

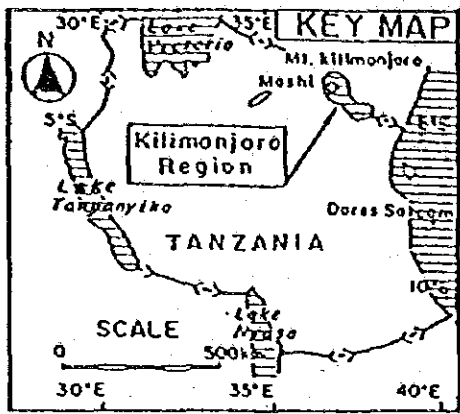
添付図面



## 添付図面リスト

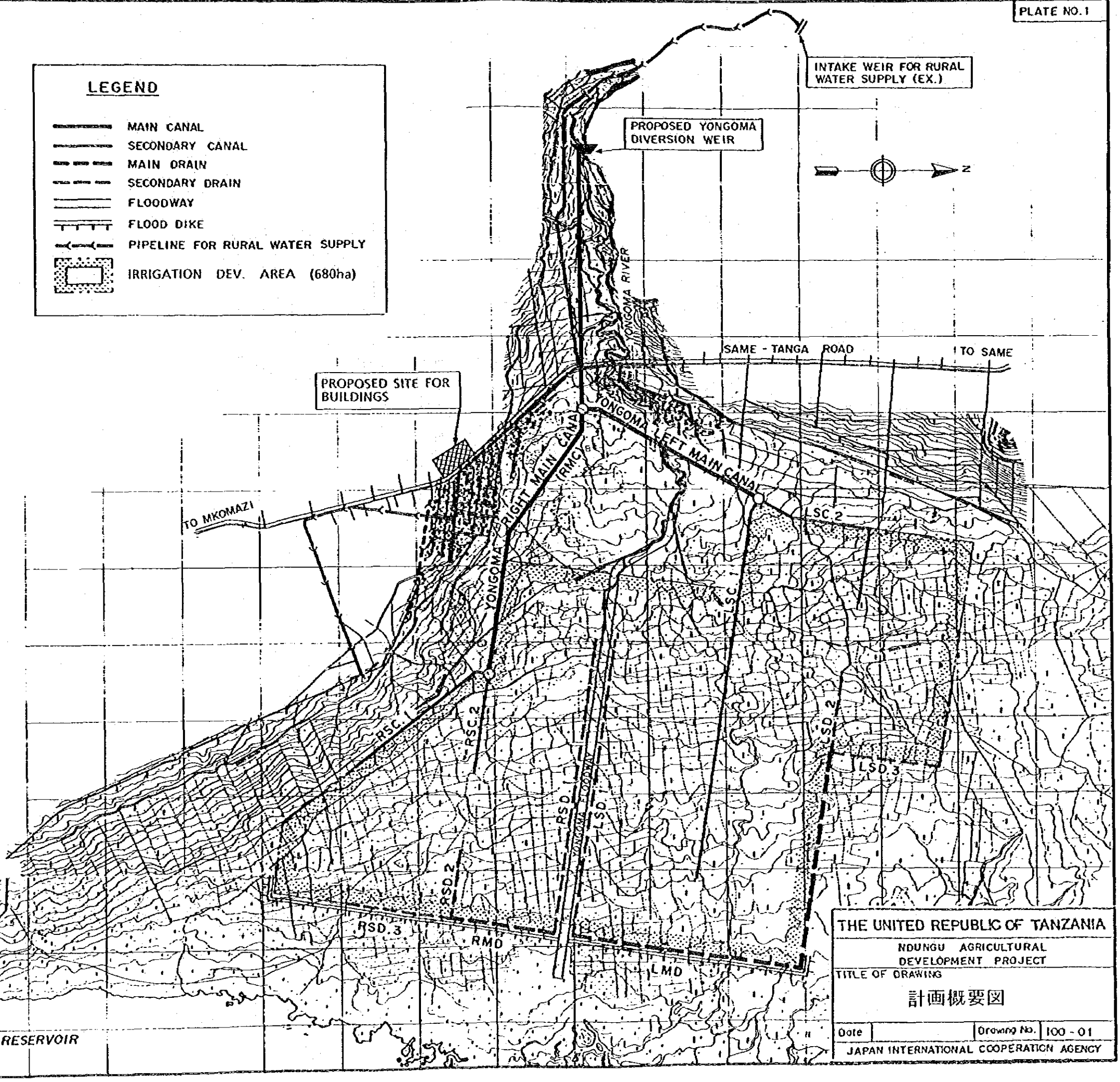
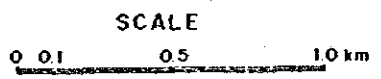
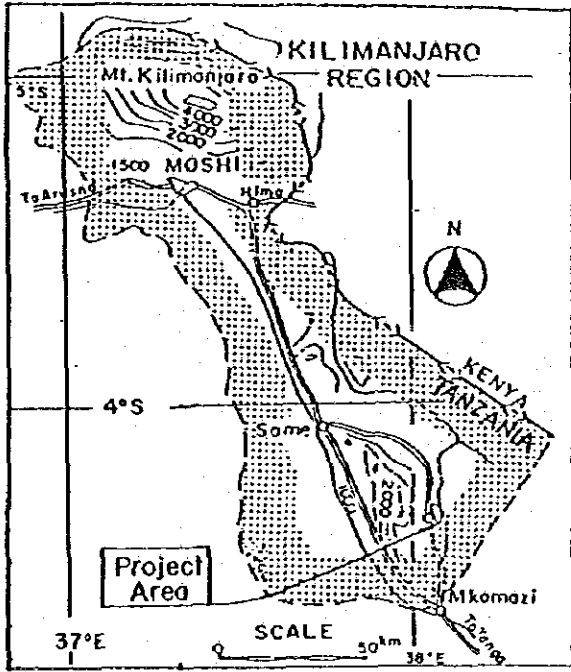
番号	図面番号	タイトル
1	100-01	計画概要図
2	100-02	一般平面図
— 灌溉・排水組織 —		
3	200-01	ヨンゴマ頭首工 (1/2)
4	200-02	ヨンゴマ頭首工 (2/2)
5	200-03	標準断面図
6	200-04	右岸幹線水路縦断図 (1/2)
7	200-05	右岸幹線水路縦断図 (2/2)
8	200-06	左岸幹線水路縦断図
9	200-07	二次用水路縦断図
10	200-08	幹線・二次排水路縦断図
11	200-09	ヨンゴマ川洪水排水路縦断図
12	200-10	幹線農道及び洪水防御堤縦断図
13	200-11	構造物配置図
14	200-12	水路ライニング詳細図 (1/2)
15	200-13	水路ライニング詳細図 (2/2)
16	200-14	調整施設及び分水工
17	200-15	余水吐及び量水施設
18	200-16	水路橋及び道路橋
19	200-17	用水路落差工及びカルバート
20	200-18	排水路横断工及びカルバート
21	200-19	排水ゲート及び道路橋
22	200-20	ゲート詳細図 (1/2)
23	200-21	ゲート詳細図 (2/2)
24	200-22	排水路落差工
25	200-23	歩道橋及びその他
26	200-24	標準圃場区画図
27	200-25	圃場整備構造物

番号	図面番号	タイトル
— 建築 —		
28	300 - 01	建物配置図
29	300 - 02	O&M 事務棟
30	300 - 03	O&M 用機械修理作業場
31	300 - 04	多目的倉庫
32	300 - 05	乾燥棟
33	300 - 06	精米棟及び守衛所
34	300 - 07	O&M 関係宿泊棟及び収穫後処理管理事務棟
— 飲雑用水供給組織 —		
35	400 - 01	飲雑用水供給施設配置図
36	400 - 02	飲雑用水供給施設工 (1/2)
37	400 - 03	飲雑用水供給施設工 (2/2)

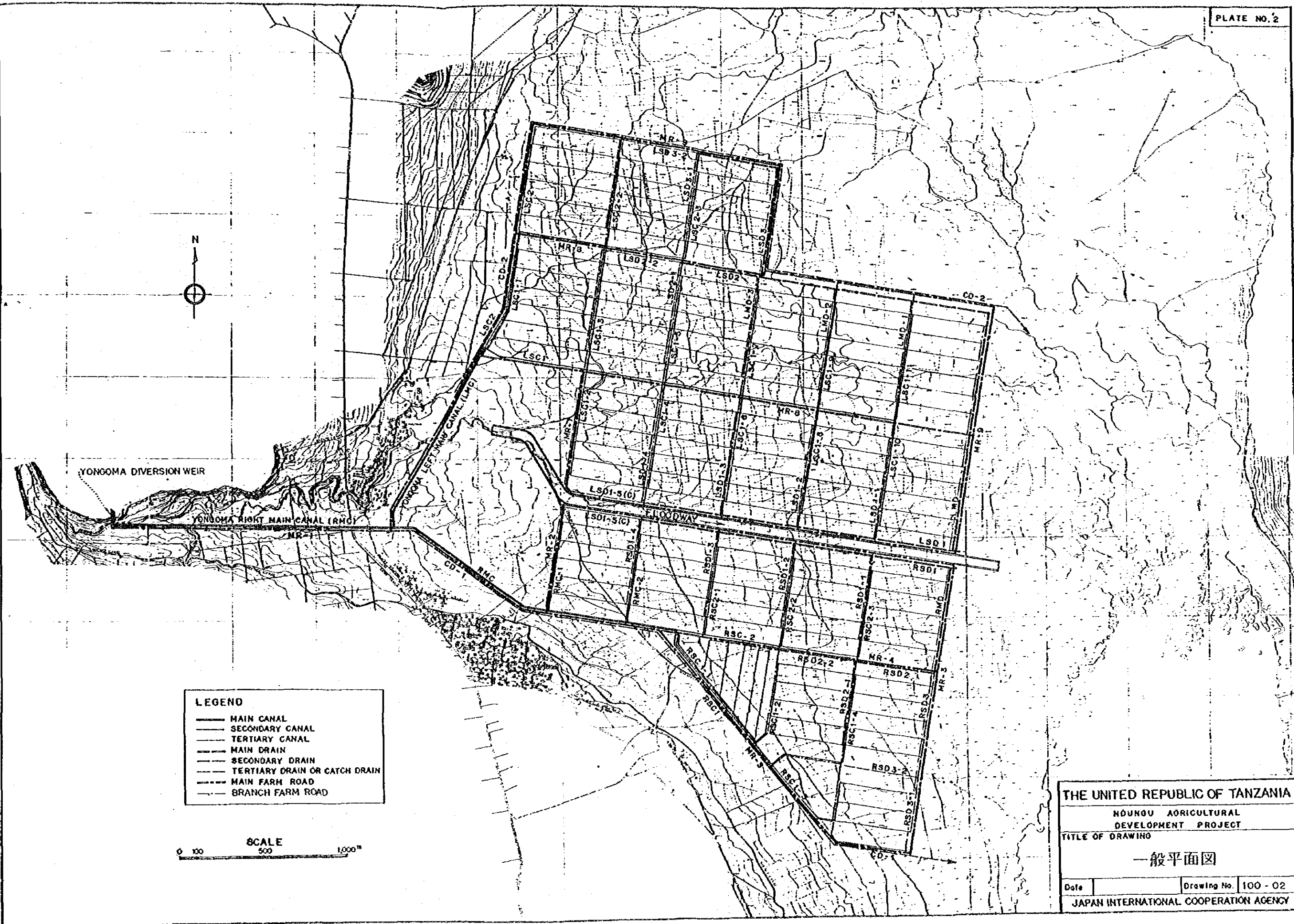


**LEGEND**

- MAIN CANAL
- SECONDARY CANAL
- MAIN DRAIN
- SECONDARY DRAIN
- FLOODWAY
- FLOOD DIKE
- PIPELINE FOR RURAL WATER SUPPLY
- ▨ IRRIGATION DEV. AREA (680ha)



THE UNITED REPUBLIC OF TANZANIA  
 NDUNGU AGRICULTURAL DEVELOPMENT PROJECT  
 TITLE OF DRAWING  
 計画概要図  
 Date \_\_\_\_\_ Drawing No. 100-01  
 JAPAN INTERNATIONAL COOPERATION AGENCY

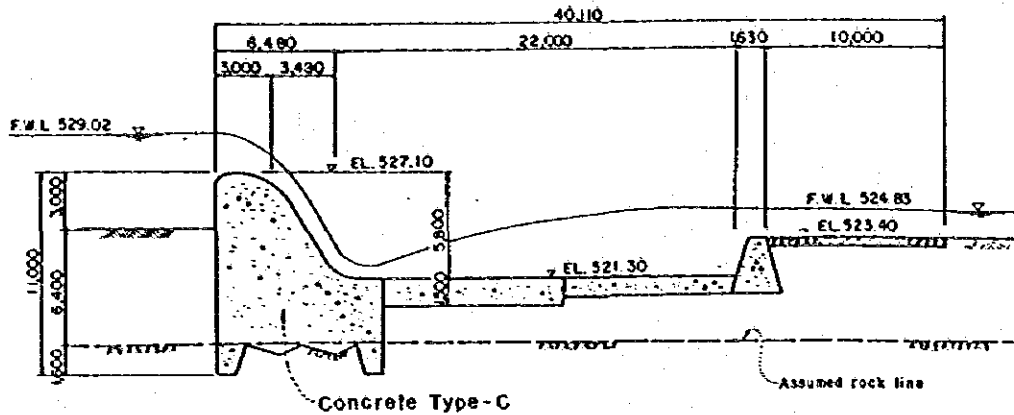
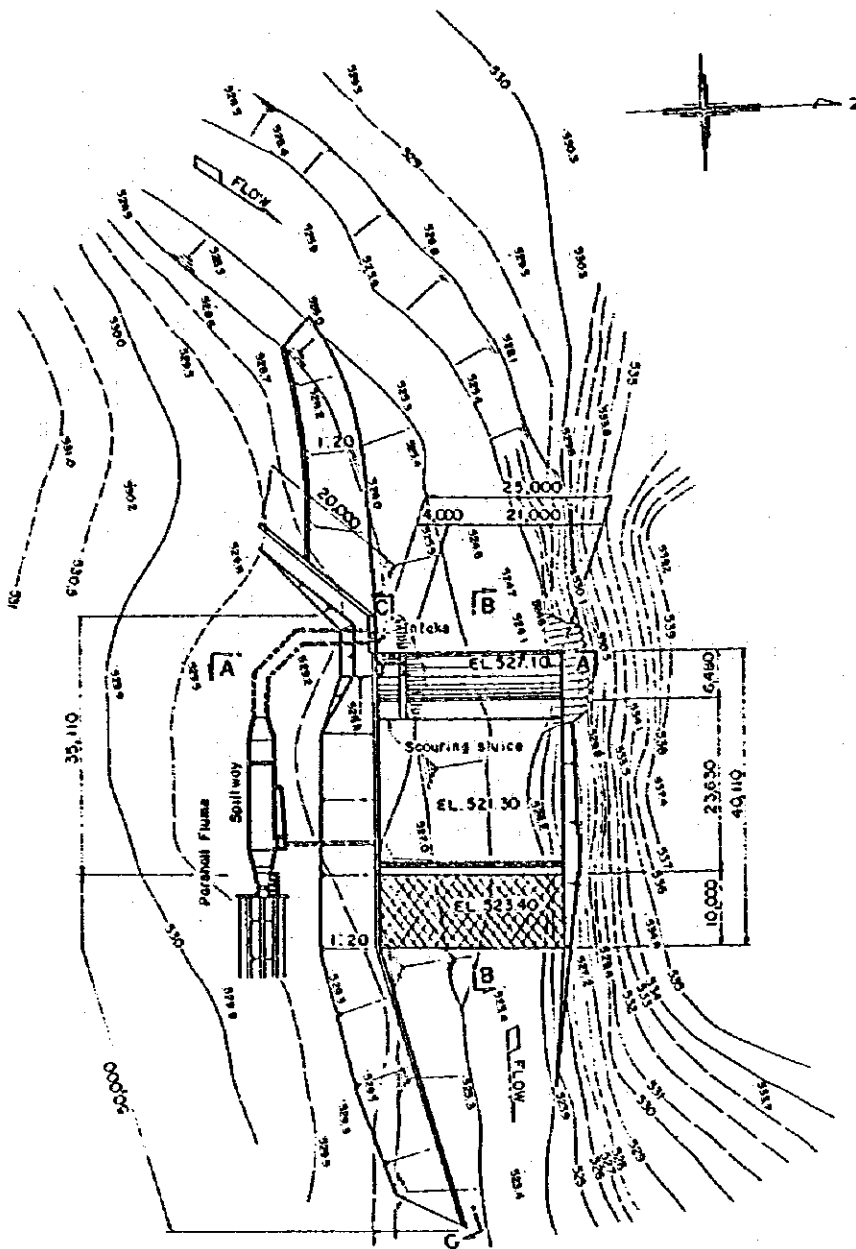


**LEGEND**

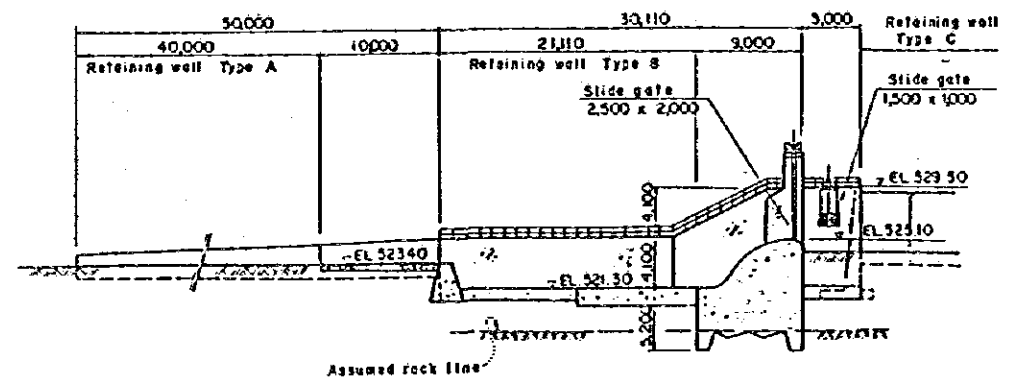
- MAIN CANAL
- SECONDARY CANAL
- TERTIARY CANAL
- MAIN DRAIN
- SECONDARY DRAIN
- TERTIARY DRAIN OR CATCH DRAIN
- MAIN FARM ROAD
- BRANCH FARM ROAD



THE UNITED REPUBLIC OF TANZANIA  
 HOUNGU AGRICULTURAL  
 DEVELOPMENT PROJECT  
 TITLE OF DRAWING  
 一般平面図  
 Date \_\_\_\_\_ Drawing No. 100 - 02  
 JAPAN INTERNATIONAL COOPERATION AGENCY

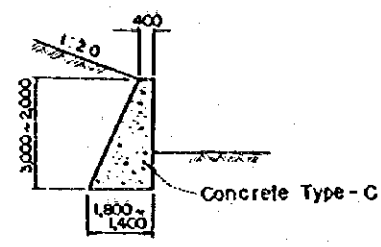


SECTION 8-B

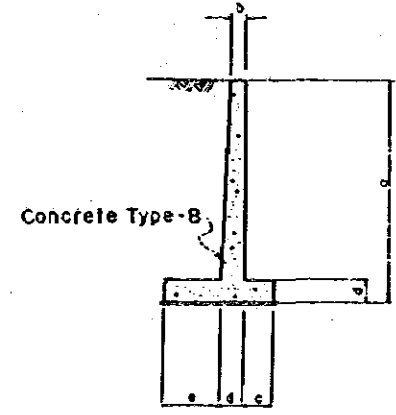


SECTION C-C

RETAINING WALL



TYPE A

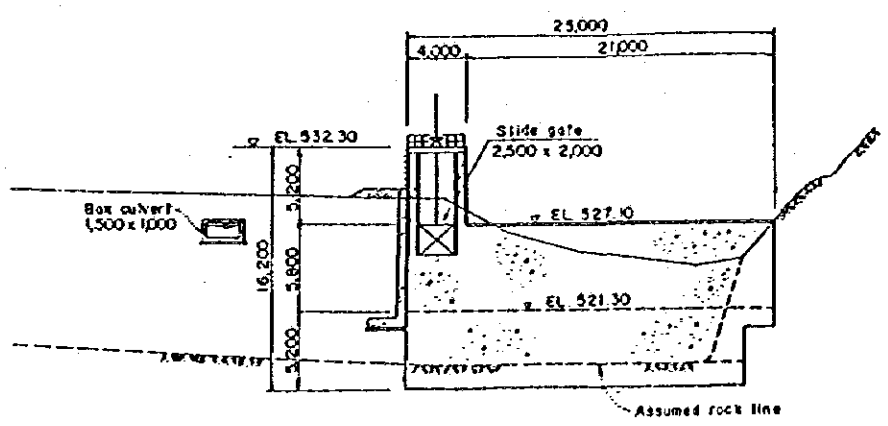


TYPE B

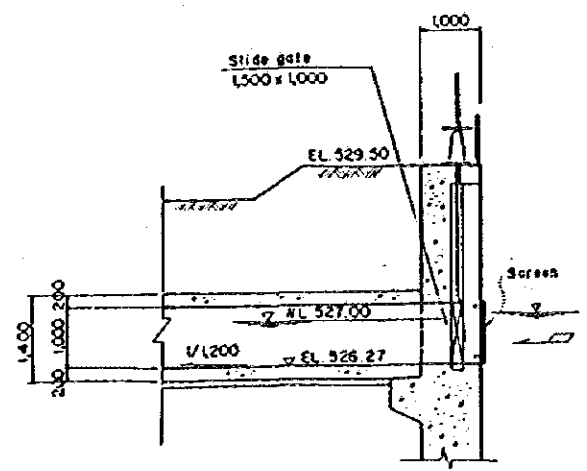
TYPE	a	b	c	d	e
B-1	9,200-6,500	400	1,000-500	700-500	1,800-1,000
B-2	9,200	1,000	1,000	1,000	1,500
B-3	9,200	400	-	600	2,000
B-4	9,200-5,100	400	-	600	2,000
B-5	5,100	350	-	500	1,500

(mm)

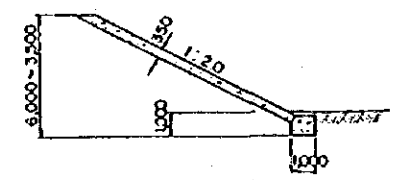
PLAN



SECTION A-A



INTAKE GATE



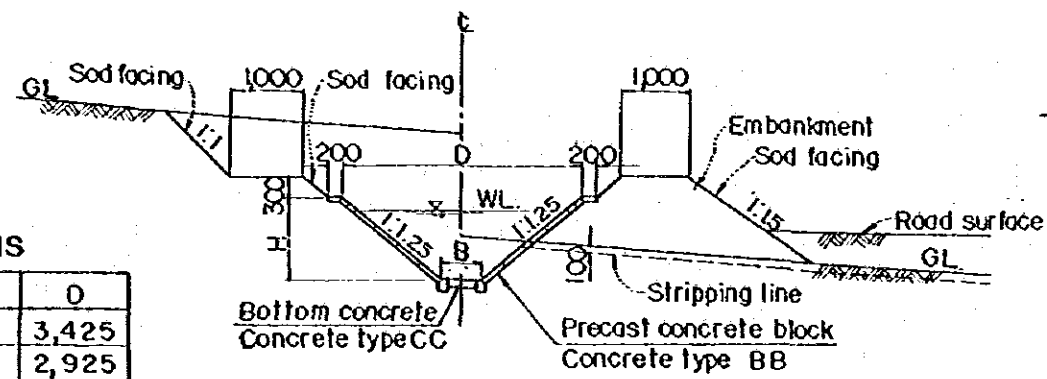
TYPE C

THE UNITED REPUBLIC OF TANZANIA  
 NDUNGU AGRICULTURAL DEVELOPMENT PROJECT  
 TITLE OF DRAWING  
 ヨンゴマ頭首工 (1/2)  
 Date \_\_\_\_\_ Drawing No. 200-01  
 JAPAN INTERNATIONAL COOPERATION AGENCY



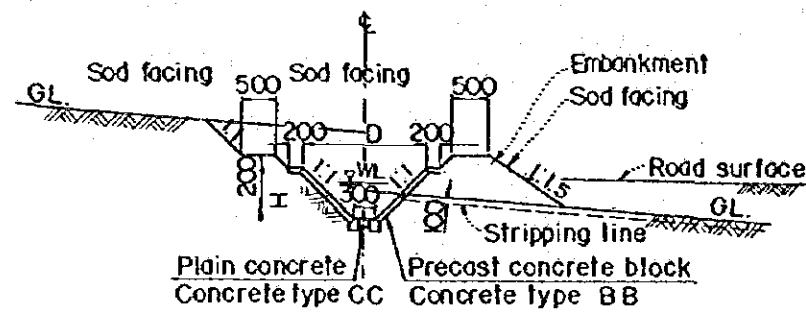


### IRRIGATION CANAL



DIMENSIONS

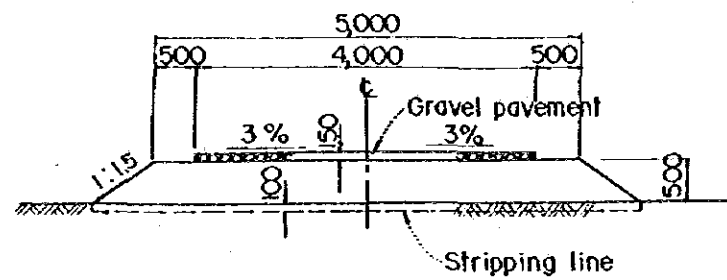
TYPE	B	H	D
A	600	1,130	3,425
B	500	970	2,925
C	400	780	2,350



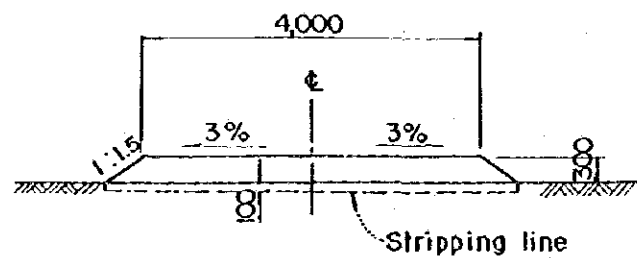
DIMENSIONS

TYPE	H	D
D1	660	1,620
D2	550	1,400
D3	440	1,180

### FARM ROAD

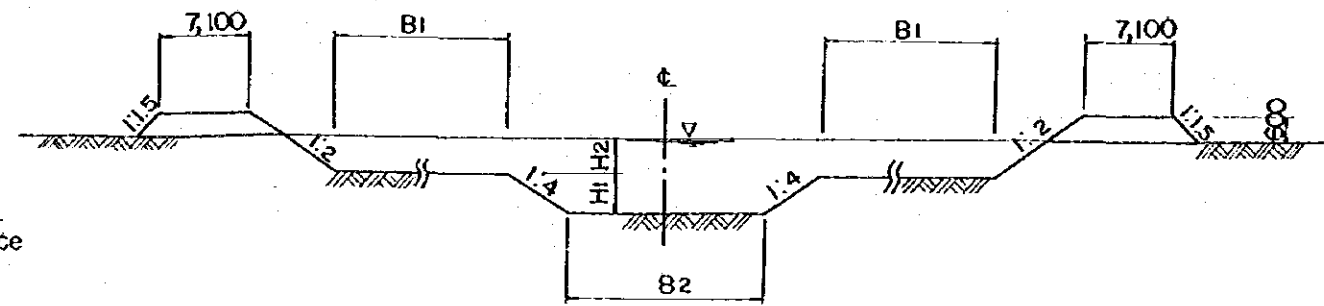


### MAIN FARM ROAD

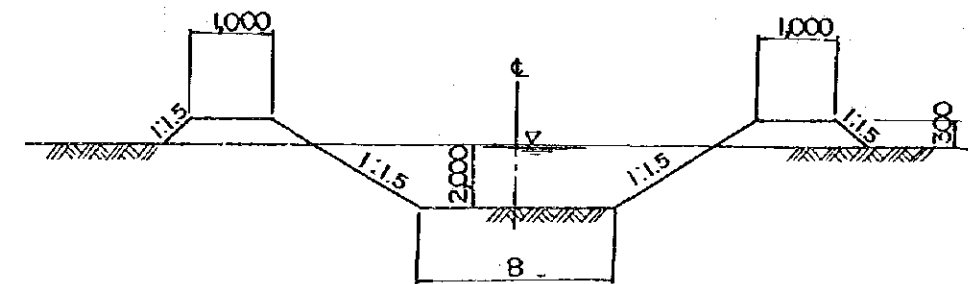


### BRANCH FARM ROAD

### FLOODWAY & DRAINAGE CANAL

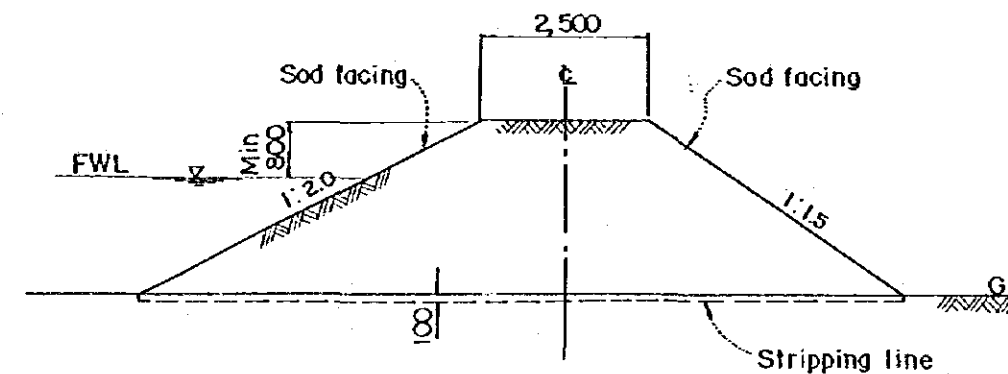


### FLOODWAY



### MAIN & SECONDARY DRAINAGE CANAL

### FLOOD DIKE



THE UNITED REPUBLIC OF TANZANIA

NDUNGU AGRICULTURAL  
DEVELOPMENT PROJECT

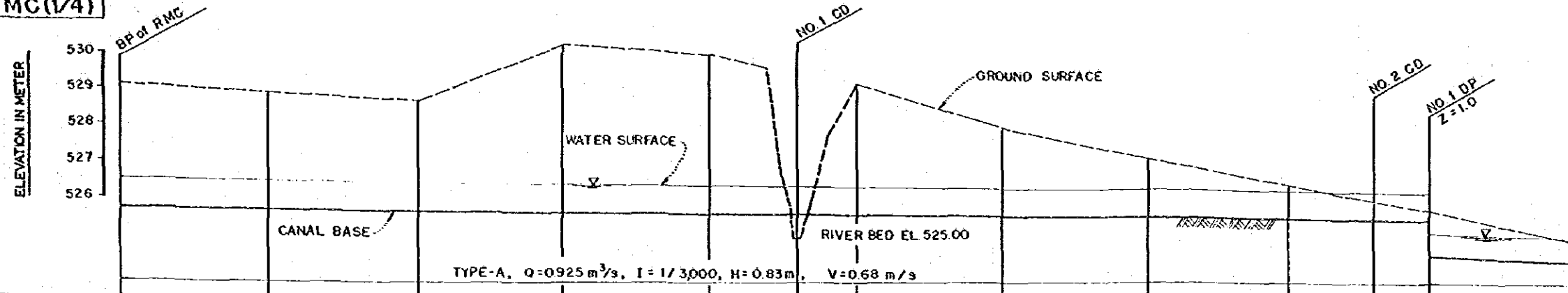
TITLE OF DRAWING

標準断面図

Date Drawing No. 200-03

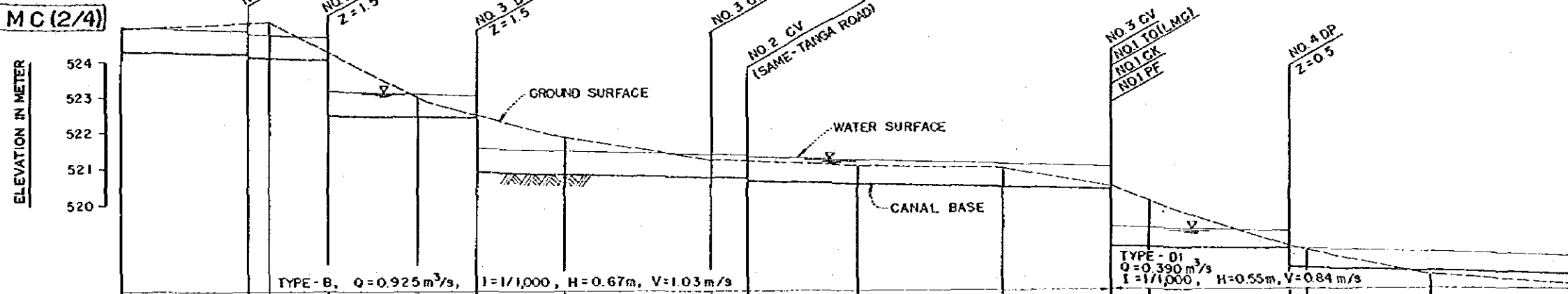
JAPAN INTERNATIONAL COOPERATION AGENCY

RMC (1/4)



