



**VISVESVARAYA NATIONAL INSTITUTE OF TECHNOLOGY,
NAGPUR – 440 010 (INDIA)**

**MINUTES OF THE 32ND MEETING OF THE BUILDING AND WORKS COMMITTEE HELD
ON MONDAY, THE 30TH DECEMBER 2013 AT VNIT, NAGPUR**

Following members were present

- | | |
|--|-------------|
| 1. Dr. Narendra S. Chaudhari, Director, VNIT, Nagpur | - Chairman |
| 2. Dr. S.C. Sahasrabudhe, Director, DAICT, Gandhinagar | - Member |
| 3. Shri Rajesh Singh Solanki MHRD, GoI Representative | - Member |
| 4. Shri Brijendra Kr Kashap S.O(IFD), GoI Representative | - Member |
| 5. Dr. S.R. Sathe Dean(P & D) VNIT, Nagpur | - Member |
| 6. Shri R.R. Akulwar, SE(Elect), PWD | - Member |
| 7. Shri Rajesh Khatke, CE(Civil) PWD Representative | - Member |
| 8. Dr. Rajendra Yerpude, Registrar, VNIT, Nagpur | - Secretary |

Dr. R.S. Sonparote, Faculty In-charge New Construction, Dr. S.S. Bhat, Faculty In-charge, Elect. Maint, Shri A.P. Virodkar, DR(Acct), Shri K.G. Barapatre, Engineer(Maint.) were present to extend assistance and help to BWC.

All Hon'ble members of BWC were welcomed to the meeting and acknowledged their earlier contributions for development and growth of the Institute infrastructure and expressed to get similar wholehearted support in the future too.

At the outset, Dr. R.S. Sonparote, Faculty In-charge, New Construction gave the presentation appraising the present status of all ongoing construction projects showing the photographs of under construction/completed building.

After the presentation, meeting proceeded by discussing the agenda and following resolutions were made.

BWC 32.01: To note the minutes of the 31st meeting of the Building and Works committee held on 23rd October 2013.

Agenda item: The minutes of the 31st meeting of the BWC held on 23rd October 2013 are placed at Annexure-I. The BWC is requested to note.

Resolution: The minutes of the 31st meeting were noted and confirmed with the suggestions that the possibility of providing exclusive lifts for carrying food in Mega Mess for boys and girls is to be explored. (BWC 31.04 and BWC 31.05)

BWC 32.02 Action taken report on the minutes of the 31st meeting of the BWC held on 23rd October 2013.

Agenda Item:

| Resolution No. | Description | Action Taken |
|----------------|---|--|
| 31.03 | Construction of Boys hostel | NBCC* is identified as PMC**. Expression of interest is submitted by NBCC. |
| 31.04 | Mega mess for boys | NBCC is identified as PMC. Expression of interest is submitted by NBCC. |
| 31.05 | Mega mess for Girls Hostel + recreation facility | NBCC is identified as PMC. Expression of interest is submitted by NBCC. Revised estimate is being prepared due to modification in site plan and then approval will be sought by circulation. |
| 31.06 | Procedure for certifying the bill of new construction | To be deferred for the time being. |

BWC is requested to approve NBCC as PMC for the above work.

* NBCC- National Building and Construction Corporation Ltd.: Public sector

** PMC - Project Management Consultant

N. Chaudhari

Resolution: BWC was informed about the cancellation of work as per item 31.11 of 31st BWC minutes in the light of master plan with respect to (1) Extension of departments of Physics, Chemistry and MEC buildings, (2) Extension of Electronics Department and recreation facility of Hostel No. 3 & 4 and (3) Extension of Computer Science Building, as recommended.

With regards to minute item no BWC 31.7 for Installation of solar power plant, the committee constituted has initiated the process and is going to put the report in the next BWC meeting.

BWC noted the action taken report.

