

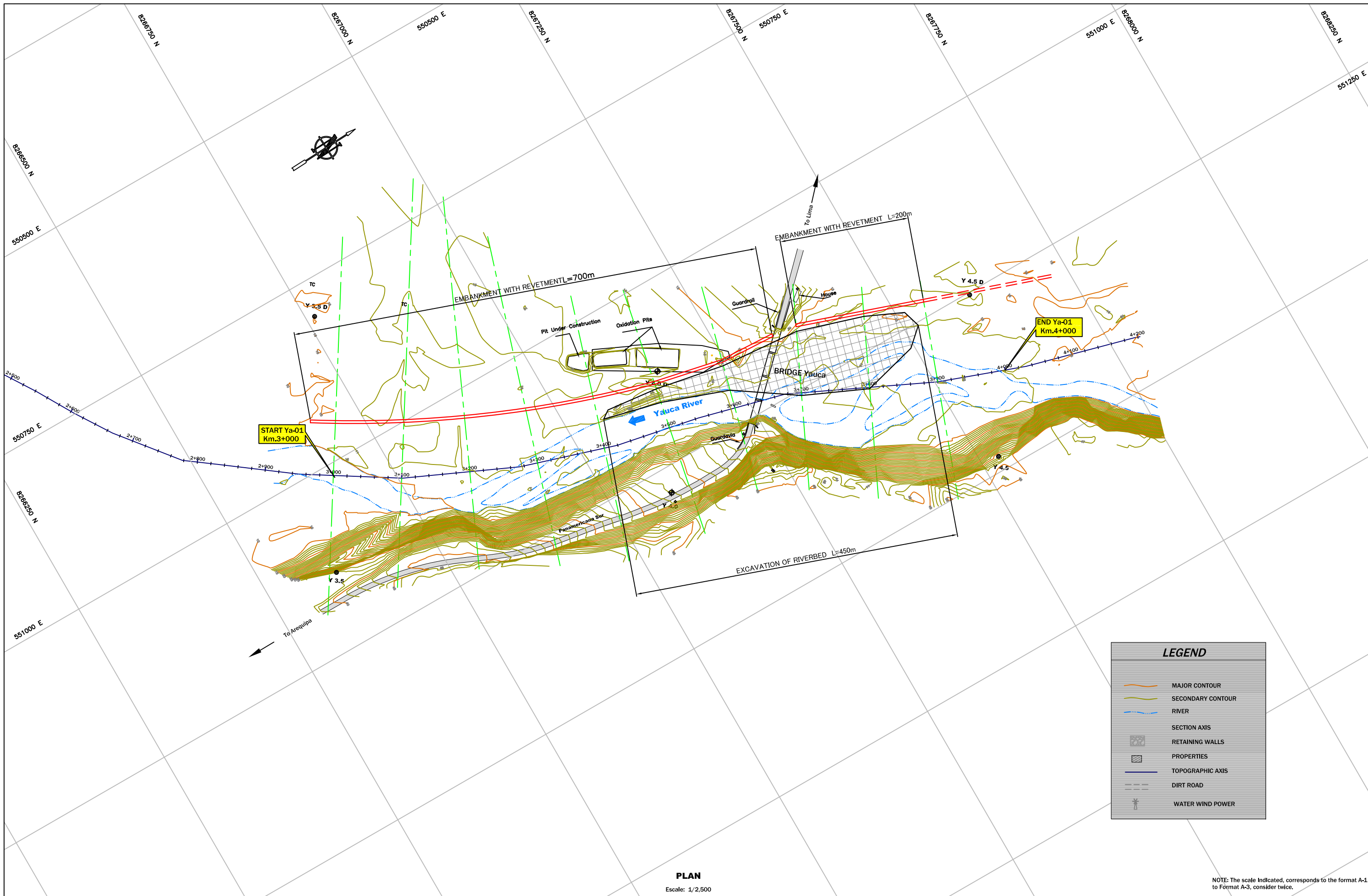
## **6. Yauca River**



## Index of Drawings

Name of river : Rio Yauca				
No.	Drawing name			
1.	Rio Yauca	YA-1	Ground Plan	Km.3+000~Km.4+000
2.	Rio Yauca	YA-2	Ground Plan	Km.4+000~Km.6+500
3.	Rio Yauca	YA-3	Ground Plan	Km.24+400~Km.25+000
4.	Rio Yauca	YA-4	Ground Plan	Km.40+400~Km.40+800
5.	Rio Yauca	YA-1	Longitudinal Section Profile	Km.2+500~Km.3+600
6.	Rio Yauca	YA-1	Longitudinal Section Profile	Km.3+700~Km.4+700
7.	Rio Yauca	YA-2	Longitudinal Section Profile	Km.4+900~Km.5+900
8.	Rio Yauca	YA-2	Longitudinal Section Profile	Km.6+000~Km.6+900
9.	Rio Yauca	YA-3	Longitudinal Section Profile	Km.24+400~Km.25+400
10.	Rio Yauca	YA-4	Longitudinal Section Profile	Km.40+400~Km.40+800
11.	Rio Yauca	Embankment Typical Cross Section		
12.	Rio Yauca	YA-1	Cross Section	Km.3+000~Km.3+300
13.	Rio Yauca	YA-1	Cross Section	Km.3+400~Km.3+900
14.	Rio Yauca	YA-2	Cross Section	Km.4+000~Km.4+500
15.	Rio Yauca	YA-2	Cross Section	Km.4+600~Km.5+100
16.	Rio Yauca	YA-2	Cross Section	Km.5+200~Km.6+500
17.	Rio Yauca	YA-3	Cross Section	Km.24+400~Km.25+000
18.	Rio Yauca	YA-4	Cross Section	Km.40+400~Km.40+800

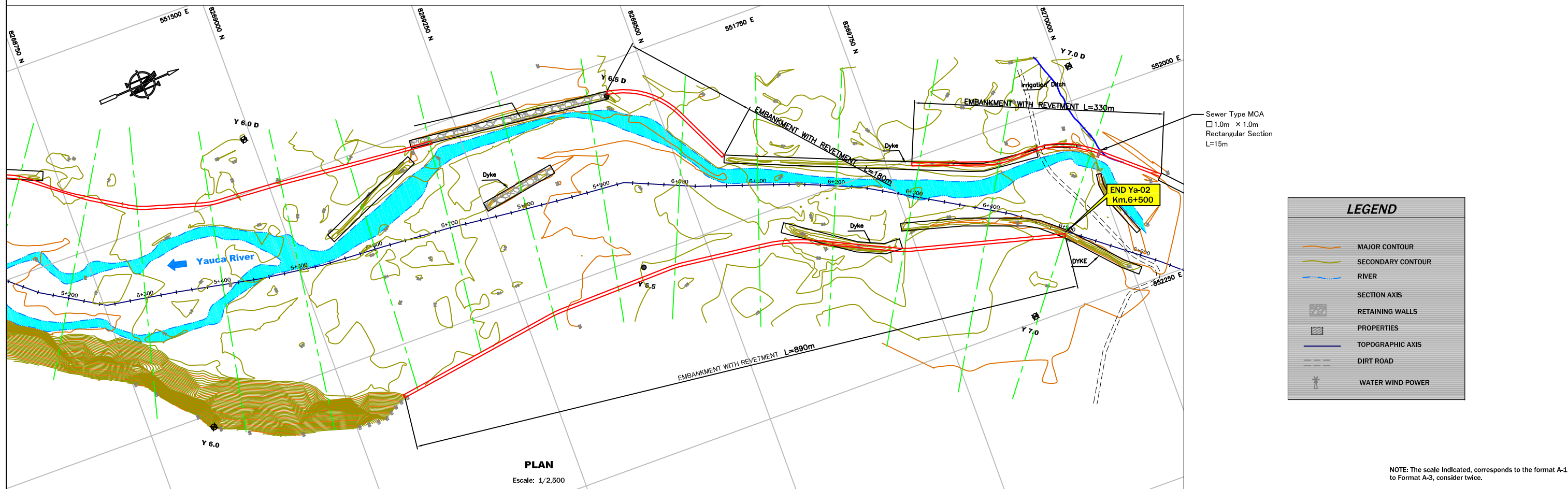
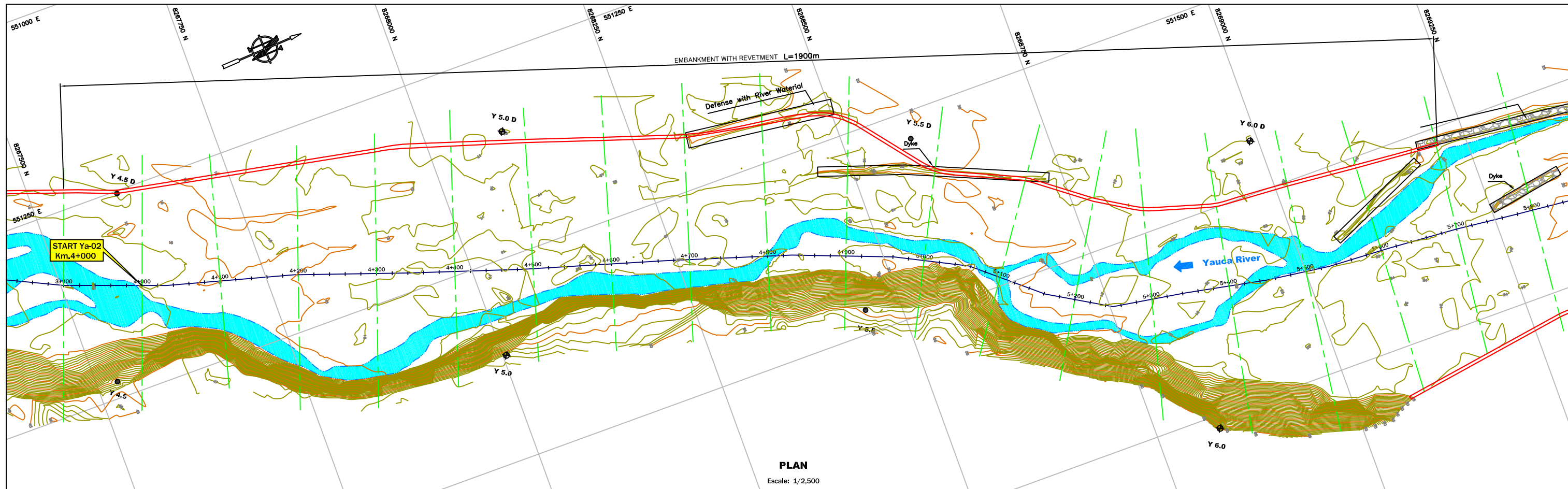




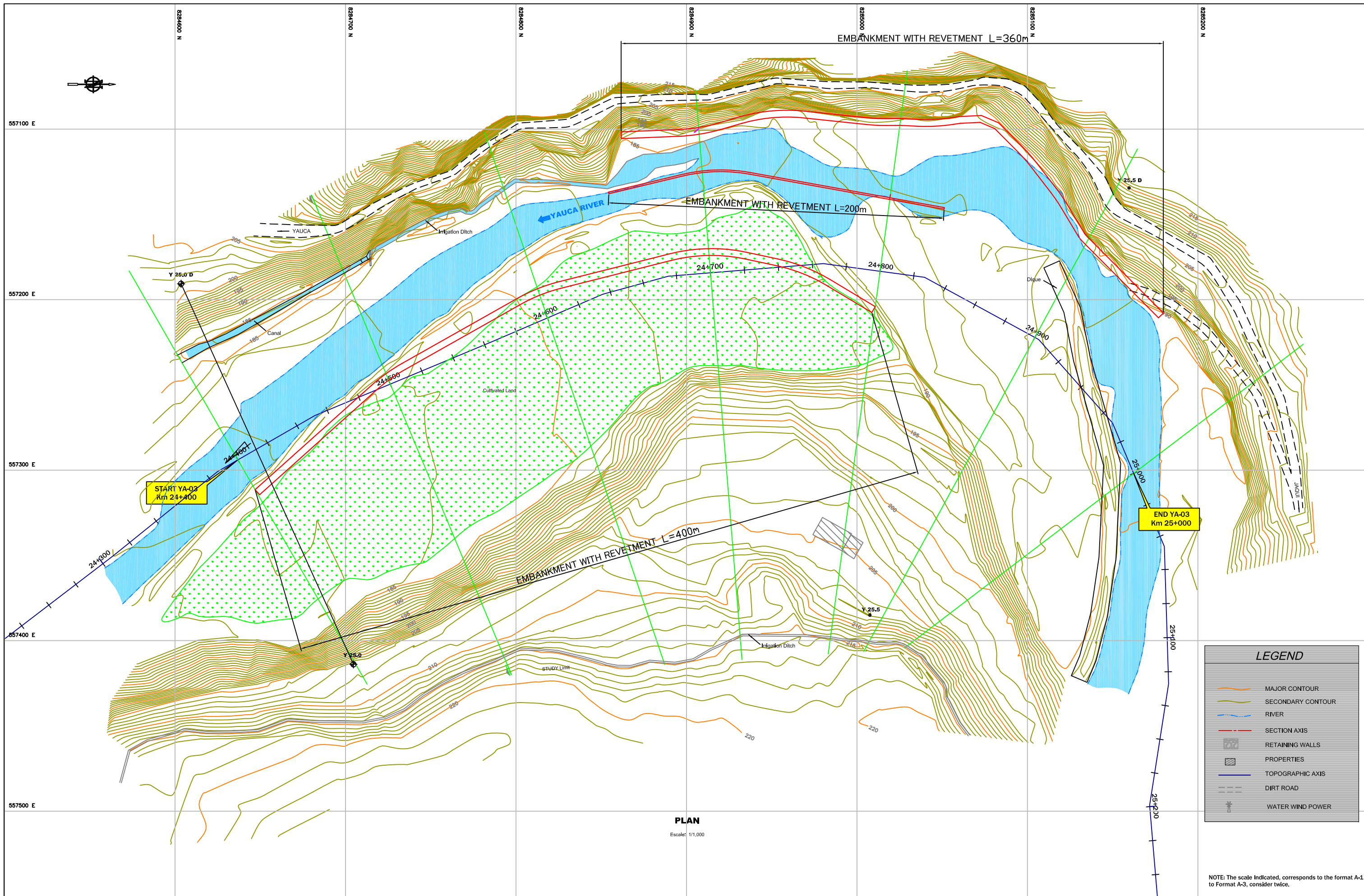
LEGEND	
	MAJOR CONTOUR
	SECONDARY CONTOUR
	RIVER
	SECTION AXIS
	RETAINING WALLS
	PROPERTIES
	TOPOGRAPHIC AXIS
	DIRT ROAD
	WATER WIND POWER

**PLAN**  
Escale: 1/2,500

NOTE: The scale Indicated, corresponds to the format A-1 to Format A-3, consider twice.



NOTE: The scale indicated, corresponds to the format A-1 to Format A-3, consider twice.

