

4. Further Study

JICA will complete the final report with the confirmed items, and send it to the Government of the Philippines around March 1993.

Jun J. Reyes



Annex I

Necessary measures to be taken by the Government of the Philippines on condition that Japan's Grant Aid is extended:

1. To secure the land necessary for the construction of the Project facilities.
2. To clear, level and reclaim for the construction sites prior to commencement to the Project.
3. To provide facilities for distribution of electricity, water supply and drainage and other incidental facilities outside the site.
4. To ensure speedy unloading, tax exemption, custom clearance of the products under the grant at the port of disembarkation.
5. To accord Japanese nationals whose services may be required in connection with the supply of the products and the services under the Verified Contracts such facilities as may be necessary for their entry into the Philippines and stay therein for the performance of their work.
6. To exempt Japanese national involved in the Project from customs duties, internal taxes and other fiscal levies which may be imposed in the Philippines with respect to the supply of equipment/machines and services under the Verified Contracts.

Mari T. Noyan



7. To bear commissions to the Japanese foreign exchange bank for the banking services based upon the Banking Arrangement.
8. To bear all expenses, other than those to be covered by the Grant Aid necessary for the execution of the Project.
9. To assign exclusive counterpart engineers/technicians for the Project.
10. To use and maintain properly and effectively the facilities constructed and equipment purchased under the Grant.

John J. Napier



I 基礎指標

1. 国名 : フィリピン共和国
2. 首都 : マニラ
3. 独立年月日 : 1989年7月12日
4. 国土面積 : 300,000 km²
5. 人口 : 60.7百万人 (1990年5月1日現在)
6. 人口密度 : 202.3人/km²
7. 人口増加率 : 2.35%/年
8. 平均寿命 : 55才
9. 政治
 - (1) 政体 : 大統領制
 - (2) 議会 : 立法、行政、司法3省からなる行政体制
 - (3) 政党 : 多党制
 - (4) 元首 (大統領) : Fidel Ramos
10. 宗教 :

Catholic	: 85.00%
Islam	: 4.32%
Aglipayan	: 3.91%
Protestant	: 3.06%
Iglesia ni Kristo	: 1.30%
Buddist	: 0.90%
11. 言語 : 87言語(方言を含む)があり、1980年現在、主にTagalog語とCebuano語、及び英語が広く使用されている。
12. 人種 : タガログ人 29.7%、セブアノ人24.2%、イロカノ人 10.3%、イロンゴ人 9.2%、ビーコル人 5.6%、その他 21.0%

13. 教育

- (1) 教育制度 : 教育制度には以下の2形態がある。また、各教育課程の施設数、教師数、生徒数は下表の通りである。

1) 公式教育制度

就学前教育（1～2年制、随意）、初等教育（6年制）、中等教育（4年制）、高等（大学）教育（4～5年制）、大学院（修士、博士課程）、専門技術教育（中等教育修了者対象；3年制）

2) 非公式教育制度

専門技術教育（短期）

教育課程	施設数	教師数*	被教育者数
就学前教育	3,837	11,018	321,459
初等教育	34,382	315,585	10,284,816
中等教育	5,521	118,805	3,961,639
高等教育	1,755	-	1,347,715
非公式教育	-	-	269,011

*公立学校の教師数、出所:1991 Philippine Statistical Yearbook, NSCB

II 社会・経済指標

1. 国内総生産 (Gross Domestic Product ; GDP)

(単位：百万ペソ)

項目	1986	1987	1988	1989	1990
GDP (時価)	91,180	95,398	101,450	107,168	109,890
GDP支出額 (時価)	11,413	12,350	14,064	16,049	18,377
国民一人当たりの国家収入					
- 時価	8,930	9,685	11,564	13,250	15,307
- 1972年固定価格	1,309	1,314	1,420	1,473	1,492
国民一人当たりの消費支出					
- 時価	8,644	9,172	10,274	11,723	13,715
- 1972年固定価格	1,212	1,228	1,271	1,313	1,363
人口 (百万人)	54.95	57.36	58.72	60.10	61.48
対米ドル為替レート (1%)	20.40	20.57	21.07	21.74	24.38

2. 産業部門別GDP (1972年固定価格表示)

(単位：百万ペソ)

項目	1986	1987	1988	1989	1990
農業、漁業、林業	27,110	26,834	27,793	28,986	29,620
鉱業	1,574	1,574	1,615	1,563	1,602
製造業	21,717	23,076	25,281	26,886	27,259
建設業	3,382	3,967	4,344	4,947	5,153
電気・ガス・水道	1,723	1,908	1,995	2,137	2,206
交通・通信	5,105	5,251	5,487	5,761	5,977
商業	14,337	15,153	15,998	16,795	17,352
金融業	4,831	5,832	6,250	6,843	7,205
サービス業	6,039	6,106	6,445	6,767	6,997
政府	5,362	5,697	6,242	6,483	6,519
合計	<u>91,180</u>	<u>95,398</u>	<u>101,450</u>	<u>107,168</u>	<u>109,890</u>

3. 通貨単位、対米ドル換算レート

(1) 通貨単位 : フィリピン・ペソ (Philippine Peso)

(2) 対米ドル換算レート

(単位：ペソ)

項目	1987	1988	1989	1990	1991
換算レート(対US\$ 1.00)	20.568	21.095	21.737	24.311	27.479

4. 消費者物価上昇率

項目	1987	1988	1989	1990	1991
年間上昇率	3.8	8.8	10.6	12.7	16.6

出所: NSO

5. 貿易構造

(1) 対外貿易の動向

(単位: ペソ)

項目	1986	1987	1988	1989	1990
輸出*	98,578.64	117,608.13	149,053.39	169,717.44	198,101.93
輸入	102,889.44	138,579.47	171,918.14	226,505.15	297,586.18
収支	(4,310.80)	(20,971.34)	(22,864.74)	(56,787.71)	(99,484.25)

* 国内輸出と再輸出の合計、出所: National Statistics Office

(2) 主要貿易財

1) 農産物

a. 輸出 (単位: 百万US\$)

項目	1986	1987	1988	1989	1990
砂糖	86.8	60.3	60.2	80.0	110.5
ココア・カカオ	332.8	380.5	408.2	376.8	360.7
バナナ	130.2	121.2	146.0	146.2	149.3
パイナップル	83.5	86.3	83.2	91.3	78.2
ココラ・ケーキ	74.8	73.4	63.4	53.5	54.0
乾燥ココナッツ	44.3	75.3	78.3	78.0	60.7
冷凍まぐろ(切身を除く)	63.1	69.9	113.2	1,130.0	102.6
コーヒー(生豆)	118.8	33.1	49.9	42.0	8.0
ココラ	17.5	31.9	28.0	25.2	20.5
アバカ(in '000 bales)	13.0	11.8	16.3	17.6	14.8

出所: Foreign Trade Statistics, NSO

b. 輸入

(単位：百万US\$)

項目	1986	1987	1988	1989	1990
穀類及びその調理品	168.31	134.41	228.25	337.01	437.10
肥料	83.41	89.24	107.74	103.69	117.29
酪産物及び鶏卵	98.22	149.54	161.44	216.56	229.30
飼料(未製粉を除く)	87.05	97.64	166.50	176.97	173.90
タバコ	65.90	94.39	78.10	65.50	62.85
コーヒー、ココア、紅茶	3.70	5.44	8.10	13.68	18.19
魚類及びその調理品	18.90	30.96	35.39	36.50	47.90
食肉及びその調理品	3.67	6.93	9.80	17.76	19.14
野菜及び果実	16.43	18.08	36.85	51.00	42.75
植物油脂	8.39	8.99	12.49	18.39	17.42

出所： Foreign Trade Statistics, NSO

2) 非農産物

a. 輸出

(単位：百万US\$)

項目	1986	1987	1988	1989	1990
鉱物	267.00	224.00	383.00	424.00	361.00
鉱物燃料及び潤滑剤	66.00	97.00	153.00	118.00	155.00
化学薬品	243.00	245.00	256.00	279.00	261.00
繊維	44.00	68.00	71.00	88.00	93.00
その他	2874.00	3558.00	4647.00	5689.00	6158.00
再輸出	112.00	149.00	80.00	70.00	95.00

出所： National Statistics Office, Central Bank of the Philippines for data prior to 1973

b. 輸入

(単位：百万US\$)

項目	1986	1987	1988	1989	1990
機械	305.20	453.60	837.40	1,105.80	1,531.20
未加工原材料	997.30	1,359.90	1,386.30	1,791.80	2,357.10
準加工原材料	3,104.90	4,092.80	4,982.50	6,329.20	6,924.20
貯蔵物資	321.40	370.90	384.40	504.60	538.20
消費財(非耐久財)	294.60	440.00	531.10	623.90	773.80

出所： National Statistics Office, Central Bank of the Philippines for data prior to 1973

6. 経済活動人口、就労人口、労賃

(1) 経済活動人口

	人口 (15才以上)	活動人口	非活動人口
1985	33,646	29,911	3,735
%	100.0	88.9	11.1
1986	4,738	4,212	526
%	100.0	88.9	11.1
1987	34,840	31,670	3,170
%	100.0	90.9	9.1
1988	35,865	32,888	2,977
%	100.0	91.7	8.3
1989	36,916	33,815	3,101
%	100.0	91.6	8.4
1990	37,999	34,921	3,078
%	100.0	91.9	8.1

(2) 産業部門別就業労働人口

(単位：千人)

産業部門	1987	1988	1989	1990
農業、林業、狩猟及び漁業	9,940	9,920	9,852	10,185
鉱業	146	157	154	133
建設業	2,059	2,238	2,298	2,188
製造業	81	95	83	91
電気・ガス・水道	759	858	911	974
商業	2,857	2,972	3,074	3,145
交通・通信	946	1,049	1,095	1,137
政府	386	379	398	444
サービス業	3,621	3,827	3,972	4,220
合計	<u>20,795</u>	<u>21,495</u>	<u>21,837</u>	<u>22,517</u>

*yearly October report に基づく

(3) 労賃

(単位：ペソ)

項目	1987	1988	1989	1990
非農業				
メトロ・マニラ圏	58.27	69.33	82.88	96.42
メトロ・マニラ圏外	57.24	69.33	82.88	96.42
農業				
プランテーション	46.67	47.67	72.04	85.85
非プランテーション	35.67	36.49	55.28	63.38

(4) 産業部門別就業労働人口割合

(単位：%)

産業部門	1987	1988	1989	1990
15才以上の就業人口(千人)	34,840	35,865	36,916	37,999
農業、林業、狩猟及び漁業	28.53	27.66	26.69	26.80
鉱業	0.42	0.44	0.42	0.35
建設業	5.91	6.24	6.22	5.76
製造業	0.23	0.26	0.22	0.24
電気・ガス・水道及び衛生サービス	2.18	2.39	2.47	2.56
商業	8.20	8.29	8.33	8.28
交通・通信	2.72	2.92	2.97	2.99
政府	1.11	1.06	1.08	1.17
サービス業	10.39	10.67	10.76	11.11
合計	59.69	59.93	59.15	59.26

7. 国際収支

(単位：百万US\$)

項目	1986	1987	1988	1989	1990
I. 通貨取引					
A. 商品取引	(202)	(1,017)	(1,085)	(2,598)	(4,020)
輸出	4,842	5,720	7,074	7,821	8,186
輸入	5,044	6,737	8,159	10,419	12,206
B. 非商品取引	783	0	(80)	303	618
収入	3,791	3,454	3,592	4,586	4,836
支出	3,008	3,454	3,672	4,283	4,218
C. 譲渡(贈与等)	441	573	775	830	714
収入	445	575	778	832	717
支出	4	2	3	2	3
通貨純収入 合計	1,022	(444)	(390)	(1,465)	(2,688)
II. 非通貨資本					
D. 長期資本収支	815	159	(519)	379	392
収入	2,545	2,598	2,412	2,811	4,398
支出	1,730	2,439	2,931	2,432	4,006
E. 直接投資	114	326	986	854	469
収入	186	439	1,077	972	695
支出	72	113	91	118	226
F. 純短期資本収支	(814)	80	(303)	(91)	9
誤差及び省略	101	144	479	385	620
G. 金の復位	279	365	314	288	218
H. 平価切上げ	(68)	(78)	83	101	797
III. 総剰余金(不足額)	1,247	264	650	451	(183)

出所：Philippine Statistical Yearbook, 1991

8. 公的対外債務

(単位：百万US\$)

項目	1984	1985	1986	1987	1988
合計	25,418	26,252	28,256	28,649	28,039
公的機関からの借入					
-国際機関	4,090	4,486	4,688	5,033	4,928
-二国間ベース	2,276	2,860	3,925	5,203	6,234
-その他	139	373	374	844	723
私的機関からの借入					
-クレジット・カウチ	3,103	3,264	3,085	2,355	2,036
-金融市場	1,089	795	828	390	399
-銀行	14,721	14,474	15,356	14,624	13,719

出所：Philippine Yearbook, 1989

9. 財政収支

(単位：百万ペソ)

項目	1987	1988	1989	1990	1991
歳入	103,214	112,861	142,136	177,216	206,381
税収	85,923	90,352	121,352	155,453	184,482
税収外	17,291	22,509	20,784	21,763	21,899
歳出	115,073	137,045	156,683	183,850	210,123
当期業績	94,812	118,807	127,483	151,233	162,777
資本支出	20,261	18,238	29,200	32,617	47,346
純予算					
剰余額/不足額	(19,459)	(24,184)	(14,547)	(6,184)	(4,519)
予算					
取引	(11,859)	(19,277)	(10,873)	6,634	(3,742)
純貸付	(7,600)	(4,907)	(3,666)	(450)	(777)
その他					
財政	41,118	64,629	13,039	4,684	3,019
国内(純)	34,337	47,339	1,644	(6,815)	(29,398)
国外(純)	6,781	17,290	11,395	11,499	32,417
調整(現金)	21,659	40,445	1,500	1,500	1,500

出所：Budget of Expenditures and Sources of Financing, Dept. of Budget & Management.

10. 使途別財政支出

(単位：百万ペソ)

項目	1987	1988	1989	1990	1991
公的債務	70,223	71,321	56,498	60,871	74,763
一般行政費	12,559	15,730	17,453	22,144	25,982
社会サービス	27,493	31,061	38,511	56,144	62,509
(内教育費比率；%)	62	71	71	63	63
(内医療費比率；%)	15	18	17	15	16
経済サービス	25,039	26,092	39,523	49,747	64,344
(内農業部門比率；%)	30	32	33	34	33
(内社会資本部門比率；%)	37	50	43	34	30
国防	70,223	71,321	56,498	60,871	74,763
合計	<u>205,537</u>	<u>215,525</u>	<u>208,483</u>	<u>249,777</u>	<u>302,361</u>

出所： Budget of Receipts and Expenditures, Dept. of Budget and Management & Annual Finance Report, Commission on Audit.

11. 対日貿易

(単位：百万US\$)

項目	1986	1987	1988	1989	1990
日本への輸出	851.1	981.5	1,420.4	1,585.9	1,616.0
日本からの輸入	868.3	1,121.2	1,421.3	2,043.2	2,232.0
バランス(輸出-輸入)	-17.2	-139.7	-0.9	-457.4	-616.1

出所： Statistical Yearbook

12. 外貨準備高

(単位：百万US\$)

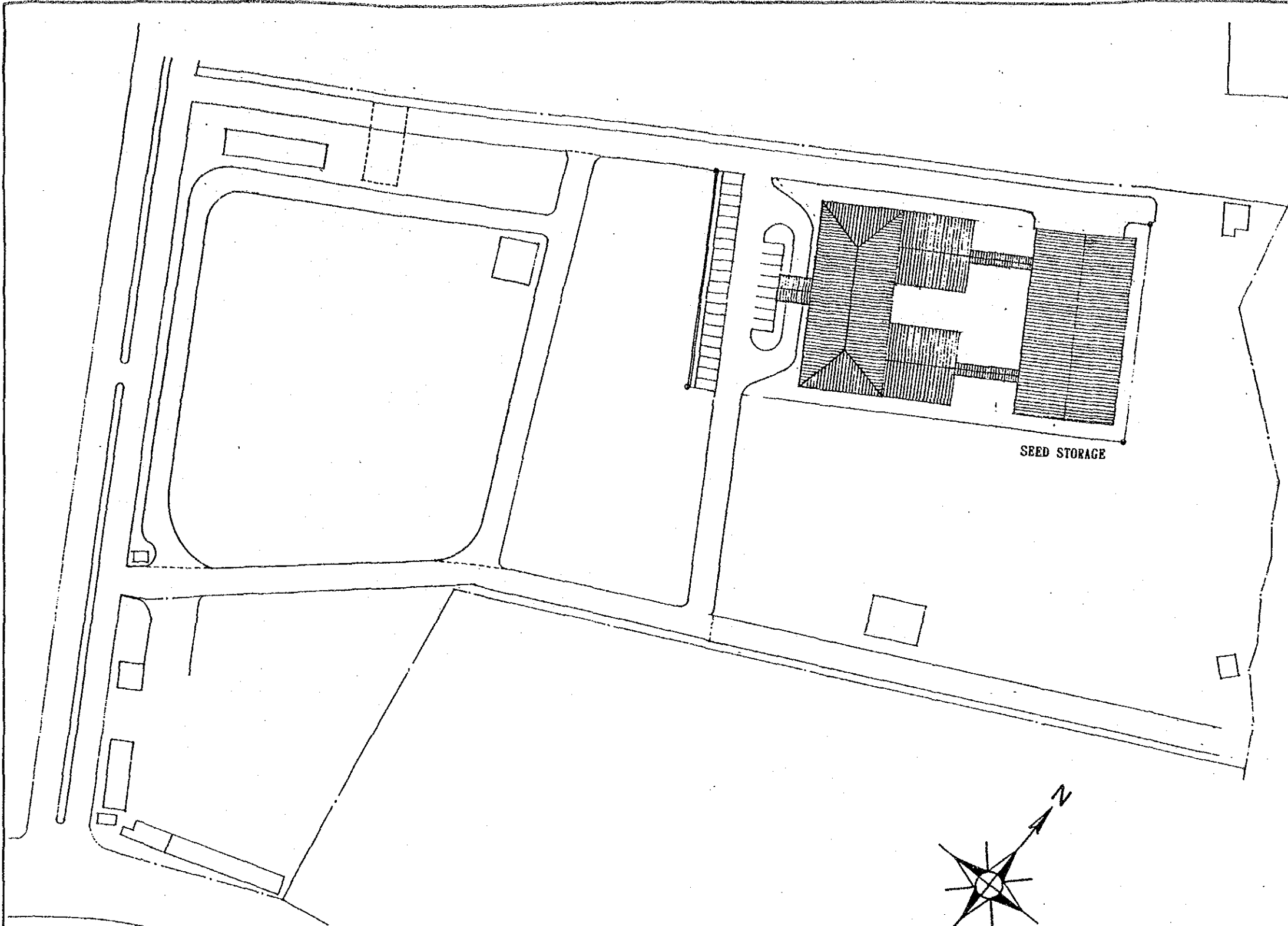
項目	1985	1986	1987	1988
外貨準備高	1,061.14	2,458.98	1,958.68	2,058.88

出所： Central Bank of the Philippines

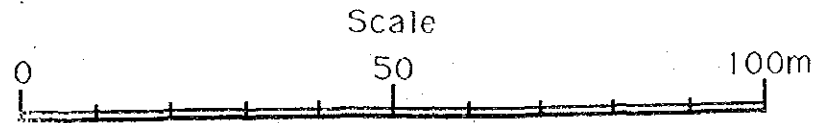
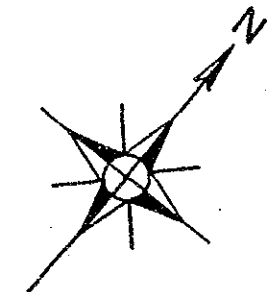
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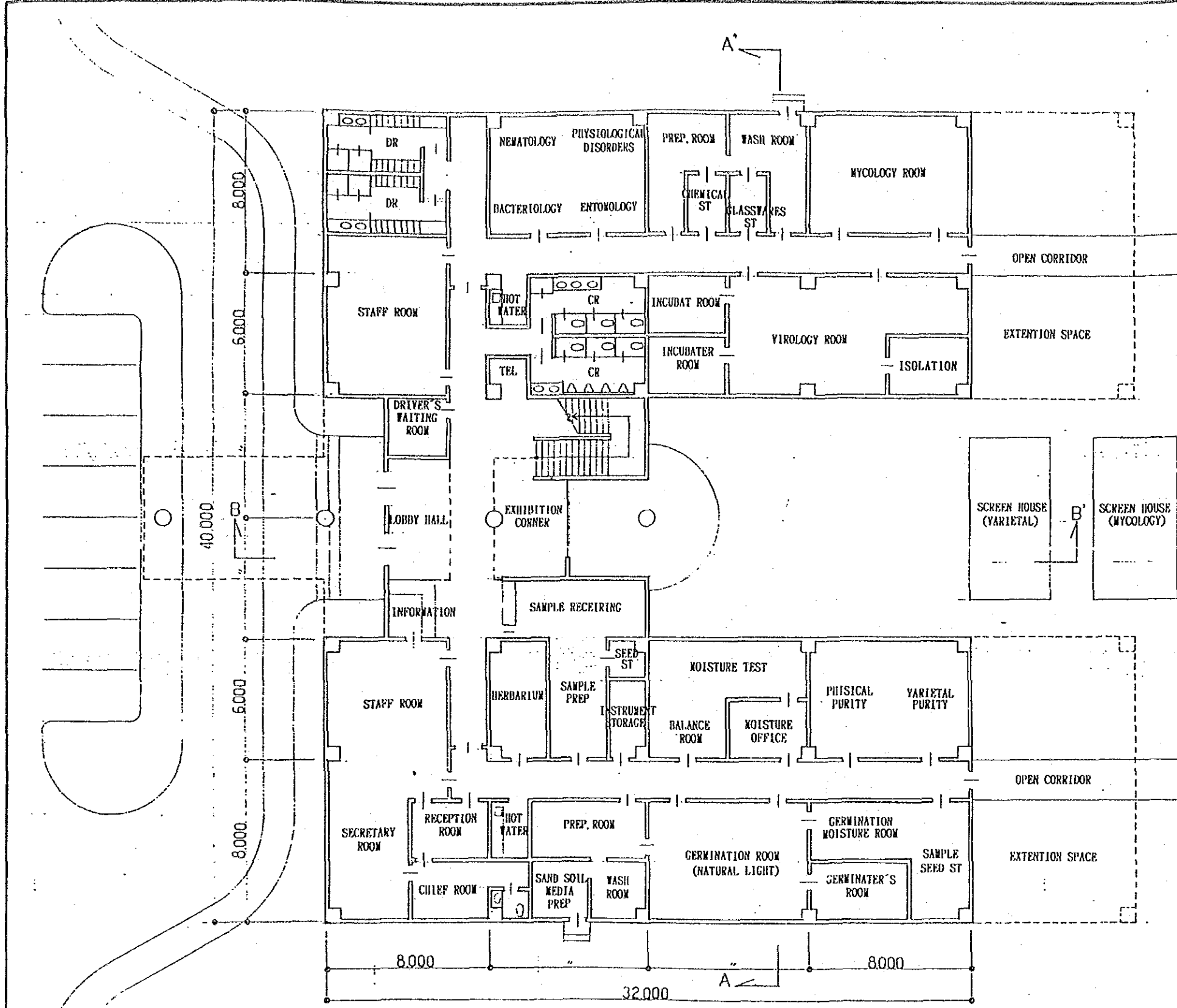
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種子倉庫、種子品質管理検査所及び種子検査所 ケソン市	
1	計画概要図
2	種子品質管理検査所
3	種子貯蔵庫
4 - 7	種子品質検査所／種子貯蔵庫 (1/4～4/4)
西ピサヤ総合農業研究センター	
8	計画概要図
9 - 12	種子検査所 (1/4～4/4)
13 - 14	モータープール／作業場 (1/2～2/2)
15 - 18	種子貯蔵庫 (1/4～4/4)
カピス県 (ロハス市)	
19	計画概要図
20 - 23	種子貯蔵庫 (1/4～4/4)
アクラン県 (マカト)	
24	計画概要図
アンティケ県 (パトノンゴン)	
25	計画概要図
26 - 29	種子貯蔵庫 (1/4～4/4)
圃場整備	
灌漑排水施設	
30	圃場計画概要図
31	ため池、ポンプ施設
32	灌漑水路縦断図 (I - 1)
33	灌漑水路・排水路標準断面図、圃場取り入れ口
34	分水工
35	取水工ゲート取り付け
36	道路横断工、トラクターパス
37	水路横断工
38	調節池
場内道路	
39	場内道路標準断面図
給水施設	
40	給水施設位置図
41	深井戸、ポンプ施設
42	給水タンク
43	場内配水パイプライン
44	配管取り付け詳細



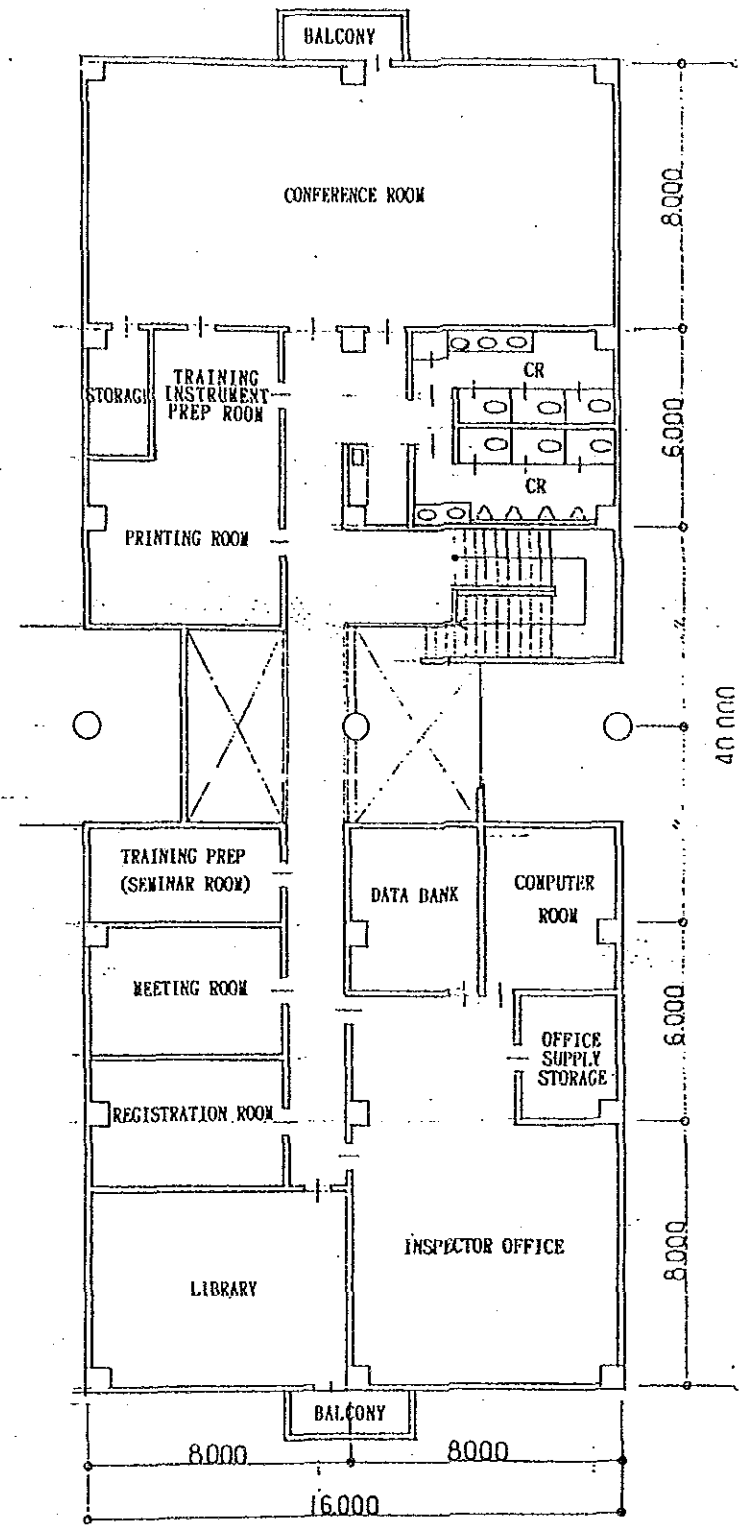
SEED STORAGE



THE REPUBLIC OF THE PHILIPPINES	
THE PROJECT FOR IMPROVEMENT OF SEED PRODUCTION AND DISTRIBUTION AND ESTABLISHMENT OF APPROPRIATE SEED STORAGE SYSTEM	
TITLE OF DRAWING	
ケソン市 計画概要図	
Date	Drawing No.
JAPAN INTERNATIONAL COOPERATION AGENCY	