BWC 32.03 Construction of Academic Block

Agenda item: Master plan of the campus wherein the need of going for high rise buildings to accommodate increased strength of students, faculty, staff and required infrastructure of 20 academic departments was discussed. (BWC item 31.11). Requirement of all the above buildings will be accommodated in single block to be constructed. Following is the description of construction activities.

| | | |
|------------------------------------|--------------|----------------------------------|
| Academic block | = 110m x 50m | = 5500 sq.m. (Approx.) |
| Deduction for courtyard | | |
| 20m x 15m x 2 Nos | | = 600 sq.m |
| Total area to be constructed | | = 4900 sq.m./per floor |
| Proposed number of floors | | = 8 (G+7) |
| Total built up area | | = 39200 sq.m |
| Cost@25000/- per sq.m. as per CPWD | | |
| Cost of building | | = 4900 x 8 x 25000 |
| | | = Rs. 98,00,00,000/- (98 crores) |

For this work NBCC is identified as PMC.

BWC is requested to approve the above proposal.

Resolution: BWC noted the detailed estimate of above Academic Block. BWC in the 31st meeting, vide item No 31.11 had approved Rs 75 crores as project cost. The revised project cost is now worked out. In this revised estimate, due to availability of more area in the identified land zone and permissible additional floor, the cost is revised to Rs. 98 crores.

BWC extended the administrative approval for revised cost of Rs 98 crores. To use the existing space for this purpose, BWC resolved that Director should constitute a committee for looking into demolition works involved in the identified zone. The committee will certify demolition of old sheds and buildings for creating clear space for this academic block.

BWC 32.04 Modification in the construction of quarters (Phase II) for Associate Professors

Agenda item: The 28th BWC meeting held on 7th February 2013 vide item No. 28.04, approved the proposal for construction of more than G+6 storied building for Associate Professors quarter.

It is therefore proposed to modify the plan of quarters from G+6 to G+7 (i.e. permissible at that site as per Civil Aviation Authority). Following is the description of construction activities.

| | | |
|------------------------------------|-----------|-------------------------------------|
| Associate Prof. Quarters= | 48m x 45m | = 2160 sq.m. (Approx.) |
| Deduction for courtyard | | |
| 18 m x 6 m x 2 Nos | | = 216 sq.m |
| Total area to be constructed | | = 1944 sq.m./per floor |
| Proposed number of floors | | = 7 (G+6) |
| Total built up area | | = 13608 sq.m |
| Cost@25000/- per sq.m. as per CPWD | | |
| Cost of building | | = 1944 x 7 x 25000 |
| | | = Rs. 34,02,00,000/- (34.02 crores) |

The work is entrusted to CPWD. BWC is requested to approve the above proposal.

Shadhi

Resolution: BWC approved the proposal with the suggestion for constructing G+8 building if it is permissible by Civil Aviation Authority.

BWC 32.05: Extension/Modification in the construction of Girls Hostel.

Agenda Item: The 27th BWC meeting held on 25th September 2012 vide item No. 27.08, approved the construction of Girls Hostel with G+6 storied building. The 28th BWC meeting held on 7th February 2013 vide item No. 28.09, suggested revising the proposal for construction of G+6 building. Accordingly, it is proposed to construct G+10 storied building for Girls Hostel (i.e. permissible at that site as per Civil Aviation Authority). Following is the description of construction activities.

| | | |
|------------------------------------|-------------|--|
| Girls Hostel = | 38m x 48m | = 1824 sq.m. (Approx.) |
| Deduction for courtyard | | |
| | 18 m x 16 m | = 288 sq.m |
| Total area to be constructed | | = 1536 sq.m./per floor |
| Proposed number of floors | | = 11 (G+10) |
| Total built up area | | = 16896 sq.m |
| Cost@25000/- per sq.m. as per CPWD | | |
| Cost of building | | = 1536 x 11 x 25000 |
| | | = Rs. 42,24,00,000/- (42.24 crores) |

The construction of G+6 storied building is entrusted to CPWD. Now it is proposed to appoint NBCC as PMC for G+10 storied Girls Hostel building. The BWC is requested to approve the modification in building plan and appointment of NBCC as PMC.

Resolution: BWC approved the proposal. It is informed that the work is withdrawn from the CPWD as NBCC is identified as PMC with the adjustment of costs in other ongoing CPWD projects .

BWC 32.06: Nomenclatures of Lecture Hall Complex/ Class Room Complex.

