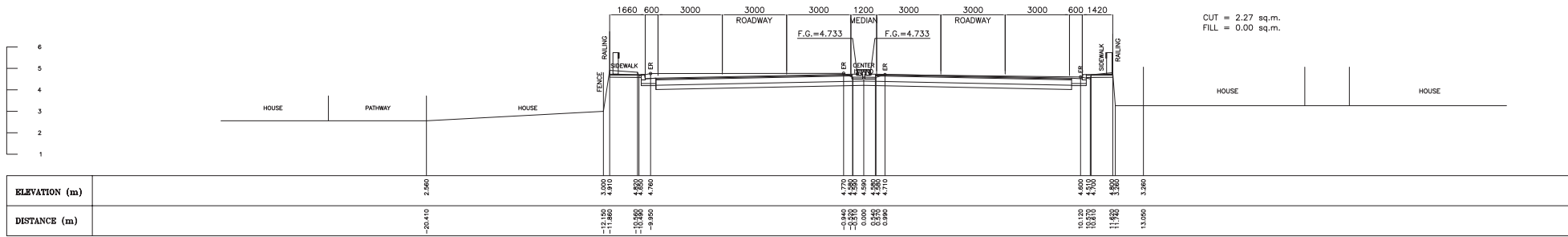
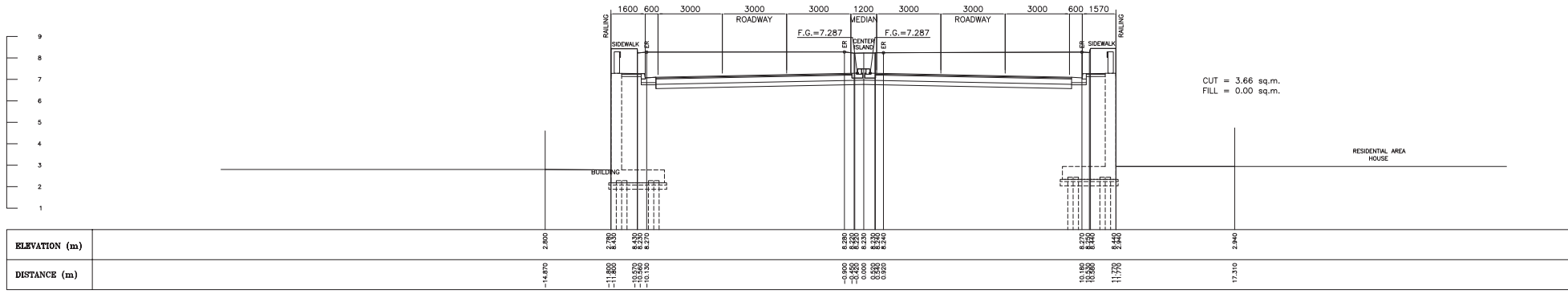


CROSS SECTION(3)



CUT = 2.27 sq.m.
FILL = 0.00 sq.m.

STA. 0+350
SCALE H 1:100
V 1:100



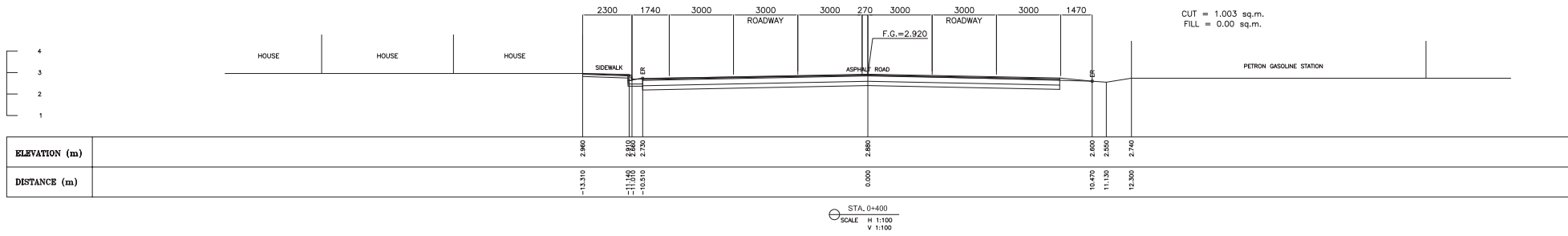
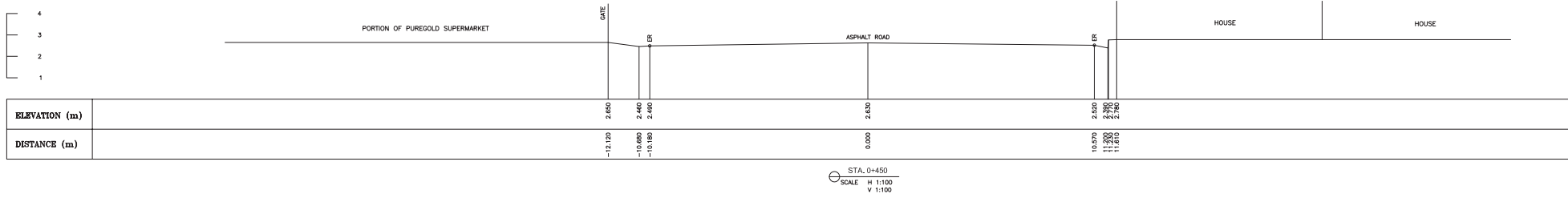
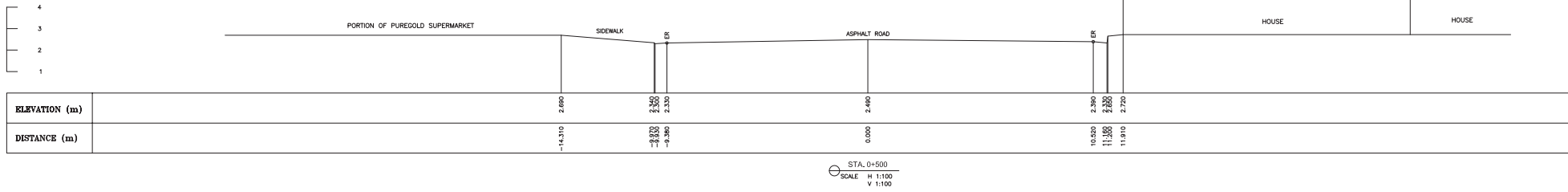
CUT = 3.66 sq.m.
FILL = 0.00 sq.m.

STA. 0+298.910 (BRIDGE 2ND APPROACH)

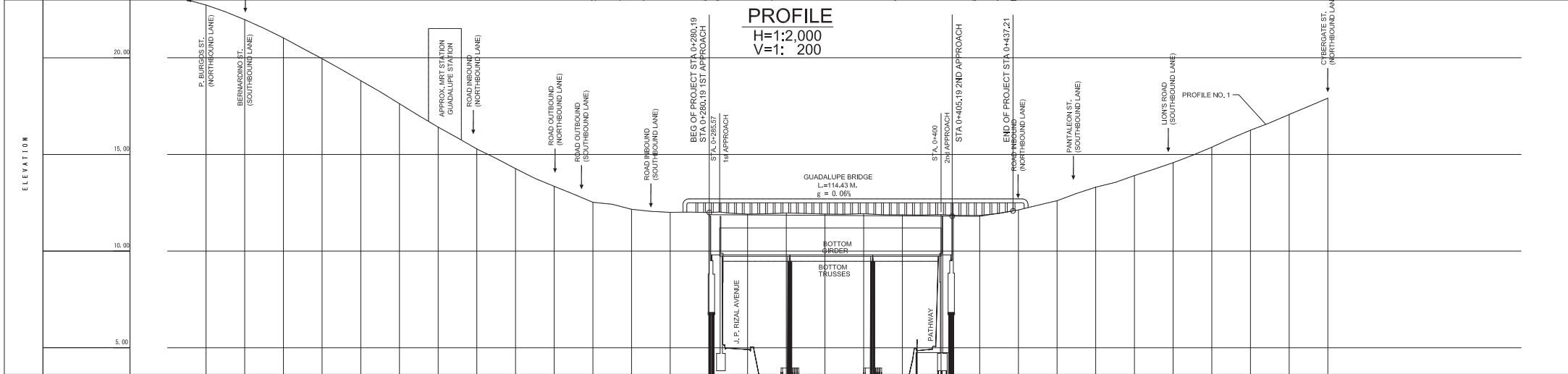
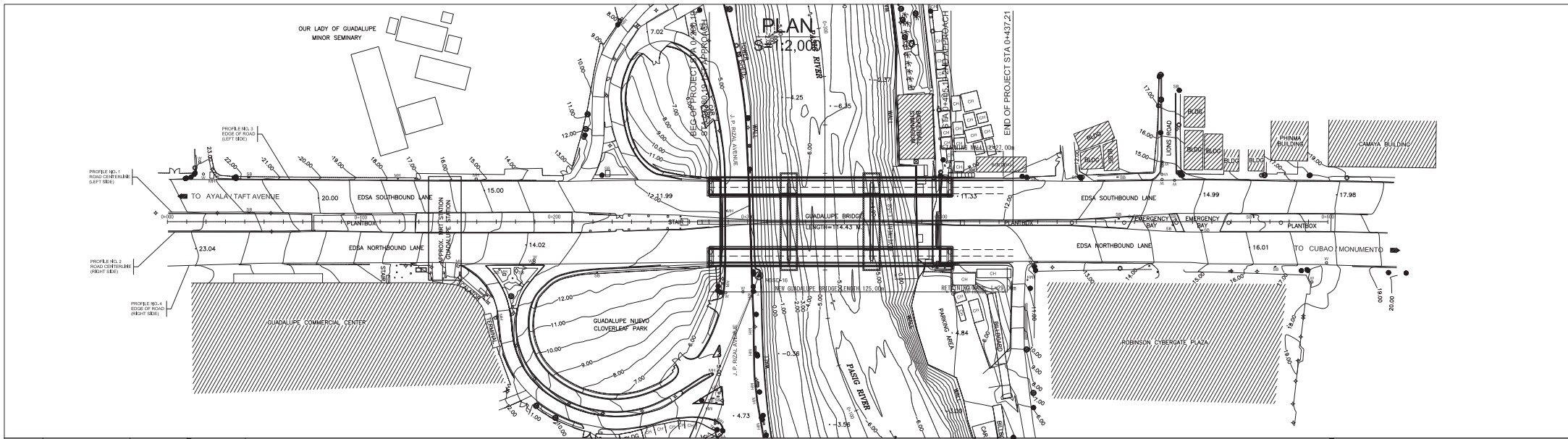
SCALE H 1:100
V 1:100

Clients:	Consultants:	Project Title:	Bridge Name:	Sheet Contents:	SHT. NO.
Japan International Cooperation Agency DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS REPUBLIC OF THE PHILIPPINES	CTI Engineering Co., Ltd. Chodai Co., Ltd. Nippon Koei	Project for Study on Improvement of Bridges Through Disaster Mitagating Measures for the Large Scale Earthquakes in the Republic of the Philippines	LAMBINGAN BRIDGE	ROAD CROSS SECTIONS(3) STA. 0+298.91 TO STA. 0+350	3-A4

CROSS SECTION(4)