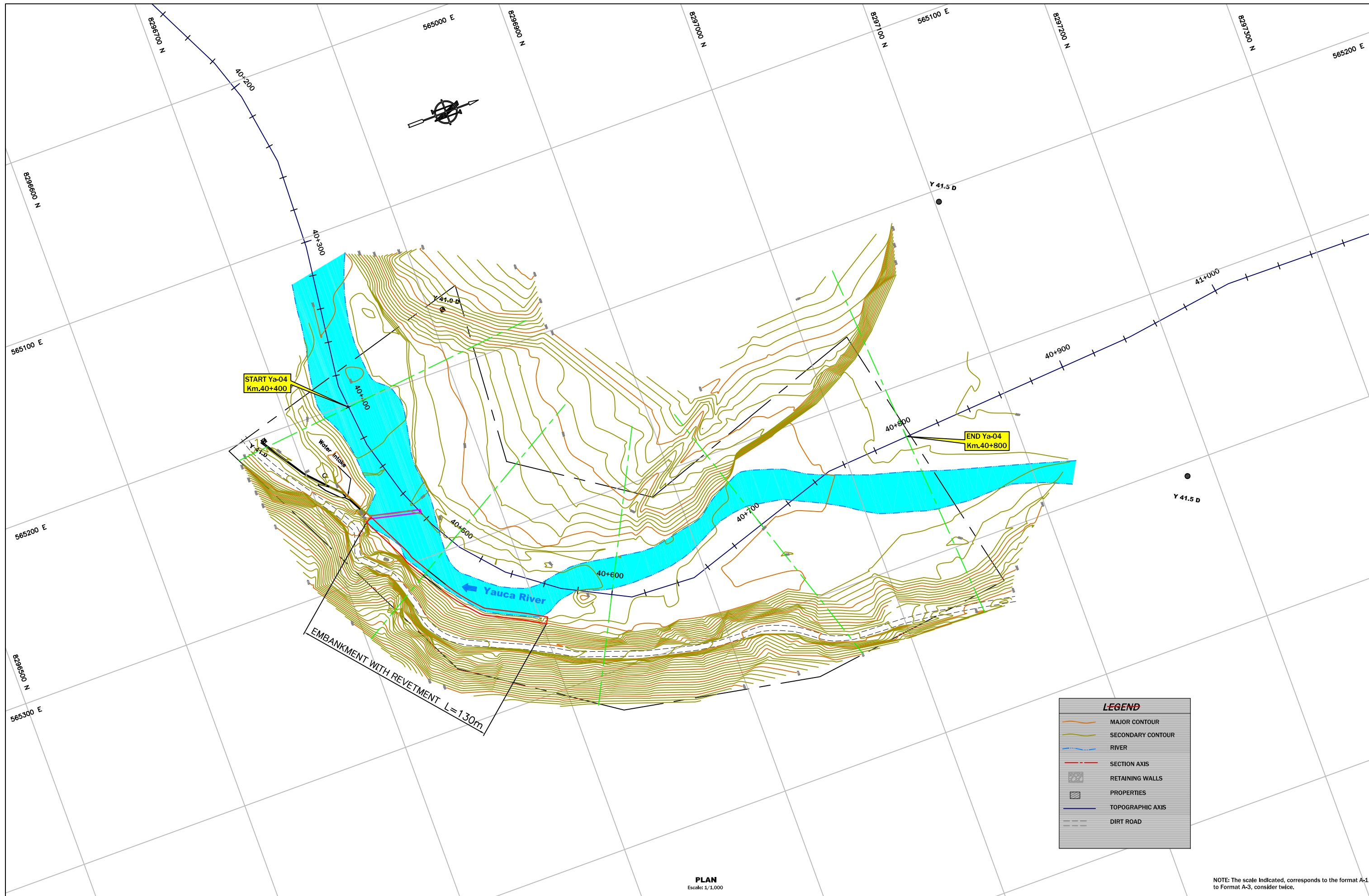


**PLAN**

Scale: 1/1,000

LEGEND	
	MAJOR CONTOUR
	SECONDARY CONTOUR
	RIVER
	SECTION AXIS
	RETAINING WALLS
	PROPERTIES
	TOPOGRAPHIC AXIS
	DIRT ROAD
	WATER WIND POWER

NOTE: The scale indicated, corresponds to the format A-1 to Format A-3, consider twice.



LEGEND	
	MAJOR CONTOUR
	SECONDARY CONTOUR
	RIVER
	SECTION AXIS
	RETAINING WALLS
	PROPERTIES
	TOPOGRAPHIC AXIS
	DIRT ROAD

**PLAN**  
Escale: 1/1,000

NOTE: The scale indicated, corresponds to the format A-1 to Format A-3, consider twice.



1:100 0 1 2 3 4 5 6 7 8 9 10

1:150 0 1 2 3 4 5 6 7 8 9 10

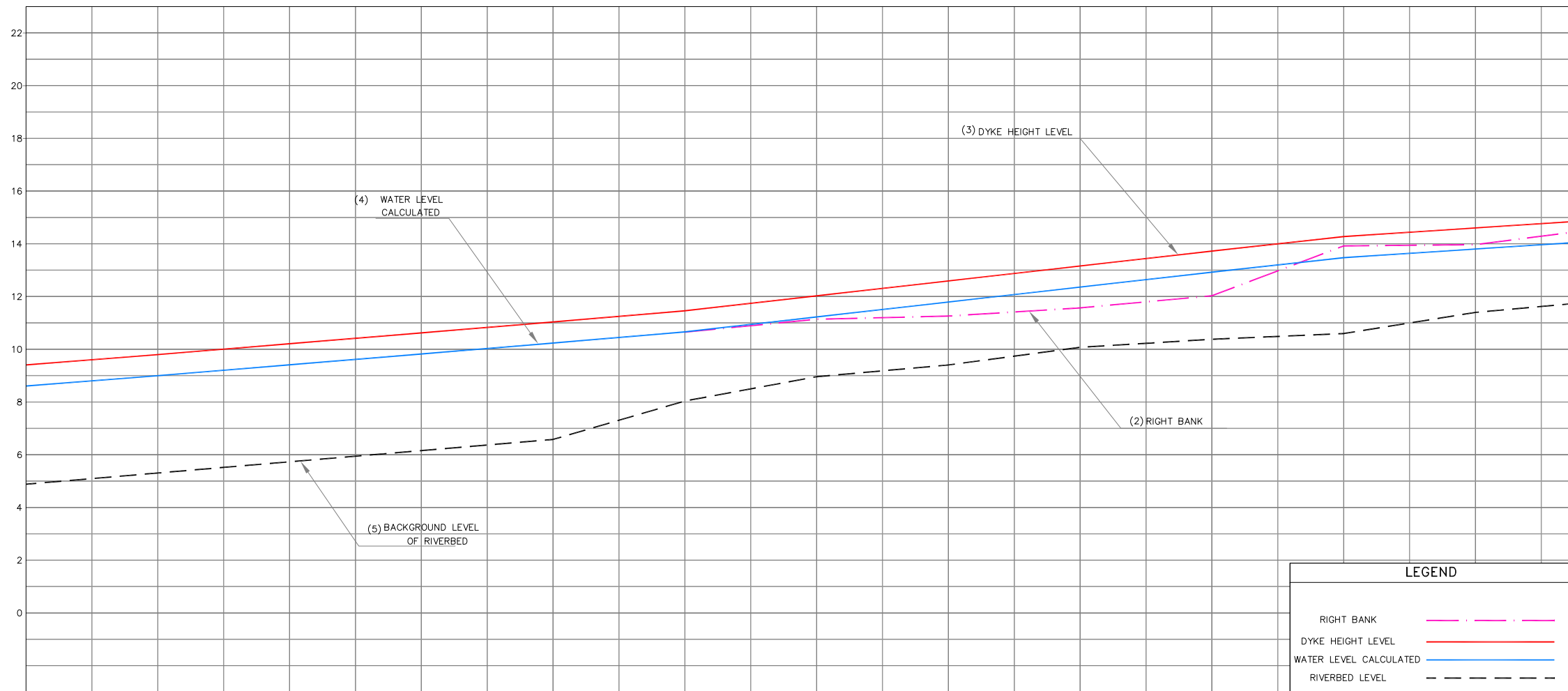
1:200 0 5 10 15

1:250 0 5 10 15 20

1:333.3 0 5 10 15 20 25 30

1:1000 0 5 10 15 20 25 30 35 40

1:750 0 10 20 30 40 50 60



DISTANCE (m)	2+500	2+600	2+700	2+800	2+900	3+000	3+100	3+200	3+300	3+400	3+500	3+600
(2) RIGHT BANK LEVEL						10.65	11.14	11.26	11.57	12.03	13.92	13.97
(3) DYKE HEIGHT LEVEL	9.41	9.80	10.21	10.62	11.04	11.46	12.03	12.59	13.16	13.73	14.27	14.60
(4) WATER LEVEL CALCULATED	8.61	9.00	9.41	9.82	10.24	10.66	11.23	11.79	12.36	12.93	13.47	13.80
(5) BACKGROUND LEVEL OF RIVERBED	4.88	5.31	5.73	6.16	6.58	6.27	9.21	9.87	10.55	10.85	10.99	11.92

**YAUCA RIVER**  
**CRITICAL POINT N° 1 (1/2)**  
 LONGITUDINAL PROFILE

NOTE: The scale indicated, corresponds to the format A-1 to Format A-3, consider twice.

1:100 0 1 2 3 4 5 6 7 8 9 10

1:150 0 1 2 3 4 5 6 7 8 9 10

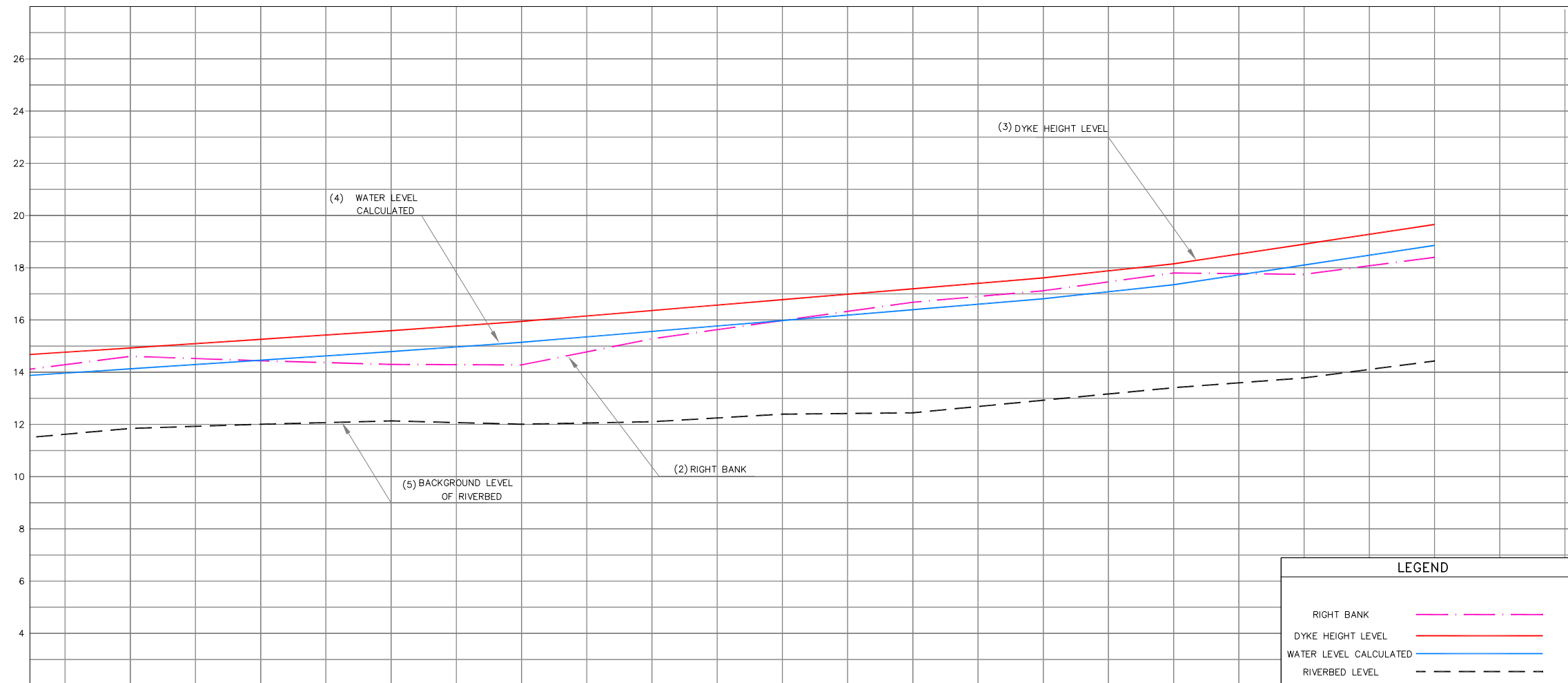
1:200 0 5 10 15

1:250 0 5 10 15 20

1:333.3 0 5 10 15 20 25 30

1:1000 0 5 10 15 20 25 30 35 40

1:750 0 10 20 30 40 50 60



LEGEND	
RIGHT BANK	— · — · — · — · — · — · — · — ·
DYKE HEIGHT LEVEL	—————
WATER LEVEL CALCULATED	—————
RIVERBED LEVEL	- - - - -

DISTANCE (m)	3+700	3+800	3+900	4+000	4+100	4+200	4+300	4+400	4+500	4+600	4+700	4+800
(2) RIGHT BANK LEVEL	14.61	14.44	14.30	14.28	15.28	15.98	16.68	17.17	17.78	17.75	18.40	
(3) DYKE HEIGHT LEVEL	14.93	15.26	15.59	15.95	16.36	16.78	17.20	17.61	18.15	18.90	19.66	
(4) WATER LEVEL CALCULATED	14.13	14.46	14.79	15.15	15.56	15.98	16.40	16.81	17.35	18.10	18.86	
(5) BACKGROUND LEVEL OF RIVERBED	12.34	12.71	13.38	11.01	11.49	11.97	12.45	12.93	13.41	13.78	14.16	

**YAUCA RIVER  
CRITICAL POINT N° 1 (2/2)  
LONGITUDINAL PROFILE**

NOTE: The scale indicated, corresponds to the format A-1 to Format A-3, consider twice.



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1:150 0 1 2 3 4 5 6 7 8 9 10

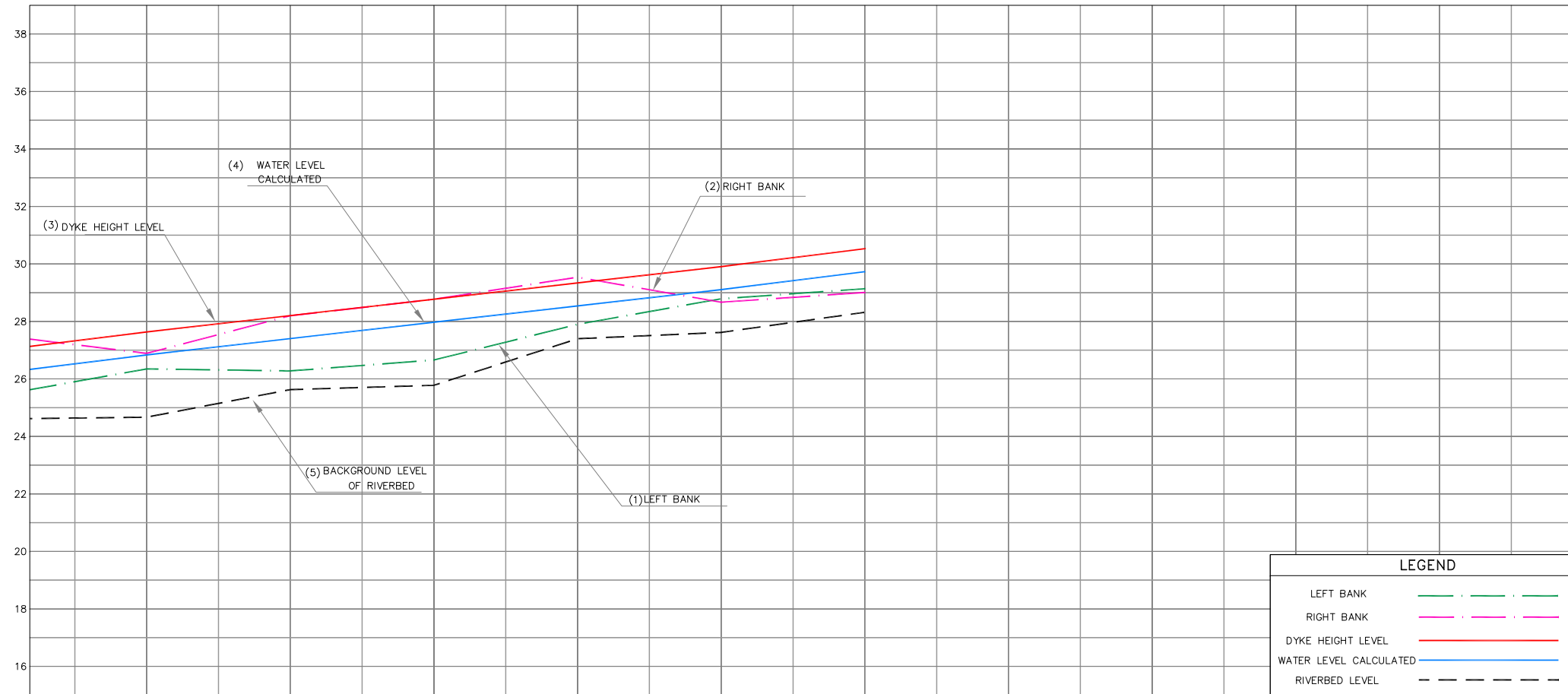
1:200 0 5 10 15

1:250 0 5 10 15 20

1:333.3 0 5 10 15 20 25 30

1:1000 0 5 10 15 20 25 30 35 40

1:750 0 10 20 30 40 50 60



DISTANCE (m)	6+000	6+100	6+200	6+300	6+400	6+500	6+600	6+700	6+800	6+900	7+000
(1) LEFT BANK LEVEL	26.35	26.28	26.66	27.90	28.79	29.14					
(2) RIGHT BANK LEVEL	26.89	28.2	28.77	29.54	28.67	29.01					
(3) DYKE HEIGHT LEVEL	27.64	28.20	28.77	29.34	29.91	30.53					
(4) WATER LEVEL CALCULATED	26.84	27.40	27.97	28.54	29.11	29.73					
(5) BACKGROUND LEVEL OF RIVERBED	24.67	25.63	25.78	27.40	27.62	28.32					

**YAUCA RIVER  
CRITICAL POINT N° 2 (2/2)  
LONGITUDINAL PROFILE**

NOTE: The scale indicated, corresponds to the format A-1 to Format A-3, consider twice.

