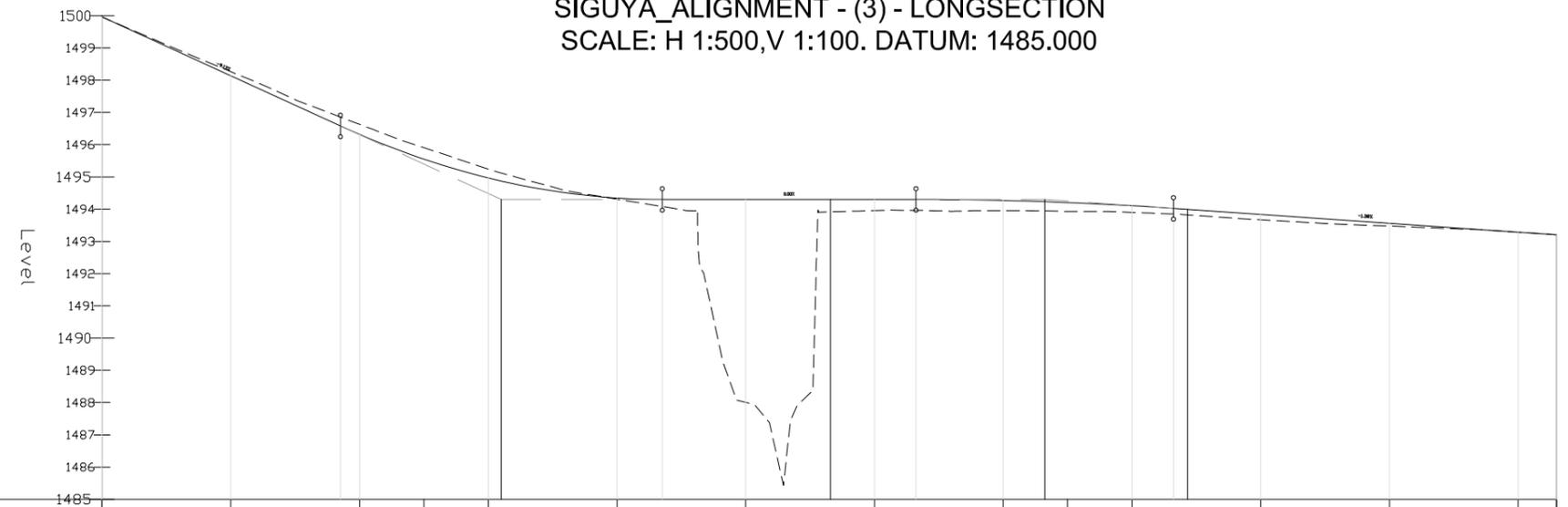
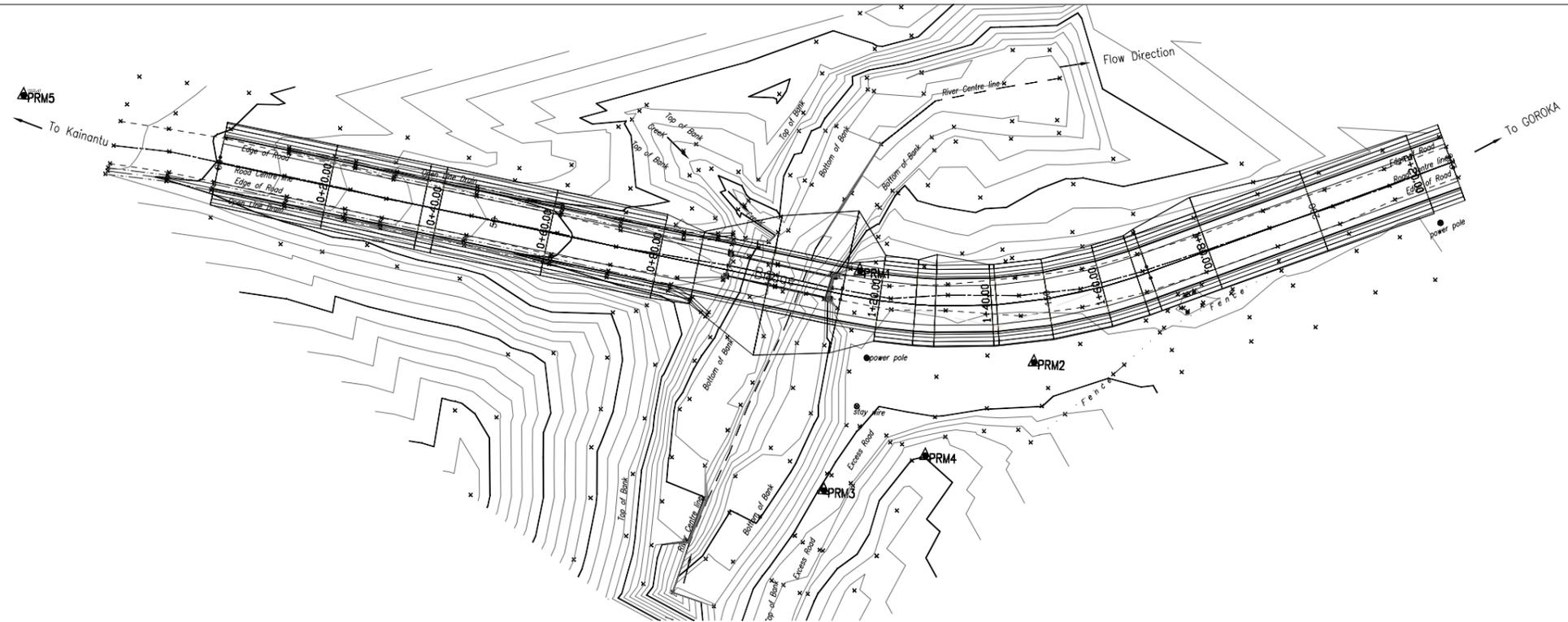


SIGUYA_ALIGNMENT - (3) - LONGSECTION
SCALE: H 1:500,V 1:100. DATUM: 1485.000

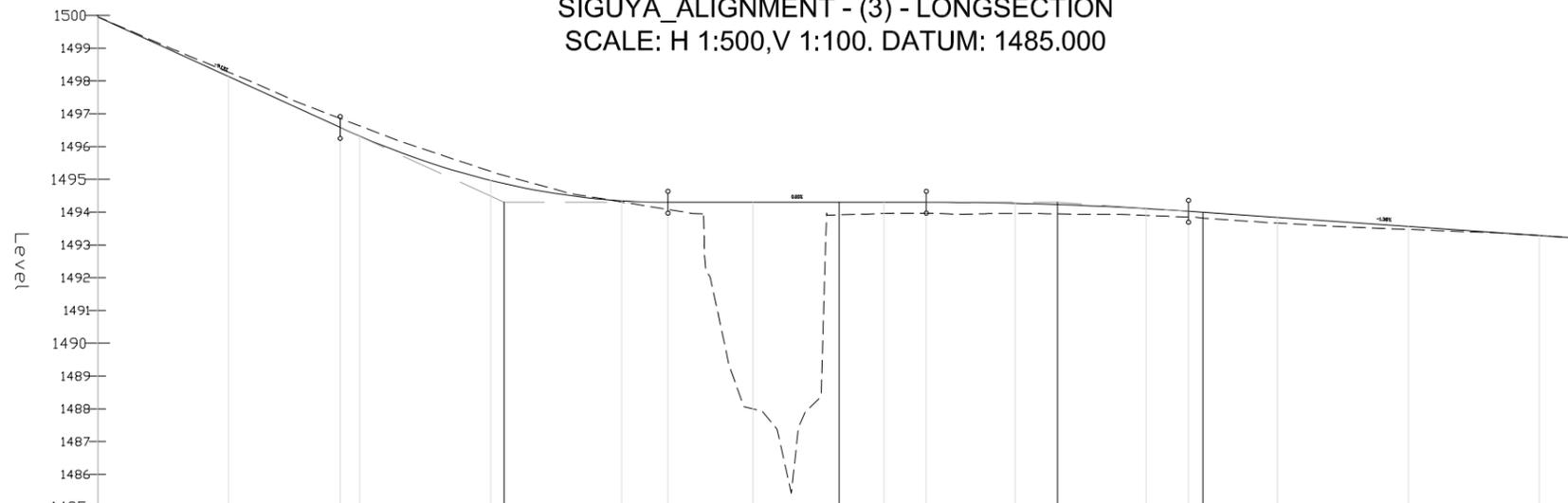


Proposed Levels	1499.962	1498.136	1496.319	1495.562	1494.967	1494.345	1494.300	1494.300	1494.268	1494.204	1494.106	1493.837	1493.561	1493.286	1493.204
Existing Levels	1489.962	1488.288	1486.631	1485.907	1485.243	1484.310	1488.003	1483.957	1483.955	1483.933	1483.900	1483.686	1483.474	1483.284	1483.204
Chainage	00.000	20.000	40.000	50.000	60.000	80.000	100.000	120.000	140.000	150.000	160.000	180.000	200.000	220.000	225.933
Horizontal Geometry	L = 113.161							R: 100.000 L: 55.473				L = 57.298			

REV.	AMENDMENTS	BY	APP'D	DATE	SURVEY	CONSULTANT	DRAWN	RECOMMENDED	SCALES	PROJECT TITLE			
					VERTICAL DATUM	PEC	D. VALLIKAY						ADB LOAN 3547, 3548 AND GRANT 0538-PNG-SUSTAINABLE HIGHLANDS HIGHWAY INVESTMENT PROGRAM (SHHP) - TRANCHE 1 - CSTB 3747 - REVISED ADDITIONAL SCOPE OF WORK
					DATE		CHECKED	PRINCIPAL ENGINEER	H 1:1000 V 1:200	DRAWING TITLE			
							A. WAZOB	APPROVED					PLAN AND PROFILE SHEET - SIGUYA
					HORIZONTAL DATUM		DESIGNED	EXECUTIVE ENGINEER	SHEET OF	PROJECT No.	AUTOCAD No.	DRAWING No.	REV.
							A. WAZOB	SECRETARY					
					SURVEY BOOK Nos	PRINCIPAL	CHECKED	EXECUTIVE ENGINEER				A1/ AR026	
						Date	I. JANG						



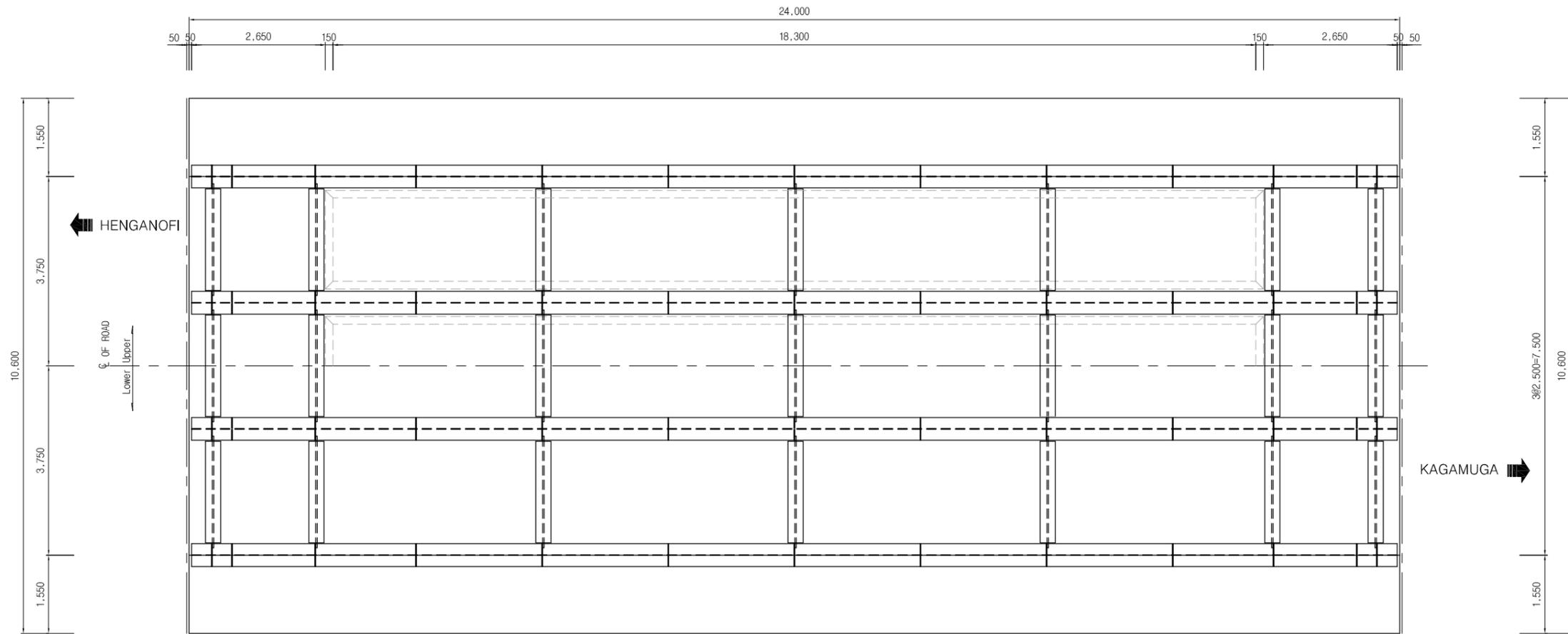
SIGUYA_ALIGNMENT - (3) - LONGSECTION
SCALE: H 1:500, V 1:100. DATUM: 1485.000



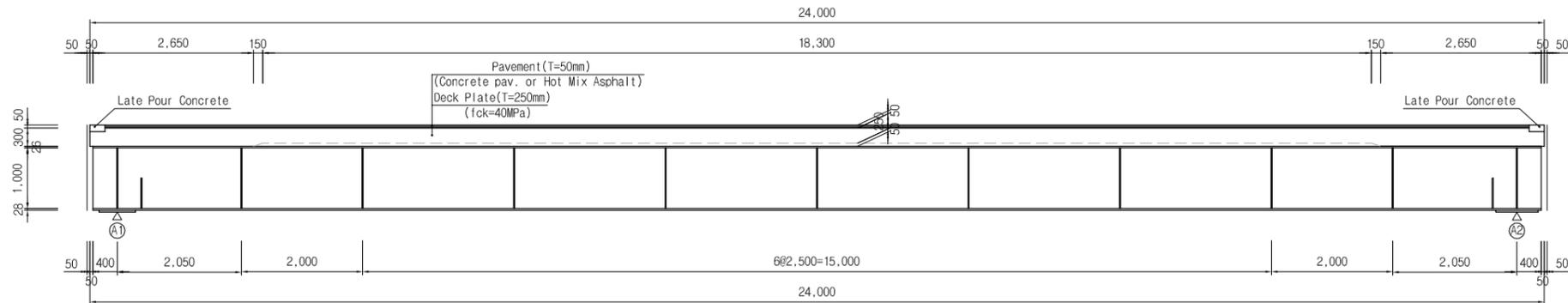
Proposed Levels	1489.962	1495.136	1496.319	1495.552	1494.967	1494.345	1494.300	1494.300	1494.268	1494.204	1494.106	1493.837	1493.561	1493.285	1493.204
Existing Levels	1499.962	1498.268	1496.631	1495.907	1495.243	1494.310	1493.957	1493.955	1493.933	1493.900	1493.666	1493.474	1493.284	1493.204	
Chainage	00.000	20.000	40.000	50.000	60.000	80.000	100.000	120.000	140.000	150.000	160.000	180.000	200.000	220.000	225.833
Horizontal Geometry	L = 113.161						R: 100.000 L: 55.473			L = 57.298					

REV.	AMENDMENTS	BY	APP'D	DATE	SURVEY	CONSULTANT	DRAWN	RECOMMENDED	SCALES	PROJECT TITLE			
					Date	PEC	D. VALLIKAY		H 1:1000	ADB LOAN 3547, 3548 AND GRANT 0538-PNG-SUSTAINABLE HIGHLANDS HIGHWAY INVESTMENT PROGRAM (SHHIP)			
					VERTICAL DATUM		A. WAZOB	PROJECT ENGINEER	V 1:200	- TRANCHE 1 - CSTB 3747 - REVISED ADDITIONAL SCOPE OF WORK			
					HORIZONTAL DATUM		A. WAZOB	APPROVED		DRAWING TITLE			
					SURVEY BOOK Nos		I. JANG	EXECUTIVE ENGINEER		PLAN AND PROFILE SHEET - SIGUYA			
					PRINCIPAL			SECRETARY	SHEET OF	PROJECT No.	AUTOCAD No.	PAPUA NEW GUINEA	DRAWING No.
					Date							DEPARTMENT OF WORKS	A1/ AR025

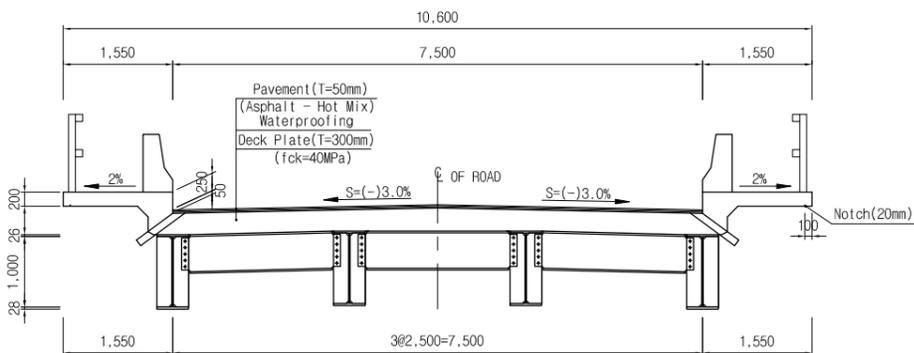
PLAN VIEW



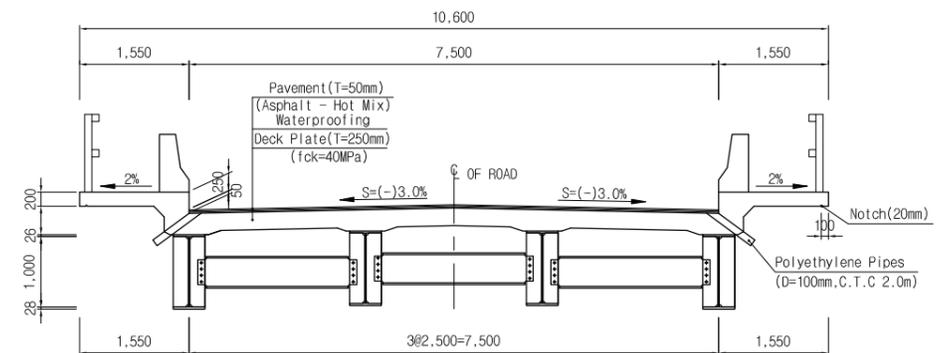
LONGITUDINAL SECTION



END PART SECTION

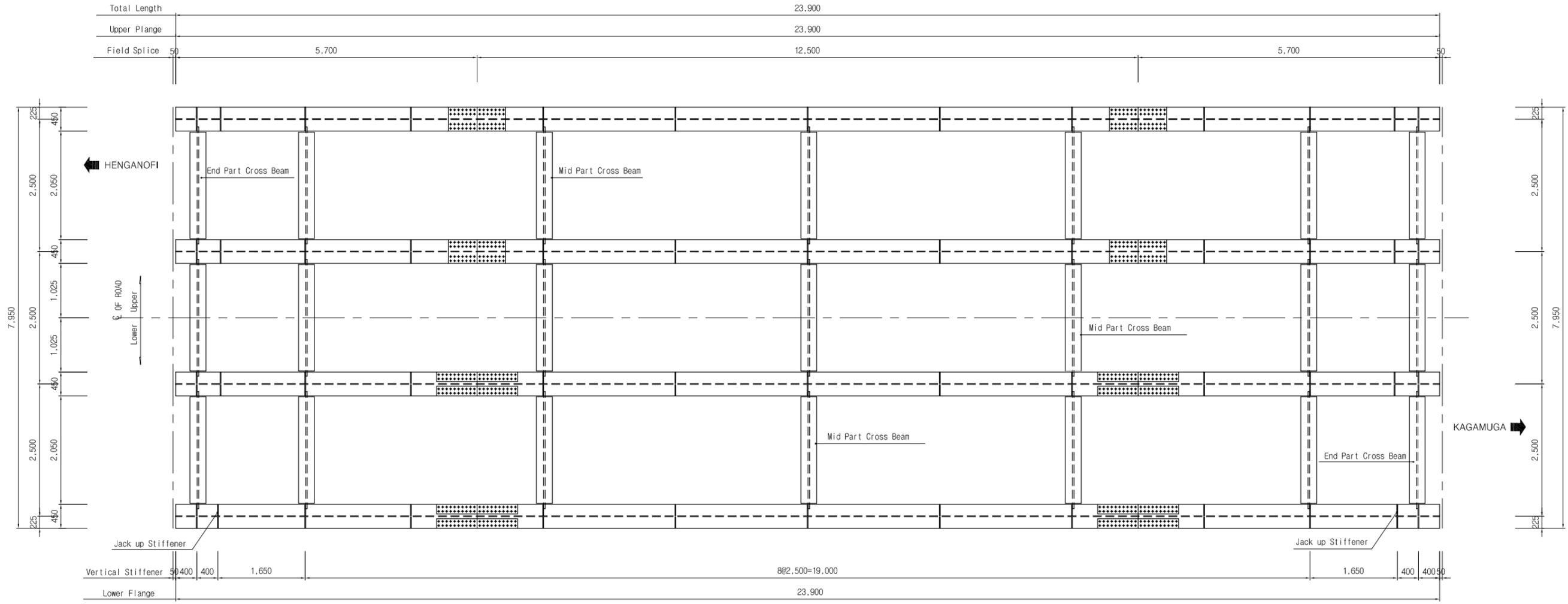


MID PART SECTION

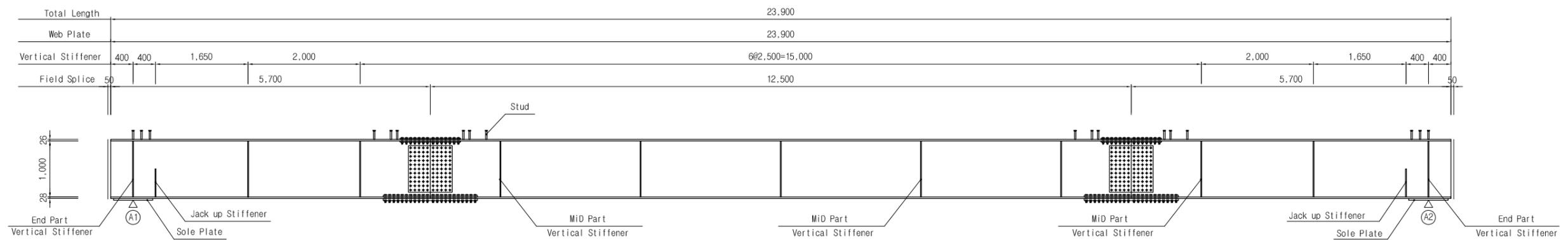


REV.	AMENDMENTS	BY	APP'D	DATE	SURVEY	CONSULTANT		DRAWN	RECOMMENDED	SCALES	PROJECT TITLE	DRAWING TITLE
					VERTICAL DATUM			PROJECT ENGINEER				
					DATE			CHECKED	APPROVED	PRINCIPAL ENGINEER	DRAWING No.	REV.
					HORIZONTAL DATUM			EXECUTIVE ENGINEER				
					SURVEY BOOK Nos	PRINCIPAL	Date	E.J. Oh			DEPARTMENT OF WORKS	