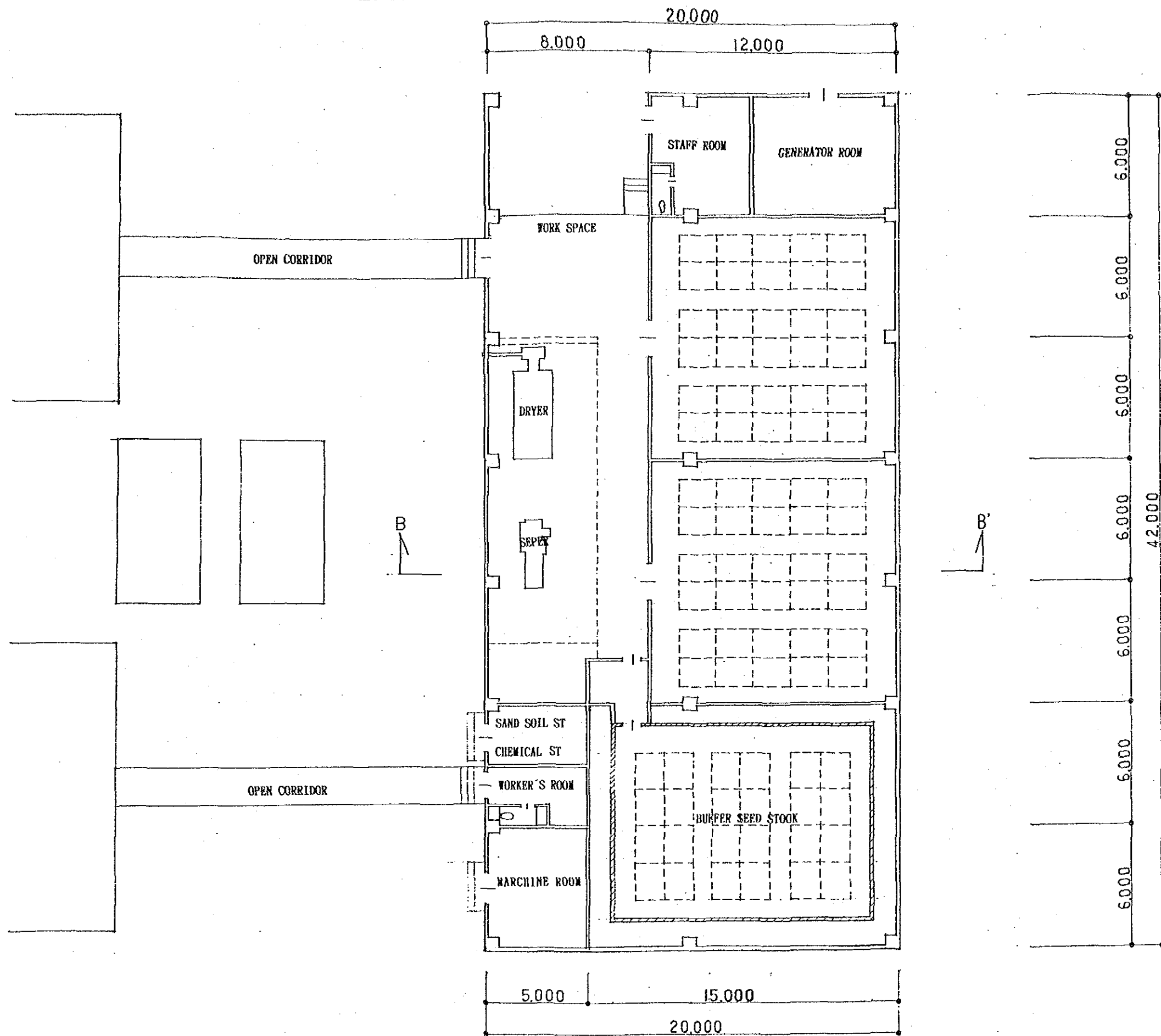


GROUND FLOOR PLAN

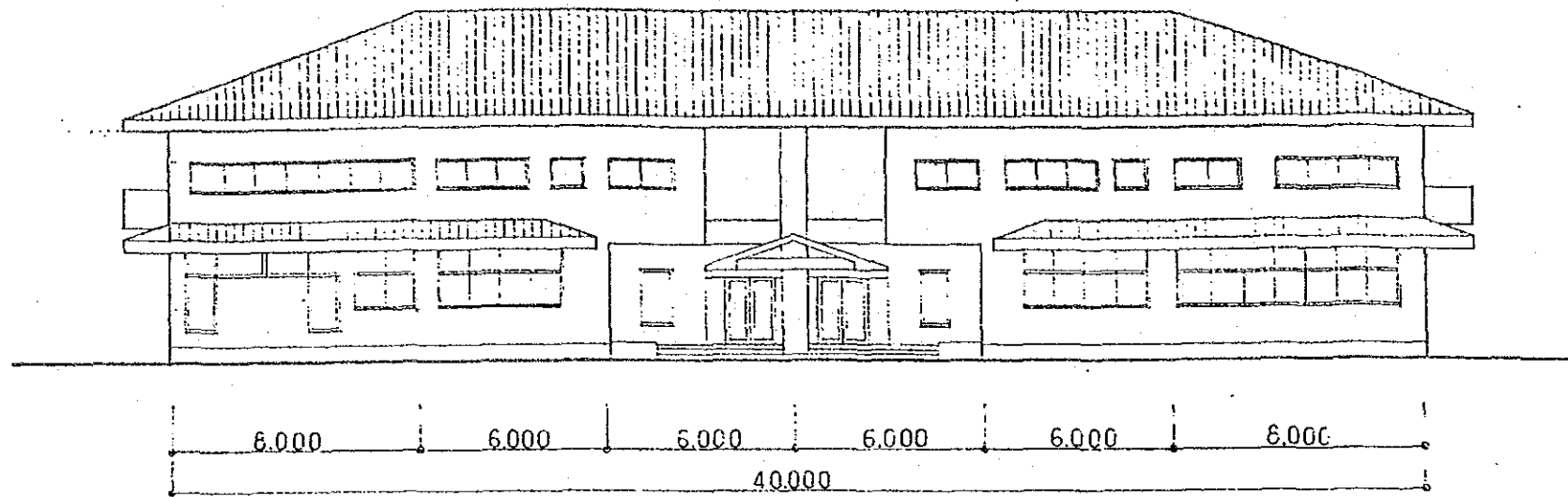


FIRST FLOOR PLAN

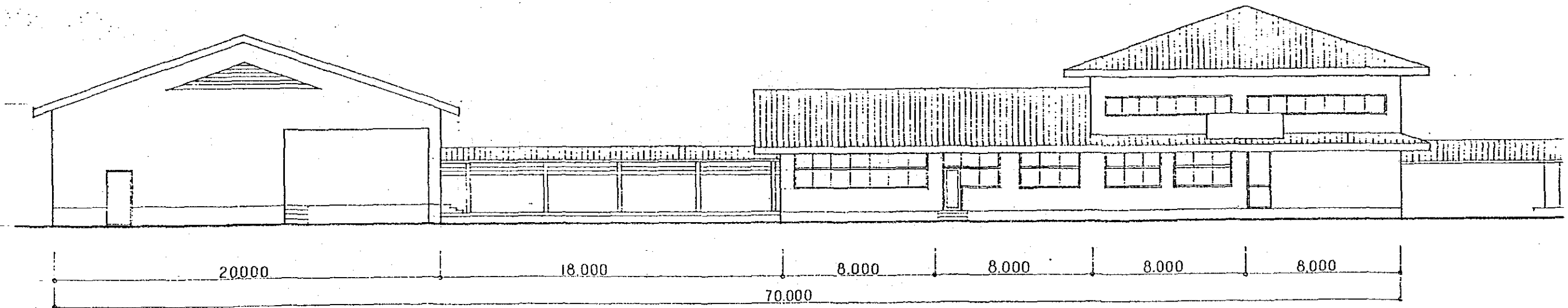
THE REPUBLIC OF THE PHILIPPINES		
THE PROJECT FOR IMPROVEMENT OF SEED PRODUCTION AND DISTRIBUTION AND ESTABLISHMENT OF APPROPRIATE SEED STORAGE SYSTEM		
TITLE OF DRAWING		
ケソン市 種子品質管理検査所		
Date	Drawing No.	
JAPAN INTERNATIONAL COOPERATION AGENCY		



THE REPUBLIC OF THE PHILIPPINES
 THE PROJECT FOR IMPROVEMENT OF SEED
 PRODUCTION AND DISTRIBUTION AND
 ESTABLISHMENT OF APPROPRIATE SEED STORAGE SYSTEM
 TITLE OF DRAWING
 ケソン市
 種子貯蔵庫
 Date _____ Drawing No. _____
 JAPAN INTERNATIONAL COOPERATION AGENCY

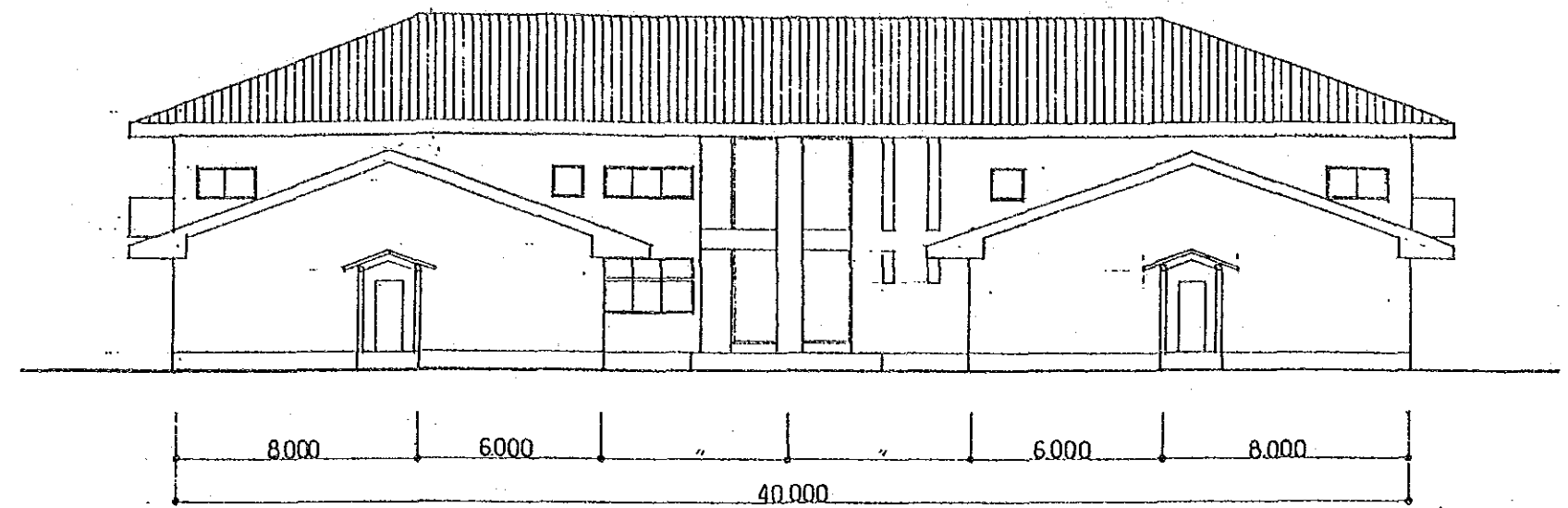


WEST ELEVATION

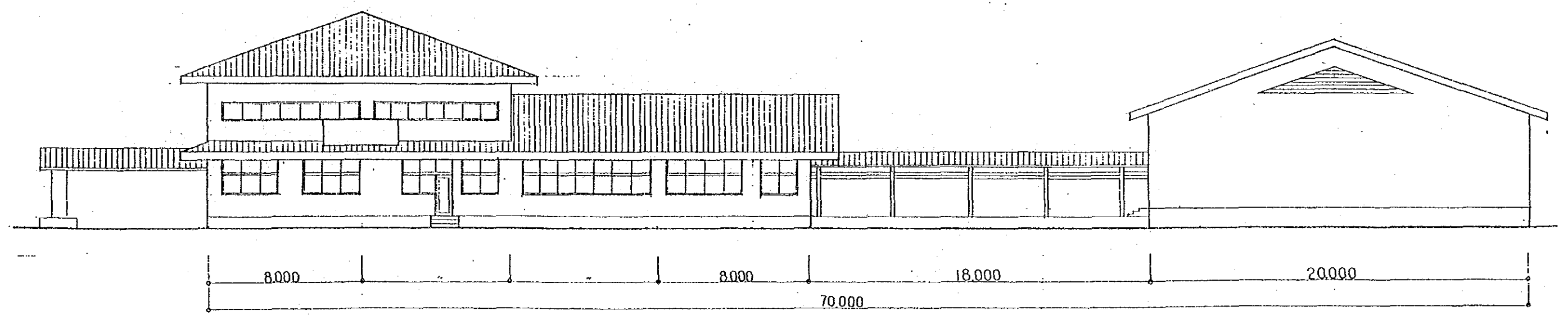


NORTH ELEVATION

THE REPUBLIC OF THE PHILIPPINES		
THE PROJECT FOR IMPROVEMENT OF SEED PRODUCTION AND DISTRIBUTION AND ESTABLISHMENT OF APPROPRIATE SEED STORAGE SYSTEM		
TITLE OF DRAWING		
ケソン市		
種子品質検査所/種子貯蔵庫 (1/4)		
Date	Drawing No.	
JAPAN INTERNATIONAL COOPERATION AGENCY		

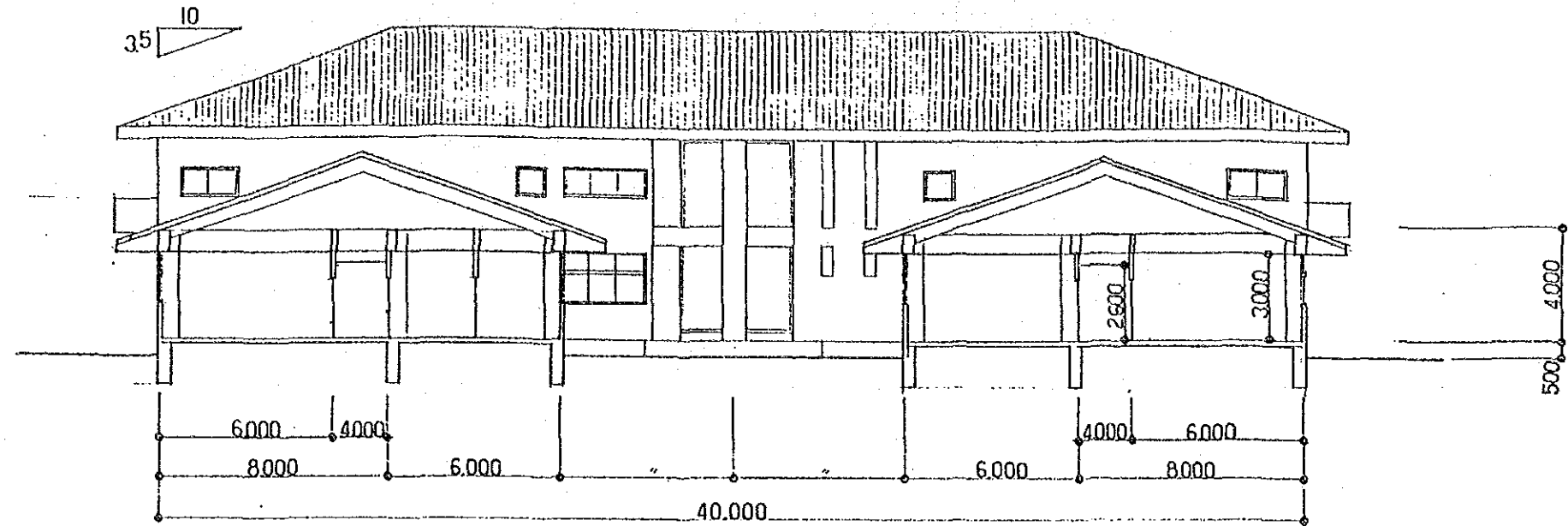


EAST ELEVATION

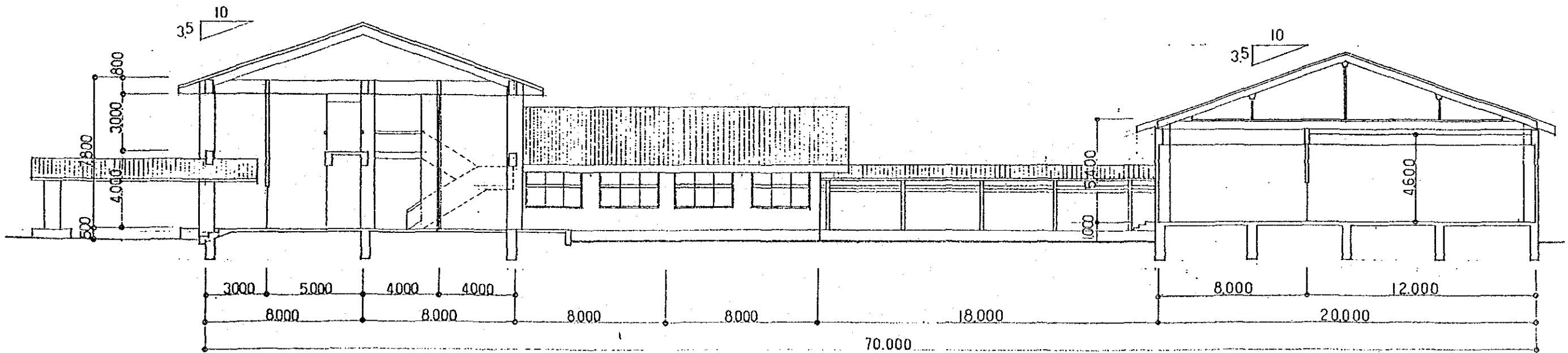


SOUTH ELEVATION

THE REPUBLIC OF THE PHILIPPINES	
THE PROJECT FOR IMPROVEMENT OF SEED PRODUCTION AND DISTRIBUTION AND ESTABLISHMENT OF APPROPRIATE SEED STORAGE SYSTEM	
TITLE OF DRAWING	
ケソン市 種子品質検査所/種子貯蔵庫 (2/4)	
Date	Drawing No.
JAPAN INTERNATIONAL COOPERATION AGENCY	

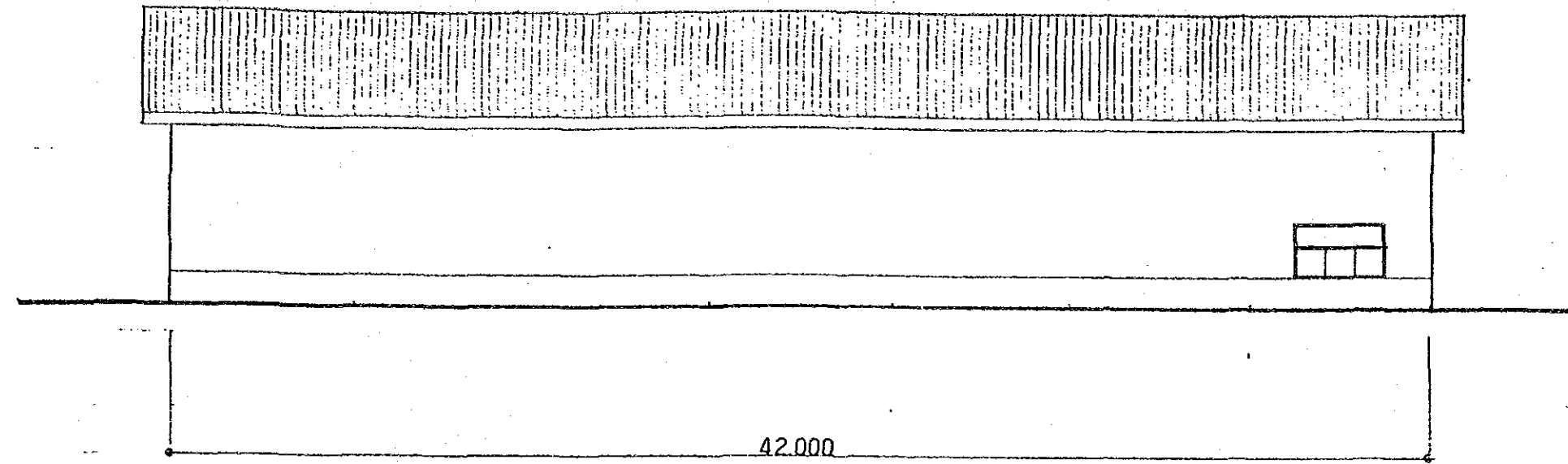


A-A SECTION

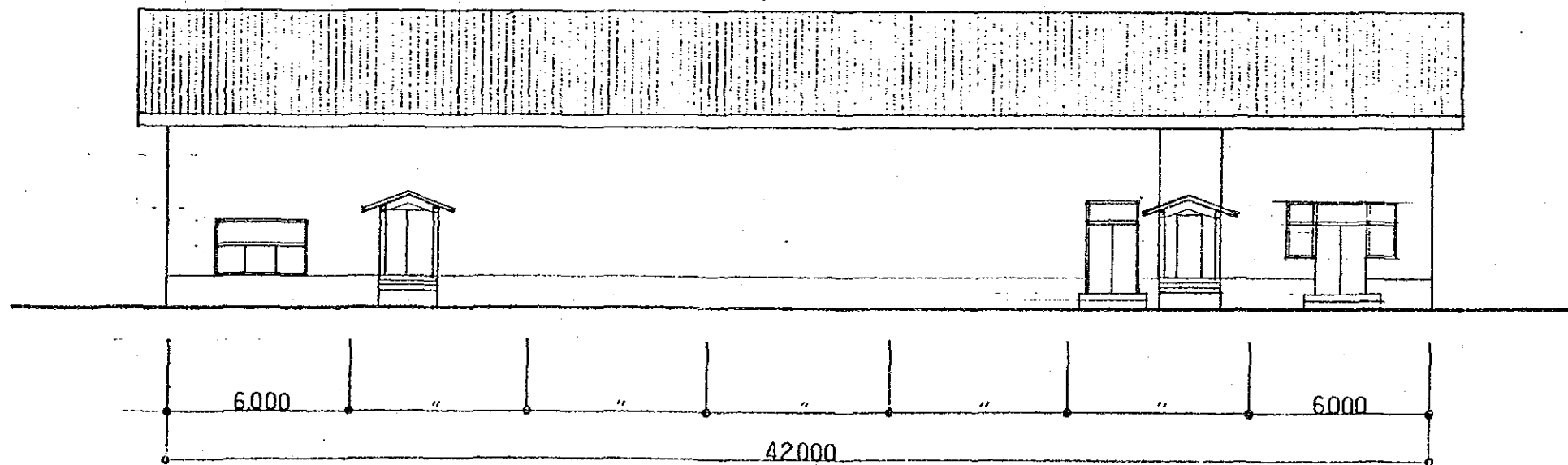


B-B SECTION

THE REPUBLIC OF THE PHILIPPINES	
THE PROJECT FOR IMPROVEMENT OF SEED PRODUCTION AND DISTRIBUTION AND ESTABLISHMENT OF APPROPRIATE SEED STORAGE SYSTEM	
TITLE OF DRAWING	
ケソン市 種子品質検査所/種子貯蔵庫 (3/4)	
Date	Drawing No.
JAPAN INTERNATIONAL COOPERATION AGENCY	

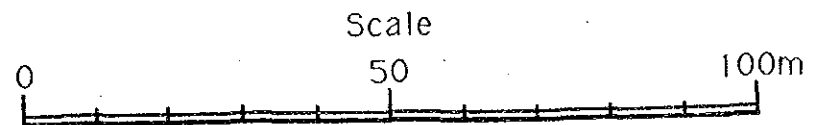
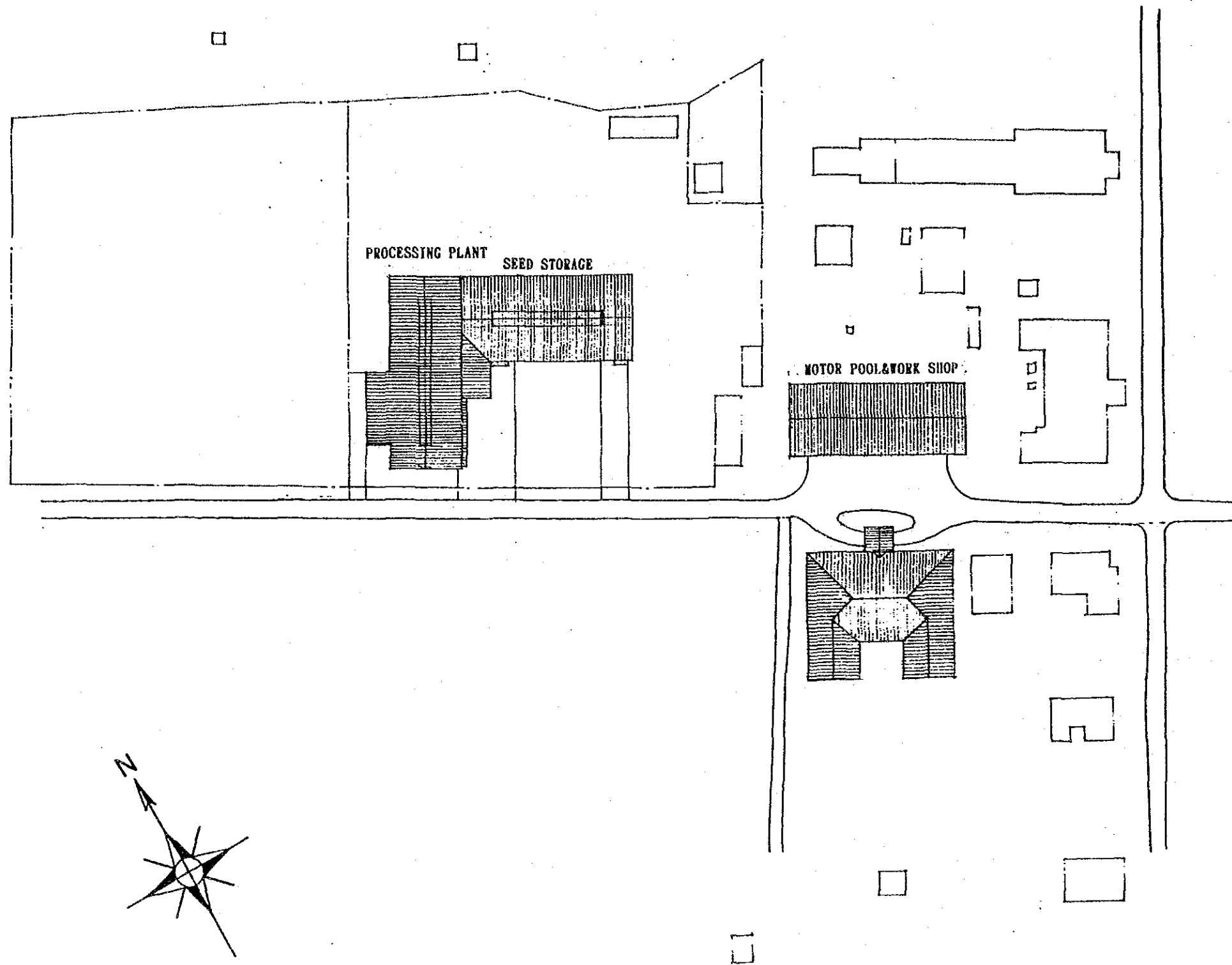


EAST ELEVATION

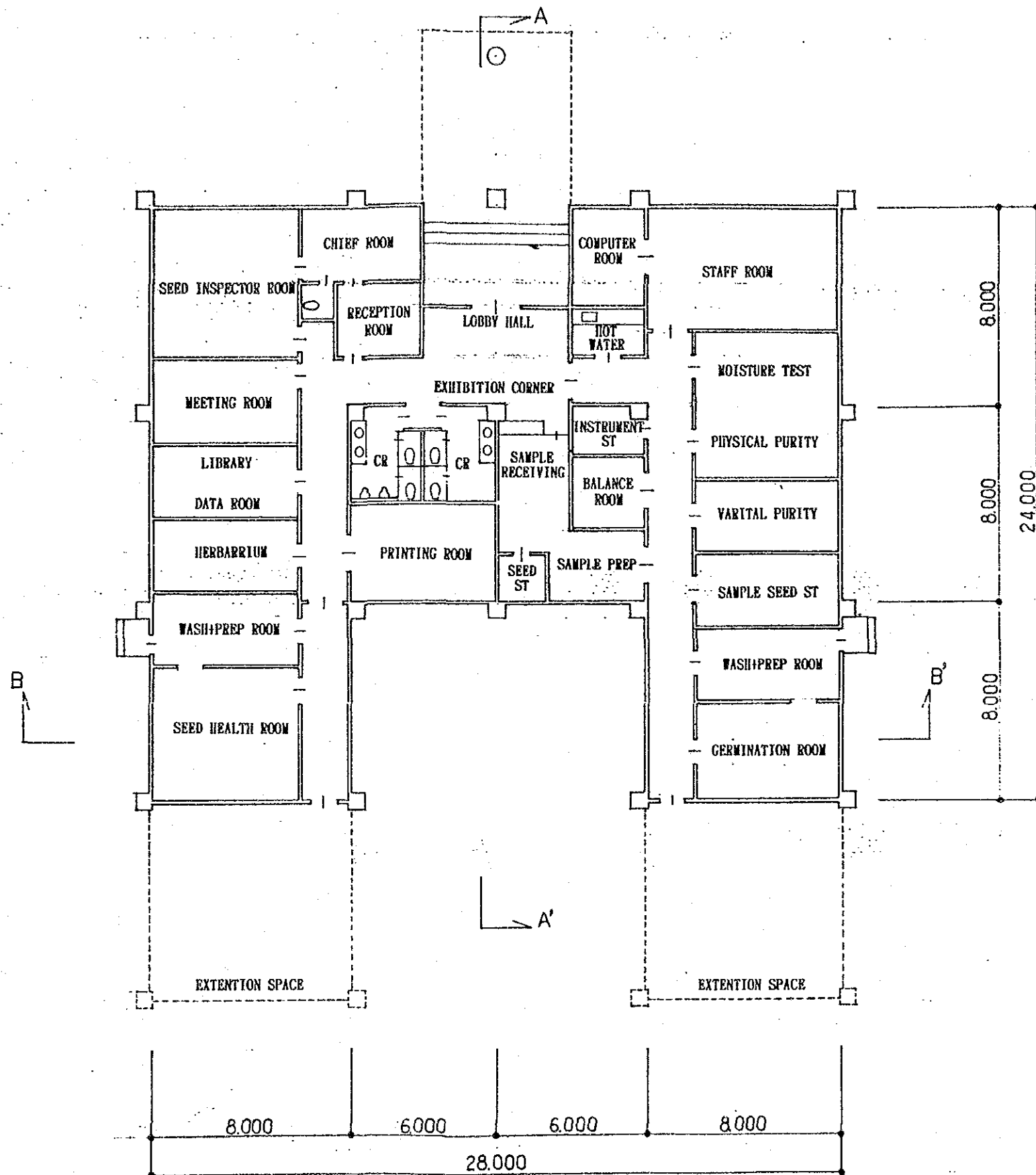


WEST ELEVATION

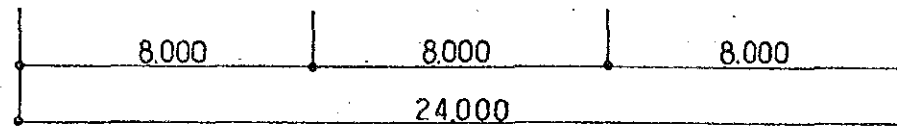
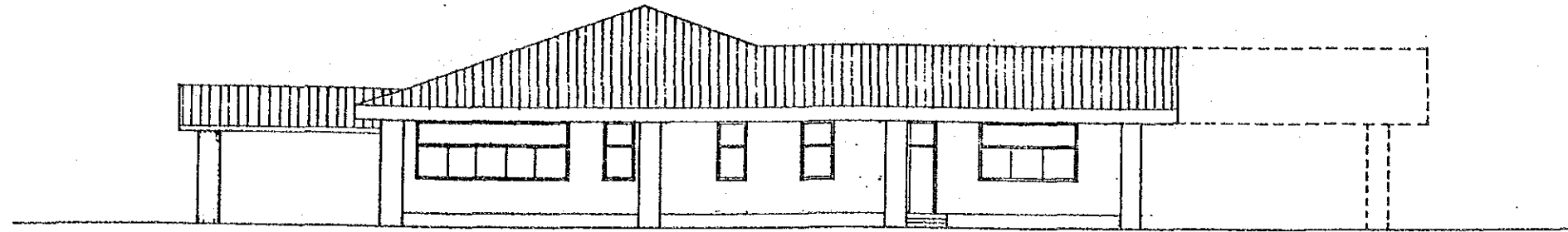
THE REPUBLIC OF THE PHILIPPINES		
THE PROJECT FOR IMPROVEMENT OF SEED PRODUCTION AND DISTRIBUTION AND ESTABLISHMENT OF APPROPRIATE SEED STORAGE SYSTEM		
TITLE OF DRAWING		
ケソン市 種子品質検査所/種子貯蔵庫 (4/4)		
Date	Drawing No.	
JAPAN INTERNATIONAL COOPERATION AGENCY		



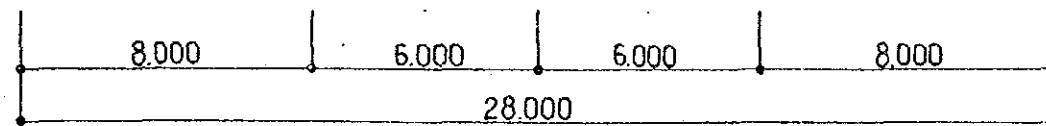
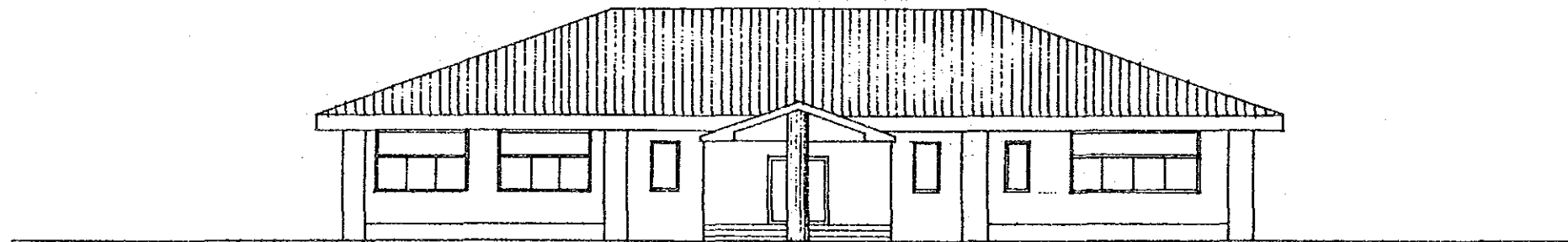
THE REPUBLIC OF THE PHILIPPINES		
THE PROJECT FOR IMPROVEMENT OF SEED PRODUCTION AND DISTRIBUTION AND ESTABLISHMENT OF APPROPRIATE SEED STORAGE SYSTEM		
TITLE OF DRAWING		
西ビサヤ総合農業研究センター 計画概要図		
Date	Drawing No.	
JAPAN INTERNATIONAL COOPERATION AGENCY		



THE REPUBLIC OF THE PHILIPPINES	
THE PROJECT FOR IMPROVEMENT OF SEED PRODUCTION AND DISTRIBUTION AND ESTABLISHMENT OF APPROPRIATE SEED STORAGE SYSTEM	
TITLE OF DRAWING	
西ビサヤ総合農業研究センター 種子検査所 (1/4)	
Date	Drawing No.
JAPAN INTERNATIONAL COOPERATION AGENCY	

