)	Less 5 % Due to U.P.R.N.N.Ltd Working	(--)		Rs 5,76,265.91
				Rs 1,09,49,052.38
(10)	Add 11.5 % U.P.R.N.N.Ltd Centage Charges	(+)		Rs 12,59,141.02
				Rs 1,22,08,193.40
				Say Rs 122.08 Lacs

  
**A.R.E**  
U.P.R.N.N.Ltd

  
**Project Manager**  
U.P.R.N.N.Ltd

**U.P.R.N.N.Ltd Muzaffarnagar Unit Muzaffarnagar ( U.P )**

**Name of work:- Construction for Extension of Community Center Building at I.I.T  
Campus Roorkee Distt Haridwar ( U.K )**

**Summary of Cost**

<b>S.No</b>	<b>Particular of Item</b>	<b>Amount</b>
<b>(1)</b>	<b>Construction for Extension of Community Center Building at I.I.T Campus Roorkee</b>	<b>Rs 1,22,08,193.40 Say Rs122.08Lacs</b>

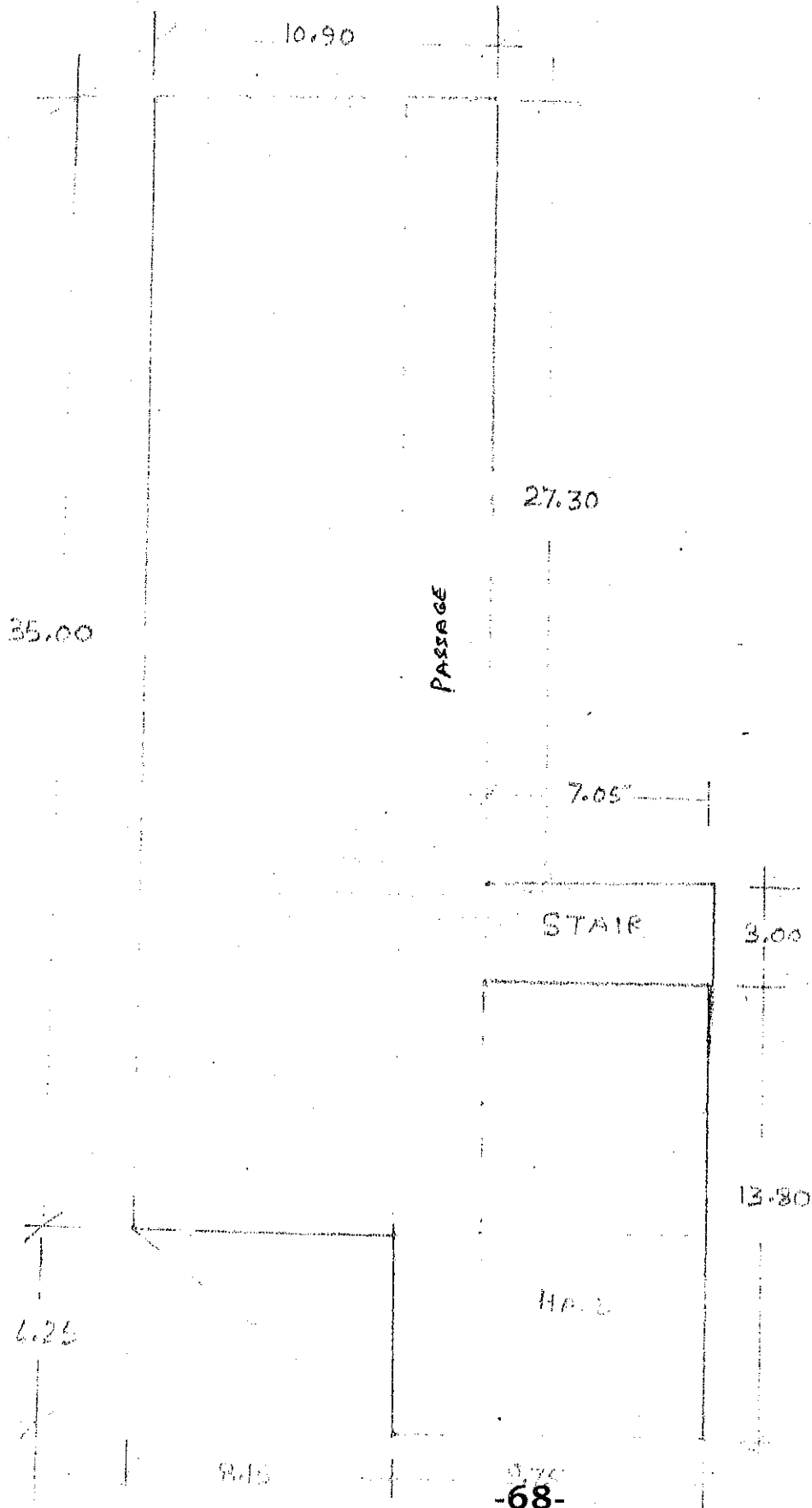
  
**A.R.E**  
**U.P.R.N.N.Ltd**

  
**Project Manager**  
**U.P.R.N.N.Ltd**

  
**27 MAY 2009**



# Community Centre, 117, Rke



-68-

Apple  
JE  
UPRNN  
117 Rke

27 MAY 2009

# उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड

(राज्य सरकार का उपक्रम)  
(ISO 9001:2000 CERTIFIED)

कैम्प कार्यालय,  
आई०आई०टी० परिसर,  
गंगा भवन होस्टल,  
रुड़की (हरिद्वार)



कार्यालय इकाई प्रभारी  
87/26 उत्तरी सिविल लाइन  
रोडवेज बस स्टैंड के सामने,  
मुजफ्फरनगर

## U.P. Rajkiya Nirman Nigam Ltd

Name of work: - Construction of Married Hostel Block 80 Seated at I.I.T Campus  
Roorkee Distt Haridwar ( U.K )

( Extension of G P Hostel )

Cost of Preliminary Estimate:- Rs 510.83 lacs only

Name of Unit:-

U.P.R.N.N. LTD  
I.I.T. Campus  
Cautley bhawan Hostel Campus  
Roorkee [Distt: Haridwar]

G.M. Office:-  
U.P. Rajkiya Nirman Nigam Ltd  
Officers Colo Officers Hostel Campus  
Delhi road saharanpur (U.P.)

Head Office:-  
U.P. Rajkiya Nirman Nigam Ltd  
Vishwaria bhawan, Vibhuti khan  
Comantinagar Lucknow (U.P.)

27 May 2005

**U.P. Rajkiya Nirman Nigam Ltd Muzaffarnagar Unit Muzaffarnagar ( U.P )**

**Name of work : - Construction for Married Hostel Block 80 seated Building  
at I.I.T campus Roorkee Distt Haridwar ( U.K )**

**Analysis of rate**

**(A) Ground floor Plinth area ( Per Square meter )**

(1) Plinth area rate as per U.A P.W.D vide Letter No 369/55 Bhawan -2008 dated 12-03-2008		Rs 6180.00
(2) Add Extra height for 0.30M beyond 2.90M height is 3.20M	1x160.00Per M2	Rs 160.00
(3) Add for Provision for R.C.C Framed structure @ 12 % on amount Rs 6180.00		Rs 741.60
(4) Add Internal water supply & sewage system of work @ 12 %		Rs 741.60
(5) Add External water supply & sewage system of work @ 5 %		Rs 309.00
(6) Add Internal Electrification work @ 12 %		Rs 741.60
(7) Add for Ant termite treatment of work		Rs 180.00
(8) Add for Earthquake Provision		Rs 370.00
(9) Add for Power wiring 3%		Rs 185.40
(10) Add for provision for Ceiling Fan 4%		Rs 247.20
(11) Add for Contingencies 4%		Rs 394.26

**Rs 10,250.66  
Per Square meter**

**(B) First floor Plinth area ( Per Square meter )**

(1) Plinth area rate as per U.A P.W.D vide Letter No 369/55 Bhawan -2008 dated 12-03-2008		Rs 5560.00
(2) Add Extra height for 0.30M beyond 2.90M height is 3.20M	1x160.00Per M2	Rs 160.00
(3) Add for Provision for R.C.C Framed structure @ 12 % on amount Rs 6180.00		Rs 667.20
(4) Add Internal water supply & sewage system of work @ 12 %		Rs 667.20
(5) Add External water supply & sewage system of work @ 5 %		Rs 278.00
(6) Add Internal Electrification work @ 12 %		Rs 667.20
(7) Add for Earthquake Provision		Rs 370.00
(8) Add for Power wiring 3%		Rs 166.80
(9) Add for provision for Ceiling Fan 4%		Rs 222.40
(10) Add for Contingencies 4%		Rs 350.35

**Rs 9,109.15  
Per Square meter**

  
**A.R.E**  
**U.P.R.N.N.Ltd**

  
**Unit Incharge**  
**U.P.R.N.N.Ltd**



**U.P. Rajkiya Nirman Nigam Ltd Muzaffarnagar Unit Muzaffarnagar ( U.P )**

**Name of work : Construction of Married Hostel Block 80 Seated Building  
at I.I.T campus Roorkee Distt Haridwar ( U.K )**

**Analysis of rate**

**(C) Second Floor Plinth area ( Per Square meter )**

- |   |                          |
|---|--------------------------|
| (1) Plinth area rate as per U.A P.W.D vide Letter No 369/55 Bhawan -2008 dated 12-03-2008 | Rs 6180.00               |
| (2) Add Extra height for 0.30M beyond 2.90M height is 3.20M                               | 1x160.00Per M2 Rs 160.00 |
| (3) Add for Provision for R.C.C Framed structure @ 12 % on amount Rs 6180.00              |                          |
| (4) Add Internal water supply & sewage system of work @ 12 %                              | Rs 741.60                |
| (5) Add External water supply & sewage system of work @ 5 %                               | Rs 309.00                |
| (6) Add Internal Electrification work @ 12 %  | Rs 741.60                |
| (7) Add for Earthquake Provision  | Rs 370.00                |
| (8) Add for Power wiring 3%   | Rs 185.40                |
| (9) Add for provision for Ceiling Fan 4%  | Rs 247.20                |
| (10) Add for Contingencies 4%   | Rs 394.26                |

**Rs 10,063.46  
Per Square meter**

**(D) 3<sup>rd</sup> Floor Plinth area ( Per Square meter )**

- |   |                          |
|---|--------------------------|
| (1) Plinth area rate as per U.A P.W.D vide Letter No 369/55 Bhawan -2008 dated 12-03-2008 | Rs 6180.00               |
| (2) Add Extra height for 0.30M beyond 2.90M height is 3.20M                               | 1x160.00Per M2 Rs 160.00 |
| (3) Add for Provision for R.C.C Framed structure @ 12 % on amount Rs 6180.00              |                          |
| (4) Add Internal water supply & sewage system of work @ 12 %                              | Rs 741.60                |
| (5) Add External water supply & sewage system of work @ 5 %                               | Rs 309.00                |
| (6) Add Internal Electrification work @ 12 %  | Rs 741.60                |
| (7) Add for Earthquake Provision  | Rs 370.00                |
| (8) Add for Power wiring 3%   | Rs 185.40                |
| (9) Add for provision for Ceiling Fan 4%  | Rs 247.20                |
| (10) Add for Contingencies 4%   | Rs 394.26                |

