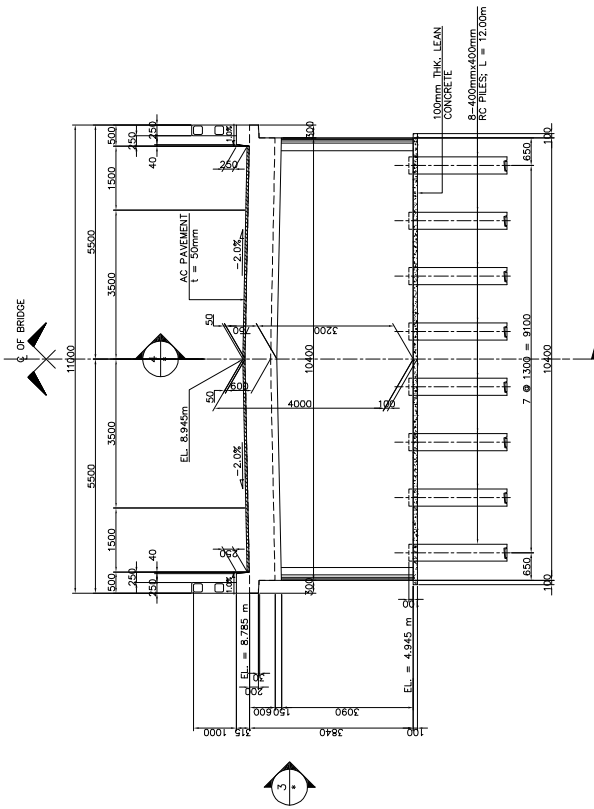
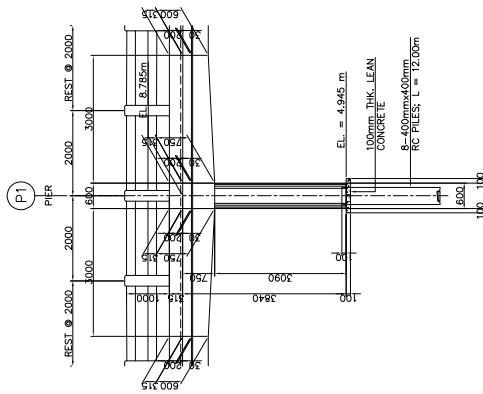


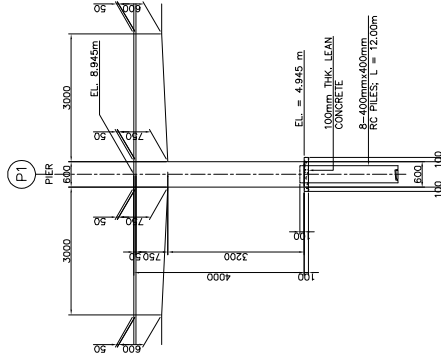
2 PLAN
SCALE 1:180



1 ELEVATION
SCALE 1:180



3 ELEVATION
SCALE 1:180



4 SECTION
SCALE 1:180

MINISTRY OF
PUBLIC WORKS AND TRANSPORT
(MPWT)

THE PROJECT FOR FLOOD
DISASTER REHABILITATION AND
MITIGATION
IN THE KINGDOM OF CAMBODIA

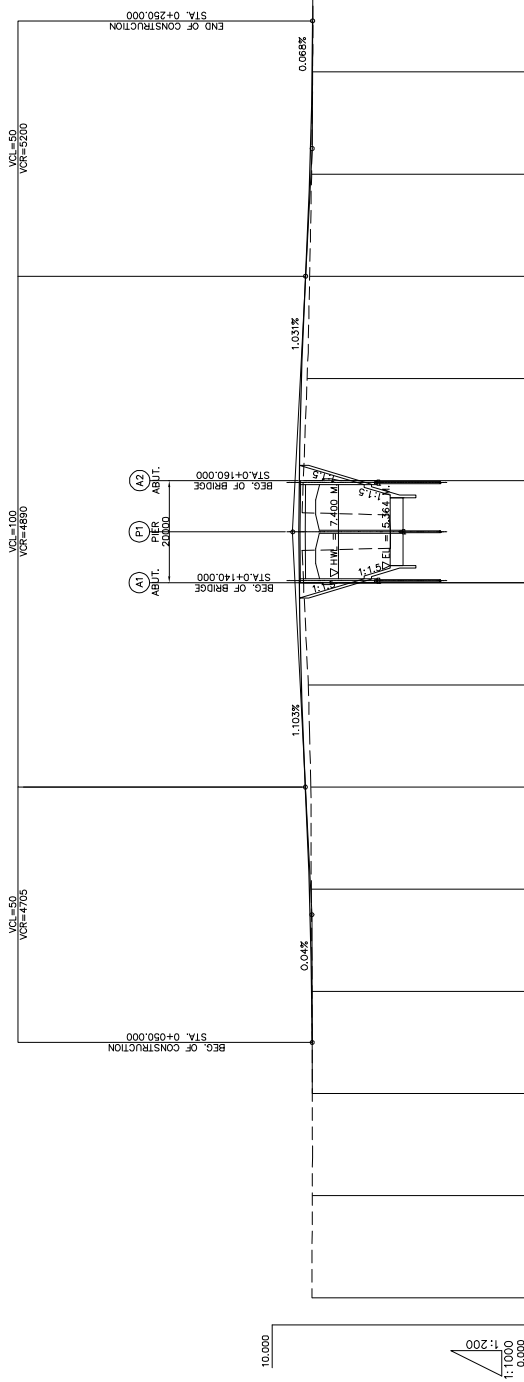
JAPAN INTERNATIONAL COOPERATION AGENCY
KATAHIRA & ENGINEERS INTERNATIONAL

TITLE:
CLV-1 TKOV II BRIDGE
SUBSTRUCTURE STRUCTURAL DIMENSION
(PIER P1)

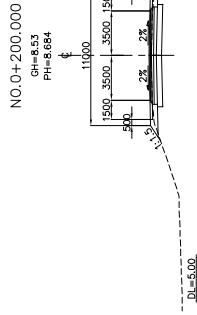
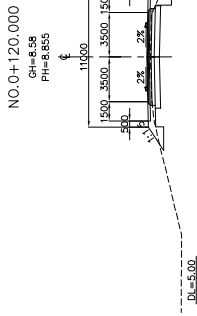
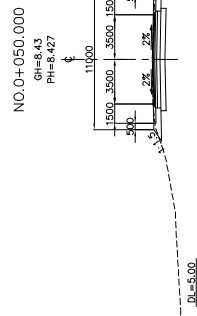
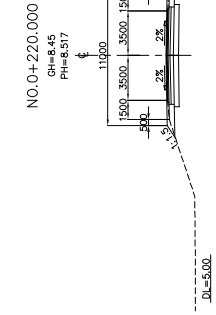
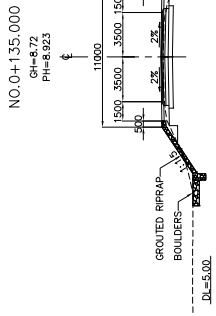
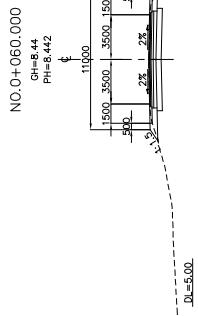
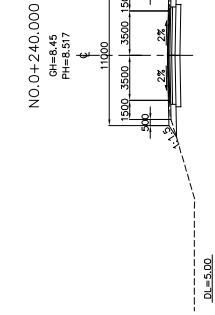
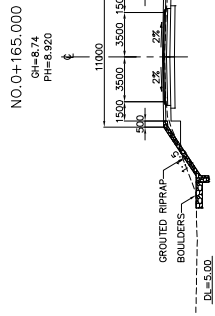
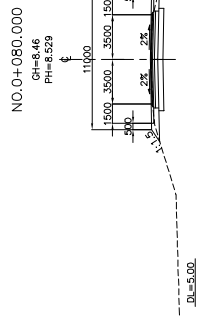
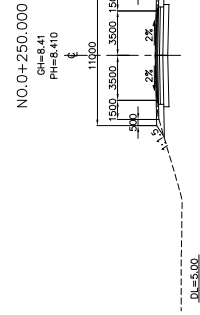
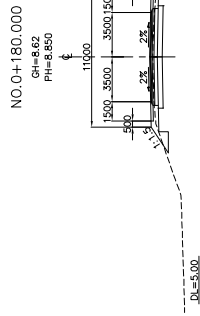
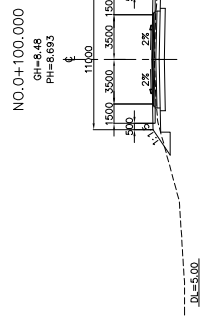
SCALE
AS SHOWN

Drawing No.
Sheet No.

6-5



VERTICAL ALIGNMENT	PAVEMENT LEVEL	GROUND LEVEL	STATION
8.427	8.44	8.42	0+000
8.440	8.44	8.42	0+020
8.442	8.44	8.42	0+040
8.429	8.46	8.42	0+080
8.493	8.529	8.46	0+100
8.693	8.693	8.48	0+120
8.855	8.855	8.58	0+140
8.935	8.935	8.77	0+160
9.200	9.394	8.77	0+180
8.850	8.850	8.62	0+200
8.684	8.684	8.53	0+220
8.517	8.517	8.45	0+240
8.426	8.426	8.41	0+260
8.410	8.410	8.39	0+280
8.410	8.410	8.41	0+300



MINISTRY OF
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THE PROJECT FOR FLOOD
DISASTER REHABILITATION AND
MITIGATION
IN THE KINGDOM OF CAMBODIA

