

**AMU-Management Complex Project**  
**Department of Business Administration**  
**Faculty of Management Studies and Research, AMU Aligarh**

Minutes of the 4<sup>th</sup> meeting of Executive Committee of AMU's Management Complex Project held on 22<sup>nd</sup> June, 2012 at 11:30 AM in the Conference Room, Department of Business Administration.

Members present:

Mr. Ameer Ahmad (in the Chair)  
Mr. Dhanjit Vadra  
Prof. Mohammad Khalid Azam, Dean & Chaiman  
Prof. Javaid Akhtar  
Mr. Feeroz Khan, University Engineer  
Mr. Nurus Salam, Deputy Finance Officer (Representing Finance Officer, AMU)  
Mr. Damodar Katti DGBIM (Special Invitee)  
Mr. Mahesh C. Sikender, DGBIM (Special Invitee)  
Prof. Parvaiz Talib, OSD (NMC), Member Secretary

Leave of absence was granted to:

Mr. HasanKabeer  
Mr. A.G. Danish  
Mr. ManojYadav

The following businesses were transacted:

OSD (NMC) raised following concerns regarding the building design proposed by the DGBIM:

- 1) The building design is *highly energy intensive*. One reason for the same could be that the building envelope's optimization has not been done adequately. Therefore the building may gain heat because of that. Moreover, the entire building seems to have been designed as a centrally air conditioned building. Because of that also the estimated power consumption is extremely high. It was noted that the total load estimated on power is almost 1000 KW(estimated provided by DGBIM). It means that roughly 9000 units shall be consumed per day. Assuming a demand load factor even at 70%, this shall be an extremely high consumption load. In Aligarh kind of environment where power backup is to be provided because of erratic power supply, this would mean that a generator backup of approximately 500 KV is to be provided. If this generator works for on an average four hours per day, roughly 150 liter of diesel would be consumed per day. This is a very high running cost. Further, it is doubtful whether Electricity Department would agree to such a heavy consumption load. It was pointed out that Committee's brief right from the beginning was that only selected part of the building may have Air conditioning and in rest of the parts, the normal temperature within the rooms may be maintained at a

comfortable level (25<sup>0</sup> to 30<sup>0</sup> C) through the orientation of the building and air circulation. It is therefore requested that an attempt may be made for low energy cooling solution instead of centralized HVAC.

**Representative of DGBIM** explained why the building is so energy intensive. DGBIM pointed out that they have incorporated for all the requirements, which were suggested the faculty members and others in various meetings held between AMU & DGBIM. DGBIM highlighted that requirement's like; each of the students to have separate Power & Data Point, the Corridors, Class Rooms and Lecture Halls to have AC etc etc; which resulted in high Power requirements. It was pointed out that the building is designed very uniquely and the main feature of the building is the shape. It was explained during first proposal presentation that the building is designed keeping in mind the Vision of the Faculty Division of AMU and because of which an EYE shape is given. They pointed out that the building is oriented based on the Rotation pattern of the sun and how the shape will envelope the building during the course of a day. Further they pointed out that for checking exposure from the direct sun, the external walls are to be Insulated block walls with Thermal barrier (extruded Polystyrene). This concept helps in keeping the Temperature under control and shall optimize the AC design parameters. Moreover, claddings are proposed to be fixed on the external part of the building through mechanical means. This again helps in creating a very thin air gap between the wall and the external façade, which also acts as Thermal barrier. They also pointed out that Central Atrium is landscaped to give enough cool air including the cross ventilation within the building. The Central Atrium shall provide natural light and ventilation within the living areas, Foyers and main entrance.

**Action :** The DGBIM was requested to curtail luxury provisions to required minimum. Accordingly, DGBIM to rework the design and revise all the drawings.

- 2) The next concern was raised in the context of the curved designs. This curved design has been followed in Canaught Place (CP, New Delhi) as well. However, the functional spaces inside are all either square or rectangular. This design ensures efficient utilization of spaces and enables use of standardized furniture. The present design may leave negative spaces which will remain unutilized because of dysfunctional corners and angles. This may also pose serious operational challenges during building construction phase and may result in lot of wastage of both labor and material during construction stage. The DGBIM may explore the options of maintaining the outside orientation of curved design but changing the inside to a more functional square and straight form. Another minor point was raised in respect of the column size which is presently designed on 230 mm. The minimum statutory requirement is of column size of 300 mm. This may be looked into. Moreover all measurements may be in metric system.

