ZIM/026/0005/01

African National Congress (SA)



ANC
DEVELOPMENT
CENTRE,
DAKAWA TANZANIA.

REVISED
1984 DEVELOPMENT PLAN

Volume III

*** Project Packages**

AUGUST 1990

Sumar Varma & Associates Chartered Architects & Planners P.O. Box 486 Dar es salaam Tanzania

Zim/026/0005/01

AFRICAN NATIONAL CONGRESS (SA)

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DAKAWA - TANZANIA

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VOLUME III
• PROJECT PACKAGES

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VOLUME III : PROJECT PACKAGES

1. INTRODUCTION

This volume describes project packages including programmes and phasing for financing of the Revised 1984 Development Plan for 2500 inhabitants.

As described in Volumes I & II, various developments have taken place at the Dakawa Development Centre which accommodates about 1200 inhabitants at present. These include infrastructure, educational, training centre, houses and supporting facilities such as administration, industrial, agricultural and social- communal institutions.

However, the present residential accommodation and supporting facilities are inadequate to meet the requirements of 1200 inhabitants. The existing facilities and those under implementation have a designed capacity of 600 to 900 inhabitants only.

In the Revised 1984 Development Plan ANC intends to provide primary and secondary school education for 500 students and 200 adults. In addition ANC has decided to increase the present facilities at VTC to provide vocational training for a total of 200 students.

2. PROGRAMME & PHASING OF THE REVISED 1984 DEVELOPMENT PLAN

The Revised 1984 Development Plan is designed for a reduced population of 2500 inhabitants, including 1080 students in creche, nursery, primary and secondary schools and training institutions. Emphasis for development is placed on maintenance of existing infrastructure and facilities and expansion of educational facilities and student accommodation as well as administration, agriculture and communal facilities.

Agricultural activities, when fully developed will meet the requirements for Dakawa and Mazimbu. At present, Mazimbu is accommodating 3500 inhabitants, including students.

Various projects for implementation of the Revised 1984 Development Plan are described in Chapter 4, Volume I. Volume II contains the drawings and layout plans.

ANC have established planning and construction base with supporting facilities such as crusher plant, stores and joinery workshop and pre-cast concrete production units at the Dakawa Development Centre.

ANC planning and construction unit together with the Consultants have completed detailed designs for various projects intended to to be developed at Dakawa. In view of the availability of planning and construction unit, and completed detailed designs, ANC intends to carry out and complete various projects contained in the Revised Development Plan within four years.

The programme as contained in Chapter 5 indicates various facilities and infrastructure services that are intended for development at the centre.

The programme has been prepared in consultation with ANC based on priorities and aspiration to provide the facilities and services to the inhabitants of the centre.

3. FINANCIAL REQUIREMENTS

ANC has made considerable progress since the preparation of Development Plan in 1984. Various facilities, infrastructure services have been implemented and others are under implementation.

With experience gained so far and the new policy and direction identified in the Revised Development Plan, it has been possible to identify projects intended to be financed in phased developments.

The preliminary cost estimates indicate total financial requirements of about US $ 30 000 000.00 for construction cost of various facilities and infrastructure services to implement the Development Centre activities and services for 2500 inhabitants. The cost estimates for construction works are based on current price trends in construction industry in Tanzania.

The recurrent expenditures financial requirement is estimated at a total of about US $ 31 750 000.00 for a initial period of five years. The Recurrent expenditure is calculated for equipment, maintenance and replacement of facilities/services and emoluments for inhabitants intended to be engaged to implement and administer the Development Centre activities and facilities.

The emoluments incorporated in the various project packages are preliminary estimates and based on South African conditions for administrative, teaching, training and technical support staff, light industries, agriculture, construction maintenance manpower requirements. The emoluments included in the project packages however do not include other allowances and benefits such as severance, travel allowance, freight for personal belongings etc. all of which ANC are currently studying to enable them determine final scales of emoluments and benefits.

ANC also intends to seek foreign experts to assist in supplementing manpower requirements especially in technical fields.

The recurrent expenditure takes into consideration inflation at the rate of 10% per annum. The preliminary costs are estimated at the current exchange rate of 1.00 US $ = T.Shs. 197.00.

TABLE I

3.1 SUMMARY OF FINANCIAL REQUIREMENTS FOR PROJECT PACKAGES

			Capital Const. Cost US $	Equipment & Recurrent Expenditure for 5 years US $
P.01	Project Management Unit	PMU	-	6 563 698.00
P.02	Primary School - Secondary School	PS-SS	1 243 819.00	2 403 582.00
P.03	PS-SS Students Dormitories Phase I & II	SD	3 719 080.00	853 095.00
P.04	Vocational Training Centre Phase I & II	VTC	3 153 218.00	1 792 089.00
P.05	Adult Education Centre at EOC	AEC	2 009 024.00	1 452 130.00
P.06	Agriculture Centre Phase I,II,III & Ranching	AGC	4 151 210.00	3 742 597.00
P.07	Health Centre	HC	513 664.00	2 265 918.00
P.08	Cultural and Social Centre	CSC	1 018 854.00	667 273.00
P.09	Central Sports Area	CSA	659 687.00	197 946.00
P.10	Ecunemical Centre	EC	223 741.00	90 955.00
P.11	Residential Houses at Village V1 & V3	-	8 270 168.00	422 194.00
P.12	Environmental Programme	EP	143 750.00	380 752.00
P.13	Infrastructure Water supply line Telecommunication Access roads/lanes; drainage system, Electrical reticulation, Fire fighting, sewage and refuse collection/disposal department infrastracture for V3	-	4 832 783.00	1 453 194.00
P.14	Main Community Administration Activity	A-A	-	9 450 457.00
	TOTAL		29 938 998.00	31 735 880.00

TABLE II

3.2 SUMMARY AND BREAKDOWN OF CONSTRUCTION COST AND RECURRENT EXPENDITURE

		Construction Cost	Furniture Equipment/ Machinery	Maintenance Civil Works Others	Emoluments and Stipends
P.01	PMU	-	180 000.00	345 755.00	6 037 943.00
P.02	PS-SS	1 243 819.00	200 000.00	210 268.00	1 993 314.00
P.03	SD I & II	3 719 080.00	300 000.00	260 050.00	293 045.00
P.04	VTC I & II	3 153 218.00	180 000.00	207 915.00	1 404 173.00
P.05	AEC	2 009 024.00	140 000.00	176 582.00	1 135 548.00
P.06	AGC I,II,III & Ranch	4 151 210.00	1 192 433.00	506 203.00	2 043 961.00
P.07	HC	513 664.00	1 776 275.00	153 848.00	335 795.00
P.08	CSC	1 018 854.00	175 000.00	96 665.00	395 608.00
P.09	CSA	659 687.00	25 000.00	99 685.00	73 261.00
P.10	EC	223 741.00	5 000.00	12 696.00	73 259.00
P.11	HSE	8 270 168.00	-	422 194.00	-
P.12	EP	143 750.00	178 621.00	37 293.00	164 838.00
P.13	Infrastructure	4 832 783.00	-	903 736.00	549 458.00
P.14	AA	-	1 568 265.00	1 398 575.00	6 483 617.00
	TOTAL	29 938 998.00	5 920 595.00	4 831 466.00	20 983 820.00

4. PROJECT PACKAGES

The various project packages intended to be developed are detailed in this chapter. The project packages are based on designs carried out by ANC and the consultants appointed by ANC.

Each project package has been divided into two sections, ie. into construction cost and the recurrent expenditure.

The recurrent expenditure is estimated for the initial period of 5 years and takes into account, furniture, equipment, materials, emoluments and maintenance required for various Education, Training, Social, Cultural, Administrative, Agricultural and Industrial activities and infrastructure services for the Development Centre, Dakawa.

In general the maintenance costs are anticipated as to incur after the 1st year of operation or occupation of various facilities with the exception of agriculture centre facilities, equipment and the existing facilities and services.

The construction costs are estimated for various facilities and infrastructure services intended to be developed and as described in The Revised 1984 Development Plan.

The main areas of development in The Revised 1984 Development Plan consists of the following project packages.

LIST OF PROJECT PACKAGES — PROJECT NO.

1.	Project Management Unit (PMU)	P.01
2.	Primary - Secondary School (PS-SS)	P.02
3.	Primary - Secondary School, Students Dormitories (SD) Phase I & II	P.03
4.	Vocational Training Centre (VTC). Phase I & II	P.04
5.	Adult Education Centre (AEC)	P.05
6.	Agriculture Activities (AGC & RANCH)	P.06
7.	Health Centre (HC)	P.07
8.	Cultural and Social Centre (CSC)	P.08
9.	Central Sports Area (CSA)	P.09
10.	Ecumenical Centre (EC)	P.10
11.	Residential Houses (RH)	P.11
12.	Environmental Programme & Reforestation (EP)	P.12
13.	Infrastructure Services	P.13
14.	• Main Water Supply Line	P.13A
15.	• Telecommunication External and Local Distribution.	P.13B
16.	• Access Link Road/Pedestrian Lanes	P.13C
17.	• Sewerage System	P.13D
18.	• Electrical Reticulation	P.13E
19.	• Fire fighting, sewerage and refuse collection and disposal activities	P.13F
20.	• Village V3 - Infrastructure	P.13G
21.	Main Community Administration Activity (AA)	P.14

CHAPTER 4.1

PROJECT MANAGEMENT UNIT (PMU)

PROJECT P. 01

NO: P. 01

PROJECT MANAGEMENT UNIT (PMU)

The further development of the ANC Centre, Dakawa, along the guidelines set out in The Revised 1984 Development Plan,envisages an effective municipal structure to organise and administer the various educational institutions, socio-cultural and production centres of the community. The nucleus of this municipal structure is established and continues to develop with the incorporation of more qualified administrative and technical ANC personnel within the scope of the Dakawa development programme (Ref: Fig No 1).

An effective management system within the overall municipal administration is required to coordinate the delivery of the various services to the community. Specifically, in the sphere of technical services the PROJECT MANAGEMENT UNIT, (PMU) has been established. The organisational model (Ref. Fig. No. 2) is born of much thought, consultation and discussion within ANC and with the unique contribution of the Norwegian Government and the NGO, Norwegian peoples Aid.

The PMU is responsible for the physical implementation of The Revised 1984 Development Plan and has been established to:

- Provide overall coordination of all development activities at Dakawa.
- Prepare development plans,guidelines and programmes as required.
- Provide contract management, supervision and control of planning, design and implementation activities.
- Plan organise and implement short and long term construction and maintenance operations.
- Provide financial control of funds made available for the various activities.
- Coordinate donor inputs of personnel, equipment, materials and funds.

Present efforts are directed towards ensuring an increased and active ANC participation in the planning, decision making, implementation, operation and maintenance activities at the ANC Development Centre, Dakawa.

With the unfolding political situation in South Africa, a large role is necessarily defined for the PMU. As an ANC resource pool the PMU will render technical consultancy services on community-based projects of the Mass Democratic Movement inside South Africa on project formulation, planning and coordination as required. A Research Section will be, of necessity, an additional component of the PMU.

Given the scarcity of qualified ANC technical expertise both inside and outside South Africa, foreign and Tanzanian experts and support staff will be recruited within the PMU framework as required.

FIG. NO. 1 THE PROPOSED MANAGEMENT OF DIFFERENT DEPARTMENTS, UNITS AT THE DAKAWA DEVELOPMENT CENTRE

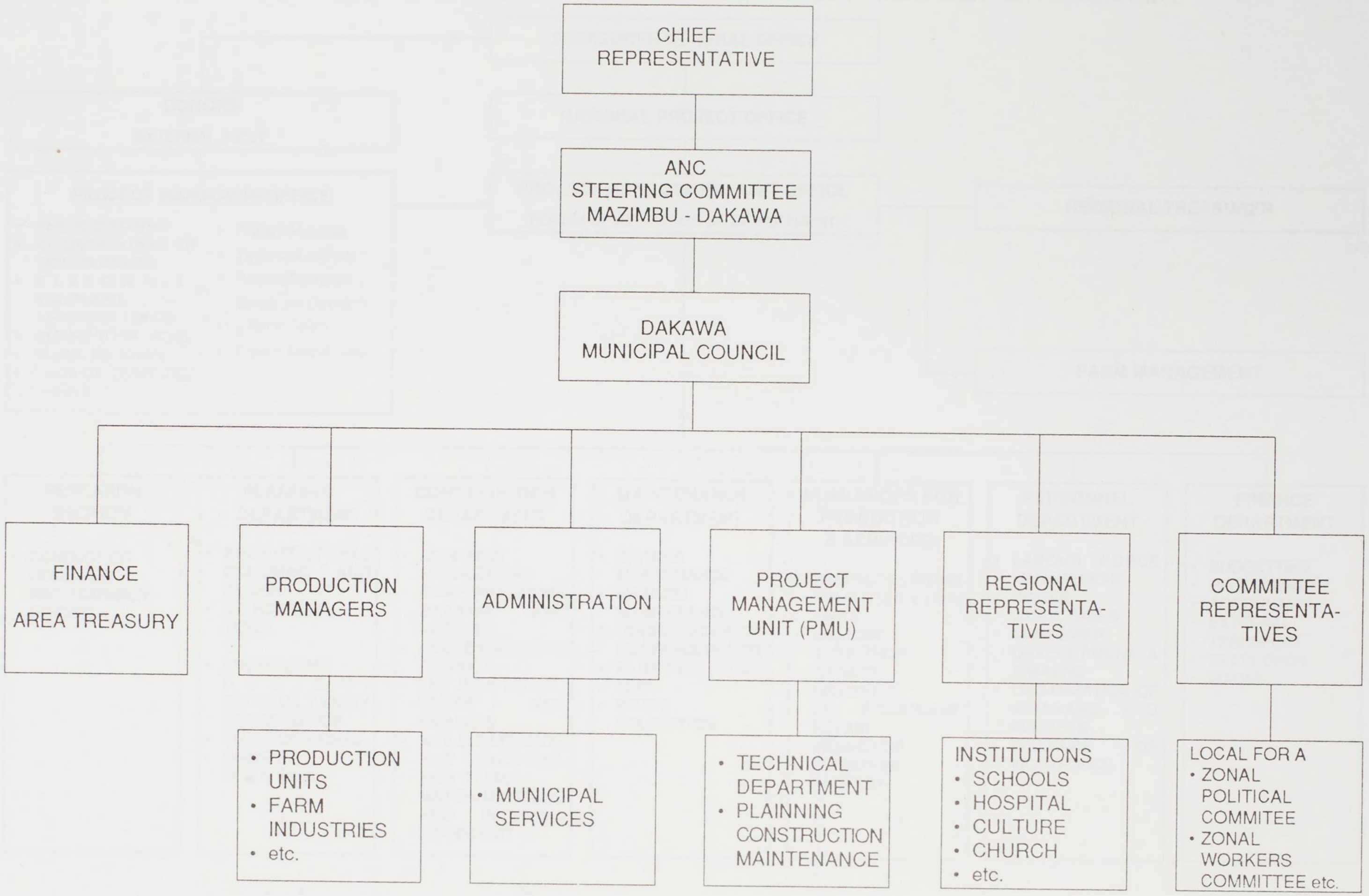
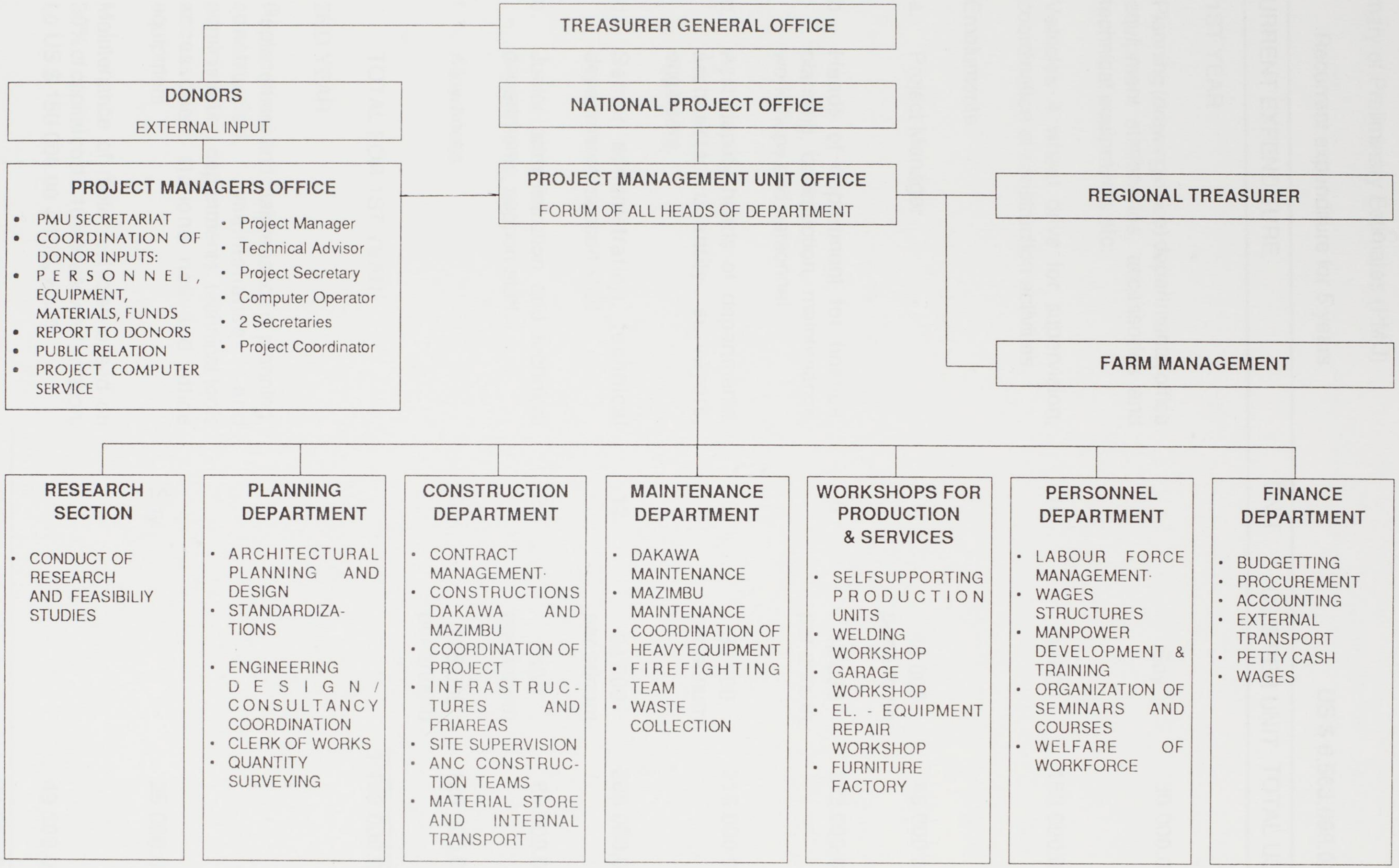


