

THE HORTICULTURAL DEVELOPMENT PROJECT
IN
THE KINGDOM OF NEPAL

CONTRACT
FOR
THE CONSTRUCTION
OF
DEMONSTRATION FARM
IN
THE NEPALGUNJ SUB-CENTER

VOLUME II

DRAWINGS

MARCH 1986

JAPAN INTERNATIONAL COOPERATION AGENCY

ADD

JR

86-24

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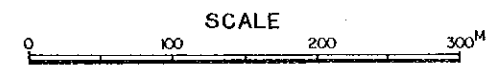
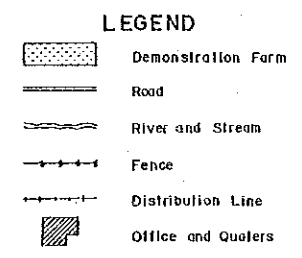
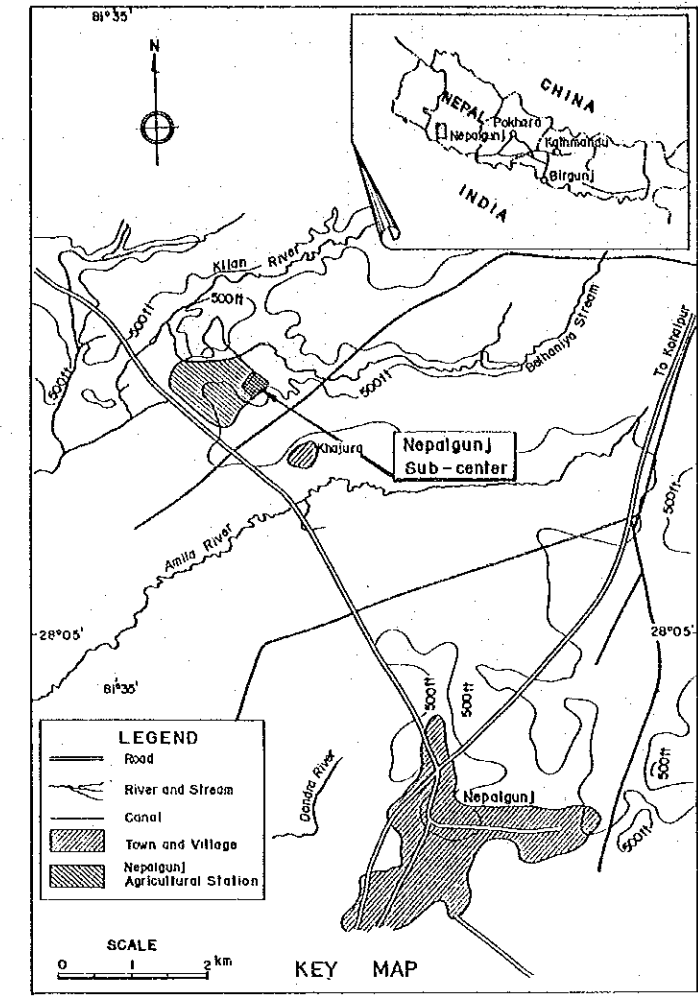
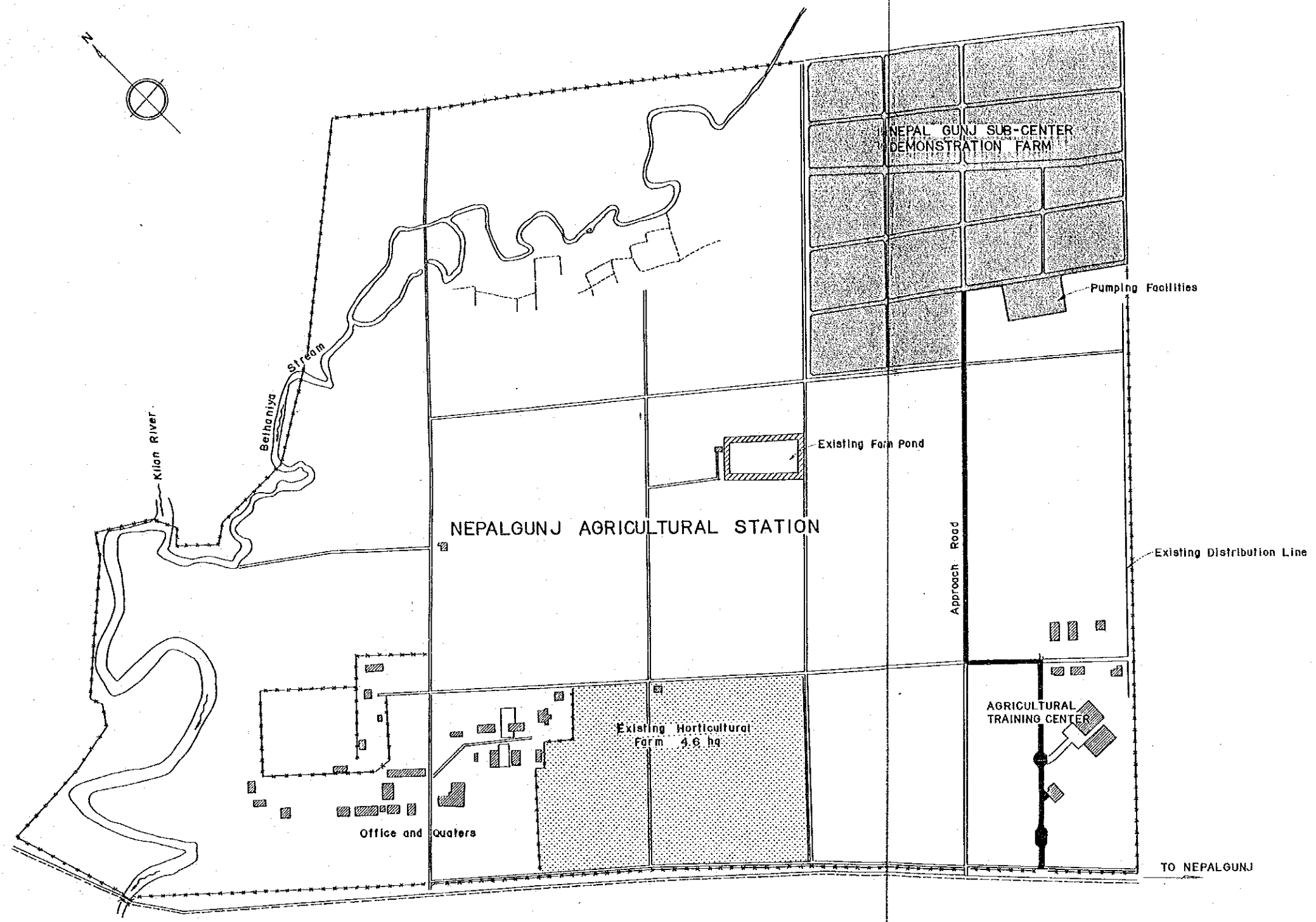


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CONTRACT
FOR
THE CONSTRUCTION
OF
DEMONSTRATION FARM
IN
THE NEPALGUNJ SUB-SENER
VOLUME II
LIST OF DRAWINGS

PLATE NO.	DRAWING NO.	TITLE
		<u>GENERAL</u>
1	N100-01	LOCATION MAP
2	N100-02	GENERAL LAYOUT (1/3), HORTICULTURAL FARM
3	N100-03	GENERAL LAYOUT (2/3), BERHANIYA STREAM
4	N100-04	GENERAL LAYOUT (3/3), APPROACH ROAD
5	N100-05	COORDINATES OF CANALS AND PIPELINES (1/2), HORTICULTURAL FARM
6	N100-06	COORDINATES OF CANALS AND PIPELINES (2/2), BERHANIYA STREAM
		<u>IRRIGATION FACILITIES</u>
7	N200-01	PUMP AND PIPE ARRANGEMENT (1/2)
8	N200-02	PUMP AND PIPE ARRANGEMENT (2/2)
9	N200-03	FARM POND (1/2)
10	N200-04	FARM POND (2/2)
11	N200-05	PLAN OF PIPELINE ARRANGEMENT
12	N200-06	PROFILE (1/3), MIP, BIP-1
13	N200-07	PROFILE (2/3), BIP-2, BIP-3
14	N200-08	PROFILE (3/3), BIP-4, BIP-5
15	N200-09	PIPE ARRANGEMENT OF PIPELINE IRRIGATION SYSTEM
16	N200-10	SPRINKLER IRRIGATION SYSTEM
		<u>DRAINAGE FACILITIES</u>
17	N300-01	NO.1 DROP ON MD, PROTECTION OF EXISTING CULVERT ON MD, NO.2 DROP & NO.2 CULVERT ON MD
18	N300-02	DRAINAGE CULVERT, SUB-SURFACE DRAIN
19	N300-03	PROFILE (1/4), MAIN DRAIN
20	N300-04	PROFILE (2/4), CD-1, CD-2, CD-3
21	N300-05	PROFILE (3/4), CD-4, CD-5
22	N300-06	PROFILE (4/4), CD-6, CD-7
23	N300-07	IMPROVEMENT OF BELHANIYA STREAM
		<u>ROADS</u>
24	N400-01	APPROACH ROAD
25	N400-02	FARM ROAD
		<u>BUILDINGS</u>
26	N500-01	PUMP HOUSE
27	N500-02	FARM HOUSE
28	N500-03	ELECTRIC FACILITIES
		<u>VINE TRELLIS</u>
29	N600-01	VINE TRELLIS (1/3)
30	N600-02	VINE TRELLIS (2/3)
31	N600-03	VINE TRELLIS (3/3)
		<u>CONSTRUCTION TIME SCHEDULE</u>
32	N700-01	CONSTRUCTION TIME SCHEDULE

国際協力事業団	
受入 月日	86.9.24
登録No.	15438
	116
	85.5
	ADD



HIS MAJESTY'S GOVERNMENT OF NEPAL HORTICULTURAL DEVELOPMENT PROJECT NEPALGUNJ SUB-CENTER			
TITLE :			
LOCATION MAP			
DATE	MAR. 1986	D.W.O. NO.	N 100 - 01
JAPAN INTERNATIONAL COOPERATION AGENCY			

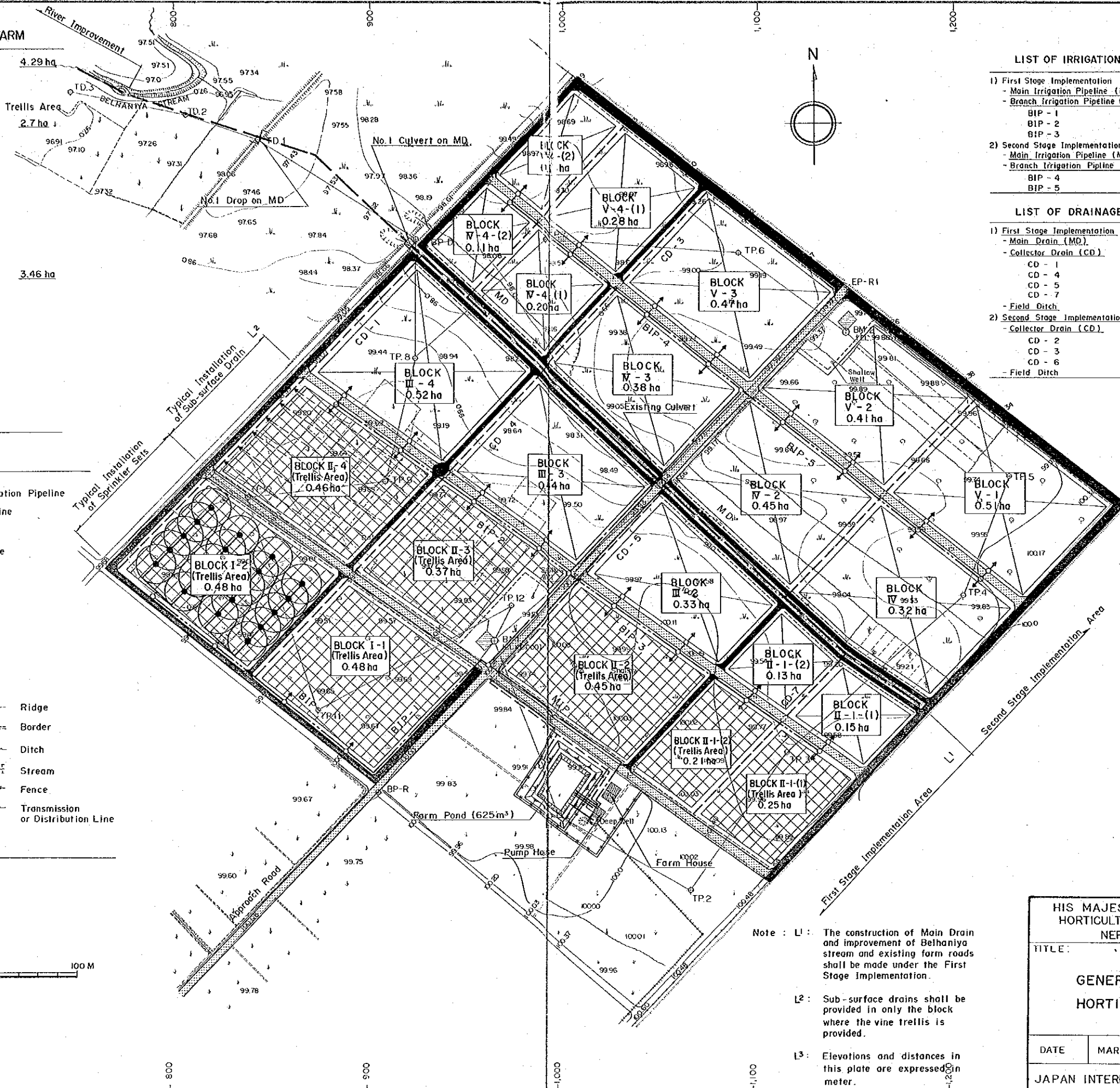
AREA OF HORTICULTURAL FARM

1) First Stage Implementation

BLOCK I - 1	0.48 ha
BLOCK I - 2	0.48 ha
BLOCK II - 1 - (1)	0.25 ha
BLOCK II - 1 - (2)	0.21 ha
BLOCK II - 2	0.45 ha
BLOCK II - 3	0.37 ha
BLOCK II - 4	0.46 ha
BLOCK III - 1 - (1)	0.15 ha
BLOCK III - 1 - (2)	0.13 ha
BLOCK III - 2	0.35 ha
BLOCK III - 3	0.44 ha
BLOCK III - 4	0.52 ha

2) Second Stage Implementation

BLOCK IV - 1	0.52 ha
BLOCK IV - 2	0.45 ha
BLOCK IV - 3	0.38 ha
BLOCK IV - 4 - (1)	0.20 ha
BLOCK IV - 4 - (2)	0.11 ha
BLOCK V - 1	0.51 ha
BLOCK V - 2	0.41 ha
BLOCK V - 3	0.47 ha
BLOCK V - 4 - (1)	0.28 ha
BLOCK V - 4 - (2)	0.13 ha



LIST OF IRRIGATION PIPELINES

1) First Stage Implementation	
- Main Irrigation Pipeline (MIP)	174.50m
- Branch Irrigation Pipeline (BIP)	531.33m
BIP - 1	227.50m
BIP - 2	150.00m
BIP - 3	153.83m
2) Second Stage Implementation	
- Main Irrigation Pipeline (MIP)	130.18m
- Branch Irrigation Pipeline (BIP)	313.49m
BIP - 4	155.66m
BIP - 5	157.83m

LIST OF DRAINAGE CANALS

1) First Stage Implementation	
- Main Drain (MD)	520.03m
- Collector Drain (CD)	755.02m
CD - 1	221.00m
CD - 4	213.00m
CD - 5	181.02m
CD - 7	140.00m
- Field Ditch	849.00m
2) Second Stage Implementation	
- Collector Drain (CD)	356.00m
CD - 2	119.00m
CD - 3	124.00m
CD - 6	113.00m
- Field Ditch	528.00m

LEGEND

- Hydrant on Branch Irrigation Pipeline
- Branch or Bend of Pipeline
- Main Irrigation Pipeline
- Branch Irrigation Pipeline
- Farm Ditch
- Drainage Culvert
- Main Drain
- Collector Drain
- Main Form Road
- Secondary Form Road
- Road
- House
- Orchard (Lemon, Utchi & Mango)
- Banana Tree
- Dry Field
- Grass Land
- Bush
- Depression
- Ridge
- Border
- Ditch
- Stream
- Fence
- Transmission or Distribution Line

SCALE 0 50 100 M

Note : L1 : The construction of Main Drain and improvement of Belhaniya stream and existing farm roads shall be made under the First Stage Implementation.

L2 : Sub-surface drains shall be provided in only the block where the vine trellis is provided.

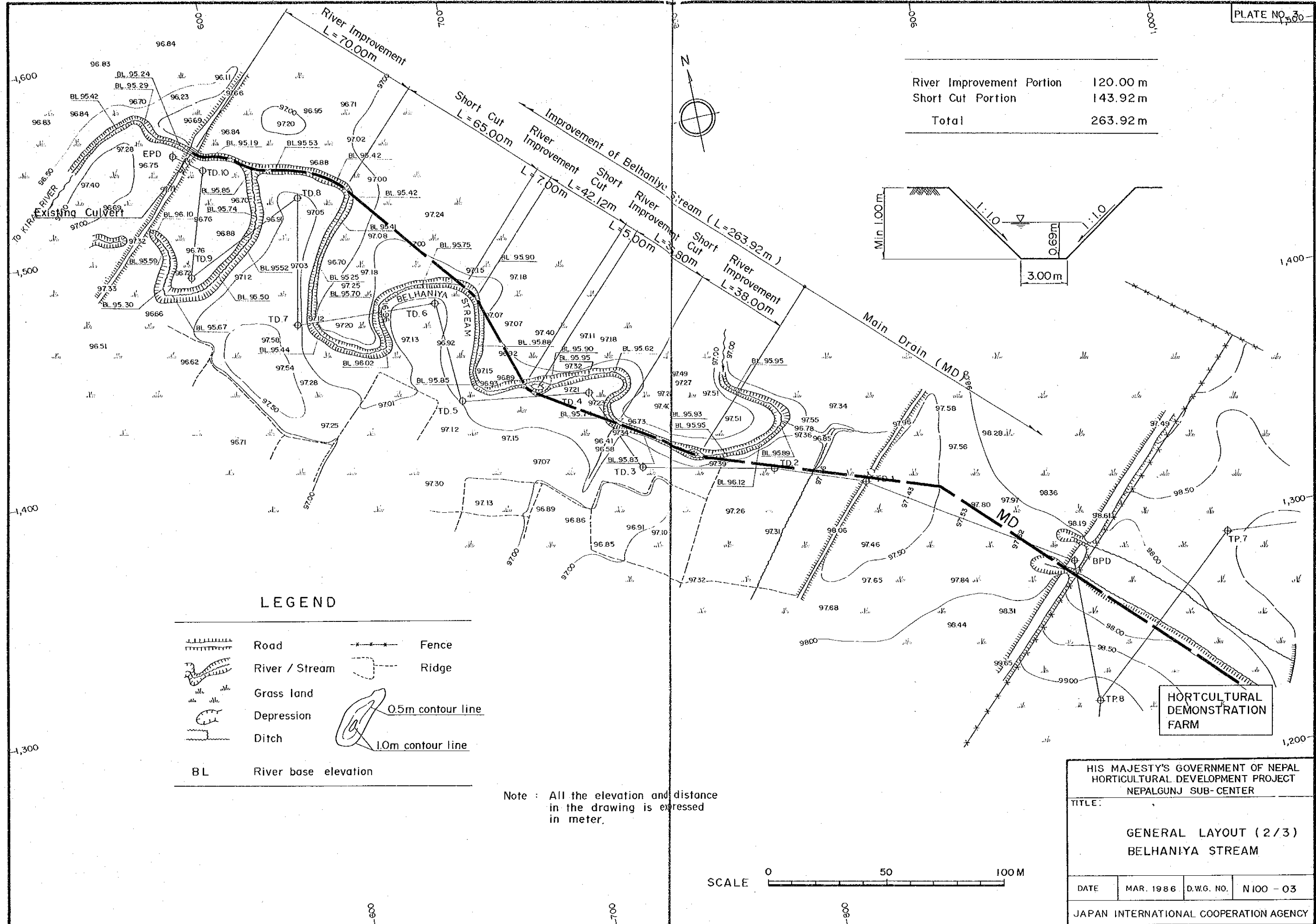
L3 : Elevations and distances in this plate are expressed in meter.

HIS MAJESTY'S GOVERNMENT OF NEPAL
HORTICULTURAL DEVELOPMENT PROJECT
NEPALGUNJ SUB-CENTER

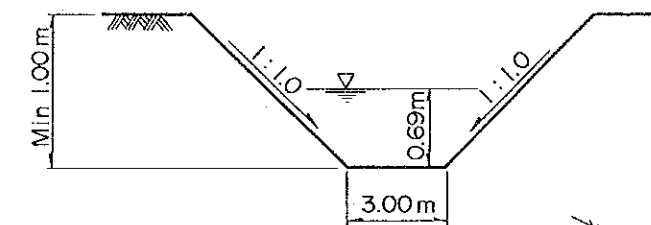
TITLE :
GENERAL LAYOUT (1/3)
HORTICULTURAL FARM

DATE MAR. 1986 D.W.G. NO. N100-02

JAPAN INTERNATIONAL COOPERATION AGENCY



River Improvement Portion	120.00 m
Short Cut Portion	143.92 m
Total	263.92 m



LEGEND

- Road
- River / Stream
- Grass land
- Depression
- Ditch
- Fence
- Ridge
- 0.5m contour line
- 1.0m contour line
- BL** River base elevation

Note : All the elevation and distance in the drawing is expressed in meter.

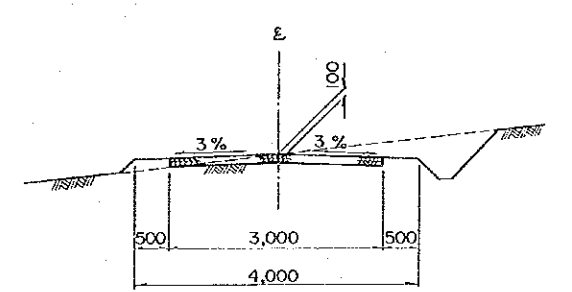
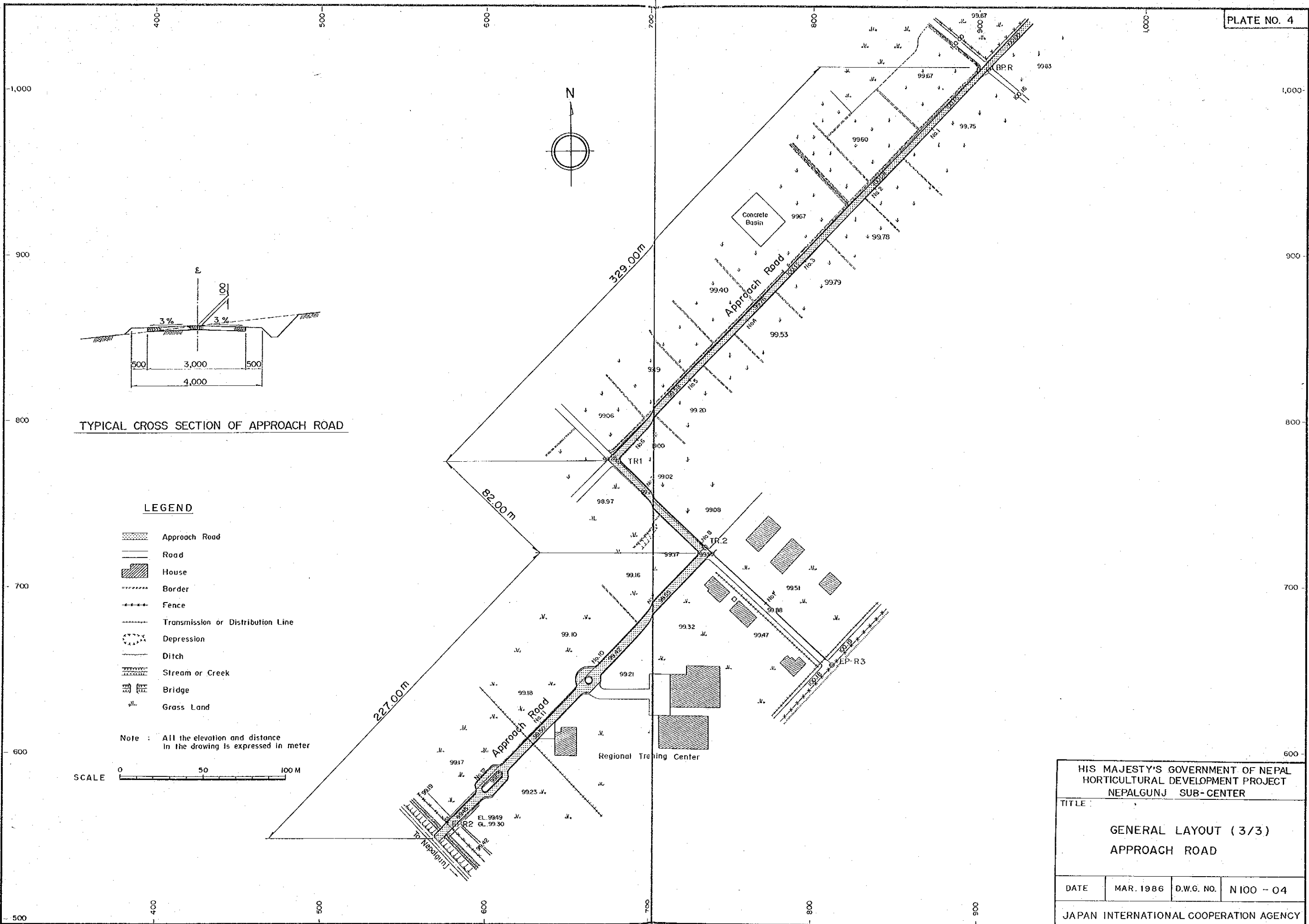


HIS MAJESTY'S GOVERNMENT OF NEPAL
 HORTICULTURAL DEVELOPMENT PROJECT
 NEPALGUNJ SUB-CENTER

TITLE:
**GENERAL LAYOUT (2/3)
 BELHANIYA STREAM**

DATE	MAR. 1986	D.W.G. NO.	N100-03
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JAPAN INTERNATIONAL COOPERATION AGENCY

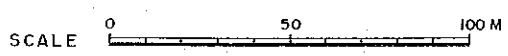


TYPICAL CROSS SECTION OF APPROACH ROAD

LEGEND

- Approach Road
- Road
- House
- Border
- Fence
- Transmission or Distribution Line
- Depression
- Ditch
- Stream or Creek
- Bridge
- Grass Land