CANAL BASE ELEVATION	525.82	525.79	525.75	525.72	525.69	525.67	525.65	525.62	525.63	525.55	525.53	525.52	524.52	524.42
WATER SURFACE ELEVATION	526.65	526.62	526.58	526.55	526.52	526.50	526.48	526.45	526.46	526.39	526.36	526.35	525.09	524.42
GROUND SURFACE ELEVATION	529.20	529.0	529.8	530.4	530.1	529.6	529.3	528.1	527.2	526.5	526.1	525.8	525.0	524.42
REDUCED DISTANCE	0	100	200	300	400	460	500	600	700	800	860	900	1,000	1,000
DISTANCE	0	100	100	100	100	60	40	100	100	100	60	40	100	100
STATION	0	1	2	3	4	4+60	5	6	7	8	8+60	9	10	10
HORIZONTAL CURVE														

RMC (2/4)



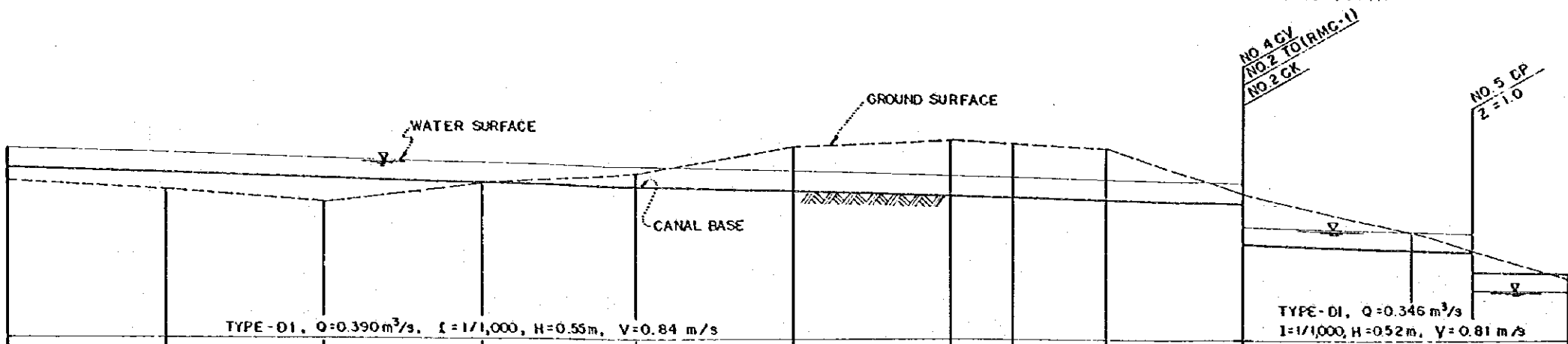
CANAL BASE ELEVATION	524.42	524.33	524.25	524.19	522.63	522.59	521.03	520.93	520.74	520.64	520.57	518.97	518.27	518.17
WATER SURFACE ELEVATION	525.09	525.00	524.92	524.86	523.30	523.26	521.70	521.60	521.41	521.31	521.24	519.42	518.82	518.17
GROUND SURFACE ELEVATION	525.0	525.20	525.20	524.40	523.10	522.60	522.0	521.4	521.2	521.1	520.60	520.20	518.90	517.8
REDUCED DISTANCE	1,000	1,085	1,100	1,140	1,200	1,240	1,300	1,400	1,425	1,500	1,600	1,675	1,700	1,800
DISTANCE	100	85	15	40	60	40	60	100	25	75	100	75	25	100
STATION	10	10+85	11	11+40	12	12+40	13	14	14+25	15	16	16+75	17	18
HORIZONTAL CURVE														

IP.1  
IA=35-00-00

THE UNITED REPUBLIC OF TANZANIA  
 NDUNGU AGRICULTURAL DEVELOPMENT PROJECT  
 TITLE OF DRAWING  
 右岸幹線水路縦断面図 (1/2)  
 Date \_\_\_\_\_ Drawing No. 200-04  
 JAPAN INTERNATIONAL COOPERATION AGENCY

RMC(3/4)

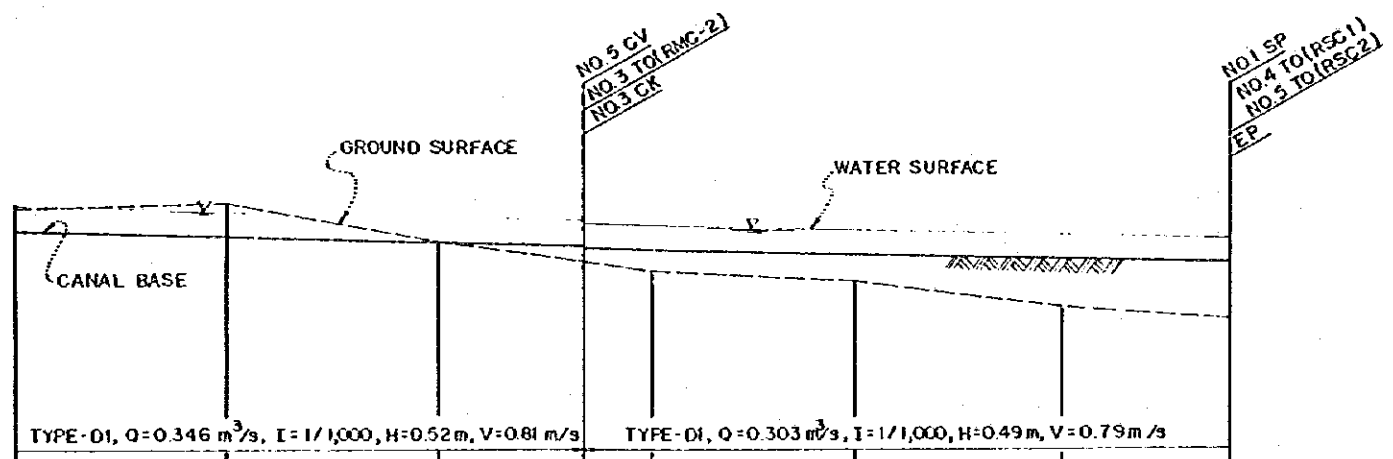
ELEVATION IN METER



CANAL BASE ELEVATION	518.17	518.07	517.97	517.87	517.77	517.67	517.57	517.53	517.47	517.38	516.22	516.12	516.08	515.08	515.02
WATER SURFACE ELEVATION	518.72	518.62	518.52	518.42	518.32	518.22	518.12	518.08	518.02	517.93	516.74	516.64	516.60	515.60	515.54
GROUND SURFACE ELEVATION	517.80	517.80	517.30	517.80	518.10	518.80	519.00	519.90	518.80	517.70	517.50	516.70	516.20	516.20	515.50
REDUCED DISTANCE	2,000	2,100	2,200	2,300	2,400	2,500	2,600	2,640	2,700	2,790	2,900	2,900	2,940	3,000	
DISTANCE	100	100	100	100	100	100	100	40	60	90	100	100	40	60	
STATION	20	21	22	23	24	25	26	26+40	27	27+90	28	29	29+40	30	
HORIZONTAL CURVE	IA = 26 - 30 - 00 IP.2														

RMC(4/4)

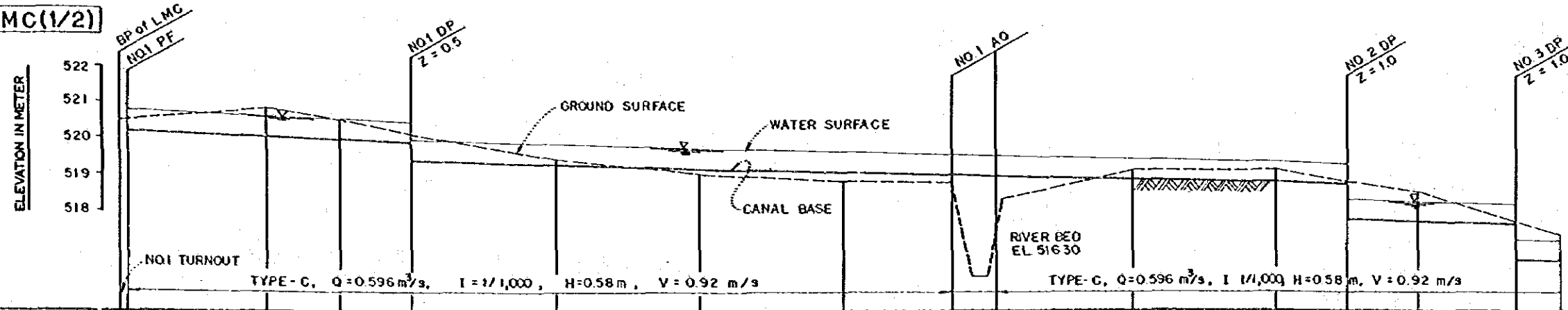
ELEVATION IN METER



CANAL BASE ELEVATION	515.02	514.92	514.82	514.75	514.70	514.60	514.50	514.42
WATER SURFACE ELEVATION	515.54	515.44	515.34	515.27	515.19	515.09	514.99	514.91
GROUND SURFACE ELEVATION	515.50	515.60	514.90	514.50	514.30	514.10	513.60	513.40
REDUCED DISTANCE	3,000	3,100	3,200	3,270	3,300	3,400	3,500	3,580
DISTANCE	60	100	100	70	30	100	100	80
STATION	30	31	32	32+70	33	34	35	35+80
HORIZONTAL CURVE								

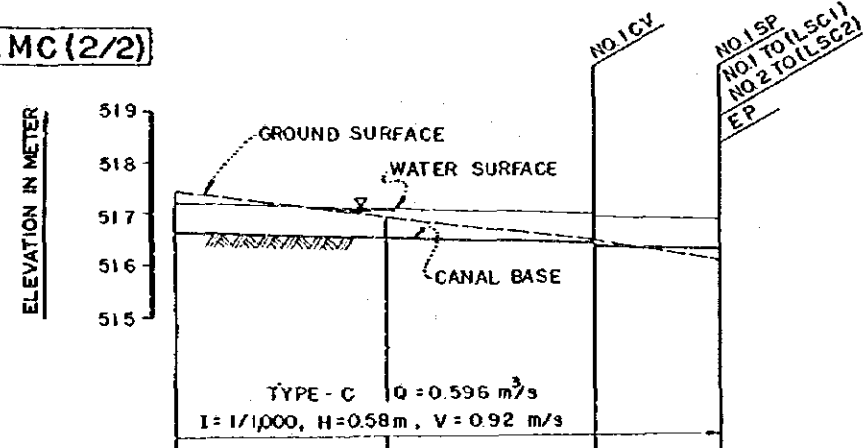
THE UNITED REPUBLIC OF TANZANIA  
 NDUNGU AGRICULTURAL DEVELOPMENT PROJECT  
 TITLE OF DRAWING  
 右岸幹線水路縦断図 (2/2)  
 Date \_\_\_\_\_ Drawing No. 200 - 05  
 JAPAN INTERNATIONAL COOPERATION AGENCY

LMC(1/2)



CANAL BASE ELEVATION	520.25	520.16	520.11	520.06	519.46	519.36	519.26	519.18	519.15	519.07	518.97	518.91	518.86	517.79	516.76
WATER SURFACE ELEVATION	520.83	520.74	520.69	520.64	520.04	519.94	519.84	519.76	519.74	519.65	519.55	519.49	518.44	517.34	516.76
GROUND SURFACE ELEVATION	520.60	520.60	520.70	520.30	519.60	519.20	519.00	518.30	518.30	519.30	519.30	519.00	518.70	517.90	517.50
REDUCED DISTANCE	0	100	150	200	300	400	500	575	600	700	800	850	900	970	1,000
DISTANCE	0	90	50	50	100	100	100	75	25	95	100	50	50	70	30
STATION	0+0	1	1+50	2	3	4	5	5+75	6	7	8	8+50	9	9+70	10
HORIZONTAL CURVE	 1% LA = 30-00-00														

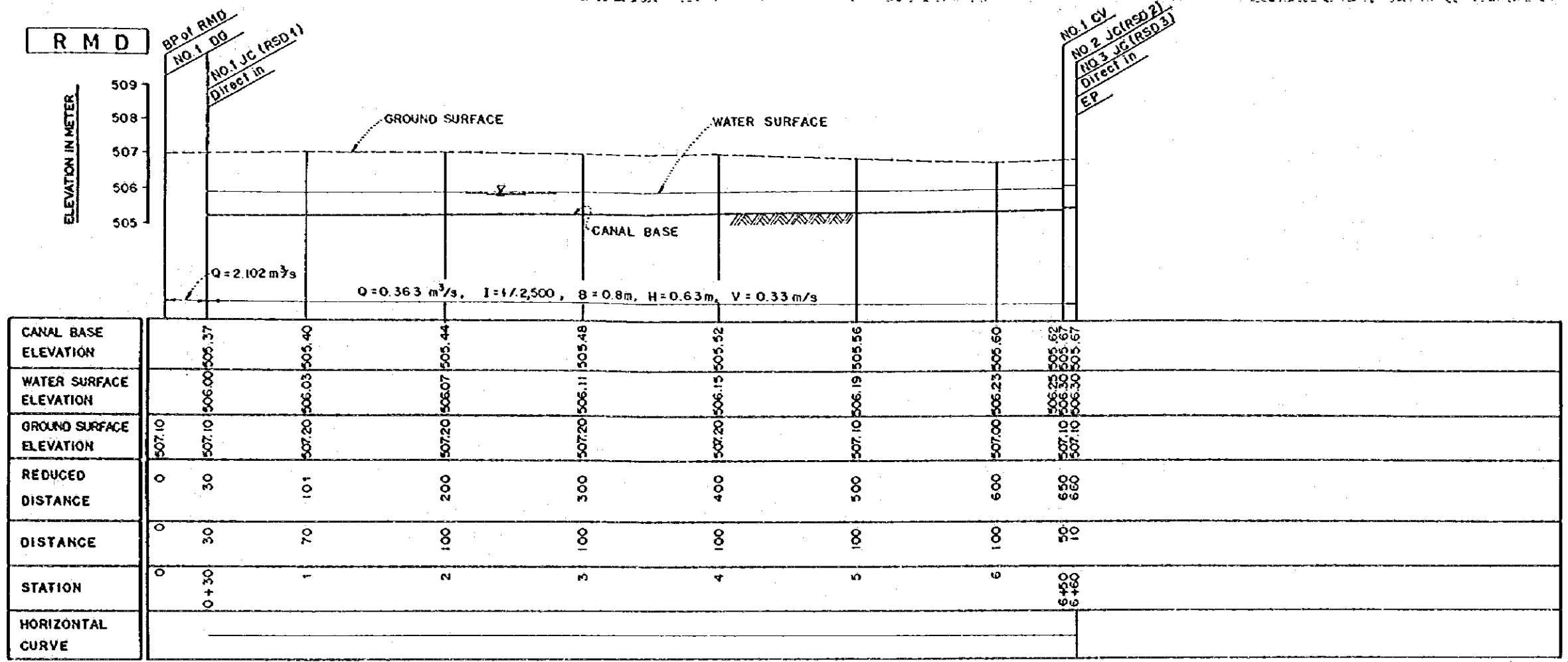
LMC(2/2)



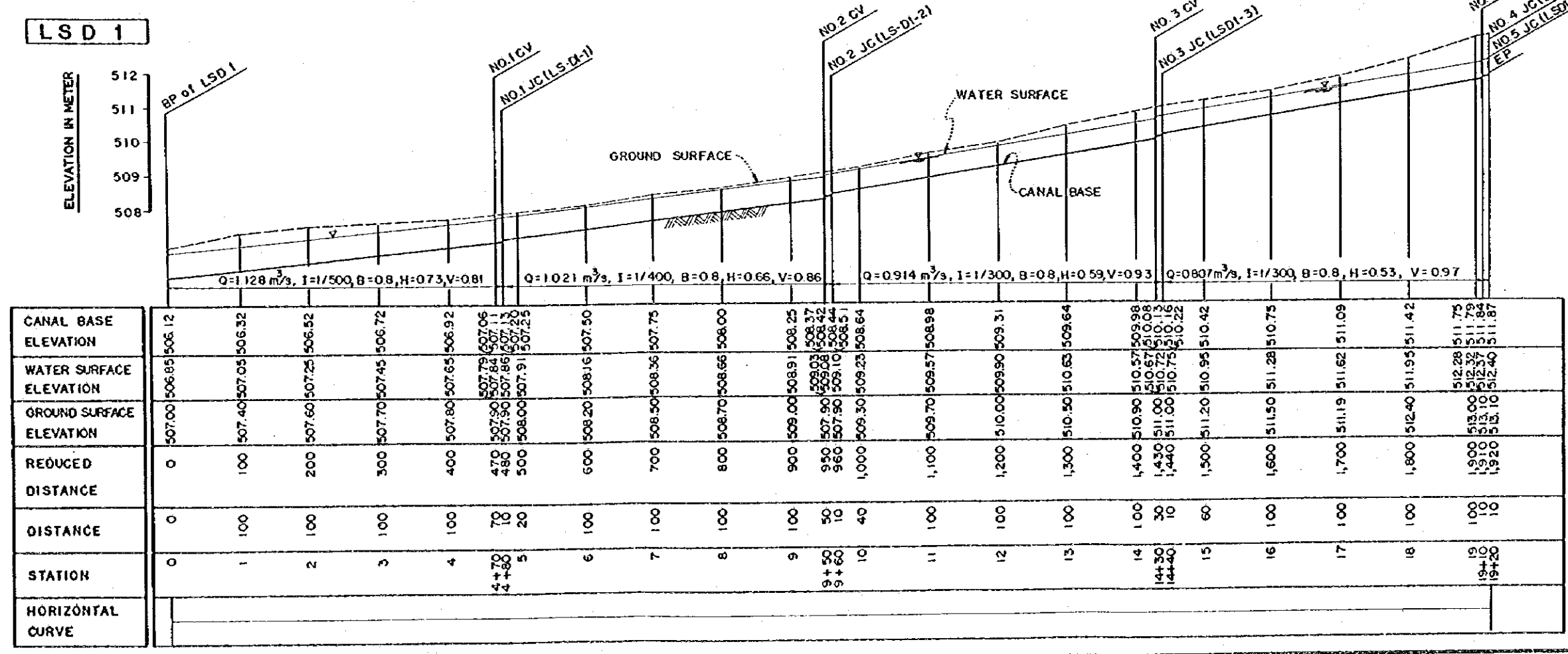
CANAL BASE ELEVATION	516.76	516.66	516.56	516.42
WATER SURFACE ELEVATION	517.34	517.24	517.14	517.00
GROUND SURFACE ELEVATION	517.5	517.00	516.60	516.20
REDUCED DISTANCE	1,000	1,000	1,200	1,260
DISTANCE	30	100	100	60
STATION	10	11	12	12+60
HORIZONTAL CURVE				

THE UNITED REPUBLIC OF TANZANIA  
 NDUNGU AGRICULTURAL DEVELOPMENT PROJECT  
 TITLE OF DRAWING  
 左岸幹線水路縦断面図  
 Date \_\_\_\_\_ Drawing No. 200-06  
 JAPAN INTERNATIONAL COOPERATION AGENCY





CANAL BASE ELEVATION	505.37	505.40	505.44	505.48	505.52	505.56	505.60	505.62	505.67	505.67
WATER SURFACE ELEVATION	506.00	506.03	506.07	506.11	506.15	506.19	506.23	506.25	506.30	506.30
GROUND SURFACE ELEVATION	507.10	507.20	507.20	507.20	507.20	507.10	507.00	506.25	507.10	507.10
REDUCED DISTANCE	0	30	101	200	300	400	500	600	650	660
DISTANCE	0	30	70	100	100	100	100	100	50	10
STATION	0	0+30	1	2	3	4	5	6	6+50	6+60
HORIZONTAL CURVE										

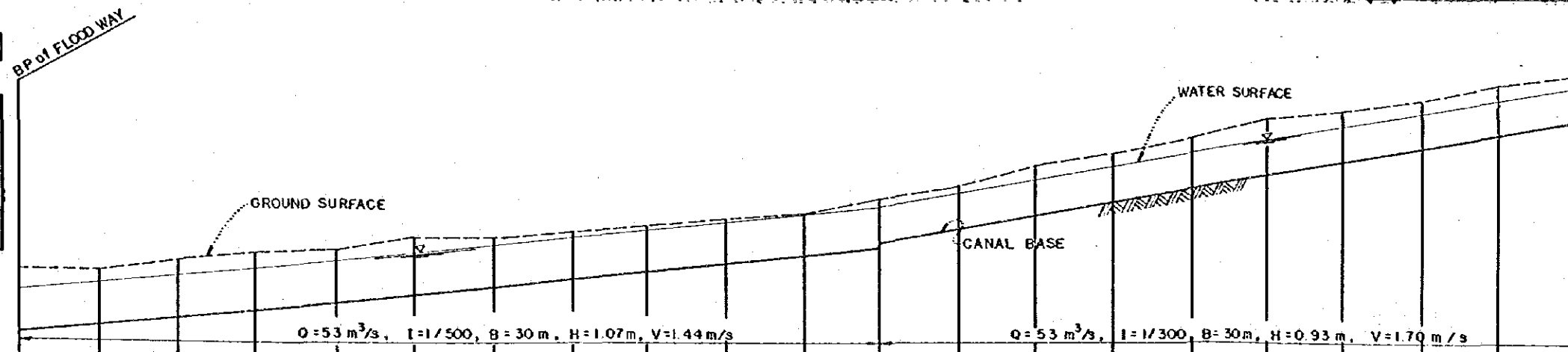


CANAL BASE ELEVATION	506.12	506.32	506.52	506.72	506.92	507.06	507.11	507.13	507.20	507.25	507.50	507.75	508.00	508.25	508.37	508.42	508.44	508.51	508.64	508.98	509.31	509.64	509.98	510.08	510.13	510.16	510.22	510.42	510.75	511.09	511.42	511.75	511.79	511.84	511.87	
WATER SURFACE ELEVATION	506.85	507.05	507.25	507.45	507.65	507.79	507.84	507.86	507.91	507.95	508.16	508.36	508.66	508.91	509.03	509.08	509.10	509.16	509.23	509.57	509.90	509.90	510.63	510.77	510.82	510.85	510.95	511.20	511.28	511.62	511.95	511.42	512.28	512.33	512.37	512.40
GROUND SURFACE ELEVATION	507.00	507.40	507.60	507.70	507.80	507.90	507.90	507.90	508.00	508.00	508.20	508.50	508.70	509.00	509.30	509.30	509.30	509.30	509.30	509.70	509.70	510.00	510.50	510.90	511.00	511.00	511.00	511.20	511.50	511.19	511.62	511.95	512.28	513.00	513.10	513.10
REDUCED DISTANCE	0	100	200	300	400	470	480	490	500	600	700	800	900	950	960	1,000	1,100	1,200	1,300	1,400	1,430	1,440	1,500	1,600	1,700	1,800	1,900	1,920	1,900	1,910	1,920	1,930	1,940	1,950		
DISTANCE	0	100	100	100	100	70	10	20	100	100	100	100	100	50	10	40	100	100	100	100	30	10	60	100	100	100	100	100	100	100	100	100	100	100		
STATION	0	1	2	3	4	4+70	4+80	4+90	5	6	7	8	9	9+50	9+60	10	11	12	13	14	14+30	14+40	15	16	17	18	19	19+20	19+30	19+40	19+50	19+60	19+70	19+80		
HORIZONTAL CURVE																																				

THE UNITED REPUBLIC OF TANZANIA  
 NDURGU AGRICULTURAL DEVELOPMENT PROJECT  
 TITLE OF DRAWING  
 幹線・二次排水路縦断図  
 Date \_\_\_\_\_ Drawing No. 200-08  
 JAPAN INTERNATIONAL COOPERATION AGENCY

FLOOD WAY (1/2)

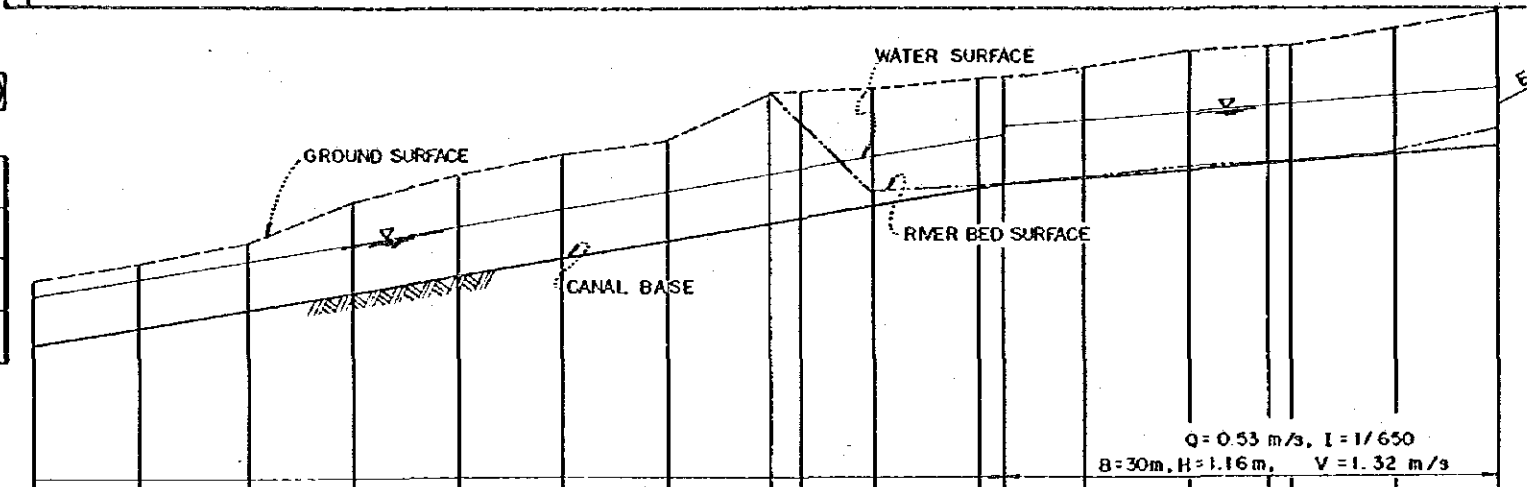
ELEVATION IN METER  
511  
510  
509  
508  
507



CANAL BASE ELEVATION	505.00	505.20	505.40	505.60	505.80	506.00	506.20	506.40	506.60	506.80	507.00	507.20	507.34	507.67	508.00	508.34	508.67	509.01	509.34	509.67	510.01	510.34	
WATER SURFACE ELEVATION	506.07	506.27	506.47	506.67	506.87	507.07	507.27	507.47	507.67	507.87	508.07	508.27	507.34	507.67	508.00	508.34	508.67	509.01	509.34	509.67	510.01	510.34	
GROUND SURFACE ELEVATION	506.60	506.60	506.90	507.10	507.20	507.50	507.50	507.60	507.80	508.00	508.10	508.50	508.80	509.30	509.60	510.00	510.50	510.70	510.90	511.30	511.60	511.60	
REDUCED DISTANCE	0	100	200	300	400	500	600	700	800	900	1,000	1,100	1,200	1,300	1,400	1,500	1,600	1,700	1,800	1,900	2,000		
DISTANCE	0	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
STATION	-3	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17		
HORIZONTAL CURVE																							

FLOODWAY (2/2)

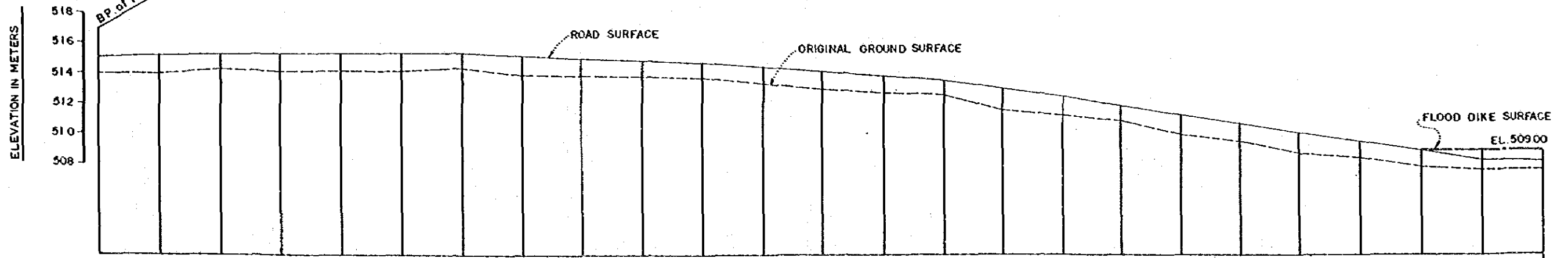
ELEVATION IN METER  
512  
511  
510  
509  
508