**Rs 10,063.46  
Per Square meter**

  
**A.R.E**  
**U.P.R.N.N.Ltd**

  
**Project Manager**  
**U.P.R.N.N.Ltd**

# **U.P.R.N.N.Ltd Muzaffarnagar Unit Muzaffarnagar ( U.P )**

**Name of work:-Construction of Married Hostel block 80 seated at I.I.T Campus  
Roorkee Distt Haridwar ( U.K )**

## **Measurement**

### **(1) Construction of Married Hostel block**

**80 seated at I.I.T Campus**

#### **Ground Floor Plinth Area**

Room	$1 \times 10 \times 7.05 \times 6.22 = 438.51 M^2$
Passage	$1 \times 35.50 \times 1.37 = 48.64$
Entrance Hall	$1 \times 8.5 \times 5.34 = 45.39$
Staircase	$1 \times 4.00 \times 2.50 = 10.00$
	$2 \times 1/2 \times 2.20 \times 1.20 = 2.64$
Activity Room	$1 \times 6.81 \times 5.11 = 34.80$
	$1 \times 1/2 \times 6.81 \times 3.50 = 11.92$

**Block A Plinth Area**  $591.90 M^2$

**Block B Plinth Area**

**Same plinth area as per block A**  $591.90 M^2$

**(a) Ground Floor Plinth area**  $1183.80 M^2$

**(b) First Floor plinth area**

**Quantity same as G.F Plinth Area**  $1183.80 M^2$

**© Second Floor Plinth Area**

**Quantity same as G.F Plinth Area**  $1183.80 M^2$

**(d) Third Floor Plinth Area**

**Quantity same as G.F Plinth Area**  $1183.80 M^2$

**(e) Forth Floor Plinth area**

**Stair case Mumtu**  $1 \times 2 \times 4.00 \times 3.13 = 25.04 M^2$

### **(2) Brick Coba treatment of**

**100mm average depth over roof**

**Including cost of all materials,**

**Lab our etc complete**

**Quantity same as G.F Plinth area**  $1183.80 M^2$

  
**A.R.E**

**U.P.R.N.N.Ltd**



**U.P.R.N.N.Ltd Muzaffarnagar Unit Muzaffarnagar ( U.P )**  
Name of work:-Construction of Married Hostel block 80 seated at I.I.T Campus  
Roorkee Distt Haridwar ( U.K )

**Measurements**

(3)Supply and fixing of 20 to 25 mm  
Thick kota stone flooring over  
Coarse sand mortar with mix 1:4  
Including supply of all materials  
and lab our etc complete.

For passage [GF to T.F]

$$4 \times 2 \times 33.00 \times 1.37 = 361.68M^2$$
$$4 \times 2 \times 2 \times 33.00 \times 0.10 = 52.80$$

For lounge [GF]

$$1 \times 2 \times 6.35 \times 4.88 = 61.98$$
$$2 \times 1/2 \times 4.50 \times 4.50 = 20.25$$
$$2 \times 4 \times 4.88 \times 10.0 = 390.40$$

Entrance

For stair case

Tread

$$2 \times 80 \times 1.22 \times 0.30 = 58.56$$

Riser

$$2 \times 80 \times 1.22 \times 0.150 = 29.28$$

Landing

$$1 \times 2 \times 3.43 \times 2.67 = 18.32$$

$$4 \times 2 \times 2.67 \times 1.22 = 26.06$$

**Total 1201.58M<sup>2</sup>**

(4)Extra for provision of 35mm thick  
Shisham wood wire gauge Jali Door  
Shutter with fitting etc complete

For 02No Block

G.F to Third Floor

$$\text{Door } 4 \times 2 \times 10 \times 0.93 \times 1.97 = 146.57M^2$$

  
A.R.E

U.P.R.N.N.Ltd



27 MAY 2009

# **U.P.R.N.N.Ltd Muzaffarnagar Unit Muzaffarnagar ( U.P )**

Name of work:-Construction of Married Hostel block 80 seated at I.I.T Campus  
Roorkee Distt Haridwar ( U.K )

## **Abstract of Cost**

<b>S.No</b>	<b>Particular of Item</b>	<b>Plinth Area</b>	<b>Rate</b>	<b>Amount</b>
(1)	<b>Construction of Married Hostel block 80 seated at I.I.T</b>			
(a)	Ground Floor Plinth Area	1183.80M <sup>2</sup>	Rs 10,250.66	Rs 1,21,34,731.31
(b)	First Floor Plinth Area	1183.80M <sup>2</sup>	Rs 9,109.15	Rs 1,07,77,490.82
(c)	Second Floor Plinth Area	1183.80M <sup>2</sup>	Rs 10,063.46	Rs 1,19,13,123.95
(d)	Third Floor Plinth Area	1183.80M <sup>2</sup>	Rs 10,063.46	Rs 1,19,13,123.95
(e)	Fourth Floor Plinth Area	25.04M <sup>2</sup>	Rs 10,063.46	Rs 2,51,989.04
(2)	<b>Supply &amp; Fixing Kota stone Flooring Over coarse sand Mortar with mix 1:4 Including supply of all materials lab our T&amp;P etc complete</b>	1201.58 M <sup>2</sup>	Rs(680.00-240.00)	Rs 5,28,695..20
(3)	<b>Extra for provision of 35mm Thick Shisham wood wire gauge Jali Door Shutter with fitting etc complete</b>	146.57M <sup>2</sup>	Rs1950.00	Rs 2,85,811.50
(4)	<b>Brick coba Treatment over roof of 100mm thick average depth with i/c Costing of all materials lab our T&amp;P etc complete</b>	1183.80M <sup>2</sup>	Rs 355.00	Rs 4,20,249.00
				Rs 4,82,25,214.77
(5)	<b>Less 5 % Due to U.P.R.N.N.Ltd Working</b>	( -- )		Rs 24,11,260.74
				Rs 4,58,13,954.03
(6)	<b>Add 11.5 % U.P.R.N.N.Ltd Centage Charges</b>	( + )		Rs 52,68,604.71
				Rs 5,10,82,558.74
				<b>Say Rs 510.83 Lacs</b>

  
**A.R.E**  
**U.P.R.N.N.Ltd**

  
**Project Manager**  
**U.P.R.N.N.Ltd**



# **U.P.R.N.N Ltd Muzaffarnagar Unit Muzaffarnager ( (U.P )**


**Name of work :- Construction of Married Hostel block 80 seated at I.I.T Campus  
Roorkee Distt Haridwar ( U.K )**

## **Summery of Cost**

<b>S.No</b>	<b>Particular[ of Item</b>	<b>Amount</b>
(1)	Construction of Married Hostel block 80 seated at I.I.T Campus Roorkee	Rs 510.83 Lacs

  
**A.R.E**  
**U.P.R.N.N.Ltd**

  
**Project Manager**  
**U.P.R.N.N.Ltd**

  
27 MAY 2009



# उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड

(राज्य सरकार का उपक्रम)

(ISO 9001:2000 CERTIFIED)

कैम्प कार्यालय,  
आई.आई.टी. परिसर,  
गंगा भवन होस्टल,  
रूड़की (हरिद्वार)



कार्यालय इकाई प्रभारी  
87/26 उत्तरी सिविल लाइन  
रोडवेज बस स्टैंड के सामने,  
मुजफ्फरनगर

## U.P. Rajkiya Nirman Nigam Ltd

*Name of work: - Construction for Extension of Govind Bhawan Hostel Block Single  
Seated 76 No of Room at I.I.T Campus Roorkee Distt Haridwar ( U.K )*

*Cost of Preliminary Estimate:- Rs 201.99 lacs only*

*Name of Unit:-*

U.P.R.N.N. LTD  
I.I.T. Campus  
Cautley bhawan Hostel Campus  
Roorkee [Distt: Haridwar]

*G.M. Office:-*

U.P. Rajkiya Nirman Nigam Ltd  
Officers Colo Officers Hostel Campus  
Delhi road saharanpur (U.P.)

*Head Office:-*

U.P. Rajkiya Nirman Nigam Ltd  
Vishwaria bhawan, Vibhuti khan  
Comantinagar Lucknow (U.P.)

27 MAY 2008

**U.P. Rajkiya Nirman Nigam Ltd Muzaffarnagar Unit Muzaffarnagar ( U.P )**

**Name of work : - Construction for Extension of Govind Bhawan Hostel Block 76  
Single Seated at I.I.T campus Roorkee Distt Haridwar ( U.K )**

**Analysis of rate**

**(A) Ground floor Plinth area ( Per Square meter )**

(1) Plinth area rate as per U.A P.W.D vide Letter No 369/55 Bhawan -2008 dated 12-03-2008	Rs 6180.00
(2) Add Extra height for 0.30M beyond 2.90M height is 3.20M	1x160.00Per M2 Rs 160.00
(3) Add for Provision for R.C.C Framed structure @ 12 % on amount Rs 6180.00	Rs 741.60
(4) Add Internal water supply & sewage system of work @ 12 %	Rs 741.60
(5) Add External water supply & sewage system of work @ 5 %	Rs 309.00
(6) Add Internal Electrification work @ 12 %	Rs 741.60
(7) Add for Ant termite treatment of work	Rs 180.00
(8) Add for Earthquake Provision	Rs 370.00
(9) Add for Power wiring 3%	Rs 185.40
(10) Add for provision for Ceiling Fan 4%	Rs 247.20
(11) Add for Contingencies 4%	Rs 394.26

**Rs 10,250.66**

**Per Square meter**

**(B) First floor Plinth area ( Per Square meter )**

(1) Plinth area rate as per U.A P.W.D vide Letter No 369/55 Bhawan -2008 dated 12-03-2008	Rs 5560.00
(2) Add Extra height for 0.30M beyond 2.90M height is 3.20M	1x160.00Per M2 Rs 160.00
(3) Add for Provision for R.C.C Framed structure @ 12 % on amount Rs 6180.00	Rs 667.20
(4) Add Internal water supply & sewage system of work @ 12 %	Rs 667.20
(5) Add External water supply & sewage system of work @ 5 %	Rs 278.00
(6) Add Internal Electrification work @ 12 %	Rs 667.20
(7) Add for Earthquake Provision	Rs 370.00
(8) Add for Power wiring 3%	Rs 166.80
(9) Add for provision for Ceiling Fan 4%	Rs 222.40
(10) Add for Contingencies 4%	Rs 350.35

**Rs 9,109.15**

**Per Square meter**

  
A.R.E

  
Unit Incharge

**U.P. Rajkiya Nirman Nigam Ltd Muzaffarnagar Unit Muzaffarnagar ( U.P )**

**Name of work : - Construction for Extension of Govind Bhawan Hostel Block 76  
Single Seated at I.I.T campus Roorkee Distt Haridwar ( U.K )**

