CHARLES-AMACHREE PRINCE HIBIOKPOM

ELECTRIAL EGINEERING

18/ENG04/024

ENGINEERS IN SOCIETY

**PROJECT TITLE:** CONSTRUCTION OF HOUSING SPACE, WIRING AND INSTALLATION OF ELECTRICAL COMPONENTS

**SCOPE OF WORK:**

Objective: the complete rehabilitation of alfa belgore hall under the directive of afe babalola university management

Deliverables:

Complete rehabilitation and upgrade of the structure. The addition of an extra floor, roofing and enhancement of the building

TIMELINE:

|  |  |  |
| --- | --- | --- |
| TASKS  | START DATE | DAYS OF COMPLETION |
| project approval | 27-Mar | 5 |
| inspection of property | 1-Apr | 3 |
| removal of existing roof | 4-Apr | 15 |
| barricading of site | 19-Apr | 5 |
| insertion of pillars | 24-Apr | 20 |
| construction of stairs | 14-May | 30 |
| decking of building | 13-Jun | 30 |
| building of first floor | 13-Jul | 25 |
| insertion of roof structure | 7-Aug | 15 |
| conduit wiring of the building | 22-Aug | 7 |
| plastering the walls | 29-Aug | 8 |
| insertion of electrical components | 6-Sep | 5 |
| painting | 11-Sep | 7 |
| commissioning | 18-Sep | 1 |

**Milestones:**

* Permit procurement
* Roofing
* Commissioning

**GNATT CHART**

**HUMAN RESOURCES**

* Architect (lead consultant): for designing and supervision of project layout
* Material engineer: for the development and testing of process materials to be used for the project
* Electrical engineer: for the development, designing, testing and management of manufactured components to be used during the project’s life cycle
* Civil engineers: for the design, fabrication, supply and installation of structures such as beams, pillars e.t.c
* Labourers: for the preliminary work that involves little amount of specialization, the tedious and manual labour supervised by he architect or personnel in charge
* Technicians: they are involved in the installation of some equipment or components used
* Project manager: for the overall ensuring that the entire project is carried out according to plan, and to ensure that the proper documentation is done to avoid legal issues
* Carpenters: for the construction of roofing structure

**WHY WAS THE SITE SECURED:**

An engineering or construction sites should always be secure to avoid injury, accident or death of the workers or passers by. In the case of alfa belgore hall the securing was done for a number of reasons

* Due to the task of deconstruction or partial demolition of the hall it was done so by standers w9uldnt wander into the site and get hit by falling debris
* The equipment and materials used for the construction don’t come by cheap and they are susceptible to theft and unwanted damage, so to prevent that the site is secured
* To prevent unwanted and unauthorized personnel from entering the site

BILL OF ENGINEERING MEASUREMENT AND EVALUATION (BEME)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ITEM NO | DESCRIPTON | QUANTITY |  UNIT COST  |  TOTAL COST  |
| 1 | Roofing sheet | 100 |  ₦ 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  |  ₦ 500,000.00  |
| 6 | Light bulbs fittings | 40 |  ₦ 8,000.00  |  ₦ 320,000.00  |
| 7 | Light bulbs | 40 |  ₦ 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.

**KEY WORDS**

BEME

: This is the Bill Of Engineering Measurement and Evaluation

DEFECTS LIABILITY PERIOD

: This is aperiod of time folloeung practical completion during which a contractor remains liablr under the building contract for dealing with any defects which become apparent. This is uaually for a period of 6 to 12 month depending ion the project

LEAD CONSULTANT:

 The [lead consultant](https://www.designingbuildings.co.uk/wiki/Lead_consultant) is the [consultant](https://www.designingbuildings.co.uk/wiki/Consultants) that directs the [work](https://www.designingbuildings.co.uk/wiki/Works) of the [consultant team](https://www.designingbuildings.co.uk/wiki/Consultant_team) and is the main [point](https://www.designingbuildings.co.uk/wiki/Points) of contact for communication between the [client](https://www.designingbuildings.co.uk/wiki/Clients) and the [consultant team](https://www.designingbuildings.co.uk/wiki/Consultant_team), except for on significant [design](https://www.designingbuildings.co.uk/wiki/Design) issues where the [lead designer](https://www.designingbuildings.co.uk/wiki/Lead_designer) may become the main [point](https://www.designingbuildings.co.uk/wiki/Points) 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](https://en.wikipedia.org/wiki/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](https://en.wikipedia.org/wiki/Administrative_law) regarding public participation and documentation of decision making, and may be subject to judicial review.

 THIS PROJECT IS TO BE CARRED OUT BY S.P.P.D AMAK’S ENTREPRISE AND IS TO BE SUPERVISED BY ***: CHARL ES-AMACHREE PRINCE***

*SIGN MANAGEMENT:*