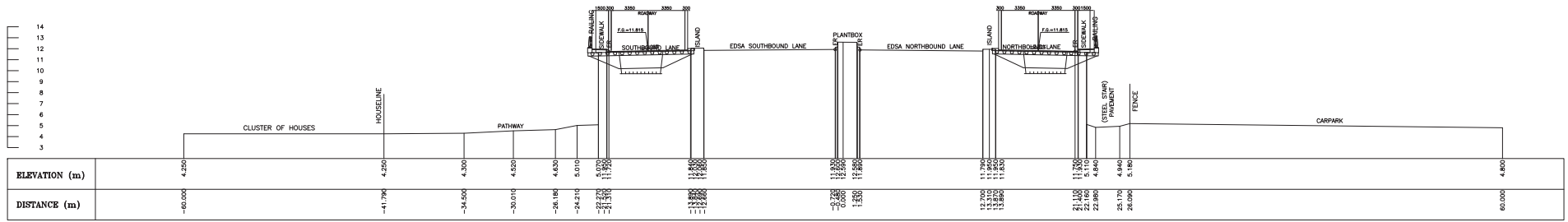
Clients:	Japan International Cooperation Agency DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS REPUBLIC OF THE PHILIPPINES	Consultants:	CTI Engineering Co., Ltd. Chodai Co., Ltd. Nippon Koei	Project Title:	Project for Study on Improvement of Bridges Through Disaster Mitagating Measures for the Large Scale Earthquakes in the Republic of the Philippines	Bridge Name:	LAMBINGAN BRIDGE	Sheet Contents:	ROAD CROSS SECTIONS(4) STA. 0+400 TO STA. 0+500	SHT. NO.	3-A5
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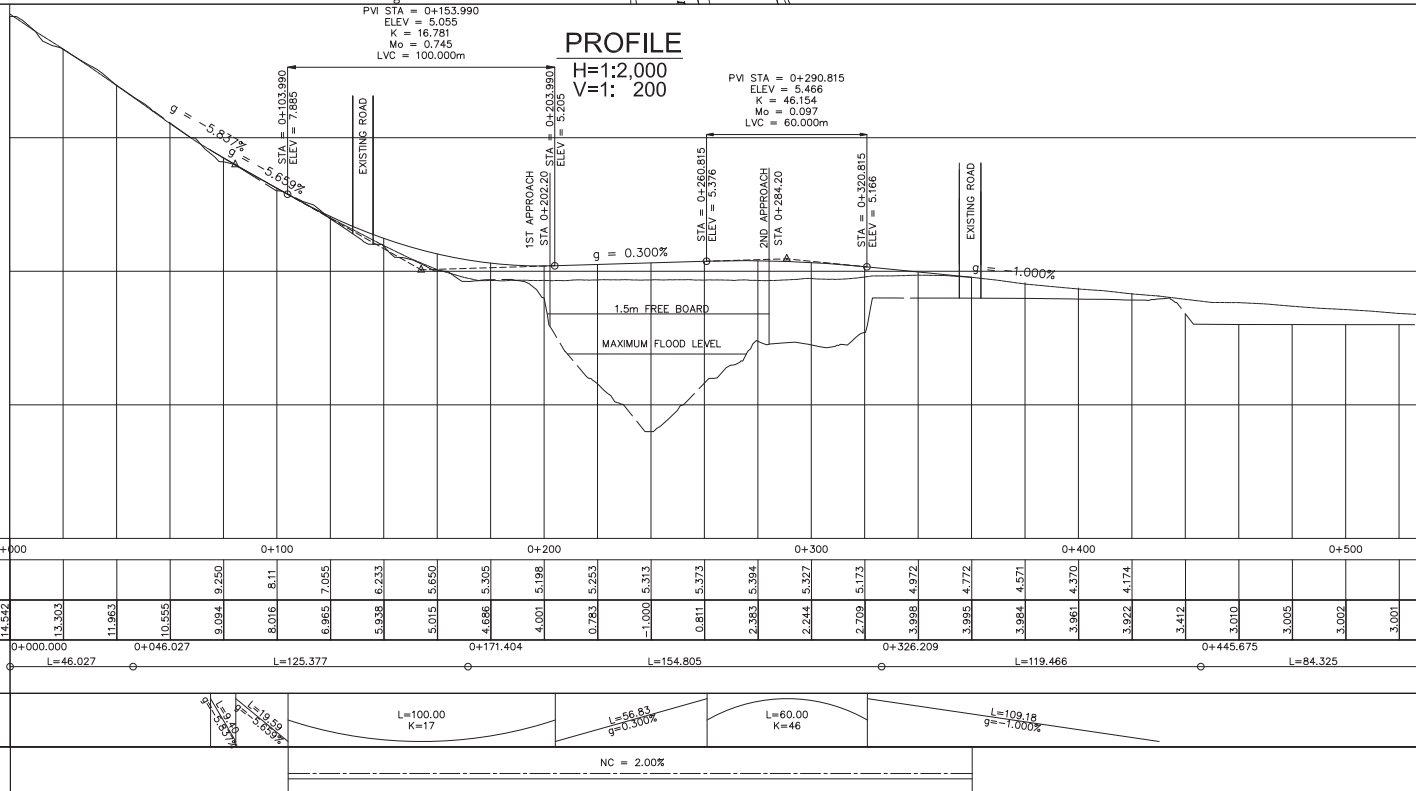
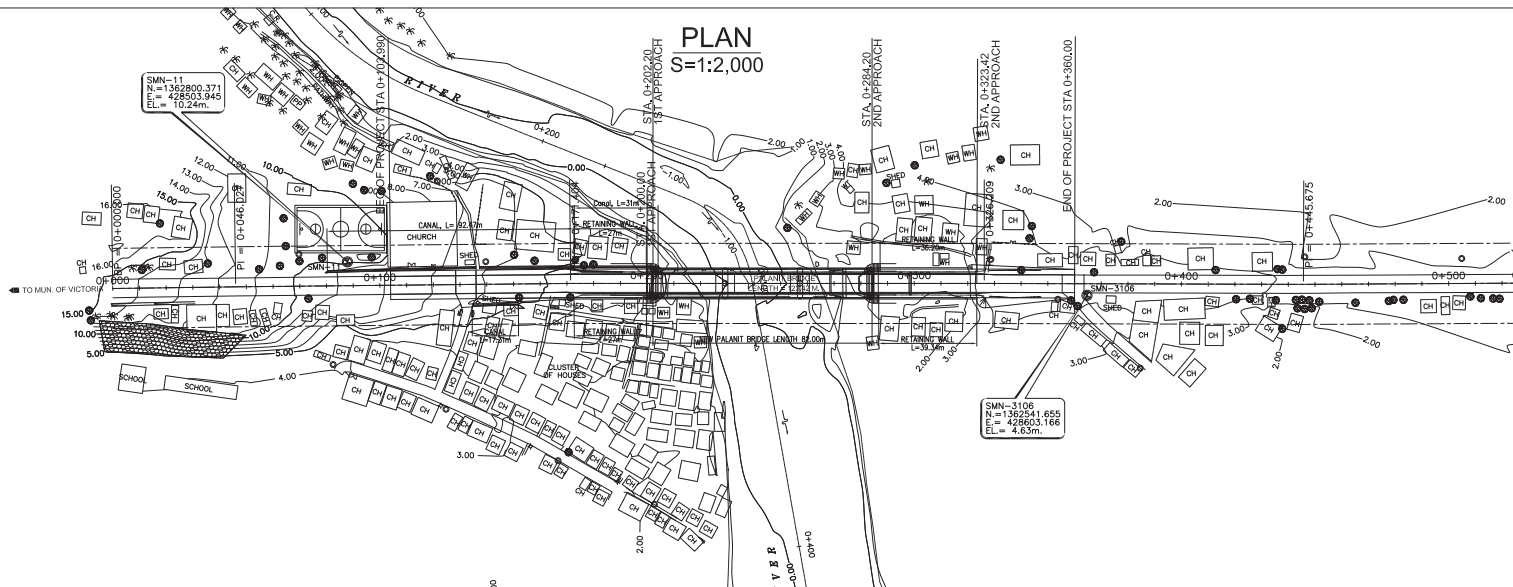


STATION	0+000	0+100	0+200	0+300	0+400	0+500	0+600	0+
FINISHED GRADE								
GROUND ELEV	23.271	23.000	22.730	22.381	21.972	21.522	21.026	20.465
	19.391	18.816	18.243	17.624	17.008	16.413	15.859	15.283
	14.796	14.268	13.763	13.251	12.948	12.535	12.423	12.187
	12.056	12.005	12.018	12.024	11.884	11.809	11.872	11.883
	11.947	11.915	11.915	11.947	11.909	11.863	11.863	11.861
	11.905	11.895	11.895	11.905	11.895	11.850	11.878	11.872
	11.884	11.885	11.885	11.884	11.811	11.812	11.844	11.802
	11.840	11.782	12.272	12.807	12.879	13.207	13.550	13.907
	14.231	14.571	14.856	15.274	15.822	16.254	16.636	17.008
	17.465	17.910						

Clients:	Consultants:	Project Title:	Bridge Name:	Sheet Contents:	SHT. NO.
Japan International Cooperation Agency DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS REPUBLIC OF THE PHILIPPINES	CTI Engineering Co., Ltd. Chodai Co., Ltd. Nippon Koei	Project for Study on Improvement of Bridges Through Disaster Mitagating Measures for the Large Scale Earthquakes in the Republic of the Philippines	GUADALUPE BRIDGE	PLAN AND PROFILE STA. 0+280.19 TO STA. 0+437.21	3-B1

CROSS SECTION(1)



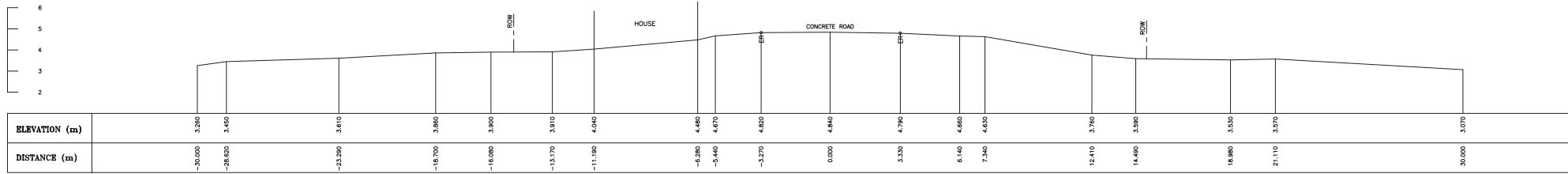


ELEVATION	10.00
	5.00
	0.00
	-5.00

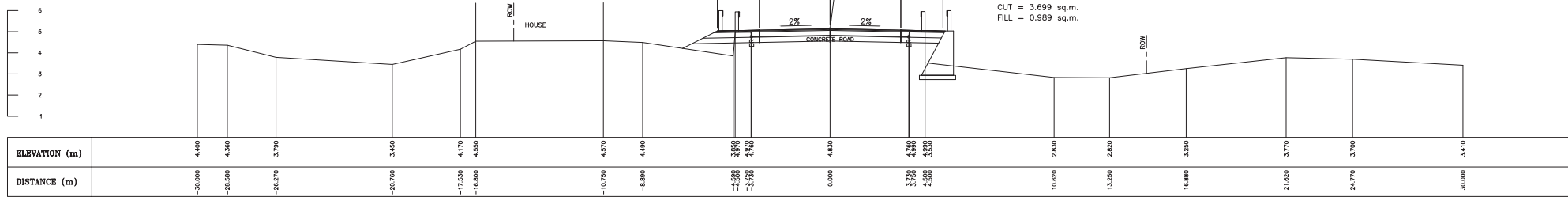
STATION	0+000	0+100	0+200	0+300	0+400	0+500
FINISHED GRADE						
GROUND ELEV	14.542	13.303	11.863	9.555	9.094	8.11
HOR. CURVATURE	L=46.027	L=125.377	L=154.805	L=326.209	L=119.466	L=84.325
VER. CURVATURE		L=100.00 K=17	L=60.00 K=46			
SUPERELEVATION		NC = 2.00%				

