

DESIGN PROPOSAL FOR YOUTH CENTRE, ABUJA WITH FOCUS ON

LANDSCAPING ELEMENTS

M.TECH. THESIS (ARCHITECTURE)

BY

ONI, OLORUNJUWON RUFUS

REG.NO. M-TECH/SET/1421/05/06

DEPARTMENT OF ARCHITECTURE

SCHOOL OF POST GRADUATE STUDIES

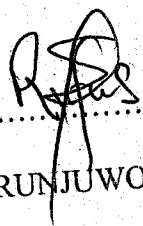
FEDERAL UNIVERSITY OF TECHNOLOGY

MINNA

SEPT, 2008

DECLARATION

I hereby declare that, this project work has been carried out by me under the supervision of Arc. S. YUSUF of the Department of Architecture, Federal University of Technology, Minna Niger State and that it has not been presented either partially by any one else for the award of any degree. All sources of information for the project have been duly acknowledged.

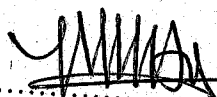
26 

ONI OLORUNJUWON RUFUS

26/10/10
DATE

CERTIFICATION

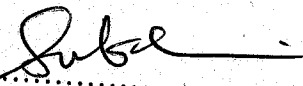
This DESIGN PROPOSAL FOR YOUTH CENTRE ABUJA write up and design is the original work of ONI OLORUNJUWON RUFUS and was carried out under close supervision of my mentor, Arc. S. Yusuf, of the Department of Architecture, Federal University of Technology, Minna, Niger State, Nigeria in fulfillment of the requirements governing the award of Masters of Technology degree in Architecture and is approved for its contribution to knowledge and literary presentation. All sources of information and quotations are duly acknowledged.



.....
Arc. S. YUSUF
Project Supervisor

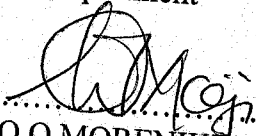
27th October, 2010

.....
Date

for 
.....
Dr. A.A MUHAMMED - OUMAR
Head of Department


27-10-2010

.....
Date


.....
Prof. O.O MORENIKEJI
Dean S.E.T

28/10/10

.....
Date


.....
Prof. S.L. LAMAI
Dean School of Post graduate.

1/11/2011

.....
Date

DEDICATION

I dedicate this project to the all sufficient God the unseen Hand behind my success – The Greatest Architect of all times – The Creator of Heaven and Earth – THE ALMIGHTY GOD, giver of wisdom, life and grace. Who gave me wisdom, courage and grace to carry out this project.

I also dedicate this project to my beloved mother, Mrs. Abigael Oni who prayed and patiently encourage me to keep on, may God reward you abundantly Amen. My late sister Mrs Obedient Comfort your memory lingers on.

ACKNOWLEDGEMENT

I give all the glory, honour and adoration to God the most worthy, the chief Architect and the merciful one whose grace, courage and love brought me out of nothing to great architect in the making. Ha! Messiah You were, You are and You are to come.

My profound gratitude goes to my supervisor Arc. S. Yusuf who despite his commitments, carefully supervised my design, read my write-up and gave his constructive criticism to guide me. You are a father indeed.

My heartfelt gratitude goes to the Dean School of Postgraduate Studies Professor Abalaka, Dean School of Environmental Technology Professor T.C Mogbo., the Head of Department of Architecture Dr A.A Muhammad Oumar, and all the lecturers in the department who have all contributed greatly to my academic career.

I acknowledge also the financial assistance of Dr. Tunji Elusoji, Mr. O. O. Ezekiel and Brother Tunji Afolayan, it is wonderful having you. With due respect and sincere gratitude, I acknowledge Brother Rotimi Akindele for his kindness, Brother Isaac Aregbeshola for caring for me, Bro Femi Ojo and Bro Samuel Oladipupo for taking time to type this project,

I also use this opportunity to acknowledge my siblings my late sister Mrs Obedient Comfort, Obafaye Sunday, Seun Obafaye, my pastors in-fact, if I have seen any further, it is by standing on your shoulders,

More also, my profound gratitude goes to my beloved sister Miss Promise Okponibout you came just in time I appreciate you, lastly the entire DLCF Campus brethren I am grateful for your prayers and all that have contributed positively to the successful completion of this project. Thank you all.

ABSTRACT

Youth centre is a social institution built, staffed and equipped to provide social, vocational and recreational activities intended primarily for use by youth. With the philosophy of enhancing communities by design, the whole task of this project was to design a state-of-the-art Youth Centre where values of Landscaping elements and ergonomics innovations will be considered to produce a youth-friendly, youth-appealing and safe environment where social, vocational and recreational activities can take place. The Centre supports opportunities for youth to develop their physical, social, emotional, and cognitive abilities, leadership training, friendship and recognition. The Centre also offers organized instructional programs for physical activities such as dance, yoga, and martial arts and for academic and arts programs such as science, crafts, and theater. It also offers opportunities for unstructured activities such as game playing, socializing, club meetings, and outdoor play. The project paid attention to Youth from ages 11 to 35years, it is intended primarily to provide so much for so many who have so little. The aim and objectives, scope and limitations and also the research methodology of this Project, were introduced in chapter one, while Chapter two dwelt on literature review, organization, ownership and financing. Chapter three dealt with Landscaping elements which are the main focus of this Project. Chapter four is on appraisals of existing youth centres, observations and deductions. Chapters five to eight were on site analysis, data collections, materials and construction techniques, design concept, building services, maintenance conclusion and recommendations.

TABLE OF CONTENTS

CONTENTS	PAGES
Cover page	i
Title page	ii
Certification	iii
Declaration	iv
Dedication	v
Abstract	vi
Table of contents	vii
List of Tables	viii
List of Figures	ix
List of Plates	x
List of Appendixes	xi
Definition of Terms	
CHAPTER ONE	
1.0 INTRODUCTION	1
1.1 Background to the study	4
1.2 Statement of the problem	4
1.3 Aim and objectives	4
1.4 Scope and Limitation of the Study	5
1.5 Justification	5
1.6 Importance of the study	6

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1	Definition of Youth	7
2.1.1	Youth in the Society	7
2.1.2	The Youth of Today	8
2.2	Adolescence: an Insight	9
2.2.1	Physical Changes	10
2.2.2	Intellectual Changes	10
2.2.3	Emotional Changes	10
2.2.4	Increase Independence from Parents	11
2.2.5	Increasing Responsibilities in Schools and Colleges	11
2.2.6	Career Planning	12
2.3.	The Youth of the World Today	12
2.3.1	The Youth of Africa	13
2.3.2	Nigerian Youth Policy	15
2.4	Youth Organizations	15
2.5	Youth Situation in Nigeria	16
2.6	The need for the Youth Centre	16
2.7	Summary	17

CHAPTER THREE

3.0	MATERIALS AND METHODS	18
3.1	The proposed Site	18
3.2	Research Method	18

3.2.1	Method of Data Collection	19
3.2.2	History of Landscape	23
3.2.3	Landscape Architecture	25
3.2.4	Classification of Landscape	27
3.2.5	Soft Landscape Elements	28
3.2.6	Hard Landscape Elements	42
3.2.7	Aesthetics In Landscaping	47
3.2.8	Principle of Landscape Design	48
3.2.9	Element of Art	57
3.2.10	Modern Landscapes	60
3.2.11	Steps in Developing a Landscape Design	62
3.2.12	Plants Specification and Maintenance	60
3.2.13	Importance of Proper Landscaping in Relation to Recreation and Leisure	67
3.2.14	The Role of Planning in Landscape Design	68
3.2.15	Soil Improvement	68
3.2.16	Efficient Irrigation	69
3.2.17	Zoning of Plants	69
3.2.18	Mulches /Turf Alternatives	70
3.2.19	Gardening	71
3.2.20	Deductions	69
3.3	Introduction to Case Studies	72
3.3.1	Case Study One (General Abdulsalam Abubakar Youth Centre, Minna)	73
3.3.2	Case Study Two (The Nigerian Youth Camp, Ilorin)	77

3.3.3	Case Study Three (Women Development Centre, Abuja)	78
3.3.4	Case Study Four (Shehu Yaradua Centre, Abuja)	82
3.4	Data Collection	87
3.4.1	Background of location	88
3.4.2	Topography and Ecology	88
3.4.3	Vegetation	89
3.4.4	Climatic Conditions	90
3.4.5	Rainfall	90
3.4.6	Temperature	91
3.4.7	Sunshine Solar Data	91
3.4.8	Economy and Commerce	91
3.4.9	Demographic Data	91
3.4.10	Humidity	92
3.4.11	Wind Gust	93
3.4.12	Socio cultural life	93
3.4.13	Transportation and Traffic Flow	93
3.4.14	Existing land use and future trend	94
3.5	Site Analysis	95
3.5.1	Introduction	96
3.5.2	Criteria for site selection	96
3.6	Location of Site	97
3.6.1	Site Characteristics (Survey)	98
3.6.2	Access and Circulation	98

3.7	Utilities	99
3.8	Scenery and Man-made Features	100
3.9	Planning Regulation/ site development control	100
3.10	Deductions	

CHAPTER FOUR

4.0	RESULTS	101
4.1	Design Brief	101
4.2	Schedule of Accommodation	101
4.3	Design Requirement	107
4.4	Materials and Construction	108
4.4.1	Construction	108
4.5	Landscape and external works	111
4.6	Design Services	111
4.6.1	Electricity and Lighting	111
4.6.2	Ventilation and Air-conditioning	112
4.6.3	Drainage and Sewage Disposal	113
4.6.4	Water Supply	113
4.6.5	Refuse Disposal	113
4.6.6	Acoustics	114
4.6.7	Fire Safety	114
4.6.8	Security	115
4.6.9	Maintenance	115

4.6.10 Solar control

116

CHAPTER FIVE

5.0 DISCUSSION, CONCLUSION AND RECOMMENDATIONS 117

5.1 Discussion 117

5.2 Conclusion 118

5.3 Recommendations 119

REFERENCES 120

APPENDICES

LIST OF TABLES

Table	Page
3.0 Showing Daily Total Rainfall	90
3.1 Showing Monthly Total Rainfall	90
3.2 Showing Relative Humidity	92
4.0 Showing Schedule of Accommodation	101

LIST OF FIGURES

FIGURE		PAGE
2.1	Showing Formal Garden	22
2.2	Showing Intractive ground of middachten castle	23
2.3	Showing Canopus at Hadrians Villa	24
2.4	Showing Hanging Garden of Babylon	25
2.1	Showing Drain gradient	26
2.1	Showing Common Oak Tree	29

LIST OF PLATES

PLATE	PAGE
1 showing the various elevations of the Abdulsalam Youth Centre	75
2 showing the various elevations of the Abdulsalam Youth Centre	76
3 showing the various elevations of the Women Centre	80
4 showing the various elevations of the Women Centre	81
5 showing the various elevations of the Shehu Musa Yaradua Centre	83
6 showing the various elevations of the Shehu Musa Yaradua Centre	83

LIST OF APPENDICES

Appendix

- A Site Plan**
- B Floor Plan**
- C Elevations**
- D Perspectives**

DEFINITIONS OF TERMS

Youth: is the period of life when one is young .i.e. the period between childhood and maturity. Between ages 13-35 years.

Centre: is a building where people have meeting.

Youth club: where youth can meet each others and have various leisure activities.

Adolescence: It is the period in life which the growing individual makes the transition from childhood to adulthood.

Menarche: the start of menstruation.

Nomenclature: corporately acceptable name of a place or things

Intellectual changes: the marks of development of various intuitive stages and measure of intellectual ability of adolescent period.

Emotional changes: changing body chemistry and partly in terms of social consistence, affection, aggression and fear.

CHAPTER ONE

1.0 INTRODUCTION

Today's generations of youths are coming to maturity in fast changing complex society, a society whose future is covered with uncertainties and whose present hopes for stability and purposefulness are turned by disillusionment, frustration, doubt for some and tragedy for many. The youth development is influenced by certain changes such as emotional, intellectual, physical and increasing independence from parents as well as more responsibility in schools and colleges. The school changes are also related in peer groups and indeed in the division and conflict-taking place in both small and large societies.

The fast urbanization in a society like ours, has led to the erosion of the normative structure, resulting to less defined behaviour of individuals by the society. The authority and wisdom of the older people is now being questioned by the young. There is no longer unified belief system which receives a general acknowledgement. Akinbode. (2001), emphasize this contract between the adolescence in earlier societies and the present, he pointed out that "earlier societies were characterized by, simplicity, smallness, static, close-knit, and kinsmen affiliation," . There exist a firm normative structure, the role and behaviour of individual was defined by society, authority and power were in the hands of the older people.

Today, the moonlight plays, the dances, the festivals, kinsmen gathering are no more. The young these days are found of growing freedom but less guidance and hence are more confused. There have been different schools of thoughts with regards to the problems affecting the youth or the causes of their problems, which are either

sociological, ethical, or psychological. Dada. (2003), observed that, a large percentage of blames lies with the parents and the society, which should have moulded Youth's character.

Many countries of the world have made progressive laws and by-laws to protecting children and the youths against cruelty, corruption exploitation and neglect to preserve them from ignorance, hunger, disease and delinquency and to the prospect of a satisfactory development and living. Most developing nations, especially African countries have different institution and programs created for the welfare of the youth. Some of the institutions emerge from traditional life and social organisation such as dance groups, performed at local festivals, others are hunters group or any traditional association for instance youth clubs in any city and props related to schools or religions. Some are boy's brigade, boy's scout, cadet e.t.c. All these groups have some thing in common that is, to provide for youths organised activities to develop self-discipline and respect.

Now in Nigeria, the federal and state government have taken progressive strides to give the necessary recommendation to the youth in the country. This led to the creation of national youth council of Nigeria in 1974; affiliated to the world assembly of youths and this forms the back-bone of all youth movement at the federal and state level of youth department in the ministry of information, youth sports and culture which handles the organisation of youth activities. But all these attempt to improve the youth by the government have not been able to achieve the set objectives due to poor coordination of the government agencies, for these polices to succeed, there has to be a determination to

reach out and understand the problems of the youth which leads to frustration, fears, anxiety, restiveness and all the social vices among the Youth.

However from this study, Nigerian youths are faced with many problems among which are:

- (i) The greatest percentage of the unemployment is taken by the youth.
- (ii) The conditions of housing for youth are terrible.
- (iii) Even the many registered youth clubs and organisations lack a central meeting place to present a formidable front.
- (iv) Statistics from the just concluded census shows that youth form the majority of the population. That is about 43% of the total population are between the ages of 13-35 years.
- (v) The youth have more leisure hours but they lack recreational facilities to enable them expand their energies and engage in activities that will be of benefit to them and the country.

Therefore the entire problem facing them must be effectively tackled to enable them to achieve their goals in life and to be good ambassadors of this country anywhere in the world. It is high time therefore, for the society to understand that the youth can be instrumental in the creation of a kind of tomorrow we all dream of having. In the bid to achieve this, the questions now are: how can we put a smile on their faces? How can they be relatively comfortable? And how can they be useful to themselves and the society in general? All the above questions require urgent attention and immediate solution have to be provided. So, if a right environment is created, it will definitely help the youths to concentrate on things that will be of value and advantageous to them and the society.

To achieve these objectives, a state of the art youth centre is hereby proposed to fulfil the dreams and aspirations of the youths of our society.

1.1 BACKGROUND TO THE STUDY

When we have a social problem the first thing that comes to mind is how do one go about solving such problem, having known that our youth does not have sufficient privilege to make something out of life unlike their counterpart in the developed country, and rate of unemployment in the country been on the increase, also Youth with special needs in our communities are acutely underserved.

1.2 STATEMENT OF THE STUDY

There is the need for a centre which will support Youth programmes and having the potentials of providing so much for so many who have so little. Therefore, if a comfortable environment is provided for youth, a place where they can come together, interact, play, and learn together a lot will be achieved in the youth society.

1.3 AIM AND OBJECTIVES OF THE STUDY

1.3.1 AIM

To design a functional Youth development centre that will help in fostering national unity and understanding among the Nigerians youth by providing a developmental, skills acquisition and recreational centre for the Youth.

1.3.2 OBJECTIVES OF THE STUDY

(1) To encourage Nigerian youth to acquire skills in vocational training and promotion of technological research to bring the Nigerians youth to a point of self-realization by exposing them to the right modern concepts.

~~(2) To provide a flexible environment that will function as a stimulus to youth activities~~

such as multi-purpose hall, game areas and so on.

(3) To provide an aesthetically balanced and structurally stable centre for youth in the society through the use local materials and recreational facilities

1.4 SCOPE AND LIMITATION OF THE STUDY.

The scope of the proposed youth centre Abuja is divided into two parts, the write-up on the centre and documentation of the design processes, problem, solution, improvement and literature review of the existing centre is part one.

The second part is the design of the centre which involves the actual drawing with emphasis on landscape elements in the provision of skill acquisition centre, education, recreation, entertainment, administration, accommodation, multipurpose halls and auxiliary facilities such as generators house, toilet, parking orchard and security and other supportive facilities.

Some of the limitations encountered in the course of this project are: restriction placed by the youth centres authority on entering some units and also taking of pictures.

1.5 JUSTIFICATION

Now for any youth to accomplish his dreams, he must prepare himself for the future. He must know that our world is a challenging world of opportunities and that he is a viable instrument of change and he should know that youths are the only real hope of any country. As young people grow up, they sometimes demand and sometimes are forced to take more responsibilities for their education. In the great majority of

elementary schools the children learn to play a role that is basically submissive to adult authority

1.6 IMPORTANCE OF STUDY

The importance of the study is to provide an environment that is conducive for skills acquisition in vocational training, recreations and promotion of technological research. It is also to create a nucleus for leadership training, eradication of Youths restiveness and social vices.

It also aimed at creating offices for workers in the Youth ministries as against the traditional method of having a Youth centre limited to social activities and under staffed in a place and one or two offices nomenclated for Youth in the far away ministry.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 DEFINITION OF YOUTH

Oxford Advanced Learner's dictionary (1998), defines youth: as the state when one is young, for instance young male and female during their maturity stage.

But Webster's International Dictionary defines it as: the time of life when one is young: the period between childhood and maturity.

Commonwealth secretariat (2003), regard Youth as people between the ages of 12-30 or better still 15-35. Youth therefore is somebody whose brain is fresh, receptive to new ideas and a adaptable to changes being capable of synthesizing original thoughts and analysis information for operational purposes. Youth in Nigeria has now been re-defined as any person within the ages of 12-30 (national youth policy for Nigeria 1983). The range differs from one country to another. For instances, united nations have accepted age range of 15-25, some African countries even extended the upper limit to 35 and 45 years. But for the purpose of this project, youth are people between the age ranges of 15-35.

2.2 YOUTH IN THE SOCIETY

Every society has a well ordered obligation to educate, feeds, cloth, accommodates and generally prepares them within the parameters of its ambition.

In deed, in every society, the youth represent a dream, a hope and a future just as they represent fear and uncertainty which all depend on the sacrifices made for youth in any particular society. In the present day Nigeria, materialism has taken over the yard stick for measuring the social status of an individual the country has no means of assuring

itself of its future survival let alone realising that of his ambitious Youth, it is like the Biblical injunction of Ex 20:5. "old sin casting a long shadow". The sins of the past generations are always visited upon the present and indeed future generation. The youths on whom the futures of the society depend have no say on how it being shaped by today's leaders. With the neglect by the society, the youths have no means of convincing the society that they are ready to carry any burden, meet any challenges, fight any battles and defeat all obstacles in enhancing their ambitions.

However, country like Nigeria cannot watch its youth degenerate into nothingness especially at the down of this new millennium. The situation has to be arrested now because the youths have dreams, which are fast turning into frustration and anxiety. Nigeria youths are becoming "the very epitome" of frustration.

Now for any youth to accomplish his dreams, he must prepare himself for the future. He must know that our world is a challenging world of opportunities and that he is a viable instrument of change and he should know that youths are the only real hope of any country.

2.2.1 The Youth of Today

Every society, be it small or large has its own youths which are catered for in terms of food, shelter, social stimulation until when they are ripe or capable of looking after themselves. In a contemporary society, a high value is place on the participation of youths in economic, social and political processes.

Broadly speaking, youths constitute very important segment in any society, they serve as channel for transmission of culture and preserve of heritage and recognisable

identity. In effect young people provide the necessary manpower for the socio-economic development of the society.

2.3 ADOLESCENCE: AN INSIGHT

It is the period in life which the growing individual makes the transition from childhood to adulthood. The period is marked by what anthropologist called the rite of passage. These are: ceremonies or customs at major transitions, such as birth, puberty, marriage and death. Virtually all culture has a way of observing adolescence. For example Australian aborigine, the masal of Africa, and various south American Indian tribes put adolescence through imitation that may involve fasting and other certain periods of instrumentation in hunting and rituals. The Austrians are ordeals and periods of instructions in hunting and rituals. The Australian aborigines and other African tribes circumcise adolescent and in South America tattooing has a similar significance. Among some of the Indian tribes of South America changes in clothing and hairstyle mark the passage to adult rank.

In simple culture the period of initiation are usually short. Young men and women are needed to work. Hence pubescent youth are admitted to the adult world as soon as they can begin to do the work of group. In more complex society, however, the period off apprenticeship between childhood and adulthood may last years rather months.

Youth in the United States found adult standard and demand confusing, the stresses of adolescents therefore requires carefulness and sometimes thus led to maladjustment.

2.3.1 Physical Changes

All adolescence experience physical changes. In fact, puberty is used to define the start of adolescence. In male, it is difficult to determine the on set puberty, but roughly, this is the time when the boys begin to need an occasional shaving, his voice begins to deepen and sex organs mature on the average, such characteristics develop in boys at about 14¹/₂years of age, however, this change may appear over a range from about 12 years to 18 years.

Usually, menarche (the start of menstruation) is considered as the start of puberty in girls. On the average menarche occurs at 13 but the age may range from 10-18. Enlargement of breast is one of the earliest criteria of menstruation in girls. In most girls, this development begins before the first menstrual period.

2.3.2 Intellectual Changes

Physical growth mostly marks the development of various stages and measure generally intellectual ability, this kind of ability is reflected by scores. Most tests continue to increase until about age 20 or slightly older. The rate of change tends to slow down as the individual approaches the closes of adolescent period.

2.3.3 Emotional Changes

Emotions are important throughout life, but during adolescence, some emotional states seem to reach a new intensity. Affection, aggression, and fear are especially likely to cause problems.

Such emotions can be understood partly in term of changing body chemistry and partly in terms of social consistence. Close friends of the same sex often precede or is apparent before the development of the heterosexual love. Because of these feelings of

uncertainty and sexual insecurity, the adolescence often derives a great deal of satisfaction from such friendships.

Ways of anger tends to change during adolescence. The young child may show his anger by kicking, crying and biting. However such behaviours are punished and by the time he reaches adolescence, the individual may not give such direct respond to his anger.

2.3.4 Increasing Independence from Parents

As the adolescent grows and his interest expands, he normally wants and gets more freedom from parental control. Psychologist used the term emancipation to refer to the process of out growing family domination. This process may be painful both for adolescent and for the parents although it need not be so. It is difficult for parents to admit that they are no longer young adults with babies and that they must now relinquish some of their loving care for the offspring. It is difficult for adolescent, with all his energy and enthusiasm, to realise that he is not completely capable of standing on his own feet. This makes some parent have the feelings of failure because children are not living to their expectations.

2.3.5 Increasing Responsibility in School and College

As young people grow up, they sometimes demand and sometimes are forced to take more responsibilities for their education. In the great majority of elementary schools the children learn to play a role that is basically submissive to adult authority. In spite of that the fact that they are approaching social maturity, adolescent often find that they must continue to play the role of submissiveness in the teacher dominated high schools real enthusiasm is limited to extra curricular activities.

2.3.6 Career Planning

In some culture, every child work as hard as he can while in others, the work of the child is usually limited to a par-time help around the house, in the store or on their farm. Yet the adult is expected to devote a large part of his time to his job and to earn enough to keep up a proper standard of living for himself and his family. In this respect, as in many others, the adolescent have to make a transition from one pattern of his life to another.

One problem in career planning is that a young person may wants to enter a certain field but actually may have not more than a superficial interest in that kind of work. Young people are often urged to make career plans solely in their high school years so that they can pick their courses to fit their future jobs. However, many students change their plans after they have started college.

2.4 THE YOUTH OF THE WORLD TODAY

One third of the world's population is between 10 to 24 years of age, and 4 out of 5 of these young people live in developing countries. The population References Bureau Inc (1996) estimated the population of world's youth who falls between ages 10 to 24 years to be 1.6 billion representing about 28% of the total world population. This figure is however expected to increase to 1.98billon by 2025. In developing countries one of every four persons is between ages 10 to 19.

Millions of people, primarily young people are deprived of a livelihood in many areas of the world this group suffers from hunger, diseases and poverty-related problems. Yet , some countries in eastern and central part of Africa are at wars with one another and this further increased the hardship being faced by young people. The relationship

between the struggle against millenarian and the drive to improve the situation of the youth in the society is understandable in this struggle, the ideological and political battles between the worlds two opposed social system (socialism and capitalism) is interestingly fierce. Deliberate government policies and initiative, according to recent UN report, on keeping political power or wealth in the hands of a few leaders are commonly the causes of major humanitarian crisis. The research which was conducted by the UN University's world institutes for development economic research observed that, "while deteriorating environmental conditions were often a source of economic hardship, humanitarian catastrophes were largely manmade. If the lots of these greedy and unpatriotic leaders were used for development and social security purposes into countries of Asia, Africa, Latin America and Caribbean, unemployment, which is the major problem affecting youth will be reduced and the lives of thousands of children dying of hunger and disease can be equally saved.

To highlight the challenges and opportunities that face young people, the United Nations designated 1975 International Youth Year with the theme: participation, development, peace, national and international agencies focusing new attention on the problems of the youth "the ideals and commitments of the younger generation will have a decisive effect in the future of our planet:" the message emphasised.

2.4.1 The Youth Of Africa

In developing countries, youth forms great resources for humanity because of their energy, ideas and fresh views. The tasks involved government as well as non governmental organisations, to bring up polices that are Youth friendly.

Nevertheless, young people are vulnerable; they live in a world which has changed in recent years. Since the importance of youth in the framework of national development cannot be underestimated, therefore, older generation must assumed responsibility for their education and moral guidance.

From the world youth population statistics carried out in 1996, African youth who are between 10 – 24 years of age accounts for about 237 million and it is projected to rise to 459 million by the year 2025. These figures account for about 32% of the total population. Consequently, it should be emphasised that youth are not just for academic study, but a factor to be reckoned with. In this regard, youth should be involved in the planning, implementation, and executing programmes meant for their benefit and the entire community.

2.4.2 Nigerian and it Youth

To aid effective planning for youth in Nigeria, former President Obasanjo inaugurated a committee on National Youth Development policy and requested Professor A.B. Borishade, the then senior special assistant to Mr. President and chairman of presidential committee New Education minister to come up with “New suggestion, recommendations and strategies that would fundamentally address the needs of Nigerian Youth and the misgiving in the Nigeria Youth Policy documents” this is a demonstration of government efforts and a right step to better youth situation in Nigeria.

The most pressing needs of youth in Nigeria are that of education, employment and effective leadership training. Not quite long, the present civilian administration introduced the Poverty Alleviation Programme (PAP) to assist the youth in creating job opportunities, which will help in reducing the poverty menace that has affected the entire

young people and the most of the people. This is the Crux of the argument, government and the public must accord the Nigerian Youth this recognition.

2.4.3 Nigerian Youth Policy

The National Youth Policy of Nigeria is divided into ten major sections with a preliminary introduction. The National Policy presumed that when others recognises persons as personalities, it becomes morally impossible for such people to commit certain acts of deviance, at least publicly. Government and indeed the public must therefore accord the youth the fundamental recognition, said in the introductory section.

The absence of a formidable youth policy that would fundamentally address the need of Nigerian youth culminated in the committee on National Youth Development Policy. It has drawn up draft document to be debated at joint zonal summits by youths. Youth organisations in a quest to get the best to correct the misgivings and inadequacies of past youth policies and by extension set the pace towards achieving optimum results with regards to youth work in the country.

2.4.4 Youth Organisation

The objectives of all youth organisations are almost the same i.e. they are aiming towards the same goals. To foster a feeling of belonging to the group, a sense of direction and purpose, provide adequately for the youth in organising their activities and develop discipline and heightened sense self-respect.

Youth organisations in Nigeria are broadly classified as:-

- a) Statutory – which could be parastatals for example, the National Youth Service Corps, the citizenship and leadership training centres and any state youth institution/association.

- b) Voluntary – Boy-scout movement, Girls-Guide Association, Young man and woman Christian association, /Islamic youth league, youth clubs and age groups.
- c) Residential – these are youth organisation that operate mostly in institutions of learning and others that are run principally in utilitarian basis e.g. students unions junior chamber of commerce.

2.4.5 Youth Situation In Nigeria

The youth situation in Nigeria today indicates that the youth that are between 13 and 35 years constitute 47% of the population. The youth population in the labour force is comparatively mobile in considering the scope of youth participation in the development of Nigeria; attention is focused on the economic, political, cultural, social and educational dimension of development.

It is therefore the responsibility of government to make available necessary facilities and structures, which will enable the youth, give in their best at any future events and also their morale should be boosted through rewarding their sweets handsomely and accordingly.