**Analysis of rate**

**(C) Second Floor Plinth area ( Per Square meter )**

- |   |                          |
|---|--------------------------|
| (1) Plinth area rate as per U.A P.W.D vide Letter No 369/55 Bhawan -2008 dated 12-03-2008 | Rs 6180.00               |
| (2) Add Extra height for 0.30M beyond 2.90M height is 3.20M                               | 1x160.00Per M2 Rs 160.00 |
| (3) Add for Provision for R.C.C Framed structure @ 12 % on amount Rs 6180.00              |                          |
| (4) Add Internal water supply & sewage system of work @ 12 %                              | Rs 741.60                |
| (5) Add External water supply & sewage system of work @ 5 %                               | Rs 309.00                |
| (6) Add Internal Electrification work @ 12 %  | Rs 741.60                |
| (7) Add for Earthquake Provision  | Rs 370.00                |
| (8) Add for Power wiring 3%   | Rs 185.40                |
| (9) Add for provision for Ceiling Fan 4%  | Rs 247.20                |
| (10) Add for Contingencies 4%   | Rs 394.26                |

**Rs 10,063.46  
Per Square meter**

**(D) 3<sup>rd</sup> Floor Plinth area ( Per Square meter )**

- |   |                          |
|---|--------------------------|
| (1) Plinth area rate as per U.A P.W.D vide Letter No 369/55 Bhawan -2008 dated 12-03-2008 | Rs 6180.00               |
| (2) Add Extra height for 0.30M beyond 2.90M height is 3.20M                               | 1x160.00Per M2 Rs 160.00 |
| (3) Add for Provision for R.C.C Framed structure @ 12 % on amount Rs 6180.00              |                          |
| (4) Add Internal water supply & sewage system of work @ 12 %                              | Rs 741.60                |
| (5) Add External water supply & sewage system of work @ 5 %                               | Rs 309.00                |
| (6) Add Internal Electrification work @ 12 %  | Rs 741.60                |
| (7) Add for Earthquake Provision  | Rs 370.00                |
| (8) Add for Power wiring 3%   | Rs 185.40                |
| (9) Add for provision for Ceiling Fan 4%  | Rs 247.20                |
| (10) Add for Contingencies 4%   | Rs 394.26                |

**Rs 10,063.46  
Per Square meter**

  
**A.R.E**  
**U.P.R.N.N.Ltd**

  
**Unit Incharge**  
**U.P.R.N.N.Ltd**

**U.P. Rajkiya Nirman Nigam Ltd Muzaffarnagar Unit Muzaffarnagar ( U.P )**

**Name of work : Construction for Extension of Govind Bhawan Hostel Single Seated  
Room 76 No at I.I.T campus Roorkee Distt Haridwar ( U.K)**

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**Plinth Area Measurement**

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**(a) Ground Floor**

Room	$1 \times 26.29 \times 5.87 = 154.32 \text{M}^2$ $1 \times 38.60 \times 5.87 = 226.58$
Passage	$1 \times 1/2 \times 26.29 \times 1.22 = 16.04$ $1 \times 1/2 \times 38.60 \times 1.22 = 23.55$ $1 \times 1/2 \times 3.005 \times 1.14 = 1.74$ $1 \times 1/2 \times 3.80 \times 3.05 = 5.80$
Balcony	$1 \times 9 \times 1/2 \times 3.05 \times 1.83 = 25.12$ $1 \times 1/2 \times 3.81 \times 1.83 = 3.49$ $1 \times 1/2 \times 1.83 \times 1.50 = 1.37$

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**458.01M<sup>2</sup>**

**(b) First Floor Plinth Area**

Quantity same as Ground Floor Plinth Area **458.01M<sup>2</sup>**

**(c) Second Floor Plinth Area**

Quantity same as first Floor Plinth Area **458.01M<sup>2</sup>**

**(d) Third Floor Plinth Area**

Quantity same as Ground Floor Plinth Area **458.01M<sup>2</sup>**

**(e) Forth Floor Plinth Area**

Stair case Mumty  $1 \times 4.04 \times 3.13 = 12.65 \text{ M}^2$





# **U.P.R.N.N.Ltd Muzaffarnagar Unit Muzaffarnagar (U.P)**

Name of work:-Construction for Extension of Govind Bhawan Hostel Block Single

Seated 76 No Of Room at I.I.T Campus Roorkee Distt Haridwar ( U.K )

## **Measurements**

### **(1) Supply & Fixing Kota stone Flooring**

Over coarse sand Mortar with mix 1:4

Including supply of all materials lab our

T&P etc complete

Ground Floor	Verandah	$1 \times 29.34 \times 1.83 = 53.69M^2$
	Passage	$1 \times 29.34 \times 1.37 = 40.20$
	Verandah	$1 \times 38.60 \times 1.83 = 70.64$
	Passage	$1 \times 38.60 \times 1.37 = 52.88$
	Toilet	$1 \times 5.30 \times 3.81 = 20.19$
First Floor to Third Floor verandah		$1 \times 3 \times 29.34 \times 1.83 = 161.32$
	Passage	$1 \times 3 \times 29.34 \times 1.37 = 120.71$
	Toilet	$1 \times 3 \times 5.30 \times 3.81 = 60.58$
	Verandah	$1 \times 3 \times 38.60 \times 1.83 = 211.91$
	Passage	$1 \times 3 \times 38.60 \times 1.37 = 158.65$
	Balcony	$9 \times 3 \times 3.005 \times 1.83 = 148.47$
		$2 \times 3 \times 1.83 \times 1.50 = 16.47$
	Staircase	
	Tread	$1 \times 80 \times 1.20 \times 0.300 = 28.80$
	Riser	$1 \times 80 \times 1.20 \times 0.150 = 14.40$
	Landing	$1 \times 4 \times 2.89 \times 1.20 = 13.87$

**1172.78M<sup>2</sup>**

- (2) Brick coba Treatment over roof of  
100mm thick average depth with i/c  
Costing of all materials lab our T&P  
Etc complete

Room Area	$1 \times 26.29 \times 5.87 = 154.32M^2$
	$1 \times 38.60 \times 5.87 = 226.58$
Passage	$1 \times 26.29 \times 1.37 = 36.02$
	$1 \times 38.60 \times 1.37 = 528.82$
	$1 \times 3.04 \times 1.14 = 3.47$
	$1 \times 3.80 \times 3.05 = 11.59$

**960.08M<sup>2</sup>**

  
A.R.E

U.P.R.N.N.Ltd



# **U.P.R.N.N.Ltd Muzaffarnagar Unit Muzaffarnagar ( U.P )**

Name of work :- Construction for extension of Govind Bhawan Hostel Block at  
Single Seated 76No of room at I.I.T Campus Roorkee Distt  
Haridwar ( U.K)

## **Abstract of Cost**

S.No	Particular of Item	Plinth Area	Rate	Amount
(1)	Construction for extension of Govind Bhawan Hostel Block at Single Seated 76No of room at I.I.T Campus Roorkee			
(a)	Ground Floor Plinth Area	458.01M <sup>2</sup>	Rs 10,250.66	Rs 46,94,904.79
(b)	First Floor Plinth Area	458.01M <sup>2</sup>	Rs 9,109.15	Rs 41,72,081.79
(c)	Second Floor Plinth Area	458.01M <sup>2</sup>	Rs 10,063.46	Rs 46,09,165.32
(d)	Third Floor Plinth Area	458.01M <sup>2</sup>	Rs 10,063.46	RS 46,09,165.32
(e)	Forth Floor Plinth Area	12.65M <sup>2</sup>	Rs 10,063.46	Rs 1,27,302.77
(2)	Supply & Fixing Kota stone Flooring Over coarse sand Mortar with mix 1:4 Including supply of all materials lab our T&P etc complete	1172.78 M <sup>2</sup>	Rs (680.00-240.00)	Rs5,16,023.20
(3)	Brick coba Treatment over roof of 100mm thick average depth with i/c Costing of all materials labour T&P Etc complete	960.08M <sup>2</sup>	Rs 355.00	Rs 3,40,828.40
(4)	Less 5 % Due to U.P.R.N.N.Ltd Working	(--)		Rs 1,90,69,471.59 Rs 9,53,473.58
(5)	Add 11.5 % U.P.R.N.N.Ltd Centage Charges	(+)		Rs 1,81,15,998.01 Rs 20,83,339.77
				Rs 2,01,99,337.78
				Say Rs 201.99 Lacs

  
A.R.J.E.  
U.P.R.N.N.Ltd

  
Project Manager  
U.P.R.N.N.Ltd



**U.P.R.N.N.Ltd Muzaffarnagar Unit Muzaffarnagar ( UP.)**

Name of work :- Construction for extension of Govind Bhawan Hostel Block at Single  
Seated 76No of room at I.I.T Campus Roorkee Distt Haridwar ( U.K )

**Summery of Cost**

S.No	Particular of Item	Amount
(1)	Construction for extension of Govind Bhawan Hostel Block Single Seated 76No of room at I.I.T Campus Roorkee	Rs 201.99 Lacs

  
A.R.E  
U.P.R.N.N.Ltd

  
Project Manager  
U.P.R.N.N.Ltd

  
27 MAY 2005

# उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड

(राज्य सरकार का उपक्रम)  
(ISO 9001:2000 CERTIFIED)

कैम्प कार्यालय,  
आई०आई०टी० परिसर,  
गंगा भवन होस्टल,  
रुड़की (हरिद्वार)



कार्यालय इकाई प्रभारी  
87/26 उत्तरी सिविल लाइन  
रोडवेज बस स्टैंड के सामने,  
मुजफ्फरनगर

## U.P. Rajkiya Nirman Nigam Ltd

*Name of work: - Construction for Extension of Ganga Bhawan ( Canteen) at I.I.T  
Campus Roorkee Distt Haridwar ( U.K)*

*Cost of Preliminary Estimate:- Rs 27.24 lacs only*

*Name of Unit:-*

U.P.R.N.N. LTD  
I.I.T. Campus  
Cautley bhawan Hostel Campus  
Roorkee [Distt: Haridwar]

*G.M. Office:-*

U.P. Rajkiya Nirman Nigam Ltd  
Officers Colo Officers Hostel Campus  
Delhi road saharanpur (U.P.)

*Head Office:-*

U.P. Rajkiya Nirman Nigam Ltd  
Vishwaria bhawan, Vibhuti khan  
Comantinagar Lucknow (U.P.)