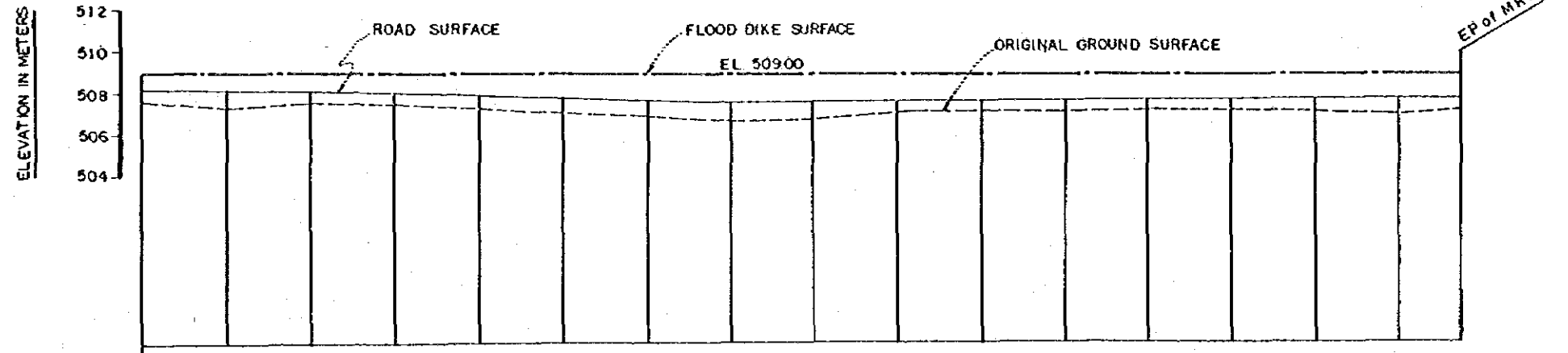
NOTE: ( ) IN GROUND SURFACE MEANS RIVER BED ELEVATION

CANAL BASE ELEVATION	510.34	510.67	511.01	511.34	511.67	512.01	512.34	512.67	512.77	513.01	513.34	513.42	513.69	513.81	513.84	514.00	514.15	
WATER SURFACE ELEVATION	511.27	511.60	511.94	512.27	512.60	512.94	513.27	513.60	513.70	513.94	514.27	514.35	514.85	514.97	515.00	515.16	515.31	
GROUND SURFACE ELEVATION	511.60	511.90	512.30	513.10	513.60	514.00	514.30	515.20	515.20	515.30	515.50	515.50	516.00	516.10	516.10	516.50	516.80	
REDUCED DISTANCE	2,000	2,100	2,200	2,300	2,400	2,500	2,600	2,700	2,730	2,800	2,900	2,925	3,000	3,100	3,180	3,200	3,300	3,400
DISTANCE	100	100	100	100	100	100	100	100	30	70	100	25	100	80	20	100	100	
STATION	17	18	19	20	21	22	23	24	24+30	25	26	26+25	27	28	28+80	29	30	31
HORIZONTAL CURVE	<p style="text-align: center;">IP.1 IA = 50-00-00</p> <p style="text-align: center;">IP.2 IA = 50-00-00</p>																	

THE UNITED REPUBLIC OF TANZANIA  
 NDUNGU AGRICULTURAL DEVELOPMENT PROJECT  
 TITLE OF DRAWING  
 ヨンゴマ川洪水排水路縦断図  
 Date \_\_\_\_\_ Drawing No. 200-09  
 JAPAN INTERNATIONAL COOPERATION AGENCY



ROAD SURFACE ELEVATION	515.00	515.15	515.30	515.35	515.40	515.45	515.50	515.35	515.20	515.05	514.90	514.60	514.30	514.00	513.70	513.15	512.57	512.00	511.40	510.80	510.20	509.60	509.00	508.35	508.25
GROUND SURFACE ELEVATION	513.9	513.9	514.3	514.2	514.3	514.3	514.5	514.1	514.1	514.0	513.9	513.5	513.1	512.9	512.7	511.7	511.3	511.0	510.1	509.6	508.8	508.5	507.9	507.7	507.6
REDUCED DISTANCE	0	100	200	300	400	500	600	700	800	900	1,000	1,100	1,200	1,300	1,400	1,500	1,600	1,700	1,800	1,900	2,000	2,100	2,200	2,300	2,400
DISTANCE	0	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
STATION NO.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24



ROAD SURFACE ELEVATION	508.25	508.18	508.10	508.00	507.90	507.80	507.70	507.60	507.65	507.70	507.70	507.70	507.70	507.70	507.70	507.70	507.70	507.70	507.70	507.70	507.70	507.70	507.70	507.70	507.70
GROUND SURFACE ELEVATION	507.6	507.3	507.6	507.5	507.3	507.1	506.9	506.7	506.8	507.1	507.2	507.2	507.2	507.2	507.2	507.2	507.2	507.2	507.1	507.0	507.0	507.2	507.2	507.2	507.2
REDUCED DISTANCE	2,400	2,500	2,600	2,700	2,800	2,900	3,000	3,100	3,200	3,300	3,400	3,500	3,600	3,700	3,800	3,800	3,800	3,800	3,800	3,800	3,870	3,870	3,870	3,870	3,870
DISTANCE	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	70	70	70	70	70
STATION NO.	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48

THE UNITED REPUBLIC OF TANZANIA  
 NOUNGU AGRICULTURAL DEVELOPMENT PROJECT  
 TITLE OF DRAWING  
 幹線農道及び洪水防御堤縦断面図  
 Date \_\_\_\_\_ Drawing No. 200 - 10  
 JAPAN INTERNATIONAL COOPERATION AGENCY



LEGEND

- TURNOUT (TO)
- ⊗ CHECK (CK)
- ⊗ PARSHALL FLUME (PF)
- ⊗ CULVERT (CV)
- ⊗ SPILLWAY (SP)
- ⊗ CROSS DRAIN (CD)
- ⊗ BRIDGE (BR) OR FOOT PATH (FP)
- ⊗ AQUEDUCT (AQ)
- ⊗ DROP (DP)
- ⊗ DRAINAGE GATE (DG)

LEGEND

- MAIN CANAL
- SECONDARY CANAL
- TERTIARY CANAL
- MAIN DRAIN
- SECONDARY DRAIN
- TERTIARY DRAIN OR CATCH DRAIN
- MAIN FARM ROAD
- BRANCH FARM ROAD



THE UNITED REPUBLIC OF TANZANIA

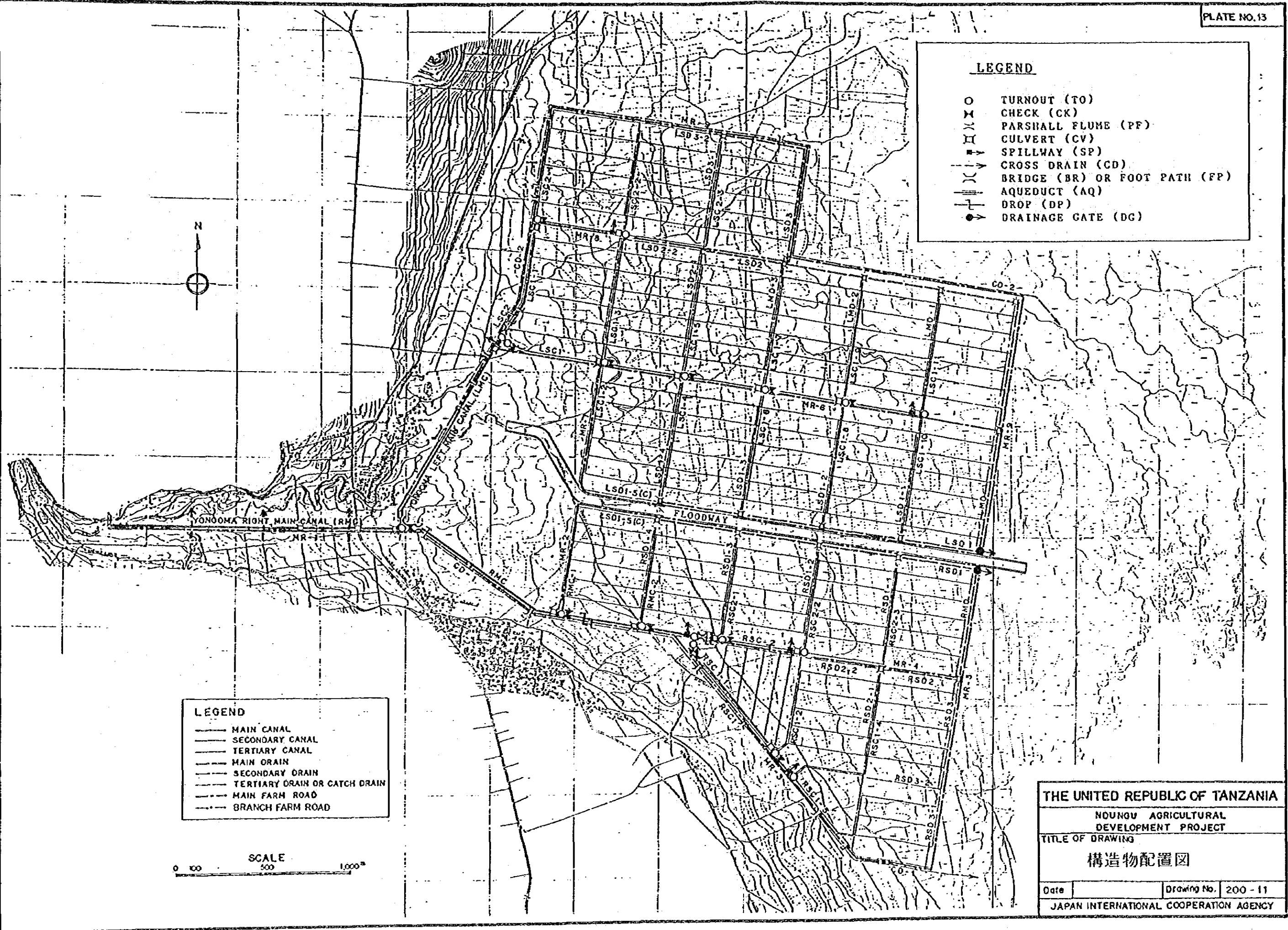
NDUNGU AGRICULTURAL  
DEVELOPMENT PROJECT

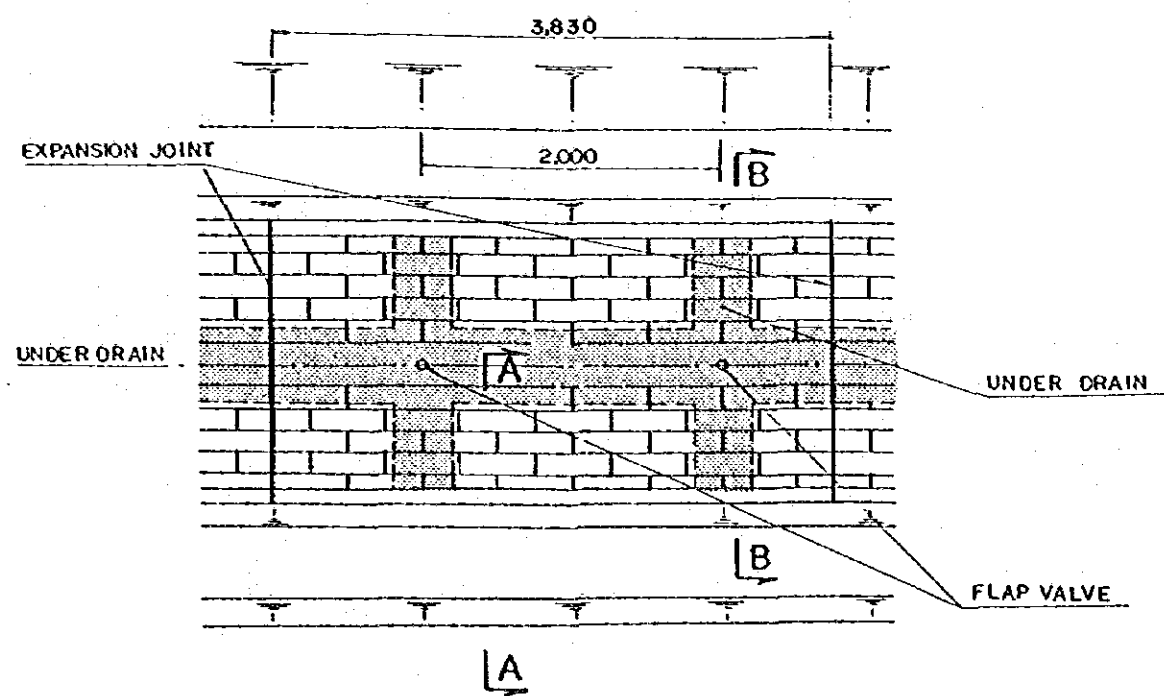
TITLE OF DRAWING

構造物配置図

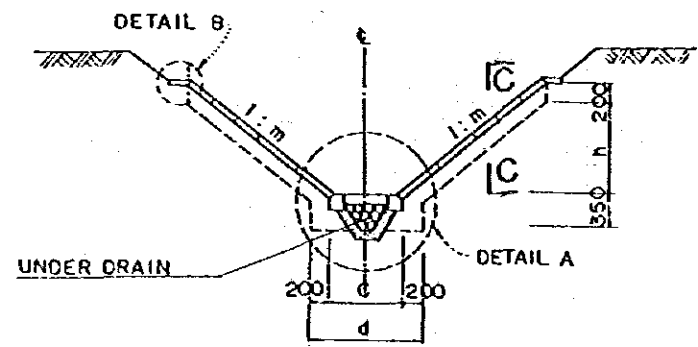
Date Drawing No. 200-11

JAPAN INTERNATIONAL COOPERATION AGENCY

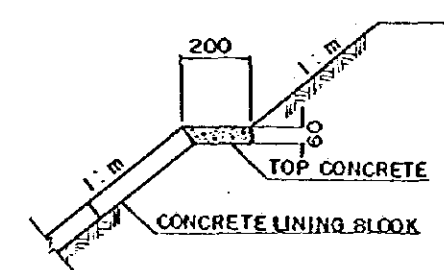




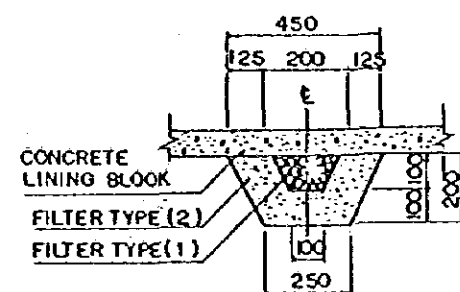
PLAN  
SCALE : A



SECTION B-B  
SCALE : B



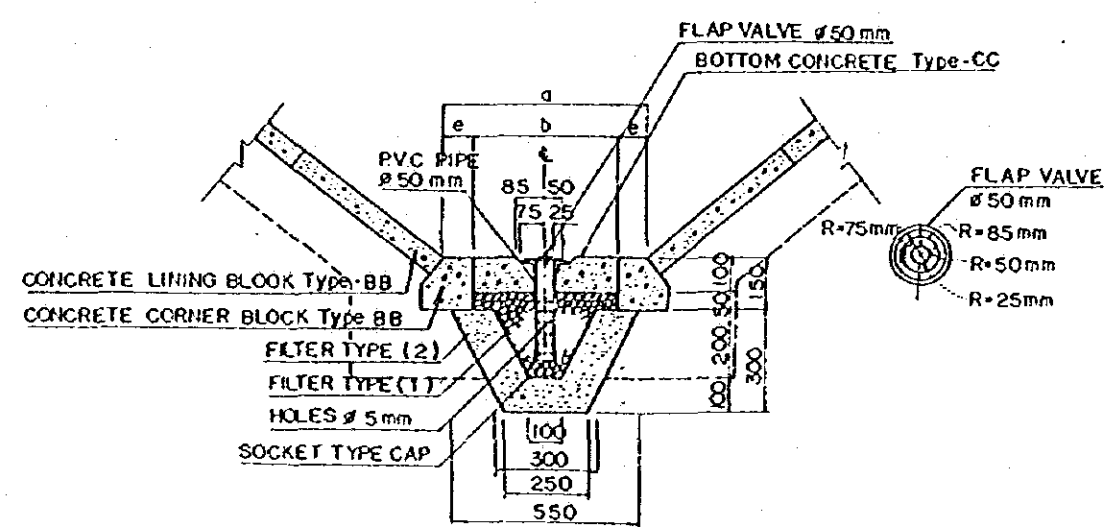
DETAIL B  
SCALE : B



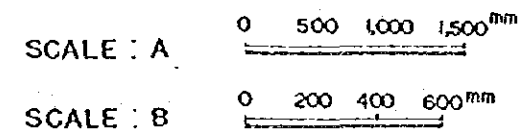
SECTION C-C  
SCALE : B

DIMENSION OF UNDERDRAIN

CANAL TYPE	m	a	b	c	d	e	h
A	1.25	600	420	720	1,120	90	930
B	1.25	500	320	620	1,020	90	770
C	1.25	400	220	520	920	90	580
D1	1.00	300	150	450	850	75	460
D2	1.00	300	150	450	850	75	350
D3	1.00	300	150	450	850	75	240



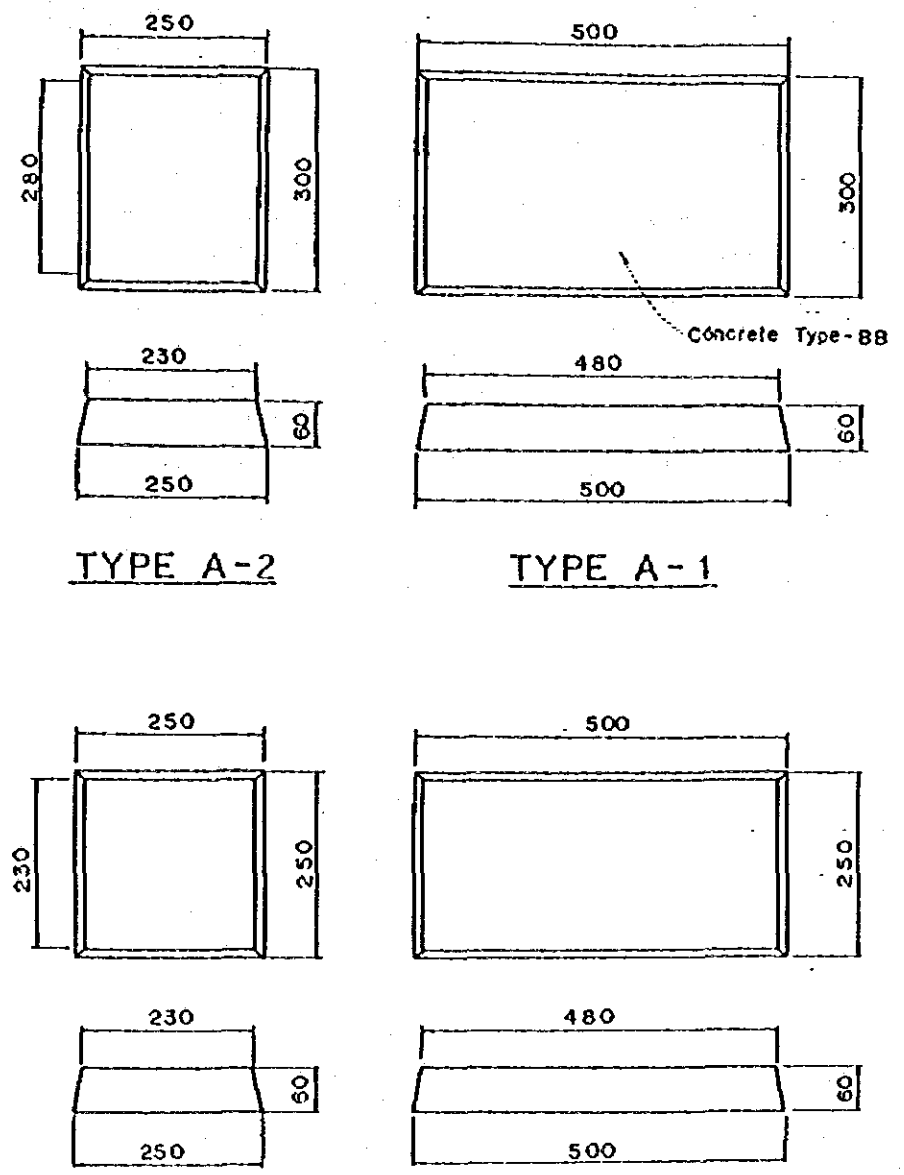
DETAIL A  
SCALE : B



THE UNITED REPUBLIC OF TANZANIA  
 NOUNGU AGRICULTURAL DEVELOPMENT PROJECT  
 TITLE OF DRAWING  
 水路ライニング詳細図 (1/2)  
 Date \_\_\_\_\_ Drawing No. | 200 - 12  
 JAPAN INTERNATIONAL COOPERATION AGENCY

### CONCRETE LINING BLOCK

SCALE : A



TYPE A-2

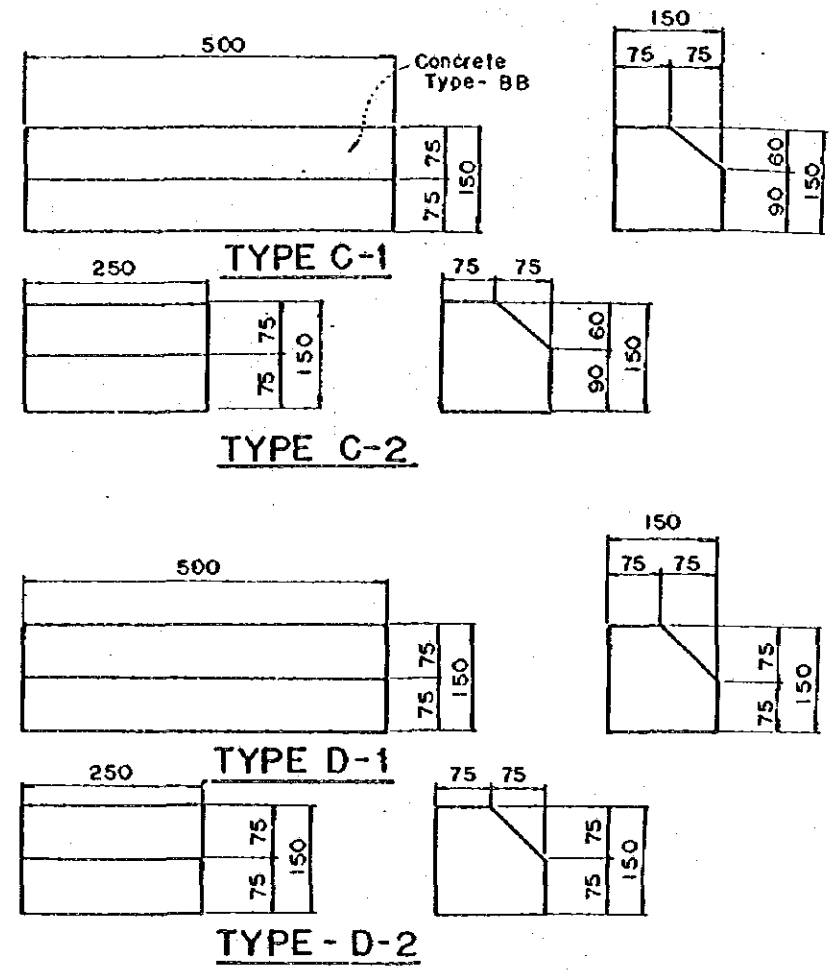
TYPE A-1

TYPE B-2

TYPE B-1

### CONCRETE CORNER BLOCK

SCALE : A



TYPE C-1

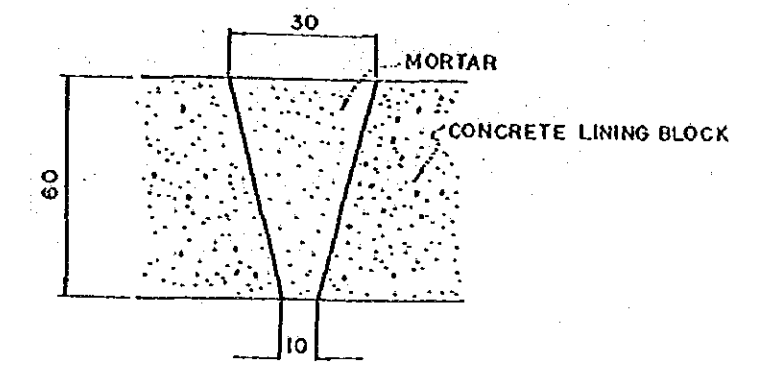
TYPE C-2

TYPE D-1

TYPE D-2

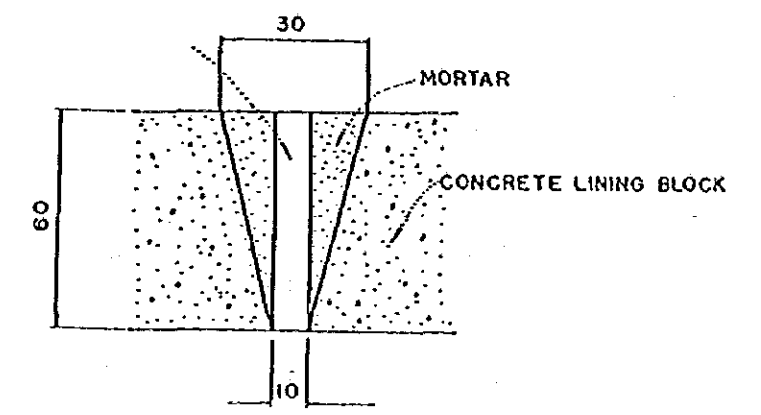
### JOINT

SCALE : B



### EXPANSION JOINT

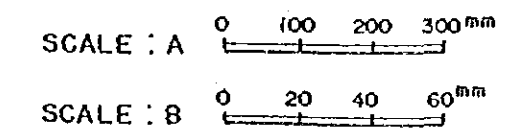
SCALE : B



### REQUIRED NOS. OF BLOCKS

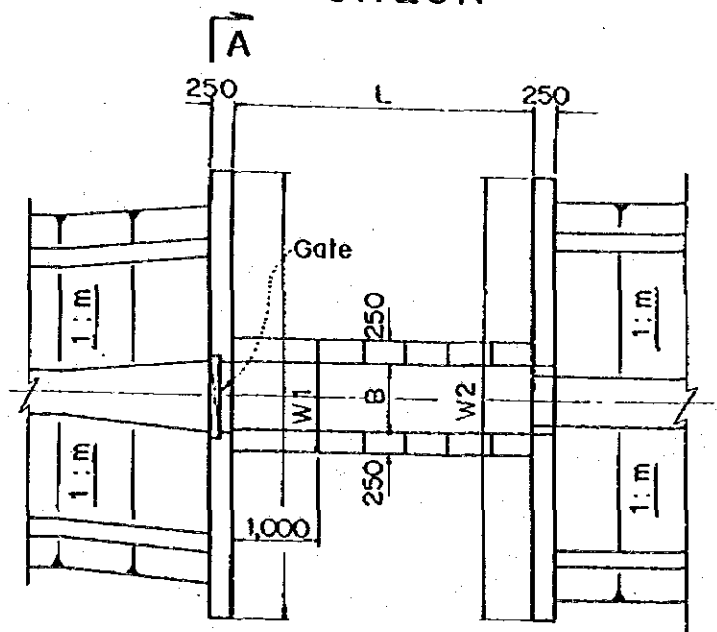
PER 3.83 meters

CANAL TYPE	CANAL HEIGHT	SLOPE LENGTH	PC LINING BLOCK				PC CORNER BLOCK			
			A-1	A-2	B-1	B-2	C-1	C-2	D-1	D-2
A	1,130	1,810	70	10	14	2	14	2	-	-
B	970	1,550	70	10	-	-	14	2	-	-
C	780	1,240	56	8	-	-	14	2	-	-
D1	660	930	42	6	-	-	-	-	14	2
D2	550	780	-	-	42	6	-	-	14	2
D3	440	620	28	4	-	-	-	-	14	2

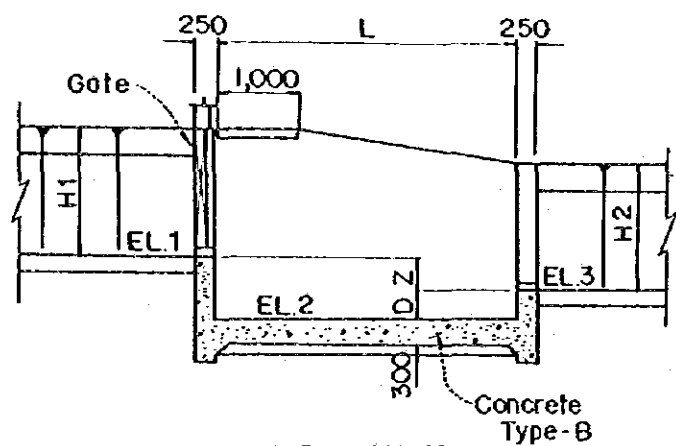


THE UNITED REPUBLIC OF TANZANIA  
 NDUNGU AGRICULTURAL DEVELOPMENT PROJECT  
 TITLE OF DRAWING  
 水路ライニング詳細図 (2/2)  
 Date \_\_\_\_\_ Drawing No. 200-13  
 JAPAN INTERNATIONAL COOPERATION AGENCY

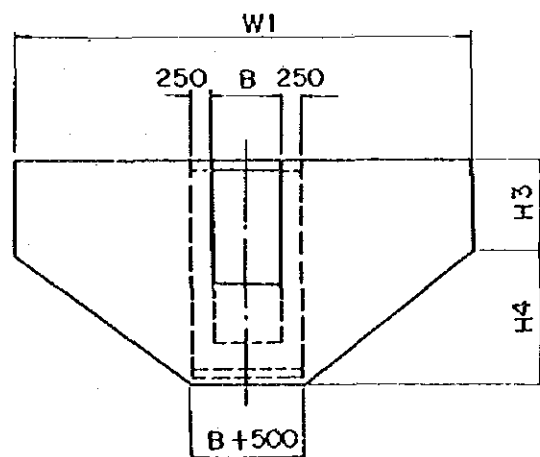
CHECK



PLAN



PROFILE



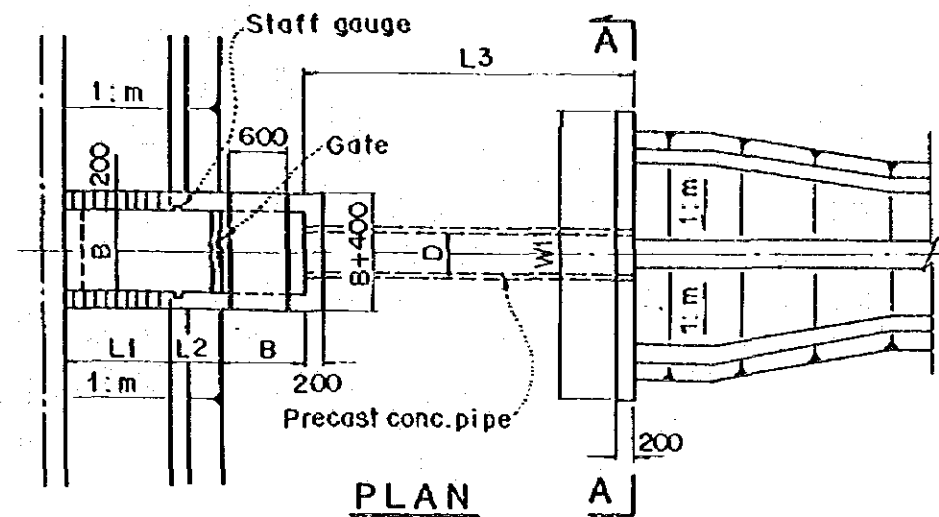
SECTION A-A

DIMENSION OF CHECK

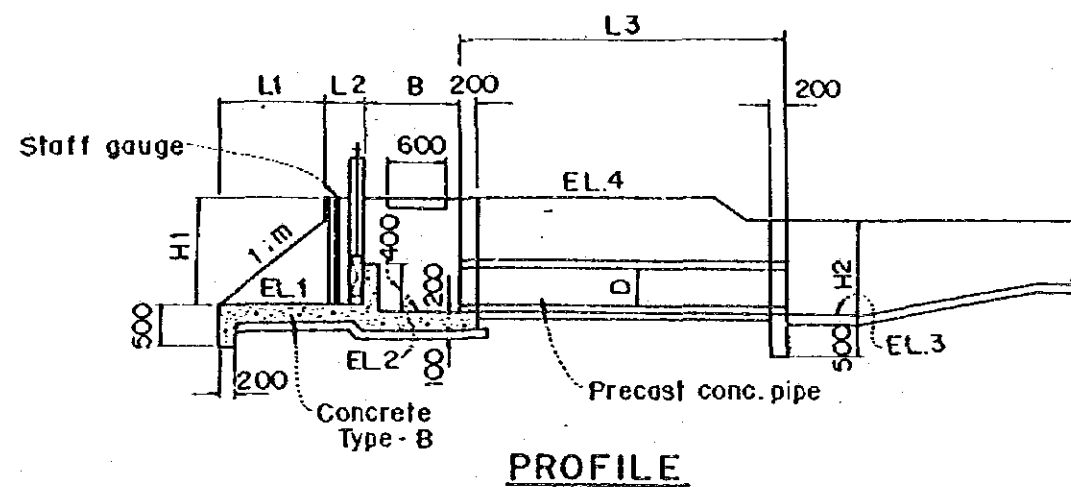
Unit : mm

TYPE	Q (m <sup>3</sup> /s)	B	L
I	~0.10	400	1,500
II	0.10 ~ 0.25	500	1,500
III	0.25 ~ 0.50	600	2,000
IV	0.50 ~	700	2,000

