

BEIN NO.	\$ (SS) TENGTE S		- 1	Ъ	ŧ
1 5	-	-			
1 1	D 29	8 530	B 868~8 120	435	
2	,	S 110	4 665	435	
3	D 16	6 760	8 838~8 093	240	
4	D 13	15 190	14 800	330	
\$	•	5 100	3 735~13 668	390	
- 6	,	15 210	14 315	390	
1	,	500	110	195	
Į.	,	730	788~217	111	
F 1	D 25	3 390	1 236	1 150	
2	D 11	1 740	1 544	195	
3	D 16	2 600	1 450	I 150	
- 1	•	2 530	2 330	195	
5		15 190	14 800	390	
- 6	D 13	15 190	14 800	390	
7		15 190	t4 £00	390	
8	•	2 360	328	278	Ш
9	—	1 330	334	284	111
		•			

ELS SO	Ø (21)	(88)	2	b	· ·
5					
1	0 29	8 710	8 622~T 919	135	
2		\$ 110	4 666	135	
3	0 16	\$ 530	1 593~7 892	285	
4	D 13	15 190	t4 800	330	
5	,	9 750	4 075~14 631	390	
ſ	•	15 210	14 317	390	
7	7	500	110	195	
8		710	768~192	111	
ŀ	D 25	\$ 050	4 148	900	
1	D 13	1 050	1 684	195	
3	D 16	2 480	1 580	900	
1	•	4 370	4 130	195	
Ş		15 280	14 800	480	
6	D 13	15 199	14 800	390	
7	•	ES 190	14 800	350	
1	1	2 360	978	278	111
3		2 380	934	284	111

JAPAN INTERNATIONAL COOPERATION AGENCY	CLIENT: MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS
(JICA)	PROJECT: D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY
JICA STUDY TEAN	TITLE: R/A-18, AQR RE-BAR ARRANGEMENT (9)
PACIFIC CONSULTANTS INTERNATIONAL FUNCTIONAL ONSULTANTS INTERNATIONAL	DATE DWG NO. W-42

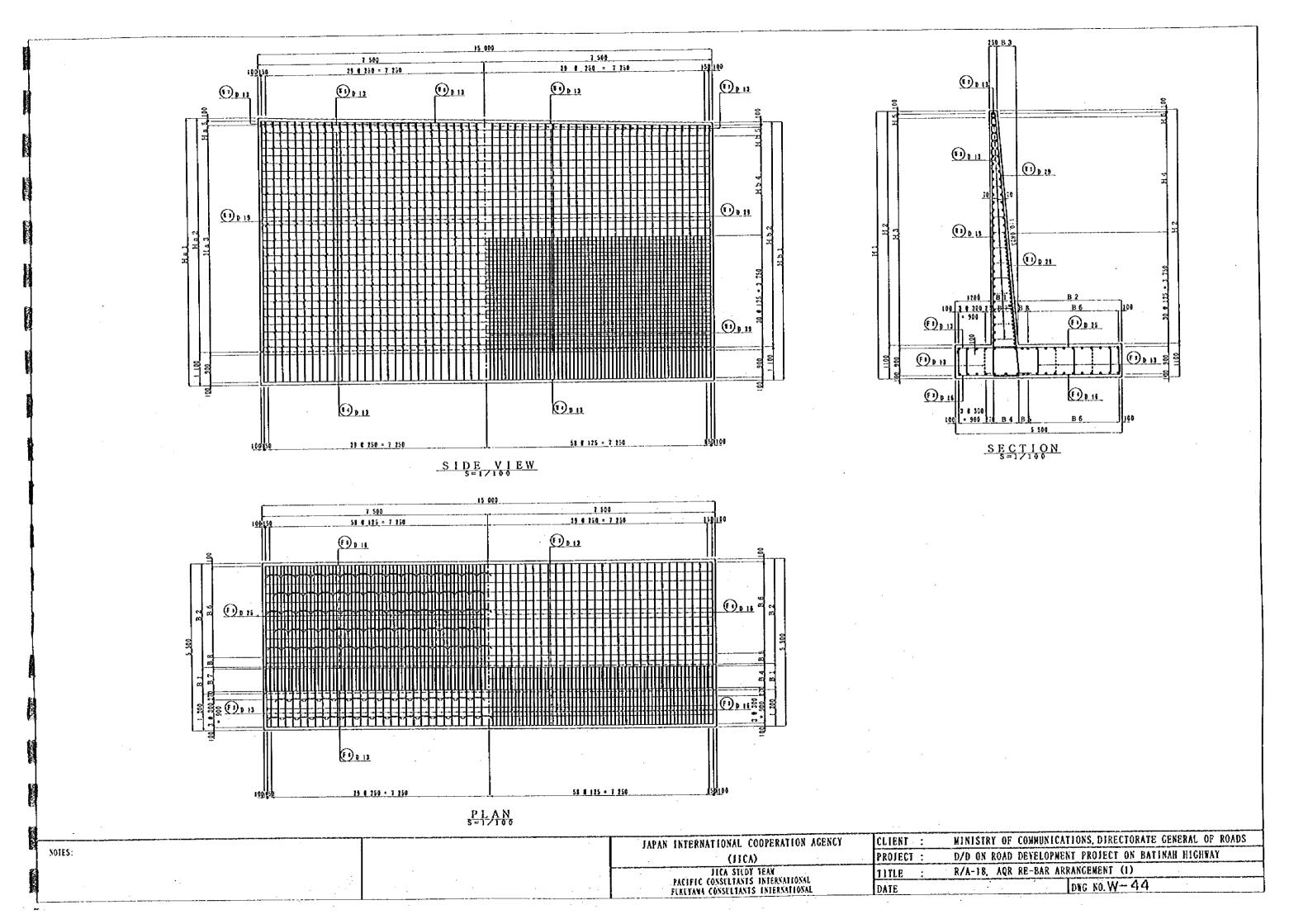
B-1LINE REIS & (ex) LESGTE NONISAL NUMB C VEIGHT VEIGHT REMARKS T 1 0 27 \$ 186 3.642 61 15.758 3 090 # -58 9.400 2 ... 3 D (6 545. 2 5 050 1,552 64 7,884 480.9 619.1 —— 25.4 —— 4 D 13 15 150 D. 994 41 15. 099 6 400 = 6 8.362 15 216 = 2 15.115 5 r 30. 2 61 0.457 30.3 530 . 265 0.527 140.2 3 700 2 235 119 E 270 1 376 0 334 61 1.362 E 1 D 15 984. 1 83.1 2 D 13 3 B 16 1 619 1.552 115 2.601 310. 2 L... 3, 211 195. 9 4 D 43 3 230 0, 994 61 15 150 10 15.699 151.0 5 -15 190 • 4 15.099 60.4 , 226. 5 ---IS 190 15 15. 953 45. 0 Ü) 560 23 1, 551 179.9 U 9 - 1 569 1.551 5 760 3.642 61 17.522 1 068.8 T 1 D 22 2 = 3 090 = 58 3 D 16 5 660 1.552 61 9. 490 535.8 1.784 4 D 13 15 190 4.594 S # 12 610 # 45 15.039 679.5 ---35.4 8.847 15 210 2 15.113 30. 