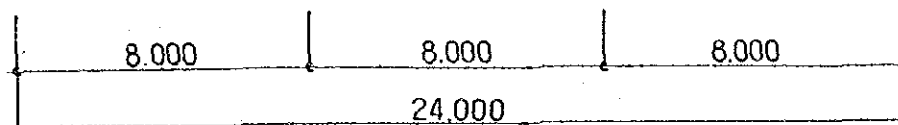
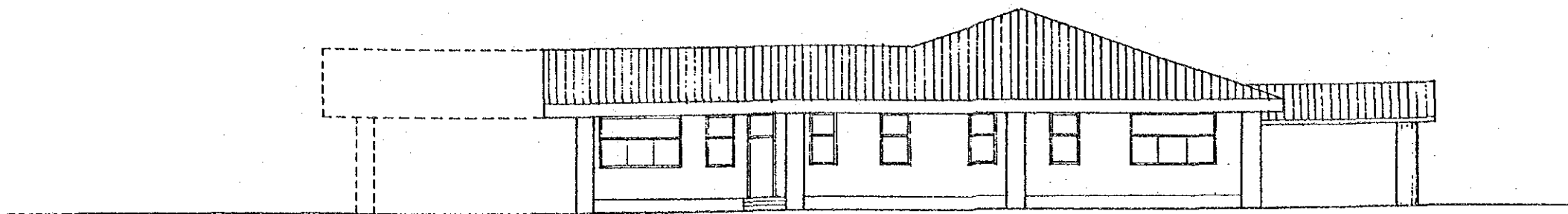


WEST ELEVATION

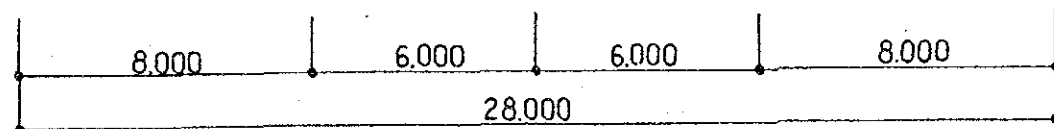
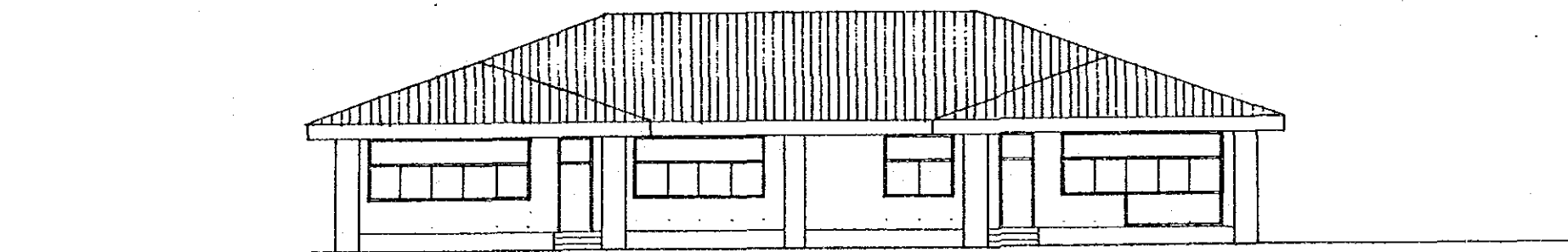


NORTH ELEVATION

THE REPUBLIC OF THE PHILIPPINES	
THE PROJECT FOR IMPROVEMENT OF SEED PRODUCTION AND DISTRIBUTION AND ESTABLISHMENT OF APPROPRIATE SEED STORAGE SYSTEM	
TITLE OF DRAWING	
西ビサヤ総合農業研究センター 種子検査所 (2/4)	
Date	Drawing No.
JAPAN INTERNATIONAL COOPERATION AGENCY	

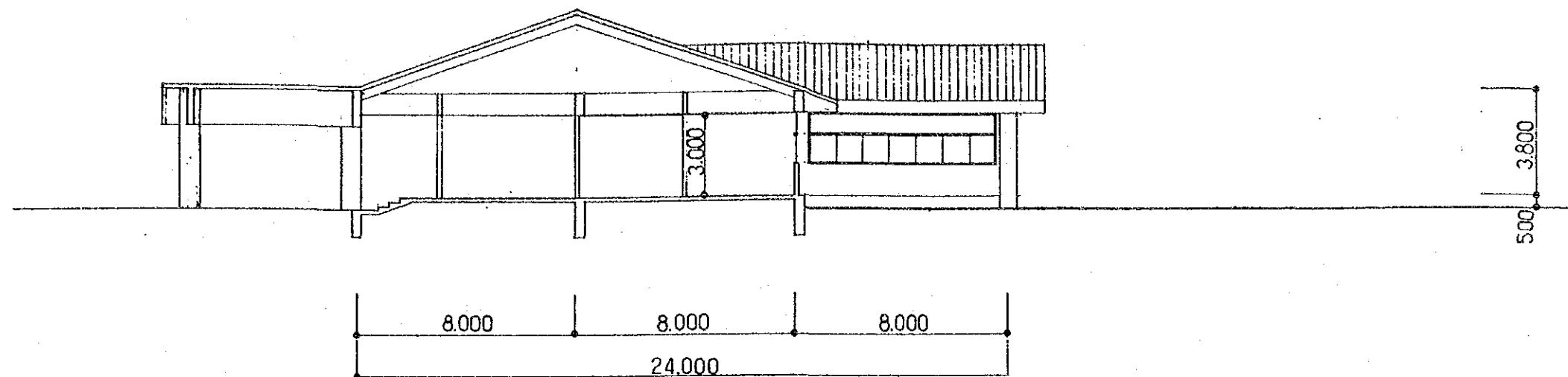


EAST ELEVATION

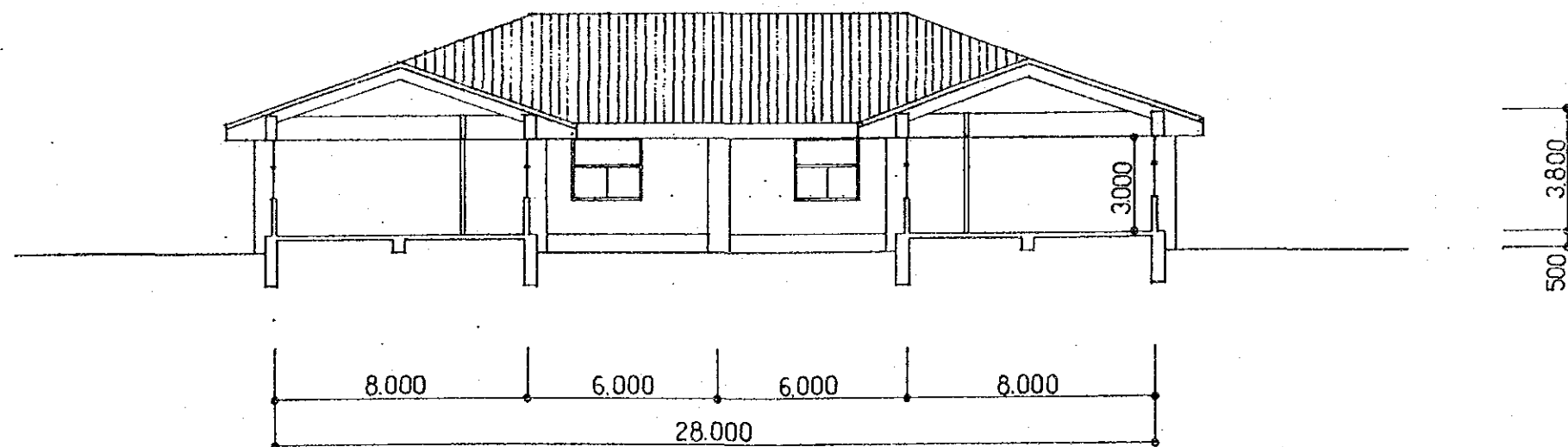


SOUTH ELEVATION

THE REPUBLIC OF THE PHILIPPINES		
THE PROJECT FOR IMPROVEMENT OF SEED PRODUCTION AND DISTRIBUTION AND ESTABLISHMENT OF APPROPRIATE SEED STORAGE SYSTEM		
TITLE OF DRAWING		
西ビサヤ総合農業研究センター 種子検査所 (3/4)		
Date	Drawing No.	
JAPAN INTERNATIONAL COOPERATION AGENCY		

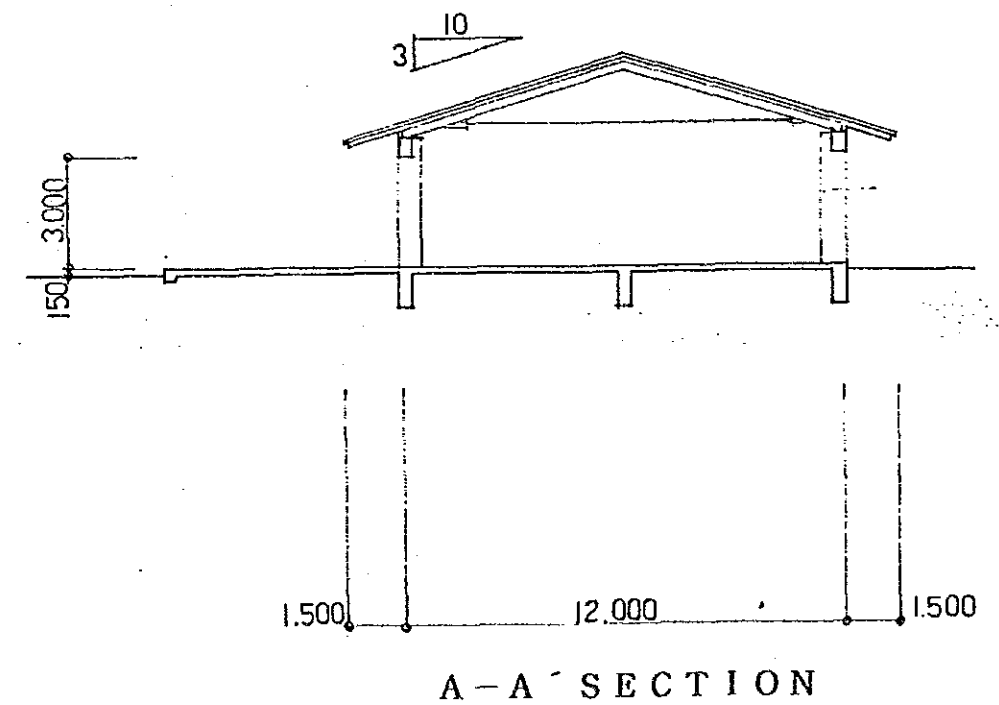
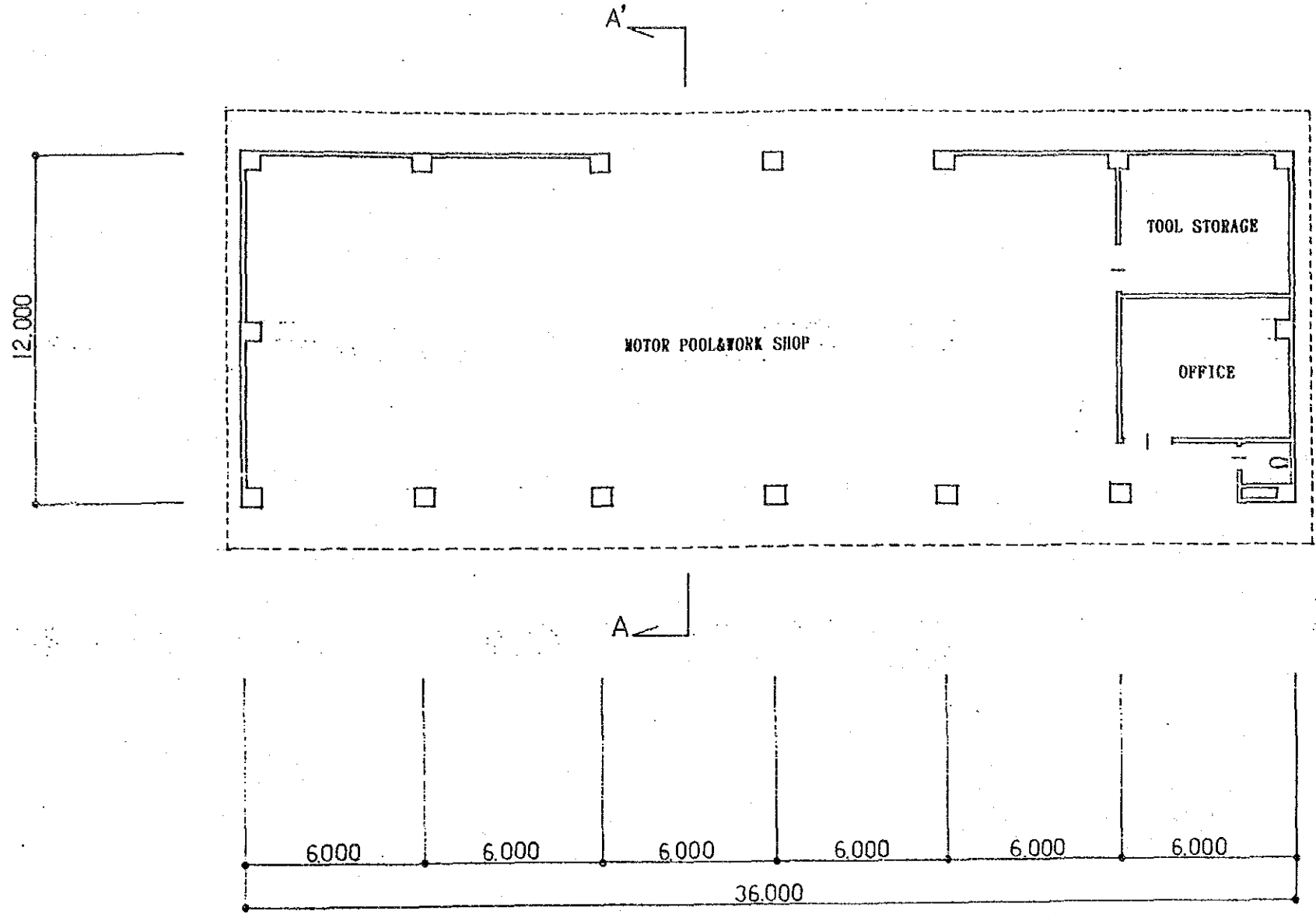


A-A SECTION

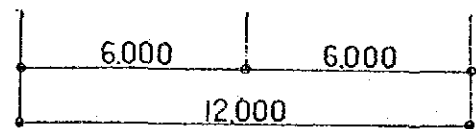
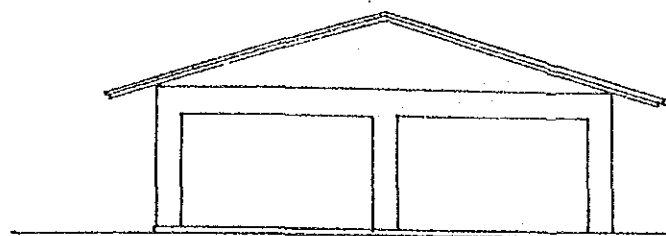


B-B SECTION

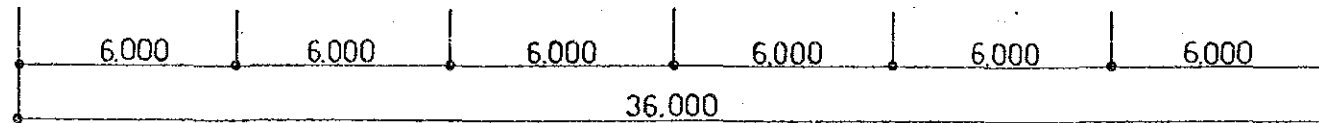
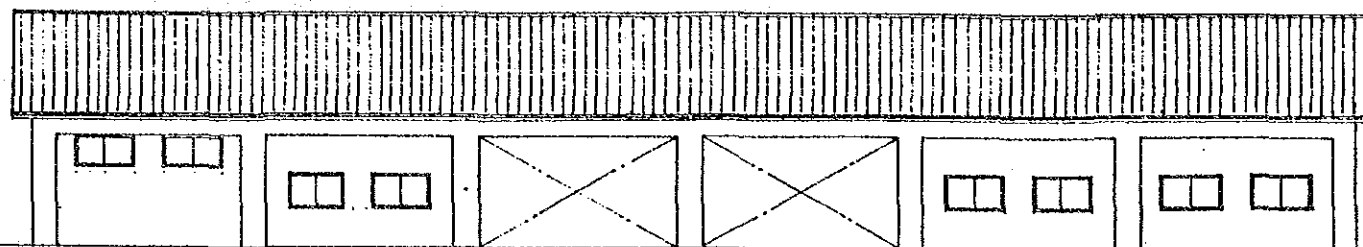
THE REPUBLIC OF THE PHILIPPINES	
THE PROJECT FOR IMPROVEMENT OF SEED PRODUCTION AND DISTRIBUTION AND ESTABLISHMENT OF APPROPRIATE SEED STORAGE SYSTEM	
TITLE OF DRAWING	
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Date	Drawing No.
JAPAN INTERNATIONAL COOPERATION AGENCY	



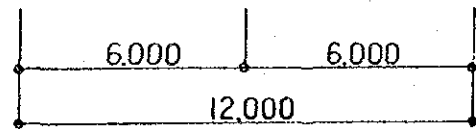
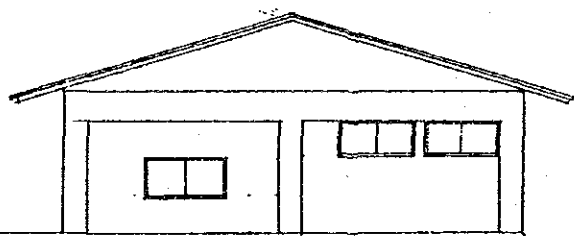
THE REPUBLIC OF THE PHILIPPINES		
THE PROJECT FOR IMPROVEMENT OF SEED PRODUCTION AND DISTRIBUTION AND ESTABLISHMENT OF APPROPRIATE SEED STORAGE SYSTEM		
TITLE OF DRAWING		
西ビサヤ総合農業研究センター		
モータープール/作業場 (1/2)		
Date	Drawing No.	
JAPAN INTERNATIONAL COOPERATION AGENCY		



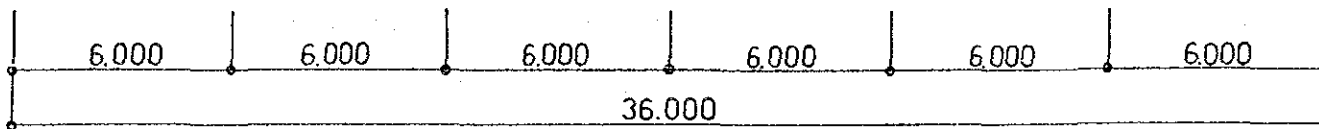
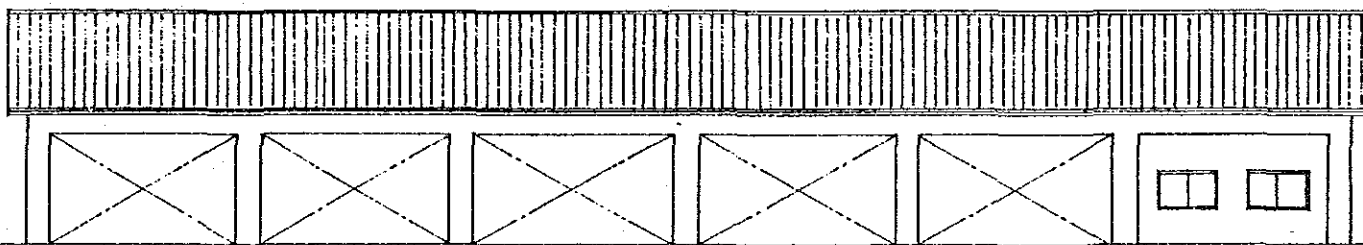
WEST ELEVATION



NORTH ELEVATION

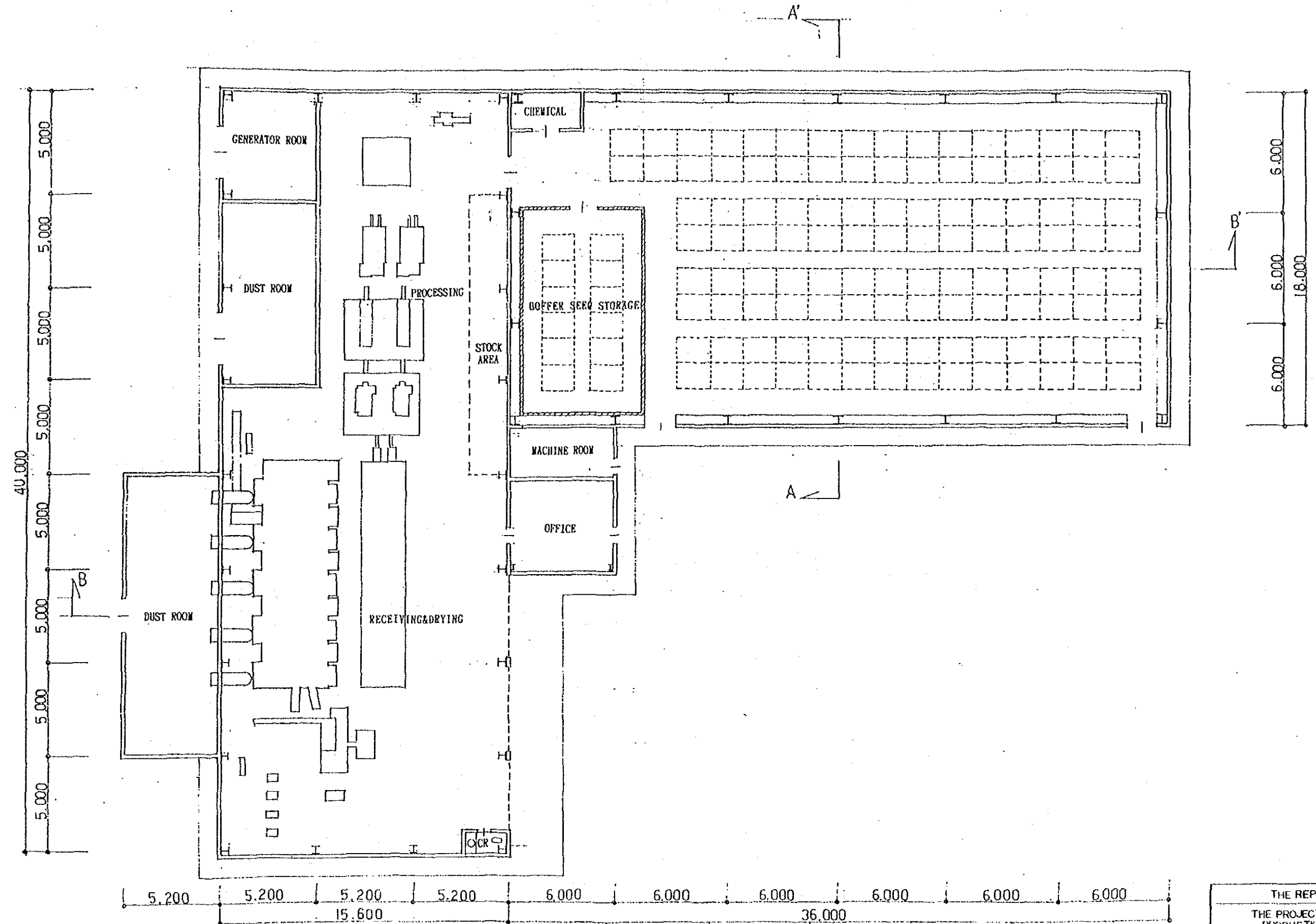


EAST ELEVATION

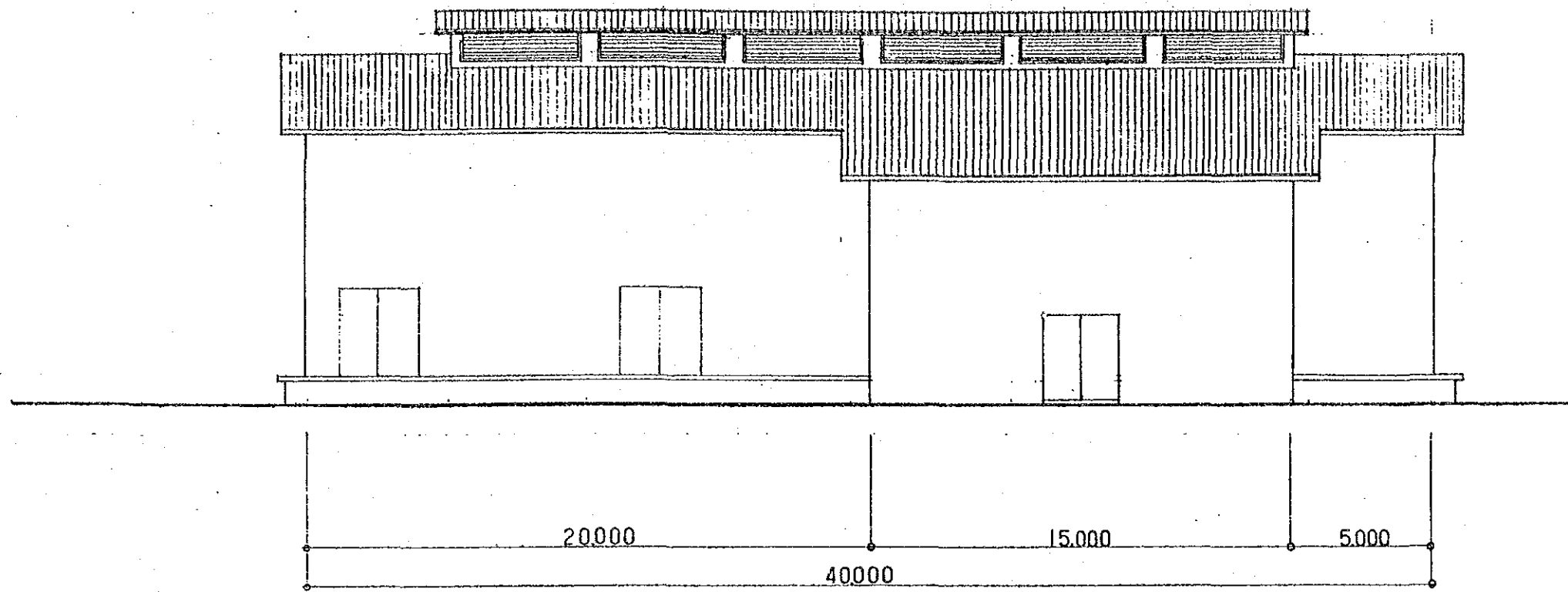


SOUTH ELEVATION

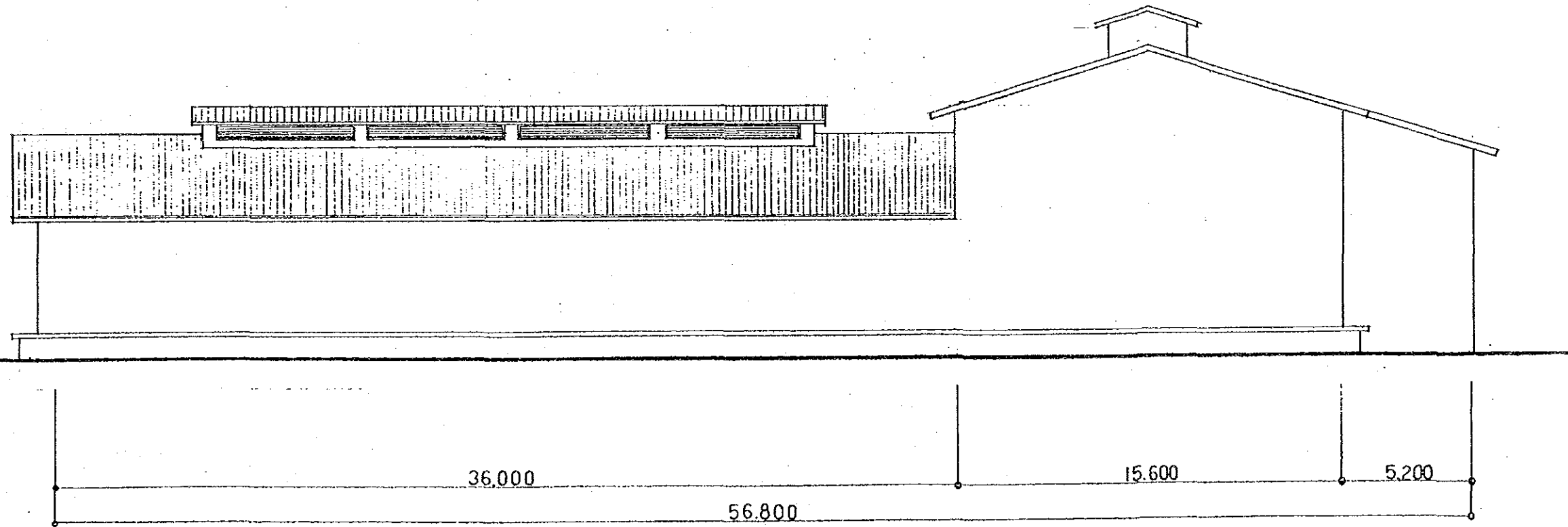
THE REPUBLIC OF THE PHILIPPINES	
THE PROJECT FOR IMPROVEMENT OF SEED PRODUCTION AND DISTRIBUTION AND ESTABLISHMENT OF APPROPRIATE SEED STORAGE SYSTEM	
TITLE OF DRAWING	
西ビサヤ総合農業研究センター	
モータープール/作業場 (2/2)	
Date	Drawing No.
JAPAN INTERNATIONAL COOPERATION AGENCY	



THE REPUBLIC OF THE PHILIPPINES		
THE PROJECT FOR IMPROVEMENT OF SEED PRODUCTION AND DISTRIBUTION AND ESTABLISHMENT OF APPROPRIATE SEED STORAGE SYSTEM		
TITLE OF DRAWING		
西ビサヤ総合農業研究センター		
種子貯蔵庫 (1/4)		
Date	Drawing No.	
JAPAN INTERNATIONAL COOPERATION AGENCY		

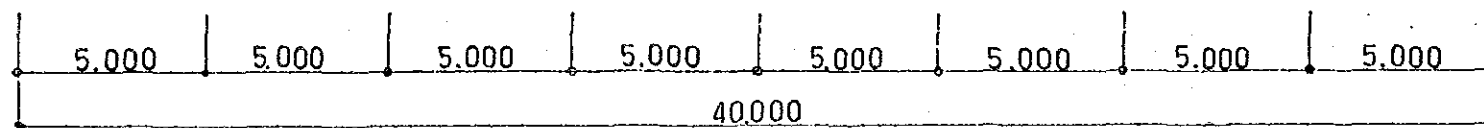
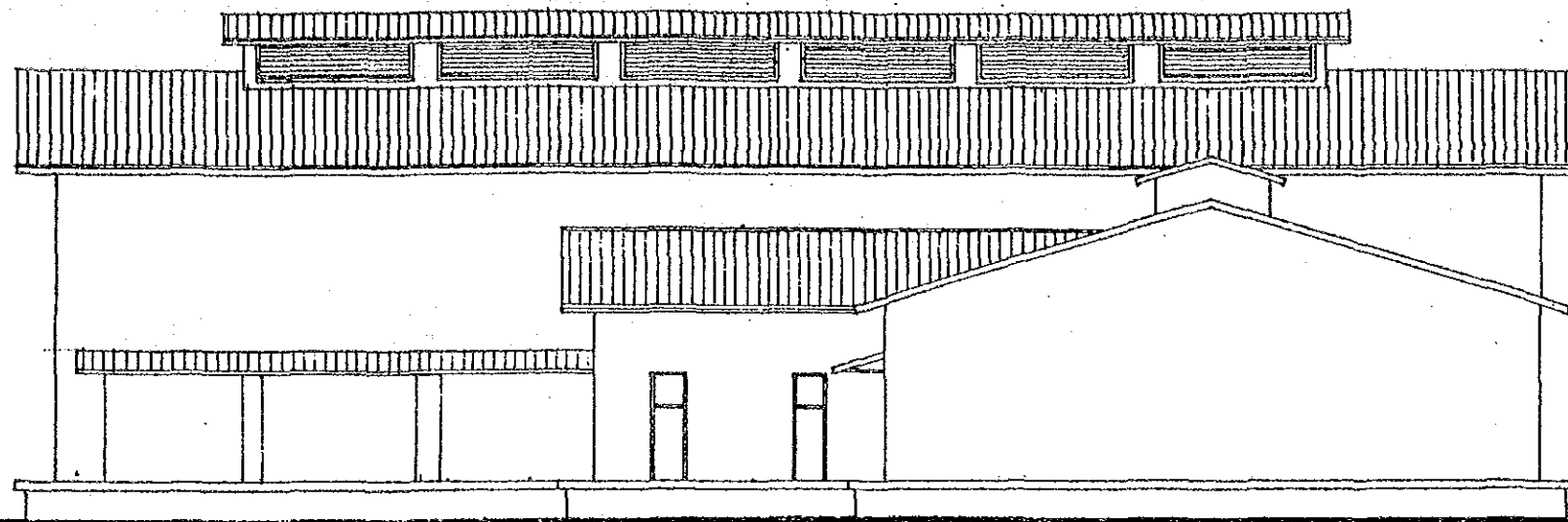


