Appendix 4

Construction Guides (data only, for CD-R)

THE PROJECT ON
CHILDREN AND YOUTH DEVELOPMENT IN KAMBIA DISTRICT,
SIERRA LEONE.

MICRO PROJECT FOR CONTRUCTION OF THREE CLASSROOMS WITH OFFICE AND STORE

CONSTRUCTION GUIDE

OUTLINE OF WORKS:

PROJECT TITLE	·····	CONTRUCTION OF THREE CLASSROOMS WITH OFFICE AND STORE
KIND OF PROJECT	·····	NEW CONSTRUCTION
BUILDING AREA	·····	2,043 square feet (189.86m^2)

WORK SHEDULE: (FOR 3RD STEP OF JICA SUPPORTED PROJECT)

COMMENCEMENT DATE	·····	3rd Week in November 2007
PROPOSED COMPLETION DATE	··	4th Week in April 2008
DURATION OF WORKS	·····	5 Months 2 Weeks

CONSTRUCTION COST:

FUND BY JICA	·····	Le	18,920,000 (Construction)
		Le	780,000 (Contingency)
		Le	300,000 (Administration cost)
	TOTAL	**Le**	**20,000,000**
COMMUNITY CONTRIBUTION	····	**Le**	**8,485,000**
GRAND TOTAL COST	·····	**Le**	**28,485,000**

LIST OF CONSTRUCTION GUIDE:

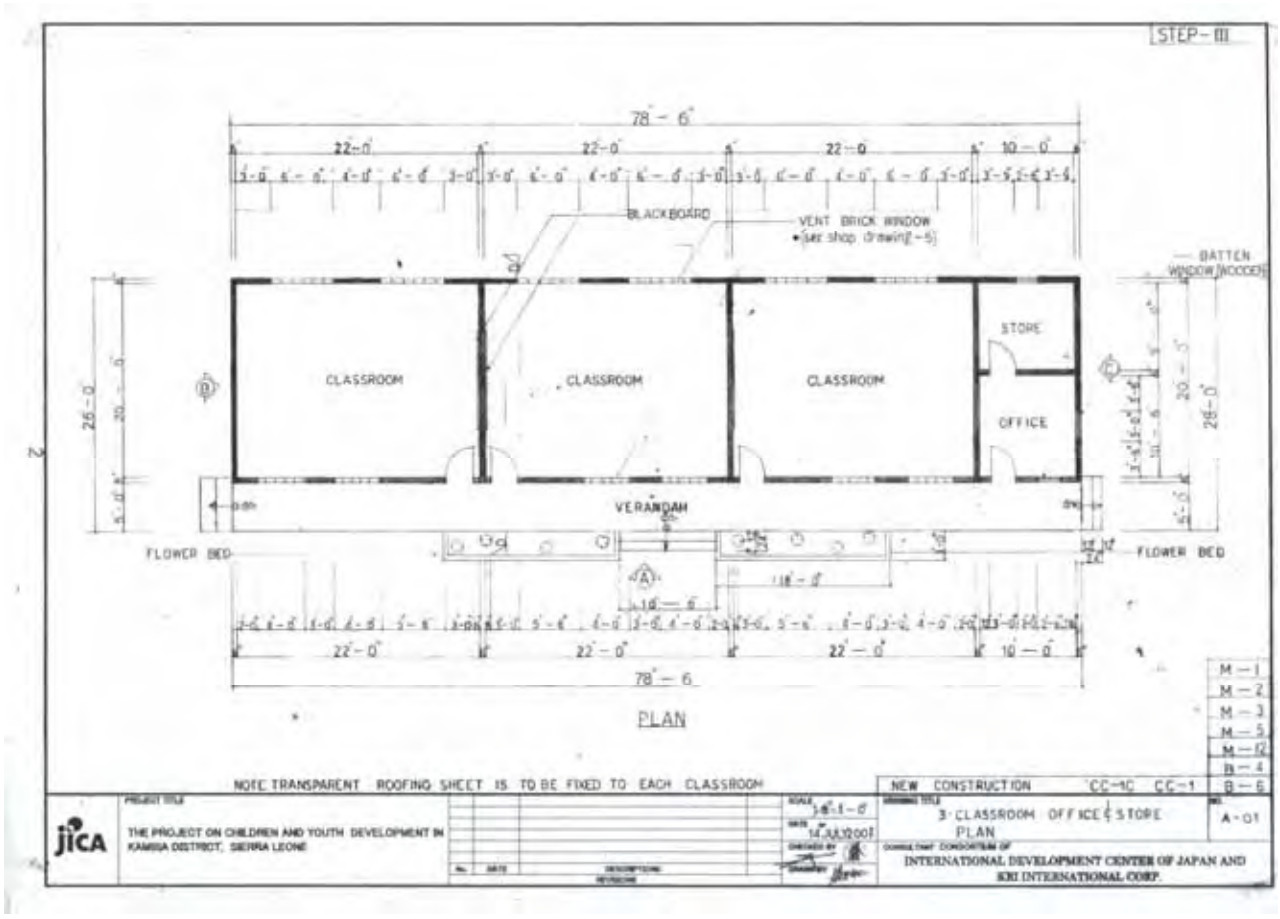
DRAWINGS
WORK SCHEDULE
SUMMARY OF COST ESTIMATE
MATERIALS BREAKDOWN

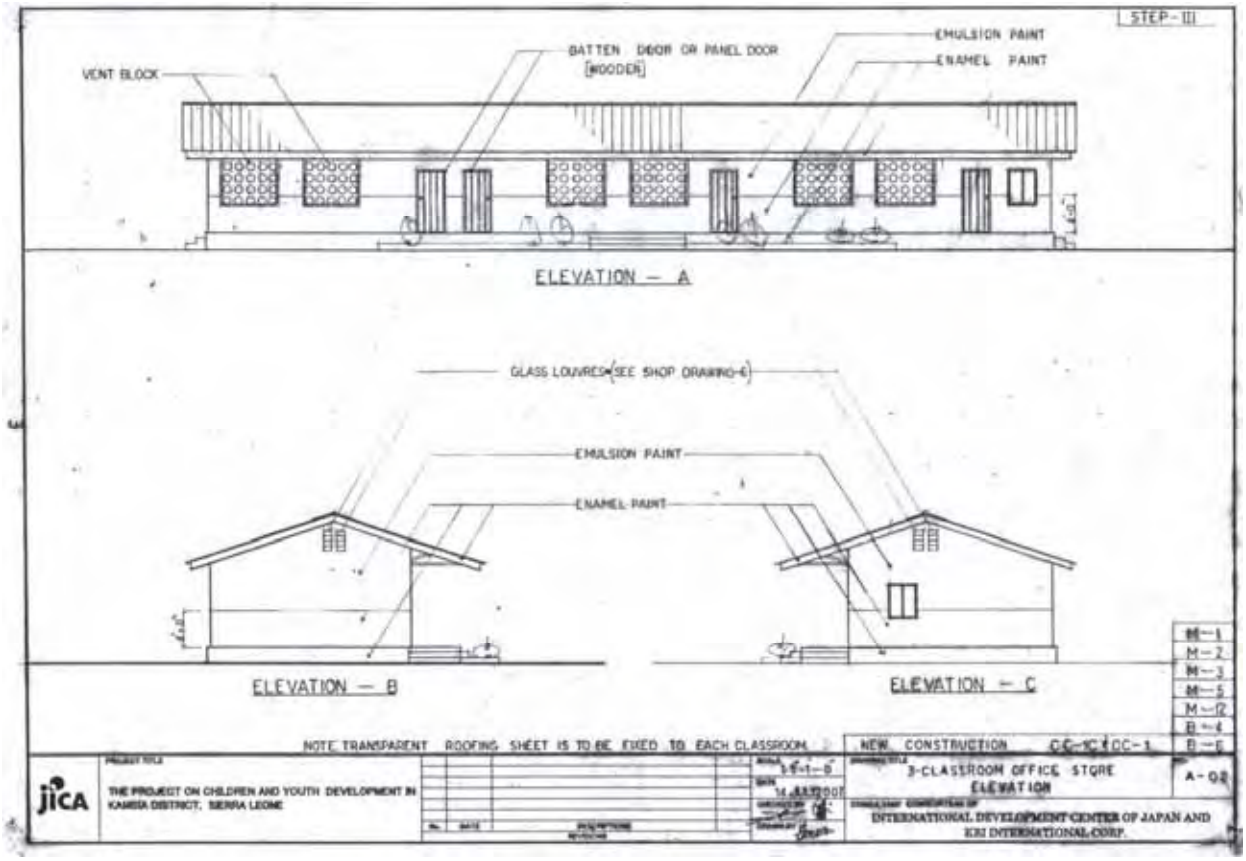
IMPLEMENT BY:

EDUCATION AND COMMUNITY DEVELOPMENT COMMITTEE (ECDC),
KAMBIA DISTRICT

PREPARED BY:

CONSORTIUM OF INTERNATIONAL DEVELOPMENT CENTRE OF JAPAN (IDCJ)
AND KRI INTERNATIONAL CORP. (KRI)


STEP-III
78' - 6"
22'-0"
22'-0"
22'-0"
10'-0"
BLACKBOARD
VENT BRICK WINDOW
(see shop drawing[-5)
BATTEN WINDOW (WOODEN)
CLASSROOM
CLASSROOM
CLASSROOM
STORE
OFFICE
VERANDAH
FLOWER BED
FLOWER BED
26'-0"
20'-0"
18'-0"
16'-6"
PLAN
NOTE TRANSPARENT ROOFING SHEET IS TO BE FIXED TO EACH CLASSROOM
NEW CONSTRUCTION
CC-1C CC-1
M-1
M-2
M-3
M-5
M-12
B-4
B-6
JICA
THE PROJECT ON CHILDREN AND YOUTH DEVELOPMENT IN KAMBIA DISTRICT, SIERRA LEONE
3-CLASSROOM OFFICE & STORE
PLAN
A-01
INTERNATIONAL DEVELOPMENT CENTER OF JAPAN AND KRI INTERNATIONAL CORP.


STEP-III
VENT BLOCK
BATTEN DOOR OR PANEL DOOR (WOODEN)
EMULSION PAINT
ENAMEL PAINT
ELEVATION — A
GLASS LOUVRES (SEE SHOP DRAWING-6)
EMULSION PAINT
ENAMEL PAINT
ELEVATION — B
ELEVATION — C
NOTE TRANSPARENT ROOFING SHEET IS TO BE FIXED TO EACH CLASSROOM
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CC-1C CC-1
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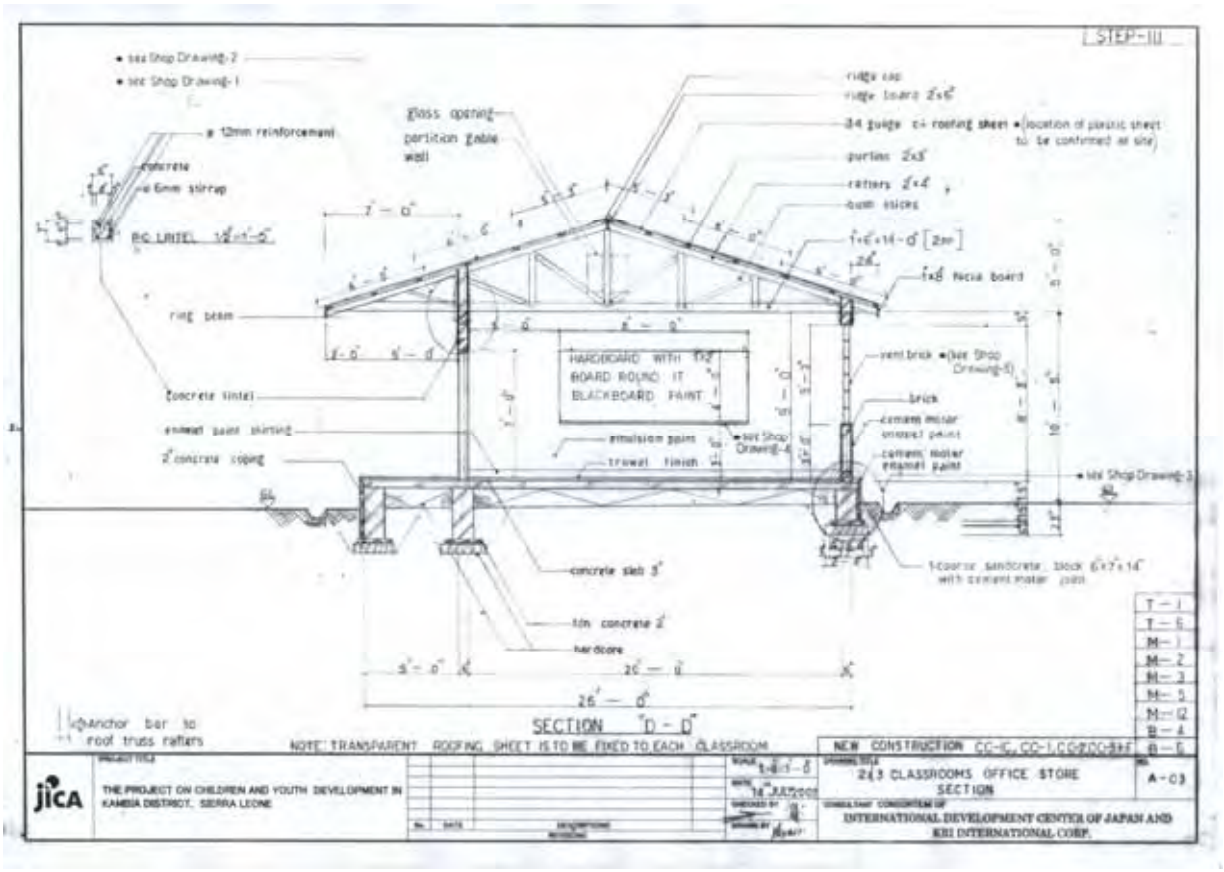
M-12
B-4
B-6
JICA
THE PROJECT ON CHILDREN AND YOUTH DEVELOPMENT IN KAMBIA DISTRICT, SIERRA LEONE
3-CLASSROOM OFFICE STORE
ELEVATION
A-02
INTERNATIONAL DEVELOPMENT CENTER OF JAPAN AND KRI INTERNATIONAL CORP.



WORK PROCEDURE FOR CONSTRUCTION OF 3-CLASSROOM WITH OFFICE AND STORE (M1, M2, M3, M5, M12, B4, B6)

Schedule
Actual Progress

(CC-1, CC-1C)

Nov 2007

Items	Description	November				December				January				February				March				April				May			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
				1st Disbursement (3rd Week, Nov. 2007)						Evaluation				2nd Disbursement (2nd Week, Feb)								Final Inspection			Completion Date (4th Week , April)				
PREPARATION & SUBSTRUCTURE																													
	Land Clearance																												
	Setting out for Building																												
	Excavation Works																												
	Foundation Lean Concrete																												
	Foundation Block Work																												
	Back filling & Placing Hardcore																												
	Shuttering for Ground Slab																												
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SUPERSTRUCTURE																													
	Superstructure Block Work																												
	Shuttering in Superstructure																												
	Concrete Works in Superstructure																												
ROOFING FRAMEWORK																													
	Wall Plate																												
	Trusses/Rafter																												
	Purlins																												
ROOFING																													
	Roofing Sheets and Accessories																												
DOORS AND WINDOWS																													
	Door Frames																												
	Vent Bricks to Windows																												
	Doors with Hardware																												
FINISHING AND MISCELLANEOUS																													
	Cement Mortar Plastering & Flower Bed																												
	Painting																												
SCHEDULE DELAYED (Weeks) to be descrived by ECDC Supervisor																													

SUMMARY OF COST ESTIMATE

3-Classroom with Office and Store(B4,B6,M3,M5,M12)

NO	DESCRIPTION	QTY.	UNIT	UNIT PRICE	ECDC (LE)	JICA FUND (LE)		
						1st DISBURSEMENT	2nd DISBURSEMENT	TOTAL
MATERIALS								
1	Cement *	229	bag	33,500	**458,000**	7,213,500	0	7,213,500
2	Sand	9	trip	150,000	1,275,000			
3	3/4" Aggregate (Red Stone)	5	trip	100,000	500,000			
4	3/4" Aggregate (Granite)	1.0	trip	150,000	150,000			
5	Bush Sticks	13	dozen	5,000	65,000			
6	Line Level	150	yard	180		27,000	0	27,000
7	Hard Core (Ball Stone)	14	trip	50,000	700,000			
8	Ø1/2" Mild Steel Rod	23	length	32,000		736,000	0	736,000
9	Ø1/4" Mild Steel Rod	6	length	13,000		78,000	0	78,000
10	Binding Wire	0.75	roll	55,000		41,250	0	41,250
11	(6" x 6" x 14") thick Mud Bricks	5,969	nr	300	1,790,700			
12	Timber (2" x 12 " x 14')	9	length	15,000		-	135,000	135,000
13	Timber (1" x 12 " x 14')	35	length	8,000		80,000	200,000	280,000
14	Timber (2" x 4" x 14')	37	length	6,000		-	222,000	222,000
15	Timber (2" x 3 " x 14')	83	length	4,500		-	373,500	373,500
16	C.I Sheets (34-Guage,i.e 11cogs)	253	sheets	15,000		3,795,000	0	3,795,000
17	Plastic Roofing Sheet (i.e 6' by 33" or 11cogs)	3	sheets	35,000		105,000	0	105,000
18	Wire Nails (Assorted)	126	packets	2,000		30,000	222,000	252,000
19	Roofing Nails	118	packets	2,000		-	236,000	236,000
20	Roofing Felt	1.0	roll	65,000		-	65,000	65,000
21	Flexible Flat Bar	100	feet	500		50,000	0	50,000
22	Hinges (4")	12	pair	2,000		-	24,000	24,000
23	Tower Bolt (4")	2	nr	2,000		-	4,000	4,000
24	Tower Bolt (Giant Size)	5	nr	5,000		-	25,000	25,000
25	Ridge Cap	14	length	15,000		-	210,000	210,000
26	Emulsion Paint	17	gallon	23,000		-	391,000	391,000
27	Enamel Paint	11	gallon	37,000		-	407,000	407,000
28	Blackboard Paint	1	gallon	30,000		-	30,000	30,000
29	Wood Preservative	10	gallon	34,000			340,000	340,000
30	Primer (White Wash)	3	bag	30,000		-	90,000	90,000
31	Paint Brush (Assorted Brush)	6	nr	5,000		-	30,000	30,000
32	Primer Brush	2	nr	7,000		-	14,000	14,000
33	(4' x 8') Hard Board	3	sheets	18,000		-	54,000	54,000
(A1)	**MATERIALS (JICA/IDCJ) CARRIED TO SUMMARY**					**12,155,750**	**3,072,500**	**15,228,250**
(A2)	**MATERIALS (ECDC) CARRIED TO SUMMARY**				**4,938,700**			
		DAYS	**MAN-DAY**	**UNIT PRICE**	**ECDC (LE)**			
	UNSKILLED LABOUR (ECDC)	164	3	6,000	2,952,000			
(B)	**ECDC SUB TOTAL**				**7,890,700**			

* ECDC/Community to meet balance cost of Cement. i.e Le 458,000
Transportation and Delivery of Cement to Site is also included in Unit Cost

NO	DESCRIPTION	ECDC (LE)	JICA FUND (LE)		
			1st DISBURSEMENT	2nd DISBURSEMENT	TOTAL
SKILLED LABOUR					
1	Masons (Foundation works up to floor slab)		250,000	-	250,000
2	Masons (Superstructure works up to gable walls)		300,000	-	300,000
3	Masons (Casting of vent Bricks for Windows)	200,000			
4	Masons (Plastering in/out and blackboards)		-	200,000	200,000
5	Carpenters (Profiling and foundation shuttering)		50,000	-	50,000
6	Carpenters (Shuttering of lintels, beams,columns)		150,000	50,000	200,000
7	Carpenters (Fabrication of doors including frames)		-	150,000	150,000
8	Carpenters (Roofing framework and roof)		-	350,000	350,000
9	Painters (Internal, external, doors, windows and fascia)		-	150,000	150,000
(C)	**SKILLED LABOUR CARRIED TO SUMMARY**		**750,000**	**900,000**	**1,650,000**
(D)	**SUB TOTAL** (JICA MATERIALS & SKILLED LABOUR) =A1+C		**12,905,750**	**3,972,500**	**16,878,250**
(E)	Transportation Costs = (A1+A2) x 10%		1,200,250	841,500	2,041,750
(F)	Food For Work = (B) x 5%	394,300			
(G)	**ECDC TOTAL**	**8,485,000**			
(H)	**TOTAL JICA FUND excluded contingency and administration (JICA Materials+Skilled Labour+Transportation+Food) =D+E+F+G**		**14,106,000**	**4,814,000**	**18,920,000**
(I)	**TOTAL PROJECT COST (JICA + ECDC)** =G+D				**27,405,000**

MATERIALS BREAKDOWN
(Use for ECDC Supervisor)
3-Classroom with Office and Store(B4,B6,M3,M5,M12)

NO	DESCRIPTION	Estimated QTY.	UNIT	Actual Used QTY.	
1	**SETTING OUT**				
A	Bush Sticks	4	dozen		
B	Wire Nails (Assorted)	5	packets		
C	Line Level	150	yards		
2	**FOUNDATION**				
	Concrete Blinding (2" thick)				
A	Cement	14	bags		
B	Sand	0.5	trip		
C	Aggregates (Stones - 3/4")	1	trip		
	Block Work (3 Course of 6"x 6"x 14" Mud Brick)				
G	Bricks (6" x 6" x 14")	2185	nr		
H	Cement	44	bags		
I	Sand	2	trip		
3	**FLOOR SLAB (3" thick)**				
	SHUTTERING				
A	(1" x 12" x 14') Timber	10	length		
B	Bush Sticks (Battens)	3	dozens		
C	Wire Nails	10	packets		
D	Hard Core (Ball Stones) - 6" thick	14	trip		
	CONCRETE (1:3:6mix and 3"thick)				
E	Cement	59	bag		
F	Sand	2	trip		
G	Aggregates (Stones - 3/4")	4	trip		
4	**Super Structure Block Work**				
A	Cement as (6" x 6" x 14") Sandcrete Blocks	8	bags		i.e 230 sandcrete bricks
B	(6" x 6" x 14") Mud Blocks	3784	nr		
C	Cement (bedding/joints)	5	bags		
5	**TIE BEAM & LINTELS**				
	Reinforced Concrete 1: 2 : 4mix and 1/2" aggregate				
A	Mild Steel Rod (Ø1/2")	23	length		
B	Mild Steel Rod (Ø1/4")	6	length		
C	Binding Wire	0.75	roll		
D	Cement	14	bag		
E	Sand	1	trip		
F	Aggregate (Granite)	1	trip		
6	**PLASTERING & COPING**				
	1: 5 mix and 1/2" thick				
A	Cement (Internal)	19	bag		
B	Cement (External & Concrete Coping)	15	bag		
C	Sand	1.5	trip		

7	**DOORS**				
A	Frames (2" x 12" x 14')	4	length		
B	Battens (1" x 12" x 14')	8	length		
C	Wire Nails (Assorted)	6	packet		
D	Hinges (4")	10	pair		
E	Tower Bolt (Giant Size)	5	nr		
8	**WINDOWS**				
	Vent Brick Windows (10" x 10" x 4" bricks)				460 vent bricks
A	Cement (Casting of Vent Bricks)	23	bag		
B	Cement (bedding/joints)	23	bag		
C	Sand	1.5	trip		
D	Hinges (4") - Office Window	2	pair		
E	Tower Bolt (4") - Office Window	2	nr		
9	**ROOFING FRAME WORK**				
A	Wall Plate (2" x 12" x 14')	6	length		
B	Bush Sticks (Rafters)	6	dozens		
C	1" x 12" x 14'	30	length		
D	2" x 4" x 14'	37	length		
E	Ridge Board (2" x 12" x 14')	3	length		
F	Fascia (1" x 12" x 14')	17	length		
G	Purline (2" x 3" x 14')	83	length		
H	Wire Nails (Assorted)	105	packet		
I	Flexible Flat Bars (Brace to Beams & Roof)	100	feet		
10	**ROOF**				
A	C.I Sheets (34-Guage, i.e 6' by 33" or 11cogs)	253	sheets		
B	Plastic Roofing Sheet (i.e 6' by 33" or 11cogs)	3	sheets		
C	Ridge Cap (6')	14	length		
D	Roofing Felt	1	roll		
E	Roofing Nails	118	packet		
11	**PAINTING**				
A	Primer (White Wash)	3	bag		
B	Emulsion (Water Paint)	17	gallon		
C	Enamel (Oil Paint)	11	gallon		
D	Blackboard Paint (Renovator)	1	gallon		
E	Wood Preservative (Carbolluim)	10	gallon		
F	Paint Brush (Assorted Sizes)	6	nr		
G	Primer Brush	2	nr		
12	**Others**				
A	Cement (Access Steps and Flower Bed)	5	bag		
B	(4'x 8') Hard Board as blackboard	3	sheets		

THE PROJECT ON
CHILDREN AND YOUTH DEVELOPMENT IN KAMBIA DISTRICT,
SIERRA LEONE.