PLAN VIEW

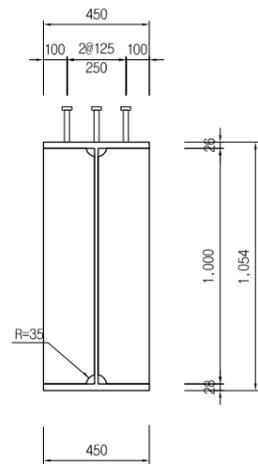


LONGITUDINAL SECTION



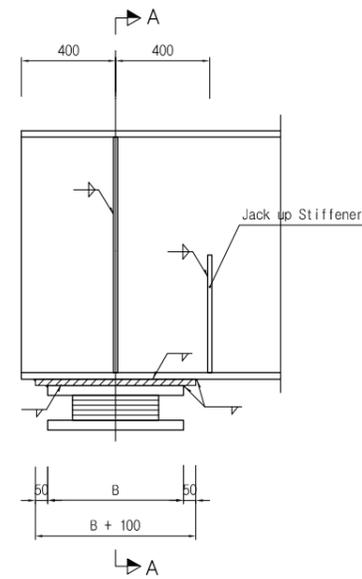
REV.	AMENDMENTS	BY	APP'D	DATE	SURVEY	CONSULTANT PEC	DRAWN M.M. Kim	RECOMMENDED	SCALES 1:40	PROJECT TITLE ADB LOAN 3547, 3548 AND GRANT 0538-PNG-SUSTAINABLE HIGHLANDS HIGHWAY INVESTMENT PROGRAM (SHIP) - TRANCHE 1 - CSTB 3747 - REVISED ADDITIONAL SCOPE OF WORK		
					VERTICAL DATUM		CHECKED Y.J. Kim			PROJECT ENGINEER	PRINCIPAL ENGINEER	DRAWING TITLE STEEL GIRDER - GENERAL LAYOUT
					HORIZONTAL DATUM		DESIGNED I.H. Jang	APPROVED	PROJECT No.	AUTOCAD No.	DRAWING No. DEPARTMENT OF WORKS A1/ NB135	
				SURVEY BOOK Nos	CHECKED E.J. Oh		EXECUTIVE ENGINEER				SECRETARY	SHEET OF

STEEL GIRDER DETAIL

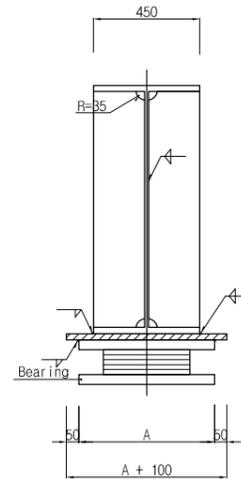


(Per 1ea)
 PL-450X26X23,900X1EA (SM420) - MAIN GIRDER UPP. FLANGE
 PL-1,000X16X23,900X1EA (SM420) - MAIN GIRDER WEB
 PL-450X26X23,900X1EA (SM420) - MAIN GIRDER LOW. FLANGE

END PART DETAIL

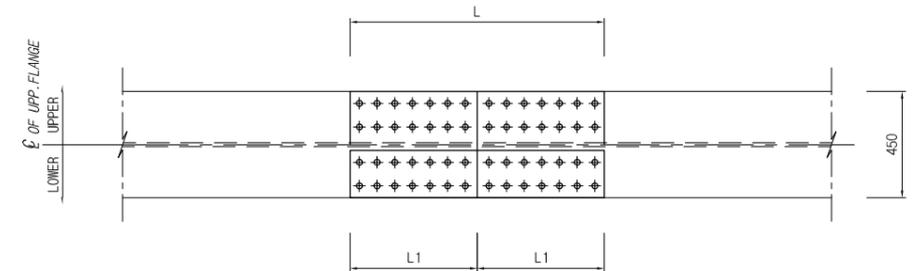


SECTION A-A

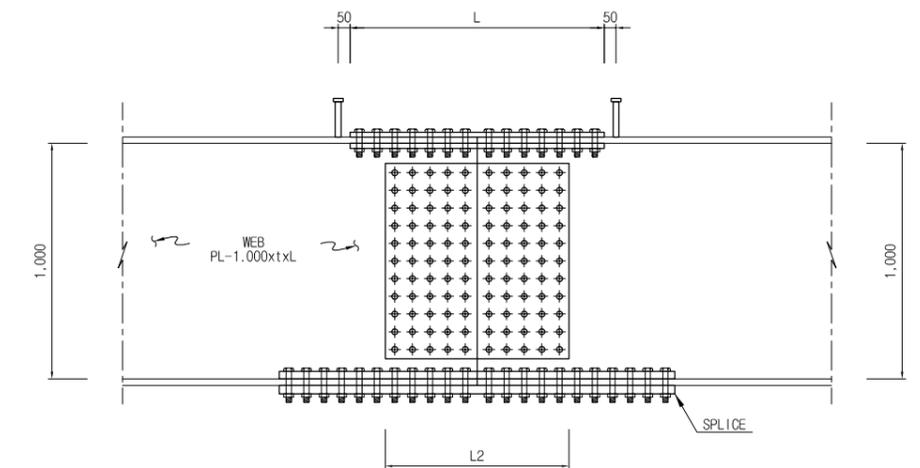


SPLICE DETAILS

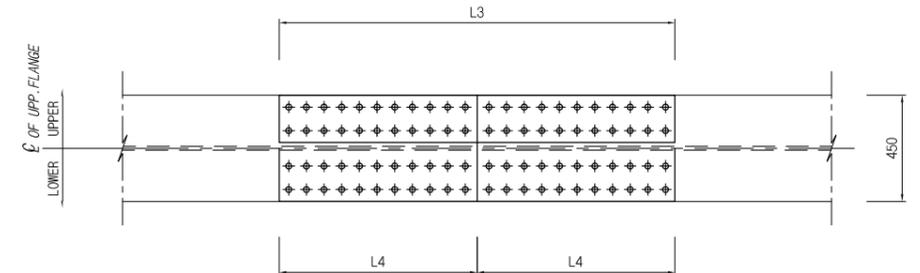
UPPER FLANGE



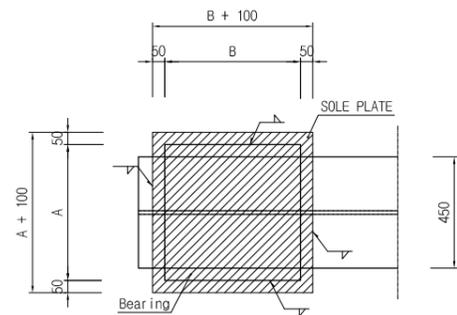
WEB FLANGE



LOWER FLANGE

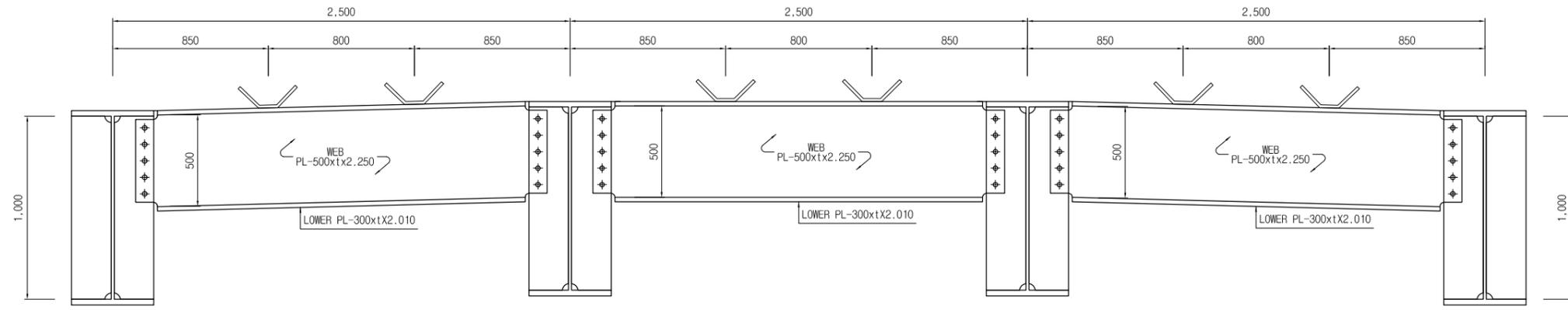


END PART PLAN VIEW

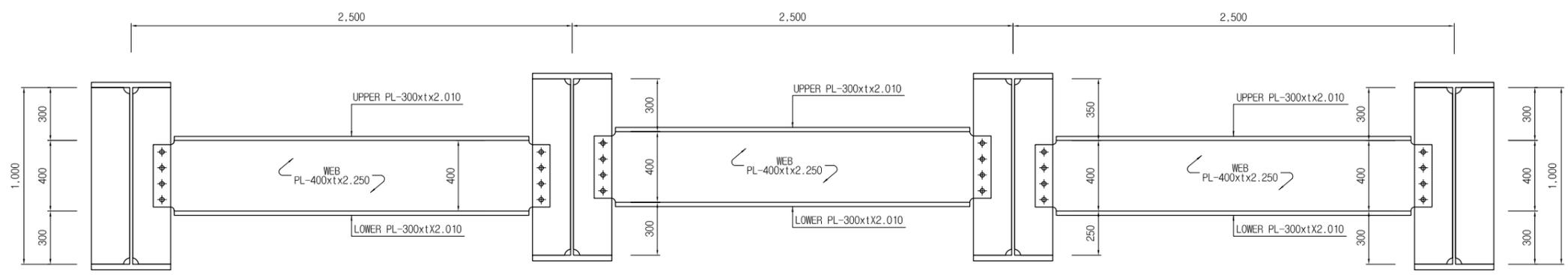


REV.	AMENDMENTS	BY	APP'D	DATE	SURVEY	CONSULTANT PEC	DRAWN M.M. Kim	RECOMMENDED	SCALES 1:15	PROJECT TITLE ADB LOAN 3547, 3548 AND GRANT 0538-PNG-SUSTAINABLE HIGHLANDS HIGHWAY INVESTMENT PROGRAM (SHHIP) - TRANCHE 1 - CSTB 3747 - REVISED ADDITIONAL SCOPE OF WORK		
					VERTICAL DATUM Date		CHECKED Y.J. Kim			PROJECT ENGINEER	PRINCIPAL ENGINEER	DRAWING TITLE STEEL GIRDER DETAILS
					HORIZONTAL DATUM		DESIGNED I.H. Jang	APPROVED	PROJECT No.	AUTOCAD No.	DRAWING No. PAPUA NEW GUINEA DEPARTMENT OF WORKS A1/ NB136	
				SURVEY BOOK Nos	CHECKED E.J. Oh		EXECUTIVE ENGINEER				SECRETARY	SHEET OF

END CROSS BEAM AT ABUTMENT



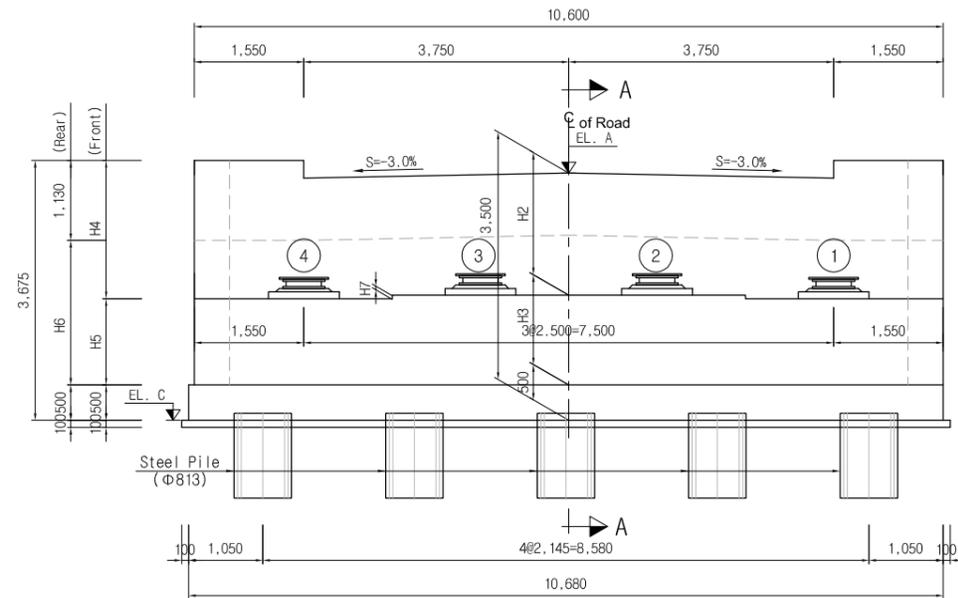
TYPICAL INTERMEDIATE CROSS BEAM DETAILS



REV.	AMENDMENTS	BY	APP'D	DATE	SURVEY	CONSULTANT PEC	DRAWN M.M. Kim	RECOMMENDED	SCALES 1:15	PROJECT TITLE ADB LOAN 3547, 3548 AND GRANT 0538-PNG-SUSTAINABLE HIGHLANDS HIGHWAY INVESTMENT PROGRAM (SHHIP) - TRANCHE 1 - CSTB 3747 - REVISED ADDITIONAL SCOPE OF WORK		
					VERTICAL DATUM Date		CHECKED Y.J. Kim			PROJECT ENGINEER	PRINCIPAL ENGINEER	DRAWING TITLE DIAPHRAGM DETAILS
					HORIZONTAL DATUM		DESIGNED I.H. Jang	APPROVED	PROJECT No.	AUTOCAD No.	DRAWING No. PAPUA NEW GUINEA DEPARTMENT OF WORKS A1/ NB137	
				SURVEY BOOK Nos	PRINCIPAL Date		CHECKED E.J. Oh				EXECUTIVE ENGINEER	SECRETARY

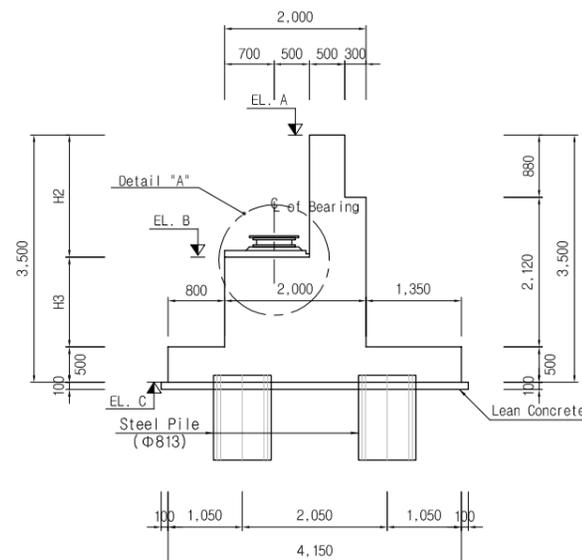
FRONT VIEW

S=1:50



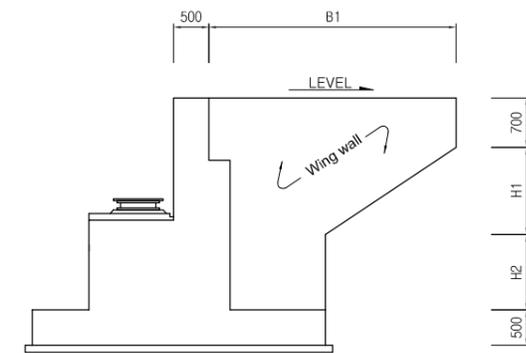
SECTION A-A

S=1:50



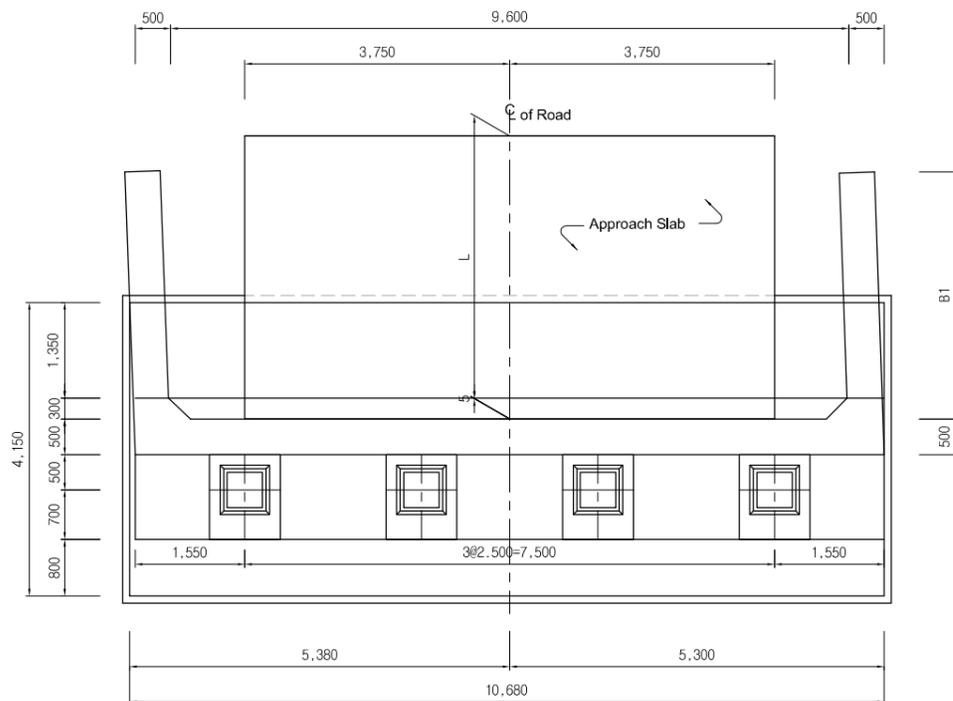
WING WALL SECTION

S=1:50



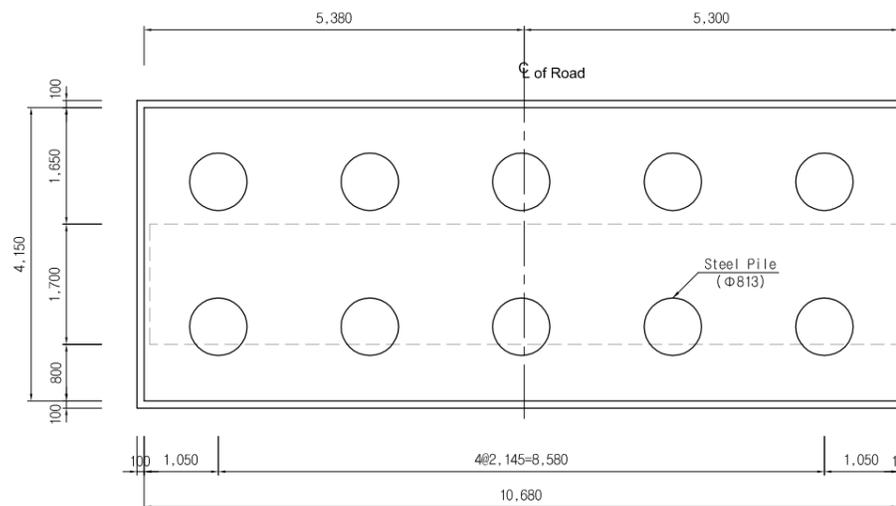
PLAN VIEW

S=1:50



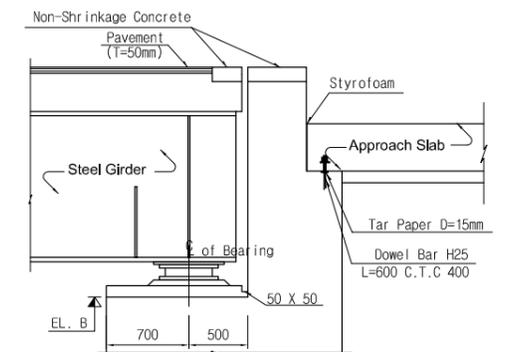
FOUNDATION PLAN VIEW

S=1:50



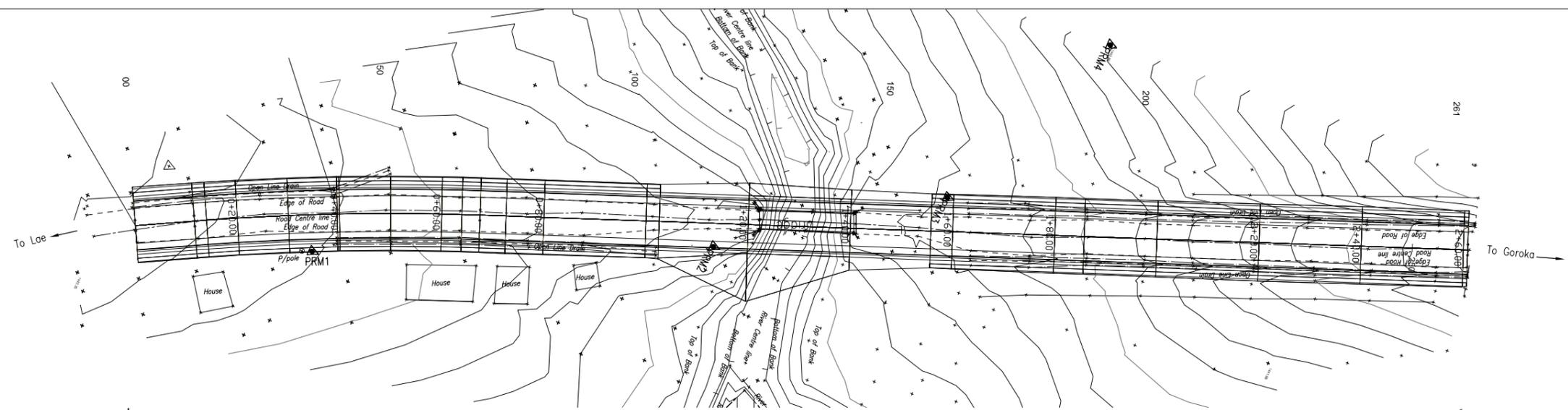
DETAIL "A"