WEST ELEVATION

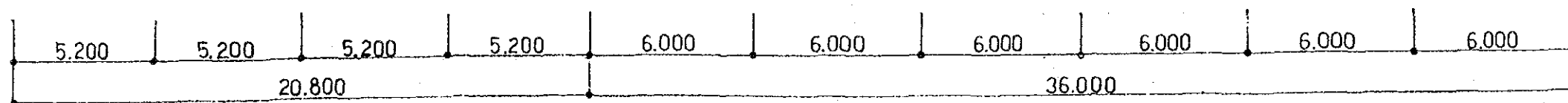
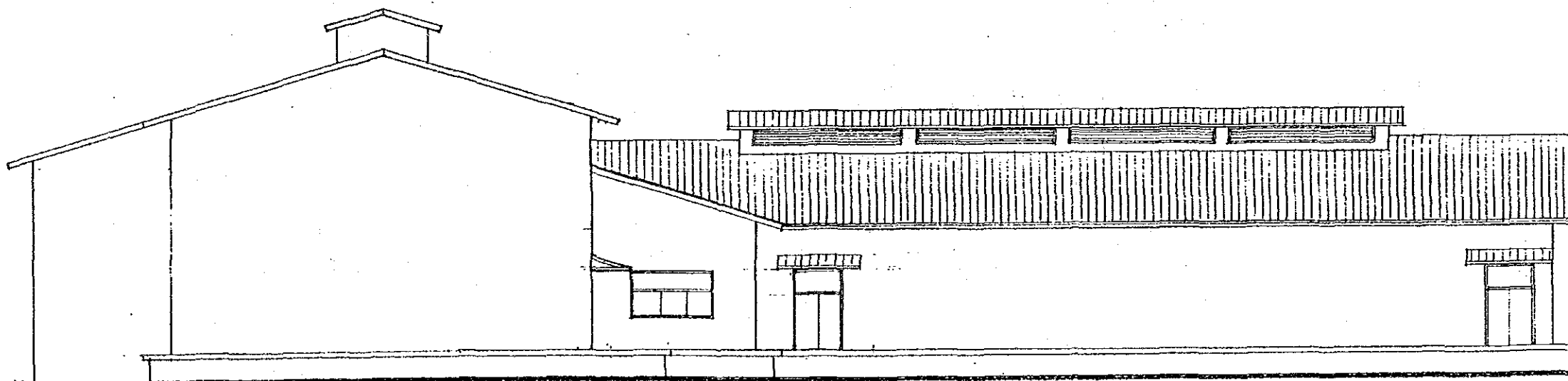


NORTH ELEVATION

THE REPUBLIC OF THE PHILIPPINES
THE PROJECT FOR IMPROVEMENT OF SEED
PRODUCTION AND DISTRIBUTION AND
ESTABLISHMENT OF APPROPRIATE SEED STORAGE SYSTEM
TITLE OF DRAWING
西ビサヤ総合農業研究センター
種子貯蔵庫 (2/4)
Date _____ Drawing No. _____
JAPAN INTERNATIONAL COOPERATION AGENCY

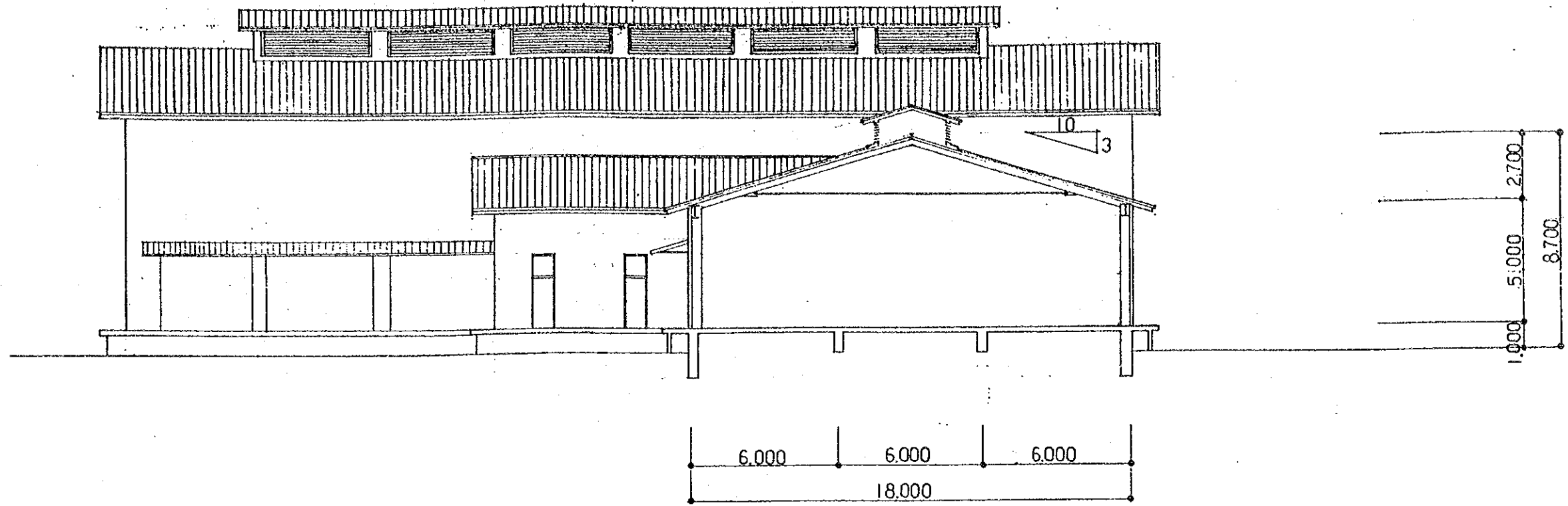


EAST ELEVATION

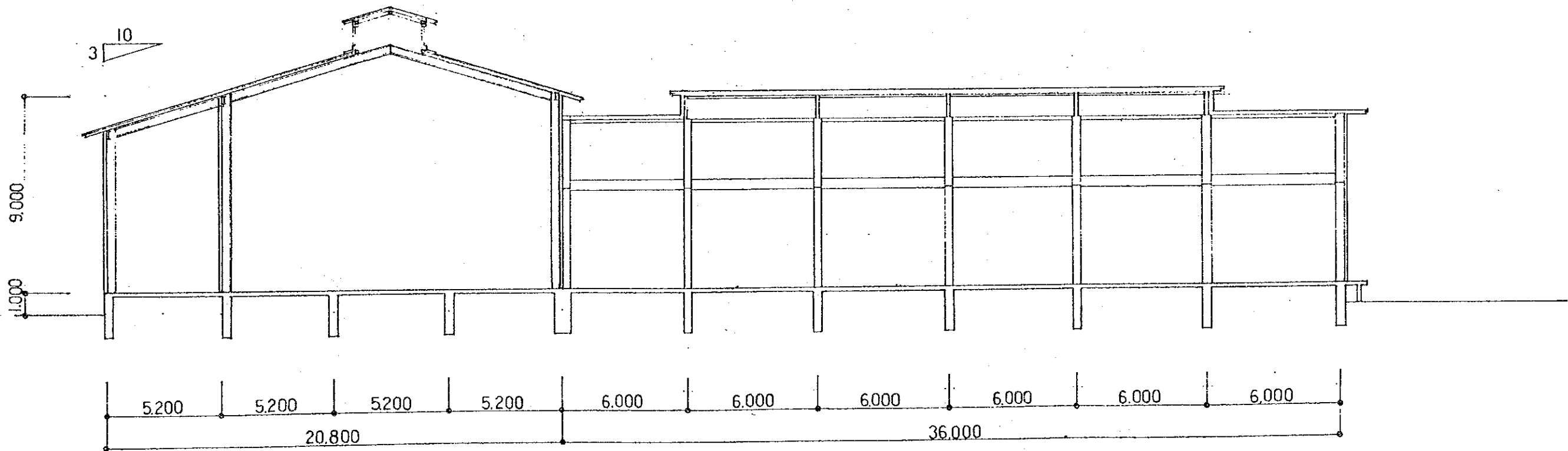


SOUTH ELEVATION

THE REPUBLIC OF THE PHILIPPINES	
THE PROJECT FOR IMPROVEMENT OF SEED PRODUCTION AND DISTRIBUTION AND ESTABLISHMENT OF APPROPRIATE SEED STORAGE SYSTEM	
TITLE OF DRAWING	
西ビサヤ総合農業研究センター	
種子貯蔵庫 (3/4)	
Date	Drawing No.
JAPAN INTERNATIONAL COOPERATION AGENCY	

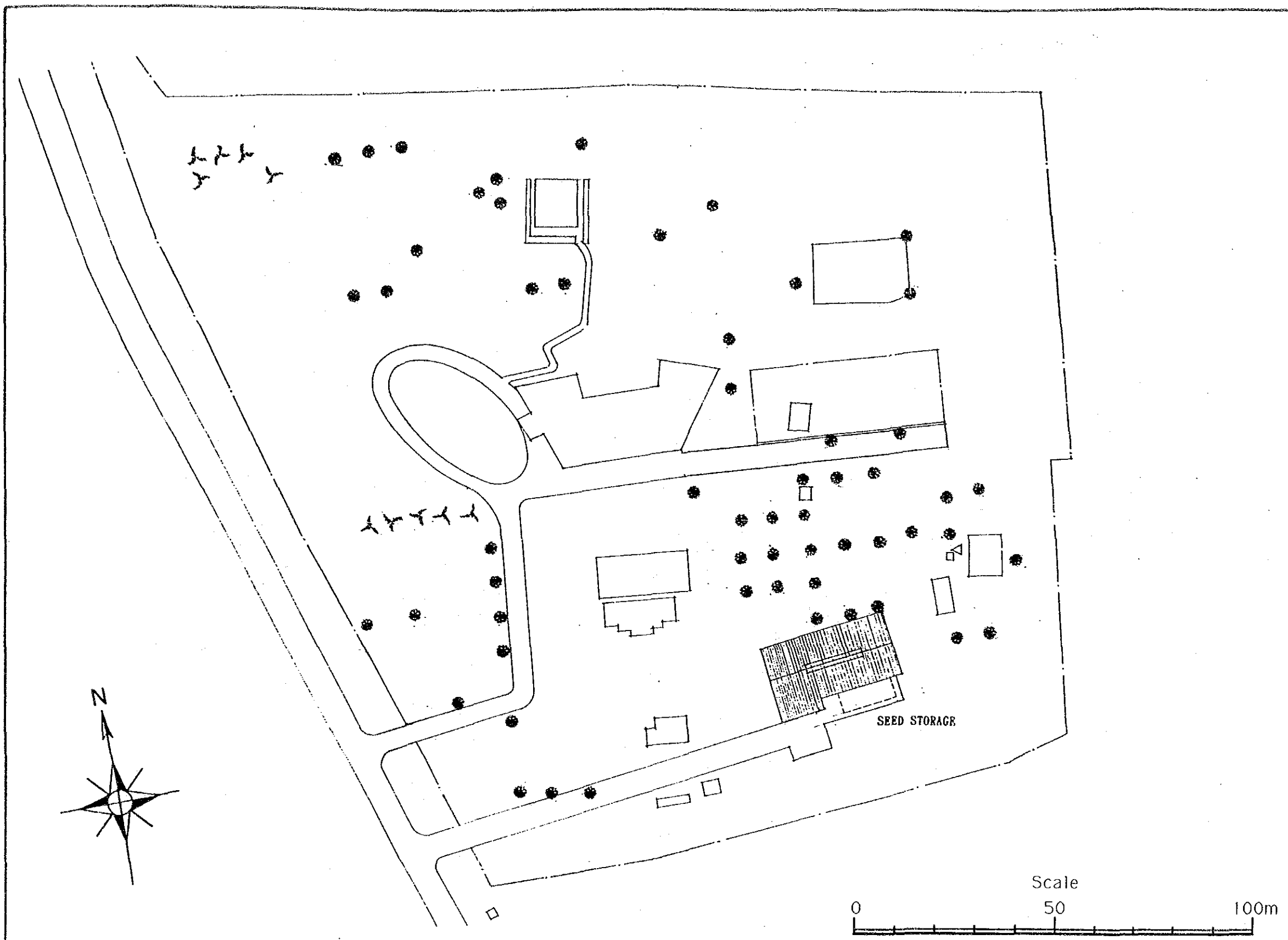


A-A SECTION

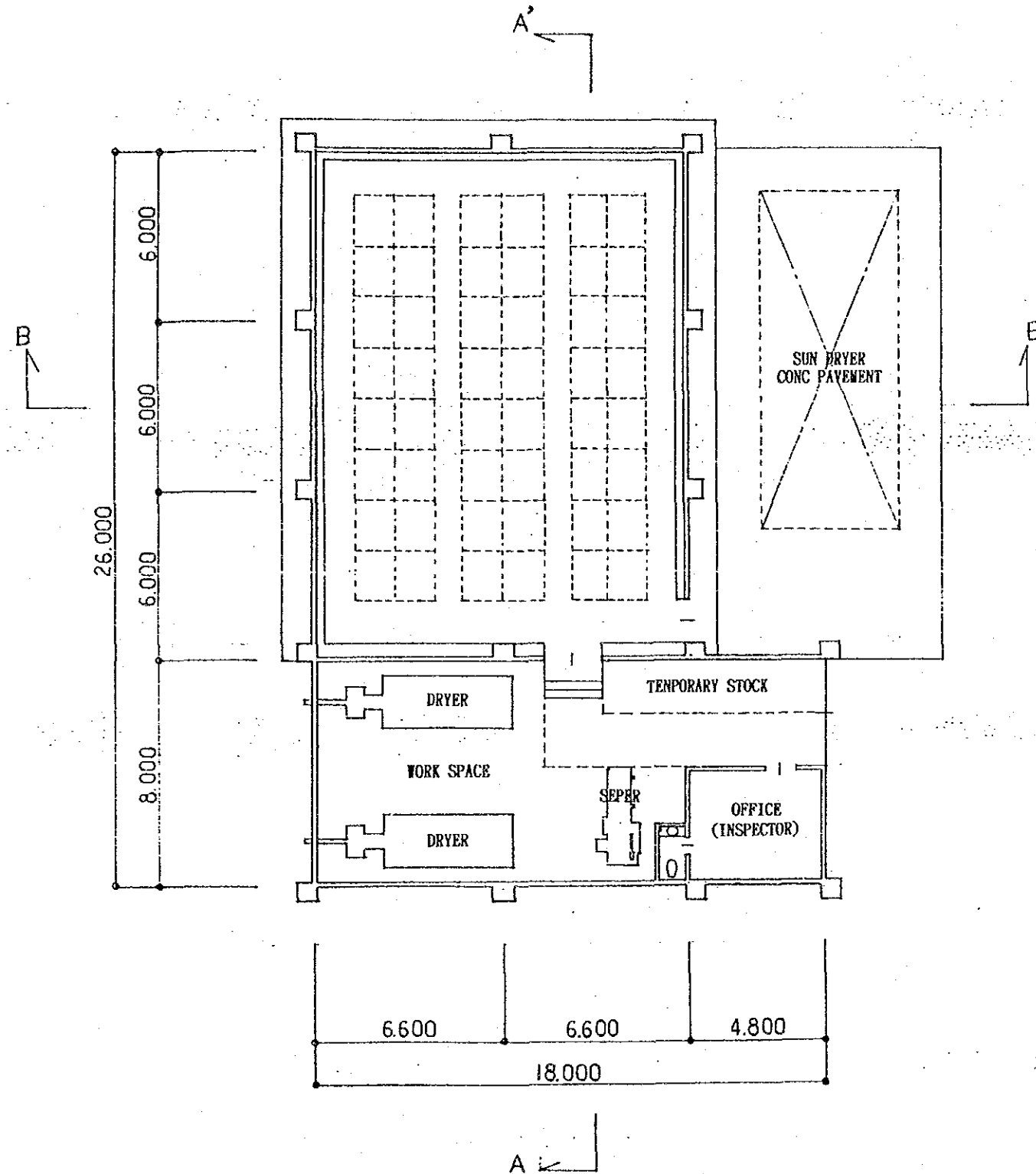


B-B SECTION

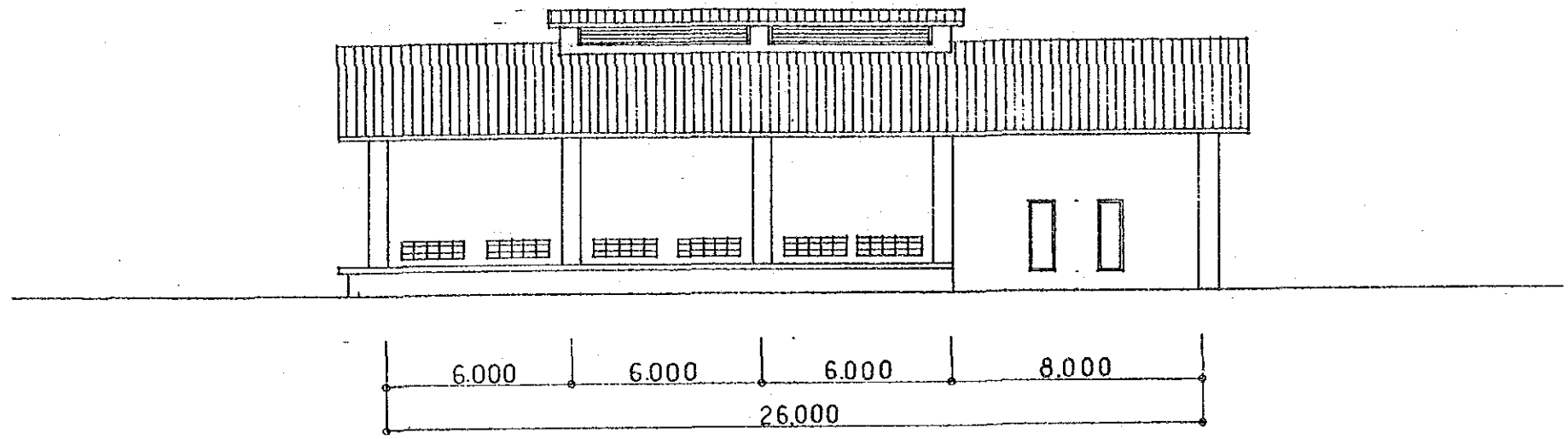
THE REPUBLIC OF THE PHILIPPINES		
THE PROJECT FOR IMPROVEMENT OF SEED PRODUCTION AND DISTRIBUTION AND ESTABLISHMENT OF APPROPRIATE SEED STORAGE SYSTEM		
TITLE OF DRAWING		
西ビサヤ総合農業研究センター		
種子貯蔵庫 (4/4)		
Date		Drawing No.
JAPAN INTERNATIONAL COOPERATION AGENCY		



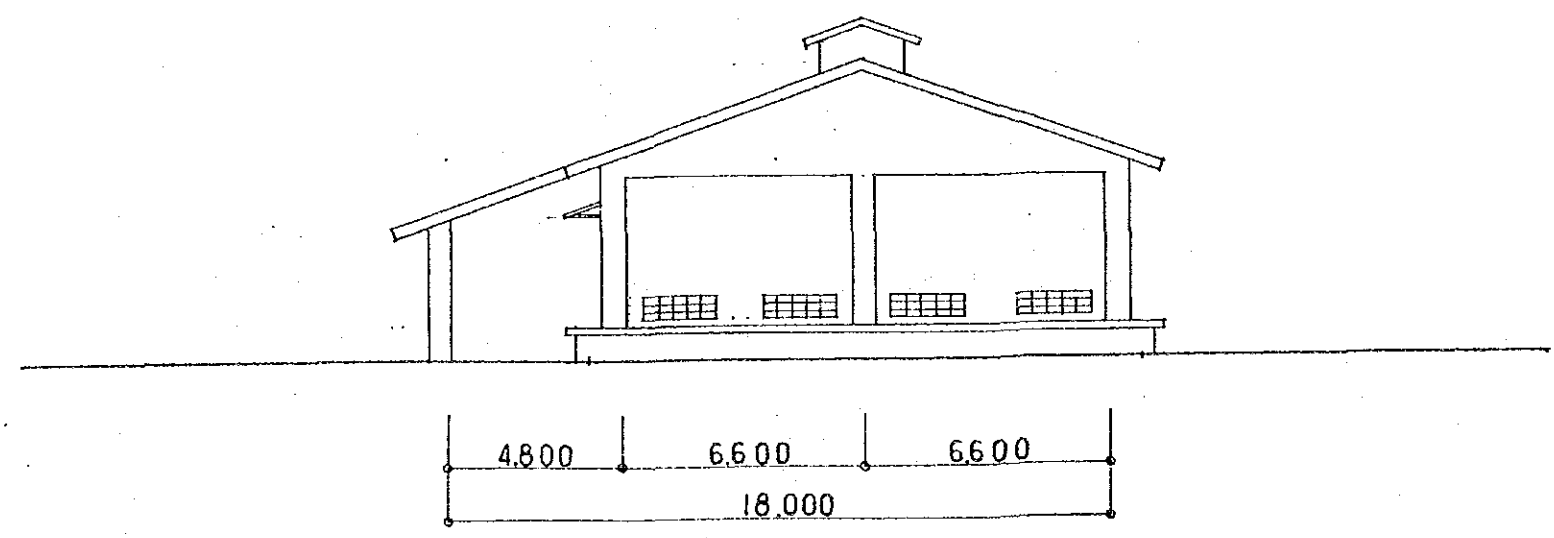
THE REPUBLIC OF THE PHILIPPINES		
THE PROJECT FOR IMPROVEMENT OF SEED PRODUCTION AND DISTRIBUTION AND ESTABLISHMENT OF APPROPRIATE SEED STORAGE SYSTEM		
TITLE OF DRAWING		
カピス県 (ロハス市)		
計画概要図		
Date	Drawing No.	
JAPAN INTERNATIONAL COOPERATION AGENCY		



THE REPUBLIC OF THE PHILIPPINES
THE PROJECT FOR IMPROVEMENT OF SEED
PRODUCTION AND DISTRIBUTION AND
ESTABLISHMENT OF APPROPRIATE SEED STORAGE SYSTEM
TITLE OF DRAWING
カピス県 (ロハス市)
種子貯蔵庫 (1/4)
Date _____ Drawing No. _____
JAPAN INTERNATIONAL COOPERATION AGENCY

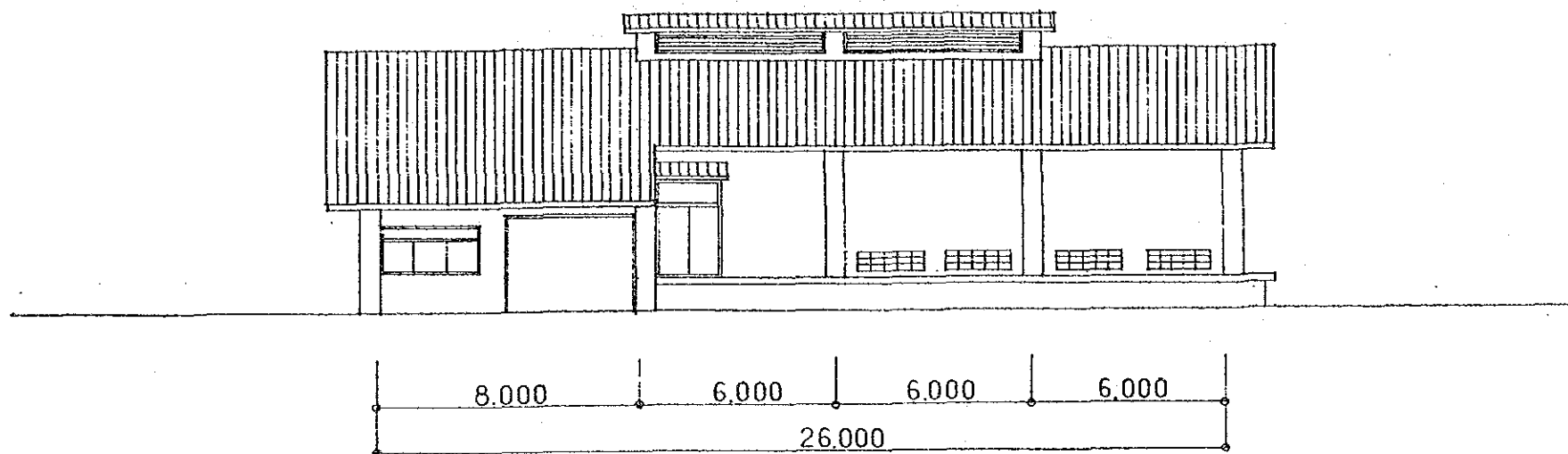


WEST ELEVATION

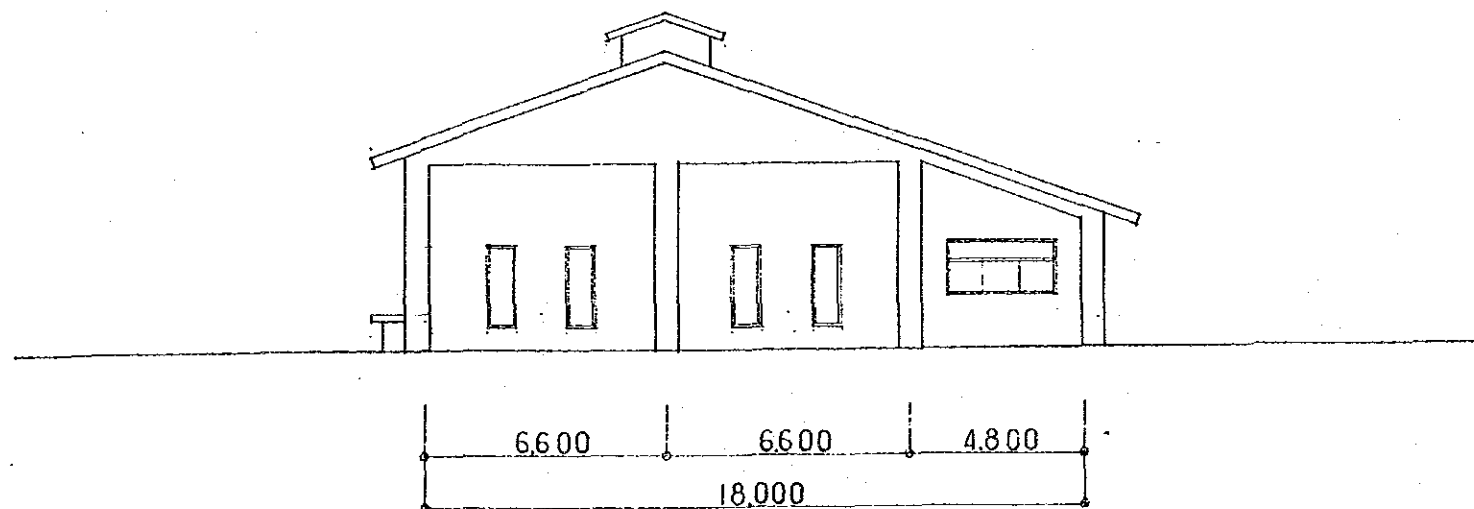


NORTH ELEVATION

THE REPUBLIC OF THE PHILIPPINES	
THE PROJECT FOR IMPROVEMENT OF SEED PRODUCTION AND DISTRIBUTION AND ESTABLISHMENT OF APPROPRIATE SEED STORAGE SYSTEM	
TITLE OF DRAWING	
カピス県 (ロハス市) 種子貯蔵庫 (2/4)	
Date	Drawing No.
JAPAN INTERNATIONAL COOPERATION AGENCY	

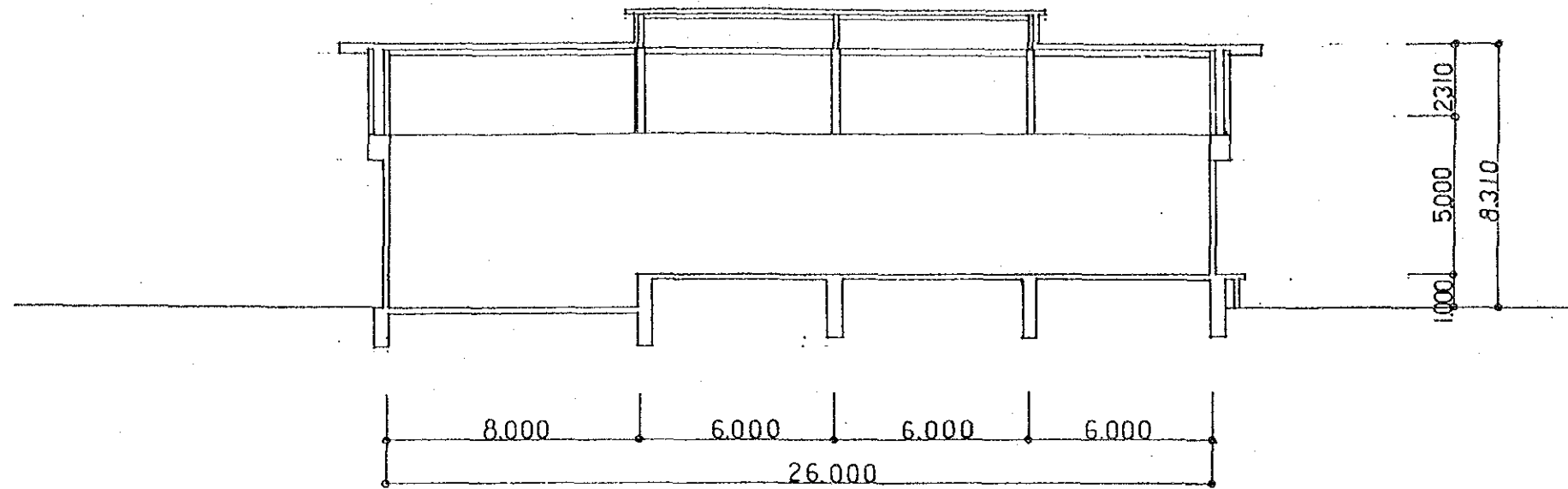


EAST ELEVATION

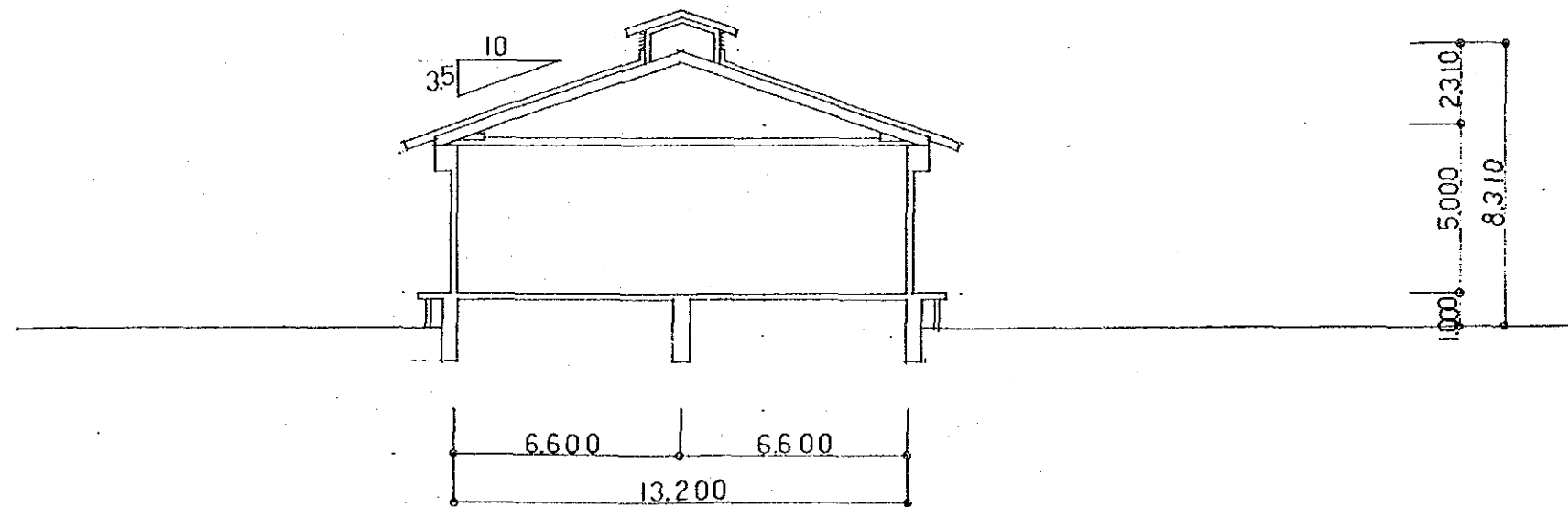


SOUTH ELEVATION

THE REPUBLIC OF THE PHILIPPINES	
THE PROJECT FOR IMPROVEMENT OF SEED PRODUCTION AND DISTRIBUTION AND ESTABLISHMENT OF APPROPRIATE SEED STORAGE SYSTEM	
TITLE OF DRAWING	
カピス県 (ロハス市) 種子貯蔵庫 (3/4)	
Date	Drawing No.
JAPAN INTERNATIONAL COOPERATION AGENCY	

