NAME: ABU DAVID

MATRIC NO: 18/ENG02/002

ENIGINEERING IN THE SOCIETY ASSIGNMENT

DEPARTMENT: COMPUTER ENGINEERING

1.The Scope of the work

**A. Design Process**

Broadly speaking, **design** is a **process** of creating the description of a new facility, usually represented by detailed plans and specifications; **construction** planning is a **process** of identifying activities and resources required to make the **design** a physical reality.

**B. Funding/ budgeting**

The **construction budget** is the amount of money allotted for a specific building or remodeling project. **Construction budgets** are used to anticipate all **costs** and expenses of the building process. A **budget** is usually tracked through a form or spreadsheet.

**C. The Architect**

Arrange a meeting with the architects. Talk through design goals and then fix an Architect, he will draw up schematics for consideration coupling functionality, room-by-room layouts, finding the best furniture positioning and use of space. Recommending structural changes where this seeks to make space work better. A 2D sketch is developed, which is then further refined and made to a 3D model, you can consult with the and his team to develop the final 3D Model of your house as well as an elevation. An approved architect will develop drawings for Panchayat /City municipality / Corporation to approve.

**D. Building Contractor**

Finding a good [building Contractor](https://www.kjasons.com/newsroom/373-civileng.html) is the next biggest task. And ideally, you have to identify a builder, plumber, mechanical, electrical contractor. But if you can find a good, reliable and reasonable contractor you can save your time and money. Always ask his method of working and check how reliable he is. You may visit and see some of his previous projects and speak with his previous clients. If he has good

You may visit and see some of his previous projects and speak with his previous clients. If he has good credentials, technical know-how and is also good at giving a quality work output then you can consider him as your Contractor.

**E. Construction Process**

**Site Clearance** -- Before starting any construction work it becomes necessary to clear the place from the unwanted grass, boulder etc. In case of any hill like appearance on the ground, that too needs to be cleared of the excess earth and if there is a pit, it is required to be filled up. This total job is called site clearance.

**Break Ground & Excavation**-- After the site clearance, the layout of the structure at the site can be planned with respect to the given foundation plans. Begin earth excavation and take trenches accordingly.

**Foundation**-- A foundation is the lower portion of building a structure that transfers its gravity loads to the earth. Foundation work is done according to drawings provided by the Architect. i.e. the size of foundation, depth, length and breadth etc. and type of foundation (Rubble Packing or Raft and beams etc ..)

**Superstructure** -- Super-structure is to provide support in the construction of the building as per designed plan and various members of super-structure such as columns and beams are designed to provide strength for carrying the dead load and live load expected to come on the various parts of the structure in a safe and well-distributed manner. After casting the roofing slab necessary [waterproofing coatings](https://www.kjasons.com/newsroom/385-watercoating.html) shall be done.

[Stairs](https://www.kjasons.com/newsroom/352-handrails2.html) -- Vasthu instructs and recommends to have rising stair steps going up in North-South direction or West-East direction if it is spiral stair steps going up in clockwise direction. But due to constraints on building design, it is not always possible to follow Vastu recommendations. [Latest Handrail Designs](https://www.kjasons.com/newsroom/344-handrails1.html).[Stairs made of Wood and Glass](https://www.kjasons.com/newsroom/352-handrails2.html).

**G. Final Cleanup**

There will always be debris left over from the construction process on the interior and exterior of the home that you’ll want to have removed/cleaned.

GNATT CHART

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| STAGES INVOLVED | YEAR 2020 | | | | | | | | | |
| MONTHS | JAN | FEB | MAR | APRIL | MAY | JUNE | JULY | | AUG | SEPT |
| DESIGN/PROCESS |  |  |  |  |  |  | |  |  |  |
| FUNDING/BUDGET |  |  |  |  |  |  | |  |  |  |
| ARCHEITECT |  |  |  |  |  |  | |  |  |  |
| BUILDING CONTRACTOR |  |  |  |  |  |  | |  |  |  |
| CONSTRUCTION PROCESS |  |  |  |  |  |  | |  |  |  |
| FINAL CLEANUP |  |  |  |  |  |  | |  |  |  |

3.The Human Resources needed to constitute the project

* Role analysis.
* Role specification.
* Workforce planning.
* Recruitment and selection of temporary and permanent staff as required..
* Training and development.
* Performance management.
* Compensation (remuneration).
* Legal issues.

THE PROJECT TEAM INVLOVED

1. CONSULTANT ENGINEERR (ABU DAVID): This is an expert in the planning, design, and construction of both public and private infrastructures.

2. Project Manager: A project manager is an expert who organizes and manages the project of the building.

3. Architect: An architect is a person who plans, designs and oversees the construction of buildings.

4. Building Contractor: A building contractor is one who engages in construction management.

5. Cleaners: This are the people that will ensure that the building is kept clean after the construction process is over.

EXPLAINING HOW THE SITE IS SECURED

The site sis secured by putting people to watch over the building when the builders are done for the day. This will ensure the safety of the building but not 100 percent. Also security cameras should be installed in order to watch the building overnight in case of any incident of robbery. Also ensure that the head of security in the school ensures he assigns people t always check the building in order to ensure it safety.

THE BEME PROJECT

|  |  |
| --- | --- |
| The Projections | Cost |
| At 10% | 5 million naira |
| At 15% | 11 million naira |
| At 5% | 1 million naira |
| At 12% | 10 million naira |
| At 20% | 20 million naira |

6.

|  |  |
| --- | --- |
| MOBILISATION | 20 MILLION NAIRA |
| COMPLETION | 10 MILLION NAIRA |
| COMPLETION AND HAND OVER | 5 MILLION NAIRA |
| DEFECT LIABILITY PERIOD | 12 MILLION NAIRA |

7.

Bill of Engineering Measurement and Evaluation (**BEME**) also referred to as 'Bill'; is a tool used before, during and to assess and value the cost of construction work

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.

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 refers to the series of events that took place in the project making.

Environmental assessment 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.