Note : All the elevation and distance in the drawing is expressed in meter



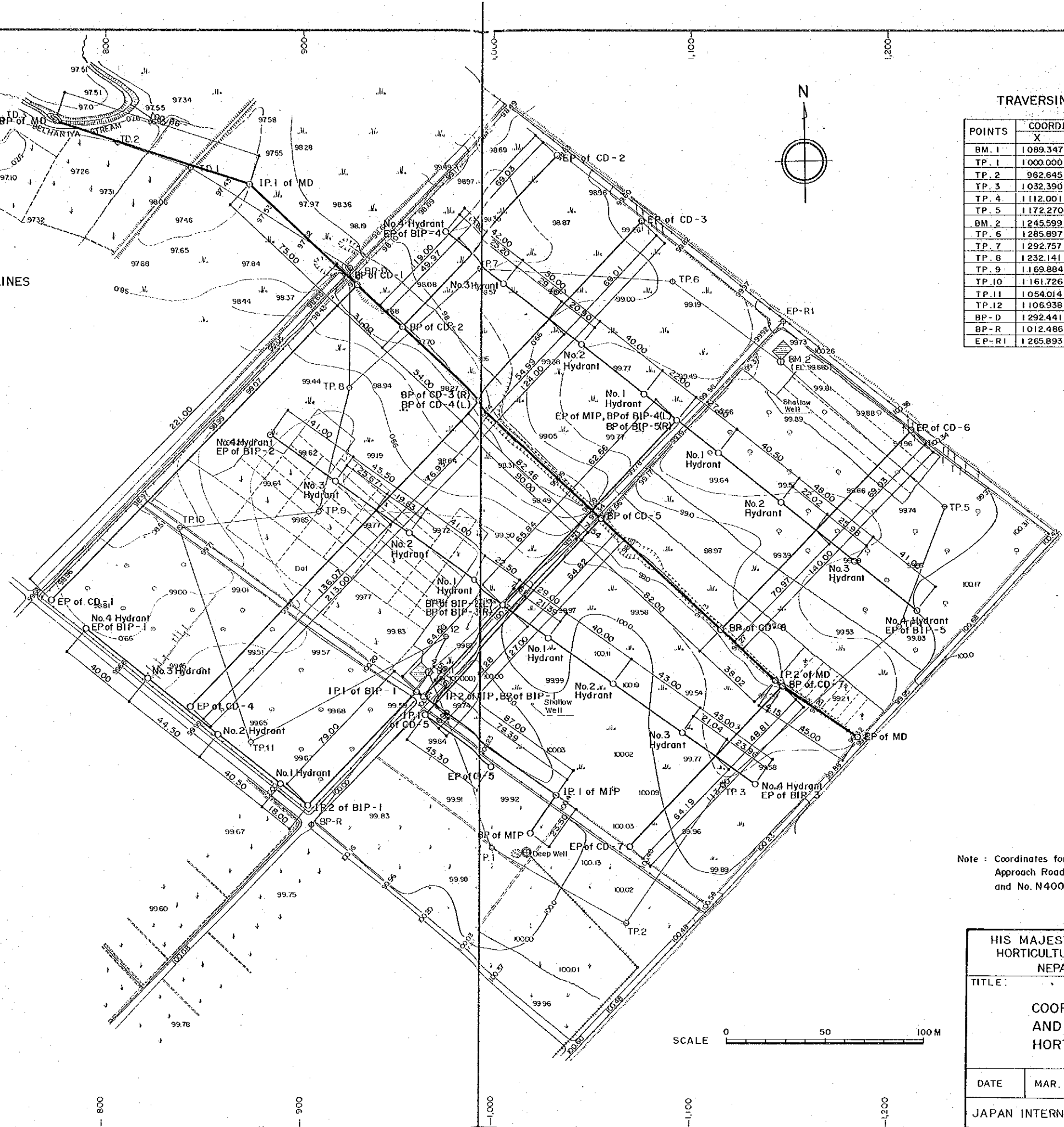
HIS MAJESTY'S GOVERNMENT OF NEPAL HORTICULTURAL DEVELOPMENT PROJECT NEPALGUNJ SUB-CENTER			
TITLE : GENERAL LAYOUT (3/3) APPROACH ROAD			
DATE	MAR. 1986	D.W.G. NO.	N 100 - 04
JAPAN INTERNATIONAL COOPERATION AGENCY			

TRAVERSING POINTS

POINTS	COORDINATES		ELEVATIONS	
	X	Y	Top	Ground
BM. 1	1089.347	964.099	100.000	—
TP. 1	1000.000	1000.000	100.385	100.385
TP. 2	962.645	1069.192	100.280	100.122
TP. 3	1032.390	1116.506	99.845	99.669
TP. 4	1112.001	1206.367	100.055	99.879
TP. 5	1172.270	1229.275	100.030	99.850
BM. 2	1245.599	1145.518	99.865	—
TP. 6	1285.897	1090.849	99.260	99.064
TP. 7	1292.757	990.128	98.585	98.400
TP. 8	1232.141	923.633	99.640	99.393
TP. 9	1169.884	900.269	100.030	99.856
TP. 10	1161.726	837.878	99.710	99.517
TP. 11	1054.014	874.597	99.900	99.718
TP. 12	1106.938	972.963	100.135	99.902
BP - D	1292.441	923.677	98.731	98.558
BP - R	1012.486	905.255	100.410	100.133
EP - R1	1265.893	1146.677	100.412	100.137

COORDINATES OF CANALS AND PIPELINES

ROUTE	POINT	COORDINATES	
		X	Y
MIP	B P	1,007.22	1,018.98
	IP - 1	1,026.41	1,032.55
	IP - 2	1,076.64	961.51
	BP of BIP-2,3	1,122.98	1,005.66
	E P	1,216.01	1,094.29
BIP-1	B P	1,076.64	961.51
	IP - 1	1,079.24	957.84
	IP - 2	1,022.04	903.35
	No.1 Hydrant	1,033.29	889.30
	No.2 Hydrant	1,058.62	857.70
	No.3 Hydrant	1,086.45	822.98
BIP-2	B P	1,122.98	1,005.66
	No.1 Hydrant	1,135.96	987.27
	No.2 Hydrant	1,159.63	953.80
	No.4 Hydrant	1,209.58	883.18
BIP-3	B P	1,122.98	1,005.66
	No.1 Hydrant	1,106.22	1,029.33
	No.2 Hydrant	1,083.13	1,061.99
	No.4 Hydrant	1,032.34	1,132.85
BIP-4	B P	1,216.01	1,094.29
	No.1 Hydrant	1,229.43	1,076.86
	No.2 Hydrant	1,253.84	1,045.17
	No.4 Hydrant	1,309.99	972.29
BIP-5	B P	1,216.01	1,094.29
	No.1 Hydrant	1,193.22	1,116.07
	No.2 Hydrant	1,174.51	1,148.16
	No.4 Hydrant	1,120.20	1,218.67
MD	B P	1,367.00	777.60
	IP - 1	1,335.73	873.49
	BP of CD - 1	1,284.67	928.42
	BP of CD - 2	1,263.56	951.13
	BP of CD - 3,4	1,226.79	990.68
	BP of CD - 5	1,165.52	1,056.59
	BP of CD - 6	1,109.69	1,116.65
	IP - 2	1,083.80	1,144.50
	BP of CD - 7	1,081.51	1,147.96
	E P	1,056.70	1,185.50
CD - 1	B P	1,284.67	928.42
	E P	1,125.73	774.87
CD - 2	B P	1,263.56	951.13
	E P	1,349.72	1,033.21
CD - 3	B P	1,226.79	990.68
	E P	1,316.57	1,076.21
CD - 4	B P	1,226.79	990.68
	E P	1,072.57	843.76
CD - 5	B P	1,165.52	1,056.59
	IP - 1	1,067.26	962.97
	E P	1,041.11	999.96
CD - 6	B P	1,109.69	1,116.65
	E P	1,211.05	1,213.22
CD - 7	B P	1,081.51	1,147.96
	E P	997.70	1,070.02



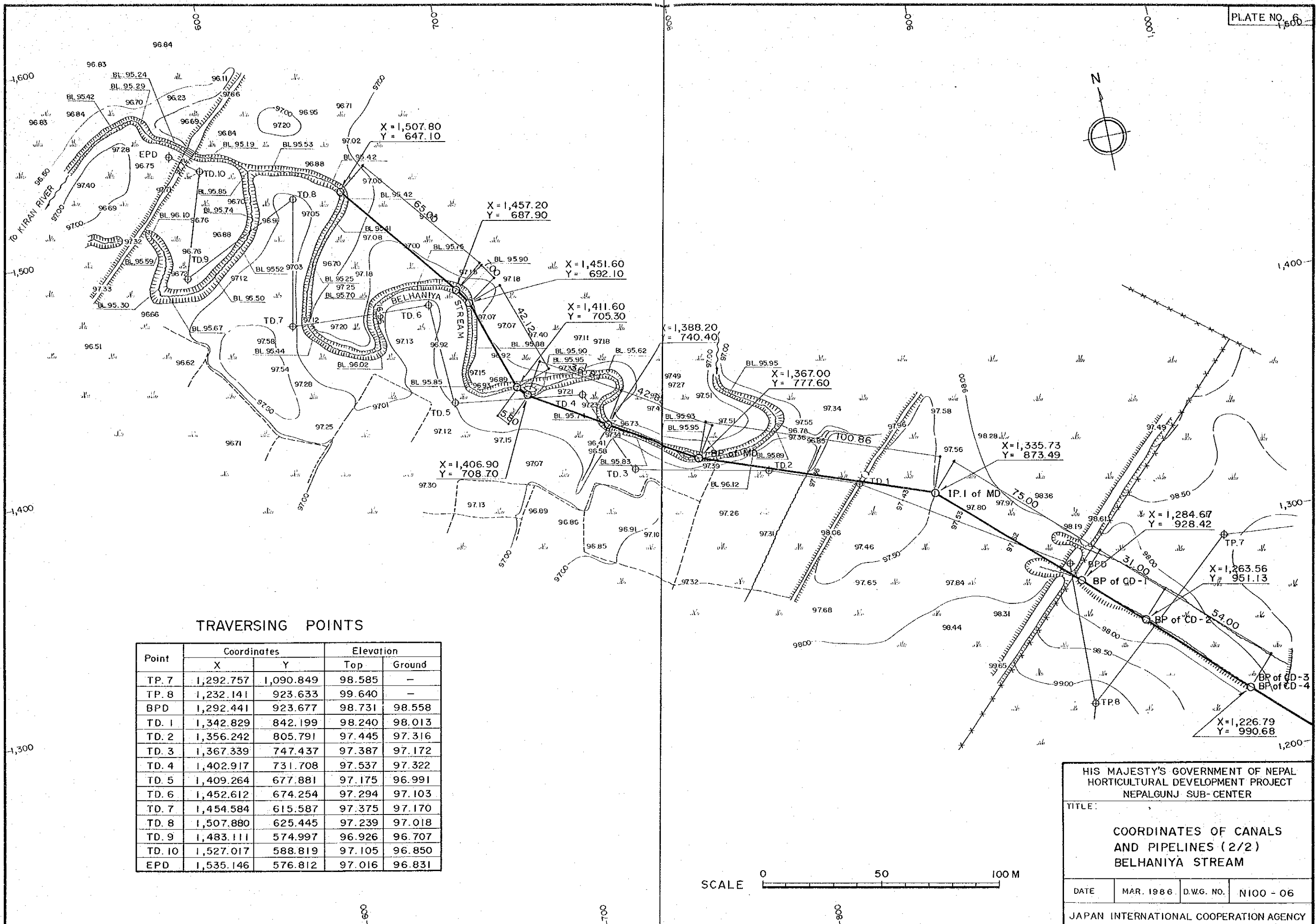
Note : Coordinates for the Belhariva Stream and the Approach Road are shown in DWG. No. N100 - 3 and No. N400 - 1, respectively.

HIS MAJESTY'S GOVERNMENT OF NEPAL
 HORTICULTURAL DEVELOPMENT PROJECT
 NEPALGUNJ SUB-CENTER

TITLE:
 COORDINATES OF CANALS
 AND PIPELINES (1/2)
 HORTICULTURAL FARM

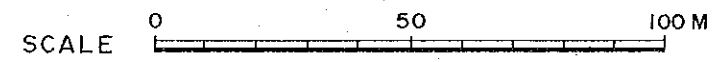
DATE	MAR. 1986	D.W.G. NO.	N 100 - 05
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JAPAN INTERNATIONAL COOPERATION AGENCY



TRAVERSING POINTS

Point	Coordinates		Elevation	
	X	Y	Top	Ground
TP. 7	1,292.757	1,090.849	98.585	-
TP. 8	1,232.141	923.633	99.640	-
BPD	1,292.441	923.677	98.731	98.558
TD. 1	1,342.829	842.199	98.240	98.013
TD. 2	1,356.242	805.791	97.445	97.316
TD. 3	1,367.339	747.437	97.387	97.172
TD. 4	1,402.917	731.708	97.537	97.322
TD. 5	1,409.264	677.881	97.175	96.991
TD. 6	1,452.612	674.254	97.294	97.103
TD. 7	1,454.584	615.587	97.375	97.170
TD. 8	1,507.880	625.445	97.239	97.018
TD. 9	1,483.111	574.997	96.926	96.707
TD. 10	1,527.017	588.819	97.105	96.850
EPD	1,535.146	576.812	97.016	96.831

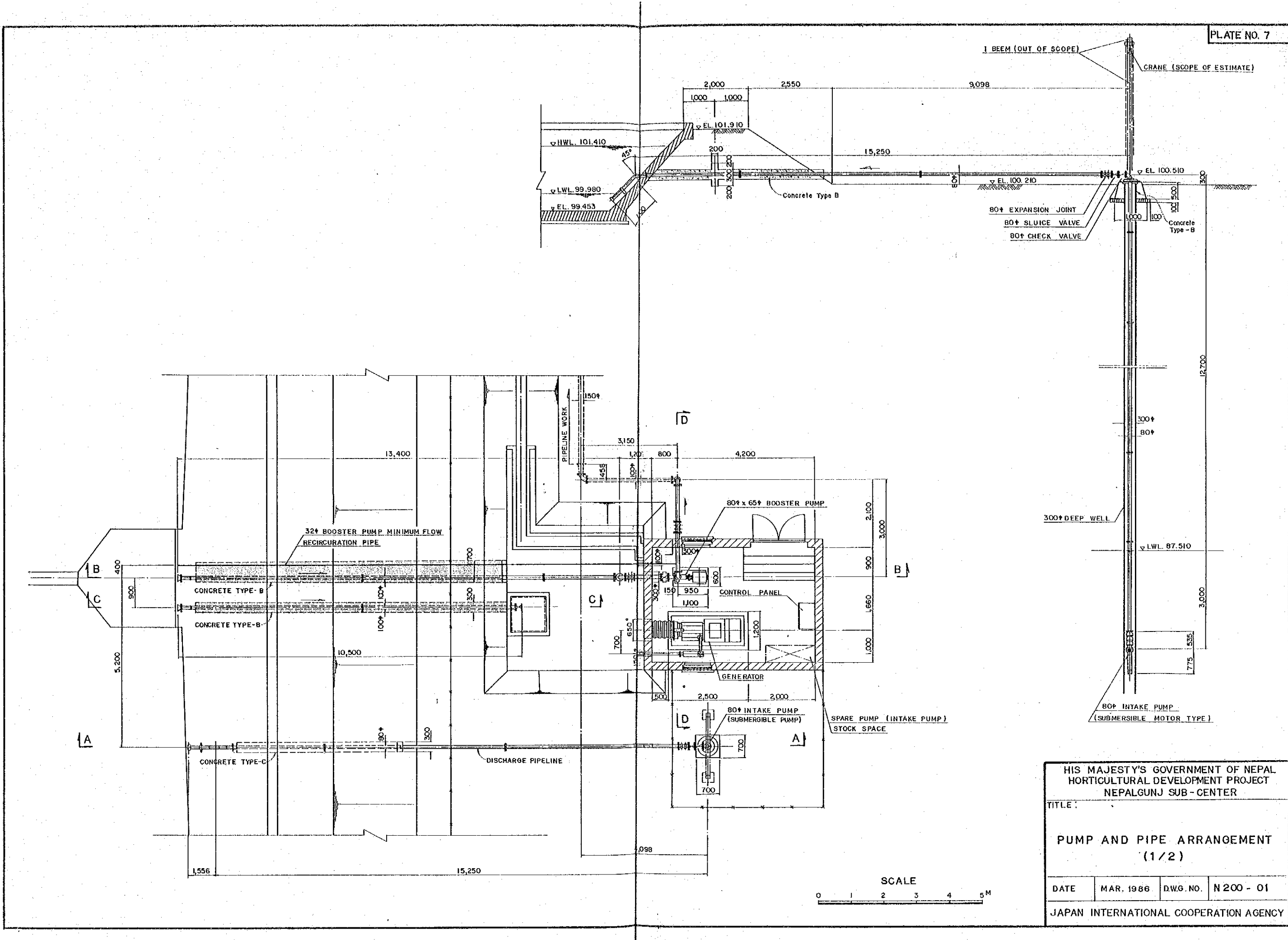


HIS MAJESTY'S GOVERNMENT OF NEPAL
 HORTICULTURAL DEVELOPMENT PROJECT
 NEPALGUNJ SUB-CENTER

TITLE:
 COORDINATES OF CANALS
 AND PIPELINES (2/2)
 BELHANIYA STREAM

DATE	MAR. 1986	D.W.G. NO.	N100 - 06
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JAPAN INTERNATIONAL COOPERATION AGENCY

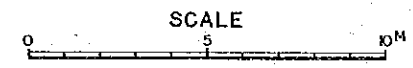
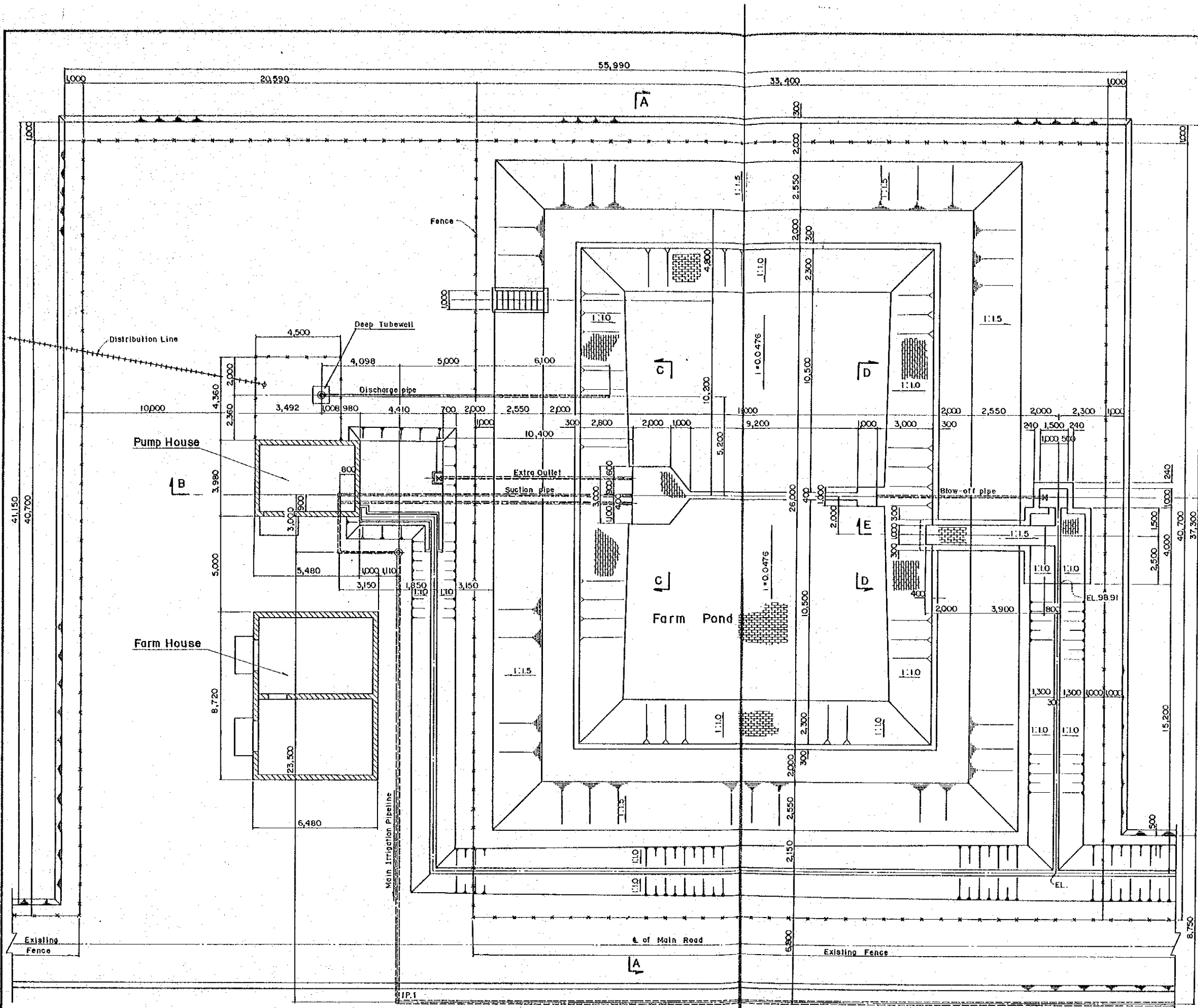


HIS MAJESTY'S GOVERNMENT OF NEPAL
 HORTICULTURAL DEVELOPMENT PROJECT
 NEPALGUNJ SUB-CENTER

TITLE:
**PUMP AND PIPE ARRANGEMENT
 (1/2)**

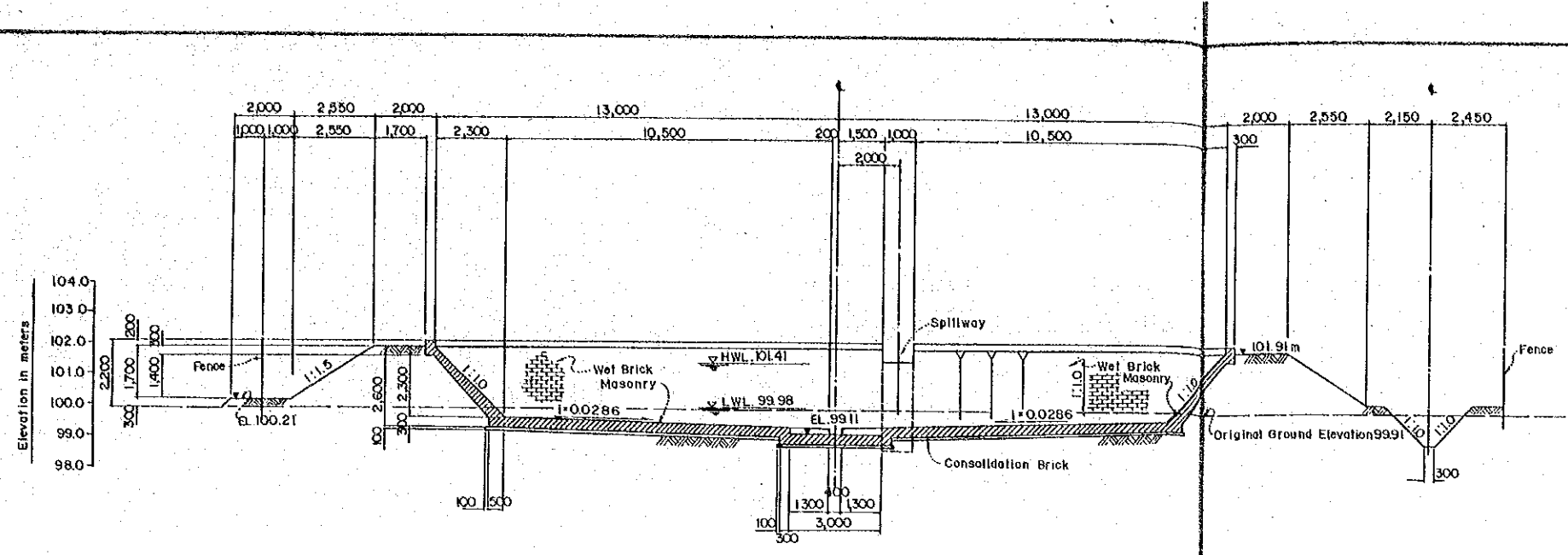
DATE	MAR. 1986	DWG. NO.	N 200 - 01
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JAPAN INTERNATIONAL COOPERATION AGENCY

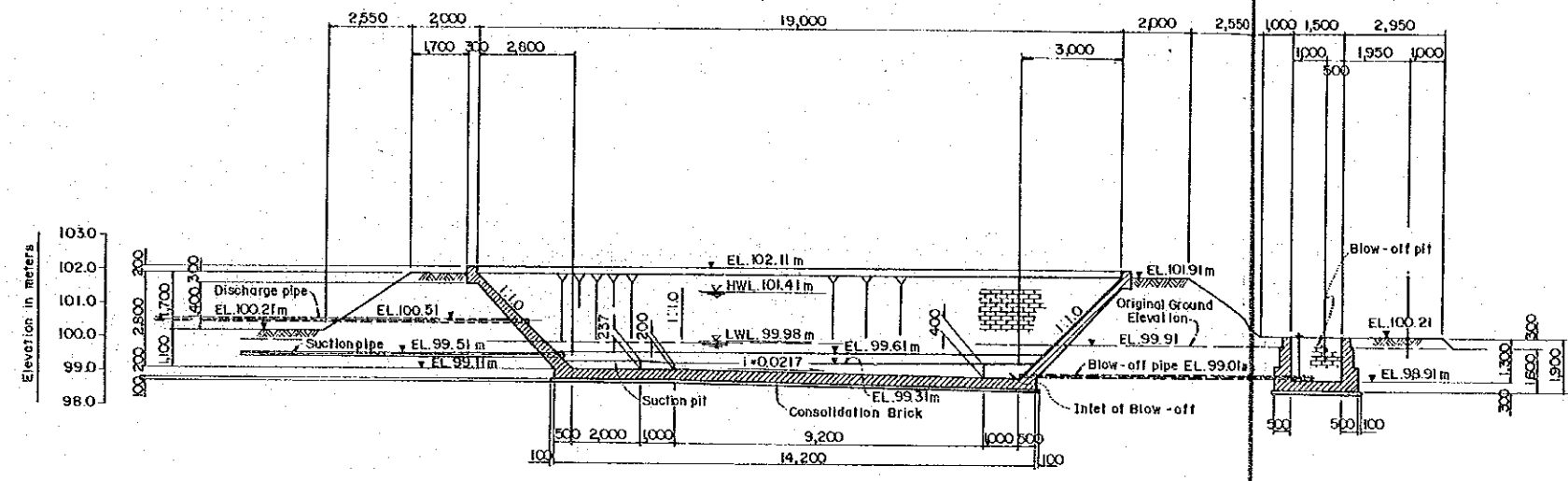
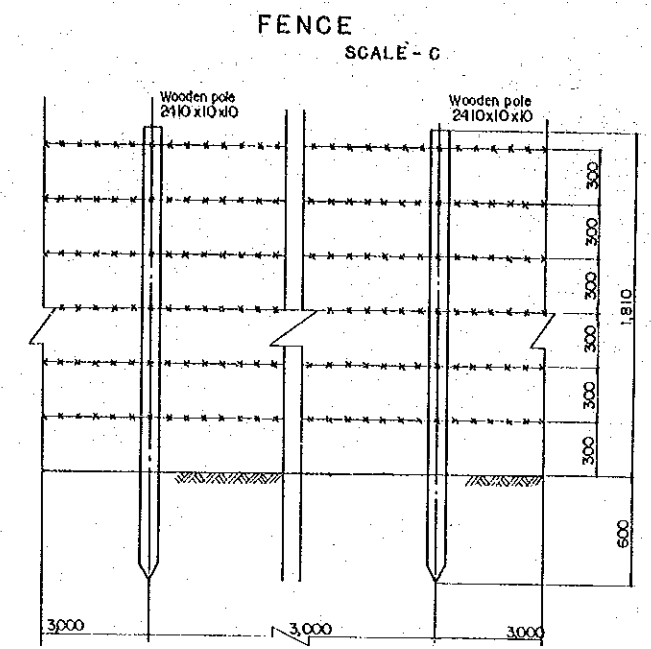


