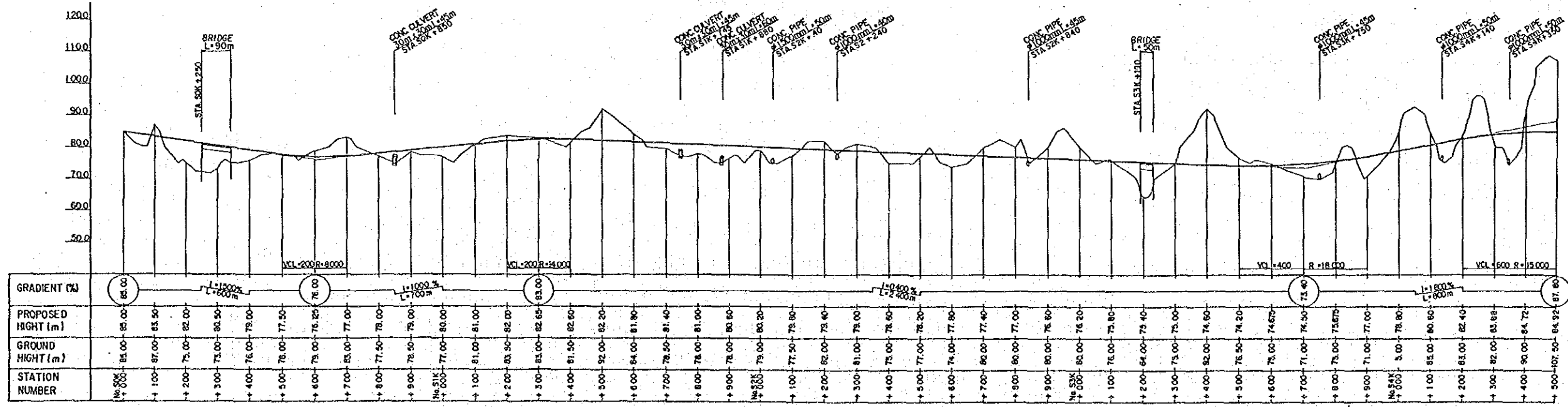


NO. I.P.S-2
IA = 54° 30'
R = 1100
TL = 566.537
CL = 1046.325
SL = 137.321

NO. I.P.S-1
IA = 52° 30'
R = 800
TL = 394.516
CL = 733.038
SL = 91.988

NO. I.P.S-3
IA = 24° 00'
R = 1400
TL = 297.579
CL = 586.431
SL = 31.277

NO. I.P.S-4
IA = 43° 30'
R = 650
TL = 259.324
CL = 493.492
SL = 49.821



PLAN & PROFILE SABANITAS SECTION (1)
PLANO-PERFIL SECCION DE SABANITAS

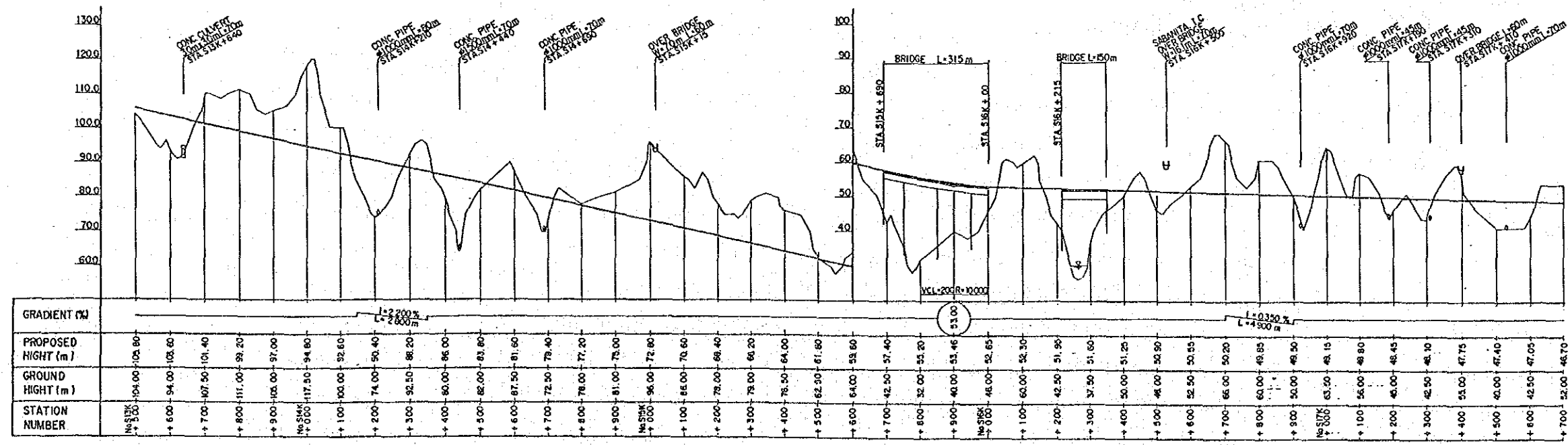
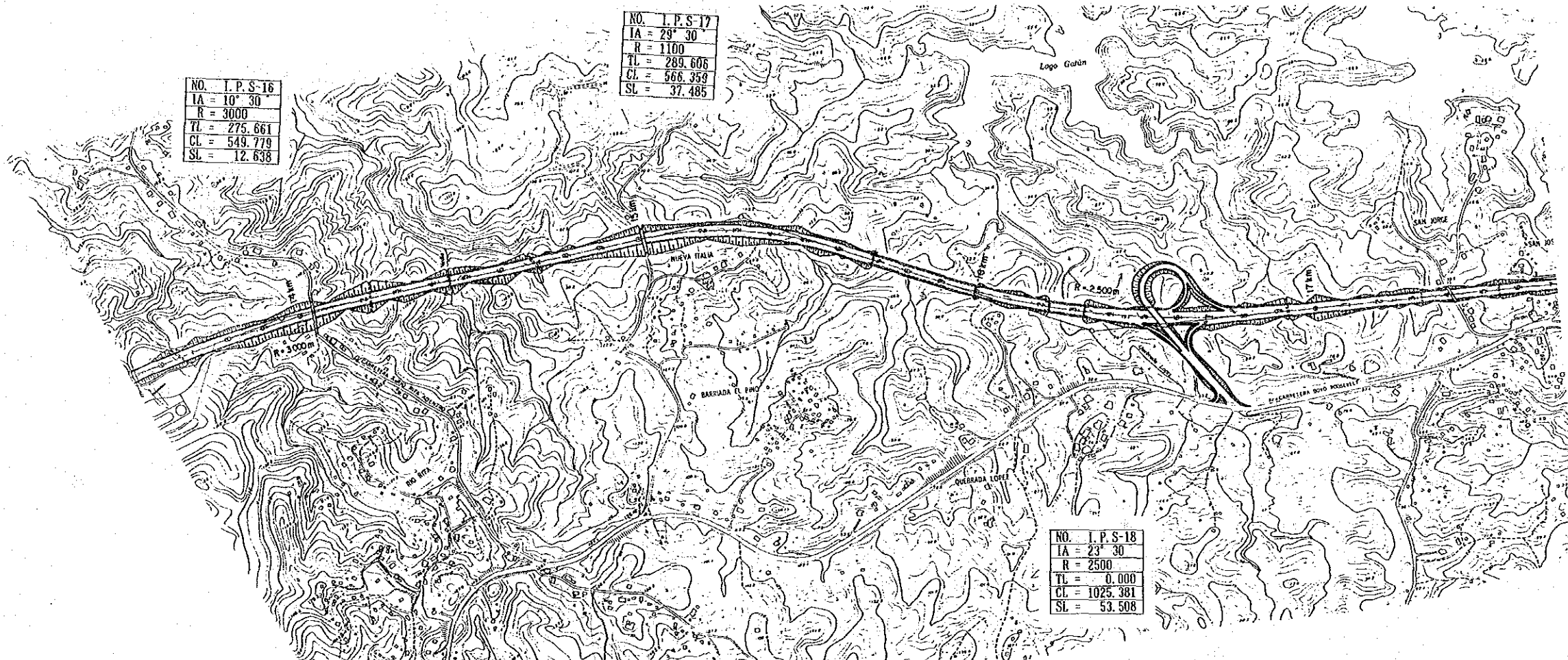
M O P
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SCALE
 ESCALA
 DATE
 FECHA

DWG. NO.
 HOJA NO.
 PAGE NO.
 PAGINA NO.



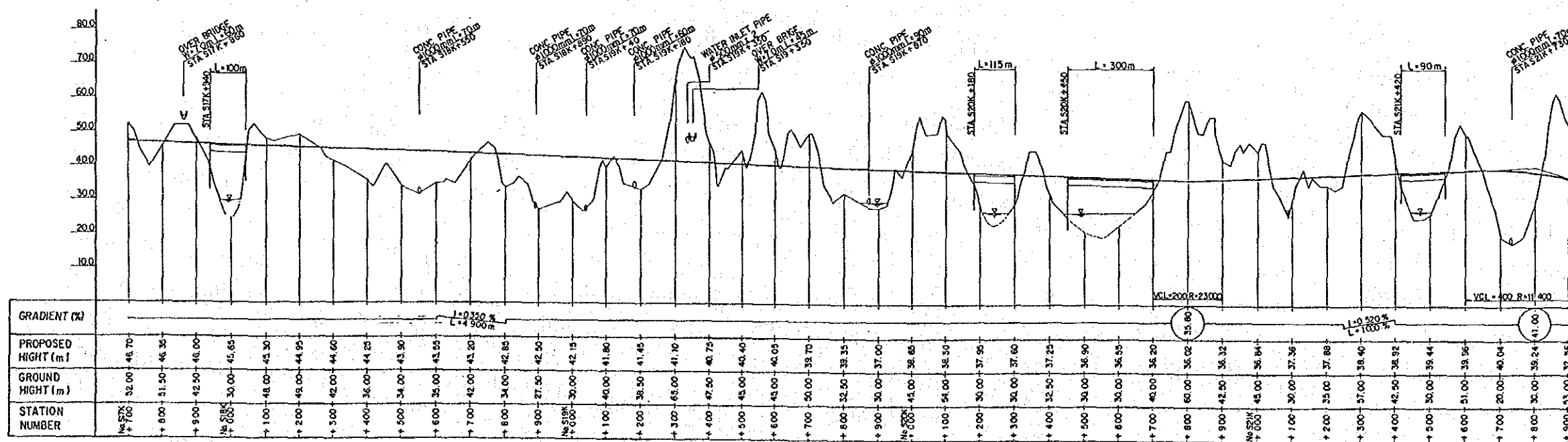
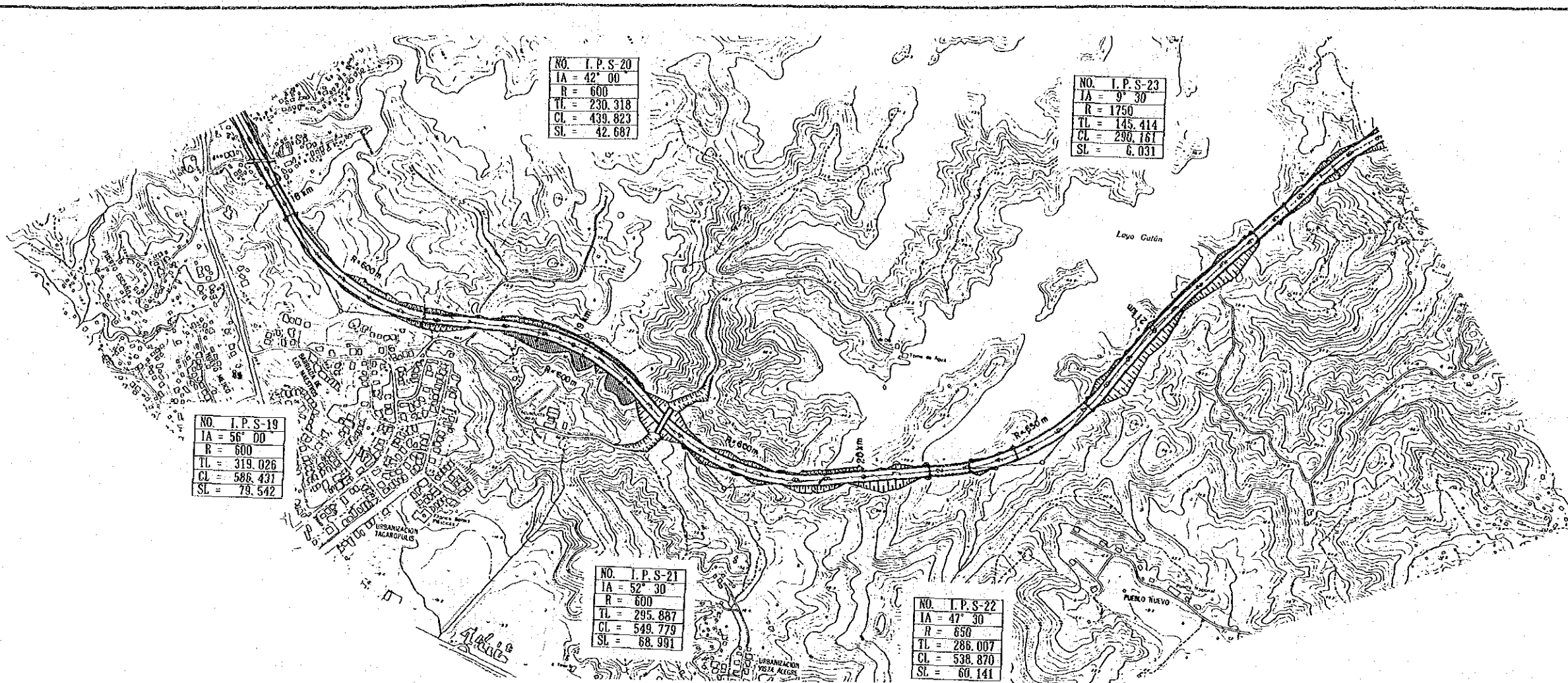
PLAN & PROFILE SABANITAS SECTION (4)
PLANO-PERFIL SECCION DE SABANITAS

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PLAN & PROFILE SABANITAS SECTION (5)
PLANO-PERFIL SECCION DE SABANITAS

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ESCALA

DATE
FECHA

DWG. NO.
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PAGINA NO.

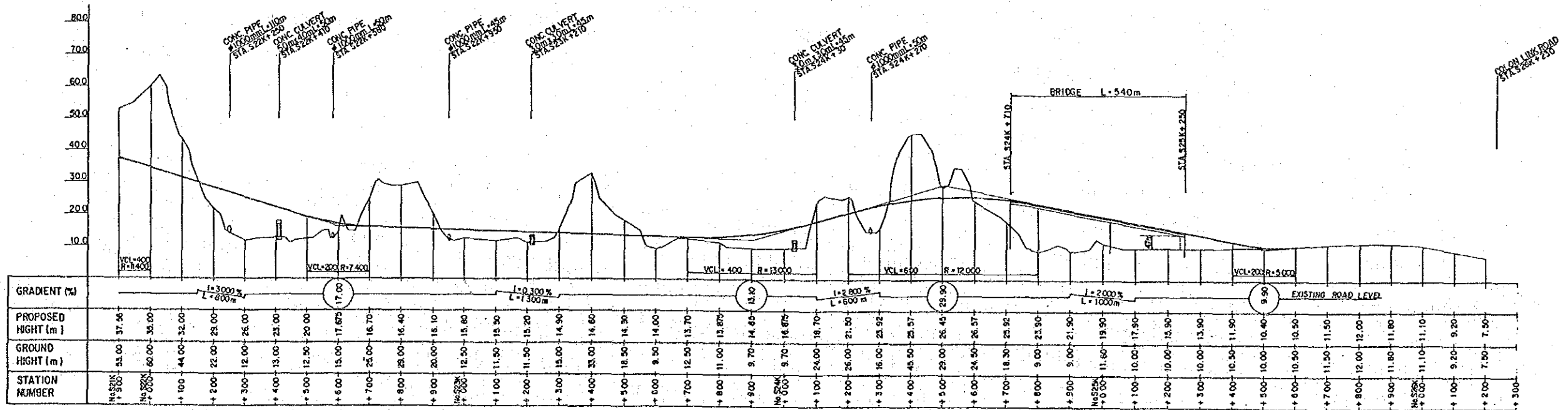
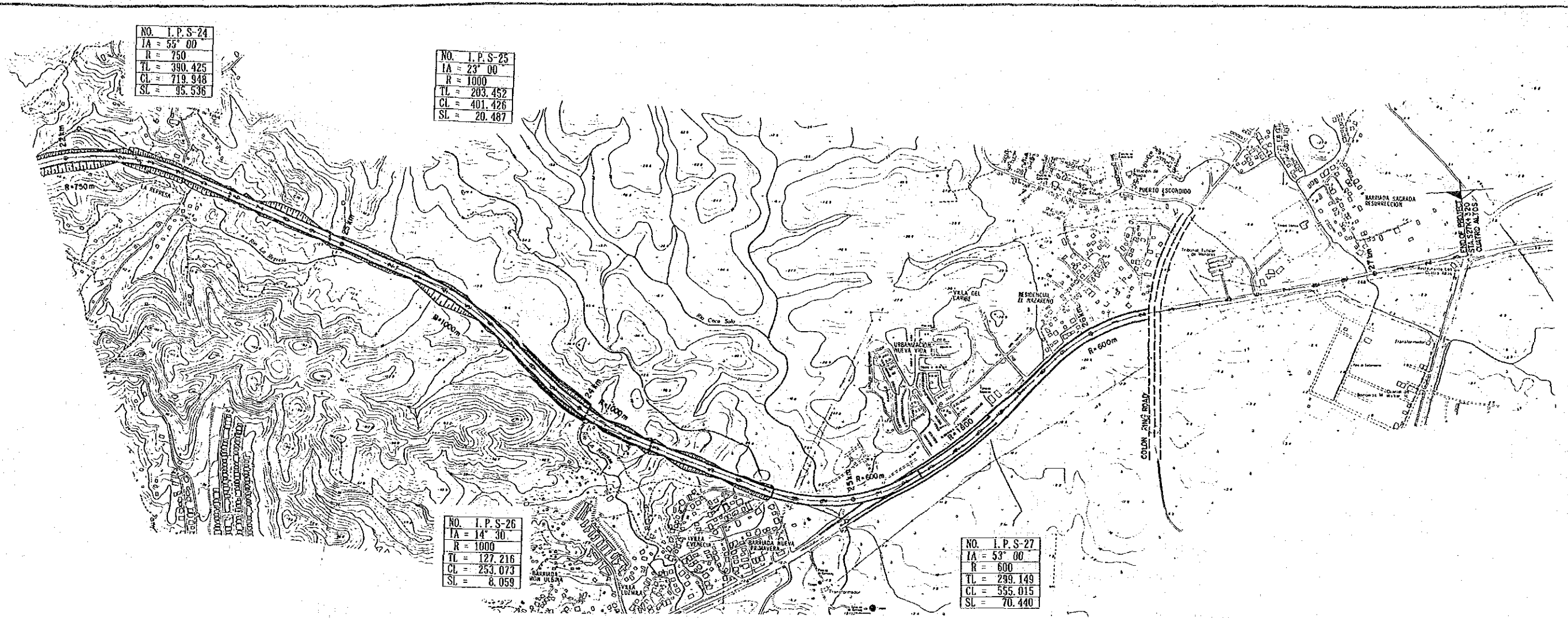
16/49