S=NONE

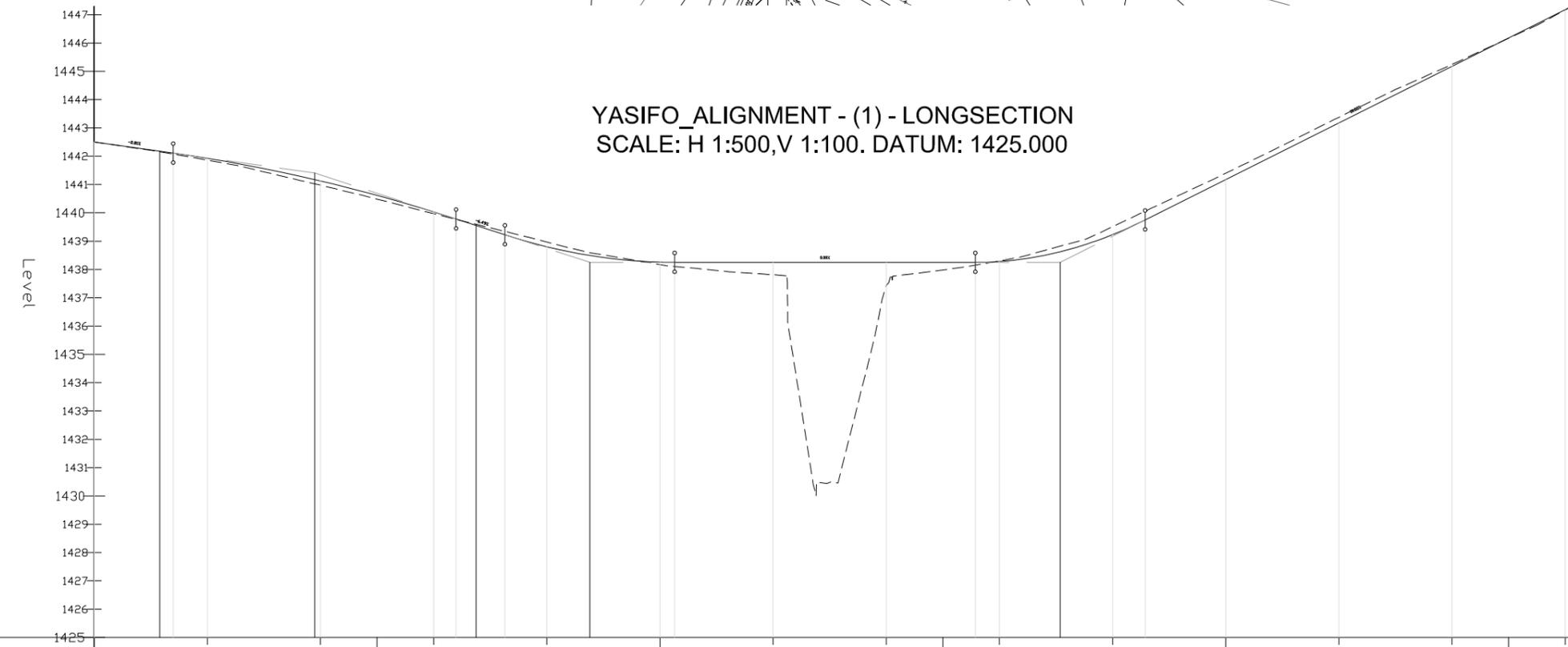


REV.	AMENDMENTS	BY	APP'D	DATE	SURVEY	CONSULTANT PEC	DRAWN M.M. Kim	RECOMMENDED	SCALES AS SHOWN	PROJECT TITLE ADB LOAN 3547, 3548 AND GRANT 0538-PNG-SUSTAINABLE HIGHLANDS HIGHWAY INVESTMENT PROGRAM (SHHIP) - TRANCHE 1 - CSTB 3747 - REVISED ADDITIONAL SCOPE OF WORK
					VERTICAL DATUM Date		CHECKED Y.J. Kim			
					HORIZONTAL DATUM		DESIGNED I.H. Jang	APPROVED	PROJECT No.	AUTOCAD No.
				SURVEY BOOK Nos	CHECKED E.J. Oh		EXECUTIVE ENGINEER			
						PRINCIPAL				PAPUA NEW GUINEA DEPARTMENT OF WORKS

40. Yasifo River Bridge



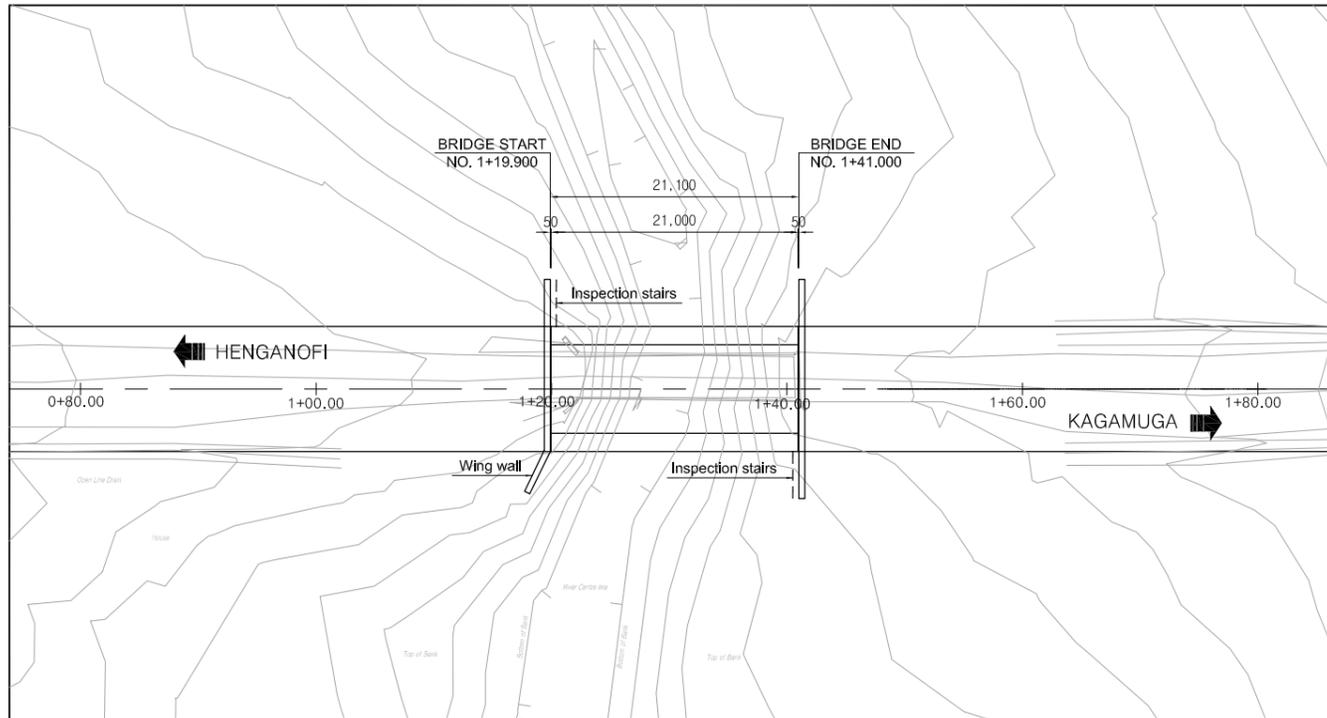
YASIFO_ALIGNMENT - (1) - LONGSECTION
SCALE: H 1:500, V 1:100. DATUM: 1425.000



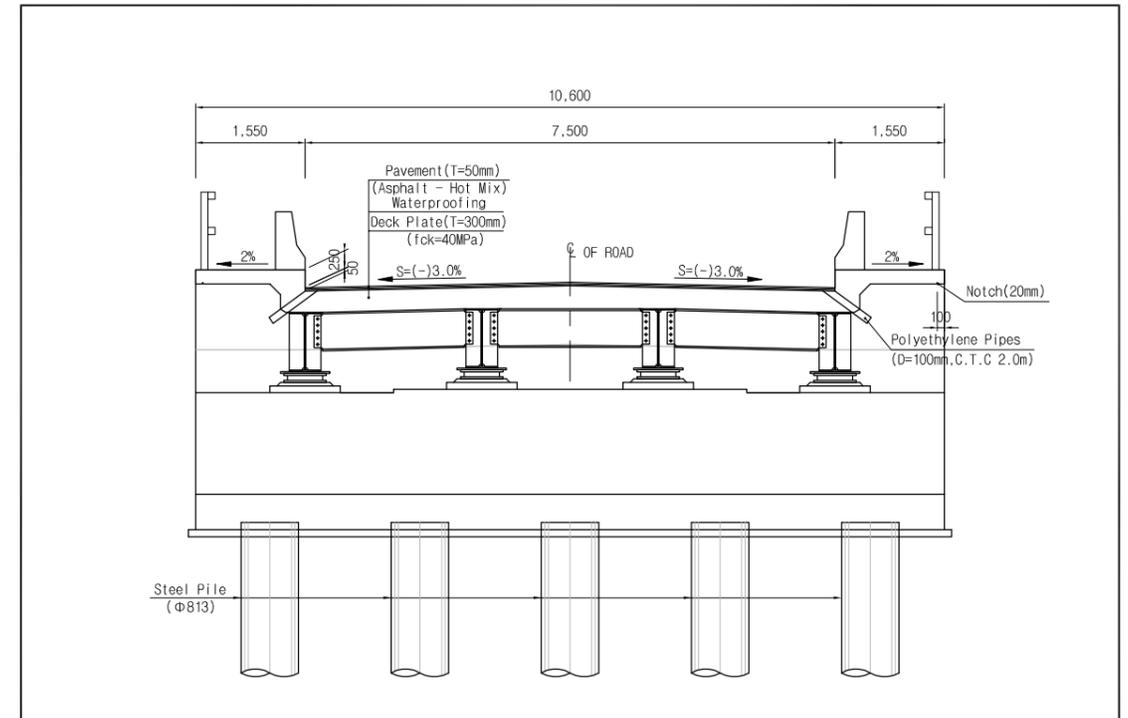
Proposed Levels	1442.502	1441.862	1440.975	1440.484	1439.970	1438.969	1438.173	1437.813	1437.438	1437.983	1438.303	1439.510	1441.399	1443.377	1445.245	1446.170	1447.566
Existing Levels	1442.502	1441.862	1440.975	1440.484	1439.970	1438.969	1438.173	1437.813	1437.438	1437.983	1438.303	1439.510	1441.399	1443.377	1445.245	1446.170	1447.566
Chainage	00.000	20.000	40.000	50.000	60.000	80.000	100.000	120.000	140.000	150.000	160.000	180.000	200.000	220.000	240.000	250.000	260.992
Horizontal Geometry	L=11.595		R: 500.000 L: 55.920				L=193.322										

REV.	AMENDMENTS	BY	APP'D	DATE	SURVEY	CONSULTANT	DRAWN	RECOMMENDED	SCALES	PROJECT TITLE				
					VERTICAL DATUM	PEC	D. VALLIKAY	PRINCIPAL ENGINEER					ADB LOAN 3547, 3548 AND GRANT 0538-PNG-SUSTAINABLE HIGHLANDS HIGHWAY INVESTMENT PROGRAM (SHHIP) - TRANCHE 1 - CSTB 3747 - REVISED ADDITIONAL SCOPE OF WORK	
					HORIZONTAL DATUM		DESIGNED	APPROVED	SHEET OF	PROJECT No.	AUTOCAD No.	DRAWING TITLE		
				SURVEY BOOK Nos	A. WAZOB		EXECUTIVE ENGINEER	SECRETARY					PAPUA NEW GUINEA	DRAWING No.
						PRINCIPAL	I. JANG					DEPARTMENT OF WORKS	A1/ AR027	

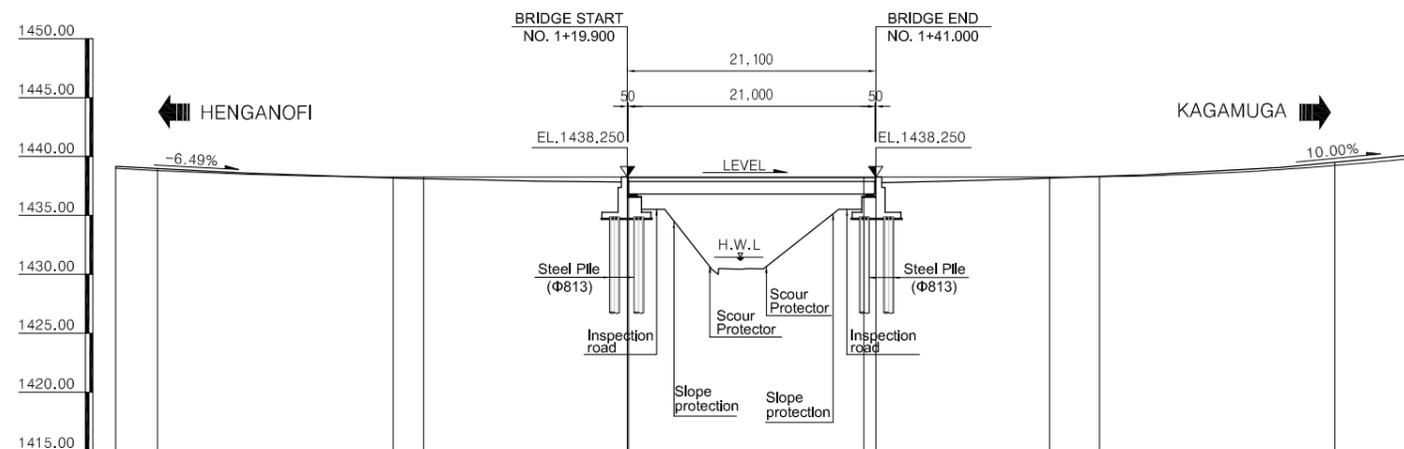
LAYOUT PLAN
S=1:300



CROSS SECTION
S=1:50



LONGITUDINAL ELEVATION
S=1:300



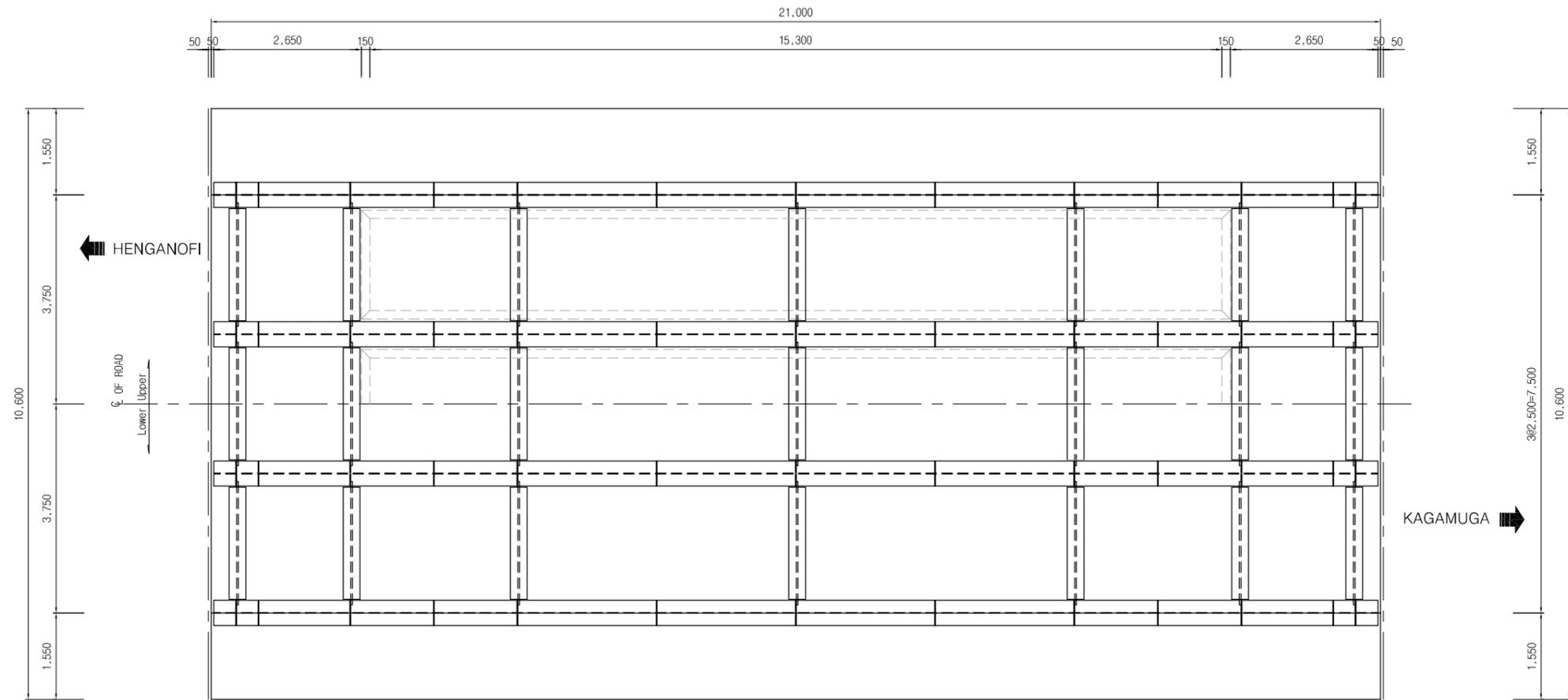
VERTICAL ALIGNMENT	S=LEVEL L=53.163	
ELEVATION DESIGN LEVEL	1438.30	1438.25
GROUND LEVEL	1438.97	1438.25
STATION	0+80.00	1+80.00

NOTE

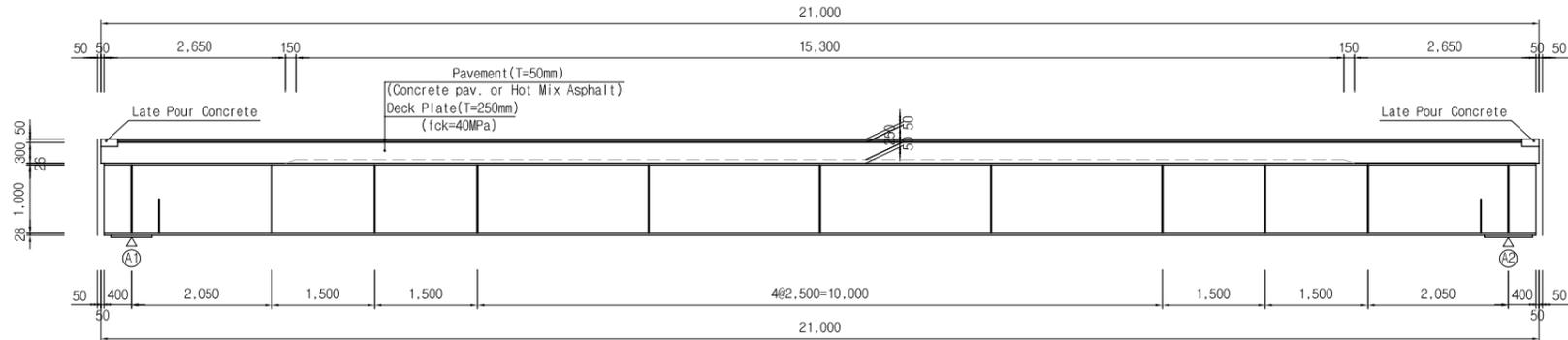
- The design level of bridge profile standardizes the top level of the bridge pavement.
- The main materials should be approved by the supervision consultant and/or PMO/DOW before construction.
- Foundation depth including pile length should be rechecked by contractor with one or more borehole geotechnical investigation in each foundation for proper bearing force. It shall be confirmed by the supervision consultant.
- Foundation ground field condition should be checked by geotechnical engineers and the supervision consultants for satisfying a proper bearing capacity requirement with plate bearing tests.
- Contractor to construct exact bridge structure described in the drawings should establish the detailed construction plan and temporary structure design for the supervision consultant's approval.
- Bridge inspection stairs should be installed for the easy maintenance work of girder, bearing and substructure.
- Foundation scour protection and slope protection in front of abutments should be installed for keeping the foundation stability.
- Drainage outlet distance should be determined based on the hydrological review detailed including climate change as increasing intensive heavy raining for the durability extension of bridge deck and pavement.
- Bridge walkway widths at both sides are determined as 1.55m to be considered for the future utilization increase.
- The designed elevation of bearings and expansion joints should be rechecked with real applied products for accurate construction.

