MAIN MARKET FOR JIMETA - YOLA

BY

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A thesis submitted to the Post-Graduate School, Ahmadu Bello University, in partial fulfilment of the requirements for the award of Degree of masters of Science in Architecture.

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August 1988.

DECLARATION

I, Lodiya Mamman KAIGAMA, hereby declare that this thesis is my authentic work under the guidance of Dr. U.O. Nkwogu. All rights are reserved and any reproduction in any form must be by permission of the appropriate authorities.

All quotations and borrowed ideas have been properly acknowledged.

Sign MKaigama

Zaria.

August, 1988

D E D I C A T I O N

This piece of work is dedicated to the most supreme of the whole Universe and my late brother, Mr. Emmanuel Sulle Kamma, may his soul rest in perfect peace Amen.

CERTIFICATION

This thesis entitled MAIN MARKET FOR JIMETA-YOLA by KAIGAMA, Mamman Lodiya meets the regulations governing the award of the degree of MASTERS OF SCIENCE IN ARCHITECTURE of Ahmadu Bello University, and is approved for its contribution to knowledge and literary presentation.

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A B S T R A C T

Jimeta - Yola, as Gongola State's Administrative Centre could not boast of main or central market of her own, the one she has, is In a deplotable condition of congestion, lack of facilities, utilities and services. The old market is a congested site of 0.6 hectare by the main crossroads in the middle of the high density area of the town. With growth in population as the town became the state[1] s Administrative Centre in 1976, a new Jimeta main market whose site measures 4 hectares was constructed.

In 1964, the new Jimeta main market was burnt down during maltatslne's riot, as such there was not viable place to carry out economic activities. This resulted in hike in prices of essential commodities, therefore an adhoc site was proposed in which the authority allocated a piece of land to each individual trader, who would then on his or her own put up a shed for himself or herself regardless of the commodities he or she was to deal on.

The layout was hap-hazard because it was not planned, the sheds are of varying shapes and outlook.

Throughout history, villages and towns have had market squares, and streets with a concentration of stores and other retail facilities. Such an area was called 'agora' in Greece; bazaew' in Turkey and 'Casbash' in

Morocco, The shaped of **today's** shopping Centre "reflects the intention to give maximum accessibility to private Cars. This led to clusters of stores, surrounded by parking that covers three to five times more ground than the buildings. Recently, the advantages to pedestrian circulation within the Centre were discovered and the 'new' concept of smalls and courts is reminiscent of the medieval market - places.

Research has shown that the present Jimeta market is plunged into problems ranging from congestion due to small size, poor traffic, network and parking, grossly inadequate services, utilities and facilities. The Structural and drainage system conditions are so poor that there is a need for Main Market at the bare burnt down site. The Main Market befitting a state capital on the basis of a bold and imaginative design geared towards establishing a meaningfull coherent and stable image of architectural space. Such market will have to be efficient; convenient and attractive. These are based on the identified planning problems from the case studies.

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CHAPTER ONE

1.01 INTRODUCTION

In Nigeria, as in most populated areas of Africa, a substantial proportion of present day wholesale and retail trading takes place in open market places and public market buildings. Periodic and daily markets gatherings were an integral part of commerce during the colonial period, and there is an evidence that market - place trading was widespread in precolonial times (Hartmann 1968). Thus, as a trading institution in Nigeria, markets possess elements of long term continuity spreading over Centuries and they can be treated as one of the most basic Central place institution throughout the history of Nigeria. Over this period, however, there have been marked changes in the distribution and nature of market - place trading associated with the processes variously described as development, modernization and westernization.

Jimeta - Yola being Gongola State Administrative headquarter could not boast of a main market of her own, the one she has, is in a deplorable condition of congestion, lack of facilities, services and so on. The old market is a congested site of 0.6 hectares, by the main

crossroads in the middle of the high density area of the town. With growth in population through birth or immigration, as the town was made an administrative Centre in 1976, a new Jimeta market which site measures 3.9 hectares was constructed. The new market was, in 1984, burntdown during maitatsine's riot, as such, there was no viable place to carry out economic activities. This resulted in hike in prices of essential commodities, therefore an adhoc site was proposed by the Government of which the authority allocated a piece of land to each individual trader, who would then on his or her own put up a shed, for himself or herself, regardless of the commodities he or she was to deal on.

1.02 DEFINITION

The term 'Market' and the equivalent term 'oja' in Yoruba, 'Kasuwa' in Hausa and 'aha' in Ibo languages have of course many connotations. Authors from various disciplines have attached different meanings to the word market. According to Hodder and Ukwu, 'market is an institutionalised activity occuring at a definite place and involving the meeting of the people there at a particular time! Frederick Gibberd, according to Arinze C.F (1976, 22) defines market as the oldest form of shopping Centre, it consists of a series of stalls or booths arranged in rows in an open or sometimes a covered space around which the public can circulate goods which are

mostly convenience goods,and they are arranged in Stalls or even on the ground which performs the function of the display windows. The market is characterised by a lively jostling crowd of people. Usual arrangement of stalls is to place them end-on in parallel rows. This should here be understood that Gibberd is describing or discussing European situations where stalls are not permanent but in Nigeria, they are permanent structures.

Eva Kraff, describes markets as Centres of social interaction, political news, consumership, terminal point of many festivities in a given part of the city. Economists define market as an area over which buyers and sellers negotiate the exchange of a well-defined commodity. For a single market to exist, it must be possible for buyers and sellers to communicate with each other and to make meaningful deals over the whole market. Markets are described functionally as agglomerations of traders on public land (Streets, open spaces, and municipal market buildings) having more than ten trading units and occuring regularly on one or more days each week.

Polly Hill (1966, 295) defines market-place as 'an authorised public concourse of buyers and sellers of commodities meeting at a place more or less strictly limited or defined; at an appointed time; Thus a market meeting usually has the sanction of authority, and it occurs regularly at a given location on a set temporal

schedule. Buyers and Sellers should also be included, and the temporal schedule could be daily or periodic. Dr. U.O Nkwogu, in his paper, entitled, The market place as a major element of urban structure in Nigeria", mentioned that the Main Market or the Central market is that continuous delineated territory in the City Central area consisting of open spaces and covered buildings, established by the City authority, and devoted enclusively to gatherings of people for the purpose of Overt Sale and purchase of commodities and services, practice of trade and habitual occupation and engagement in a variety of spontaneous social contacts."

Although this study is on the socio-economic functions of the market, it gives an in sight to any further study of markets in any West African Country. Thus Polly Hill's definition is widely quoted. Main or Central markets are markets often located on the Central area of town. They are the first in the line of hierarchy in the area that they serve and often have wider range of goods.

1.03 LITERATURE REVIEW

In Nigerian towns one can find numerious place where a few sellers, mostly women, gather at street corners and inter-sections of roads or infront of compounds and building sites and engage in petty - trading. Such trading-place have been excluded from this study nor does this review include marketing boards; department stores, super markets and trading streets.

Traditional West African markets have not been studied widely, most literature available in this topic are mostly by geographers, economists, sociologists and historians. The result being that studies on traditional West African markets have left out the physical design aspects of it.

The review of available literature on market is broken up into two parts, the first part reviews literature which surrounds the historic; social, economic and geogrophical characteristics of traditional markets, the second part is on consumer behaviour.

From the foregoing Hill's definition, therefore, it excludes those innumerable small places of adhoc trading involving a handful of women meeting at street corners, infront of compounds or building sites. They also mentioned that traditional markets are purely not merely economic institutions but are associated with several non-economic aspects of peoples culture. Such non-economics functions are religious, social, cultural and political.

T. H. Eighamy in his article on "rural periodic markets and the extension of the urban systems," observed that rural markets usually operate on a periodic regime because of increased demand and the inclusion of more westernized central place functions in the urban markets. He further mentioned that an increase in the Central place function of markets is a material manifestation of rising

expectation and a greater diffusion of information which are characteristic of developing areas today.

Writers on consumer behaviour have taken into account christaller's central place theory and much of the finding hover around the assumptions of the theory. Christaller's advanced the idea that there were two limits to the market size an upper limit beyond which the consumer would not travel for the goods and a lower limit below which there would be in sufficient consumers services such as meat and green grocery longer journeys were made to purchase less frequently demanded goods. The significant point is the general tendancy to visit nearest Centres more frequently.

W. A. V. Clark observed that "it is necessary to understand the relationship between households and Central places because it is the consumer who supports the Central places." He adds that we may then treat shopping centres as central places because Central place theory can be employed in physical planning to determine the spatial structure of shopping centres within a City in terms of their hierarchy, functions performed and minimum threshold population to support the function. Shopping streets and spots are unplanned competition featuring convenience and shopping goods developed on major arteries around traditional market zones and residential areas; stores are widely spaced over length of artery and in residential buildings.

1.04 MARKETS IN HISTORY

One of the oldest institution of mankind has been a system of exchange which makes it possible for a man to procure whatever commodity he desires to have. In the past, it was a barter system' where material goods were exchanged for another material goods. Today it is a 'Monetary' system where money is exchanged for material goods. The avenue where this system ancient and modern, takes place is the 'market'. As the social and economic structure of the society became more complex, more formal and organised Market trading was introduced. Large areas of land were allocated for markets sites. Market stalls were erected not by individuals this time, but by the local councils for their respective Towns and Villages.

In the pest market trading took place under tree shade; the trees could provide some shelter from the burning tropical sun, but they could not prevent completely drenching people and merchandise when rainfalls. As the standard of living of the people increased and social and economic transactions demanded more time and leisure, sheds like farm huts were erected usually in rural areas, in a haphazard manner, undertree shade, blocks of rock about the size of small stool and smoothened logs of fallen trees were used as seats. With changes in demographic, environmental, economic, social and technological advancement, standard and defined place was set up as a

market usually in the urban Centres. The old system still exist in the rural areas.

Traditional markets seem to be relevant, not only to speculative thinking about what to do today in certain forms of economic development. This starts from individuals propensity to barter, perhaps involving silent barter, it deduces from this the necessity for local exchange, the division of labour in local markets, and infers finally the necessity of long - distance or at least external, markets or trade.

In ancient times it was an open space to which farmers and craftmen brought their products for barter. The development of transportation and money systems implemented the transfer of goods, and the barter system shifted to a form of retail enterprise. Expansion of commerce created a merchant class dealing in the exchange of goods produced by others than themselves. The industrial system brought more changes in the nature of the market place. The system of communication also accelerated the exchange of goods. The great cities became the trading Centres in which world commerce was concentrated.

Throughout the underdeveloped and developing world, periodic markets usually appear in areas with low purchasing power, poor transport, system or poorly utilised resource bases and low population density. As one or more of these characteristics changes, the nature of a market and the system in which it is embedded also changes.

An increase in purchasing power, the building of new roads or the improvement of old ones, the use of fertilizers, or an increase in population by birth or immigration to mention a few possibilities, tend to have the following effects:

i) The fregnency in which a market meets increase until it becomes a daily market.

ii) The range of goods offered for sale grows because demand is raised, thereby allowing new individuals with higher threhhold to enter.

iii) Trade specialization increases, since there is more demand for a given product and since economic of scale can be realized.

iv) The distance that consumers are willing to travel to market increases because a greater variety of goods is available.

v) The need is increased for local institutionalization and regulation of sanitation, quality control of goods offered and of local traffic flows.

vi) The likehihood increases that the wholesaling function will be present or that physically and spatially distinct wholesaling markets will be established.

Lack of traditional markets will encourage hawking trade, for hawkers are quick to locate themselves at the

point of greatest consumer demand. Government see hawkers (and truely) as a nuisance, obstructing traffic; creating congestion and refuse problems - impossible to supervise, encouraging criminality, competing unfairly with Shop owners and as a menace to public health.

1.05 IMPORTANCE AND FUNCTION OF MARKETS.

Considering the fact emergence of exchange markets is fundamentally related not merely to the desire of producers to trade-off surplus production in exchange for other goods, but basically, markets come into existance as a function of the division of labour, so that those who concentrate on production of one sort may obtain the produce of others.

Markets being the oldest institution of mankind where a system of exchange which makes it possible for a man to procure whatever commodity he desires to have, has some economic, religious, cultural and security importance.

Vagale (1974,1) mentioned that markets play a very vital role in the economic life of the people. They are essential links in the Chain of commodity distribution, strengthen the economic base of towns and sustain the tax-base of the local authority. Most roads and streets and the means of transportation converge on markets. The market as a business institution has given a large measure of economic opportunity and social security to women, who form bulk of the traders.

It is therefore, no wonder that almost every town and most villages have market days at least once in eight days. Most market lie within a radius of one to seven or eight miles from urban and rural settlements which they serve and, therefore, can be reached by some people on foot. These markets, whether daily or periodic, deal in a variety of commodities like Yams, grains, pulses, meat, vegetable, oils, cooked food, cloth, leather goods earthen and enamal were, plastic goods, salts, soap and herbs. The market are not only economic institution, but also serve as social entities. They forge links between people of diverse ethnic groups, racial backgrounds and cultural H traits. They also serve as meeting places for socio-cultural, religious and political activities. Markets provide a physical setting for interaction between urban and rural cultures. Despite the fact that indigenous markets account for the bulk of trade, little attention has been paid to organise, operate and improve them. They face formidable problems of sanitation; movement of people and goods and provision of utilities and services. If markets have to survive as productive, efficient and useful institutions, it is necessary to understand their physical and socio-economic profiles and to redevelop them in a planned manner.

According to Robert, H.T. (1978) number of participants are present in market place to obtain Cash through the sale of goods and services or to obtain or order goods and

services. Other purposes can be served by a visit to the market place, and some people are present in the market-place neither to offer goods and services for sale nor to purchase goods and services. Some markets have additional function apart from its economic role. Bohannaus made a similar claims for Tiv markets. Tiv market places are institutions within which goods and money are exchanged on a free market, on the other hand, there are political, religious and recreational aspects of the market places. Thus market - places served both economic and non-economic functions.

Nigeria's markets perform three economic functions simultaneously. These include local exchange, internal trade and central place, since markets sites mesh supply and demand in both their spatial and temporal variations.
LOCAL EXCHANGE: This mediates family surphuses and deficits, base on small scale division of labour, requires no more than a subsistance economy, and the services available at a the market - place are single.
INTERNAL TRADE: This implies specific complementarily between areas of supply and demand, market-place facilitate bulking and consignment of local surplus and this involves participants who play no role in local exchange.

As this dominates; at a market place; the services performed by the market become more complex.

CENTRAL PLACE OF FUNCTIONS

This involves low order manufactured goods, exotic foodstuffs and certain services and these are paid for with the cash proceeds of niternal trade (and, occassionally, of export crops).

The assertion that the main function of most periodic market places seem to be the supply of urban oriented middlemen with rural goods produced in small individual lots, rather than to supply peasents with retail goods, implies that internal trade functions dominate both local exchange and central place functions. These three economic functions are present to varying degrees in all market places.

1.06 CLASSIFICATION OF MARKETS

Markets may be grouped in terms of several variables, according to vogale and these variables include

i) Scale of transactions, whether retail or whole sale
ii) The type commodities sold (food grains, cloth and household goods)
iii) Periodicity (whether daily or occuring at regular intervals)
iv) Time of operation (whether functioning in the day, night, or day and night)
v) Nature of growth (whether organic or laid out or planned) and
vi) Ownership of land and building (town council local community, a chief, or a family).

However, vagale, L.R. mentioned that the most - valid and useful classification of markets in Nigerian towns seems to be the one based on the periodicity of market operations.

At local level, commodities flow from the rural catchment to urban node and vice-versa, through daily markets. At the regional level, periodic markets are held at specific intervals to replenish stocks of local markets in urban areas

Daily markets ——— — Morning markets
— day markets
— Night markets
— day and night markets

Periodic markets. They are held at intervals of four, eight, twelve or sixteen days in a sequance to form a 'market ring; each ring being composed of a complete and integrated cycle of market operation.

Day Markets:- The day markets are the most common type of markets in Nigerian towns. They are also more organised, planned and distributed than other types. They serve a very useful purpose in distributing agricultural as well as non-agricultural commodities to the actual consumers. The day markets, with few exceptions cater for only retail trade. A wide assortment of goods such as prepared foods, provisions, household utensils; plastic wares, textiles and herbs are to be found in these

markets. Day markets are characterised by intense commercial activity; high density of day time population, congestion, noise and a preponderance of women over men in selling as well as buying.

Night Markets. This is understood in terms of cultural patterns and social traditions of the country. They specialise in selling various types of cooked food, cater for the need of local community and the service areas are small. Serve basically economic institutions as well as social purpose and also a scene of local polities, Advertisements, festivals.

Vagale (1974, 3) further classified periodic market into provincial periodic markets and inter-kingdom periodic market. Provincial periodic market, is usually held on every fouth day and is attended by people living not too far from the market place. While the inter-kingdom periodic markets, have service areas much large than the first type. The buyers.and sellers come to the market from distances ranging from fifty to a hundred miles.

The principal economic function of periodic market is collecting, bulking and distributing indigenous as well as improved goods like foodstuffs, cloth, household materials and fancy goods. They also provide the setting for fairs, scope for entertainment, amusement and social get together, as most Nigerian communities are still at a stage of urbanisation in which economic pursuits are not fully seperated from socio-cultural activities.

1.07 STATEMENT OF PROBLEMS

The occurance of a market in any urban city brings about series of problems from Environmental sanitation, traffic congestion to complicated socio-economic problems which eventually lead to further environmental sanitation problems of illegal street trading arising. The problems that arise as a result of creating market, might be due to unproper planning. Some of these problems identified include:-

(i) Chaotic vehicular and pedestrian traffic flow.

(ii) Market congestion and traffic congestion

(iii) Unorganised Vehicular parking

(iv) Chaotic commercial traffic planning

(v) Poor zoning layout making it difficult for shopping and social activities to be uninterrupted.

(vi) No specific zoning for street traders

(vii) Poor market stalls, conditions of services and facilities.

(viii) Sudden increase in number of people participating in trading activities as a result of lack of jobs, in the crumbling economy, retrenchments and retirements.

Therefore all planning problems including drainage and servicing facilities should be well placed for the proper functioning of the market.

1.08 AIMS

Since the market site was burnt down, there was no defined market place, the one they have is not planned and congested. The one or adhoc site was unplanned, what the authority did was to allocates a plot of land to individual trader, who own their own put up structures for themselves as mentioned earlier. Therefore the author decided to take up this topic.

To this end, the market place as a built up space has the following as aims.

To find ways of advancing quality of relationship of buyers, sellers and staff on one hand and the environment setting at the other. To identify, redesign or design opportunity support and reward structures within the environment to assist the community in their economic, social and physical environment, To crown it all, it serves as meeting point for buyers and sellers of commodities.

1.09 OBJECTIVES

Since this is an economic venture, conditions have to be created to attract buyers or shoppers, it should therefore be easily accessible, attractive, clean and fill up with splendid displays of a variety of merchadise. To propose clusters of multistorey stalls to effect optinium use of space to cater for future needs of the market users. To propose efficient and hygienic structure with adequate

utilities, facilities and services. To reduce congestion caused by hawkers eneroachment on walkways, open air trading and erection of illegal temporary stalls through provision of ample space for them. To propose a centralised public facilities and to subsidize rents so as to be stable and reasonable. And to encourage the continuation of the traditional market trading system for the economic and social benefit for the community.

1.10 SCOPE AND OUTLINE OF PROPOSAL

This shall comprise Administration, lockup shops, warehouses, stalls both open and lock-up types. General facilities like telephone booths, postal agency; bank, court; police post; lattable space for barbers, tailors, shoe repairers, Hawkers and refuse chute and fire station.

The proposal include the segregation of Vehicular and pedestrian traffic, provide for pedestrian gates through which access is achieved to the purchasing zones. Network of walkways which allow for free flow of people. Bulky perishable essential commodities are accommodated in the ground floor level. Textiles, electronics and electricals in the upper floor levels. Organise the market based on commodities zones and to decentralise parking space to reduce congestion on one side.

1.11 METHODOLOGY

Since market place has always been, the focal point of the city, a center for the exchange of goods, therefore,

the system used in data collection for the research work include:-

(i) Field in ventory or survey

(ii) Structural or informal Interviews

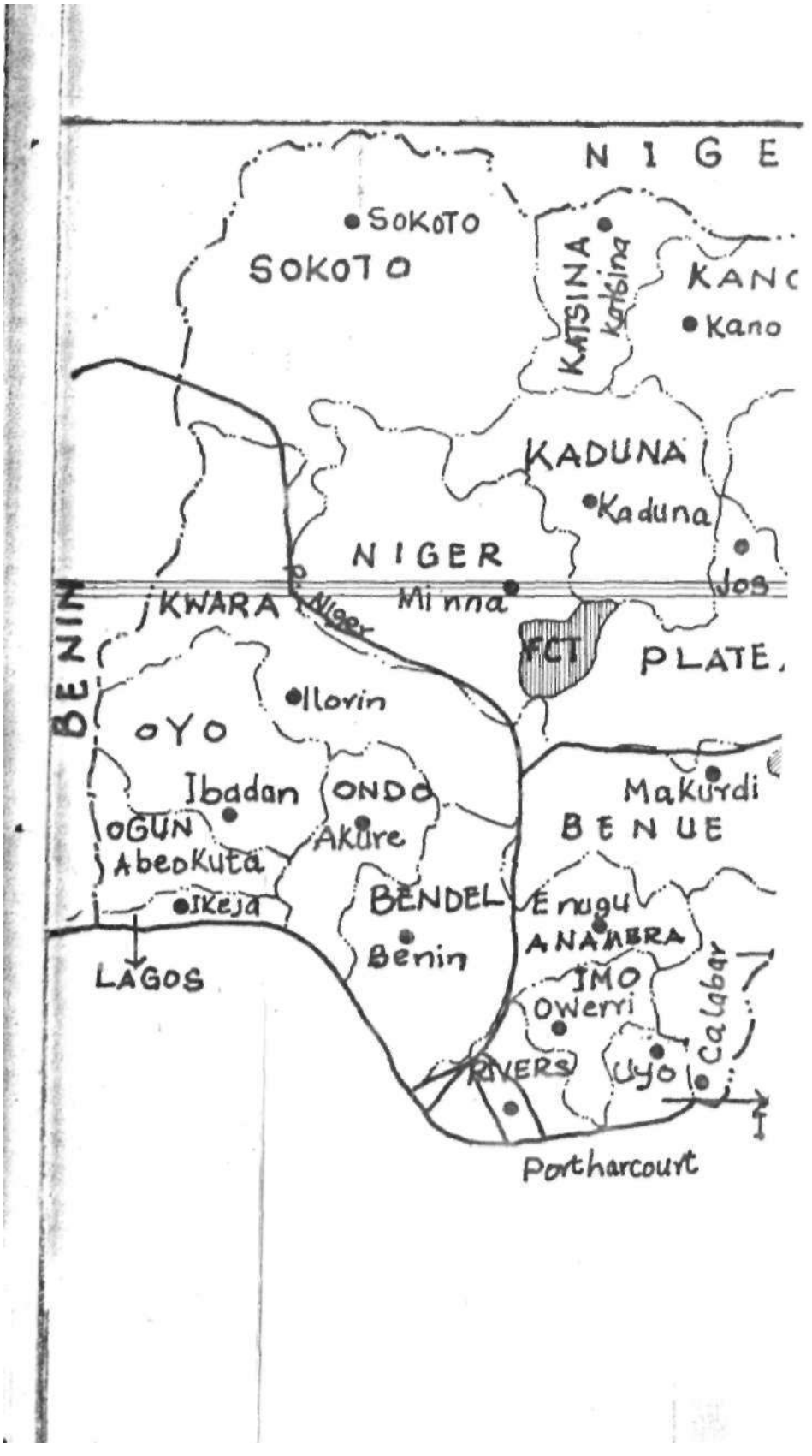
(iii) Unstructured or informal Interviews

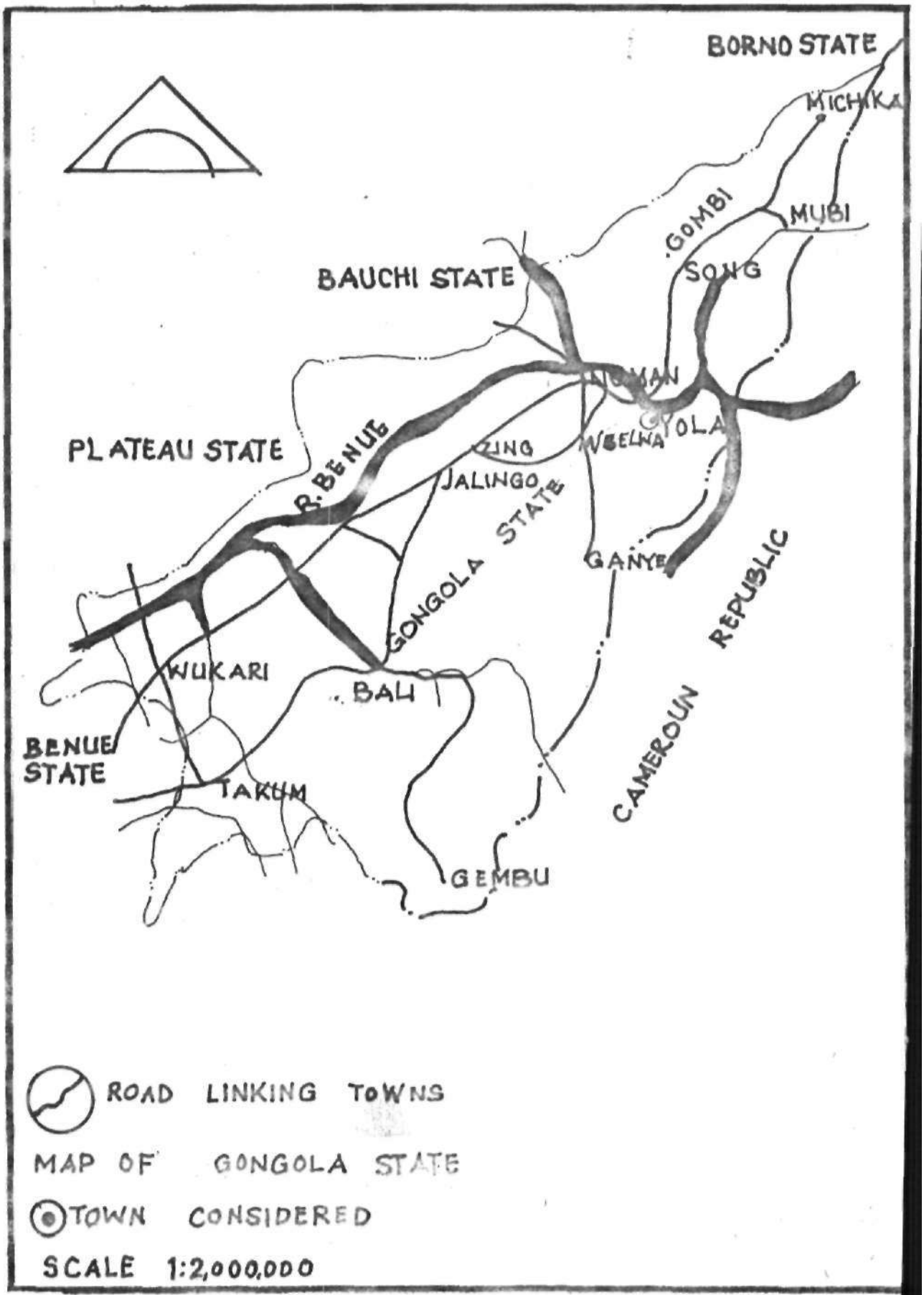
(vi) Reading of documented books.

1.12 LIMITATION

The Thesis Cannot look into the technical details of providing the necessary utilities, services and facilities to be proposed. The thesis as a whole will be based on research informations available.

Also some perculiar problems of markets are, no matter the initial design, there would always come a time when the design would be distorted. This can be attributed to the growing population. When the population increases more people have to be fed as such more goods would be needed in the market. The raise in economy of the nation would also change taste of many individuals from a lower to higher one, when this happens the previous market will attract more traders into business the market site then becomes too small, this leads to congestion.


NIGE
SOKOTO
SOKOTO
KATSINA
Katsina
KANO
Kano
KADUNA
Kaduna
NIGER
Minna
Jos
KWARA
Niger
FCT
PLATE
BENIN
Ilorin
OYO
Ibadan
ONDO
Akure
Makurdi
BENUE
OGUN
Abeokuta
Ikeja
BENDEL
Benin
Enugu
ANAMBRA
IMO
Owerri
RIVERS
Uyo
Calabar
LAGOS
Portharcourt


BORNO STATE
MICHIKA
GOMBI
MUBI
SONG
BAUCHI STATE
PLATEAU STATE
B. BENUE
JALINGO
GONGOLA STATE
GANYE
GONGOLA
WUKARI
BALI
BENUE STATE
TAKUM
GEMBU
CAMEROUN REPUBLIC
ROAD LINKING TOWNS
MAP OF GONGOLA STATE
TOWN CONSIDERED
SCALE 1:2,000,000

CHAPTER TWO

2 THE STUDY AREA

2.01 JIMETA - YOLA TOWN

Jimeta - Yola falls along latitude 9°N and longitude 12°E. It lies in the most hot humid climatic zone of Nigeria with two alternating seasons of dry and rainy seasons respectively.

The study area is on the south eastern part of the then North eastern state of Nigeria. The City has two districts, these are the Yola district and the Jimeta district. Yola district is relatively older than and more traditional while Jimeta district is newer and is the Centre of commerce and trading activities.

Yola is separated from Jimeta by a six kilometres stretch of floodland. Jimeta lies on a rocky outcrop directly over looking the Benue river. Founded as a small trading Centre based on river traffic, Jimeta served as the colonial Government Administrative headquarters which has now grown up as a modern settlement. The river Benue and its floodlands and the large expanses of land covered by the Government Reserved Area (G.R.A) and the over-generous allocation of suitable available land to public institutions namely the Army and Federal Advanced teacher's College, have severe restrictions on the physical expansion of Jimeta. The bustle over crowding, poor housing conditions and a greater mixture of population makes it a complete contrast to Yola.