NO. I. P. S-24
 IA = 55° 00'
 R = 750
 TL = 390.425
 CL = 719.948
 SL = 95.536

NO. I. P. S-25
 IA = 23° 00'
 R = 1000
 TL = 203.452
 CL = 401.426
 SL = 20.487

NO. I. P. S-26
 IA = 14° 30'
 R = 1000
 TL = 127.216
 CL = 253.073
 SL = 8.059

NO. I. P. S-27
 IA = 53° 00'
 R = 600
 TL = 299.149
 CL = 555.015
 SL = 70.440



PLAN & PROFILE SABANITAS SECTION (6)
PLANO-PERFIL SECCION DE SABANITAS

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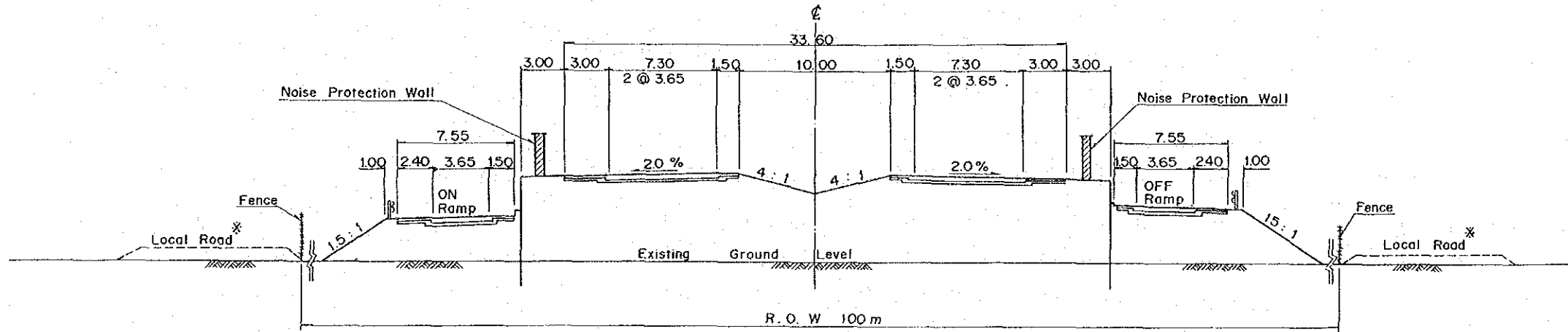
THE FEASIBILITY STUDY ON THE IMPROVEMENT OF THE PANAMA-COLON HIGHWAY
EL ESTUDIO DE FACTIBILIDAD SOBRE EL MEJORAMIENTO DE LA CARRETERA ENTRE PANAMA Y COLON

SCALE
 ESCALA
 DATE
 FECHA

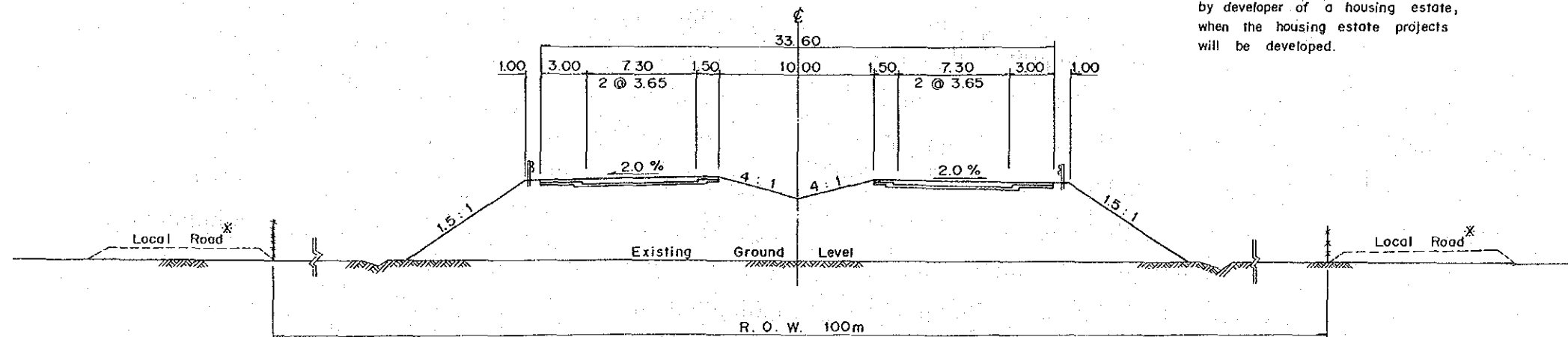
DWG. NO.
 HOJA NO.
 PAGE NO.
 PAGINA NO.

TYPICAL CROSS — SECTION

STA No.AOK + 200
(Alcarde Diaz Section)



STA. No.A2K + 400
(Alcarde Diaz Section)



* The Local Roads should be constructed by developer of a housing estate, when the housing estate projects will be developed.

CROSS SECTION
SECCION TRANSVERSAL

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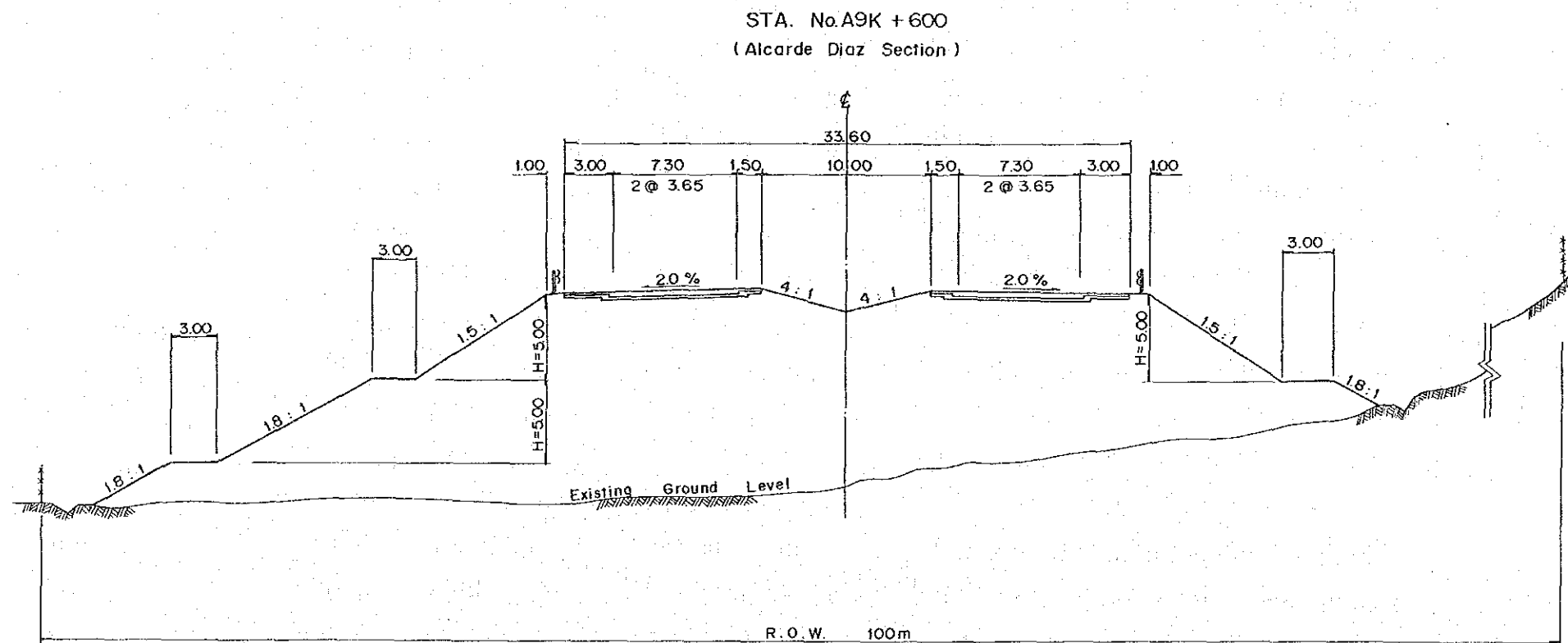
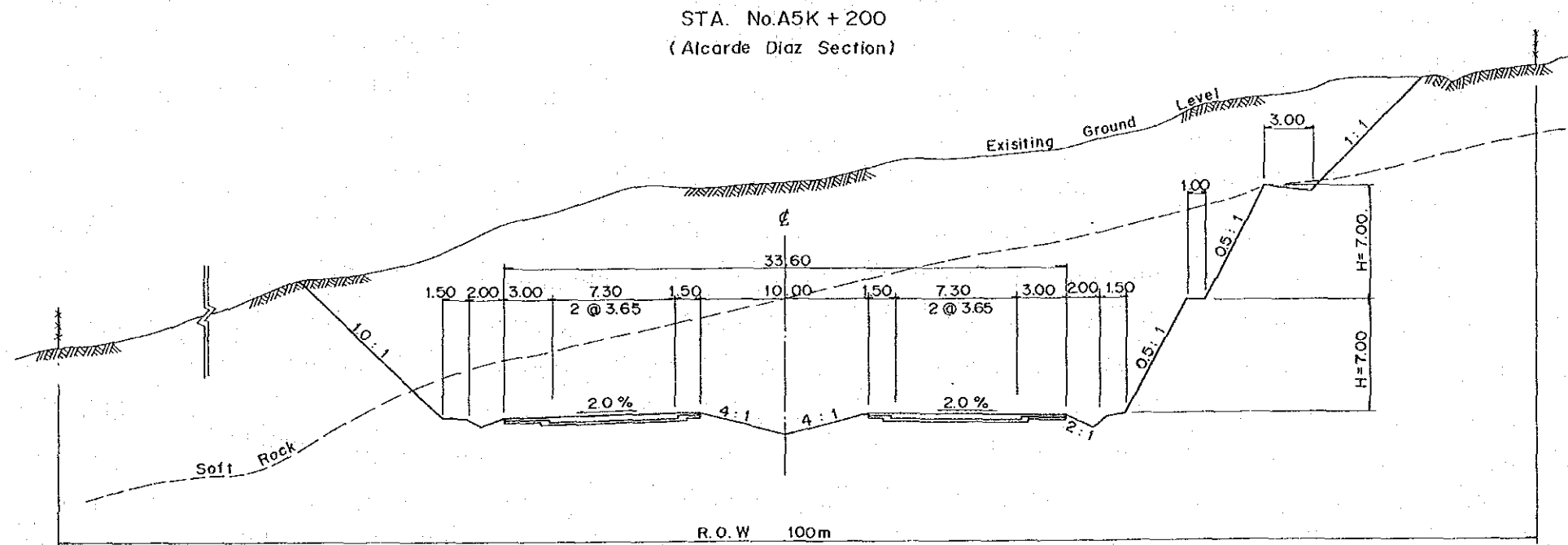
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CROSS SECTION
SECCION TRANSVERSAL

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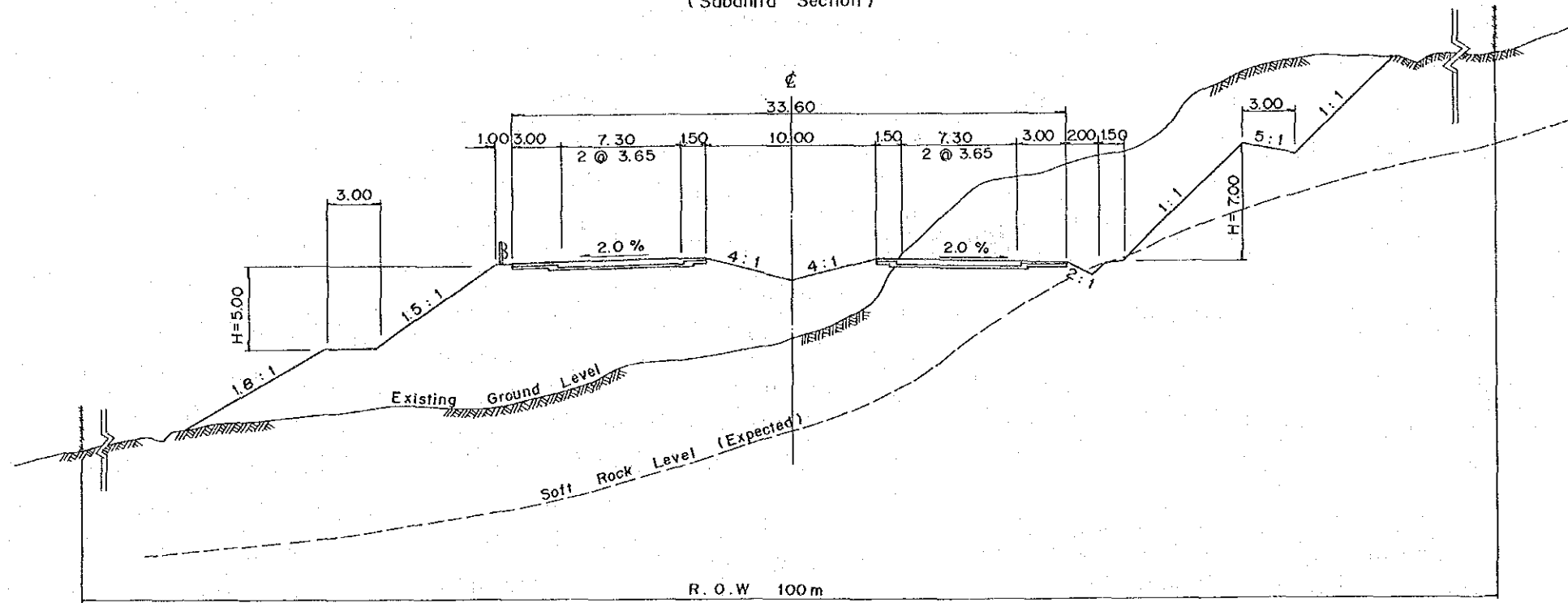
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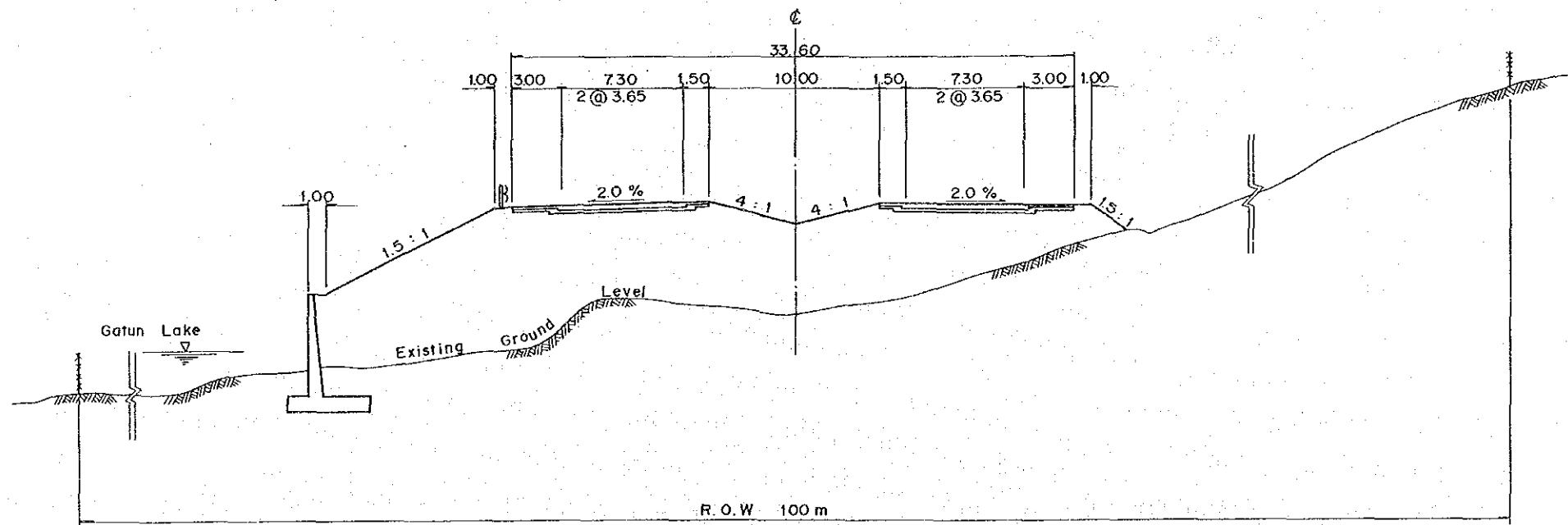
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HOJA NO.
PAGE NO.
PAGINA NO.