REV.	AMENDMENTS	BY	APP'D	DATE	SURVEY	CONSULTANT	DRAWN	RECOMMENDED	SCALES	PROJECT TITLE
					Date	PEC	M.M. Kim		AS SHOWN	ADB LOAN 3547, 3548 AND GRANT 0538-PNG-SUSTAINABLE HIGHLANDS HIGHWAY INVESTMENT PROGRAM (SHHIP) - TRANCHE 1 - CSTB 3747 - REVISED ADDITIONAL SCOPE OF WORK
					VERTICAL DATUM		Y.J. Kim	PRINCIPAL ENGINEER		DRAWING TITLE
					HORIZONTAL DATUM		I.H. Jang	APPROVED		GENERAL ARRANGEMENT OF BRIDGE
					SURVEY BOOK Nos		E.J. Oh	EXECUTIVE ENGINEER		PAPUA NEW GUINEA DEPARTMENT OF WORKS
								SECRETARY		DRAWING No. A1/ NB140

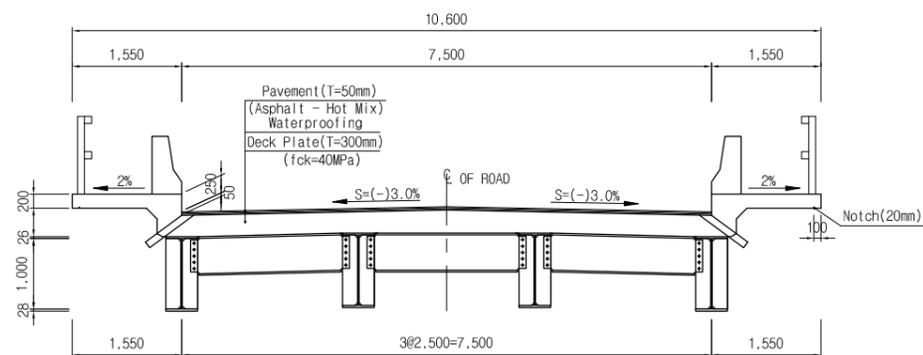
PLAN VIEW



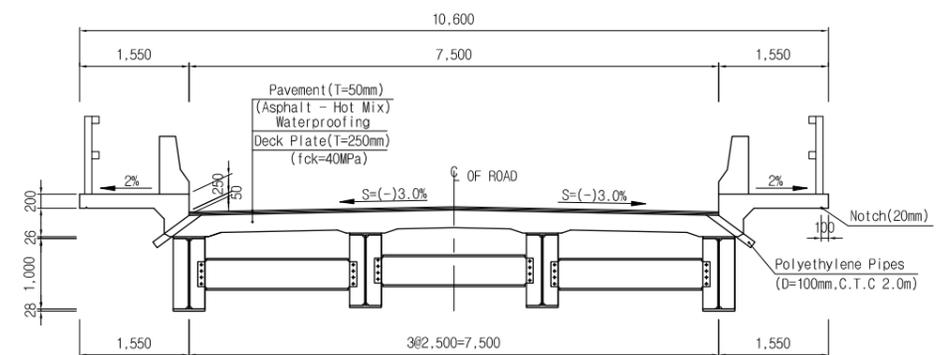
LONGITUDINAL SECTION



END PART SECTION

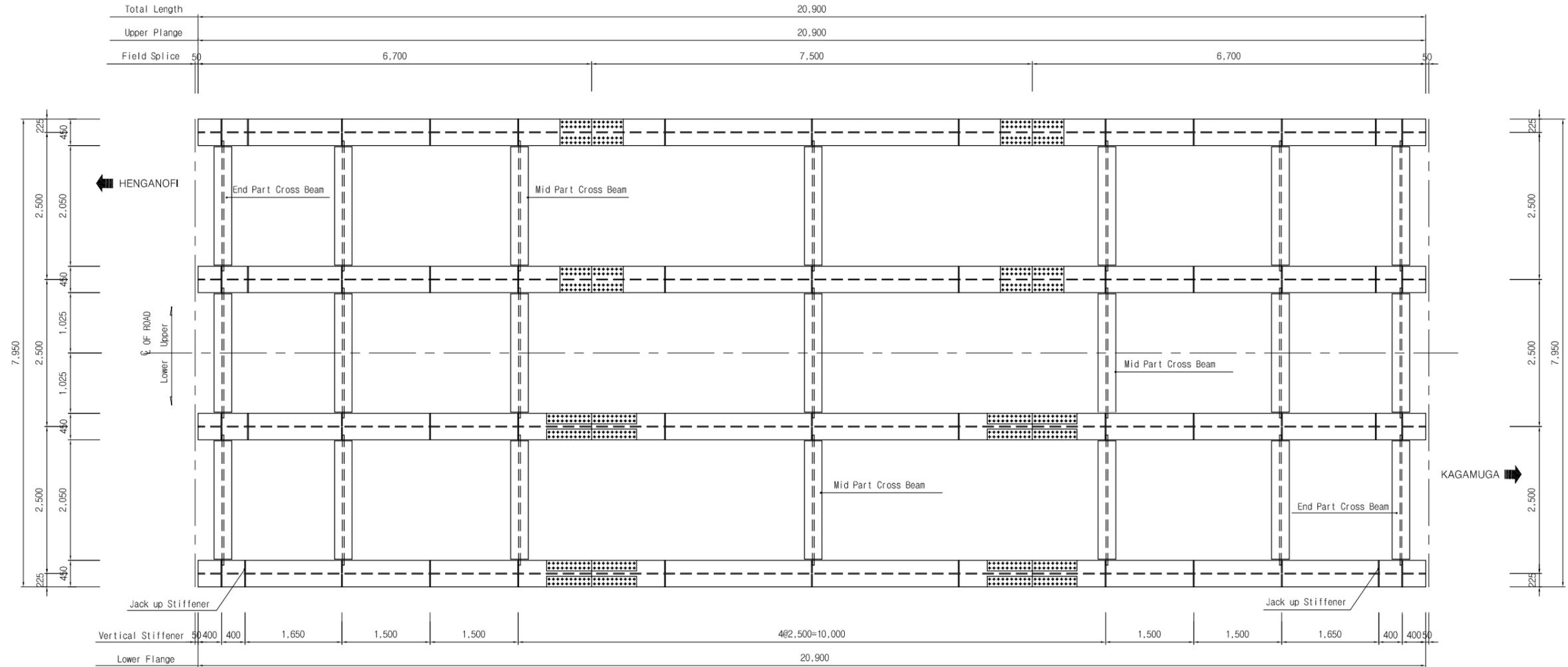


MID PART SECTION

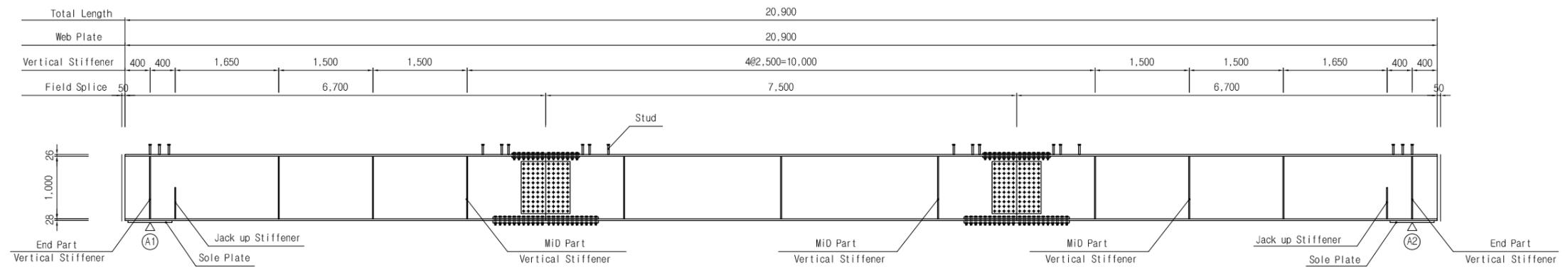


REV.	AMENDMENTS	BY	APP'D	DATE	SURVEY	CONSULTANT		DRAWN	RECOMMENDED	SCALES	PROJECT TITLE		
					VERTICAL DATUM							PROJECT ENGINEER	1 : 50
					HORIZONTAL DATUM		DESIGNED	APPROVED	PRINCIPAL ENGINEER	SHEET OF	DRAWING TITLE		
				SURVEY BOOK Nos			EXECUTIVE ENGINEER					SECRETARY	PAPUA NEW GUINEA
						PRINCIPAL		EXECUTIVE ENGINEER		PROJECT No.	AUTOCAD No.	DEPARTMENT OF WORKS	A1/ NB141
						Date							REV.

PLAN VIEW

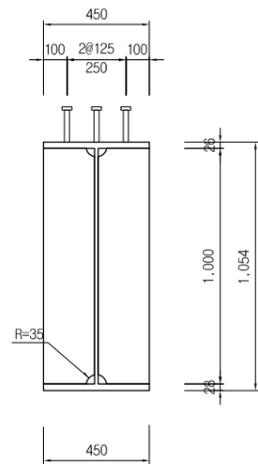


LONGITUDINAL SECTION



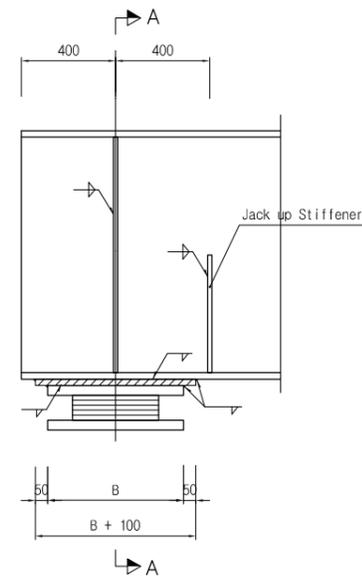
REV.	AMENDMENTS	BY	APP'D	DATE	SURVEY	CONSULTANT	DRAWN	RECOMMENDED	SCALES	PROJECT TITLE			
					VERTICAL DATUM	PEC	M.M. Kim	1:40	ADB LOAN 3547, 3548 AND GRANT 0538-PNG-SUSTAINABLE HIGHLANDS HIGHWAY INVESTMENT PROGRAM (SHHIP) - TRANCHE 1 - CSTB 3747 - REVISED ADDITIONAL SCOPE OF WORK				
					DATE		CHECKED	PROJECT ENGINEER	APPROVED	PROJECT No.	AUTOCAD No.	DRAWING TITLE	
					SURVEY BOOK Nos		DESIGNED	PRINCIPAL ENGINEER				SECRETARY	SHEET OF
						PRINCIPAL	CHECKED	EXECUTIVE ENGINEER				DRAWING No.	REV.
						Date	E.J. Oh					A1/ NB142	

STEEL GIRDER DETAIL

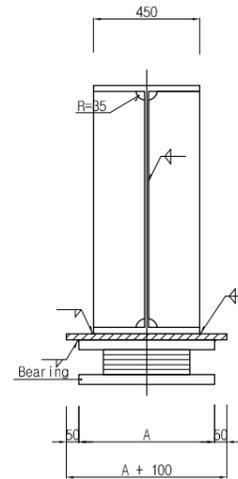


(Per 1ea)
 PL-450X26X20,900X1EA (SM420) - MAIN GIRDER UPP. FLANGE
 PL-1,000X16X20,900X1EA (SM420) - MAIN GIRDER WEB
 PL-450X26X20,900X1EA (SM420) - MAIN GIRDER LOW. FLANGE

END PART DETAIL

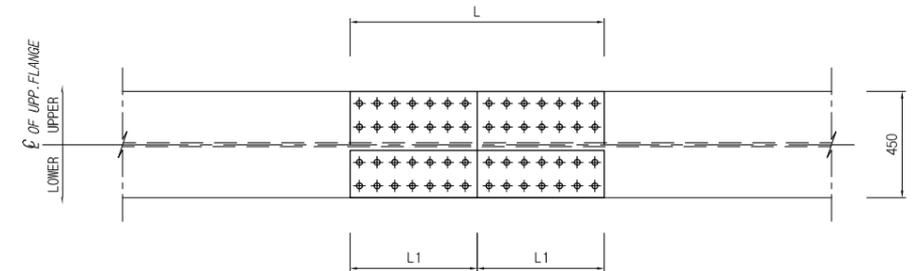


SECTION A-A

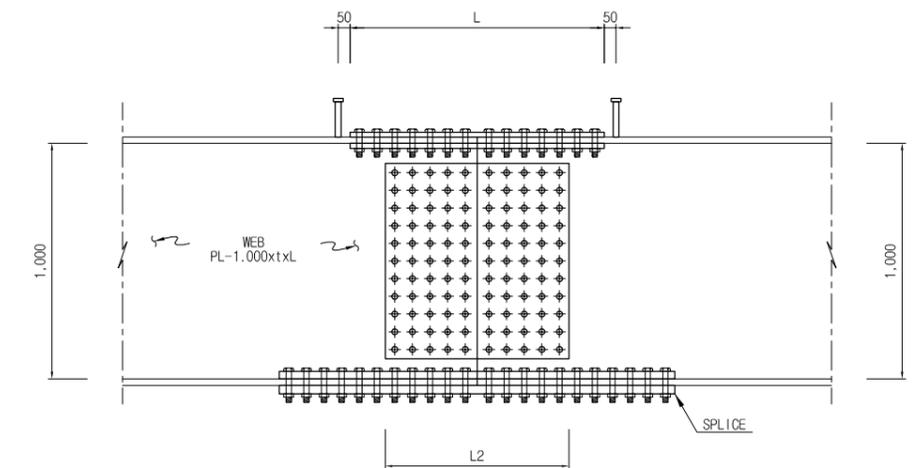


SPLICE DETAILS

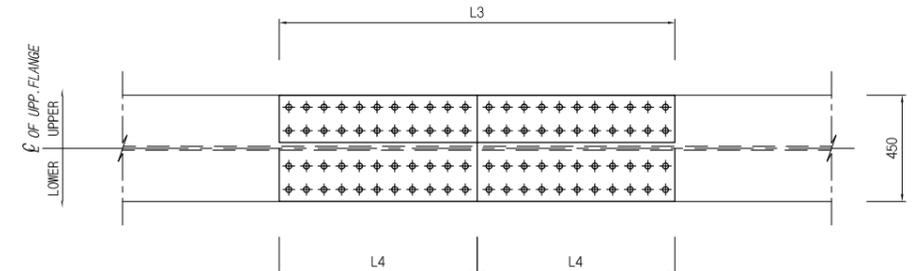
UPPER FLANGE



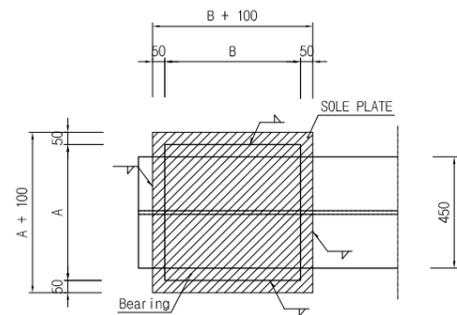
WEB FLANGE



LOWER FLANGE

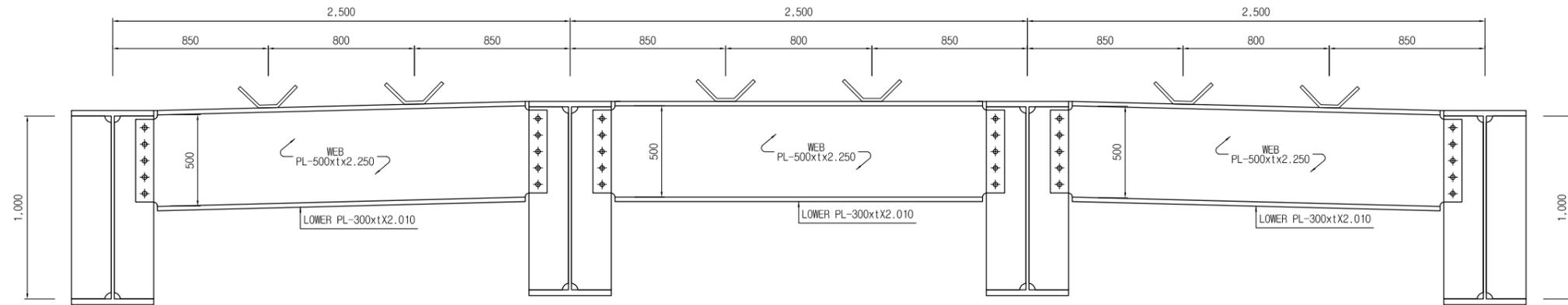


END PART PLAN VIEW

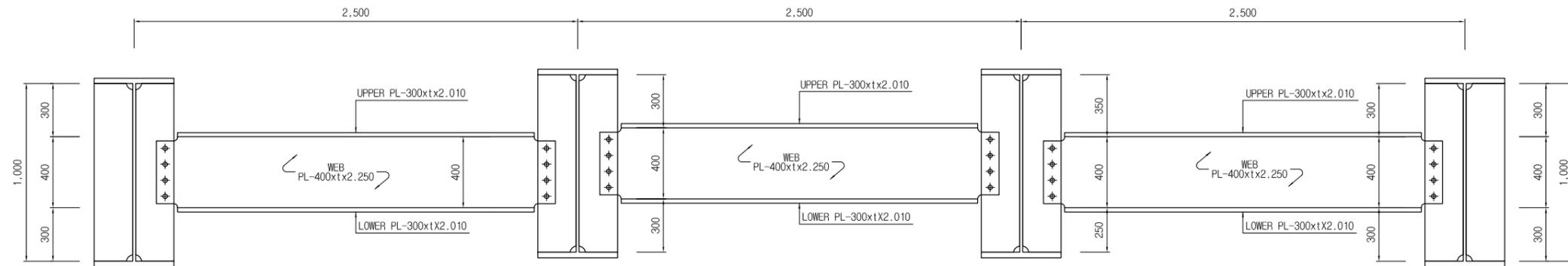


REV.	AMENDMENTS	BY	APP'D	DATE	SURVEY	CONSULTANT PEC	DRAWN M.M. Kim	RECOMMENDED	SCALES 1:15	PROJECT TITLE ADB LOAN 3547, 3548 AND GRANT 0538-PNG-SUSTAINABLE HIGHLANDS HIGHWAY INVESTMENT PROGRAM (SHHIP) - TRANCHE 1 - CSTB 3747 - REVISED ADDITIONAL SCOPE OF WORK		
					VERTICAL DATUM		CHECKED Y.J. Kim			PROJECT ENGINEER	PRINCIPAL ENGINEER	DRAWING TITLE STEEL GIRDER DETAILS
					HORIZONTAL DATUM	PRINCIPAL 	DESIGNED I.H. Jang	APPROVED	PROJECT No.	AUTOCAD No.	DRAWING No. PAPUA NEW GUINEA DEPARTMENT OF WORKS A1/ NB143	
				SURVEY BOOK Nos	CHECKED E.J. Oh		EXECUTIVE ENGINEER				SECRETARY	SHEET OF

