NAME: OCHIJENU RAMAT ENEMAKU

MAT NO: 18/ENG05/041

DET: MECHATRONICS ENG

COURSE CODE: ENG 284

COURSE TITLE: THE ENGINEER IN SOCIETY

PROJECT NAME: ALFA BELGORE REHABILITATION ROJECT

PROJECT SCOPE STATEMENT:

 The purpose of the rehabilitation is expand the space of the hall to accommodate more population for the convenient of people during programs.

INTRODUCTION/BACKGROUND TO THE PROJECT

 The capacity of the Alfa belgore hall is less than 2000 sittings. Due to this fact that the hall cannot accommodate more than 2000 people, the need for enlargement arouse because of the fact that when programs like convocation, matriculation and many more comes up it will be able to accommodate them with any inconvenient. We receive the go ahead on January 26, 2020.

BUNSINESS CASE

 Expansion of hall in order to accommodate more people.

 DELIVERABLES

1. Air conditioning, landscape, finish work, including inside and exterior doors, interior cabinetry and cabinetry hardware, toilets fixtures and flooring will selected by contractor grade one quality option.
2. Lighting fixture.

MILESTONES

 The project will require 67,900,000 naira and the project must be achieve by December 31,2020. Progress milestones associate with the project are as follows:

1. Permit approved ­­­­­- January 26,2020
2. Selection of project team- January 28,2020
3. Architectural drawings complete and approved- January 28,2020
4. Project started- February 1,2020
5. Lot preparation and clearing- February 1,2020
6. Foundation excavation complete- February 15,2020
7. Footings poured and set – February 20,2020
8. Foundation poured, block construction complete, foundation set- February 22,2020
9. Interior wiring – February 29,2020
10. Exterior wiring – march 3,2020
11. HVAC(Heating , Ventilation and Air conditioning) completed – march 6,2020
12. Interior plumbing complete – march 9,2020
13. Exterior plumbing complete – march 12,2020
14. Landscape and parking area complete – march 16,2020
15. Exterior finish complete - march 31, 2020
16. Interior finish complete – April 6, 2020
17. Site visit – April 21 , 2020
18. Certificate of occupancy granted – April 25, 2020
19. Acceptance review and turnover complete – may 5, 2020



TECHANICAL REQUIREMENTS

1. Home must meet local building codes.
2. All windows and doors must pass NFRC class 40 energy ratings
3. Exterior wall insulation must meet an “A” factor of 21.
4. Ceiling insulation must meet an “R” factor of 38.
5. Parking lot should contain more than 200 cars.
6. Structure must pass seismic stability codes.

ROJECT TEAM

1. Architect-lead consultant
2. Mechanical engineer
3. Civil engineer
4. Contractor/laborers
5. Carpenter
6. Electrician
7. Plumber
8. Painter
9. Safety engineers
10. Energy engineers
11. Structural engineers
12. Technology engineers
13. Quantity surveyor

 The site was secured that is restriction of only individual not carrying out the project into the site or keeping the number of site entrances and exits to a minimum. This is done because of the following reasons:

1. To prevent accidents. Take from example, prevention of following object hitting passer-by or prevention of sharp object injuring passer-by.
2. To prevent criminals from stealing tools from the site.

Other ways of securing a site is by;

1. Provide site safety.
2. Protect site assets by keeping the tools after work in a safe place.
3. Providing a monitored and controlled site evacuation.
4. Surveillance of the people on site.

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| SERIAL NUMBER | TASKS | MODULES | PERCENTAGE ALLOCATED | AMOUNT(NAIRA) |
|  1 | MISCELLANEOUS | a. feeding for workerb. fencingc. extra wood |   100 |  2,000,000 |
|  2 | TRANSPORTATION | a. transportation of toolsb. transportation of electrical equipment like air condition, light build and so farc. importation of tec |  12  |  1,000,000 |
|  3 | CONSULTANCY FEE | a.chief consultant b.surveyorc.electrical testing d.government |   15 |   20,000,000 |
|  4 | SITE PREPARATION AND CLEARING AFTER CONSTRUCTION | a.sweepingb.interlocking.c.asbestors fenced.packing of sande. felling of trees |  5 |  4,000,000 |
|  5 | PROFIT |  |  20 | 16,000,000 |
|  6 | OTHER EXPENSES | Testing and inspection | 38 | 10,000,000 |
|  |  |  | TOTAL | 35,000,000 |

|  |  |  |  |
| --- | --- | --- | --- |
| s/n | WORK DESCRIPTION | PERCENTAGE ALLOCATED | AMOUNT(NAIRA) |
|  1 | MOBLIZATIONa.the commencement of projectb.aquiring machineryc.hiring ofworker | 30.0 | 10,500,000 |
|  2 | TEC AT COMPLETION | 30.0-50.0 | 17,500,000 |
|  3 | FINAL PAYMENT OF TECH AT COMPLETION AND HANDOVER | 40.0 | 14,000,000 |
|  6 | RETAIN TECH FOR A 6 MONTHS DEFECT LIABILITY PERIOD | 10.0 | 3,500,000 |
|  |  | TOTAL | 32,900,000 |

-BEME means: 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

 LIABILTY PERIOD- A defects liability period is a period of time following practical completion during which a contractor remains liable under the building contract for dealing with any defects which become apparent. Depending on the form of contract you are reading, it may also be referred to as a rectification period or defects correction period.

A defects liability period is usually a period of around six or 12 months but it can vary depending on the contract used. Any defects or faults which arise during this period (for example - due to defective materials or workmanship) must be put right by the contractor at its own expense.

-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.

 - 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.

**Environmental Impact Assessment** (EIA) is a process of evaluating the likely **environmental impacts** of a proposed project or development, taking into account inter-related socio-economic, cultural and human-health **impacts**, both beneficial and adverse.