Clients:	Consultants:	Project Title:	Bridge Name:	Sheet Contents:	SHT. NO.
Japan International Cooperation Agency DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS REPUBLIC OF THE PHILIPPINES	CTI Engineering Co., Ltd. Chodai Co., Ltd. Nippon Koei	Project for Study on Improvement of Bridges Through Disaster Mitagating Measures for the Large Scale Earthquakes in the Republic of the Philippines	PALANIT BRIDGE	PLAN AND PROFILE STA. 103+990 TO STA. 320+815	3-C1

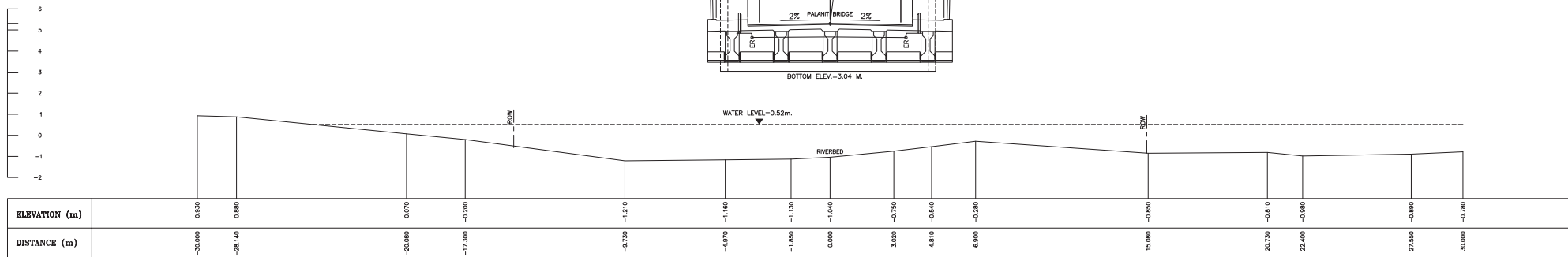
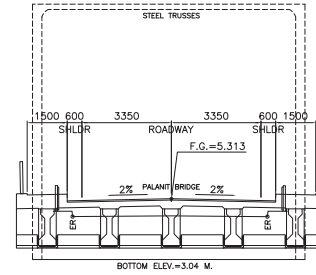
CROSS SECTION(2)



STA. 0+350.00
SCALE H 1:100
V 1:100

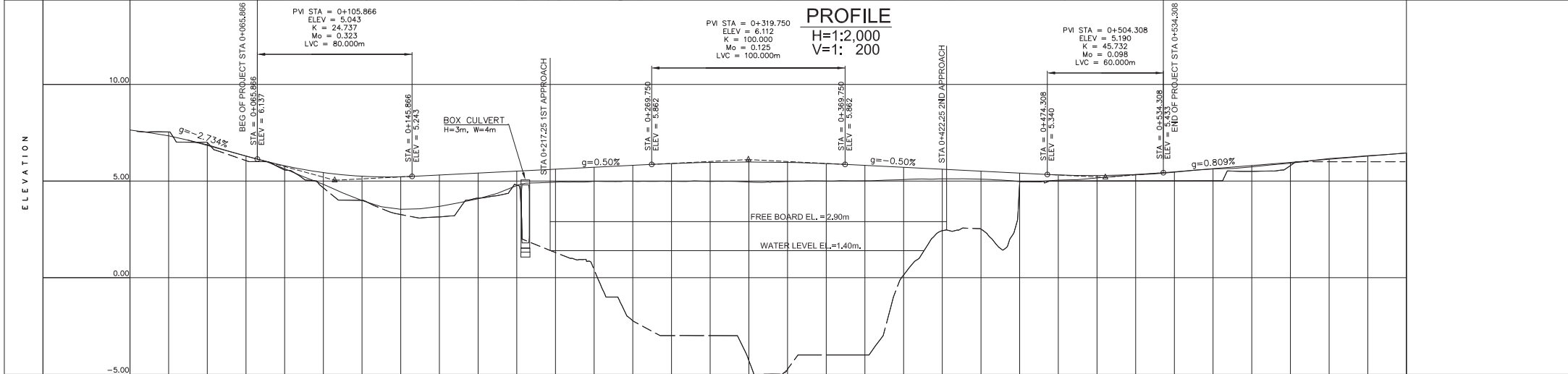
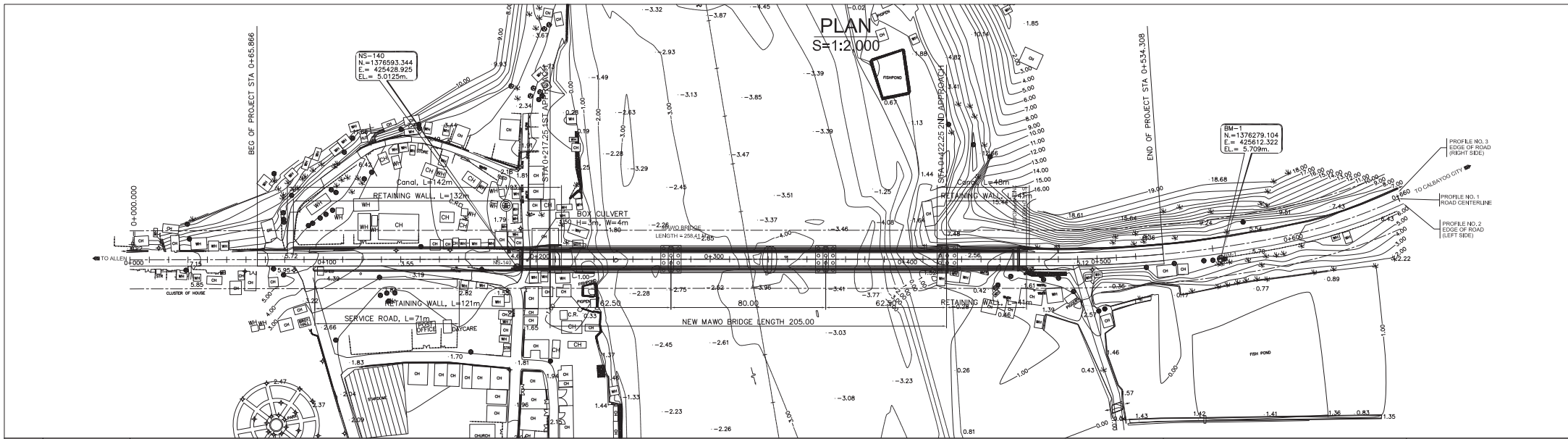


STA. 0+323.42 (2ND APPROACH)
SCALE H 1:100
V 1:100



STA. 0+240.00
SCALE H 1:100
V 1:100

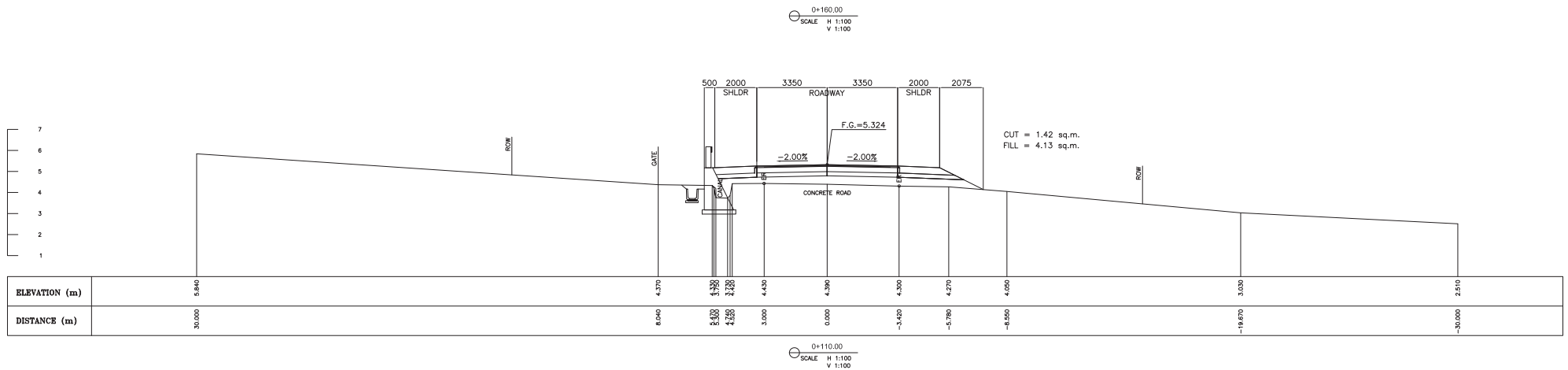
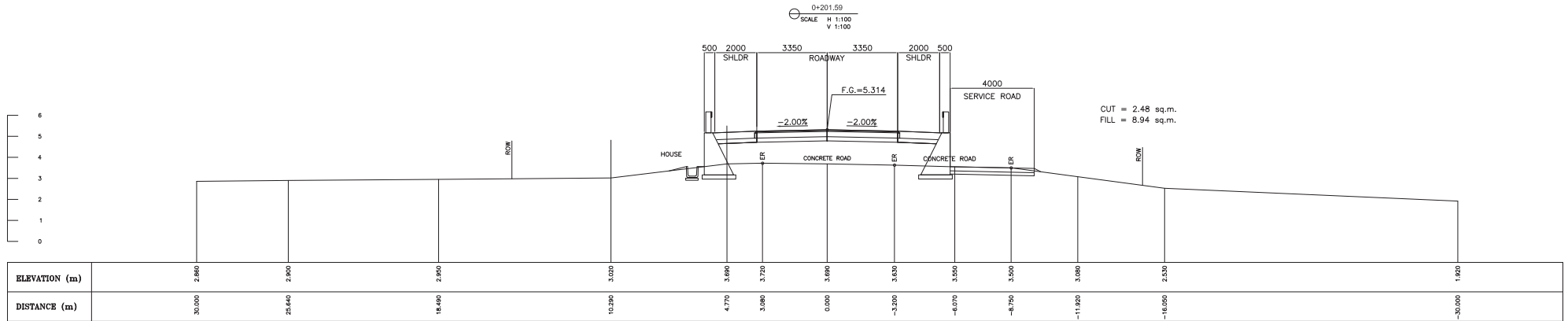
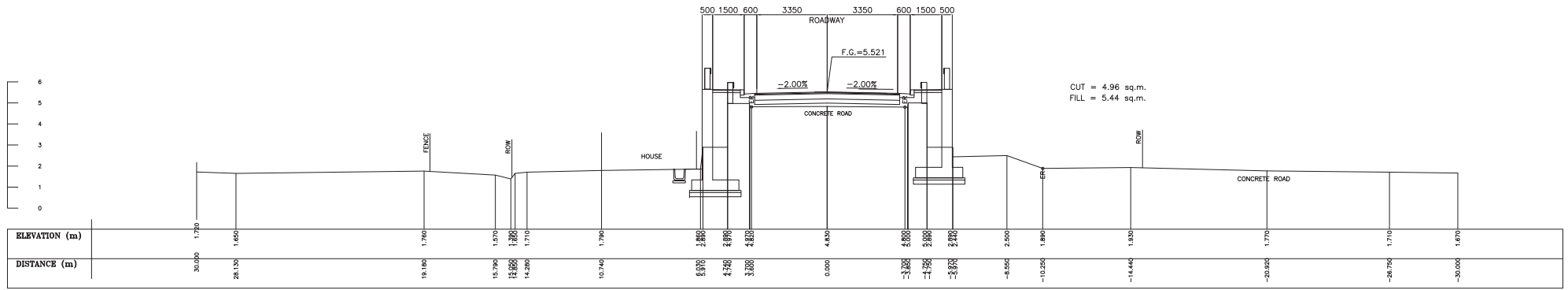
Clients:	Japan International Cooperation Agency	DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS REPUBLIC OF THE PHILIPPINES	Consultants:	CTI Engineering Co., Ltd. Chodai Co., Ltd. Nippon Koei	Project Title:	Project for Study on Improvement of Bridges Through Disaster Mitagating Measures for the Large Scale Earthquakes in the Republic of the Philippines	Bridge Name:	PALANIT BRIDGE	Sheet Contents:	ROAD CROSS SECTIONS(2) STA. 0+240 TO STA. 0+350	SHT. NO.	3-C3
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STATION	0+000.000										0+100										0+200										0+300										0+400										0+500										0+600										0+656.421									
FINISHED GRADE											6.844	6.828	5.791	5.444	5.249	5.221	5.314	5.414	5.51	5.614	5.714	5.814	5.908	5.97	5.997	5.906	5.811	5.71	5.611	5.511	5.411	5.315	5.28	5.340	5.480	5.642	5.805	5.97	6.129	6.292	6.45																																							
GROUND ELEV	7.541										6.997	6.088	5.570	4.649	4.001	3.287	3.142	4.111	4.793	1.302	0.411	-2.226	-2.995	-2.996	-4.290	-4.739	-3.999	-4.000	0.137	2.430	2.912	4.890	5.001	5.005	5.007	5.008	5.012	5.502	5.802	6.000	6.000	6.000	6.445																																					
HOR. CURVATURE	R=∞										R=∞										R=∞										R=∞										R=∞										R=∞										R=∞										R=∞									
VER. CURVATURE	L=80.00 K=25										L=123.88 K=100										L=100.00 K=100										L=104.06 K=46										L=60.00 K=46										L=126.88 K=100																													
SUPERELEVATION											NC = 2.00%																																																																					