Agenda Item: Lecture hall complex is being built on VNIT campus. CPWD is entrusted with the construction of this building. The work is about to start. This building is referred as lecture hall complex or class room complex in different documents. Henceforth it is proposed to refer this building as **Class Room Complex only** to avoid ambiguity.
BWC is requested to approve the above proposal.

Resolution: BWC approved the name of this complex henceforth as Class Room Complex and this will be applicable to all the approvals sought earlier.

BWC 32.07: To approve the detailed estimate of construction of compound wall along Nag nallah behind cricket ground.

Agenda item: The premises of VNIT is surrounded with compound wall. The compound wall of backside of the cricket ground fell down due to incessant rains this year and heavy flood of Nag nallah. This boundary wall between VNIT campus and outside public colony, thus gives open access to all and creates security problem. Around 100m length compound wall is washed out due to scouring of foundation. The detailed estimate is on the basis of CSR of PWD 2013-14 and enclosed as Annexure-II. The estimated cost is Rs 23 lakhs.
BWC is requested to approve the above proposal.

Resolution: BWC approved the proposal to construct the compound wall.

Agenda item added with permission of the Chairman of BWC

BWC 32.08: Rewiring of Departments with 4 pole MCCB.

Agenda item: In the 29th BWC meeting tender approval was given in favour of M/S V.R. Associates. But for better safety and maintenance it is proposed to have 4 pole MCCB wiring with the added cost of 33% than the quoted rates as per CSR.
BWC is requested to approve the proposal.

Resolution: BMC approved the proposal with the advice to revise the cost as per present rate and gross amount.

For most of the construction work NBCC is identified as PMC. Hence, it is suggested to invite NBCC officials for giving detailed presentation of all proposed projects as per their design in the next BWC.

The meeting ended with vote of thanks to the Chair.


Dr. Narendra S. Chaudhari
CHAIRMAN

Detailed EstimateName of work :- Construction of Compound wall along nag nallah behind cricket ground at VNIT, Nagpur.

| Item No. | CSR Item | Description of Items | No. | L | B | H/D | Qty | Unit | Rate | Amount |
|----------|------------|---|-----|------|------|-------|--------|------|---------|-----------|
| 1 | 2/p-5 | Providing double under reamed piles of specified diameter with following grade of concrete including boring, under reming in all sorts of soils filling the bulbs and stem with C.C. mix (excluding steel reinforcement) as per detailed specification and drawings etc. complete. | | | | | | | | |
| | | ii) 37.50 cm diameter | | | | | | | | |
| | | M-25 grade concrete | | | | | | | | |
| | | Spec. No. : I.S.2911-Part I 1964 Clause No. 6.1.5. | | | | | | | | |
| | | For footing (Length up to 100 m. 3m c/c) | 36 | 4.5 | | | 162.00 | | | |
| | | | | | | Total | 162.00 | | | |
| | | | | | | Say | 165.00 | Rmt | 1601.00 | 264165.00 |
| 2 | IBDAI /P-1 | Excavation for foundation in earth, soils of all types, sand gravel and soft murum, hard murum including removing the excavated material upto a distance of 50 m. beyond the building area and stacking or spreading as directed, dewatering, preparing the bed for the foundation and necessary back filling, ramming, watering, including shoring and strutting as necessary complete. Spec No. BDA. 1/Page No. 259. A) Lift up to 1.5m | | | | | | | | |
| | | Excavation for trench on ground level below plinth beam | 1 | 100 | 0.4 | 0.15 | 6.00 | | | |
| | | Excavation for pile cap | 36 | 0.75 | 0.75 | 0.45 | 9.11 | | | |
| | | | | | | Total | 15.11 | | | |
| | | | | | | Say | 20.00 | Cu.m | 113.00 | 2260.00 |

