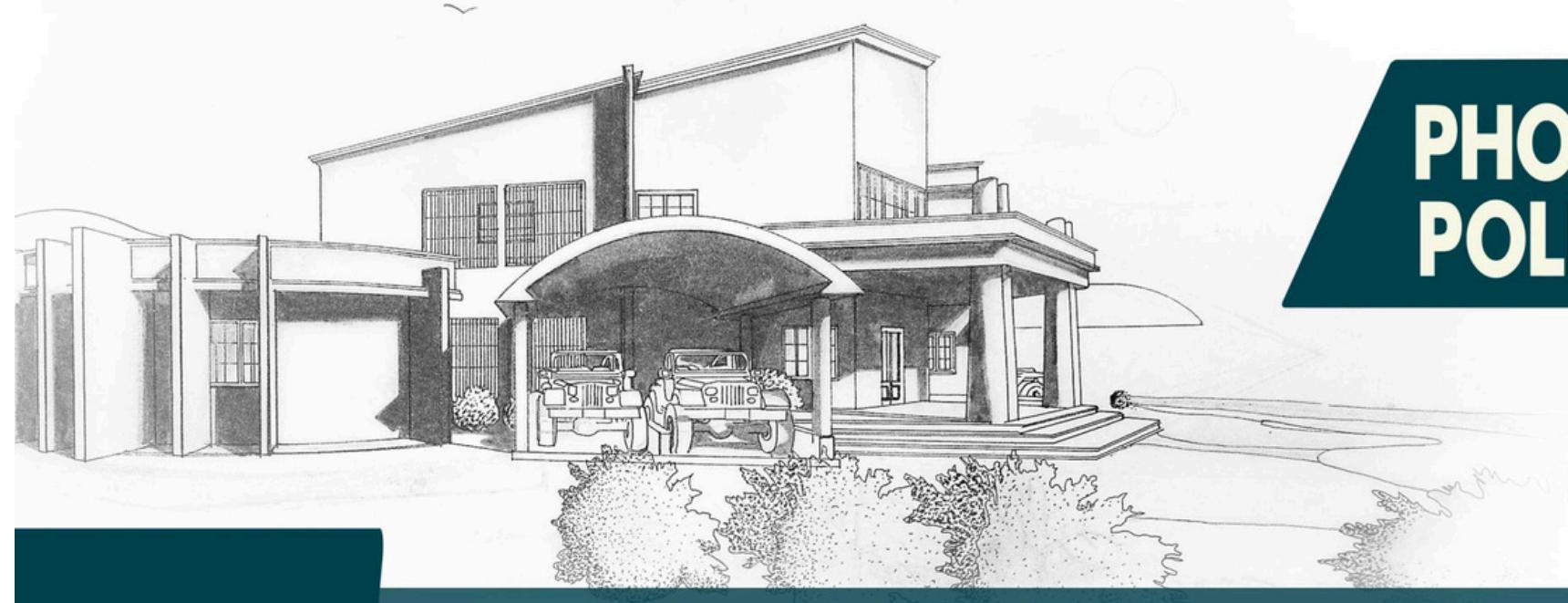


E PORTFOLIO

**BERNARD
MARTIN LAWAN**

BTECH. ARCHITECTURE,
MODIBBO ADAMA UNIVERSITY OF TECHNOLOGY, YOLA
ÓBUDA UNIVERSITY, BUDAPEST



PHOTOVOLTAIC CELLS/ POLICE STATION

(YEAR 5)

INTRODUCTION

The student was required to design a standard police station for a small community in Bekaji, Yola North, Adamawa state, Nigeria.

The design is meant to provide maximum security as well as ensure it meets design functionality and suitability of its purpose. The student was required to meet all preliminary design requirement as deemed suitable, e.g. Space requirement, climatic analysis and site analysis.