JAPAN INTERNATIONAL COOPERATION AGENCY
KATAHIRA & ENGINEERS INTERNATIONAL

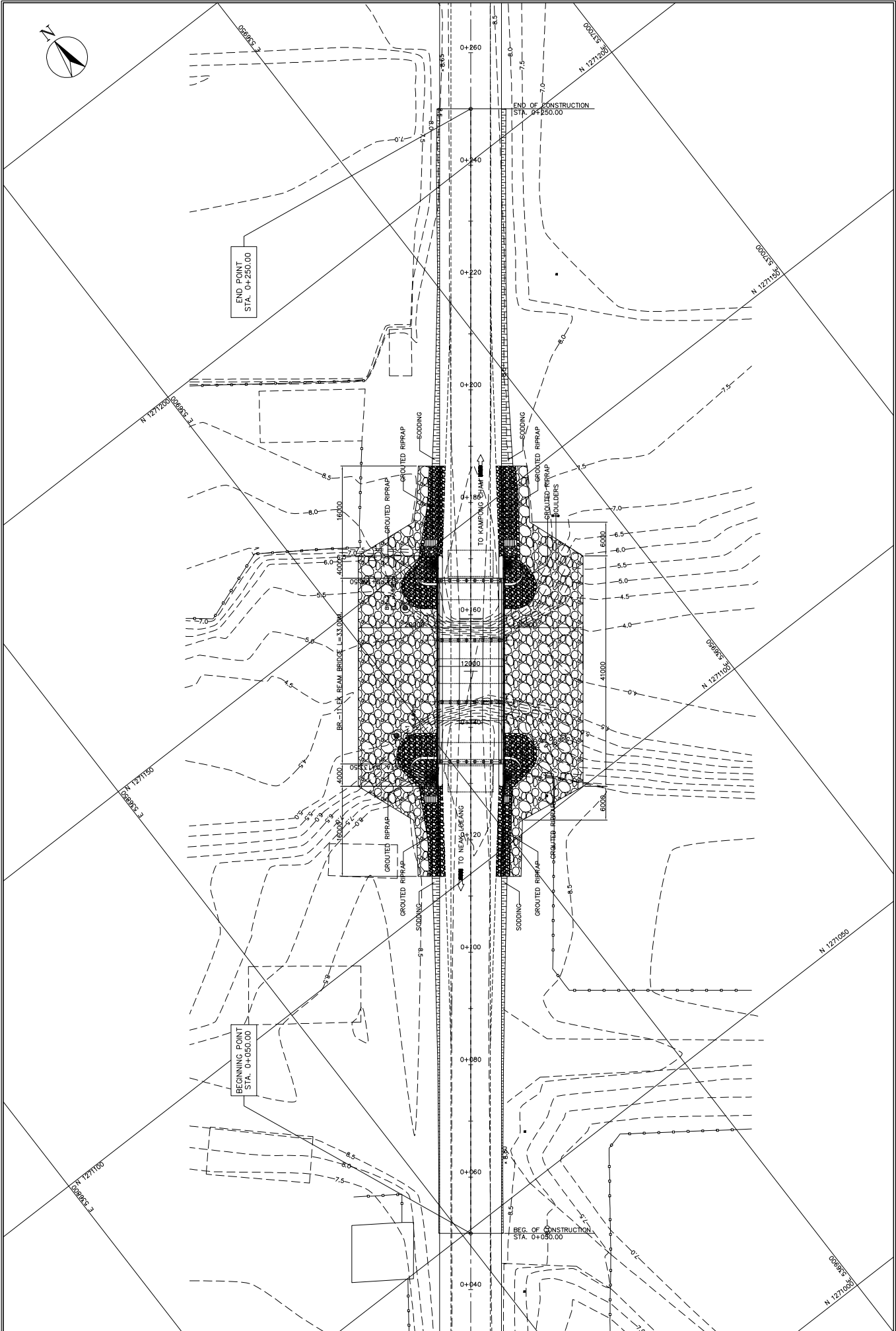
TITLE:
CLV-1 TKOV II BRIDGE
APPROACH ROAD CROSS SECTION S

SCALE
1:400

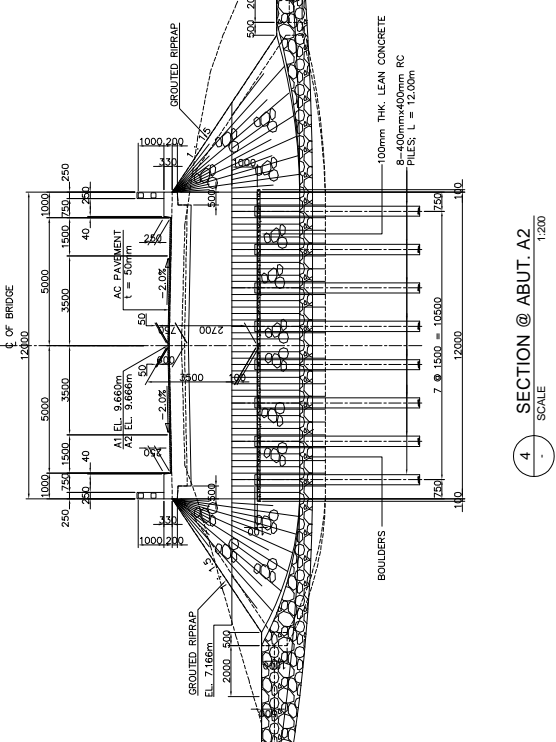
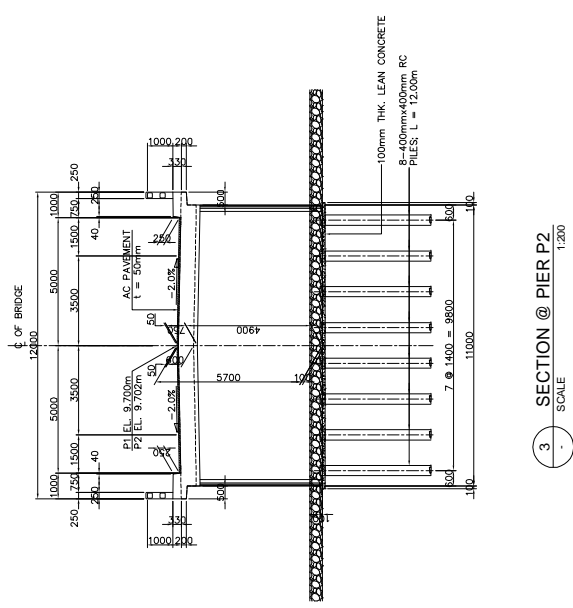
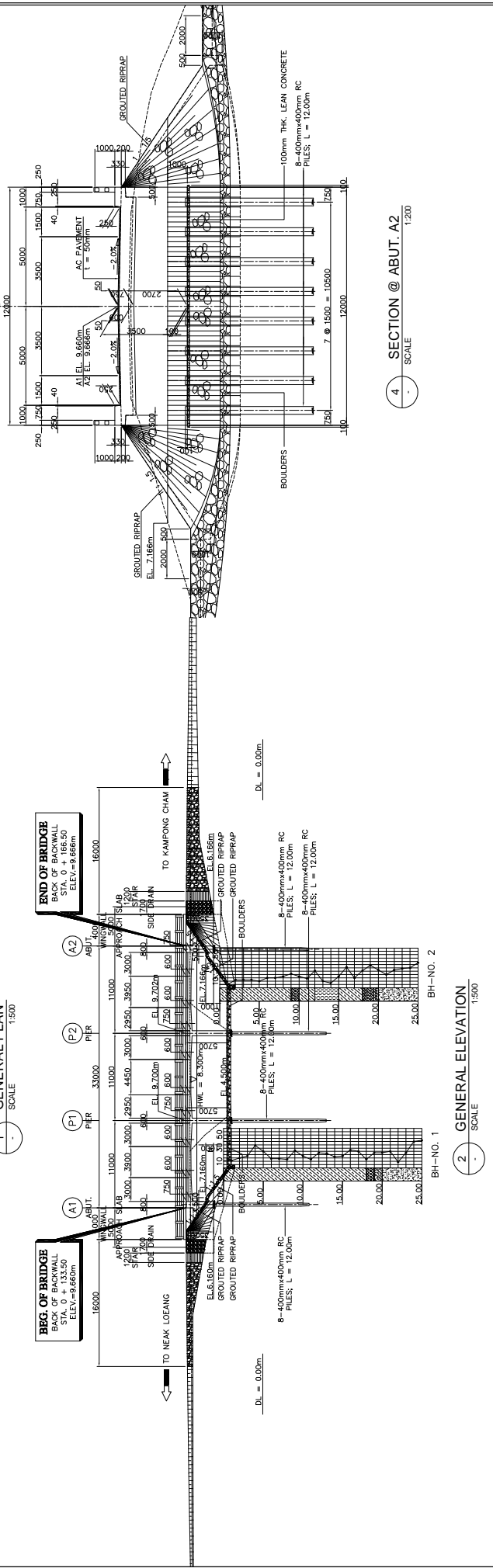
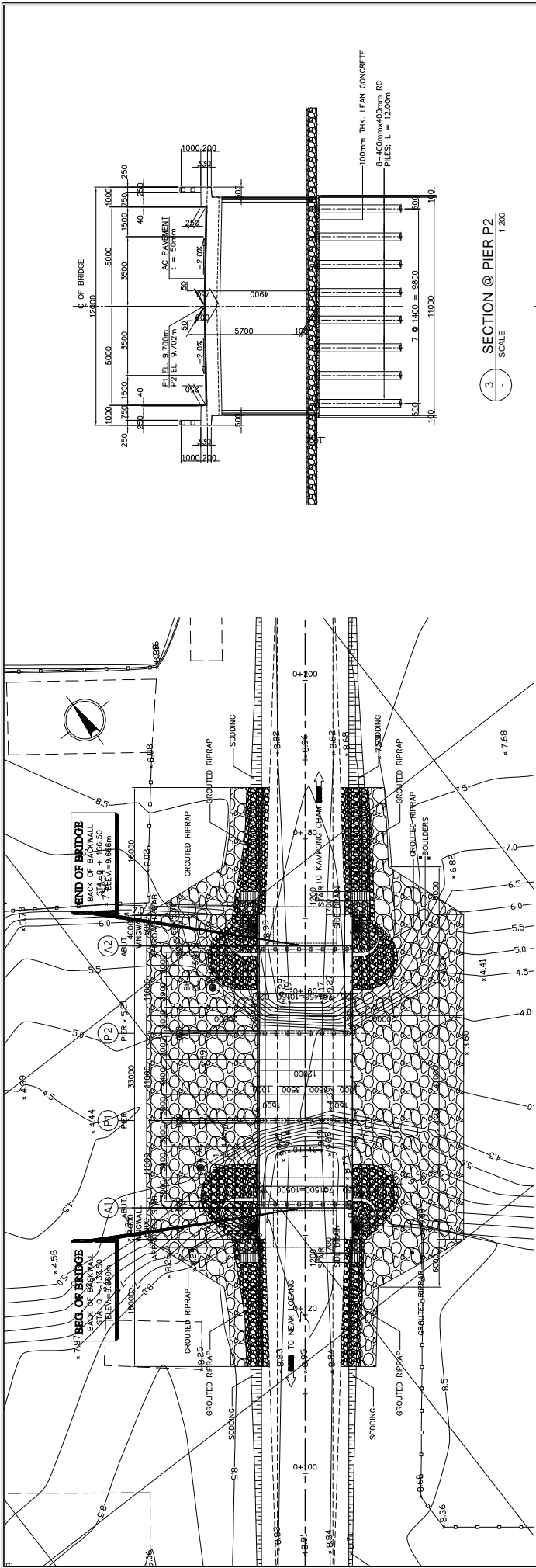
Drawing No.
Sheet No.

6-7

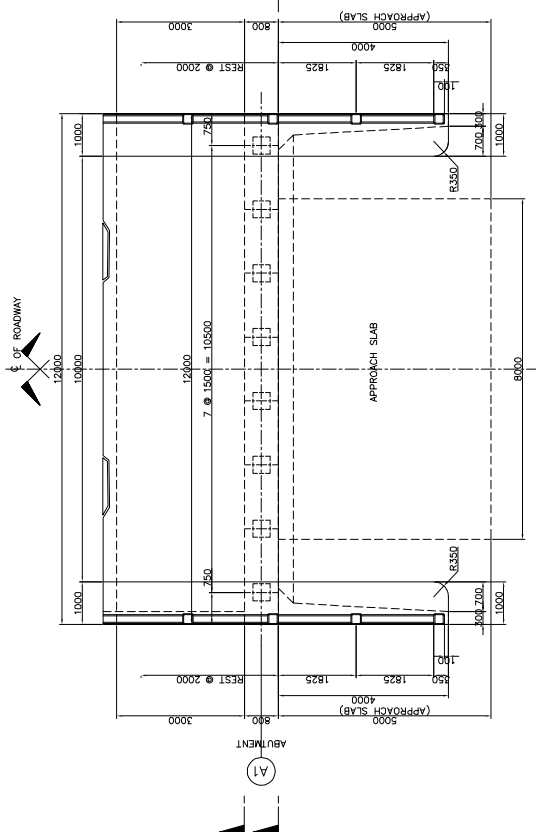
BR-11 EK REAM BRIDGE



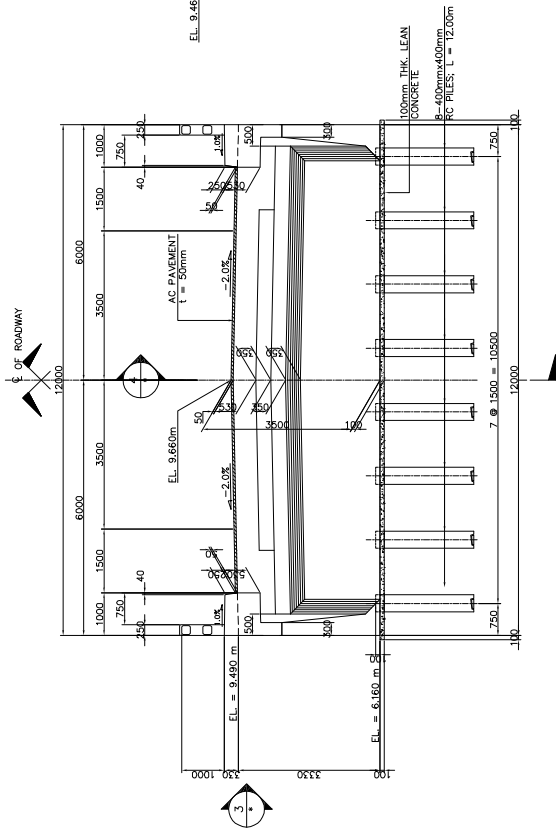
MINISTRY OF PUBLIC WORKS AND TRANSPORT (MPWT)	THE PROJECT FOR FLOOD DISASTER REHABILITATION AND MITIGATION IN THE KINGDOM OF CAMBODIA	JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	TITLE: BR-11 EK REAM BRIDGE GENERAL SITE PLAN	SCALE	Drawing No.
				1:800	7 - 1
					Sheet No.



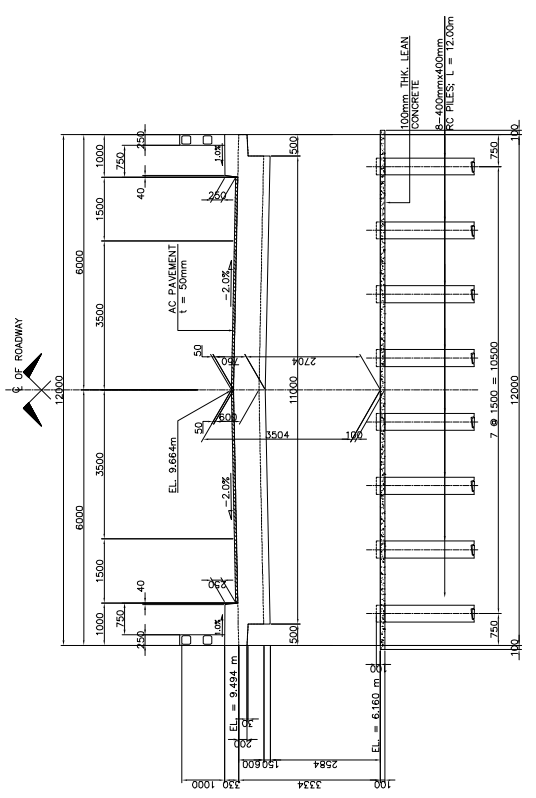
MINISTRY OF PUBLIC WORKS AND TRANSPORT (MPWT)	THE PROJECT FOR FLOOD DISASTER REHABILITATION AND MITIGATION IN THE KINGDOM OF CAMBODIA	JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	TITLE: BR-11 EK REAM BRIDGE GENERAL VIEW	SCALE AS SHOWN	Drawing No.
					Sheet No.
					7-2



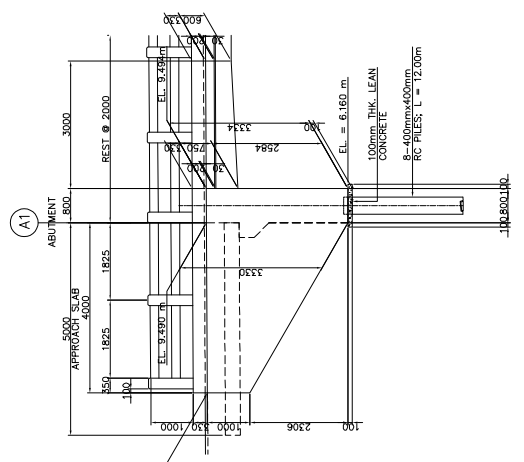
2 PLAN SCALE 1:60



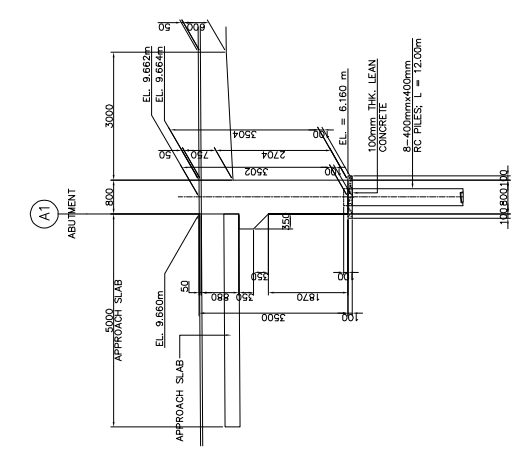
1 ELEVATION SCALE 1:60



5 ELEVATION SCALE 1:60



3 ELEVATION SCALE 1:60



4 SECTION SCALE 1:60

MINISTRY OF PUBLIC WORKS AND TRANSPORT (MPWT)

THE PROJECT FOR FLOOD DISASTER REHABILITATION AND MITIGATION IN THE KINGDOM OF CAMBODIA

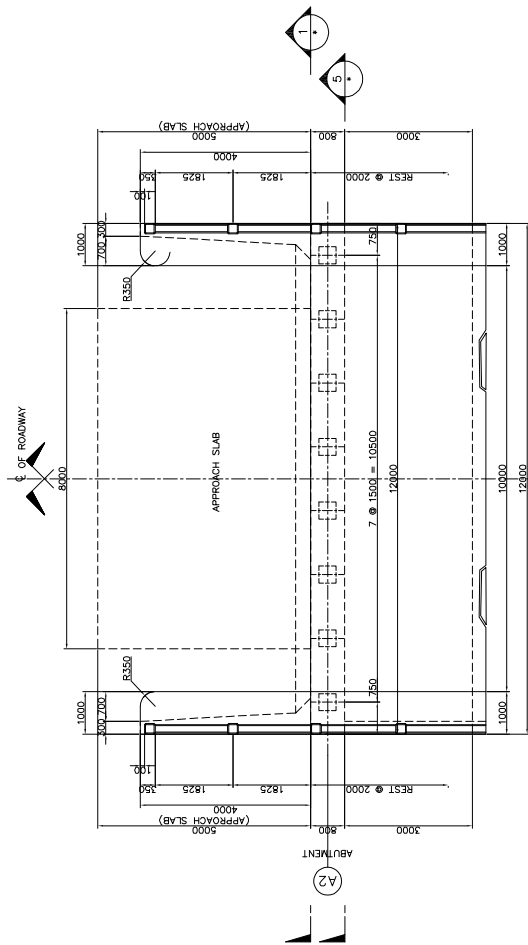
JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL

TITLE: BR-11 EK REAM BRIDGE SUBSTRUCTURE STRUCTURAL DIMENSION (ABUT. A1)

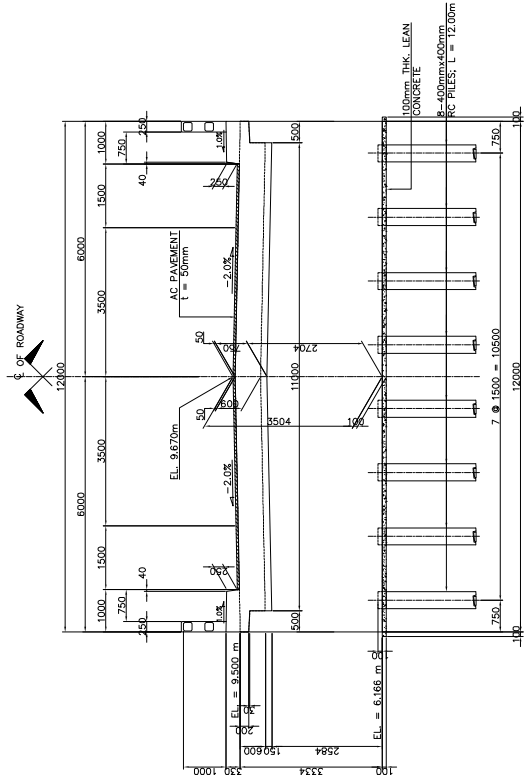
SCALE AS SHOWN

Drawing No. Sheet No.

