

#### TECHNICAL REPORT WRITING

ON

# STUDENT INDUSTRIAL WORK EXPERIENCE SCHEME

(SIWES)

**HELD AT** 

BTI ARCHITECTURAL STUDIO LTD.

SHOPE 56, CHARLS SHOPPING COMPLEX,

ALONG OPOMALU R

PRESENTED BY

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**SUBMITTED TO:** 

# THE DEPARTMENT OF ARCHITECTURE TECHNOLOGY INSTITUTE OF ENVIRONMENTAL STUDY

KWARA STATE POLYTECHNIC, ILORIN

IN PARTIAL FULFILMENT OF AWARD ON NATIONAL DIPOLMA.

# **DECLARATION**

I ADEGBOYE GABRIEL authentic and a documentation		•	declared	that	this	project	is
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Date			Signatur	e		• • • • • • • • • • • • • • • • • • • •	••

### **DEDICATION**

I declare this project firstly to Almighty God, the maker of heaven and earth, who has enabled me to be alive to study in this Institution and to write this project.

I also dedicate this project to my lovely parent who has been always helpful and caring for me since my childhood till this present moment. I pray that the Almighty God will bless them and eat the fruit of their labor.

#### ACKNOWLEDGEMENT

First and first most, I thank God Almighty for making this report a reality. I also thank my H.O.D of ARCHITECTURE TECHNOLOGY Department.

My appreciation also goes to all my lectures and non teaching staff in my department, who took me throughout my stay in school I say thanks to you all God bless you

One again I will like to appreciate my parent in person Mr& Mrs ADEGBOYE and all BTI staff thanks you all.

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#### **CHAPTER TWO**

# 2.0 SECTION/ UNITS OF THE ORGANIZATION AND SPECIFICATION (JHIO CONSUILT)

Presently the ministry has the following department unit or sections headed by respective directors and these are;

- 1. Administrative department
- 2. Architectural and building department
- 3. Estate management department

2.3 HISTORICAL BACKGROUND OF BTL CONSULTANT

BTL CONSRUCTION was established for the design, coasting and

supervision of all building projects, maintenance and general consultancy

services are also performed in the organization.

It is private firm located at oke odo zone11, agbede tanke, Ilorin kwara

state. The company main responsibilities include; Architectural

design, building construction and supervision, building valuation and land

surveying.

Many construction projects have been executed by the company in date

and other state is around the country, the management efficiency and

attract lots of clients to the company. The company is committed to

maintaining it's personality and reputation by rendering services with

absolute integrity and trustworthiness.

2.1 ORGANIZATION CHART

**STUDIO** 

OFFICE.

**OFFICE** 

CHAIRMAN OFFICE.

RECEPTIONIST.

DIRECTOR OFFICe

#### **CHAPTER THREE**

# 3.0 STUDENTS SPECIAL INVOIVEMENT AT VARIOUS SECTION ARCHITECTURAL INSTRUMENTS AND THIRD FUNCTIONS

Explaining the various architectural instruments to me and my colleagues and their various functions E.G. T-square for horizontal lines.

Adjustable set square for vertical lines and for angled, circles template for arc and circle, furniture arrangement, stenil for writing Alphabets and numbers and scale rule for measuring e.t.c.

Lettering, Conversion And Accuracy

This is the act of written an alphabet and number in architecture.

Lettering is important on architecture because is the act that will teach how to write in an architecture.

#### Conversion

This is the process of changing measurement from one unit to another e.g changing of feet to meter, minimize to feet e.t.c

Table 1.0

Minimize fo	or	Metre (m)	Inches (")	Feet(')
(mm)				
25		0.025	1	0
50		0.050	2	0
300		0.3	12	1

#### Example

- 1. 300mm=0.4m12"=1ft
- 2.1200mm=1.2m=48"=14ft
- 3. 4200mm=4.2m 168"=14ft

#### Accuracy

This is an attempt to establish the difference between the measured value and the true value. Although absolute accuracy is not possible.

(a) DIMENSIONING; THIS IS the act of measuring the drawing so as to know the size of the drawing i.e to know the length and breath of a project and also percespace covered.

#### (b) DRAWING

Various types of drawing involved to make up vis plan of a building are:

- 1. Architecture drawing
- 2. Structural drawing
- 3. Electrical and mechanical drawing

#### 1. ARCHITECTURAL DRAWING

There are two classes of drawing in Architecture namely;

- Working drawing

### - presentation drawing

#### Working drawing

This is the type of drawing that is used for the construction of a project and is also the drawing that others draw i.e structural, electrical and mechanical drawing will follow for the production of their own drawing, an architect must sure that drawing is well discussed.