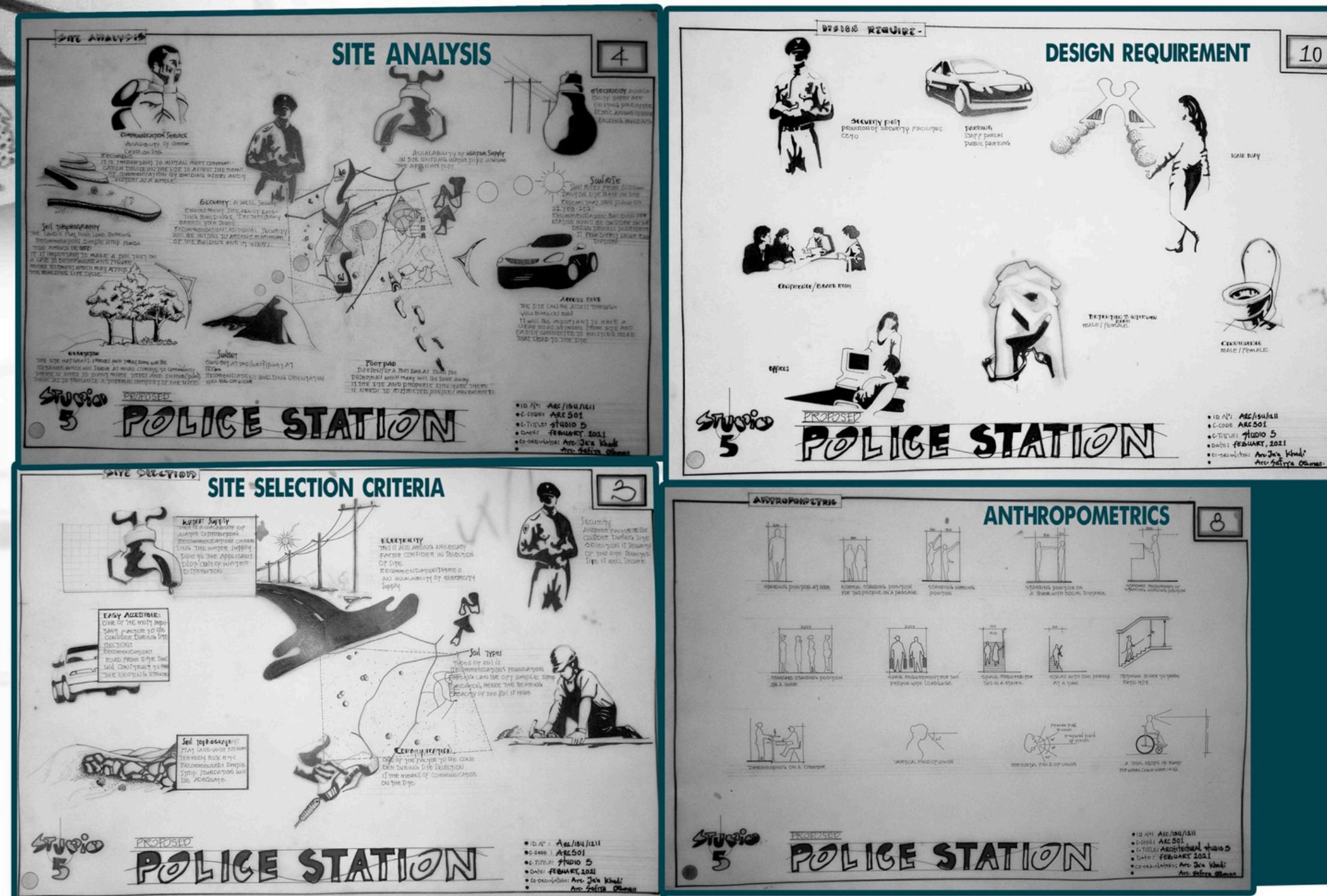
More so, I was able to incorporate an energy conservation method to the design as a form of design sustainability by the use of photovoltaic cells (PVC) to trap and utilize the excessive sunlight in Yola, Nigeria to power the building.

The design consist of

- 1. Research findings on PVCs
- 2. Case study of PVCs
- 3. Site / Climatic analysis
- 4. Design concept
- 5. Site plan
- 6. Floor plan
- 7. Roof plan
- 8. Elevation
- 9. Sections
- 10. 3Ds

February 2021.

