

SUMMARY OF QUANTITIES

ITEM	DESCRIPTION	Q'TY
1.	Target Population in 2017	1,700
2.	Transmission Pipeline	338.5
3.	Distribution Pipeline	1,018.0
4.	Water Source Borehole	2 No.s
5.	Public Stand	6 No.s
6.	Elevated Tank	1 No.
7.	Yard for Solar Modules	1 No.
8.	Air Valve and Wash Out Chambers on Transmission Pipeline	0 No.
9.	Air Valve, Wash Out and Service Pipe Chambers on Distribution Pipeline	10 No.s

LEGEND

	Public Water Stand.
	Existing Water Source; Borehole.
	Solar Module.
	Elevated Tank.
	Distribution Pipeline.
	Transmission Pipeline.
	Electric Power Line
	Air Valve Chambers
	Wash Out Chambers
	Service Pipe Chambers
	Electric Power Line
	Education Center.
	Health Center.
	RGC Core Area.

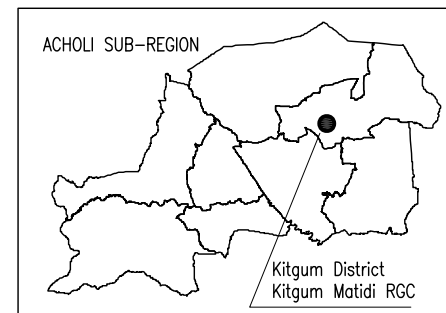
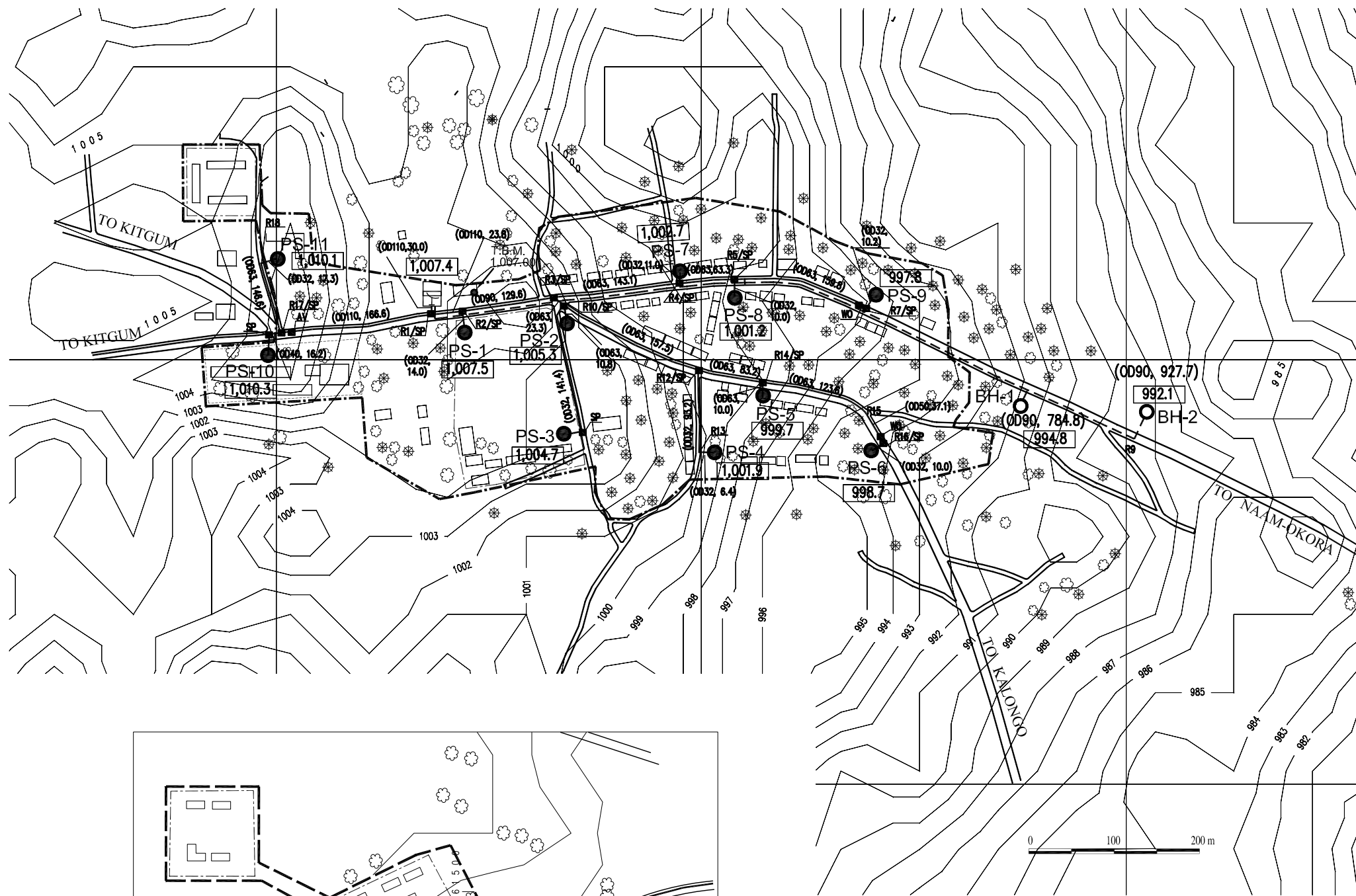
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No:	Date:	Approved:	Revision:

Project:  
**THE PROJECT FOR PROVISION OF IMPROVED WATER SOURCE FOR RETURNED IDP IN ACHOLI SUB-REGION IN REPUBLIC OF UGANDA**

**JICA**  
 JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)  
 TOKYO ENGINEERING CONSULTANTS CO., LTD.  
 IN ASSOCIATION WITH  
 OYO INTERNATIONAL CORPORATION

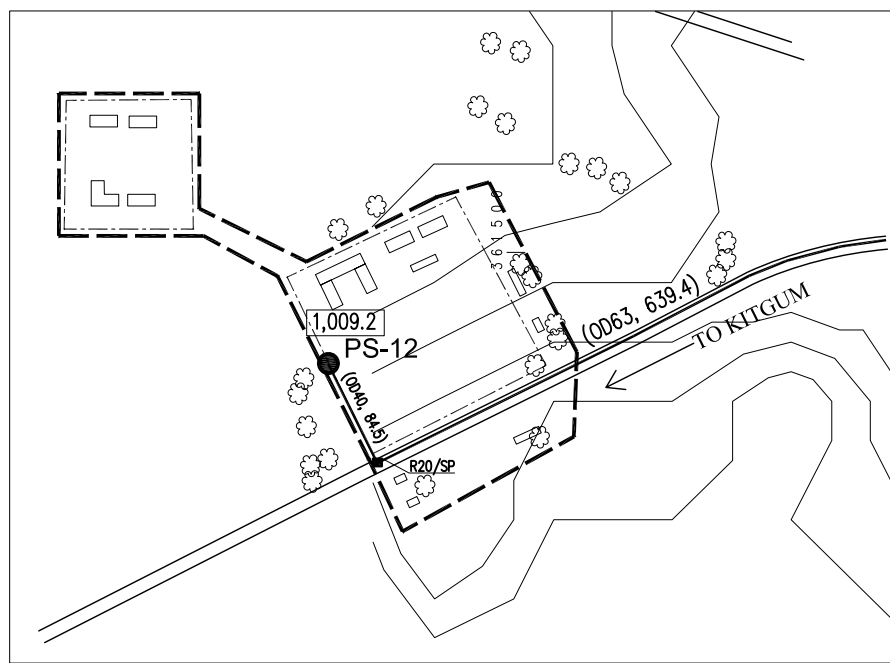
管路給水施設  
 Title:  
**施設配置計画図(アウエレ RGC)**

Date:		
No:		Ref:



SUMMARY OF QUANTITIES

ITEM	DESCRIPTION	Q'TY
1.	Target Population in 2017	2,800
2.	Transmission Pipeline	1,712.5
3.	Distribution Pipeline	2,361.9
4.	Water Source Borehole	2 No.s
5.	Public Stand	12 No.s
6.	Elevated Tank	1 No.
7.	Yard for Solar Modules	1 No.
8.	Air Valve and Wash Out Chambers on Transmission Pipeline	0 No.
9.	Air Valve, Wash Out and Service Pipe Chambers on Distribution Pipeline	17 No.s



LEGEND

●	Public Water Stand.
○	Existing Water Source; Borehole.
▭ (with lines)	Solar Module.
□	Elevated Tank.
—	Distribution Pipeline.
- - -	Transmission Pipeline.
- - -	Electric Power Line
AV	Air Valve Chambers
WO	Wash Out Chambers
SP	Service Pipe Chambers
---	Education Center.
---	Health Center.
---	RGC Core Area.