FIG. NO. 2 ORGANISATION CHART FOR THE DAKAWA DEVELOPMENT CENTER PROGRAMME



Summary of Preliminary Estimates (PMU)

a) Recurrent expenditure for 5 years — US $ 6,563,698.00

RECURRENT EXPENDITURE	UNIT	US $ PER UNIT	TOTAL US $
A. 1ST YEAR			
i. Planning (drawing office) departments, office equipment stationeries, accessories and technical equipments etc.	Say		30 000.00
ii. Vehicles 4 wheel drive for supervision, coordination of construction activities.	10	15000	150 000.00
iii. Emoluments			
a. Project Manager	1	48 000 per annum	48 000.00
b. Heads of department for finance, planning, construction, maintenance, workshops and personnel.	6	42 000 per annum	252 000.00
c. Asst./deputy heads of departments, architects, quantity surveyors, engineers.	6	36 000 per annum	216 000.00
d. Senior administration, technical departments, support staff	12	24 000 per annum	288 000.00
e. Junior administration and technical departments, support staff	25	2400 per annum	60 000.00
f. Allowances	Say	125 000 per annum	125 000.00
TOTAL FOR 1ST YEAR			1 169 000.00
B. 2ND YEAR			
i. Replacement and maintenance of planning, construction, maintenance and administration departments, technical tools accessories, statione ries and office equipment	Say		25 000.00
ii. Maintenance of motor vehicles based on 30% of capital cost + 10% to allow for inflation. i.e US $ 150 000.00 + 10% x 30%			49 500.00
C/F			74 500.00

RECURRENT EXPENDITURE	UNIT	US $ PER UNIT	TOTAL US $
	B/F		74 500.00
iii. Emoluments based on 1st year emoluments + 10% to allow for inflation. i.e US $ 989 000.00 + 10%			1 087 900.00
TOTAL FOR 2ND YEAR			1 162 400.00
C. 3RD YEAR			
2nd year total + 10% to allow for inflation			116 240.00
TOTAL FOR 3RD YEAR			1 278 640.00
D. 4TH YEAR			
3rd year total + 10% to allow for inflation.			127 864.00
TOTAL FOR 4TH YEAR			1 406 504.00
E. 5TH YEAR			
4th year total + 10% to allow for inflation.			140 650.00
TOTAL FOR 5TH YEAR			1 547 154.00

CHAPTER 4.2

PRIMARY - SECONDARY SCHOOL (PS - SS)

PROJECT P. 02

NO: P. 02

PRIMARY & SECONDARY SCHOOL (PS-SS)

The primary and secondary school is located west of Ecumenical Centre and North of Central Sports Area. The primary and secondary school will be constructed as one complex separated by a common administration facilities. The sports and extra curricular activities will be accommodated in a separate complex shared by all the inhabitants of The Development Centre. The classrooms are designed for 25 students each. The primary and secondary school is intended to provide education for 500 students between the age of 7 and 18 years.

Summary of Preliminary Estimates (PS-SS)

a)	Construction Cost	US $ 1 243 819.00
b)	Recurrent Expenditure for 5 years	US $ 2 403 582.00
	TOTAL	US $ 3 647 401.00

ACCOMMODATION	AREA SQ. M.	US $ PER UNIT	TOTAL US $
i. Classrooms 20 nos. x 50 sq.m.	1000	370	370 000.00
ii. Laboratories/Special Rooms • Physics Lab. • Biology Lab. • Chemistry Lab. • Art room • History/Geography room • Library/Reading room	500	425	212 500.00
iii. Administration Offices • Headteachers Office (2 nos. x 25 sq.m.) • Staff room (4 nos. x 25 sq.m.) • General Offices (6 nos. x 15 sq.m)	240	425	102 000.00
iv. Stores for : • Books/Stationery • Laboratories/Special Room • Administration Materials/Records	200	250	50 000.00
v. Washrooms • Boys • Girls • Staff • Handicaped	250	500	125 000.00
vi. Circulation, Corridors	500	150	75 000.00
C/F	2690		934 500.00

ACCOMMODATION		AREA SQ. M.	US $ PER UNIT	TOTAL US $
	B/F	2690		934 500.00
vii. External Works			Say 10%	93 450.00
				1 02 7 950.00
viii. Preliminaries			Say 10%	102 795.00
				1 130 745.00
ix. Prime Cost & Provisional Sum			Say 10%	113 074.00
Total Construction Cost		2690	462.38	1 243 819.00

RECURRENT EXPENDITURE		UNIT	US $ PER UNIT	TOTAL US $
A.	1ST YEAR			
i.	Laboratory equipment, teaching aid, text books, stationeries for 500 students	500	250 per student	125 000.00
ii.	Students and general furniture including desks, chairs, tables, cupboards, lockers for 500 students and admin. offices.	500	150 per student	75 000.00
iii.	School teachers, emoluments based on 1 teacher for 25 students and art instructor, librarian.	25	9600 per annum	240 000.00
iv.	Supporting administration staff emoluments	10	2400 per annum	24 000.00
v.	Stipends for 500 students	500	125 per annum	62 500.00
	TOTAL FOR 1ST YEAR			526 500.00
B.	2ND YEAR			
i.	Maintenance of civil works based on 1% of construction cost + 10% to allow for inflation. ie. US $ 1 243 819.00 x 10% x 1%			13 682.00
ii.	Maintenance and replacement of loose furniture based on 5% per annum of capital cost + 10% to allow for inflation. ie US $ 75 000.00 + 10% x 5%			4 125.00
iii.	Replacement of laboratory and teaching aid material including text books based on 5% per annum of capital cost + 10% to allow for inflation. ie. US $ 100 000.00 + 10% x 5%			27 500.00
iv.	School teachers, emoluments 1st year + 10% to allow for inflation ie. US $ 90 000.00 + 10%	25	10560 per annum	264 000.00
v.	Supporting administration staff emoluments, 1st year + 10% to allow for inflation ie. US $ 18 000.00 + 10%	10	2640 per annum	26 400.00
	C/F			335 707.00

RECURRENT EXPENDITURE	UNIT	US $ PER UNIT	TOTAL US $
	B/F		335 707.00
vi. Students exercise books, stationeries and students stipends for 500 students 1st year + 10% to allow for inflation. ie. US $ 62 500.00 + 10%	500 per student	137.50	68 750.00
TOTAL FOR 2ND YEAR			404 457.00
C. 3RD YEAR			
i. 2nd year total + 10% to allow for inflation.			40 445.00
TOTAL FOR 3RD YEAR			444 902.00
D. 4TH YEAR			
i. 3rd year total + 10% to allow for inflation.			44 490.00
TOTAL FOR 4TH YEAR			489 392.00
E. 5TH YEAR			
i. 4th year total + 10% to allow for inflation.			48 939.00
TOTAL FOR 5TH YEAR			538 331.00

CHAPTER 4.3

PRIMARY - SECONDARY SCHOOL, STUDENTS DORMITORIES (SD)

PROJECT P. 03

NO: P. 03

PRIMARY - SECONDARY SCHOOL STUDENTS DORMITORIES (SD)

The primary-secondary school students dormitories are located north- west of the PS-SS. The Dormitories are intended to accommodate a total of 500 students with 32 students in 8 bedroom dormitory block with common ablution block.

The students dormitories will share common canteen and kitchen block separating primary school dormitories with secondary school. There will be 2 residential houses for primary and secondary school students wardens and 2 houses for kitchen staff.

The dormitories will be built in two phases for accommodation of 250 students each.

Summary of Preliminary Estimates (SD)

a)	Construction Cost		
	Phase I	2 196 416.00	
	Phase II	1 522 664.00	
	TOTAL CONSTRUCTION COST		US $ 3 719 080.00
b)	Recurrent Expenditure for 5 years		US $ 859 475.00
	TOTAL		US $ 4 578 555.00

ACCOMMODATION	AREA SQ. M.	US $ PER UNIT	TOTAL US $
A. PHASE I for 250 students			
i. Dormitory blocks at 32 per block 8 blocks x 290 sq.m.	2320	400	928 000.00
ii. Ablution block (washrooms) 4 blocks x 108 sq.m	432	500	216 000.00
iii. Canteen & Kitchen Block	800	450	360 000.00
iv. Warden - Caretakers House 2 units x 2 hses x 86 sq.m	344	425	146 200.00
			1650 200.00
v. External Works			
		Say 10%	165 020.00
C/F	3896		1 815 220.00

ACCOMMODATION		AREA SQ. M.	US $ PER UNIT	TOTAL US $
	B/F	3896		1 815 220.00
vi. Preliminaries			Say 10%	181 522.00
				1 996 742.00
vii. Prime Cost and Provisional Sums			Say 10%	199 647.00
TOTAL		3896	563.76	2 196 416.00
B. PHASE II for 250 students				
i. Dormitory blocks at 32 students per block 8 blocks x 290 sq.m.		2320	400	928 000.00
ii. Ablution block (washrooms) 4 blocks x 108 sq.m.		432	500	216 000.00
				1 144 000.00
iii. External Works			Say 10%	114 400.00
				1 258 400.00
iv. Preliminaries			Say 10%	125 840.00
				1 384 240.00
v. Prime cost and provisional sums			Say 10%	138 424.00
		2752	553.29	1 522 664.00

RECURRENT EXPENDITURE	UNIT	US $ PER UNIT	TOTAL US $
A. 1ST YEAR			
i. Kitchen equipment and cutlery, crockery to cater for 150 meals per seating comprising of refrigerators, freezers boiling pans, oven range + burner, deep fryer, grill, tea-coffee dispenser, mixing bowl, gas tank accessories.		Say	150 000.00
ii. Dormitory furniture for 500 students comprising of bunk-beds, cupboards, table, chairs, lounge chairs, coffee table, bookshelf.	500	250 per student	125 000.000
iii. Canteen furniture for 150 seating		Say	25 000.00
iv. Canteen and kitchen support staff including wardens, caretaker emoluments	20	2400 per annum	48 000.00
TOTAL FOR 1ST YEAR			348 000.00
B. 2ND YEAR			
i. Maintenance of civil works based on 1% of construction cost + 10% to allow for inflation. ie US $ 3 719 080.00 (Phase I & II) + 10% x 1%			40 909.00
ii. Maintenance and replacement of loose furniture based on 5 % per annum of capital cost + 10% to allow for inflation. ie. US $ 125 000.00 + 10% x 5%			6 875.00
iii. Maintenance and servicing of kitchen equipment including replacement of cutlery based on 5% per annum of capital cost + 10% to allow for inflation. i.e US $ 150 000.00 + 10% x 5%			8 250.00
iv. Canteen and kitchen support staff including, wardens, caretaker emoluments based on 1st year emoluments + 10% to allow for inflation. i.e US $ 1 800.00 + 10%	20	2640 per student	52 800.00
C/F			108 834.00

RECURRENT EXPENDITURE	UNIT	US $ PER UNIT	TOTAL US $
C. 3RD YEAR	B/F		108 834.00
v. 2nd year total + 10% to allow for inflation			10 883.00
TOTAL FOR 3RD YEAR			119 717.00
D. 4TH YEAR			
vi. 3rd year total + 10% to allow for inflation			11 971.00
TOTAL FOR 4TH YEAR			131 688.00
E. 5TH YEAR			
vii. 4th year total + 10% to allow for inflation			13 168.00
TOTAL FOR 5TH YEAR			144 856.00

CHAPTER 4.4

VOCATIONAL TRAINING CENTRE (VTC)

PROJECT P. 04

NO: P. 04

VOCATIONAL TRAINING CENTRE (VTC)

Vocational Training Centre is located south-west of PS-SS. The existing teaching facilities at the VTC provides training for 40 students in electrical, plumbing and masonry. ANC intends to extend the existing facilities to provide additional courses in mechanics, tailoring, allied building trades and accommodation for a total of 200 students, with 16 students per dormitory block.

Summary of Preliminary Estimates

a)	Construction Cost:		
	Phase I	2 283 996.00	
	Phase II	869 222.00	
	Total Construction Cost		US $ 3 153 218.00
b)	Recurrent Expenditure for 5 years		US $ 1 792 089.00
	TOTAL		US $ 4 945 307.00

ACCOMMODATION	AREA SQ. M.	US $ PER UNIT	TOTAL US $
A. PHASE I - DORMITORIES			
i. Dormitory block with 16 students per block. 12 blocks x 290 sq.m	3480	400	1 392 000.00
ii. Ablution blocks (washrooms) 6 blocks x 108 sq.m	648	500	324 000.00
			1 716 000.00
iii. External Works	Say	10%	171 600.00
			1 887 600.00
iv. Preliminaries	Say	10%	188 760.00
			2 076 360.00
v. Prime Cost and Provisional Sums	Say	10%	207 636.00
TOTAL	4128	553.29	2 283 996.00

ACCOMMODATION		AREA SQ. M.	US $ PER UNIT	TOTAL US $
B.	PHASE II - TRAINING FACILITIES			
i.	1 Classroom block	218	370	80 660.00
ii.	Workshop blocks 4 blocks x 318 sq.m	1272	450	572 400.00
				653 060.00
iii.	External Works	Say	10%	65 306.00
				718 366.00
iv.	Preliminaries	Say	10%	71 836.00
				790 202.00
v.	Prime Cost and Provisional Sums	Say	10%	79 020.00
	TOTAL	1490	583.37	869 222.00

RECURRENT EXPENDITURE	UNIT	US $ PER UNIT	TOTAL US $
A. 1ST YEAR			
i. Dormitory, classroom, furniture for 200 students comprising of bed, cupboard, table, chair, coffee table, bookshelf, lounge chairs	200	400	80 000.00
ii. Workshop equipment, apparatus furniture, teaching aid, tools etc. per annum	Say		100 000.00
iii. VTC tutors, technician's emoluments based on 1 tutor for 20 students	10	12000 per annum	120 000.00
iv. Supporting administration staff emoluments per annum	25	2400 per annum	60 000.00
v. Stipends for 200 students/trainees	200	250 per annum	50 000.00
TOTAL FOR 1ST YEAR			410 000.00
B. 2ND YEAR			
i. Maintenance of civil works based on 1% of construction cost + 10% to allow for inflation. ie. US $ 3 153 218.00 + 10% x 1%			34 685.00
ii. Maintenance and replacement of furniture based on 5% per annum of capital cost + 10% to allow for inflation. ie. US $ 80 000.00 + 10% x 5%			4 400.00
iii. Maintenance and replacement of workshop equipment etc. based on 5% per annum of capital cost + 10% to allow for inflation. i.e US $ 100 000.00 + 10% x 5%	10	5280	5 500.00
iv. VTC tutor's, technicians emoluments based on 1st year emoluments + 10% to allow for inflation. ie. US $ 4 800.00 + 10%	10	13200 per annum	132 000.00
v. Supporting administration staff emoluments based on 1st year emoluments + 10% to allow for inflation. ie. US $ 45 000.00 + 10%	25	2640 per annum	66 000.00
vi. Students/trainees stipends based on 1st years stipends + 10% to allow for inflation. ie. US $ 50 000.00 + 10%	200	275 per annum	55 000.00
TOTAL FOR 2ND YEAR	C/F		297 585.00

RECURRENT EXPENDITURE	AREA	US $ PER UNIT	TOTAL US $
	B/F		297 585.00
C. 3RD YEAR			
2nd year total + 10% to allow for inflation			29 758.00
TOTAL FOR 3RD YEAR			327 343.00
D. 4TH YEAR			
3rd year total + 10% to allow for inflation			32 734.00
TOTAL FOR 4TH YEAR			360 077.00
E. 5TH YEAR			
4th year total + 10% to allow for inflation			36 007.00
TOTAL FOR 5TH YEAR			396 084.00

CHAPTER 4.5

ADULT EDUCATION CENTRE (AEC)

PROJECT P. 05

NO: P. 05

ADULT EDUCATION CENTRE (AEC) (previously EOC)

The Adult Education Centre will be provided at the present Education Orientation Centre. ANC intends to provide secondary school education to 200 adults. The present facilities at EOC requires an addition of 9 no. dormitory blocks, one classroom block and laboratory blocks.

