

STA 7+850
W.S. EL. # 19.50
DATE: 3-17-88

STA 8+400
W.S. EL. # 22.78
DATE: 3-18-88

TULAY NA BATO BRIDGE

STA 8+000
W.S. EL. # 19.88
DATE: 3-17-88

STA 8+550
W.S. EL. # 22.80
DATE: 3-18-88

STA 8+200
W.S. EL. # 22.38
DATE: 3-17-88

STA 8+775
W.S. EL. # 22.85
DATE: 3-18-88



ACRE SURVEYING
& DEVELOPMENT

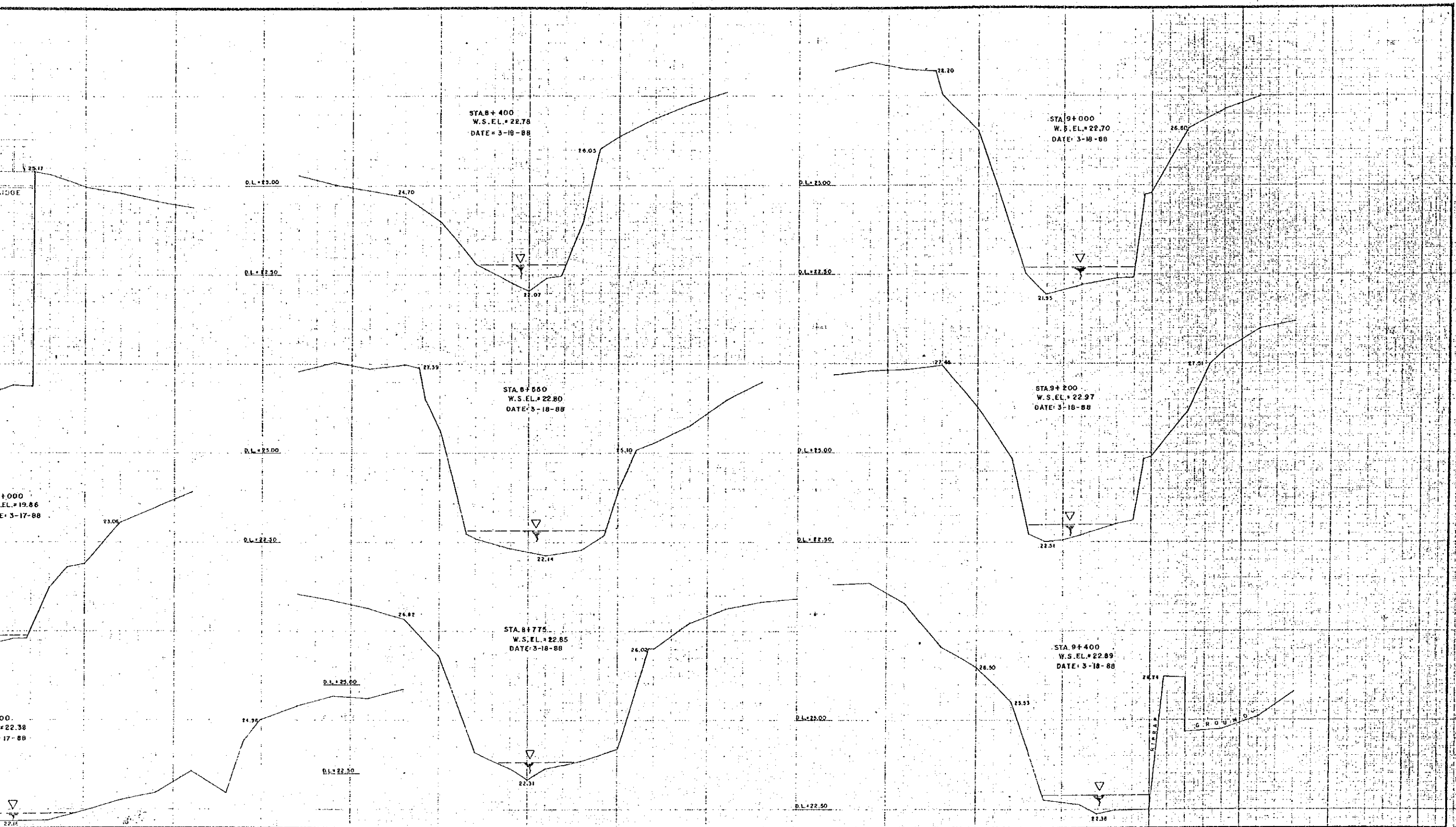
CONSULTANTS		
	DATE	SIGNATURE
SURVEYED BY:	12-MG-88	<i>[Signature]</i>
CHECKED BY:	8-13-88	<i>[Signature]</i>
PROJECT MANAGER	8-14-88	<i>[Signature]</i>



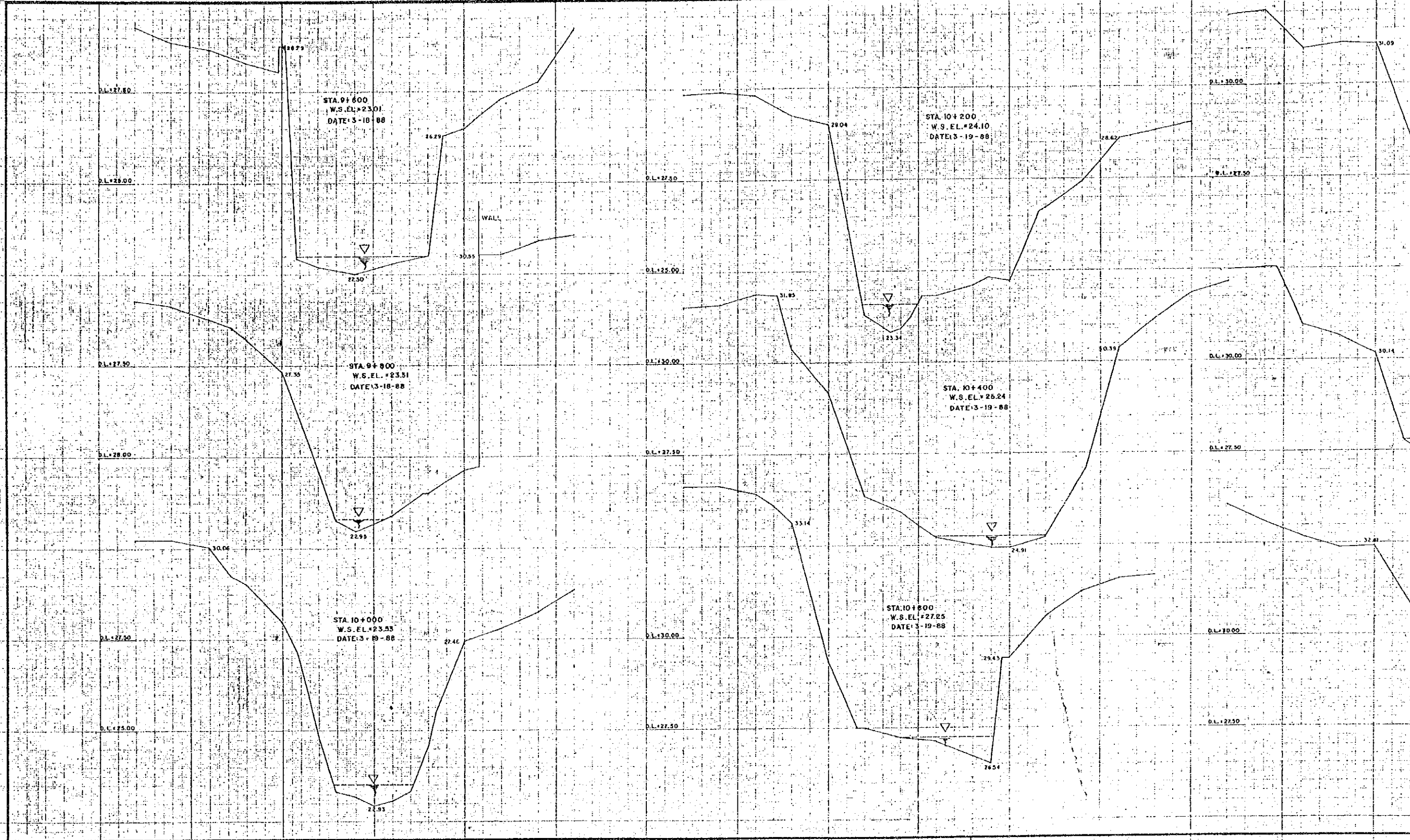
REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF
PUBLIC WORKS AND HIGHWAYS

REPUBLIC OF THE PHILIPPINES	
PROJECT ENGINEER	PROJECT MANAGER
<i>[Signature]</i> NONITO F. FAND	<i>[Signature]</i> EUGENIO MANALO

120



CONSULTANTS			REPUBLIC OF THE PHILIPPINES			DATE		SIGNATURE		SCALE		DRWS. NO.	
BY:	DATE	SIGNATURE	DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS			PROJECT ENGINEER	PROJECT MANAGER	NONITO F. FAND EUGENIO M. MARALDO		HORIZONTAL 1:250		7/15	
BY:	8-13-88	<i>[Signature]</i>								VERTICAL 1:50			
BY:	8-14-88	<i>[Signature]</i>								TULLAHAN RIVER		STA 7+850 - STA 9+400	



**ACRE SURVEYING
& DEVELOPMENT**

CONSULTANTS		
	DATE	SIGNATURE
SURVEYED BY	Jul-18-88	<i>Char. ...</i>
CHECKER BY	8-12-88	<i>[Signature]</i>
PROJECT-MANAGER	8-14-88	<i>[Signature]</i>