**U.P. Rajkiya Nirman Nigam Ltd Muzaaffarnagar Unit Muzaaffarnagar ( U.P )**

**Name of work : - Construction for Extension of Ganga Bhawan Canteen Building  
at I.I.T campus Roorkee Distt Haridwar ( U.K )**

**Analysis of rate**

**(A) Ground floor Plinth area ( Per Square meter )**

(1) Plinth area rate as per U.A.P.W.D vide Letter No 369/55 Bhawan -2008 dated 12-03-2008	Rs 6180.00
(2) Add Extra height for 0.30M beyond 2.90M height is 3.20M	1x160.00Per M2 Rs 160.00
(3) Add for Provision for R.C.C Framed structure @ 12 % on amount Rs 6180.00	Rs 741.60
(4) Add Internal water supply & sewage system of work @ 12 %	Rs 741.60
(5) Add External water supply & sewage system of work @ 5 %	Rs 309.00
(6) Add Internal Electrification work @ 12 %	Rs 741.60
(7) Add for Ant termite treatment of work	Rs 180.00
(8) Add for Earthquake Provision	Rs 370.00
(9) Add for Power wiring 3%	Rs 185.40
(10) Add for provision for Ceiling Fan 4%	Rs 247.20
(11) Add for Contingencies 4%	Rs 394.26

**Rs 10,250.66  
Per Square meter**

**(B) First floor Plinth area ( Per Square meter )**

(1) Plinth area rate as per U.A.P.W.D vide Letter No 369/55 Bhawan -2008 dated 12-03-2008	Rs 5560.00
(2) Add Extra height for 0.30M beyond 2.90M height is 3.20M	1x160.00Per M2 Rs 160.00
(3) Add for Provision for R.C.C Framed structure @ 12 % on amount Rs 6180.00	Rs 667.20
(4) Add Internal water supply & sewage system of work @ 12 %	Rs 667.20
(5) Add External water supply & sewage system of work @ 5 %	Rs 278.00
(6) Add Internal Electrification work @ 12 %	Rs 667.20
(7) Add for Earthquake Provision	Rs 370.00
(8) Add for Power wiring 3%	Rs 166.80
(9) Add for provision for Ceiling Fan 4%	Rs 222.40
(10) Add for Contingencies 4%	Rs 350.35

**Rs 9,109.15  
Per Square meter**

  
A.R.N.  
U.P.R.N.N.Ltd

  
Unit Incharge  
U.P.R.N.N.Ltd

**U.P. Rajkiya Nirman Nigam Ltd Muzaffarnagar Unit Muzaffarnagar ( U.P )**

**Name of work : Construction for extension of Ganga Bhawan Canteen Building  
at I.I.T campus Roorkee Distt Haridwar ( U.K)**

**Analysis of rate**

**(C) Second Floor Plinth area ( Per Square meter )**

- |   |                          |
|---|--------------------------|
| (1) Plinth area rate as per U.A P.W.D vide Letter No 369/55 Bhawan -2008 dated 12-03-2008 | Rs 6180.00               |
| (2) Add Extra height for 0.30M beyond 2.90M height is 3.20M                               | 1x160.00Per M2 Rs 160.00 |
| (3) Add for Provision for R.C.C Framed structure @ 12 % on amount Rs 6180.00              |                          |
| (4) Add Internal water supply & sewage system of work @ 12 %                              | Rs 741.60                |
| (5) Add External water supply & sewage system of work @ 5 %                               | Rs 309.00                |
| (6) Add Internal Electrification work @ 12 %  | Rs 741.60                |
| (7) Add for Earthquake Provision  | Rs 370.00                |
| (8) Add for Power wiring 3%   | Rs 185.40                |
| (9) Add for provision for Ceiling Fan 4%  | Rs 247.20                |
| (10) Add for Contingencies 4%   | Rs 394.26                |

**Rs 10,063.46  
Per Square meter**

**(D) 3<sup>rd</sup> Floor Plinth area ( Per Square meter )**

- |   |                          |
|---|--------------------------|
| (1) Plinth area rate as per U.A P.W.D vide Letter No 369/55 Bhawan -2008 dated 12-03-2008 | Rs 6180.00               |
| (2) Add Extra height for 0.30M beyond 2.90M height is 3.20M                               | 1x160.00Per M2 Rs 160.00 |
| (3) Add for Provision for R.C.C Framed structure @ 12 % on amount Rs 6180.00              |                          |
| (4) Add Internal water supply & sewage system of work @ 12 %                              | Rs 741.60                |
| (5) Add External water supply & sewage system of work @ 5 %                               | Rs 309.00                |
| (6) Add Internal Electrification work @ 12 %  | Rs 741.60                |
| (7) Add for Earthquake Provision  | Rs 370.00                |
| (8) Add for Power wiring 3%   | Rs 185.40                |
| (9) Add for provision for Ceiling Fan 4%  | Rs 247.20                |
| (10) Add for Contingencies 4%   | Rs 394.26                |

**Rs 10,063.46  
Per Square meter**

  
A.R.I.E.

U.P.R.N.N.Ltd

  
Project Manager  
U.P.R.N.N.Ltd

# **U.P.R.N.N.Ltd Muzaffarnagar Unit Muzaffarnagar (U.P)**

Name of work:-Construction for Extension of Ganga Bhawan(Canteen) Building I.I.T  
Campus Roorkee Distt Haridwar ( U.K)

## **Measurements**

### **(1) Plinth area Measuremerat**

#### **(a) Second Floor Plinth area**

$$1 \times 15.80 \times 8.90 = 140.62 M^2$$

$$1 \times 4.60 \times 8.90 = 40.94$$

$$\text{Stair case } 9.45 \times 2.55 = 24.10$$

$$\hline 205.66 M^2$$

#### **(b) Third Floor Plinth Area**

$$\text{For Stair case Mumty } 1 \times 9.45 \times 2.80 = 26.46 M^2$$

### **(2) Supply & Fixing Kota stone Flooring**

over coarse sand Mortar with mix 1:4

Including supply of all materials lab our

T&P etc complete

For Staircase

$$\text{Landing } 1 \times 2.45 \times 1.20 = 2.94 M^2$$

$$\text{Tread } 1 \times 20 \times 1.15 \times 0.300 = 6.90$$

$$\text{Riser } 1 \times 20 \times 1.150 \times 0.150 = 3.45$$

$$\text{Second Floor } 1 \times 22.20 \times 10.70 = 237.54$$

$$\hline 250.83 M^2$$

### **(3) Brick coba Treatment over roof of**

100mm thick average depth with i/c

costing of all materials lab our T&P

etc complete

Quantity same as second Plinth Area 205.66 M<sup>2</sup>



A.R.E

U.P.R.N.N.Ltd



27 MAY 2009

**U.P.R.N.N.Ltd Muzaffarnagar Unit Muzaffarnagar (U.P)**  
 Name of work:-Construction for Extension of Ganga Bhawn (Canteen )Building at  
 I.I.T Campus Roorkee Distt Haridwar ( U.K )

**Measurement**

- (4) Supplying & Fixing Aluminum Glazing  
 Open able Portion 1.5mm thick with rubber.  
 ,beading etc complete

Second Floor

Door  $1 \times 1.80 \times 2.10 = 3.78M^2$   
 $1 \times 1.00 \times 2.10 = 2.10$   
 Window  $1 \times 7 \times 1.85 \times 1.27 = 16.45$

22.33M<sup>2</sup>

- (5) Supplying & Fixing Aluminum Glazing  
 Fixed Portion 1.5mm thick with rubber.  
 ,beading etc complete

Second Floor

Window  $1 \times 4 \times 0.45 \times 1.36 = 2.45M^2$   
 $1 \times 2 \times 0.60 \times 3.60 = 4.32$   
 $1 \times 1.00 \times 3.60 = 3.60$

10.37M<sup>2</sup>

- (6) Supply & Fixing 12mm thick practical board  
 In open able portion

second Floor

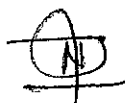
In Door  $1 \times 1.80 \times 2.10 = 3.78M^2$   
 $1 \times 1.00 \times 2.10 = 2.10$

5.88M<sup>2</sup>

50% quantity of 5.88M<sup>2</sup> = 2.94M<sup>2</sup>

- (7) Supply & Fixing door Floor spring  
 with fitting etc complete

Second Floor  $1 \times 3 = 3$  No of Floor Spring





**U.P.R.N.N.Ltd Muzaffarnagar Unit Muzaffarnagar ( U.P )**  
**Name of work:-Construction for Extension of Ganga Bhawn (Canteen )Building at**  
**I.I.T Campus Roorkee Distt Haridwar ( U.K )**

**Abstract of Cost**

S.No	Particular of Item	Plinth Area	Rate	Amount
(1)	Construction for Extension of Ganga Bhawn (Canteen) Building			
	(a) Second Floor Plinth Area	205.66M <sup>2</sup>	Rs 10,063.46	Rs 20,69,651.18
	(b) Third Floor Plinth Area	26.46M <sup>2</sup>	Rs 10,063.46	Rs 2,66,279.16
(2)	Supply & Fixing Kota stone Flooring Over coarse sand Mortar with mix 1:4 Including supply of all materials lab our T&P etc complete	250.83 M <sup>2</sup>	Rs (680.00-240.00)	Rs 1,10,365.20
(3)	Brick coba Treatment over roof Of 100mm thick average depth with i/c Costing of all materials lab our T&P Etc complete	205.66M <sup>2</sup>	Rs 355.00	Rs 73,009.30
(4)	Supplying & Fixing Aluminum Glazing Open able Portion 1.5mm thick with rubber ,beading etc Complete	22.33 M <sup>2</sup>	Rs( 2475.00 – 1076.00)	Rs 31,239.67
(5)	Supplying & Fixing Aluminum Glazing Fixed Portion 1.5mm thick with rubber. ,beading etc Complete	10.37 M <sup>2</sup>	Rs 1669.00	Rs 17,307.53
(6)	Supplying & Fixing 12mm thick Partical Board Open able/Fixed Portion with beading etc complete	2.94M <sup>2</sup>	Rs 322.00	Rs 946.68
(7)	Supply & Fixing door Floor spring with fitting etc complete	3 No	Rs 800.00	Rs 2400.0
				Rs 25,71,198.72
(8)	Less 5 % Due to U.P.R.N.N.Ltd Working	(--)		Rs 1,28,559.94
				Rs 24,42,638.78
(9)	Add 11.5 % U.P.R.N.N.Ltd Centage Charges	(+)		Rs 2,80,903.46
				Rs 27,23,754.24
				Say Rs 27.24 Lacs

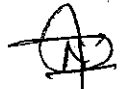
  
**A.R.E**  
**U.P.R.N.N.Ltd**

  
**Project Manager**  
**U.P.R.N.N.Ltd**

**U.P.R.N.N.Ltd Muzaffarnagar Unit Muzaffarnagar ( U.P )**  
**Name of work:- Construction for Extension of Ganga Bhawn (Canteen )Building at**  
**I.I.T Campus Roorkee Distt Haridwar ( U.K )**

**Summery of Cost**

<b>S.No</b>	<b>Particular of Item</b>	<b>Amount</b>
	<b>(1) Construction for Extension of Ganga Bhawn (Canteen )Building at</b>	<b>Rs 27,23,754.24</b>
		<b>Say Rs 27.24 Lacs</b>

  
**A.R.E**  
**U.P.R.N.N.Ltd**

  
**Project Manager**  
**U.P.R.N.N.Ltd**



GANGA GHANAM EXTENSION (CONTEN)

9.45 am

STAIR

HALL

VERH.