MICRO PROJECT FOR CONTRUCTION OF THREE CLASSROOMS WITH OFFICE AND STORE

CONSTRUCTION GUIDE

OUTLINE OF WORKS:

PROJECT TITLE	·····	CONTRUCTION OF THREE CLASSROOMS WITH OFFICE AND STORE
KIND OF PROJECT	·····	NEW CONSTRUCTION
BUILDING AREA	·····	2,043 square feet (189.86m^2)

WORK SHEDULE: (FOR 3RD STEP OF JICA SUPPORTED PROJECT)

COMMENCEMENT DATE	·····	3rd Week in November 2007
PROPOSED COMPLETION DATE	··	4th Week in April 2008
DURATION OF WORKS	·····	5 Months 2 Weeks

CONSTRUCTION COST:

FUND BY JICA	·····	Le	19,058,000 (Construction)
		Le	642,000 (Contingency)
		Le	300,000 (Administration cost)
	TOTAL	**Le**	**20,000,000**
COMMUNITY CONTRIBUTION	····	**Le**	**10,540,000**
GRAND TOTAL COST	·····	**Le**	**30,540,000**

LIST OF CONSTRUCTION GUIDE:

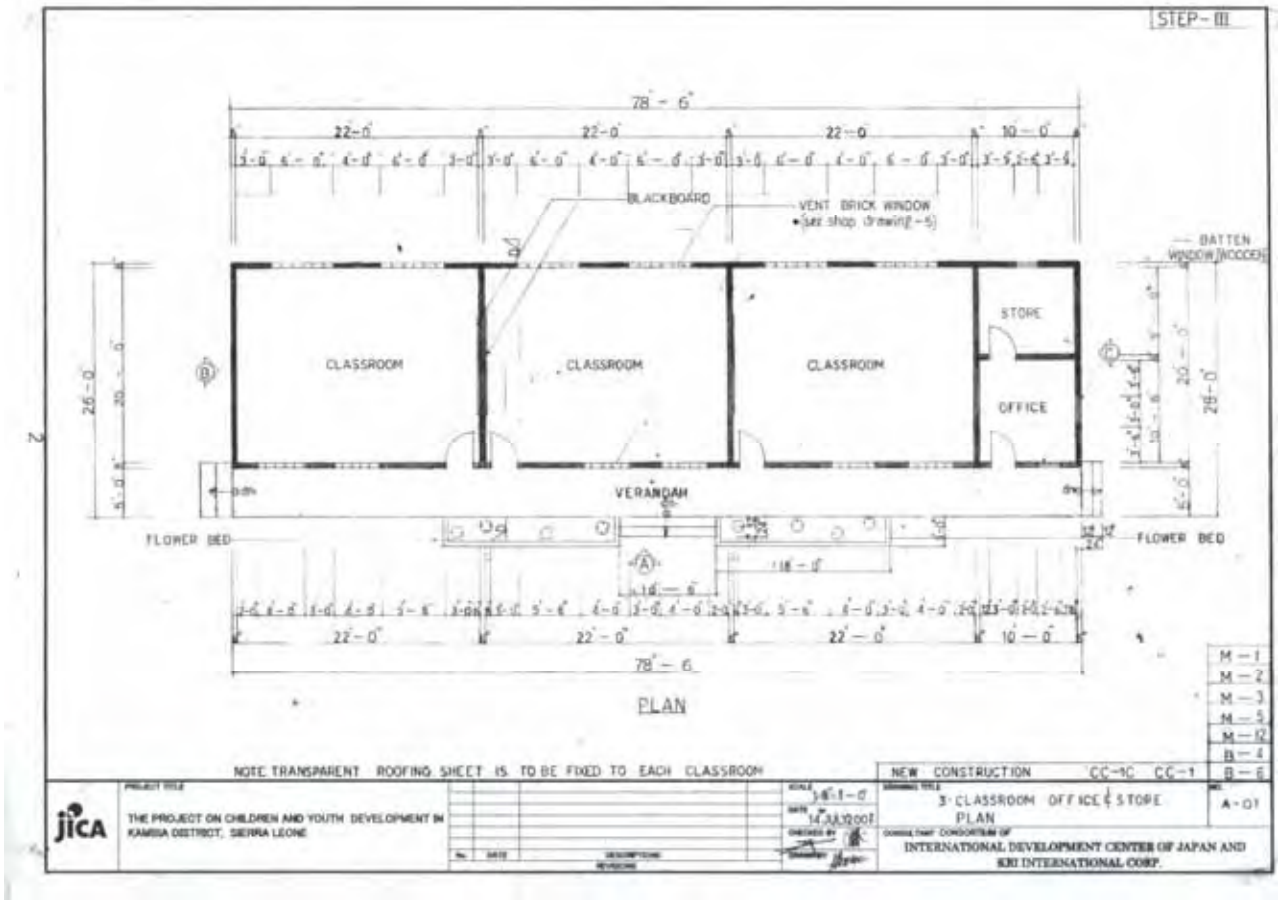
DRAWINGS
WORK SCHEDULE
SUMMARY OF COST ESTIMATE
MATERIALS BREAKDOWN

IMPLEMENT BY:

EDUCATION AND COMMUNITY DEVELOPMENT COMMITTEE (ECDC),
KAMBIA DISTRICT

PREPARED BY:

CONSORTIUM OF INTERNATIONAL DEVELOPMENT CENTRE OF JAPAN (IDCJ)
AND KRI INTERNATIONAL CORP. (KRI) **THE PROJECT ON**


STEP-III
78' - 6"
22'-0"
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BLACKBOARD
VENT BRICK WINDOW
(see shop Drawing[-5)
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PLAN
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NEW CONSTRUCTION CC-1C CC-1
3-CLASSROOM OFFICE & STORE
PLAN
A-01
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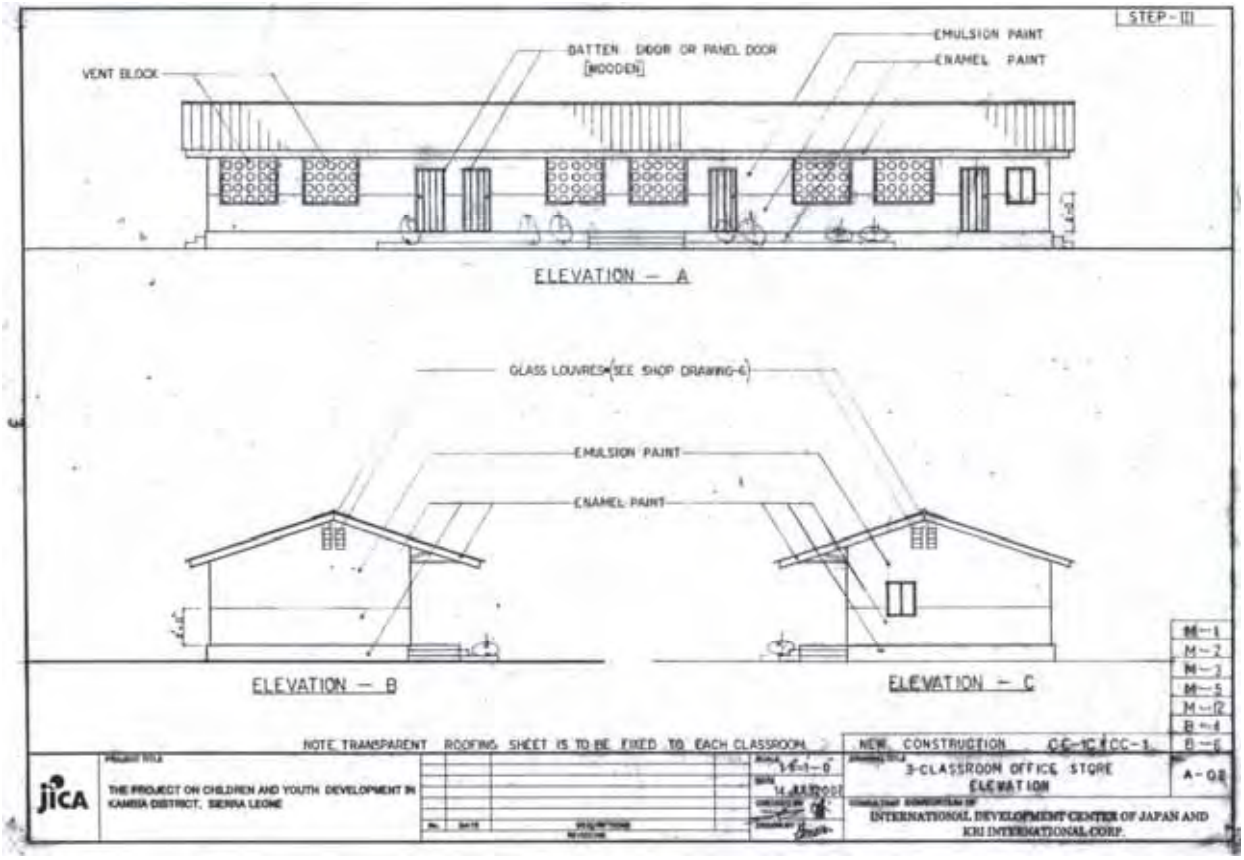
INTERNATIONAL DEVELOPMENT CENTER OF JAPAN AND KRI INTERNATIONAL CORP.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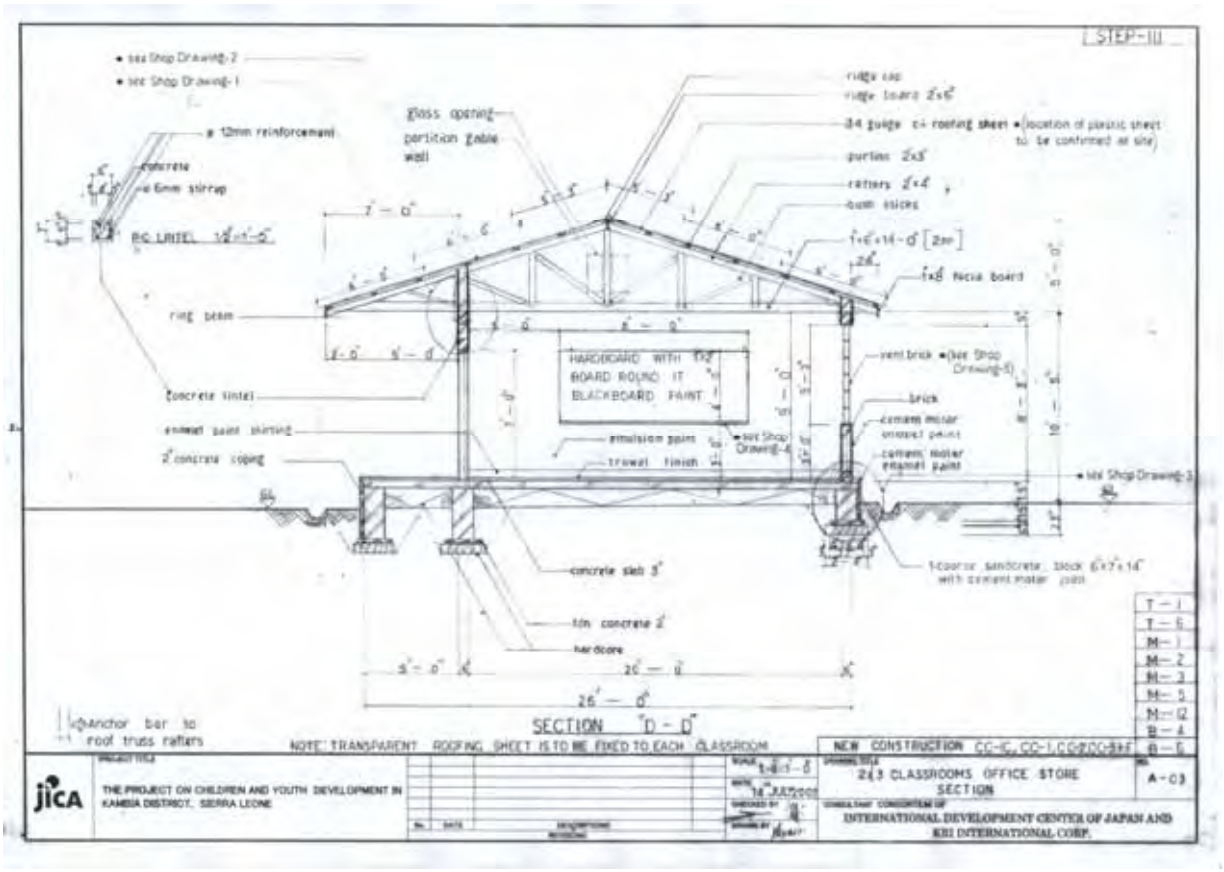
INTERNATIONAL DEVELOPMENT CENTER OF JAPAN AND KRI INTERNATIONAL CORP.



WORK PROCEDURE FOR CONSTRUCTION OF 3-CLASSROOM WITH OFFICE AND STORE (M1, M2, M3, M5, M12, B4, B6)

Schedule
Actual Progress

(CC-1, CC-1C)

Nov 2007

Items	Description	November				December				January				February				March				April				May			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
				◇ 1st Disbursement (3rd Week, Nov. 2007)								Evaluation				◇ 2nd Disbursement (2nd Week, Feb)								Final Inspection			▲ Completion Date (4th Week , April)			
PREPARATION & SUBSTRUCTURE																													
	Land Clearance																												
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	Painting																												
SCHEDULE DELAYED (Weeks) to be descrived by ECDC Supervisor																													

SUMMARY OF COST ESTIMATE
3-Classroom with Office & Store (M1,M2)

NO	DESCRIPTION	QTY.	UNIT	UNIT PRICE	ECDC (LE)	JICA FUND (LE)		
						1st DISBURSEMENT	2nd DISBURSEMENT	TOTAL
MATERIALS								
1	Cement *	366	bag	33,500	**1,281,000**	10,980,000	0	10,980,000
2	Sand	13	trip	150,000	1,875,000			
3	3/4" Aggregate (Red Stone)	5	trip	100,000	500,000			
4	3/4" Aggregate (Granite)	1.0	trip	150,000	150,000			
5	Bush Sticks	13	dozen	5,000	65,000			
6	Line Level	150	yard	180		27,000	0	27,000
7	Hard Core (Ball Stone)	14	trip	50,000	700,000			
8	Ø1/2" Mild Steel Rod	11	length	32,000		352,000	0	352,000
9	Ø1/4" Mild Steel Rod	7	length	13,000		91,000	0	91,000
10	Binding Wire	0.50	roll	55,000		27,500	0	27,500
11	Timber (2" x 12 " x 14')	13	length	15,000		195,000	0	195,000
12	Timber (1" x 12 " x 14')	65	length	8,000		520,000	0	520,000
13	Timber (2" x 4" x 14')	37	length	6,000		-	222,000	222,000
14	Timber (2" x 3 " x 14')	83	length	4,500		373,500	0	373,500
15	C.I Sheets (34-Guage,i.e 11cogs)	253	sheets	15,000		-	3,795,000	3,795,000
16	Plastic Roofing Sheet (i.e 6' by 33" or 11cogs)	3	sheets	35,000		-	105,000	105,000
17	Wire Nails (Assorted)	126	packets	2,000		30,000	222,000	252,000
18	Roofing Nails	118	packets	2,000		-	236,000	236,000
19	Roofing Felt	1.0	roll	65,000		-	65,000	65,000
20	Hinges (4")	12	pair	2,000		-	24,000	24,000
21	Tower Bolt (4")	2	nr	2,000		-	4,000	4,000
22	Tower Bolt (Giant Size)	5	nr	5,000		-	25,000	25,000
23	Ridge Cap	14	length	15,000		-	210,000	210,000
24	Emulsion Paint	17	gallon	23,000	391,000	-		
25	Enamel Paint	11	gallon	37,000	407,000	-		
26	Blackboard Paint	1	gallon	30,000	30,000	-		
27	Wood Preservative **	10	gallon	34,000	340,000			
28	Primer (White Wash)	3	bag	30,000	90,000	-		
29	Paint Brush (Assorted Brush)	6	nr	5,000	30,000	-		
30	Primer Brush	2	nr	7,000	14,000	-		
31	(4' x 8') Hard Board	3	sheets	18,000		-	54,000	54,000
(A1)	**MATERIALS (JICA/IDCJ) CARRIED TO SUMMARY**					**12,596,000**	**4,962,000**	**17,558,000**
(A2)	**MATERIALS (ECDC) CARRIED TO SUMMARY**				**5,873,000**			
		DAYS	**MAN-DAY**	**UNIT PRICE**	**ECDC (LE)**			
	UNSKILLED LABOUR (ECDC)	164	2.5	6,000	2,460,000			
(B)	**ECDC SUB TOTAL**				**8,333,000**			

* ECDC/Community to meet balance cost of Cement. i.e Le 1,281,000
Transportation and Delivery of Cement to Site is also included in Unit Cost

** ECDC/Community to provide Wood Preservative on time for use!

NO	DESCRIPTION	ECDC (LE)	JICA FUND (LE)		
			1st DISBURSEMENT	2nd DISBURSEMENT	TOTAL
SKILLED LABOUR					
1	Masons (Foundation works up to floor slab)		250,000	-	250,000
2	Masons (Superstructure works up to gable walls)		300,000	-	300,000
3	Masons (Plastering in/out and blackboards)		-	200,000	200,000
4	Carpenters (Profiling and foundation shuttering)		50,000	-	50,000
5	Carpenters (Shuttering of lintels, beams,columns)		150,000	50,000	200,000
6	Carpenters (Fabrication of doors including frames)		-	150,000	150,000
7	Carpenters (Roofing framework and roof)		-	350,000	350,000
8	Painters (Internal, external, doors, windows and fascia)	150,000	-	-	
(C)	**SKILLED LABOUR CARRIED TO SUMMARY**		**750,000**	**750,000**	**1,500,000**
(D)	**SUB TOTAL** (JICA MATERIALS & SKILLED LABOUR) =A1+C		**13,346,000**	**5,712,000**	**19,058,000**
(E)	Transportation Costs = (A1+A2) x 7%	**1,640,000**			
(F)	Food For Work = (B) x 5%	417,000			
(G)	**ECDC TOTAL**	**10,540,000**			
(H)	**TOTAL JICA FUND EXCLUDED CONTINGENCY AND ADMINISTRATION COST** (JICA Materials+Skilled Labour) =D		**13,346,000**	**5,712,000**	**19,058,000**
(I)	**TOTAL PROJECT COST (JICA + ECDC)** =G+H				**29,598,000**

MATERIALS BREAKDOWN TO BE USED FOR EACH STAGE
(Use for ECDC Supervisor)
3-Classroom with Office and Store(M1,M2)

NO	DESCRIPTION	Estimated QTY.	UNIT	Actual Used QTY.	
1	**SETTING OUT**				
A	Bush Sticks	4	dozen		
B	Wire Nails (Assorted)	5	packets		
C	Line Level	150	yards		
2	**FOUNDATION**				
	Concrete Blinding (2" thick)				
A	Cement	14	bags		
B	Sand	0.5	trip		
C	Aggregates (Stones - 3/4")	1	trip		
D	Mild Steel Rod (Ø1/2")	0	length		
E	Mild Steel Rod (Ø1/4")	0	length		
F	Binding Wire	0	roll		
	BlockWork(3Courses of 5"x 9"x 18"Sandcrete Bricks)				
G	Cement - (5" x 9" x 18") Sandcrete Bricks	29	bags		732 bricks i.e 29 bags of cement
H	Cement (bedding/joints)	26	bags		
I	Sand	2	trip		
3	**FLOOR SLAB (3" thick)**	253			
	SHUTTERING				
A	(1" x 12" x 14') Timber	10	length		
B	Bush Sticks (Battens)	3	dozens		
C	Wire Nails	10	packets		
D	Hard Core (Ball Stones) - 6" thick	14	trip		
	CONCRETE (1:3:6mix and 3"thick)				
E	Cement	59	bag		
F	Sand	2	trip		
G	Aggregates (Stones - 3/4")	4	trip		
4	**Super Structure Block Work**				
A	Cement - (5" x 9" x 18") Sandcrete Bricks	76	bags		1886 bricks i.e 85 bags of cement
B	Cement (bedding/joints)	67	bags		
C	Sand	3	trip		
5	**TIE BEAM & LINTELS**				
	Reinforced Concrete 1: 2 : 4mix and 1/2" aggregate				
A	Mild Steel Rod (Ø1/2")	11	length		
B	Mild Steel Rod (Ø1/4")	4	length		
C	Binding Wire	0.5	roll		
D	Cement	19	bag		
E	Sand	1	trip		
F	Aggregate (Granite)	1	trip		

6	**PLASTERING & COPING**				
	1: 4 mix and 1/2" thick				
A	Cement (Internal)	19	bag		
B	Cement (External & Concrete Coping)	17	bag		
C	Sand	2	trip		
7	**DOORS**				
A	Frames (2" x 12" x 14')	4	length		
B	Battens (1" x 12" x 14')	8	length		
C	Wire Nails (Assorted)	6	packet		
D	Hinges (4")	10	pair		
E	Tower Bolt (Giant Size)	5	nr		
8	**WINDOWS**				
	Vent Brick Windows (10" x 10" x 4")				
A	Cement (as Vent Bricks)	19	bag		i.e 460 Vent Bricks
B	Cement (bedding/joints)	16	bag		
C	Sand	2	trip		
D	Hinges (4") - Office Window	2	pair		
E	Tower Bolt (4") - Office Window	2	nr		
9	**ROOFING FRAME WORK**				
A	Wall Plate (2" x 12" x 14')	6	length		
B	Bush Sticks (Rafters)	6	dozens		
C	1" x 12" x 14'	30	length		
D	2" x 4" x 14'	37	length		
E	Ridge Board (2" x 12" x 14')	3	length		
F	Fascia (1" x 12" x 14')	17	length		
G	Purline (2" x 3" x 14')	83	length		
H	Wire Nails (Assorted)	105	packet		
I	Mild Steel Rod (Ø1/4") (Brace to Beams & Roof)	3	length		
10	**ROOF**				
A	C.I Sheets (34-Guage, i.e 6' by 33" or 11cogs)	253	sheets		
B	Plastic Roofing Sheet (i.e 6' by 33" or 11cogs)	3	sheets		
C	Ridge Cap (6')	14	length		
D	Roofing Felt	1	roll		
E	Roofing Nails	118	packet		
11	**PAINTING**				
A	Primer (White Wash)	3	bag		
B	Emulsion (Water Paint)	17	gallon		
C	Enamel (Oil Paint)	11	gallon		
D	Blackboard Paint (Renovator)	1	gallon		
E	Wood Preservative (Carbolluim)	10	gallon		
F	Paint Brush (Assorted Sizes)	6	nr		
G	Primer Brush	2	nr		
12	**Others**				
A	Cement (Access Steps and Flower Bed)	5	bag		
B	(4'x 8') Hard Board as blackboard	3	sheets		

THE PROJECT ON
CHILDREN AND YOUTH DEVELOPMENT IN KAMBIA DISTRICT,
SIERRA LEONE.

MICRO PROJECT FOR CONTRUCTION OF STAFF QUARTERS

CONSTRUCTION GUIDE

OUTLINE OF WORKS:

PROJECT TITLE	·····	CONTRUCTION OF STAFF QUARTERS
KIND OF PROJECT	·····	NEW CONSTRUCTION & FABRICATION OF FURNITURE
BUILDING AREA	·····	1,050 square feet (97.55m^2)

WORK SHEDULE:

COMMENCEMENT DATE	·····	3rd Week in November 2007
PROPOSED COMPLETION DATE	··	4th Week in April 2008
DURATION OF WORKS	·····	5 Months, 2 Weeks

CONSTRUCTION COST: (FOR 3RD STEP OF JICA SUPPORTED PROJECT)

FUND BY JICA	·····	Le	16,873,000 (Construction)
		Le	827,000 (Contingency)
		Le	300,000 (Administration cost)
	TOTAL	**Le**	**18,000,000**
COMMUNITY CONTRIBUTION	····	**Le**	**6,733,600**
TOTAL COST	·····	**Le**	**24,733,600**

LIST OF CONSTRUCTION GUIDE:

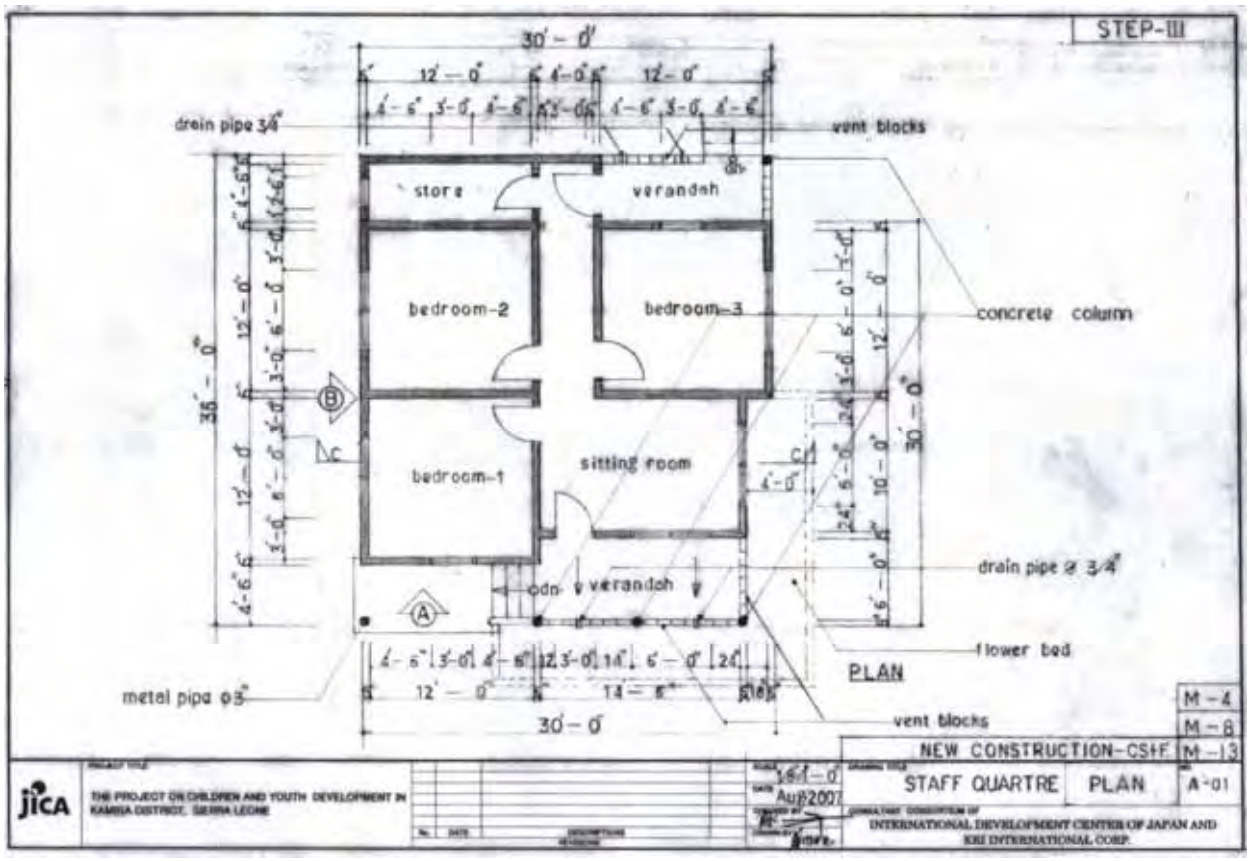
DRAWINGS
WORK SCHEDULE
SUMMARY OF COST ESTIMATE
MATERIALS BREAKDOWN

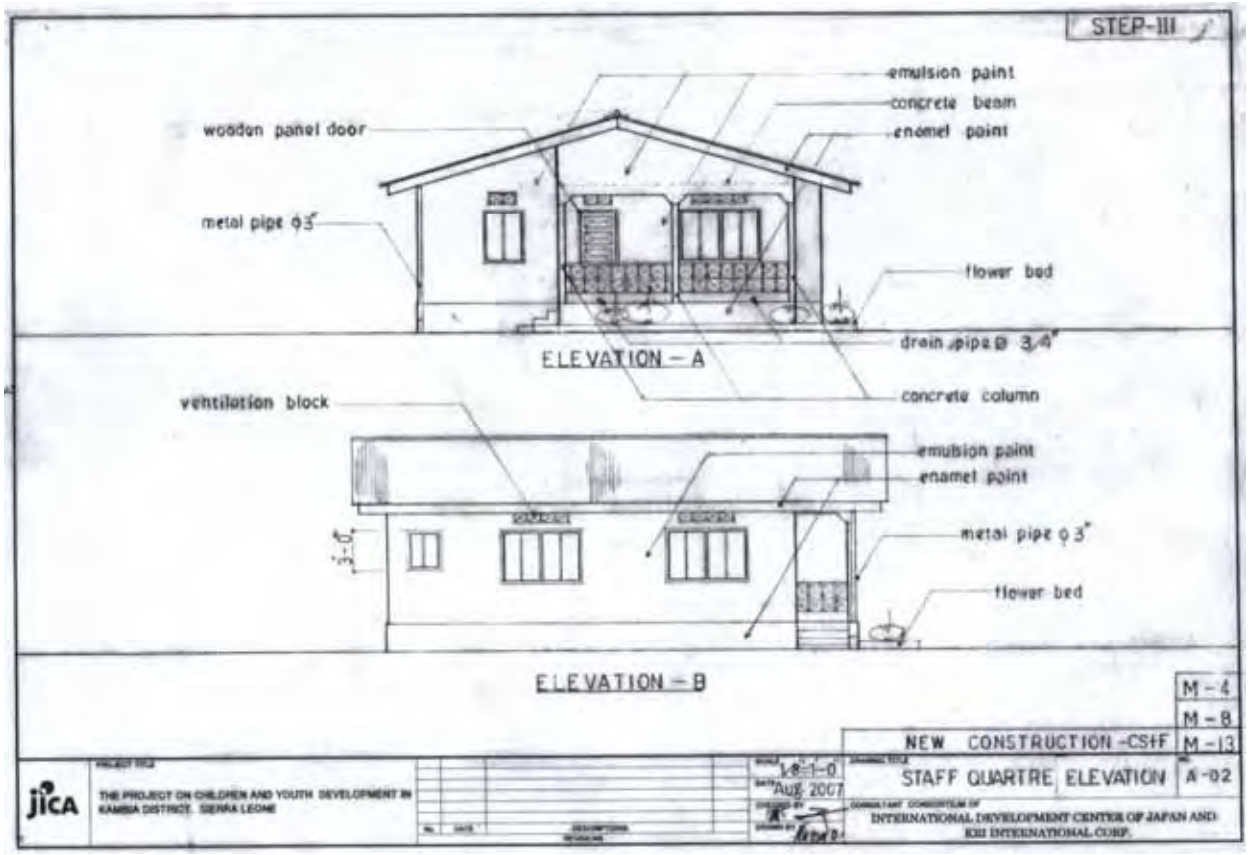
IMPLEMENT BY:

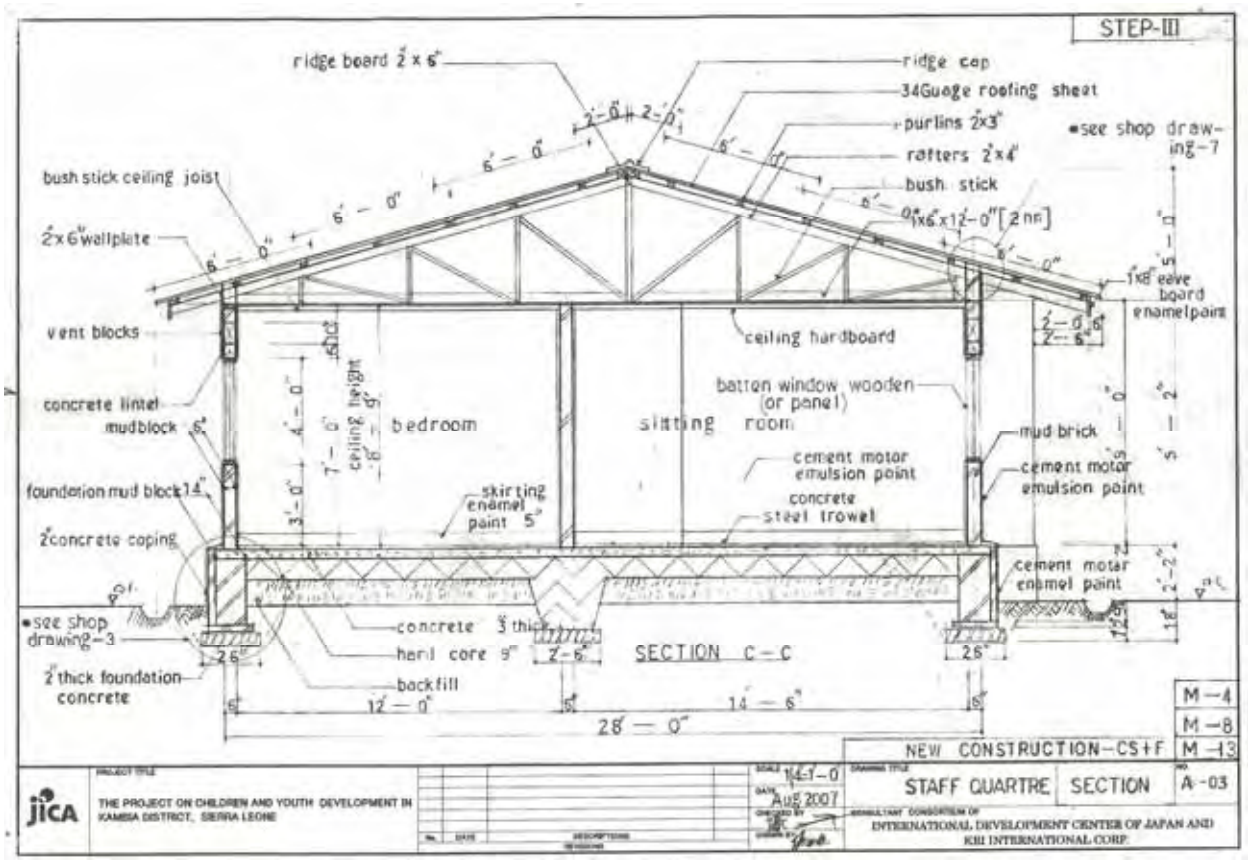
EDUCATION AND COMMUNITY DEVELOPMENT COMMITTEE (ECDC),
KAMBIA DISTRICT

PREPARED BY:

CONSORTIUM OF INTERNATIONAL DEVELOPMENT CENTRE OF JAPAN (IDCJ)
AND KRI INTERNATIONAL CORP. (KRI)


STEP-III
30' - 0"
drain pipe 3/4"
vent blocks
store
verandah
bedroom-2
bedroom-3
concrete column
bedroom-1
sitting room
drain pipe @ 3/4"
verandah
flower bed
PLAN
metal pipe ø3"
vent blocks
M - 4
M - 8
M - 13
NEW CONSTRUCTION-CS+F
STAFF QUARTRE PLAN
A-01
JICA
THE PROJECT ON CHILDREN AND YOUTH DEVELOPMENT IN KAMBIA DISTRICT, SIERRA LEONE
1/8"-1'-0"
Aug 2007
INTERNATIONAL DEVELOPMENT CENTER OF JAPAN AND KRI INTERNATIONAL CORP.


STEP-III
emulsion paint
concrete beam
enamel paint
wooden panel door
metal pipe ø3"
flower bed
drain pipe @ 3/4"
ELEVATION - A
ventilation block
concrete column
emulsion paint
enamel paint
metal pipe ø3"
flower bed
ELEVATION - B
M - 4
M - 8
M - 13
NEW CONSTRUCTION -CS+F
STAFF QUARTRE ELEVATION
A-02
JICA
THE PROJECT ON CHILDREN AND YOUTH DEVELOPMENT IN KAMBIA DISTRICT, SIERRA LEONE
1/8"-1'-0"
Aug 2007
INTERNATIONAL DEVELOPMENT CENTER OF JAPAN AND KRI INTERNATIONAL CORP.



WORK PROCEDURE FOR CONSTRUCTION OF 3-CLASSROOM WITH OFFICE AND STORE, STAFF QUARTERS, and HEALTH POST (T1, M4, M8, M10, M13)

Schedule
Actual Progress

(CC-3+F, CS+F, CHP+F)

Nov 2007

Items	Description	November				December				January				February				March				April				May			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
				1st Disbursement (3rd Week, Nov. 2007)								Evaluation				2nd Disbursement (1st Week, Feb)								Final Inspection			Completion Date (4th Week , April)			
PREPARATION & SUBSTRUCTURE																													
	Land Clearance																												
	Setting out for Building																												
	Excavation Works																												
	Foundation Lean Concrete																												
	Foundation Block Work																												
	Back filling & Placing Hardcore																												
	Shuttering for Ground Slab																												
	Concrete Works in Ground Slab																												
SUPERSTRUCTURE																													
	Superstructure Block Work																												
	Shuttering in Superstructure																												
	Concrete Works in Superstructure																												
ROOFING FRAMEWORK																													
	Wall Plate																												
	Trusses/Rafter																												
	Purlins																												
ROOFING																													
	Roofing Sheets and Accessories																												
DOORS AND WINDOWS																													
	Door Frames																												
	Vent Bricks to Windows																												
	Doors with Hardware																												
FINISHING AND MISCELLANEOUS																													
	Cement Mortar Plastering & Flower Bed																												
	Painting																												
FURNITURE																													
	Fabrication of Furniture and Assembly																												
SCHEDULE DELAYED (Weeks) to be descrived by ECDC Supervisor																													

SUMMARY OF COST ESTIMATE

Staff Quarter (M4,M8,M13)

NO	DESCRIPTION	QTY.	UNIT	UNIT PRICE	ECDC (LE)	JICA FUND (LE)		
						1st DISBURSEMENT	2nd DISBURSEMENT	TOTAL
MATERIALS								
1	Cement	171	bag	33,500		5,728,500	0	5,728,500
2	Sand	9	trip	150,000	1,275,000			
3	3/4" Aggregate (Red Stone)	5	trip	100,000	500,000			
4	3/4" Aggregate (Granite)	1.0	trip	150,000	150,000			
5	Bush Sticks	18	dozen	5,000	90,000			
6	Line Level	150	yard	180		27,000	0	27,000
7	Hard Core (Ball Stone)	7	trip	50,000	350,000			
8	Ø1/2" Mild Steel Rod	37	length	32,000		1,184,000	0	1,184,000
9	Ø1/4" Mild Steel Rod	7	length	13,000		91,000	0	91,000
10	Ø3" Metal Pipe	3	length	150,000		450,000		450,000
11	Binding Wire	1.00	roll	55,000		55,000	0	55,000
12	(6" x 6" x 14") thick Mud Bricks	4,962	nr	300	1,488,600			
13	Timber (2" x 12 " x 14')	26	length	15,000		234,000	156,000	390,000
14	Timber (1" x 12 " x 14')	63	length	8,000		301,000	203,000	504,000
15	Timber (2" x 4" x 14')	28	length	6,000		140,000	28,000	168,000
16	Timber (2" x 3 " x 14')	35	length	4,500		157,500	0	157,500
17	C.I Sheets (34-Guage)	110	sheets	15,000		-	1,650,000	1,650,000
18	Ceiling Hard Board (4' x 8')	44	sheets	18,000		-	792,000	792,000
19	Fillet Board (Cover and Corner Strips)	3	bundle	14,000		-	42,000	42,000
20	Wire Nails (Assorted)	157	packets	2,000		230,000	84,000	314,000
21	Roofing Nails	90	packets	2,000		180,000	0	180,000
22	Roofing Felt	1.0	roll	65,000		65,000	0	65,000
23	Flexible Flat Bar	100	feet	500		50,000	0	50,000
24	Hinges (4")	38	pair	2,000		-	76,000	76,000
25	Tower Bolt (4")	26	nr	2,000		-	52,000	52,000
26	Tower Bolt (Giant Size)	3	nr	5,000		-	15,000	15,000
27	Ridge Cap	7	length	15,000		105,000	0	105,000
28	Emulsion Paint	15	gallons	23,000		-	345,000	345,000
29	Enamel Paint	8	gallons	37,000		-	296,000	296,000
30	Primer (White Wash)	3	bag	30,000		-	90,000	90,000
31	Paint Brush (Assorted Brush)	6	nr	5,000		-	30,000	30,000
32	Primer Brush	2	nr	7,000		-	14,000	14,000
(A1)	**MATERIALS (JICA/IDCJ) CARRIED TO SUMMARY**					**8,998,000**	**3,873,000**	**12,871,000**
(A2)	**MATERIALS (ECDC) CARRIED TO SUMMARY**				**3,853,600**			
		DAYS	**MAN-DAY**	**UNIT PRICE**	**ECDC (LE)**			
	UNSKILLED LABOUR (ECDC)	160	3	6,000	2,880,000			
(B)	**ECDC TOTAL**				**6,733,600**			

NO	DESCRIPTION	QTY.	UNIT	UNIT PRICE	ECDC (LE)	JICA FUND (LE) 1st DISBURSEMENT	JICA FUND (LE) 2nd DISBURSEMENT	JICA FUND (LE) TOTAL
SKILLED LABOUR								
1	Masons (Foundation works up to floor slab)					150,000	-	150,000
2	Masons (Superstructure works up to gable walls)					350,000	-	350,000
3	Masons (Plastering in/out and blackboards)					-	150,000	150,000
4	Carpenters (Profiling and foundation shuttering)					50,000	-	50,000
5	Carpenters (Shuttering of lintels, beams, columns and fixing of doors and windows)					150,000	-	150,000
6	Carpenters (Fabrication of doors and windows including frames)					150,000	-	150,000
7	Carpenters (Roofing framework and roof)					250,000	-	250,000
8	Carpenters (Ceiling Joists and Ceiling works)					-	100,000	100,000
9	Painters (Internal, external, doors, windows and fascia)					-	150,000	150,000
(C)	**SKILLED LABOUR CARRIED TO SUMMARY**					**1,100,000**	**400,000**	**1,500,000**
FURNITURE								
1	Plain Teachers Bed (4'-6"x 6'-0") with Floor and Drawer	3	nr	150,000		0	450,000	450,000
2	Dining Table (5'-0" x 3'-0" x 2'-9") with 4 Dining Chairs	1	set	70,000		0	70,000	70,000
3	Foam Mattress (6" thick to fit bed)	3	nr	90,000		0	270,000	270,000
(D)	**FURNITURE CARRIED TO SUMMARY**					**-**	**790,000**	**790,000**
(E)	**SUB TOTAL** (JICA MATERIALS, SKILLED LABOUR & FURNITURE) =A1+C+D					**10,098,000**	**5,063,000**	**15,161,000**
(F)	Transportation Costs = (A1+A2 + D) x 10%					1,000,000	493,000	1,493,000
(G)	Food For Work = (B) x 5%					150,000	69,000	219,000
(H)	**TOTAL JICA FUND EXCLUDED CONTINGENCY AND ADMINISTRATION COST** (JICA Materials+Skilled Labour +Furniture+Transportation+Food) =E+F+G					**11,248,000**	**5,625,000**	**16,873,000**
(I)	**TOTAL PROJECT COST (JICA + ECDC)** =H+B							**23,606,600**

MATERIALS BREAKDOWN TO BE USED AT EACH STAGE

(Use for ECDC Supervisor)
Staff Quarter (M4,M8,M13)

NO	DESCRIPTION	Estimated QTY.	UNIT	Actual Used QTY.	
1	**SETTING OUT**				
A	Bush Sticks	3	dozen		
B	Wire Nails (Assorted)	2	packets		
C	Line Level	150	yards		
2	**FOUNDATION**				
	Concrete Blinding (2" thick)				
A	Cement	30	bags		
B	Sand	1	trip		
C	Aggregates (Stones - 3/4")	2	trip		
	Block Work (3 Course of 6"x 6"x 14" Mud Brick)				
D	Bricks (6" x 6" x 14")	1290	nr		
E	Cement	27	bags		
F	Sand	1.5	trip		
G	Ø3" Metal pipe	3	length		
3	**FLOOR SLAB (3" thick)**				
	SHUTTERING				
A	(1" x 12" x 14') Timber	11	length		
B	Bush Sticks (Battens)	2	dozens		
C	Wire Nails	10	packets		
D	Hard Core (Ball Stones) - 6" thick	7	trip		
	CONCRETE (1:3:6mix and 3"thick)				
E	Cement	30	bag		
F	Sand	1.5	trip		
G	Aggregates (Stones - 3/4")	3	trip		
4	**SUPER STRUCTURE BLOCK WORK**				
A	Cement (6" x 6" x 14") Sandcrete Blocks	9	bag		i.e 204 sandcrete bricks
B	(6" x 6" x 14") Mud Blocks	3672	nr		
C	Cement	10	bag		i.e 196 Vent Bricks
D	Cement	8	bag		bedding/joints
E	Sand	2	trip		
5	**TIE BEAM & LINTEL**				
	Reinforced Concrete 1: 2 : 4mix and 1/2" aggregate				
A	Mild Steel Rod (Ø1/2")	26	length		
B	Mild Steel Rod (Ø1/4")	7	length		
C	Binding Wire	1	roll		
D	Cement	14	bag		
E	Sand	0.5	trip		
F	Aggregate (Granite)	1	trip		
6	**PLASTERING & COPING**				
	1: 5 mix and 1/2" thick				
A	Cement (Internal)	19	bag		
B	Cement (External & Concrete Coping)	17	bag		

C	Sand	2	trip		
7	**DOORS**				
A	Frames (2" x 12" x 14')	9	length		
B	Battens (1" x 12" x 14')	12	length		
C	Wire Nails (Assorted)	9	packet		
D	Hinges (4")	12	pair		
E	Tower Bolt (Giant Size)	3	nr		
F	Tower Bolt (4")	12	nr		
8	**WINDOWS**				
A	Frames (2" x 12" x 14')	10	length		
B	Battens (1" x 12" x 14')	13	length		
C	Braces (1" x 12" x 14')	5	length		
D	Wire Nails (Assorted)	16	packet		
E	Hinges (4")	26	pair		
F	Tower Bolt (4")	26	nr		
G	Ø1/2" M.S Rods (Guard Bars)	11	length		
H	Cement (Fixing of Windows)	3	bag		
9	**ROOFING FRAME WORK**				
A	Wall Plate (2" x 12" x 14')	5	length		
B	Bush Sticks (Rafters)	4	dozens		
C	1" x 12" x 14'	12	length		
D	2" x 4" x 14'	28	length		
E	Bush Sticks (Ceiling Joists)	9	dozens		
F	Ridge Board (2" x 12" x 14')	2	length		
G	Fascia (1" x 12" x 14')	10	length		
H	Purline (2" x 3" x 14')	35	length		
I	Wire Nails (Assorted)	120	packet		
J	Ceiling Hard Board (4' x 8')	44	sheets		
K	Flexible Flat Bars (Brace to Beams & Roof)	100	feet		
L	Fillet Board (Cover and Corner Strips)	3	bundle		
10	**ROOF**				
A	C.I Sheets (34-Guage, i.e 6' by 33" or 11cogs)	110	sheets		
B	Ridge Cap (6')	7	length		
C	Roofing Felt	1	roll		
D	Roofing Nails	90	packet		
11	**PAINTING**				
A	Primer (White Wash)	3	bag		
B	Emulsion (Water Paint)	15	gallons		
C	Enamel (Oil Paint)	8	gallons		
D	Paint Brush (Assorted Sizes)	6	nr		
E	Primer Brush	2	nr		
12	**Others**				
	Cement (Access Steps and Flower Bed)	4	bag		

THE PROJECT ON
CHILDREN AND YOUTH DEVELOPMENT IN KAMBIA DISTRICT,
SIERRA LEONE.

MICRO PROJECT FOR CONTRUCTION OF COMMUNITUY HEALTH POST

CONSTRUCTION GUIDE

OUTLINE OF WORKS:

PROJECT TITLE	·····	CONSTRUCTION OF COMMUNITY HEALTH POST
KIND OF PROJECT	·····	CONSTRUCTION & FABRICATION OF FURNITURE
BUILDING AREA	·····	1,007 square feet (93.6m^2)

WORK SHEDULE:

COMMENCEMENT DATE	·····	4th Week in November 2007
PROPOSED COMPLETION DATE	··	4th Week in April 2008
DURATION OF WORKS	·····	5 Months, 2 Weeks.

CONSTRUCTION COST: (FOR 3RD STEP OF JICA SUPPORTED PROJECT)

FUND BY JICA	·····	Le	17,731,000 (Construction)
		Le	769,000 (Contingency)
		Le	300,000 (Administration cost)
	TOTAL	**Le**	**18,800,000**
COMMUNITY CONTRIBUTION	····	**Le**	**5,571,900**
TOTAL COST	·····	**Le**	**24,371,900**

LIST OF CONSTRUCTION GUIDE:

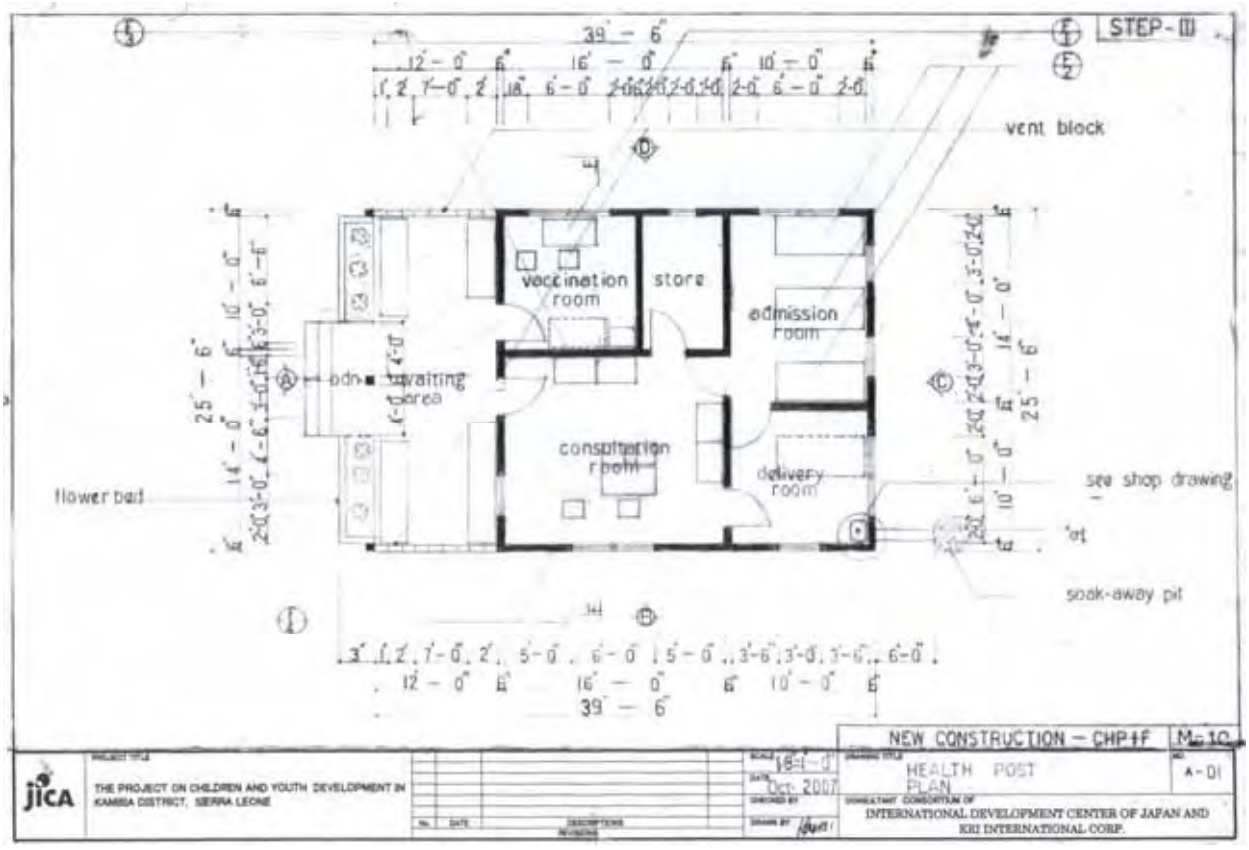
DRAWINGS
WORK SCHEDULE
SUMMARY OF COST ESTIMATE
MATERIALS BREAKDOWN

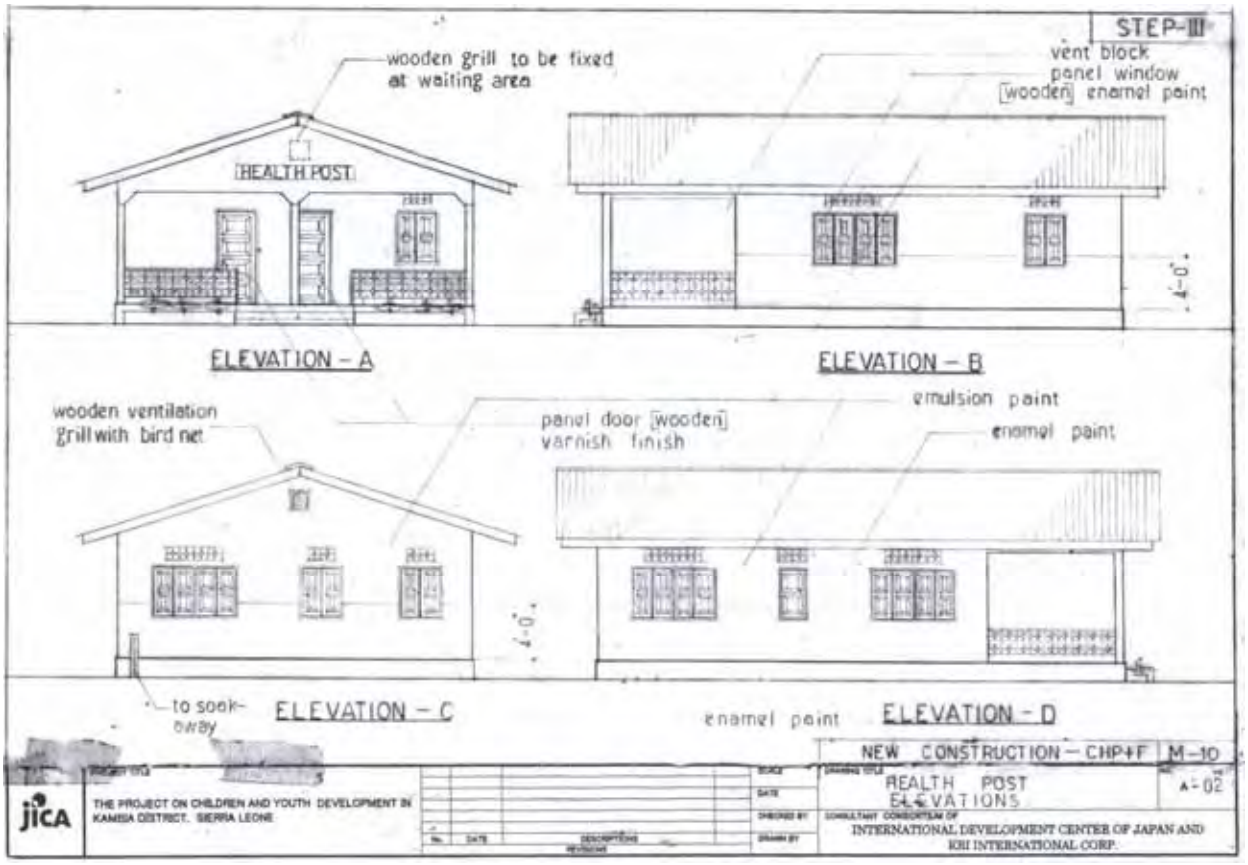
IMPLEMENT BY:

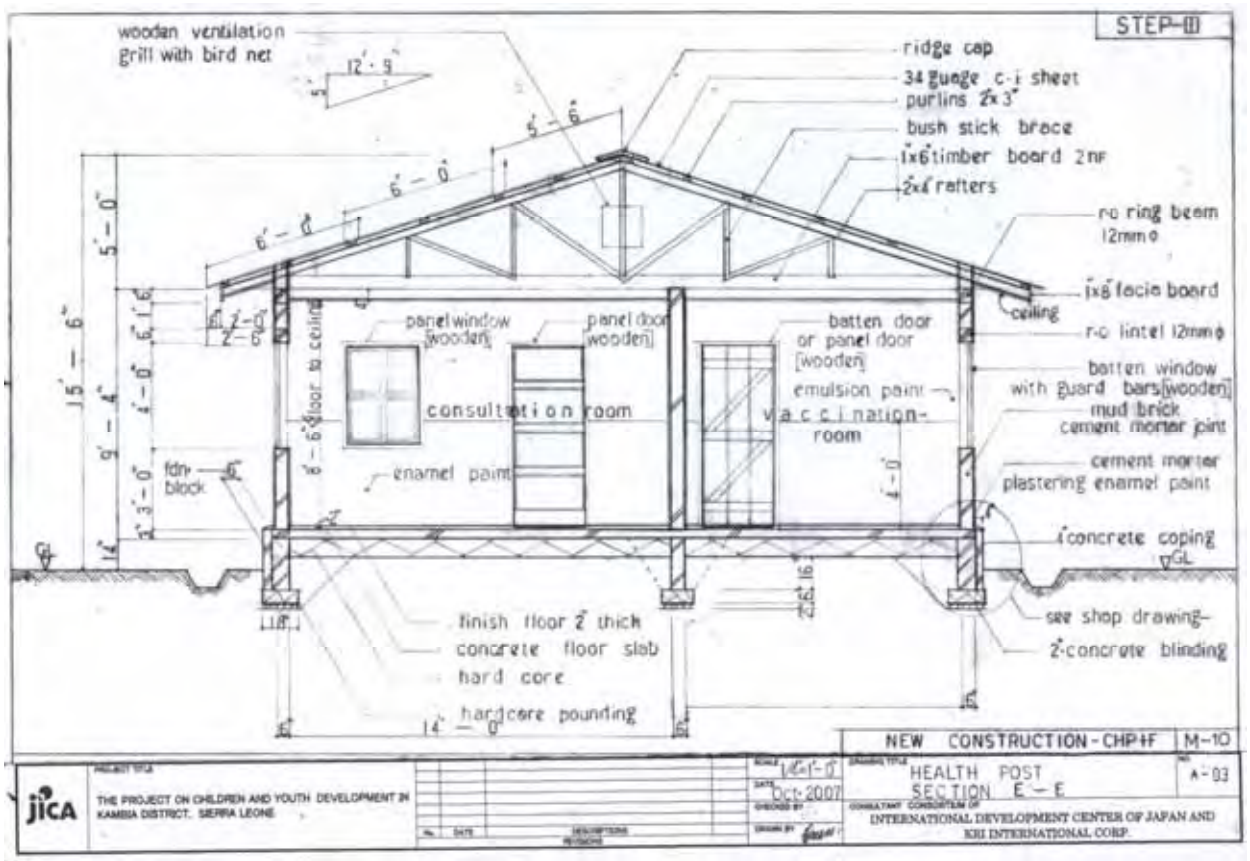
EDUCATION AND COMMUNITY DEVELOPMENT COMMITTEE (ECDC),
KAMBIA DISTRICT

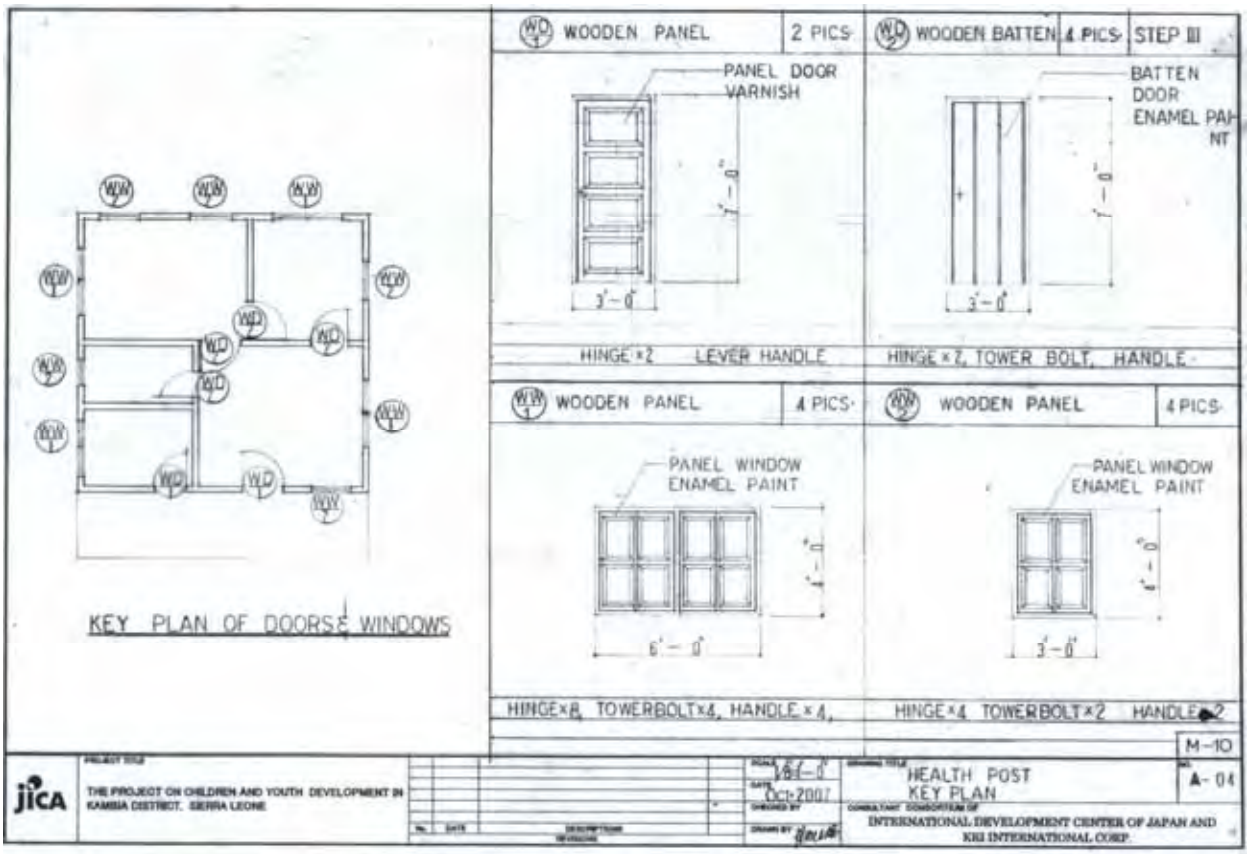
PREPARED BY:

CONSORTIUM OF INTERNATIONAL DEVELOPMENT CENTRE OF JAPAN (IDCJ)
AND KRI INTERNATIONAL CORP. (KRI)


STEP-III
39' - 6"
vent block
vaccination room
store
admission room
waiting area
consultation room
delivery room
flower bed
see shop drawing
soak-away pit
NEW CONSTRUCTION – CHP+F
M-10
HEALTH POST PLAN
A-01
THE PROJECT ON CHILDREN AND YOUTH DEVELOPMENT IN KAMBIA DISTRICT, SIERRA LEONE
Oct. 2007
INTERNATIONAL DEVELOPMENT CENTER OF JAPAN AND KRI INTERNATIONAL CORP.


STEP-III
wooden grill to be fixed at waiting area
vent block
panel window
wooden enamel paint
HEALTH POST
ELEVATION – A
ELEVATION – B
wooden ventilation grill with bird net
panel door wooden varnish finish
emulsion paint
enamel paint
to soak-away
ELEVATION – C
enamel paint
ELEVATION – D
NEW CONSTRUCTION – CHP+F
M-10
HEALTH POST ELEVATIONS
A-02
THE PROJECT ON CHILDREN AND YOUTH DEVELOPMENT IN KAMBIA DISTRICT, SIERRA LEONE
INTERNATIONAL DEVELOPMENT CENTER OF JAPAN AND KRI INTERNATIONAL CORP.


STEP-III
woodan ventilation grill with bird net
ridge cap
34 guage c-i sheet
purlins 2"x3"
bush stick brace
1"x6" timber board 2nr
2"x4" rafters
rc ring beam 12mm ø
1"x8" facia board
ceiling
rc lintel 12mm ø
batten window with guard bars (wooden)
mud brick cement mortar joint
cement mortar plastering enamel paint
concrete coping
GL
see shop drawing
2" concrete blinding
panel window (wooden)
panel door (wooden)
batten door or panel door (wooden)
emulsion paint
consultation room
vaccination-room
enamel paint
fdn block
finish floor 2" thick concrete floor slab
hard core
hardcore pounding
NEW CONSTRUCTION - CHP+F
M-10
JICA
THE PROJECT ON CHILDREN AND YOUTH DEVELOPMENT IN KAMBIA DISTRICT, SIERRA LEONE
Oct-2007
HEALTH POST
SECTION E - E
A-03
INTERNATIONAL DEVELOPMENT CENTER OF JAPAN AND KRI INTERNATIONAL CORP.

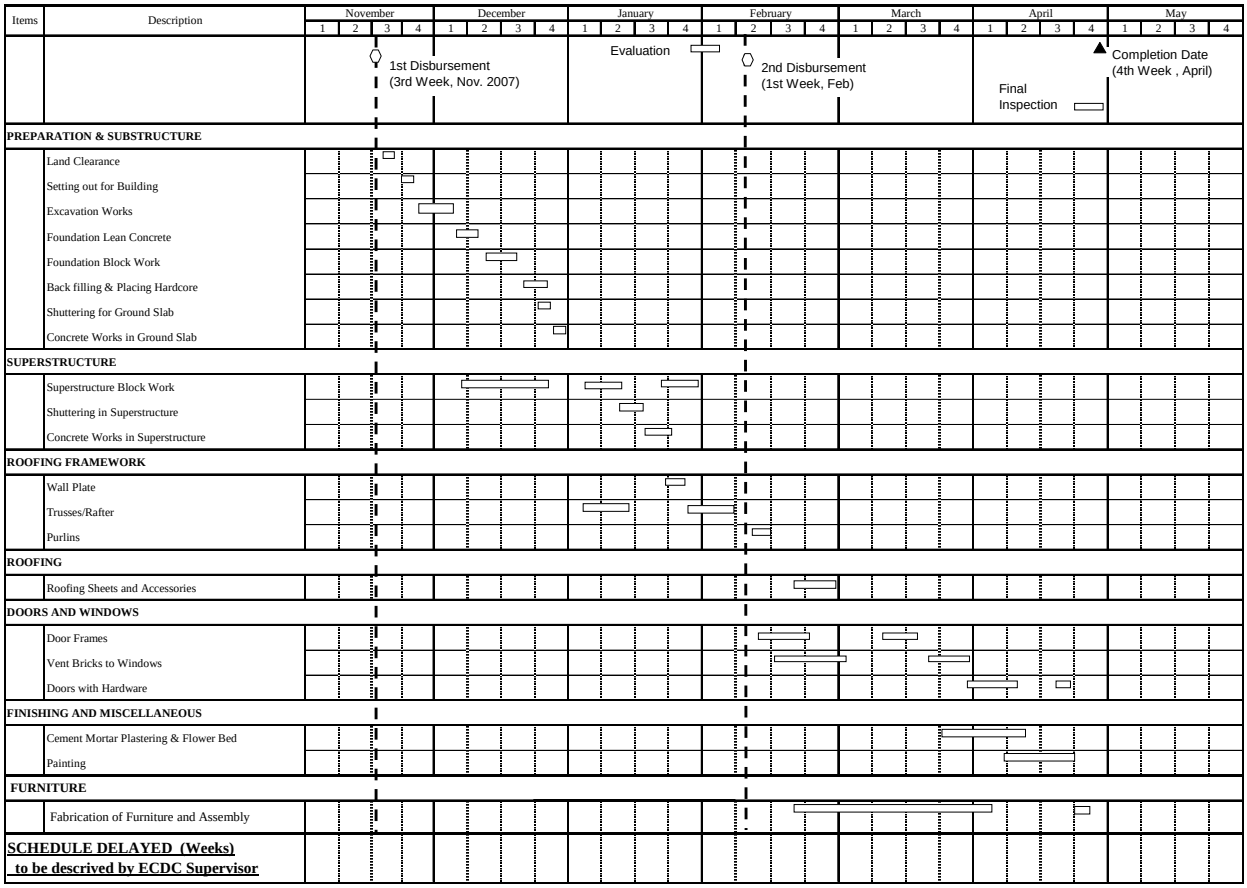

WD1 WOODEN PANEL 2 PICS
PANEL DOOR VARNISH
HINGE×2 LEVER HANDLE
WD2 WOODEN BATTEN 4 PICS
STEP III
BATTEN DOOR ENAMEL PAINT
HINGE×2, TOWER BOLT, HANDLE
WW1 WOODEN PANEL 4 PICS
PANEL WINDOW ENAMEL PAINT
HINGE×8, TOWERBOLT×4, HANDLE×4
WW2 WOODEN PANEL 4 PICS
PANEL WINDOW ENAMEL PAINT
HINGE×4 TOWERBOLT×2 HANDLE×2
KEY PLAN OF DOORS & WINDOWS
M-10
JICA
THE PROJECT ON CHILDREN AND YOUTH DEVELOPMENT IN KAMBIA DISTRICT, SIERRA LEONE
Oct-2007
HEALTH POST
KEY PLAN
A-04
INTERNATIONAL DEVELOPMENT CENTER OF JAPAN AND KRI INTERNATIONAL CORP.

WORK PROCEDURE FOR CONSTRUCTION OF 3-CLASSROOM WITH OFFICE AND STORE, STAFF QUARTERS, and HEALTH POST (T1, M4, M8, M10, M13)

Schedule
Actual Progress

(CC-3+F, CS+F, CHP+F)

Nov 2007



SUMMARY OF COST ESTIMATE

Community Health Post (M10)

NO	DESCRIPTION	QTY.	UNIT	UNIT PRICE	ECDC (LE)	JICA FUND (LE)		
						1st DISBURSEMENT	2nd DISBURSEMENT	TOTAL
MATERIALS								
1	Cement	155	bag	33,500		5,192,500	0	5,192,500
2	Sand	7	trip	150,000	1,350,000			
3	3/4" Aggregate (Red Stone)	3	trip	100,000	250,000			
4	3/4" Aggregate (Granite)	1	trip	150,000	150,000			
5	Bush Sticks	20	dozen	5,000	100,000			
6	Line Level	150	yard	180		27,000	0	27,000
7	Hard Core (Ball Stone)	8	trip	50,000	400,000			
8	Ø1/2" Mild Steel Rod	33	length	32,000		1,715,000	-659,000	1,056,000
9	Ø1/4" Mild Steel Rod	107	length	13,000		209,000	1,182,000	1,391,000
10	Binding Wire	1	roll	90,000		90,000	0	90,000
11	(6" x 6" x 14") thick Mud Bricks	1,233	nr	300	369,900			
12	Timber (2" x 12 " x 14')	23	length	15,000		-	345,000	345,000
13	Timber (1" x 12 " x 14')	64	length	8,000		70,000	442,000	512,000
14	Timber (2" x 4" x 14')	37	length	6,000		-	222,000	222,000
15	Timber (2" x 3 " x 14')	42	length	4,500		-	189,000	189,000
16	C.I Sheets (34-Guage)	126	sheets	15,000		-	1,890,000	1,890,000
17	Flat Bar (4mm thick)	100	feet	2,400		-	240,000	240,000
18	Wire Nails (Assorted)	154	packets	2,000		16,000	292,000	308,000
19	Steel Nails (3")	2	packets	5,000		10,000	0	10,000
20	Roofing and Ceiling Nails	120	packets	2,000		-	240,000	240,000
21	Roofing Felt	1	roll	65,000		-	65,000	65,000
22	Hinges (3")	26	pair	2,000		-	52,000	52,000
23	Hinges (4")	12	pair	2,000		-	24,000	24,000
24	Tower Bolt (4")	13	nr	1,200		-	15,600	15,600
25	Tower Bolt (Giant Size)	6	nr	5,000		-	30,000	30,000
26	Ridge Cap	8	length	15,000		-	120,000	120,000
27	Ceiling Hard Board (4'x8')	23	sheets	18,000		-	414,000	414,000
28	Emulsion Paint	14	gallons	23,000		-	322,000	322,000
29	Enamel Paint	6	gallons	37,000		-	222,000	222,000
30	Primer (White Wash)	3	bag	30,000		-	90,000	90,000
31	Paint Brush (Assorted Brush)	6	nr	5,000		-	30,000	30,000
32	Primer Brush	2	nr	7,000		-	14,000	14,000
33	Wash Basin	1	nr	25,000			25,000	25,000
(A1)	**MATERIALS (JICA/IDCJ) CARRIED TO SUMMARY**					**7,329,500**	**5,806,600**	**13,136,100**
(A2)	**MATERIALS (ECDC) CARRIED TO SUMMARY**				**2,619,900**			
		DAYS	**MAN-DAY**	**UNIT PRICE**	**ECDC (LE)**			
	UNSKILLED LABOUR (ECDC)	164	3	6,000	2,952,000			
(B)	**ECDC TOTAL**				**5,571,900**			

NO	DESCRIPTION	QTY.	UNIT	UNIT PRICE	ECDC (LE)	JICA FUND (LE) 1st DISBURSEMENT	JICA FUND (LE) 2nd DISBURSEMENT	JICA FUND (LE) TOTAL
SKILLED LABOUR								
1	Masons (Foundation works up to floor slab)					200,000	-	200,000
2	Masons (Superstructure works up to gable walls)					250,000	-	250,000
3	Masons (Plastering in/out)					-	150,000	150,000
4	Carpenters (Profilling and foundation shuttering)					50,000	-	50,000
5	Carpenters (Shuttering of lintels, beams, columns and fixing of doors/gate and windows)					100,000	50,000	150,000
6	Carpenters (Fabrication of doors/gate and windows including frames)					-	150,000	150,000
7	Carpenters (Roofing framework,roof and ceiling)					-	350,000	350,000
8	Painters (Internal, external, doors, windows and fascia)					-	150,000	150,000
(C)	**SKILLED LABOUR CARRIED TO SUMMARY**					**600,000**	**850,000**	**1,450,000**
FURNITURE		QTY.	UNIT	UNIT PRICE				
1	(3'x6'-6") Plain Bed	3	nr	110,000			330,000	330,000
2	6" thick Foam Mattress to fit Bed	3	nr	100,000			300,000	300,000
3	Bench	4	nr	40,000			160,000	160,000
4	Dining Table and 3 Chairs	1	set	90,000			90,000	90,000
5	Bedside Cabinet (12"x18"x22")	3	nr	40,000			120,000	120,000
6	Wooden Cabinet (15"x48"x70")	2	nr	180,000			360,000	360,000
(D)	**FURNITURE CARRIED TO SUMMARY**					**-**	**1,360,000**	**1,360,000**
(E)	**SUB TOTAL** (JICA MATERIALS, SKILLED LABOUR & FURNITURE) =A1+C+D					**7,929,500**	**8,016,600**	**15,946,100**
(F)	Transportation Costs = (A1+A2 + D) x 10%					1,000,500	505,400	1,505,900
(G)	Food For Work = (B) x 5%					150,000	129,000	279,000
(H)	**TOTAL JICA FUND EXCLUDED CONTINGENCY AND ADMINISTRATION COST** (JICA Materials+Skilled Labour+Furniture+Transportation+Food) =E+F+G					**9,080,000**	**8,651,000**	**17,731,000**
(I)	**TOTAL PROJECT COST (JICA + ECDC)** =H+B							**23,302,900**

MATERIALS BREAKDOWN TO BE USED AT EACH STAGE

(Use for ECDC Supervisor)
Community Health Post (M10)

NO	DESCRIPTION	Estimated QTY.	UNIT	Actual Used QTY.	
1	**SETTING OUT**				
A	Bush Sticks	3	dozen		
B	Wire Nails (Assorted)	5	packet		
C	Line Level	150	yard		
2	**FOUNDATION**				
	Concrete Blinding (2" thick)				
A	Cement	11	bag		
B	Sand	0.3	trip		
C	Aggregates (Stones - 3/4")	0.5	trip		
	Block Work (5 Course of 6"x 6"x 14" Mud Brick)				
D	Bricks (6" x 6" x 14")	1225	nr		
E	Cement	27	bag		
F	Sand	1	trip		
3	**FLOOR SLAB (3" thick)**				
	SHUTTERING				
A	(1" x 12" x 14') Timber	10	length		
B	Bush Sticks (Battens)	1	dozen		
C	Wire Nails	6	packet		
D	Hard Core (Ball Stones) - 6" thick	8	trip		
	CONCRETE (1:3:6mix and 3"thick)				
E	Cement	29	bag		
F	Sand	1.5	trip		
G	Aggregates (Stones - 3/4")	2	trip		
4	**Super Structure Block Work**				
A	Cement as (6" x 6" x 14") Sandcrete Blocks	8	bag		i.e 145 sandcrete bricks
B	(6" x 6" x 14") Mud Blocks	2470	nr		
C	Cement as (10" x 10" x 4") Ventilated Sandcrete Blocks	7	bag		i.e 130 vent bricks
D	Cement	14	bag		bedding/joints
E	Sand	2	trip		
5	**TIE BEAM, COLUMNS & LINTELS**				
	Reinforced Concrete 1: 2 : 4mix and 1/2" aggregate				
A	Mild Steel Rod (Ø1/2")	26	length		
B	Mild Steel Rod (Ø1/4")	7	length		
C	Binding Wire	1	roll		
D	Cement	15	bag		
E	Sand	0.5	trip		
F	Aggregate (Granite)	1	trip		
6	**PLASTERING & COPING**				
	1: 5 mix and 1/2" thick				
A	Cement (Internal)	19	bag		
B	Cement (External & Concrete Coping)	16	bag		
C	Sand	1.5	trip		

7	**DOORS**				
A	Frames (2" x 12" x 14')	11	length		
B	Battens (1" x 12" x 14')	15	length		
C	Braces (1" x 12" x 14')	2	length		
D	Wire Nails (Assorted)	13	packet		
E	Hinges (4")	12	pair		
F	Tower Bolt (Giant Size)	6	nr		
G	Tower Bolt (4")	2	nr		
8	**WINDOWS**				
A	Frames (2" x 12" x 14')	7	length		
B	Battens (1" x 12" x 14')	10	length		
C	Braces (1" x 12" x 14')	3	length		
D	Wire Nails (Assorted)	10	packet		
E	Hinges (3")	26	pair		
F	Tower Bolt (4")	11	nr		
G	Ø1/2" M.S Rods (Guard Bars)	7	length		
H	Cement (Fixing of Doors & Windows)	4	bag		
9	**ROOFING FRAME WORK**				
A	Wall Plate (2" x 12" x 14')	3	length		
B	Bush Sticks (Rafters)	3	dozen		
C	1" x 12" x 14'	8	length		
D	2" x 4" x 14'	37	length		
E	Ridge Board (2" x 12" x 14')	2	length		
F	Fascia (1" x 12" x 14')	16	length		
G	Purline (2" x 3" x 14')	42	length		
H	Wire Nails (Assorted)	120	packet		
I	Steel Nails (3")	2	packet		
J	Flat Bar (Brace to roof)	100	feet		
K	Ceiling Joists (Bush Sticks)	13	dozen		
10	**ROOF AND CEILING**				
A	C.I Sheets (34-Guage, i.e 6' by 33")	126	sheets		
B	Ridge Cap (6')	8	length		
C	Roofing Felt	1	roll		
D	Roofing and Ceiling Nails	120	packet		
E	Ceiling Hard Board (4'x8')	23	sheets		
11	**PAINTING**				
A	Primer (White Wash)	3	bag		
B	Emulsion (Water Paint)	14	gallons		
C	Enamel (Oil Paint)	6	gallons		
D	Paint Brush (Assorted Sizes)	6	nr		
E	Primer Brush	2	nr		
12	**Others**				
	Cement (Access Steps and Flower Bed)	5	bag		

THE PROJECT ON
CHILDREN AND YOUTH DEVELOPMENT IN KAMBIA DISTRICT,
SIERRA LEONE.

MICRO PROJECT FOR CONTRUCTION OF COMMUNITY STORE

CONSTRUCTION GUIDE

OUTLINE OF WORKS:

PROJECT TITLE	·····	CONSTRUCTION OF COMMUNITY STORE
KIND OF PROJECT	·····	NEW CONSTRUCTION & FABRICATION OF FURNITURE
BUILDING AREA	·····	1,134 square feet (105.35m^2)

WORK SHEDULE:

COMMENCEMENT DATE	·····	4th Week in November 2006
PROPOSED COMPLETION DATE	··	2nd Week in April 2007
DURATION OF WORKS	·····	4 Months, 3 Weeks.

CONSTRUCTION COST: (FOR 3RD STEP OF JICA SUPPORTED PROJECT)

FUND BY JICA	·····	Le	14,702,000 (Construction)
		Le	1,470,200 (Contingency)
	TOTAL	**Le**	**16,172,200**
COMMUNITY CONTRIBUTION	····	**Le**	**4,807,900**
TOTAL COST	·····	**Le**	**20,980,100**

LIST OF CONSTRUCTION GUIDE:

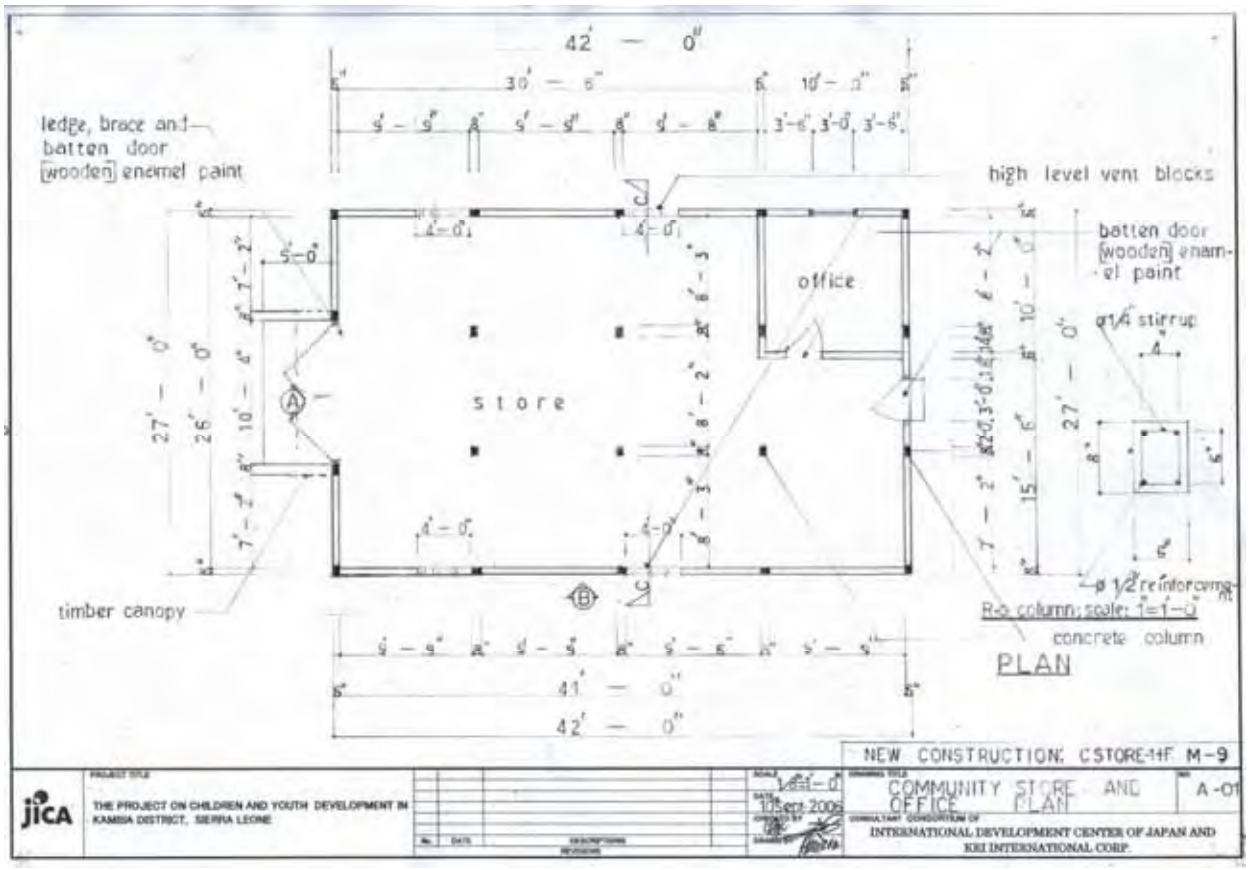
DRAWINGS
WORK SCHEDULE
SUMMARY OF COST ESTIMATE
MATERIALS BREAKDOWN

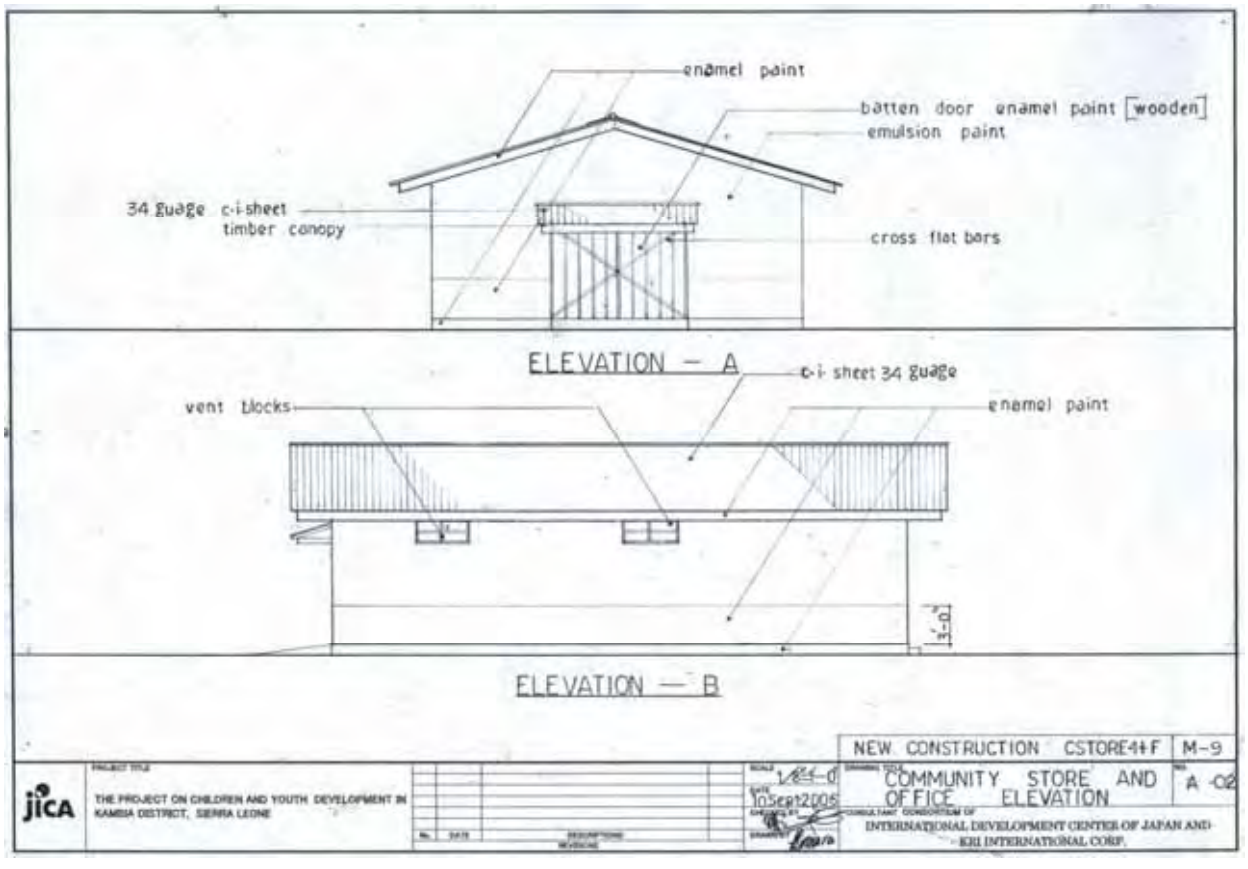
IMPLEMENT BY:

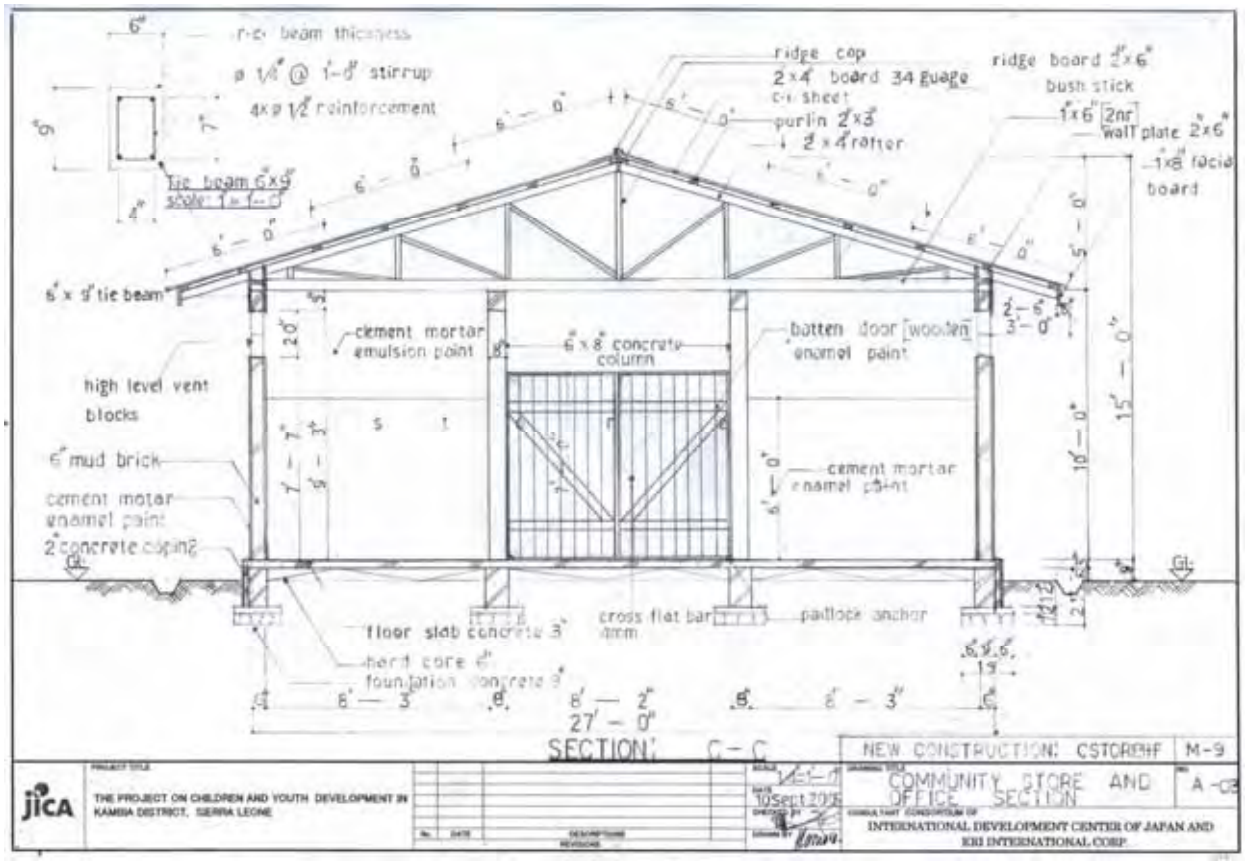
EDUCATION AND COMMUNITY DEVELOPMENT COMMITTEE (ECDC),
KAMBIA DISTRICT

PREPARED BY:

CONSORTIUM OF INTERNATIONAL DEVELOPMENT CENTRE OF JAPAN (IDCJ)
AND KRI INTERNATIONAL CORP. (KRI)


42' — 0"
30' — 6"
10' — 2"
ledge, brace and batten door [wooden] enamel paint
high level vent blocks
batten door [wooden] enamel paint
office
store
timber canopy
R-C column; scale: 1=1-0
concrete column
PLAN
41' — 0"
42' — 0"
NEW CONSTRUCTION CSTORE-11F M-9
THE PROJECT ON CHILDREN AND YOUTH DEVELOPMENT IN KAMBIA DISTRICT, SIERRA LEONE
COMMUNITY STORE AND OFFICE PLAN
A-01
INTERNATIONAL DEVELOPMENT CENTER OF JAPAN AND KRI INTERNATIONAL CORP.


enamel paint
batten door enamel paint [wooden]
emulsion paint
34 guage c-i sheet
timber canopy
cross flat bars
ELEVATION — A
c-i sheet 34 guage
vent blocks
enamel paint
ELEVATION — B
NEW CONSTRUCTION CSTORE-11F M-9
THE PROJECT ON CHILDREN AND YOUTH DEVELOPMENT IN KAMBIA DISTRICT, SIERRA LEONE
COMMUNITY STORE AND OFFICE ELEVATION
A-02
INTERNATIONAL DEVELOPMENT CENTER OF JAPAN AND KRI INTERNATIONAL CORP.



CONSTRUCTION SCHEDULE FOR CONSTRUCTION OF COMMUNITY STORE WITH OFFICE (M -9)

Schedule
Actual Progress

10th Nov 2006

Items	Description	November				December				January				February				March				April				May			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
	Procurement Commencement & Completion	△ Commencement (4th Week, Nov)				⬭ 1st Disbursement / ⬭ 1st Procurement				Evaluation				⬭ 2nd & final Disbursement / ○ 2nd Procurement				▲ Proposed Date of Completion (4th Week, April)											
PREPARATION & SUBSTRUCTURE																													
	Land Clearance																												
	Setting out for Building																												
	Excavation Works																												
	Foundation Lean Concrete																												
	Foundation Block Work																												
	Back filling & Placing Hardcore																												
	Shuttering for Ground Slab																												
	Concrete Works in Ground Slab																												
SUPERSTRUCTURE																													
	Superstructure Mud Block Work																												
	Shuttering in Superstructure (Lintels, etc)																												
	Concrete Works in Superstructure																												
ROOFING FRAMEWORK																													
	Wall Plate																												
	Trusses/Rafter																												
	Purlins																												
ROOFING AND CEILING																													
	Roofing Sheets and Accessories																												
DOORS AND WINDOWS																													
	Fabrication of Door/Gate and Window plus Frame																												
	Guard Bars to Window																												
	Fixing of Door/Gate and Window with Hardware																												
FINISHING AND MISCELLANEOUS																													
	Cement Mortar Plastering																												
	Painting																												
FURNITURE																													
	Fabrication of Furniture and Assembly																												

SUMMARY OF COST ESTIMATE
Construction of Community Store and Office (M-9)

NO	DESCRIPTION	QTY.	UNIT	UNIT PRICE	ECDC (LE)	JICA FUND (LE)		
						1st DISBURSEMENT	2nd DISBURSEMENT	TOTAL
MATERIALS								
1	Cement	158	bag	33,000		4,422,000	792,000	5,214,000
2	Sand	9	trip	150,000	1,350,000			
3	3/4" Aggregate (Red Stone)	3	trip	100,000	290,000			
4	3/4" Aggregate (Granite)	2	trip	150,000	300,000			
5	Bush Sticks	7	dozen	5,000	35,000			
6	Line Level	150	yard	180		27,000	0	27,000
7	Hard Core (Ball Stone)	9	trip	50,000	450,000			
8	Ø1/2" Mild Steel Rod	50	length	35,000		1,715,000	35,000	1,750,000
9	Ø1/4" Mild Steel Rod	13	length	19,000		209,000	38,000	247,000
10	Binding Wire	1	roll	90,000		90,000	0	90,000
11	(6" x 6" x 14") thick Mud Bricks	3,443	nr	300	1,032,900			
12	(18" x 6" x 6") Ventilated Sandcrete Blocks	50	nr	2,000		100,000	0	100,000
13	Timber (2" x 12 " x 14')	13	length	9,000		-	117,000	117,000
14	Timber (1" x 12 " x 14')	49	length	7,000		70,000	273,000	343,000
15	Timber (2" x 4" x 14')	7	length	5,000		-	35,000	35,000
16	Timber (2" x 3 " x 14')	28	length	4,500		-	126,000	126,000
17	C.I Sheets (34-Guage)	143	sheets	14,000		-	2,002,000	2,002,000
18	Flat Bar (4mm thick)	25	feet	2,400		-	60,000	60,000
19	Wire Nails (Assorted)	143	packets	2,000		16,000	270,000	286,000
20	Steel Nails (3")	3	packets	5,000		15,000	0	15,000
20	Roofing Nails	76	packets	2,000		-	152,000	152,000
21	Roofing Felt	1	roll	114,000		-	114,000	114,000
22	Hinge (Giant Size)	6	pair	14,000		-	84,000	84,000
23	Hinges (3")	2	pair	2,000		-	4,000	4,000
24	Hinges (4")	4	pair	2,000		-	8,000	8,000
25	Tower Bolt (4")	4	nr	1,200		-	4,800	4,800
26	Tower Bolt (Giant Size)	4	nr	14,000		-	56,000	56,000
27	Ridge Cap	8	length	15,000		-	120,000	120,000
28	Emulsion Paint	14	gallons	21,000		-	294,000	294,000
29	Enamel Paint	4	gallons	38,000		-	152,000	152,000
30	Primer (White Wash)	3	bag	30,000		-	90,000	90,000
31	Paint Brush (Assorted Brush)	6	nr	5,000		-	30,000	30,000
32	Primer Brush	2	nr	7,000		-	14,000	14,000
(A1)	**MATERIALS (JICA/IDCJ) CARRIED TO SUMMARY**					**6,664,000**	**4,870,800**	**11,534,800**
(A2)	**MATERIALS (ECDC) CARRIED TO SUMMARY**				**3,457,900**			
	UNSKILLED LABOUR (ECDC)				1,350,000			
(B)	**ECDC TOTAL**				**4,807,900**			

NO	DESCRIPTION	QTY.	UNIT	UNIT PRICE	ECDC (LE)	JICA FUND (LE) 1st DISBURSEMENT	JICA FUND (LE) 2nd DISBURSEMENT	TOTAL
SKILLED LABOUR								
1	Masons (Foundation works up to floor slab)					200,000	-	200,000
2	Masons (Superstructure works up to gable walls)					250,000	-	250,000
3	Masons (Plastering in/out)					-	150,000	150,000
4	Carpenters (Profilling and foundation shuttering)					50,000	-	50,000
5	Carpenters (Shuttering of lintels, beams, columns and fixing of doors/gate and windows)					100,000	50,000	150,000
6	Carpenters (Fabrication of doors/gate and windows including frames)					-	150,000	150,000
7	Carpenters (Roofing framework and roof)					-	250,000	250,000
8	Painters (Internal, external, doors, windows and fascia)					-	150,000	150,000
(C)	**SKILLED LABOUR CARRIED TO SUMMARY**					**600,000**	**750,000**	**1,350,000**
FURNITURE		**QTY.**	**UNIT**	**UNIT PRICE**				
1	Office Table and 3 Chairs	1	set	70,000		0	70,000	70,000
(D)	**FURNITURE CARRIED TO SUMMARY**					**-**	**70,000**	**70,000**
(E)	**SUB TOTAL** (JICA MATERIALS, SKILLED LABOUR & FURNITURE) =A1+C+D					**7,264,000**	**5,690,800**	**12,954,800**
(F)	Transportation Costs = (A1+A2 + D) x 10%					1,000,000	506,200	1,506,200
(G)	Food For Work = (B) x 5%					150,000	91,000	241,000
(H)	**TOTAL JICA FUND excluded contingency and administration cost** (JICA Materials+Skilled Labour+Furniture+Transportation+Food) =E+F+G					**8,414,000**	**6,288,000**	**14,702,000**
(I)	**TOTAL PROJECT COST (JICA + ECDC)** =H+B							19,509,900

MATERIALS BREAKDOWN
Construction of Community Store and Office (M-9)

NO	DESCRIPTION	Estimated QTY.	UNIT	Actual Used QTY.	
1	**SETTING OUT**				
A	Bush Sticks	3	dozen		
B	Wire Nails (Assorted)	2	packets		
C	Line Level	150	yards		
2	**FOUNDATION**				
	Concrete Blinding (2" thick)				
A	Cement	4	bags		
B	Sand	0.2	trips		
C	Aggregates (Stones - 3/4")	0.4	trips		
	Block Work (3 Course of 6"x 6"x 14" Mud Brick)				
D	Bricks (6" x 6" x 14")	810	nr		
E	Cement	15	bags		
F	Sand	1.5	trips		
3	**FLOOR SLAB (3" thick)**				
	SHUTTERING				
A	(1" x 12" x 14') Timber	10	length		
B	Bush Sticks (Battens)	1	dozen		
C	Wire Nails	6	packets		
D	Hard Core (Ball Stones) - 6" thick	9	trip		
	CONCRETE (1:3:6mix and 3"thick)				
E	Cement	30	bag		
F	Sand	1.5	trip		
G	Aggregates (Stones - 3/4")	2.5	trip		
4	**Super Structure Block Work**				
A	(6" x 6" x 14") Mud Blocks	2633	nr		
B	(18" x 6" x 6") Ventilated Sandcrete Blocks	50	nr		
C	Cement	50	bag		
D	Sand	3	trip		
5	**TIE BEAM, COLUMNS & LINTELS**				
	Reinforced Concrete 1: 2 : 4mix and 1/2" aggregate				
A	Mild Steel Rod (Ø1/2")	49	length		
B	Mild Steel Rod (Ø1/4")	11	length		
C	Binding Wire	1	roll		
D	Cement	34	bag		
E	Sand	1	trip		
F	Aggregate (Granite)	2	trip		
6	**PLASTERING & COPING**				
	1: 5 mix and 1/2" thick				
A	Cement (Internal)	12	bag		
B	Cement (External & Concrete Coping)	12	bag		
C	Sand	2	trip		

7	**DOORS & MAIN GATE**				
A	Frames (2" x 12" x 14')	4	length		
B	Battens (1" x 12" x 14')	9	length		
C	Braces (1" x 12" x 14')	1	length		
D	Wire Nails (Assorted)	11	packet		
E	Hinge (Giant Size)	6	pair		
F	Hinges (4")	4	pair		
G	Tower Bolt (Giant Size)	4	nr		
H	Tower Bolt (4")	2	nr		
I	Flat Bar (4mm thick) as cross bar to gate	25	feet		
8	**WINDOWS**				
A	Frames (2" x 12" x 14')	1	length		
B	Battens (1" x 12" x 14')	1	length		
C	Braces (1" x 12" x 14')	1	length		
D	Wire Nails (Assorted)	3	packet		
E	Hinges (3")	2	pair		
F	Tower Bolt (4")	2	nr		
G	Ø1/2" M.S Rods (Guard Bars)	1	length		
H	Cement (Fixing of Doors & Windows)	1	bag		
9	**ROOFING FRAME WORK**				
A	Wall Plate (2" x 12" x 14')	6	length		
B	Bush Sticks (Rafters)	3	dozens		
C	1" x 12" x 14'	14	length		
D	2" x 4" x 14'	7	length		
E	Ridge Board (2" x 12" x 14')	2	length		
F	Fascia (1" x 12" x 14')	13	length		
G	Purline (2" x 3" x 14')	28	length		
H	Wire Nails (Assorted)	121	packet		
I	Steel Nails (3")	3	packet		
J	Mild Steel Rod (Ø1/4") (Brace to roof)	2	length		
10	**ROOF (Including Cantilever to main entrance)**				
A	C.I Sheets (34-Guage, i.e 6' by 33")	143	sheets		
B	Ridge Cap (6')	8	length		
C	Roofing Felt	1	roll		
D	Roofing Nails	76	packet		
11	**PAINTING**				
A	Primer (White Wash)	3	bag		
B	Emulsion (Water Paint)	14	gallons		
C	Enamel (Oil Paint)	4	gallons		
D	Paint Brush (Assorted Sizes)	6	nr		
E	Primer Brush	2	nr		

THE PROJECT ON
CHILDREN AND YOUTH DEVELOPMENT IN KAMBIA DISTRICT,
SIERRA LEONE.

MICRO PROJECT FOR CONTRUCTION OF COMMUNITY WELL

CONSTRUCTION GUIDE

OUTLINE OF WORKS:

PROJECT TITLE	·····	CONSTRUCTION OF COMMUNITY WELL
KIND OF PROJECT	·····	NEW CONSTRUCTION

WORK SHEDULE:

COMMENCEMENT DATE	·····	4th Week in November 2007
PROPOSED COMPLETION DATE	··	1st Week in January 2008
DURATION OF WORKS	·····	5 Weeks

CONSTRUCTION COST: (FOR 3RD STEP OF JICA SUPPORTED PROJECT)

FUND BY JICA	·····	Le	**17,051,000** (Construction)
		Le	1,149,000 (Contingency)
		Le	300,000 (Administration cost)
	TOTAL	**Le**	**18,500,000**
COMMUNITY CONTRIBUTION	····	**Le**	**1,650,000**
TOTAL COST	·····	**Le**	**20,150,000**

LIST OF CONSTRUCTION GUIDE:

DRAWINGS
WORK SCHEDULE
BREAKDOWN OF COST ESTIMATES
BREAKDOWN OF WELL CARE TAKER TRAINING

IMPLEMENT BY:

EDUCATION AND COMMUNITY DEVELOPMENT COMMITTEE (ECDC),
KAMBIA DISTRICT

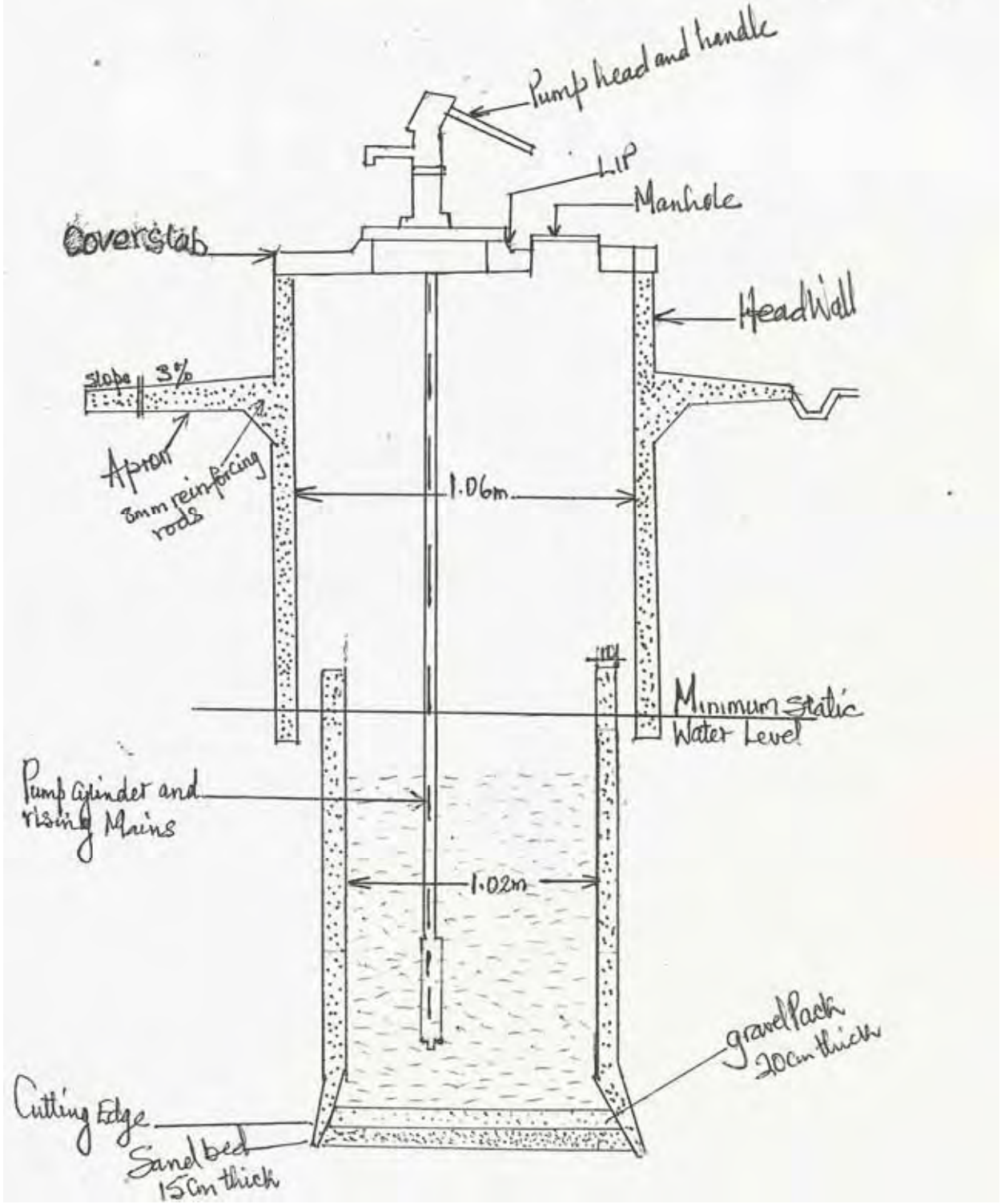
PREPARED BY:

CONSORTIUM OF INTERNATIONAL DEVELOPMENT CENTRE OF JAPAN (IDCJ)
AND KRI INTERNATIONAL CORP. (KRI)

PROPOSED NEW WATER WELL, TO BE CONSTRUCTED AT TENEBABRAMAHA VILLAGE

BRAMAHA CHIEFDOM (2km)

B-8

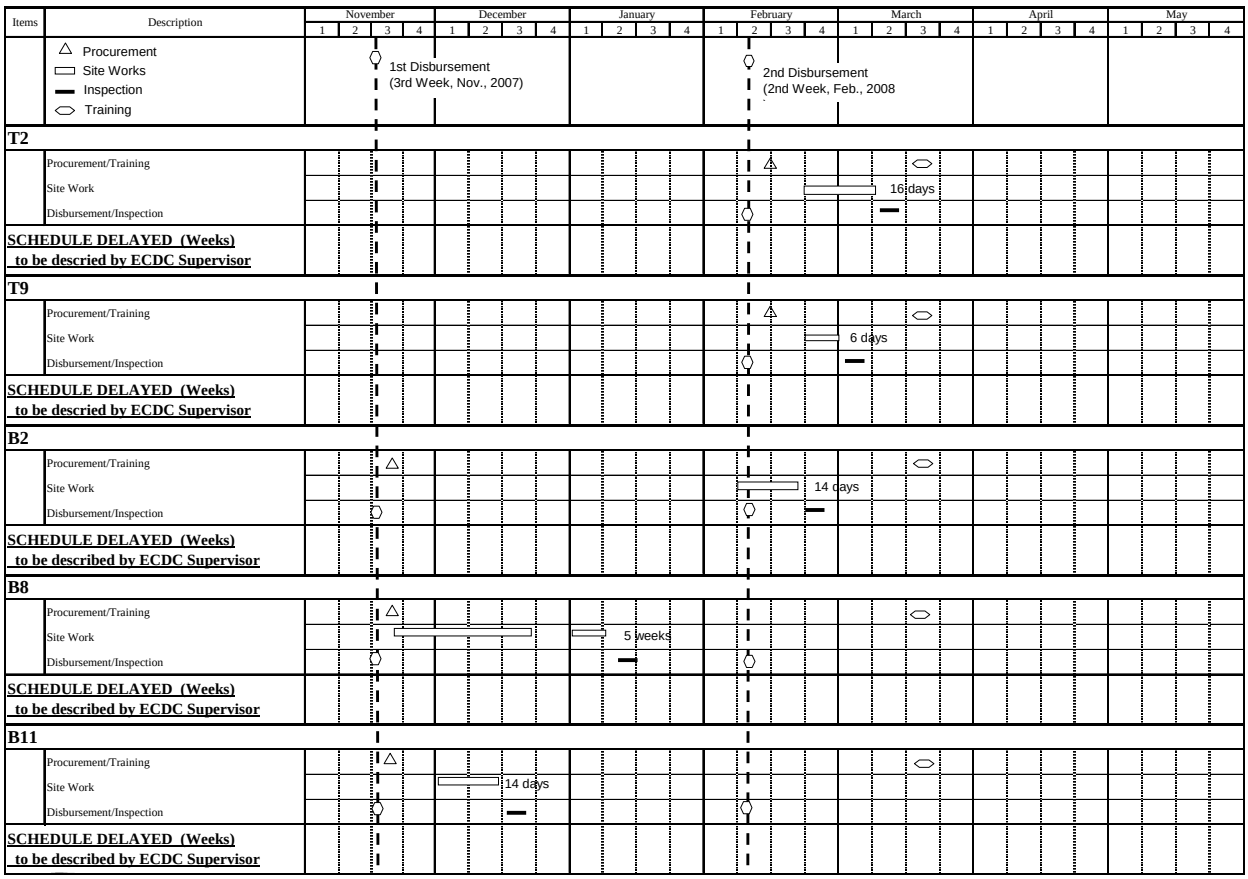


WORK PROCEDURE FOR CONSTRUCTION OF NEW AND REHABILITATION FOR WELL (T2, T9, B2, B8, B11)

Schedule
Actual Progress

(Reh-W, New-W)

Nov 2007



BUDGET BREAKDOWN FOR WELL CARE TAKER TRAINING PER ECDC

PERSONEL

NO	ITEM	PERSON(S)	UNIT	QTY	UNIT RATE (Le)	AMOUNT (Le)
1	Honorarium for ECDC Participants	3	man-day	3	5,000	45,000
2	Honorarium for Training Facilitators	3	man-day	3	10,000	90,000
PERSONEL CARRIED TO SUMMARY						135,000

FOOD

NO	ITEM	PERSON(S)	UNIT	QTY	UNIT RATE (Le)	AMOUNT (Le)
1	Food	4	man-day	3	5,000	60,000
2	Tea		Lump Sum	3	2,000	6,000
FOOD CARRIED TO SUMMARY						66,000

STATIONERY & RENTAL FEE FOR RC

NO			UNIT	QTY	UNIT RATE (Le)	AMOUNT (Le)
1	Stationery		Lump Sum	1	6,000	6,000
2	Rental Fee for Resource Centre		Lump Sum	1	12,500	12,500
STATIONERY & RENTAL CARRIED TO SUMMARY						18,500

HAND PUMP INSTALLATION

NO	ITEM		UNIT	QTY	UNIT RATE (Le)	AMOUNT (Le)
1	Installation of Hand Pump		Lump Sum	1	91,500	91,500
HAND PUMP INSTALLATION CARRIED TO SUMMARY						91,500
GRAND TOTAL					311,000	

Cost Estimates for the Construction of New Well

ECDC Number: B-8

Location: Teneba Bramaia Community Well, Teneba Bramaia Village, Bramaia Chiefdom

Duration: 5 weeks

Short Description of Works: Excavation, Concrete Works (i.e lining, sinking, headwall, apron, drainage, cover slab), cleaning, chlorination and installation of hand pump.