END CROSS BEAM AT ABUTMENT



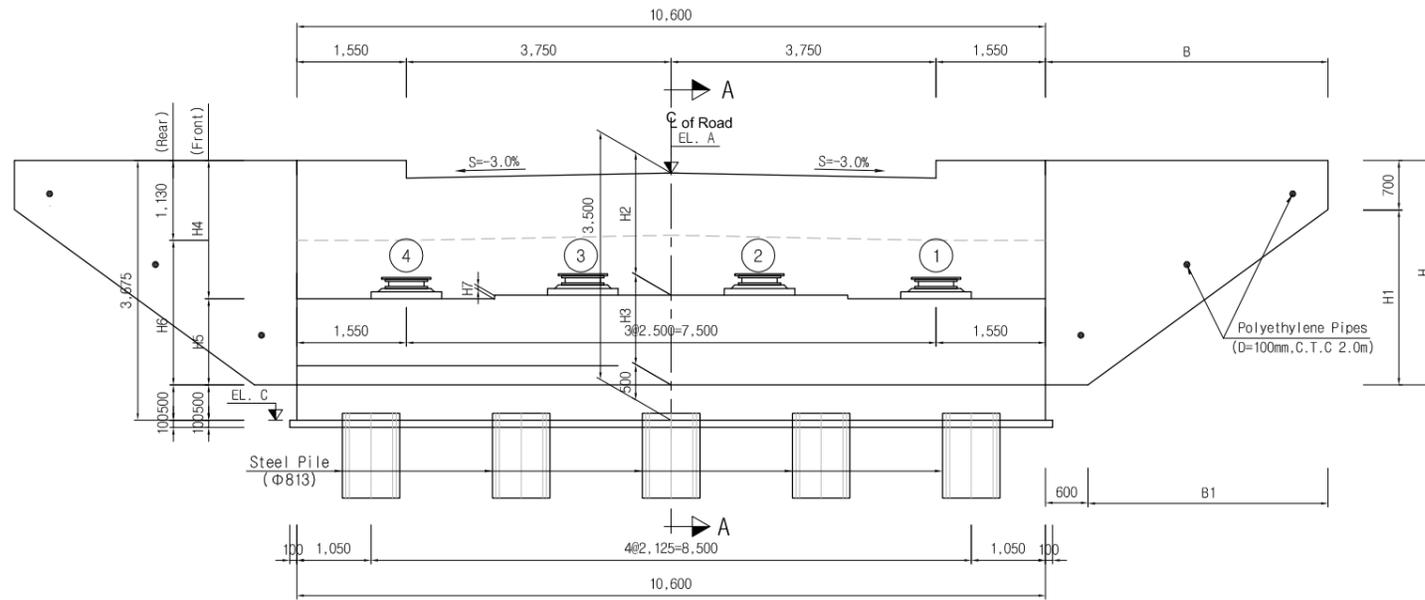
TYPICAL INTERMEDIATE CROSS BEAM DETAILS



REV.	AMENDMENTS	BY	APP'D	DATE	SURVEY	CONSULTANT PEC	DRAWN M.M. Kim	RECOMMENDED	SCALES 1:15	PROJECT TITLE ADB LOAN 3547, 3548 AND GRANT 0538-PNG-SUSTAINABLE HIGHLANDS HIGHWAY INVESTMENT PROGRAM (SHHIP) - TRANCHE 1 - CSTB 3747 - REVISED ADDITIONAL SCOPE OF WORK		
					VERTICAL DATUM Date		CHECKED Y.J. Kim			PROJECT ENGINEER	PRINCIPAL ENGINEER	DRAWING TITLE DIAPHRAGM DETAILS
					HORIZONTAL DATUM		DESIGNED I.H. Jang	APPROVED	PROJECT No.	AUTOCAD No.	DRAWING No. PAPUA NEW GUINEA DEPARTMENT OF WORKS A1/ NB144	
				SURVEY BOOK Nos	PRINCIPAL Date		CHECKED E.J. Oh				EXECUTIVE ENGINEER	SECRETARY

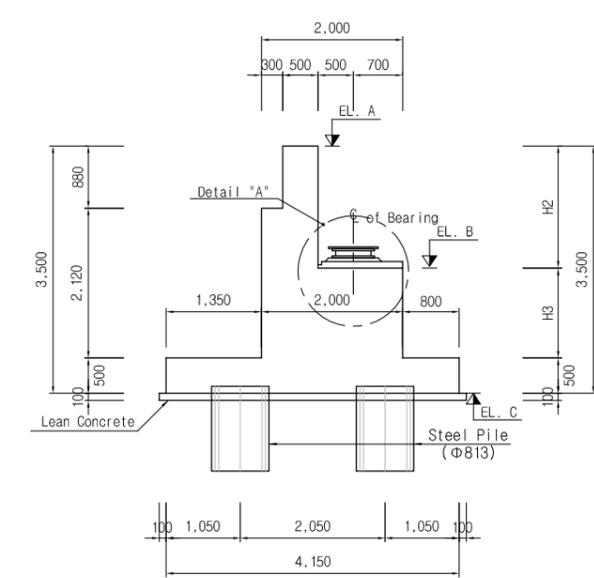
FRONT VIEW

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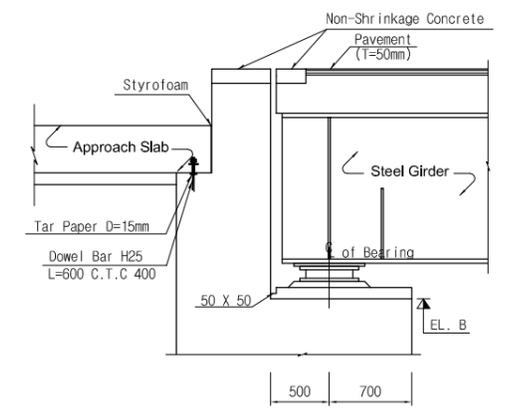
SECTION A-A

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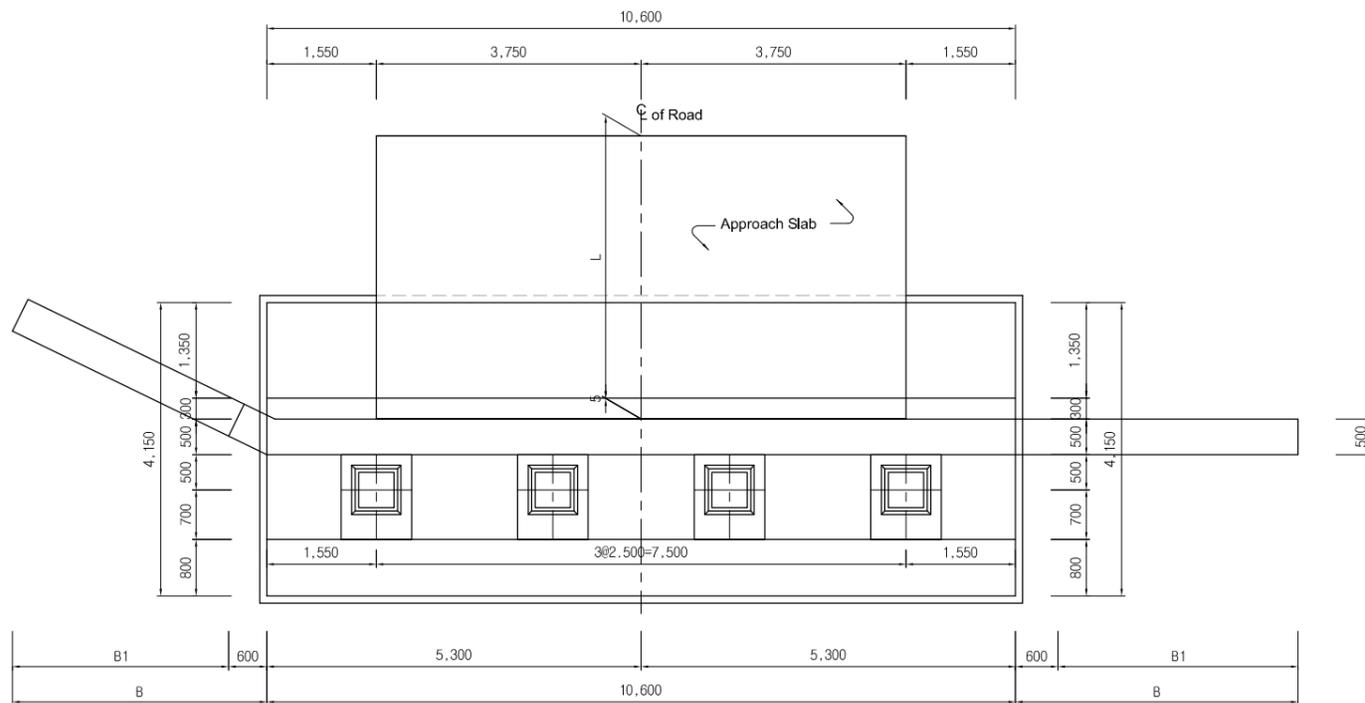
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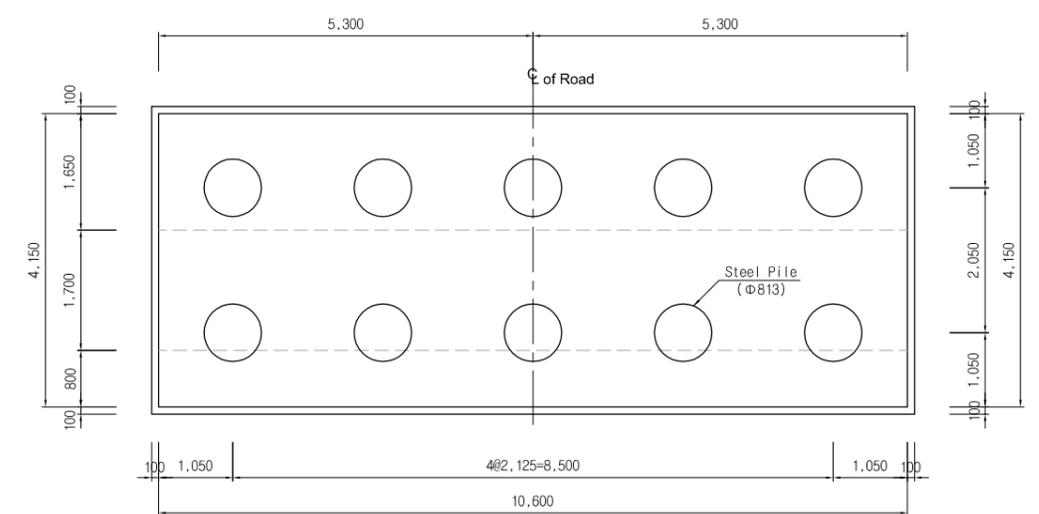
PLAN VIEW

S=1:50



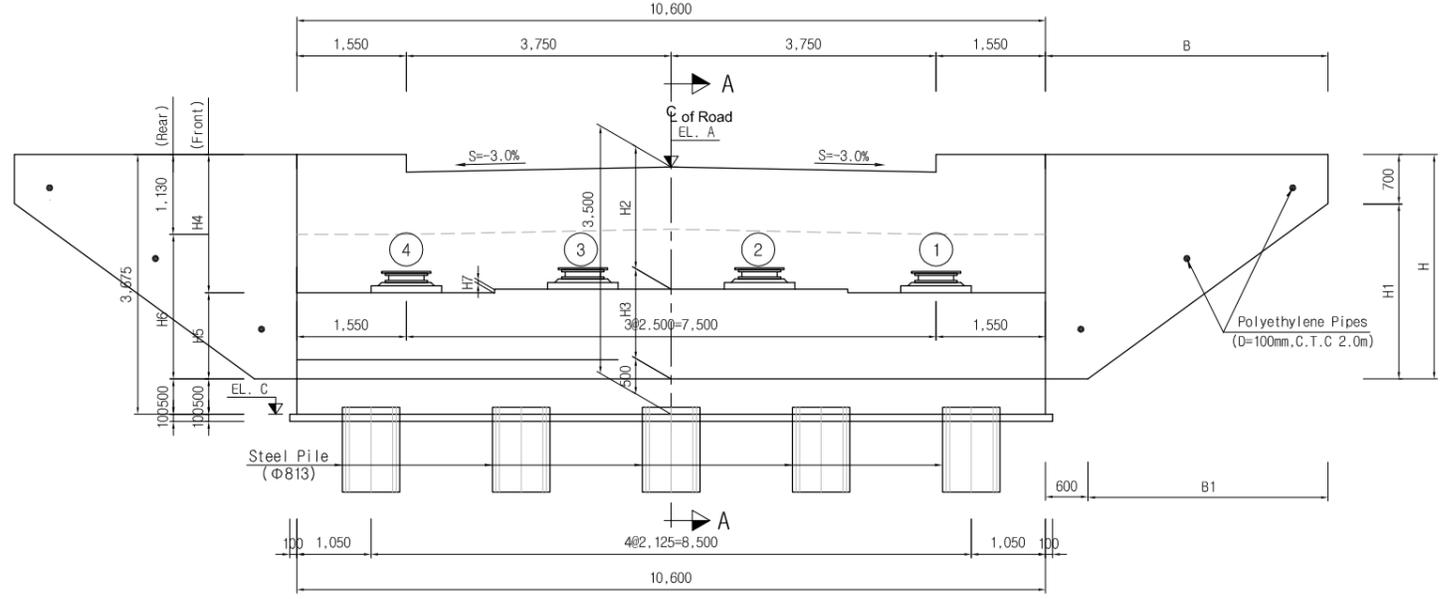
FOUNDATION PLAN VIEW

S=1:50

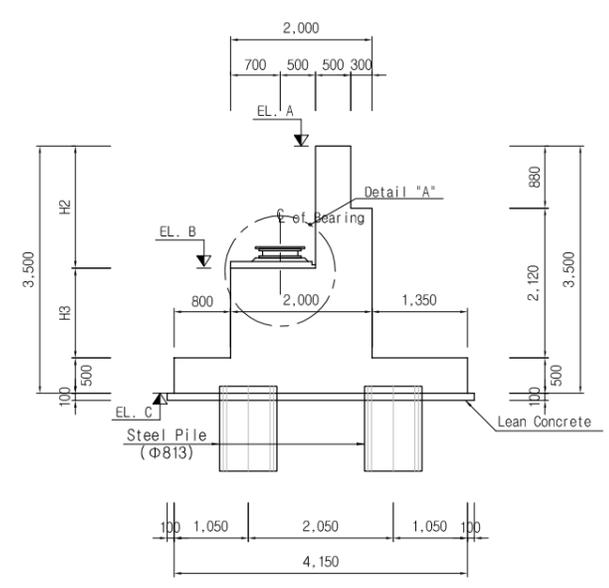


REV.	AMENDMENTS			BY	APP'D	DATE	SURVEY	CONSULTANT PEC	DRAWN M.M. Kim	RECOMMENDED	SCALES AS SHOWN	PROJECT TITLE ADB LOAN 3547, 3548 AND GRANT 0538-PNG-SUSTAINABLE HIGHLANDS HIGHWAY INVESTMENT PROGRAM (SHHIP) - TRANCHE 1 - CSTB 3747 - REVISED ADDITIONAL SCOPE OF WORK			
	VERTICAL DATUM		DESIGNED I.H. Jang				PROJECT ENGINEER		APPROVED			PRINCIPAL ENGINEER	DRAWING TITLE ABUTMENT - GENERAL LAYOUT (A1)		
	HORIZONTAL DATUM												CHECKED E.J. Oh	EXECUTIVE ENGINEER	SECRETARY
	SURVEY BOOK Nos		PRINCIPAL				Date		SHEET			OF			

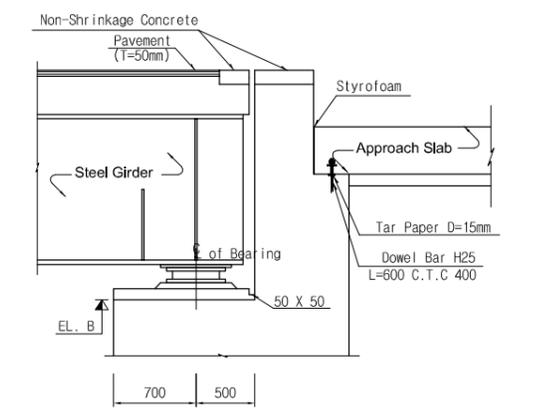
FRONT VIEW
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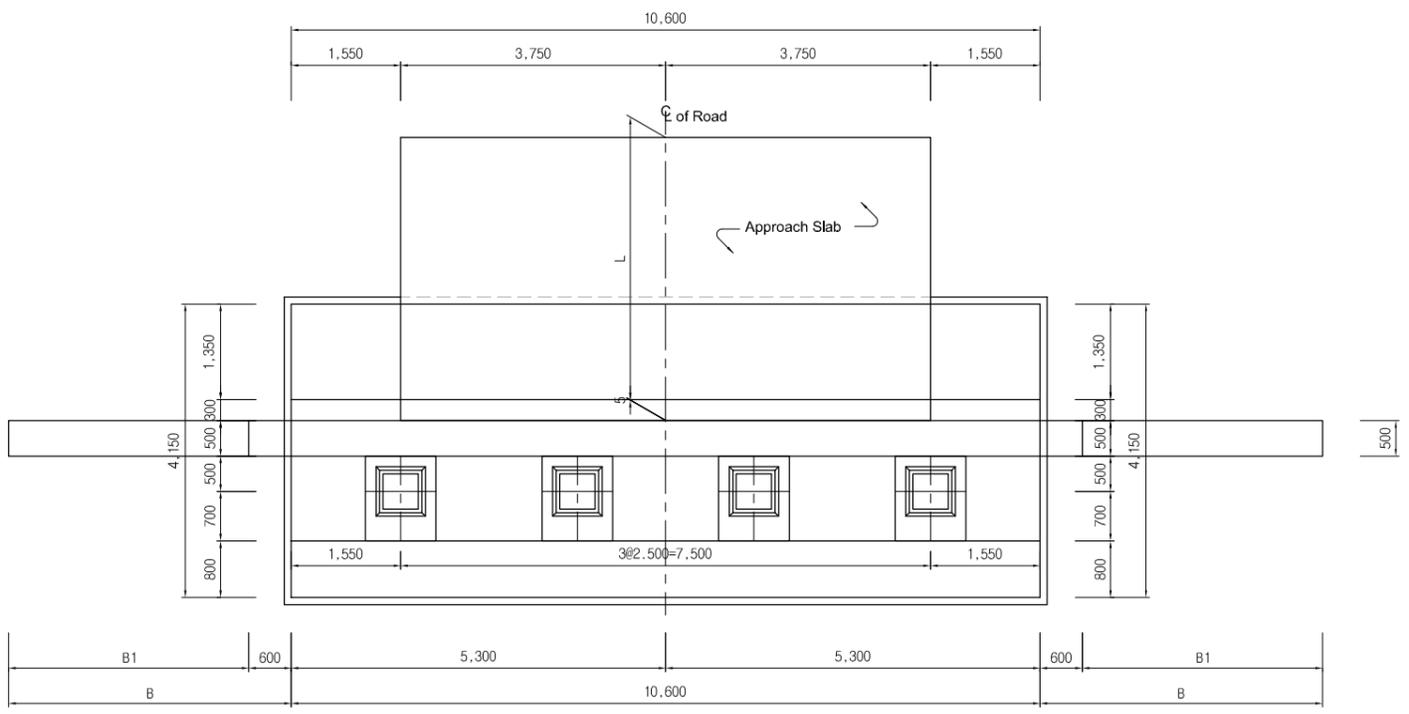
SECTION A-A
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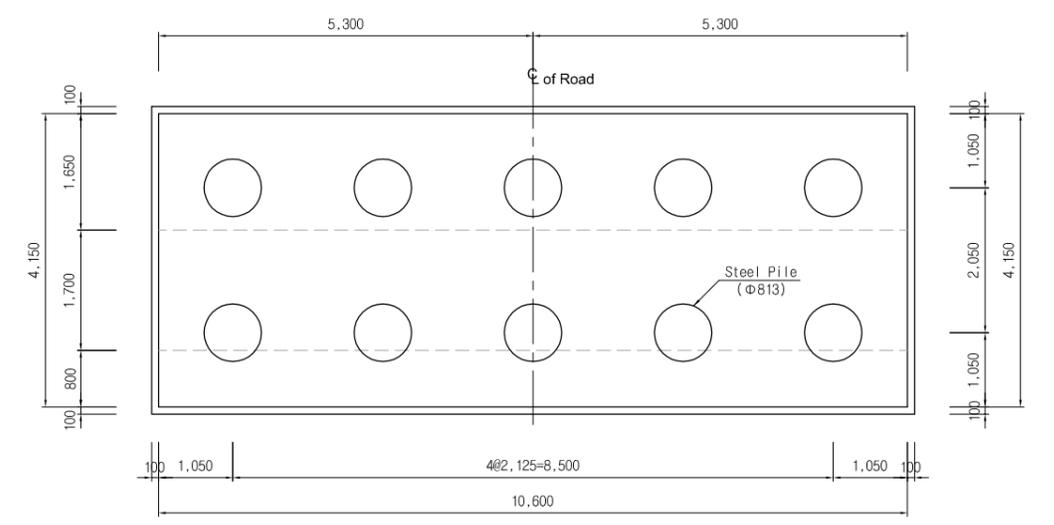
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PLAN VIEW
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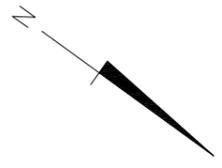


FOUNDATION PLAN VIEW
S=1:50



REV.	AMENDMENTS			BY	APP'D	DATE	SURVEY	CONSULTANT PEC	DRAWN M.M. Kim	RECOMMENDED	SCALES AS SHOWN	PROJECT TITLE ADB LOAN 3547, 3548 AND GRANT 0538-PNG-SUSTAINABLE HIGHLANDS HIGHWAY INVESTMENT PROGRAM (SHHP) - TRANCHE 1 - CSTB 3747 - REVISED ADDITIONAL SCOPE OF WORK			
	VERTICAL DATUM		DESIGNED I.H. Jang				PROJECT ENGINEER		APPROVED			PRINCIPAL ENGINEER	DRAWING TITLE ABUTMENT - GENERAL LAYOUT (A2)		
	HORIZONTAL DATUM												CHECKED E.J. Oh	EXECUTIVE ENGINEER	SECRETARY
	SURVEY BOOK Nos		PRINCIPAL				Date		EXECUTIVE ENGINEER			SECRETARY			