2.5 The Need For A Youth Centre

In our contemporary society today, the youth centre takes the place of traditional “Dandull” as the avenue for grooming young people. It serves as the nucleus for various socio cultural, vocational and recreational activities. So the youth centre can be seen as of stimulating, maintaining and deepening a sense of community in the youths and also as a means of creating an awareness of our rich cultural heritage which also satisfy the function of mobilising the youth.

There are therefore, the needs for a centre that draw inspiration from cultural values. The beauty of architecture and make available conducive environment to contain educational and cultural activities based on their present and future needs.

It is hoped that this proposed centre will provide an avenue where government programmes and policies will be implemented for the development of the youths of this great nation.

2.6 SUMMARY

In our contemporary society today, the youth centre takes the place of traditional "Dandull" as the avenue for grooming young people. It serves as the nucleus for various socio cultural, vocational and recreational activities. So the youth centre can be seen as stimulating, maintaining and deepening a sense of community in the youths and also as a means of creating an awareness of our rich cultural heritage which also satisfy the function of mobilising the youth.

There are therefore, the needs for a centre that draw inspiration from cultural values. The beauty of architecture and make available conducive environment to contain educational and cultural activities based on their present and future needs.

It is hoped that this proposed centre will provide an avenue where government programmes and policies will be implemented for the development of the youths of this great nation.

CHAPTER THREE

3.0 MATERIALS AND METHODS

3.1 The Proposed Site

The geographical entity known today as Abuja came into existence by Decree No.6 of February 5th 1976. Until the creation of this new Federal Capital Territory (F.C.T), Lagos had remained the capital of Nigeria. The ownership, control, governances of the land is the sole responsibility of the government.

The increased tempo of economic activities and the influx of people into Lagos were not matched with corresponding increase in the low level of infrastructural development and services necessitate the movement to Abuja. In 1975, the then federal military government under the late Gen. Murtala Mohammed setup a panel to look into the issue of relocation of the Federal capital. The panel submitted its report recommending Abuja for the centrality with easy accessibility from other parts of the country, and is to promote private participation in commerce and industry and thereby enhancing the economic power of residence of Abuja. Commercial enterprises are mainly retail outlets for manufactured goods in the neighbourhood centres, districts and market. There are also small-scale industries and rural estate enterprises in and around the city.

3.2 RESEARCH METHOD

In order to carry out an efficient and effective study, the following methods of getting research information have been employed:

(1) Literature review:

This involves finding out information in the libraries about the areas of study as it enables one to have a sound and genuine theoretical knowledge.

(2) Case studies:

These involve visiting and appraising the existing related centres to know the extent of work that has been done, identifying good architectural features, applying them where necessary and to avoid the design problems observed.

(3) Interviews:

These entails asking questions from members of staff of existing area of study who possess knowledge as regards to youth centre.

(4) Personal observation:

This is familiarization with the youth, nature and general characteristic of the study.

3.2.1 Method of Data Collection

The geographical entity known today as Abuja came into existence by Decree No.6 of February 5th 1976. Until the creation of this new Federal Capital Territory (F.C.T), Lagos had remained the capital of Nigeria. The ownership, control, governance of the land is the sole responsibility of the government.

The increased tempo of economic activities and the influx of people into Lagos were not matched with corresponding increase in the low level of infrastructural development and services necessitate the movement to Abuja. In 1975, the then federal military government under the late Gen. Murtala Mohammed setup a panel to look into the issue of relocation of the Federal capital. The panel submitted its report recommending Abuja for the centrality with easy accessibility from other parts of the country, and is to promote private participation in commerce and industry and thereby enhancing the economic power of residence of Abuja. Commercial enterprises are mainly retail outlets for manufactured goods in the neighbourhood centres, districts and market. There are also small-scale industries and rural estate enterprises in and around the city.

3.2.2 LANDSCAPING ELEMENTS

Landscape is the total surface form of any area. The term landscape is derived from the Dutch *landschap*, which refers simply to rural scenery. Landscaping can be defined as an art or science of making the environment look better i.e. enhancing the appearance of land by altering its contours and planting trees and shrubs for aesthetic effect. A landscape is an aggregation, or accumulation, of landforms.

Encarta (2006), defined landform as a single and typical unit that forms part of the overall shape of the Earth's surface. For example, a solitary mountain, a hill, a single

valley, and a dune are all landforms. A landscape is often the same type of landform. For example, a volcanic landscape may consist of a region of cones, lava flows, and lesser features of volcanic activity, such as fumaroles; a dune may be part of a desert or coastal landscape.

Although it often appears otherwise, landscape is transitory. It is merely one stage in the grand cycle of destruction and creation that characterizes the surface of the Earth. Landscapes result from the interaction between internal and external forces operating on the Earth's crust, these internal forces including tectonic activity and vulcanicity controlling the basic structural differentiation of the Earth's surface.

It is due to tectonic processes that mountains increase their magnitude, such as it occurred in the Andes, the Alps, and the Zagros Mountains. Volcanic eruptions can both create land, as molten material escapes from the interior of the Earth to the surface where it hardens (such as the island of Surtsey on the Mid-Atlantic Ridge), and destroy land (such as in the aftermath of the eruption of Mount St Helens).

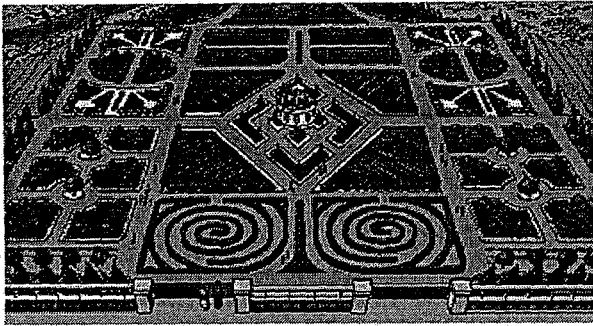
Landscape design is the design of outdoor and indoor spaces for human use and pleasure. These spaces range in sizes from small yards and terraces attached to suburban homes to large country estates and public parks. The primary concern here is not to create a display ground for plant, rather to consider many factors including human needs, the beauty of natural site and other aesthetic considerations with ultimate goal of designing a site that is not only pleasing to the eye but perfectly functional in terms of extended use.

Landscaping is one of the beauties of past times and is a year round activity which is mostly started in the winter (i.e. rainy season) by planting the landscapes. Basically, landscaping combines elements of art and science to create a functional, aesthetically pleasing extension of indoor to the outdoors, one initial purpose of landscaping is to blend man's technology building into natural surrounding that he lives in.

Though historically, landscaping had its earliest development thousand of years ago in Assyria, Egypt and Babylon, where circumstance of culture and climate greatly influence their design, inventive landscape designers of the time include the Romans, the Italians of Renaissance and Baroque period; notably in France, was Andre Notre, who designed the garden of Versailles. Until the 19th century, landscape architecture was used mostly on the private estates of the wealthy. After the industrial revolution, as the middle class grew, the need for gardens increased and the service of professional landscape architects were soon in great demand.

However, in the 21st century, great increase in urban areas had created a need for large scale multiple atmospheres for relaxation. It has now become a challenge for the landscape architects to design courtyard, play areas, recreation centres, and roof gardens that are both functional and aesthetically pleasing for the benefit of human utilization as in **formal garden** of the Europeans in the 17th century as shown in Plate 1 below.

Plate: 1 showing Formal Garden



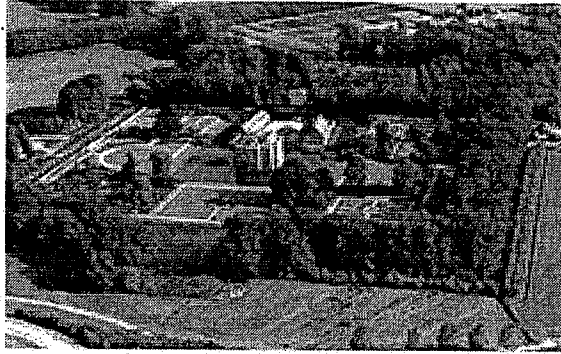
© Microsoft Corporation. All Rights Reserved.

Formal Garden

Formal gardens such as this were popular in Europe in the 17th century. A garden as large as this would probably be laid out in the grounds of a palace. The centre of the garden, featuring a gazebo, is the hub around which a perfectly symmetrical design is formed with bushes, trees, flowers, and walkways. The mazes are created by walls of shrubbery. The architect probably positioned various types of plants so as to create a pleasing pattern of light and dark tones when the garden is viewed from the terrace

Landscapes have been defined in many ways from a cultural, literary, or geographical viewpoint. This thesis focuses on the various elements forming physical forms from a geographical standpoint, dealing with the concept of landscapes and landforms, the study of landscapes, types of landscapes features, the interaction of landscapes and people, and the preservation of landscapes as shown in Plate2 below.

Plate 2 showing the interactive Grounds of Middachten Castle



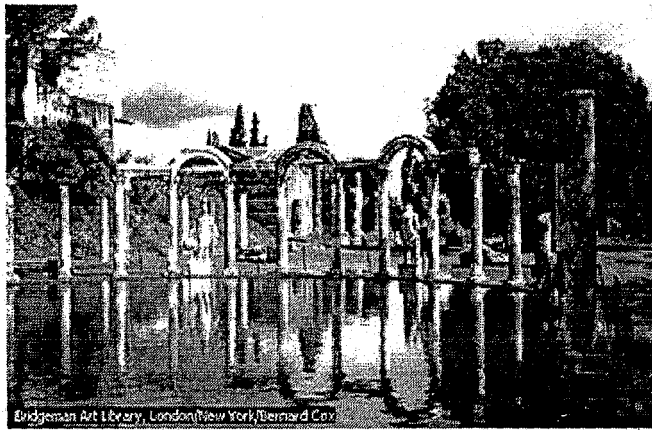
Bridgeman Art Library, London/New York
Grounds of Middachten Castle

3.2.3 HISTORY OF LANDSCAPE: The Ancient World

As early as the third millennium BC, the Egyptians planted gardens within the walled enclosures surrounding their homes. At times these gardens came to be formally laid out around a rectangular fish pond flanked by orderly rows of first trees and ornamental plants, as in tomb paintings.

Hadrian Villa, at Tivoli, constructed between AD 118 and 134, was the largest Roman Villa ever built. It was surrounded by a landscape garden with a pool, the Canopus, named after the two-mile canal connecting Canopus and Alexandria in Greece. The Canopus is bordered with classical columns and arches interspaced with copies of Greek sculptures as shown in Plate3.

Plate 3 showing Canopus at Hadrian's Villa



Canopus at Hadrian's Villa

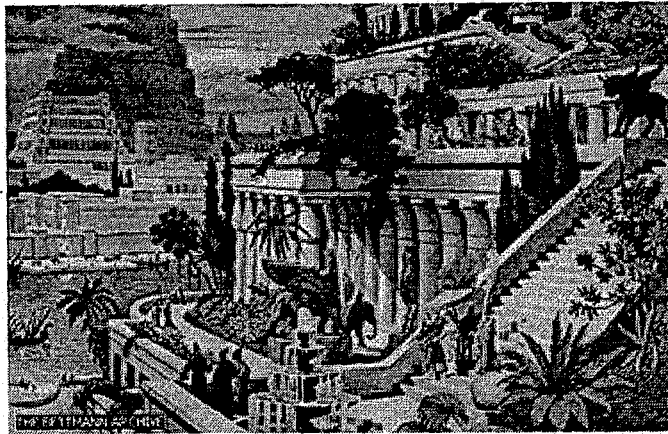
Hadrian's Villa, at Tivoli, constructed between AD 118 and 134, was the largest Roman villa ever built. It was surrounded by a landscaped garden with a pool, the Canopus, named after the two-mile canal connecting Canopus and Alexandria in Greece. The Canopus, seen here, is bordered with classical columns and arches interspersed with copies of Greek sculptures.

Bridgeman Art Library, London/New York/Bernard Cox

Microsoft © Encarta © Encyclopedia 2005. © 1993-2004 Microsoft Corporation. All rights

In Mesopotamia, the hanging gardens of Babylon were one of the seven wonders of the ancient world. They included full-size trees planted on earth-covered terraces raised on stone vaults in a corner of the palace complex of Nebuchadnezzar II. In the highlands to the north, the Assyrians and Persians developed great tree-filled parks for hunting on horseback. They also planted rectangular walled formal gardens, irrigated by pools and canals and shaded by trees, usually set in vast barren plains. These gardens symbolized paradise and inspired the design of Persian carpets as shown in Plate 4 below.

Plate 4 showing Hanging Gardens of Babylon



Hanging Gardens of Babylon

a This hand-coloured engraving by 16th-century Dutch artist Martin Heemskerck depicts the Hanging Gardens of Babylon, one of the Seven Wonders of the World. Technically, the gardens did not hang, but grew on the roofs and terraces of the royal palace in Babylon. Nebuchadnezzar II, the Chaldean king, probably built the gardens in about 600 BC as a consolation to his Median wife who missed the natural surroundings of her homeland.

THE BETTMANN ARCHIVE

Microsoft © Encarta © Encyclopedia 2005. © 1993-2004 Microsoft Corporation. All rights reserved.

In ancient Greece, sacred groves were preserved as the habitats of divinities. Greek houses included a walled court or garden usually surrounded by a colonnade. In 5th century BC Athens, public gardens and colonnaded walls attached to the academy “school” and the Lyceum “gymnasium” were much frequented by philosophers and their disciples.

3.2.4 LANDSCAPE ARCHITECTURE

This is the science and art of embellishing and remodelling expanses of land according to comprehensive and aesthetic plans. Elements to be taken into consideration include topographical features such as hills, valleys, rivers and ponds; vegetation such as trees, shrubbery, grass and flowers and construction such as buildings, terraces, roads, bridges, fountains and statues.

No strict rules exist in landscape architecture because each plot of ground offers unique challenges caused by size, topography, climate, and surrounding areas and the wishes of clients/owners.

Landscape architecture was formerly called; "Landscape Gardening" and was limited to the creation of gardens around private dwellings. Today, landscape architecture covers a much wider area of concerns, ranging from the setting out of parks, malls, and highways. It includes landscape gardening, which is now understood as the work done by commercial gardeners that installs and cares for flowers and greenery according to the design of landscape architects. The landscape architect, who usually holds an academic degree in this field, has the same professional standing as an architect or engineer and receives a fee directly from the client. The landscape gardener may be a commercial contractor or an amateur, who landscapes the grounds of a private home.

Landscape architects do not only design the aesthetic and decorative aspect of the garden but also take into account such practical considerations as drainage gradient, plan most large-scale gardens as shown in Plate 5 below.

Plate 5 showing drain gradient of Sabatini Gardens, Madrid



Tourist Office of Spain
Sabatini Gardens, Madrid

The Sabatini Gardens, in the grounds of the Palacio Real (1737-1764), Madrid, are a classic example of a formal garden, or *parterre*, with shaped yews, shrubbery in geometric shapes, and an artificial pond with classical statuary.

Microsoft © Encarta © Premium Suite 2004. © 1993-2003 Microsoft Corporation. All

3.2.5 CLASSIFICATION OF LANDSCAPING: Landscape is broadly classified into two types:-Natural landscape (i.e. made by God) and Artificial landscape (i.e. man-made).The natural landscape deals with the natural features such as stream, lakes, ponds, swamp rivers, trees, forest, sea, prairie, valley, plain, canyon stones formation (hill, mountains, rock), while the artificial landscape deals with man made features such as fountain, ornamental pool, decorations, pergolas.

Basically, we have two categories in landscape; hard landscape and soft landscape. The hard landscape comprises of elements that are not living and therefore do not need water to survive. Such elements include paving, rocks, light, pergolas, chairs and fountains. The soft landscape comprises of those elements that are living and need water to survive such elements include trees shrubs and ground cover.

The services that an architect can render rest on his ability to apply the principles of sound design to orchestration of open spaces. This entails in addition to basic design ability, knowledge of materials of landscape, that is, land, water, organic life and artificial elements. He must also understand the interaction between these materials, the climate in which they function and the human use to which they are being adapted

Having reintroduced the constituent elements of the various types, divisions and subdivisions of the landscape Architecture, the focus of this chapter is to redirect our attention to the importance and the place of landscape in our built environment. These elements have been divided into two – soft and hard landscape elements. For a recreation centre of any type, relaxation plays a major factor in landscaping. Mental relaxation can be achieved by strategic placing of landscape elements, along the user's path.

3.2.6 Soft Landscape Elements

Soft landscape elements form part of the organic life found existing on site, but they could also be incorporated into the design to beautify the environment and they include: Flowers, Trees, Stream, Turfs, Shrubs, Pond and Naturally existing rocks and landforms.

a Trees

Perennial plants are plants having an upright woody main stem and usually the tallest of plants at maturity. A tree differs from a shrub in that it usually produces a single, well-defined main stem, or trunk, and from a herbaceous plant in that the stem is composed almost entirely of woody tissue. Trees of some smaller species of tree never produce shrubby forms. Some species, when they reach maturity, are only a few metres tall, with trunks as slender as 15 cm in circumference, the largest species may reach heights of more than 112 m, with trunks that have a diameter of more than 6 m. However, trees are popularly grouped into two; (i) Deciduous (ii) Evergreen .

i. Deciduous Trees

Deciduous trees are those tree species that lose all their leaves and have bare branches for a part of the year. They are classified into types such as oak, birch, and maple because of seed structure, although the shapes of the leaves and pollen, and the appearance of the bark, are also taken into account as shown in Plate 6 below.

Plate: 6 showing Common Oak

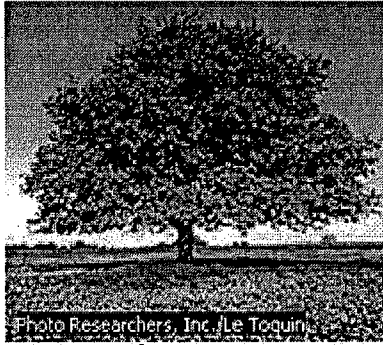


Photo Researchers, Inc./Le Toquin

Common Oak

The oak tree, with its dense hard wood, is used extensively in the manufacture of furniture. Oak trees have root systems that penetrate the soil to depths of more than 30 m (100 ft) in search of water.

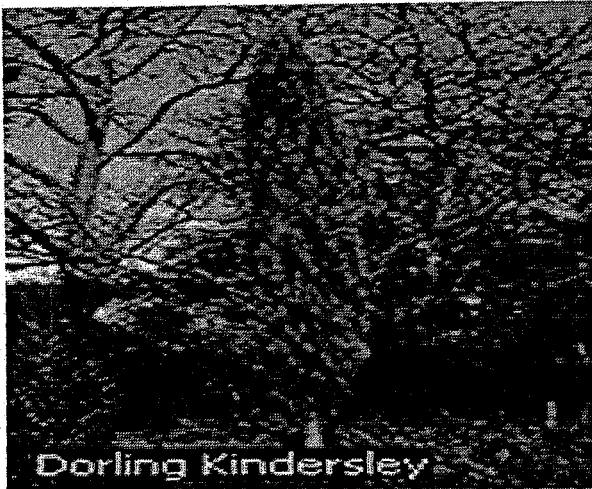
Photo Researchers, Inc./Le Toquin

Microsoft © Encarta © Encyclopedia 2005. © 1993-2004 Microsoft

ii. **Evergreens**

Evergreen trees retain some or all of their foliage throughout the year, growing new leaves before the old ones fall off. Both needle-bearing and broadleaf evergreens exist. Trees play an important role in landscaping. They reduce the harsh lines of the backdrop of the building structure and break the straight horizon line. Apart from these, they have the power to absorb smoke, dust and noise; also they have a very high ornamental value. Trees planted must conform to existing soil and climate conditions as well as visual needs as shown in Plate 7 below.

Plate 7 showing Juniper Tree



Juniper

This pencil cedar, actually a juniper, is a coniferous, evergreen tree native to the eastern United States. The wood of this tree contains an oil that deters moths, and is used to line chests. The wood is also used for making pencils.

Dorling Kindersley

Microsoft © Encarta © Encyclopedia 2005. © 1993-2004 Microsoft Corporation. All rights reserved.

Other elements of soft landscape include: Shrubs, flower and the ground covers.

(b) Shrubs

Shrub, any plant that differs from herbs in being woody, and that differs from trees chiefly in height, and partly in being multi-stemmed. The distinction is largely artificial because of the transitions or overlapping within the groups.

Shrubs are also referred to as hedges; they act as a windbreaker and are more effective than walls due to their permeability. They do not grow very high; their height is about 1.5m to 2m. They complement trees as they are used to demarcate enclosures of boundaries for privacy and used to control pedestrian tariffs from damaging the soft plants.

Landscape trees and shrubs landscaping entourage for architectural rendering, graphics visualization landscape and they are usually strong-growing and are in various species as shown in Plate 8 below.

Plate: 8 showing Landscaping trees and shrubs for Architectural rendering and Visualization.

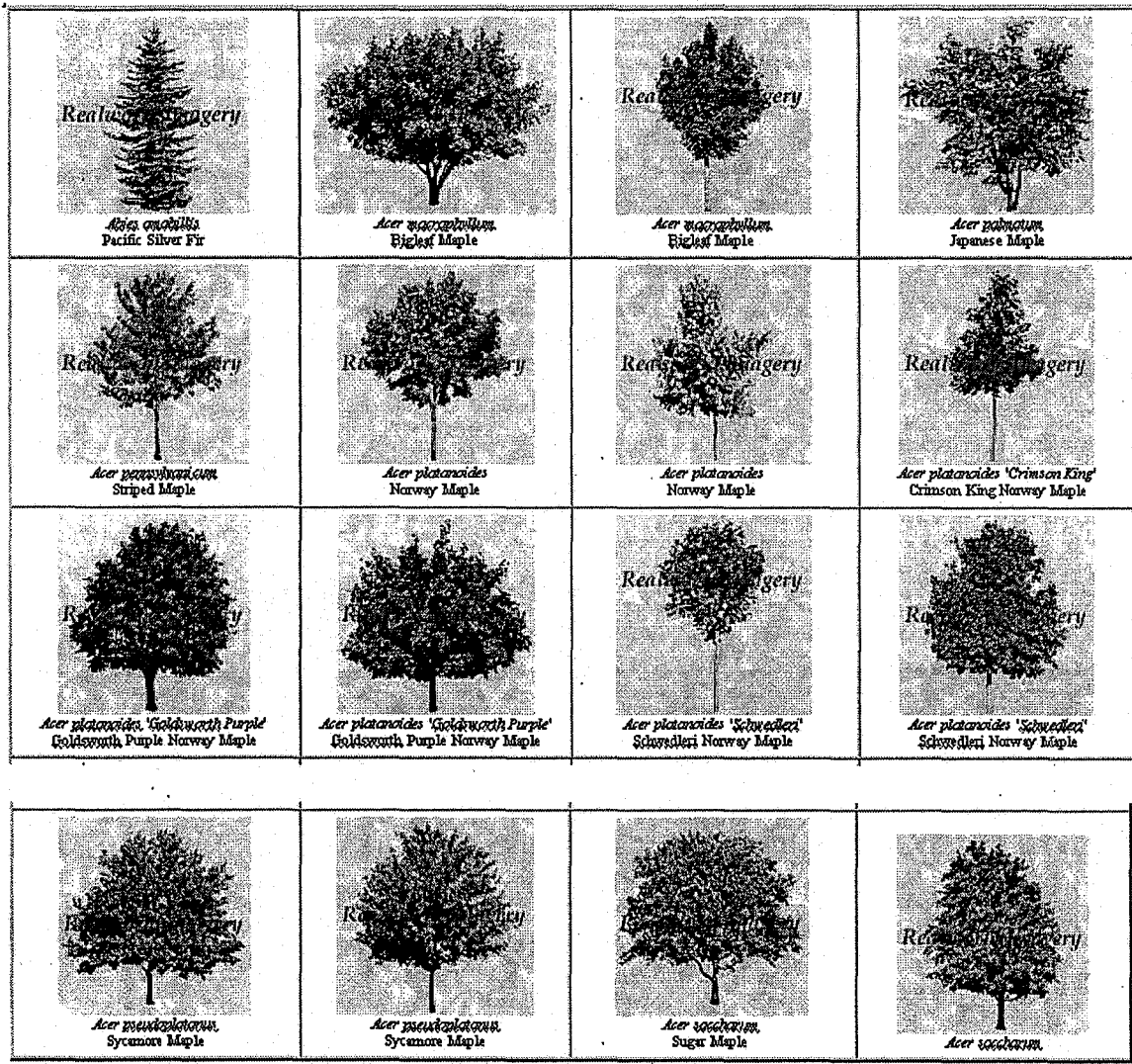


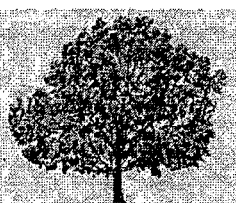
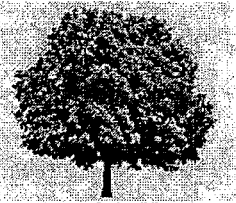
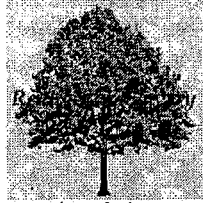
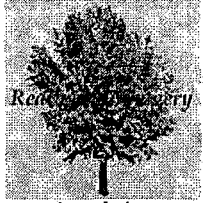

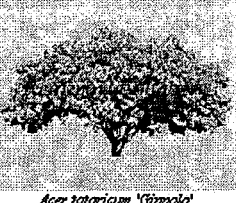
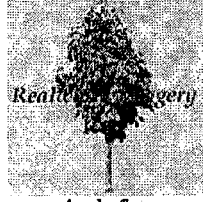
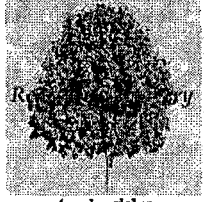
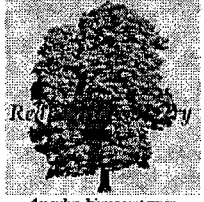
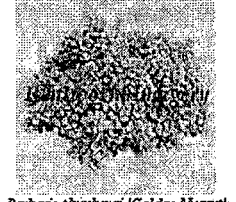
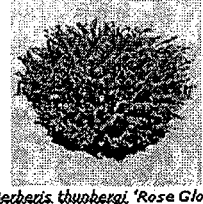

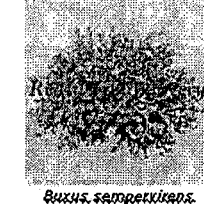

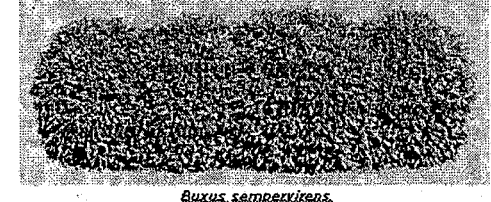
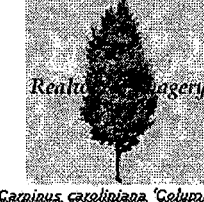
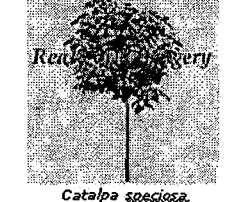
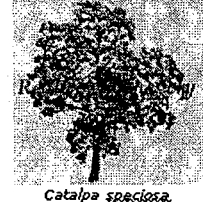
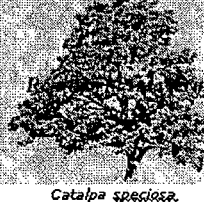
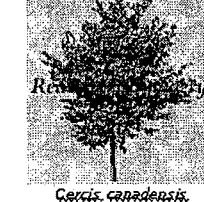

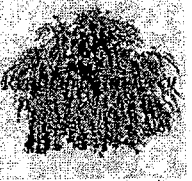







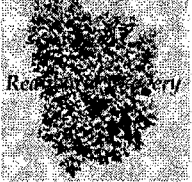

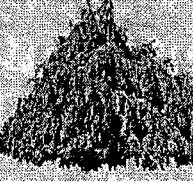

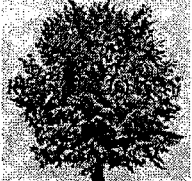
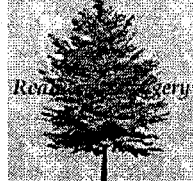
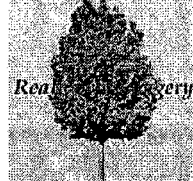

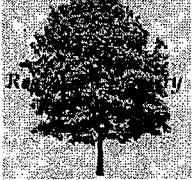
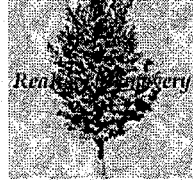
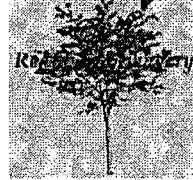

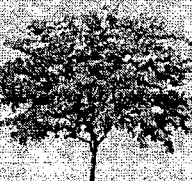


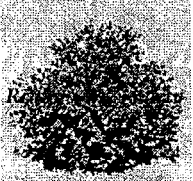



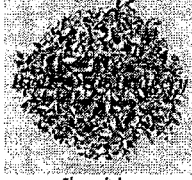
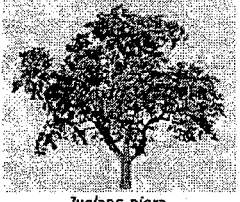
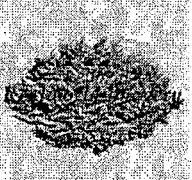


