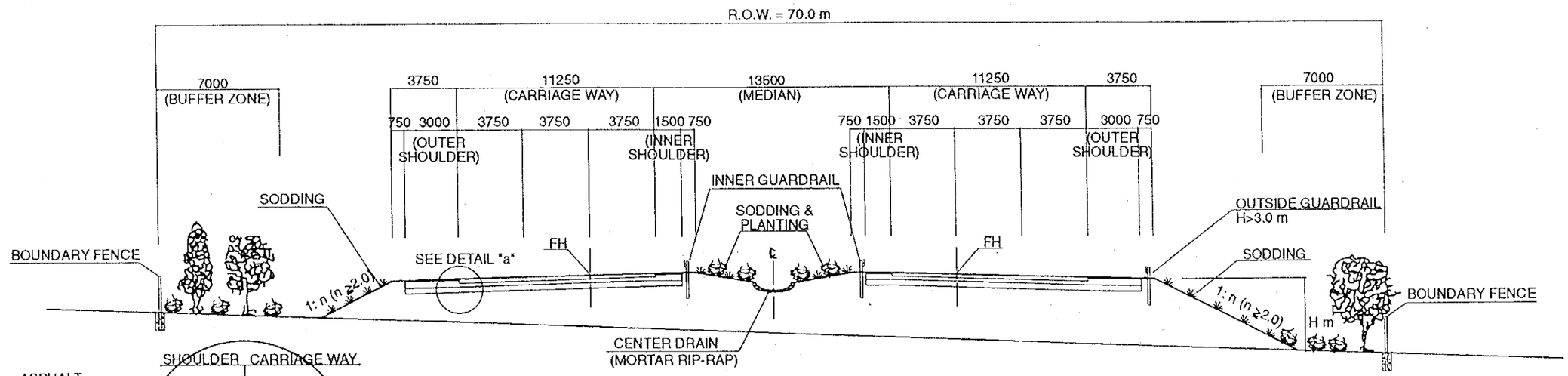
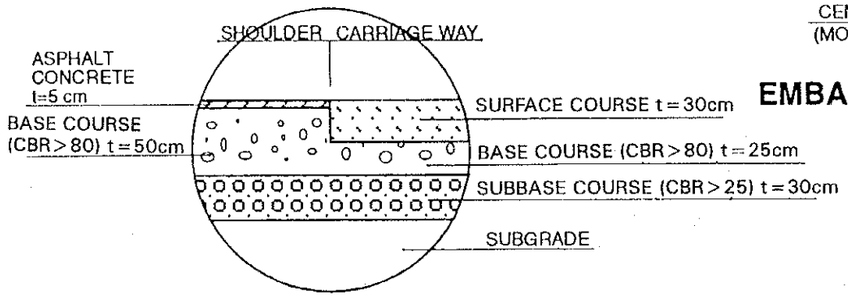
BAN PONG-CHA AM ROUTE	DWG No. BC. 3- 1
TYPICAL CROSS SECTION (1)	



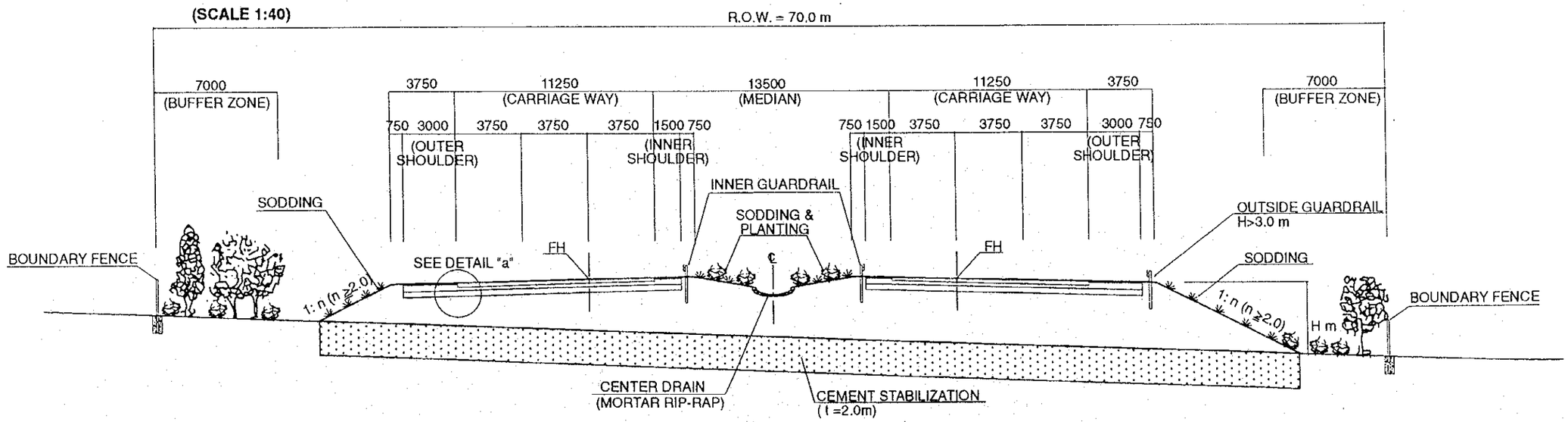
EMBANKMENT SECTION IN FLAT AREA

(SCALE 1:250)



DETAIL "a"

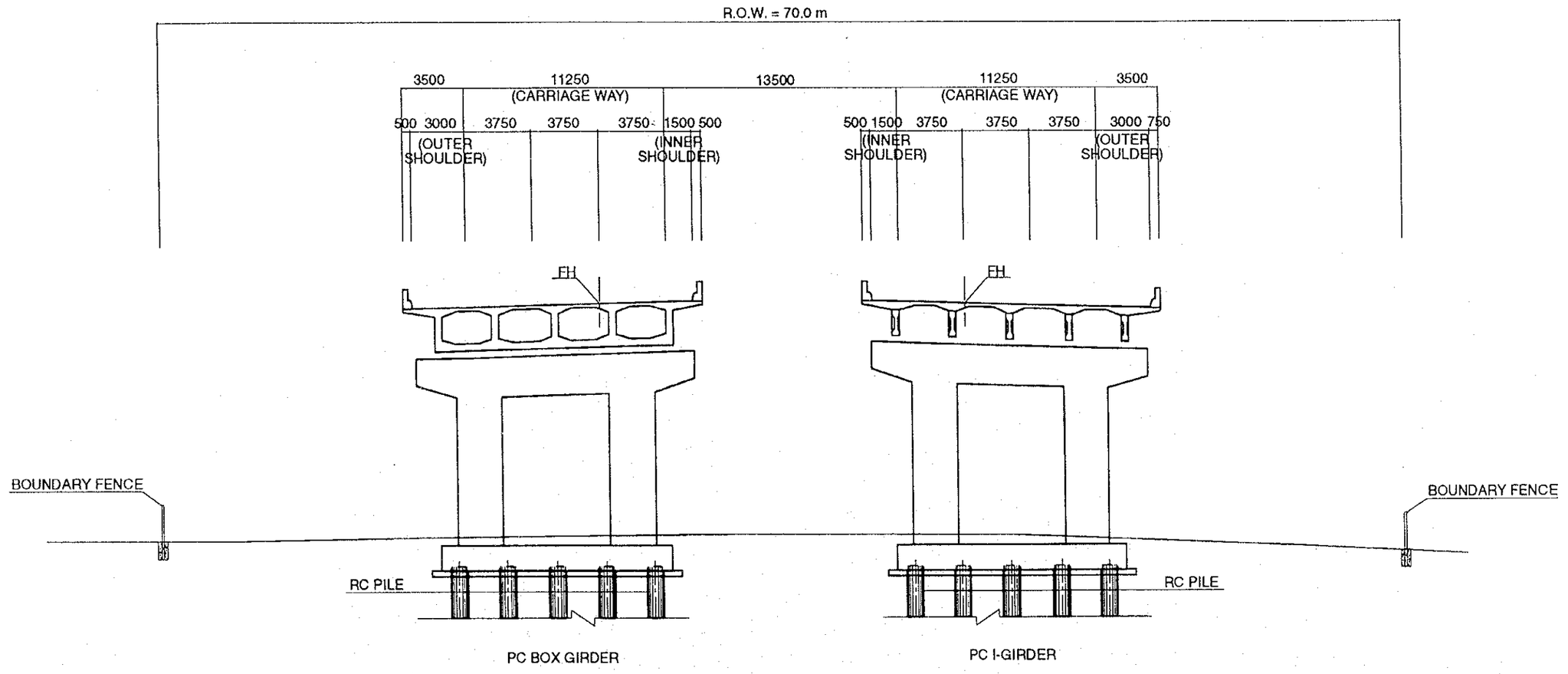
(SCALE 1:40)



EMBANKMENT SECTION IN SOFTGROUND AREA

(SCALE 1:250)

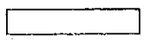
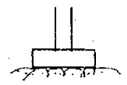
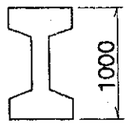
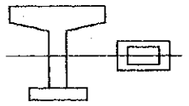
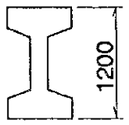
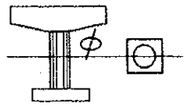
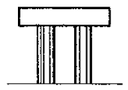
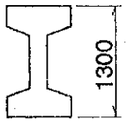
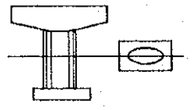
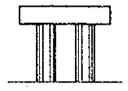
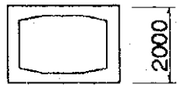
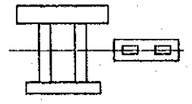
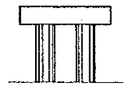
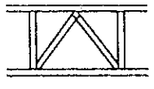
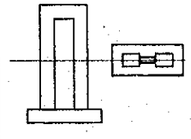
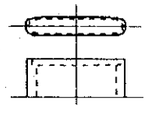
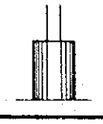
BAN PONG-CHA AM ROUTE	DWG No. BC. 3- 2
TYPICAL CROSS SECTION (2)	



BRIDGE AND VIADUCT SECTION

(SCALE 1:250)

BAN PONG-CHA AM ROUTE	DWG No. BC. 4- 1
STRUCTUAL CLASSIFICATION	

Superstructure			Subsutructure			Foundation		
Type	Shape	Available Span(m)	Type	Shape	Description	Type	Shape	Description
RC. A		L ≦ 15	A	Pile Bent	DOH Standard	A		Spread Foudation
PC. B - 1		15 < L ≦ 25	B		Wall Applicable to Viaduct	B		Precast □ - 400 RC Pile
PC. B - 2		25 < L < 30	C		Culum Applicable to River Cossings	C - 1		Cast in Place RC . Pile ∅1.0m
PC. B - 3		30 ≦ L ≦ 35	D		Wall Applicable to River Cossings	C - 2		Cast in Place RC . Pile ∅1.2m
PC. B - 4		35 < L ≦ 50	E		Double Column Applicable to the Southern Route	C - 3		Cast in Place RC . Pile ∅ 1.5m
M . C		50 < L < 100	F		H - Section Wall Applicable to the High Pier H ≧ 25	D		Open Well Applicable to Mountain area
						E		RC . Pile . ∅ 3.0m (Chicago Board Method)

BAN PONG-CHA AM ROUTE	DWG No. BC. 4- 2
LIST OF BRIDGES AND VIADUCTS	

BRIDGE

STA.	Length (m)	Number of Spans	Type: Super-structure	Type: Sub-structure	Remark
4+830	11.0	1 x 11.0m	A	A	Canal: TH=65cm
10+620	21.0	1 x 21.0m	B - 1	A	Canal: GH=1.0m
11+970	15.0	2 x 7.5m	A	A	Pond: TH=45cm
13+850	6.0	1 x 6.0m	A	A	Canal: TH=40cm
15+470	17.0	2 x 8.5m	A	A	Canal: TH=55cm
17+880	14.0	1 x 14.0m	A	A	Canal: TH=85cm
17+970	17.0	2 x 8.5m	A	A	Canal: TH=55cm
19+000	6.0	1 x 6.0m	A	A	Canal: TH=40cm
23+500	9.0	1 x 9.0m	A	A	Canal: TH=55cm
24+500	17.0	1 x 17.0m	B - 1	A	Canal: GH=1.0m
33+300	9.0	1 x 9.0m	A	A	Canal: TH=55cm
33+460	7.0	1 x 7.0m	A	A	Canal: TH=45cm
33+930	9.0	1 x 9.0m	A	A	Canal: TH=55cm
37+650	15.0	2 x 7.5m	A	A	Canal: TH=45cm
39+050 ~39+220	170.0	2 x 25.0m 4 x 30.0m	B - 1 B - 3	A A	Pond : GH=1.1m, 1.3m L=25+4x30+25
42+510	40.0	2 x 20.0m	B - 1	A	Canal : GH=1.0m L=2x20m
43+100	12.0	1 x 12.0m	A	A	Canal: TH=70cm
44+280	10.0	1 x 10.0m	A	A	Canal: TH=60cm
46+300	12.0	1 x 12.0m	A	A	Canal: TH=70cm
46+630	20.0	1 x 20.0m	B - 1	A	Canal: GH=1.0m
48+570	9.0	1 x 9.0m	A	A	Canal: TH=55cm
49+230	10.0	1 x 10.0m	A	A	Canal: TH=60cm
51+930	9.0	1 x 9.0m	A	A	Canal: TH=55cm
52+700	19.0	1 x 19.0m	B - 1	A	Canal: GH=1.0m
53+800	13.0	1 x 13.0m	A	A	Canal: TH=70cm
55+300	8.0	1 x 8.0m	A	A	Canal: TH=50cm
57+100	11.0	1 x 11.0m	A	A	Canal: TH=65cm
57+760	6.0	1 x 6.0m	A	A	Canal: TH=40cm
59+100	10.0	1 x 10.0m	A	A	Canal: TH=60cm
59+320	10.0	1 x 10.0m	A	A	Canal: TH=60cm
62+400	30.0	2 x 15.0m	A	A	Canal: TH=95cm
64+910	5.0	1 x 5.0m	A	A	Canal: TH=35cm
65+770	15.0	2 x 7.5m	A	A	Canal: TH=50cm
66+100	5.0	1 x 5.0m	A	A	Canal: TH=35cm
68+100	7.0	1 x 7.0m	A	A	Canal: TH=45cm
74+460	7.0	1 x 7.0m	A	A	Canal: TH=45cm
75+400	15.0	2 x 7.5m	A	A	Canal: TH=50cm
77+280	8.0	1 x 8.0m	A	A	Canal: TH=50cm
78+180	22.0	2 x 11.0m	A	A	Canal: TH=65cm
79+400	6.0	1 x 6.0m	A	A	Canal: TH=40cm
81+470	7.0	1 x 7.0m	A	A	Canal: TH=45cm
82+370	12.0	2 x 6.0m	A	A	Canal: TH=40cm
83+850	6.0	1 x 6.0m	A	A	Canal: TH=40cm
85+900	6.0	1 x 6.0m	A	A	Canal: TH=40cm
86+480	24.0	2 x 12.0m	A	A	Canal: TH=70cm
88+650	7.0	1 x 7.0m	A	A	Canal: TH=45cm
95+870	10.0	1 x 10.0m	A	A	Canal : Relocate TH=60cm
97+200	20.0	1 x 20.0m	B - 1	A	Canal: GH=1.0m
101+040	9.0	1 x 9.0m	A	A	Canal: TH=55cm
102+730	32.0	2 x 16.0m	B - 1	A	Canal: GH=1.0m
107+100	40.0	2 x 20.0m	B - 1	A	Pond: GH=1.0m
107+160	7.0	1 x 7.0m	A	A	Canal: TH=45cm
109+850	14.0	1 x 14.0m	A	A	Canal: TH=85cm
112+150	18.0	1 x 18.0m	B - 1	A	Canal: GH=1.0m
115+160	18.0	2 x 9.0m	A	A	Canal: TH=55cm
117+050	22.0	1 x 22.0m	B - 1	A	Canal: GH=1.0m
117+050	11.0	1 x 11.0m	A	A	TH=65cm
118+670	6.0	1 x 6.0m	A	A	Canal: TH=40cm
124+600	22.0	1 x 22.0m	B - 1	A	Canal: GH=1.0m
124+600	11.0	1 x 11.0m	A	A	TH=65cm

NOTE : 1.TH ; Thickness (cm) , 2.GH ; Girder Height (m)

VIADUCT

STA.	Length (m)	Number of Spans	Type: Super-structure	Type: Sub-structure	Type: Foun-dation	Remark
0+600 ~1+800	1200	40 x 30.0m	B - 3	E	C - 1	Ban pong J/C
6+751 ~9+400	2650	64 x 35.0m 2 x 50.0m 5 x 40.0m 3 x 30.0m 1 x 20.0m	B - 3 B - 4 B - 4 B - 3 B - 1	E E E E E	C - 1 C - 3 C - 2 C - 1 C - 1	Railway , Ban pong I/C
19+400 ~22+500	3100	16 x 30.0m 72 x 35.0m 2 x 50.0m	B - 3 B - 3 B - 4	E E E	C - 1 C - 1 C - 3	R 3080 Photharam I/C
60+650 ~61+700	1050	24 x 35.0m 4 x 40.0m 1 x 50.0m	B - 3 B - 4 B - 4	E E E	C - 1 C - 2 C - 3	Pak Tho I/C
63+200 ~64+000	800	18 x 35.0m 2 x 45.0m 2 x 40.0m	B - 3 B - 4 B - 4	E E E	C - 1 C - 2 C - 2	Railway
86+750 ~87+650	900	5 x 30.0m 20 x 35.0m 1 x 50.0m	B - 3 B - 3 B - 4	E E E	C - 1 C - 1 C - 4	R 4
104+300 ~105+200	900	30 x 30.0m	B - 3	E	C - 1	Tha Yang I/C R 3187
125+000 ~125+800	800	10 x 35.0m 1 x 50.0m 10 x 35.0m 2 x 25.0m	B - 3 B - 4 B - 3 B - 1	E E E E	C - 1 C - 3 C - 1 C - 1	R 4 Bypass

RIVER OVERCROSSING

STA.	Length (m)	Number of Spans	Type: Super-structure	Type: Sub-structure	Type: Foun-dation	Remark
3+200 ~4+400	1200	40 x 30.0m	B - 3	D	C - 1	Khlong Yang . GH=1.3m
27+400	17	1 x 17.0m	B - 1	A	------	
32+750	36	1 x 36.0m	B - 3	E	C - 1	Khlong Sala . GH=1.8m
35+750	22	1 x 22.0m	B - 1	A	------	
36+600	12	1 x 12.0m	A	A	------	
39+600 ~41+000	1400	32 x 32.5m 8 x 45.0m	B - 3 B - 4	D D	C - 2 C - 3	Mea Nam Mea Khlong . GH=2.3m,1.4m
58+700	36	2 x 18.0m	B - 1	A	------	Khlong Wan Daw
66+800	17	1 x 17.0m	B - 1	A	------	
73+670	20	2 x 10.0m	A	A	------	Khlong Bot TH=60cm
80+250	13	1 x 13.0m	A	A	------	TH=70cm
102+930 ~103+030	100	4 x 25.0m	B - 1	A	------	GH=1.0m
103+450 ~103+750	300	10 x 30.0m	B - 1	D	C - 1	Phetchaburi River .
112+500	12	1 x 12.0m	A	A	------	Yang Strean

