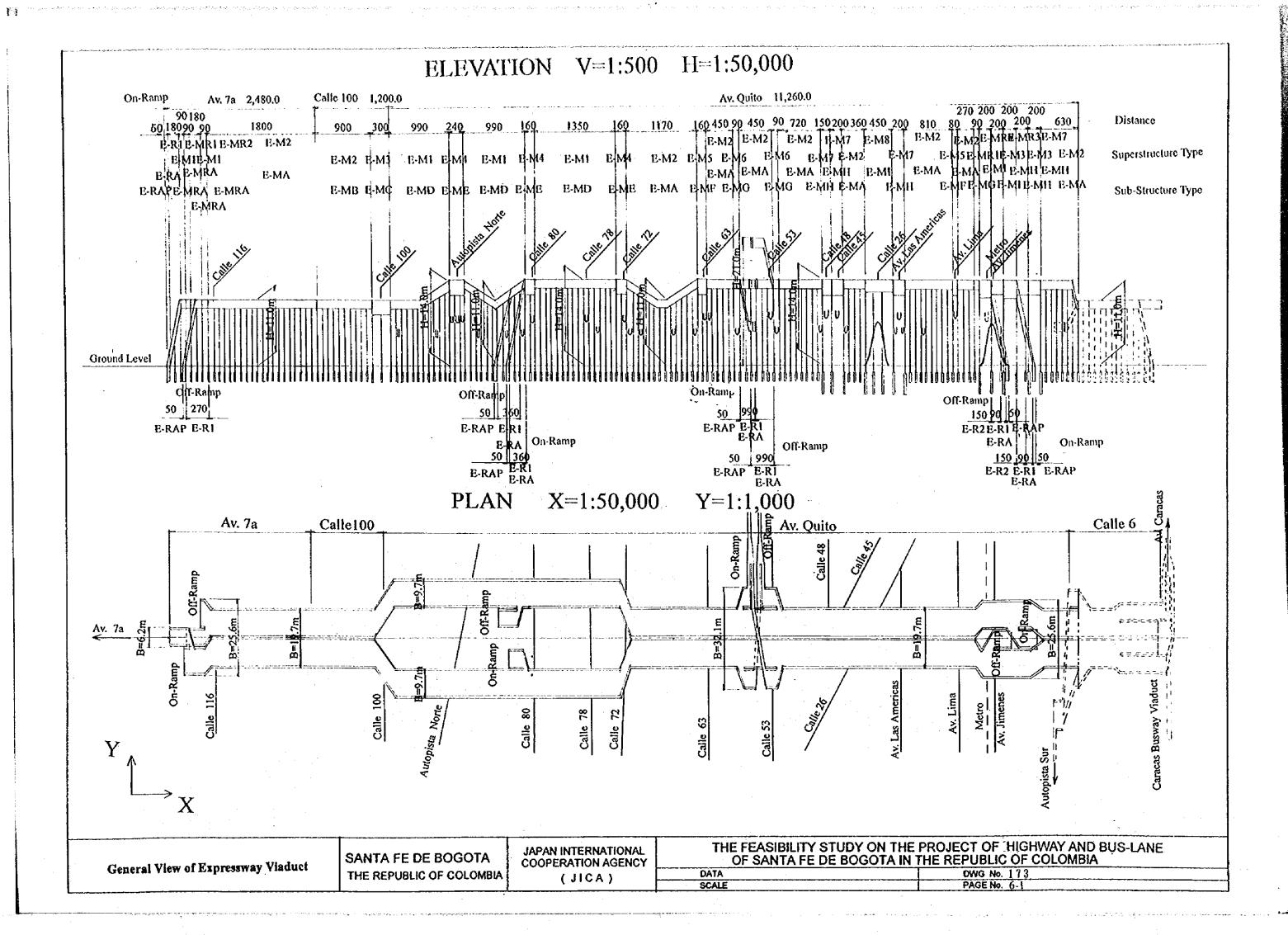
Viaduct

SANTA FE DE BOGOTA THE REPUBLIC OF COLOMBIA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

THE FEASIBILITY STUDY ON THE PROJECT OF HIWAY AND BUS-LANE OF SANTA FE DE BOGOTA IN THE REPUBLIC OF COLOMBIA

DWG No. 172

DATA SCALE



Super-Structure Type E-M 1 Sub-Structure Type E-MD

ELEVATION 1:600

90.00

30.00

30.00

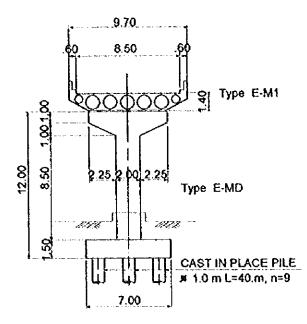
30.00

30.00

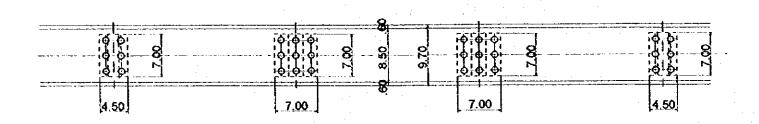
Super-Structure Type E-M 1

Sub-Structure 200 8 Type E-MD 2

SECTION 1:300



PLAN 1:600



DES	IGN CRITERIA
TYPE	3 SPAN P.C. HOLLOW SLAB
TOTAL BRIDGE LIGHT	90.0m
SPAN	3 x 30m
WOTH	9.7 m
LIVE LOAD	C 40 - 95
ACCELERATION COEFFICIENT	A = 0.20 (Ct =0.17)
STANDARD	Codigo Colombiano de Diseño Sismico de Puentes.

Expressway Viaduct
General View1

SANTA FE DE BOGOTA
THE REPUBLIC OF COLOMBIA

JAPAN INTERNATIONAL
COOPERATION AGENCY
(JICA)