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1:150 0 1 2 3 4 5 6 7 8 9 10

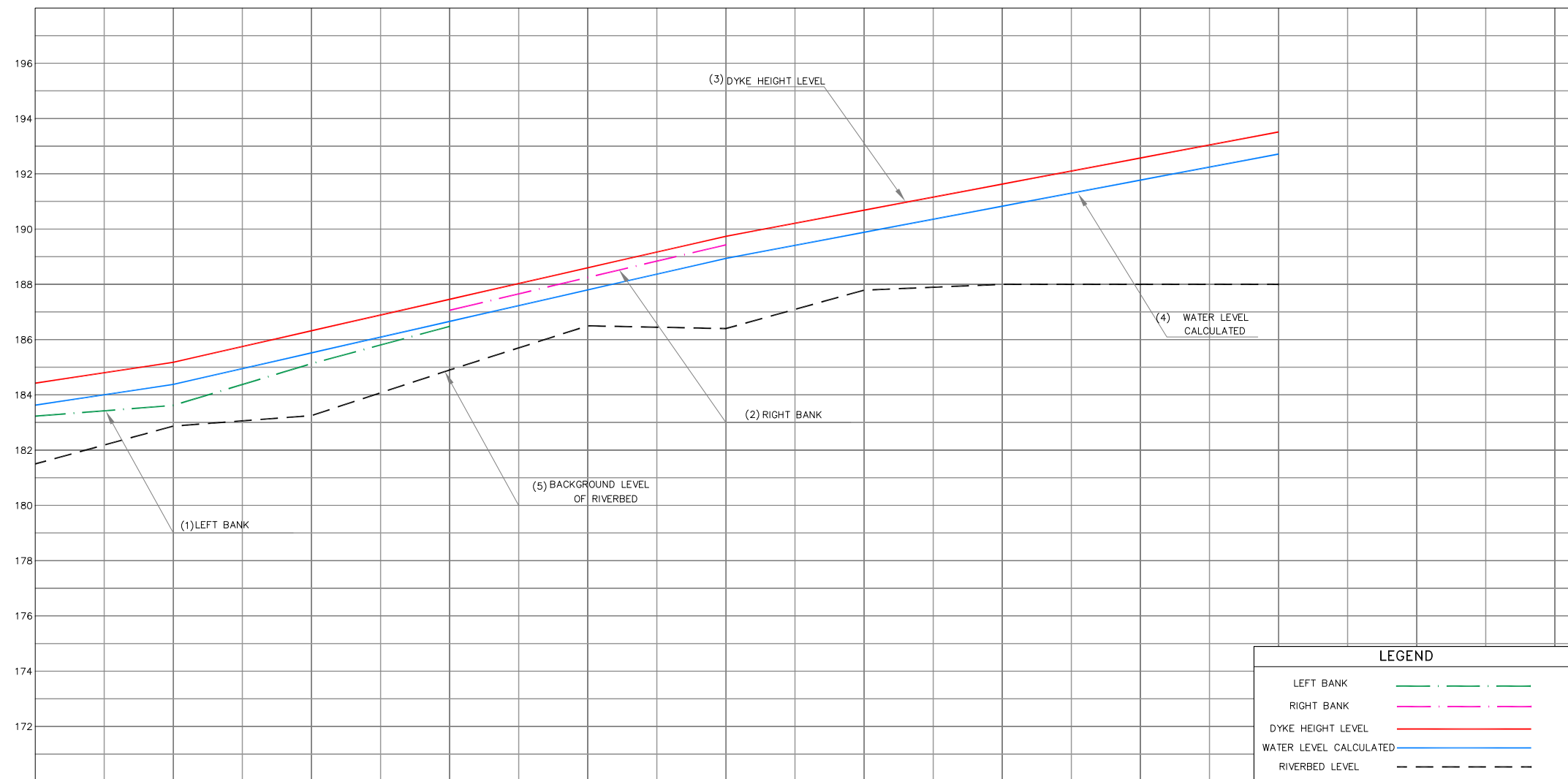
1:200 0 5 10 15

1:250 0 5 10 15 20

1:333.3 0 5 10 15 20 25 30

1:1000 0 5 10 15 20 25 30 35 40

1:750 0 10 20 30 40 50 60



DISTANCE (m)	24+400	24+500	24+600	24+700	24+800	24+900	25+000	25+100	25+200	25+300	25+400	25+500
(1) LEFT BANK LEVEL	183.23	183.62	185.13	186.48								
(2) RIGHT BANK LEVEL				187.06	188.25	189.43						
(3) DYKE HEIGHT LEVEL	184.42	185.18	186.32	187.46	188.60	189.74	190.69	191.63	192.57	193.51		
(4) WATER LEVEL CALCULATED	183.63	184.39	185.52	186.66	187.80	188.94	189.89	190.83	191.77	192.71		
(5) BACKGROUND LEVEL OF RIVERBED	181.50	182.87	183.25	184.90	186.50	187.80	187.79	188.57	188.53	188.48		

YAUCA RIVER  
CRITICAL POINT N° 3  
LONGITUDINAL PROFILE

NOTE: The scale indicated, corresponds to the format A-1 to Format A-3, consider twice.

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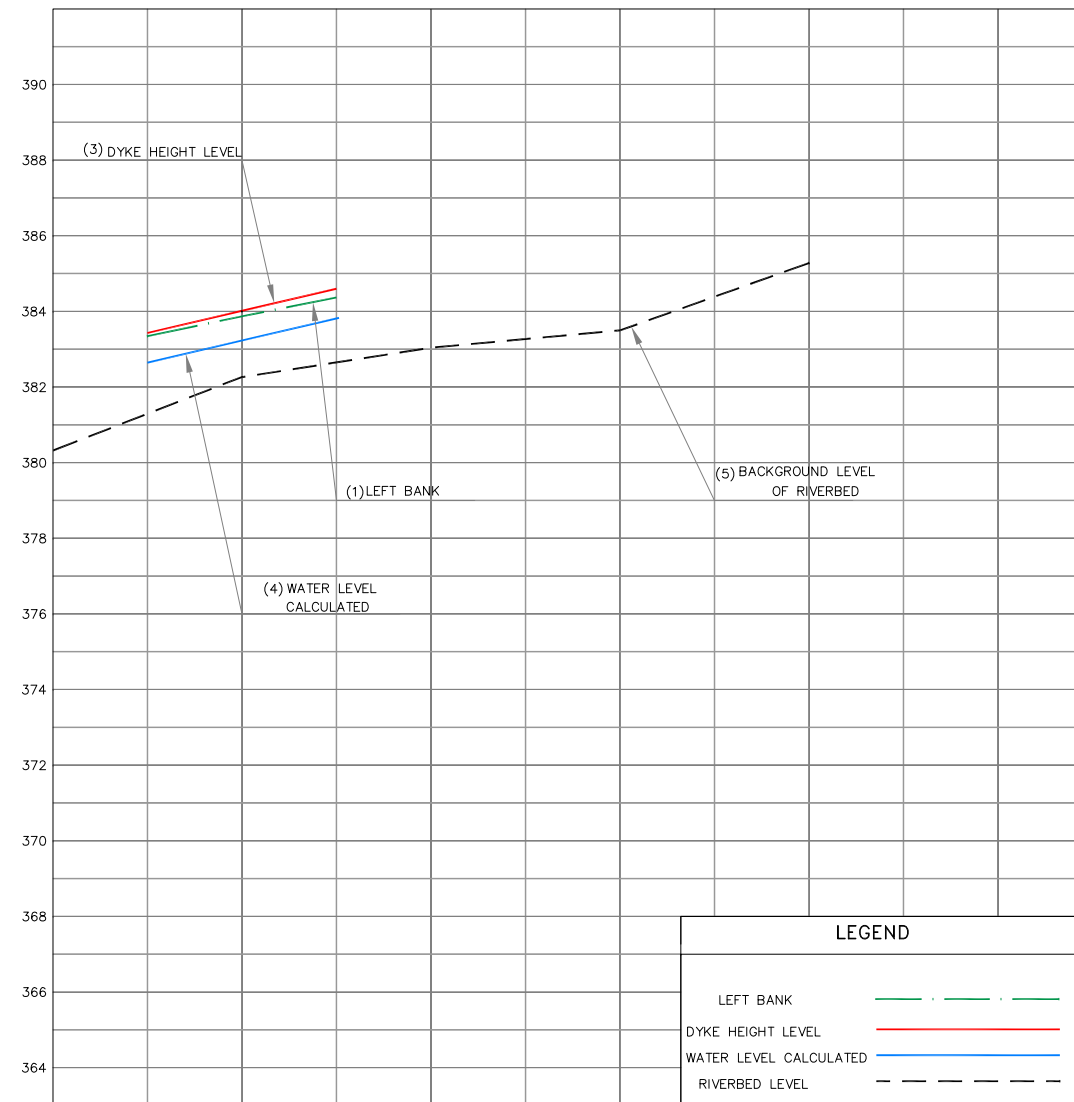
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1:250 0 5 10 15 20

1:333.3 0 5 10 15 20 25 30

1:1000 0 5 10 15 20 25 30 35 40

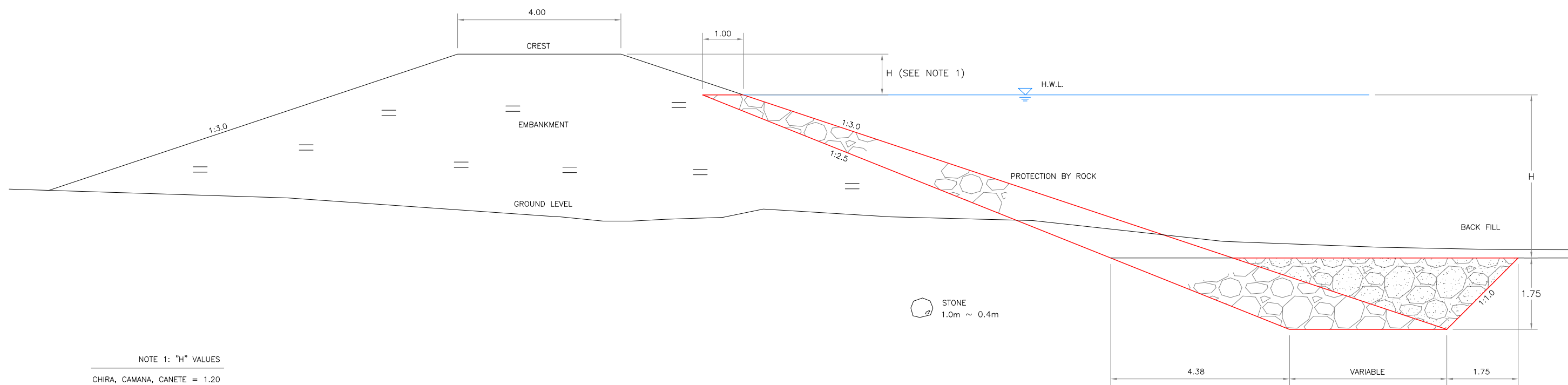
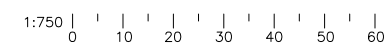
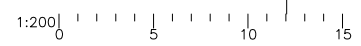
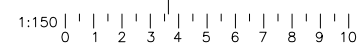
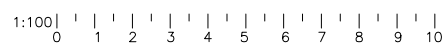
1:750 0 10 20 30 40 50 60



DISTANCE (m)	40+400	40+500	40+600	40+700	40+800	40+900
(1) LEFT BANK LEVEL		383.84				
(3) DYKE HEIGHT LEVEL		384.03				
(4) WATER LEVEL CALCULATED		383.23				
(5) BACKGROUND LEVEL OF RIVERBED	380.32	382.16	383.04	383.50	385.28	

**YAUCA RIVER  
CRITICAL POINT N°4  
LONGITUDINAL PROFILE**

NOTE: The scale indicated, corresponds to the format A-1 to Format A-3, consider twice.



NOTE 1: "H" VALUES  
 CHIRA, CAMANA, CANETE = 1.20  
 PISCO = 1.00  
 CHINCHA, YAUCA = 0.80

TYPICAL SECTION OF THE PROJECTED DYKE

NOTE: The scale indicated, corresponds to the format A-1 to Format A-3, consider twice.