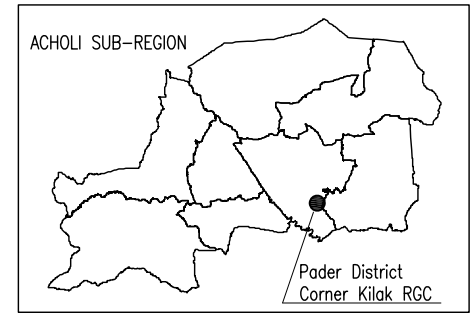
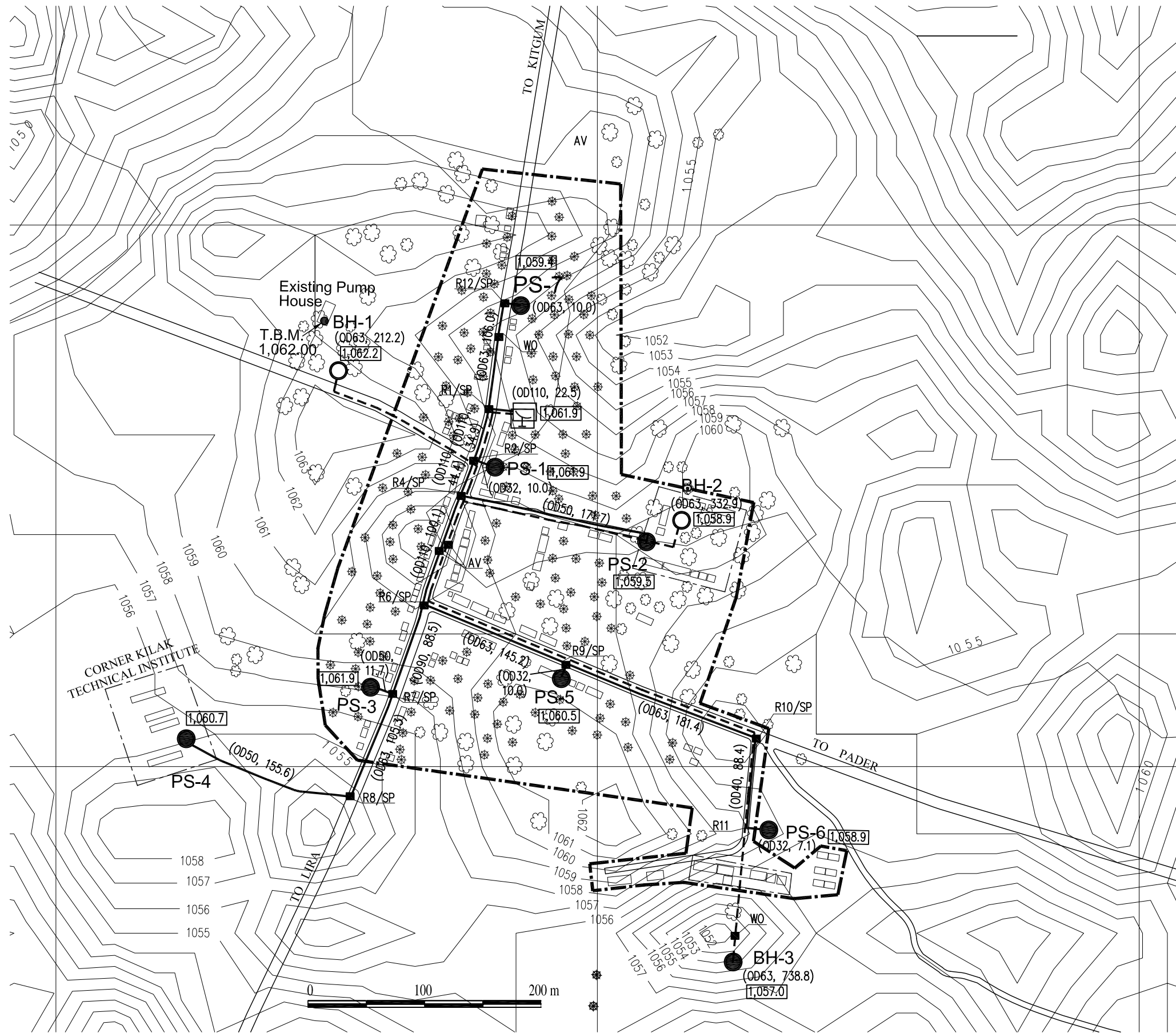
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No:	Date:	Approved:	Revision:

Project:  
 THE PROJECT FOR PROVISION OF IMPROVED WATER SOURCE FOR RETURNED IDP IN ACHOLI SUB-REGION IN REPUBLIC OF UGANDA

**JICA**  
 JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)  
 TOKYO ENGINEERING CONSULTANTS CO., LTD.  
 IN ASSOCIATION WITH  
 OYO INTERNATIONAL CORPORATION

Title:  
 管路給水施設  
 施設配置計画図  
 (キトゥグムマティディ RGC)

Date:  
 No:  
 Ref:  
 <>



SUMMARY OF QUANTITIES

ITEM	DESCRIPTION	Q'TY
1.	Target Population in 2017	2,000
2.	Transmission Pipeline	1,283.9
3.	Distribution Pipeline	1,292.8
4.	Water Source Borehole	3 No.s
5.	Public Stand	7 No.s
6.	Elevated Tank	1 No.
7.	Yard for Solar Modules	1 No.
8.	Air Valve and Wash Out Chambers on Transmission Pipeline	1 No.
9.	Air Valve, Wash Out and Service Pipe Chambers on Distribution Pipeline	11 No.s

LEGEND

	Public Water Stand.
	Existing Water Source; Borehole.
	Solar Module.
	Elevated Tank.
	Distribution Pipeline.
	Transmission Pipeline.
	Electric Power Line
	Air Valve Chambers
	Wash Out Chambers
	Service Pipe Chambers
	Education Center.
	Health Center.
	RGC Core Area.

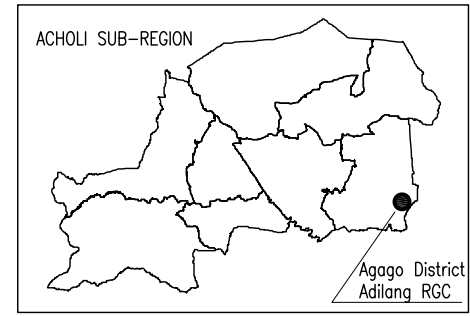
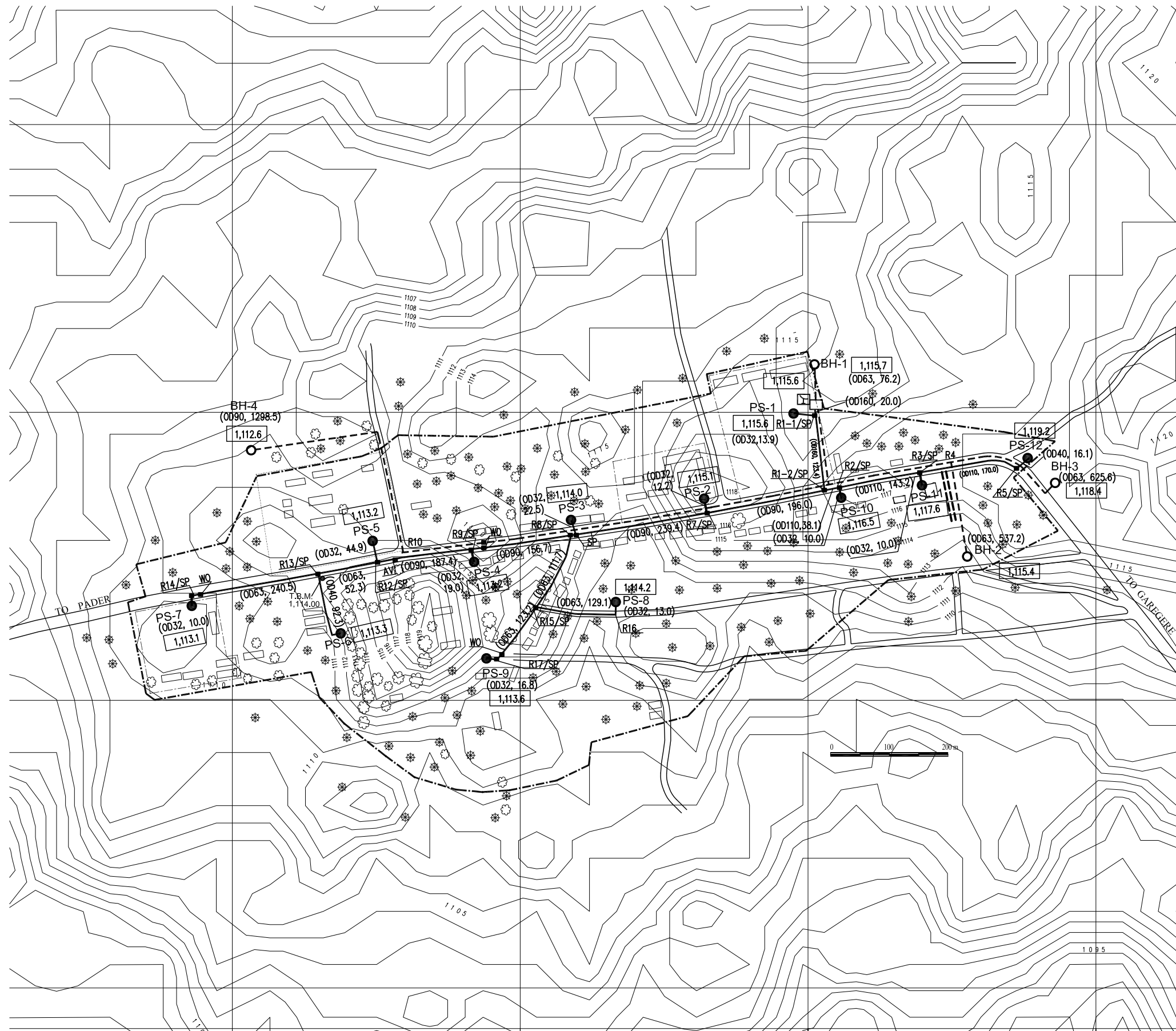
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No:	Date:	Approved:	Revision:

Project:  
**THE PROJECT FOR PROVISION OF IMPROVED WATER SOURCE FOR RETURNED IDP IN ACHOLI SUB-REGION IN REPUBLIC OF UGANDA**

**JICA**  
 JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)  
 TOKYO ENGINEERING CONSULTANTS CO., LTD.  
 IN ASSOCIATION WITH  
 OYO INTERNATIONAL CORPORATION

管路給水施設  
 Title:  
**施設配置計画図(コーナーキラク RGC)**

Date:  
 No: \_\_\_\_\_ Ref: \_\_\_\_\_



SUMMARY OF QUANTITIES

ITEM	DESCRIPTION	Q'TY
1.	Target Population in 2017	3,800 (3,420 served)
2.	Transmission Pipeline	2,529.5
3.	Distribution Pipeline	2,211.7
4.	Water Source Borehole	4 No.s
5.	Public Stand	12 No.s
6.	Elevated Tank	1 No.
7.	Yard for Solar Modules	1 No.
8.	Air Valve and Wash Out Chambers on Transmission Pipeline	1 No.
9.	Air Valve, Wash Out and Service Pipe Chambers on Distribution Pipeline	18 No.s

LEGEND

	Public Water Stand.
	Existing Water Source; Borehole.
	Solar Module.
	Elevated Tank.
	Distribution Pipeline.
	Transmission Pipeline.
	Electric Power Line
	Air Valve Chambers
	Wash Out Chambers
	Service Pipe Chambers
	Education Center.
	Health Center.
	RGC Core Area.

