2-2-3 Basic Design Drawing

(1) Breakdown list of the planned equipment

The details of the equipment to be procured in this project are as follows in Table 2-10.

As a result of the study, the quantity of equipment to be procured is outlined in the following table.

Facility	Quantity Requested		in the Mir	Priority nutes of Bas:	ic Design	Final Quantity (after analysis in Japan)		
	nequesteu	Equipment	A	В	С	Jap	an)	
Canzibe Hospital	spital 246 items		165 items	8 items	72 items	172 items	277 nos.	
St. Barnabas Hospital	246 items	547 nos.	144 items	10 items	91 items	150 items	259 nos.	
Nessie Knight Hospital	246 items	547 nos.	177 items	11 items	57 items	183 items	294 nos.	
St. Lucy's Hospital	B Hospital 246 items		178 items	8 items	58 items	183 items	293 nos.	
Zithulele Hospital	246 items	547 nos.	163 items	10 items	72 items	169 items	273 nos.	
Hospitals Total	246 items	2,735 nos.	178 items	11 items	91 items	188 items	1,396 nos.	
Health Centres	21 items	2,053 nos.	32 items	1 items	8 items	30 items	564 nos.	
Clinics	ZIICEMS	2,053 nos.	28 items	2 items	8 items	29 items	2,887 nos.	
Mobile Clinics	1 item	6 nos.	1 item	-	-	1 item	6 nos.	

		Nyanden	i District	Mhlontlo	District	KSD District	
Item No.	Name of Equipment	1. Canzibe Hospital	2. St.Barnabas Hospital	3. Nessie Knight Hospital	4. St.Lucy's Hospital	5. Zithulele Hospital	Tot Qty
		Qty's	Qty's	Qty's	Qty's	Qty's	
—	[HI-CARE AND RESUSCITATION WARD]						
2	Bedside monitors	2	0	2	2	2	8
3	Clinical clock wall mounted	1	0	1	1	1	4
5	Dressing trolley - large	1	1	1	1	1	5
6	Drip stand - mobile	4	0	4	4	4	16
7	ECG Machine	1	1	1	1	1	5
8-1	Emergency trolley	1	1	1	1	1	5
8-2	Defibrillator	1	1	1	1	1	5
10	Examination light	2	2	2	2	2	10
11	Hi-Lo Beds w/Mattress	4	0	4	4	4	16
12	Infusion pump	2	2	2	2	2	10
13	Infusion pump - syringe type	2	2	2	2	2	10
14	Instrument trolley - large	1	1	1	1	1	5
17	Sphygmomanometer	2	2	2	2	2	10
18	Suction unit - electric- midium	2	0	2	2	2	8
21	White board	1	0	1	1	1	4
22	X-ray viewing box - 4films	1	1	1	1	1	5
		Ĩ	1	1	1	1	1
_	[MEDICAL & SURGICAL WARDS]						
2	Examination light	2	2	2	2	2	10
3	Basin stand w/Basin - Double mobile	2	2	2	2	2	10
<u> </u>	Bedpan - stainless steel	4	4	4	4	4	20
	Beds w/adj back rest & mattress - mobile	4	4	4	4	4	20 70
5	Bowls stainless steel-set						
7		2	4	2	2	2	12
9	Sphygmomanometer	2	4	2	2	2	12
10	Step on sanitary can	2	2	2	2	2	10
11	Diagnostic set	2	2	2	2	2	10
12	Drip stand - mobile	4	4	4	4	4	20
13	ECG Machine	2	2	2	2	2	10
17	Glucometer	2	2	2	2	2	10
18	Hemoglobinmeter	2	2	2	2	2	10
19	Infusion pump	2	2	2	2	2	10
20	Infusion pump - syringe type	2	2	2	2	2	10
21	Instrument trolley - large	2	2	2	2	2	10
22	Instrument trolley - small	2	2	2	2	2	10
23	Kidney dishes set	2	4	2	2	2	12
25	Measuring jug S/S	2	2	2	2	2	10
26	Nebulizer	2	2	2	2	2	10
28	Oxygen flow meter set	2	2	2	2	2	10
35	Patient trolley w/Mattress	2	2	2	2	2	10
36	Pulse oximeter	2	2	2	2	2	10
37	Refridgerator	2	2	2	2	2	10
38	Emergency trolley	1	1	1	1	1	5
40	Suction unit - electric- midium	2	2	2	2	2	10
40	Urinals - stainless steel	2	2	2	2	2	10
	Vital signs monitor						5
43		1	1	1	1 2	1	
44	Clinical clock wall mounted	2	2	2		2	10
	Weighing scale	2	2	2	2	2	10
	Height scale	2	2	2	2	2	10
47	Wheel chairs - heavy duty	2	2	2	2	2	10
48	Peak flow meter	2	2	2	2	2	10
49	X-ray viewing box - 1 film	2	2	2	2	2	10
—	[MATERNITY WARD]						
2	Baby weight	1	1	1	1	1	5

		Nyander	ni District	Mhlontlo	District	KSD District	
Item No.	Name of Equipment	1. Canzibe Hospital	2. St.Barnabas Hospital	3. Nessie Knight Hospital	4. St.Lucy's Hospital	5. Zithulele Hospital	Total Qty's
		Qty's	Qty's	Qty's	Qty's	Qty's	ά εγ σ
3	Bassinetts	4	4	4	4	4	20
5	Clinical clock wall mounted	1	1	1	1	1	5
7	Delivery bed and mattress	2	2	2	2	2	10
8	Dressing trolley - large	2	2	2	2	2	10
9	Examination table for gynecology	1	1	1	1	1	5
10	Fetal doppler	1	1	1	1	1	5
11	ICU Resuscitation unit - radiant type	2	2	2	2	2	10
12	Infant incubator	2	2	2	2	2	10
13	Infant warmer	2	2	2	2	2	10
14	Oxygen monitor	1	1	1	1	1	5
15	Footstool - double	2	2	2	2	2	10
16	Phototherapy unit	1	2	1	1	1	6
17	Delivery set	2	2	2	2	2	10
18	Suction unit - electric- large	1	1	1	1	1	5
20	Vacuum extractor	1	1	1	1	1	5
21	Ablution basin	1	1	1	1	1	5
-		-	-	-	-	-	
4-	PAEDIATRIC WARD					1	H
1	Pediatric scales	1	1	1	1	1	5
2	Basin stand w/Basin - Double mobile	2	2	2	2	2	10
3	Bedpan - stainless steel	4	4	4	4	4	20
5	Bilirubin meter	1	1	1	1	1	5
6	Bowls stainless steel-set	1	1	1	1	1	5
7	Sphygmomanometer for pediatric	2	2	2	2	2	10
8	Step on sanitary can	1	1	1	1	1	5
9	Pediatric bed	4	4	4	4	4	20
-	Diagnostic set	1	4		1	4	5
11	Dressing trolley - large	1	1	1	1	1	5
12	Drip stand - mobile	3	3	3	3	3	15
12	Examination light	1	1	1	3	1	5
15	Infant transport incubator	1	1	1	1	1	5
16	ICU Resuscitation unit - radiant type	0	1	0	0	0	1
17	Infusion pump	2	2	2	2	2	10
17		2	2	2	2	2	10
	Infusion pump - syringe type	-					-
	Instrument trolley - large Kidney dishes set	2	1 2	1 2	1 2	1 2	5 10
			1	1	1	1	5
	Laryngoscope set for pediatric Measuring jug s/s	1 2	2	2	2	2	5 10
	Pediatric monitor					1	5
		1	1	1	1	1	5
	Oxygen flow meter set	1	1	1	1	-	
	Oxygen tent	1	1	1	1	1	5
	Oxygen monitor	1	1	1	1	1	5
	Pulse oximeter	1	1	1	1	1	5
31	Refridgerator for immunisation	1	1	1	1	1	5
	Resuscitator set for pediatric	1	1	1	1	1	5
	Weighing scale	1	1	1	1	1	5
	Height scale	1	1	1	1	1	5
36	Suction unit - electric- midium	1	1	1	1	1	5
	Nebulizer	2	2	2	2	2	10
40	X-ray viewing box - 1film	1	1	1	1	1	5
_							μ
	OPERATING THEATRE						
2	Anaesthetic trolley - large	1	2	1	1	1	6
3	Basin stand w/Basin - Double mobile	1	2	1	1	1	6
4	White board	2	4	2	2	2	12

		Nyander	ni District	Mhlontlo	District	KSD District	
Item No.	Name of Equipment	1. Canzibe Hospital	2. St.Barnabas Hospital	3. Nessie Knight Hospital	4. St.Lucy's Hospital	5. Zithulele Hospital	Total Qty's
		Qty's	Qty's	Qty's	Qty's	Qty's	
5	Bone saw set	1	1	1	1	1	5
6	Defibrillator	0	1	1	1	0	3
8	Operating chair	2	4	2	2	2	12
9	Drip stand - mobile	2	4	2	2	2	12
	Drug cabinet	1	2	1	1	1	6
11	Electrosurgical unit	1	2	1	1	1	6
13	Footstool - single	1	2	1	1	1	6
14	Instrument cabinet	2	2	2	2	2	10
15-1	Instrument set for general surgery	2	2	2	2	2	10
15-2	Instrument set for caesarean	2	2	2	2	2	10
16	Instrument trolley - large	1	0	2	2	1	6
17	Instrument trolley - small	1	0	2	2	1	6
	Kick bucket	2	2	2	2	1	9
	Mayo table with s/s tray	1	2	1	1	1	6
21	Operating light - ceiling type	1	0	1	1	0	3
	Operating light - mobile	1	2	1	1	1	6
23	Operating theatre table and accessories	0	2	1	0	0	3
25	Patient trolley w/Mattress	1	1	1	1	1	5
	Suction unit - electric - large	1	2	1	1	1	6
29-2	Suction unit - electric- small	1	2	1	1	0	5
30	Swab rack	0	0	1	0	0	1
31	Clinical clock wall mounted	1	0	1	1	0	3
32	X-ray viewing box - 3films	1	2	1	1	1	6
6-	[CSSD]						
1-1	Autoclave high pressure	1	0	1	1	1	4
	Autoclave high pressure - vertical type	0	0	1	0	0	1
2	Drums - sterilyzing set	1	1	1	1	1	5
3	Boiling sterilizer, foot pedal type	1	0	2	1	1	5
2		-	<u> </u>	_	-	-	
7-	[CASUALTY]						
1	Ambulance w/first aid equipment	1	1	1	1	1	5
2	Boiling sterilizer	1	1	1	1	1	5
3	Baby weight	1	1	1	1	1	5
5	Basin stand w/Basin - double mobile	2	0	2	2	2	8
6	Step on sanitary can	1	0	1	1	1	4
7	Clinical clock wall mounted	1	1	1	1	1	5
	Diagnostic set	2	0	2	2	2	8
	Drip stand - mobile	2	0	2	2	2	8
	Drug cabinet	1	0	1	1	1	4
	ECG Machine	0	1	1	1	0	3
	Emergency trolley	1	1	1	1	1	5
13-2	Defibrillator	1	1	1	1	1	5
	Examination light	2	0	2	2	2	8
	Instrument cabinet	1	1	1	1	1	5
17	Instrument trolley - large	2	0	2	2	0	6
	Nebulizer	2	0	2	2	2	8
	Weighing scale	1	1	1	1	1	5
	Height scale	1	1	1	1	1	5
	Patient trolley w/Mattress	1	0	1	1	1	4
	Pulse oximeter	1	1	1	1	1	5
-0	Sphygmomanometer	2	0	2	2	2	8
25		- L		4	~	4	0
			0	1	1	1	Λ
	Suction unit - electric- midium Vital signs monitor	1	0	1	1	1	4 5