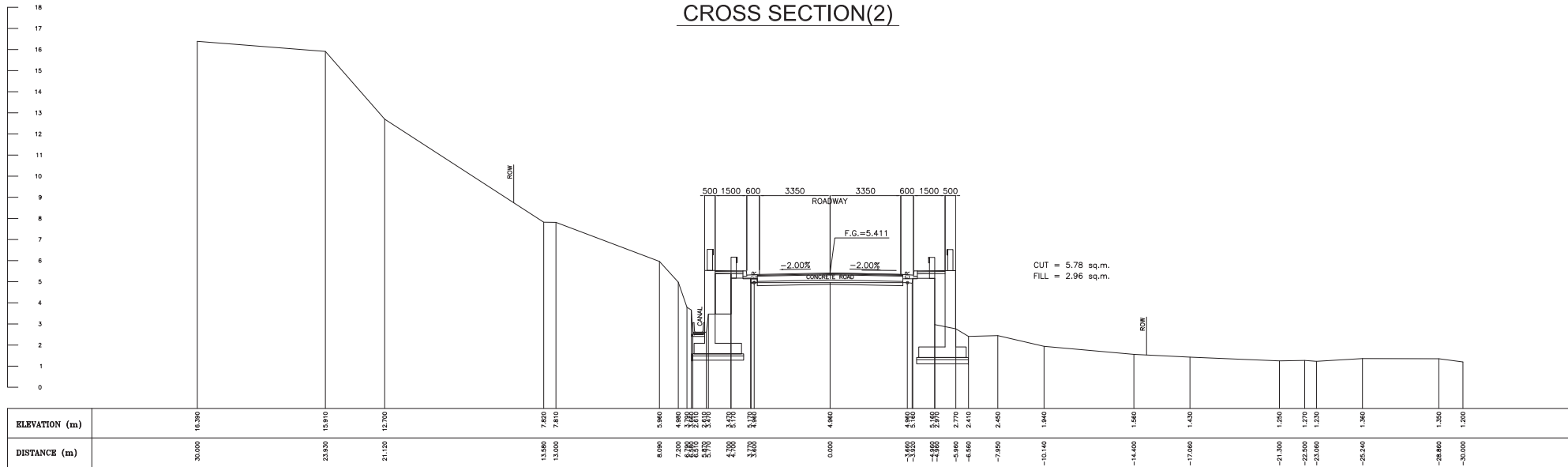
Clients:	Consultants:	Project Title:	Bridge Name:	Sheet Contents:	SHT. NO.
		Project for Study on Improvement of Bridges Through Disaster Mitagating Measures for the Large Scale Earthquakes in the Republic of the Philippines	MAWO BRIDGE	PLAN AND PROFILE STA. 0+65.866 TO STA. 0+534.308	3-D1

CROSS SECTION(1)

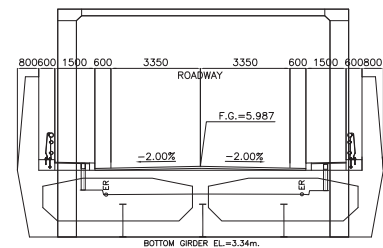


Clients:	Japan International Cooperation Agency	Consultants:	CTI Engineering Co., Ltd. Chodai Co., Ltd. Nippon Koei	Project Title:	Project for Study on Improvement of Bridges Through Disaster Mitagating Measures for the Large Scale Earthquakes in the Republic of the Philippines	Bridge Name:	MAWO BRIDGE	Sheet Contents:	ROAD CROSS SECTIONS(1) STA. 0+110 TO STA. 0+201.59	SHT. NO.	3-D2
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CROSS SECTION(2)



0+460.00
SCALE H 1:100
V 1:100

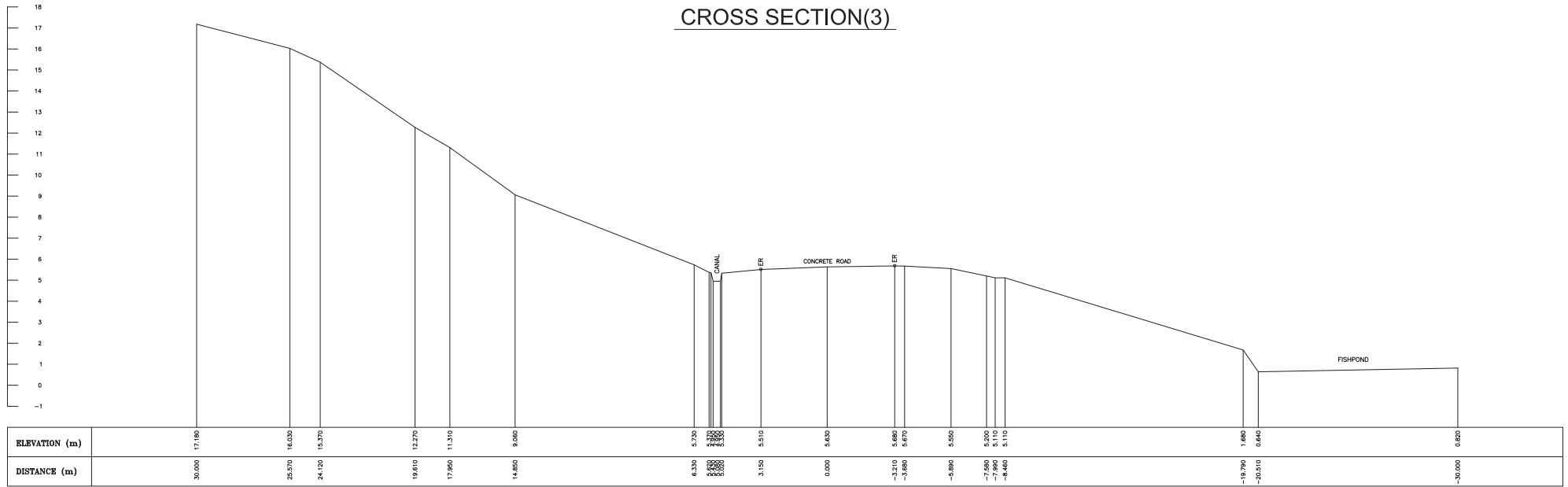


WATER LEVEL EL.=0.50m.

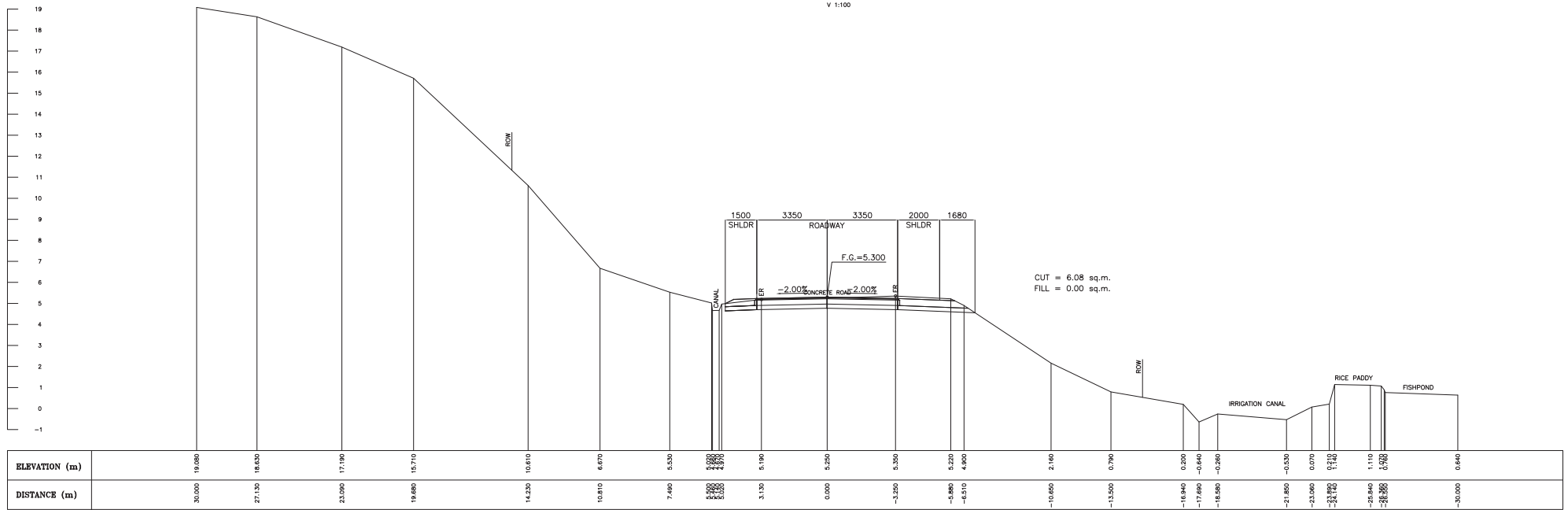
0+320.00
SCALE H 1:100

Clients:	Japan International Cooperation Agency DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS REPUBLIC OF THE PHILIPPINES	Consultants:	CTI Engineering Co., Ltd. Chodai Co., Ltd. Nippon Koei	Project Title:	Project for Study on Improvement of Bridges Through Disaster Mitigating Measures for the Large Scale Earthquakes in the Republic of the Philippines	Bridge Name:	MAWO BRIDGE	Sheet Contents:	ROAD CROSS SECTIONS(2) STA. 0+320 TO STA. 0+460	SHT. NO.	3-D3
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CROSS SECTION(3)