| Item No. | CSR Item | Description of Items | No. | L | B | H/D | Qty | Unit | Rate | Amount |
|----------|--------------|---|-----|------|------|-------|-------|-------|---------|----------|
| 3 | 4BDE1/P-10 | Providing and laying in situ, cement concrete in 1:2:4 of trap/granite/quartzite/geniess metal for foundation and bedding including bailing out water, plywood/steel formwork, compacting, finishing uneven and honeycombed surface curing etc. complete. The Cement Mortar 1:3 plaster is considered for rendering uneven and honeycombed surface only. Newly laid concrete shall be covered by gunny bag, plastic, tarpaulin etc. Spec No. :Bd. E.1/Page No. 287/I.S.456 (2000) | | | | | | | | |
| | | Below pile cap | 36 | 0.75 | 0.75 | 0.1 | 2.03 | | | |
| | | For trench below plinth beam | 1 | 100 | 0.4 | 0.3 | 12.00 | | | |
| | | | | | | Total | 14.03 | | | |
| | | | | | | Say | 20.00 | Cu.m. | 4437.00 | 88740.00 |
| 4 | 1BDF1 A/P-13 | Providing and casting in situ cement concrete of required grade of trap / granite / quartzite / geniess metal for R.C.C. pile capes as per detailed design and drawings including bailing out water , steel centering, plywood / steel formwork, compacting, finishing uneven and honeycombed surface with C.M. 1:3 of sufficient minimum thickness to give smooth and even surface and curing etc. complete.(excluding reinforcement, including cover block). The cement Mortar 1:3 Plaster is considered for rendering uneven and honeycombed surface only. Newly laid concrete shall be covered by gunny bag; plastic; tarpaulin etc. (Wooden centring will not be allowed) | | | | | | | | |
| | | b) For C.C. M-25 | | | | | | | | |
| | | Spec. No.: BD. F. 7 / Page No. 297 / I.S. 456 (2000) | | | | | | | | |
| | | For Pile cap | 36 | 0.75 | 0.75 | 0.5 | 10.13 | | | |
| | | | | | | Say | 15.00 | Cu.m. | 5323.00 | 79845.00 |

| Item No. | CSR Item | Description of Items | No. | L | B | H/D | Qty | Unit | Rate | Amount |
|----------|-----------|---|-----|------|------|-----|------|-------|---------|----------|
| 5 | 3BDF/P-14 | Providing and casting in situ, cement concrete M-25 grade of trap/granite/quartzite/gneiss metal for R.C.C. Column as per detailed design and drawings or as directed, including steel centring, plywood/steel formwork, compaction, finishing uneven and honeycombed surface with C.M. 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening the surface if special finish is to be provided and curing etc. complete. including use of plasticizer wherever necessary as directed by Engineer (Cost of plasticizer is included in item) (Excluding reinforcement) The cement Mortar 1:3 plaster is considered for rendering uneven and honeycombed surface only. Newly laid concrete shall be covered by gunny bag plastic, tarpaulin etc. (Wooden centring will be not allowed). Spec No. Bd.F.5/Page No. 300/I.S.456(2000) | | | | | | | | |
| | | For column above pile cap | 36 | 0.23 | 0.30 | 2.1 | 5.22 | | | |
| | | | | | | Say | 8.00 | Cu.m. | 6033.00 | 48264.00 |
| 6 | 3BDF/P-1 | Providing and casting in situ, cement concrete M-25 grade of trap/granite/quartzite/gneiss metal for R.C.C. Beams and lintels as per detailed design and drawings or as directed, including steel centring, plywood/steel formwork steel props, compaction, finishing uneven and honeycombed surface with C.M 1:3 of sufficient minimum thickness to give a smooth and even surface or roughening if special finish is to be provided and curing etc. complete. including use of plasticizer wherever necessary as directed by Engineer-in-charge (Cost of plasticizer is included in item) (Excluding reinforcement). The cement Mortar 1:3 plaster is considered for rendering uneven and honeycombed surface only. Newly laid concrete shall be covered by gunny bag plastic, tarpaulin etc. (Wooden centring will be not allowed)(including slope beam) Spec No. Bd.F. 6/Page No. 300/I.S. 456(2000) | | | | | | | | |