2.02 BRIEF HISTORICAL BACKGROUND OF THE TOWN

Yola is an old Fulani settlement founded around 1841. It is purported that the town was formed when the then Fulani ruler moved his Administrative headquarter from Gurin to the present Yola site. Modibbo Adama, the then ruler, was made Emir by Usman Danfodio in 1806 as a reward for the part he played in the Jihad. Throughout the nineteenth Century the emirate was known as Adamawa derived from Adama's name, but was changed to Yola by the British after it was captured by them in 1901, and in 1926 reverted to the name Adamawa. Jimeta, part of Yola town has the river Benue beyond it and is navegable as far as Garua in the Camerouns, but only for a comparatively short season. But, now the river have been bridged to link Jimeta town with Mubi and towns. It is a busy bursting cosmopolitan town, spreadout rather haphazardly along two roads which cross more or less in the middle of the town. Besides the traditional mud compounds, many of them dilapiladated, there are a lot of buildings with roofs of corrugated iron sheet, aliminium and some solid modern bungalows and flats of all sizes existing now.

Yola derived its meaning from the fulfulde word 'Yolde' meaning outside entrance. The towns are surrounded to the north, east and west by floodland. This has put a physical limitation to the expansion of the town in these directions.

2.03 TERRITORIAL GROWTH OF JIMETA - YOLA

Before the creation of Gongola State, Jimeta - Yola was growing, but at a snail rate, with the traditional huts and households arranged in groups of compounds which were hemmed round by mud walls or straw screens. But with the creation of the state in April 1976, increasing tendencies towards building modern houses and yet the traditional importance of keeping the spying eyes of passerby is maintained by erecting walls of mud or fence. Nonetheless, there are more modern buildings in Jimeta than Yola. Planning is rectangular with compounds and blocks of buildings facing main roads, streets and foot-paths. It also has a greater growth potential than Yola. It is also in Jimeta that the Government offices both State and Federal are located other zones in the town are residential, commercial, industrial, educational, health and the Government reserved Area (G.R.A). The Administration to the east, industrial to the North West, G.R.A. to the South-east, with a number of ministries located within it and the new State and Federal secretariats (under construction) also to the that end with the trend of development in the growth of Jimeta especially, it can be foreseen that in a near future the two towns would merge up to be a unity.

2.04 SOCIO - CULTURAL CHARACTERISTICS

Jimeta - Yola is solidly Fulani, followed by the Hausa, Jimeta is more mixed but still about 43% are

Fulani and Hausa accounted for 18% according survey carried out by max lock group. All the other groups were small in number spread amongst a galaxy of tribal names. The greatest concentration of Hausa in Jimeta was in the inner area around the market and some of the smaller tribal groups.

Today, the settlers of Jimeta town are either civil servants, traders or industrial producers, this is because of urbanisation and other economic factors.

2.05 CIRCULATION

The State capital is linked by roads from Numan and Mayo belwa from other States of the Federation Via Ngurore to Yola at the Western end. At the Northern part, it is linked by road from Mubi via the bridge and south by road from Jufore. These roads pass to other neighbouring States like Borno, Bauchi, Benue and Plateau respectively.

2.06 TRAFFIC VOLUME

According to survey carried out by max, lock group, the result observed was that the most heavily loaded intersection is the roundabout opposite the police barracks with a daily (8 hours) throughout of about 2,500 P.C.U. For comparison, about 2,000 PCU were recorded at the junction infront of the then provincial secretariat and 1500 PCU at the intersection of main - street (Aliyu Mustapha road) and Sir Kashim Ibrahim road. The flows

on the major roads are relatively well distributed, varying from about 1,700 PCU /day on Sir Kashim Ibrahim road to 2,350 PCU/day on Ahmadu Bello Way Stretches of main street are thought to carry as much as 2,500 PCU/day. Although at river side round about, only 1,250 P.CU /day were recorded up to 5000 PCU/day travel between Yola and Jimeta, at least half of which use Ahmadu Bello Way and Mubi road to get to and from the police barracks roundabout. Only 12 - 15% used hospital road now Bishop Street.

2.07 ECONOMIC BASE OF JIMETA - YOLA

Like some parts of the State, occupation of people in this area include farming, fishing, wood carving, pottery, leatherworks, metal works, sewing, knitting carpentary, masonary and painting. The northern grain economy predominates, millet, maize and guinea corn are the main crops. Groundnut, sweet potatoes and paddy rice are also widely cultivated planting of Cassava is becoming important. They also grow cotton plant and indigo for dying cotton. Locally made strips of cotton cloth were a standard medium of exchange in most of the towns.

The town being an important dry season area for the nomadic Fulani, sheep, goats and cow are brought from the north to the Benue Valley when the dry season has rendered areas in the north bare of green grass for the animals. The nomadic Fulani move northwards before the rainy season sets in and quite unlike the southward movement which is

slow. These herdmen produce the fresh milk and meat that are consumed in the urban areas.

2.08 TRANSPORTATION

The two towns are linked by a narrowly embanked tarred road which crosses a number of streams by narrow bridges. But with the growth of the two towns, the road is converted to dual carriage way, and it is under construction. Jimeta has another main road linking the Yola road and running to Numan. There are other wide streets and roads linked to the main town by a tarred road and this road is joined by the short one linking the Yola - Jimeta road with the Government offices.

There exist an efficient taxi/buses services between Yola and Jimeta and Jimeta has an internal service of its own. Apart from motor Vehicles plying the roads, Bicycles, push trucks, Motor cycles, animal of burden and human porterage is employed for conveying the greater bulk of goods in the two towns.

2.09 ANALYSIS OF POPULATION

The population of Jimeta and Yola is predominantly Fulani. The composition in Jimeta is more mixed than in traditional Yola yet the Fulanis, according to the 'Max Lock' Survey comprise 43% and 18%. The remaining 39% is made up of the minor tribes of Gongola State and immigrants from the neighbouring Country Cameroun. The percentage

age composition in Yola of the Fulani is higher than it is in Jimeta.

On the projected population basing the facts on the figure obtained by the planning consultants, the max lock group, the present population (1988) in Jimeta and Yola is slightly above 112,500 base on the population rate of increase per annum of 2.8% average. Since in 1979 the population was 65, 500, Jimeta is slightly above 47,500 and that of Yola 18,000.

According to 'Max Lock' survey, the population is bound to increase both by immigration and naturally.

A similar survey carried out by another group of planning consultants, 'Dar Al Handash'. Confirmed all facts and figures of the Max Lock group and went on further to discover that population natural increase will be as follows.

Table 2.1 Rate of Population increase per annum.

1978 - 1983	rate of	increase	per	annum	= 2.8%	average
1983 - 1988	"	"	"	"	= 2.5%	"
1988 - 1993	"	"	"	"	= 2.5%	"
1993 - 1998	"	"	"	"	= 2.3%	"
1998 - 2002	"	"	"	"	= 2.2%	"
2002 - 2008	"	"	"	"	= 2.0%	"

Another aspect of population growth as has been stated in by immigration, and this is assumed as a rural-urban movement resulting from new facilities and new job opportunities at Yola being the Capital of Gongola State.

Table 2.2 Population Growth in Percentage

YEAR	JIMETA		YOLA	
	% Natural growth	% Migration	% Natural growth	% Migration
1983 - 88	2.8	4.2	2.5	0.95
1988 - 98	2.5	4.5	2.5	0.95
1998 - 2008	2.5	2.5	2.5	0.95
2008 -	2.2	2.1	2.1	0.90

Table 2.3 The Population trend estimated by both Max lock group and Dar - Al - Handash is follows:-

YEAR	JIMETA		YOLA	
	Dar-Al-Handash	Maxlock group	Dar-Al-Handash	Maxlock group
1978	45,000	45,000	16,000	16,500
1988	88,500	88,500	21,120	24,000
1998	174,100	144,200	27,036	33,800
2008	343,000	200,000	34,600	46,300

Which means by the year 2008 the total population for Yola (Comprising Jimeta) will be by:-

(i) Dar-Al-Handash = 343,000 + 34.600

= 377,600

(ii) Max Lock group = 200,000 + 46,300

= 246,300

Average = 377,600 + 246,300/2 = 623.900/2

= 311,950



Proposed Land Use

Structure Plan 4: Current Land Use Proposals
May 1976

Mixed Urban Mainly Residential
- High Density
- Medium Density

Institutional
- Education
- Law & Defence
- Public Services & Administration

Services
- Public Transport & Utilities
- Mixed Commercial
- Industrial

Open Spaces
- Public Open Space
- Agricultural Production
- Land to Remain Undeveloped

- Primary Roads
- District Roads
- State Secretariat

2.10 MARKETS IN JIMETA - YOLA

Apart from the old Jimeta market, mid-way along Mohammed Mustapha way, there are three other small shift markets of not more than fifty men and women traders at full capacity, one at the western half and the other along Mayobelwa road; south - east of the eastern half.

The new Jimeta main market south west of Donbeli ward that was set ablaze by the fires during the 1984 religious disturbances has been removed to a new adhoc layout site westwards, and far from the former location. The pattern of Shopping and Commercial Services show that provision is on two levels:-

(i) Town - wide

(ii) Local Mohammed Mustapha, Mubi road, and Sarkin wuta Street clearly form part of the commercial Centre of Jimeta as a whole, and therefore the bulk of commercial activities should be seen as providing services, to the town as a whole rather than to the site area.

Outside these three main streets, business seem to perform a more local function to the population of the area itself. There are clustering of business along the north, the west and south-west of the site. There exist also in Yola town a market, which is traditionally said to be weekly, but a lot of marketing goes on everyday. This market as that of Jimeta occupies the central part of the town. The market has less, in terms of infrastructure as compared to Jimeta market.

CHAPTER THREE

3. CASE STUDIES

3.01 SOKOTO CENTRAL MARKET

LOCATION: The market is located outside the City, wall, it forms part of the commercial core of the town and well served by across roads, that makes it accessible to both inhabitants of the town and even people from Niger Republic.

3.02 TECHNICAL DATA

ARCHITECTS: Messrs Kueppers (Nig Ltd.)

Total floor area: 50 acres (21Ha)

Type of Contract: Design and Construct or turn key contract

Date work began: October 1977

Date the market was commissioned: June 1979

Total Cost of Project N23.5 Million (Market and long parked

Source of Money for the Project: Loans of N10 M from the State government and the rest from Commercial banks especially first bank of Nigeria Limited.

Contractors: Messrs Kueppers (Nig) Ltd.

Engineers: Scot Wilson Kirkpatrick (Nig) and partners.

Commercial and industrial consultants: Berif international Inc.

Total number of Stalls: 5000 Stalls of varying design.

Total number occupied by March 1985: about 4000 Stalls.

Total number unoccupied by March 1985 is about 1,000 Stalls.

Open Stalls: 45%

Lockable Stalls: 55%

Distance between Stalls: blocks 6.0M

Stall Size: 4 x 3 M and 5 x 3 M.

Roofing: 75% asbestos and 25% concrete barrel Vaults

Walls: 100% concrete

Total Population Served: 270,375 (1995 Projection)

Rents Charged Per Stall Per Annum Open Stalls: ₦7:00

Lockable Stalls: ₦30.00

Lockable Stalls Without Electricity: ₦20:00

Restuarants: ₦50:00

Total expected Monthly Rents: Open Stalls: ₦18,900:00

Lockable Stalls and Restuarants: ₦74,250:00

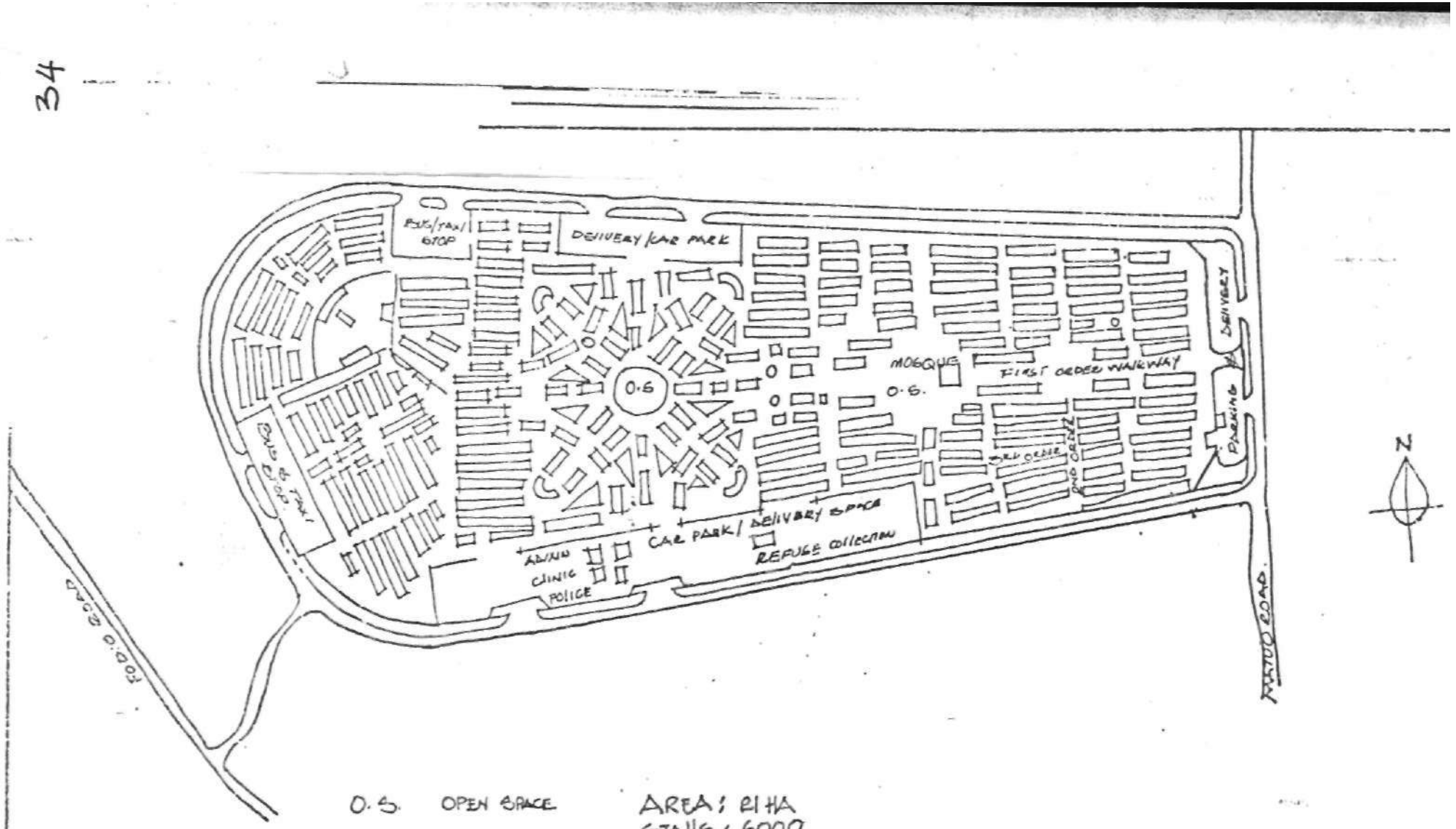
From the above calculation, it is expected that about ₦1.2 million will be generated yearly as rents.

3.03 CLIENT REQUIREMENTS

"To give Sokoto a permanent Central Market preserving the long standing tradition of Stalls for individual traders but incorporating all modern amenities plus special features to render the whole concept one which should ensure pride of place for Sokoto in the national Development programme."

3.04 THE SITE

(i) An open space of about 50 acres (21 HA)
(Old Gandu layout)



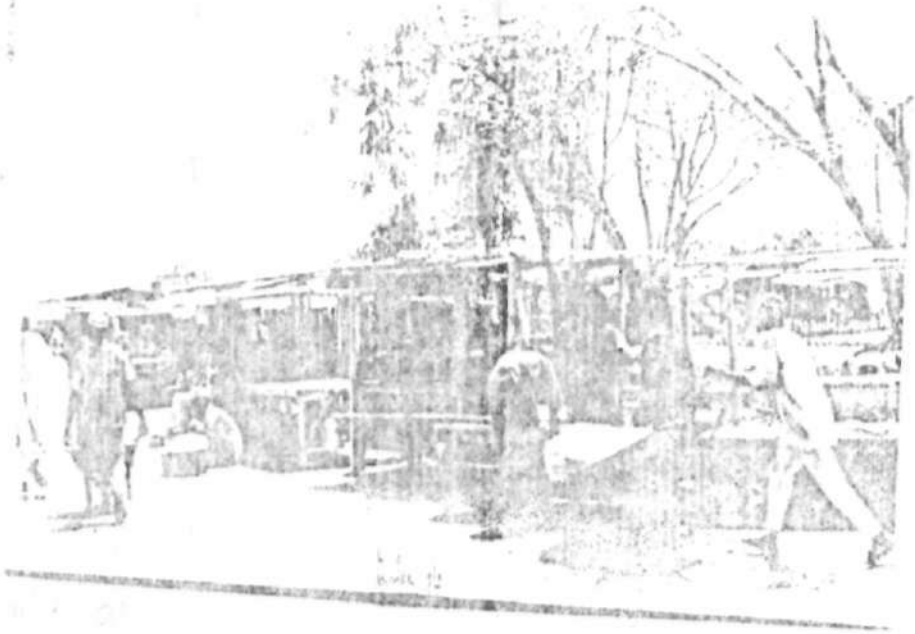
0·S. OPEN SPACE

AREA: 21 HA
STALLS: 6000

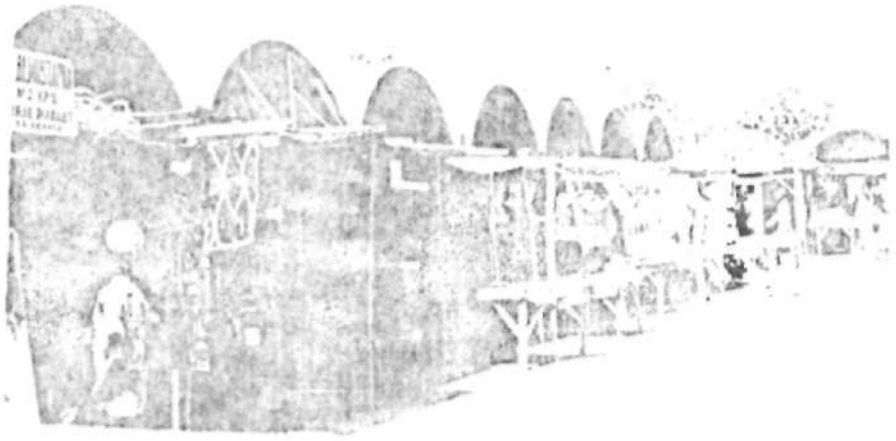
FIG. 3.1. SOKOTO CENTRAL MARKET.



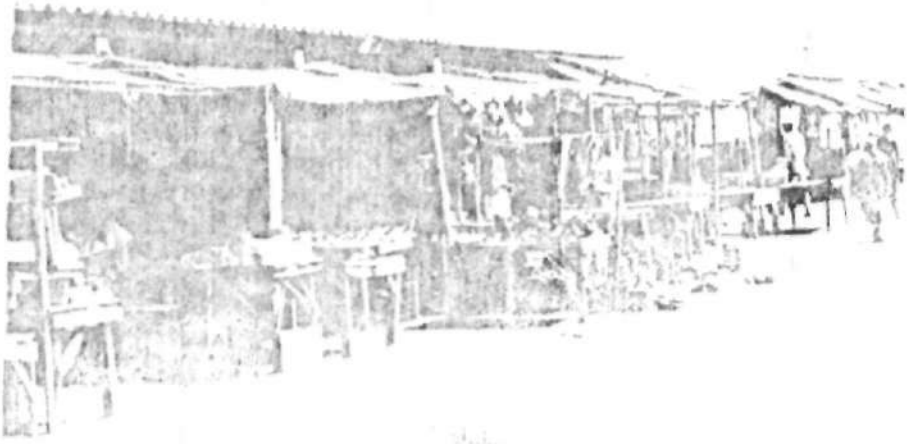
Secondary order walkway of Sokoto Central Market. Note how the illegal extension of Stalls make the Stalls clumsy. Empty Cartions are Stored on the roof. And the manumental building which is the focal point of the Market and carries the alarm bell.



Junction of the Secondary order walkway with the main shopping mall, note also the illegal extension of Stalls.



The Secondary order walkway showing the barrel vault roofing of the corridors, which has been encroached by display of goods.



This also shows a temporary extension of stalls, which is used for display leaving the main stalls.



This shows the entrance situation at one of the gates in Sokoto Central Market.



This shows the Administrative block of Sokoto Central Market, with tree infront

(ii) Fairly flat terrian without any special obstructive features.

(iii) Fairly served with infrastructure.

(iv) Not very Central.

3.05 THE PLANNING PRINCIPLES

(i) Major road development in the project area including a dual carriage way perimeter road around the new market all with modern drainage and street lighting.

(ii) Central lorry park flanking the main entrance of the market. It accommodates about 400 Vehicles and is provided with Stores, Stalls, Shelters; toilets, and security lighting. Its floor is of reinforced concrete construction.

(iii) The whole market area except the landscaped open spaces is covered with lightly reinforced concrete.

(iv) A system of open lined drains protected by railing and top grillage.

(v) The whole market is surrounded by a high security wall.

(vi) A large market lorry park is situated at the main (south) entrance to accommodate up to 150 market bound Vehicles and provided with grain stores, food hotels, shelters, toilets and security lighting. Adjacent is a parking lot for private Cars and Motor cycles.

(vii) Nearby the private Car park are the police station, A Area court and information Bureau.

(viii) The other three entrances, north, east and west each has parking spaces for private Cars, but are mostly used as delivery boys especially for goods and taxi passengers.

(ix) A fire station is provided in the 'works yard', it is on 24 - hours duty with trained personel and a land - Rover fire tender, sleeping quarters, workshops for maintenance, staff and garage space for plant and equipment such as septic tank emptiers, Refuse collection Vehicles etc.

(x) Water Supply including fire hydrants cover the whole area of the market and storage is provided by a 100,000 gallons elevated tank.

(xi) 12 number toilets blocks spaced in the market area and manumental building in the centre of the m market carries the alarm.

(xii) Administrative building is provided in the heart of the market to house the managerial and accounting staff and a clinic. It is a two - storey building. This building is joined by a walkway to the bank building.

(xiii) Flanking the Administrative building on both sides in the Central axis are the Mosques and an open recreational area.

(xiv) No space for street traders (hawkers) and wheel barrow boys.

3.06 APPRAISAL

(i) The main (south) entrance is in two stages: First entrance leads one to the parking lot, the police station, the area court and the information bureau. It has no lockable gates. The second stage entrance leads one into the market area i.e the sales area.

(ii) The marketing areas are clearly defined with restuarants, cold drinks stores and other items that needs refreggeration immediately fronting the main entrance. It is only these stalls that are provided with electricity in case of fire accidents resulting from electricity this can be put-off. The fact that the rest Stalls are not connected with electricity is a welcome decision.

(iii) The use of land scaped gardens at appropriate spacings. Serves as 'Shopping brakes' and thus reduces customers fatique resulting from continuous walk along stalls or shop fronts.

(iv) Properly designed meat and fish (both fresh and dry) Stalls, but the tenants have greatly abused) it. From observation and findings this is due to in efficiency on the part of the Administrative

section. The drains are constantly littered with filt.

(v) The refuse collection system is satisfactory and keeps the market averagely neat at all times.

(vi) The structural systems used are good and reflects the traditions of the community.

(vii) Sufficient area for display of goods, in the lockable stalls is not provided in the design and this has led to ugly and illegal extension of StaIIs. Consquently, this encroachment has reduced the designed widths of the various walkways. The display of goods in the open is a socio-economic characteristics of this community which was over sighted by the architects.

(viii) The street trader and the barrow boys have been haphazardly taken care of. They are charged about one to two Naira per day and yet, no specific open space is provided for them. Hence they line the main walkways.

(ix) Quite a number of the stalls were unoccupied. This might be due to its location, the rent charged, time of opening and of course the present economic situation.

In conclusion, one can safely say that the architects, have gone a long way in trying to give

Sokoto a permanent Central market preserving the long standing tradition of stalls for individual traders, but incorporating all modern amenities plus special features to render the whole concept one which should ensure pride of place for Sokoto in the national development programme.

* Followed by plans & pictures

3.07 MAIDUGURI MONDAY MARKET

LOCATION: The new Maiduguri Monday market is located at the old market site in the heart of the City of Maiduguri. The market is an organised shopping precinct providing the opportunity of direct exchange of goods between the farmers, traders, and the general public. The project is said to cover the area of 85000m^2 about (8.5 HA) and is bounded by main City roads.

The market is dominated by a combination of cluster of small hexagonal sheds laid in three large Central hexagons interpenetrated by open spaces given light and ventilation separation of clusters allows for different ground elevations, stalls and other rentable spaces are laid out continuously under the sheds.

3.08 MARKET FACILITIES

Administrative building

- Administrative offices
- Court
- Clinic
- Police Post.

other include: mosque, public toilets, Boreholes and water tanks, Cartage rooms and fire houses, car and donkey parks, Car and lorry park, peripheral fencing, landscaping and interior paved roads,/storm water drainage and sewerge treatment plants.

3.09 PROJECT DATA

Market Site area = 21 HA

Total rentable area = 21 350 m^2 = (2.14 HA)

Car and lorry park for 147 Vehicles

Date Completed 1985

Total number of Stalls = 7170

Simple Stalls - 5,394

Stalls with Cabinents - 1,313

traders shop - 24

peripheral shops - 47

workshop - 19

Stores - 12

Stores with cold storage facilities - 310

Food Stalls with berbeque gril - 60

Total - 7170.

3.10 DESIGN AIMS AND OBJECTIVES

To resettle the people of the burnt old Monday Market which was the necleus point for the north eastern trans-saharan trade - route. Design was to be evolved for quick reconstruction and easy erection for immediate

resettlement. To provible adequate prevention from fire. To provide hygenic and efficient facilities for trading operations. To encourage the continuation of the traditional market trading system for the economic and social benefit for the community. Advantages are, the construction is mainly steel and concrete therefore cheap. Design facilitates adequate Ventilation and lighting.

3.11 LAYOUT PRINCIPLES

(i) Parking is centralised

(ii) The market is accessible from two roads, Ahmadu Bello Way and another tarred road in the market layout.

(iii) Poligonal Shaded spaces are organised around open courtyard

(iv) There are two Vehicular entrances along an axis in between these Vehicular entrances the road was deliverably looped to provide access to other sections of the market. This road serves as a service spine for deliveries, garbage collection and for fire fighting Van to have access to the Stalls in case of any fire incident. It should be noted that only these service Vans are allowed into the market through this road, since deliveries and garbage collections are done very early in the morning and later in the evenings at the closing time of the market.

(v) A large number of market stalls were linked together by the roofing system which provides shelter in moving from one stall to another without being exposed to the sun.

3.12 ROOFING SYSTEM AND UTILIZATION

The roofs of the structure were painted in different colours so that the market users especially those coming to the market for the first time could identify where they are.

The area is utilized to its maximum potentiality by allowing extensive display of goods while providing reasonable storage facilities.

3.12 PLANNING PRINCIPLES

This is contained in a rectangular piece of land and bounded by three roads, on three sides. Taxi park located at the eastern end of the market while the general Car park is at the western end. Delivery area is located behind the market. For smooth traffic circulation, both taxi and general car park have separate entrances. The layout being in three levels, is entirely a new concept of layout in the history of Nigerian markets. Groundfloors contain facilities such as banks, post office, food canteens and Administrative offices etc. They are all located at the definite grid marked 'A' on the ground floor plan. Contains also some

Shopping halls which are arranged ground courtyards located at certain strategic grids to facilitate Ventilation.

3.13 CIRCULATION PATTERN

Approach to the market is at the western, eastern and northern sides of the market. There are two main walkways at the two (longest) sides. Entrances were provided at intervals to the Shopping halls and stalls both in the ground floor and first floor.

KADUNA CENTRAL MARKET

3.14 LOCATION: This is located within the Central business district of the town, although not directly on the major commercial road that forms the artery of the town. (Ahmadu Bello Way). The market is located close to this road and served by the broadcasting road and Ibrahim Taiwo road.

3.15 PLANNING PRINCIPLES

Parking is at the periphery, thus the commercial section is purely pedestrian. Stalls are laid in rows and ranged in long clusters. Public services like Police post; the bank etc are located peripherially. Perishable wet commodities which are frequently needed are peripherially located for easy access. Administrative block is located easy identification by both traders and customers within the central area of the area.

3.16 CIRCULATION

As one gets to the market; he approaches first the parking, then pedestrian movement through the gate first in a wide walkway about 30 metres wide and then 25 metres walkway that separates the clusters. Spaces in between stalls are 5 metres. Because of the existing walkway encroachment by squaters in the market, the 30 metres walkway is now reduced to between 25 and 10 metres.

3.17 IDENTIFICATION OF PLANNING PROBLEMS AND PLANNING PRINCIPLES.

(i) No provision for expansion of the market by the 1975 plan.

(ii) The market lacks clear segregation between Vehicular and pedestream traffic which has resulted into congestions.

(iii) No defined and organised Car parking space thus resulting into on street parking which deter smooth flow of traffic in and around the market.

(iv) In adequacy of certain basic public facilities, this has resulted into the emergence of a very inhygenic and unpleasent environment

(v) In adequate ware houses.

JIMETA MARKET

3.18 LOCATION: This is located within the high density residential area by the main cross-roads in the middle

of the town. It is surrounded by blocks of lockup shops and is extremely inaccessible and difficult to serve, being on a congested land of 0.6 hectares.

3.19 LAYOUT PRINCIPLES This is contained in a rectangular piece of land, with the stalls laid in rows and arranged in long clusters. Perishable wet commodities which are frequently needed are peripherially located for easy access.

3.20 CIRCULATION PATTERN. An approach to the market is at the northern, western and southern sides of the market. There were two major walkways at the longest sides. With two pedestrian getes on the northern end and the other at the southern end.

3.21 IDENTIFICATION OF PLANNING PROBLEMS AND PLANNING PRINCIPLES

The market is on a congested land of 0.6 hectares. No space for expansion, and the present situation is very deplorable. Lack of facilities, utilities and services. Virtually, there is no specialist non - food trades. No local crafts or service trades. The congested site and limited number of stalls and the pressure of many shops close by accounts for this situations. No clear segregation between Vehicular and pedestrian traffic which has resulted into congestion of the roads around.

No defined parking area for both private and taxis Cars which resulted into on street parking which deter smooth flow of traffic in and around the market. Lack of public facilities has resulted into the emergence of a very in hygenic and unpleasant environment. There were no ware houses. No defined Administrative offices, the one they have; is very small and lacks facilities and utilities.