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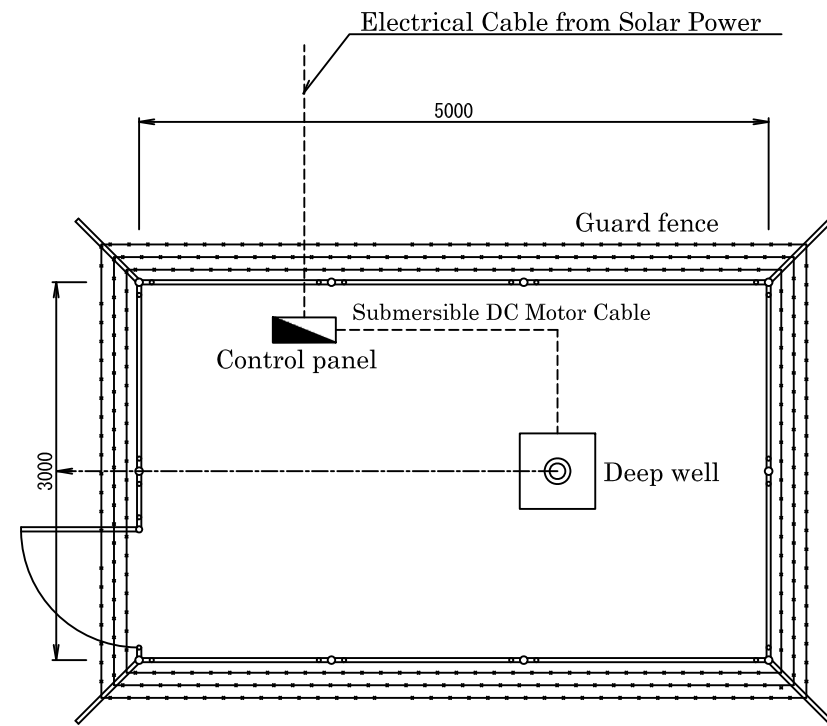
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**THE PROJECT FOR PROVISION OF IMPROVED WATER SOURCE FOR RETURNED IDP IN ACHOLI SUB-REGION IN REPUBLIC OF UGANDA**

**JICA**  
 JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)  
 TOKYO ENGINEERING CONSULTANTS CO., LTD.  
 IN ASSOCIATION WITH  
 OYO INTERNATIONAL CORPORATION

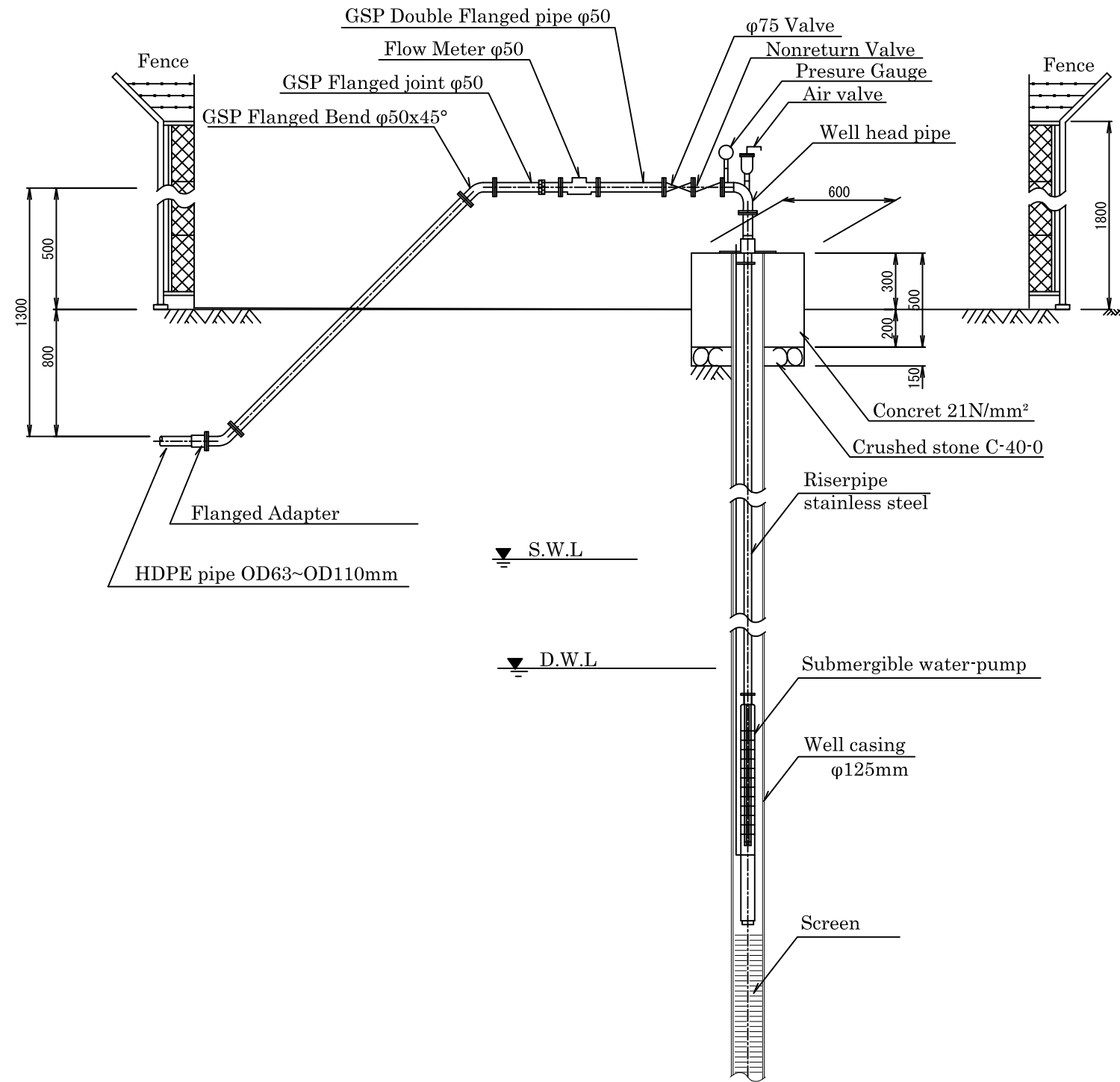
管路給水施設  
 施設配置計画図 (アディラン RGC)

Date:		
No:		Ref:

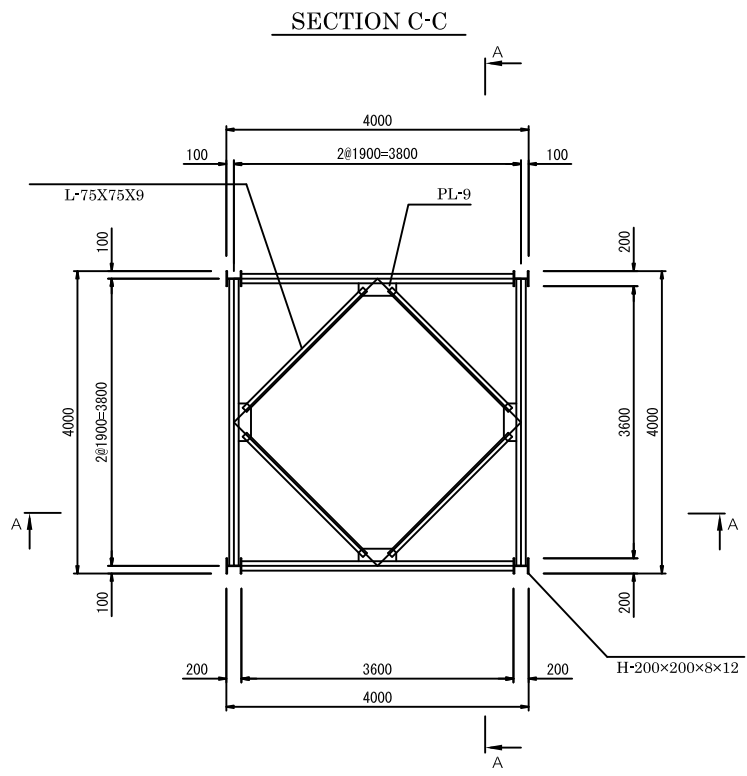
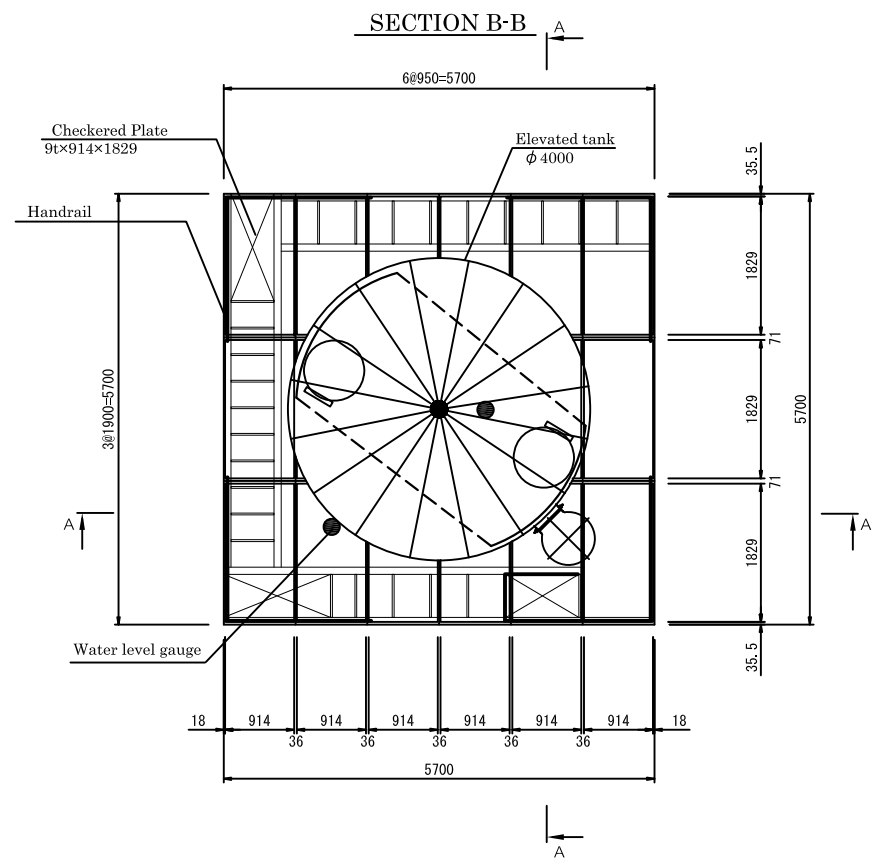
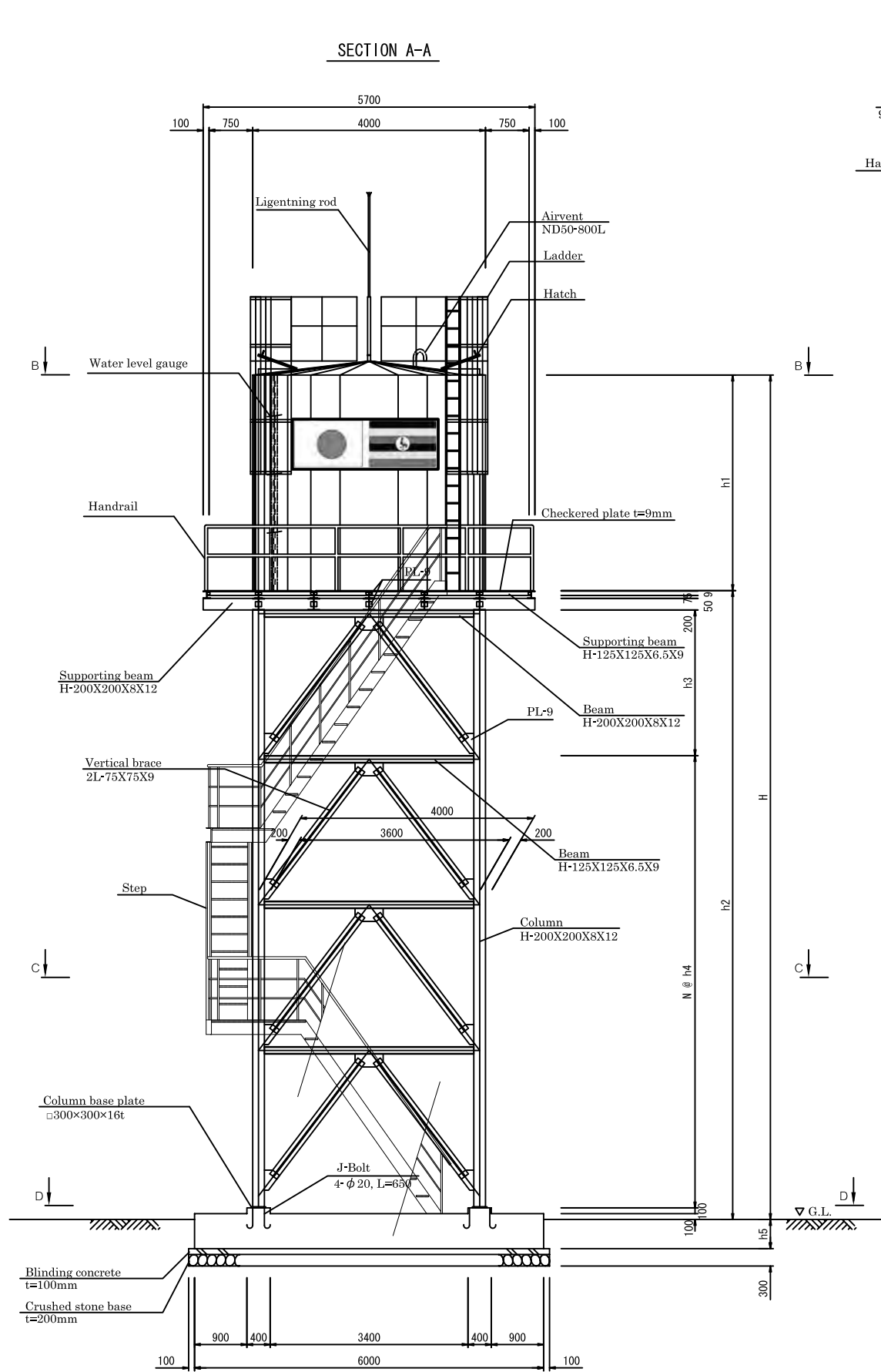
Plan of Production Deep Well



