

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)  
MINISTRY OF PUBLIC WORKS, REPUBLIC OF INDONESIA

**A STUDY  
FOR  
ARTERIAL ROAD SYSTEM DEVELOPMENT  
IN  
GERBANG KERTOSUSILA REGION  
(SURABAYA METROPOLITAN AREA)**

FINAL REPORT  
DRAWINGS

JULY 1997

JICA LIBRARY

J1139967 (2)

PACIFIC CONSULTANTS INTERNATIONAL  
YACHIYO ENGINEERING CO., LTD.

SURABAYA  
SURABAYA

SSF

JR

97-089



J/1399672



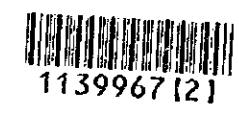
JAPAN INTERNATIONAL COOPERATION AGENCY(JICA)  
MINISTRY OF PUBLIC WORKS REPUBLIC OF INDONESIA

A STUDY  
FOR  
ARTERIAL ROAD SYSTEM DEVELOPMENT  
IN  
GERBANG KERTOSUSILA REGION  
(SURABAYA METROPOLITAN AREA)

FINAL REPORT  
DRAWINGS

JULY 1997

PACIFIC CONSULTANTS INTERNATIONAL  
YACHIYO ENGINEERING CO., LTD.



## INDEX OF DRAWINGS

INDEX OF SHEET	SHEET NO.
PROJECT LOCATION MAP	1
LEGEND	2
TYPICAL CROSS SECTIONS	3 TO 7
PHOTO MOSAIC AND PLAN AND PLOFILE	8 TO 73
TYPICAL CROSS OF BRIDGE	74
GENERAL VIEW OF BRIDGES	75 TO 109

### Sources of Topography:

Peta Garis Projek Drainasi Surabaya;  
Photography: Nov.'82 S=1/10,000, Mapping: Mar.'83 S=1/2,500

Peta Garis Kali Surabaya Phase II;  
Photography: May.'88 S=1/10,000, Mapping: May.'89 S=1/2,500  
by DPU Directorate Jenderal Pengairan, Badan Pelaksana  
Projek Induk Pengembangan Wiraha Sungai Kali Brantas

Peta Garis Surabaya Skala 1:5,000;  
Photography: S=1/5,000, Mapping: S=1/1,000  
by Pemerintah Kotamadya DT II Surabaya






### Source of Aerial Photography:

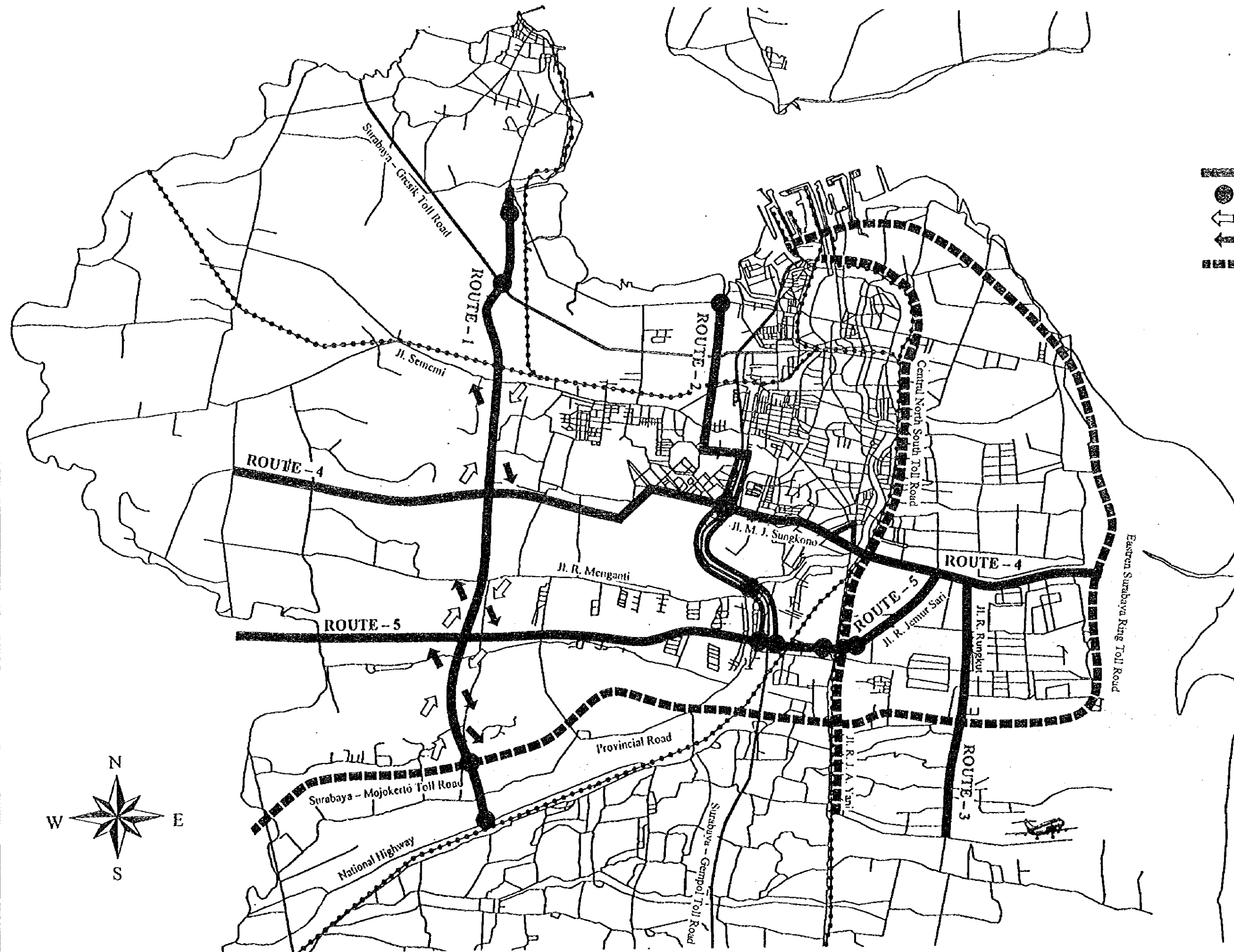
scale=1:30,000, photography: 1993/1994, BAKOSURTANAL

PROJECT	PROVINCE	SHEET NO	TOTAL SHEET
ARSIS - GKS	EAST JAVA	1	109
PROJECT LOCATION MAP			



# LEGEND

-  : Project Roads
-  : Interchange
-  : On - Ramp
-  : Off - Ramp
-  : Planned Toll Road



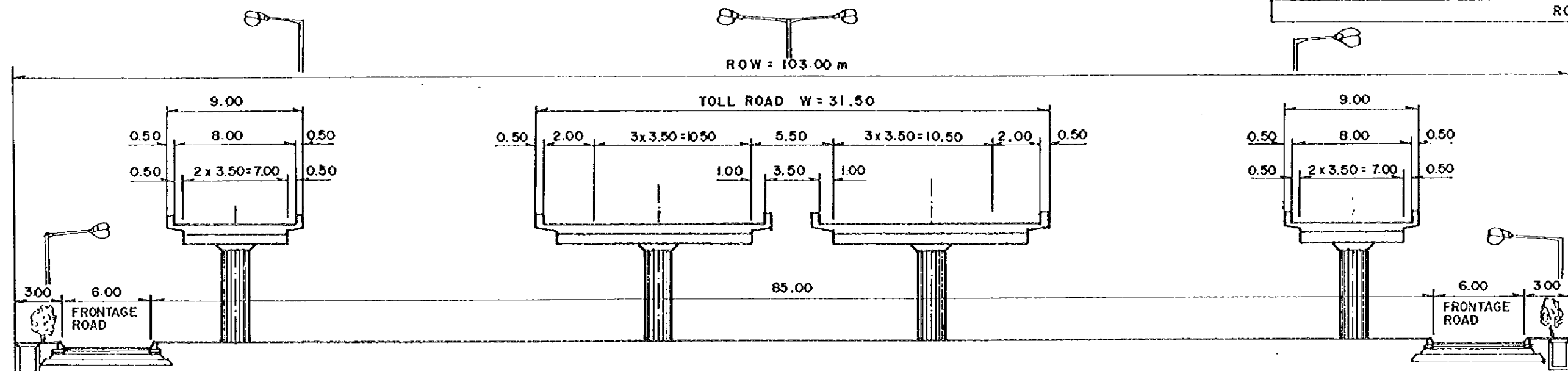


## LEGENDA LEGEND

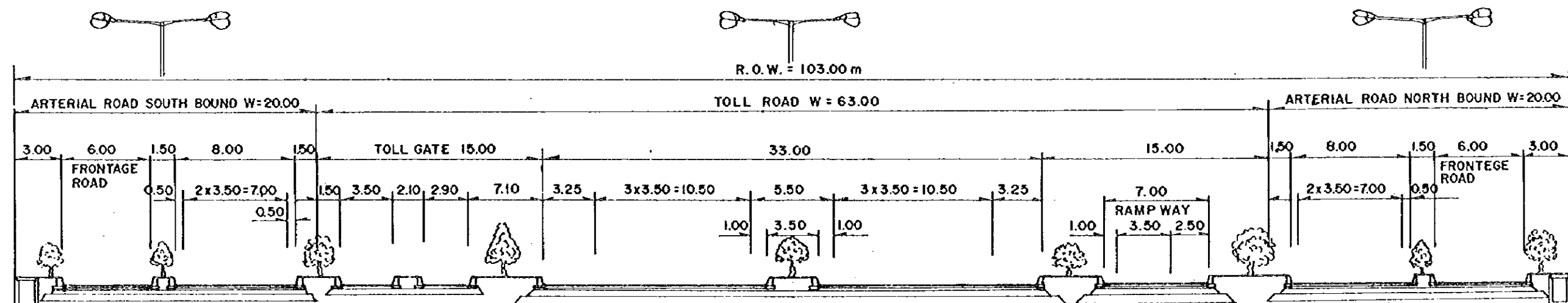
	Kontur dan titik tinggi Spot elevation		Rumput - Alang alang Grass		Gardu listrik Transformen house
	Pasir / Krikil gosong timbul Sand		Bakau - Palembang Mangrove - Hemp palm		Kuburan Islam - Kristen - Tionghoa - Bali Moslem graves - Cristian graves - Chinese graves - Hindu graves
	Sungai / Anak sungai River		Bambu - Pohon pohonan Bambo - Rubber Plantation		Jalan aspal - Jalan tidak diaspal Paved road - Unpaved road
	Tempat pompa air Water pump station		Kelapa - Karet - Jati Palm plantation - Rubber plantation - Teak plantation		Jalan setapak Track
	Saluran Channel		Teh - Cemara / Pinus Tea plantation		Jalan sedang dibuat Road under construction
	Bendung Dam		Rumah House / Building		Tanggul Dike
	Bendungan Dam		Kantor Pemerintahan Government office		Jembatan Batu / Besi Concrete and Iron Bridge
	Pintu air Sluice		Sekolahan School		Jalan kereta api / Station Railway and station
	Rawa Swamp		Rumah sakit Hospital		Hantaran listrik tegangan tinggi Electricity power line
	Tanah bencah - Empong Marshy place - Fish pond		Pabrik Factory		Batas Kabupaten Kabupaten boundary
	Pematang Small dikes		Pagor Fence		Batas Kecamatan Kecamatan boundary
	Sawah - Ladang - Tebu Rice field - Farm / Cultivated - Sugar cane		Los pasar Open market		Batas Desa Desa boundary
	Hutan belantara - Belukar Dense forest - Forest		Mosjid - Gereja - Kelenteng - Pura Mosque - Church - Temple - Hindu temple		

PROJECT	PROVINCE	SHEET NO.	TOTAL SHEET
ARSDS - OKS	EAST JAVA	3	109
TYPICAL CROSS SECTION {I}		SCALE 1:300	
ROUTE -1			

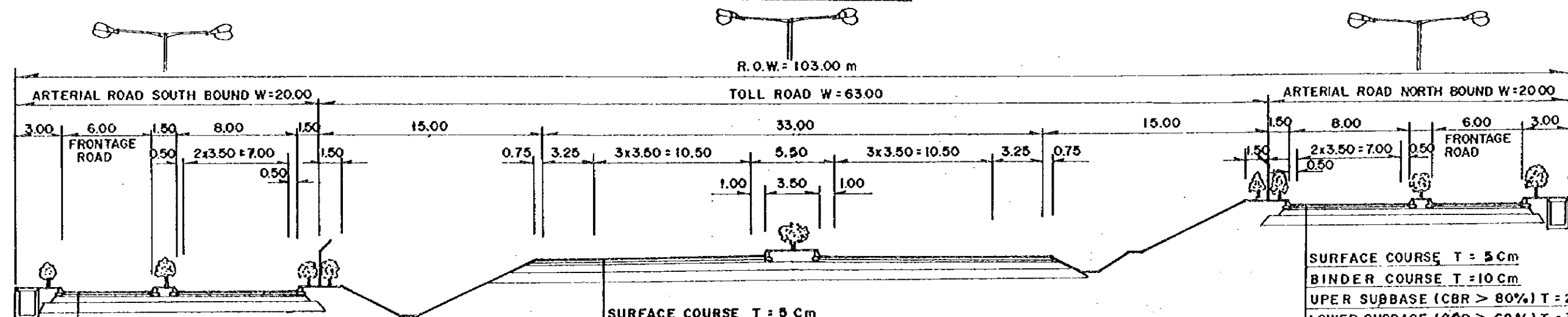
## ELEVATED SECTION



## ON, OFF RAMP SECTION



## ATGRADE SECTION



SURFACE COURSE T = 5 cm  
 BINDER COURSE T = 10 cm  
 UPER SUBBASE (CBR > 80%) T = 25 cm  
 LOWER SUBBASE (CBR > 60%) T = 30 cm  
 REPRACED MATERIAL (CBR > 20%) T = 60 cm

SURFACE COURSE T = 5 cm  
 BINDER COURSE T = 10 cm  
 UPER SUBBASE (CBR > 80%) T = 25 cm  
 LOWER SUBBASE (CBR > 60%) T = 30 cm  
 REPRACED MATERIAL (CBR > 20%) T = 60 cm

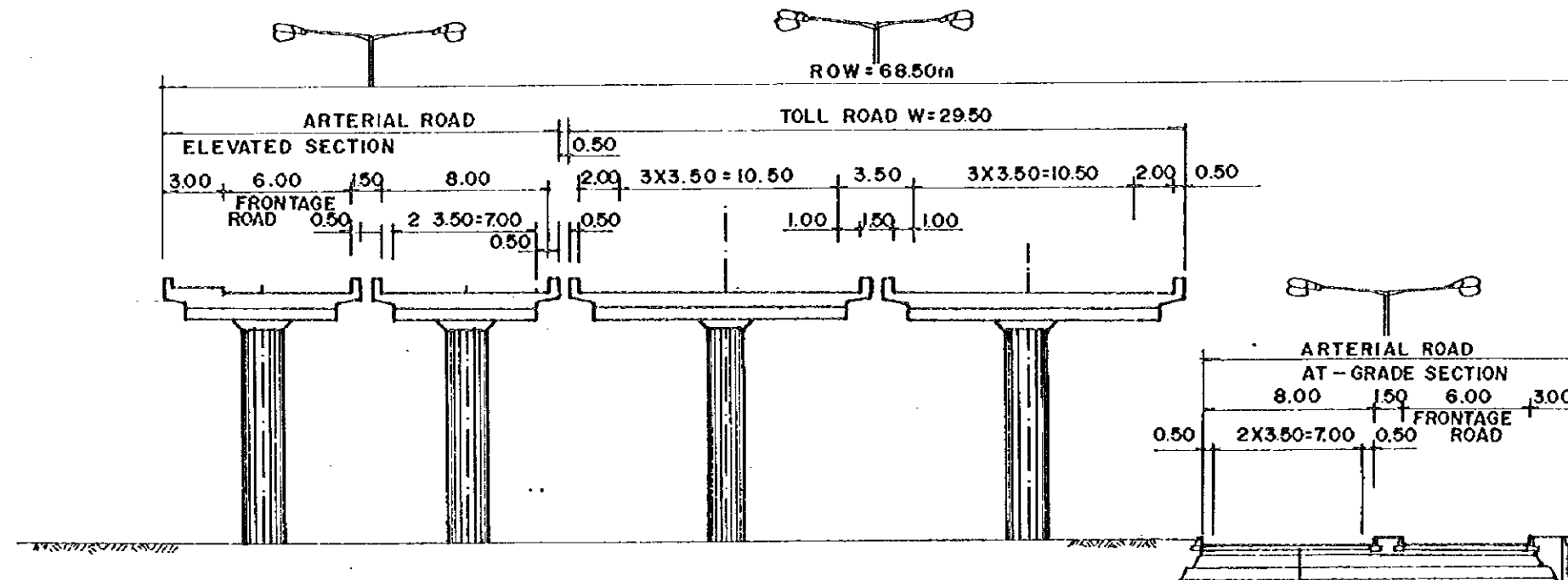
SURFACE COURSE T = 5 cm  
 BINDER COURSE T = 10 cm  
 UPER SUBBASE (CBR > 80%) T = 25 cm  
 LOWER SUBBASE (CBR > 60%) T = 30 cm  
 REPRACED MATERIAL (CBR > 20%) T = 60 cm

PROJECT	PROJECT	SHEET NO	TOT. SHEET
ARSDS--GKS	EAST JAVA	4	109
TYPICAL CROSS SECTION (2)		SCALE: 1:300	
		ROUTE -- I	

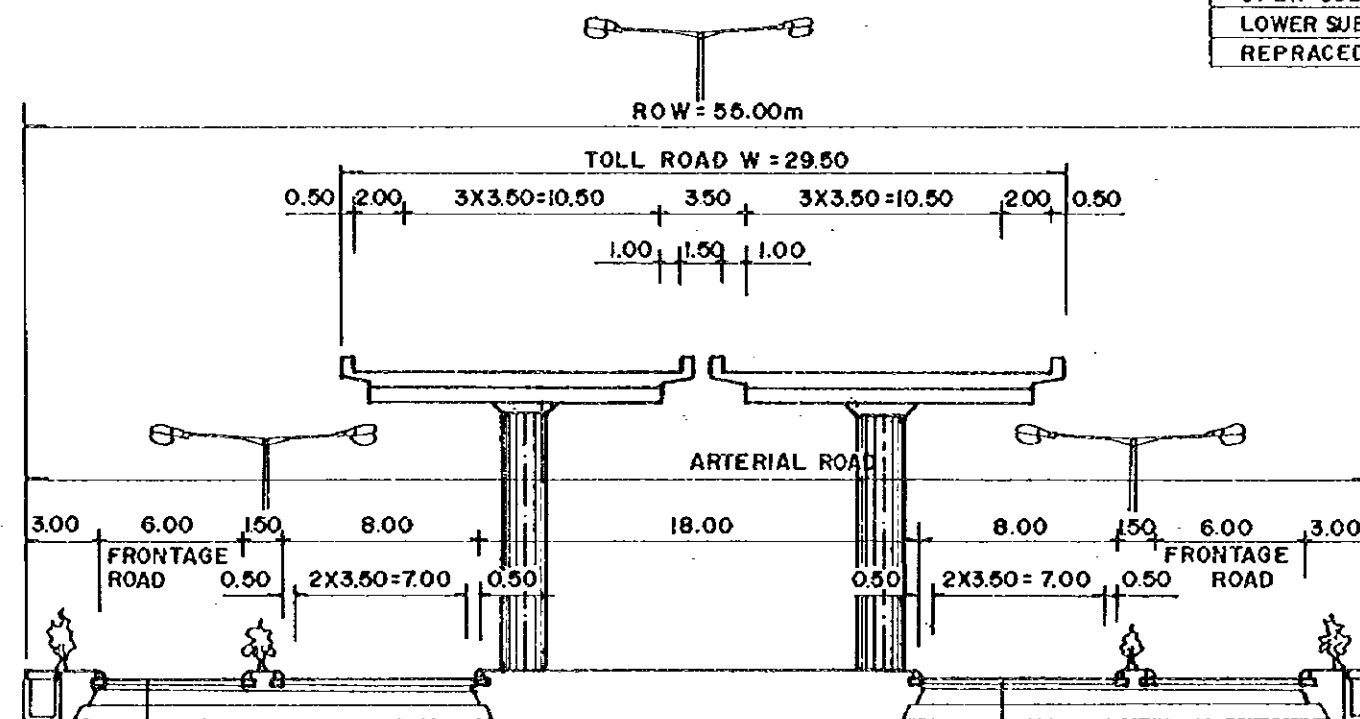
# STA. 19+00 TO STA. 20+800

## ELEVATED SECTION

## ATGRADE SECTION



## ROUTE -4 TO JL. RAYA MENGANTI

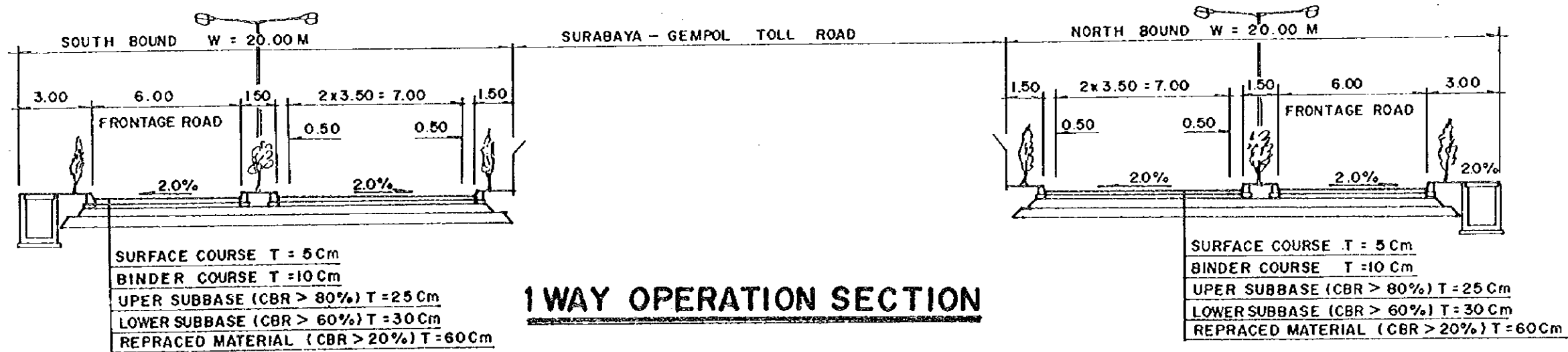


SURFACE COURSE T = 5 cm  
 BINDER COURSE T = 10 cm  
 UPER SUBBASE (CBR > 80%) T = 25 cm  
 LOWER SUBBASE (CBR > 60%) T = 30 cm  
 REPRACED MATERIAL (CBR > 20%) T = 60 cm

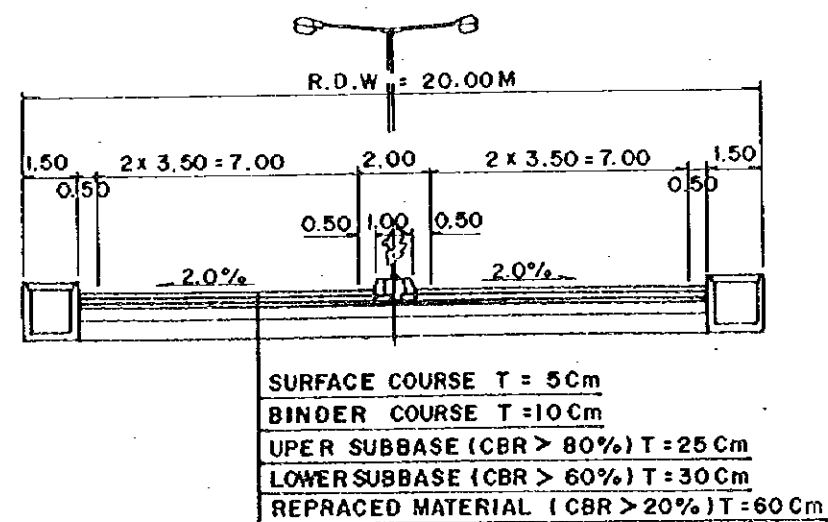
SURFACE COURSE T = 5 cm  
 BINDER COURSE T = 10 cm  
 UPER SUBBASE (CBR > 80%) T = 25 cm  
 LOWER SUBBASE (CBR > 60%) T = 30 cm  
 REPRACED MATERIAL (CBR > 20%) T = 60 cm

SURFACE COURSE T = 5 cm  
 BINDER COURSE T = 10 cm  
 UPER SUBBASE (CBR > 80%) T = 25 cm  
 LOWER SUBBASE (CBR > 60%) T = 30 cm  
 REPRACED MATERIAL (CBR > 20%) T = 60 cm

PROJECT	PROVINCE	SHEET NO	TOT. SHEET
ARSDS -- GKS	EAST JAVA	5	109
TYPICAL CROSS SECTION (3)		SCALE 1:200	
ROUTE-2			

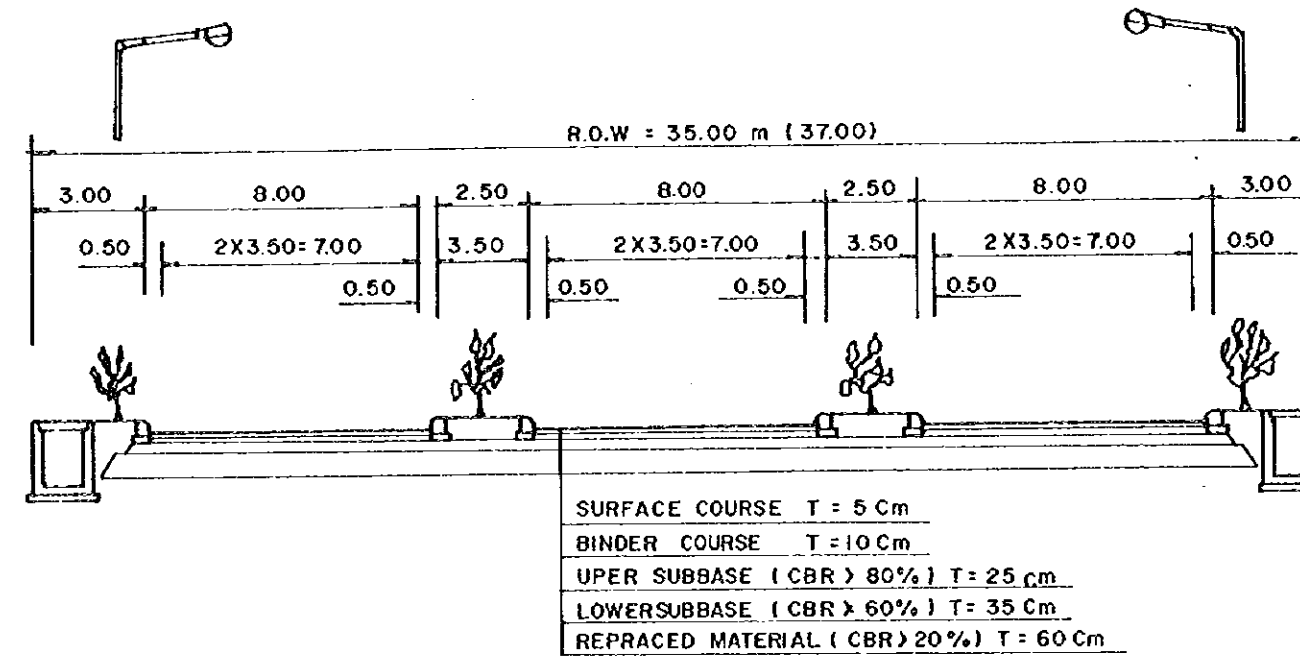


### 1 WAY OPERATION SECTION

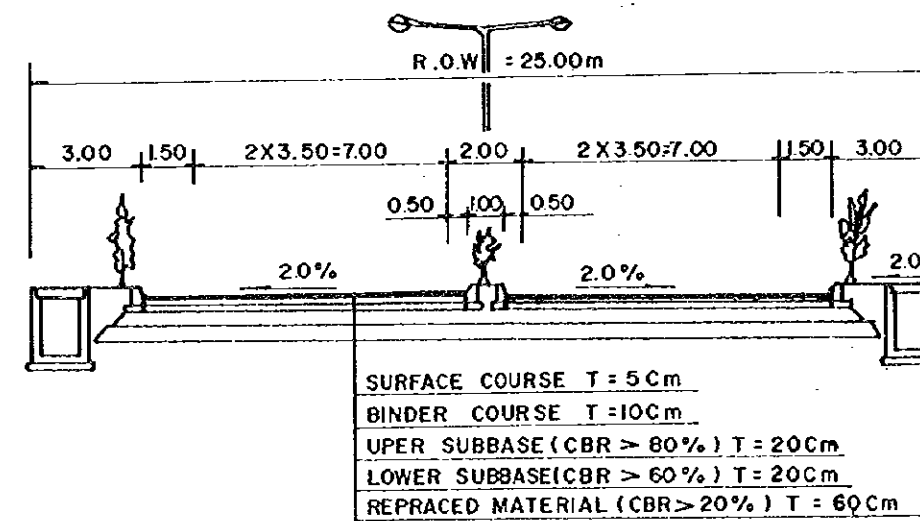


### 2 WAY OPERATION SECTION

PROJECT	PROVINCE	SHEET NO.	TOTAL SHEET
ARSDS - 0 K3	EAST JAWA	6	109
TYPICAL CROSS SECTION(4)		SCALE 1 : 300	
ROUTE 3 AND 5			



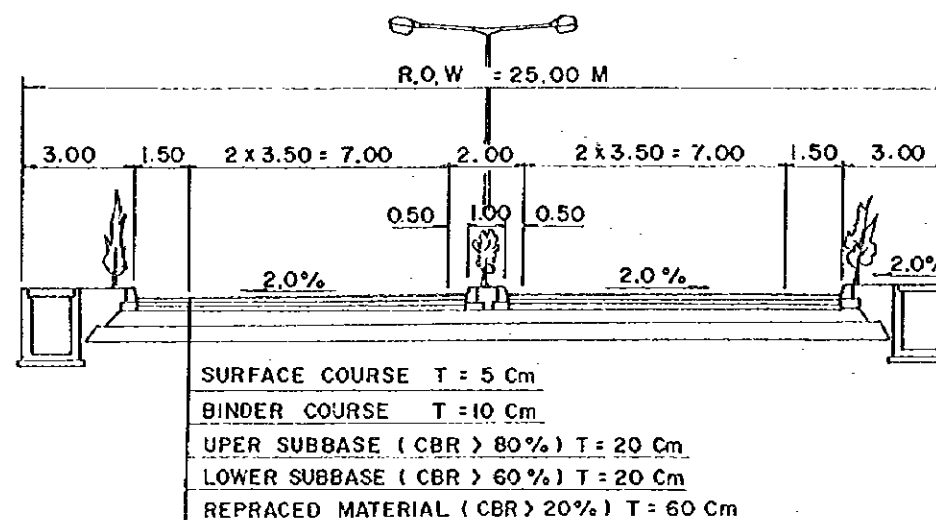
## ROUTE - 5



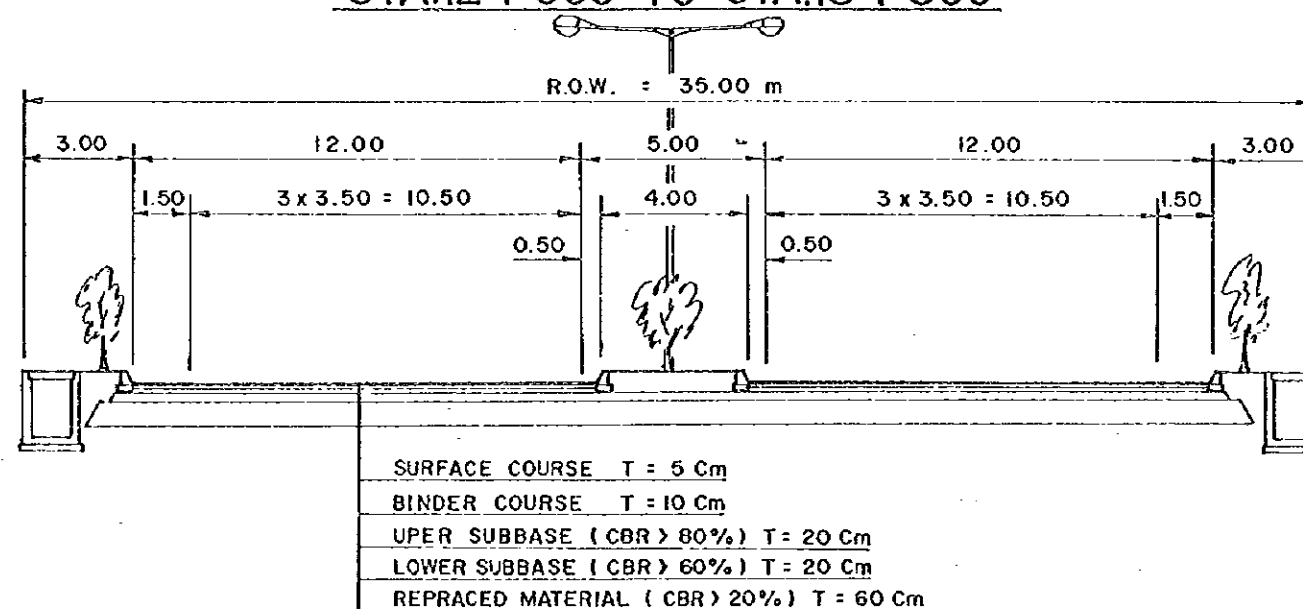
## ROUTE - 3

# STA.19+00 TO STA.27+000

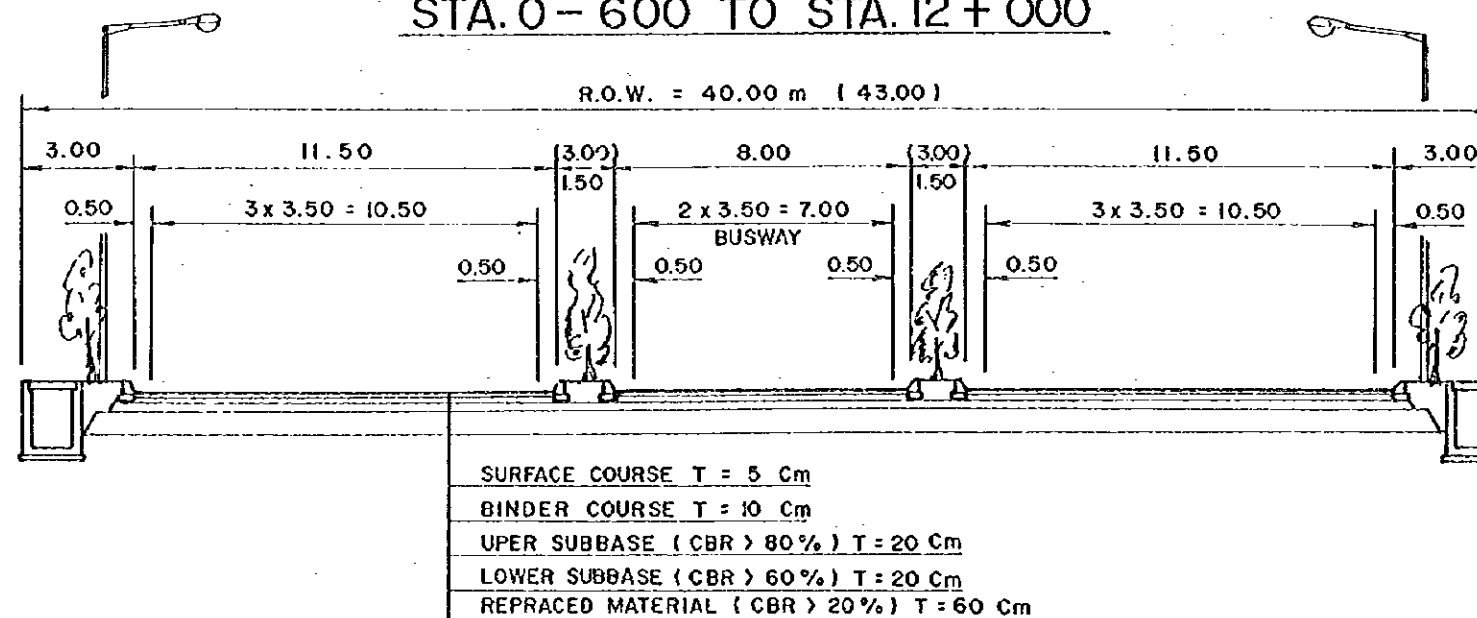
PROJECT	PROVINCE	SHEET NO.	TOTAL SHEET
ARSDS - GKS	EAST JAVA	7	109
TYPICAL CROSS SECTION(5)		SCALE	1:200
ROUTE - 4			



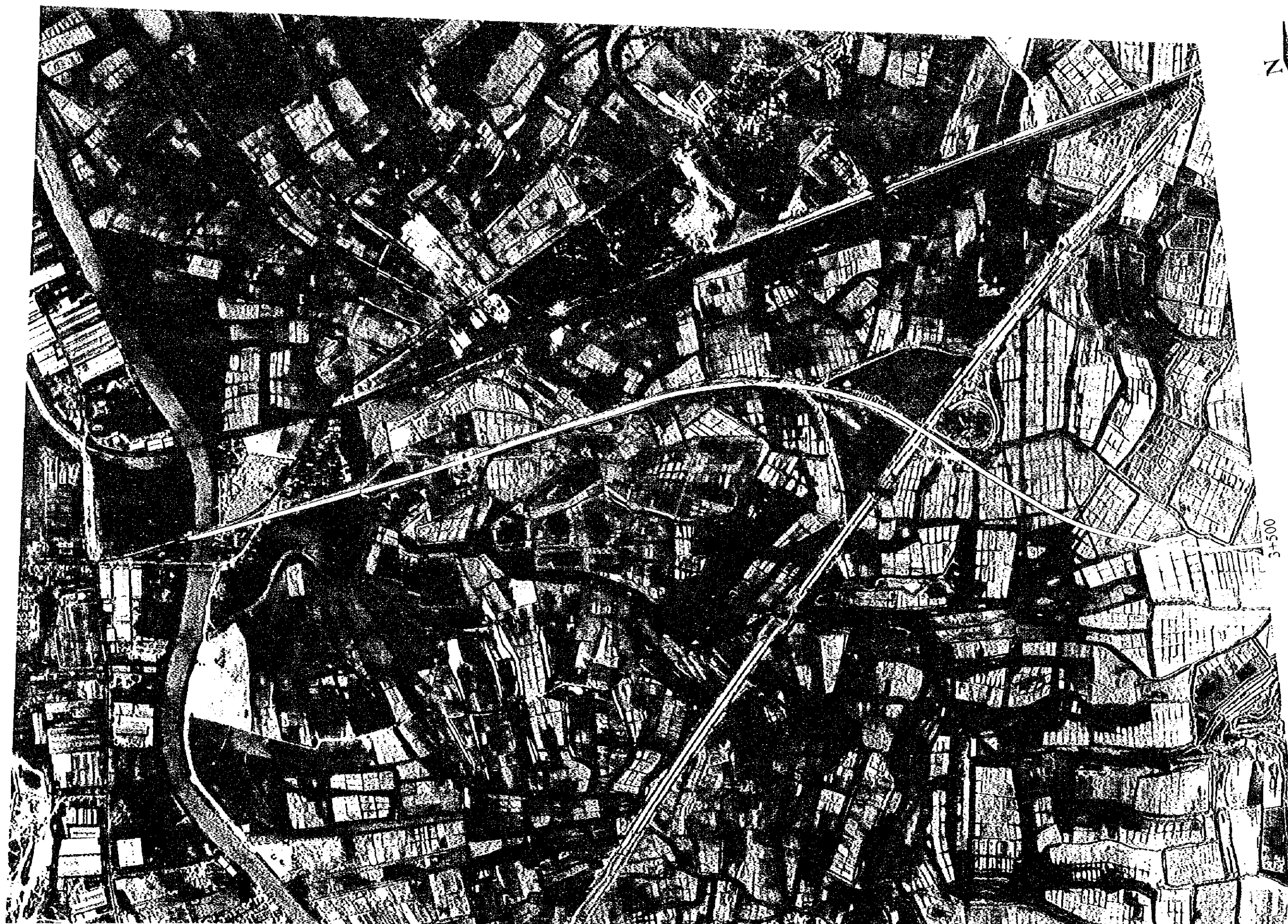
# STA.12+000 TO STA.18+500



# STA.0-600 TO STA.12+000

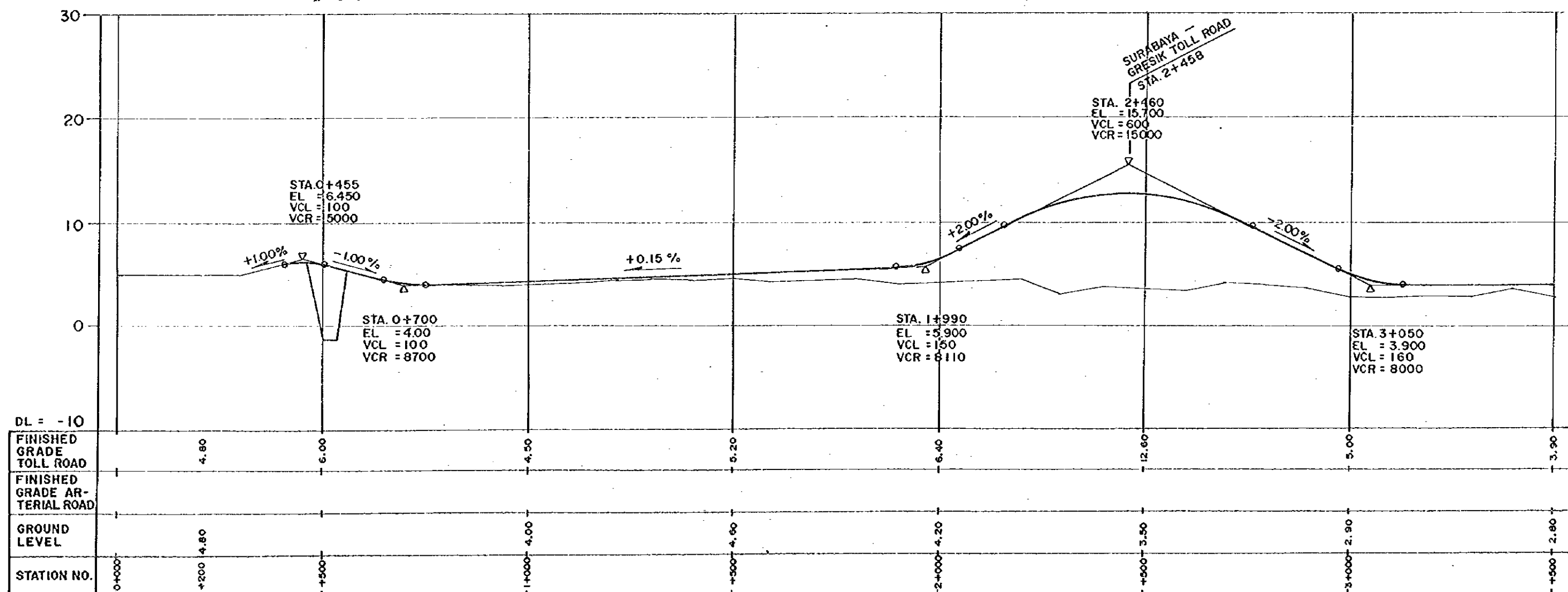
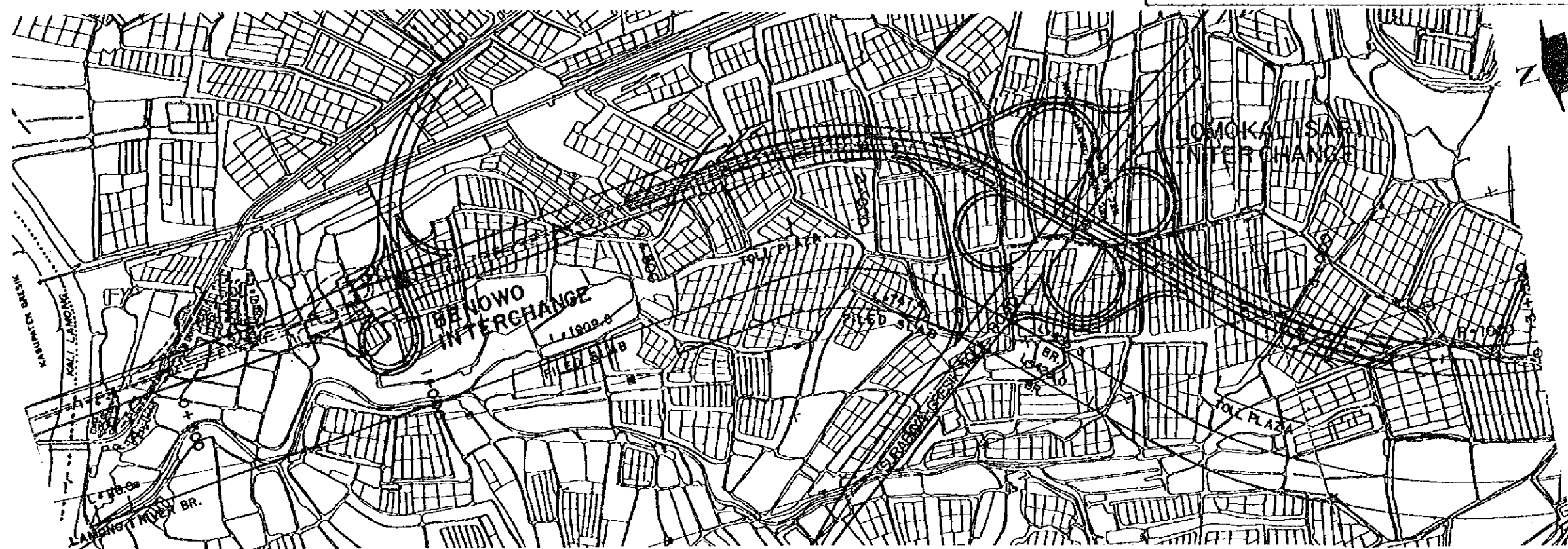


PROJECT	PROVINCE	SHEET NO	TOTAL SHEET
ARSDS - GKS	EAST JAVA	8	109
PHOTO MOSAIC ( 1 )		SCALE 1:10 000	
ROUTE - 1			





PROJECT	PROVINCE	SHEET NO.	TOTAL SHEET
ARSDS -- GKS	EAST JAVA	9	109
PLAN AND PROFILE (   )		SCALE H=1:10000 V=1:400	
ROUTE - I			

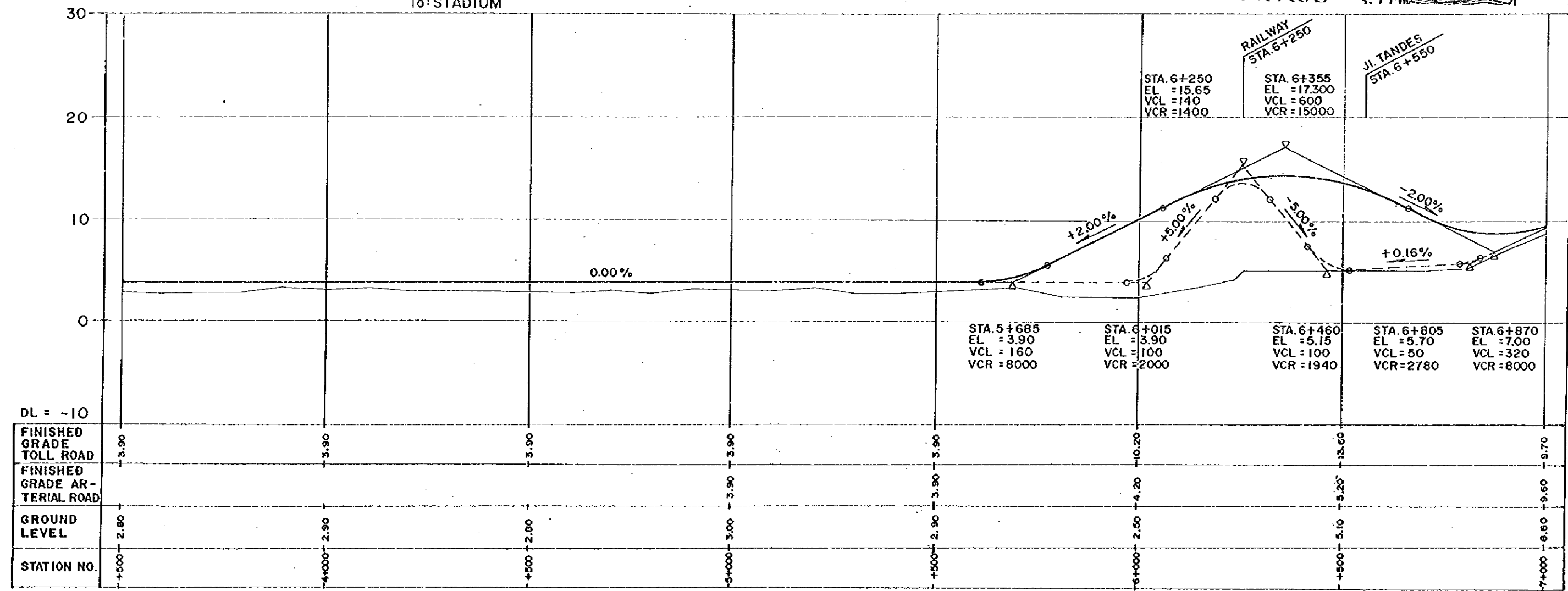
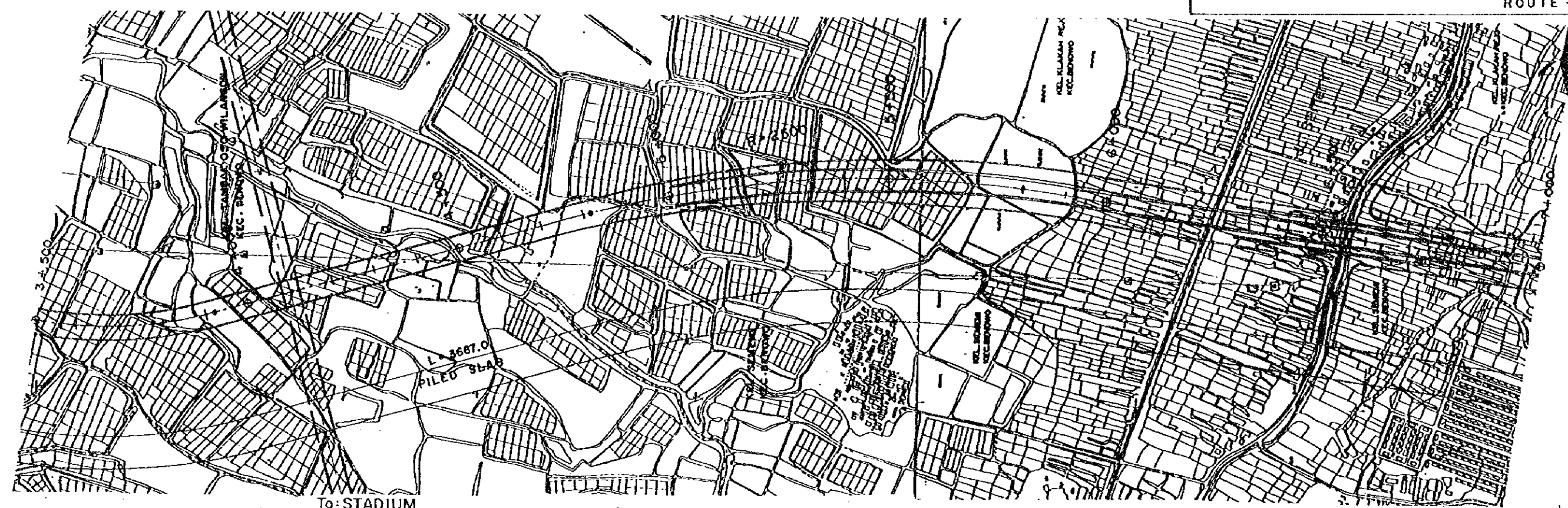




PROJECT	PROVINCE	SHEET NO	TOTAL SHEET
ARSDS ~ GKS	EAST JAVA	10	109
PHOTO MOSAIC ( 2 )		SCALE 1:10 000	
ROUTE - 1			



PROJECT	PROVINCE	SHEET NO.	TOTAL SHEET
ARSDS - GKS	EAST JAVA	11	109
PLAN AND PROFILE (2)		SCALE H=1:10000 V=1:400	
ROUTE - 1			





PROJECT	PROVINCE	SHEET NO	TOTAL SHEET
ARSDS - GKS	EAST JAVA	12	109
PHOTO MOSAIC ( 3 )		SCALE 1:10 000	
ROUTE - 1			