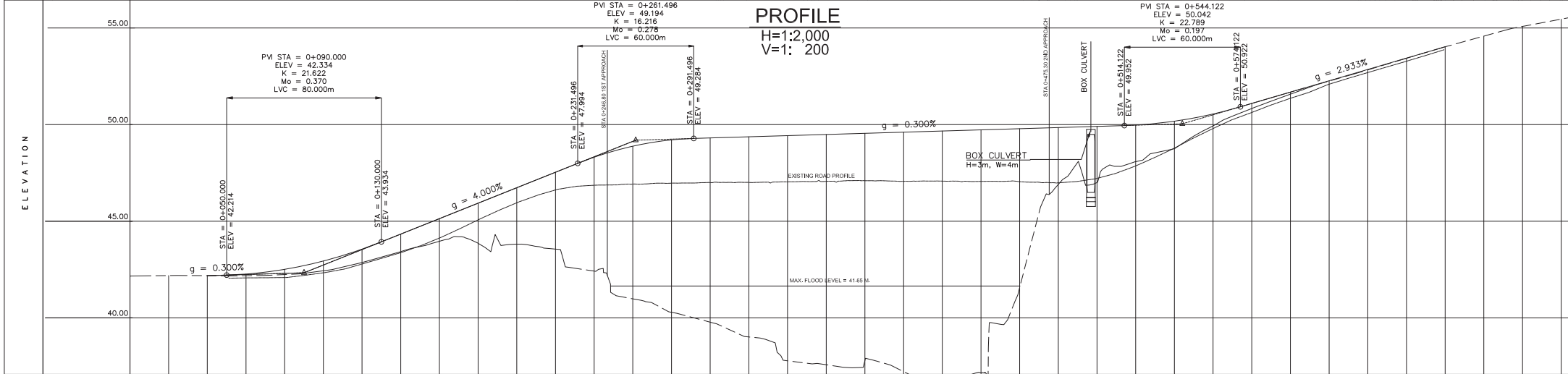
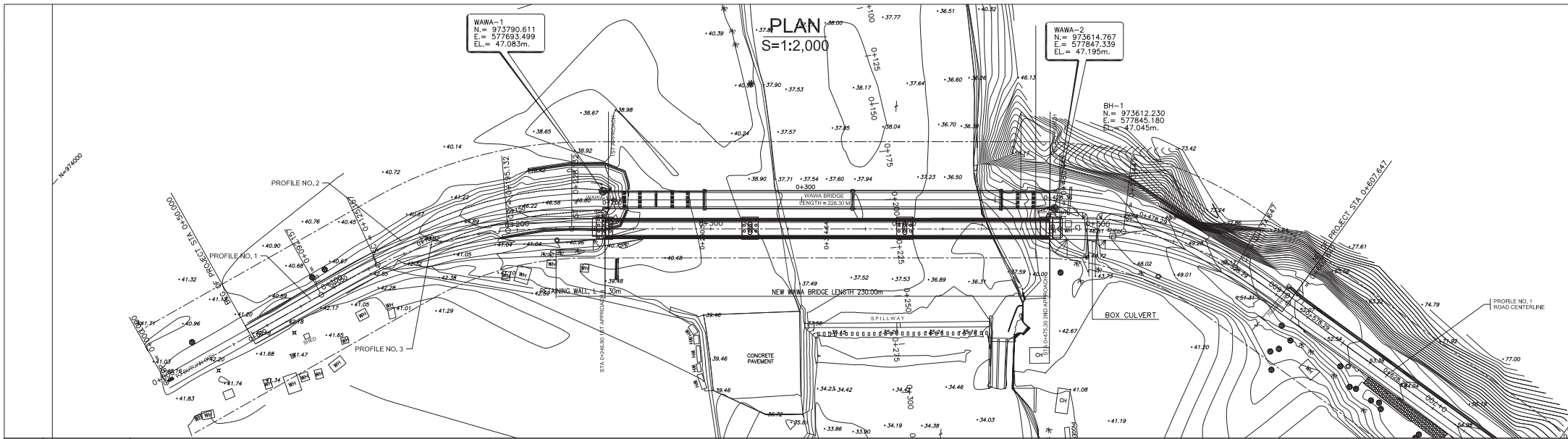
0+560.00
SCALE H 1:100
V 1:100



0+510.00
SCALE H 1:100
V 1:100

CUT = 6.08 sq.m.
FILL = 0.00 sq.m.

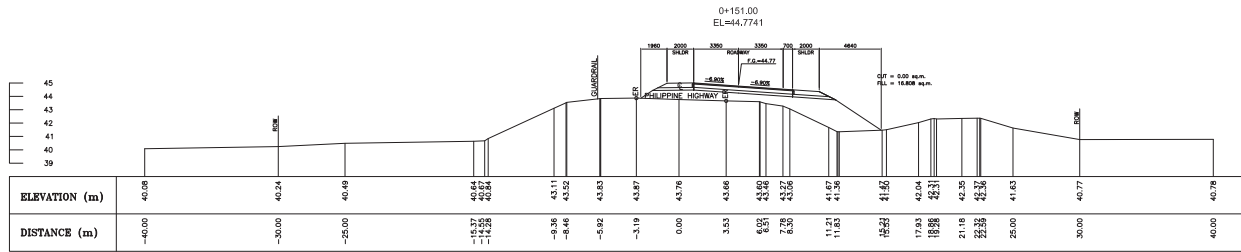
Clients:	Japan International Cooperation Agency DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS REPUBLIC OF THE PHILIPPINES	Consultants:	CTI Engineering Co., Ltd. Chodai Co., Ltd. Nippon Koei	Project Title:	Project for Study on Improvement of Bridges Through Disaster Mitagating Measures for the Large Scale Earthquakes in the Republic of the Philippines	Bridge Name:	MAWO BRIDGE	Sheet Contents:	ROAD CROSS SECTIONS(3) STA. 0+510 TO STA. 0+560	SHT. NO.	3-D4
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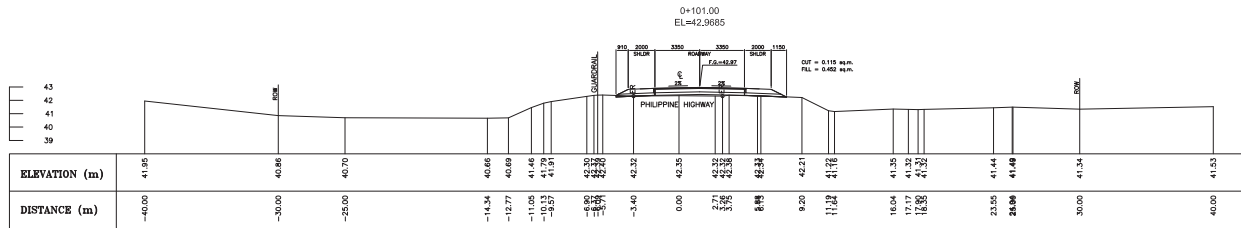
STATION	0+000	0+100	0+200	0+300	0+400	0+500	0+600	0+700
FINISHED GRADE	42.147	42.184	42.267	42.512	42.94	43.557	44.334	45.134
GROUND ELEV	42.147	42.184	42.267	42.512	42.94	43.557	44.334	45.134
HOR. CURVATURE	L=92.157		L=80.00 K=22		L=101.50 g=4.000%		L=60.00 K=16	
VER. CURVATURE	L=80.00 K=22		L=101.50 g=4.000%		L=60.00 K=16		L=222.63 g=0.300%	
SUPERELEVATION	NC = 2.00%		e = 6.90%		NC = 2.00%		e = 6.90%	

Clients:	Consultants:	Project Title:	Bridge Name:	Sheet Contents:	SHT. NO.
Japan International Cooperation Agency DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS REPUBLIC OF THE PHILIPPINES	CTI Engineering Co., Ltd. Chodai Co., Ltd. Nippon Koei	Project for Study on Improvement of Bridges Through Disaster Mitagating Measures for the Large Scale Earthquakes in the Republic of the Philippines	WAWA BRIDGE	PLAN AND PROFILE STA. 0+050 TO STA. 0+607.647	3-E1

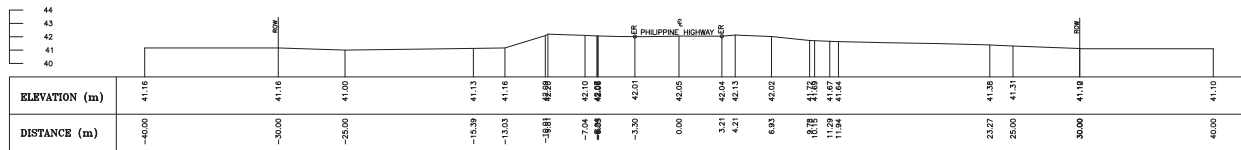
CROSS SECTION(1)



0+100.00
SCALE H 1:200
V 1:200



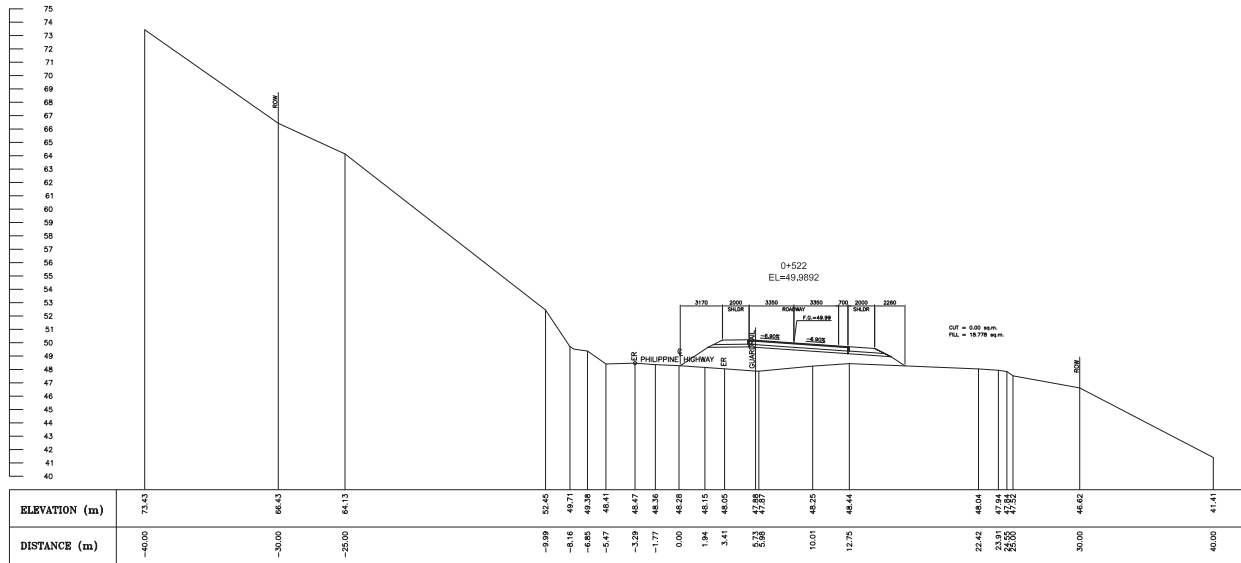
0+050.00
SCALE H 1:200
V 1:200



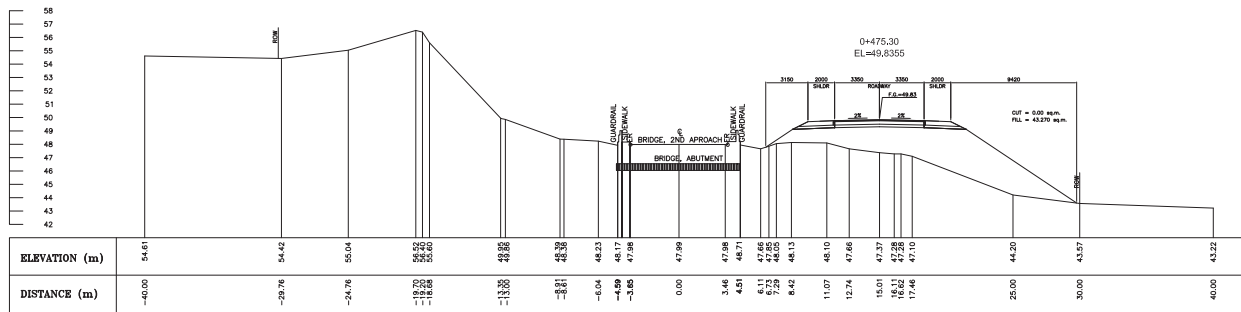
0+000.00
SCALE H 1:200
V 1:200

Clients:	Japan International Cooperation Agency DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS REPUBLIC OF THE PHILIPPINES	Consultants:	CTI Engineering Co., Ltd. Chodai Co., Ltd. Nippon Koei	Project Title:	Project for Study on Improvement of Bridges Through Disaster Mitagating Measures for the Large Scale Earthquakes in the Republic of the Philippines	Bridge Name:	WAWA BRIDGE	Sheet Contents:	ROAD CROSS SECTIONS(1) STA. 0+000 TO STA. 0+100	SHT. NO.	3-E2
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CROSS SECTION(3)