3.21.1 REFUSE DISPOSAL IN JIMETA - YOLA MARKET

The existing market in Jimeta have become such a squalor owing greatly to the inefficient system of refuse disposal. Collection of refuse is usually the responsibility of the local authority. The Jimeta town council does not seem to have an efficient system to cope with the disposal of refuse produced in the markets.

Usually, storage of refuse in individual stalls is suppose to be in dust-bins, which are later emptied into a large open shed from which the authority's collecting lorry of Van collects it. But the reverse occurred in Jimeta market.

3.21.2 ANOMALIES OF THE EXTSTING SYSTEM ARE:

(i) No proper system for refuse collection on the Shopping aistes.

(ii) Culverts and drains are not regularly cleared and cleared and cleaned.

(iii) The open shed into which refuse is dumped is untidy and odious.

(iv) Collection by authority's lorries is not regular enough.

(v) General design of system is not conducive to hygienic environment.

3.21.3 SUGGESTED SYSTEMS

(i) Each Stalls to have private dust-bins; which should be emptied into the large refuse chutes.

(ii) Well-designed dust-bins to be located at reasonable places on the Shopping zones. So that shoppers can throw into them old papers, leaves etc. These will be cleared regularly by the maintenance staff.

(iii) Refuse chutes to be of vitreous enamelled Iron, 1.2m in diameter in cased in reinforced concrete, with galvanised mild steel troppers at each level access.

(iv) Collecting lorries to collect regularly the refuse from the huge bins.

(v) Maintenance staff to wash and clean the refuse rooms regularly.

3.22 DERIVATION OF SPECIAL STANDARDS.

3.22.1 LOCATION: Centrality is very important here because accessibility depends largely on the relationship between the market and the settlement pattern.

3.22.2 SITE COVERAGE

Standard for site coverage depends on two factors

(i) Status of the market

(ii) Population to be served.

Table 3.1 Suggested areas and site coverage for markets

Type of marked	Site area in hectares	Percentage Coverage.
Minor	0.81 - 2	30 - 35
Major	2.025 - 8.1	25 - 30
Regional	Over 8.1	20 - 25

Table 3.2 Population to be served by markets and the distance from residential areas.

Typed of Market	Distance in metres from Residential area.	Population range to be served
MMinor	804.65 - 160g.31	10,000 - 20,000
Major	3218.62 - 6437.24	50,000 and above
Regional	8046.55 and above	variable

3.22.3 WALKWAYS

These are in system of ordering. That is the first order, second order and so on. The walkways should be reduced in width to below 20m, a scale just convenient

for the pedestrian circulation and access for fire fighting Vans. This is mainly to discourage further walkway encroachment by hawkers.

Table 3.3

	Kumasi Market	[illegible] Market	Average
First order walkway	11m	10m	10.5m
Second order walkway	6m	6m	6m
Third order walkway	5m	5m	5m
Recommended	4m	6m	5m

3.22.4 LAND USE STRUCTURE

The suggested land allocation in a market/commercial development according to Vagale is as follows.

Percentage of developed area

Stalls/Shops - 30 - 35

Organised open spaces - 15 - 20

Utilities; services and facilities - 10 - 15

Streets; walks and parking lots - 20 - 12

Other use - 10 - 12

3.22.5 ANALYSIS OF STALL ALLOCATION TO VARIOUS COMMODITIES

Table 3.4

Kaduna Central Market	Wet zone	Dry zone	Grains	Poultry	Tubers
Main Market	21%	52%	15%	9%	3%
Sabon Gentre Market	23%	12%	12%	10%	4%
Average	22%	52%	13.5%	9%	3.5%
Recommended	24%	52%	12%	10%	4%

3.22.6 ANALYSIS OF UTILITIES, FACILITIES AND SERVICES

Table 3.5

Element	Kaduna Central Market	Sabon Gentral Market	Jimeta Market	Derived for Main Jimeta market.
Total No of Stalls	2, 148	6,000	802	1300
Distance between blocks	5m	6.0m	4m	5m
Stall Sizes	4 x 3 m,	4x3m.	3x3m,	3x3.5m, 25x3m
	5x4m	5x3m	3x2,m	7x3.5,7x7m
Lockable Stalls	76%	55%	30%	65%
Open Stalls	24%	45%	70%	35%
Roofing	Asbestor	Asbestor/ Concrete	Zinc, Timber Shingles	Aluminium Sheet painted green
Walls	Concrete	Concrete	Sand, Cement blocks plastered	Burnt-bricks concrete
Population	1.2 mill	278,775	112,500	115,500
Taxi/bus Stops	Stalls	Stalls	Nil	Stalls
Parking	¼ Stalls	Stalls	Nil	Stalls
Toilets	½ Stalls	Stalls	Nil	Stalls

Element	Kaduna Central Market	Sokoto Cent. Market	Jimeta Market	Derived for Main Jimeta market.
Water taps	Stalls	Stalls	Nil	Stalls
Refuse receptacles	Stalls	Stalls	Nil	Stalls
Drainage	Partly covered	Fully Covered	Open drain	Fully covered
Telephone	Limited to Admin.	Limited to Admin.	Nil	Admin/ Public through entrance
Fire Station	1	1	Nil	1
Police Post	1	1	1	1
Post Office	1	1	Nil	1
Bank	1	1	Nil	1
Clinic	1	1	Nil	1
Mosque	1	1	1	1
Information	1	1	Nil	1

Table 3.6

Market	FoodStuffs	Manufactured	Other Services
Kaduna	67%	23%	10%
Sokoto	70%	25%	5%
Jimeta	60%	29%	11%

Standards have been derived on the basis of comparative study of the two markets (Sokoto and Kaduna Central markets) and the identified planning principles. These standards with guide in the derivation of the proposed standards for the market, they were determined from the averages between standards identified.

3.23 ADMINISTRATION AND ORGANISATION OF THE MARKET

The importance of the Administrative system has been given a lot of considerations since it is on this that the over all implementation and the effectiveness of the physical planning system depends to a larger extent. The Administrative core performs the function of controlling the various components proposal and integrates in the overall design.

Table 3.7 Kaduna Central Market



Sokoto Central Market

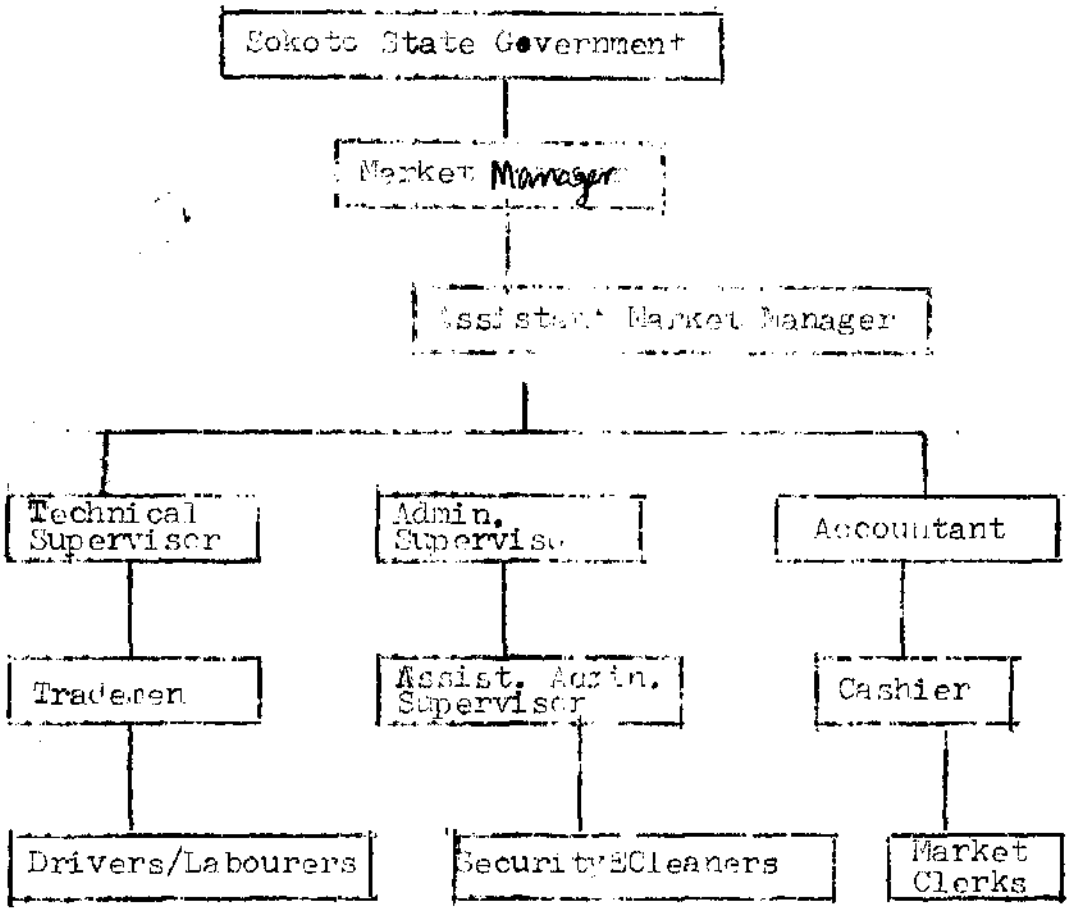
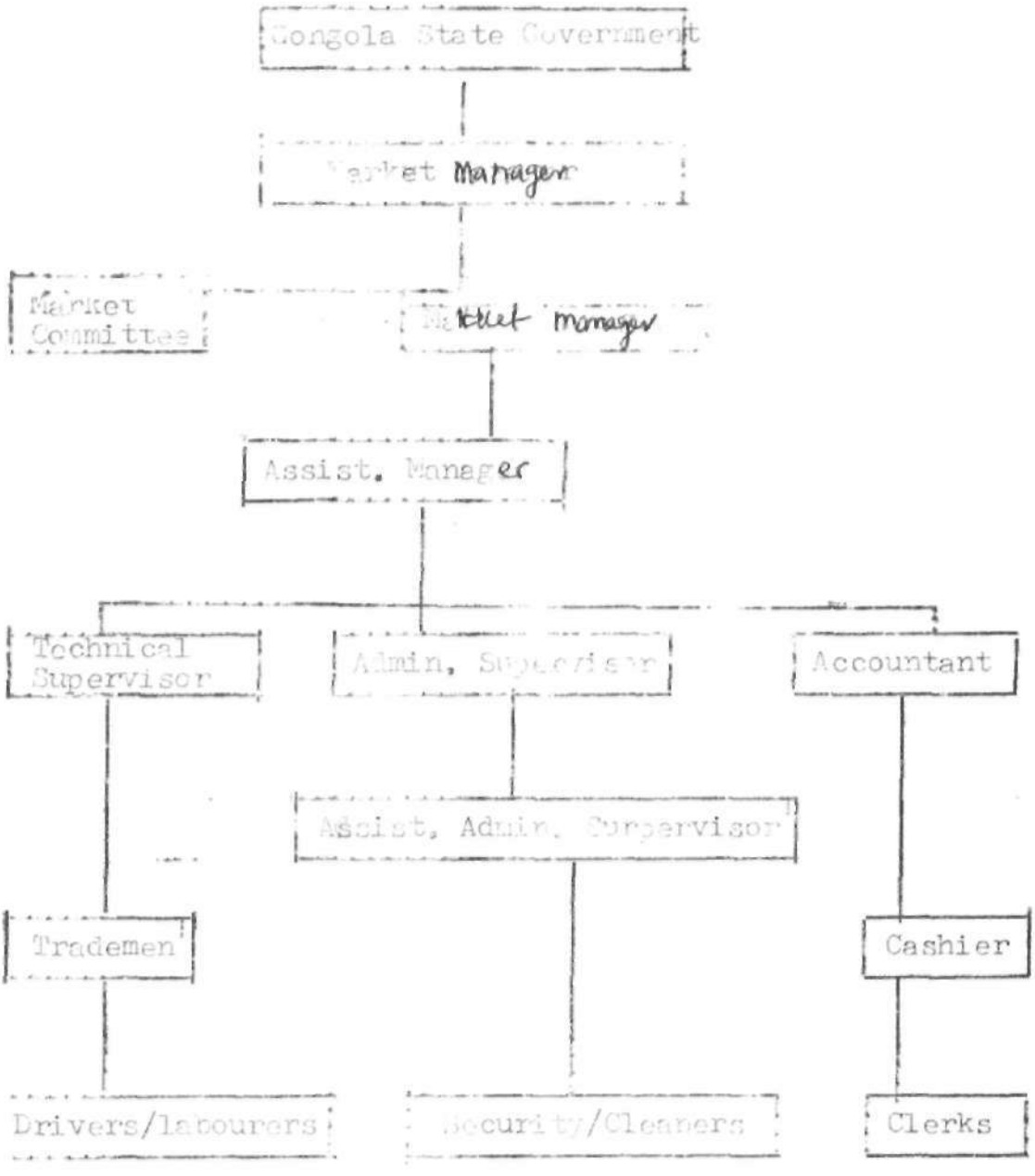


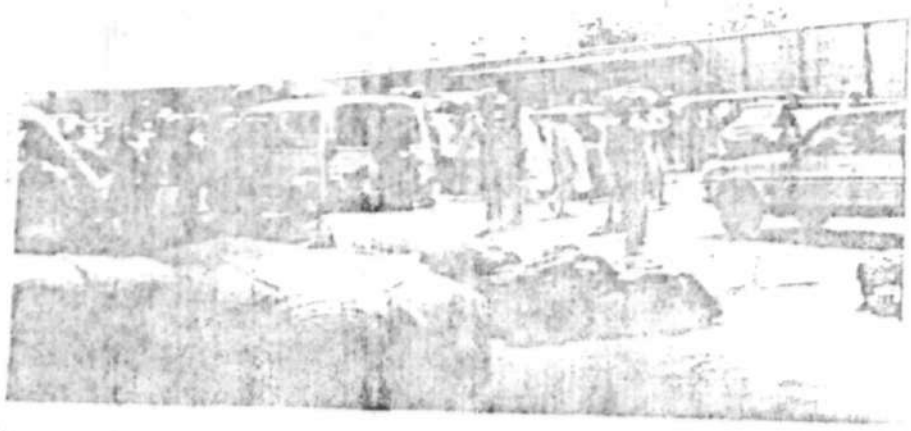
Table 3.8 Recommended for Jimeta - Yola Main Market



The author therefore recommends that an Administrative and managerial structure similar to that of the Sokoto Central market be implemented for the Jimeta - Yola Main Market.

Table 3.9 Market Areas as Compared to total developed Urban area.

Market	Site Area (Ha)	Total developed Urban area (Ha)	% Covered by market
Kabuta Central Market	13.00	8,284	0.16
Soweto	20.24	6,280	0.32
Jimeta (Present)	3.9	6,50	
Jimeta (1988+5) 1993	11.5	6,580	0-17



Mix up ness of Vehicular and pedestrian traffic in Keduna Central Market due to lack of defined parking space.



The entrance situation at Kaduna Central Market. Note the illegal encroachment by hawkers and habitual traders.

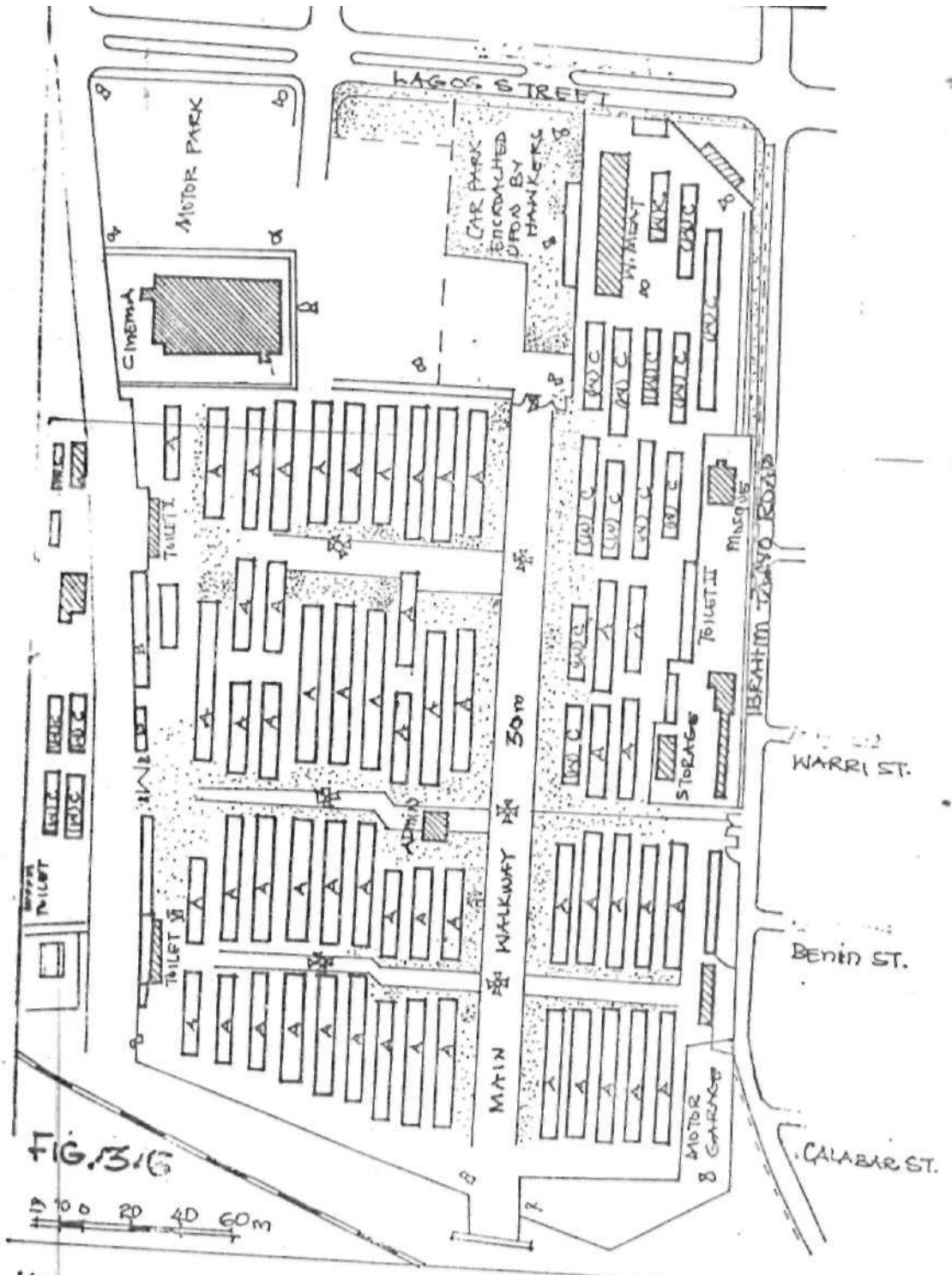


FIG. 3.6

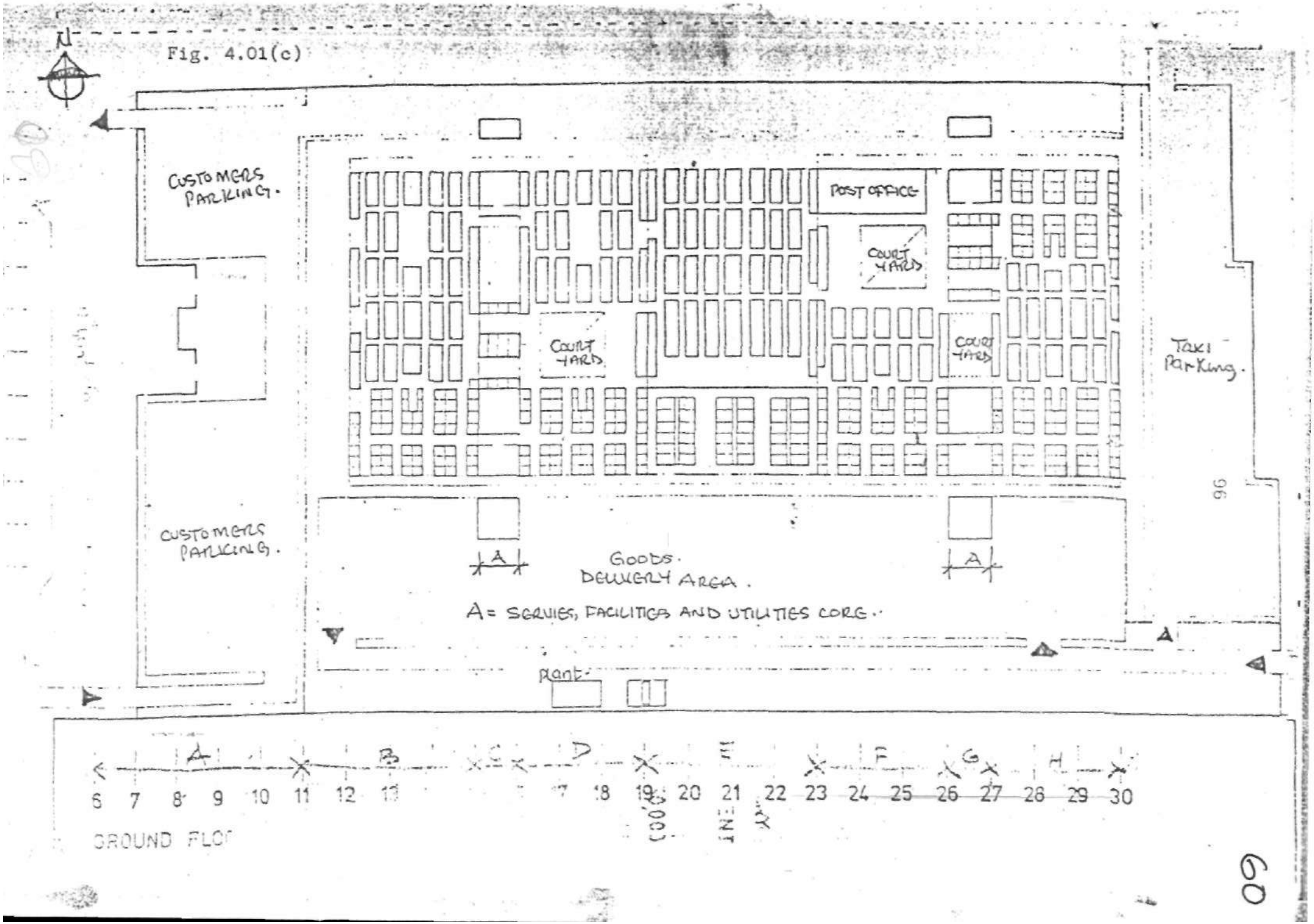
KADUNA CENTRAL MARKET (PLAN).

SOURCES:- Ministry of lands and survey Kaduna state.

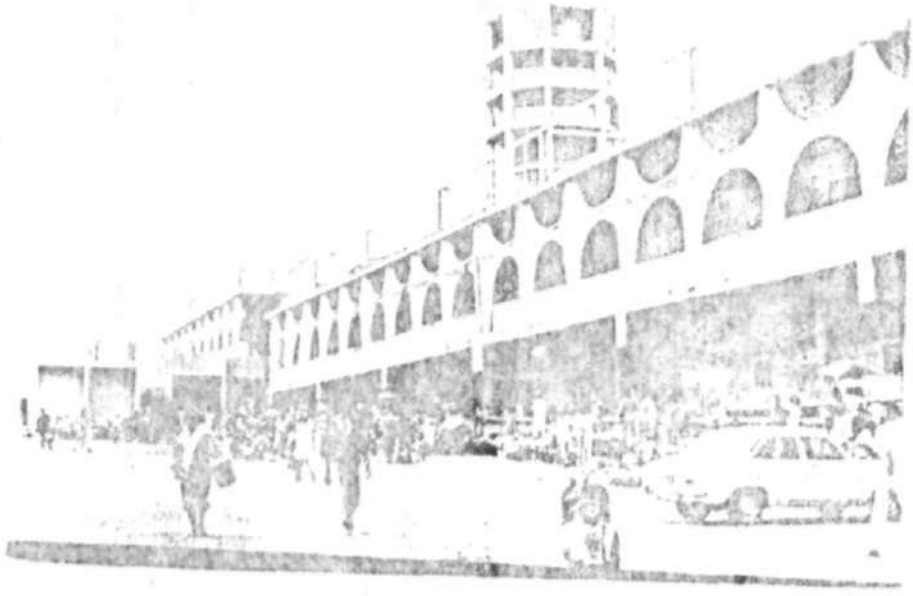
Floodlights (cluster of four)		Lockable stall type "A"	A
Twin Floodlight		Lockable stall type "B"	B
Single floodlight		HAWKERS Encroachment.	
Wet open stalls	(W)C	motor vehicles	

- TOTAL LOCKABLE STALLS 76%
- TOTAL OPEN STALLS 24%
- TOTAL NO OF DESIGNED STALLS 2,148
- TOTAL AREA 13 HECTARES.

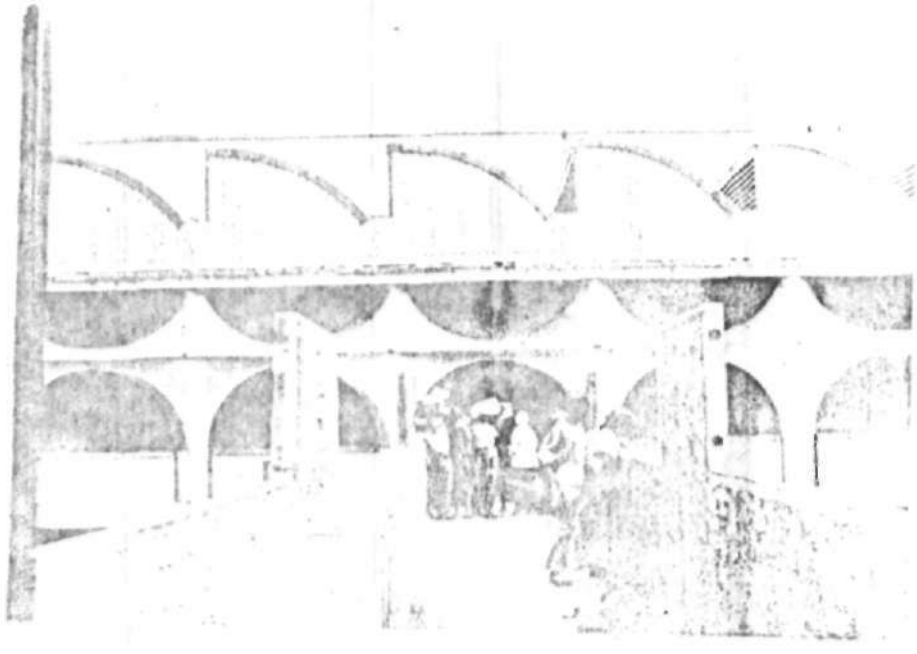
Fig. 4.01(c)


N
CUSTOMERS PARKING.
CUSTOMERS PARKING.
POST OFFICE
COURT YARD
COURT YARD
COURT YARD
TAXI PARKING.
A
A
GOODS DELIVERY AREA.
A = SERVICES, FACILITIES AND UTILITIES CORE.
plant
A
B
C
D
E
F
G
H
6 7 8 9 10 11 12 13 18 19 20 21 22 23 24 25 26 27 28 29 30
GROUND FLOOR

S
T
J
K
L
M
N
O
P
Q
6
FIRST FLOOR
LOCKABLE STALLS
A
A= SERVICES UTILITIES AND PUBLIC FACILITIES.
27



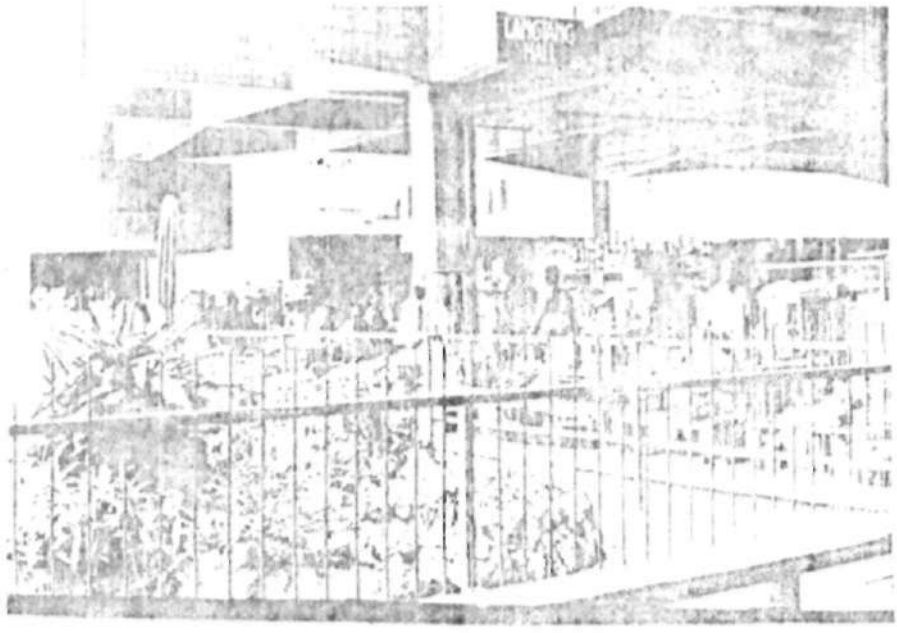
The western elevation of new Jos market, with the manumental tower at background. Note the shading devices used to reflect northern character.



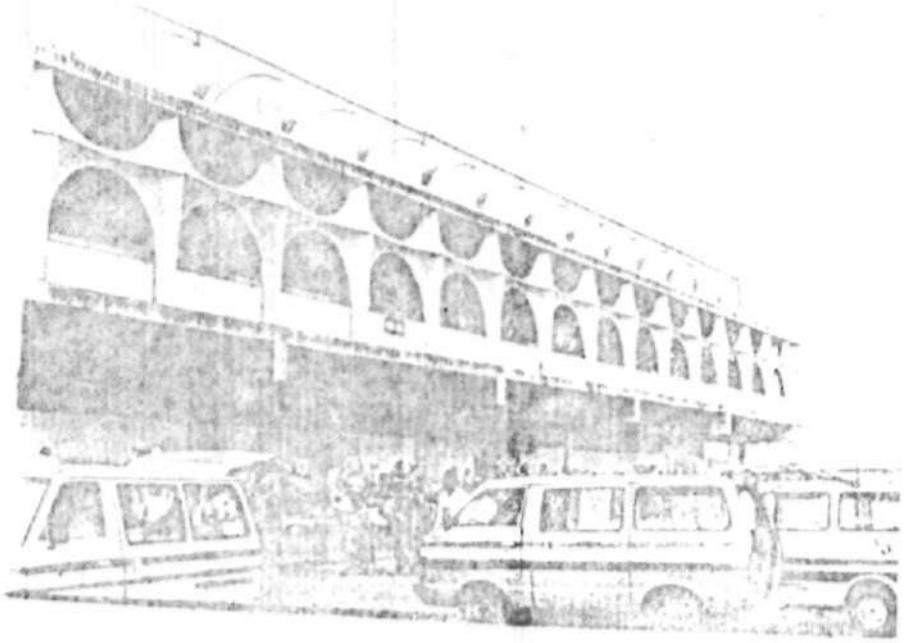
The last floor of new Jos Market showing the bridge from one block to the other for effective circulation.