The residential accommodation is adequate for 64 adults. There will be 16 adults accommodated in 8 bedroom dormitory block.

Summary of Preliminary Estimates

a)	Construction Cost	US $	2 009 024.00
b)	Recurrent Expenditure for 5 years	US $	1 452 130.00
	TOTAL	US $	3 461 154.00

ACCOMMODATION		AREA SQ. M.	US $ PER UNIT	TOTAL US $
i.	Classroom Block	218	370	80 660.00
ii.	Laboratories			
	• Physics			
	• Biology			
	• Chemistry	270	425	114 750.00
iii.	Dormitory Blocks, 16 adults per block 9 blocks x 290 sq.m.	2610	400	1 044 000.00
iv.	Ablution Blocks (Washroom) 5 Blocks x 108 sq.m.	540	500	270 000.00
				1 509 410.00
v.	External Works		Say 10%	150 941.00
				1 660 351.00
vi.	Preliminaries		Say 10%	166 035.00
				1 826 386.00
vii.	Prime Cost and Provisional Sums			182 638.00
	Total Construction Cost	3638	552.23	2 009 024.00

RECURRENT EXPENDITURE		UNIT	US $ PER UNIT	TOTAL US $
A.	1ST YEAR			
i.	Laboratory equipment, teaching aid stationeries and text books for 200 adult students	200	250 per student	50 000.00
ii.	Students and General Furniture including desks, chairs, tables, cupboards, lockers for 200 adult students and administration furniture	200	150 per student	30 000.00
iii.	Dormitory furniture for 200 adults comprising of beds, cupboards, tables, chairs, coffee tables, book shelf, lounge chairs, etc..	200	300 per student	60 000.00
iv.	School teachers emoluments based on 1 teacher for 25 students and art instructor	10	9600 per annum	96 000.00
v.	Supporting staff for administration, canteen, dormitories, caretakers etc.	25	2400 per annum	60 000.00
vi.	Stipends for 200 adults	200	150 per annum	30 000.00
	TOTAL FOR 1ST YEAR			326 000.00
B.	2ND YEAR			
i.	Maintenance of civil works based on 1% of construction cost + 10% to allow for inflation. ie. US $ 2 009 024.00 + 10% x 1%			22 099.00
ii.	Maintenance and replacement of school and dormitory furniture based on 5% of capital cost + 10% to allow for inflation. ie. US $ 90 000.00 + 10% x 5%			4 950.00
iii.	Maintenance and replacement of laboratory equipment, teaching aid and text book based on 20% of capital cost + 10% to allow for inflation. ie. US $ 50 000 + 10% x 20%			11 000.00
iv.	School teachers emoluments based on previous years emolument + 10% to allow for inflation ie. US $ 360.00 +10%	10	10560 per annum	105 600.00
	C/F			143 649.00

RECURRENT EXPENDITURE		UNIT	US $ PER UNIT	TOTAL US $
		B/F		143 649.00
v.	Supporting administration, canteen, dormitories, caretaker emoluments based on previous years emolument + 10% to allow for inflation		2640	
	ie.US$1 800.000 + 10%	25	per annum	66 000.00
vi.	Students stipends based on previous years stipends + 10% to allow for inflation		165	33 000.00
	ie. US $ 150.00 + 10%	200	per annum	
	TOTAL FOR 2ND YEAR			242 649.00
C.	3RD YEAR			
	2nd year total + 10% to allow for inflation			24 264.00
	TOTAL FOR 3RD YEAR			266 913.00
D.	4TH YEAR			
	3rd year total + 10% to allow for inflation			26 691.00
	TOTAL FOR 4TH YEAR			293 604.00
E.	5TH YEAR			
	4th year total + 10% to allow for inflation			29 360.00
	TOTAL FOR 5TH YEAR			322 964.00

CHAPTER 4.6

AGRICULTURE ACTIVITIES (AGC & RANCH)

PROJECT P. 06

NO: P. 06

AGRICULTURE ACTIVITIES (AGC & RANCH)

The agriculture activity at the Development Centre is intended to meet the agricultural production requirements for Dakawa and Mazimbu centres. There will be a total of 6000 inhabitants who will be supplemented with agricultural produce from Dakawa which include 3500 inhabitants already residing at Mazimbu. Mazimbu camp has already reached the maximum development potential in both the facilities and agricultural output. Whereas the Mazimbu has developed the piggery and vegetable production including slaughtering facilities, Dakawa intends to develop the crop production and ranching of Beef Cattle for both Dakawa and Mazimbu requirements. Dakawa Camp will also develop dairy and poultry to meet its requirements. The AGC is intended to provide practical training in commercial agricultural activity.

Summary of Preliminary Estimates:

a) Construction Cost:

• Phase I	2 359 893.00	
• Phase II	780 764.00	
• Phase III	563 678.00	
• Ranch	446 875.00	
Total Construction Cost		US $ 4 151 210.00
b) Recurrent Expenditure for 5 years		US $ 3 742 597.00
TOTAL		US $ 7 893 807.00

ACCOMMODATION	AREA SQ. M.	US $ PER UNIT	TOTAL US $
A. PHASE I - AGRICULTURE CENTRE			
i Infrastructure including roads, water, sewage, electrical reticulation			1 100 000.00
ii. Poultry houses for broilers 10 units x 440 sq.m	4400	100	440 000.00
iii. Service building	230	250	57 500.00
iv. Broiler slaughter house	135	400	54 000.00
v. Residential houses, semi detached 3 units x 2 houses x 86 sq.m	516	425	219 300.00
C/F	5281		1 870 800.00

ACCOMMODATION		AREA SQ. M.	US $ PER UNIT	TOTAL US $
	B/F	5281		1 870 800.00
vi.	External works for building only of US $ 770 800.00 (i.e. ii to v)	Say	10%	77 080.00
vii.	Preliminaries	Say		197 880.00
			10%	2 145 358.00
viii.	Prime Cost and Provisional Sums	Say	10%	214535.00
	TOTAL	5281	446.86	2359 893.00
B.	PHASE II			
i.	Fertiliser and dry goods cool store	864	250	216 000.00
ii.	Poultry houses - layers 8 units x 300 sq.m	2400	100	240 000.00
iii.	Service building	230	250	57 500.00
iv.	Residential houses, semi-detached 1 unit x 2 houses x 86 sq.m	172	425	73 100.00
				586 600.00
v.	External Works	Say	10%	58 660.00
				645 260.00
vi.	Preliminaries	Say	10%	64 526.00
				709 786.00
vii.	Prime Cost and Provisional Sums	Say	10%	70 978.00
	TOTAL	3666	212.97	780 764.00

ACCOMMODATION		AREA SQ. M.	US $ PER UNIT	TOTAL US $
C.	PHASE III			
i.	Dairy unit/stores	2420	175	423 500.00
ii.	External Works	Say	10%	42 350.00
				465 850.00
iii.	Preliminaries	Say	10%	46 585.00
				512 435.00
iv.	Prime Cost and Provisional Sums	Say	10%	51 243.00
	TOTAL	2420	232.92	563 678.00
D.	RANCH/AGRICULTURAL MACHINERY			
i.	Bush clearing at the ranch 1300 ha.	1300 ha.	50	65 000.00
ii.	Fencing of paddocks of average 50 hectares each	29	2500	72 500.00
iii.	Disc Ridger 2 rows	2	2000	4 000.00
iv.	Ranch Cattle	900	190	171 000.00
v.	Dairy Cattle	125	750	93 750.00
				406 250.00
	Add Contingencies	Say	10%	40 625.00
	TOTAL			446 875.00

RECURRENT EXPENDITURE		UNIT	US $ PER UNIT	TOTAL US $
A.	1ST YEAR			
I	POULTRY UNIT			
i.	Layers, two batches of 1000 layers for egg production	6 000	0.75	4 500.00
ii.	Broilers for meat production raised in four to five cycles per annum	140 000	0.50	70 000.00
iii.	Drinkers/feeders for every 10 layers/broilers	14 600	6.00	87 600.00
iv.	Chicken feed for layers and broilers	Say		50 000.00
v.	Drugs/medicine for poultry section	Say		5 750.00
	TOTAL FOR POULTRY UNIT			217 850.00
II	CROP PRODUCTION - per annum (Maize, Sunflower, Sorghum, Beans and Rice)			
i.	Land preparation			7 500.00
ii.	Seeds			2 500.00
iii.	Fertiliser/insecticides			1 500.00
iv.	Packing materials			10 000.00
	TOTAL FOR CROP PRODUCTION			21 500.00
III	AGC MANPOWER, EQUIPMENT, MACHINERY REHABILITATION			
i.	Maintenance and spares for new and existing machinery at AGC. Vehicle, disc ploughs, tractors, disc harrows, cultivator, planter boom sprayer, slashers and trailers at 30% of capital cost			40 000.00
ii.	Maintenance of civil works and infrastructure at AGC based on 1% of capital cost. ie. US $ 3 901 460.00 + 10% x 1%			42 916.00
	C/F			82 916.00

RECURRENT EXPENDITURE	UNIT	US $ PER UNIT	TOTAL US $
	B/F		82 916.00
iii. Salaries of agricultural activities at AGC and farming.			
a. Farm Manager	1	12 000 per annum	12 000.00
b. Asst. Farm Manager, Veternarian, Agronomist, Chief Accountants	8	9 600 per annum	76 800.00
c. Field Officers, foreman, accountants.	12	6 000 per annum	72 000.00
d. Administration and support staff for farming, ranching, poultry, dairy, crop production etc.	80	1 800 per annum	144 000.00
e. Temporary/part time manpower during planting, weeding, harvesting, de-shelling	50	600 per annum	30 000.00
TOTAL FOR AGC, EQUIPMENT, MACHINERY REHABILITATION			417 716.00
TOTAL FOR 1ST YEAR OF ITEM I, II & III			657 066.00
B. 2ND YEAR			
I POULTRY UNIT			
i. Replacement of layers, broilers, chicken feed, drugs, medicine, same as 1st year + 10% to allow to allow for inflation. ie. US $ 130 250.00 +10%			143 275.00
ii. Replacement of drinkers and feeders based on 10% per annum of capital cost + 10% to allow for inflation. i.e US $ 87 600.00 + 10% x 10%			9 636.00
TOTAL FOR POULTRY UNIT			152 911.00
II CROP PRODUCTION			
i. Replacement of agricultural input based on capital cost + 10% to allow for inflation. ie. US $ 21 500.00 + 10%			23 650.00
TOTAL FOR CROP PRODUCTION			23 650.00

RECURRENT EXPENDITURE	UNIT	US $ PER UNIT	TOTAL US $
III CIVIL WORKS, EQUIPMENT, MANPOWER			
i. Maintenance, emoluments based on initial cost + 10% to allow for inflation. i.e. US $ 417 716.00 + 10%			459 487.00
TOTAL FOR CIVIL WORKS, EQUIPMENT & MANPOWER			459 487.00
IV. RANCH & DAIRY PRODUCTION			
i. Replacement of dairy cattle based on initial cost + 10% to allow for inflation.	29	825	23 925.00
ii. Replacement of ranch cattle based on initial cost + 10% to allow for inflation	190	209	39 710.00
TOTAL FOR RANCH & DAIRY PRODUCTION			63 635.00
TOTALFOR 2ND YEAR ITEM I, II, III & IV			699 683.00
C. 3RD YEAR			
Based on 2nd year total for poultry unit, crop production, civil works maintenance, ranch and dairy production (I,II,III & IV) + 10% to allow for inflation. ie. US $ 699 683.00 + 10%			769 651.00
TOTAL FOR 3RD YEAR			769 651.00
D. 4TH YEAR			
Based on 3rd year total + 10% to allow for inflation but excluding recurrent expenditure for ranch and dairy cattle. ie. US $ 699 653.00 + 10%			769 618.00
TOTAL FOR 4TH YEAR			769 618.00
E. 5TH YEAR			
Based on 4th year total + 10% to allow for inflation. ie. US $ 769 618.00 +10%			846 579.00
TOTAL FOR 5TH YEAR			846 579.00

CHAPTER 4.7

HEALTH CENTRE (HC)

PROJECT P. 07

NO: P. 07

HEALTH CENTRE (HC)

The Health Centre is located north-west of PS-SS and adjacent to the Cultural and Social Centre at the main central area. The Health Centre will provide medical facilities for 2500 inhabitants at the Development Centre, Dakawa and the nearby villages of Magole, Mbigili, Mabana etc. The Health Centre will be equipped to provide curative and preventive medical care. In addition there will be pre and post natal care, mini-operation theatre, laboratory and pharmacy.

Summary of Preliminary Estimates

a)	Construction Cost	US $ 513 664.00
b)	Recurrent Expenditure for 5 years	US $ 2 265 918.00
	TOTAL	US $ 2 779 582.00

ACCOMMODATION	AREA SQ. M.	US $ PER UNIT	TOTAL US $
i. Health Centre comprising of:			
• Reception, Registry Office • Doctors Consultation room • Laboratory • Pharmacy • Labour room, Pre and Post Natal Care (4 beds) • Observation ward (8 beds) • Minor operations theatre • Stores/Washroom • Kitchen	550	500	275 000.00
ii. Residential houses 3 units x 87 sq.m	261	425	110 925.00
			385 925.00
iii. External Works	Say	10%	38 592.00
			424 517.00
iv. Preliminaries	Say	10%	42 451.00
			466 968.00
v. Prime Cost & Provisional Sum	Say	10%	46 696.00
Total Construction Cost			513 664.00

RECURRENT EXPENDITURE	UNIT	US $ PER UNIT	TOTAL US $
A. 1ST YEAR			
i. Health Centre, medical equipment, apparatus, including for emergency operation theatre, labour room		Say	150 000.00
ii. Health centre furniture, cupboards, beds, tables, chairs		Say	50 000.00
iii. Ambulance vans (four wheel drive) including spares, 1 stretcher, 1 attendant seat, spare oxygen cylinder, medicine box and ventilation	2	25000 per annum	50 000.00
iv. Doctor's emoluments	2	12000 per annum	24 000.00
v. Medical assistants, nurses, supporting staff emoluments	13	2400 per annum	31 200.00
vi. Essential medicines for prevention and curative medical care for Dakawa camp and nearby villages	2500	100 per annum	250 000.00
TOTAL FOR 1ST YEAR			555 200.00
B. 2ND YEAR			
i. Maintenance of civil works based on 1% of construction cost + 10% to allow for inflation. ie US $ 513 664.00 + 10% x 1%			5 650.00
ii. Maintenance and replacement of medical equipment, apparatus, furniture based on 5% of capital cost + 10% to allow for inflation ie.US $ 200 000.00 + 10% x 5%			11 000.00
iii. Maintenance/spares of ambulance vans based on 30% of capital cost + 10% to allow for inflation. ie. US $ 50 000.00 + 10% x 1%			16 500.00
iv. Doctor's emoluments based on 1st year emolument + 10% to allow for inflation.	2	13200 per annum	26 400.00
v. Medical assistants, nurses supporting staff emoluments based on 1st year emolument + 10% to allow for inflation	13	2620	34 060.00
C/F			93 610.00

RECURRENT EXPENDITURE	UNIT	US $ PER UNIT	TOTAL US $
	B/F		93 610.00
vi. Replacement of essential medicines for prevention and curative medical care based on 1st year estimates + 10% to allow for inflation	2500	110	275 000.00
TOTAL FOR 2ND YEAR			368 610.00
C. 3RD YEAR			
2nd year total + 10% to allow for inflation			36 861.00
TOTAL FOR 3RD YEAR			405 547.00
D. 4TH YEAR			
3rd year total + 10% to allow for inflation			40 547.00
TOTAL FOR 4TH YEAR			446 018.00
E. 5TH YEAR			
4th year total + 10% to allow for inflation			44 601.00
TOTAL FOR 5TH YEAR			490 619.00

CHAPTER 4.8

CULTURAL AND SOCIAL CENTRE (CSC)

PROJECT P. 08

NO: P. 08

CULTURAL AND SOCIAL CENTRE (CSC)

Cultural and Social Centre is located west of the primary and secondary school and the central sports area. The cultural and social centre is intended to provide art and cultural facilities for extra curricular activities for the schools and vocational training centre in addition to the Dakawa inhabitants. The Cultural and Social Centre will also accommodate a shop, supermarket and recreation facilities to enhance cohesion among inhabitants. A library for the inhabitants is under implementation at present.