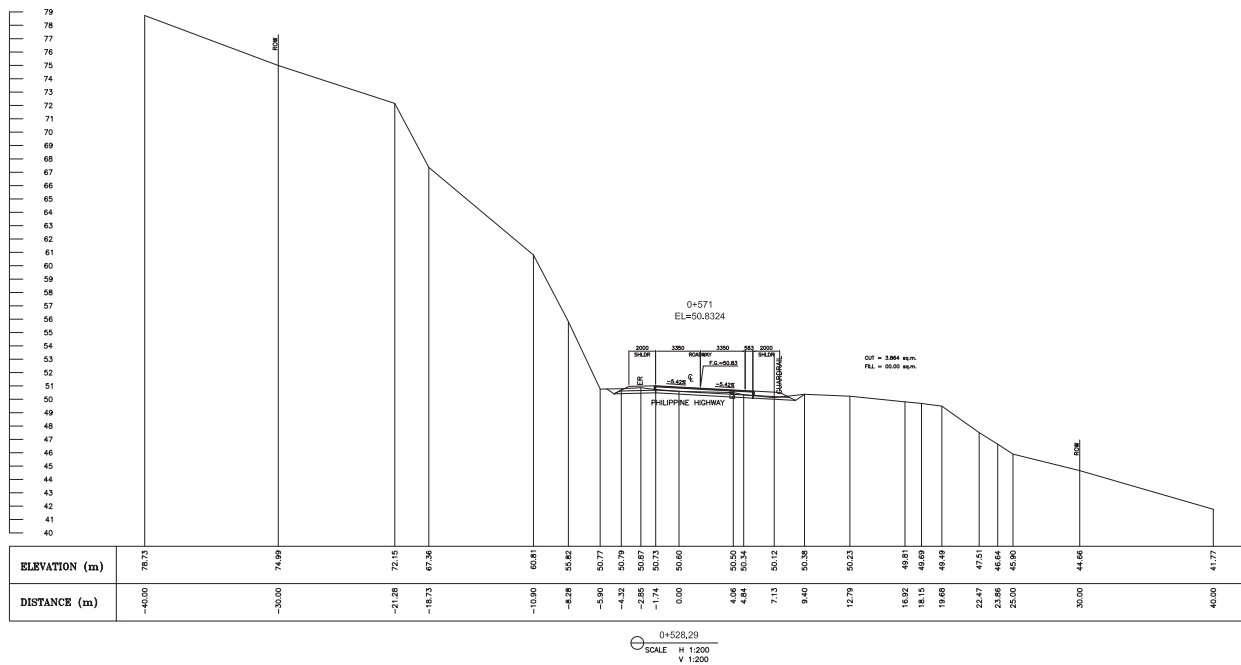
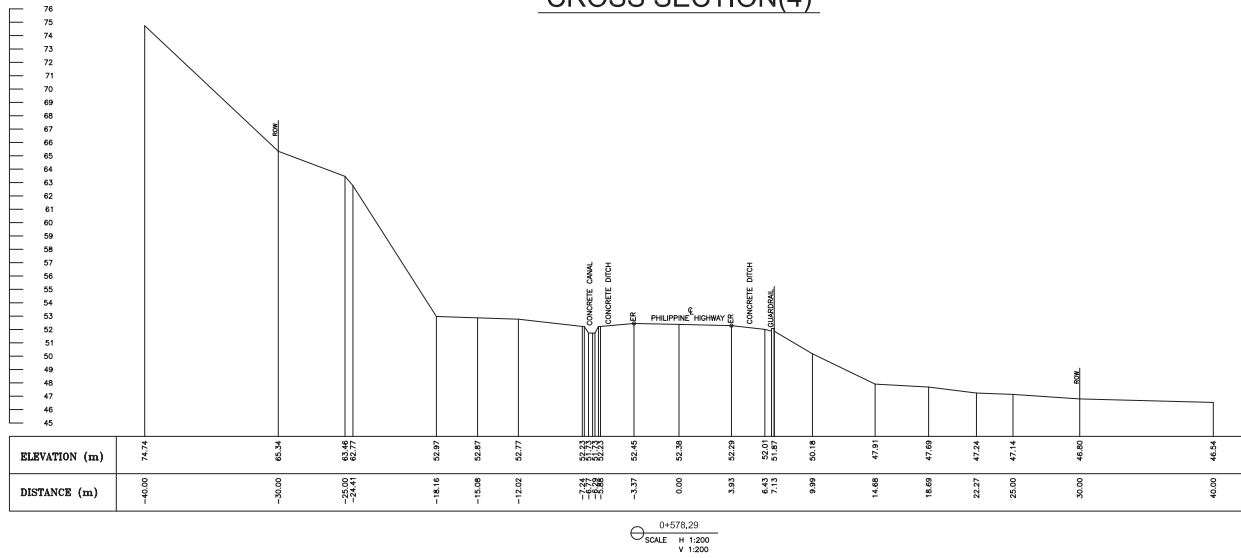
0+478.29
SCALE H 1:200
V 1:200



0+428.36
SCALE H 1:200
V 1:200

Clients:	Japan International Cooperation Agency	DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS REPUBLIC OF THE PHILIPPINES	Consultants:	CTI Engineering Co., Ltd. Chodai Co., Ltd. Nippon Koei	Project Title:	Project for Study on Improvement of Bridges Through Disaster Mitagating Measures for the Large Scale Earthquakes in the Republic of the Philippines	Bridge Name:	WAWA BRIDGE	Sheet Contents:	ROAD CROSS SECTIONS(3) STA. 0+428.36 TO STA. 0+478.29	SHT. NO.	3-E4
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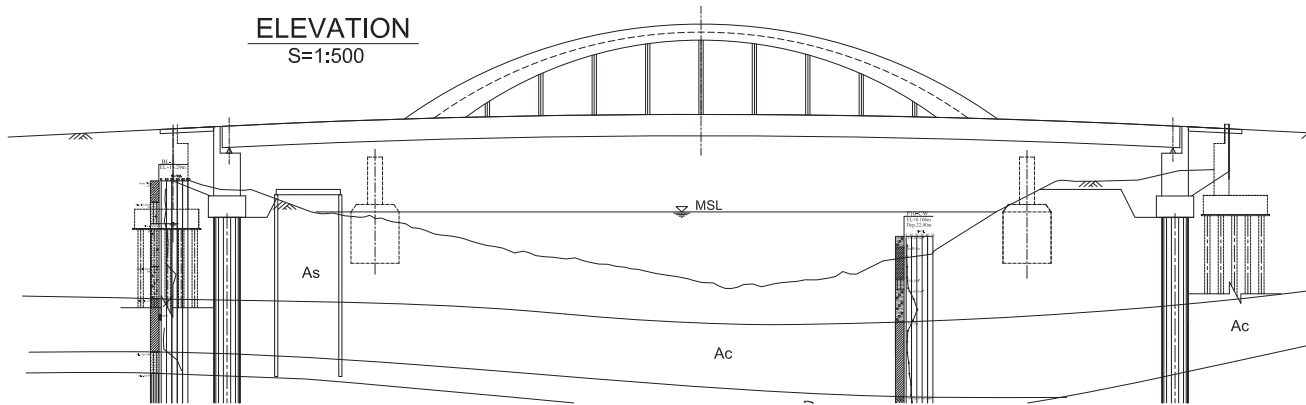
CROSS SECTION(4)



Clients:	Japan International Cooperation Agency	Consultants:	CTI Engineering Co., Ltd. Chodai Co., Ltd. Nippon Koei	Project Title:	Project for Study on Improvement of Bridges Through Disaster Mitagating Measures for the Large Scale Earthquakes in the Republic of the Philippines	Bridge Name:	WAWA BRIDGE	Sheet Contents:	ROAD CROSS SECTIONS(4) STA. 0+528.29 TO STA. 0+578.29	SHT. NO.	3-E5
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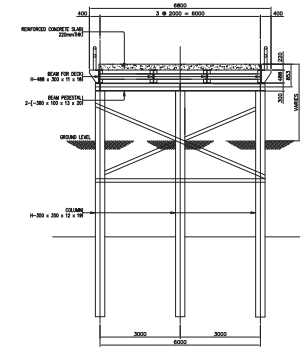
TEMPORARY ROAD OF LAMBINGAN BRIDGE