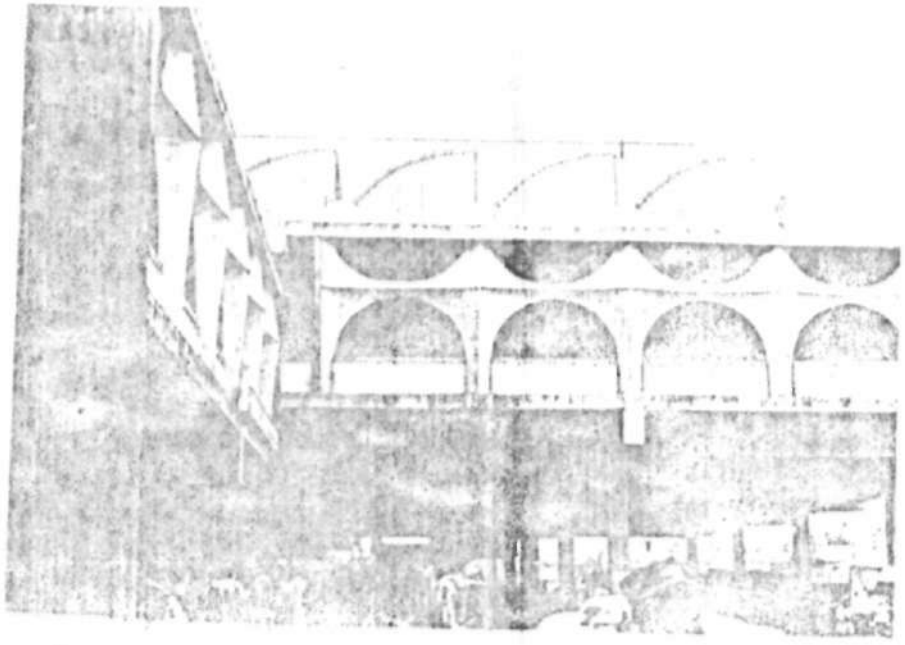


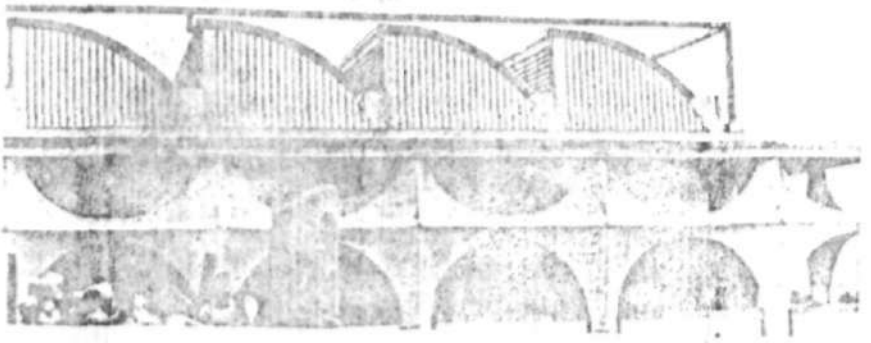
(11) This shows the structural columns and beams which facilitates the ample space for effective circulation of market users.

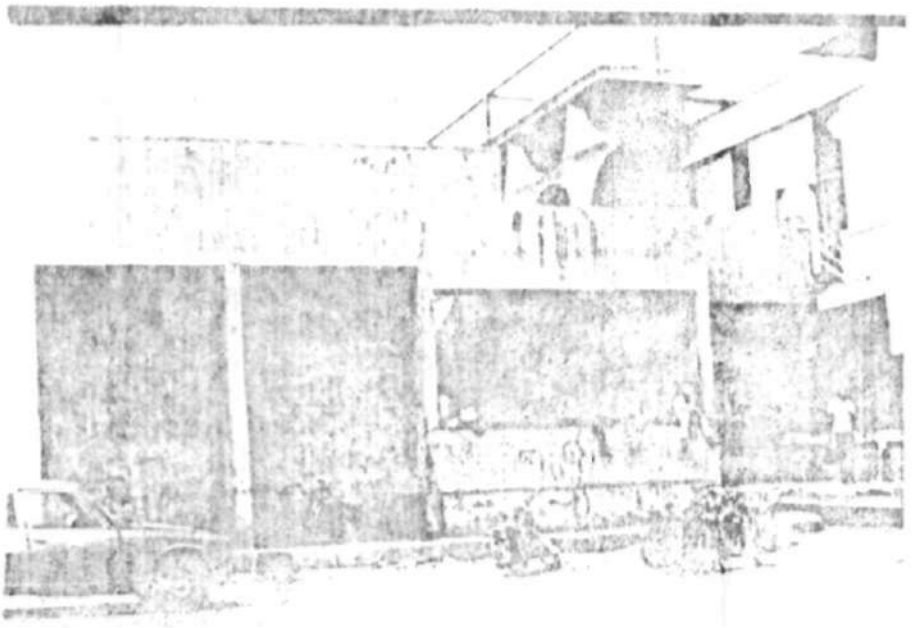


(12) This shows the open space which helps in lighting and ventitating the shops and it is properly landscaped to create relief for market users.









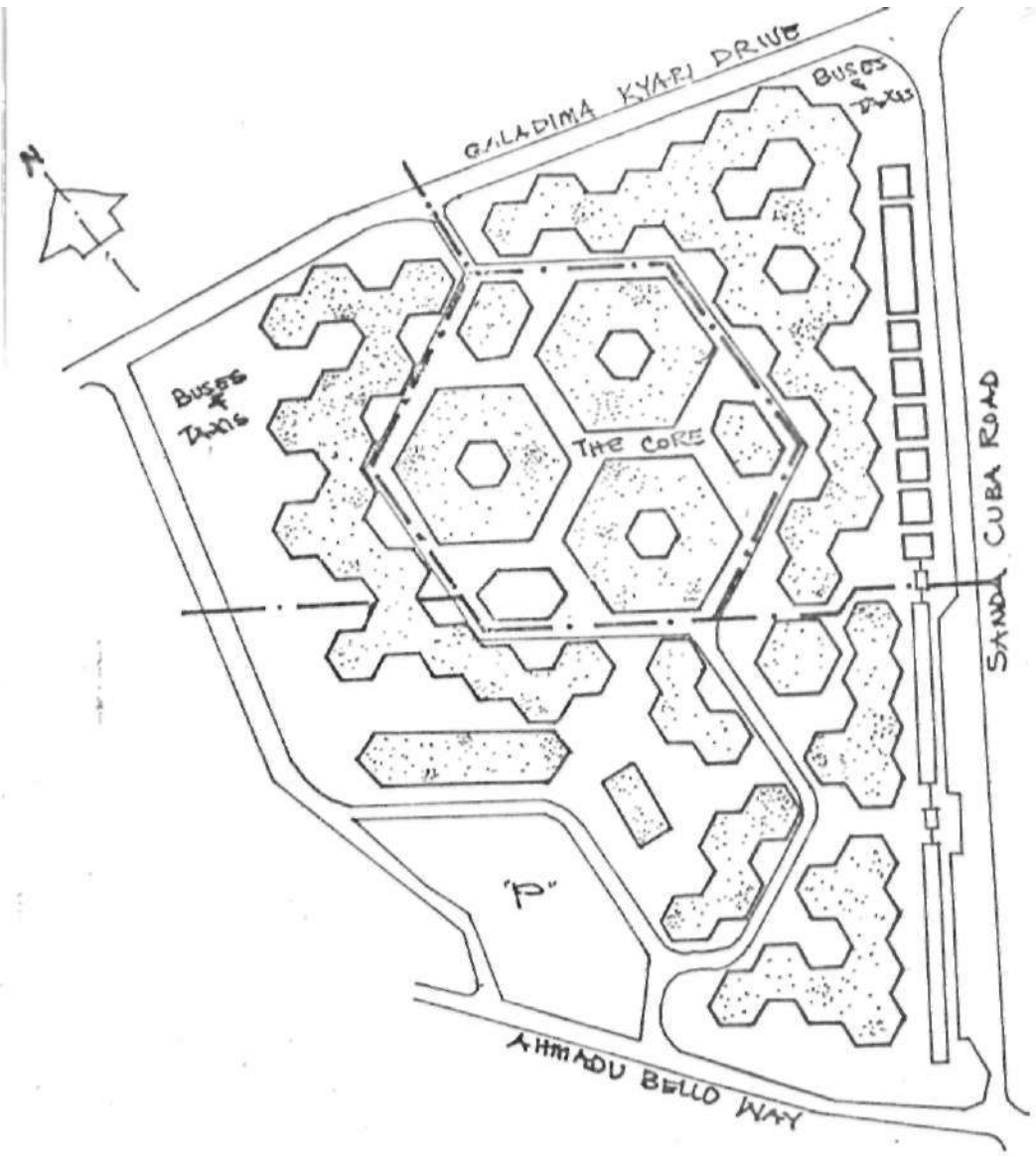


FIG.3.8. MAIDUGURI MONDAY MARKET.

BUILT-UP COMMERCIAL AREA

PERIPHERIAL SHOPS.

"P" PARKING LOT.

- MODIFIED INTROVERT CONCEPT.
- CENTRALIZED PARKING — NOT GOOD!
- PEDESTRIAL AND VEHICULAR TRAFFIC STILL MIXED.
- INTRODUCTION OF A CENTRAL CORE AND COURTYARDS.

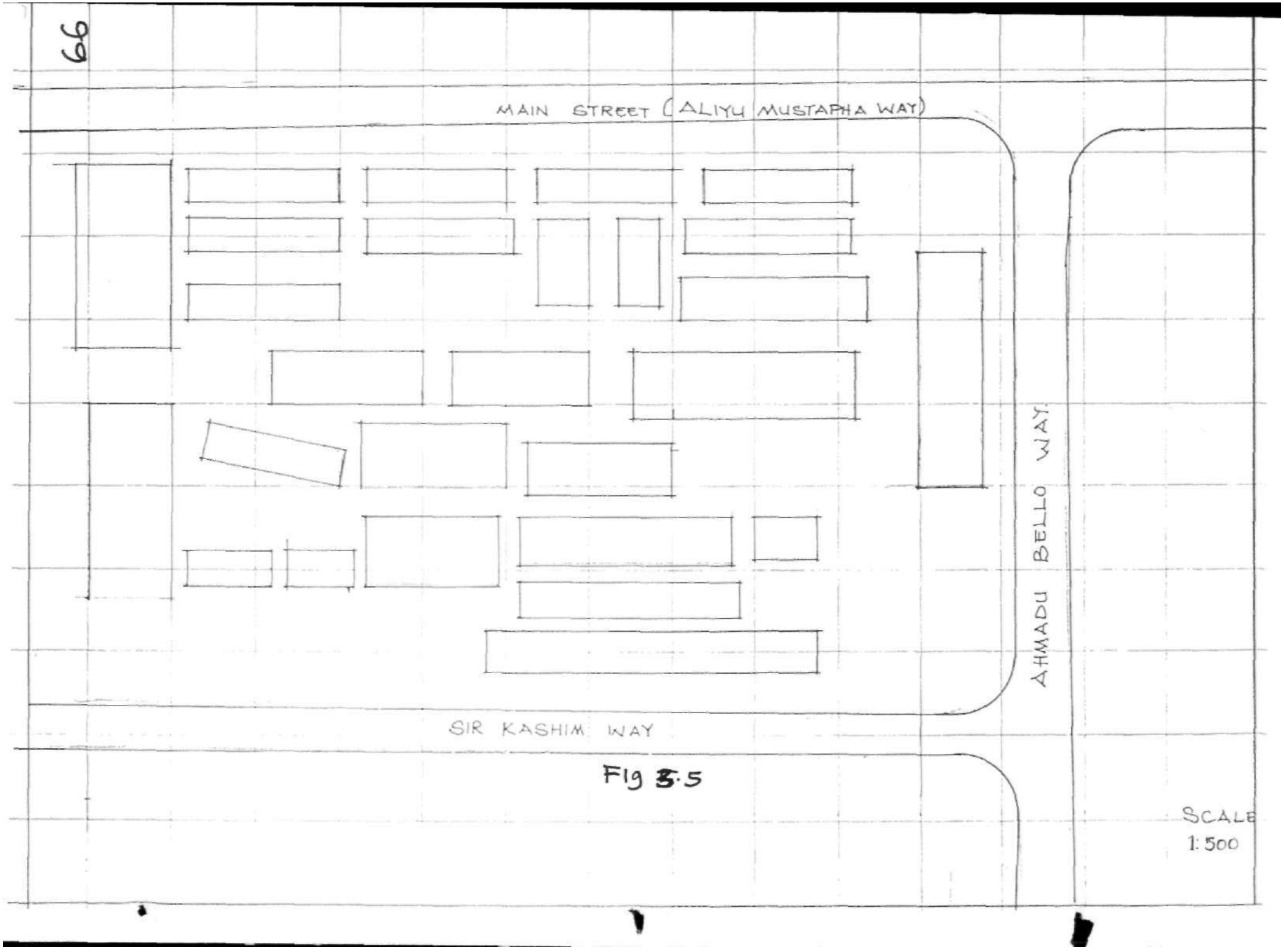

MAIN STREET (ALIYU MUSTAPHA WAY)
AHMADU BELLO WAY
SIR KASHIM WAY
SCALE
1:500

Fig 3.5



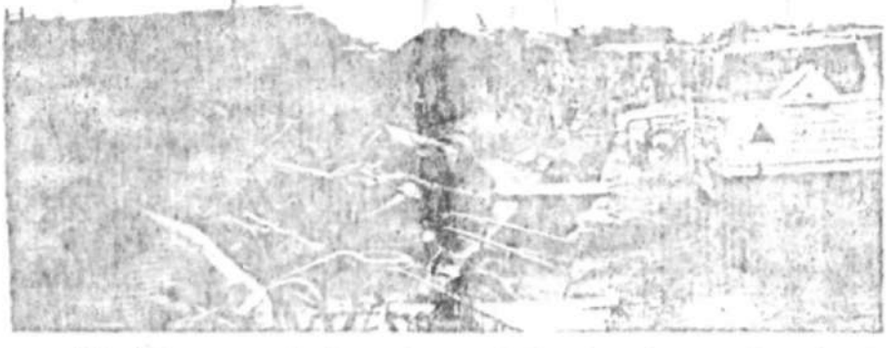
Temporary Stall erected by traders that deal on perishable goods, grains and tubers and those who could not afford the means of permanent structures.



Uncompleted stalls by private individuals due to lack of fund. This being left as refuse dumping point.



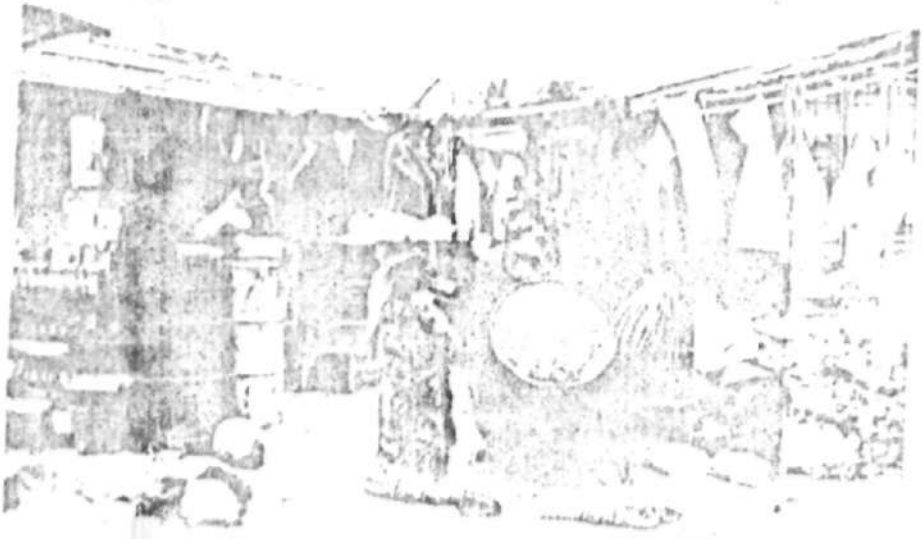
The first order walkway being encroached by hawkers and some habitual traders which reduces the effective circulation space.



Temporary Stalls erected and used by traders who deal on grains, tubers and the secondary walkway being blocked by habitual traders implements. The open drainage gutter would encourage dupping of refuse. Already some parts of the market have started disposing off refuse into some.



Still first order walkway with buyers and sellers moving up and down carrying out economic activities.



The third order walkway being totally blocked by traders' extension of illegal structures, in old Jimeta - Yola Market.

CHAPTER FOUR

4. TRANSPORATATION

Of all the amazing products of remarkable age, none has made more startling progress than the Vehicles of transportation. With the Variety in modes of travel came increased speed, extended lines of communication, and most importantly; unprecedented mobility of countless millions of people. The impact on the structure of our civilisation is appalling. The industrial economy is robbed in large part on the production and circulation of Vehicles of transportation. Within our cities, we are presented with a paradox. On the one hand is the struggle to design a circulation system to accommodate vast changes in speed of transportation, on the other we search desperately for a place for these Vehicles to come to halt (parking space)[1]

> The main objectives of a road system should be to provide a free and unterrupted flow of traffic. Transport is one of the most important elements of communication which links various land uses that exist within an area. It can open up people's horizon for leisure, tourism and recreation. No community can survive without regular supplies of goods and services Trade and Commerce will be impossible without transport.[2]

A. B. Gallion and S. Eisner (1963), the Urban pattern City planning and design," pp 284 - 285.

4.01 JIMETA - TOWN CENTRE ROAD NETWORK

Generally, the roads in Jimeta have suffered a relatively slow pace of development in the past. This may be due to lack of high demand for the use of roads in the town. But with the change in the status from a provincial Administrative headquarter to a State Administrative headquarter in 1976 more people and activities are being attracted to the town and the demand for road usage is steadily increasing and therefore a massive township road renewal programme has been embarked upon.

Prior to the renewal programme, only a few roads can be said to have been in good condition within the town. Amongst the good ones is Ahmadu Bello Way (formerly two lanes road) which has now been reconstructed to a four lanes dual carriage spine road. And the Aliyu Mustapha why (the then main street) is now one of the widest road within the town. It carries both the internal and the through traffic and is presently the only road that connects the places of residence and to work places. There are other numerous roads that were constructed when the town was made an Administrative headquarter, but mention was made only of most busy ones.

The contrasting function of Yola and Jimeta reflect also the nature of the transport problems to be found in

the town. This has now been reduced to the manimum with the upgrading of roads within the town. The main regional route runs through Jimeta linking Jalingo and Numan on the south side of the river Benue with little Gombi and Mubi on the north side. This regional route which presently forms the main street of Jimeta in the east-west axis from the airport to the bridge is where the concentrations of commercial activity is to be found.

The other regional route runs to the South through Yola to connect Kojoli and Taungo and Gurin, on the border of the camaroons. This route forms both the main spine of Yola and the narrow twisting road which links Yola with Jimeta, now being expanded to four lames dual carriage road now the route has been made a through traffic by-pass the town and its local traffic.

The present structure of roads in Jimeta is more complex; as the basic 'T' shape formed by the regional roads has evolved into a fan-shaped with more than three main roads radiating from the roundabout on the Yola-Jimeta road opposite the police barracks. The other roads upgraded are Sir Kashim Ibrahim road which runs down the east side of the town and its link roads to Ahmadu Bello Way which serve the old G.R.A. and many other roads.

4.02 TRAFFIC SURVEYS

In design of Commercial/Shopping premises, the first and of course the major problem to be solved is the transportation system of vehicular and pedestrian circulation in and around the trade areas. It is therefore pertinent that a thorough study of the circulation pattern in the trade area is the first step in the successful design of the shopping area.

The basic aim of the traffic surveys is to provide a clear picture of the traffic movement in and around the project area; identify the problems and of course attempt to solve such problems because an inefficient traffic system threatens both the prosperity and the amenity of a town centre. Traffic jams cost money, and a Centre congested with stationary or slow moving Vehicles will loose much of its attraction for all those who come there whether as workers, shoppers or visitors. The planning of a town Centre rest to a very large degree upon a well thought out communications and traffic pattern. No where is the integration of land use and transport planning more vital. Shoppers and other visitors will wants, as Car ownership grows, to be able to come and go by Car, to dispose of their Cars conveniently, and yet be able to walk and shop in the Centre free from the danger; noise and fumes of traffic. On street parking, if uncontrolled, impedes traffic, is bad for trade, is dangerous and is vienally extremely unattractive.

Thus the objectives of traffic surveys are as follows:-

To provide a basic data on traffic movement (volume). To determine approximately the major desire lines within the trade area and plan for alternative routes in advance, thereby eliminating future congestion problems on the roads. To determine what type of Vehicles are used, Mostly to the market and the roads they are found in greater number.

The traffic census stations are shown on fig. (4.1) Also shown are the traffic volumes for all the roads survey was carried out on. The survey was carried out for 6 hours then another 6 hours first from 6:30 to 12:30, and then next day from 12:30 - 6:30p.m. This makes 12 hours. The results were analysed and presented in bar and line graphs.

The bar shows the hourly flow of five(s) groups of Vehicles namely:-

(i) Cars and Taxis

(ii) Motor cycles and scooters

(iii) Trucks, tankers, Typers and traders

(iv) Buses, coaches and wagons

(v) Bicycles.

The line graph shows the total hourly flow of traffic for all Vehicles types combined for each station or road (see figs 4.2 - 4.6)

Site for the Market Traffic Survey

Total number of Vehicles by type for each road in (P.C.U).

Table 3.1

	Types of Vehicles	Mubi road - MBR	Bishop road - BSR	Ibadan road - IDR
A	Private Cars, taxis light goods vehicles eg. pickups.	4804	2614	3901
B	Motorcycles, scooters	1998	1171	1164
C	Trailers, Tippers, Tankers and 911's	995	1008	104
D	Buses coaches Trolleys	2005	2120	1228
E	Dicycles	150	139	66

Source: April 1988 site traffic survey by the author.

The market site, Mubi dual carriage road records the highest number of private Cars, taxis and light goods Vehicles. And also Buses which pass to hospital via Bishop street. From the above, one can deduce that the commonest types of Vehicles used to the market site are taxis, privates Cars, light goods; Buses/Coaches and Motorcycles.

KEY



PRIVATE CARS, TAXIS, LIGHT GOODS VEHICLES.

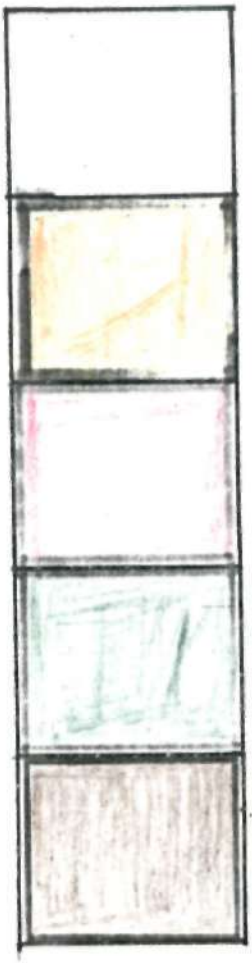
MOTORCYCLES AND SCOOTERS

TRUCKS, TANKERS, TIPPERS TRAILERS AND 911S.

BUSES, COACHES

BICYCLES

KEY



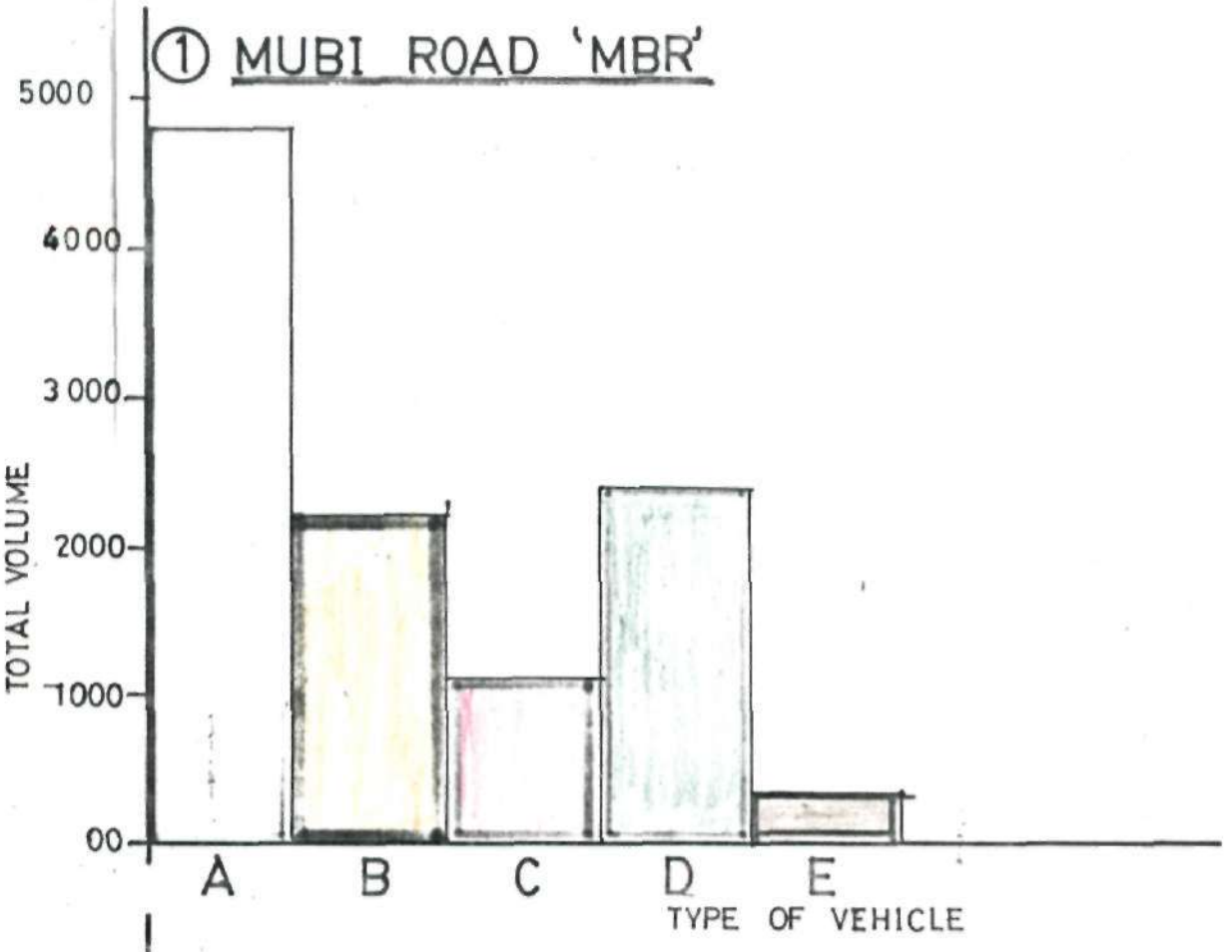
PRIVATE CARS, TAXIS, LIGHT GOODS VEHICLES.

MOTORCYCLES AND SCOOTERS

TRUCKS, TANKERS, TIPPERS TRAILERS AND 911S.