		Nyande	ni District	Mhlontlo	District	KSD District	
Item No.	Name of Equipment	1. Canzibe Hospital	2. St.Barnabas Hospital	3. Nessie Knight Hospital	4. St.Lucy's Hospital	5. Zithulele Hospital	Total Qty's
		Qty's	Qty's	Qty's	Qty's	Qty's	
30	Examination Table	2	0	2	2	2	8
8-	OUTPATIENTS DEPARTMENT						
1	Sphygmomanometer	2	0	2	2	2	8
2	Pediatric height scale, bed type	1	1	1	1	1	5
3	Diagnostic set	2	0	2	2	2	8
5	Ear syrynge	1	1	1	1	1	5
6	ECG Machine	0	1	1	1	1	4
7	Examination table	0	0	2	2	0	4
9	Instrtument set - treatment	2	2	2	2	2	10
11	Footstool - double	0	0	2	2	2	6
	Weighing scale	1	1	1	1	1	5
12-2	Height scale	1	1	1	1	1	5
	Screen mobile 4 section with curtains	0	0	2	2	0	4
14	Snellen chart	2	0	2	2	2	8
15	Examination set for Gynecology	2	0	2	2	2	8
16	Sterilizer boiling type	1	1	1	1	1	5
18	X-ray viewing box - 1 film	1	0	1	1	1	4
19	Ultrasound scanner	0	1	1	1	1	4
9-	[RADIOLOGY]						
1	Accessory for X-ray apparatus	1	1	1	1	1	5
3	X-ray apparatus	1	1	1	1	1	5
4	X-ray apparatus - mobile	1	1	0	1	0	3
6	X-ray viewing box - 3films	1	1	1	1	1	5
10 -	DENTAL						
1	Autoclave - table top	0	1	0	0	0	1
2	Dental chair w/rotating stool & compressor	0	1	1	1	0	3
3	Dental X-ray film processor	0	0	1	1	0	2
4	Dental X-ray unit	0	0	1	1	0	2
5	Instrument set for dental	0	1	1	1	1	4
11							
	[REHABILITATION]	1	1	1	1	1	<u> </u>
	Bicycle exerciser	1	1	1	1	1	5
2	Dumbell set	1	1	1	1	1	5
3	Exercise hand set	1	1	1	1	1	5
	Hot pack unit	1	1	1	1	1	5
	Mat for exercise	1	1	1	1	1	5
6	Traction unit (w/bed)	1	0	0	1	0	2
	Ultraviolet lamp	1	1	1	1	1	5
8-2	Infrared lamp	1	1	1	1	1	5
9	Wall stall bars	1	0	0	1	0	2
10	Parallel Bars	1	1	1	1	1	5

Health Center

				KSD E	District		Mhlontl	o District	
Item No.	Name of Equipment	Basic Qty's for	KU01 Baziya HC	KU02 Ngangelizwe HC	KU03 Stanford Terrace HC	KU04 Mbekweni HC	MN01 Qumbu HC	ML01 Mhlakulo HC	Total Qty's
		Package	Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	
2	Peak flow meter	3	3	3	3	3	3	3	18
3	Weighing scale for Pediatric	3	3	3	3	3	3	3	18
4-1	Weighing scale	3	3	3	3	3	3	3	18
4-2	Height scale	3	3	3	3	3	3	3	18
4-3	Pediatric height scale, bed type	3	3	3	3	3	3	3	18
5	Refrigerator	3	3	3	3	3	3	3	18
7	Stethoscope	6	6	6	6	6	6	6	36
8	Sphygmomanometer	6	6	6	6	6	6	6	36
9	Diagnostic set	6	6	6	6	6	6	6	36
11	Examination lamp	3	3	3	3	3	3	3	18
12-1	Suction unit, manual type	2	2	2	2	2	2	2	12
12-2	Suction unit, electiric type	2	2	2	2	2	2	2	12
14	Fetal doppler	1	1	1	1	1	1	1	6
15	Resuscitator for infant & adult	3	3	3	3	3	3	3	18
16	O2 flow meter set	3	3	3	3	3	3	3	18
23	Boiling sterilizer	3	3	3	3	3	3	3	18
24	Dressing instrument set for General	6	6	6	6	6	6	6	36
25	Dressing instrument set for Gynecology	6	6	6	6	6	6	6	36
26	Delivery instrument set	3	3	3	3	3	3	3	18
27	Partition	6	6	6	6	6	6	6	36
28	Instrument cabinet	6	6	6	6	6	6	6	36
29	Nebulizer	2	2	2	2	2	2	2	12
31	Ablution basin	1	1	1	1	1	1	1	6
32	Drip stand	3	3	3	3	3	3	3	18
33	Hemogrobin meter	1	1	1	1	1	1	1	6
34	Gulucose meter	1	1	1	1	1	1	1	6
35	Consultation desk & chair	3	3	3	3	3	3	3	18
36	Stretcher	1	1	1	1	1	1	1	6
37	Wheel chair	1	1	1	1	1	1	1	6
38	X−ray viewing box	1	1	1	1	1	1	1	6

Clinic & Mobile Clinc

Clinic

		Nyander	ni District	Mhlontlo	District	KSD D	listrict	
Item No.	Name of Equipment	Under Canzibe Hospital	Under St.Barnabas Hospital	Under Nessie Knight Hospital	Under St.Lucy's Hospital	Under Umtata General Hospital	Under Zithulele Hospital	Total
		10 Clinics Qty's	16 Clinics Qty's	13 Clinics Qty's	10 Clinics Qty's	21 Clinics Qty's	13 Clinics Qty's	Qty's
1	Examination table	10	16	13	10	21	13	83
2	Peak flow meter	10	16	13	10	21	13	83
3	Weighing scale for Pediatric	10	16	13	10	21	13	83
4-1	Weighing scale	10	16	13	10	21	13	83
4-2	Height scale	10	16	13	10	21	13	83
4-3	Pediatric height scale, bed type	10	16	13	10	21	13	83
5	Refrigerator	10	16	13	10	21	13	83
7	Stethoscope	20	32	26	20	42	26	166
8	Sphygmomanometer	20	32	26	20	42	26	166
9	Diagnostic set	20	32	26	20	42	26	166
11	Examination lamp	10	16	13	10	21	13	83
12	Suction unit, manual type	10	16	13	10	21	13	83
14	Fetal doppler	10	16	13	10	21	13	83
15	Resuscitator for infant & adult	10	16	13	10	21	13	83
16	O2 flow meter set	10	16	13	10	21	13	83
22	Stand by Generator for examination lamp	10	16	13	10	21	13	83
23	Boiling sterilizer, gas type	10	16	13	10	21	13	83
24	Dressing instrument set for General	20	32	26	20	42	26	166
25	Dressing instrument set for Gynecology	20	32	26	20	42	26	166
26	Delivery instrument set	9	15	12	9	20	12	77
27	Partition	10	16	13	10	21	13	83
28	Instrument cabinet	20	32	24	20	41	26	163
29	Nebulizer, cell bettery type	10	16	13	10	21	13	83
31	Ablution basin	9	15	12	9	20	12	77
32	Drip stand	10	16	13	10	21	13	83
33	Hemogrobin meter	10	16	13	10	21	13	83
34	Gulucose meter	10	16	13	10	21	13	83
35	Consulation desk & chair	10	16	11	10	20	13	80
36	Stretcher, holding type	10	16	13	10	21	13	83

(Note): Refer to Next Table " Clinic 1/6 - 6/6 " for each detail.

Mobile Clinic

Item No.	Name of Equipment	Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	Total Qty's
1	Mobile clinic unit	1	1	1	1	1	1	6

Clinic (1/6)

Nyandeni District (Under Canzibe Hospital)

							Nya	andeni D	strict					
Item		Basic Qty's					Under	Canzibe	Hospita	ıl				Total
No.	Name of Equipment	for Package	NC01 Buntingville	NC02 Nkumandeni	NC03 Nqanda	NC04 Ntibane	NC05 Pilani	NC06 Lwandile	NC07 Nolita	NC08 Ntapane	NC09 Lujizweni	NC10 Canzibe Gate.		Qty's
			Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	Qty's		
1	Examination table	1	1	1	1	1	1	1	1	1	1	1		10
2	Peak flow meter	1	1	1	1	1	1	1	1	1	1	1		10
3	Weighing scale for Pediatric	1	1	1	1	1	1	1	1	1	1	1		10
4-1	Weighing scale	1	1	1	1	1	1	1	1	1	1	1		10
4-2	Height scale	1	1	1	1	1	1	1	1	1	1	1		10
4-3	Pediatric height scale, bed type	1	1	1	1	1	1	1	1	1	1	1		10
5	Refrigerator	1	1	1	1	1	1	1	1	1	1	1		10
7	Stethoscope	2	2	2	2	2	2	2	2	2	2	2		20
8	Sphygmomanometer	2	2	2	2	2	2	2	2	2	2	2		20
9	Diagnostic set	2	2	2	2	2	2	2	2	2	2	2		20
11	Examination lamp	1	1	1	1	1	1	1	1	1	1	1		10
12	Suction unit, manual type	1	1	1	1	1	1	1	1	1	1	1		10
14	Fetal doppler	1	1	1	1	1	1	1	1	1	1	1		10
15	Resuscitator for infant & adult	1	1	1	1	1	1	1	1	1	1	1		10
16	O2 flow meter set	1	1	1	1	1	1	1	1	1	1	1		10
22	Stand by Generator for examination lamp	1	1	1	1	1	1	1	1	1	1	1		10
23	Boiling sterilizer, gas type	1	1	1	1	1	1	1	1	1	1	1		10
24	Dressing instrument set for General	2	2	2	2	2	2	2	2	2	2	2		20
25	Dressing instrument set for Gynecology	2	2	2	2	2	2	2	2	2	2	2		20
26	Delivery instrument set	1	1	1	1	1	1	1	1	1	1	0		9
27	Partition	1	1	1	1	1	1	1	1	1	1	1		10
28	Instrument cabinet	2	2	2	2	2	2	2	2	2	2	2		20
29	Nebulizer,cell bettery type	1	1	1	1	1	1	1	1	1	1	1		10
31	Ablution basin	1	1	1	1	1	1	1	1	1	1	0		9
32	Drip stand	1	1	1	1	1	1	1	1	1	1	1		10
33	Hemogrobin meter	1	1	1	1	1	1	1	1	1	1	1		10
34	Gulucose meter	1	1	1	1	1	1	1	1	1	1	1		10
35	Consulation desk & chair	1	1	1	1	1	1	1	1	1	1	1		10
36	Stretcher, holding type	1	1	1	1	1	1	1	1	1	1	1		10

Nyandeni District (Under St.Barnabas Hospital)

										Nyand	eni Distric	ot							
Item		Basic Qty's							Und	er St.Ba	arnabas H	ospital							Total
No.	Name of Equipment	for Package	NB01 Libode	NB02 Nyandeni	NB03 Malusi	NB04 D.Falls	NB05 Mangcwa nguleni	NB06 Ndanya	NB07 Mevana	NB08	NB09(*) Makotyana	NB10	NB11 Mgweny ana	NB12 St.Bar.G ate.	NB13 Nkanunu	NB14 O.Bunting	NB15 Cwele	NB16 Mampon domiseni	Qty's
			Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	
1	Examination table	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16
2	Peak flow meter	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16
3	Weighing scale for Pediatric	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16
4-1	Weighing scale	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16
4-2	Height scale	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16
4-3	Pediatric height scale, bed type	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16
5	Refrigerator	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16
7	Stethoscope	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	32
8	Sphygmomanometer	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	32
9	Diagnostic set	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	32
11	Examination lamp	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16
12	Suction unit, manual type	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16
14	Fetal doppler	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16
15	Resuscitator for infant & adult	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16
16	O2 flow meter set	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16
22	Stand by Generator for examination lamp	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16
23	Boiling sterilizer, gas type	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16
24	Dressing instrument set for General	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	32
25	Dressing instrument set for Gynecology	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	32
26	Delivery instrument set	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	15
27	Partition	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16
28	Instrument cabinet	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	32
29	Nebulizer,cell bettery type	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16
31	Ablution basin	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	1	1	15
32	Drip stand	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16
33	Hemogrobin meter	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16
34	Gulucose meter	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16
35	Consulation desk & chair	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16
36	Stretcher, holding type	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	16