ELEVATION
S=1:500

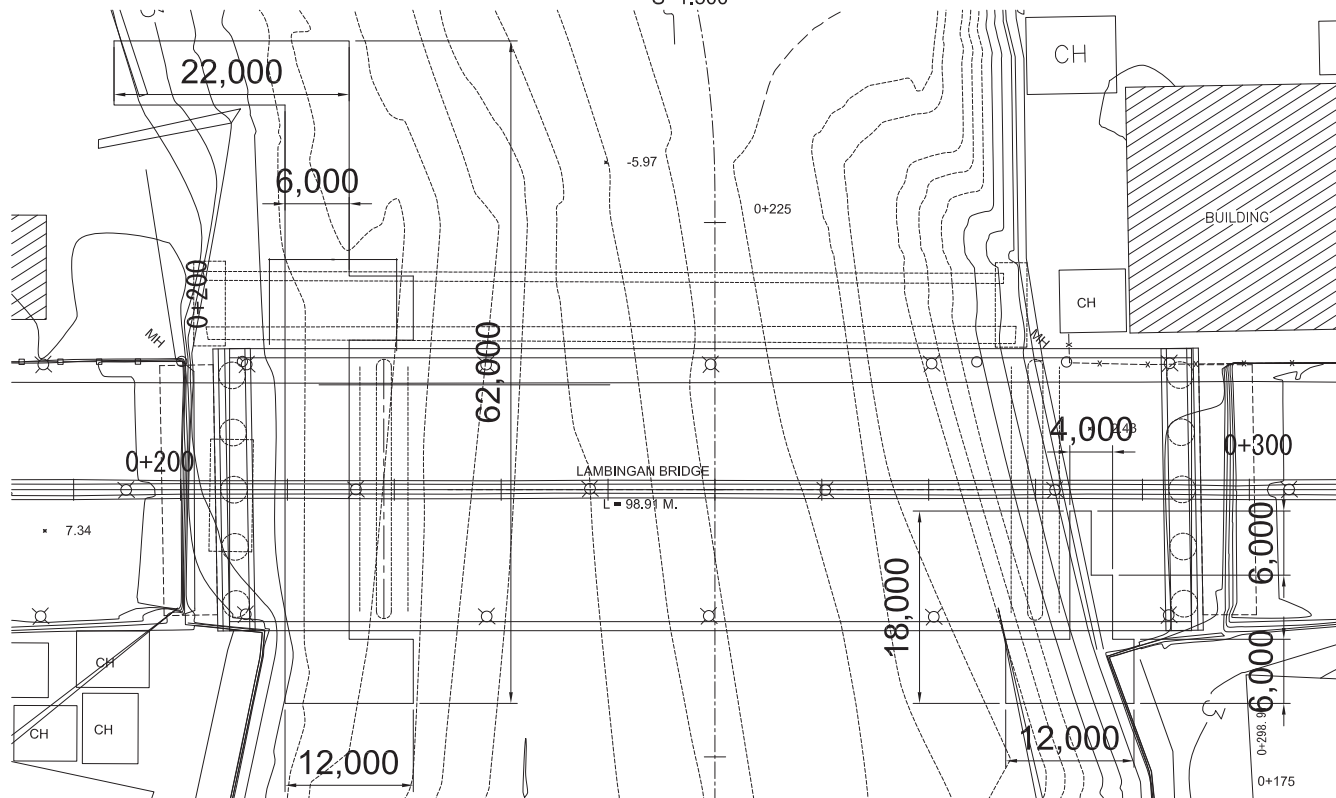


CROSS SECTION
S=1:200






Temporary Bridge



PLAN
S=1:500



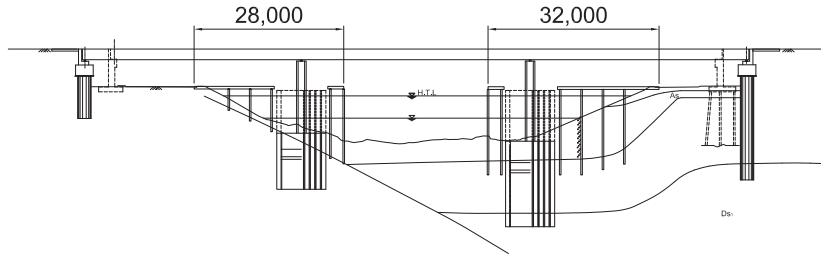
Temporary Stage for Girder Casting
(Upper Stream from Lambingan Br.)
Area = 100m * 20m

Clients:	Consultants:	Project Title:	Bridge Name:	Sheet Contents:	SHT. NO.
 Japan International Cooperation Agency  DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS REPUBLIC OF THE PHILIPPINES	 CTI Engineering Co., Ltd.  Chodai Co., Ltd.  Nippon Koei	Project for Study on Improvement of Bridges Through Disaster Mitigating Measures for the Large Scale Earthquakes in the Republic of the Philippines	LAMBINGAN BRIDGE	TEMPORARY ROAD	4-A1

TEMPORARY ROAD OF GUADALUPE BRIDGE

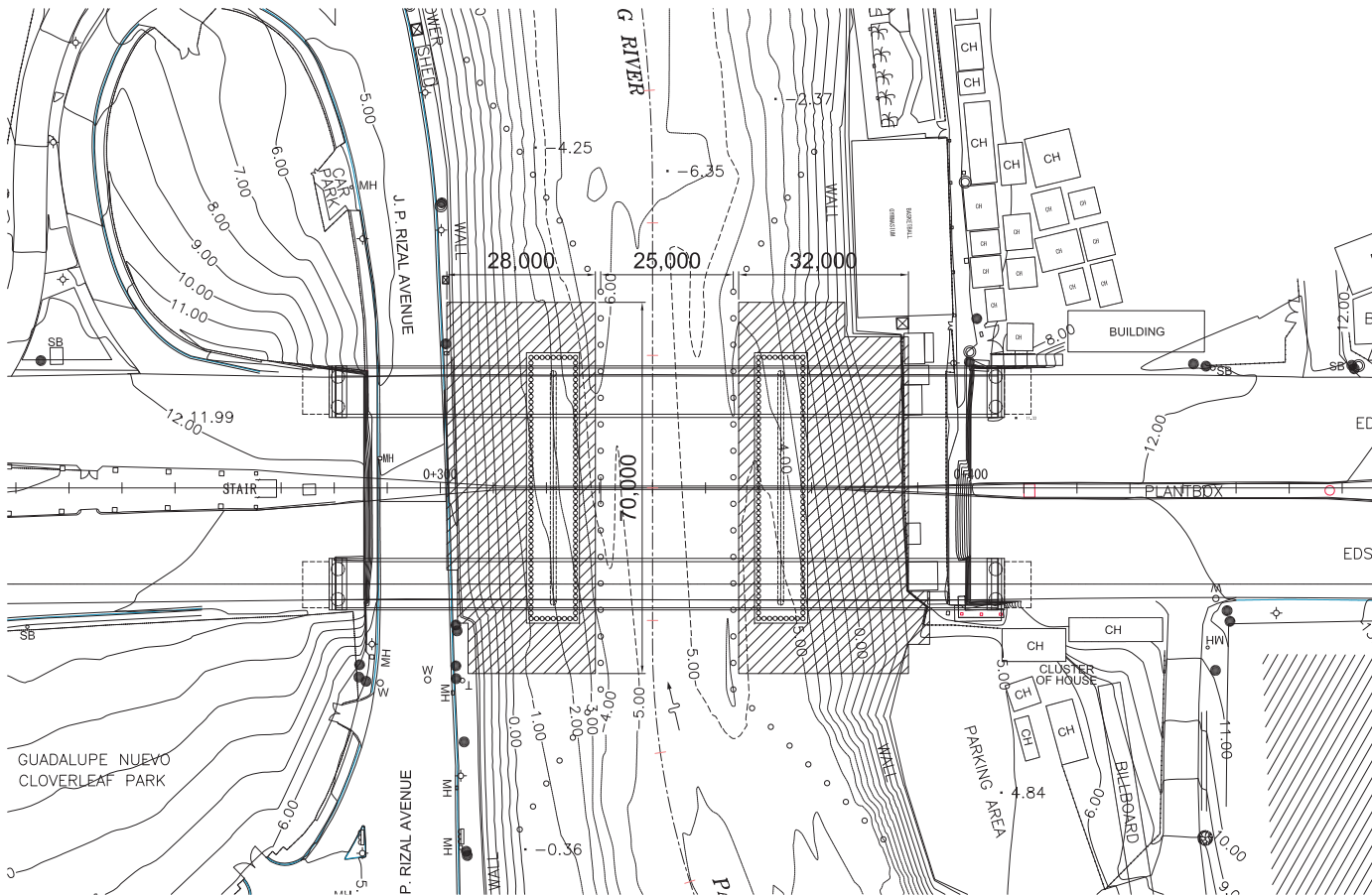
ELEVATION

S=1:1000



PLAN

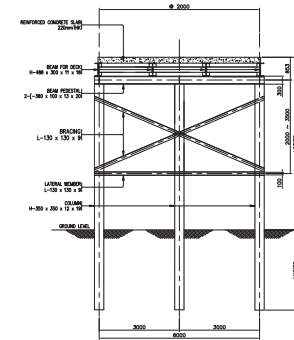
S=1:1000








CROSS SECTION

S=1:200

TEMPORARY STAGE

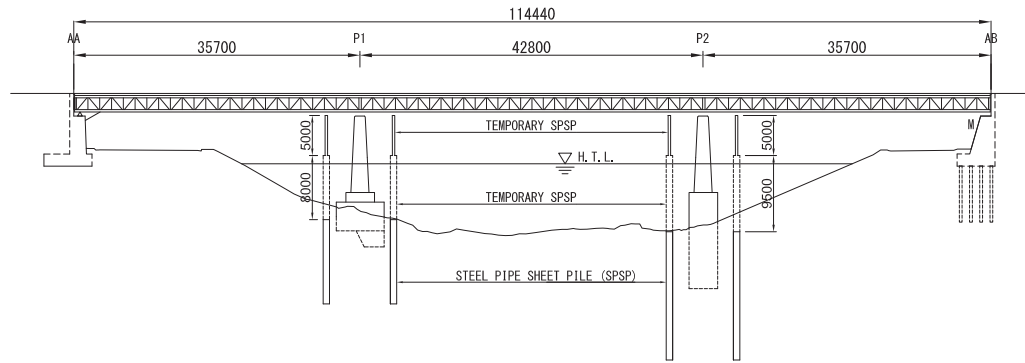


Clients:	Consultants:	Project Title:	Bridge Name:	Sheet Contents:	SHT. NO.
 Japan International Cooperation Agency  DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS REPUBLIC OF THE PHILIPPINES	 CTI Engineering Co., Ltd.  Chodai Co., Ltd.  Nippon Koei	Project for Study on Improvement of Bridges Through Disaster Mitagating Measures for the Large Scale Earthquakes in the Republic of the Philippines	GUADALUPE BRIDGE	TEMPORARY ROAD	4-B1