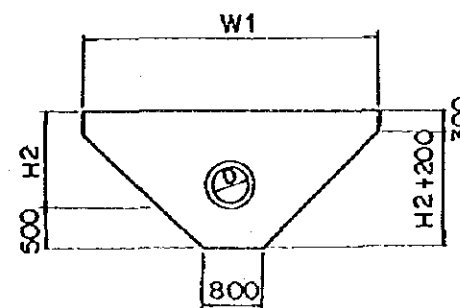
TURNOUT



PLAN



PROFILE



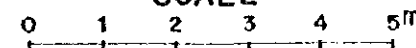
SECTION A-A

DIMENSION OF TURNOUT

Unit : mm

TYPE	Q (m <sup>3</sup> /s)	D	B
I	~0.06	300	700
II	0.06 ~ 0.10	400	700
III	0.10 ~ 0.20	500	1,000
IV	0.20 ~ 0.35	600	1,200
V	0.35 ~ 0.60	800	1,400
VI	0.60 ~	1,000	1,600

SCALE



THE UNITED REPUBLIC OF TANZANIA

NDUNGU AGRICULTURAL  
DEVELOPMENT PROJECT

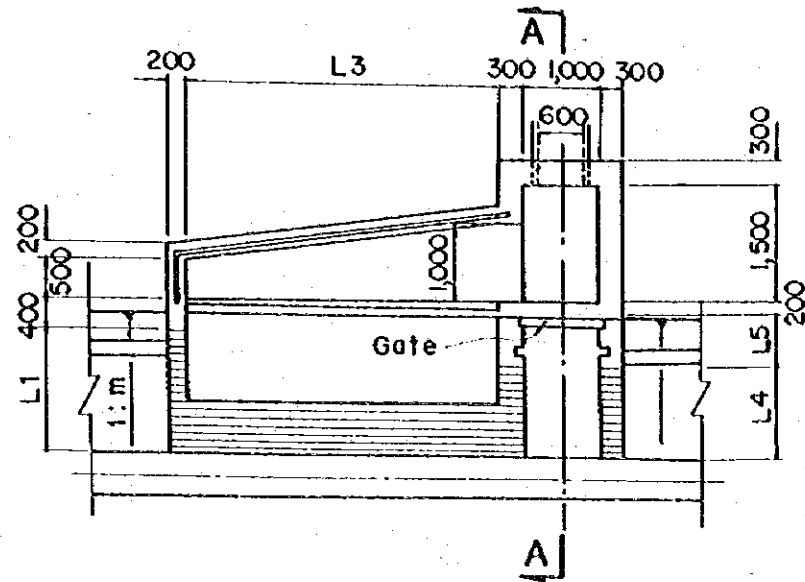
TITLE OF DRAWING

調整施設及び分水工

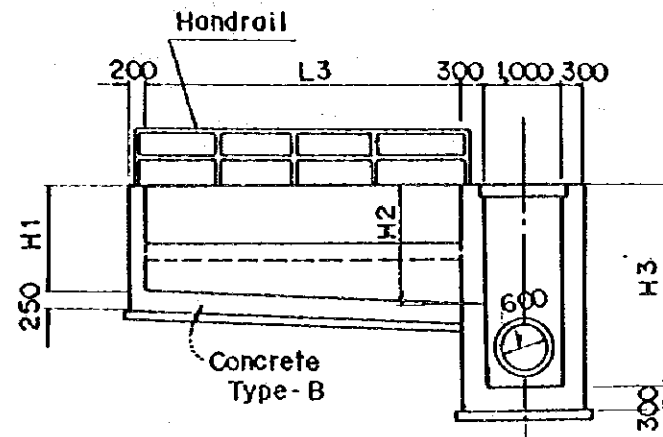
Date Drawing No. 200 - 14

JAPAN INTERNATIONAL COOPERATION AGENCY

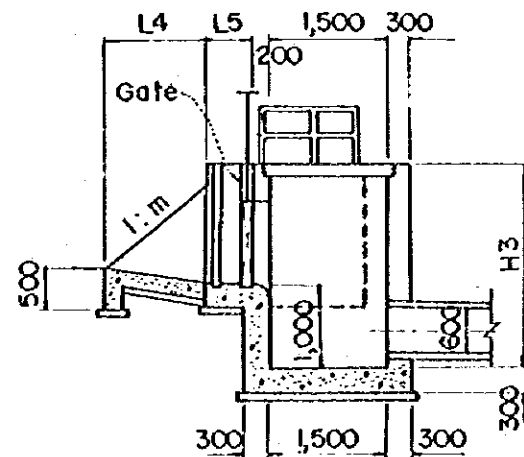
**SPILLWAY**



**PLAN**  
(SCALE - B)



**PROFILE**  
(SCALE - B)

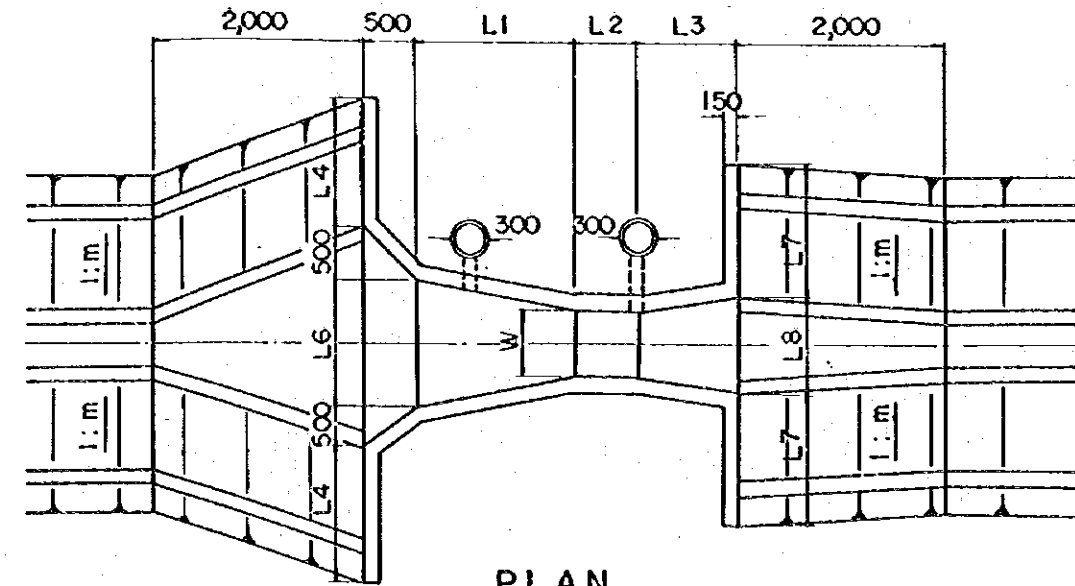


**SECTION A-A**  
(SCALE - B)

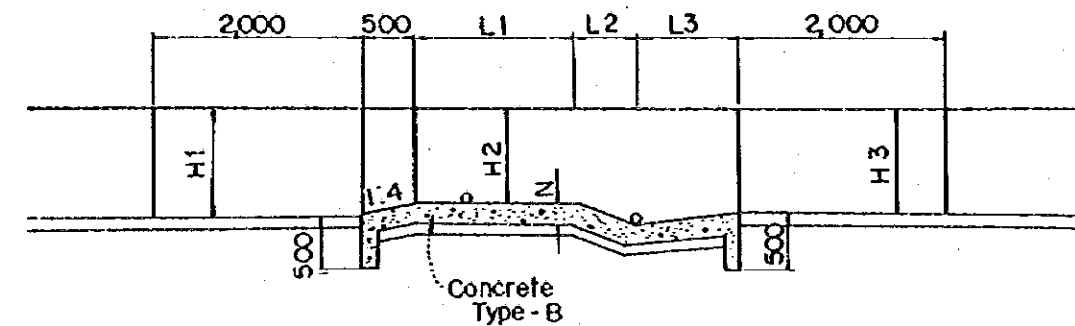
**DIMENSION OF SPILLWAY**  
Unit : mm

TYPE	Q(m <sup>3</sup> /s)	L3
I	~ 0.5	3,000
II	0.5 ~ 0.8	6,000
III	0.8 ~	10,000

**PARSHALL FLUME**



**PLAN**  
(SCALE - A)



**PROFILE**  
(SCALE - A)

**DIMENSION OF PARSHALL FLUME**

Unit : mm

TYPE	W	L1	L2	L3	L6	L8	H2	IV
I	152	610	305	610	397	394	610	114
II	229	864	305	457	575	381	762	114
III	305	1,348	610	714	845	610	914	229
IV	610	1,495	610	914	1,206	914	914	229

SCALE - A 0 1 2 3m

SCALE - B 0 1 2 3 4 5m

THE UNITED REPUBLIC OF TANZANIA

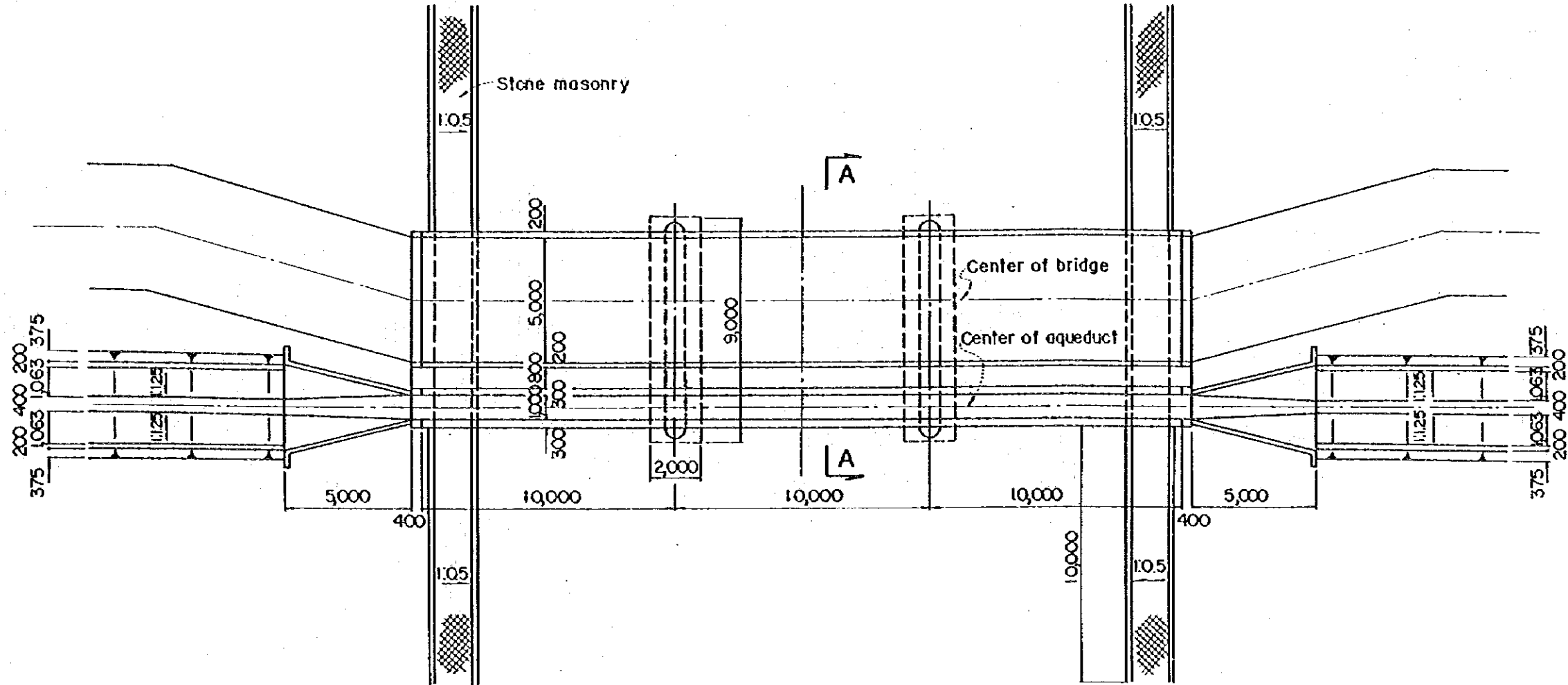
NDUNGU AGRICULTURAL  
DEVELOPMENT PROJECT

TITLE OF DRAWING

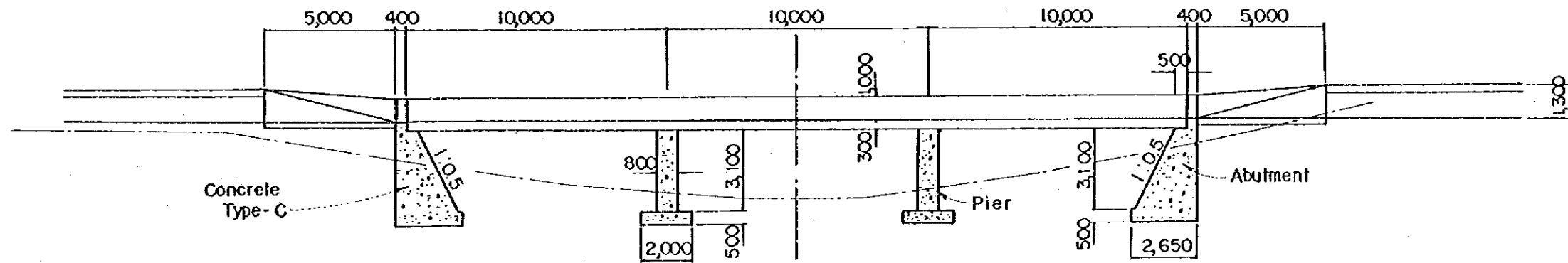
余水吐及び量水施設

Date Drawing No. 200 - 15

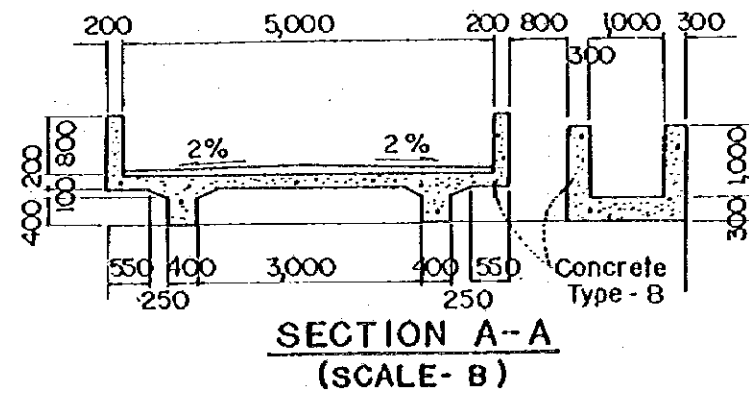
JAPAN INTERNATIONAL COOPERATION AGENCY



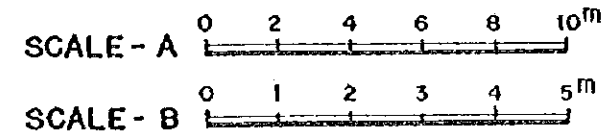
PLAN  
(SCALE - A)



PROFILE  
(SCALE - A)

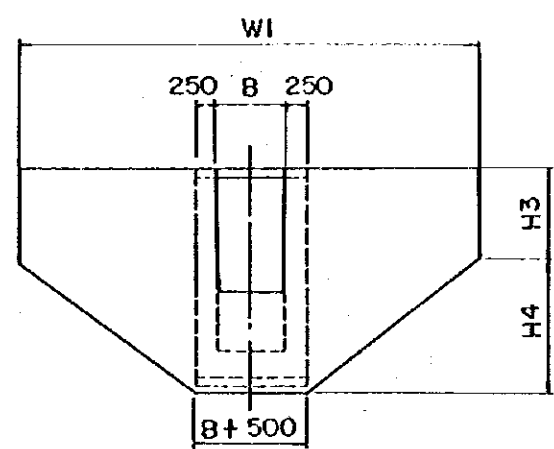
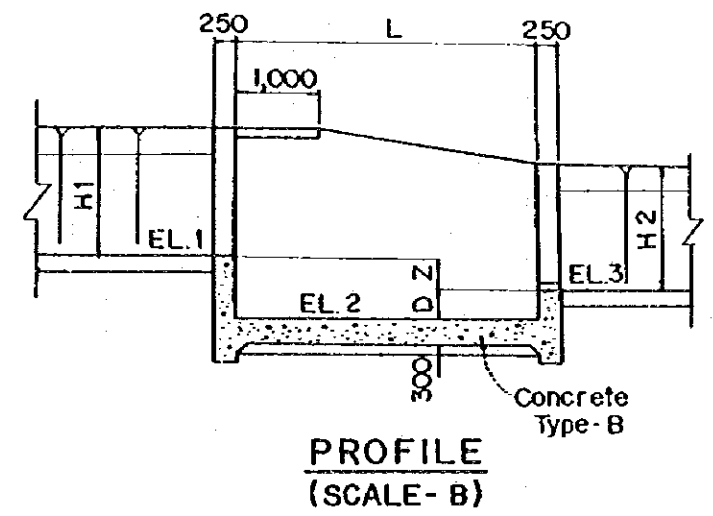
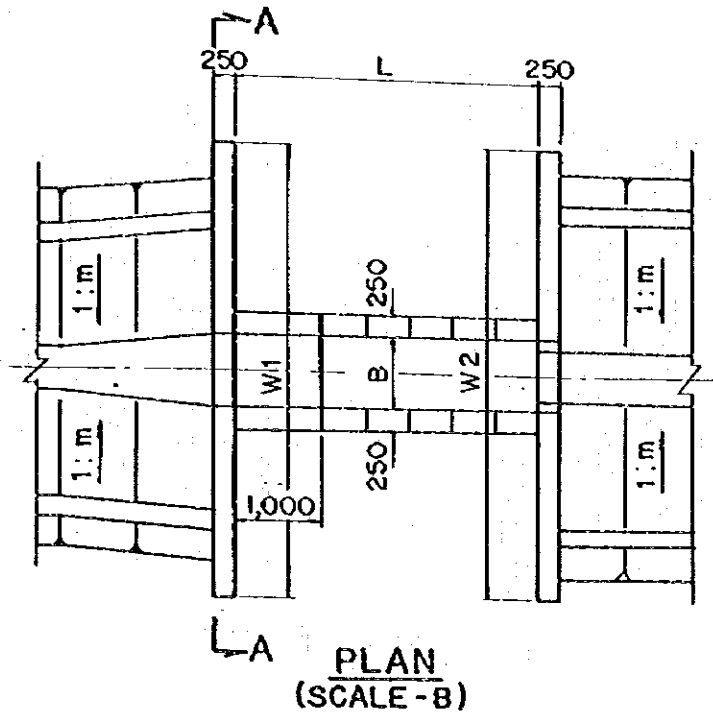


SECTION A-A  
(SCALE - B)



THE UNITED REPUBLIC OF TANZANIA	
NDUNGU AGRICULTURAL DEVELOPMENT PROJECT	
TITLE OF DRAWING	
水路橋及び道路橋	
Date	Drawing No. 200 - 16
JAPAN INTERNATIONAL COOPERATION AGENCY	

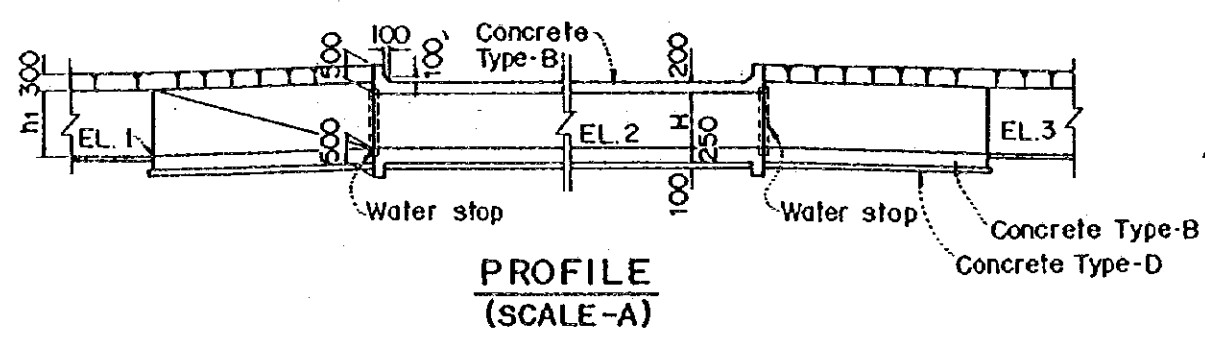
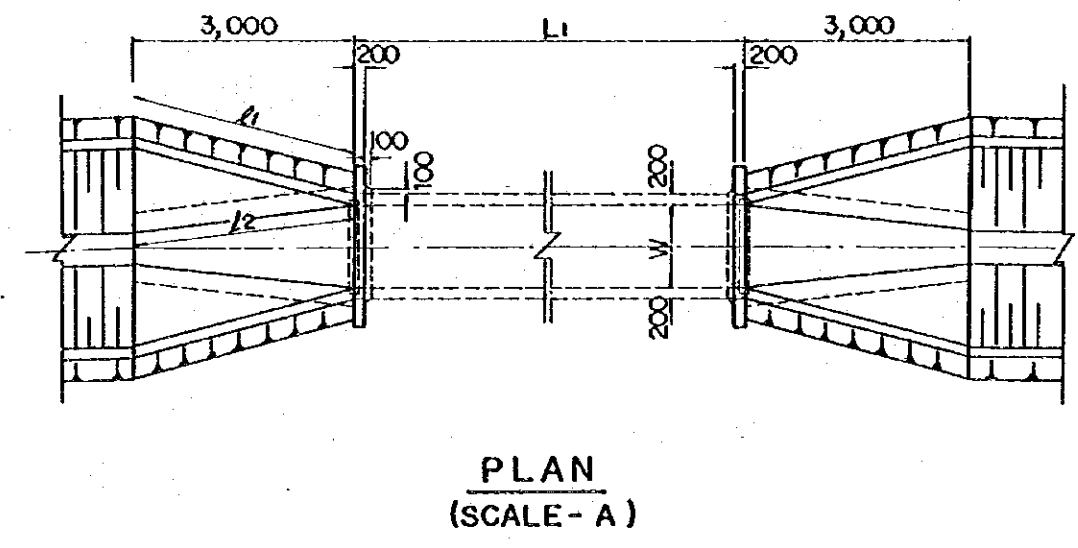
DROP



DIMENSION OF DROP  
Unit : mm

TYPE	Q (m <sup>3</sup> /s)	B	L
I	~ 0.10	400	1,500
II	0.10~0.25	500	1,500
III	0.25~0.50	600	2,000
IV	0.50~	700	2,000

BOX TYPE

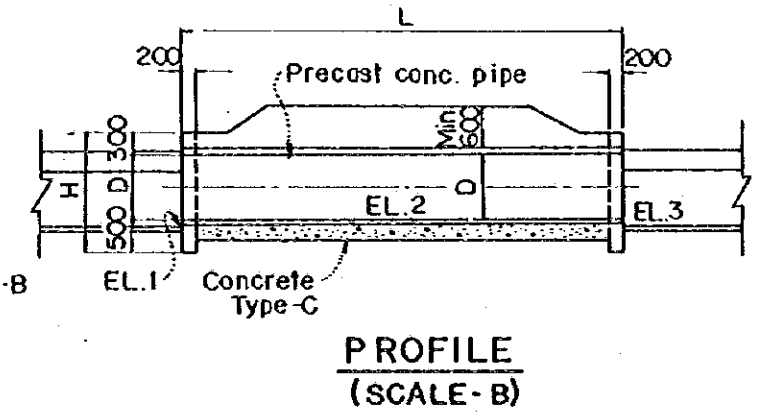
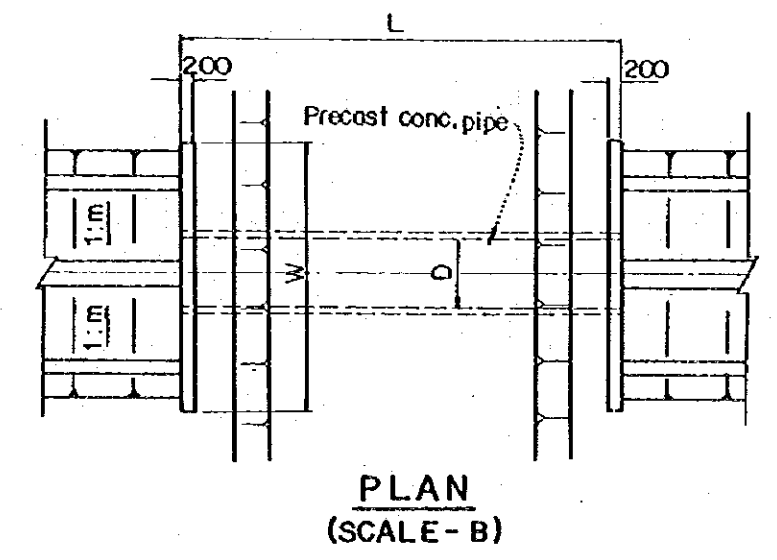


DIMENSION OF BOX CULVERT  
Unit : mm

TYPE	Q (m <sup>3</sup> /s)	H	W
I	0.6 ~ 1.3	1,000	1,000
II	1.3 ~	1,000	1,500

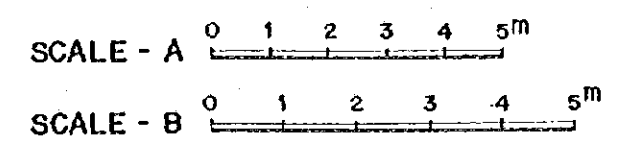
IRRIGATION CULVERT

PIPE TYPE



DIMENSION OF PIPE CULVERT  
Unit : mm

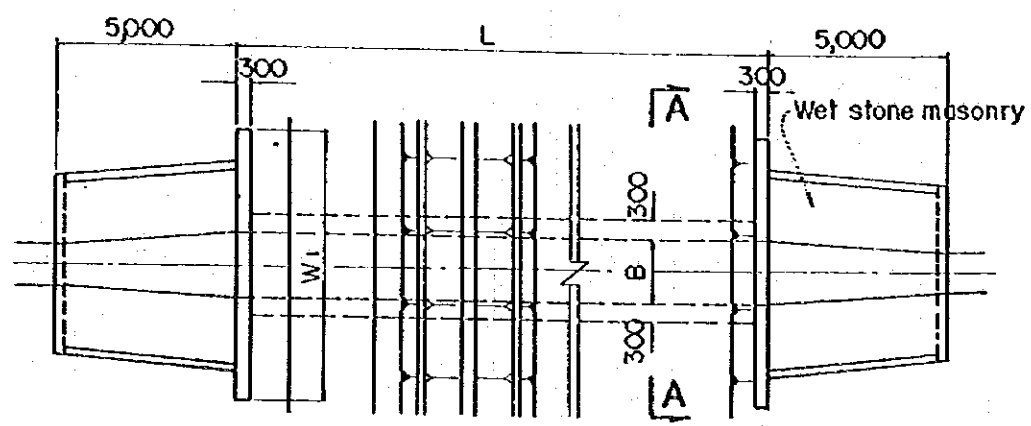
TYPE	Q (m <sup>3</sup> /s)	D	W
I	~ 0.2	500	2,400
II	0.2 ~ 0.3	600	2,600
III	0.3 ~ 0.5	800	3,000
IV	0.5 ~ 0.6	1,000	4,000



THE UNITED REPUBLIC OF TANZANIA  
 NDUHOU AGRICULTURAL DEVELOPMENT PROJECT  
 TITLE OF DRAWING  
 用水路落差工及びカルバート  
 Date \_\_\_\_\_ Drawing No. 200 - 17  
 JAPAN INTERNATIONAL COOPERATION AGENCY

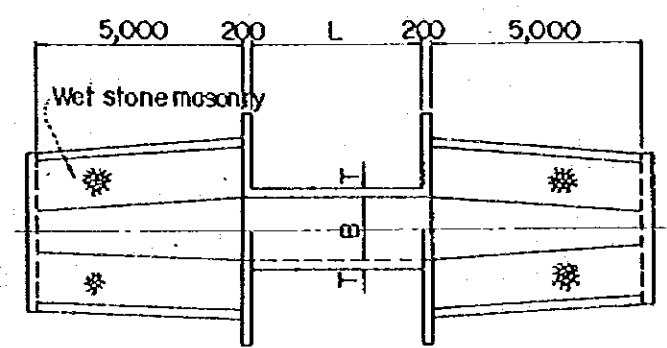
DRAINAGE CULVERT

CROSSDRAIN



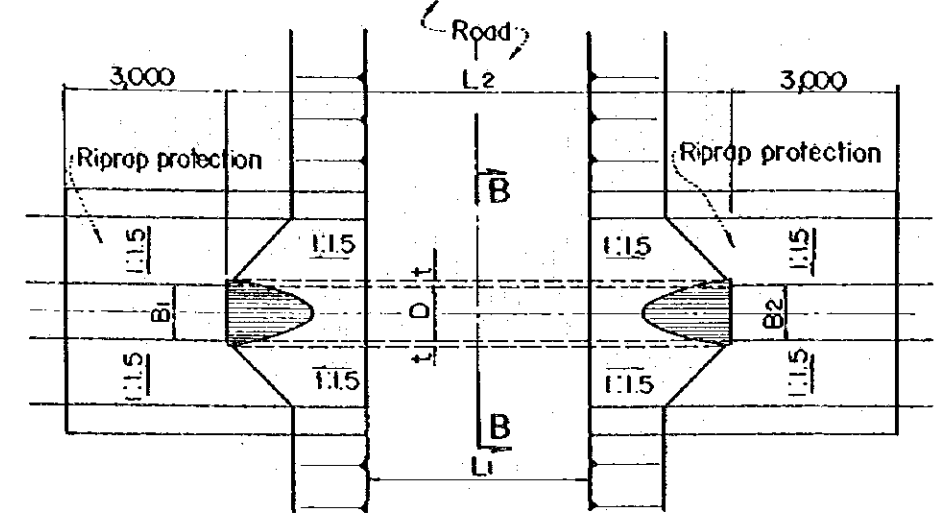
PLAN (SCALE - A)

BOX TYPE

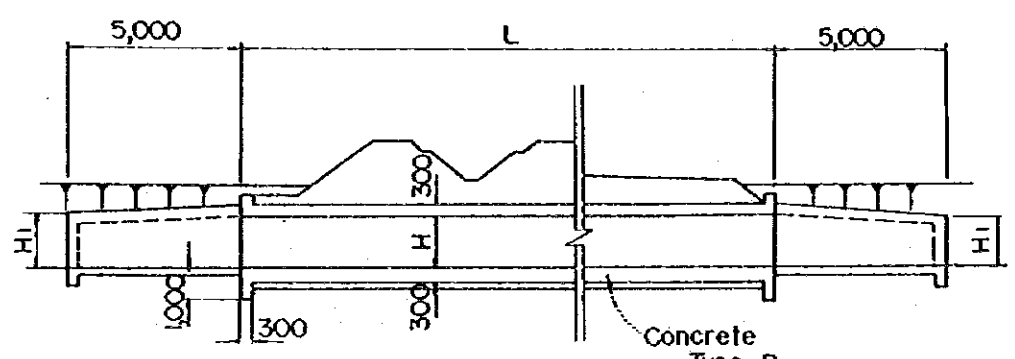


PLAN (SCALE - B)