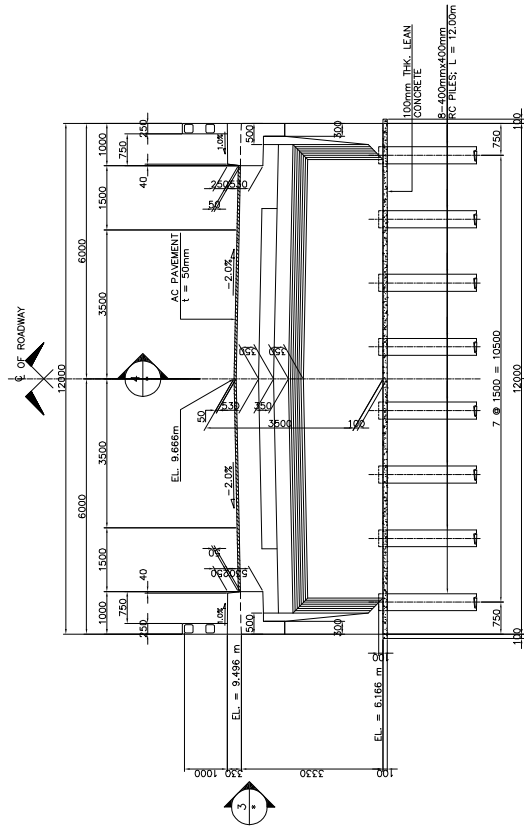
7-3



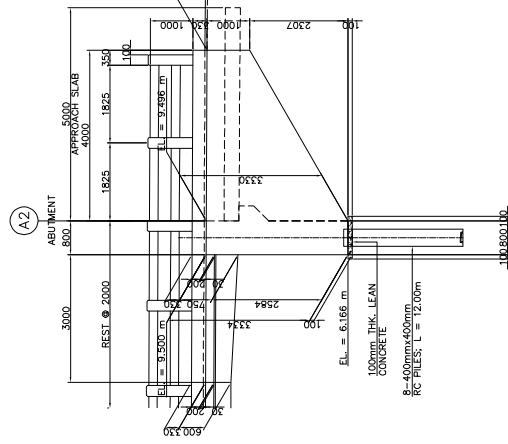
2 PLAN SCALE 1:150



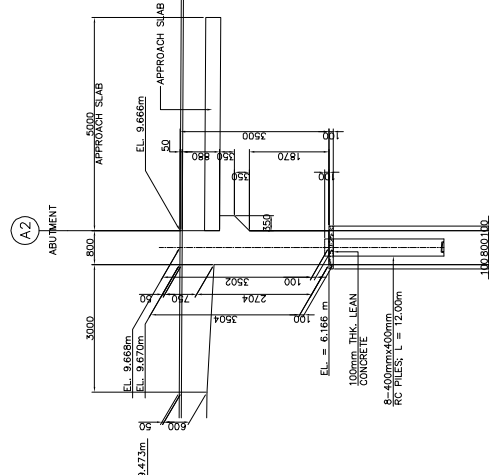
5 ELEVATION SCALE 1:150



1 ELEVATION SCALE 1:150



3 ELEVATION SCALE 1:150



4 SECTION SCALE 1:150

MINISTRY OF
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(MPWT)

THE PROJECT FOR FLOOD
DISASTER REHABILITATION AND
MITIGATION
IN THE KINGDOM OF CAMBODIA

JAPAN INTERNATIONAL COOPERATION AGENCY
KATAHIRA & ENGINEERS INTERNATIONAL

TITLE : BR-11 EK REAM BRIDGE
SUBSTRUCTURE STRUCTURAL DIMENSION
(ABUT. A2)

SCALE
AS SHOWN

Drawing No.

Sheet No.

7-4

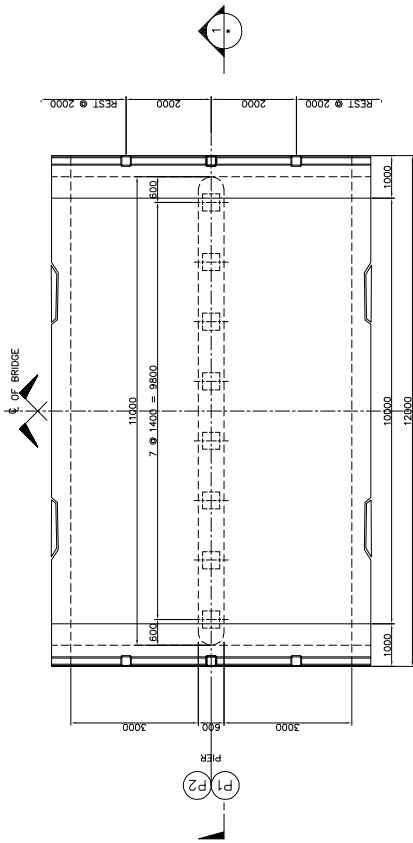
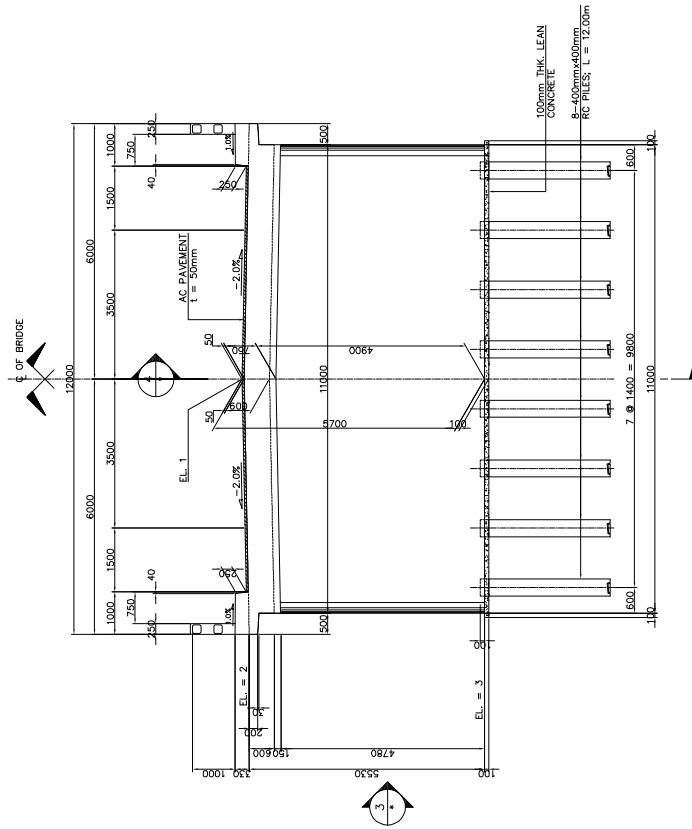


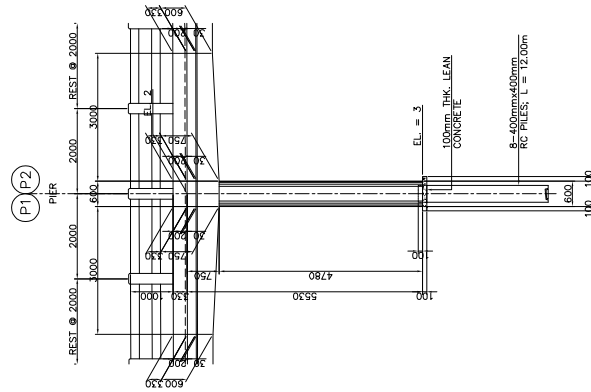
TABLE OF ELEVATIONS

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PIER 2	9.702m	9.532m	4.002m

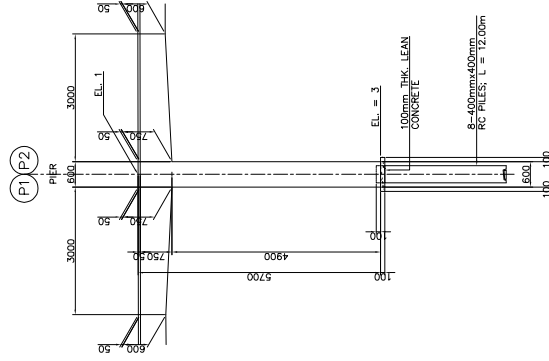
2 PLAN SCALE 1:60



1 ELEVATION SCALE 1:60



3 ELEVATION SCALE 1:60



4 SECTION SCALE 1:60

MINISTRY OF
PUBLIC WORKS AND TRANSPORT
(MPWT)

THE PROJECT FOR FLOOD
DISASTER REHABILITATION AND
MITIGATION
IN THE KINGDOM OF CAMBODIA

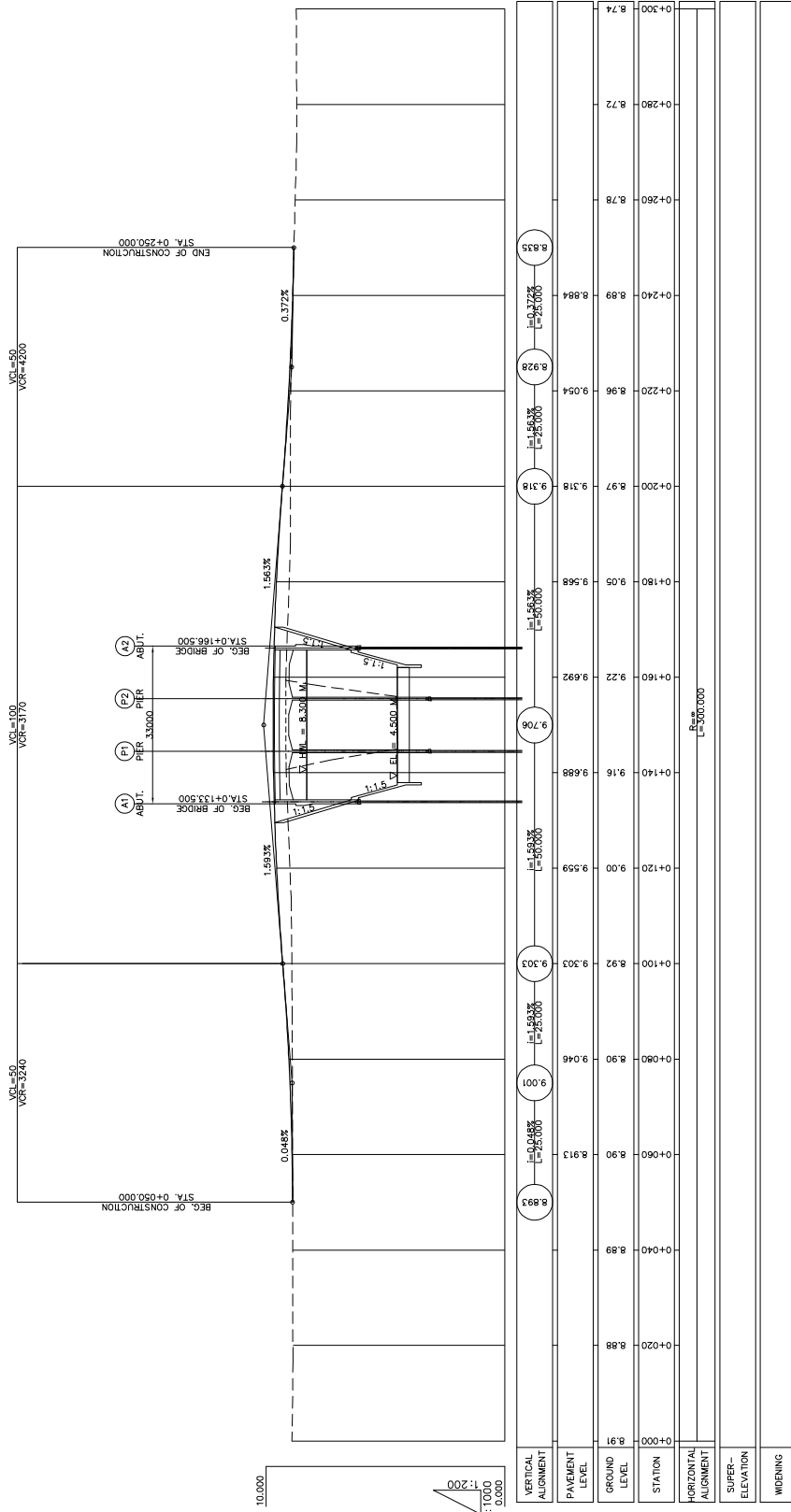
JAPAN INTERNATIONAL COOPERATION AGENCY
KATAHIRA & ENGINEERS INTERNATIONAL

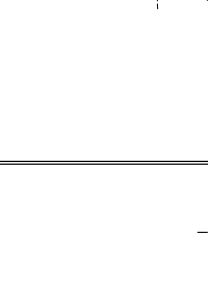
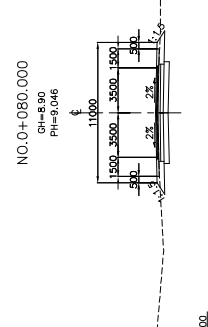
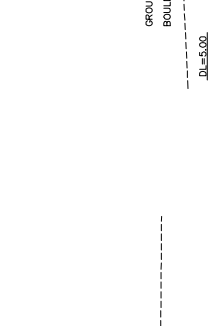
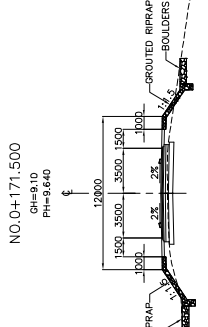
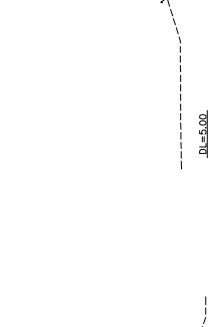
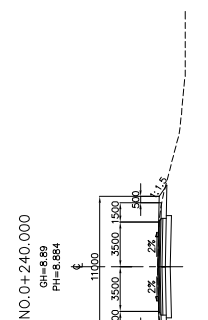
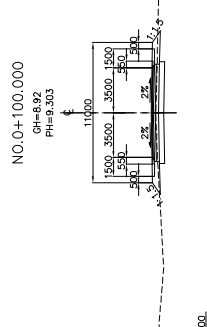
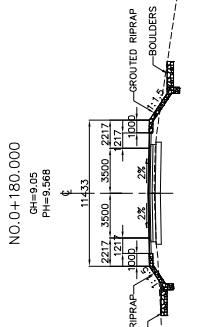
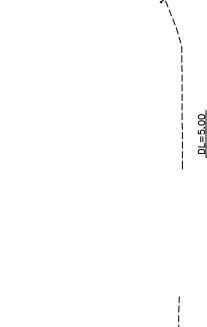
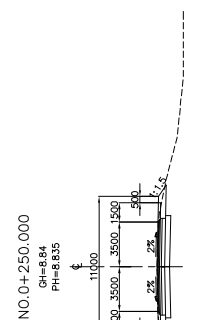
TITLE : BR-11 EK REAM BRIDGE
SUBSTRUCTURE STRUCTURAL DIMENSION
(PIER P1 & P2)

SCALE
AS SHOWN

Drawing No.
Sheet No.