Mhlontlo District (Under Nessie Knight Hospital)

								М	hlontlo D	istrict						
Item		Basic Qty's						Under N	lessie Kn	ight Hospit	al					Total
No.	Name of Equipment	for Package	MN02 Nxotwe	MN03 Gura	MN04 Tsilitwa	MN05 T.Falls	MN06 Kalanko mo	MN07 Shawbury		MN09 Mahlungulu	MN10 Ngwemny ama	MN11 Qanqu	MN12 Mbalisweni	MN13 N.K.Gate.	MN14 Mdyobe	Qty's
			Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	
1	Examination table	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
2	Peak flow meter	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
3	Weighing scale for Pediatric	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
4-1	Weighing scale	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
4-2	Height scale	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
4-3	Pediatric height scale, bed type	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
5	Refrigerator	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
7	Stethoscope	2	2	2	2	2	2	2	2	2	2	2	2	2	2	26
8	Sphygmomanometer	2	2	2	2	2	2	2	2	2	2	2	2	2	2	26
9	Diagnostic set	2	2	2	2	2	2	2	2	2	2	2	2	2	2	26
11	Examination lamp	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
12	Suction unit, manual type	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
14	Fetal doppler	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
15	Resuscitator for infant & adult	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
16	O2 flow meter set	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
22	Stand by Generator for examination lamp	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
23	Boiling sterilizer, gas type	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
24	Dressing instrument set for General	2	2	2	2	2	2	2	2	2	2	2	2	2	2	26
25	Dressing instrument set for Gynecology	2	2	2	2	2	2	2	2	2	2	2	2	2	2	26
26	Delivery instrument set	1	1	1	1	1	1	1	1	1	1	1	1	0	1	12
27	Partition	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
28	Instrument cabinet	2	2	2	2	1	2	2	2	2	1	2	2	2	2	24
29	Nebulizer,cell bettery type	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
31	Ablution basin	1	1	1	1	1	1	1	1	1	1	1	1	0	1	12
32	Drip stand	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
33	Hemogrobin meter	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
34	Gulucose meter	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
35	Consulation desk & chair	1	1	1	1	0	1	1	1	1	0	1	1	1	1	11
36	Stretcher, holding type	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13

Clinic (4/6)

Mhlontlo District (Under St.Lucy's Hospital)

							Mhlo	ntlo Distr	rict				
Item		Basic Qty's					Under St	.Lucy's ⊢	lospital				Total
No.	Name of Equipment	for Package	ML02 Langeni	ML03 Sidwadweni	ML04 Tsolo	ML05 Up.Mjika	ML06 L.Gungululu	ML07 Lotana	ML08 Mbokotwana	ML09 Mhlahlane	ML10 Beledale	ML11 St.L.Gate.	Qty's
			Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	
1	Examination table	1	1	1	1	1	1	1	1	1	1	1	10
2	Peak flow meter	1	1	1	1	1	1	1	1	1	1	1	10
3	Weighing scale for Pediatric	1	1	1	1	1	1	1	1	1	1	1	10
4-1	Weighing scale	1	1	1	1	1	1	1	1	1	1	1	10
4-2	Height scale	1	1	1	1	1	1	1	1	1	1	1	10
4–3	Pediatric height scale, bed type	1	1	1	1	1	1	1	1	1	1	1	10
5	Refrigerator	1	1	1	1	1	1	1	1	1	1	1	10
7	Stethoscope	2	2	2	2	2	2	2	2	2	2	2	20
8	Sphygmomanometer	2	2	2	2	2	2	2	2	2	2	2	20
9	Diagnostic set	2	2	2	2	2	2	2	2	2	2	2	20
11	Examination lamp	1	1	1	1	1	1	1	1	1	1	1	10
12	Suction unit, manual type	1	1	1	1	1	1	1	1	1	1	1	10
14	Fetal doppler	1	1	1	1	1	1	1	1	1	1	1	10
15	Resuscitator for infant & adult	1	1	1	1	1	1	1	1	1	1	1	10
16	O2 flow meter set	1	1	1	1	1	1	1	1	1	1	1	10
22	Stand by Generator for examination lamp	1	1	1	1	1	1	1	1	1	1	1	10
23	Boiling sterilizer, gas type	1	1	1	1	1	1	1	1	1	1	1	10
24	Dressing instrument set for General	2	2	2	2	2	2	2	2	2	2	2	20
25	Dressing instrument set for Gynecology	2	2	2	2	2	2	2	2	2	2	2	20
26	Delivery instrument set	1	1	1	1	1	1	1	1	1	1	0	9
27	Partition	1	1	1	1	1	1	1	1	1	1	1	10
28	Instrument cabinet	2	2	2	2	2	2	2	2	2	2	2	20
29	Nebulizer, cell bettery type	1	1	1	1	1	1	1	1	1	1	1	10
31	Ablution basin	1	1	1	1	1	1	1	1	1	1	0	9
32	Drip stand	1	1	1	1	1	1	1	1	1	1	1	10
33	Hemogrobin meter	1	1	1	1	1	1	1	1	1	1	1	10
34	Gulucose meter	1	1	1	1	1	1	1	1	1	1	1	10
35	Consulation desk & chair	1	1	1	1	1	1	1	1	1	1	1	10
36	Stretcher, holding type	1	1	1	1	1	1	1	1	1	1	1	10

KSD District (Under Umtata General Hospital)

												KSE) Dist	rict										
Item		Basic Qty's								Ur	nder l	Jmtata	a Gen	ieral H	lospita	al								Total
No.	Name of Equipment	for Package	KU05		KU07	KU08	KU09	KU10	KU11	KU12	KU13	KU14	KU15	KU16	КU17	KU18	KU19	KU20	KU21	KU22	KU23	KU24	KU25	
		Tuonago	Ntshele	Zitatele	Sitebe	Tabase	Tyelebana	Up.Xongora	Xhwili	Ngcenga ne	Qunu	C.Center	Kambi	Mpeko	Mpunzana	Ntshabeni	Qokolwe ni	Sangoni	Ndibela	Ncambele	Efata	Maxwel	Mqekezw eni	Qty's
			Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	
1	Examination table	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	21
2	Peak flow meter	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	21
3	Weighing scale for Pediatric	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	21
4-1	Weighing scale	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	21
4-2	Height scale	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	21
4-3	Pediatric height scale, bed type	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	21
5	Refrigerator	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	21
7	Stethoscope	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	42
8	Sphygmomanometer	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	42
9	Diagnostic set	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	42
11	Examination lamp	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	21
12	Suction unit, manual type	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	21
14	Fetal doppler	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	21
15	Resuscitator for infant & adult	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	21
16	O2 flow meter set	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	21
22	Stand by Generator for examination lan	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	21
23	Boiling sterilizer, gas type	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	21
24	Dressing instrument set for General	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	42
25	Dressing instrument set for Gynecology	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	42
26	Delivery instrument set	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	20
27	Partition	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	21
28	Instrument cabinet	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	1	2	2	41
29	Nebulizer, cell bettery type	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	21
31	Ablution basin	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	20
32	Drip stand	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	21
33	Hemogrobin meter	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	21
34	Gulucose meter	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	21
35	Consulation desk & chair	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	1	1	20
36	Stretcher, holding type	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	21

Clinic (6/6)

KSD District (Under Zithulele Hospital)

								K	SD Distric	t						
Item		Basic Qty's						Under Z	ithulele H	ospital						Total
No.	Name of Equipment	for Package	KZ01 Ndzulwini	KZ02(*) Mqanduli	KZ03 Luthuben i	KZ04 Mapuzi	KZ05 Ngcwanguba	KZ06 Ngqungqu	KZ07 Ntlangaza	KZ08 Pumalanga	KZ09 Jalamba	KZ10 Wilo	KZ11 Hlabatshan e	KZ12 Ngwenya	KZ13 Pakamile	Qty's
			Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	Qty's	
1	Examination table	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
2	Peak flow meter	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
3	Weighing scale for Pediatric	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
4-1	Weighing scale	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
4-2	Height scale	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
4-3	Pediatric height scale, bed type	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
5	Refrigerator	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
7	Stethoscope	2	2	2	2	2	2	2	2	2	2	2	2	2	2	26
8	Sphygmomanometer	2	2	2	2	2	2	2	2	2	2	2	2	2	2	26
9	Diagnostic set	2	2	2	2	2	2	2	2	2	2	2	2	2	2	26
11	Examination lamp	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
12	Suction unit, manual type	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
14	Fetal doppler	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
15	Resuscitator for infant & adult	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
16	O2 flow meter set	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
22	Stand by Generator for examination lamp	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
23	Boiling sterilizer, gas type	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
24	Dressing instrument set for General	2	2	2	2	2	2	2	2	2	2	2	2	2	2	26
25	Dressing instrument set for Gynecology	2	2	2	2	2	2	2	2	2	2	2	2	2	2	26
26	Delivery instrument set	1	1	1	1	1	1	1	1	0	1	1	1	1	1	12
27	Partition	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
28	Instrument cabinet	2	2	2	2	2	2	2	2	2	2	2	2	2	2	26
29	Nebulizer,cell bettery type	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
31	Ablution basin	1	1	1	1	1	1	1	1	0	1	1	1	1	1	12
32	Drip stand	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
33	Hemogrobin meter	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
34	Gulucose meter	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
35	Consulation desk & chair	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13
36	Stretcher, holding type	1	1	1	1	1	1	1	1	1	1	1	1	1	1	13

(2) Specifications of the main equipment

As for the main equipment to be procured in this project, the specifications and applications are mentioned in the Table 2-11 "List of Main Equipment".

Table 2-11 List of Main Equipment

Name of Equipment	Specifications	Quantity	Applications
	Composition:		This is an accessory set necessary
A according for V roy	X-ray protective apron and gloves,		for roentgenograph and
Accessory for X-ray	Film mark set, Dark room lamp,	4	development of roentgenogram,
apparatus (A)	Exhaust fan, etc.		including X-ray protective supplies
			and Dark room lamp.
	Composition:		This is an accessory set necessary
A according for V way	X-ray protective apron and gloves,		for protect, roentgenograph, and
Accessory for X-ray	X-ray protective door and screen,	1	development of roentgenogram,
apparatus (B)	Film mark set, Dark room lamp,		including X-ray protective
	Exhaust fan, etc.		supplies, door and Dark room lamp.
	Composition: Sphygmomanometer,		It is a vehicle mainly used for the
A 1 1	Stethoscope, Resuscitator,	-	referral of patient between a clinic
Ambulance	Oxygen flowmeter, Suction	5	and a hospital. This vehicle
	machine, stretcher, etc.		carries a basic kit for first aid.
	Capacity: 150 L or more Sterilizing		It is used for sterilization of
A	temperature: 132 °C or more	4	operating gowns and surgical
Autoclave high pressure	Provided with steam generator	4	forceps with high-pressure steam.
	Attachments: feed water filter		
	Parameter: ECG, respiration rate,		It is used to monitor the vital sign
	temperature, HR, SpO ₂ , NIBP		of the serious patients, and to
D 1 1 1	Provided with cart	10	record the condition of such
Bedside monitor		18	patients. In critical condition, it
			issues the warning to doctors and
			nurses with alarm.
	Output : $2\sim$ 360J or wider		It is used for resuscitation of the
	Monitor: 5 inch or more		patient in cardiac arrest. This
	Buttery charger: built-in		equipment gives countershock with
Dofibrillator	Power: DC, AC	13	direct current for the ventricular
Defibrillator	With Paddle for adults and		fibrillation, and it stimulates the
	pediatrics		patient to recover the original
			rhythm of his heartbeat.

