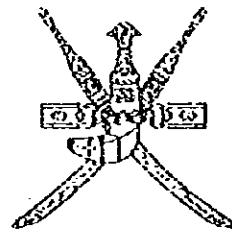




**SULTANATE OF OMAN
MINISTRY OF COMMUNICATIONS
DIRECTORATE GENERAL OF ROADS**



**CONSTRUCTION OF PEDESTRIAN UNDERPASS
AT
A'TAREEF
BATINAH HIGHWAY**

TENDER DOCUMENT

DRAWINGS

JICA LIBRARY



J 1140572 (7)

**PACIFIC CONSULTANTS INTERNATIONAL
FUKUYAMA CONSULTANTS INTERNATIONAL**

March, 1997

SSF
CR(5)
97-015

DRAWING SCHEDULE
(PU3-A'TAREEF PEDESTRIAN UNDERPASS)

SHEET NO.	DRAWING TITLE
G	GENERAL
G - 1	Drawing Schedule
P	PEDESTRIAN UNDERPASS
P - 1	General View (1)
P - 2	General View (2)
P - 3	General View (3)
P - 4	General View (4)
P - 5	General View (5)
P - 6	Re-bar Arrangement (1)
P - 7	Re-bar Arrangement (2)
P - 8	Re-bar Arrangement (3)
P - 9	Re-bar Arrangement (4)
P - 10	Re-bar Arrangement (5)
P - 11	Re-bar Arrangement (6)
P - 12	Re-bar Arrangement (7)
P - 13	Re-bar Arrangement (8)
P - 14	Re-bar Arrangement (9)
P - 15	Re-bar Arrangement (10)
T	TEMPORARY WORKS
T - 1	Construction Sequence
T - 2	Detour Layout

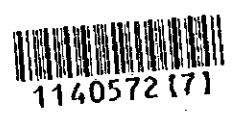
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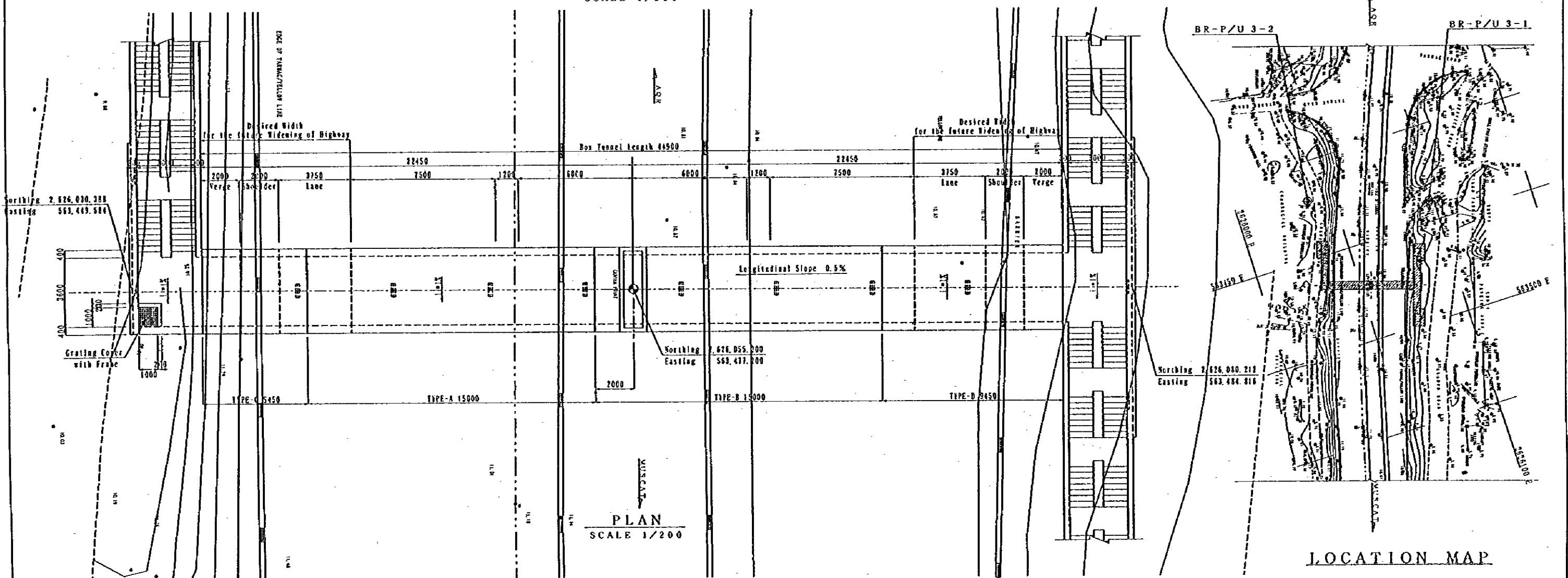
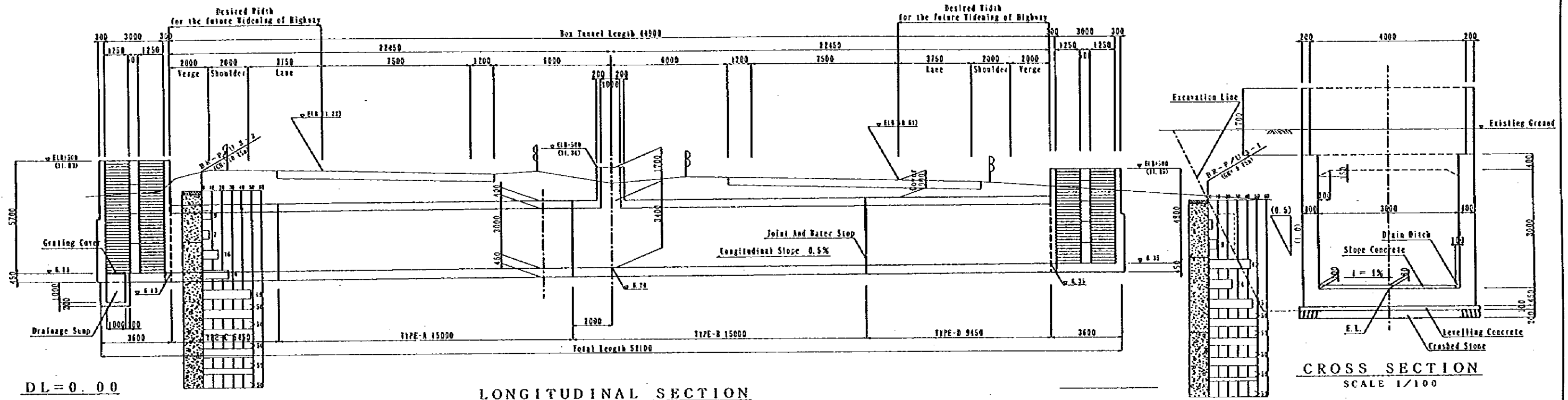
JAPAN INTERNATIONAL COOPERATION AGENCY
(JICA)
JICA STUDY TEAM
PACIFIC CONSULTANTS INTERNATIONAL
FUKUYAMA CONSULTANTS INTERNATIONAL

CLIENT :	MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS
PROJECT :	D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY
TITLE :	PU-3, A' TAREEF DRAWING SCHEDULE
DATE :	DWG NO. G-1

1140572 (7)

Item No.	Description	Quantity
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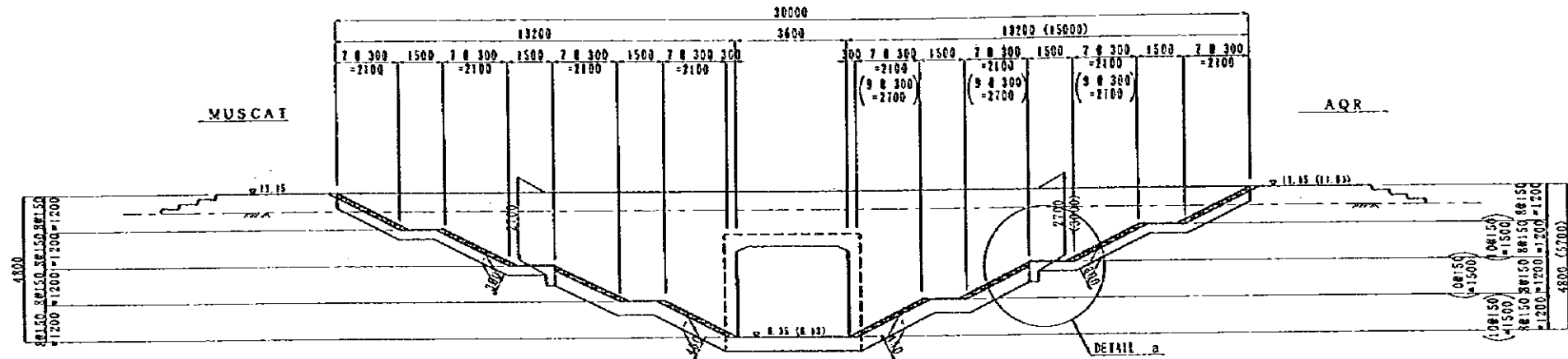


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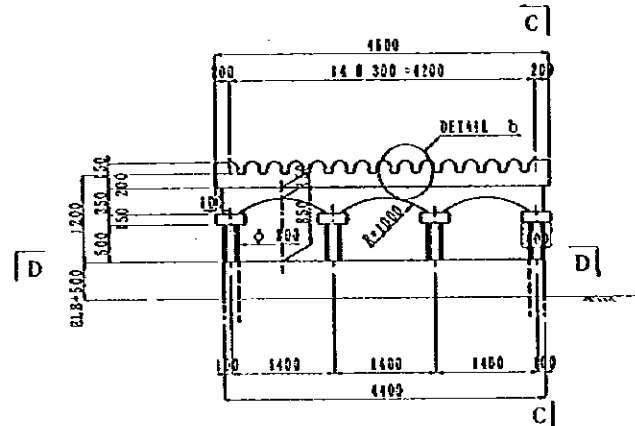
JAPAN INTERNATIONAL COOPERATION AGENCY
(JICA)

JICA STUDY TEAM
PACIFIC CONSULTANTS INTERNATIONAL
FUKUYAMA CONSULTANTS INTERNATIONAL

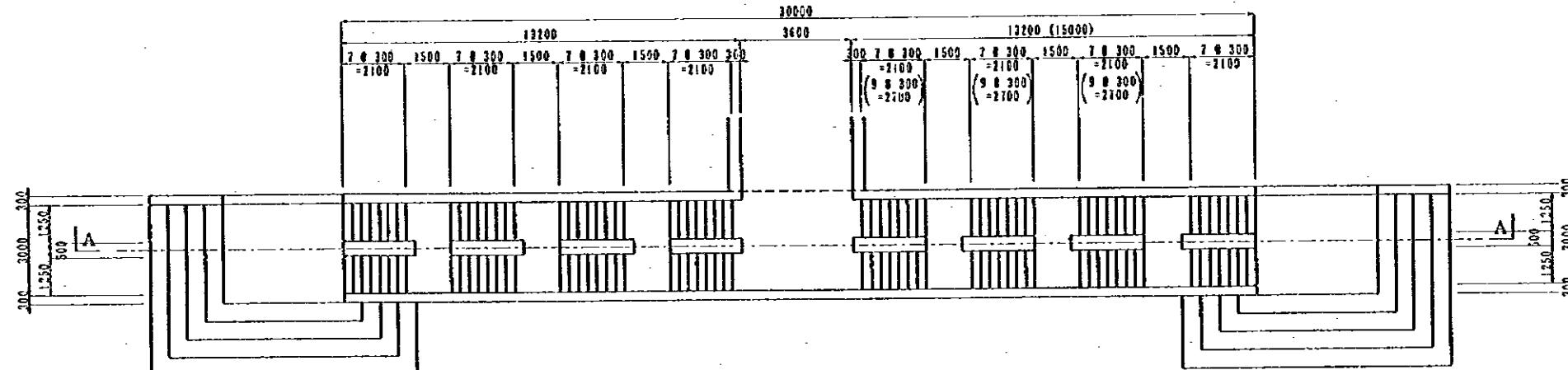
CLIENT : MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS
PROJECT : D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY
TITLE : P/U-3, A' TAREEF GENERAL VIEW (I)
DATE : _____ DWG NO. P-1



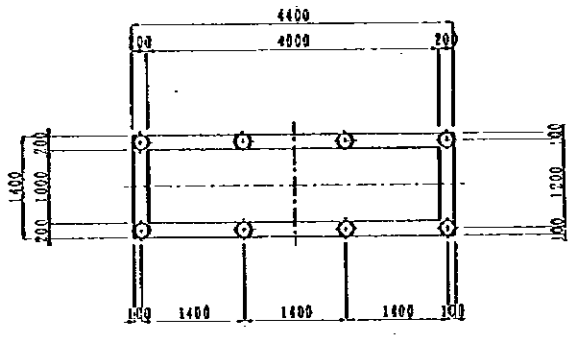
STAIR (SECTION A-A)
SCALE 1/200



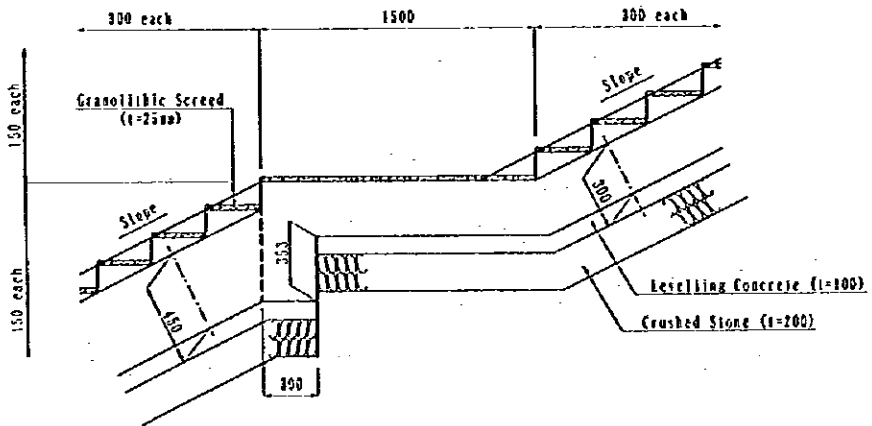
SIDE ELEVATION
SCALE 1/100



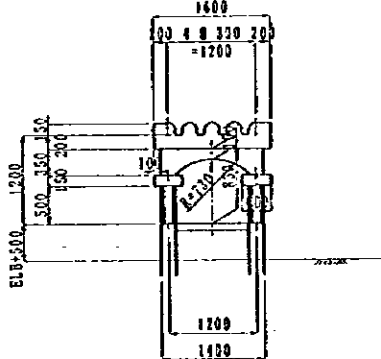
PLAN OF STAIR
SCALE 1/200



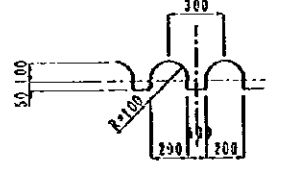
SECTION D-D
SCALE 1/100



DETAIL a
SCALE 1/40



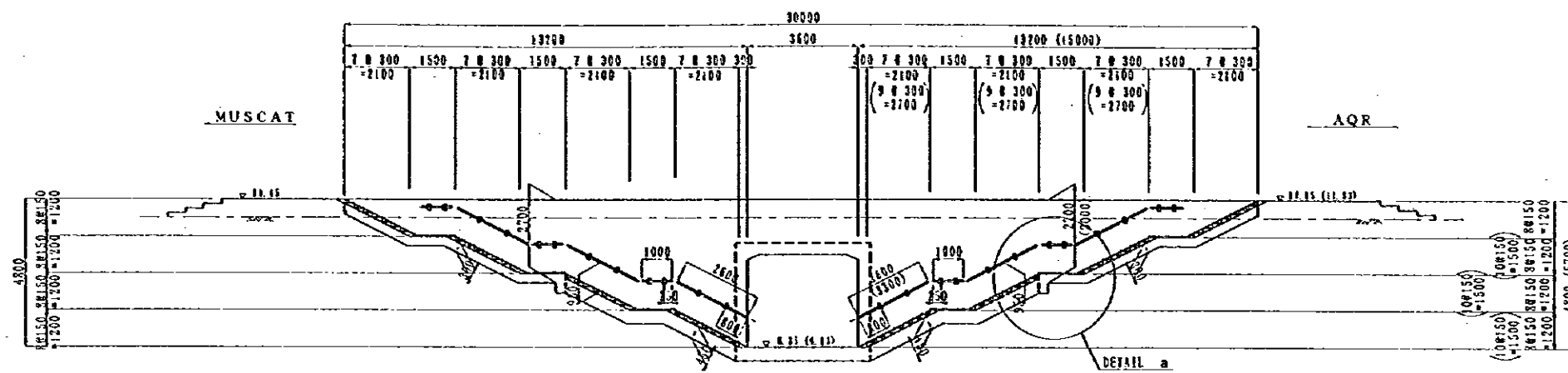
SECTION B-B
SCALE 1/100



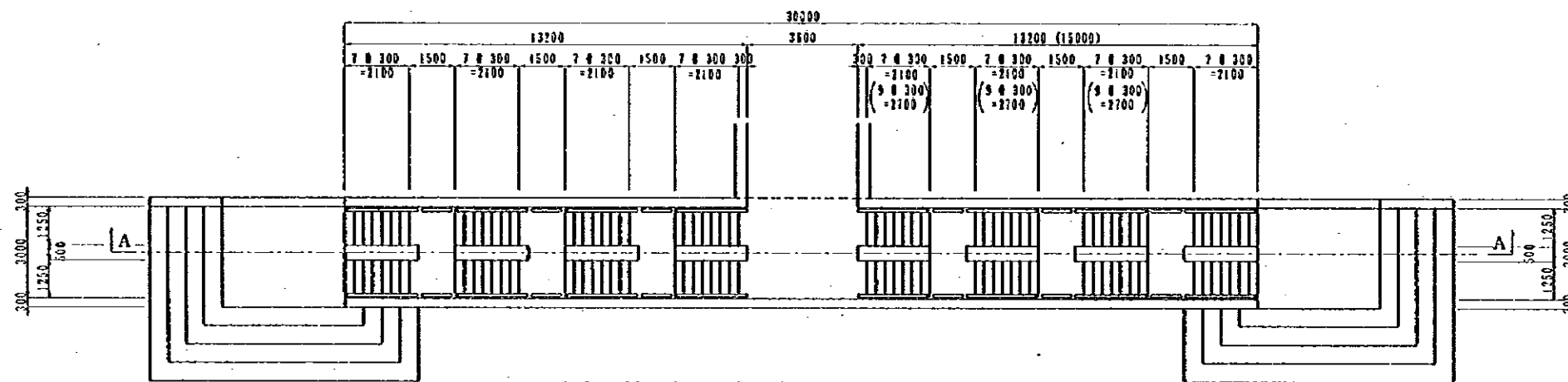
DETAIL b
SCALE 1/40

CANOPY ON LIGHT WELL

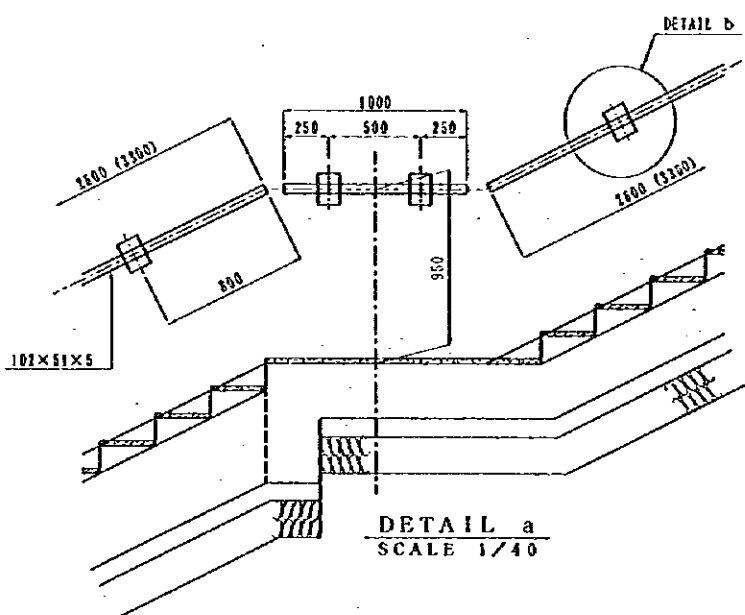
NOTES: Dimensionless of () value are for inland stair.	JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	CLIENT : MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS
	JICA STUDY TEAM PACIFIC CONSULTANTS INTERNATIONAL FUJIKAWA CONSULTANTS INTERNATIONAL	PROJECT : D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY
		TITLE : P/U-3, 'A' TAREEF GENERAL VIEW (2)
		DATE : _____ DWG NO. P-2



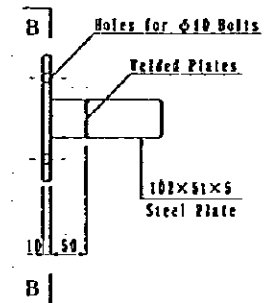
STAIR HANDRAILE (SECTION A-A)
SCALE 1/200



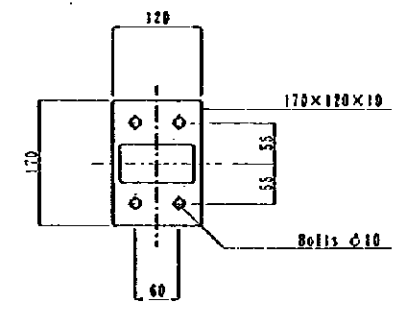
PLAN OF STAIR HANDRAILE
SCALE 1/200



DETAIL a
SCALE 1/40



DETAIL b
SCALE 1/10

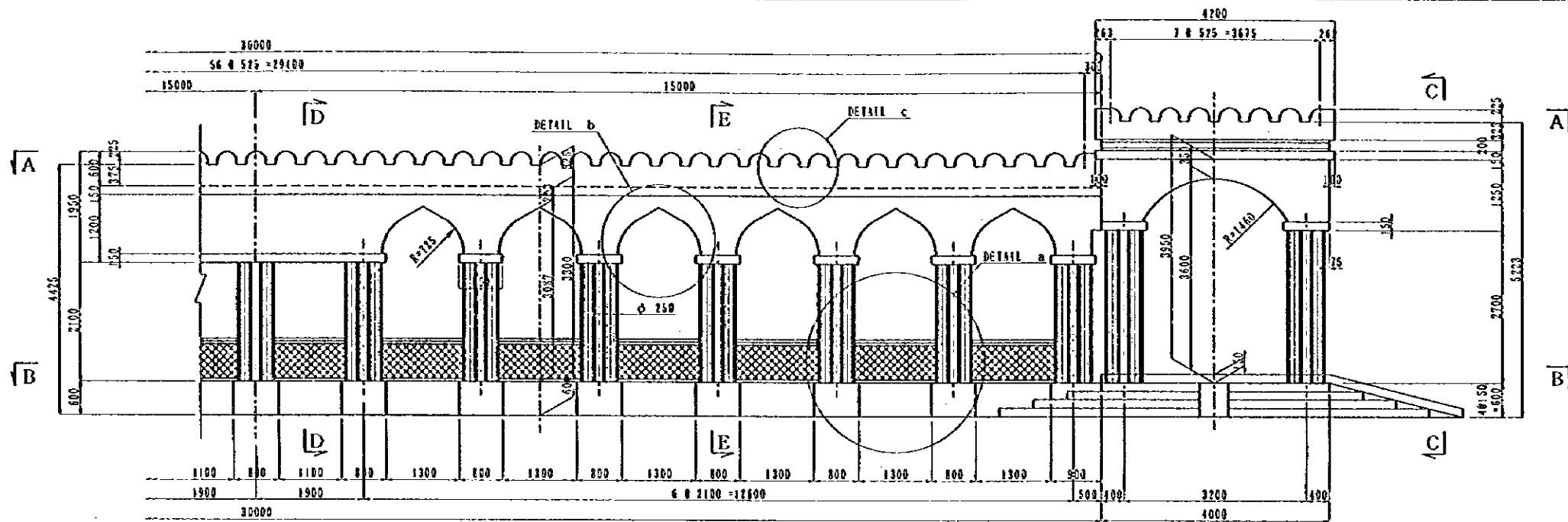


SECTION B-B
SCALE 1/10

NOTES: Dimensions of () value are for inland stair.

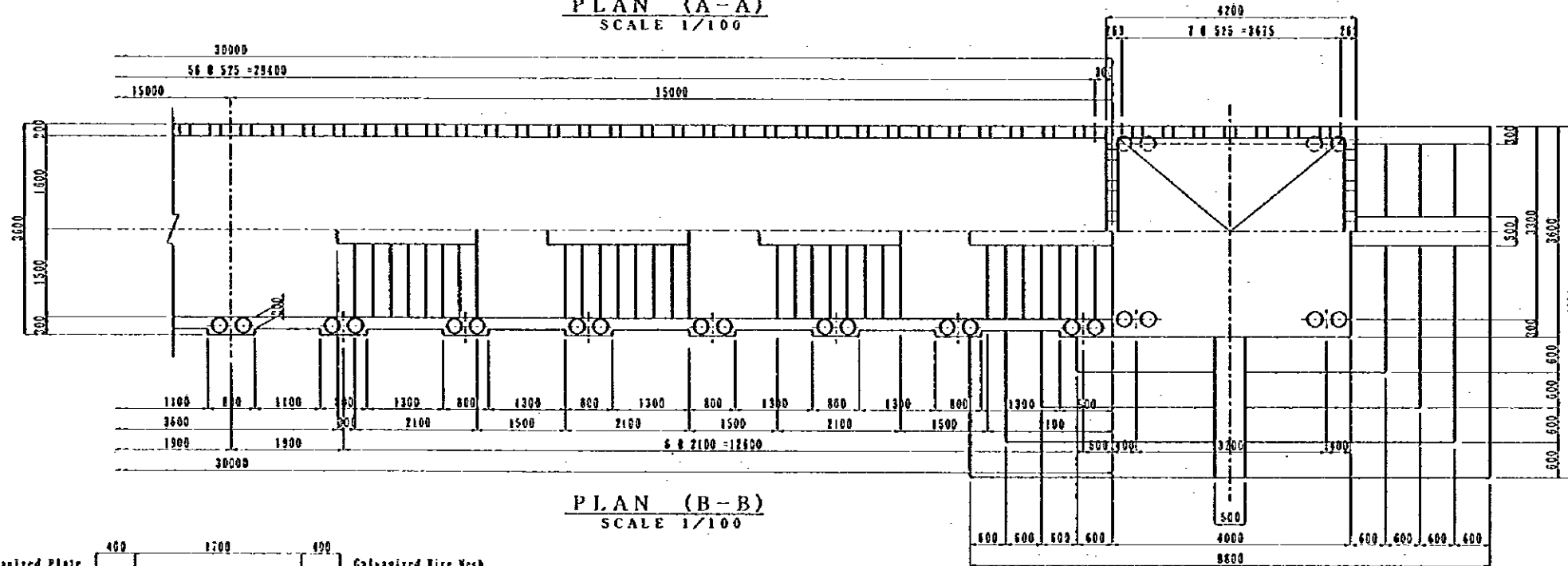
JAPAN INTERNATIONAL COOPERATION AGENCY
(JICA)
JICA STUDY TEAM
PACIFIC CONSULTANTS INTERNATIONAL
FLKRYANA CONSULTANTS INTERNATIONAL

CLIENT : MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS
PROJECT : D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY
TITLE : P/U-3, A' TAREEF GENERAL VIEW (3)
DATE : _____ DWG NO. : P-3

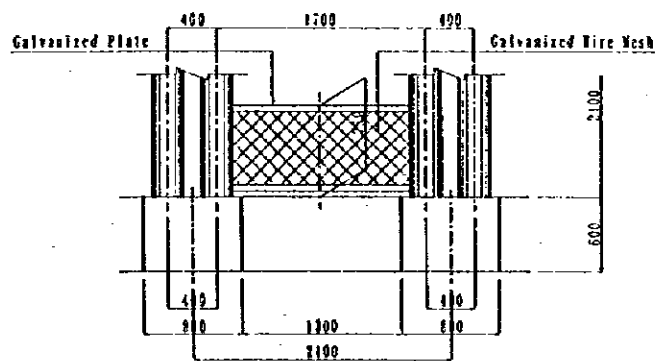


PROFILE OF CANOPY
SCALE 1/100

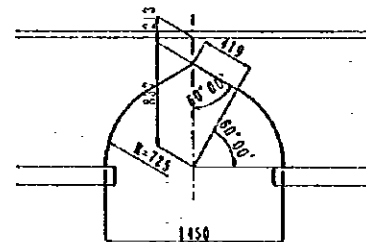
PLAN (A-A)
SCALE 1/100



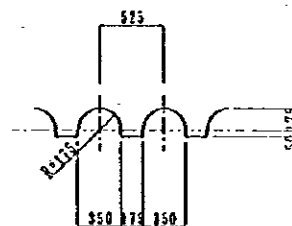
PLAN (B-B)
SCALE 1/100



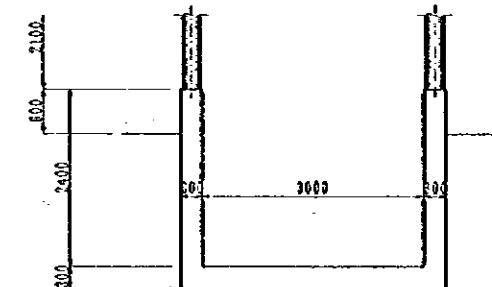
DETAIL a
SCALE 1/60



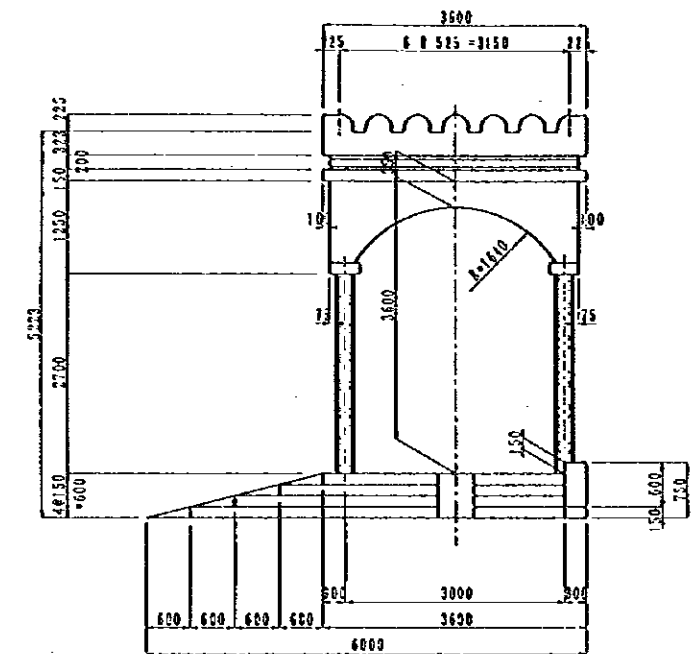
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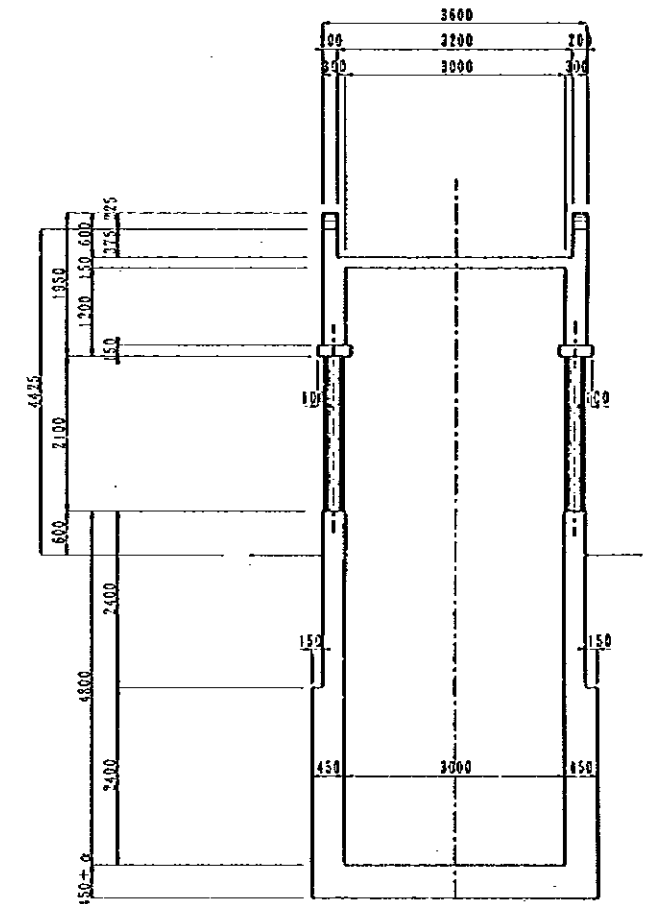
DETAIL c
SCALE 1/60



CROSS SECTION E-E
SCALE 1/100



ENTRANCE (C-C)
SCALE 1/100



CROSS SECTION D-D
SCALE 1/100

NOTES:

JAPAN INTERNATIONAL COOPERATION AGENCY
(JICA)

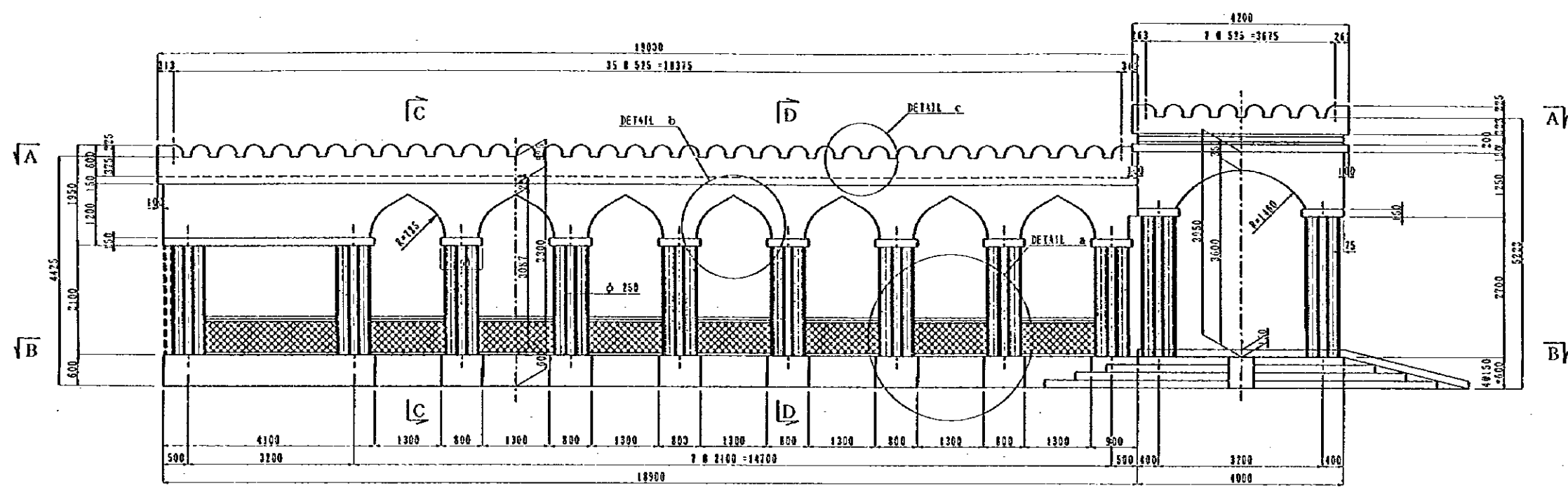
JICA STUDY TEAM
PACIFIC CONSULTANTS INTERNATIONAL
FURUYAMA CONSULTANTS INTERNATIONAL

CLIENT : MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS

PROJECT : D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY

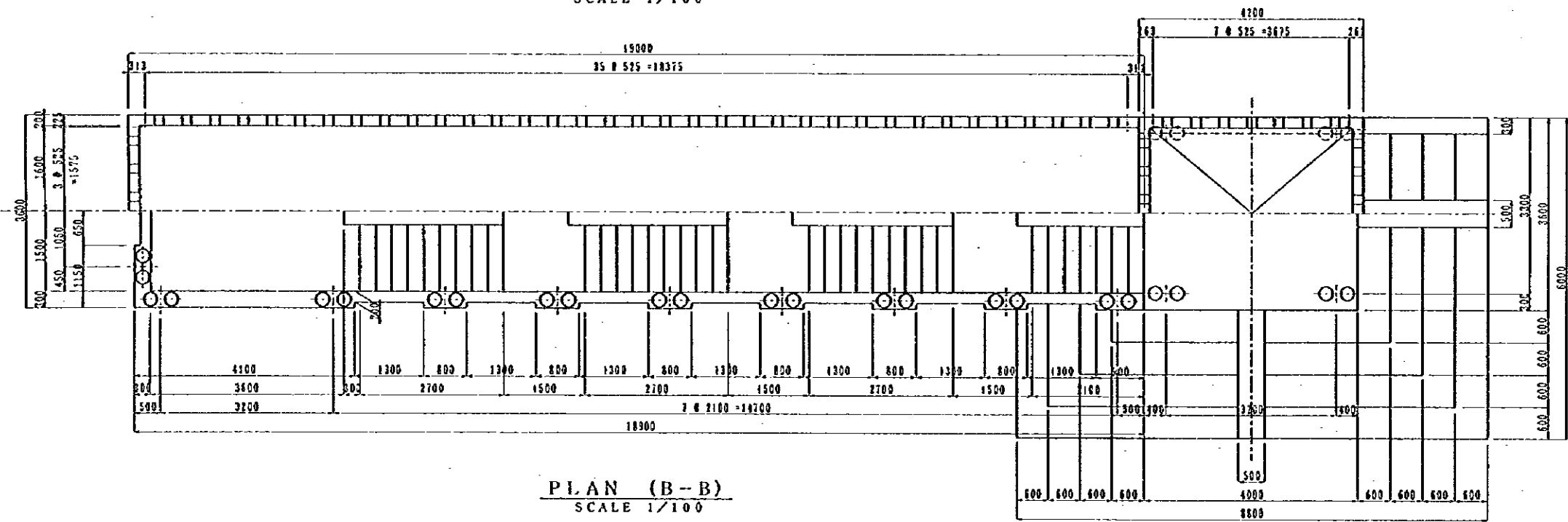
TITLE : P/U-3, A' TAREEF GENERAL VIEW (4)

DATE : _____ DWG NO. P-4

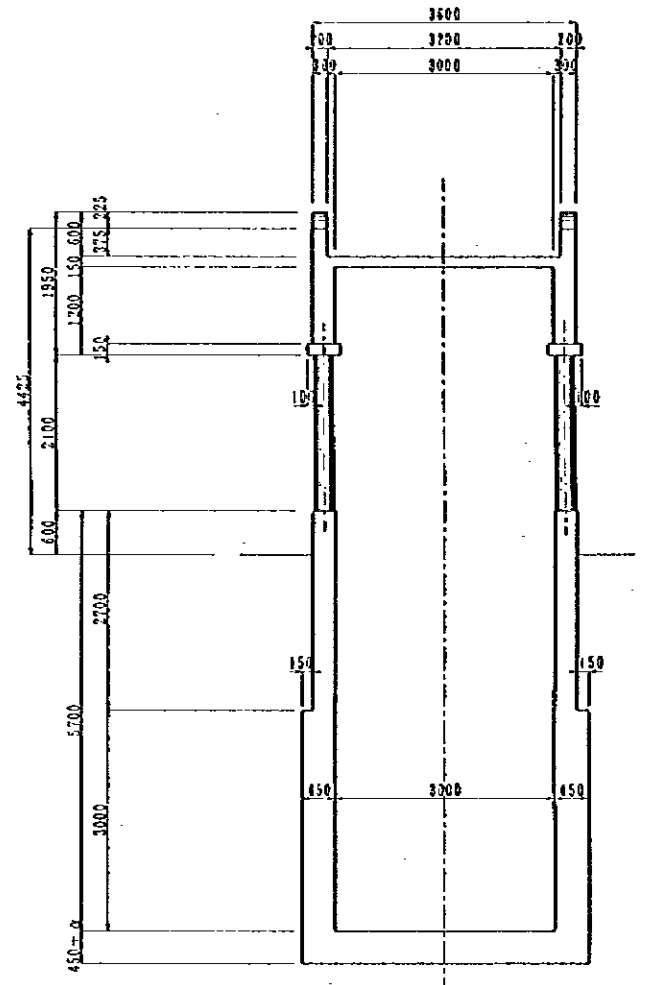


PROFILE OF CANOPY
SCALE 1/100

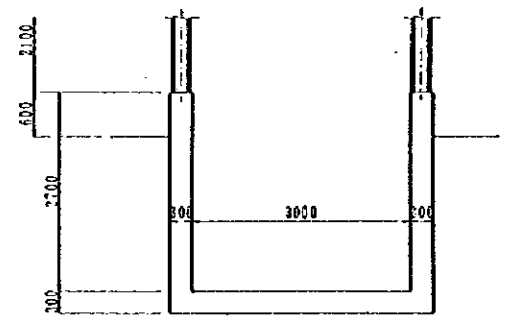
PLAN (A-A)
SCALE 1/100



PLAN (B-B)
SCALE 1/100



CROSS SECTION C-C
SCALE 1/100

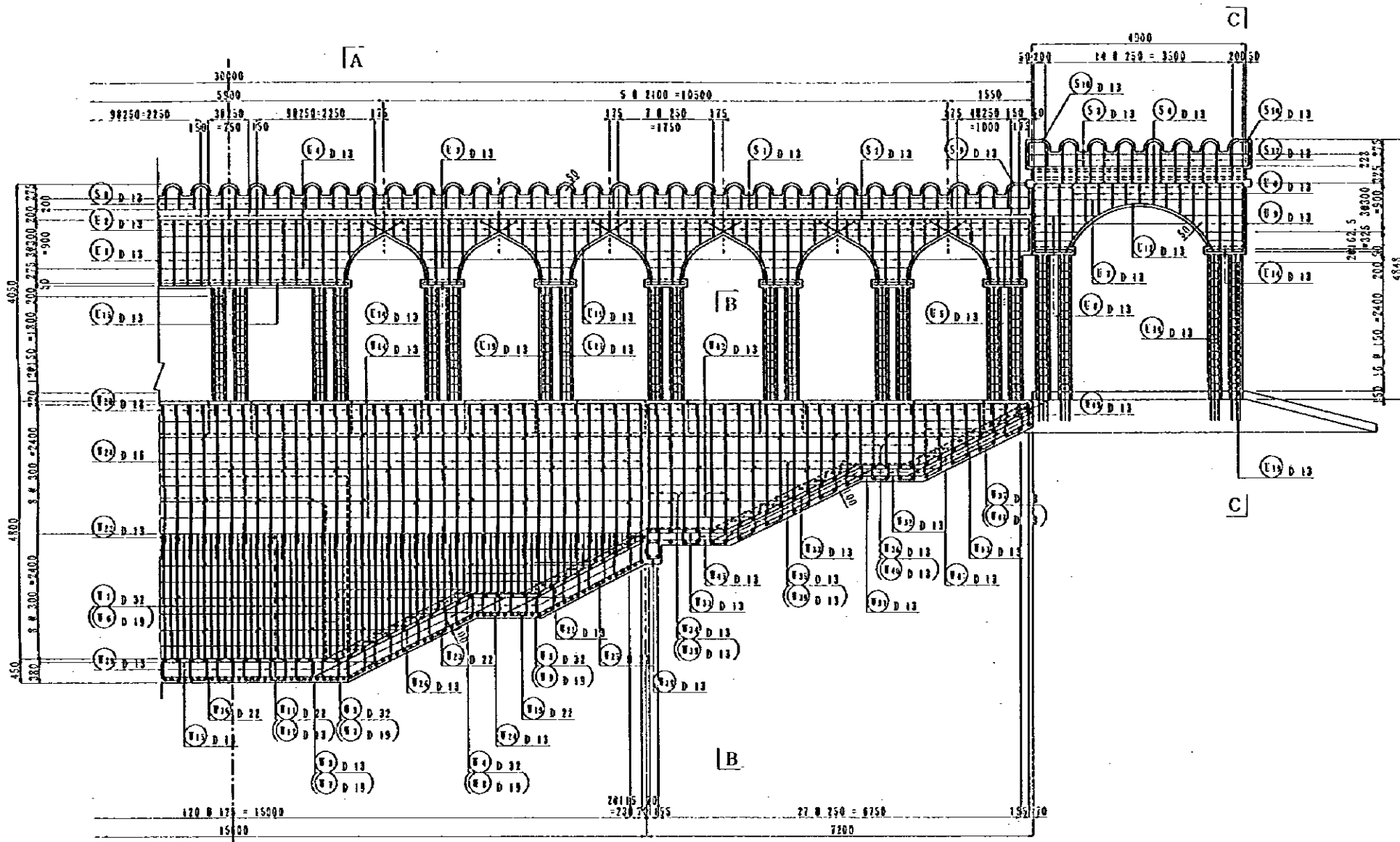


CROSS SECTION D-D
SCALE 1/100

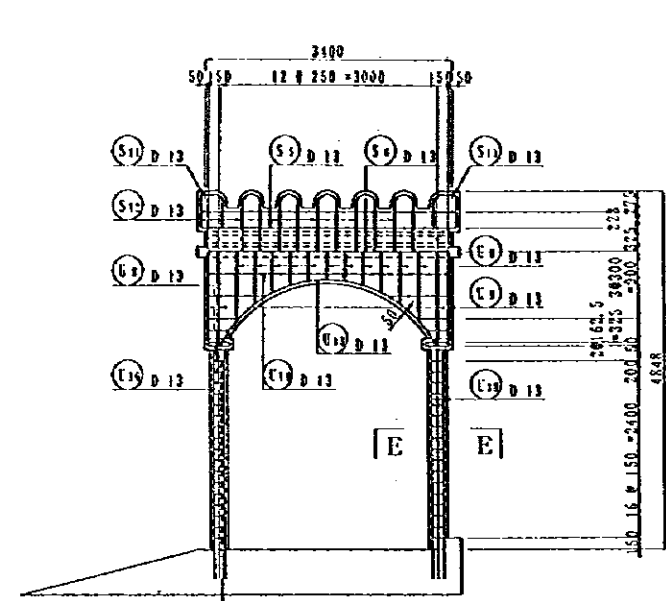
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JAPAN INTERNATIONAL COOPERATION AGENCY
(JICA)
JICA STUDY TEAM
PACIFIC CONSULTANTS INTERNATIONAL
FUKUYAMA CONSULTANTS INTERNATIONAL

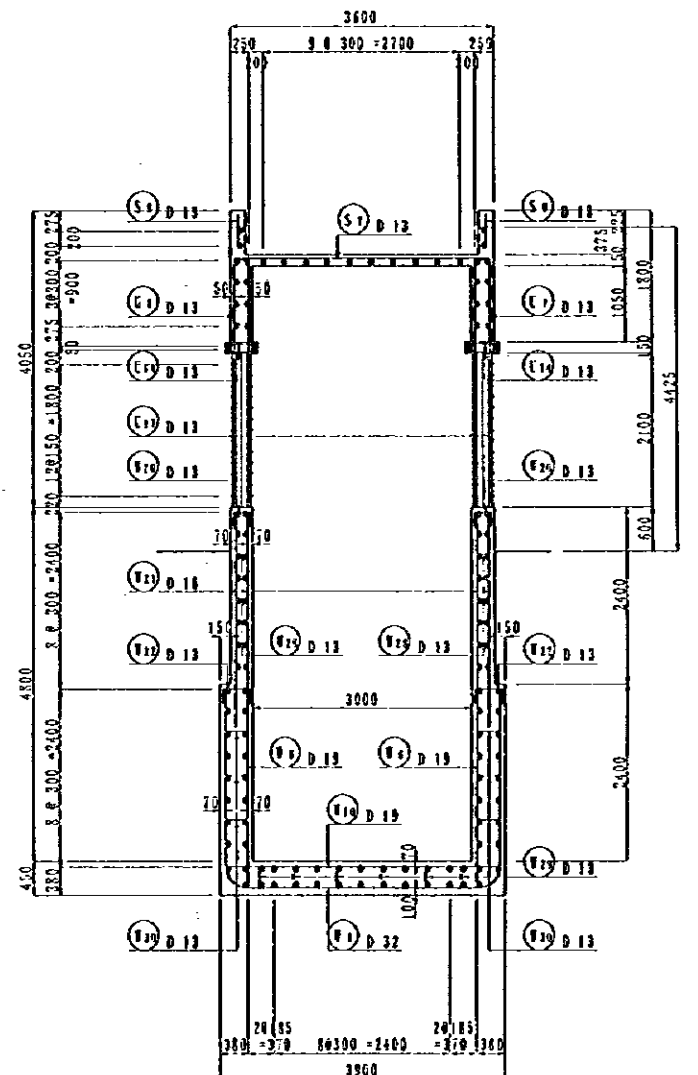
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PROJECT : D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY
TITLE : P/U-3, A' TAREEF GENERAL VIEW (S)
DATE :
DWG NO. P - 5



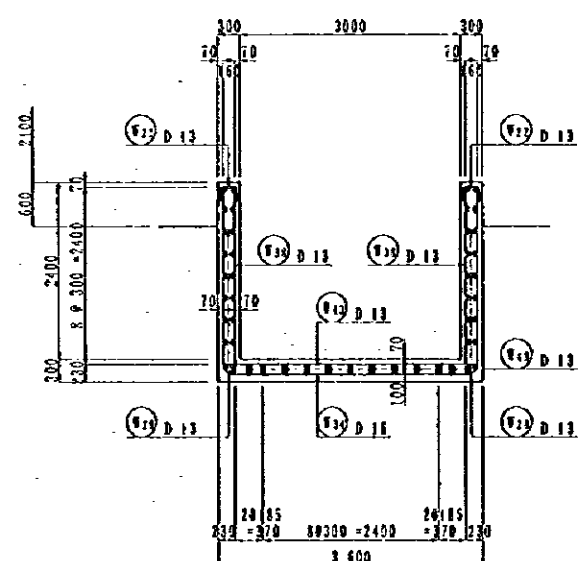
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SIDE VIEW
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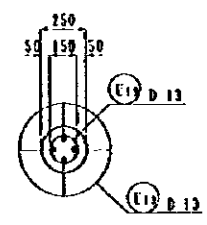
C-C
 S=1/100



A-A
 S=1/100



B-B
 S=1/100

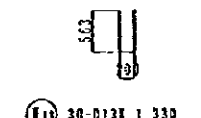
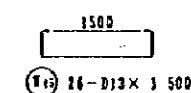
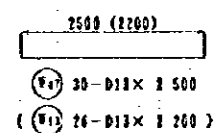
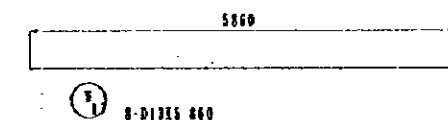
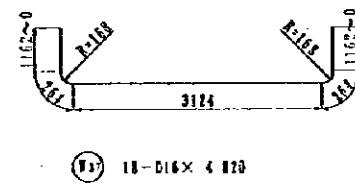
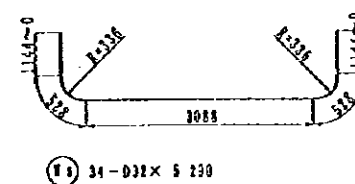
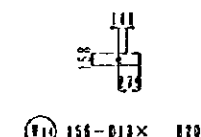
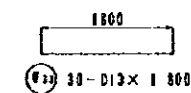
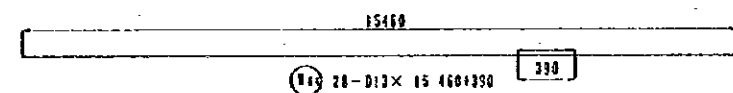
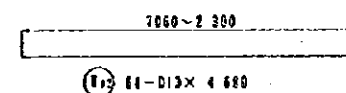
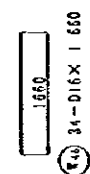
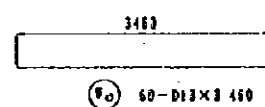
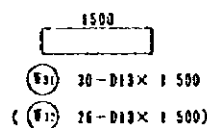
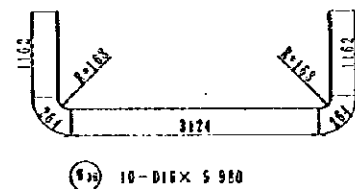
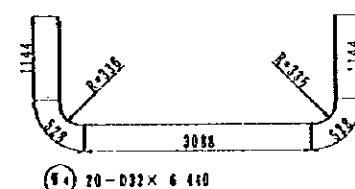
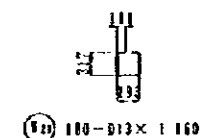
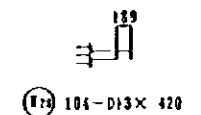
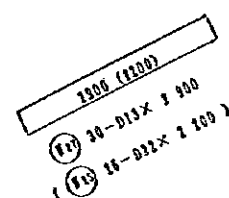
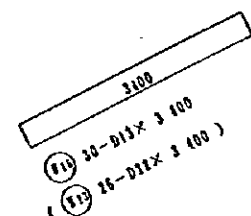
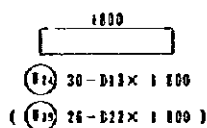
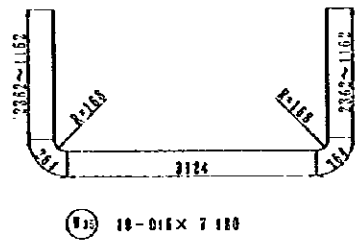
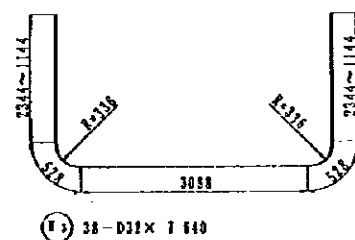
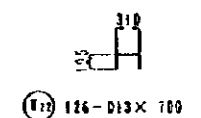
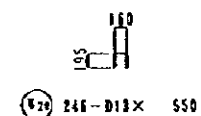
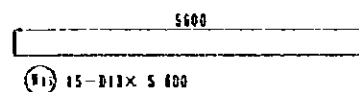
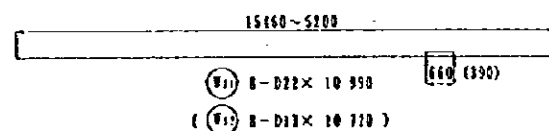
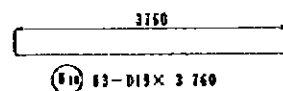
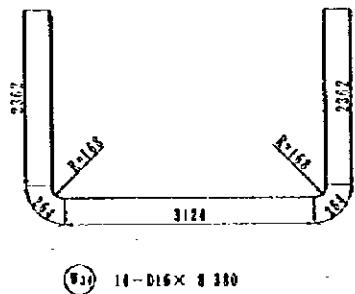
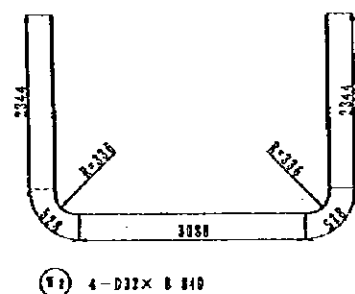
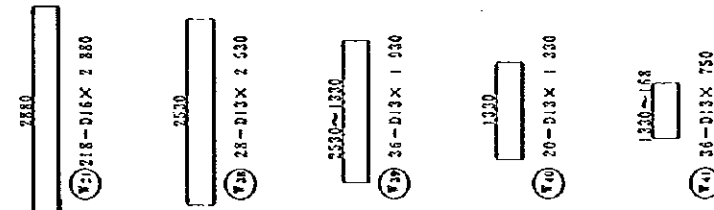
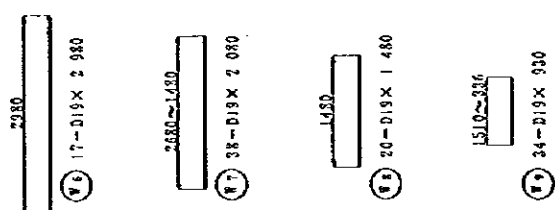
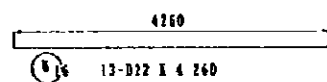
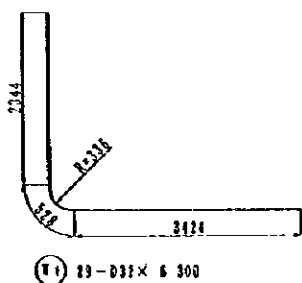


E-E
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NOTES:

JAPAN INTERNATIONAL COOPERATION AGENCY
 (JICA)
 JICA STUDY TEAM
 PACIFIC CONSULTANTS INTERNATIONAL
 FUKUYAMA CONSULTANTS INTERNATIONAL

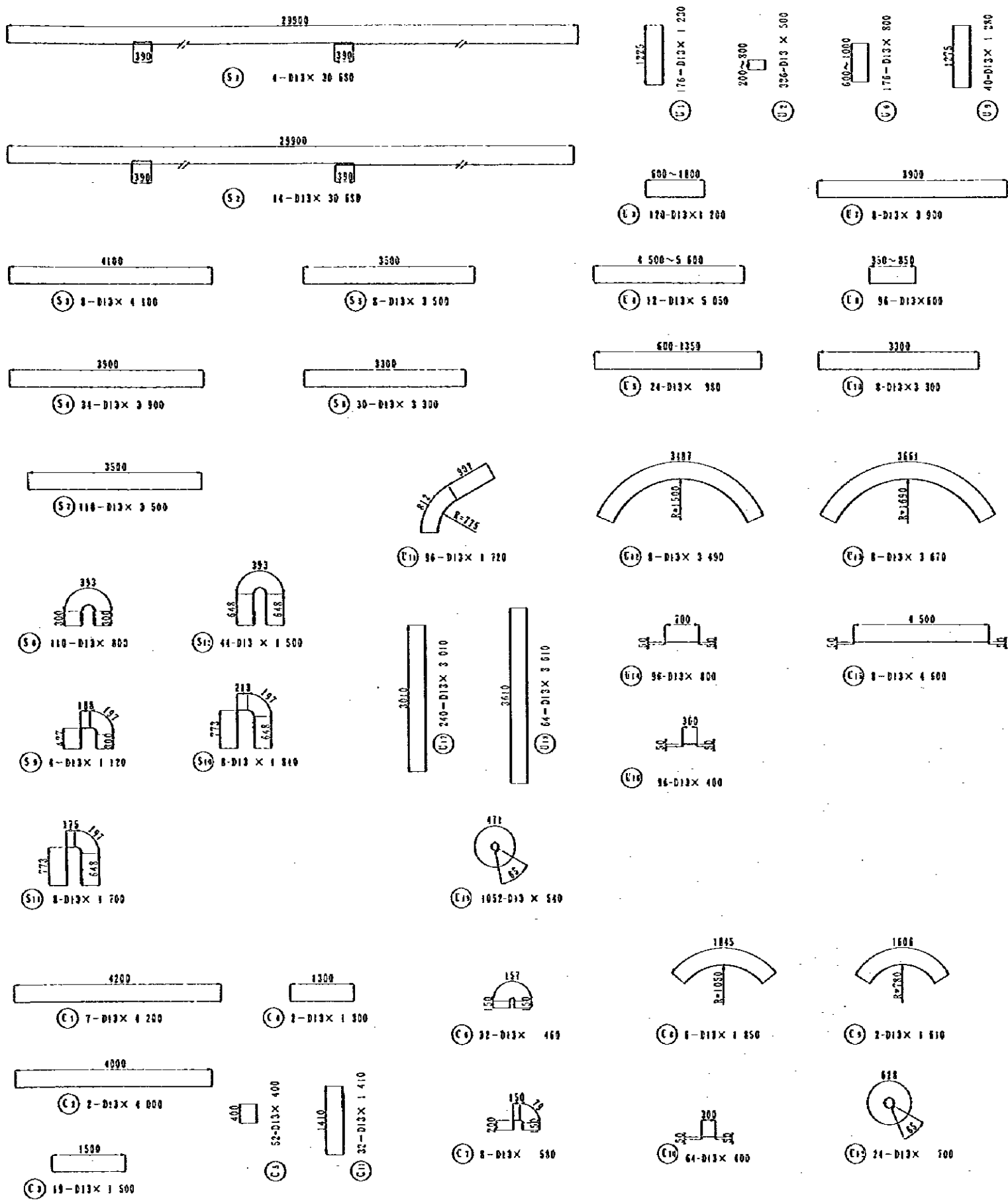
CLIENT : MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS
 PROJECT : D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY
 TITLE : P/U-3, A' TAREEF RE-BAR ARRANGEMENT (1)
 DATE : _____
 DWG NO. P-6



NOTES:

JAPAN INTERNATIONAL COOPERATION AGENCY
(JICA)
JICA STUDY TEAM
PACIFIC CONSULTANTS INTERNATIONAL
FUKUYAMA CONSULTANTS INTERNATIONAL

CLIENT : MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS
PROJECT : D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY
TITLE : P/U-3. A' TAREEF RE-BAR ARRANGEMENT (2)
DATE : _____
DWG NO. P-7



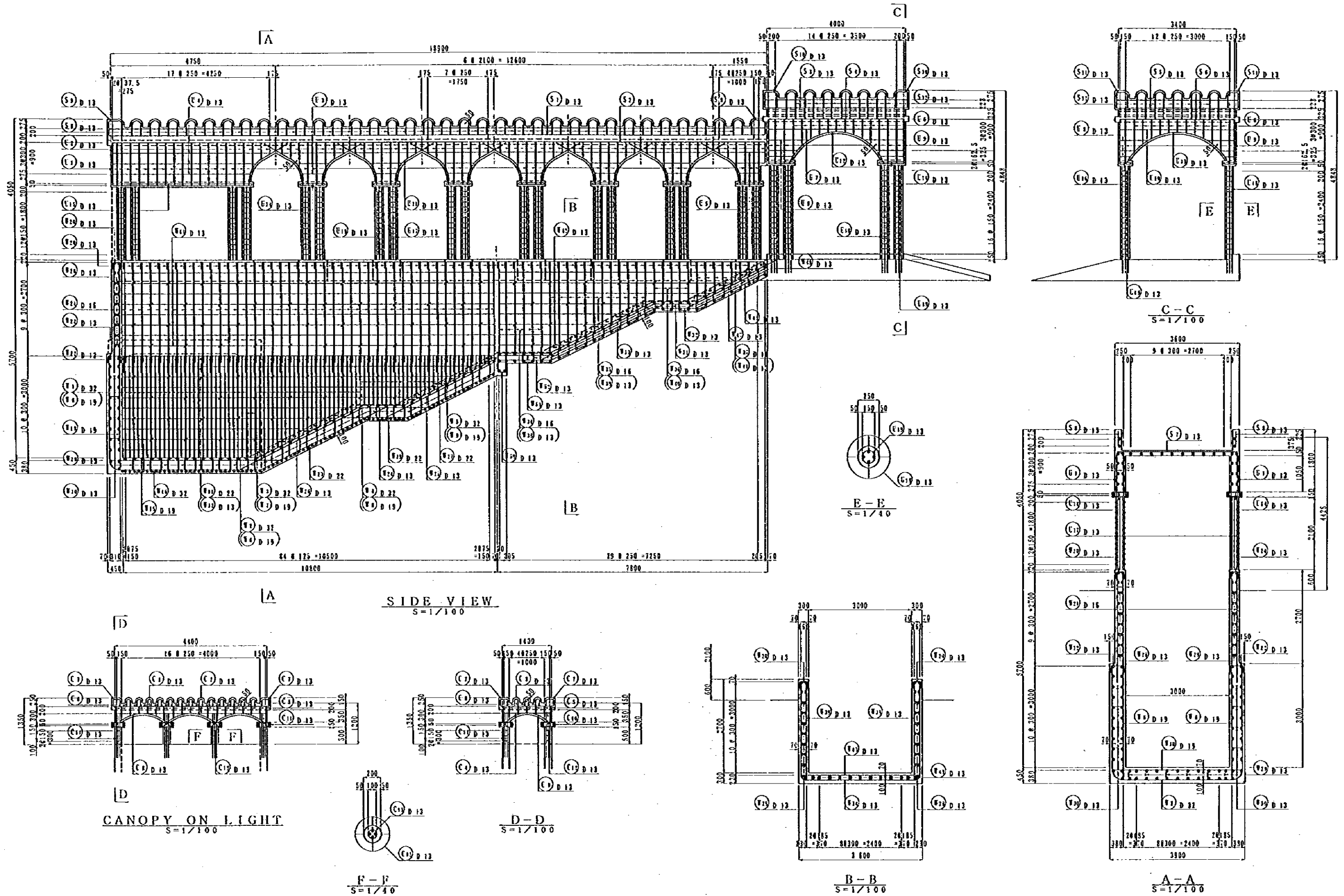
REIN. NO.	∅ (mm)	LENGTH (mm)	NOMINAL WEIGHT	NUMB	E WEIGHT	WEIGHT	REMARKS
1	D 32	6 300	6.403	29	40.333	1169.8	
2	"	8 840	"	4	56.603	226.4	
3	"	7 840	"	38	48.919	1858.9	"
4	"	8 440	"	18	41.235	412.4	"
5	"	5 290	"	17	33.812	575.8	"
6	D 19	2 930	2.235	12	6.660	113.2	
7	"	2 920	"	38	5.165	197.0	"
8	"	1 480	"	28	3.308	66.2	"
9	"	910	"	34	2.034	69.2	"
10	"	3 760	"	63	8.404	529.5	"
11	D 22	10 990	3.042	8	24.310	267.3	
12	D 13	10 720	0.994	8	10.656	85.2	"
13	"	2 200	"	26	2.187	66.9	"
14	"	820	"	156	0.815	127.2	
15	D 13	5 600	0.994	15	6.566	83.5	"
16	D 22	4 260	3.042	13	12.959	168.5	"
17	D 13	5 860	0.994	8	5.825	46.6	"
18	"	1 330	"	30	1.322	39.7	
19	D 22	1 800	3.042	26	5.476	142.4	"
20	D 13	550	0.994	246	0.547	124.6	
21	D 16	2 680	1.552	218	4.470	974.5	
22	D 13	700	0.994	126	0.636	82.7	
23	D 22	3 400	3.042	26	10.313	268.9	
24	D 13	1 800	0.994	30	1.785	53.7	"
25	D 22	2 200	3.042	26	6.692	174.0	"
26	D 13	3 400	0.994	30	3.380	101.4	"
27	"	2 900	"	30	2.883	88.5	"
28	D 13	420	0.994	104	0.417	43.4	"
29	"	1 160	"	160	1.153	207.5	
30	"	580	"	39	0.577	22.5	"
31	"	1 500	"	30	1.491	44.7	"
32	"	1 500	"	26	1.491	38.8	"
33	"	1 800	"	30	1.789	53.7	"
34	D 16	8 380	1.552	14	13.006	192.1	
35	"	7 180	"	18	11.143	200.6	"
36	"	5 980	"	18	5.281	92.8	"
37	"	4 820	"	18	7.481	134.7	"
38	D 13	2 520	0.994	28	2.515	70.4	
39	"	1 930	"	36	1.918	69.1	"
40	"	1 330	"	20	1.322	26.4	"
41	"	750	"	36	0.746	26.8	"
42	"	4 680	"	61	4.652	197.7	"
43	"	3 460	"	60	3.439	206.4	"
44	"	15 850	"	28	15.755	481.1	"
45	"	1 500	"	26	1.491	38.8	"
46	D 16	1 660	1.552	34	2.576	87.6	
47	D 13	2 500	0.994	30	2.485	74.6	
(0476.3)							

REIN. NO.	∅ (mm)	LENGTH (mm)	NOMINAL WEIGHT	NUMB	E WEIGHT	WEIGHT	REMARKS
S 1	D 13	30 650	0.994	4	30.456	127.0	
2	"	30 650	"	14	30.456	426.9	"
3	"	4 100	"	8	4.075	32.6	"
4	"	3 900	"	34	3.877	131.6	"
5	"	3 500	"	8	3.479	27.8	"
6	"	3 300	"	30	3.280	98.4	"
7	"	3 500	"	118	3.479	382.7	"
8	"	800	"	110	0.795	87.5	
9	"	1 120	"	4	1.113	4.5	
10	"	1 840	"	8	1.829	14.6	"
11	"	1 200	"	8	1.690	13.5	"
12	"	1 500	"	14	1.491	65.6	
1 487.9							

E 1	D 13	1 230	0.994	176	1.823	215.2	
2	"	520	"	236	0.497	117.0	"
3	"	1 200	"	120	1.193	143.1	"
4	"	5 050	"	12	5.020	60.2	"
5	"	980	"	24	0.580	12.5	"
6	"	800	"	176	0.795	140.0	
7	"	3 900	"	8	3.877	31.0	"
8	"	600	"	96	0.590	57.3	"
9	"	1 280	"	40	1.272	50.9	"
10	"	3 300	"	8	3.280	26.2	
11	"	1 720	"	36	1.710	164.1	"
12	"	3 490	"	6	3.469	27.8	
13	"	3 670	"	8	3.648	29.2	
14	"	800	"	96	0.795	76.3	
15	"	4 600	"	8	4.612	36.6	"
16	"	400	"	96	0.398	38.2	
17	"	3 810	"	240	2.932	710.1	
18	"	3 610	"	64	3.588	239.7	"
19	"	540	"	1052	0.537	564.7	○
2 799.1							

C 1	D 13	4 260	0.994	7	4.175	29.2	
2	"	4 000	"	2	3.976	8.0	"
3	"	1 500	"	19	1.491	28.3	"
4	"	1 300	"	2	1.292	2.6	"
5	"	600	"	53	0.398	20.7	
6	"	450	"	32	0.457	14.6	
7	"	580	"	8	0.577	4.6	
8	"	1 850	"	6	1.839	11.0	
9	"	1 610	"	2	1.600	3.2	"
10	"	690	"	64	0.398	25.4	
11	"	1 410	"	32	1.402	44.8	
12	"	700	"	24	0.696	18.7	○
705.1							

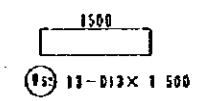
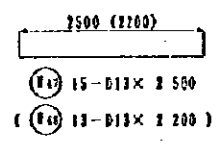
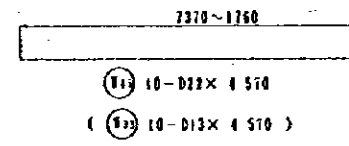
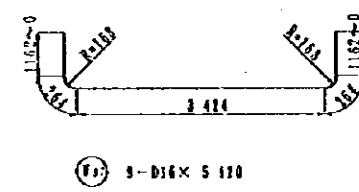
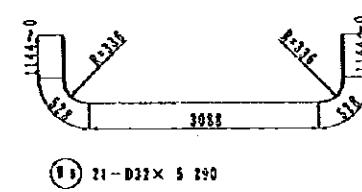
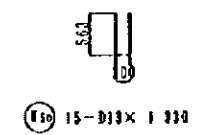
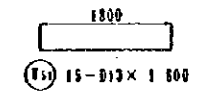
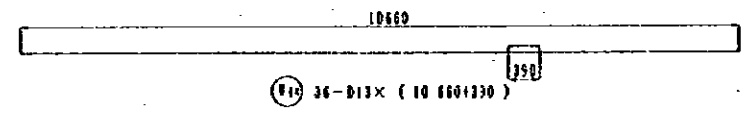
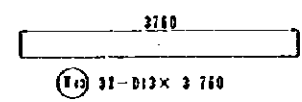
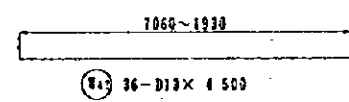
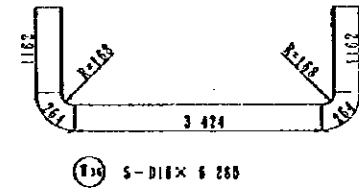
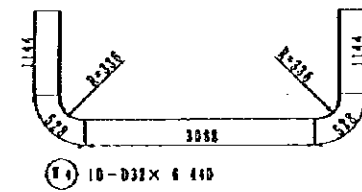
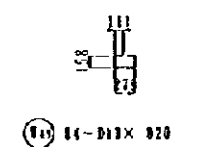
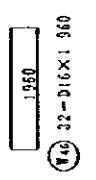
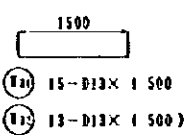
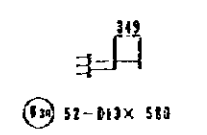
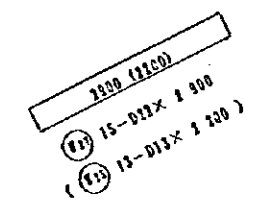
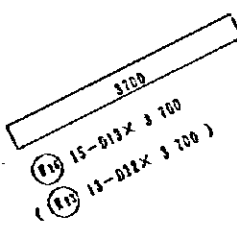
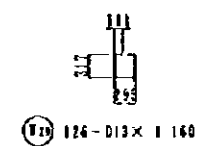
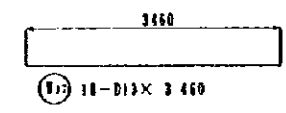
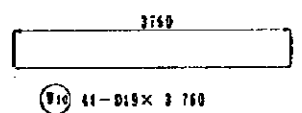
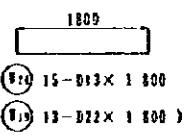
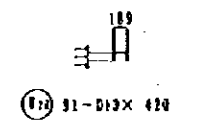
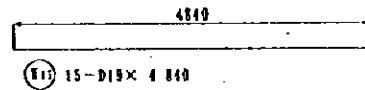
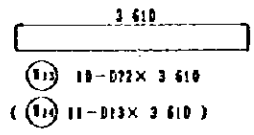
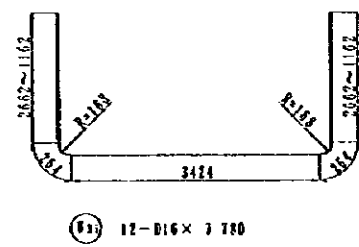
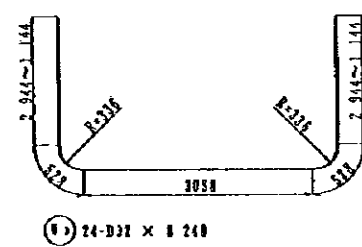
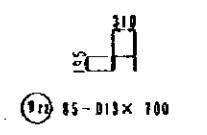
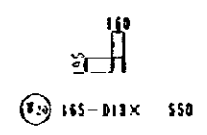
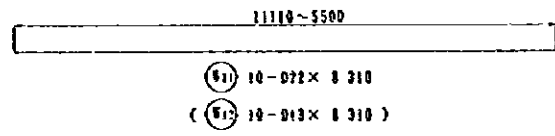
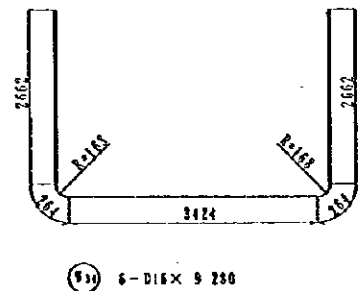
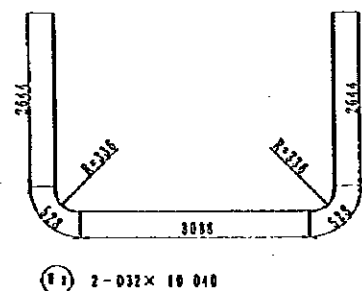
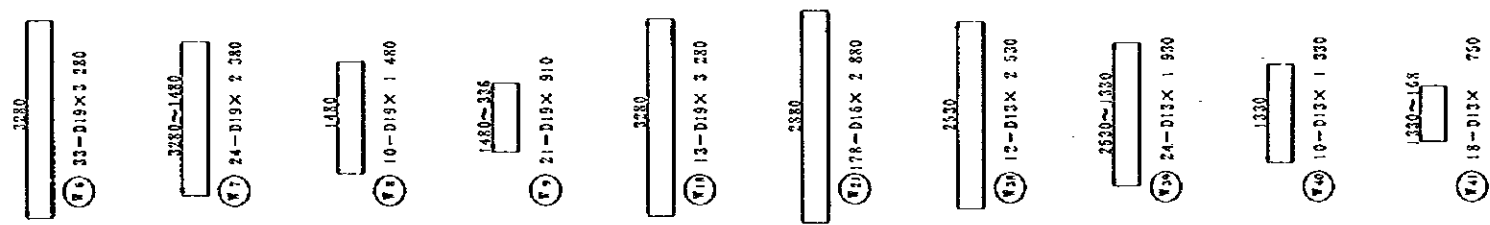
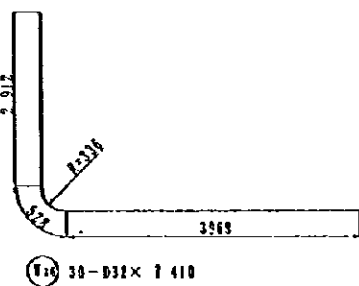
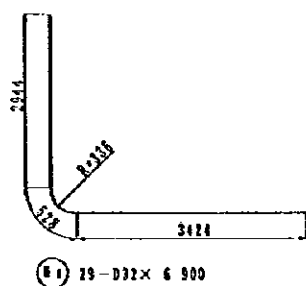
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D 22 1021.1							
D 19 975.1							
D 16 1 672.3							
D 13 6 581.6							
TOTAL WEIGHT 14 652.4							



NOTES:

JAPAN INTERNATIONAL COOPERATION AGENCY
(JICA)
JICA STUDY TEAM
PACIFIC CONSULTANTS INTERNATIONAL
FUJIKAWA CONSULTANTS INTERNATIONAL

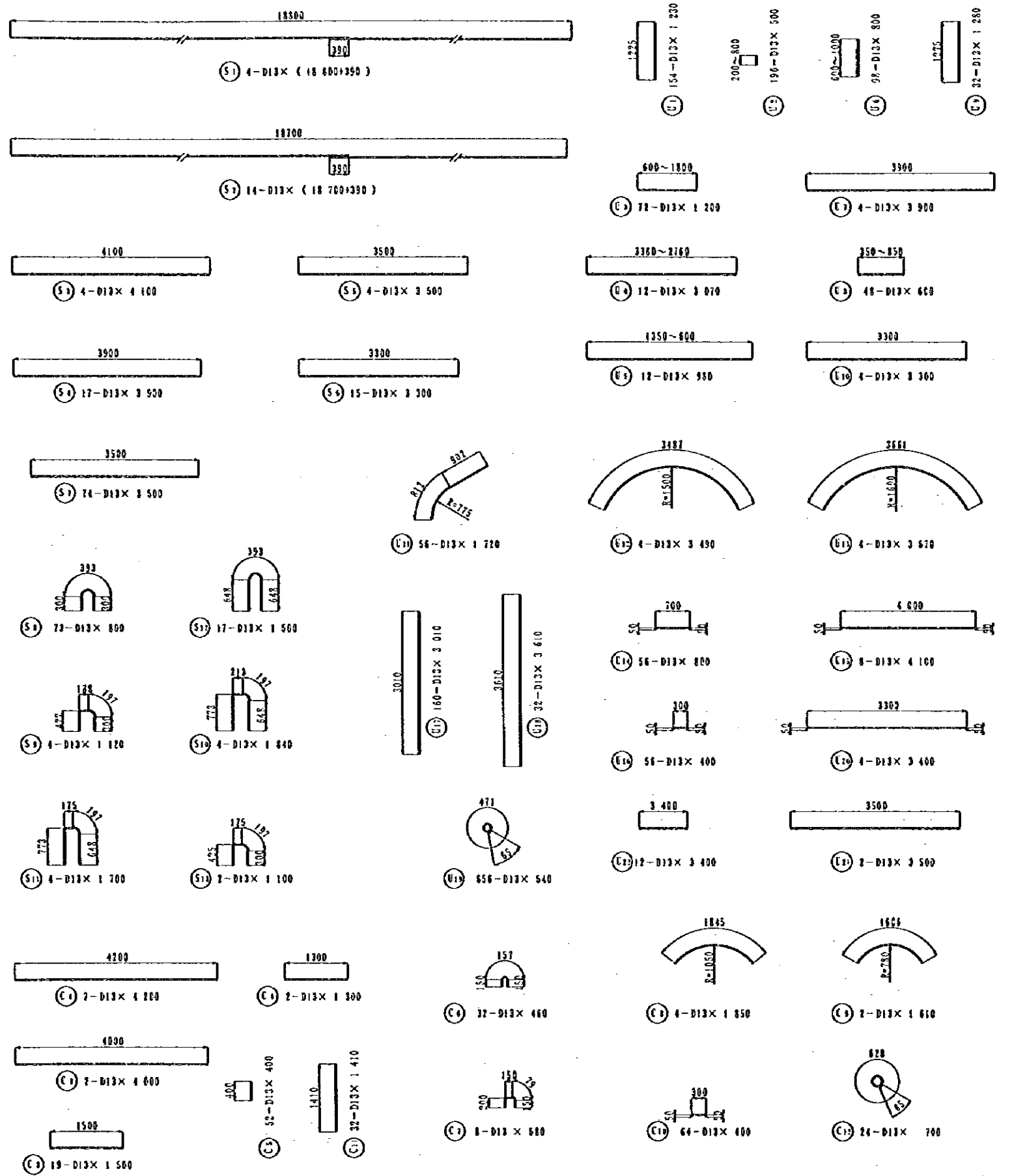
CLIENT : MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS
PROJECT : D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY
TITLE : P/U-3, A' TAREEF RE-BAR ARRANGEMENT (4)
DATE :
DWG NO. P - 9



NOTES:

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
JICA STUDY TEAM
PACIFIC CONSULTANTS INTERNATIONAL
FLUYAMA CONSULTANTS INTERNATIONAL

CLIENT : MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS
PROJECT : D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY
TITLE : P/U-3, A' TAREEF RE-BAR ARRANGEMENT (S)
DATE : DWG NO. P-10



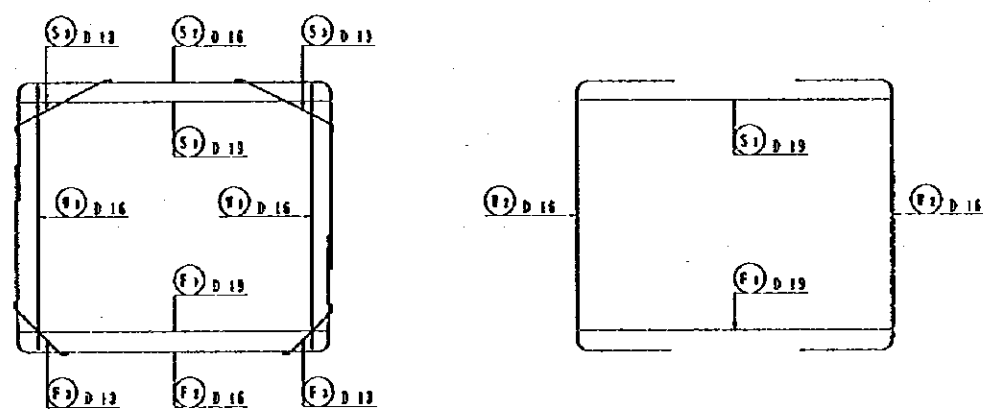
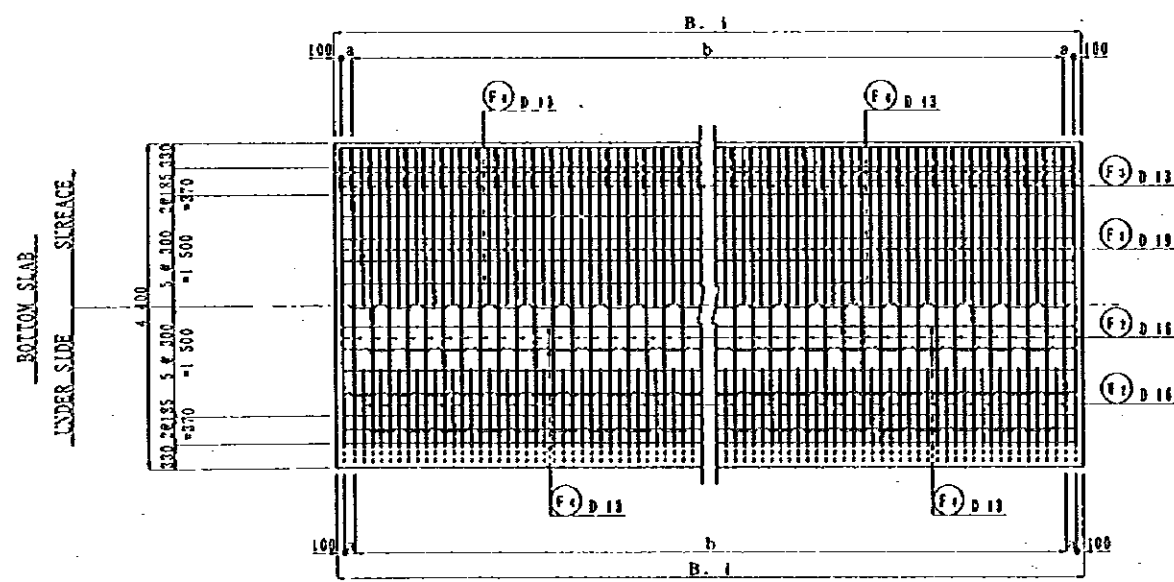
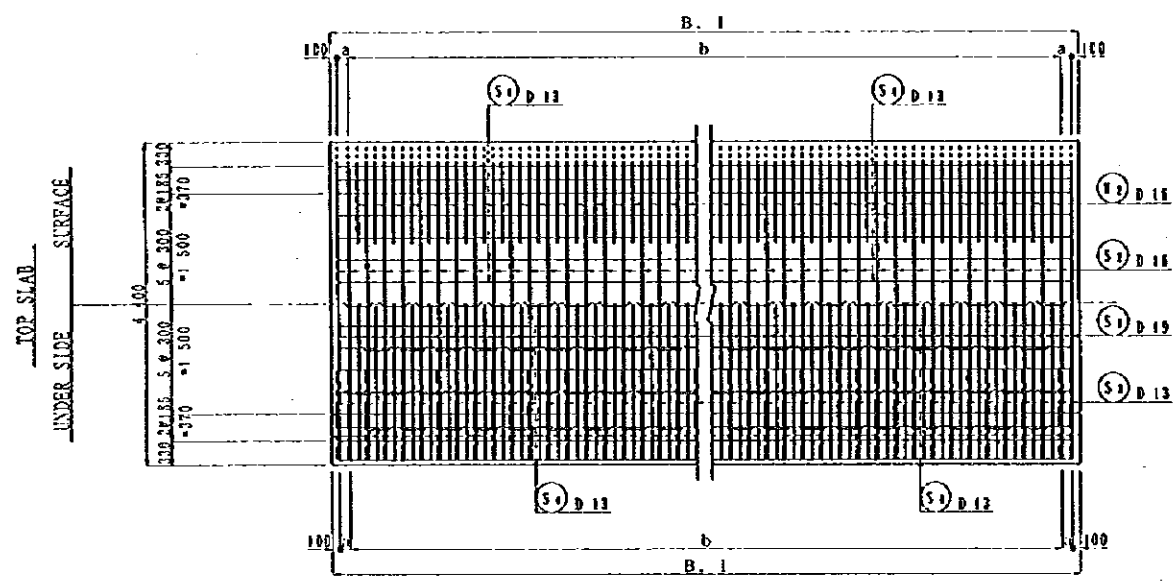
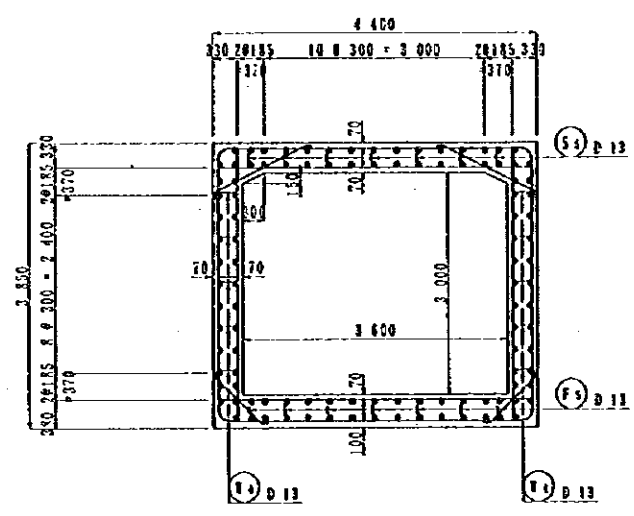
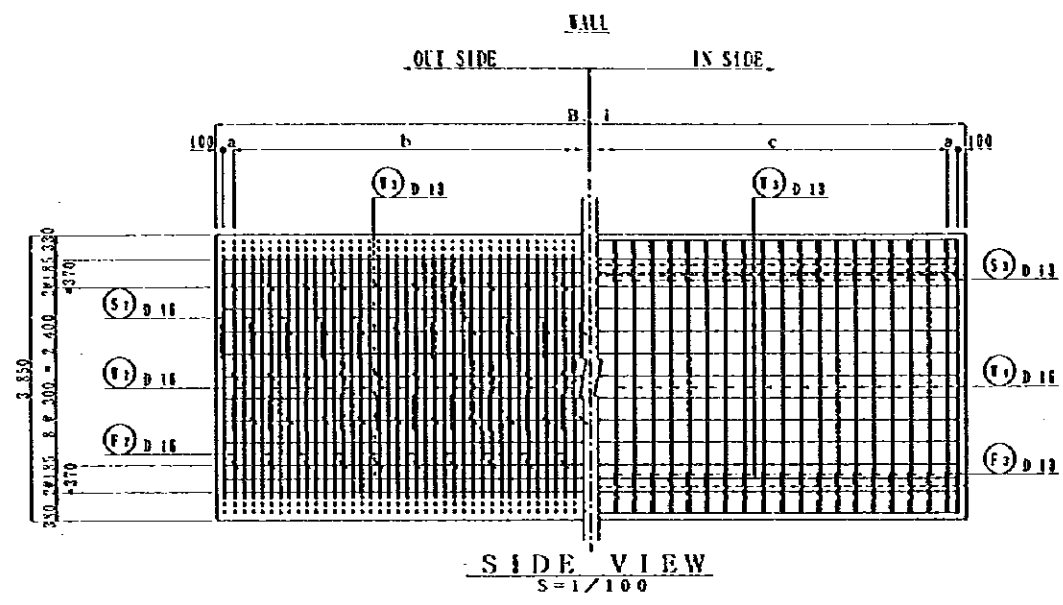
REIN NO.	Ø (mm)	LENGTH (mm)	NOMINAL WEIGHT	NLWB	U WEIGHT	WEIGHT	REMARKS
1	D 32	6 900	6.401	29	44.181	1281.2	
2	"	10 040	"	2	61.286	126.6	
3	"	8 240	"	24	59.595	1260.1	
4	"	8 440	"	10	41.235	412.4	
5	"	5 290	"	21	39.872	711.9	
6	D 19	3 220	2.235	13	7.331	241.9	
7	"	2 380	"	24	5.319	127.7	
8	"	1 450	"	10	3.208	32.1	
9	"	910	"	21	2.034	42.7	
10	"	3 760	"	41	6.404	244.5	
11	D 22	8 310	3.042	10	15.279	252.8	
12	D 13	8 310	0.994	10	8.260	82.6	
13	D 22	3 810	3.042	10	10.932	109.8	
14	D 13	3 810	0.994	11	2.592	33.5	
15	D 19	4 810	2.235	15	10.817	162.3	
16	D 32	7 410	6.401	30	47.446	1423.4	
17	D 13	3 460	0.994	18	3.439	61.9	
18	D 19	3 220	2.235	13	7.331	95.3	
19	D 22	1 800	3.042	13	5.476	71.2	
20	"	550	"	185	1.673	276.1	
21	D 16	2 880	1.552	128	4.470	795.4	
22	D 13	700	0.994	85	8.696	59.1	
23	D 22	3 100	3.042	13	11.255	146.3	
24	D 13	1 800	0.994	15	1.785	26.8	
25	"	2 200	"	13	2.187	28.4	
26	"	3 700	"	15	3.678	55.2	
27	D 22	2 900	3.042	15	8.822	132.3	
28	D 13	420	0.994	91	8.417	38.0	
29	"	1 180	"	126	1.153	145.3	
30	"	580	"	52	0.577	30.0	
31	"	1 500	"	15	1.431	21.4	
32	"	1 500	"	13	1.431	19.4	
33	D 22	4 570	3.042	10	13.902	139.4	
34	D 16	5 280	1.552	6	14.403	86.4	
35	"	7 280	"	12	12.075	144.9	
36	"	8 280	"	5	9.747	48.7	
37	"	5 120	"	9	7.946	71.5	
38	D 13	2 530	0.994	12	2.515	30.2	
39	"	1 920	"	24	1.918	46.0	
40	"	1 350	"	10	1.322	13.2	
41	"	750	"	18	0.746	13.4	
42	"	4 500	"	36	4.423	161.0	
43	"	3 760	"	32	3.737	119.6	
44	"	11 050	"	36	10.984	395.4	
45	"	4 570	"	10	4.543	45.4	
46	D 16	1 980	1.552	12	3.042	32.3	
47	D 13	2 500	0.994	15	2.485	37.3	
48	"	2 200	"	13	2.187	28.4	
49	"	820	"	84	0.815	68.5	
50	"	1 330	"	15	1.322	19.8	
51	"	1 800	"	15	1.789	26.8	
52	"	1 500	"	13	1.431	19.4	
10 269.4							

REIN NO.	Ø (mm)	LENGTH (mm)	NOMINAL WEIGHT	NLWB	U WEIGHT	WEIGHT	REMARKS
1	D 13	19 130	0.994	4	18.875	76.3	
2	"	19 030	"	14	18.925	265.2	
3	"	4 100	"	4	4.875	16.3	
4	"	3 900	"	17	3.877	65.9	
5	"	3 500	"	4	3.479	13.9	
6	"	3 300	"	15	3.260	49.8	
7	"	3 500	"	24	3.479	83.4	
8	"	800	"	72	0.795	58.1	
9	"	1 120	"	4	1.113	4.5	
10	"	1 840	"	4	1.829	7.3	
11	"	1 760	"	4	1.650	6.8	
12	"	1 500	"	22	1.431	31.8	
13	"	1 100	"	2	1.093	2.2	
856.4							
1	D 13	1 230	0.994	154	1.273	188.3	
2	"	500	"	156	0.497	87.6	
3	"	1 200	"	72	1.193	85.9	
4	"	4 250	"	12	4.225	50.7	
5	"	930	"	12	0.974	11.7	
6	"	800	"	98	0.795	77.9	
7	"	3 900	"	4	3.877	15.5	
8	"	600	"	48	0.596	28.6	
9	"	1 280	"	20	1.272	25.4	
10	"	3 300	"	4	3.260	13.1	
11	"	1 720	"	58	1.710	99.7	
12	"	3 490	"	4	3.469	13.9	
13	"	3 670	"	4	3.648	14.6	
14	"	800	"	58	0.795	46.5	
15	"	4 100	"	8	4.875	31.6	
16	"	420	"	58	0.396	23.3	
17	"	3 810	"	160	2.992	478.2	
18	"	3 610	"	32	3.596	114.8	
19	"	540	"	656	0.537	351.1	
20	"	3 400	"	4	3.380	13.5	
21	"	3 500	"	2	3.479	7.0	
22	"	3 400	"	12	3.380	40.6	
1874.8							
1	D 13	4 200	0.994	7	4.175	29.2	
2	"	4 000	"	2	3.976	8.0	
3	"	1 500	"	19	1.431	28.9	
4	"	1 300	"	2	1.292	2.6	
5	"	400	"	52	0.399	20.7	
6	"	460	"	32	0.457	14.6	
7	"	580	"	8	0.577	4.6	
8	"	1 850	"	6	1.839	11.0	
9	"	1 610	"	2	1.600	3.3	
10	"	400	"	84	0.398	25.4	
11	"	1 610	"	32	1.492	41.8	
12	"	700	"	24	0.698	16.7	
209.1							
D 32 5 217.0							
D 22 1 137.5							
D 19 1 017.5							
D 16 1 244.4							
D 13 4 533.9							
TOTAL WEIGHT 13 159.7							

NOTES:

JAPAN INTERNATIONAL COOPERATION AGENCY
(JICA)
JICA STUDY TEAM
PACIFIC CONSULTANTS INTERNATIONAL
FUKUYAMA CONSULTANTS INTERNATIONAL

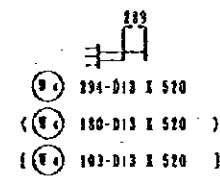
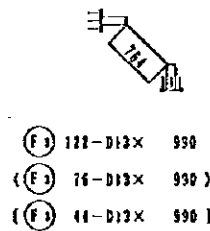
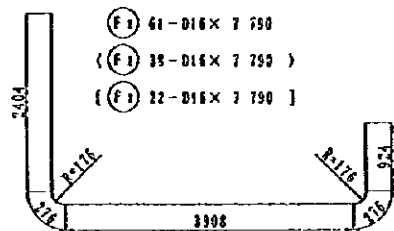
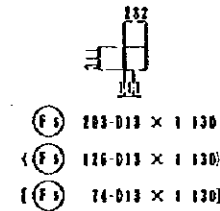
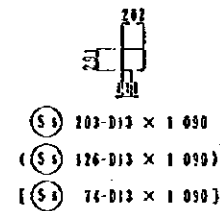
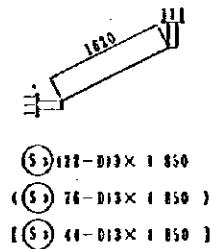
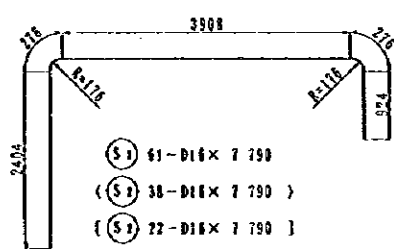
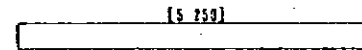
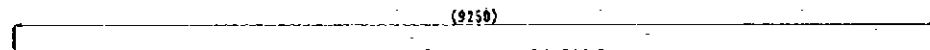
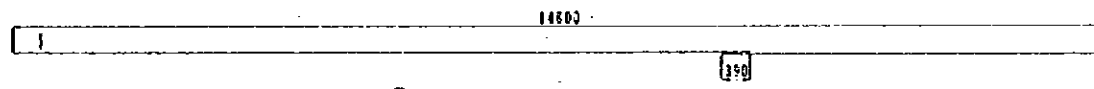
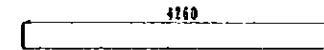
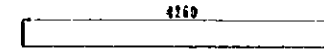
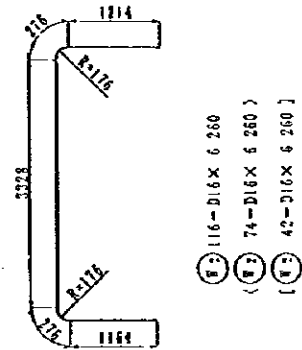
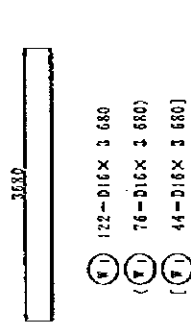
CLIENT : MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS
PROJECT : D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY
TITLE : P/U-3, A' TAREEF RE-BER ARRANGEMENT (6)
DATE : _____
DWG NO. P-11



	B. I	a	b	c
TYPE A	15 000	160	116 @ 125	58 @ 250
TYPE C	9 450	---	74 @ 125	37 @ 250
TYPE D	5 450	---	42 @ 125	21 @ 250

PLAN
S=1/100

NOTES:	JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)	CLIENT : MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS
	JICA STUDY TEAM PACIFIC CONSULTANTS INTERNATIONAL FUKUYAMA CONSULTANTS INTERNATIONAL	PROJECT : D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY
		TITLE : P/U-3, A' TAREEF RE-BAR ARRANGEMENT (7)
		DATE : _____
		DWG NO. P-12



REIN. NO.	Ø (mm)	LENGTR (mm)	NO. OF BARS	UNIT WEIGHT	WEIGHT	REMARKS
TYPE-A						
S 1	D 19	4 260	2.235	119	9.521	1133.0
2	D 16	7 290	1.552	61	12.090	737.5
3	D 13	1 850	0.994	122	1.839	224.4
4	"	15 190	"	32	15.099	483.2
5	"	1 090	"	203	1.083	219.9
TYPE-B						
F 1	D 19	4 260	2.235	119	9.521	1133.0
2	D 16	7 290	1.552	61	12.090	737.5
3	D 13	1 850	0.994	122	1.839	224.4
4	"	15 190	"	32	15.099	483.2
5	"	1 090	"	203	1.083	219.9
TYPE-C						
S 1	D 13	4 260	2.235	75	9.521	714.1
2	D 16	7 290	1.552	38	12.090	459.4
3	D 13	1 850	0.994	76	1.839	139.8
4	"	9 250	"	32	9.195	294.2
5	"	1 090	"	126	1.083	136.5
TYPE-D						
F 1	D 13	4 260	2.235	75	9.521	714.1
2	D 16	7 290	1.552	38	12.090	459.4
3	D 13	1 850	0.994	76	1.839	139.8
4	"	9 250	"	32	9.195	294.2
5	"	1 130	"	126	1.123	141.5
TYPE-E						
S 1	D 19	4 260	2.235	43	9.521	409.4
2	D 16	7 290	1.552	22	12.090	266.0
3	D 13	1 850	0.994	44	1.839	80.9
4	"	5 250	"	32	5.219	167.0
5	"	1 090	"	74	1.083	80.1
TYPE-F						
F 1	D 19	4 260	2.235	43	9.521	409.4
2	D 16	7 290	1.552	22	12.090	266.0
3	D 13	1 850	0.994	44	1.839	80.9
4	"	5 250	"	32	5.219	167.0
5	"	1 130	"	74	1.123	83.1
TOTAL WEIGHT						
					D 19	4513.0
					D 16	4562.0
					D 13	5058.1
					TOTAL WEIGHT	14133.1

NOTES: () TYPE-C
[] TYPE-D

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)

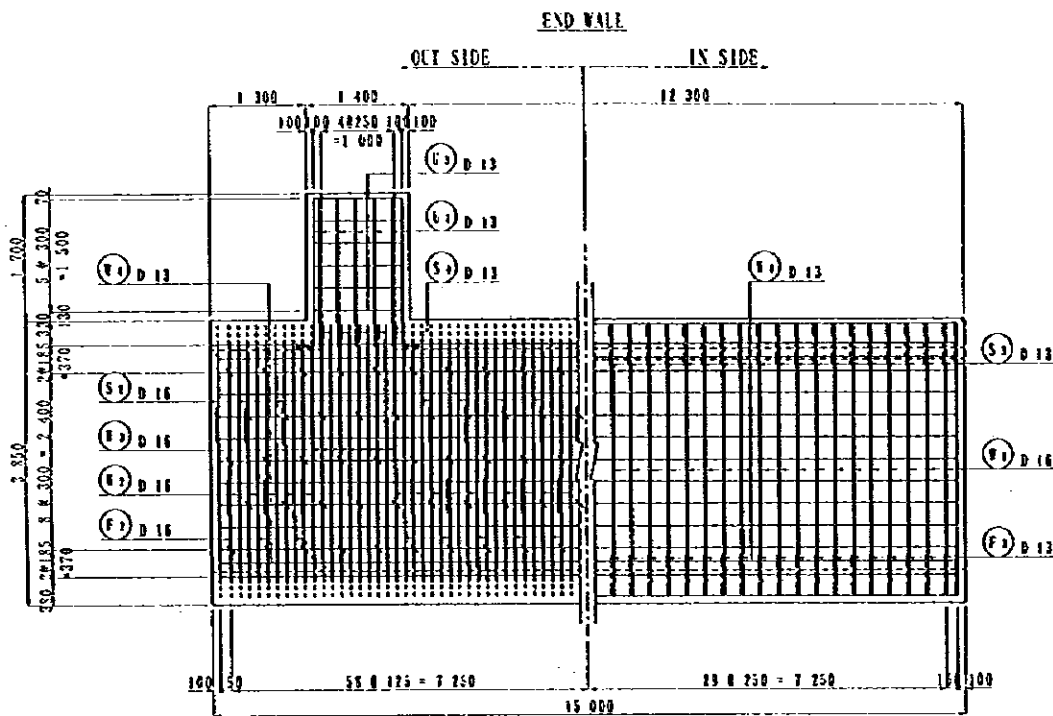
JICA STUDY TEAM
PACIFIC CONSULTANTS INTERNATIONAL
FUKUYAMA CONSULTANTS INTERNATIONAL

CLIENT : MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS

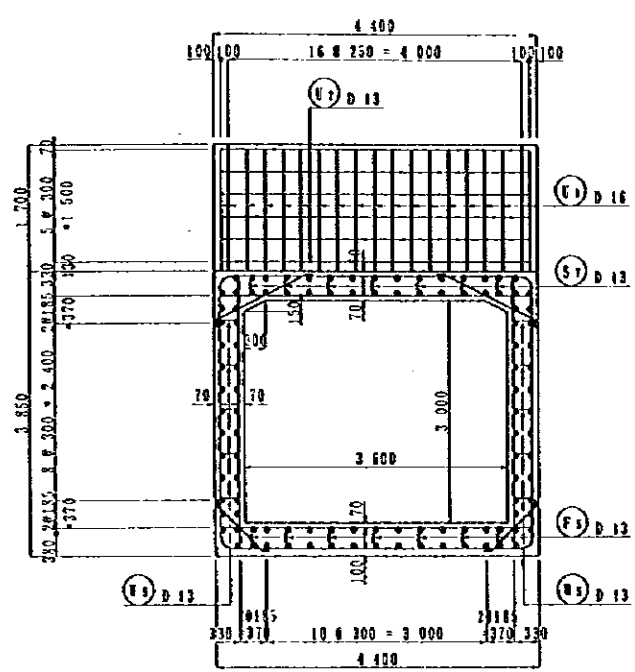
PROJECT : D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY

TITLE : P/U-3, A' TAREEF RE-BAR ARRANGEMENT (8)

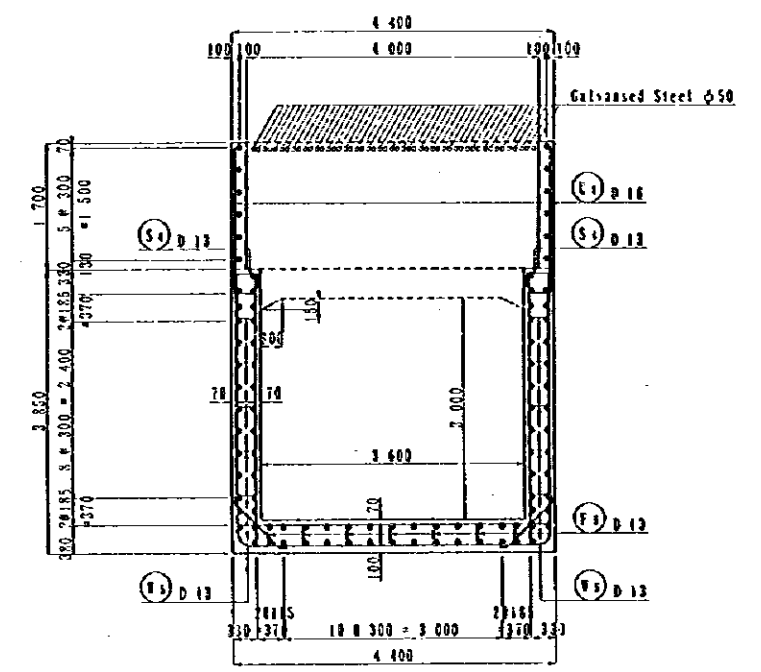
DATE : DWG NO. P - 13



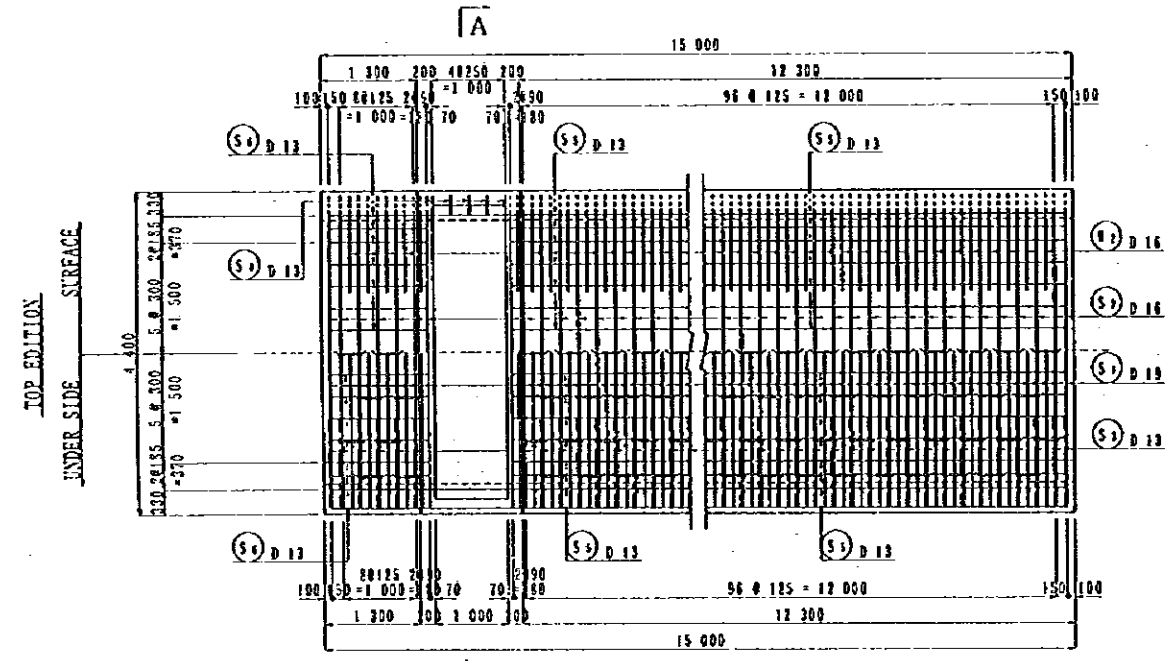
SIDE VIEW
S=1/100



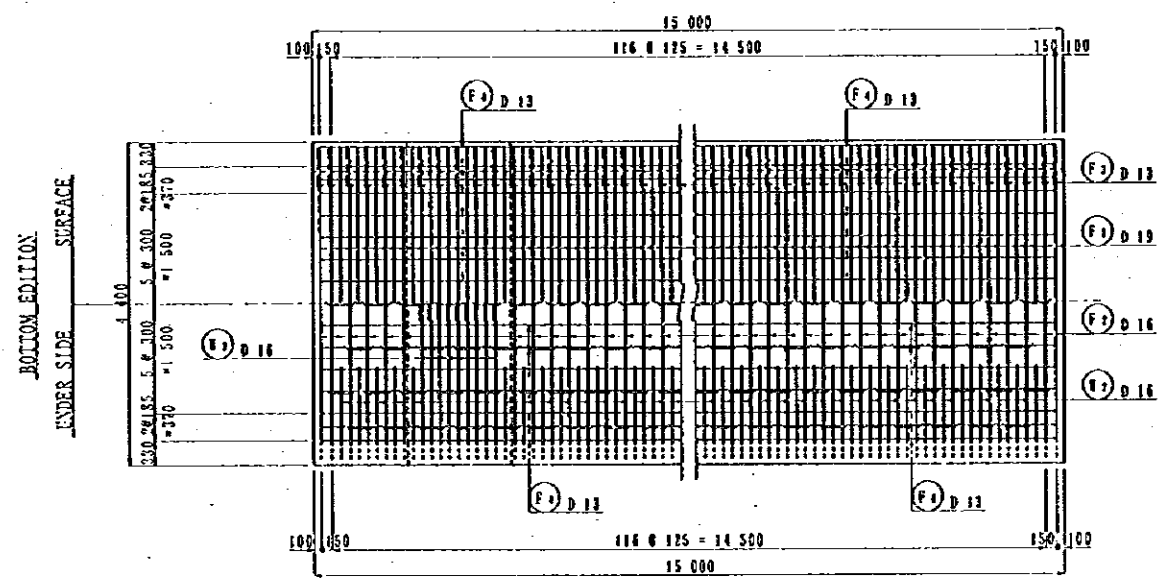
SECTION
S=1/100



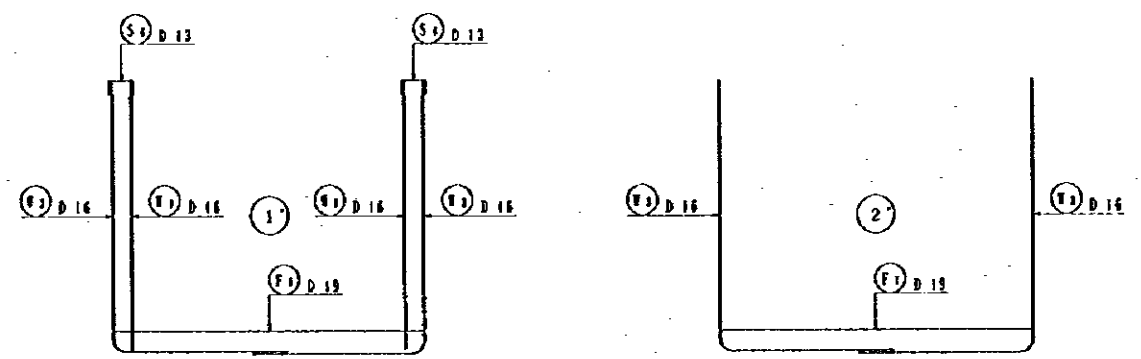
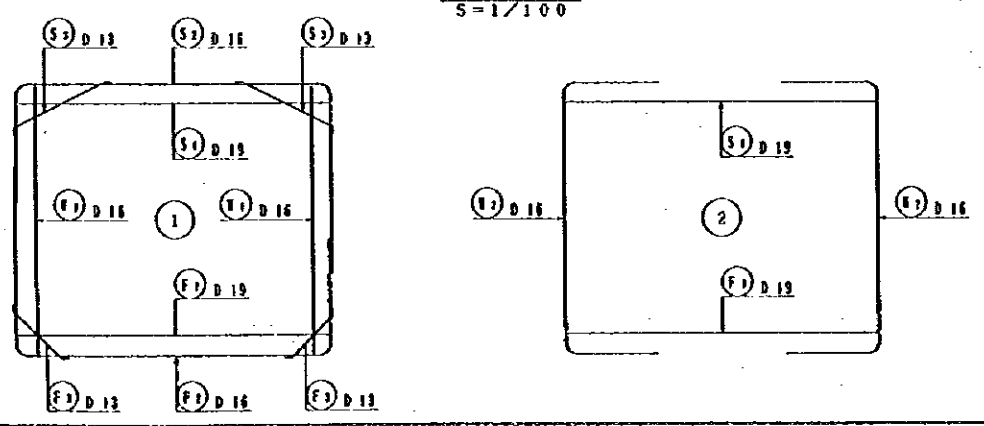
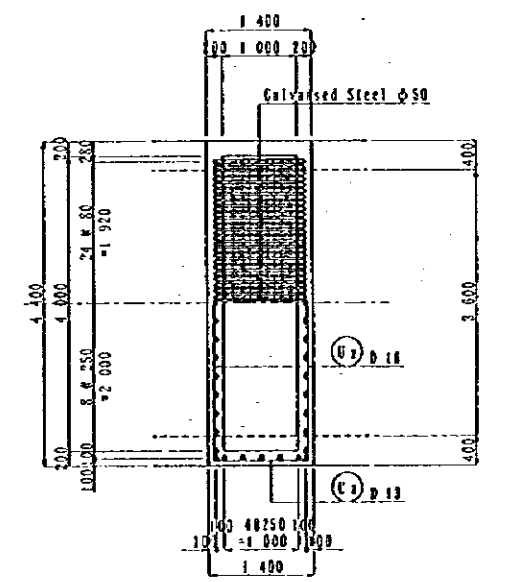
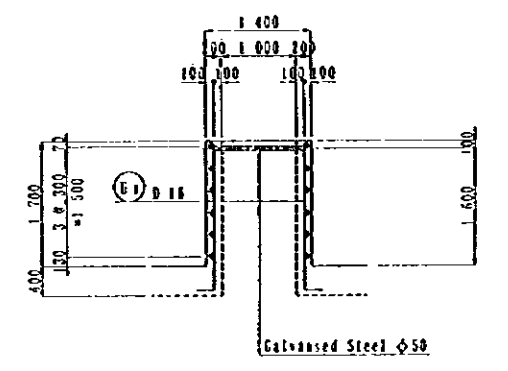
A-A
S=1/100



PLAN
S=1/100

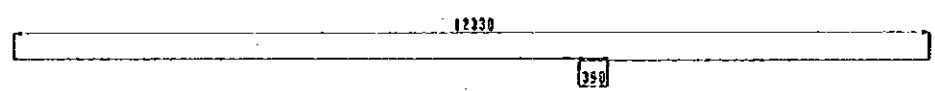
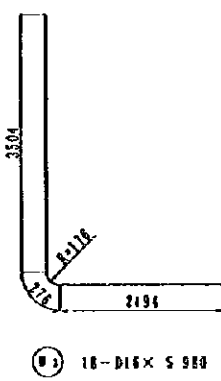
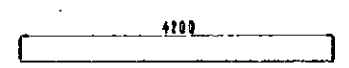
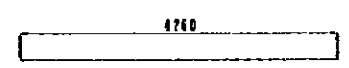
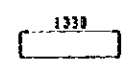
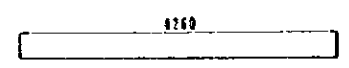
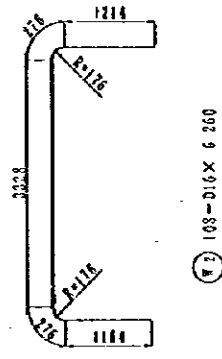
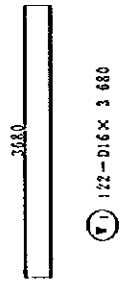


PLAN
S=1/100

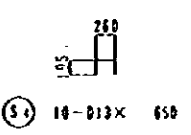
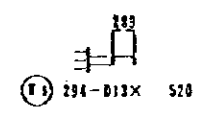
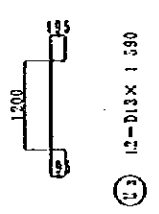
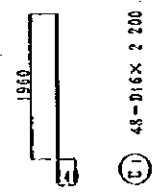
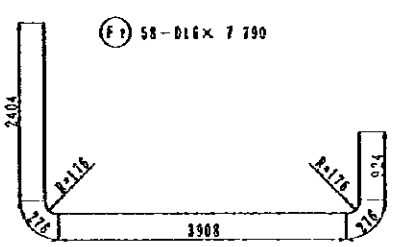
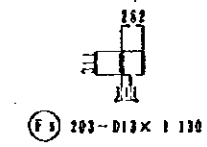
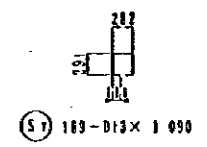
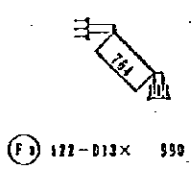
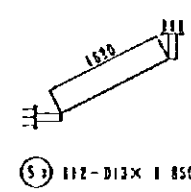
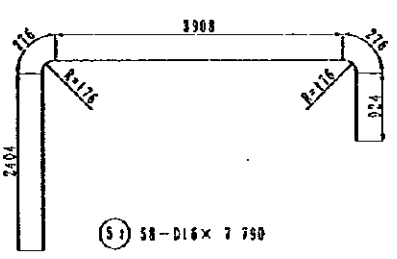


NOTES:

JAPAN INTERNATIONAL COOPERATION AGENCY (JICA) JICA STUDY TEAM PACIFIC CONSULTANTS INTERNATIONAL FURUYAMA CONSULTANTS INTERNATIONAL	CLIENT : MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS
	PROJECT : D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY
	TITLE : P/U-3, A' TAREEF RE-BAR ARRANGEMENT (9)
	DATE : _____ DWG NO. P-14



- (S) 44-D13 x (12 330 + 390)
- (F) 32-D13 x (12 330 + 390)
- (S) 32-D13 x (12 330 + 390)



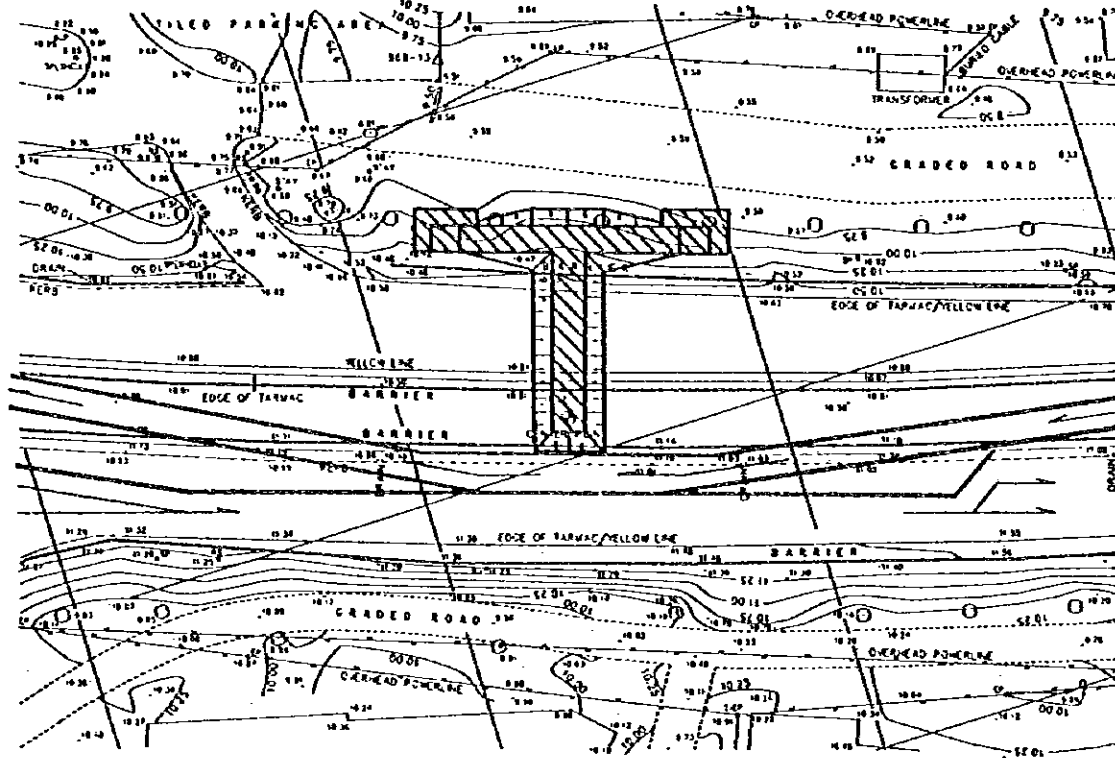
REIN. NO.	φ (mm)	LENGTB (mm)	ADMITAL WEIGHT	NLWS	G WEIGHT	WEIGHT	REMARKS
TYPE - B							
S 1	D 19	4 260	2.235	111	9.585	1056.8	—
2	D 16	7 790	1.552	58	12.050	701.2	—
3	D 13	1 850	0.994	112	1.141	226.0	—
4	"	650	"	10	0.648	6.5	—
5	"	12 720	"	32	12.644	404.6	—
6	"	1 330	"	32	1.322	42.3	—
7	"	1 090	"	189	1.093	224.7	—
F 1	D 16	8 650	1.552	122	5.711	686.7	—
2	"	6 260	"	108	9.716	1049.3	—
3	"	5 330	"	18	9.281	167.1	—
4	D 12	12 720	0.994	44	12.644	556.3	—
5	"	520	"	294	0.517	152.0	—
F 1	D 19	4 260	2.235	119	9.521	1133.0	—
2	D 16	7 790	1.552	58	12.050	701.2	—
3	D 13	930	0.994	122	0.994	120.0	—
4	"	12 720	"	32	12.644	404.6	—
5	"	1 130	"	293	1.123	228.0	—
U 1	D 16	2 200	1.552	48	3.414	168.9	—
2	D 12	4 200	0.994	12	4.175	50.1	—
3	"	1 550	"	12	1.530	19.0	—
						D 19	2189.8
						D 16	2479.4
						D 13	2254.1
						TOTAL WEIGHT	8043.3

NOTES:

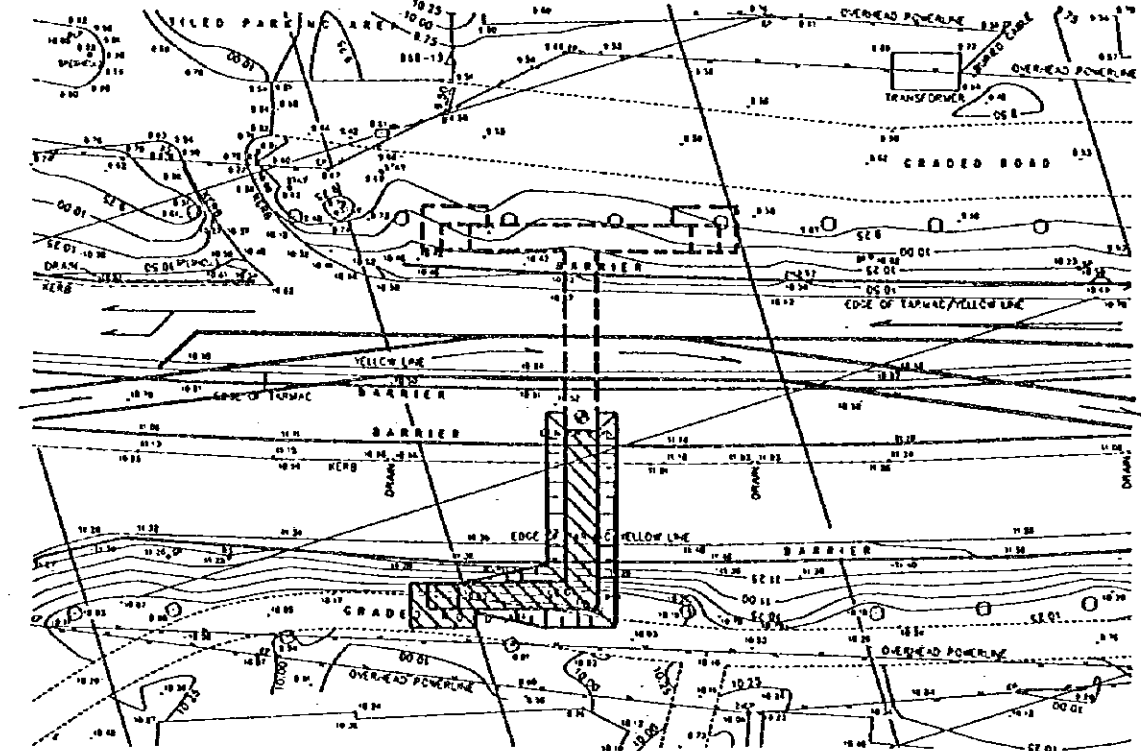
JAPAN INTERNATIONAL COOPERATION AGENCY (JICA)
 JICA STUDY TEAM
 PACIFIC CONSULTANTS INTERNATIONAL
 FUKUYAMA CONSULTANTS INTERNATIONAL

CLIENT : MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS
 PROJECT : D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY
 TITLE : P/U-3, A' TAREEF RE-BAR ARRANGEMENT (10)
 DATE : _____
 DWG NO. : P-15

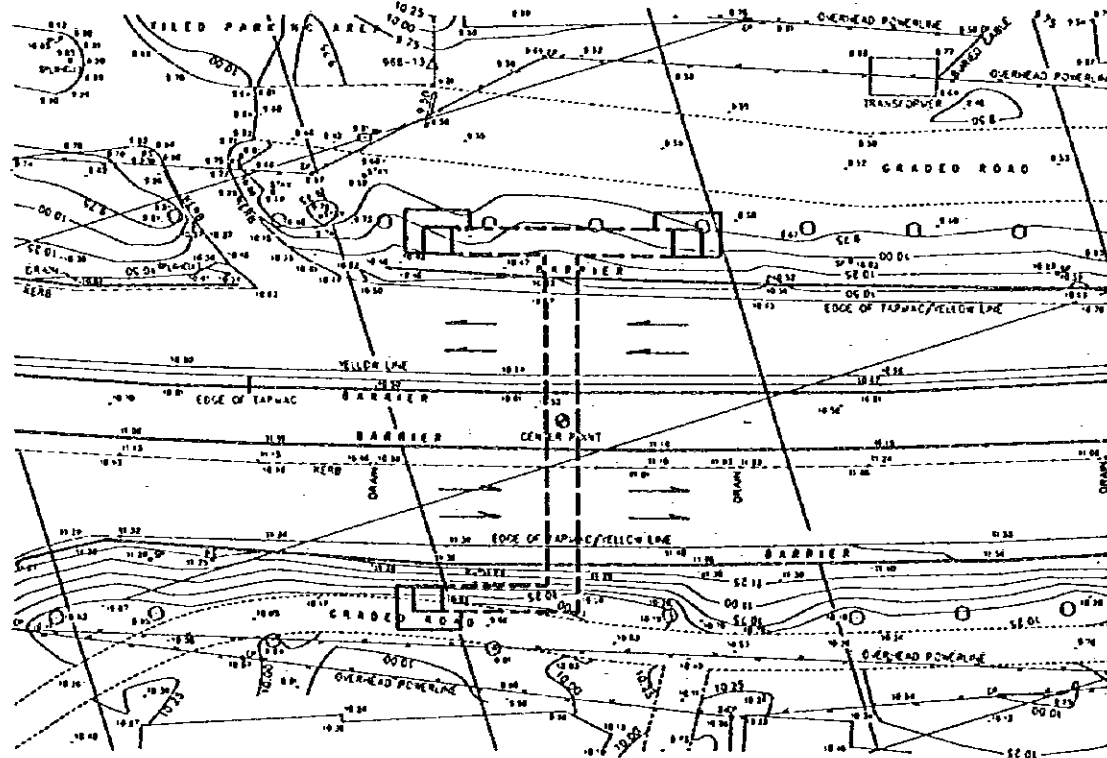
FIRST CONSTRUCTION STAGE



SECOND CONSTRUCTION STAGE



THIRD CONSTRUCTION STAGE



FIRST CONSTRUCTION STAGE

1. Divert traffic from the existing carriageway and demarcate the yard for the first stage of construction.
2. Carry out the first stage of construction for the underpass.
3. After completion of first stage of construction, restore the existing carriageway to allow traffic flow.

SECOND CONSTRUCTION STAGE

1. Divert traffic from the other carriageway and demarcate the yard for the second stage of construction.
2. Carry out the second stage of construction for the underpass.
3. After completion of second stage of construction, restore the existing carriageway to allow traffic flow.

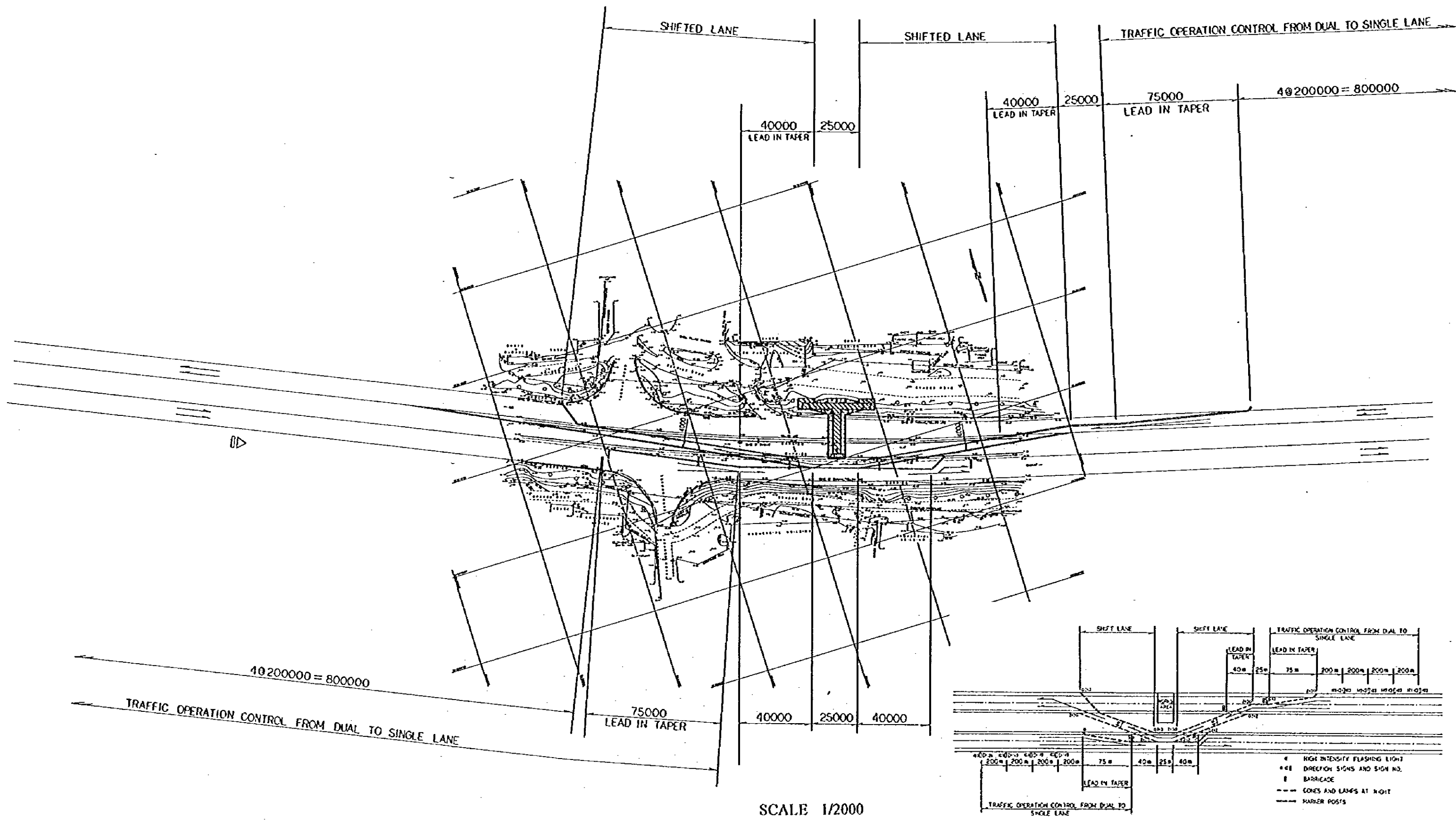
THIRD CONSTRUCTION STAGE

1. Carry out accessory installation work for pedestrian underpass and open it to use.
2. Construction completed.

NOTES:

JAPAN INTERNATIONAL COOPERATION AGENCY
(JICA)
JICA STUDY TEAM
PACIFIC CONSULTANTS INTERNATIONAL
FUKUYAMA CONSULTANTS INTERNATIONAL

CLIENT: MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS
PROJECT: D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY
TITLE: SEQUENCE OF ATAREEF PU CONSTRUCTION
DATE: _____ DWGNO. T-1



GENERAL LAYOUT PLAN OF P/U WORKS

NOTES:

JAPAN INTERNATIONAL COOPERATION AGENCY
(JICA)

JICA STUDY TEAM
PACIFIC CONSULTANTS INTERNATIONAL
FUKUYAMA CONSULTANTS INTERNATIONAL

CLIENT: MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS

PROJECT: D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY

TITLE: DETOUR LAYOUT OF A'TAREEF P/U WORKS

DATE

DWGNO.

T-2