MATERIALS

NO	DESCRIPTION	QTY.	UNIT	UNIT PRICE	AMOUNT (Le)		JICA	ECDC
1	Hand Pump (Indian Mark II)	1	set	3,000,000	3,000,000		3,000,000	
2	Cement	100	bag	34,000	3,400,000		3,400,000	
3	Sand	2	trip	150,000	300,000		300,000	
4	1/2" Aggregate (Granite)	600	head pan	1,200	720,000		720,000	
5	Ø6mm Mild Steel Rod	90	length	12,000	1,080,000		1,080,000	
6	Ø8mm Mild Steel Rod	30	length	28,000	840,000		840,000	
7	Binding Wire	1	roll	60,000	60,000		60,000	
8	(50cm x 50cm) Metal Plate as Manhole Cover	1	nr	50,000	50,000		50,000	
9	34cm Metal Bucket	2	nr	20,000	40,000		40,000	
MATERIALS CARRIED TO SUMMARY					**9,490,000**		**9,490,000**	**0**

RENTAL OF EQUIPMENT

NO		DURATION	UNIT	UNIT PRICE	AMOUNT (Le)			
1	Set of Moulds	3	week	200,000	600,000		600,000	
2	Dewatering Machine	2	days	300,000	600,000			600,000
3	Pulley	35	days	10,000	350,000		350,000	
4	Drawing Rope (54m)	35	days	10,000	350,000		350,000	
RENTAL OF EQUIPMENT CARRIED TO SUMMARY					**1,900,000**		**1,300,000**	**600,000**

TRANSPORTATION

NO		FROM	TO	UNIT PRICE	AMOUNT (Le)			
1	Imported Materials and Equipment	Bamoi	Teneba Bramaia	1,000,000	1,000,000		1,000,000	
2	Sand	Kukuna River	Teneba Bramaia	200,000	200,000		200,000	
3	Aggregate	Kambia	Teneba Bramaia	500,000	500,000		500,000	
4	Motor Bike Rentals for Supervision	Kambia	Teneba Bramaia	500,000	500,000		500,000	
5	Hand Pump (Indian Mark II)	Freetown	Teneba Bramaia	150,000	150,000		150,000	
TRANSPORTATION CARRIED TO SUMMARY					**2,350,000**		**2,350,000**	**0**

LABOUR

NO		PERSONS	UNIT	QTY	RATE (Le)	AMOUNT (Le)		
1	Supervisor	1	man-day	30	50,000	1,500,000	1,500,000	
2	Wells Technician	2	man-day	35	30,000	2,100,000	2,100,000	
3	Unskilled Labour	6	man-day	35	5,000	1,050,000		1,050,000
LABOUR CARRIED TO SUMMARY						**4,650,000**	**3,600,000**	**1,050,000**

SPARE PARTS

NO			UNIT	QTY	RATE (Le)	AMOUNT (Le)		
1	Spare Parts							
SPARE PARTS CARRIED TO SUMMARY						**-**	**-**	**-**

WELL CARE TAKER TRAINING

NO		PERSONS	UNIT	QTY	RATE (Le)	AMOUNT (Le)		
1	Well Care Taker Training	3	Lump Sum	1	311,000	311,000	311,000	
WELL TRAINING CARRIED TO SUMMARY						**311,000**	**311,000**	**-**

		TOTAL AMOUNT	JICA	ECDC
GRAND TOTAL		**18,701,000**	**17,051,000**	**1,650,000**

1st Disbursement	16,740,000
2nd Disbursement	311,000
G. Total	17,051,000

THE PROJECT ON
CHILDREN AND YOUTH DEVELOPMENT IN KAMBIA DISTRICT,
SIERRA LEONE.

MICRO PROJECT FOR

CONTRUCTION OF RESOURCE CENTRE LATRINE

CONSTRUCTION GUIDE

OUTLINE OF WORKS:

PROJECT TITLE	·····	CONSTRUCTION OF RESOURCE CENTRE LATRINE
KIND OF PROJECT	·····	NEW CONSTRUCTION
BUILDING AREA	·····	80.75 square feet (8.83m^2)

WORK SHEDULE:

COMMENCEMENT DATE	·····	4th Week in October 2007
PROPOSED COMPLETION DATE	··	1st Week in February 2008
DURATION OF WORKS	·····	3 Months and 1 Week

CONSTRUCTION COST:

FUND BY JICA	·····	Le	7,284,000 (Construction)
		Le	116,000 (Contingency)
		Le	100,000 (Administration cost)
	TOTAL	**Le**	**7,500,000**
COMMUNITY CONTRIBUTION	····	**Le**	**0**
TOTAL COST	·····	**Le**	**7,500,000**

LIST OF CONSTRUCTION GUIDE:

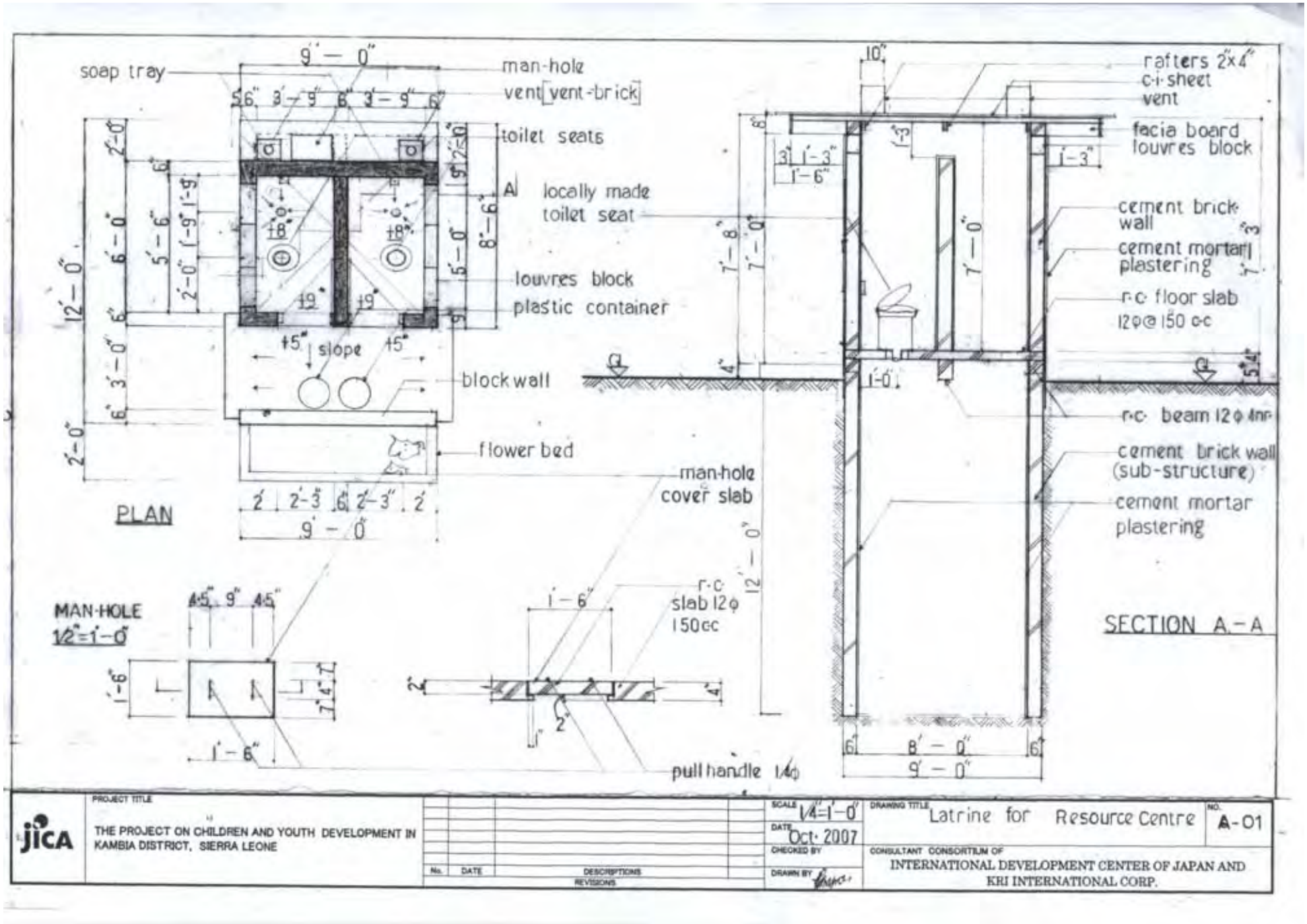
DRAWINGS
WORK SCHEDULE
SUMMARY OF COST ESTIMATE

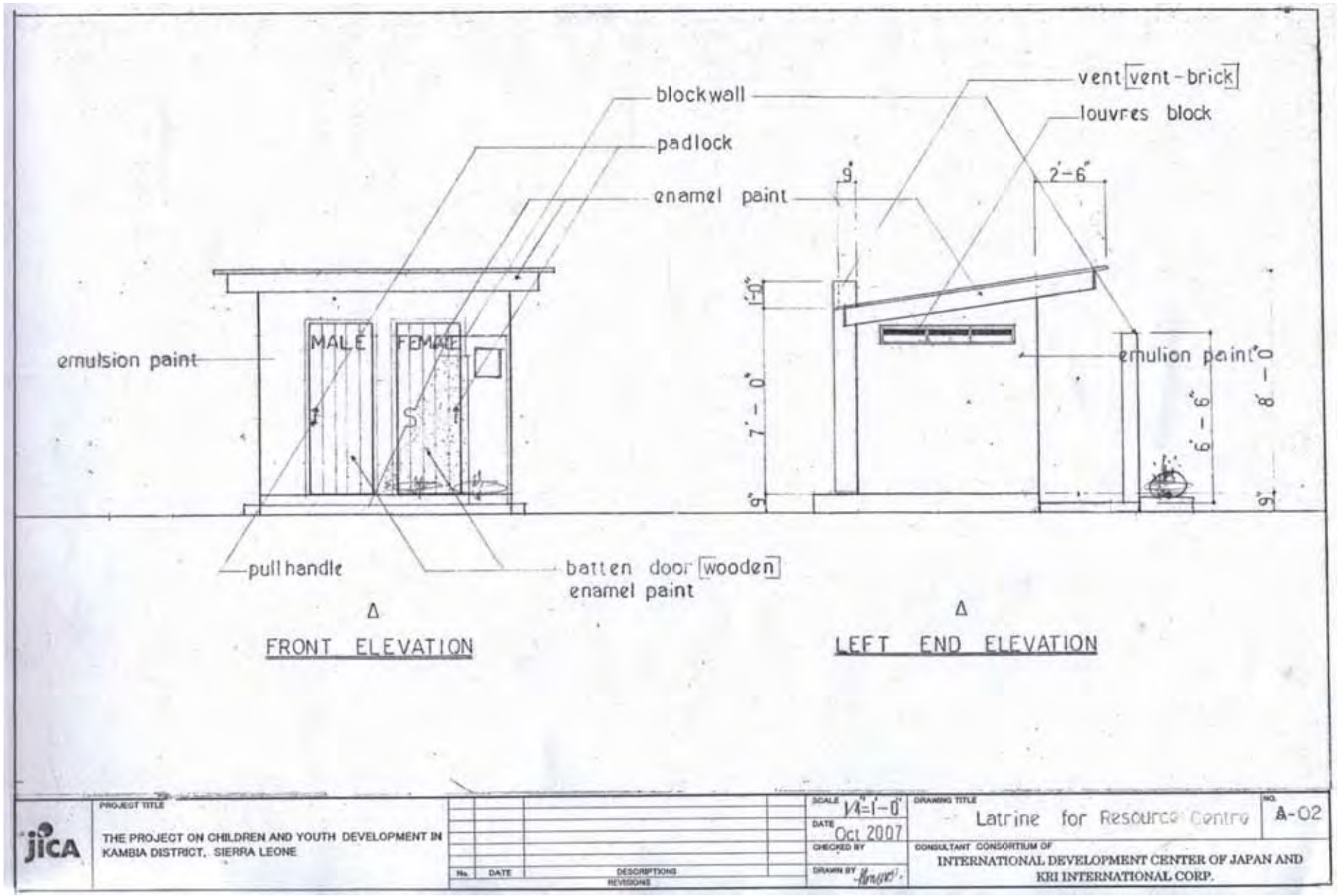
IMPLEMENT BY:

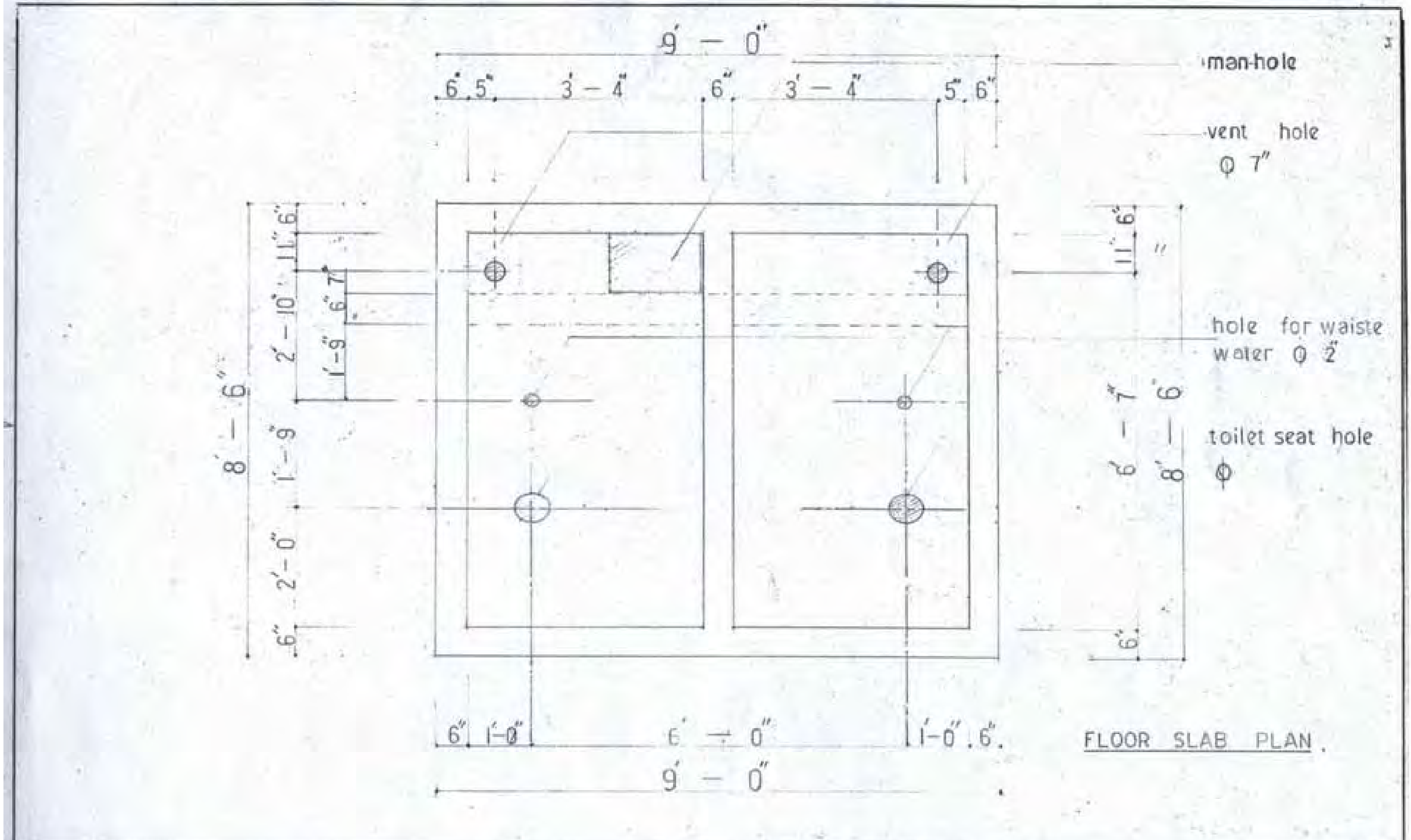
MANAGEMENT GROUP OF RESOURCE CENTRE (MGRC), KAMBIA DISTRICT

PREPARED BY:

CONSORTIUM OF INTERNATIONAL DEVELOPMENT CENTRE OF JAPAN (IDCJ)
AND KRI INTERNATIONAL CORP. (KRI)


soap tray
man-hole
vent [vent-brick]
toilet seats
locally made toilet seat
louvres block
plastic container
slope
block wall
flower bed
man-hole cover slab
PLAN
MAN-HOLE
1/2"=1'-0"
pull handle
rafters 2"x4"
c.i. sheet
vent
facia board
louvres block
cement brick wall
cement mortar plastering
r.c. floor slab
12φ@150 c-c
r.c. beam 12φ 4nr.
cement brick wall (sub-structure)
cement mortar plastering
SECTION A-A
r.c. slab 12φ 150cc
PROJECT TITLE
THE PROJECT ON CHILDREN AND YOUTH DEVELOPMENT IN KAMBIA DISTRICT, SIERRA LEONE
SCALE 1/4"=1'-0"
DATE Oct. 2007
CHECKED BY
DRAWN BY
DRAWING TITLE Latrine for Resource Centre
NO. A-01
CONSULTANT CONSORTIUM OF
INTERNATIONAL DEVELOPMENT CENTER OF JAPAN AND KRI INTERNATIONAL CORP.
No. DATE DESCRIPTIONS REVISIONS


blockwall
padlock
enamel paint
emulsion paint
MALE
FEMALE
pull handle
batten door wooden
enamel paint
FRONT ELEVATION
vent vent-brick
louvres block
9"
2'-6"
1'-0"
7'-0"
9"
emulion paint
8'-0"
6'-9"
9"
LEFT END ELEVATION
PROJECT TITLE
THE PROJECT ON CHILDREN AND YOUTH DEVELOPMENT IN KAMBIA DISTRICT, SIERRA LEONE
No. DATE DESCRIPTIONS REVISIONS
SCALE 1/4"=1'-0"
DATE Oct 2007
CHECKED BY
DRAWN BY
DRAWING TITLE
Latrine for Resource Centre
NO. A-02
CONSULTANT CONSORTIUM OF
INTERNATIONAL DEVELOPMENT CENTER OF JAPAN AND KRI INTERNATIONAL CORP.



JICA	PROJECT TITLE THE PROJECT ON CHILDREN AND YOUTH DEVELOPMENT IN KAMBIA DISTRICT, SIERRA LEONE
No. / DATE / DESCRIPTIONS	REVISIONS
SCALE	1/4"=1'-0"
DATE	Oct2007
CHECKED BY	
DRAWN BY	
DRAWING TITLE	Latrine for Resource Centre
NO.	A-03
CONSULTANT CONSORTIUM OF	INTERNATIONAL DEVELOPMENT CENTER OF JAPAN AND KRI INTERNATIONAL CORP.

TIME SCHEDULE FOR CONSTRUCTION OF RESOURCE CENTRE LATRINE

Schedule

Items	Description	October				November				December				January				February			
		1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
	Disbursement, Meeting & Completion					1st Disbursement 4th Week of Oct				2nd Disbursement 1st Week of Dec								Proposed Completion 1st Week Feb 2008			
Preparation & SUBSTRUCTURE																					
	Land Clearance																				
	Setting out for Building																				
	Excavation Works																				
	Blockwork Lining																				
	Concrete Works in Substructure and Ground Slab																				
SUPERSTRUCTURE																					
	Superstructure Block Work																				
	Concrete Works in Superstructure																				
ROOFING FRAMEWORK																					
	Wall Plate																				
	Rafter and Purlines																				
ROOFING																					
	Roofing Sheets and Accessories																				
DOORS AND WINDOWS																					
	Door Frames																				
	Doors with Hardware																				
FINISHING AND MISCELLANEOUS																					
	Cement Mortar Plastering																				
	External Wall and Apron																				
	Painting																				
	Installation of Toilet Seat																				

BREAKDOWN OF COST ESTIMATES

Construction of 2-Seater Latrine (Lined) For Resource Centres

NO	DESCRIPTION	Estimated QTY.	UNIT	Unit Price (Le)	JICA FUND DISBURSEMENT(Le)		
					1st	2nd	Total Amount
1	**SETTING OUT**						
A	Bush Sticks	1	dozen	5,000	5,000		5,000
B	Wire Nails (Assorted)	2	packets	1,500	3,000		3,000
C	Line Level	50	yards	200	10,000		10,000
2	**SUB STRUCTURE**				-		
A	Excavation (8'x9'x12")				-		
	Concrete Blinding (2" thick)				-		
B	Cement	2	bags	33,000	66,000		66,000
C	Sand	18	head pan	2,000	36,000		36,000
D	Aggregates (Laterite - 3/4")	36	head pan	2,000	72,000		72,000
	Block Work (6"x 9"x 18" Sandcrete Brick)				-		
E	Bricks (6"x 9"x 18")	389	nr	2,500	972,500		972,500
F	Cement	20	bags	33,000	660,000		660,000
G	Sand	240	head pan	2,000	480,000		480,000
3	**SUPERSTRUCTURE-FLOOR SLAB (4" thick)**				-		
	SHUTTERING				-		
A	(1" x 12" x 14') Timber	4	length	7,000	28,000		28,000
B	Bush Sticks (Battens)	1	dozen	5,000	5,000		5,000
C	Wire Nails	4	packets	1,500	6,000		6,000
	REINFORCED CONCRETE (1:2:4mix and 4"thick)				-		
D	Cement	4	bag	33,000	132,000		132,000
E	Sand	16	head pan	2,000	32,000		32,000
F	Aggregates (granite - 3/4")	32	head pan	2,500	80,000		80,000
G	Mild Steel Rod (Ø1/2")	6	length	32,000	192,000		192,000
H	Binding Wire	0.25	roll	90,000	22,500		22,500
4	**Super Structure Block Work**				-		
A	(6"x 9"x 18") Sandcrete Bricks	230	nr	2,500	575,000		575,000
B	(6"x 9"x 18") Louvre Bricks	8	nr	5,000		40,000	40,000
C	(10"x 10"x 4") Vent Bricks as Vent Pipe	48	nr	5,000		240,000	240,000
D	Cement	14	bag	33,000	462,000		462,000
E	Sand	84	head pan	2,000	168,000		168,000
5	**TIE BEAMS,STRUT & LINTELS**					-	
	Reinforced Concrete 1: 2 : 4mix and 1/2" aggregate					-	
A	Mild Steel Rod (Ø1/2")	8	length	32,000		256,000	256,000
B	Mild Steel Rod (Ø1/4")	2	length	12,000		24,000	24,000
C	Binding Wire	0.25	roll	90,000		22,500	22,500
D	Cement	5	bag	33,000	165,000		165,000
E	Sand	20	head pan	2,000	40,000		40,000
F	Aggregate (Granite)	40	head pan	2,500	100,000		100,000
6	**PLASTERING & APRON**						
	1: 5 mix and 1/2" thick						
A	Cement (Internal & Lining)	4	bag	33,000	132,000		132,000
B	Cement (External & Concrete Coping)	5	bag	33,000	165,000		165,000
C	Sand	60	head pan	2,000	120,000		120,000
D	Aggregates (Laterite - 3/4")	24	head pan	2,000	48,000		48,000

7	**DOORS**						
A	Frames (2" x 12" x 14')	1	length	15,000		15,000	15,000
B	Battens (1" x 12" x 14')	3	length	8,000		24,000	24,000
C	Braces (1" x 12" x 14')	1	length	8,000		8,000	8,000
D	Wire Nails (Assorted)	10	packet	2,000		20,000	20,000
E	Hinges (4")	4	pair	2,000		8,000	8,000
F	Tower Bolt (4")	2	nr	2,000		4,000	4,000
G	Padlock	2	nr	6,000		12,000	12,000
H	Door Handle	2	nr	6,000		12,000	12,000
8	**ROOFING FRAME WORK AND ROOF**						
A	Wall Plate (2" x 12" x 14')	1	length	15,000		15,000	15,000
B	2" x 4" x 14' (Rafters)	2	length	6,000		12,000	12,000
C	Purline (2" x 3" x 14')	3	length	4,500		13,500	13,500
D	Fascia (1" x 12" x 14')	3	length	8,000		24,000	24,000
E	Wire Nails (Assorted)	12	packet	2,000		24,000	24,000
F	Steel Nails (3")	1	packet	5,000		5,000	5,000
G	Mild Steel Rod (Ø1/4") (Brace to roof)	1	length	12,000		12,000	12,000
H	C.I Sheets (33" x 6') i.e 11 cogs	12	sheet	15,000	180,000		180,000
I	Roofing Nail	3	packet	2,000		6,000	6,000
9	**OTHER MATERIALS**						
A	Toilet Seat including Plastic Cover for Ceramic Toilet Seat and Transportation	2	nr	140,000	280,000		280,000
B	Plastic Water Container (i.e Pigs Feet Container)	2	nr	50,000	100,000		100,000
C	Toilet Bruch	2	nr	15,000		30,000	30,000
D	Sanitary Kettle (Plastic)	2	nr	5,000		10,000	10,000
E	Scrubbing Brush	2	nr	2,500		5,000	5,000
10	**PAINTING**						
A	Primer (White Wash)	1	bag	30,000		30,000	30,000
B	Emulsion (Water Paint)	3	gallon	25,000		75,000	75,000
C	Enamel (Oil Paint)	2	gallon	40,000		80,000	80,000
	MATERIALS TOTAL				**5,337,000**	**1,027,000**	**6,364,000**
LABOUR							
	Labour (Excavation Works)		l/sum		100,000	-	100,000
	Masons (Sub-structure and super-structure)		l/sum		150,000	100,000	250,000
	Masons (Plastering in/out)		l/sum		-	80,000	80,000
	Carpenters (Profilling and Shuttering)		l/sum		30,000	-	30,000
	Carpenters (Roofing)		l/sum		-	80,000	80,000
	Carpenters (Fabrication of doors)		l/sum		-	20,000	20,000
	Painters (Internal, external, doors and fascia)		l/sum		-	60,000	60,000
	LABOUR TOTAL				**280,000**	**340,000**	**620,000**
	Transportation of Materials				235,000	65,000	300,000
	GRAND TOTAL				**5,852,000**	**1,432,000**	**7,284,000**
				%	80.34	19.66	
				USD	1,951	477	**2,428**

Appendix 5

Training Manuals (data only, for CD-R)

Ministry of Education,
Science and Technology

Japan International
Cooperation Agency

Moderator's Guide

for

Personal Hygiene Workshop

in

The Project on Children and Youth Development

in Kambia District in the Republic of Sierra Leone

March 2007 (Revised)

JICA Project Team

Moderator's Guide
for
Personal Hygiene Workshop
in
The Project on Children and Youth Development
in Kambia District in the Republic of Sierra Leone

Table of Contents

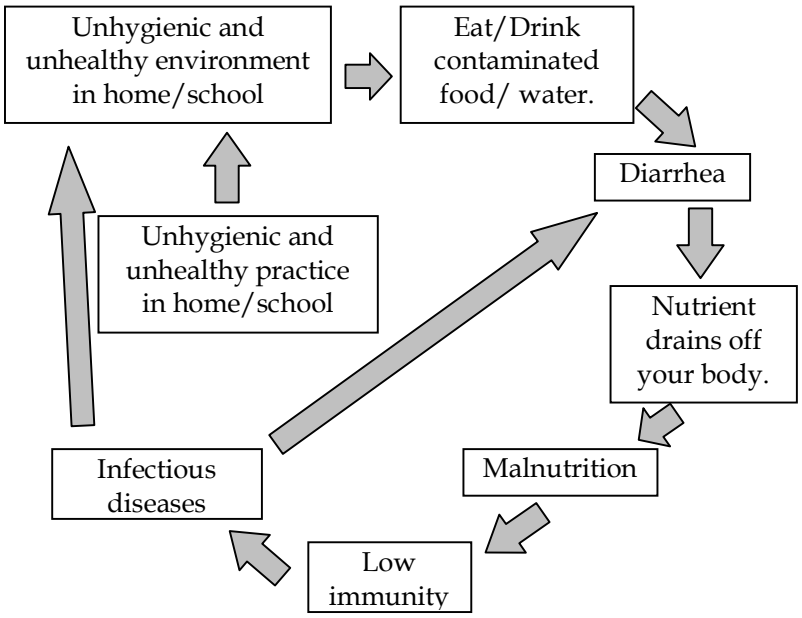
I. Goal of Personal Hygiene Workshop

in the Project for Children and Youth Development in Kambia District

At the end of the workshop, the participants:

- **Aware of their level of hygiene practice;**
- **Understand importance of proper hygiene practice; and**
- **Are motivated to change their daily hygiene practice.**

During the project, JICA Project Team (JPT) has been aware that personal hygiene practice affects on health status of school children as shown in the following figure.



