

Chidubem

Mechatronics

18/ENG05/037

ENG 284

Alfa belgore rehabilitation project

Scope of work

Project name: Project belgore rehabilitate.

Project scope statement: The project that would be embarked is for the transformation of the multi-purpose hall into a more satisfactory that would be more enjoyable and pleasurable to the needs of the users.

Background to the project: As brought to notice by the clients (Afe babalola university), the hall has ceased to meet up to the requirements of the school as attended, the institution has requested that a corrective measure be employed to the building: An increase in size capacity of building, introducing of more effective pipelines, redistribution of the lighting system, adding of smart systems to the building for smoother operation of events*. The listed are the demands that are being placed, after much review, the project is ready to be embarked on. As the other professionals that would be embarking on the project have already been contacted about the required proceeds.

Precautions: When demolition of the alfa belgore hall starts a lot of parts and components of the building will be coming down crumbling and due to the close proximity of the hall to residential blocks, class room blocks which comprise of a lot of people so for the safety of these individuals and the continuity of school activities, the hall will need to be securely fenced, also students would not to be allowed to come near the hall maintain at least a twenty-five feet distance from the project site, all properties and equipments in the building would need to be removed when the project commences to avoid destruction of property.

Major plan activities: Nwosu consulting limited will set up the schedule of requirements as well as take on the responsibility of supervising the project on the site.

The following tasks will be organized and carried out by Nwosu consulting limited

- Carry a out a topographical survey of the site, this would be to ensure how to go about construction and also the type of materials can be used.
- Draft a well precise and detailed designs and specifications.
- Generate a bill of engineering measurement and evaluation(BEME)
The upgrading of the building is more like constructing a new building, a lot is going to be put in that will cause and show the obvious difference from how the hall was initially.

Here is a list of operations that would be carried out on the building

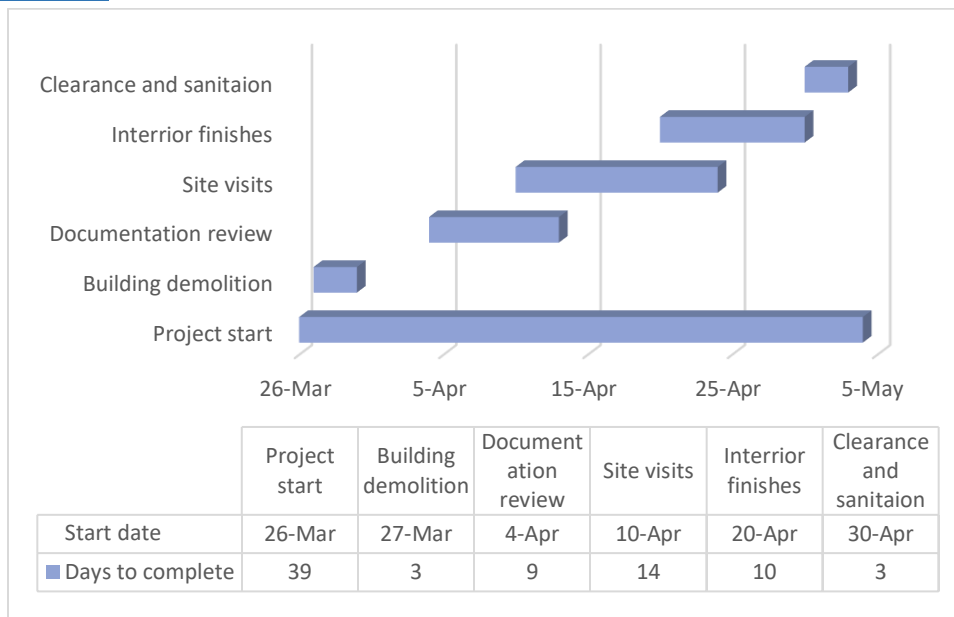
- Removal of the rooves of the building
- Demolition of the building
- Plastering, concrete and block works
- Doors, windows and metal works
- Plumbing systems
- Mechanical systems
- Electrical systems
- Smart systems
- Ventilation works

Timeline: The project is going to commence on the 26th of March and is set to end by the 3rd of May. During this time duration a series of workers from various professions would all be coming to the site to add their specialties to the development of the upgraded hall. When the commencing date arrives they would be a lot of demolitions going on, so they would be some safety precautions that would need to be observed.

Schedule of activities

- Project commencement-26th March
- Building demolition-27th March
- Documentation review- 4th April
- Site visits-10th April for 14 days
- Interior finishes- 20th April
- Clearance and sanitation- 30th April

Gantt chart



A variety of individuals of different skills and profession would be on board for the successful delivery of this project, heading these individuals is the lead consultant Engr Nwosu Paul, the following will make up the human resources of the project otherwise known as the project team:

- Civil Engineers: They perform engineering duties in planning, designing and overseeing the construction and maintenance of building structures.
- Mechanical Engineers: They design, operate and maintain mechanical systems.

- Electrical Engineers: These set of people will run the wiring system of the building and design and develop other electrical devices.
- Architects: They are responsible for the design of the building, they are the brains behind how the building is going to look like.
- Manual laborers: These set of people are very essential to the project, as they are the muscles behind the moving of building parts such as blocks.
- Computer Engineers These set of people are responsible for the design and set up of smart systems.
- Structural Engineers: They design, assess ensure the structures of the building are reliable and don't come down crumbling.

The site was secured not out of any context reason but because that is were the Alfa belgore hall was initially established and the management of the institution did not tell us to carry out the project anywhere else, but the location of the Alfa belgore is a good one because of it's close proximity to class blocks which make it very convenient for both lecturers and students to be able to go for surprise or emergency meetings at any time when called for.

BILL OF ENGINEERING MEASUREMENT AND EVALUATION (BEME) OF ALFA BELGORE REHABILITATION PROJECT

Total estimated cost(TEC)= ₦ 100,000,000

ITEM	Amount ₦			
Consultancy fee(15%)	15,0000,00			
Transportation(12%)	12,0000,00			
Miscellaneous(10%)	10,0000,00			
Site preparation and clearance(5%)	5,0000,00			
Profit(20%)	20,0000,00			
Provision of blocks	19,0000,00			
Provision of roofing materials	19,0000,00			
TOTAL	100,000,000			

Payment schedule for the Alfa belgore hall rehabilitation project

Estimated completion date	Construction breakdown	Draw(%TEC)
26 th March	Mobilization	30%
15 th April	50% completion	30%
5 th May	Completion	40%
5 th July	Defect liability period	10%

Bill of Engineering Measurement and Evaluation(BEME): This is a tool used before, during and post-construction to assess and value the cost of construction works.

Deficit liability period: This is a period of time allowing practical completion during which a contractor remains liable under building contract for dealing with any defects which become apparent.

Project life cycle: This is the duration of time from which the project commenced to the time that it ended.

Lead consultant: The lead consultant directs the work of the consultant team and is the main point of contact for communication between the client and the consultant team.

Environmental impact assessment: This is the assessment of the environmental consequences of a plan, policy, program, or actual projects prior to the decision to move forward with the proposed action