Summary of Preliminary Estimates

a)	Construction Cost	US $ 1 018 547.00
b)	Recurrent Expenditure for 5 years	US $ 667 273.00
	TOTAL	US $ 1 685 820.00

ACCOMMODATION	AREA SQ. M.	US $ PER UNIT	TOTAL US $
i. Multipurpose hall including stage green room, 500 seating capacity	500	500	250 000.00
ii Graphic, audio, video, photographic studios	400	425	170 000 .00
iii. Shop and Supermarket	200	425	85 000.00
iv. Social Club	300	425	127 500.00
v. Offices	50	425	21 250.00
vi. Stores	150	250	37 500.00
vii. Washrooms (male, female staff)	100	500	50 000.00
viii. Passageways	160	150	24 000.00
			765 250.00
viii. External Works		Say 10%	76 525.00
			841 775.00
ix. Preliminaries		Say 10%	84 177.00
			925 952.00
x. Prime Cost and Provisional Sums		Say 10%	92 595.00
Total Construction Cost	1860	547.60	1 018 547.00

RECURRENT EXPENDITURE	UNIT	US $ PER UNIT	TOTAL US $
A. 1ST YEAR			
i. Cultural and Social Centre material, equipment for auditorium, studios, social club which includes lighting, and, darkroom, video, art/graphic materials, etc	Say		150 000.00
ii. Furniture, loose fittings such as chairs, work benches, tables in offices.	Say		25 000.00
iii. CSC Directors emolument	1	12 000 per annum	12 000.00
iv. Instructor's emoluments	3	9 600 per annum	28 800.00
v. Administration and support staff emoluments.	10	2 400 per annum	24 000.00
TOTAL FOR 1ST YEAR			239 800.00
B. 2ND YEAR			
i. Maintenance of civil works based on 1% of construction cost + 10% to allow for inflation. ie. US $ 1 018 547.00 + 10% x 1%			11 204.00
ii. Replacement and maintenance of furniture, CSC material, equipment based on 5% of capital cost + 10% to allow for inflation. ie. US $ 175 000.00 + 10% x 5%			9 625.00
iii. CSC Director's emoluments based on 1st year's emoluments + 10% to allow for inflation. ie. US $ 6 000.00 + 10%	1	13 200	13 200.00
iv. Instructor's emoluments based on 1st year's emoluments + 10% to allow for inflation. ie. US $ 10 800.00 + 10%	3	10 560	31 680.00
v. Administration support staff emolument based on 1st years emoluments + 10% to allow for inflation. i.e US $ 18 000.00 + 10%	10	2 640	26 400.00
TOTAL FOR 2ND YEAR	C/F		92 109.00

RECURRENT EXPENDITURE	UNIT	US $ PER UNIT	TOTAL US $
	B/F		92 109.00
C. 3RD YEAR			
2nd year total + 10% to allow for inflation			9 210.00
TOTAL FOR 3RD YEAR			101 319.00
D. 4TH YEAR			
3rd year total + 10% to allow for inflation			10 131.00
TOTAL FOR 4TH YEAR			111 450.00
E. 5TH YEAR			
4th year total + 10% to allow for inflation			11 145.00
TOTAL FOR 5TH YEAR			122 595.00

CHAPTER 4.9

CENTRAL SPORTS AREA (CPA)

PROJECT P. 09

NO: P. 09

CENTRAL SPORTS AREA (CSA)

Central Sports Area is located west of VTC and south of PS-SS in the main central area. The sports area will provide primarily sporting grounds for the schools and vocational training centre. The CSA will also cater for the inhabitants of Dakawa centre. International standards sports fields will be provided. Indoor sports will be played in the multi-purpose auditorium with the exception of squash courts. Football, rugby, tennis, basket ball, volleyball, netball, hockey field and running track will be provided at the CSA. The CSA will be maintained by a green keeper supervised by a professional games coach.

Summary of Preliminary Estimates

a)	Construction Cost	US $ 659 687.00
b)	Recurrent expenditure for 5 years	US $ 197 946.00
	TOTAL	US $ 857 633.00

ACCOMMODATION	AREA SQ. M.	US $ PER UNIT	TOTAL US $
i. Football	7140	8	57 120.00
ii. Running Track	2650	10	26 500.00
iii. Spectators Stand	100	75	7 500.00
iv. Rugby Field	8533	8	68 264.00
v. Hockey Field	5450	8	43 600.00
vi. Tennis Courts (2)	1200	10	12 000.00
vii. Volleyball Court	300	8	2 400.00
viii. Netball Court	685	10	6 850.00
ix. Basketball Court	540	10	5 400.00
x. Squash Court (2)	156	275	42 900.00
xi. Changing rooms/Sports House	300	500	150 000.00
xii. Caretakers House (2)	172	425	73 100.00
			495 634.00
xiv. External Works	Say	10%	49 563.00
	C/F		545 197.00

ACCOMODATION	UNIT	US $ PER UNIT	TOTAL US $
	B/F		545 197.00
xv. Preliminaries	Say	10%	54 519.00
			599 716.00
xvi. Prime Cost and Provisional Sums	Say	10%	59 971.00
Total Construction Cost			659 687.00

RECURRENT EXPENDITURE	UNIT	US $ PER UNIT	TOTAL US $
A. 1ST YEAR			
i Maintenance and upkeep of sports fields based on 2% of construction cost ie.US $ 659 687.00 x 2%			13 193.00
ii Furniture at sports house, sports equipment gear, uniforms lockers		Say	25 000.00
iii. Games coach emolument	1	9600 per annum	9 600.00
iv. Green keeper, caretaker and other support staff's emolument	4	600 per annum	2 400.00
TOTAL FOR 1ST YEAR			50 193.00
B. 2ND YEAR			
i. Maintenance and upkeep of sports fields based on 1st year's maintenance cost + 10% to allow for inflation. ie. US $ 13 193.00 + 10%			14 512.00
ii. Maintenance and replacement of furniture, equipment at sports house based on 15% of the original cost + 10% to allow for inflation. ie.US $ 2 500.00 + 10% x 15%			4 125.00
iii. Games coach emoluments based on 1st years emoluments + 10% to allow for inflation. ie. US $ 3 600.00 + 10%	1	10 560.00 per annum	10 560.00
iv. Green keeper, caretaker and other support staff's emolument based on 1st years emoluments + 10% to allow for inflation. ie. US $ 7 200.00 + 10%	4	660 per annum	2 640.00
TOTAL FOR 2ND YEAR			31 837.00
C. 3RD YEAR			
2nd year total + 10% to allow for inflation			3 183.00
TOTAL FOR 3RD YEAR	C/F		35 020.00

RECURRENT EXPENDITURE	UNIT	US $ PER UNIT	TOTAL US $
	B/F		35 020.00
D. 4TH YEAR			
3rd year total + 10% to allow for inflation			3 502.00
TOTAL FOR 4TH YEAR			38 522.00
E. 5TH YEAR			
4th year total + 10% to allow for inflation			3 852.00
TOTAL FOR 5TH YEAR			42 374.00

CHAPTER 4.10

ECUMENICAL CENTRE (EC)

PROJECT P. 10

No: P. 10

ECUMENICAL CENTRE (EC)

Ecumenical Centre is located between the schools and vocational training centre along the main access road. The Ecumenical Centre is intended to provide facilities for congregation of various Christian denominations.

The Ecumenical Centre will consist of congregation hall for 100 persons and library cum reading room, offices and residential house.

Summary of Preliminary Estimates

a)	Construction Cost	US $ 223 741.00
b)	Recurrent Expenditure for 5 years	US $ 90 955.00
	TOTAL	US $ 314 696.00

ACCOMMODATION	AREA SQ. M.	US $ PER UNIT	TOTAL US $
i. Congregation Hall	150	375	56 250.00
ii. Library/Reading room/Stores	75	375	28 125.00
iii. Offices	25	425	10 625.00
iv. Residential Houses 2 units x 86 sq.m	172	425	73 100.00
			168 100.00
v. External Works		Say 10%	16 810.00
			184 910.00
vi. Preliminaries		Say 10%	18 491.00
			203 401.00
vii. Prime Cost and Provisional Sums		Say 10%	20 340.00
TOTAL CONSTRUCTION COST	422	530.19	223 741.00

RECURRENT EXPENDITURE	UNIT	US $ PER UNIT	TOTAL US $
A. 1ST YEAR			
i. Furniture, reading material for the congregation hall library, offices	Say		5 000.00
ii. Ecumenical centres Ministers allowance	1	9600 per annum	9 600.00
iii. Ecumenical Support Staff emolument.	1	2400 per annum	2 400.00
TOTAL FOR 1ST YEAR			17 000.00
B. 2ND YEAR			
i. Maintenance of civil works based on 1% of construction cost + 10% to allow for inflation. ie. US $ 223 741.00 + 10% x 1%			2 416.00
ii. Maintenance of furniture and replacement of reading materials based on 5% of capital cost + 10% to allow for inflation. i.e US $ 5 000.00 + 10% x 1%			275.00
iii. E.C Ministers allowance based on previous years allowance + 10% to allow for inflation ie. US $ 9 600.00 + 10%	1	10560 per annum	10 560.00
iv. E.C Support Staff emoluments based on previous years emolument + 10% to allow for inflation ie. US $ 2 400.00 + 10%	1	2650 per annum	2 640.00
TOTAL FOR 2ND YEAR			15 936.00
C. 3RD YEAR			
2nd year total + 10% to allow for inflation			1 593.00
TOTAL FOR 3RD YEAR			17 529.00
D. 4TH YEAR			
3rd year total + 10% to allow for inflation			1 752.00
TOTAL FOR 4TH YEAR			19 281.00
E. 5TH YEAR			
4th year total + 10% to allow for inflation			1 928.00
TOTAL FOR 5TH YEAR			21 209.00

CHAPTER 4.11

RESIDENTIAL HOUSES (RH)

PROJECT P. 11

NO: P. 11

RESIDENTIAL HOUSES (RH)

ANC have adopted 2 and 3 bedroom semi-detached house plans developed by ANC planning and construction department. The houses are intended to be constructed around the partly developed villages and villages for which infrastructure has already been designed. The houses are designed to accommodate an average of 5 persons sharing a dwelling.

The average area of 3 bedroom house is about 86 sq.m. A total of 1600 inhabitants will be provided with 320 houses of which 135 house have been constructed or under construction. There are houses at other centres also incorporated in The Revised Development Plan. A total of 160 houses will be developed in the villages.

Summary of Preliminary Estimates

a)	Construction Cost	US $ 8 270 168.00
b)	Recurrent Expenditure for 5 years	US $ 422 194.00
	TOTAL	US $ 8 692 362.00

ACCOMMODATION	AREA SQ. M.	US $ PER UNIT	TOTAL
i. 80 houses at Village V1 80 units x 86 sq.m	6880	425.00	2 924 000.00
ii. 90 houses at Village V3 90 units x 86 sq.m.	7740	425.00	3 289 500.00
			6 213 500.00
iii. External Works		Say 10%	621 350.00
			6 834 850.00
iv. Preliminaries		Say 10%	683 485.00
			7 518 335.00
v. Prime Cost and Provisional Sums		Say 10%	751 833.00
Total Construction Cost	14620	565.67	8 270 168.00

RECURRENT EXPENDITURE	UNIT	US $ PER UNIT	TOTAL US $
A. 1ST YEAR			
It is anticipated that 1st year maintenance will be covered within the defects liability period.			Nil
B. 2ND YEAR			
Maintenance based on 1% of construction cost + 10% to allow for inflation ie. US $ 8 270 168.00 + 10% x 1%			90 971.00
C. 3RD YEAR			
2nd year total + 10% to allow for inflation			9 097.00
TOTAL FOR 3RD YEAR			100 068.00
D. 4TH YEAR			
3rd year total + 10% to allow for inflation			10 006.00
TOTAL FOR 4TH YEAR			110 074.00
E. 5TH YEAR			
4th year total + 10% to allow for inflation			11 007.00
TOTAL FOR 5TH YEAR			121 081.00

CHAPTER 4.12

ENVIRONMENTAL PROGRAMME AND REFORESTATION (EP)

PROJECT P. 12

NO: P. 12

ENVIRONMENTAL PROGRAMME AND REFORESTATION (EP)

A nursery is located at the Adult Education Centre north-west corner of the Centre. Selected shade and fruit trees are to be planted along the main access roads, pedestrian lane, village, centre and the grove.

Summary of Preliminary Estimates

a)	Construction Cost	US $ 143 750.00
b)	Recurrent Expenditure for 5 years	US $ 380 752.00
	TOTAL	US $ 524 502.00

ACCOMMODATION	SEEDLINGS	US $ PER UNIT	TOTAL US $
i. Establish tree plant nursery for 5,000 seedlings per annum	5 000	10	50 000.00
ii. Prepare areas and plant and maintain selected trees.			
a. Grove/Green Areas 200 trees ha. x 37ha	7 400	5	37 000.00
b. Along access roads, pedestrian lanes, village roads, 200 trees ha. x 50ha	10 000	5	50 000.00
c. Schools, VTC, AEC and other centres and the grove park- land 30 trees ha. x 45ha	1 350	5	67 500.00
Total Construction Cost			143 750.00

RECURRENT EXPENDITURE	UNIT	US $ PER UNIT	TOTAL US $
A. 1ST YEAR			
i. Equipment including slashers, mowers, pruners	Say		25 000.00
ii. Horticulturalist emolument	1	12 000 per annum	12 000.00
iii. Support staff emolument at the nursery and for planting	25	600 per annum	15 000.00
iv. Fertiliser, polythene bags protection and support for newly planted trees	Say		25 000.00
TOTAL FOR 1ST YEAR			77 000.00
B. 2ND YEAR			
i. Maintenance and replacement of equipment based on 30% of capital cost + 10% to allow for inflation. ie. US $ 25 000.00 + 10% x 30%			8 250.00
ii. Horticulturalist emolument based on 1st year emolument + 10% to allow for inflation ie. US $ 12 000.00 + 10%	1	13 200 per annum	13 200.00
iii. Support staff emolument based 1st year emolument + 10% to allow for inflation. ie. US $ 15 000.00 + 10%	25	660 per annum	16 500.00
iv. Fertiliser, polythene bags, protection and support for trees based on 1st year capital expenditure + 10% to allow for inflation ie. US $ 25 000.00 + 10%	Say		27 500.00
TOTAL FOR 2ND YEAR			65 450.00
C. 3RD YEAR			
i. 2nd year total + 10% to allow for inflation			6 545.00
TOTAL FOR 3RD YEAR	C/F		71 995.00

RECURRENT EXPENDITURE	UNIT	US $ PER UNIT	TOTAL US $
	B/F		71 995.00
D. 4TH YEAR			
3rd year total + 10% to allow for inflation			7 199.00
TOTAL FOR 4TH YEAR			79 194.00
E. 5TH YEAR			
4th year total + 10% to allow for inflation			7 919.00
TOTAL FOR 5TH YEAR			87 113.00

CHAPTER 4.13

INFRASTRUCTURE SERVICES

PROJECT P. 13

NO: P. 13

INFRASTRUCTURE SERVICES

Infrastructure services are to be developed to extend around existing infrastructure services to support The Revised Development Plan.

The pedestrian and access roads are proposed to bring closer the various existing developments in The Revised Development Plan.