Therefore, JPT prepared this manual to support activities to improve personal hygiene practice to be conducted by ECDC aiming at the above goal.

II. Framework of Personal Hygiene Workshop

JICA Project Team (JPT) will provide training of moderators, in cooperation with Ministry of Health and Sanitation (MOHS) in Kambia, in Resource Center. The trainees

in this training will be moderators in each community to conduct the workshop in school and community.

Moderators and community should have strong commitment to continue the series of activities to achieve the above goal.

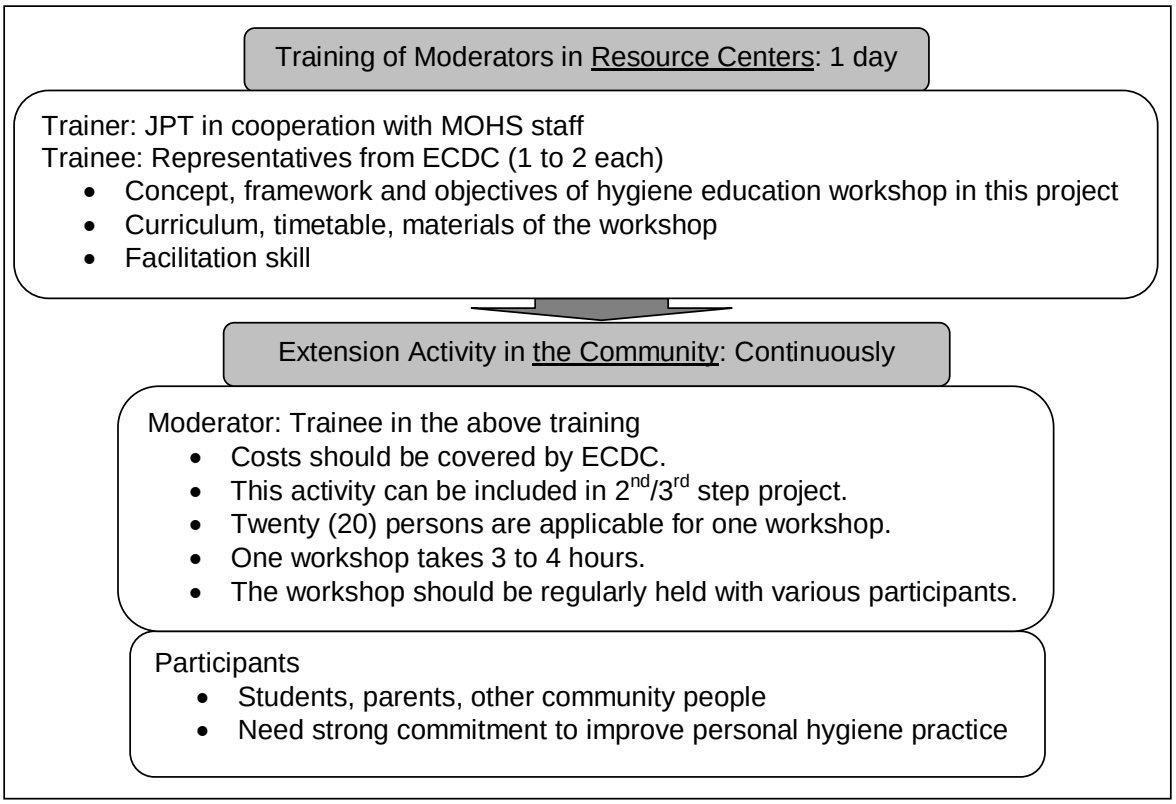


Figure II.1 Framework of Personal Hygiene Workshop

III. Methodology of Personal Hygiene Workshop

"Participatory Hygiene and Sanitation Transformation (PHAST)" is applied in this project. PHAST was developed in East Africa to sensitize people to improve personal hygiene practice. It was designed to encourage people, including illiterate people and children, to participate actively.

Complete PHAST method includes many tools, however, JPT selected the most essential ones for the target population in this project.

IV. Key Players of Personal Hygiene Workshop

- **Moderators (who receive training in Resource Center)**
- **ECDC**
- **Community**

Main players are ECDC and community. JPT provide minimum support in cooperation with concerned organizations such as: training for moderators in Resource Center; monitoring of hygiene improvement activity in each ECDC; and providing technical advices to improve the class operation.

V. Standard Program of Personal Hygiene Workshop

Standard program of the workshop is as follows, but the key players can modify it according to level of understanding of participants.

Participants: 20 to 25 people
Venue: School or common space in community with a wall to place posters
Materials: PHAST posters (2 to 4 sets) and pins/soft rubbers

Time	Subject	Contents
20min.	Introduction	➢ Moderator explain objectives and roles of the workshop ➢ Participants form 4 small groups of 5-10 people.
60min.	Water Ladder	➢ Discussion on their water supply situation and steps to improve it.
40min.	Sanitation Ladder	➢ Discussion on their sanitation situation and steps to improve it.
40min.	Hand Washing Ladder & Hand Washing Time	➢ Discussion on their hand washing practice and steps to improve it.
20 min.	Song Making	➢ Creating a song on importance of hygiene practice improvement
10min.	Conclusion	➢ Moderator reviews the discussion held during the workshop and encourage them to improve their personal hygiene practice.

However, ECDC can arrange the timetable in accordance with capacity and availability. For example, short (one-hour) workshop of Water Ladder only can be held.

The pictures included in this manual are not the exact ones. Moderator can encourage school students or parents to add more pictures according to their actual situation.

VI. Basics of Facilitation

- NO DOMINATION IS ALLOWED IN THIS PARTICIPATORY WORKSHOP.
- Moderator should encourage all participants are involved in group work actively, and present the result of their group work.
- All out puts of the group work MUST be based on consensus of all group members.
- Moderator must not reject the out put of the group work. Listen to the participants carefully and with respect.
- After that, a moderator should explain about each picture according to guidance in Section VII.

VII. Detailed Instruction for Each Tool

Detailed instruction for moderators to achieve objectives of each tool is described in this chapter. However, the moderator can arrange in accordance with level of understanding of participants.

Before the group work, the moderator facilitate participants to form 2 to 4 groups and gather in front of walls with pictures and soft rubber adhesive (Power Tack).

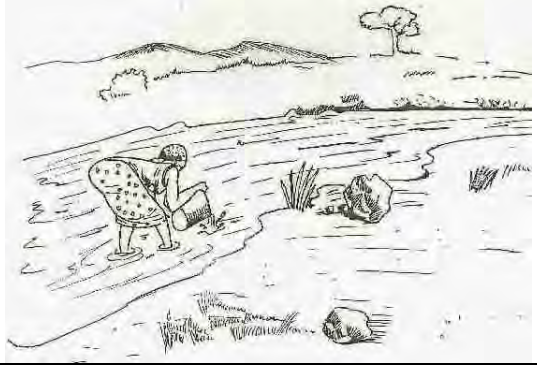
VII.1 Water Ladder

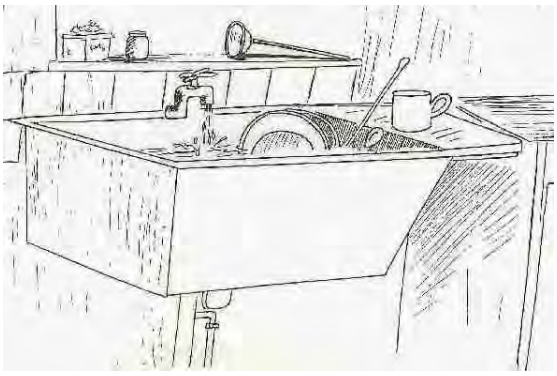
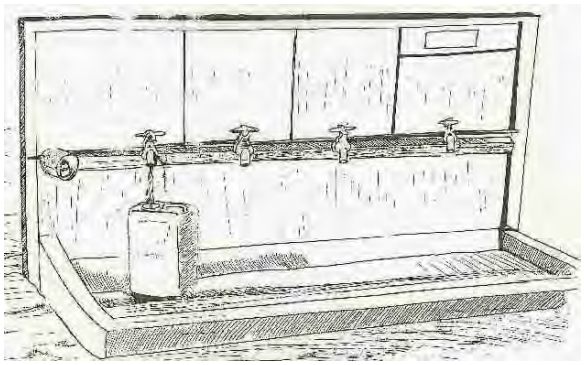
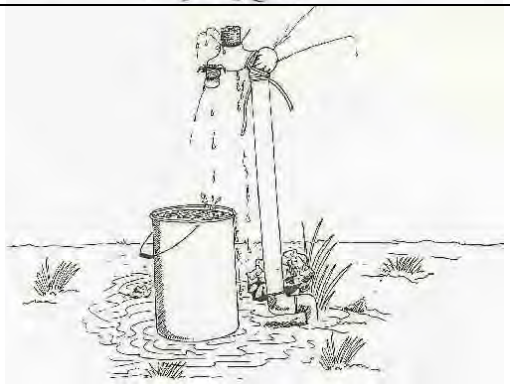
Group work:	30 minutes
Presentation:	5 minutes/group
Guidance by moderator:	10 minutes

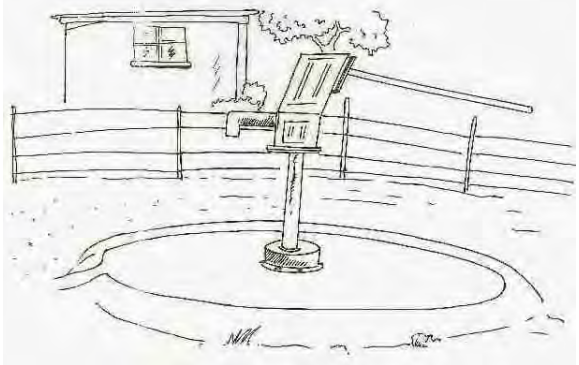
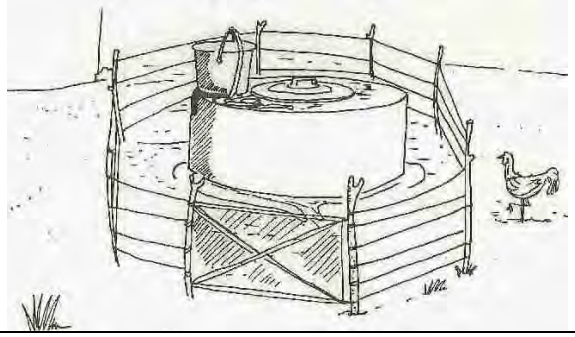
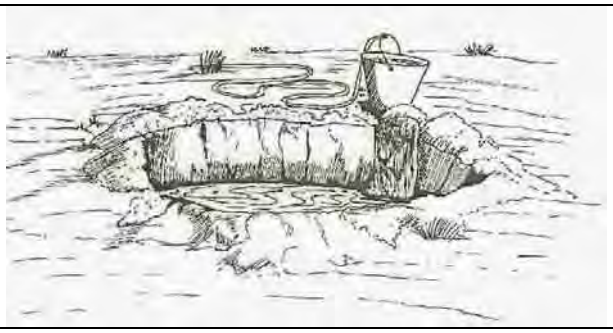
Objectives:
- Participants can identify their own situation on a scale of various water supply systems and options.
- Participants can determine the merits and demerits of each water sources.
- Participants realize the improvements of water environment can be done step by step.

<Group work>

1. Moderator distributes one set of "Water Ladder" posters to each group.
2. Each group arranges the pictures in order of preferable situation from left to right.
3. Each group discusses the merits and demerits of each water sources.
4. Each group identify the picture which is the nearest to their current situation.
5. Each group present the results of group work.
   - Order of pictures and its reason
   - Merits and demerits of each water sources
   - The picture which is the nearest to their current situation
6. Moderator shows participants merits and demerits of each water sources as shown in the following table.

Picture	Merit and demerit
	○ No cost ○ Water is rather stable × If someone washes animals, clothes or body, or excretes nearby, level of contamination is very high. × If this woman's feet or her bucket are dirty, she brings contamination.

Picture	Merit and demerit
	○ Water is purified before distributed to each household. ○ Each household control contamination individually. × User fee is expensive. × Some facilities (pipe, tap, etc.) are easy to breakdown. × If family members do not keep clean the kitchen, water will be contaminated.
	○ Water is purified before distribution. ○ User fee is cheaper. ○ It has drainage facility. ○ Container can enclose water to keep its quality. × If community member do not keep clean around, water will be contaminated and a paddle will bread mosquitoes. × If community member do not well maintain, it will be damaged soon.
	○ Water may be purified before distribution. ○ There are gravels to avoid a paddle. × It may get contamination between water tap and home because water is in the open bucket. × It is easy to be broken because it is not protected.
	○ Water may be purified before distribution. × Tap has been broken and not repaired. × It creates a paddle to bread mosquitoes. × It wastes water. × If the clothe and ropes wrapping the tap is dirty, water is contaminated.

Picture	Merit and demerit
	○ It is protected by fence and cement. ○ If it is chlorinated, water is safer. ○ It has drainage ditch. ○ Community can maintain it by their own effort. × It may dry up in dry season or by change of environment. × If community do not well maintain, it will not function soon.
	○ It is protected from animals by fence and cover. ○ Rope and bucket seem to be kept clean. ○ It is easy to maintain by community effort. × Water quality may be affected by contamination of surrounding soil.
	○ Low cost and easy to install ○ It is protected from contamination on the ground surface and small animals. × The protection is not enough. × Water quality is affected by contamination of surrounding soil. × Rope and bucket is not kept clean × It may dry up in dry season or by change of environment.
	○ Low cost and easy to install × Water quality is affected by contamination of surrounding soil. × Rope and bucket is not kept clean × It may dry up in dry season or by change of environment.

Picture	Merit and demerit
	○ Low cost × If the woman's feet and cloth are dirty, water will be contaminated. × If water is contaminated, she will get skin infectious diseases, worm, etc. × Water will be contaminated between this well and her house because of open bucket.
	○ The stream is protected by fence and blocks. ○ Water from the stream may be pure. × If community does not well maintain it, water will be contaminated.

<Topic 1> Criteria of good water sources

- ✓ Divided according to the purpose: drinking water; washing dishes; washing closes; washing human body; washing animals; etc.
- ✓ Quantity and quality of water is stable.
- ✓ Protected from all possible contamination (fence, cover, etc.).
- ✓ With proper drainage facility.
- ✓ The facility and surroundings are kept clean.

<Topic 2> Keep water clean

- ✓ Use clean container with proper cover.
- ✓ Store water inside your house.
- ✓ Use water within a week.
- ✓ Keep your house clean.
- ✓ Wash your hand before use water.

VII.2 Sanitation Ladder

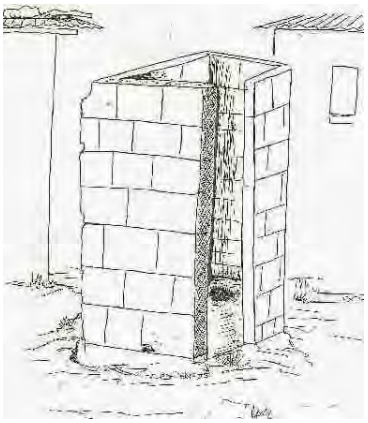
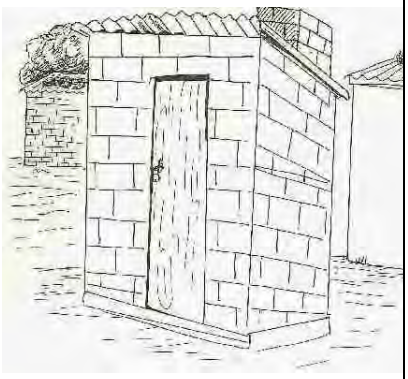
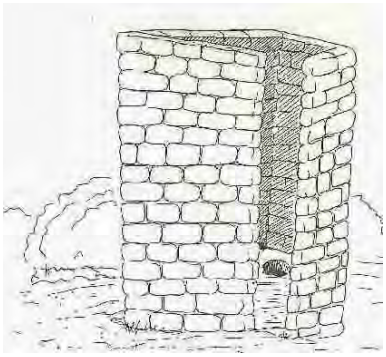
Group work:	20 minutes
Presentation:	5 minutes/group
Guidance by moderator:	10 minutes

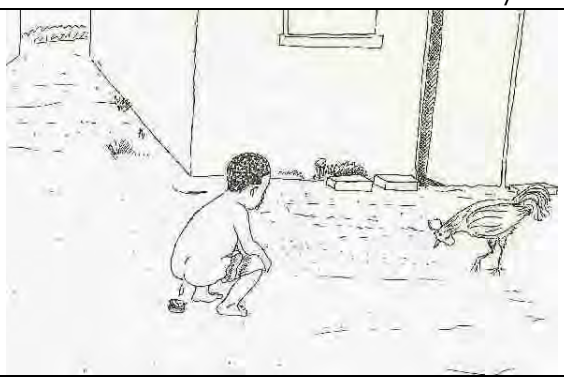
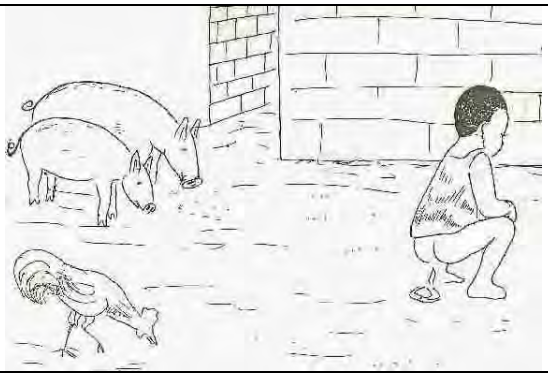
Objectives:
- Participants can identify their own situation on a scale of various sanitation options.
- Participants can determine the merits and demerits of sanitation options.
- Participants realize the improvements of sanitation environment can be done step by step.

<Group work>

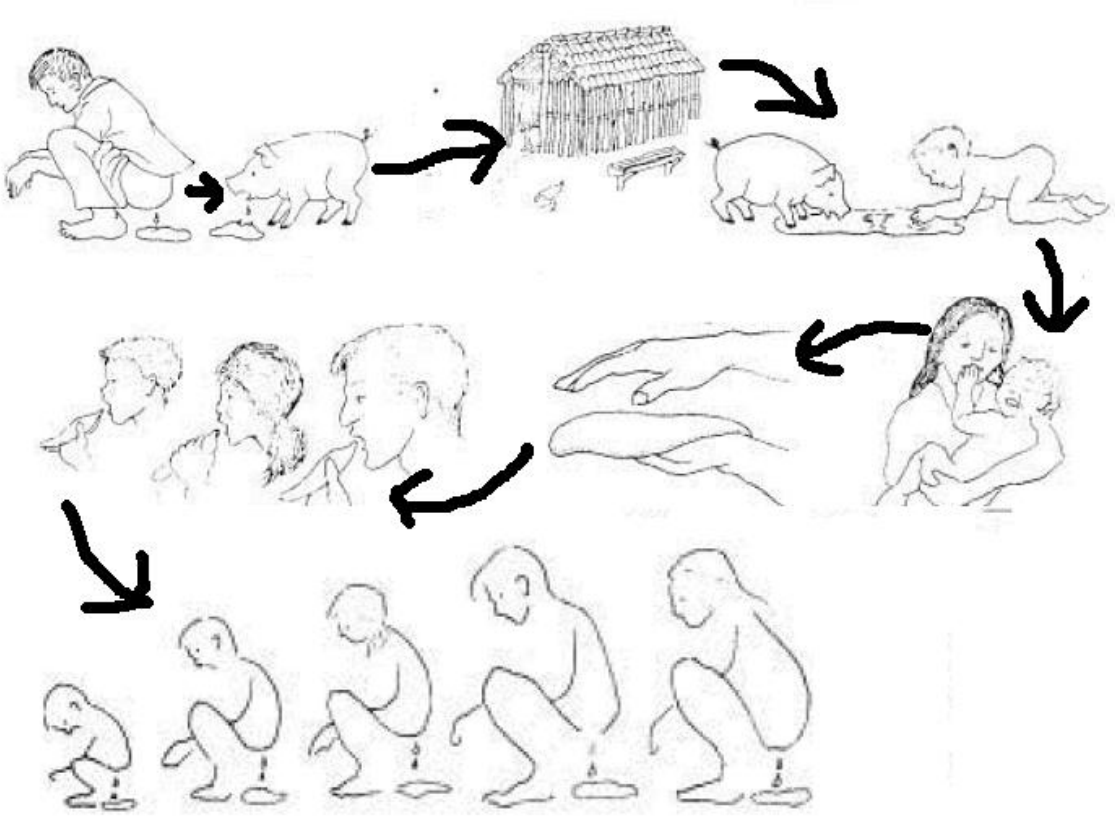
1. Moderator distributes one set of "Sanitation Ladder" posters to each group.
2. Each group arranges the pictures in order of preferable situation from left to right.
3. Each group discusses the merits and demerits of each sanitation situation.
4. Each group identify the picture which is the nearest to their current situation (adults and children).
5. Each group present the results of group work.
   - Order of pictures its reason
   - Merits and demerits of each sanitation situation
   - The picture which is the nearest to their current situation
6. Moderator shows participants merits and demerits of each excretion behavior as shown in the following table

Picture/ Merit and demerit		
		
× Close to a house. × Excrement will get on human or animal walking here later.	○ Not excreting on the street × He may be contaminated during bringing the box.	○ Not close to foods. × Family member will be contaminated, if the box is not covered properly.
		
○ He will cover after excreting. × Close to a house × Risk of snake, scorpion, etc. × His naked feet will be contaminated.	○ It's sanitary good. × Consume lots of water. × Easy to be broken without proper use and maintenance.	○ The pit will be covered. ○ The toilet is kept clean. ○ She wears shoes to avoid contamination. × If she does not wash hand after this work, she could get contamination.

Picture/ Merit and demerit		
		
○ Pit latrine with concrete block. × It is too close to houses. × It seems not well maintained and dirty.	○ Ventilated improved pit (VIP) Latrine with proper structure. × If people do not use properly, it will cause disease outbreak.	○ Mother takes excreta immediately. × Naked feet of a child may get contamination. × If she does not throw the excreta at proper place, it will cause contamination.
		
○ Pit latrine is not close to residential area. × The mud brick is weak against rain. × It needs roof, door and cover on pit.	○ It's not too close to residential area. × It's not well protected. × It's not well maintained.	○ It is somehow protected. × The protection is not enough. × It's too close to residential area. × It's not well maintained.

Picture/ Merit and demerit	
	
× A chicken will get excretion. × The chicken will enter to a house with contamination. × People coming out from the house may get excretion. × Place is too close to residential area.	× Place is too close to residential area. × Animals will get excretion and contamination. × Children may be contaminated, if they play with those animals.

<Topic 3> If your child gets contamination…



Source: David Werner et. al., "Where there is no doctor ~ revised edition ~", Macmillan, 2004

VII.3 Hand Washing Ladder and Hand Washing Time

Group work:	20 minutes
Presentation:	5 minutes/group
Guidance by moderator:	10 minutes

Objectives:
- Participants can identify their own situation on a scale of various hand washing practices.
- Participants can determine the merits and demerits of hand washing practices options.
- Participants understand importance of hand washing and when they should wash hand in daily activity.

<Group work>

Hand Washing Ladder

1. Moderator distributes one set of "Hand Washing Ladder" posters to each group.
2. Each group arranges the pictures in order of preferable practice from left to right.
3. Each group discusses the merits and demerits of each hand washing practice.
4. Each group identify the picture which is the nearest to their current situation.
5. Each group present the results of group work.
   - Order of pictures its reason
   - Merits and demerits of each sanitation situation
   - The picture which is the nearest to their current situation
6. Moderator shows participants merits and demerits of each had washing behavior as shown in the following table

Picture/ Merit and demerit	Picture/ Merit and demerit	Picture/ Merit and demerit
		
○ With flowing water ○ Individually ○ With soap	○ With flowing water ○ Individually × Without soap	○ With soap × All of them may be contaminated, if one have bacteria or warm.
		
× All of them may be contaminated, if one have bacteria or warm.	○ With flowing water ○ Individually × Without soap × Foods may be contaminated with splashed water	

Hand Washing Time

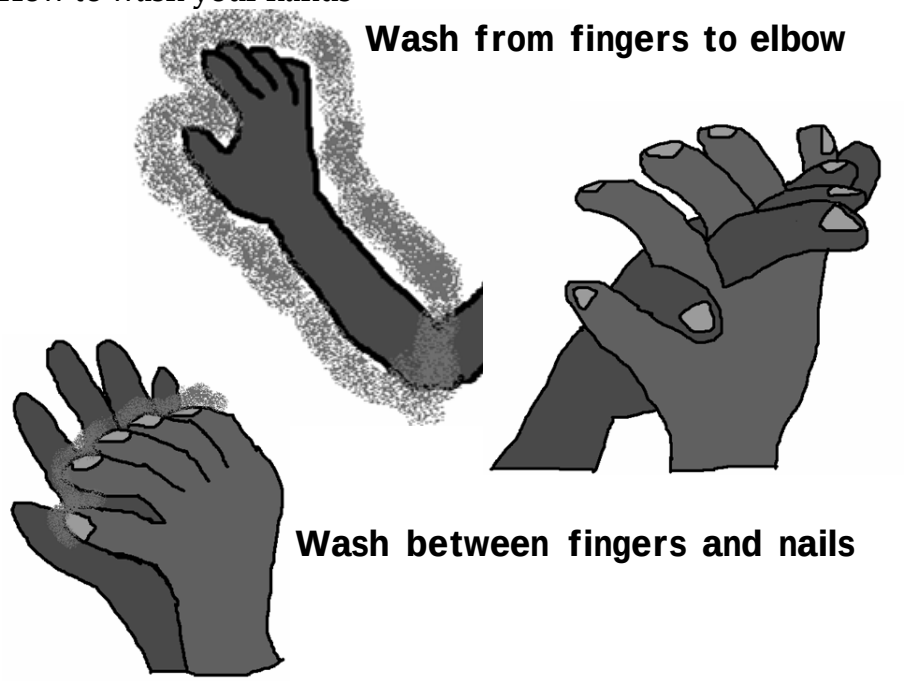
1. Moderator distributes one set of "Hand Washing Time" posters to each group.
2. Each group discusses following topics on each pictures.
   - Does he/she have to wash his/her hand?
   - Why?
   - If yes, does he/she have to wash hand before or after?