PLAN OF FARM POND

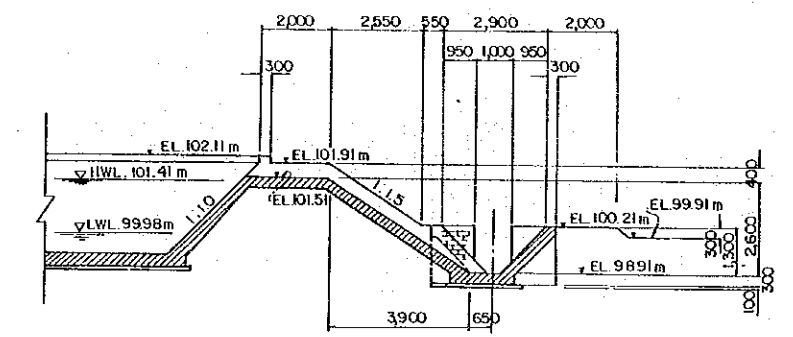
HIS MAJESTY'S GOVERNMENT OF NEPAL HORTICULTURAL DEVELOPMENT PROJECT NEPALGUNJ SUB-CENTER			
TITLE: FARM POND (1/2)			
DATE	MAR. 1986	D.W.G. NO.	N200 - 03
JAPAN INTERNATIONAL COOPERATION AGENCY			



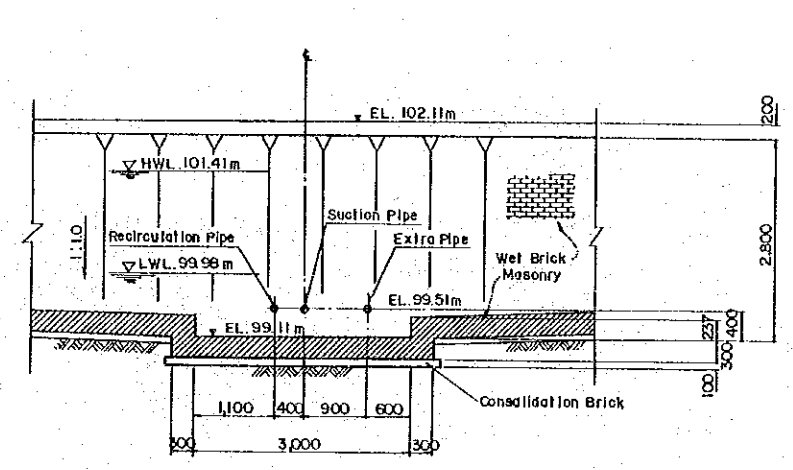
SECTION A-A
SCALE - A



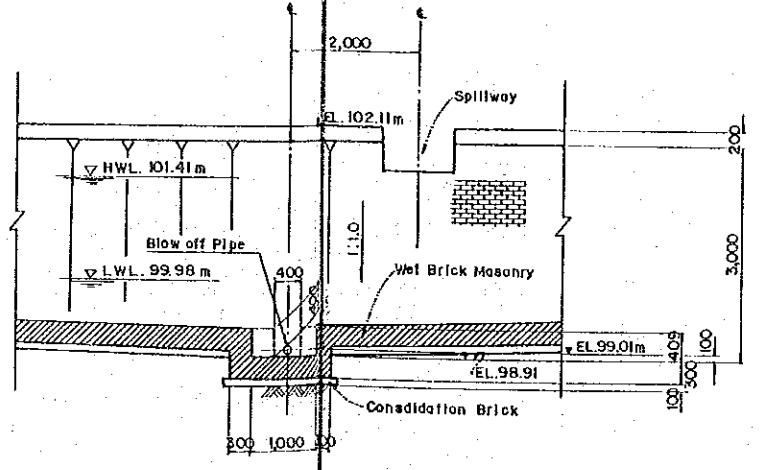
SECTION B-B
SCALE - A



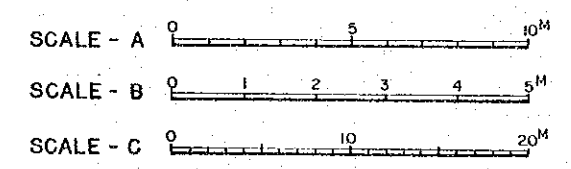
SECTION E-E
SCALE - A



SECTION C-C
SECTION - B



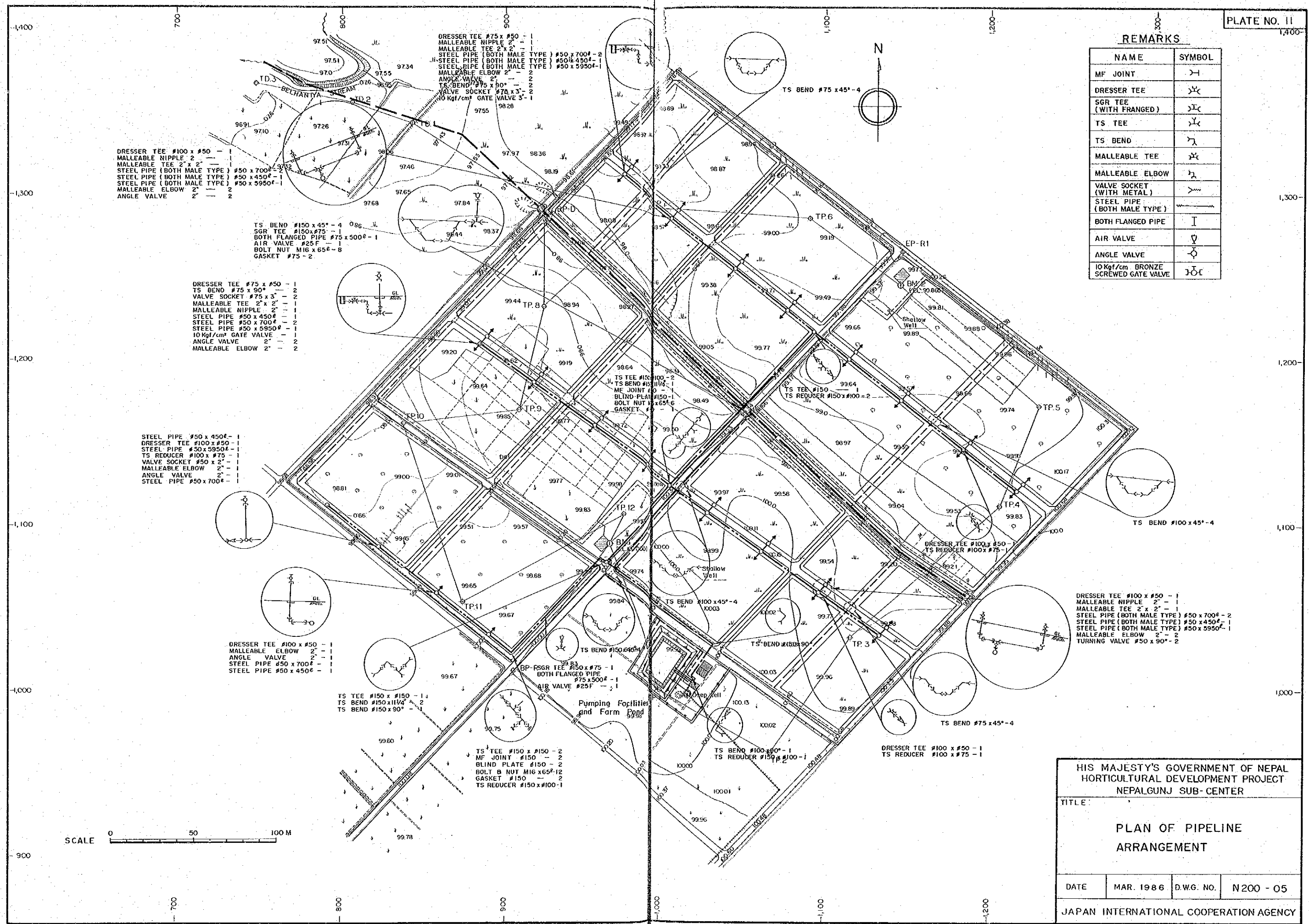
SECTION D-D
SECTION - B



HIS MAJESTY'S GOVERNMENT OF NEPAL HORTICULTURAL DEVELOPMENT PROJECT NEPALGUNJ SUB-CENTER			
TITLE: FARM POND (2/2)			
DATE	MAR. 1986	D.W.G. NO.	N 200 - 04
JAPAN INTERNATIONAL COOPERATION AGENCY			

REMARKS

NAME	SYMBOL
MF JOINT	— —
DRESSER TEE	⊥
SGR TEE (WITH FRANGED)	⊥
TS TEE	⊥
TS BEND	⌒
MALLEABLE TEE	⊥
MALLEABLE ELBOW	⌒
VALVE SOCKET (WITH METAL)	⊥
STEEL PIPE (BOTH MALE TYPE)	—
BOTH FLANGED PIPE	⌈
AIR VALVE	∇
ANGLE VALVE	⊙
10 Kg/cm BRONZE SCREWED GATE VALVE	⊙



TS BEND #150 x 45° - 4
 SGR TEE #150 x #75 - 1
 BOTH FLANGED PIPE #75 x 500# - 1
 AIR VALVE #25F - 1
 BOLT NUT M16 x 65# - 8
 GASKET #75 - 2

DRESSER TEE #75 x #50 - 1
 TS BEND #75 x 90° - 2
 VALVE SOCKET #75 x 3" - 2
 MALLEABLE TEE 2' x 2' - 1
 MALLEABLE NIPPLE 2' - 1
 STEEL PIPE #50 x 450# - 1
 STEEL PIPE #50 x 700# - 2
 STEEL PIPE #50 x 5950# - 1
 10 Kg/cm² GATE VALVE - 1
 ANGLE VALVE 2" - 2
 MALLEABLE ELBOW 2" - 2

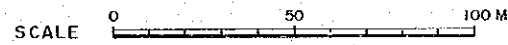
STEEL PIPE #50 x 450# - 1
 DRESSER TEE #100 x #50 - 1
 STEEL PIPE #50 x 5950# - 1
 TS REDUCER #100 x #75 - 1
 VALVE SOCKET #50 x 2" - 1
 MALLEABLE ELBOW 2" - 1
 ANGLE VALVE 2" - 1
 STEEL PIPE #50 x 700# - 1

DRESSER TEE #100 x #50 - 1
 MALLEABLE ELBOW 2" - 1
 ANGLE VALVE 2" - 1
 STEEL PIPE #50 x 700# - 1
 STEEL PIPE #50 x 450# - 1

TS TEE #150 x #150 - 1
 TS BEND #150 x 11 1/4" - 2
 TS BEND #150 x 90° - 1

TS TEE #150 x #150 - 2
 MF JOINT #150 - 2
 BLIND PLATE #150 - 2
 BOLT NUT M16 x 65# - 12
 GASKET #150 - 2
 TS REDUCER #150 x #100 - 1

DRESSER TEE #100 x #50 - 1
 MALLEABLE NIPPLE 2" - 1
 MALLEABLE TEE 2' x 2' - 1
 STEEL PIPE (BOTH MALE TYPE) #50 x 700# - 2
 STEEL PIPE (BOTH MALE TYPE) #50 x 450# - 1
 STEEL PIPE (BOTH MALE TYPE) #50 x 5950# - 1
 MALLEABLE ELBOW 2" - 2
 TURNING VALVE #50 x 90° - 2

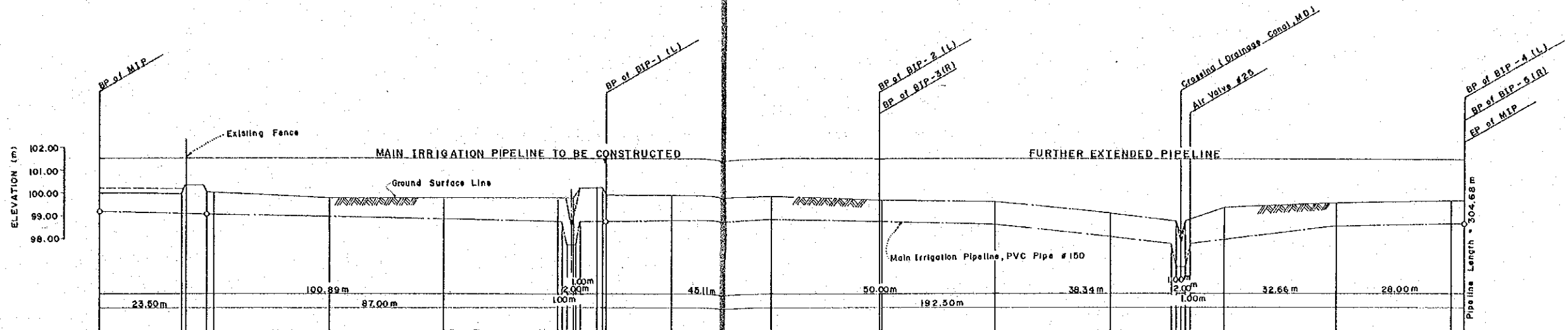


HIS MAJESTY'S GOVERNMENT OF NEPAL
 HORTICULTURAL DEVELOPMENT PROJECT
 NEPALGUNJ SUB-CENTER

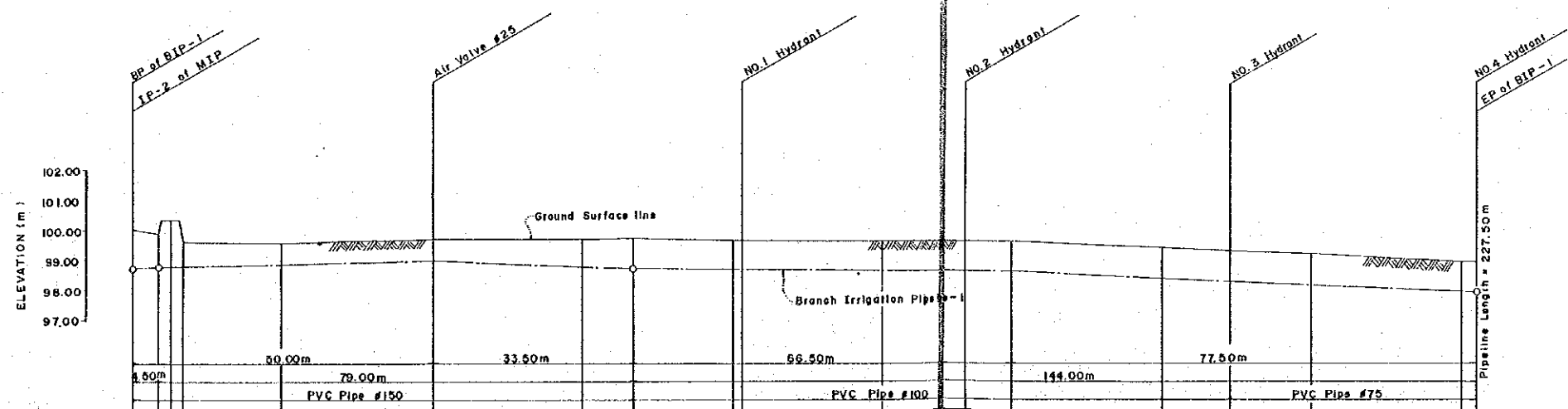
TITLE:
PLAN OF PIPELINE ARRANGEMENT

DATE	MAR. 1986	D.W.G. NO.	N200 - 05
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JAPAN INTERNATIONAL COOPERATION AGENCY



MAIN IRRIGATION PIPELINE	PIPELINE ELEVATION	99.21	99.97	99.97	100.03	99.74	99.74	99.87	99.87	99.60	99.12	98.73	98.73	98.59	98.70	
	Slope Distance / Gradient				L = 100.89m i = 0.47%		L = 48.11m i = 0.29%		L = 50.00m i = 0.50%		L = 38.34m i = 2.16%		L = 32.67m i = 2.46%		L = 28.00m i = 0.39%	
GROUND SURFACE ELEVATION		99.97	99.97	100.03	99.74	99.74	99.87	99.87	99.60	99.12	98.73	98.73	98.59	98.70		
REDUCED DISTANCE		0.00	18.00	23.50	90.00	75.00	100.00	150.00	174.50	200.00	225.00	238.00	248.00	275.00	303.00	
DISTANCE		0.00	18.00	45.00	23.50	75.00	123.50	173.50	223.50	261.84	299.84	332.51	364.51	392.51	420.51	
STATION		BP	IP-1	NO.1	NO.2	NO.3	NO.4	NO.5	NO.6	NO.7	NO.8	NO.9	NO.10	NO.11	NO.12	
HORIZONTAL ANGLE		IA = 90-00-00				IA = 81-39-02										



BRANCH IRRIGATION PIPELINE - 1	PIPELINE ELEVATION	98.75	98.75	98.00	98.75	98.75	98.75	98.75	98.75	98.75	98.75	98.75	98.75	98.75		
	Slope Distance / Gradient			L = 50.00m i = 0.48%		L = 33.50m i = 0.75%		L = 66.50m i = 0.08%		L = 77.50m i = 0.90%						
GROUND SURFACE ELEVATION		100.03	99.90	100.35	99.59	99.70	98.70	98.70	98.70	98.70	98.61	98.70	98.50	98.40	98.00	
REDUCED DISTANCE		0.00	4.50	6.50	25.00	50.00	75.00	83.50	100.00	125.00	142.00	175.00	186.50	200.00	227.50	
DISTANCE		0.00	4.50	8.50	16.50	25.00	75.00	83.50	100.00	125.00	142.00	175.00	186.50	200.00	227.50	
STATION		BP	IP-1	NO.1	NO.2	NO.3	NO.4	NO.5	NO.6	NO.7	NO.8	NO.9	NO.10	NO.11	NO.12	
HORIZONTAL ANGLE		IA = 98-20-58				IA = 94-53-55										

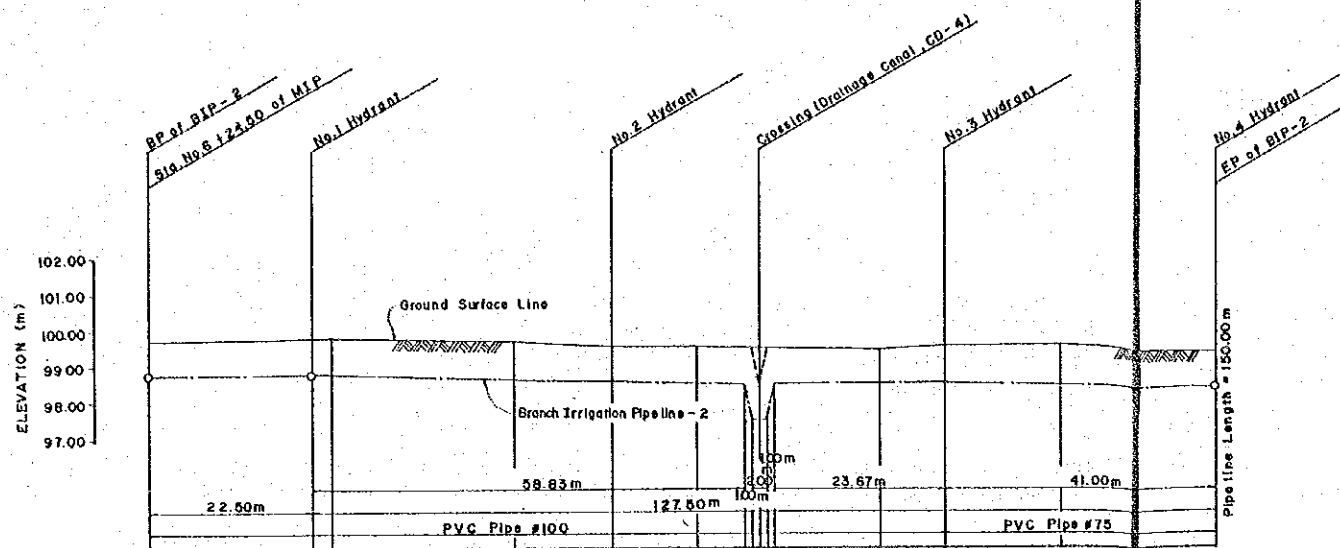
Note :- The MIP from BP of BIP-3 to EP of MIP shall not included in the First stage Implementation.
- Pipes, Valves and Fittings shall be Provided by the Client.

HIS MAJESTY'S GOVERNMENT OF NEPAL
HORTICULTURAL DEVELOPMENT PROJECT
NEPALGUNJ SUB-CENTER

TITLE :
**PROFILE (1/3)
MIP, BIP - 1**

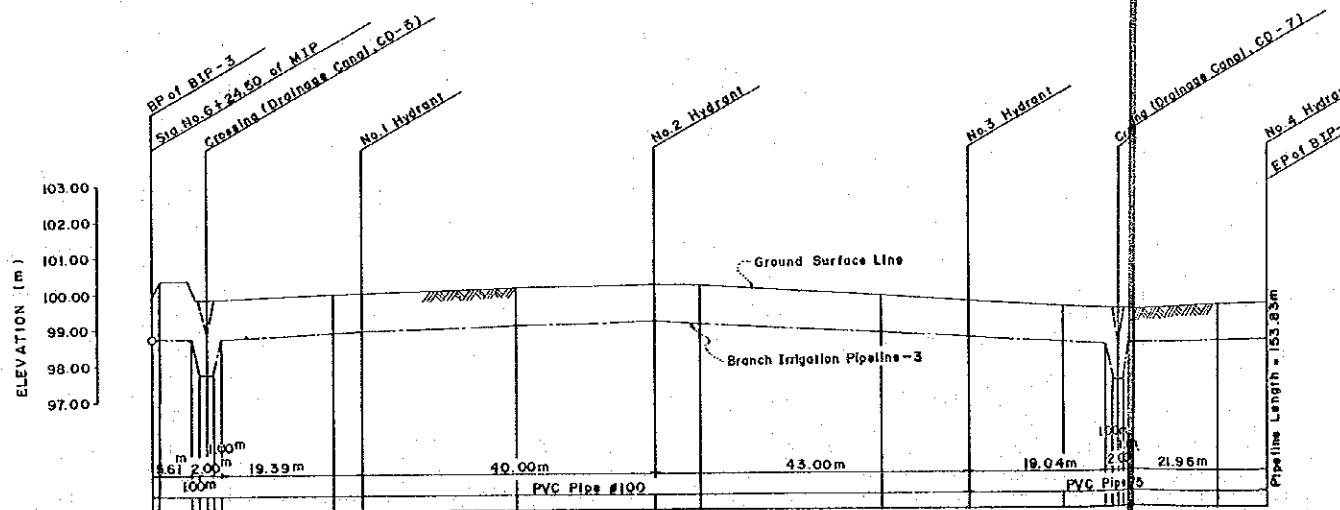
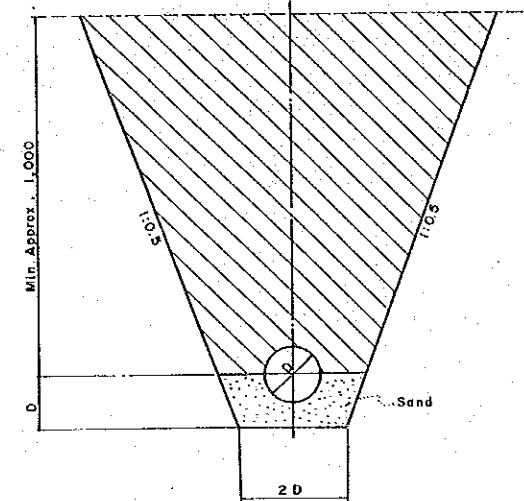
DATE	MAR. 1986	D.W.O. NO.	N200 - 06
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JAPAN INTERNATIONAL COOPERATION AGENCY



BRANCH IRRIGATION PIPELINE - 2	PIPELINE ELEVATION	98.73	98.80	98.70	98.50	98.50	98.50	98.55	98.40	
	Slope	L=22.50m I=0.22%		L=58.83m I=0.81%		L=23.67m I=0.21%		L=41.00m I=0.37%		
	Distance I:Gradient									
	GROUND SURFACE ELEVATION	98.70	99.80	99.60	99.70	99.50	99.46	99.50	99.40	
	REDUCED DISTANCE	0.00	22.50	25.00	50.00	63.50	75.00	100.00	125.00	150.00
	DISTANCE	0.00	22.50	25.00	25.00	13.50	11.50	14.67	9.00	16.00
STATION	BP	NO.1		NO.2	+13.50	NO.3	NO.4	NO.5	EP	
HORIZONTAL ANGLE	→									

TYPICAL SECTION OF PIPELINE



BRANCH IRRIGATION PIPELINE - 3	PIPELINE ELEVATION	98.70	98.70	98.70	98.70	98.70	98.70	98.70	98.70	98.70			
	Slope	L=19.39m I=1.19%		L=40.00m I=0.63%		L=43.00m I=1.09%		L=19.04m I=1.16%		L=21.96m I=0.66%			
	Distance I:Gradient												
	GROUND SURFACE ELEVATION	98.70	98.70	98.70	98.70	98.70	98.70	98.70	98.70	98.70	98.70		
	REDUCED DISTANCE	0.00	19.39	25.00	29.00	50.00	69.00	75.00	100.00	112.00	125.00	150.00	157.00
	DISTANCE	0.00	19.39	4.00	4.00	21.00	19.00	6.00	25.00	12.00	13.00	25.00	7.00
STATION	BP	NO.1		NO.2	+8.00	NO.3	NO.4	NO.5	NO.6	EP			
HORIZONTAL ANGLE	→												

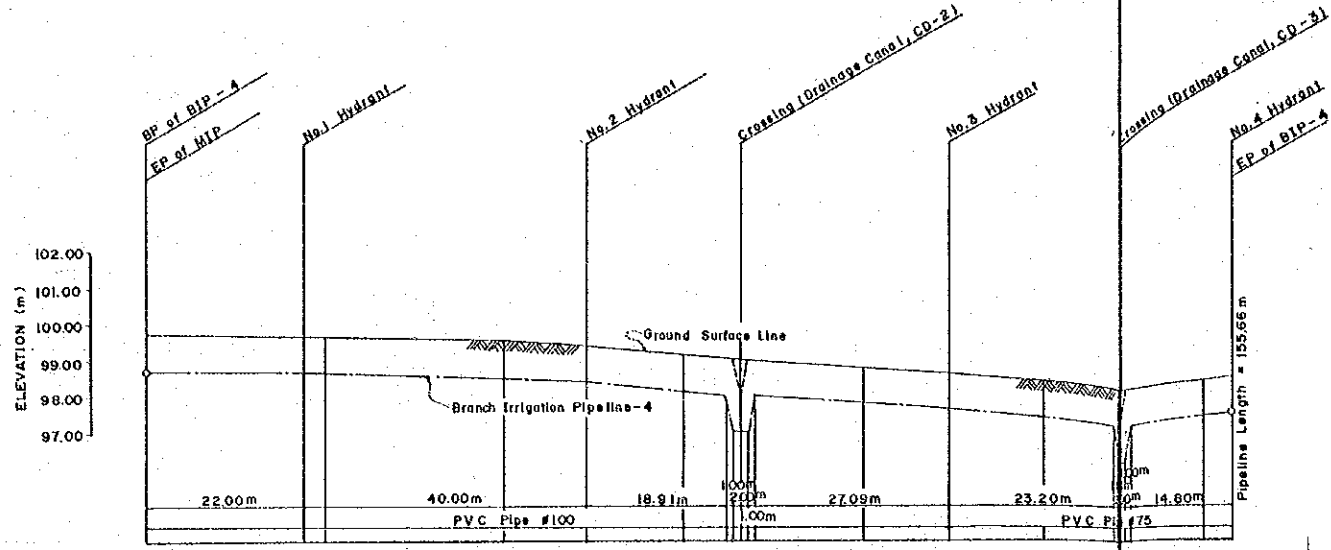
Note: Pipes, Valves and Fittings shall be Provided by the Client.