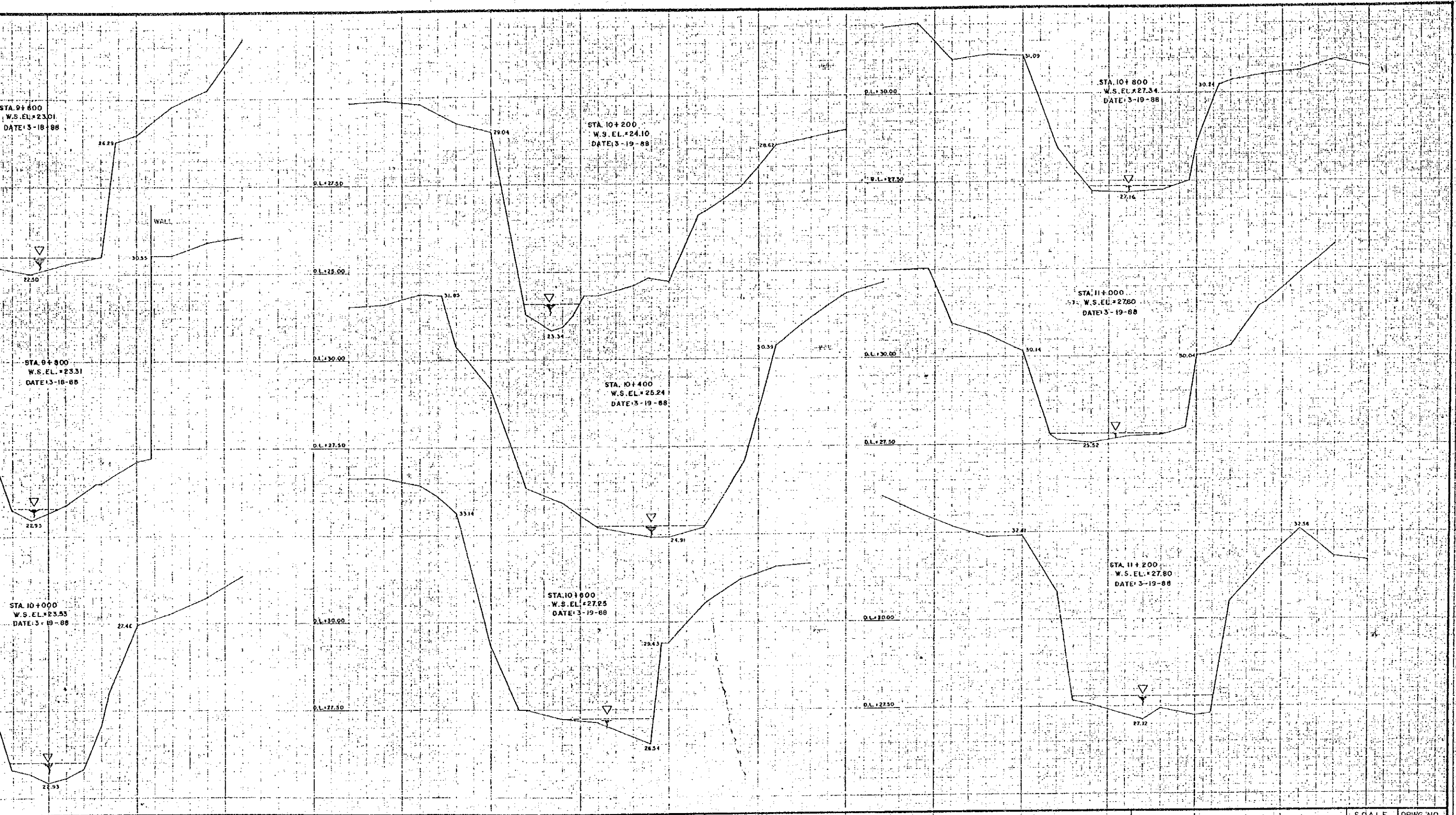


DEPARTMENT OF
PUBLIC WORKS AND HIGHWAYS

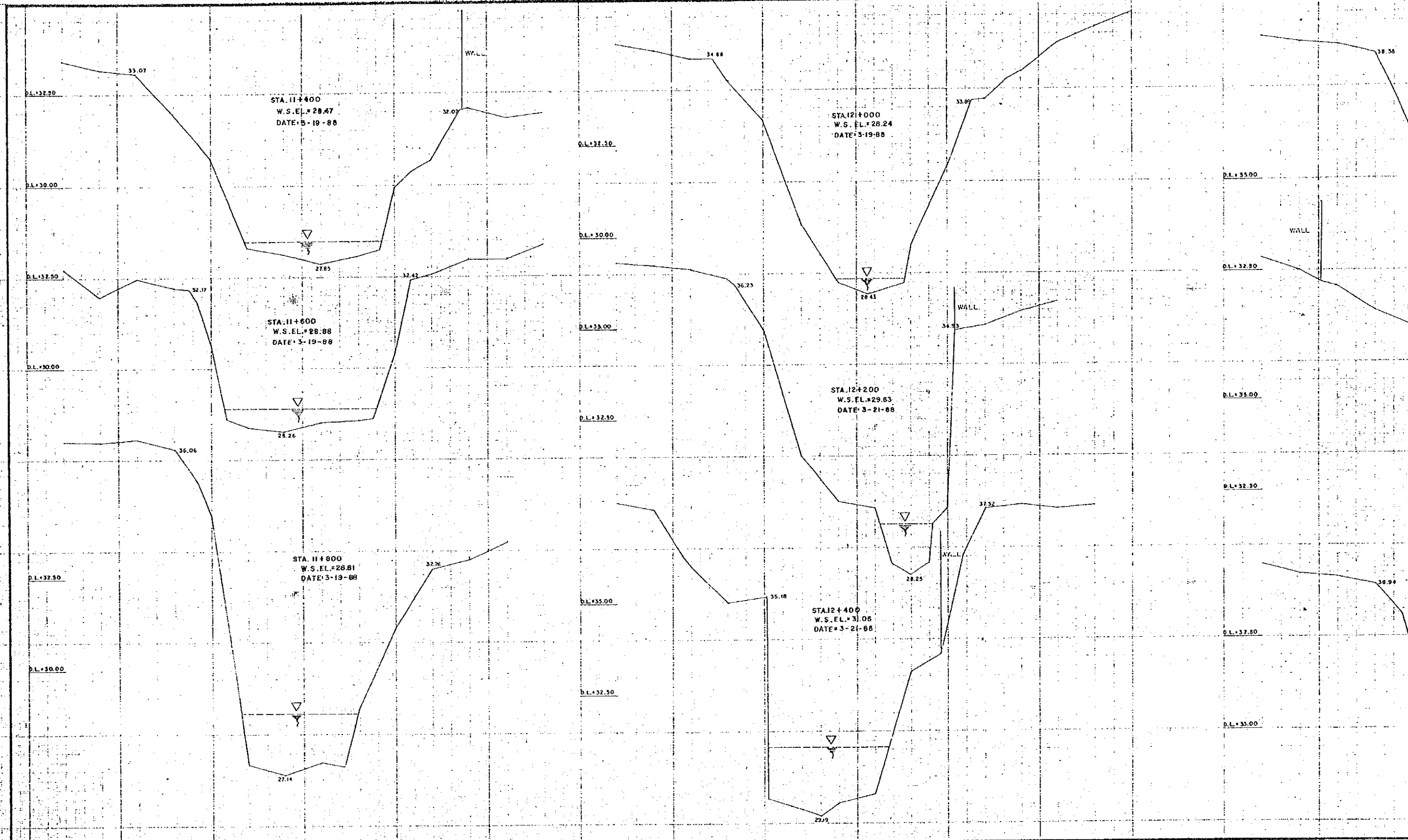
REPUBLIC OF THE PHILIPPINES

PROJECT ENGINEER
 PROJECT MANAGER

NONITO P. PATA
 EUGENE M. RAMAL



CONSULTANTS		REPUBLIC OF THE PHILIPPINES		DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS		PROJECT ENGINEER		PROJECT MANAGER		DATE		SCALE		DRWG. NO.	
DATE	SIGNATURE	DATE	SIGNATURE	DATE	SIGNATURE	DATE	SIGNATURE	DATE	SIGNATURE	DATE	SIGNATURE	HORIZONTAL	VERTICAL		
8-14-88	<i>[Signature]</i>	8-14-88	<i>[Signature]</i>	8-14-88	<i>[Signature]</i>	8-14-88	<i>[Signature]</i>	8-14-88	<i>[Signature]</i>	8-14-88	<i>[Signature]</i>	1:250	1:50	8715	
TULLAHAN RIVER CROSS SECTION															



ACRE SURVEYING
& DEVELOPMENT

CONSULTANTS		
SURVEYED BY:	DATE:	SIGNATURE:
...
CHECKED BY:	8-12-88	...
PROJECT MANAGER	8/14/88	...