Typical Detail of Production Deep Well

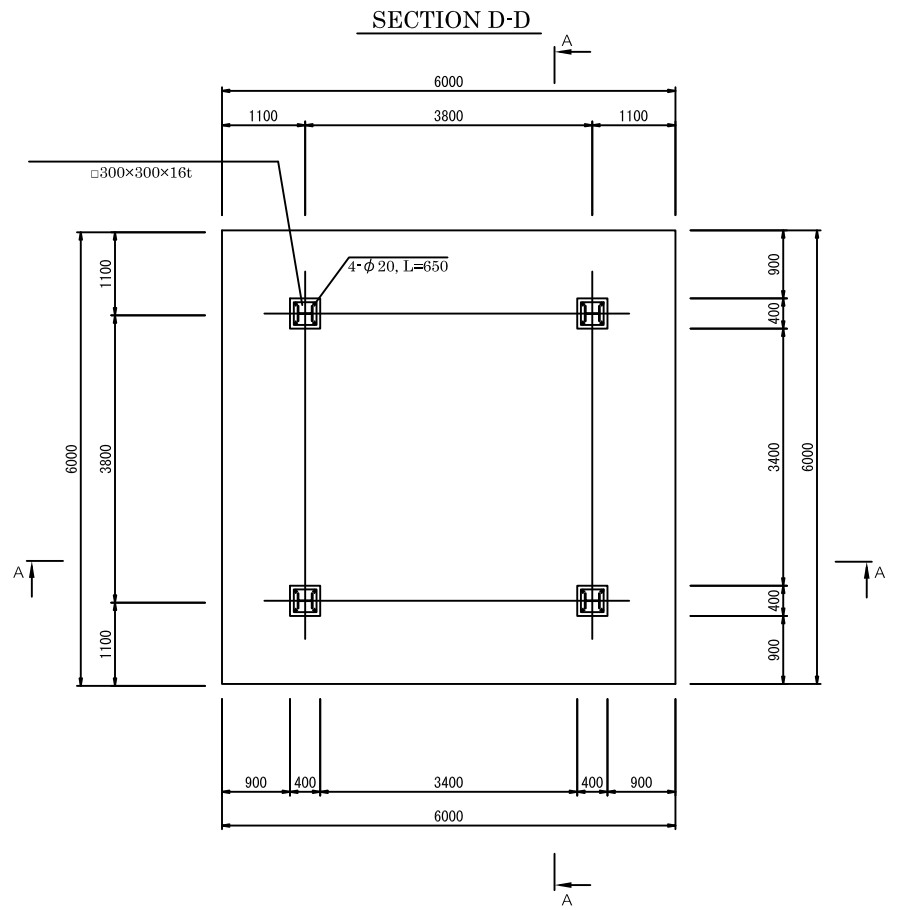


◇				Project:	 JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	管路給水施設	Date:			
◇				THE PROJECT FOR PROVISION OF IMPROVED WATER SOURCE FOR RETURNED IDP IN ACHOLI SUB-REGION IN REPUBLIC OF UGANDA			TOKYO ENGINEERING CONSULTANTS CO., LTD. IN ASSOCIATION WITH OYO INTERNATIONAL CORPORATION	Title: 取水施設一般構造図	No:	
◇									Ref:	◇
◇										
◇										
No:	Date:	Approved:	Revision:							



**Measurement Table of Elevated Tank**

RGCs		Koch Goma	Unyama	Awere	Adilang	Kitgum Matidi	Coner Kilak
Measurement Table	Capacity(m3)	40	60	30	60	50	30
	h1(m)	3.700	5.230	2.900	5.300	4.500	2.900
	h2(m)	4.300	7.970	4.100	9.800	9.400	6.200
	h3(m)	2.000	1.920	1.900	1.920	1.840	2.000
	N	1	3	1	4	4	2
	h4(m)	2.100	1.950	2.000	1.920	1.840	2.000
	h5(m)	0.600	0.700	0.600	0.700	0.700	0.600
	H(m)	8.000	13.200	7.000	15.100	13.900	9.100



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No:	Date:	Approved:	Revision:

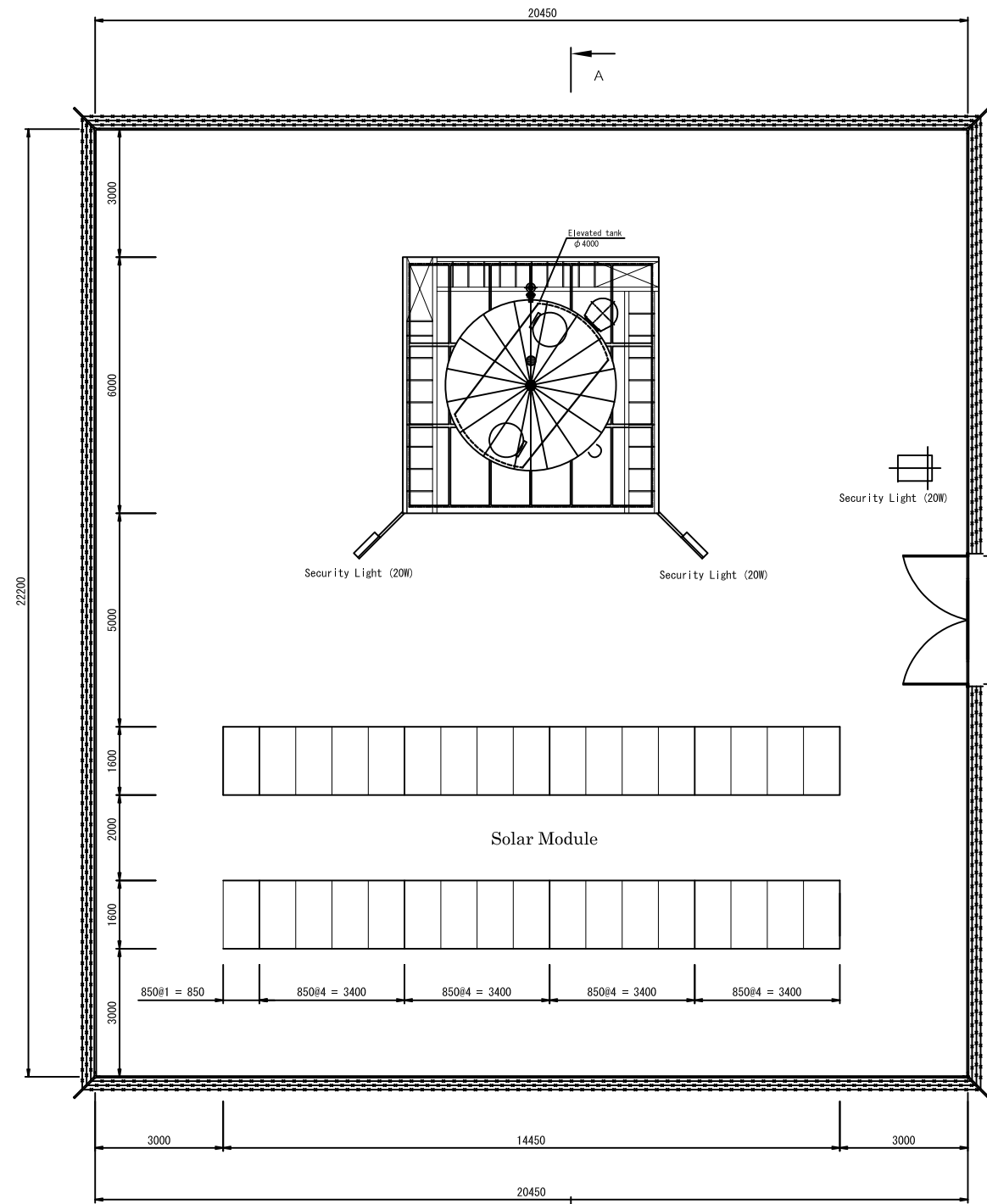
Project:  
**THE PROJECT FOR PROVISION OF IMPROVED WATER SOURCE FOR RETURNED IDP IN ACHOLI SUB-REGION IN REPUBLIC OF UGANDA**

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 JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)  
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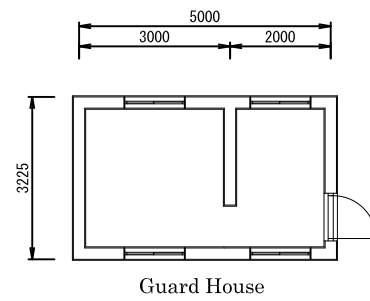
**管路給水施設**  
 Title:  
**高架水槽・一般構造図**

Date:  
 No:  
 Ref:  
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PLAN OF ELEVATED TANK