3 500 61 0.497 8 - 550 - 280 0.547 F 1 0 19 3 660 2.235 119 8.180 153. 2 573. 4 2 D 13 1 400 0.994 61 1.392 84.5 1 SEO 1.552 115 3 230 0.994 Et 2. 607 310. 7 L. 3 D 16 4 D 13 3. 211 195. 9 15 190 13 15 099 , # 6 # 13 # 58 # 145 15.099 60.4 15 199 15 150 226.5 15.099 1. 551 45.4 D 1 560 1, \$51 171. 1 D 1 560 61 28, 447 1 735, 3 T 1 D 25 - 7 169 3.573 58 61 4 690 • 18. 633 | 0 80. 7 2 . 662. 7 7 600 1.551 10 F64 3 D 16 4 D 13 15 150 D 954 S8 15.059 175. 7 7, 863 47. 2 \$ 7 910 <u>- L</u> 15 218 15.119 30. 1 10. 3 61 0.497 500 213.0 • 339 0.646 4 100 1 173 113 15.074 2 269. 3 E 1 D 25 106.1 2 D 13 1 750 0. 994 fi 1. 749 3 D 16 2 189 1.552 119 3. 383 482.6 L._ 61 6.317 - 355.3 ----4 010 -S D 13 15 190 0.994 12 15.059 181. 2 75. 5 ----15.099 18 15.495 271.1 15 150 2. 147 3 * 2 160 3 * 2 160 61. 3 C 29 314.2 2. 157

-							
REIN NO.	¢ (11)	1 E 3 G 1 B (e s)	NOMINAL REIGHT	NUB	T FEIGHT	181137	REMARES
T 4							
1 1	D 25	7 850	3, 973	[6]	31. 188	1 902.5	l
		4 650		5.8	11 633	1 080.7	(
1	D 16	7 690	1. 552	61	11. 935	720.0	
	D 13	15 190	0. 934	50	15. 6 59	7\$5. Q	
5	,	1 280			8. 230	32. 5	
		15 210	,	1	15. 113	30. 2	
- - -	-	500		61	0.497	30. 3	5
-	-	650	L	365	0, 646	238. 4	-
┟┰┿	D 25	4 740	3, 973	115	18, 832	2 241.0	
 		1 800	0. 99#	61	1. 769	103.1	
-	D 13	2 180	1. 552	119	3. 193	402.6	<u> </u>
		4 670	1. 871	\$1	6. 317	335. 3	
				ļ	15.098	181. 2	
<u> </u>	D 13	15 260	0. 354	12	15. 039	75. 5	- <u></u>
— <u>•</u>		I\$ 190		1		271.8	
- 3		15 190	:-	16	15. 039	62.3	ü
<u> </u>		1 160		29	2. 147		0 -
	<u></u> _	1 889	<u> </u>	145	2, 157	314.2	L
<u> </u>						1 84 F. Ø	
<u> </u>							
15		 	r	1			r
1 1	B 25	8 530	5. 059	1 11	45, 177	2 755.8	
1 2	<u>'</u>	5 114		- 58	25, 851	1 499.4	<u> </u>
3	0 19	1 760	2. 235	61	19, 579	1 194.3	<u> </u>
1	0 13	15 190	9. 994	11	19. 093	1 356.0	
5	•	3 100		-	9, 645	54.3	
	-	15 210		11	15, 103	30.2	
7		500	· · ·	61	0.497	30.1	4
	•	730	•	428	0.716	316.7	
F 1	b 15	5 045	3, 373	119	20.779	2 382.9	