Name of Equipment	Specifications	Quantity	Applications
Dental chair unit	Dental unit: hydraulic control Doctor's chair Compressor	3	It is used for treatment of the oral diseases, such as dental caries and periodontal disease.
Electrosurgical unit	Function: Bipolar Output: Coagulation 100W or more, Cutting 250W or more, Mix 200W or more, Bipolar 18W or more Foot switch	6	It is used in the operation, in which hemostatic incision and coagulation are performed on the tissue of patient. It is especially fit to use for the operation on the region with many fine blood vessels.
Instrument set for general surgery	Composition: Sponge forceps, scalpel control handle and other instrument set	10	This is a set of surgical instruments used for general operation and emergency operation.
Operating theatre table	Type: hydraulic and manual operation Table top: 1900(L)×450(W)mm or wider Adjustable height: 720 \sim 1,000mm or wider Trendelenburg: ±25° or more Lateral tilting: ±20° or more	3	By adjusting the table height and angle according to the operation method and the operation region, the patient can be placed at the most suitable position for ease and safety of the operation. This is essential equipment in the operating theatre.
Traction unit	Traction: 900N at the max Traction mode: 3 types or more Safety function: with emergency shut down switch	2	This is basic equipment in Physiotherapy, used for traction of cervical vertebra and lumbar vertebra.

Name of Equipment	Specifications	Quantity	Applications
	Method: electronic scanning		It enables the doctors to make
	Display mode: B, M, B/M		imaging diagnostic of the patient
T T1. 1	Monitor: 12-inch/black & white		by detecting and observing the
Ultrasound scanner	Connection of probe: 2 or more	4	echoes on the abdominal region.
	Image Memory: provided		
	Probe: Convex, Linear, Transvaginal		
	X-ray tube voltage: 150KV		It is a general-purpose apparatus
	X-ray tube electric current: 500 mA or		that also enables to take a plain
X-ray apparatus	more	5	X-ray photograph of the skeleton,
	Composition: X-ray generator, X-ray		chest, abdomen and soft tissues.
	tube, Bucky table, and Bucky stand		
	Inverter type: high voltage unit		It is used in serious cases of the
	Tube voltage range: 40~125kv		patients who are too infirm to move
X-ray apparatus-mobile	mAs range: up to 125mAs or more	3	to the X-ray room for examination.
	X-ray tube focus size: $0.7 \sim 1.0$ mm		The whole body is the subject of
			X-ray examination.
	Parameter: ECG, respiration rate,		It is used to monitor the vital sign
	temperature, HR, SpO ₂ , NIBP		of the Pediatric in a serious
	Provided with cart		condition, and to record the
Pediatric monitor		5	condition of such patients. In
			critical condition, it issues the
			warning to doctors and nurses with
			alarm.
	Composition:Medical examination		It is used to diagnosis and to
	table, Refrigerator for drugs,		treatment for the people in remote
	Sphygmomanometer, Stethoscope,		places that can't be serviced by
	Hanger stand, etc.		clinics. It is a 4WD vehicle that is
		6	furnished with a medical
Mobile Clinic		6	examination table and a refrigerator
			for drugs and loaded with the
			medical equipment such as
			stethoscope and
			sphygmomanometer.

(3) Allocation plan of the equipment

The equipment requiring installation works is such as autoclave high pressure, dental unit and X-ray apparatus.

The layout plan is shown for the project facilities as follows.

Canzibe Hospital

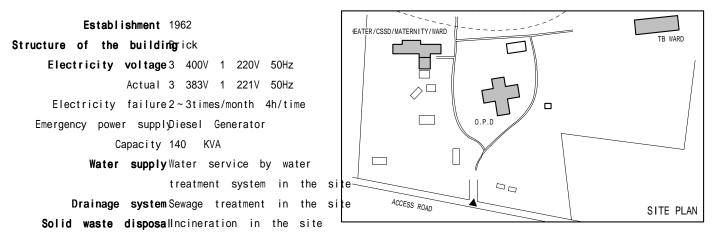
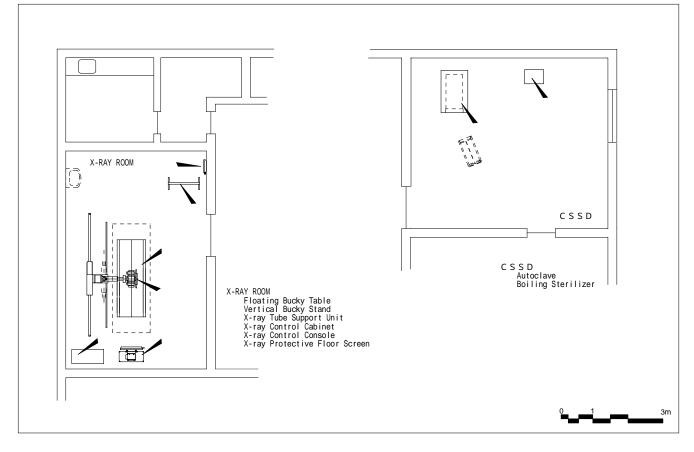
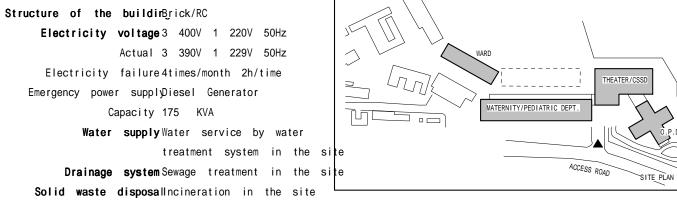


Figure 2-1-1 Layout Drawing for Equipment



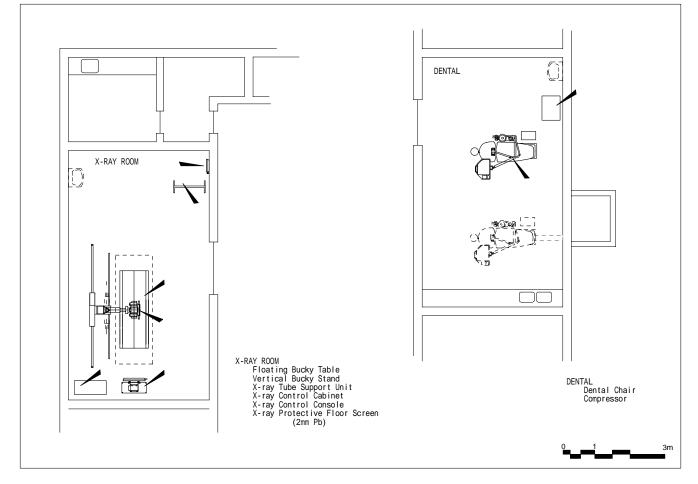
St. Barnabas Hospital

Establishment

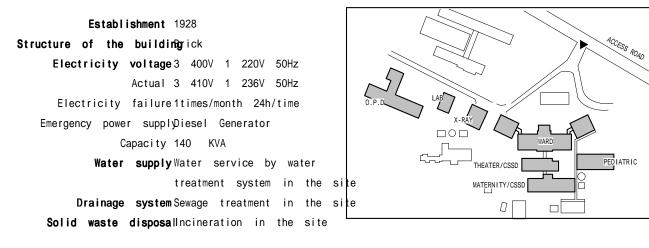


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Figure 2-1-2 Layout Drawing for Equipment



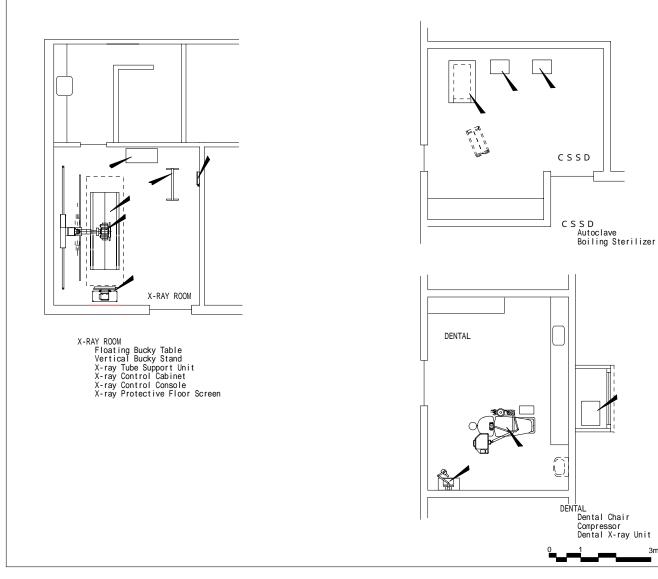
Nessie Knight Hospital



SITE PLAN

3m

Figure 2-1-3 Layout Drawing for Equipment



St. Lucy's Hospital

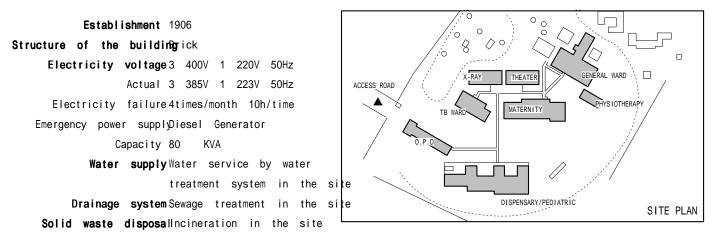
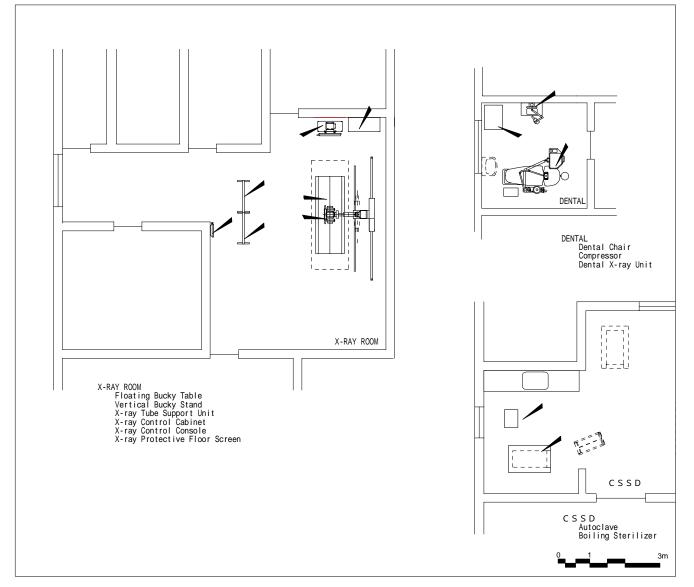
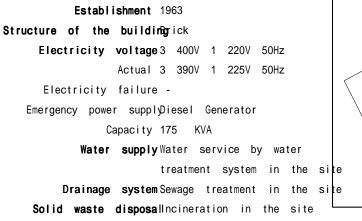


Figure 2-1-4 Layout Drawing for Equipment



Zithulele Hospital



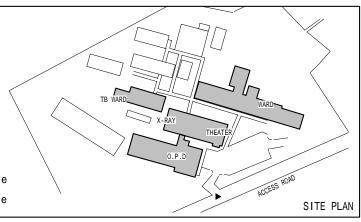
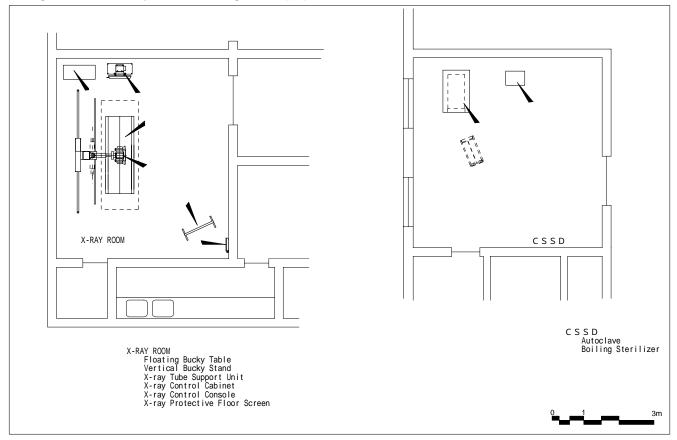


Figure 2-1-5 Layout Drawing for Equipment



2-2-4 Implementation Plan

2-2-4-1 Implementation Policy

This project shall be implemented officially in accordance with the Grant Aid framework of the Government of Japan after approval by both Japanese and South African governments and conclusion of the Exchange of Notes (E/N). Before implementation, a consultant who is a Japanese corporation representative is selected by the South African side, and the consultant shall commence work for approval of tender documents for the equipment procurement. After completion of the tender documents, tenders are invited. A Japanese trading company, selected as a result of the tender, shall implement the actual work of procurement, disposition and installation of the equipment. The consultant agreement and the supply contract shall come into effect after verification by the Government of Japan.