7 - 5



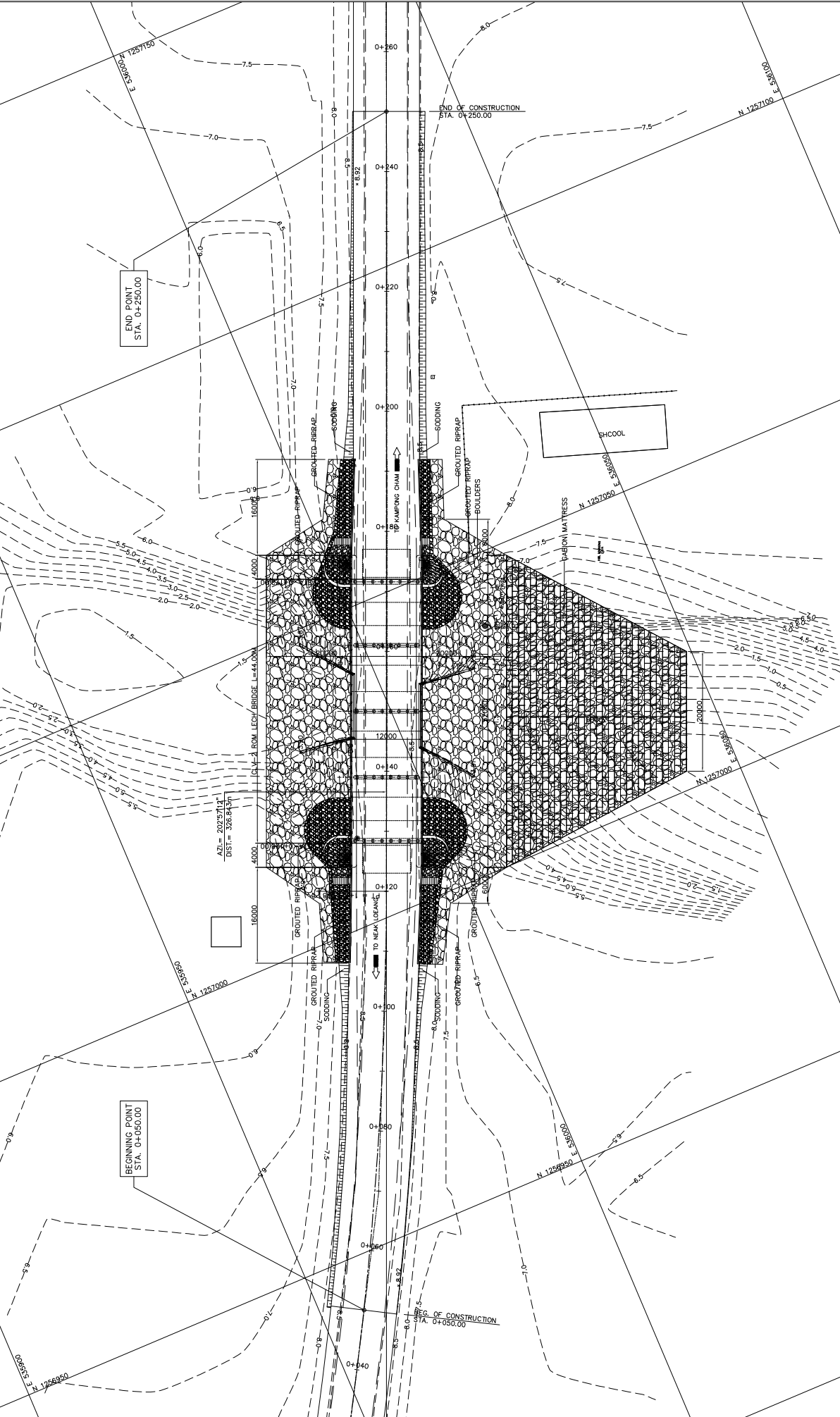


MINISTRY OF PUBLIC WORKS AND TRANSPORT (MPWT)	THE PROJECT FOR FLOOD DISASTER REHABILITATION AND MITIGATION IN THE KINGDOM OF CAMBODIA	JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	TITLE: BR-11 EK REAM BRIDGE APPROACH ROAD CROSS SECTIONS	SCALE	Drawing No.
				1:400	7-7
					Sheet No.

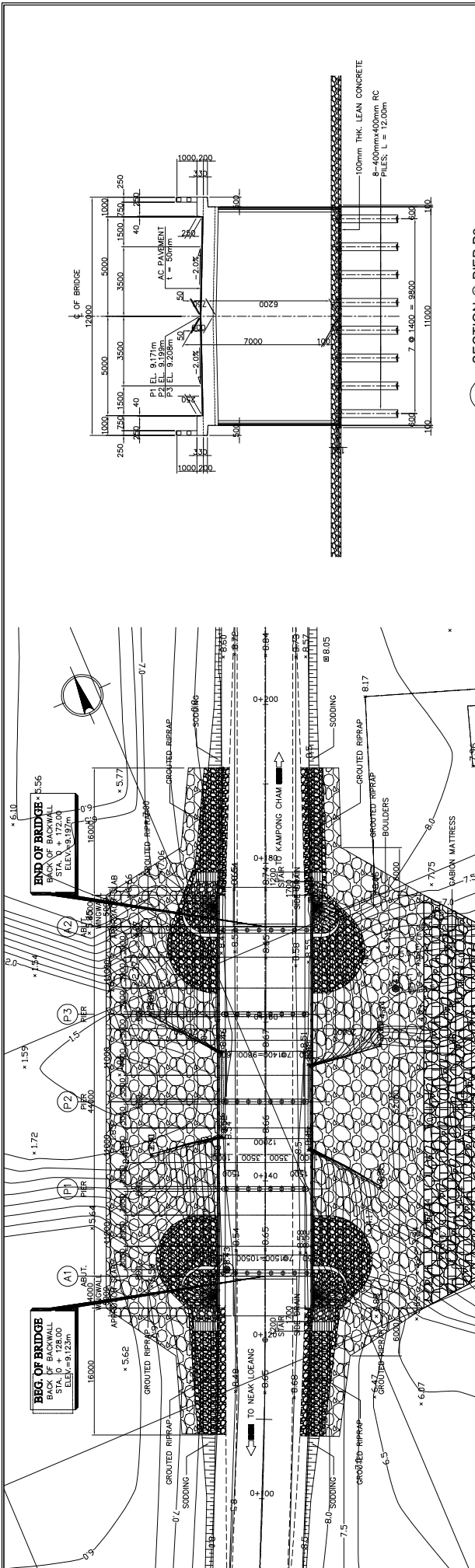
CLV-2 ROM LECH BRIDGE



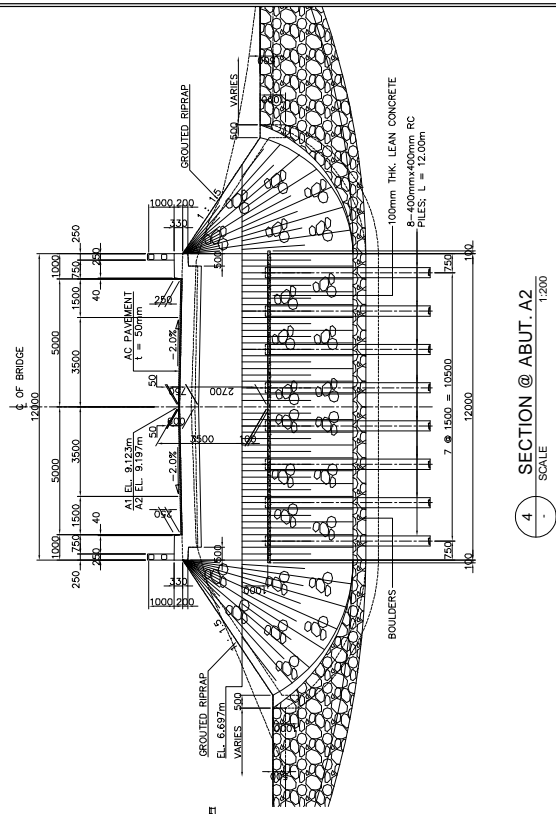
ELEMENTS OF CURVE										
PI NO.	STATION	COORDINATES	Δ	R	T	Lc	E	e%	W	V(kph)
PI-00	-0+168.836	NORTHING 1256771.391 EASTING 5354920.506				NO HORIZONTAL CURVE				
PI-01	-0+021.995	NORTHING 1256688.857 EASTING 5359330.336	25277.96°	650.00	146.841	288.834	16.390	*		
PI-03	0+300.000	NORTHING 1257169.822 EASTING 536057.797				NO HORIZONTAL CURVE				



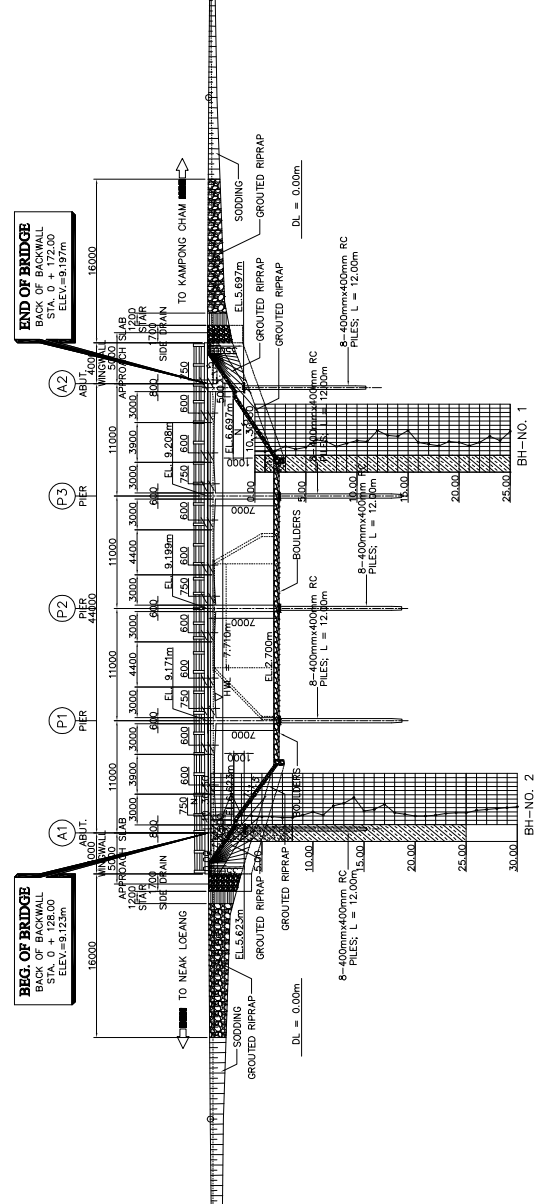
MINISTRY OF PUBLIC WORKS AND TRANSPORT (MPWT)	THE PROJECT FOR FLOOD DISASTER REHABILITATION AND MITIGATION IN THE KINGDOM OF CAMBODIA	JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	TITLE: CLV-2 ROM LECH BRIDGE GENERAL SITE PLAN	SCALE	8 - 1
				1:600	Sheet No.



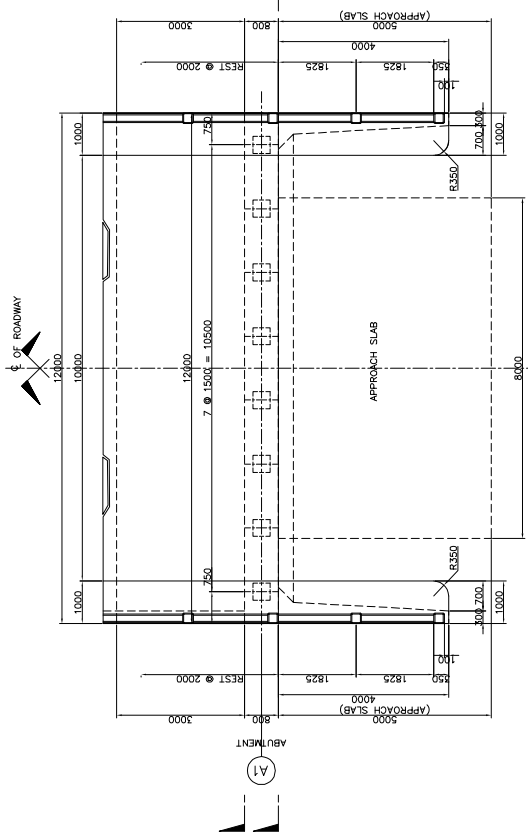
3. SECTION @ PIER P2
SCALE 1:200



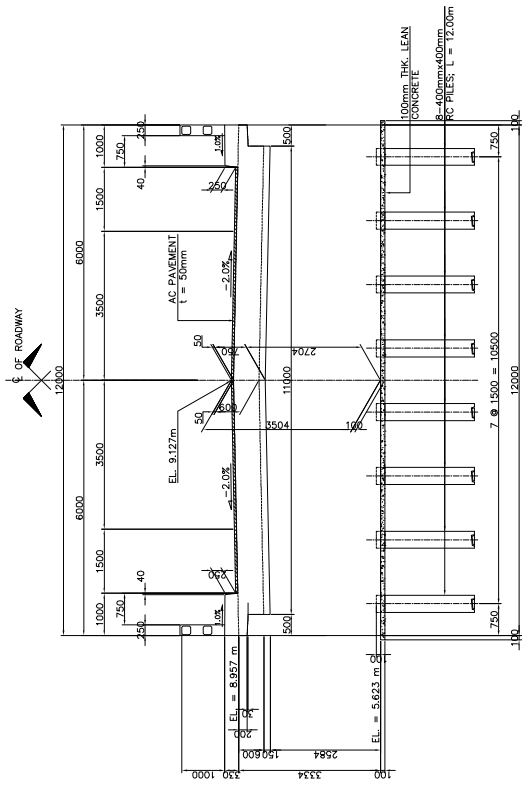
2. GENERAL ELEVATION
SCALE 1:500



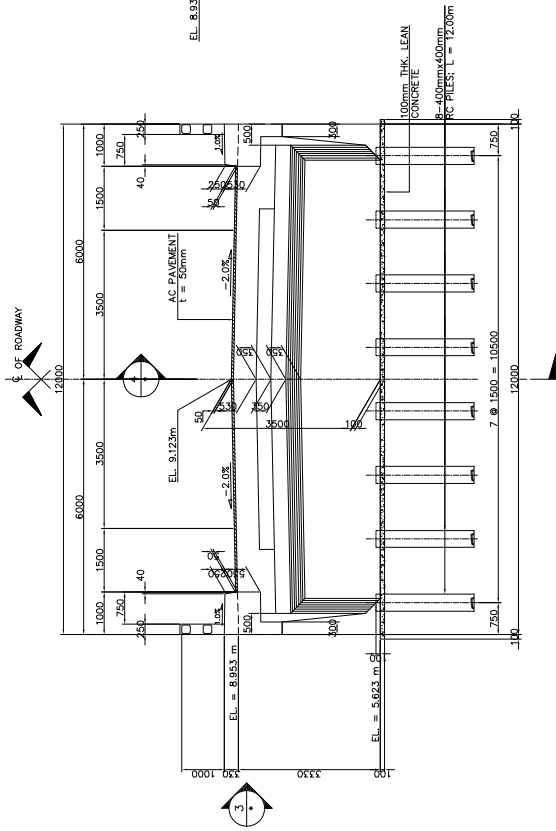
MINISTRY OF PUBLIC WORKS AND TRANSPORT (MPWT)	THE PROJECT FOR FLOOD DISASTER REHABILITATION AND MITIGATION IN THE KINGDOM OF CAMBODIA	JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	TITLE: CLV-2 ROM LECH BRIDGE GENERAL VIEW	SCALE	Drawing No.
				AS SHOWN	8-2
					Sheet No.