HIS MAJESTY'S GOVERNMENT OF NEPAL
 HORTICULTURAL DEVELOPMENT PROJECT
 NEPALGUNJ SUB-CENTER

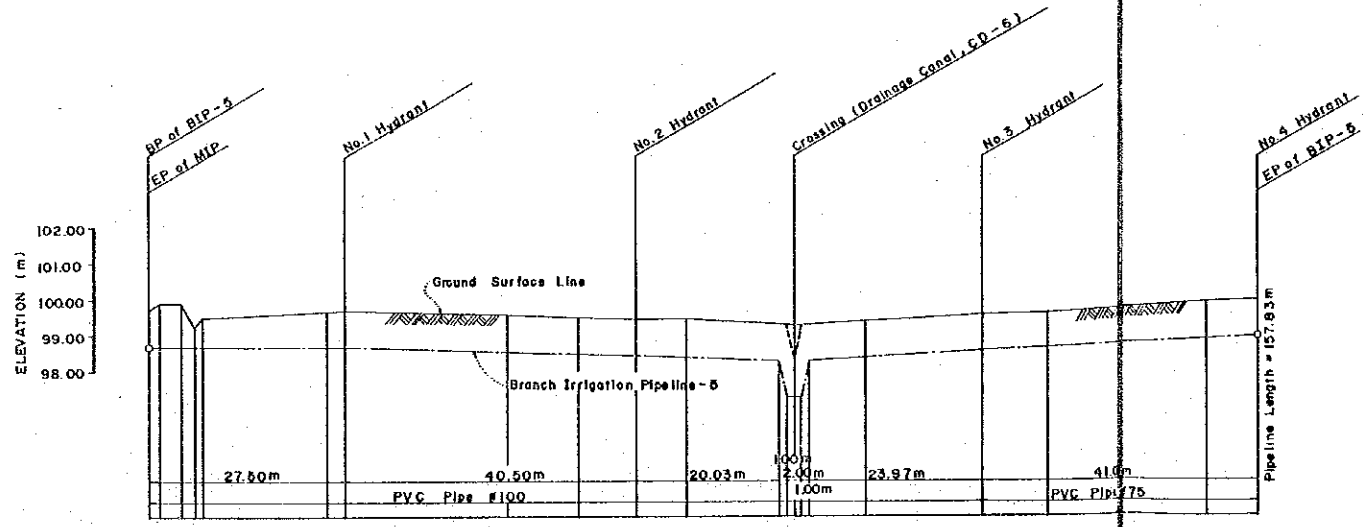
TITLE:
PROFILE (2/3)
BIP - 2, BIP - 3

DATE	MAR. 1986	D.W.O. NO.	N200 - 07
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JAPAN INTERNATIONAL COOPERATION AGENCY



PIPELINE ELEVATION Slope L:Distance i:Gradient	L=22.00m i=0.05%		L=40.00m i=0.73%		L=18.91m i=2.12%		L=27.09m i=1.40%		L=23.20m i=1.81%		L=14.80m i=2.03%	
	GROUND SURFACE ELEVATION	99.70	99.69	99.67	99.54	99.40	99.13	98.96	98.77	98.62	98.40	98.20
REDUCED DISTANCE	0.00	22.00	25.00	50.00	62.00	75.00	83.91	90.00	100.00	112.00	125.00	150.00
DISTANCE	0.00	22.00	30.00	25.00	12.00	13.00	8.91	7.09	15.09	12.00	9.00	10.80
STATION	B.P.	NO.1		NO.2	+	NO.3		NO.4	+	NO.5		NO.6
HORIZONTAL ANGLE	—											



PIPELINE ELEVATION Slope L:Distance i:Gradient	L=27.50m Level		L=40.50m i=0.62%		L=20.03m i=0.73%		L=23.97m i=1.26%		L=41.00m i=0.6%			
	GROUND SURFACE ELEVATION	99.70	99.30	99.30	99.19	99.19	98.95	98.70	98.30	98.40	98.60	98.95
REDUCED DISTANCE	0.00	1.50	4.50	9.50	25.00	37.50	50.00	68.00	75.00	88.00	92.00	
DISTANCE	0.00	1.50	3.00	2.00	7.50	2.50	1.00	13.23	7.00	13.23	1.00	
STATION	B.P.	NO.1		NO.2		NO.3		NO.4		NO.5		NO.6
HORIZONTAL ANGLE	—											

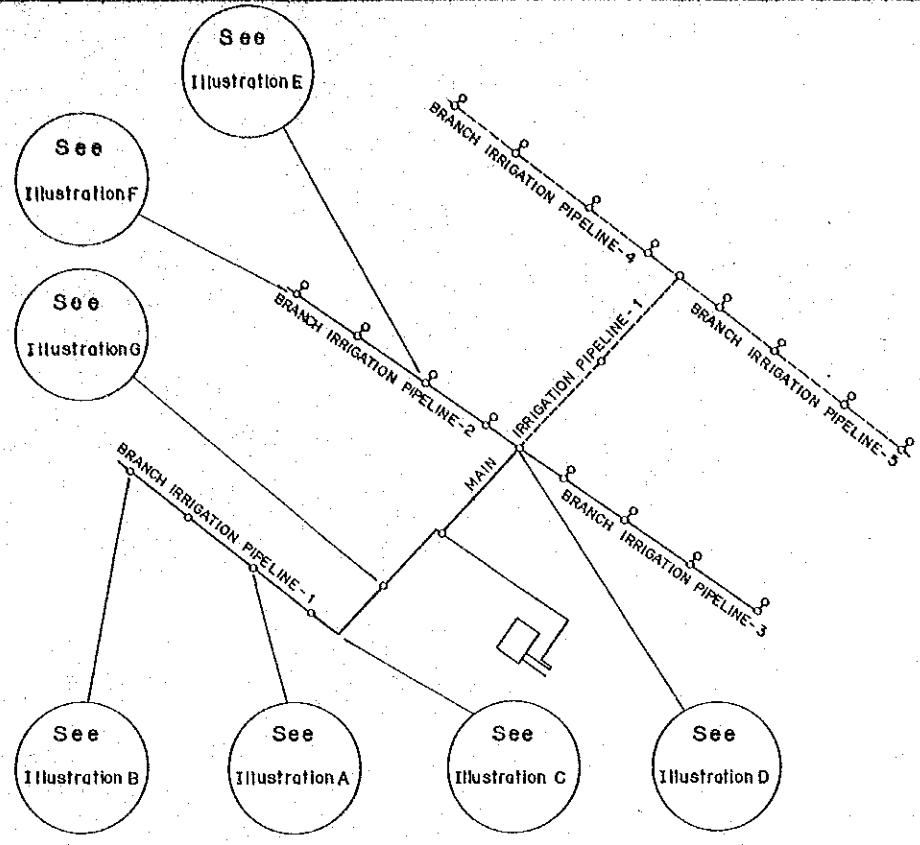
Note: Branch Irrigation Pipeline - 4 and 5 shall be constructed on further stage.

HIS MAJESTY'S GOVERNMENT OF NEPAL
HORTICULTURAL DEVELOPMENT PROJECT
NEPALGUNJ SUB-CENTER

TITLE:
PROFILE (3/3)
BIP - 4, BIP - 5

DATE	MAR. 1986	D.W.G. NO.	N200 - 08
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JAPAN INTERNATIONAL COOPERATION AGENCY



SCHEMA OF PIPELINE SYSTEM

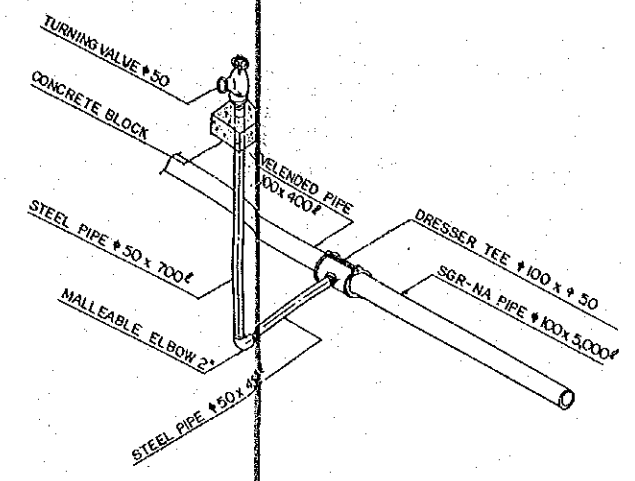


ILLUSTRATION A

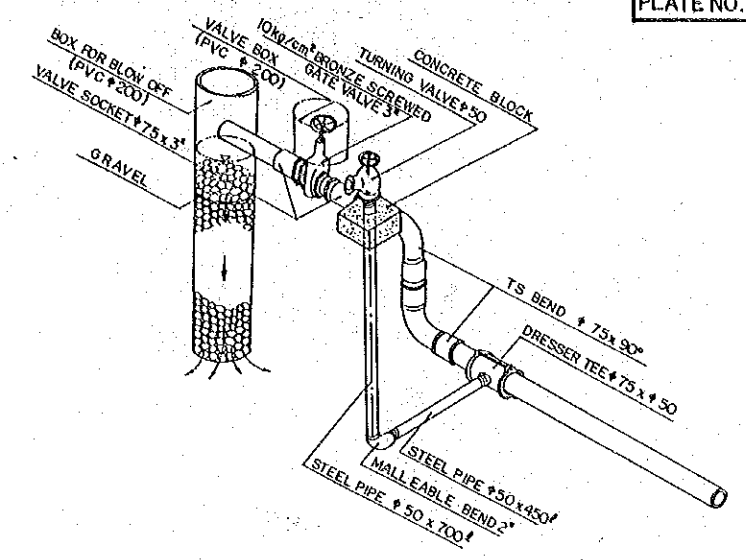


ILLUSTRATION B

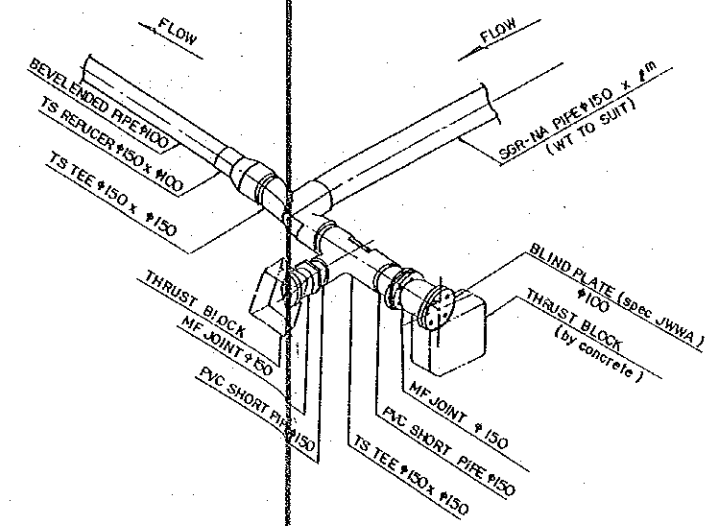


ILLUSTRATION C

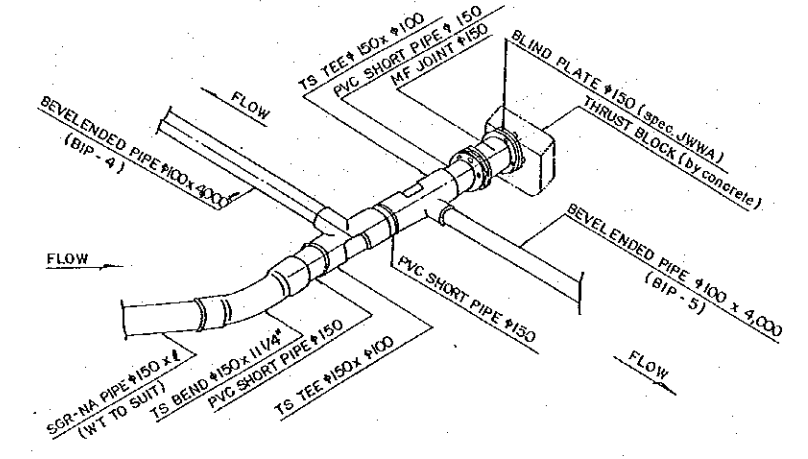


ILLUSTRATION D

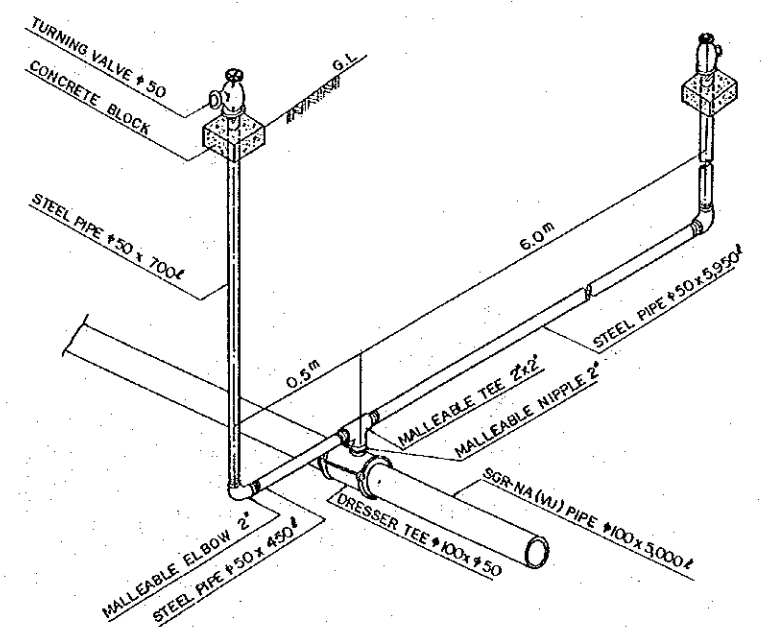


ILLUSTRATION E

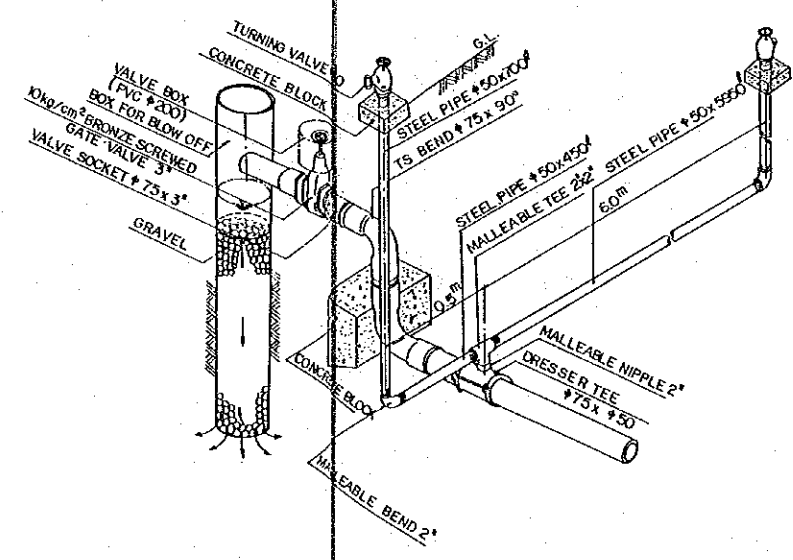


ILLUSTRATION F

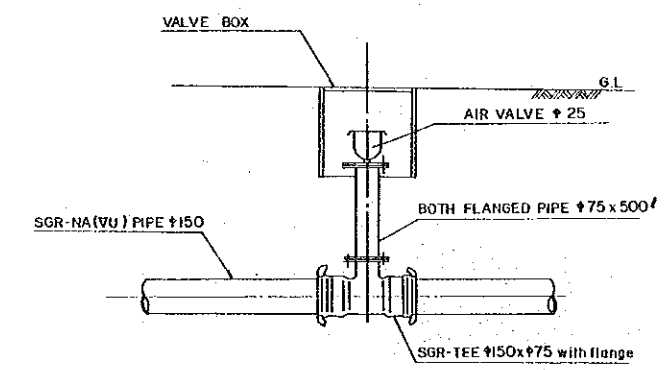
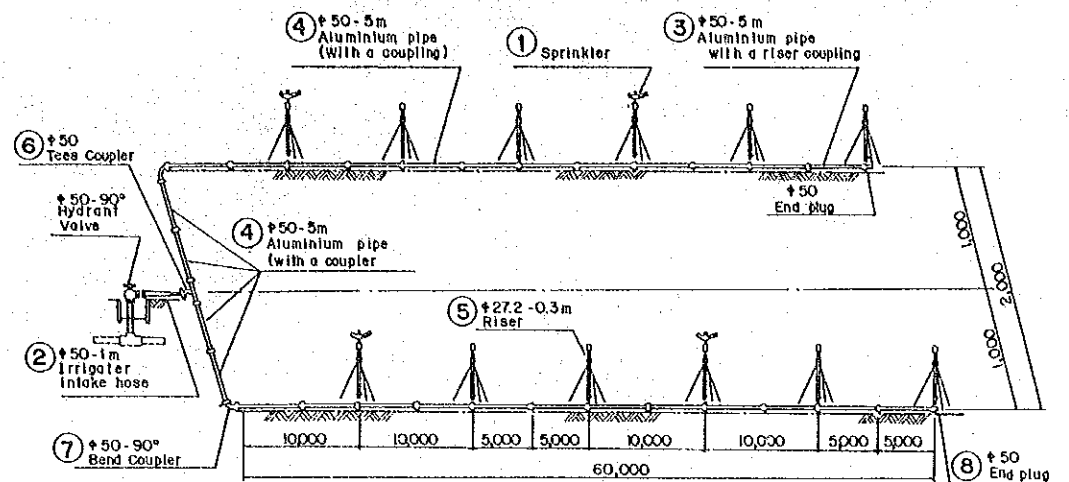


ILLUSTRATION G

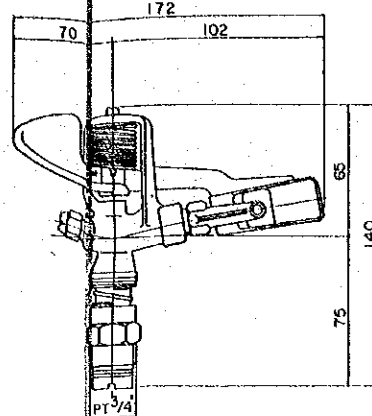
Note :- Pipes, Valves and Fittings shall be provided by the client.
 - The construction of BIP-4, BIP-5 and the last part of MIP often the branch of BIP - 3 shall not be included in the First Stage Implementation.

HIS MAJESTY'S GOVERNMENT OF NEPAL HORTICULTURAL DEVELOPMENT PROJECT NEPALGUNJ SUB-CENTER		
TITLE :		
PIPE ARRANGEMENT OF PIPELINE IRRIGATION SYSTEM		
DATE	MAR. 1988	D.W.G. NO. N 200 - 09
JAPAN INTERNATIONAL COOPERATION AGENCY		

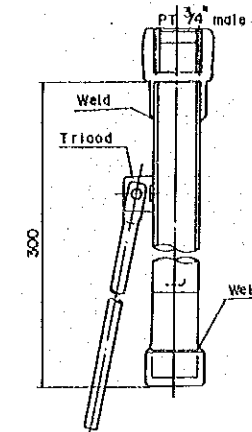


EASY-REMOVABLE SPRINKLER SETS (φ 50)

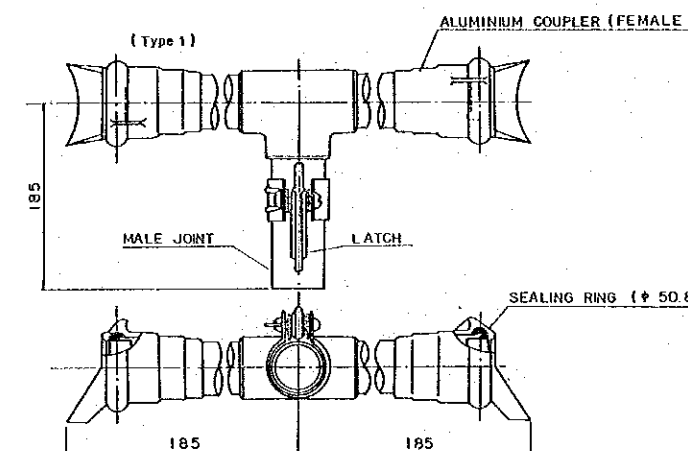
1 SPRINKLER



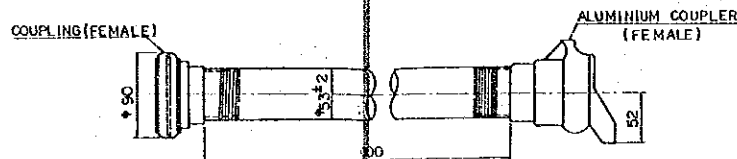
5 ALUMINIUM RISER φ 20



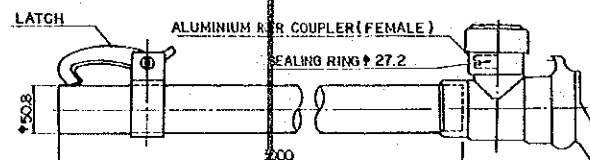
6 TEES COUPLER - φ 50



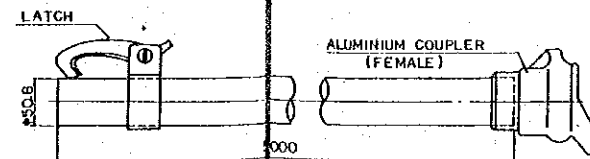
2 IRRIGATOR INTAKE HOSE - φ 50-1.0 m



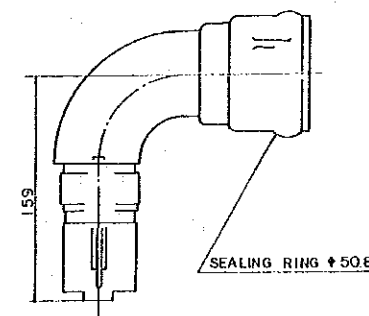
3 ALUMINIUM PIPE φ 50-5.0 m



4 ALUMINIUM PIPE φ 50-5.0 m



7 BEND COUPLER φ 50 - 90°
(CAST ALUMINIUM WITH A HOOK COUPLER & HOOK)



8 TERMINAL PLUG - φ 50

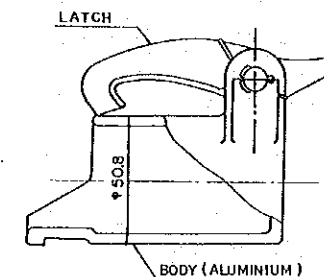


TABLE OF QUANTITY

ITEM NO.	NAME OF INSTRUMENT	SIZE	DESCRIPTION	QUANTITY (TOTAL 2 SETS)		
				ONE SET	REMARKS	TOTAL
1	Sprinkler	PT 3/4" Jet Angle 10°	Pressure 2.5 kg/cm ² Discharge 21.2 lit./min. Diameter 21.2 mm Nozzle size 4.0x2.4 mm	12 NOS.	Including 1 No. of spare	25
2	Irrigation Intake Hose	φ 50 mm x 1.0 m	With a female coupling, φ 50 mm	1		2
3	Aluminium pipe	φ 50 mm x 5.0 m	With a riser coupling (Female)	12		24
4	Aluminium pipe	φ 50 mm x 5.0 m	With a coupling (Female)	16		32
5	Aluminium riser	φ 20 mm x 0.3 m	With a tripod	12	Including 1 No. of spare	25
6	Tees Coupler	φ 50 mm	Cast Aluminium	1		2
7	Bend coupler	φ 50 mm - 90°	Cast Aluminium	2		4
8	End coupler	φ 50 mm	Cast Aluminium	2		4
Spare parts						
9	1) Riser sealing ring	φ 27.2 mm	Ruber (Spare parts for Item No.3)			50
	2) Coupler sealing ring	φ 50.8 mm	Ruber (Spare parts for Item No.4)			100
	3) Hook sets Type-1		Cast Aluminium (Item No.3,4,6,7)			10
	Type-2		Cast Aluminium (Item No.8)			2
	4) Irrigation	φ 50 mm x 3 m	With a clamp 6 pce. (Item No.2)			1
	5) O-sealing ring		TEF			2

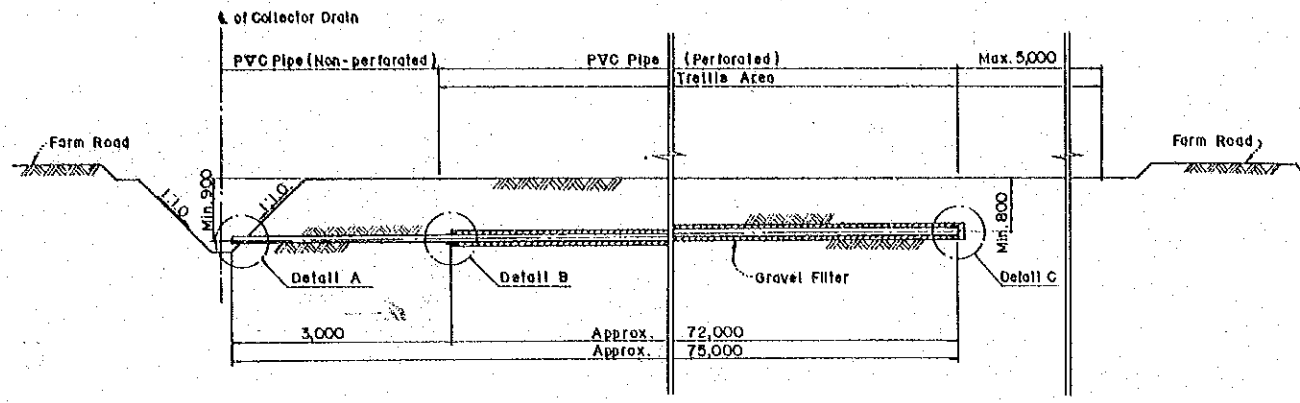
HIS MAJESTY'S GOVERNMENT OF NEPAL
HORTICULTURAL DEVELOPMENT PROJECT
NEPALGUNJ SUB-CENTER