This project should be carried out in accordance with Japan's Grant Aid. The implementation plan of this project is elaborated considering the following points.

- (1) The work schedule should be confirmed by both the Japanese and South African staff in charge. Both sides should clarify the scope of works and the starting and completion dates of each task in order to avoid confusion over mutual tasks.
- (2) In order to shorten the work period as much as possible, the consultant and the supplier should investigate the project facilities by 2 months before installation of the equipment. They should also check the delivery routes, power supply, water supply and drainage, and they should prepare a bring-in schedule.
- (3) It is expected to take about 2 months for installation and hand-over.
- (4) For equipment requiring technical support (X-ray apparatus, Ultrasound apparatus, autoclave high pressure, and other electromedical equipment), instruction for operation shall be given by a sales engineer of each equipment manufacturer or the authorized agent.
- (5) For equipment to be procured from Japan, instruction for operation shall be given by a Japanese engineer or a sales engineer (of the authorized agent) specializing in electric equipment or general medical equipment.
- (6) The competent authority in charge of implementation of this project is the National Department of Health, and the office in charge is the International Health Liaison. The observatory agency is the Eastern Cape Province Department of Health. The project facilities are the medical facilities located in the 3 sub-districts (KSD district, Mhlontlo district and Nyandeni district) in the Oliver Tambo District of the Eastern Cape Province.

The following is the organ responsible to the work execution in each stage.

Business Outline	Organ Responsible to the Work Execution							
Exchange of Notes (E/N)	National Department of Health							
Authorization to Pay (A/P)	Eastern Cape Province Department of Health							
Consultant Contract	Eastern Cape Province Department of Health							
Tendering	Eastern Cape Province Department of Health							
Supply Contract	Eastern Cape Province Department of Health							
Work Execution	Eastern Cape Province Department of Health							
Delivery	Eastern Cape Province Department of Health							

2-2-4-2 Implementation Conditions

The project facilities are the medical facilities currently under operation. Considering this situation, the implementation schedule should not disturb their daily activities. Meeting should be held with the project facilities about the disposition plan of the equipment to confirm the schedule of carrying in, the delivery routes, and the distribution of the equipment.

2-2-4-3 Scope of Works

The scope of responsibility of the Japanese side in accordance with the Grant Aid Scheme of this project covers procurement and subsequent disposition of the medical equipment to the 5 district hospitals, the 6 health centers, the 83 clinics and six 6 mobile units disposed in the district hospitals. The scope is limited to those described below.

- (\climet) The equipment shown in the aforementioned equipment list
- ② The expenses for ocean transport, land transport and inland transport to the project facilities
- ③ The expenses for installation of the equipment (expenses for dispatching engineers, local workers, tools and measuring instruments)
- ④ The expenses for setting-up, the test-run, and the expenses for guidance on operation, inspection and maintenance management, for all the equipment to be procured.

2-2-4-4 Consultant Supervision

- Implementation system
 This project shall be implemented by the following 3 parties.
 - Project implementing bodies
 The observatory agency is the Department of Health of the Eastern Cape Province

in South Africa. The responsible agency is the sub-district health offices of Nyandeni, Mhlontlo and KSD in the Oliver Tambo District. The project sites are 94 medical facilities in total.

② Consultant

Since this project is implemented under Japan's Grant Aid Program, it is stipulated by its rule that a Japanese consultant gives instructions, advises and coordinates from a fair standpoint throughout the tender and the implementation, according to the agreement with the responsible agent of South Africa. In addition, the consultant performs necessary work for smooth implementation of the project.

The specific tasks are as follows:

• Approval of tender documents

Preparation of tender documents for procurement of the equipment (documents of tender conditions, equipment specifications, and budget report)

• Promotion of tender and supply contract

Decision about the supply contract system, preparation of a draft of the supply contract, content analysis of the report on equipment installation works, and selection of supplier (public announcement of tender, tender, tender evaluation, contract negotiation, and contract witnessing)

· Inspection and approval of the working plan

Inspection and approval of the equipment specifications and the working procedure submitted by the supplier

• Report on the work progress

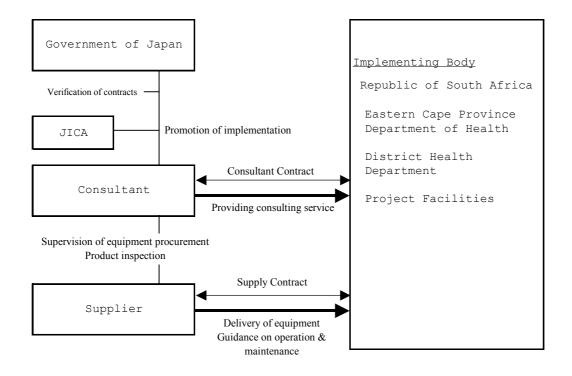
Supervision of progress of work execution, and report on the progress to the project-implementing bodies and related organizations

- Cooperation in approval procedures for payment Content analysis of the bills to the remuneration to be paid after the shipment, and cooperation in these procedures
- Consulting work

Witness to various works from the beginning through the completion of the project

③ Supplier

The Procurement of the equipment shall be implemented by the Japanese supplier (trading company) who makes a successful bid. The supplier, based upon the contract with the South African side, is responsible for manufacture, supply, delivery and set-up of the equipment, and gives instructions for equipment operation and maintenance to the South African side before hand-over. The following is a flow chart of the implementation system.



Implementation Flow Chart

(2) Implementation design and supervision

The consultant, based on the agreement with the South African side, performs implementation design and supervision of the project. In the implementation design, detailed specifications of the equipment are determined based on the basic design study, and the tender documents are prepared comprising these specifications, tender conditions and a draft of the supply contract, etc.

"Supervision" indicates assuring that the work of the supplier is implemented in accordance with the contract, fairly giving instructions and advice, and coordinating to promote the project.

 $(\cline 1)$ Stage of implementation design

reparation of tender documents, preparation for tender, and execution of a written contract

② Stage of tender

Prior screening of the qualifications of the prospective tenderer, opening of tender, evaluation of tender, and conclusion of contract

③ Stage of work execution

Supervision of work execution (inspection and approval of the equipment specifications; supervision of shipment, ocean transport and inland transport; instruction and supervision of installation; and supervision of work to be borne by the recipient country), report on the work progress, and issuance of certificates (upon confirming that the equipment installation is completed and the contract conditions are complied with, the consultant witnesses the hand-over of the equipment and completes his/her duty by obtaining acknowledgement of receipt of the equipment from the South African side.)

In addition to the above-mentioned work, the consultant reports on the work progress, payment procedures, completion of delivery, etc., to those concerned of the Government of Japan.

(3) Personnel plan

Those who are engaged in the consulting work as to the implementation design and supervision of the work execution are as follows:

• Project Manager	(5	Japanese	consultant):	1	person
• Medical Equipment Plan	ner I (J	Japanese	consultant):	1	person
• Medical Equipment Plan	ner II (J	Japanese	consultant):	1	person

2-2-4-5 Procurement Plan

(1) Procurement of equipment

The equipment to be procured in this project shall be restricted to those to be procured from Japan or South Africa in the E/N. The equipment is selected considering the reliability of the delivery schedule and the appropriateness of procurement costs.

The equipment applied to some of the following conditions shall be procured from a third country.

- $(\cline{1})$ The equipment to be procured is not manufactured in Japan.
- ② While the equipment is manufactured in Japan, competitiveness is not expected in tender, and fairness of tender may not be secured by restricting the procurement source to Japan.
- ③ If the equipment is restricted to the Japanese product, the transportation costs are very expensive, lessening the effect of aid. Alternatively, the equipment manufacturer and the local agent do not have their own maintenance network, and the equipment cannot be maintained properly. This may lessen the effect of the project.
- 4 There are unavoidable circumstances, such as urgency of procurement.

(2) Transportation of the equipment

The equipment to be procured from a third country shall be transported by sea to the port of Durban in South Africa. After all the shipments pass the custom at this port, then transported to each project facility by land. In order to avoid miscarriage, the equipment shall be packed into a wooden box or a container site by site.

2-2-4-6 Implementation Schedule

(1) Implementing process

When this project is approved in the Cabinet meeting of the Government of Japan and the Exchange of Notes (E/N) is concluded between both countries, the project shall be conducted according to the following procedures:

1.Conclusion of the Exchange of Notes between both relevant governments

- 2.Conclusion of agreement between the responsible agency and a bank in Japan on payment of the Japan's Grant Aid for implementation of this project (Banking Arrangement; B/A)
- 3.Conclusion of the consultant agreement between the responsible agency and the consultant of Japanese nationality
- 4. Issuance of the Authorization to Pay (A/P) by the responsible agency according to the consultant agreement
- 5.Verification of the above contract by the Government of Japan
- 6.Preparation of tender documents by the consultant
- 7.Approval of the tender documents by the responsible agency and preparation for tendering by the consultant
- 8.Implementation of tender, and assessment of tender
- 9.Conclusion of supply contract between the responsible agency and the Japanese supplier
- 10.Verification of the above contract by the Government of Japan.
- 11. Issuance of the Authorization to Pay (A/P) by the responsible agency according to the supply contract
- 12.Approval to manufacture of equipment, and approval of the working plan. (The consultant examines and approves the equipment specifications submitted by the supplier, provides necessary instruction, and coordinates for smooth implementation of the project by maintaining close contact with the Department of Health, the Government of Eastern Cape Province)
- 13.Witnessing for equipment inspection

(The consultant witnesses factory inspection before shipment, if necessary, and approves the inspection on behalf of the Department of Health, the Government of Eastern Cape Province)

- 14.Installation conditions, distribution plan of the equipment, and adjustment of the work schedule
- 15.Supervision of work execution

(In accordance with the contract, the consultant, as the proxy of the Department of Health, the Government of Eastern Cape Province, conducts examination and approval of the equipment specifications, examination and approval of equipment, supervision and instruction of inland-transport, and supervision of the works covered by the recipient country)

16.Progress control

(The consultant supervises work progress and gives necessary instruction to the supplier so that the supply contract may be completed within the period stated in the Exchange of Notes)

17.Complete survey and test run

(The consultant performs a final inspection and test-run to the equipment to be procured, confirms that the performance is as described in the specifications, and submits a certificate of completion of inspection to the Department of Health, the Government of Eastern Cape Province)

- 18.Hand-over of the equipment
- 19.Completion of the Project

(2) Period of implementation

After conclusion of the Exchange of Notes, the period required for each task on the Japanese side is as follows:

Content of Work	Work Period
1. Confirmation of a draft of tender documents	1.0
2. Approval to tender documents	0.7
3. Tendering, conclusion of contract, and approval of supply contract	2.5
4. Manufacture of equipment	4.0
5. Delivery	1.8
6. Installation (including trial operation, adjustment, operator training, guidance on maintenance management, verification of completion of hand-over, etc.)	2.0
TOTAL	12.0 months

The work progress chart is as follows:

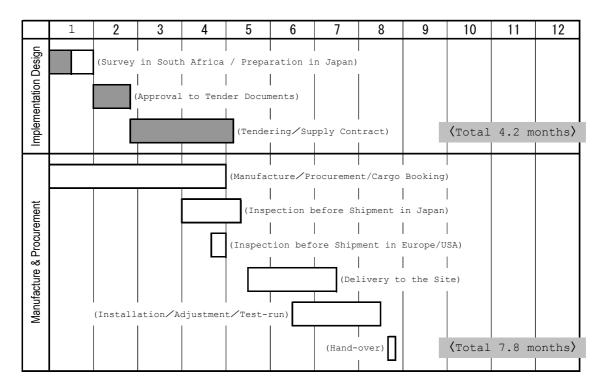


Figure 2-2 Work Execution

2-3 Obligations of Recipient Country

For the implementation of this project, the South African side is required to undertake the following measures:

Items to be covered by the South African side are as follows.