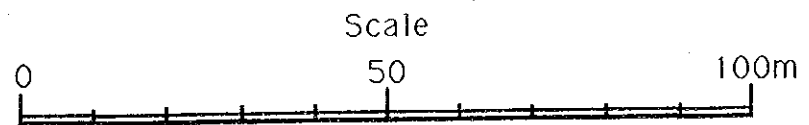
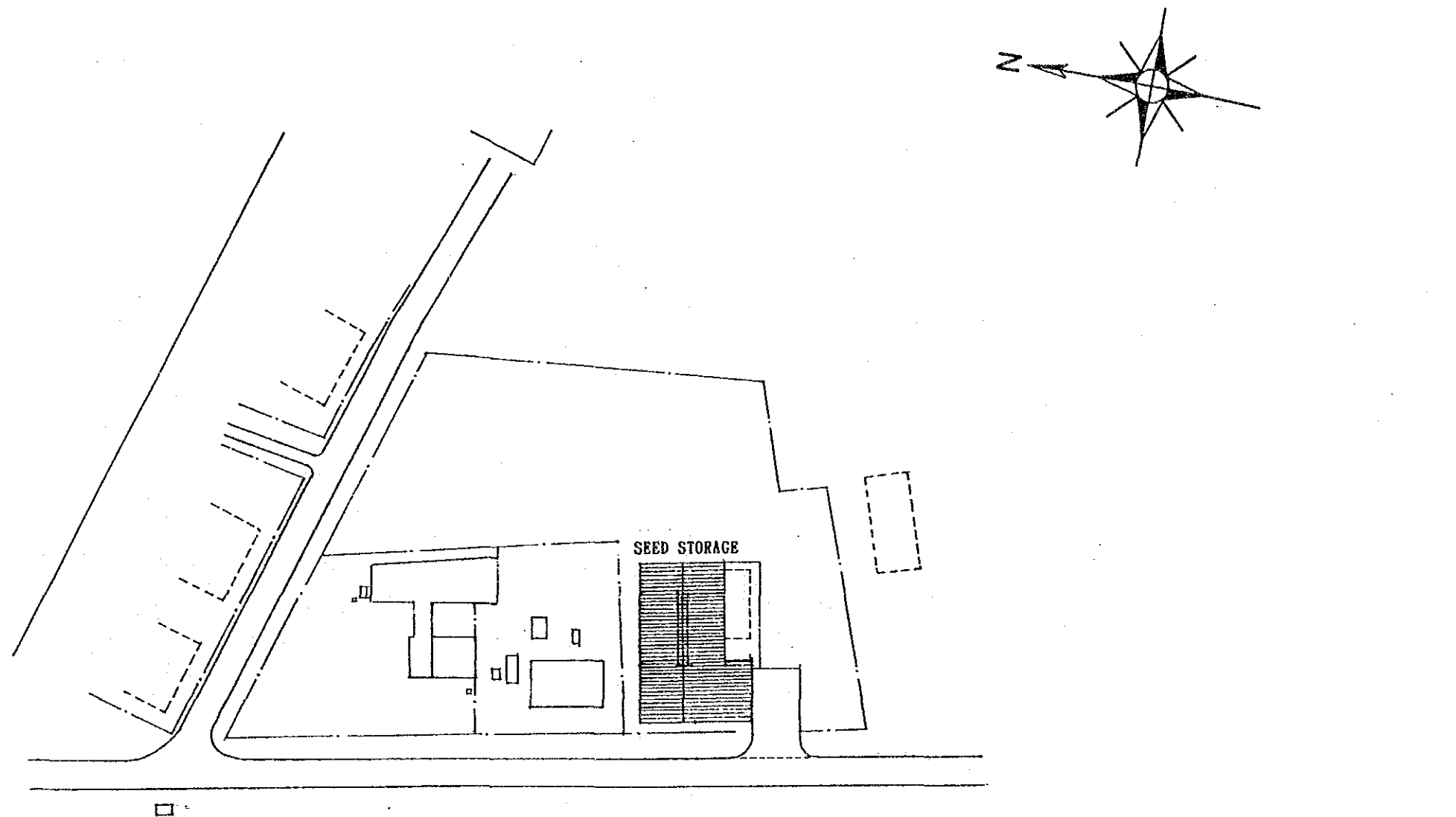


A-A SECTION

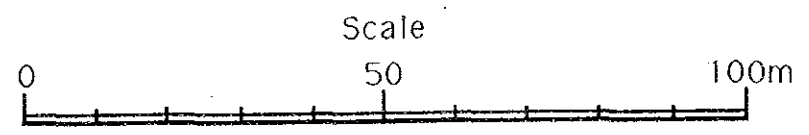
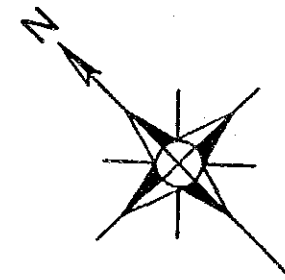
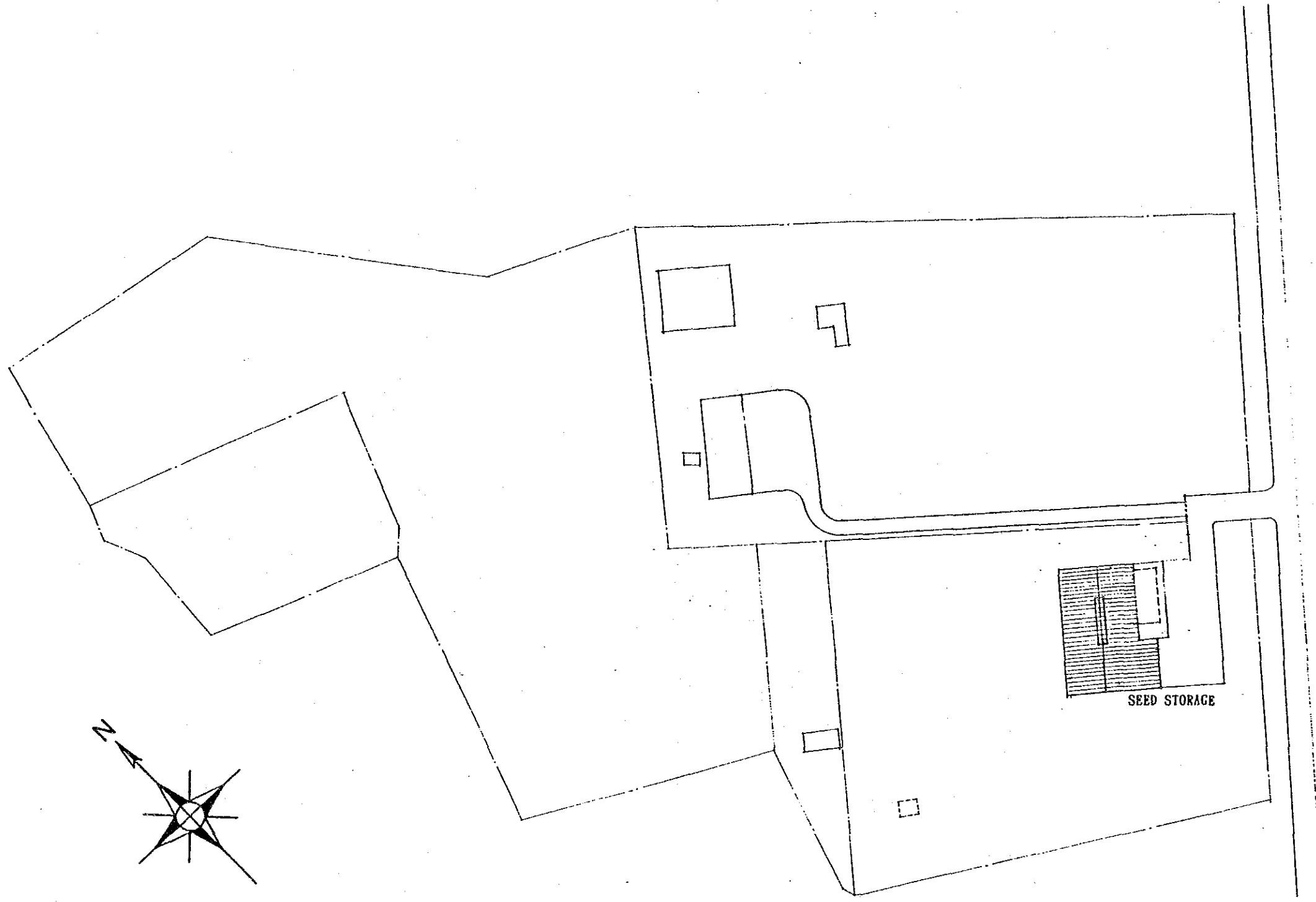


B-B SECTION

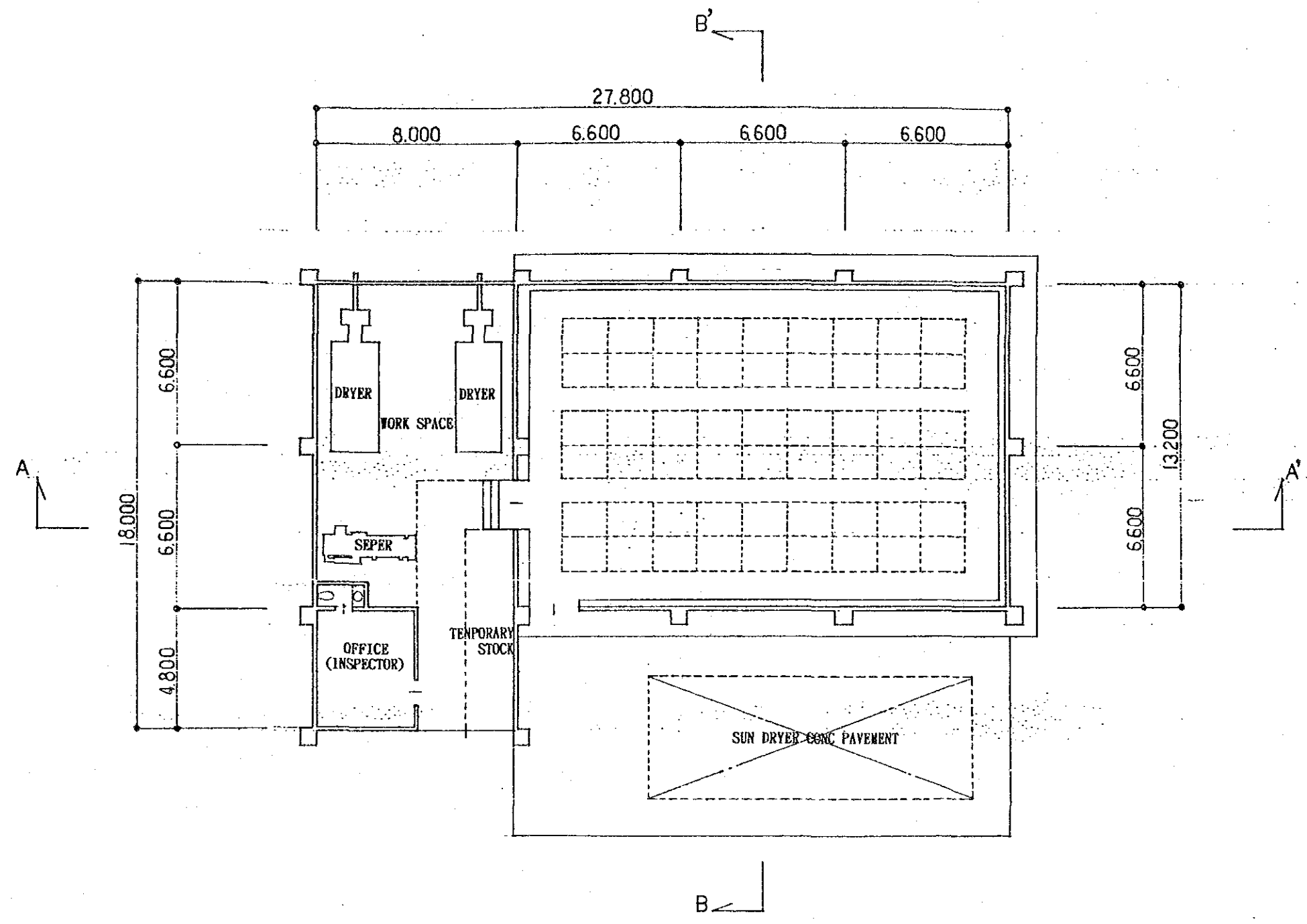
THE REPUBLIC OF THE PHILIPPINES		
THE PROJECT FOR IMPROVEMENT OF SEED PRODUCTION AND DISTRIBUTION AND ESTABLISHMENT OF APPROPRIATE SEED STORAGE SYSTEM		
TITLE OF DRAWING		
カピス県 (ロハス市)		
種子貯蔵庫 (4/4)		
Date	Drawing No.	
JAPAN INTERNATIONAL COOPERATION AGENCY		



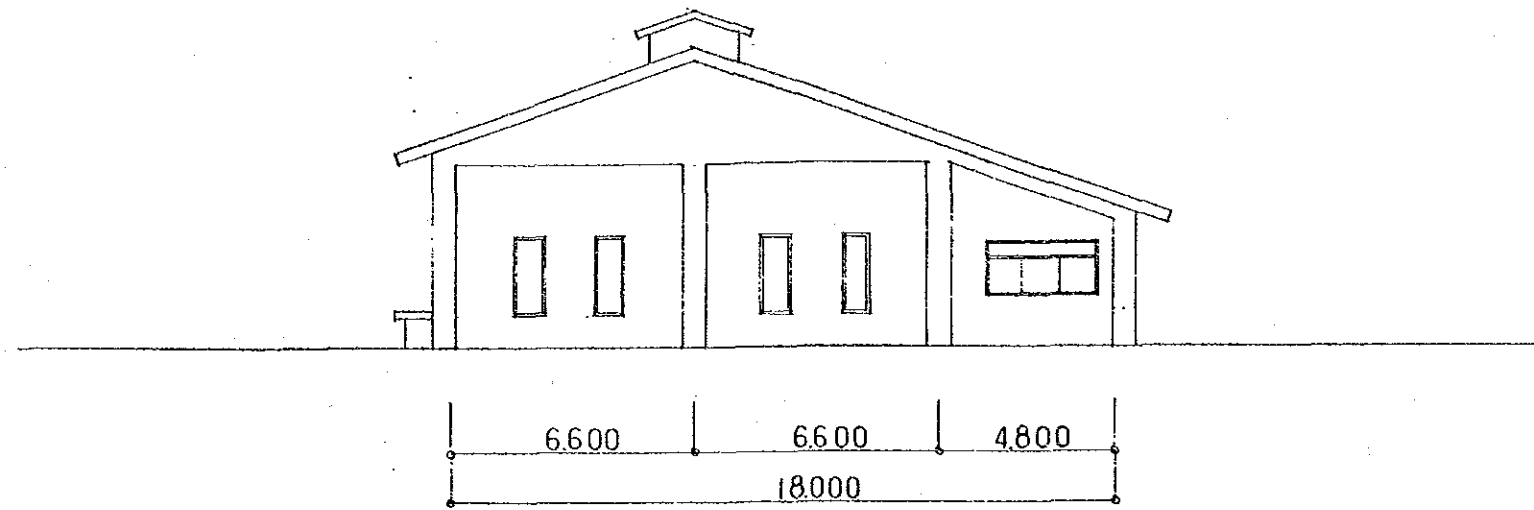
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THE PROJECT FOR IMPROVEMENT OF SEED PRODUCTION AND DISTRIBUTION AND ESTABLISHMENT OF APPROPRIATE SEED STORAGE SYSTEM	
TITLE OF DRAWING	
アクラン県 (マカト)	
計画概要図	
Date	Drawing No.
JAPAN INTERNATIONAL COOPERATION AGENCY	



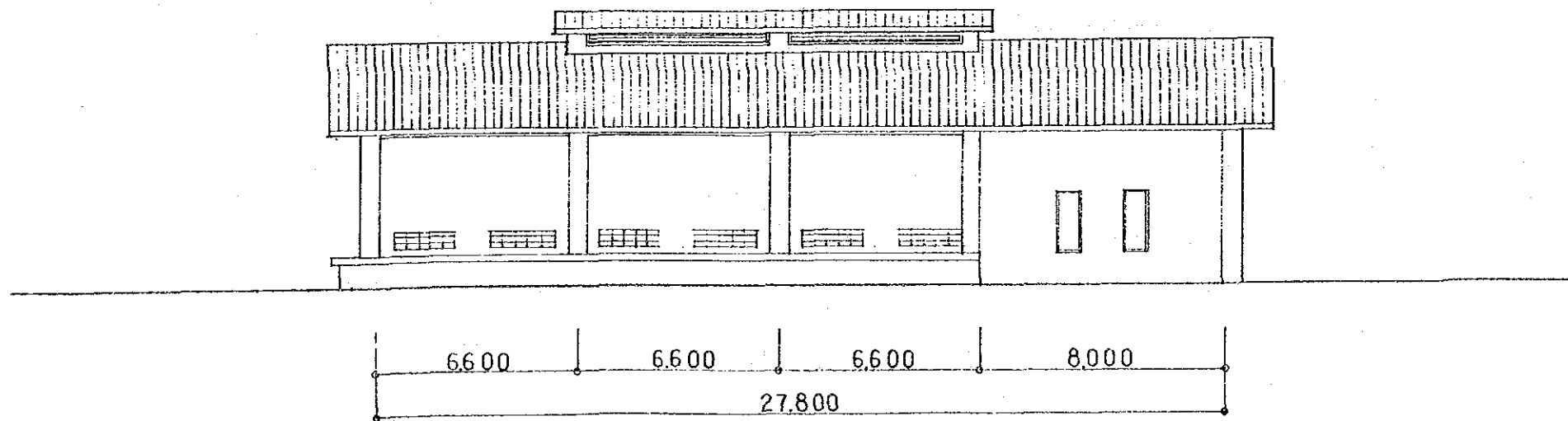
THE REPUBLIC OF THE PHILIPPINES	
THE PROJECT FOR IMPROVEMENT OF SEED PRODUCTION AND DISTRIBUTION AND ESTABLISHMENT OF APPROPRIATE SEED STORAGE SYSTEM	
TITLE OF DRAWING	
アンティケ渠 (バトノンゴン)	
計画概要図	
Date	Drawing No.
JAPAN INTERNATIONAL COOPERATION AGENCY	



THE REPUBLIC OF THE PHILIPPINES
 THE PROJECT FOR IMPROVEMENT OF SEED
 PRODUCTION AND DISTRIBUTION AND
 ESTABLISHMENT OF APPROPRIATE SEED STORAGE SYSTEM
 TITLE OF DRAWING
 アンティケ県 (バトノンゴン)
 種子貯蔵庫 (1/4)
 Date _____ Drawing No. _____
 JAPAN INTERNATIONAL COOPERATION AGENCY

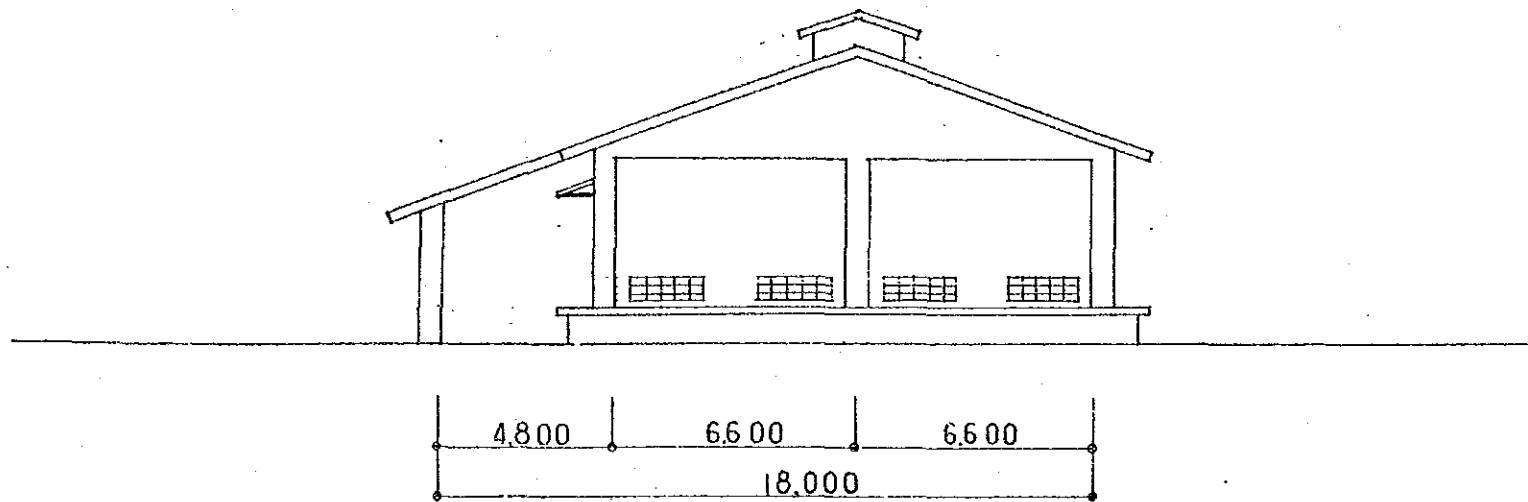


WEST ELEVATION

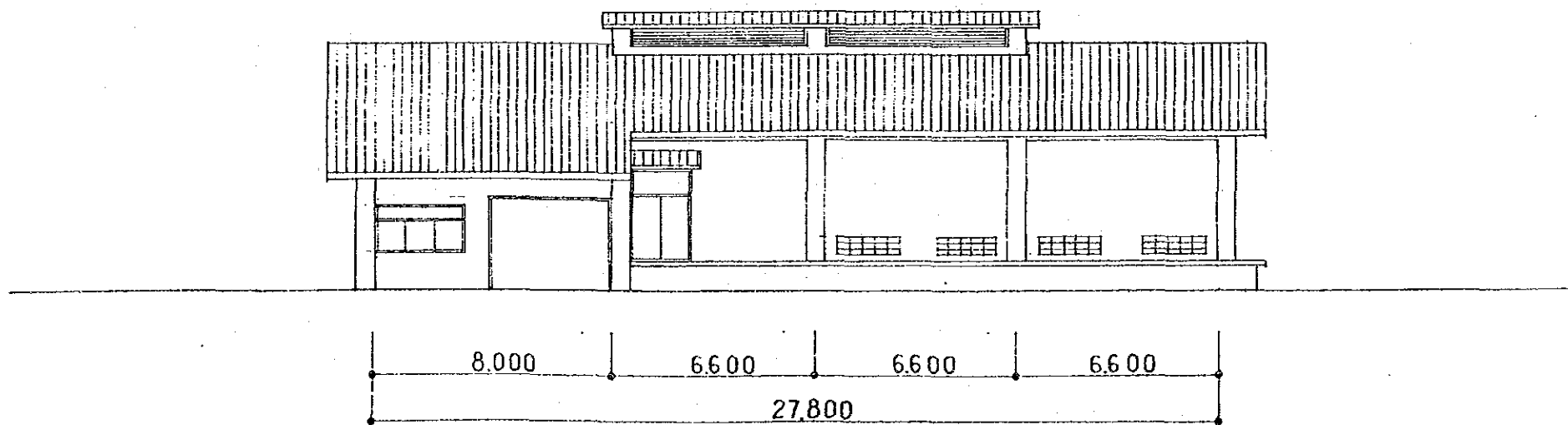


NORTH ELEVATION

THE REPUBLIC OF THE PHILIPPINES	
THE PROJECT FOR IMPROVEMENT OF SEED PRODUCTION AND DISTRIBUTION AND ESTABLISHMENT OF APPROPRIATE SEED STORAGE SYSTEM	
TITLE OF DRAWING	
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Date	Drawing No.
JAPAN INTERNATIONAL COOPERATION AGENCY	

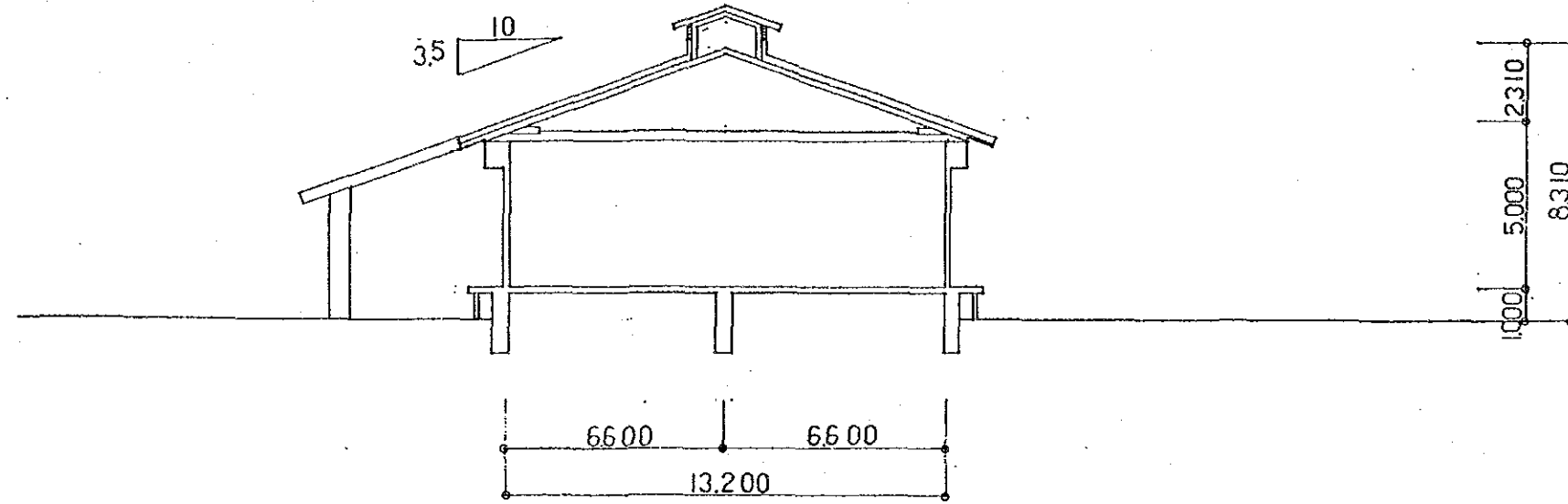


EAST ELEVATION

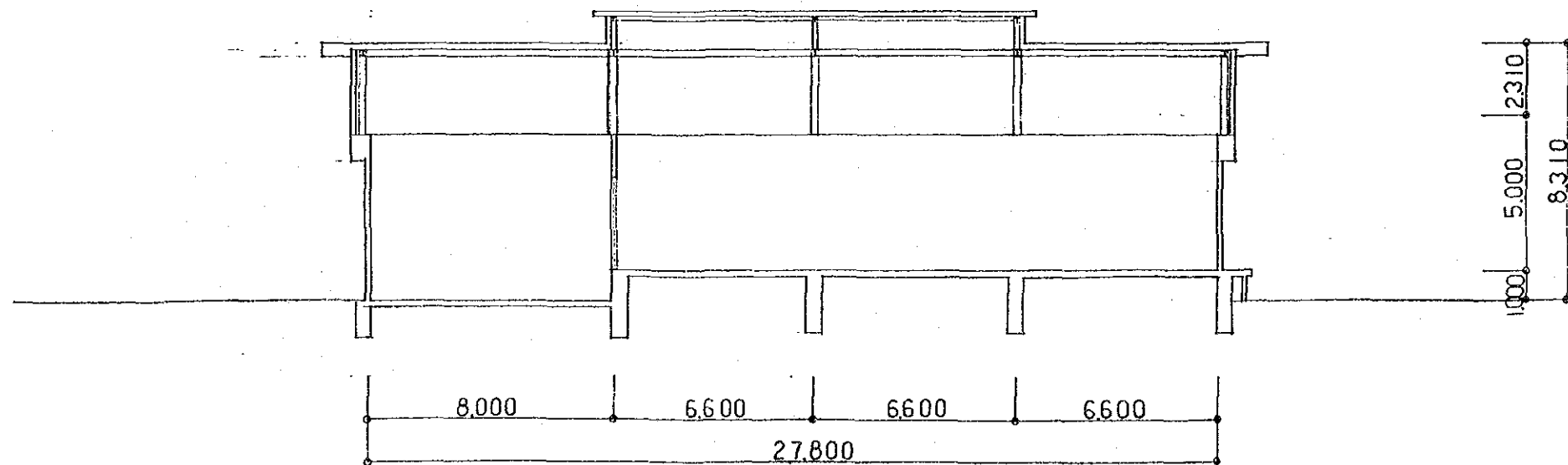


SOUTH ELEVATION

THE REPUBLIC OF THE PHILIPPINES	
THE PROJECT FOR IMPROVEMENT OF SEED PRODUCTION AND DISTRIBUTION AND ESTABLISHMENT OF APPROPRIATE SEED STORAGE SYSTEM	
TITLE OF DRAWING アンティケ構 (バトノンゴン) 種子貯蔵庫 (3/4)	
Date	Drawing No.
JAPAN INTERNATIONAL COOPERATION AGENCY	