BAN PONG-CHA AM ROUTE	DWG No. BC. 4- 3
LIST OF OVERBRIDGES AND BOX CULVERTS	

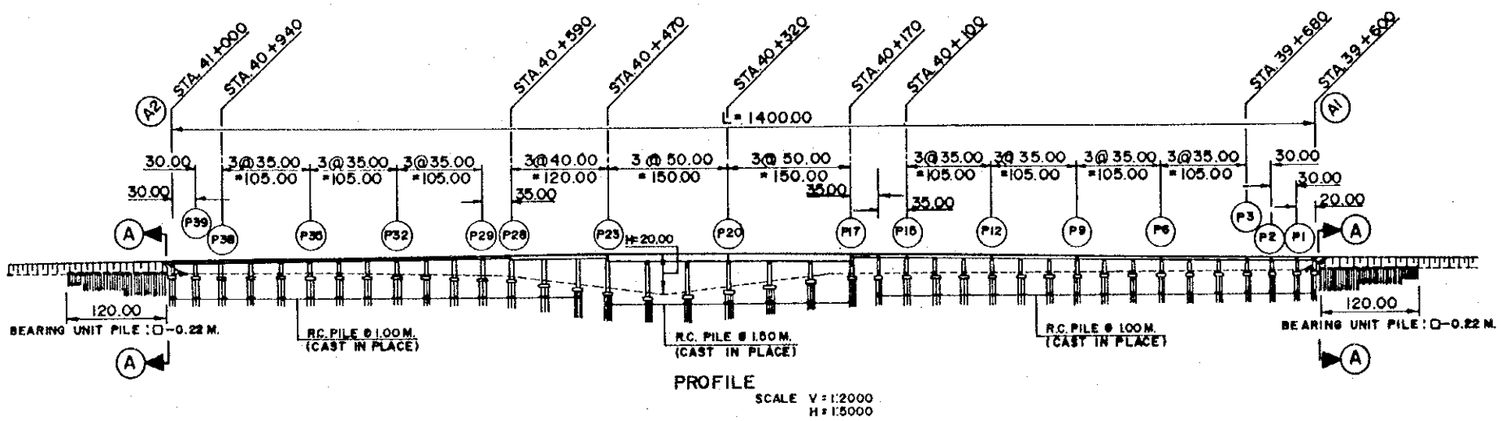
OVERBRIDGE

STA.	Length (m)	Width (m)	Number of Spans	Type	Remark	STA.	Length (m)	Width (m)	Number of Spans	Type	Remark
1+850	170.0	5.0	2 x 35.0m 4 x 25.0m	PC Post-Ten	Gradient 5%	73+400	170.0	6.0	2 x 35.0m 4 x 25.0m	PC Post-Ten	R 3172 Gradient 5%
4+830	170.0	5.0	2 x 35.0m 4 x 25.0m	PC Post-Ten	Gradient 5%	74+460	170.0	6.5	2 x 35.0m 4 x 25.0m	PC Post-Ten	Gradient 5%
5+700	170.0	5.0	2 x 35.0m 4 x 25.0m	PC Post-Ten	Gradient 5%	78+480	170.0	6.5	2 x 35.0m 4 x 25.0m	PC Post-Ten	Gradient 5%
10+620	170.0	5.5	2 x 35.0m 4 x 25.0m	PC Post-Ten	Gradient 5%	83+850	170.0	6.0	2 x 35.0m 4 x 25.0m	PC Post-Ten	Gradient 5%
13+850	170.0	5.0	2 x 35.0m 4 x 25.0m	PC Post-Ten	Gradient 5%	85+900	170.0	5.0	2 x 35.0m 4 x 25.0m	PC Post-Ten	Gradient 5%
17+880	170.0	5.0	2 x 35.0m 4 x 25.0m	PC Post-Ten	Gradient 5%	91+370	170.0	6.0	2 x 35.0m 4 x 25.0m	PC Post-Ten	Phetchbaburi I/C. R 3171, Gradient 5%
23+130	170.0	5.0	2 x 35.0m 4 x 25.0m	PC Post-Ten	Gradient 5%	92+380	170.0	6.5	2 x 35.0m 4 x 25.0m	PC Post-Ten	Gradient 5%
24+020	170.0	5.5	2 x 35.0m 4 x 25.0m	PC Post-Ten	R 3335 Gradient 5%	93+960	170.0	6.5	2 x 35.0m 4 x 25.0m	PC Post-Ten	R 3205 Gradient 5%
24+500	170.0	6.0	2 x 35.0m 4 x 25.0m	PC Post-Ten	Gradient 5%	95+870	170.0	5.0	2 x 35.0m 4 x 25.0m	PC Post-Ten	Gradient 5%
33+300	170.0	5.0	2 x 35.0m 4 x 25.0m	PC Post-Ten	Gradient 5%	97+200	170.0	5.5	2 x 35.0m 4 x 25.0m	PC Post-Ten	R 3204 Gradient 5%
35+530	170.0	6.5	2 x 35.0m 4 x 25.0m	PC Post-Ten	Gradient 5%	107+800	170.0	6.0	2 x 35.0m 4 x 25.0m	PC Post-Ten	Gradient 5%
37+650	170.0	5.0	2 x 35.0m 4 x 25.0m	PC Post-Ten	Gradient 5%	109+850	170.0	6.0	2 x 35.0m 4 x 25.0m	PC Post-Ten	R 3175 Gradient 5%
44+280	170.0	5.0	2 x 35.0m 4 x 25.0m	PC Post-Ten	Gradient 5%	112+150	170.0	6.0	2 x 35.0m 4 x 25.0m	PC Post-Ten	Gradient 5%
46+630	170.0	5.0	2 x 35.0m 4 x 25.0m	PC Post-Ten	Gradient 5%	114+950	170.0	5.5	2 x 35.0m 4 x 25.0m	PC Post-Ten	Gradient 5%
53+800	170.0	5.0	2 x 35.0m 4 x 25.0m	PC Post-Ten	Gradient 5%	117+050	170.0	6.5	2 x 35.0m 4 x 25.0m	PC Post-Ten	Gradient 5%
55+300	170.0	6.5	2 x 35.0m 4 x 25.0m	PC Post-Ten	Gradient 5%	118+950	170.0	8.5	2 x 35.0m 4 x 25.0m	PC Post-Ten	Gradient 5%
57+760	170.0	5.5	2 x 35.0m 4 x 25.0m	PC Post-Ten	Gradient 5%	119+930	170.0	5.0	2 x 35.0m 4 x 25.0m	PC Post-Ten	Gradient 5%
59+100	170.0	5.0	2 x 35.0m 4 x 25.0m	PC Post-Ten	Gradient 5%	123+700	170.0	6.0	2 x 35.0m 4 x 25.0m	PC Post-Ten	R 3203 Gradient 5%
62+400	170.0	6.0	2 x 35.0m 4 x 25.0m	PC Post-Ten	Gradient 5%	124+050	170.0	6.5	2 x 35.0m 4 x 25.0m	PC Post-Ten	Gradient 5%
64+910	170.0	5.0	2 x 35.0m 4 x 25.0m	PC Post-Ten	Gradient 5%	130+300	170.0	5.5	2 x 35.0m 4 x 25.0m	PC Post-Ten	Gradient 5%
68+100	170.0	5.5	2 x 35.0m 4 x 25.0m	PC Post-Ten	Gradient 5%	131+250	170.0	6.0	2 x 35.0m 4 x 25.0m	PC Post-Ten	Gradient 5%

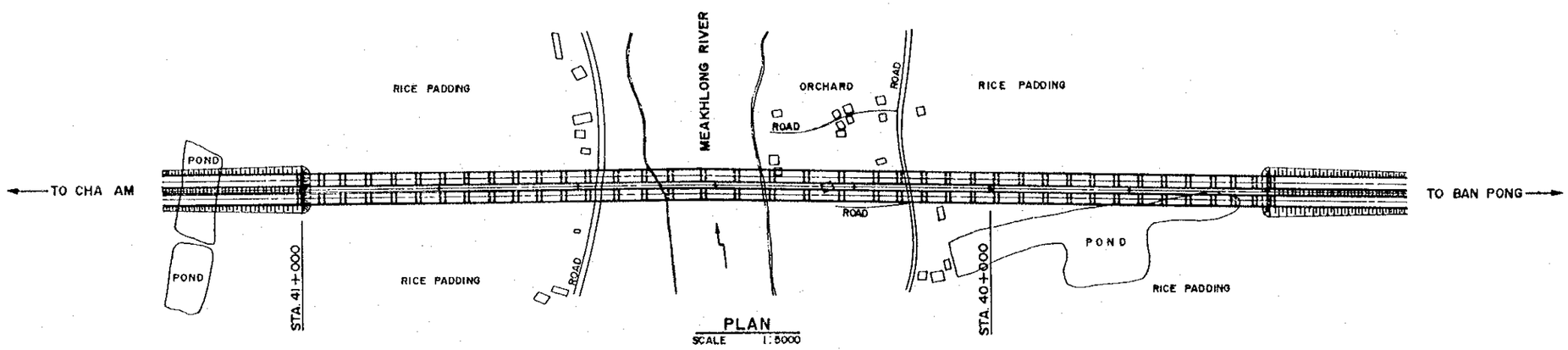
BOX CULVERTS

STA.	Cross Section	Length (m)
28+770	3.0m x 1.5m	40.0
30+750	3.0m x 1.5m	40.0
31+680	3.0m x 1.5m	40.0
32+080	3.0m x 1.5m	40.0
38+570	3.5m x 1.8m	40.0
84+920	3.0m x 1.2m	40.0
95+120	3.0m x 1.2m	40.0
110+650	3.5m x 1.5m	40.0
114+700	2.0m x 1.5m	40.0
121+120	3.0m x 1.5m	40.0
133+200	3.5m x 1.8m	40.0

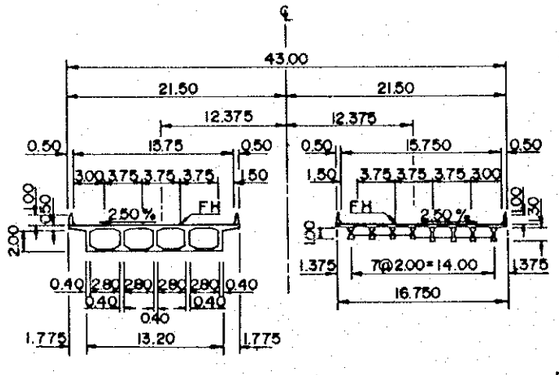
BAN PONG–CHA AM ROUTE	DWG No. BC.4–4
MEAKHLONG RIVER	