3. Each group arranges the pictures in three (3) groups:
   "washing hand before"; "washing hand after" and "not necessary"
4. Each group present the results of group work.
5. Moderator tells the right answers and those reasons for each picture as shown in following table.

Picture/ Hint		
		
He should touch medicine with clean hands.	She should touch foods with clean hands.	Money is dirty through many hands in the market.
		
He may get poison in this work.	He should eat foods with clean hands.	He may be contaminated in the toilet.

Picture/ Hint		
		
His hands get oil, dust, etc. during this work.	She should touch fruits with clean hands.	She may be contaminated during this work.

<Topic 4> How to wash your hands



VII.4 Song Making on Hygiene Practice

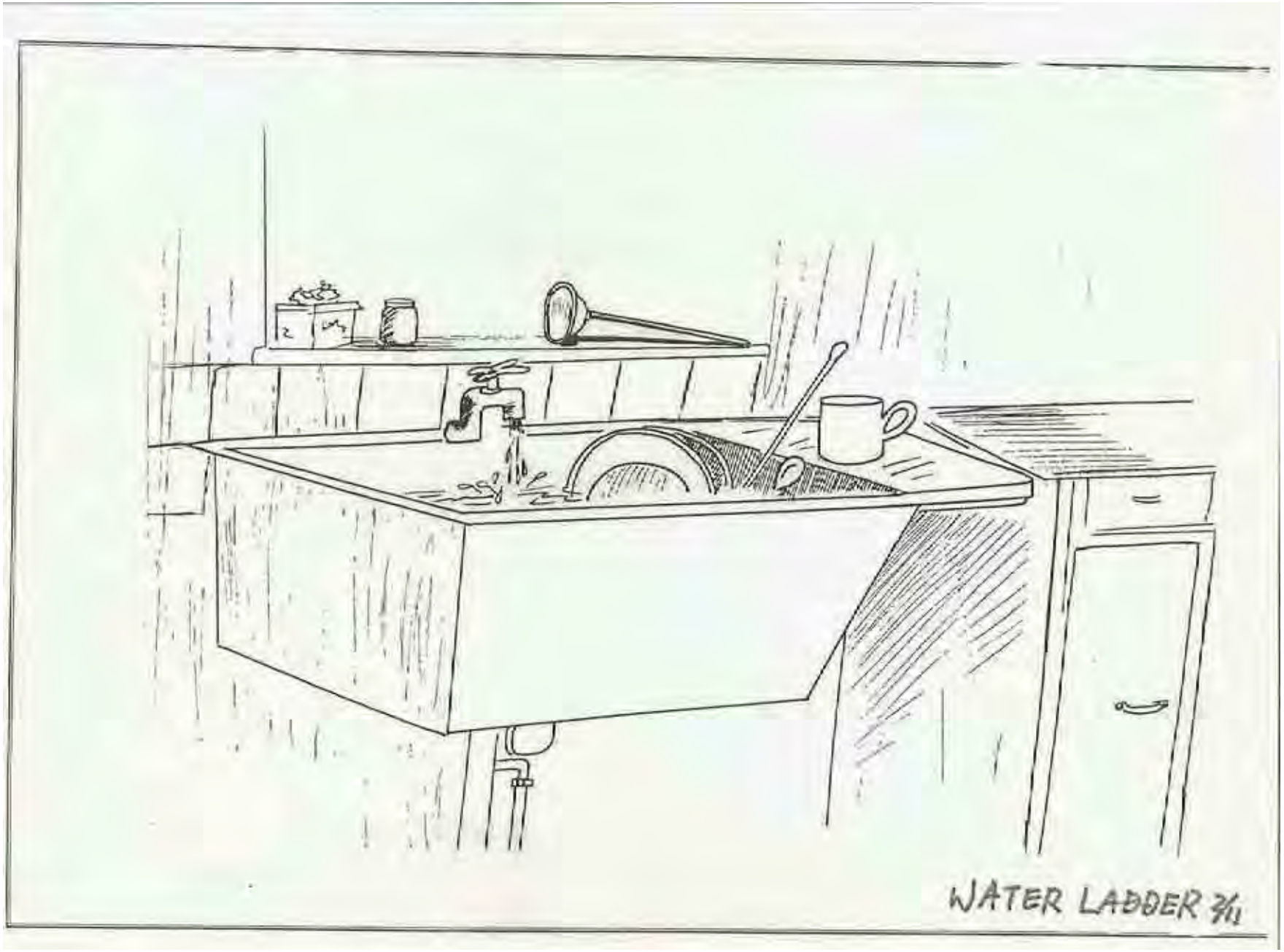
Group work: 15 minutes
Presentation (singing): 3 minutes/group

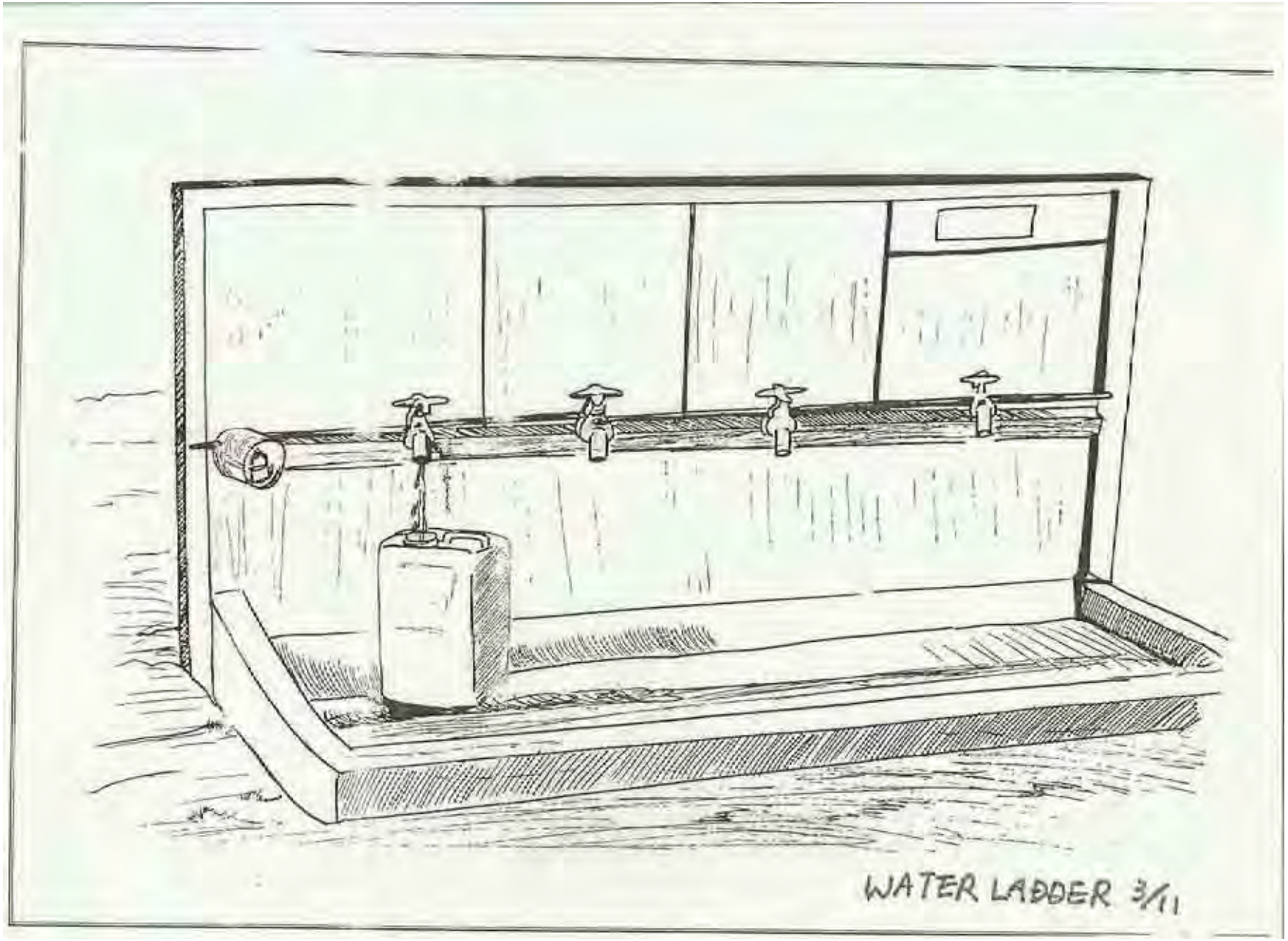
Objectives:
- Participants can confirm what they have learned in this workshop.
- Participants can remember the importance of hygiene practice improvement by singing this song.
- Moderator knows level of understanding of this workshop.

1. Each group creates a song about what they learned today in their local language.
2. Each group sings the song.

Appendix 1: Water Ladder


WATER LADDER 1/11


WATER LADDER 3/11

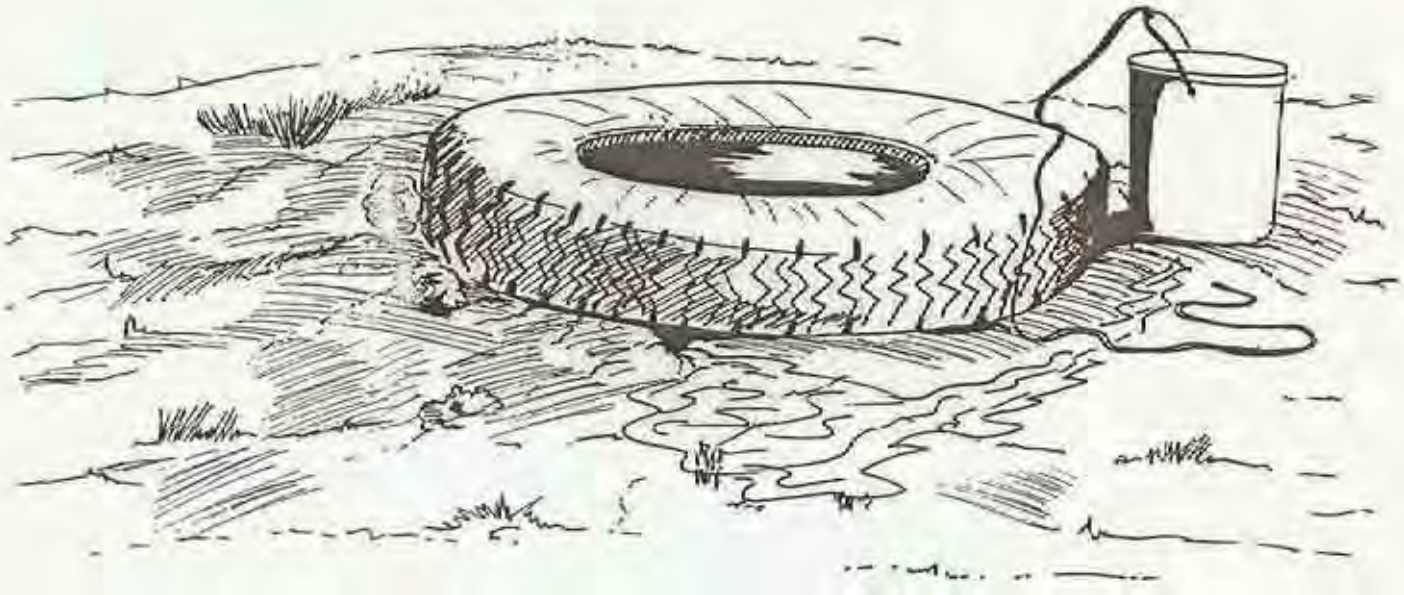

WATER LADDER 3/11

WATER LADDER 4/1

WATER LADDER 5/11


WATER LADDER 6/11


WATER LADDER 7/11



WATER LADDER 8/11


WATER LADDER 9/11

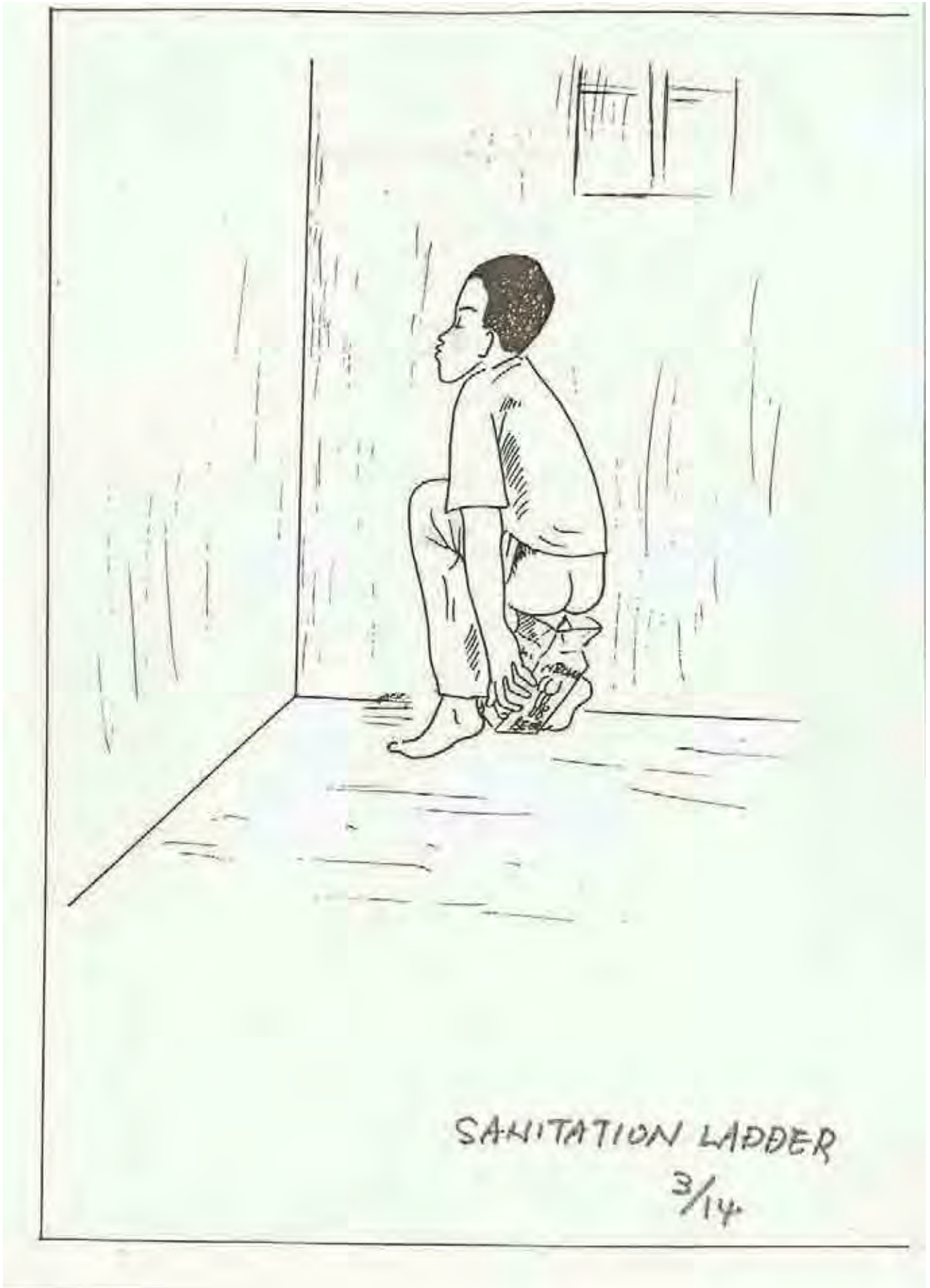

WATER LADDER 10/11

WATER LADDER 11/11

Appendix 2: Sanitation Ladder


SANITATION LADDER
V/14


SANITATION LADDER
3/14



SANITATION LADDER

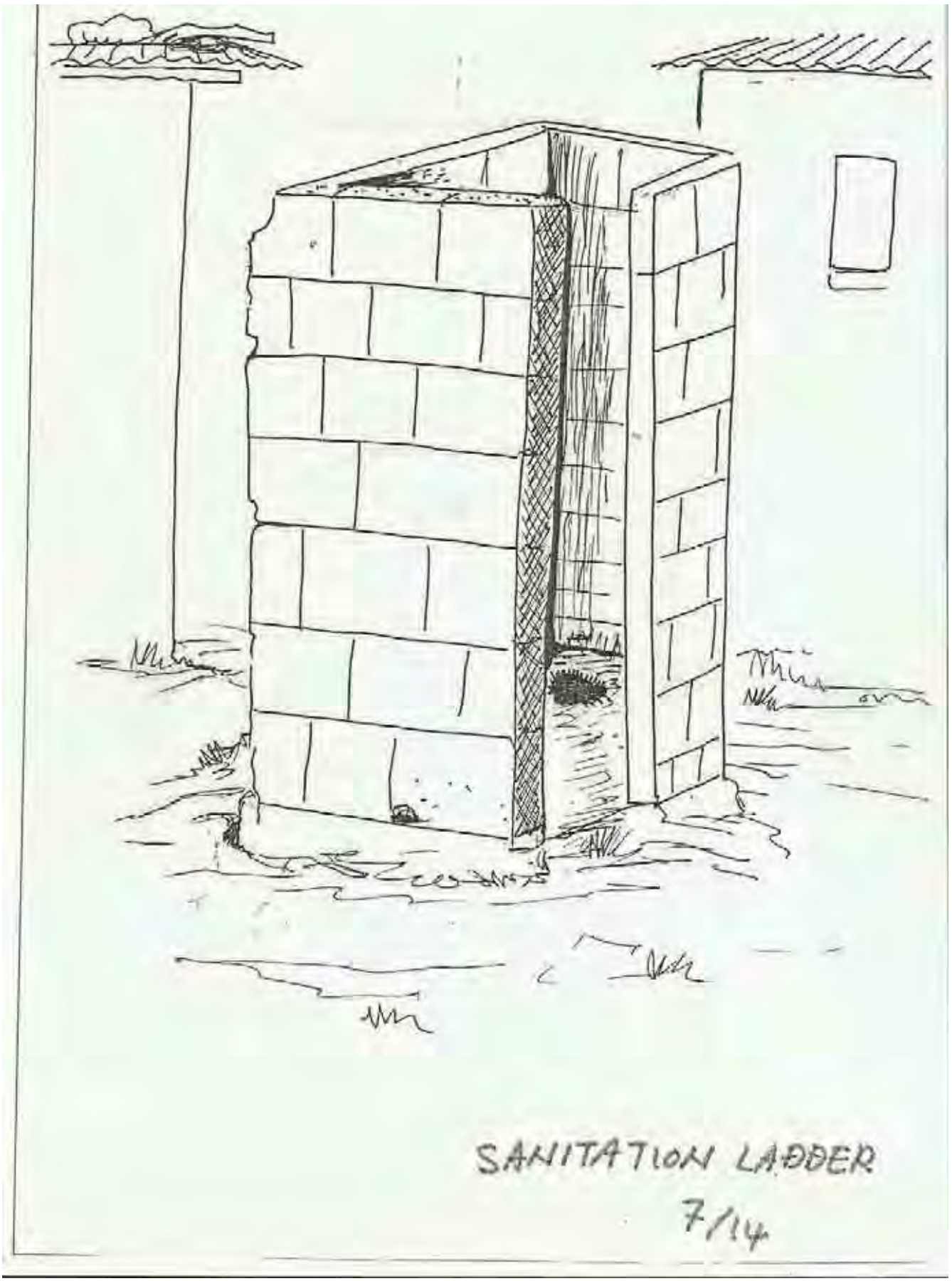
3/14


SANITATION LADDER
4/14

SANITATION LADDER

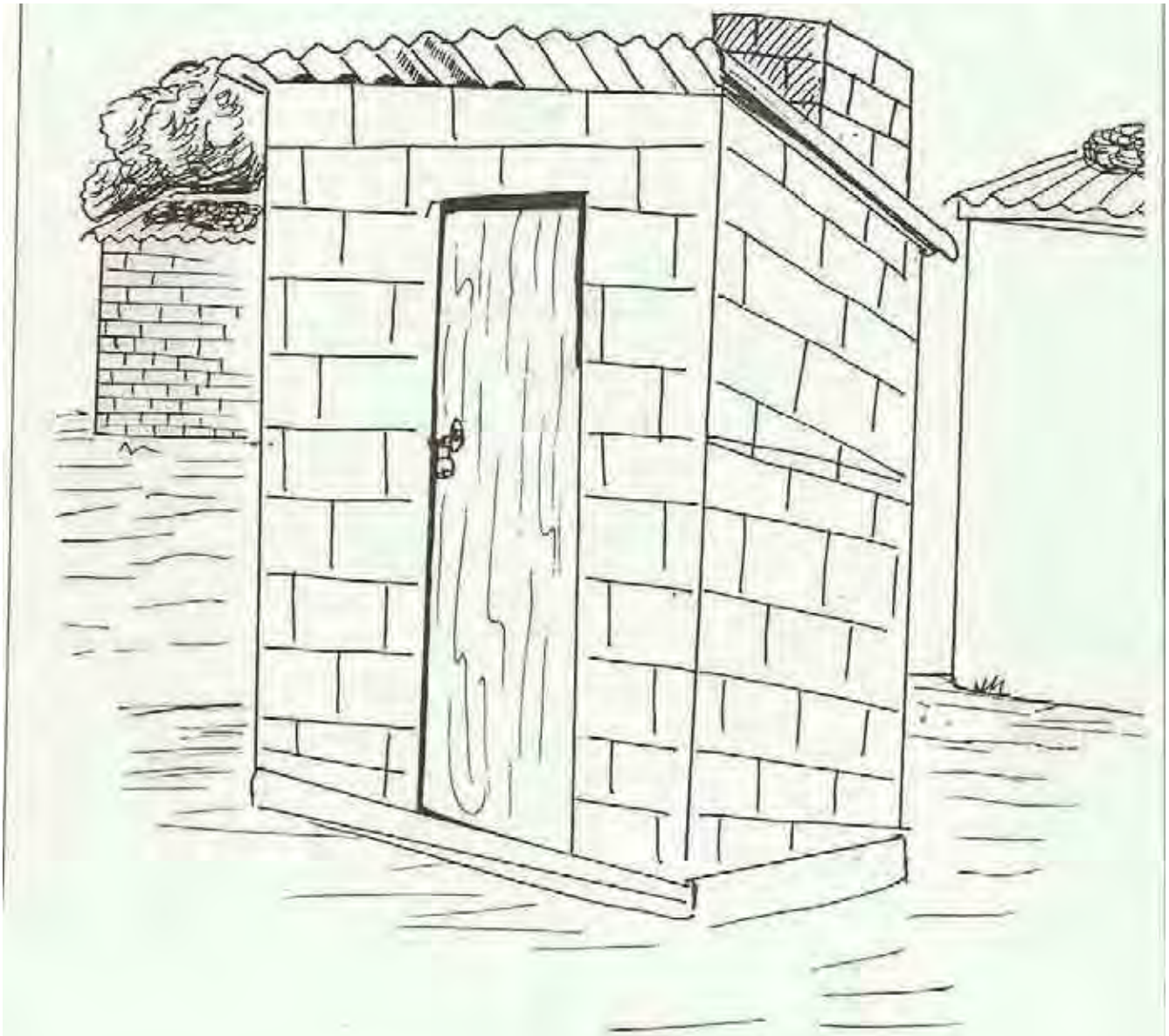
5/14


SANITATION LADDER
6/14



SANITATION LADDER

7/14



SANITATION LADDER

8/14


SANITATION LADDER 9/14

SANITATION LADDER
10/14


SANITATION LADDER
11/14

SANITATION LADDER
12/14

SANITATION LADDER
13/14


SANITATION LADDER
14/14

Appendix 3: Hand Washing Ladder

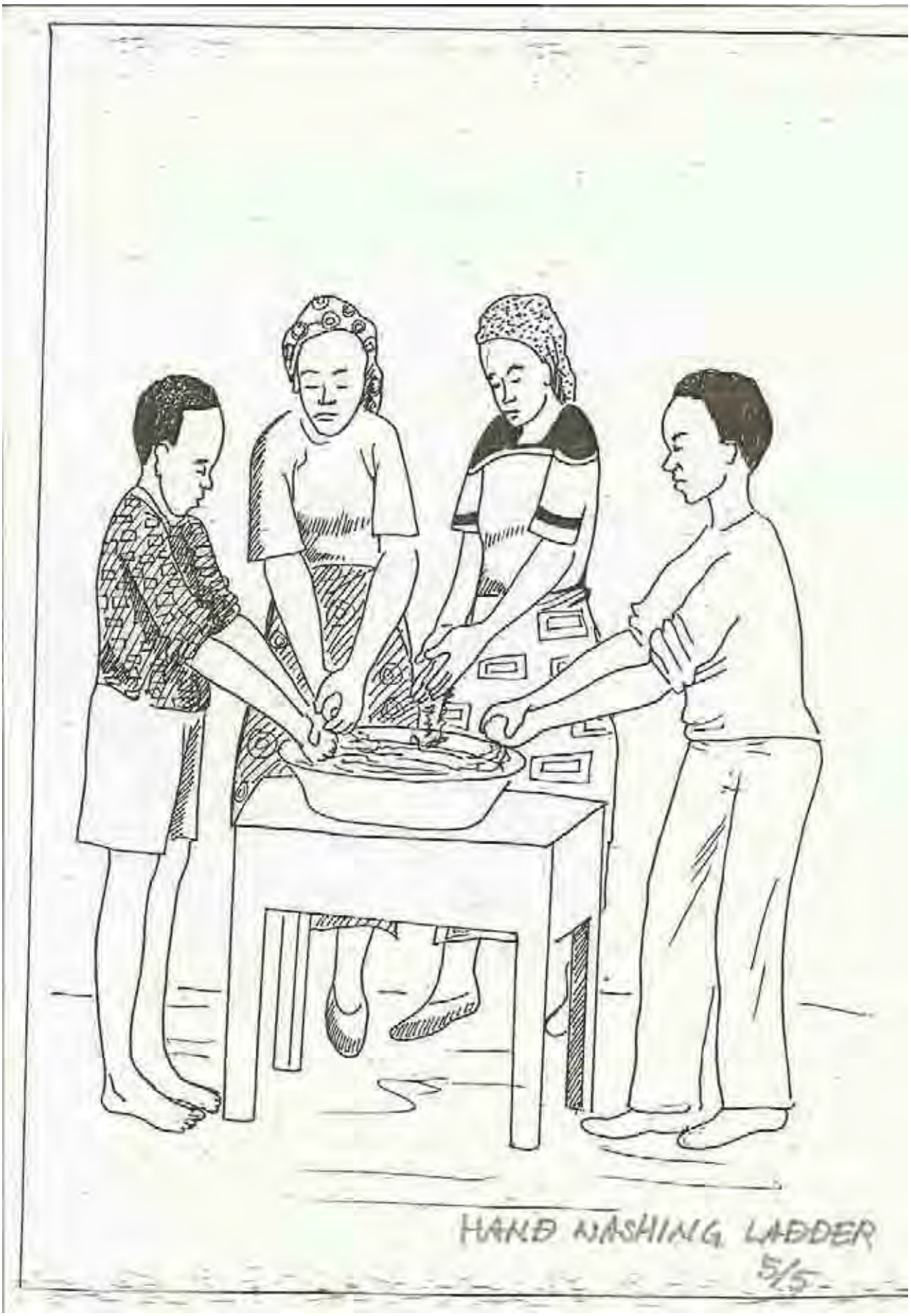
HAND WASHING LABDER
1/5


HAND WASHING LADDER
2/5


HAND WASHING LADDER
3/5

HAND WASHING LADDER

4/5


HAND WASHING LADDER
5/5

Appendix 4: Hand Washing Time


HAND WASHING TIME


HAND WASHING TIME
3/9


HAND WASHING TIME
3/9


HAND WASHING
TIME
4/9


HAND WASHING
TIME 5/9


HAND WASHING
TIME 6/9


HAND WASHING TIME
7/9


HAND WASHING TIME
B/9


HAND WASHING TIME
9/9