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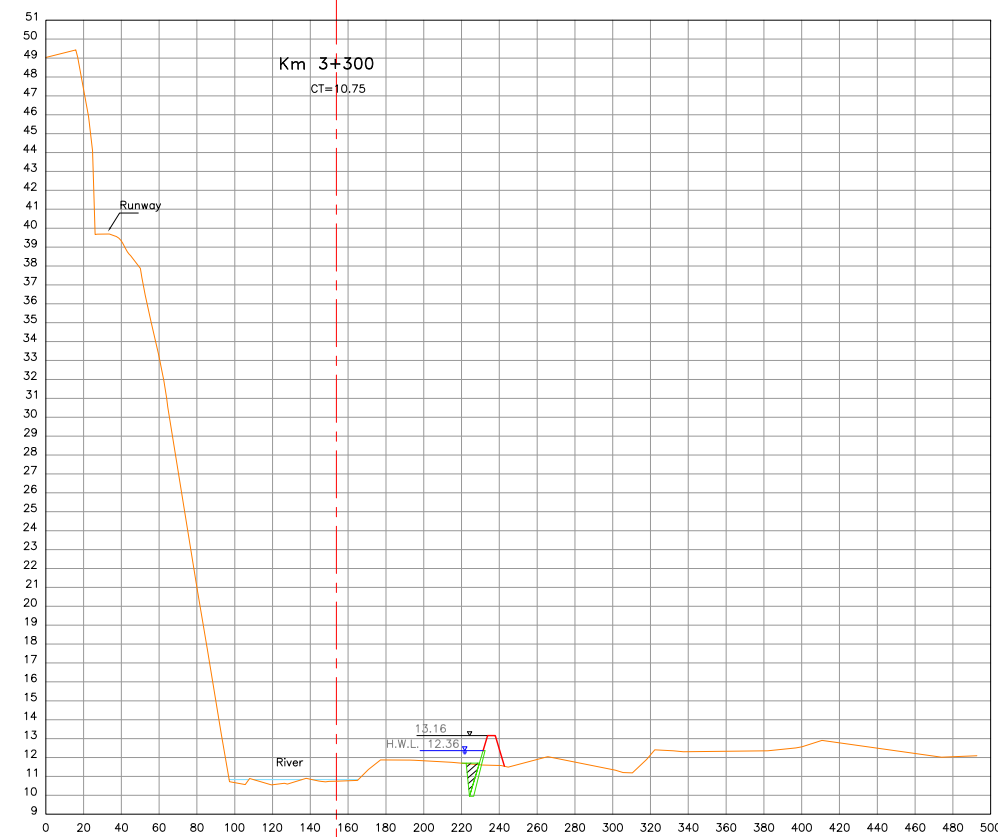
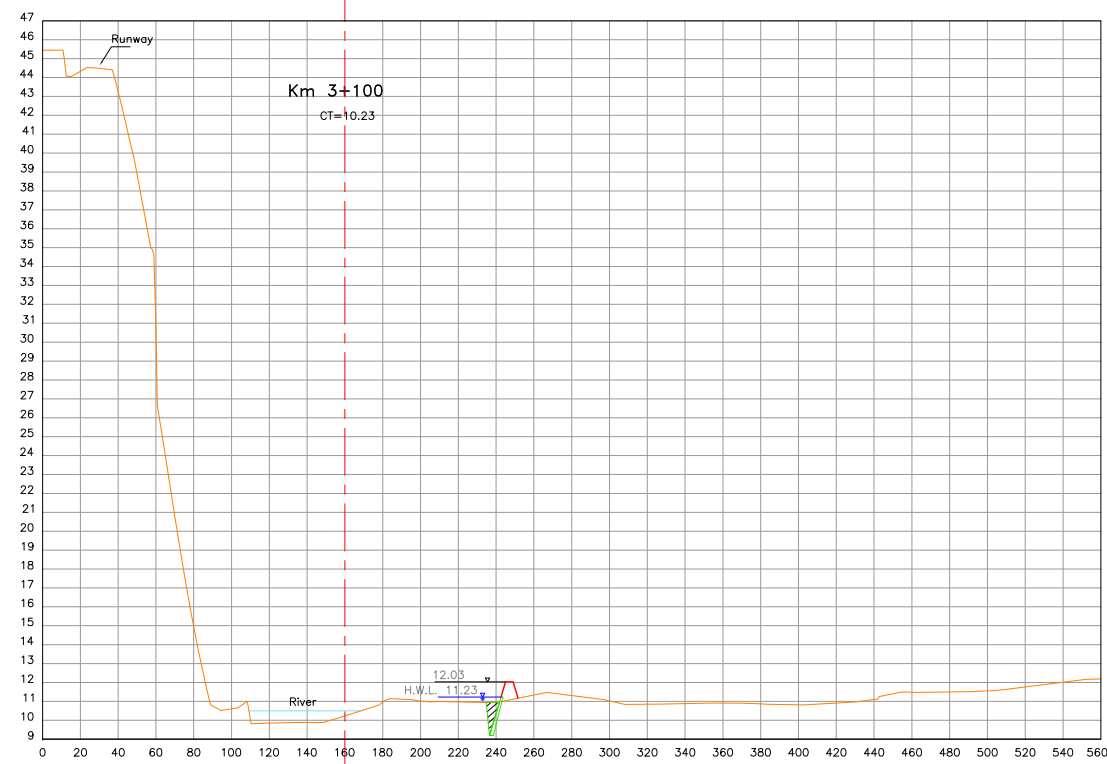
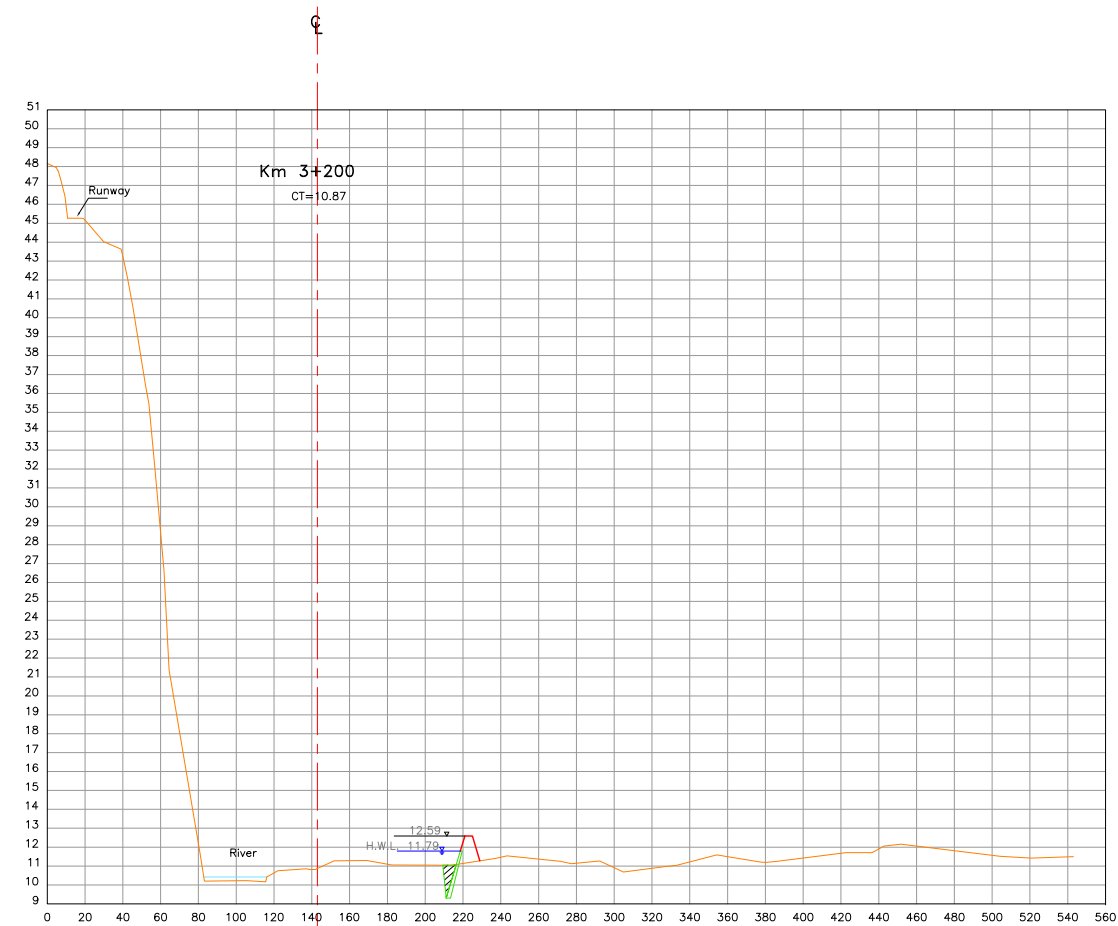
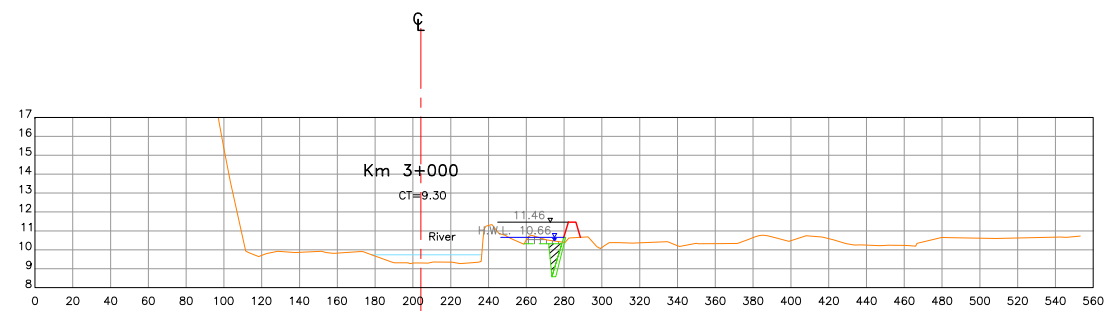
1:200 0 5 10 15

1:250 0 5 10 15 20

1:333.3 0 5 10 15 20 25 30

1:1000 0 5 10 15 20 25 30 35 40

1:750 0 10 20 30 40 50 60



NOTE: The scale indicated, corresponds to the format A-1 to Format A-3, consider twice.



Consultants:  
**Yec**  
Yachyo Engineering Co., Ltd.



LATIN AMERICA - CARIBBEAN  
**NIPPON KOEI LAC CO., LTD.**  
Consulting Engineers

Designed by: M.SOYA  
Revised by: M.KITANO  
Approved by: Y.NAKAGAWA  
Revised by: Y.NAKAGAWA

Project:  
THE PREPARATORY STUDY ON PROJECT OF THE PROTECTION OF  
FLOOD PLAIN AND VULNERABLE RURAL POPULATION AGAINST  
FLOOD IN THE REPUBLIC OF PERU

Drawing:  
**YAUCA RIVER: YA-1  
CROSS SECTIONS  
KM. 3+000 - KM. 3+300**

ESCALE: INDICATED  
DATE: MARCH - 2013  
CODE: **YA-1-ST-01**



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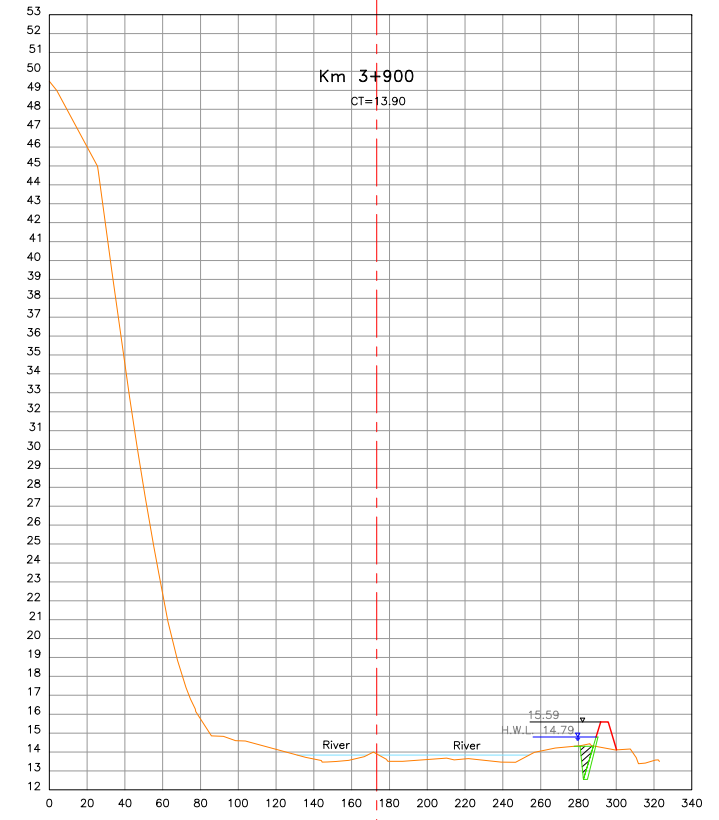
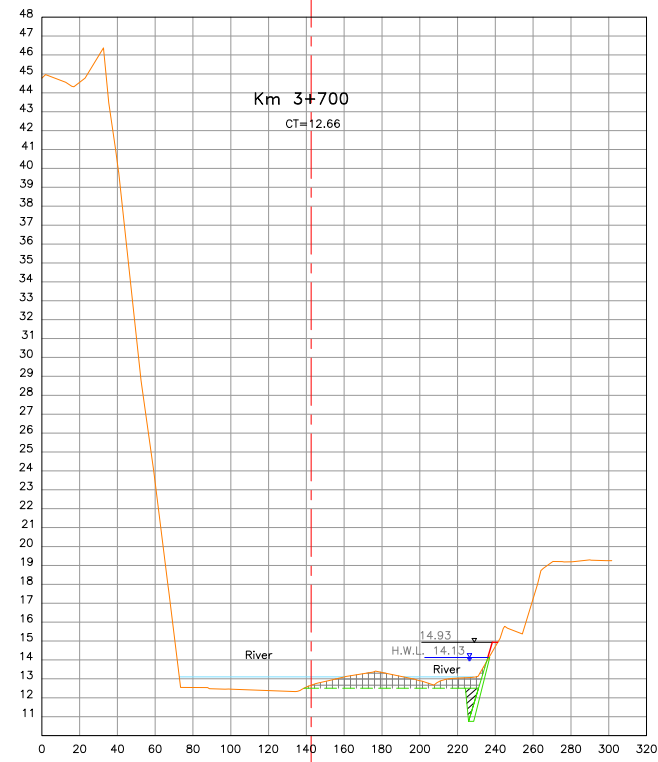
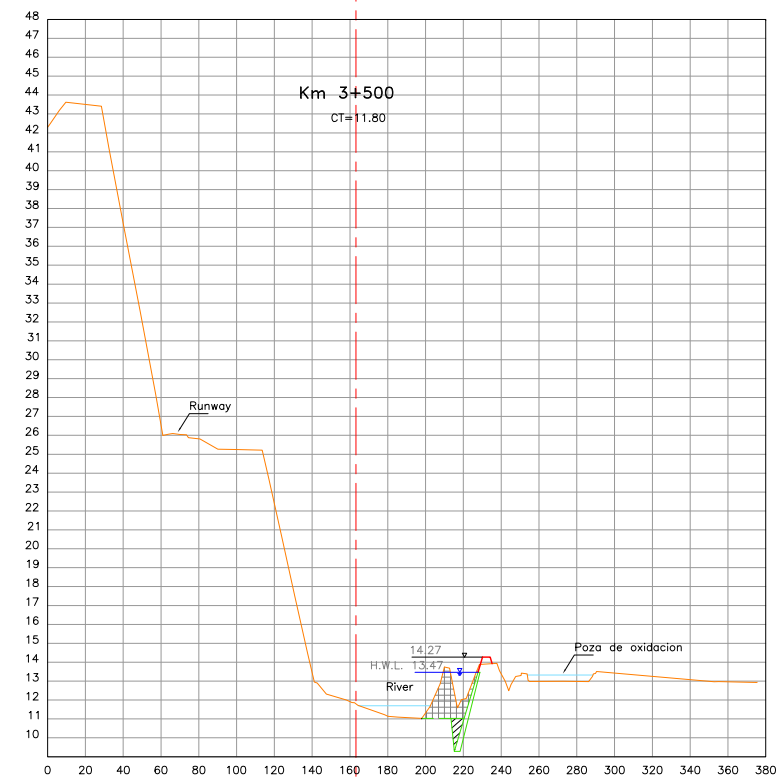
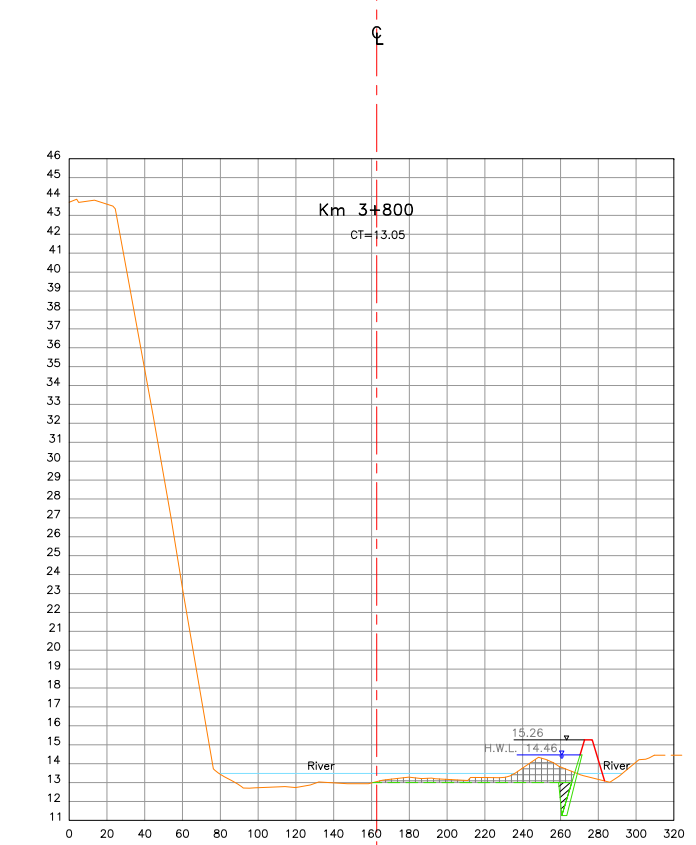
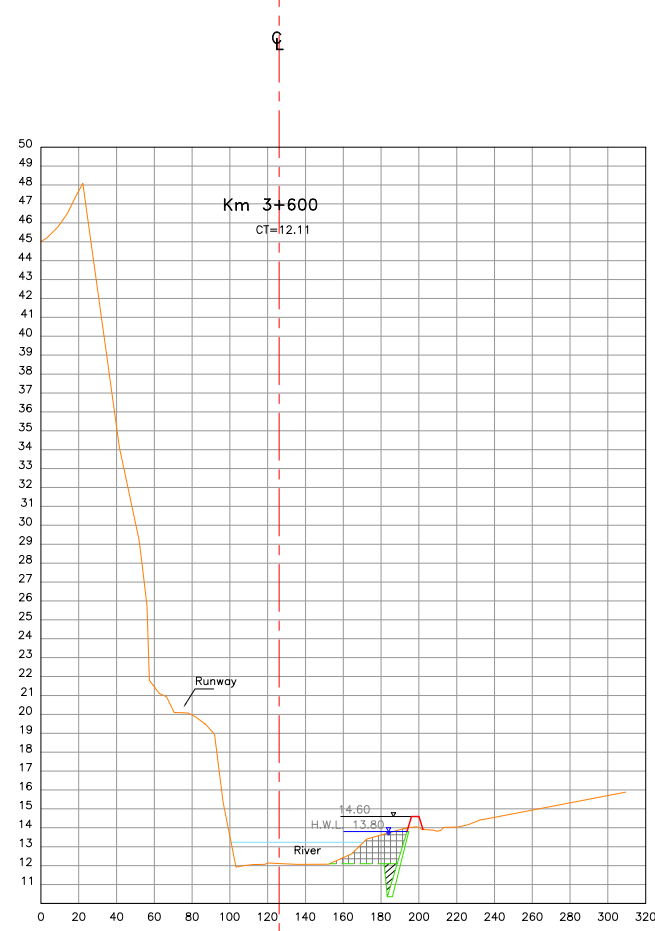
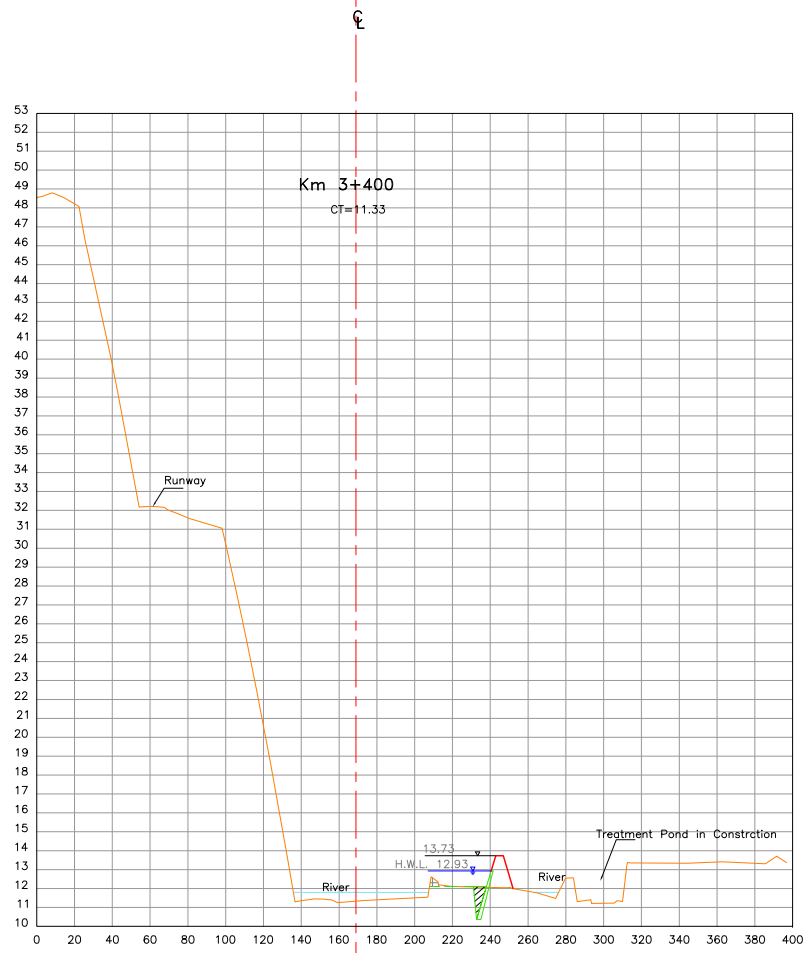
1:200 0 5 10 15