B-B SECTION

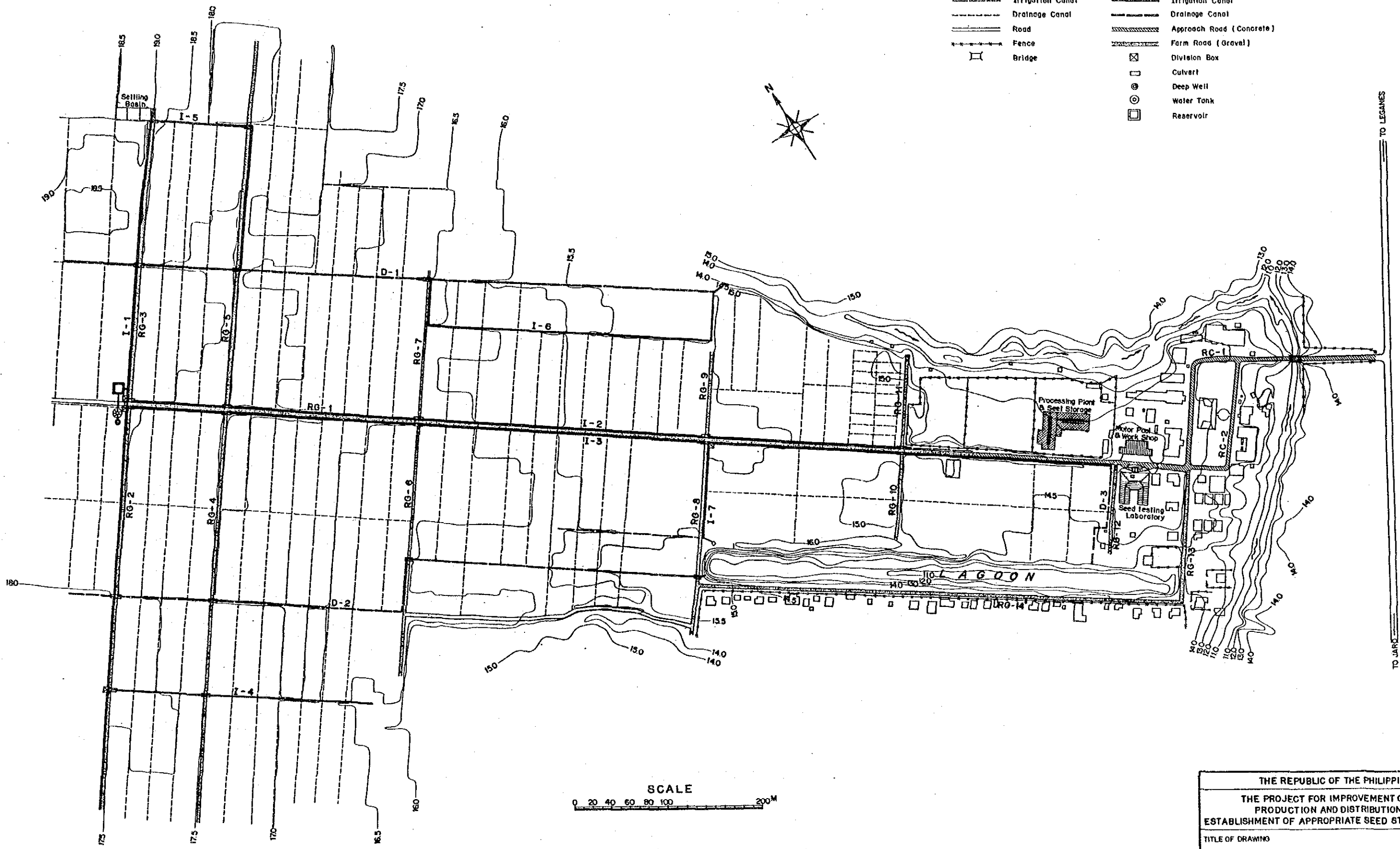


A-A SECTION

THE REPUBLIC OF THE PHILIPPINES	
THE PROJECT FOR IMPROVEMENT OF SEED PRODUCTION AND DISTRIBUTION AND ESTABLISHMENT OF APPROPRIATE SEED STORAGE SYSTEM	
TITLE OF DRAWING	
アンティケ県 (バトノンゴン) 種子貯蔵庫 (4/4)	
Date	Drawing No.
JAPAN INTERNATIONAL COOPERATION AGENCY	

LEGEND

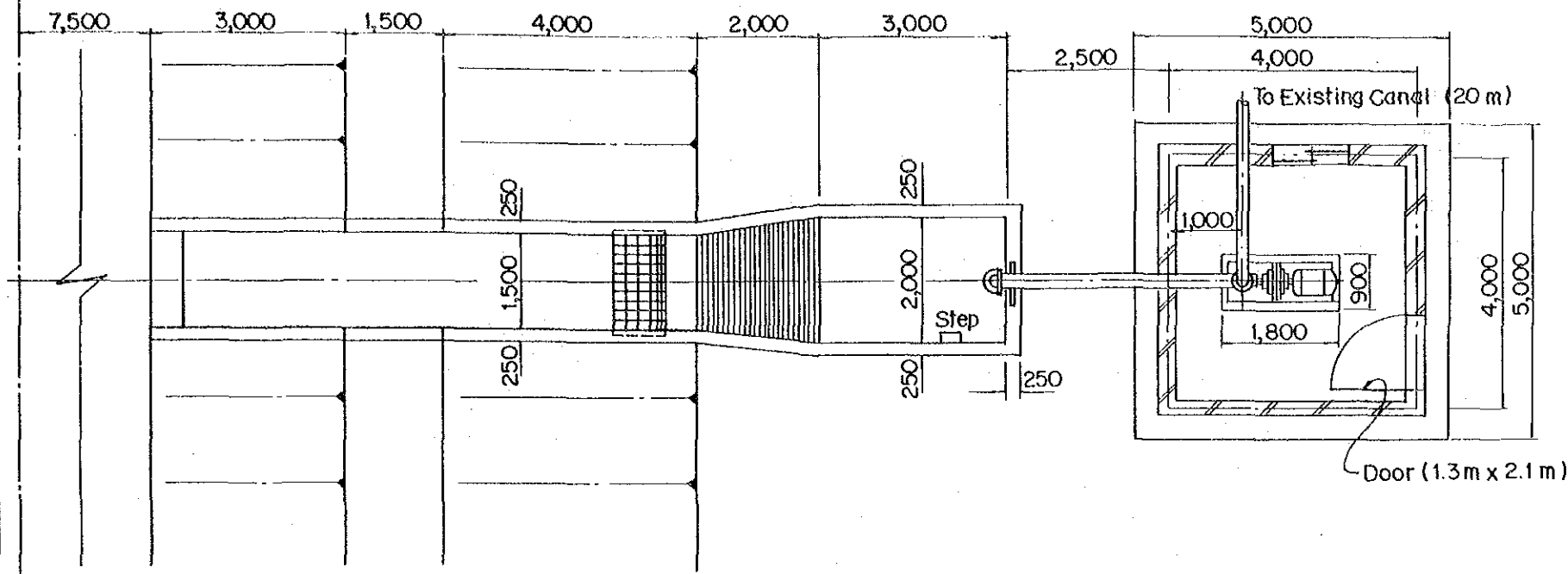
- | | |
|----------------------|-------------------------------|
| EXISTING | PLAN |
| --- Irrigation Canal | --- Irrigation Canal |
| - - - Drainage Canal | - - - Drainage Canal |
| == Road | ==== Approach Road (Concrete) |
| --- Fence | ==== Farm Road (Gravel) |
| ⌈ Bridge | ⊠ Division Box |
| | □ Culvert |
| | ⊙ Deep Well |
| | ⊙ Water Tank |
| | □ Reservoir |



SCALE
0 20 40 60 80 100 200M

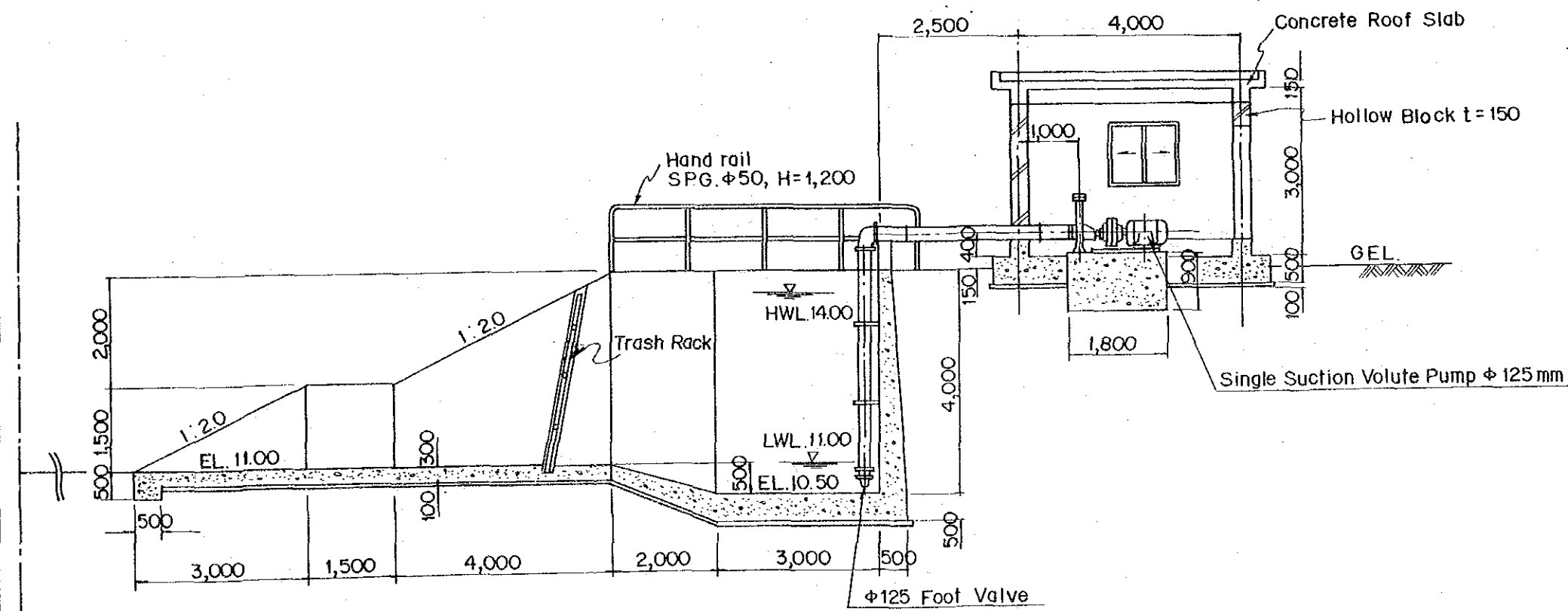
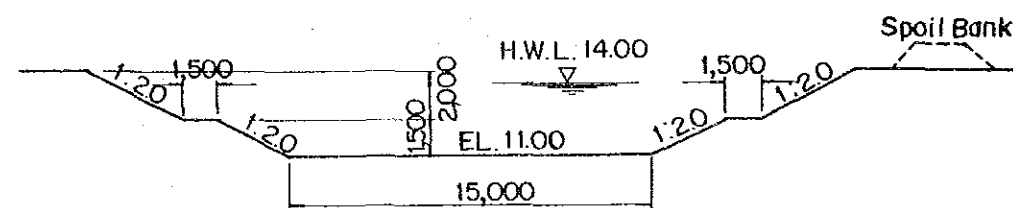
THE REPUBLIC OF THE PHILIPPINES	
THE PROJECT FOR IMPROVEMENT OF SEED PRODUCTION AND DISTRIBUTION AND ESTABLISHMENT OF APPROPRIATE SEED STORAGE SYSTEM	
TITLE OF DRAWING 灌漑排水施設 圃場計画概要図	
Date	Drawing No.
JAPAN INTERNATIONAL COOPERATION AGENCY	

Center of Pond

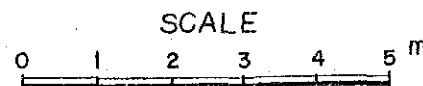
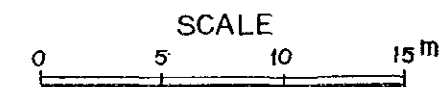


PLAN

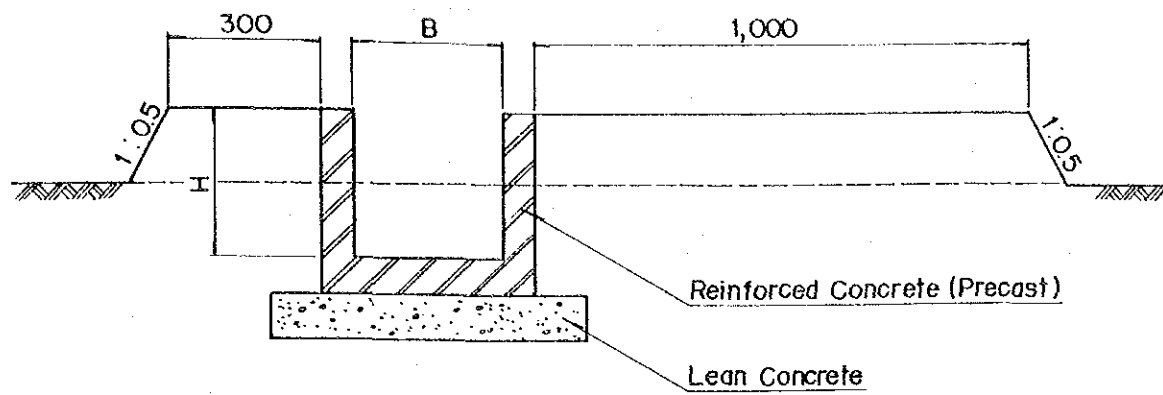
TYPICAL CROSS SECTION OF LAGOON



PROFILE



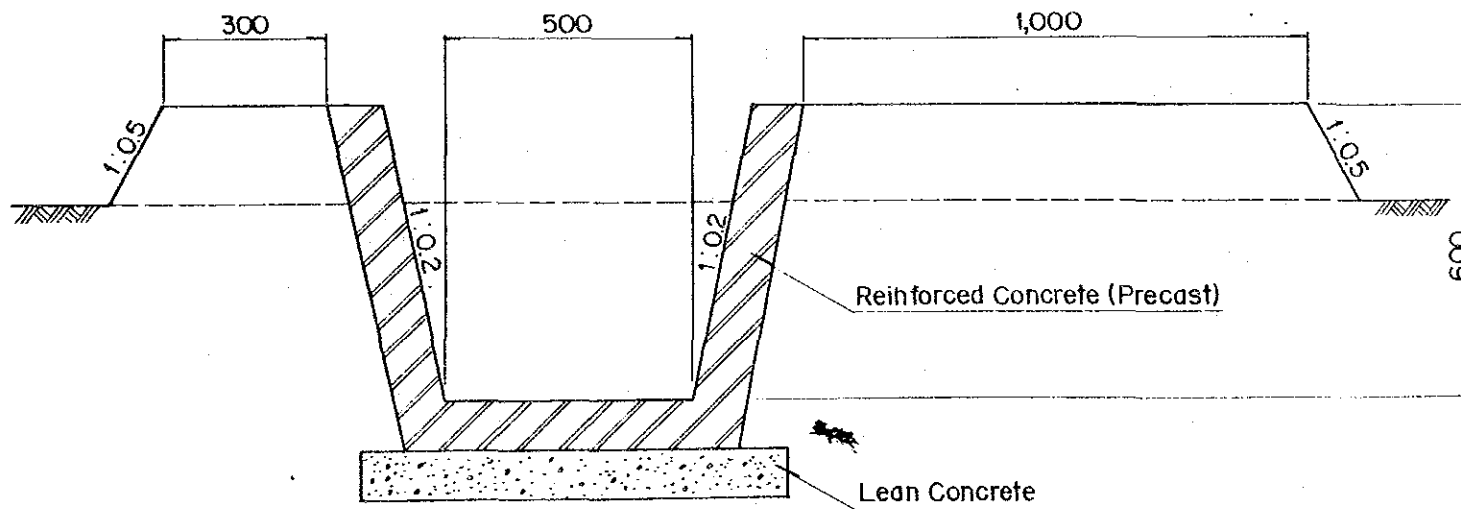
THE REPUBLIC OF THE PHILIPPINES	
THE PROJECT FOR IMPROVEMENT OF SEED PRODUCTION AND DISTRIBUTION AND ESTABLISHMENT OF APPROPRIATE SEED STORAGE SYSTEM	
TITLE OF DRAWING	
灌漑排水施設 ため池、ポンプ施設	
Date	Drawing No.
JAPAN INTERNATIONAL COOPERATION AGENCY	



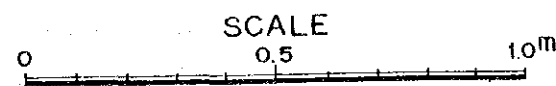
Canal Type	L (m)
I-1 A	440.0
B	302.0
I-2 A	830.5
I-3 A	1,053.5
I-4 A	290.4
I-5 A	266.0
I-6 A	410.0
I-7 A	100.0
Total	3,692.4

CROSS SECTION OF IRRIGATION CANAL

Type	B	H
A	300	300
B	400	400

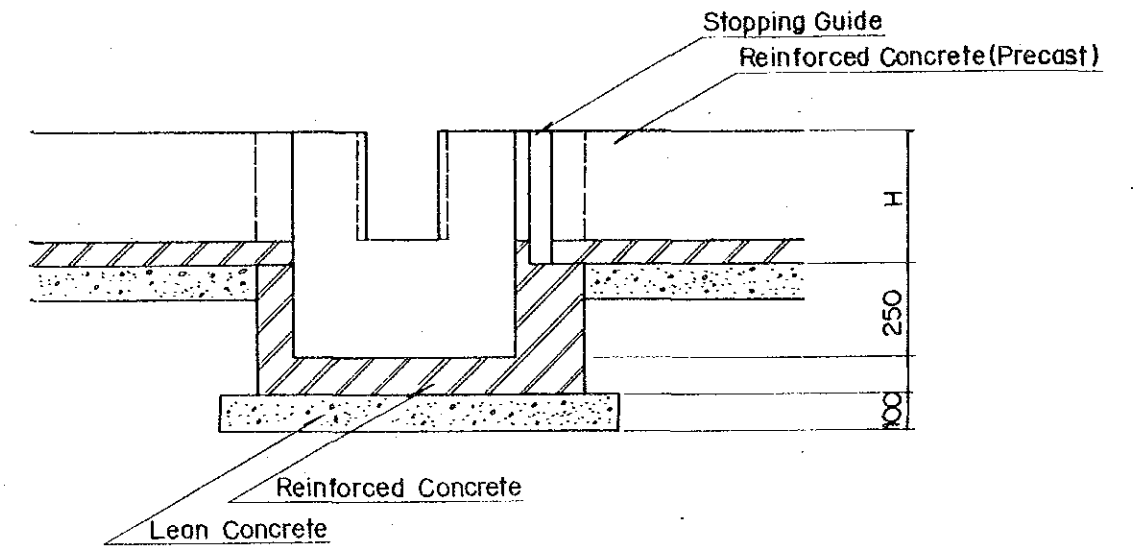
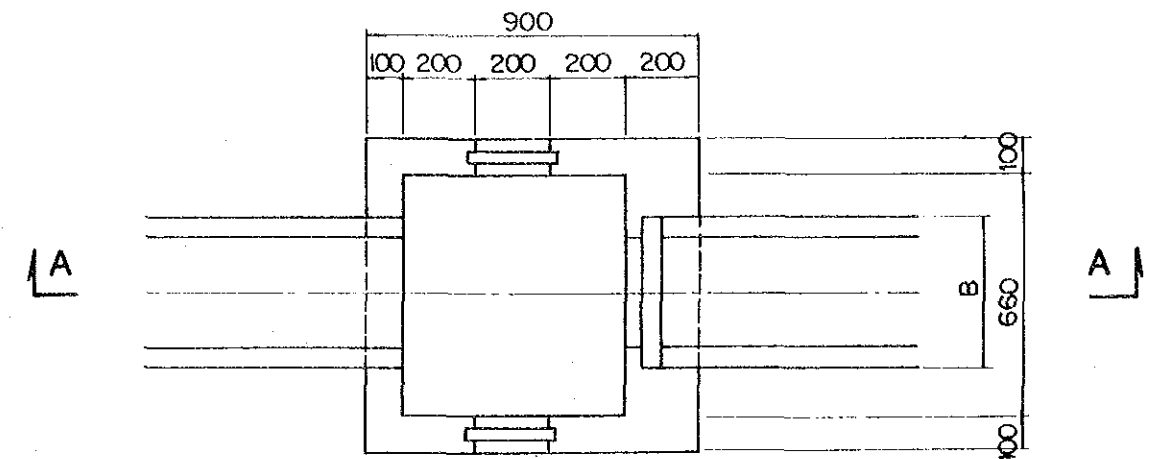


CROSS SECTION OF DRAIN

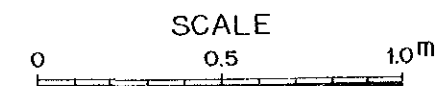


Drainage Canal	L (m)
D-1	705.0
D-2	730.0
Total	1,435.0

FIELD OUTLET



SECTION A-A

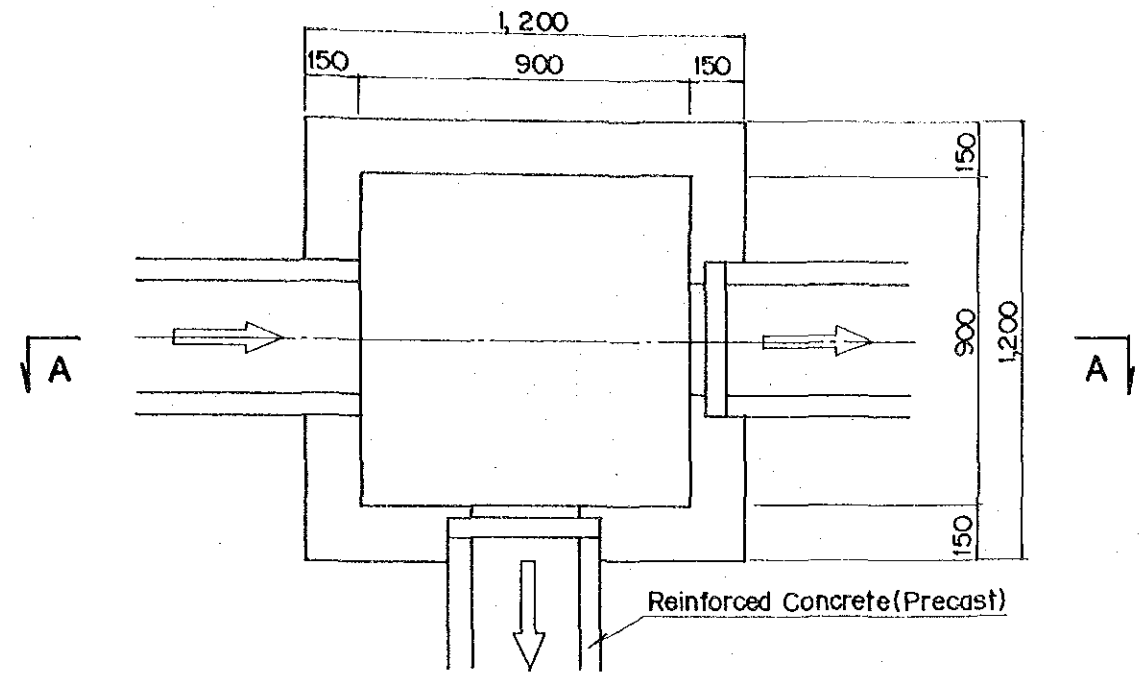


Type	B	H
A	420	370
B	520	470

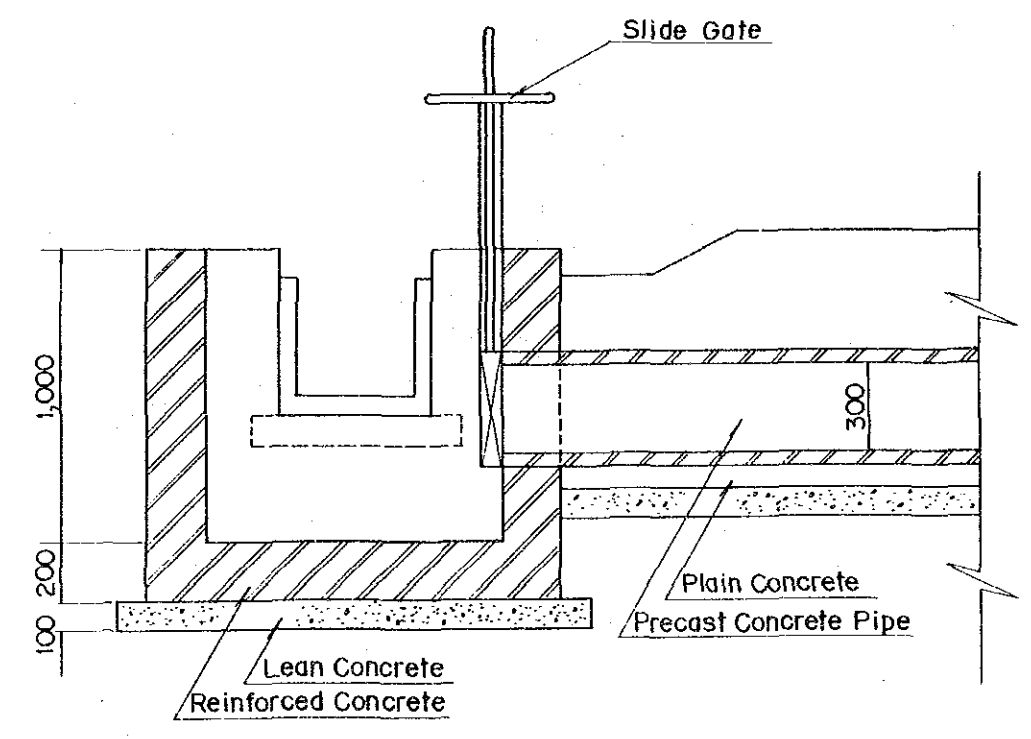
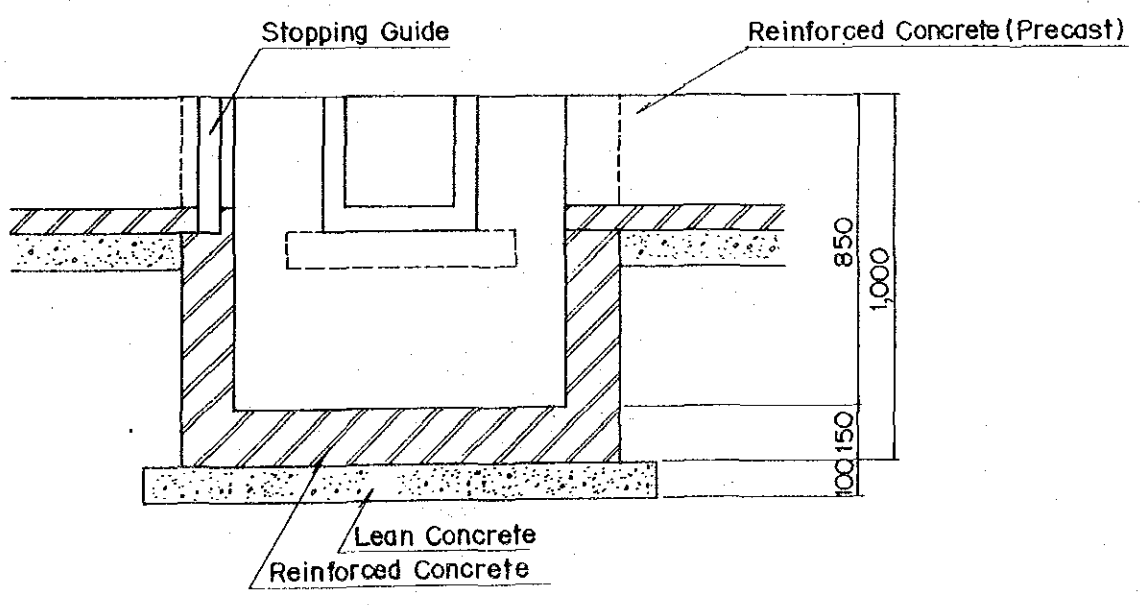
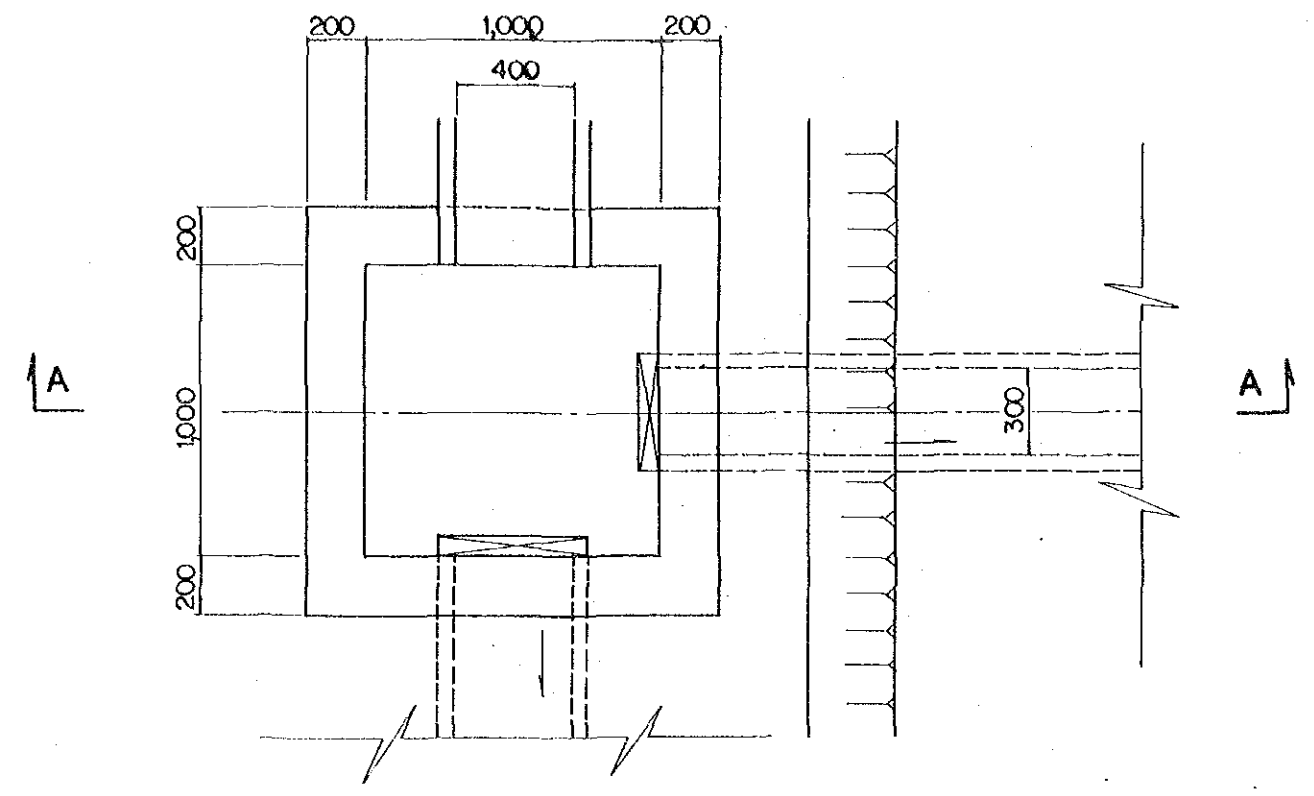
Canal Type	Field Outlet (No)
I-1 A	5
B	1
I-2 A	24
I-3 A	28
I-4 A	11
I-5 A	5
I-6 A	9
Total	83

THE REPUBLIC OF THE PHILIPPINES
 THE PROJECT FOR IMPROVEMENT OF SEED PRODUCTION AND DISTRIBUTION AND ESTABLISHMENT OF APPROPRIATE SEED STORAGE SYSTEM
 TITLE OF DRAWING
 灌溉水路・排水路標準断面図、圃場取り入れ口
 Date _____ Drawing No. _____
 JAPAN INTERNATIONAL COOPERATION AGENCY