TITLE:
SPRINKLER IRRIGATION SYSTEM

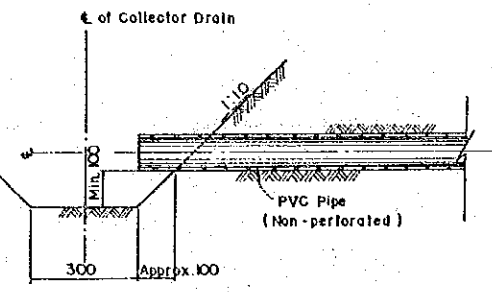
DATE: MAR. 1986 D.W.G. NO. N 200 - 10

JAPAN INTERNATIONAL COOPERATION AGENCY

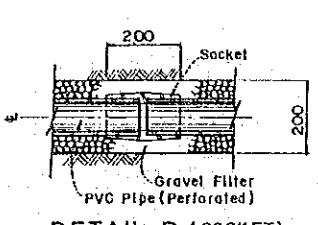
SUB - SURFACE DRAIN



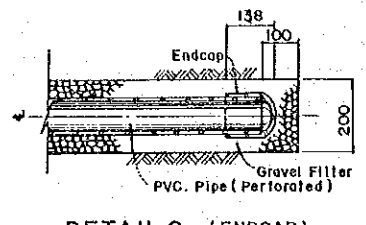
PROFILE SCALE - A



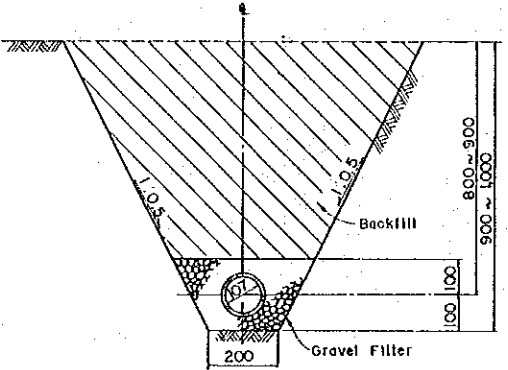
DETAIL A (OUTLET) SCALE - B



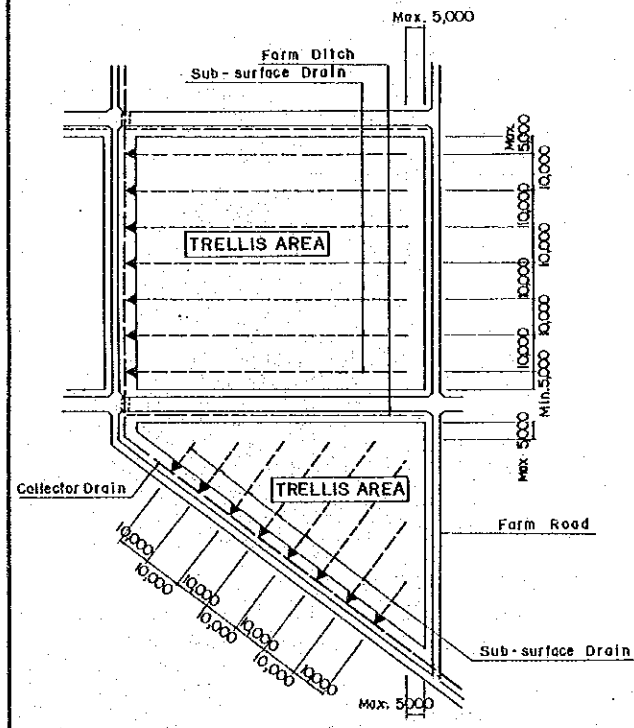
DETAIL B (SOCKET) SCALE - B



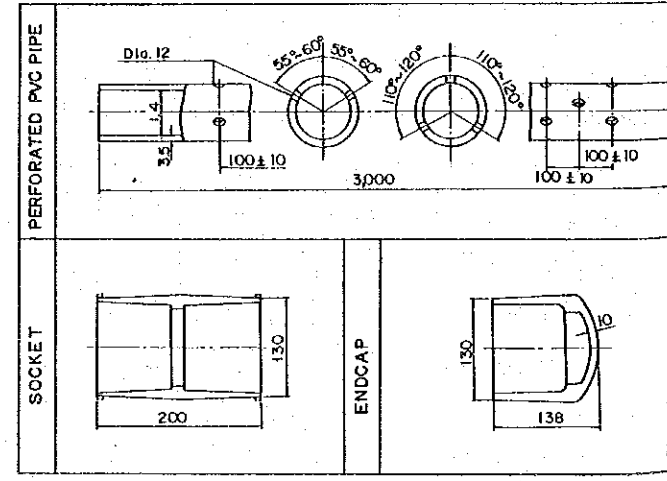
DETAIL C (ENDCAP) SCALE - B



SECTION SCALE - B

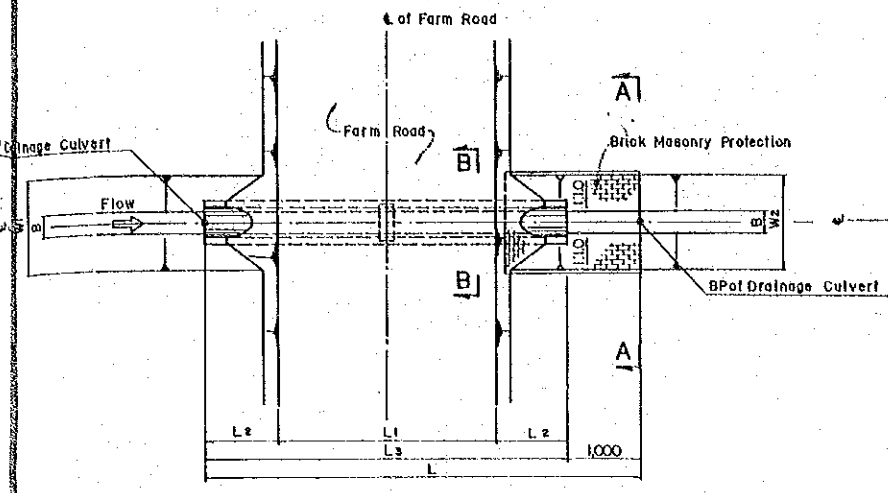


TYPICAL LAYOUT OF SUB - SURFACE DRAIN

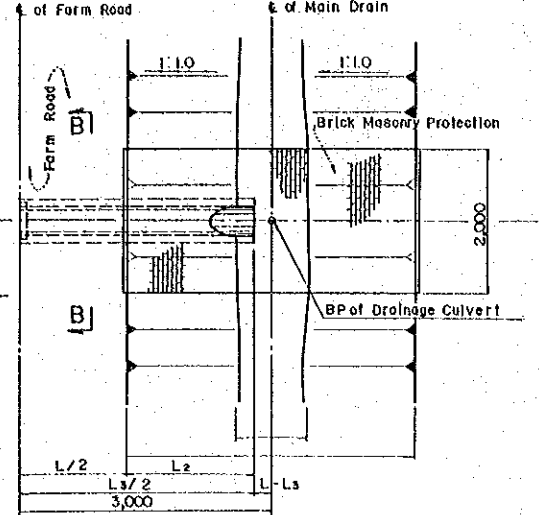


Note: The holes on provided PVC pipes shall be drilled by the Contractor.

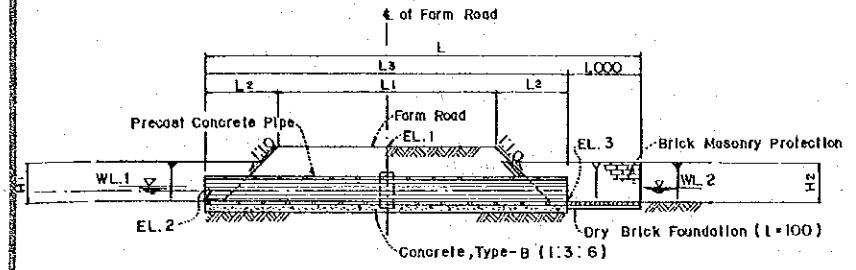
DRAINAGE CULVERT



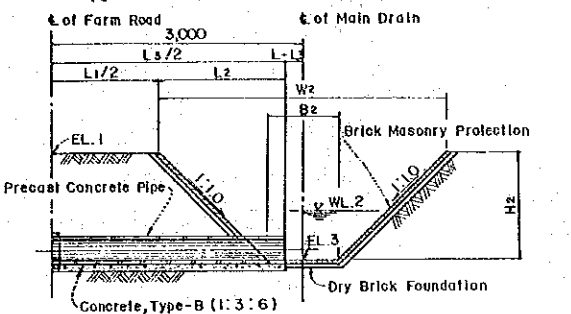
PLAN SCALE - A



PLAN SCALE - A (In Case of Outlet Culvert)



PROFILE SCALE - A

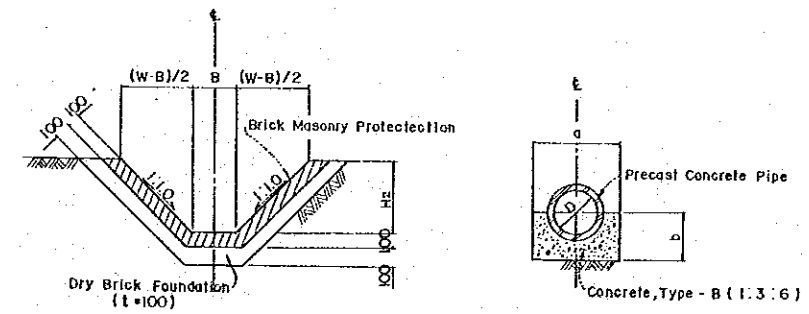
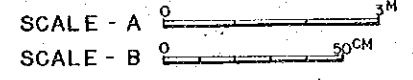


PROFILE SCALE - A (In Case of Outlet Culvert)

DIMENSION TABLE OF DRAINAGE CULVERT

Canal	NO.	Sta. BP	Sta. EP	WL 1	WL 2	EL. 1	EL. 2	EL. 3	L	L1	L2	L3	B	W1	W2	H1	H2	D	a	b
CD - 1	NO. 1	BP	BP + 550	97.58	97.55	98.20	97.12	97.09	5,500	2,000	1,500	5,000	2,180	2,060	4,000	880	910	400	800	400
	NO. 2	NO. 3 + 3.50	NO. 3 + 13.50	97.67	97.64	99.35	97.37	97.34	10,000	4,000	2,500	9,000	300	3,720	3,800	1,710	1,750	400	800	400
	NO. 3	NO. 6 + 0.00	NO. 6 + 9.00	97.76	97.73	99.05	97.46	97.43	9,000	4,000	2,000	8,000	300	2,360	2,380	1,030	1,040	400	800	400
CD - 2	NO. 1	BP	BP + 550	97.60	97.57	98.20	97.16	97.13	5,500	2,000	1,500	5,000	2,260	1,980	4,000	840	870	300	600	300
	NO. 2	NO. 1 + 23.47	NO. 2 + 6.47	97.60	97.60	98.45	97.38	97.35	8,000	4,000	1,500	7,000	300	2,060	2,000	880	850	300	600	300
	NO. 1	BP	BP + 550	97.70	97.67	98.70	97.41	97.38	5,500	2,000	1,500	5,000	1,760	2,480	4,000	1,090	1,120	300	600	300
CD - 3	NO. 1	BP	BP + 550	97.70	97.67	98.70	97.41	97.38	5,500	2,000	1,500	5,000	1,760	2,480	4,000	1,090	1,120	300	600	300
	NO. 2	NO. 2 + 2.99	NO. 2 + 11.99	97.81	97.78	99.15	97.66	97.63	9,000	4,000	2,000	8,000	300	2,840	3,000	1,270	1,350	300	600	300
	NO. 1	BP	BP + 550	97.71	97.68	98.70	97.27	97.24	5,500	2,000	1,500	5,000	1,480	2,760	4,000	1,230	1,260	400	800	400
CD - 4	NO. 1	BP	BP + 550	97.71	97.68	98.70	97.27	97.24	5,500	2,000	1,500	5,000	1,480	2,760	4,000	1,230	1,260	400	800	400
	NO. 2	NO. 2 + 19.43	NO. 3 + 2.43	98.49	98.46	99.55	98.20	98.17	8,000	4,000	1,500	7,000	300	2,860	2,620	1,280	1,160	400	800	400
	NO. 3	NO. 5 + 13.00	NO. 5 + 22.00	98.58	98.55	99.95	98.29	98.26	9,000	4,000	2,000	8,000	300	2,720	2,780	1,210	1,240	400	800	400
CD - 5	NO. 1	BP	BP + 550	98.43	98.40	99.20	97.99	97.96	5,500	2,000	1,500	5,000	1,920	2,320	4,000	1,010	1,040	300	600	300
	NO. 2	NO. 2 + 7.32	NO. 2 + 15.32	98.72	98.69	100.05	98.60	98.57	8,000	4,000	1,500	7,000	300	2,920	2,800	1,310	1,250	300	600	300
	NO. 3	NO. 5 + 2.72	NO. 5 + 11.72	98.83	98.80	100.24	98.70	98.67	9,000	4,000	2,000	8,000	300	2,580	3,220	1,140	1,460	300	600	300
CD - 6	NO. 1	BP	BP + 550	98.51	98.48	99.20	98.05	98.02	5,500	2,000	1,500	5,000	2,040	2,200	4,000	950	980	400	800	400
	NO. 2	NO. 2 + 19.47	NO. 3 + 2.47	98.75	98.72	99.60	98.54	98.51	8,000	4,000	1,500	7,000	300	2,040	2,000	870	850	400	800	400
	NO. 1	BP	BP + 550	98.55	98.52	99.20	98.19	98.16	5,500	2,000	1,500	5,000	2,320	1,920	4,000	810	840	300	600	300
CD - 7	NO. 1	BP	BP + 550	98.55	98.52	99.20	98.19	98.16	5,500	2,000	1,500	5,000	2,320	1,920	4,000	810	840	300	600	300
	NO. 2	NO. 1 + 16.31	NO. 1 + 24.31	98.63	98.60	99.60	98.50	98.47	8,000	4,000	1,500	7,000	300	2,240	2,160	970	930	300	600	300

Note: The first culvert on each collector drain is the outlet culvert



SECTION A-A SCALE - B

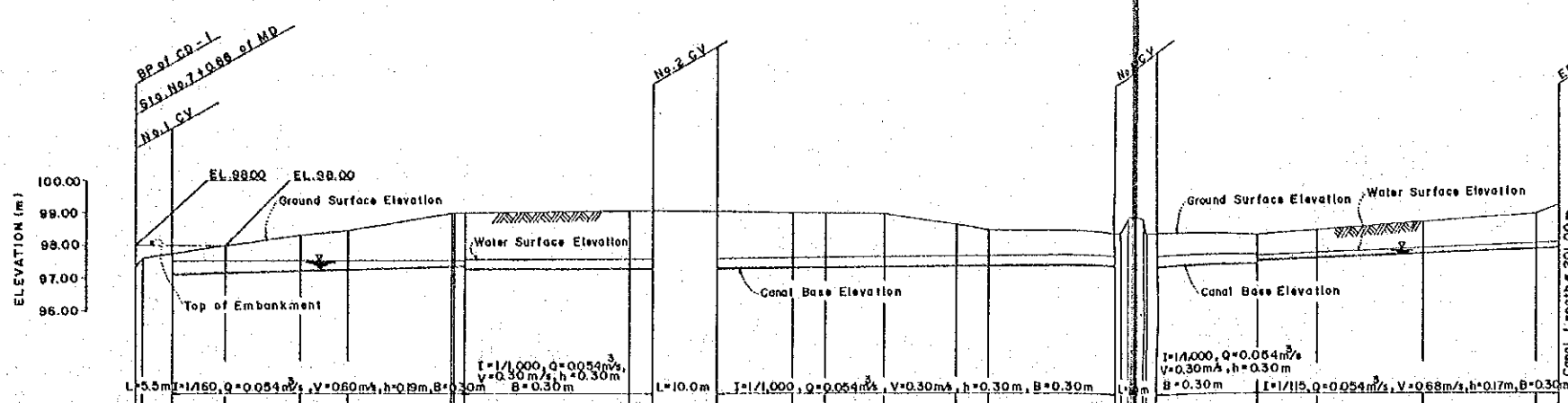
SECTION B-B SCALE - B

HIS MAJESTY'S GOVERNMENT OF NEPAL
 HORTICULTURAL DEVELOPMENT PROJECT
 NEPALGUNJ SUB-CENTER

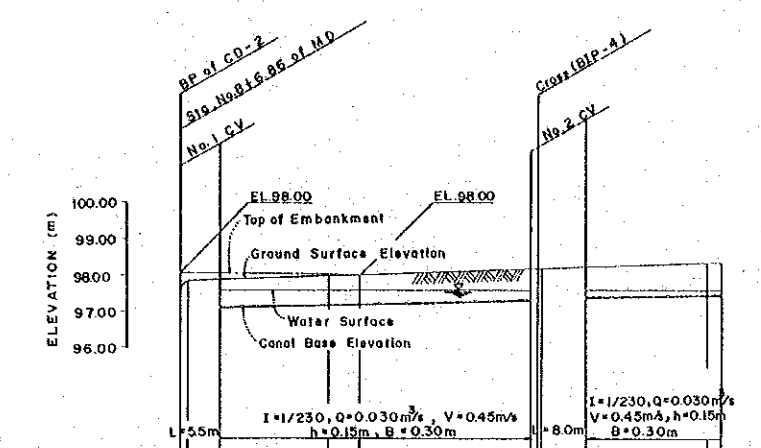
TITLE:
**DRAINAGE CULVERT
 SUB - SURFACE DRAIN**

DATE: MAR. 1986 D.W.G. NO. N 300 - 02

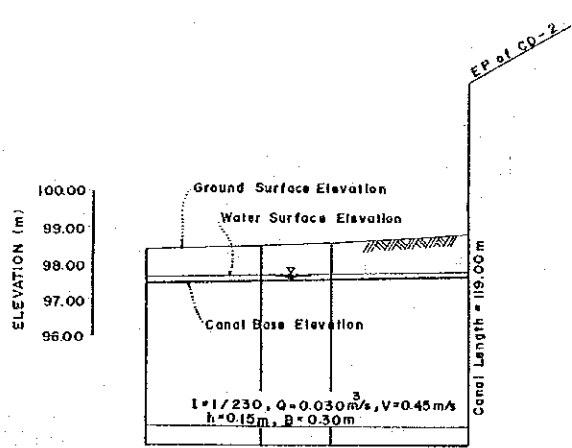
JAPAN INTERNATIONAL COOPERATION AGENCY



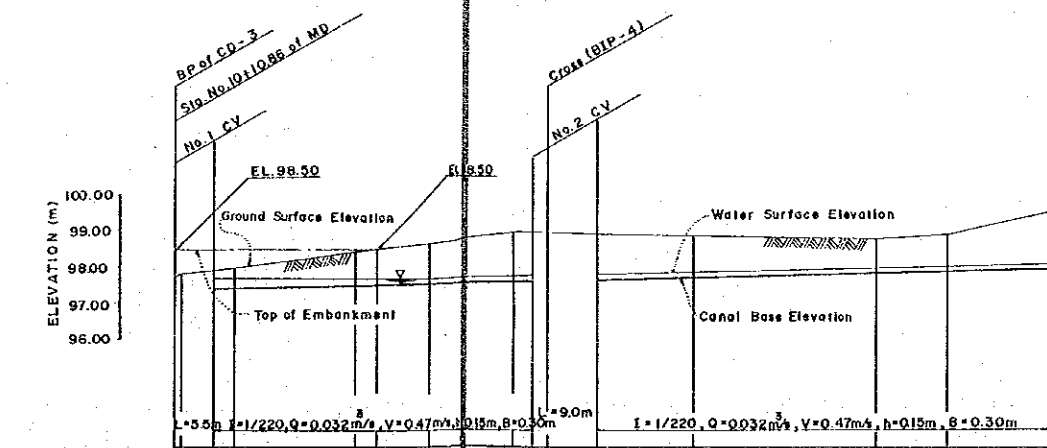
COLLECTOR DRAIN - 1	CANAL BASE ELEVATION	97.09	97.12	97.17	97.24	97.29	97.39	97.40	97.41	97.41	97.43	97.45	97.46	97.48	97.59	97.81	97.96	97.99	
	WATER SURFACE ELEVATION	97.55	97.58	97.58	97.58	97.58	97.58	97.58	97.58	97.58	97.58	97.58	97.58	97.58	97.58	97.58	97.58	97.58	
	GROUND SURFACE ELEVATION	97.25	97.77	98.00	98.31	98.50	99.00	99.09	99.10	99.08	99.03	98.50	98.49	98.37	97.78	98.73	99.00	99.26	
	REDUCED DISTANCE	0.00	5.50	13.50	25.00	32.00	48.00	48.00	50.00	50.00	50.00	100.00	114.00	125.00	130.00	200.00	217.50	221.00	
	DISTANCE	0.00	5.50	8.00	11.50	7.00	15.00	0.00	1.00	4.50	11.50	14.00	11.00	5.00	15.00	9.00	16.00	17.50	
	STATION	BP	+4.50	+13.50	NO.1	+7.00	NO.2	NO.3	+3.50	+5.00	+13.50	NO.4	+4.00	NO.5	+3.00	NO.6	NO.7	+7.50	EP
	CURVE	—																	



COLLECTOR DRAIN - 2 (1/2)	CANAL BASE ELEVATION	97.15	97.23	97.24	97.58	97.45	
	WATER SURFACE ELEVATION	97.57	97.60	97.60	97.60	97.61	
	GROUND SURFACE ELEVATION	97.63	97.78	98.00	98.21	98.39	
	REDUCED DISTANCE	0.00	3.00	5.50	48.47	75.00	
	DISTANCE	0.00	3.00	2.50	23.97	2.00	
	STATION	BP	+3.50	+23.50	NO.1	+6.47	NO.2
	CURVE	—					



COLLECTOR DRAIN - 2 (2/2)	CANAL BASE ELEVATION	97.66	97.53	97.57	97.65
	WATER SURFACE ELEVATION	97.61	97.68	97.72	97.80
	GROUND SURFACE ELEVATION	98.29	98.50	98.60	98.81
	REDUCED DISTANCE	75.00	90.50	100.00	119.00
	DISTANCE	2.00	15.50	8.50	19.00
	STATION	NO.3	+15.50	NO.4	EP
	CURVE	—			



COLLECTOR DRAIN - 3	CANAL BASE ELEVATION	97.38	97.41	97.42	97.55	97.61	97.63	97.66	97.72	97.83	97.88	97.94	
	WATER SURFACE ELEVATION	97.67	97.70	97.70	97.70	97.70	97.70	97.70	97.70	97.70	97.70	97.70	
	GROUND SURFACE ELEVATION	97.73	97.86	98.00	98.42	98.50	98.66	98.99	98.87	98.50	99.00	99.49	
	REDUCED DISTANCE	0.00	3.00	8.50	25.00	28.00	35.59	50.00	52.99	75.00	100.00	124.00	
	DISTANCE	0.00	2.00	2.50	3.00	7.39	14.61	2.99	2.00	17.01	23.00	14.00	
	STATION	BP	+3.00	+3.50	+8.50	NO.1	+3.00	+10.39	NO.2	+4.99	NO.3	NO.4	EP
	CURVE	—											

Note : The construction of CD-2 and CD-3 is not included in the First Stage Implementation.

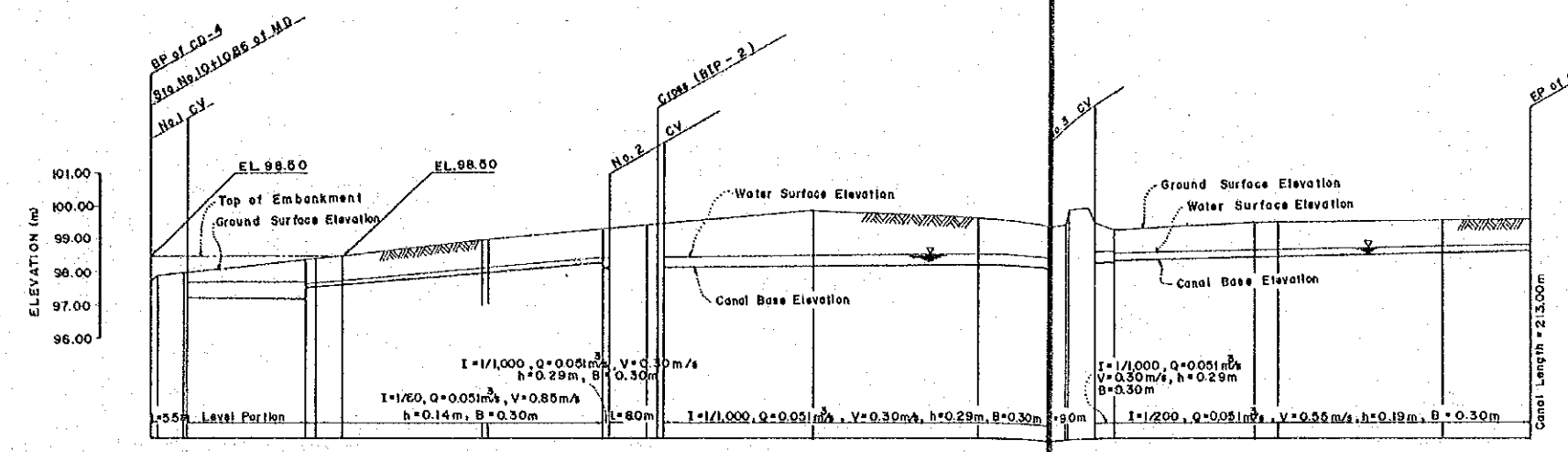
DP : Drainage Drop
CV : Drainage Culvert

HIS MAJESTY'S GOVERNMENT OF NEPAL
HORTICULTURAL DEVELOPMENT PROJECT
NEPALGUNJ SUB-CENTER

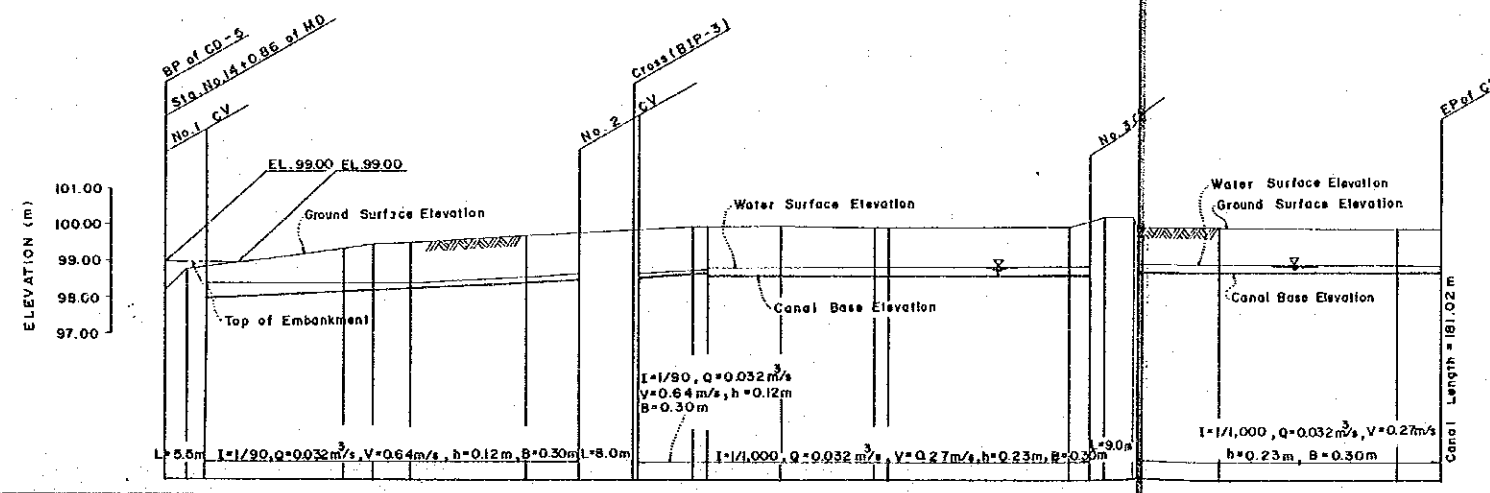
TITLE :
PROFILE (2/4)
CD-1, CD-2, CD-3

DATE : MAR. 1986 D.W.G. NO. : N 300 - 04

JAPAN INTERNATIONAL COOPERATION AGENCY



COLLECTOR DRAIN - 4	CANAL BASE ELEVATION	97.24	97.27	97.23	97.23	97.97	97.97	98.28	98.17	98.20	98.22	98.24	98.29	98.29	98.48	98.50	98.62	98.69
	WATER SURFACE ELEVATION	97.68	97.71	97.71	97.76	98.11	98.13	98.32	98.36	98.49	98.51	98.53	98.59	98.59	98.67	98.69	98.81	98.88
	GROUND SURFACE ELEVATION	97.73	97.85	97.85	98.00	98.38	98.41	98.32	98.33	98.44	98.48	98.49	98.50	98.50	98.50	98.51	98.54	98.59
	REDUCED DISTANCE	0.00	0.00	0.00	25.43	25.00	50.00	51.00	68.43	69.43	75.00	77.23	100.00	125.00	141.50	143.00	147.00	150.00
	DISTANCE	0.00	0.00	0.00	17.93	1.57	21.00	1.00	17.43	1.00	5.77	0.90	22.57	25.00	21.50	3.50	25.00	213.00
	STATION	BP	+1.30	+1.30	+2.83	+4.00	+1.00	+1.00	+1.84	+1.84	+4.03	+4.93	+1.00	+1.00	+1.70	+2.00	+2.15	+2.00
	CURVE	----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- -----																



COLLECTOR DRAIN - 5	CANAL BASE ELEVATION	97.96	97.99	98.21	98.25	98.31	98.48	98.57	98.60	98.69	98.71	98.65	98.64	98.65	98.67	98.67	98.74	98.74
	WATER SURFACE ELEVATION	98.40	98.43	98.43	98.43	98.43	98.60	98.69	98.72	98.72	98.72	98.72	98.72	98.72	98.72	98.72	98.74	98.74
	GROUND SURFACE ELEVATION	98.19	98.80	98.87	98.87	98.87	98.87	98.87	98.87	98.87	98.87	98.87	98.87	98.87	98.87	98.87	98.87	98.87
	REDUCED DISTANCE	0.00	3.00	5.50	25.00	28.00	33.92	50.00	57.32	61.82	64.82	65.32	75.00	75.00	85.00	95.00	100.00	100.00
	DISTANCE	0.00	3.00	2.50	19.50	4.00	4.92	16.08	7.32	4.50	3.00	0.50	7.68	2.00	10.00	10.00	2.72	181.02
	STATION	BP	+3.00	+3.50	+1.82	+4.00	+8.92	+1.00	+7.32	+1.82	+4.82	+5.32	+12.00	+12.00	+12.00	+12.00	+12.00	+12.00
	CURVE	----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- ----- -----																

Note : The construction of CD - 4 is not included in the First Stage Implementation.