- During the implementation period of the project, the South African side should find a place to be used as a temporary office in each designated facility for this project.
- (2) The peripheral foundations (supply of electricity and water supply, drainage, and other facilities) necessary for this project should be prepared and supplied before distribution of the equipment. In addition, the existing equipment should be removed from places where the new equipment will be installed before the distribution.
- (3) The equipment imported for this project should be unloaded without delay, and necessary measures for customs clearance and inland transportation of the equipment should be taken. Tax exemption certificates should be arranged before arrival of containers at Durban in South Africa.
- (4) Payments of customs duties and other taxes should be exempted for the Japanese nationals who stay in South Africa to fulfill their mission in this project.
- (5) For the Japanese nationals who participate in the supply of the necessary equipment and who participate in implementation of this project, necessary conveniences for their stay in South Africa be provided and sufficient consideration made for their security.
- (6) In accordance with the Banking Arrangement (B/A), the South African side should pay the banking commission and the commission for the issuance of the Authorization to Pay into the authorized bank in Japan.
- (7) The equipment to be procured under the Japan's Grant Aid should be maintained properly and used effectively. For this purpose, necessary budget and personnel should be secured.
- (8) The South African side should bear the cost of preparatory works of strengthening of the floor of the X-ray room, and renovation of the ICU and the dental clinic for Nessie Knight Hospital, St. Lucy's Hospital and Canzibe Hospital before installation of the equipment.
- (9) The equipment to be procured under the Japan's Grant Aid should be maintained properly and used effectively. And confirmation should be made of the utilization and condition of the equipment.
- (10) For implementation of this project, all the expenses other than those covered by Japan's Grant Aid should be borne by the South African side.

2-4 Project Operation Plan

In this project, procurement of all equipment is made as renewal or supplementation of the equipment that is now in service at the project facilities. Therefore, it is judged that there will be no problem in the maintenance management.

Maintenance work is now entrusted to the outsourcing which is used the manufacturer or the authorized agent of the equipment.

Therefore, conclusion of an overall contract on maintenance is compulsory as to the main equipment such as X-ray apparatus, sterilizer, and other electro-medical apparatuses. The Department of Health, the Government of Eastern Cape Province is required to secure the annual budgetary allocation for the expenses for maintenance contract.

In addition, it is desirable that the Department of Health establishes the own maintenance workshops with engineers & artisans in this district.

The equipment to be procured in this project, which is required an annual maintenance service, and such expenses(trial calculation) are as follows.

Equipment	Q'ty	Unit Cost of Maintenance	Condition of Maintenance Service Contract	Annual Contract Cost
Bedside monitor	4	¥40,000	On-call services. Engineering fee only.	160,000
Pediatric monitor	1	¥37,000	On-call services. Engineering fee only.	37,000
ECG Machine	3	¥8,000	On-call services. Engineering fee only.	24,000
Defibrillator	2	¥37,000	On-call services. Engineering fee only.	74,000
Ultrasound apparatus	0	¥400,000	Periodical maintenance for each 6 months including on-call services. Engineering fee only.	0
X-ray apparatus	1	¥750,000	Periodical maintenance for each 6 months including on-call services. Engineering fee only.	750,000
X-ray apparatus - mobile	1	¥300,000	Periodical maintenance for each 6 months including on-call services. Engineering fee only.	300,000
Autoclave high pressure	1	¥183,000	Periodical maintenance for each 6 months including on-call services. Engineering fee only.	183,000
		TOTA	L (JPY)	1,528,000
		TOTA	L(ZAR 1 = JPY 15)	101,867

Table 2-13	Annual	Cost for	Maintenance	Service
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Equipment	Q'ty	Unit Cost of Maintenance	Condition of Maintenance Service Contract	Annual Contract Cost
Bedside monitor	2	¥40,000	On-call services. Engineering fee only.	80,000
Pediatric monitor	1	¥37,000	On-call services. Engineering fee only.	37,000
ECG Machine	5	¥8,000	On-call services. Engineering fee only.	40,000
Defibrillator	3	¥37,000	On-call services. Engineering fee only.	111,000
Ultrasound apparatus	1	¥400,000	Periodical maintenance for each 6 months including on-call services. Engineering fee only.	400,000
X-ray apparatus	1	¥750,000	Periodical maintenance for each 6 months including on-call services. Engineering fee only.	750,000
X-ray apparatus - mobile	1	¥300,000	Periodical maintenance for each 6 months including on-call services. Engineering fee only.	300,000
Autoclave high pressure	0	¥183,000	Periodical maintenance for each 6 months including on-call services. Engineering fee only.	0
		TOTA	L (JPY)	1,718,000
		TOTA	L(ZAR 1 = JPY 15)	114,533

St. Barnabas Hospital

Nessie Knight Hospital

Equipment	Q'ty	Unit Cost of Maintenance	Condition of Maintenance Service Contract	Annual Contract Cost
Bedside monitor	4	¥40,000 On-call services. Engineering fee only.		160,000
Pediatric monitor	1	¥37,000	On-call services	
ECG Machine	5	¥8,000	On-call services	
Defibrillator	3	¥37,000	On-call services. Engineering fee only.	111,000
Ultrasound apparatus	1	¥400,000	Periodical maintenance for each 6 months including on-call services. Engineering fee only.	400,000
X-ray apparatus	1	¥750,000	Periodical maintenance for each 6 months including on-call services. Engineering fee only.	750,000
X-ray apparatus - mobile	0	¥300,000	Periodical maintenance for each 6 months including on-call services. Engineering fee only.	0
Autoclave high pressure	1	¥183,000	Periodical maintenance for each 6 months including on-call services. Engineering fee only.	183,000
TOTAL (JPY)				1,681,000
TOTAL (ZAR 1 = JPY 15)				112,067

St. Lucy's Hospital

Equipment	Q'ty	Unit Cost of Maintenance	Condition of Maintenance Service Contract	Annual Contract Cost
Bedside monitor	4	¥40,000	On-call services. Engineering fee only.	160,000
Pediatric monitor	1	¥37,000	On-call services. Engineering fee only.	37,000
ECG Machine	5	¥8,000	On-call services. Engineering fee only.	40,000
Defibrillator	3	¥37,000	On-call services. Engineering fee only.	111,000

			Periodical maintenance for each 6 months	
Ultrasound apparatus	1	¥400,000	including on-call services.	400,000
			Engineering fee only.	
			Periodical maintenance for each 6 months	
X-ray apparatus	1	¥750,000	including on-call services.	750,000
			Engineering fee only.	
			Periodical maintenance for each 6 months	
X-ray apparatus - mobile	1	¥300,000 including on-call services.		300,000
			Engineering fee only.	
	1	¥183,000	Periodical maintenance for each 6 months	
Autoclave high pressure			including on-call services.	183,000
			Engineering fee only.	
TOTAL (JPY)				1,981,000
TOTAL (ZAR 1 = JPY 15)				132,067

Zithulele Hospital

Equipment	Q'ty	Unit Cost of Maintenance	Condition of Maintenance Service Contract	Annual Contract Cost	
Bedside monitor	4	¥40,000	On-call services.	160,000	
		110,000	Engineering fee only.		
Pediatric monitor	1	¥37,000	On-call services.	37,000	
	1		Engineering fee only.	37,000	
ECG Machine	4	¥8,000	On-call services.	32,000	
		40,000	Engineering fee only.	32,000	
Defibrillator	2	¥37,000	On-call services.	74,000	
Denomiator	2		Engineering fee only.	74,000	
		¥400,000	Periodical maintenance for each 6 months	400,000	
Ultrasound apparatus	1		including on-call services.		
			Engineering fee only.		
		¥750,000	Periodical maintenance for each 6 months	750,000	
X-ray apparatus	1		including on-call services.		
			Engineering fee only.		
X-ray apparatus - mobile		¥300,000	Periodical maintenance for each 6 months	0	
	0		including on-call services.		
			Engineering fee only.		
Autoclave high pressure		¥183,000	Periodical maintenance for each 6 months	183,000	
	1		including on-call services.		
			Engineering fee only.		
TOTAL (JPY)				1,636,000	
TOTAL (ZAR 1 = JPY 15)				109,067	

As the above tables show, it is estimated for the annual budgetary allocation for the maintenance contract in each project facility at $1.5\sim 2$ million yen.

2-5 Project Cost Estimate

2-5-1 Project Cost estimate

The project cost necessary for implementation of this project by the Japan's Grant Aid shall be about 1,034 million yen(expenses borne by the Japan's side:1,033million yen, expenses borne by the South African side: 1million yen). This cost estimate is provisional and would be further examined by the Government of Japan for the approval of the Grant.

(1) Estimating Conditions

1. Estimating Condition	:	July, 2003	
2. Exchange Rate	:	US\$ 1 = JPY 119.71	
		zar 1 = JPY 16.74	
3. Work Period	:	The work period shall be about twelve (12)	
		months for the implementation design, and	
		procurement and installation of the equipment.	
4. Others	Others : This project shall be impleme		
		with the Grant Aid framework of the Government	
		of Japan.	

(2) Expenses borne by the Japan's side

Account Description			Rough Estimate of the Operating Cost (million yen)		
		Canzibe Hospital	81		
		Nessie Knight Hospital	96		
	Hospitals	St. Barnabas Hospital	85	448	
		St. Lucy's Hospital	100	1	
		Zithulele Hospital	86		
円 .0		Health Centres	0		
цт [т	Nyndeni District	Clinics	127	144	
pme		Mobile Clinics	17		
Mhlontlo Distric		Health Centres	28		
	Mhlontlo District	Clinics	112	157	
		Mobile Clinics	17		
KSD District		Health Centres	56		
	KSD District	Clinics	167	240	
		Mobile Clinics	17		
	Implementation Des Procurement and T		44		

Approximately 1,033 million yen

(3) Expenses borne by the South African side

Project Facility	Content of Work	Cost (JPY)
Nessie Knight Hospital	Rebasing Work for X-ray Room	¥100,000
St. Lucy's Hospital	Renovation for ICU and Dental Clinic	¥700,000
Canzibe Hospital	Renovation for ICU	¥500,000
	¥1,300,000	
	(ZAR 82,908)	

Table 2-14 Description of Work and Cost

2-5-2 Operating and Maintenance Cost

Each project facility is required to secure a budget for procurement cost of necessary consumables and parts for the equipment to be procured in this project. The additional operating and maintenance cost thereby is mentioned below.

Hospital	Additionally required Operation and Maintenance Cost for Replaced Equipment under the Project			
	J. Yen	South African Rand		
Canzibe Hospital	2,961,196	188,851		
St. Barnabas Hospital	3,006,316	191,729		
Nessie Knight Hospital	2,874,316	183,310		
St. Lucy's Hospital	3,191,116	203,515		
Zithulele Hospital	2,753,836	175,627		
Health Centres (6 places)	858,624	54,759		
Clinics (83 places)	13,345,072	851,088		
Mobile Clinics (6 units)	2,121,600	135,306		
Total	31,112,076	1,984,185		

Table 2-15 Cost Estimation Additionally Required for Operation and Maintenance

For the budget for maintenance cost, the details were described in the foregoing paragraph (the budget analysis). The budget for the fiscal year 2003 is estimated at 411 million rand, and the budget for the fiscal year 2002 was 349 million rand. It is increased by 18%. Referring to the above trial calculation, the maintenance cost newly required shall be about 2 million rand, and it is only 0.5% of the budget. The Provincial Department of Health regards this project as important, and it shall ensure an increase in the annual budget for the maintenance cost after implementation of this project.