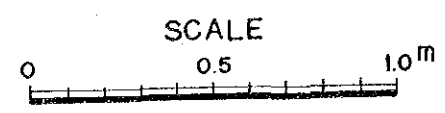
DIVISION BOX, TYPE - A



DIVISION BOX, TYPE - B

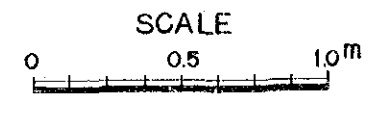


SECTION A - A

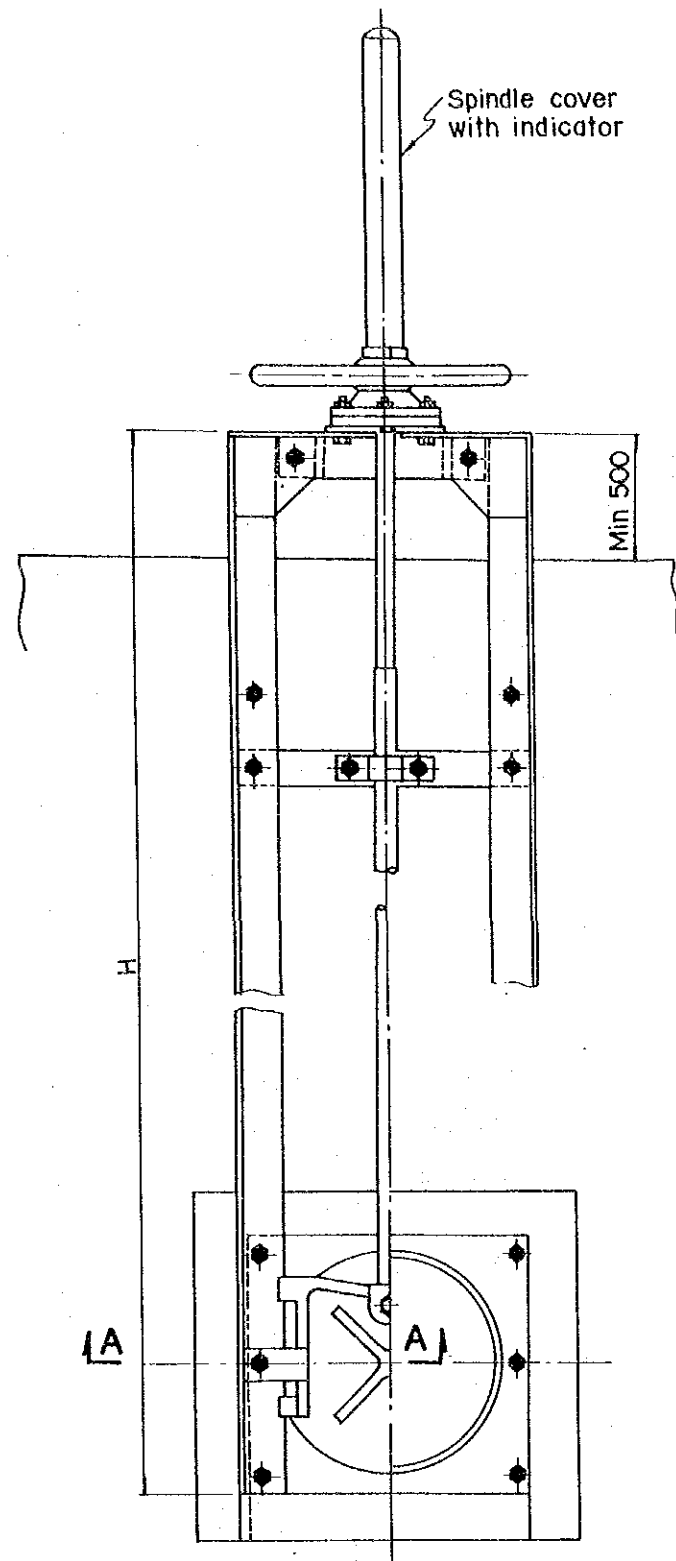


Canal	Type	Division Box (No)
I-1	A	2
	B	1
I-3	A	1
Total		4

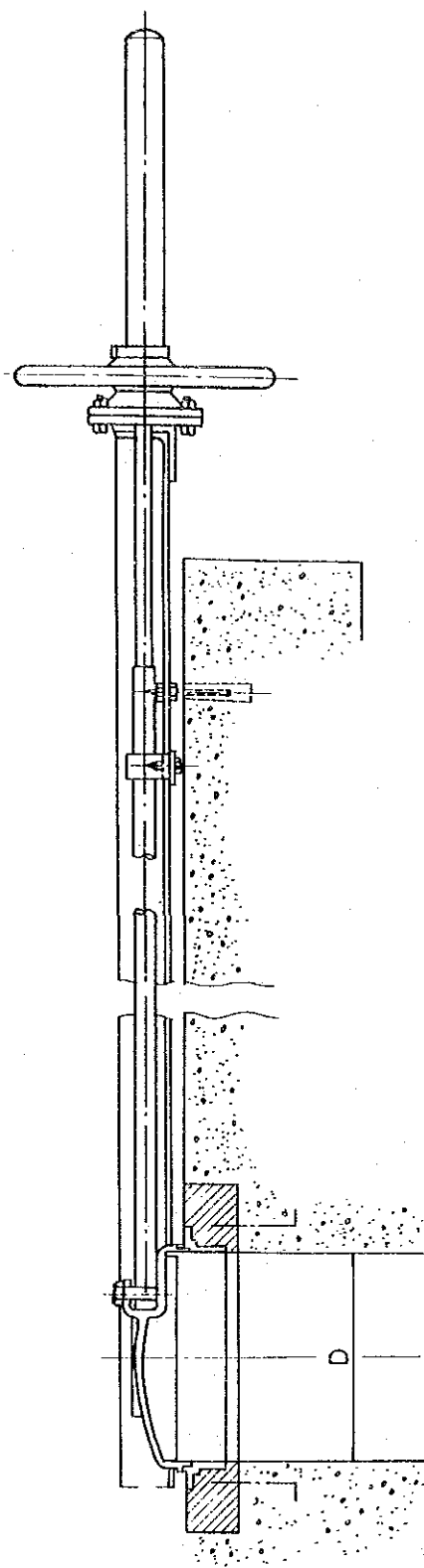
SECTION A - A



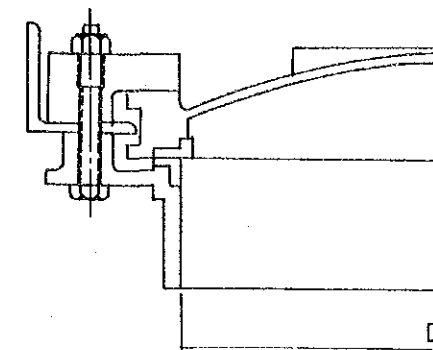
THE REPUBLIC OF THE PHILIPPINES
 THE PROJECT FOR IMPROVEMENT OF SEED
 PRODUCTION AND DISTRIBUTION AND
 ESTABLISHMENT OF APPROPRIATE SEED STORAGE SYSTEM
 TITLE OF DRAWING
 灌溉橋水施設
 分水工
 Date _____ Drawing No. _____
 JAPAN INTERNATIONAL COOPERATION AGENCY



FRONT VIEW



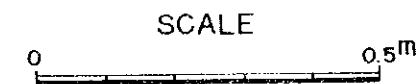
SECTION



SECTION A - A

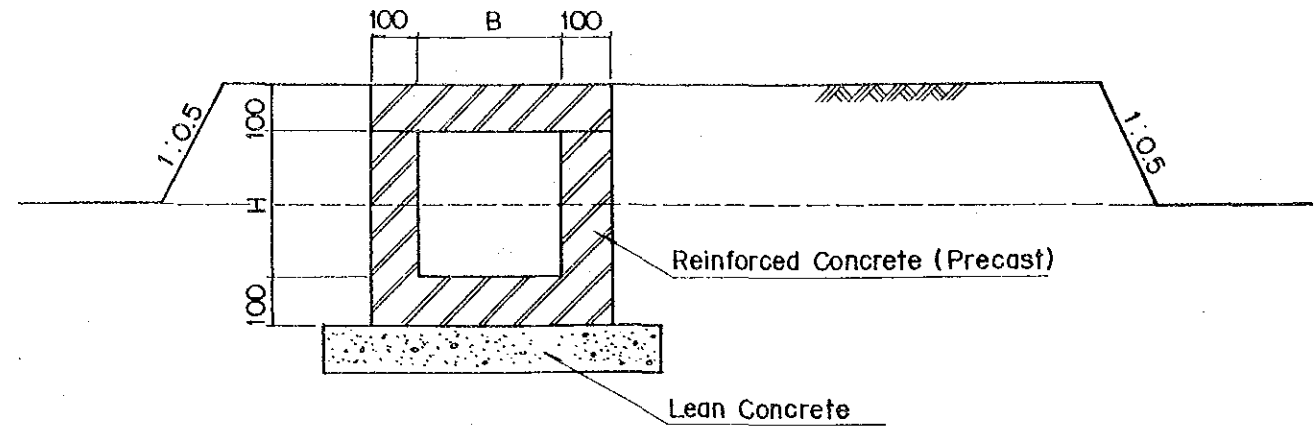
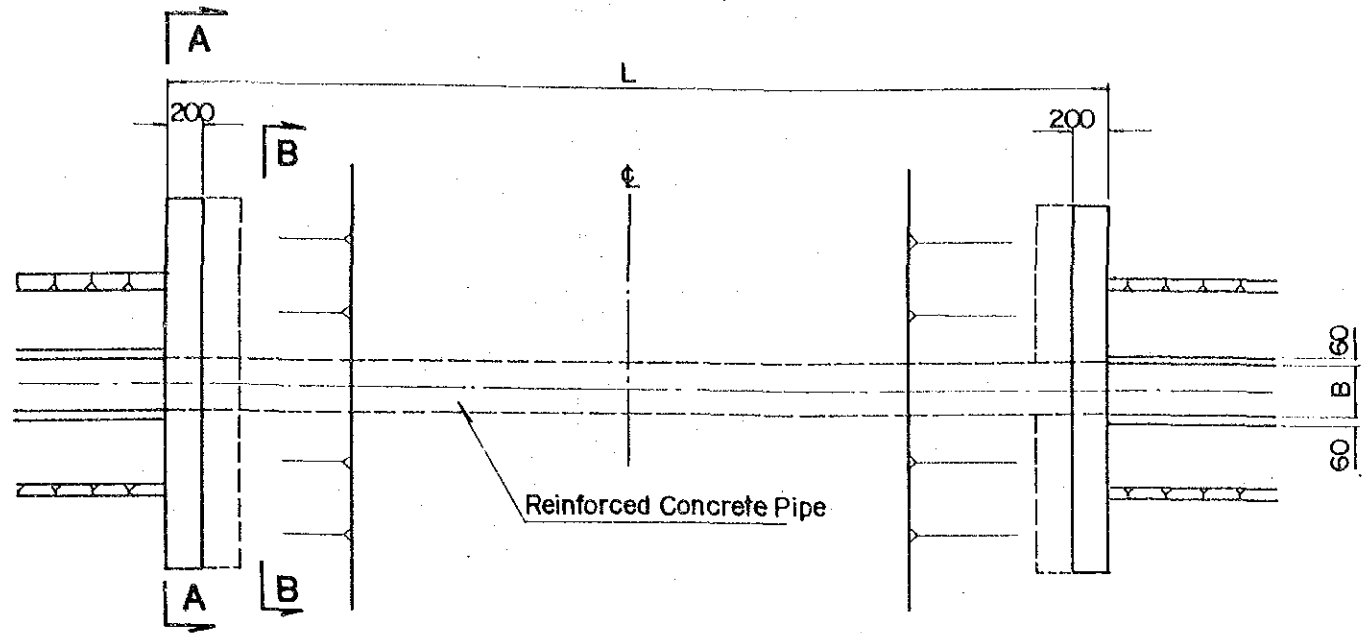
DIMENSION TABLE

Name of Canal	Name of STR.	D (m)	H (m)	Nos. of Gate
	Regulating Pond	0.45	2.0	1
I - 1	Settling Basin	0.45	1.8	1
	DB - 1	0.45	1.2	1
		0.45	1.2	1
I - 5	Settling Basin	0.45	1.8	1



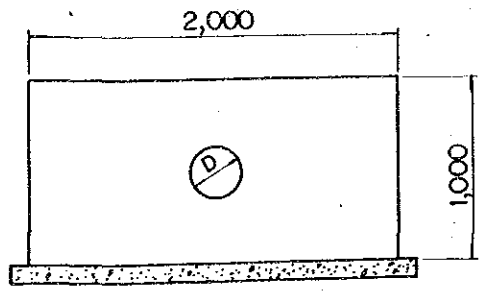
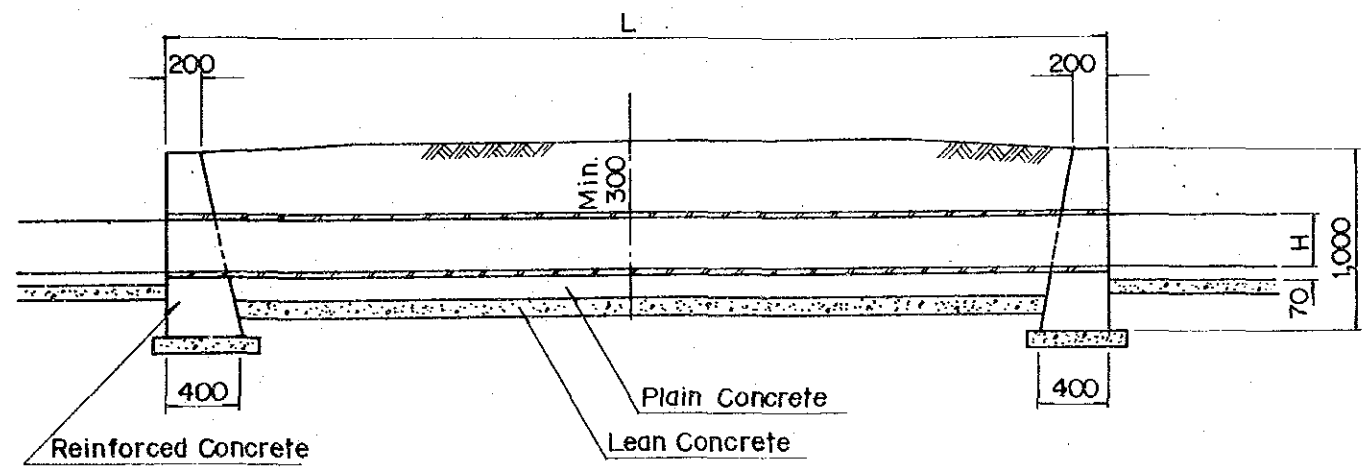
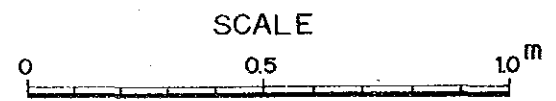
THE REPUBLIC OF THE PHILIPPINES
 THE PROJECT FOR IMPROVEMENT OF SEED
 PRODUCTION AND DISTRIBUTION AND
 ESTABLISHMENT OF APPROPRIATE SEED STORAGE SYSTEM
 TITLE OF DRAWING
 灌溉排水施設
 取水工ゲート取り付け
 Date _____ Drawing No. _____
 JAPAN INTERNATIONAL COOPERATION AGENCY

CULVERT

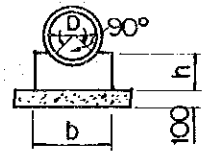


CROSS SECTION OF TRCTOR PASS

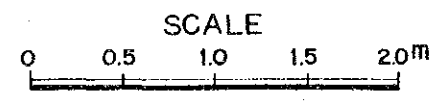
Type	B	H
A	300	300
B	400	400



SECTION A-A



SECTION B-B



(m)				
D	h	B	H	b
450	250	400	400	550

Canal	Culvert (No)
I-1	2
I-2	5
I-3	5
I-4	2
I-5	2
Total	16

THE REPUBLIC OF THE PHILIPPINES

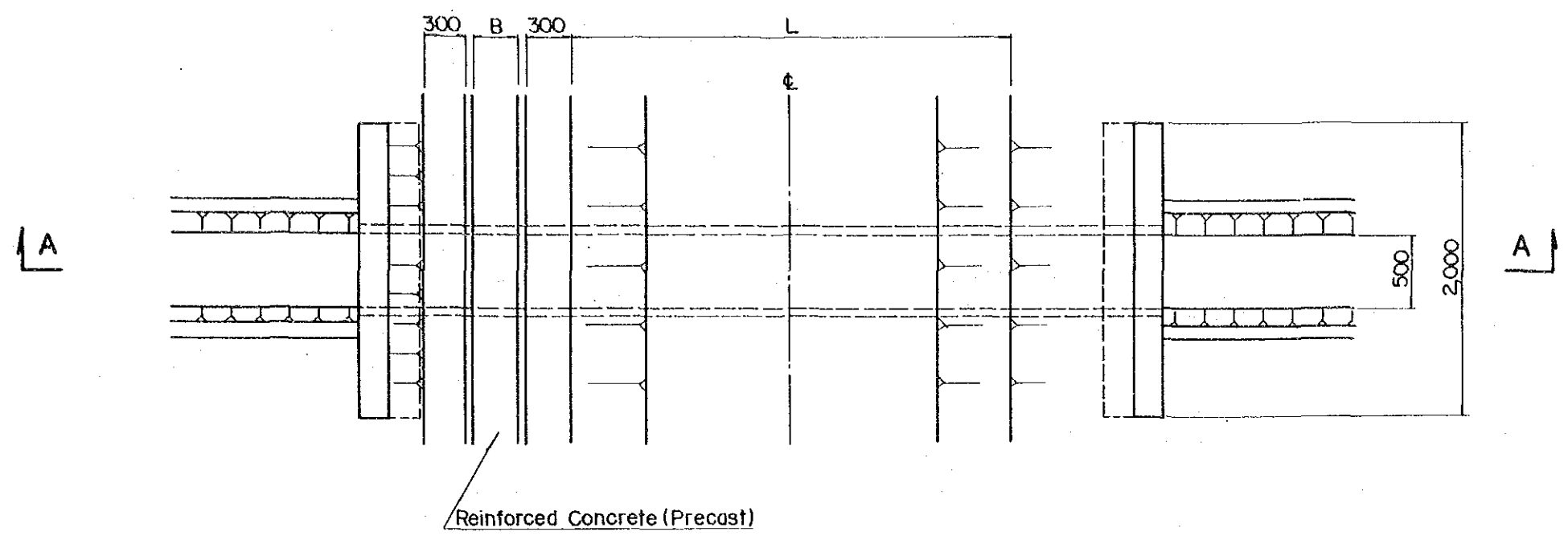
THE PROJECT FOR IMPROVEMENT OF SEED PRODUCTION AND DISTRIBUTION AND ESTABLISHMENT OF APPROPRIATE SEED STORAGE SYSTEM

TITLE OF DRAWING
灌漑排水施設
道路横断工、トラクターパス

Date _____ Drawing No. _____

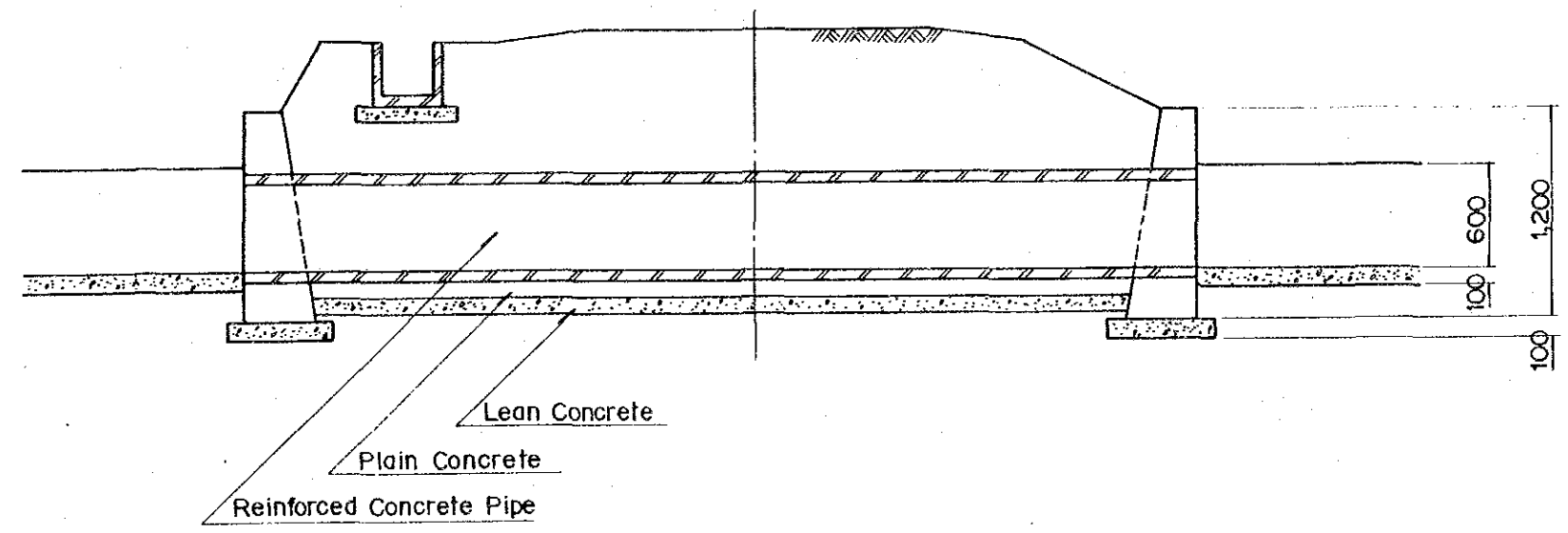
JAPAN INTERNATIONAL COOPERATION AGENCY

DRAINAGE CULVERT

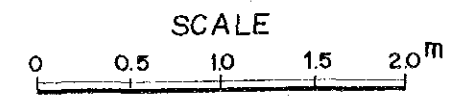
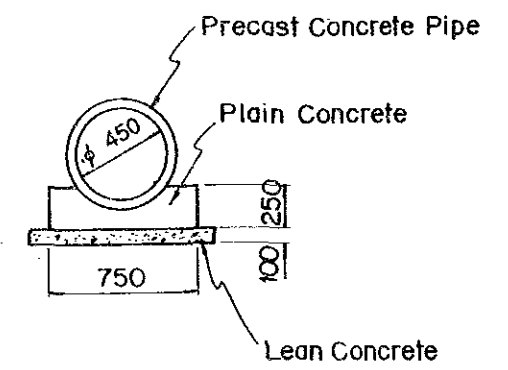


PLAN

	(nos.)
Drainage Canal	
D - 1	3
D - 2	4
Total	7



SECTION A - A

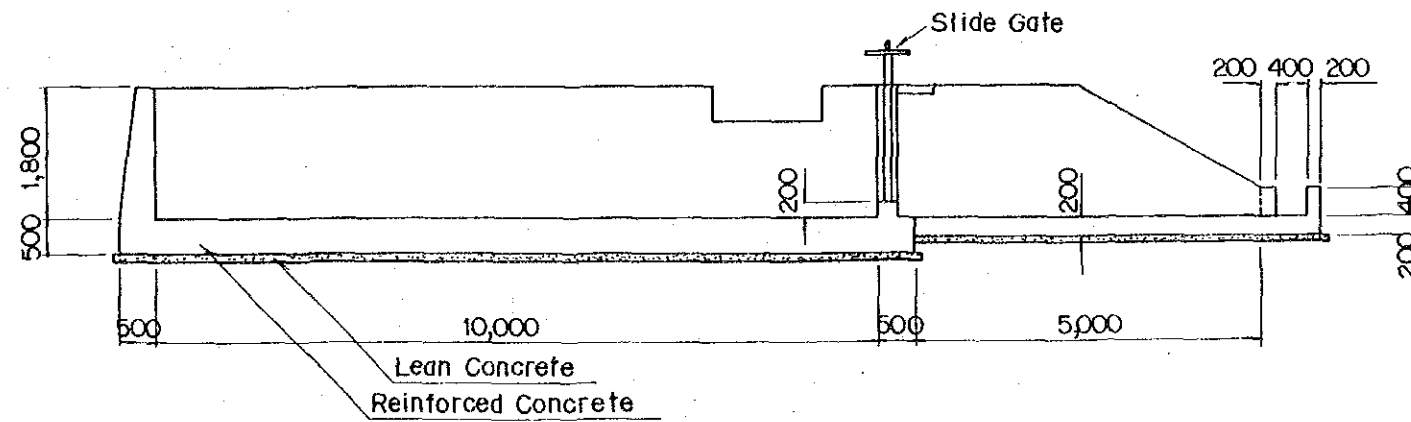
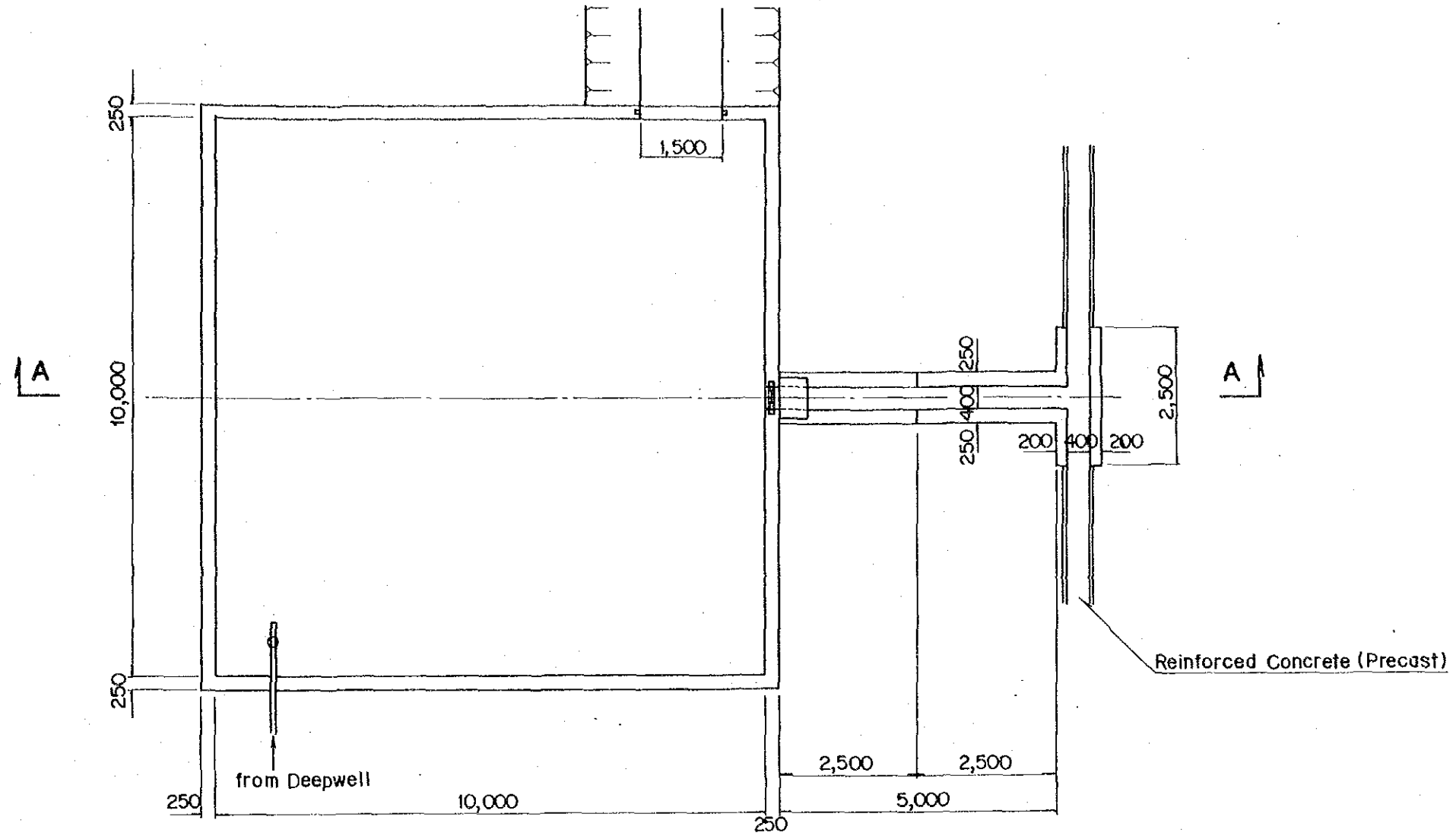


THE REPUBLIC OF THE PHILIPPINES
THE PROJECT FOR IMPROVEMENT OF SEED
PRODUCTION AND DISTRIBUTION AND
ESTABLISHMENT OF APPROPRIATE SEED STORAGE SYSTEM

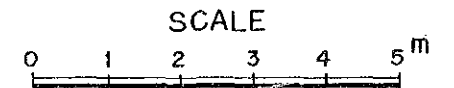
TITLE OF DRAWING
灌溉排水施設
水路横断工

Date _____ Drawing No. _____
JAPAN INTERNATIONAL COOPERATION AGENCY

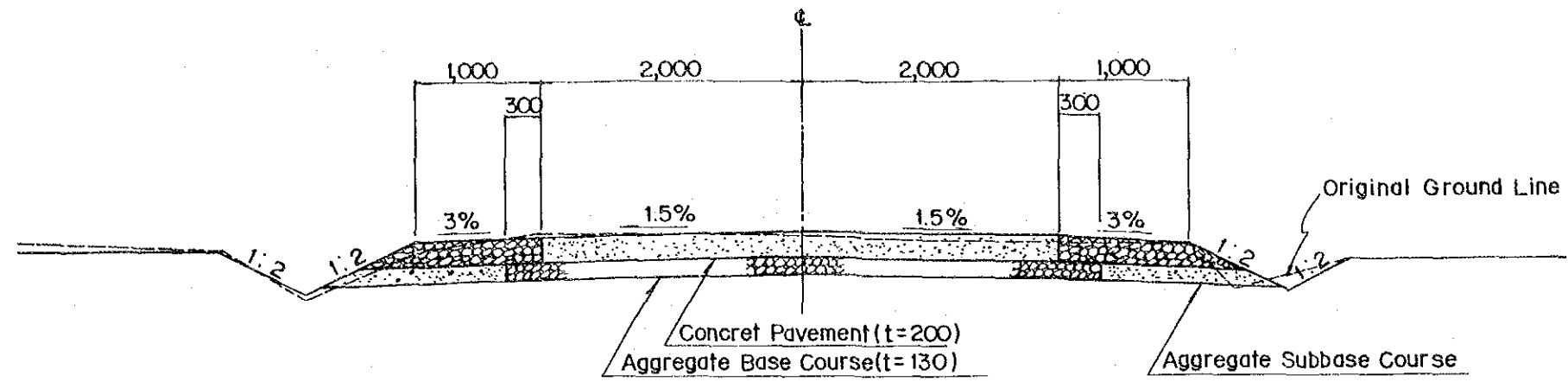
REGULATING POND



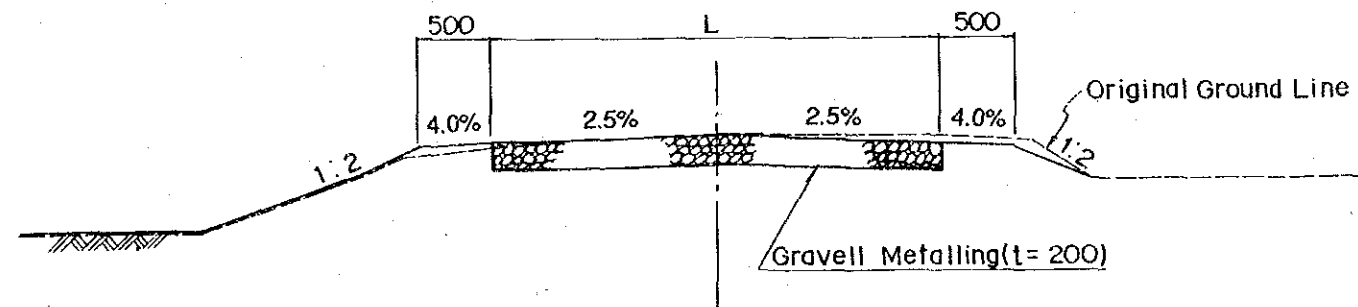
SECTION A-A



THE REPUBLIC OF THE PHILIPPINES		
THE PROJECT FOR IMPROVEMENT OF SEED PRODUCTION AND DISTRIBUTION AND ESTABLISHMENT OF APPROPRIATE SEED STORAGE SYSTEM		
TITLE OF DRAWING 灌漑排水施設 調節池		
Date	Drawing No.	
JAPAN INTERNATIONAL COOPERATION AGENCY		

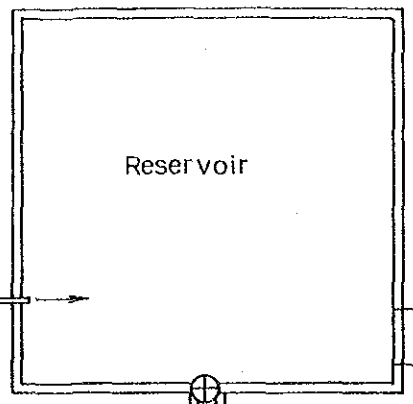
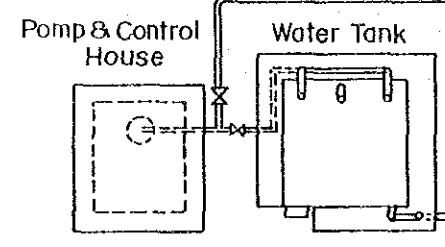
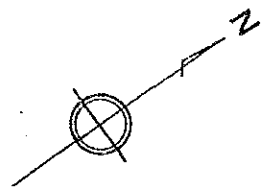