BUSES, COACHES

BICYCLES


① MUBI ROAD 'MBR'
5000
4000
3000
2000
1000
00
TOTAL VOLUME
A
B
C
D
E
TYPE OF VEHICLE

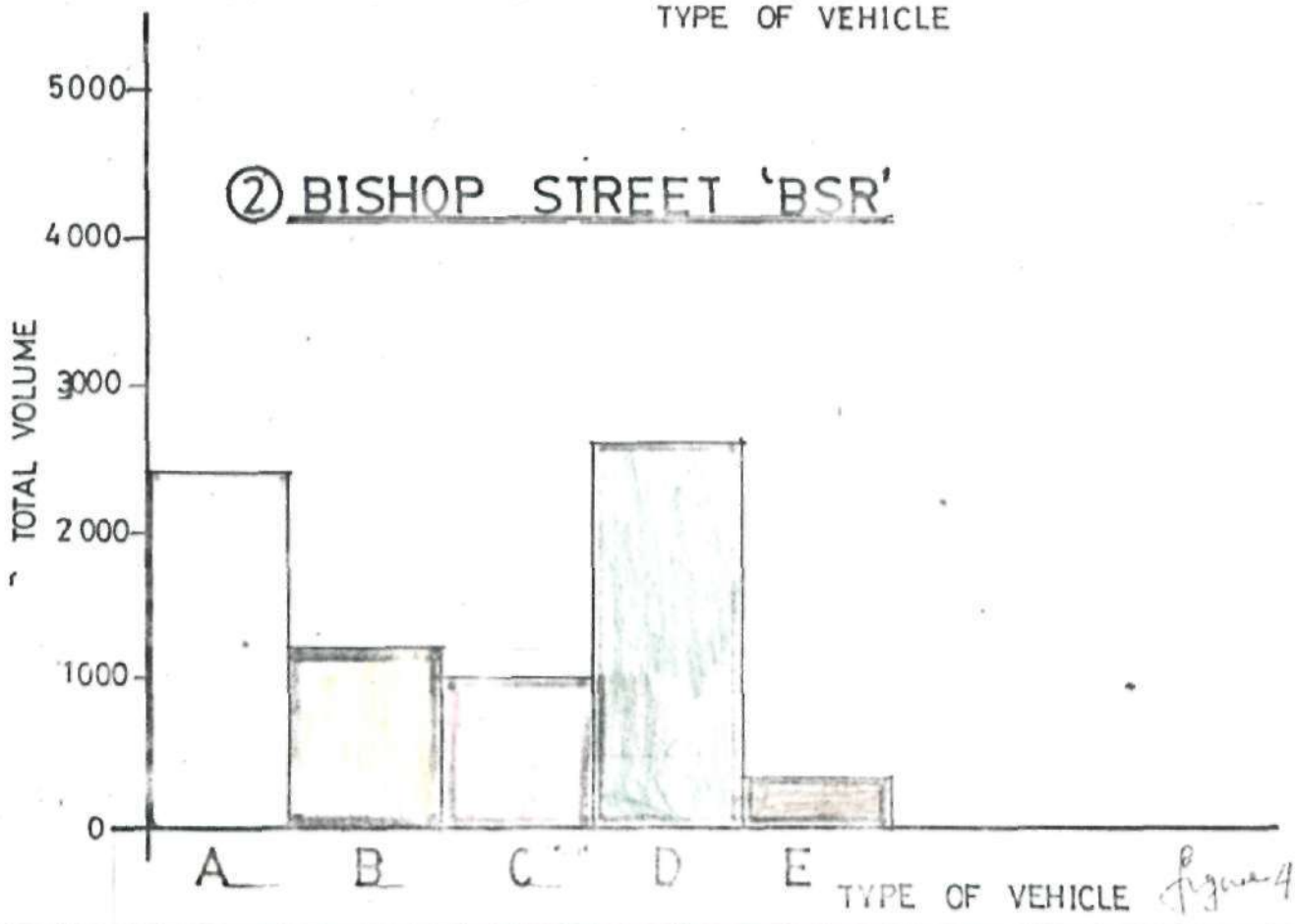
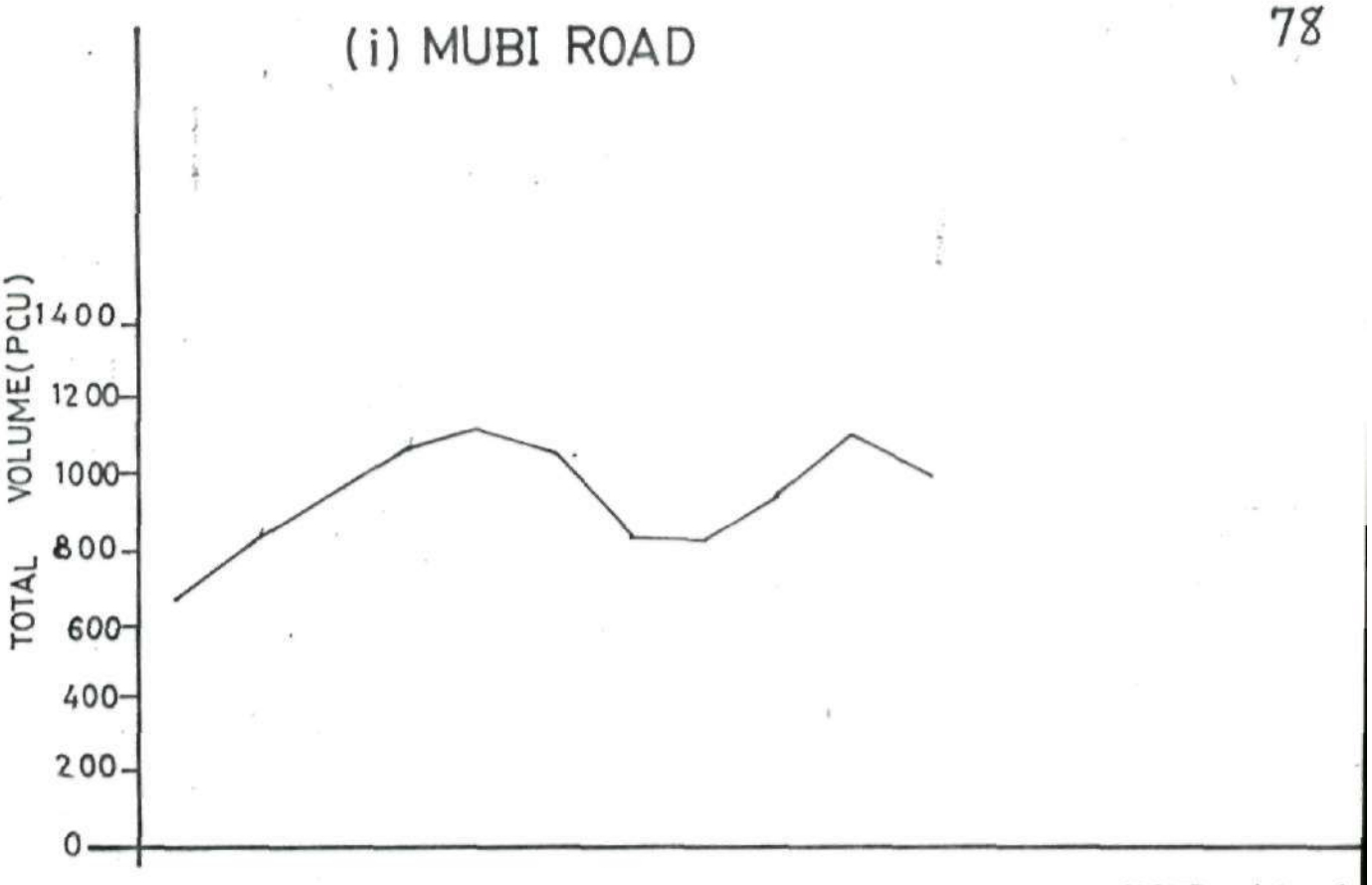

② BISHOP STREET 'BSR'
5000
4000
3000
2000
1000
0
TOTAL VOLUME
A
B
C
D
E
TYPE OF VEHICLE

Figure 4.7

(i) MUBI ROAD



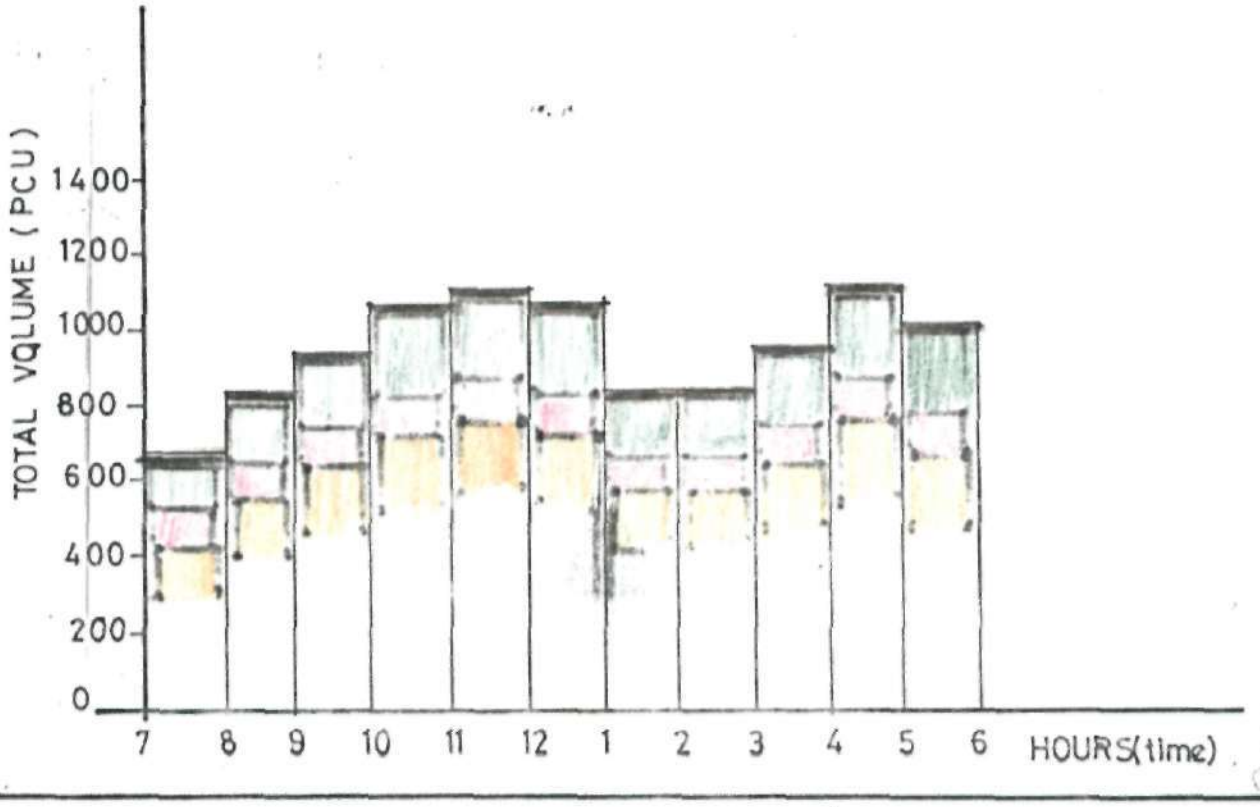


Figure 4

③ IBADAN STREET 'IDR'

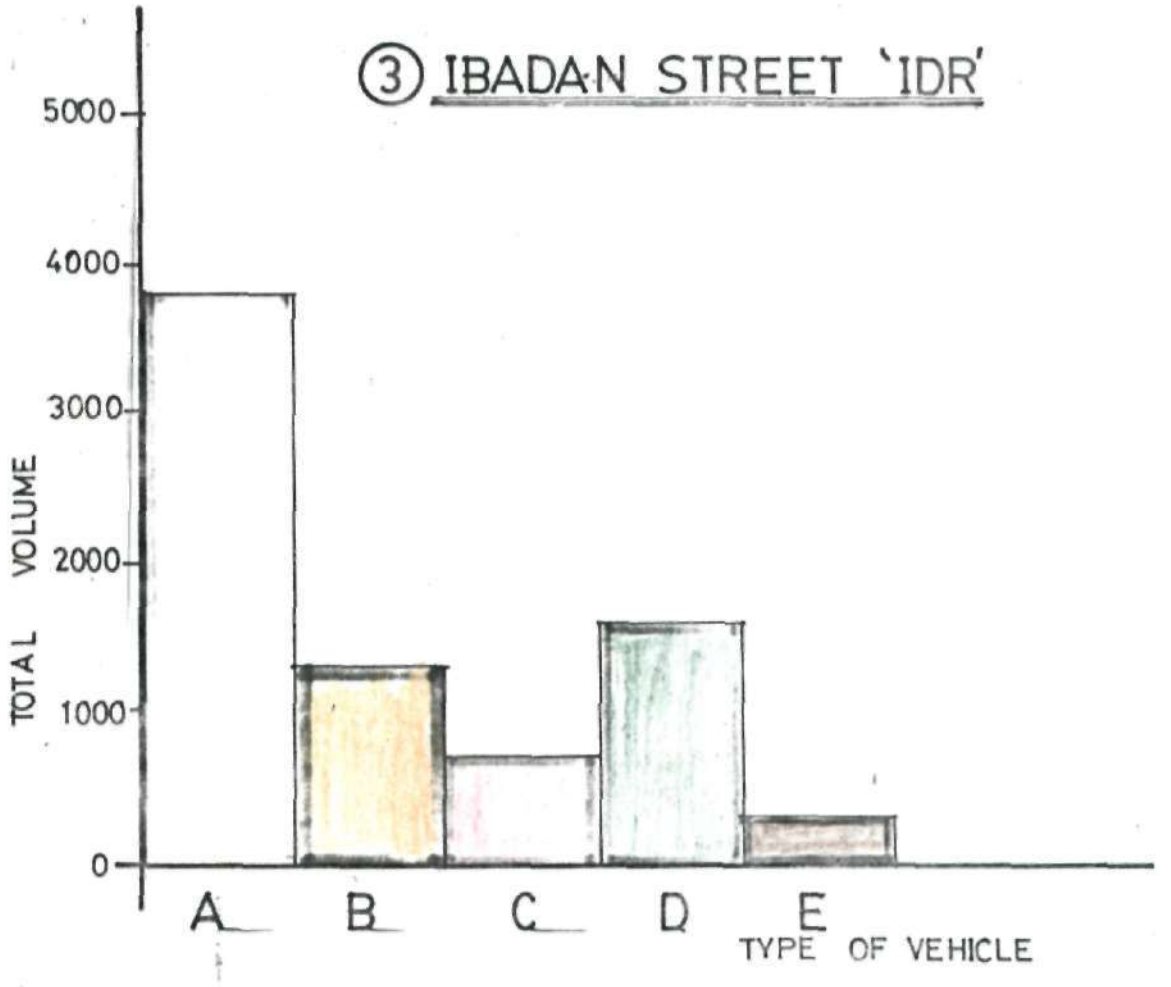
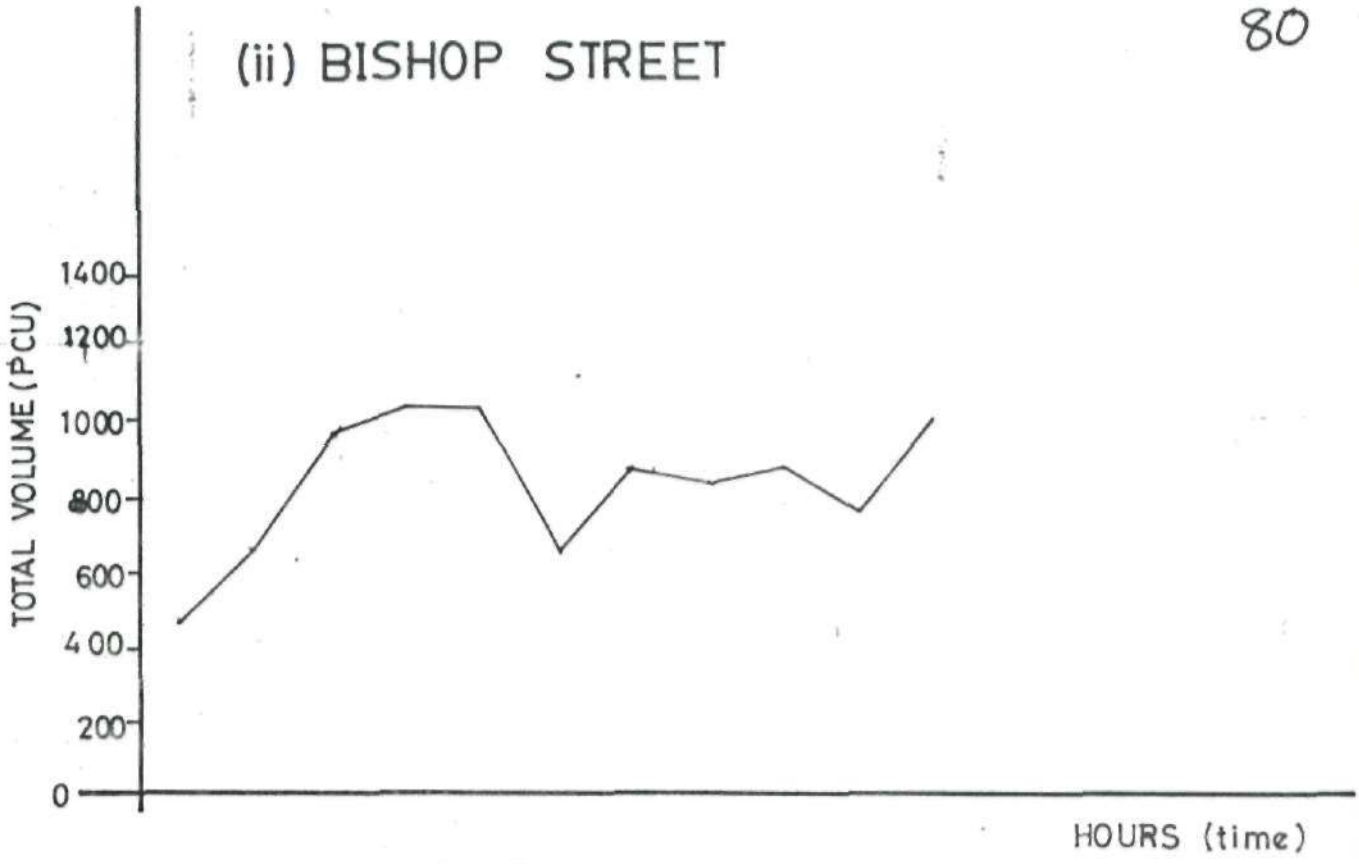
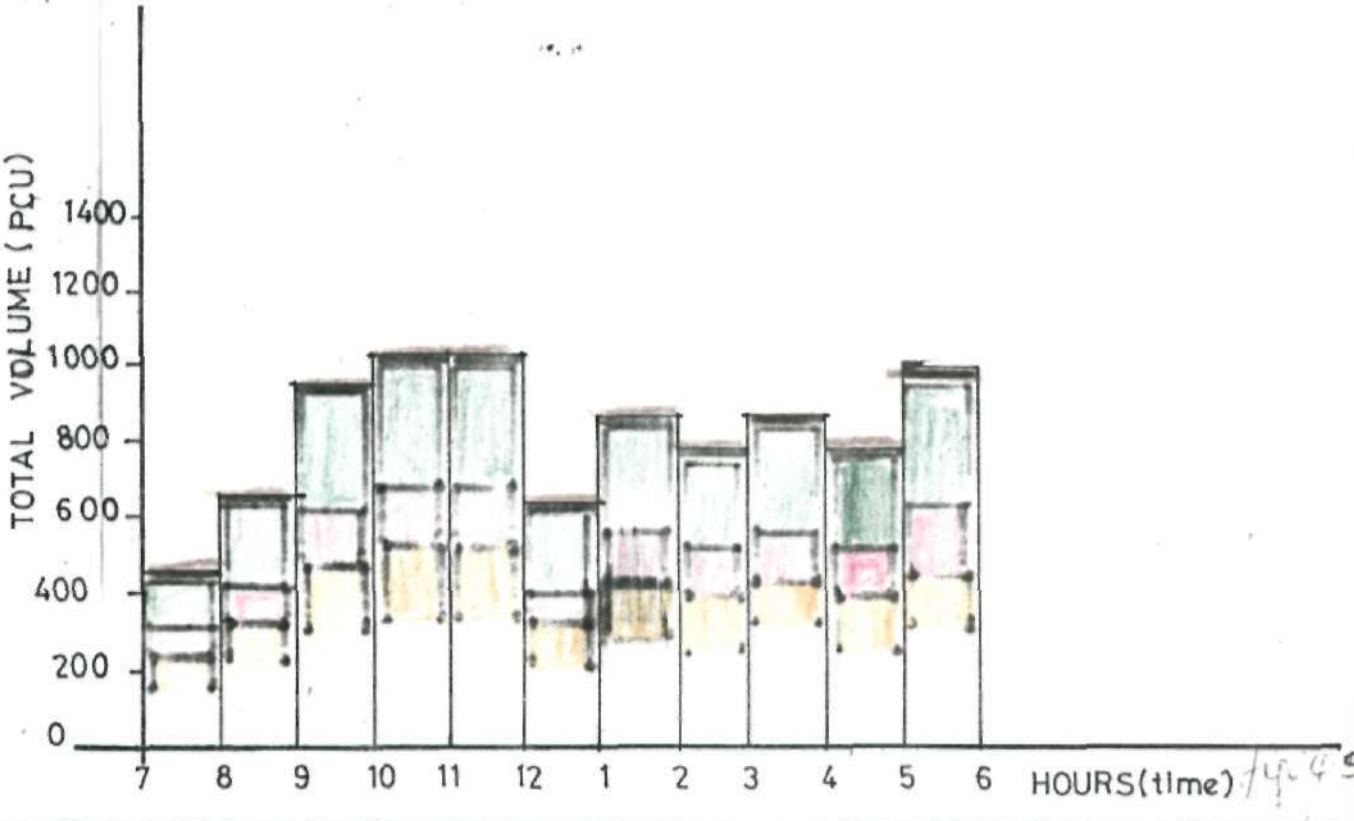


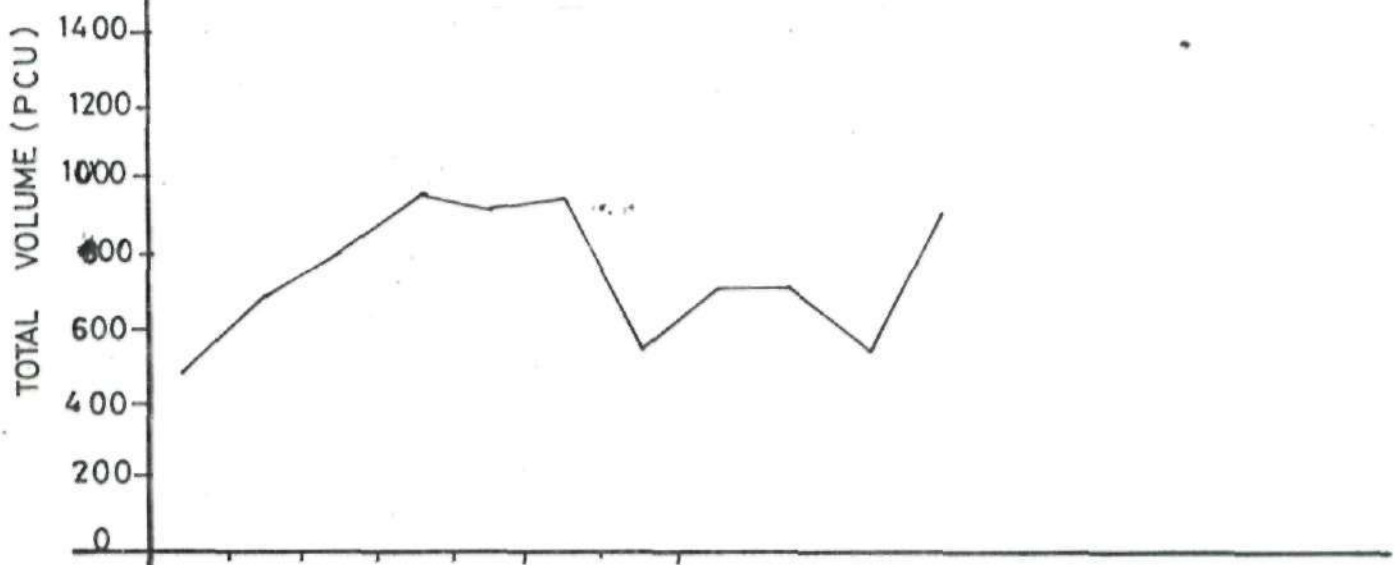
fig 4

(ii) BISHOP STREET





(iii) IBADAN STREET



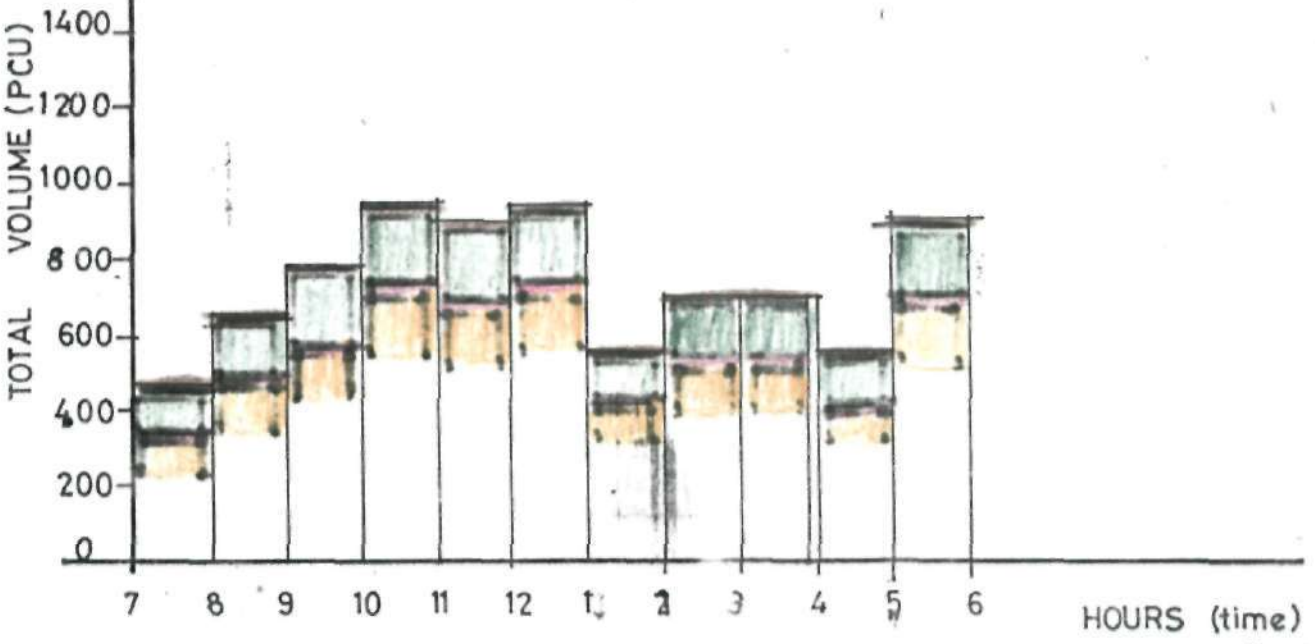


fig 4.6

4.03 OBSERVATION AND RECOMMENDATIONS

The graphs have shown that:-

(i) The Mubi road records the highest number of traffic per hour. The highest number of buses, Coaches is recorded also by Mubi road.

(ii) The most Commonest Vehicles used to the project site are tonds, private Cars light goods Vehicles, buses, Coaches and motorcycles.

(iii) The continued used of the Mubi road as a Vehicular route forecast for the success of the market in general.

(iv) Ibadan Street should be up-graded and tarred to ease the traffic flow at the eastern end of the market site.

(v) The through road which divides the site into two should be blocked since it is a laterite road and being created because of the then motor park.

4.04 PRIVATE AND PUBLIC TRANSPORT SYSTEMS

The problem of urban passenger transport in Nigeria (especially in Jimeta - Yola) today is that people are increasingly choosing the superior service which can be supplied by private Car ownership, while the community is unwilling, or unable; to provide the space required for unlimited Car access to City Centres.

According to Clifford Sharp (1967), that studies which have attempted long term projections of demand for Car transport like traffic in towns" and the "Leicester traffic plan", have shown that even if the cost of providing for the potential demand for travelling by Car in City Centre areas could be met, the provision of the necessary road space would destroy the town as a place to live and in which to work and shop American experiences have already, to some extent, borne out this condition.

Clifford Sharp (1969) problems of urban passenger transport Leicester University Press P 104.

Today, the rate of private car ownership in Jimeta has risen, compared with when the town was still a divisional administrative centre about 12 years ago. What will then be the situation in the year 2000 A.D. and beyond?

The author then feels that it will be of importance if the public transportation system especially to commercial areas and places of work be encouraged. This could be done by the development of roads and the establishment of standard prototype district markets in others wards and old market near prison be upgraded to the prevailing standard. However, it is hoped that it will go a long way in relieving the city centre from these areas will then go to the Central market say, once or more in a week.

4.05 PUBLIC TRANSPORT SYSTEM

Added to the major road redevelopment in the area, very efficient passenger collection and dropping points must be designed as integral component part of the major road development programme. It is only then (because of efficiency) that even car owners would prefer public buses; to go to the market by public transport system.

4.06 PARKING

"Man's struggle to achieve speed has been successful according to Clifford Shaw, and we are confronted with an anarchronism, inadequate space to slow down and stop. Automobiles; buses, and trucks must have a place at both origin and destination of their travel routes. This is the parking problem.

It has been obseved that the Motorist entering the down town district for shopping does not wish to walk from his parking place a distance more than 1000 ft (300 m).

The requirement for Vehicle parking in a market is directly related to the amount of floor space occupied by commercial enterprise. The stability of commercial districts will therefore depend to a great extent on the adequancy and convenience of space for auto Mobile parking available to customers, employers and service.

The only sort of parking provided in Jimeta Market is on street. This street takes certain percentage of the road, which brings about congestion and traffic jams. A properly designed and economic off-street parking is needed. It is therefore important that in addition to the above facts, considerations should be given to local circumstances such as density of commercial area, driving habit, assessment of space available and the potential of increasing it and estimate of present and future use.

Table 4.2 SUMMARY OF TRAFFIC VOLUMES BY ROADS IN (P.C.U)

	'MBR'	'BSR'	'IDR'	TOTAL
Total Number	9952	6553	6463	22970
Average/hour	1659	1092	1077	3828
Percentage	43.34	28.53	28.13	100

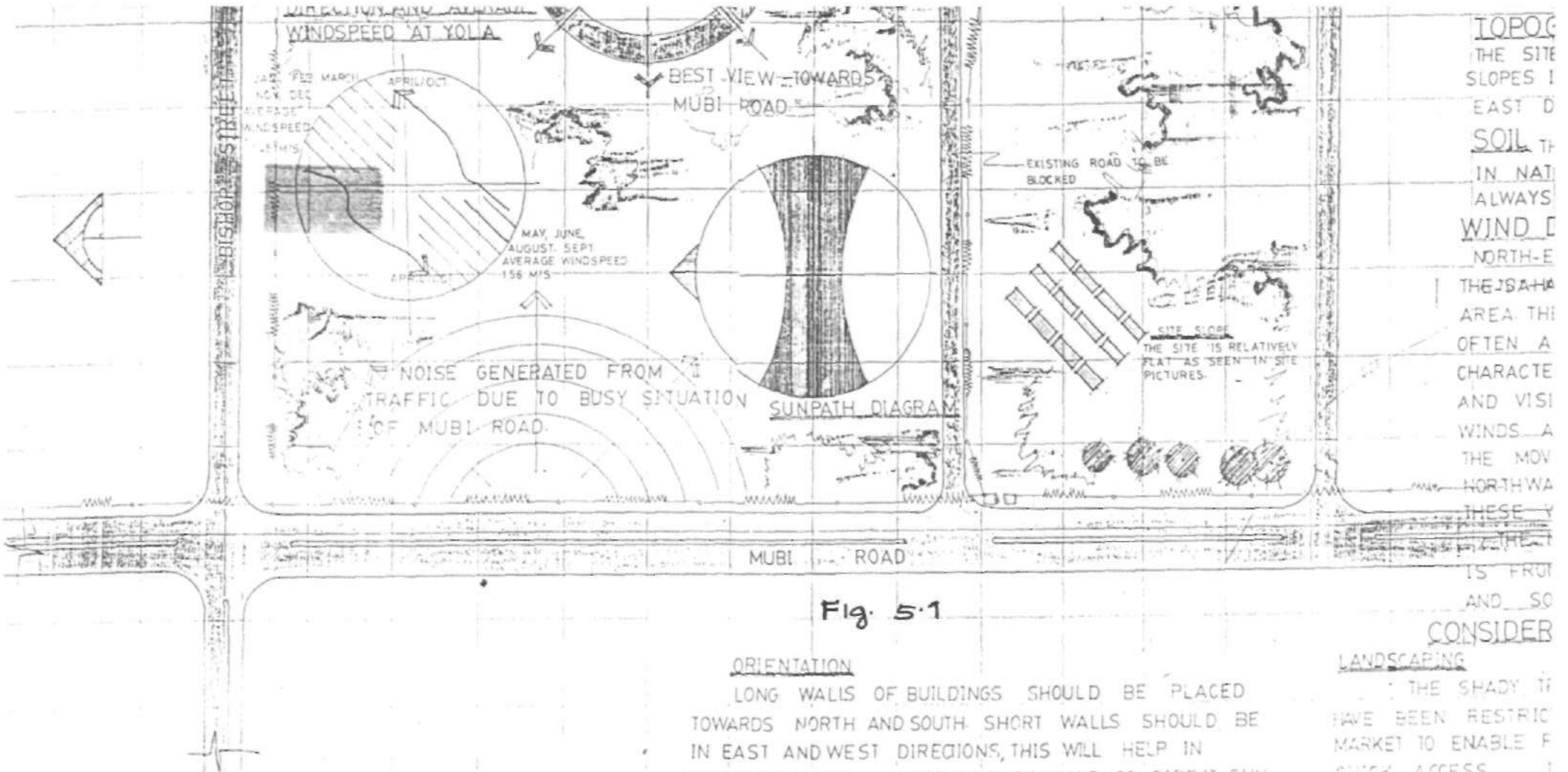


Fig. 5.1

ORIENTATION

LONG WALLS OF BUILDINGS SHOULD BE PLACED TOWARDS NORTH AND SOUTH SHORT WALLS SHOULD BE IN EAST AND WEST DIRECTIONS, THIS WILL HELP IN MINIMISING THE EXPOSURE OF WALLS TO DIRECT SUN

LANDSCAPING

THE SHADY TR
HAVE BEEN RESTRIC
MARKET TO ENABLE F
QUICK ACCESS

CHAPTER FIVE

5.01 SITE ANALYSIS

Before Architects and planners can begin to place the various elements of the design on the site, They must first assemble data about the site. Good site planning reflects research about the physical features of the area, such as existing landscape, utilities (water supply, sewer etc,, services and infrastructure, topography, views, climate and traffic flows. A proper research into these features of the site offers the designer a breadth of knowledge of the limits and/or assets of the site. It is therefore imperative that a designer first understands fully, the limits and assets of his/her project site before beginning the process of design.