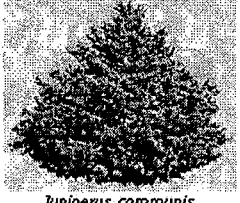
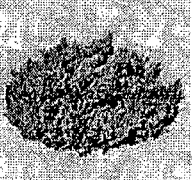
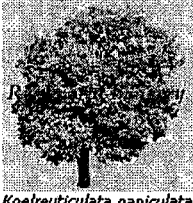
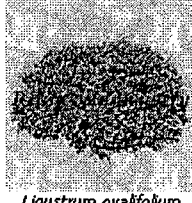
Plate: 8 (B)

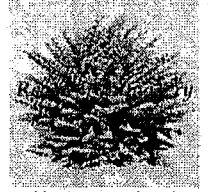


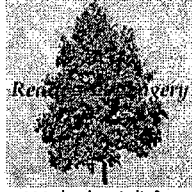
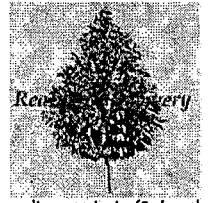
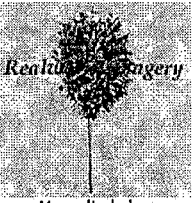
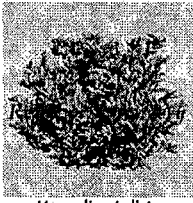
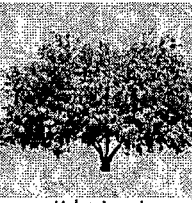
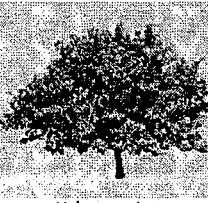



			Sugar Maple
 <i>Realtree Sugarery</i> <i>Acer saccharinum</i> Sugar Maple	 <i>Realtree Sugarery</i> <i>Acer saccharinum</i> Sugar Maple	 <i>Acer saccharum 'Nigra'</i> Black Maple	 <i>Acer saccharum 'Nigra'</i> Black Maple
 <i>Acer saccharinum</i> Silver Maple	 <i>Acer saccharinum</i> Silver Maple	 <i>Acer saccharum 'Columnare'</i> Columnar Silver Maple	 <i>Acer tartaricum 'Ginnolor'</i> Amur Maple
 <i>Aesculus flava</i> Yellow Buckeye	 <i>Aesculus flava</i> Ohio Buckeye	 <i>Aesculus hippocastanum</i> Horse Chestnut	 <i>Berberis thunbergii 'Golden Nugget'</i> Golden Nugget Dwarf Barberry
 <i>Berberis thunbergii 'Rose Glow'</i> Rose Glow Japanese Barberry	 <i>Berberis thunbergii 'Rose Glow'</i> Rose Glow Japanese Barberry	 <i>Buxus sempervirens</i> European Box	 <i>Betula albosinensis 'Fastigiata'</i> Chinese Columnar Red Birch
 <i>Buxus sempervirens</i> European Box		 <i>Carpinus caroliniana 'Columnaris'</i> Columnar American Hornbeam	 <i>Catalpa speciosa</i> Catalpa
 <i>Catalpa speciosa</i> Catalpa	 <i>Catalpa speciosa</i> Catalpa	 <i>Cercis canadensis</i> Eastern Redbud	 <i>Cercis canadensis 'Pendula'</i> Weeping Eastern Redbud

Ditto 8 (B)

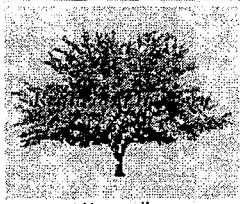
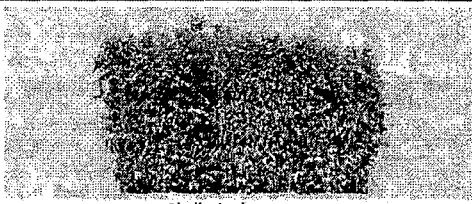
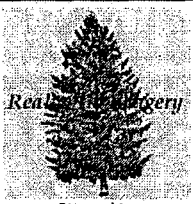
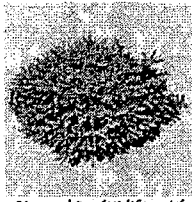

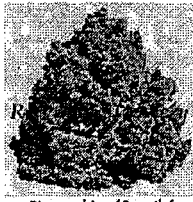





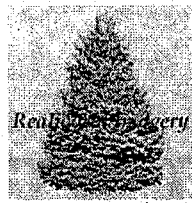


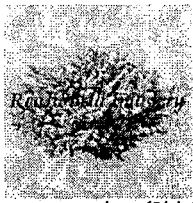





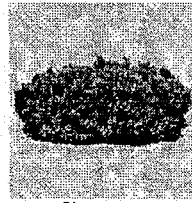
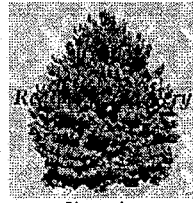

 <p><i>Cercidiphyllum japonicum 'Caerulea'</i> Weeping Katsura Tree</p>	 <p><i>Shamaecyparis lawsoniana 'Kramer'</i> Kramer Cypress</p>	 <p><i>Cornus florida</i> Flowering Dogwood</p>	 <p><i>Cornus coccinea</i> Pacific Dogwood</p>
 <p><i>Corylus colurna</i> Turkish Filbert</p>	 <p><i>Corylus colurna</i> Turkish Filbert</p>	 <p><i>Crataegus phaenopynum</i> Washington Hawthorn</p>	 <p><i>Crataegus phaenopynum</i> Washington Hawthorn</p>
 <p><i>Euonymus fortunei 'Sunshine'</i> Sunshine Euonymus</p>	 <p><i>Fagus sylvatica 'Dawsoni'</i> Dawson European Beech</p>	 <p><i>Fagus sylvatica 'Caerulea'</i> Weeping Beech</p>	 <p><i>Fagus sylvatica 'Euxanthera'</i> Purple Beech</p>
 <p><i>Fagus sylvatica 'Tricolor'</i> Tricolor Beech</p>	 <p><i>Fagus sylvatica 'Tricolor'</i> Tricolor Beech</p>	 <p><i>Fraxinus americana</i> White Ash</p>	 <p><i>Fraxinus americana 'Autumn Purple'</i> Autumn Purple White Ash</p>
 <p><i>Fraxinus americana 'Autumn Purple'</i> Autumn Purple White Ash</p>	 <p><i>Ginkgo biloba</i> Maidenhair Tree</p>	 <p><i>Gleditsia triacanthos</i> Honey Locust</p>	 <p><i>Gleditsia triacanthos</i> Honey Locust</p>
 <p><i>Gleditsia triacanthos</i> Honey Locust</p>	 <p><i>Gleditsia triacanthos</i> Honey Locust</p>	 <p><i>Ilex cornuta</i> Chinese Holly</p>	 <p><i>Ilex cornuta 'Burfordii'</i> Burford Holly</p>

Ditto 8 (B)


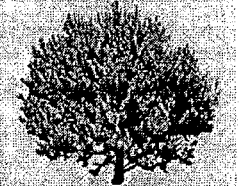

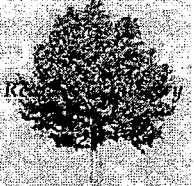

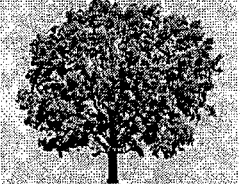


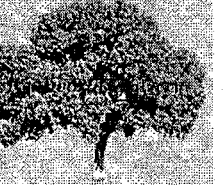

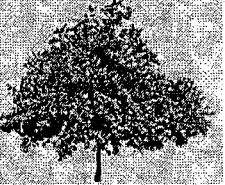


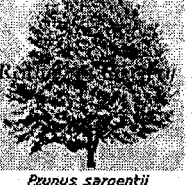
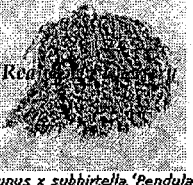





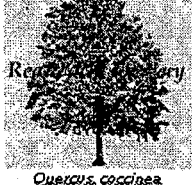



 <p><i>Ilex cornuta 'Burfordii'</i> Burford Holly</p>			 <p><i>Ilex glabra</i> Shamrock Inkberry</p>
 <p><i>Juglans nigra</i> Black Walnut</p>	 <p><i>Juniperus chinensis 'Old Gold'</i> Old Gold Juniper</p>	 <p><i>Real Sycamore</i></p> <p><i>Juniperus chinensis 'Tortulosa'</i> Tortulosa Juniper</p>	 <p><i>Real Sycamore</i></p> <p><i>Juniperus chinensis 'Tortulosa'</i> Tortulosa Juniper</p>
 <p><i>Juniperus communis</i> Common Juniper</p>	 <p><i>Juniperus squamata 'Blue Star'</i> Blue Star Juniper</p>	 <p><i>Real Sycamore</i></p> <p><i>Koelreuteria paniculata</i> Rapid Golden Rain Tree</p>	 <p><i>Real Sycamore</i></p> <p><i>Ligustrum ovalifolium</i> Oval Leaf Privet</p>

 <p><i>Real Sycamore</i></p> <p><i>Ligustrum x vicarii</i> Golden Privet</p>	 <p><i>Real Sycamore</i></p> <p><i>Liquidambar styraciflua</i> Sweet Gum</p>	 <p><i>Real Sycamore</i></p> <p><i>Liquidambar styraciflua</i> Sweet Gum</p>	 <p><i>Real Sycamore</i></p> <p><i>Liriodendron tulipifera</i> Chinese Tulip Tree</p>
 <p><i>Real Sycamore</i></p> <p><i>Magnolia acuminata 'Subcordata'</i> Yellow Cucumber Tree</p>	 <p><i>Real Sycamore</i></p> <p><i>Magnolia kobus</i> Kobus Magnolia</p>	 <p><i>Real Sycamore</i></p> <p><i>Magnolia stellata</i> Star Magnolia</p>	 <p><i>Real Sycamore</i></p> <p><i>Malus loensis</i> Bradley Crabapple</p>
 <p><i>Real Sycamore</i></p> <p><i>Malus species</i> Crabapple</p>	 <p><i>Real Sycamore</i></p> <p><i>Metasequoia glyptostroboides</i> Dawn Redwood</p>	 <p><i>Real Sycamore</i></p> <p><i>Metasequoia glyptostroboides</i> Dawn Redwood</p>	 <p><i>Real Sycamore</i></p> <p><i>Morus alba</i> White Mulberry</p>


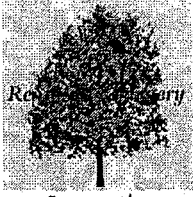
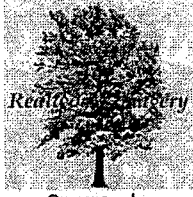
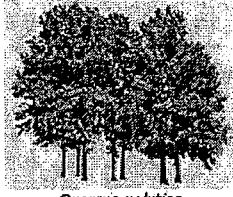
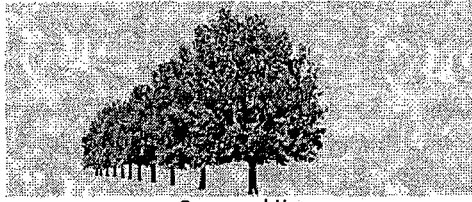
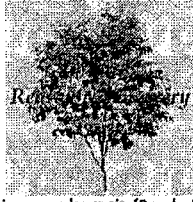

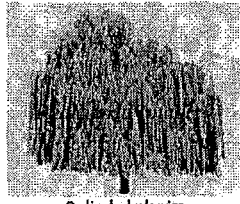
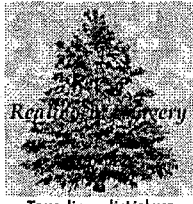
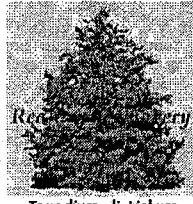
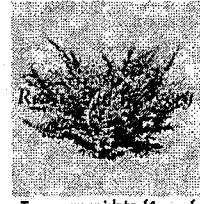
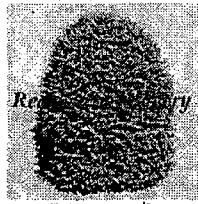
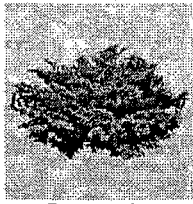
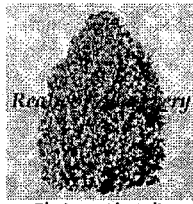
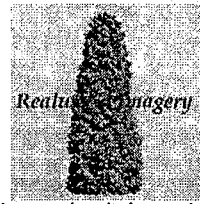
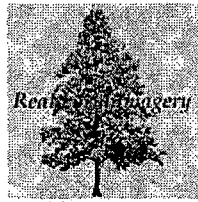
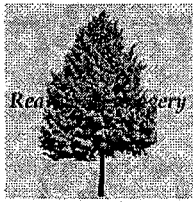

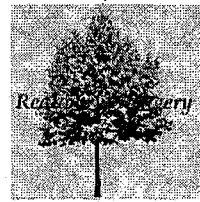
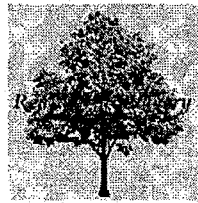
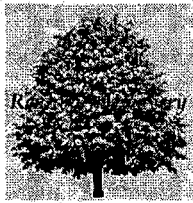
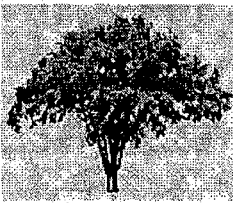
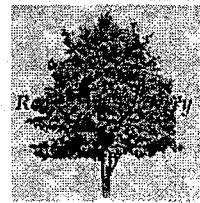
Ditto 8 (B).

 <p><i>Morus alba</i> White Mulberry</p>	 <p><i>Chlorestachys aurea</i> Golden Bamboo</p>	 <p><i>Realis ... gery</i> <i>Abies</i> Norway Spruce</p>	
 <p><i>Abies 'Birds Nest'</i> Birds Nest Spruce</p>	 <p><i>Realis ... gery</i> <i>Abies 'Pendula'</i> Weeping Norway Spruce</p>	 <p><i>Realis ... gery</i> <i>Abies 'Cumula'</i> Dwarf Norway Spruce</p>	 <p><i>Realis ... gery</i> <i>Abies engelmannii</i> Engelmann Spruce</p>
 <p><i>Realis ... gery</i> <i>Abies concolor</i> Colorado Spruce</p>	 <p><i>Realis ... gery</i> <i>Abies concolor</i> Colorado Spruce</p>	 <p><i>Realis ... gery</i> <i>Abies concolor</i> Colorado Spruce</p>	 <p><i>Realis ... gery</i> <i>Abies concolor</i> Colorado Spruce</p>
 <p><i>Realis ... gery</i> <i>Abies concolor glauca</i> Colorado Blue Spruce</p>	 <p><i>Realis ... gery</i> <i>Abies concolor glauca</i> Colorado Blue Spruce</p>	 <p><i>Realis ... gery</i> <i>Abies concolor glauca</i> Globe Colorado Blue Spruce</p>	 <p><i>Realis ... gery</i> <i>Abies concolor glauca</i> 'Globose' Globe Colorado Blue Spruce</p>
 <p><i>Realis ... gery</i> <i>Abies concolor glauca</i> 'Maastricht' Maastricht Blue Spruce</p>	 <p><i>Realis ... gery</i> <i>Abies concolor glauca</i> 'Maastricht' Maastricht Blue Spruce</p>	 <p><i>Realis ... gery</i> <i>Abies sitchensis</i> Sitka Spruce</p>	 <p><i>Realis ... gery</i> <i>Abies sitchensis</i> Sitka Spruce</p>
 <p><i>Realis ... gery</i> <i>Pinus cembra</i> Swiss Stone Pine</p>	 <p><i>Pinus mugo</i> Mugo Pine</p>	 <p><i>Realis ... gery</i> <i>Pinus nigra</i> Austrian Black Pine</p>	 <p><i>Realis ... gery</i> <i>Pinus strobus</i> 'Pendula' Weeping Eastern White Pine</p>

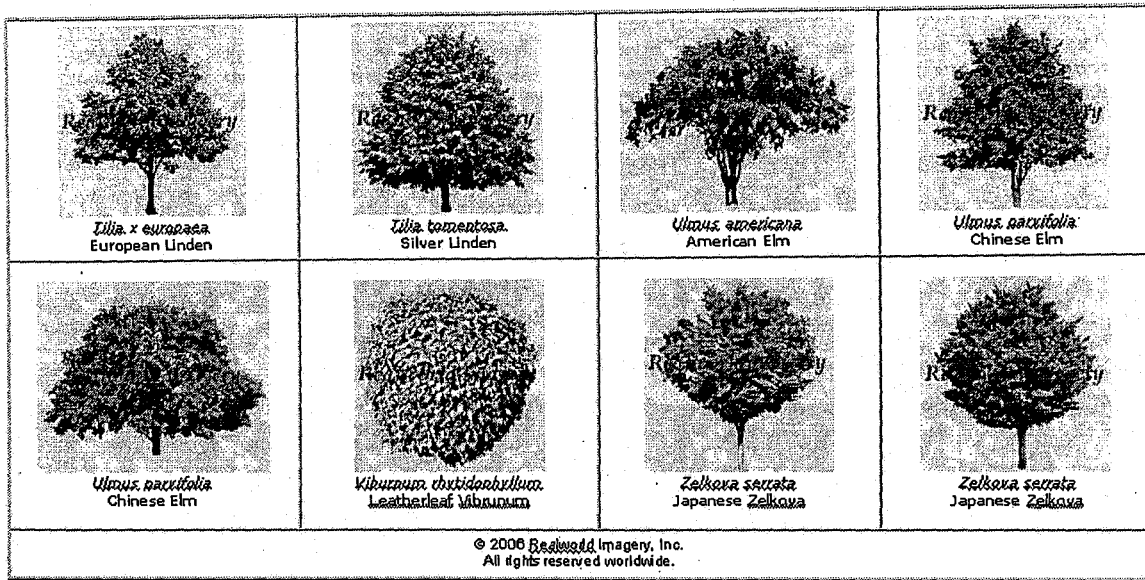
Ditto 8 (B)

 <p><i>Pinus sylvestris</i> Scotch Pine</p>	 <p><i>Pinus thunbergii</i> Japanese Black Pine</p>	 <p><i>Platanus occidentalis</i> Sycamore</p>	 <p><i>Platanus occidentalis</i> Sycamore</p>
 <p><i>Platanus occidentalis</i> Sycamore</p>	 <p><i>Populus deltoides</i> Eastern Cottonwood</p>	 <p><i>Populus fremontii</i> Fremont Cottonwood</p>	 <p><i>Populus fremontii</i> Fremont Cottonwood</p>
 <p><i>Populus fremontii</i> 'Wichitani' Rio Grande Cottonwood</p>	 <p><i>Populus tremula</i> 'Tower' Upright European Aspen</p>	 <p><i>Prunus x blissiana</i> Blissiana Plum</p>	 <p><i>Prunus cerasifera</i> 'Atropurpurea' Purple Leaf Plum</p>
 <p><i>Prunus cerasifera</i> 'Atropurpurea' Purple Leaf Plum</p>	 <p><i>Prunus sargentii</i> Sargent Cherry</p>	 <p><i>Prunus x subhirtella</i> 'Pendula' Weeping Flowering Cherry</p>	 <p><i>Prunus x subhirtella</i> 'Pendula' Weeping Flowering Cherry</p>
 <p><i>Euonymus alatus</i> 'Bradford' Bradford Pear</p>	 <p><i>Euonymus alatus</i> 'Bradford' Bradford Pear</p>	 <p><i>Euonymus alatus</i> Callery Pear</p>	 <p><i>Quercus acutissima</i> Sawtooth Oak</p>
 <p><i>Quercus coccinea</i> Scarlet Oak</p>	 <p><i>Quercus prinus</i> Pin Oak</p>	 <p><i>Quercus prinus</i> Swamp Chestnut Oak</p>	 <p><i>Quercus prinus</i> Swamp Chestnut Oak</p>

Ditto (B).

 <p><i>Quercus robur</i> 'Attention' Columnar English Oak</p>	 <p><i>Quercus robur</i> English Oak</p>	 <p><i>Quercus rubra</i> Red Oak</p>	 <p><i>Quercus velutina</i> Black Oak</p>
 <p><i>Quercus velutina</i> Black Oak</p>		 <p><i>Robinia pseudoacacia</i> 'Purple Robe' Purple Robe Black Locust</p>	 <p><i>Salix babylonica</i> Weeping Willow</p>
 <p><i>Salix babylonica</i> Weeping Willow</p>	 <p><i>Taxodium distichum</i> Bald Cypress</p>	 <p><i>Taxodium distichum</i> Bald Cypress</p>	 <p><i>Taxus cuspidata</i> 'Aurea' Golden Japanese Yew</p>
 <p><i>Taxus x media</i> Yew</p>	 <p><i>Taxus species</i> Yew</p>	 <p><i>Thuja occidentalis</i> Northern White Cedar</p>	 <p><i>Thuja occidentalis</i> 'Pyramidalis' Pyramidal Arborvitae</p>
 <p><i>Tilia americana</i> American Basswood</p>	 <p><i>Tilia cordata</i> Little Leaf Linden</p>	 <p><i>Tilia cordata</i> Little Leaf Linden</p>	 <p><i>Tilia x europaea</i> European Linden</p>
 <p><i>Tilia x europaea</i> European Linden</p>	 <p><i>Tilia tomentosa</i> Silver Linden</p>	 <p><i>Ulmus americana</i> American Elm</p>	 <p><i>Ulmus parvifolia</i> Chinese Elm</p>

Ditto 8 (B)



They also complement hard landscape elements to form pleasant views in built environment as shown in plate 9 below.

Plate 9 showing the complement of Shrub and hard Landscape.

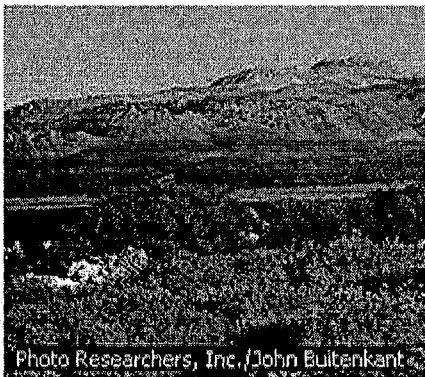


Photo Researchers, Inc./John Buitenkant

Shrub Lands

Shrub lands, characterized by small-leaved deciduous and evergreen shrubs, are found worldwide between about 30 and 40 degrees north and south of the equator. Climates in shrub land areas vary from those with distinct wet and dry seasons throughout the year to those with hot, dry summers and cool, moist winters, as in the Iberian peninsula.

Photo Researchers, Inc./John Buitenkant

Microsoft © Encarta © Encyclopedia 2005. © 1993-2004 Microsoft Corporation. All rights reserved.

c Flower

Flowers that have numerous spirally arranged and separately attached to their floral axes appeared earlier in the evolution of angiosperms, Flowers that vary from these conditions are more derived. Thus, whirling reduction of parts, fusion of parts, loss of parts and bilateral symmetry indicate modification. The flower in possession of all or anyone of these characteristics is more derived. If only one characteristic is present, then flower is considered derived for that characteristic alone. Buttercups and magnolias are among the oldest plants on earth in terms of resemblance to fossil ancestry, while it is believed that the earliest flowering plants were most closely related genetically to Amborella, a small cream-coloured flower from New Caledonia, Nymphaea, or water lilies and Austrobaileya, a plant native to Australia. Snapdragons, mints, composite flowers and orchids are among the most advanced that is more recently evolved.

Flowers refer to specie of flowering plants with pure or special ornamental purposes or effects e.g. star-of-Bethlehem, sunflower, roses, hibiscus sweet pea, and lilac plant as shown in Plate 10-12 below .

Plate: 10 showing sun flower

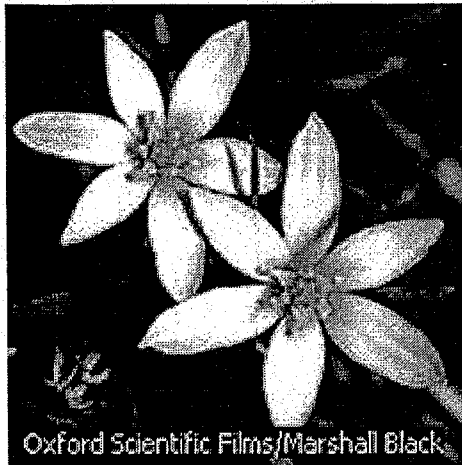


Triggered mainly by the shortening periods of darkness during spring and summer, flower buds open to display brightly-coloured petals that attract insects seeking nectar. Once a flower has been pollinated, its petals shrivel and drop off.

Oxford Scientific Films

Microsoft © Encarta © Encyclopedia 2005. © 1993-2004 Microsoft Corporation. All rights

Plate 11 showing Star-of-Bethlehem



Star-of-Bethlehem

The star-of-Bethlehem is widely cultivated for its white, star-shaped flowers. The herb contains poisons in its bulb that can cause death if eaten.

Oxford Scientific Films/Marshall Black



Microsoft  Encarta  Encycloedia 2005. © 1993-2004 Microsoft

Plate: 12 showing Sweet Pea



Sweet Pea

The sweet pea belongs to a family of plants called *Fabaceae*, also known as legumes. The legumes are an economically important group of plants that have root nodules containing a bacterium that helps return nitrogen to the soil. Because of this characteristic, legumes such as sweet pea are used to enrich nitrogen-poor soils. Other legumes include beans, peanuts, ~~soya~~ beans, and alfalfa.

Oxford Scientific Films

d Ground Cover (Grasses)

Grasses, common name for a large family of flowering plants, that is economically and ecologically the most important in the world. The grass family contains about 635 general and 9,000 species, making it the fourth-largest family after the legume, orchid, and daisy families.

e Legume: Common name for a plant family, the only member of the third largest order of flowering pants in terms of species, with some 16,400 and the

second most important economically, after the grasses.

f Orchid: Common name for a family comprising one of the largest groups of flowering plants. The family is worldwide in distribution, being absent only from Antarctica and some of the most arid desert zones as shown in Plate 13 below.

Plate 13 showing Tropical Orchid



Tropical Orchid

Orchids are perennial flowering plants found around the world, but mostly in tropical areas. They have diverse flower forms that are used to attract specific insects.

The Image Bank/James H. Carmichael, Jr.

g Daisy: Common name for a number of flowering herbs of the family Asteraceae (or Composite). They include the native British species known simply as the daisy but sometimes distinguished as the English daisy, a flower with a yellow disc and small white or pink rays and the western daisy of the United States, which has violet or purple rays. Various other species are called daisies, including the African daisy. The black-eyed Susan is a common US wild flower with a dark brown disc and yellow rays as shown in Plate 14 below.

Plate 14 showing Daisies in Bloom



Daisies in Bloom

The daisy, a carpeting, slow-growing perennial flower, grows to a height of up to 20 cm (8 in) with a flower width of 2.5 cm (1 in). Some varieties are cultivated as garden flowers, and are also popular in the floral industry.

Oxford Scientific Films/G.A. Maclean

3.2.7 Hard Landscape Elements: this consists of Stone / rock fabrication, Curvetts, Gazebo, Walkway, (pavement), Flower vase, and most concrete elements.

Hard landscape elements are those elements that are artificially made for fulfilling both aesthetic and functional requirements of the proposed design. The degree of evident harmony or unity of the various elements of a landscaped area is a measure not only of the pleasure induced in us, but also of the quality we call beauty, that is the evident harmonies of all seized components. So natural landscape beauty is of many varying qualities, which include: the Bizarre, the Delicate, the Graceful, the Series, the Bold, the Stark, the Majestic and the, Loyllic.

They have become increasingly important especially in our urban civilization though some are naturally found but are made or worked upon by men to suit what purpose they want it to fulfill. Some of these natural ones are rocks, stones, etc forming pleasing scenery, but here are some of the artificial landscape elements.

a. **Paved ways:**

Paved ways, also known, as walkways are constructed footpaths deliberately built with artificial materials. The function of the paved ways is to provide a hard, dry, non-slip surface, which will carry the required load of pedestrian traffic. Its other functions include the restriction of pedestrian priorities by leading straight to facilities, also paving patterns indicate subtly focal points where people pause in a paved area.

The choice of paving materials is determined by appearance, safety, noise and cost. For recreational facilities, the most appropriate is the all weather surface made of compressed mud blocks locally manufactured or burnt bricks as shown in Plate 15 below.

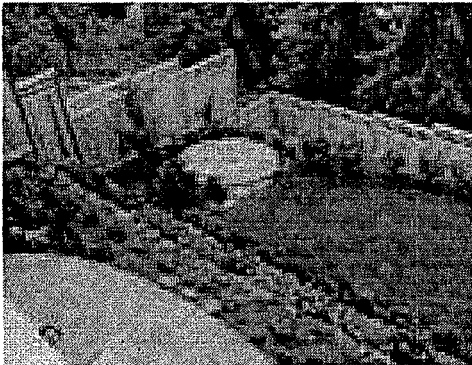
Plate 15: showing Pavement



b. Retaining walls:

This is used around the swimming pool area since swimming pools are below natural ground level. It is constructed with local quarry stones to create a rubble finish as shown in Plate 16 below.