CROSS SECTION OF APPROACH ROAD



CROSS SECTION OF FARM ROAD

THE REPUBLIC OF THE PHILIPPINES	
THE PROJECT FOR IMPROVEMENT OF SEED PRODUCTION AND DISTRIBUTION AND ESTABLISHMENT OF APPROPRIATE SEED STORAGE SYSTEM	
TITLE OF DRAWING	
場内道路 場内道路標準断面図	
Date	Drawing No.
JAPAN INTERNATIONAL COOPERATION AGENCY	



Drain

Irrigation Canal I - 1

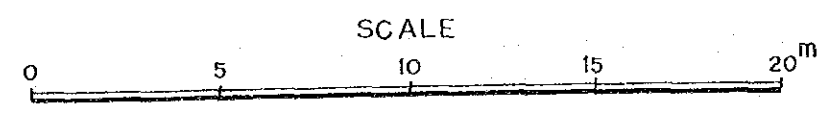
Farm Road RG - 2

Farm Road RG - 3

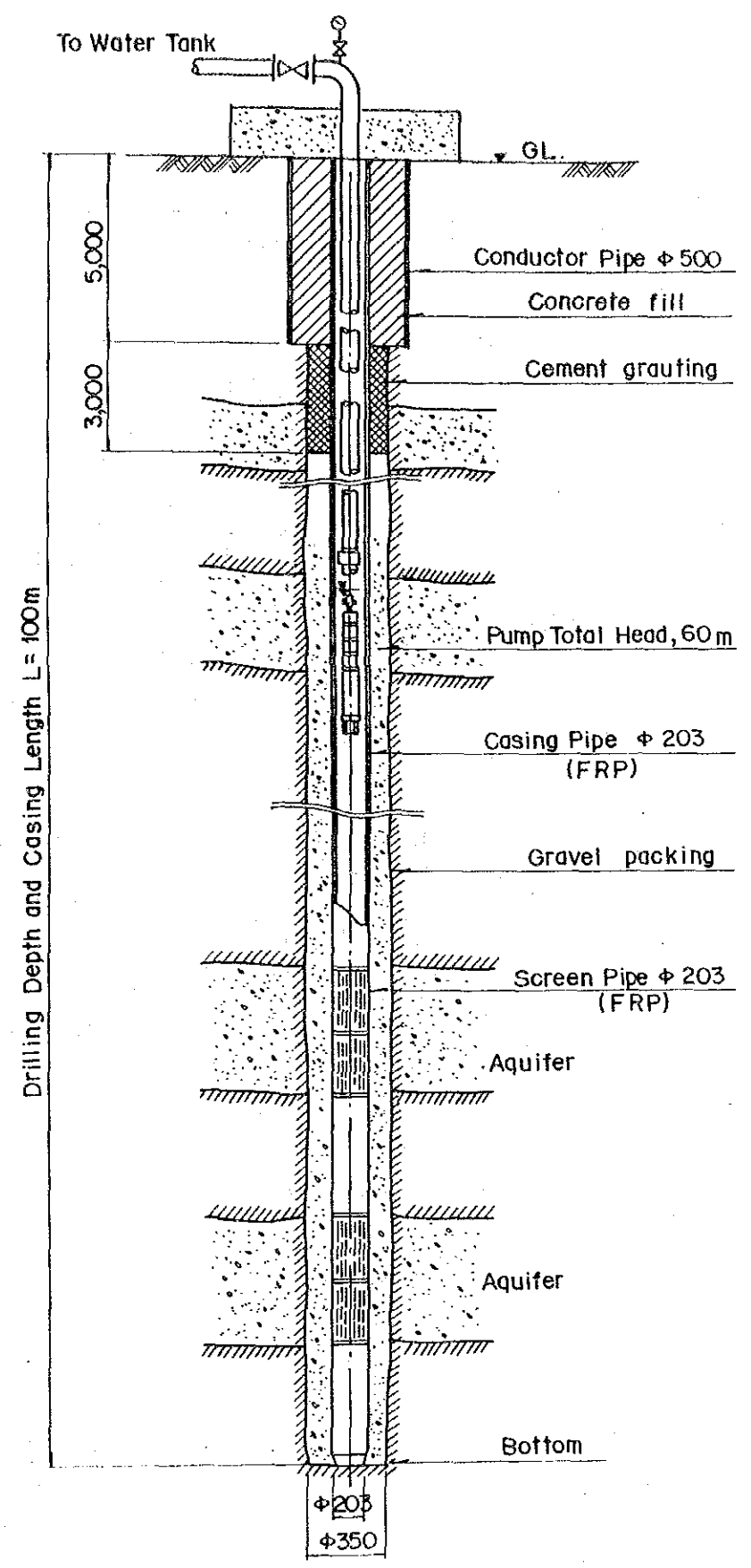
Irrigation Canal I - 3

Farm Road RG - 1

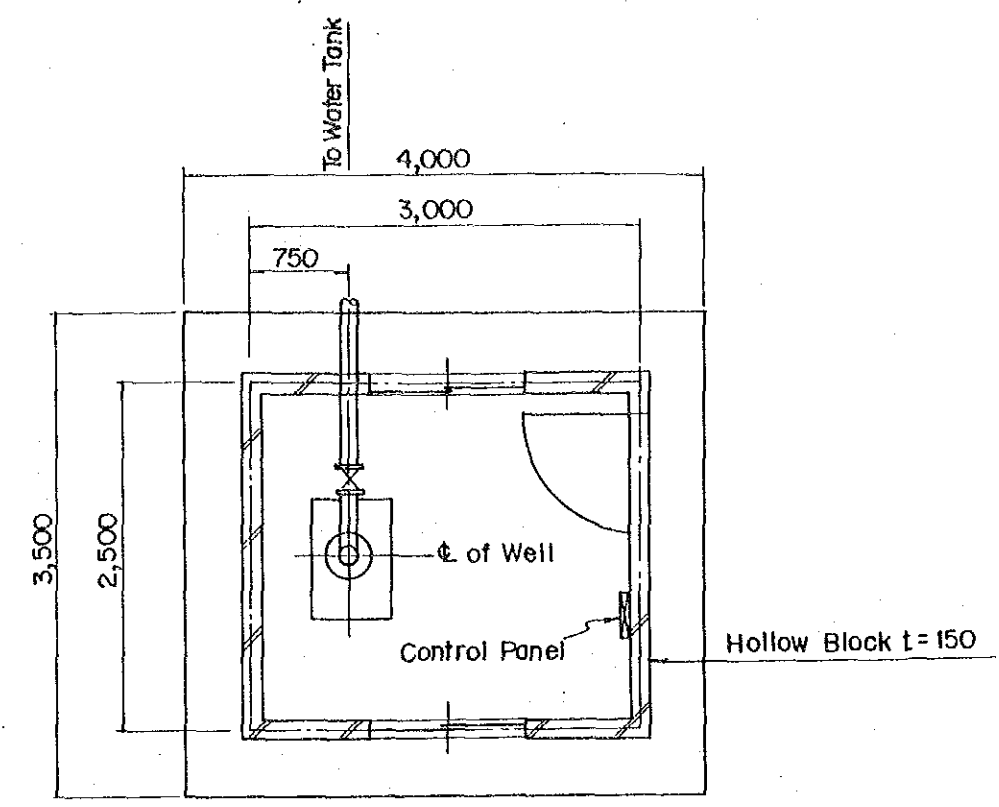
Irrigation Canal I - 2



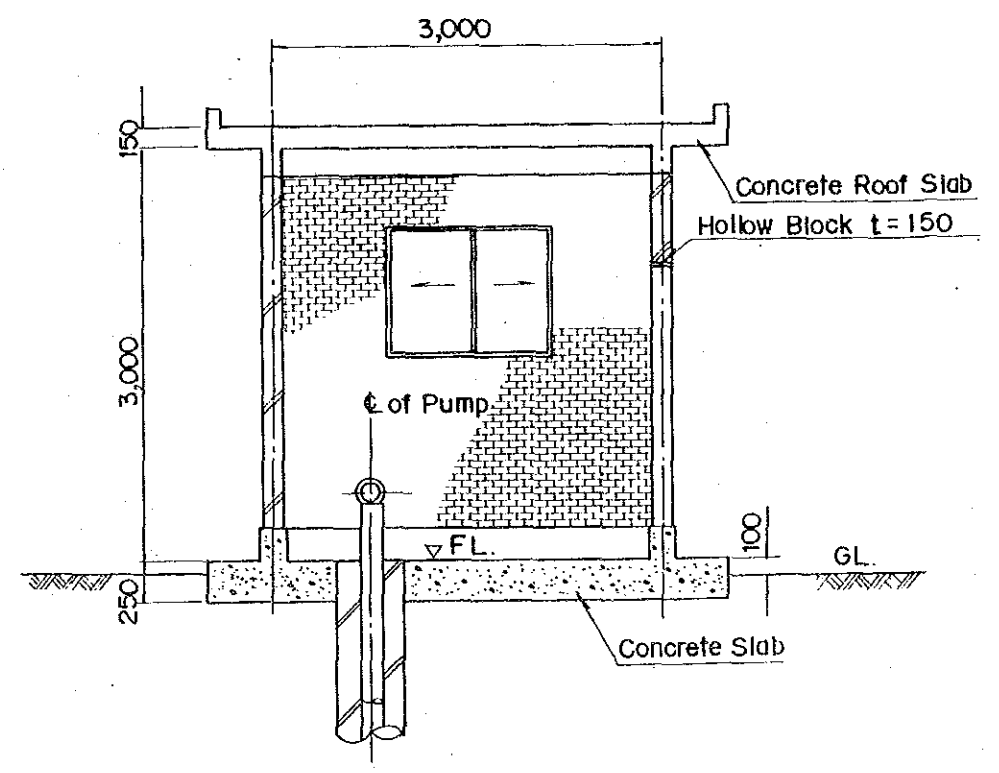
THE REPUBLIC OF THE PHILIPPINES	
THE PROJECT FOR IMPROVEMENT OF SEED PRODUCTION AND DISTRIBUTION AND ESTABLISHMENT OF APPROPRIATE SEED STORAGE SYSTEM	
TITLE OF DRAWING 給水施設 給水施設位置図	
Date	Drawing No.
JAPAN INTERNATIONAL COOPERATION AGENCY	



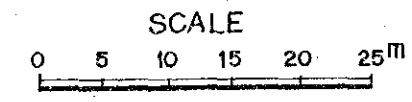
TYPICAL PROFILE OF TUBEWELL
NOT TO SCALE



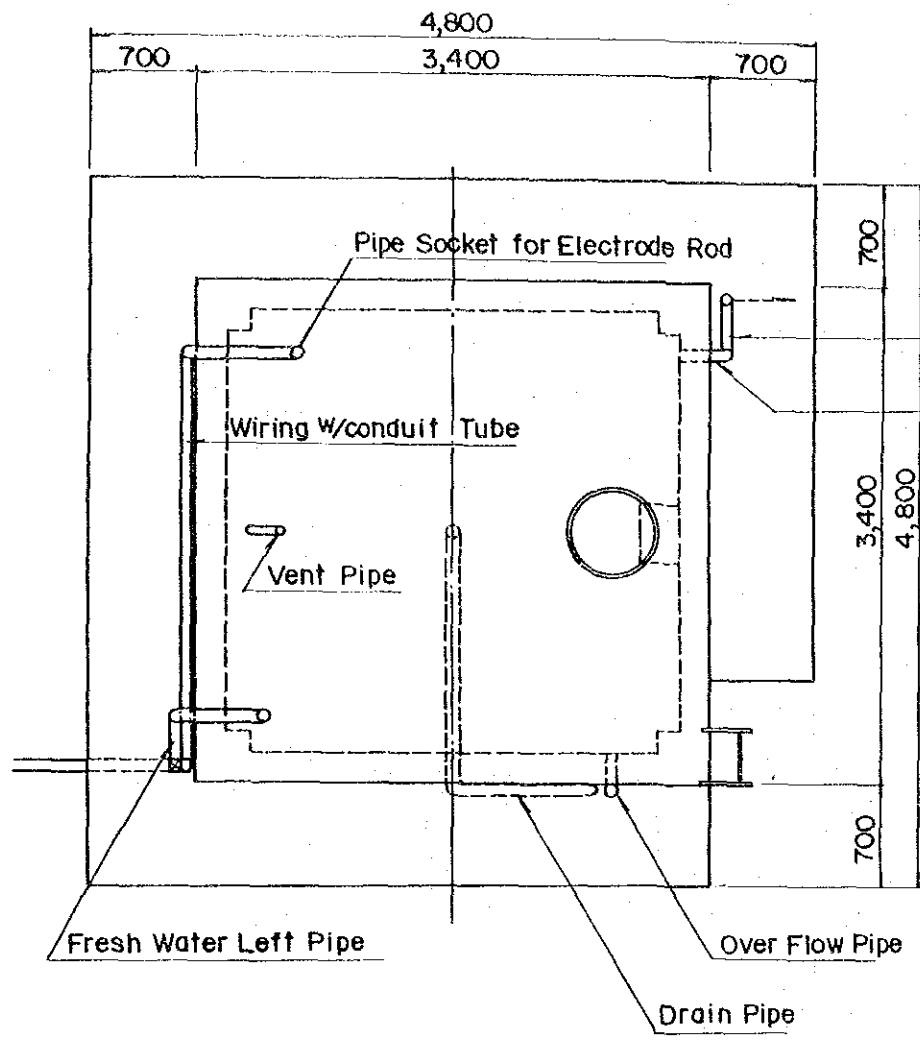
PLAN



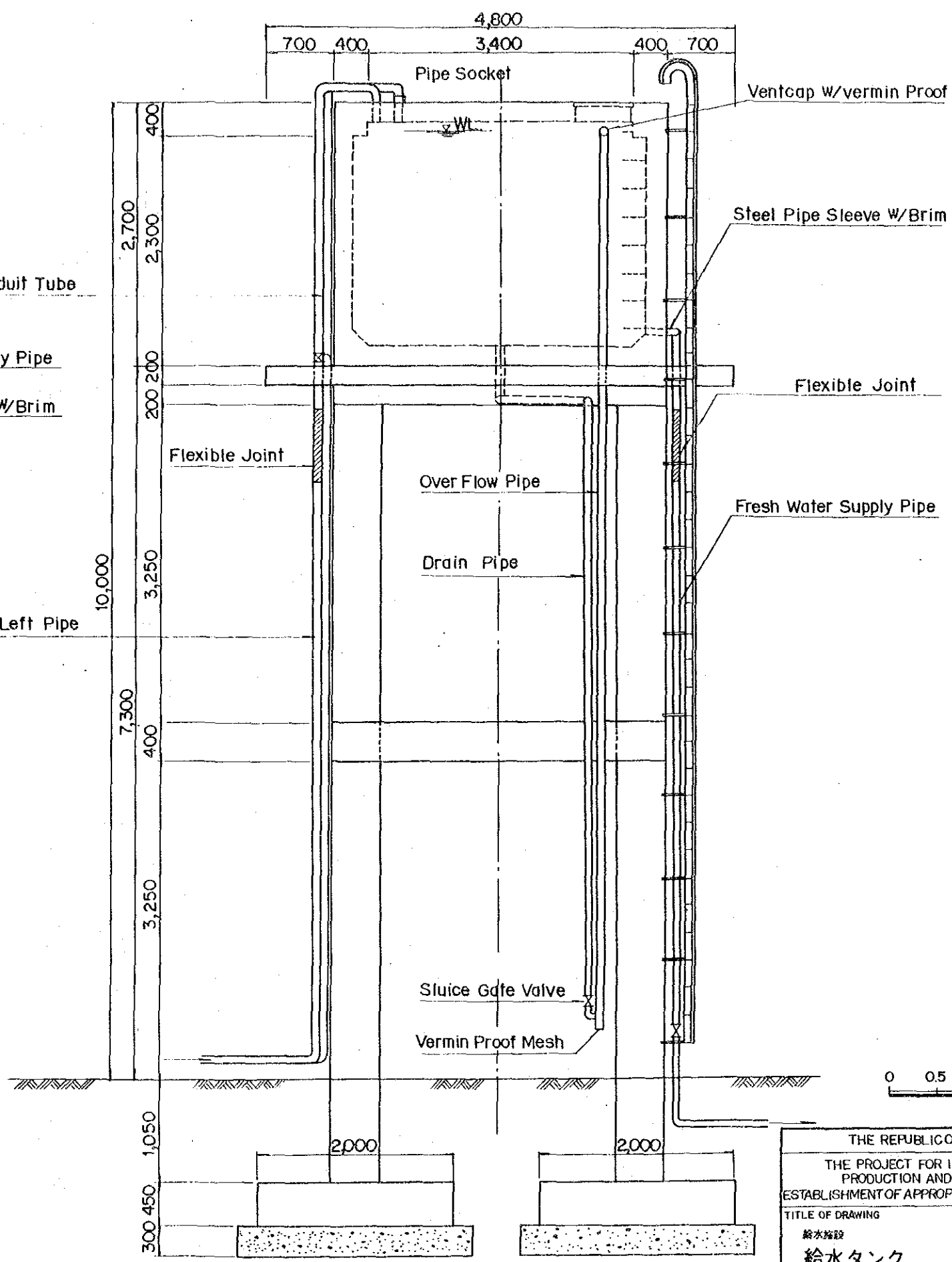
SECTION



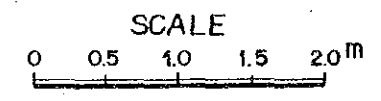
THE REPUBLIC OF THE PHILIPPINES		
THE PROJECT FOR IMPROVEMENT OF SEED PRODUCTION AND DISTRIBUTION AND ESTABLISHMENT OF APPROPRIATE SEED STORAGE SYSTEM		
TITLE OF DRAWING		
給水施設 深井戸、ポンプ施設		
Date	Drawing No.	
JAPAN INTERNATIONAL COOPERATION AGENCY		



PLAN

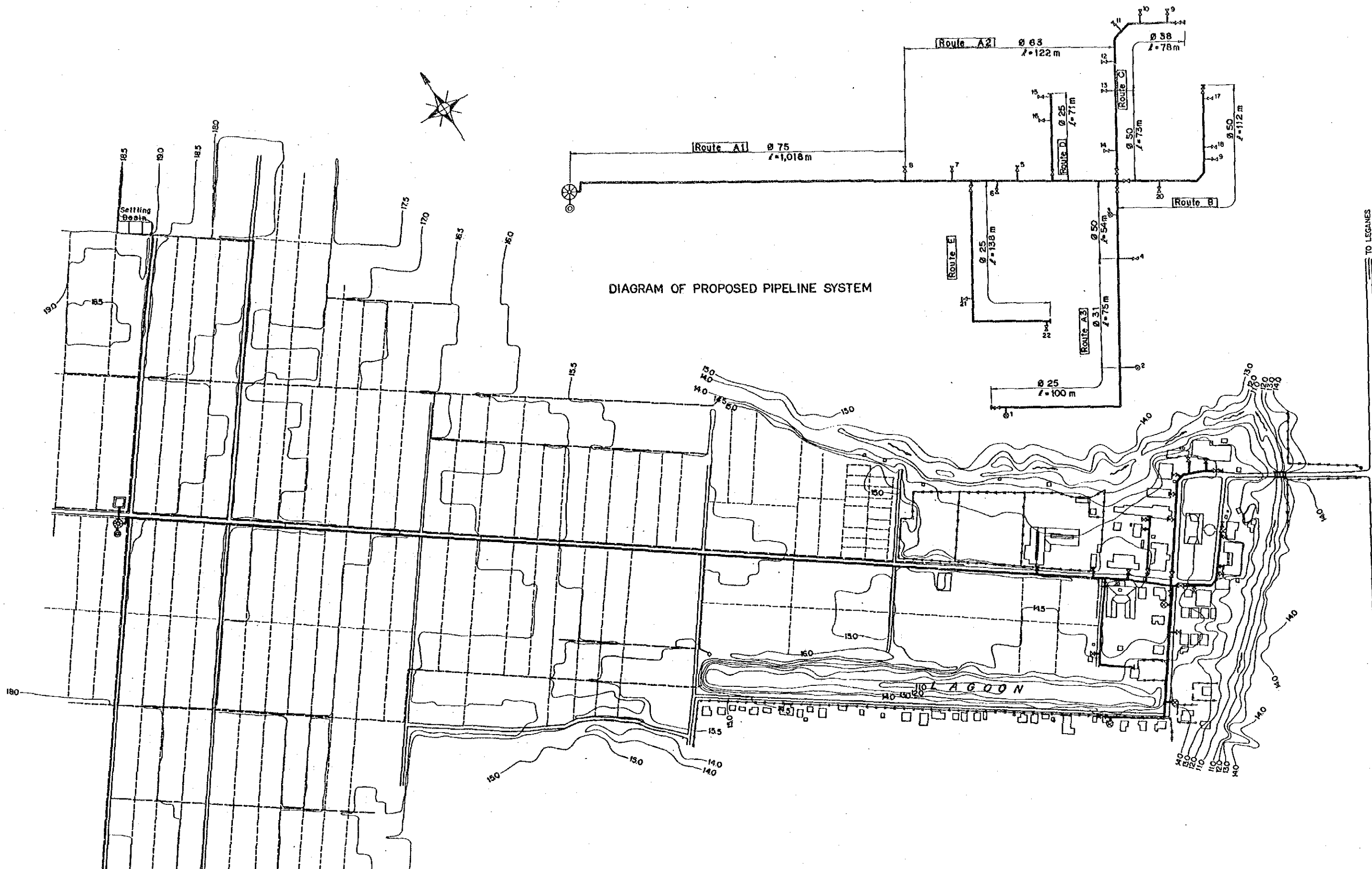


PROFILE



THE REPUBLIC OF THE PHILIPPINES
 THE PROJECT FOR IMPROVEMENT OF SEED
 PRODUCTION AND DISTRIBUTION AND
 ESTABLISHMENT OF APPROPRIATE SEED STORAGE SYSTEM
 TITLE OF DRAWING
 給水施設
 給水タンク
 Date _____ Drawing No. _____
 JAPAN INTERNATIONAL COOPERATION AGENCY

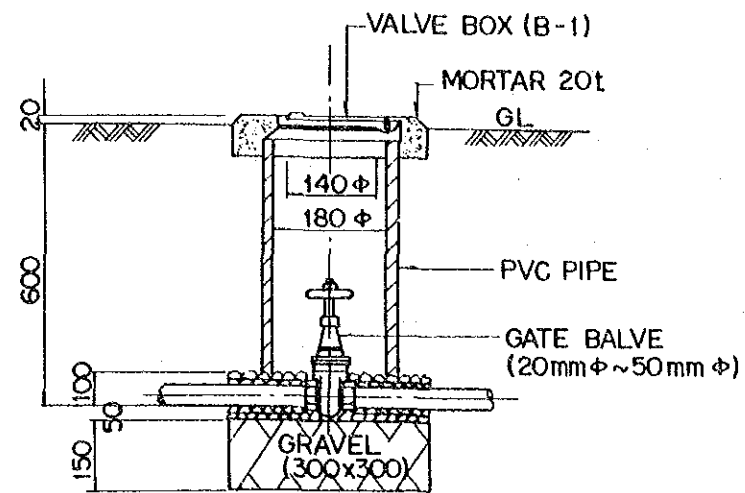
DIAGRAM OF PROPOSED PIPELINE SYSTEM



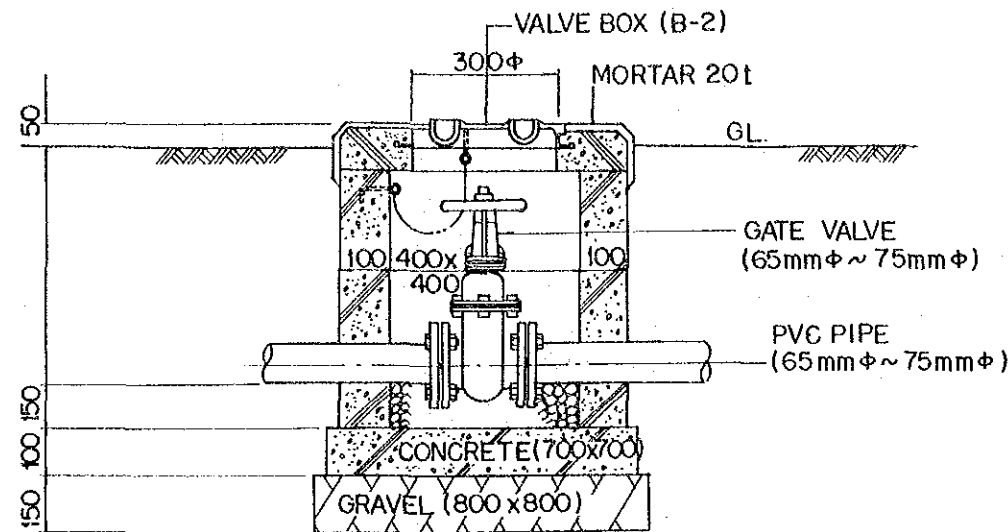
LEGEND

- ⊙ Deep Well
- ⊕ Storage Tank
- ⌀ 75 / 106 Pipe Diameter (mm) / Pipe Length (m)
- ⊕ Public Faucet
- ⊕ Service Connection (to supply pipe of existing / proposed buildings)

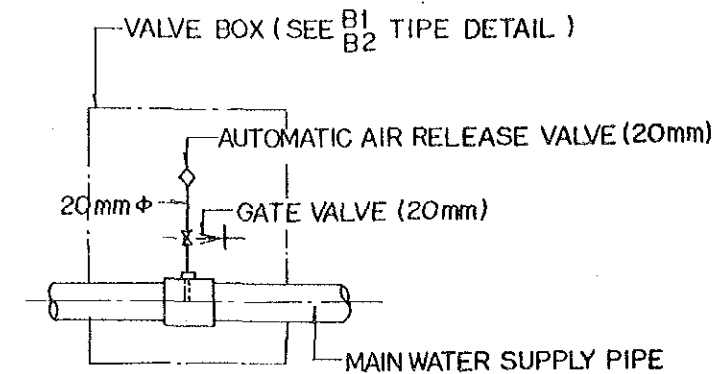
THE REPUBLIC OF THE PHILIPPINES	
THE PROJECT FOR IMPROVEMENT OF SEED PRODUCTION AND DISTRIBUTION AND ESTABLISHMENT OF APPROPRIATE SEED STORAGE SYSTEM	
TITLE OF DRAWING	
給水施設 場内配水パイプライン	
Date	Drawing No.
JAPAN INTERNATIONAL COOPERATION AGENCY	



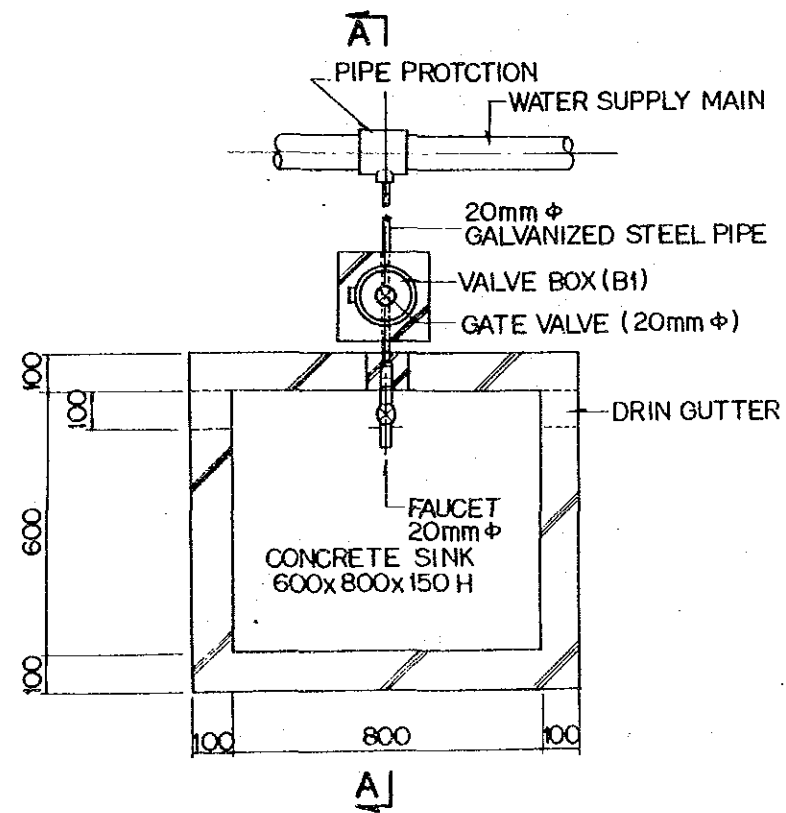
DETAIL OF VALVE BOX



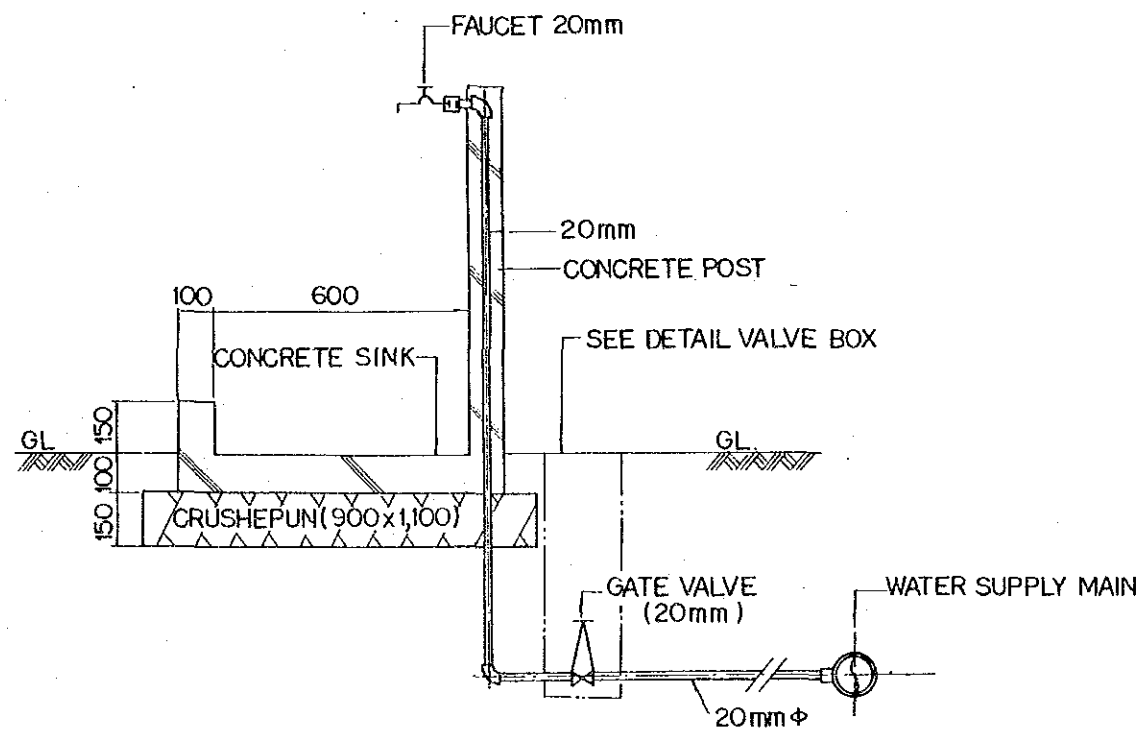
DETAIL OF VALVE BOX



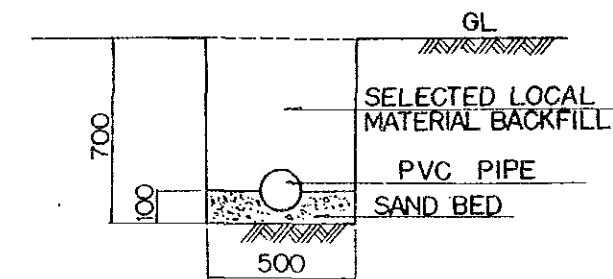
DETAIL OF AIR RELEASE VALVE



DETAIL OF FAUCET & SINK



SECTION A-A



DETAIL OF TRENCH

THE REPUBLIC OF THE PHILIPPINES	
THE PROJECT FOR IMPROVEMENT OF SEED PRODUCTION AND DISTRIBUTION AND ESTABLISHMENT OF APPROPRIATE SEED STORAGE SYSTEM	
TITLE OF DRAWING 給水施設 配管取り付け詳細	
Date	Drawing No.
JAPAN INTERNATIONAL COOPERATION AGENCY	