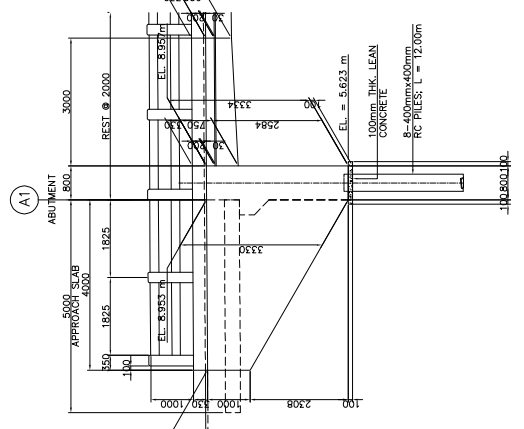
2 PLAN SCALE 1:80



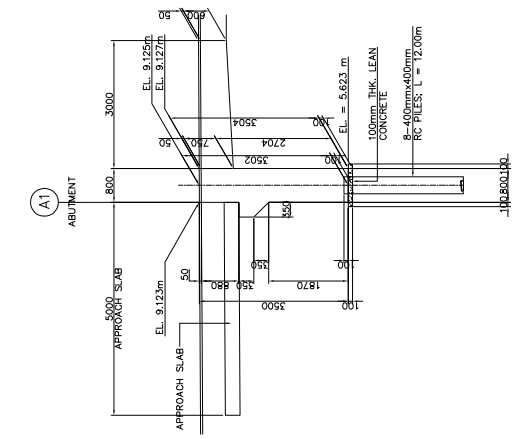
5 ELEVATION SCALE 1:80



1 ELEVATION SCALE 1:80



3 ELEVATION SCALE 1:80



4 SECTION SCALE 1:80

MINISTRY OF PUBLIC WORKS AND TRANSPORT (MPWT)

THE PROJECT FOR FLOOD DISASTER REHABILITATION AND MITIGATION IN THE KINGDOM OF CAMBODIA

JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL

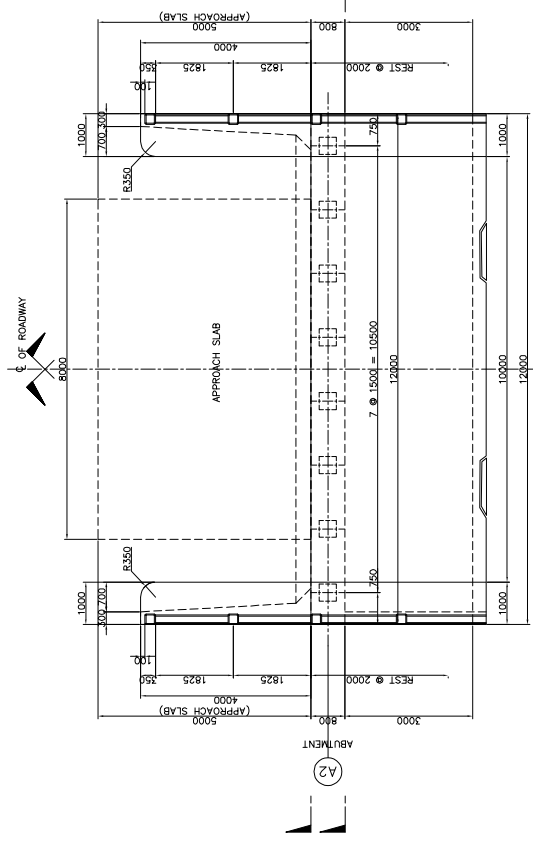
TITLE: CLV-2 ROM LECH BRIDGE SUBSTRUCTURE STRUCTURAL DIMENSION (ABUT. A1)

SCALE AS SHOWN

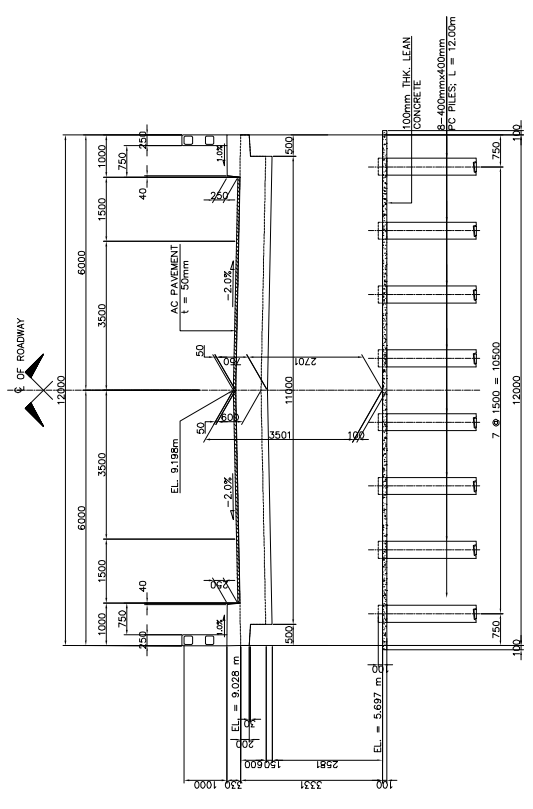
Drawing No.

Sheet No.

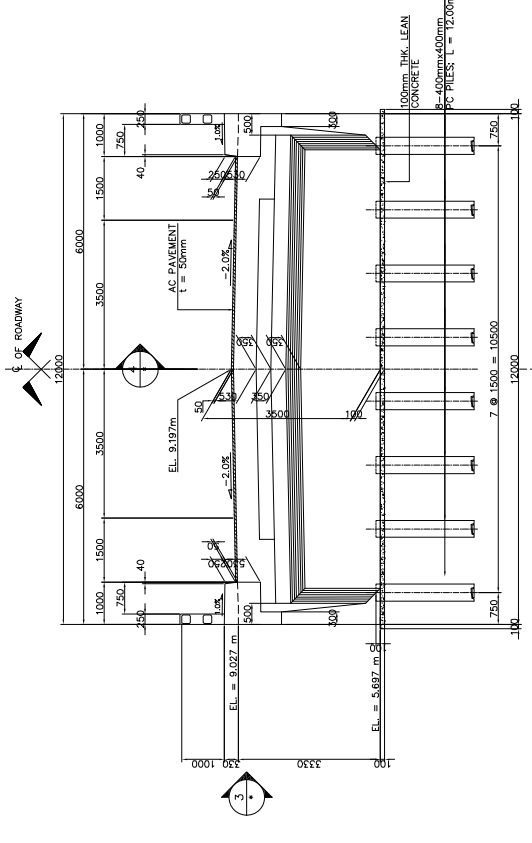
8-3



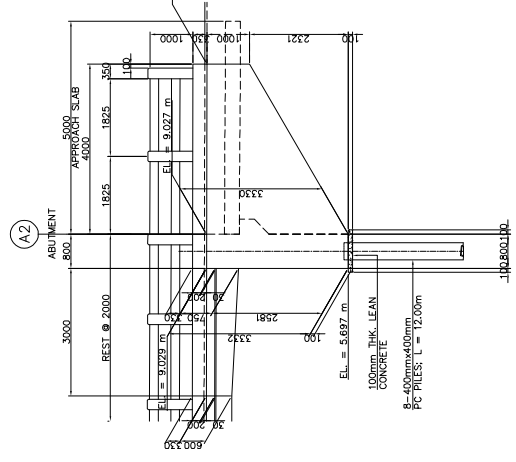
2 PLAN SCALE 1:100



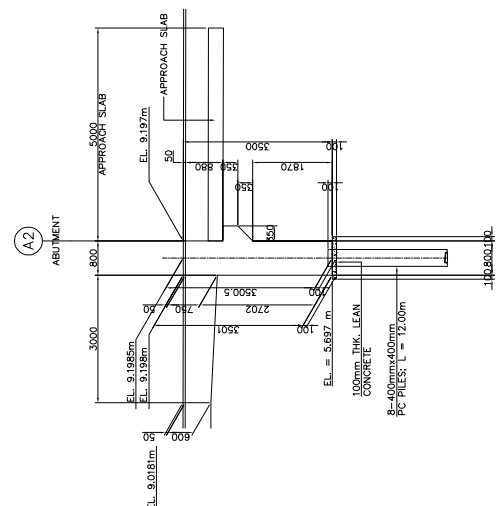
5 ELEVATION SCALE 1:100



1 ELEVATION SCALE 1:100



3 ELEVATION SCALE 1:100



4 SECTION SCALE 1:100

<p>MINISTRY OF PUBLIC WORKS AND TRANSPORT (MPWT)</p>	<p>THE PROJECT FOR FLOOD DISASTER REHABILITATION AND MITIGATION IN THE KINGDOM OF CAMBODIA</p>	<p>JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL</p>	<p>TITLE : CLV-2 ROM LECH BRIDGE SUBSTRUCTURE STRUCTURAL DIMENSION (ABUT. A2)</p>	<p>SCALE AS SHOWN</p>	<p>Drawing No. 8-4 Sheet No.</p>
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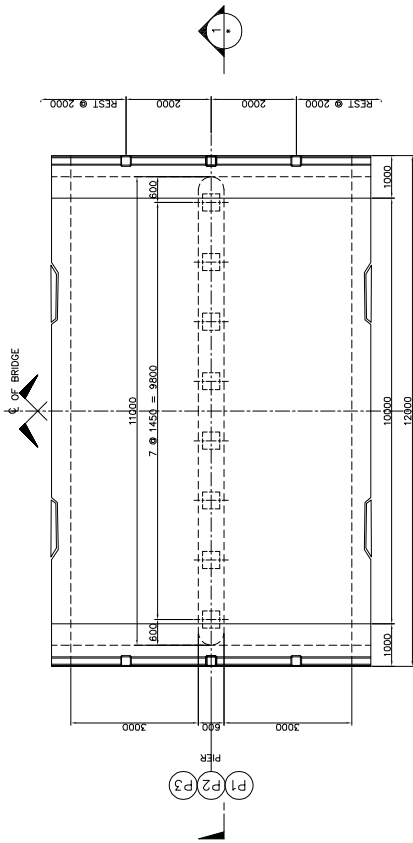
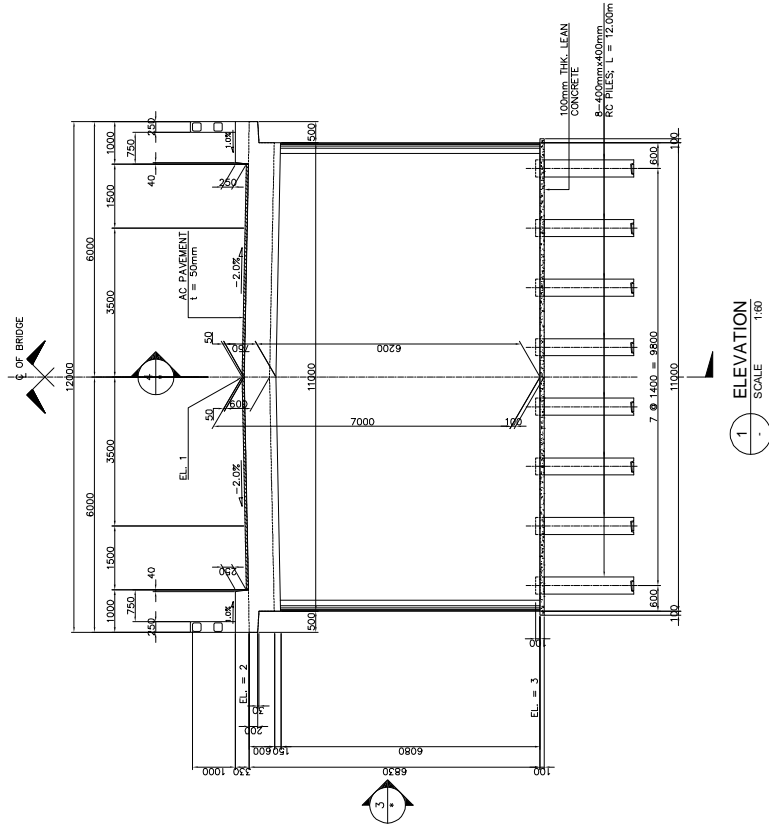


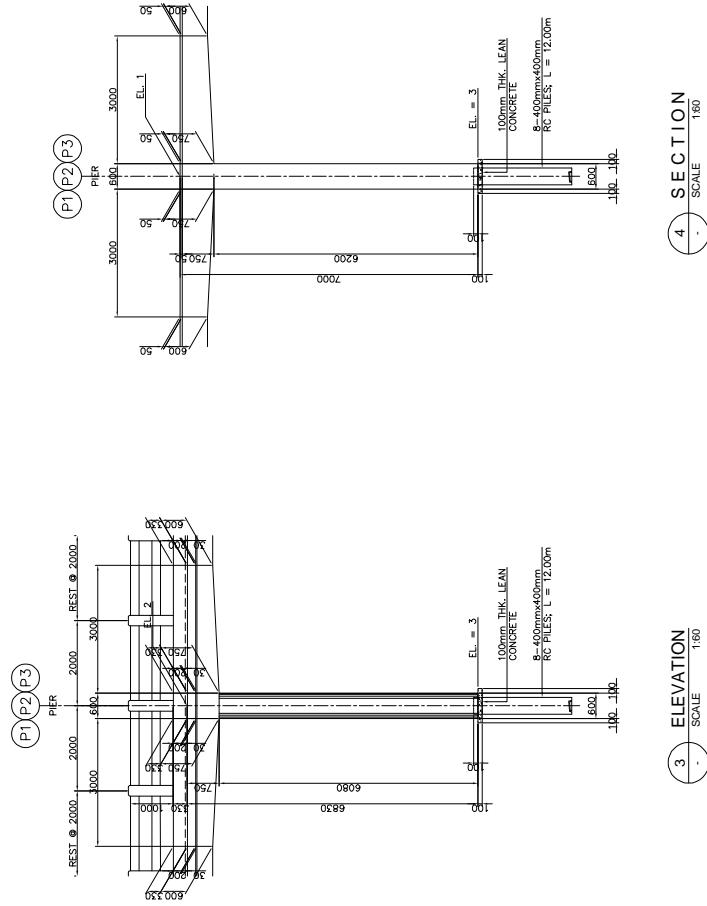
TABLE OF ELEVATIONS

LOCATION	EL. 1	EL. 2	EL. 3
PIER 1	9.171m	9.001m	2.171m
PIER 2	9.199m	9.029m	2.199m
PIER 3	9.208m	9.038m	2.208m

2 PLAN SCALE 1:60



1 ELEVATION SCALE 1:60



3 ELEVATION SCALE 1:60

4 SECTION SCALE 1:60

MINISTRY OF
PUBLIC WORKS AND TRANSPORT
(MPWT)

