NAME: ORUMWENSE OSAYAMEN EDNA

MATRIC NUMBER: 18/ENG04/068

DEPARTMENT: ELECTRICAL /ELECTRONICS ENGINEERING

COURSE TITLE: ENGINEER IN SOCIETY

COURSE CODE: ENG 284

THE ALFA BELGORE REHABILITATION PROJECT ANALYSIS

Scope of work in order of occurrence:

The Ongoing renovation of the Alpha Belgore hall in Afe babalola university, ado-ekiti is a necessary one, There are certain reasons behind the renovation of a building, And those reasons are:

- To increase the comfort and enjoyment of the students: The number of students
 increase rapidly each session, and hence the hall needs to be expanded in order to
 maintain comfort, both for the student's and the staff.
- For safety purposes
- To improve the value and standard
- To upgrade the function
- To increase the efficiency,etc.

We will begin the project on the 31st of January, 2020. This project involves different processes, the process along side with their explanations are listed below:

THE CLEARING

At this stage which is the first stage the building would be evacuated for work to beginning on.

The building would be cleared and all the furniture would be taken out and moved to a secured and safe place. Facilities would also be removed and safely stored in the ware house till after the project. Businesses which where there or close (e.g. ICT centre and bookshop) would be located to another site temporarily, so they can continue to carry out their activities while their permanent site would still be under construction.

The clearing stage is estimated to be completed in 21days (3 weeks).

SECURING THE SITE

At this stage after evacuation and removal of furniture and other important facilities and vacation of other businesses around that premises, the stage would be commenced immediately.

At this stage a barrier made of roofing sheets would be used to secure the site. This is necessary so as to ensure no one would be able to enter and leave the site at will. The only set of people with access to the site would be authorised personnel, official personnel, workers and official members of the school board (owners of the project) to inspect. This would restrict access to the site for students and those who are not mentioned above. This would be in order to prevent unnecessary accidents and limit to movement on site and also secure the equipments used on site as no one would be allowed access once the gate is locked and work for the day has finished.

It would take an estimated number of 2 weeks to complete.

REMODELLING Works

This is when the main work begins; we will start by removing the roof of the building. After that we will then beginning other re modelling work on the building. The main aim for this work is to expand the building so it can accommodate more people for social events, programs and other activities the schools comes up with. At the end of the project, the building is going to have more space, more facilities and more modern day touch in other to represent they school name better.

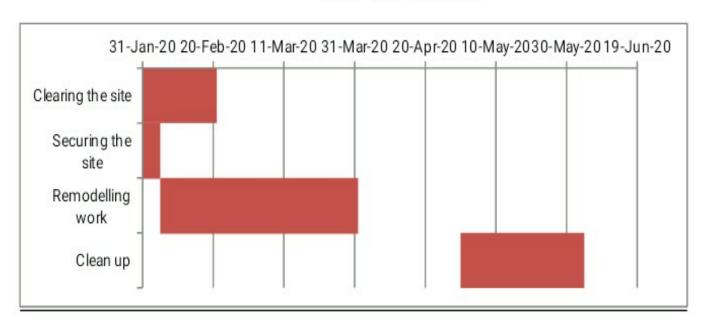
The estimated duration of this stage is 2-3 months (6-8 weeks).

Clean up

This is the final stage of the project, where all the materials, the tools, equipments used and the heavy duty machines would be returned. The roofing sheets would also be cleared and also the left over material. So that the place would be okay and ready for use and if the need be; to be

re-commissioned.

GNATT CHART



The operation would take an estimated amount of 4-5 weeks.

HUMAN RESOURCES NEEDED AND THE PROJECT TEAM

For the project to be successful and to be accomplished within the time given, a workforce of 30-40 men would be needed for the whole project if the project is to follow the estimated time given to it which is approximately 126 days to complete.

The project team would consist of following professional members;

Quantity surveyors who will ensure that all the materials used for the project are of good quality and can used and also to ensure that the materials are in good shape

An electrical engineer that will ensure that all the electrical connections are correct and the electrical Appliances are installed correctly.

An Architect who will design the new structure.