41. Parirosay River Bridge

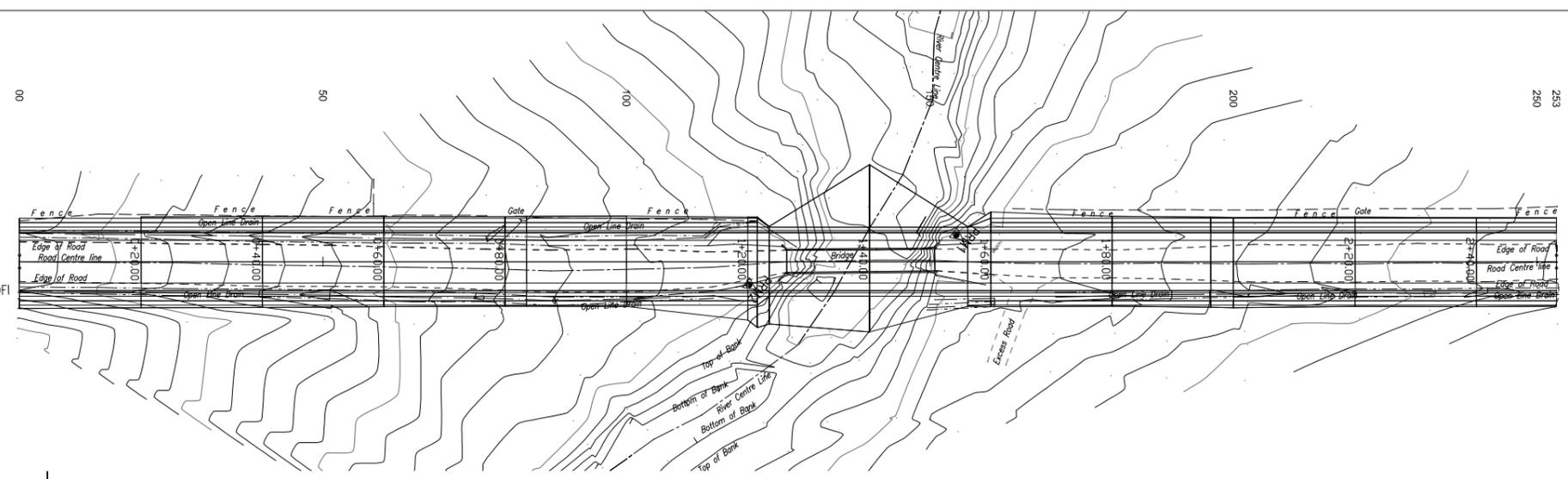


PRM4

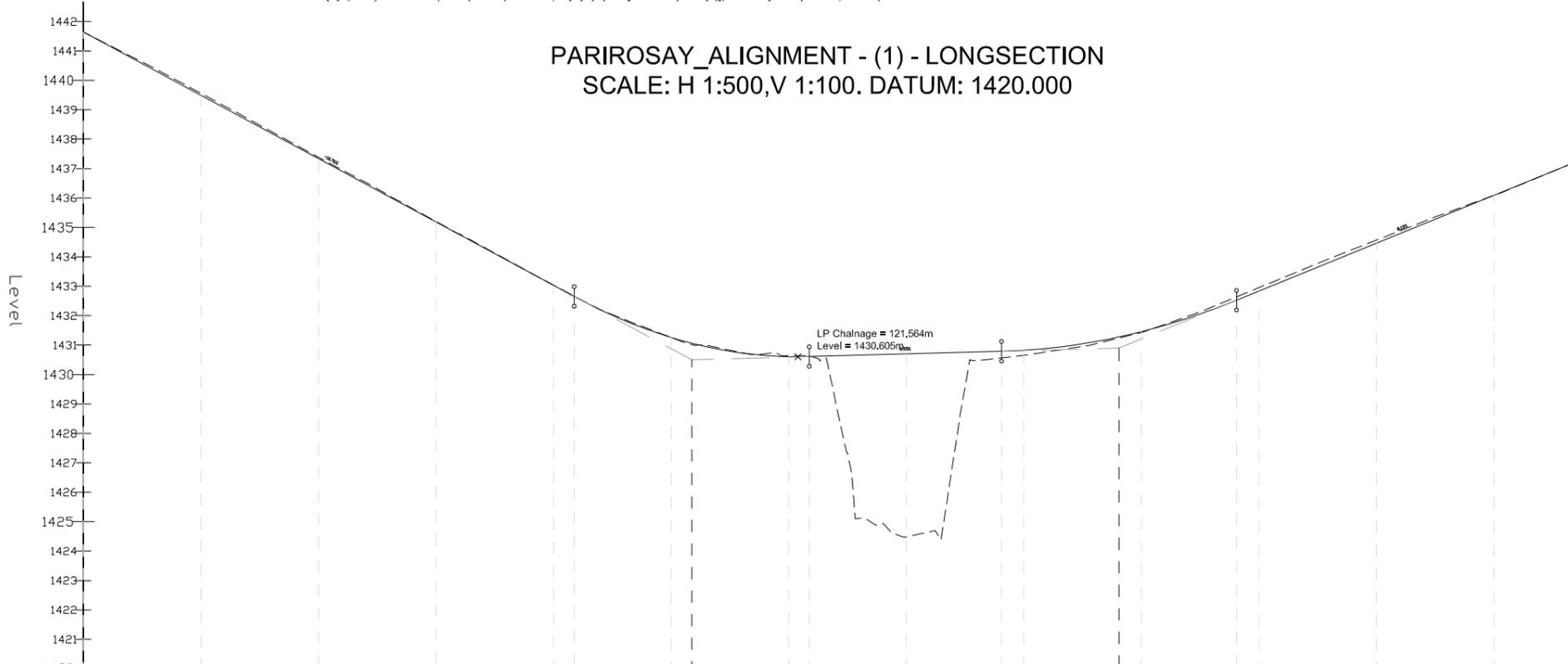
PRM3

To LAE
To KAINANTU
To HENGANOFI

To GOROKA



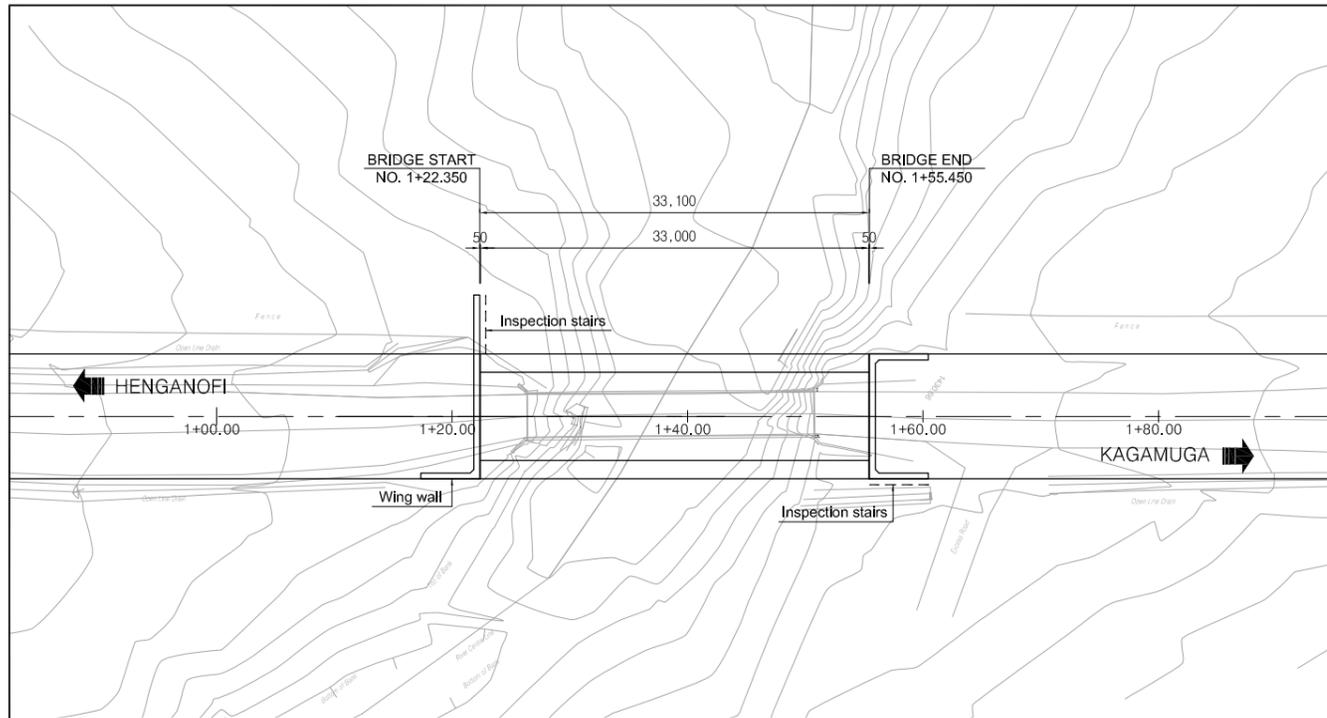
PARIROSAY_ALIGNMENT - (1) - LONGSECTION
SCALE: H 1:500, V 1:100. DATUM: 1420.000



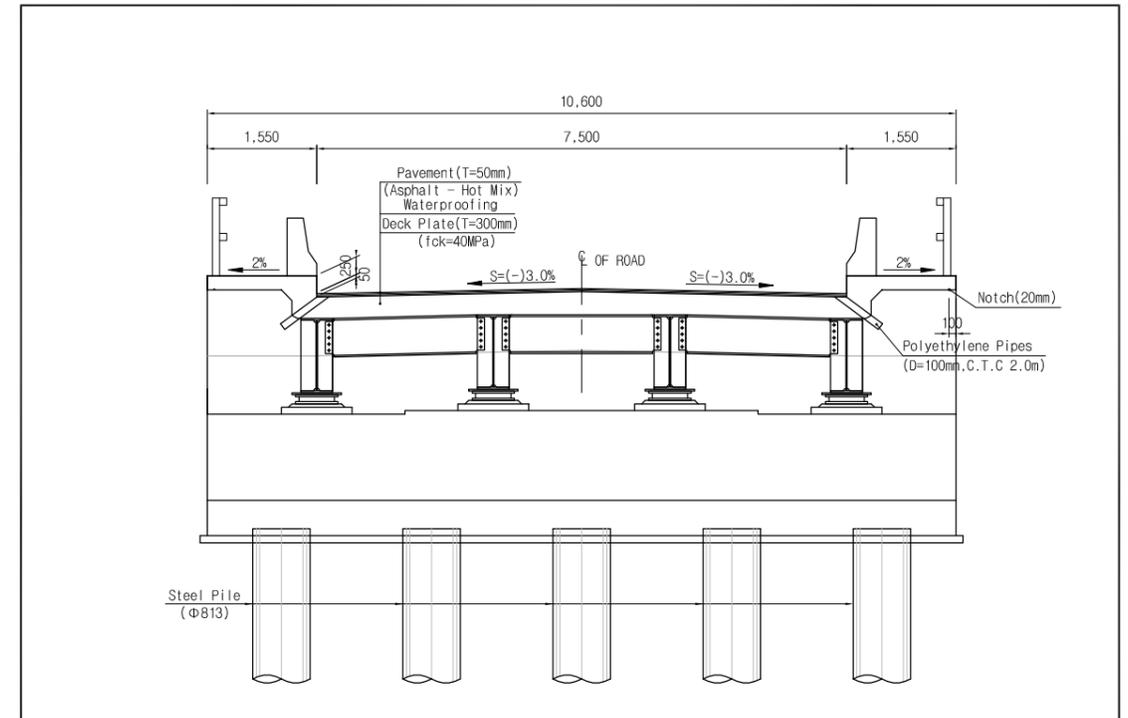
Proposed Levels	1441.641	1440.565	1439.489	1438.412	1437.336	1436.260	1435.183	1434.107	1433.031	1432.014	1431.262	1430.794	1430.608	1430.646	1430.701	1430.756	1430.824	1431.046	1431.457	1432.058	1432.835	1433.648	1434.461	1435.275	1436.088	1436.901	1437.162	
Existing Levels	1441.641	1440.620	1439.558	1438.476	1437.385	1436.315	1435.202	1434.125	1433.036	1432.039	1431.259	1430.829	1430.640	1427.332	1424.483	1429.555	1430.654	1430.957	1431.427	1432.128	1432.955	1433.771	1434.588	1435.356	1436.087	1436.898	1437.162	
Chainage	00.000	10.000	20.000	30.000	40.000	50.000	60.000	70.000	80.000	90.000	100.000	110.000	120.000	130.000	140.000	150.000	160.000	170.000	180.000	190.000	200.000	210.000	220.000	230.000	240.000	250.000	253.206	
Horizontal Geometry																												

REV.	AMENDMENTS	BY	APP'D	DATE	SURVEY	CONSULTANT	DRAWN	RECOMMENDED	SCALES	PROJECT TITLE				
					VERTICAL DATUM	PEC	D. VALLIKAY			ADB LOAN 3547, 3548 AND GRANT 0538-PNG-SUSTAINABLE HIGHLANDS HIGHWAY INVESTMENT PROGRAM (SHHIP) - TRANCHE 1 - CSTB 3747 - REVISED ADDITIONAL SCOPE OF WORK				
					DATE		CHECKED	PRINCIPAL ENGINEER	H 1:1000 V 1:200	DRAWING TITLE				
					HORIZONTAL DATUM		A. WAZOB			APPROVED	PLAN AND PROFILE SHEET - PARIROSAY			
					SURVEY BOOK Nos	PRINCIPAL	DESIGNED	EXECUTIVE ENGINEER	SHEET OF	PROJECT No.	AUTOCAD No.	PAPUA NEW GUINEA	DRAWING No.	REV.
						Date	I. JANG	SECRETARY				DEPARTMENT OF WORKS		A1/ AR028

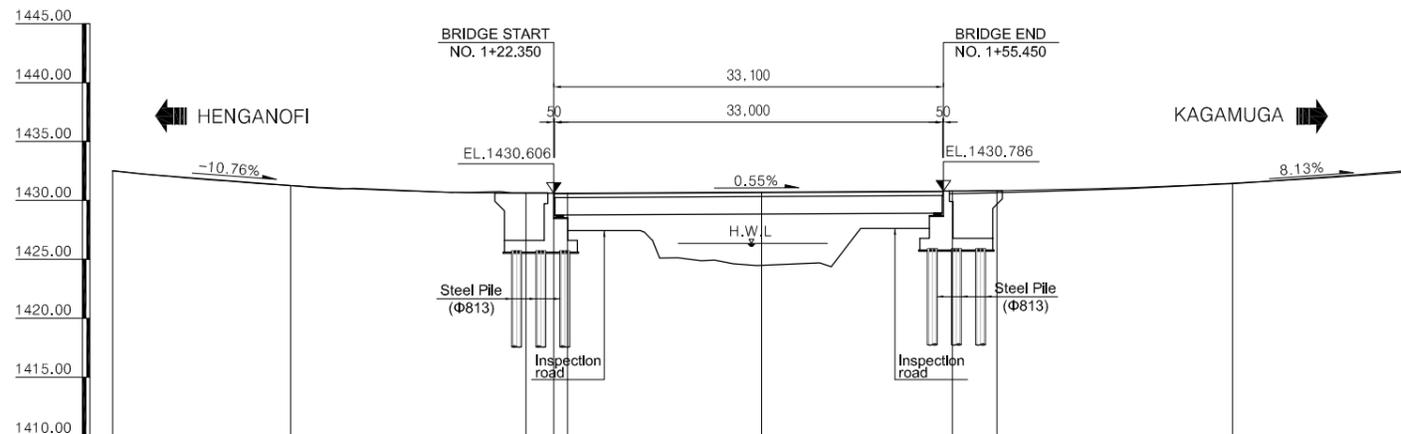
LAYOUT PLAN
S=1:300



CROSS SECTION
S=1:50



LONGITUDINAL ELEVATION
S=1:300



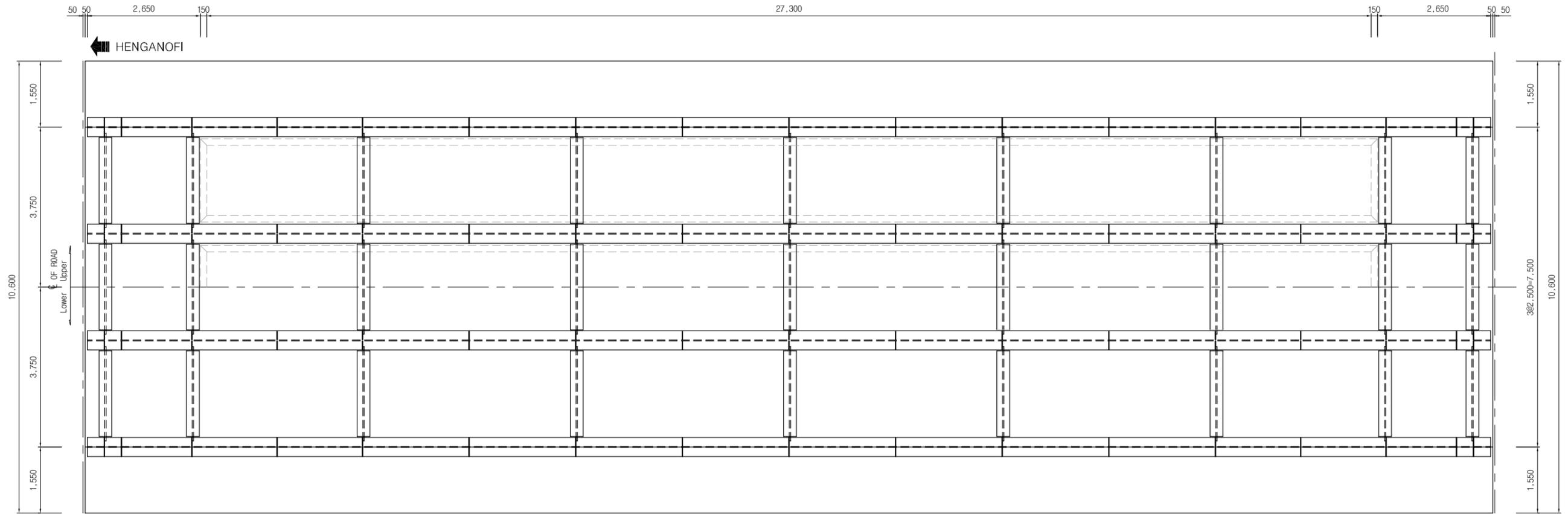
VERTICAL ALIGNMENT			S=0.5500%		H=0.180, L=32.705		1430.61		1430.79	
ELEVATION DESIGN LEVEL	1431.26	1431.26	1430.61	1430.61	1430.70	1430.79	1430.79	1430.82	1432.46	1432.46
GROUND LEVEL	1431.26	1431.26	1430.64	1430.64	1424.48	1430.55	1430.56	1430.65	1432.43	1432.46
STATION	1+00.00	1+20.00	1+22.35	1+23.51	1+40.00	1+55.45	1+56.21	1+60.00	1+80.00	1+80.00

NOTE

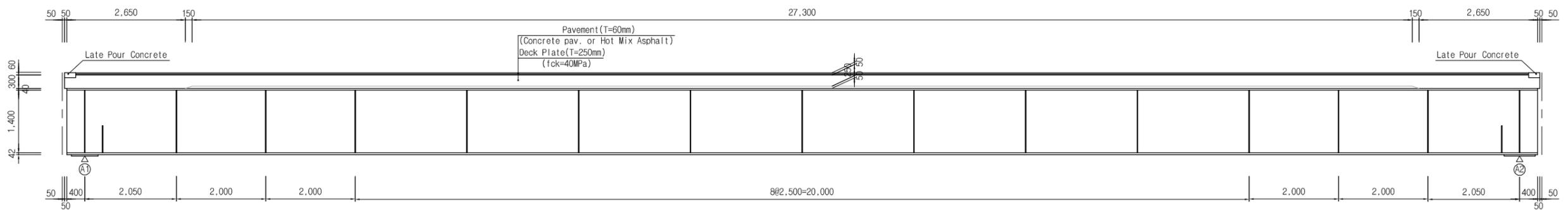
- The design level of bridge profile standardizes the top level of the bridge pavement.
- The main materials should be approved by the supervision consultant and/or PMO/DOW before construction.
- Foundation depth including pile length should be rechecked by contractor with one or more borehole geotechnical investigation in each foundation for proper bearing force. It shall be confirmed by the supervision consultant.
- Foundation ground field condition should be checked by geotechnical engineers and the supervision consultants for satisfying a proper bearing capacity requirement with plate bearing tests.
- Contractor to construct exact bridge structure described in the drawings should establish the detailed construction plan and temporary structure design for the supervision consultant's approval.
- Bridge inspection stairs should be installed for the easy maintenance work of girder, bearing and substructure.
- Foundation scour protection and slope protection in front of abutments should be installed for keeping the foundation stability.
- Drainage outlet distance should be determined based on the hydrological review detailed including climate change as increasing intensive heavy raining for the durability extension of bridge deck and pavement.
- Bridge walkway widths at both sides are determined as 1.55m to be considered for the future utilization increase.
- The designed elevation of bearings and expansion joints should be rechecked with real applied products for accurate construction.