Fig. 5.1 Shows a general (Macro) analysis of the project site. The site is bounded from the north by Bishop street which runs to the eastern part to meet Ibadan street that bounded the site to eastern end. From west is the busy Nubi dual carriage way and south is the least busy laterite road. Created when a motor park existed at that end. The area has fairly nice terrain that would not need much investment to drain.

5.02 RESIDENTIAL FRINGE

The entire market site is surrounded by mixed residential blocks. Ninety percent of such buildings

in the western fringe are of sand-cement blocks. To the south, south-west and east, most of the buildings in these fringes are in medium condition, built of cement blocks with rusted corrugated aluminium roofs, There exist also a handful of buildings built of mud and Mud-Blocks.

The houses on the northern fringe, especially those immediately fringing Bishop Street are of Mud and a few are of Cement blocks which needs renovation and rehabilitation.

5.03 THE TRAFFIC SYSTEM

To the west is the Mubi dual carriage spine road. It's designed traffic capacity is 3030 P.C.U. on each direction. This road diverts and takes both the internal and through traffic. To the north exist Bishop street which crosses Mubi road and passes at the end of the site to meet Ibadan street at the eastern end of the project site. It is not as busy as Mubi road. Bounded to the east is the Ibadan street which is less busy and carries traffic from residential units.

5.04 GEOGRAPHICAL DATA OF JIMETA - YOLA

Basically the area consists of alluvial soils that requires careful planning. The soils is loamy on the surface and up to the distance of 50cm to 60cm below the earth surface. It is clayey and slightly alkaline on digging further down.

5.05 TOPOGRAPHY

The lands in Jimeta - Yola generally slope in the south - west, the east and the North-west directions. The highest point in Jimeta has an elevation of about 225 metres and lowest of about 152 metres above mean sea level (M.S.L). The topography of Yola town is comparatively flat and the elevations range between 182 metres and 157 metres above mean sea level (M.S.L).

5.06 GEOLOGY

Jimeta - Yola lies in the Benue trough which consists of undulating flood plains. Flat topsoils of sedimentary origin are found in the lower part of the trough which is believed to be an ancient riff valley of flood plains consist of geologically recent alluvium, which are of a loamy to clayey nature.

5.07 LAND DRAINAGE

The area is crossed by a number of water - courses draining the upper part of the town. These water-courses may be unculverted for considerable distances, constituting an effective barrier to Motor Vehicles and cutting off large areas from convenient access. Most of the crossings that do exist are rudimentary pedestrian bridges made by laying planks or metal sheeting accross the ditches and minor maintenance failure or blockage

can cut off a large numbers of compound.

5.08 SOILS

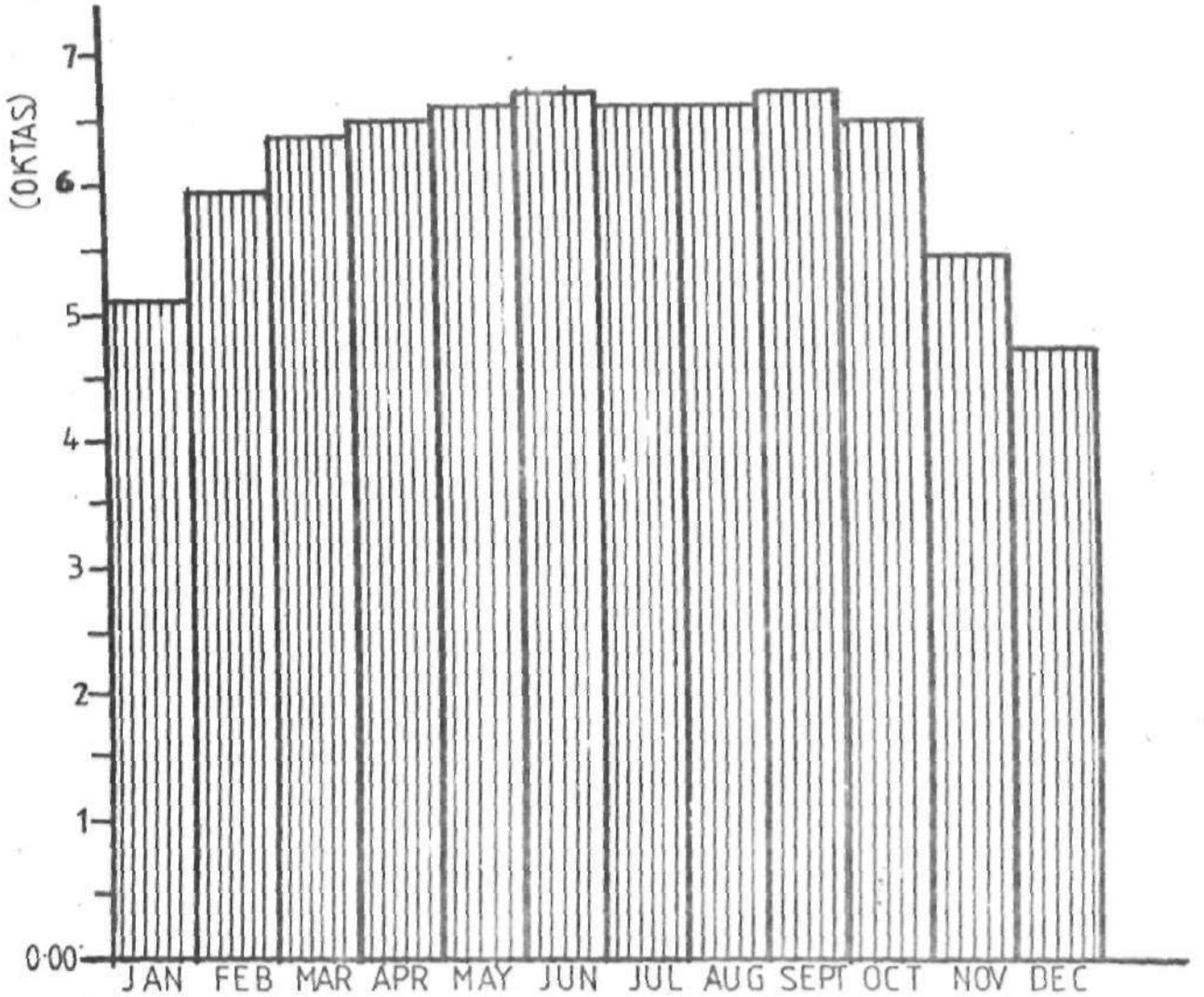
The soil of the site is underlain by the cretaceous bima sandstone which therefore made it sandstone in nature. The soil is coarse reddish brown in nature, with moderate fertility and always very strong. The soil could be classified under what we may describe as ferrugeneous tropical soils category developed on sandy parent substance and also with locality developed litho soils in few isolated areas. It is laterenic and fairly well drained especially on the high plain areas.

According to H. Vines (1953), that the texture ranges from the silty forms to the aluvial soils of the lowland regions. The soils are therefore less intensively rich and are more or less acidic.

5.09 VEGETATION: The Vegetation of this area is "guinea savana' type. Its mostly grass that only grow with the advant of rain. Tall grass of 1 metre to 2 metres are seen in the alluvial area. The low rolling plain consists mainly of annual grasses of about 0.6m tall mostly shrubs and stunted trees. The bare rocky outcrops are covered by perenial plonee plants.

5.10 CLIMATIC DATA OF YOLA

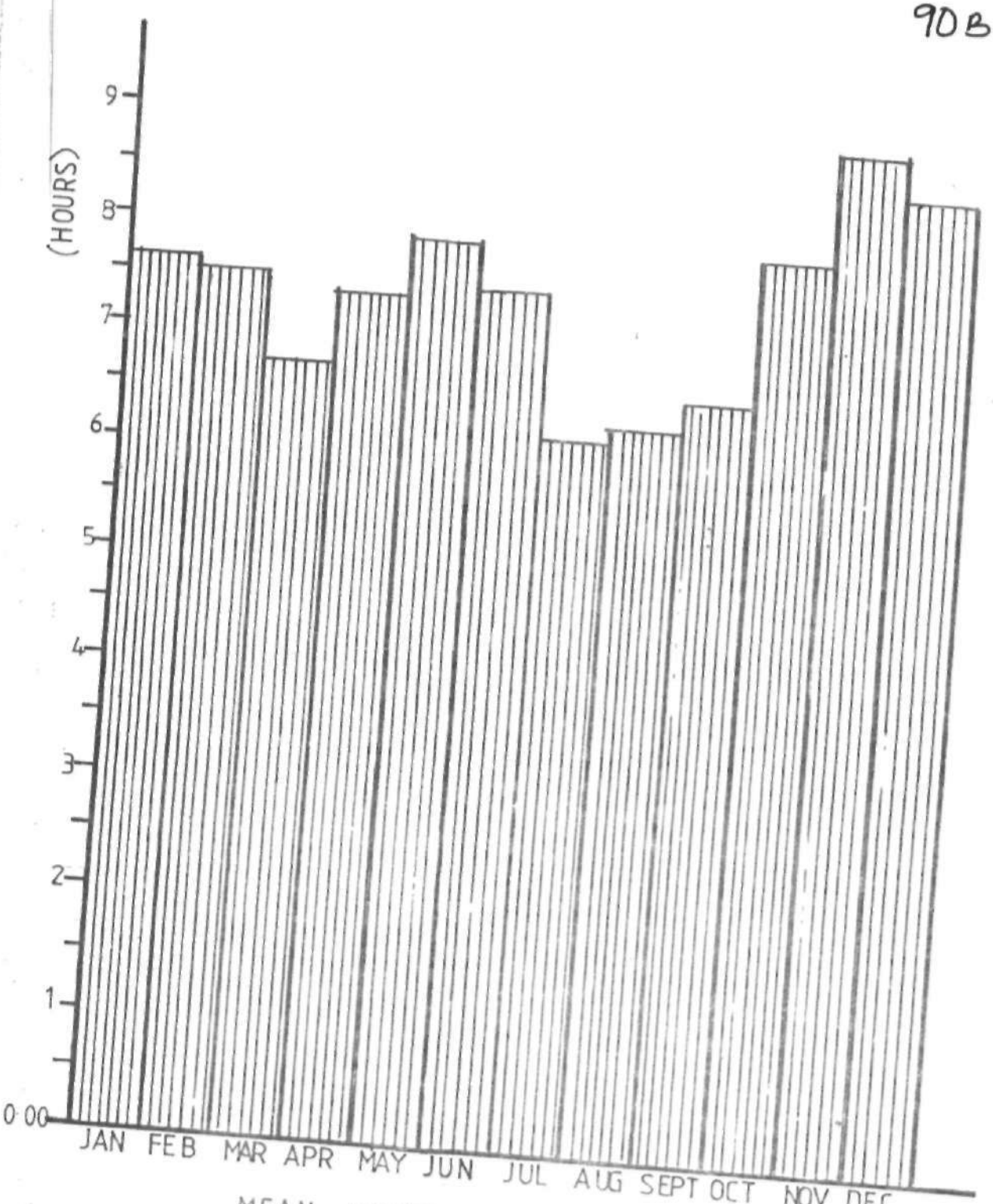
5:10:1 TEMPERATURE: The climate can be described as



MEAN MONTHLY CLOUD COVER (OKTAS)

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
5·0	5·8	6·3	6·4	6·5	6·7	6·6	6·6	6·7	0·4	0·5	4·6

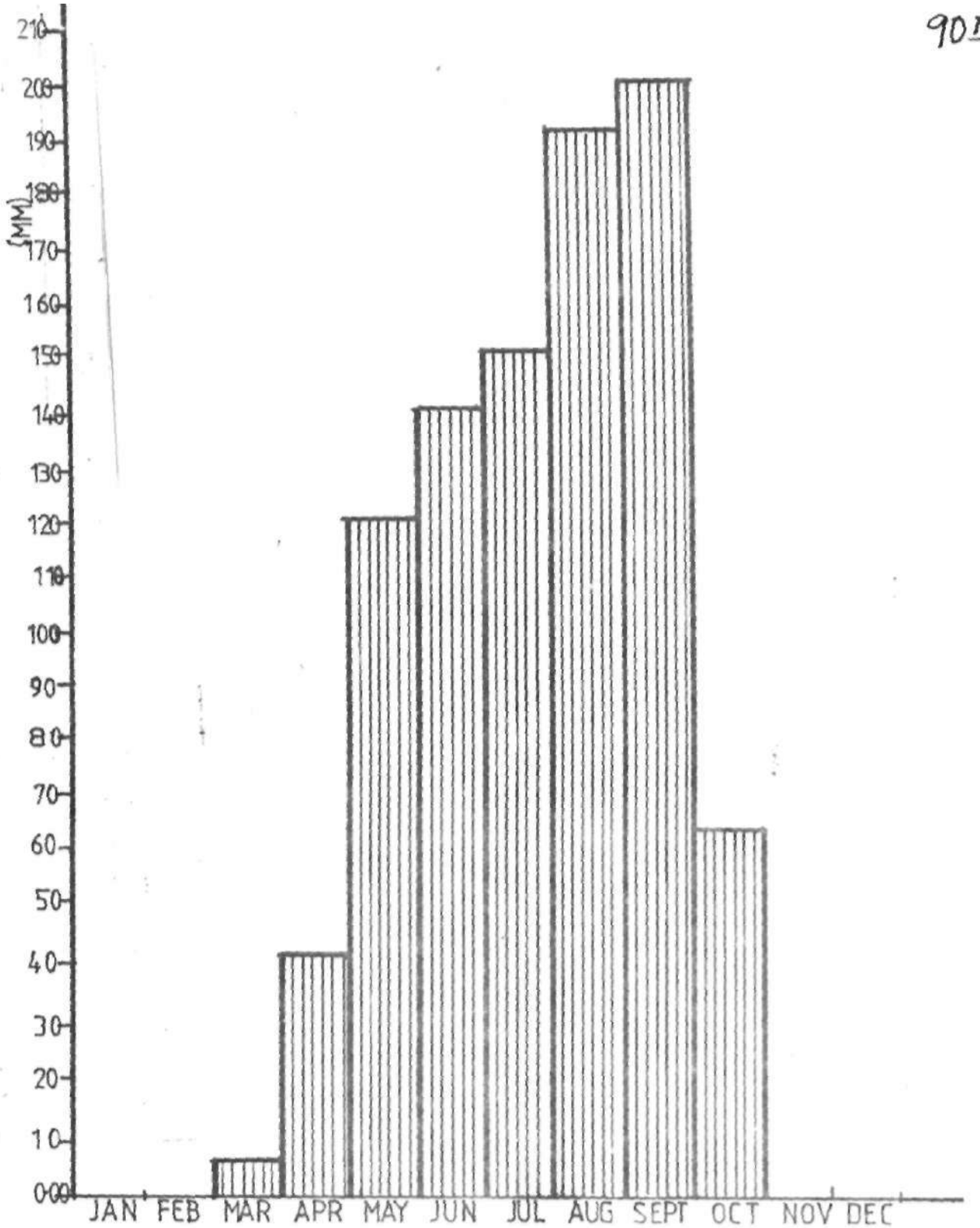
Fig



MEAN MONTHLY SUNSHINE (HOURS)

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
76	75	68	73	80	74	62	63	67	79	90	80

Fig 1



MEAN MONTHLY RAINFALL (MM)

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEPT	OCT	NOV	DEC
0·00	0·02	5·90	47·50	119·40	140·20	150·60	190·80	206·70	62·70	0·00	0·00

Fig

tropical semi-arid. Jimeta-Yola is among the hottest towns in the Country having an average maximum temperature of 40.5°C during the day in early summer in April. Average minimum temperature is 25°C at night during the harmmattam, the temperature of Yola falls to 15°C in the night Yola is hot most times of the year. Fig 5.2.

5:10:2 HUMIDITY

Due to river Benue and lakes around the town and heat of the area; the humidity is high especially during the rainy season (May to October).

Data Fig 5.3

5:10:3 RAINFALL

Rainy season occurs from late April to October. The heaviest rainfall ever experienced in the state Capital was 75 mm on August 15th 1977. The total annual rainfall is about 100 mm.

Data 5.4

5:10:4 WINDS

The wind distribution can be classified into the following categories. November - Early April North-eastern dry winds with occasional Gustiness of 15 - 18 knots. Haze Hammattam can be seen at this time especially in jammary. Mid-April to June, Humid Southern,

south-westerly winds with moderate or high hummidity at night. And late June to September. There is occasional heavy squally thunderstorm with rain wind gustiness of up to 50 knots are usually experienced. There are damages of this for example up rooting of trees and roofs.

5:11 SOCIO-ECONOMIC SURVEYS

5:11:1 OCCUPATION

Skilled workers form the largest single group in Jimeta covering a wide variety of crafts as shown below in the table. In Yola too, it is an important source of employment, there are small traditional industries, pottery and so on.

The most important occupation in Yola is still Agriculture with 37% of working men engaged in it, and even in Jimeta it still accounts for 15% of the workers. Both cash and food crops are grown.

The occupational classes essential for physical development as a percentage of the total economically active in each town is as shown from the table below. One finds out from the table that Jimeta has higher percentage of essential occupations of Administrative, managerial and professional classes for proper supervision. Business and trade merchants for finance and supplies in private sector and finally the skilled

services and building trades workers to carry out the actual development, altogether makeup 13.1% in Jimeta of the total economically active persons and 10.9% in Yola. There are comparatively high proportion when compared to the other towns. But since the creation of the state in 1976, and Jimeta being the State's Administrative Centre, the position of things have almost certainly improved. Presently resulting to the problems of unemployment of these skilled workers.

Occupational classes Essential to physical Development as a percentage of the total Economically Active in each town.

From the table 5.1 the author believes that the likely town that will experience rapid development is Jimeta, therefore, there is a need for more professionals to take up opportunities in the town.

Table 5.1

OCCUPATIONAL CLASS	JIMETA	YOLA
Administrative Managerial	3.0	0.5
Business and Trades Merchants	0.7	0.5
Skilled Services Building Trades	9.7	9.9

5:11:2 OCCUPATIONAL STRUCTURE

The activity rates for adult population (15^{+}) shows that 62% of Adult Men and only 19.7% of Women are working. The low activity rate of women is not unexpected in a predominantly muslim area.

Table 5.2 ECONOMIC ACTIVITY OF ADULT POPULATION

Economically Active %		Dependent	Total
Male	62	38.0	100
Female	19.7	80.3	100
Total	41.8	58.2	100

Socio-economic Report, World Bank Urban development programme for Gongola State Nigeria 1985.

5:11:3 EMPLOYMENT

Before Jimeta became what she is today, the majority of people are self - employed and mostly reclion it to be on a full-time basis. Trade and commerce; therefore are occupation employing many people in Jimeta but relatively few in Yola. The difference between full and part-time or casual employment is difficult to measure for those who are their own masters. According to Max lock group, since it can be assessed, it is an

indication of underemployment, which undoubtedly exist. There is relatively little private employment in these towns, and public employment covers about one fifth of those employed. This category covers; as well as the Administrative occupations such as police, teachers, nurses and a host of manmual and semi skilled workers in Government offices and public institutions.

Table 5.3 Jimeta Income Groups Distributions In Trade Areas %

	Below		Above		Total
	₦100	₦160-₦199	₦200-₦390	₦500	
Districts	40	20	25	15	100
Core	40	25	20	15	100
G.R.A	5	10	25	60	100

From the income distribution table, it shows that majority of those residing in the core and districts, earn below ₦100 per month (40 percent each) while about 60 percent of those in the G.R.A earn well over ₦500 a month.

In the final analysis, the design can only be a success if the following questions (resulting from the site analysis) are answered by the design.

(a) Physical Features

(i) Will the Site meet the programme requirements?

(ii) Is the cost of the land compatible with the

cost of the proposed buildings?

(iii) Will the Site contribute to the aesthetics of the buildings?

(iv) Can pedestrians, Vehicles and services circulate adequately within the site?

(v) Are the building and road systems, feasible wiith respect to topography?

(vi) With the site provide necessary flexibility?

(b) Climate

The following points should be considered

(i) General weather.

(ii) Prevailing winds would be reduced partially by Landscaping.

(iii) The building to be oriented in relation to the sun-

(iv) Proper drainage to be provided for the maximum. anticipated rainfall.

(c) Traffic Flow

(i) Does pedestrian movement between buildings and from parking areas work well?

(ii) It's better to channel Vehicular traffic rather than to let it dominate the centre site.

CHAPTER SIX

6:00 DESIGN

Market design is a very difficult project to undertake. This is because of its users. It is meant to serve diverse interests of the shoppers and the shopkeepers. The Shoppers or buyers want a feeling of activity in the market, safety from traffic, protection from the weather, short walking distance. The motorists want in addition, free Car parking infront of every shop and wide roads which will enable him to get about their business without being constantly held-up by traffic jams and without having to proceed by slow Jerks because of pedestrian shoppers walking on, and accross, the carriage way. The Shopkeepers want as much traffic as possible (both pedestrian and vehicular) to pass his Shops. "He also wants easy servicing of his Shop and he wants to let everyone know exactly where he is and what he sells, from as wide a viewing range as possible"

Burns W. (1959) British Shopping Centres, P.12.

it is not possible to completely satisfy all these diversed requirements. So in this thesis, the basic emphasis is to satisfy the pedestrian shopper (Since even the motorist will on parking his Car becomes pedestrian shopper) to the fullest, and at the same time be of benefit for the public that will look at trade

in shop or live with the architecture. Thus, as earlier stated in the goals and objectives of this thesis.

6:01 PLANNING PROPOSALS

After careful analysis of various markets case studies, I identified some planning problems ranging from layout principles, circulation, services and facilities, The following planning proposals are proposed.

- Segregation of Vehicular and pedestrian traffic.
- To propose clusters of multistorey stalls to effect optimum use of space of cater for future needs of the market users.
- The market should be organised based on commodity zones.
- The parking space is decentralised to reduce congestion on one side.
- To provide enough stalls in the market for traders and to articulate design with the choice of material and construction technique to provide adequate reduction in the spread of fire.
- To propose efficient and hygienic structure with adequate utilities and amenities. Also Adequate space is provided for each cluster to accommodate the fire van in case of any fire incident.
- To provide for expansion of the market.
- Bulky commodities and perishable essential commodities are accommodated in the ground floor level. While

electronics, electricals and other non-food trades are in upper level. Pedestrian gates are provided through which access is achieved to the purchasing zones. There should also be network of walkways which allows for free flow of people.

- Administrative offices (block) is located Centrally, which makes it equally accessible to market users at all times, make it stand as a focal point, a to act as manumental structure in the market. To crown it all, it's to ease dissemination of information and easy Administration of the various parts of the market.

6.02 DESIGN CONCEPTS

The principles in which the design concept is based is in line with Vagale's proposal. This is based on the followings:-

(a) Rationalisation of land use structure, so as to provide adequate areas for

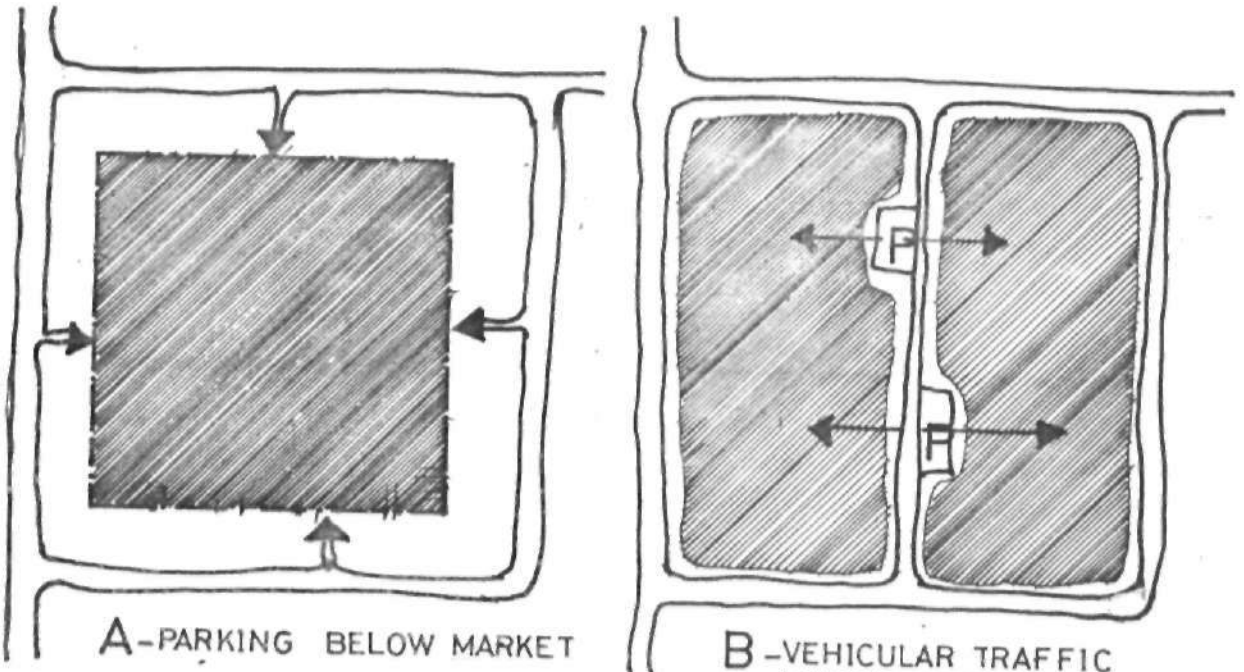
  (i) Commercial building

  (ii) organised open spaces

  (iii) community facilities and

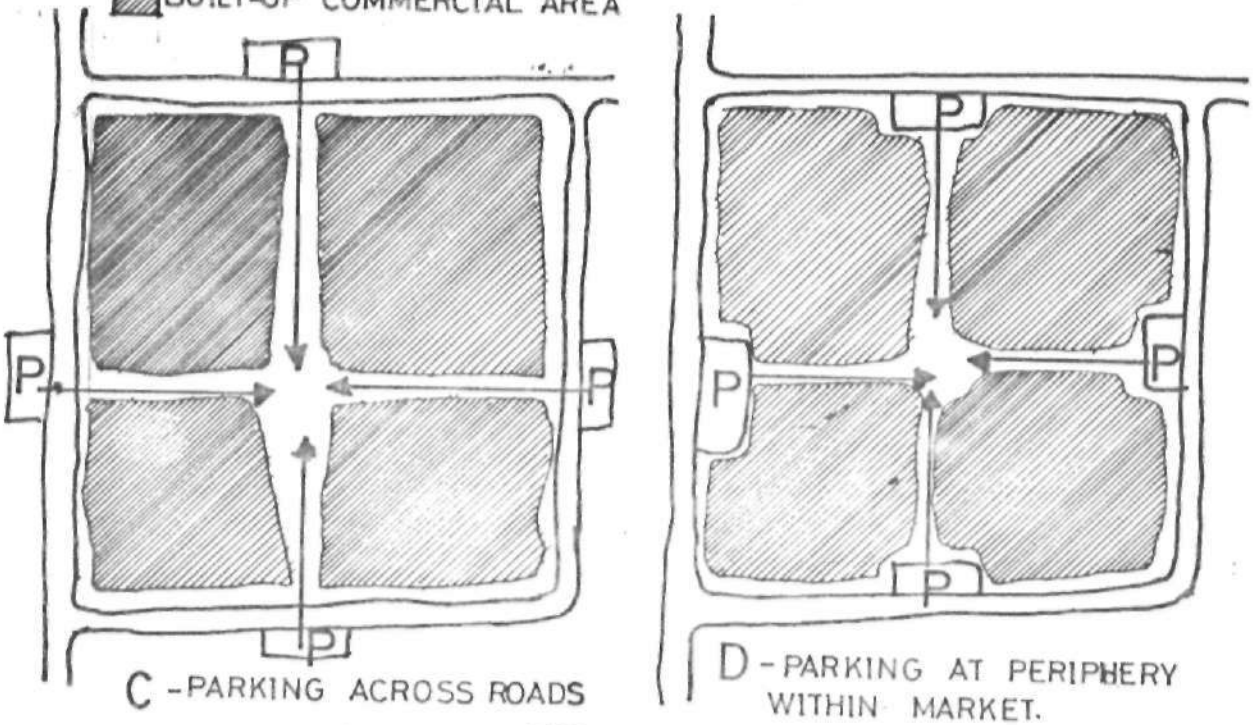
  (iv) circulation network.