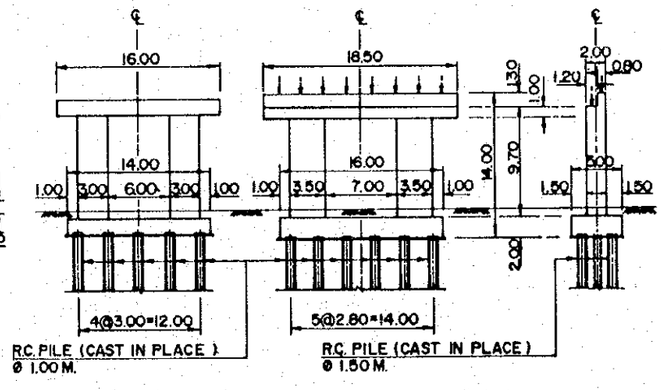
PROFILE
SCALE V = 1:2000
H = 1:5000



PLAN
SCALE 1:5000

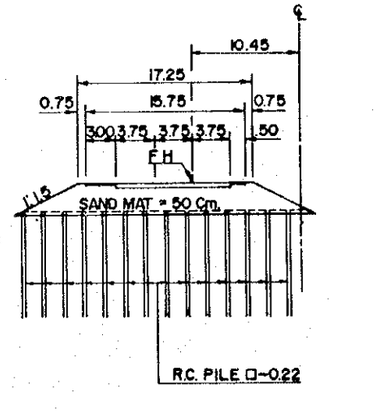


TYPICAL CROSS SECTION
SCALE 1:400

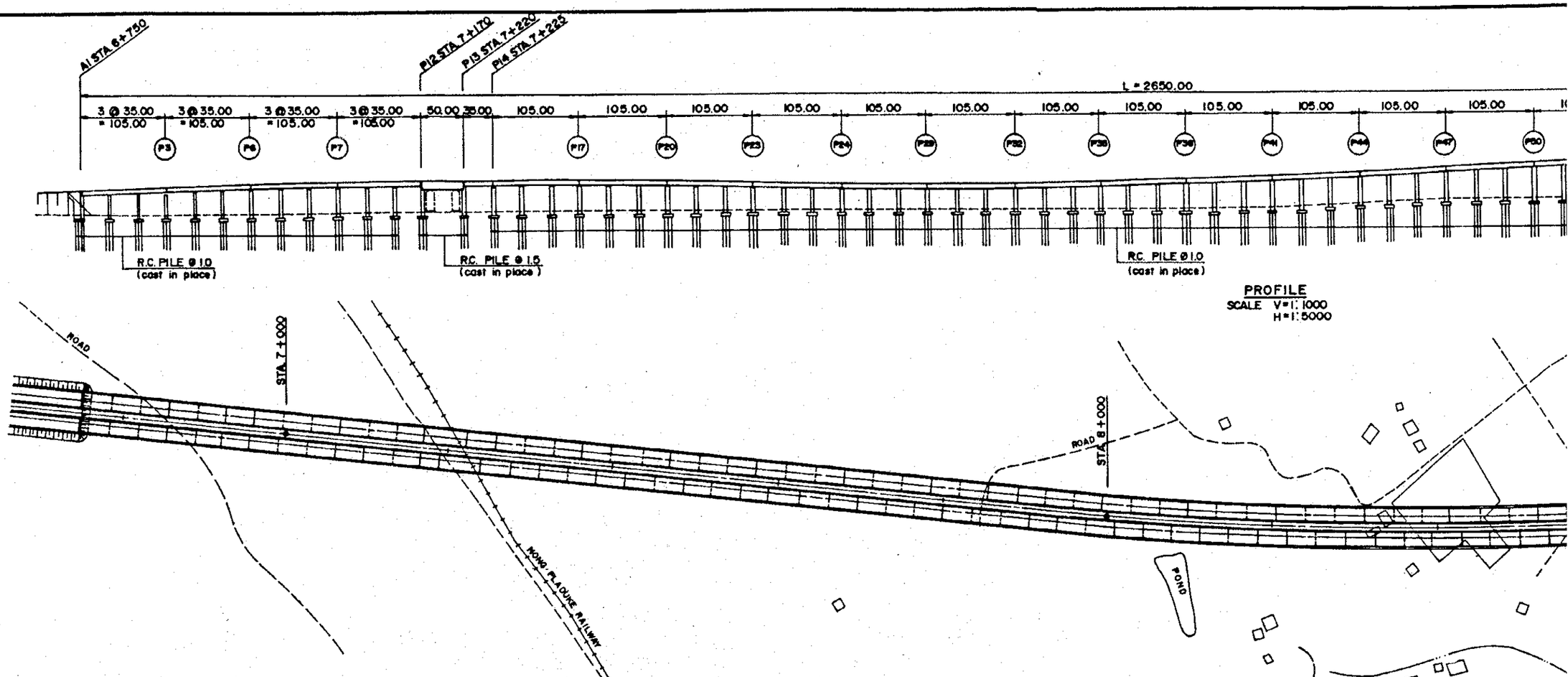


P29 CROSS SECTION
SCALE 1:400

P25 CROSS SECTION
SCALE 1:400

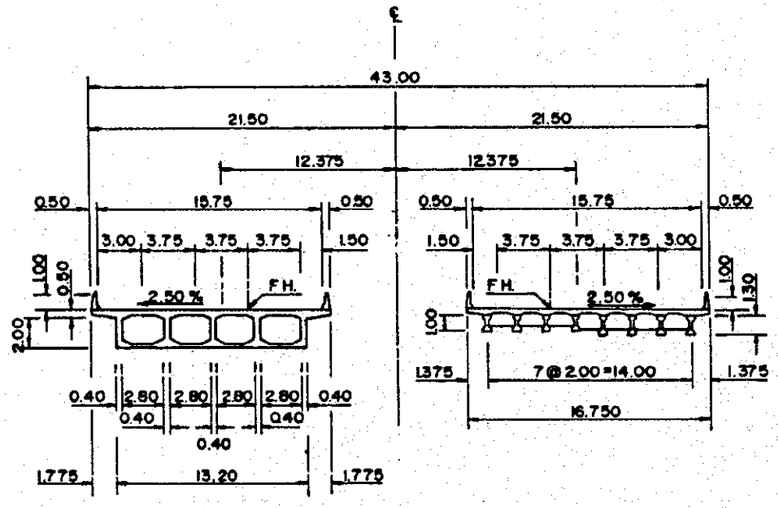


BEARING UNIT CROSS SECTION (A) (A)
SCALE 1:400

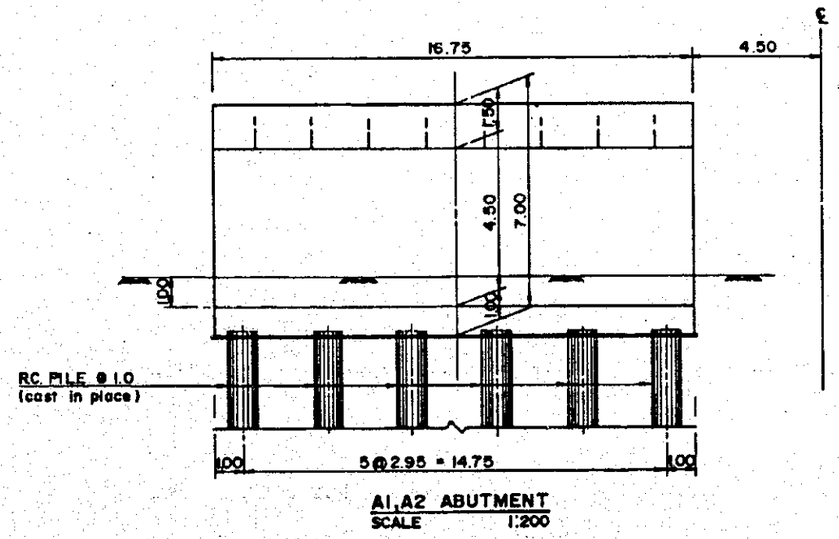


PROFILE
SCALE V=1:1000
H=1:5000

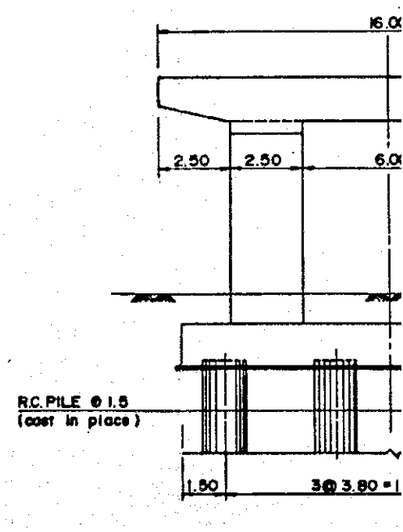
PLAN
SCALE 1:5000



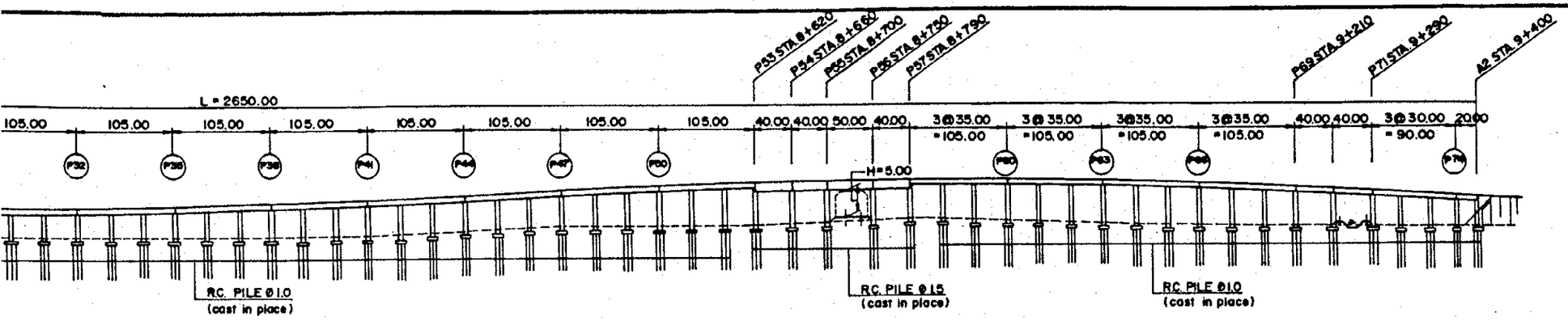
TYPICAL CROSS SECTION
SCALE 1:400



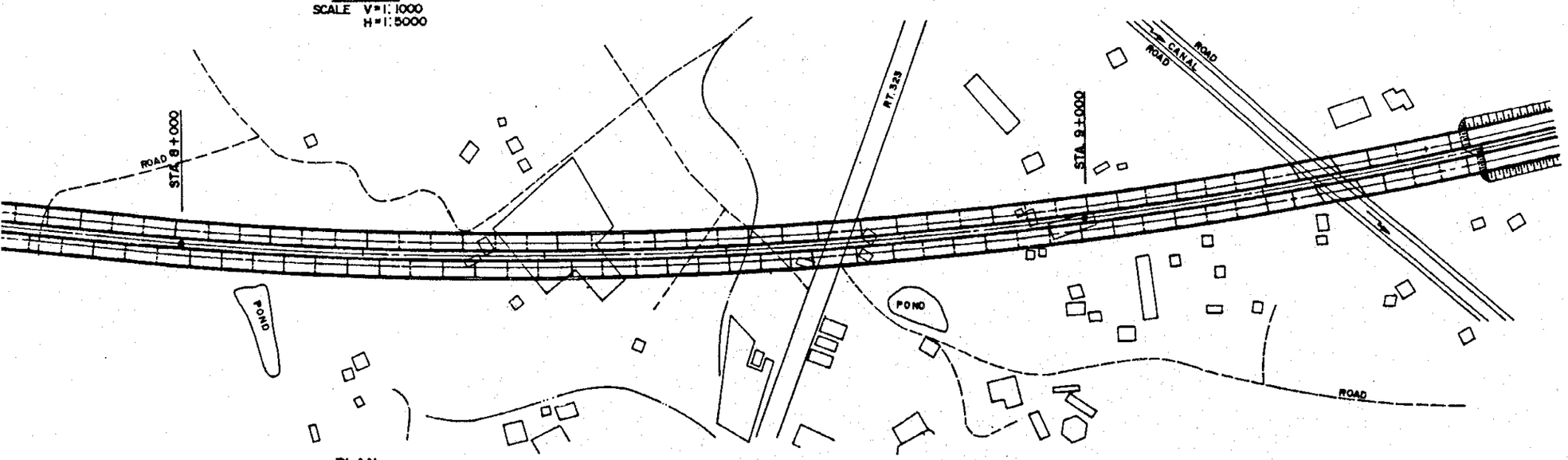
A1, A2 ABUTMENT
SCALE 1:200



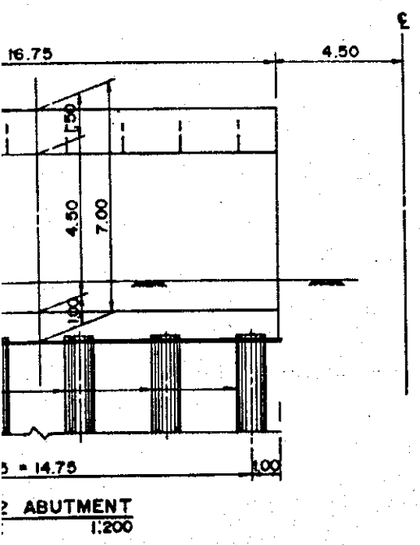
BAN PONG CHA-AM ROUTE	DWG No. BC.4-8
VIADUCT AT STA. 6+750 TO STA. 9+400	



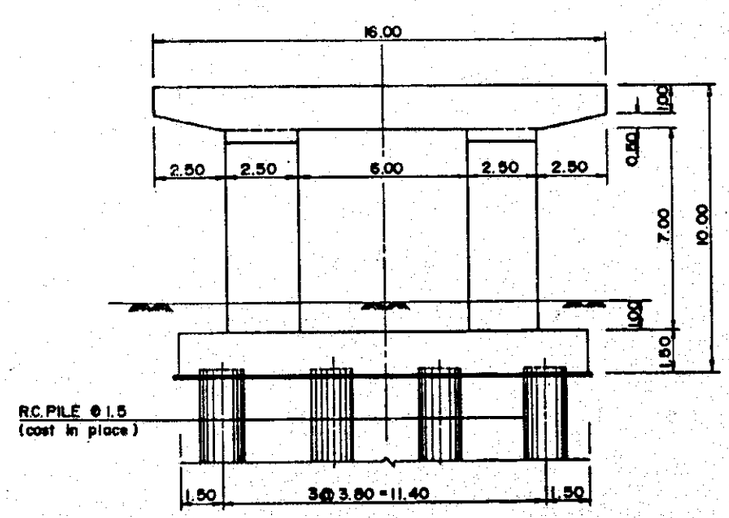
PROFILE
SCALE V=1:1000
H=1:5000

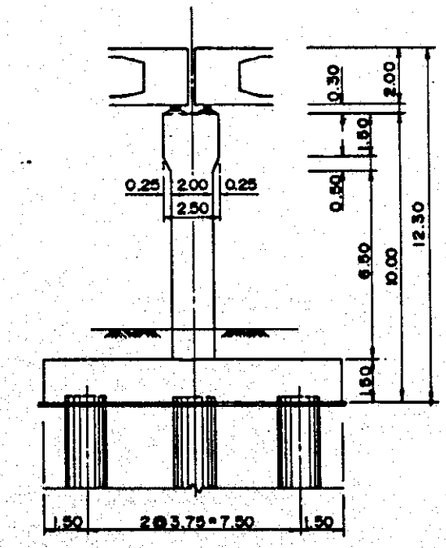


PLAN
SCALE 1:5000



ABUTMENT
1:200



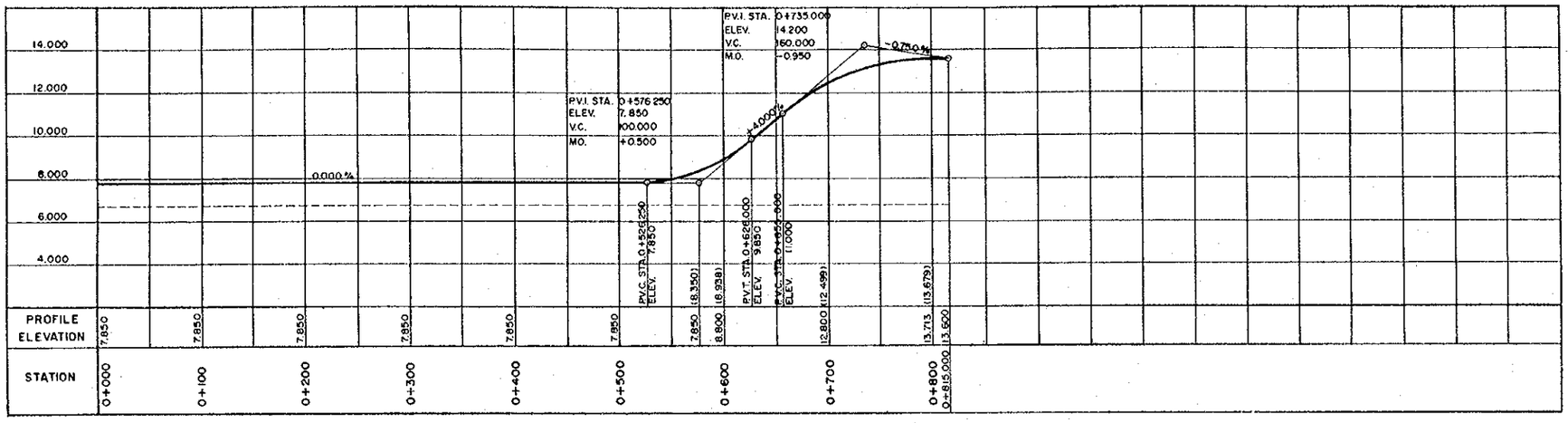


P55 DETAIL
SCALE 1:200

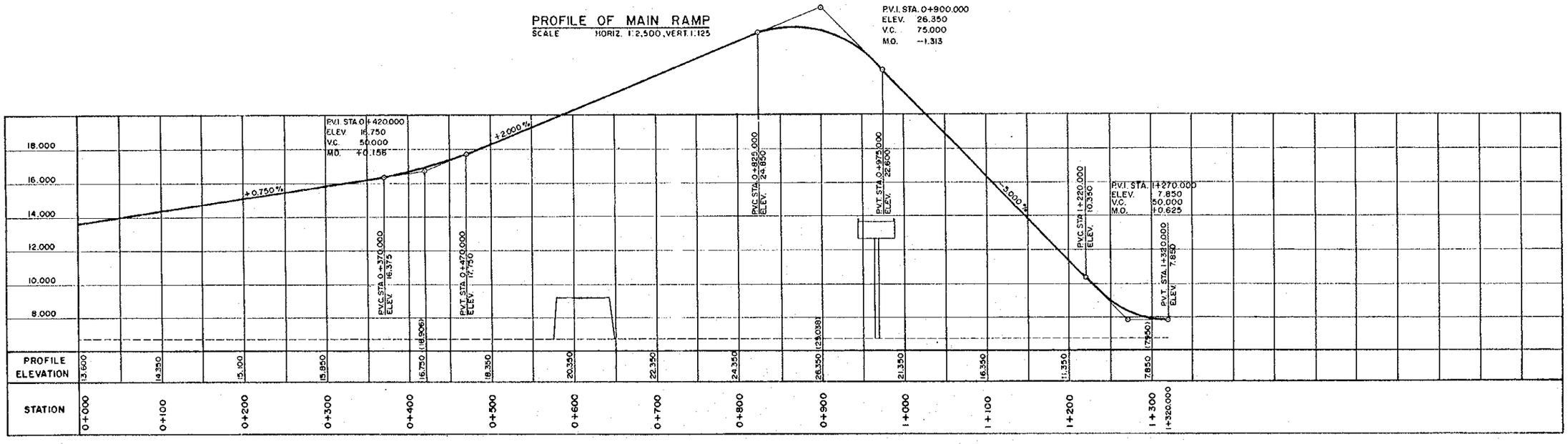
FEASIBILITY STUDY ON
THE INTER - CITY TOLL MOTORWAY PROJECT
IN THE KINGDOM OF THAILAND

BAN PONG - CHA AM ROUTE

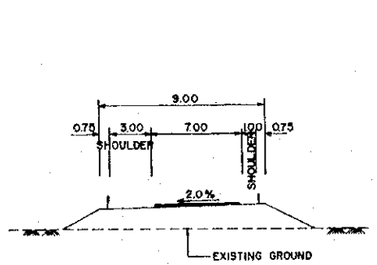
BAN PONG JUNCTION PROFILE & SECTION	SCALE AS SHOWN	SHEET NO. BC 5-2
	DATE	



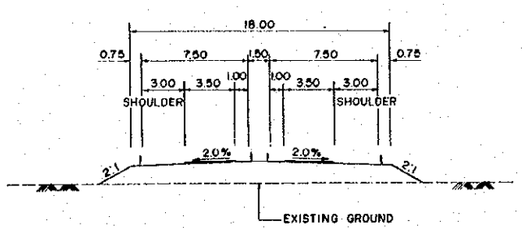
PROFILE OF MAIN RAMP
SCALE HORIZ. 1:2,500, VERT. 1:125



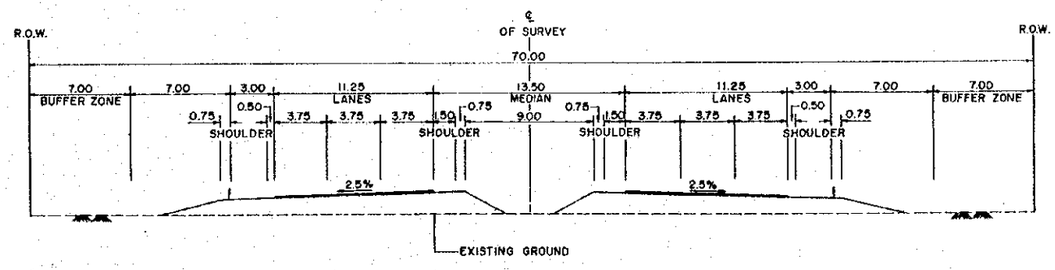
PROFILE OF MAIN RAMP
SCALE HORIZ. 1:2,500, VERT. 1:125



SECTION (A)-(A)
SCALE 1:200



SECTION (B)-(B)
SCALE 1:200

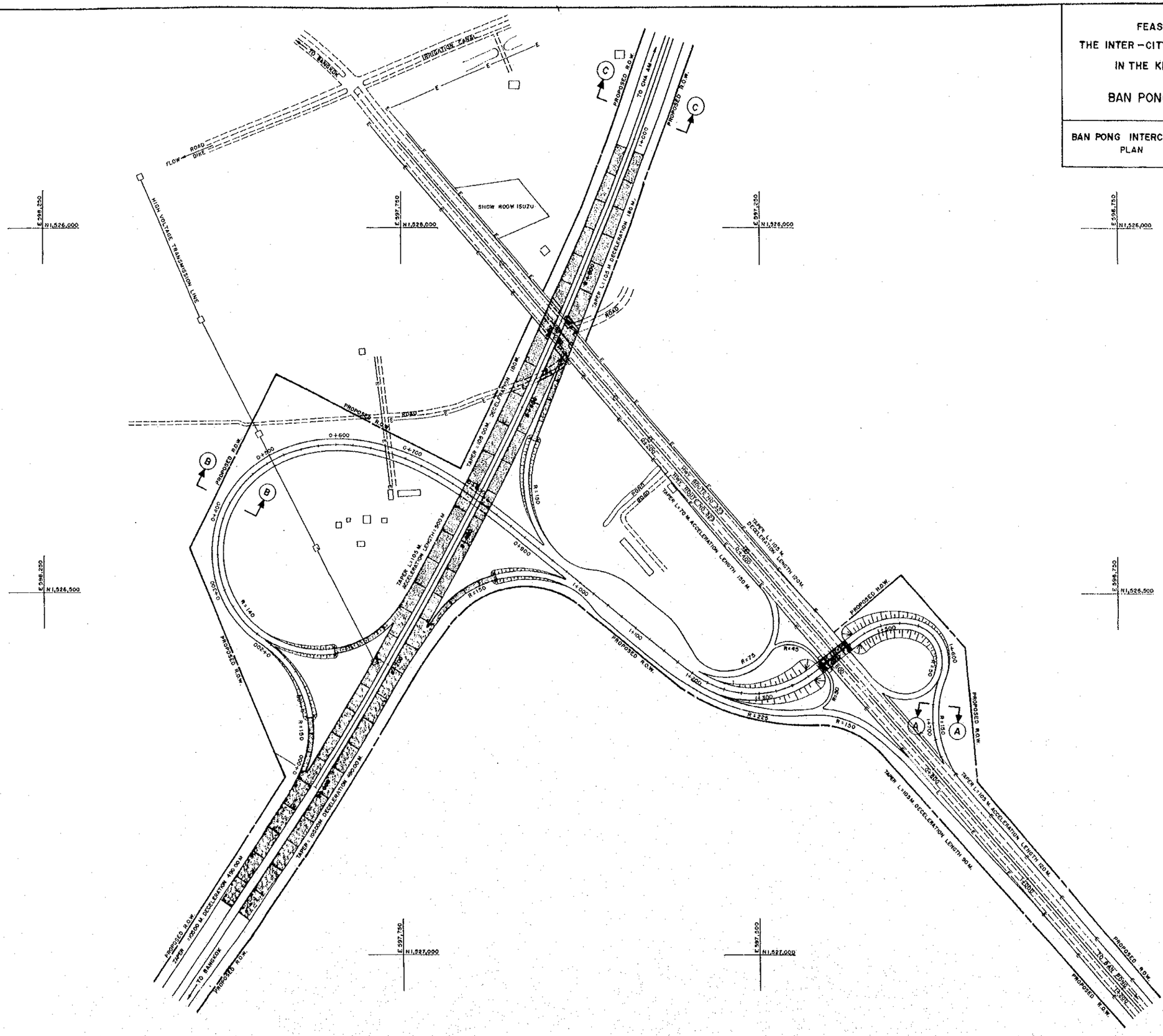


SECTION (C)-(C)
SCALE 1:200

FEASIBILITY STUDY ON
THE INTER-CITY TOLL MOTORWAY PROJECT
IN THE KINGDOM OF THAILAND

BAN PONG - CHA AM ROUTE

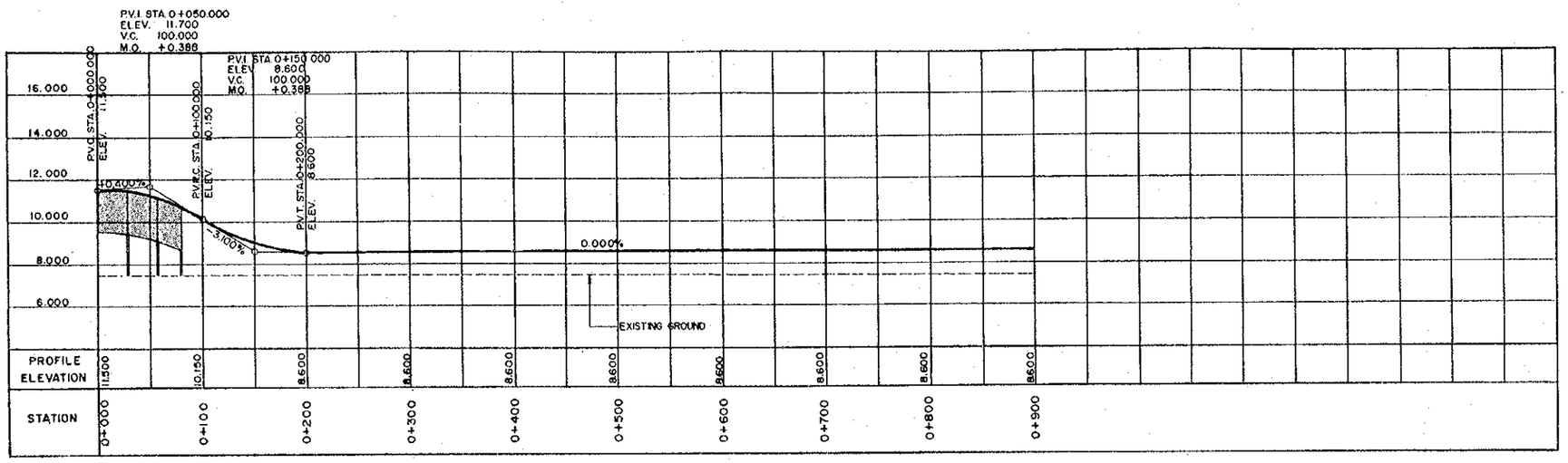
BAN PONG INTERCHANGE PLAN	SCALE 1: 2,000	SHEET NO. BC5-3
	DATE	



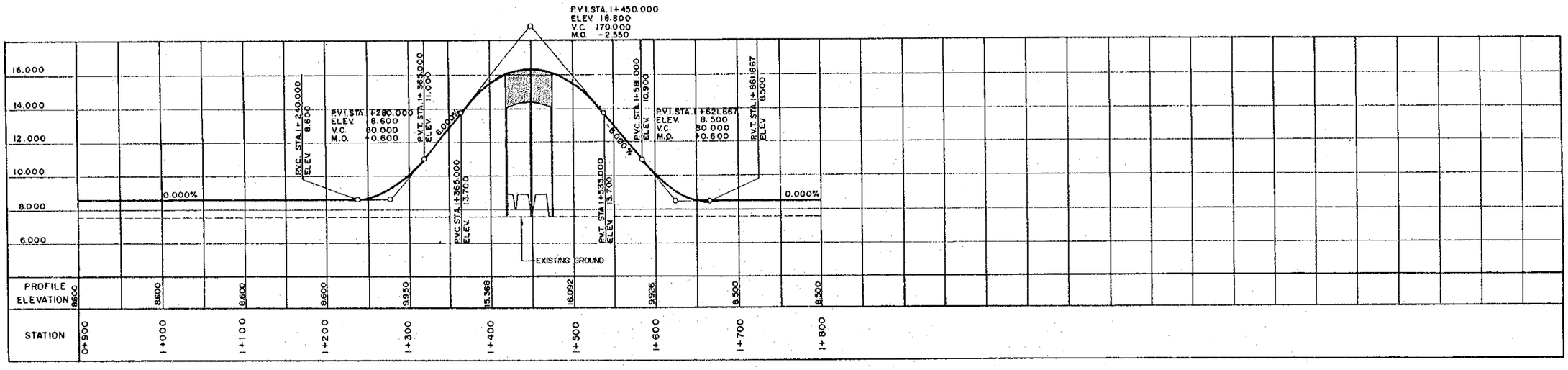
FEASIBILITY STUDY ON
THE INTER - CITY TOLL MOTORWAY PROJECT
IN THE KINGDOM OF THAILAND

BAN PONG – CHA AM ROUTE

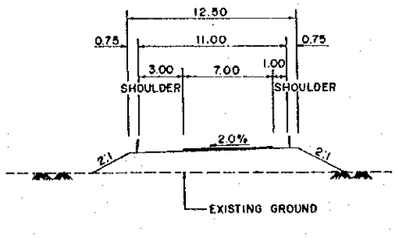
BAN PONG INTERCHANGE PROFILE & SECTIONS	SCALE AS SHOWN	SHEET NO. BC 5-4
	DATE	



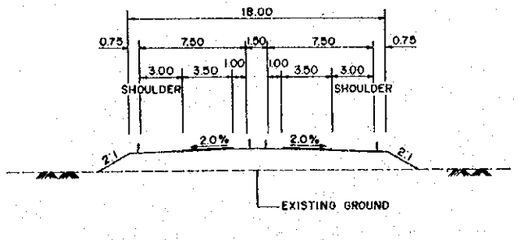
PROFILE OF MAIN RAMP
SCALE HORIZ. 1:2,500, VERT. 1:125



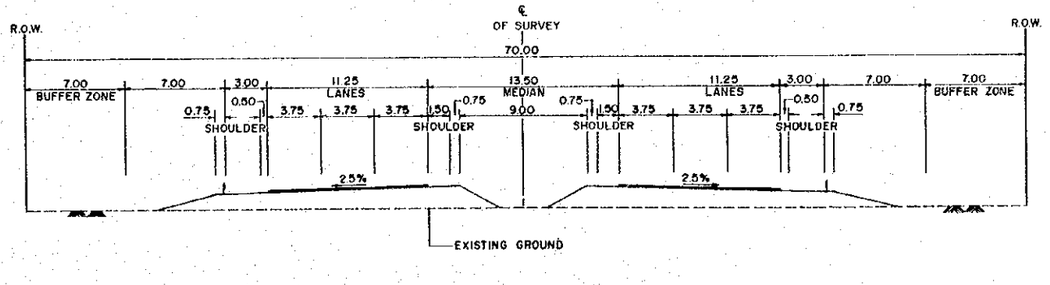
PROFILE OF MAIN RAMP
SCALE HORIZ. 1:2,500, VERT. 1:125