19/49

STA. No.S13K + 100
(Sabanita Section)



STA. No.S18K + 400
(Sabanita Section)



CROSS SECTION
SECCION TRANSVERSAL

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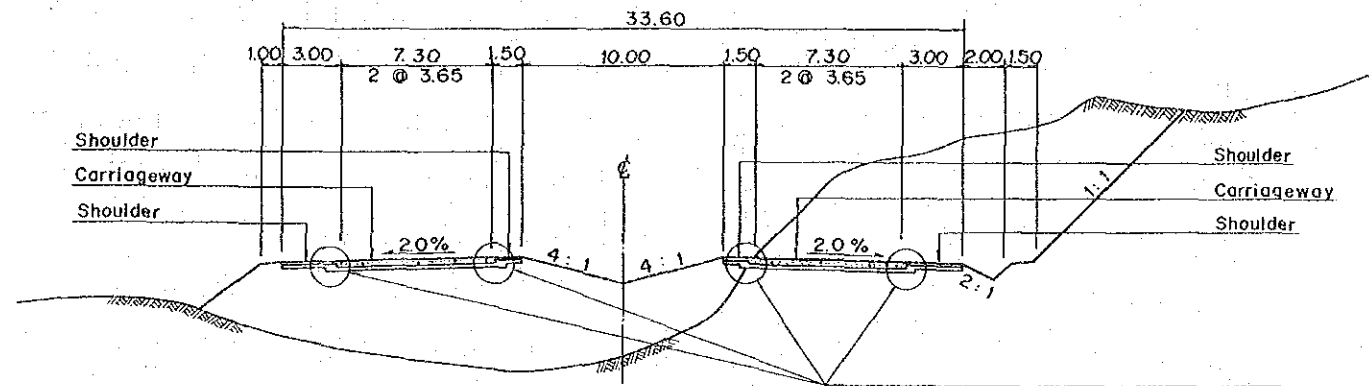
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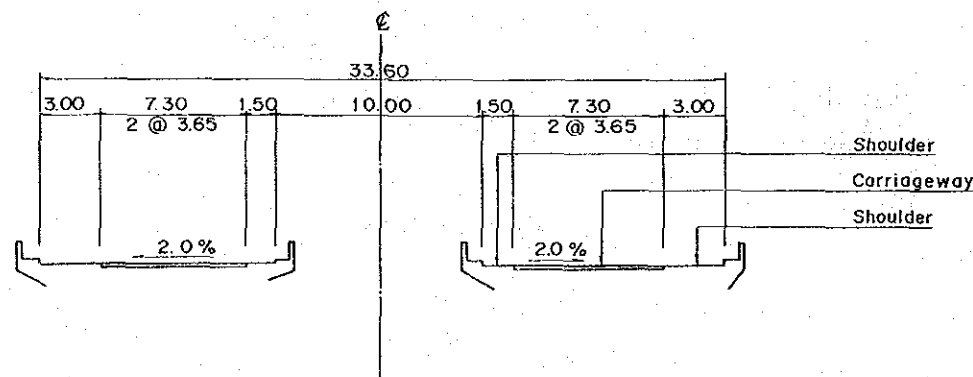
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PAGINA NO.

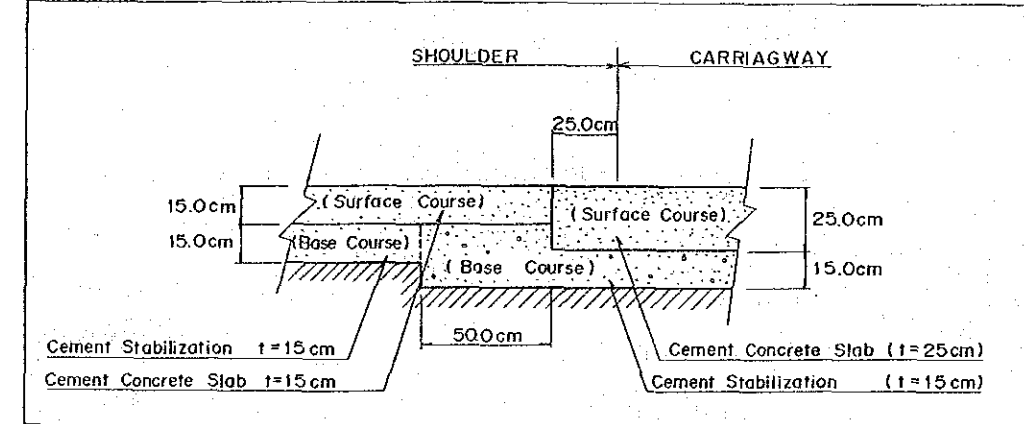
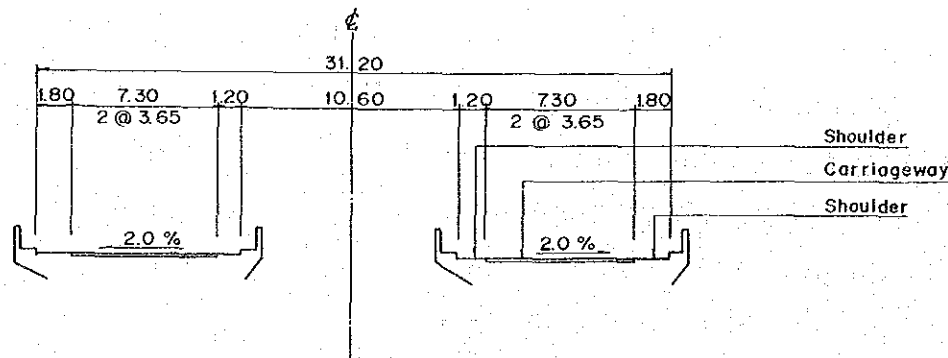
Pavement Cross-Section



Bridge Cross-Section
(Bridge Length L < 50m)



Bridge Cross-Section
(Bridge Length L > 50m)



CROSS SECTION-PAVEMENT & BRIDGE
SECCION TRANSVERSAL-PAVIMENTO Y PUENTE

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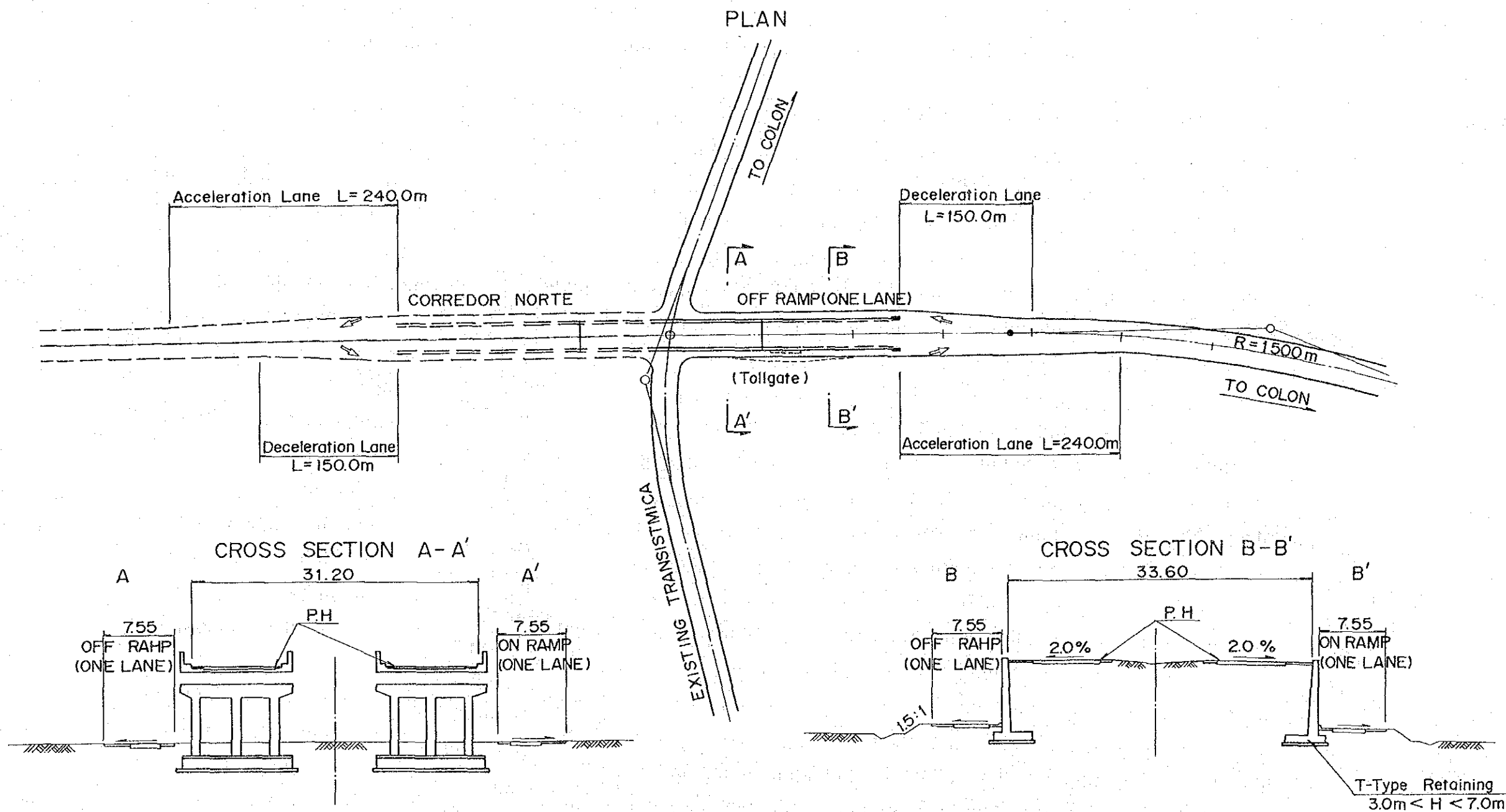
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Interchange (Diamondo Type) STA. AOK+0.00



INTERCHANGE (DIAMOND TYPE)
INTERSECCION (TIPO DIAMANTE)

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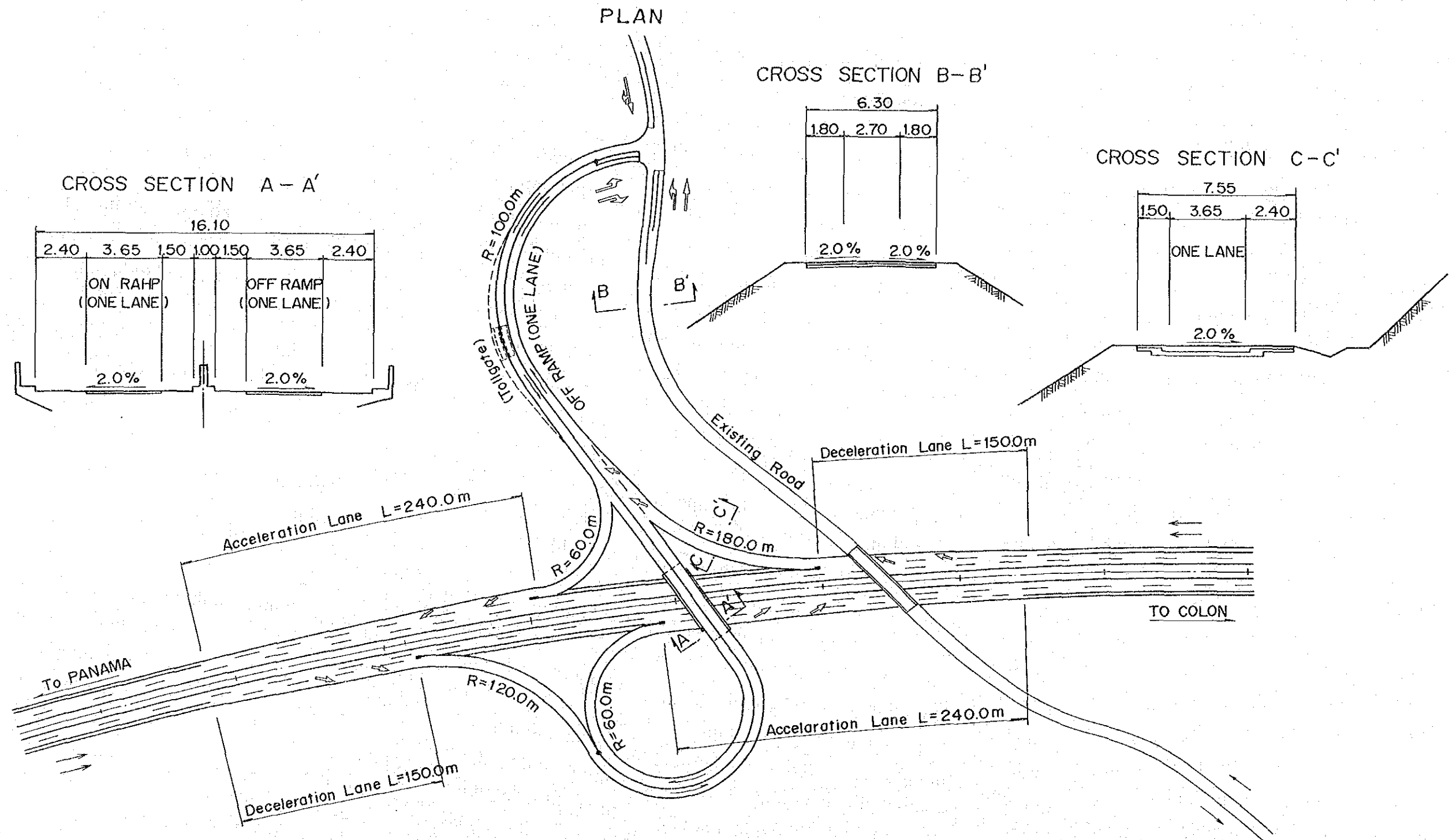
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SCALE
ESCALA
DATE
FECHA

DWG. NO.
HOJA NO.
PAGE NO.
PAGINA NO.