1	0 13	2 100	e. 994	61	2. 097	127. 3	
1	D 16	2 480	1. 552	119	3, 843	458. 0	<u> </u>
1	•	4 370		61	C. 781	413.7	
5	•	15 280		13	23, 715	305. 3	
í	D 13	15 190	6. 994	1	15. 099	75. 5	
7	•	15 190		19	15. 499	286. 9	
	•	2 368	•	58	2. 346	116. 1	0
9		2 350	•	146	2. 366	315. 1	0
						11 765.1	
					D 25	4 255, 2	
					D 25	11 192.4	
					0 12	1 120.4	<u> </u>
1					D 13	1 (5). [
					D 16	5 783. 6	
		-			8 13	10 726.2	
				Ţ	OTAL VEIGHT	39 729.7	
				,			
						-, -	
							

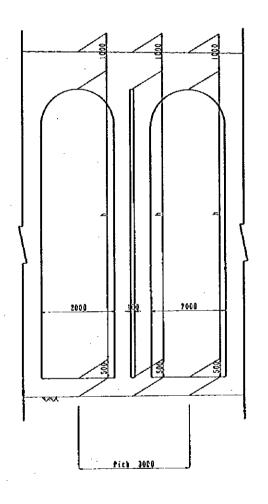
ř	30 LE E		INE	SONINAL	SENB	183)34 3	SEEGRI	1EXARES
L	NO.	¢ (s s)	(11)	TEIGHT	3113	t retrai	TELVAL	
╌	11			A 143		16, 153	\$85. 3	
Į.	1 1	D 22	5 318	3.012	61 58	5. 400	\$45. 2	- 1
ŀ	- !		3 690	1. 552	61	8.486	453. 2	
-	- 1	D (6	\$ 210 15 190	0. 934	41	15.499	619. I	
- 1	- :	D 13		- V. 335		10. 158	41. 0	
- [-	5	: 	15 200		<u>`</u>	15, 109	30, 2	
ŀ	- 6		500		- 61	0.437	39. 3	B
ŀ			540		251	0.537	134. 8	7
ŀ	FI	D 19	3 690	1. 235	115	8, 247	981. 6	
ŀ	' ;	D 13	1 370	0. 534	- 61	1.162	83. I	<u></u>
ŀ	3	D 16	1 680	1. 552	115	2, 607	110. 2	L.,
ŀ	-:	D 13	3 238	0. 334	61	3.711	135. 3	
╌	5	-;	15 190		10	15.093	151. 0	
ŀ	- 5		15 190	,	4	15.033	60.4	~
ŀ		•	15 190	•	15	15.099	226.5	
ŀ			1 550	-	29	1.551	45. 0	C
ŀ			1 560	,	116	1. 551	175. 5	Ð
ŀ				L			5 111 5	
ľ								
Ì	1 2				_	,		
•	1 1	9 22	\$ 830	3, 041	. 61	17. 735	1 687. 8	
	1	•	3 090		58	9.400	545. 3	
Į	1	D 16	5 720	1. \$\$2	- 61	8. 877	\$41. \$	
	1	D 11	15 190	D. 394	41	15.093	£13. t	
	5	•	10 750		- 1	10. 725	42, 5	
ļ	6	•	15 200		- 1	15, 103	30. 2	
Į	1	-	\$00		61	0. 497	30.3	
- 1	1		560		280	D. \$\$7	156. 0	
	FI	D (9	3 660	2, 235	319	8. 180	173. 4	
ı		D 13	1 410	0.334	- 61	1. 102 2. 609	85. S 310. Z	
ı	3	D 16	1 689	f. 552 6, 934	113	3. 111	195. \$	
ŀ	4	D 13	3 23D	V. 331	10	15.039	151. 0	
ł	5		15 198		1 4	15, 699	60. 4	
		- "	15 190		15	15. 099	126. \$	
-	7	•	1 560		29	1.551	45. 0	1 0
		,	1 560		115	1. 551	179. 5	0
	- 3	L		L	1		5 274. B	
				 -	-			
	11							
		D 25	7 130	3.571	61	28. 327		
	2	•	4 690		51	18, 633	1 080.7	
	3	D 16	6 9 7 0	1.551	13	10. 817	653. 8	
	- 1	D 11	15 199	0. 994	53	15.053	875.7	ŧ
	\$	•	9 100	*	1	9. 045	36.2	
	6		15 210	<u> </u>	1 2	+	30.2	4
1	7		500	<u> </u>	1 1	0.497	30. 3	
		•	630		339			- t
	F 1	0 25	4 480	3. 173	111		1	
	1	D 11	1 760	D. 354	61	1.745		
	1	D 16	2 180	1, \$57	115	·	1	
	- 1	<u>.</u>	4 070	<u>'</u>	61	6. \$17		1
	5	D 13	15 190	0. 934	112	1	1	1
		<u> </u>	15 190	ļ '	5		+	
		_	15 190	 	1 !!		+	
			2 160	<u> </u>	25	2. 147	62. 3	<u> </u>

7									
T 4 T 1 D 25									
T I D 25 7 716 3.973 61 30.632 1 868.6 1 2 4 690 58 18.633 1 080.7 1 3 D 16 7 550 1.552 60 11.718 714.8 5 4 D 13 15 190 0.994 61 15.659 936.1									
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4 D 13 15 190 0 9.94 61 15.053 536.1 5									
\$ " 9 220 " 6 9.155 55.0									
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F 1 D 25									
1 D 13 1 790 0.994 61 1.279 108.5 F 3 D 16 2 160 1.552 119 3.383 492.6 L 4 " 4 079 " 61 6.317 385.3 — 5 D 18 15 180 0.894 12 15.495 181.2 — 5 D 18 15 180 " 5 15.895 75.5 — 2 " 15 190 " 18 15.095 271.8 — 3 " 2 160 " 29 2.147 87.3 [9 " 2 160 " 29 2.147 87.3 [9 " 2 160 " 29 2.147 87.3 [9 " 2 160 " 3 003.6 [15 T 1 D 29 2 710 5.059 61 44.066 2.687.8 [2 " 5 110 " 58 25.859 1499.4 [3 D 19 6 530 2.235 61 19.065 1 143.0 [4 D 12 15 190 0.994 63 19.095 1317.8 — 5 " 3 750 " 6 9.652 58.2 —									
2 0 13 1 790 0 9.94 61 1.279 109.5 F 3 0 16 2 160 1.552 119 3.383 402.6 L 4 - 4 070 - 61 6.317 385.3 - 5 0 13 15 150 0 934 12 15.093 131.2 - 6 - 15 190 - 5 15.095 75.5 - 7 - 15 190 - 18 15.095 271.8 - 8 - 2 160 - 29 2.147 67.8 - 9 - 2 160 - 29 2.147 67.8 - 5 0 3.8 T 1 0 29 0 710 5.059 61 44.065 2 687.5 2 - 2 - 5 110 - 58 25.851 1 499.4 3 0 19.055 1 163.0 4 0 12 15 190 0 9.954 63 19.093 1 317.8 - 5 - 3 750 - 6 9.652 58.2 -									
3 D 16									
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5 D 18 15 180 0.894 12 15.995 181.2 — 6									
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\$ " 2 160 " 29 2.147 57.3 6 9 " 2 160 " 145 2.167 214.2 1 \$ 003.6 1 5 V 1 D 29									