1:250 0 5 10 15 20

1:333.3 0 5 10 15 20 25 30

1:1000 0 5 10 15 20 25 30 35 40

1:750 0 10 20 30 40 50 60



NOTE: The scale indicated, corresponds to the format A-1 to Format A-3, consider twice.



Consultants:  
**Yeo**  
Yachyo Engineering Co., Ltd.



LATIN AMERICA - CARIBBEAN  
**NIPPON KOEI LAC CO., LTD.**  
Consulting Engineers

Designed by: M.SOYA  
Revised by: M.KITANO  
Approved by: Y.NAKAGAWA  
Revised by: Y.NAKAGAWA

Project:  
THE PREPARATORY STUDY ON PROJECT OF THE PROTECTION OF FLOOD PLAIN AND VULNERABLE RURAL POPULATION AGAINST FLOOD IN THE REPUBLIC OF PERU

Drawing:  
**YUCA RIVER: YA-1**  
**CROSS SECTIONS**  
**KM. 3+400 - KM. 3+900**

ESCALE: INDICATED  
DATE: MARCH - 2013  
CODE: **YA-1-ST-02**

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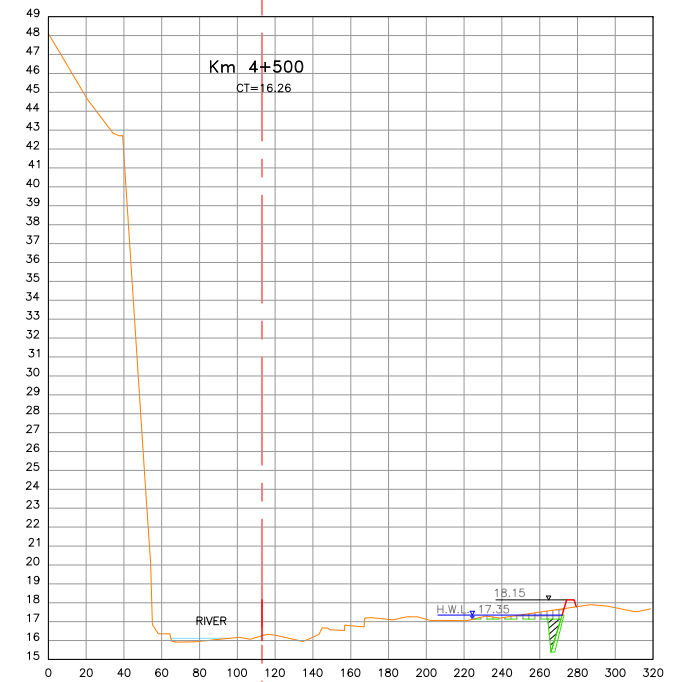
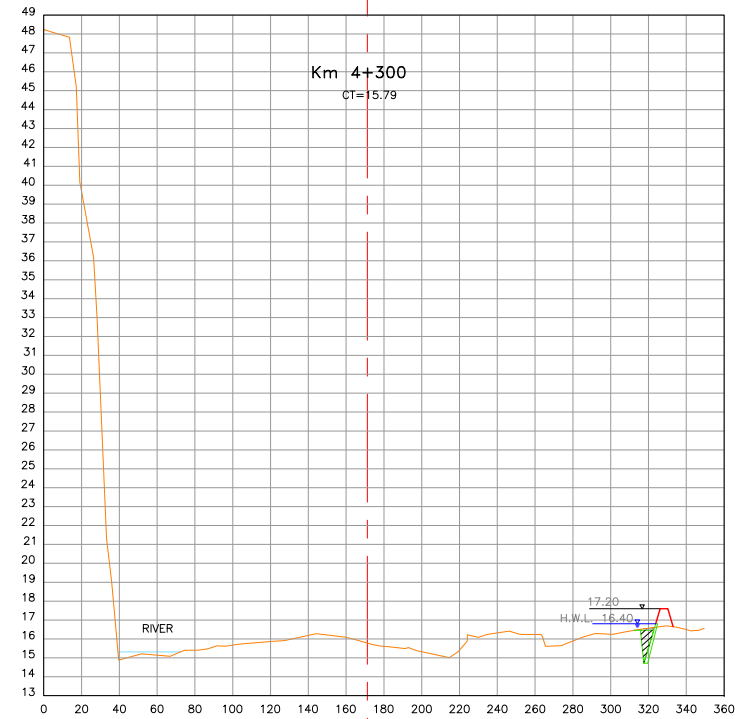
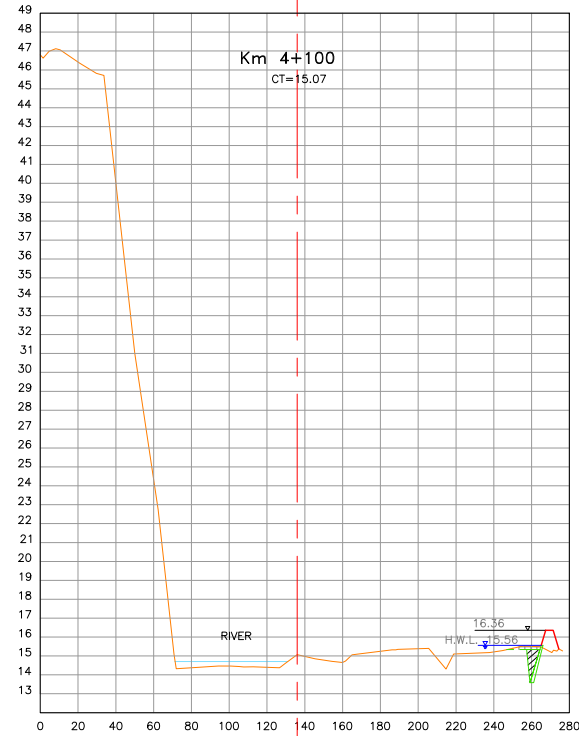
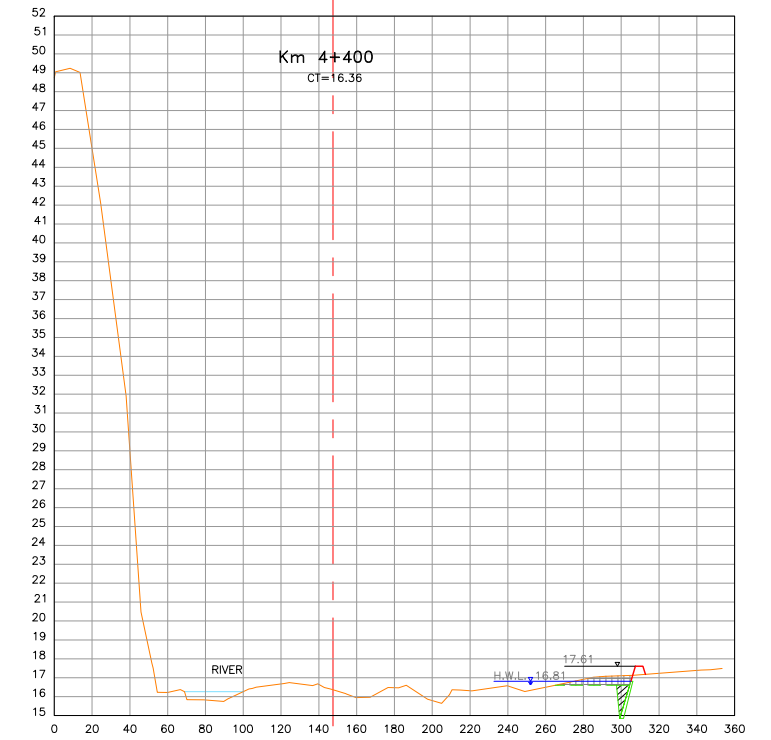
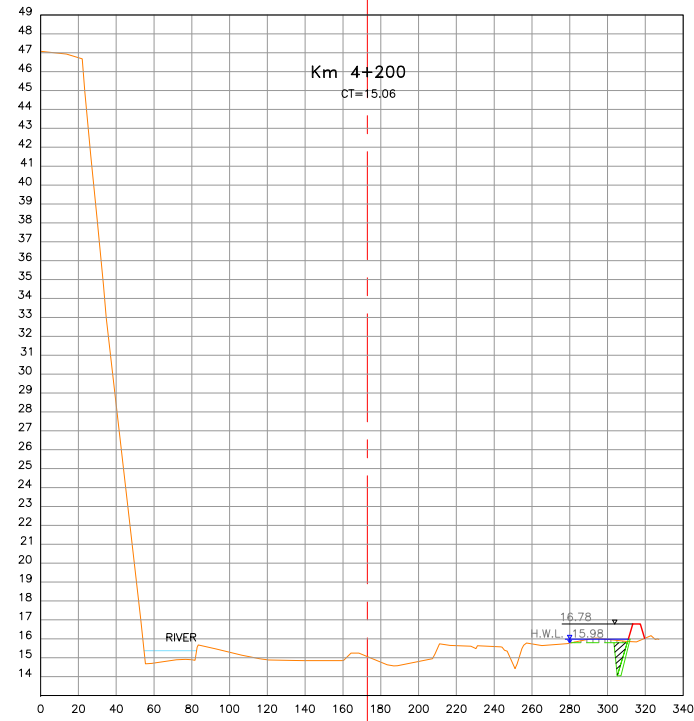
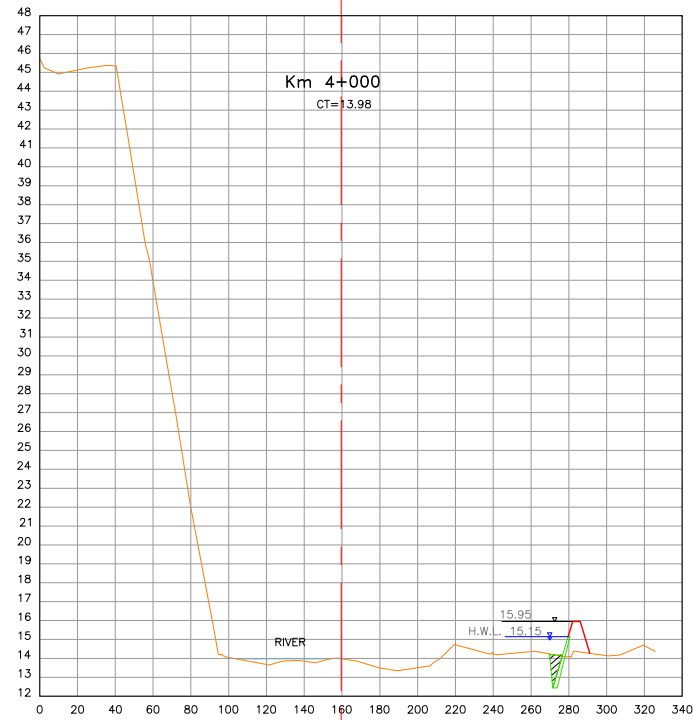
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1:250 0 5 10 15 20

1:333.3 0 5 10 15 20 25 30

1:1000 0 5 10 15 20 25 30 35 40

1:750 0 10 20 30 40 50 60



NOTE: The scale indicated, corresponds to the format A-1 to Format A-3, consider twice.