THE PROJECT FOR FLOOD
DISASTER REHABILITATION AND
MITIGATION
IN THE KINGDOM OF CAMBODIA

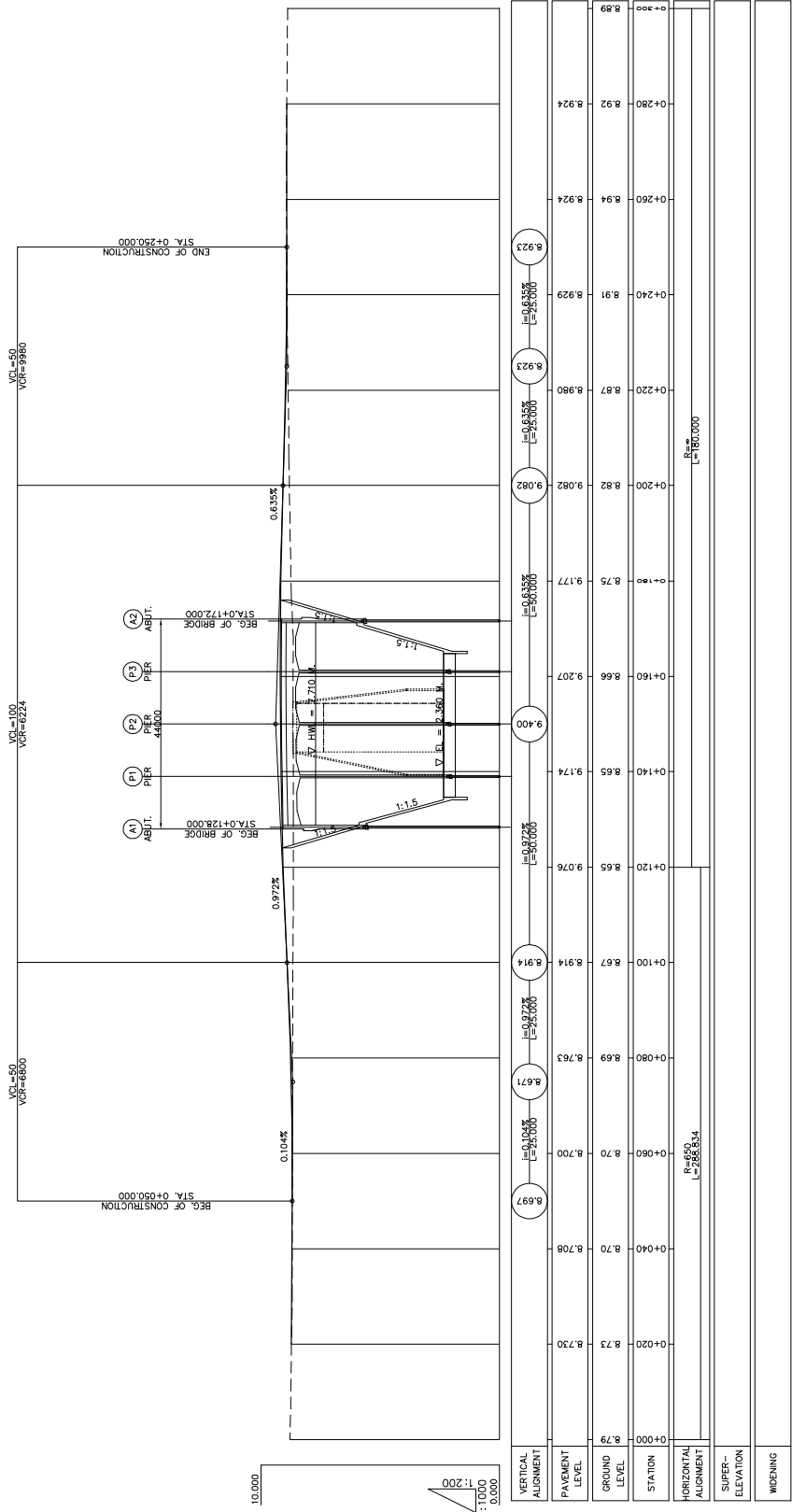
JAPAN INTERNATIONAL COOPERATION AGENCY
KATAHIRA & ENGINEERS INTERNATIONAL

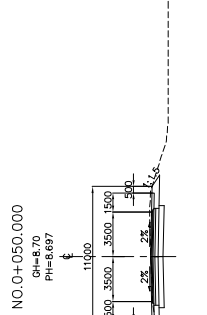
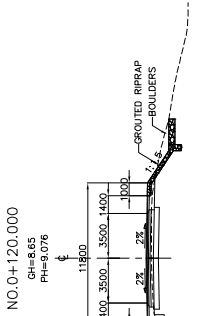
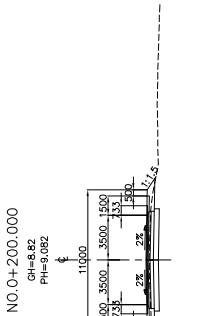
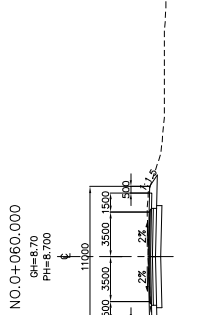
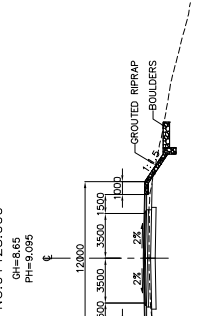
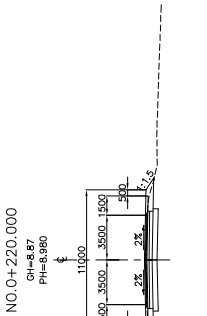
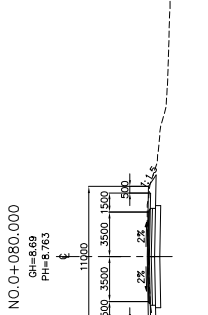
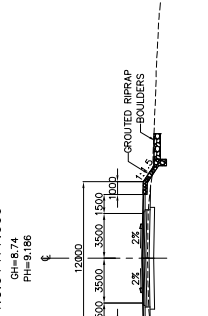
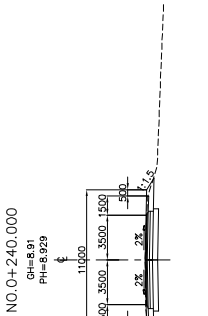
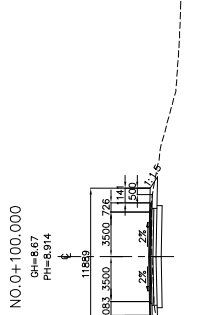
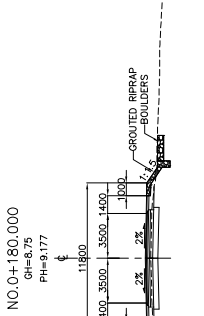
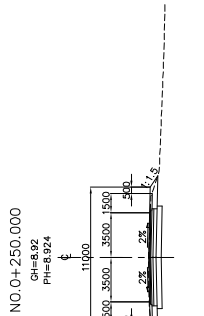
TITLE: CLV-2 ROM LECH BRIDGE
SUBSTRUCTURE STRUCTURAL DIMENSION
(PIER P1, P2 & P3)

SCALE
AS SHOWN

Drawing No.
Sheet No.

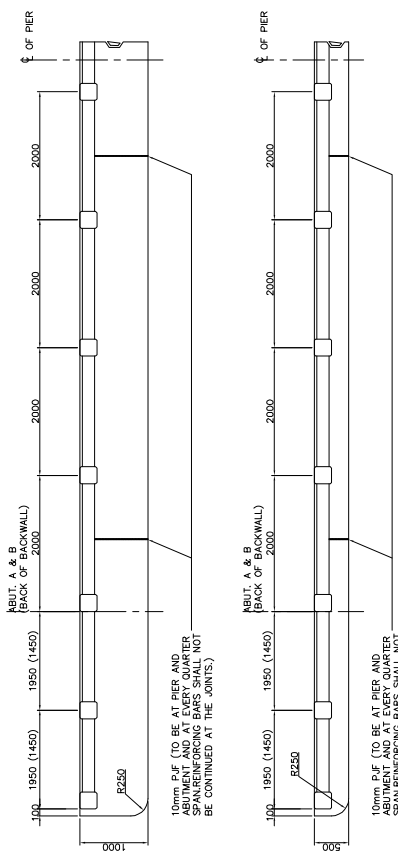
8-5





MINISTRY OF PUBLIC WORKS AND TRANSPORT (MPWT)	THE PROJECT FOR FLOOD DISASTER REHABILITATION AND MITIGATION IN THE KINGDOM OF CAMBODIA	JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	TITLE: CLV-2 ROM LECH BRIDGE APPROACH ROAD CROSS SECTIONS	SCALE 1 : 400	Drawing No. 8 - 7
					Sheet No.

DETAILS OF STANDARD STRUCTURES



1A PLAN SCALE 1:10

1B ELEVATION SCALE 1:10

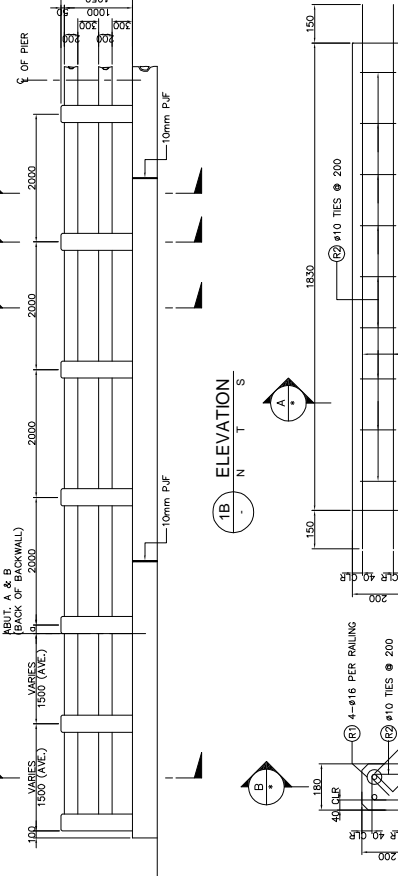
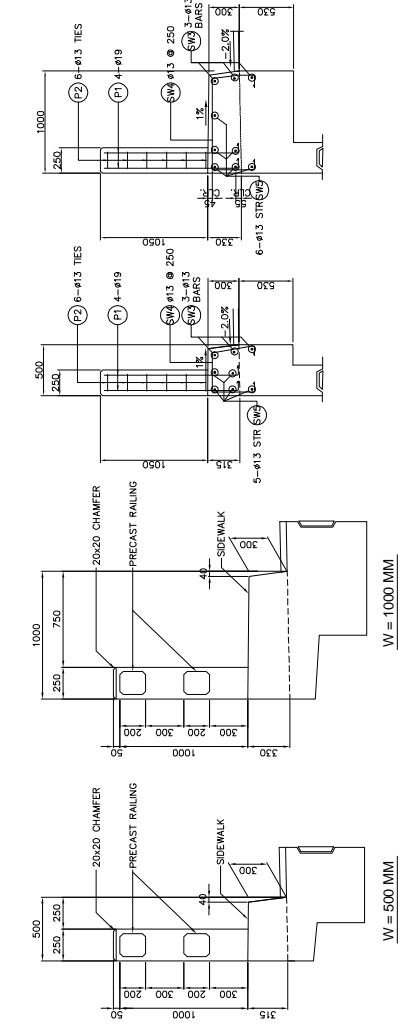
1C DETAIL OF PRECAST RAILING SCALE 1:10

1D PLAN SCALE 1:40

1E SECTION SCALE 1:50

1F SECTION SCALE 1:50

1H APPROACH RAILING & SIDEWALK DETAIL SCALE 1:50

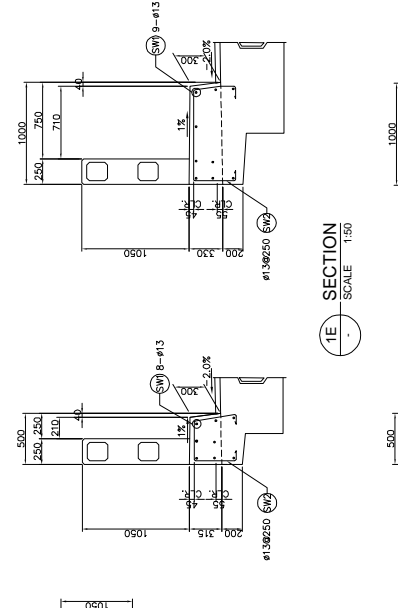


SECTION - A

SECTION - B

PLAN

DETAIL OF PRECAST RAILING



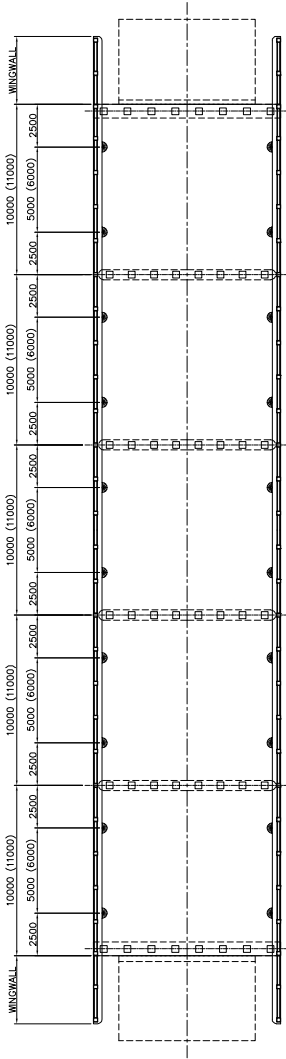
BAR SCHEDULE (PER 2M); W = 1000mm

STRUCTURE COMPONENT	BAR MARK SIZE	BAR LENGTH	QTY.	UNIT WT.	PER TOTAL BAR WT.	
BRIDGE SIDEWALK	SW1 D13	2.000	9	1.042	2.084	
	SW2 D13	1.960	8	1.042	1.634	
CONCRETE CLASS A: VOL. = 0.62 CU. M.						
SUB TOTAL = 35.10 kgs						
APPROACH SIDEWALK	SW3 D13	2.600	3	1.042	2.709	
	SW4 D13	1.960	6	1.042	1.634	
	SW5 D13	2.000	6	1.042	2.084	
	CONCRETE CLASS A: VOL. = 0.62 CU. M.					
	SUB TOTAL = 36.97 kgs					
POST (ONE POST)	P1 D19	1.470	4	2.235	3.285	
	P2 D13	0.880	6	1.042	0.917	
CONCRETE CLASS C: VOL. = 0.07 CU. M.						
SUB TOTAL = 18.64 kgs						
PRECAST RAILING (2 RAILING)	R1 D16	2.130	8	1.578	3.36	
	R2 D10	0.640	18	0.617	0.395	
CONCRETE CLASS C: VOL. = 0.13 CU. M.						
SUB TOTAL = 34.00 kgs						

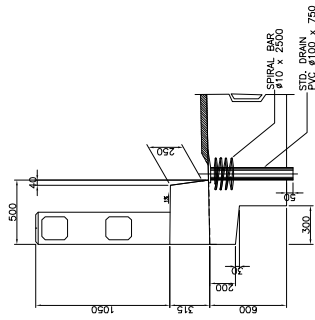
BAR SCHEDULE (PER 2M); W = 500mm

STRUCTURE COMPONENT	BAR MARK SIZE	BAR LENGTH	QTY.	UNIT WT.	PER TOTAL BAR WT.	
BRIDGE SIDEWALK	SW1 D13	2.000	8	1.042	2.084	
	SW2 D13	1.430	8	1.042	1.490	
CONCRETE CLASS A: VOL. = 0.29 CU. M.						
SUB TOTAL = 28.59 kgs						
APPROACH SIDEWALK	SW3 D13	2.600	3	1.042	2.709	
	SW4 D13	1.430	8	1.042	1.490	
	SW5 D13	2.000	5	1.042	2.084	
	CONCRETE CLASS A: VOL. = 0.29 CU. M.					
	SUB TOTAL = 30.47 kgs					
POST (ONE POST)	P1 D19	1.470	4	2.235	3.285	
	P2 D13	0.880	6	1.042	0.917	
CONCRETE CLASS C: VOL. = 0.07 CU. M.						
SUB TOTAL = 18.64 kgs						
PRECAST RAILING (2 RAILING)	R1 D16	2.130	8	1.578	3.36	
	R2 D10	0.640	18	0.617	0.395	
CONCRETE CLASS C: VOL. = 0.13 CU. M.						
SUB TOTAL = 34.00 kgs						

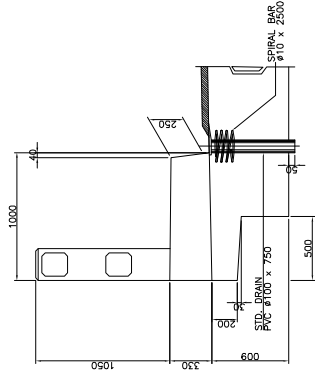
BRIDGE RAILING AND SIDEWALK DETAILS AS SHOWN



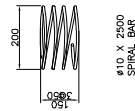
2 . SCALE 1:150
KEY PLAN



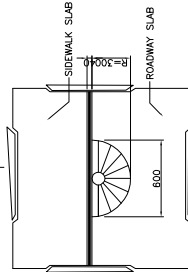
1C . SCALE 1:20
SECTION (FLAT SLAB, 0.50m SIDEWALK)



1C . SCALE 1:20
SECTION (FLAT SLAB, 1.00m SIDEWALK)



BRIDGE NO.	BRIDGE NAME	BRIDGE LENGTH	SPAN LAYOUT	NO. OF DECK, DRAW
BR-4	AGAL BEUJING	33.00m	3 x 11m	12
BR-5	KATE BEUJING	40.00m	4 x 10m	6
BR-7	SOM RUTHOR II	45.00m	4 x 11m	16
BR-8	MESON	50.00m	5 x 10m	20
BR-9	TKOV	44.00m	4 x 11m	16
CUV-1	TKOV II	20.00m	2 x 10m	8
BR-11	EK REAM	33.00m	3 x 11m	12
CUV-2	ROM LECH	44.00m	4 x 11m	16



1A . SCALE 1:20
SECTION

1 . SCALE 1:20
TYPICAL DRAIN DETAILS

MINISTRY OF
PUBLIC WORKS AND TRANSPORT
(MPWT)

THE PROJECT FOR FLOOD
DISASTER REHABILITATION AND
MITIGATION
IN THE KINGDOM OF CAMBODIA

JAPAN INTERNATIONAL COOPERATION AGENCY
KATAHIRA & ENGINEERS INTERNATIONAL

TITLE :
STANDARD DRAWINGS
TYPICAL DECK DRAIN DETAILS

SCALE
AS SHOWN

Drawing No.