REV.	AMENDMENTS	BY	APP'D	DATE	SURVEY	CONSULTANT PEC	DRAWN M.M. Kim	RECOMMENDED	SCALES AS SHOWN	PROJECT TITLE ADB LOAN 3547, 3548 AND GRANT 0538-PNG-SUSTAINABLE HIGHLANDS HIGHWAY INVESTMENT PROGRAM (SHHIP) - TRANCHE 1 - CSTB 3747 - REVISED ADDITIONAL SCOPE OF WORK
					VERTICAL DATUM		CHECKED Y.J. Kim			
					HORIZONTAL DATUM	PRINCIPAL Date	DESIGNED I.H. Jang	APPROVED	SHEET OF	PROJECT No.
				SURVEY BOOK Nos	CHECKED E.J. Oh		EXECUTIVE ENGINEER	SECRETARY		

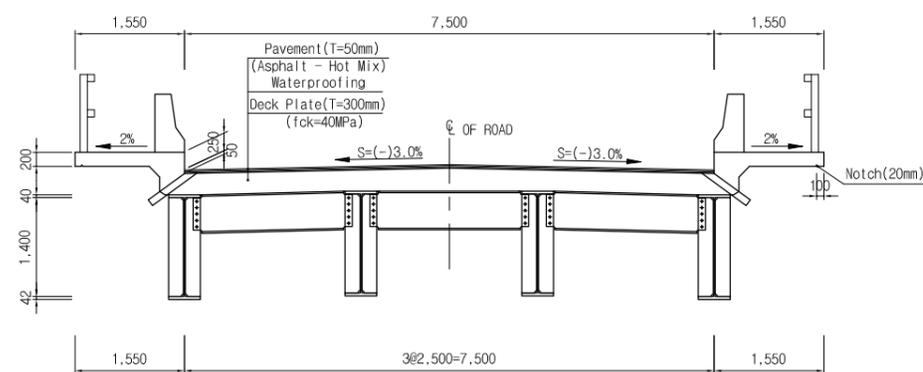
PLAN VIEW



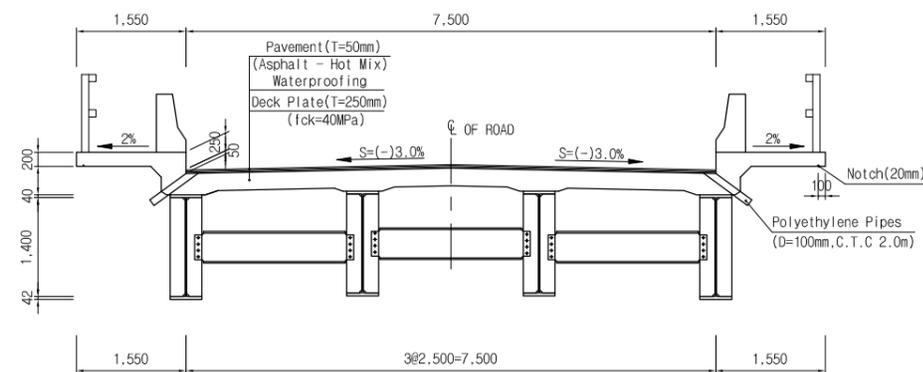
LONGITUDINAL SECTION



END PART SECTION

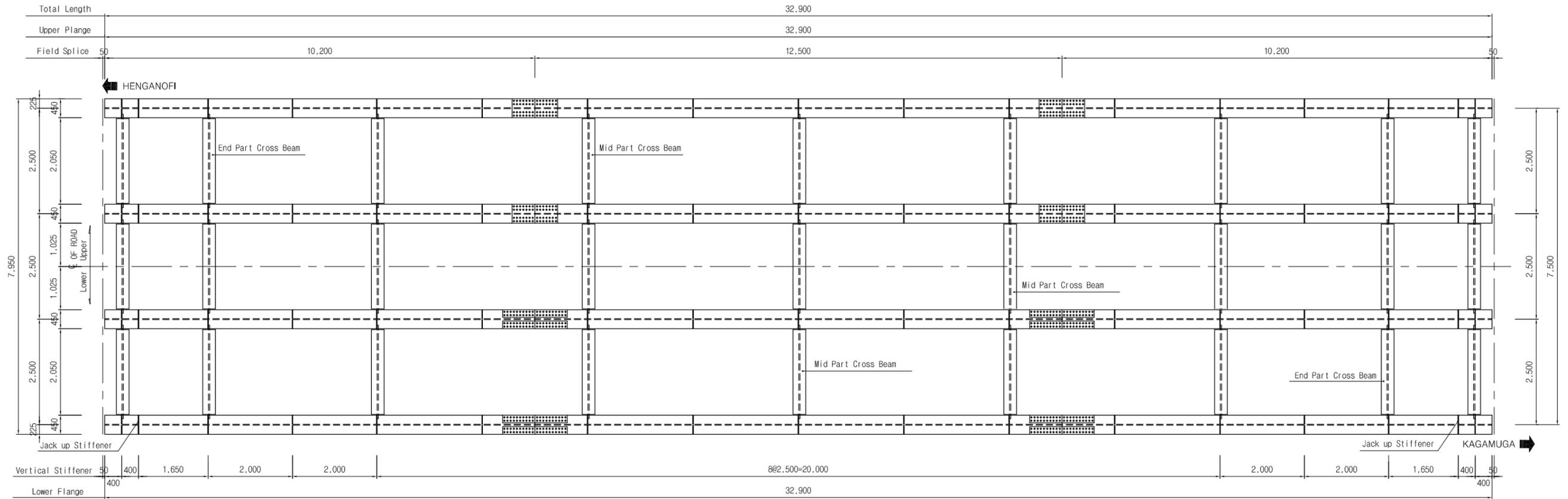


MID PART SECTION

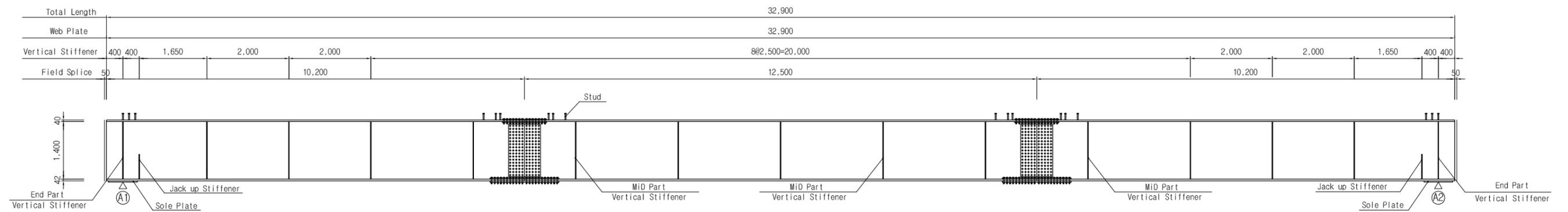


REV.	AMENDMENTS			SURVEY Date VERTICAL DATUM HORIZONTAL DATUM SURVEY BOOK Nos	CONSULTANT PEC PRINCIPAL Date	DRAWN M.M. Kim CHECKED Y.J. Kim DESIGNED I.H. Jang CHECKED E.J. Oh	PROJECT ENGINEER APPROVED EXECUTIVE ENGINEER	RECOMMENDED PRINCIPAL ENGINEER APPROVED SECRETARY	SCALES 1 : 50	PROJECT TITLE ADB LOAN 3547, 3548 AND GRANT 0538-PNG-SUSTAINABLE HIGHLANDS HIGHWAY INVESTMENT PROGRAM (SHHP) - TRANCHE 1 - CSTB 3747 - REVISED ADDITIONAL SCOPE OF WORK	DRAWING TITLE SLAB-GENERAL LAYOUT	PAPER PAPER No. AUTOCAD No. DEPARTMENT OF WORKS	DRAWING No. A1/ NB148	REV.
	BY	APP'D	DATE											

PLAN VIEW

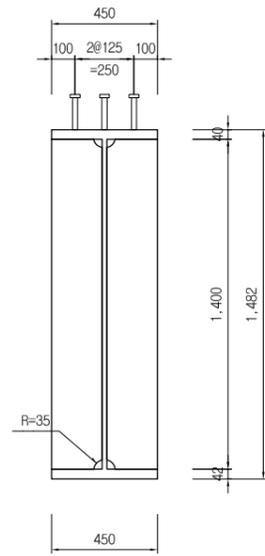


LONGITUDINAL SECTION



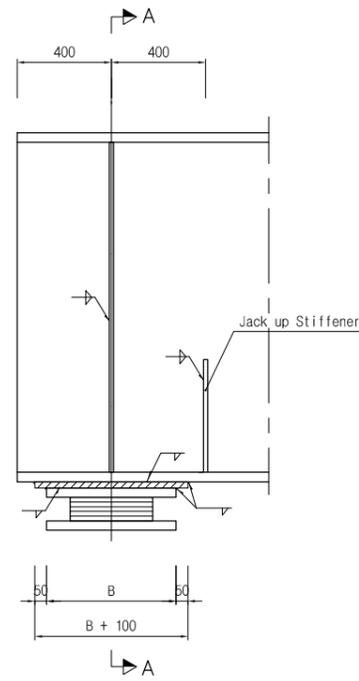
REV.	AMENDMENTS	BY	APP'D	DATE	SURVEY	CONSULTANT PEC	DRAWN M.M. Kim	RECOMMENDED	SCALES 1 : 50	PROJECT TITLE ADB LOAN 3547, 3548 AND GRANT 0538-PNG-SUSTAINABLE HIGHLANDS HIGHWAY INVESTMENT PROGRAM (SHIP) - TRANCHE 1 - CSTB 3747 - REVISED ADDITIONAL SCOPE OF WORK		
					VERTICAL DATUM		CHECKED Y.J. Kim			PROJECT ENGINEER	PRINCIPAL ENGINEER	DRAWING TITLE STEEL GIRDER - GENERAL LAYOUT
					HORIZONTAL DATUM		DESIGNED I.H. Jang	APPROVED	PROJECT No.	AUTOCAD No.	DRAWING No. PAPUA NEW GUINEA DEPARTMENT OF WORKS A1/ NB149	
				SURVEY BOOK Nos	CHECKED E.J. Oh		EXECUTIVE ENGINEER				SECRETARY	SHEET OF

STEEL GIRDER DETAIL

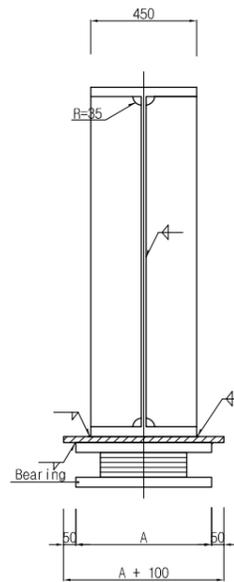


(Per 1ea)
 PL-450X40X32,900X1EA (SM420) - MAIN GIRDER UPP. FLANGE
 PL-1,400X20X32,900X1EA (SM420) - MAIN GIRDER WEB
 PL-450X42X32,900X1EA (SM420) - MAIN GIRDER LOW. FLANGE

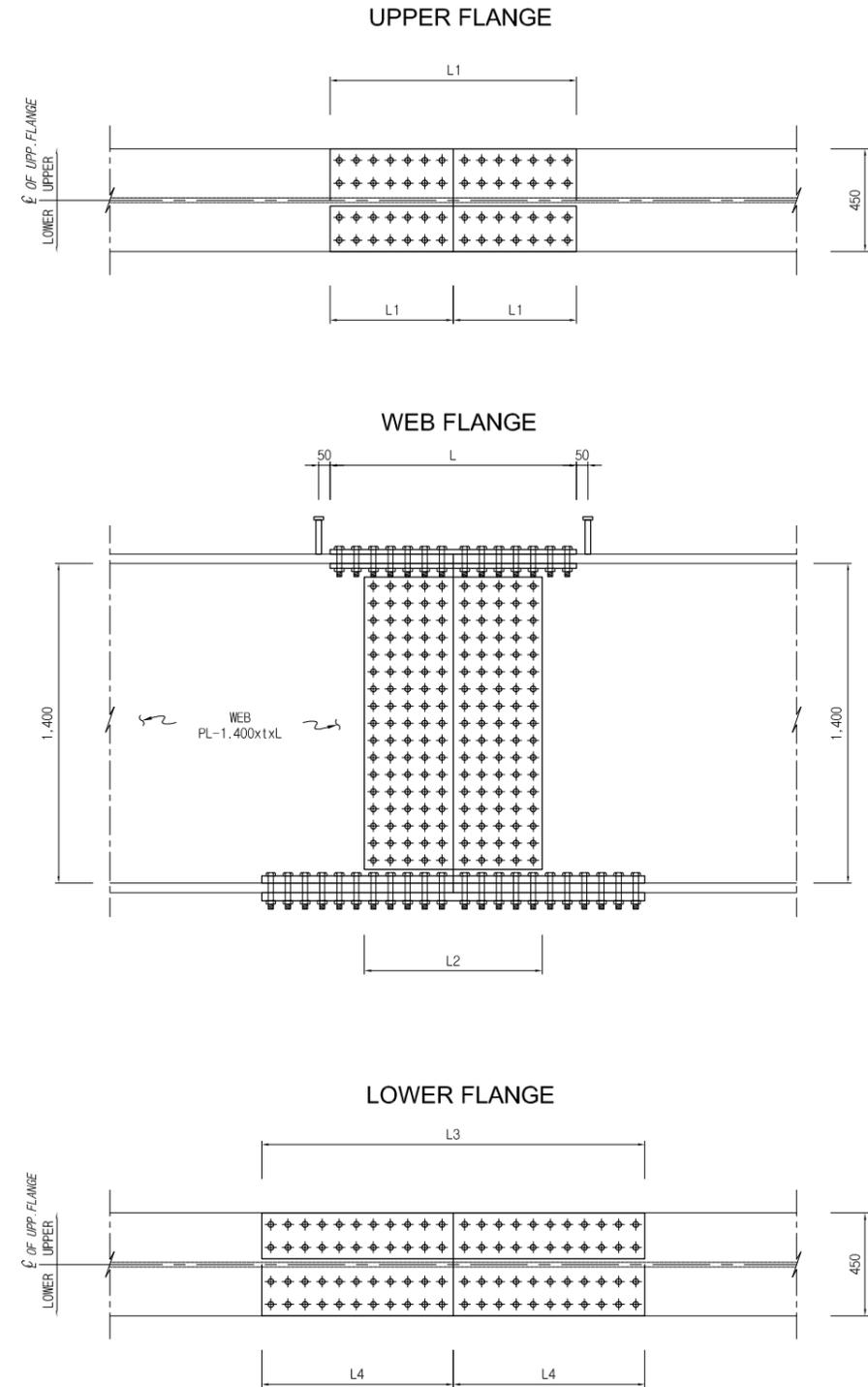
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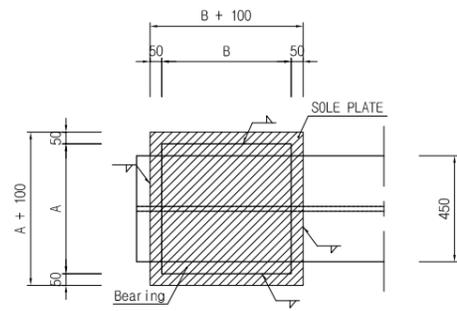
SECTION A-A



SPLICE DETAILS

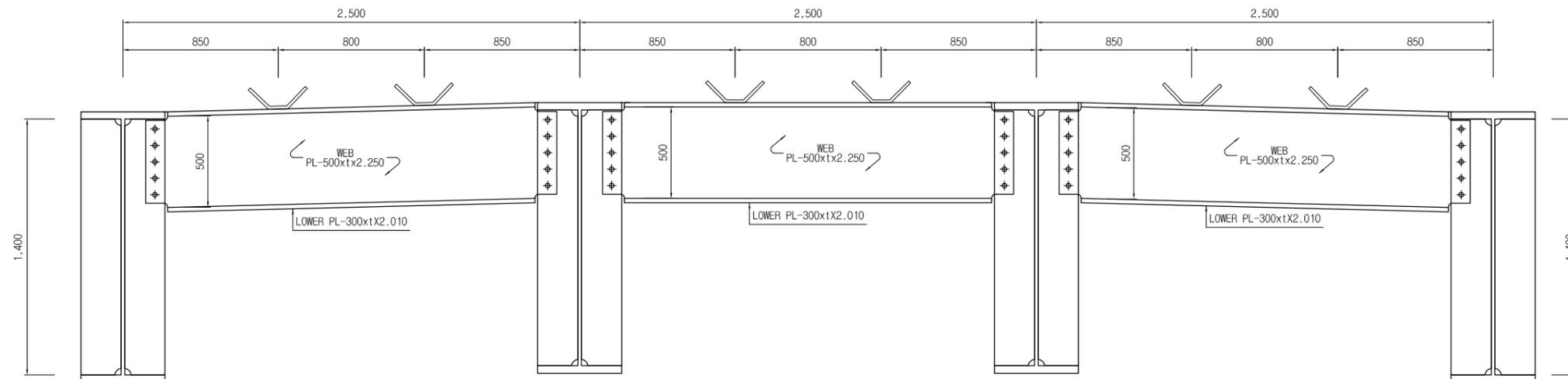


END PART PLAN VIEW

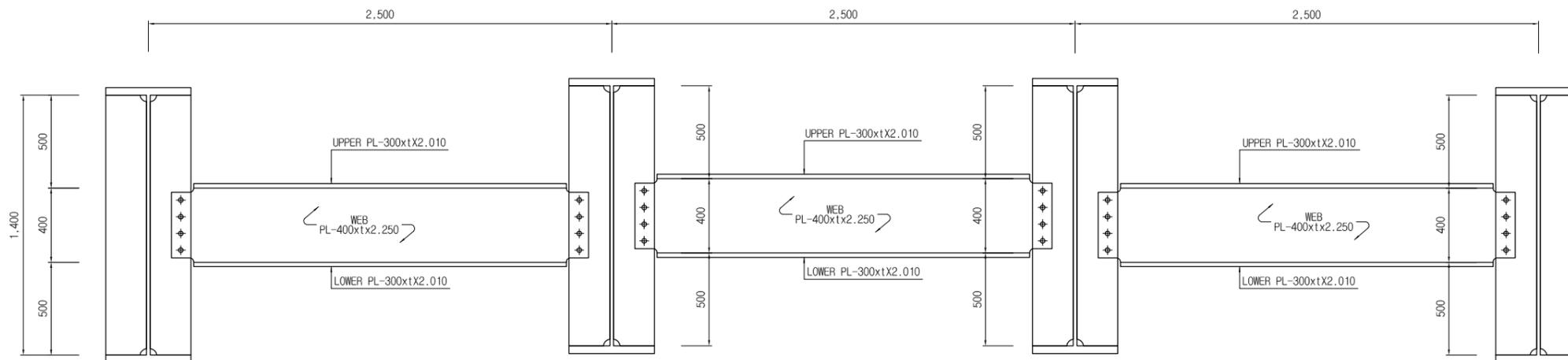


REV.	AMENDMENTS	BY	APP'D	DATE	SURVEY	CONSULTANT PEC	DRAWN M.M. Kim	RECOMMENDED	SCALES 1 : 15	PROJECT TITLE ADB LOAN 3547, 3548 AND GRANT 0538-PNG-SUSTAINABLE HIGHLANDS HIGHWAY INVESTMENT PROGRAM (SHHP) - TRANCHE 1 - CSTB 3747 - REVISED ADDITIONAL SCOPE OF WORK		
					VERTICAL DATUM Date		CHECKED Y.J. Kim			PROJECT ENGINEER	PRINCIPAL ENGINEER	DRAWING TITLE STEEL GIRDER DETAILS
					HORIZONTAL DATUM	PRINCIPAL 	DESIGNED I.H. Jang	APPROVED	PROJECT No.	AUTOCAD No.	DRAWING No. PAPUA NEW GUINEA DEPARTMENT OF WORKS A1/ NB150	
				SURVEY BOOK Nos	DATE		CHECKED E.J. Oh				EXECUTIVE ENGINEER	SECRETARY

END CROSS BEAM AT ABUTMENT



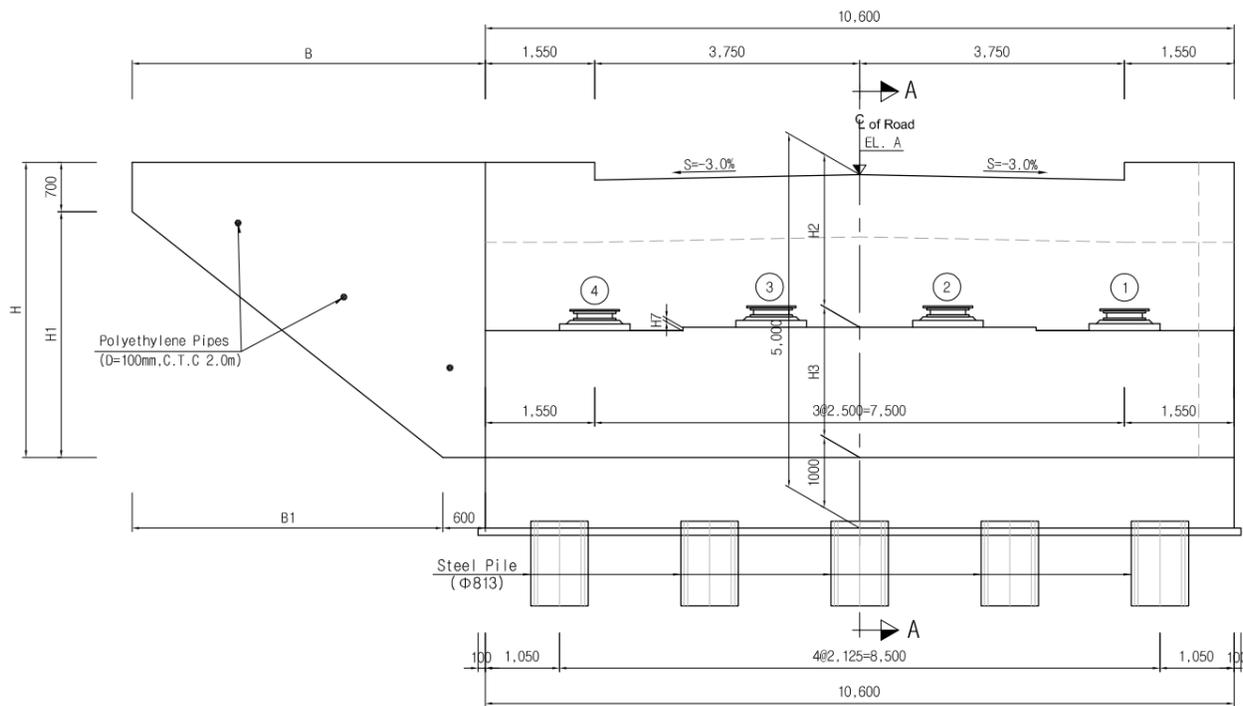
TYPICAL INTERMEDIATE CROSS BEAM DETAILS



REV.	AMENDMENTS	BY	APP'D	DATE	SURVEY	CONSULTANT PEC	DRAWN M.M. Kim	RECOMMENDED	SCALES 1 : 15	PROJECT TITLE ADB LOAN 3547, 3548 AND GRANT 0538-PNG-SUSTAINABLE HIGHLANDS HIGHWAY INVESTMENT PROGRAM (SHHIP) - TRANCHE 1 - CSTB 3747 - REVISED ADDITIONAL SCOPE OF WORK		
					VERTICAL DATUM Date		CHECKED Y.J. Kim			PROJECT ENGINEER	PRINCIPAL ENGINEER	DRAWING TITLE DIAPHRAGM DETAILS
					HORIZONTAL DATUM		DESIGNED I.H. Jang	APPROVED	PROJECT No.	AUTOCAD No.	DRAWING No. DEPARTMENT OF WORKS A1/ NB151	
				SURVEY BOOK Nos	CHECKED E.J. Oh		EXECUTIVE ENGINEER				SECRETARY	SHEET OF