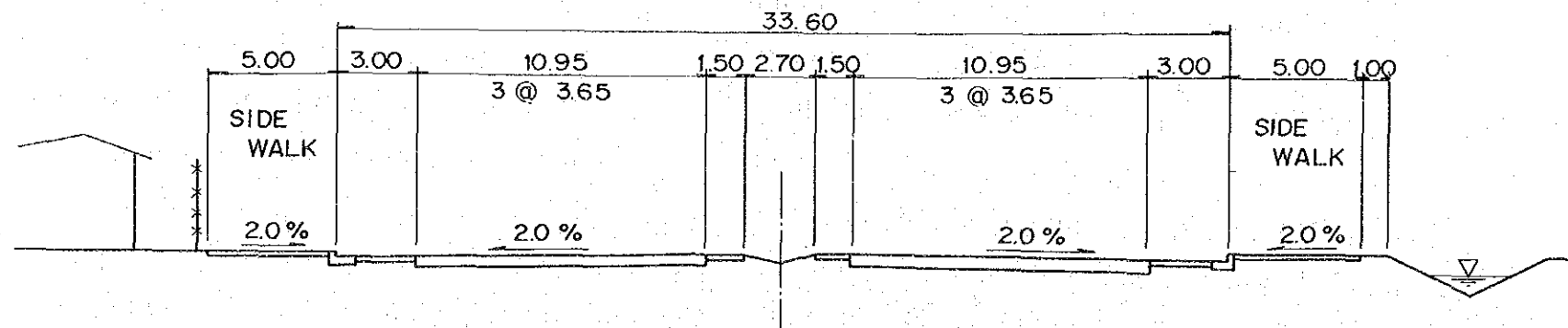
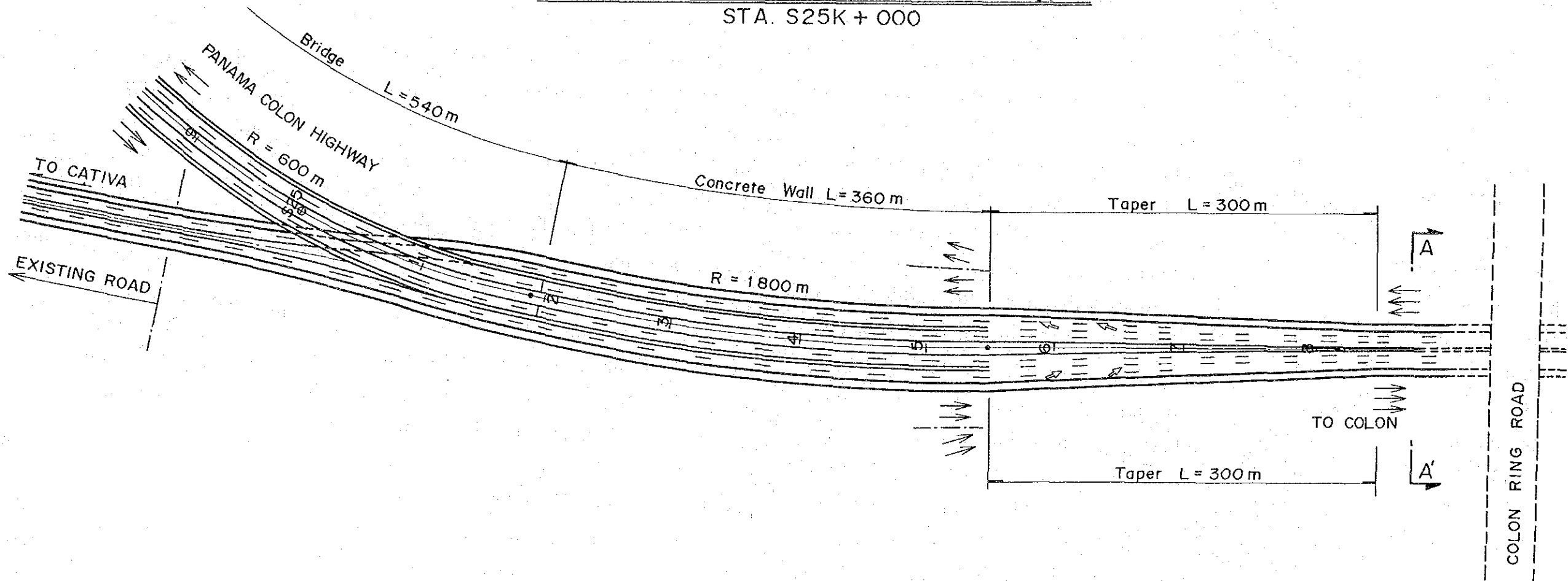
Interchange (Trumpet Type)



INTERCHANGE (TRUMPET TYPE) INTERSECCION (TIPO TROMPETA)	MOP MINISTRY OF PUBLIC WORKS THE REPUBLIC OF PANAMA MINISTERIO DE OBRAS PUBLICAS	JICA JAPAN INTERNATIONAL COOPERATION AGENCY AGENCIA DE COOPERACION INTERNACIONAL DEL JAPAN	THE FEASIBILITY STUDY ON THE IMPROVEMENT OF THE PANAMA-COLON HIGHWAY EL ESTUDIO DE FACTIBILIDAD SOBRE EL MEJORAMIENTO DE LA CARRETERA ENTRE PANAMA Y COLON	
				SCALE ESCALA
			DATE FECHA	PAGE NO. PAGINA NO.

Interchange (Three Leg Directional Type)

STA. S25K + 000



INTERCHANGE (THREE LEG DIRECTIONAL TYPE)
INTERSECCION (TIPO DIRECCIONAL EN TRES FASES)

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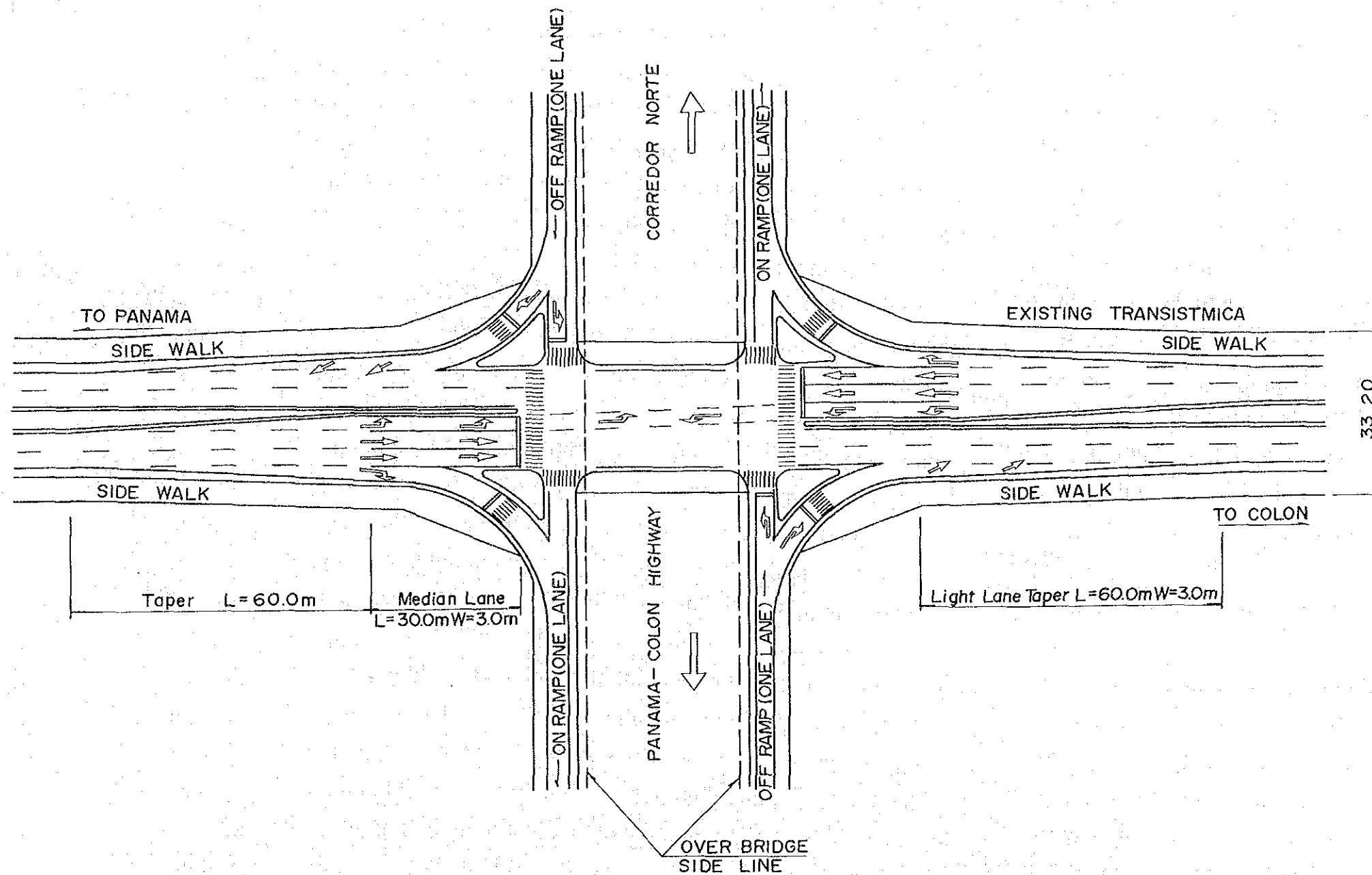
THE FEASIBILITY STUDY ON THE IMPROVEMENT OF THE PANAMA-COLON HIGHWAY
EL ESTUDIO DE FACTIBILIDAD SOBRE EL MEJORAMIENTO DE LA CARRETERA ENTRE PANAMA Y COLON

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At-Grade Intersection STA. AOK + 0.00



AT-GRADE INTERSECTION -SAN MIGUELITO I.C.
INTERSECCION A NIVEL - SAN MIGUELITO I.S.

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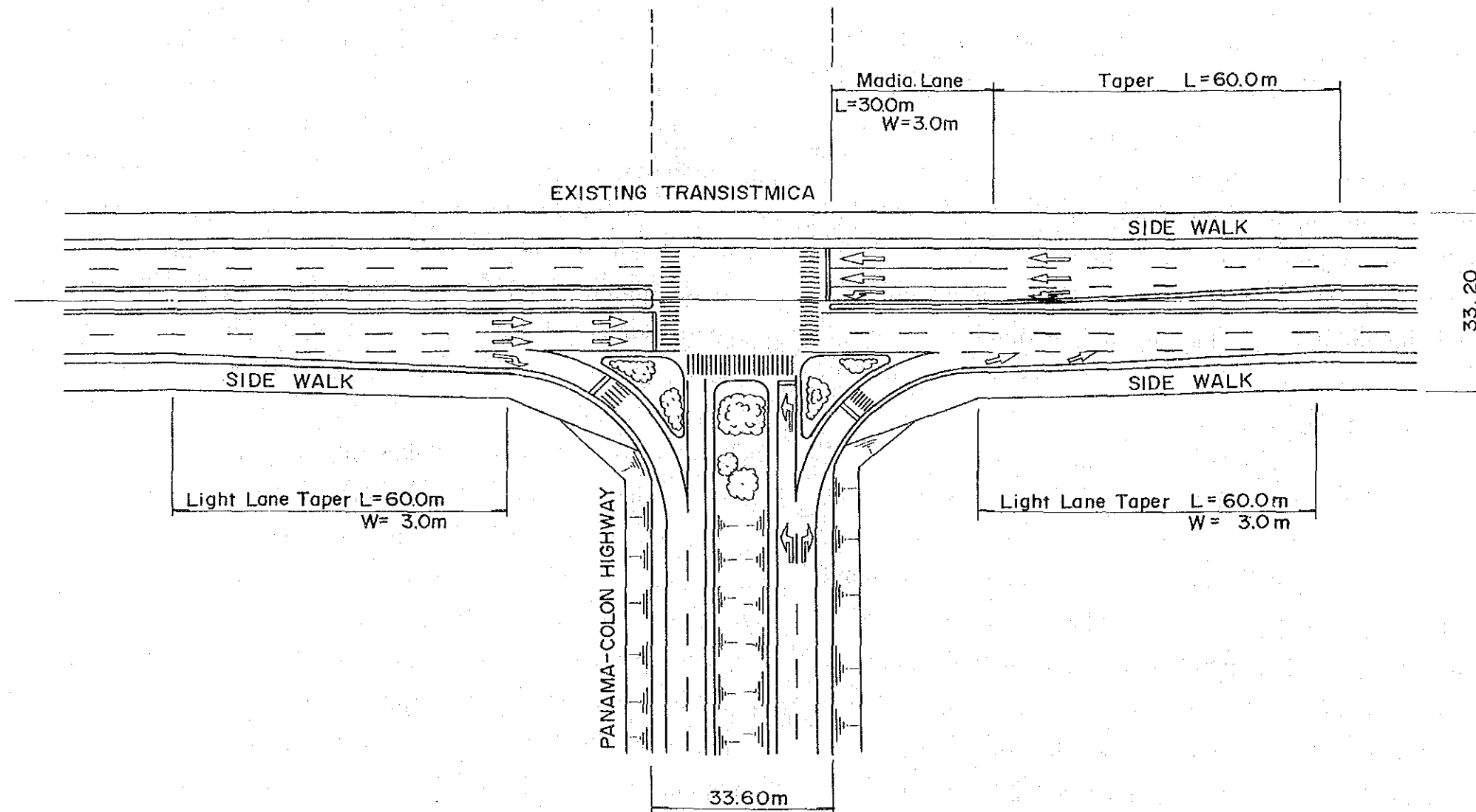
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 ESCALA
 DATE
 FECHA

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 PAGINA NO.

At-Grade Intersection STA. A20K+215.0



AT-GRADE INTERSECTION
INTERSECCION A NIVEL

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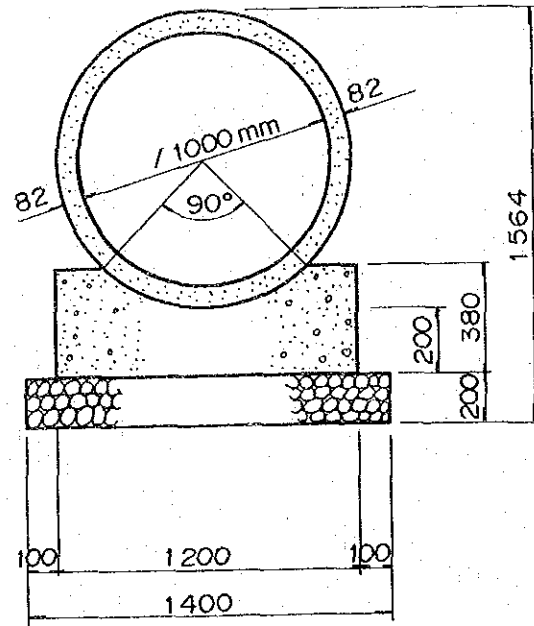
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DATE
FECHA

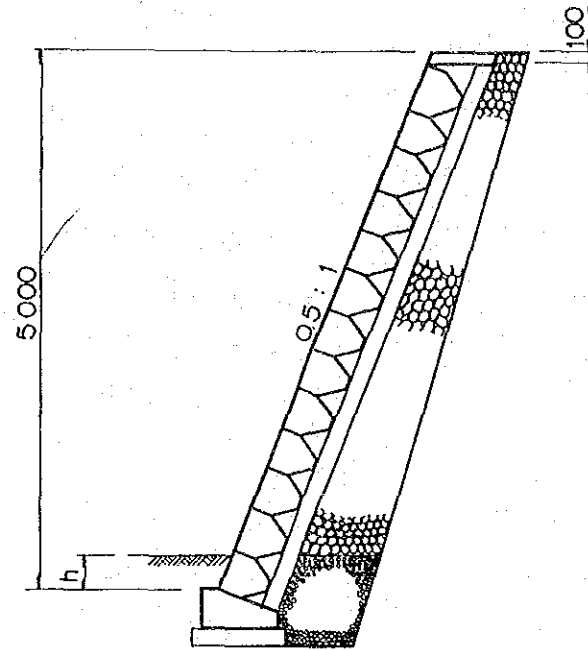
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CONC. PIPE