**DGBIM** explained that the curved design helps in creating class rooms and Lecture Halls in the form of Auditorium seating (this was discussed with Prof Abad Ahamed during

April 2011). Further they pointed out that a careful study of the floor plans shall bring forth this point that DGBIM have specified the Furniture layouts; the positioning of the furniture to ensure efficient utilization of space, including the Dean's office. They also felt confident that no serious issues shall arise in constructing such a building with curved design and therefore requested the committee not to suggest change in the shape of the building at this stage.

**Action:** DGBIM shall however revisit the design and shall work towards the changes as requested by committee with minimum changes in the current shape.

- 3) The OSD (NMC) raised the third concern that the design along with associated facilities is expected to cost Rs. 20 crores. This is higher than expected. The total cost of the first phase may be limited to 10 crores only. DGBIM was requested to work out the cost of the shell and core of this building. The BOQ of the same may be worked out by them and then the other cost component may be specified separately.

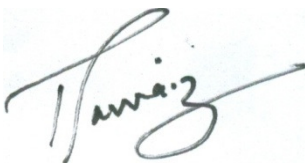
DGBIM's representative agreed to rework on points as discussed during the meeting. DGBIM was advised to resort to **curtailment** and **phasing** to bring the overall cost down. DGC to rework on the revised requirements of and make necessary changes to the design drawings

A brief of the design changes proposed is as under:

- \* **External Cladding :** The front facing Red brick cladding to be retained. Entrance side white stone cladding to be retained. From disable ramp onwards complete periphery of the external surface of the main building - Cladding to be removed. Finishing for the external walls to be of textured painting.
- \* **Lifts:** Two lifts to be removed from the main building.
- \* **Faculty toilets :** Faculty to use common toilet. Only Dean and Chairman's Chambers shall have attached toilet
- \* **Corridor AC :** All corridor Air Conditioning to be deleted. Cross ventilation to be provided, way of providing Windows, Louves etc.
- \* **Class room AC :** All Class rooms to be provided with natural ventilation. Air Conditioning to be deleted from these class rooms. Electrical power provision for Air Conditioning (at a later date) to be considered. Lecture hall will have Air Conditioning as a basic.
- \* **MDP Block :** MDP Block building to be considered in phase 2. Due to phasing of MDP block, chairman block / rooms to be used as MDP block. Internal Brick partitions to be deleted at this stage and partitions w.r.t particle board to be considered to accommodate, three MDP classrooms, one MDP office and one Incubation center.

- \* **Amphitheatre** : Amphitheatre to be built in phases. In first phase it will be shell & core type. Electrical power provision for future phases to be considered from beginning.
- \* **LC System** : Bare minimum WIFI requirement to be considered with formation of zoning system within the campus. CCTV and access to be kept bare minimum to cover the entrance lobby, libraries and other such key places.
- \* **Levels** : Semi basement level for MDP block need to be re-looked at with respect to the levels related to Cafeteria and Amphitheatre.
- \* **Green Room** : Provide toilets for green rooms in Multi-purpose hall
- \* **Frontage** : If possible more set backs to be provided at the front to make the entrance much more grandeur.
- \* **Vertical Garden** : Provide Vertical landscaping near the private property create a natural curtain, sort of drapers etc. This is necessary because of phased development of MDP block.
- \* **Riser Dimensions** Check the risers for the staircase and also in the lecture halls for the dimensions. Max it has to be 150 mm.
- \* **Arches** : In line with request of present AMU's VC the entire front of the building may reflect Indo Islamic features. Accordingly DGBIM to re-look at the design of the windows and converting their into Arches, matching with the front entrance arches.

DGBIM was requested to revise the design and submit afresh the same at the earliest. Meeting came to an end with vote of thanks by the chair



Prof. Parvaiz Talib  
OSD (AMU Management Complex Project)  
Member Secretary, Executive Committee