SECTION (A)-(A)
SCALE 1:200



SECTION (B)-(B)
SCALE 1:200

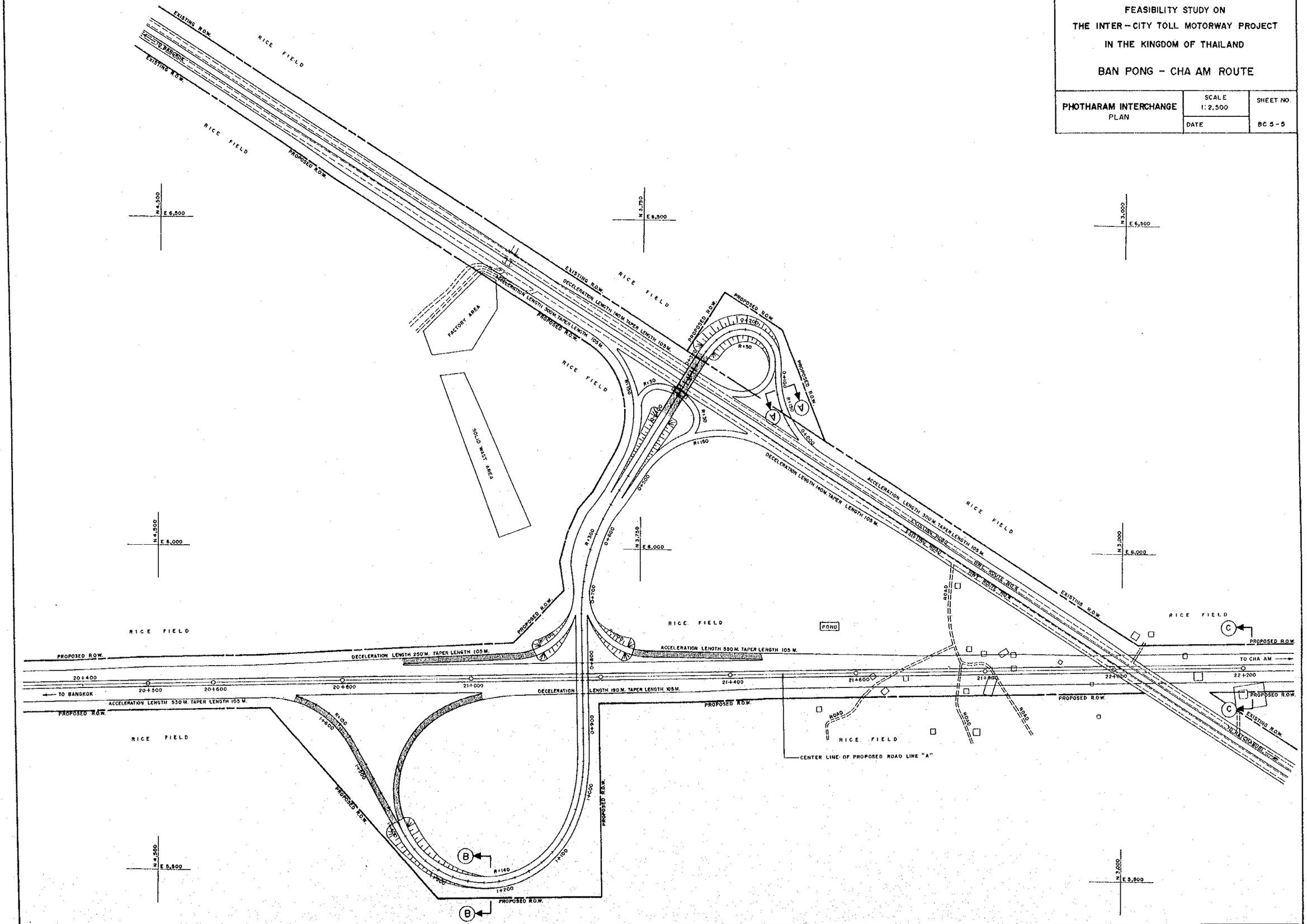


SECTION (C)-(C)
SCALE 1:200

FEASIBILITY STUDY ON
THE INTER-CITY TOLL MOTORWAY PROJECT
IN THE KINGDOM OF THAILAND

BAN PONG - CHA AM ROUTE

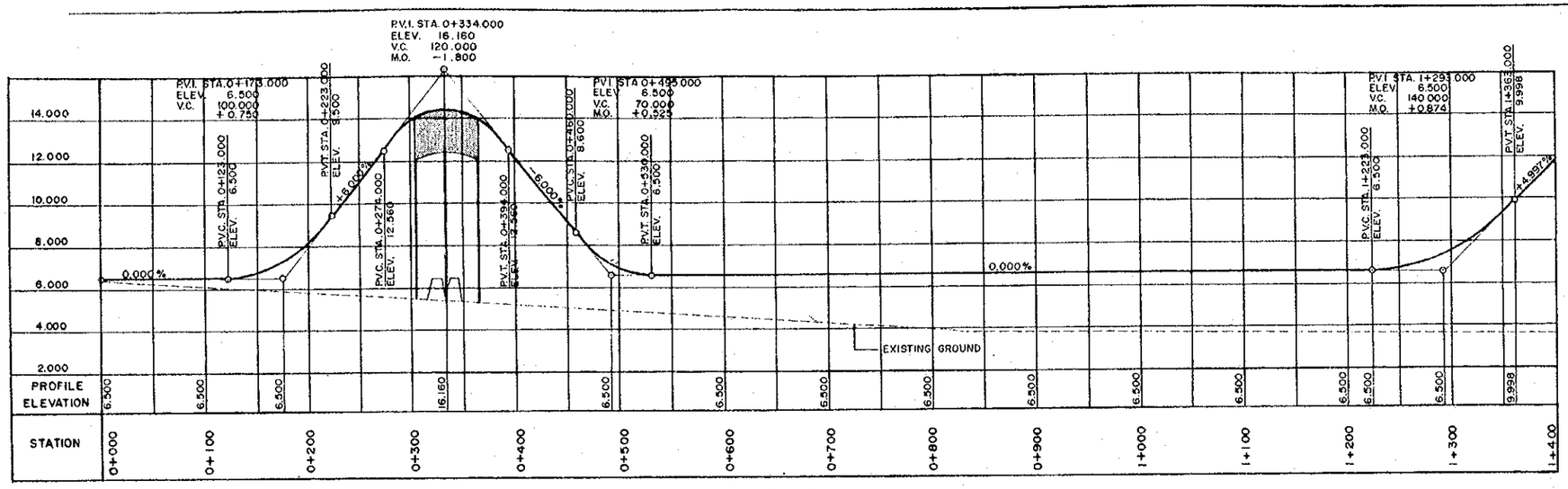
PHOTHARAM INTERCHANGE PLAN	SCALE 1:2,500	SHEET NO.
	DATE	BC 5-5



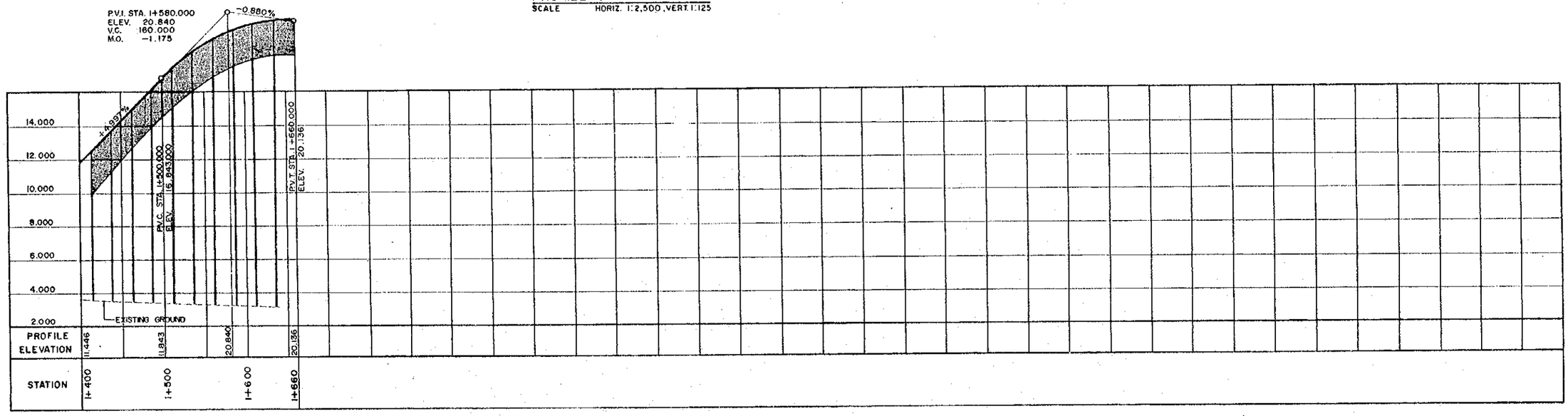
FEASIBILITY STUDY ON
THE INTER - CITY TOLL MOTORWAY PROJECT
IN THE KINGDOM OF THAILAND

BAN PONG – CHA AM ROUTE

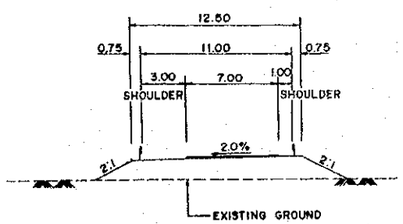
PHOTHARAM INTERCHANGE PROFILE & SECTIONS	SCALE AS SHOWN	SHEET NO. BC 5 - 6
	DATE	



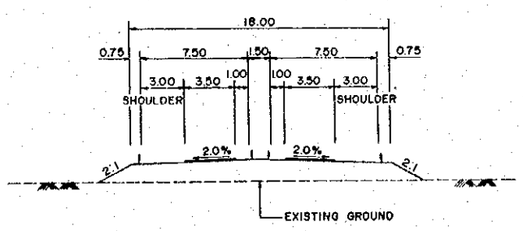
PROFILE OF MAIN RAMP
SCALE HORIZ. 1:2,500, VERT 1:125



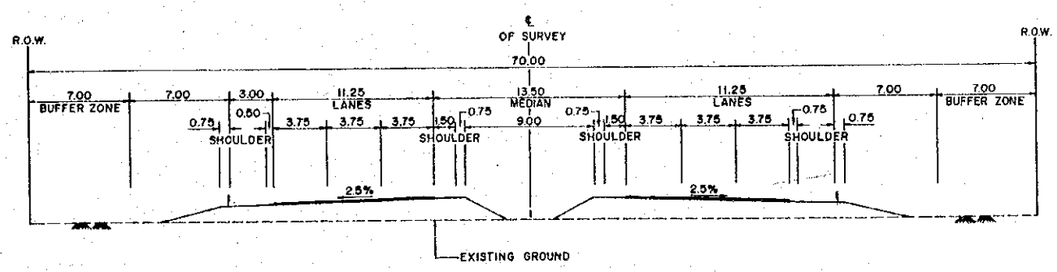
PROFILE OF MAIN RAMP
SCALE HORIZ. 1:2,500, VERT 1:125



SECTION (1)–(1)
SCALE 1:200



SECTION (2)–(2)
SCALE 1:200

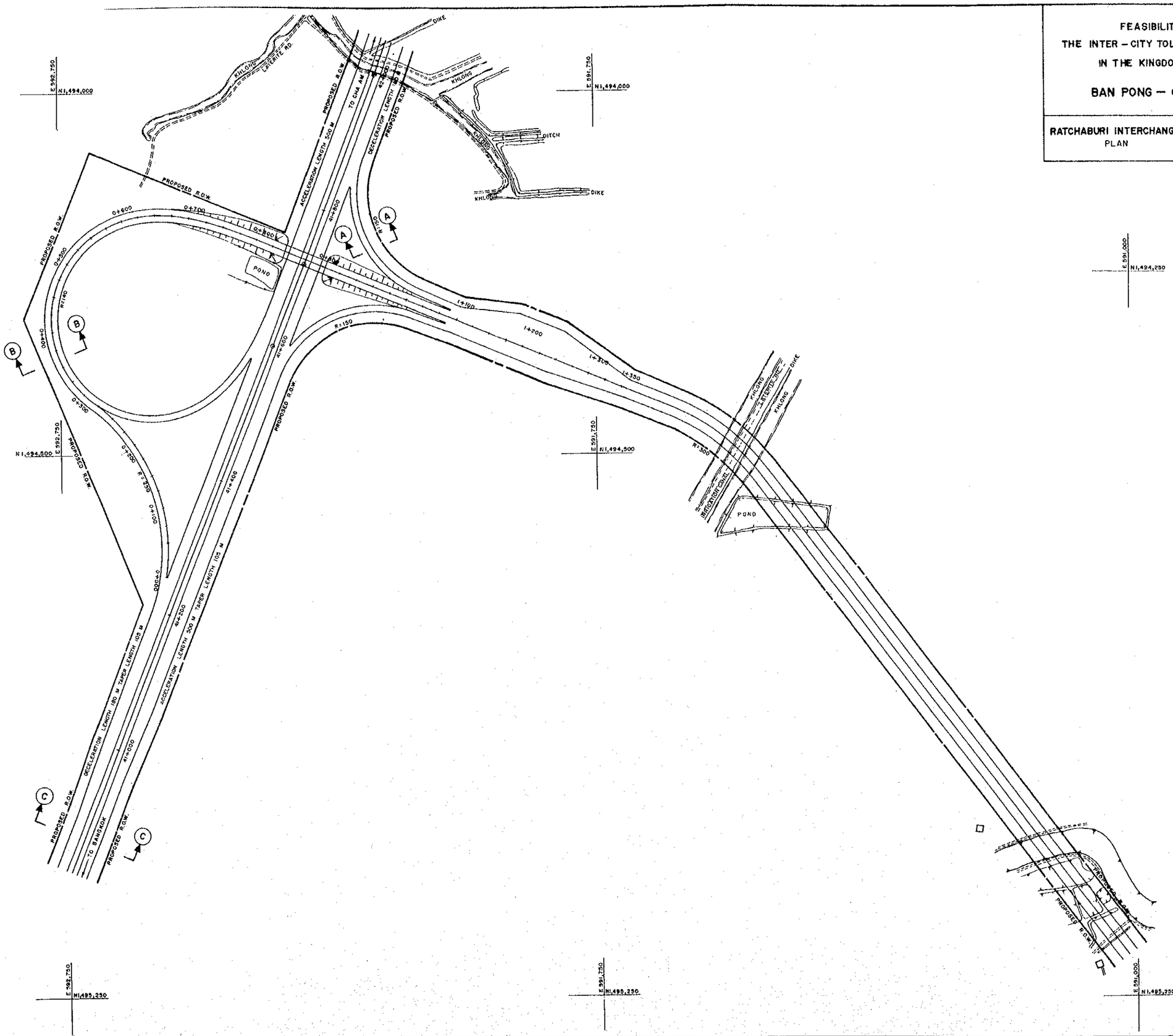


SECTION (3)–(3)
SCALE 1:200

FEASIBILITY STUDY ON
THE INTER – CITY TOLL MOTORWAY PROJECT
IN THE KINGDOM OF THAILAND

BAN PONG – CHA AM ROUTE

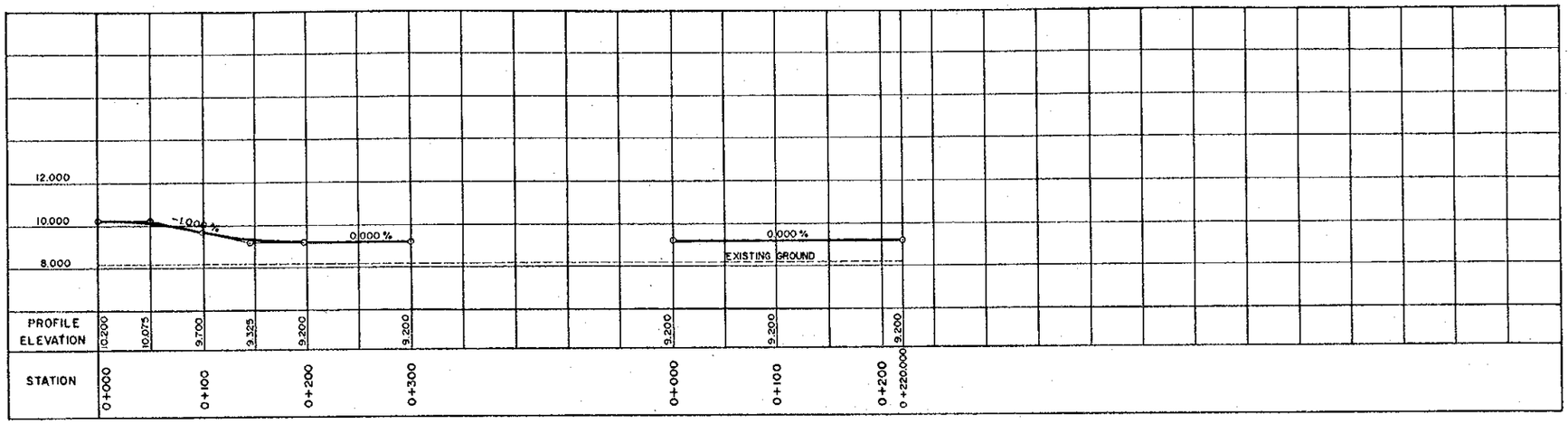
RATCHABURI INTERCHANGE PLAN	SCALE 1: 2,500	SHEET NO. BC 5 – 7
	DATE	



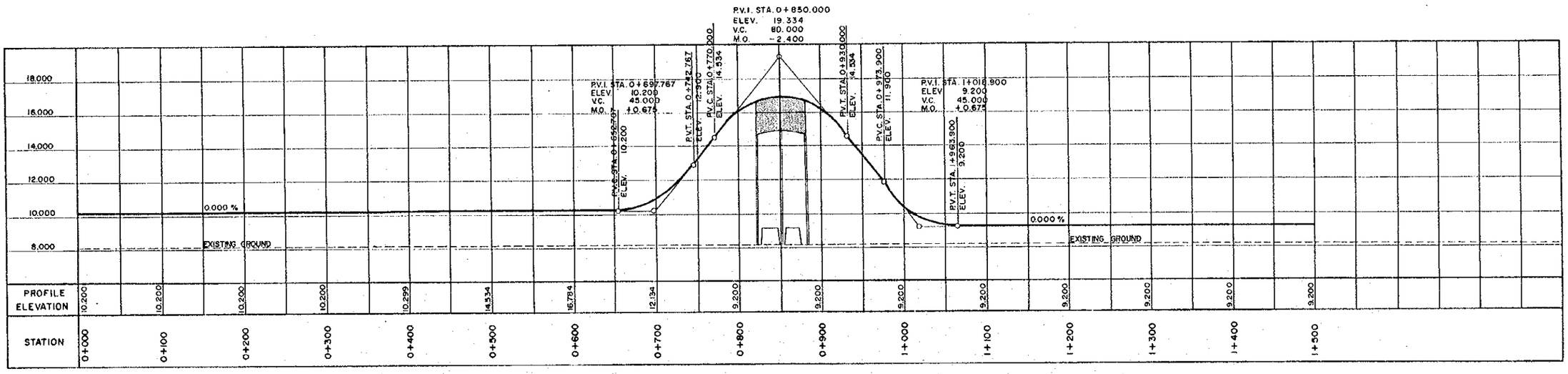
FEASIBILITY STUDY ON
THE INTER-CITY TOLL MOTORWAY PROJECT
IN THE KINGDOM OF THAILAND

BAN PONG – CHA AM ROUTE

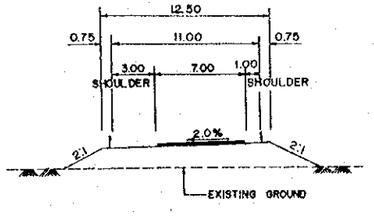
RATCHABURI INTERCHANGE PROFILE & SECTIONS	SCALE AS SHOWN	SHEET NO. BC 5 – 8
	DATE	



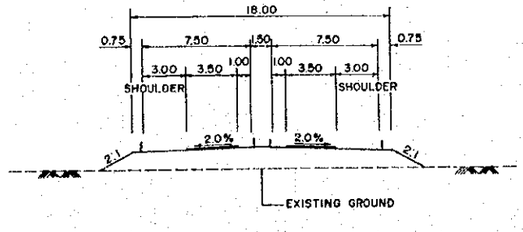
PROFILE OF MAIN RAMP
SCALE HORIZ. 1:2,500, VERT. 1:125



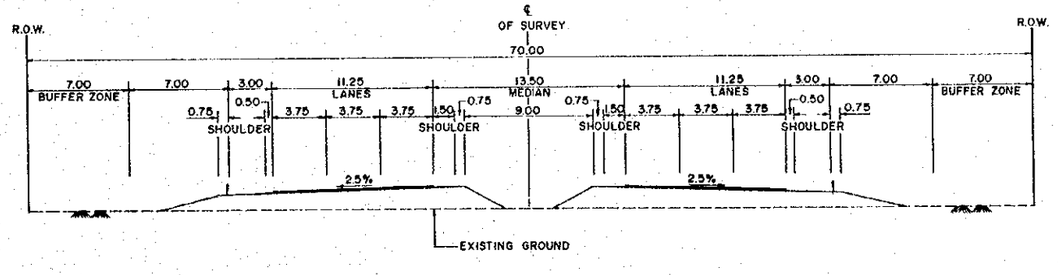
PROFILE OF MAIN RAMP
SCALE HORIZ. 1:2,500, VERT. 1:125



SECTION (A)–(A)
SCALE 1:200



SECTION (B)–(B)
SCALE 1:200

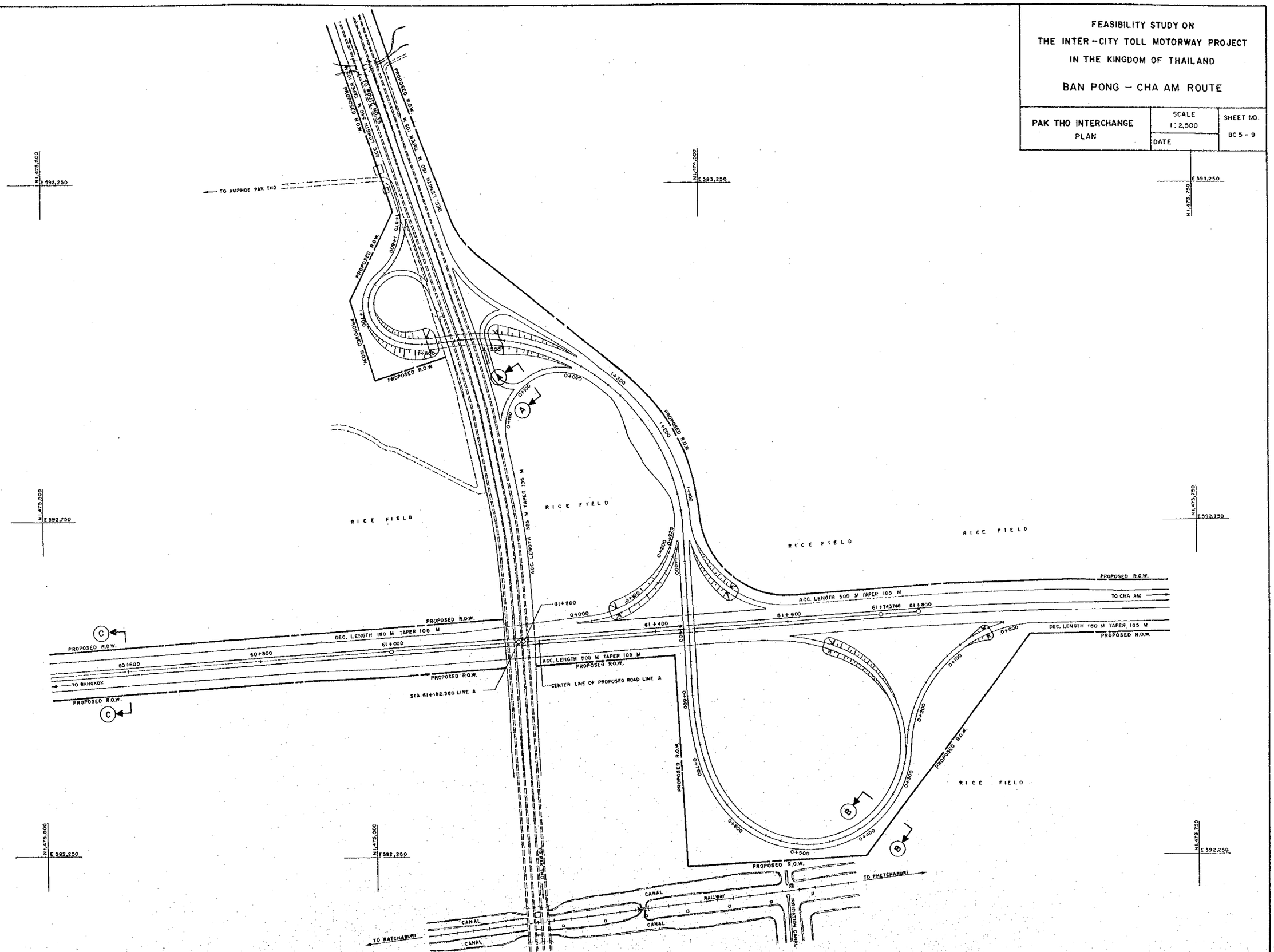


SECTION (C)–(C)
SCALE 1:200

FEASIBILITY STUDY ON
THE INTER-CITY TOLL MOTORWAY PROJECT
IN THE KINGDOM OF THAILAND

BAN PONG – CHA AM ROUTE

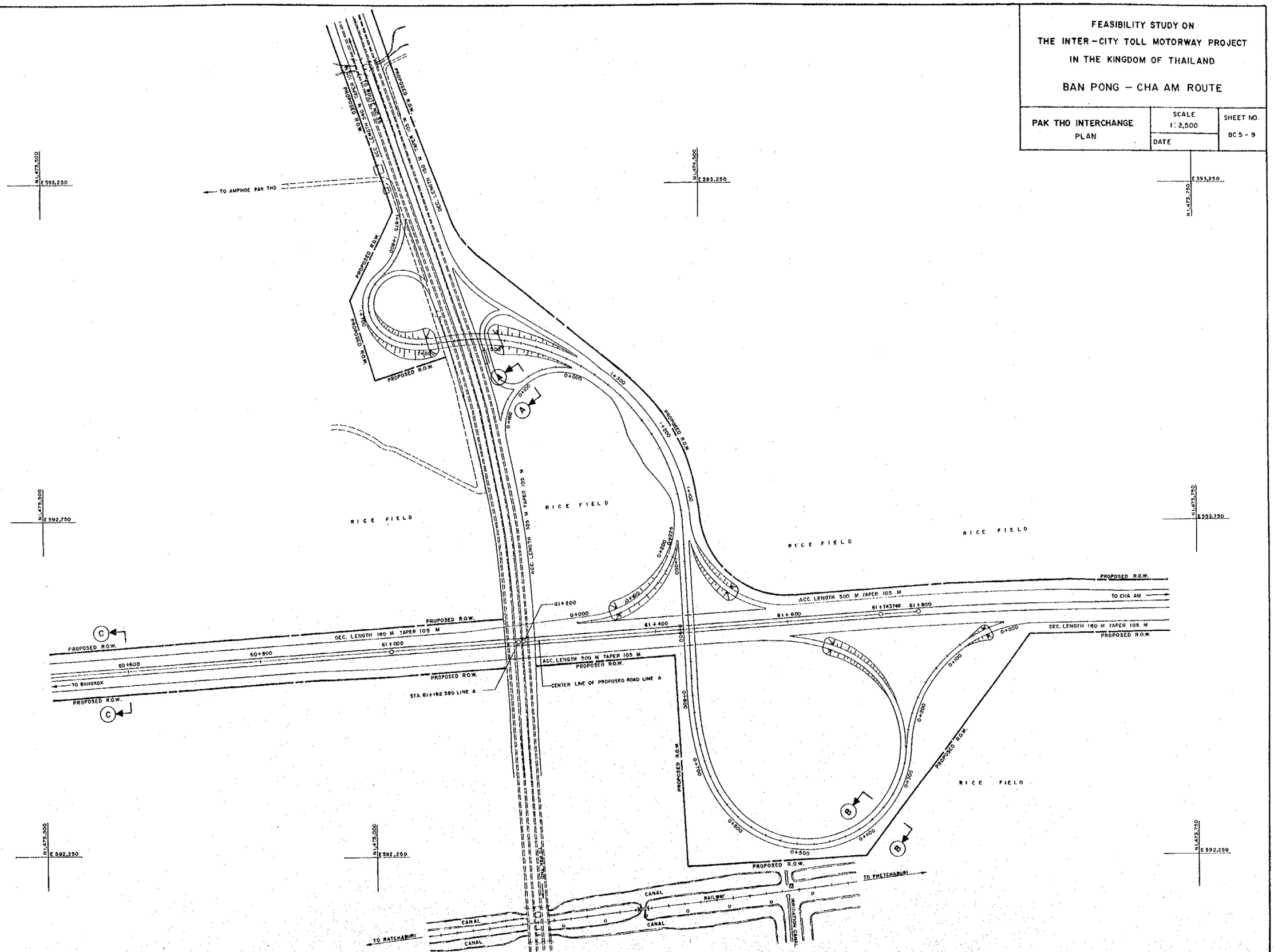
PAK THO INTERCHANGE PLAN	SCALE 1 : 2,500	SHEET NO. BC 5 - 9
	DATE	



FEASIBILITY STUDY ON
THE INTER-CITY TOLL MOTORWAY PROJECT
IN THE KINGDOM OF THAILAND

BAN PONG – CHA AM ROUTE

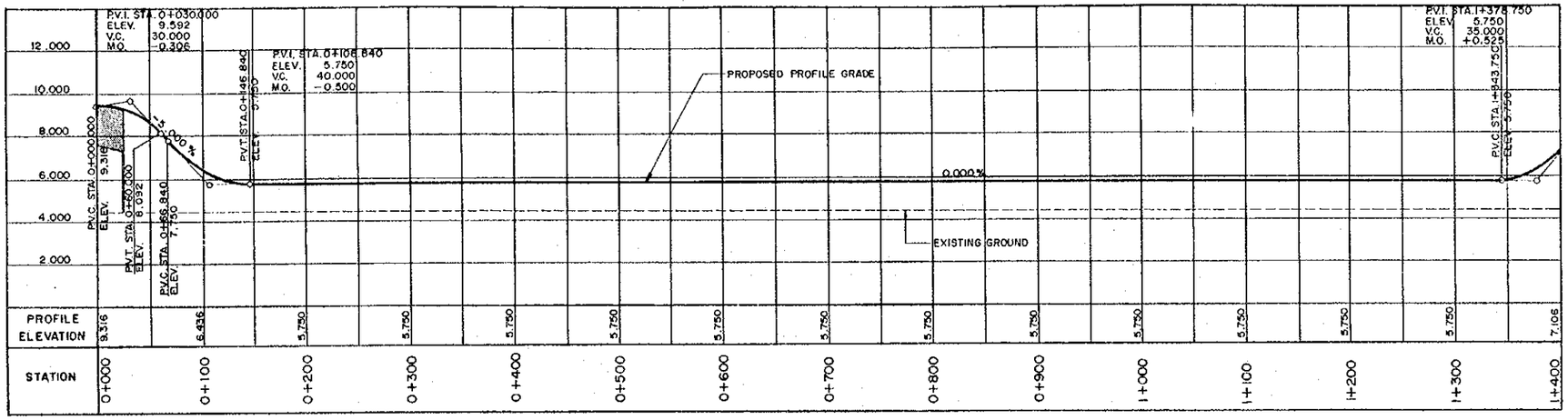
PAK THO INTERCHANGE PLAN	SCALE 1 : 2,500	SHEET NO. BC 5 - 9
	DATE	



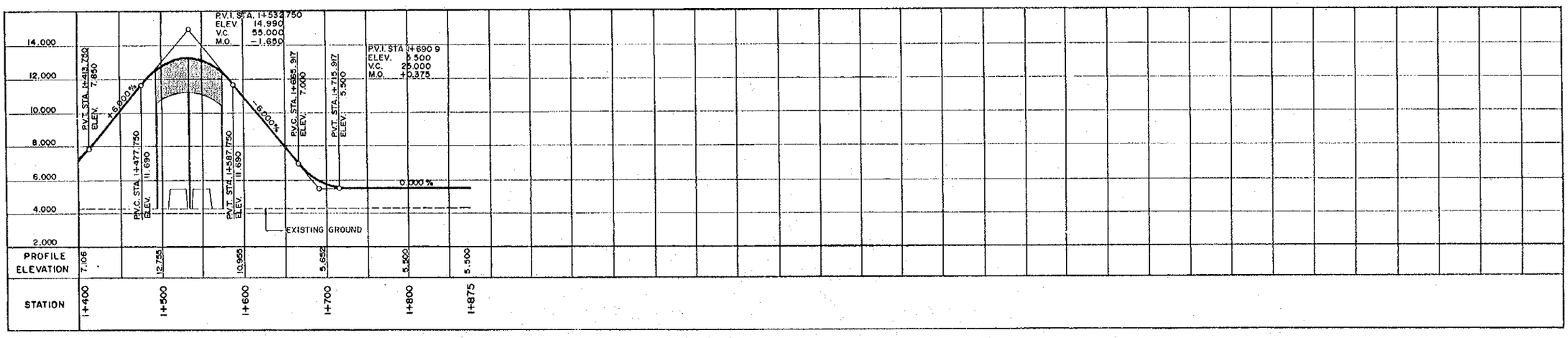
FEASIBILITY STUDY ON
THE INTER - CITY TOLL MOTORWAY PROJECT
IN THE KINGDOM OF THAILAND

BAN PONG — CHA AM ROUTE

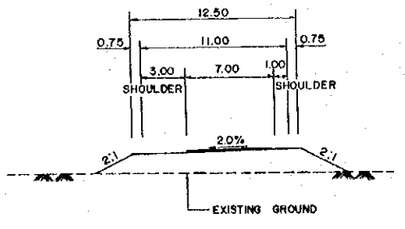
PAK THO INTERCHANGE PROFILE & SECTIONS	SCALE AS SHOWN	SHEET NO. BC 5 - 10
	DATE	



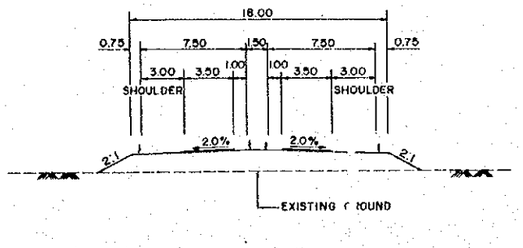
PROFILE OF MAIN RAMP
SCALE HORIZ. 1:2,500, VERT. 1:125



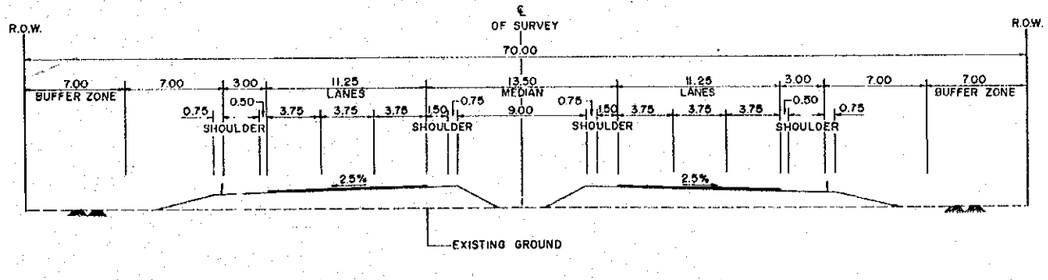
PROFILE OF MAIN RAMP
SCALE HORIZ. 1:2,500, VERT. 1:125



SECTION (A)-(A)
SCALE 1:200



SECTION (B)-(B)
SCALE 1:200

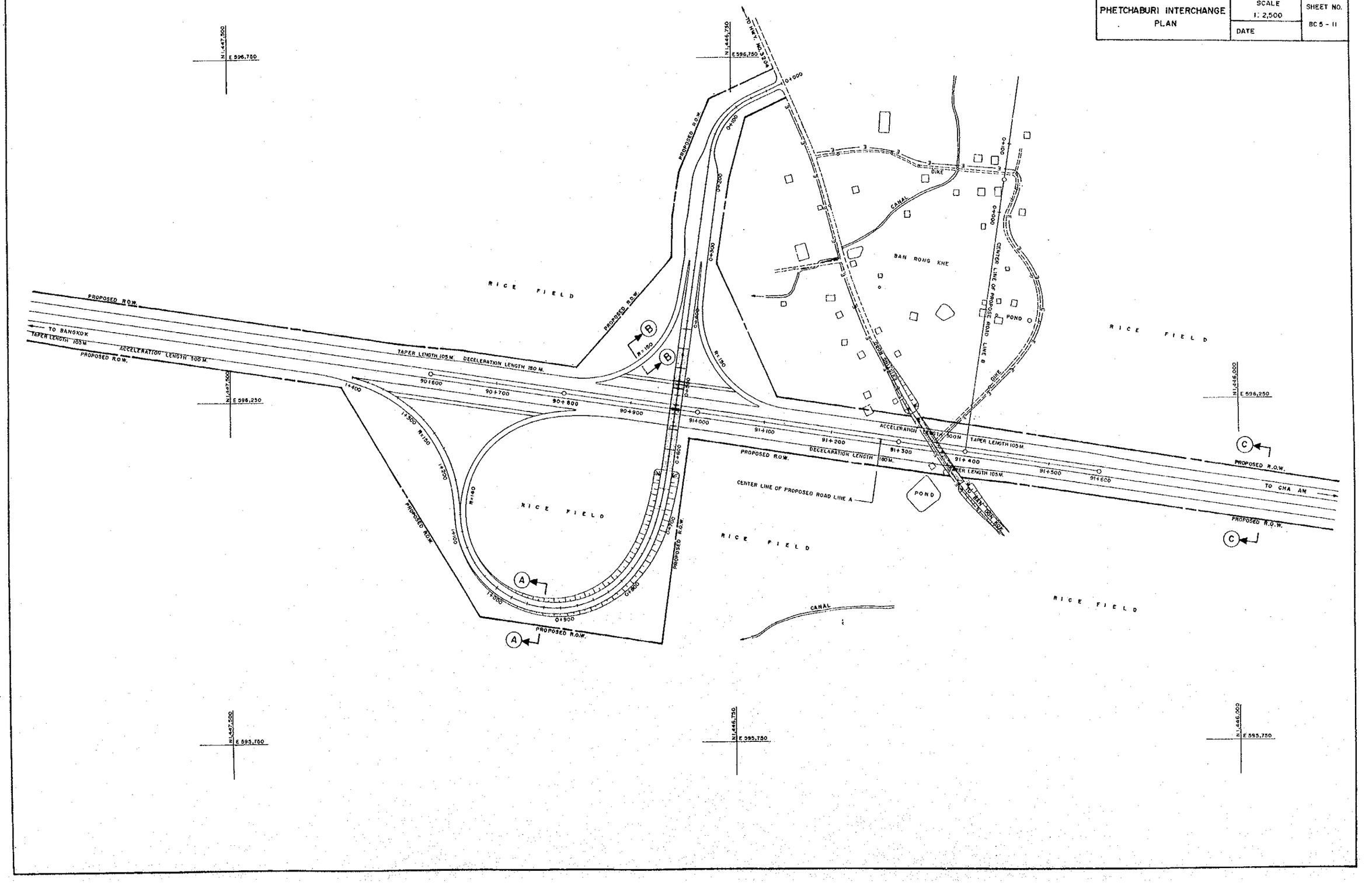


SECTION (C)-(C)
SCALE 1:200

FEASIBILITY STUDY ON
THE INTER-CITY TOLL MOTORWAY PROJECT
IN THE KINGDOM OF THAILAND

BAN PONG – CHA AM ROUTE

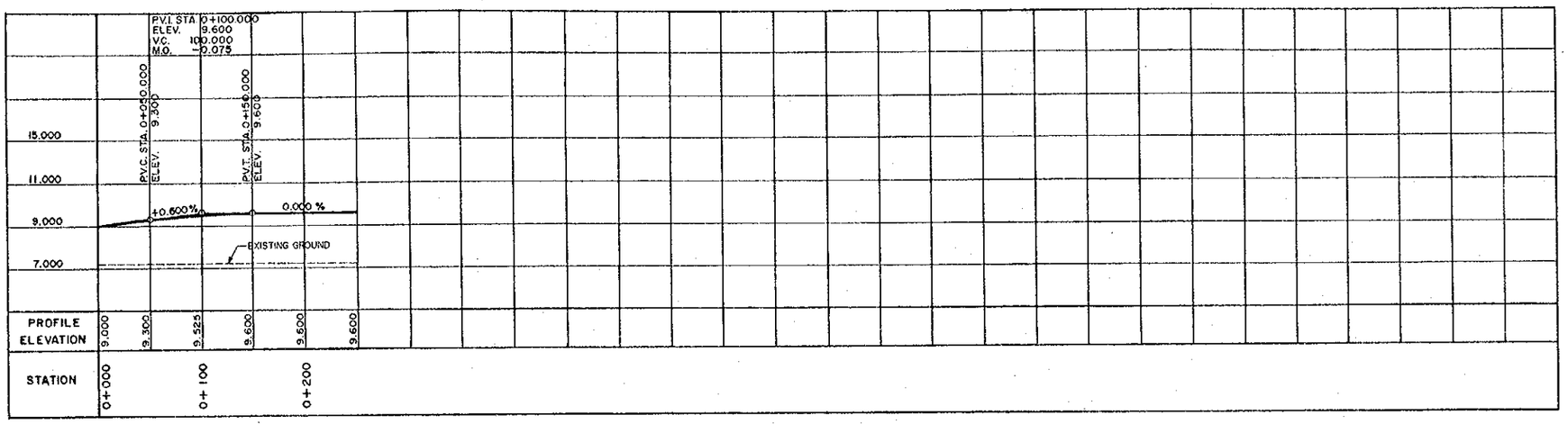
PHETCHABURI INTERCHANGE PLAN	SCALE 1: 2,500	SHEET NO. BC 5 - 11
	DATE	



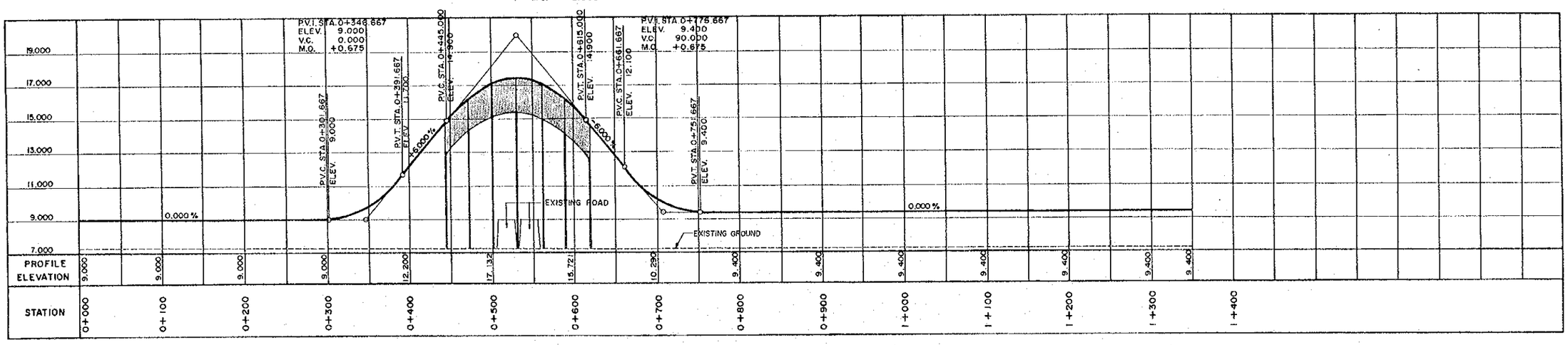
FEASIBILITY STUDY ON
THE INTER - CITY TOLL MOTORWAY PROJECT
IN THE KINGDOM OF THAILAND

BAN PONG - CHA AM ROUTE

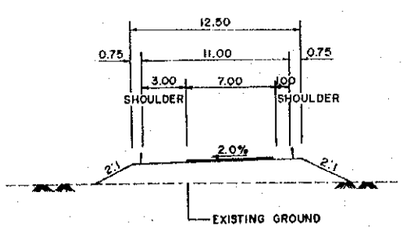
PHETCHABURI INTERCHANGE PROFILE & SECTIONS	SCALE AS SHOWN	SHEET NO. BC5 - 12
	DATE	



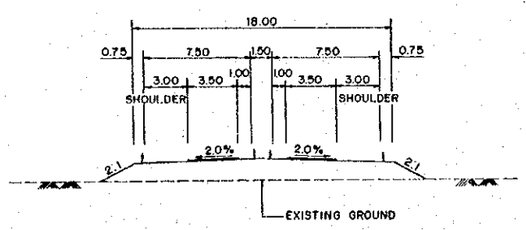
PROFILE OF MAIN RAMP
SCALE HORIZ. 1:2,500, VERT. 1:125



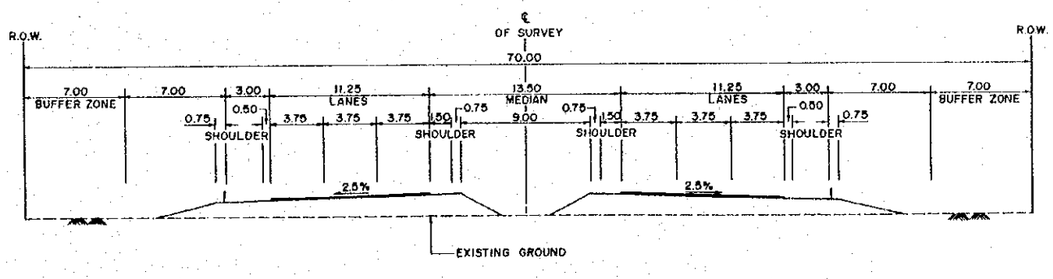
PROFILE OF MAIN RAMP
SCALE HORIZ. 1:2,500, VERT. 1:125



SECTION (A)-(A)
SCALE 1:200



SECTION (B)-(B)
SCALE 1:200

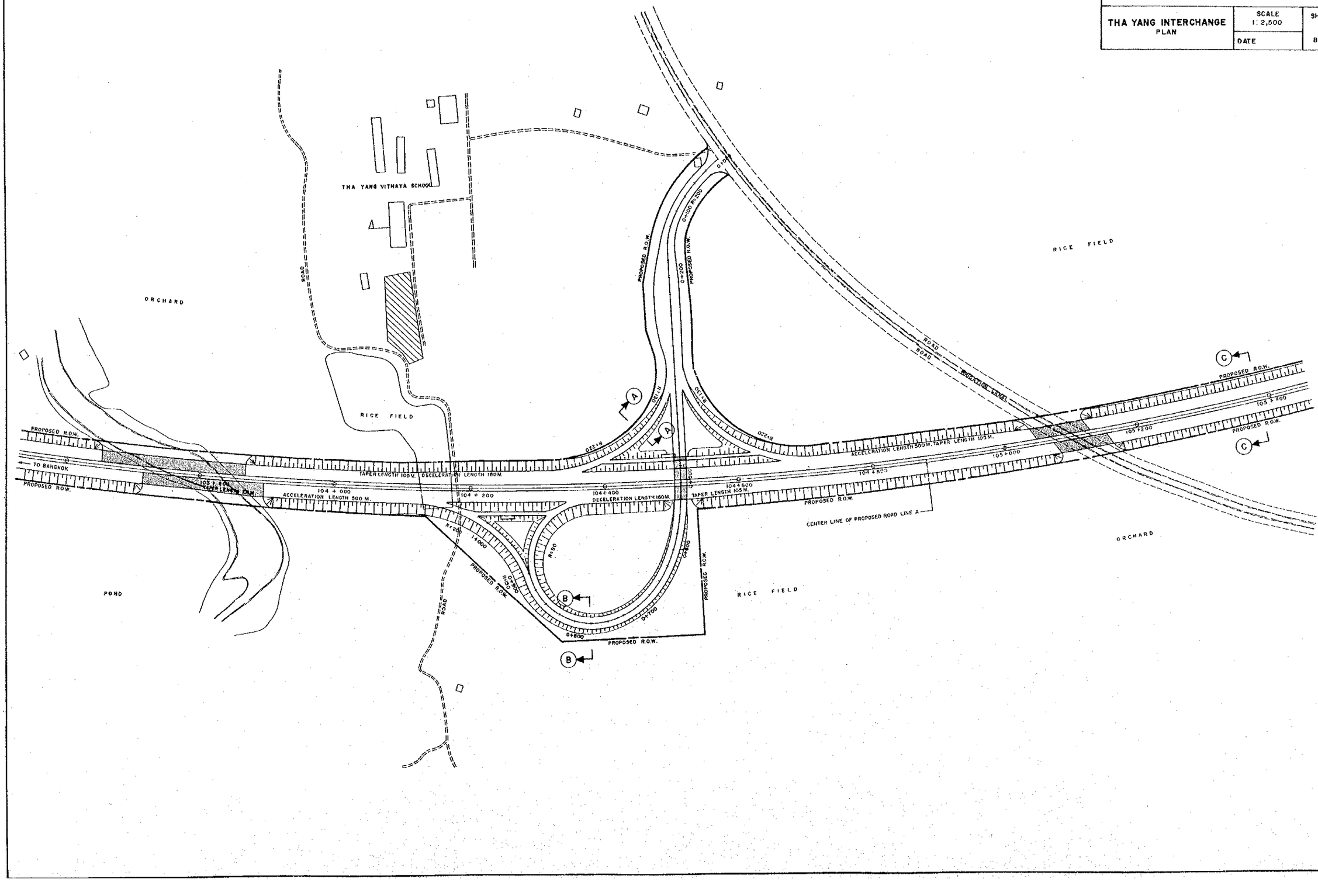


SECTION (C)-(C)
SCALE 1:200

FEASIBILITY STUDY ON
THE INTER – CITY TOLL MOTORWAY PROJECT
IN THE KINGDOM OF THAILAND

BAN PONG – CHA AM ROUTE

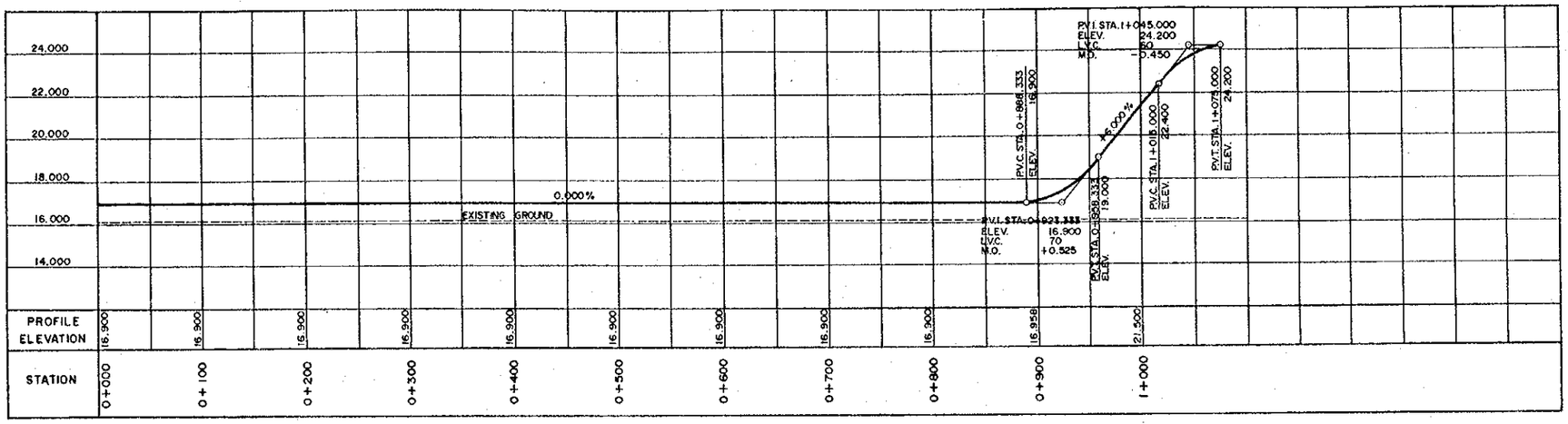
THA YANG INTERCHANGE PLAN	SCALE 1: 2,500	SHEET NO.
	DATE	BC 5-13



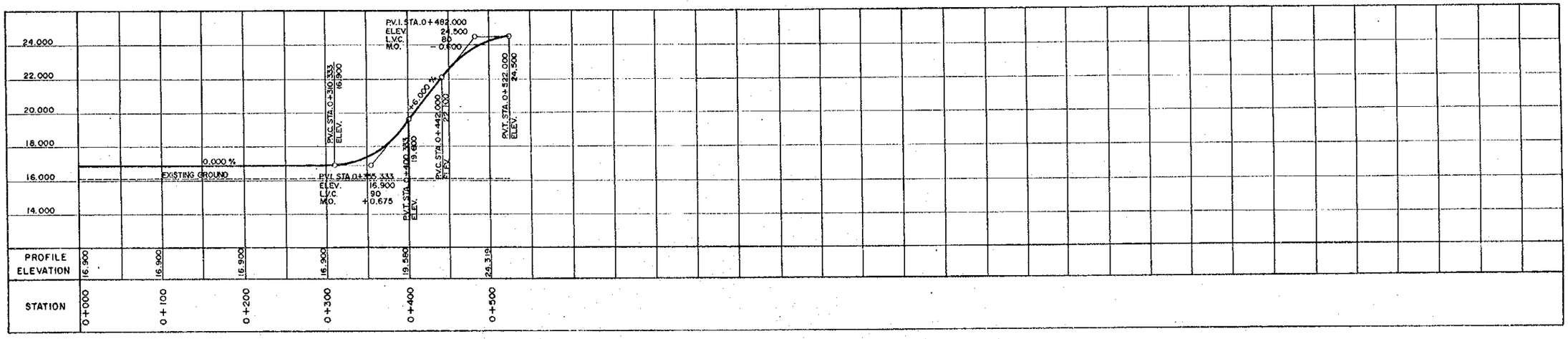
FEASIBILITY STUDY ON
THE INTER - CITY TOLL MOTORWAY PROJECT
IN THE KINGDOM OF THAILAND

BAN PONG – CHA AM ROUTE

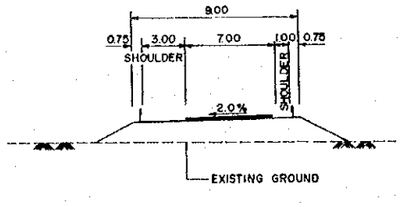
THAYANG INTERCHANGE PROFILE & SECTIONS	SCALE AS SHOWN	SHEET NO. BC 5 - 14
	DATE	



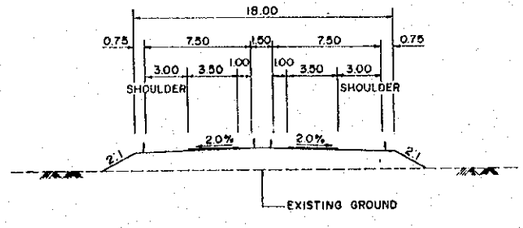
PROFILE OF MAIN RAMP
SCALE HORIZ. 1:2,500, VERT. 1:125



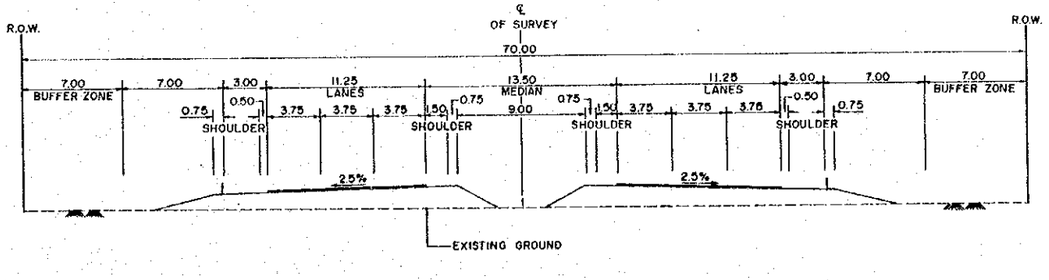
PROFILE OF MAIN RAMP
SCALE HORIZ. 1:2,500, VERT. 1:125



SECTION (A)–(A)
SCALE 1:200



SECTION (B)–(B)
SCALE 1:200

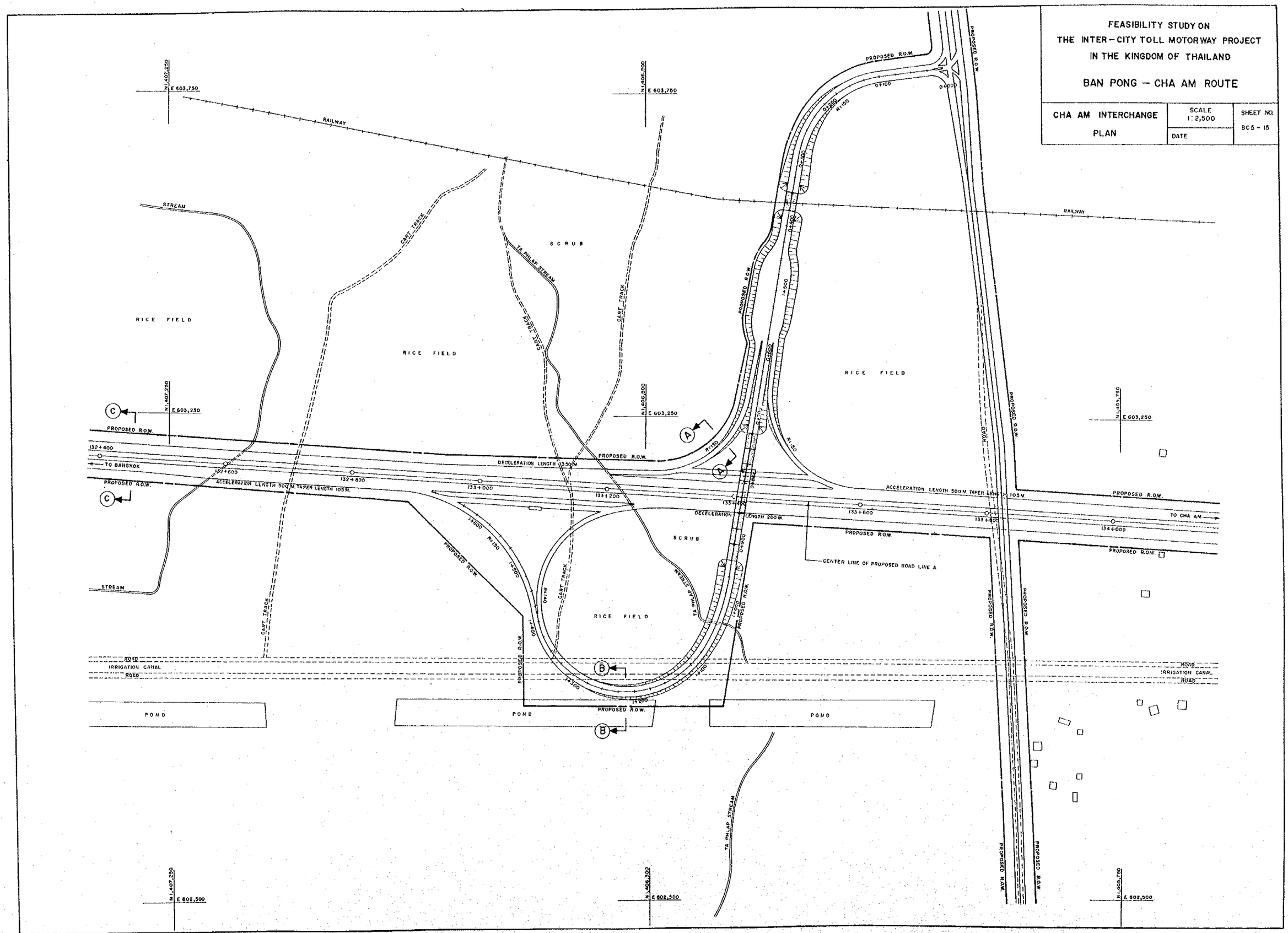


SECTION (C)–(C)
SCALE 1:200

FEASIBILITY STUDY ON
THE INTER-CITY TOLL MOTORWAY PROJECT
IN THE KINGDOM OF THAILAND

BAN PONG – CHA AM ROUTE

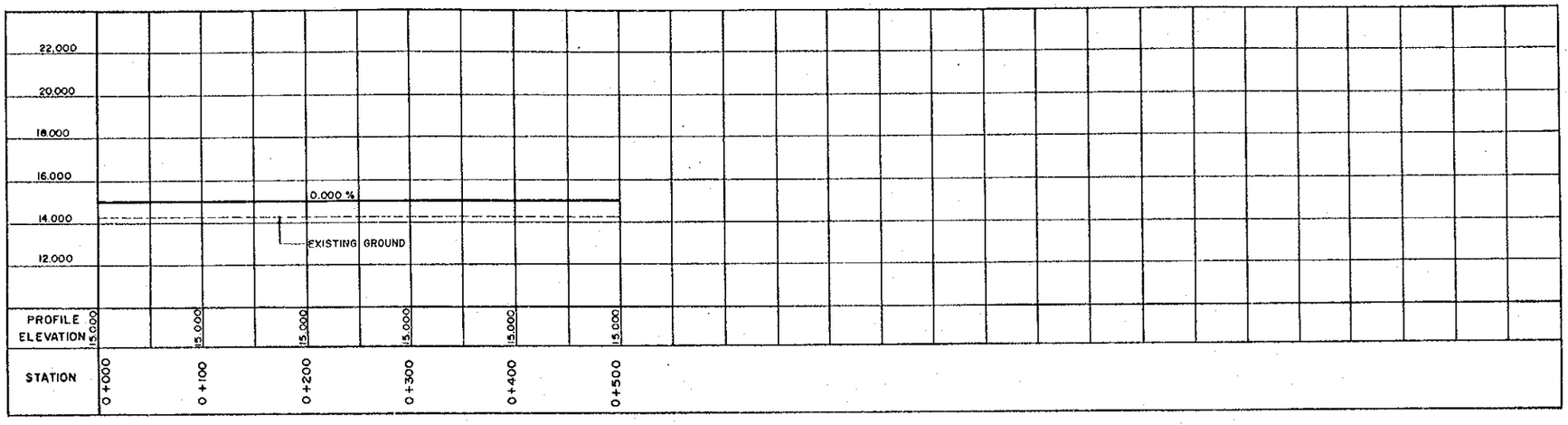
CHA AM INTERCHANGE PLAN	SCALE 1:2,500	SHEET NO. BC5-15
	DATE	



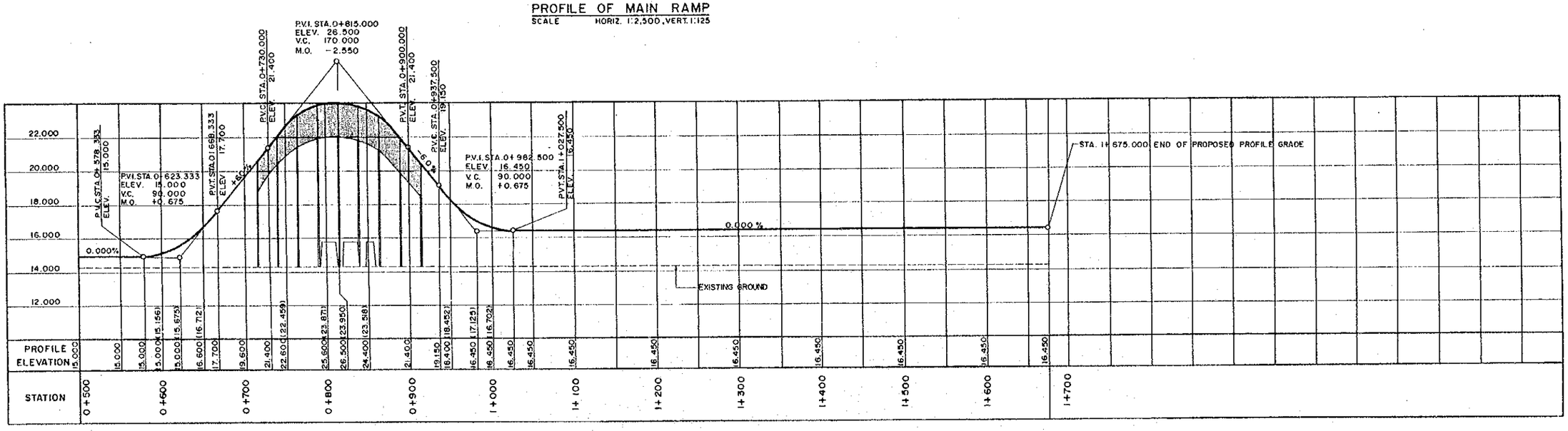
FEASIBILITY STUDY ON
THE INTER – CITY TOLL MOTORWAY PROJECT
IN THE KINGDOM OF THAILAND

BAN PONG – CHA AM ROUTE

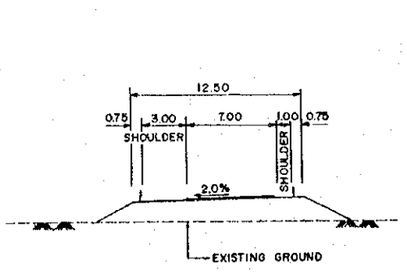
CHA AM INTERCHANGE PROFILE & SECTIONS	SCALE AS SHOWN	SHEET NO. BC 5 – 16
	DATE	



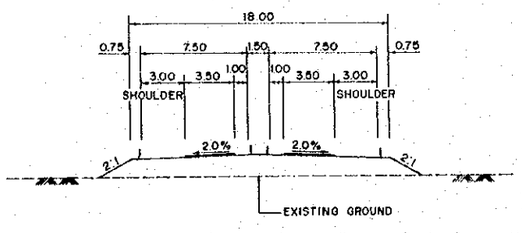
PROFILE OF MAIN RAMP
SCALE HORIZ. 1:2,500, VERT. 1:125



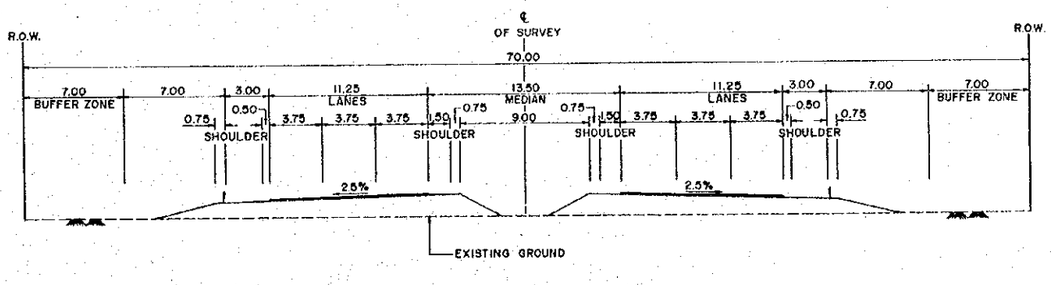
PROFILE OF MAIN RAMP
SCALE HORIZ. 1:2,500, VERT. 1:125



SECTION (A)–(A)
SCALE 1:200



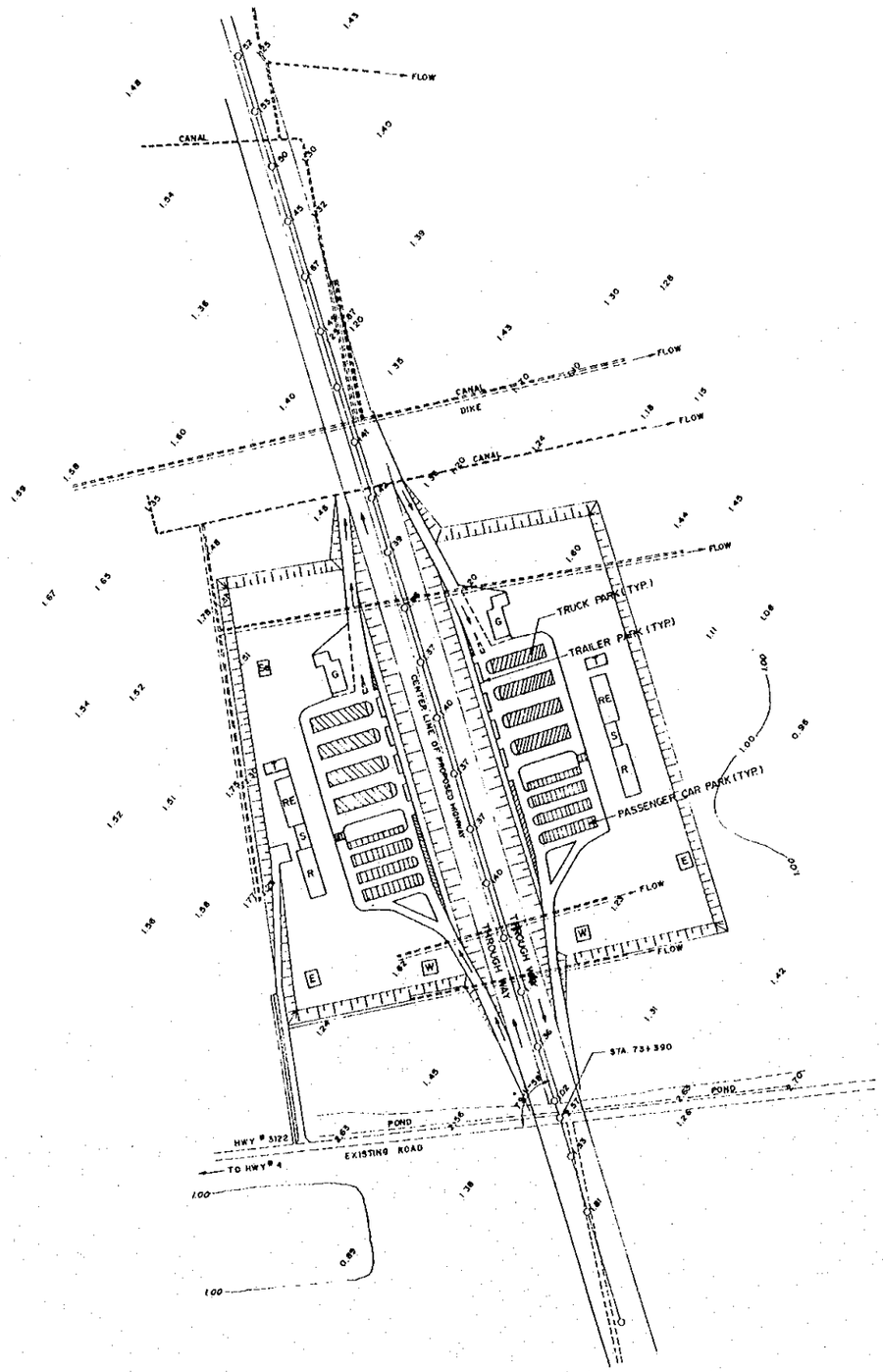
SECTION (B)–(B)
SCALE 1:200



SECTION (C)–(C)
SCALE 1:200

FEASIBILITY STUDY ON
THE INTER-CITY TOLL MOTORWAY PROJECT
IN THE KINGDOM OF THAILAND
BAN PONG – CHA AM ROUTE
LAMPANG – DOI SAKET ROUTE

REST AREA TYPE "A" DETAIL	SCALE 1:2,500	SHEET NO. BC 5 – 17
	DATE	



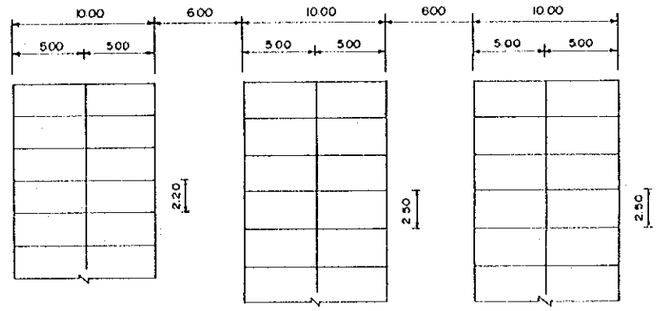
REST AREA TYPE "A" DETAILS
SCALE 1:2500

SYMBOL :

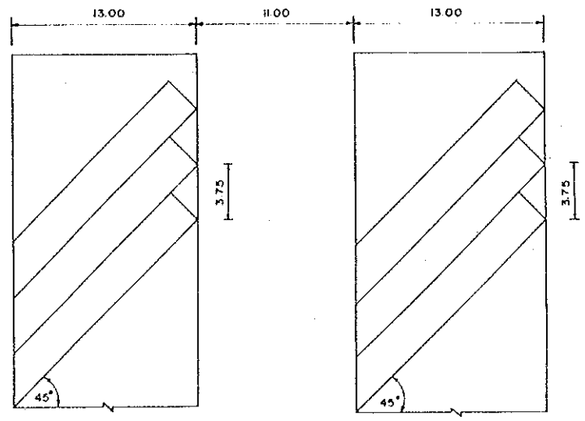
- W = ELEVATED WATER TANK
- R = RESTAURANT
- S = SHOP
- RE = RESTING ROOM
- T = TOILET
- G = GAS STATION
- Se = SEWERAGE EQUIPMENT ROOM
- E = ELECTRICITY MACHINERY FACILITY ROOM
- = EMBANKMENT SLOPE

NOTES :

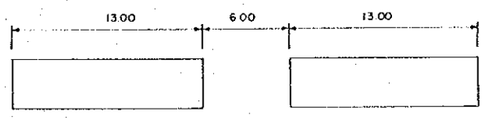
1. THIS PLAN SHOWN PROPOSED SERVICE AREA AT KHAO YOI ON BAN PONG – CHA AM ROUTE.
2. THIS TYPE OF SERVICE AREA ALSO WILL BE USED FOR PROPOSED SERVICE AREA AT MAETHA ON LAMPANG – DOI SAKET ROUTH.



PASSENGER CAR PARK



TRUCK PARK

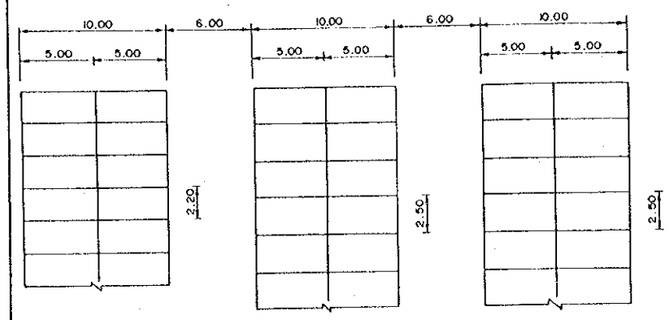


TRAILER PARK

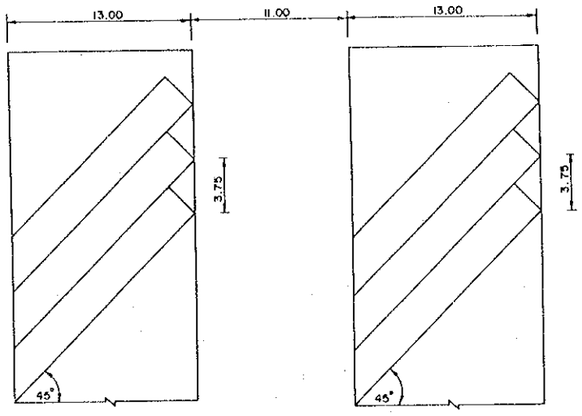
PARKING LOT DETAILS

FEASIBILITY STUDY ON
THE INTER-CITY TOLL MOTORWAY PROJECT
IN THE KINGDOM OF THAILAND
BAN PONG - CHA AM ROUTE
LAMPANG - DOI SAKET ROUTE

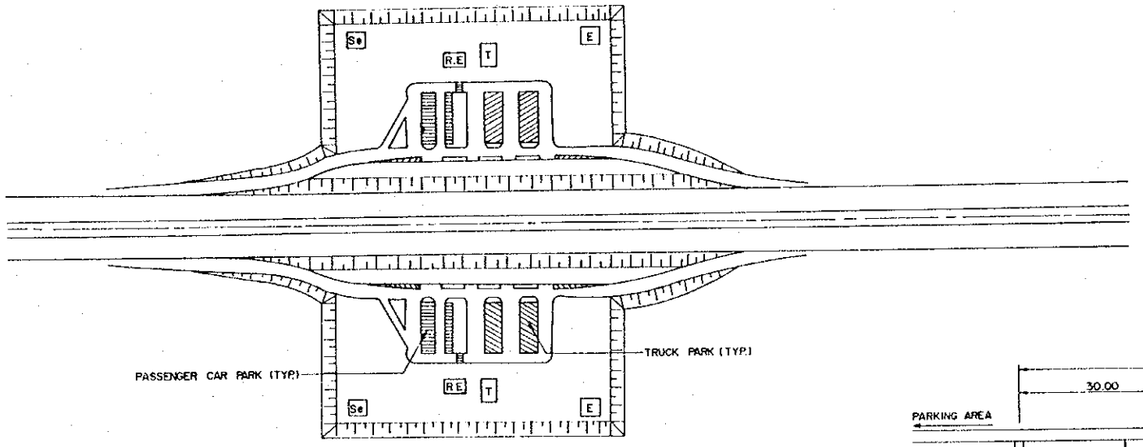
REST AREA TYPE "B" "a" "C" DETAILS	SCALE AS SHOWN	SHEET NO. BC. 5 - 18
	DATE	



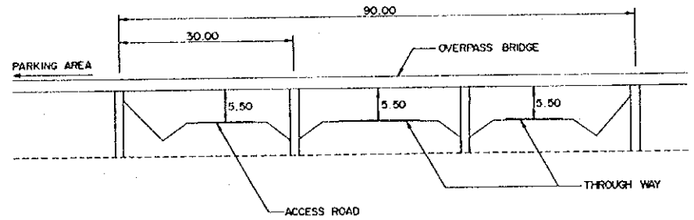
PASSENGER CAR PARK



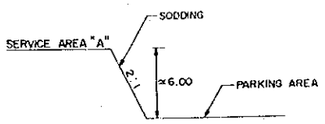
TRUCK PARK



REST AREA TYPE "B" DETAILS
SCALE 1 : 2000



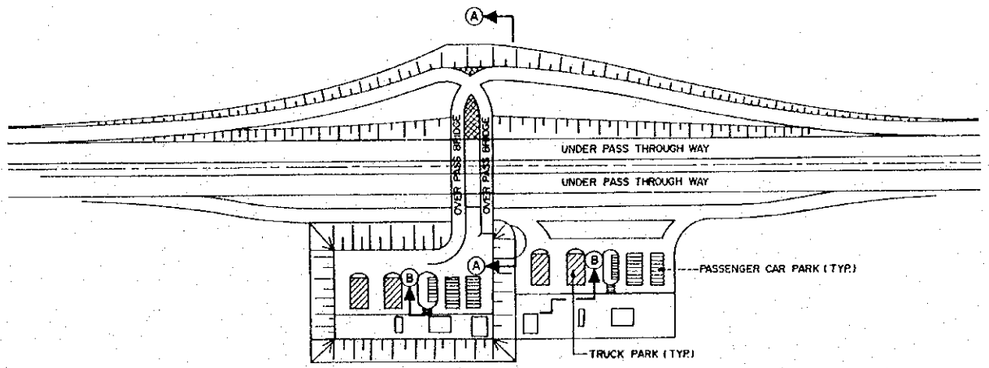
SECTION (A)-(A)
SCALE 1 : 500



SECTION (B)-(B)
SCALE 1 : 250

SYMBOL :

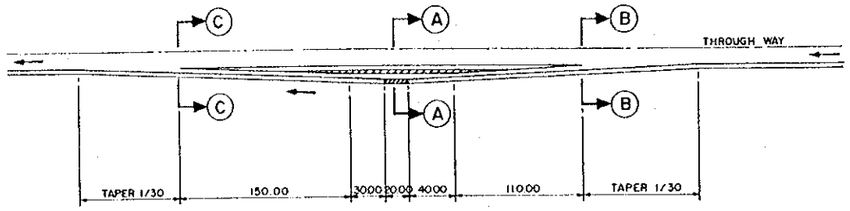
- RE = RESTING ROOM
- T = TOILET
- Se = SEWERAGE EQUIPMENT ROOM
- E = ELECTRICITY MACHINERY FACILITY ROOM
- = EMBANKMENT SLOPE



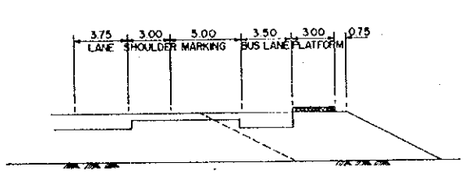
REST AREA TYPE "C" DETAILS
SCALE 1 : 2000

FEASIBILITY STUDY ON
THE INTER-CITY TOLL MOTORWAY PROJECT
IN THE KINGDOM OF THAILAND
BAN PONG – CHA AM ROUTE
LAM PANG – DOI SAKET ROUTE

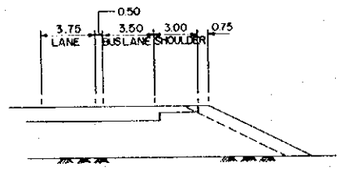
BUS STOP DETAILS	SCALE AS SHOWN	SHEET NO. BC. 5-19
	DATE	



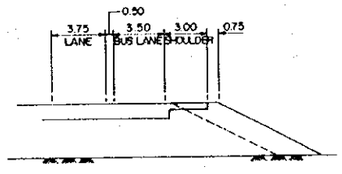
BUS STOP PLAN
SCALE 1:2500



SECTION (A)-(A)
SCALE 1:200

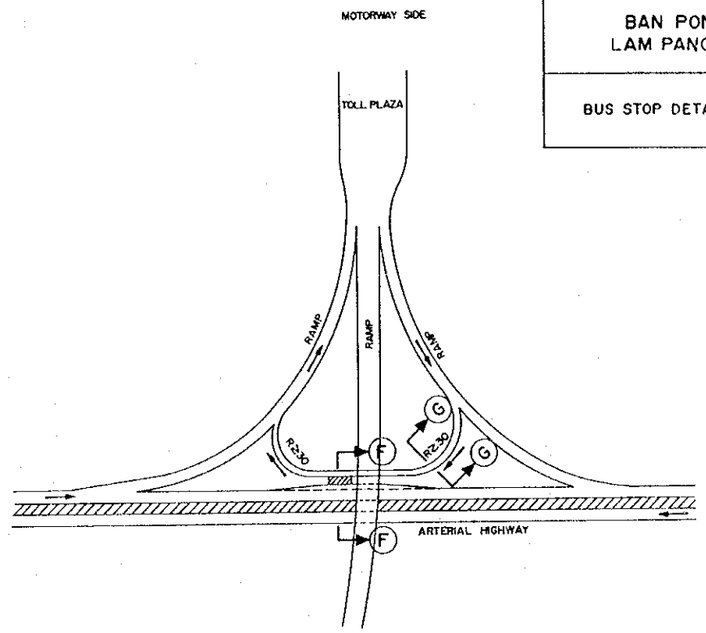


SECTION (B)-(B)
SCALE 1:200

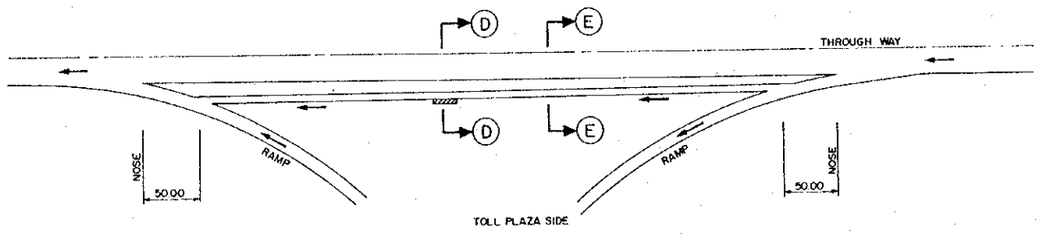


SECTION (C)-(C)
SCALE 1:200

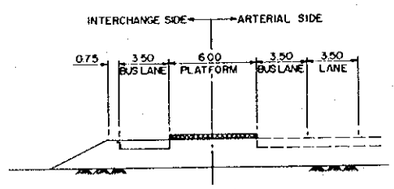
BUS STOP TYPE A (INDEPENDENT TYPE)
SCALE 1:2500



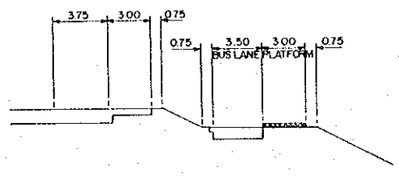
BUS STOP PLAN
SCALE 1:2500



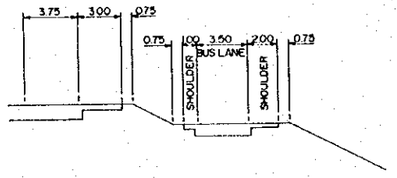
BUS STOP PLAN
SCALE 1:2500



SECTION (F)-(F)
SCALE 1:200

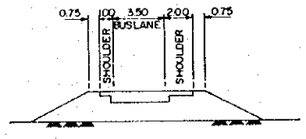


SECTION (D)-(D)
SCALE 1:200



SECTION (E)-(E)
SCALE 1:200

BUS STOP TYPE "B" (BETWEEN RAMPS OF MOTORWAY SIDE)
SCALE 1:2500

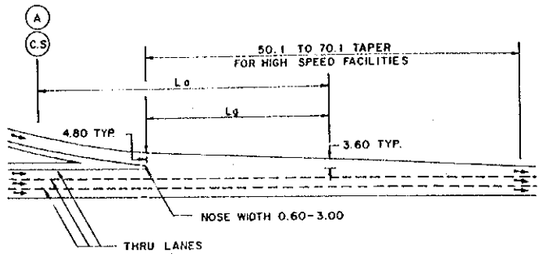


SECTION (G)-(G)
SCALE 1:200

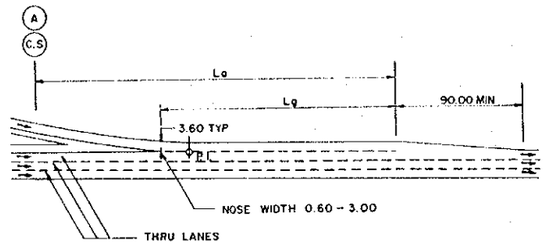
BUS STOP TYPE "C" (BETWEEN RAMPS OF ARTERIAL SIDE)
SCALE 1:2500

FEASIBILITY STUDY ON
THE INTER-CITY TOLL MOTORWAY PROJECT
IN THE KINGDOM OF THAILAND
BAN PONG - CHA AM ROUTE
LAM PANG - DOI SAKET ROUTE

RAMP TEMINAL DETAILS	SCALE NOT TO SCALE	SHEET NO. BC. 5 - 20
	DATE	

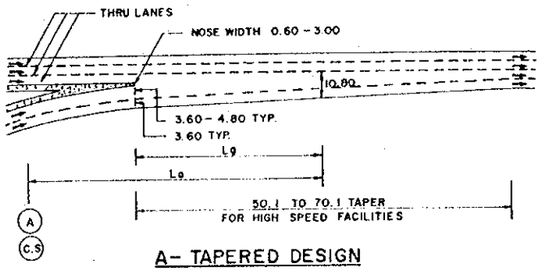


A - TAPERED DESIGN

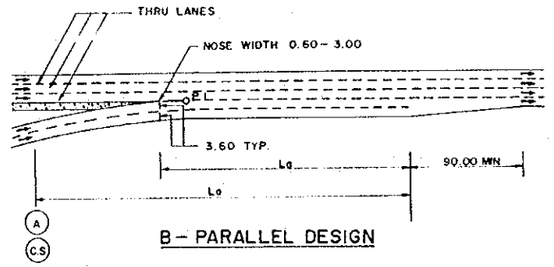


B - PARALLEL DESIGN

TYPICAL SINGLE - LANE ENTRANCE RAMP

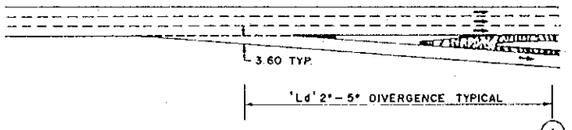


A - TAPERED DESIGN

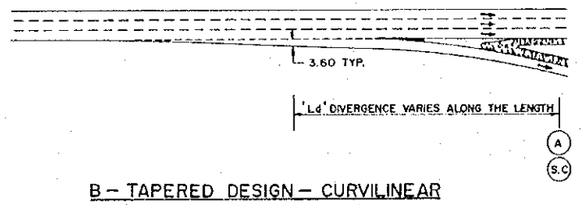


B - PARALLEL DESIGN

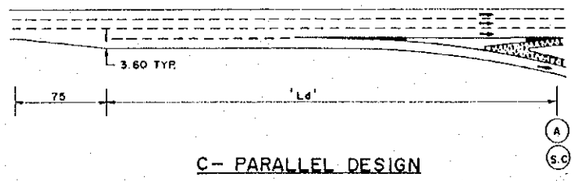
TYPICAL TWO - LANE ENTRANCE RAMP



A - TAPERED DESIGN - TANGENT

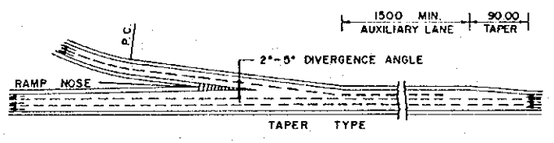


B - TAPERED DESIGN - CURVILINEAR

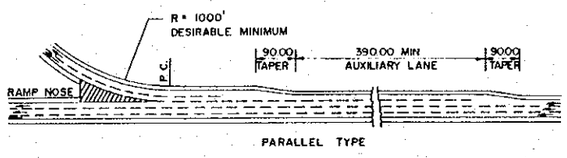


C - PARALLEL DESIGN

TYPICAL SINGLE - LANE EXIT RAMP



A - TAPERED DESIGN

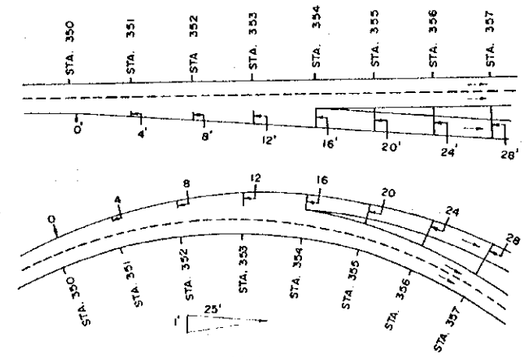


B - PARALLAL DESIGN

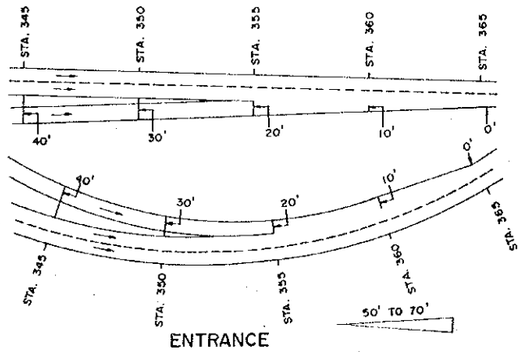
TYPICAL TWO - LANE EXIT RAMP

NOTES

1. "Lo" IS THE REQUIRED ACCELERATION LENGTH.
2. POINT (A) CONTROLS SAFE SPEED ON THE RAMP "Lo" SHOULD NOT START BACK ON THE CURVATURE OF THE RAMP UNLESS THE RADIUS EQUALS 300 M. OR MORE
3. "Lg" IS REQUIRED GAP ACCEPTANCE LENGTH Lg SHOULD BE A MINIMUM OF 90 M. TO 150 M. DEPENING ON THE NOSE WIDTH
4. THE VALVE OF Lo OR Lg, WHICHEVER PRODUCES THE GREATEST DISTANCE DOWNSTREAM FROM WHERE THE NOSE WIDTH EQUALS 0.60 M., IS SUGGESTED FOR USE IN THE DESIGN OF THE RAMP ENTRANCE.
5. "Ld" IS THE REQUIRED DECELERATION LENGTH.
6. DIMENSION ARE METERS.