Plate 16: Showing Retaining Wall



Sourced: from Google search “lifestyle” www.lifestyle.comm, 18, November 2006.

c. Gazebo

Gazebo is a half-built, hut like structure usually roofed. It contains seats that are used for outdoor relaxation; it is to be located in the shade and sheltered from the winds; some far enough to ensure absolute privacy while others near enough to supporting facilities for viewing and use of the bar. Generally, it should be located at least two (2)

meters away from paved ways and faces landscape areas than pedestrian paths. It is constructed using compressed mud blocks finished with burnt brick facings.

d. **Pergola**

Pergola is a skeletal construction of framework covering all paved ways. It seems to protect users from harsh weather conditions while not alienating them completely from their immediate environment. Other landscape elements such as water pots, orders, walk ways, carve stone, flower bed are also used in the garden to create beautiful scene as shown in Plate: 17-24 below.

Plate 17: showing water



Plate 18 showing the orders in landscaping



Plate 19 showing flower in pot

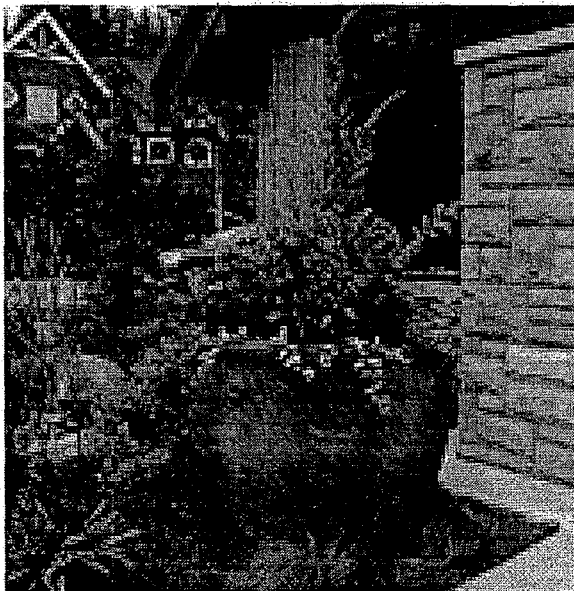


Plate 20 showing flowerpot in garden



Plate 21 showing tree and garden flowers



Plate 22 showing flowers court

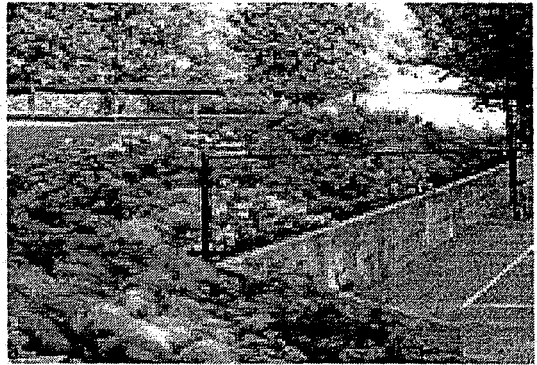


Plate 23 showing natural stone



Plate 24 showing flower walkway

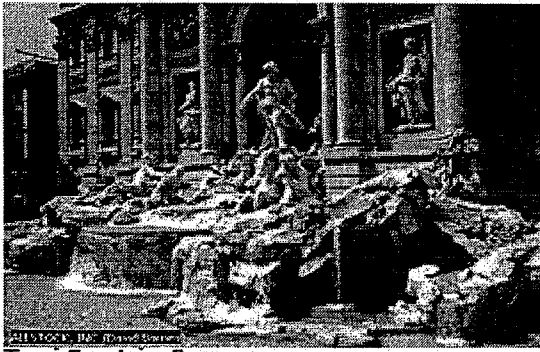


. Sourced : Sourced: ditto page 41.

e. **Fountain**

Fountains are used to cool the surrounding environment by releasing water molecules into the atmosphere. It increases the relative humidity of air. Apart from this function, it is very ornamental; the jets come between the spectator and the sun since water is most spectacular when it appears luminous, this also is true of waterfall swimming pool and reservoirs. The distance from public paths should be at least three times higher of the jet as shown in Plate 25-27 below.

Plate 25 showing Trevi Fountain, Rome



Trevi Fountain, Rome

Designed by Nicola Salvi and completed in the 18th century, the Trevi Fountain in Rome, is an example of high baroque design. Statues of gods and horses adorn the fountain, and the two Tritons on either side of Neptune, the Roman god of the sea, seem ready to conduct Neptune's winged chariot over the water. According to tradition, tossing a coin into the Trevi Fountain ensures a return visit to Rome.

ALLSTOCK, INC./David Barnes **FIG:3.28**

Plate 26 showing small water fall



Plate 27 shows swimming pool

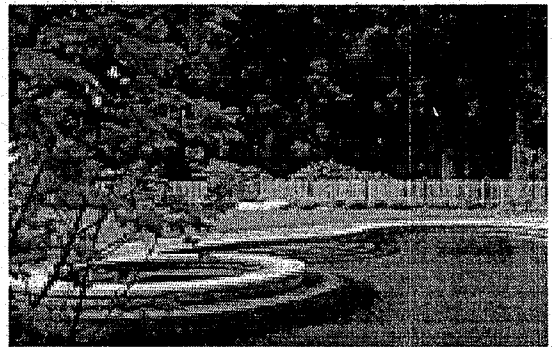


Plate 27 showing water body



Plate 28 showing garden water



. Sourced : Sourced: ditto page 41.

The success of an excellent landscape depends on planning; to start with, the area is mapped out in detail by drawing the proposed area to landscape to scale. The following points should be taking into consideration: the type of landscaping element, i.e. weather hard or soft landscape, the type of trees, considering its form, configuration and its root nature and the number of rows of trees or shrubs to give an aesthetically balanced views.

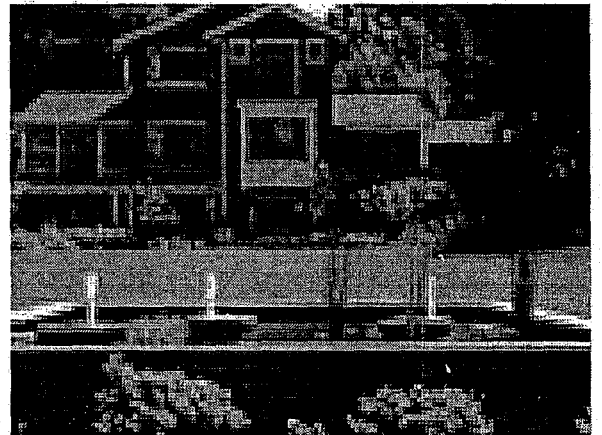
3.2.8 AESTHETICS IN LANDSCAPING

We can take note that desert landscape is not interesting at all, and this is partly because of the absence of vegetation, i.e. green areas being absent. More over, it's because it lacked; trees, flowers and shrubs, i.e. talking about the natural landscape without man's involvement. The combination of both natural and artificial elements of landscaping with the built environment often give a beautiful scene that relax the mind and refresh the brain it also in proof health and prolong life as shown in Plate 30-33 below.

Plate 30 showing umbrella



Plate 31 showing fountain



. Sourced : Sourced: ditto page 41.

Plate 32 showing tieles walkway



Plate 33 showing effect of soft



. Sourced : Sourced: ditto page 41.

3.2.9 PRINCIPLES OF LANDSCAPE DESIGN

Colour, line, form, texture and scale are tools, which are used in combinations to adjust design principles. Design principles include unity, balance, transition, focalization, proportion, rhythm, repetition and simplicity. All these principles interact to yield the intended design.

a. Unity:

Unity is obtained by the effective use of components in a design to express a main idea through consistent style. Unity is emphasized by consistency of character between units in the landscape use of elements to express a specific theme within units creates harmony. Unity can be achieved by using mass planting and repetition.

Unity means that all parts of the composition or landscape go together, they fit. A natural feeling evolves when each activity area belongs to and blends with the entire landscape. Everything selected for a landscape must compliment the central scheme and

must, above all, serve some functional purpose these could be repeated grasses, flower, trees, and stones as shown in Plate 34-37 below.

Plate 34 showing repeated grass



Plate 35 showing repeated flowers



Plate 36 showing repeated stones



Plate 37 showing repeated shrubs



Sourced : Sourced: ditto page 41

b. **Balance:**

Balance in design refers to the equilibrium or equality of visual attraction. Symmetrical balance is achieved when one side of the design is a mirror image of the other side. There is a distinct dividing line between the two sides. Equal lines, forms, textures or colours are on each side of a symmetrical design.

A symmetrical balance uses different forms, colours and textures to obtain balance of visual attraction. These opposing compositions on either side of the central axis create equal attraction. For example, mass object maybe opposed by colour or a linear dimension by height. The landscape designer must skilfully manipulate the design elements to create a symmetrical balance. The central axis must be predetermined and then developed by the elements of art and other principles of design as shown in Plate 38-51 below.

Plate 38 showing contrasting colours flower

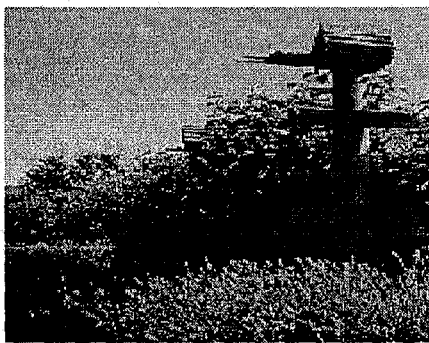
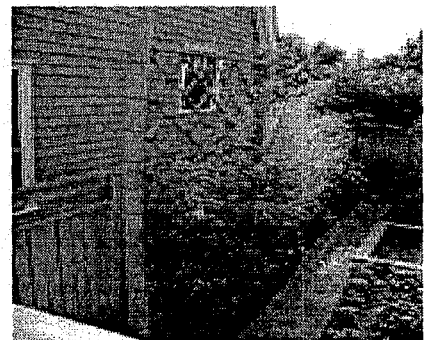


Plate 39 showing visual flower attraction



Sourced : Sourced: ditto page 41.

Plate 40 showing flowers in built



Plate 41 showing lowers, colour



Plate 42 showing flowers, pave, tree contrast.



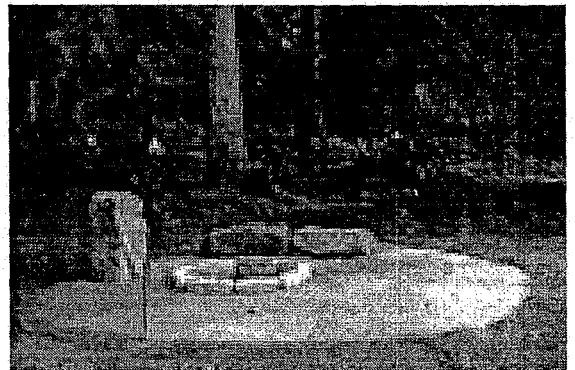
Plate 43 showing flowers, forms, grass, and pot contrast.



Plate 44 showing harmony of pave. tree.



Plate 45 showing natural ground. stone



Sourced : Sourced: ditto page 41.

Plate 46 showing flowers, paved,

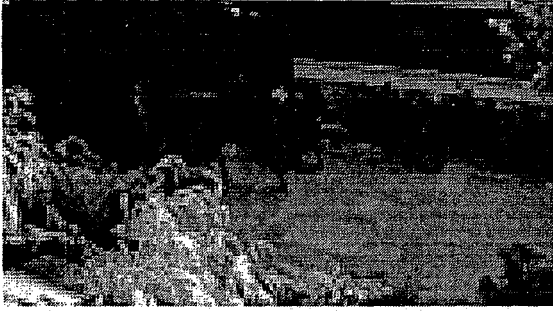


Plate 47 showing raked paved grass



Plate 48 showing flower, grass, tre

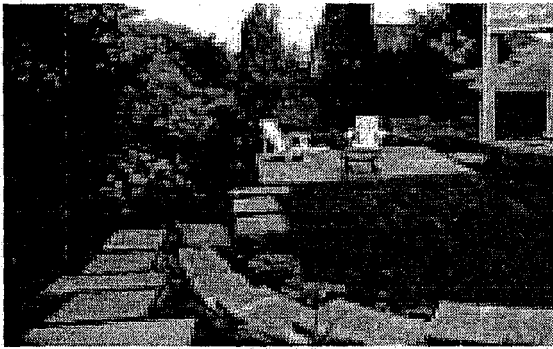


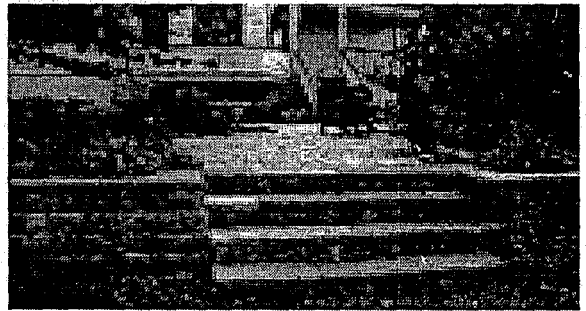
Plate 49 showing flower, poles pav



Plate 50 showing relaxation point



Plate 51 showing flower, pave, cha



Sourced : Sourced: ditto page 41.

c. **Transition**

Transition is gradual change. Transition in colour can be illustrated by the radial sequence on the colour wheel (monochromatic colour scheme). Transition can be obtained by the arrangement of objects with varying textures, forms, or sizes in logical sequential order. For example, coarse to medium to fine textures, round to oval to linear structural forms, or cylindrical to globular to prostrate plants. An unlimited number of schemes exists by combining elements of various sizes, form, texture and colour to create transition. Transition refers to the 3-dimensional perspective of composition, not just the flat or facial view. It is also possible to use transition to extend visual dimensions beyond actual dimensions but generally transition assists in the gradual movement of a viewer's eye to the design and within it as shown in Plate 52- below.

Plate 52 showing transition in path

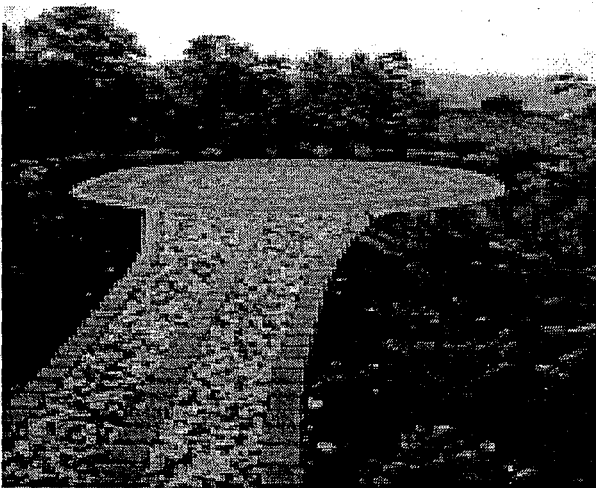


Plate 53 showing transition in courtyard



. Sourced : Sourced: ditto page 41.

Plate 54 showing relaxation foyer.



Plate 55 showing transition in garden

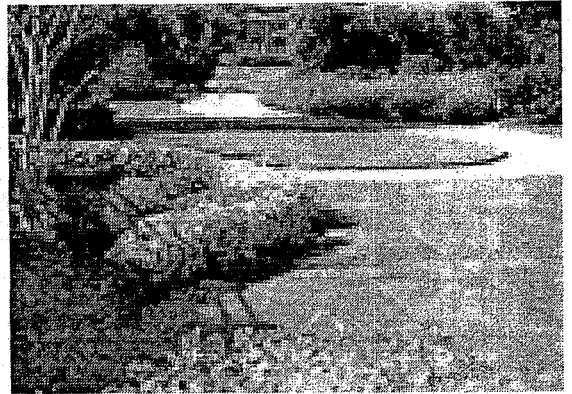


Plate 56 showing transition in entrance



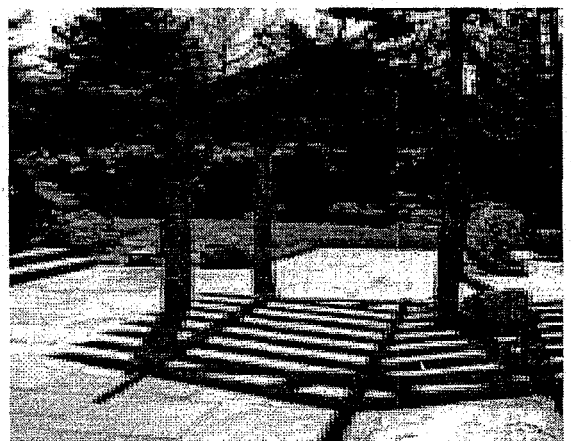
Plate 57 showing transition in
entourage



Plate 58 showing transition in walkway.



Plate 59 showing transition relaxation point



Sourced : Sourced: ditto page 41.

d. **Proportion**

Proportion is the size of parts of the design in relation to each other and to the design as a whole. One large towering oak may compliment an office building but would probably dwarf a single story residence. A three-foot pool would be lost in a large open lawn but would fit beautifully into a small private area. Moreover, of course, a colossal fountain would dominate a private garden but could enhance a large city plaza.

Proportion in landscape design usually relates to people and their activities. The desired size relationships of components in a design should pose little problem for the designer who considers this principle routinely in systematic thought processes.

e. **Rhythm**

Rhythm is achieved when the elements of a design create a feeling of motion that leads the viewer's eye through or even beyond the designed area. Tools like colour schemes, line and form can be repeated to attain rhythm in landscape design. Rhythm reduces confusion in the design.

f. **Focalization**

Focalization involves the leading of visual observation toward a feature by placement of this feature at the vanishing point between radial or approaching lines. Straight radial lines create a strong focalization when compared to curved lines. The viewer's eye is quickly forced along straight lines to a focal point. Generally, weaker or flowing lines of focalization are desirable in the residential landscape. Since focalization can be used to direct attention to a point, traffic in an area is usually directed to that point. Therefore, focalization could be used to direct traffic in a garden area. Guidance of view

toward features of commercial, aesthetic or cultural value may attract the eye of the unaware without conscious effort.

g. **Repetition**

Repetition is the re-occurring use of features like plants with identical shape, line, form, texture and colour. Too much repetition creates monotony but when used effectively can lead to rhythm, focalization or emphasis. Unity can be achieved very well by no other means than repetition. Think of repetition as not having too much variety in the design that creates a cluttered or busy appearance.

h. **Simplicity**

Simplicity blends with repetition and can be achieved by elimination of unnecessary detail. Too much variety or detail creates confusion of perception. Simplicity is the reduction of a design to its simplest, functional form, which avoids unnecessary cost and maintenance.

Whatever the scale of the project, the landscape architect first studies the site. Working alone or with a planner, traffic engineer, or building architect, as the project requires, the landscape architect considers the proposed use for the site. Other considerations are the layout of the terrain, climate and soil conditions, and costs. Once this information is known, the landscape architect proceeds to the actual design.

An overall plan is established, which might be a formal garden based on a symmetrical arrangement of geometric beds or an informal arrangement of planting to make as much use as possible of the natural characteristics of the site and elements like

sculpture, benches, walls and terraces, small structures such as gazebos, kiosks, and trellises.

3.2.9 ELEMENTS OF ART

The element of art includes the following: sculpture, colour, line, form, texture and scale. These elements are never independent of each other they are used to complement each other to create beautiful impressions at deferent situations to fulfil a particular desire as shown in Plate 60-.61 below.

Plate 60 showing human sculpture



Plate 61 showing animal sculpture



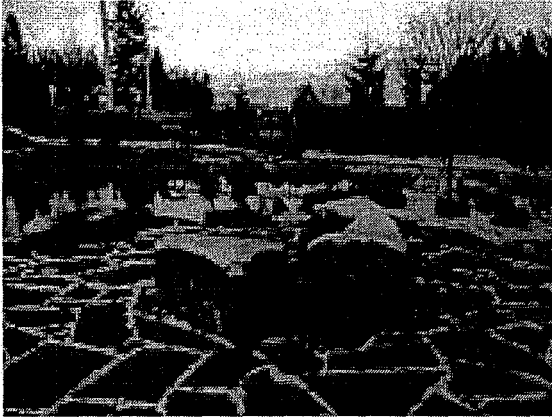
. Sourced : Sourced: ditto page 41.

a. Colour

Colour variation can be best explained by use of a colour wheel. Primary colours are red, blue and yellow; orange, green and violet are called secondary colours because they are combinations of two primary colours. For example, yellow and red are combined to yield orange.

- Tertiary colours are the fusion of one primary and one secondary colour. These colours would be between primary and secondary colours.

Plate 62 showing the use of colour



. Sourced : Sourced: ditto page 41.

b. Tint and shade

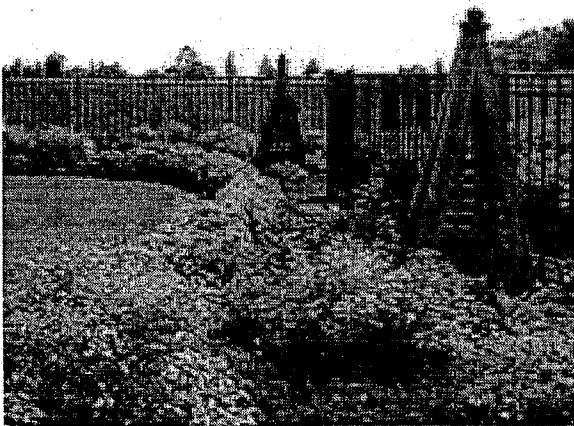
Tint refers to a light value and is accomplished by adding white to the pure colour on the colour wheel, while shade is a dark value and is created by adding black to the pure colour on the colour wheel. Black, white and grey are neutrals and are compatible with any colour. Light colours and tints tend to attract attention, as do bright, vivid colours. Colours are combined into colour schemes for practical applications. Three basic colour schemes are monochromatic, analogous and complementary. A monochromatic colour scheme consists of different tints and shades of one colour and is seldom-achieved in its pure form in the landscape.

c. **Line**

Line is related to eye movement or flow. The concept and creation of line depends upon the purpose of the design and existing patterns. In the overall landscape, line is referred by bed arrangement and the way these beds fit or flow together. Line is also created vertically by changes in plant height and the height of tree and shrub canopies. Branching habits of plants, arrangement of leaves and / or sequence of plant materials create line in a small area such as an entrance or privacy garden.

Straight lines tend to be forceful, structural and stable and direct the observer's eye to a point faster than curved lines. Curved or free-flowing lines are sometimes described as smooth, graceful or gentle and create a relaxing, progressive, moving and natural feeling as shown in Plate 63 below.

Plate 63 showing the use of lines.



. Sourced : Sourced: ditto page 41.

d. **Form**

Form and line are closely related. Line is considered usually in terms of the outline or edge of objects, whereas form is more encompassing. The concept of form is

related also to the size of an object or area. Form can be discussed in terms of individual's plant growth habits or as the planting in a landscape.

Plant forms include upright, oval, columnar, spreading, broad spreading, and weeping. Form is the shape and structure of a plant or mass of plants. Structures also have form and should be considered as such when designing the area around them.

e. **Texture**

Texture describes the surface quality of an object than can be seen or felt. Surfaces in the landscape include building, walks, patios, groundcovers and plants. The texture of plants differs as the relationship between the leaves, twigs and branches differ. Coarse, medium or fine could be used to describe texture but so could smooth, rough, glossy or dull.

f. **Scale**

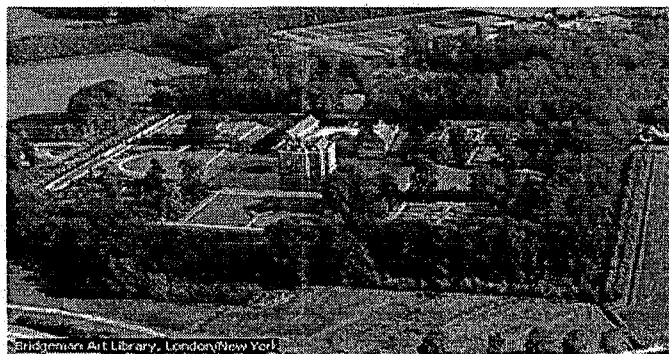
Scale refers to the size of an object or in relation to the surroundings. Size refers to definite measurements while scale describes the size relationship between adjacent objects. The size of plantings and buildings compared on the human scale must be considered.

3.2.10 MODERN LANDSCAPES

Like all landscapes, urban landscapes are often likened to palimpsests, with new landscape superimposed on the remains of the old. This view, of course, implies that landscapes are mainly composed of what people have created. However, the contribution of natural landforms cannot be ignored. The site of a city greatly affects how the eye perceives the landscape.

Hills, rivers and seafronts, even when heavily modified by construction, still give the landscape its most enduring character. It is only necessary to consider what Sydney would look like without its harbour or San Francisco without its hills and bay. Nonetheless, if the site provides the 'skeleton' of the city, the "flesh" is the product of constantly changing in human activity and this brings in the idea of a palimpsest. However in the 21st century, great increase in urban areas had created a need for large-scale multiple atmospheres for relaxation. It has now become a challenge for the landscape architects to design courtyards, play areas, recreation centres and roof gardens that are both functional and aesthetically pleasing for the benefit of human utilization like that of Middachten Castle as shown in Plate 64 below.

Plate 64 showing Grounds of Middachten Castle



Grounds of Middachten Castle

Landscape architecture combines within a defined space elements such as plants, buildings, and ponds or lakes in an aesthetically pleasing way. The grounds of Middachten Castle, near De Steeg, Netherlands, were laid out in about 1900, but are closely based on an original design that was influenced by French landscape architecture of the late Baroque period.

Bridgeman Art Library, London/New York

3.2.11 STEPS IN DEVELOPING A LANDSCAPE DESIGN

The benefits of an organized system in developing a landscape design are tremendous, as with most endeavours. The level of efficiency relative to time input is greatly increased with an organized approach. The game plan for the landscape designers should follow a sequence such as the ones presented here as follows:

- i. Develop a plot plan
- ii. Conduct a site analysis
- iii. Assess family needs and desires
- iv. Locate activity areas
- v. Design activity areas
- vi. Plant selection and placement

Group plants for emphasis. Group the same plants rather than alternating shrubs or using many individual plants spotted about the property to provide a sense of unity and order.

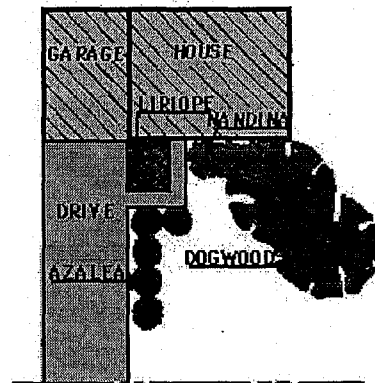
3.2.12 PLANT SPECIFICATION AND MAINTENANCE

Landscape management is the process of ensuring the long-term objectives of both the designer and user so that the landscape evolves and matures to their satisfaction. This concerns both the use of land and the growth of physically and visually acceptable relationships between the land and its living communities.

Maintenance concerns the routine care of lands, vegetation structure and surfaces as intended by the designer. Maintenance cannot be avoided, but it can be minimized. Even the perfectly designed and installed landscape will fail if maintenance fails. However, many maintenance problems are designed into landscapes. Complex designs usually require more maintenance. Simplicity can be achieved by avoiding unnecessary detail. Limit the number of plant species and create well-defined planted areas by not scattering plants throughout open areas. Design the appropriate size of maintained area and arrange plants in groups of like species to create a mass effect. Tree beds can

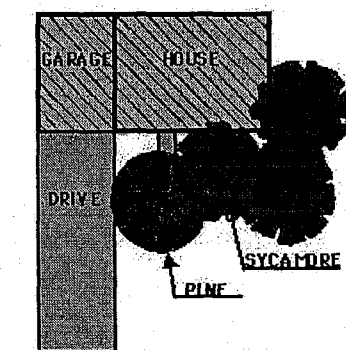
eliminate trimming, reduce lawn mower damage to tree trunks and increase the speed of mowing. Edging of beds creates a sharp clean line and reduces maintenance requirements as shown in Plate 65 below.

Plate 65 showing group planting for emphasis



Plant trees for shade; Trees of appropriate mature size should be used so that they will be neither too large nor too small for the house. Deciduous trees can usually be planted closer to the home than evergreens as shown in Plate 66 below.

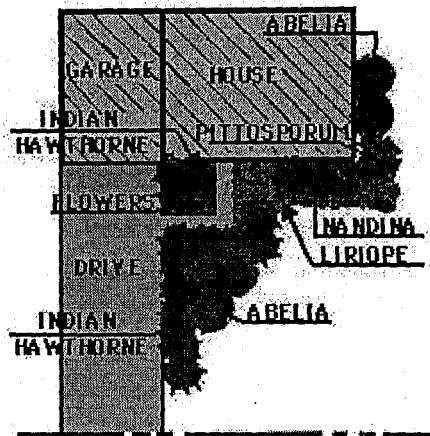
Plate 66 showing plant of Trees for shade



. Sourced : Sourced: ditto page 41.

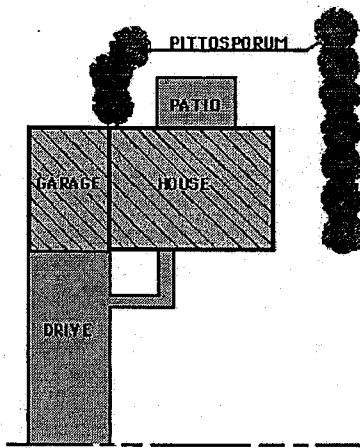
Trees can also be planted so as to complement the structure. In doing this, building should not be separated from its site by a ring of plants or foundation planting. Plants should compliment the lines of the structure, not set it apart from the site as shown in plate 67 below.