DP : Drainage Drop
CV : Drainage Culvert

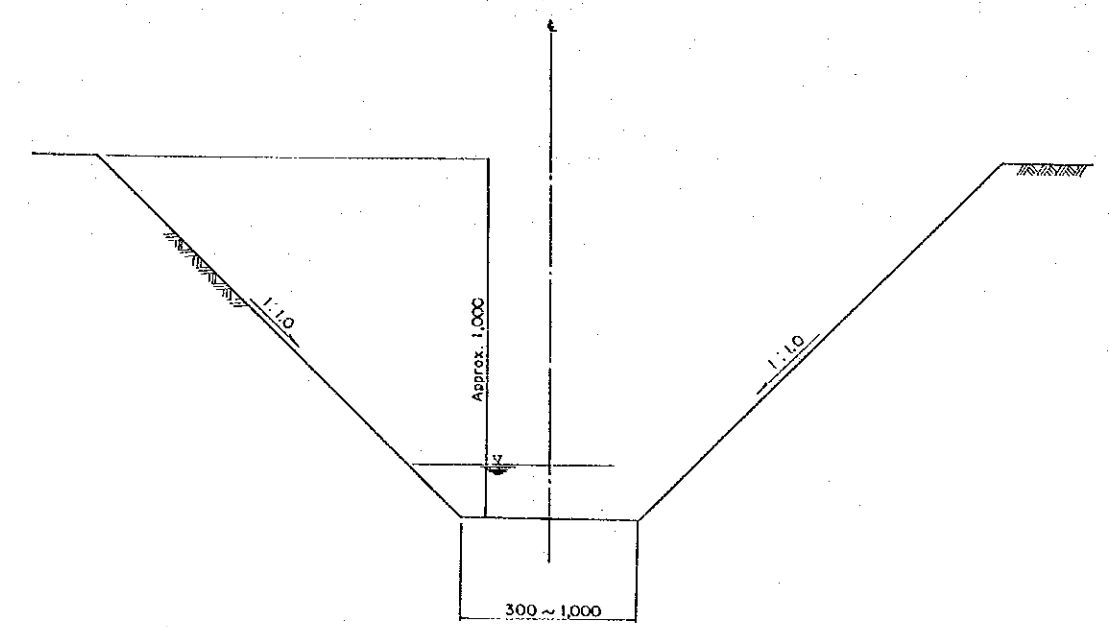
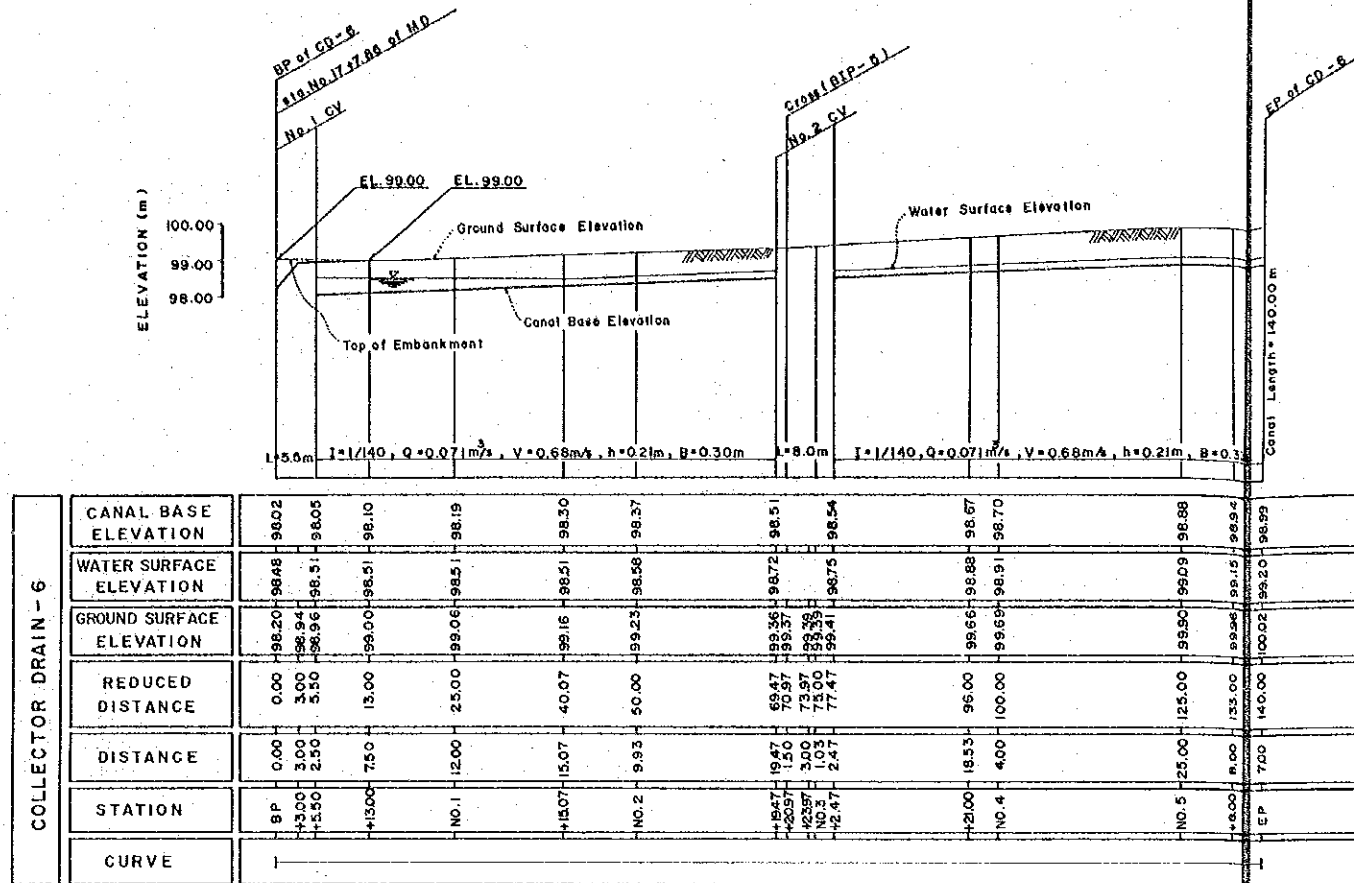
Note : The construction of CD - 4 is not included in the First Stage Implementation.

HIS MAJESTY'S GOVERNMENT OF NEPAL
HORTICULTURAL DEVELOPMENT PROJECT
NEPALGUNJ SUB-CENTER

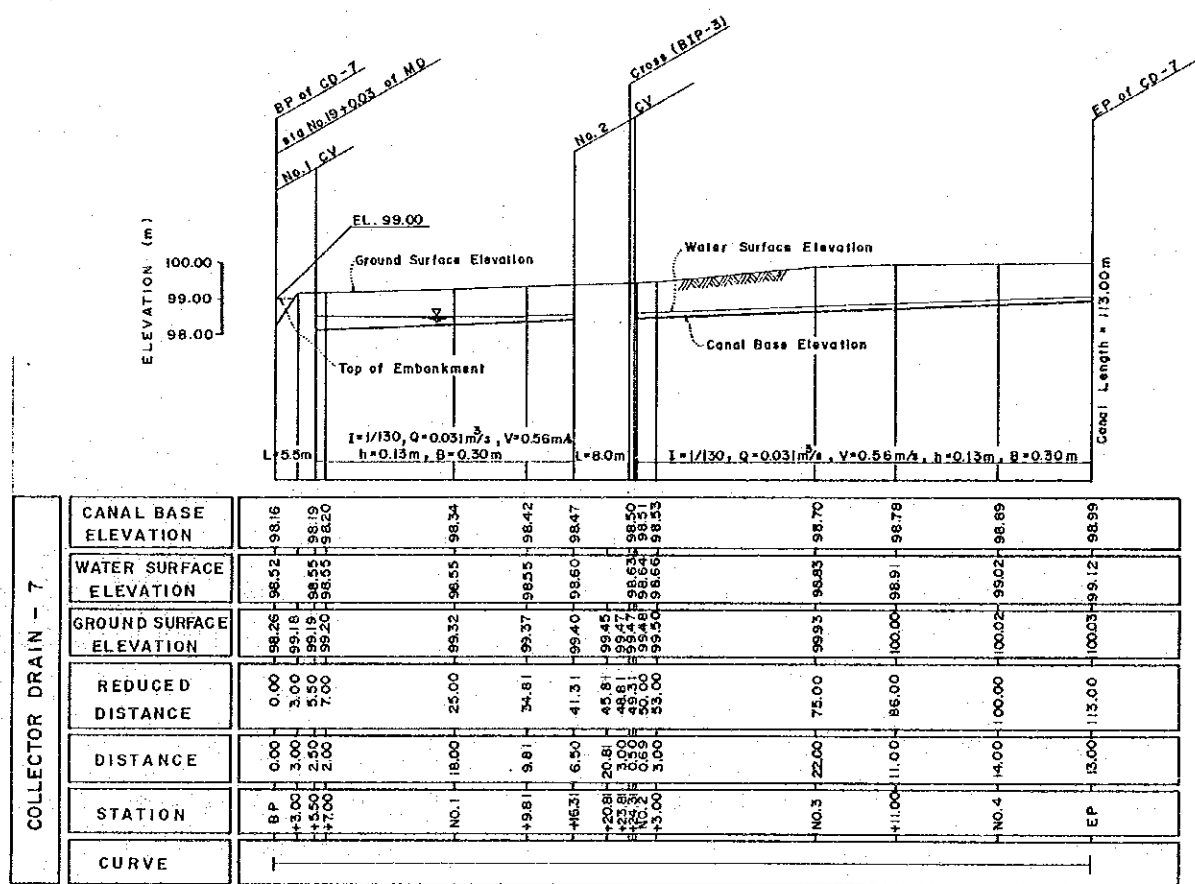
TITLE :
PROFILE (3/4)
CD - 4, CD - 5

DATE	MAR. 1986	DWG. NO.	N 300 - 05
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JAPAN INTERNATIONAL COOPERATION AGENCY



TYPICAL CROSS SECTION OF DRAINAGE CANALS



DP : Drainage Drop
CV : Drainage Culvert

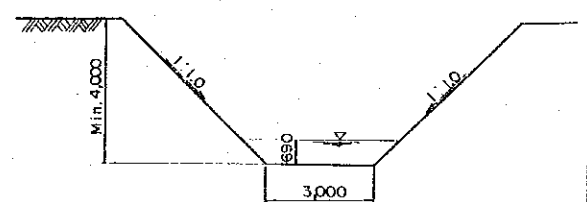
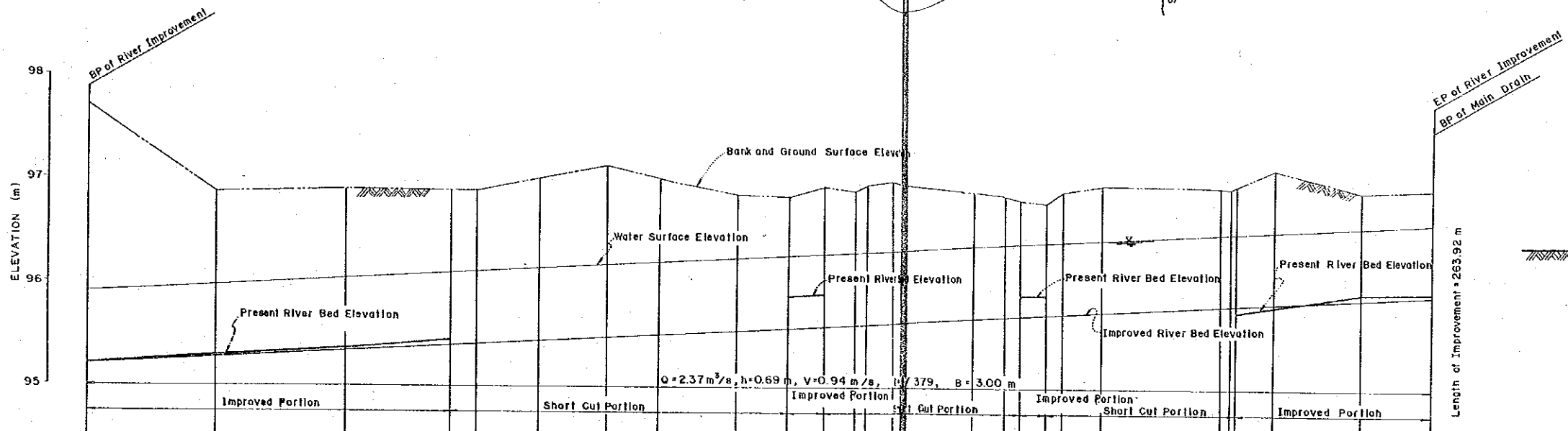
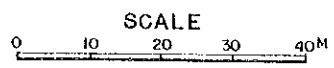
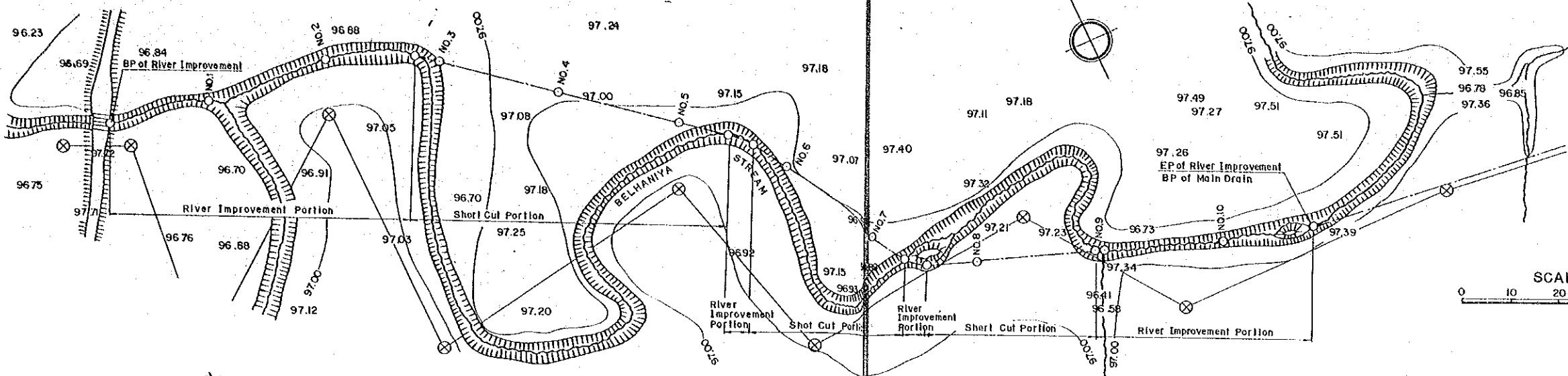
Note: The construction of CD-6 shall not be included in the First stage Implementation

HIS MAJESTY'S GOVERNMENT OF NEPAL
HORTICULTURAL DEVELOPMENT PROJECT
NEPALGUNJ SUB-CENTER

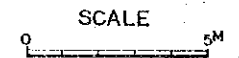
TITLE:
PROFILE (4/4)
CD - 6, CD - 7

DATE	MAR. 1986	D.W.G. NO.	N 300 - 06
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JAPAN INTERNATIONAL COOPERATION AGENCY



TYPICAL SECTION OF IMPROVED BELHANIYA STREAM



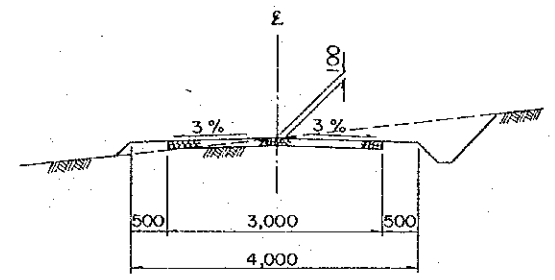
IMPROVED RIVER BED EL.	95.22	95.30	95.35	95.40	95.42	95.45	95.48	95.51	95.55	95.58	95.59	95.61	95.62	95.63	95.66	95.70	95.71	95.72	95.73	95.75	95.81	95.81	95.83	95.83	95.88	95.92	
WATER SURFACE ELEVATION	95.91	95.98	96.04	96.09	96.11	96.14	96.17	96.20	96.24	96.27	96.28	96.30	96.31	96.32	96.37	96.39	96.40	96.41	96.42	96.44	96.50	96.50	96.53	96.53	96.57	96.57	
RIVER BED ELEVATION	95.22	95.30	95.37	95.45	96.11	96.14	96.17	96.20	96.24	96.27	96.28	96.30	96.31	96.32	96.37	96.39	96.40	96.41	96.42	96.44	96.50	96.50	96.53	96.53	96.57	96.57	
BANK ELEVATION	97.71	96.85	96.88	96.88	96.88	96.75	96.75	96.73	96.73	96.73	96.73	96.73	96.73	96.73	96.81	96.79	96.79	96.79	96.79	96.81	96.81	96.81	96.81	96.81	96.81	96.81	96.81
GROUND SURFACE ELEVATION	97.71	96.85	96.88	96.88	96.88	96.75	96.75	96.73	96.73	96.73	96.73	96.73	96.73	96.73	96.81	96.79	96.79	96.79	96.79	96.81	96.81	96.81	96.81	96.81	96.81	96.81	96.81
GROUND DISTANCE	0.00	25.00	50.00	70.00	75.00	87.00	100.00	110.00	125.00	135.00	142.00	148.00	150.00	156.00	175.00	181.00	184.12	189.12	192.12	200.00	231.12	236.00	236.92	243.00	250.00	263.92	
DISTANCE	0.00	25.00	25.00	20.00	5.00	12.00	13.00	10.00	15.00	10.00	7.00	6.00	2.00	6.00	19.00	6.00	3.12	5.00	3.00	7.88	3.12	0.98	0.98	24.00	13.92	263.92	
STATION	BP	No. 1	No. 2	+20.00	No. 3	+12.00	No. 4	+10.00	No. 5	+10.00	+17.00	+23.00	No. 6	+6.00	No. 7	+9.12	+4.12	+17.12	No. 8	+6.00	No. 9	No. 10	EP				
CURVE																											

HIS MAJESTY'S GOVERNMENT OF NEPAL
 HORTICULTURAL DEVELOPMENT PROJECT
 NEPALGUNJ SUB-CENTER

TITLE:
IMPROVEMENT OF BELHANIYA STREAM

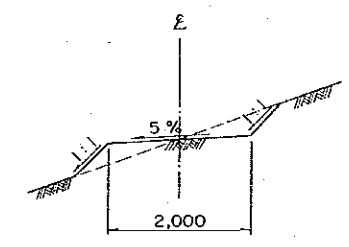
DATE: MAR. 1986 | D.W.G. NO. | N 300 - 07

JAPAN INTERNATIONAL COOPERATION AGENCY



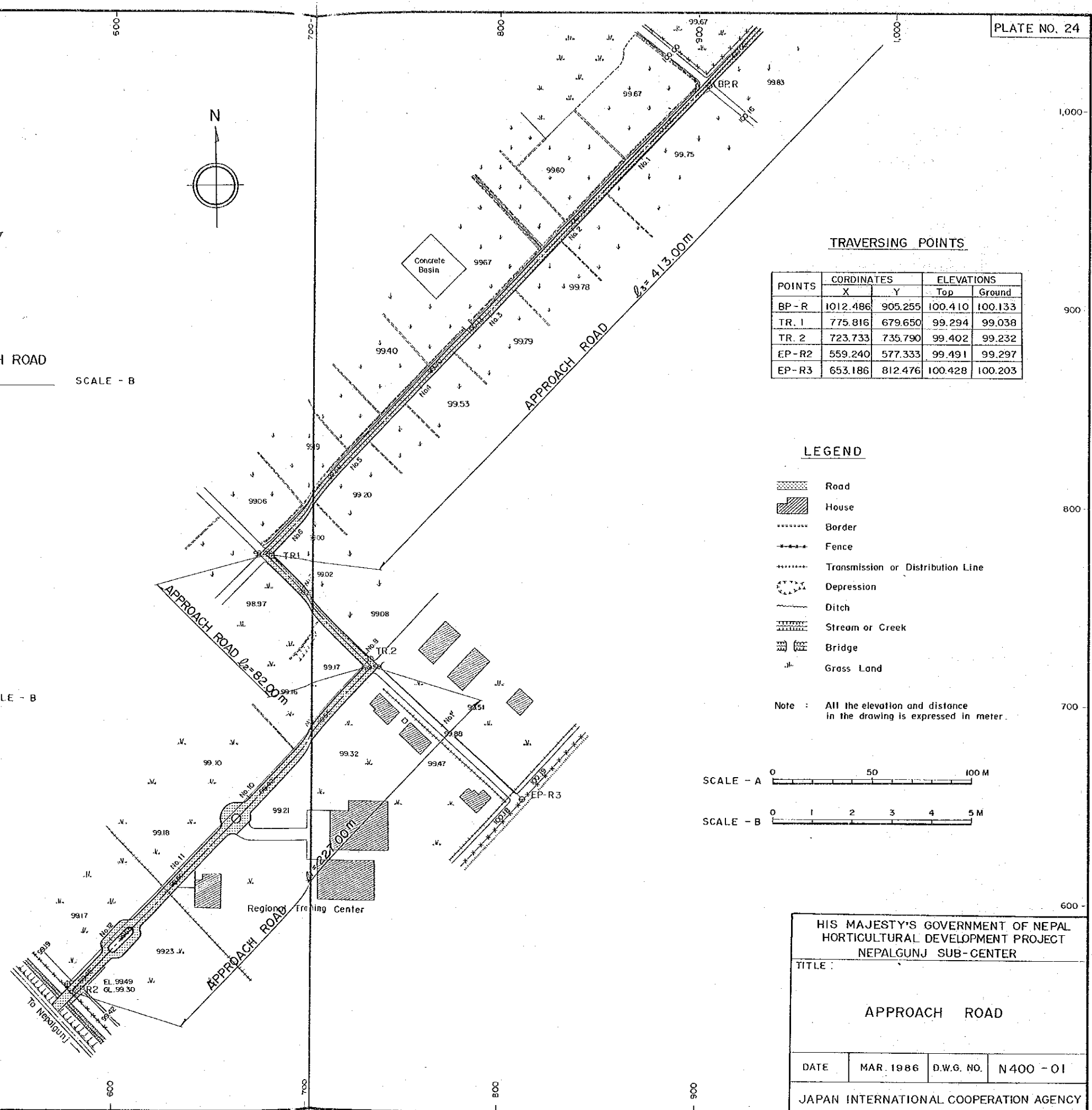
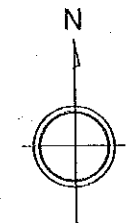
TYPICAL CROSS SECTION OF APPROACH ROAD AND MAIN FARM ROAD

SCALE - B



TYPICAL CROSS SECTION OF SECONDARY FARM ROAD

SCALE - B



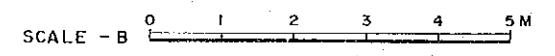
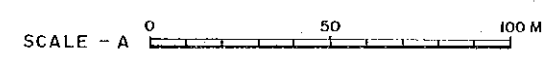
TRAVERSING POINTS

POINTS	COORDINATES		ELEVATIONS	
	X	Y	Top	Ground
BP-R	1012.486	905.255	100.410	100.133
TR. 1	775.816	679.650	99.294	99.038
TR. 2	723.733	735.790	99.402	99.232
EP-R2	559.240	577.333	99.491	99.297
EP-R3	653.186	812.476	100.428	100.203

LEGEND

- Road
- House
- Border
- Fence
- Transmission or Distribution Line
- Depression
- Ditch
- Stream or Creek
- Bridge
- Grass Land

Note : All the elevation and distance in the drawing is expressed in meter.