Summary of Preliminary Estimates

a)	Construction Cost		US $
	i. P.13A Main Water Supply Line	1 187 401.00	
	ii. P.13B Telecommunication		
	• External Connection	415 575.00	
	• Local Distribution	250 000.00	
	iii. P.13C Access Link Road/Lanes	556 600.00	
	iv. P.13D Sewerage System	423 500.00	
	v. P.13E Electrical Reticulation	866 360.00	
	vi. P.13F Fire fighting, sewage/refuse collection and disposal activities	229 750.00	
	vii. P.13G Village V3 Infrastructure	903 567.00	
	Total Construction Cost		US $ 4 832 783.00
b)	Recurrent Expenditure for 5 years		US $ 1 453 194.00
	TOTAL		US $ 6 285 977.00

ACCOMMODATION	UNIT	US $ PER UNIT	TOTAL US $
A. P.13-A MAIN WATER SUPPLY LINE			
i. Permanent 150 mm dia. PVC water line from bore hole at Wami river bed.	12,000 m	38	456 000.00
ii. Civil works including intermediate booster pumps, pump house, elevated water tanks (325 cu.m)	Say		400 000.00
iii. Pump operator/security guards house at Wami including external works 2 units x 86 sq.m	172 sq. m.	467	80 324.00
iv. Water pumps	3	15 000	45 000.00
			981 324.00
v. Preliminaries	Say	10%	98 132.00
			1 079 456.00
vi. Prime Cost and Provisional Sum	Say	10%	107 945.00
TOTAL			1 187 401.00
B. P.13-B TELECOMMUNICATION			
I PHASE I - EXTERNAL SYSTEM			
In accordance with the local telecommunication authority requirements for low capacity UHF radio system with speech and duplex facilities, the following will be provided.			
i. 2 megabit per second digital radio system 2 hop link with 30 channels capacity	4		107 500.00
ii. Multiplex equipment	2		47 250.00
iii. 10m height towers	2		25 500.00
iv. Antenna with Accessories	4		22 000.00
v. Speech and one duplex unit for telegraph/ telex			6 000.00
vi. Power source (solar)			65 000.00
C/F			273 250.00

ACCOMODATION	UNIT	US $ PER UNIT	TOTAL US $
	B/F		273 250.00
vii. Spare's at 10%			27 325.00
viii. Training of operators/technician			55 000.00
ix. Civil works for exchange room, foundation for antenna towers			60 000.00
			415 575.00
B. PHASE II - LOCAL DISTRIBUTION			
i. Main exchange equipment for 55 lines including distribution lines, poles, equipment, spares etc.			250 000.00
TOTAL PHASE I & II			665 575.00
C. P.13-C ACCESS LINK ROAD AND PEDESTRIAN/CYCLIST LANES			
i. 5m wide gravel access link road at the northern boundary of village V1 and V3 linking to existing access road leading to main central area.	1.7 km	88 235	150 000.00
ii. 3m wide gravel pedestrian/ cyclist lanes interlinking villages and centres	9.1 km	34 065	310 000.00
			46 000.00
iii. Preliminaries	Say	10%	46 000.00
			506 000.00
iv. Prime Cost and Provisional Sum	Say	10%	50 600.00
TOTAL			556 600.00

ACCOMMODATION		UNIT	US $ PER UNIT	TOTAL US $
D.	P.13-D SEWERAGE SYSTEM			
i.	Main sewer lines including pumping station at school dormitories, schools, health centre to be connected to existing sewer lines leading to waste stabilisation ponds.			350 000.00
				350 000.00
ii.	Preliminaries	Say	10%	35 000.00
				385 000.00
iii.	Prime Cost and Provisional Sums	Say	10%	38 500.00
	TOTAL			423 500.00
E.	P.13-E ELECTRICAL RETICULATION			
	Electrical reticulation excluding for village V3 which is contained separately but mainly for upto Agriculture Centre (AGC), Students Dormitories (SD).			
i.	Installation of 2 transformer at AGC and SD.	2		21 000.00
ii.	Commissioning of extention of H.T 11 kv line for AGC and SD			60 000.00
iii.	L.T underground distribution network in main central area			425 000.00
iv.	L.T overhead distribution networks. AGC & SD			210 000.00
				716 000.00
v.	Preliminaries	Say	10%	71 600.00
				787 600.00
vi.	Prime Cost and Provisional Sums	Say	10%	78 760.00
	TOTAL			866 360.00

ACCOMMODATION	UNIT	US $ PER UNIT	TOTAL US $
F. P.13-F FIRE FIGHTING, SEWAGE AND REFUSE COLLECTION AND DISPOSAL DEPARTMENTS			
i. Fire tender 4 wheel drive with 2600 lt/min. discharge 10.5 sq.cu.m head and 17.5kg/sq.cum. max. pressure	1		50 000.00
ii. Cesspit emptier with 1930 lt.per min. suction and 1500 lt. capacity.	1		35 000.00
iii. Refuse tipper (open top) with 2.0 cu.m capacity	1		19 750.00
iv. Development of tipping site including access upto the tipping site.	9000 cu. m.		125 000.00
TOTAL			229 750.00
G. P.13-G VILLAGE V3 INFRASTRUCTURE			
i. Internal roads/storm drainage			312 000.00
ii. Electrical LV overhead reticulation including transformer installation.			175 000.00
iii. Water distribution			55 250.00
iv. Main sewage connection including pumping station to waste stabilisation ponds.			204 500.00
			746 750.00
v. Preliminaries	Say	10%	74 675.00
			821 425.00
vi. Prime Cost and Provisional Sums	Say	10%	82 142.00
TOTAL			903 567.00

RECURRENT EXPENDITURE	UNIT	US $ PER UNIT	TOTAL US $
MAINTENANCE AND OPERATION OF INFRASTRUCTURE SERVICES			
A. 1ST YEAR			
i. Maintenance of civil works for both existing developments and those contained in The Revised Development Plan based on 1% of the construction cost of existing and as proposed in The Revised Development Plan. ie.US $ 10 000 000.00 x 1%			100 000.00
ii. Maintenance and spares of plant, equipment, vehicles at 30% of the intial cost. ie.US $ 160 100.00 x 30%			48 030.00
iii. Manpower Emoluments.			
a) Head of Maintenance department	1	12000 per annum	12 000.00
b) Engineers for electrical, water, sewage, roads, equipment	5	9600 per annum	48 000.00
c) Support staff including fire fighting squad, sewage, water, electrical	50	600 per annum	30 000.00
TOTAL FOR 1ST YEAR			238 030.00
B. 2ND YEAR			
1st year total + 10% to allow for inflation			23 803.00
TOTAL FOR 2ND YEAR			261 833.00
C. 3RD YEAR			
2nd year total + 10% to allow for inflation			26 183.00
TOTAL FOR 3RD YEAR			288 016.00
D. 4TH YEAR			
3rd year total + 10% to allow for inflation			28 801.00
TOTAL OF 4TH YEAR			316 817.00
E. 5TH YEAR			
4th year total + 10% to allow for inflation			31 681.00
TOTAL FOR 5TH YEAR			348 498.00

CHAPTER 4.14

MAIN COMMUNITY ADMINISTRATION ACTIVITY (AA)

PROJECT P. 14

NO: P. 14

MAIN COMMUNITY ADMINISTRATION ACTIVITY (AA)

The Main Community Administration Activities are to administer the day to day activities of The Development Centre and organise accommodation for Dakawa inhabitants. The Main Administration Area office is located south of VTC where the Heads of various departments will be located. Additional supplementary activities of Main Community Administration will be located at the light industrial area and industrial area I.3 where the planning, construction and maintenance offices are located.

The Main Community Administration Activities are to organise, procure and provide essential requisites and services to the inhabitants.

Summary of Preliminary Estimates

Recurrent expenditure for 5 years US $ 9 450 457.00

RECURRENT EXPENDITURE	UNIT	US $ PER UNIT	TOTAL US $
A. 1ST YEAR			
i. Office equipment, stationery, furniture including typewriters, photocopiers, filing cabinets, general office furniture for 30 senior administrators, 120 administration support staff, 20 secretaries	Say	Approx.	150 000.00
ii. Residential furniture for 185 residential houses including beds, dining tables, lounge chairs, wardrobes, bedside tables, curtains, etc. at centres and villages	185	1500	277 500.00
iii. Vehicles 4 wheel drive, twin cab	10	15000	150 000.00
iv. Mini-bus within centre (30 passengers)	3	25000	75 000.00
v. Emoluments			
a. Managers and Seniors administrators	30	9600 per annum	288 000.00
b. Administration support staff	170	1800 per annum	306 000.00
c. Secretaries	20	1200 per annum	24 000.00
d. Community Day Care Centre and Nursery school teachers	10	9600 per annum	96 000.00
	C/F		1 366 500.00

RECURRENT EXPENDITURE	UNIT	US $ PER UNIT	TOTAL US $
	B/F		1366500.00
e. Mechanics/Drivers	25	1800 per annum	45 000.00
f. Industries	100	600 per annum	60 000.00
g. Part time employment/handicraft activities and others	405	600 per annum	243 000.00
vi. Industrial activities input, garments, leather machinery maintenance, spares, raw materials	Say		150 000.00
vii. Maintenance including materials, equipment and spares of existing plant, equipment, vehicles, buildings stores and houses at village V1, V2, V4, EOC, VTC and other centres			150 000.00
TOTAL FOR 1ST YEAR			2 014 500.00
B. 2ND YEAR			
i. Maintenance and replacement of office equipment, based on 10% of capital cost + 10% to allow for inflation. i.e. US $ 150 000.00 + 10% x 10%			16 500.00
ii. Maintenance of residential houses, furniture based on 5% of capital cost + 10% to allow for inflation. ie. US $ 277 500.00 + 10% x 5%			15 262.00
iii. Emoluments based on 1st year emoluments + 10% to allow for inflation. ie. US $ 764 250.00 + 10%			1 168 200.00
iv. Industrial activities input based on 1st years input + 10% to allow for inflation. ie. US $ 150 000.00 + 10%			165 000.00
v. Maintenance of existing buildings based on 1st years maintenance cost + 10% to allow for inflation. ie. US $ 150 000.00 + 10%			165 000.00
C/F			1 529 962.00

RECURRENT EXPENDITURE	UNIT	US $ PER UNIT	TOTAL US $
	B/F		1 529 962.00
vi. Maintenance of motor vehicles based on 30% of capital cost + 10% to allow for inflation. ie. US $ 219 000.00 + 10% x 30%			72 270.00
TOTAL FOR 2ND YEAR			1 602 232.00
C. 3RD YEAR			
2nd year total + 10% to allow for inflation			160 223.00
TOTALFOR 3RD YEAR			1 762 455.00
D. 4TH YEAR			
3rd year total + 10% to allow for inflation			176 245.00
TOTAL FOR 4TH YEAR			1 938 700.00
E. 5TH YEAR			
4th year total + 10% to allow for inflation			193 870.00
TOTAL FOR 5TH YEAR			2 132 570.00

CHAPTER 5.0

PROGRAMME AND DRAWINGS

ANC DEVELOPMENT CENTRE DAKAWA, TANZANIA
REVISED 1984 DEVELOPMENT PLAN – PROGRAMME 1991 – 1

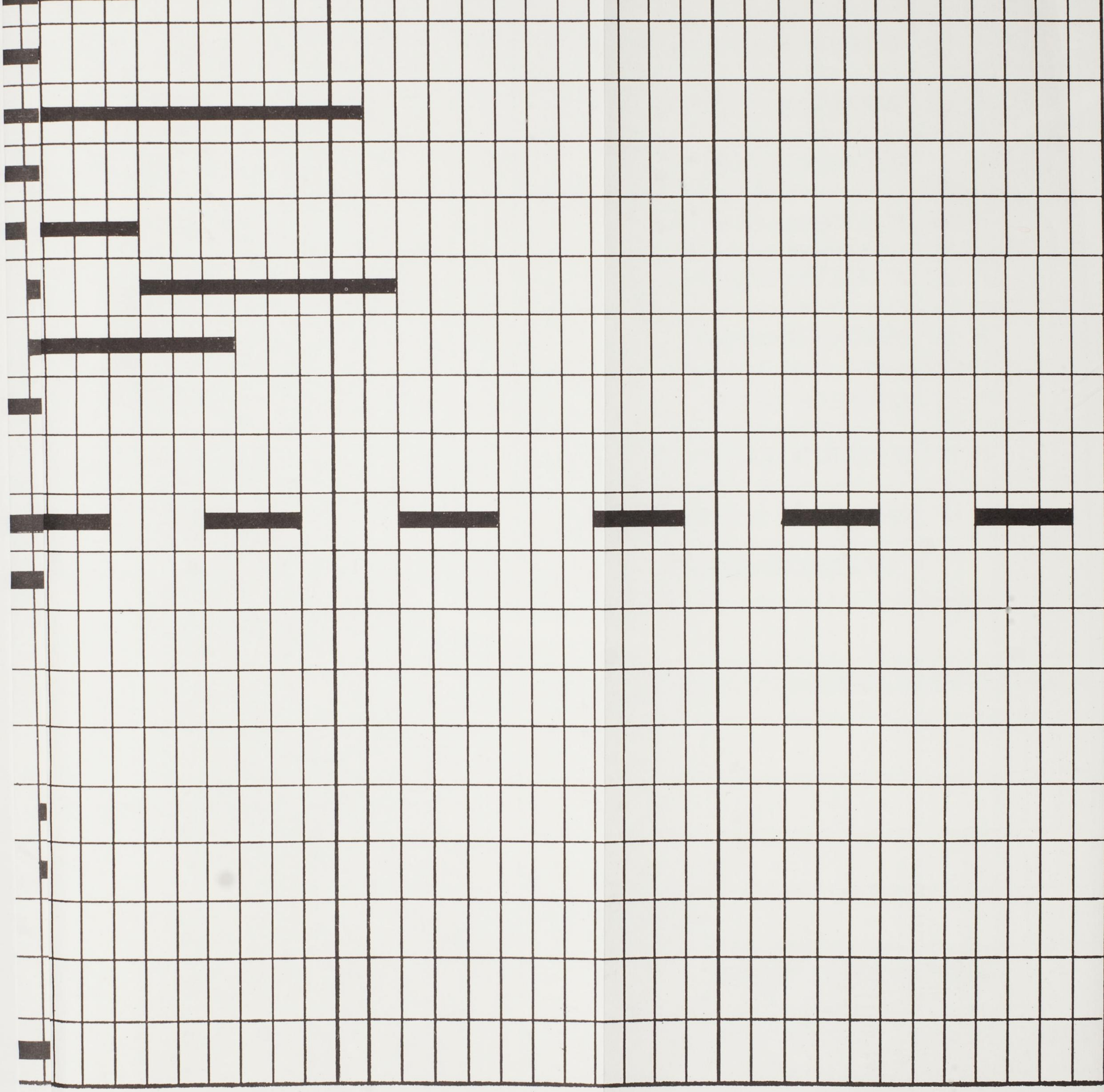
Project Package Number	Description	1991												1	
		J	F	M	A	M	J	J	A	S	O	N	D	J	F
P . 01	PRIMARY, SECONDARY SCHOOL														
P . 02/3	DORMITORIES PP/SS PHASE I AND VTC														
P . 01	ADVERTISE/RECRUITMENT OF TEACHERS														
P . 06	HEALTH CENTRE														
P . 04	EXTENTION OF EOC FOR AEC														
P . 09	ECUNEMICAL CENTRE														
P . 126	INFRASTRUCTURE OF V3														
P . 10	80 HOUSES AT V1														
P . 11	TREE PLANT NURSERY AT EOC														
P . 07	CULTURE AND SOCIAL CENTRE														
P . 13	PROCURRENT OF EQUIPMENT														
P . 11	PLANTING OF TREES AND BUSHES														
P . 02	DORMITORIES PS/SS PHASE II														
P . 10	50 HOUSES AT V3 PHASE I														
P . 08	CENTRAL SPORTS AREA														
P . 05	INFRASTRUCTURE & PHASE I OF AGC														
P . 03	WORKSHOP/CLASS ROOMS AT VTC														
P . 05	AGC PHASE II														
P . 05	AGC PHASE III														
P . 10	MAINTENANCE OF BUILDINGS														