Plate :67 showing the use of trees to complement structure.



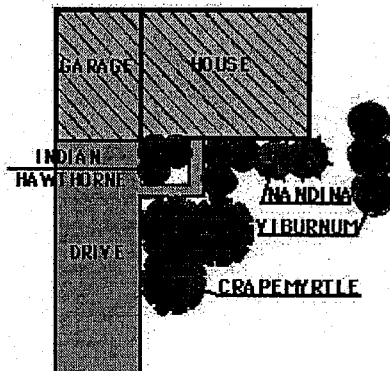
Trees also provide privacy. Instead of planting all the way around the property lines of your site, place screen plantings where they will provide privacy to exposed traffic and neighbourhood activity but should be use only where necessary as shown Plate 68 below.

Plate 68 showing the use of Trees for privacy



Using plants to soften walks and drives: Walks and drives in most cases serve only as aids in circulating people. When they are lined with hedges, border grass or other materials, they may become too prominent. Enough materials is used to soften large areas of paving but lawn grass are allow to meet the pavements in most areas as shown in Plate 69 below.

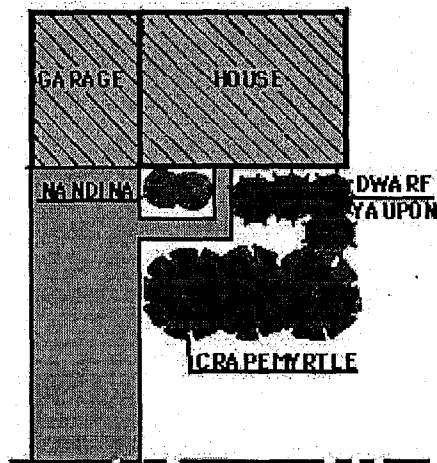
Plate 69 showing soften walks and drive ways



Sourced : Sourced: ditto page 41.

Allow space for ultimate growth: Space shrubs in relation to buildings to allow for natural growth. Generally, no shrub should be placed closer than 900mm from the building unless it is a groundcover or a plant which uses the wall for support. Do not be fooled by small plants in the nursery. Knowing the mature size of all plants to be used and spacing them accordingly is the best option. Plants should compliment, not cover a building. Select plants that require less maintenance as shown in Plate 70 below.

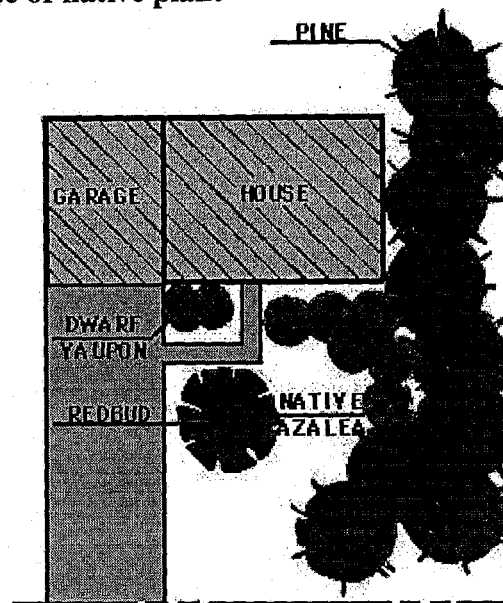
Plate: 70 showing ultimate growth.



. Sourced : Sourced: ditto page 41.

Native plants frequently withstand weather extremes and are usually more resistant to insects and diseases. Native plants can also be important in relating a

Plate 71 showing the use of native plant



Sourced; Sourced: ditto page 41.

3.2.13 IMPORTANCE OF PROPER LANDSCAPING IN RELATION TO RECREATION AND LEISURE

The importance of proper landscaping cannot be overemphasized, as it plays a great role in everyday psychology. Effective landscaping and the use of available landscape elements, help improving the health of the people within the environment. Landscape and recreation are two subjects that cannot be separated from each other.

Recreation is basically a renewal or preparation for routine and necessary work or means of escape from it. One school of thoughts says that the main purpose of recreation is revitalizing people so that they may efficiently return to activities, which are not recreational but economically gainful. It should however be realized that it is the major

factor which motivates landscape, because landscaping is an integral part of any architectural design. The use of landscape elements are what are referred to as finishing touches in architectural designs. It accentuates the form of the building structure erected and puts life into the built environment.

Proper landscaping is the key to accentuating any design especially recreational facilities where landscape elements play the dominant role. Proper landscaping with a recreational facility relates the message of tranquillity, peace, and relaxation. This is the aim of proper landscaping within a recreational facility, that is to create a stress free, visually peaceful and mentally revitalizing environment for recreation.

3.2.13 THE ROLE OF PLANNING IN LANDSCAPE DESIGN

Planning and design of the site is critical to identify watering zone requirements and to determine soil types as well as to identify which locations are the most extreme for plant survival. Parking facilities are particularly difficult as the plants are primarily installed in locations that are

surrounded by reflective hard surfaces, steep slopes or along roadways where exhaust fumes are a constant.

3.2.14 SOIL IMPROVEMENT

Proper soil preparation is the key to successful water conservation. If the soil is sandy, water and nutrients will be lost due to leaching below the root zone. If the soil is heavy clay, water will be lost through runoff. Heavy clay soils tend to repel surface water resulting in runoff. The water that does get into these soils is held so tightly by the clay itself that plants cannot use it. Plants in a clay soil, even though moist often tend to wilt

from lack of moisture. Plant roots also need air to thrive. In clay soils, air spaces are small and may fill with water, so plants suffer from oxygen starvation. In very sandy soils, the opposite is true. Sandy soils have very large pore spaces. Because the particles are large, there is little surface area to hold the water, so sandy soils tend to lose water rapidly.

3.2.16 EFFICIENT IRRIGATION

Proper irrigation practices can lead to significant water savings. Different plant types should be watered with different irrigation zones. The system needs to be designed to fit the landscape, minimizing overlap onto streets, sidewalks and parking areas. Plant types need to be installed in zones that have similar water needs. This will optimize the irrigation system, saving significant amounts of water. Drip zones are to be used in locations that are for shrubs and trees only.

3.2.17 ZONING OF PLANTS

Plants of similar water use requirements need to be grouped together to take advantage of water savings. Selecting plants that will do well depending on the site exposure is also important. The use of the most water conserving plants on south and western slopes and those that require more moisture can be placed close to drainage ways and low lying areas. Grouping plants appropriately will minimize water waste.

3.2.18 MULCHES AND TURF ALTERNATIVES

Mulching helps keep plant roots to be cool, prevents soil from crusting, minimizes evaporation and reduces weed growth. Organic mulches such as shredded cedar should be placed 4 inch thick. Inorganic mulches and landscape/geotextile fabrics are generally not used. The use of alternative turf grasses to reduce the amount of water needed to keep an area looking attractive and green. A variety of success is achieved with warm season buffalo grass, gramma grasses and cool season fescue and hybrid bluegrass blends. Regular scheduled maintenance is a basic requirement. The first two years is a specification requirement for warranty and maintenance of the landscape components of the facility. The maintenance plan should include regular weeding, pruning, water management, fertilizing, pest control, irrigation system maintenance and plant replacement.

3.2.19 Gardening

The history of the development of gardening as a leisure activity from ancient history to the present day cannot be over emphasized. A garden is an area of ground, usually enclosed, and beside or near to the house, in which plants and trees are grown, usually in an ordered fashion, with some open spaces to allow the owner or visitors room for pleasurable activity.

Cultivation of plant in enclosed areas for ornamental purposes is distinct from agriculture and horticulture, both of which are concerned with plants grown on a large scale for economic or other gain to the cultivator. Scientific research into plants is normally a matter for the botanist as shown in Plate72 below.

Plate 72 showing Gardens at Versailles

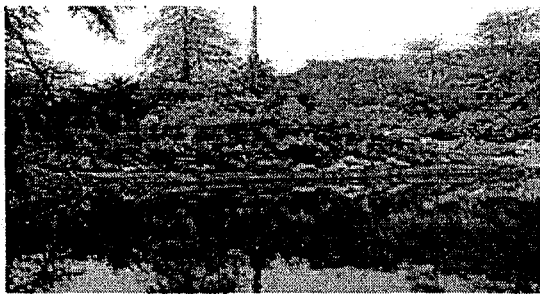


Woodfin Camp and Associates, Inc./Adam Woolfitt
Gardens at Versailles

Extensive gardens, designed (1662-1669) by André Le Nôtre.

Gardening is often a matter of recreation for the home gardener, who usually follows the patterns and methods established by commercial and professional gardeners but adapted to smaller operations. The gardener may purchase some plants, seeds and tools from a commercial nursery, which provides various services to householders and small-scale gardeners like that of Claremont garden as shown in Plate 73 below.

Plate 73 showing Claremont Landscape Garden



The National Trust for Places of Historic Interest or Natural Beauty/Sheila O'Connell
Claremont Landscape Garden

The landscaped garden that surrounds the Palladian mansion of Claremont, in Surrey, was begun by John Vanbrugh and Charles Bridgeman in the early decades of the 18th century. William Kent and, later, Capability Brown also worked on it. This is a view of the grotto that overlooks the lake.

3.2.20 DEDUCTIONS

In addition to earth friendly practices in the field and green friendly practices in the office environment, the recycling of office paper, light bulbs, batteries and fluorescent lights are used to save energy within office space and as an element of interior

decorations. These elements are combined together to create a relaxing atmosphere for recreation and in climate control, bringing the user close to nature, thus, creating relaxed impact on the user's life physically, mentally and psychologically. It is encouraging to note that good landscaped environment help in getting the mind refreshed, by reducing stress and hypertension, and giving room for renewed mind set for a new productive task. It happens to be a secret discovery about health and physical conditions. It can also be observed from this project report that when the constituent elements of landscaping are identified and employed effectively, it gives psychological happiness and satisfaction, balance human growth and creativeness, improve financial worth of the environment, better learning environment, better physical condition or complete physical states of mind, improved social relationship, better attitude to life and greater emotional stability. Though, landscaping may not be able to proffer solutions to all the vices of our society, but it does have a significant role to play by providing serene environment where minds can positively be redirected to the prevention of anti social behaviors of the youth.

3.3 INTRODUCTION TO CASE STUDIES

To carry out any project, it is very important on the side of the designers to study the existing similar projects to enable him to see how the design of the previous got his concept and hence see what can be done or how to improve the concept. These improvements are made possible by the use of today's new and advance technology, new building techniques and better understanding of those to be affected by the design that is, in this case the youths. Before going into the field for the case studies parameters are set. It is based on these set guidelines that studies are made which includes:

- (1) To appraise the existing centres and adapt the good attributes in the proposed centre.

(2) To find out to what extent the physical environment and the workplace have been designed to aid the mental and psychological needs of the youth with a view to acknowledge the positive values or denouncing the negative ones.

(3) To spot the physical, structural and environmental set-up at such centres with a view to determining their stability.

To this effect, case studies were carried out based on the above need so as to increase the current trend where necessary and also, to appraise the available youth facilities, incorporate their merits and improve on their defects in this proposed project.

3.3.1 CASE STUDY ONE: (GENERAL ABDULSALAM ABUBAKAR YOUTH CENTRE, MINNA)

Abdulsalam Abubakar Youth Centre, Minna is located along Minna-Paiko Road. It can also be accessed from eastern by-pass. The main aim of the centre is basically a social one and the objective is to provide a focal point for the youth of the state and. It is also to interact with each other and thereby promoting the much-desired unity.

The relationship of art and architecture has been cemented ever since Homosapiens left the cave. It was on this note that this youth centre was built to exploit this relationship in more ways. This centre has generated attention for the way in which it challenges the gloomy reputation of some youth centres as a form of centre where one go to mourn.

(i) Available Facilities

The facilities available are administrative offices, indoor games area, conference halls, restaurants, vocational facilities, lawn tennis and badminton court and other open spaces which are spacious enough for various activities.

(ii) Merits

1. It has good landscape layout.
2. It has good spacing for the available Areas.

3. The combination of both soft and hard landscape is very good.

(iii) Demerits

1. The parking lot is not properly defined.
2. The walk ways provided are inadequate.
3. There are poor drains to landscape and difficult watering system.
4. Poor maintenance. All these can be seen in Plate 74-81 below.

Plate 74 to 77 showing the various elevations of the Abdulsalam Youth Centre

Plate 74 showing the approach elevation

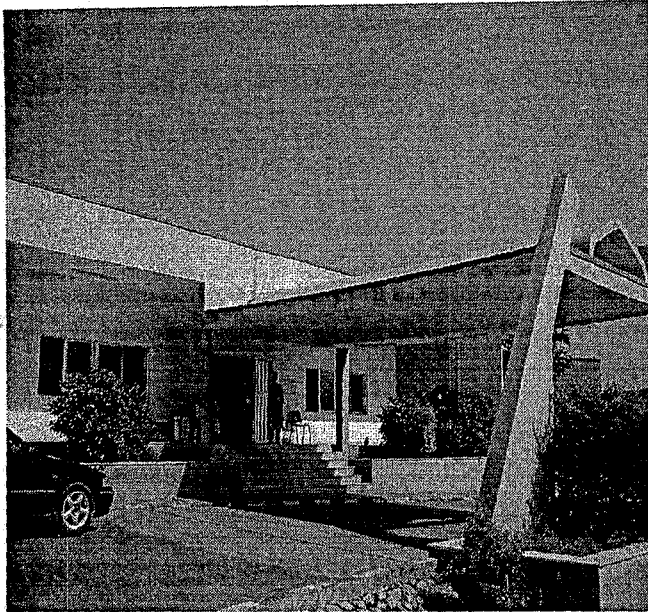


Plate 75 showing the left side elevation

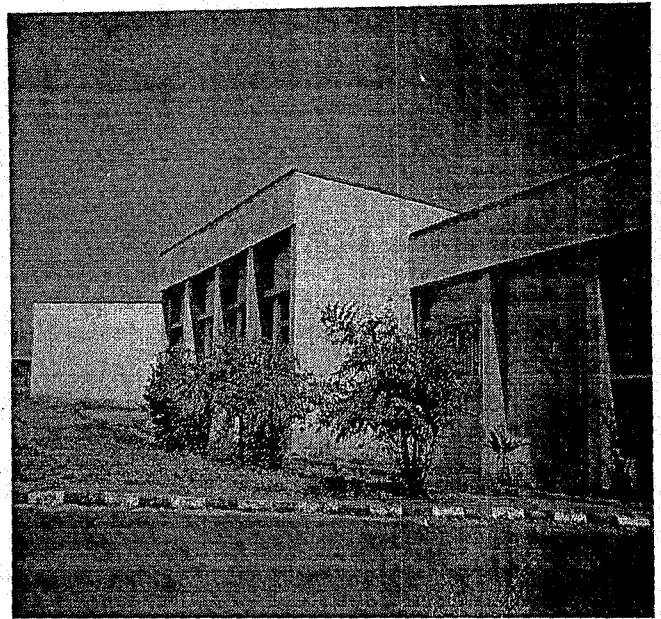
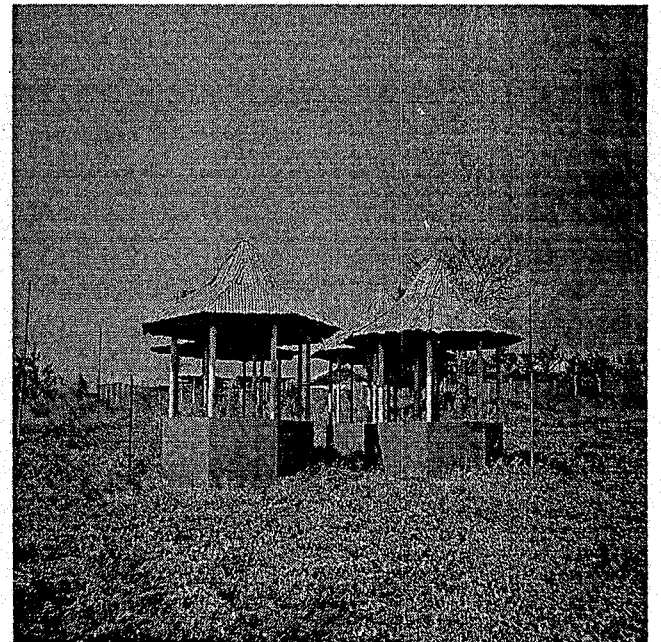


Plate 76 showing the right side elevation



Plate 77 showing abandoned gazzebo



Source: Author's research

Plate 78 to 81 showing the various elevations of the Abdulsalam Youth Centre

Plate 78 showing external perspective

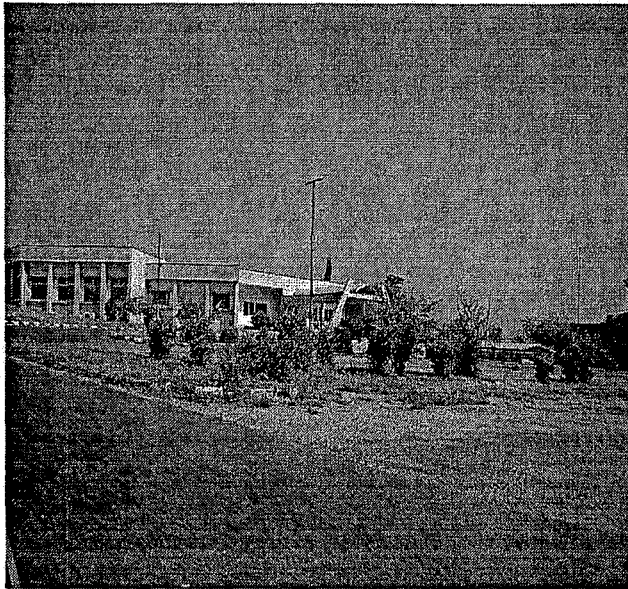


Plate 79 showing the gazebo

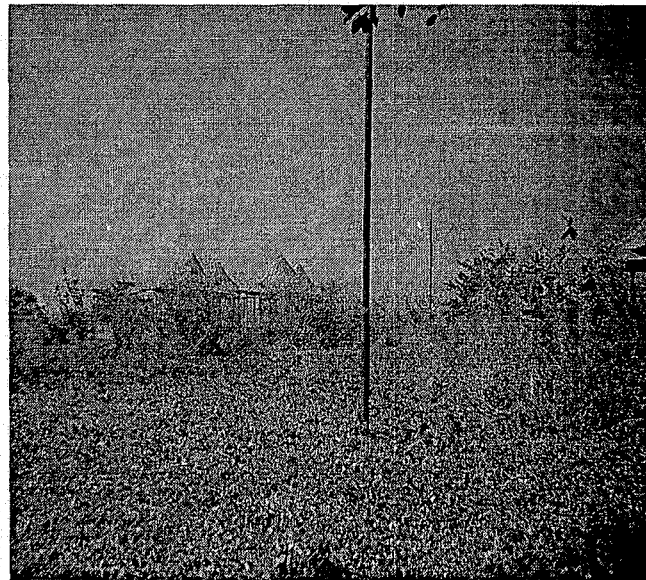


Plate 80 showing rear elevation

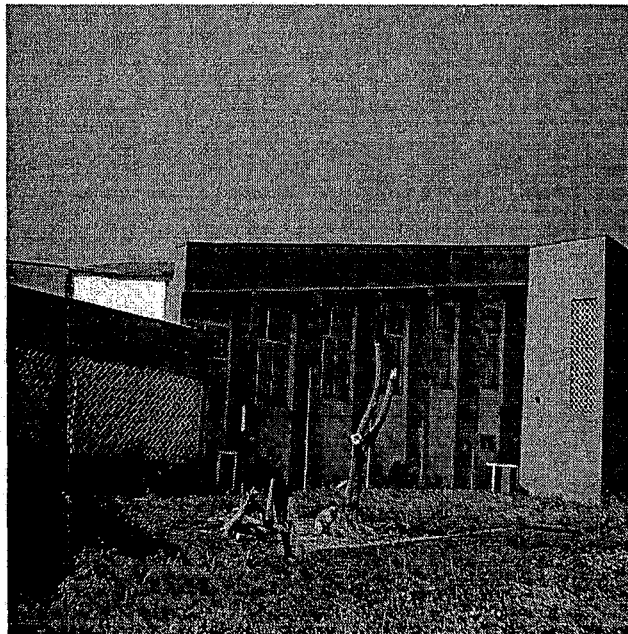


Plate 81 showing the court yard



Source: Author's research

3.3.2 CASE STUDY TWO: THE NIGERIAN YOUTH CAMP, ILORIN

The Nigerian Youth Camp, Ilorin is along Ilorin-Ogbomosho Road. The site has good accessibility and the necessary facilities such as auditorium, restaurant, hostel, office, clinic and others.

The plan is very functional with its arrangement of forms to depict various units and sections. The reception is open directly into a large court yard which leads straight to the auditorium at the back with some flight of steps to the right wing of the building are the youth hostels while on the left side are the guest chalets. Because of its good accessibility, the centre is good for retreat and it's unique for its quietness. It also enjoys both artificial and natural lighting with the provisions of courtyards within the complex the openings are also large which let in a lot of light. The openings on wall help to ventilate the centre. Interior courts are also used to improve ventilation of different sections.

(i) Merits

1. The use of Trees as soft landscape is very good.
2. Nice environment especially during raining season.

(ii) Demerits

1. Poor landscape maintenance.
2. There are no walkways in the open spaces.
3. There is no provision for enough outdoor recreational activities.

3.3.3 CASE STUDY THREE: WOMEN DEVELOPMENT CENTRE, ABUJA

The centre is located in Abuja; directly opposite the centre, is the Central Bank of Nigeria and to the rear are Ministries complexes among which are: Law School, War College separated by undeveloped canal. The various departments in this centre are: Administrative, Peace Auditorium, Vocational Centre, Chalets, Kitchen, Conference Rooms and so on.

The design of the centre applies the use of effective circulation which is reflected also in the external environment. The landscape is superb; the wall and ceiling finishes are to taste. The red brick wall and red roofs of long span aluminium sheet complement the well maintained landscape typify "serenity of element".

The radial shape fused into rectangular forms of story building similar to Frank Lloyd Wright concept produced an aesthetically balance and a well celebrated and welcoming entrances.

The finishes in the floor are terrazzo floor finish and on the walls are ceramics and quality texcote paint with balanced colour combination. The circulation is through linked corridor and stair case for vertical circulation.

(i) Merits

1. Good landscaping.
2. The interior and exterior colour scheme is welcoming and friendly.
3. The centre was purposely design for the functions it is performing.
4. There is good use of ground modelling.
5. There is very good maintenance culture.

(ii) **Demerits**

1. Continuous use of hard landscape affects the environmental temperature.

This unique centre various elevations are shown in Plate 82-89 below

Plate 82 to 85 showing the various elevations of the women Centre

Plate 82 showing part of the offices



Plate 83 showing the guest house

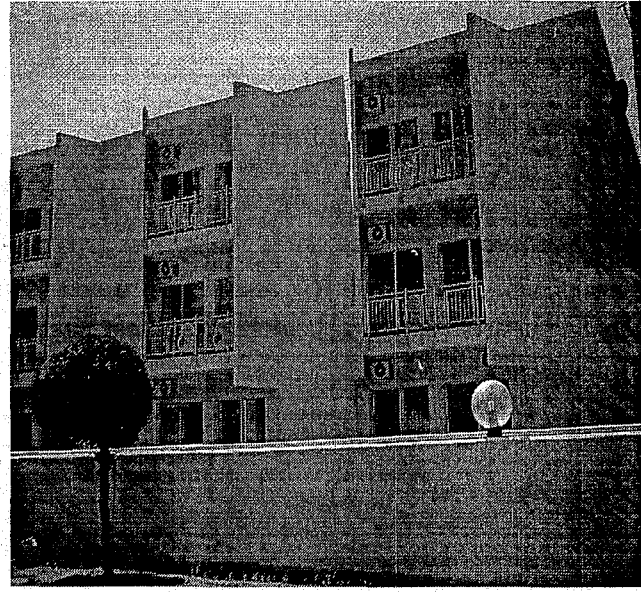


Plate 84 showing the vocation centre

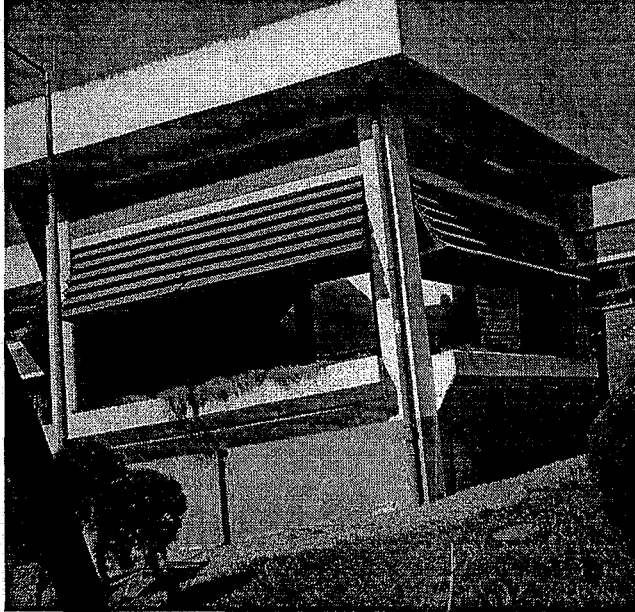


Plate 85 showing the kitchen and restaurant



Source: Author's research

Plate 86 to 89 showing the various elevations of the women Centre

Plate 86 showing the Administrative Block

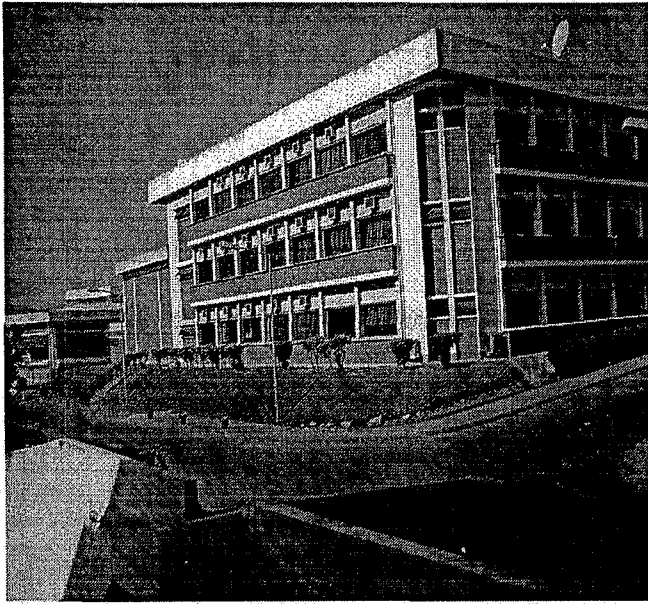


Plate 87 showing the landscaped forecourt

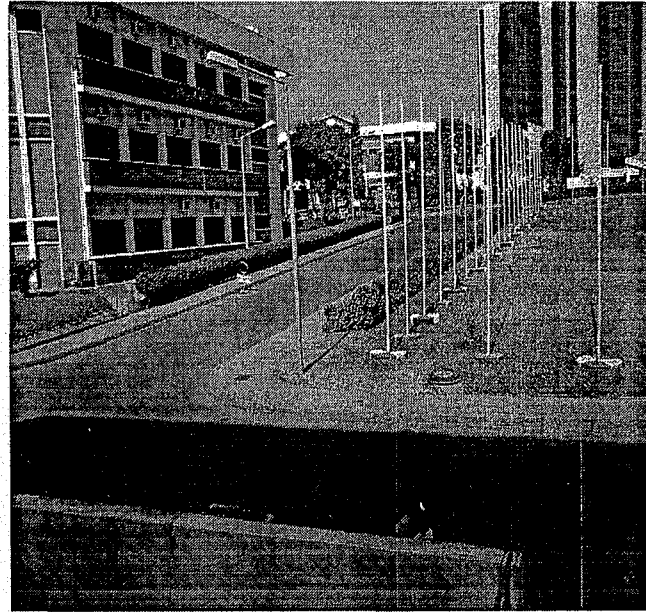


Plate 88 showing part of Peace Hall

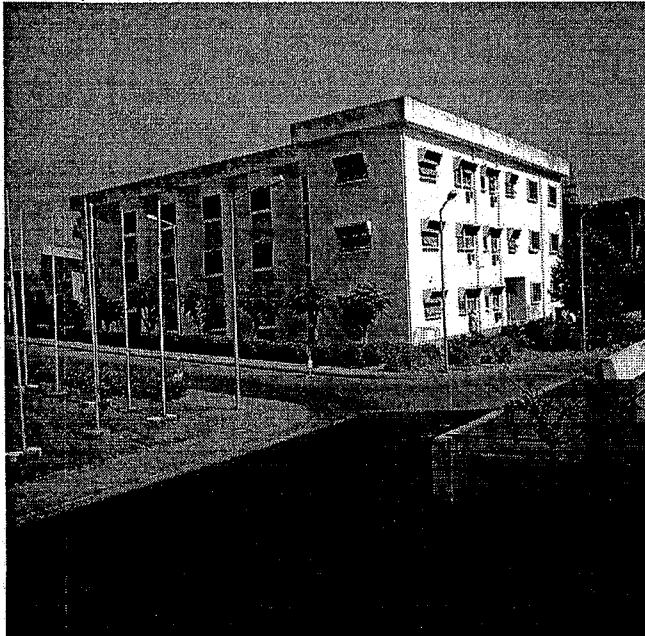
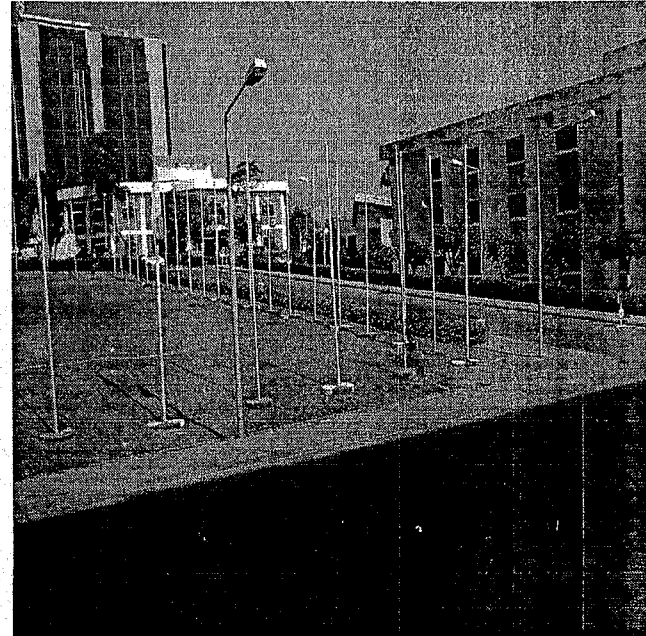


Plate 89 showing part of the hard landscaped



Source: Author's research

3.3.4 CASE STUDY FOUR: SHEHU MUSA YARADUA CENTRE, ABUJA

The centre is located adjacent to the popular Sheraton Hotel and Tower just as one is approaching the central mosque and it is described as a place for total serenity combining the best in architectural aesthetics with an emotionally supportive environment. Full advantage of the generous site is used as the centre is welcoming to visitors and their families.