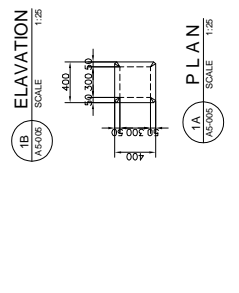
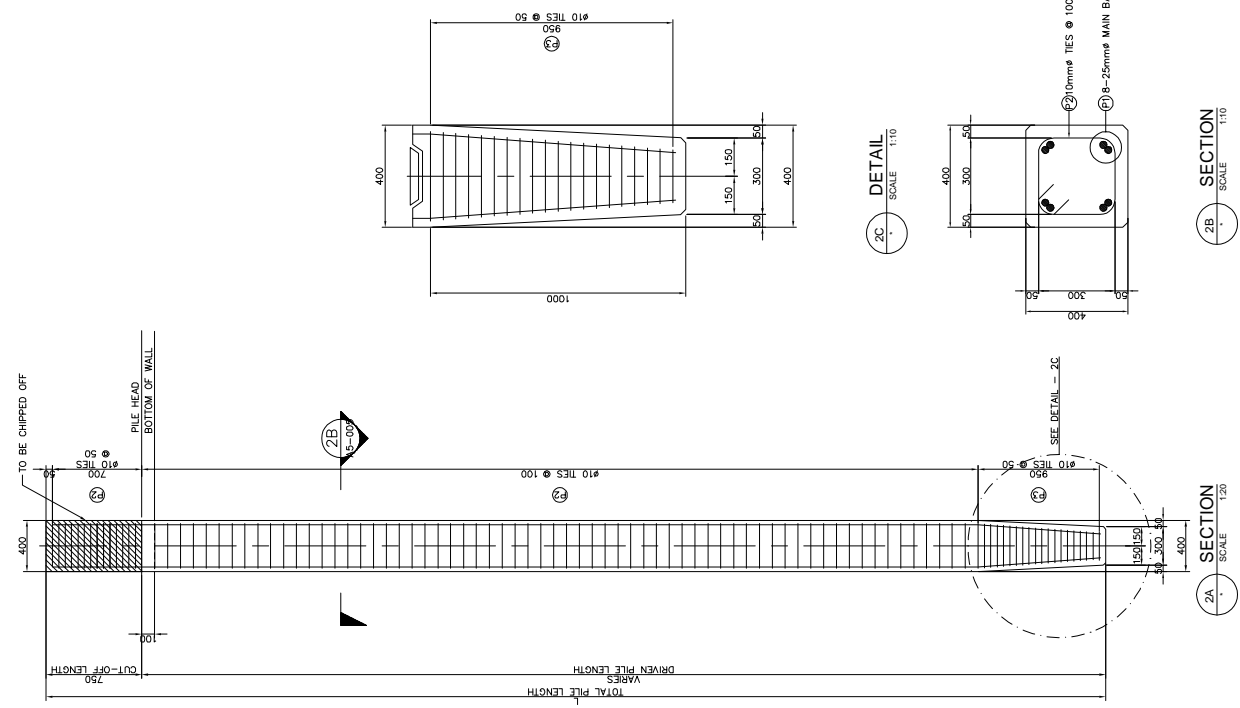
9 - 2

Sheet No.

BRIDGE NAME	LOCATION	TOTAL PILE LENGTH	NO. OF PILES
BR. 4 KBAL BOEUNG	ABUT. A1	12.00m.	8
	PIERS, P1, P2	12.00m.	8
	ABUT. A2	12.00m.	8
BR. 5 SNAKE	ABUT. A1	12.00m.	8
	PIERS, P1, P2 & P3	15.00m.	8
	ABUT. A2	12.00m.	8
BR. 7 SAM PUTHOR II	ABUT. A1	12.00m.	8
	PIERS, P1, P2 & P3	12.00m.	8
	ABUT. A2	12.00m.	8
BR. 8 MEBON	ABUT. A1	12.00m.	8
	PIERS, P1, P2, P3 & P4	12.00m.	8
	ABUT. A2	12.00m.	8
BR. 9 TKOV I	ABUT. A1	12.00m.	8
	PIERS, P1, P2 & P3	12.00m.	8
	ABUT. A2	12.00m.	8
CLV-1 TKOV II	PIERS, P1	12.00m.	8
	ABUT. A2	12.00m.	8
	ABUT. A1	12.00m.	8
BR. 11 EK REAM	ABUT. A1	12.00m.	8
	PIERS, P1, P2	12.00m.	8
	ABUT. A2	12.00m.	8
CLV-2 ROM LECH	ABUT. A1	12.00m.	8
	PIERS, P1, P2 & P3	12.00m.	8
	ABUT. A2	12.00m.	8

BAR SCHEDULE OF RC PILE

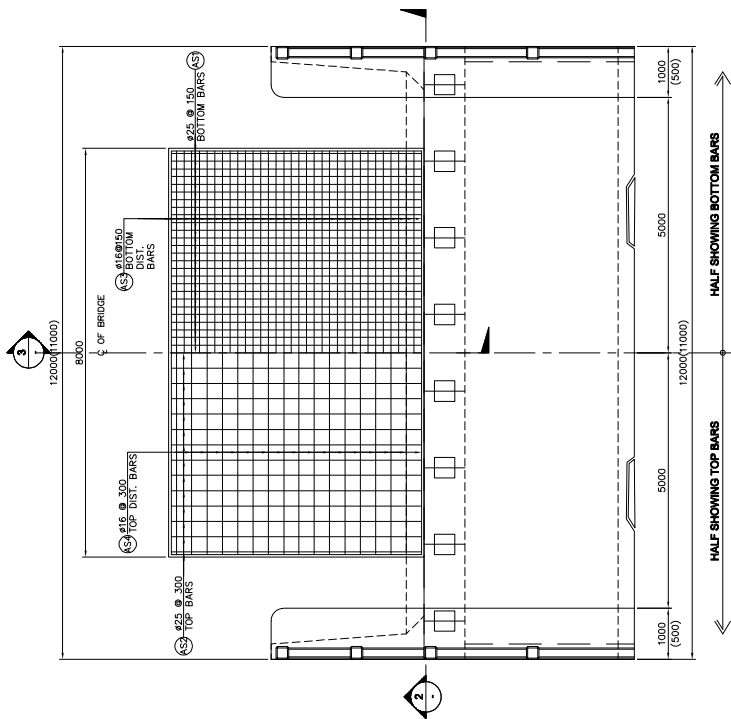
PILE LENGTH	BAR MARK	BAR SIZE	BAR LENGTH	QTY.	UNIT WT.	PER BAR	TOTAL WT.
L = 12.00m	P1	Ø25	12.000	8	3.853	48.236	388.89
	P2	Ø10	1.400	117	0.617	0.864	101.06
	P3	Ø10	1.200	20	0.617	0.740	14.81
SUB TOTAL =					485.76	Kg	
CONCRETE CLASS E. VOL. =					1.88	CU. M.	
L = 15.00m	P1	Ø25	15.000	8	3.853	57.795	462.36
	P2	Ø10	1.400	147	0.617	0.864	126.98
	P3	Ø10	1.200	20	0.617	0.740	14.81
SUB TOTAL =					604.15	Kg	
CONCRETE CLASS E. VOL. =					2.36	CU. M.	



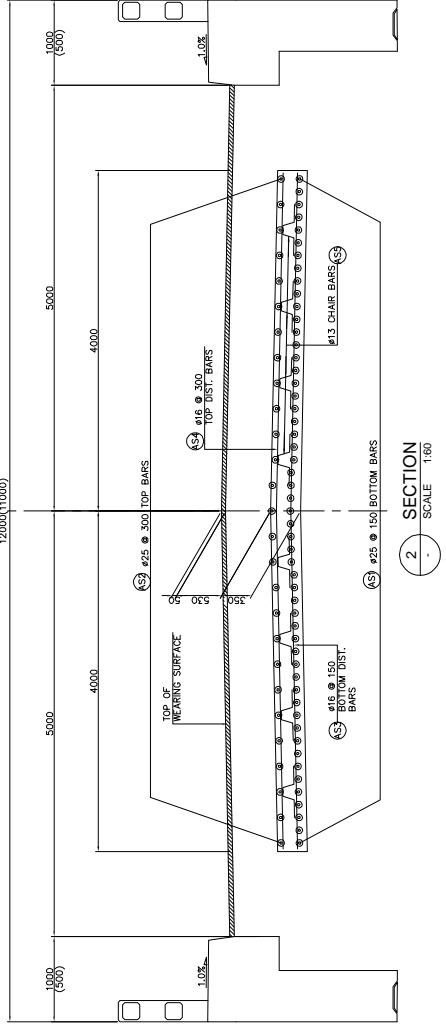
1 R. C. PILE LAYOUT AND DIMENSION SCALE 1:25

2 R. C. PILE REINFORCEMENT DETAILS SCALE 1:25

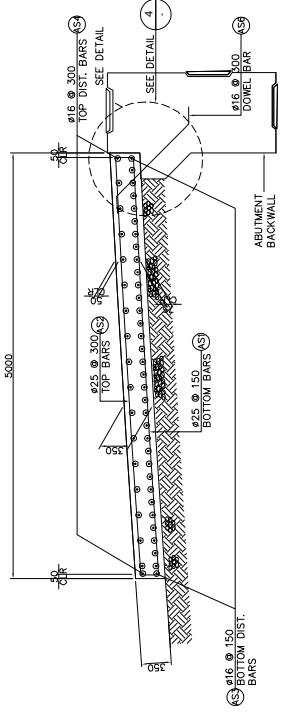
MINISTRY OF PUBLIC WORKS AND TRANSPORT (MPWT)	THE PROJECT FOR FLOOD DISASTER REHABILITATION AND MITIGATION IN THE KINGDOM OF CAMBODIA	JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	STANDARD DRAWINGS RC PILE DETAILS	SCALE AS SHOWN	Drawing No. 9-3
					Sheet No.



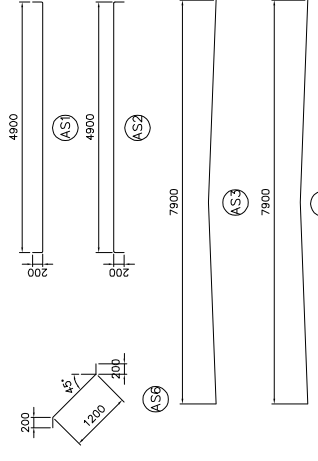
1 PLAN SCALE 1:100



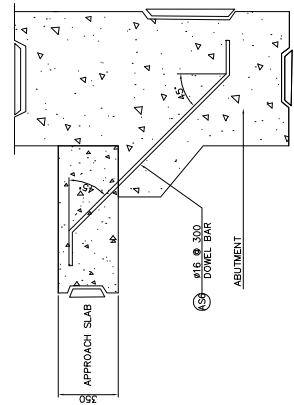
2 SECTION SCALE 1:80



3 SECTION SCALE 1:80



5 BAR BENDING DIAGRAM SCALE NOT TO



4 DETAIL SCALE 1:30

QUANTITY PER APPROACH SLAB					
BAR MARK	BAR SIZE	BAR LENGTH	QTY.	UNIT WT. PER BAR	TOTAL WT.
AS1	25	5,300	53	3,853	20,421
AS2	25	5,300	27	3,853	20,421
AS3	16	7,800	34	1,578	12,466
AS4	16	7,800	18	1,578	12,466
AS5	13	0,625	32	1,042	0,651
AS6	16	1,600	27	1,578	2,525
TOTAL					2370.92 Kgp
CONCRETE VOLUME, CLASS A = 14.00 CU. M.					

MINISTRY OF PUBLIC WORKS AND TRANSPORT (MPWT)

THE PROJECT FOR FLOOD DISASTER REHABILITATION AND MITIGATION IN THE KINGDOM OF CAMBODIA

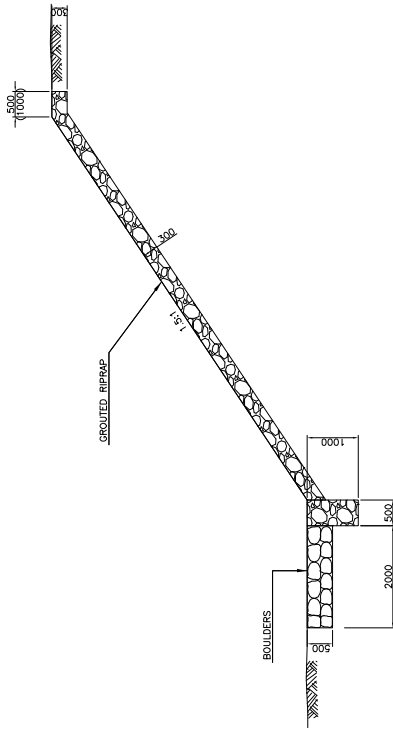
JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL

STANDARD DRAWINGS TYPICAL APPROACH SLAB DETAILS

SCALE AS SHOWN

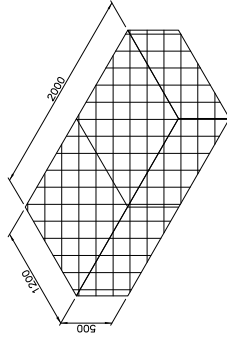
Drawing No. 9-4

Sheet No.



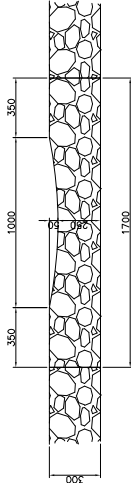
1 GROUTED RIPRAP SLOPE PROTECTION
SCALE 1:100

NOTE:
THE MINIMUM SIZE OF BOULDERS
SHALL BE LARGER THAN 200MM.
GEOTEXTILE SHALL BE INSTALLED
BENEATH THE BOULDERS.



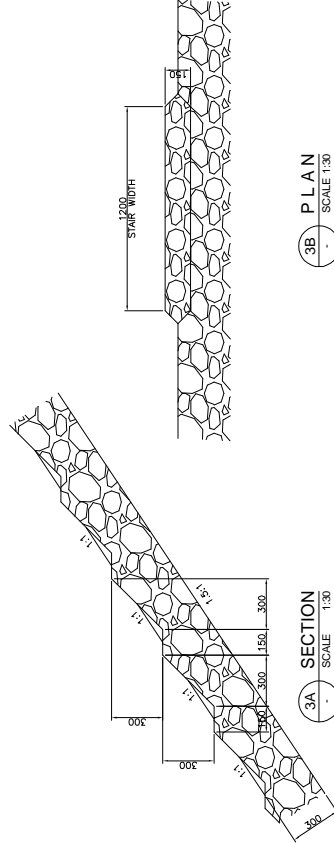
5 GABION MATTRESS
SCALE NOT TO SCALE

NOTE:
THE MINIMUM SIZE OF BOULDERS TO BE CONTAINED IN THE GABION SHALL BE
LARGER THAN 200mm.
THE WIRE MESH SHALL BE MADE OF GALVANIZED STEEL HAVING MINIMUM SIZE
OF 3.2MM (3/16 INCH) DIAMETER (U.S. WIRE GAGE NO. 11). THE TENSILE
STRENGTH OF THE WIRE SHALL BE IN THE RANGE OF 413.7 TO 586.1 MPa
(60,000 TO 85,000 PSI). THE MINIMUM ZINC COATING OF THE WIRE SHALL BE
AS PER ASTM A641. THE MINIMUM ZINC COATING OF THE WIRE SHALL BE
DETERMINED BY TESTS CONDUCTED IN ACCORDANCE WITH AASHTO T 85.