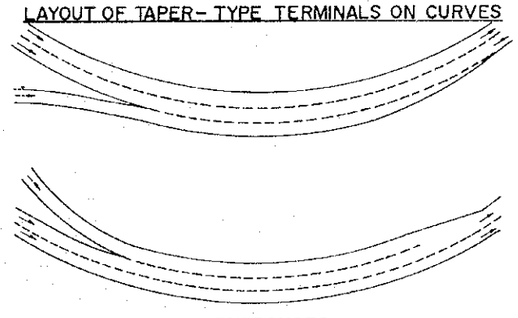


EXIT



ENTRANCE

LAYOUT OF TAPER - TYPE TERMINALS ON CURVES



ENTRANCES

EXITS

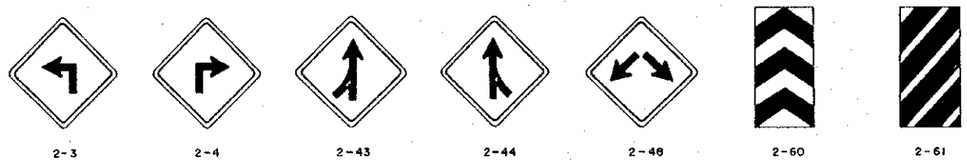
PARALLEL - TYPE RAMP TERMINALS ON CURVES DIAGRAM - MATIC

FEASIBILITY STUDY ON
THE INTER - CITY TOLL MOTORWAY PROJECT
IN THE KINGDOM OF THAILAND
BAN PONG - CHA AM ROUTE
LUM PANG - DOI SAKET ROUTE

TRAFFIC SIGN DETAIL	SCALE AS SHOWN	SHEET NO.
	DATE	BC. 5-21

1-1 1-8 1-25 1-32

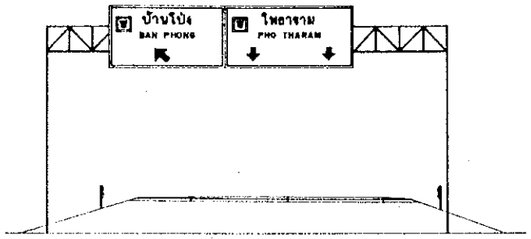
CODE 1 - REGULATORY SIGNS
NOT TO SCALE

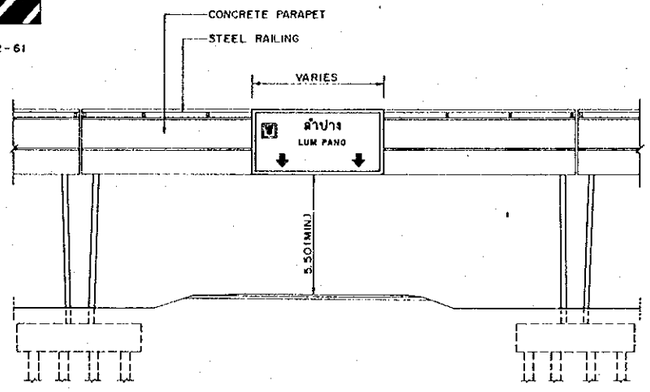


2-3 2-4 2-43 2-44 2-46 2-60 2-61

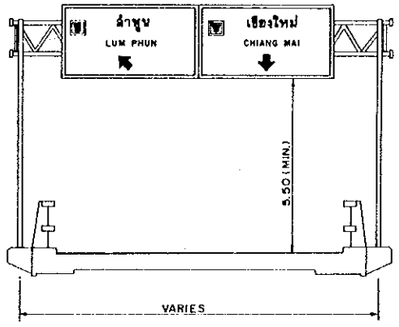
2-62 2-63 2-80(3) 2-82/1 2-82/2 2-83

CODE 2 - WARNING SIGNS
NOT TO SCALE



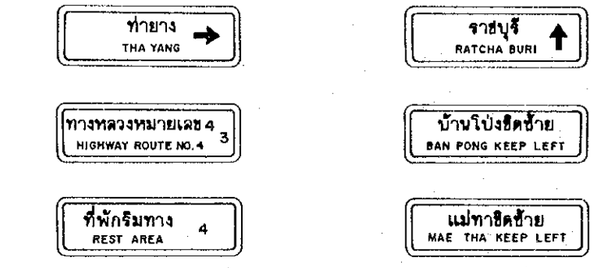


OVERHEAD SIGN BOARD (TYP.)
NOT TO SCALE

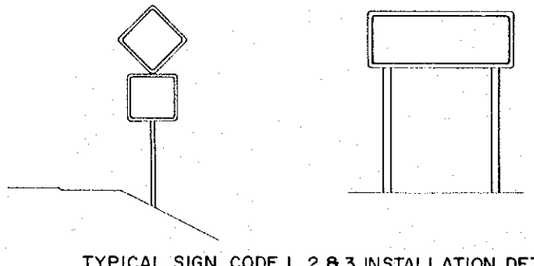


OVERHEAD SIGN BOARD (ON BRIDGE DECK)
NOT TO SCALE

OVERHEAD SIGN BOARD (ON BARRIER)
NOT TO SCALE

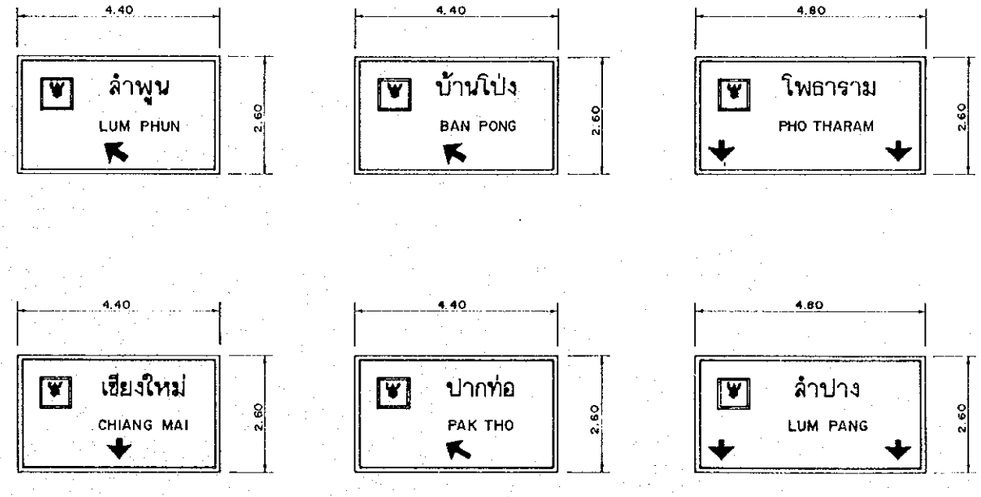


CODE 3 - GUIDE SIGNS
NOT TO SCALE



TYPICAL SIGN CODE 1, 2 & 3 INSTALLATION DETAIL
NOT TO SCALE

TYPICAL OVERHEAD SIGN BOARD INSTALLATION

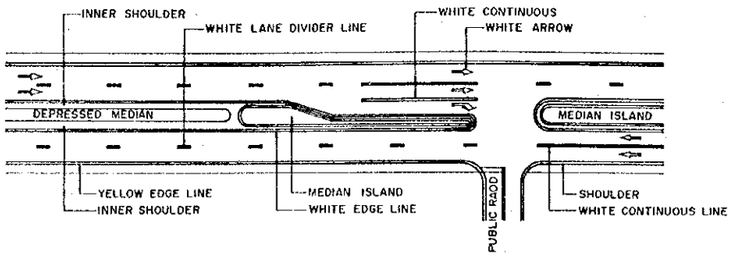


OVERHEAD SIGN DETAILS
NOT TO SCALE

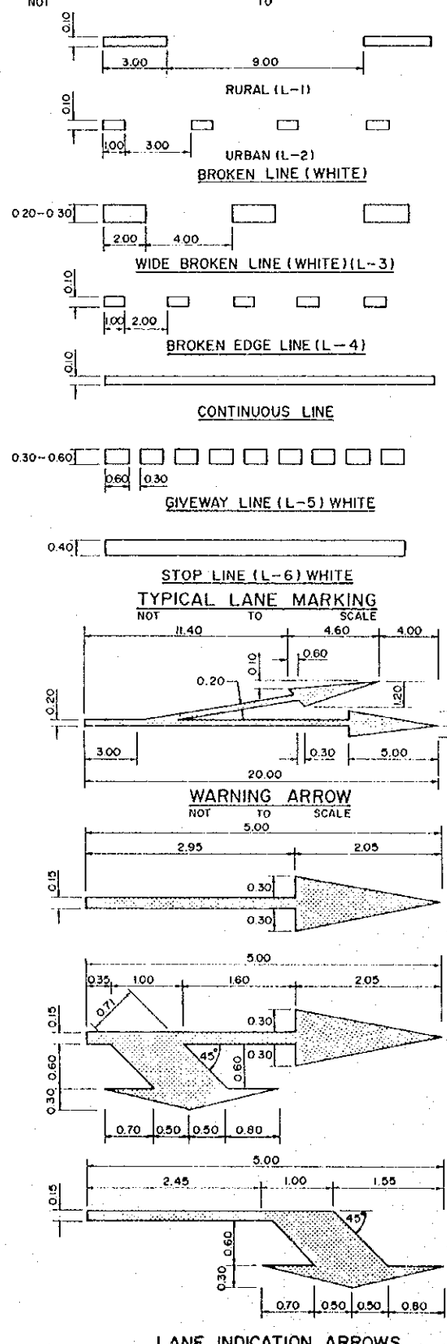
TYPICAL TRAFFIC SIGN INSTALLATION

FEASIBILITY STUDY ON
THE INTER-CITY TOLL MOTORWAY PROJECT
IN THE KINGDOM OF THAILAND
BAN PONG - CHA AM ROUTE
LAM PANG - DOI SAKET ROUTE

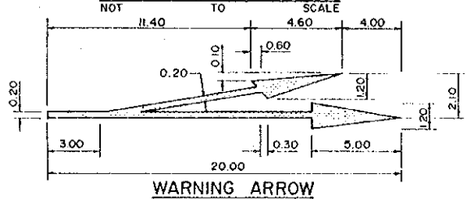
ROAD MARKING DETAILS	SCALE NOT TO SCALE	SHEET NO. BC. 5 - 22
	DATE	



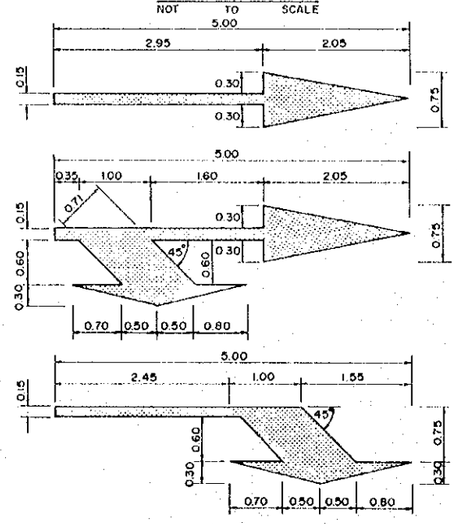
STANDARD LANE MARKING FOR DIVIDED HIGHWAYS
NOT TO SCALE



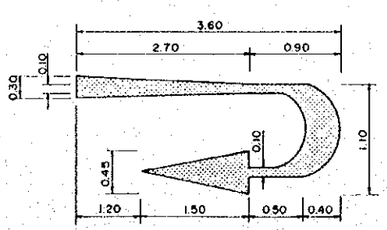
TYPICAL LANE MARKING
NOT TO SCALE



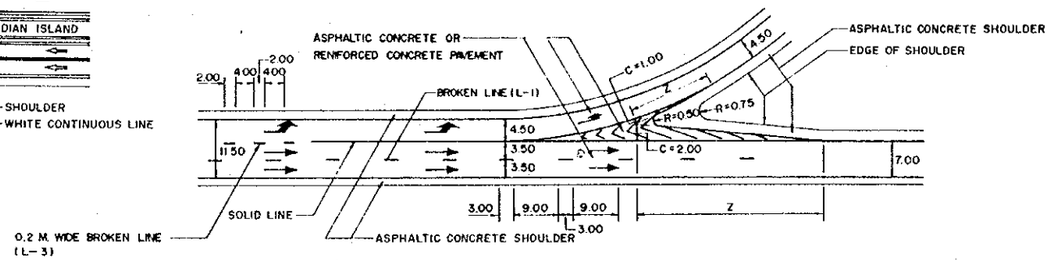
WARNING ARROW
NOT TO SCALE



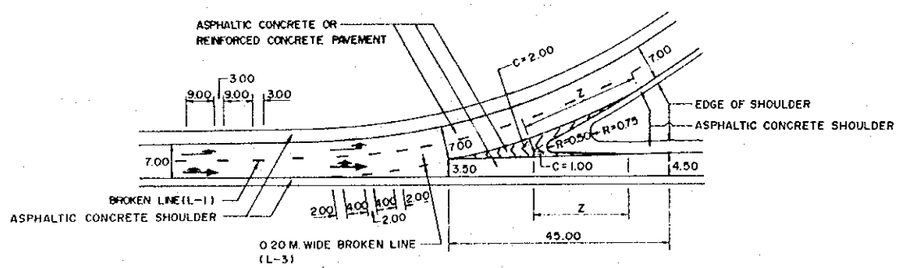
LANE INDICATION ARROWS
NOT TO SCALE



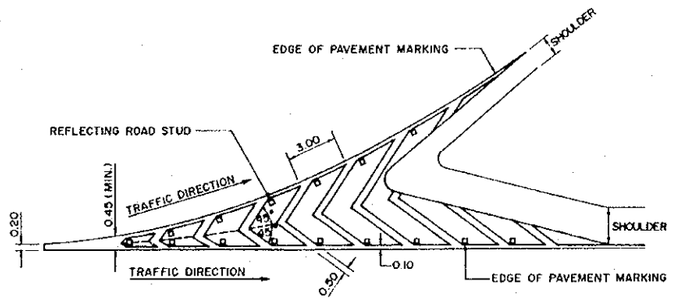
U - TURN ARROW
NOT TO SCALE



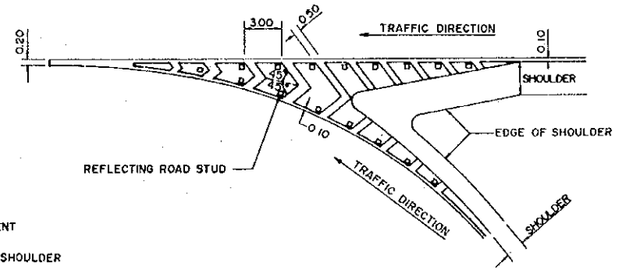
EXIT RAMP MARKING - TYPE 1
NOT TO SCALE



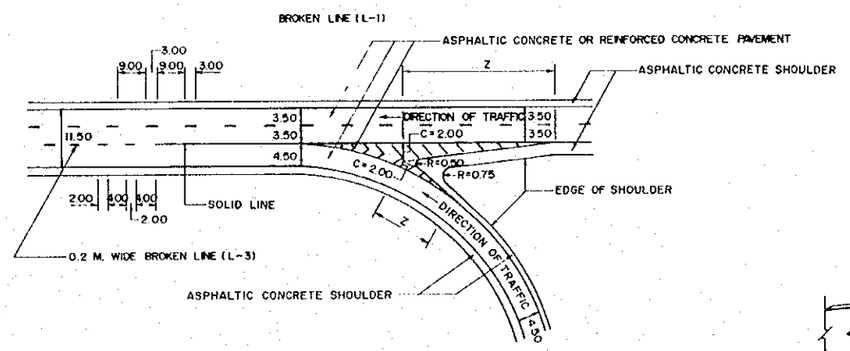
EXIT RAMP MARKING - TYPE 2
NOT TO SCALE



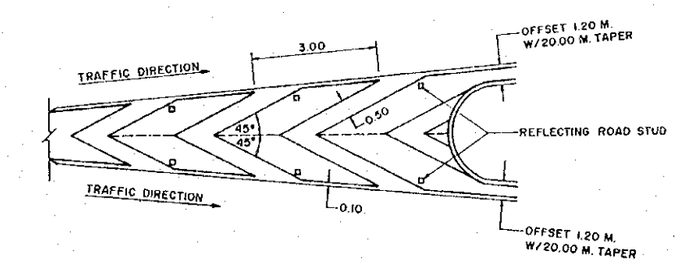
EXIT RAMP MARKING DETAIL
NOT TO SCALE



ENTRANCE RAMP MARKING DETAIL
NOT TO SCALE



ENTRANCE RAMP MARKING
NOT TO SCALE

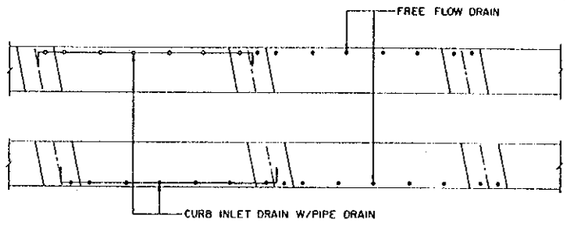


STANDARD CHEVRON HATCHING
NOT TO SCALE

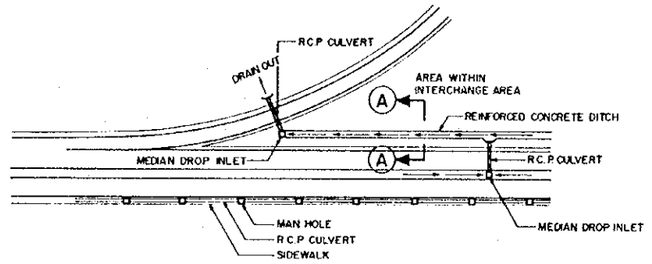
TYPICAL TRAFFIC MARKING

FEASIBILITY STUDY ON
THE INTER-CITY TOLL MOTORWAY PROJECT
IN THE KINGDOM OF THAILAND
BAN PONG - CHA AM ROUTE
LAM PANG - DOI SAKET ROUTE

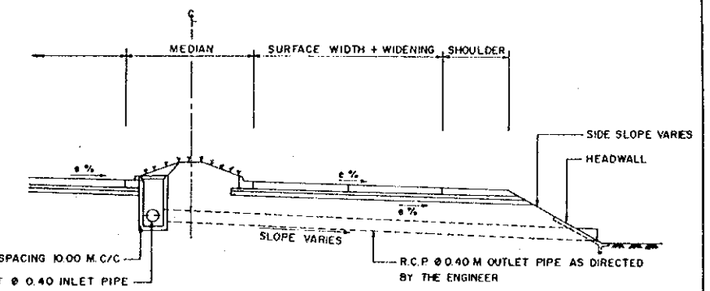
DRAINAGE SYSTEM DETAILS	SCALE NOT TO SCALE	SHEET NO. BC. 5 - 23
	DATE	



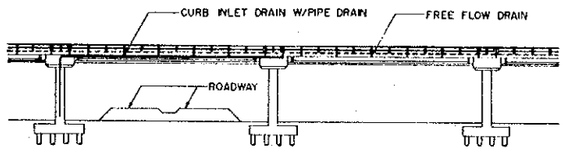
PLAN BRIDGE DECK SLAB
NOT TO SCALE



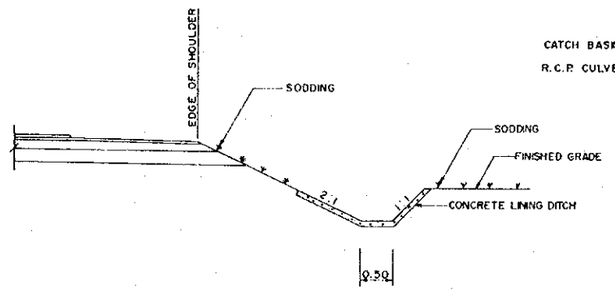
TYPICAL PLAN AT GRADE DRAINAGE
NOT TO SCALE



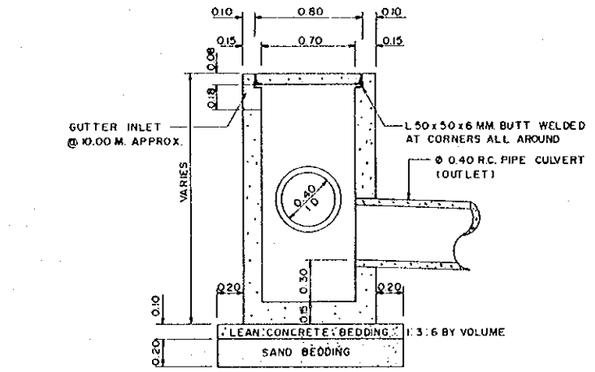
TYPICAL CROSS-DRAIN
NOT TO SCALE



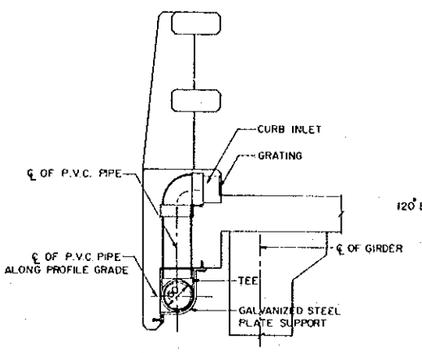
ELEVATION



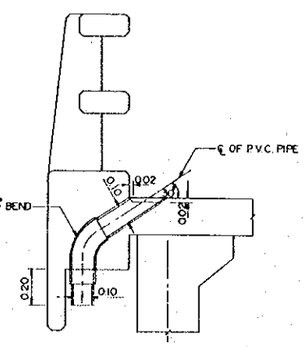
SECTION (A)-(A)
NOT TO SCALE



CATCH BASIN DETAILS
NOT TO SCALE

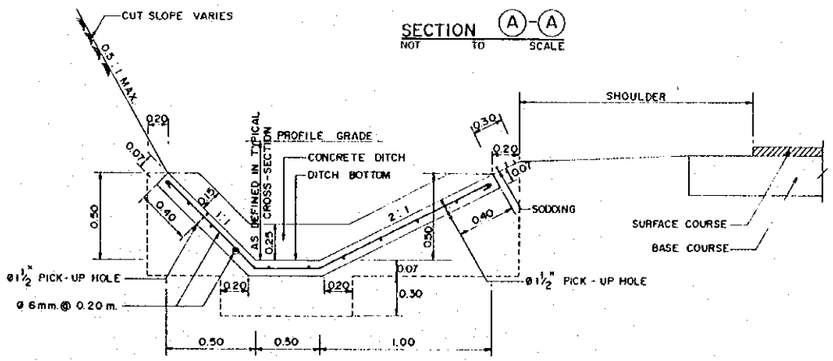


TYPICAL CURB INLET DRAIN

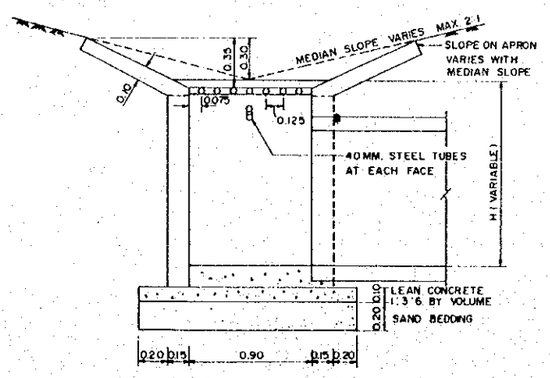


TYPICAL FREE FLOW DRAIN

DRAINAGE AT BRIDGE DECK (TYPICAL)
NOT TO SCALE

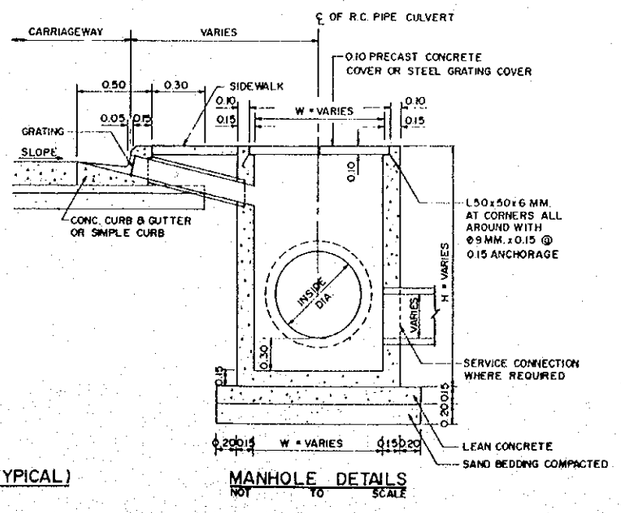


R.C. DITCH LINING DETAIL
NOT TO SCALE



MEDIAN DROP INLET DETAILS
NOT TO SCALE

AT GRADE DRAINAGE (TYPICAL)



MANHOLE DETAILS
NOT TO SCALE