(b) An efficient circulation system comprising roads, Pedestrian walks, Car parking lots, loading and unloading platforms and busstands to be evolved,



P–PARKING ——→DIRECTION OF MOVEMENT.

BUILT-UP COMMERCIAL AREA



TRANSPORTATION CONCEPTS

Al. A

ensuring the safety of pedestrians. The entire market premises to be free from Vehicular traffic, so that the pedestrians may move around safety within the market premises without encounting Vehicular traffic.

(c) The open spaces in the market should be properly landscaped with flowering trees and shrubs; to enhance the quality of environment.

(d) There should be proper provision of necessary utilities and services like piped-borne water, sewerage, fire hydrants, telephone booths, mail boxes, garbage receptacles, comfort stations, canteens, community halls and first-aid rooms (Clinic).

(e) The market should be zoned by allocating different areas to lockable stalls, open stalls, open-air trading platforms and cold storage units, depending upon the types of commodities sold.

(f) The design of shop units and other components should be based on modules.

(g) The design of the various buildings to vary in height and bulk to avoid monotory.

6.03 CONCEPTUAL APPROACH ALTERNATIVE (A)

In design of shopping centres, two basic concepts exist (i) Extrovert (ii) Introvert. In the case of

the former, a group of stores surround a Central Court. This Court is used as delivary of goods while Shopping is from outside. The major demerit of this is that shoppers traffic is splitted which implies that some shoppers who enter from the parking area might never be exposed to the public pedestrian areas and other stalls.

The introvert concept is such that stores open upto a Court inside and shopping is done from the Court. This concept has the following advantages.

- It brings about a balanced shopping traffic stream within the complex.
- possiblity of an attractive treatment of the exterior of the central core.
- Saving in capital and operational cost.

In case of a retail market, an analogy can be drawn in relation to the two concepts described. Thus, the extrovert concept can be taken for a free-plan traditional market where shops are laid back to back while the introvert concept can be applied to cluster of Stalls with continuous shopping on both the sides.

Documented (case studies) and undocumented research in this thesis has led to an identification of some concepts in market design as will be illustrated in figures 6.1, 6.2.6.3

The basic factor or parameter influencing these concept is transportation or circulation. These alternatives are as explained below.

6:03.1 PARKING BELOW MARKET

In this case parking is below commercial platforms. This brings about high cost of construction and drainage problem in which the resultant structure poses.

6:03.2 VEHICULAR TRAFFIC WITHIN MARKET

The provision of motorable route within the market is made, moreso, parking is provided for on both sides of the road. This concept does not guarantee pedestrian safety. Thus contradicting the basic principles of safety.

6.03.3 PARKING ACROSS ROAD

Here, parking done across the perimeter Vehicular roads. Thus people park and walk across the Vehicular road to attend the market; crossing the Vehicular road after parking, to attend the market is a great safety hazard.

6.03.4 PARKING AT PERIPHERY WITHIN MARKET

This concept permits parking at the periphery within the market after which movement of pedestrians start through the gates into the commercial zones. Here, there is complete segregation of Vehicular traffic from pedestrian traffic. This as such conforms with the general principles of pedestrian safety. This is the concept

adapted in the design of Sokoto Central Market. And it's same concept that will be adapted for this thesis design work.

6.05 CONCEPTUAL APPROACH ALTERNATIVE 'C'

The clustering pattern of L, U and T. forms concept takes more space as mentioned below, as such it is discarded in favour of transportation concept.

This type of concept will only be used where there is emple space as a result of discarded in favour of grid loyout. Even though, this enjoys some advantages like cross ventilation, lighting, easy layout and planning and permitts a lot of clustering options.

OBJECTIVES

- Segregation of classes of shoppers, recreational area is an obvious barrier.
- Circulation of Shoppers more delious and broken
- Service to general goods like fish and meat sections above is difficult.
- Pedestrian Crossing road is unsafe.
- If under one roof the cost of construction will be high as such uneconomic.

6.06 CONCLUSION

From the three concepts, having considered their merits and demerits, the author believes that the applicable one for the market design in relation to the chosen project site is parking at periphery within market of conceptual approach 'A'. This will be based on grid layout even though rigid, but has some advantages.

6.07 STALLS ARRANGEMENT AND LAYOUT PRINCIPLES

The planning has taken a grideon form because of the following reasons:

- It guarantees efficient circulation, full utilisation of available space and easy accessibility of fire service to the four parts of the market.
- The design has been based on the concept of a market (with shopping at two levels) having modern amenities

such as electricity, pipe-borne water, flush toilets and so on, that offer better selling and buying environment.

- The concept of rectangular grid riged design is to reduce cost by allowing the decentralisation of amenities and quick accessibility.
- Provision of service entrance for refuse collection and fire service only.
- Parking for motorcyles and bicycles inside the fenced market. The Stalls are arranged in such a way that they face the walkways. The Stalls are allowed a set back of 1.2 metres of commodity display and for hagging and bargaining by Shoppers or buyers.

The shops or stalls are of three types, type 'A', B and C. The type A, is lockable with storage space and it measures 35x5m for retail trade. Type 'B', is lockable without storage space, it measures 3.5x4m and type 'C' is the open Stalls measuring 25x3m where food trades are sold especially perishable goods, as will be explained later.

The stalls or shops have metal and fire resistant doors which open to one side while the stores (warehouses) open to two sides. There is coutyard inbetween blocks with ramps and centralised staircase for each cluster. The Courtyard helps in lighting the space inbetween and

for cross ventilation. Cold storage is provided near fish and meat stalls located within zones of food trades. Large stalls of 7x3.5m have been proposed for bulky commodities like sacks of rice, gari, beans and the like. In short, grains and flour, located near the delivery bay.

The stalls are grouped into the following order.

(i) Type 'A' Stalls - Lock-up Stalls for the sell of Foot wear

(ii) Textiles, provisions.

(iii) Electrical fittings and household equipment.

(iv) Plastic; metal and Aluminium products

(v) Soft drinks and beer.

Type 'B' - lock-up shops for:

(i) Service trades - Barbing, hair plaiting, tailors, shoes makers, coblers,

(ii) Provisions, fancy goods, vegetable oil and other dry condiments.

Type 'C' - open shops for:-

(i) Local groceries

(ii) Perishable goods

(iii) Fish/meat,

(iv) Palm oil and other wet condiments.

6.08 REFUSE COLLECTION AND DISPOSAL

The refuse collection centres have been located at the periphery of the market for easy collection by the service Vehicles, through the service entrance. Traders at the end of the daily sale, then dispose their waste into the refuse Centres. This is to reduce the incidence of fire through refuse burning.

6.09 PLANNING

The projected population of Jimeta and Yola for 1988 is 112,500 and it is expected to rise to 144,303 by 1993, that is, giving a growth tolerance of five years.

6.09.1 PROPOSED NO OF STALLS BASED ON POPULATION

With the growth tolerance of 5 years ahead then, it means, 1988 + 5 years = 1993.

Applying Kaduna Central Market ratio. Kaduna population as at 1985 = 604, 162

Kaduna population as at 1988 = 803, 636

Numbers of Stalls in Kaduna Central Market as at 1988 = 6,500 Stalls.

Therefore

803636 - 6500

112,500 -

803636 = 6500 x 112,500

$$= \frac{6500 \times 112,500}{803,636}$$

= 1228 . 4

= 1300 Stalls.

Therefore the number of stalls for the market is 1,300 stalls. From the number of stalls got above, stalls allocation for commodities will be as follows based on percentage.

Commodity	Allocated	Number of Stalls allocated
Textile and Apparel	38	494
Vegetable, fruits and Soup ingredients	20	260
Meat and fish		
Grains	8	104
Poultry	7	91
Tubers	4	52
Building Materials	7	91
Confectionary	6	78
Shoes and Clothes	4	52
Electricals and Electronics	6	78

From Kaduna and Sokoto Central Markets, the percentages of lockable and open stalls of Jimeta - Yola market is derived by taking the average.

	Lockable Stalls	Open Stalls
Kaduna Central Market	76%	24%
Sokoto Central Market	55%	45%
Average	65.5%	34.5%

Recommended for Jimeta-Yola Main Market is 65% for lockable and 35% for open stalls.

Total number of stalls to be designed for is 1,300. Therefore the number of lockable stalls is 65/100 x 1300

= 845 Stalls.

and for open Stalls = 1300 - 845 = 455 Stalls.

6.10 BRIEF AND SCHEDULE OF ACCOMMODATION

The brief, schedule of accommodation, planning and architecture which forms the resultant design are as results of the synthesis of the entire research work and a number of factors such as:-

- A comparative analysis of case studies of Kaduna, Sokoto, Jos, Maiduguri and of course Jimeta-Yola Mx Markets.
- Survey of the study area (both traffic and general)
- Study of space standards for Nigerian Markets by Professor L. R. Vagale and study of international standards as spelt out in time savers standards (second edition) by Joseph De Chiara and John Callender. Other factors include, the need for an uncongested town Centre, Chinatic considerations and Demographic and average income trends.

6.10.1 BRIEF

(A) Commercial Area
Lockable Stalls

(B) RECREATION - COMMERCIAL
- organised open spaces

Open Stalls - Restaurants

Open Space - Snack bars.

(C) Roads, Streets and parking

- order of walkways
- parking space.

FACILITIES

- Police Station
- Fire Station
- BANK
- Information
- Telephone booths } P
- Postal Services } Post Office
- Clinic
- Mosque
- Public toilets.

SERVICES

- REFUSE COLLECTION point and receptacles
- LIGHTING
- Drainage and Sewerage
- Water Supply

ADMINISTRATION

- Administration
- Accounts

6.10.2 SCHEDULE OF ACCOMMODATION AND SPACE REQUIREMENTS REQUIREMENTS

(A) STALLS		AREA (m^2) Per Stall
(i) Small size	-	2.5x3
(ii) Medium size	-	3.5x5 = 17.5
(iii) Large Stall	-	7x3.5 = 24.5
(iv) Extra large	-	7x7 = 49

ADMINISTRATION

Market manager	-	$24m^2$
Assistant market manager	-	$24m^2$
Secretary	-	$20m^2$
Technical supervisor	-	$20m^2$
Administrative supervisor	-	$20m^2$
Accountant	-	$24m^2$
Tradement	-	$24m^2$
Board/Committee room	-	$84m^2$
Drivers/Cleaners	-	$24m^2$
Labourers	-	$25m^2$

FACILITIES, UTILITIES AND SERVICES

(i)	BANK	- $400m^2$
(ii)	CLINIC	- $98m^2$
(iii)	POST OFFICE	- $100m^2$
(iv)	POLICE POST	- $100m^2$
(v)	FIRE STATION/WORKSHOP	- $600m^2$
(vi)	POSTAL SERVICES	- $150m^2$
(vii)	Telephone booths	- 700 for public
(viii)	Refuse Collection points)	- 1 per 16 stalls (Main points)
		1 per 1 stalls (Minor points)
(ix)	Lighting	- Flood lights.
(x)	Drainage and Sewerage	- Covered drains
(xi)	Public toilets	- 1 per 46 Stalls
(xii)	Mosque	- 500 persons plus 300 person on open the space.

(xiii) Water faucets - 1 per 100 Stalls or
1 per 300 persons.

(xiv) Parking lots - 130 Cars at a time.

6.11 TRADE CLASSIFICATIONS

The goods sold in Nigeria can be put into three broad categories - the food trades, non-food trades or manufactured goods and service trades.

6.11.1 FOOD TRADES

This group is further divided into two sub-groups of perishable and non-perishables.

(a) PERISHABLES

These includes vegetables; fruits, fresh fish, fresh meat and perishable soup ingredients. Most of the Stalls for this trade has been provided and they are the open types. In addition a standard meat and fish (fresh) hall with food sanitary condition has been provided in the food trades units.

(b) NON - PERISHABLES

Grains, tubers, durable soup ingredients and provisions fall into this group. The grains include rice, beans, flour, gari, maize and guinea corn, while tubers are barely yam, cassava and potatoes.

The soup ingredients with lasting qualities are oils, salt, spices and other condiments. While the provisions include all kinds of preserved foodstuffs, canned or bottled; together with confectionaries, wines and spirits. Most of these sales are allocated spaces of the wet area.

6.11.2 NON-FOOD TRADES

This can be subdivided into groups as follows:-

(a) General wears and fabrics such as men's wears, ladies wears, sports gear, leather and rubber goods.

(b) Educational equipment

(c) Gift Shops such as Jewelry, watches, toy and novel.

(d) Body care shops specializing in cosmetics, drugs, toiletaries, optical products and others goods related to human body.

(e) Electrical wares dealing in motor powered equipment such as generators, coolers and freezers and general electrical products, parts and tools.

(f) Mechanical equipment: They sell cycles and their spare parts, mechanical pumps.

(g) House equipment: This includes building materials household furniture, household utensils, carpets and rugs and other related goods for house use.

Much of the goods classified under this category are provided for in dry part of the market.

6.11.3 SERVICE TRADES

This has also subdivisions such as:-

(a) Personal services; comprising of barbers, hairdressers and beauty saloons.

(b) Repair services:- Such as watch repairers, cobblers, and tinkers.

(c) General services which includes tailors, dye cleaners, painters, sign - writers and other miscellaneous services.

6:12 PARKING LOTS AND DELIVERY BAYS

There are two parking lots along the roads on the frontage of the market at the northern parts, another at the rear near the mosque. Both locations were chosen for the ease and convenience of traffic flow. There is also a delivery bay located along Ibadan Street which serves the bulk purchasing section of the market.

Taxi and bus stops are conveniently located along Mubi road west of the site, lying along the dual carriage way and easily accessible. Therefore taxis and buses don't have to get into the site. Motorcycles and Bicycles park has been located within market at the periphery, this is for safety and to reduce competition with Cars for parking area.

6.13 LANDSCAPING

The shady trees proposed for the market have been restricted to the periphery of the market to enable fire service have easy and quick access in cases of fire outbreak. The shrubs used for landscaping of open spaces in the site.

6.14 PROTECTION AGAINST FIRE HAZARDS

Fire is the worst threat to markets in Nigeria today. From late 1984 to date a series of fire disasters on our markets have taken place claiming a number of lives and goods worth millions of Naira. For examples, fire gutted down Kano Central Market on December 14, 1984 claiming a life and goods well over a million naira.

Though Jimeta-Yola Central market's experience was due to maitatsine's uprising, it is pertinent that any design for the market should have great consideration for fire hazards. Thus the design has tried to a great extent to check spread of any fire outbreak.
This is achieved through the structure used. Basically, the whole structure is of reinforced concrete skeleton with burnt bricks as infilling panels. This is also used in some part of the roof structure. But the roof structure is basically steel and aluminium sheets. Moreso, a number of fire hydrants have been proposed

with one standby. Each fire hydrants is capable of operating within a radius of 50 fifty metres as shown on the services sheet.

However, it is necessary to state here that, the best way of avoiding fire hazards is to prevent it from happening or occurring. Thus, the public should be enlightened on fire hazards and briefed as to how to escape such occurences. The Shop owners should be guided by certain rules regarding the effective management of

(i) Garbage and trash.

(ii) Paints, inflammable liquids, oils and acids.

(iii) Electrical appliances and equipment

(iv) Cutting and welding works.

(v) Pressurised containers and smoking.

6.15 TOILETS, LIGHTINGS AND OTHER FACILITIES

Enough toilets facilities have been proposed at the four conners of the market for easy accessibility and services since they are all of water system (closts) - squatting type.

Except in offices, artificial lighting is to be by flood lighting end suspended flourescent tubes. Above all the design has encouraged a great deal of natural lighting and ventitation through the provision of Courtyards that open to the sky. Telephone booths are proposed for the three major entrances to the market at east, north and west. The other facilities like

Administration, Police Post, fire station, Health Clinic, Post Office and so on have been each served with their own telephone.

6.16 FUTURE EXPANSION

By the time this scheme is implemented, there will be no more site for future expansion since the space left for expansion is not large enough, and the market site is bounded in all sides by roads, and lands around the market has been developed. So to avoid this handicap, a storey market was then suggested to provide more stalls of various sizes.

6.17 MATERIALS AND FINISHES

Wood or Timber materials have been avoided, since they are susceptible to fire. Burnt bricks have been used to avoid finishes and with stand fire for some times. Also burnt bricks have the following advantages,

(i) less maintenance,

(ii) provide good Apperance

(iii) nearness of the market to Mubi burnt bricks industry. And considering the size of the project, it will be economical if large purchase is made.

The sub-structure work of all the buildings, will be in reinforced concrete strip foundation and infilled burnt bricks walls could be non-load bearing where

column are used as the load bearing elements for areas of more than a level where it is of a level the walls are self supporting burnt bricks of standard size 230 x [illegible] 450 x 20[illegible] with 20mm mortar joints. Columns, beams, hintels are in reinforced concrete with nominal reinforcement.

Different sizes of angle cleats, I - sections, beams, and different sizes and specification of Mild Steel section are used in the roof trusses and hook boths used to hold down the long span Aluminium roofing sheets on steel trusses to cover individual blocks of stalls, while the walkways were covered with concrete flat roof.

6.17.1 FINISHES

The buildings don't need plastering since it is of burnt bricks. The mortar joints should be neatly dressed.

6.18 ZONING

The general layout plan has been guided by the zoning principle where bulky commodities like grains (mostly carried in sacks), Garrie and Tubers are located close to the unloading bay to ease the problem of moving commodities to their selling points within the market.

6.19 DRAINAGE

This should be by means of covered gutter (drains) Main drainage 1m wide, 1.2m deep while the secondary drainage and minor drains (Chamnels) are 0.65m wide by 0.75m deep and 0.45m by 0.60 deep respectively.

CHAPTER SEVEN

7:00 POLICY RECOMMENDATIONS

7.01 IMPLEMENTATION

The success of any physical plan and design no matter how comprehensive and rational depends to a great extent on the implementation strategies and control.

The implementation of a main or central market of this nature or type should be the responsibility of both the Yola Local Government Authority or Council and urban planning and Development board under Gongola State Government. This is in view of the huge amount of money involved. The actual construction could be given to any construction firm of reputable records in market consruction.

7.02 FINANCE

This is the most important determinants of any implementation strategy. The financial aspects deal mainly with who will provide the money and from what source. The financing of the main Jimeta-Yola Market construction should be done by the Gongola State Government Council. The money could be got through loans from banks or other financial institutions either within or outside the Country. Private organisations should also be encouraged to participate in the programme.

7.03 PROGRAMMING

Programming is one of the important implementation strategies. It guides the implementation process and helps in control of finance. This aspect delineetes the project into stages and helps in control of cash flow. This is because these stages of work can be quantified in monetary terms so as to guide in the allocation of fund it ensures also proper work and finishing at each stage.

7.03.1 STAGE I

This stage includes identification of the construction firm and the Goverrment organ to supervise the work. Then the construction work should start with the provision of basic utilities that will be necessary for the construction work such as electricity and water.

7.03.2 STAGE II

This stage will include the construction of the Administrative blocks, provision of public facilities and services.

7.03.3 STAGE III

The construction of stalls; drains, planting of trees.

7.04 ADMINISTRATION AND MANAGERIAL STRUCTURE

The day to day running and maintenance of the market mainly depend on the managerial structure.

Government approved markets in Jimeta-Yola town are managed by the Yola Local Government Council. However, a proposal to enhance administrative and managerial structure for the control and management of the market by the Yola Local Government Authority under which the State Government oversees the activities.

Thus, the management of market is principally involved with three interrelated elements. people, property and money. These elements have widely diverse, and sometimes contradicting interests and it is the role of the management to reconcile those interests to the greatest possible advantage to all the parties.

Table 7.1

The managerial structure in diagrammatic form.

GONGOLA STATE GOVERNMENT

YOLA LOCAL GOVERNMENT COUNCIL

MARKET MANAGER

ASSISTANT MARKET MANAGER

TECHNICAL SUPERVISOR	ADMINISTRATIVE SUPERVISOR	ACCOUNTANTS
TRADEMEN	ASST. ADMIN SUPERVISOR	CASHIER
DRIVERS/CLEANERS	SECURITY/LABOURERS	CLERKS.

The management functions include the followings:-

- To allocate stalls and arrange transfer of ownership of Stalls.

- Collection of rents from traders
- Ensure security within the market.
- Clearing and general maintenance of the market place and advise the Government about the market Affairs.

CONCLUSION

Markets are important socio-economic institutions. Therefore more consideratio[illegible] be geared towards their planning and management.

The study has analysed the physical characteristics of markets. These include Jimeta - Market; Sokoto Central Market, Kaduna Central Market; New Jos Market and Maiduguri Monday Market. The physical planning problems of Jimeta-Yola Market have been highlighted to include small site area, serious walkways encroachments, by squatters or hawkers, poor provision of facilities, utilities and services other include parking space, poor drainage system and non-durable construction materials.

Space standards have also been identified from the study which also forms one of the basic elements of the author's proposals for planning and design of Jimeta Main Market.

An enhanced Administrative and managerial structure for the market has been proposed. Large stalls and more lockable stalls have been proposed. The design has provided for convenience through; ease of Vehicular and pedestrian access to and from the market. Ease and adequacy of parking space. To crown it all; the work done on this thesis by the author has been directed towards the stated objectives.

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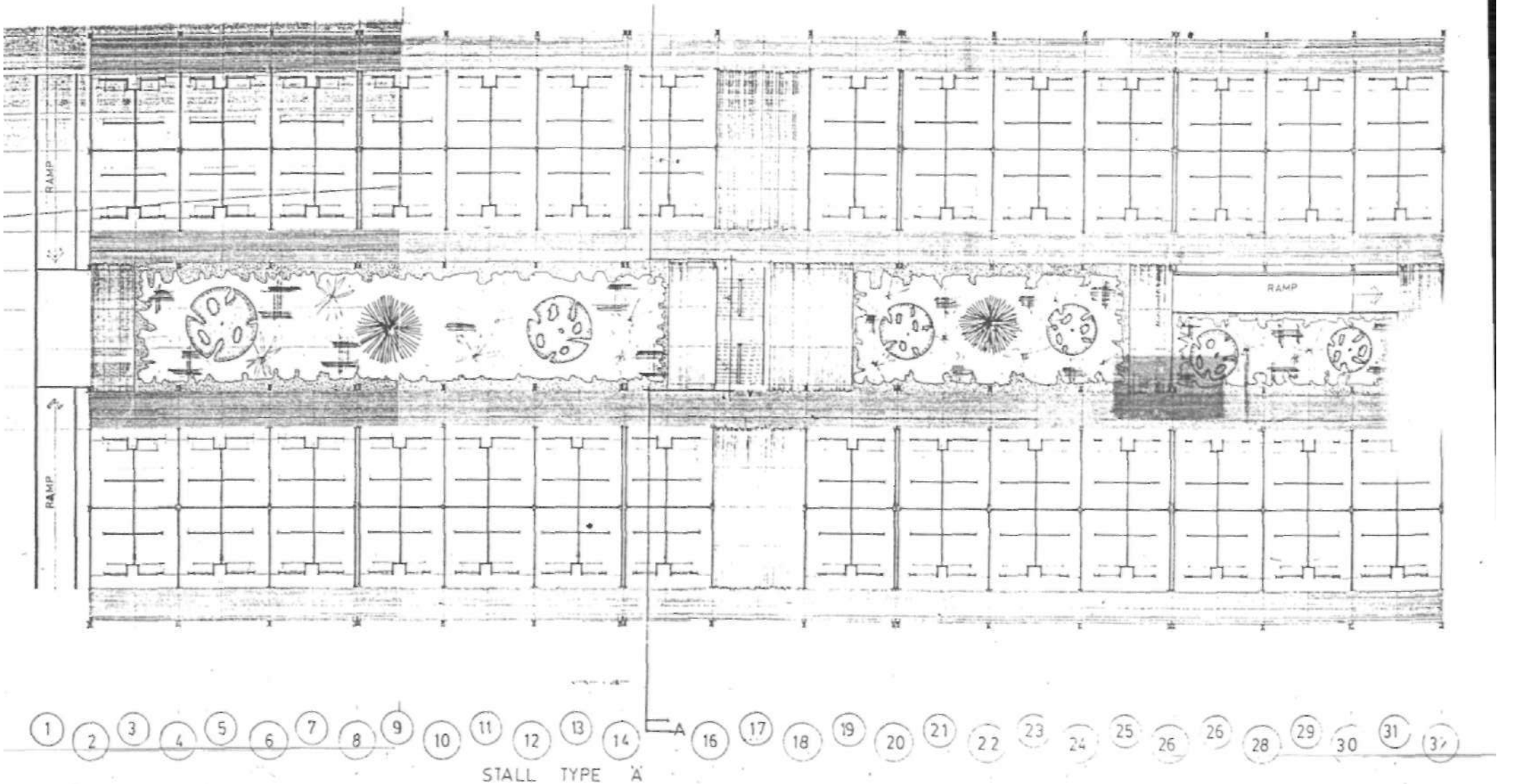
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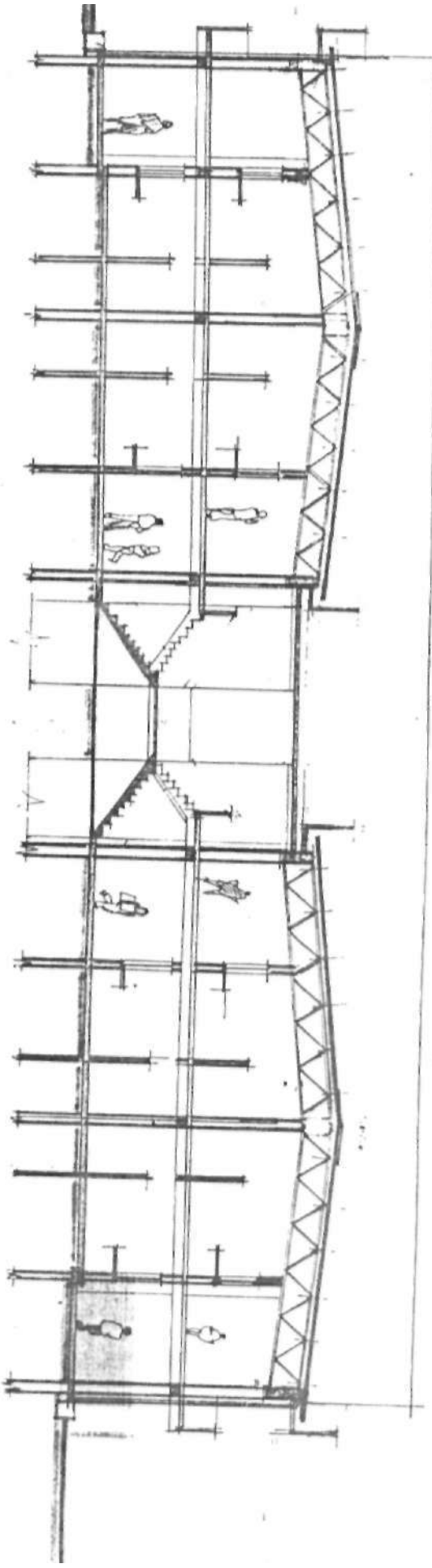
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BISHOP STREET
MUBI ROAD
BICYCLES AND PEDAL CYCLES PARK
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MOTORCYCLES PARK
ADMINISTRATION
MONITOR PARK
DELIVERY LORRY PARK
MOSQUE
WHY GRID
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FULL UTILIS
EASY ACCE
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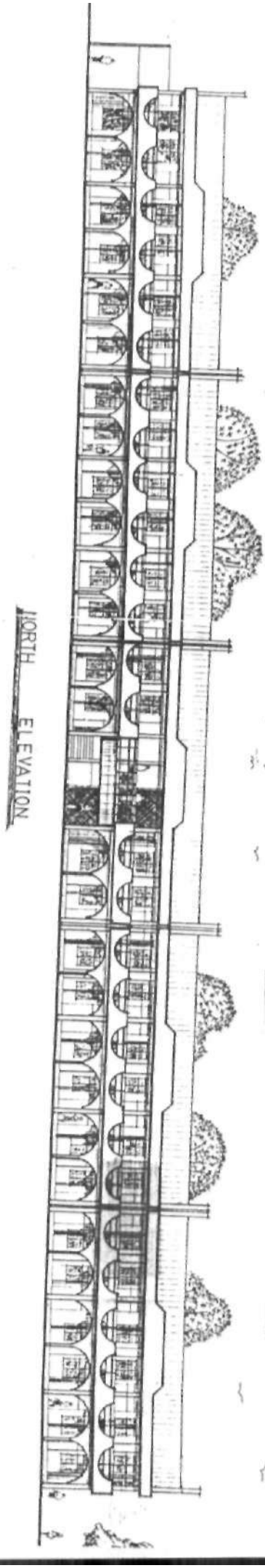