Chapter 3 Project Evaluation and Recommendations

Chapter 3 Project Evaluation and Recommendations

3-1 Project Effects

(1) Direct Effect

- 1. The medical services shall be improved in the project facilities by improving medical equipment in district hospitals, health centers and clinics in the Oliver Tambo District of the Eastern Cape Province. A medical system that enables provision of primary and secondary medical services of a standard appropriate for the residents of the designated area shall thus be established. It shall contribute to improving the activity condition of the project facilities (such as the number of outpatients, the number of operations, the number of X-ray examinations, and the number of initial inspections for patients with chronic diseases) with qualitative improvement of the medical services.
- 2. The medical services shall be improved for local residents, who do not live within easy access to clinics, by the enhancement of mobile clinics. This project shall contribute to the intensive implementation of PHC on which the new Government of South Africa has laid emphasis. This project shall also contribute to improving the community health system and establishing such a system that enables the provision of medical services impartially and expeditiously to all residents of the area concerned in this project including the tribes living in remote areas of former Bantu Homelands.
- (2) Indirect Effect

The referral system between district hospitals and primary medical facilities (health centers and clinics) shall be improved in the Oliver Tambo District. By improving the medical equipment, this project shall indirectly support the district hospitals in fulfilling their function as referral hospitals from health centers and clinics.

3-2 Recommendations

To implement this project smoothly and make effective and continuous use of the equipment to be procured, the following items are proposed.

(1) Securing medical workers

To improve the medical services at the project facilities, it is necessary to improve the medical equipment and the facilities on the hardware side. The South African side is also required to secure medical workers (doctors, nurses, medicalX-raytechnicians, pharmacists, hygienists and so forth) so that the project facilities can provide more appropriate and effective medical services.

(2) Reinforcement of the operation and maintenance system and budgetary appropriation In implementing this project, it is necessary to reinforce the operation and maintenance system of the medical equipment and the facilities, which will lead to an increase in the maintenance costs. It is necessary to secure a budgetary appropriation for such costs.

The maintenance of the equipment is now entrusted to external personnel. It is necessary in the future to set up a maintenance department that has its own workshops and to establish a maintenance system to enable effective and efficient usage of the existing equipment.

- (3) It is necessary to improve the peripheral infrastructure of the project facilities (access roads, electricity, communication fixtures, water supply, and other facilities).
- (4) Establishment of community structures for participation in PHC issues The Provincial Department of Health and the sub-district health offices are expected to make further efforts to prompt the communities to cultivate a sense of participation in health and hygiene issues.

Appendices

1. Member List of the Study Team

MEMBER LIST OF THE STUDY TEAM

At the stage of B/D study :

Dr. Junichi INABA	Team leadr & Technical advisor	Bureau of International Cooperation, International Medical Center of Japan, Ministry of Health, Labour and Welfare
Mr. Tatsuro NAKAJIMA	Project manager	Binko Ltd.,
Ms. Yoko OGAWA	Health sector surveyor	Binko Ltd.,
Mr. Hiroaki NARITA	Equipment planner I	Binko Ltd.,
Mr. Hiroshi MURAKAMI	Equipment planner II	Binko Ltd.,
Mr. Mitsuhiro NASU	Facility planner I	Binko Ltd.,
Mr. Ichiro NOMURA	Facility planner II	Binko Ltd.,
Mr. Takashi OGAWA	Cost & Procurement planner	Binko Ltd.,
Mr. Hiromichi SATO	Coodinator	Binko Ltd.,

At the stage of Draft B/D study :

Mr. Shinji TOZUKA	Team leader	Japan International Cooperation Agency (JICA)
Dr. Junichi INABA	Technical advisor	Bureau of International Cooperation, International Medical Center of Japan, Ministry of Health, Labour and Welfare
Mr. Mizuki MATSUZAKI	Project coordinator	Japan International Cooperation Agency (JICA)
Mr. Tatsuro NAKAJIMA	Project manager	Binko Ltd.,
Mr. Hiroaki NARITA	Equipment planner I	Binko Ltd.,
Mr. Mitsuhiro NASU	Facility planner I	Binko Ltd.,
Mr. Takashi OGAWA	Cost & Procurement planner	Binko Ltd.,

2. Study Schedule

Schedule of Basic Design Study

				(a)Project	(b)Health	(c)Equipment	(d)Equipment	(e)Facilities	(f)Facilities	(g)Procurement	(h)
No.	Date		Officials	Manager	Sector Surveyor	Planner I	Planner II	Planner I	Planner II	&Cost Planner	Coordinator
			9days	45days	28days	45days	35days	35days	35days	30days	14days
1	3/8	sat		Tokyo→Singapore (SIN)						
2	3/9	sun		$SIN \rightarrow Johannesburg (J$	•						
3	3/10	mon		JICA / Embassy of Japa JNB → East London (E.L)	an / DOH in Pretoria					1	Tokyo→SIN
4	3/11	tue		$J(NB \rightarrow East London (E.L)$ E.L \rightarrow Bisho (B.H) Provincial DoH	Together with (a)	with (a)	${\rm Tokyo} \to {\rm SIN}$			_	SIN →JNB JNB → UMT
5	3/12	wed		Provincial DoH B.H → (Site visit) → Umtata (UMT)	Provincial DOH	with (a)	${\rm SIN} \rightarrow {\rm JNB}$				
6	3/13	thu		KSD & Mhlontlo District DoH	Provincial DOH	with (a)	JNB→UMT	JNB→UMT	JNB→UMT		
7	3/14	fri		Nyandeni District DoH (Site visit)	${\rm B.H} \rightarrow {\rm UMT}$	with (a)	with (a)	with (a)	with (a)		
8	3/15	sat		Team meeting	Team meeting	Team meeting	Team meeting	Team meeting	Team meeting		
9	3/16	sun		Review of study	Review of study	Review of study	Review of study	Review of study	Review of study	Tokyo→SIN	Umtata
10	3/17	mon		KSD DoH (Clinics u/Umtata Hospital)	KSD DoH (Clinics u/Umtata Hospital)	KSD DoH (Clinics u/Zithulele)	KSD DoH (Clinics u/Umtata)	KSD DoH (Clinics u/Zithulele)	KSD DoH (Clinics u/Umtata)	SIN →JNB	
11	3/18	tue		Clinics u/Umtata	with (a)	Clinics u/Zithulele	Clinics u/Umtata	Clinics u/Zithulele	Clinics u/Umtata	Study of market	
	3/19	wed		Survey of Maintenance System	with (a)	Clinics u/Zithulele	Clinics u/Umtata	Clinics u/Zithulele	Clinics u/Umtata	Study of market	
13	3/20	thu		Clinics u/Umtata	with (c)	Clinics u/Zithulele	Clinics u/Umtata	Clinics u/Zithulele	Clinics u/Umtata	Study of market	
14	3/21	fri		Clinics u/Umtata	with (a)	Clinics u/Zithulele	Clinics u/Umtata	Clinics u/Zithulele	Clinics u/Umtata	JNB→UMT	$\rm UMT \rightarrow \rm JNB$
15	3/22	sat		Clinics u/Umtata	with (a)	Clinics u/Zithulele	Clinics u/Umtata	Clinics u/Zithulele	Clinics u/Umtata	Clinics u/Umtata	$JNB \rightarrow SIN$
16	3/23	sun		Review of study	Review of study	Review of study	Review of study	Review of study	Review of study	Review of study	$SIN \rightarrow Tokyc$
17	3/24	mon		Mhlontlo Distric DoH Clinics u/St.Lucy	Mhlontlo Distric DoH	Mhlontlo DoH Clinics u/Nessie K.	Mhlontlo DoH Clinics u/St.Lucy	Mhlontlo DoH Clinics u/Nessie K.	Mhlontlo DoH Clinics u/St.Lucy	Mhlontlo Distric DoH Clinics u/St.Lucy	
18	3/25	tue		St.Lucy's Hospital Clinics u/St.Lucy	Nyandeni District DoH	Nessie Knight Hospl. Clinics u/Nessie K.	St.Lucy's Hospital Clinics u/St.Lucy	Nessie Knight Hospl. Clinics u/Nessie K.	St.Lucy's Hospital Clinics u/St.Lucy	St.Lucy's Hospital Clinics u/St.Lucy	
	3/26	wed		Clinics u/St.Lucy	with (a)	Clinics u/Nessie K.	Clinics u/St.Lucy	Clinics u/Nessie K.	Clinics u/St.Lucy	Clinics u/St.Lucy	
20	3/27	thu		Clinics u/St.Lucy	KSD District DoH	Clinics u/Nessie K.	Clinics u/St.Lucy	Clinics u/Nessie K.	Clinics u/St.Lucy	Clinics u/St.Lucy	
21	3/28	fri		St.Lucy's Hospital	Nessie Knight Hospl.	Nessie Knight Hospl.	St.Lucy's Hospital	Nessie Knight Hospl.	St.Lucy's Hospital	St.Lucy's Hospital	
22	3/29	sat		Clinics u/St.Lucy	Review of study	Clinics u/Nessie K.	Clinics u/St.Lucy	Clinics u/Nessie K.	Clinics u/St.Lucy	Clinics u/St.Lucy	
23	3/30	sun		Review of study	Review of study	Review of study	Review of study	Review of study	Review of study	Review of study	
24	3/31	mon		Nyandeni District DoH Clinics u/Canzibe	UMT→JNB	Nyandeni DoH Clinics u/St.Barnabas	Nyandeni DoH Clinics u/Canzibe	Nyandeni DoH Clinics u/St.Barnabas	Nyandeni DoH Clinics u/Canzibe	Nyandeni DoH Clinics u/Canzibe	
25	4/1	tue		Canzibe Hospital Clinics u/Canzibe	DoH in Pretoria	St.Barnabas Hosp. Clinics u/St.Barnabas	Canzibe Hospital Clinics u/Canzibe	St.Barnabas Hosp. Clinics u/St.Barnabas	Canzibe Hospital Clinics u/Canzibe	Canzibe Hospital Clinics u/Canzibe	
	4/2	wed		Clinics u/Canzibe	DoH in Pretoria	Clinics u/St.Barnabas	Clinics u/Canzibe	Clinics u/St.Barnabas	Clinics u/Canzibe	Clinics u/Canzibe	
	4/3	thu		Clinics u/Canzibe	JNB→SIN	Clinics u/St.Barnabas	Clinics u/Canzibe	Clinics u/St.Barnabas	Clinics u/Canzibe	Clinics u/Canzibe	
28	4/4	fri		Canzibe Hospital	SIN→Tokyo	St.Barnabas Hospital	Canzibe Hospital	St.Barnabas Hospital	Canzibe Hospital	Canzibe Hospital	
29	4/5	sat		Canzibe Hospital		St.Barnabas Hospital	Canzibe Hospital	St.Barnabas Hospital	Canzibe Hospital	Canzibe Hospital	
30	4/6	sun		Review of study		Review of study	Review of study	Review of study	Review of study	Review of study	
	4/7	mon	Tokyo→(Via)	Clinics u/Canzibe		Zithulele Hospital Clinics u/Zithulele	Canzibe Hospital	Zithulele Hospital Clinics u/Zithulele	Canzibe Hospital	Canzibe Hospital	
32	4/8	tue	(Via)→JNB→ →Pretria JICA/EOJ	Review of study		Zithulele Hospital	Clinics u/Canzibe	Zithulele Hospital	Clinics u/Canzibe	Clinics u/Canzibe	
	4/9	wed	JNB→E.L→B.H Provincial DoH	UMT→B.H Provincial DoH		Review of study	Clinics u/Canzibe	Review of study	Clinics u/Canzibe	UMT→JNB	
00	4/ J	weu	B.H→UMT Nyandeni DoH	B.H→UMT Nyandeni DoH		Nyandeni DoH Site survey	Review of study	Review of study	Nyandeni DoH Site survey	Survey of agent	
34	4/10	thu	Site survey KSD DoH	Site survey KSD DoH		KSD DoH			KSD DoH	Larrey of agent	
35	4/11	fri	Mhlontlo District DOH Site Survey	Mhlontlo District DOH Site Survey		Mhlontlo District DOH Site Survey	Mhlontlo District DOH Site Survey	Mhlontlo District DOH Site Survey	Survey of Heath Center & Hospital	Survey of agent	
	4/12	sat	Team meeting	Team meeting		Team meeting	UMT→JNB			Survey of agent	
37	4/13	sun	UMT→B.H	UMT→B.H		UMT→B.H	JNB →SIN				
			Consultation of	Consultation of		Consultation of Minute	SIN -T-I				
38	4/14	mon	Minute Siging of Minute	Minute Siging of Minute		Minute Siging of Minute	SIN →Tokyo				
39	4/15	tue	E.L→JNB	Review of study		Review of study					
	4/16	wed		$E.L \rightarrow JNB$		$E.L \rightarrow JNB$					
41	4/17	thu		DOH in Pretria JICA/EoJ		with (a)		Singapore	= SIN		
	4/18	fri		study of market		with (a)		Johannesburg	= JNB		
	4/19	sat		JNB→(Paris)		JNB→(Paris)		East London	= JND = E.L.		
	1, 10	Sac									
	4/20	sun		Paris→(Tokyo)	and the second	Paris→(Tokyo)		Bisho	= B.H.		