Instead of the monolithic, institutionalized building common with most Youth Centres, the key proposition which emerged was of a clustered urban complex unified by its landscape setting.

The stair and turn-around services the lobby and the gallery. The different entrances separate the very different flows of traffic to the overall facility of the centre.

Basically, the one story facility building purposely appears as a bungalow and serves the various activities.

(i) Merits

1. The site provided for a human-scale, low-rise building while the gentle slope of the site helped off-set any tendency for the complex to become too widespread by providing a variety of complementing landscape elements at different entries.

2. The approach of the complex gives the impression of a little town. Once inside, the city feelings are reinforced by the individual interior decoration characters of the sections.

3. The beautifully landscaped forecourt area with its unfinished bridge depicting the short life of Yaradua and hints on the landscaping in the northern side of the building.

4. The cultural plans ensure the Centre's utilitarian character and balanced with aesthetical dimension as shown in Plate90 -101below.

Plate 90 showing unfinished bridge

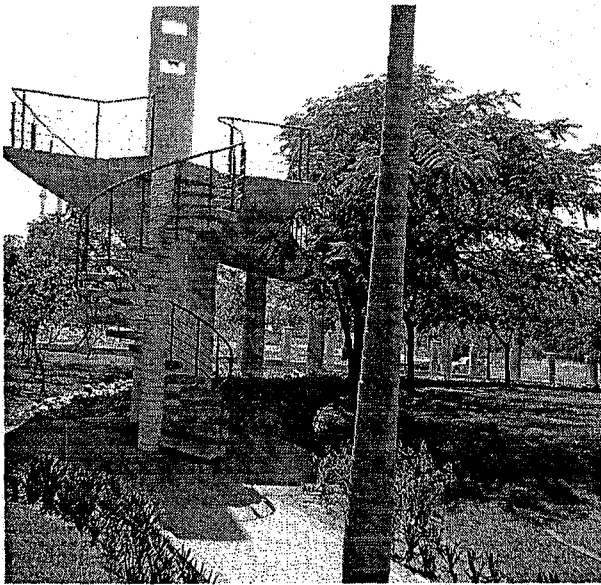


Plate 91 showing approach elevation

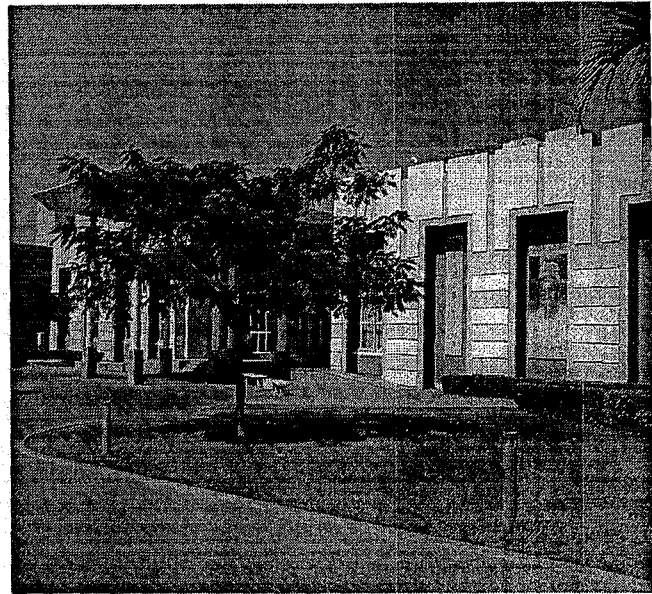


Plate 92 showing rear elevation

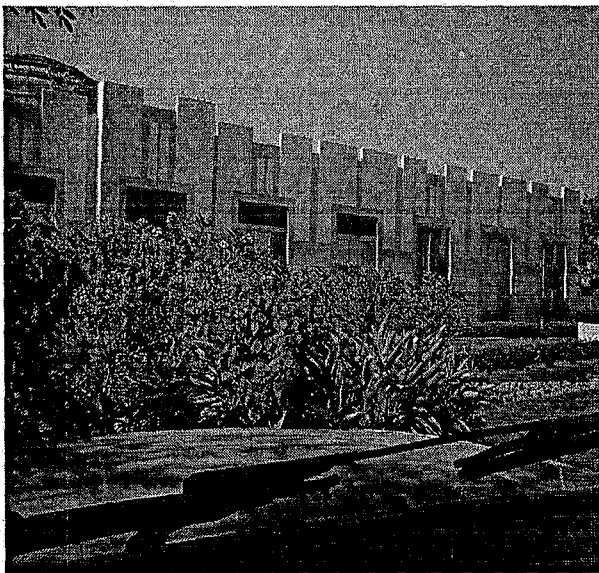


Plate 93 showing right side elevation

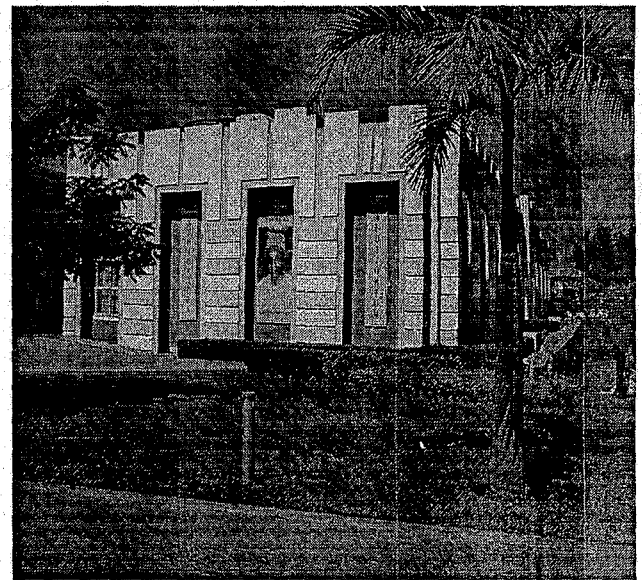


Plate 94 to 97 showing the various elevations of the women Centre

Plate 94 showing approach elevation

Plate 95 showing entrance



Plate 96 showing interior

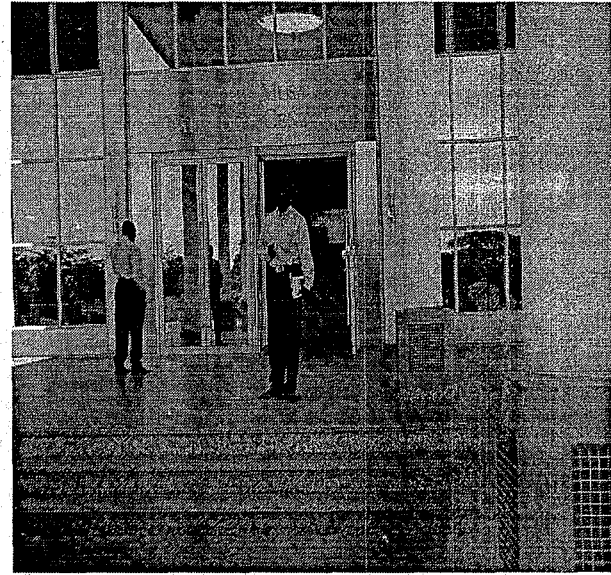
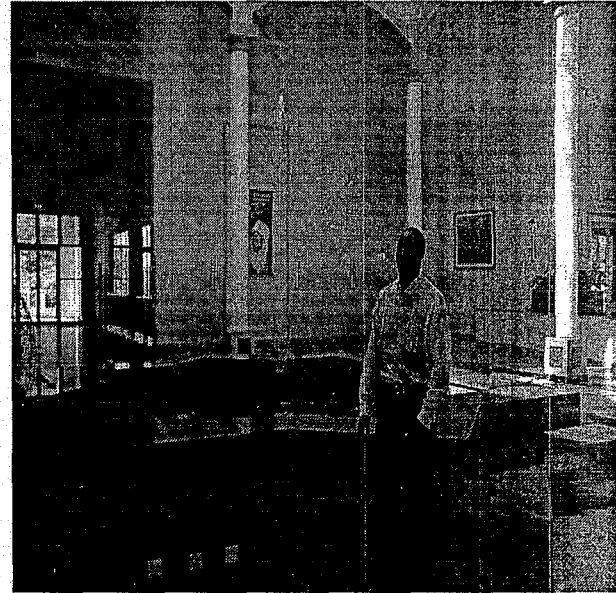


Plate 97 showing the fountain in the covered court y.



Source: Author's research

Plate 98 to 101 showing the various elevations of the women Centre

Plate 98 showing area perspective

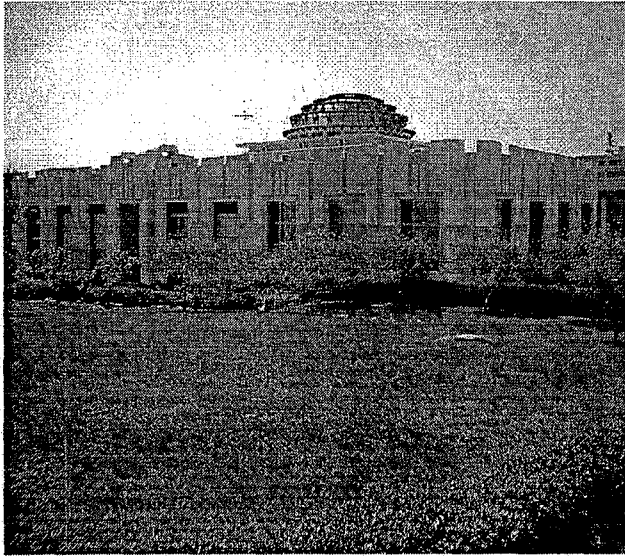


Plate 99 showing tastefully treated court yard

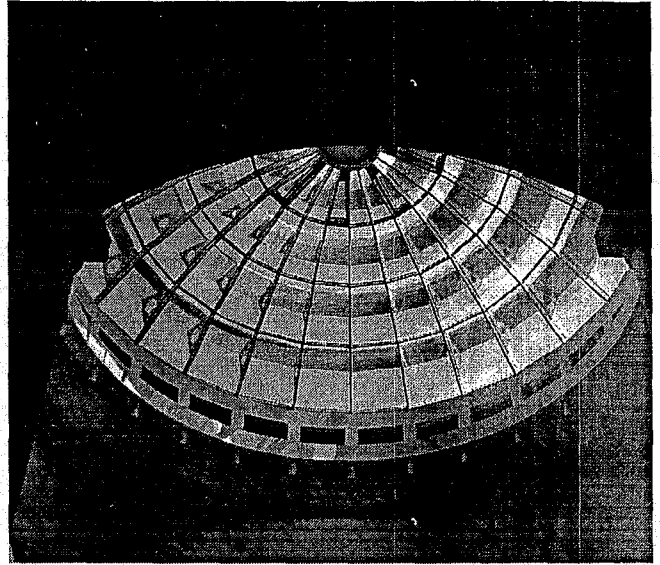


Plate 100 showing orders in the interior



Plate 101 showing the bridge



3.3.5 CASE STUDY FIVE: VICTORY YOUTH CENTRE, WELLINGTON

Victory Youth Centre is located in the countryside and easily access from the main road leading to the site that is, the junction of the old and new A5 roads. The youth centre is adequately equipped with necessary facilities such as changing room for boys and girls, hall for variety of activities such as drama and music, judo and table tennis also work room, general purpose room, offices and other necessary things needed.

The Youth Centre has entrances and driveways along with several outdoor courts and play areas. It has a main drop off which allows children or adult to go directly into the school and some convenient stairs to a courtyard, to the games areas or main entrance and lobby.

The rectangular forms of the four-story building produced an aesthetically balance and a well celebrated entrances.

On the ground floor of this building are the staffs working areas, indoor games, service department, library, etc. The finishes in the floors are done to individual specified required floor finish and on the walls are ceramics and quality texcot paint with balanced colour combination. The circulation is through linked corridor and stair case for vertical circulation.

(i) Merits

1. Landscape environment.
2. There are good outdoor recreational facilities.
3. There is good use of both soft and hard landscape elements.

(ii) Demerits

1. High noise effect.

3.3.6 DEDUCTION

All the case studies carried out have one thing in common, the interest of youth are well taken care of in term of satisfying their social need. Architecturally, the Abdulsalam Abubakar Youth Centre, Minna was purposely built and has some elements that will be used in the proposed design of the Youth Centre, Abuja. The Nigerian Youth Camp, Ilorin has a very beautiful auditorium that satisfied the indoor spaces and vocational activities. The Women Centre, Abuja has some unique vocational areas that could serve as a place to start for the proposed centre. Yaradua Centre is renown for it excellent interior finishes that will serve as a standard for this centre. Lastly, Victory Youth Centre, Wellington Salop is a successful one. The facilities provided are enough for the teaming number of users.

The proposal will take care of the aforementioned problems in the case studies and also make use of interesting elements observed.

3.4 Data Collection

The geographical entity known today as Abuja came into existence by Decree No.6 of February 5th 1976. Until the creation of this new Federal Capital Territory (F.C.T), Lagos had remained the capital of Nigeria. The ownership, control, governances of the land is the sole responsibility of the government.

The increased tempo of economic activities and the influx of people into Lagos were not matched with corresponding increase in the low level of infrastructural development and services necessitate the movement to Abuja. In 1975, the then federal military government under the late Gen. Murtala Mohammed setup a panel to look into

the issue of relocation of the Federal capital. The panel submitted its report recommending Abuja for the centrality with easy accessibility from other parts of the country, and is to promote private participation in commerce and industry and thereby enhancing the economic power of residence of Abuja. Commercial enterprises are mainly retail outlets for manufactured goods in the neighbourhood centres, districts and market. There are also small-scale industries and rural estate enterprises in and around the city.

3.4.1 BACKGROUND OF LOCATION

Abuja is a city whose creation was achieved by the people who craved for unity. It is owned not by individuals or groups of individuals, ethnic groups or states but by all Nigerians. The various participating ethnic groups from all over the country attest to the fact that it is a cultural melting point devoid of a distinct and custom or tradition.

Culturally, one can safely say Abuja has no specific culture, but the cultural heritage of the nation is adequately represented.

3.4.2 TOPOGRAPHY AND ECOLOGY

The general relief of the Abuja area is undulating. Being located along the edge of northern Plateau, and within the sedimentary basin of the Niger Trough, the area is marked by gentle rises and falls of the land. There are numerous Inselberg rocks scattered around the land much as there are dotted large outcrops of rock around which form an interesting and spectacular shapes.

The central city of Abuja is situated in the Gwagwa plains, which is on the north eastern section of the F.C.T. The general elevation of the plains is about 365m in the west to 610m in the east within the area of the new city.

The average slope of the plain is less than 15%, with steep-faced inselbergs and other granitic clusters occupying about 8% of the total plains. The Gurara plains and other plains; like the Iku-Gurara plains, in the west, the Robo plain in the south are surrounded by chains of hills and ridges. The land is typified by gentle undulating terrain interlaced by riverine depressions. Inselberg and other granites clusters occupy a reasonable percentage of the total plain areas which could be rocky in varying sizes and occurring as isolated masses or in groups. These plains include older Precambrian unit of metamorphic, sedimentary rock and a system of younger Precambrian igneous, which includes;

- 1 Metamorphic rock: This includes biotite, muscovite, and schist, megacrystic that underlie majority of Abuja area and avaritia gneiss.
- 2 Igneous rock: This includes granite, large intrusive masses as outcrops in Gwagwa plains, rhyolite, small intrusive surrounded by porphyritic gneiss.
- 3 Sedimentary rock: This includes alluvium in stream-bed located throughout the city. It consists basically sand gravel beds and deposits of clay.

3.4.3 VEGETATION

The vegetation of the area consists of the rainforest on the western part and the typical wooded savannah and grassland to the eastern part of the site. Some of the notable economic trees include the Iroko, Mahogany, locust beans, obeche, baobab and neams that are used for medicinal purposes. It is classified as high savannah with trees of moderate height. The tree stratum is less dense than that of the savannah woodland, but more substantial than that of the shrub savannah. Shrub vegetation occurs on flatter plains and insulating terrain.

3.4.4 CLIMATIC CONDITION.

The Federal Capital City, Abuja experiences two major annual variations in weather common to Sub-Sahara African Tropics, the dry season (summer) and the rainy season (winter).

3.4.5 RAINFALL

The rainy season begins from mid march and runs through September to early October, with an average rainfall of 1.632mm annually as can be seen for 2001-2004 in Table 1.0 below.

TABLE 1.0 SHOWING MONTHLY TOTAL RAINFALL (mm) 2001-2004

	JAN	FE B	MA R	APRI L	MA Y	JUN E	JUL Y	AU G	SEP T	OCT	NOV	DE C
200 1	0.0	0.0	26.7	56.3	118. 9	114. 5	221. 3	198. 9	417. 4	153. 5	1.4	0.0
200 2	0.0	0.0	2.5	70.5	238. 0	172. 5	215. 7	235. 1	326. 9	140. 0	+RAC E	0.0
200 3	+RAC E	0.0	27.6	76.5	166. 6	166. 6	186. 9	225. 0	247. 7	198. 3	9.5	0.0
200 4	0.0	28. 7	9.9	86.5	102. 1	102. 1	310. 0	181. 4	196. 1	322. 0	0.0	0.0

Sourced: geographical information centre FCDA.

The climate is quite favourable, the soil and hydrology permits the cultivation of Nigerian's staple crops.

The dry season, sunshine is characterized by bright sun ray beginning from October and runs through December to march of the following year. The harmattan, with

occasional haze occurs between November and early February. During the harmattan period, weather may be very cold at late night and the early hours of the morning.

3.4.6 Temperature

The mean maximum temperature in the city is 37° between March and June with lowest minimum temperature usually in December and January

3.4.7 SUNSHINE SOLAR DATA

Abuja, according to Mabogunje (1977), is exposed to 2500 sunshine hours annually. During the dry season, the monthly radiation i.e. the amount of sunshine follows the general trend of increment over 275 hours. As the wet season approaches, the sunshine hours decrease intensively. The amount of isolation gives rooms for the use of materials which can reflect or absorb solar radiation.

3.4.8 ECONOMY AND COMMERCE

Like in various places there are range of business, household and personal services supplying goods and services to the capital city. These include:

- 1 Traditional and modern establishment in form of retails.
- 2 Private commercial core, sectors, centres and district centres
- 3 Large scale modern retail shopping outlets

Specialized business services banking insurance, real estate, etc.

3.4.9 DEMOGRAPHIC DATA

The demographic characteristic of Abuja city from FEDERAL CAPITAL DEVELOPMENT AUTHORITY (FCDA) Information Unit reveals that "In December 1991 after 15years of planning and construction, there is steady and growing trend of people movement into the city.

Before the creation of Abuja as the nation's capital city, the area was sparsely populated. As at 1963, population census, the number was put at 109,000 and 1977, the number rose to 125,000 respectively but with the commencement of the physical development and movement of people began in 1982, the population as continued to rise. The International Planning Association (IPA) designers of the master plan of the city projected the population of the territory to hit 3.1 million mark after completion of the final development phases.

However, as at 1991 National population census available in March 1992 it stood at 378,671, 800,000 in 1997 and at present, estimated population is at 1.5 million. It is projected to increase to 3 million by the time the last development phase will be completed with the youth comprising 35% of the populace.

3.4.10 HUMIDITY

The dry season commences in October and the relative humidity is as lower as 140mm between December and February, it increase by about 25% in March to November as can be seen for 2001-2004 in Table 1.2 below.

TABLE: 1.1 SHOWING RELATIVE HUMIDITY (%) 2001-2004

	JAN	FE B	MA R	APRIL	MA Y	JUNE	JULY	AU G	SEP T	OCT	NOV	DE C
200 1	40	53	55	163	80	81	86	87	85	83	65	54
200 2	56	51	66	64	79	83	86	87	87	87	57	53
200 3	48	23	49	71	80	83	86	86	84	85	96	53
200	44	40	37	61	77	81	86	88	85	84	67	52

4													
---	--	--	--	--	--	--	--	--	--	--	--	--	--

Sourced: geographical centre (GIS)

3.4.11 WIND GUST

Tropical hinterland climate is very associated with very high temperature. Mean monthly maximum temperature range from 28°C – 32°C. The early months of the year and later parts of the year are hotter than the middle months. The long dry season months are generally hotter than the rest of the seasons.

3.4.12 SOCIO CULTURAL LIFE

Abuja, land of vary dramatic hills, jotting skywards like fingers pointing to the creator is 250sqkm, it consist ethnically, of the Gwari which form 64.9%, Kor 8.3% Gwaqandara 7.9%, Gada 6.5%, Hausa 4.9%, Fulani 4.6% and other groups following 2.9%. These are the original settlers who make up the population. Majority are in the four area councils of the territory while the new dwellers dominate the city.

The philosophy by the late General Murtala Mohammed as regards the establishment of the new city is that, it is not within the control of any ethnic group in the country, it is a land for all Nigerian a symbol of oneness and unity and to be free from political, constitutional and administrative confusion.

3.4.13 TRANSPORTATION AND TRAFFIC FLOW

There are two distinct categories of transportation services which are provided to ensure a viable and efficient Federal Capital City. Provision of transport means and facilitates which deal with the daily functioning of the capital city via road streets public transport services.

The transport services allow interaction between the capital and its environs. The use of a linear spine feeder system makes it possible for a series of contacts and exists to allow buses to loop off the spine and provide direct services to districts and then return to the spine. The street pattern allows maximum flexibility in transit service within the sector as well as providing high transit services between sectors via the transit spine. These allow easy ingress and egress to and from Abuja. Within the town there is ease of movement as the road network in the town links up with each other very well and provides access to all the nooks and crannies of the town. The availability of these good road networks many a times eschews the possibilities of heavy traffic even at peak periods except in a few cases.

On arrival to Nnamdi Azikiwe Airport Abuja, there are available airport taxis. Prices range between N 2,000.00 to N2, 500.000. Intercity movement in Abuja could range between N 100 to N 250 depending on the distance.

3.4.14 EXISTING LAND USE AND FUTURE TREND

The planning process which shaped the capital city with its objectives and programs led to the definition of basic organizational structure. This was done in phases, under the auspices of the federal capital Development Agency (FCDA) which regulates land uses and other building codes within the region. The original master plan of Abuja is adhered to in most areas, in areas where this is not the case, the capital city under the leadership of the minister, Nasiru El-Rufai is out to correct as much odds as it can to see that the master plan is adhered to in all parts of the city. The existing land uses in the FCT include residential, recreational, Administrative, agricultural, religious and open spaces. The central area is home to most governmental agencies and buildings while

other zones have mixed land uses. Presently out of the 800sqkm of land that Abuja occupies, only 256sqkm has be put to use. This still gives room for expansion on areas that are habitable, because high lands occupy about 25,500 hectares of land with very rugged terrains that cannot be built on. Some of the land uses and their percentages are shown in table below

Table:2 showing the land use analysis for Abuja as originally planned.

S/NO	CATEGORY OF LAND USE	LAND BUDGET (HECTARES)	PERCENT AGE TOTAL (%)
1.	Government Institutions	500.00	1.96
2.	Services (Hospitals)	891.00	3.49
3.	Light Industries	920.00	3.61
4.	Infrastructure	1840.00	7.22
5.	Residential	12486.00	48.79
6.	Commercial	561.00	2.20
7.	Open Spaces And Recreational Areas	8300.00	32.55
	TOTAL	25498.00	100.00

(Source: federal capital development authority, FCDA)

3.5 SITE ANALYSIS

Site analysis also provides some information below, above and on the ground which are very important as it aid in the planning of functions, stability, cost and balanced aesthetics. Before the design and construction of a building, it is imperative to carefully consider the implication of such proposal's physical context, i.e. the building site. The geographical location, climatic condition, topography, orientation and adjoining

properties should all influence the overall building relationship to the ground plane and its interior spaces design and layout.

Correct location of a building can also help to control natural lighting, heat, view, noise and other environmental elements. Site selection is determined by functions and design considerations of a project, also at this stage cost factors are monitors. The two major factors to be considered in site selection are the micro and macro factors.

3.5.1 INTRODUCTION

The site proposed for the national youth centre is located in Maitama district of the metropolis. The site is banded in the south by arterial road outer northern expressway, in the north by Boulevard Street, on the east, the proposed sport complex and in the west residential plots under development.

3.5.2 CRITERIA FOR SITE SELECTION

The criteria for the selection of a particular site for development are based principally on the design consideration and functions which are to be performed within the designed space of a particular facility. The criteria also covered cost implication of excavation and filling, which are determined by the nature or relief of a particular site.

The success therefore of a project depends among other factors, on the analysis of the site. This gives detail of the site's nature as to knowing the hindrances that could be encountered in the cause of construction. Other benefits could also be achieved at the design stage e.g. the design could be done so as to complement the site in a homogeneous nature like the falling water by Frank Lloyd Wright.

Site analysis also provides some information below, above and on the ground which are very important as it aid in the planning of functions, stability, cost and

balanced aesthetics. Before the design and construction of a building, it is imperative to carefully consider the implication of such proposal's physical context, i.e. the building site. The geographical location, climatic condition, topography, orientation and adjoining properties should all influence the overall building relationship to the ground plane and its interior spaces design and layout.

Correct location of a building can also help to control natural lighting, heat, view, noise and other environmental elements. Site selection is determined by functions and design considerations of a project, also at this stage cost factors are monitors. The two major factors to be considered in site selection are the micro and macro factors.

The micro factors which include:

- 1 The marked out area on the city master plan
- 2 Good transport and traffic network
- 3 Network of water, sewage drains, drainage, electrification, landscape preservation and existing relief.

The macro factors also include:

- 1 A site location that is well accessible
- 2 Proximity to the city for inter-intra sector travel
- 3 A site located where it can be visible
- 4 A relatively fertile soil.

3.6 LOCATION OF SITE

Facilities or infrastructure established on a particular site is related to the importance of such facilities to the environment in which they are situated. This choice of site is determined by the following:

Zoning: The site should be in an area exclusively reserved for such building.

Topography and geology: The slope of site should be relatively gentle so that courtyards and fields do not significantly shape or require costly cut and fill. This factor is also necessary when one considered the handicapped youths who are expected in the centre.

Hydrology: The water task at the site should be adequate to support plant life and other landscaping elements. The water table should not be less than 800mm.

Ecology: The green area should be adequate to add to the general landscape of the sites. The sites should have trees that will help in reducing the noise level and serve as wind breakers.

The site proposed for the national youth centre is located in Maitama district of the metropolis. The site is banded in the south by arterial road outer northern expressway, in the north by Boulevard Street, on the east, the proposed sport complex and in the west residential plots under development.

3.6.1 SITE CHARACTERISTICS (SURVEY)

The site is relatively flat with gentle slope southward. As stated earlier on, site inventories include object or things that could be observed above, on and under the ground. In the case of this site, there is no obstruction; the air above the ground is free of high tension cable. The land presently use for farming with scattered shrubs. There is no visible construction going on presently on the site even though the surrounding is gradually being developed by both government and private owners.

3.6.2 ACCESS AND CIRCULATION

The site is accessible from the south by arterial road outer northern expressway and from the north by Boulevard Street. The availability of utilities such as underground

telephone cable, underground water pipe electricity and good road will facilitate easy construction, easy site location and easy supply of materials. Since there is a proposal for sport complex in the adjoining site of the master plan which has not been executed, when they are put in place, the Youth centre will also have the privilege of using some of the sporting facilities of the complex.