PHOTOVOLTAIC CELLS/ POLICE STATION (YEAR 5)



BERNARD MARTIN LAWAN (ARC/15U/1211)



PHOTOVOLTAIC CELLS/ POLICE STATION

(YEAR 5)

CONCEPT EVOLUTION:

The design was inspired from a handcuff concept denoting security

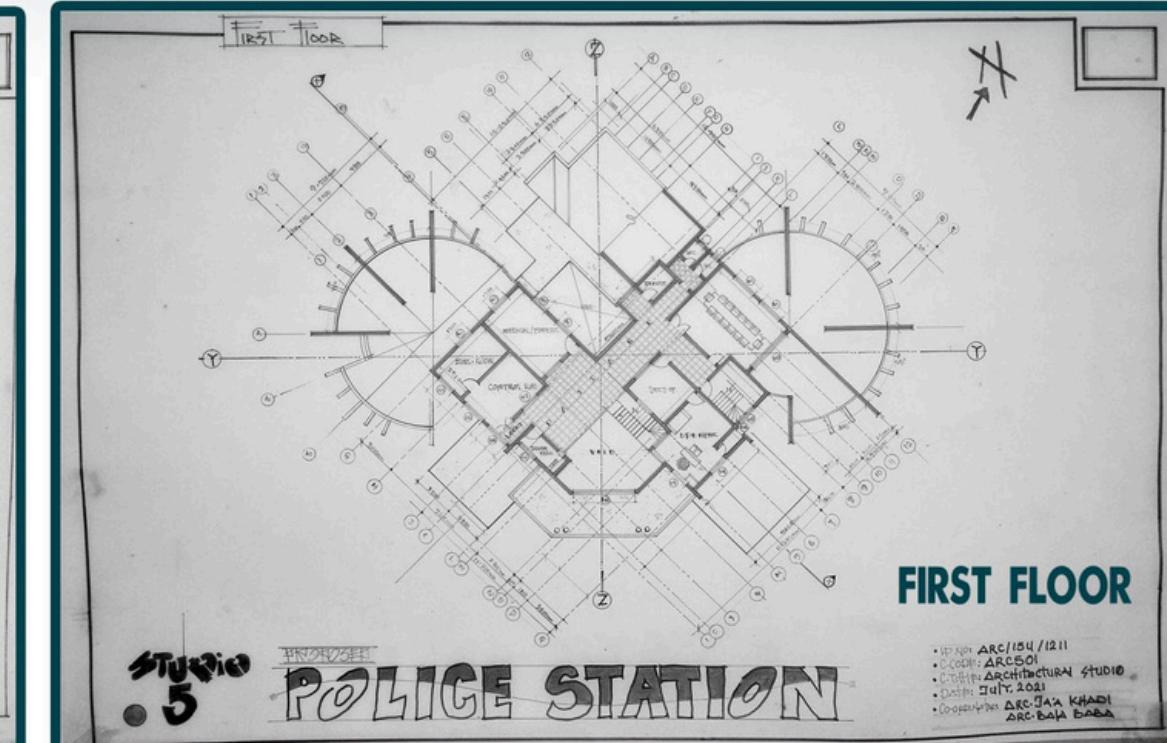