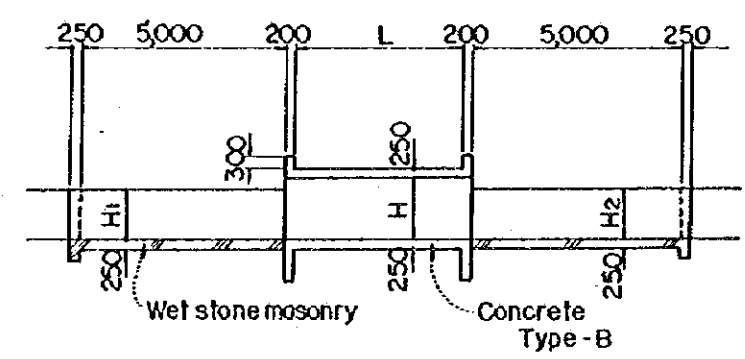
PIPE TYPE



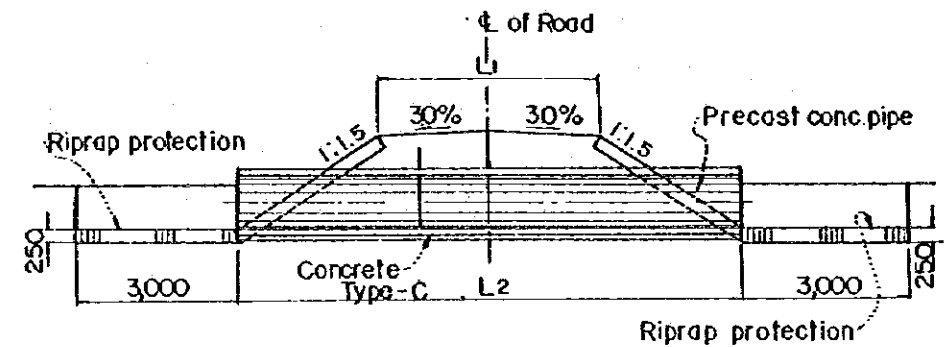
PLAN (SCALE - C)



PROFILE (SCALE - A)



PROFILE (SCALE - B)



PROFILE (SCALE - C)

DIMENSION OF CROSSDRAIN & BOX CULVERT

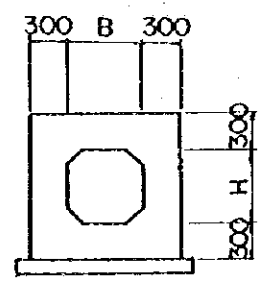
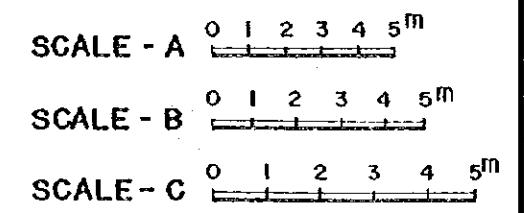
Unit: mm

TYPE	Barrel No.	Q (m <sup>3</sup> /s)	B	H
I	1	1.0 ~ 1.2	1,000	1,000
II	1	1.2 ~ 1.6	1,500	1,000
III	2	1.6 ~ 2.4	1,000	1,000
IV	1	2.4 ~ 3.6	2,000	1,500
V	2	3.6 ~ 5.4	1,500	1,500
VI	2	5.4 ~	2,000	1,500

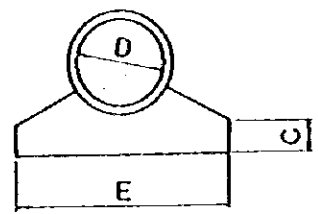
DIMENSION OF PIPE CULVERT

Unit: mm

TYPE	Q (m <sup>3</sup> /s)	D
I	~ 0.5	600
II	0.5 ~ 0.8	800
III	0.8 ~ 1.0	1,000



SECTION A-A

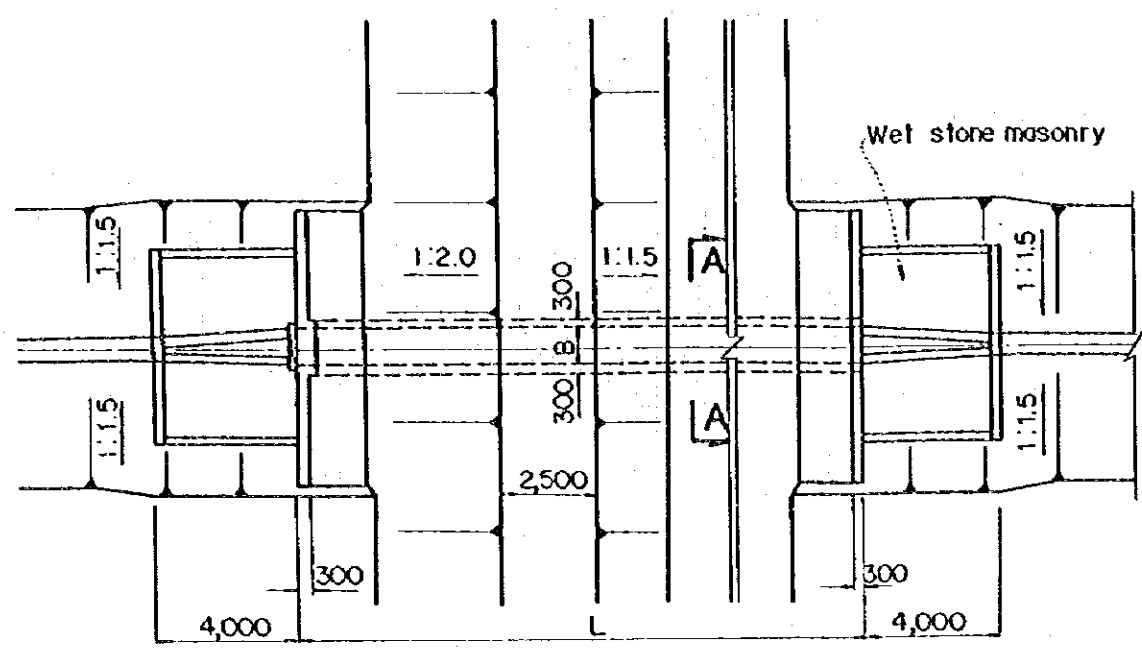


SECTION B-B

THE UNITED REPUBLIC OF TANZANIA  
 NOUNGU AGRICULTURAL DEVELOPMENT PROJECT  
 TITLE OF DRAWING  
 排水路横断工及びカルバート  
 Date \_\_\_\_\_ Drawing No. 200-18  
 JAPAN INTERNATIONAL COOPERATION AGENCY

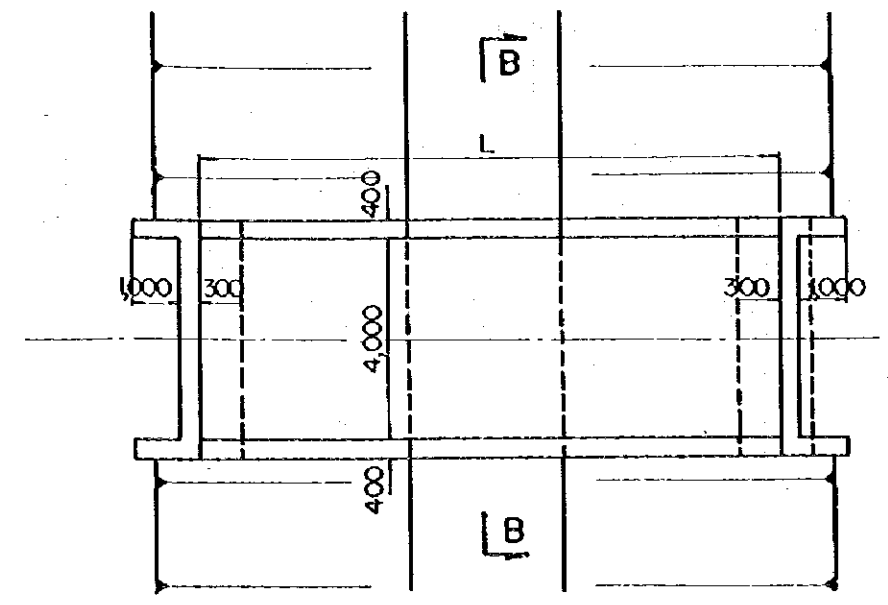


### DRAINAGE GATE

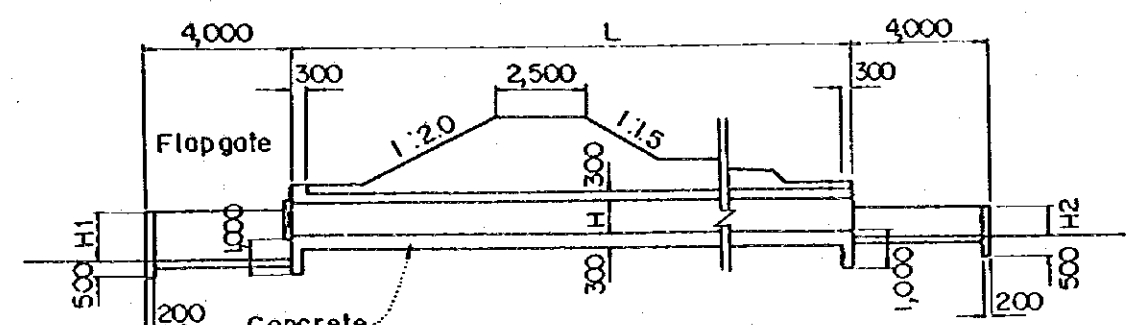


PLAN  
(SCALE - A)

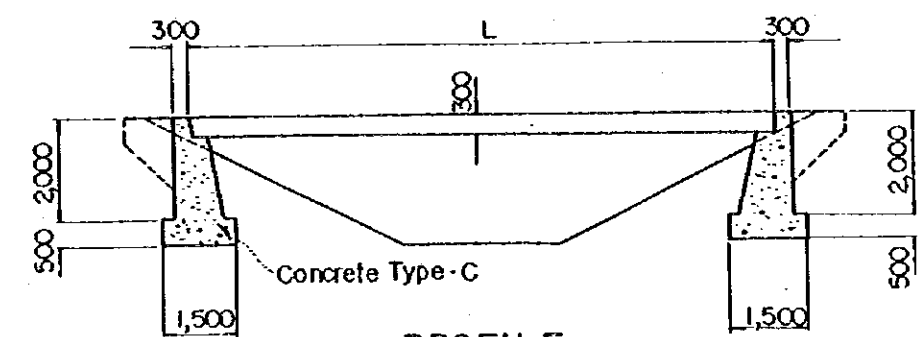
### BRIDGE



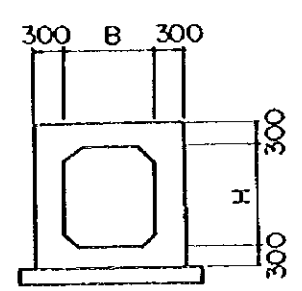
PLAN  
(SCALE - B)



PROFILE  
(SCALE - A)



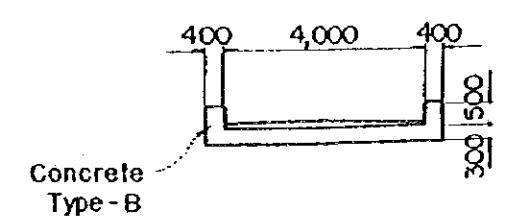
PROFILE  
(SCALE - B)



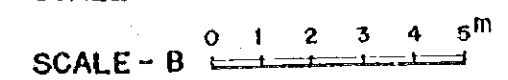
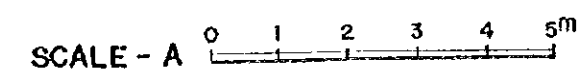
SECTION A-A

DIMENSION OF DRAINAGE GATE

TYPE	Q (m <sup>3</sup> /S)	B	H
I	~ 1.2	1,000	1,000
II	1.2 ~ 1.6	1,500	1,000
III	1.6 ~	2,000	1,500

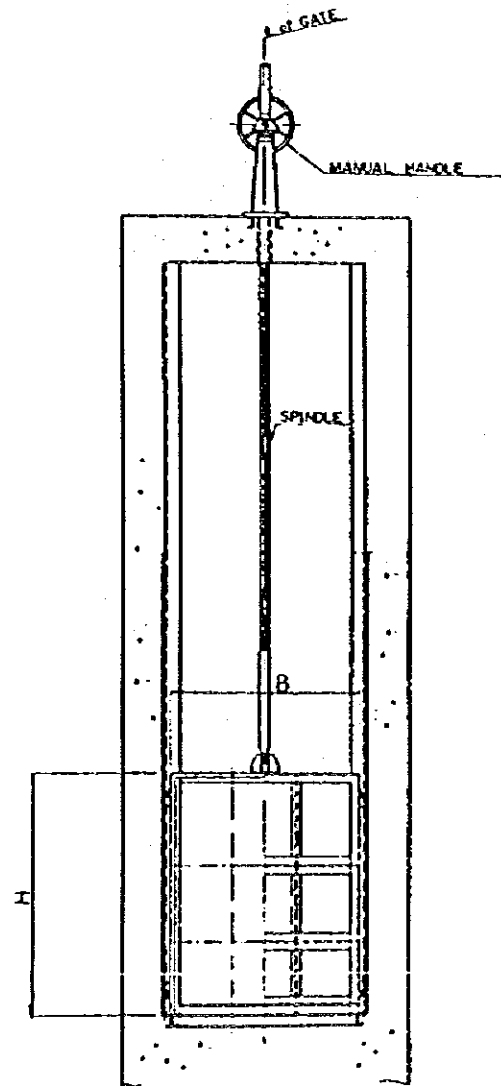


SECTION B-B  
(SCALE - B)

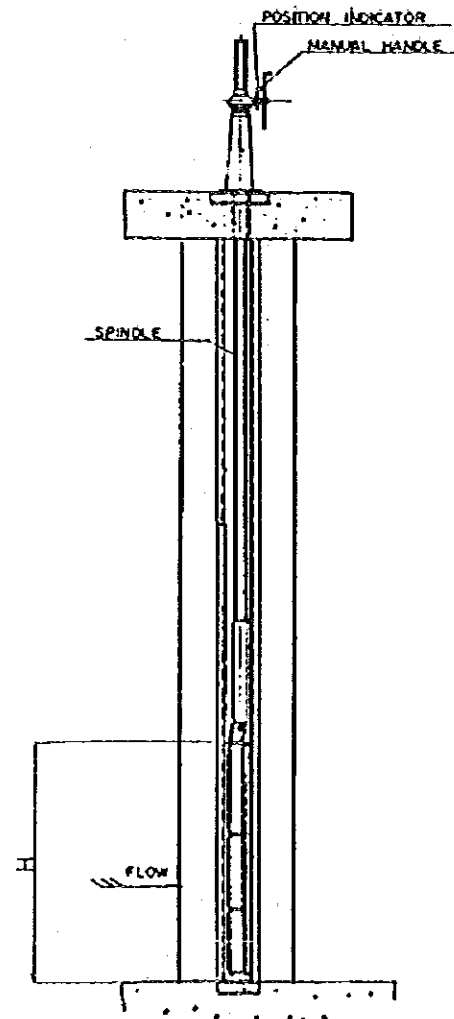


THE UNITED REPUBLIC OF TANZANIA  
 NOUNGU AGRICULTURAL DEVELOPMENT PROJECT  
 TITLE OF DRAWING  
 排水ゲート及び道路橋  
 Date \_\_\_\_\_ Drawing No. 200-19  
 JAPAN INTERNATIONAL COOPERATION AGENCY

SCOURING SLUICE GATE

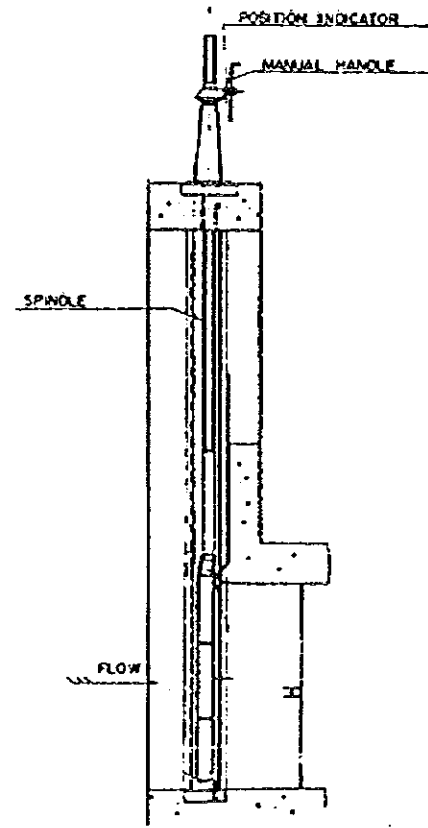


DOWNSTREAM VIEW UPSTREAM VIEW



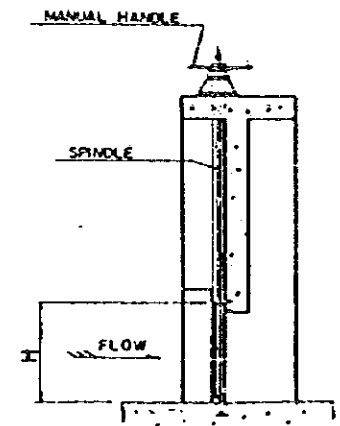
PROFILE

INLET GATE



PROFILE

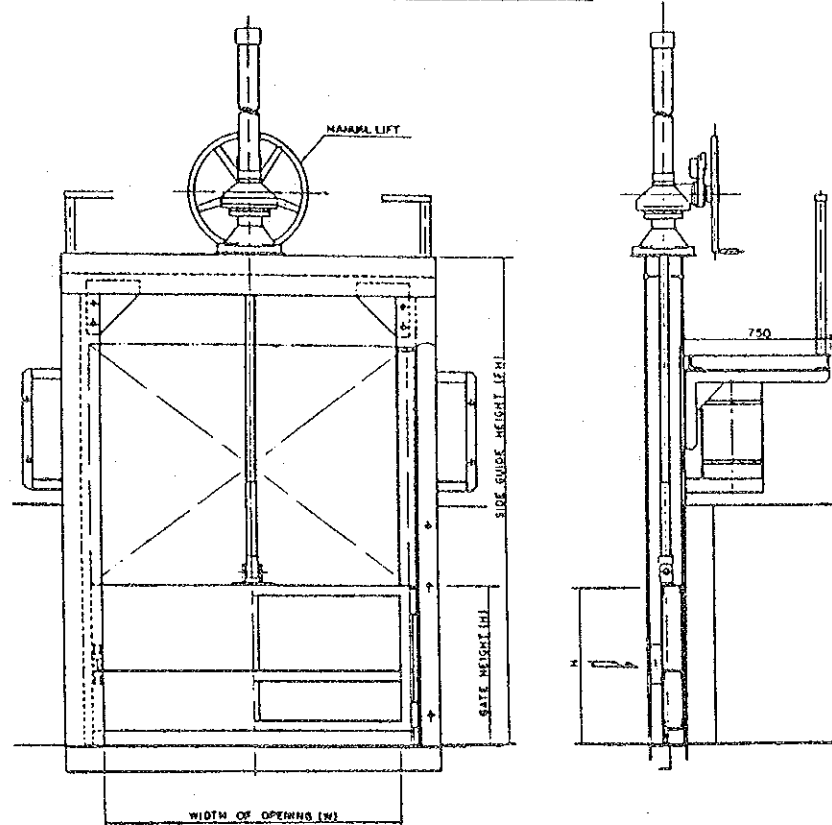
WASTE WAY GATE



PROFILE

THE UNITED REPUBLIC OF TANZANIA	
NOUNGU AGRICULTURAL DEVELOPMENT PROJECT	
TITLE OF DRAWING	
ゲート詳細図 (1/2)	
Date	Drawing No. 200-20
JAPAN INTERNATIONAL COOPERATION AGENCY	

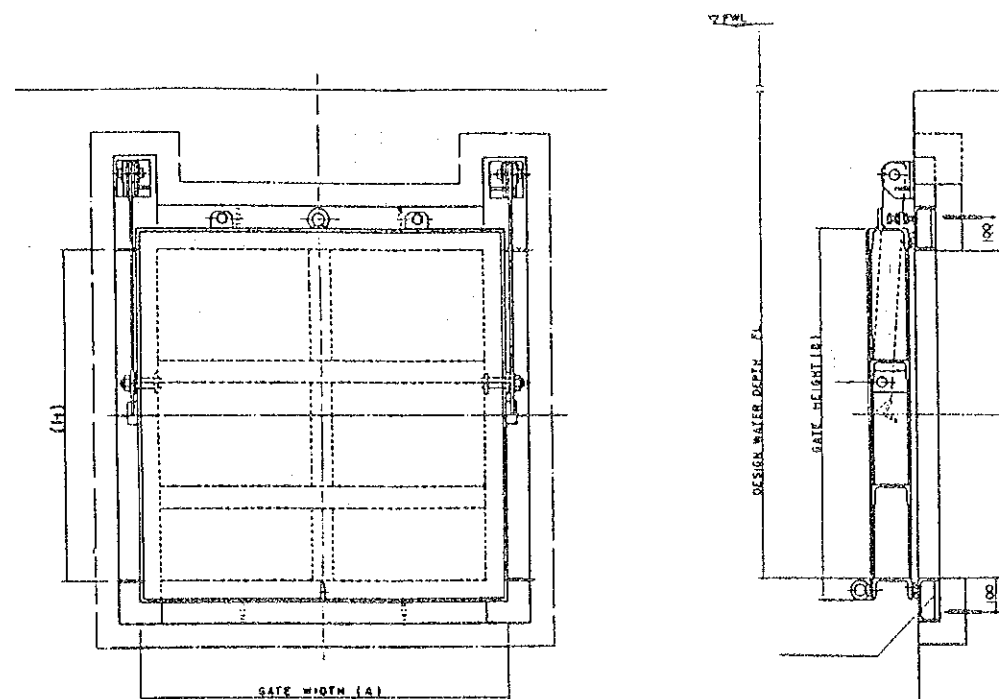
SLIDE GATE - TYPE A -



FRONT VIEW

SECTION

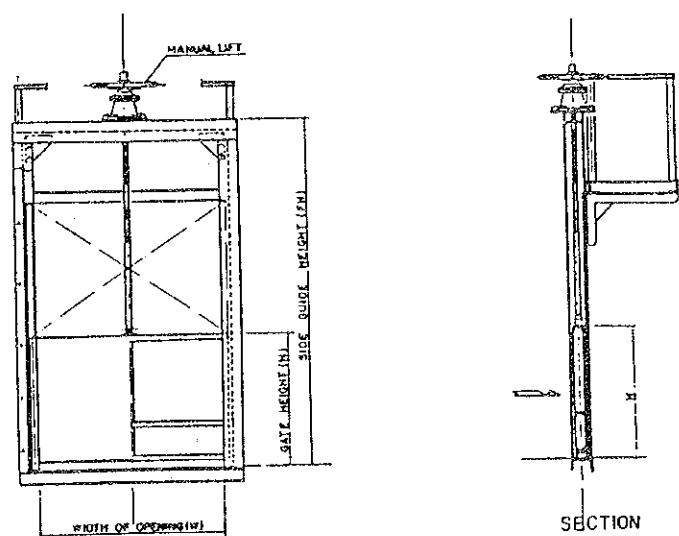
FLAP GATE



FRONT VIEW

SECTION

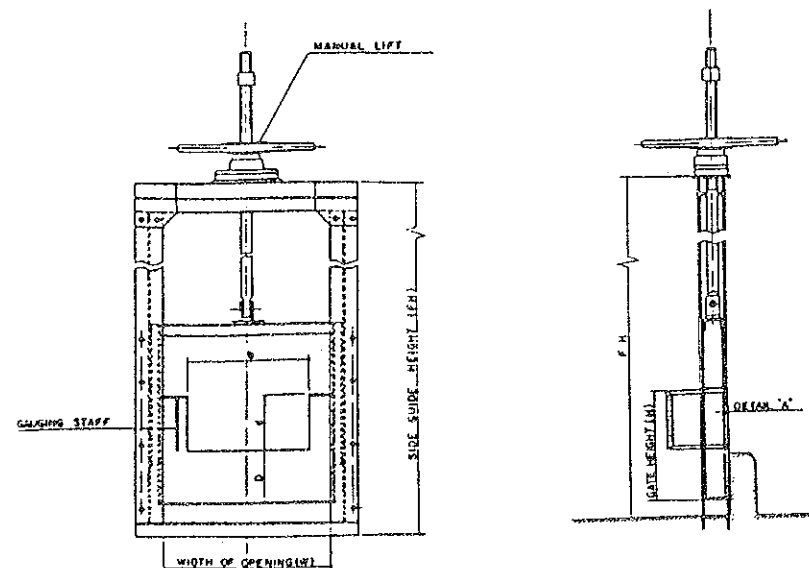
SLIDE GATE - TYPE B -



FRONT VIEW

SECTION

SLIDE GATE - TYPE T -

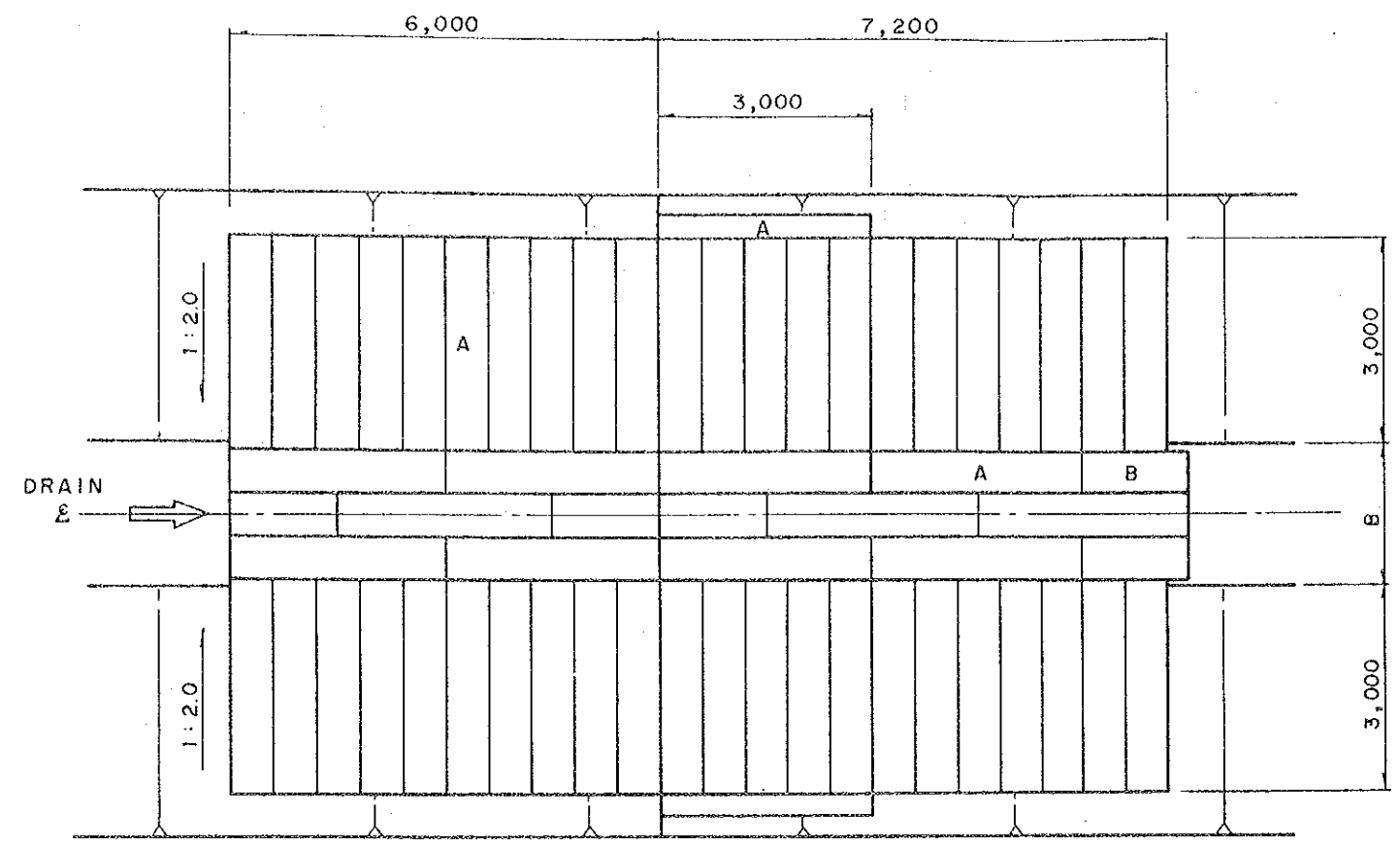


FRONT VIEW

SECTION

THE UNITED REPUBLIC OF TANZANIA	
NOUNGU AGRICULTURAL DEVELOPMENT PROJECT	
TITLE OF DRAWING	
ゲート詳細図 (2/2)	
Date	Drawing No.   200 - 21
JAPAN INTERNATIONAL COOPERATION AGENCY	