Note: Adilang

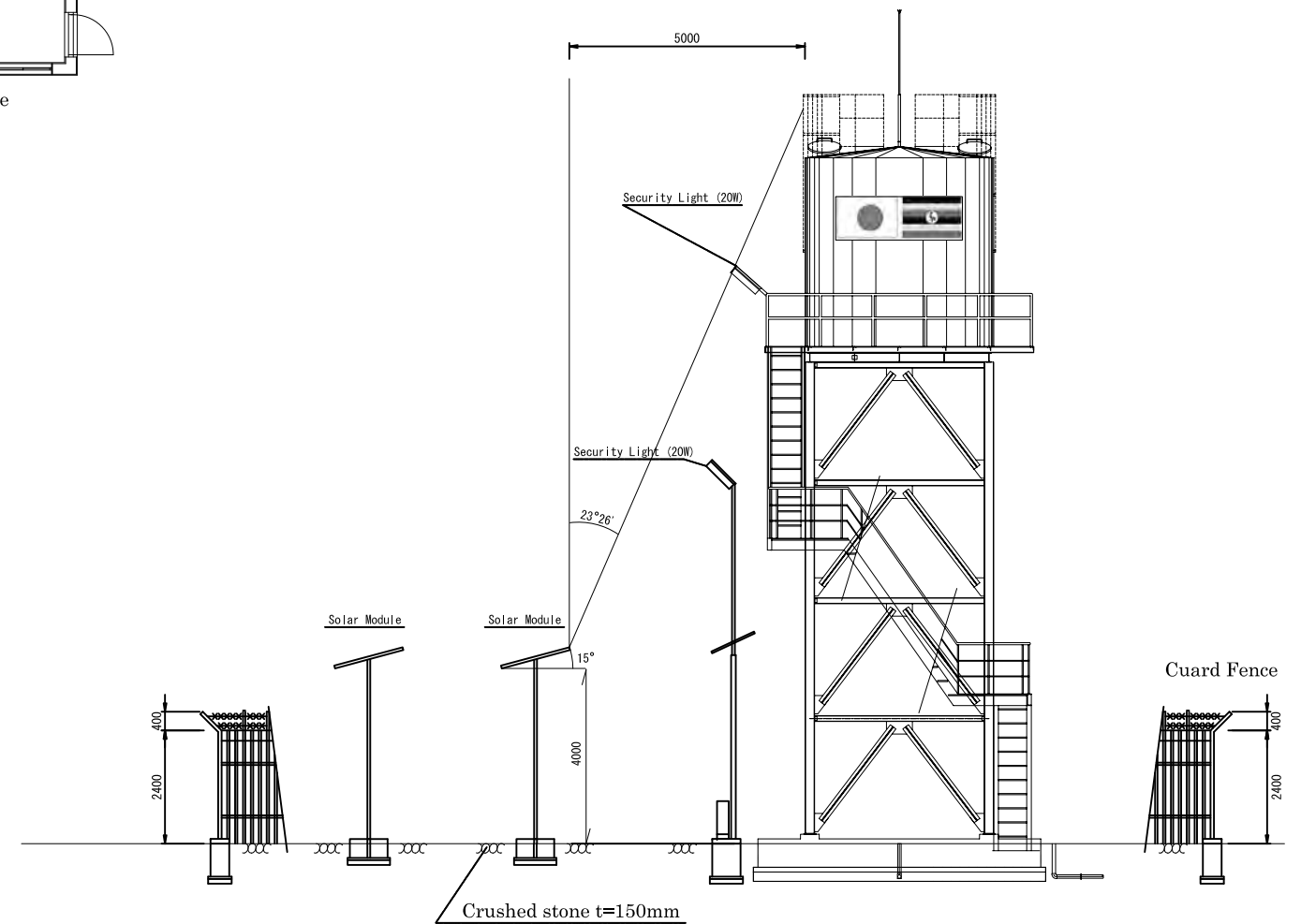


Guard House

Outline of Solar Generation Facilities and Required Area

Case	RGCs	Schematic Drawings	Well No	No. of Solar Module	Required Area /Length of Guard Fence*	Case	RGCs	Schematic Drawings	Well No	No. of Solar Module	Required Area /Length of Guard Fence*
1	Kochi Boma		AT-1	3	Required Area (ET+SM): 18.6m x 11.95m = 222.3m <sup>2</sup>	4	Aullang		AT-1	8	Required Area (ET+SM): 22.2m x 20.45m = 454.0m <sup>2</sup>
			TD-1	4	Length of GF (ET+SM): (18.6m + 11.95m) x 2-3m = 58.2m				AT-4	14	Length of GF (ET+SM): (22.2m + 20.45m) x 2-3m = 82.4m
			Total	7					TD-1	4	
2	Uryama		AT-1	18	Required Area (ET): 12.0m x 15.0m = 180.0m <sup>2</sup>	5	Kikuumi Matidi		AT-1	18	Required Area (ET+SM): 22.2m x 21.3m = 472.9m <sup>2</sup>
			TD-2	18	Required Area (SM): 13.2m x 20.45m = 269.9m <sup>2</sup>				TD-1	8	Length of GF (ET+SM): (22.2m + 21.3m) x 2-3m = 84.0m
			Total	34	Length of GF (ET): (12.0m + 15.0m) x 2-3m = 51.0m Length of GF (SM): (13.2m + 20.45m) x 2-3m = 84.4m				Total	26	
3	Aweere		AT-1	4	Required Area (ET): 12.0m x 15.0m = 180.0m <sup>2</sup>	6	Cawen-Riak		AT-1	8	Required Area (ET+SM): 22.2m x 11.95m = 265.2m <sup>2</sup>
			AT-2	4	Required Area (SM): 9.6m x 12.8m = 122.9m <sup>2</sup>				AT-2	4	Length of GF (ET+SM): (22.2m + 11.95m) x 2-3m = 65.4m
			Total	8	Length of GF (ET): (12.0m + 15.0m) x 2-3m = 51.0m Length of GF (SM): (9.6m + 12.8m) x 2-3m = 41.8m				TD-1	2	
					Note: ET: Elevated Tank SM: Solar Module * Length of guard fence except gate width						

SECTION A-A



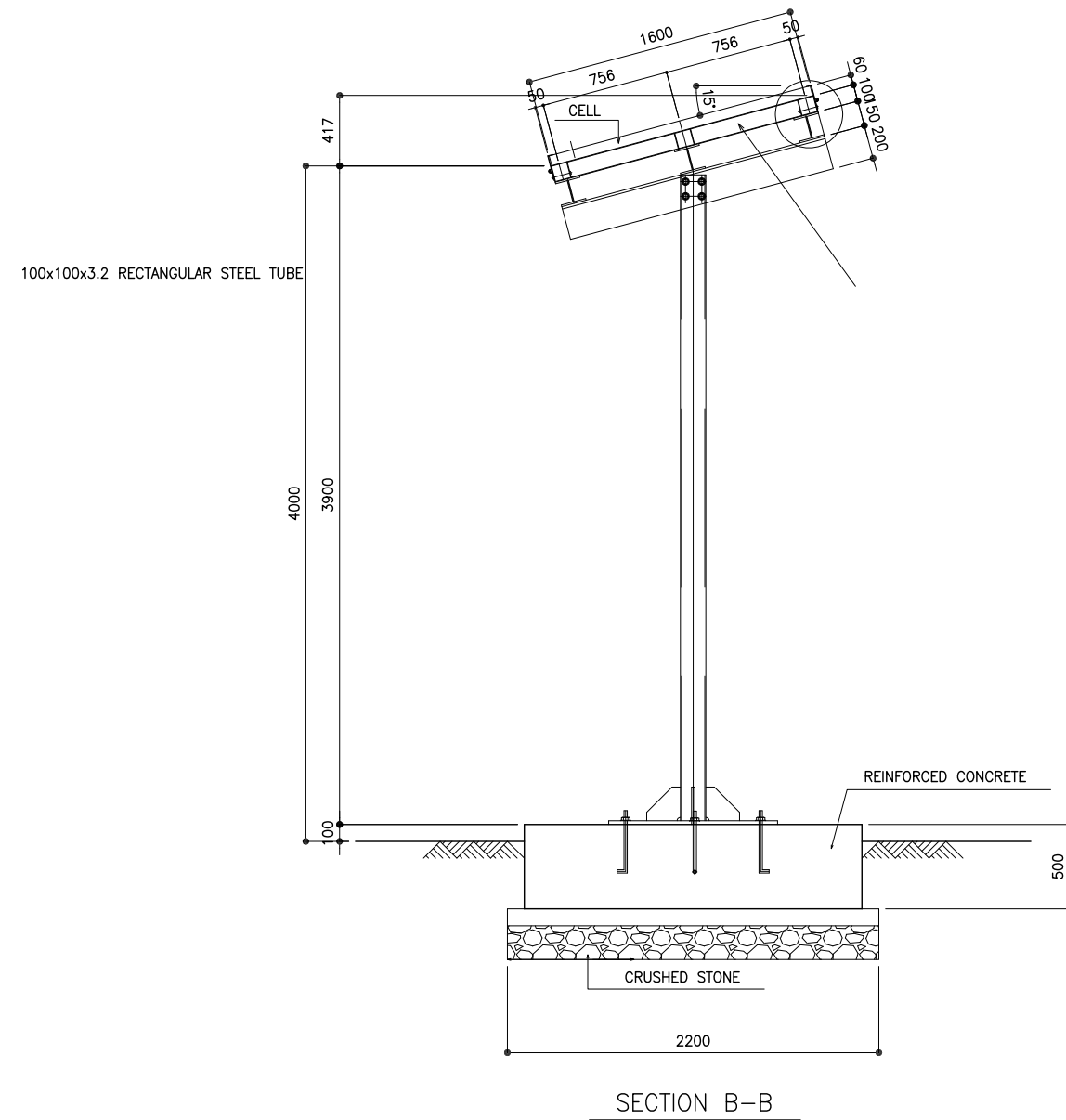
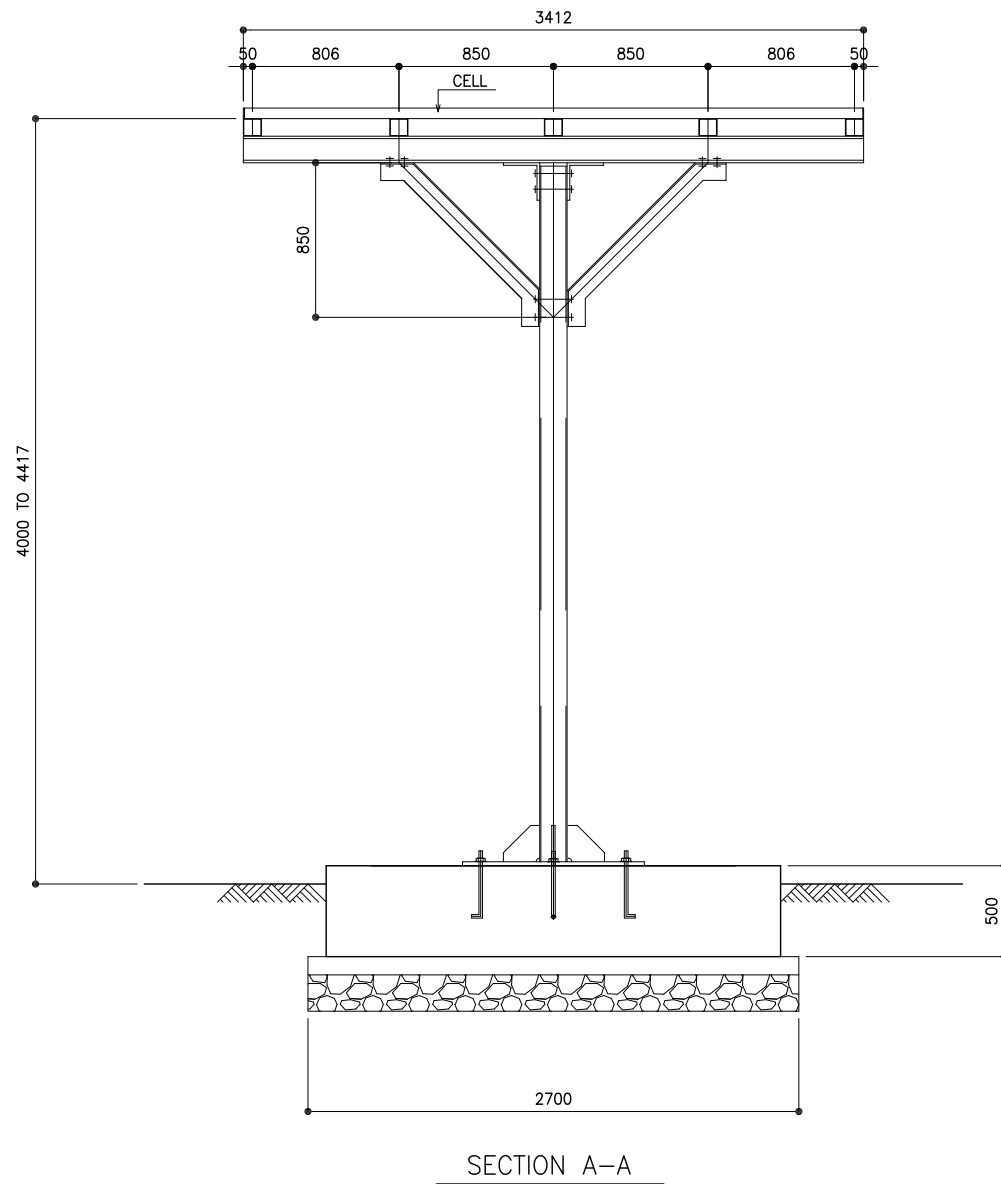
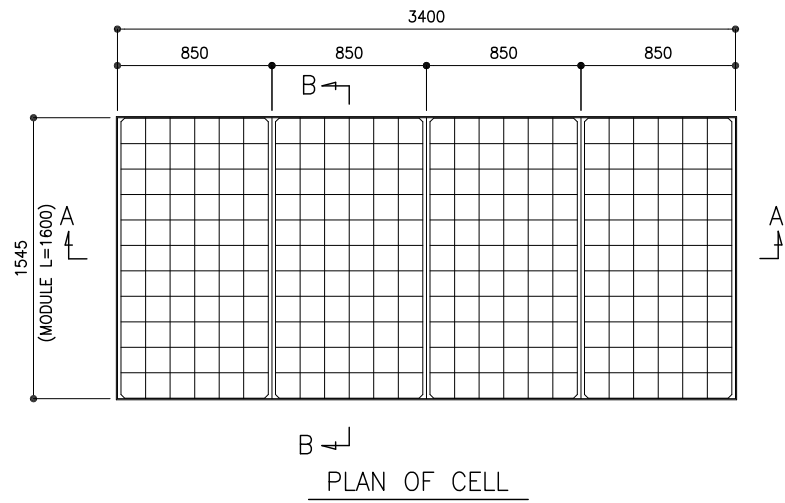
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No:	Date:	Approved:	Revision:

Project:  
THE PROJECT FOR PROVISION OF IMPROVED WATER SOURCE FOR RETURNED IDP IN ACHOLI SUB-REGION IN REPUBLIC OF UGANDA

**JICA**  
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)  
TOKYO ENGINEERING CONSULTANTS CO., LTD.  
IN ASSOCIATION WITH  
OYO INTERNATIONAL CORPORATION

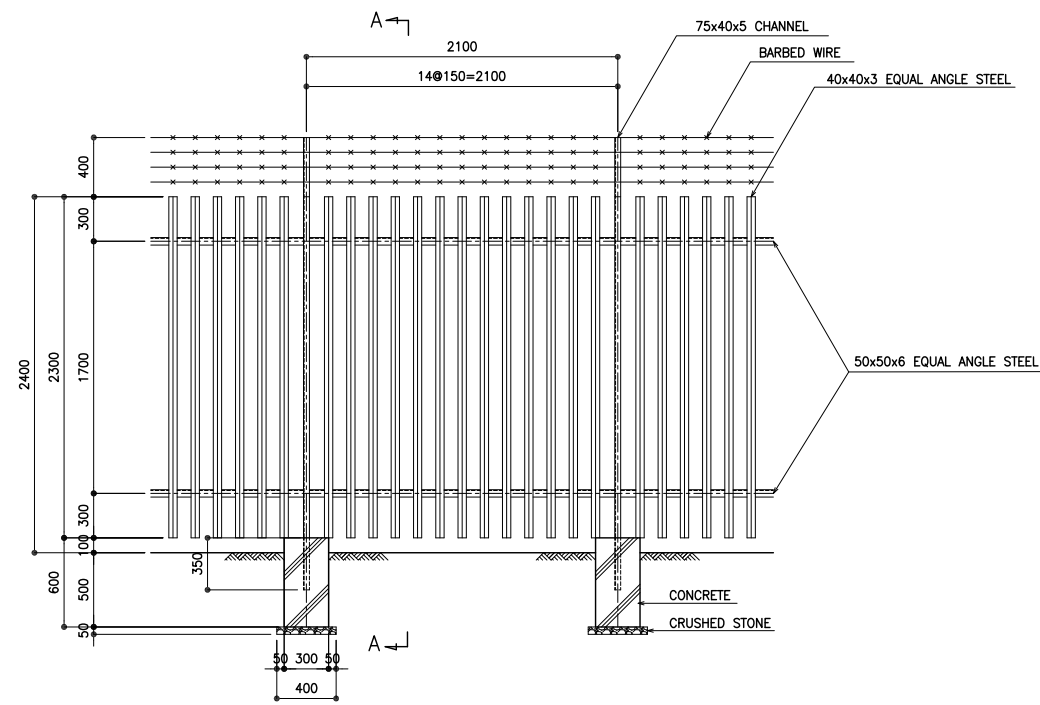
Date:  
管路給水施設  
Title:  
高架水槽及び太陽光発電施設一般図

No:  
Ref:  
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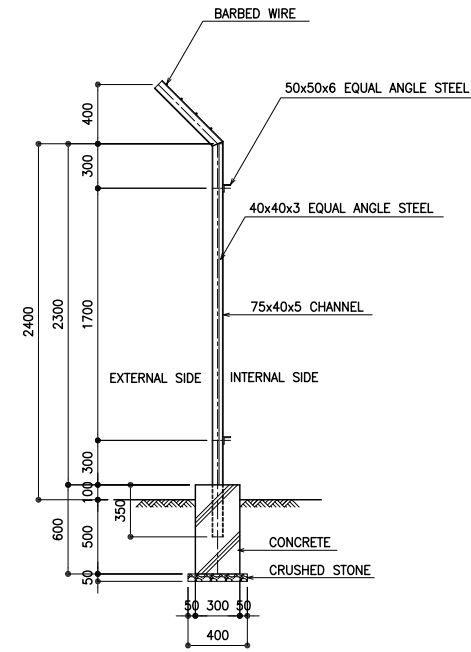


No:	Date:	Approved:	Revision:	Project:	 JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) TOKYO ENGINEERING CONSULTANTS CO., LTD. IN ASSOCIATION WITH OYO INTERNATIONAL CORPORATION	管路給水施設 太陽光発電施設 (太陽光発電モジュール)	Date:		
				THE PROJECT FOR PROVISION OF IMPROVED WATER SOURCE FOR RETURNED IDP IN ACHOLI SUB-REGION IN REPUBLIC OF UGANDA					No:

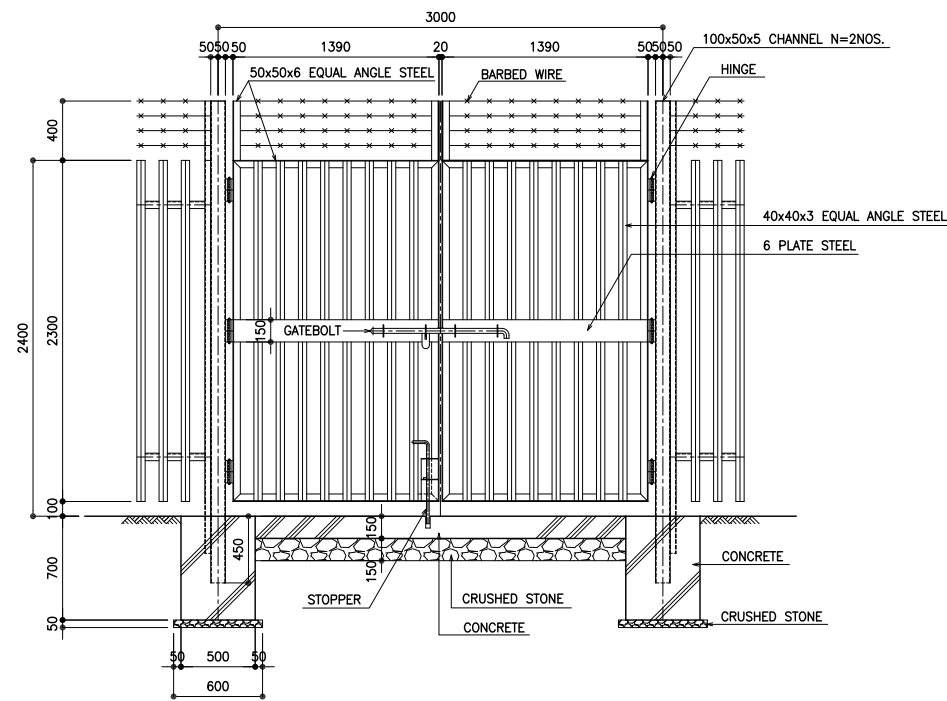




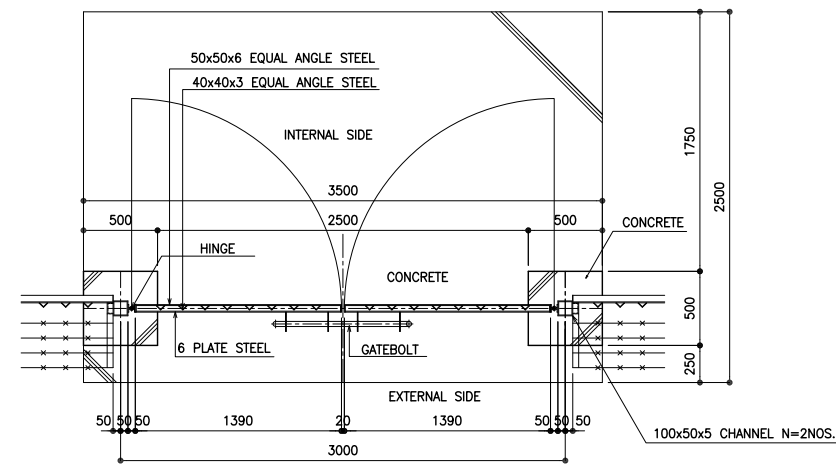
VIEW OF FENCE (EXTERNAL SIDE)