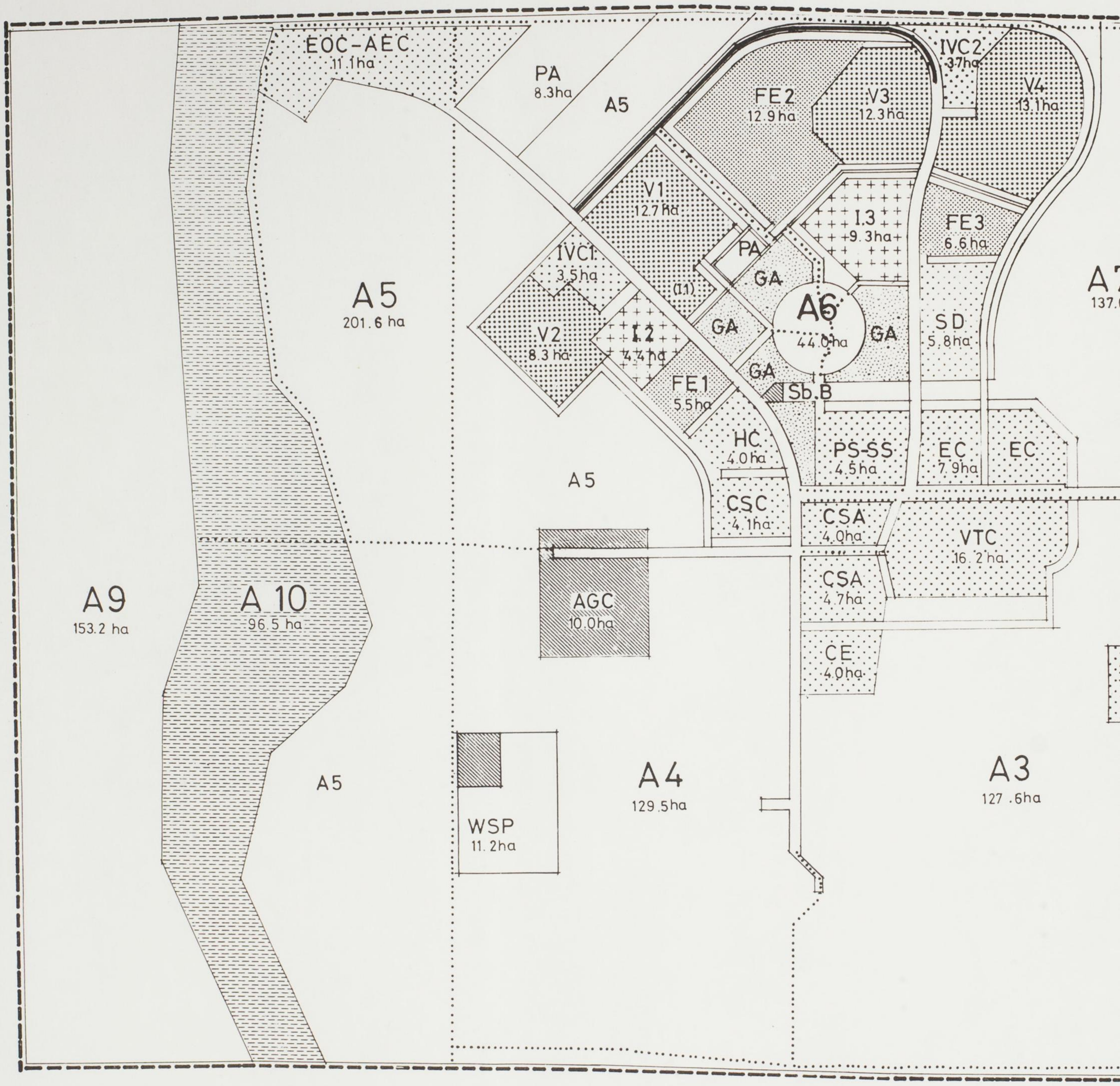

1992
1993
1994
M A M J J A S O N D J F M A M J J A S O N D J F M A M J J A S O N D

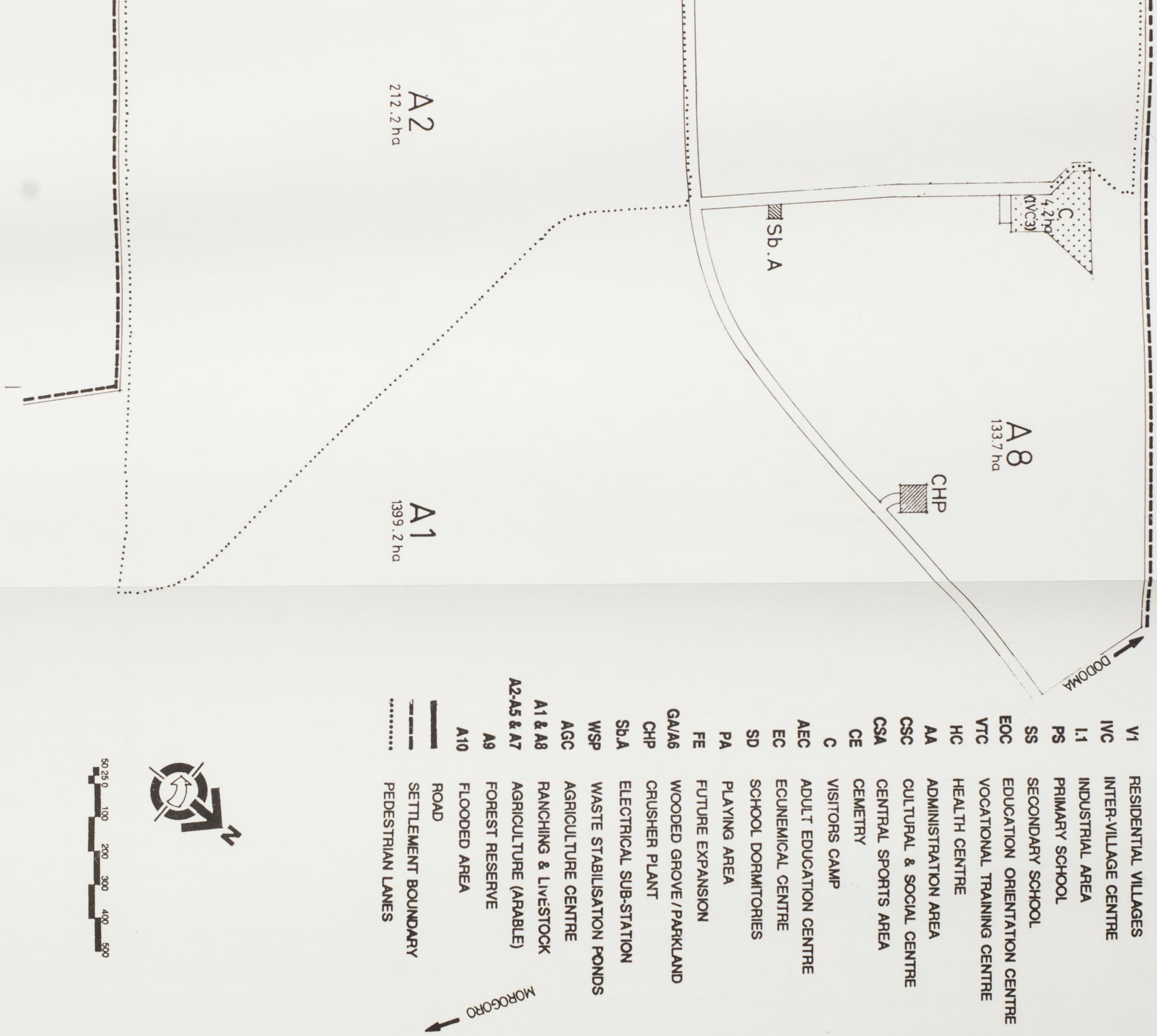
ANC DEVELOPMENT CENTRE DAKAWA, TANZANIA
REVISED 1984 DEVELOPMENT PLAN – PROGRAMME 1991 – 19

Project Package Number	Description	1991														
		J	F	M	A	M	J	J	A	S	O	N	D	J	F	M
P . 12C	STORM DRAINS/PONDS															
P . 12A	MAIN WATER LINE															
P . 12B	EXTERNAL TELECOMMUNICATION															
P . 12B	INTERNAL TELECOMMUNICATION															
P . 12E	ELECTRICAL RETICULATION															
P12C/11	PEDESTRIAN LANES/GROVE															
P . 12C	ACCESS LINK ROAD VI TO V3															
P . 12D	SEWAGE CONNECTIONS															
P . 12F	REFUSE TIPPING SITE															
P . 12G	WATER RETICULATION & STORAGE TANKS															
P . 12	MAINTENANCE OF INFRASTRUCTURE															

1992											1993												1994											
M	A	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D

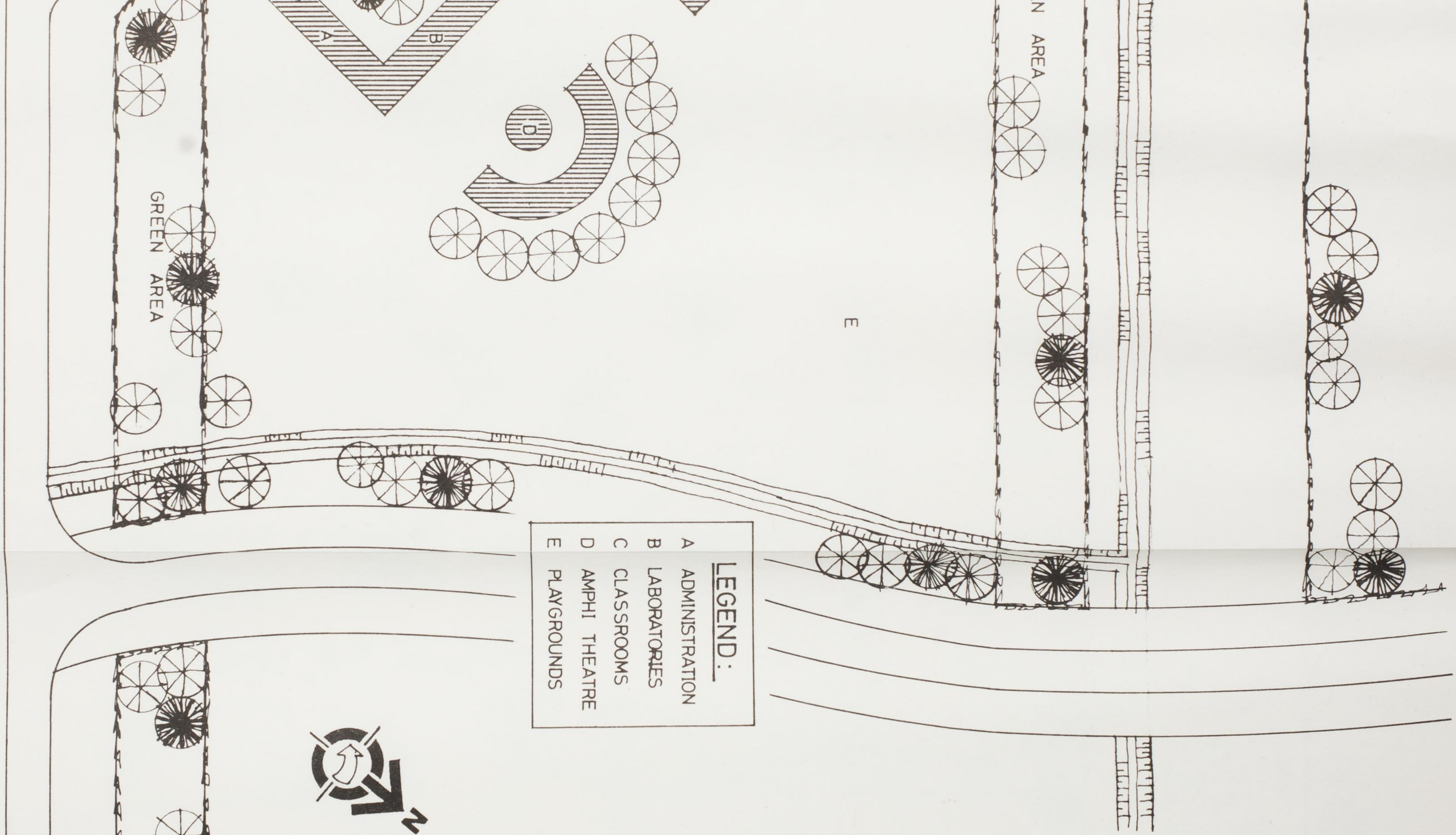



EOC-AEC
11.1ha
PA
8.3ha
A5
FE2
12.9ha
V3
12.3ha
IVC2
3.7ha
V4
13.1ha
V1
12.7ha
I.3
9.3ha
FE3
6.6ha
IVC1
3.5ha
PA
GA
(1.1)
A6
44.0ha
GA
A5
201.6 ha
V2
8.3 ha
I.2
4.4 ha
GA
GA
SD
5.8ha
FE1
5.5ha
Sb.B
HC
4.0ha
PS-SS
4.5ha
EC
7.9ha
EC
A5
CSC
4.1ha
CSA
4.0ha
VTC
16.2ha
A9
153.2 ha
A 10
96.5 ha
AGC
10.0ha
CSA
4.7ha
CE
4.0ha
A5
A4
129.5ha
A3
127.6ha
WSP
11.2ha



A.N.C. DEVELOPMENT CENTRE, DAKAWA, TANZANIA	1990 REVISED DEVELOPMENT PLAN VILLAGE/ROAD NETWORK	SCALE : 1 : 12500	DATE : JULY 1990
		DRG : 604/C/01	


HC
CSC
CSA

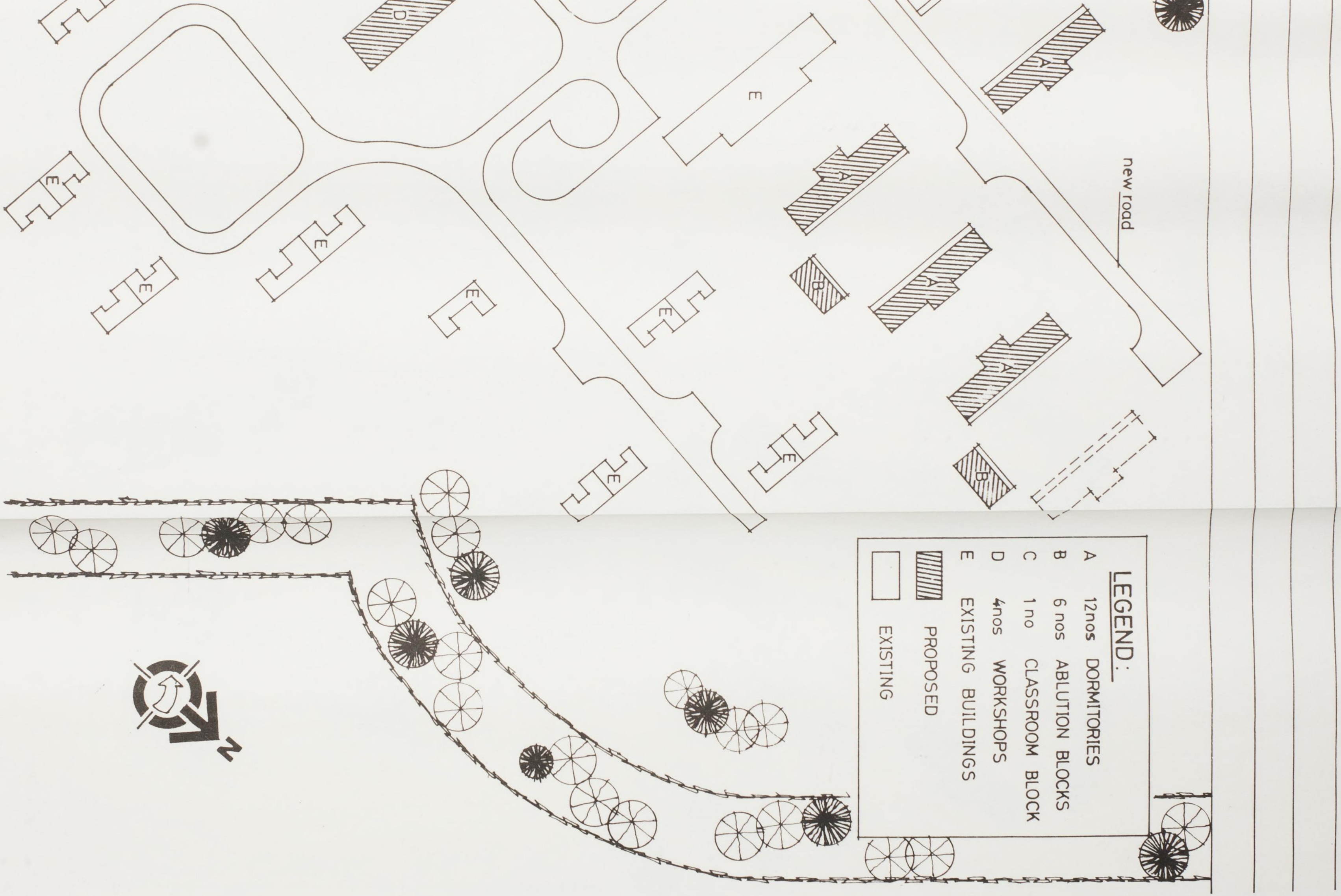


A.N.C. DEVELOPMENT CENTRE, DAKAWA, TANZANIA	1990 REVISED DEVELOPMENT PLAN PRIMARY - SECONDARY SCHOOL	SCALE : 1 : 1250	DATE : JULY 1990
		DRG : 604/D/02	