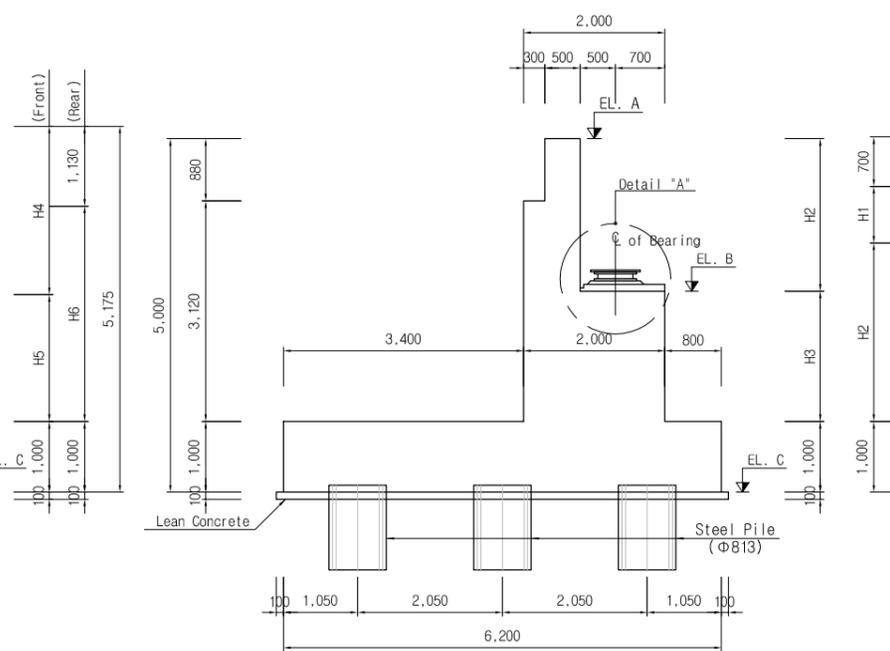
FRONT VIEW

S=1:50



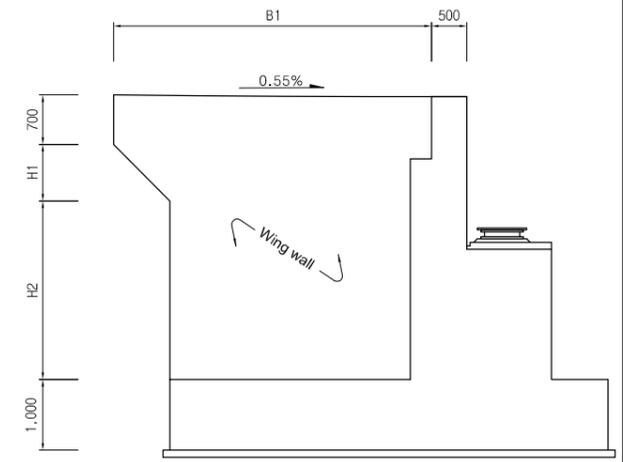
SECTION A-A

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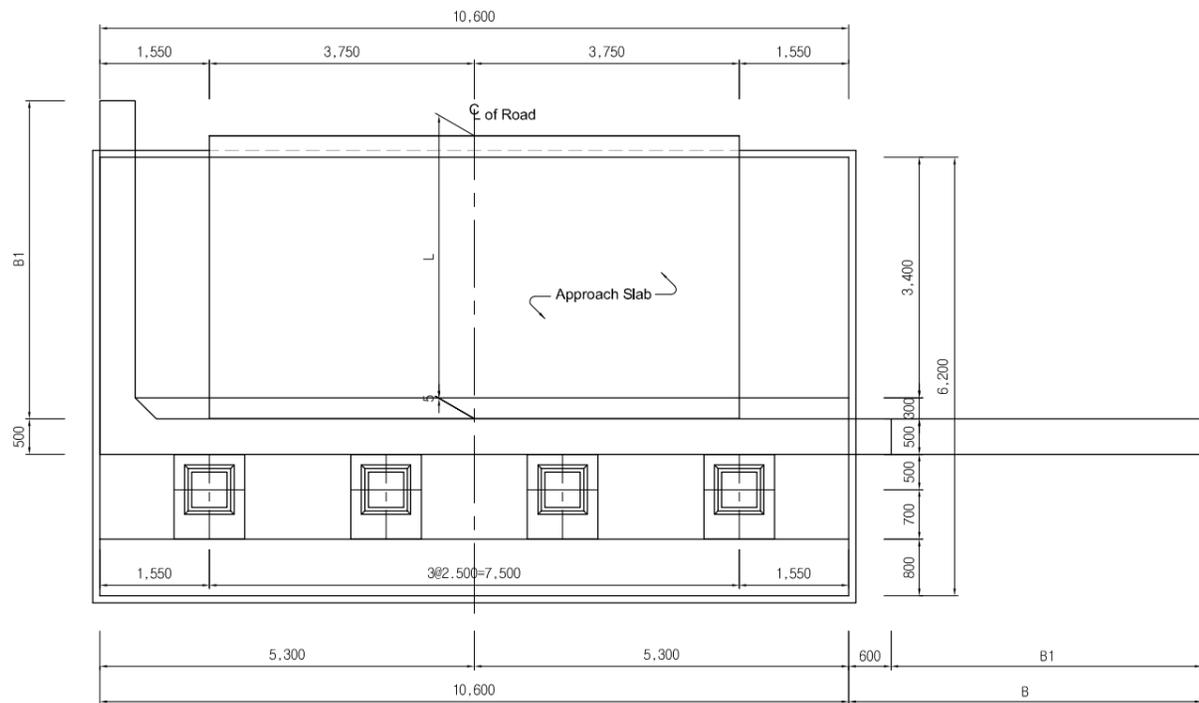
WING WALL SECTION

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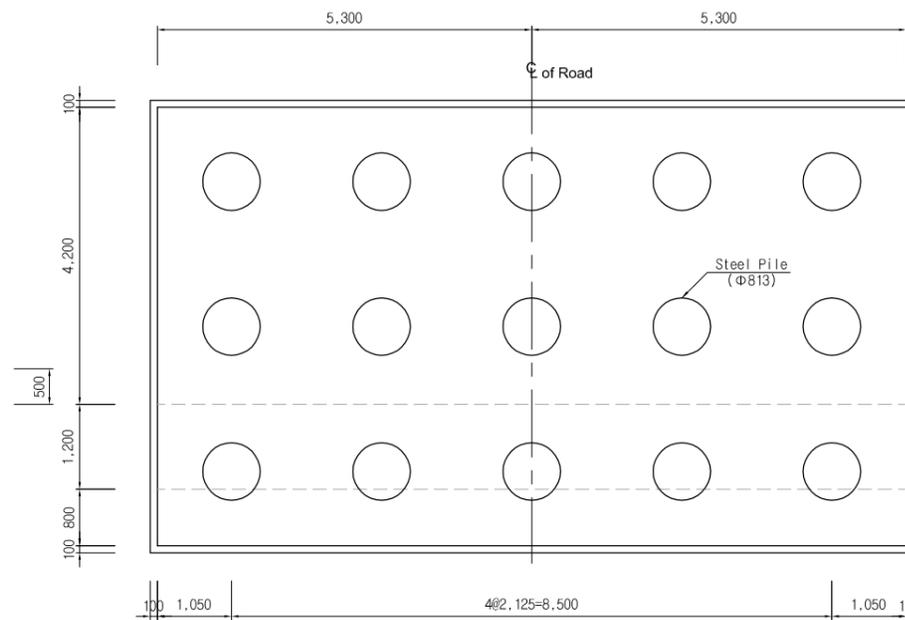
PLAN VIEW

S=1:50



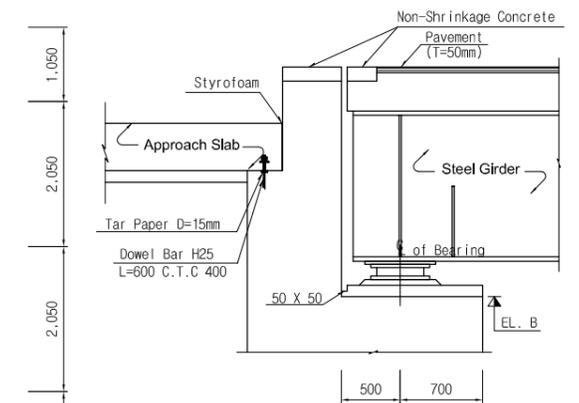
FOUNDATION PLAN VIEW

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DETAIL "A"

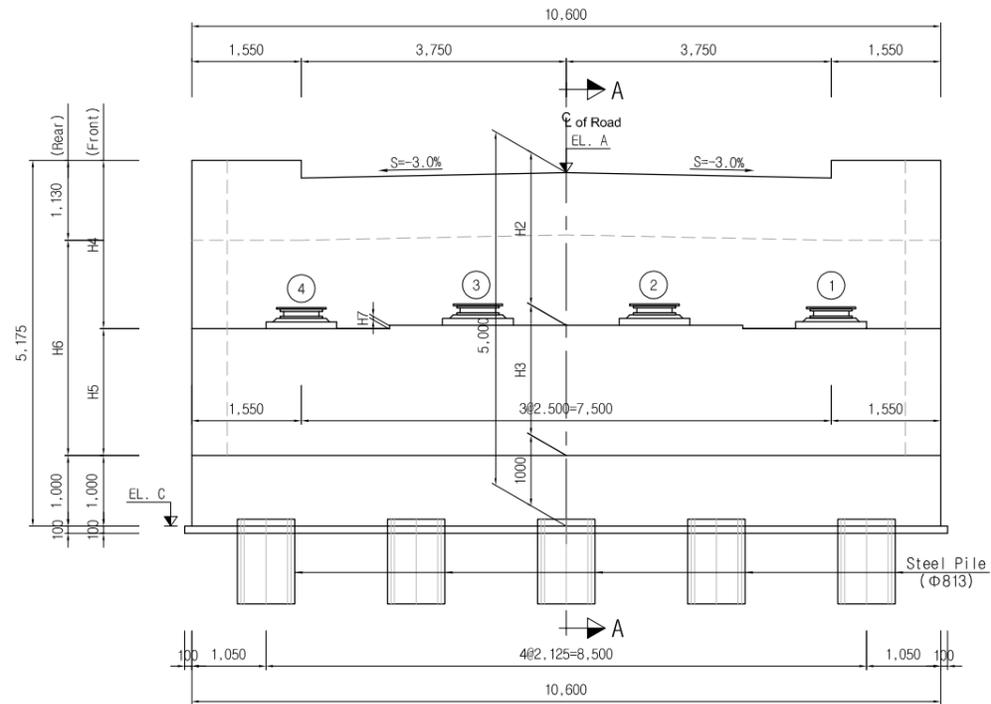
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REV.	AMENDMENTS	BY	APP'D	DATE	SURVEY	CONSULTANT PEC	DRAWN M.M. Kim	RECOMMENDED	SCALES AS SHOWN	PROJECT TITLE ADB LOAN 3547, 3548 AND GRANT 0538-PNG-SUSTAINABLE HIGHLANDS HIGHWAY INVESTMENT PROGRAM (SHIP) - TRANCHE 1 - CSTB 3747 - REVISED ADDITIONAL SCOPE OF WORK
					VERTICAL DATUM		CHECKED Y.J. Kim			
					HORIZONTAL DATUM	PRINCIPAL 	DESIGNED I.H. Jang	APPROVED	SHEET OF	PROJECT No.
				SURVEY BOOK Nos	CHECKED E.J. Oh		EXECUTIVE ENGINEER			
						Date				DRAWING No. A1/ NB152

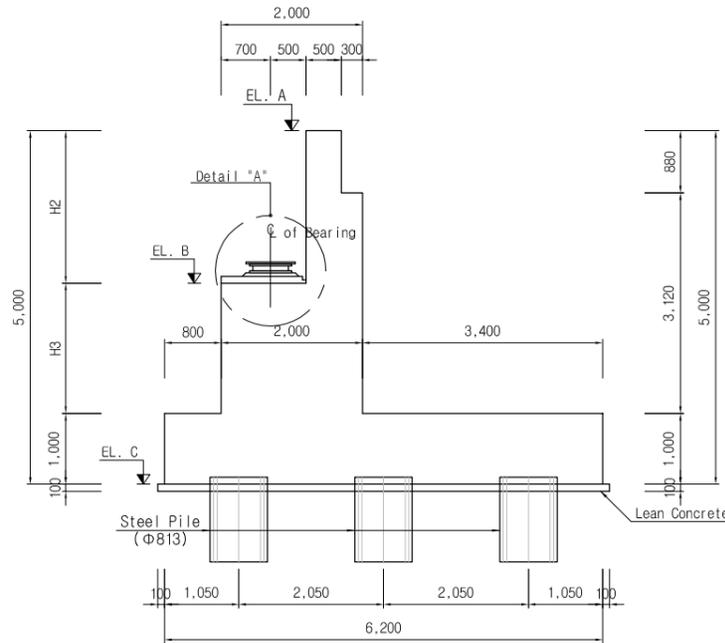
FRONT VIEW

S=1:50



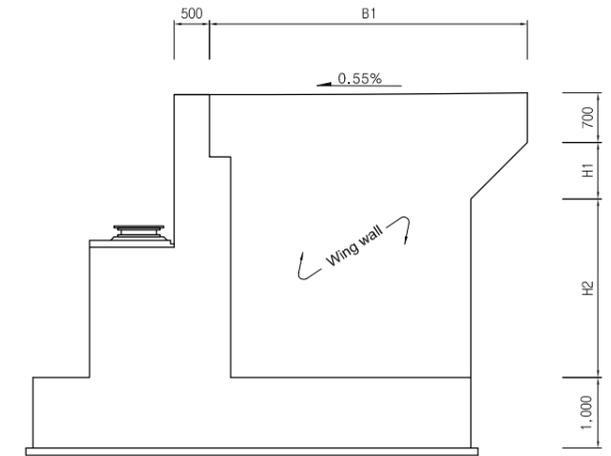
SECTION A-A

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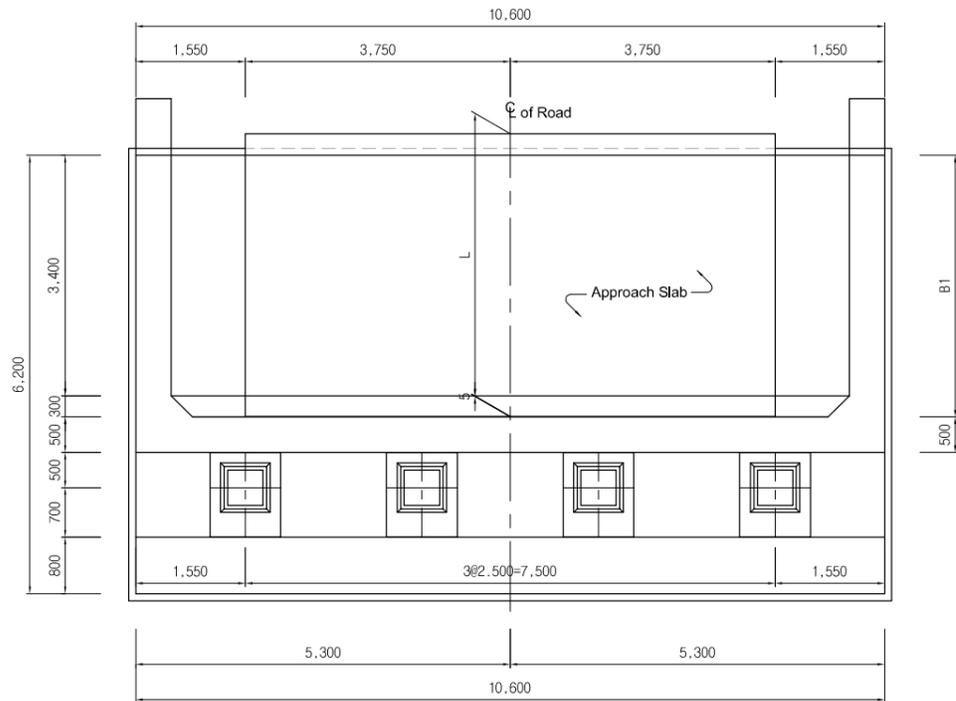
WING WALL SECTION

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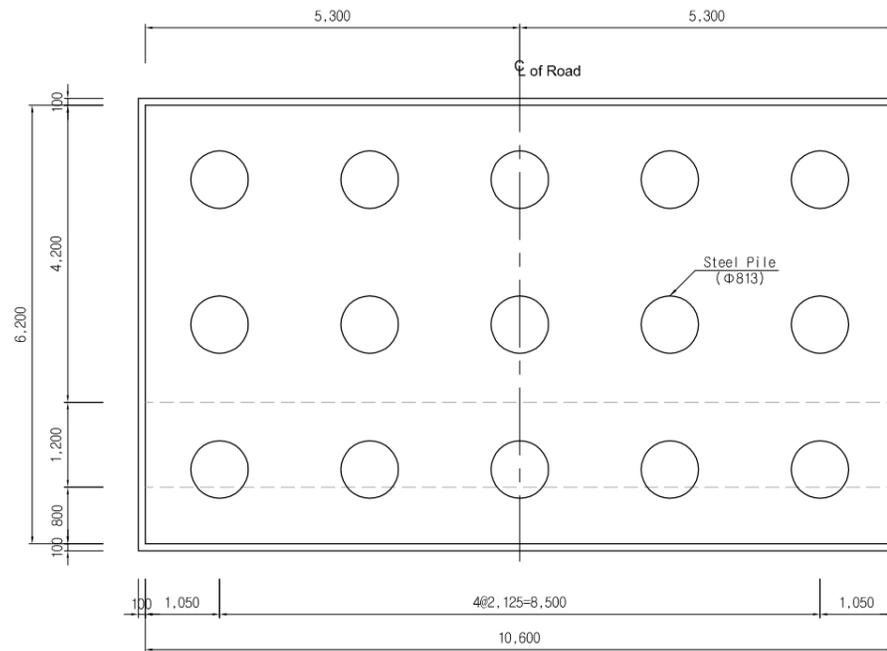
PLAN VIEW

S=1:50



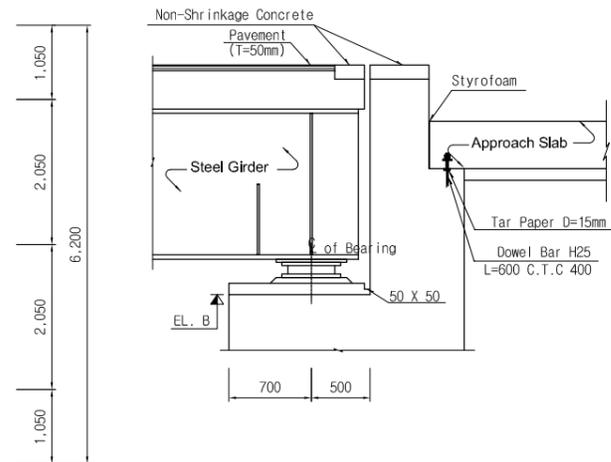
FOUNDATION PLAN VIEW

S=1:50



DETAIL "A"

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REV.	AMENDMENTS	BY	APP'D	DATE	SURVEY	CONSULTANT PEC	DRAWN M.M. Kim	RECOMMENDED	SCALES AS SHOWN	PROJECT TITLE ADB LOAN 3547, 3548 AND GRANT 0538-PNG-SUSTAINABLE HIGHLANDS HIGHWAY INVESTMENT PROGRAM (SHIP) - TRANCHE 1 - CSTB 3747 - REVISED ADDITIONAL SCOPE OF WORK		
					VERTICAL DATUM Date		CHECKED Y.J. Kim			PROJECT ENGINEER	PRINCIPAL ENGINEER	DRAWING TITLE ABUTMENT - GENERAL LAYOUT (A2)
					HORIZONTAL DATUM		DESIGNED I.H. Jang	APPROVED		PROJECT No.	AUTOCAD No.	PAPUA NEW GUINEA
				SURVEY BOOK Nos	CHECKED E.J. Oh		EXECUTIVE ENGINEER					SECRETARY

42. Bena Bena River Bridge