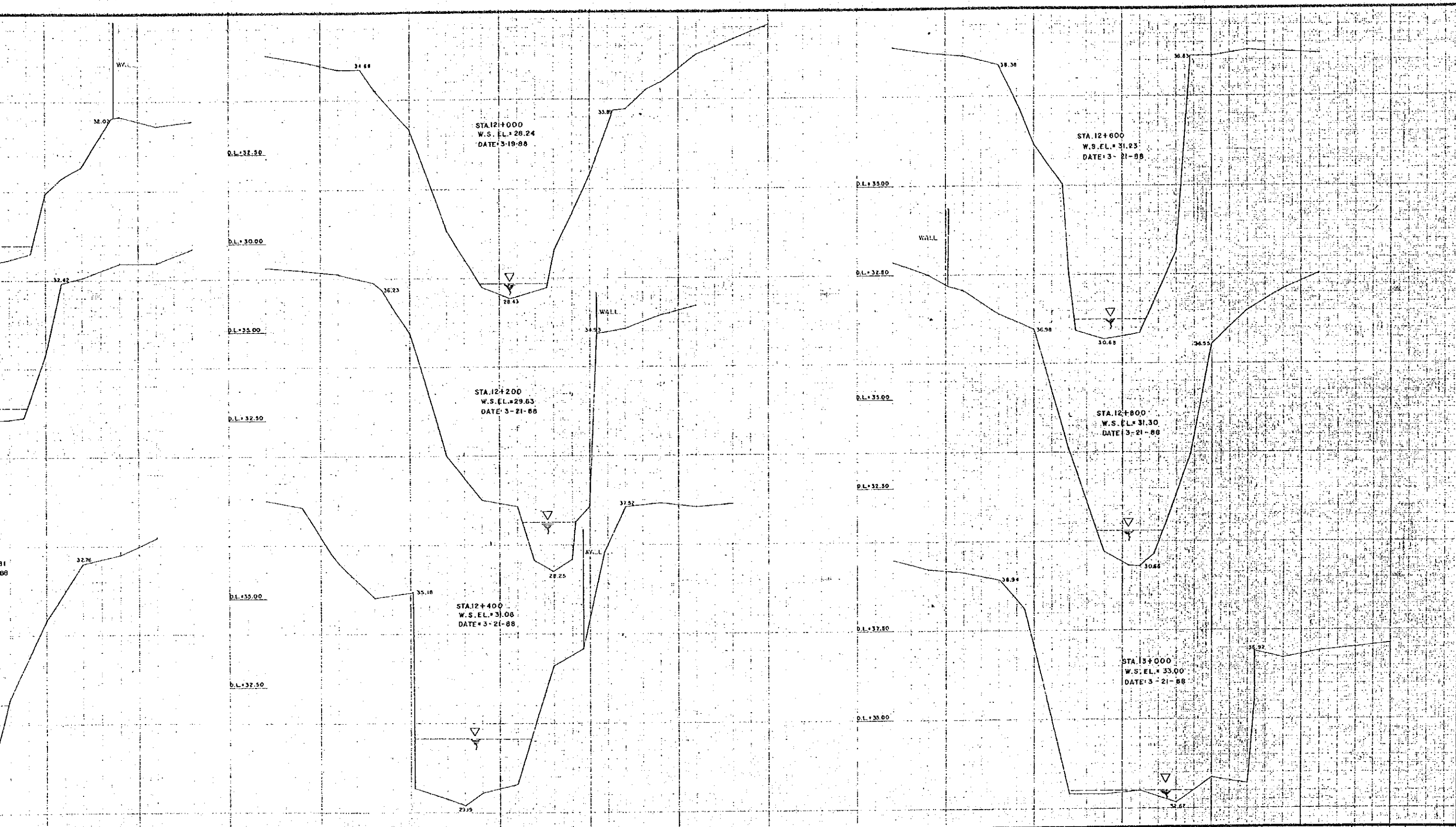


DEPARTMENT OF
PUBLIC WORKS AND HIGHWAYS

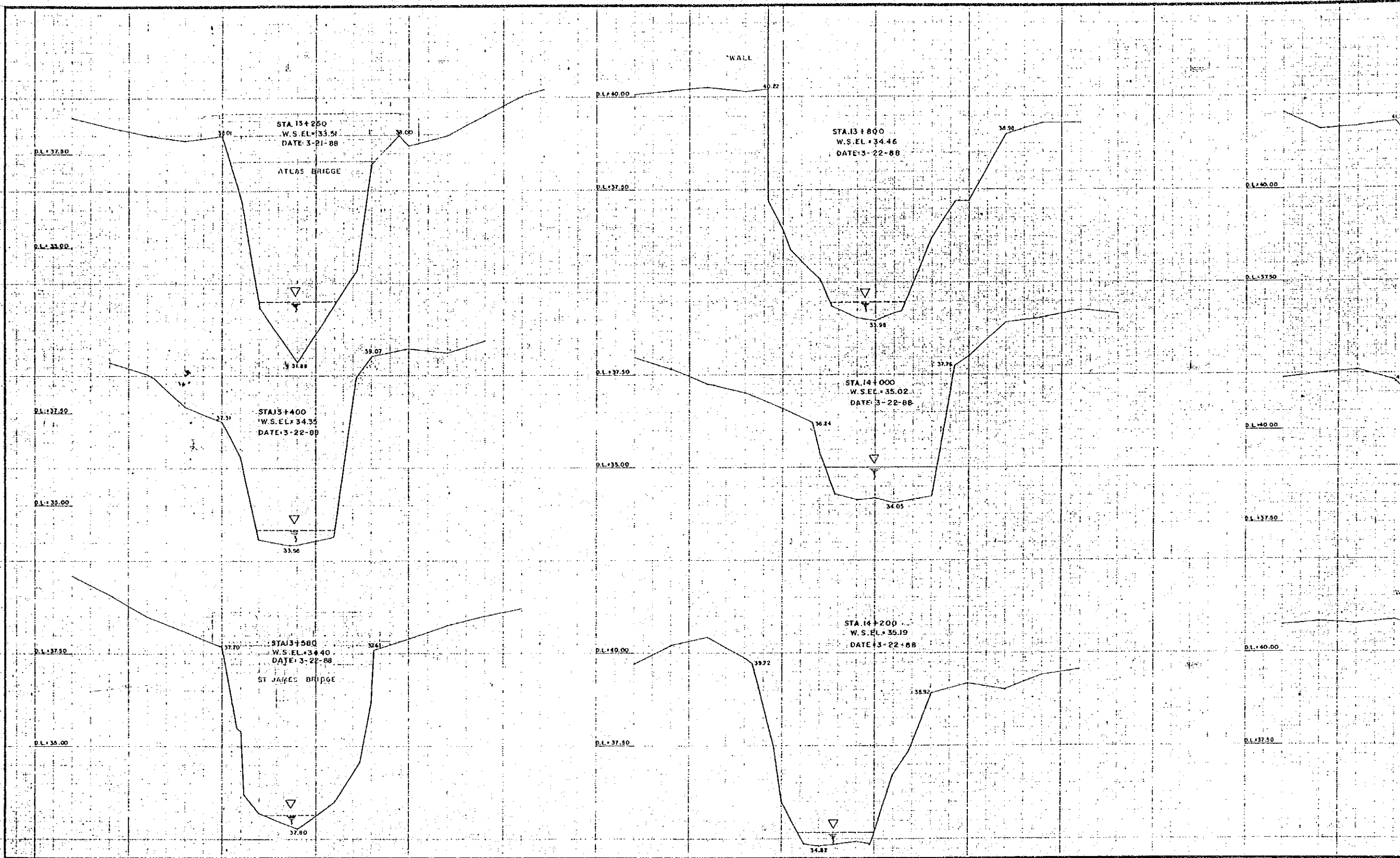
REPUBLIC OF THE PHILIPPINES

REPUBLIC OF THE PHILIPPINES	
PROJECT ENGINEER	SIGNATURE
...	...
PROJECT MANAGER	...

Has 11 piece
Printed in Japan



CONSULTANTS			REPUBLIC OF THE PHILIPPINES			SCALE		DRWG. NO.
BY	DATE	SIGNATURE	PROJECT ENGINEER	PROJECT MANAGER	DATE	HORIZONTAL	VERTICAL	
BY: <i>[Signature]</i>	8-12-88	<i>[Signature]</i>	NONITO FAND	EUGENIO MANALO	8-14-88	1:250	1:50	
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS						CROSS SECTION		9/15
						TULLAHAN RIVER		STA. 12+400 - STA. 13+000