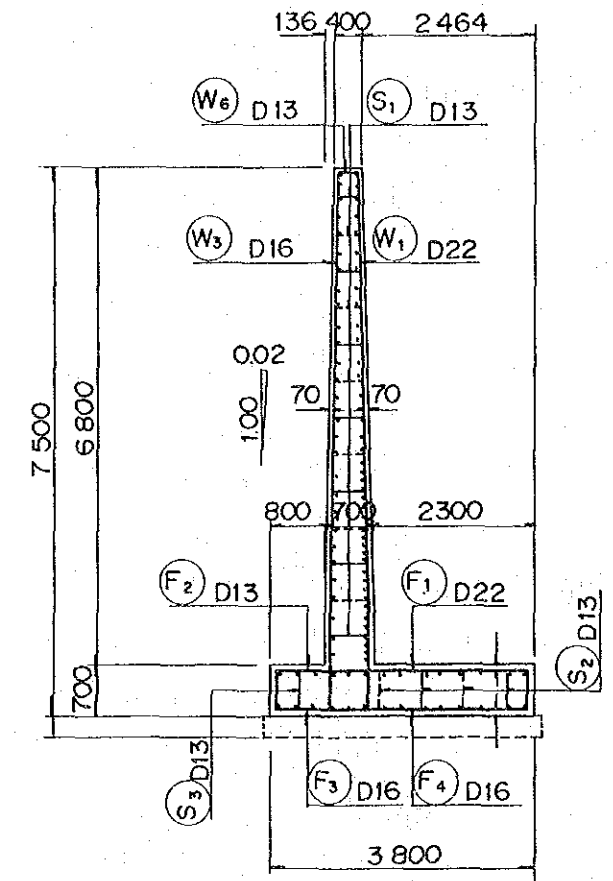


CONC. PIPE ϕ 1000m



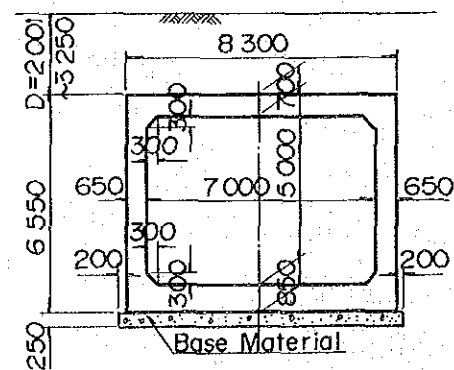
CONC. BLOCK H<5.0m

WALL

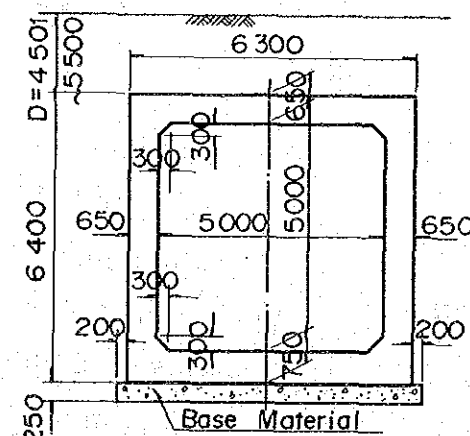


T-TYPE RETAINING H<7.0m

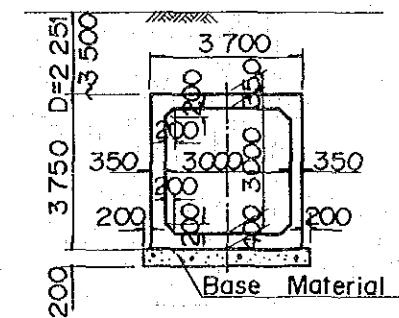
CONC. CULVERT BOX



CROSS-SECTION 7.0mx5.0m



CROSS-SECTION 5.0mx5.0m



CROSS-SECTION 3.0mx 3.0m

GENERAL VIEW OF FACILITIES
 CONC. PIPE WALL, CONC. CULVERT BOX
 VISTA GENERAL DE FACILIDADES
 TUBO, PARED CONC, ALCANT. CONC

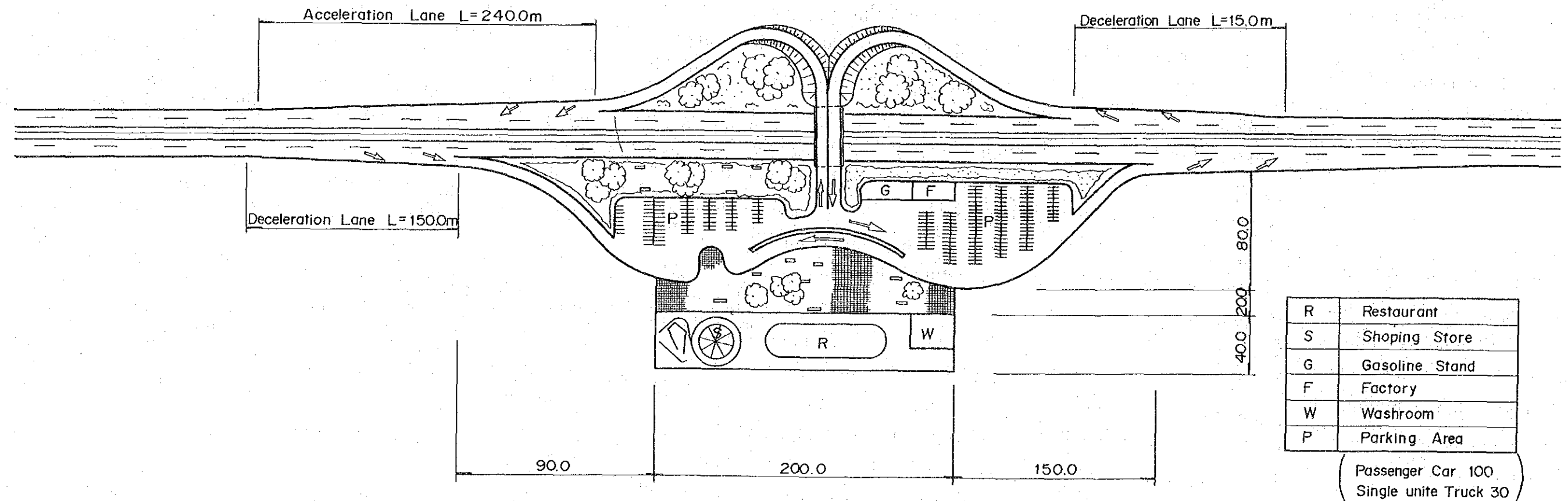
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Service Area



SERVICE AREA
AREA DE SERVICIO

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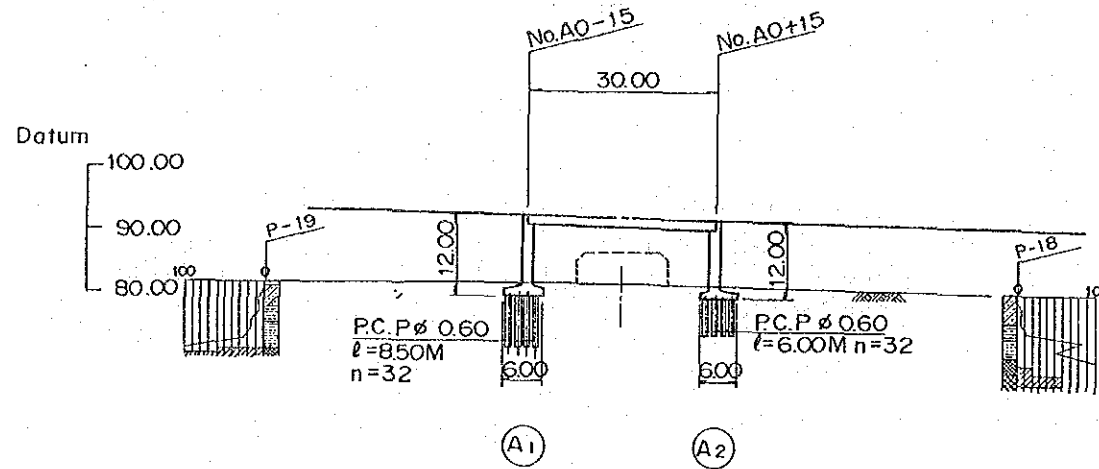
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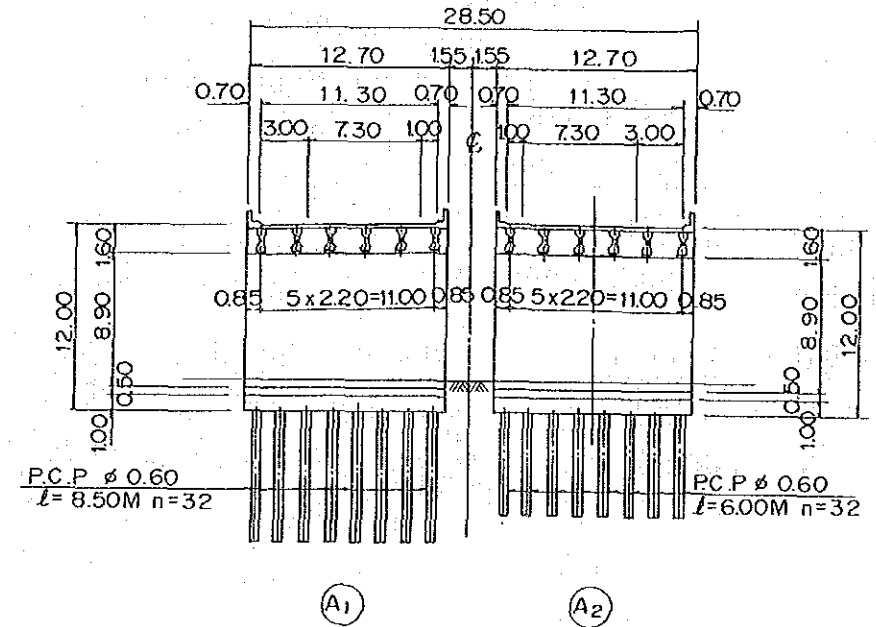
28/49

SANTA BARBARA INTERSECTION BRIDGE

ELEVATION

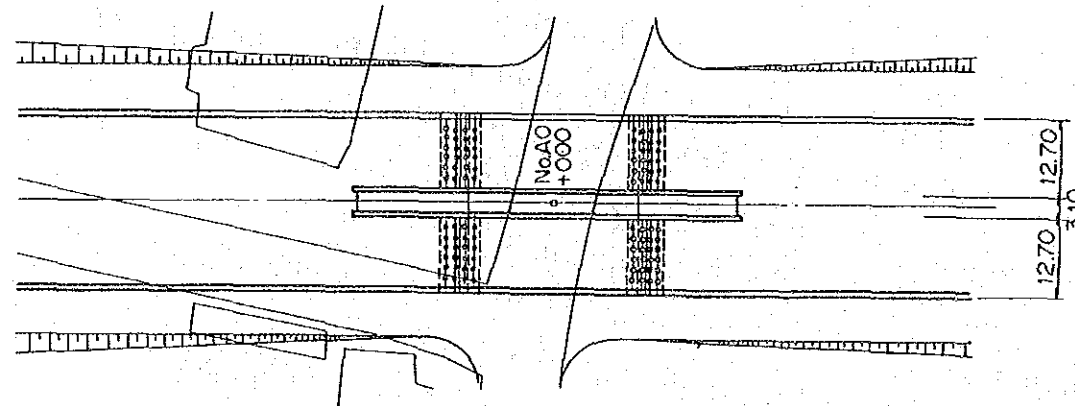


SECTION



GRADE			
PLANNING HEIGHT			
GROUND HEIGHT			
STATION			

PLAN



DESIGN CRITERIA

T Y P E	P. C. SIMPLE COMPOSITE GIRDER
TOTAL BRIDGE LENGTH	30.00M
SPAN	30.00M
WIDTH	2@11.30M
LIVE LOAD	HS 20-44
IMPACT COEFFICIENT	$I=15.24/(L+38.1)$
ACCELERATION COEFFICIENT	$A=0.15$
STANDARD	AASHTO

GENERAL VIEW OF BRIDGE-SAN MIGUELITO I.C.
VISTA GENERAL DE PUENTE-SAN MIGUELITO I.S.

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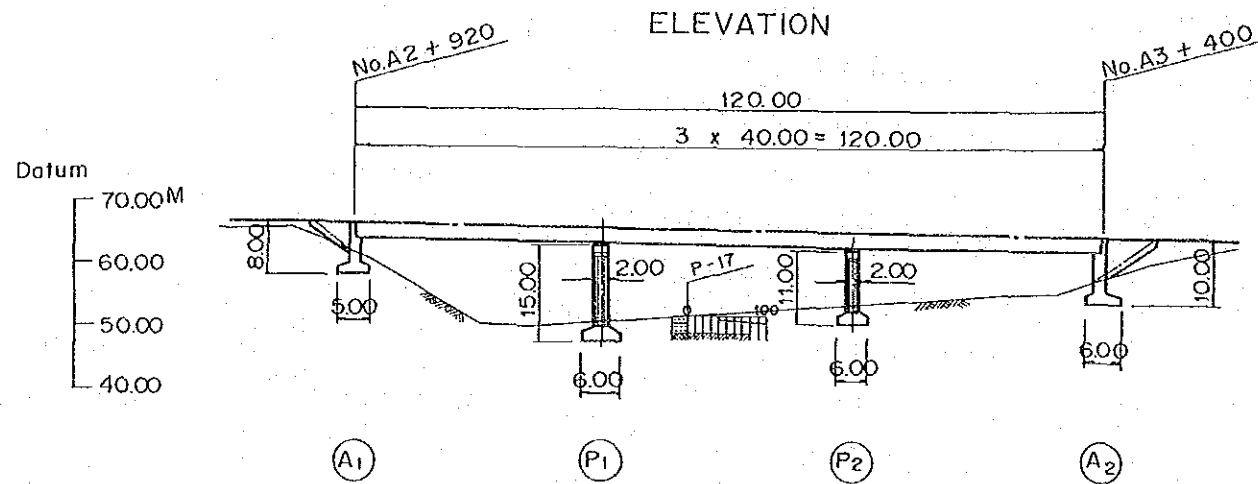
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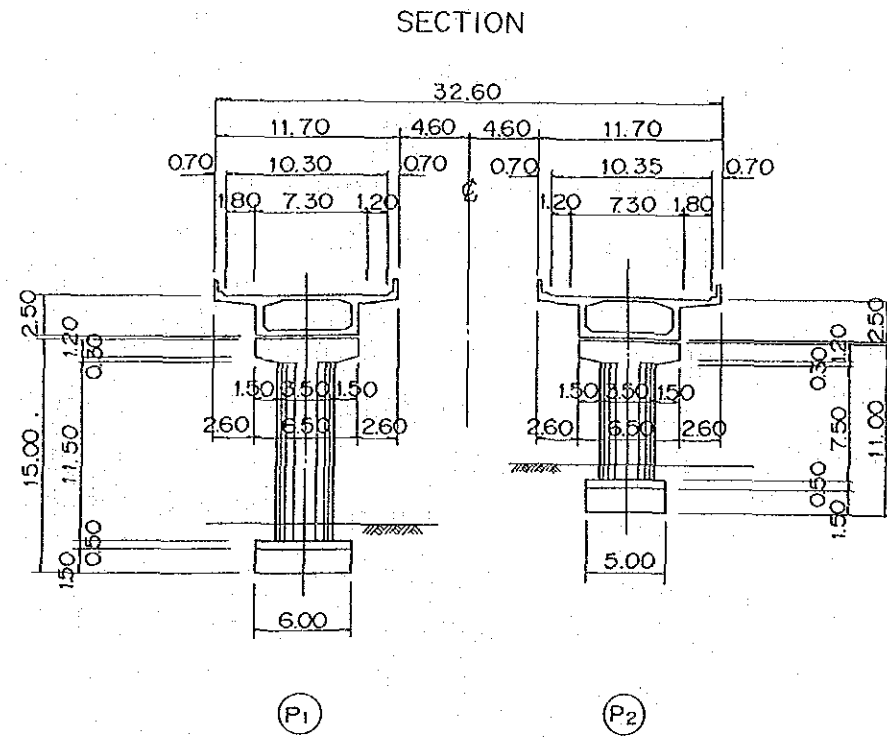
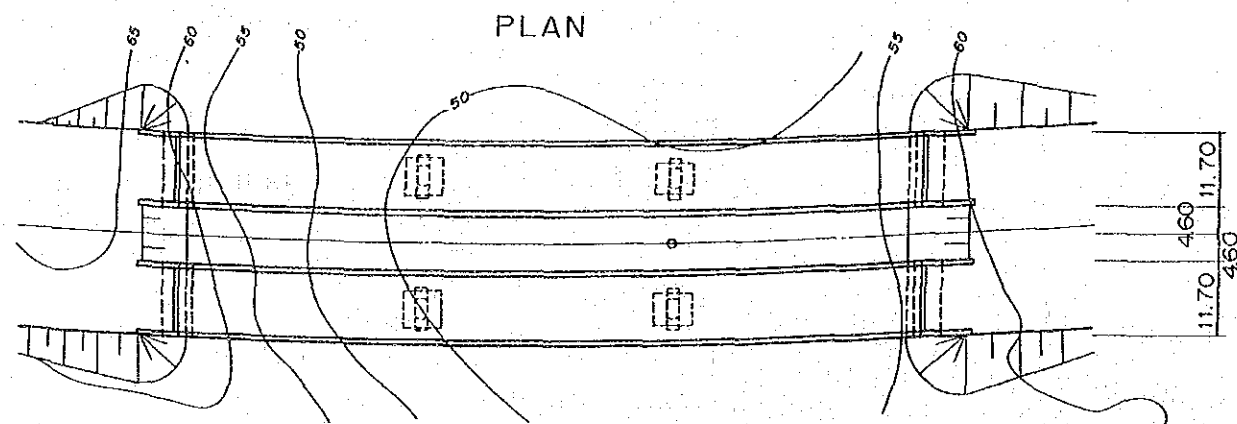
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RIO LAS LAJAS BRIDGE



GRADE	$i = 1.500\%$ $L = 1300M$			
PLANNING HEIGHT	+66.50	+65.90	+65.30	+64.70
GROUND HEIGHT			+53.45	
STATION	No. A2 +920	+960	+1000	+400



DESIGN CRITERIA

T Y P E	P. C. 3 CONTINUOUS BOX GIRDER
TOTAL BRIDGE LENGTH	120.00M
SPAN	3 @ 40.00M
WIDTH	2 @ 10.30M
LIVE LOAD	HS 20-44
IMPOACT COEFFICIENT	$I = 15.24 / (L + 38.1)$
ACCELERATION COEFFICIENT	$A = 0.15$
STANDARD	AASHTO