2.10

15.80

4.60

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2nd F. PLAN

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17

27 MAY 2009

# उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड

(राज्य सरकार का उपक्रम)  
(ISO 9001:2000 CERTIFIED)

कैम्प कार्यालय,  
आई०आई०टी० परिसर,  
गंगा भवन होस्टल,  
रूड़की (हरिद्वार)



कार्यालय इकाई प्रभारी  
87/26 उत्तरी सिविल लाइन  
रोडवेज बस स्टैंड के सामने,  
मुजफ्फरनगर

## U.P. Rajkiya Nirman Nigam Ltd

*Name of work: - Construction for extension of I.I.C Building at I.I.T Campus  
Roorkee Distt Haridwar ( U.K )*

*Cost of Preliminary Estimate:- Rs 129.50 lacs only*

*Name of Unit:-*

U.P.R.N.N. LTD  
I.I.T. Campus  
Cautley bhawan Hostel Campus  
Roorkee [Distt: Haridwar]

*G.M. Office:-  
U.P. Rajkiya Nirman Nigam Ltd  
Officers Colo Officers Hostel Campus  
Delhi road saharanpur (U.P.)*

*Head Office:-  
U.P. Rajkiya Nirman Nigam Ltd  
Vishwaria bhawan, Vibhuti khan  
Comantinagar Lucknow (U.P.)*

  
27 MAY 2000



**U.P. Rajkiya Nirman Nigam Ltd Muzaffarnagar Unit Muzaffarnagar ( U.P )**

**Name of work : - Construction for Extension of I.I.C Building at  
I.I.T campus Roorkee Distt Haridwar ( U.K )**

**Analysis of rate**

**(A) Ground floor Plinth area ( Per Square meter )**

(1) Plinth area rate as per U.A P.W.D vide Letter No 369/55 Bhawan -2008 dated 12-03-2008	Rs 6180.00
(2) Add Extra height for 0.30M beyond 2.90M height is 3.20M	1x160.00Per M2 Rs 160.00
(3) Add for Provision for R.C.C Framed structure @ 12 % on amount Rs 6180.00	Rs 741.60
(4) Add Internal water supply & sewage system of work @ 12 %	Rs 741.60
(5) Add External water supply & sewage system of work @ 5 %	Rs 309.00
(6) Add Internal Electrification work @ 12 %	Rs 741.60
(7) Add for Ant termite treatment of work	Rs 180.00
(8) Add for Earthquake Provision	Rs 370.00
(9) Add for Power wiring 3%	Rs 185.40
(10) Add for provision for Ceiling Fan 4%	Rs 247.20
(11) Add for Contingencies 4%	Rs 394.26

**Rs 10,250.66**

**Per Square meter**

**(B) First floor Plinth area ( Per Square meter )**

(1) Plinth area rate as per U.A P.W.D vide Letter No 369/55 Bhawan -2008 dated 12-03-2008	Rs 5560.00
(2) Add Extra height for 0.30M beyond 2.90M height is 3.20M	1x160.00Per M2 Rs 160.00
(3) Add for Provision for R.C.C Framed structure @ 12 % on amount Rs 6180.00	Rs 667.20
(4) Add Internal water supply & sewage system of work @ 12 %	Rs 667.20
(5) Add External water supply & sewage system of work @ 5 %	Rs 278.00
(6) Add Internal Electrification work @ 12 %	Rs 667.20
(7) Add for Earthquake Provision	Rs 370.00
(8) Add for Power wiring 3%	Rs 166.80
(9) Add for provision for Ceiling Fan 4%	Rs 222.40
(10) Add for Contingencies 4%	Rs 350.35

**Rs 9,109.15**

**Per Square meter**

  
**A.R.E**

**U.P.R.N.N.Ltd**

  
**Unit Incharge**  
**U.P.R.N.N.Ltd**

**U.P. Rajkiya Nirman Nigam Ltd Muzaaffarnagar Unit Muzaaffarnagar ( U.P )**

**Name of work : Construction for extension of I.I.C Building at I.I.T  
campus Roorkee Distt Haridwar ( U.K)**

**Analysis of rate**

**(C) Second Floor Plinth area ( Per Square meter )**

- |  |                |            |
|--|----------------|------------|
| (1) Plinth area rate as per U.A P.W.D vide Letter No<br>369/55 Bhawan -2008 dated 12-03-2008 |                | Rs 6180.00 |
| (2) Add Extra height for 0.30M beyond 2.90M<br>height is 3.20M                               | 1x160.00Per M2 | Rs 160.00  |
| (3) Add for Provision for R.C.C Framed<br>structure @ 12 % on amount Rs 6180.00              |                |            |
| (4) Add Internal water supply & sewage system of work @ 12 %                                 |                | Rs 741.60  |
| (5) Add External water supply & sewage system of work @ 5 %                                  |                | Rs 309.00  |
| (6) Add Internal Electrification work @ 12 %   |                | Rs 741.60  |
| (7) Add for Earthquake Provision   |                | Rs 370.00  |
| (8) Add for Power wiring 3%  |                | Rs 185.40  |
| (9) Add for provision for Ceiling Fan 4%   |                | Rs 247.20  |
| (10) Add for Contingencies 4%  |                | Rs 394.26  |

**Rs 10,063.46  
Per Square meter**

**(D) 3<sup>rd</sup> Floor Plinth area ( Per Square meter )**

- |  |                |            |
|--|----------------|------------|
| (1) Plinth area rate as per U.A P.W.D vide Letter No<br>369/55 Bhawan -2008 dated 12-03-2008 |                | Rs 6180.00 |
| (2) Add Extra height for 0.30M beyond 2.90M<br>height is 3.20M                               | 1x160.00Per M2 | Rs 160.00  |
| (3) Add for Provision for R.C.C Framed<br>structure @ 12 % on amount Rs 6180.00              |                |            |
| (4) Add Internal water supply & sewage system of work @ 12 %                                 |                | Rs 741.60  |
| (5) Add External water supply & sewage system of work @ 5 %                                  |                | Rs 309.00  |
| (6) Add Internal Electrification work @ 12 %   |                | Rs 741.60  |
| (7) Add for Earthquake Provision   |                | Rs 370.00  |
| (8) Add for Power wiring 3%  |                | Rs 185.40  |
| (9) Add for provision for Ceiling Fan 4%   |                | Rs 247.20  |
| (10) Add for Contingencies 4%  |                | Rs 394.26  |

**Rs 10,063.46  
Per Square meter**

  
**A.R.E**  
**U.P.R.N.N.Ltd**

  
**Project Manager**  
**U.P.R.N.N.Ltd**

**U.P.R.N.N.Ltd Muzaffarnagar Unit Muzaffarnagar (U.P)**  
 Name of work:-Construction for Extension of I.I.C Building at I.I.T Campus Roorkee  
 Distt Haridwar ( U.K )

**Measurements**

**(1) Plinth Area Measurement**

**(a) Ground Floor Plinth Area**

Building Area	$1 \times 21.50 \times 12.93 = 277.99M^2$
column offsets	$6 \times 2 \times 0.500 \times 0.23 = 1.38$
Porch	$1 \times 1/2 \times 3.73 \times 3.50 = 6.53$
	<hr/> 285.90M <sup>2</sup>

**(b) First Floor Plinth Area**

Building Area	$1 \times 21.50 \times 12.93 = 277.99M^2$
Column Offsets	$6 \times 2 \times 0.500 \times 0.230 = 1.38$
	<hr/> 279.37M <sup>2</sup>

**(c) Second Floor Plinth area**

Quantity same as first floor Plinth area 279.37M<sup>2</sup>

**(d) Third Floor Plinth Area**

Quantity same as second Floor Plinth area 279.37M<sup>2</sup>

**(2) Supply & Fixing Kota stone Flooring**

Over coarse sand Mortar with mix 1:4  
 Including supply of all materials lab our  
 T&P etc complete

G.F to Third Floor  $1 \times 4 \times 21.09 \times 12.16 = 1025.82M^2$

**(3) Supplying & Fixing Aluminum Glazing**

Open able Portion 1.5mm thick with rubber,  
 beading etc complete

G.F to Third Floor

Door D1	$2 \times 4 \times 2.40 \times 2.10 = 40.32M^2$
D2	$3 \times 4 \times 1.200 \times 2.10 = 30.24$
	<hr/> 70.56M <sup>2</sup>

**(4) Supplying & Fixing Aluminum Glazing**

Sliding Window Portion 1.5mm thick  
 with rubber ,beading etc complete

G.F Floor to Third Floor

Window	$4 \times 11 \times 3.30 \times 1.20 = 174.24M^2$
	$1 \times 4 \times 1.200 \times 1.200 = 5.76$
	<hr/> 180.00M <sup>2</sup>

**(5) Supply & Fixing 12mm thick Partical Board**

With fitting etc complete

50% quantity of open able Portion  $70.56M^2 = 35.28M^2$

  
 A.R.E

U.P.R.N.N.Ltd



**U.P.R.N.N.Ltd Muzaffarnagar Unit Muzaffarnagar (U.P)**  
Name of work:-Construction for Extension of I.I.C Building at I.I.T Campus Roorkee  
Distt Haridwar ( U.K )

**Measurements**

(6) Supply & Fixing door Floor spring  
with fitting etc complete

Ground Floor to Third Floor

For D1 Door  $2 \times 4 \times 2 = 16$  No of Floor Spring

D2 Door  $2 \times 3 \times 4 = 24$

40 No of Floor Spring

(7) Brick coba Treatment over roof of  
100mm thick average depth with i/c  
costing of all materials lab our T&P  
etc complete

Quantity same as G.F Plinth Area  $285.90 \text{ M}^2$

  
A.R.E

U.P.R.N.N.Ltd



27 MAY 2009

# **U.P.R.N.N.Ltd Muzaffarnagar Unit Muzaffarnagar ( U.P )**

**Name of work:- Construction for Extension of I.I.C Building at I.I.T Campus Roorkee  
Distt Haridwar ( U.K )**

## **Abstract of Cost**

<b>S.No</b>	<b>Particular of Item</b>	<b>Plinth Area</b>	<b>Rate</b>	<b>Amount</b>
(1)	<b>Construction for Extension of I.I.C Building at I.I.T Campus Roorkee</b>			
(a)	Ground Floor Plinth Area	285.90M <sup>2</sup>	Rs 10,250.66	Rs 29,30,663.69
(b)	First Floor Plinth Area	279.37M <sup>2</sup>	Rs 9,109.15	Rs 25,44,823.24
(c)	Second Floor Plinth Area	279.37M <sup>2</sup>	Rs 10,063.46	Rs 28,11,428.82
(d)	Third Floor Plinth Area	279.37M <sup>2</sup>	Rs 10,063.46	Rs 28,11,428.82
(2)	<b>Supply &amp; Fixing Kota stone Flooring Over coarse sand Mortar with mix 1:4 Including supply of all materials lab our T&amp;P etc complete</b>	1025.82 M <sup>2</sup>	Rs (680.00-240.00)	Rs 4,51,360.80
(3)	<b>Supplying &amp; Fixing Aluminum Glazing Open able Portion 1.5mm thick with rubber, beading etc complete</b>	70.56M <sup>2</sup>	Rs(2475-1076.00)	Rs 98,713.44
(4)	<b>Supplying &amp; Fixing Aluminum Glazing Sliding Window Portion 1.5mm thick with rubber, beading etc complete</b>	180.00M <sup>2</sup>	Rs 2403.00	Rs 4,32,540.00
(5)	<b>Supply &amp; Fixing 12mm thick Partical Board With fitting etc complete</b>	35.28M <sup>2</sup>	Rs 322.00	Rs 11,360.16
(6)	<b>Supply &amp; Fixing door Floor spring with fitting etc complete</b>	40No	Rs 800.00	Rs 32,000.00
(7)	<b>Brick coba Treatment over roof of 100mm thick average depth with i/c Costing of all materials labour T&amp;P Etc complete</b>	285.90M <sup>2</sup>	Rs 355.00	Rs 1,01,494.50
				Rs 1,22,25,813.47
(8)	<b>Less 5 % Due to U.P.R.N.N.Ltd Working</b>	(--)		Rs 6,11,290.67
				Rs 1,16,14,522.80
(9)	<b>Add 11.5 % U.P.R.N.N.Ltd Centage Charges</b>	(+)		Rs 13,35,670.12
				Rs 1,29,50,192.92
				<b>Say Rs 129.50 Lacs</b>