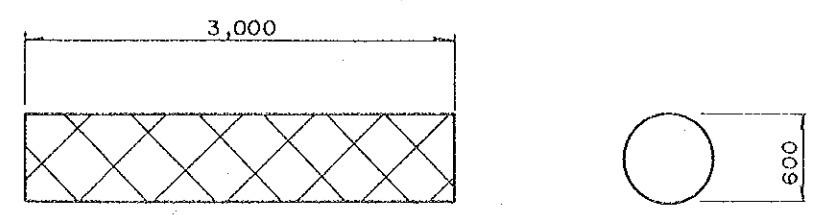
# DRAINAGE DROP



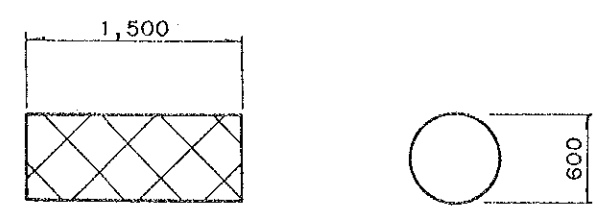
PLAN  
SCALE A

## CYLINDER GABION

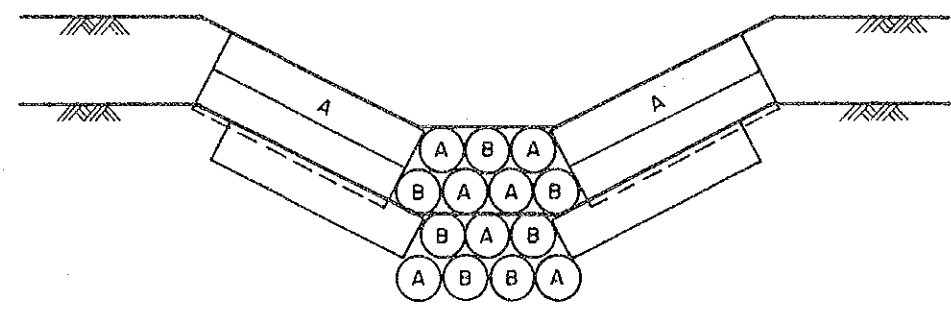
SCALE B



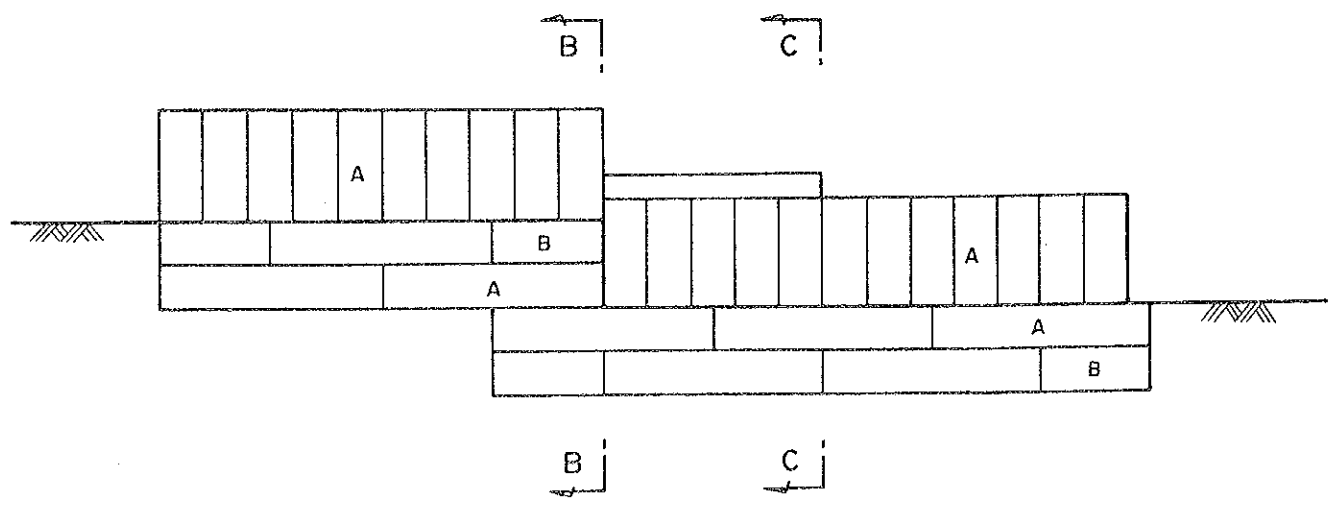
TYPE A



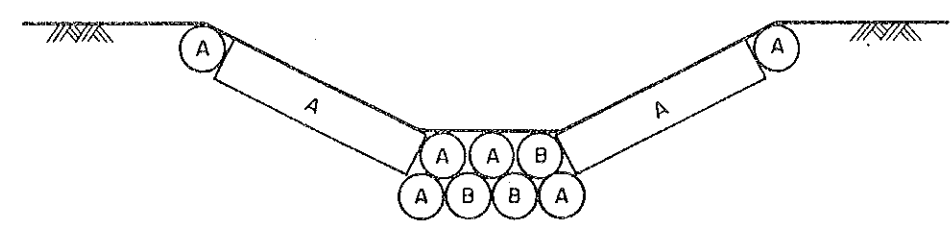
TYPE B



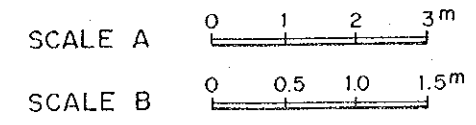
SECTION B - B  
SCALE A



SECTION A - A  
SCALE A

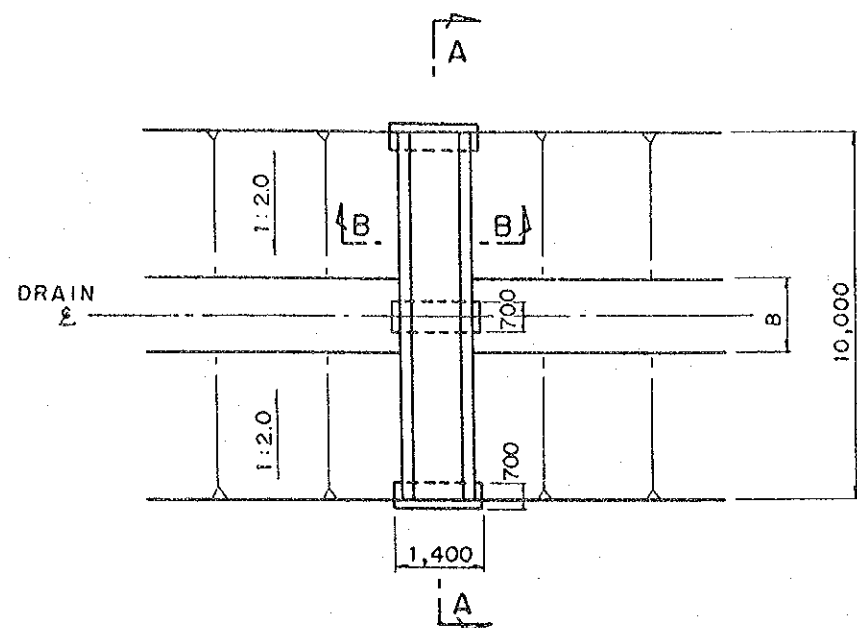


SECTION C - C  
SCALE A

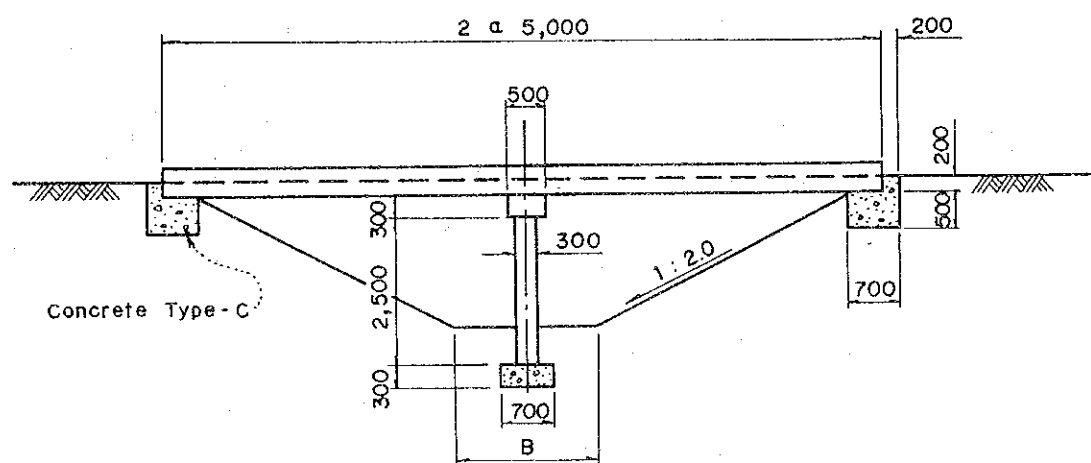


THE UNITED REPUBLIC OF TANZANIA	
NDUNGU AGRICULTURAL DEVELOPMENT PROJECT	
TITLE OF DRAWING	
排水路落差工	
Date	Drawing No. 200 - 22
JAPAN INTERNATIONAL COOPERATION AGENCY	

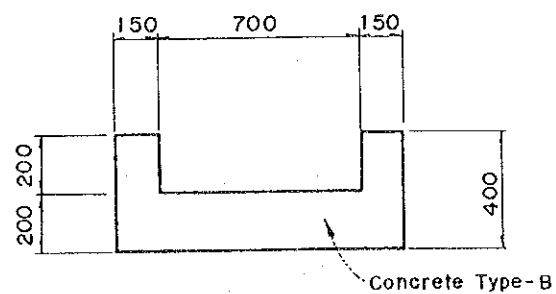
# FOOT PATH



PLAN  
SCALE A



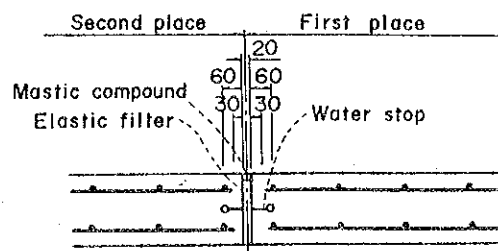
SECTION A - A  
SCALE B



SECTION B - B  
SCALE C

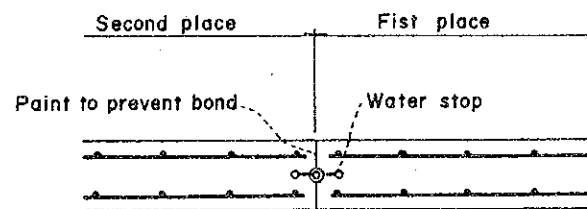
## EXPANSION JOINT

SCALE B



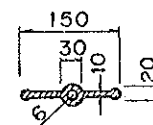
## CONTRACTION JOINT

SCALE C



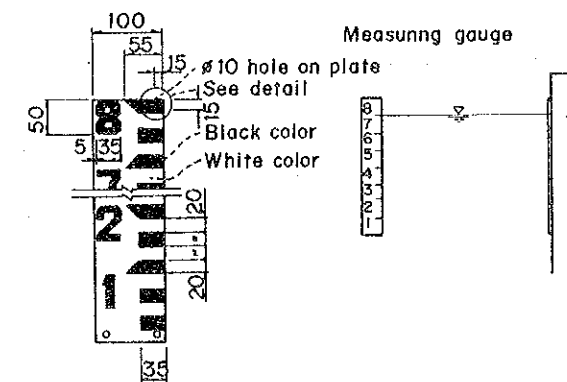
## DETAIL OF WATER STOP

SCALE D



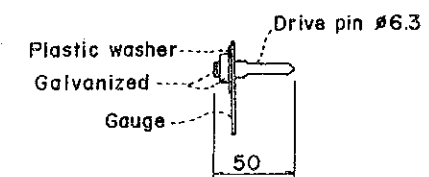
## STAFF GAUGE

SCALE D

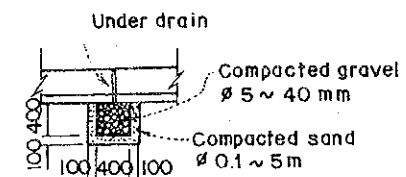


## DETAIL - A

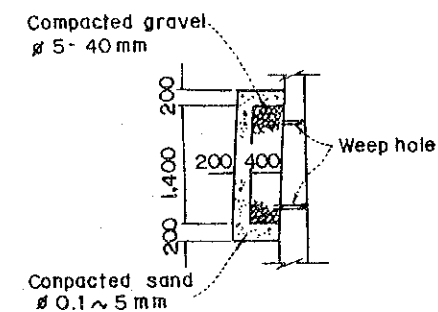
SCALE E



## UNDER DRAIN



## WEEP HOLE



- SCALE : A 0 2 4 6 m
- SCALE : B 0 1 2 3 m
- SCALE : C 0 0.5 1 m
- SCALE : D 0 0.1 0.2 0.3 m
- SCALE : E 0 0.05 0.1 m

THE UNITED REPUBLIC OF TANZANIA

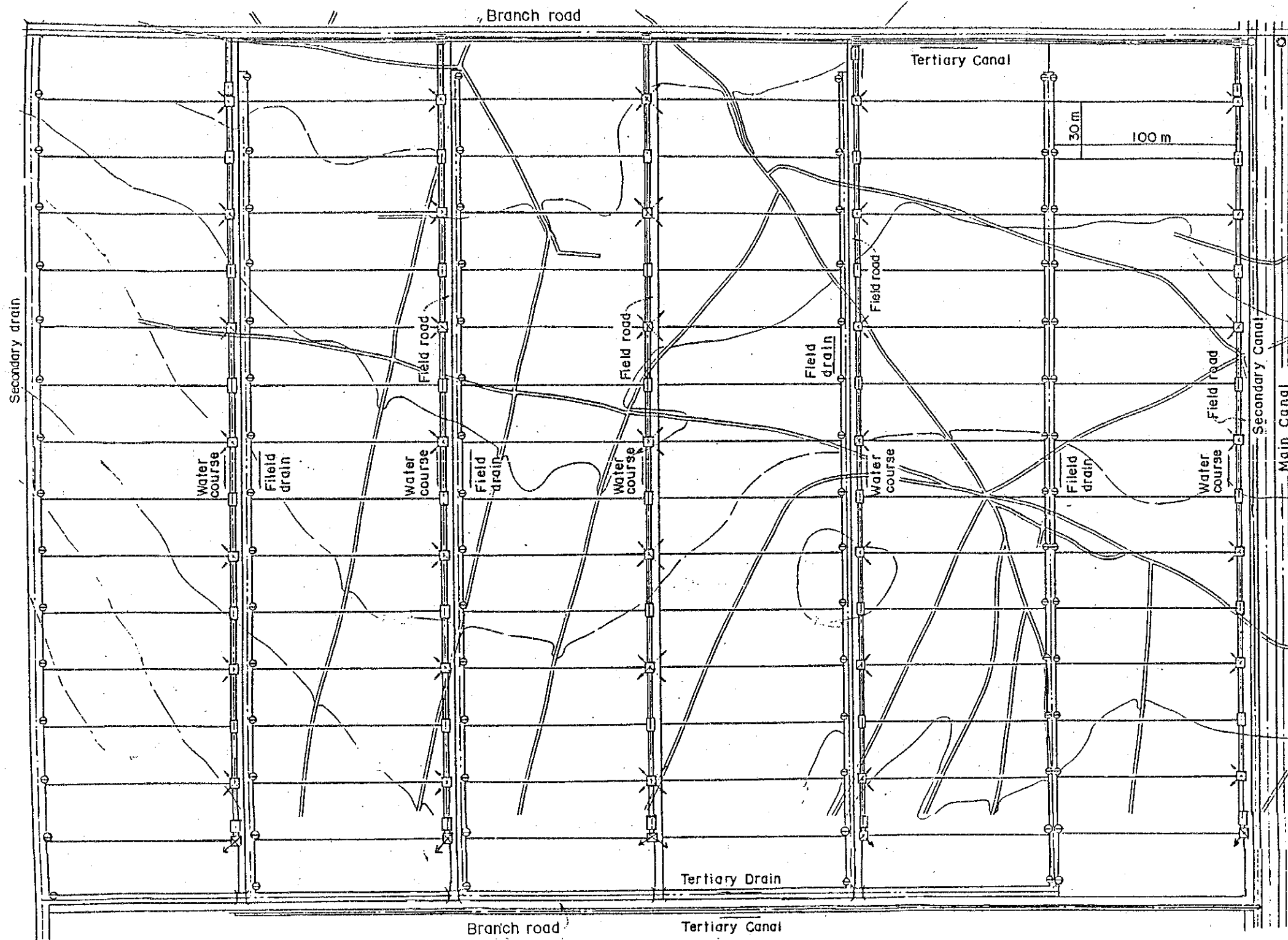
NDUNGU AGRICULTURAL  
DEVELOPMENT PROJECT

TITLE OF DRAWING

歩道橋及びその他

Date Drawing No. 200 - 23

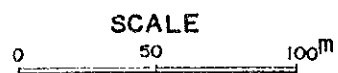
JAPAN INTERNATIONAL COOPERATION AGENCY



**LEGEND**

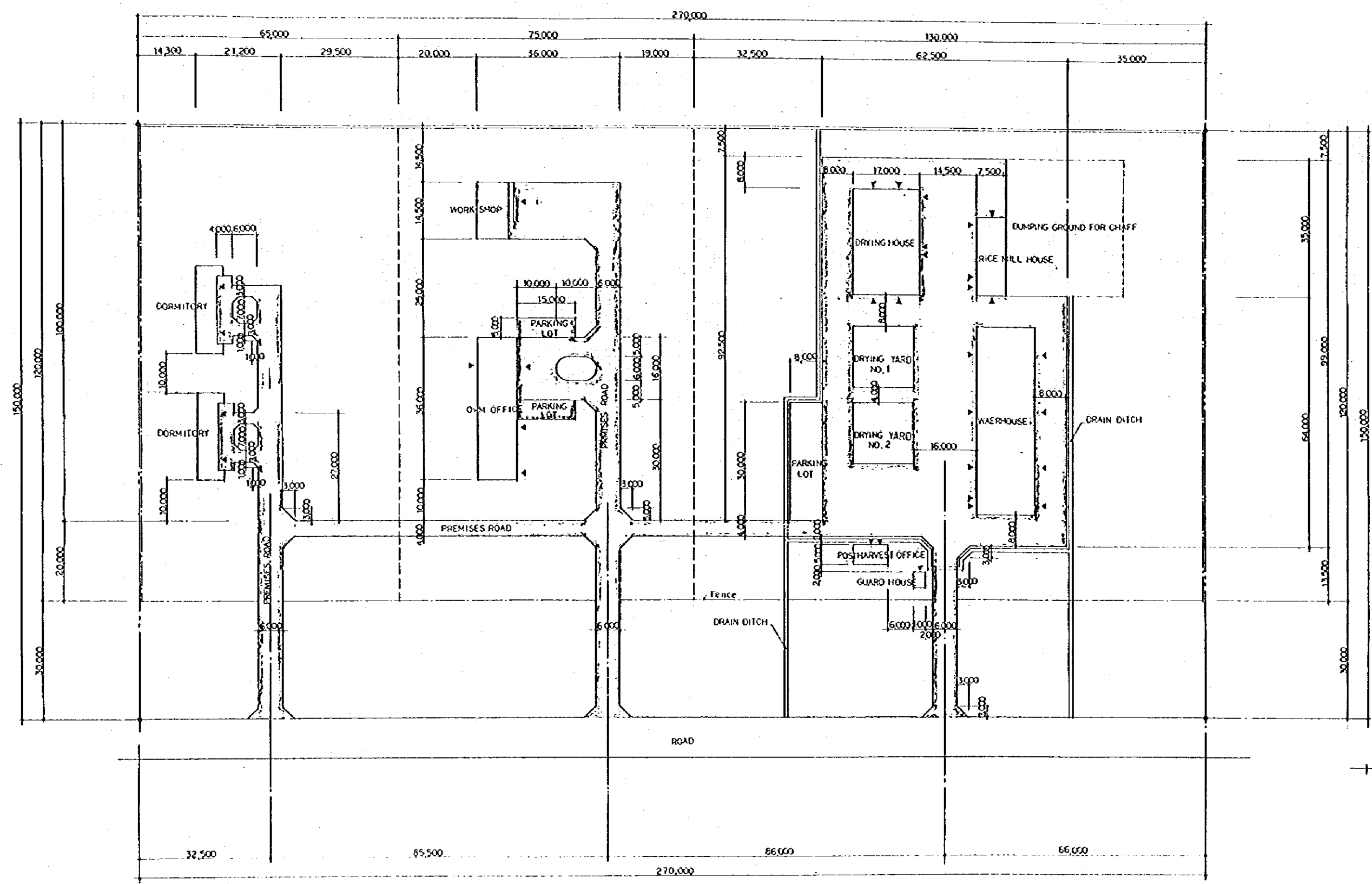
- Tertiary canal (TC) & water course (WC)
- Tertiary drain (TD) & Field drain (FD)
- Field road
- Field border
- Turnout
- Division box (TC to WC)

- Farm outlet (WC to Field)
- Irrigation culvert
- Drainage culvert
- Drain pipe
- Field access

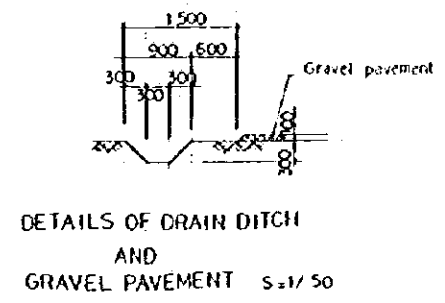


THE UNITED REPUBLIC OF TANZANIA	
NDUNGU AGRICULTURAL DEVELOPMENT PROJECT	
TITLE OF DRAWING	
標準圃場区画図	
Date	Drawing No. 200 - 24
JAPAN INTERNATIONAL COOPERATION AGENCY	



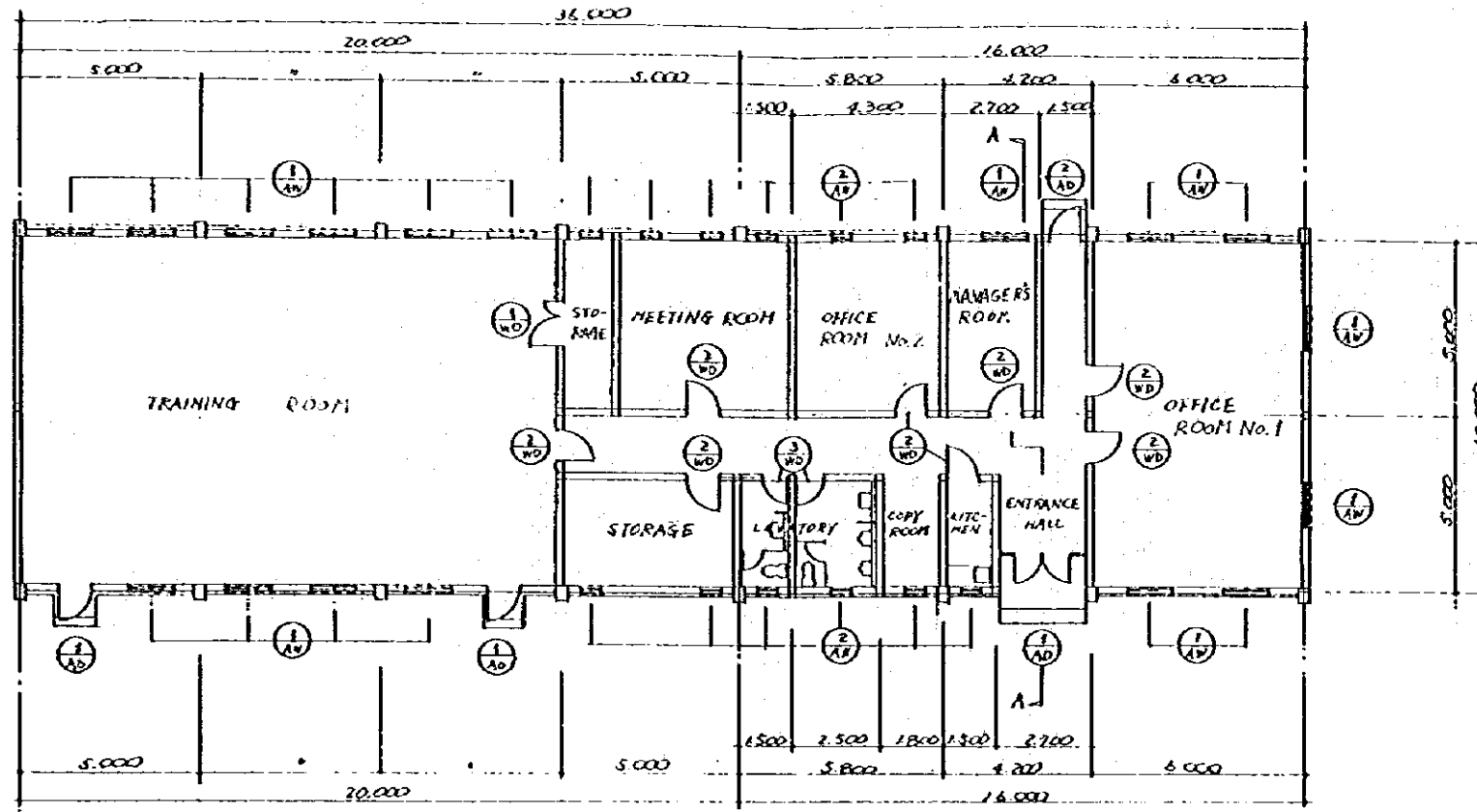


PLOT PLAN S-1/500

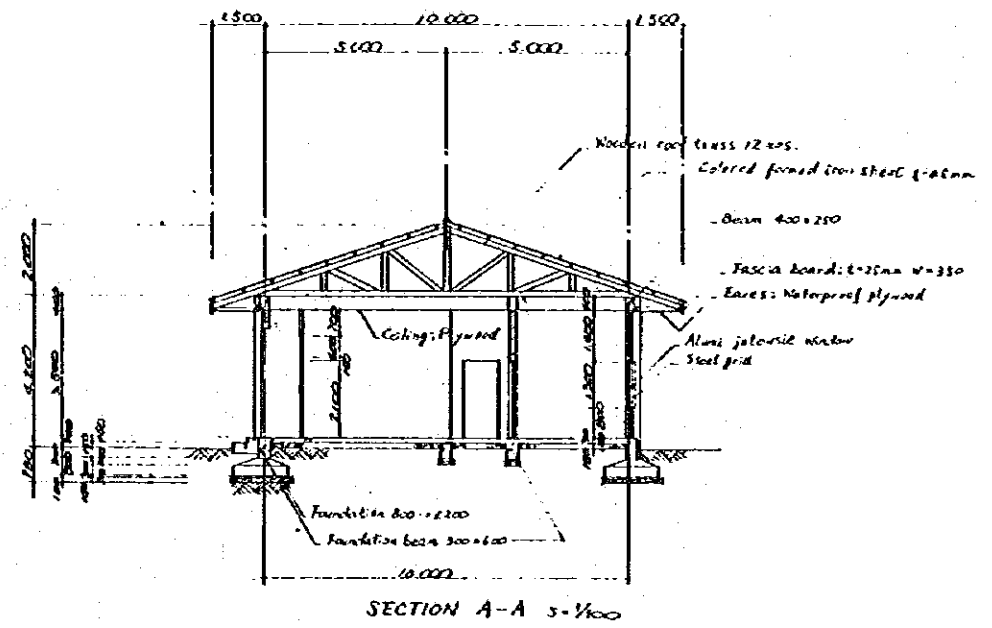


THE UNITED REPUBLIC OF TANZANIA	
NOUNGU AGRICULTURAL DEVELOPMENT PROJECT	
TITLE OF DRAWING	
建物配置図	
Date	Drawing No.
JAPAN INTERNATIONAL COOPERATION AGENCY	





FLOOR PLAN 1/400 Floor area 360. m<sup>2</sup>



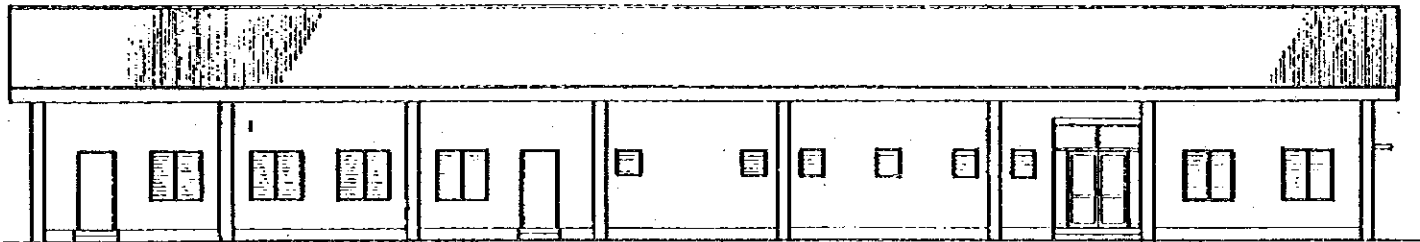
SECTION A-A 1/400

EXTERIOR FINISH SCHEDULE

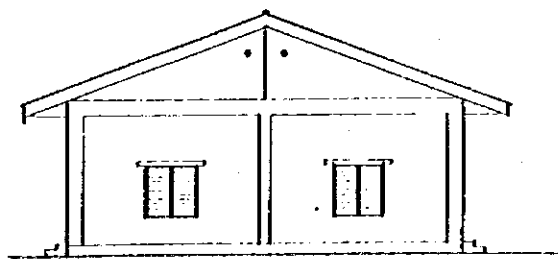
	FINISH
ROOF	Colored formed iron sheet 1.05mm
WALL	Acrylic emulsion paint
EAVES & FASCIA	Eaves: Acrylic emulsion paint on waterproof plywood. Fascia: Oil paint on wooden board
DOOR & WINDOW	Aluminium door and window. Steel grill for outside of window

INTERIOR FINISH SCHEDULE

	FLOOR	SKIRTING WAINSCOT	WALL	CEILING	REMARKS
OFFICE, ENTRANCE HALL, MEETING ROOMS CORRIDOR	Terrazzo	Vinyl asbestos H-100	Vinyl emulsion paint on cement mortar	Oil paint on plywood	
TRAINING INSTITUTE & ASSEMBLY HALL	- DO -	- DO -	- DO -	- DO -	
KITCHEN & COPY ROOM	- DO -	- DO -	- DO -	- DO -	
LAVATORY	- DO -	Terrazzo H-100	- DO -	- DO -	
STORAGE	Cement mortar	Cement mortar H-100	- DO -	- DO -	



FRONT ELEVATION 1/400



SIDE ELEVATION 1/400

DOOR AND WINDOW LIST

Mark	W x H	Materials	Glass	Hardware
(1)	1.600 x 2.000	Aluminium door	Sheet glass 3mm	Cylinder door lock, Door check
(2)	900 x 2.100	- DO -	- DO -	- DO -
(3)	1.300 x 1.300	Aluminium jalousie window	Sheet glass 3mm	- DO -
(4)	800 x 900	- DO -	- DO -	- DO -
(5)	1.200 x 2.100	Wood door	- DO -	Cylinder door lock, Door stopper
(6)	900 x 2.100	- DO -	- DO -	- DO -
(7)	700 x 2.100	- DO -	- DO -	Door stopper