SECTION A-A



VIEW OF GATE (EXTERNAL SIDE)



PLAN OF GATE

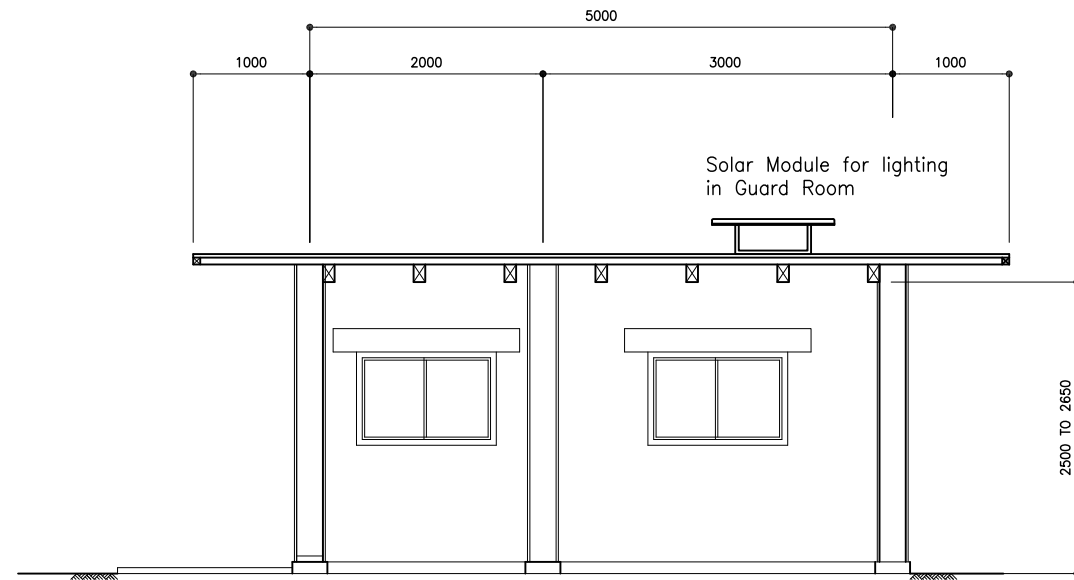
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Project:  
 THE PROJECT FOR PROVISION OF IMPROVED WATER SOURCE FOR  
 RETURNED IDP IN ACHOLI SUB-REGION IN REPUBLIC OF UGANDA

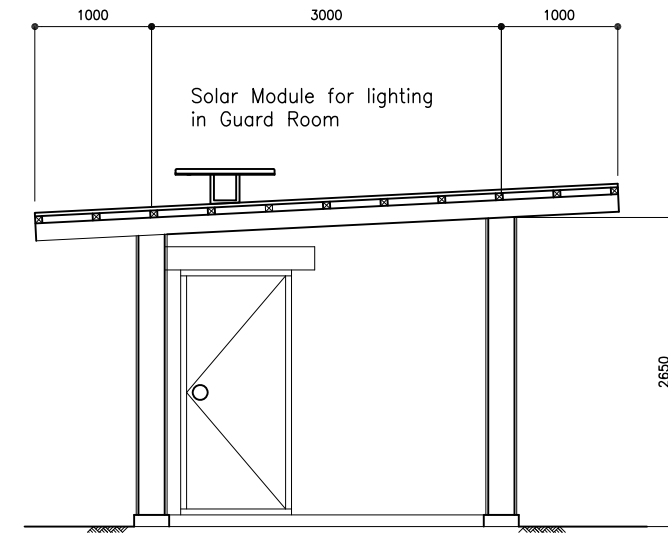
**JICA**  
 JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)  
 TOKYO ENGINEERING CONSULTANTS CO., LTD.  
 IN ASSOCIATION WITH  
 OYO INTERNATIONAL CORPORATION

Title:  
 管路給水施設  
 太陽光発電施設  
 (防護柵及びゲート)

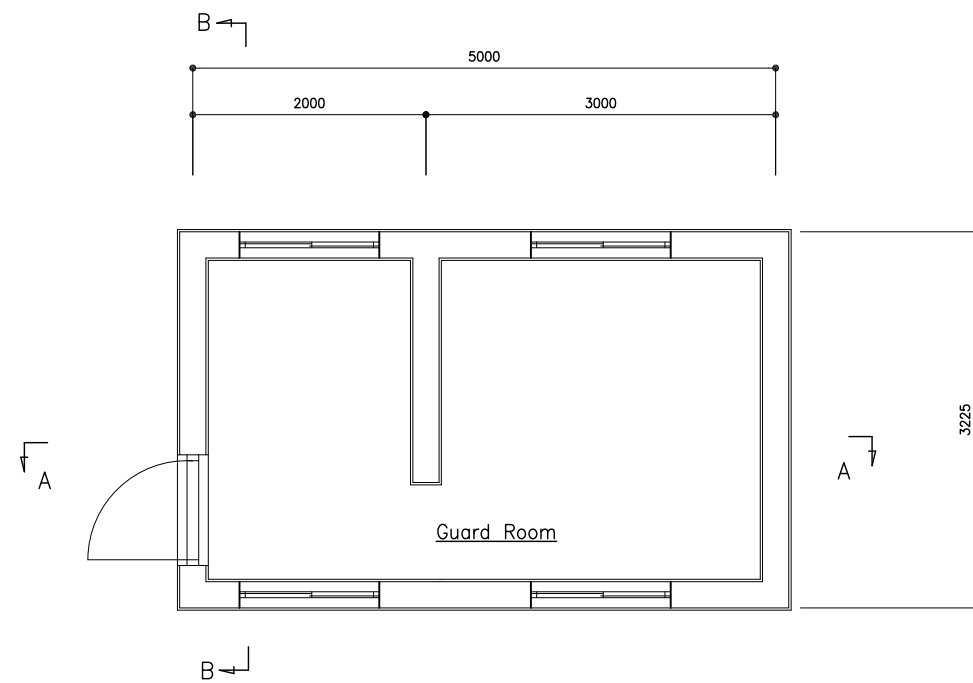
Date:  
 No:  
 Ref:



A-A VIEW



B-B VIEW

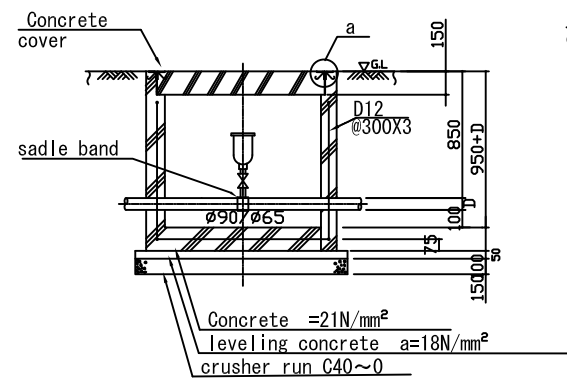
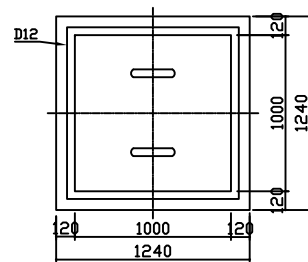


PLAN

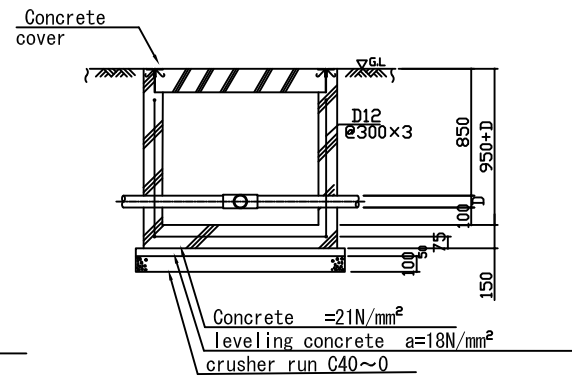
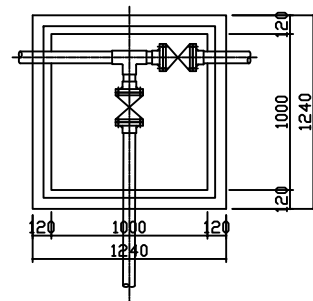
				Project:	 JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	管路給水施設  太陽光発電施設 (警備小屋一般図)	Date:	
				THE PROJECT FOR PROVISION OF IMPROVED WATER SOURCE FOR RETURNED IDP IN ACHOLI SUB-REGION IN REPUBLIC OF UGANDA			TOKYO ENGINEERING CONSULTANTS CO., LTD. IN ASSOCIATION WITH OYO INTERNATIONAL CORPORATION	Title:
No:	Date:	Approved:	Revision:				No:	Ref:

# TYPICAL PIPELINE CHAMBERS

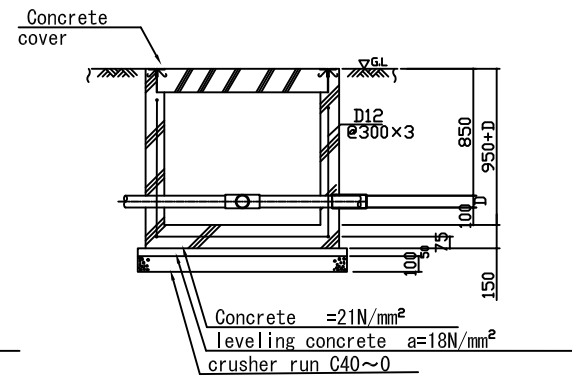
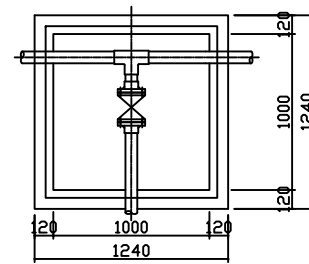
AIR VALVE CHAMBERS