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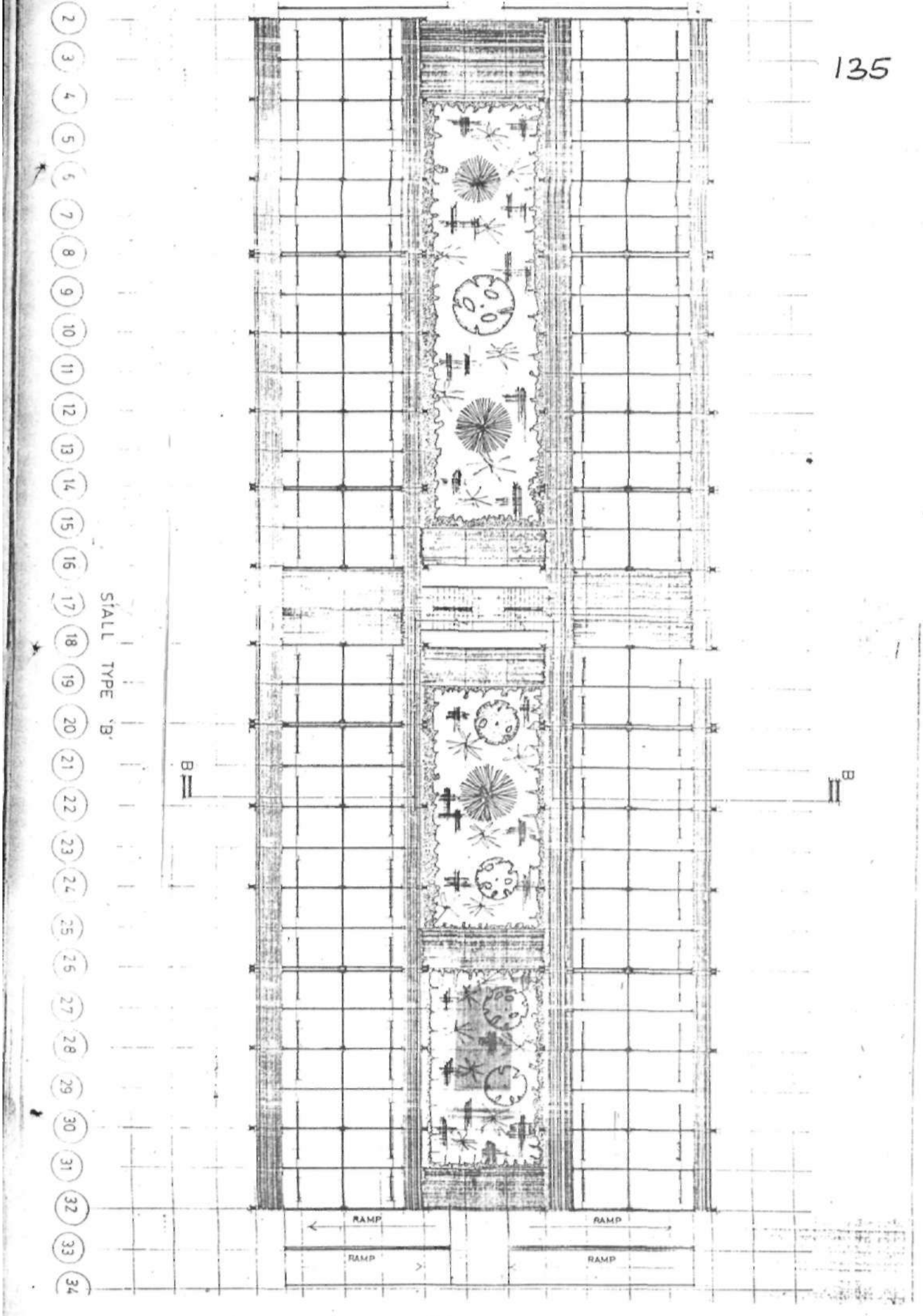
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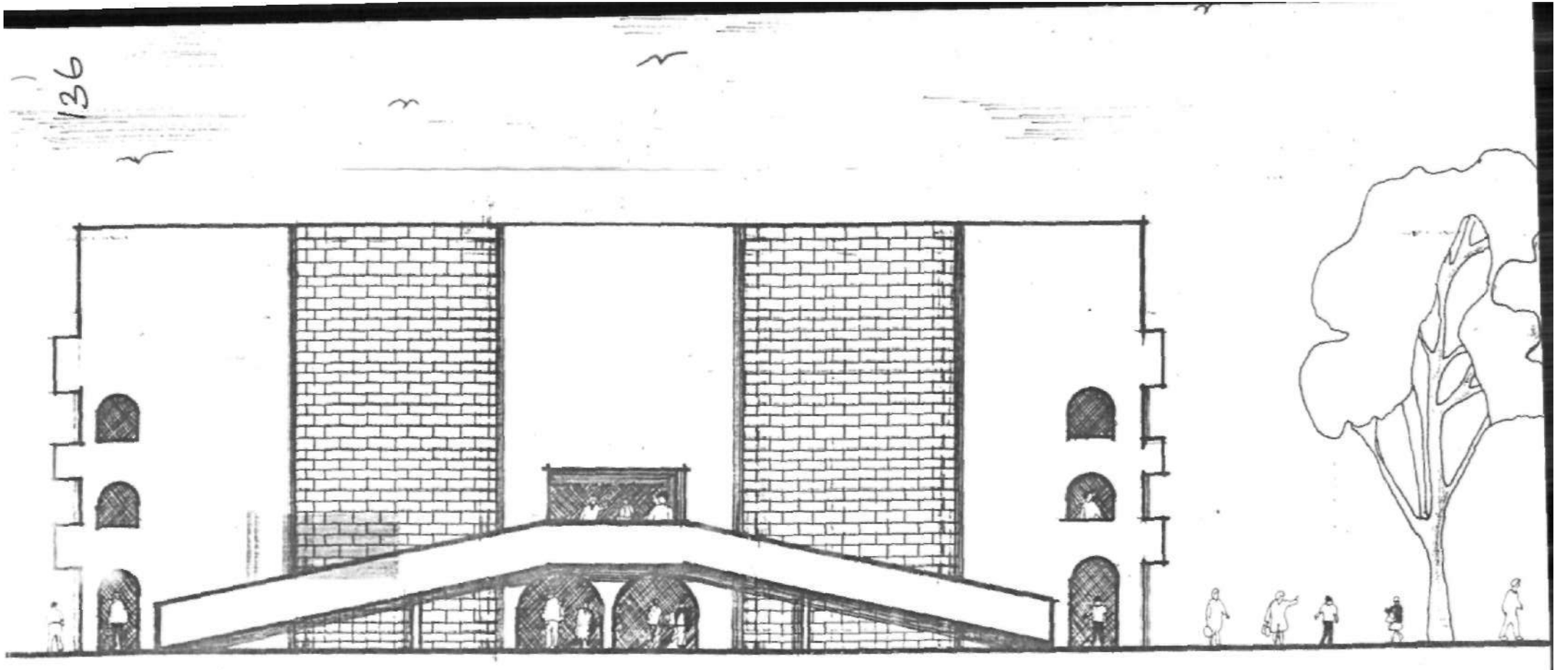


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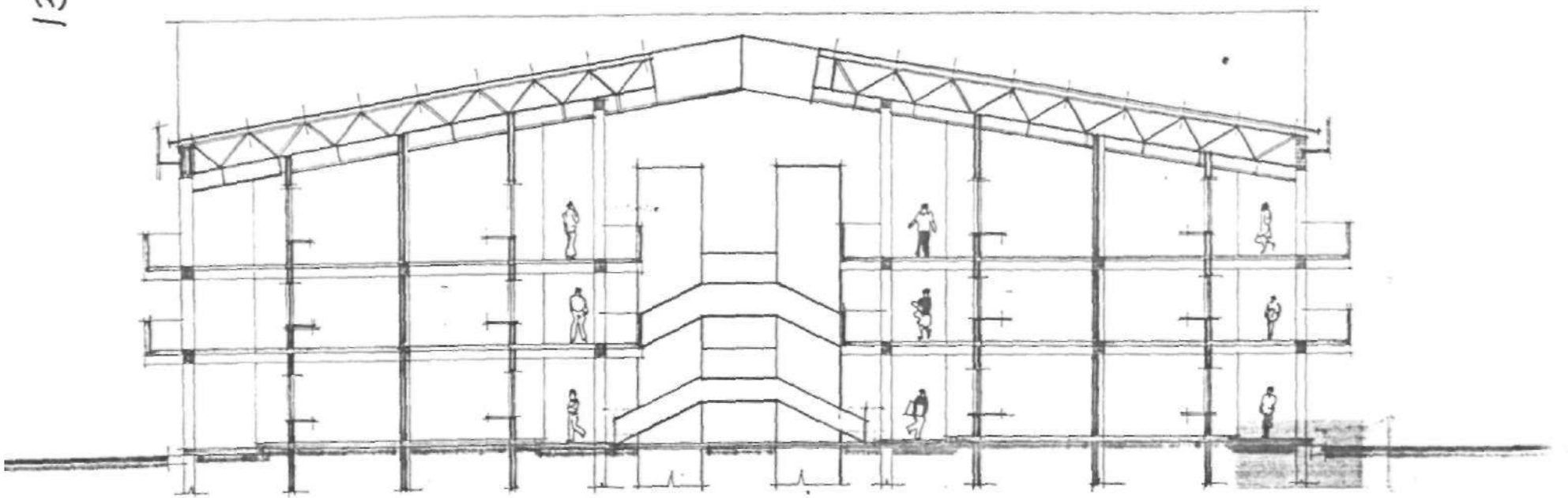


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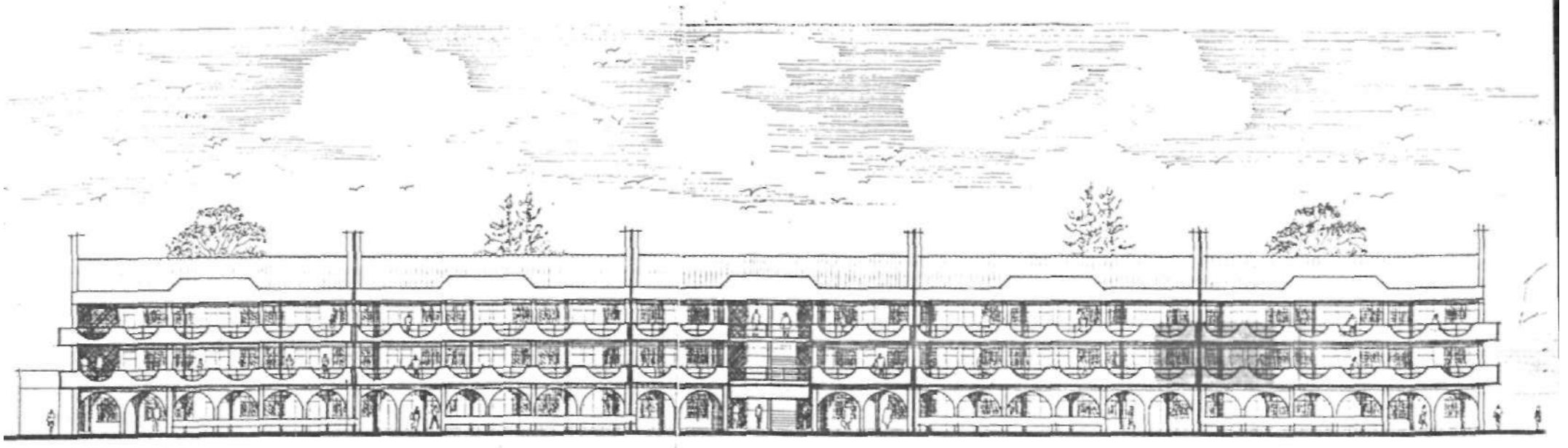


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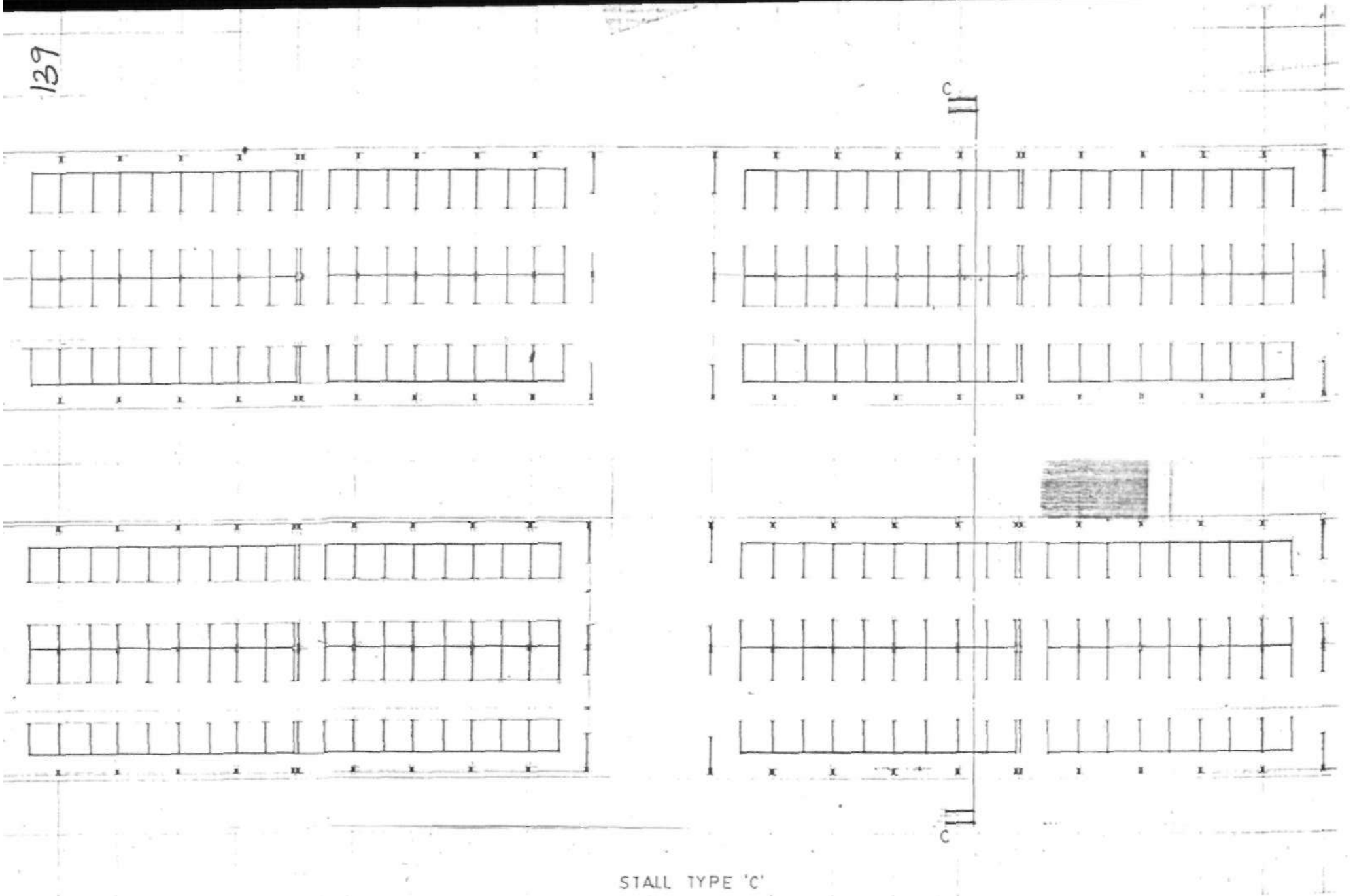


SECTION B-B

STALL TYPE



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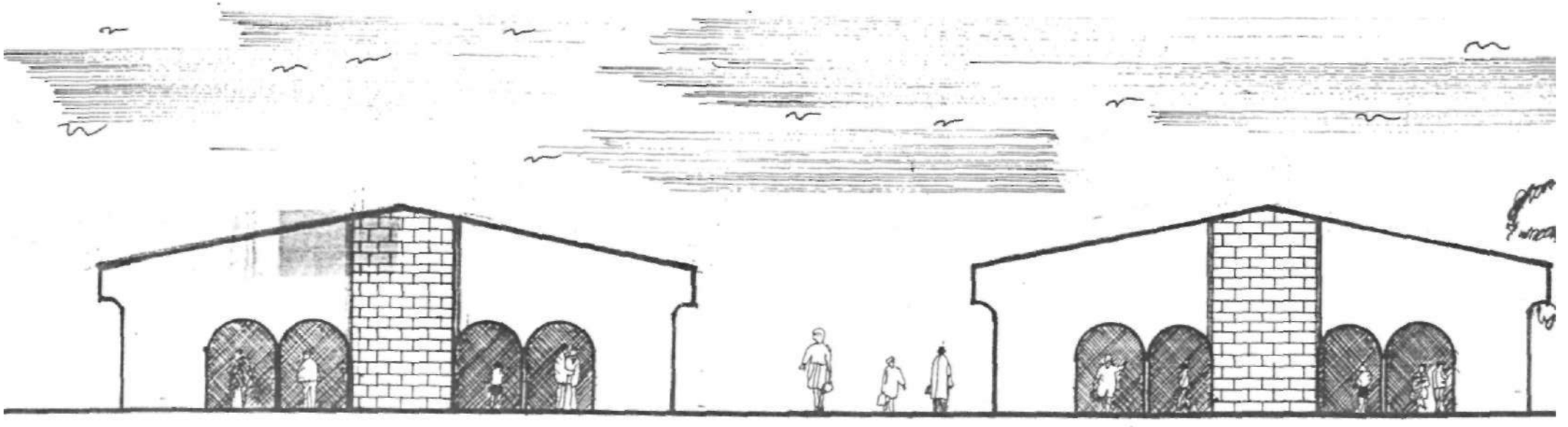


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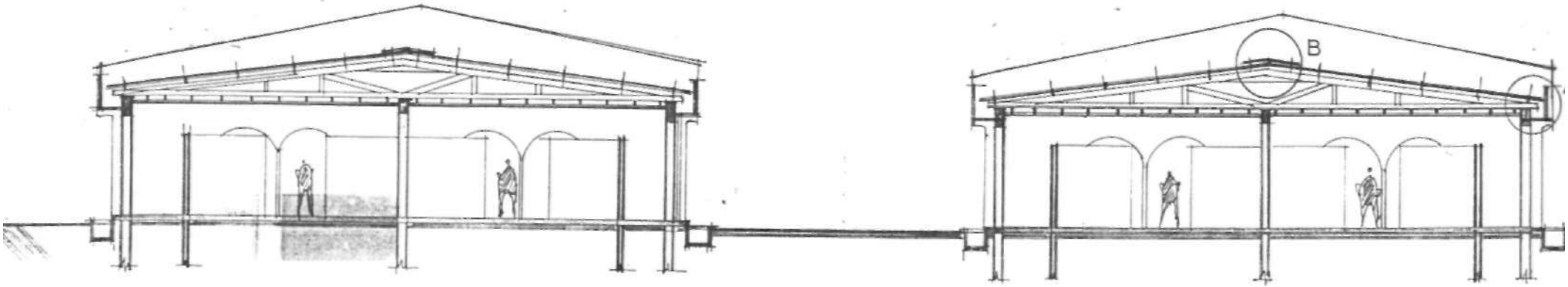
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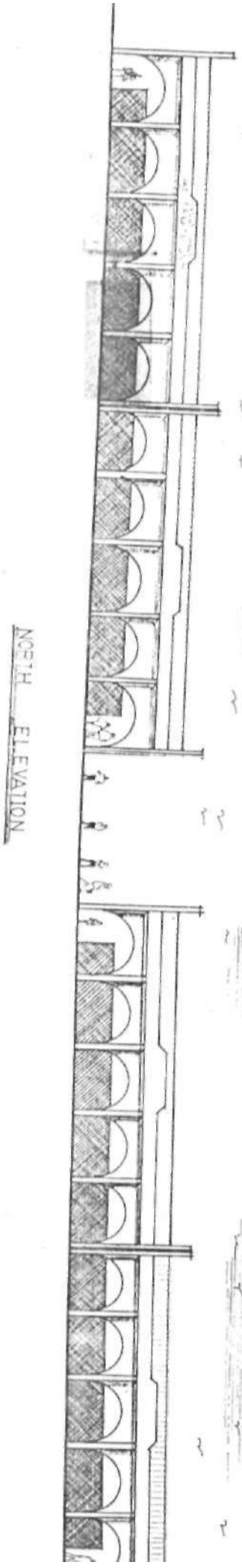


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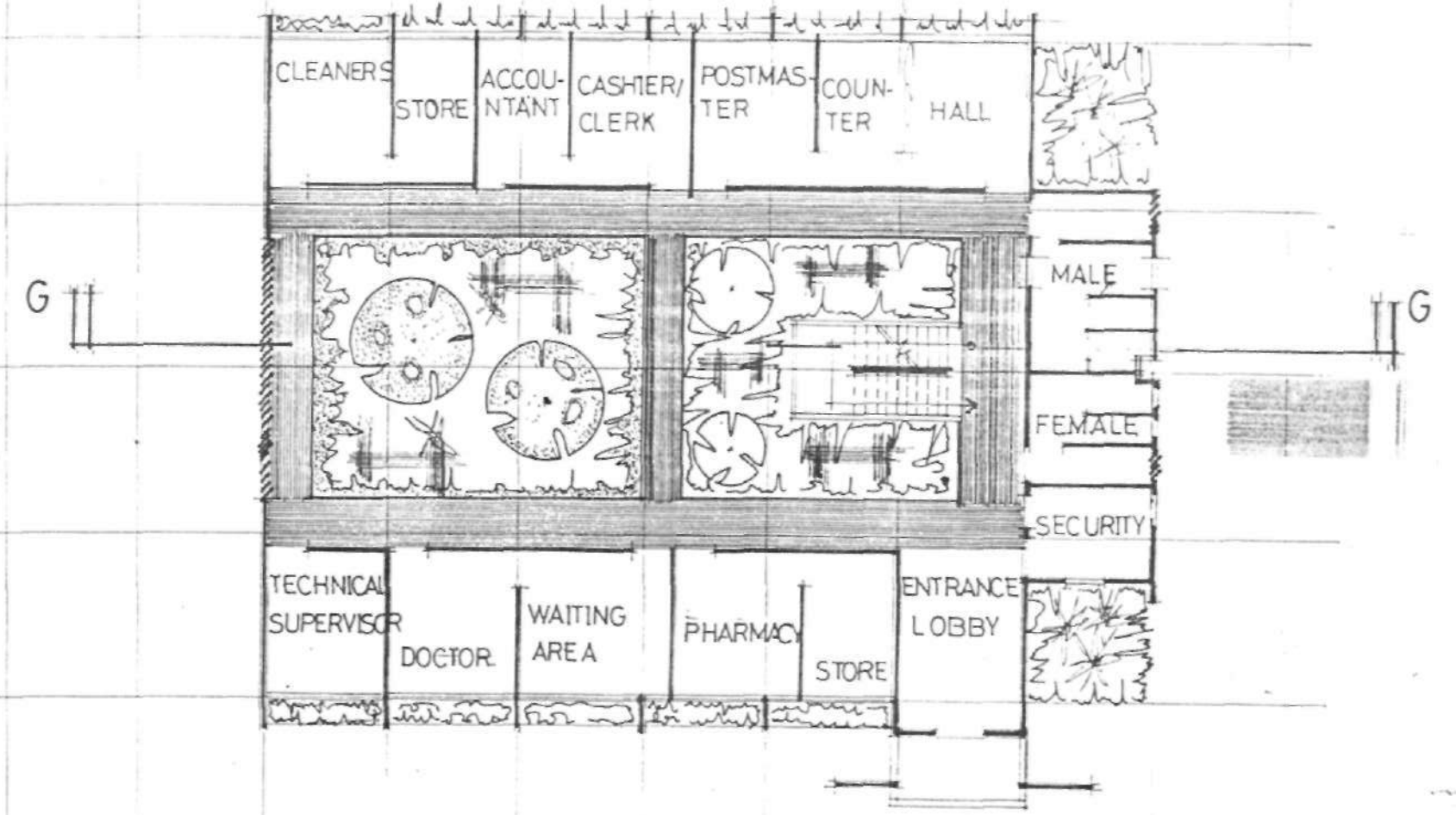


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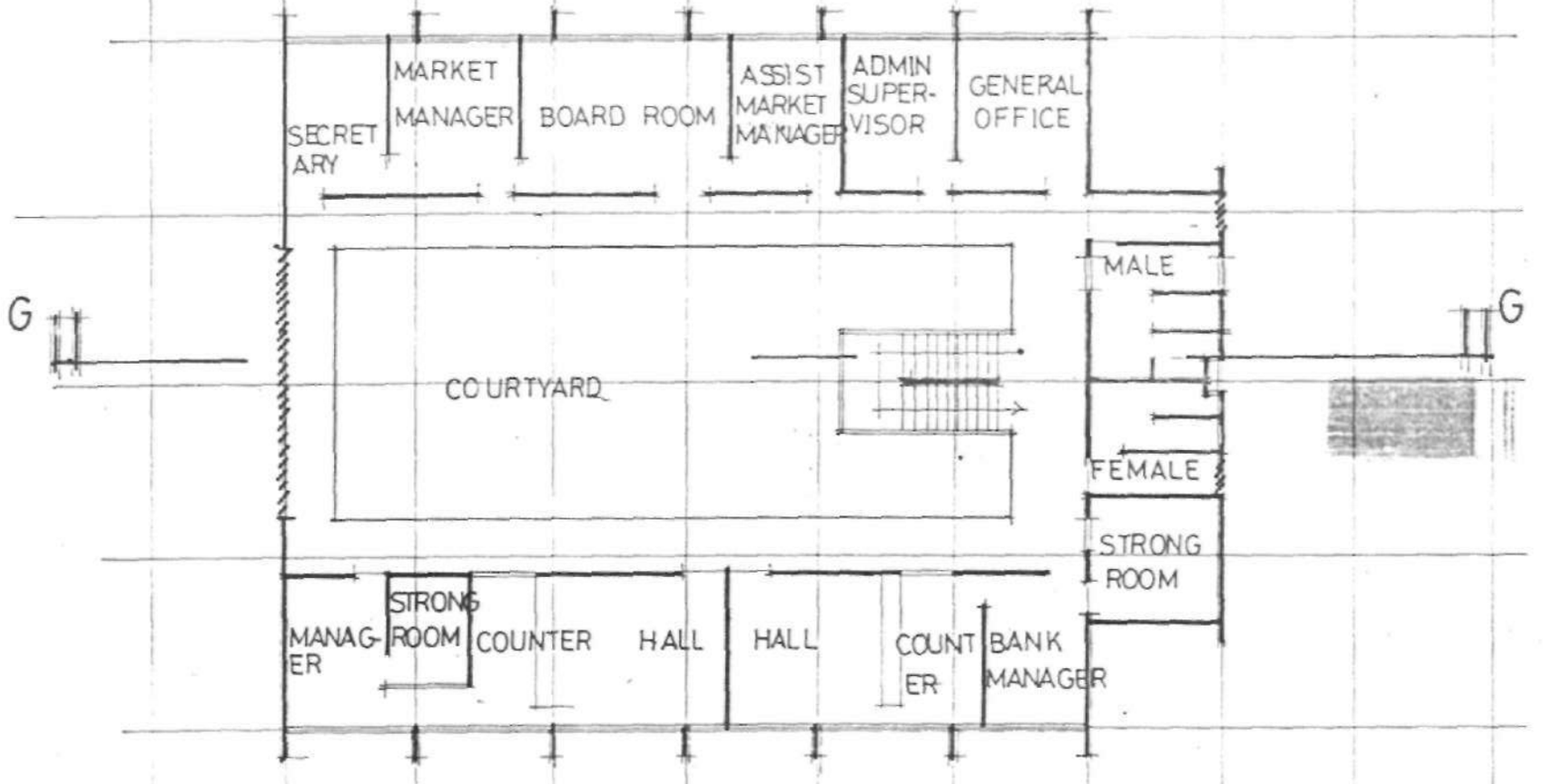
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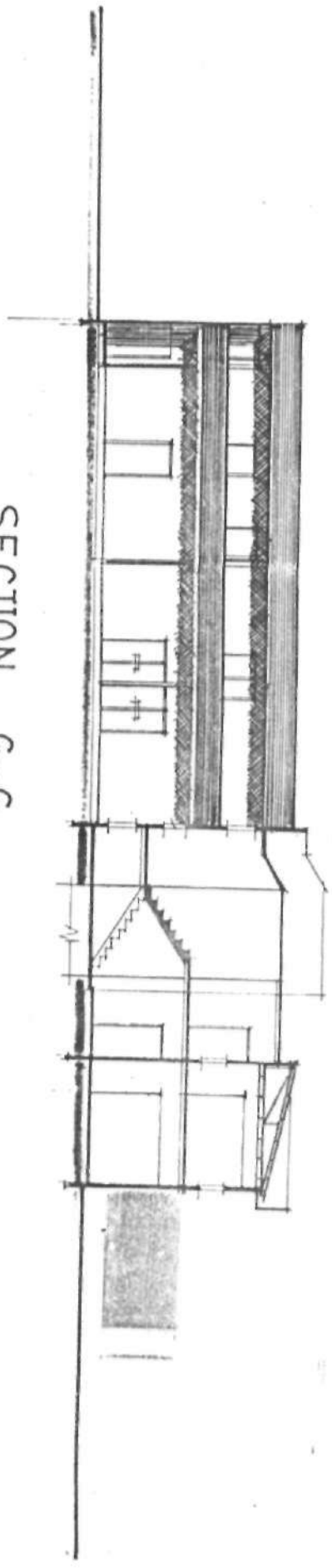
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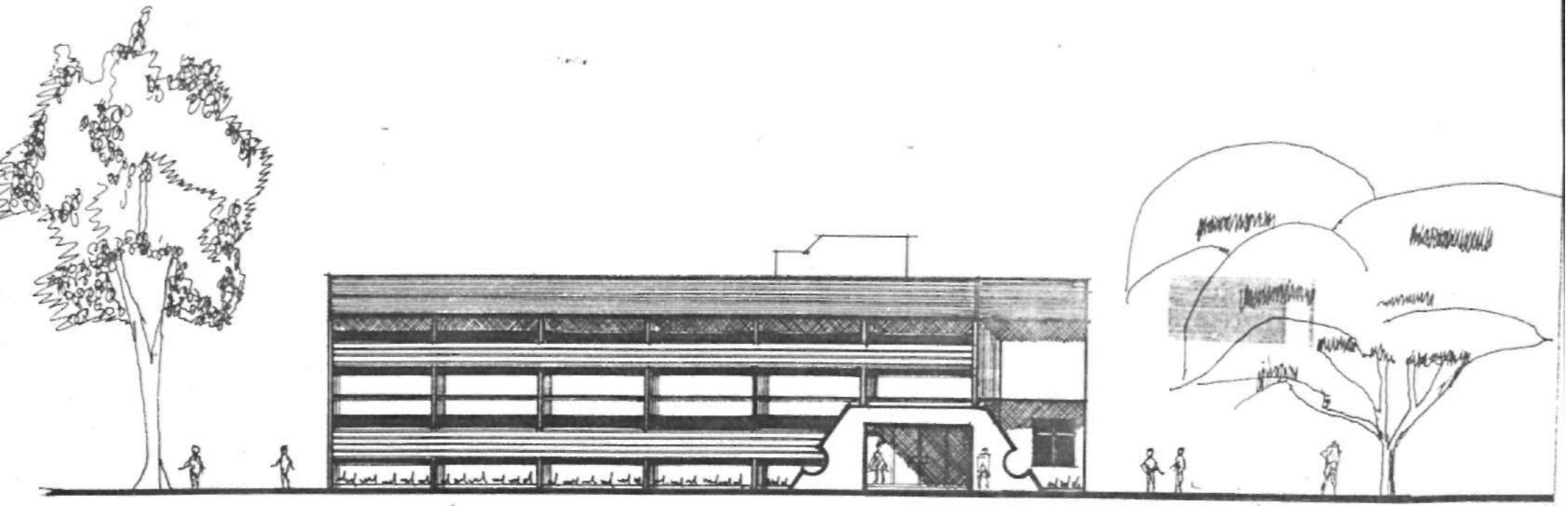
GROUND FLOOR PLAN



FIRST FLOOR PLAN



SECTION G-G



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