  
**A.R.E**  
**U.P.R.N.N.Ltd**

  
**Project Manager**  
**U.P.R.N.N.Ltd**


**U.P.R.N.N.Ltd Muzaffarnagar Unit Muzaffarnagar ( U.P )**  
Name of work:- Construction for Extension of I.I.C Building at I.I.T Campus Roorkee  
Distt Haridwar ( U.K )

**Summary of Cost**

S.No	Particular of Item	Amount
(1)	Construction for Extension of I.I.C Building at I.I.T Campus Roorkee	Rs 1,29,50,192.92 Say Rs129.50 Lacs

  
A.R.E  
U.P.R.N.N.Ltd

  
Project Manager  
U.P.R.N.N.Ltd





# उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड

(राज्य सरकार का उपक्रम)  
(ISO 9001:2000 CERTIFIED)

कैम्प कार्यालय,  
आई.आई.टी. परिसर,  
गंगा भवन होस्टल,  
रूढ़की (हरिद्वार)



कार्यालय इकाई प्रभारी  
87/26 उत्तरी सिविल लाइन  
रोडवेज बस स्टैंड के सामने,  
मुजफ्फरनगर

## U.P. Rajkiya Nirman Nigam Ltd

*Name of work: - Construction of 400 Boys Hostel Block Building at D.P.T Campus  
Saharanpur Distt Saharanpur ( U.P )*

*Cost of Preliminary Estimate:- Rs 1159.00 lacs only*

*Name of Unit:-*

U.P.R.N.N. LTD  
I.I.T. Campus  
Cautley bhawan Hostel Campus  
Roorkee [Distt: Haridwar]

*G.M. Office:-  
U.P. Rajkiya Nirman Nigam Ltd  
Officers Colo Officers Hostel Campus  
Delhi road saharanpur (U.P.)*

*Head Offic:-  
U.P. Rajkiya Nirman Nigam Ltd  
Vishwaria bhawan, Vibhuti khan  
Comantinagar Lucknow (U.P.)*

27 MAY 2009



U.P Rajkiya Nirman Nigam Ltd Muzaffar nagar unit Muzaffar nagar ( U.P )

Name of work :- Construction of Hostel Building at I.P.T Saharanpur in Distt Saharanpur ( U.P )

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**Plinth Area Measurement**

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**(A) Ground Floor Plinth area**

$$\begin{aligned} 1 \times 2 \times 75.55 \times 9.39 &= 1418.83 \\ 2 \times 2 \times 2 \times 12.16 \times 1.5 &= 145.92 \\ 2 \times 24.00 \times 9.39 &= 450.72 \\ 2 \times 12.23 \times 1.12 &= 27.39 \\ 2 \times 12 \times 9.39 &= 225.36 \\ \text{Balcony } 1 \times 1/2 \times 52 \times 3.00 \times 1.50 &= 117.00 \end{aligned}$$

---

$$2385.85 \text{ M}^2$$

Mess Area , Kitchen, &  
Store Area

$$\begin{aligned} 1 \times 18.23 \times 17.73 &= 323.22 \\ 1 \times 1/2 \times 3.50 \times 17.73 &= 31.03 \\ 1 \times 1/2 \times 17.73 \times 6.00 &= 53.19 \\ 1 \times 18.62 \times 17.73 &= 322.13 \\ 1 \times 1/2 \times 17.73 \times 3.50 &= 31.03 \end{aligned}$$

---

$$768.60 \text{ M}^2$$

**(B) First Floor Plinth Area**

Quantity same as G.F Plinth Area  $2385.85 \text{ M}^2$

**(C) Second Floor Plinth Area**

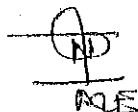
Quantity same as First Floor Plinth Area  $2385.85 \text{ M}^2$

**(D) Third Floor Plinth Area**

Quantity same as Second Floor Plinth Area  $2385.85 \text{ M}^2$

**(E) 4th Floor Plinth Area**

Stair Case  $1 \times 3 \times 5.18 \times 3.46 = 53.77 \text{ M}^2$

  
NLE

  
27 MAY 2009

U.P Rajkiya Nirman Nigam Ltd Muzaffar nagar unit Muzaffar nagar ( U.P )

Name of work :--- Construction of Hostel Building at DP.T Saharanpur in Distt Saharanpur ( U.P )

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Analysis of rate

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( A ) Ground Floor Plinth area ( Per squaremetre )

( 1 ) Plinth area rate as per U.A.P.W.D vide Letter No 369 / 55 Bhawan - 2008 dated 12-03-2008	Rs 6180.00
( 2 ) Add Extra height for 0.30 M beyond 2.90M height is 3.20 M 1x160.00 PM <sup>2</sup>	Rs 160.00
( 3 ) Add for provision for R.C.C Framed Structure @ 12 % on amount Rs 6180.00	Rs 741.60
( 4 ) Add Internal water supply & sewage system of work @ 12 %	Rs 741.60
( 5 ) Add External water supply & sewage system of work @ 5 %	Rs 309.00
( 6 ) Add Internal Electrification of work @ 12.50 %	Rs 772.50
( 7 ) Add for Ant termite of work Treatment	Rs 180.00
( 8 ) Add for earth quake Provision	Rs 370.00
( 9 ) Add for External Development Charges @ 5%	Rs309.00
( 10 ) Add for Provision of Internet @ 0.5%	Rs30.90
( 11 ) Add for Power wiring 3 %	Rs 185.40
( 12 ) Add for Contingencies 4 % including Rain Water Harvesting	Rs 394.26


---

Rs 10,374.26

Rate Rs 10,374.26 per square meter

---

  
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U.P.R.N.N.Ltd

U.P Rajkiya Nirman Nigam Ltd Muzaffar nagar unit Muzaffar nagar ( U.P )

Name of work :--- Construction of Hostel Building at J.P.T Saharanpur in Distt Saharanpur ( U.P )

---

Analysis of rate

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( B ) First Floor Plinth area ( Per Square Metre )

( 1 ) Plinth area rate as per U.A.P.W.D vide Letter No 369 / 55 Bhawan - 2008 dated 12-03-2008	Rs 5560.00
( 2 ) Add Extra height for 0.30 M beyond 2.90M height is 3.20 M $1 \times 160.00 \text{ PM}^2$	Rs 160.00
( 3 ) Add for provision for R.C.C Framed Structure @ 12 % on amount Rs 6180.00	Rs 667.20
( 4 ) Add Internal water supply & sewage system of work @ 12 %	Rs 667.20
( 5 ) Add External water supply & sewage system of work @ 5 %	Rs 278.00
( 6 ) Add Internal Electrification of work @ 12.50 %	Rs 695.00
( 7 ) Add for earth quake Provision	Rs 370.00
( 8 ) Add for Power wiring 3 %	Rs 166.80
( 9 ) Add for Provision of Internet @ 0.5 %	Rs 27.80
( 10 ) Add for Contingencies 4 % including Rain water harvesting	Rs 350.35

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Rs 8,942.35

Rate Rs 8,942.35 Per Sqm

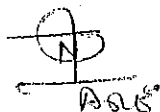
( C ) Second Floor Plinth Area ( Per Square Meter )

( 1 ) Plinth area rate as per U.A.P.W.D vide Letter No 369 / 55 Bhawan - 2008 dated 12-03-2008	Rs 6180.00
( 2 ) Add Extra height for 0.30 M beyond 2.90M height is 3.20 M $1 \times 160.00 \text{ PM}^2$	Rs 160.00
( 3 ) Add for provision for R.C.C Framed Structure @ 12 % on amount Rs 6180.00	Rs 741.60
( 4 ) Add Internal water supply & sewage system of work @ 12 %	Rs 741.60
( 5 ) Add External water supply & sewage system of work @ 5 %	Rs 309.00
( 6 ) Add Internal Electrification of work @ 12.50 %	Rs 772.50
( 7 ) Add for earth quake Provision	Rs 370.00
( 8 ) Add for Power wiring 3 %	Rs 185.40
( 9 ) Add for Provision of Internet 0.50 %	Rs 30.90
( 10 ) Add for Contingencies 4 % including Rain water harvesting	Rs 387.06

---

Rs 9,878.06

Rate Rs 9,878.06 Per Sqm

  
A.S.S.



U.P Rajkiya Nirman Nigam Ltd Muzaffar nagar unit Muzaffar nagar-( U.P )

Name of work :--- Construction of Hostel Building at D.P.T Saharanpur in  
Distt Saharanpur ( U.P )

---

Analysis of rate

---

(D) Third Floor Plinth Area ( Per Square Meter )

- |   |            |
|---|------------|
| ( 1 ) Plinth area rate as per U.A.P.W.D vide Letter No<br>369 / 55 Bhawan - 2008 dated 12-03-2008 | Rs 6180.00 |
| ( 2 ) Add Extra height for 0.30 M beyond 2.90M<br>height is 3.20 M 1x160.00 PM <sup>2</sup>       | Rs 160.00  |
| ( 3 ) Add for provision for R.C.C Framed Structure<br>@ 12 % on amount Rs 6180.00                 | Rs 741.60  |
| ( 4 ) Add Internal water supply & sewage system of work @ 12 %                                    | Rs 741.60  |
| ( 5 ) Add External water supply & sewage system of work @ 5 %                                     | Rs 309.00  |
| ( 6 ) Add Internal Electrification of work @ 12.50 %  | Rs 772.50  |
| ( 7 ) Add for earth quake Provision   | Rs 370.00  |
| ( 8 ) Add for Power wiring 3 %  | Rs 185.40  |
| ( 9 ) Add for Provision of Internet 0.50 %  | Rs 30.90   |
| ( 10 ) Add for Contingencies 4 % including Rain water harvesting                                  | Rs 387.06  |

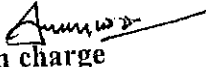
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Rs 9,878.06

Rate Rs 9,878.06 Per Sqm

---

  
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Unit In charge  
U.P.R.N.N.Ltd

U.P.Rajkiya Nirman Nigam Ltd Muzaffarnagar Unit Muzaffarnagar ( U.P )

Name of work :--Construction of Hostel Building in campus of D.P.T  
Saharanpur in Distt Saharanpur ( U.P )

### ABSTRACT OF COST OF HOSTEL BUILDING

S.No	Particular of item	Plinth area	Rate	Amount
(1)	Cost for Hostel Building			
(A)	Ground Floor Plinth area			
	Construction of Hostel Building			
	Single Seated Room with Mesh ,			
	Kitchen , Store Etc Complete			
	Hostel Building	2385.85.85 M <sup>2</sup>	Rs 10,374.26	Rs 247.51 Lacs
	Mesh ,kitchen, Store	768.60 M <sup>2</sup>	Rs 10,374.26	Rs 79.74 Lacs
	<del>2nd Floor area</del>			
(B)	First Floor Plinth area	2385.85 M <sup>2</sup>	Rs 8,942.35	Rs 213.35 Lacs
(C)	Second Floor Plinth area	2385.85M <sup>2</sup>	Rs 9,878.06	Rs 235.68Lacs
(D)	3 <sup>rd</sup> Floor Plinth Area	2385.85M <sup>2</sup>	Rs 9,878.06	Rs 235.68Lacs
(E)	4 <sup>th</sup> Floor Plinth Area	53.77M <sup>2</sup>	Rs 9,878.06	Rs 2.35 Lacs
(2)	Add for Brick Coba			
	Treatment of work	3154.45 M <sup>2</sup>	Rs 355.00	Rs 11.20 Lacs
				Rs 1025.51.Lacs
(3)	Less 5 % due to U.P.R.N.N Ltd working		( -- )	Rs 51.28 Lacs
				Rs 974.23 Lacs
(4)	Add 11.5 % U.P.R.N.N.Ltd Cent age Charges		( + )	Rs 112.04 Lacs
				Rs 1086.27 Lacs

Note :- Final Drawing will be submitted after sanction of work.

  
A.R.E  
U.P.R.N.N.Ltd

  
Unit In charge  
U.P.R.N.N.Ltd

  
27 MAY 2009

# U.P.R.N.N.Ltd Muzaffarnagar Unit Muzaffarnagar ( U.P )

Name of work:- Estimate for the Provision for Construction of Hostel Building  
At D.P.T Campus Saharanpur Distt Saharanpur (U.P)


## Abstract of cost

S.No	Particular of Item	Quantity	Rate	Amount
(1)	<b>Door and window frame:-</b>			
	(a) Window frame; Press Steel frames made out of Corrosion resistant coated 1.6mm thick sheet with double rebate			
	(b) Door frames; Press steel made out of corrosion Resistant coated 1.6mm thick sheet with single Rebate for main door and double rebate for the Balcony side door M.S.T-iron for toilet and mumty Door			
(2)	<b>Window/ventilator shutters:-</b>			
	MS tubular box section corrosion resistant Glazed Shutter and M.S wire mesh shutter With powder coated M.S Fitting			
(3)	<b>Door shutters and fittings</b>	10365.77M <sup>2</sup>	Rs300.00 per sqm	Rs31.10 Lacs
	(a) all room door shutters shall be 35mm thick Commercial flush door shutter with a provision of Wire gauge shutter of second class deodar wood For the balcony side door.			
	(b) Toilet/bath door shall be 30mmthick P.V.C. Moulded door shutters.			
	© Factory made M/s Godrej / Delight type CRC Steel sheet double leaf shutter for room Cupboards shall be provided ,powder Coated iron fittings for all doors			
(4)	<b>External Finish</b>	4000M <sup>2</sup>	Rs550.00 per sqm	Rs 22.00lacs
	Extra provision for fixing of Brick machine mould Tile over externall wall			
(5)	<b>External Street light</b>		L.S	Rs 5.00 Lacs
(6)	<b>Provision has been kept for R.C.C Over Head tank on terrace</b>	40,000 Liter	Rs 9.00 Per liter	Rs3.60 Lacs
				Rs 61.70 Lacs

Co -To Next -Page 02

  
A.R.E.  
U.P.R.N.N.Ltd

  
Project Manager  
U.P.R.N.N.Ltd

  
27 MAY 2009

# **U.P.R.N.N.Ltd Muzaffarnagar Unit Muzaffarnagar ( U.P )**


**Name of work:- Estimate for the Provision for Construction of Hostel Building  
At D.P.T Campus Saharanpur Distt Saharanpur (U.P)**

## **Abstract of cost**

<b>S.No</b>	<b>Particular of Item</b>	<b>Quantity</b>	<b>Rate</b>	<b>Amount</b>
				<b>B/F Rs 61.70 Lacs</b>
(7)	Add for under Ground sump	20,000Liter	Rs9.00 Per Liter	Rs 1.80Lacs
(8)	Granite Floor on Kitchen Platform & vertical tile on Dining Hall & kitchen	10365.77M <sup>2</sup>	Rs 50.00	Rs 5.18Lacs
(9)	less 5% due to U.P.R.N.N Ltd working	(---)		Rs 68.68 Lacs Rs 3.43 Lacs
(10)	Add 11.5% U.P.R.N.N.ltd Centage Charges	(+)		Rs 65.25 Rs 7.50
				<b>Rs 72.75Lacs</b>

  
A.R.E  
U.P.R.N.N.Ltd

  
Project Manager  
U.P.R.N.N.Ltd


  
27 MAY 2009

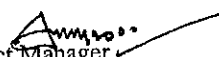
**U.P.R.N.N.Ltd Muzaffarnagar Unit Muzaffarnagar ( U.P )**

**Name of work:- Estimate for the Provision for Construction of Hostel Building  
At D.P.T Campus Saharanpur Distt Saharanpur (U.P)**

**Summary of Cost**

S.No	Particular of Item	Amount
	(1) Cost for Construction of Hostel Building	Rs 1086.27Lacs
	(2) Extra Provision for Extra Specifications	Rs 72.75
		Rs 1159.00Lacs

  
A.R.E  
U.P.R.N.N.Ltd

  
Project Manager  
U.P.R.N.N.Ltd



27 MAY 2008



## उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड

(राज्य सरकार का उपक्रम)

(ISO 9001:2000 CERTIFIED)

कैम्प कार्यालय,  
आई०आई०टी० परिसर,  
गंगा भवन होस्टल,  
रुड़की (हरिद्वार)



कार्यालय इकाई प्रभारी  
87/26 उत्तरी सिविल लाइन  
रोडवेज बस स्टैंड के सामने,  
मुजफ्फरनगर

पत्रांक... 862/250/RMN/07

दिनांक: 25.4.09

सेवा में,

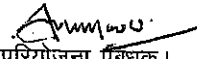
संस्थान अभियंता  
आई०आई०टी०,  
रुड़की ।

महोदय,

डी०पी०टी० परिसर सहारनपुर में 500 कि०मी० क्षमता के आर०सी०सी० अवर जलाशय के निर्माण का आगमन रु० 66.79 लाख का गठित कर आपको सूचनार्थ एवं आवश्यक कार्यवाही हेतु संलग्न कर प्रेषित किया जा रहा है।

सधन्यवाद,

भवदीय

  
अपर परियोजना प्रबंधक।

# उत्तर प्रदेश राजकीय निर्माण निगम लिमिटेड

(राज्य सरकार का उपक्रम)

(ISO 9001:2000 CERTIFIED)

कैम्प कार्यालय,  
आई०आई०टी० परिसर,  
गंगा भवन होस्टल,  
रुड़की (हरिद्वार)



कार्यालय इकाई प्रभारी  
87/26 उत्तरी सिविल लाइन  
रोडवेज बस स्टैंड के सामने,  
मुजफ्फरनगर

पत्रांक.....

दिनांक.....

NAME OF WORK; CONSTRUCTION OF OVERHEAD TANK OF 500 K.L.  
CAPACITY AT D.P.T CAMPUS SAHARANPUR.

## ABSTRACT OF COST

S.NO	PARTICULARS	QTY	RATE	AMOUNT [ In Lacs]
1.	Constructction of RCC Overhead 500 K.L. Tank upto 20.00M staging Complete.		Rs:12.50 P.Lit	Rs: 62.50  Rs: 62.50
2.	Less: 5% Due to UPRNN working		[-]	Rs: 03.13  Rs: 59.37
3.	Add: 12.5% Centage charges of UPRNN Including Aechitectoral & Structural Drawings.		[+]	Rs: 07.42  TotalRs: 66.79Lacs

ARE

P.M.

27 MAR 2009

**Appendix 'M'**  
**Item No. B&WC/22.3.14**

**ESTATE & WORKS**  
**INDIAN INSTITUTE OF TECHNOLOGY**  
**ROORKEE**  
**PROGRESS OF WORK AS ON 15.5.2009**

**Name of Work:** Construction of Multi Storied Boy's Hostel near Ganga Bhawan.

**Date of Start :** 1.9.07

**Date of Completion:** 30.6.09

Sl. No.	Items	Works completed up to 23.3.09	Work completed from 24.3.09 to 15.5.09
1	Foundation upto Plinth level	Completed	---
2	R.C.C. frame work and Brick work G.F.	Completed	---
3.	R.C.C. frame work and Brick work Ist.F	Completed	---
4.	R.C.C. frame work and Brick work II.F	Completed	---
5.	R.C.C. frame work and Brick work III.F	Completed	---
6.	R.C.C. frame work and Brick work IV.F	Completed	.....
7.	R.C.C. frame work and Brick work V.F	Completed	.....
8.	R.C.C. frame work and Brick work VI.F	Completed	.....
9.	R.C.C. frame work and Brick work VII F	Completed	.....
10.	Plastering	65%	20%
11.	Flooring	70%	15%
12.	Sanitary/Water Supply	70%	10%
13.	Electrification	50%	10%
14.	Finishing Work		10%

**ESTATE & WORKS  
INDIAN INSTITUTE OF TECHNOLOGY  
ROORKEE**

**PROGRESS OF WORK AS ON 15.5.2009**

**.Name of Work:** Extension of M.R. Chopra Bhawan/Azad wing (48 suites)

**Date of Start :** 1.8.08

**Date of Completion:** 31.3.09

Sl. No.	Items	Works completed up to 23.3.09	Work completed from 24.3.09 To 15.5.09
1	Foundation upto Plinth level	Completed	—
2	R.C.C. frame work and Brick work G.F.	Completed	—
3.	R.C.C. frame work and Brick work F.F	Completed	—
4.	R.C.C. frame work and Brick work S.F	Completed	—
5.	R.C.C. frame work and Brick work T.F	Completed	—
6.	Plastering	Completed	—
7.	Flooring	Completed	—
8.	Sanitary/Water Supply	Completed	—
9.	Electrification	Completed	—
10.	Finishing Work	Completed	—



27 MAY 2009

**ESTATE & WORKS  
INDIAN INSTITUTE OF TECHNOLOGY  
ROORKEE**

**PROGRESS OF WORK AS ON 15.5.2009**

**.Name of Work:** Extension of Cautlay Bhawan (144 seats)

**Date of Start :** 1.7.08

**Date of Completion:** 28.2.09

Sl. No.	Items	Works completed up to 23.3.09	Work completed from 24.3.09 To 15.5.09
1	Foundation upto Plinth level	Completed	—
2	R.C.C. frame work and Brick work G.F.	Completed	—
3.	R.C.C. frame work and Brick work F.F	Completed	—
4.	R.C.C. frame work and Brick work S.F	Completed	—
5.	R.C.C. frame work and Brick work T.F	Completed	—
6.	Plastering	Completed	—
7.	Flooring	Completed	—
8.	Sanitary/Water Supply	Completed	—
9.	Electrification	Completed	25%
10.	Finishing Work	Completed	—



**ESTATE & WORKS  
INDIAN INSTITUTE OF TECHNOLOGY  
ROORKEE**

**PROGRESS OF WORK AS ON 15.5.2009**

**Name of Work:** Extension of Cautlay Bhawan (160 seats)

**Date of Start :** 1.9.08

**Date of Completion:** 30.6.09

Sl. No.	Items	Works completed up to 23.3.09	Work completed from 24.3.09 To 15.5.09
1	Foundation upto Plinth level	Completed	
2	R.C.C. frame work and Brick work G.F.	Completed	
3.	R.C.C. frame work and Brick work F.F	Completed	
4.	R.C.C. frame work and Brick work S.F	Completed	
5.	R.C.C. frame work and Brick work T.F	RCC 75% BW 50%	RCC 25% BW 5 %
6.	Plastering	25%	50%
7.	Flooring	25%	50%
8.	Sanitary/Water Supply	10%	40%
9.	Electrification	10%	40%
10.	Finishing Work		25%



**ESTATE & WORKS  
INDIAN INSTITUTE OF TECHNOLOGY  
ROORKEE**

**PROGRESS OF WORK AS ON 15.5.2009**

**.Name of Work:** Construction of Boys Hostels at DPT Saharanpur.

**Date of Start :** 1.8.08

**Date of Completion:** 30.6.09

Sl. No.	Items	Works completed up to 23.3.09	Work completed from 24.3.09 To 15.5.09
1	Foundation upto Plinth level	Completed	
2	R.C.C. frame work and Brick work G.F.	Completed	
3.	R.C.C. frame work and Brick work F.F	Completed	
4.	R.C.C. frame work and Brick work S.F	RCC 75%    B.W. 75%	RCC 25%    B.W. 25%
5.	R.C.C. frame work and Brick work T.F	RCC 75%    B.W. 75%	RCC 25%    B.W. 25%
6.	Plastering	25%	25%
7.	Flooring	25%	25%
8.	Sanitary/Water Supply	25%	25%
9.	Electrification	25%	25%
10.	Finishing Work		25%



**ESTATE & WORKS  
INDIAN INSTITUTE OF TECHNOLOGY  
ROORKEE**

**PROGRESS OF WORK AS ON 15.5.09**

**Name of Work:** Construction of M.S. Boys Hostel near AHEC (650 Seats)

**Date of Start :** 15.11.08

**Date of Completion:** 30.6.10

Sl. No.	Items	Works completed up to 23.3.09	Work completed from 24.3.09 to 15.5.09
1	Foundation upto Plinth level	Completed	
2	R.C.C. frame work and Brick work G.F.	RCC 60%      BW 50%	RCC 40%      BW 25%
3.	R.C.C. frame work and Brick work Ist.F	RCC 50%      BW 50%	RCC 50%      BW 10%
4.	R.C.C. frame work and Brick work II.F	RCC 50%      BW 50%	RCC 25%      BW 10%
5.	R.C.C. frame work and Brick work III.F	RCC 50%      BW 50%	RCC 25%      BW 5%
6.	R.C.C. frame work and Brick work IV.F	RCC 50%      BW 25%	RCC 25%      BW 5%
7.	R.C.C. frame work and Brick work V.F		RCC 50%      BW 25%
8.	R.C.C. frame work and Brick work VI.F		RCC 50%      BW 25%
9.	Plastering		10%
10.	Flooring		
11.	Sanitary/Water Supply		
12.	Electrification		
13.	Finishing Work		





**ESTATE & WORKS  
INDIAN INSTITUTE OF TECHNOLOGY  
ROORKEE**

**PROGRESS OF WORK AS ON 15.5.09**

**Name of Work:** Construction of Biotechnology Deptt./Other Centers

**Date of Start :** 15.1.09

**Date of Completion:** 30.6.10

Sl. No.	Items	Works completed up to 23.3.09	Work completed from 24.3.09 to 15.5.09
1	Foundation upto Plinth level	Completed	
2	R.C.C. frame work and Brick work G.F.	RCC 50%	RCC 25% BW 25%
3.	R.C.C. frame work and Brick work Ist.F		RCC 25% BW 15%
4.	R.C.C. frame work and Brick work II.F		RCC 15% BW 15%
5.	R.C.C. frame work and Brick work III.F		
6.	R.C.C. frame work and Brick work IV.F		
7.	R.C.C. frame work and Brick work V.F		
8.	R.C.C. frame work and Brick work VI.F		
9.	Plastering		
10.	Flooring		
11.	Sanitary/Water Supply		
12.	Electrification		
13.	Finishing Work		



**ESTATE & WORKS  
INDIAN INSTITUTE OF TECHNOLOGY  
ROORKEE**

**PROGRESS OF WORK AS ON 15.5.09**

**Name of Work:** Construction of Lecture Hall Complex

**Date of Start :** 15.1.09

**Date of Completion:** 30.6.10

Sl. No.	Items	Works completed up to 23.3.09	Work completed from 24.3.09 to 15.5.0
1	Foundation upto Plinth level	Completed	
2	R.C.C. frame work and Brick work G.F.	RCC 60%	RCC 40% BW 50%
3.	R.C.C. frame work and Brick work Ist.F		RCC 50%
4.	R.C.C. frame work and Brick work II.F		RCC 20%
5.	R.C.C. frame work and Brick work III.F		
6.	Plastering		
7.	Flooring		
8.	Sanitary/Water Supply		
9.	Electrification		
10.	Finishing Work		



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ROORKEE**

**PROGRESS OF WORK AS ON 15.5.09**

**Name of Work:** Construction of M.S. Girls Hostel (800 Seats)

**Date of Start :** 1.3.09  
**Date of Completion:** 31.7.10

Sl. No.	Items	Works completed up to 23.3.09	Work completed from 24.3.09 to 15.5.09
1	Foundation upto Plinth level	20%	60%
2	R.C.C. frame work and Brick work G.F.		
3.	R.C.C. frame work and Brick work Ist.F		
4.	R.C.C. frame work and Brick work II.F		
5.	R.C.C. frame work and Brick work III.F		
6.	R.C.C. frame work and Brick work IV.F		
7.	R.C.C. frame work and Brick work V.F		
8.	R.C.C. frame work and Brick work VI.F		
9.	Plastering		
10.	Flooring		
11.	Sanitary/Water Supply		
12.	Electrification		
13.	Finishing Work		



27 MAY 2009

**ESTATE & WORKS  
INDIAN INSTITUTE OF TECHNOLOGY  
ROORKEE**

**PROGRESS OF WORK AS ON 15.5.09**

**. Status of Barrier Free Access for Physically disabled persons.**

**(A) Barrier free access has been provided at the following locations.**

1. Civil Engg. Deptt.	1 No.
2. O.P. Jain Auditorium	2 Nos.
3. Earth Science Deptt.	1 No.
4. Electronics & Communication Deptt.	1 No.
5. W.R.D.M.	1 No.
6. Met.& Mat. Engg. Deptt.	1 No.
7. Chemical Engg. Deptt.	2 Nos.
8. K.I.H.	1 No.
9. Jai Krishna House	1 No.
10. Sarojini Bhawan	1 No.
11. Jawahar Bhawan	3 Nos.
12. Earthquake Engg. Deptt.	1 No.
13. Main Building	4 Nos.
14. Toilet in O.P. Jain auditorium	1 No.

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**Total Ramps - 20 Nos. Toilet -1No.**

**(B) The work is in progress at following locations.**

1. Elect. Engg. Deptt.	1 No.
2. Old library	1 No.
3. Toilet in Elect. Engg. Deptt.	1 No.



27 MAY 2009

**NATIONAL BUILDINGS CONSTRUCTION CORPORATION LTD.**

(A Govt. of India Enterprise)  
COMMITTED TO CUSTOMER'S DELIGHT

**66/1, Ravindra Lok**  
Karam Path, IIT Campus  
IIT Roorkee - 247667

No. NBCC/IIT R/CL/2009/2912

Date: 14.05.2009

**The Institute Engineer( E & W)**

Indian Institute of Technology, IIT Campus, Roorkee

**SUB: Concept Project Reports and Preliminary Cost Estimates for Sewerage Systems & Sewage Treatment Plants for IIT, Roorkee and IIT, Saharanpur**

Dear Sir,

As desired, we are furnishing herewith the concept Project Reports and Preliminary Cost Estimates for the Sewerage Systems and Sewage Treatment Plants for IIT, Roorkee and IIT, Saharanpur as per details below:

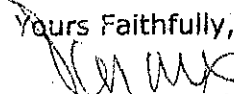
S. No.	ITEM OF WORK	IIT, Roorkee		IPT, Saharnpur	
		Contents (Approx.)	Cost	Contents (Approx.)	Cost
1	Laying of Sewer Lines	11850 Mtr	474.75	1850 Mtr	56.03
2	Sewerage Pumping Station, Rising Main etc.	1 No. for 3.0 MLD	160.00	1 No. for 0.6 MLD	75.00
3	Sewerage Treatment Plant (SBR Technology) and ancillary facilities	2.5 MLD	366.77	0.5 MLD	103.67
4	Boundary wall & Gate	1 Set	8.60	1 Set	3.56
	<b>Sub Total</b>		<b>1010.12</b>		<b>238.26</b>
5	Add contingencies @ 3%		30.30		7.15
	<b>Sub Total</b>		<b>1040.42</b>		<b>245.41</b>
6	Add NBCC Agency charges @ 10%		104.05		24.54
	<b>TOTAL</b>		<b>1144.47</b>		<b>269.95</b>
	<b>GRAND TOTAL</b>		<b>1414.42</b>		

Both the Concept Project Reports along-with the Preliminary Cost Estimates and drawings of Sewerage Networks & Sewage Treatment Plants are submitted for needful consideration and approval of the Projects please.

Thanking you

-120-



Yours Faithfully,  
  
(Rajesh Arora)  
AGM (Engg.)

Encl.: As above

27 MAY 2009