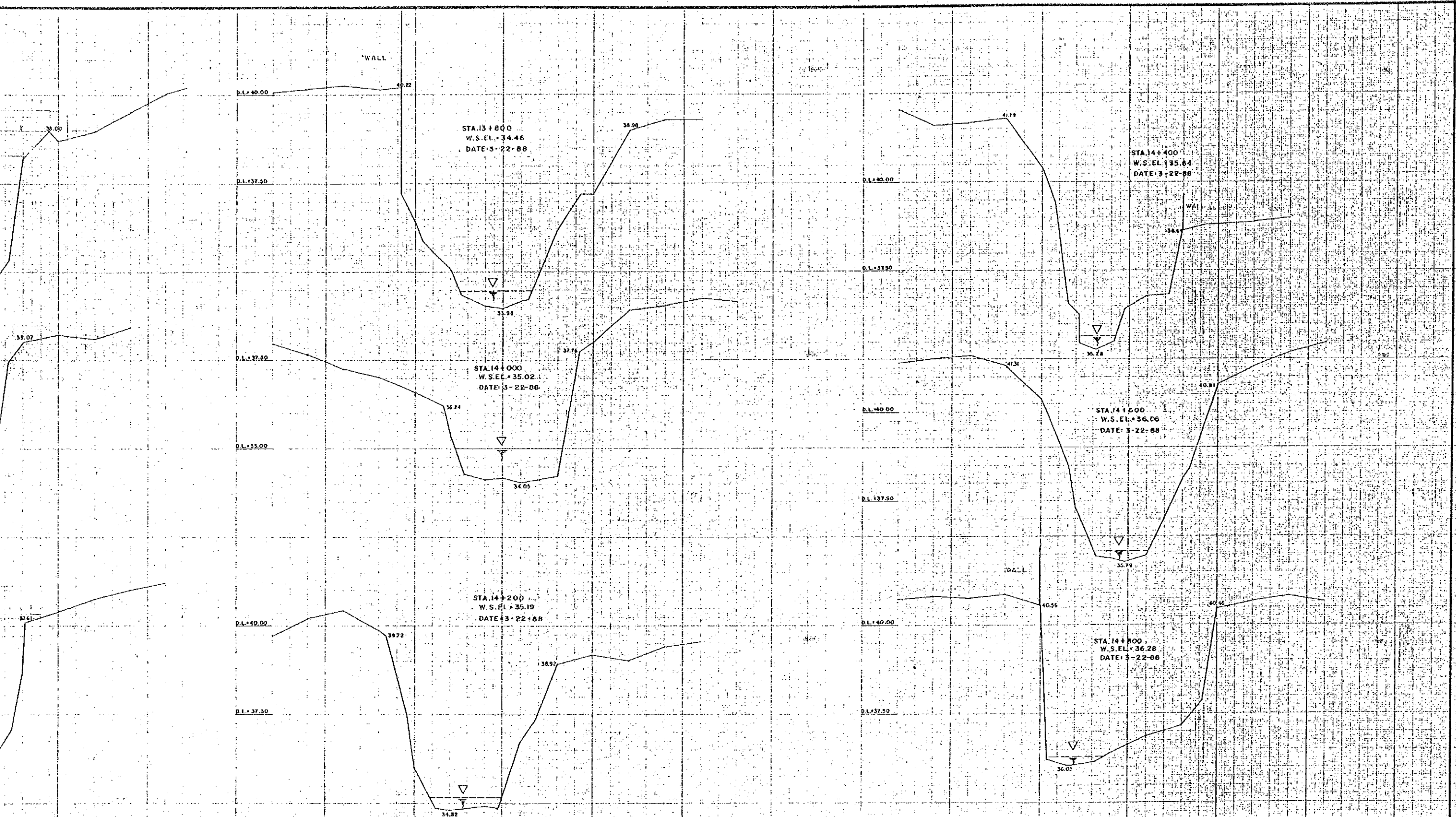


ACRE SURVEYING & DEVELOPMENT		CONSULTANTS		REPUBLIC OF THE PHILIPPINES		DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS	
	DATE	SIGNATURE		DATE	SIGNATURE		
SURVEYED BY:	Jul-20-88	<i>[Signature]</i>	PROJECT ENGINEER		<i>[Signature]</i>		
CHECKED BY:	8-2-88	<i>[Signature]</i>	PROJECT MANAGER		<i>[Signature]</i>		
PROJECT MANAGER	1-14-88	<i>[Signature]</i>					

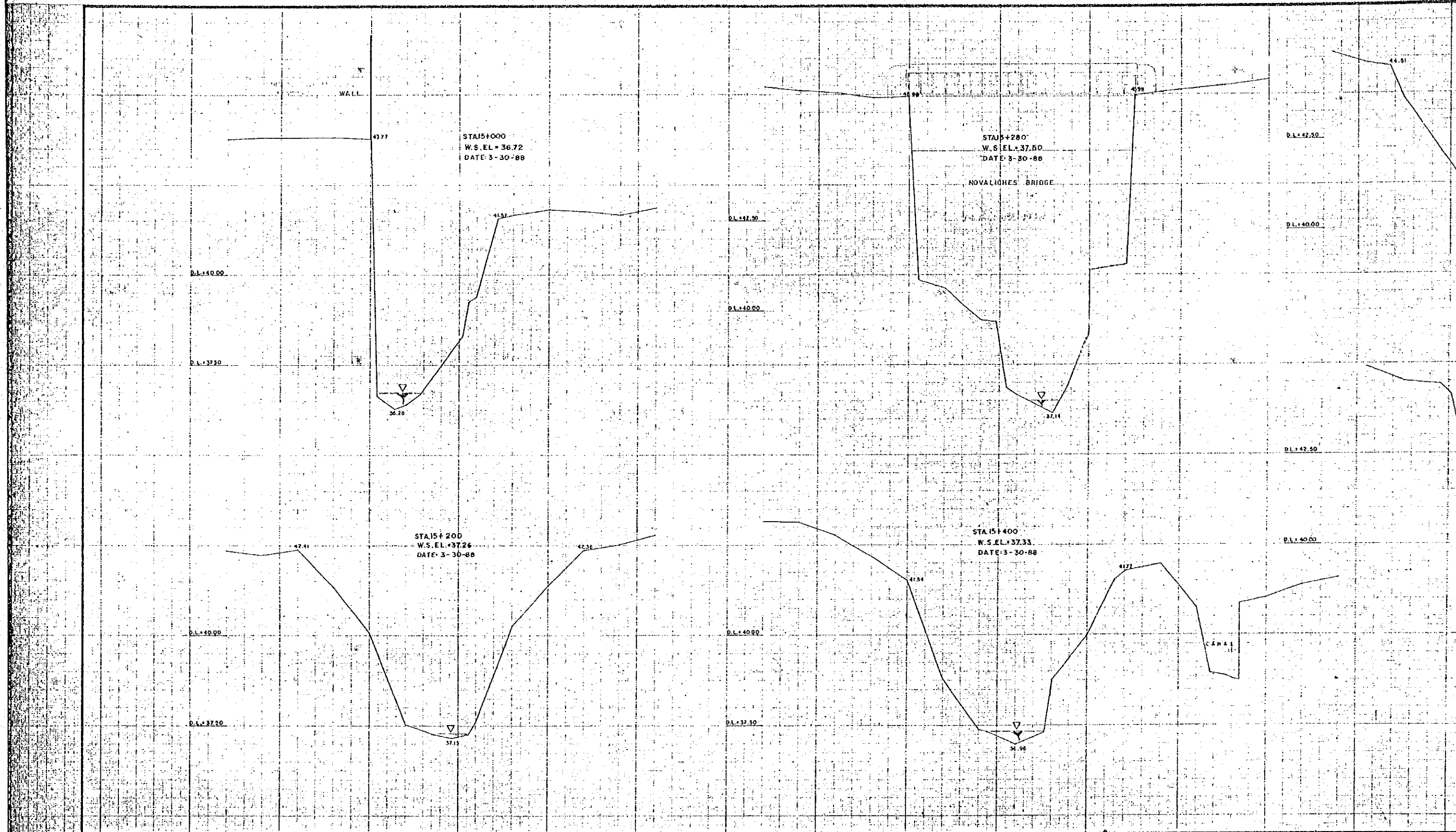
23



Map Scale: 1:1000
 1 inch = 100 feet

Map Scale: 1:1000
 1 inch = 100 feet



CONSULTANTS		REPUBLIC OF THE PHILIPPINES		DATE		SIGNATURE		SCALE		DRWG. NO.	
BY	DATE	DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS		PROJECT ENGINEER	DATE	SIGNATURE		HORIZONTAL	1:250		
BY	DATE			PROJECT MANAGER		NONITO P. FANLO		VERTICAL	1:50		
BY	DATE					EUGENIO P. MANALO		CROSS SECTION		10/15	
BY	DATE							TULLAHAN RIVER		STA. 13+250 - STA. 14+000	

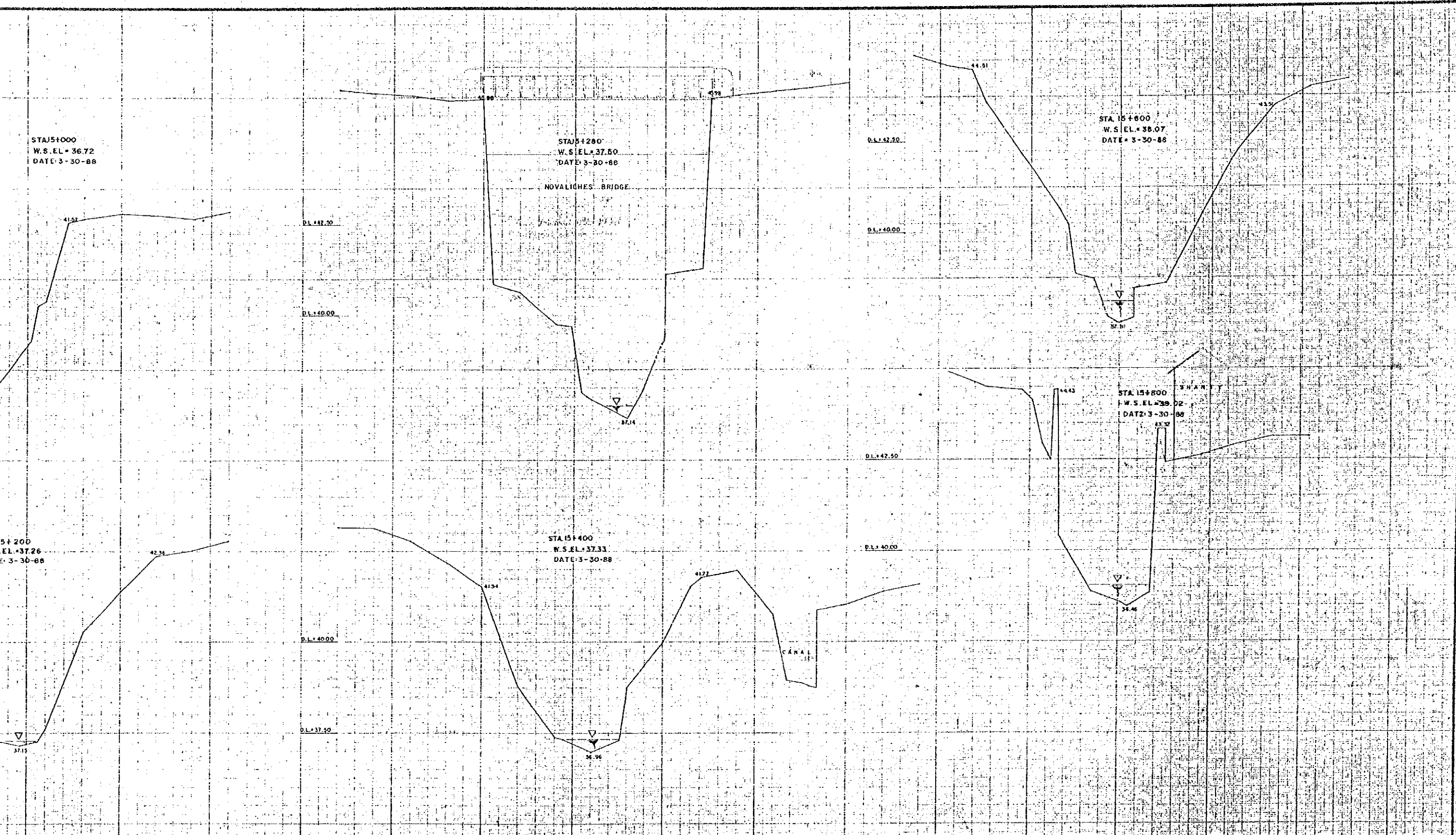


 M. ACRE SURVEYING & DEVELOPMENT	CONSULTANTS		REPUBLIC OF THE PHILIPPINES				
	SURVEYED BY:	DATE	SIGNATURE	 DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS	PROJECT ENGINEER	DATE	SIGNATURE
	CHECKED BY:	8/12/88	<i>[Signature]</i>		PROJECT MANAGER		<i>[Signature]</i>
	PROJECT MANAGER	8/11/88	<i>[Signature]</i>				<i>[Signature]</i>
			HONITO P. FAND EDGENO MANALO				