A Structural Engineer that will ensure that the new structure can hold and can live up to its expectation.

Water works engineer who will ensure that the water facilities are in good order, especially in the toilet.

The will also be a group of consultants who will advice the best way that the project will move.

WHY WAS THE SITE SECURED?

- Regular access by a wide range of people
- Vandalism occurs on many construction sites
- Physical change throughout the building
- Attack on site workers or people around the environment
- To avoid the illegal claiming of valuable materials (stealing)
- To avoid accidents.

BILL OF ENGINEERING MEASUREMENT AND EVALUATION (BEME)

ITEM NO	DESCRIPTON	QUANTITY	UNIT COST	TOTAL COST	
1	Roofing sheet	100	N 1,400.00	₦ 140,000.00	
2	cement bags	500	₦ 180,000.00	₦ 90,000,000.00	
3	Trucks of gravel	12	₦ 35,000.00	₦ 420,000.00	
4	Trucks of sand	13	₩ 45,000.00	₩ 585,000.00	
5	Glass which will be brought as 12x12	10	₩ 50,000.00	N 500,000.00	
6	Light bulbs fittings	40	₦ 8,000.00	₦ 320,000.00	
7	Light bulbs	40	N 2,500.00	₦ 100,000.00	

8	Copper wires	60	₩	2,000.00	₩	120,000.00
9	Projector	3	₩	150,000.00	₩	450,000.00
10	T.V	4	₩	100,000.00	₩	400,000.00
11	Pipes of different sizes	46	₩	80,000.00	₩	3,680,000.00
12	Window	13	₩	450,000.00	₩	5,850,000.00
13	CCTV cameras for security	12	₩	25,000.00	₩	300,000.00
14	CCTV system	1	₩	50,000.00	₩	50,000.00
15	Total estimated cost					102,915,000.00
16	Miscellaneous (10%)					10,291,500.00
17	Consultancy Fee (15%)					15,437,250.00
18	Site preparations and clearing after completion (5%)					5,145,750.00
19	Transportation (12%)					12,349,800.00
20	Profit (20%)					20,583,000.00

PAYMENT SCHEDULE

30% of Total Estimated cost for Mobilisation

30 % of Total Estimated cost

50% of Total Estimated cost for completion

Finally payment of 40% of Total Estimated cost at completion and hand over

Retain 10% of Total Estimated cost for a 6 months defect liability period.

Bill of Engineering Measurement and Evaluation (BEME)

For all engineering works, it is required to know beforehand the probable cost of construction known as estimated cost. Bill of Engineering Measurement and Evaluation (BEME) also referred to as 'Bill'; is a tool used before, during and post-construction to assess and value the cost of construction works. This includes the cost of materials, labor, equipment and all/any other resource(s) required for the success of any construction endeavor based on a pre-determined scope and specification.

Defect Liability Period

The defects liability period (or 'DLP') is a fixed period of time, starting from

the date of practical completion, during which the contractor has an express contractual right to return to the site to rectify defects.

Lead Consultant

The lead consultant is the consultant that directs the work of the consultant team and is the main point of contact for communication between the client and the consultant team, except for on significant design issues where the lead designer may become the main point of contact.

Project Life Cycle

A project life cycle is the sequence of phases that a project goes through from its initiation to its closure. The number and sequence of the cycle are determined by the management and various other factors like needs of the organization involved in the project, the nature of the project, and its area of application. The phases have a definite start, end, and control point and are constrained by time. The project lifecycle can be defined and modified as per the needs and aspects of the organization. Even though every project has a definite start and end, the particular objectives, deliverables, and activities vary widely. The lifecycle provides the basic foundation of the actions that has to be performed in the project, irrespective of the specific work involved.

Environment Impact Assessment (EIA)

The term "environmental impact assessment" (EIA) is usually used when applied to actual projects by individuals or companies and the term "strategic environmental assessment" (SEA) applies to policies, plans and programmes most often proposed by organs of state .It is a tool of environmental management forming a part of project approval and decision-making. Environmental assessments may be governed by rules of administrative procedure regarding public participation and documentation of decision making, and may be subject to judicial review.