| Item No. | CSR Item | Description of Items | No. | L | B | H/D | Qty | Unit | Rate | Amount |
|----------|------------|--|------|--------|--------|-------|----------|-------|----------|------------|
| | | For Plinth Beam above pile cap | 1 | 100.00 | 0.23 | 0.3 | 6.90 | | | |
| | | For beam on top level | 1 | 100.00 | 0.23 | 0.3 | 6.90 | | | |
| | | | | | | Total | 13.80 | | | |
| | | | | | | Say | 15.00 | Cu.m. | 6537.00 | 98055.00 |
| 7 | 20BDF/P-23 | Providing and fixing in position after reinforcement of various diameter for R.C.C. pile caps, footing, foundation, slabs, beams, and column, staircase, coping fins, etc. as per detailed design and drawing and schedules including cutting, bending hooking the bars, binding with wires or tack welding and supporting as required completed. (For T.M.T Steel Bars) Spec No. Bd.F. 17/Page No. 306 | | | | | | | | |
| | | Total qty of R.C.C. = 203 Cu.m | | 203.00 | 110.00 | | 22330.00 | Kg | | |
| | | Qty of reinforcement = 203 Cu.m X 110 Kg = 22330.00 kg | | | | Total | 22.33 | | | |
| | | | | | | Say | 23.00 | M.T | 57414.00 | 1320522.00 |
| 8 | IBDG1/P-24 | Providing Fly ash lime brick masonry brick conforming to I.S. 12894:1990 of size 19 cm x9 cm x 9 cm) in cement mortar 1:6 in foundation and plinth of inner walls/in plinth of external walls including bailing out water, striking joints on unexposed faces, racking out joints on exposed face and watering complete. Spec No. Bd. G. 1 / Page No. 313 | | | | | | | | |
| | | Above P.C.C to bottom level of plinth beam | 1 | 100.00 | 0.23 | 0.35 | 8.05 | | | |
| | | | | | | Total | 8.05 | | | |
| | | | | | | Say | 9.00 | Cu.m. | 3838.00 | 34542.00 |
| 9 | 3/P-28 | Providing Fly ash lime Brick masonry (Bricks conforming to I.S. 12894 : 1990 and of size 19 cm x 9 cm x 9 cm) in cement mortar 1:6 in super structure including striking joints, racking out joints watering and scaffolding complete. | | | | | | | | |
| | | Spec No. Bd. G. 5 / Page No. 315 | | | | | | | | |
| | | Above plinth beam to lintel bottom | 1.00 | 89.00 | 0.23 | 2.10 | 42.99 | | | |
| | | | | | | Say | 45.00 | Cu.m. | 607.00 | 27315.00 |

| Item No. | CSR Item | Description of Items | No. | L | B | H/D | Qty | Unit | Rate | Amount |
|----------|----------------------|--|-----|--------|------|-------|--------------------------------------|------|--------|------------|
| 10 | 08BDL 4A/P- 40 | Providing external/internal cement plaster 20mm thick in a single coat in cement mortar 1:4 without neeru finish to concrete, brick surfaces in all positions including scaffolding and curing, etc, complete. | | | | | | | | |
| | | For top of lintel beam | 1 | 100.00 | 0.23 | | 23.00 | | | |
| | | For top of pile cap | 36 | 0.75 | 0.75 | | 20.25 | | | |
| | | for sides of pile cap | 72 | 0.75 | | 0.50 | 27.00 | | | |
| | | For wall | 2 | 100 | | 3.20 | 640.00 | | | |
| | | | | | | Total | 710.25 | | | |
| | | | | | | Say | 715.00 | Sq.m | 214.00 | 153010.00 |
| 11 | 29V73 | Providing and applying exterior emulsion water based water proof cement paint of approved manufacture and of approved colour and shade to exterior old/new surfaces in two coats including scaffolding preparing the surface to receive paint etc. complete. Spec. No.: As directed by Engineer-in-charge. | | | | | | | | |
| | | Qty.same as a plaster qty. | 1 | | | | 715.00 | Sq.m | 85.05 | 60810.75 |
| | | | | | | | | | Total | 2177528.75 |
| | | | | | | | Add 1 % for Labour welfare cess | | | 21775.29 |
| | | | | | | | Total Amount | | | 2199304.04 |
| | | | | | | | Add Contingencies @ 5% | | | 109965.20 |
| | | | | | | | Total Amount including contingencies | | | 2309269.24 |