GENERAL VIEW OF BRIDGE-RIOLAS LAJAS BRIDGE
VISTA GENERAL DE PUENTE-PUENTE RIOLAS LAJAS

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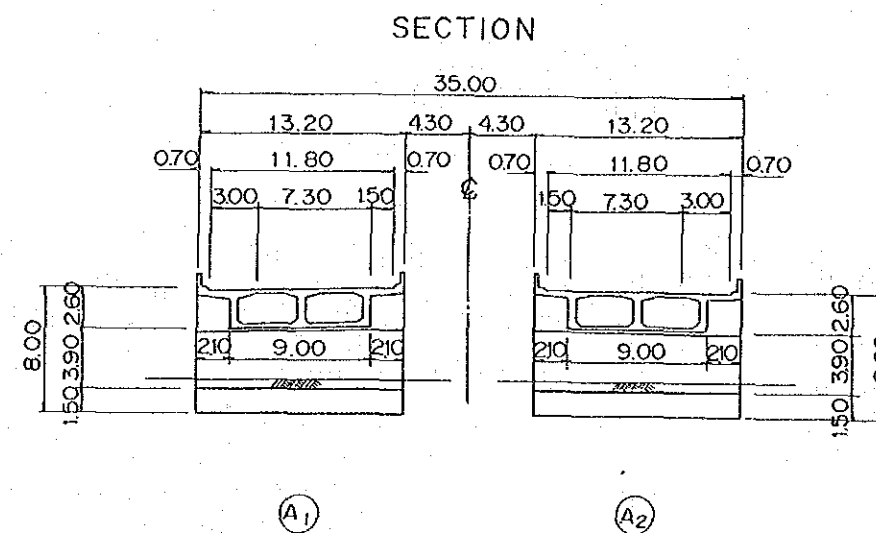
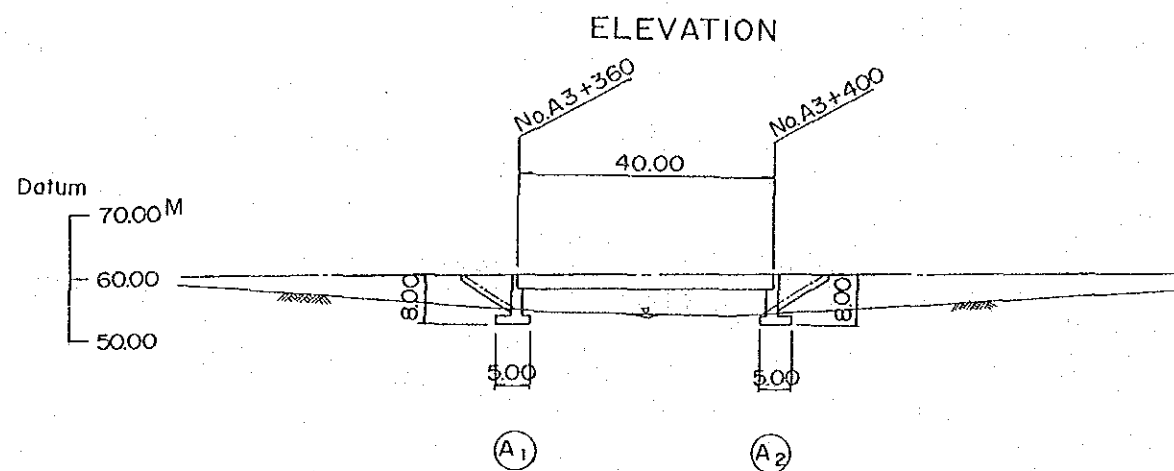
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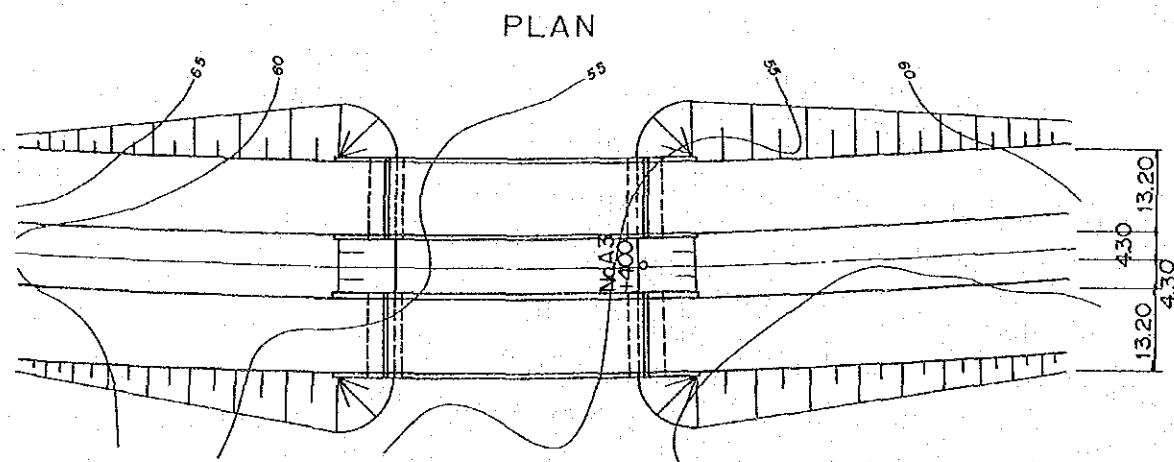
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QUEBRADA GONZALILLO BRIDGE



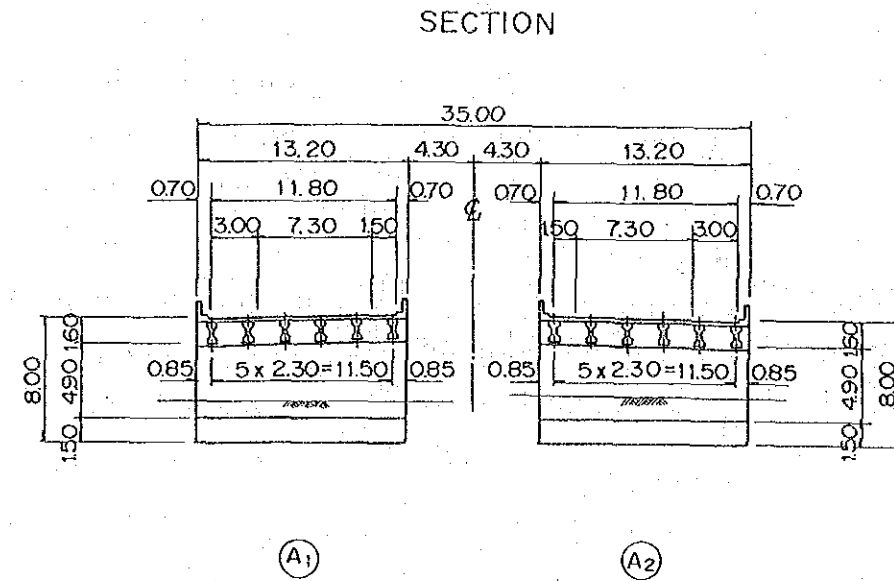
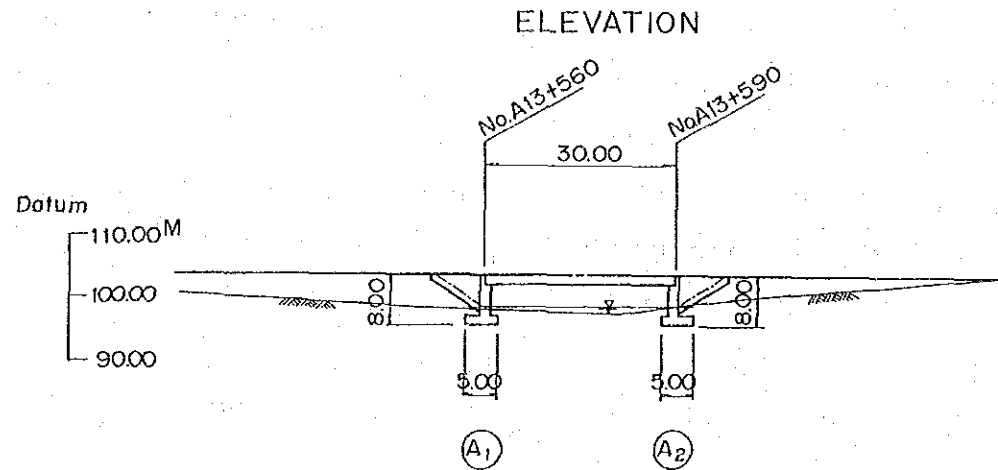
GRADE	$i = 1.000\%$ $L = 1800\text{M}$	
PLANNING HEIGHT	61.40	61.80
GROUND HEIGHT		55.0
STATION	No. A3 +360	+400

DESIGN CRITERIA	
T Y P E	P. C. SIMPLE BOX GIRDER
TOTAL BRIDGE LENGTH	40.00M
SPAN	40.00M
WIDTH	2 @ 11.80M
LIVE LOAD	HS 20-44
IMPOACT COEFFICIENT	$I = 15.24 / (L + 38.1)$
ACCELERATION COEFFICIENT	A = 0.15
STANDARD	AASHTO



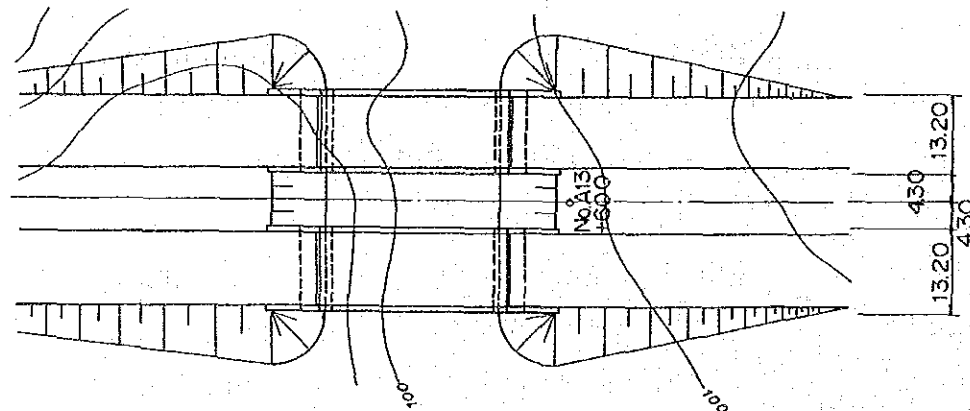
GENERAL VIEW OF BRIDGE-QUEBRADA GONZALILLO BRIDGE VISTA GENERAL DE PUENTE-PUENTE QUEBRADA GONZALILLO	M O P MINISTRY OF PUBLIC WORKS THE REPUBLIC OF PANAMA MINISTERIO DE OBRAS PUBLICAS	J I C A JAPAN INTERNATIONAL COOPERATION AGENCY AGENCIA DE COOPERACION INTERNACIONAL DEL JAPAN	THE FEASIBILITY STUDY ON THE IMPROVEMENT OF THE PANAMA-COLON HIGHWAY EL ESTUDIO DE FACTIBILIDAD SOBRE EL MEJORAMIENTO DE LA CARRETERA ENTRE PANAMA Y COLON	
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QUEBRADA LA CABIMA BRIDGE



GRADE	$i = 0.500\%$ $L = 1500M$		
PLANNING HEIGHT	+103.60	+103.65	+103.60
GROUND HEIGHT			
STATION	No. A13+560	+590	+600

PLAN



DESIGN CRITERIA

T Y P E	P. C. SIMPLE COMPOSITE GIRDER
TOTAL BRIDGE LENGTH	30.00M
SPAN	30.00M
WIDTH	2 @ 11.80M
LIVE LOAD	HS 20-44
IMPACT COEFFICIENT	$I = 15.24 / (L + 38.1)$
ACCELERATION COEFFICIENT	$A = 0.15$
STANDARD	AASHTO

GENERAL VIEW OF BRIDGE-QUEBRADA LA CABIMA BRIDGE
VISTA GENERAL DE PUENTE-PUENTE QUEBRADA LA CABIMA

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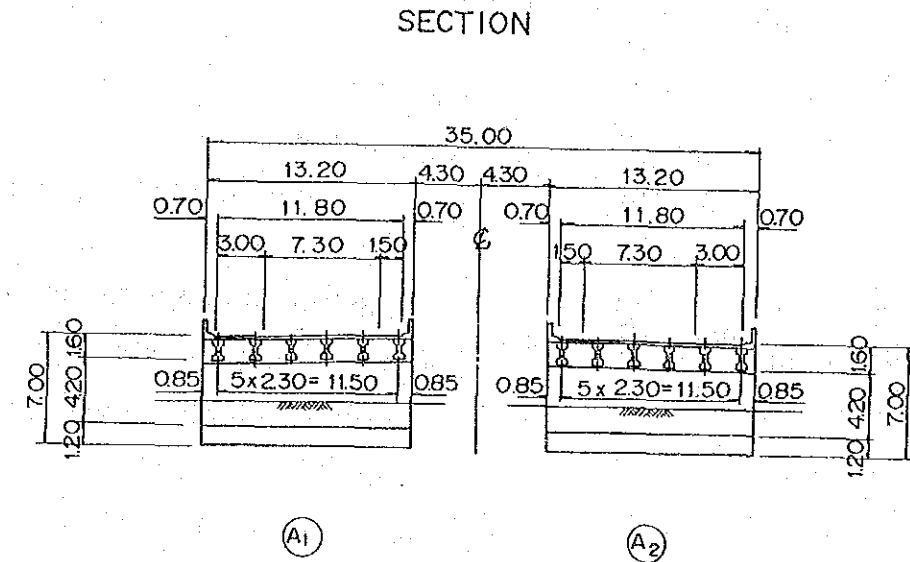
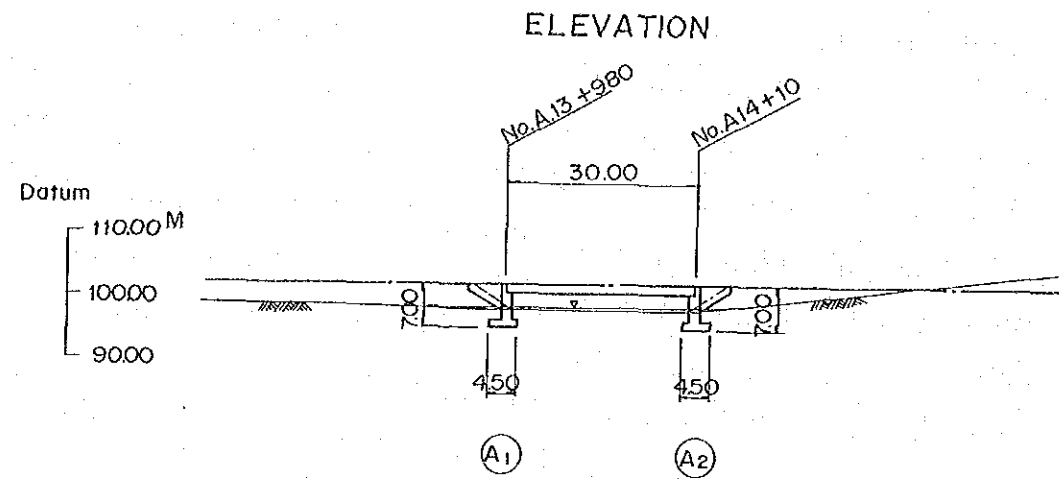
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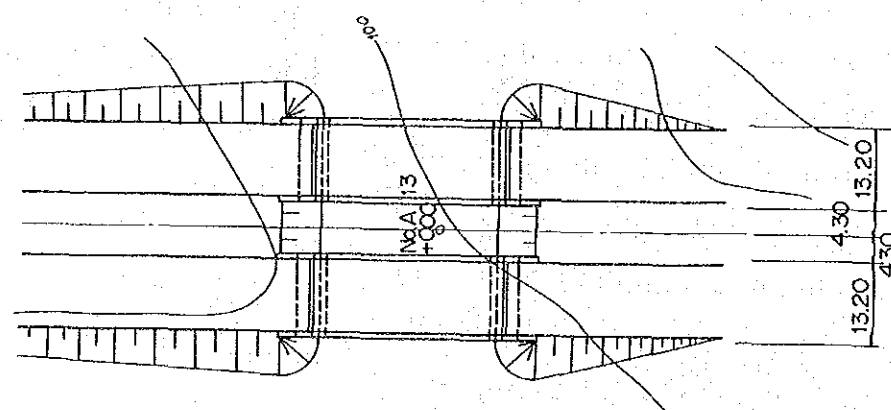
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QUEBRADA EL MARANON BRIDGE



GRADE	$i = 0.500\%$ $L = 1500M$		
PLANNING HEIGHT	+101.70	+101.60	+101.55
GROUND HEIGHT	+100.0	+100.0	+100.0
STATION	+980	+000	+10