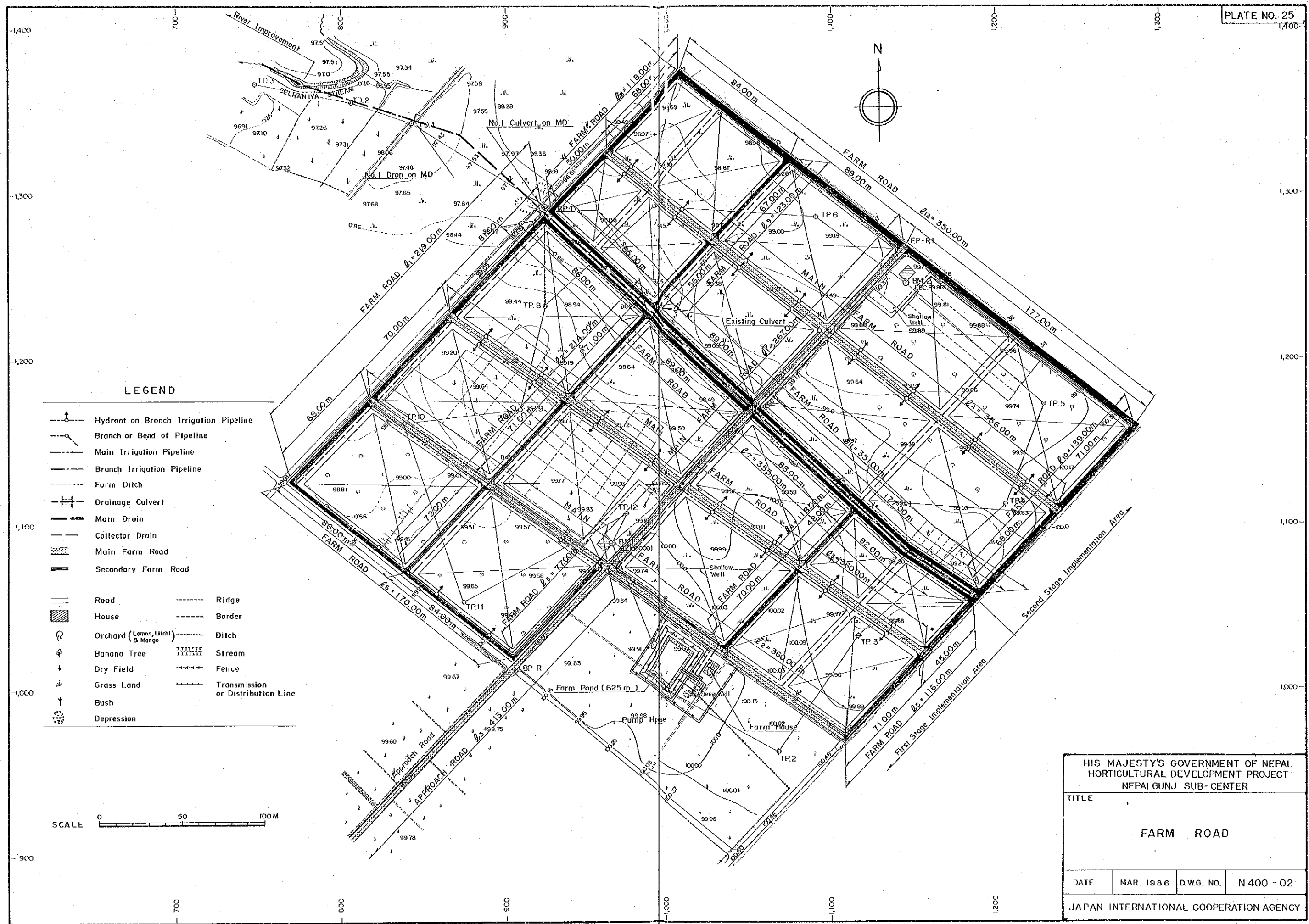
HIS MAJESTY'S GOVERNMENT OF NEPAL
HORTICULTURAL DEVELOPMENT PROJECT
NEPALGUNJ SUB-CENTER

TITLE :

APPROACH ROAD

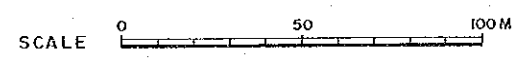
DATE	MAR. 1986	D.W.G. NO.	N400-01
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JAPAN INTERNATIONAL COOPERATION AGENCY

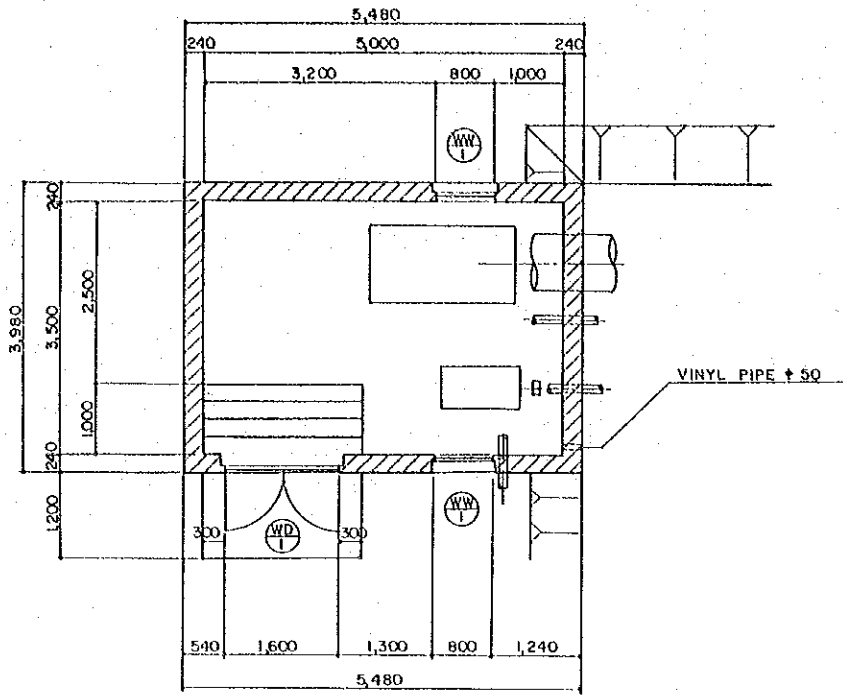


LEGEND

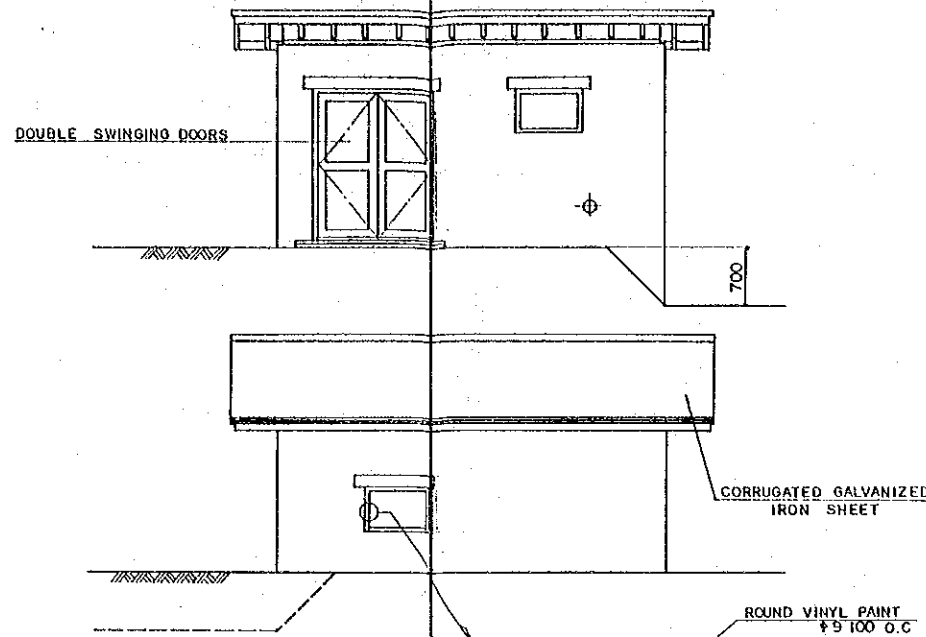
- Hydrant on Branch Irrigation Pipeline
- Branch or Bend of Pipeline
- Main Irrigation Pipeline
- Branch Irrigation Pipeline
- Form Ditch
- Drainage Culvert
- Main Drain
- Collector Drain
- Main Farm Road
- Secondary Farm Road
- Road
- House
- Orchard (Lemon, Litchi & Mango)
- Banana Tree
- Dry Field
- Grass Land
- Bush
- Depression
- Ridge
- Border
- Ditch
- Stream
- Fence
- Transmission or Distribution Line



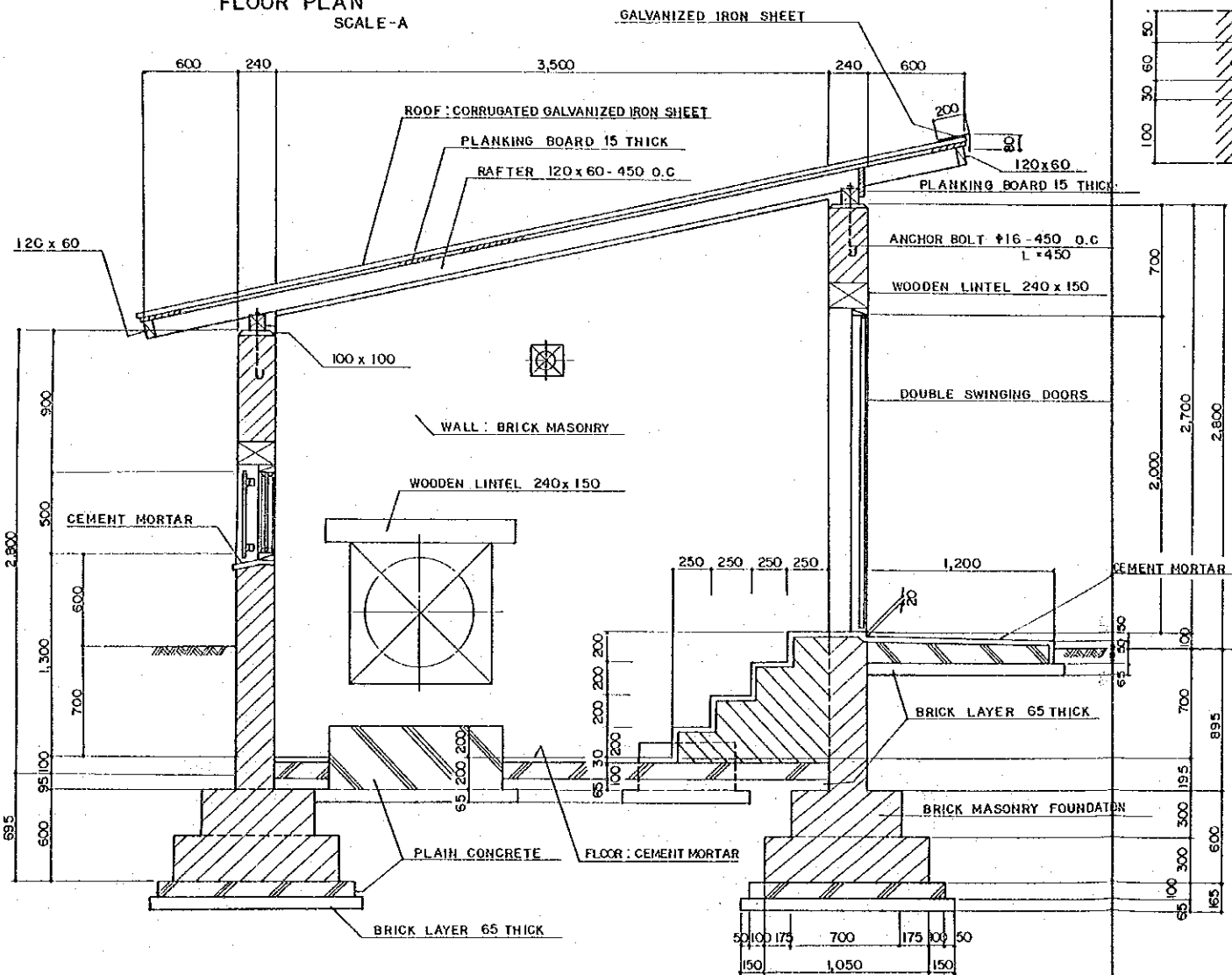
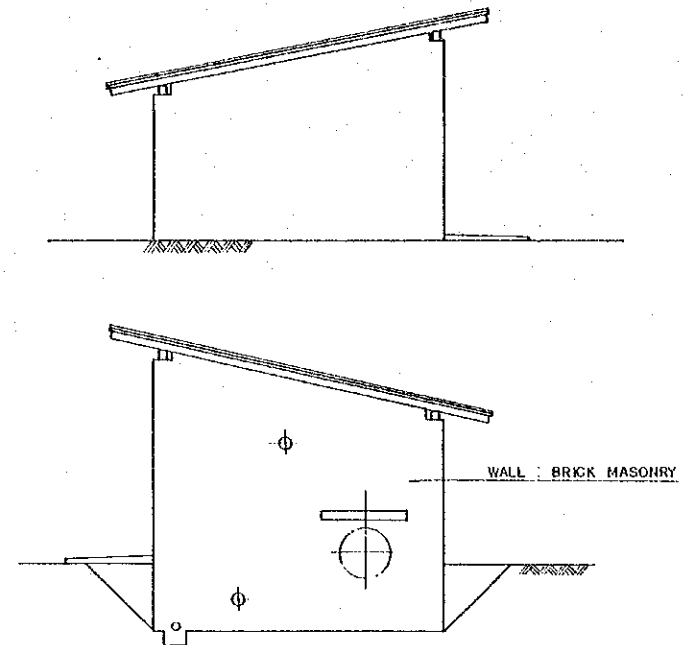
HIS MAJESTY'S GOVERNMENT OF NEPAL HORTICULTURAL DEVELOPMENT PROJECT NEPALGUNJ SUB-CENTER			
TITLE FARM ROAD			
DATE	MAR. 1986	D.W.G. NO.	N 400 - 02
JAPAN INTERNATIONAL COOPERATION AGENCY			



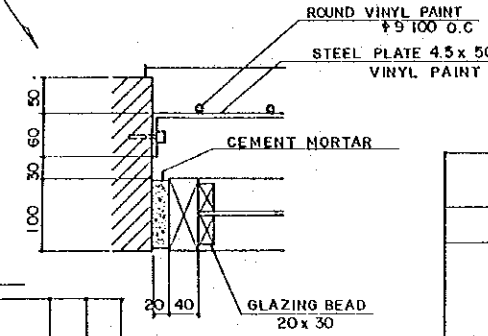
FLOOR PLAN
SCALE - A



ELEVATION
SCALE - A

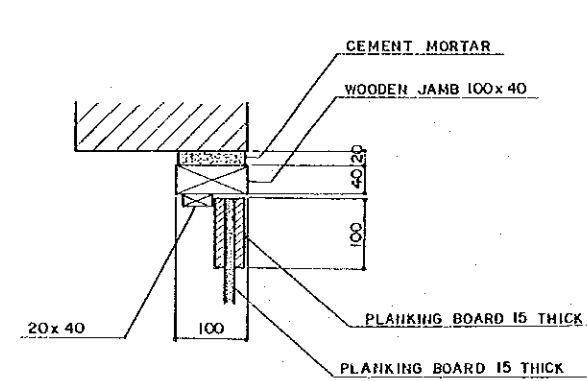


SECTION
SCALE - B

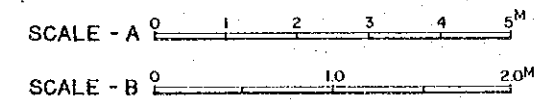


DOOR AND WINDOWS SCHEDULE SCALE - A

SYMBOL	DOUBLE SWINGING DOORS	FIXED WINDOW
PROFILE		
ROOM	PUMP ROOM	PUMP ROOM
DEPTH	QUANTITY	1
FINISH	PLANKING BOARD	
GLASS		TRANSPARENT GLASS 2 ^{MM}
HARDWARE	CYLINDER LOCKSET MORTISE HINGES FLUSH BOLT	
REMARKS	HINGE 100 ^{MM} 6 NOS	



DOOR DETAIL
SCALE - A



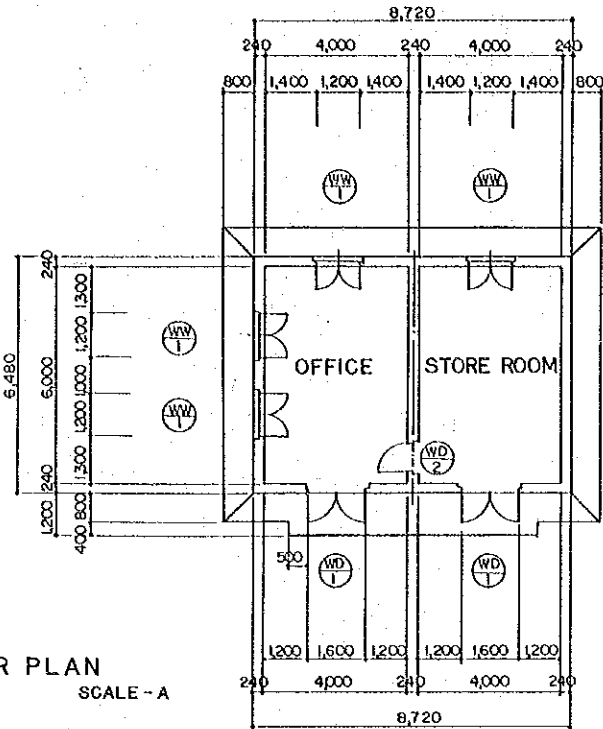
HIS MAJESTY'S GOVERNMENT OF NEPAL
HORTICULTURAL DEVELOPMENT PROJECT
NEPALGUNJ SUB-CENTER

TITLE:

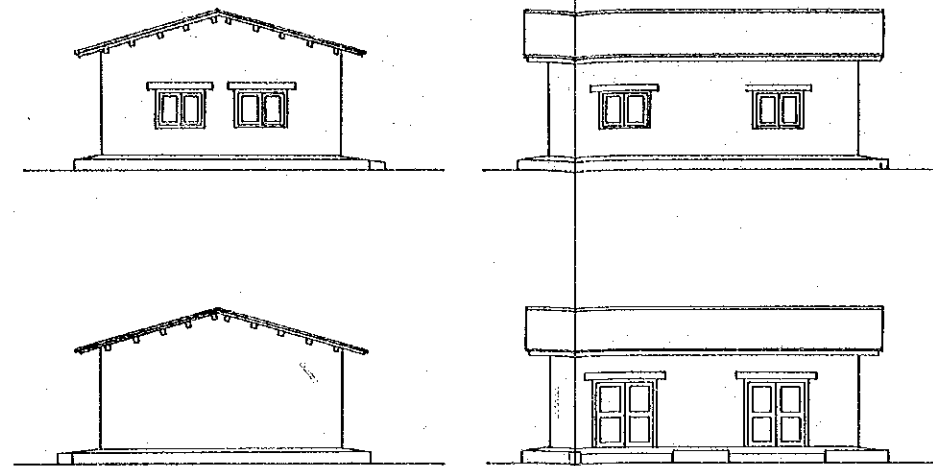
PUMP HOUSE

DATE	MAR. 1986	D.W.G. NO.	N 500 - 01
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JAPAN INTERNATIONAL COOPERATION AGENCY

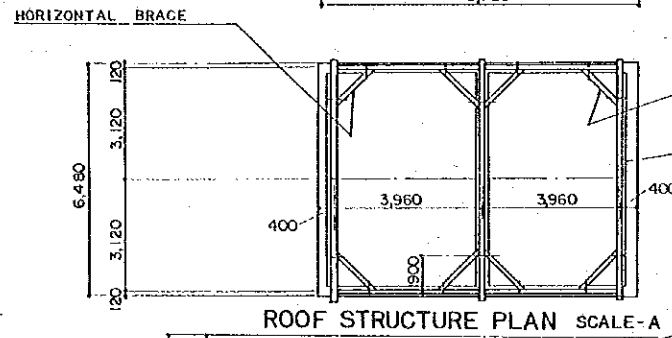


FLOOR PLAN
SCALE - A

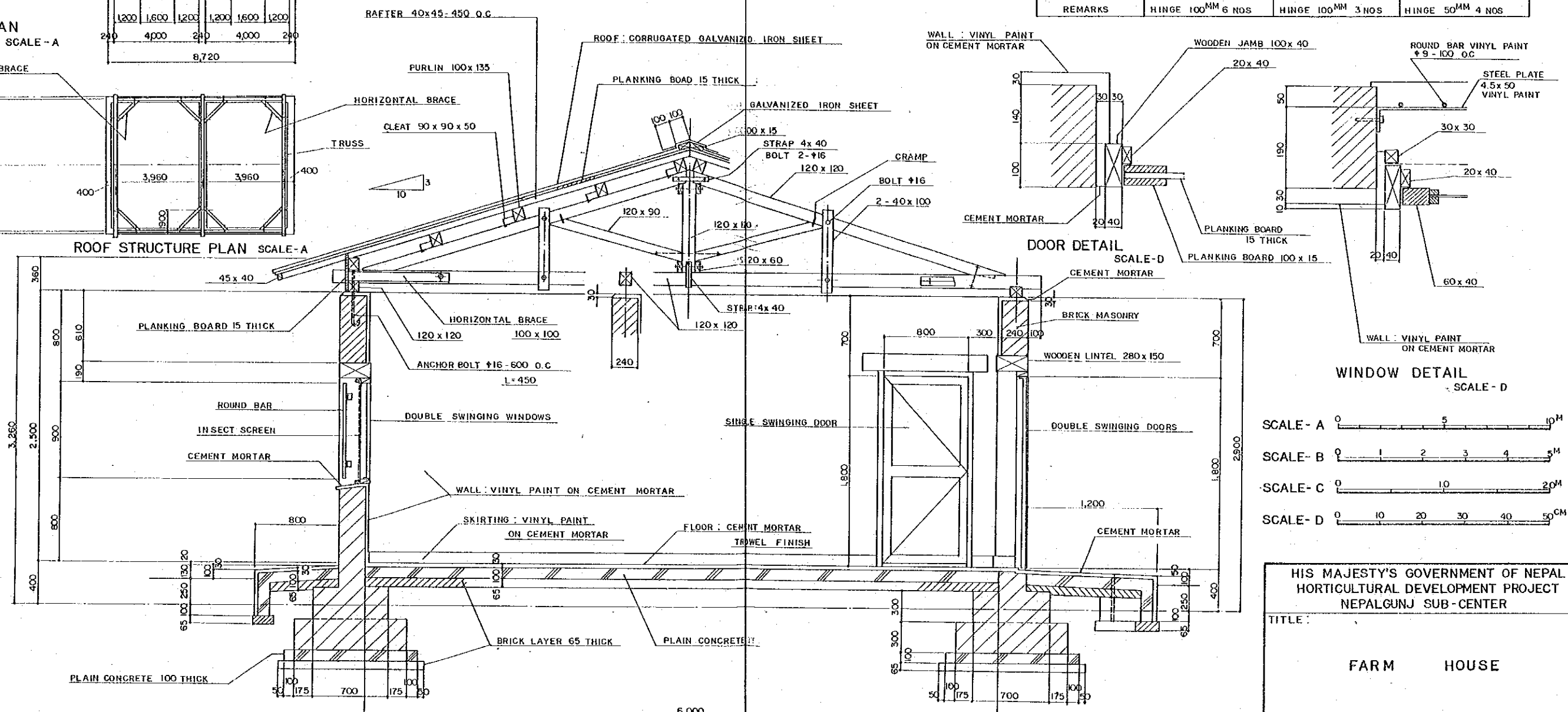


ELEVATION
SCALE - A

DOOR AND WINDOWS SCHEDULE				SCALE - B	
SYMBOL	① DOUBLE SWINGING DOORS	② SINGLE SWINGING DOOR	③ DOUBLE SWINGING WINDOWS		
PROFILE					
ROOM	OFFICE, STORE ROOM	STORE ROOM	OFFICE, STORE ROOM		
DEPTH	QUANTITY	2	1	4	
FINISH	PLANKING BOARD VP	PLANKING BOARD VP	VP	2 MM	
GLASS				TRANSPARENT GLASS	
HARDWARE	CYLINDER LOCKSET MORTISE HINGES FLUSH BOLT	CYLINDER LOCKSET MORTISE HINGES	FASTENERS MORTISE HINGES		
REMARKS	HINGE 100MM 6 NOS	HINGE 100MM 3 NOS	HINGE 50MM 4 NOS		

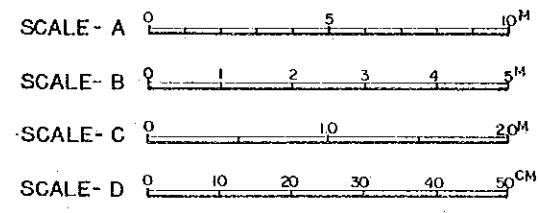


ROOF STRUCTURE PLAN SCALE - A



SECTION
SCALE - C

NOTE
OFFICE WALL : VINYL PAINT ON CEMENT MORTAR
STORE ROOM WALL : CEMENT MORTAR



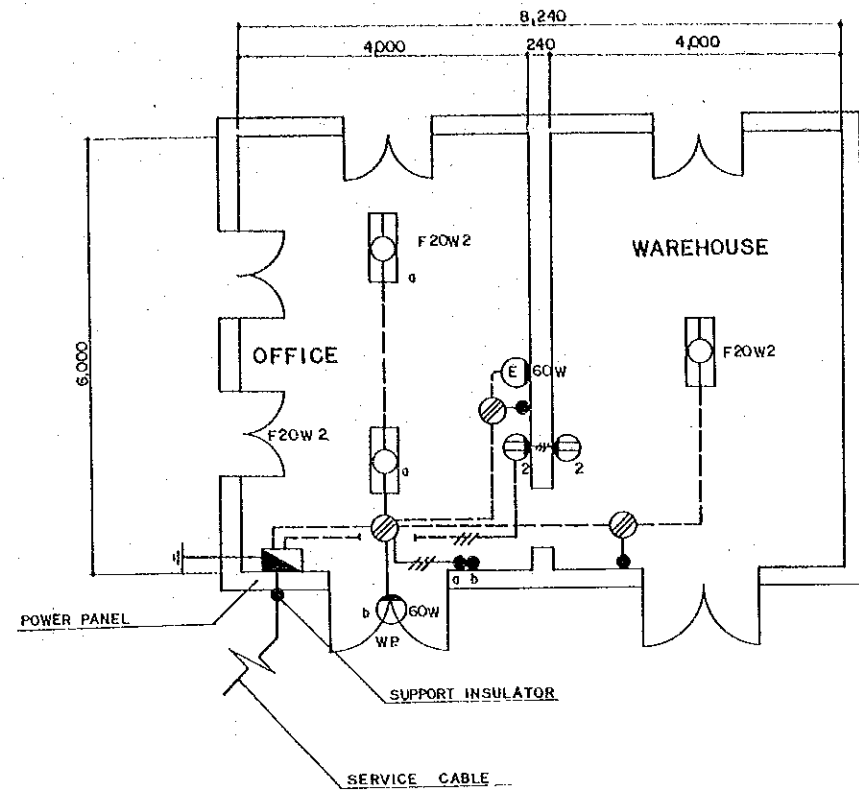
HIS MAJESTY'S GOVERNMENT OF NEPAL
HORTICULTURAL DEVELOPMENT PROJECT
NEPALGUNJ SUB-CENTER

TITLE :
FARM HOUSE

DATE	MAR. 1986	D.W.G. NO.	N 500 - 02
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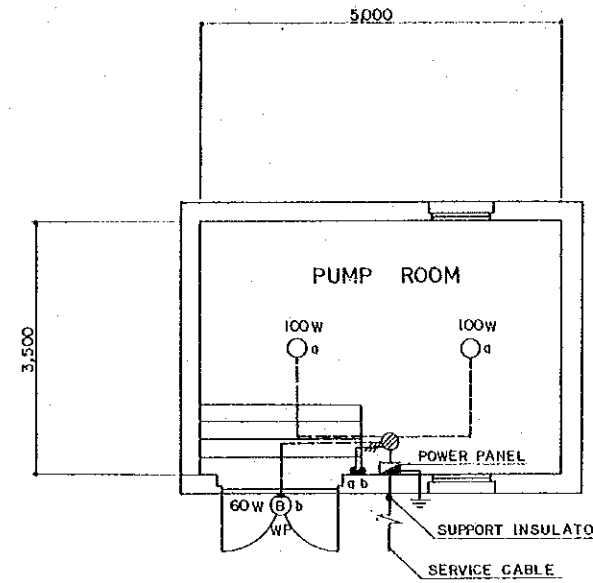
JAPAN INTERNATIONAL COOPERATION AGENCY

FARM HOUSE



FLOOR PLAN

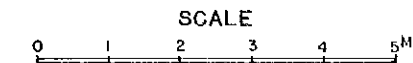
PUMP HOUSE



FLOOR PLAN

NOTES
1 ALL WIRES SHALL BE 600V VINYL INSULATED VINYL CABLE UNLESS OTHERWISE NOTED

CABLE	CORE	NUMBER
1.6MM φ	2	1
1.6MM φ	3	1
2.0MM φ	3	1



DISTRIBUTION BOARD		SCHEDULE 1φ 2W 230V 50HZ				
CIRCUIT NO	LOAD DESCRIPTION	Q'TY	UNIT	PHASE LOAD(VA)		LOCATION
				VA	U.W	
1	FLUORESCENT LAMPS 20W X 2	2	60	120		OFFICE
	- DITTO - 20W X 2	1	60	60		WAREHOUSE
2	INCANDESCENT LAMPS 60W	1	60	60		OFFICE
	- DITTO - 60W	1	60	60		OUT DOOR LIGHTING
2	DUPLEX CONVENIENCE OUTLET 200W	1	200	200		OFFICE
	- DITTO - 200W	1	200	200		WAREHOUSE