THIS IS A PIECE
OF THE ORIGINAL

[Handwritten notes]

11/15



STA 5+000
W.S. EL. = 36.72
DATE 3-30-88

STA 5+280
W.S. EL. = 37.50
DATE 3-30-88

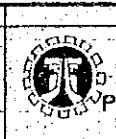
STA 15+600
W.S. EL. = 38.07
DATE 3-30-88

STA 5+200
W.S. EL. = 37.26
DATE 3-30-88

STA 15+400
W.S. EL. = 37.33
DATE 3-30-88

STA 15+800
W.S. EL. = 39.02
DATE 3-30-88

DATE	SIGNATURE
Jul. 1988	<i>[Signature]</i>
8-12-88	<i>[Signature]</i>
8-14-88	<i>[Signature]</i>



REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF
PUBLIC WORKS AND HIGHWAYS

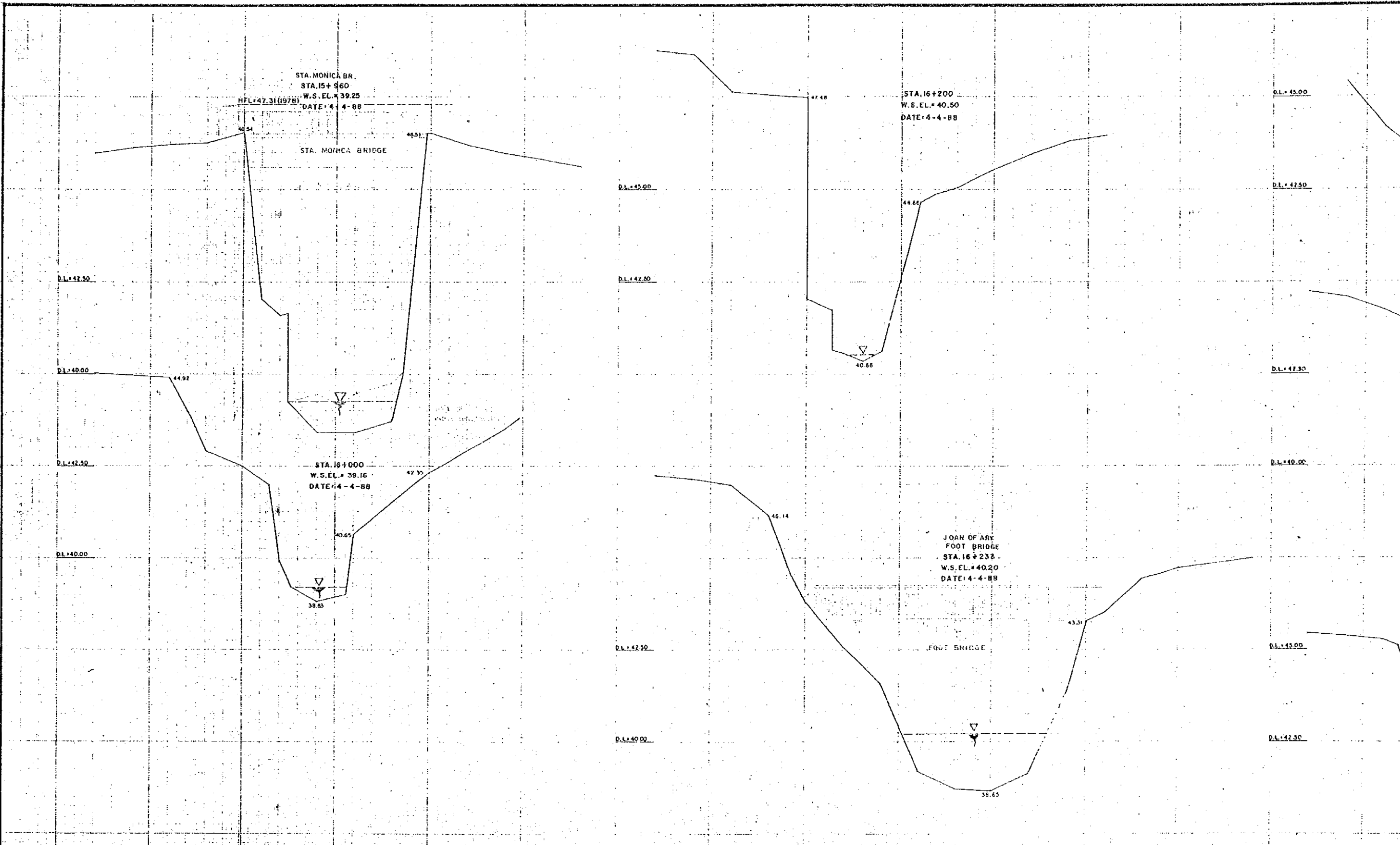
PROJECT ENGINEER
PROJECT MANAGER
HONITO P. FANO
EUGENIO MANALO

CROSS SECTION
TULLAHAN RIVER
STA 15+000 - STA 15+600

SCALE	DRWG. NO.
HORIZONTAL 1:250 VERTICAL 1:50	11/15

Metric Scale
Printed in Japan

A-9-15

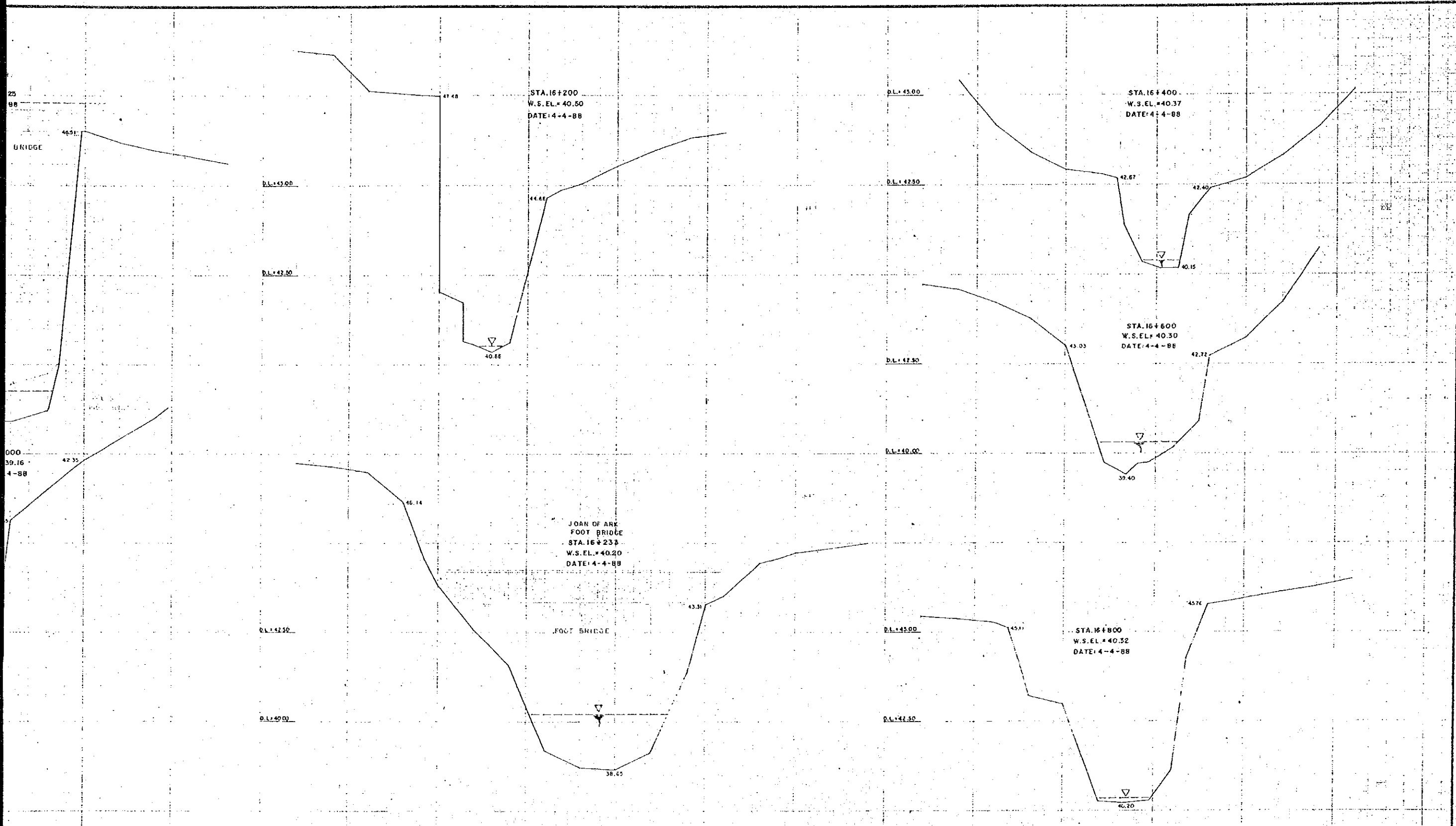



ACRE SURVEYING & DEVELOPMENT

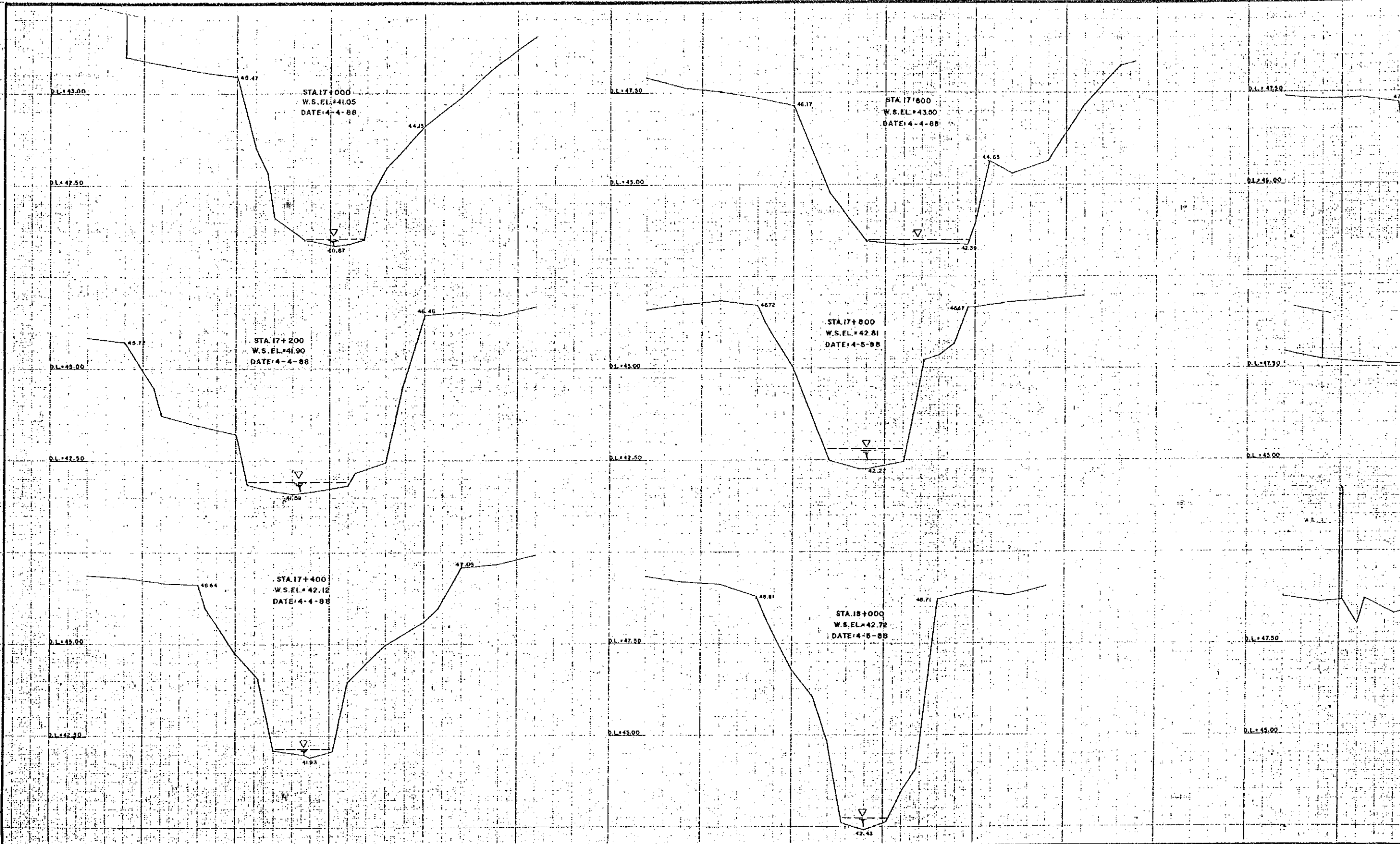
CONSULTANTS			
SURVEYED	BY	DATE	SIGNATURE