PLAN



DESIGN CRITERIA

T Y P E	P. C. SIMPLE COMPOSITE GIRDER
TOTAL BRIDGE LENGTH	30.00M
SPAN	30.00M
WIDTH	2 @ 11.80M
LIVE LOAD	HS 20-44
IMPOACT COEFFICIENT	$I = 15.24 / (L + 38.1)$
ACCELERATION COEFFICIENT	$A = 0.15$
STANDARD	AASHTO

GENERAL VIEW OF BRIDGE-QUEBRADA EL MARAÑON BRIDGE
VISTA GENERAL DE PUENTE-PUENTE QUEBRADA EL MARAÑON

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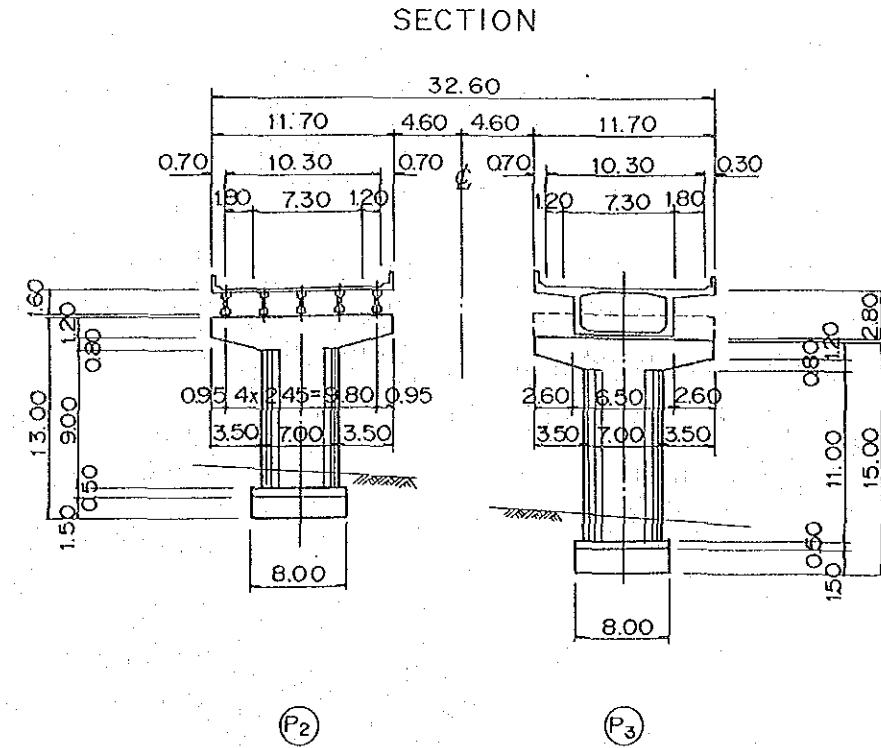
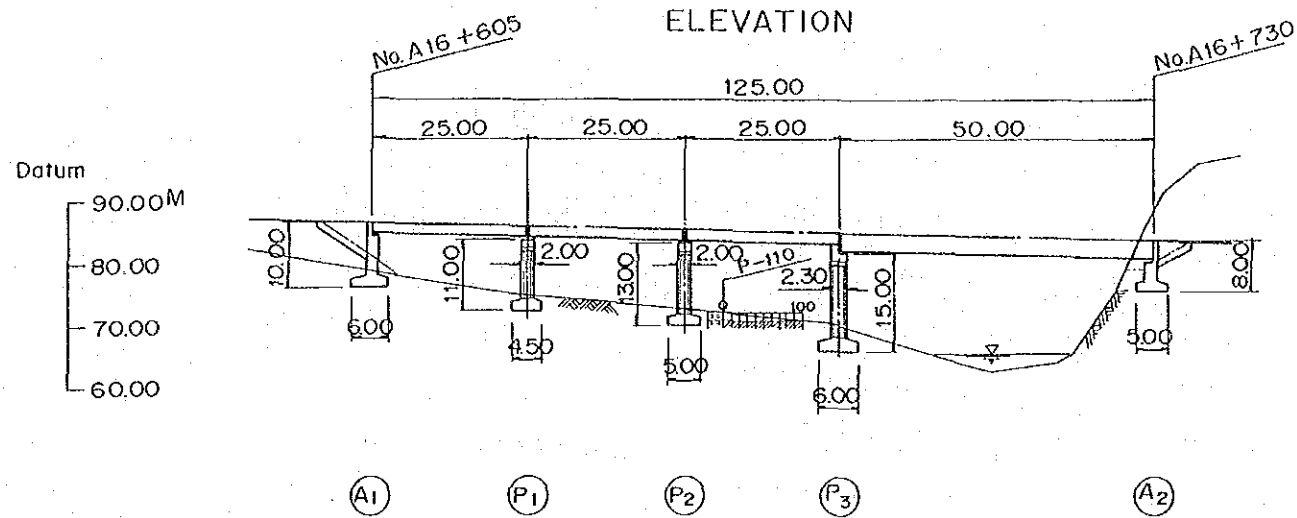
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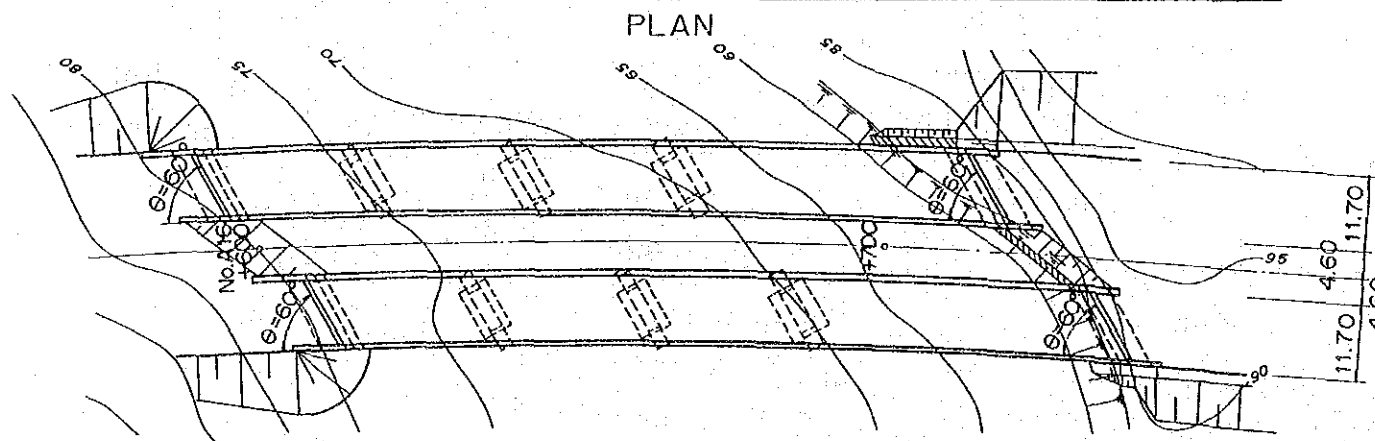
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RIO CHILIBRILLO BRIDGE



GRADE	$i = 3.000\%$ $L = 700\text{ M}$					
PLANNING HEIGHT	+87.00	+86.85	+86.85	+85.35	+84.60	+84.00
GROUND HEIGHT	+80.0	+80.0	+80.0	+65.0	+65.0	+84.00
STATION	No. A16 +600	+605	+630	+655	+680	+700



DESIGN CRITERIA

T Y P E	P. C. SIMPLE COMPOSITE (BOX) GIRDER
TOTAL BRIDGE LENGTH	125.00M
SPAN	3@25.00M + 50.00M
WIDTH	2 @ 10.30M
LIVE LOAD	HS 20-44
IMPOACT COEFFICIENT	$I = 15.24 / (L + 38.1)$
ACCELERATION COEFFICIENT	$A = 0.15$
STANDARD	AASHTO

GENERAL VIEW OF BRIDGE-RIO CHILIBRILLO BRIDGE
VISTA GENERAL DE PUENTE-PUENTE RIO CHILIBRILLO

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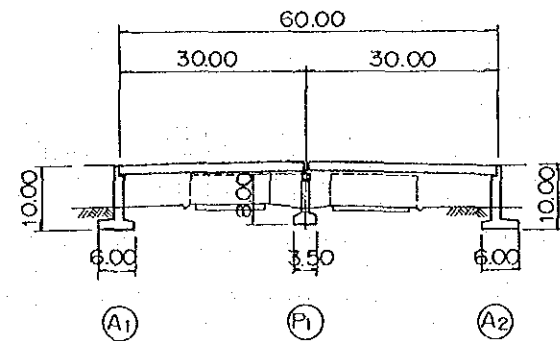
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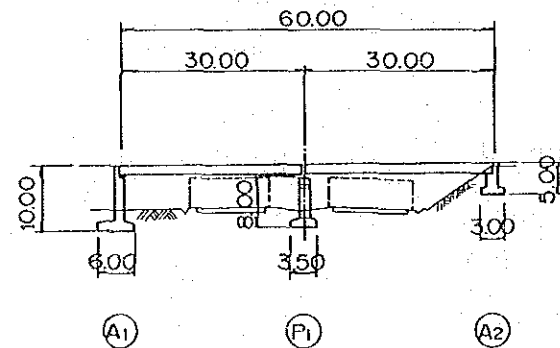
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OVER BRIDGE
(ALCALDE DIAZ AREA)

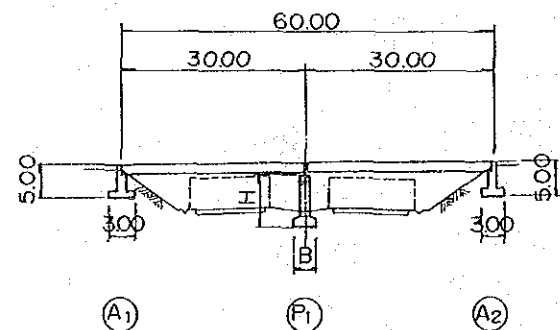
ELEVATION
TYPE I



TYPE II

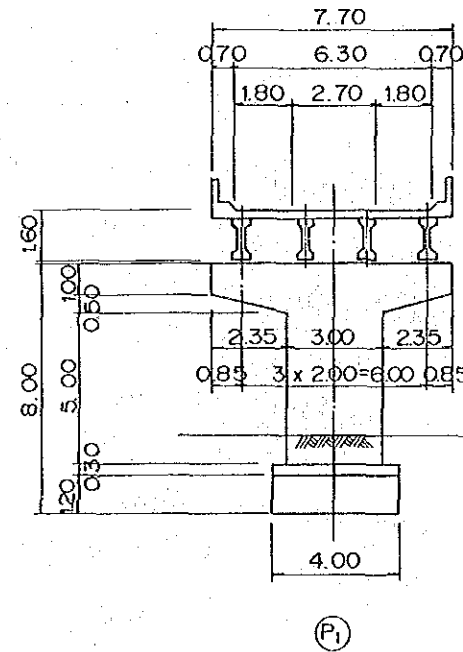


TYPE III

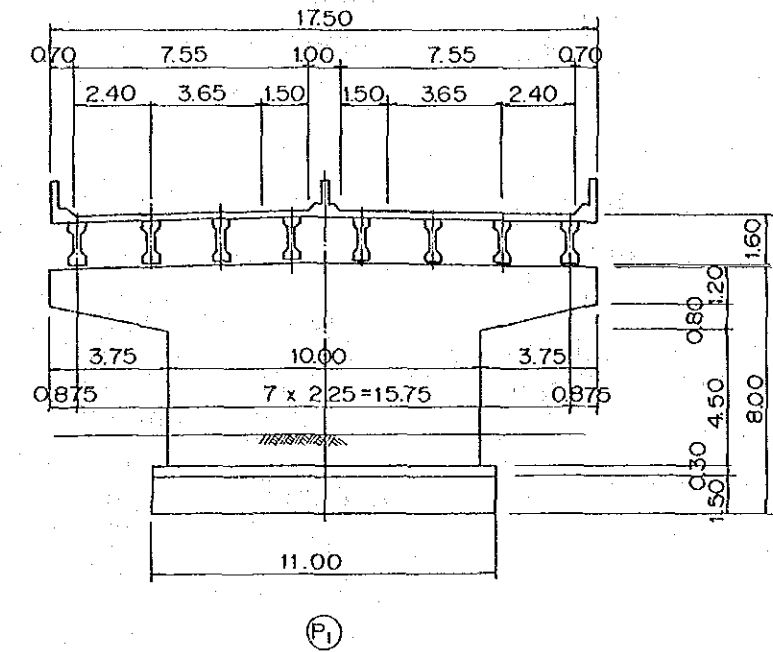


SECTION

TYPE A



TYPE B



BRIDGE NAME	STATION	TOTAL BRIDGE LENGTH (M)	WIDTH (M)	TYPE	P1	
					H (M)	B (M)
SAN AGUSTIN OVERBRIDGE	A1 +430	60.00	6.30	I A	8.00	3.50
LA ROTONDA OVERBRIDGE	A2 +590	60.00	6.30	II A	8.00	3.50
ALCALDE PIAZ INTERCHANGE BRIDGE	A9 +110	60.00	16.10	I B	8.00	3.50
MARIA LUIS OVERBRIDGE	A9 +250	60.00	6.30	III A	12.00	5.50
FINCA PANAMA OVERBRIDGE	A15+ 60	60.00	6.30	III A	9.00	4.00
CALZADA LARGA INTERCHANGE BRIDGE	A15+580	60.00	16.10	I B	8.00	3.50

DESIGN CRITERIA

LIVE LOAD	HS 20-44
IMPACT COEFFICIENT	$I=15.24/(L+38.1)$
ACCELERATION COEFFICIENT	A=0.15
STANDARD	AASHTO

GENERAL VIEW OF BRIDGE-OVERBRIDGE (I)
VISTA GENERAL DE PUENTE-SOBRE EL PUENTE

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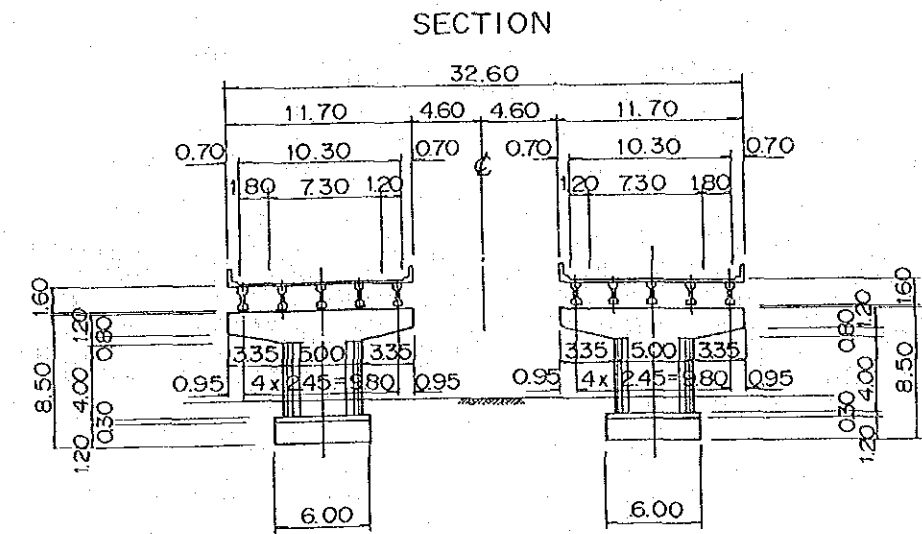
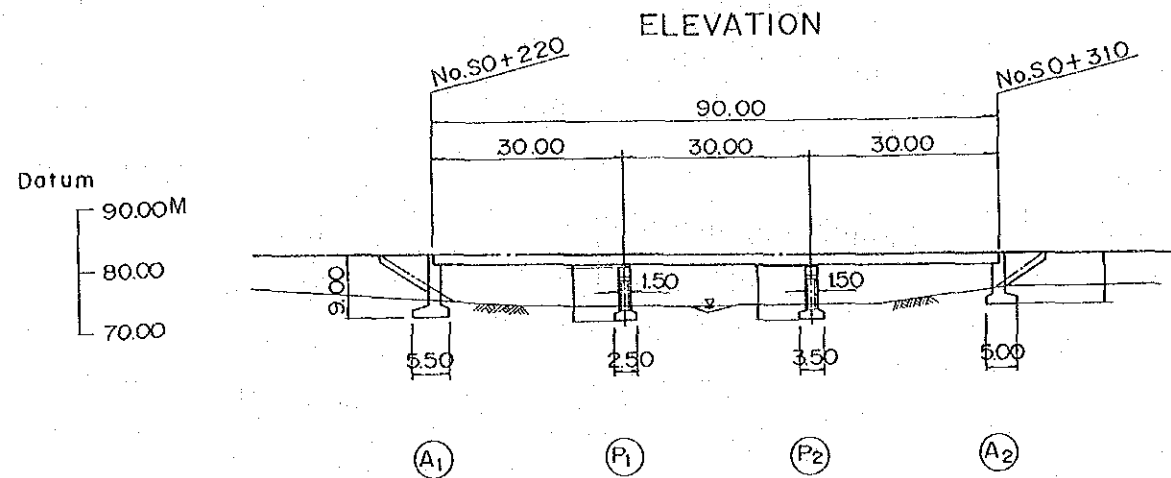
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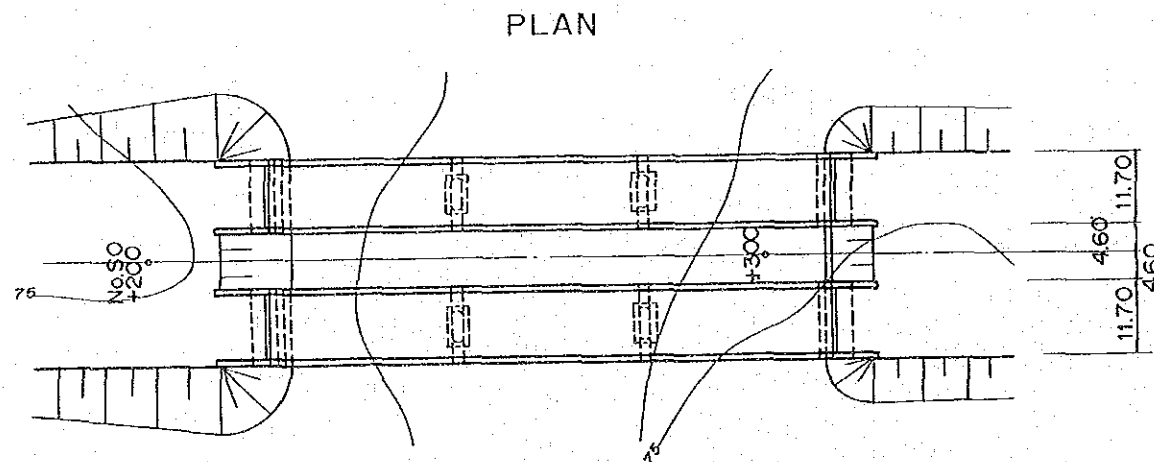
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RIO DUQUE BRIDGE



