

# FEDERAL REPUBLIC OF NIGERIA

# COUNCIL FOR THE REGULATION OF ENGINEERING IN NIGERIA



## WORK EXPERIENCE REPORT

# IN PARTIAL FULFILMENT FOR REGISTRATION AS REGISTERED ENGINEER/TECHNOLOGIST

## YOUR ENGINEERING DISCIPLINE

By: NAME (Candidate) Application ID: XXXX Phone: 080 XXX XXX Email: name @yahoo.com

MM, YYYY

# Cover page

## **Table of Contents**

#### **CHAPTER ONE**

#### 1.0 INTRODUCTION

• Summary of your academic and professional Engineering Work Experience (Maximum of one page).

Practice and understanding of Engineering in: planning, design, production, construction, installation, fabrication, testing, commissioning, maintenance, operations, research and/or sales of Engineering Products

## **CHAPTER TWO**

# 2.0 Summary of Work Experience

Period	Detail of Projects/Activities	Duration (Months)	Supervisor	
		(Months)	Name	Signature
	EMPLOYER:			
	Position: Trainee			
March,	Project:			
2010 to date	Activities undertaken were for examples: -			
	<ul> <li>i. Preparation of annual maintenance plan</li> <li>ii. Prioritizing the road to be maintained</li> <li>iii. Prepare 3year strategic plan for road works</li> <li>iv. Conduct Annual District Road Inventory and Condition Survey.</li> <li>v. Categorise maintenance work into difference interventions i.e. Periodic, Spot improvement and routine maintenance.</li> </ul>	9	Eng	

#### **CHAPTER THREE**

#### 3.0 DETAILS OF ENGINEERING WORK EXPERIENCE

3.1 Project: Design of bridge along Abuja – Lafia Road (193km)

3.1.1 Project Particulars

**Client**: Federal Ministry of Works and Housing, Abuja

**Project cost** : N80 Billion

**Consultant** : Etteh Aro & Partners

**Position held** : Trainee

**Period** : 6 Months

#### 3.1.2 Project description

- Introduction of the project
- objective

#### 3.1.3 Relevant Bridge regulation and design standards

#### [Codes]

- BS 5400 of 1982
- SATCC Code of Practice for design of Road Bridges and Culverts 1998 reprinted in July 2001.
- Overseas Road Note 9 Design Manual for small Bridges, 2000.

### [Software]

- Excel calculation sheets
- Master series
- Demonstrate the extent of use of Standards, Codes, Manuals, Handbooks etc.
- 3.1.4 Applications of Health, Safety and Environmental Standards to the Area of Practice

#### 3.1.5 Scope of the Works

To be defined by applicant.

Example: carry out of feasibility study so as to prepare design equitable for a bridge of total length of 33m long, Design and preparation of detail drawings, prepare bills of quantities; cost estimation, preparation of proposal to solicit funds and preparing tender documents.

#### 3.1.6 My involvement in this Project:

Worked as a Graduate Engineer in this project, I performed the following

activities:

- (a) Carrying out feasibility study for the bridge
  - i. Involved in preliminaries checking of the site condition.
  - ii. Checking the population data for communities who will benefit from the implementation of the project.
  - iii. Discuss with community on the river characteristics history.
  - iv. Select the appropriate construction site as per road alignment.
  - v. Conducting Topographic Survey.
  - vi. Road Vertical Alignment correlating with bridge.
  - vii. Selecting the economical span length of the structure.
  - viii. To check the vertical clearance and water-cross area
  - ix. Selecting bridge type was influenced with the existing condition.
  - x. Proposing means for river revetment and protection from scouring using stone masonry wing walls.
  - (b) Preparing project proposal for the project to solicit funds. The proposal was written and submitted to the Federal Ministry of Works and Housing Headquarters Abuja. It covered the following components:
    - i. Executive summary
    - ii. Introduction and background
    - iii. Project objectives
    - iv. Project organization, management and implementation
    - v. Project output and market
    - vi. Project Benefit and Justification
    - vii. Environmental Impact Assessment (EIA):
    - viii. Conclusion and endorsement.
    - ix. Annexes (attached with District road network map to show location of bridge, BEME, Drawings and site photos.)

#### **3.1.7** Detail design and preparation of detail drawings

After collection of all necessary information and data during feasibility study, organization of these data and start design work in the following procedures:

#### 3.1.8 Challenges encountered and Solutions

- Challenge
- solutions

#### 3.1.9 Experience Gained

The experiences gained during my designing practice were:-

- a) To be more familiar with structural design codes such as BS 5400 of 1982, SATCC Code of Practice for design of Road Bridges and Culverts 1998 reprinted in July 2001, Overseas Road Note 9 Design Manual for small Bridges, 2000.
- c) Loading of members differs to live loads from slab to beam where by the beams live include knife edge load.
- d) Capability on combining design loads for the all cases (at Ultimate and serviceability limit states).
- e) Checking the suitability of structural members against bending moment, shear force and crack control.
- f) Designing of structural members in respect with determination of dead and live loads, identification of free body diagrams (FBD)/statistical system, dimensioning and determination of appropriate assumptions for design.
- g) Preparation of working drawings and bar bending schedule.
- h) Proposing good site for the bridge.

**CHAPTER FOUR** 

4.0 Conclusion

As I have narrated above in this report, I have gained adequate Work Experience in Civil

Engineering (design, site supervision and office management) as well as knowledge in

procurement matters, project management and contracts administration. I have now managed to

bridge theories and reality on site. I have faced many challenges while implementing projects

and I have also been able to look for the solution to those problems.

Further I certify that, this report results from my involvement in various civil engineering works

carried out and is not copied from any unauthorized materials and thus the activities written in

this report were carried out under close supervision of Registered Engineers.

With regard to the professional engineering work experience I have gained so far, I finally wish

the COREN to consider, evaluate and approve my application for registration as an

Engineer/Technologist.

Name:	
Signature:	
Data	

## **CHAPTER FIVE**

#### **5.1 Endorsement**

I, the undersigned, have gone through the report that has been prepared and we endorse the experience attained and reported by the writer. Based on our personal knowledge of the character and professional reputation of the applicant, I recommend for acceptance of this Work Experience report by the COREN in Partial fulfillment of the requirements for registration as Registered Engineer/Technologist.

Name Stamp and Signatur

#### **5.2** Endorsement

Engineer/Technologist.

I, the undersigned, have gone through the report that has been prepared and we endorse the experience attained and reported by the writer. Based on our personal knowledge of the character and professional reputation of the applicant, I recommend for acceptance of this Work Experience report by the COREN in Partial fulfillment of the requirements for registration as Registered

Name Stamp and Signature

# **APPENDICES**

Design Calculations - To be signed and stamped by a Registered Engineer on every page.

Design Drawings - To be signed and stamped by a Registered Engineer on every page.