2A SECTION
SCALE 1:30

2 SIDE DRAIN IN GROUTED RIPRAP
SCALE AS SHOWN

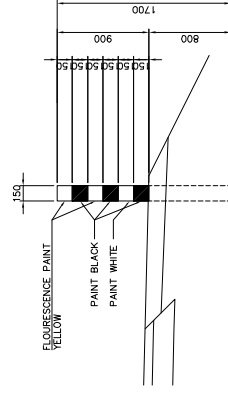


3A SECTION
SCALE 1:30

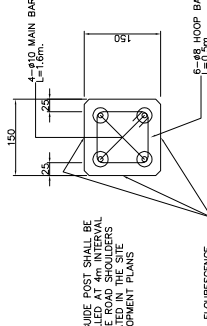
3B PLAN
SCALE 1:30

3 STAIRS IN GROUTED RIPRAP
SCALE AS SHOWN

QUANTITY PER GUIDE POST	
CONCRETE CLASS * C *	0.038 m ³
BAR # 10	3.95 kg
BAR # 8	1.2 kg



4A ELEVATION
SCALE 1:50



4B SECTION
SCALE 1:10

NOTE: THE GUIDE POST SHALL BE
AS SHOWN AND BOULDERS
INDICATED IN THE SITE
DEVELOPMENT PLANS

4 GUIDE POST
SCALE AS SHOWN

MINISTRY OF
PUBLIC WORKS AND TRANSPORT
(MPWT)

THE PROJECT FOR FLOOD
DISASTER REHABILITATION AND
MITIGATION
IN THE KINGDOM OF CAMBODIA

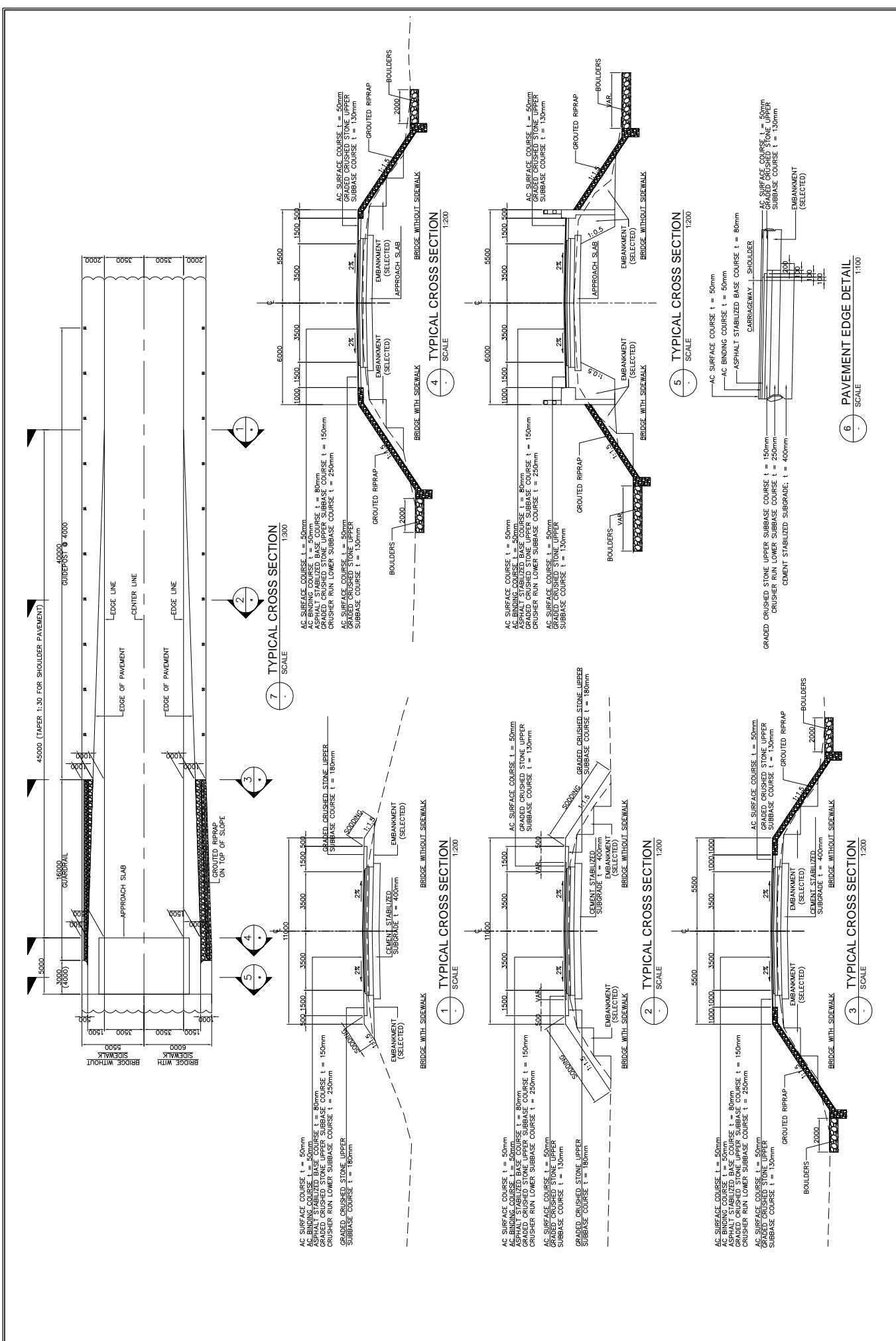
JAPAN INTERNATIONAL COOPERATION AGENCY
KATAHIRA & ENGINEERS INTERNATIONAL

TITLE : STANDARD DRAWINGS
RIPRAP SLOPE PROTECTION,
GABION MATTRESS AND
GUIDE POST DETAILS

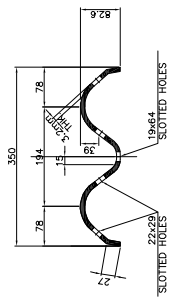
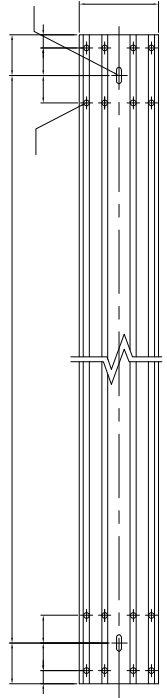
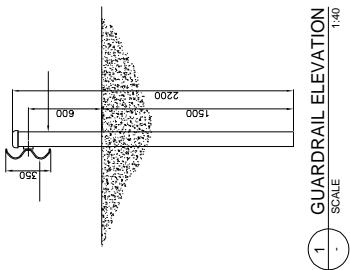
SCALE
AS SHOWN

Drawing No.
Sheet No.

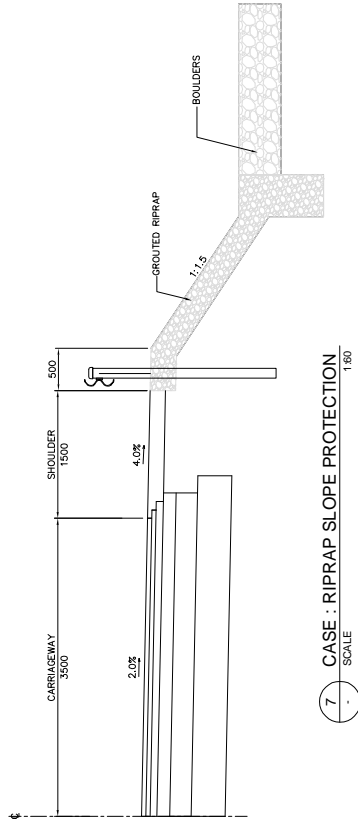
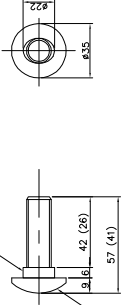
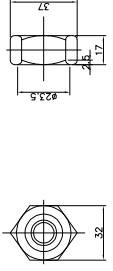
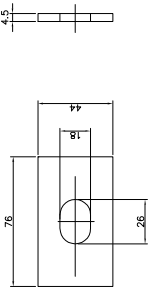
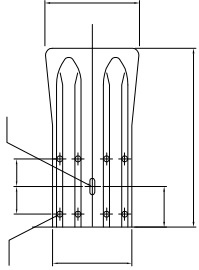
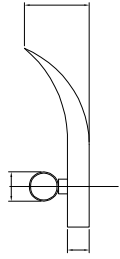
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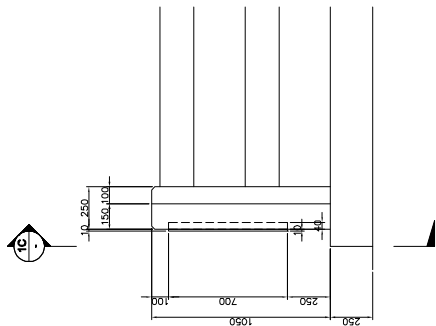
<p>MINISTRY OF PUBLIC WORKS AND TRANSPORT (MPWT)</p>	<p>THE PROJECT FOR FLOOD DISASTER REHABILITATION AND MITIGATION IN THE KINGDOM OF CAMBODIA</p>	<p>JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL</p>	<p>STANDARD DRAWINGS TYPICAL CROSS SECTION OF APPROACH ROAD SECTION</p>	<p>SCALE AS SHOWN</p>	<p>Drawing No. 9-6 Sheet No.</p>
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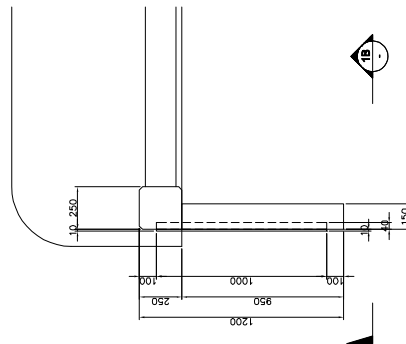
1. MATERIALS AND WORKMANSHIP FOR METAL BEAM GUARDRAIL SHALL COMPLY TO THE TECHNICAL SPECIFICATIONS OF THIS CONTRACT.
2. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE INDICATED.
3. ALL NUTS SHALL BE WELDED TO BOLTS AFTER TIGHTENING.
4. STRUCTURAL STEEL SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M180
5. EXACT LOCATION OF GUARDRAILS SHALL BE VERIFIED ON SITE DURING CONSTRUCTION.
6. GUARDRAIL PRODUCTS SIMILAR AND EQUIVALENT TO THIS DRAWING MAY BE ACCEPTED WHEN APPROVED BY THE CONSULTANT.



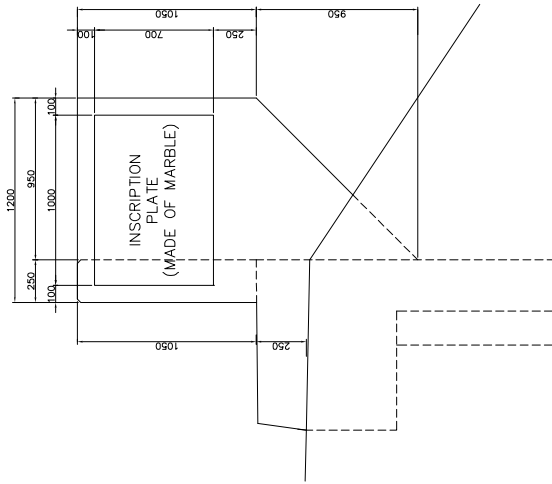
MINISTRY OF PUBLIC WORKS AND TRANSPORT (MPWT)	THE PROJECT FOR FLOOD DISASTER REHABILITATION AND MITIGATION IN THE KINGDOM OF CAMBODIA	JAPAN INTERNATIONAL COOPERATION AGENCY KATAHIRA & ENGINEERS INTERNATIONAL	TITLE: STANDARD DRAWING STEEL BEAM GUARDRAIL DETAILS	SCALE	AS SHOWN	Drawing No.	9-7
						Sheet No.	



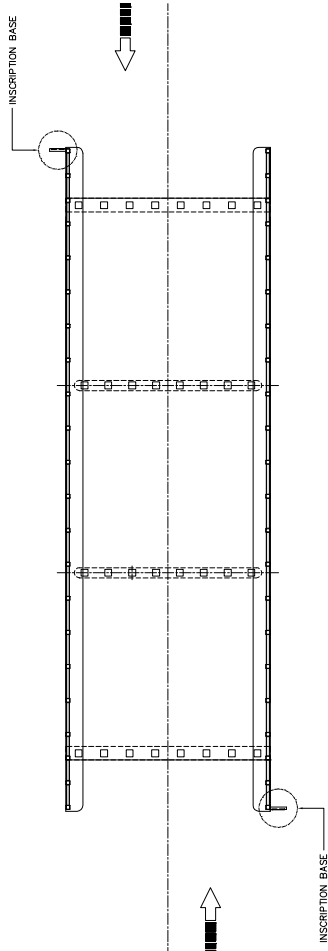
1A
ELEVATION
SCALE 1:30



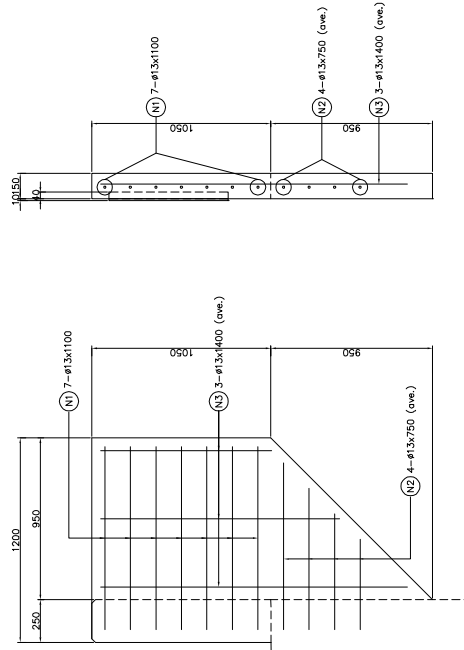
1B
ELEVATION
SCALE 1:30



1C
ELEVATION
SCALE 1:30



3
LOCATION OF INSCRIPTION BASE
SCALE 1:300



2
REINFORCEMENT DETAILS
SCALE 1:30

SCHEDULE OF REINFORCEMENT					
BAR MARK	BAR SIZE	BAR LENGTH	QTY.	UNIT WT. BAR	TOTAL WT. BAR
N1	13	1.100	7	1.042	1.146
N2	13	0.750(ave.)	4	1.042	0.782
N3	13	1.400(ave.)	3	1.042	1.459
TOTAL					15.53 Kgs

CONCRETE VOLUME, CLASS C = 0.277 CU. M.

1
STRUCTURE OF INSCRIPTION BASE PLATE DETAILS
SCALE 1:30

MINISTRY OF
PUBLIC WORKS AND TRANSPORT
(MPWT)

THE PROJECT FOR FLOOD
DISASTER REHABILITATION AND
MITIGATION
IN THE KINGDOM OF CAMBODIA

JAPAN INTERNATIONAL COOPERATION AGENCY
KATAHIRA & ENGINEERS INTERNATIONAL

TITLE:
STANDARD DRAWINGS
INSCRIPTION BASE DETAILS

SCALE
AS SHOWN

Drawing No. 9-8

Sheet No.