DISTRIBUTION BOARD		SCHEDULE 1φ 2W 230V 50HZ				
CIRCUIT NO	LOAD DESCRIPTION	Q'TY	UNIT	PHASE LOAD(VA)		LOCATION
				VA	U.W	
1	INCANDESCENT LAMPS 100W	2	100	200		PUMP ROOM
	- DITTO - 60W	1	60	60		OUT DOOR LIGHTING

LEGEND		
SYMBOL	NAME	REMARK
⊙ WP	INCANDESCENT LAMP	WALL INSTALLED (WATER PROOF TYPE)
⊙	INCANDESCENT LAMP	WALL INSTALLED
⊙ F20W X 2	FLUORESCENT LAMP	EXAMPLE FL 20W X 2
⊙	JOINT BOX FOR CABLE	
⊙	TUMBLER SWITCH	FOR ONE SET ON OFF LAMP CONTROL
⊙	TUMBLER SWITCH	FOR TWO SETS
⊙	DUPLEX CONVENIENCE OUTLET	WITH GROUNDING
⊙	DISTRIBUTION BOARD	FOR LIGHTING
---	WIRING CONCEALED IN CEILING OR WALL	
---	WIRING EXPOSED	
---	BUILDING SERVICE	
---	GROUNDING	

LEGEND		
SYMBOL	NAME	REMARK
⊙	INCANDESCENT LAMP	WALL INSTALLED (WATER PROOF TYPE)
⊙	INCANDESCENT LAMP	WALL INSTALLED
⊙	JOINT BOX FOR CABLE	
⊙	TUMBLER SWITCH	FOR TWO SET ON OFF LAMP CONTROL
⊙	DUPLEX CONVENIENCE OUTLET	WITH GROUNDING
⊙	DISTRIBUTION BOARD	FOR LIGHTING
---	WIRING CONCEALED IN CEILING OR WALL	
---	WIRING EXPOSED	
---	BUILDING SERVICE	
---	GROUNDING	

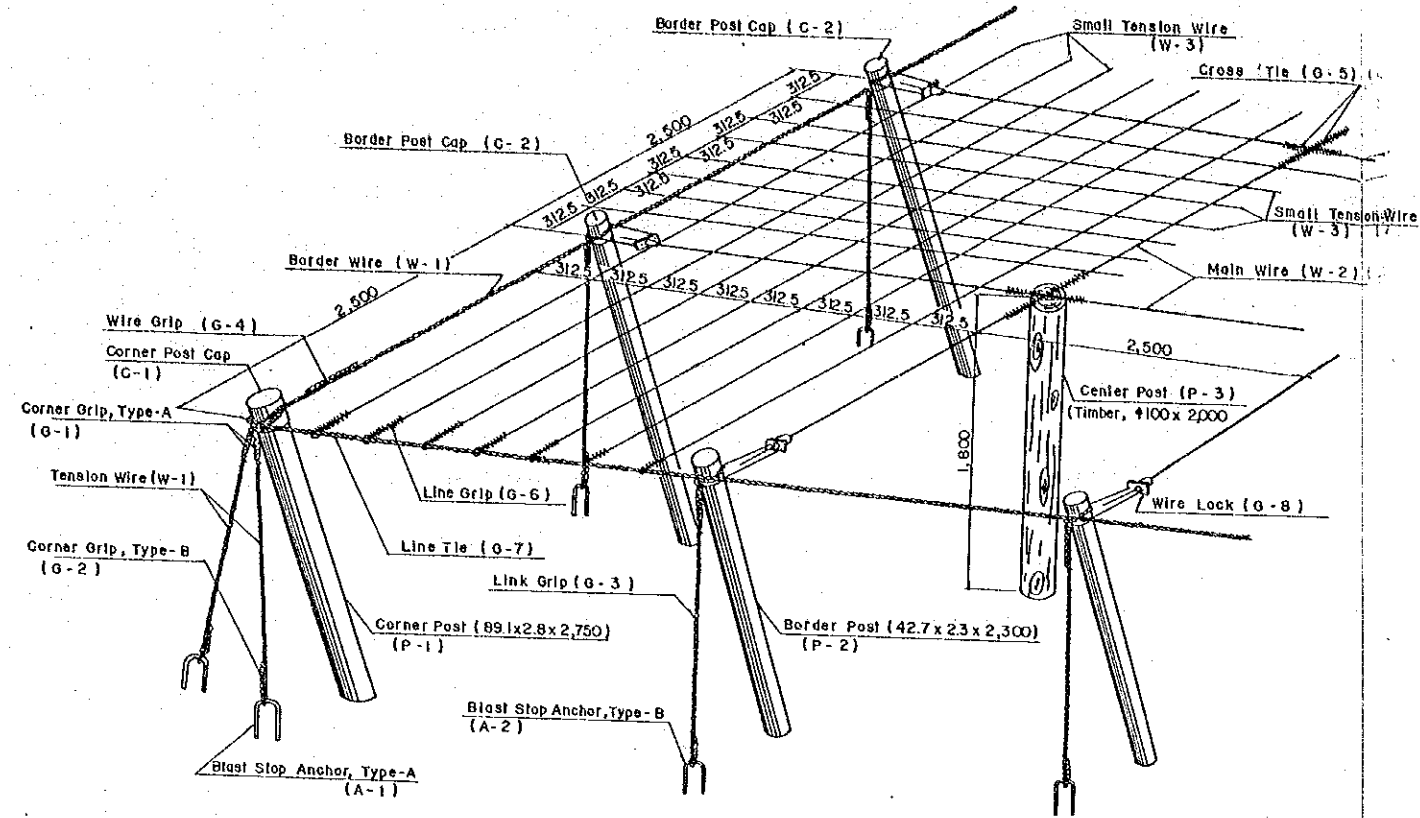
HIS MAJESTY'S GOVERNMENT OF NEPAL
HORTICULTURAL DEVELOPMENT PROJECT
NEPALGUNJ SUB-CENTER

TITLE :

ELECTRIC FACILITIES

DATE MAR. 1986 DWG. NO. N 500 - 03

JAPAN INTERNATIONAL COOPERATION AGENCY

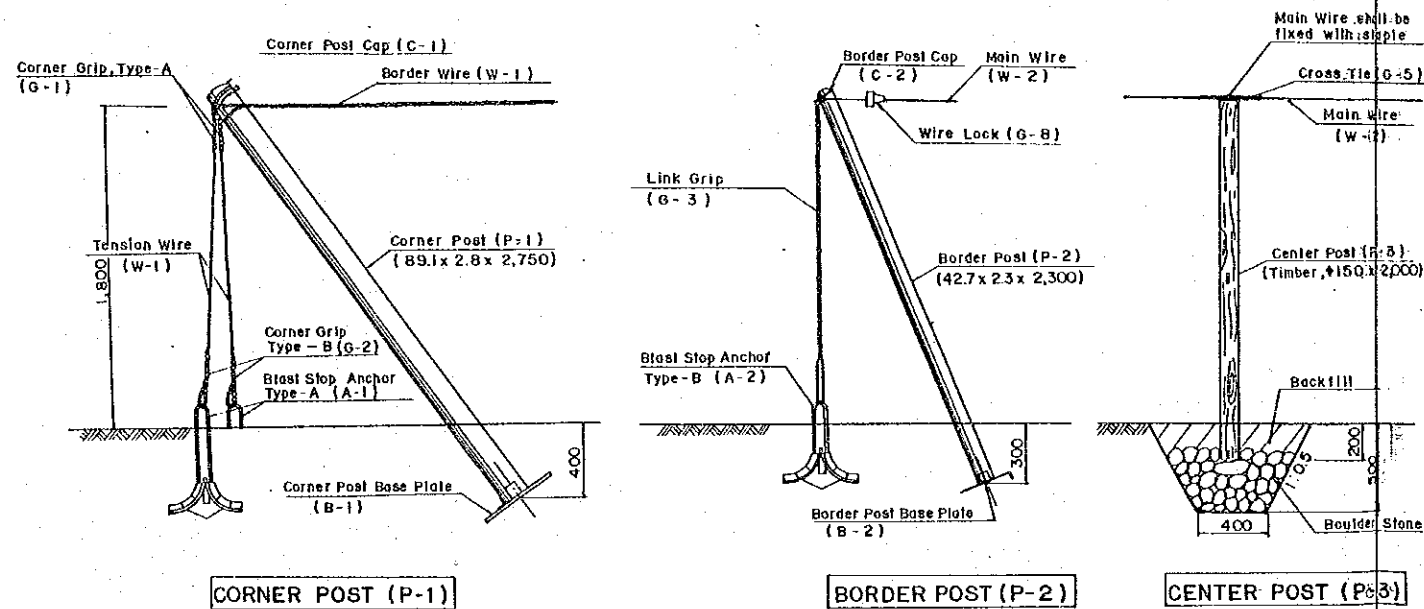


GENERAL VIEW OF VINE TRELLIS

LIST OF SUPPLIED MATERIALS

P-1	Corner Post	P-2	Border Post	P-3	Center Post
A-1	Blast Stop Anchor, Type-A	A-2	Blast Stop Anchor, Type-B	A-3	Blast Stop Anchor, Type-C
G-1	Corner Grip, Type-A	G-2	Corner Grip, Type-B	G-3	Link Grip
<p>Twined wire No.4 (φ6.0 mm) (No.14 wire x 7 Nos, 22mm²)</p>		<p>Twined wire (φ6.0 mm) (No.14 wire x 7 Nos, 22 mm²)</p>			

Note: The above materials shall be supplied to the Contractor.



INSTALLATION OF POLES

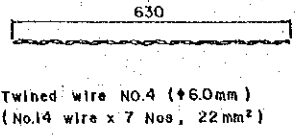
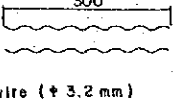
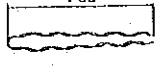
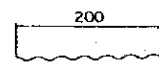
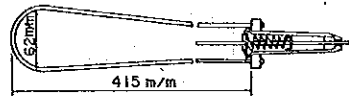
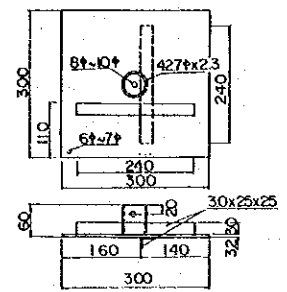
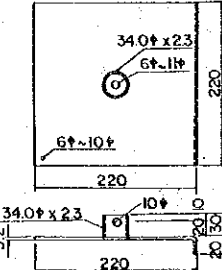
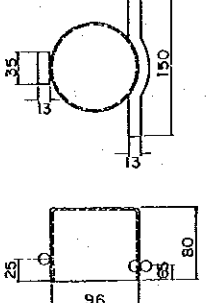
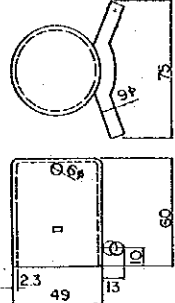
HIS MAJESTY'S GOVERNMENT OF NEPAL
 HORTICULTURAL DEVELOPMENT PROJECT
 NEPALGUNJ SUB-CENTER

TITLE:
VINE TRELLIS (1/3)

DATE: MAR. 1986 DWG. NO. N 600 - 01

JAPAN INTERNATIONAL COOPERATION AGENCY

LIST OF SUPPLIED MATERIALS

<p>G-4 Wire Grip</p> 	<p>G-5 Cross Tie</p> 	<p>G-6 Line Grip</p> 
<p>G-7 Line Tie</p> 	<p>G-8 Wire Lock</p> 	<p>B-1 Corner Post Base Plate</p> 
<p>B-2 Border Post Base Plate</p> 	<p>C-1 Corner Post Cap</p> 	<p>C-2 Border Post Cap</p> 

Code	Name	Nominal Size	Allowable Tensile Stress (kg)	Weight (kg/km)	Remarks
W-1	Border Wire Tension Wire	Sectional Area 22 mm ²	1,820	174.00	NO.14 wire x 7 nos
W-2	Main Wire	Dia. 3.2	725	62.97	NO.10 wire
W-3	Small Tension Wire	Dia. 2.0	284	24.60	NO.14 wire

Note : The above materials shall be supplied to the Contractor.

LIST OF REQUIRED MATERIALS

NO.	Mark	Name	Unit	Block I-1	Block I-2	Block II-1 (1)	Block II-1 (2)	Block II-2	Block II-3	Block II-4	Total
1	○	P-1 Corner Post	NO.	4	4	4	4	4	6	4	30
2	○	P-2 Border Post	NO.	108	108	78	73	108	105	107	687
3	●	P-3 Center Post	NO.	180	176	91	68	169	133	170	987
4	◆	A-1 Blast Stop Anchor, Type-A	NO.	8	8	8	8	8	12	8	60
5	◇	A-2 Blast Stop Anchor, Type-B	NO.	113	113	79	75	112	111	115	718
6	◇	A-3 Blast Stop Anchor, Type-C	NO.	48	48	25	21	45	37	46	270
7		G-1 Corner Grip, Type-A	NO.	8	8	8	8	8	12	8	60
8		G-2 Corner Grip, Type-B	NO.	8	8	8	8	8	12	8	60
9		G-3 Link Grip	NO.	113	113	79	75	112	111	115	718
10		G-4 Wire Grip	NO.	4	4	4	4	4	4	4	28
11		G-5 Cross Tie	NO.	1,490	1,600	740	600	1,400	1,150	1,430	8,410
12		G-6 Line Grip	NO.	770	826	602	546	812	826	840	5,222
13		G-7 Line Tie	NO.	770	826	602	546	812	826	840	5,222
14		G-8 Wire Lock	NO.	114	114	79	75	113	114	116	725
15		W-1 Border Wire and Tension Wire	m	310	310	232	216	302	314	306	1,990
16		W-2 Main Wire	m	4,120	4,120	1,990	1,610	3,720	3,080	3,910	22,530
17		W-3 Small Tension Wire	m	29,900	29,900	14,500	11,700	27,000	22,200	28,400	163,600
18		B-1 Corner Post Base Plate	NO.	4	4	4	4	4	6	4	30
19		B-2 Border Post Base Plate	NO.	108	108	78	73	108	105	107	687
20		C-1 Corner Post Cap	NO.	4	4	4	4	4	6	4	30
21		C-2 Border Post Cap	NO.	108	108	78	73	108	105	107	687
Net Trellis Area			ha.	0.48	0.48	0.25	0.21	0.45	0.37	0.46	2.7

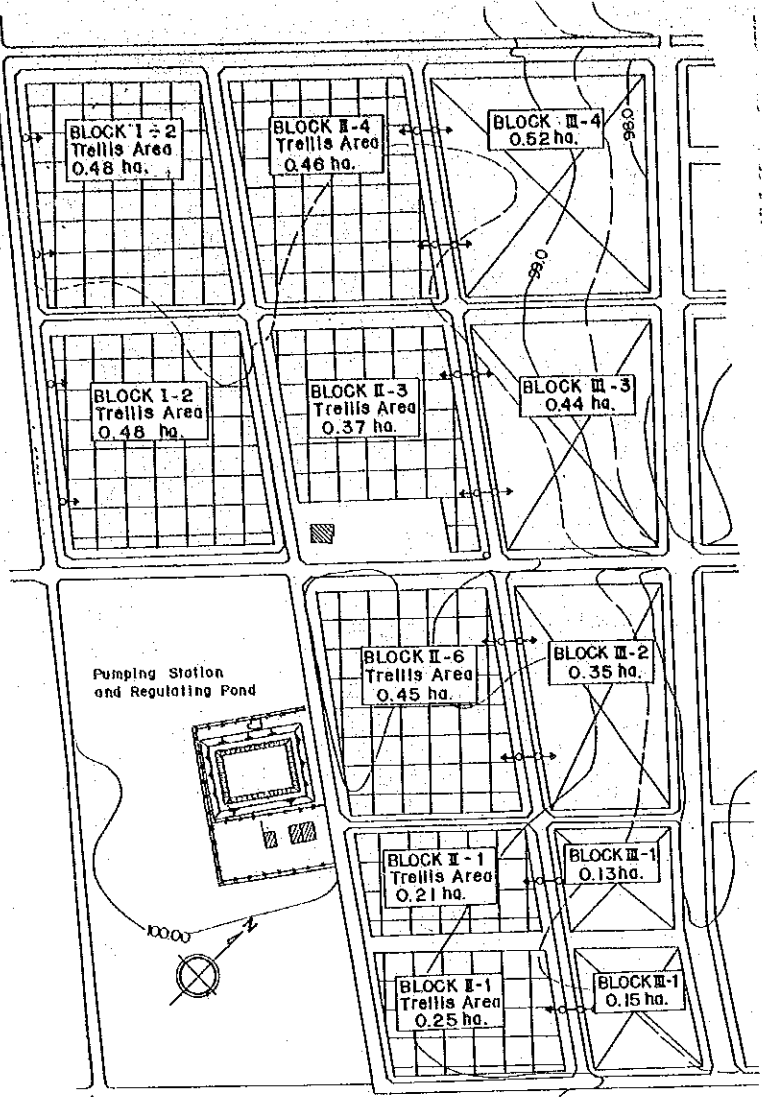
HIS MAJESTY'S GOVERNMENT OF NEPAL
HORTICULTURAL DEVELOPMENT PROJECT
NEPALGUNJ SUB-CENTER

TITLE :

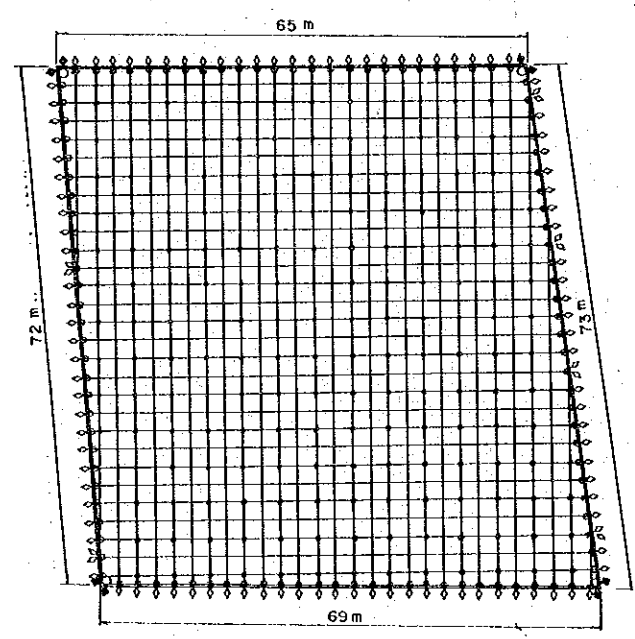
VINE TRELLIS (2 / 3)

DATE : MAR. 1986 D.W.G. NO. : N 600-02

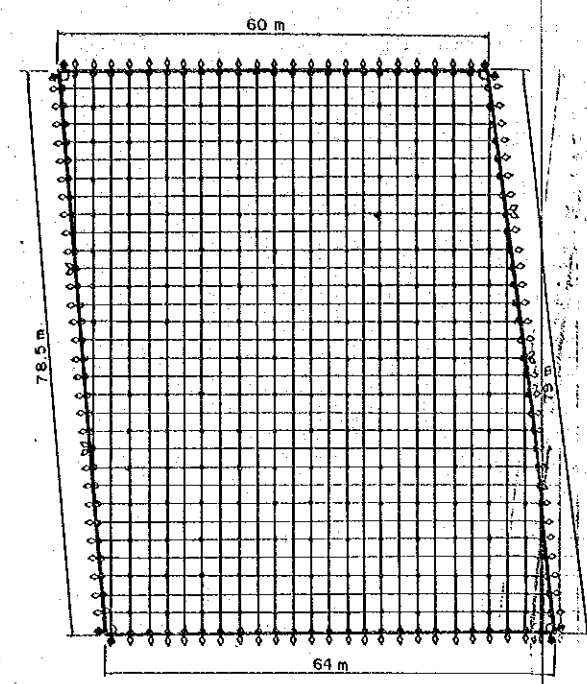
JAPAN INTERNATIONAL COOPERATION AGENCY



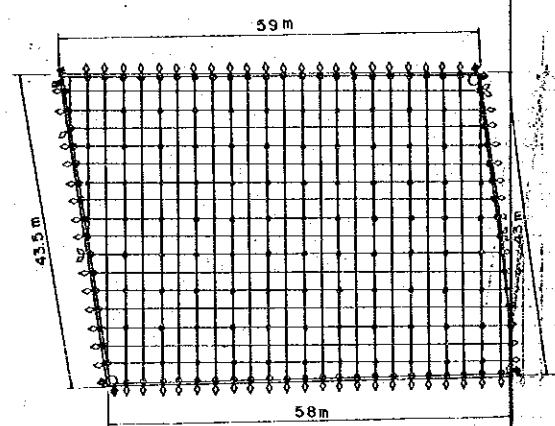
TRELLIS AREA



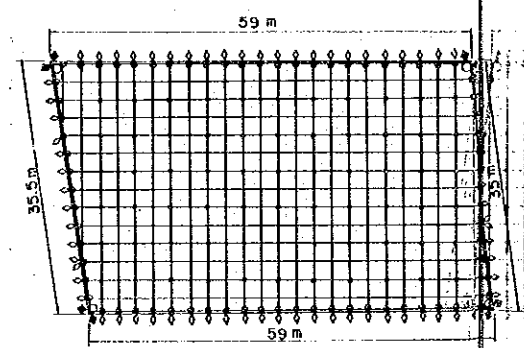
BLOCK I-1



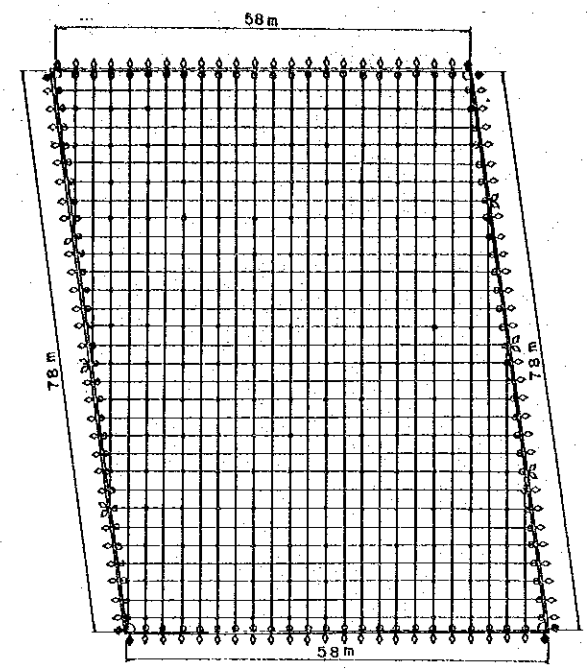
BLOCK I-2



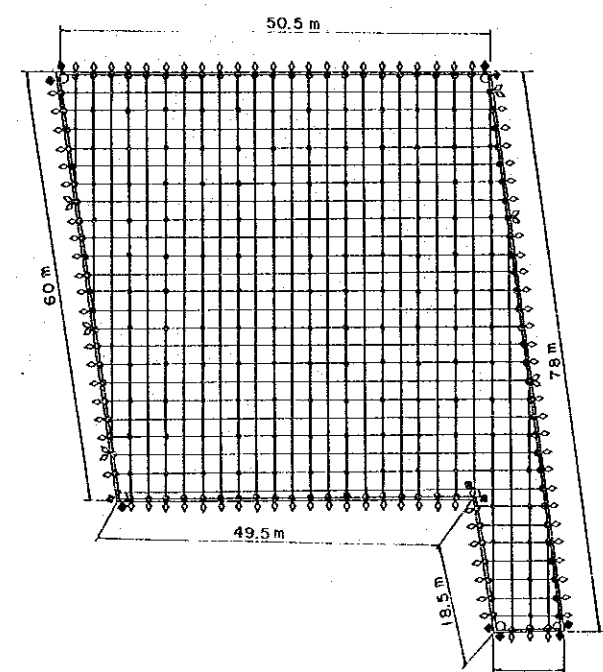
BLOCK II-1-(1)



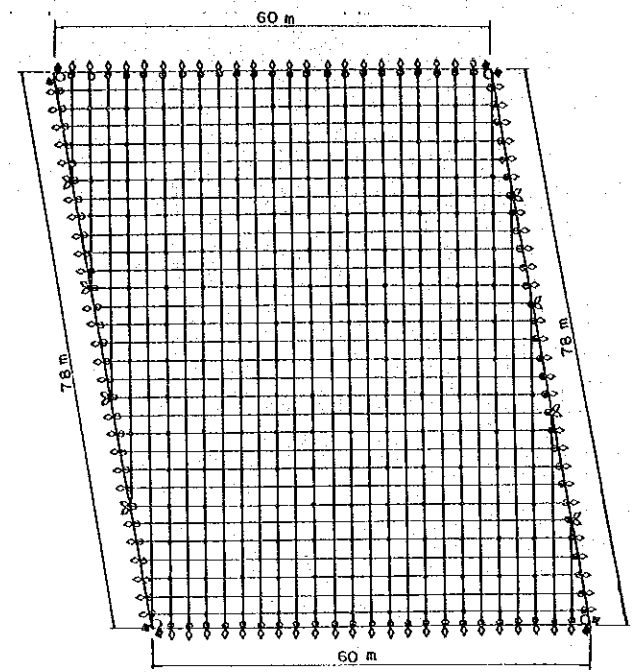
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BLOCK II-2

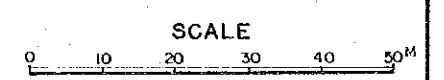


BLOCK II-3



BLOCK II-4

Mark No.	Name
○ P-1	Corner Post
○ P-2	Border Post
● P-3	Center Post
◆ A-1	Blast Stop Anchor, Type - A
◇ A-2	Blast Stop Anchor, Type - B
— W-1	Border Wire and Tension Wire
— W-3	Small Tension Wire



HIS MAJESTY'S GOVERNMENT OF NEPAL
HORTICULTURAL DEVELOPMENT PROJECT
NEPALGUNJ SUB-CENTER

TITLE :

VINE TRELLIS (3/3)

DATE	MAR. 1986	D.W.G. NO.	N600-03
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JAPAN INTERNATIONAL COOPERATION AGENCY

CONSTRUCTION TIME SCHEDULE OF NEPALGUNJ SUB - CENTER

WORK ITEM	1986						1987				REMARKS	
	Jul	Aug	Sep	Oct	Nov	Dec	Jan.	Feb.	Mar.	Apr.		
I. TENDER												
Tender Announce	▽											
Tender Close		▽										
Tender Evaluation			▽									
Award of Tender				▽								
Signing of Contract					▽							
Commencement						▽						
II. CONSTRUCTION												
1. Preparatory Works					—	—	—	—	—	—	—	—
2. Pump Station Facilities						—	—	—	—	—	—	—
3. Farm Pond							—	—	—	—	—	—
4. Irrigation Pipeline							—	—	—	—	—	—
5. Drainage Works						—	—	—	—	—	—	—
6. Road Works					—	—	—	—	—	—	—	—
7. Land Grading							—	—	—	—	—	—
8. Vine Trellis								—	—	—	—	—
9. Farm House								—	—	—	—	—
III. PROCUREMENT OF EQUIPMENTS AND MATERIALS												
1. Pumping Equipment							○					
2. Steel Pipes, P.V.C Pipes, Valves and Hydrants W/ Fitting							○					
3. Trellis Materials								○				
Sprinkler Sets									○			

HIS MAJESTY'S GOVERNMENT OF NEPAL
 HORTICULTURAL DEVELOPMENT PROJECT
 NEPALGUNJ SUB-CENTER

TITLE:
 CONSTRUCTION TIME SCHEDULE

DATE: MAR. 1986 D.W.G. NO. N700 - 01

JAPAN INTERNATIONAL COOPERATION AGENCY

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