A TECHNICAL REPORT

ON

STUDENT INDUSTRIAL WORK EXPERIENCE SHEME

(SIWES)

HEAD AT

YAGBE WEST LOCAL GOVERNMENT ODO - ERE, KOGI STATE

BY

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ND/23/ARC/FT/028

SUBMITTED TO: THE DEPARTMENT OF ARCHITECTURAL TECHNOLOGY

INSTITUTE OF ENVIROMENTAL STUDIES

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CERTIFICATION

This is to certify that IDRIS ABDULRAHMAN AREMU whose matric number is ND/23/ARC/FT/028 has completed his four (4) month *SIWES* Program at YAGBA WEST LOCAL GOVERNMENT. They have demonstrated a thorough understanding of the training material and have met all the requirements for completion. The work contain here is original and entirely executed by the above-named student in partial fulfillment of the requirement for the award of NATIONAL DIPLOMA (ND) in department of ARCHITECTURAL TECHNOLOGY.

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SIWES CORDINATOR. **DATE**

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HEAD OF DEPARTMENT **DATE**

DEDICATION

I dedicate this siwes report to God Almighty, who has been my guiding light and source of strength throughout my academic journey

I also dedicate this siwes report to my loving family who have been my rock and pillar support. Your unwavering love, encouragement, and prayers have meant the world to me.

Thank you, God, for your blessings and mercy. Thank you, family, for your unconditional love and support

ACKNOWLEDGMENT

Thank be to almighty Allah for his blessing, guidance, protection, the courage and the opportunity given to me to the successful completion of my SIWES program, may his protection and blessing continue to be with us (amen).

I would like to extend my deepest gratitude to the company that give me a great opportunity to do my Siwes program at their firm YAGBA WEST LOCAL GOVERNMENT,

Thank you once again for your support, guidance, and encouragement. I am grateful for the experience and look forward to applying the skills and knowledge gained in my future endeavors

ABSTRACT

Architecture is the art and science of designing buildings and structures that are aesthetically pleasing, functional, and sustainable. It involves the creation of physical environments that meet the needs of users, while also reflecting the cultural, social, and environmental context in which they are built.

Good architecture can enhance the human experience, promote social interaction, and contribute to the well-being of individuals and communities. It can also reflect the values and aspirations of a society, and provide a sense of identity and belonging. Furthermore, architecture can play a critical role in addressing some of the world's most pressing challenges, such as climate change, urbanization, and social inequality.

This report gives a detailed account of my industrial work experience during my SIWES program at YAGBA WEST LOCAL GOVERNMENT, which deals with designing building and structures that are aesthetically pleasing, functional and sustainable. This report is based on practical and theory experience gained during the period of my program in the industry.

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CHAPTER ONE

1.1 INTRODUCTION TO SIWES

SIWES stands for students industrial work experience scheme. It is the accepted skills training program, which forms part of the approved minimum Academic standards in the various degree program for all Nigerian tertiary Universities (N.U.C 1996). SIWES goes a long way inputting to test the level of knowledge a student has acquired during the industrial training program. It is an effort to bridge the gap existing between theory and other practice of architecture, engineering and technology, sciences, agriculture and other professional educational programs in the Nigerian tertiary institutions. It is aimed at exposing students to machines and equipment and professional work methods in industries and other organizations. The scheme is a tripartite program, involving the students, the universities and the industries (employers of labor). It affords students the opportunity to familiarize and expose themselves to the knowledge and experience needed in handling equipment that is not readily available in their various institutions. Before the establishment of this scheme, employers believed that the theoretical education in tertiary institutions were not adequate enough to meet most of the needs of employers of labor Students Industrial Work Experience Scheme (SIWES) was established in 1971 by decree 47 with the aim of promoting and encouraging the acquisition of skills in the private and public industries. Its relevance in education system cannot be over emphasized as it develops the student to become skilled and experience professionalism in their various disciplines. It enables students to appreciate the basic concept involved in their field of study. It is also an effort to bridge the gap existing between theory and practical, in the sense that it exposes students to real industrial work experience. SIWES, which involves the University authorities and the industrial sector, runs for 24 weeks for students in the fourth academic year in universities. The scheme was organized by the Federal Government and jointly coordinated by the Industrial Training Fund (ITF) and the Nigeria Universities Commission (NUC).The importance of the training scheme is justified as it is a research field, which enables students to be totally in-depth in finding the working culture, practice and tools in their various areas of specialization.

1.2 OBJECTIVES OF SIWES

1. **Industrial familiarization: to expose students to the work environment, culture and ethics of the industry**
2. **Career guidance: to help students make informed career choices and develop a sense of professionalism**
3. **Enhancing employability: to equip students with the skills and knowledge by employers, making them more employable**
4. **SIWES aims to give students hands-on experience in their chosen field, allowing them to apply theoretical knowledge in a real-world setting.**
5. **It helps to bridge the gap between theoretical knowledge acquired in the classroom and practical skills required in the industry.**
6. **To develop students' skills and competencies in areas such as communication, teamwork, problem-solving, and critical thinking.**
7. **To provides students with an opportunity to learn about industrial practices and procedures, including safety protocols, quality control measures, and production processes.**
8. **To promotes collaboration between academic institutions and industries, allowing for the exchange of ideas, expertise, and resources.**
9. **It encourages students to think creatively and develop innovative solutions to real-world problems, promoting entr1**

CHAPTER TWO

2.1 BRIEF INTRODUCTION OF THE FIRMS

YAGBE WEST LOCAL GOVERNMENT ODO-ERE, KOGI STATE was officially created along side others Local government areas when Kogi state was established in August 27,1991, during the regime of General Ibrahim Babangida.