3.7 UTILITIES

The site will be drained through the main drainage along the highway. The design pattern for the site will be divided into the following:

- i. **Tertiary collectors:** This will make up the various units of the centre.
- ii. **Secondary collectors:** This is intended to collect water from the various units, which will be laid along the earth and footpaths.
- iii. **Primary collectors:** They are intended to receive water from secondary collectors.
- iv. **Main collector:** These are existing open channel as part of the mains.
- v. **Sewage network:** These are existing 600mm diameter mains on the highway (road). The mains usually drain to a sewage treatment plant of daily capacity of 425,000m³.

The traffic flow along the high way is relatively high because it links so many important areas such as AYA, Maitama and Mabushi flyover. The noise from the traffic will be reduced to the minimal by introducing trees around the centre.

Lastly, the success of any design also depends on the exterior appearance of the building in these regards, aesthetic appreciation is of considerable important on the site by concentrating on the design space using the relief and incongruent features.

So, the site has exciting visual potential which can enhance landscaping element to give pleasant environment to the users, visitors and passer-by.

3.8 SCENERY AND MAN-MADE FEATURES

As earlier stated the site is relatively flat with gentle slope southward. The vegetation is typical of savannah; there is no much alteration to the soil so it will accommodate a variety of tropical plant species

3.9 PLANNING REGULATION/ SITE DEVELOPMENT CONTROL

The soil and sub-soil are made up of ferralitic gneiss associated with deep granitic formations. The soil is firm and dense with appreciably high bearing capacity. There are two dominant wind in this area, the southwest monsoon wind which brings rain. The wind creates a cooler microclimate atmosphere compared to northern east trade winds. This wind is more prevalent around the months of April – October and sometimes even earlier that is, around March. The second type is the northeast trade winds, which brings harmattan and dust particles which settle on building surfaces. It is prevalent more around October-May, it is usually very harsh and dry. The site is usually exposed to over 2000 hours of sunshine annually, especially during the months of November to March. The sun rises as early as 6 am from the east and set in the west around 5.30pm. There is usually slight variation from time to time depending on the season and weather. The area experiences heavy rainfall from the months of August to September makes good drainage pattern imperative. Average temperature is about 27°C for the most part of the year with minimum relative humidity of about 10% for the same period. It is therefore necessary to provide for adequate cross ventilation.

SPACE	UNIT (M ²)	SPACE ALLOCATION (M ²)
Lecture Centre		
Waiting	16 x 10m	160 m ²
Lecture room	12 x 10m	120 m ²
Audio visual	4x10m	40 m ²
Shops	24 x 5m	120 m ²
Lift	4x5m	20 m ²
Stair hall	4 x 6m	24 m ²
Offices		
Lobby		343 m ²
G. counseling	12x7+16m	100 m ²
Void	4x15mx2	120 m ²
IT Centre	12.4x15	163.68 m ²
Library	16x10m	160 m ²
Store	4x3mx2	18 m ²
Toilets	4x4.5mx2	36m ²
Computer room	16 x 10m.	160 m ²
Security stand	12.4x15	163.68 m ²
Shops	4x5m	20 m ²
Lift	24 x 5m	120m ²

Stair hall	4x5m	20 m ²
Lobby	4 x 6m	24 m ²
Curt yard		143 m ²
Library	12x5mx2	150 m ²
Mult/hall	12.4x13.2	163.68 m ²
Store	16x7+25x18m	576 m ²
Toilets	4x3mx2	24m ²
Service room	12 x 10m	10m ²
Shops	4x5m	20 m ²
Stair hall	4x5m	20 m ²
Lobby	4 x 5m	20 m ²
National Youth council		343 m ²
Conference room	8x10m	80 m ²
Asst. Director; offices	8x10m	80 m ²
Offices		
Directors offices		
Store	8x10m	80 m ²
Toilets	4x2.5mx2	20 m ²

Table: 4 SCHEDULE OF SPACE ALLOCATED TO EACH UNIT IN THE YOUTH CENTRE.

SPACE	UNIT (M ²)	SPACE ALLOCATION (M ²)
Accommodation		
Reception	8 x 3.5m	24.5 m ²
Shop	4 x 5m	20 m ²
Kitchen	4x5m	20 m ²
Common room	8 x 5.2m	45.5 m ²
Stair hall	4 x 6mx2+3x4.5m	61.5 m ²
Lobby		143 m ²
Rooms	4x4.5mx40	630 m ²
Toilets	2x1.8mx40	144m ²

TABLE: 5 SCHEDULE OF SPACE ALLOCATED TO EACH UNIT IN THE YOUTH CENTRE.

SPACE	UNIT (M ²)	SPACE ALLOCATION (M ²)
Reception	8x 4.5m	34m ²
Courtyard	4 x 10mx2x2	160 m ²
Service room	4x5m	20 m ²
Catering	8 x10m	80 m ²
Change room	4x4m	16 m ²
Stair hall	4 x 6mx2	48 m ²
Lobby		54 m ²
Office	4x3.5mx4	56 m ²
Store	4x5mx4	80 m ²
Wood work	8x10m	80 m ²
Toilet	1.2x1.8mx18	38.88 m ²
Electrical	12x10m	120 m ²
void	5x7mx2x2	140m ²
Craft	8.5x4m	34 m ²
Leather work	12x10mx	120m ²

4.3 DESIGN REQUIREMENTS

To achieve the objectives stated above these units will be set up in the centre

Administration, recreational facilities, youth hostels, retreat centre, vocational ,training centre, catering facilities, ancillary facilities

For the purpose of this design, it is necessary to explain each section:

4.3.1 Administrative

This would house both the headquarters of the youth organization in Nigeria (National Youth Council) as well as the administrative nerve of the centre.

4.3.2 Recreational Facilities

A conception of game to leisure and not sport would be emphasized here. Games facilities would be provided which would be geared toward recreation rather than sports.

4.3.3 Youth Hostel

This would take care of the accommodation of a number of youth, retreat visitors and few of the centre's staff at subsidized rate.

4.3.4 Vocational Training Centre

This is a skill acquisition centre where the youth are expected to learn various trades and vocational works such as fashion designing, tailoring, electrical repairs, building, art and crafts and the others.

4.3.5 Catering Facilities

Provision would be made for catering services for the youths, staff and visitors at a subsidized rate.

4.3.6 Auxiliary Facilities

This unit would facilitate smooth daily functioning of the complex. They include services such as sewage, water, air conditioning, electricity, telecommunication service and general maintenance of the centre.

4.4 MATERIAL AND CONSTRUCTION

The process of selecting the right materials for the construction of any building calls for a careful consideration and has strong influence on the beauty of the overall design. Therefore, the materials for construction in this context should be economical, functional and should satisfy the aesthetic requirement of the building. The material that will meet these three functions are to be used in the youth centre, such materials will be integrated to satisfy the quality of good architecture communication, firmness and aesthetic. Because of comfort, the internal surfaces will receive various finishing materials. The main building materials are chosen and used on distinct characterized properties such as strength, stiffness, durability, reaction to chemicals, frost action and all agents of denudation. Materials are also considered based on their economic, mechanical and aesthetic values so as to provide a structurally balanced building.

The attractiveness of outdoor recreation in terms of design, planning, entertainment and aesthetic use of material for finishes contributes immensely to its economic viability hence, these basic materials are employed in the design:-Concrete, Stone, Steel, Masonry, Non-ferrous metal, Plywood laminated timber, Glass, Wood, Plastic and Paint.

The floors are of reinforced concrete slabs with granolithic finishes. Bitumen layers are used on the screeded roof slab to disallow entry of water into the building.

i. Foundation

The foundation of a building constitutes its substructure and acts as an anchor between the building and the ground upon which it is built. Practically, the use of reinforced concrete base for walls and columns is described as the foundation.

Due to the geology of the site and its bearing capacity which is noted to hold ground pressure up to 65KN/m, strip, pad and steel stanchion foundation will be used for the project.

ii. Structural System

Waffle grid structural slab with reinforced concrete beams will be used since it has the ability to span large areas without intermediate support and providing aesthetic effects in the interiors. The beam through the column carries the structural load of the building.

4.4.1 Vertical Structure Elements

i. Walls: Walls are of 230mm x 450mm x 150mm hollow sandcrete block work and fixed glazed aluminium panels are to be used in both external and internal walls.

The external wall receive reflective materials as finishes with the interior wall of cement and sand rendering with texcots finish and white glazed wall tiles in toilet generally up to lintel level.

ii. Column: Columns were used predominantly in the design together with the two-way waffle grid they form the structural framework of the building. The column

were spaced at an interval of 6m x 9m they constitute the load bearing vertical support element of the structure.

- iii. **Doors:** These are openings in a wall through which people can have access into the building. All external doors will be of anodized factory glazed aluminium frames and 44mm plywood faced flush doors in steel frames in offices, stores, lavatories etc. Except in work shops steeldoors will be used.
- iv. **Windows:** This is to allow the passage of daylight and air into the interior of a building. The clear glass is used to admit the natural day lighting and still gives the aesthetic quality desired. It also allows for a view of the outdoors environment. Double glazing is employed using regular plane glass with temperature glass to reduce the green house effect within the structure as well as trapping the heat along corridors.

4.4.2 Roofing System and Fittings: The roof system to be employed is steel roof and reinforced concrete roof.

- i **Roof Coverings:** The roof are to be covered with long span aluminium corrugated roofing sheet on steel purlins, it is chosen because of its light weight and does not progressively corrode like steel. It has long life of and requires little maintenance. it has an attractive appearance that does not deteriorate due to weathering.
- ii **Parapet Wall:** All the roofs are hit fan inside thus making external walls to be raised above the level of the roof. This will be subjected to rain, frost and wind hence it will be protected by treating the wall with copper or aluminium flashing to prevent water saturating the wall.

iii Fittings: All fittings in general shall be mounted as requires on walls and ceiling.

The fitting is selected in such a way to contribute to the interior aesthetic and design of interior spaces.

4.5 LANDSCAPE AND EXTERNAL WORKS

This is concerned with the various external works provided in connection with buildings, apart from drainage and other underground services. They consist principally of roads, paved areas, footpaths, landscape work (soft) fencing and gate.

The roads, parking lots are finished in asphalt with precast concrete elements such as kerbs and slabs for landscaping (hard landscape).

The main function of the kerbs are to resist the lateral thrust of the carriageway, to define carriageway limits, to direct the flow of surface water to gullies and to support and protect footpaths and verges.

4.6 DESIGN SERVICES

Services are systems of arrangement that supply public needs. It would be described as expert advice given by an agent on the installation of appliances. This chapter dealth with the type of services provided in the design and how these services will be used to achieve a conducive environment for the Youth centre activities especially the indoor ones.

4.6.1 ELECTRICITY AND LIGHTING

The supply of power is the only dominicial feature upon which satisfaction of a Youth centre is based. Power Holdings Company of Nigeria (PHCN) would be notified of the estimated total electric power needed to conform to service availability and co-ordination of service connections. A transformer will be required to switch from the supply voltage to the service voltage. An automatic generator and solar panels will be

installed to check the inadequacy of power supply on the part of PHCN (Power Holdings Company of Nigeria).

(a) Lighting

This performs two major functions in a building;-

- i. To illuminate the interior and its content
- ii. To aid visibility in order to perform some tasks.

Lighting of an interior however depends on the task to which the interior space is to be used. Indirect cornices will provide high degree of uniformity in lighting. This is to display some interesting architectural effects in places like the multi-purpose halls, display room, garden and the retreat area.

4.6.2 VENTILATION AND AIR CONDITIONING

In achieving thermal comfort in the Youth centre, factors to be consider during the design and planning are: building location and orientation, choice of building materials and construction. The importance of ventilation and need for thermal comfort cannot be over emphasized considering the nature of the activity carried out and the climatic condition of the environment. The environmental comfort that may be controlled by mechanical system include the temperature of the surrounding air, the mean radiant temperature of surrounding surfaces, the relative humidity, air motion, dirt and odor. Moisture can be introduced into the air by natural means via the use of: trees, shrubs, pools, and flowers among others. Artificial means include: sprays, fountains and humidifiers.

4.6.3 DRAINAGE AND SEWAGE DISPOSAL

Sanitary drainage systems depend on gravity flow and will require large pipes and proper installation. Drainage systems have to be designed to provide an efficient and economical method of carrying away water borne wastes. In such a way as to avoid the risk of pipe blockage and the escape of effluent into the ground, they are drained into septic tanks and finally into the soak away pit.

4.6.4 WATER SUPPLY

This deals with the supply of water to the centre. It also relates to the treatment and discharge of soil water and water from the building. Water will be supplied from the water board and the supply should be in the right quantity and at the proper flow rate, pressure and temperature. The service pressure must be high enough to absorb pressure losses due to vertical travel and friction as the water flows through pipes and fittings and still satisfy the pressure equipment of each building fixture. As an alternative to this, overhead tanks shall be provided alongside boreholes: water sourced from the boreholes will be pumped mechanically to the overhead tanks, and efforts shall also be made to provide the site with treatment plant for potable water supply.

4.6.5 REFUSE DISPOSAL

Waste baskets and bins shall be located strategically for collection of waste in small bits. All the wastes will be collected on the site by refuse trucks, which in turn dump them into the incinerator where the refuse is sorted and recycled.

4.6.6 ACOUSTIC

This is defined as the science of sound including the production, transmission and control of its effects. The acoustic design of a place involves the reinforcement of desirable noise. Sound that could be generated as a result of different human activities in buildings such as the indoor games, multi-purpose hall and others alike have been sufficiently handled by the following ways:

- i. Independent slab shall be bordered on all sides by anti-vibration pad (AVP).
- ii. 24 hours noise pattern for the area shall be put into consideration.
- iii. Provision of large windows would also guard and regulate echo effects and reverberation in high head rooms in large enclosure.
- iv. Use of panel absorbers of fixed frequencies.
- v. Provision of carpet on floors of interior of low noise desirability.
- vi. Reverberation time for building shall be adequately calculated and used for acoustic purpose.

4.6.7 FIRE SAFETY

Fire safety is duly considered at planning stage with provision of early reached escape routes, which is well lit, ventilated and protected from fire and smoker accumulation. So, for effective fire control that may occur in the centre, both manual and automatic fire control devices shall be installed in form of smoke detectors, water sprinklers, fire alarms, sirens and fire extinguishers at strategic places. Also there shall be the use of fire retardant finishes and fire escape routes.

4.6.8 SECURITY / TELECOMMUNICATION

This is also an important factor in every organization. Security here means the safety of people's lives and property. For the purpose of this project security has been considered and implemented. Right from the gate there is a security point, within the Youth centre environment security shall be achieved by fencing the site boundary with high-level of wire fence with security devices such as cameras and movement sensors to detect any break-in. Telecommunication has to do with the exchange of information at a distance. Provision shall be made for phone communication facilities at strategic points where major activities take place.

4.6.9 MAINTENANCE

This is the work undertaken in order to keep, restore or improve facilities within and around the Youth centre, to keep services in a currently accepted standard and to sustain the utility and value of the facilities.

The life span of a building component depends on effective maintenance. Maintenance intervals vary depending on effect of weather over time and natural decay, normal wear and tear, and extent of misuse.

The Nigeria Building Association recommends all roofs should be inspected at one or two year's interval with a checklist or potential effects. Flat roof should be inspected annually. In areas of high pollution inspection may need to be more frequent. In electrical service installation, any wiring that is more than thirty five years old is out of date and should be replaced (NBA 1985). The expected life of wiring is twenty to thirty years. Light should be inspected at least every six months.

The expected life of lifts before refurbishment is twenty to forty years (NBA 1985). Suspension ropes however, have a life of only about six years.

Lifts should be checked every six months under a planned Programme. In plumbing service, overflow pipes and ball valves should be checked, periodically depending on frequency of use. Binds and channels in the pipe work should be inspected and cleaned yearly. Drains should be water tested every two or three years. Soak-away pit should be emptied periodically.

Air conditioning should be checked every six months and serviced annually.

The maintenance of this Youth centre shall be the responsibility of the management who shall employ adequate maintenance techniques as they deem fit. But it is recommended that effective landscaping in design planning is used and also planned maintenance which consists mainly of preventive maintenance and corrective maintenance and involves routine checks, servicing, cleansing, restoration of facilities and replacement as the case may be is employed.

4.6.10 SOLAR CONTROL

For thermal control, ideal orientation provides openings on north-south elevations. Shading devices may be used to reduce sun intensity through openings. Internal and external shading devices shall be used. Table 1.9 below is recommended vertical and horizontal shading angles for selected orientation for use in external opening as shown in table 6 below.

CHAPTER FIVE

5.0 DISCUSSION, CONCLUSION AND RECOMMENDATIONS

5.1 DISCUSSION

The concept for the centre is on visual and symbolic natural features bird (eagle) with harmonious distribution of forms to give the centre the identity desires by youths. This is further achieved through relationship among the centre's functions, forms and symbolism in the form of architectural character and through relationship of the built form to the natural environment context.

With various functions and activities all spread on the site there is need for a well functional site planning which will coordinate all the various activities; therefore the whole concept development takes into cognizance flexibility, efficiency, adaptation and expansion.

Zoning of activities, based on noise level is also employed with activities graded as public semi-public and private zones while other open spaces parks, courts would receive heavy planting of trees.

The study and design of youth centre extend beyond providing enough recreational facilities in order to keep youths off antisocial activities but to create a centre, which will first address youth restiveness and create fundamental recognition of youth needs in Nigeria. The basis of the design is to attempt to find architectural solution to the youth problems. Therefore, ideas and thoughts are brought together, examined, defined and fine tune to meet their aspirations.

5.2 CONCLUSION

Assessing the situation of the youths in Nigeria and their problems is such that deserved a devoted attention. The youth problems must be approached in more serious ways than it had been in the past. The fact that the youths are not only leaders of tomorrow or builders of today, but are also the future and hope of the nation, must be well understood. It is now time to start to encourage the youths to use their energy creatively. They should be encouraged to shun vices in any form and their moral boosted when spotted doing beautiful and courageous things. This is why all hands must be on deck for the overall development of the youth. The Federal Government should not just bring out policies on the youth but must ensure that the policies are established and effective.

This proposal through its concept and philosophy in attempt to provide architectural solution to some of the prevailing social vices among the youth, has worked through the use of architectural forms and effective landscaping elements to create a centre for learning skills, information technology, retreat centre, social centre and a place where they can independently think and invent new things. It is encouraging to note that good landscaped environment help in getting the mind refreshed, by reducing stress and tension, and give room for renewed mind set for a new productive task. It happens to be a secret discovery about health and physical conditions. It can also be observed from this project report that, when elements of landscaping are identified and employed effectively, it gives psychological happiness and satisfaction, balance human growth and creativeness, better learning environment, better physical condition or complete physical states of mind. It also improved social relationship, better attitude to life and aids greater

emotional stability. Although, landscaping may not be able to proffer solutions to all the vices of our society, it does have a significant role to play by providing serene environment where minds can positively be redirected to the prevention of anti social behaviors of the youth.

It is greatly believed that this edifice will be a place or avenue where developmental programmes for the Youths will be implemented and also serve as centre for skills acquisition and policies implementation for the development of the young minds.

5.3 RECOMMENDATION

The main objectives of this proposal is to provide a conducive centre where the hopes and aspirations of Nigerian youth can be fully realized. This proposal, through its concept and with the philosophy of enhancing communities by design, fulfilled its goals, by creating a centre for learning new skills, handcraft and interactive session with other youth. This centre also serves as a place where they can independently demonstrate their talents or compete favourably with their counterparts in any part of the world. The youth with their high imaginative abilities requires a conducive environment where their dreams can be achieved.

Youth centre facilities calls for constant maintenance of all the elements, either in structures or spaces. Lawn should be trimmed low, flowers pruned to suitable heights, paintings of structures from time to time and before providing for recreational facilities, the need and interest of the people should be taken into consideration, sizes, types and numbers to be provided should also be part of the analysis. There should always be a continuous provision of innovative ideas into new areas but participatory ergonomic principles should be applied.

REFERENCES

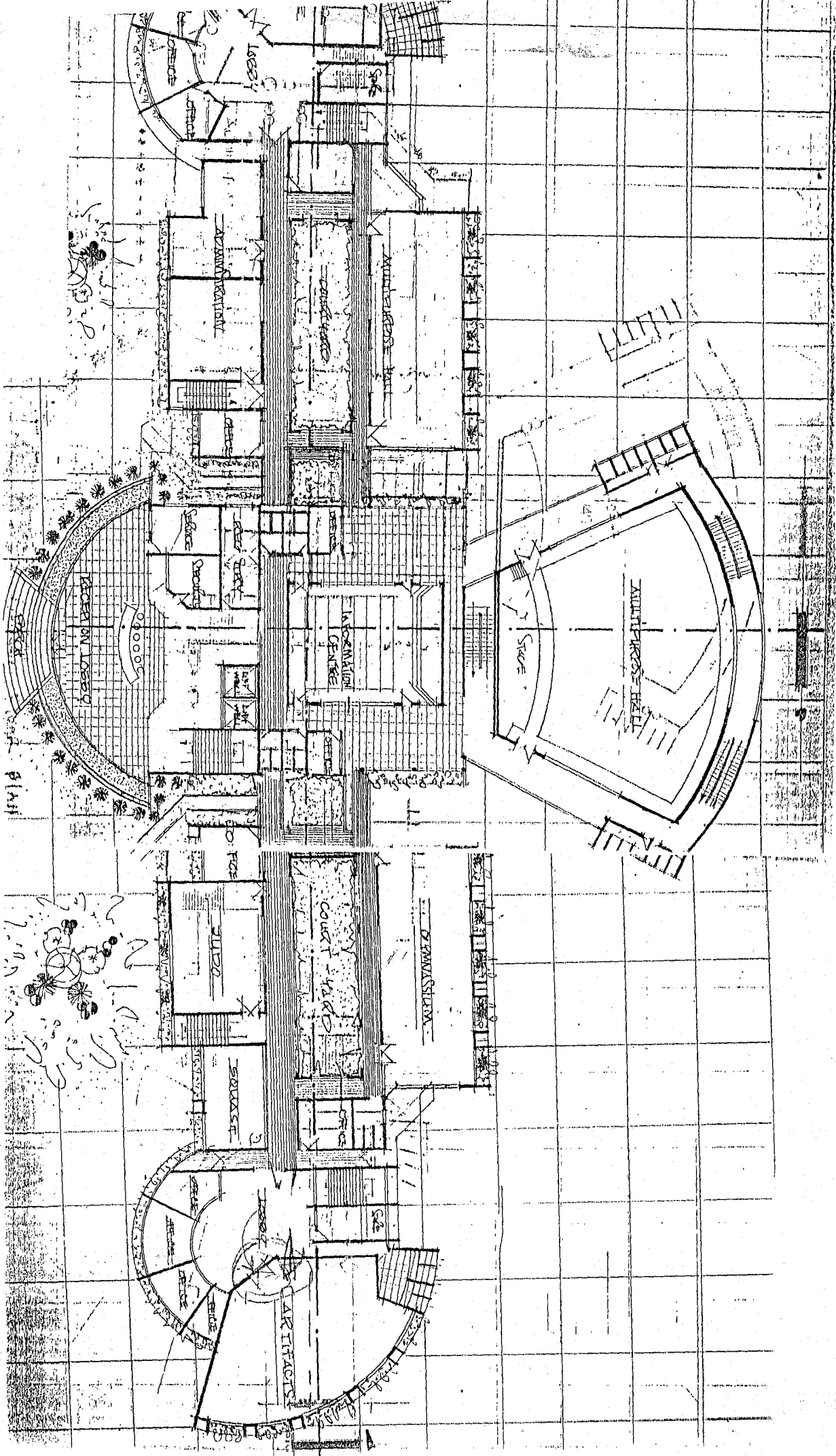
Akinbode J.O. (1971), *Guidance and Strategies for Handling Adolescent and Youth*.
University Press Limited. Nigeria

Dada J. A. (1996) *Certificate of competence for Youth leaders*.
University Press Limited. Nigeria

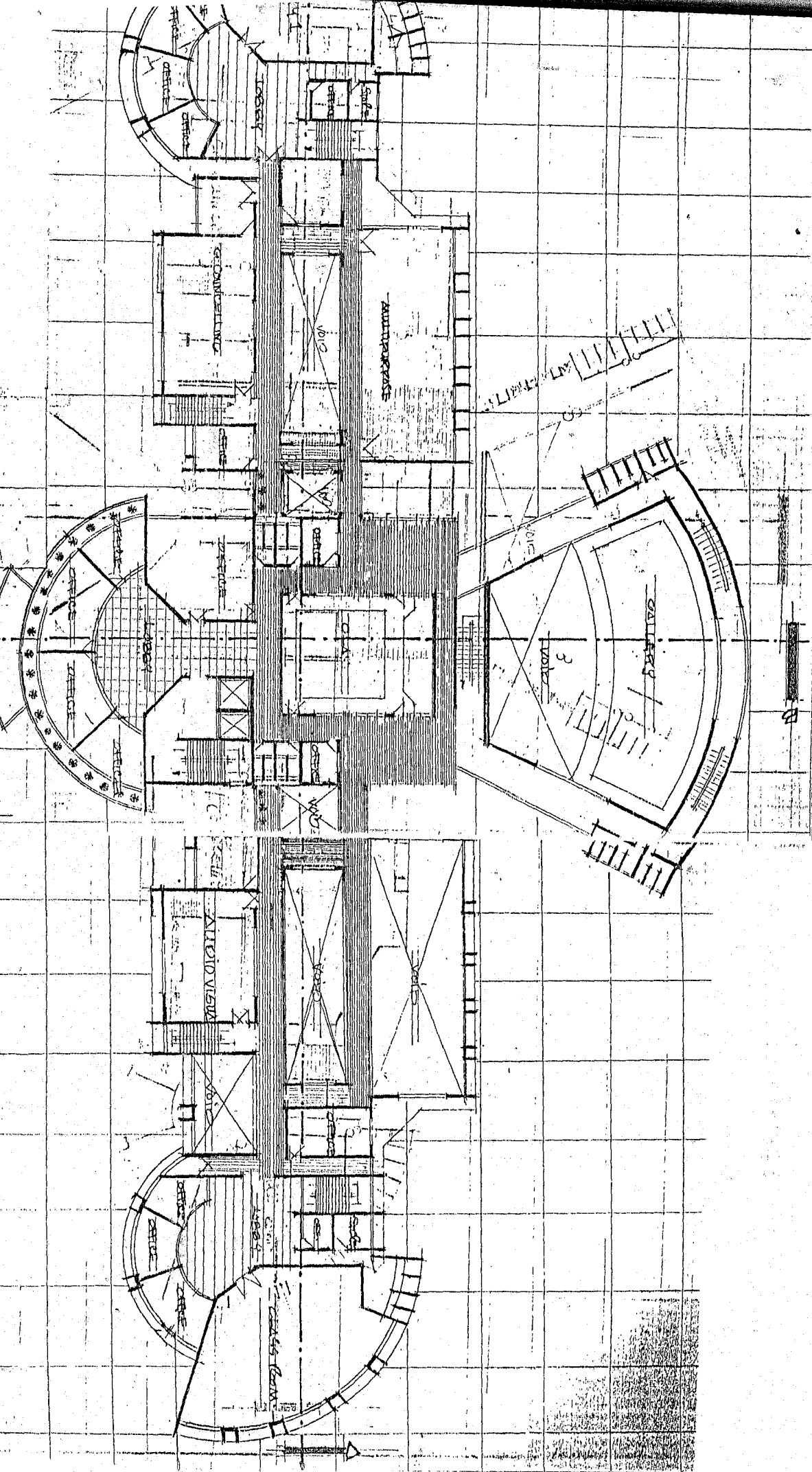
Edward T.W. (1994) *Concept source of book*. New York; Aps Publications,
Inc.