Schedule of Explanation of Draft Report

No.	Date Officials		Officials	(a)Project Manager	(c)Equipment Planner I	(e)Facilities Planner I	(g)Procurement &Cost Planner			
			10days	22days 22days 22days		20days				
1	6/30	mon	/	Tokyo (SQ997/12:00) → Si						
2	7/1	tuo			IN (SQ406/01:35) → Johannesburg (JNB) 06:15					
		tue			ICA / Embassy of Japan					
3	7/2 7/3	wed thu		DOH in Pretoria JNB(SA1471) → East Long			(JNB)			
5	7/4	fri		Consultation with Eastern Cape Provincial DOH in Bisho (B.H.)	011 (LL.)		Survey of agent (E.L)			
6	7/5	sat		Documentation / Survey o	f agent					
7	7/6	sun		B.H → Umtata (UMT)	B.H → Umtata (UMT)	B.H → Umtata (UMT)	B.H → Umtata (UMT)			
8	7/7	mon		KSD District DoH	KSD District DoH	KSD District DoH	KSD District DoH			
9	7/8	tue		Nyandeni District DoH	Nyandeni District DoH	Nyandeni District DoH	Nyandeni District DoH			
10	7/9	wed		Mhlontlo District DoH	Mhlontlo District DoH	Mhlontlo District DoH	Mhlontlo District DoH			
11	7/10	thu	Tokyo→KUL(01:05)→	District Hospital	District Hospital	District Hospital	District Hospital			
	7/11		→JNB(05:40) JICA / Embassy of Japan JNB(SA0475/14:45) → E.L.(16:10)	District Hospital	District Hospital	District Hospital	District Hospital			
13	7/12	sat	E.L. → Umtata Site survey: District Hospital & Health Center	Join w/Officials District Hospital & Health Center	Join w/Officials District Hospital & Health Center	Join w/Officials District Hospital & Health Center	Join w/Officials District Hospital & Health Center			
14	7/13	sun	Site survey UMT→E.L.	Site survey UMT→E.L.			Site survey UMT→E.L.			
15	7/14	mon	Provincial DoH Consultation of Minutes Signing of Minutes	Provincial DoH Consultation of Minutes Signing of Minutes	Minutes ← Ditto ← Ditto		← Ditto			
16	7/15	tue	Clinics (Site survey)	Clinics (Site survey)	← Ditto ← Ditto		← Ditto			
17	7/16	wed	E.L.(SA1408/15:35) → JNB	E.L.(SA1408)→JNB	(SA1408)→JNB E.L.(SA1408)→JNB Survey of agent in E.L.		Survey of agent in E.L.			
	7/17		JICA / Embassy of Japan Signing of Minutes National DoH in Pretoria JNB(19:20)→	JICA / Embassy of Japan Signing of Minutes National DoH in Pretoria	← Ditto	Survey of agent in E.L. E.L.(SA1408/15:35)→ JNB	Survey of agent in E.L. E.L.(SA1408/15:35)→ JNB			
	7/18	fri	→BKK(11:20) BKK(22:15)→	Survey of agent in JNB	$JNB(SQ405) \rightarrow (SIN)$					
20	7/19	sat	→Tokyo(06:15)	Review & Documentation	SIN(SQ12)→ Tokyo					
	7/20	sun		JNB (SQ405/14:15) → (SIN						
22	7/21	mon		SIN (SQ12/9:45) \rightarrow Tokyo						

3. List of Parties Concered in the Recipient Country

LIST OF PARTY CONCERNED IN SOUTH AFRICA

Embassy of Japan Mr. K. Matsui

JICA Office Mr. H. Murakami Mr. K. Jitsukawa

DOH in Pretoria Ms. Catwerine Makwakwa Ms. Nonkonzo T. Molai Mr. Hanief Kander Ms. Tsakani Mnisi Mr. Baset Khlaf

DOH in Eastern Cape Province Ms. B. Mzileni Mr. D. Barnard Ms. J. N. Matebese Mr. T. S. Mafu

KSD District DOH Ms. M. S. Thifanyane Dr. R. O. Osigwe Ms. N. C. Bovungana Ms. M. N. Godlwana Ms. N. S. Ntshanga

> [Health Center & Clinic / under Umtata Hospital] Ms. Nikiwe Mjindi Mr. Dekeda Ms. P. K. Mgikwa Ms. Bacela Ms. N. Mabuva Ms. M.N. Nokwali Ms. N. Mpoba Ms. R.L. Goosha Ms. Matiyela Ms. N. Mfolombane Ms. Dastile Ms. R. A. Essel Ms. T.S. Soga Ms. C. Sinxoto Ms. Pantshwa Ms. Ncokazi Ms. Mtembo Ms. Ncume Ms. M. Sontundu Ms. Ntshanga (N/A)Ms. Tafa Ms. L.R. Dubeni

First secretary

Resident representative Assistant resident representative

Director, International health liasion Director, Health technology policy Deputy director, Health technology planning Deputy director, Policy & donor coordination Deputy director, Health technology planning

Project manager Chief enginner Director, Primarty health Deputy director, Health facilities planning

District manager Chief medical officer Middle manager for health Manager for maternal & child Manager for primary health care

Ntshele clinic Baziya health centre Zitatele clinic Sitebe clinic Tabase clinic Tyelebana clinic Upper xongora clinic Xhwili clinic Ngangelizwe health centre Ngcengane clinic Qunu clinic Civic centre clinic Stanford terrace health centre Kambi clinic Mbekweni health centre Mpeko clinic Mpunzana clinic Ntshabeni clinic Qokolweni clinic Sangoni clinic Ndibela clinic Ncambele clinic Efata clinic

Ms. R.N. Finca Maxwele clinic Ms. L.L. Memani Maekezweni clinic [Zithulele Hospital] Ms. N.S. Sentundu Acting hospital manager Dr. D.R. Chirwa Senior medical superintendent Ms. N.S. Kela Middle manager [Health Center & Clinic / under Zithulele Hospital] Ms. Sitvebi Ndzulwini clinic Ms. T.P. Matebese Mganduli (H.C.) Ms. V.X. Ngqeleni Luthubeni clinic Ms. V.V. Lutholi Mapuzi clinic Ms. T.P. Qingore Ngcwanguba clinic Ms. Z.Z. Xhanti Ngqungqu clinic Ms. N. Sobuwa Ntlangaza clinic Ms. M.V. Mtolo Pumalanga clinic Ms. M.S. Mhhawka Jalamba clinic Ms. Jafta Wilo clinic Ms. Noah Hlabatshane clinic Ms. Mnyaika Ngwenya clinic Ms. N.M. Raziya Pakamile clinic Mhlontlo District DOH Ms. Nokwe **District** manager Ms. Z.Z. Tilavi PHC Coordinator Ms. Nandi Human resource officer Ms. B. Ngcikiza Acting middle manager, Administration Ms. S.E. Gcisa Clinic supervisor [Nessie Knight Hospital] Ms. N.A. Majeke Chief professional nurse Ms. S.P. Hlongwana Matron Ms. T.P. Bulabula Acting nursing service manager [Health Center & Clinic / under Nessie Knight Hospital] Ms. N.S.Mayengese Nxotwe clinic Ms. N.I.Matiwane Caba clinic Ms. P.A.Mnini Nessie knight gateway clinic Ms. Kiviet Qangu clinic Ms. N.P.Mbutuma Kalankomo clinic Ms. P.N.Madikane Tsilitwa clinic Ms. B.F.Khali Gura clinic Ms. S.C.Mandondo Mahlungulu clinic Ms. E.N.Ncikane Mbalisweni clinic Ms. A.N.Mkula Tina falls clinic Ms. N.V.Nvembezi Ngwemnyama clinic Ms. R.Twetwa Shawbury clinic Ms. A.N.Kumalo Mdyobe clinic Ms. L.Ndzamela Qumbu health centre [St. Lucy's Hospital] Dr. S. Mlenzana Medical superintendent Ms. T.H. Mabanga Middle manager, Nursing Ms. J.T. Mbakaza Chief professional nurse

[Health Center & Clinic / under St. Lucy's Hospital] Ms. N.Q. Ngadala Langeni clinic Ms. L.M. Tsotso Sidwadweni clinic Ms. L. Mrengwa Tsolo village clinic Ms. B.N. Mapoma Beledale clinic Ms. N. Gcwabe Upper mjika clinic Ms. Mesatvwa Lower gungululu clinic Ms. F. Ndzandzeka Lotana clinic Ms. P.N. Hoza Mbokotwana clinic Ms. N. Mbokoma Mhlahlane clinic Ms. N.G. Sodaba Mhlakulo health centre Ms. A. Madala St. Lucy's gateway clinic Nyandeni District DOH Ms. N.V. Mfili District manager Ms. B. Kumalo Middle manager Ms. N. Mlokti Information manager Ms. N.D.Qougule Clinic supervisor Ms. B. Ndamase Provisioning & Logistical support Ms. T.W. Gedu Nursing middle manager [Canzibe Hospital] Dr. M.A. Kabir Acting medical superintendent Ms. T.V. Matoti Senior administrative officer Ms. M.N. Yakobi Chief professional nurse Ms. N. Vabaza Naursing service manager [Health Center & Clinic / under Canzibe Hospital] Ms. N. Mcaniba Buntingville clinic Ms. N.A. Soyamba Nkumandeni clinic Nganda clinic Ms. Mavumengwana Ms. N. Madikizela Ntibane clinic Ms. Sivcau Sen Pilani clinic Ms. M. Bulwayo Lwandile clinic Ms. M.N. Bam Nolita clinic Ms. Mgobozi Ntapane clinic Ms. Jonga Lujizweni clinic Ms. Kwaza Canzibe gateway clinic [St. Barnabas Hospital] Medical superintendent Dr. P.K. Navaratnarajan Dr. E.D. Chao Medical officer Ms. A.T. Gabana Nursing service manager [Health Center & Clinic / under St. Barnabas Hospital] Ms. Sivongwana Libode clinic Ms. O.H. Rozam Nvandeni clinic Ms. N.H. Genge Malusi clinic Ms. N. Bokleni Double falls clinic Ms. Nomqupu Mangcwanguleni clinic Ms. Sigila Ndanya clinic Mr. M. Vuyile Mevana clinic Ms. L.N. Mtwana Ngcolora clinic Ms. N. Maqungu Makotyana (H.C.) Ms. P.N. Nhuku Nkanga clinic Ms. O. Mvubu Mgwenyane healh center (Clinic)

Ms. M.B. Mbana Ms. N.L.. Vamela Ms. A.M. Boko Ms. M.E.. Ludidi Ms. N.R. Mbina St. Barnabas gateway clinic Nkanunu clinic Old Bunting clinic Cwele clinic Mampondomiseni clinic