TEMPORARY SUPPORT OF GUADALUPE BRIDGE

ELEVATION

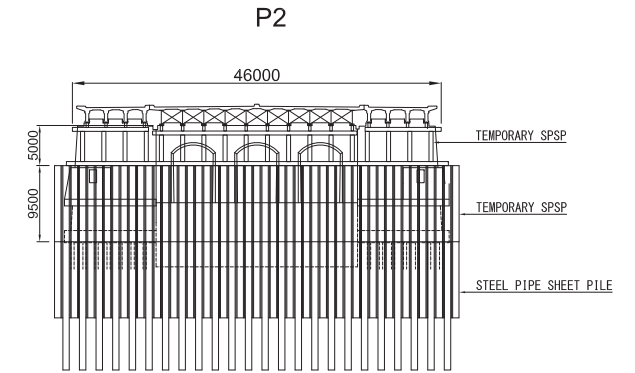
SCALE 1:600



CROSS SECTION

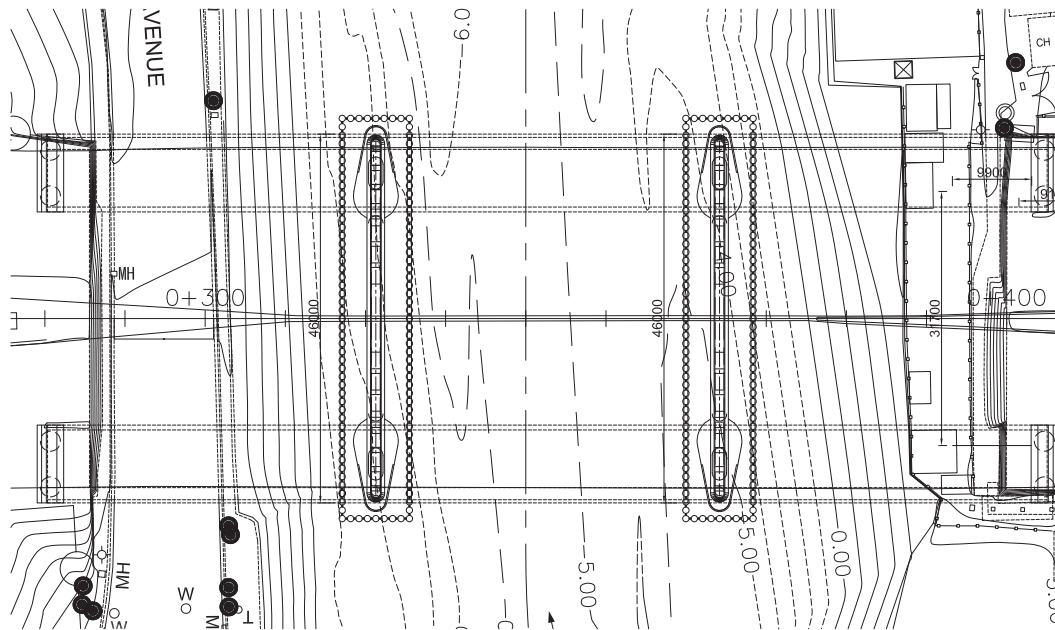
TEMPORARY SUPPORT FOR SUPERSTRUCTURE






SCALE 1:600



PLAN

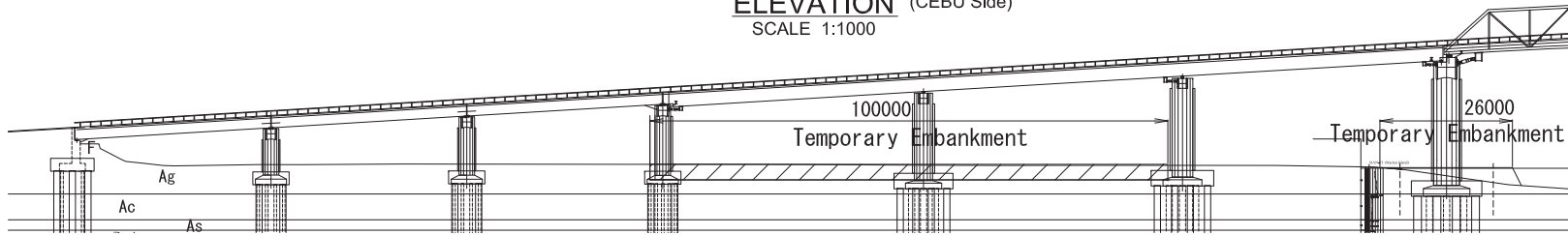
SCALE 1:600



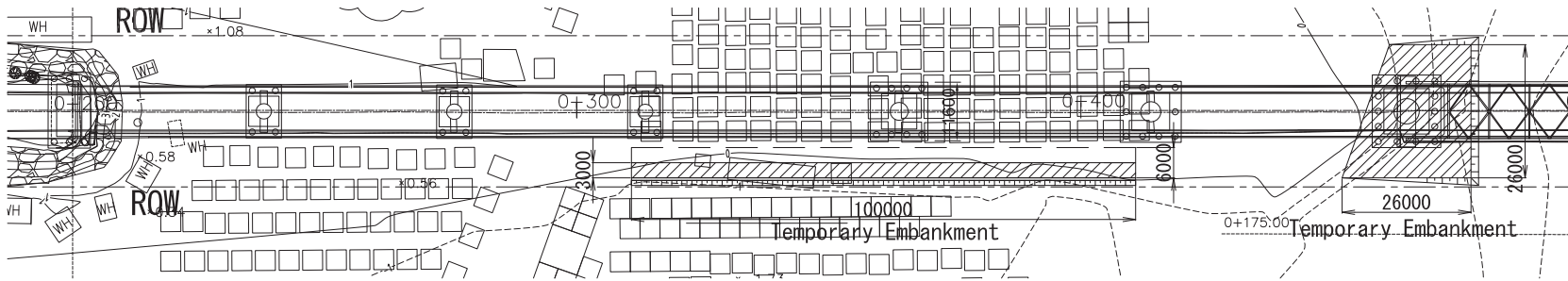
Clients:	Consultants:	Project Title:	Bridge Name:	Sheet Contents:	SHT. NO.
 Japan International Cooperation Agency	 DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS REPUBLIC OF THE PHILIPPINES	 CTI Engineering Co., Ltd.  Chodai Co., Ltd.  Nippon Koel	Project for Study on Improvement of Bridges Through Disaster Mitigating Measures for the Large Scale Earthquakes In the Republic of the Philippines	GUADALUPE BRIDGE TEMPORARY SUPPORT	4-B2

TEMPORARY ROAD of 1st MANDAUE-MACTAN BRIDGE

ELEVATION (CEBU Side)
SCALE 1:1000

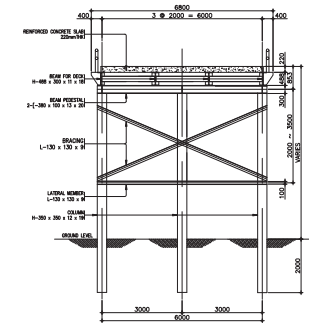


PLAN (CEBU Side)
SCALE 1:500

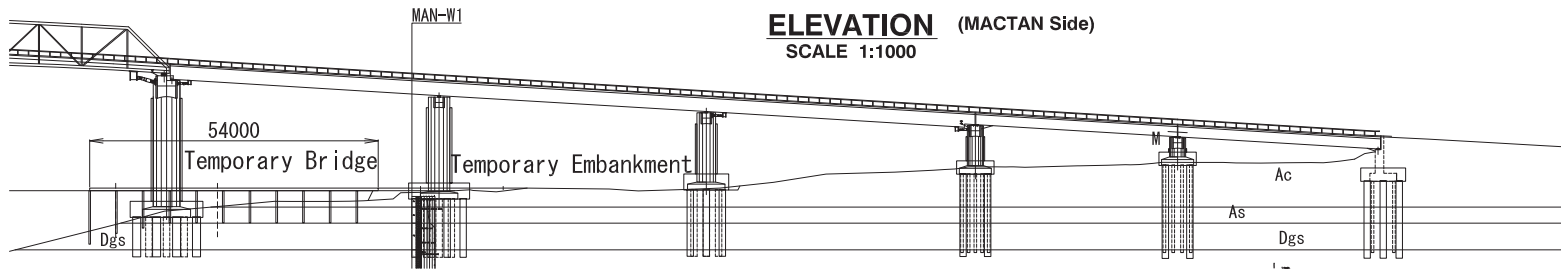


CROSS SECTION
SCALE 1:200

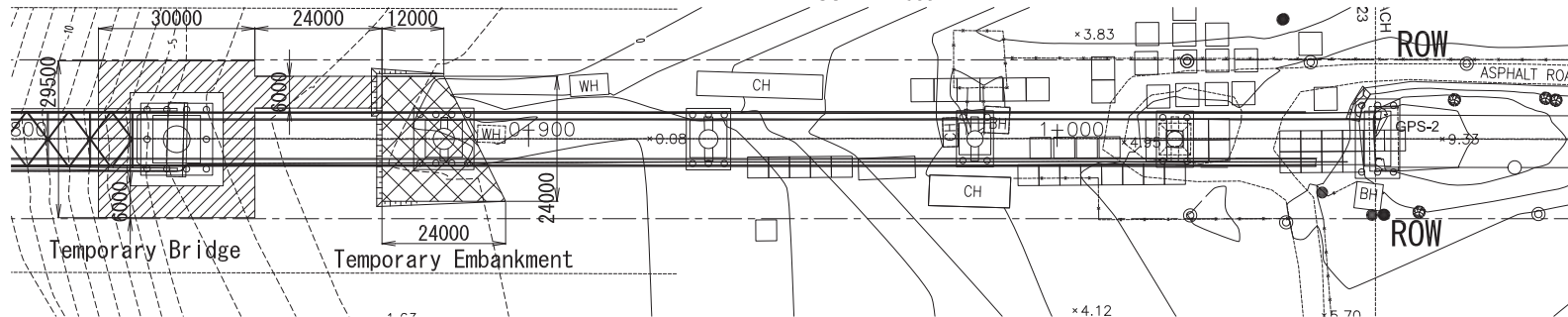
Temporary Bridge



ELEVATION (MACTAN Side)
SCALE 1:1000

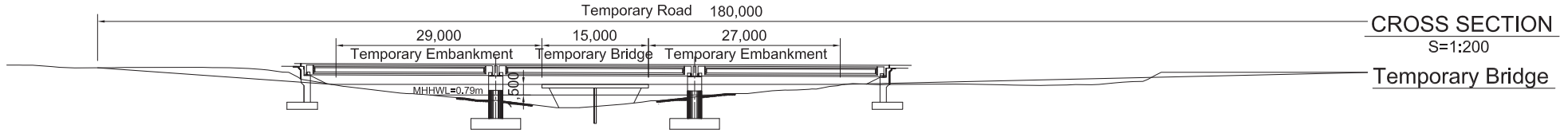


PLAN (MACTAN Side)
SCALE 1:500

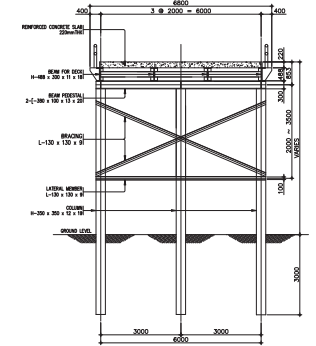


TEMPORARY ROAD OF PALANIT BRIDGE

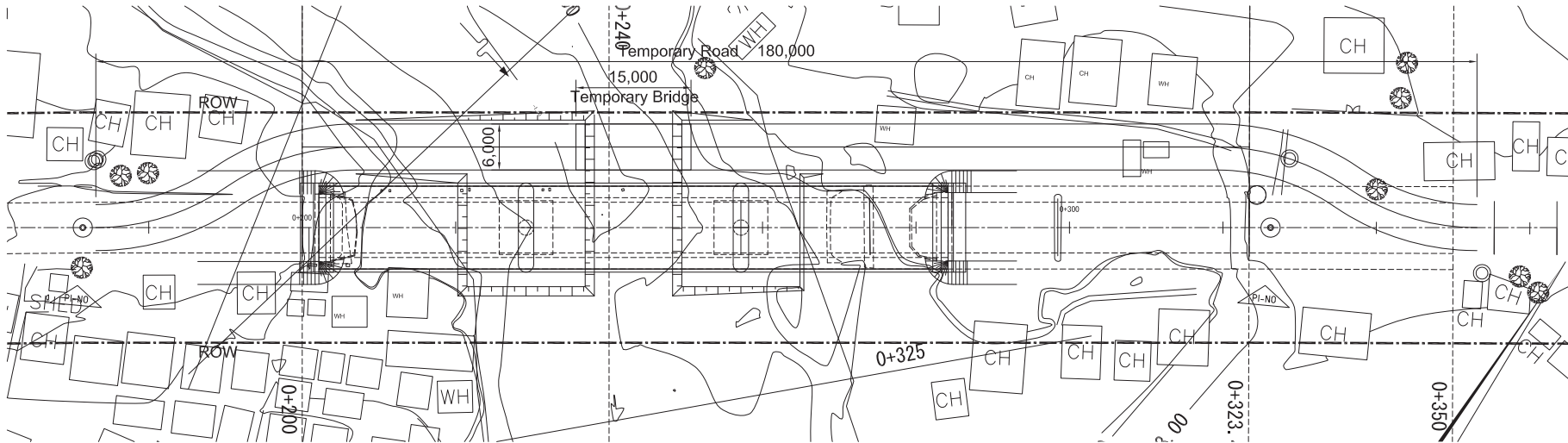
ELEVATION
S=1:600








CROSS SECTION
S=1:200
Temporary Bridge



PLAN
S=1:600



Clients:	Consultants:	Project Title:	Bridge Name:	Sheet Contents:	SHT. NO.
 Japan International Cooperation Agency  DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS REPUBLIC OF THE PHILIPPINES	 CTI Engineering Co., Ltd.  Chodai Co., Ltd.  Nippon Koei	Project for Study on Improvement of Bridges Through Disaster Mitagating Measures for the Large Scale Earthquakes in the Republic of the Philippines	PALANIT BRIDGE	TEMPORARY ROAD	4-D1