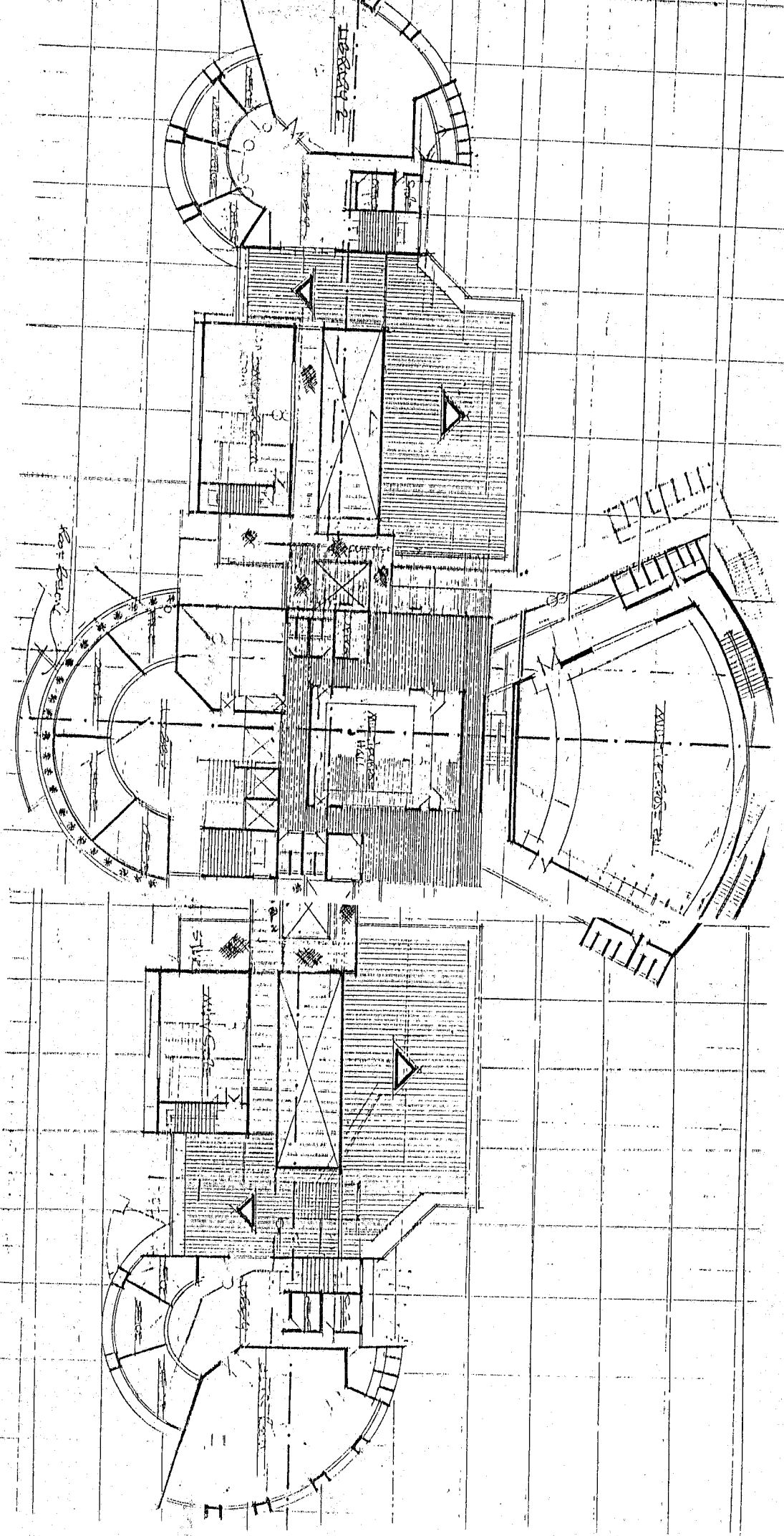
Eric, G.M. (2001), *Youth centres facilities and maintenance*, Lewis and Zimmerman
Associate, inc. London.

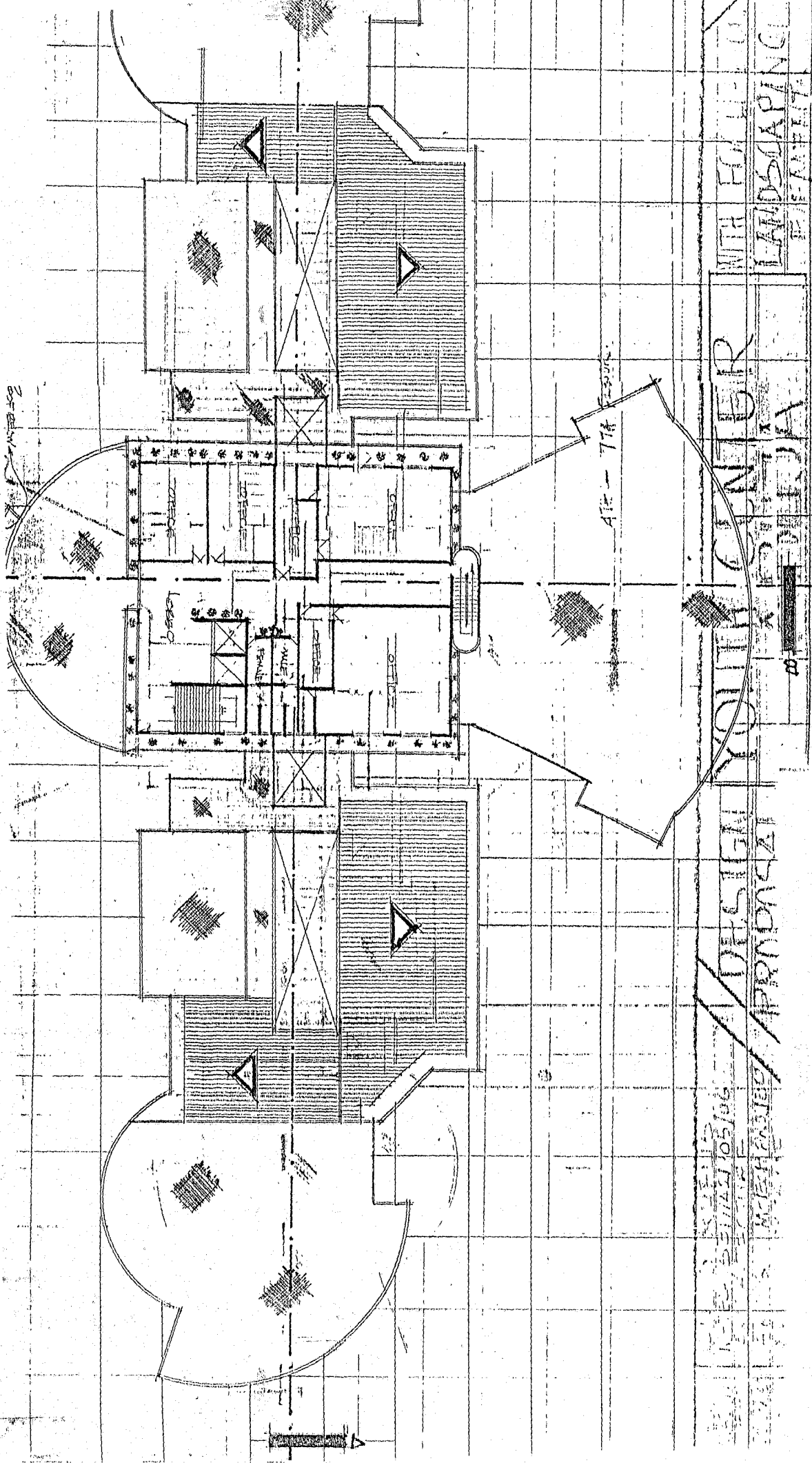
Oladimeji S.O. (1998), *Rehabilitation of Youths*. NISER publication,
Ibadan Nigeria



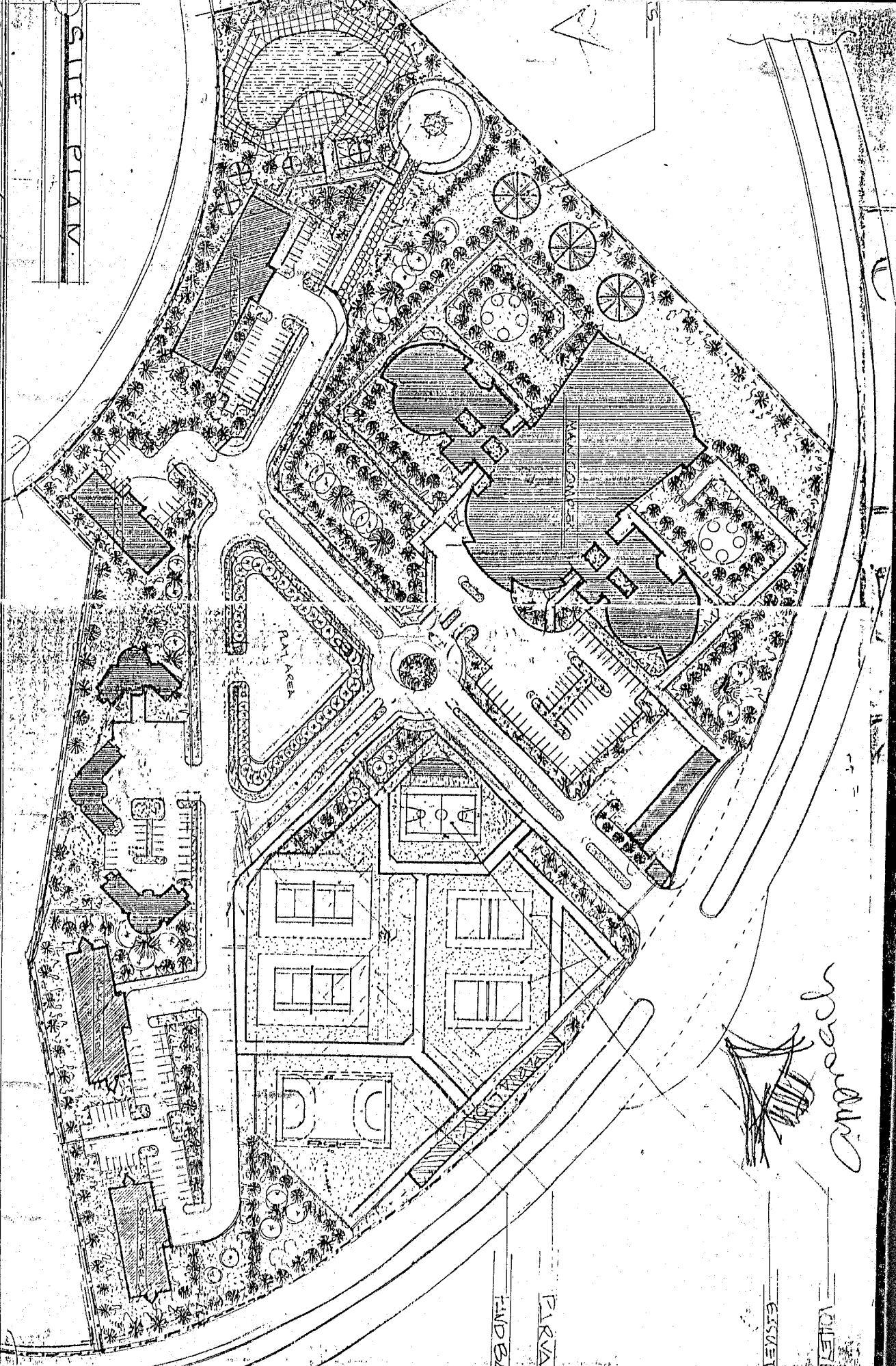
WEST FRONT
FIRST FLOOR PLAN







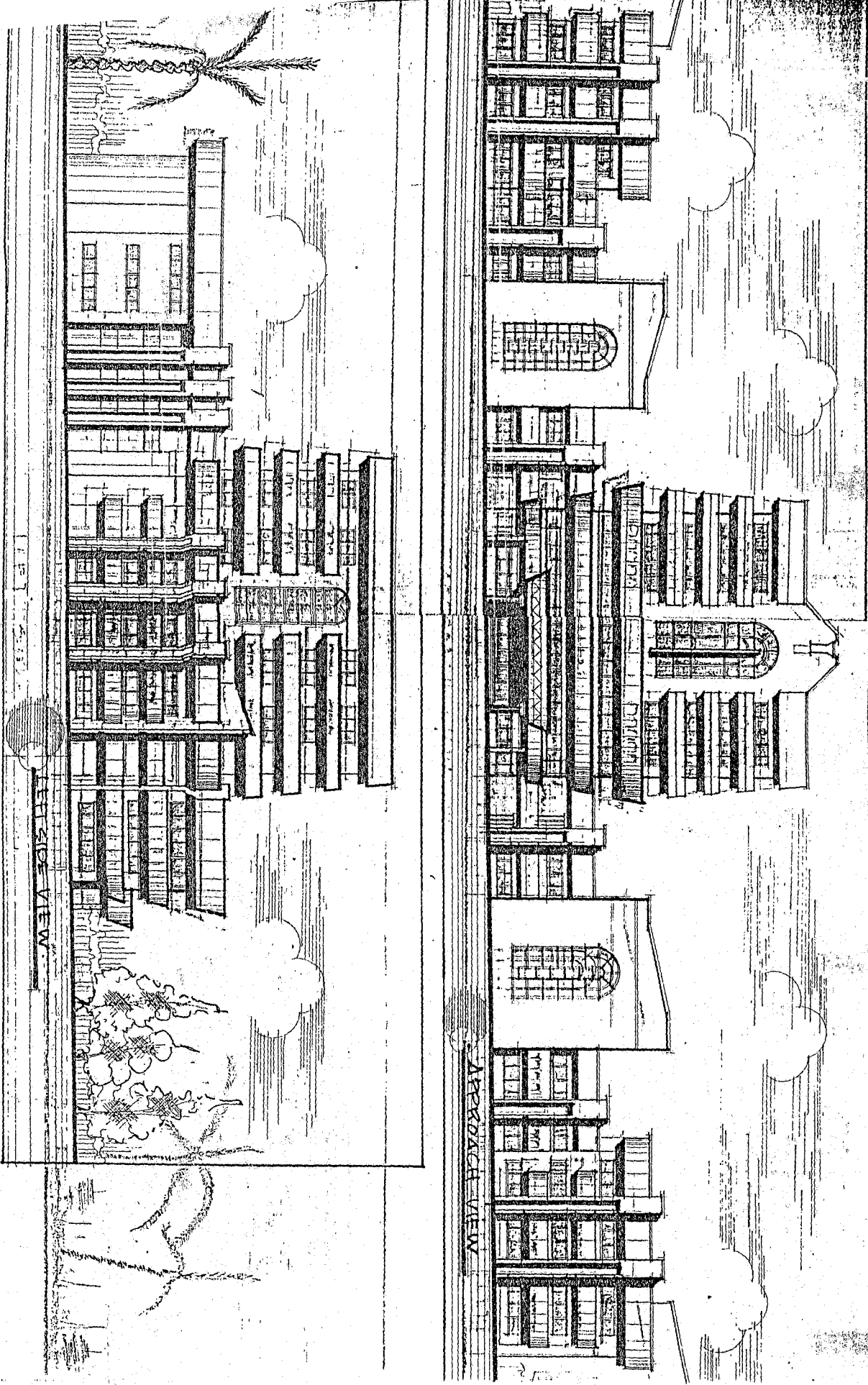
WITH FLOOR PLAN
 LANDSCAPING
 DESIGN YOUTH CENTER
 APPROVED APRON 1966
 WITH FLOOR PLAN
 LANDSCAPING
 DESIGN YOUTH CENTER
 APPROVED APRON 1966



SET VAZZIO 05/06/11
EDUCARE
DE
L'EDUCAZIONE
RUFUS
SIT PLAN
DESIGN & QUALITY
PROPOSAL
FOR
ARCHITECTURE
WITH FOCUS
ON LANDSCAPING
ELEMENTS

Amorach

PARVA
FAND BA
ESSET
VILETA



D. RUEUS

ET 142/05/100

ATURE

DESIGN PROPOSAL

FOR

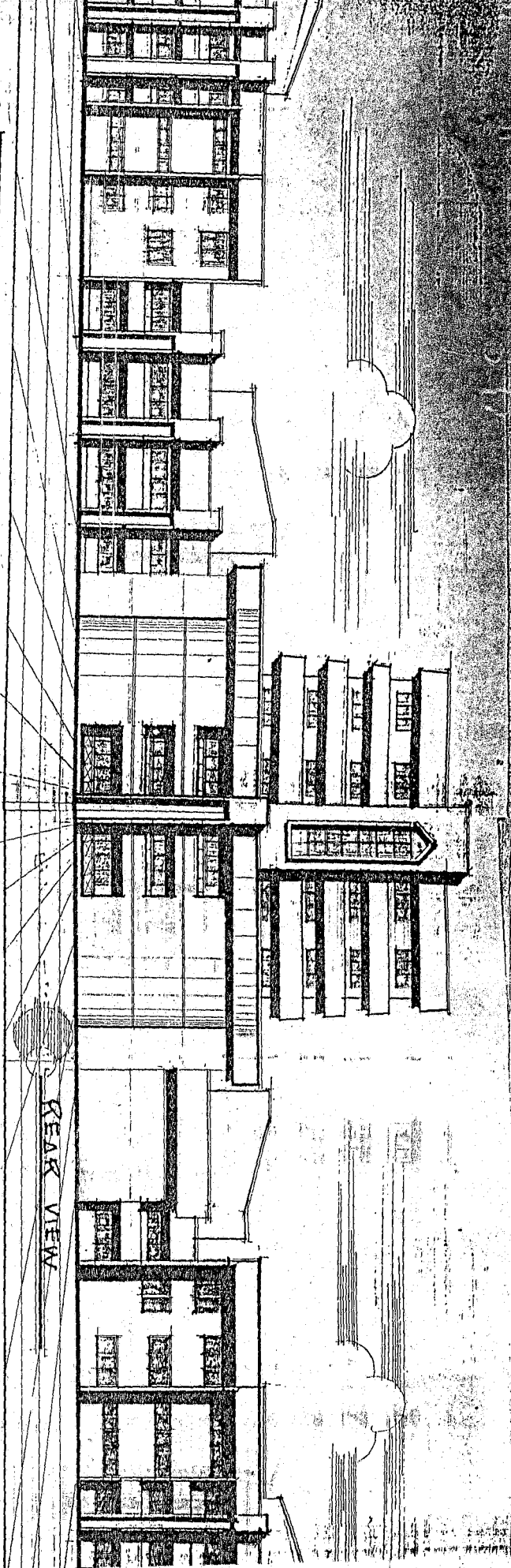
POWELL EMPIRE

ABUJA

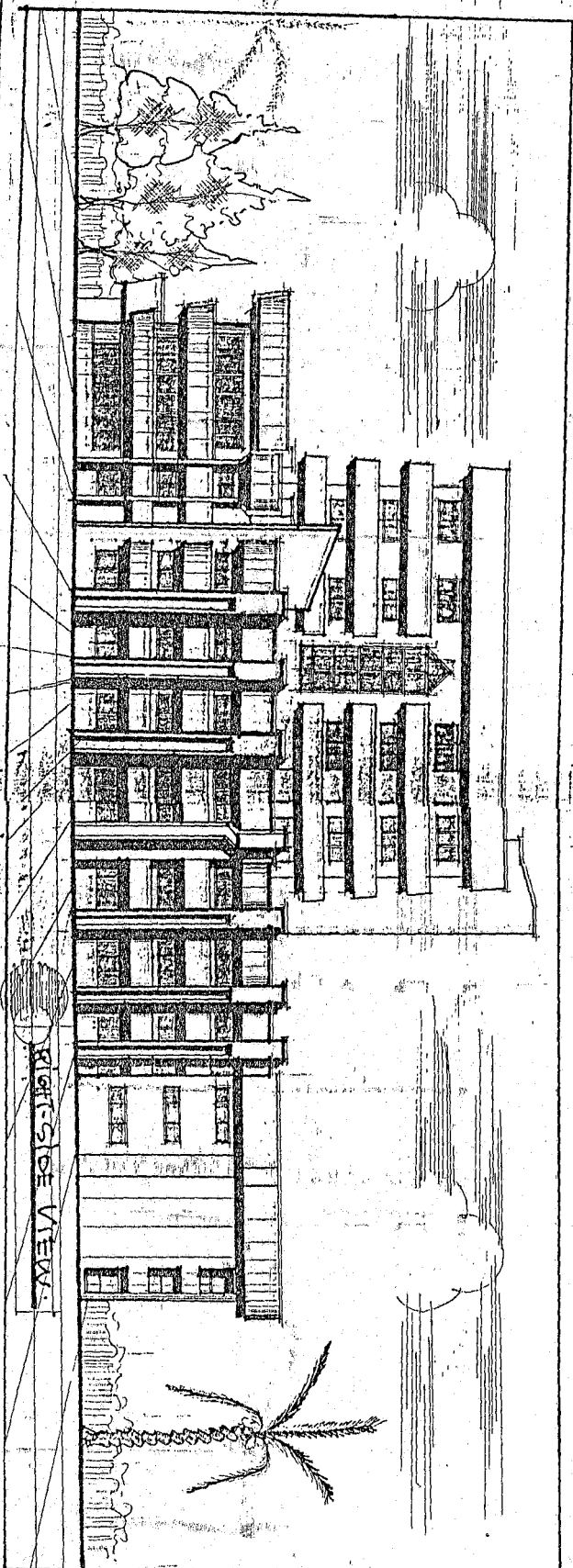
WITH FOCUS

ON LANDSCAPING

ELEMENTS



REAR VIEW

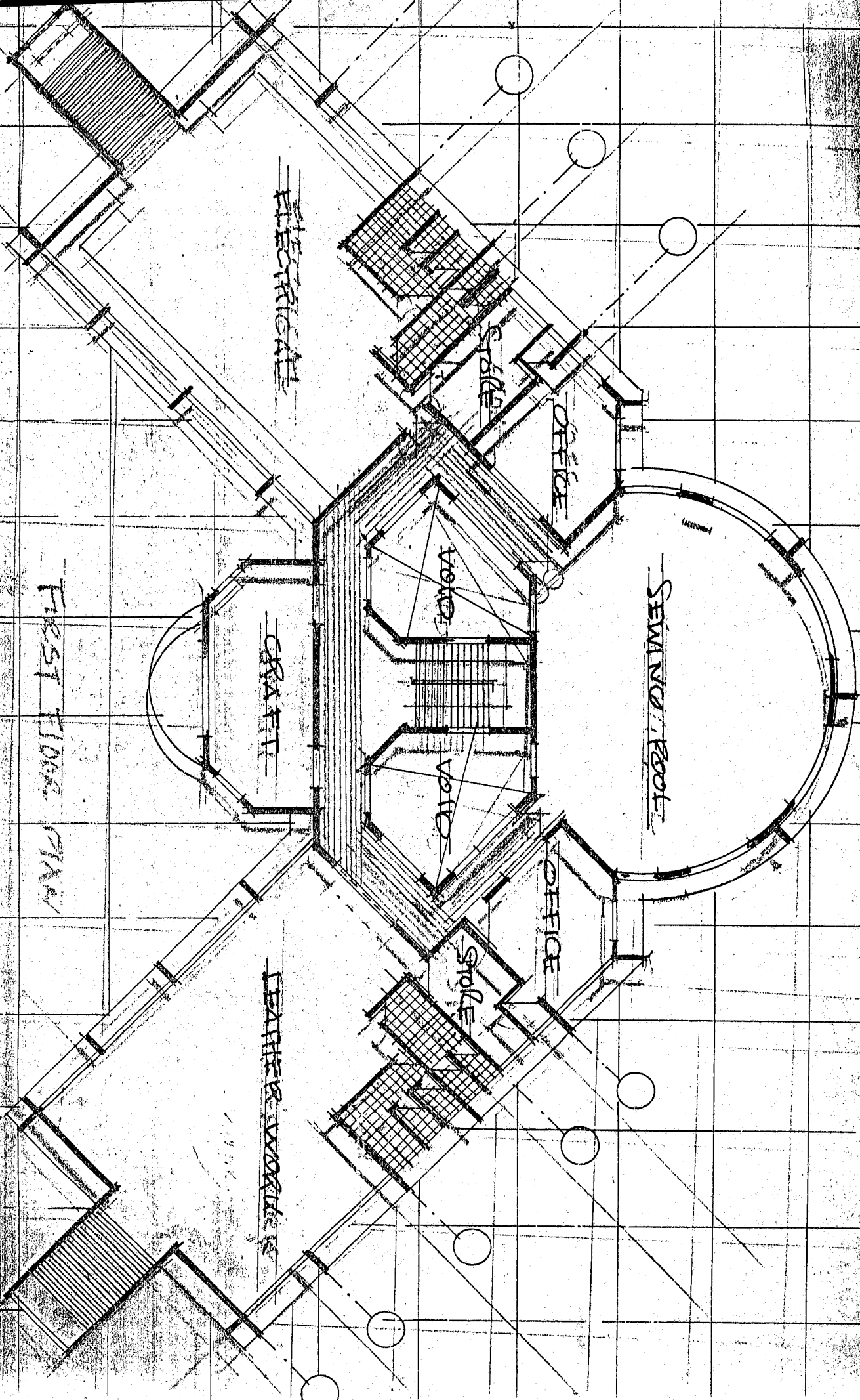


RIGHT-SIDE VIEW

ARCHITECT: KREHLS
SCALE: 1/4" = 1'-0"
DATE: 10/15/04
PROJECT: CITY
DESIGN: PROPOSAL
FOLDER

YOUTH CENTER HARQUA

WITH FOCUS
ON LANDSCAPING
ELEMENTS



ELECTRICIAN

STOGE

OFFICE

VOID

SEWING ROOM

VOID

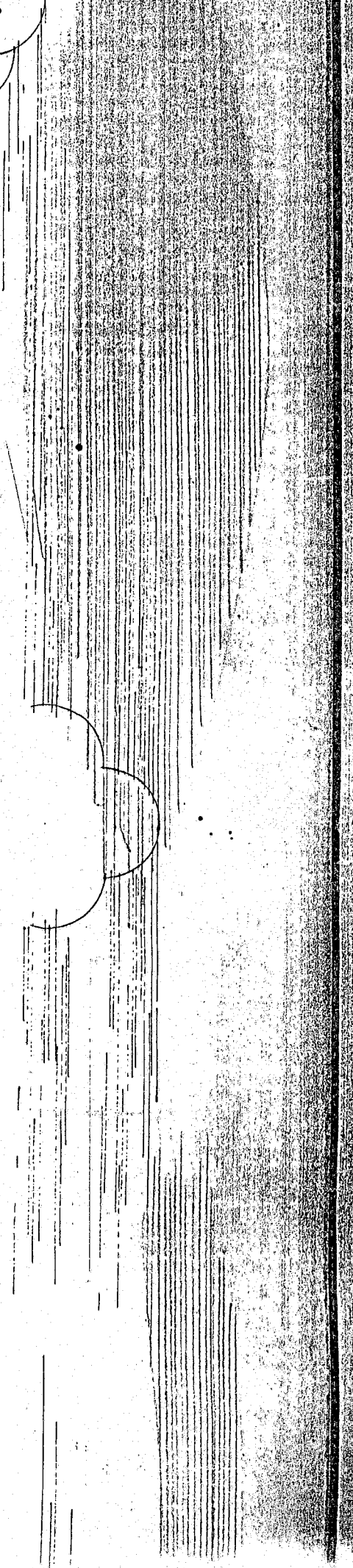
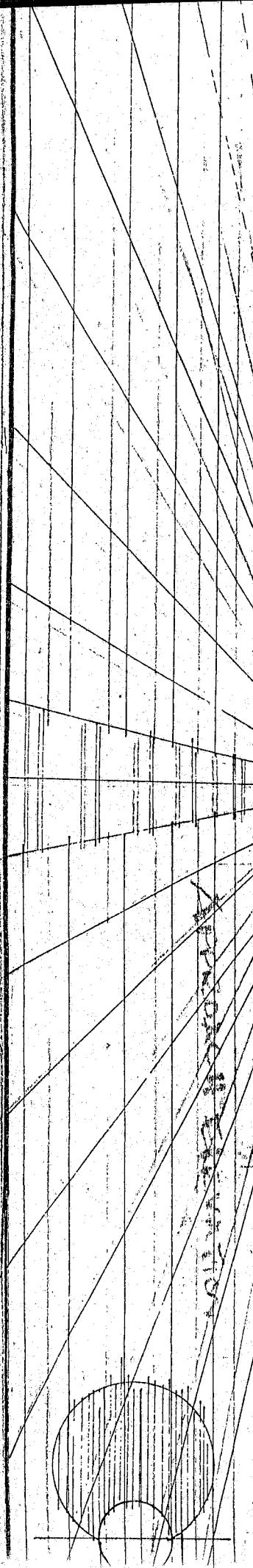
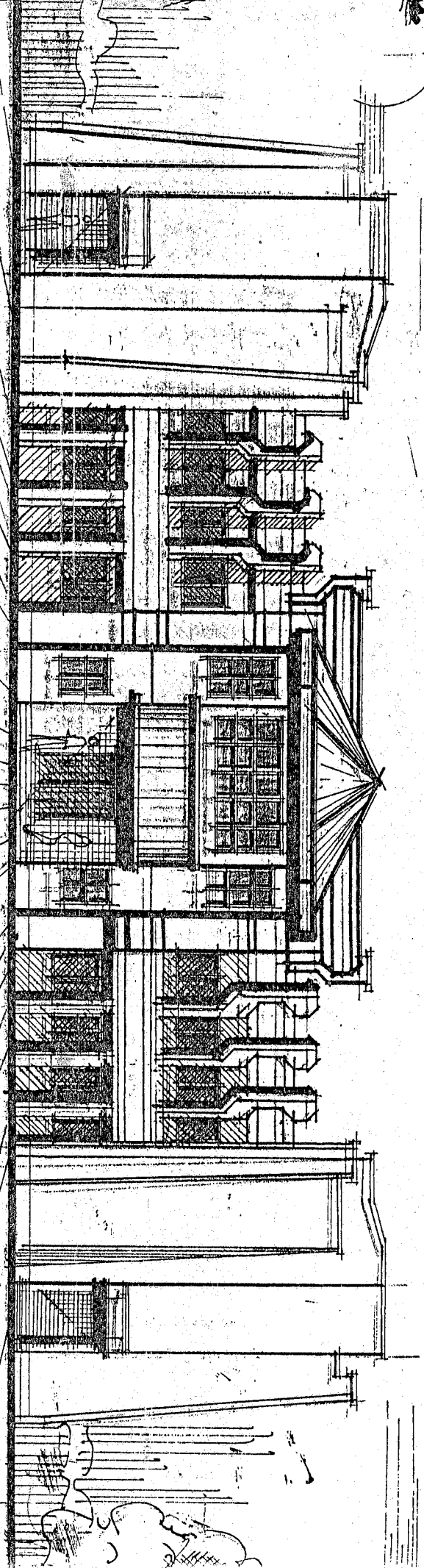
OFFICE

STOGE

LEATHER WORKING

GRATE

FIRST FLOOR PLAN



SECTION

24

