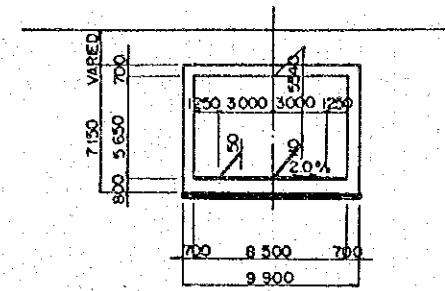
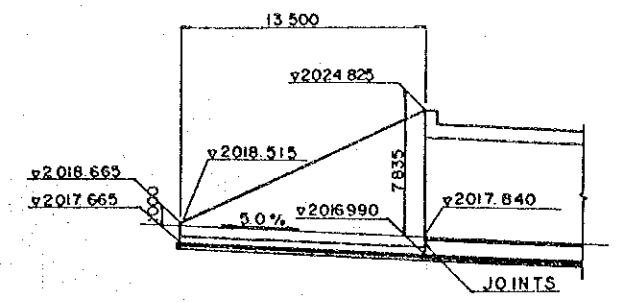


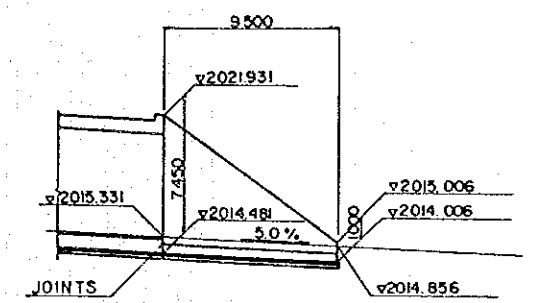
PROFILE SCALE 1:300



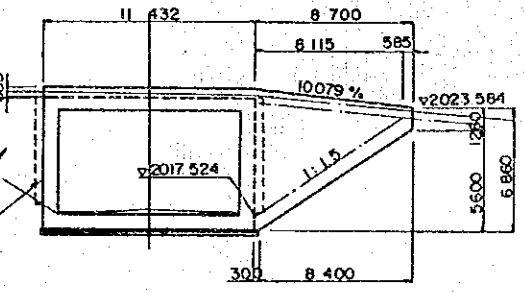
CROSS SECTION SCALE 1:200



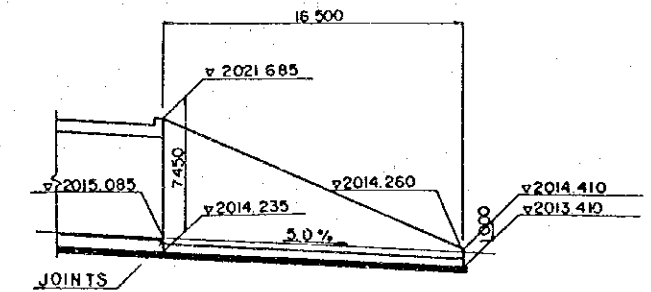
ELEVATION OF W1 WALL SCALE 1:200



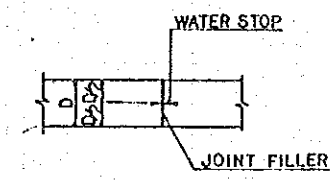
ELEVATION OF W2 WALL SCALE 1:200



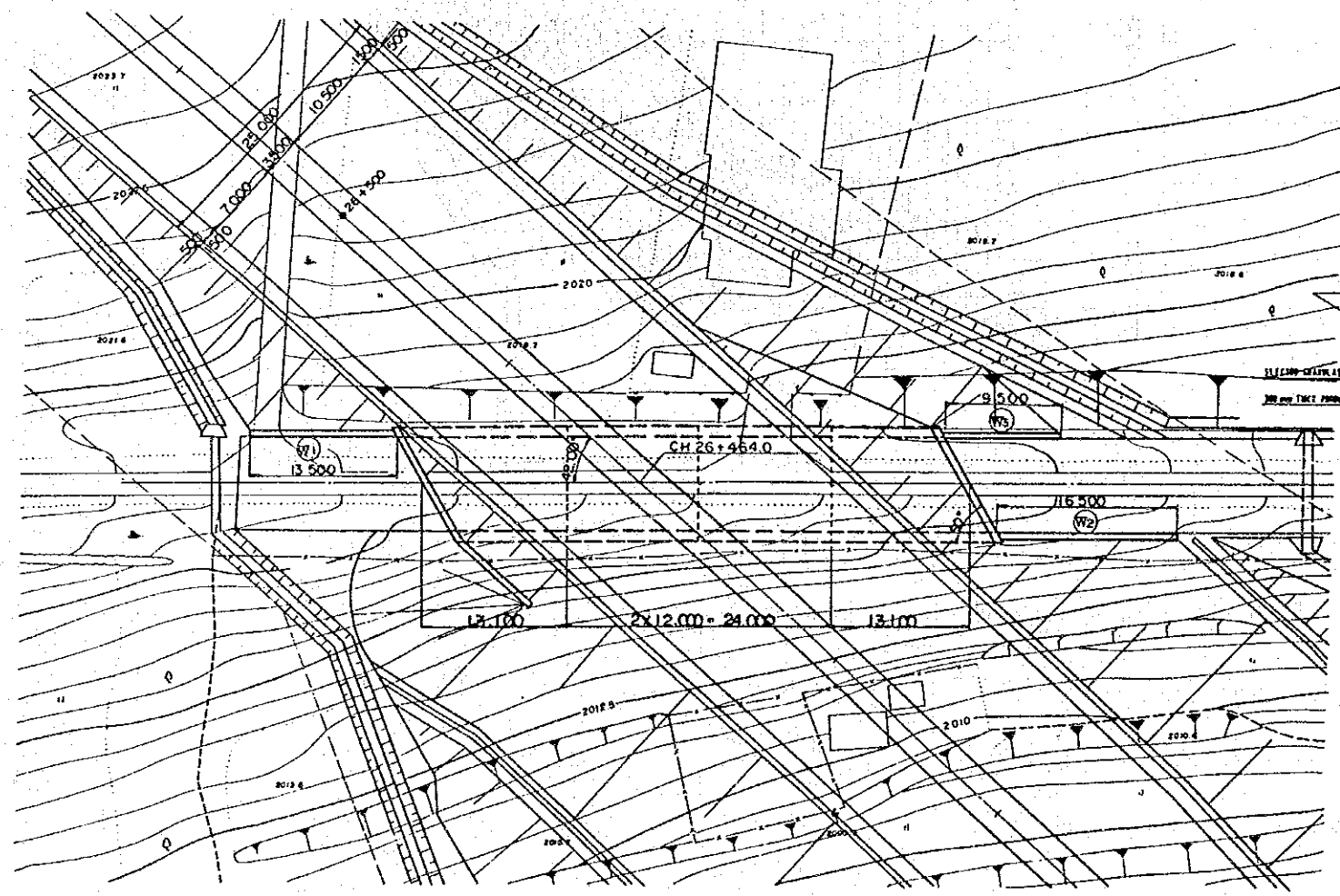
ELEVATION OF WING WALL SCALE 1:200



ELEVATION OF W3 WALL SCALE 1:200



DETAIL OF JOINTS



PLAN SCALE 1:300

NO 7 BOX CULVERT FOR ROAD

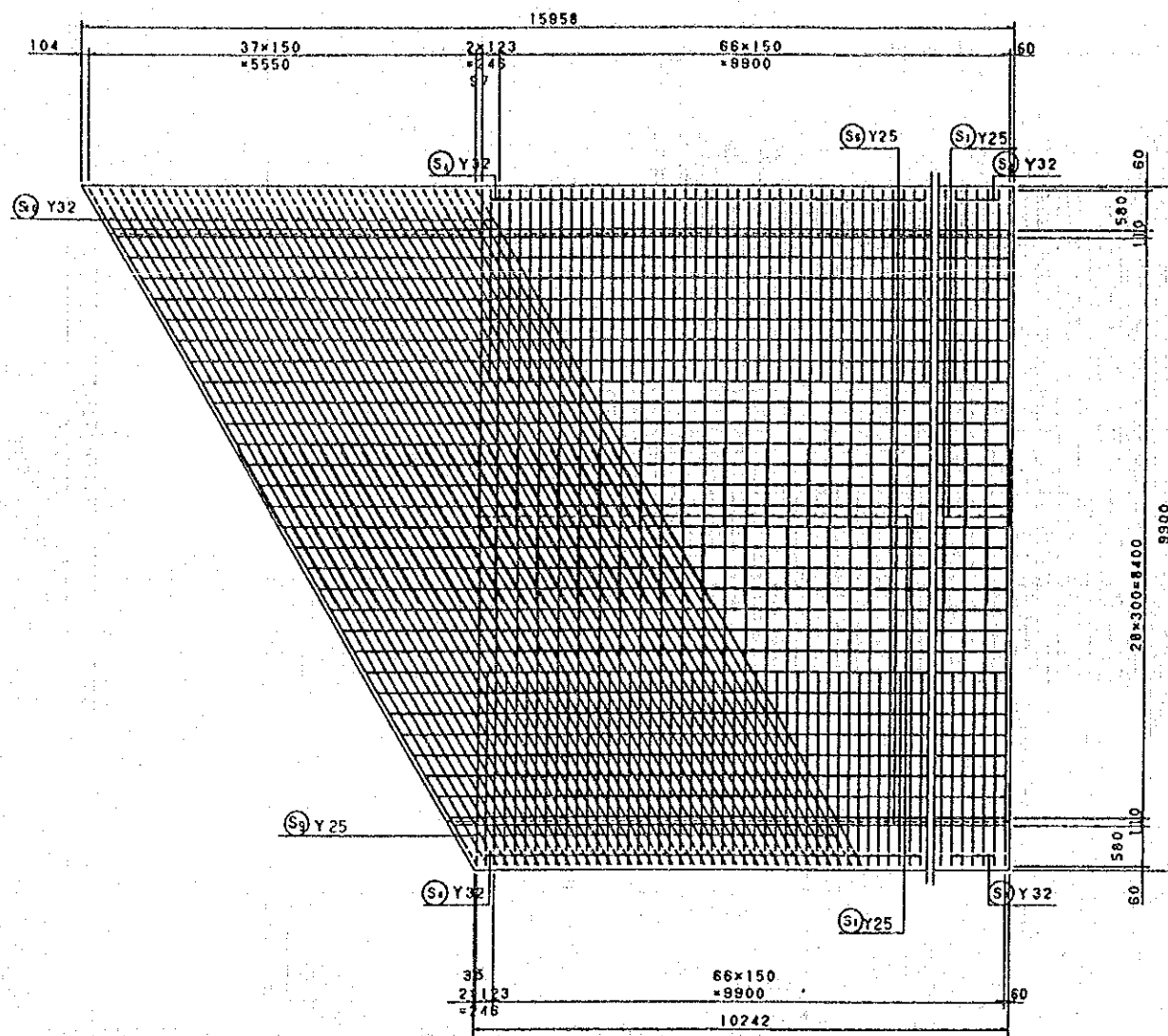
SURVEYED BY
 MAPPING BY
 AERIAL PHOTO BY
 TRACED BY
 LOCATION BY
 CHECKED BY

M.O.P.W. ROADS DEPT. DRG. NO.

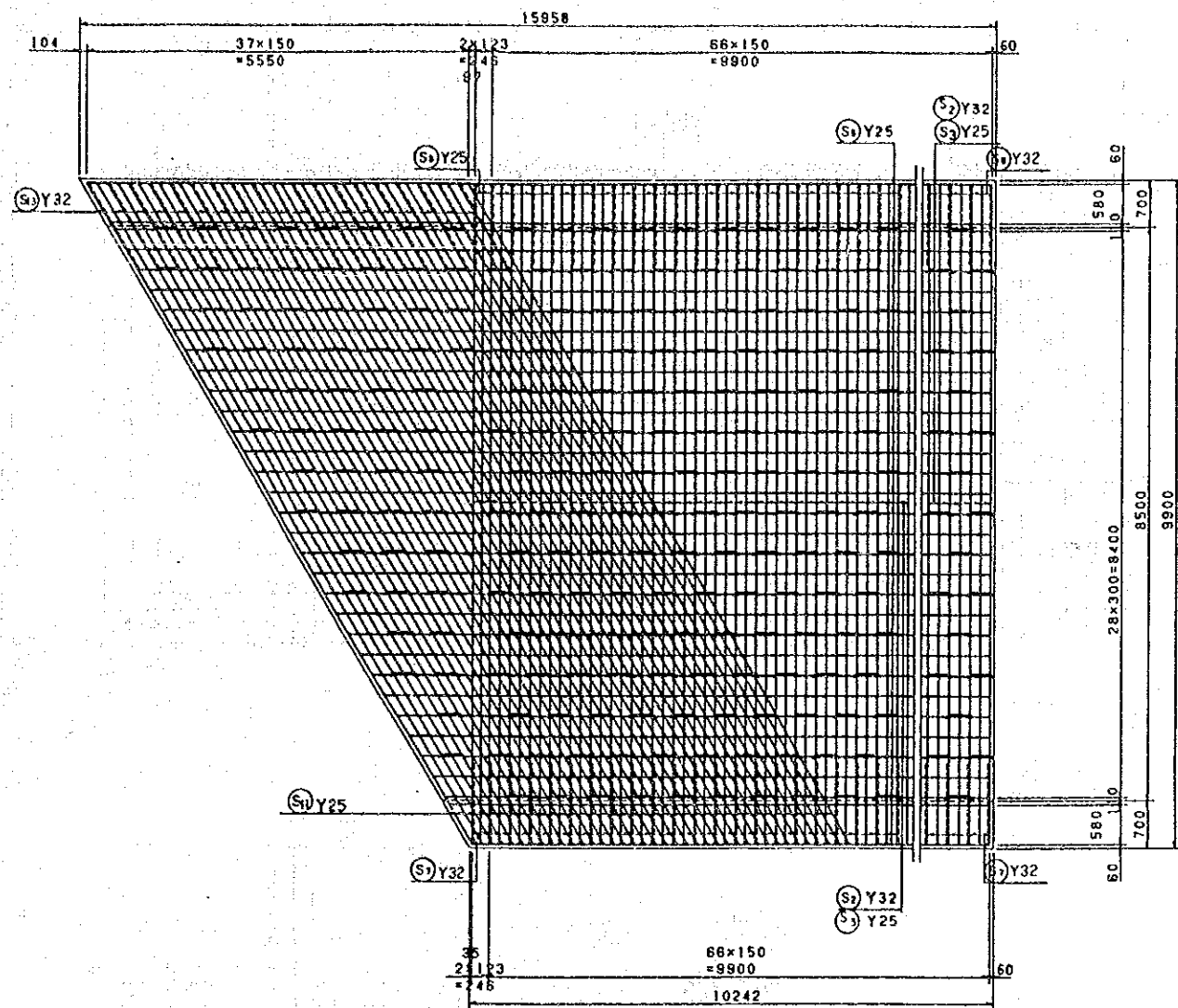
REVISIONS DESCRIPTION DATE		JAPAN INTERNATIONAL COOPERATION AGENCY	CHIEF ENGINEER (ROADS) CHIEF SUPT. ENG. (DESIGN)	SEN SUPT. ENG. (DESIGN) SUPT. ENGINEER (DESIGN) PROJECT ENGINEER	SCALES 1:200, 300	NAIROBI BYPASS VEHICLE BOX CULVERTS CH 26+464.00 R=8.50 B=5.66 (1)	Q SHEET 89 OF 189

AERIAL PHOTO BY	SURVEYED BY
MAPPING BY	TRACED BY
LOCATION BY	CHECKED BY

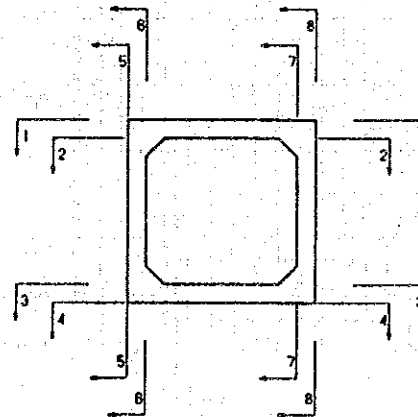
M.O.P.W. ROADS DEPT DRG NO.



1 — 1



2 — 2



REVISIONS	
DESCRIPTION	DATE

JAPAN INTERNATIONAL COOPERATION AGENCY

CHIEF ENGINEER (ROADS)
CHIEF SUPT ENG (DESIGN)

SEN SUPT. ENG (DESIGN)
SUPT ENGINEER (DESIGN)
PROJECT ENGINEER

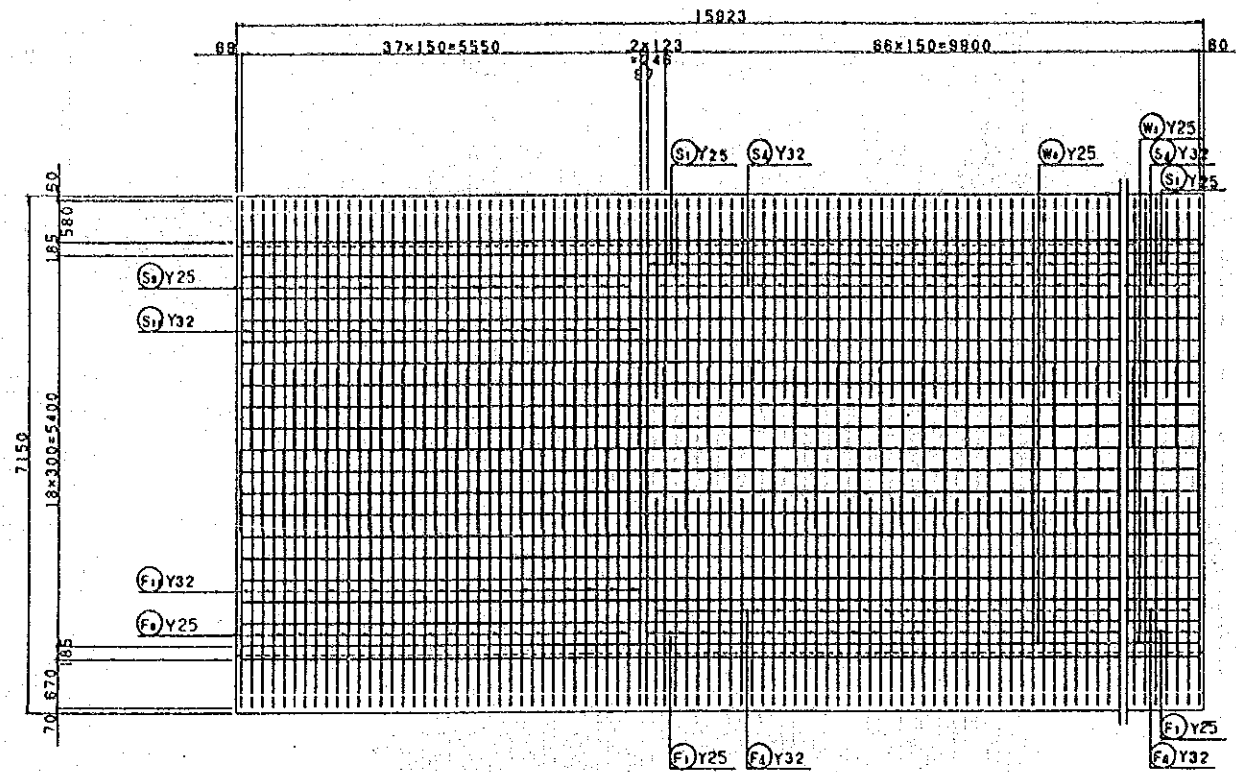
SCALES
1:50

NAIROBI BYPASS
VEHICLE BOX CULVERTS
CN 26+464.00 R=8.60 Z=1.65 (2)

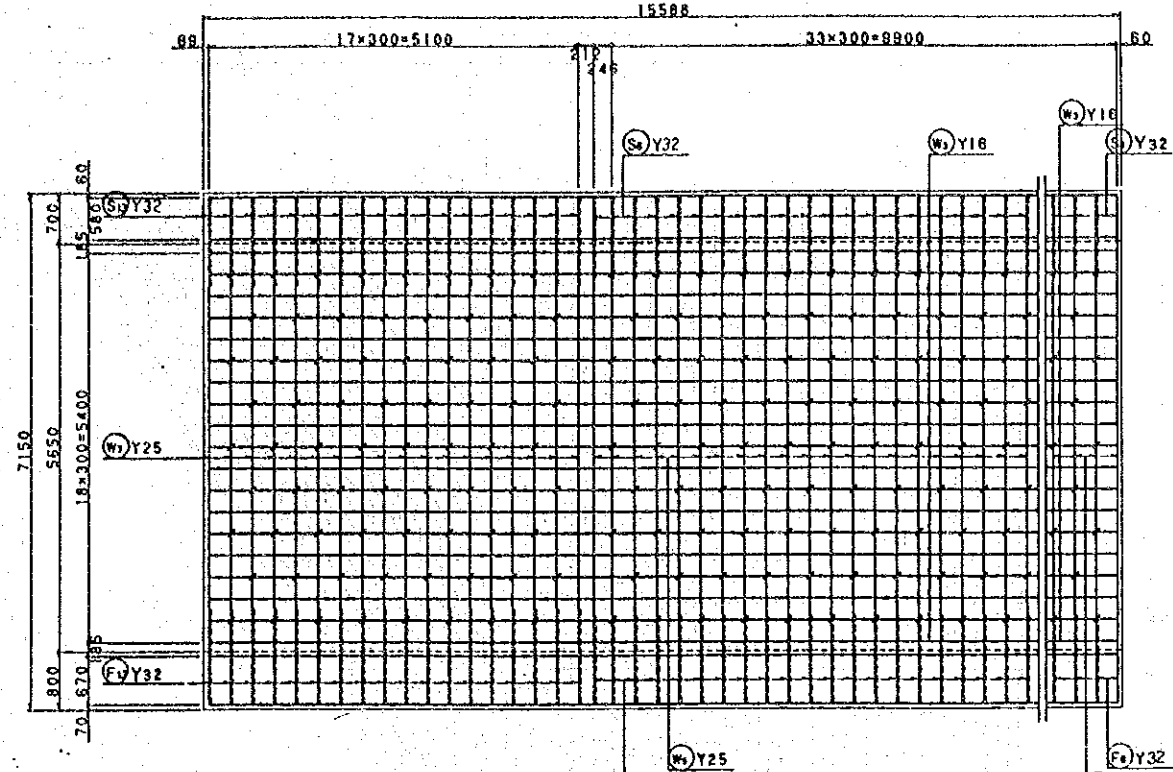
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SHEET 84 OF 188

SURVEYED BY
 MAPPING BY
 LOCATION BY
 TRACED BY
 CHECKED BY

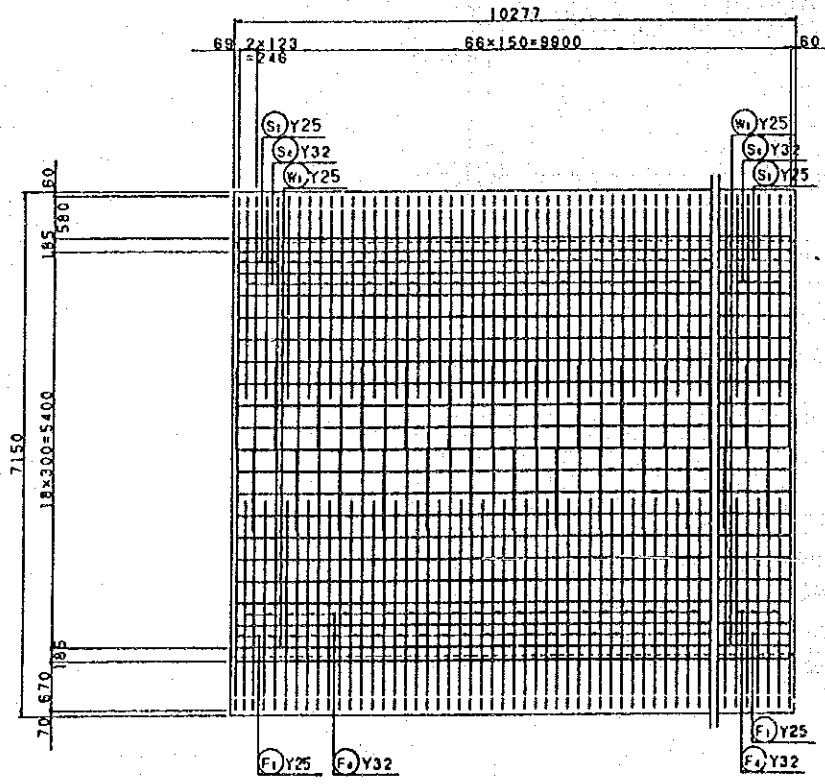
M.O.P.W. ROADS DEPT. DRG. NO.



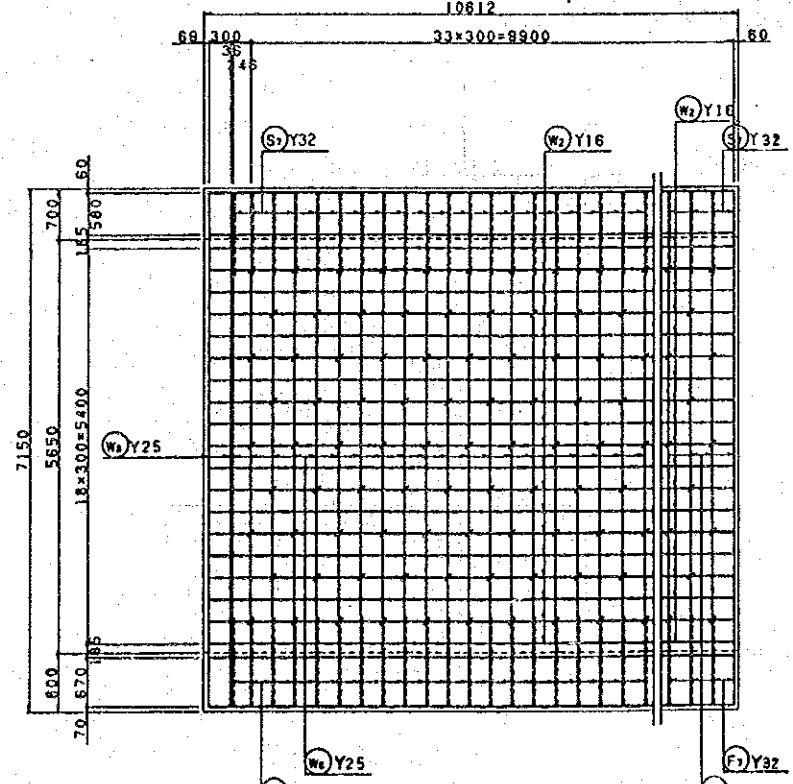
5 — 5



6 — 6



8 — 8



7 — 7

REVISIONS	
DESCRIPTION	DATE

JAPAN INTERNATIONAL
COOPERATION AGENCY

CHIEF ENGINEER (ROADS)
CHIEF SUPT. ENG. (DESIGN)

SEN SUPT. ENG. (DESIGN)
SUPT. ENGINEER (DESIGN)
PROJECT ENGINEER

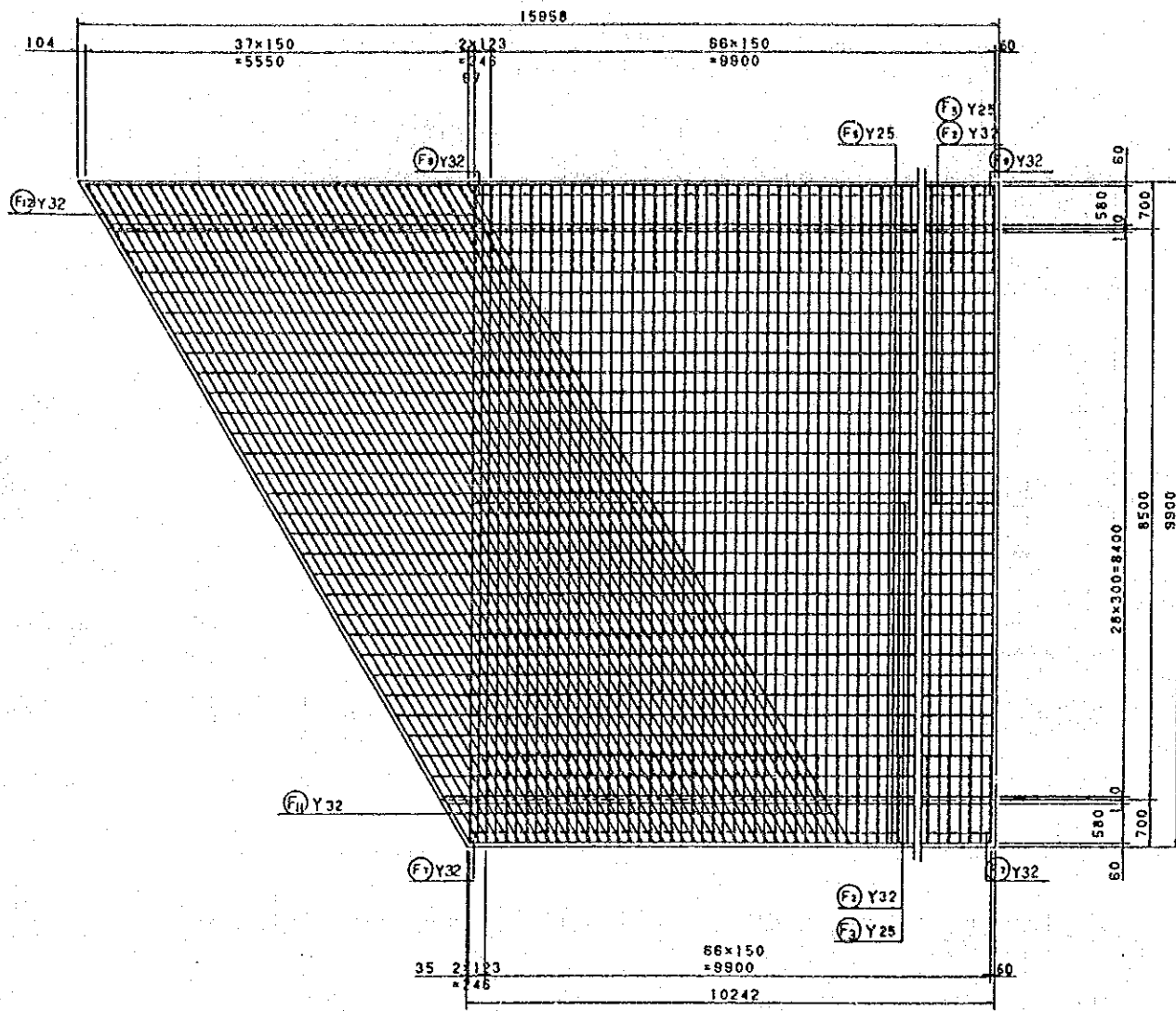
SCALES
1:50

NAIROBI BYPASS
VEHICLE BOX CULVERTS
CR 28+481.00 R+2.00 W+6.00 (S)

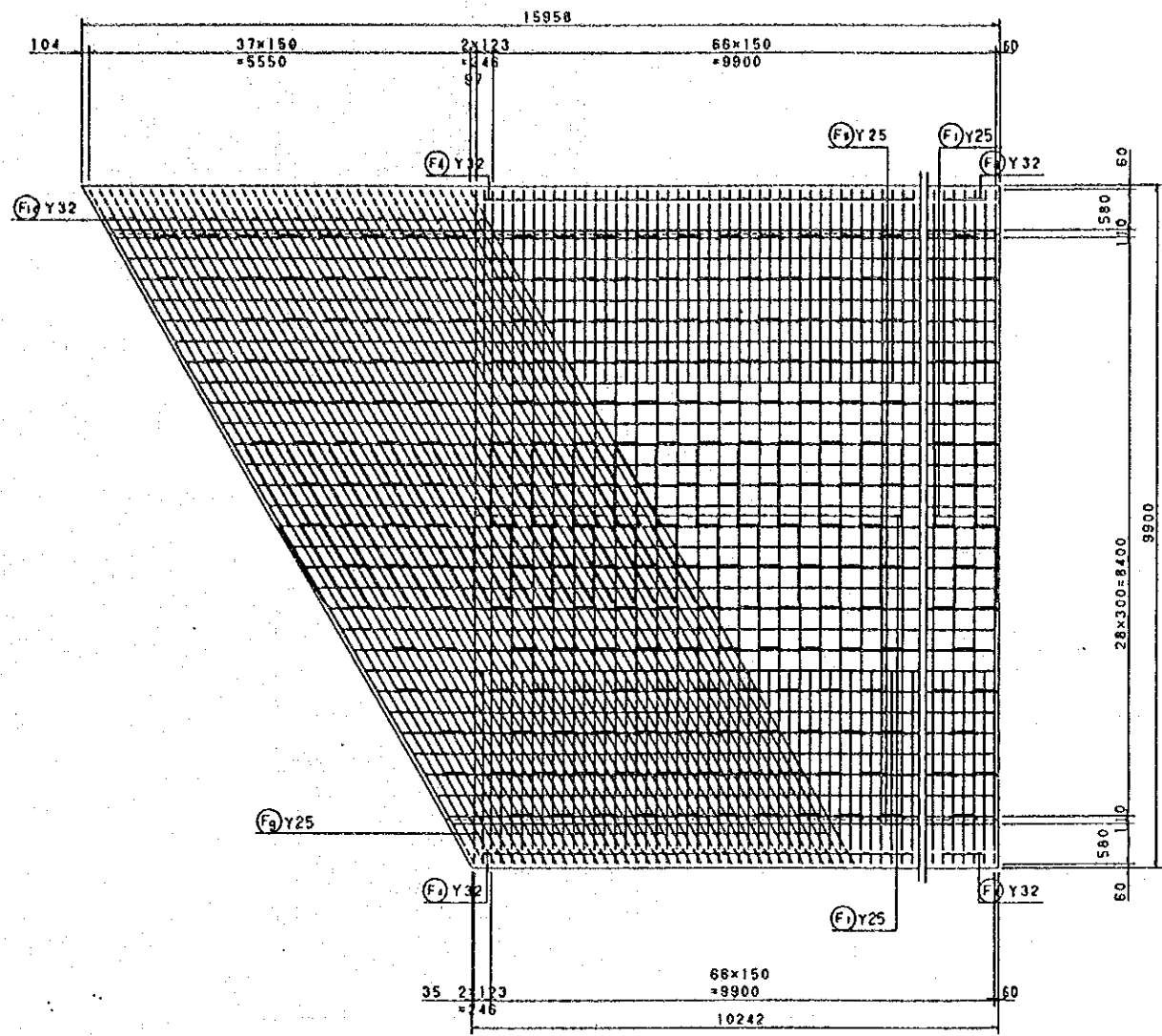
Q
SHEET 85 OF 183

AERIAL PHOTO BY	SURVEYED BY
MAPPING BY	TRACED BY
LOCATION BY	CHECKED BY

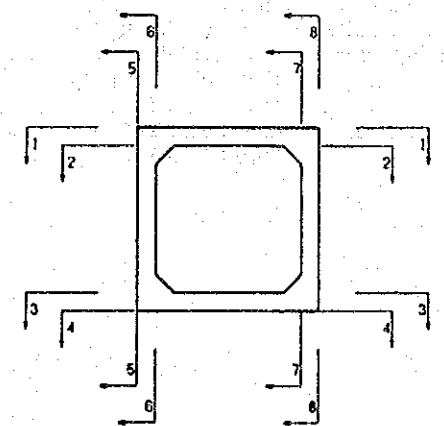
M.O.P.W. ROADS DEPT DRG NO.



3 — 3



4 — 4



REVISIONS	
DESCRIPTION	DATE

JAPAN INTERNATIONAL COOPERATION AGENCY

CHIEF ENGINEER (ROADS)
CHIEF SUPT ENG (DESIGN)

SEN SUPT. ENG (DESIGN)
SUPT ENGINEER (DESIGN)
PROJECT ENGINEER

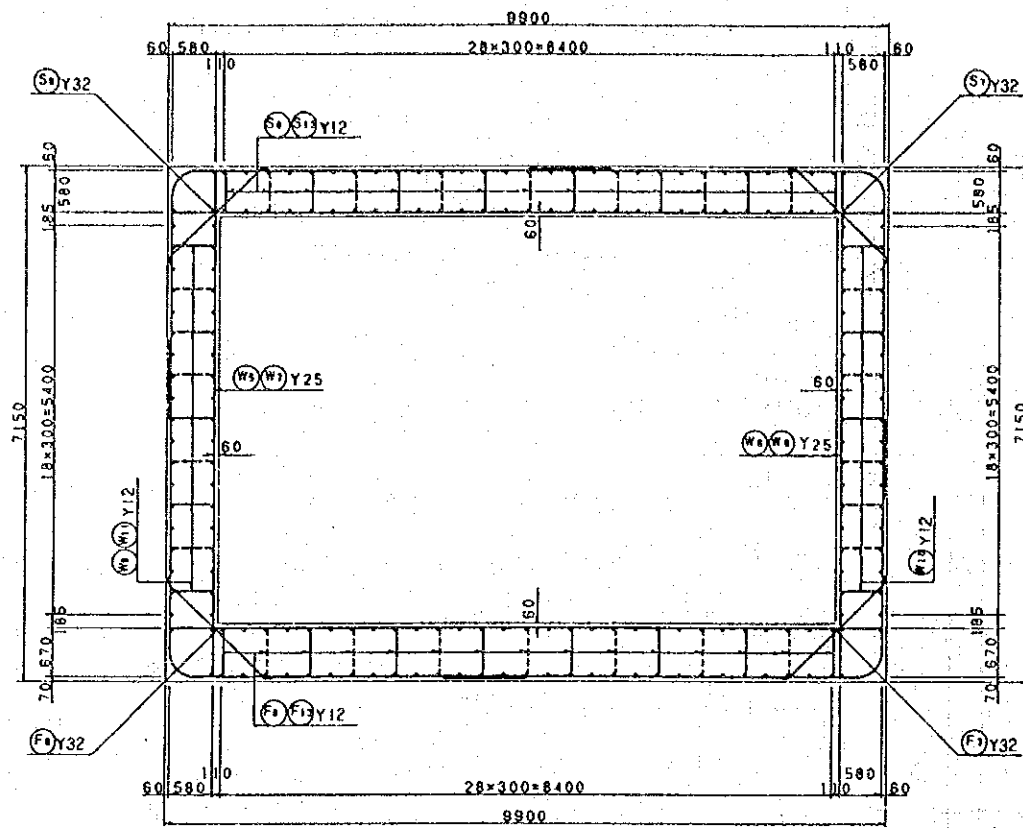
SCALES
1:50

NAIROBI BYPASS
VEHICLE BOX CULVERTS
CR 26+464.00 V=+1.50 R=5.05 (4)

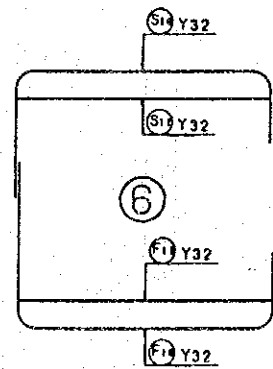
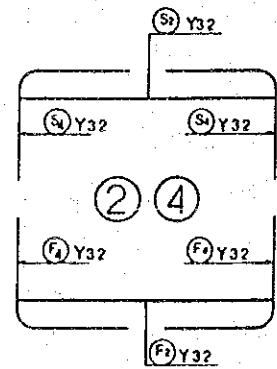
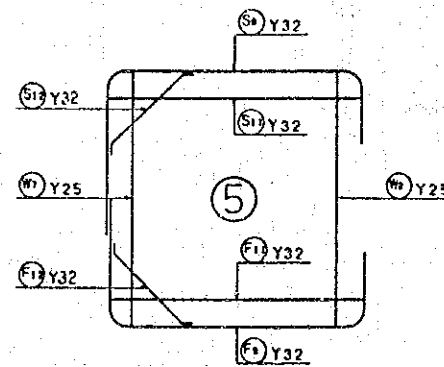
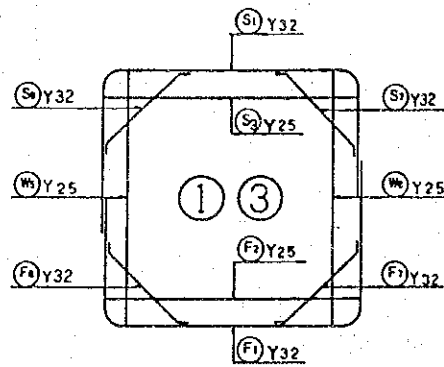
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SHEET 86 OF 183

AERIAL PHOTO BY _____ SURVEYED BY _____
 MAPPING BY _____ TRACED BY _____
 LOCATION BY _____ CHECKED BY _____

MOPW ROADS DEPT DRG NO.



SECTION



MARK	DIA	a	b	L	REMARK
S 8	Y12	345	625	1795	
S13	Y12	345	625	1795	
F 8	Y12	345	715	1975	
F13	Y12	345	715	1975	
W 9	Y12	—	622	822	
W10	Y12	—	622	822	
W11	Y12	—	711	811	

MARK	DIA	a	H	L	NUMBER
S 6	Y32	1690	1195	1890	35
S 7	Y32	1690	1195	1890	35
S12	Y32	1830	1294	2030	18
F 6	Y32	1817	1285	2017	35
F 7	Y32	1817	1285	2017	35
F12	Y32	1857	1384	2157	18

MARK	DIA	a	b	c	L = a + b	LAP. NUMBER
S 5	Y25	10000	1023~ 6669(3846)	875	11023~ 16669 (13846)	1 64
F 5	Y25	10000	1023~ 6669(3846)	875	11023~ 16669 (13846)	1 64
W 1	Y25	10000	1023	875	11023	1 19
W 2	Y16	10000	1043	560	11040	1 19
W 3	Y16	10000	6019	560	16020	1 19
W 4	Y25	10000	6669	875	16669	1 19

REVISIONS	
DESCRIPTION	DATE

JAPAN INTERNATIONAL COOPERATION AGENCY
 CHIEF ENGINEER (ROADS)
 CHIEF SUPT ENG (DESIGN)

SEN SUPT. ENG (DESIGN)
 SUPT ENGINEER (DESIGN)
 PROJECT ENGINEER

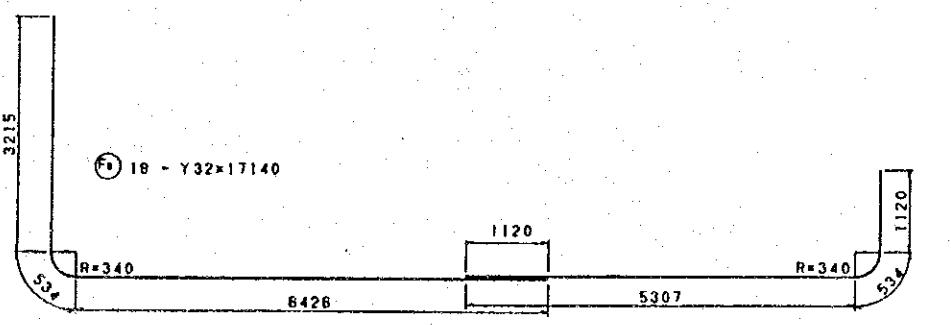
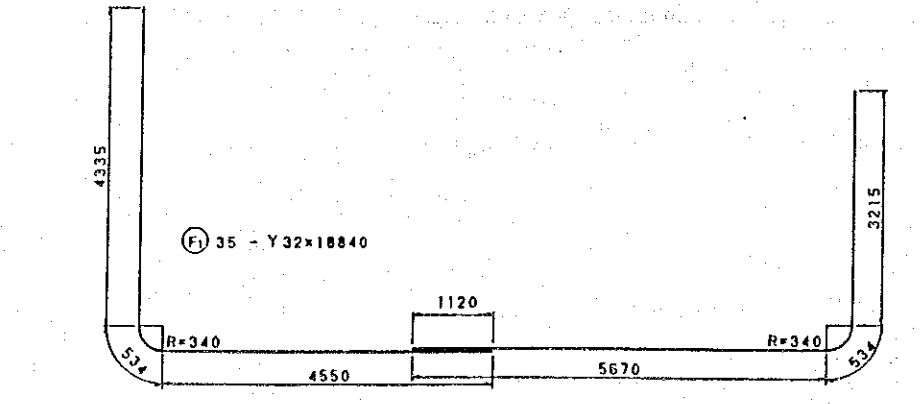
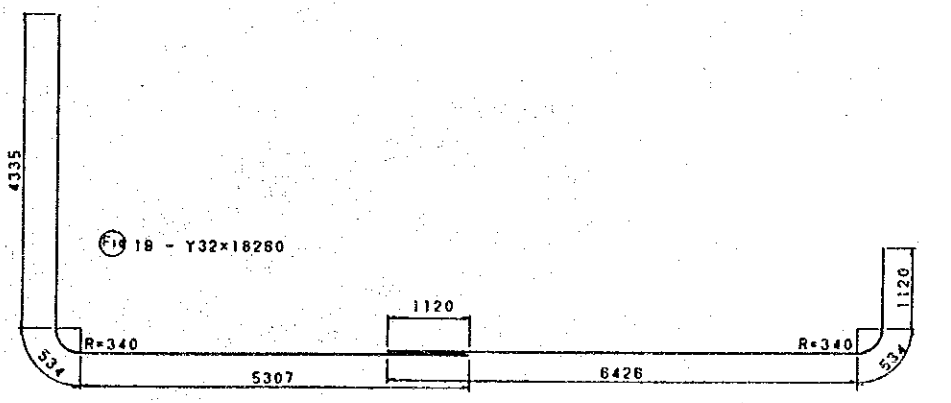
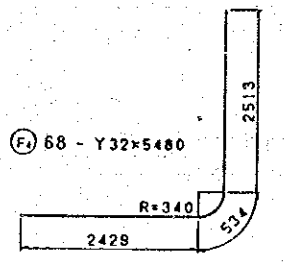
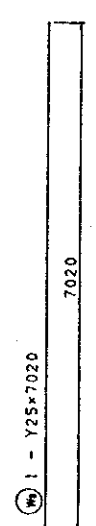
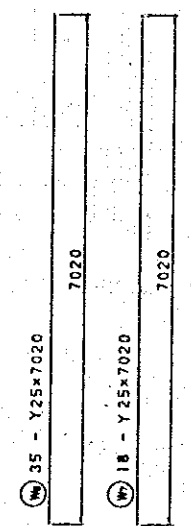
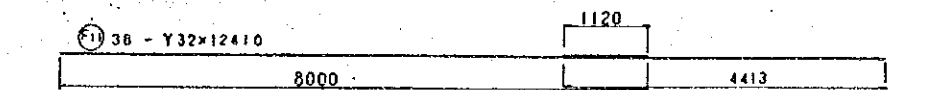
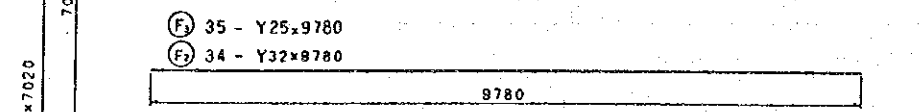
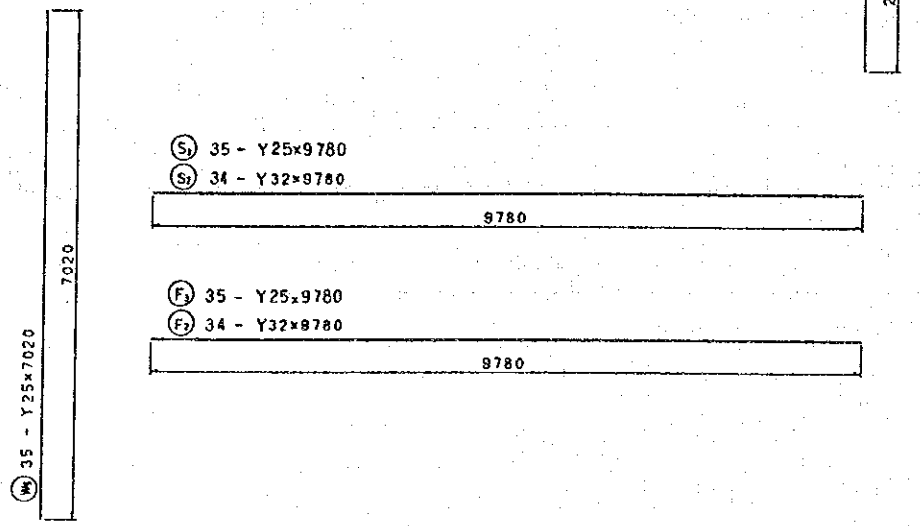
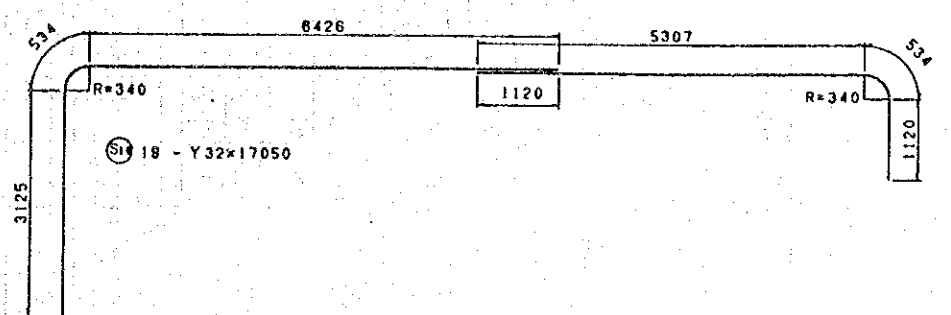
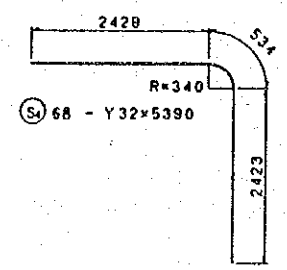
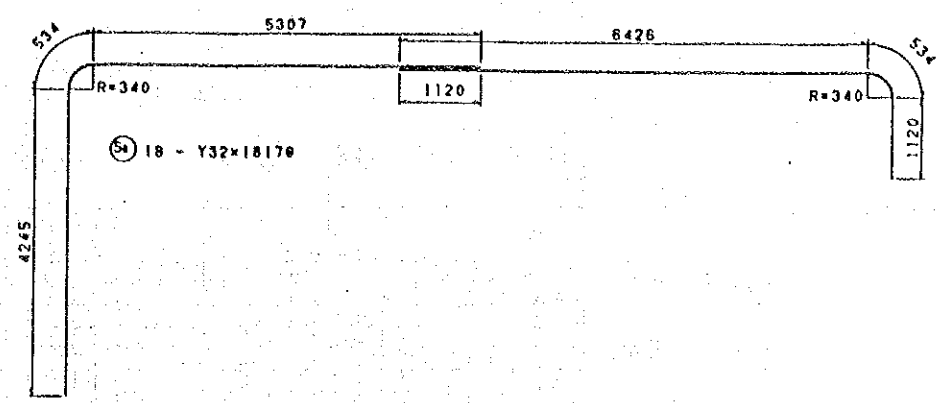
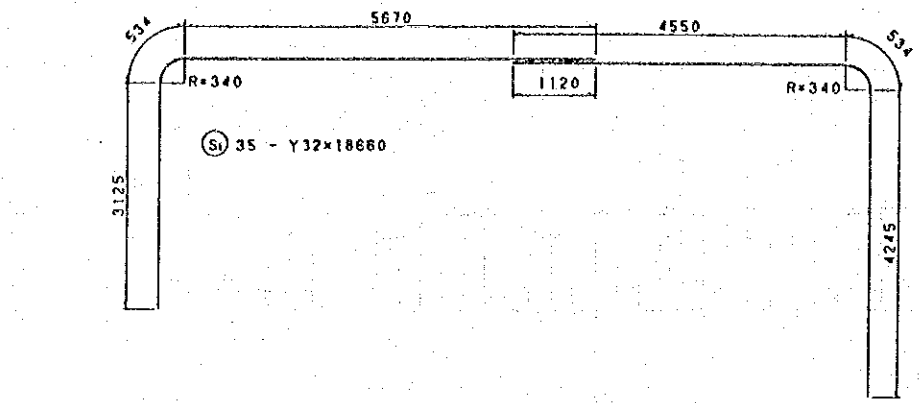
SCALES
 1:50

NAIROBI BYPASS
 VEHICLE BOX CULVERTS
 CH 26+461.00 W=8.50 D=5.65 (6)

Q
 SHEET 87 OF 103

AERIAL PHOTO BY	SURVEYED BY
MAPPING BY	TRACED BY
LOCATION BY	CHECKED BY

M.P.W. ROADS DEPT. DRG. NO.



REVISIONS	
DESCRIPTION	DATE

JAPAN INTERNATIONAL COOPERATION AGENCY

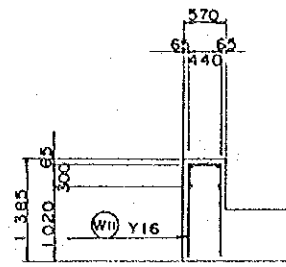
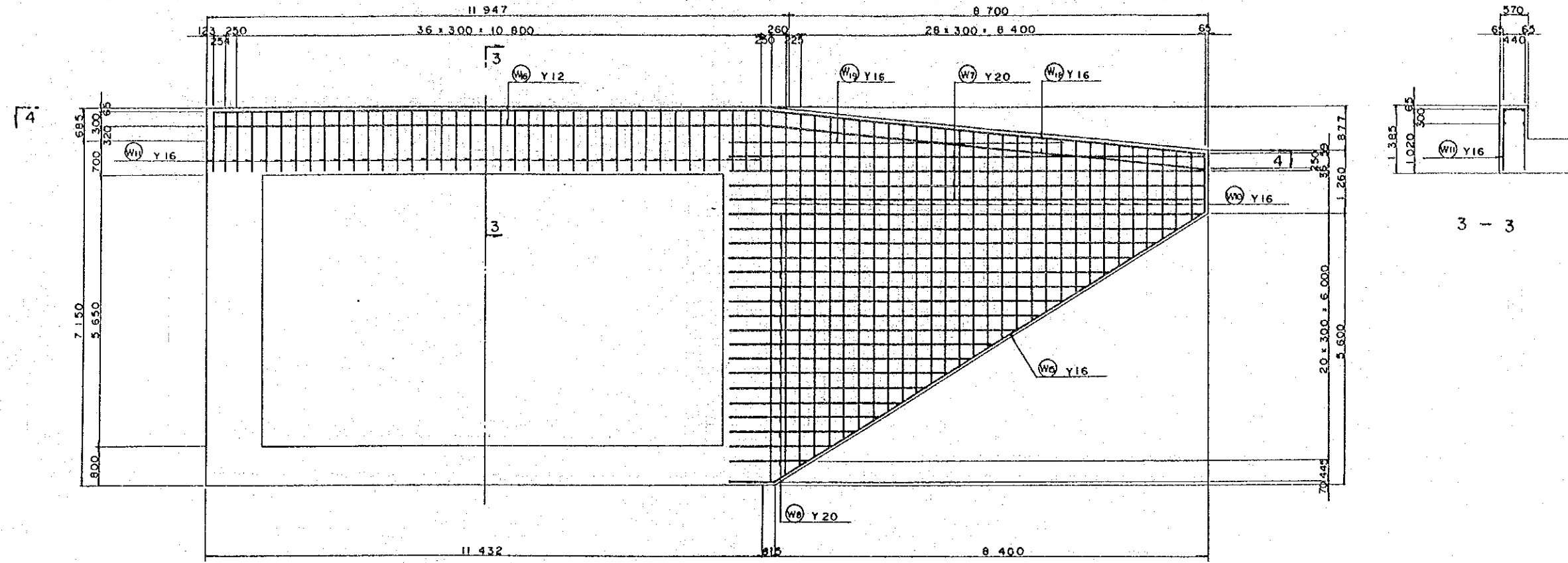
CHIEF ENGINEER (ROADS)
CHIEF SUPT ENG (DESIGN)

SEN SUPT ENG (DESIGN)
SUPT ENGINEER (DESIGN)
PROJECT ENGINEER

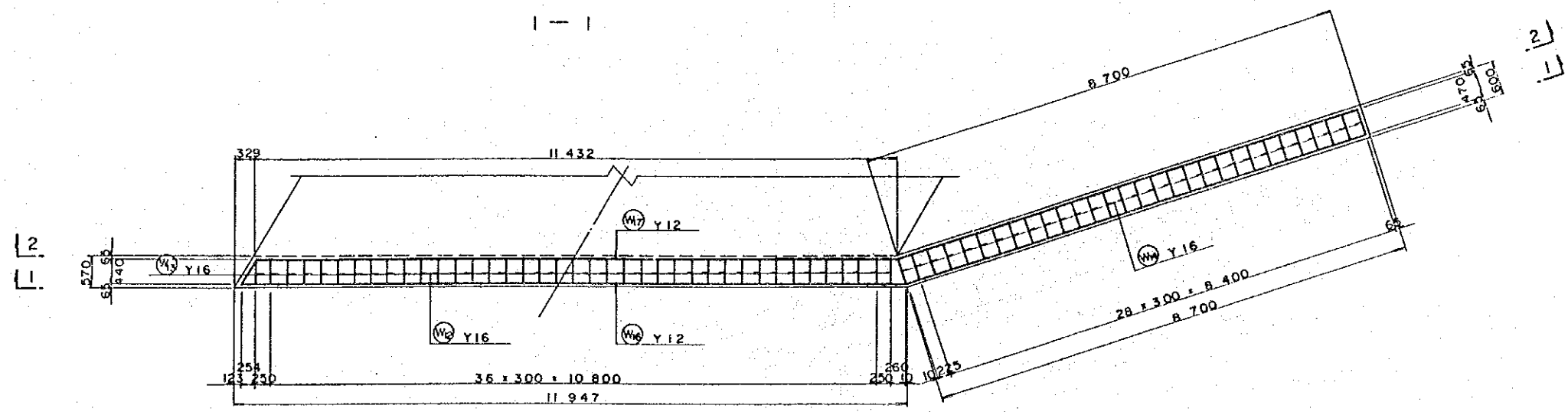
SCALES
1:50

NAIROBI BYPASS
VEHICLE BOX CULVERTS
CN 26+464.00 R=4.50 R+5.85 (6)

Q
SHEET 8 OF 14



3 - 3

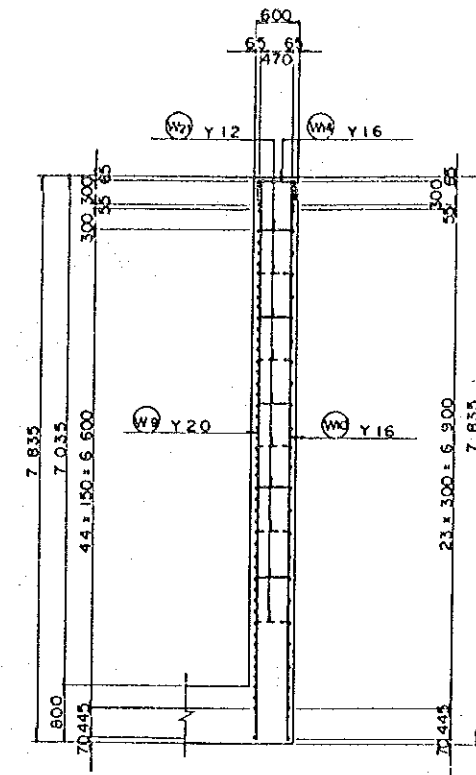
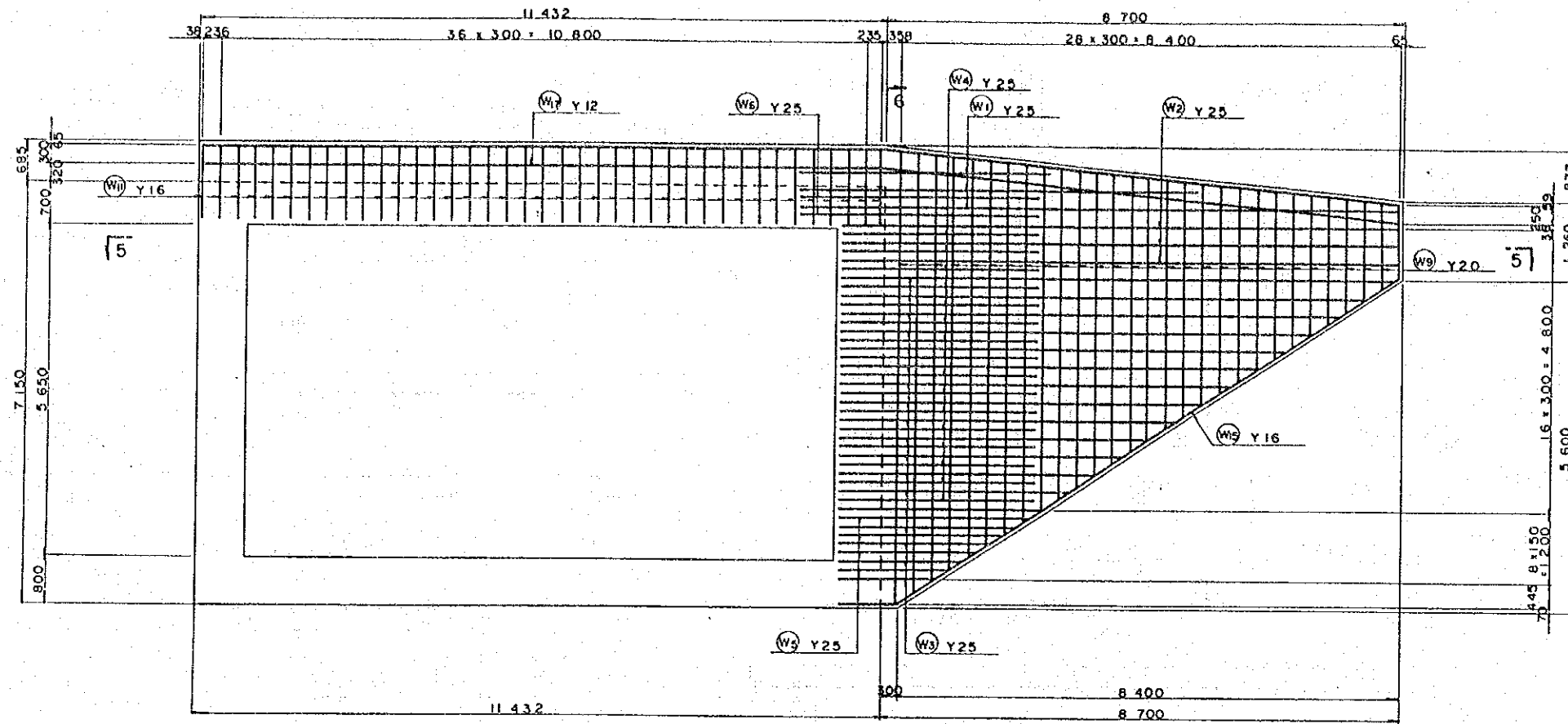


4 - 4

AERIAL PHOTO BY	SURVEYED BY
MAPPING BY	TRACED BY
LOCATION BY	CHECKED BY

MOPW ROADS DEPT DRG NO.

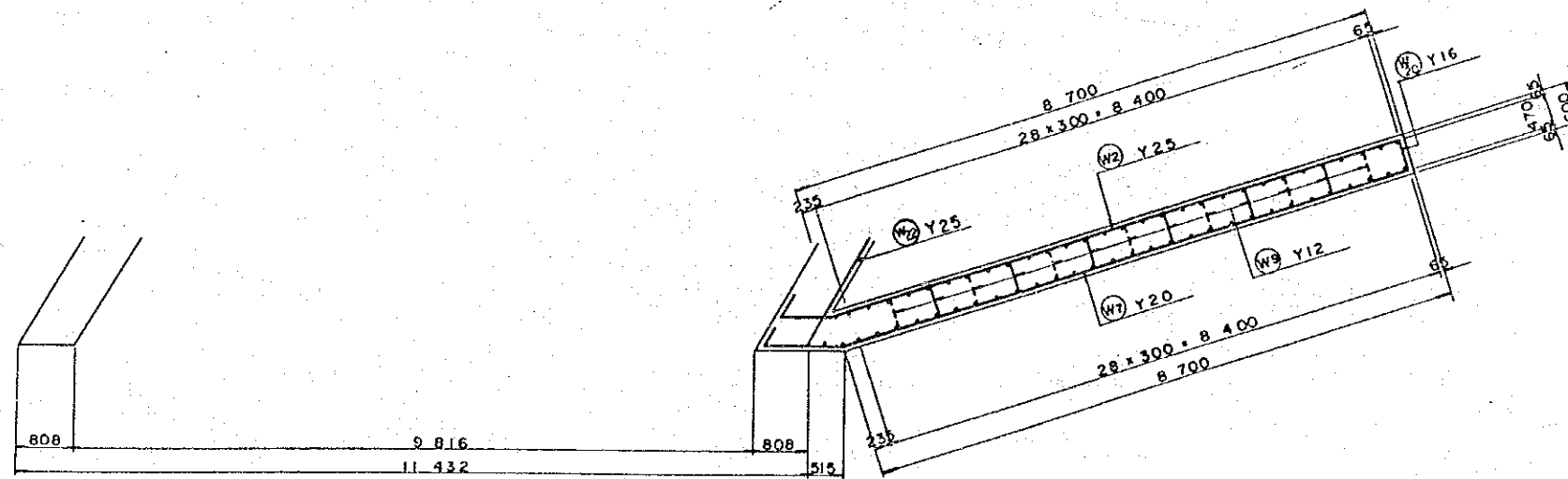
REVISIONS		JAPAN INTERNATIONAL COOPERATION AGENCY	CHIEF ENGINEER (ROADS)	SEN SUPT ENG (DESIGN)	SCALES	NAIROBI BYPASS	Q
DESCRIPTION	DATE						
				PROJECT ENGINEER			SHEET 89 OF 183



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6

6 - 6



5 - 5

AERIAL PHOTO BY	SURVEYED BY
MAPPING BY	TRACED BY
LOCATION BY	CHECKED BY

MOPW ROADS DEPT DRG NO

REVISIONS	
DESCRIPTION	DATE

JAPAN INTERNATIONAL COOPERATION AGENCY

CHIEF ENGINEER (ROADS)
CHIEF SUPT ENG (DESIGN)

SEN SUPT ENG (DESIGN)
SUPT ENGINEER (DESIGN)
PROJECT ENGINEER

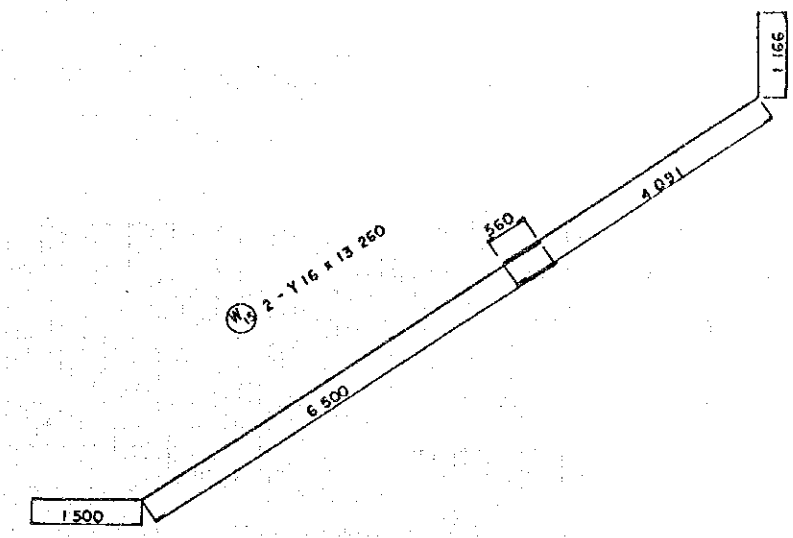
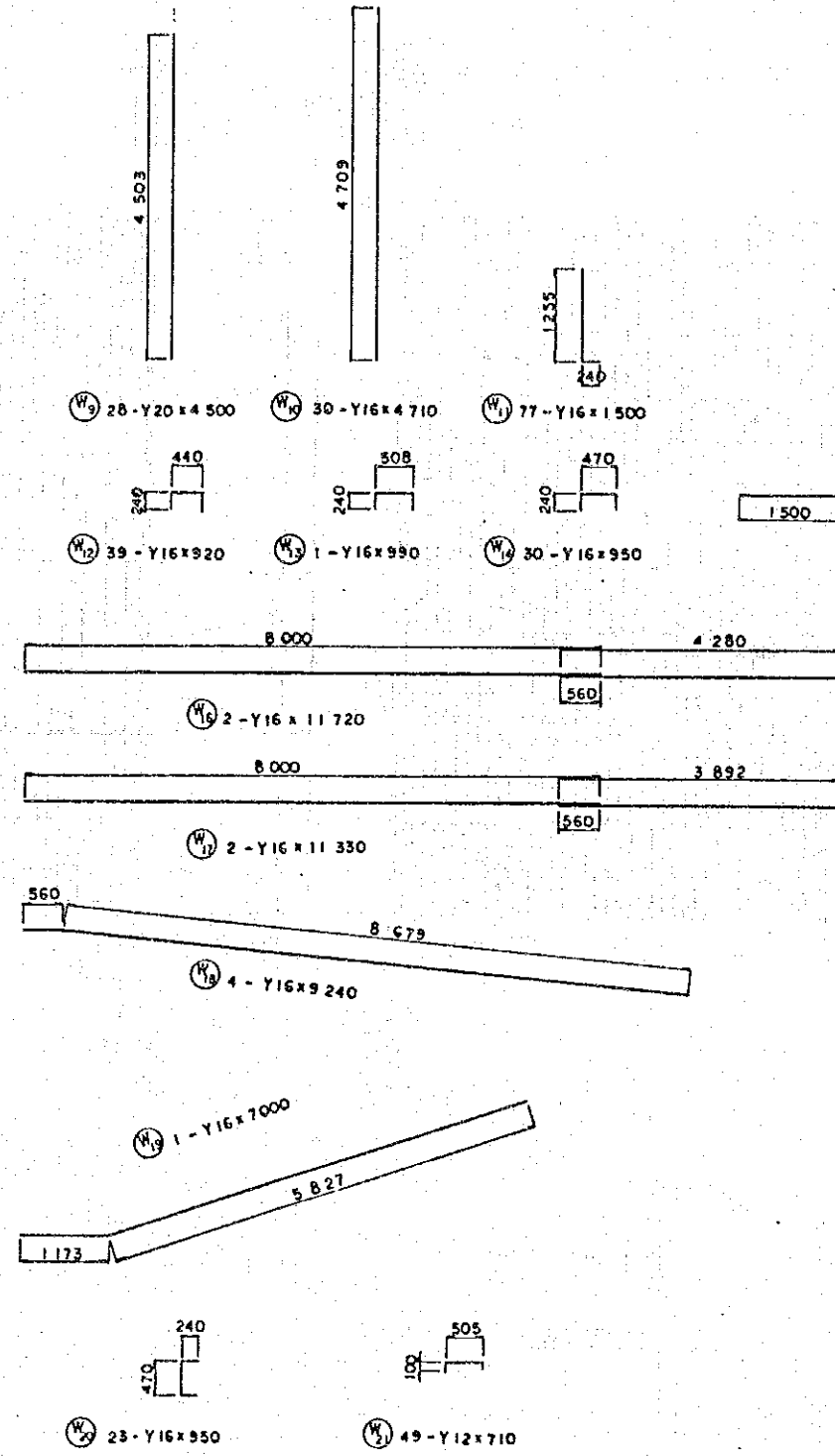
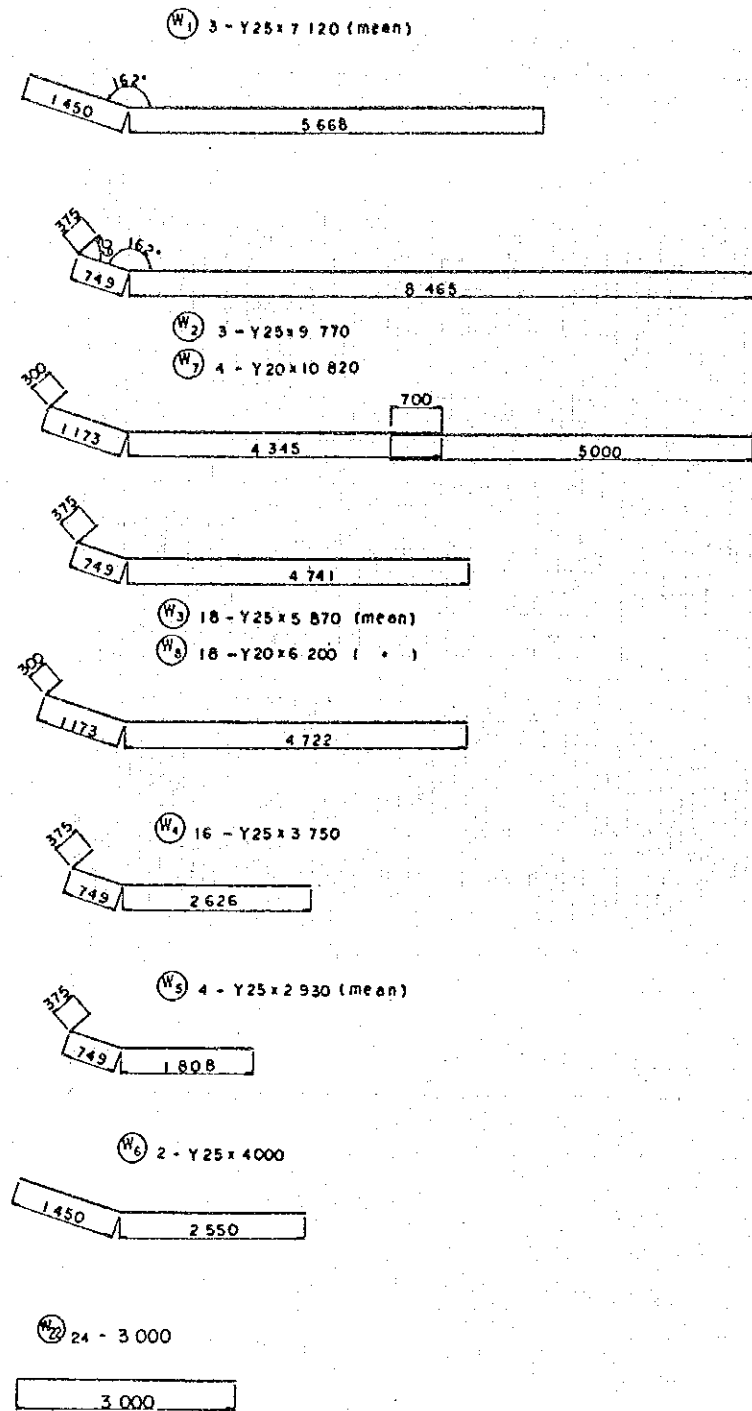
SCALES
1:50

NAIROBI BYPASS
VEHICLE BOX CULVERTS
CH 26+454.00 W=1.50 B=1.65 (1)

Q
SHEET 900F 163

SURVEYED BY
 TRACED BY
 CHECKED BY
 AERIAL PHOTO BY
 MAPPING BY
 LOCATION BY

M.O.P.W. ROADS DEPT DRG NO.



REVISIONS	
DESCRIPTION	DATE

JAPAN INTERNATIONAL COOPERATION AGENCY
 CHIEF ENGINEER (ROADS)
 CHIEF SUPT ENG (DESIGN)

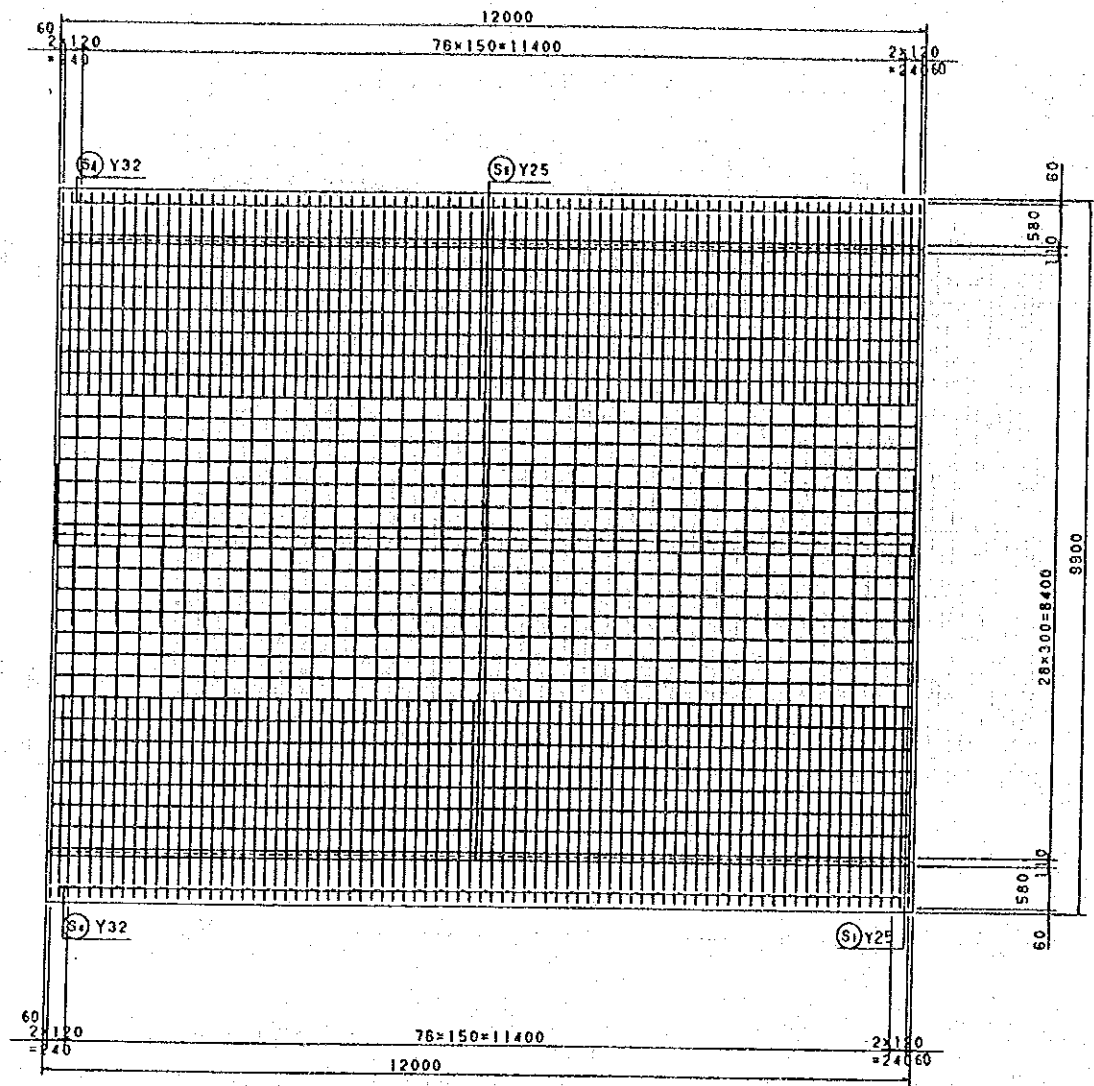
SEN SUPT ENG (DESIGN)
 SUPT ENGINEER (DESIGN)
 PROJECT ENGINEER

SCALES
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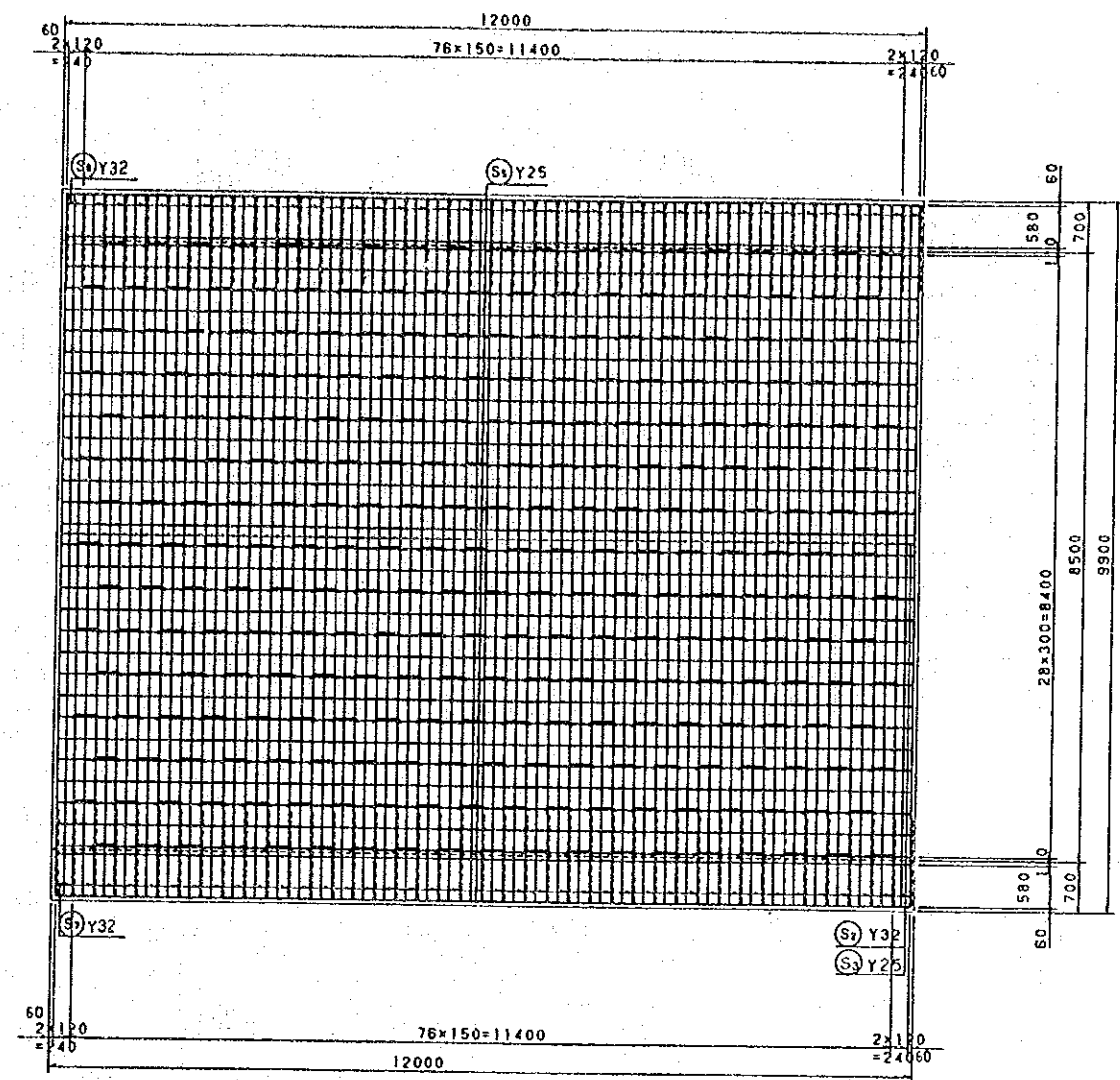
NAIROBI BYPASS
 VEHICLE BOX CULVERTS
 CN 26-464.00 W=2.50 H=3.65 (M)

AERIAL PHOTO BY	SURVEYED BY
MAPPING BY	TRACED BY
LOCATION BY	CHECKED BY

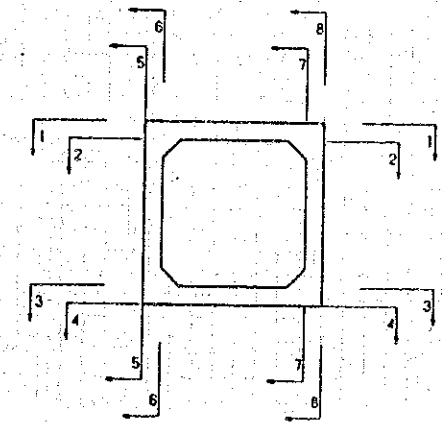
MOPW ROADS DEPT DRG NO



1 — 1



2 — 2



REVISIONS	
DESCRIPTION	DATE

JAPAN INTERNATIONAL COOPERATION AGENCY

CHIEF ENGINEER (ROADS)
CHIEF SUPT ENG (DESIGN)

SEN SUPT ENG (DESIGN)
SUPT ENGINEER (DESIGN)
PROJECT ENGINEER

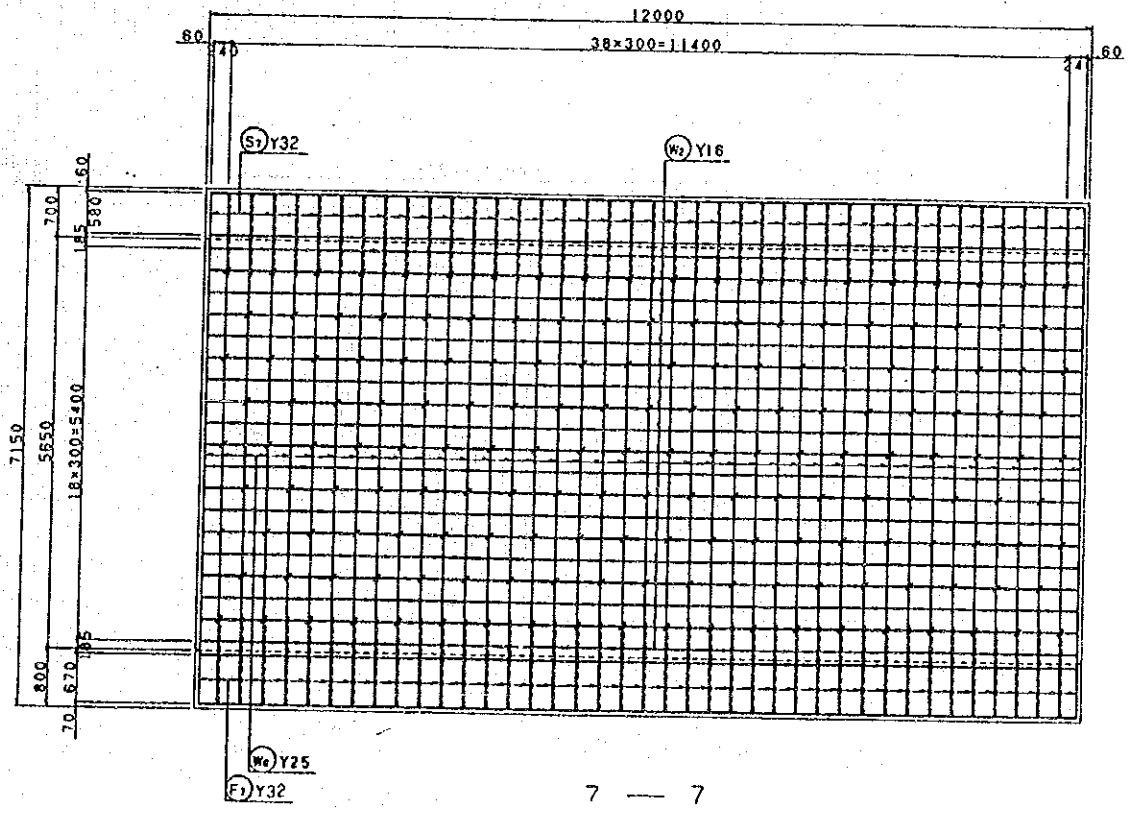
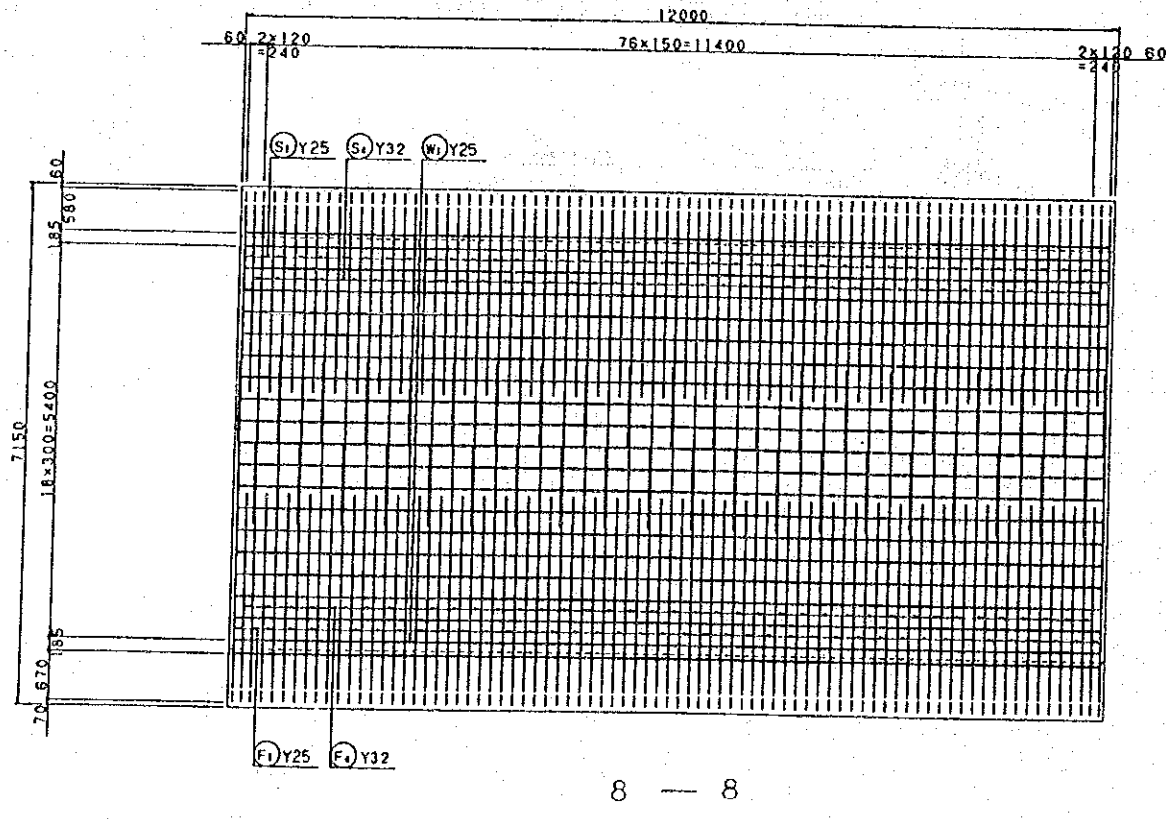
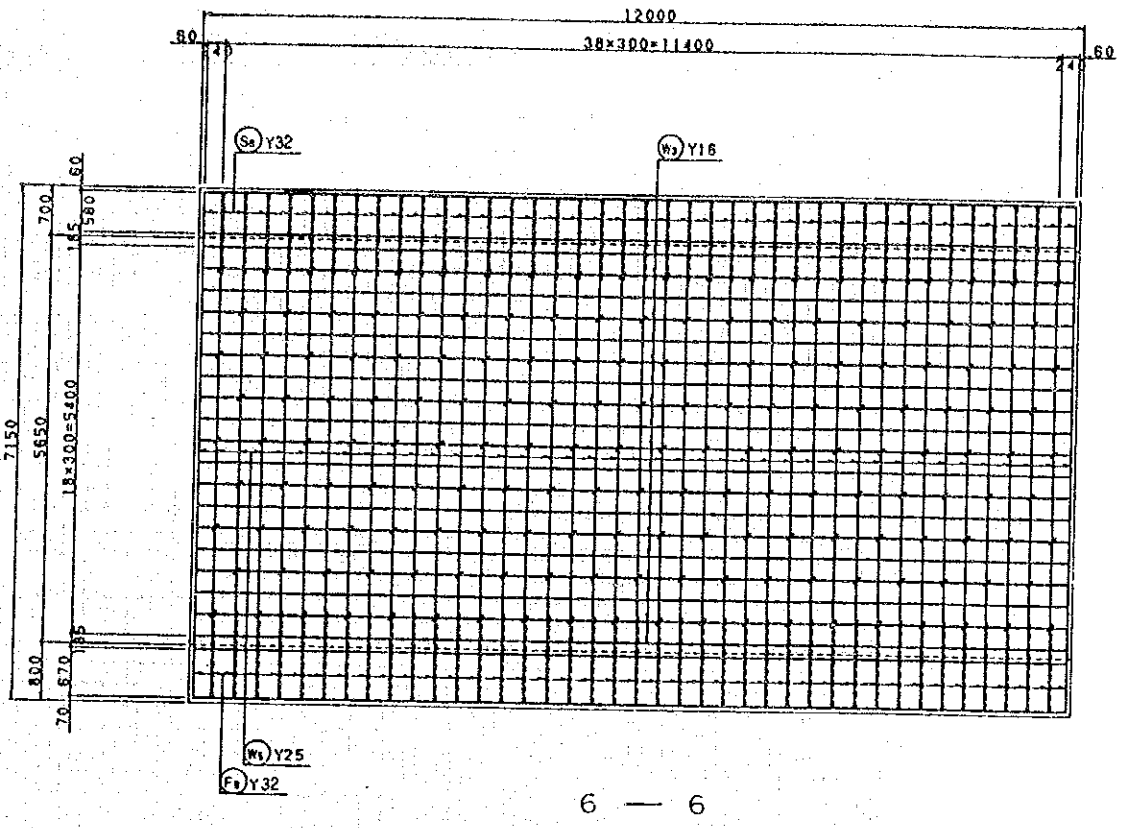
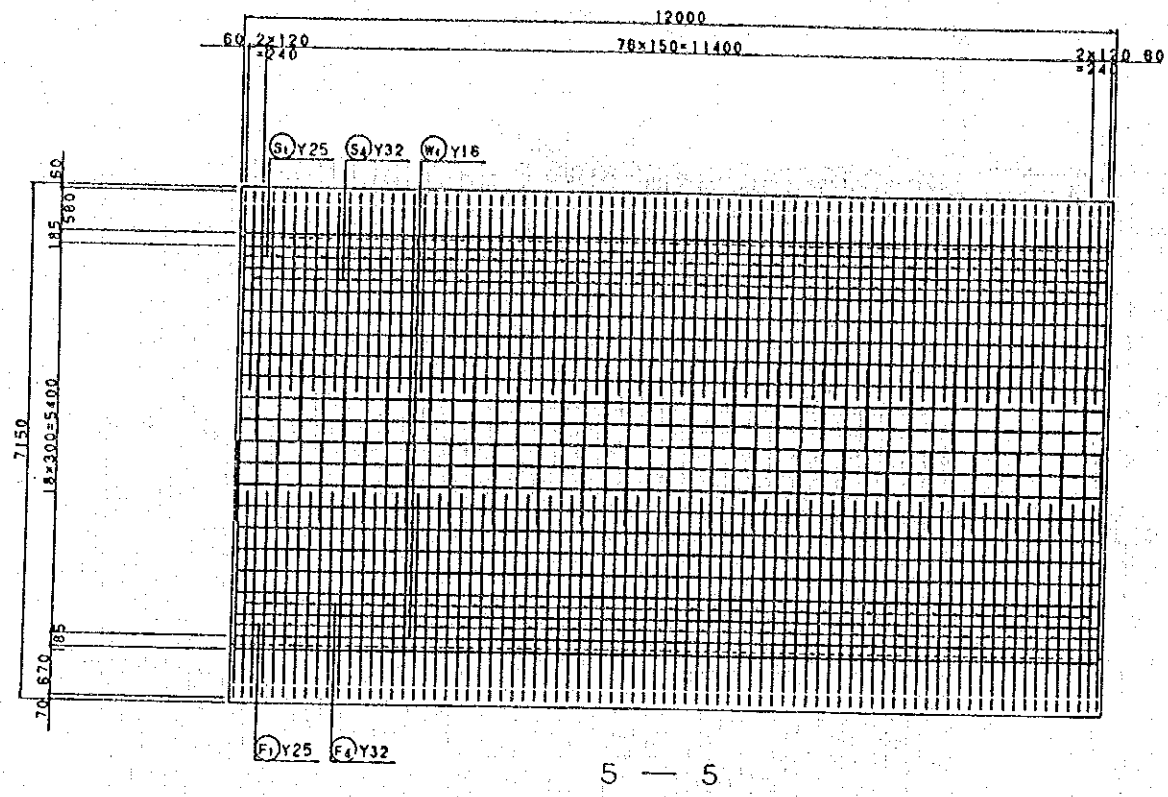
SCALES
1:50

NAIROBI BYPASS
VEHICLE BOX CULVERTS
CR 76+464.00 R=1.50 D=5.85 (10)

Q
SHEET 2 OF 183

AERIAL PHOTO BY _____ SURVEYED BY _____
 MAPPING BY _____ TRACED BY _____
 LOCATION BY _____ CHECKED BY _____

M.O.P.W. ROADS DEPT. DRG. NO. _____



REVISIONS	
DESCRIPTION	DATE

JAPAN INTERNATIONAL COOPERATION AGENCY

CHIEF ENGINEER (ROADS)
CHIEF SUPT. ENG. (DESIGN)

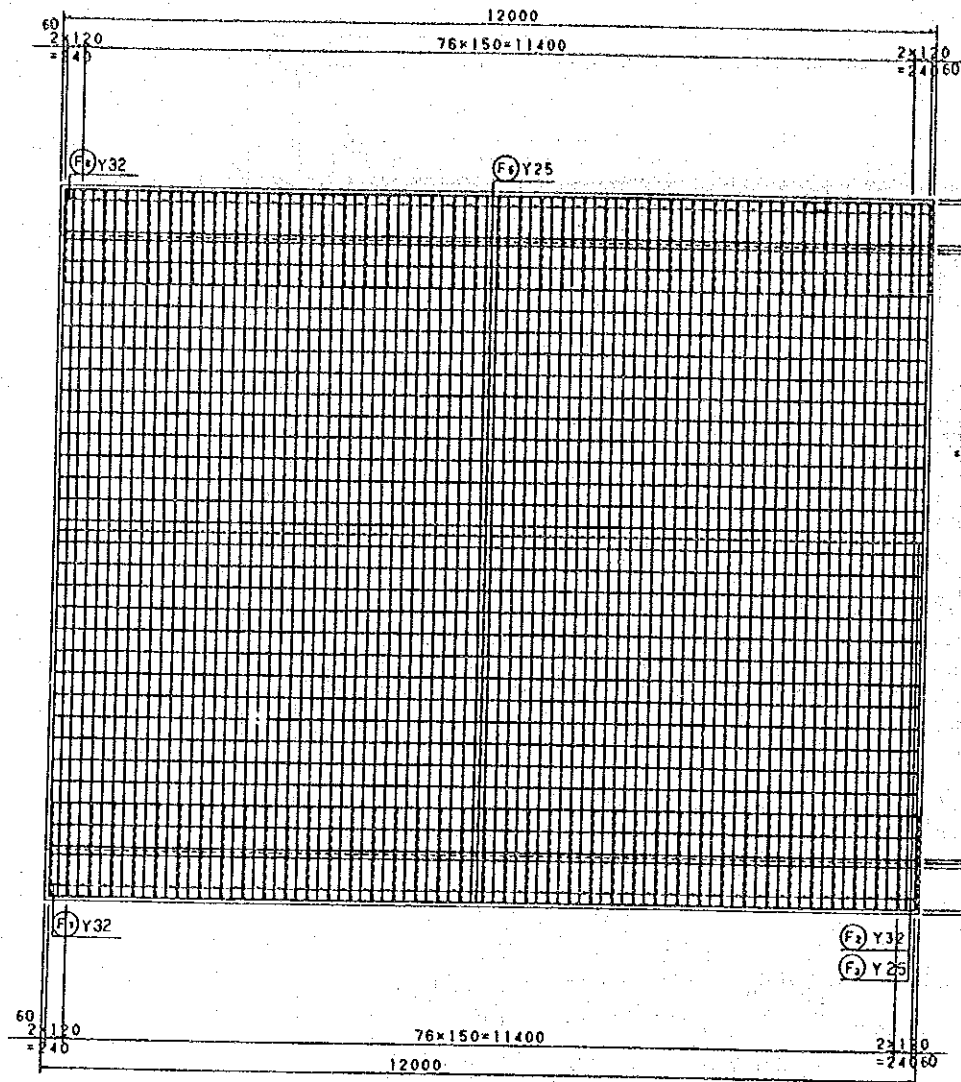
SEN SUPT. ENG. (DESIGN)
SUPT. ENGINEER (DESIGN)
PROJECT ENGINEER

SCALES
1:50

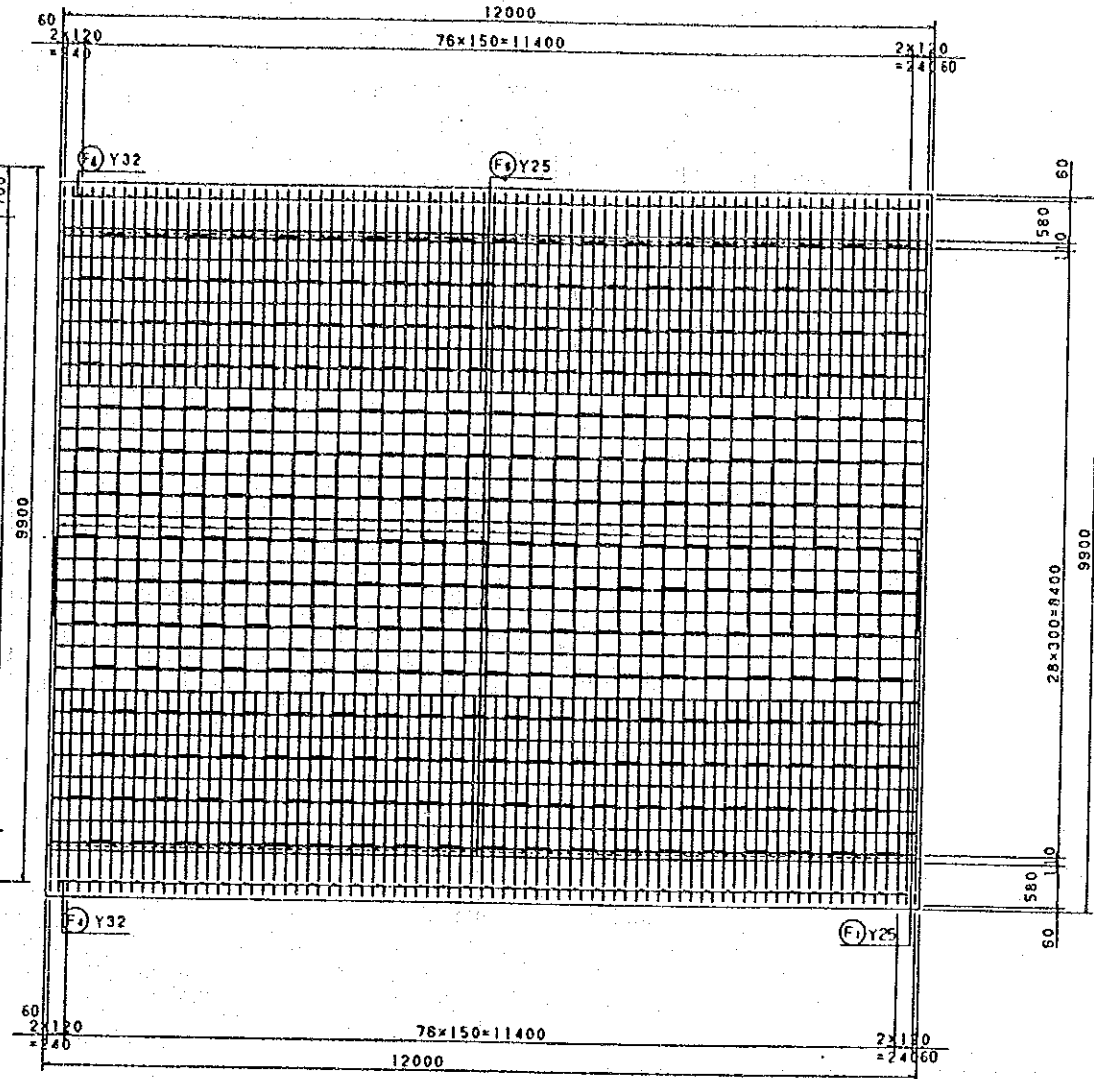
NAIROBI BYPASS
VEHICLE BOX CULVERTS
CR 26+484.00 R+4.60 R+5.65 (11)

AERIAL PHOTO BY _____ SURVEYED BY _____
 MAPPING BY _____ TRACED BY _____
 LOCATION BY _____ CHECKED BY _____

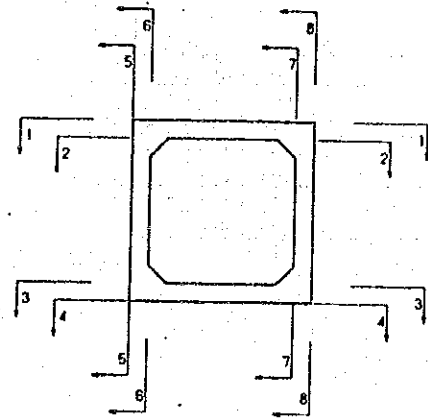
M.O.P.W. ROADS DEPT. DRG. NO.



3 — 3



4 — 4



REVISIONS	
DESCRIPTION	DATE

JAPAN INTERNATIONAL
COOPERATION AGENCY

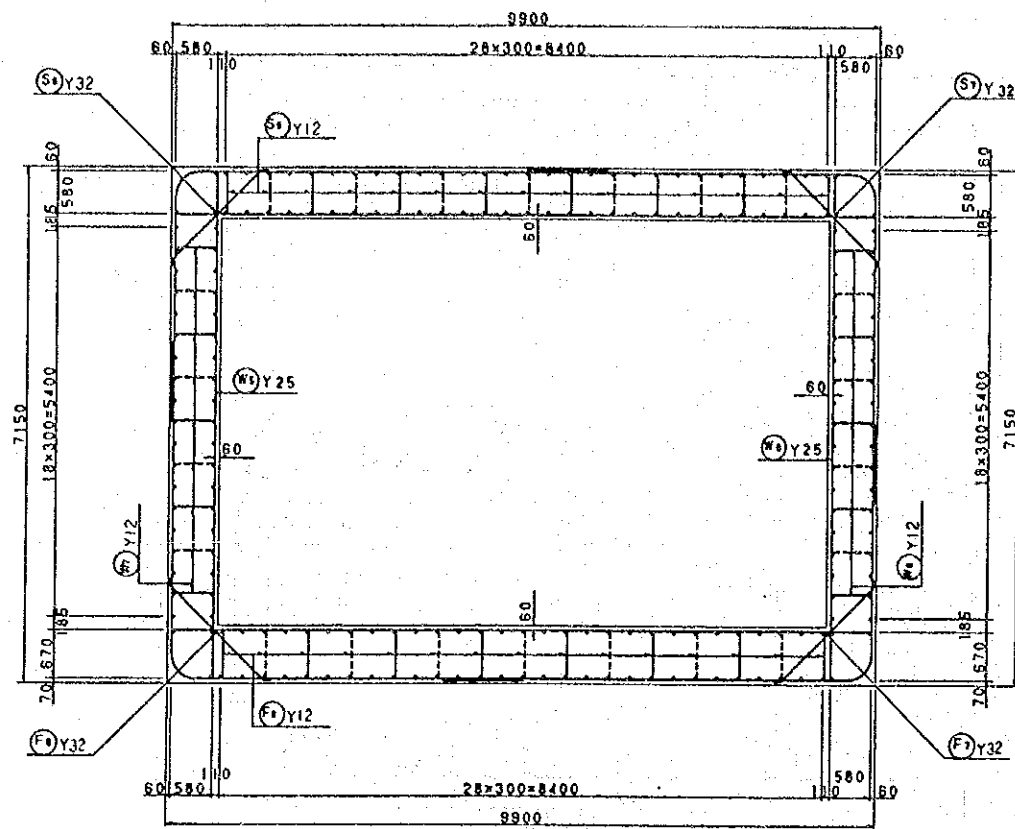
CHIEF ENGINEER (ROADS)
CHIEF SUPT ENG (DESIGN)

SEN SUPT ENG (DESIGN)
SUPT ENGINEER (DESIGN)
PROJECT ENGINEER

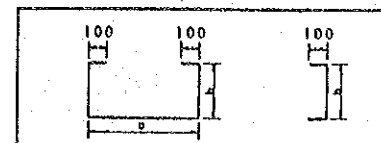
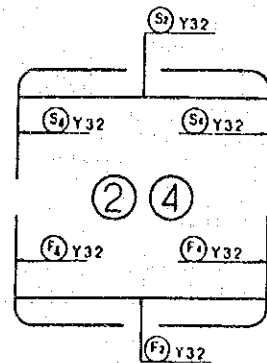
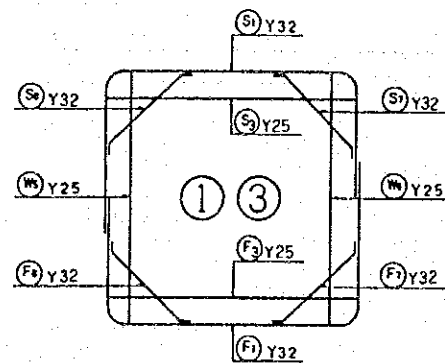
SCALES
1:50

NAIROBI BYPASS
VEHICLE BOX CULVERTS
CR 26+484.00 R+4.50 R+5.85 (11)

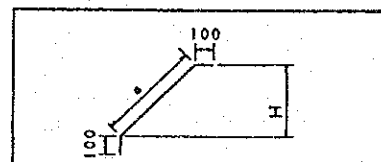
SHEET: 4 OF 163



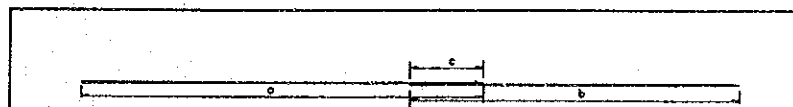
SECTION



MARK	DIA	a	b	L	REMARK
S 6	Y12	345	625	1795	
F 6	Y12	345	715	1975	
W 7	Y12	—	622	822	
W 8	Y12	—	822	822	



MARK	DIA	a	H	L	NUMBER
S 6	Y32	1690	1195	1890	41
S 7	Y32	1690	1195	1890	41
F 6	Y32	1817	1285	2017	41
F 7	Y32	1817	1285	2017	41



MARK	DIA	a	b	c	L = a + b	LAP NUMBER
S 5	Y25	10000	2755	875	12755	1 64
F 5	Y25	10000	2755	875	12755	1 64
W 1	Y25	10000	2755	875	12755	1 19
W 2	Y16	10000	2440	560	11880	1 19
W 3	Y16	10000	2440	560	11880	1 19
W 4	Y25	10000	2755	875	12755	1 19

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M.O.P.W. ROADS DEPT DRG NO.

REVISIONS	
DESCRIPTION	DATE

JAPAN INTERNATIONAL COOPERATION AGENCY
 CHIEF ENGINEER (ROADS)
 CHIEF SUPT ENG (DESIGN)

SEN SUPT. ENG (DESIGN)
 SUPT ENGINEER (DESIGN)
 PROJECT ENGINEER

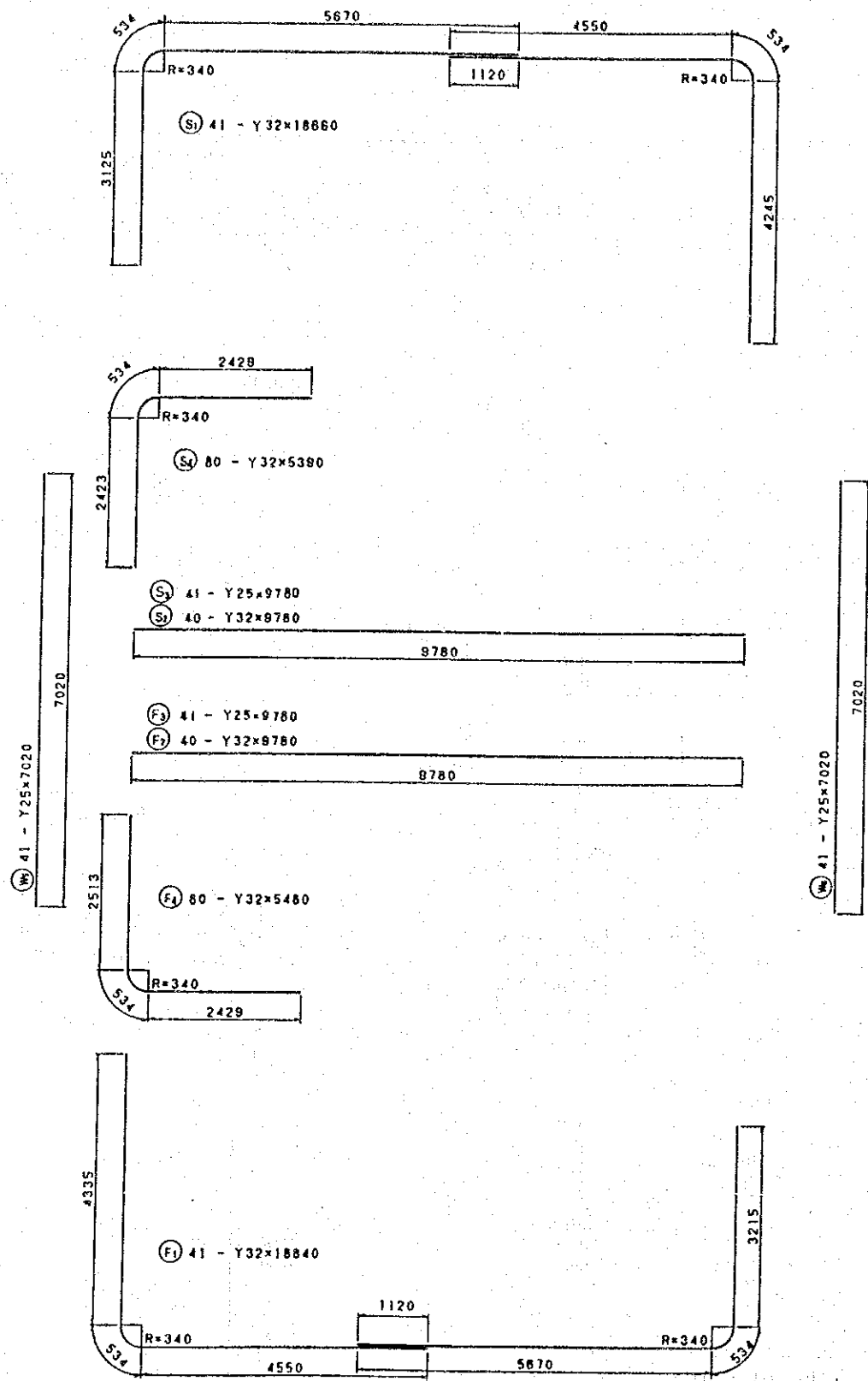
SCALES
 1:50

NAIROBI BYPASS
 VEHICLE BOX CULVERTS
 CR 28+484.00 R=8.50 D=5.65 (15)

Q
 SHEET 95 OF 183

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M.O.P.W. ROADS DEPT. DRG. NO.



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DESCRIPTION	DATE

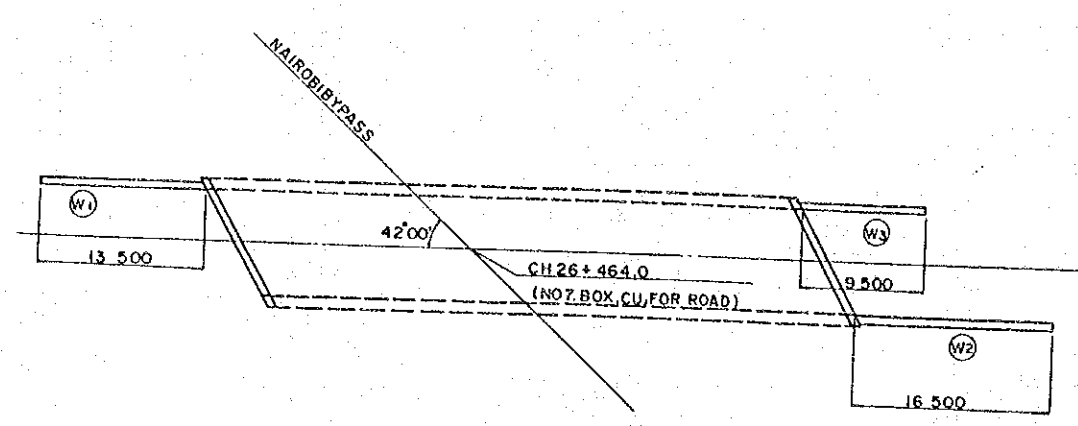
JAPAN INTERNATIONAL COOPERATION AGENCY	CHIEF ENGINEER (ROADS)
	CHIEF SUPT. ENG. (DESIGN)

SEN SUPT. ENG. (DESIGN)	
SUPT. ENGINEER (DESIGN)	
PROJECT ENGINEER	

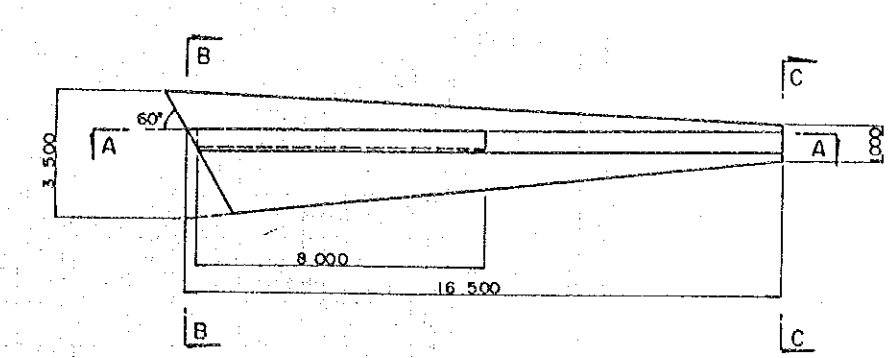
SCALES
1:50

NAIROBI BYPASS
VEHICLE BOX CULVERTS
CR 26+464.00 R=1.50 M=6.41 (10)

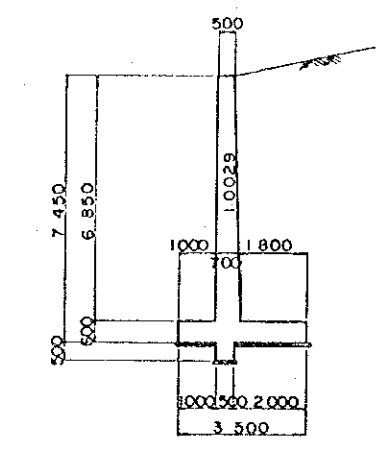
Q
SHEET 5 OF 14



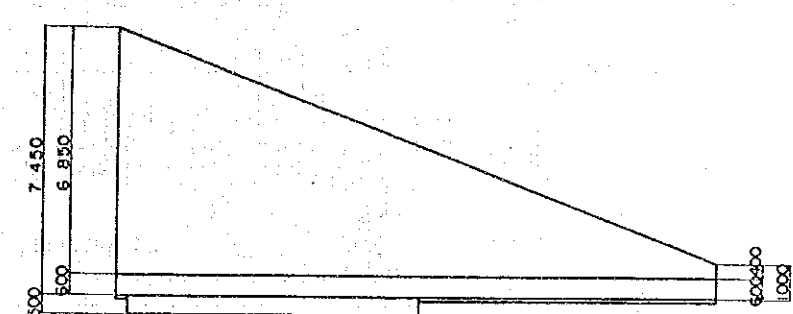
KEY PLAN SCALE 1:300



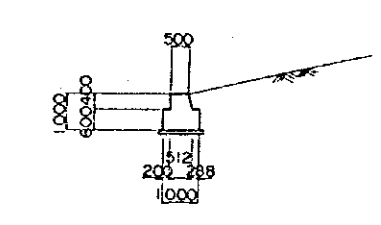
PLAN



B - B

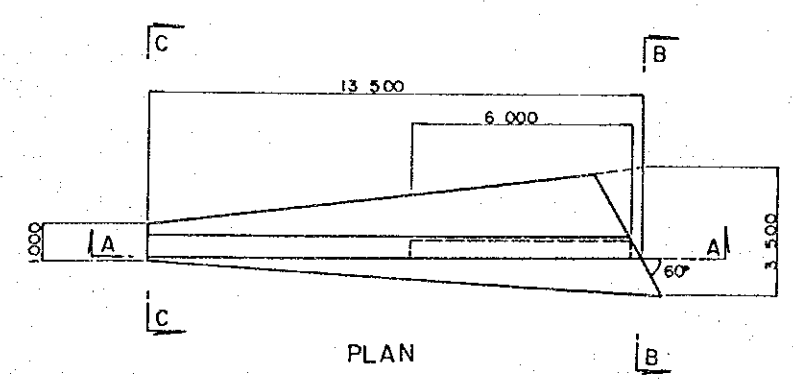


A - A

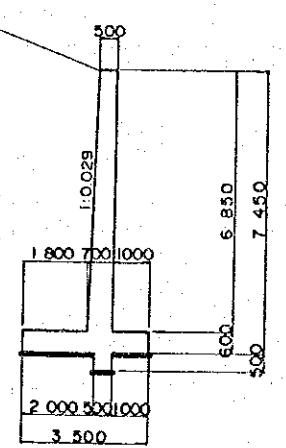


C - C

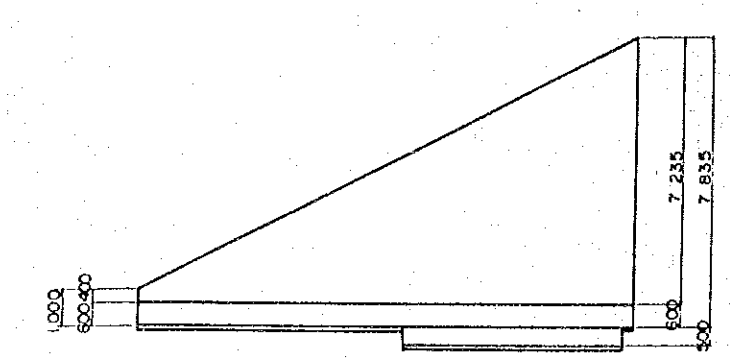
W2 RETAINING WALL SCALE 1:100



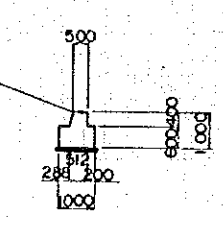
PLAN



B - B

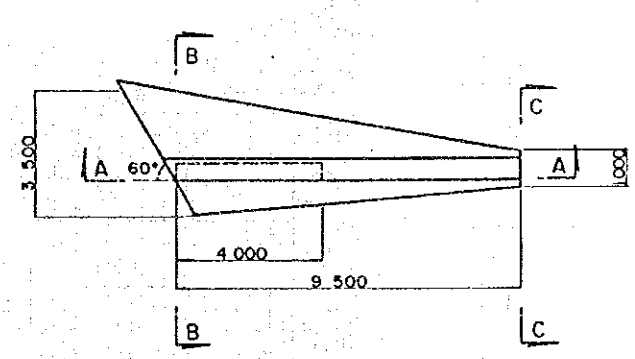


A - A

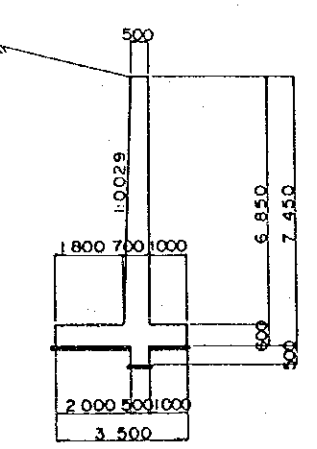


C - C

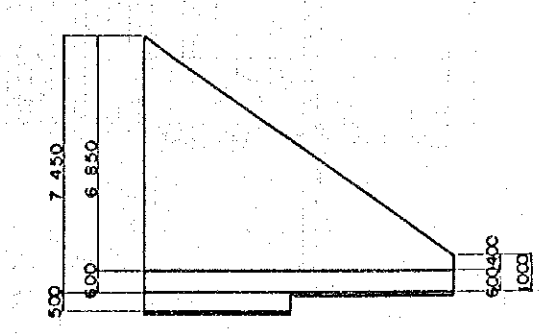
W1 RETAINING WALL SCALE 1:100



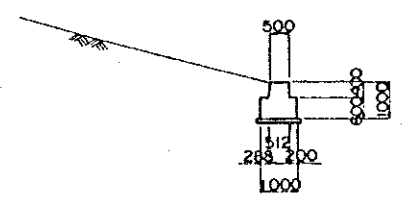
PLAN



B - B



A - A



C - C

W3 RETAINING WALL SCALE 1:100

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MOPW ROADS DEPT DRG NO.

REVISIONS	
DESCRIPTION	DATE

JAPAN INTERNATIONAL COOPERATION AGENCY
CHIEF ENGINEER (ROADS)
CHIEF Supt ENG (DESIGN)

SEN Supt ENG (DESIGN)
Supt ENGINEER (DESIGN)
PROJECT ENGINEER

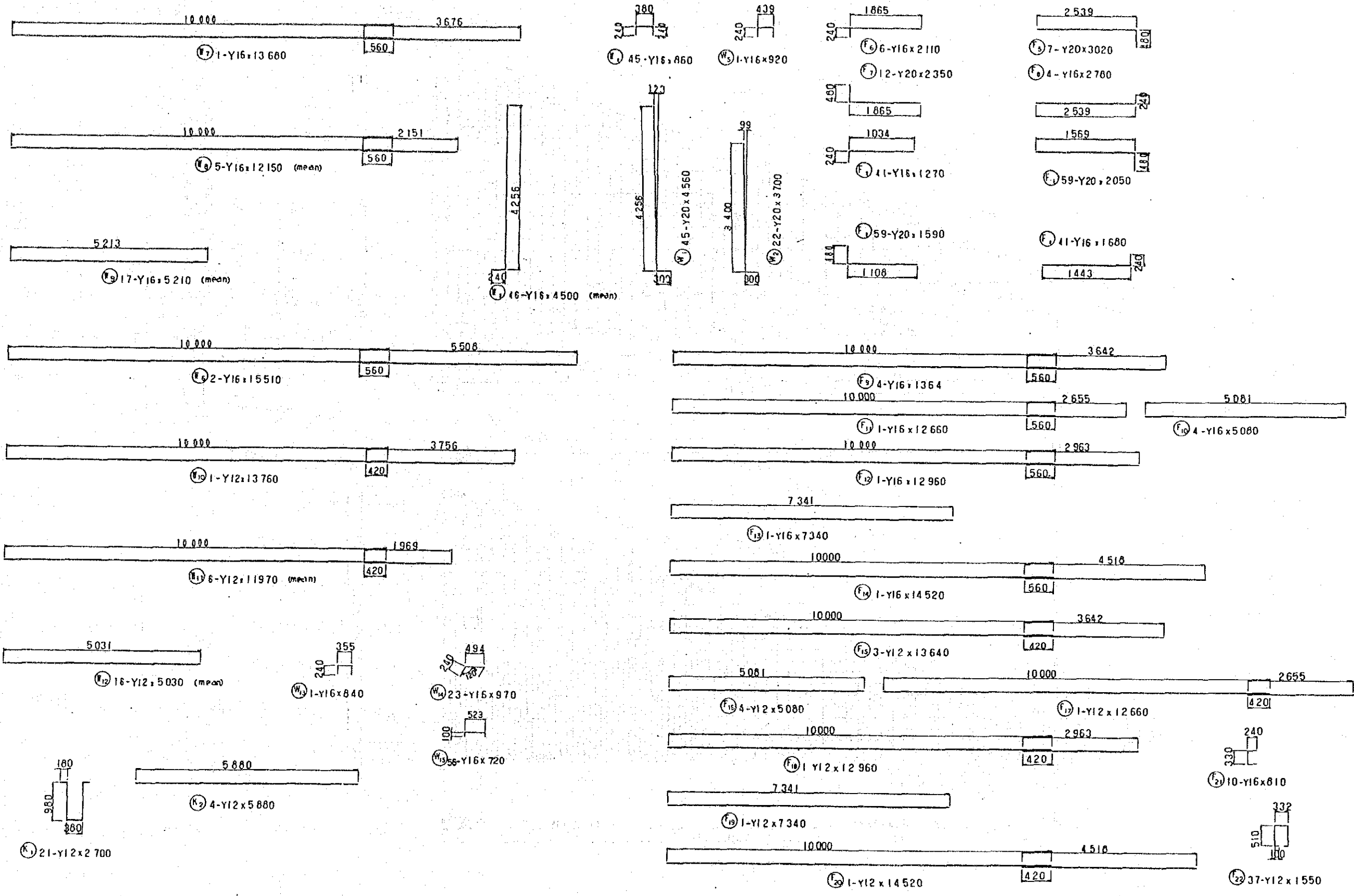
SCALES
1:100, 300

NAIROBI BYPASS
VEHICLE BOX CULVERTS
CH 26+464.00 R+4.60 R+5.65 (16)

Q
SHEET 97 OF 183

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REVISIONS	
DESCRIPTION	DATE

JAPAN INTERNATIONAL COOPERATION AGENCY
 CHIEF ENGINEER (ROADS)
 CHIEF SUPT. ENG. (DESIGN)

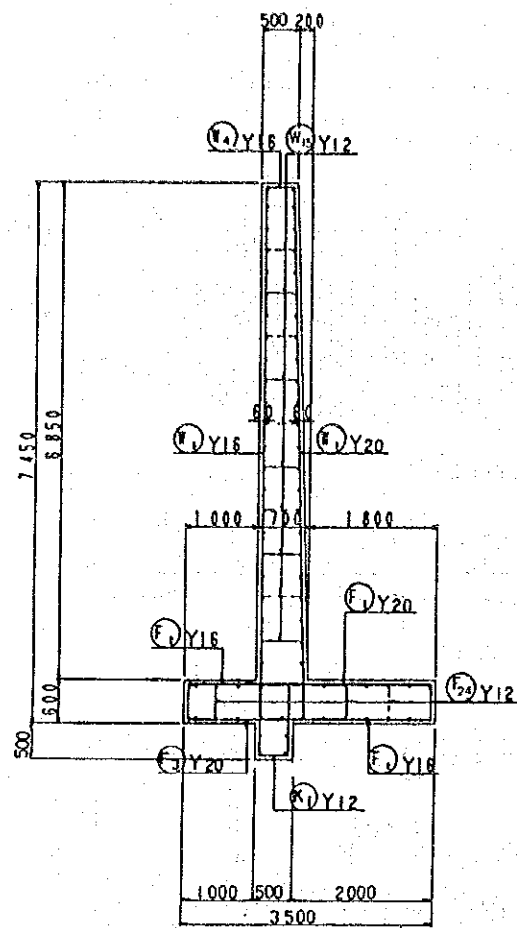
SEN SUPT. ENG. (DESIGN)
 SUPT. ENGINEER (DESIGN)
 PROJECT ENGINEER

SCALES
 1:50

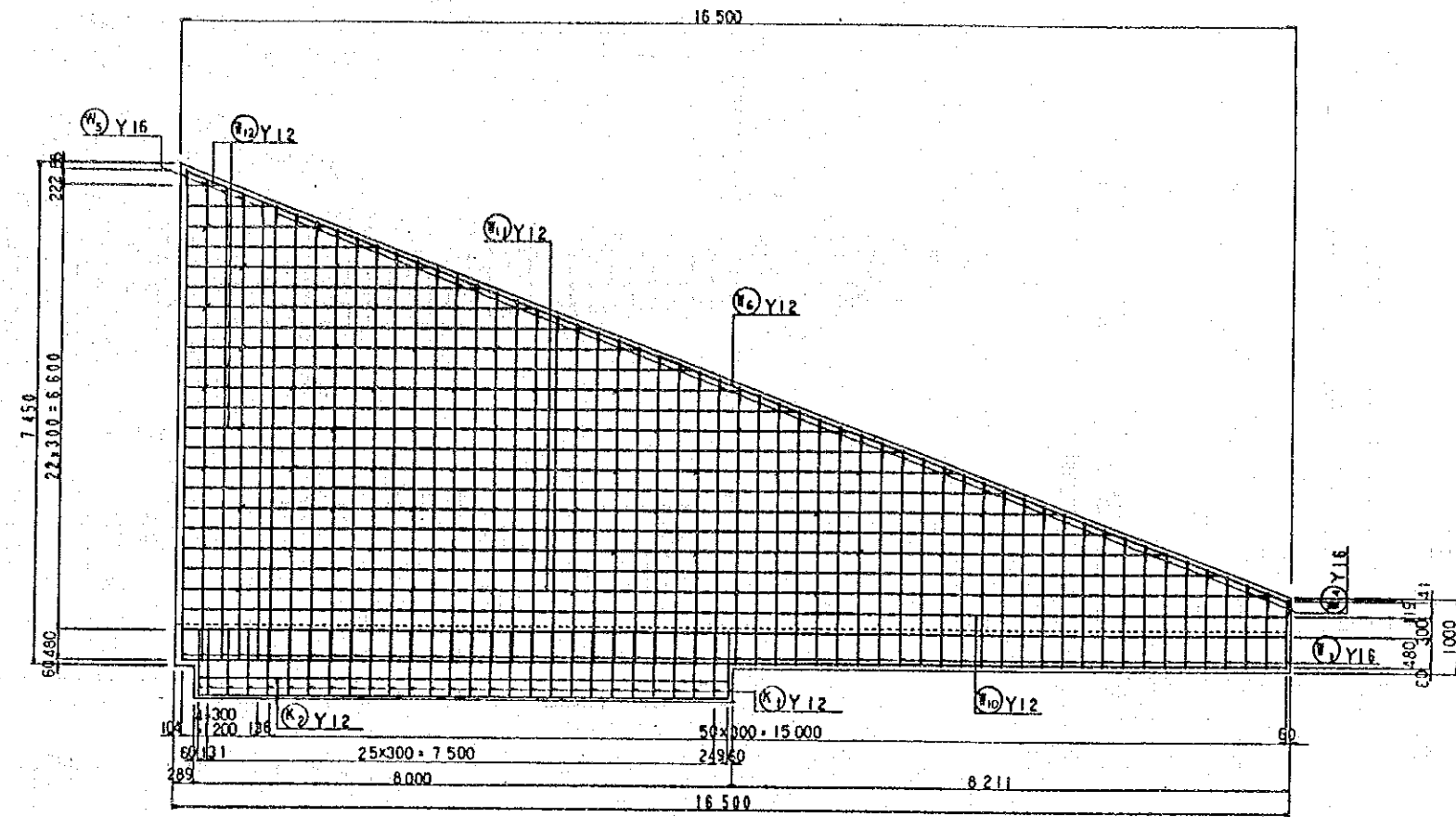
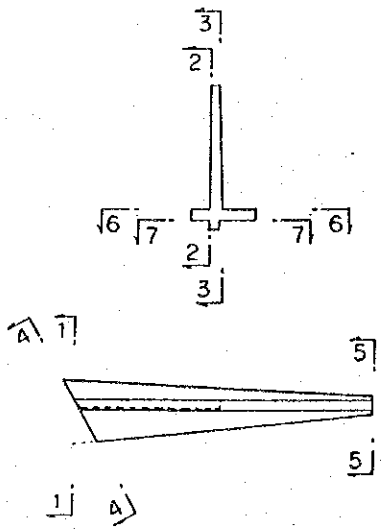
NAIROBI BYPASS
 VEHICLE BOX CULVERTS
 CR 26/44.00 W=1.50 H=5.85 (10) (W1)

AERIAL PHOTO BY _____ SURVEYED BY _____
 MAPPING BY _____ TRACED BY _____
 LOCATION BY _____ CHECKED BY _____

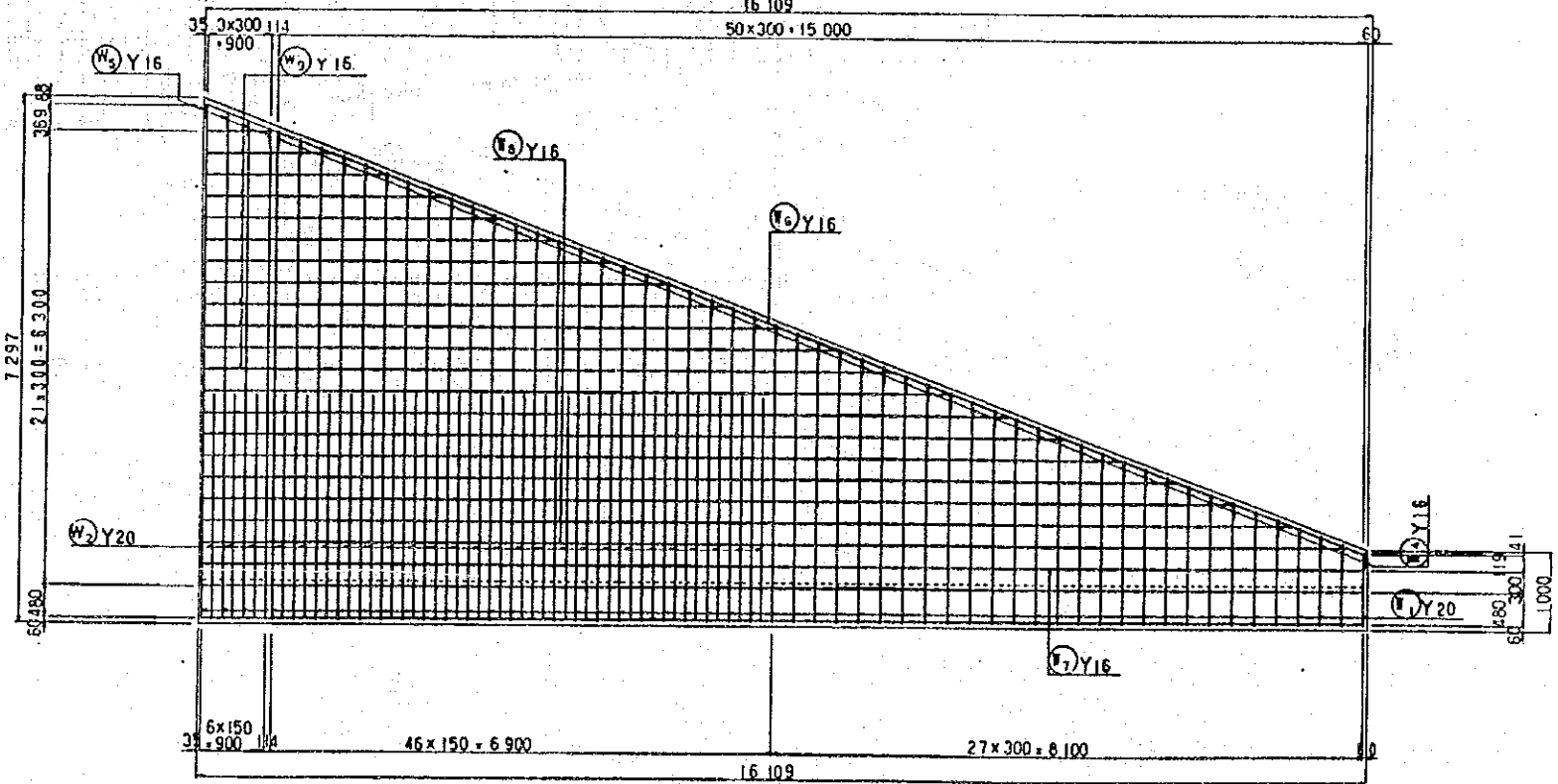
M.C.P.W. ROADS DEPT. DRG. NO. _____



1 — 1



2 — 2



3 — 3

REVISIONS	
DESCRIPTION	DATE

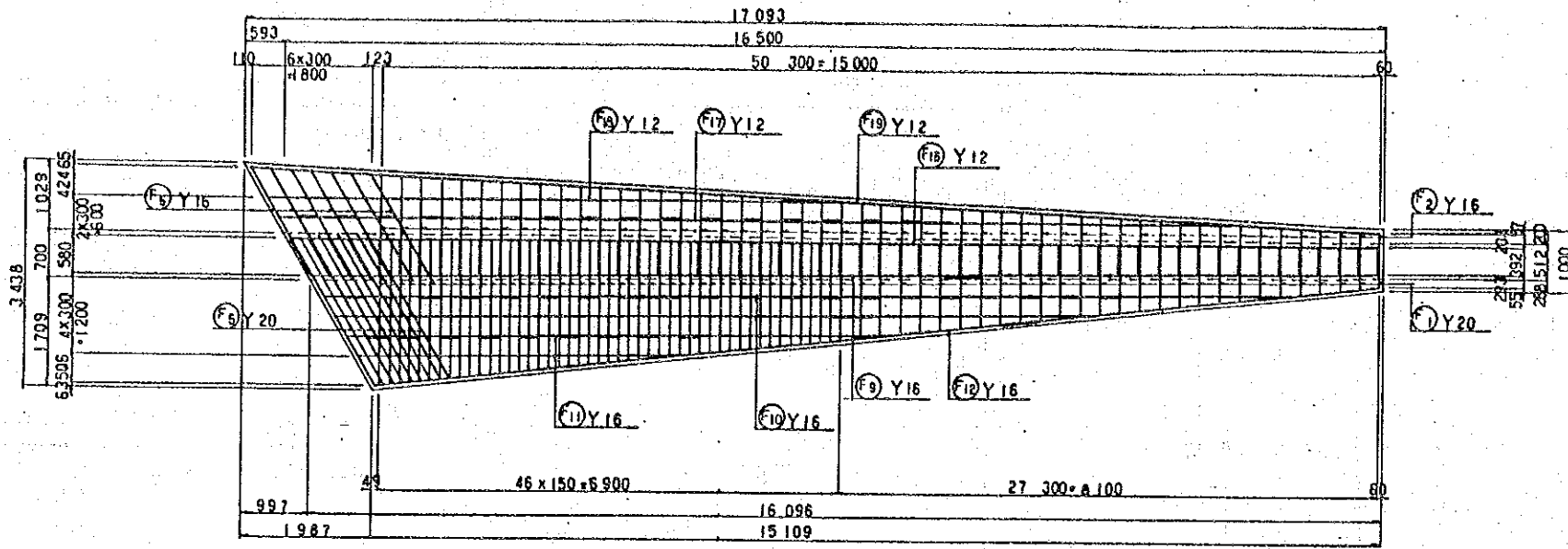
JAPAN INTERNATIONAL COOPERATION AGENCY
 CHIEF ENGINEER (ROADS)
 CHIEF SUPT. ENG. (DESIGN)

SEN SUPT. ENG. (DESIGN)
 SUPT. ENGINEER (DESIGN)
 PROJECT ENGINEER

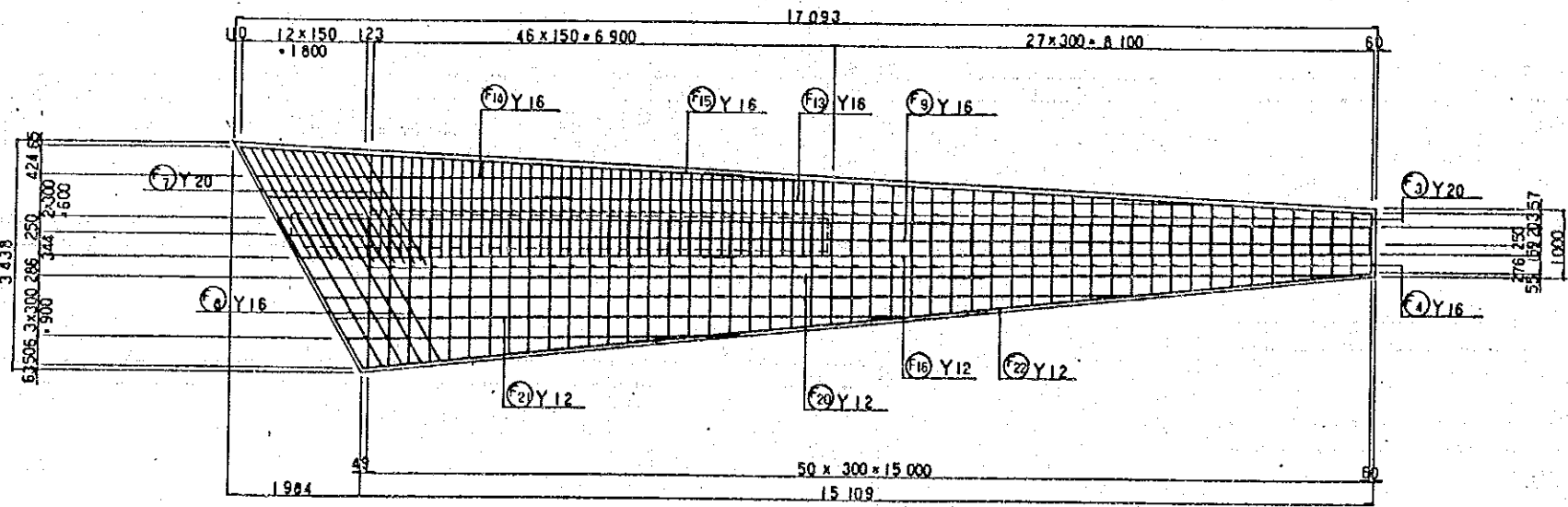
SCALES
 1:50

NAIROBI BYPASS
 VEHICLE BOX CULVERTS
 CR 26-164.00 R=1.60 R=6.65 (15)

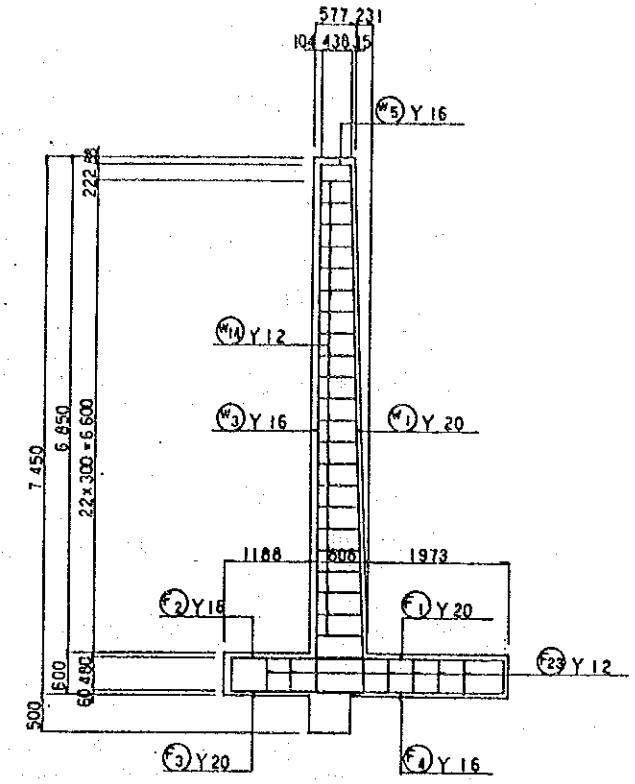
SHEET 101 OF 183



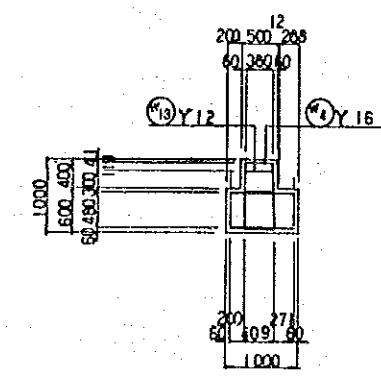
6 — 6



7 — 7



4 — 4



5 — 5

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REVISIONS	
DESCRIPTION	DATE

JAPAN INTERNATIONAL
COOPERATION AGENCY

CHIEF ENGINEER (ROADS)
CHIEF SUPT ENG (DESIGN)

SEN SUPT. ENG (DESIGN)
SUPT ENGINEER (DESIGN)
PROJECT ENGINEER

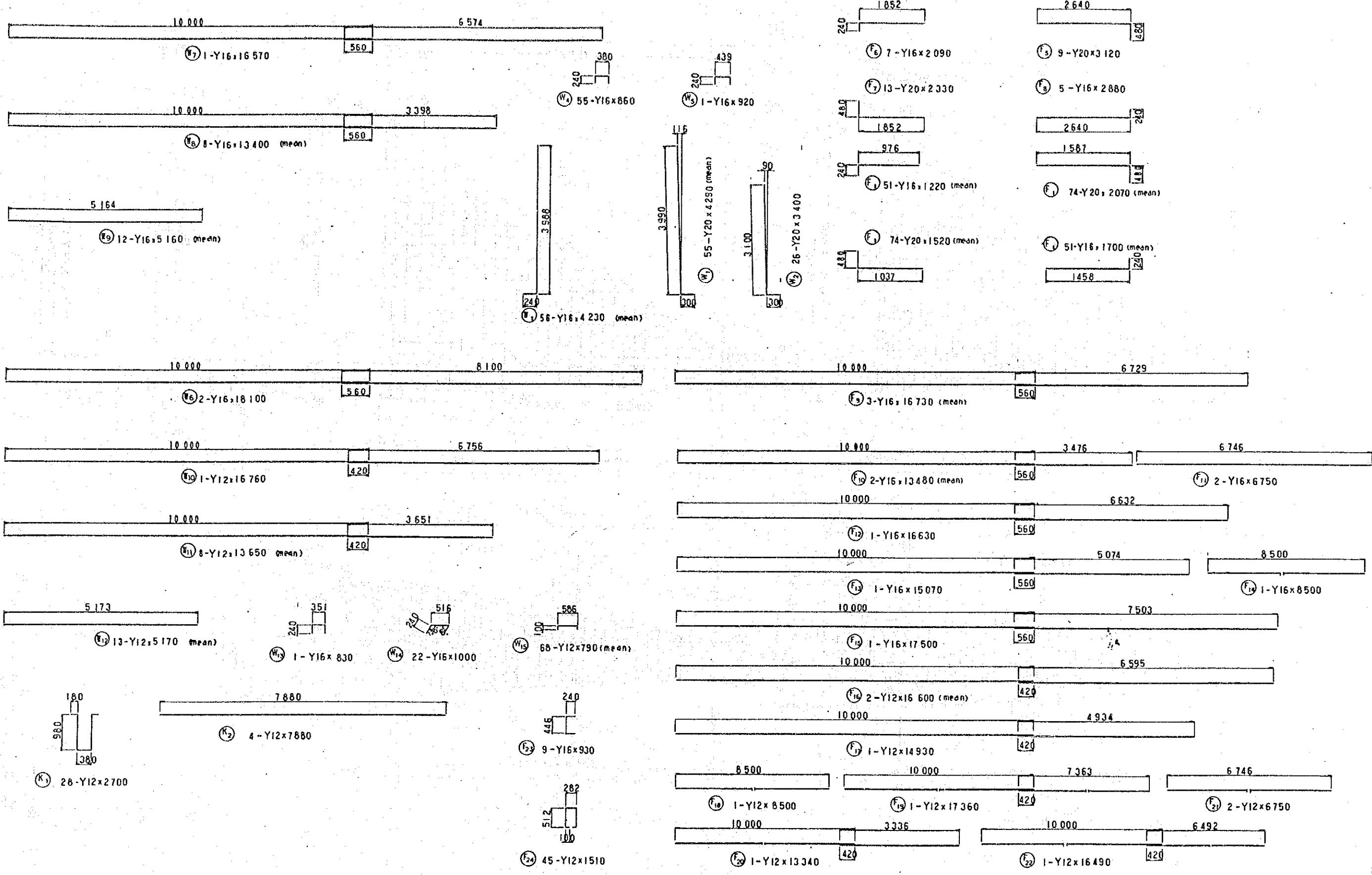
SCALES
1:50

NAIROBI BYPASS
VEHICLE BOX CULVERTS
CR 28+484.00 W=2.50 H=5.61 (20) (1/2)

Q
SHEET 102 OF 183

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M.O.P.W. ROADS DEPT. DRG. NO.



REVISIONS	
DESCRIPTION	DATE

JAPAN INTERNATIONAL COOPERATION AGENCY
 CHIEF ENGINEER (ROADS)
 CHIEF SUPT. ENG. (DESIGN)

SEN. SUPT. ENG. (DESIGN)
 SUPT. ENGINEER (DESIGN)
 PROJECT ENGINEER

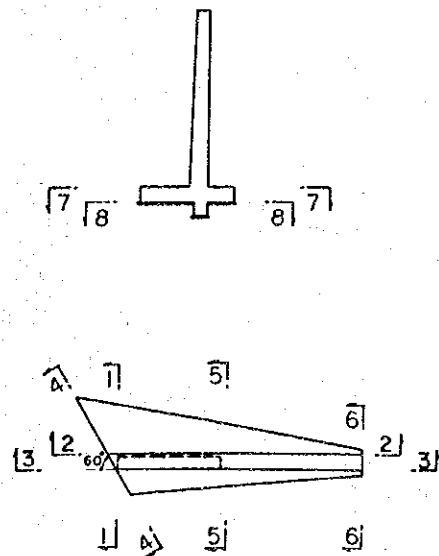
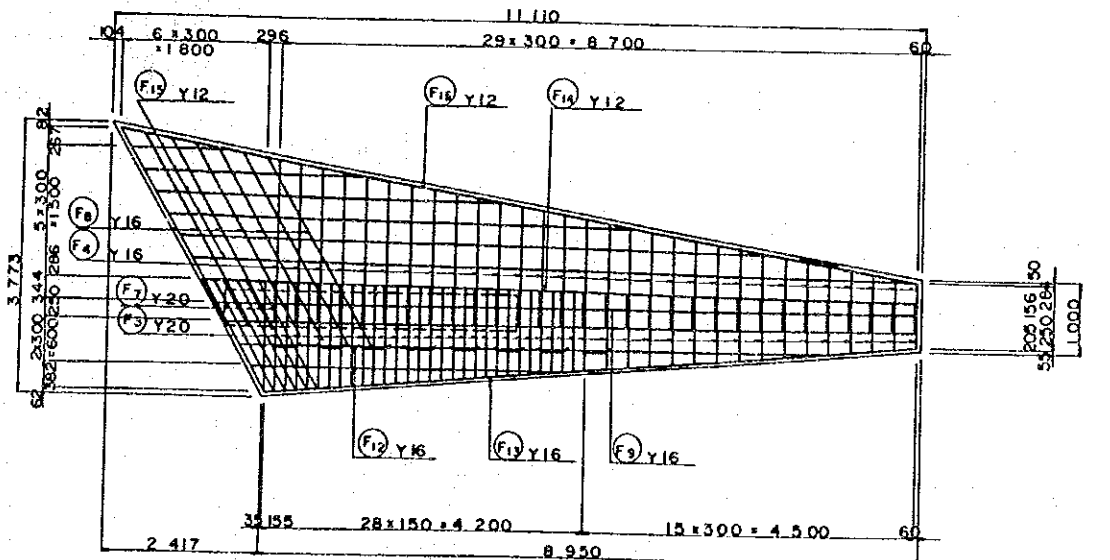
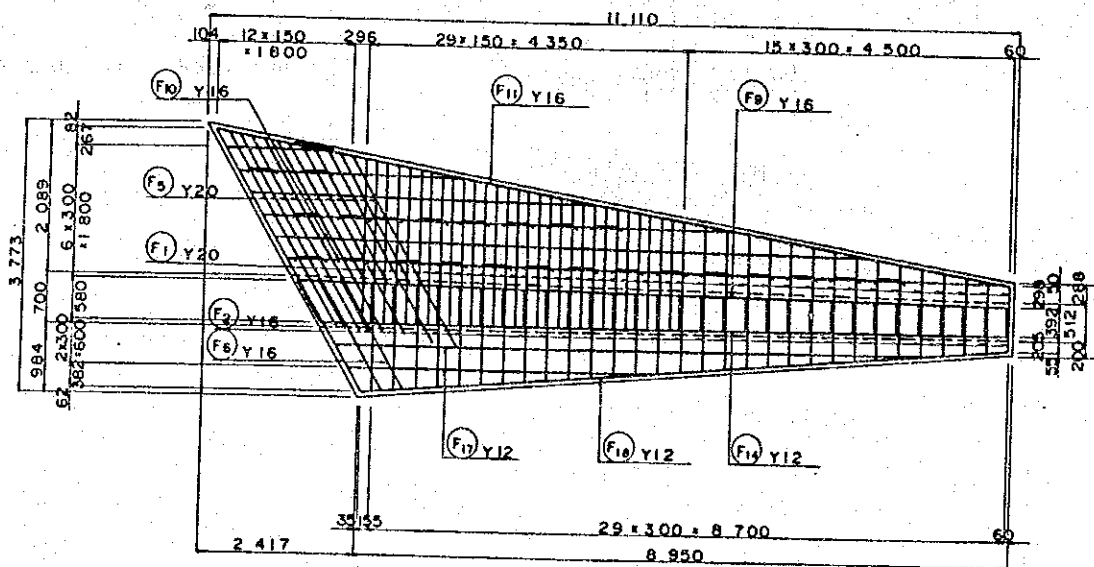
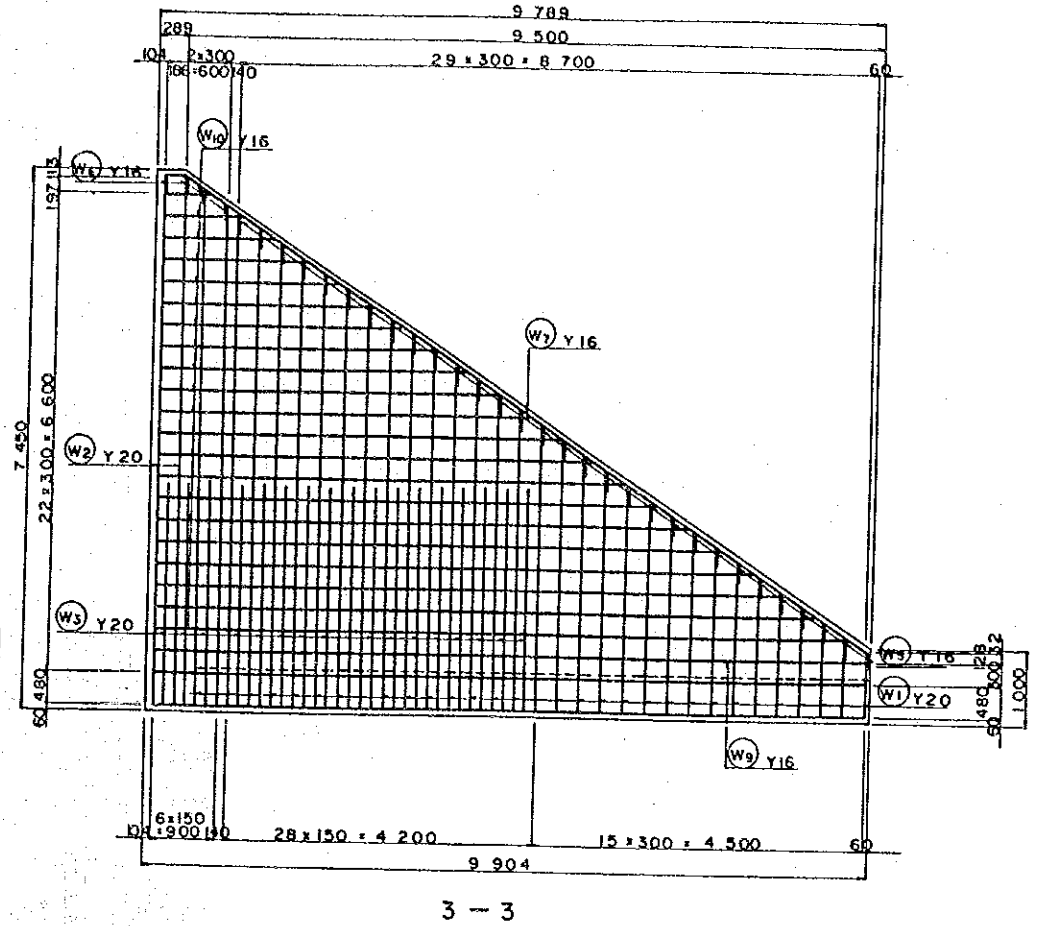
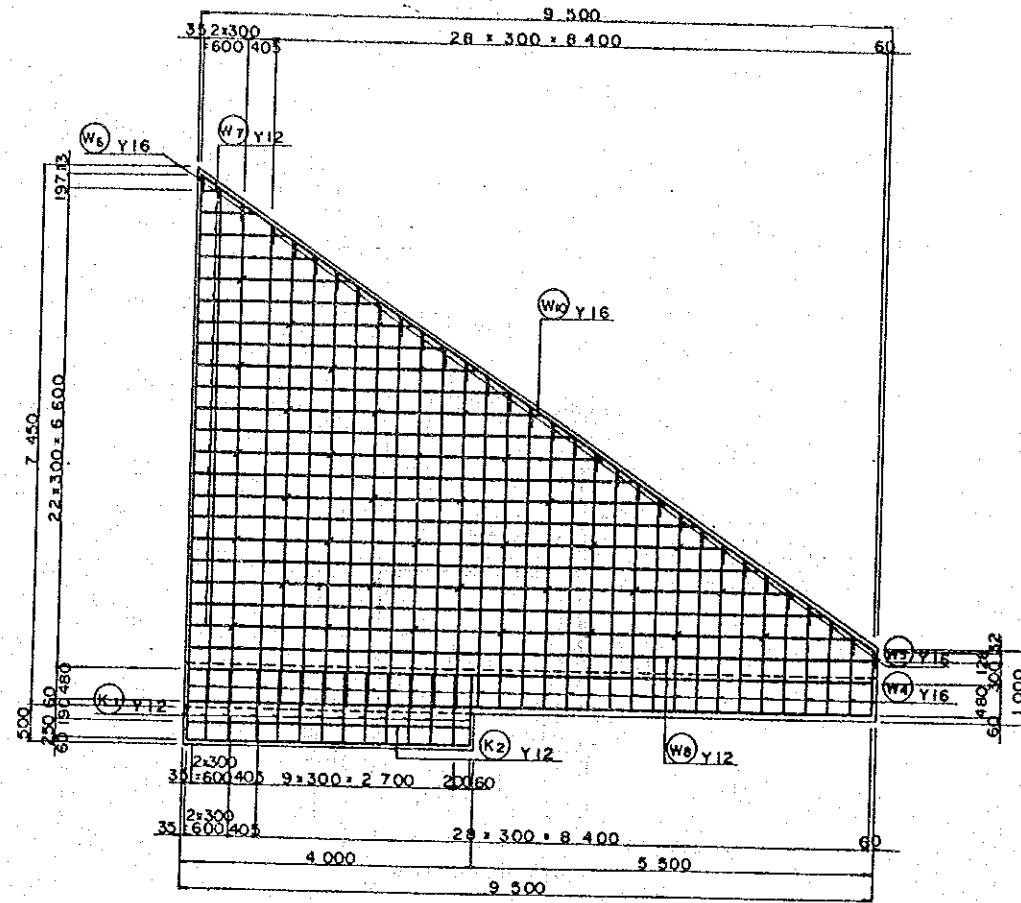
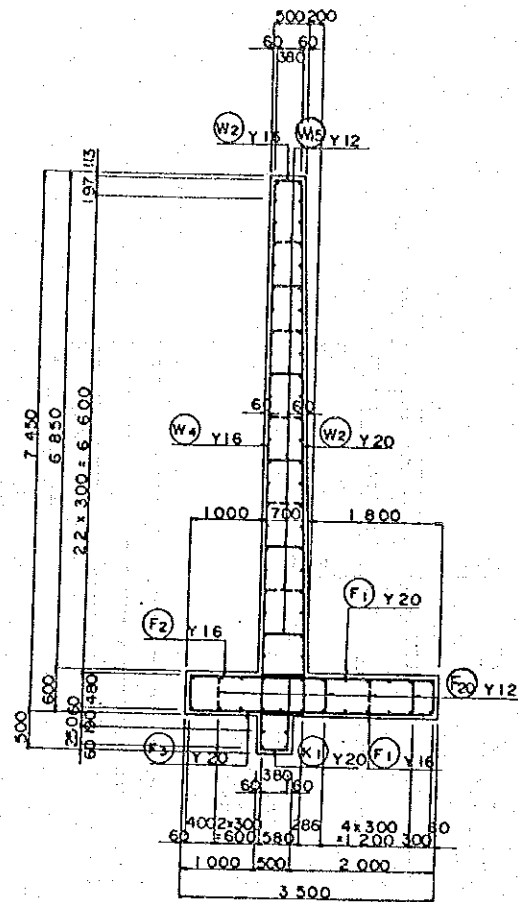
SCALES
 1:50

NAIROBI BYPASS
 VEHICLE BOX CULVERTS
 CH 26+484.00 N+1.50 W+6.85 (21) (W)

Q
 SHEET 103 OF 113

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 LOCATION BY _____
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M.O.P.W. ROADS DEPT. DRG. NO. _____



REVISIONS	
DESCRIPTION	DATE

JAPAN INTERNATIONAL COOPERATION AGENCY

CHIEF ENGINEER (ROADS)

CHIEF SUPT. ENG. (DESIGN)

SEN SUPT. ENG. (DESIGN)

SUPT. ENGINEER (DESIGN)

PROJECT ENGINEER

SCALES

1:50

NAIROBI BYPASS

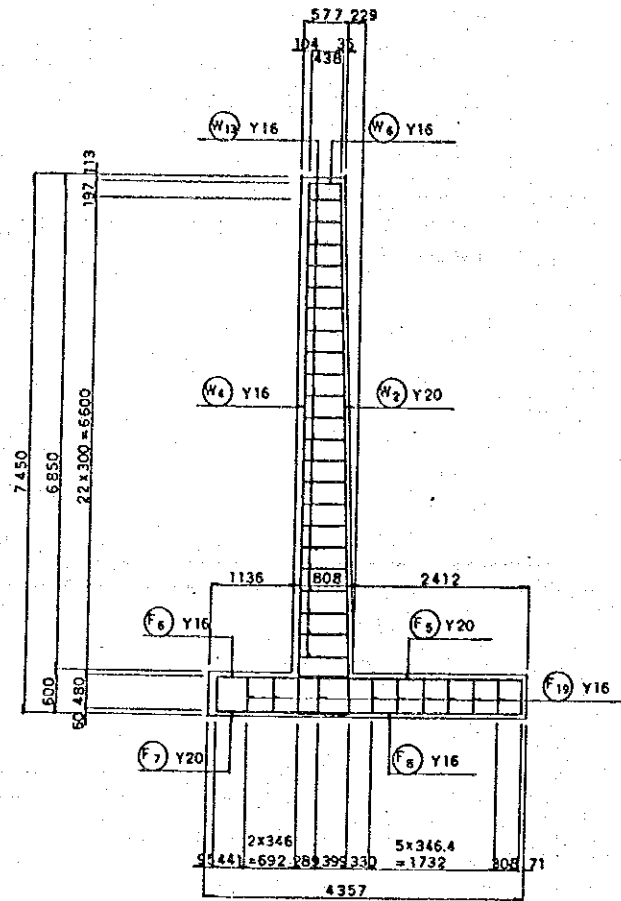
VEHICLE BOX CULVERTS

CN 26+484:00 W=1.50 H=5.05 (22) (W3)

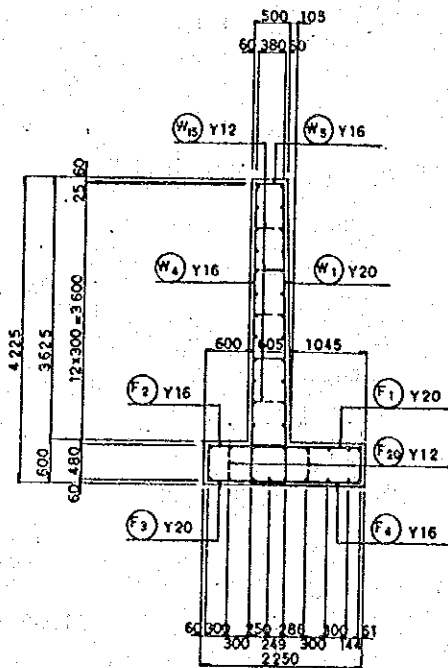
SHEET 1040F183

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TRACED BY	BY
CHECKED BY	BY
AERIAL PHOTO BY	BY
MAPPING	BY
LOCATION	BY

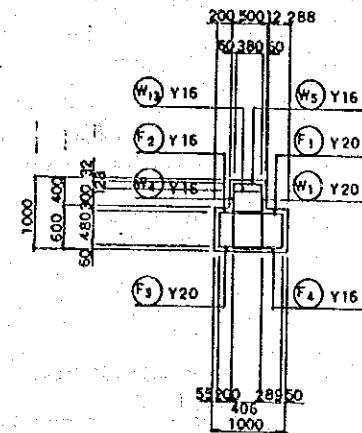
M.O.P.W. ROADS. DEPT. DRG. NO.



4-4



5-5



6-6

REVISIONS	
DESCRIPTION	DATE

JAPAN INTERNATIONAL COOPERATION AGENCY

CHIEF ENGINEER (ROADS)
CHIEF SUPT. ENG. (DESIGN)

SEN SUPT. ENG. (DESIGN)
SUPT. ENGINEER (DESIGN)
PROJECT ENGINEER

SCALES
1:50

NAIROBI BYPASS
VEHICLE BOX CULVERTS
CR 26+484.00 P=4.50 B=5.81 (25)

Q
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