GRADE	$i = 1.500\%$ $L = 600\text{ M}$					
PLANNING HEIGHT	+82.00	+81.70	+81.25	+80.80	+80.50	+80.35
GROUND HEIGHT	+75.0				+73.0	
STATION	No. 50+200	+220	+250	+280	+300	+310



(P1) (P2)

DESIGN CRITERIA

T Y P E	P. C. SIMPLE COMPOSITE GIRDER
TOTAL BRIDGE LENGTH	90.00M
SPAN	3 @ 30.00M
WIDTH	2 @ 10.30M
LIVE LOAD	HS 20-44
IMPOACT COEFFICIENT	$I = 15.24 / (L + 38.1)$
ACCELERATION COEFFICIENT	$A = 0.15$
STANDARD	AASHTO

GENERAL VIEW OF BRIDGE-RIO DUQUE BRIDGE
VISTA GENERAL DE PUENTE-PUENTE RIO DUQUE

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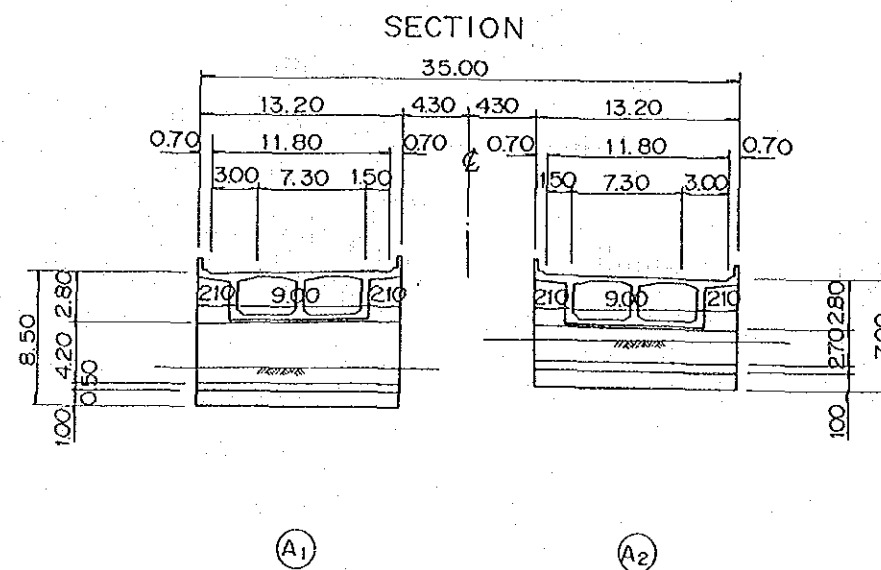
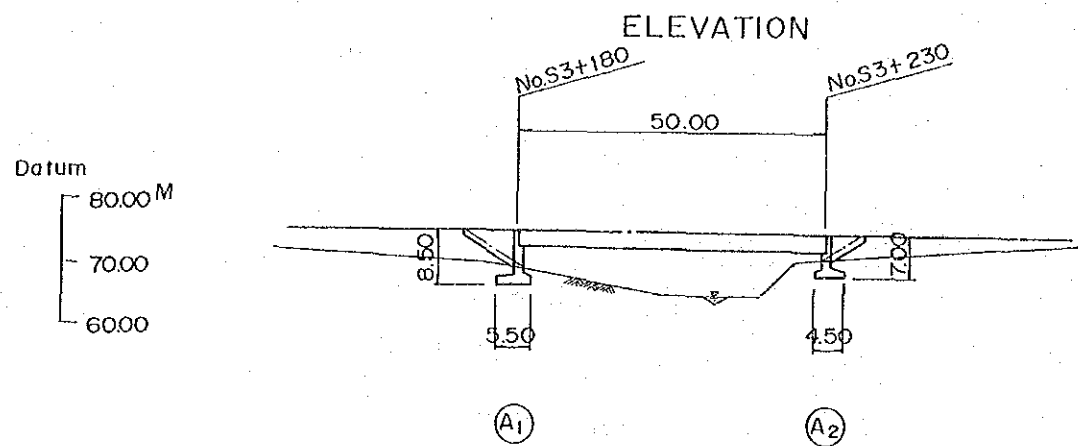
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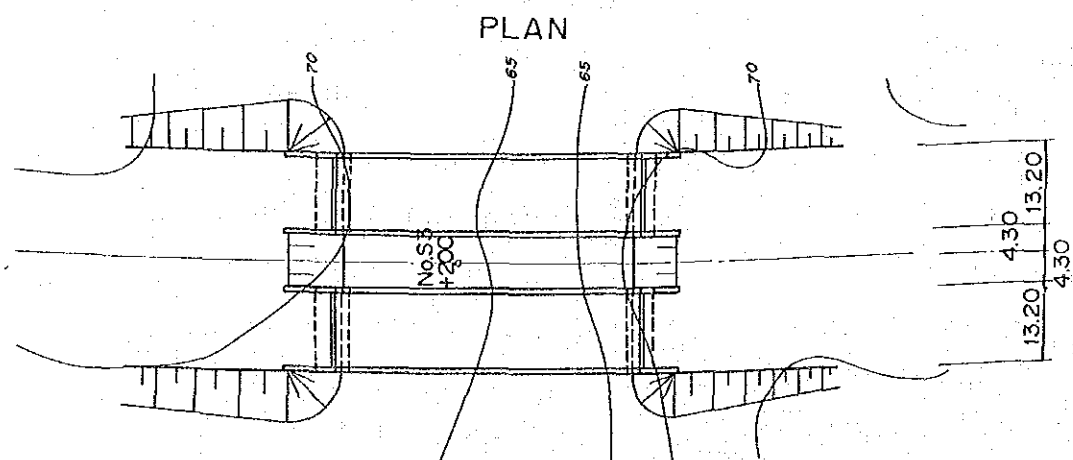
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RIO AGUA SUCIA BRIDGE



GRADE	$i=0.400\%$ $L=2400M$		
PLANNING HEIGHT	75.48	75.40	75.28
GROUND HEIGHT		64.0	
STATION	No.S3 +180	+200	+230



DESIGN CRITERIA	
T Y P E	P. C. SIMPLE BOX GIRDER
TOTAL BRIDGE LENGTH	50.00M
SPAN	50.00M
WIDTH	2 @11.80M
LIVE LOAD	HS 20-44
IMPOACT COEFFICIENT	$I=15.24/(L+38.1)$
ACCELERATION COEFFICIENT	A=0.15
STANDARD	AASHTO

GENERAL VIEW OF BRIDGE-RIO AGUA SUCIA BRIDGE
VISTA GENERAL DE PUENTE-PUENTE RIO AGUA SUCIA

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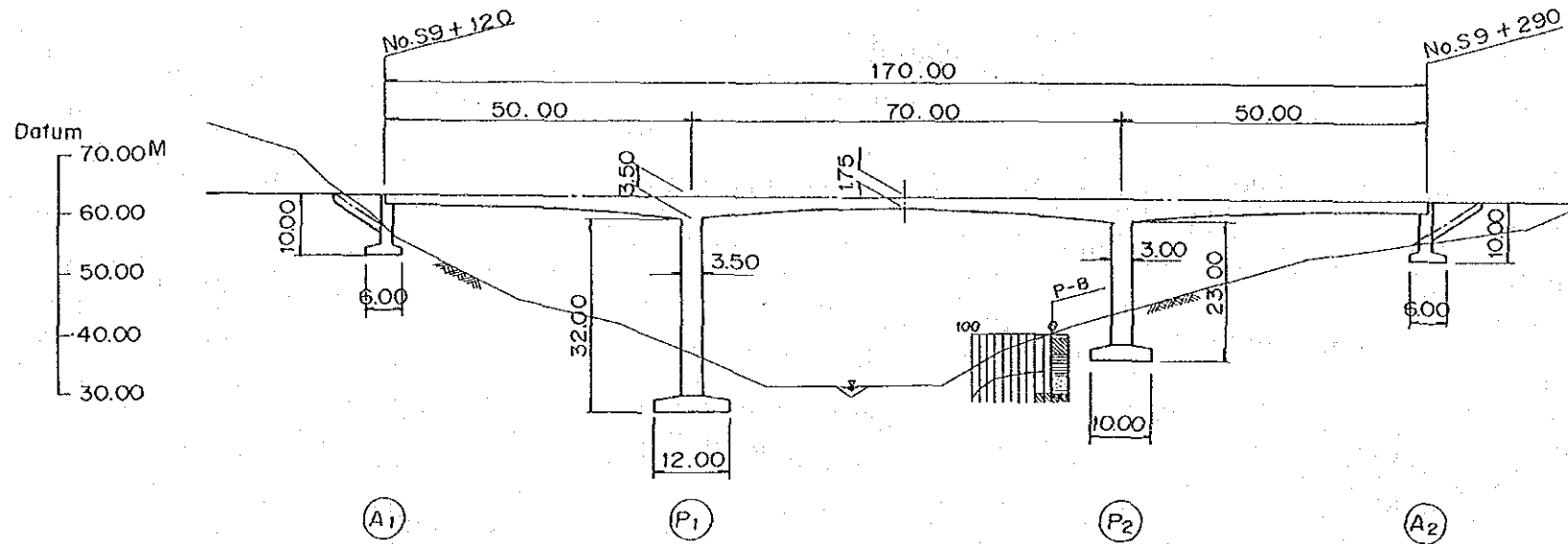
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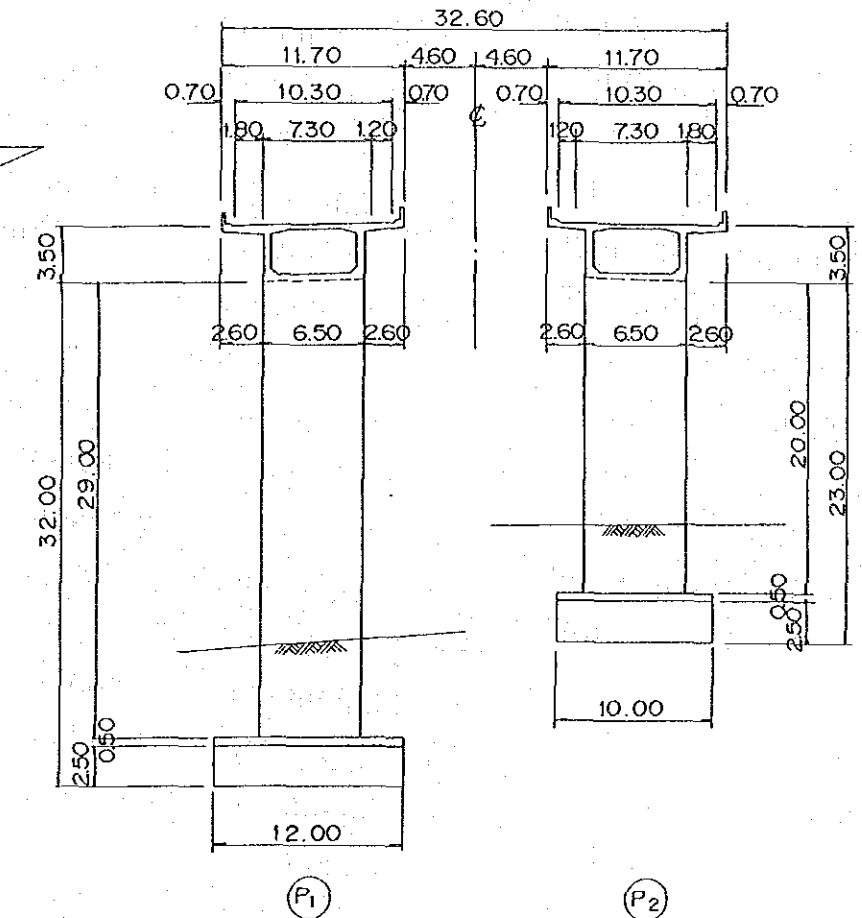
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QUEBRADA ANCHA BRIDGE

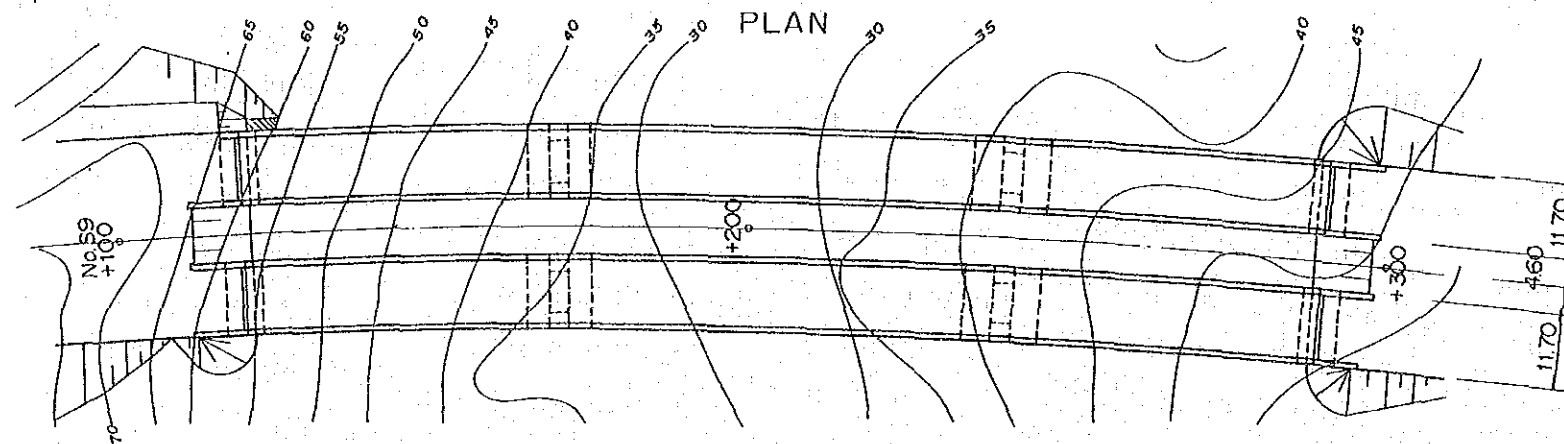
ELEVATION



SECTION



GRADE	$i = 1.200\%$ $L = 2500M$					
PLANNING HEIGHT	+62.60	+62.36	+61.40	+61.40	+60.92	+60.32
GROUND HEIGHT	+72.0		+30.0		+54.0	+60.20
STATION	No. S9 +100	+120	+170	+200	+240	+290



DESIGN CRITERIA

T Y P E	P. C. 3 CONTINUOUS BOX GIRDER
TOTAL BRIDGE LENGTH	170.00M
SPAN	50.00M + 70.00M + 50.00M
WIDTH	2 @ 10.30M
LIVE LOAD	HS 20-44
IMPACT COEFFICIENT	$I = 15.24 / (1 + 38.1)$
ACCELERATION COEFFICIENT	A = 0.15
STANDARD	AASHTO

GENERAL VIEW OF BRIDGE-QUEBRADA ANCHA BRIDGE
VISTA GENERAL DE PUENTE-PUENTE QUEBRADA ANCHA

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