THE UNITED REPUBLIC OF TANZANIA

NOUNGU AGRICULTURAL DEVELOPMENT PROJECT

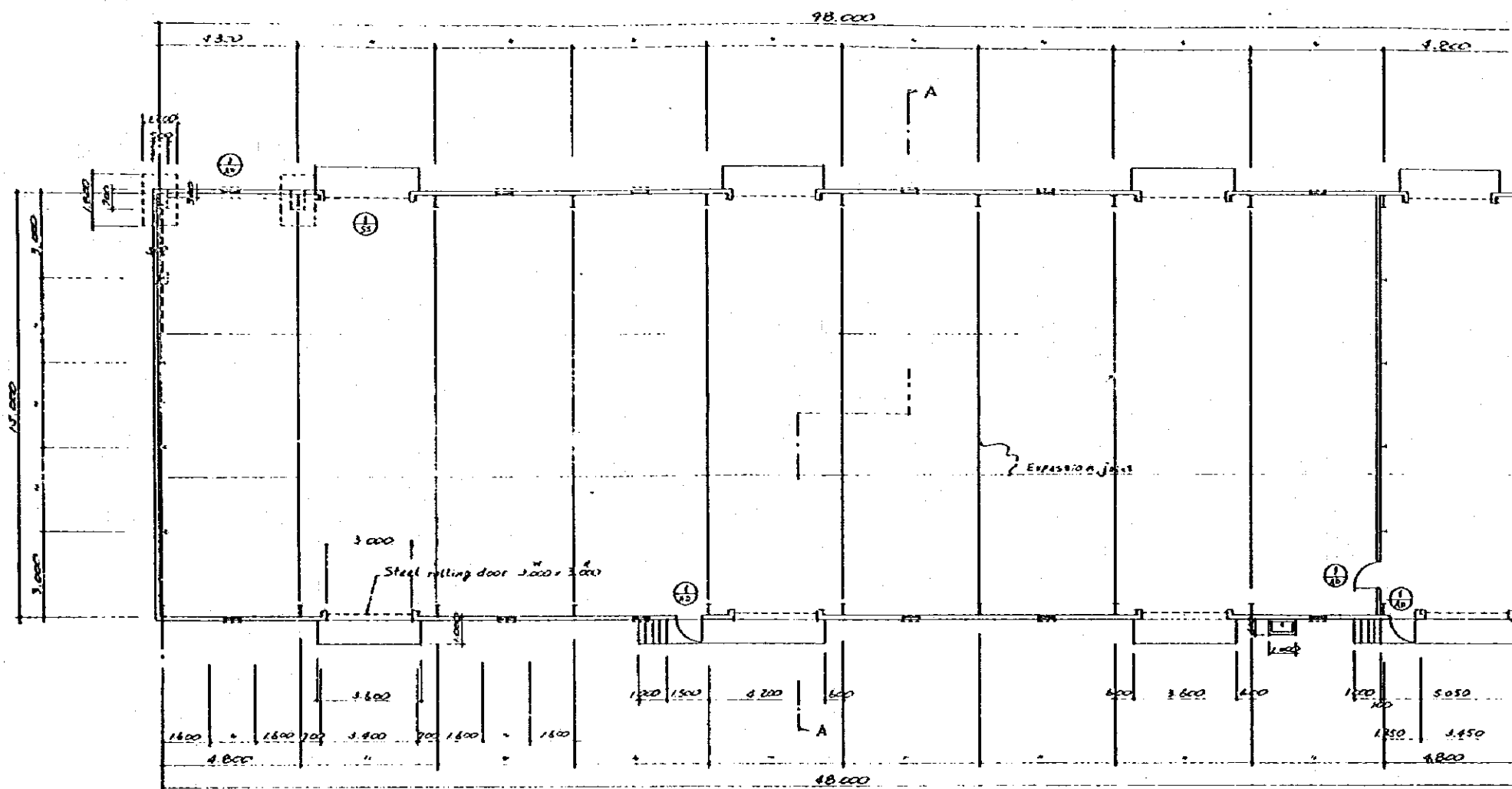
TITLE OF DRAWING

O&M 事務棟

Date Drawing No. 300-02

JAPAN INTERNATIONAL COOPERATION AGENCY





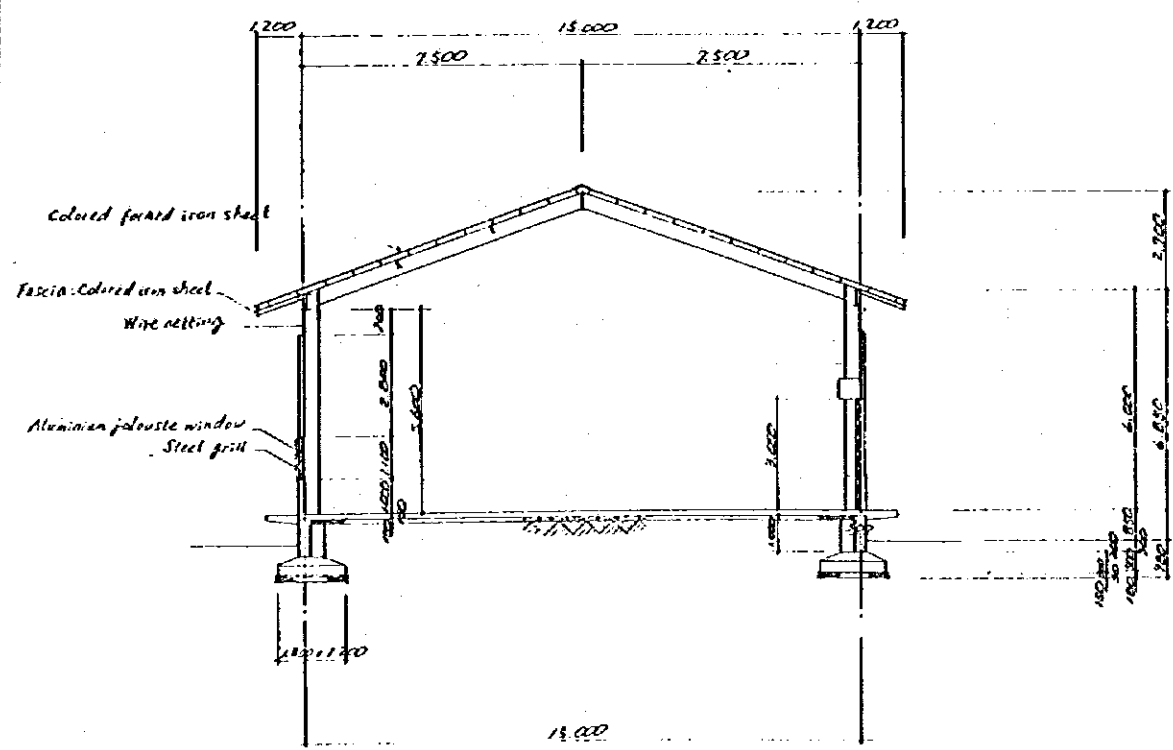
FLOOR PLAN s. 1/100 Floor area 720M<sup>2</sup>

**EXTERIOR FINISH SCHEDULE**

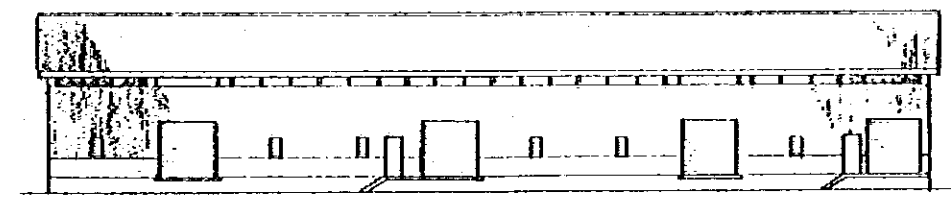
	FINISH
ROOF	Colored formed iron sheet 2.05mm
WALL	Do
FASCIA	Colored iron sheet 2.05mm
WAINSCOT	Acrylic emulsion paint on cement mortar
STEP	Cement mortar
DOOR & WINDOW	Aluminium door & window
	Steel rolling door 3000 x 3000
STEEL SURFACE	Oil paint

**INTERIOR FINISH SCHEDULE**

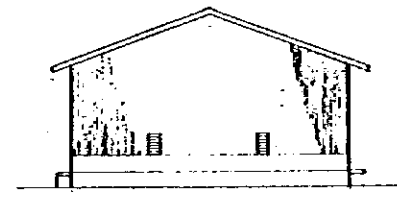
FLOOR	: Concrete trowel finish
WAINSCOT	: Cement mortar
STEEL SURFACE	: Oil paint



SECTION A-A s. 1/100



FRONT ELEVATION s. 1/200

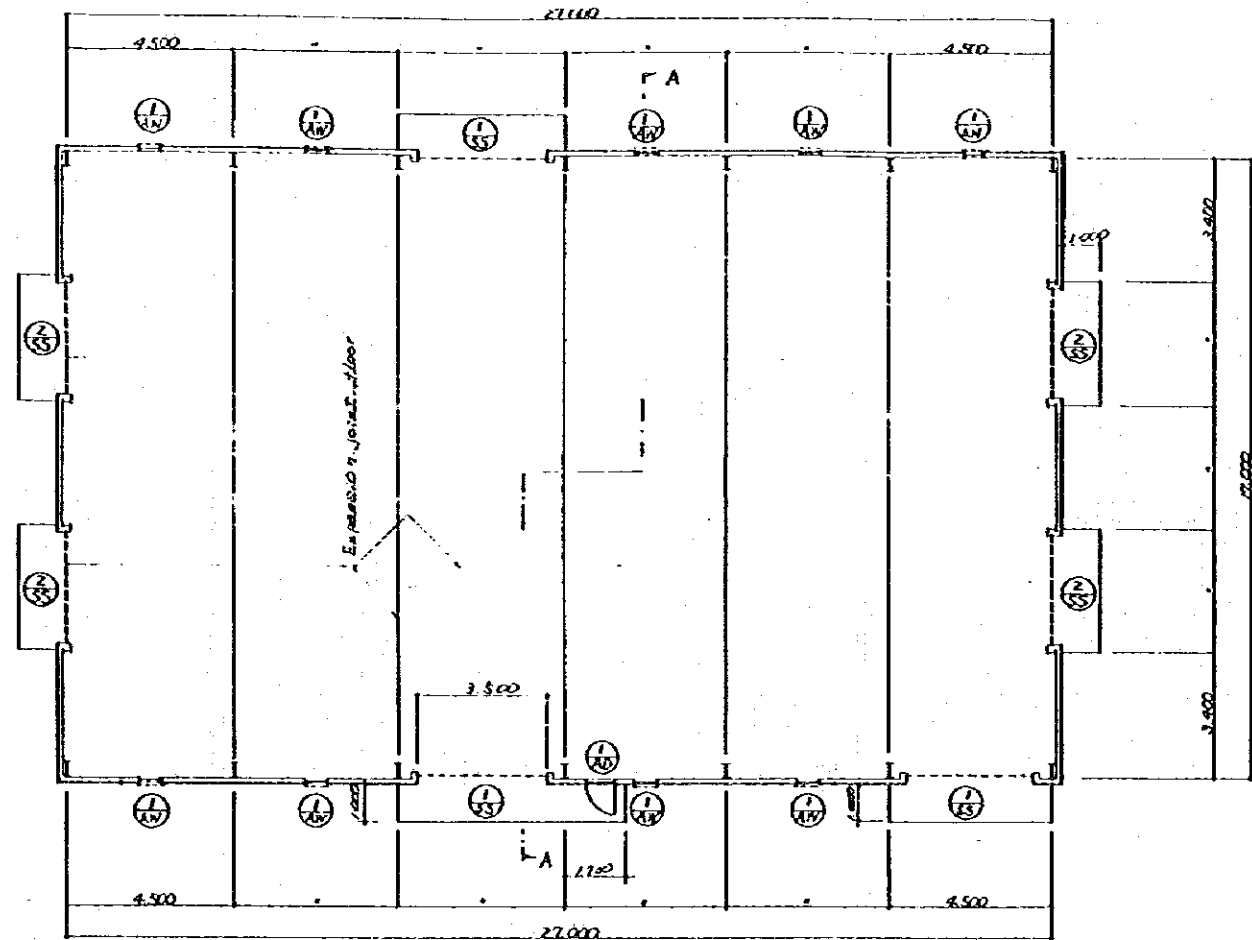


SIDE ELEVATION s. 1/200

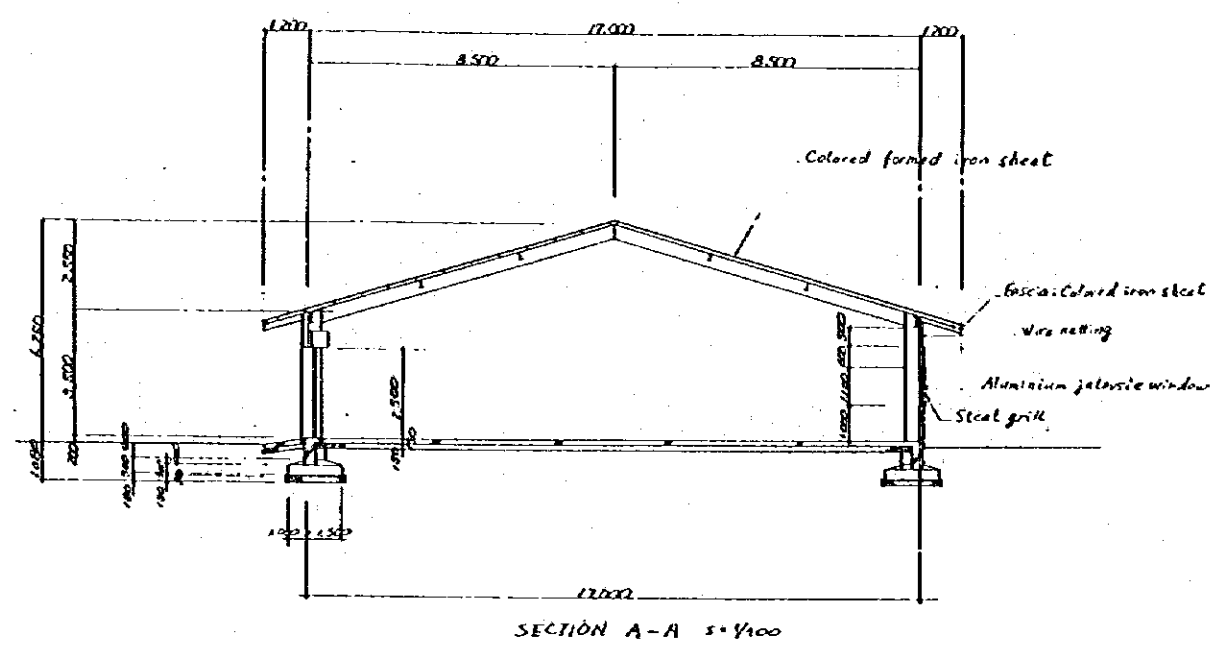
**DOOR AND WINDOW LIST**

	W x H	Material	Glass	Hardware	Remarks
⊕	900 x 2,100	Aluminium door	---	Cylinder door lock, Door stopper	
⊕	100 x 1,100	Aluminium jalousie window	Sheet glass 5mm		Steel grill
⊕	3,000 x 3,000	Steel rolling door	---		

**THE UNITED REPUBLIC OF TANZANIA**  
 NDUNGU AGRICULTURAL DEVELOPMENT PROJECT  
 TITLE OF DRAWING  
**多目的倉庫**  
 Date \_\_\_\_\_ Drawing No. 300-04  
 JAPAN INTERNATIONAL COOPERATION AGENCY



FLOOR PLAN 1:1000 Floor area 459.72



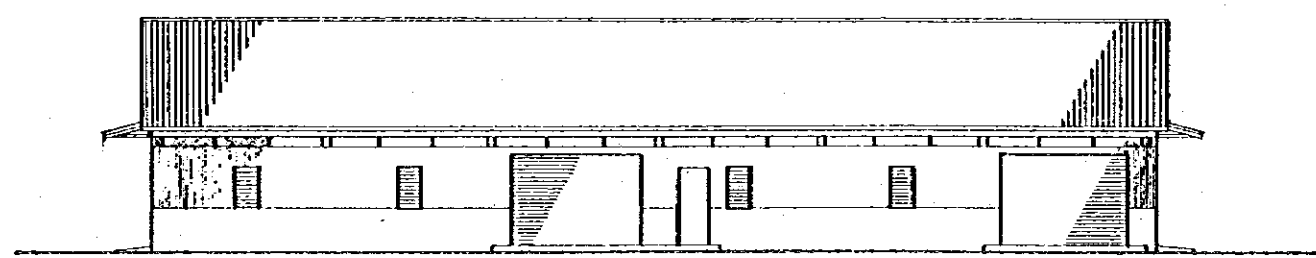
SECTION A-A 1:1000

EXTERIOR FINISH SCHEDULE

	FINISH
ROOF	Colored formed iron sheet 1.05mm
WALL	Do
FASCIA	Colored iron sheet 1.05mm
DOOR & WINDOW	Aluminium door and window Steel rolling door 2500 x 3500
STEEL SURFACE	Oil paint

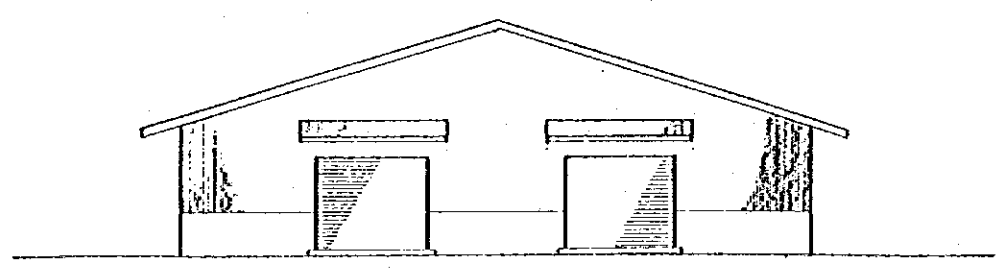
INTERIOR FINISH SCHEDULE

- FLOOR : Concrete trowel finish
- WAINSCOT : Cement mortar
- STEEL SURFACE : Oil paint



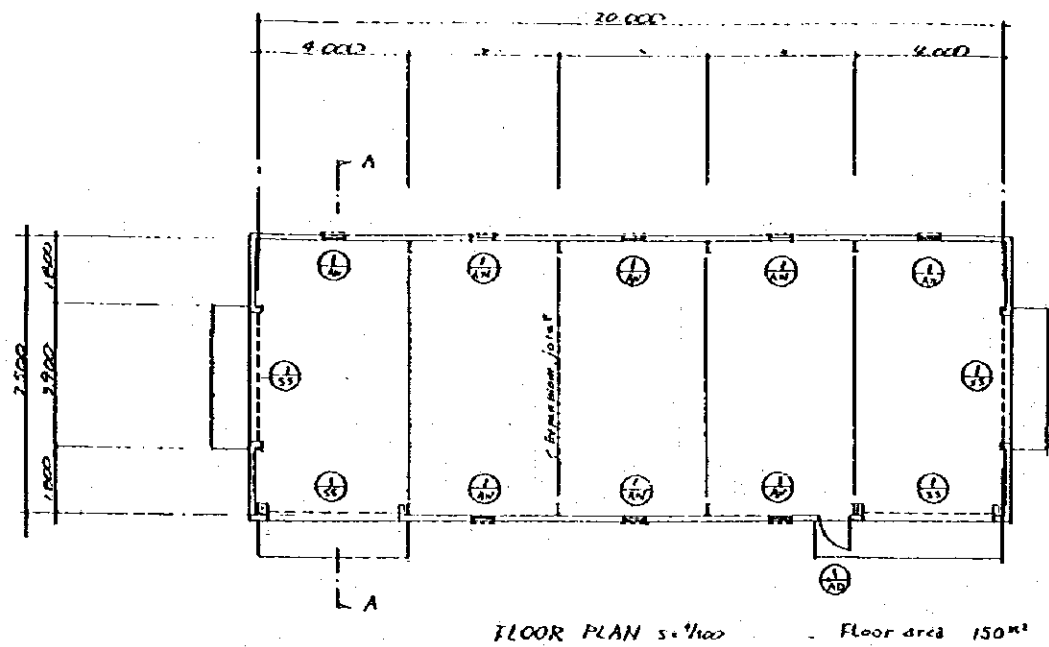
FRONT ELEVATION 1:1000

Marks	W x H	Materials	Glass	Hardware	Remarks
(1/35)	3,500 x 2,500	Steel, light weight			
(2/35)	3,000 x 2,500	Steel, light weight			
(1/AD)	900 x 2,000	Aluminium door	Sheet glass 3mm	Cylinder door lock, Door check	
(1/15)	600 x 1,800	Aluminium jalousie window	Sheet glass 5mm		Steel grill



SIDE ELEVATION 1:1000

THE UNITED REPUBLIC OF TANZANIA  
 NOUNGU AGRICULTURAL DEVELOPMENT PROJECT  
 TITLE OF DRAWING  
 乾燥棟  
 Date \_\_\_\_\_ Drawing No. 300-05  
 JAPAN INTERNATIONAL COOPERATION AGENCY

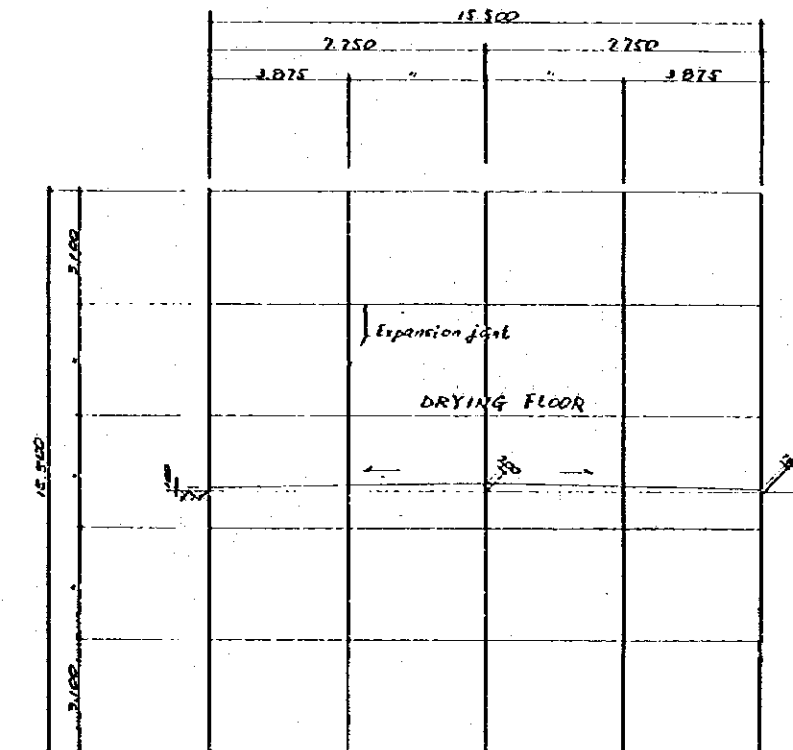


EXTERIOR FINISH SCHEDULE

ROOF	Colored formed iron sheet 1.05mm
WALL	Do
FASCIA	Colored iron sheet
WAINSCOT	Acrylic emulsion paint on cement mortar
DOOR & WINDOW	Aluminium door & window
	Steel rolling door 3,000 x 3,000
STEEL SURFACE	Oil paint

INTERIOR FINISH SCHEDULE

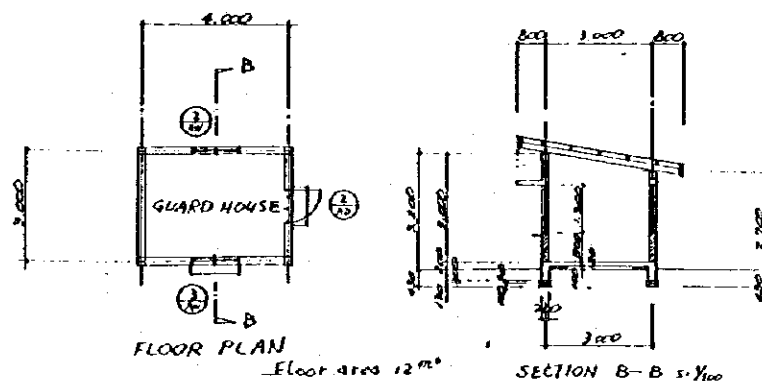
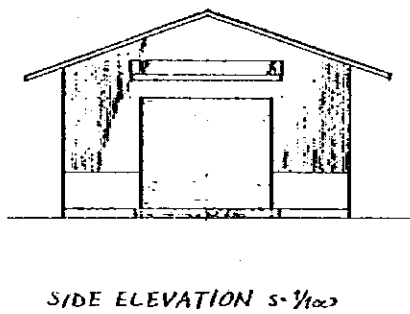
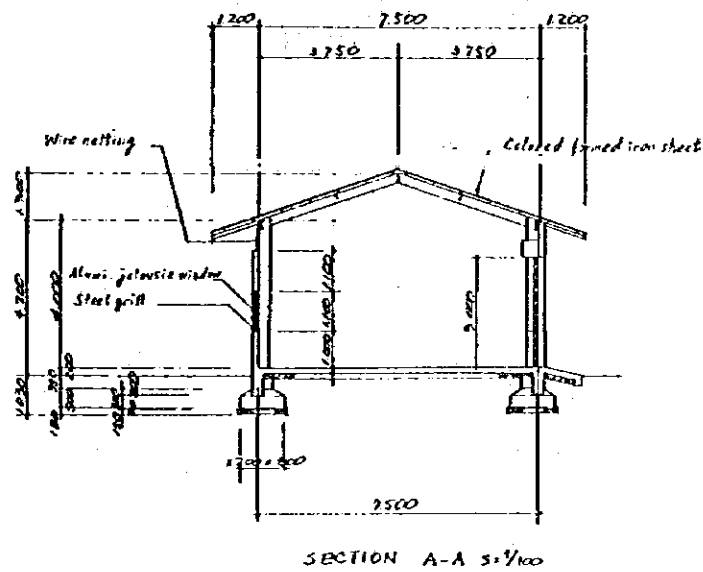
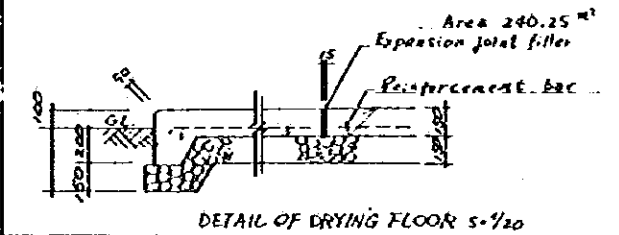
FLOOR	: Concrete trowel finish
WAINSCOT	: Cement mortar
STEEL SURFACE	: Oil paint



DOOR AND WINDOW LIST

	W x H	MATERIAL	GLASS	HARDWARE
①	700 x 2,100	Aluminium door		Cylinder door lock, door stopper
②	800 x 1,100	Aluminium jalousie window	Sheet glass 5mm	Steel grill
③	3,000 x 3,000	Steel rolling door		

DRYING FLOOR 5-1/100

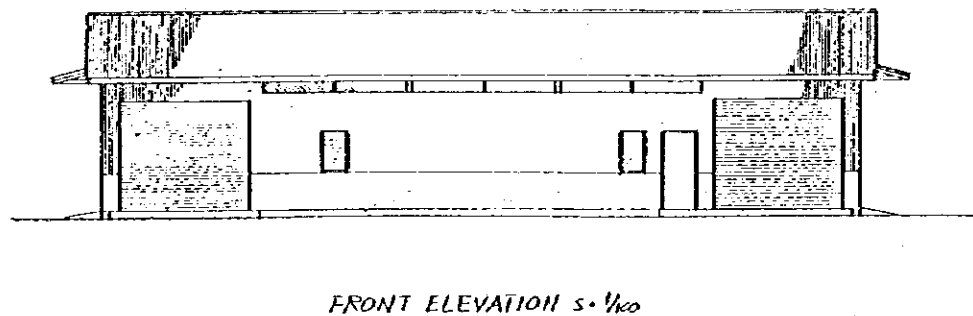
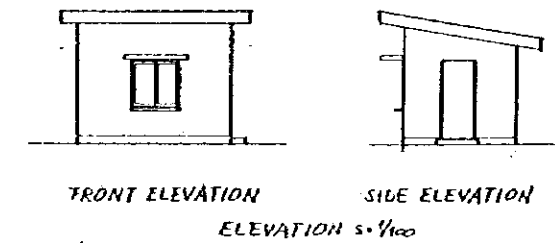


EXTERIOR FINISH SCHEDULE

ROOF	: Colored formed iron sheet 1.05mm
WALL	: Acrylic emulsion paint on cement mortar
DOOR & WINDOW	: Aluminium door and window

INTERIOR FINISH SCHEDULE

FLOOR	: Concrete trowel finish
SKIRTING	: Cement mortar
WALL	: Vinyl emulsion paint on cement mortar



DOOR AND WINDOW LIST

	W x H	MATERIAL	GLASS	HARDWARE	Remarks
①	700 x 2,100	Aluminium door		Cylinder door lock, door stopper	
②	1,300 x 1,300	Aluminium jalousie window	Sheet glass 5mm		Steel grill
③	1,300 x 1,300	Aluminium window	Sheet glass 3mm	Crescent	

THE UNITED REPUBLIC OF TANZANIA

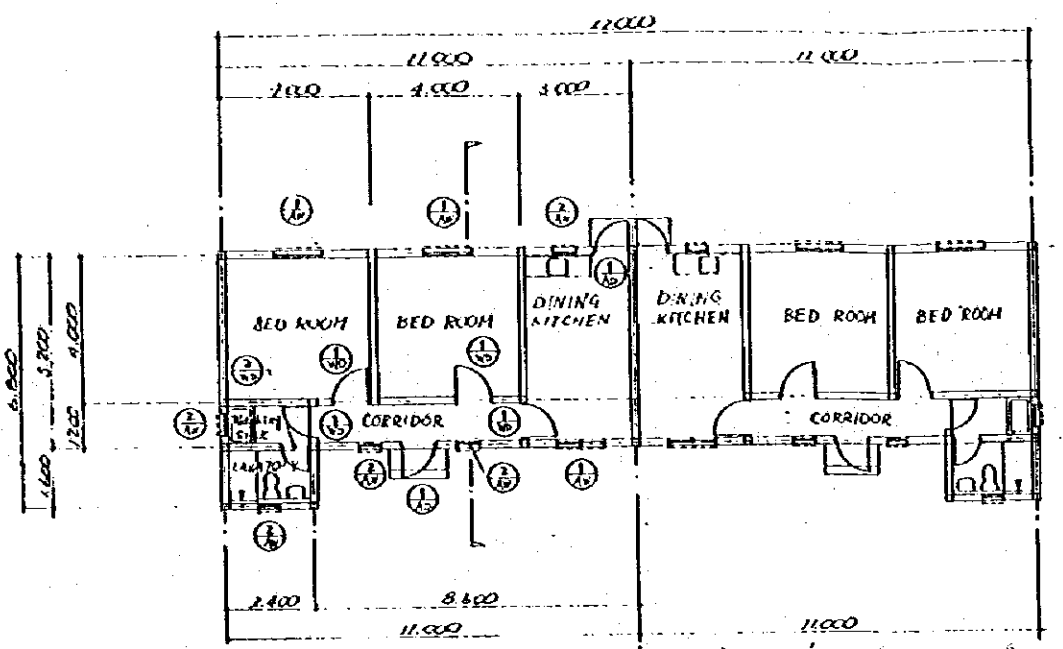
NDUNGU AGRICULTURAL DEVELOPMENT PROJECT

TITLE OF DRAWING

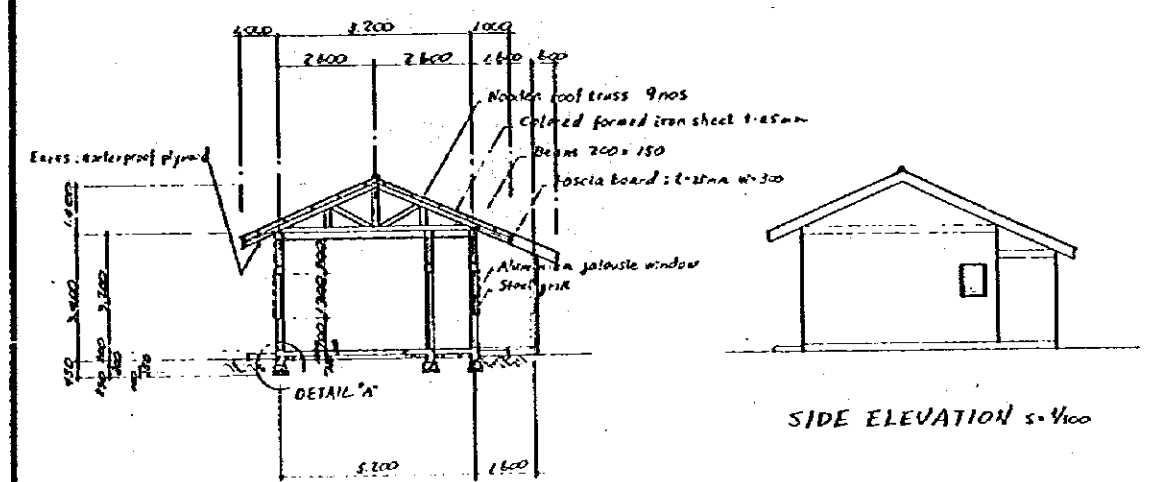
精米棟及び守衛所

Date Drawing No. 300-06

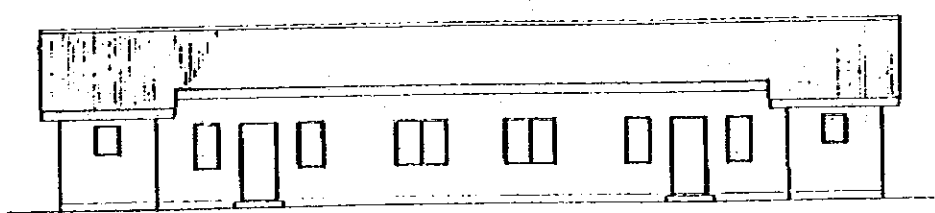
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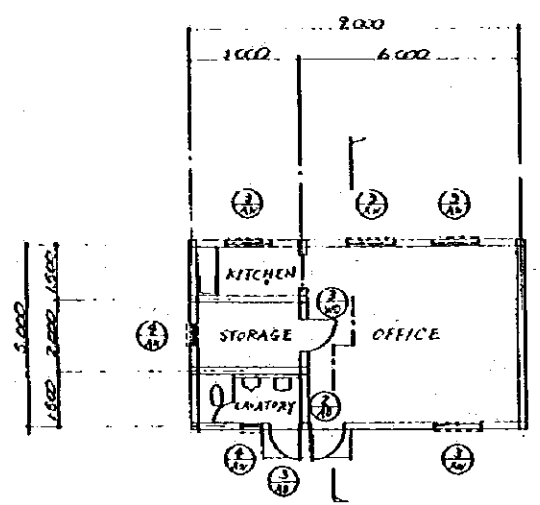
FLOOR PLAN s. 1/100  
Floor area 122.08 m<sup>2</sup>