Japan International Cooperation Agency

Consultants:



Yachiyo Engineering Co., Ltd.



NIPPON KOEI CO., LTD.

LATIN AMERICA - CARIBBEAN



NIPPON KOEI LAC CO., LTD. Consulting Engineers

Designed by: M.SOYA  
Revised by: M.KITANO  
Approved by: Y.NAKAGAWA  
Revised by: Y.NAKAGAWA

Project:  
THE PREPARATORY STUDY ON PROJECT OF THE PROTECTION OF FLOOD PLAIN AND VULNERABLE RURAL POPULATION AGAINST FLOOD IN THE REPUBLIC OF PERU

Drawing:

**YAUCA RIVER: YA-2  
CROSS SECTIONS  
KM. 4+000 - KM. 4+500**

ESCALE: INDICATED  
DATE: MARCH - 2013  
CODE: **YA-2-ST-01**

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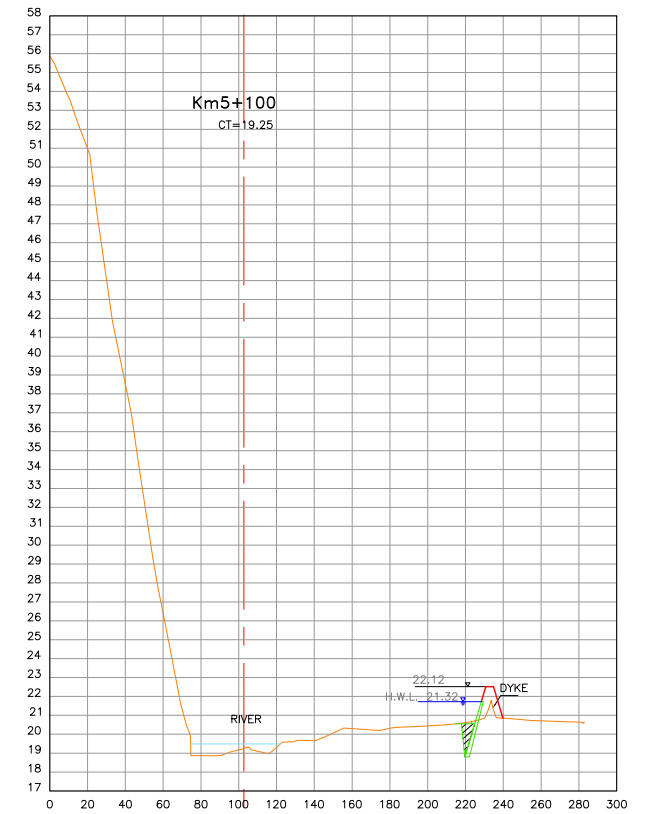
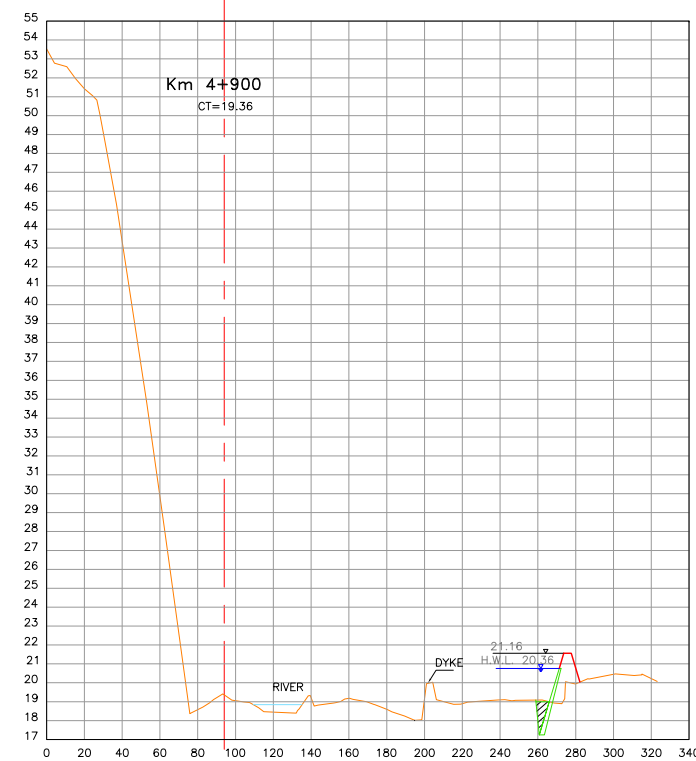
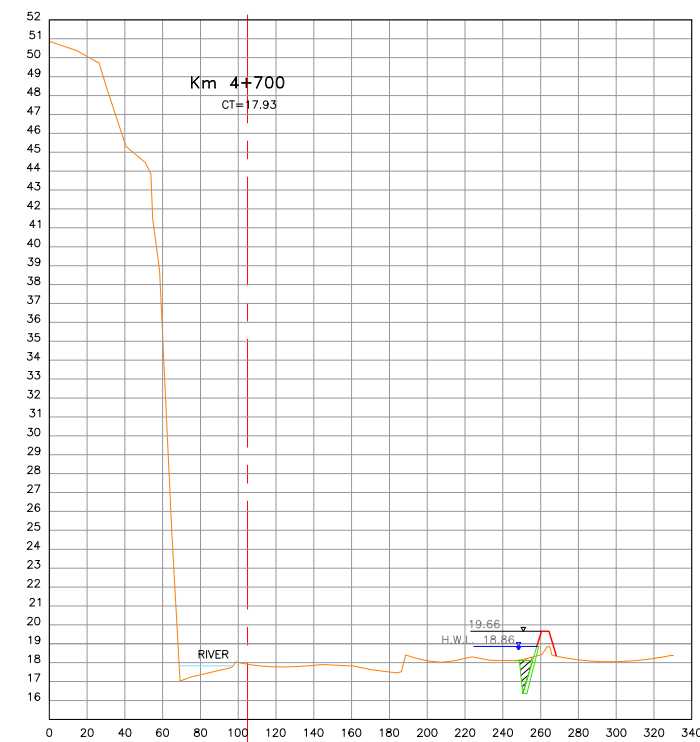
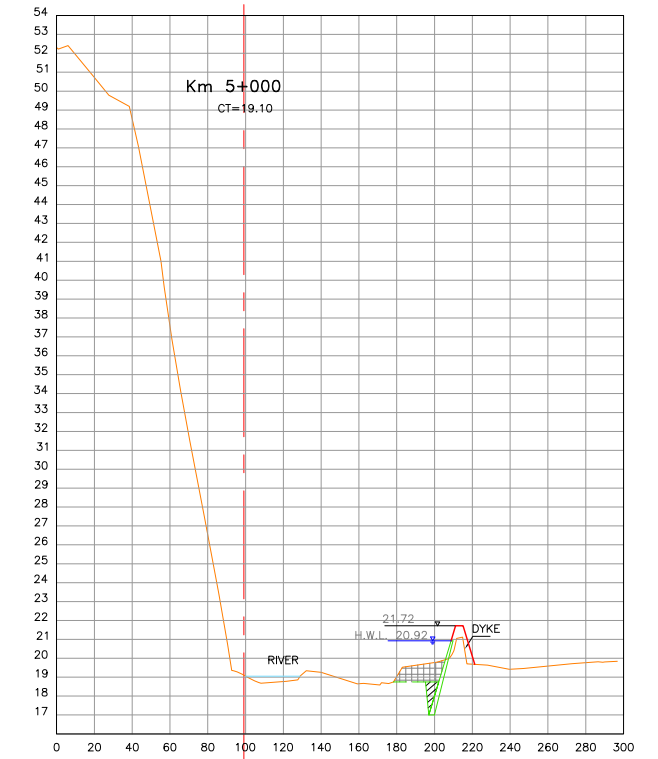
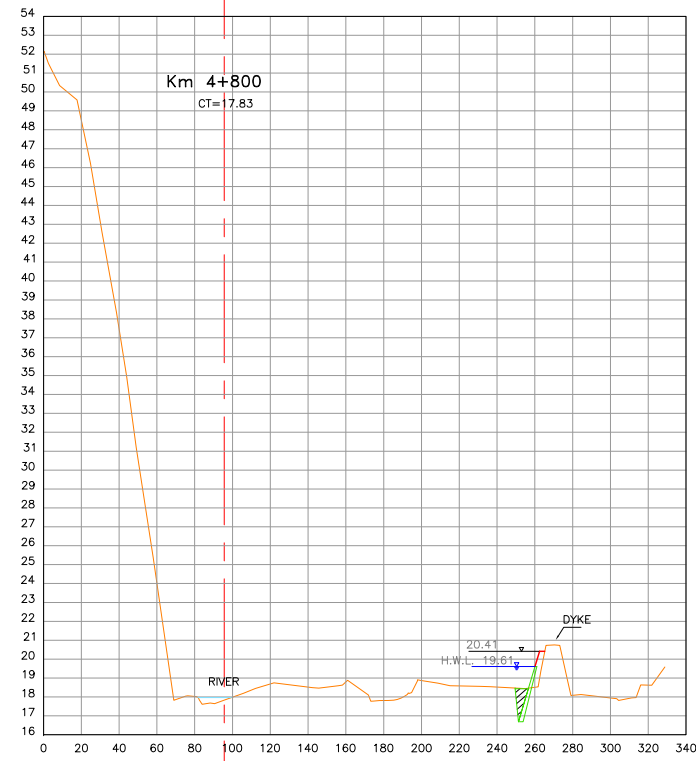
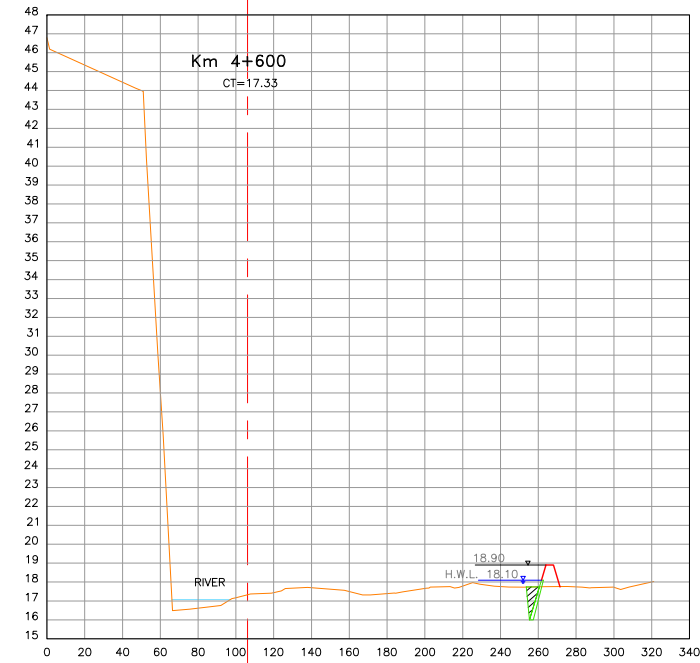
1:200 0 5 10 15

1:250 0 5 10 15 20

1:333.3 0 5 10 15 20 25 30

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1:750 0 10 20 30 40 50 60



NOTE: The scale indicated, corresponds to the format A-1 to Format A-3, consider twice.



Consultants:

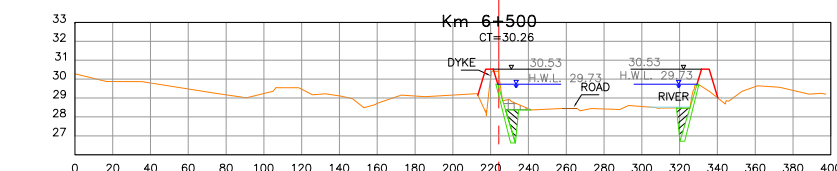
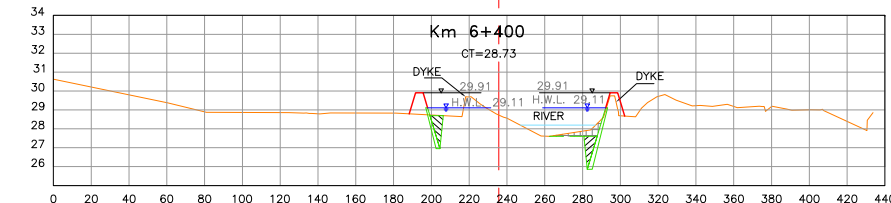
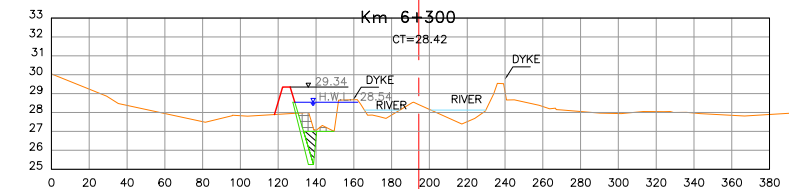
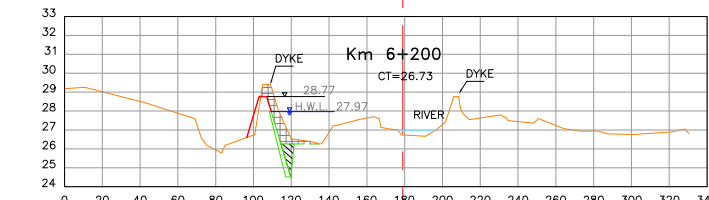
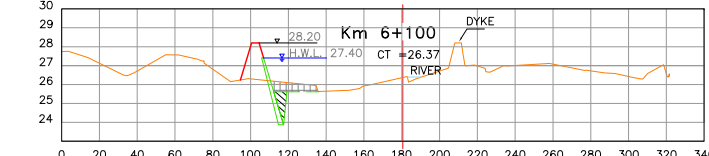
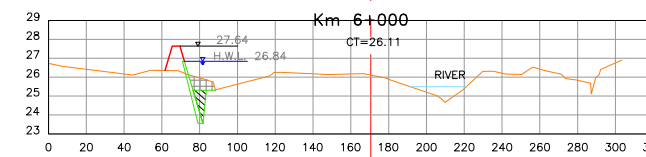
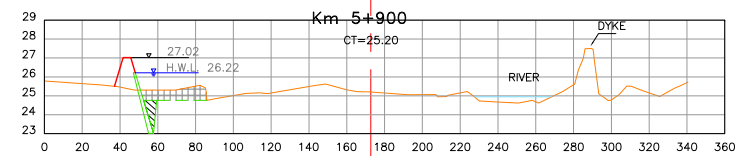
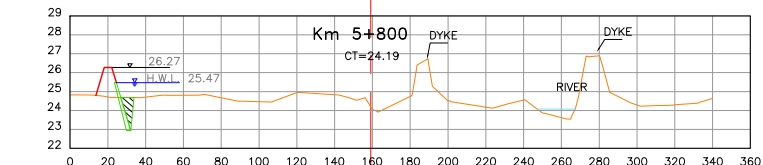
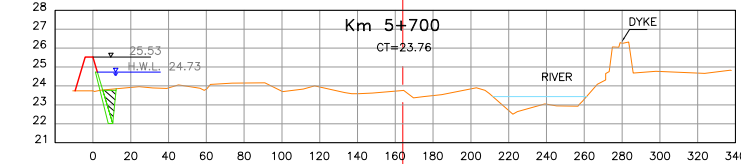
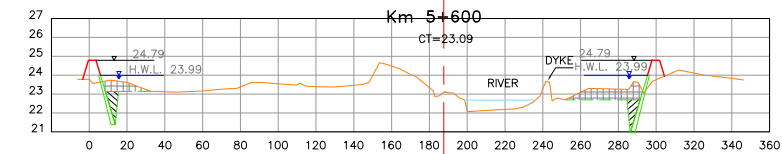
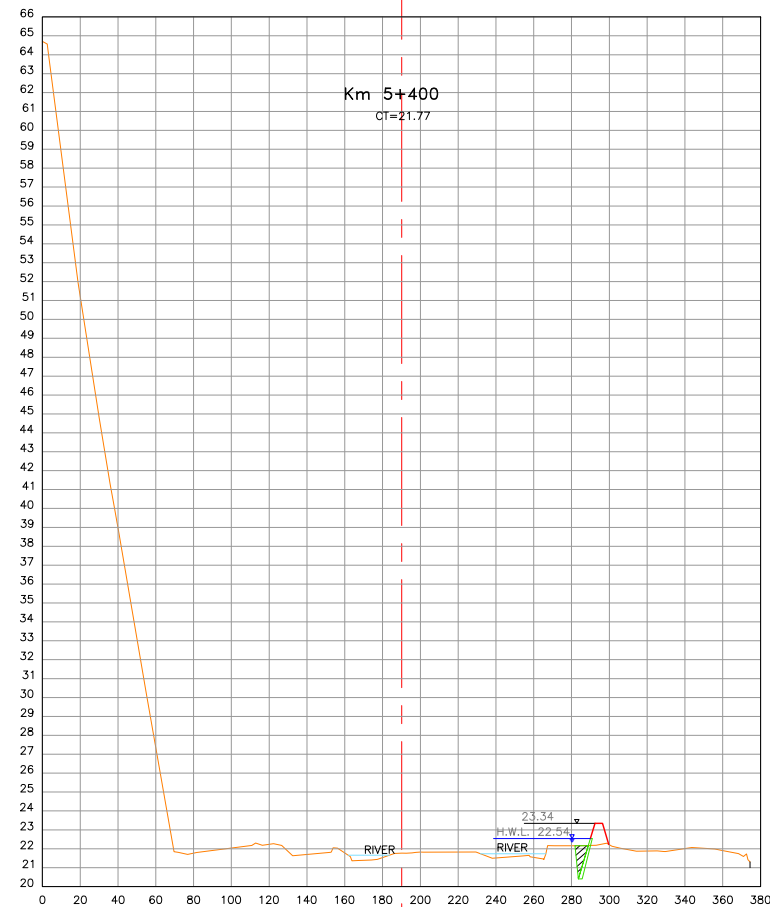
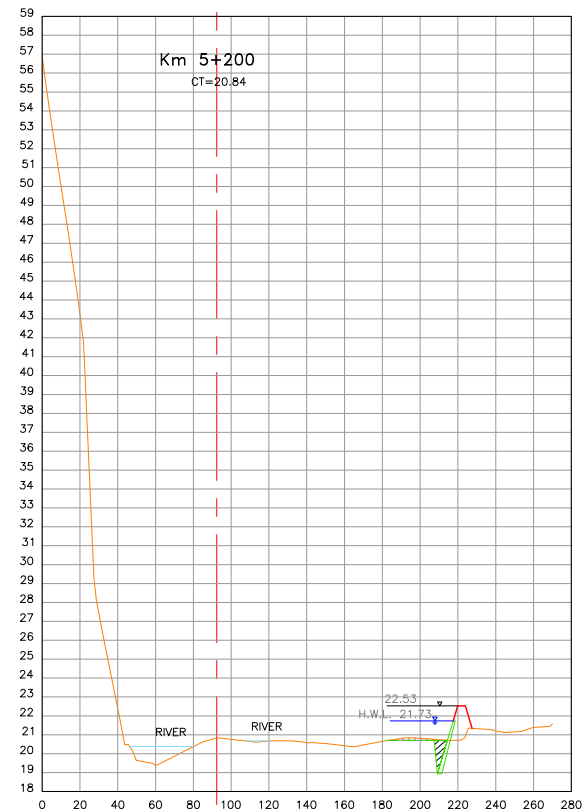


Designed by: M.SOYA  
 Revised by: M.KITANO  
 Approved by: Y.NAKAGAWA  
 Revised by: Y.NAKAGAWA

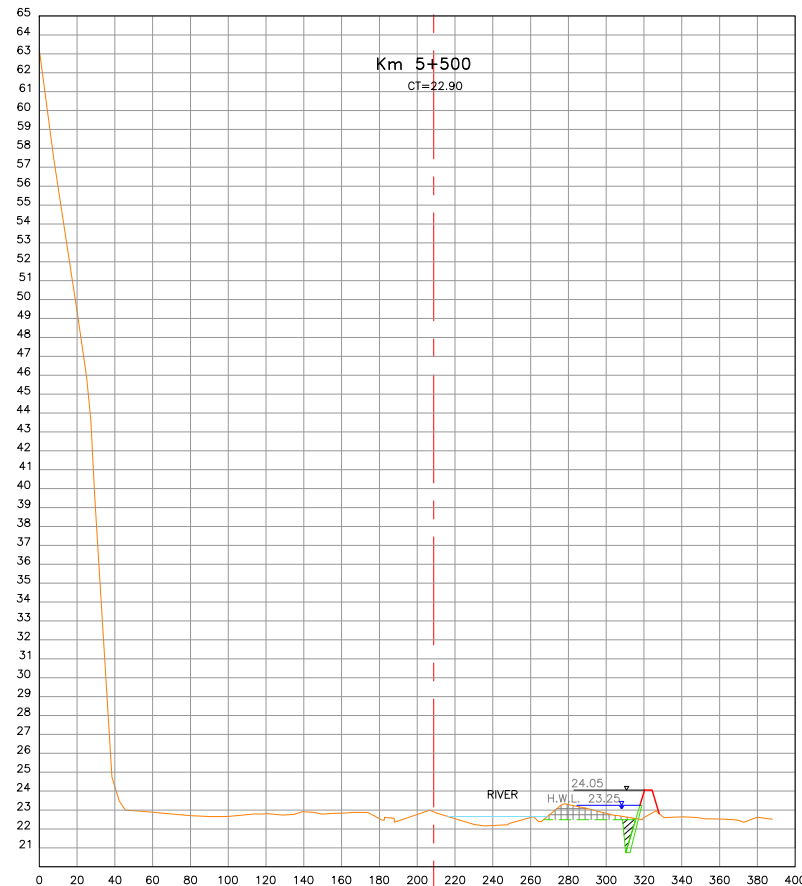
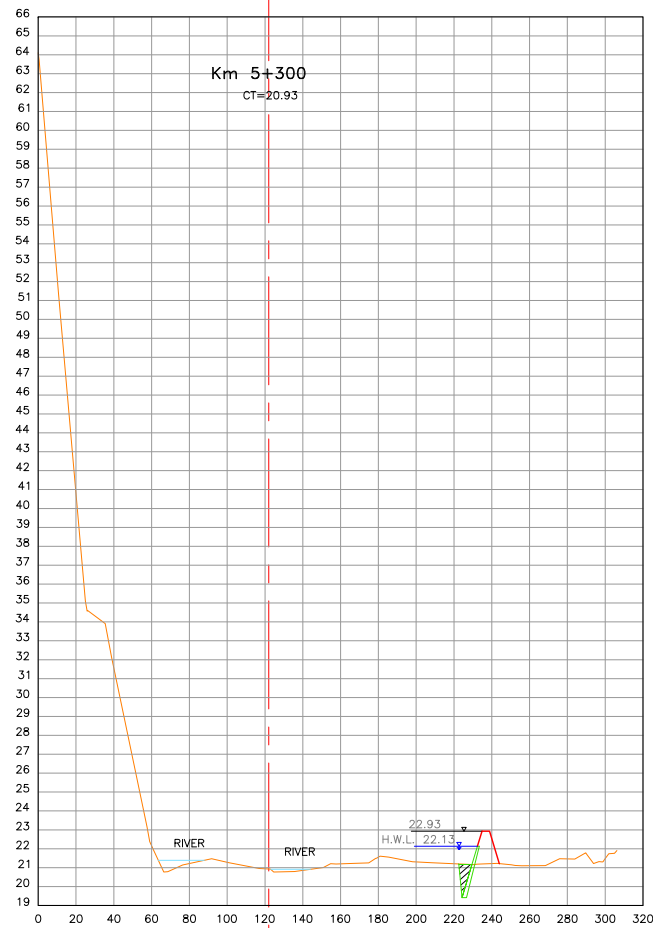
Project:  
 THE PREPARATORY STUDY ON PROJECT OF THE PROTECTION OF  
 FLOOD PLAIN AND VULNERABLE RURAL POPULATION AGAINST  
 FLOOD IN THE REPUBLIC OF PERU

Drawing:  
**YAUCA RIVER: YA-2  
 CROSS SECTIONS  
 KM. 4+600 - KM. 5+100**

ESCALE: INDICATED  
 DATE: MARCH - 2013  
 CODE: **YA-2-ST-02**



NOTE: The scale indicated, corresponds to the format A-1 to Format A-3, consider twice.