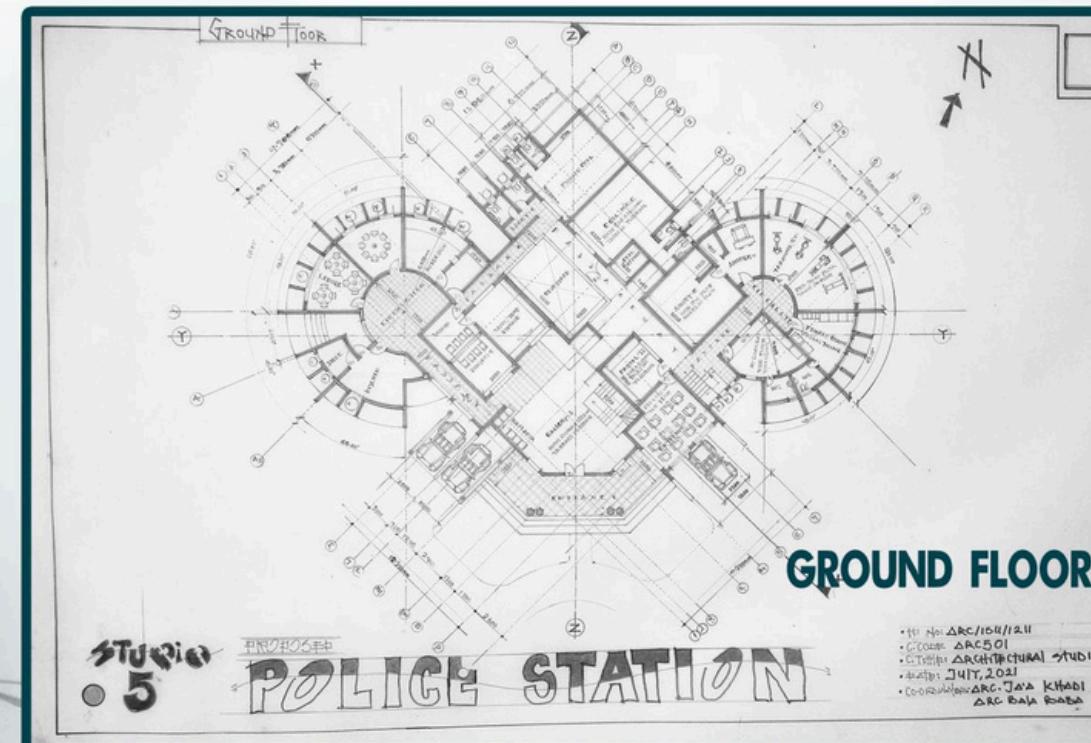
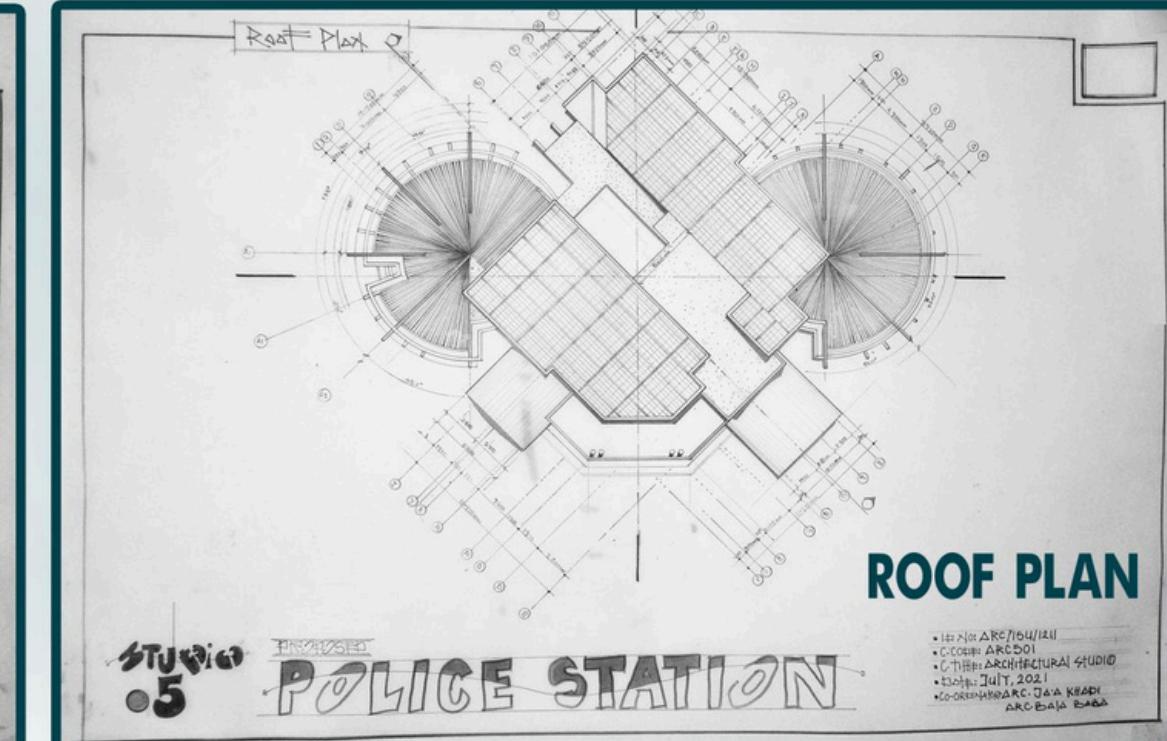
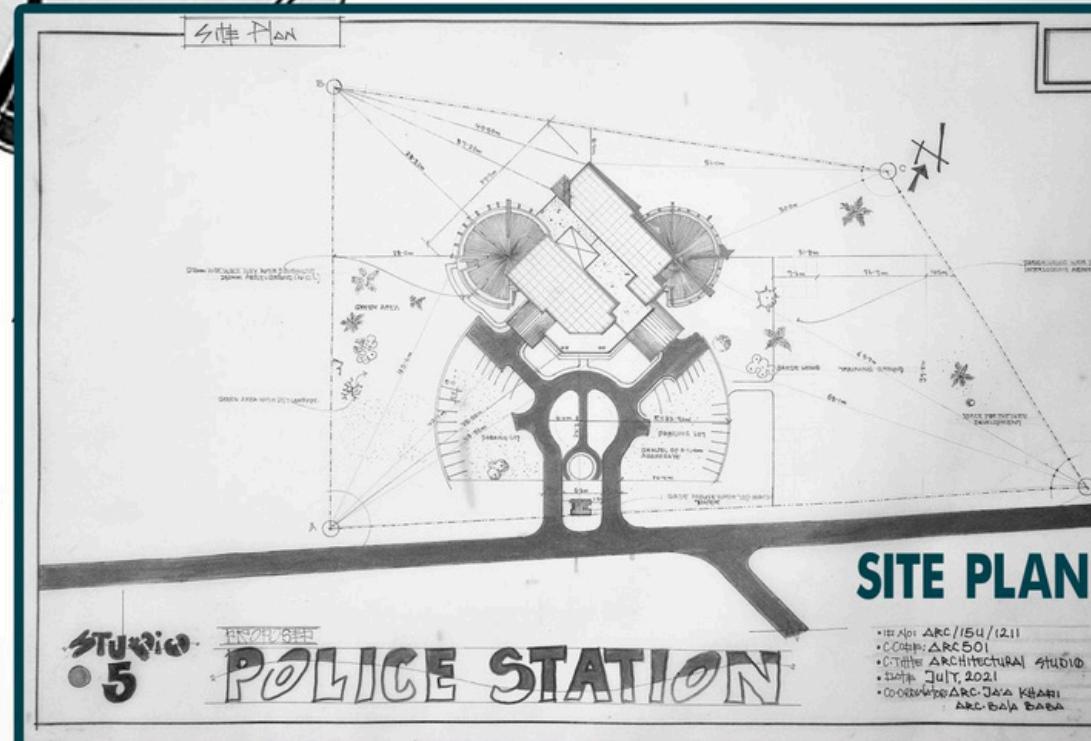
NOTES:

The brief required that, this design be completely traced and inked.

Therefore, all sheets were drafted and inked on paper by the author during the course of the project.

There were no computer aided design software used for the program.

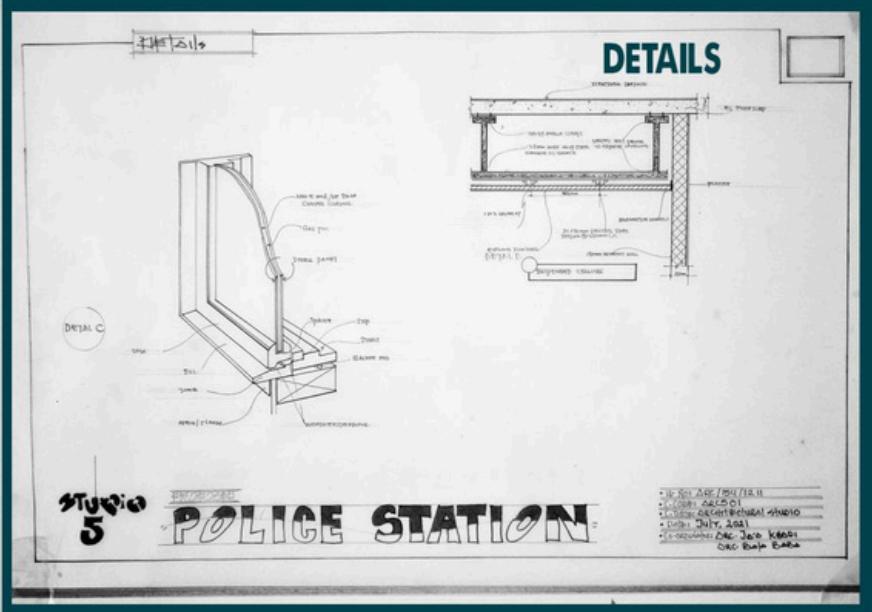
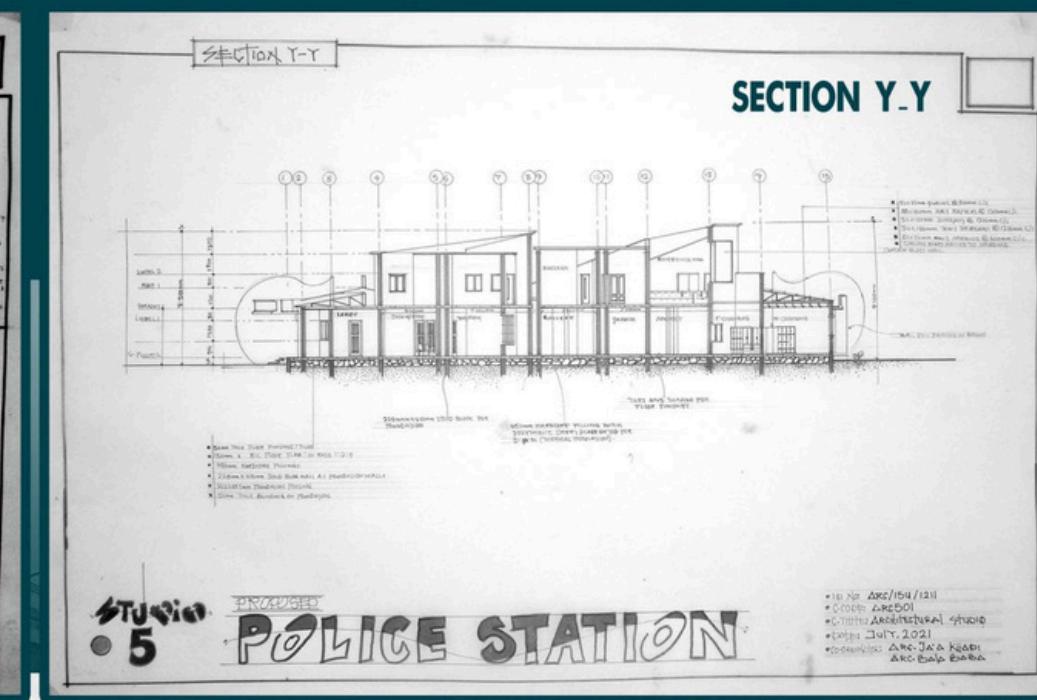
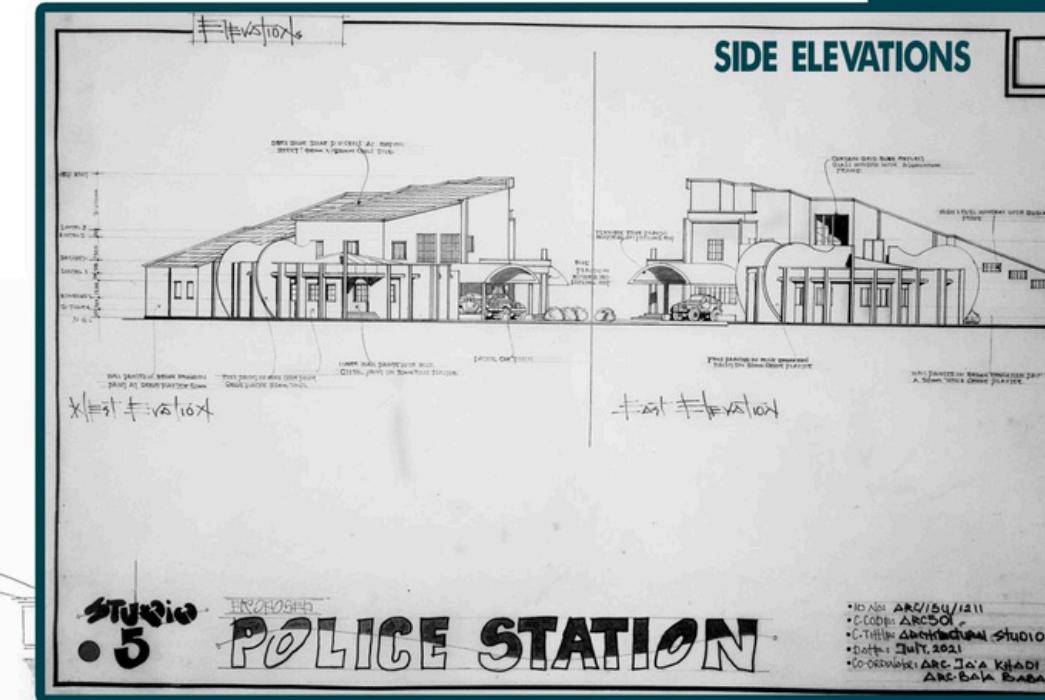
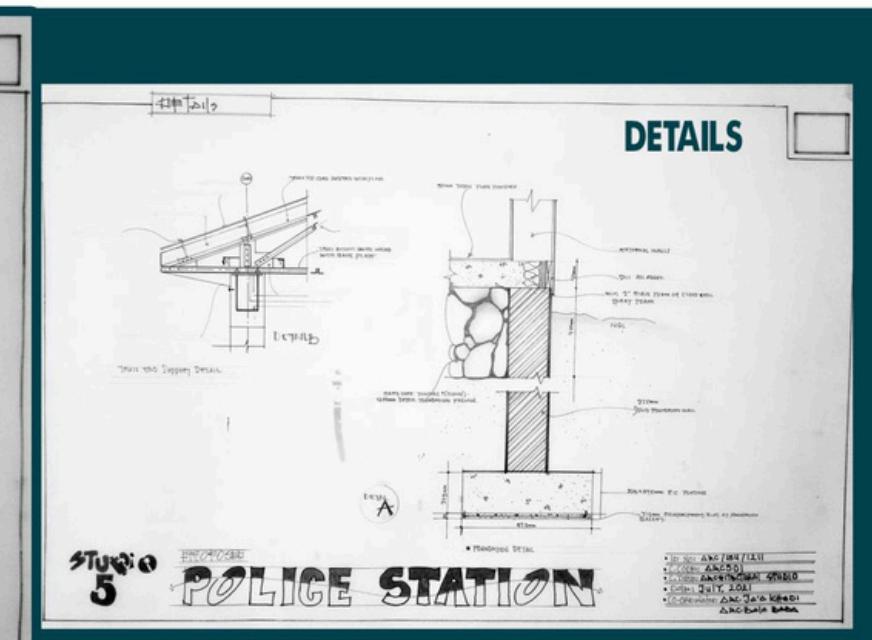