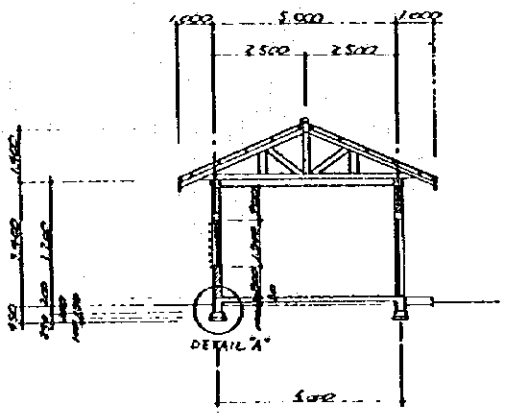
SECTION A-A s. 1/100



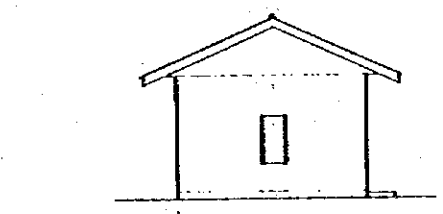
FRONT ELEVATION s. 1/100



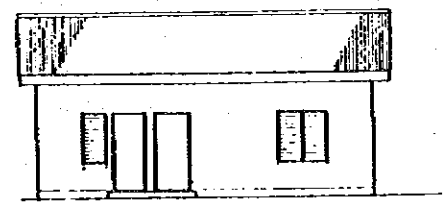
FLOOR PLAN s. 1/100  
Floor area 45.00



SECTION B-B s. 1/100



SIDE ELEVATION s. 1/100



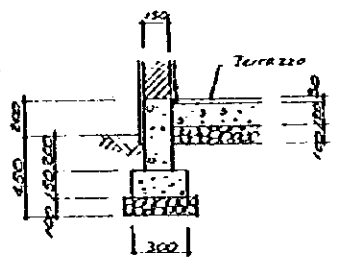
FRONT ELEVATION s. 1/100

DOOR AND WINDOW LIST

	W	x	H	Materials	Remarks
(1)	900	x	2,100	Aluminium door	
(2)	1,200	x	1,300	Aluminium jalousie window	Steel grill
(3)	600	x	1,300	— Do —	— Do —
(4)	900	x	2,100	Wooden door	
(5)	700	x	2,100	— Do —	

	W	x	H	Materials	Remarks
(6)	900	x	2,100	Aluminium door	
(7)	600	x	2,100	— Do —	
(8)	1,300	x	1,300	Aluminium jalousie window	Steel grill
(9)	600	x	700	— Do —	— Do —
(10)	900	x	2,100	Wooden door	

Notes:  
Hardware: Cylinder door lock, Door check  
Glass: Sheet glass 5mm



DETAIL "A" s. 1/20

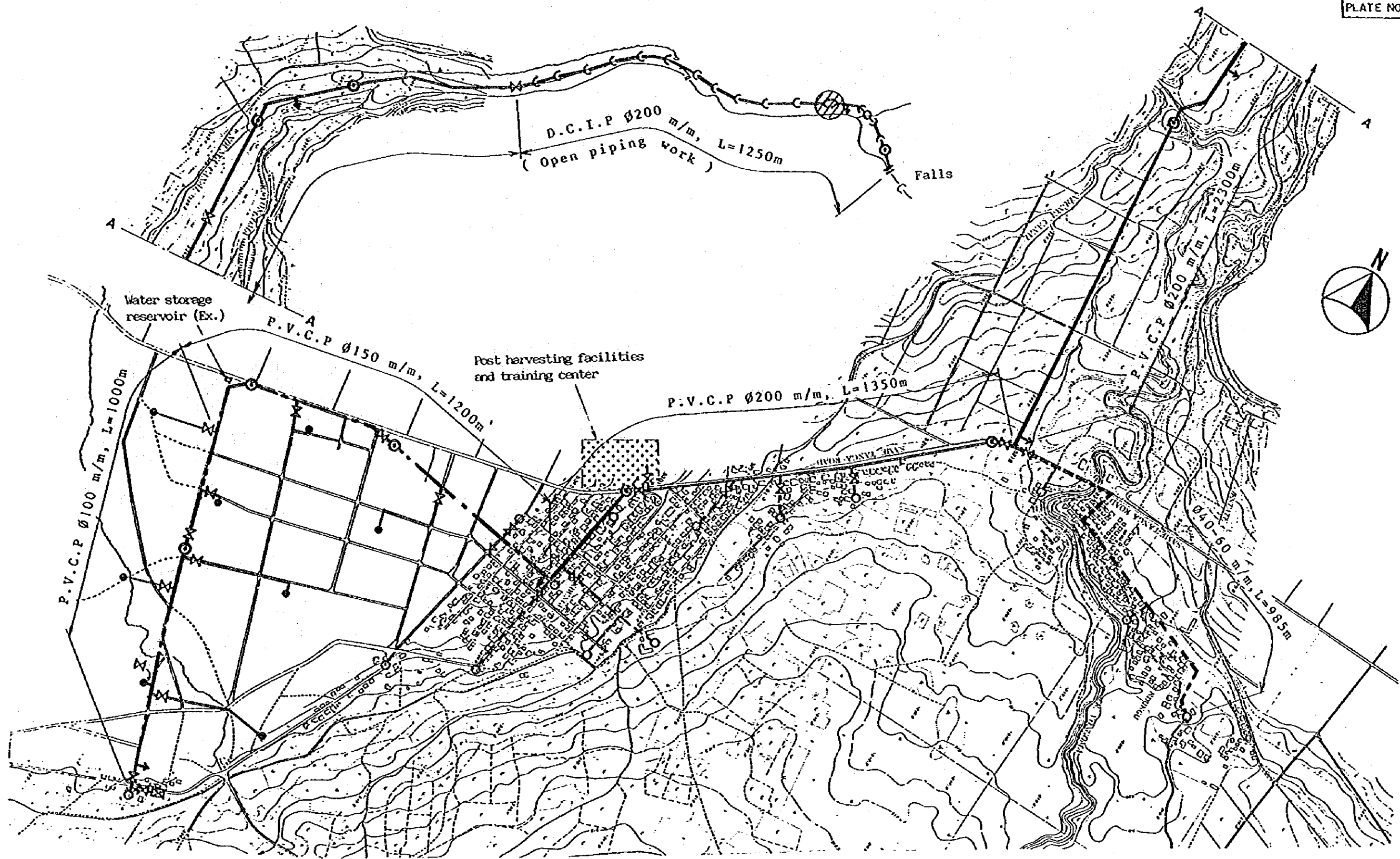
INTERIOR FINISH SCHEDULE

	FLOOR	SKIRTING WAINSCOT	WALL	CEILING	REMARKS
BED ROOM	Terrazzo	Vinyl asbestos H-100	Vinyl emulsion paint on cement mortar	Oil paint on plywood	
DINING KITCHEN	— Do —	— Do —	— Do —	— Do —	
LAVATORY	— Do —	Terrazzo H-100	— Do —	— Do —	
OFFICE	Terrazzo	Vinyl asbestos H-100	Vinyl emulsion paint on cement mortar	Oil paint on plywood	
KITCHEN	— Do —	— Do —	— Do —	— Do —	
STORAGE	Cement mortar	Cement mortar H-100	— Do —	— Do —	
LAVATORY	— Do —	Vinyl emulsion paint on cement mortar H-100	— Do —	— Do —	

EXTERIOR FINISH SCHEDULE

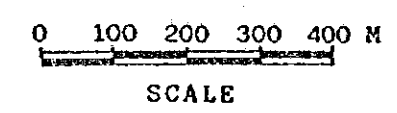
	FINISH
ROOF	Colored formed iron sheet 1.45m
WALL	Acrylic emulsion paint
EAVES	Dormitory only: Acrylic emulsion paint on waterproof plywood
FASCIA	Oil paint on wooden board
DOOR & WINDOW	Aluminium door and window. Steel grill for outside of window

THE UNITED REPUBLIC OF TANZANIA  
 NONGU AGRICULTURAL DEVELOPMENT PROJECT  
 TITLE OF DRAWING  
 O&M関係宿泊棟及び  
 収穫後処理管理事務棟  
 Date: \_\_\_\_\_ Drawing No. 300-07  
 JAPAN INTERNATIONAL COOPERATION AGENCY



LEGEND

D.C.I. pipe	Ø200mm		Service pipe	Ø 50mm	
P.V.C. pipe	Ø200mm		"	Ex.	
"	Ø150mm		Communal standpipe	Ø 20mm	
"	Ø100mm		"	Ex.	
"	Ex.		Sluice valve		
Aqueduct	Ø200mm		Air valve		
Grit chamber			Drainage facilities		
Intake weir	Ex.		Cattle trough	Ex.	



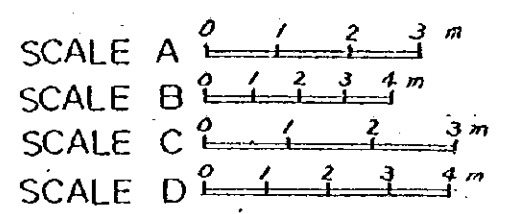
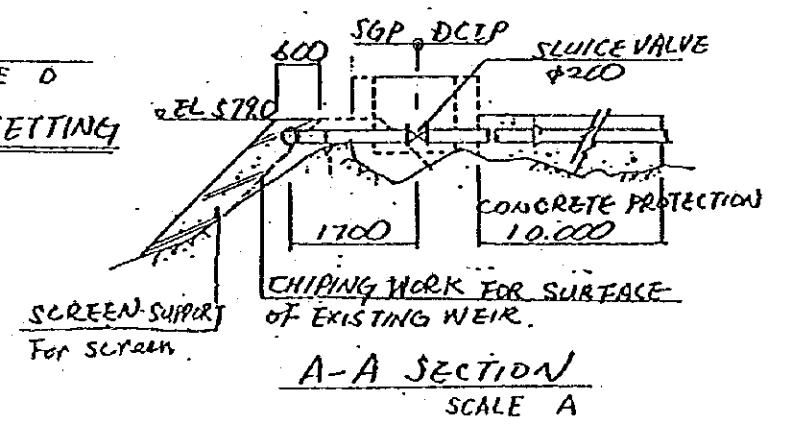
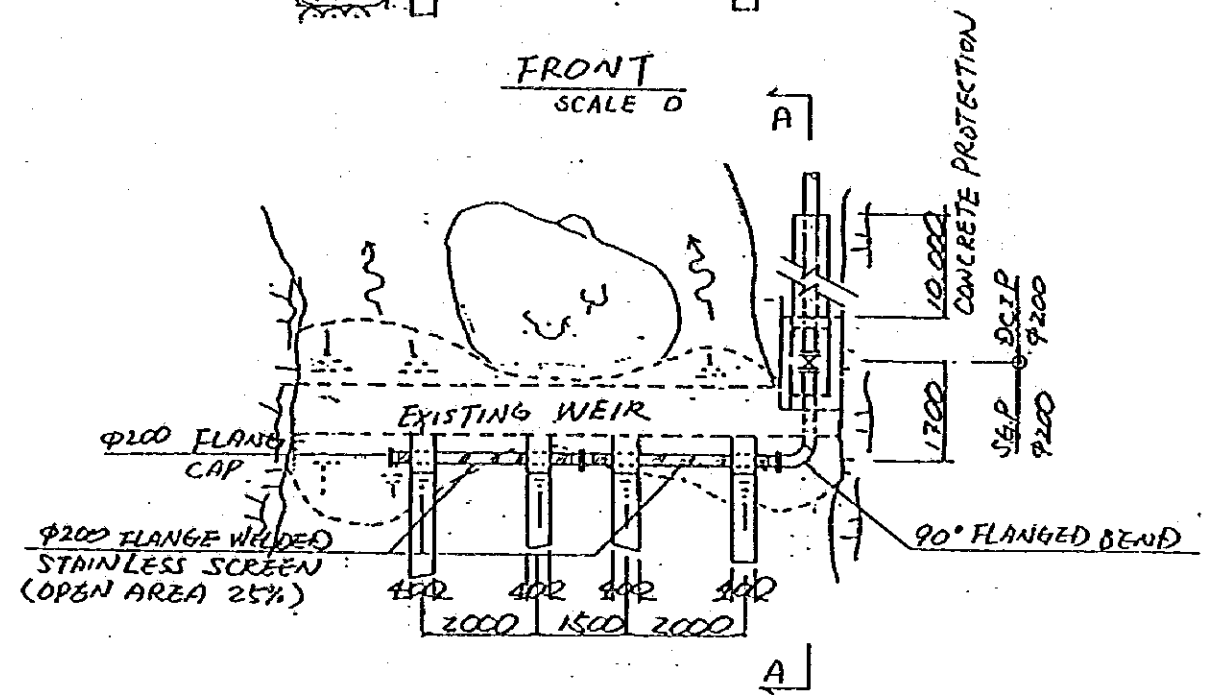
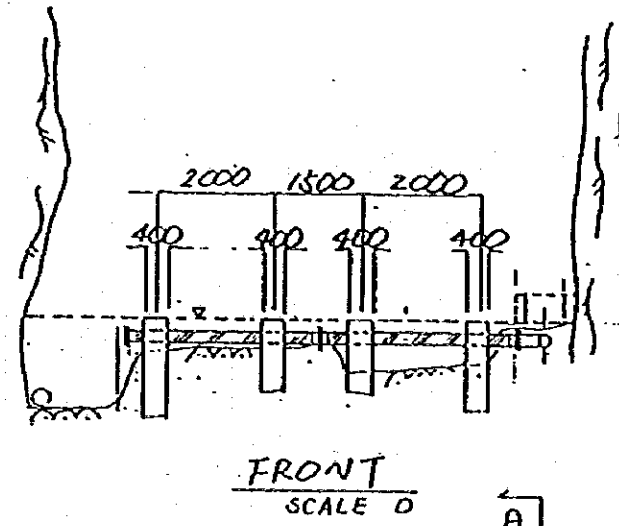
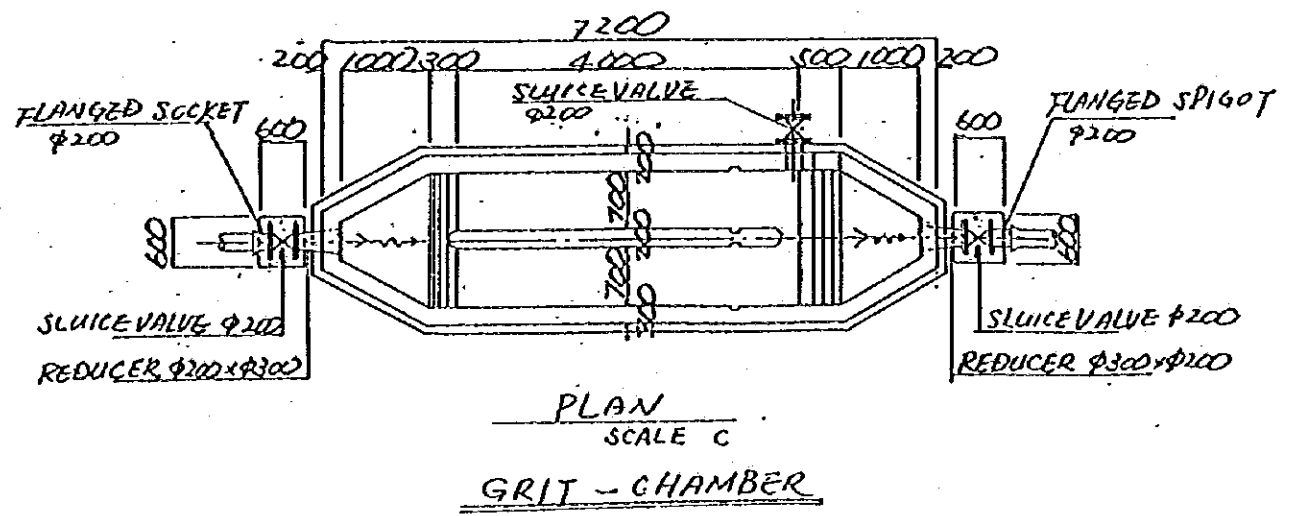
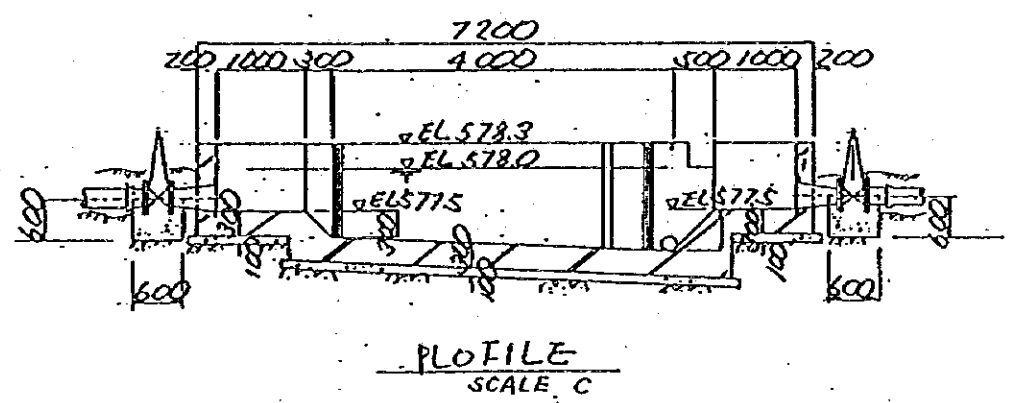
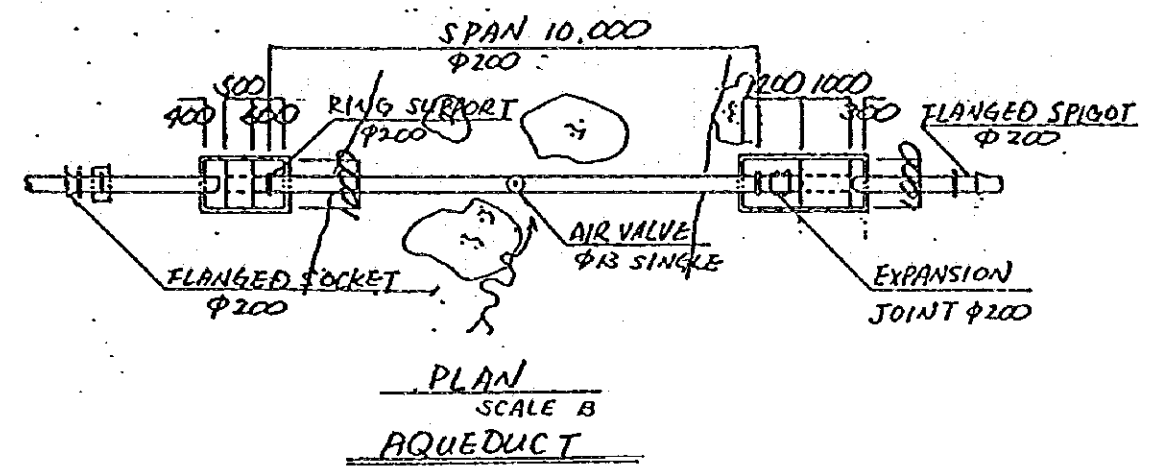
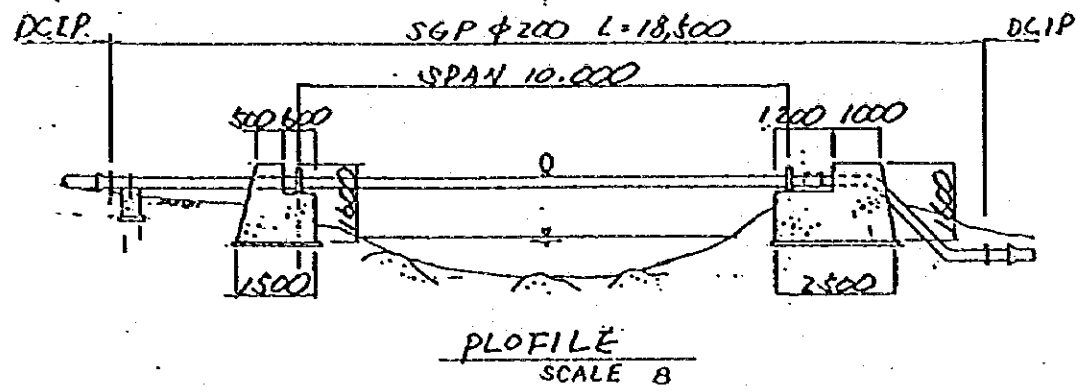
THE UNITED REPUBLIC OF TANZANIA

NUUNGU AGRICULTURAL DEVELOPMENT PROJECT

TITLE OF DRAWING  
飲雑用水供給施設配置図

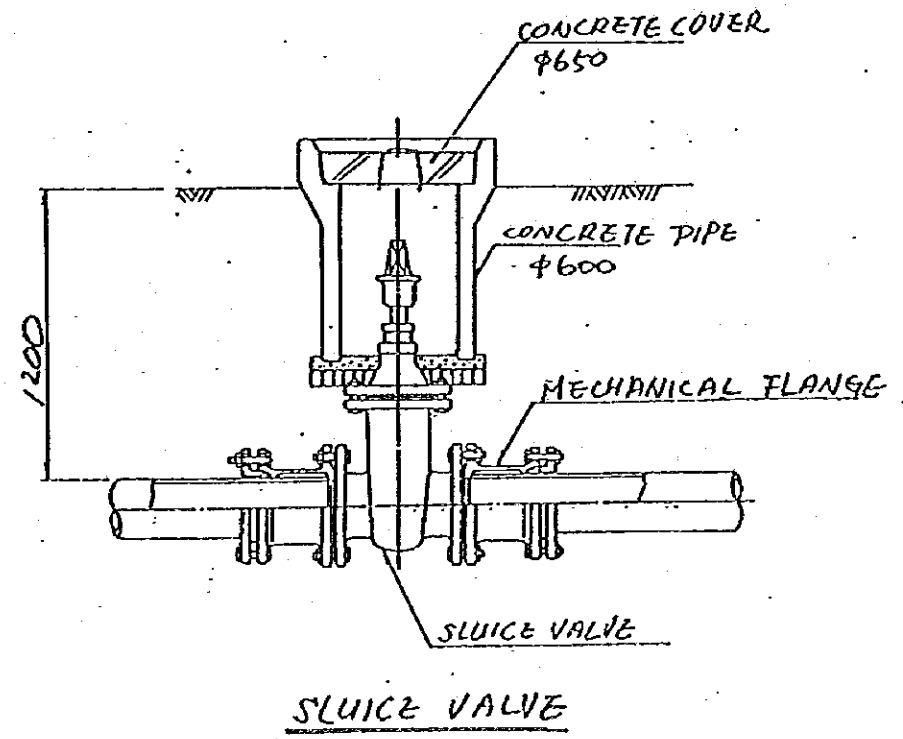
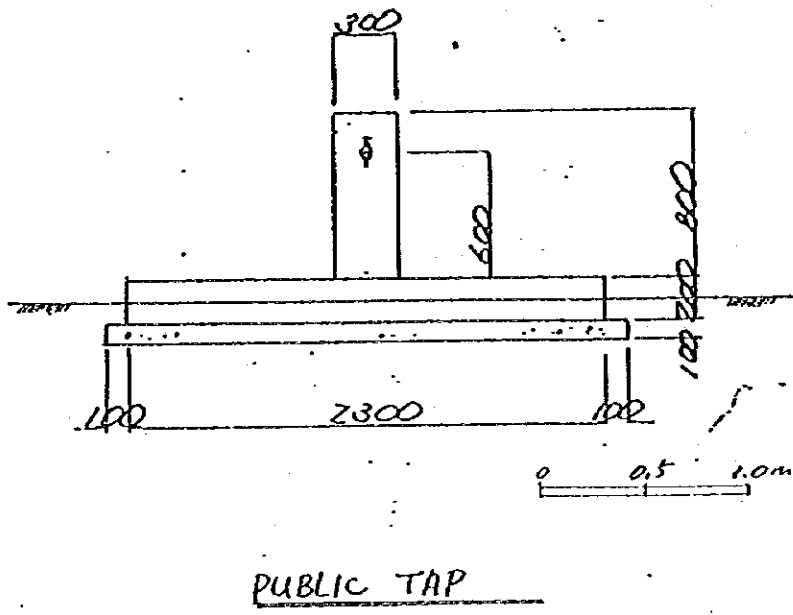
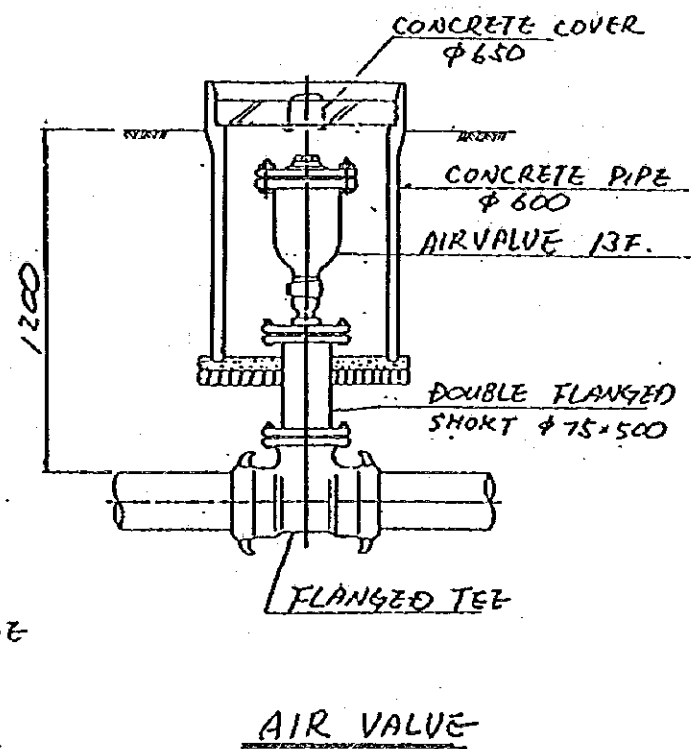
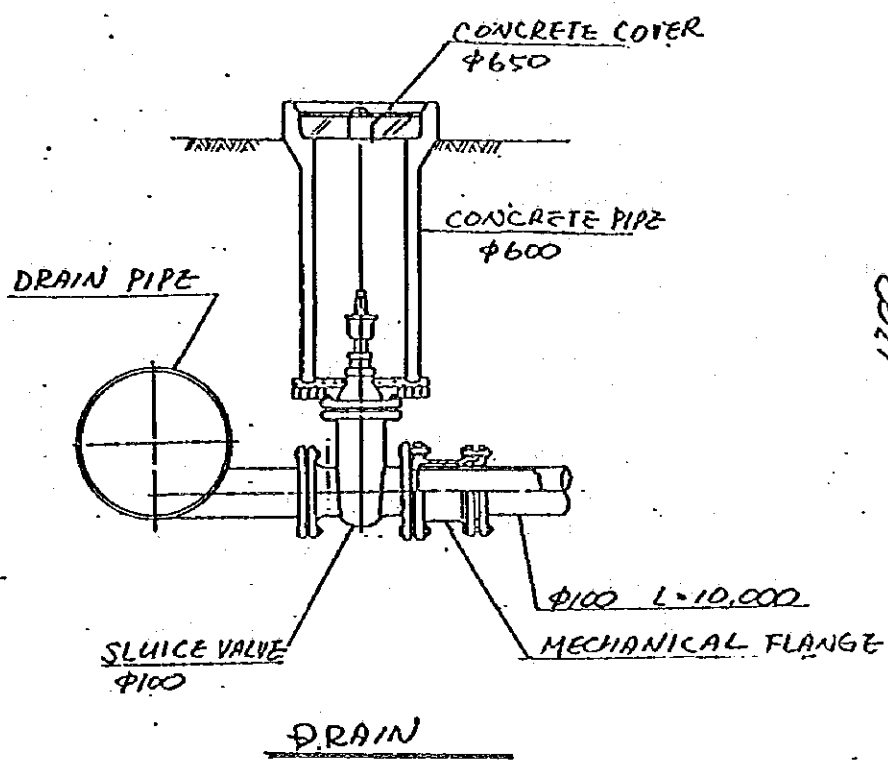
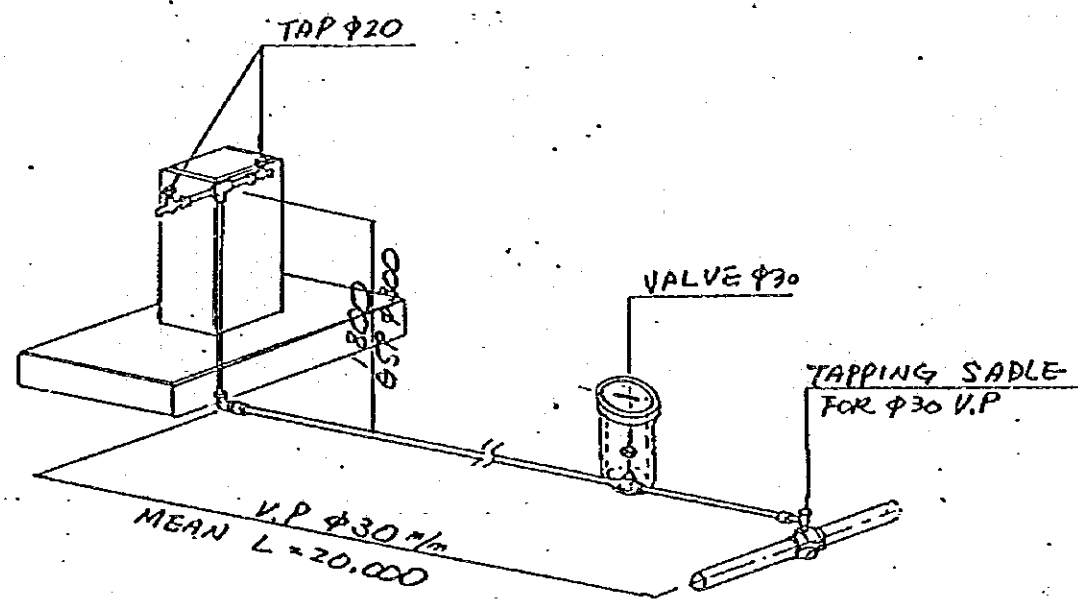
Date \_\_\_\_\_ Drawing No. 400-01

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THE UNITED REPUBLIC OF TANZANIA	
NDUNGU AGRICULTURAL DEVELOPMENT PROJECT	
TITLE OF DRAWING	
飲雑用水供給施設工 (1/2)	
Date	Drawing No. 400-02
JAPAN INTERNATIONAL COOPERATION AGENCY	





THE UNITED REPUBLIC OF TANZANIA	
NDUNGU AGRICULTURAL DEVELOPMENT PROJECT	
TITLE OF DRAWING	
飲雜用水供給施設工 (2/2)	
Date	Drawing No. 400 - 03
JAPAN INTERNATIONAL COOPERATION AGENCY	





JICA