EXISTING ROAD

new road

B A B A B A A A B A A A B A A



	A.N.C. DEVELOPMENT CENTRE, DAKAWA, TANZANIA	1990 REVISED DEVELOPMENT PLAN VOCATIONAL TRAINING CENTRE	SCALE : 1 : 1250	DATE : JULY 1990
			DRG : 604/D/03	

VOLLEYBALL

SQUASH

NETBALL

EXISTING ROAD

FOOTBALL &
TRACKS

IN

new road

CAR
PARK

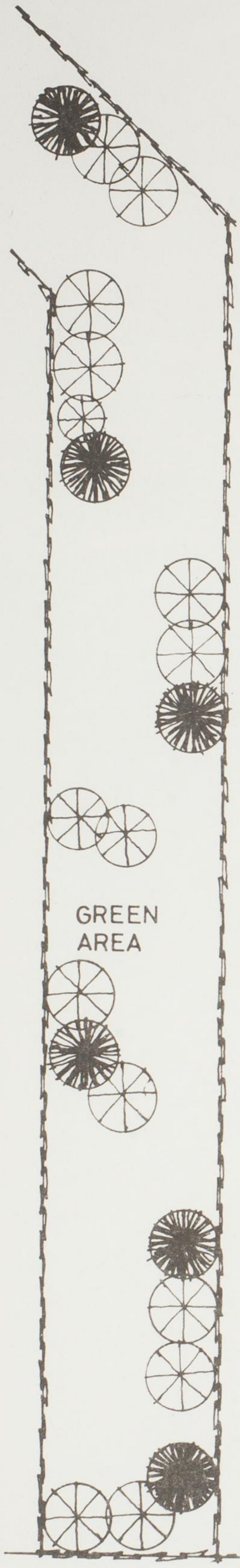
OUT

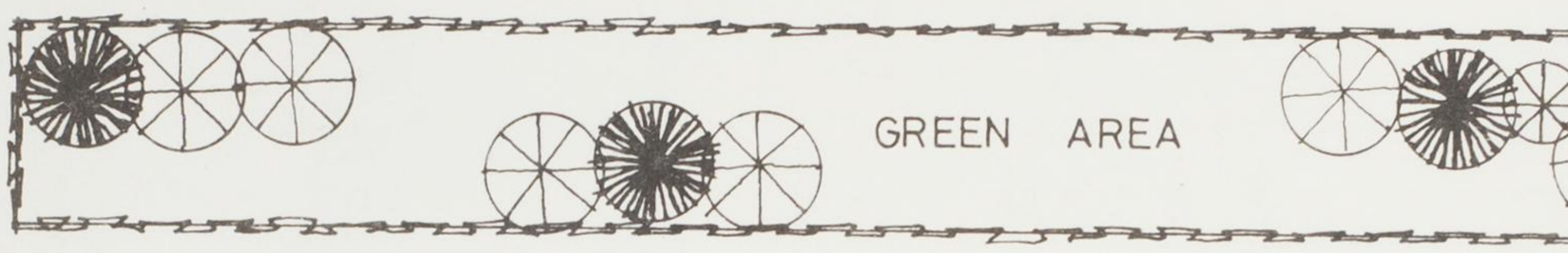
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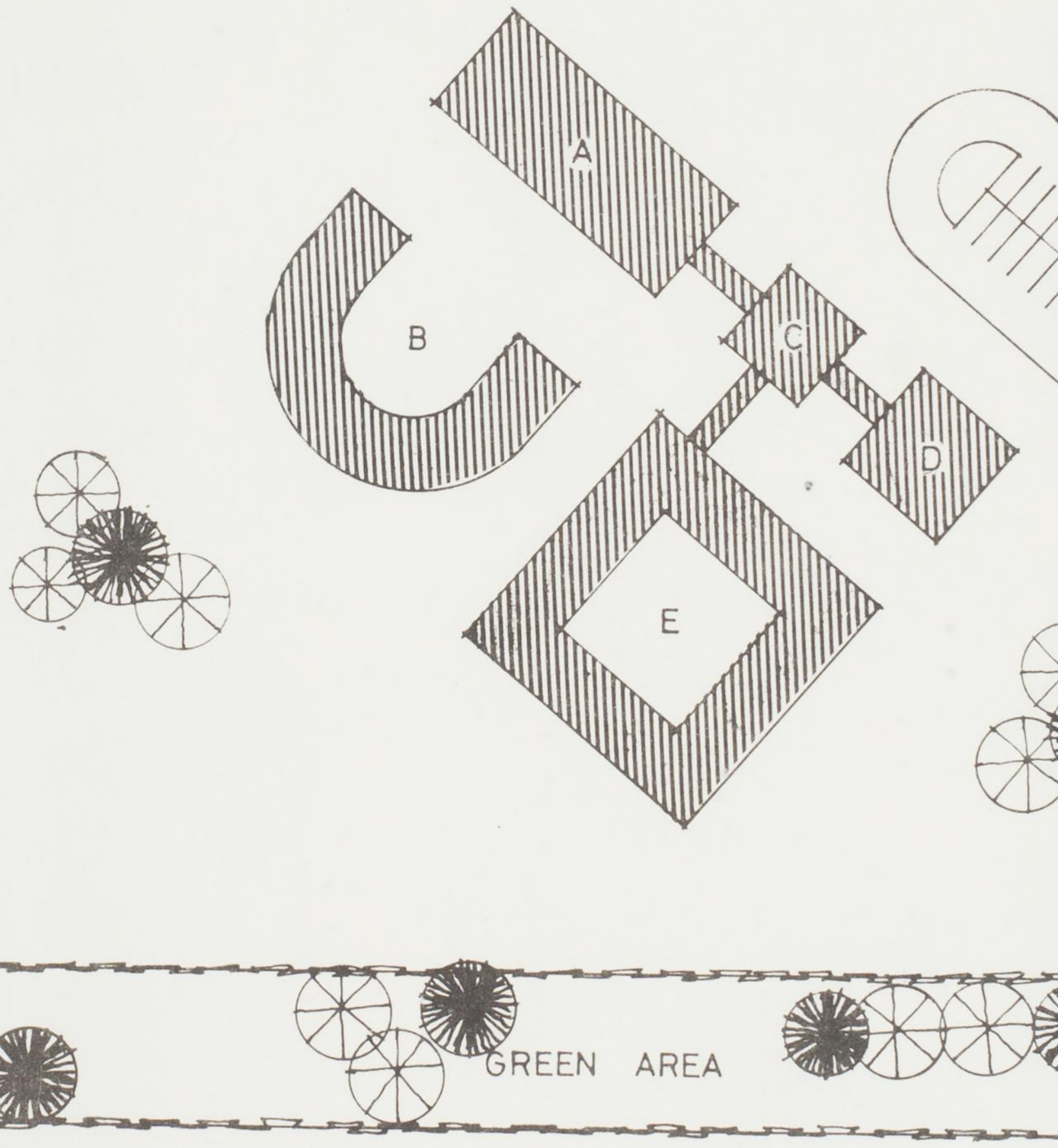
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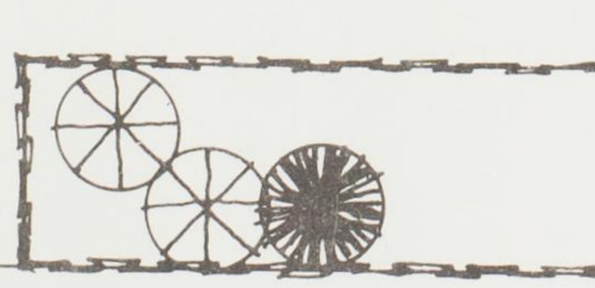


	A.N.C. DEVELOPMENT CENTRE, DAKAWA, TANZANIA	1990 REVISED DEVELOPMENT PLAN CENTRAL SPORTS AREA	SCALE : 1 : 1250	DATE : JULY 1990
			DRG : 604/D/04	

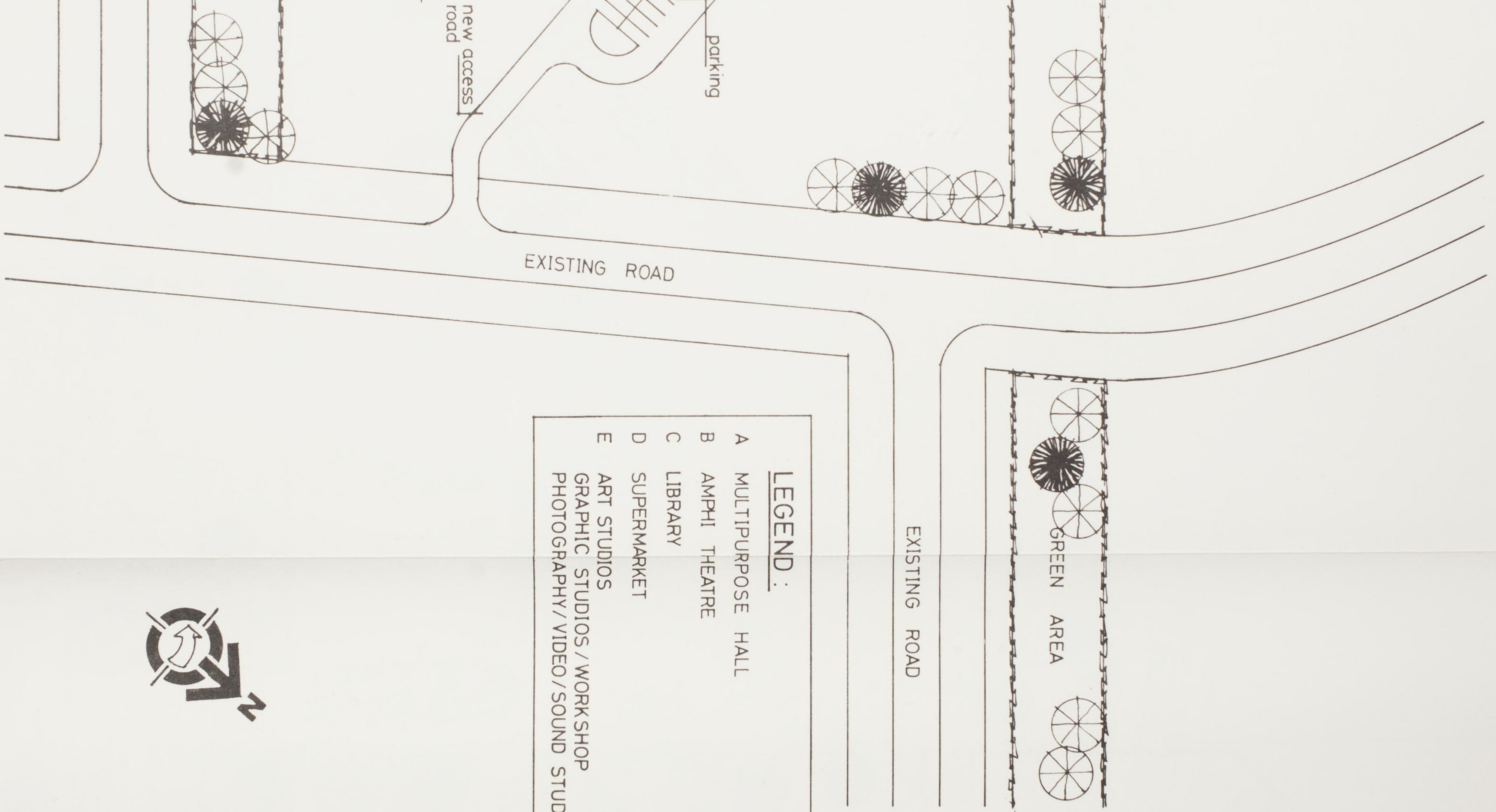








EXISTING ROAD



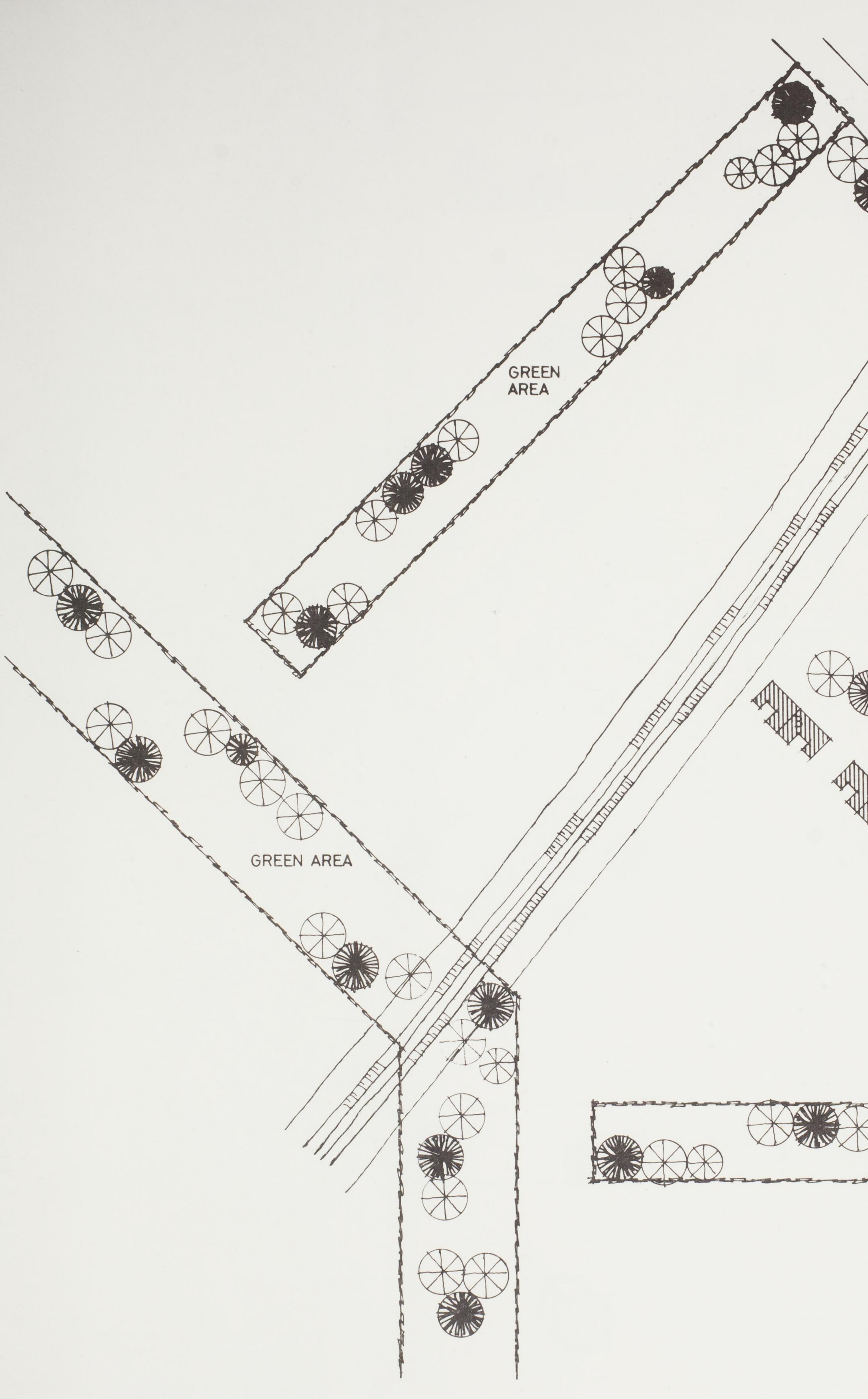
A.N.C. DEVELOPMENT CENTRE,
DAKAWA, TANZANIA