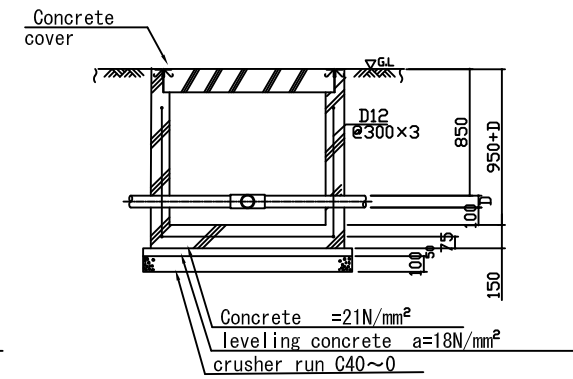
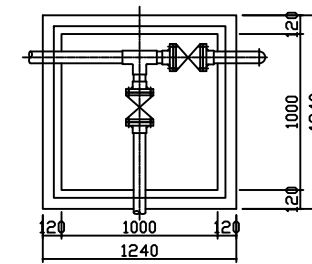
WASH OUT CHAMBERS



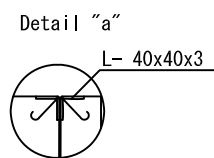
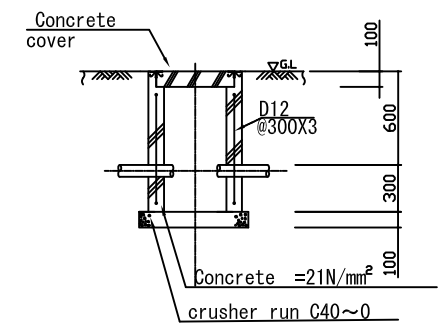
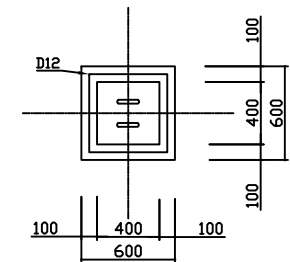
SERVICEPIPE CHAMBERS



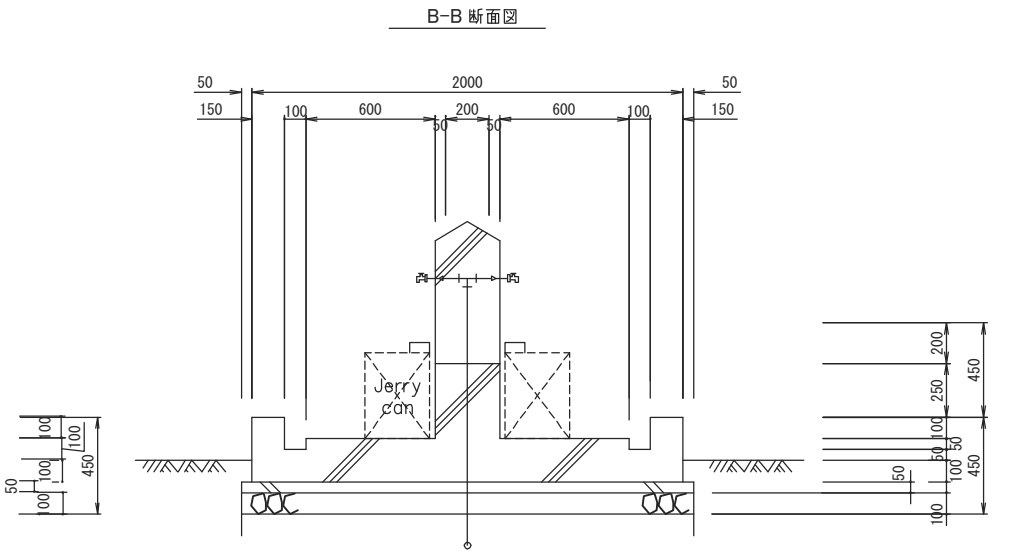
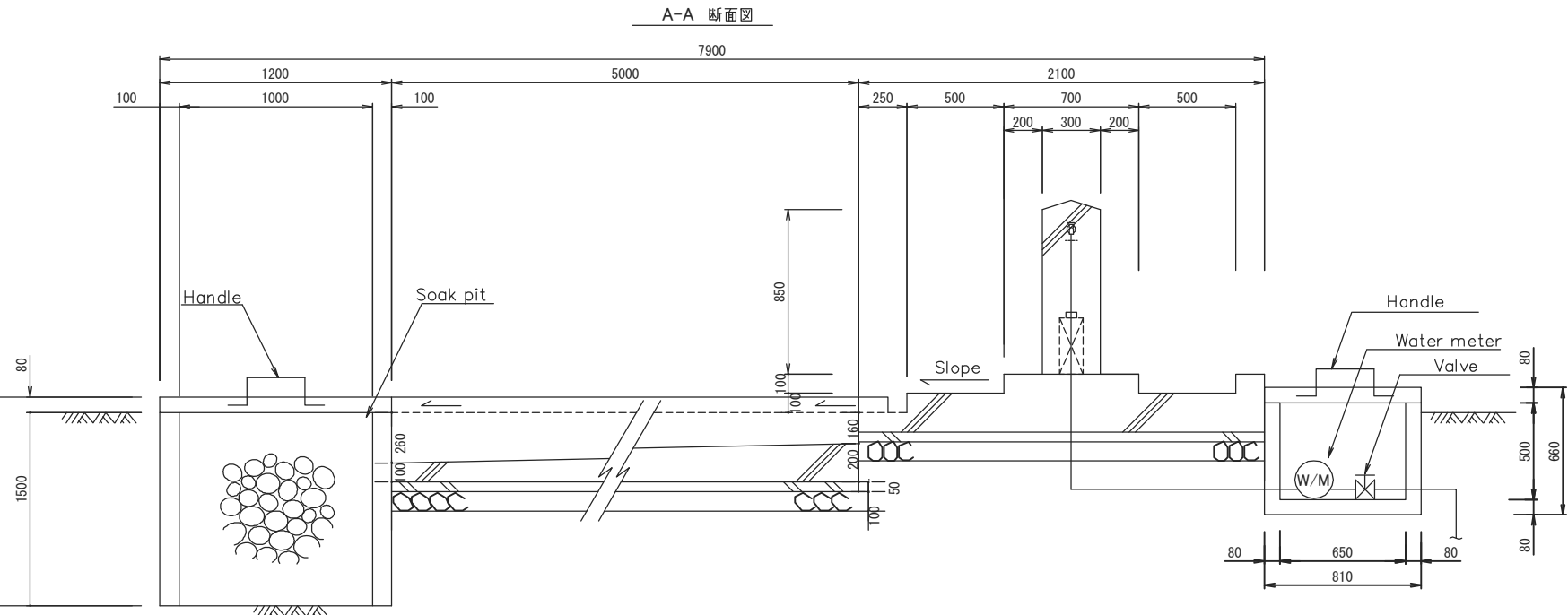
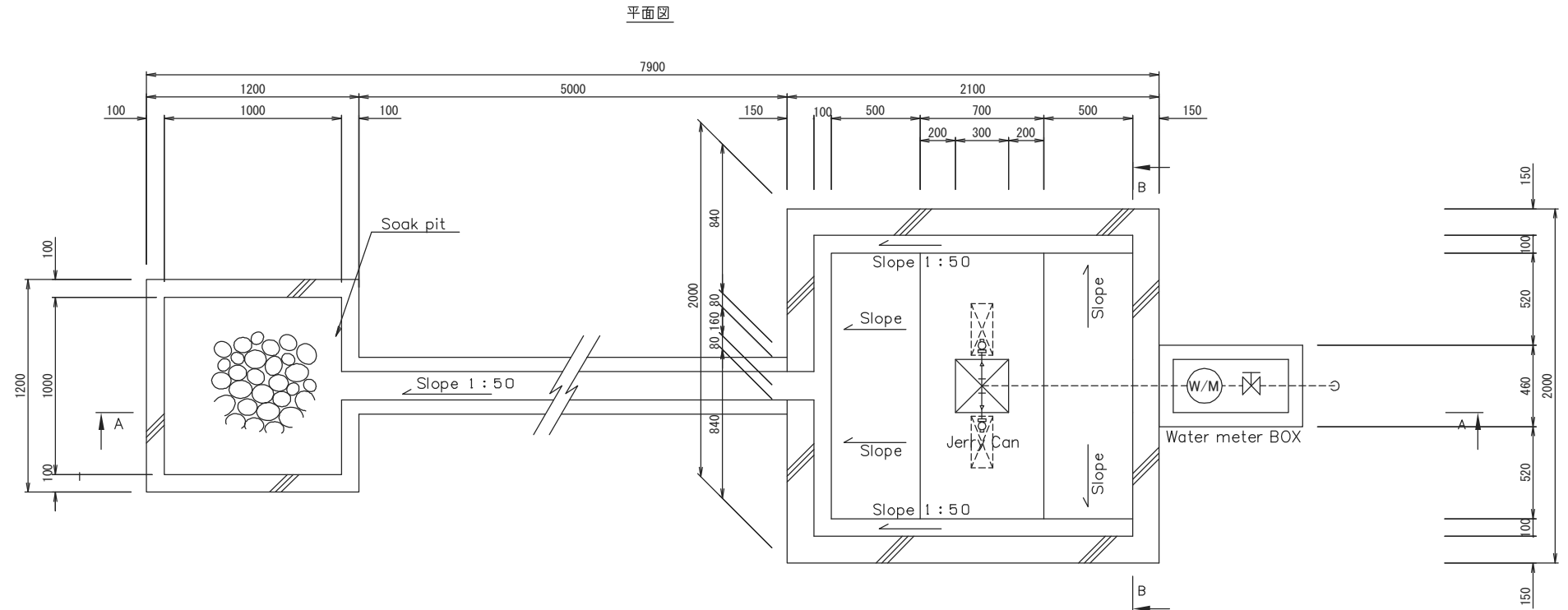
SERVICEPIPE CHAMBERS  
(end-point of networks)



CABLE CHAMBERS




Project:	 JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	管路給水施設	Date:		
THE PROJECT FOR PROVISION OF IMPROVED WATER SOURCE FOR RETURNED IDP IN ACHOLI SUB-REGION IN REPUBLIC OF UGANDA			TOKYO ENGINEERING CONSULTANTS CO., LTD. IN ASSOCIATION WITH OYO INTERNATIONAL CORPORATION	管路樹標準図	No:
					Ref:
No: Date: Approved: Revision:					



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No:	Date:	Approved:	Revision:

Project:  
**THE PROJECT FOR PROVISION OF IMPROVED WATER SOURCE FOR RETURNED IDP IN ACHOLI SUB-REGION IN REPUBLIC OF UGANDA**

  
**JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)**  
 TOKYO ENGINEERING CONSULTANTS CO., LTD.  
 IN ASSOCIATION WITH  
 OYO INTERNATIONAL CORPORATION

管路給水施設

Title:  
**公共水栓一般構造図**

Date:

No: Ref: