



राष्ट्रीय प्रौद्योगिकी संस्थान, राउरकेला  
National Institute of Technology, Rourkela

**Minutes of the 14<sup>th</sup> Building & Works Committee, National Institute of Technology, Rourkela held at 10.00AM on 02.07.2011 (Saturday) in the Board Room of the Institute.**

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**Members Present:**

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|----|------------------------------------------------------------------------------------------------------|-----|-----------|
| 1. | Prof. Sunil Kr. Sarangi, Director<br>N.I.T., Rourkela.                                               | ... | Chairman, |
| 2. | Shri R.K. Bandyopadhyay,<br>Deputy Secretary , NITs(TS-III), New Delhi                               | ... | Member    |
| 3. | Shri Vinod Kr Shrivastava, DGM<br>Refrigeration & Air Conditioning, RSP.,<br>SAIL, RSP, Rourkela     | ... | Member    |
| 4. | Shri Ajaya Kr. Nayak, DGM<br>Civil Engineering, Town Engineering Department,<br>SAIL, RSP, Rourkela. | ... | Member    |
| 5. | Prof. S. K. Sahoo,<br>Dean(PD), Civil Engg., NIT., Rourkela.                                         | ... | Member    |
| 6. | Shri S. K. Upadhyay, Registrar, NIT, Rourkela                                                        | ... | Secretary |

**Invitees Present:**

- |     |                                                                  |     |         |
|-----|------------------------------------------------------------------|-----|---------|
| 7.  | Prof. Sarat Kr. Das<br>PIC, Civil Construction, NIT Rourkela     | ... | Invitee |
| 8.  | Prof. K. C. Biswal,<br>PIC, Civil Maint., NIT., Rourkela         | ... | Invitee |
| 11. | Prof. A. K. Sahoo<br>VP, Civil Engineering Dept., NIT Rourkela   | ... | Invitee |
| 12. | Mr. S. P. Mohaptra,<br>AEE (Civil), Estate Office, NIT Rourkela. | ... | Invitee |

**Invitees Absent:**

- |     |                                                            |     |         |
|-----|------------------------------------------------------------|-----|---------|
| 13. | Prof. A.K. Panda,<br>VP, Civil Engg., NIT Rourkela.        | ... | Invitee |
| 14. | Prof. Chitti Babu<br>PIC ,Electrical Maint., NIT Rourkela. | ... | Invitee |

The leave of absence was approved for all members absent.

**BWC:14(2011)- 01: Welcome to the members by the Chairman.**

*Chairman, Building & Works Committee welcomed all the members.*

**BWC:14 (2011)-02: Confirmation of the minutes of the 13<sup>th</sup> Meeting of the BWC held on 16.03.2011.**

*BWC confirmed minutes of the 13<sup>th</sup> Meeting of the BWC held on 16.03.2011.*

**BWC:14(2011)-03: To report on the action taken on the decisions made in the 13<sup>th</sup> Meeting of BWC held on 16.03.2011 and to discuss matters arising out of the minutes:**

The report on the action taken on the decisions made in the 13<sup>th</sup> Meeting BWC held on 16.03.2011 was presented for BWC's consideration.

*Registrar informed the Committee that the BOG, in its BOG-26 (2011)-20 dt.17.06.2011 meeting has approved the Deviation Statement, extra items and price escalation for major projects (Lecture Hall Complex, Electrical Science Building, Faculty Residence, 100 seated Hostel and Development work) being executed by M/s UPRNN which are given in Annexure-A1.*

*The BWC advised Dean (PD) to streamline the records for the major project in line with BOG approval. He was advised to draft appropriate amendment to the work order and process the bills. It was further decided that in future, all drawings, BOQs, and proposals for deviations, extra items and escalations will be sent by Dean (PD) to the Secretary BWC for circulation among members a prior ( or post-facto, on approval of Director only in emergency cases) before being presented to BWC.*

**(Annexure-A1, Page No. 6 - 7)**

**BWC:14(2011)-04: Review of ongoing Civil Projects:**

A report on the progress of ongoing Civil Projects was enclosed for perusal of the Committee.

*All the ongoing civil projects were reviewed. The following critical issues were identified which need to be addressed.*

**Critical Issues:**

- 1) *Work order to be placed for the remaining work of faculty club and staff club which were abandoned midway by previous contractors.*
- 2) *It was informed that the scope for sewerage system for hostel's has been finalized. Starting of work is required to be expedited. Letter will be issued by PIC (CC) immediately asking for completion schedule. If satisfactory reply is not received, alternative arrangement should be made.*

- 3) Drawings for AC ducting from Arch-en-Design for BM, LC, E.Sc. Buildings have been received. Now AC for BM has been put in Phase-II, the work of which has to be expedited.
- 4) Renovation work for A and B type quarters to be expedited.
- 5) The tendering of transmission line from Chhend to NIT Campus has to be expedited in consultation with M/s WESCO. A reminder has been sent to M/s WESCO. A letter will be sent b Director to MD, RSP requesting for permission for construction of the line. Prof. Y.K. Sahu, VP (E) was requested to follow up.

**(Annexure-A2, Page No.8 - 11)**

**BWC:14(2011)-05: Review of ongoing Electrical Projects:**

All the ongoing Electrical Projects were reviewed. The following were the critical issues:

**1) 33 KV Substation:**

*M/s Blue Star was advised to expedite the work for timely completion. It was decided that the main receiving substation will be set up in its originally planned site on the abandoned main gate.*

**2) Diesel Generator:**

*Prof. Y. K. Sahu informed that the party has sent request for inspection on 2<sup>nd</sup> July, 2011. The final decision will be taken after receiving the DG set at site.*

**(Annexure-A3, Page No. 12 - 24)**

**BWC:14(2011)-06: Approval of BOQ and estimates for New Projects.**

On the recommendation of BWC vide resolution No.BWC-9(2009)06(b) & No.BWC12(2010)-)07(3), BOG approved the proposals vide resolution No. BOG-22(2009)-12: 18.09.2009 & BOG-24(2009)-05, dt.22.10.11 respectively. Draft BOQ and estimations (Civil) for the following projects were discussed.

Sl. No.	Name of the Project	Estimation Cost Lakh
1)	Extension of K. M. Shaw Hall of Residence	12,04 lakh
2)	Addition and renovation of 'B' type qrs.	191.37 lakh
3)	A.C. Plant Phase – II	23.75 lakh
4)	Balance works in 'D' type flat	101.74 lakh

BWC advised Dean(PD) the proposals regarding extension of M.S. Swaminathan Hall of residence, extension of Mining Engg Building, extension of Ceramic Engg. Building and extension of Computer Sc.

Engg. Building will be freshly examined and final versions will be sent to members before being put up to BWC for approval in its next meeting.

**(Annexure-A4, Page No. 25 - 30)**

**BWC:14(2011)-07: Revised estimate for Extension and Renovation campus High School.**

BWC vide resolution No.BWC:13(2011)-14 dt.16.03.2011 approved in principle for Extension and Renovation campus High School. The revised estimate was put up on the table.

The item was deferred.

**BWC:14(2011)-08: Administrative Approval for Widening of existing road network and construction of new roads.**

*With increasing number of cars on the roads, the present width is proving insufficient in all old roads. It is proposed to widen all roads to accommodate 2 cars and to create new roads in the south east portion of the campus. It is estimated that we need about 6 km of new roads and widening of 10 km of road. Using Rs.1.5 crore per km of new road and Rs. 1 crore per km for widening. The rough cost estimate of the project stands at Rs. 19 crore (Nineteen Crore only).*

*BWC approved the proposal for putting up to FC and BOG for financial approval. It directed the administration to proceed with preparation of drawings and BOQ.*

**BWC:14(2011)-09: Administrative approval for carrying out detailed urban planning for the campus.**

The Institute's infrastructure growth is today based on a preliminary plan made by M/s M.N. Dastur in 2004. It is proving inadequate for implementation of new projects.

It is proposed to carry out a detailed urban planning covering roads, buildings, water bodies, Water and electricity supply, ICT, Sewage , drainage etc. A competent architect is to be employed for the purpose.

Administrative approval may be accorded to choose a reputed architectural firm and proceed with preparation of cost estimate.

*BWC directed that the selection of Architect for campus planning should be done through open advertisement. Dean (PD) was advised to prepare the advertisement.*

**BWC:14(2011)-10: Policy on recruitment of Architects for Minor work.**

BWC is requested to work out a procedure for choosing architects for small jobs.

The BWC recommended the following:

For small jobs, where architectural fees are expected to be less than Rs.10 lakh the process of open selection may be dispensed with. The civil construction committee may recommend to allocate the work to an

architect or an architectural firm with proven track record of good work in the Institute. It may at its discretion, choose a single firm or hold a limited tender type competition among all architects doing work for the Institute.

The following restriction will apply:

- 1) The total fee for a single site will not exceed Rs.10 lakh.
- 2) If multiple such assignments as given, the total fees for all sites over a year should not exceed Rs.10 lakh per year.
- 3) The rate of fees expressed as a fraction of the building cost shall not exceed the lowest rate given to any firm for comparable kind of work, new or renovation.
- 4) There must be a liquidated damage clause in the contract that will contain imposition of penalty in supply of drawings and other documents.
- 5) The recommendations of BWC may be put up to FC for its approval.

*The BWC approved the proposal.*

**BWC:14(2011)-11: Any other item with the permission of the Chair.**

**1) Approval of extra items for construction of Main Gate complex.**

Dean (PD) appraised the committee regarding requirement of 17 extra items including Steel Logo worthy of Rs.7,81,723 and deviations in quantity amounting to Rs.3,93,449/-. As a whole, there is a deviation of Rs.11,75,163/- over the original work order value of Rs.26,71,464/- (3.99% deviation).

BWC approved the extra items and deviations considering the need for creating an iconic structure in the main gate and meeting higher safety standards.

*The BWC approved the proposal.*

**(Annexure-A5, 31 - 33)**

**2) Revised schedule of Rates for Civil construction and Maintenance works.**

Dean (PD) presented the analysis of rates and the comparison of these rates with the previous rates and DSR-2007 with cost index of 145%, prevailing as per CPWD at Rourkela. The analysis of rates was prepared based on the provisions of CPWD analysis of rates. The BWC accepted the rates in principle for implementation in estimate for construction and maintenance work and settlement of extra items (if any).

*The BWC approved the proposal.*

**(Annexure-A6, 34)**

The meeting ended with thanks to the Chair.

**(S. K. Upadhyay)**  
**Registrar & Secretary**  
Building & Works Committee

**(S. K. Sarangi)**  
**Director & Chairman**  
Building & Works Committee

Report on the action taken on the decisions made in the 12<sup>th</sup> Meeting of BWC held on 11.10.2010

<i>BWC item No.</i>	<i>Item Descriptions</i>	<i>Action taken</i>
<b>BWC: 12(2010)-03:</b>	<p>To report on the action taken on the decisions made in the 11<sup>th</sup> Meeting of BWC held on 09.04.2010 and to discuss matters arising out of the minutes:</p> <p>i). The Board also advised to explore the possibility of negotiating with architects towards reduction of Architect fees particularly on the new housing complex as this constitutes a number of repetitive blocks of same type design (BWC-11(2010)-06. M/s Arch-en-design have agreed to reduce their fees from 1.98% to 1.89% of the project cost for faculty residences.</p> <p>ii) The Board advised that in future, new proposals for construction will be examined by the BWC and the Board based on the actual requirement of plinth area for each building or activity keeping the existing facilities in view. A rough plinth areas and rate estimate as per CPWD or state norms, will have to be submitted, duly examined by the BWC before such a project can be sanctioned by the Board.</p>	In progress.
<b>BWC: 12(2010) - 04:</b>	<p><b>Review of ongoing Civil Projects:</b></p> <p>BWC reviewed the ongoing Civil Projects. The report is given in the Annexure. BWC expressed concern at the slow progress of many projects, but accepted the underlying reasons of labour shortage to be genuine. All concerned were advised to make conscious effort to accelerate pace of work, commensurate with the externally imposed situations.</p>	In progress.
<b>BWC:12 (2010) - 05:</b>	<p><b>Review of ongoing Electrical Projects:</b></p> <p>BWC reviewed the ongoing Civil Projects. The report is given in the Annexure. BWC expressed concern at the slow progress of many projects, but accepted the underlying reasons of labour shortage to be genuine. All concerned were advised to make conscious effort to accelerate pace of work, commensurate with the externally imposed situations.</p>	In progress.
<b>BWC: 12 (2010)- 06:</b>	Hotline Connection from Chhend to NIT Rourkela	Under process.

<b>BWC: 12(2010)- 07:</b>	<p><b><u>Proposal for New Constructions:</u></b></p> <ol style="list-style-type: none"> <li>1. 1500 Seater Auditorium.</li> <li>2. Proposal for Construction of 3<sup>rd</sup> Floor (in G + 3 system) in the Extension portion of C.V. Raman Hall of residence.</li> <li>3. Proposal for extension of Mining, Ceramic and Computer Science Buildings.</li> <li>4. Proposal for construction of additional water supply capacity.</li> <li>5. Renovation of Hill Top Water Tank and Construction of Boundary wall.</li> </ol>	<p>Under process. Under construction.</p> <p>Under process.</p> <p>Under process.</p> <p>Under process.</p>
<b>BWC: 12 (2010)- 08:</b>	Deviation Statement for all the Projects.	As per the decision of the BOG vide resolution No. BOG-24(2010)-05, a committee was constituted who will study the aspects of the projects and submit the report before the next meeting.
<b>BWC:12(2010)- 09:</b>	<p><b>Any other item with the permission of the Chair.</b></p> <ol style="list-style-type: none"> <li>1. Analysis of rate for rate contract.</li> <li>2. Dismantling of collapsible Decorative frame structure for Homi Bhava Hall of Residence.</li> <li>3. Construction of New Gate:</li> <li>4. Use of fly ash Bricks:</li> </ol>	<p>Under process. Implemented</p> <p>Completed Implemented.</p>

(S. K. Upadhyay)  
Registrar & Secretary  
Building & Works Committee

**Report on the action taken on the decisions made in the 11<sup>th</sup> Meeting of BWC held on 09.04.2010**

<i>BWC item No.</i>	<i>Item Descriptions</i>	<i>Action taken</i>
<b>BWC: 11(2009) - 04:</b>	<p><b>Review of ongoing Civil Projects:</b></p> <ol style="list-style-type: none"> <li>1. Construction of Bio Medical Science Building.</li> <li>2. Construction of Electronics and Electrical Science Building.</li> <li>3. Lecturer Hall Complex.</li> <li>4. Faculty Residence.</li> <li>5. Construction of Hostel Building</li> </ol>	<ol style="list-style-type: none"> <li>1) Building partially handed over. Finishing works in other areas in progress. Building to be handed over by 31.10.10.</li> <li>2) Ground Floor roof 70% completed and First Floor roof 50% completed. Brick work in progress in basement and Ground Floor.</li> <li>3) 4 Lecture Halls in basement and Ground Floor handed over.</li> <li>4) Finishing works in 2 blocks in progress, which will be handed over by 31.12.10. Additional 2 blocks will be handed over by 31.3.11, and last 2 blocks by 30.06.11.</li> <li>5) 128 rooms have been handed over. Additional 128 rooms will be ready by 14.10.10. Another 256 by 30.12.10 and balance 500 rooms by 30.6.11.</li> </ol>
<b>BWC:11 (2009) - 05:</b>	<p><b>Review of ongoing Electrical Projects:</b></p> <ol style="list-style-type: none"> <li>i) <b>Biomedical Electrical wiring.</b></li> <li>ii) <b>33 KV Substation.</b></li> <li>iii) <b>Air-conditioning in B. Behera Auditorium</b></li> </ol>	<p>Work is in progress Under process. Under process.</p>
<b>BWC: 11 (2010)- 06:</b>	Selection of Architects / Consultants for New construction Projects	Work orders issued to all Architects for major projects (Ph.II).
<b>BWC: 11(2008)- 07:</b>	Road network throughout the Campus for better connectivity	Work order issued. Work in progress.
<b>BWC: 11 (2009)- 08:</b>	Proposal for development of Water Ponds/Water bodies.	Under process.
<b>BWC:11(2009)- 09:</b>	Revised Deviation Statement of the	Details of revised deviation statement will be put up in the

	Ongoing Major Projects (Phase-I).	Next meeting.
<b>BWC: 11 (2009)-10:</b>	Prequalification of Civil/Electrical Contractors for New Construction Projects (Phase – II) (e.g. Mechanical Science Building, Satish Dhawan Hall, Golden Jubilee Building, Lecture Hall Complex and Faculty Residence).	Under finalization.
<b>BWC: 11(2010)-12:</b>	<p><b>Proposal for New works:</b> The following new works are proposed.</p> <ol style="list-style-type: none"> <li>1. Provision of Low side AC work in Biomedical Building.</li> <li>2. 0.18 MLD Sewage Treatment Plant for Hostels:</li> <li>3. Selection of AC Consultant for existing and New Academic Buildings.</li> <li>4. Dismantling of Space Frame in the existing Gate and re-erection near Biju Pattnaik Library:</li> </ol>	<p>Under process</p> <p>Work order issued. Drawing submitted to consultant for approval.</p> <p>Worker order under issue.</p> <p>Dismantled and erected in front of Library.</p>
<b>BWC: 11(2010)-13:</b>	<p>Any other item with the permission of the Chair.</p> <ol style="list-style-type: none"> <li>1. Registration of Contractors.</li> <li>2. Review of Water supply to NIT Campus</li> <li>5. Payment of Cess @1% under the Building and other construction and payment of Minimum wages to the worker working under different Civil, Electrical and other agencies etc.</li> </ol>	<p>Completed.</p> <p>Reviewed.</p> <p>Under process.</p>

**(S. K. Upadhyay)**  
 Registrar & Secretary  
 Building & Works Committee

**BWC:13(2011)-14: Request from REC Campus School for renovation of School Building.**

Headmaster, REC Campus has requested NIT, Rourkela for

1. Repair of Class rooms, Bath rooms, Toilets etc.
2. White washing of the School Building.
3. Construction of Conference Hall in the existing building.
4. Approach Road from main road to school building.

BWC may consider the proposal.