DATA

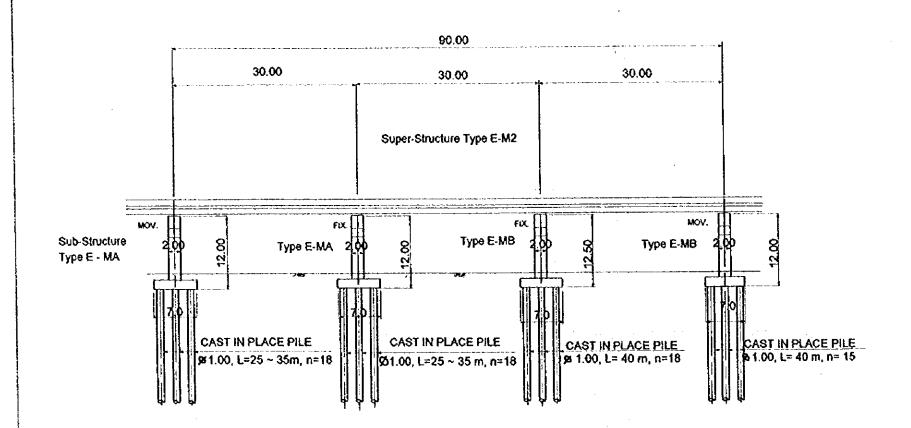
SCALE

THE FEASIBILITY STUDY ON THE PROJECT OF HIGHWAY AND BUS-LANE OF SANTA FE DE BOGOTA IN THE REPUBLIC OF COLOMBIA

DWG No PAGE No 6 Super-Structure Type E-M2 Sub-Structure Type E - MA, E-MB

ELEVATION 1:600

SECTION 1:300



19.70

60 8.50 150 8.50 60

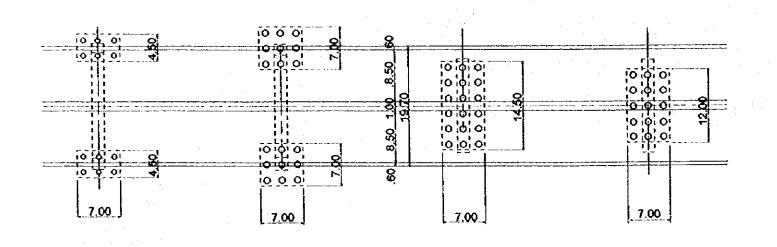
Type E-M2

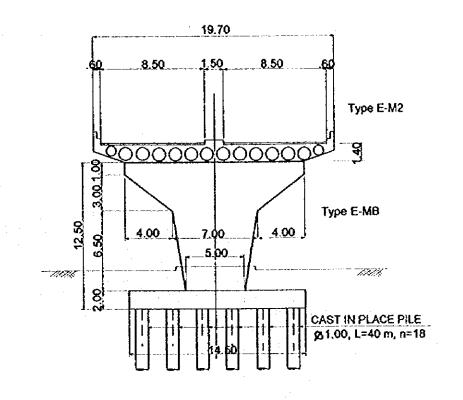
80 200 1700 200 Type E-MA

700 1700 200 Type E-MA

80 100, L=25 ~ 35 m, n=18

PLAN 1:600





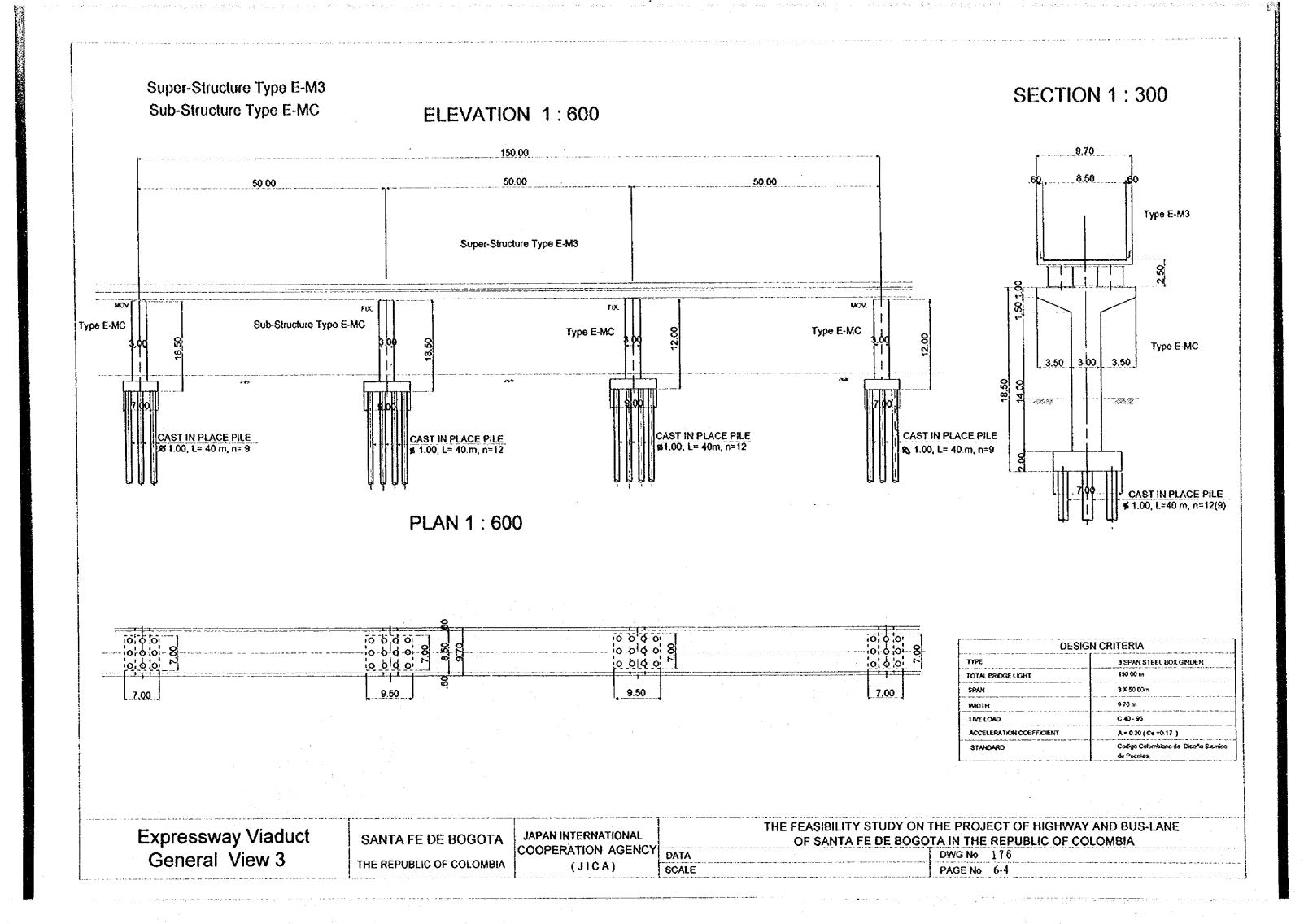
Expressway Viaduct General View 2

SANTA FE DE BOGOTA
THE REPUBLIC OF COLOMBIA

JAPAN INTERNATIONAL
COOPERATION AGENCY
DATA
(JICA)
SCALE

THE FEASIBILITY STUDY ON THE PROJECT OF HIGHWAY AND BUS-LANE
OF SANTA FE DE BOGOTA IN THE REPUBLIC OF COLOMBIA

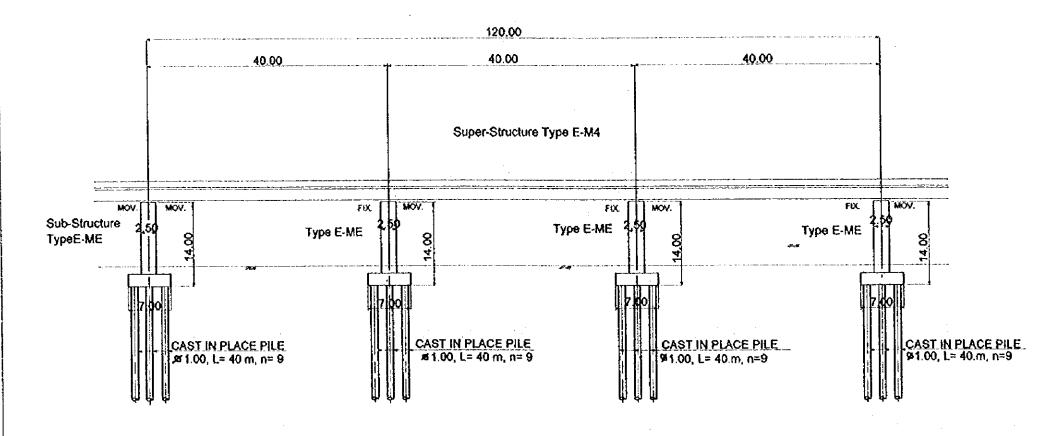
DWG No. 175

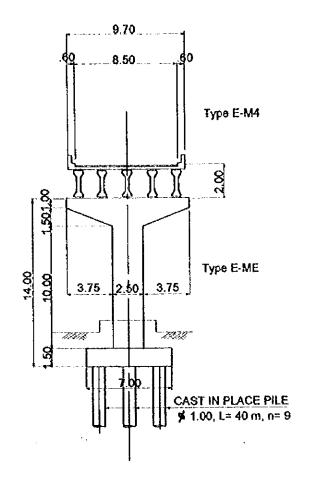


Super-Structure Type E-M4
Sub-Structure TypeE-ME

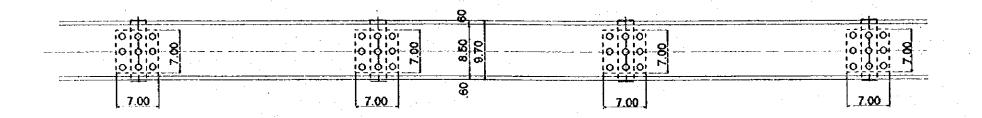
ELEVATION 1:600

SECTION 1:300





PLAN 1:600



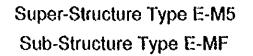
DES	IGN CRITERIA
TYPE SIMPLE COMPOSIT P.C.I.G	
TOTAL BRIDGE LIGHT	40.00 m
SPAN	40.00m
WIDTH	9 70 m
(NE LOAD	C 40 - 95
ACCELERATION COEFFICIENT	A = 0 20 (Cs =0.17)
STANDARD	Codigo Colombiano de Diseño Sismico de Puentes.

Expressw	ay Viaduct
General	View 4

SANTA FE DE BOGOTA
THE DEDURE OF COLOMBIA

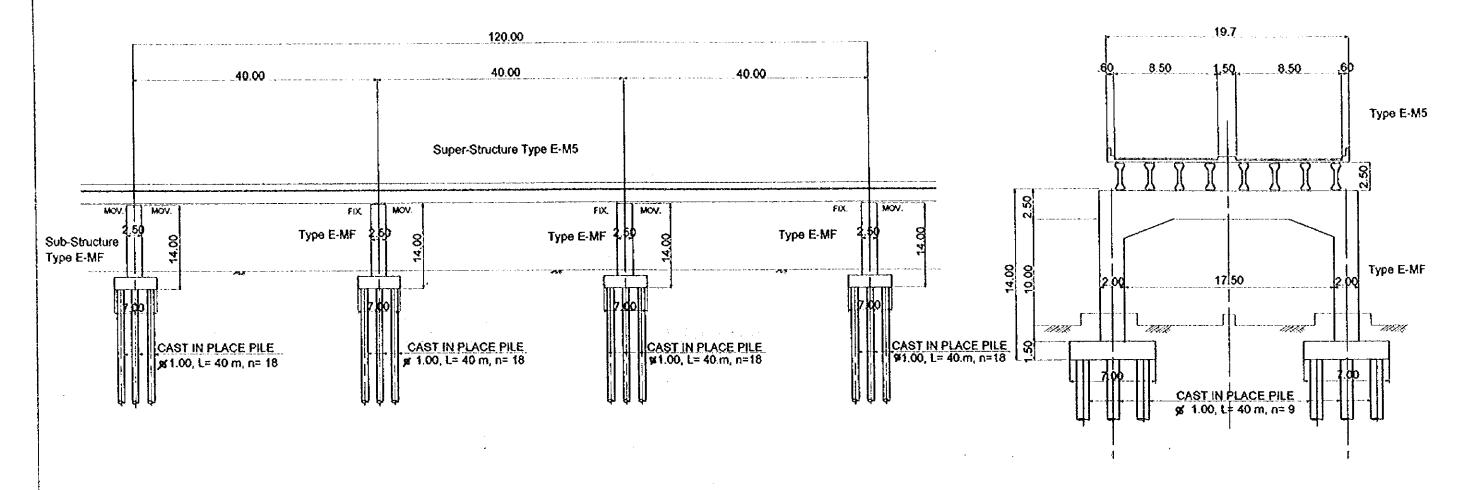
THE FEASIBILITY STUDY ON	THE PRO	ECT OF	HIGHWAY	AND BUS	-LANE
OF SANTA FE DE BOGO					
	DWG No	177			

PAGE No 6-5

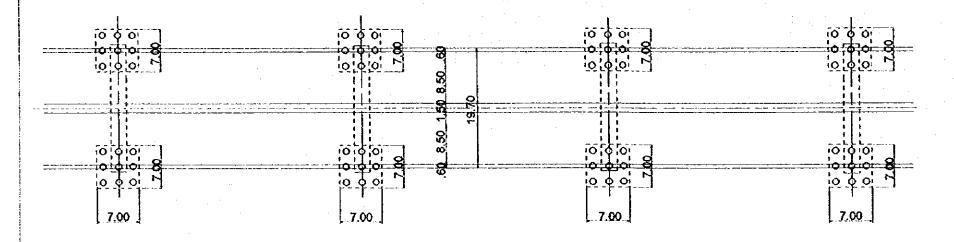


ELEVATION 1:600

SECTION 1:300



PLAN 1:600



DESIGN CRITERIA		
TYPE	SIMPLE COMPOSIT P.C.I GIRDER	
TOTAL BRIDGE LIGHT	40 00 m	
SPAN	40 00m	
WIOTH	19.70 m	
LNE LOAD	C 40 - 95	
ACCELERATION COEFFICIENT	A = 0 20 (Co = 0.17)	
STANDARD	Codigo Colombiano de Diseño Sismico de Puentes.	

Expressw	ay Viaduct
General	View 5

SANTA FE DE BOGOTA
THE REPUBLIC OF COLOMBIA

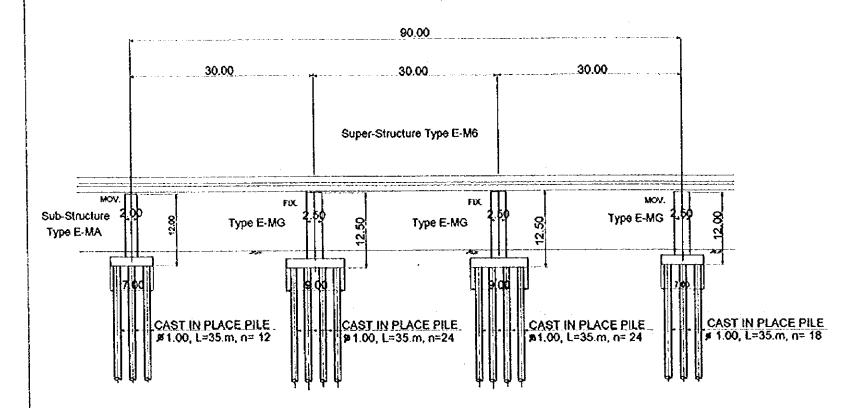
JAPAN INTERNATIONAL COOPERATION AGENCY DATA (JICA)

SCALE

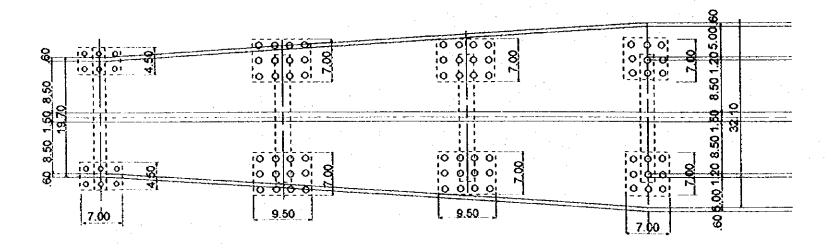
THE FEASIBILITY STUDY ON THE PROJECT OF HIGHWAY AND BUS-LANE OF SANTA FE DE BOGOTA IN THE REPUBLIC OF COLOMBIA DWG No 178

Super-Structure Type E-M6 Sub-Structure Type E-MG

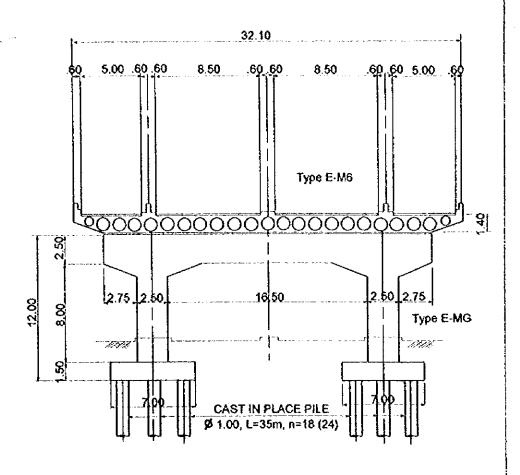
ELEVATION 1:600



PLAN 1:600



SECTION 1:300



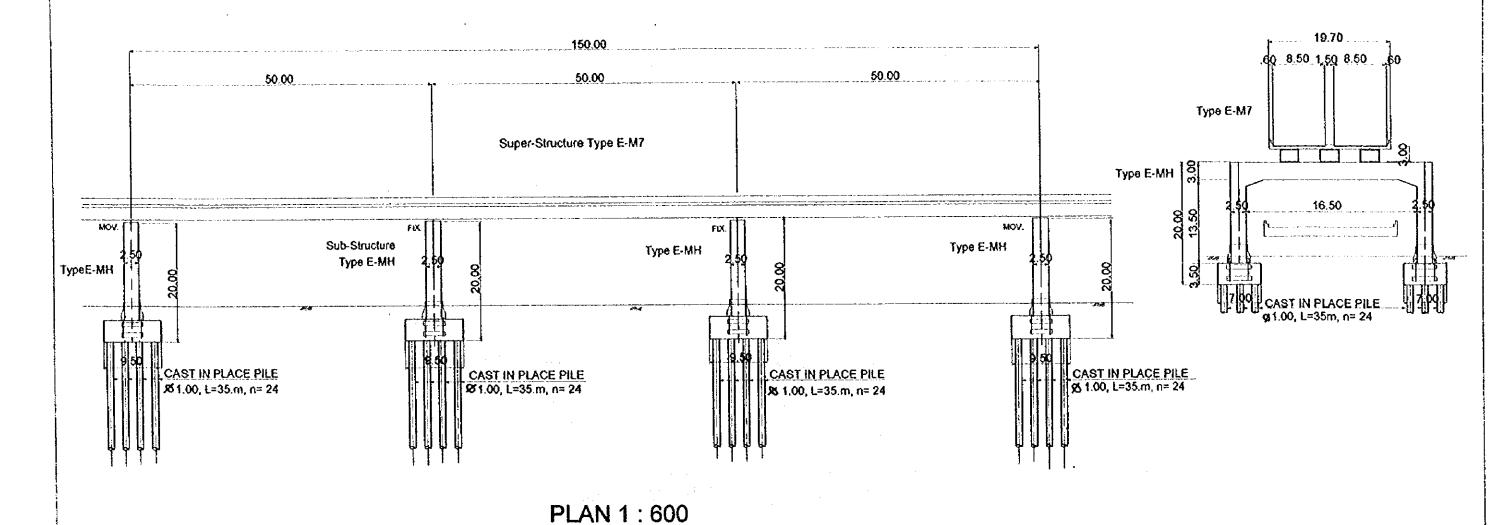
DESIGN CRITERIA		
TYPE	3 SPAN P.C. HOLLOW SLAB	
TOTAL BRIDGE LIGHT	90 0 m	
SPAN	3 x 30m	
WIDTH	197 m ~ 32.1 m	
UVE LOAD	C 40 - 95	
ACCELERATION COEFFICIENT	A = 0.20 (Ca = 0.17)	
STANDARD	Codigo Colombiano de Diseño Sismio de Puentes.	

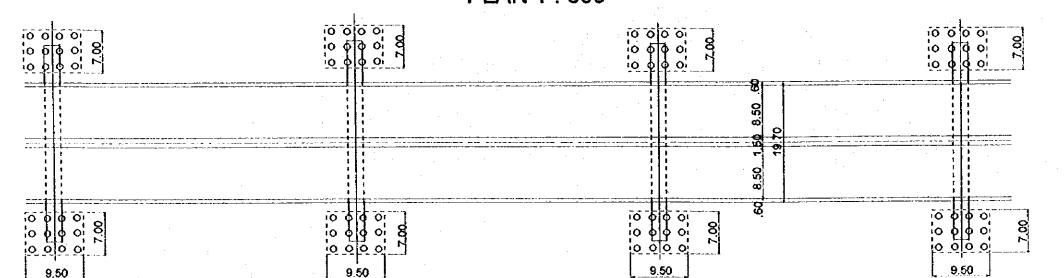
Express	way Viaduct
General	View 6

DATA

PAGE No 6-7

SECTION 1:600





DESIGN CRITERIA		
TYPE	3 SPAN STEEL BOX GIRDER	
TOTAL BRIDGE LIGHT	150.0 m	
SPAN	3 x 50m	
MOTH	19.7 m	
LIVE LOAD	C 40 - 95	
ACCELERATION COEFFICIENT	A=020 (Cs=017 +	
STANDARD	Codigo Colombiano de Diseño Sismico	
	de Puentes.	

Expresswa	ay Viaduct
General	View 7

SANTA FE DE BOGOTA
THE REPUBLIC OF COLOMBIA

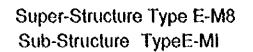
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

DATA

SCALE

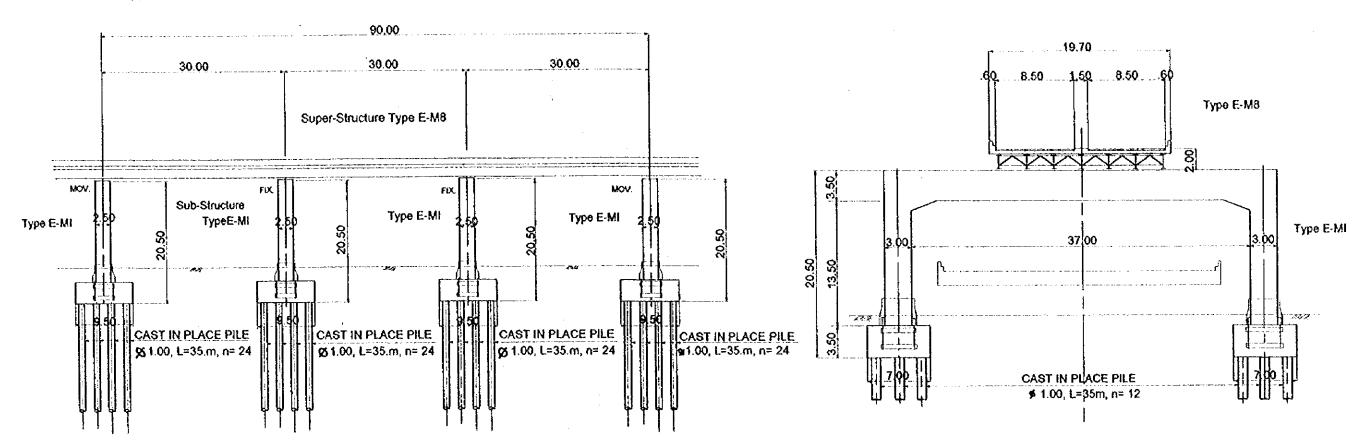
THE FEASIBILITY STUDY ON THE PROJECT OF HIGHWAY AND BUS-LANE
OF SANTA FE DE BOGOTA IN THE REPUBLIC OF COLOMBIA

DWG No. 180
PAGE No. 6-8

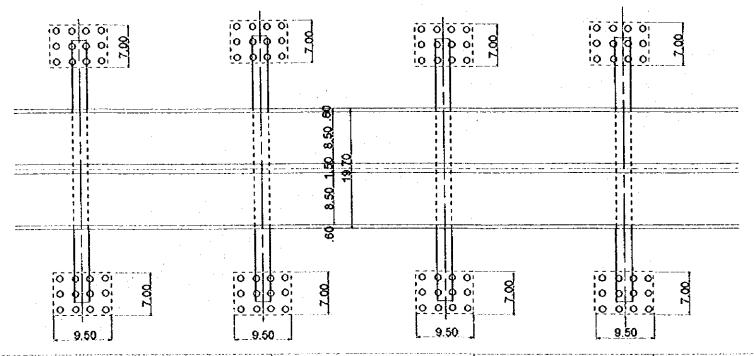


ELEVATION 1:600

SECTION 1:400



PLAN 1:600



DESIG	SN CRITERIA
TYPE	3 SPAN STEEL PLATE GIRDER
TOTAL SRIDGE LIGHT	90.0 m
SPAN	3 x 30m
WOTH	19.7 m
LIVE FOYD	C 40 - 95
ACCELERATION COEFFICIENT	A=020(C=017)
STANDARD	Codigo Colombiano de Diseño Sismico de Puentes.

Expressway	y Viaduct
General '	View 8

SANTA FE DE BOGOTA
THE REPUBLIC OF COLOMBI

1	
	JAPAN INTERNATIONAL
	JAPAN INTERNATIONAL COOPERATION AGENCY
	(JICA)

DATA

THE FEASIBILITY STUDY ON THE PROJECT OF HIGHWAY AND BUS-LANE
OF SANTA FE DE BOGOTA IN THE REPUBLIC OF COLOMBIA

DWG No 181

Super-Structure Type E-R1
Sub-Structure Type E-RA

ELEVATION 1:600

90.00
30.00 30.00 30.00

Super-Structure Type E-R1

Sub-Structure
Type E-RA

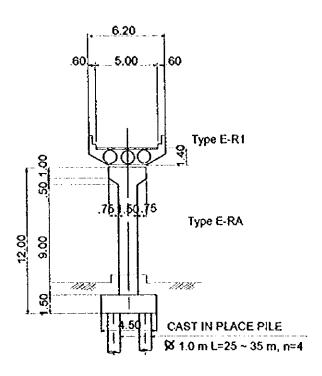
O

SType E-RA

O

CAST IN PLACE PILE
90.1.00, L=25.m, n=4

SECTION 1:300



PLAN 1:600

		&		
[6] 8 	6 6	- 8 8	6 8	668
00 4	<u>0,0</u> 4	ν (φ)	Ø, 6 4	<u> 4;</u>
4.50	4.50	. W	4.50	4.50

DESIG	ON CRITERIA
TYPE	3 SPAN P.C. HOLLOW SLAB
TOTAL BRIDGE LIGHT	90 0m
SPAN	3 x 30m
WIDTH	6.2 m
UNE LOAD	C 40 - 95
ACCELERATION COEFFICIENT	A=020(Cs =0.17)
STANDARD	Codigo Colombiano del Diseño Sismico de Puentes.

Expressway Viaduct General View 9

SANTA FE DE BOGOTA
THE REPUBLIC OF COLOMBIA

JAPAN INTERNATIONAL
COOPERATION AGENCY
(JICA)

DATA

SCALE

THE FEASIBILITY STUDY ON THE PROJECT OF HIGHWAY AND BUS-LANE
OF SANTA FE DE BOGOTA IN THE REPUBLIC OF COLOMBIA

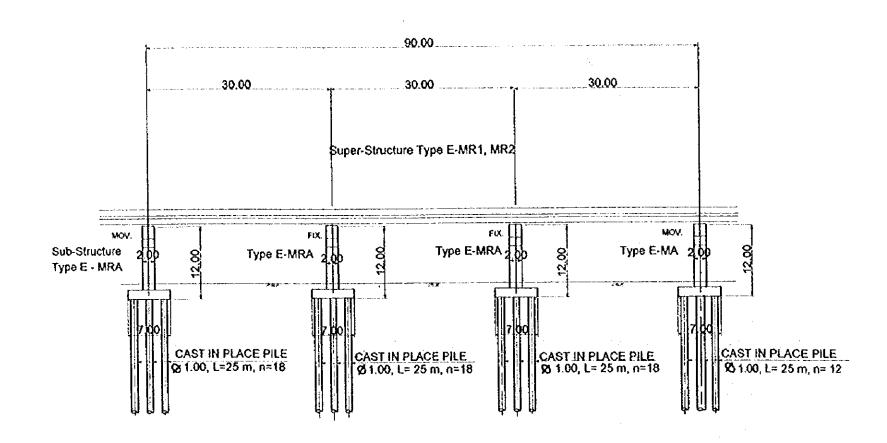
DWG 189

No 182

Super-Structure Type E-MR1, MR2 Sub-Structure Type E - MRA

ELEVATION 1:600

SECTION 1:300



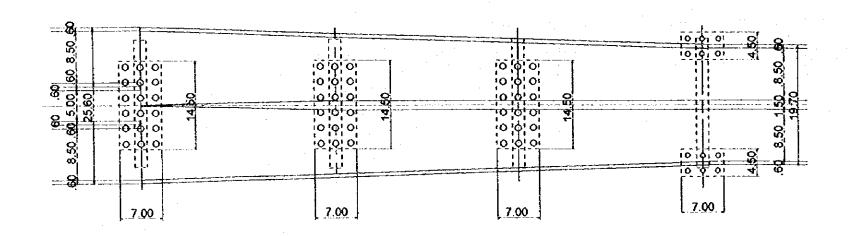
25.60
60 5.00 60 8.50 60

Type E-MR2

4.00 13.00 4.00

CAST IN PLACE PILE
90 1.00, L= 25 m, n = 18

PLAN 1:600



DESIC	SN CRITERIA
TYPE	3 SPAN P.C. HOLLOW SLAB
TOTAL BRIDGE LIGHT	90.0m
SPAN	3 x 30m
WIOTH	19.7 ~ 25.6 m
LIVELOAD	C 40 - 95
ACCELERATION COEFFICIENT	A = 0 20 (Cs=0.17)
STANDARD	Codigo Colombiano de Diseño Sismico de Puentes.

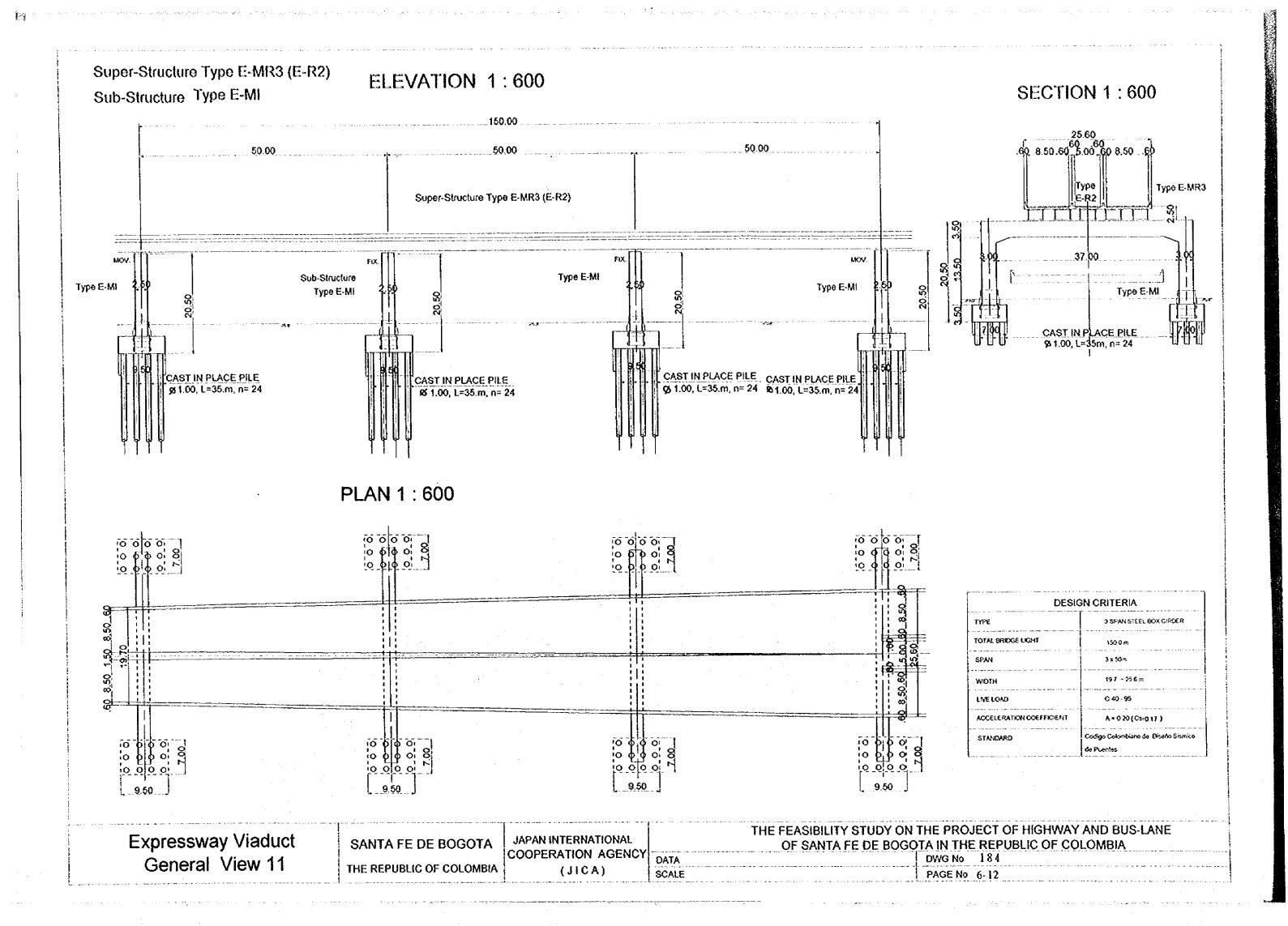
Expressway Viaduct
General View 10

SANTA FE DE BOGOTA
THE REPUBLIC OF COLOMBIA

!	
ļ	JAPAN INTERNATIONAL
	COOPERATION AGENCY
١	(JICA)

DATA

THE FEASIBILITY STUDY ON TH	HE PROJE	ECT OF	HIGHWA'	Y AND BL	JS-LANE
OF SANTA FE DE BOGOTA	A IN THE	REPUB	LIC OF CO	DLOMBIA	
	DWG No	183			



Miscellaneous

SANTA FE DE BOGOTA

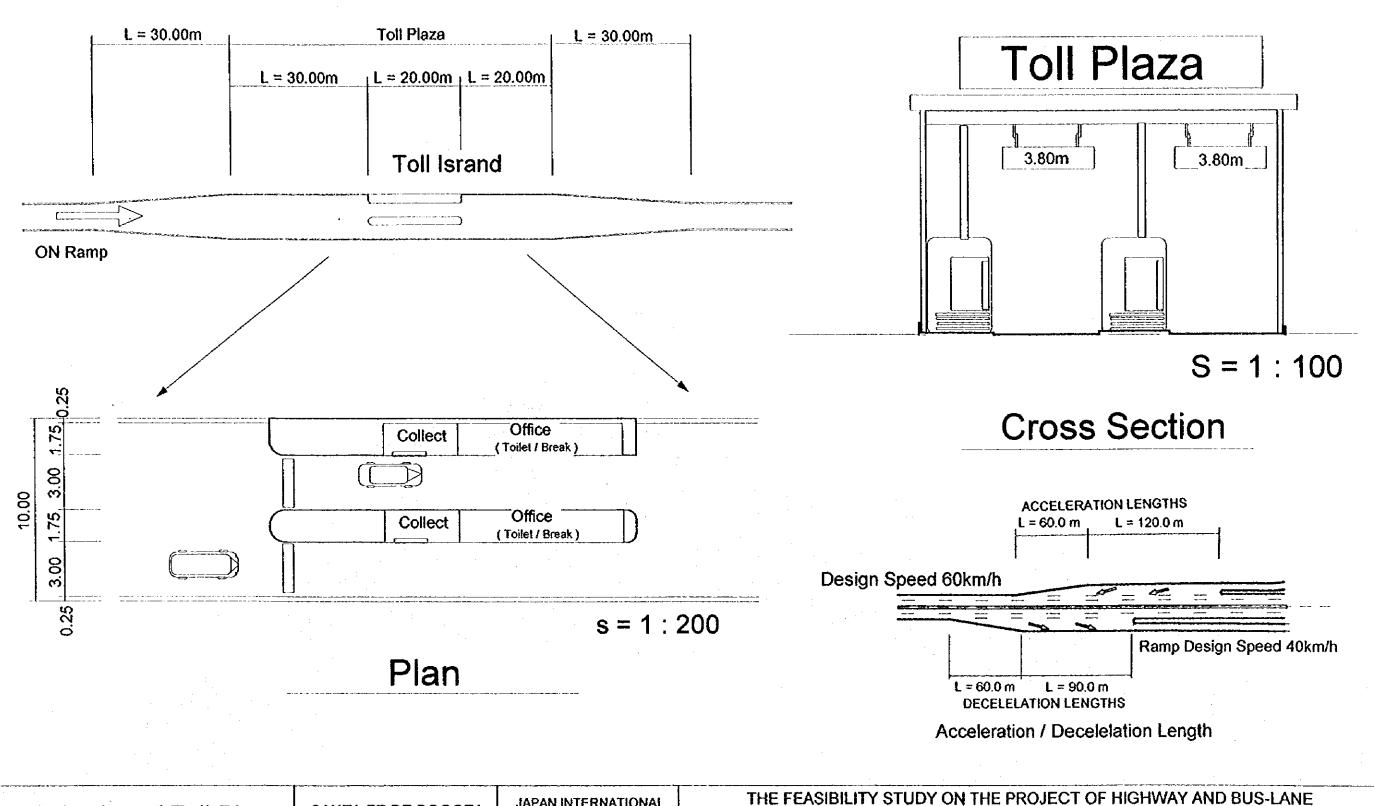
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

THE FEASIBILITY STUDY ON THE PROJECT OF HIWAY AND BUS-LANE OF SANTA FE DE BOGOTA IN THE REPUBLIC OF COLOMBIA

DATA

DWG No. 185
PAGE No.

Inner Ring Expressway Detail Design of Toll Plaza



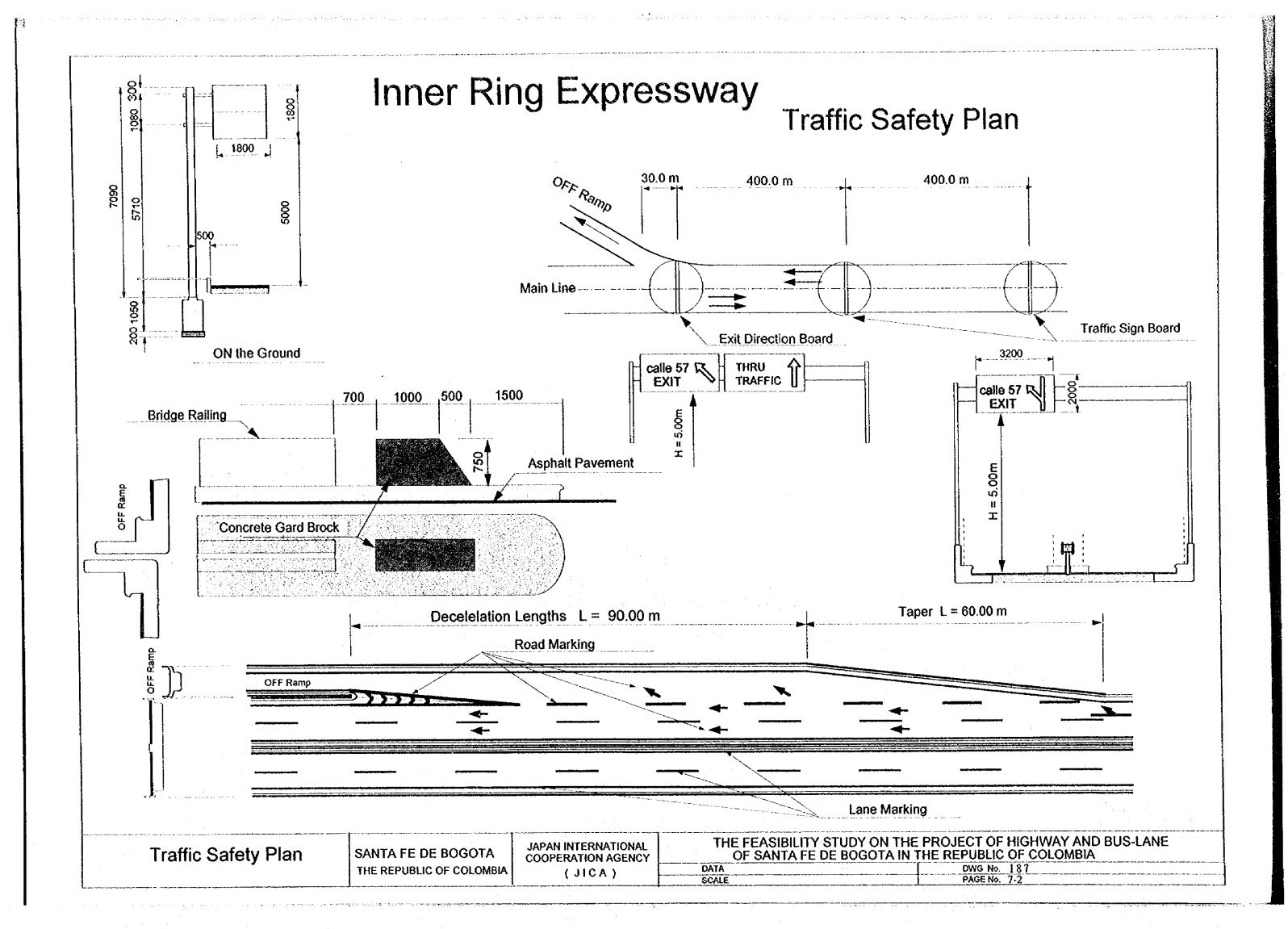
Detail Design of Toll Plaza

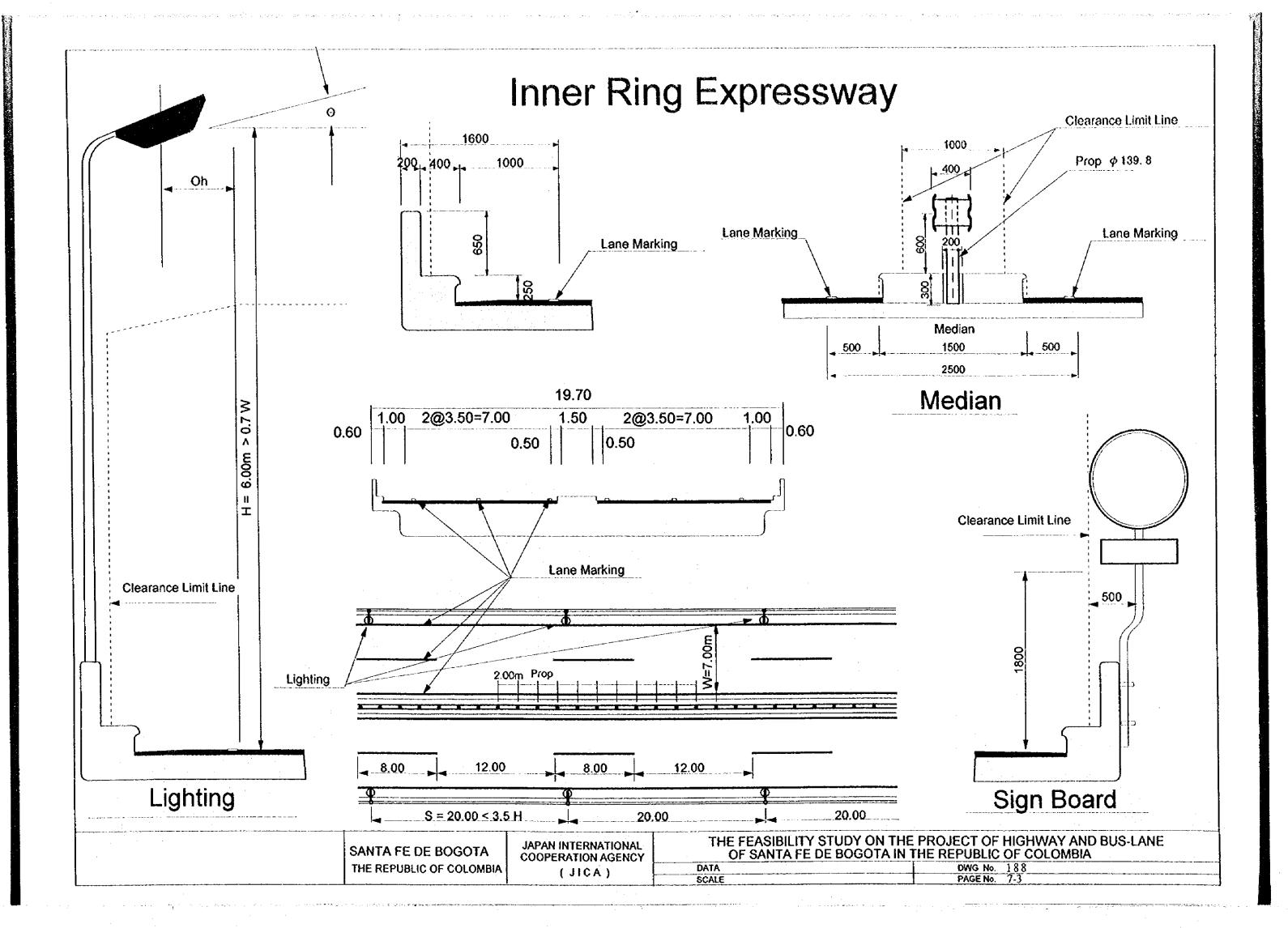
SANTA FE DE BOGOTA THE REPUBLIC OF COLOMBIA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

THE FEASIBILITY STUDY ON THE PROJECT OF HIGHWAY AND BUS-LANE OF SANTA FE DE BOGOTA IN THE REPUBLIC OF COLOMBIA

 DATA
 DWG No. 186

 SCALE
 H=1:400
 PAGE No. 7-1



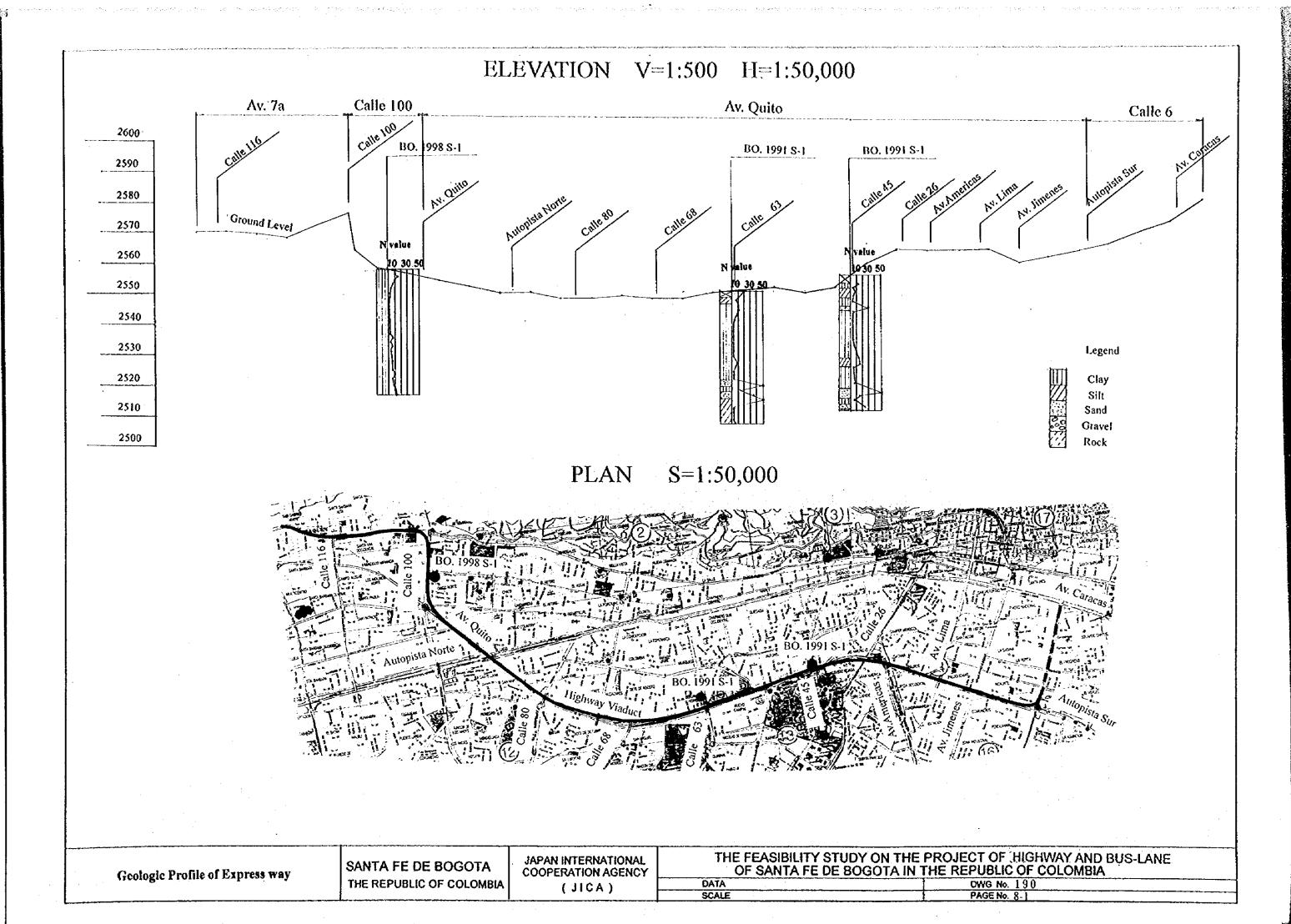


Construction Method

SANTA FE DE BOGOTA THE REPUBLIC OF COLOMBIA JAPAN INTERNATIONAL COOPERATION AGENCY (J I C A)

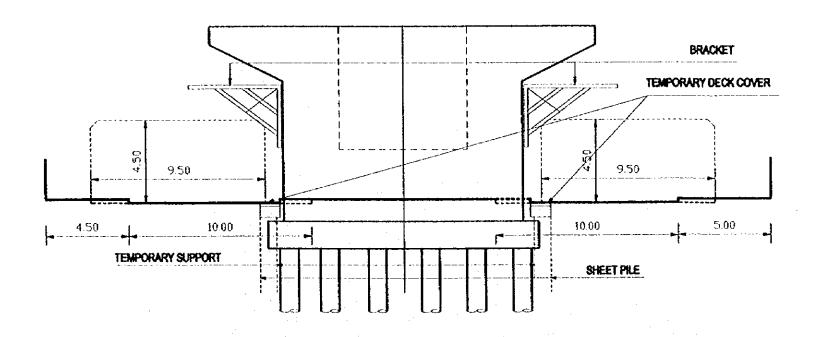
THE FEASIBILITY STUDY ON THE PROJECT OF HIGHWAY AND BUS-LANE OF SANTA FE DE BOGOTA IN THE REPUBLIC OF COLOMBIA

DATA SCALE DWG No. 189 PAGE No.



CARRERA SEPTIMA

RAMP



INNER RING EXPRESSWAY VIADUCT SUB-STRUCTURE CONSTRUCTION METHOD

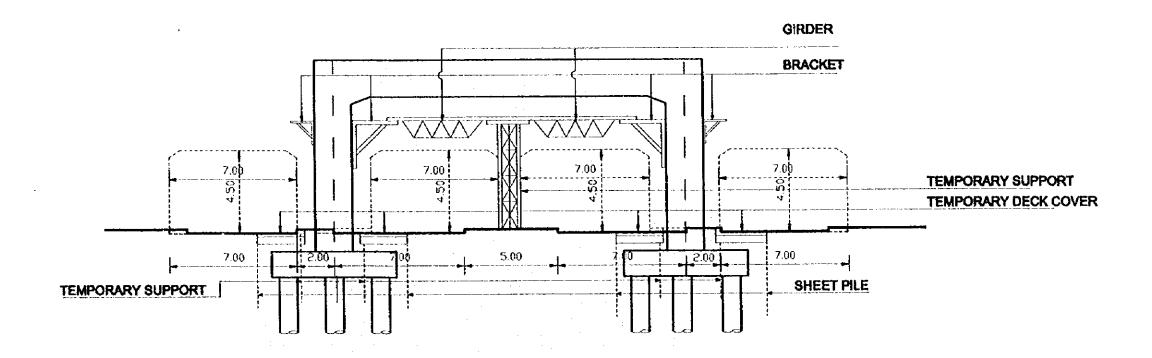
SANTA FE DE BOGOTA THE REPUBLIC OF COLOMBIA JAPAN INTERNATIONAL COOPERATION AGENCY () () ()

THE FEASIBILITY STUDY ON THE PROJECT OF HIGHWAY AND BUS-LANE OF SANTA FE DE BOGOTA IN THE REPUBLIC OF COLOMBIA

DATA
DATA
SCALE :1.200
PAGE No. 8-2

CARRERA SEPTIMA

TYPICAL



INNER RING EXPRESSWAY VIADUCT SUB-STRUCTURE CONSTRUCTION METHOD

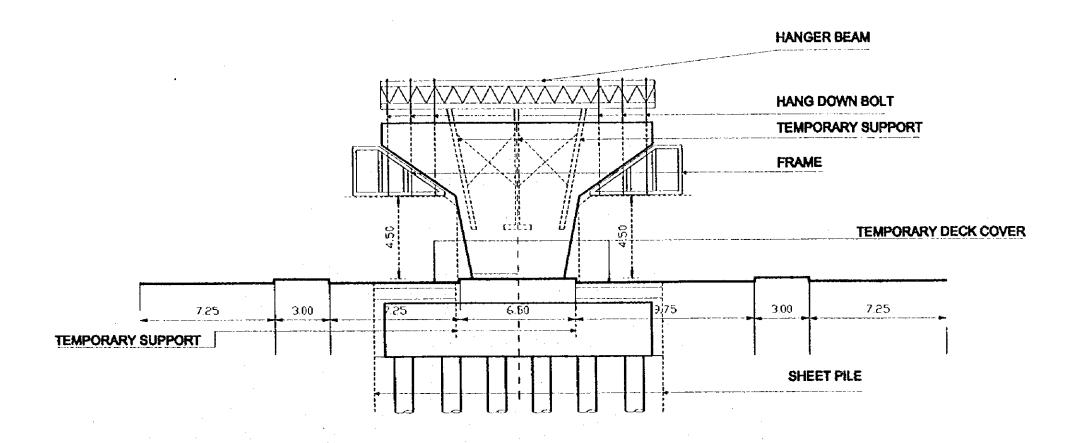
SANTA FE DE BOGOTA THE REPUBLIC OF COLOMBIA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) THE FEASIBILITY STUDY ON THE PROJECT OF HIGHWAY AND BUS-LANE OF SANTA FE DE BOGOTA IN THE REPUBLIC OF COLOMBIA

DATA

DAYA

SCALE :1200

DWG No. 1 9 2
PAGE No. 8-3



INNER RING EXPRESSWAY VIADUCT SUB-STRUCTURE CONSTRUCTION METHOD

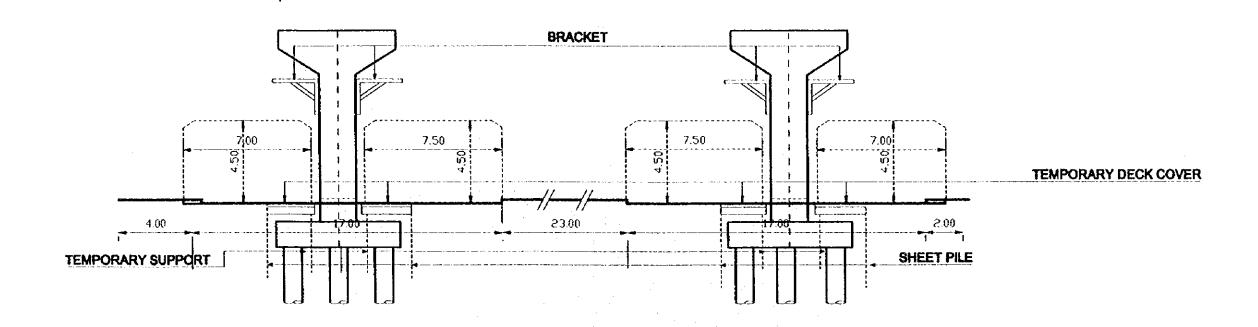
SANTA FE DE BOGOTA THE REPUBLIC OF COLOMBIA

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

THE FEASIBILITY STUDY ON THE PROJECT OF HIGHWAY AND BUS-LANE OF SANTA FE DE BOGOTA IN THE REPUBLIC OF COLOMBIA

ATA
CALE :1200 DWG No. 193
PAGENO. 8-4

CALLE 94 ~ 68

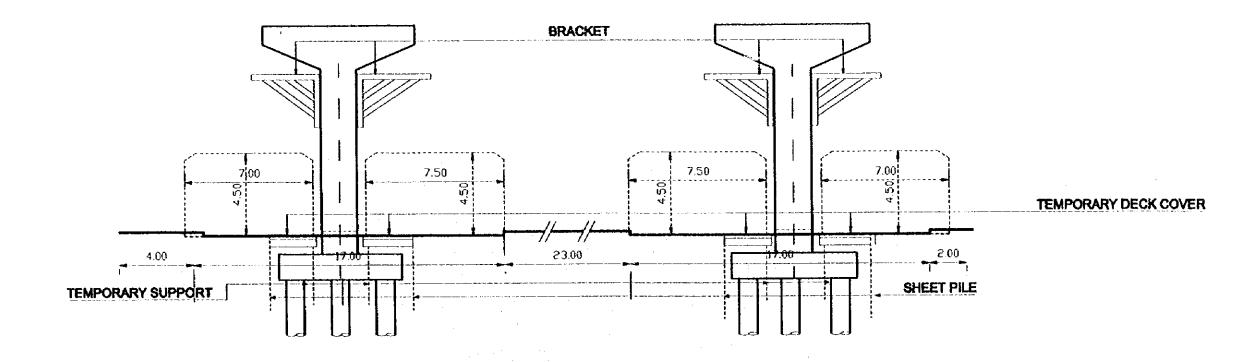


INNER RING EXPRESSWAY VIADUCT SUB-STRUCTURE CONSTRUCTION METHOD

SANTA FE DE BOGOTA THE REPUBLIC OF COLOMBIA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) THE FEASIBILITY STUDY ON THE PROJECT OF HIGHWAY AND BUS-LANE OF SANTA FE DE BOGOTA IN THE REPUBLIC OF COLOMBIA

DATA
DATA
SCALE :1.200
PAGE No. 1 9 4
PAGE No. 8-5

CALLE 78



INNER RING EXPRESSWAY VIADUCT SUB-STRUCTURE CONSTRUCTION METHOD

SANTA FE DE BOGOTA THE REPUBLIC OF COLOMBIA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) THE FEASIBILITY STUDY ON THE PROJECT OF HIGHWAY AND BUS-LANE OF SANTA FE DE BOGOTA IN THE REPUBLIC OF COLOMBIA

DATA

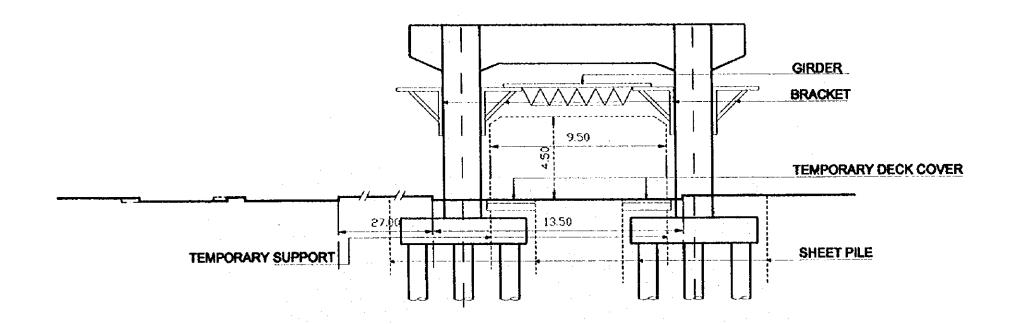
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DWG No. 195

SCALE 1200

PAGENO. 8-6

CALLE 68



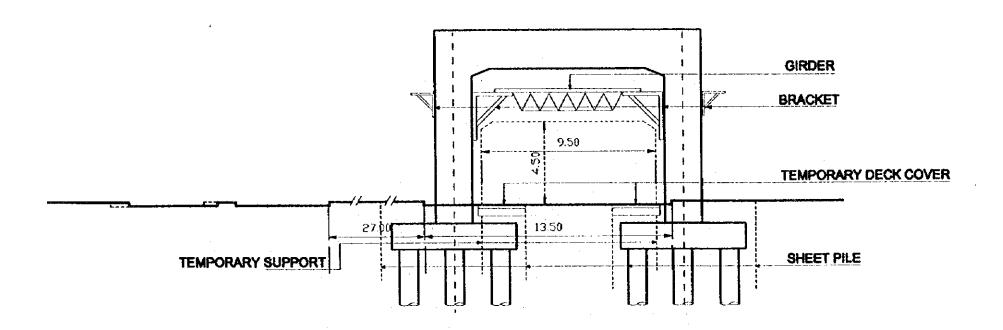
EXPRESSBUSWAY VIADUCT SUB-STRUCTURE CONSTRUCTION METHOD

SANTA FE DE BOGOTA THE REPUBLIC OF COLOMBIA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

THE FEASIBILITY STUDY ON THE PROJECT OF HIGHWAY AND BUS-LANE OF SANTA FE DE BOGOTA IN THE REPUBLIC OF COLOMBIA

DATA
DATA
DATA
SCALE :1200
PAGE No. 196
PAGE No. 8-7

CALLE 68 ~ 63



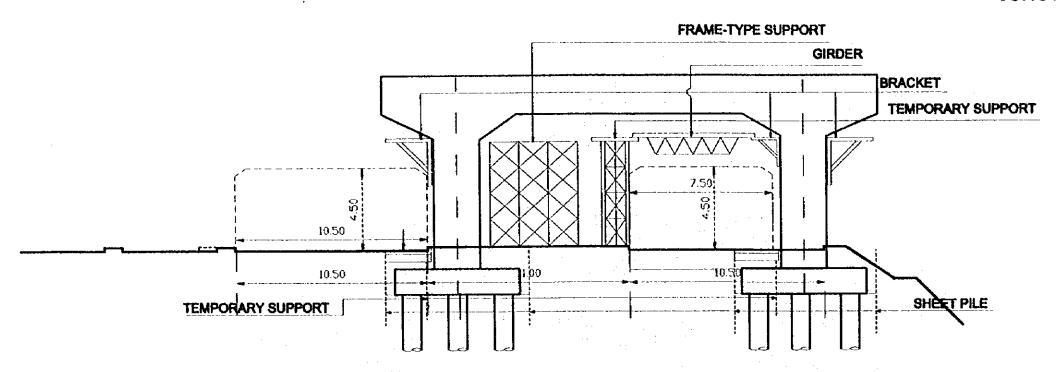
EXPRESSBUSWAY VIADUCT	
SUB-STRUCTURE CONSTRUCTION METHOD	

SANTA FE DE BOGOTA THE REPUBLIC OF COLOMBIA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

THE FEASIBILITY STUDY ON THE PROJECT OF HIGHWAY AND BUS-LANE OF SANTA FE DE BOGOTA IN THE REPUBLIC OF COLOMBIA		
ŢĀ	DWG No. 197	

CALLE 57

JUNCTION

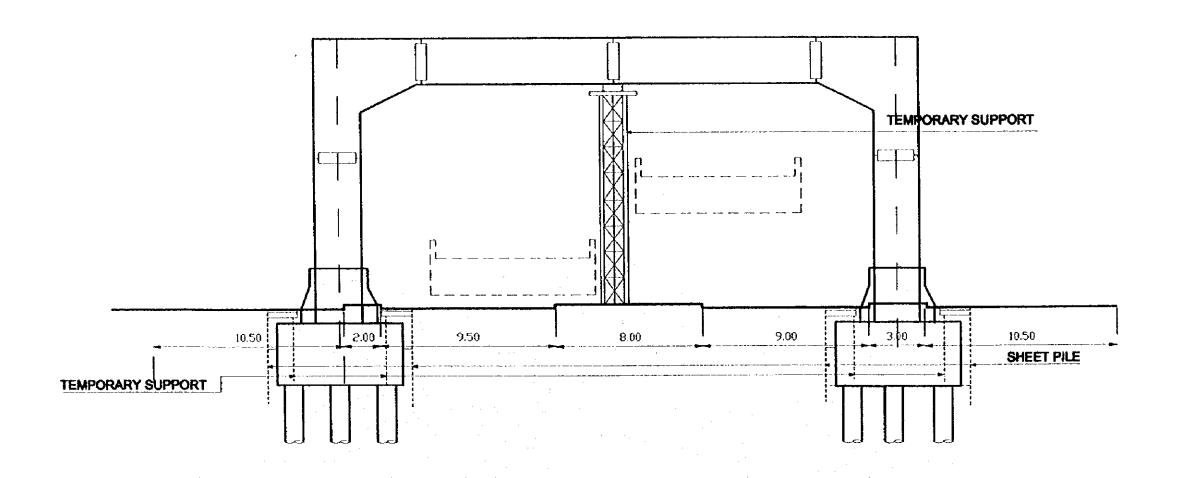


INNER	RING EXPRESSWAY VIADUCT	
SUB-STRUCTURE CONSTRUCTION METHOD		

SANTA FE DE BOGOTA THE REPUBLIC OF COLOMBIA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

THE FEASIBILITY STUDY ON THE PROJECT OF HIGHWAY AND BUS-LANE OF SANTA FE DE BOGOTA IN THE REPUBLIC OF COLOMBIA	
DATA	OWG No. 198
SCALE :1.200	PAGENa. 8-9

CALLE 45~ AVENIDA 28



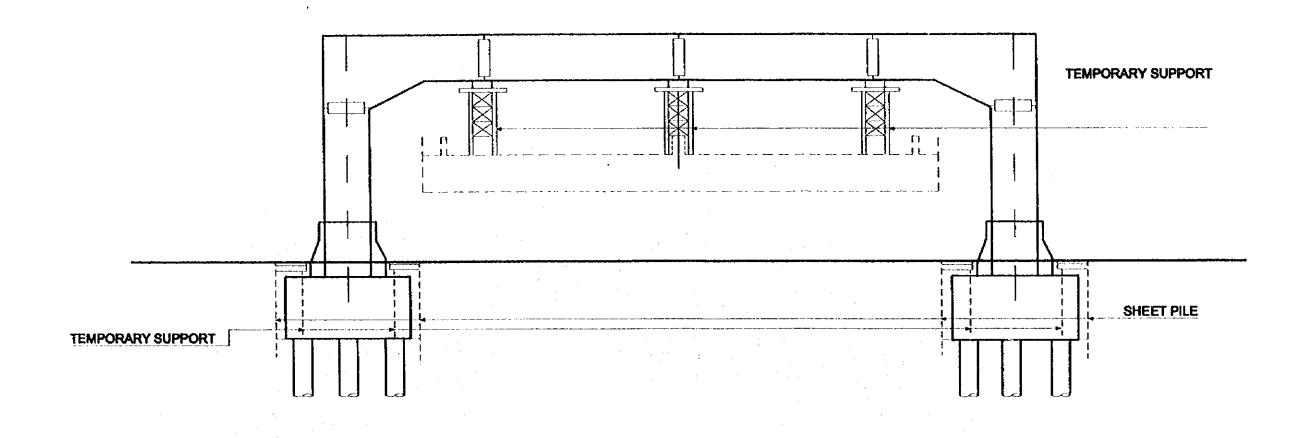
INNER RING EXPRESSWAY VIADUCT SUB-STRUCTURE CONSTRUCTION METHOD

SANTA FE DE BOGOTA THE REPUBLIC OF COLOMBIA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

THE FEASIBILITY STUDY ON THE PROJECT OF HIGHWAY AND BUS-LANE
OF SANTA FE DE BOGOTA IN THE REPUBLIC OF COLOMBIA

DATA
DATA
DATA
PAGE No. 199
SCALE
PAGE No. 8-10

CALLE 26



INNER RING EXPRESSWAY VIADUCT SUB-STRUCTURE CONSTRUCTION METHOD

SANTA FE DE BOGOTA THE REPUBLIC OF COLOMBIA

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

THE FEASIBILITY STUDY ON THE PROJECT OF HIGHWAY AND BUS-LANE OF SANTA FE DE BOGOTA IN THE REPUBLIC OF COLOMBIA

ATA

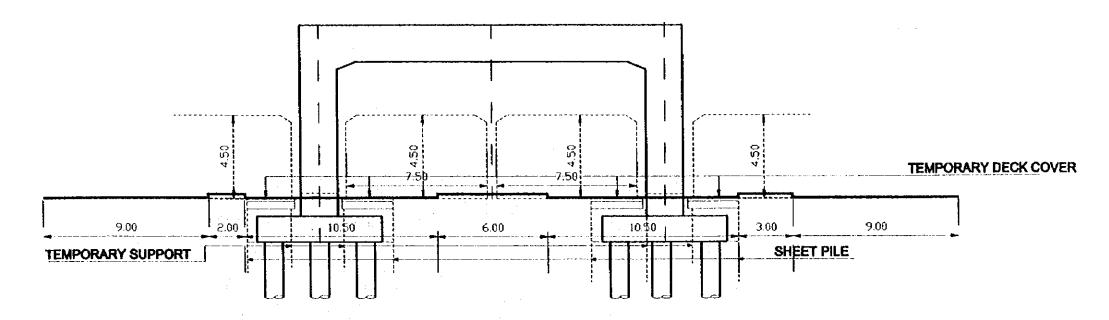
CALE 1:200

PAGENO. 8-11

DAYA SCALE 1:200

AV LAS AMERICAS ~ CALLE 18

SIMILAR TO "SEPTIMA TYPICAL"



INNER RING EXPRESSWAY VIADUCT SUB-STRUCTURE CONSTRUCTION METHOD

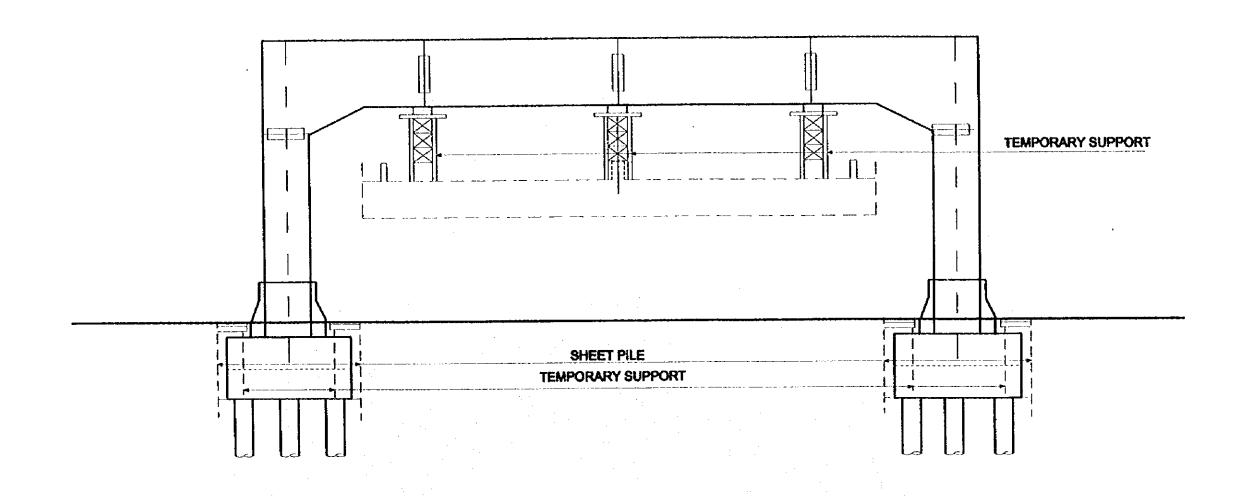
SANTA FE DE BOGOTA THE REPUBLIC OF COLOMBIA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

THE FEASIBILITY STUDY ON THE PROJECT OF HIGHWAY AND BUS-LANE OF SANTA FE DE BOGOTA IN THE REPUBLIC OF COLOMBIA

OWG No. 201

CALE 1200 PAGENG. 8-12

CALLE 16 ~ 12



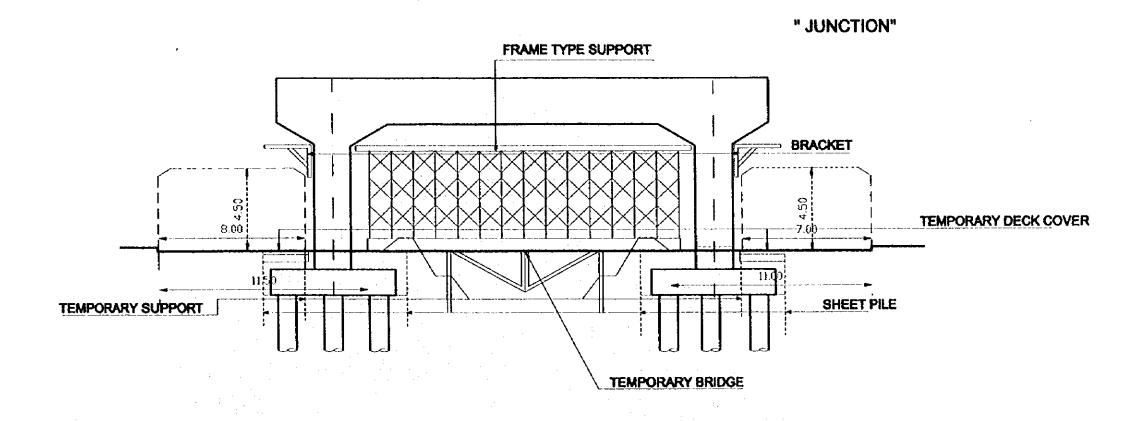
INNER	RING EXPRESSWAY VIADUCT	
SUB-STRUCTURE CONSTRUCTION METHOD		

THE FEASIBILITY STUDY ON THE PROJECT OF HIGHWAY AND BUS-LANE OF SANTA FE DE BOGOTA IN THE REPUBLIC OF COLOMBIA		
OF SANTA PE DE BUGUTA IN THE REPUBLIC OF COLUMBIA		
NTA .	DWG No. 202	

 DATA
 DWG No. 20

 SCALE 1:200
 PAGE No. 8

CALLE 6



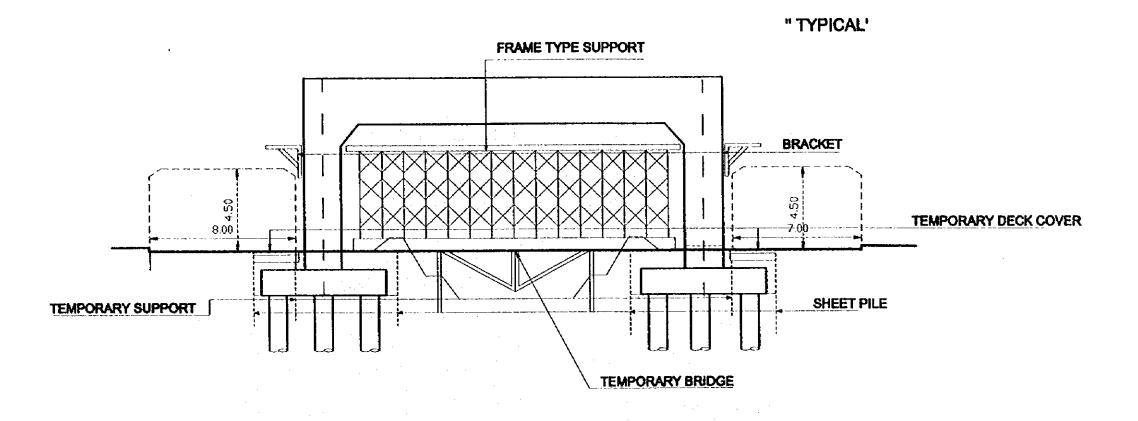
INNER RING EXPRESSWAY VIADUCT SUB-STRUCTURE CONSTRUCTION METHOD

SANTA FE DE BOGOTA THE REPUBLIC OF COLOMBIA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

THE FEASIBILITY STUDY ON THE PROJECT OF HIGHWAY AND BUS-LANE
OF SANTA FE DE BOGOTA IN THE REPUBLIC OF COLOMBIA

DATA
DATA
DATA
PARENG 8-14

CALLE 6



INNER RING EXPRESSWAY VIADUCT SUB-STRUCTURE CONSTRUCTION METHOD

SANTA FE DE BOGOTA THE REPUBLIC OF COLOMBIA JAPAN INTERNATIONAL COOPERATION AGENCY ()ICA) THE FEASIBILITY STUDY ON THE PROJECT OF HIGHWAY AND BUS-LANE OF SANTA FE DE BOGOTA IN THE REPUBLIC OF COLOMBIA

DATA

DWG No. 204

SCALE :1200 PAGENO. 8-15

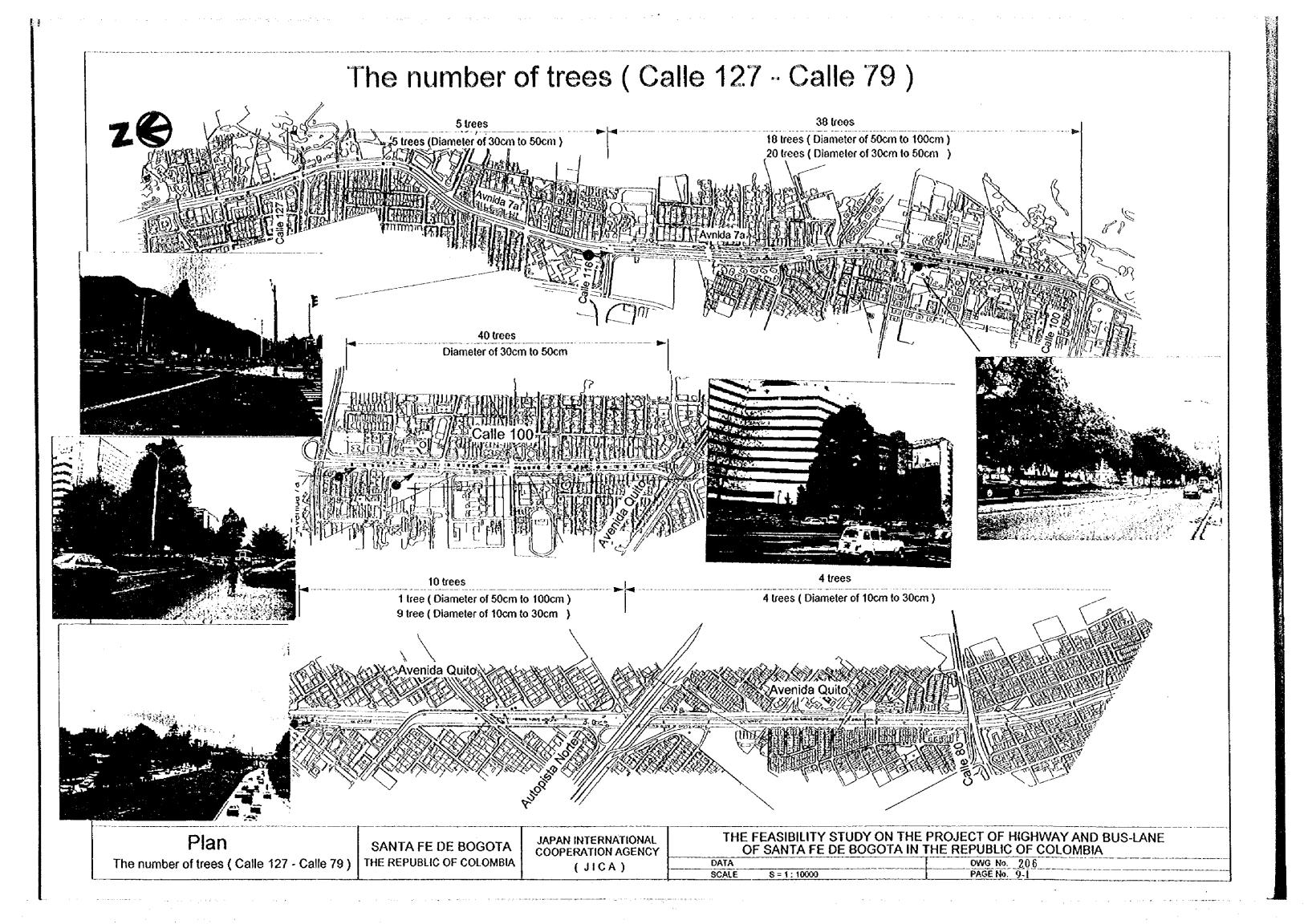
Existing Trees

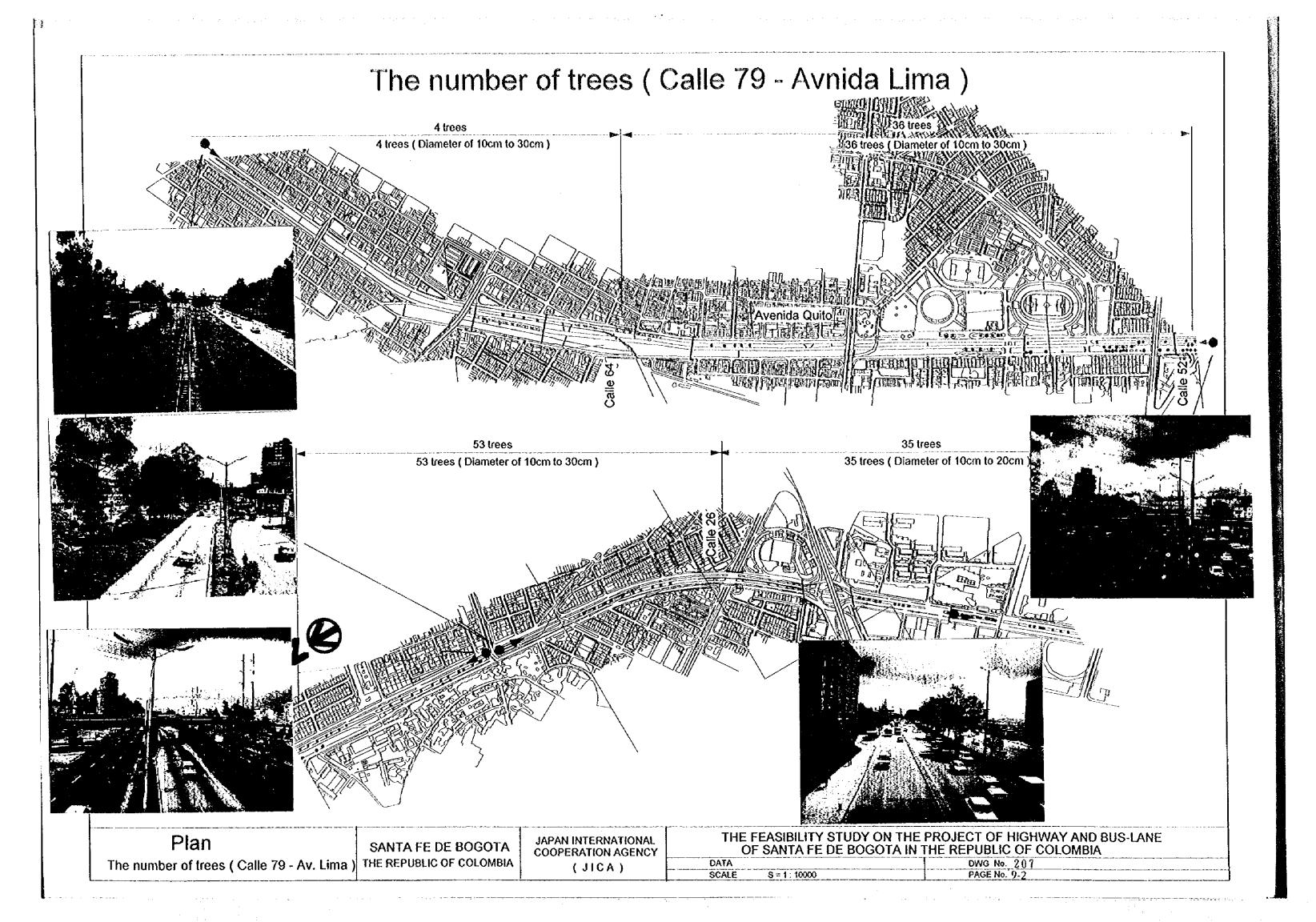
SANTA FE DE BOGOTA THE REPUBLIC OF COLOMBIA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

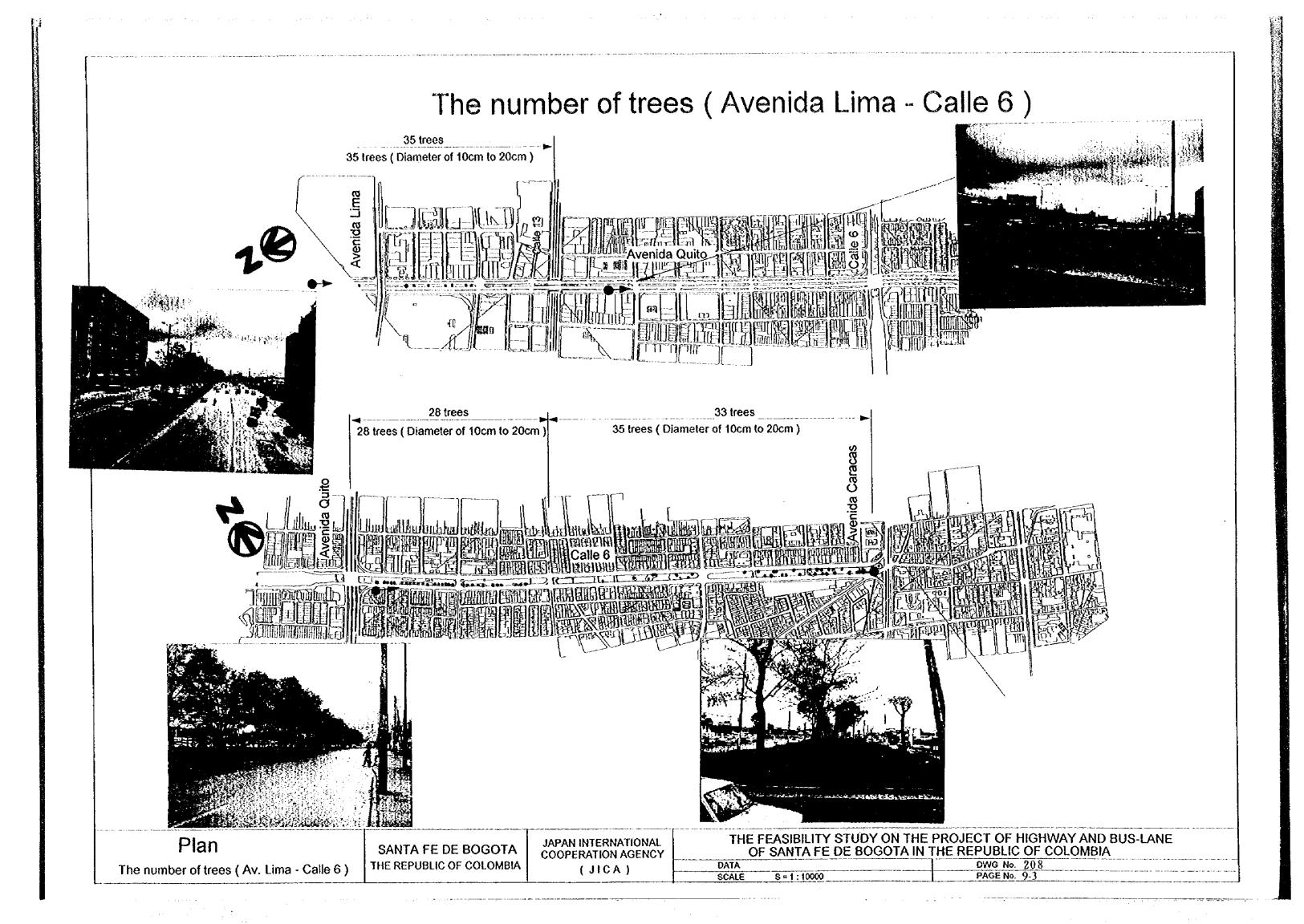
THE FEASIBILITY STUDY ON THE PROJECT OF HIGHWAY AND BUS-LANE OF SANTA FE DE BOGOTA IN THE REPUBLIC OF COLOMBIA

ATA

CWG No. 205
PAGE No.







Noise Barrier

SANTA FE DE BOGOTA THE REPUBLIC OF COLOMBIA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

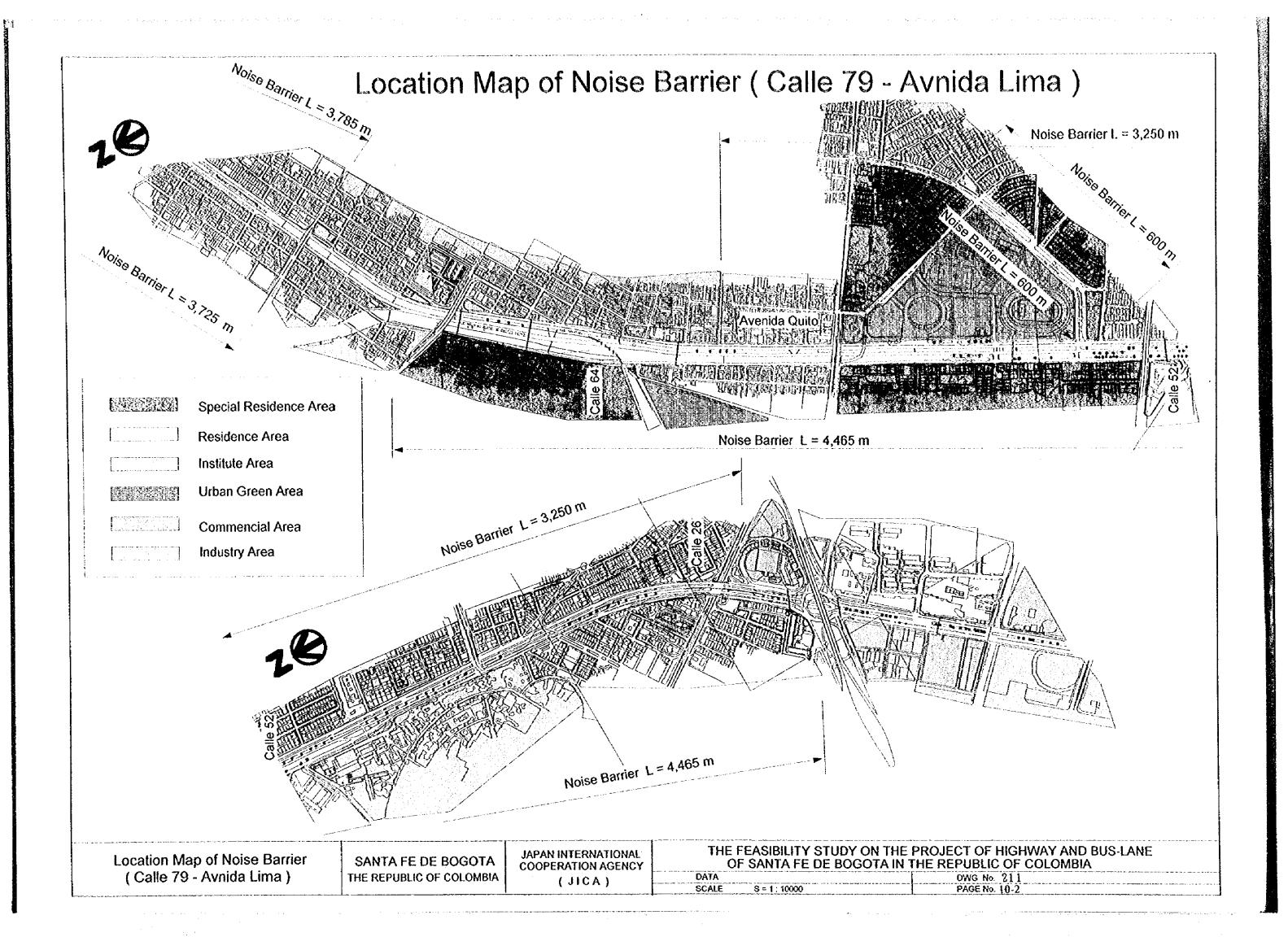
THE FEASIBILITY STUDY ON THE PROJECT OF HIGHWAY AND BUS-LANE OF SANTA FE DE BOGOTA IN THE REPUBLIC OF COLOMBIA

DATA

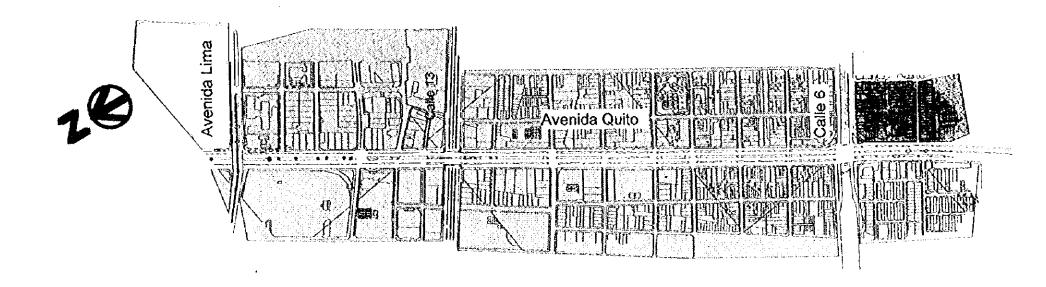
DWG No. 209
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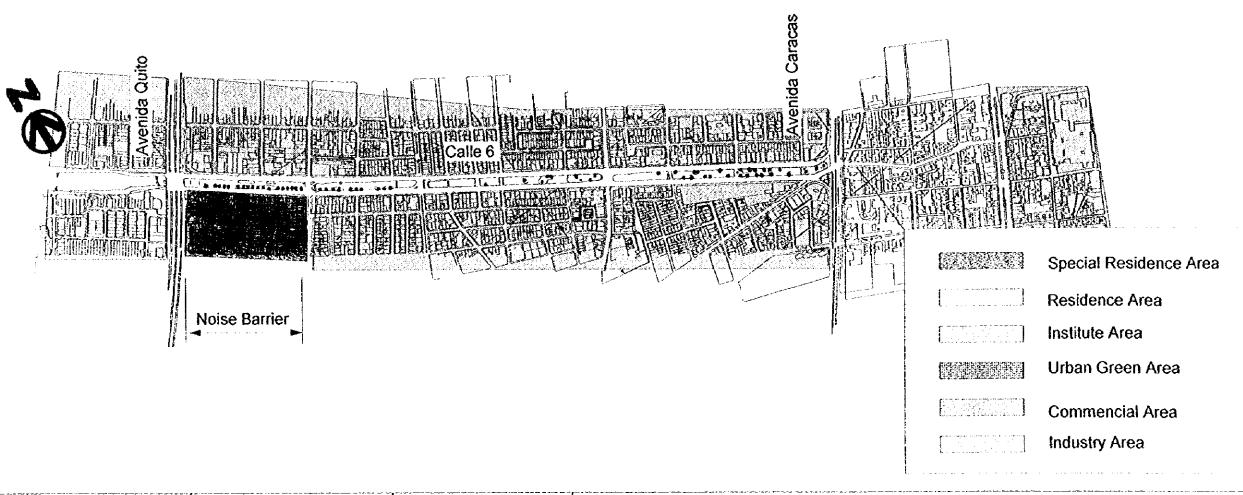
DATA SCALE

Location Map of Noise Barrer (Calle 127 - Calle 79) Noise Barrier L = 2,400 m H = 3.0 mNoise Barrier L = 1,250 m Special Residence Area Residence Area Institute Area Urban Green Area Commencial Area Noise Barrier L = 1,250 m H = 3.0 m**Industry Area** Noise Barrier L = 3,785 m H = 3.0 m Noise Barrier L = 3,725 m H = 3.0 mTHE FEASIBILITY STUDY ON THE PROJECT OF HIGHWAY AND BUS-LANE OF SANTA FE DE BOGOTA IN THE REPUBLIC OF COLOMBIA JAPAN INTERNATIONAL COOPERATION AGENCY **Location Map of Noise Barrer SANTA FE DE BOGOTA** (Calle 127 - Calle 79) DATA THE REPUBLIC OF COLOMBIA (JICA)



Location Map of Noise Barrier (Avenida Lima - Calle 6)





Location Map of Noise Barrier (Avenida Lima - Calle 6)

SANTA FE DE BOGOTA THE REPUBLIC OF COLOMBIA JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

THE FEASIBILITY STUDY ON THE PROJECT OF HIGHWAY AND BUS-LANE OF SANTA FE DE BOGOTA IN THE REPUBLIC OF COLOMBIA

 DATA
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 SCALE
 S = 1:10000
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