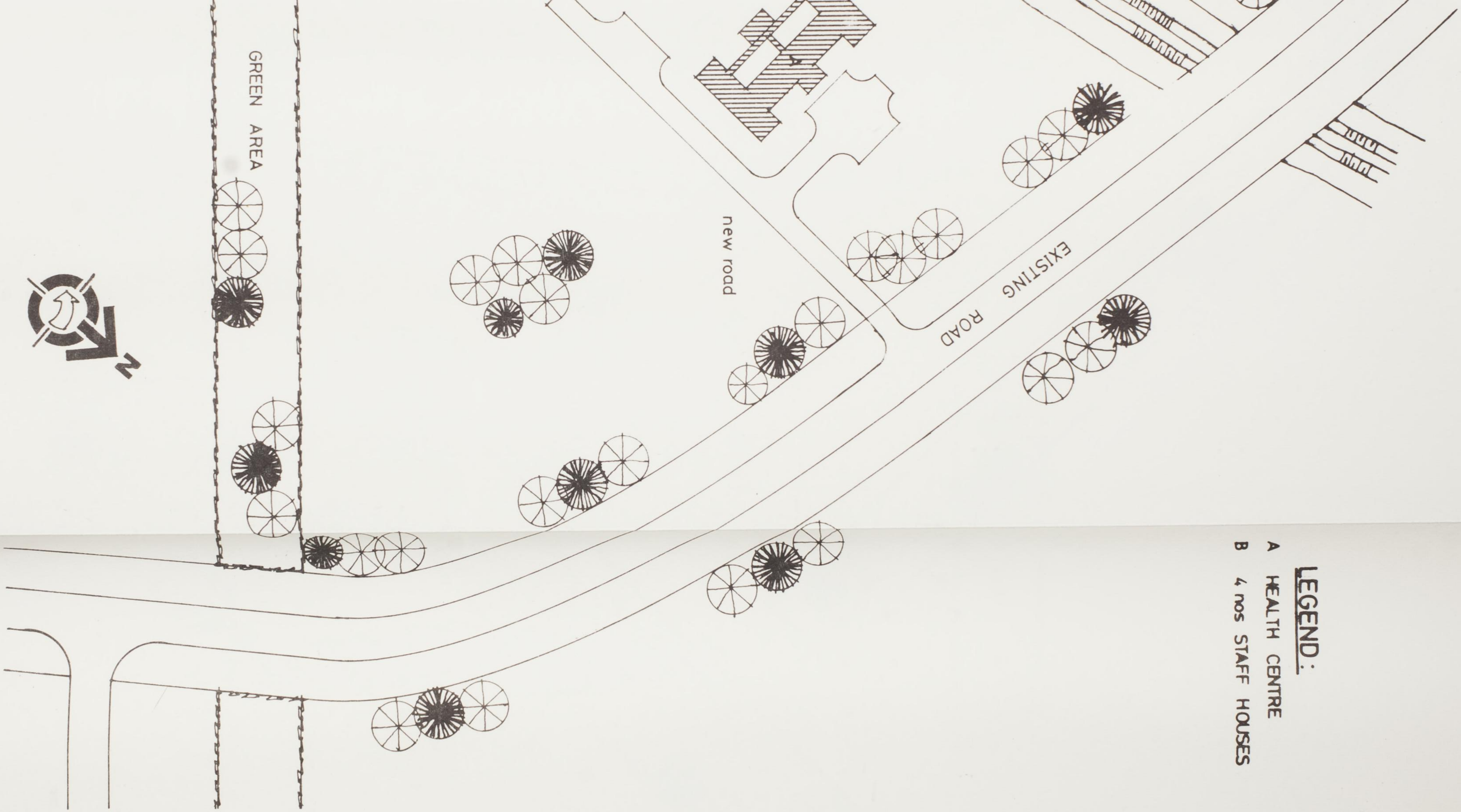
1990 REVISED DEVELOPMENT PLAN
CULTURAL AND SOCIAL CENTRE

SCALE : 1 : 1250

DATE : JULY 1990

DRG : 604/D/05


GREEN
AREA
GREEN AREA



LEGEND :

A HEALTH CENTRE

B 4 nos STAFF HOUSES

	A.N.C. DEVELOPMENT CENTRE, DAKAWA, TANZANIA	1990 REVISED DEVELOPMENT PLAN HEALTH CENTRE	SCALE : 1 : 1250	DATE : JULY 1990
			DRG : 604/D/06	

GREEN AREA

WALKWAY

GREEN AREA

A

B

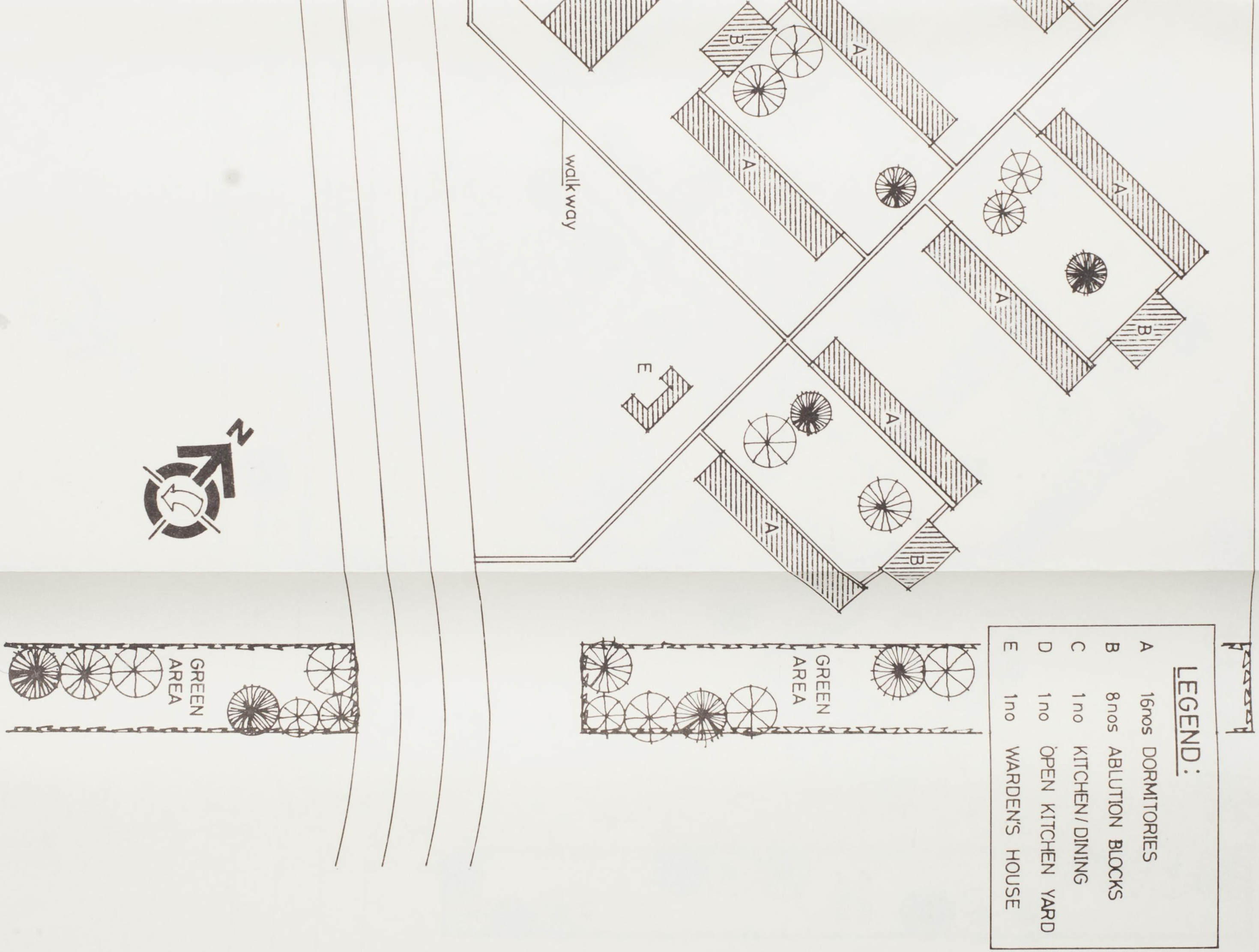
covered corridor

C

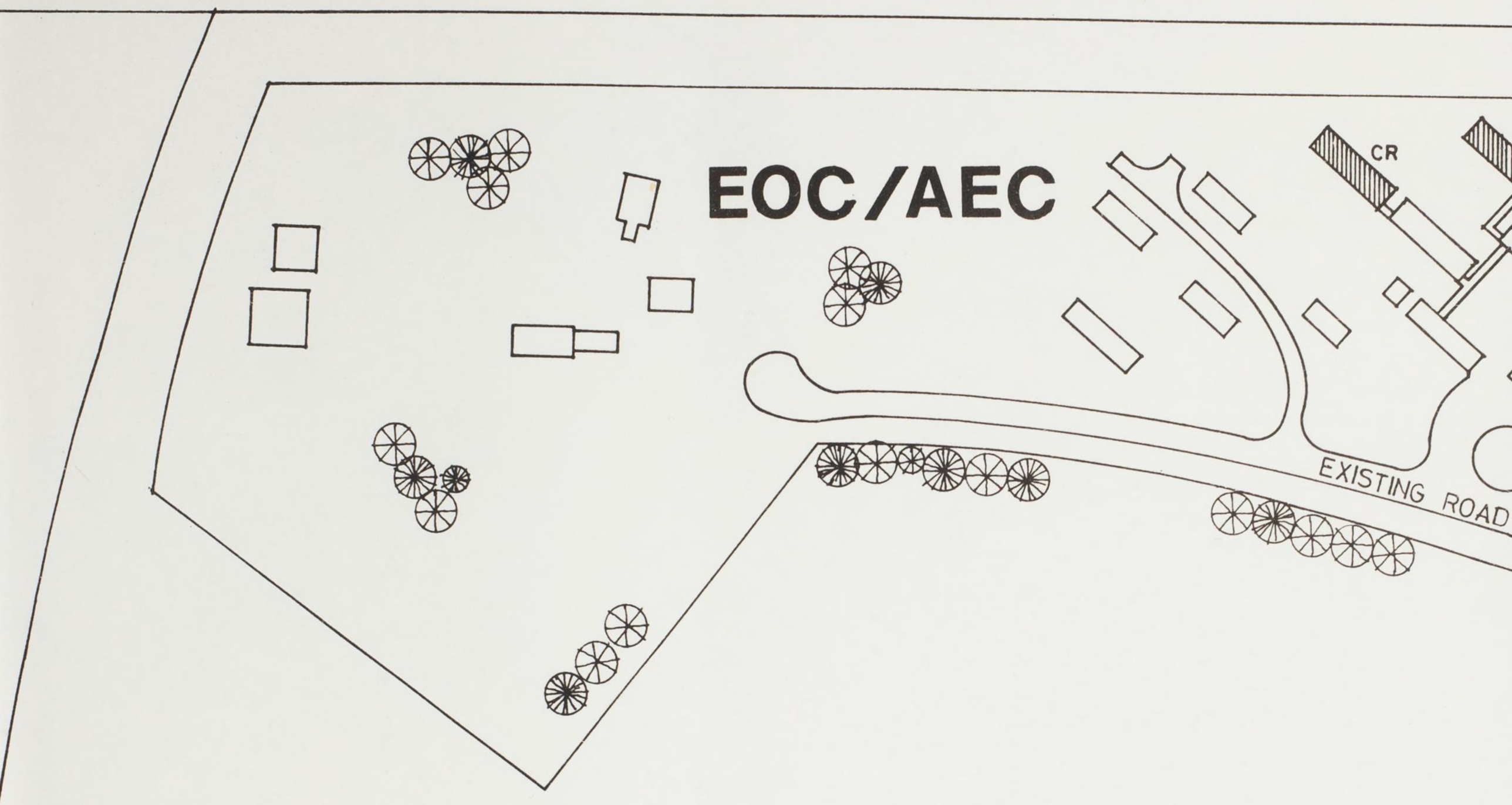
D

new access road

EXISTING ROAD



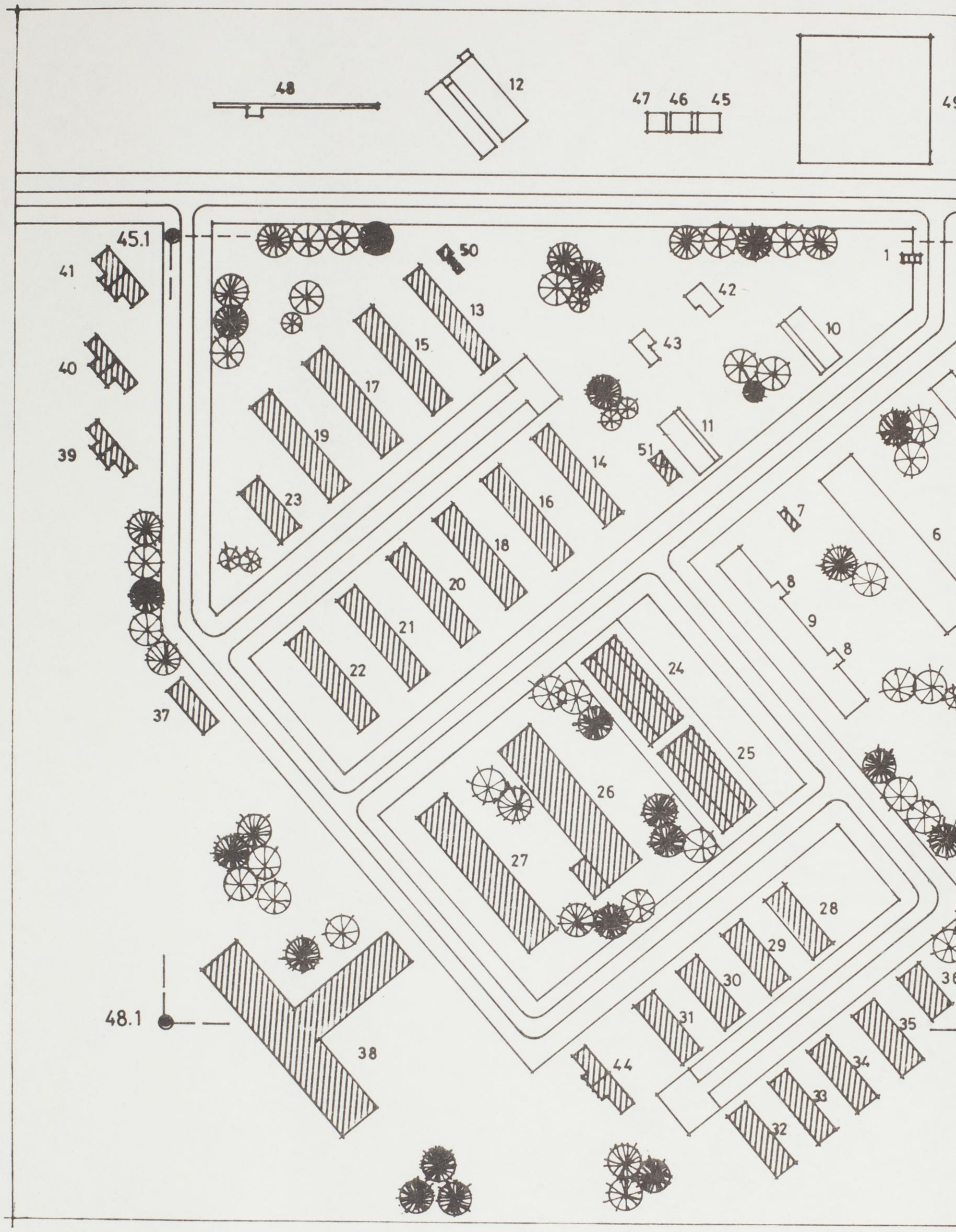
	A.N.C. DEVELOPMENT CENTRE, DAKAWA, TANZANIA	1990 REVISED DEVELOPMENT PLAN STUDENT DORMITORIES	SCALE : 1 : 1250	DATE : JULY 1990
			DRG : 604/D/07	



A5



A.N.C. DEVELOPMENT CENTRE, DAKAWA, TANZANIA	1990 REVISED DEVELOPMENT PLAN EOC/AEC	SCALE : 1 : 2500	DATE : JULY 1990	
		DRG : 604/D/08		


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LEGEND:

1 GATE HOUSE

2 TRANSFORMER

3 OPEN AIR STORE

4 WASHING PLACE

5 HEAVY MACHINERY

6 MACHINERY HALL

7 FUEL DEPOT

8 STORE

9 WORKSHOP

10 OFFICE

11 CANTEEN

12 TEMPORARY DAIRY SHED

13 — 22 POULTRY HOUSES - BROILERS

23 SERVICE BUILDING

24 — 25 MAIZE COB DRYING

26 CROP STORAGE & HANDLING

27 FERTILIZER & DRY STAF COOL STORE

28 — 35 POULTRY HOUSES - LAYERS

36 SERVICE BUILDING

37 BROILERS' SLAUGHTER HOUSE

38 DAIRY SHED

39 — 44 STAFF QUARTERS

45 — 47 EMERGENCY HOUSES

48 CATTLE SPRAY RACE

49 SHED/ TEMPORARY WORKSHOP

50 WATER PUMP/ STORAGE TANKS

51 GENERATOR HOUSE

PROPOSED

CONSTRUCTED OR UNDER CONSTRUCTION

N

SCALE : 1 : 2500 | DATE : JULY 1990

DRG : 604/D/09

1990 REVISED DEVELOPMENT PLAN
AGRICULTURAL CENTRE

A.N.C. DEVELOPMENT CENTRE,
DAKAWA, TANZANIA

A.N.C. DEVELOPMENT CENTRE,
DAKAWA, TANZANIA

1990 REVISED DEVELOPMENT PLAN
AGRICULTURAL CENTRE

SCALE : 1 : 2500

DATE : JULY 1990

DRG :

604/D/09