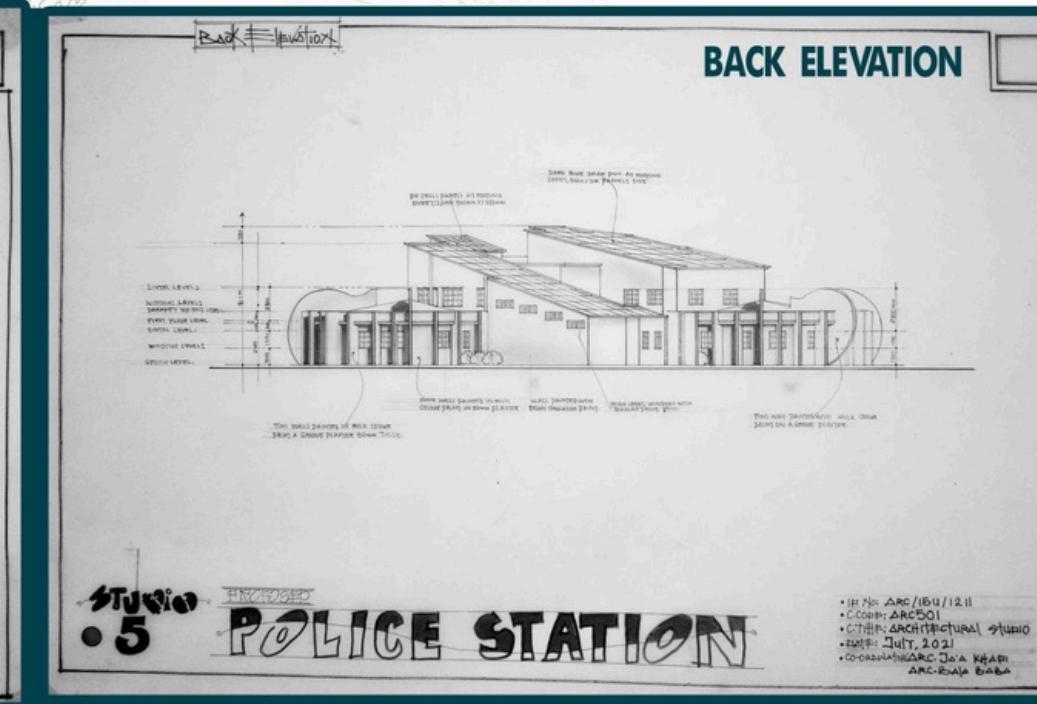
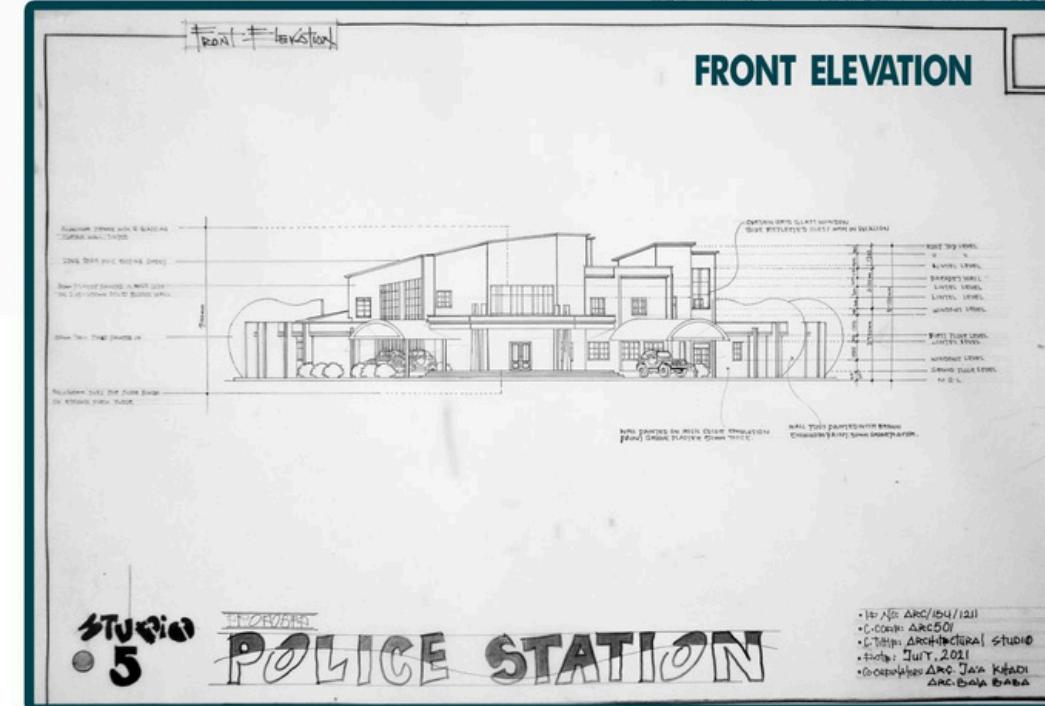
Design sheets were snapped to portray the work of the author.





PHOTOVOLTAIC CELLS / POLICE STATION

(YEAR 5)



BERNARD MARTIN LAWAN (ARC/15U/1211)