		Jul-10-88	<i>[Signature]</i>
CHECKED	BY	8-13-88	<i>[Signature]</i>
PROJECT MANAGER		8-14-88	<i>[Signature]</i>



REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS

PROJECT ENGINEER
 PROJECT MANAGER
 MONITOR FUND
 ENGINEER-IN-CHARGE



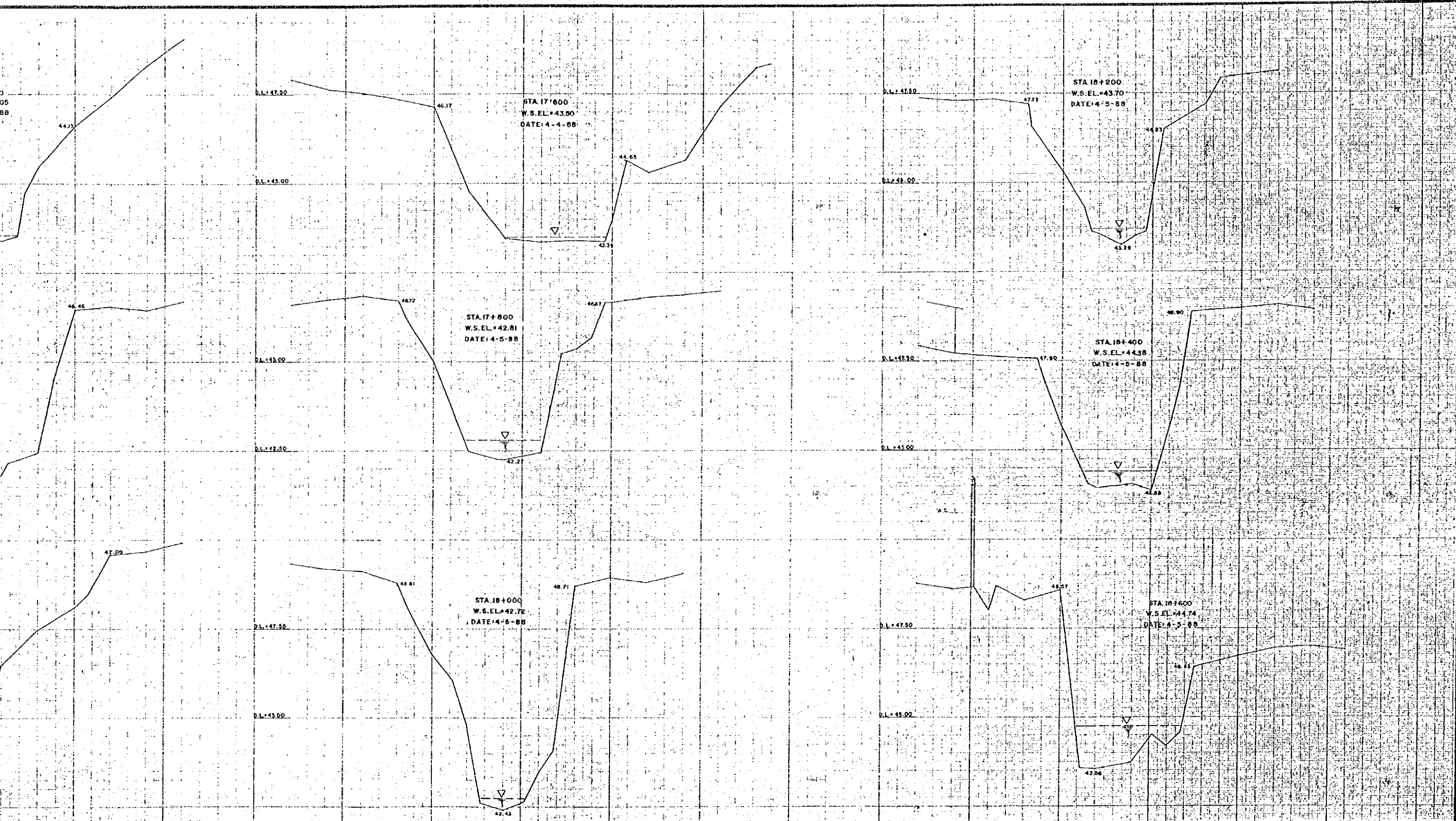
CONSULTANTS		REPUBLIC OF THE PHILIPPINES		DATE		SCALE		DRWG. NO.	
BY	DATE	SIGNATURE		PROJECT ENGINEER		HORIZONTAL		12/15	
BY	8-19-88	<i>[Signature]</i>		PROJECT MANAGER		VERTICAL		1:50	
BY	8-14-88	<i>[Signature]</i>		 DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS		PLAN AND PROFILE TULAGHAN RIVER STA. 16+960 - STA. 16+800			



 ACRE SURVEYING & DEVELOPMENT	CONSULTANTS		REPUBLIC OF THE PHILIPPINES		DATE	
	SURVEYED BY	DATE	SIGNATURE	PROJECT ENGINEER		DATE
	CHECKED BY	DATE	SIGNATURE	PROJECT MANAGER		DATE
	PROJECT MANAGER	DATE	SIGNATURE	PROJECT ENGINEER		DATE
			 DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS		NONITO P. PANO EUGENIO M. RONALD	