The Architecture in YAGBA WEST LOCAL GOVERNMENT, PARTICULARLY IN ODO-ERE, KOGI STATE, was significantly influenced by Chief J. O. AJIBOYE. He was known for his contributions to the Architectural Development in the area.

CHAPTER THREE

3.1 SCOPE OF THE WORKDONE

OFFICE EXPERIENCE

This part is a summary of lessons learnt in the office and on different projects carried out during my SIWES training. In the office basically, I was able to work on different projects and designs that were sketched by my Supervising Architects, before being given to me to draft on the computer, while the ones revised are already on the system which had been previously worked on by a staff of the firm.

ARCHITECTURAL WORKS

I learnt that there were regulations and laws guiding every aspect of a building design and its construction, which I summarized in the following:

- **The minimum set back from the road to the building line is 6 meters; while from the center of the road to the building line is 9 meters.**
- **The structural stability of a design at the inception stage.**

The architect must take into consideration the structural aspect of the building, which gives the structural engineer a framework to work with and at the end of the project.

Real life architectural works must be self-explanatory with all the necessary dimensions shown to precision in all the design stages which includes the following:

1. **The site plan**
2. **The floor plans**
3. **The roof plan**
4. **The sections**
5. **The elevation**

DIMENSIONS

IMPORTANCE OF ACCURATE DIMENSIONS

Accurate dimensions are crucial in architectural drawings, as they ensure that the building is constructed correctly and safely. Inaccurate dimensions can lead to costly mistakes, delays, and even structural failures. Therefore, it is essential to prioritize accuracy when measuring and representing dimensions in architectural drawings.

METHODS USED TO ENSURE ACCURATE DIMENSIONS

To ensure accurate dimensions in any drawings, I employed the following

- **Precise measure**
- **Verification and cross checking**
- **Use a reference point**

REPRESENTATION OF DIMENSIONS IN DRAWINGS

In my drawings, I represented dimensions using the following methods

- **Dimension lines**
- **Dimension text**
- **Scale bars**
- **Tolerances**

3.2 THERE MAIN PHYSICAL WORK

1 PRESENTATION DRAWINGS

2 WORKING DRAWINGS

PRESENTATION DRAWINGS:

It refers to the first stage of Architecture design which carry its life future of Architectural element of design. And it's used to convince the client.

WORKING DRAWINGS:

includes the following

1 Floor plan

2 Site plan

3 Sections

4 Elevation

5 Foundation

6 Roof plan

The floor plans It displace the unit of a design such as bedroom, main lounge, dinning, eating hall, bathroom, toilet, office e.t.c

The foundation plan it displace the essential of excavation tranches.

CHAPTER FOUR

4.0 DESIGN EXPERIENCE

4.1 PROJECT.1

A ONE BEDROOM

I was asked to design a one bedroom building containing sixteen units in total. The features of the design are terrace, living room, kitchen, lobby, bedroom, toilet.

Lesson Learnt: **I was able to manage spaces due to the small portion of land, and made sure the spaces were well accessible and I made sure that the windows size was 1200x1500mm because of their orientation and ventilation.**

4.2 PROJECT.2

A ROOM SELF CONTAIN

Bubble diagram, Functional relationship

I designed a room self contain as sketched by my supervisor which had two units. The following features are present: a Bedroom, leaving room, a kitchen, main lounge and a lightning lobby.

Lesson Learnt: **I was able to manage spaces due to the size of the land, and made sure the spaces were well accessible and ventilated. And also putting more effort to meet the client need.**

4.3 PROJECT.3

A THREE BEDROOM FLAT

Floor plan, elevation, section, bubble diagram, functional relationship

I designed a bedroom duplex as sketched by my supervisor which had three units. The following features are present: a master's bedroom, two other bedrooms, a kitchen, main Living Room, Dinning, and a lightning lobby.

CHAPTER FIVE

5.1 PROBLEMS AND CHALLENGES

PROBLEMS ENCOUNTERED

The problems or challenges encountered during my six (4) months' work experience which could be constraints to future students who may want to observe their SIWES in LSDPC can be stated as follows.

REJECTION OF STUDENTS

Some organizations reject students when approached for placement. This to a large extent discourages students and kills their enthusiasm towards the SIWES program. Also, the process of entering the Corporation was politicalized, as you had to know somebody working in the Corporation before you can be accepted to work, this routine of recruitment had discouraged students.

5.2 CHALLENGES

FINANCIAL PROBLEM

This was a major constraint because the allowance given to trainee was not encouraging. Finance are meant to be considered as a motivating factor for any intending trainee student. Financial aid is very important to help the students cover up the expenses of feeding, transportation and wears (i.e., official wears) among others.

TRANSPORTATION PROBLEM

The place is far from where am staying and there's not enough stay to use in his office, I have to go and use another staff office

5.3 RECOMMENDATIONS

This Siwes program has being of immense benefit to me while undergoing the training. Thus to ameliorate the situation sprouting from the identified problems and makes SIWES more beneficial, the following recommendations are following

- **Take initiative and be proactive on projects**

For the architectural department

- **Consider providing more training and workshops on software applications and design principles**
- **Encourage team members to share their knowledge and expertise with interns**
- **Provide opportunities for the interns to work on live project and contribute to the design process**

5.4 CONCLUSION

In the past 4 months of my learning, I learnt a crucial aspect of Architecture and enlightening me to various design in building construction. The SIWES program has contributed immensely to the acquisition of practical experience and knowledge which are of paramount importance to my field of study. Its relevance therefore can never be overestimated. This training section has broadened my level of knowledge and as well paved way for diverse future opportunities.