#### **Presentation Drawing**

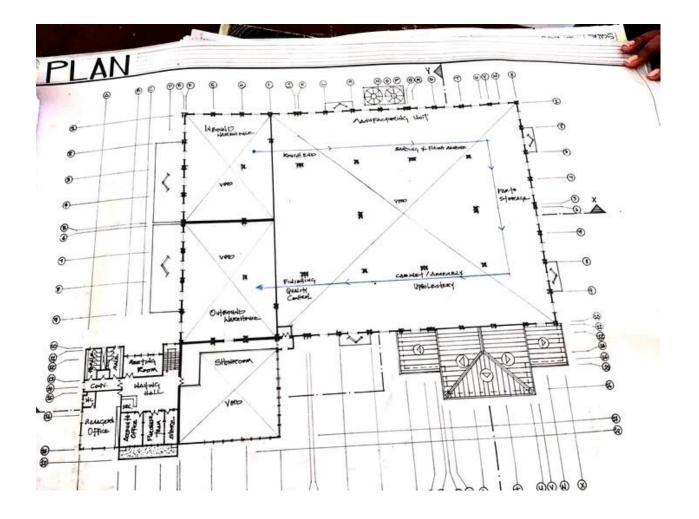
This is the type that is presented to the client so as to know that his/her project will look like.

#### FLOOR PLAN

This is plan that shows the arrangement of different rooms (spaces) and passage. Each floor must be provided with a floor plan.

A floor plan is usually a sectional plan at about the edge level of the observer and must give that details of the following.

- direction of North
- The size and spacing of all supporting members and the thickness of all walls.the exact location of doors, windows, wardrobes, water closet, sinks, baths or any other features that can be changed seen. (There objects must be indicated by the appropriate standard symbols.) The overall dimensions and sizes of individual's part



### **ROOF PLAN**

This is the plan that shows the roof of a building when it's viewed i.e the view is above the plan. Roof plan must at least be 600mm projected away from the normal building this is because it will prevent the building from direct rays of the sun and rain. The projection is called roof overhang.

# **SECTION**

This is the plan that show the skeleton of the building so as to detail some feature that can be seen in the elevations.

We have to two types of section namely:

- 1. Cross section
- 2 longitudinal section

#### (5a) CROSS SECTION

There are vertical sectional elevation through the building.

#### (5b). LONGITUDINAL SECTION

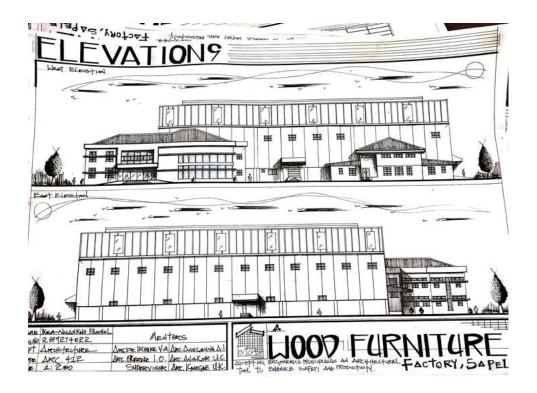
Longitudinal section Al elevation cut through the building section must be chosen so that they cut (and show) as many detail as possible. The following details must be given.

- Detail of construction materials ( which may be shown symbolically), together with the thickness of each.
- The height of doors, windows, wardrobes, and ceilings.
- The depth and width of foundations, beams walls and floors.
- The arrangement for and the slope of the roofs.
- The street and ground elevation
- Details of stair cases

#### **ELEVATION**

This is the plan that shows the external face of a building which will have four type of elevation.

- 1. front elevation
- 2 Right. elevation
- 3. Left elevation
- 4.Back elevation



During the period of my attachment, my experiences constituted of the following

- 1. Office activities.
- 2. Site and technical meetings.
- 3. Construction and site activities.

Which are on detail below



Site activities

#### 3.1 OFFICE ACTIVITIES

I was exposed to some office and Secretariat works and computer works during the course of my attachment. Die to the development and scientific advancements in our t which has also affected Architecture in a large way.

One of such area is in the creation of Architectural design software such as autocad

I was privileged to draw with Autocad such as floor plan, roof plan, sections and elevations.



Construction and site activities 1



Construction and site activities 2



Office activities on software program

#### **CHAPTER FOUR**

#### 4.0 SITE OUT OF BUILDING

This is the transfer of information on the building drawing to the ground with high degree of accuracy. The first tasked in setting out a building is to establish a base line from which the whole of the building can be set out. After the base line has been established, marked and checked the main lines of the building can be set out.

4.1 Setting out equipment

1 measuring tape

2 Profile

3 pegs

4 hammer

5 white chalk or pencil

6 builder square

# 4.2 Method of setting out a building

1 using 3,4,5

2 using the builder's method

3 using the theodolite

## 4.3 Process of setting out

The first thing we need to a parallel/reference/ base line, to which all other lines can be related. This can be taken along an existing close to the proposed new structure/boundary wall if existing/keebs line. e.t.c



Process of setting out