M&S Inc.
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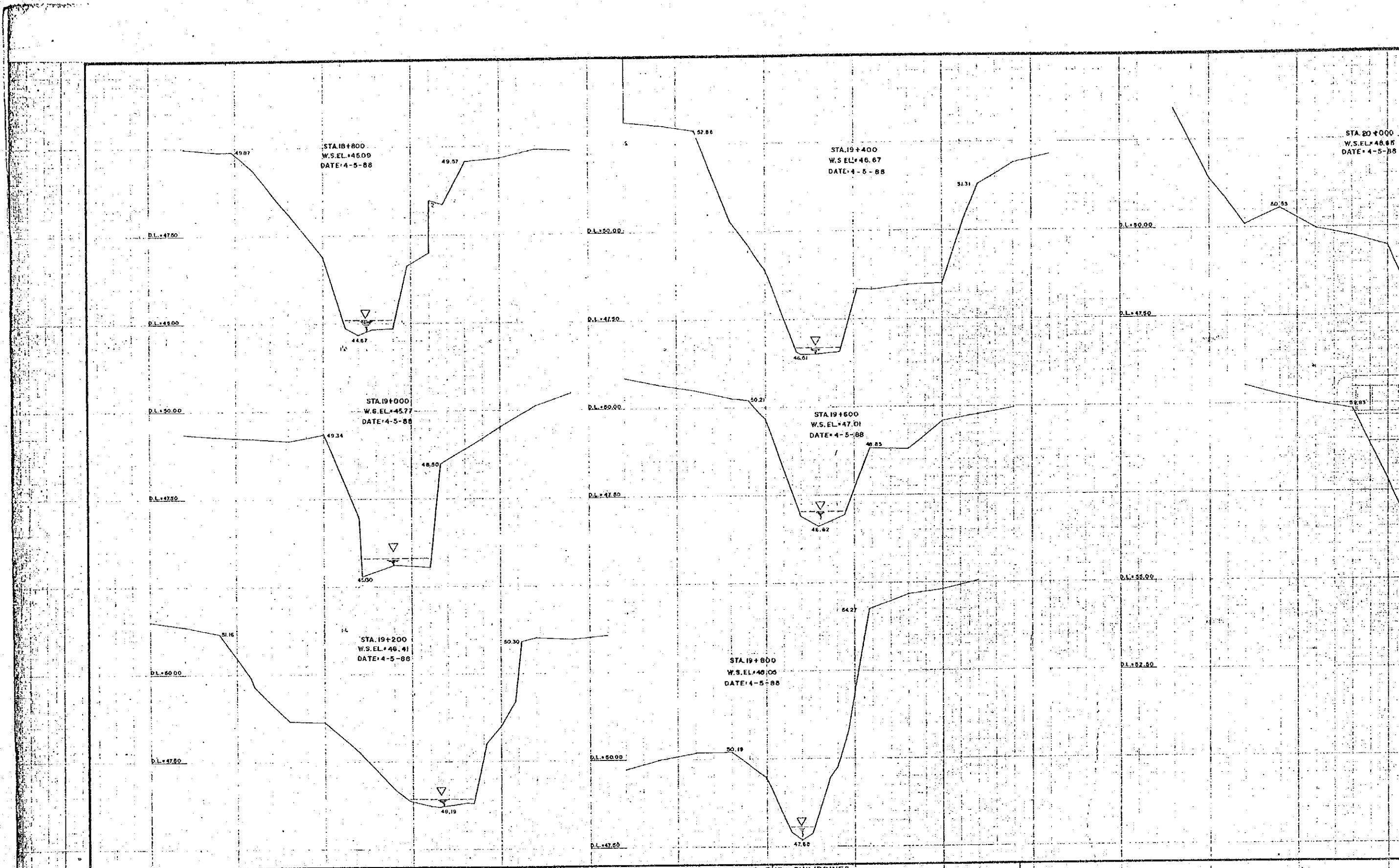
CONSULTANTS			REPUBLIC OF THE PHILIPPINES			SCALE		DRWG. NO.
DATE	SIGNATURE		DATE	SIGNATURE		HORIZONTAL		
Jul 10, 88	<i>[Signature]</i>	PROJECT ENGINEER		RONITO F. PANO		1" = 250'	137/5	
8/15/88	<i>[Signature]</i>	PROJECT MANAGER		EUGENIO MANALO		VERTICAL		
8/14/88	<i>[Signature]</i>					1" = 50'		



DEPARTMENT OF
PUBLIC WORKS AND HIGHWAYS

PLAN AND PROFILE
TULLAHAN RIVER STA. 17+000, STA. 18+600

Must be filed
in the office

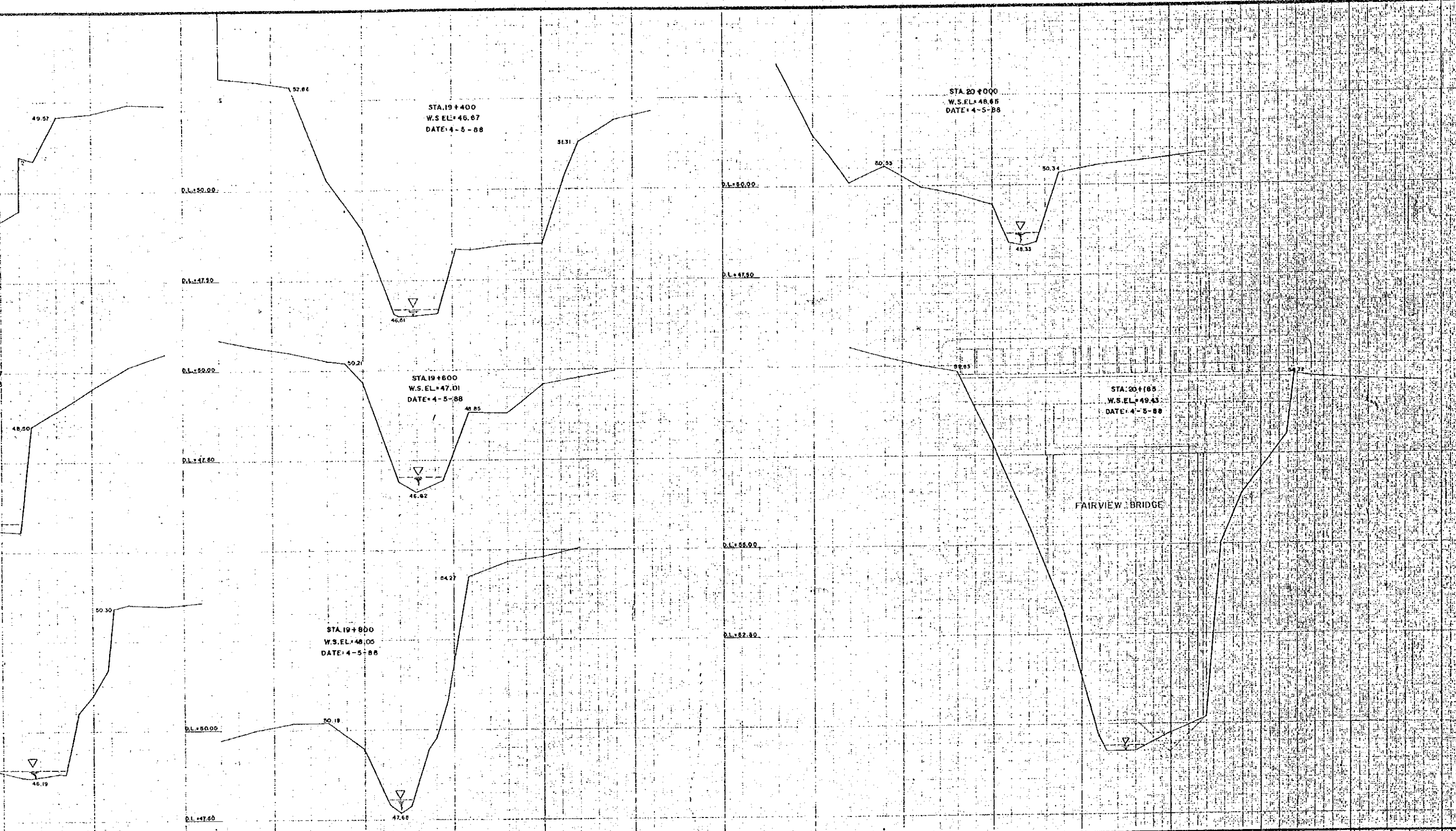


ACRE SURVEYING & DEVELOPMENT

CONSULTANTS	
DATE	SIGNATURE
5-1-88	<i>Charles A. J.</i>
8-1-88	<i>[Signature]</i>
8-11-88	<i>[Signature]</i>