1:100 0 1 2 3 4 5 6 7 8 9 10

1:150 0 1 2 3 4 5 6 7 8 9 10

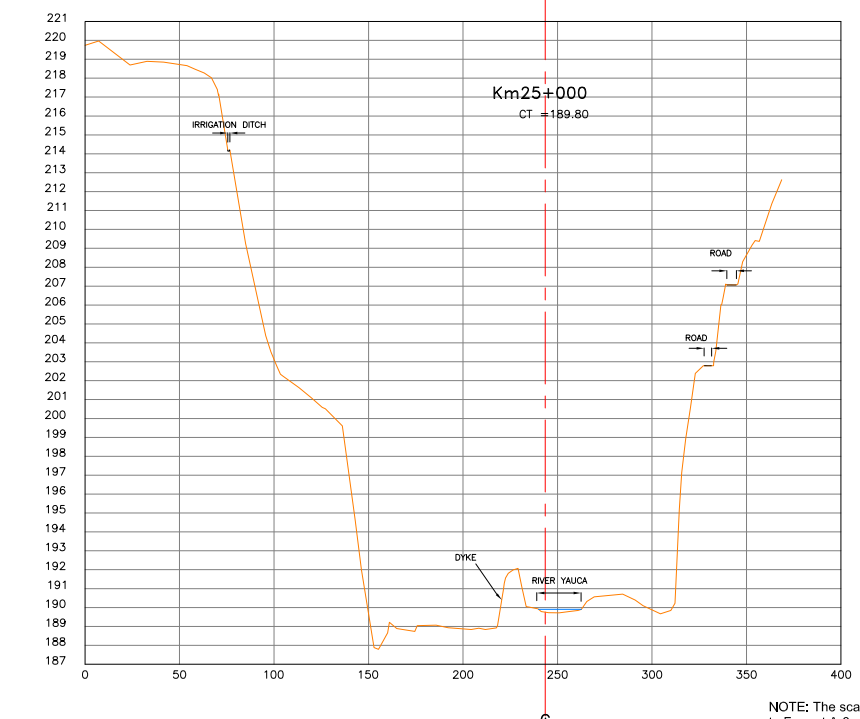
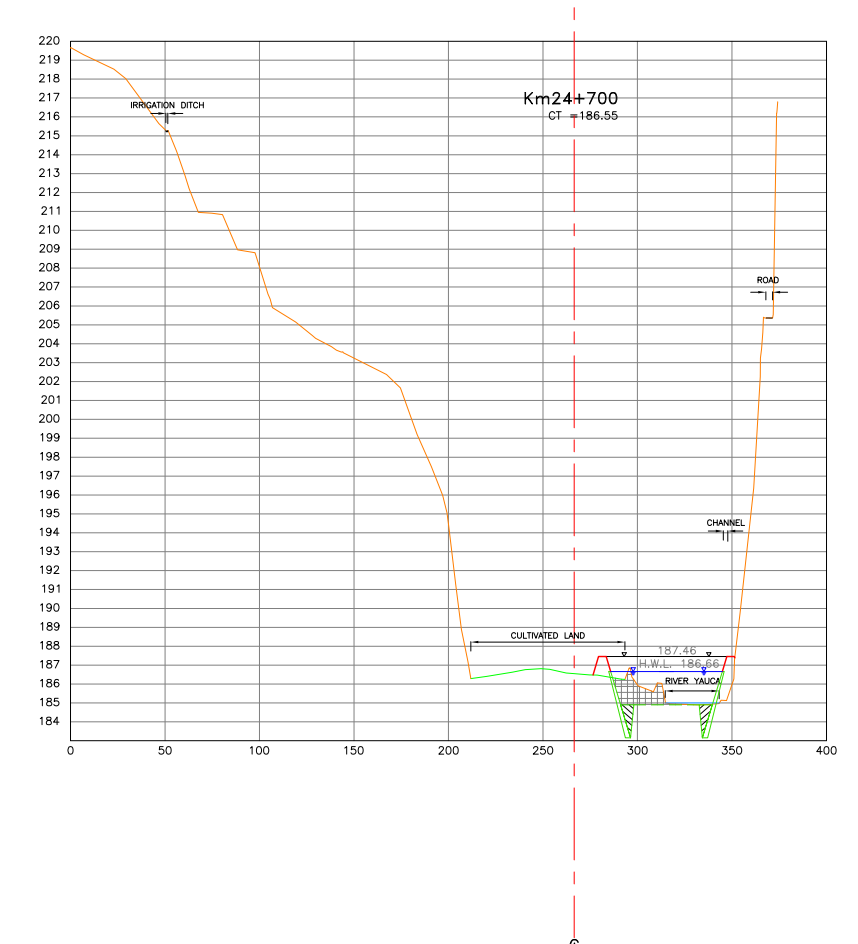
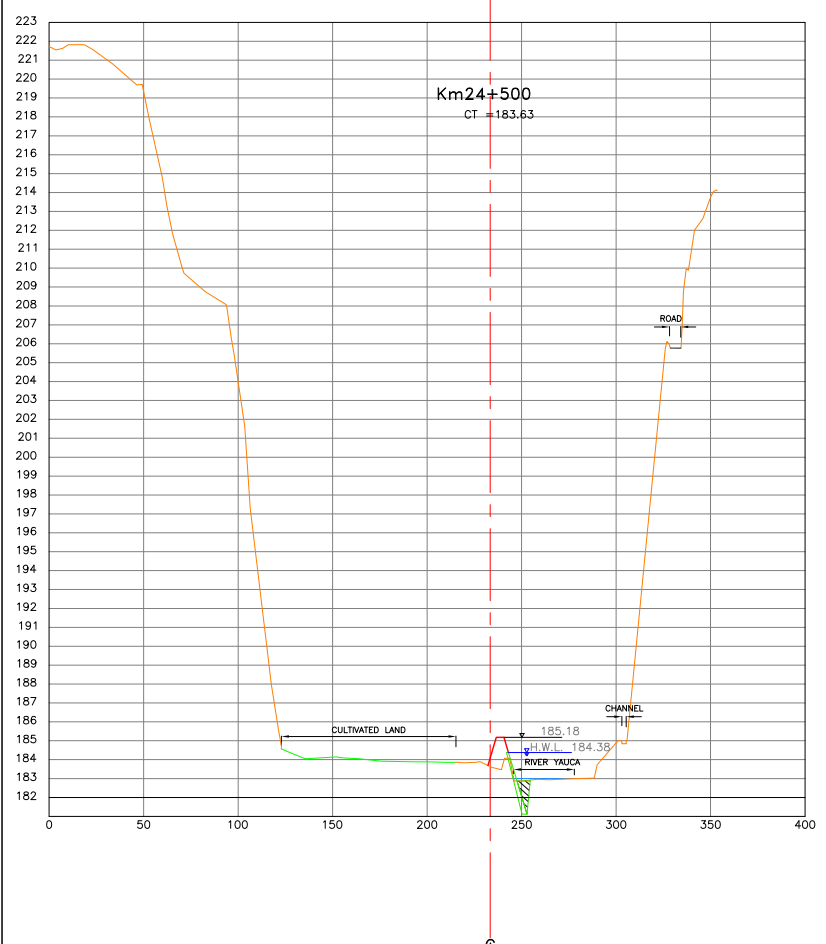
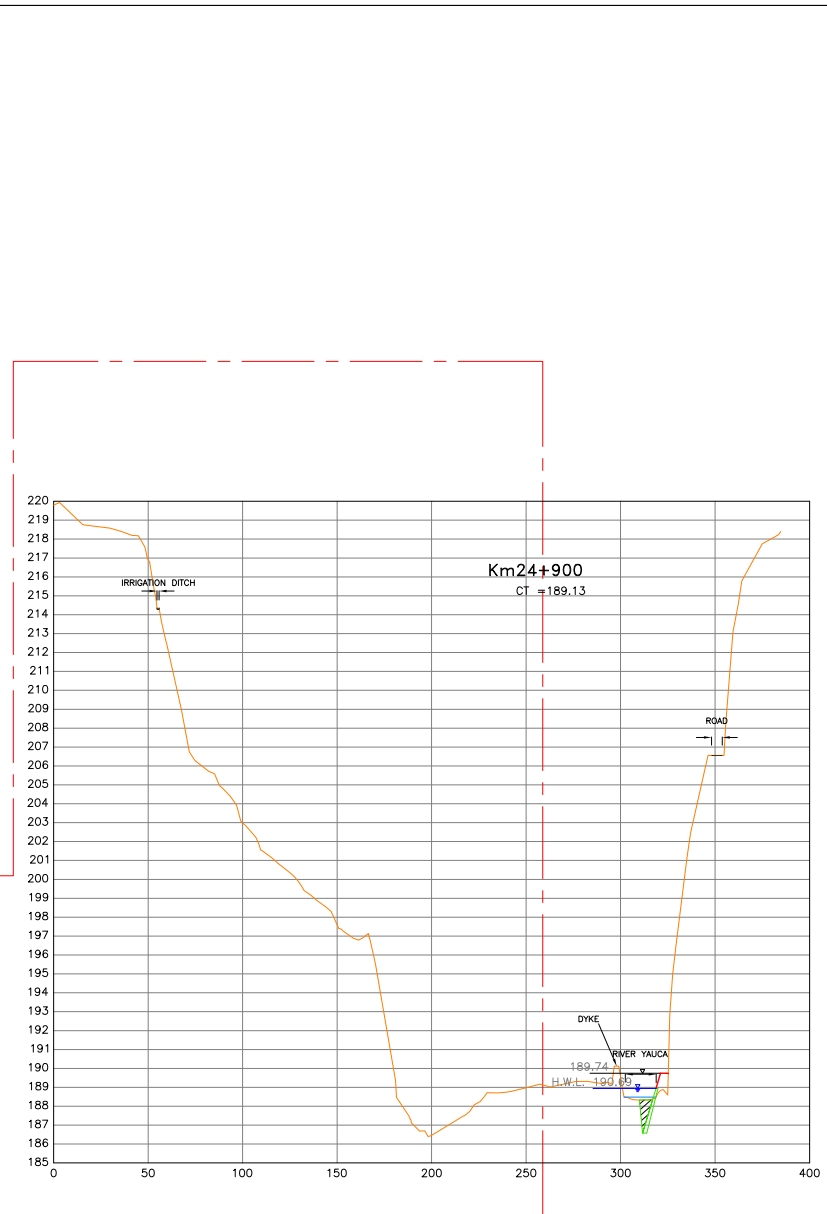
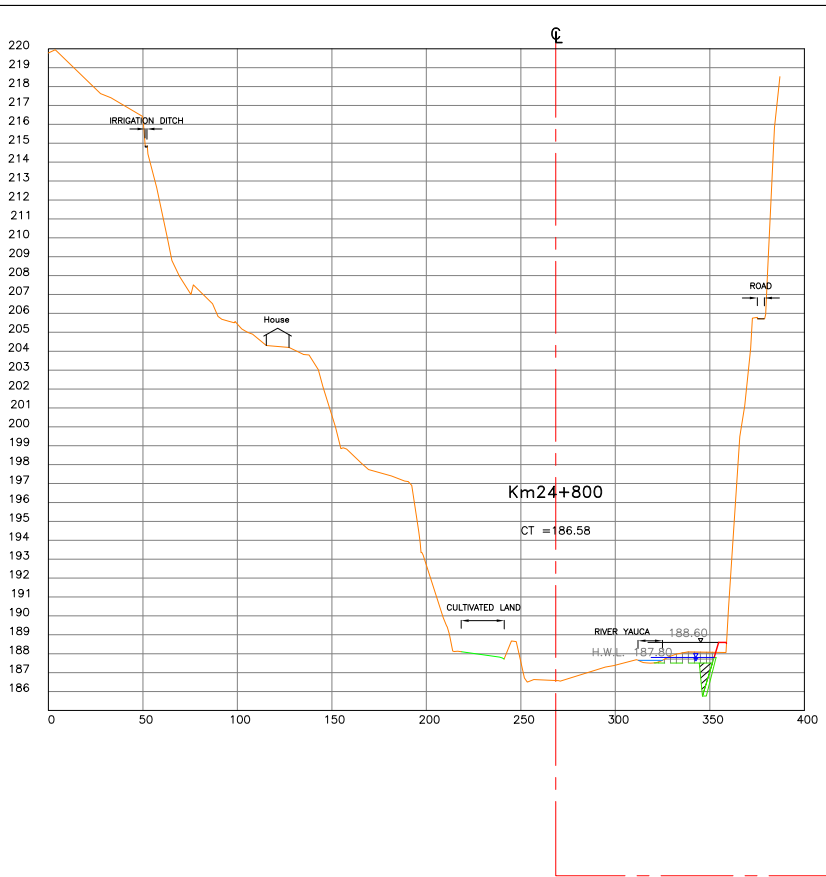
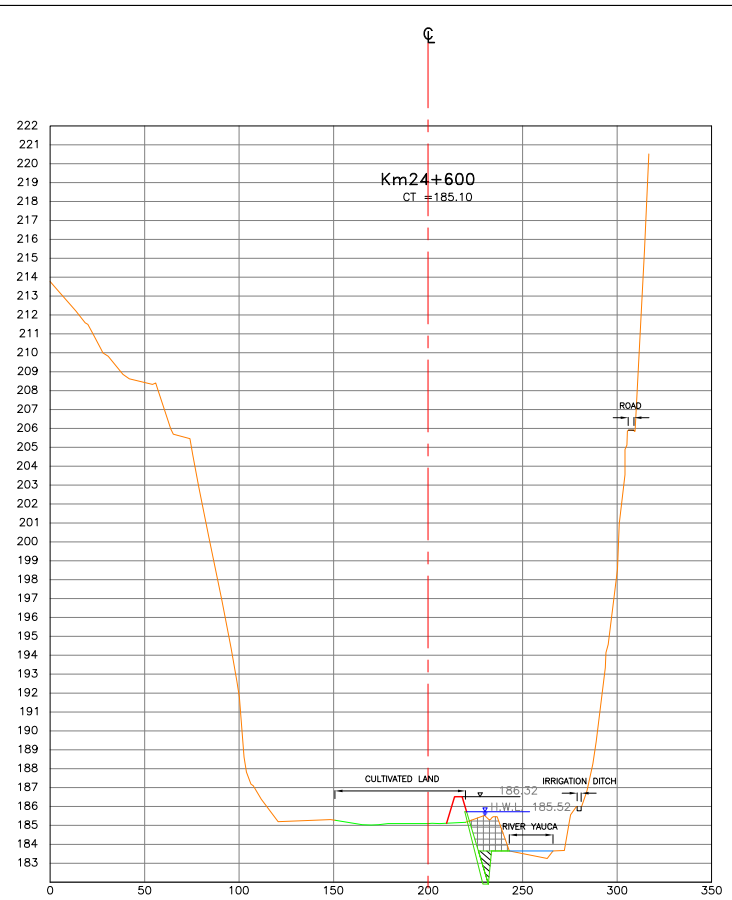
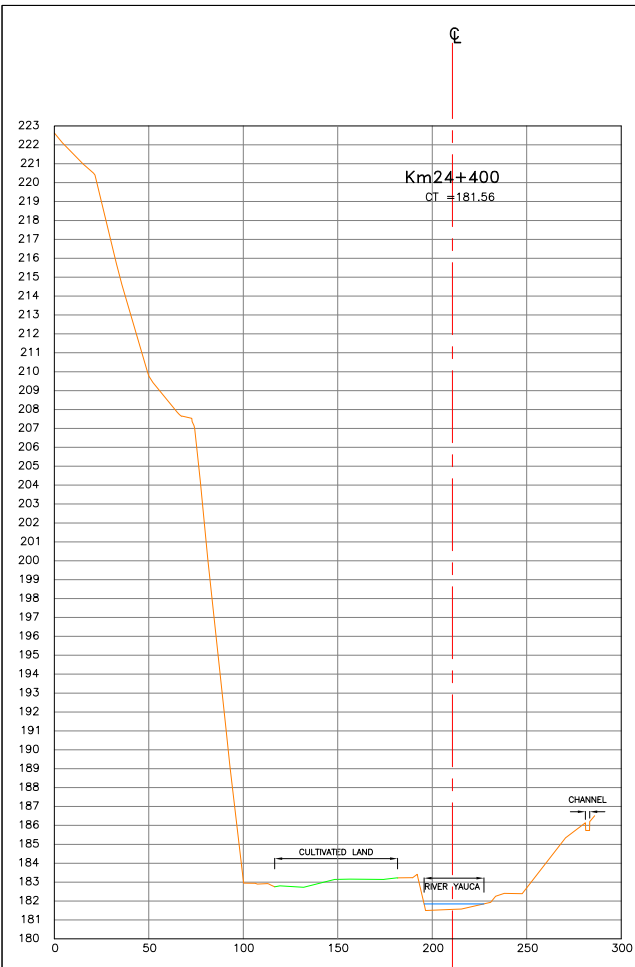
1:200 0 5 10 15

1:250 0 5 10 15 20

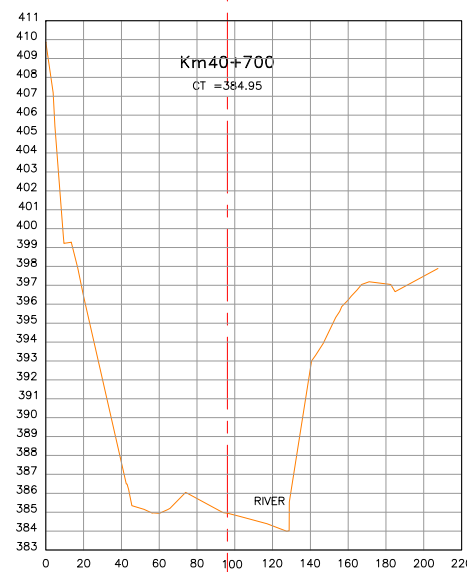
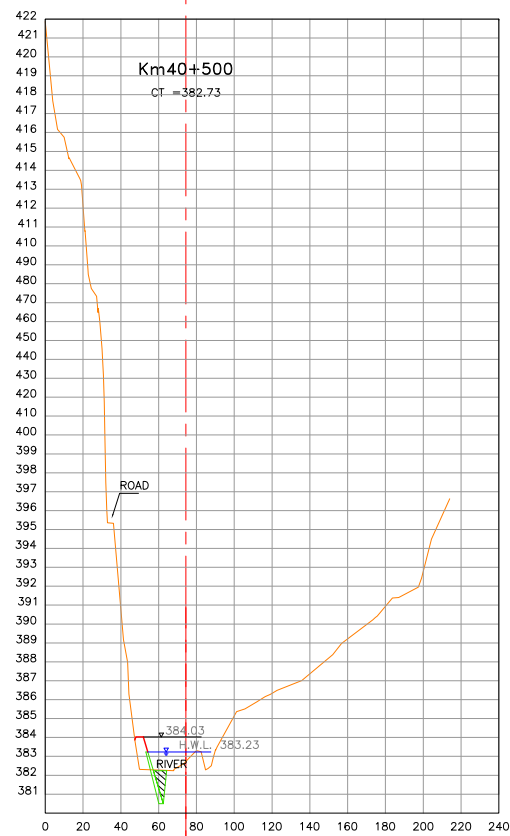
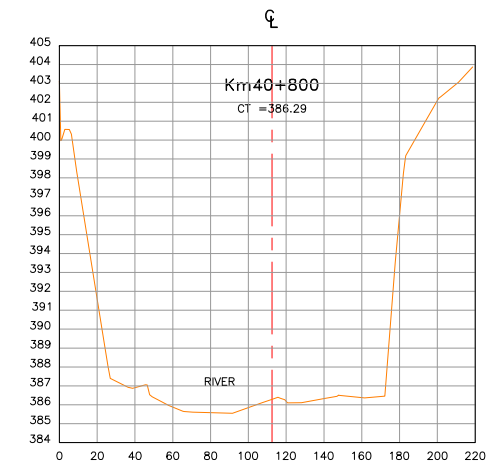
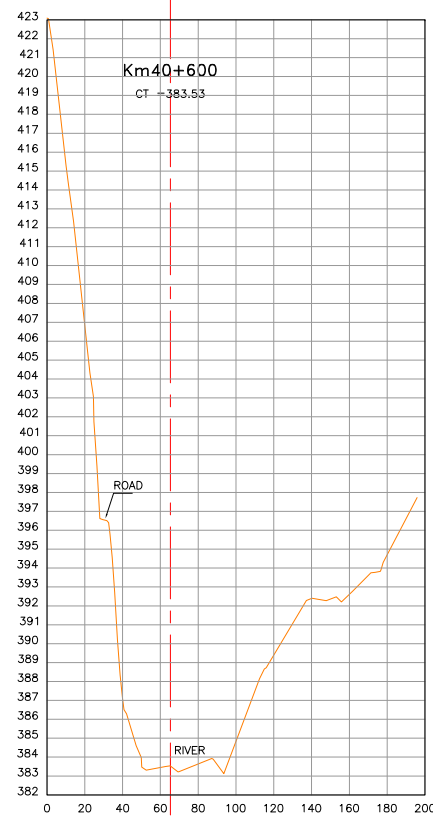
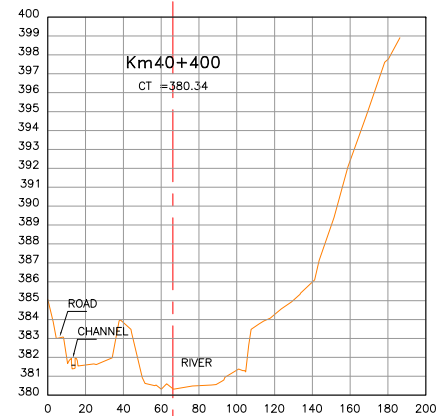
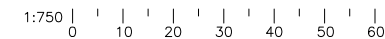
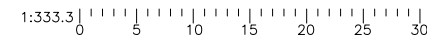
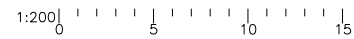
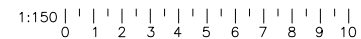
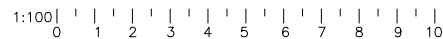
1:333.3 0 5 10 15 20 25 30

1:1000 0 5 10 15 20 25 30 35 40

1:750 0 10 20 30 40 50 60



NOTE: The scale indicated, corresponds to the format A-1 to Format A-3, consider twice.



NOTE: The scale indicated, corresponds to the format A-1 to Format A-3, consider twice.