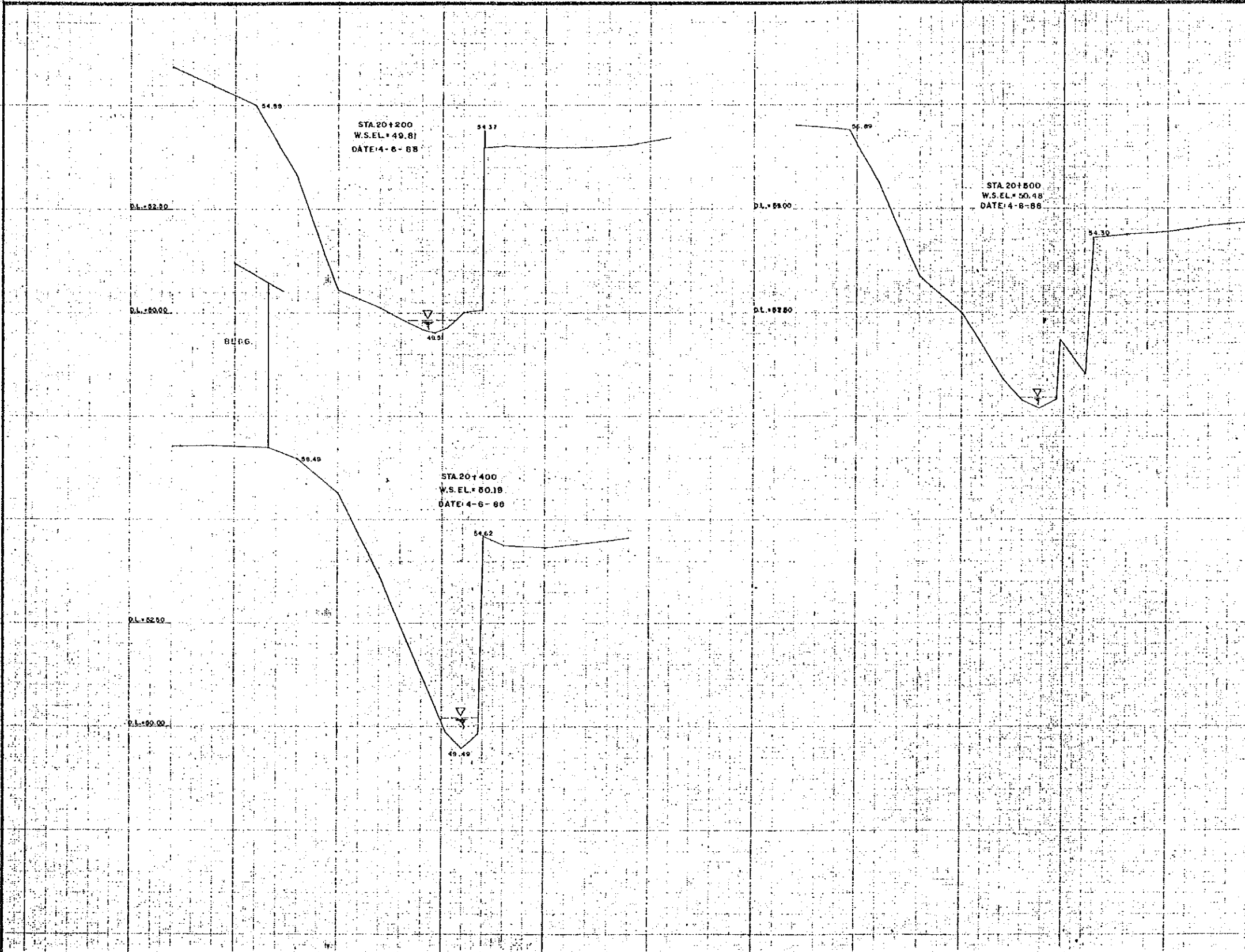
REPUBLIC OF THE PHILIPPINES
 DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS

DATE	SIGNATURE
	<i>NONITO P. AND</i>
	<i>EUGENIO M. MANALO</i>



CONSULTANTS		REPUBLIC OF THE PHILIPPINES		DATE: 4-5-88		SCALE		DRWG. NO.	
DATE	SIGNATURE	DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS		PROJECT ENGINEER	NONITO T. AND	PLAN AND PROFILE		HORIZONTAL	1:250
8-1-88	<i>[Signature]</i>			PROJECT MANAGER	EUGENIO M. MANALO	TULLAHAN RIVER - STA. 18+600 - STA. 20+000		VERTICAL	1:50
8-1-88	<i>[Signature]</i>								14/15

Map for piece
Printed in Japan



ACRE SURVEYING
& DEVELOPMENT

CONSULTANTS

	DATE	SIGNATURE
SURVEYED BY	Jul 26, 88	<i>[Signature]</i>
CHECKED BY	8-1-88	<i>[Signature]</i>
PROJECT MANAGER	8-1-88	<i>[Signature]</i>

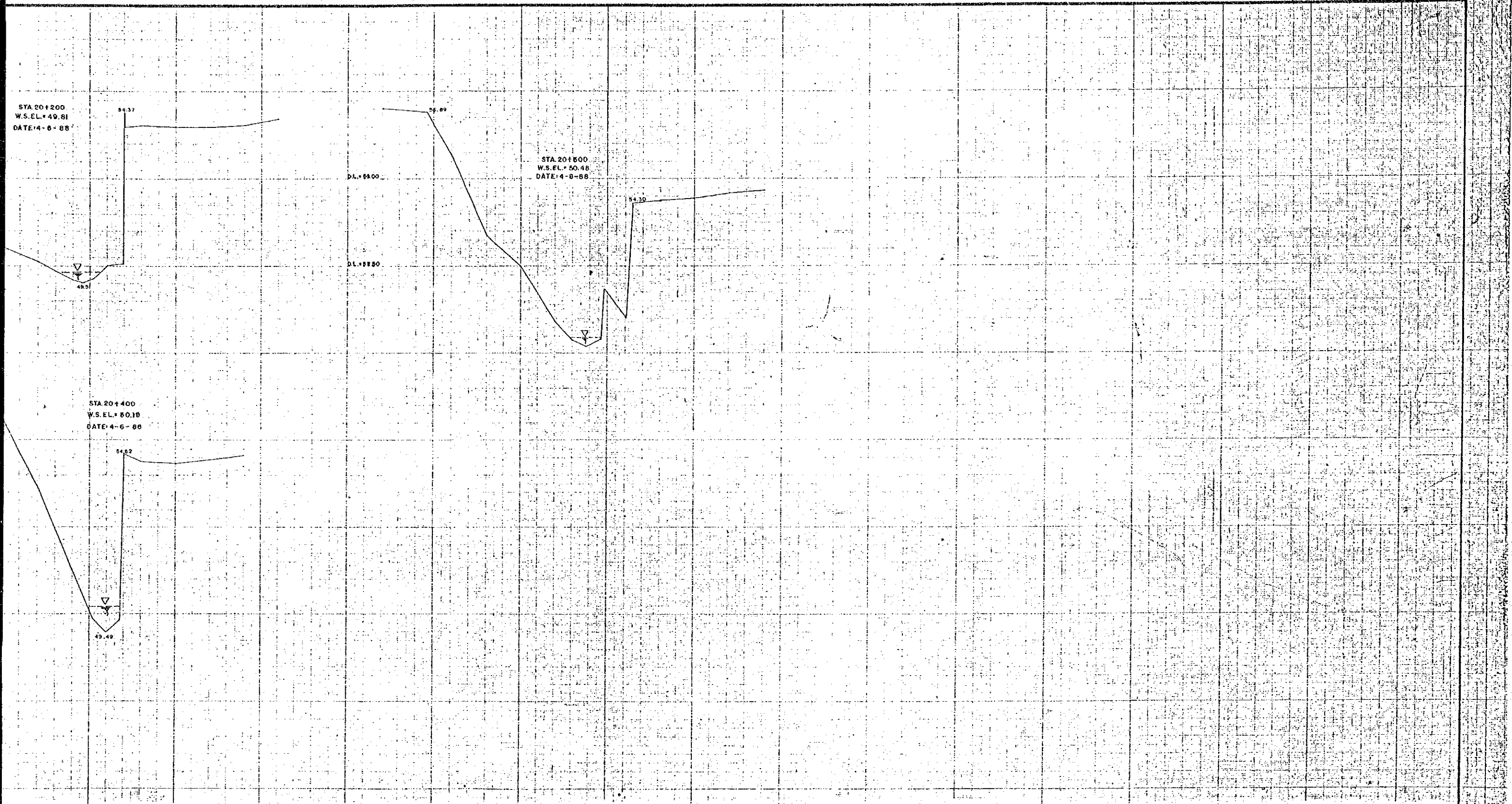


DEPARTMENT OF
PUBLIC WORKS AND HIGHWAYS

REPUBLIC OF THE PHILIPPINES

PROJECT ENGINEER
PROJECT MANAGER

DATE: *[Signature]*
SIGNATURE: *[Signature]*
NONITO LEANDRO
EUGENIO MANALO



CONSULTANTS	
DATE	SIGNATURE
8/1/88	<i>[Signature]</i>
8/1/88	<i>[Signature]</i>

REPUBLIC OF THE PHILIPPINES	
DEPARTMENT OF PUBLIC WORKS AND HIGHWAYS	
PROJECT ENGINEER	<i>[Signature]</i> RONITO P. AND
PROJECT MANAGER	<i>[Signature]</i> EUGENIO R. MARIAL

DATE	SIGNATURE

CROSS SECTION
TULLAHAN RIVER
STA 20+200 - STA 20+300

SCALE	DRWS NO.
HORIZONTAL 1:250 VERTICAL 1:50	18/15

Max. Deflection
1/1000

MASTIC FLOOR
1:1000

A-10 PARAÑAQUE, SOUTH PARAÑAQUE, SAN DIONISIO,
DONGALO, LAS PINAS AND ZAPOTE RIVERS

INDEX MAP (1 SHEET)

LONGITUDINAL PROFILE (6 SHEET)

CROSS SECTION (18 SHEET)



NOTES:
 A. Datum Line (D.L.) = 10.00m. below W.L.M.
 B. M.L.V. = 0.462 m. below H.S.L.
 C. Bench Mark used;

SAN DIONISIO RIVER		SAN PASCAL RIVER		ESTERO DE CALINA		ZAROTE EST.		PASASAYAN RIVER	
BM	D.L.	BM	D.L.	BM	D.L.	BM	D.L.	BM	D.L.
1. BM - 1	11.700	1. BM - 1	11.210	1. BM - 1	11.899	1. BM - 1	11.991	1. BM - 1	11.991
2. BM - 1	12.138	2. BM - 1	12.092	2. BM - 2	12.151	2. BM - 2	12.151	2. BM - 2	12.151
3. BM - 2	12.263	3. BM - 2	12.263	3. BM - 3	13.712	3. BM - 3	13.712	3. BM - 3	13.712
4. BM - 3	11.684	4. BM - 3	12.277	4. BM - 4	13.005	4. BM - 4	13.005	4. BM - 4	13.005
5. BM - 4	11.539	5. BM - 4	12.177						
6. BM - 2	12.078	6. BM - 2	12.177						
		7. BM - 3	16.077						
		8. BM - 3	16.077						
		9. BM - 3	16.077						