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T 5 W 1 D 29									
N 1 D 29 9 710 5 059 61 44 065 2 687 8 2 - 5 110 - 58 25 851 1 499 4 2 D 19 6 530 2 235 61 19 665 1 163 0 4 D 19 15 190 0 954 63 19 893 1 317 3 5 - 3 750 - 6 9 652 58 2									
N 1 D 29 9 710 5 059 61 44 065 2 687 8 2 - 5 110 - 58 25 851 1 499 4 2 D 19 6 530 2 235 61 19 665 1 163 0 4 D 19 15 190 0 954 63 19 893 1 317 3 5 - 3 750 - 6 9 652 58 2									
N 1 D 29 9 710 5 059 61 44 065 2 687 8 2 - 5 110 - 58 25 851 1 499 4 2 D 19 6 530 2 235 61 19 665 1 163 0 4 D 19 15 190 0 954 63 19 893 1 317 3 5 - 3 750 - 6 9 652 58 2									
2	Ĺ								
3 D 19 6 530 1.235 61 19.065 1 163.0 4 D 13 15 190 0.334 63 19.095 1 217.8 — 5 3 750 6 9.692 58.2 —	l								
4 D 13 15 190 4.994 63 19.895 1 317.8 — 5 . 9 750 . 6 9.692 58.2 —	ì—								
5 # 9 750 * 6 9.652 58.2 -	<u>'-</u>								
4 4 15 5 6 4 1 2 15.219 30.21 ===									
T " 500 " 61 6.497 30.3	•								
6 7 110 7 12d T. 100 900.0									
F 1 D 25 5 230 3.973 119 20.664 2 387.6	<u> </u>								
2 D 13 2 380 0.994 61 2.068 125.1 c									
3 D 16 3 100 1.552 119 3.849 458.0 L									
4 4 270 4 61 6.782 413.7 -									
5 # 15 260 # 13 23.745 308.3 -	-								
6 D 13 15 190 D. 994 5 15. 999 75. 5									
	_								
	Ū								
1 344	<u>o</u>								
3 2 300									
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D 25 12 655. 2									
D 12 3 157.5									
D 19 3 117. B									
0 16 5 785.5									
D 13 10 266. 0									
ANIME PERSON OF ANIME	10TAL TELGOT 38 \$19.3								

			· · · · · · · · · · · · · · · · · · ·	
			JAPAN INTERNATIONAL COOPERATION AGENCY	CLIENT: MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS
NOTES:	-	·	(IICA)	PROJECT: D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY
			JICA STUDY TEAN	TITLE : R/A-18, AQR RE-BAR ARRANGEMENT (10)
	:		PACIFIC CONSULTANTS INTERNATIONAL FERLYANA CONSULTANTS INTERNATIONAL	DATE DNG NO. W-43
· A	•		• • •	



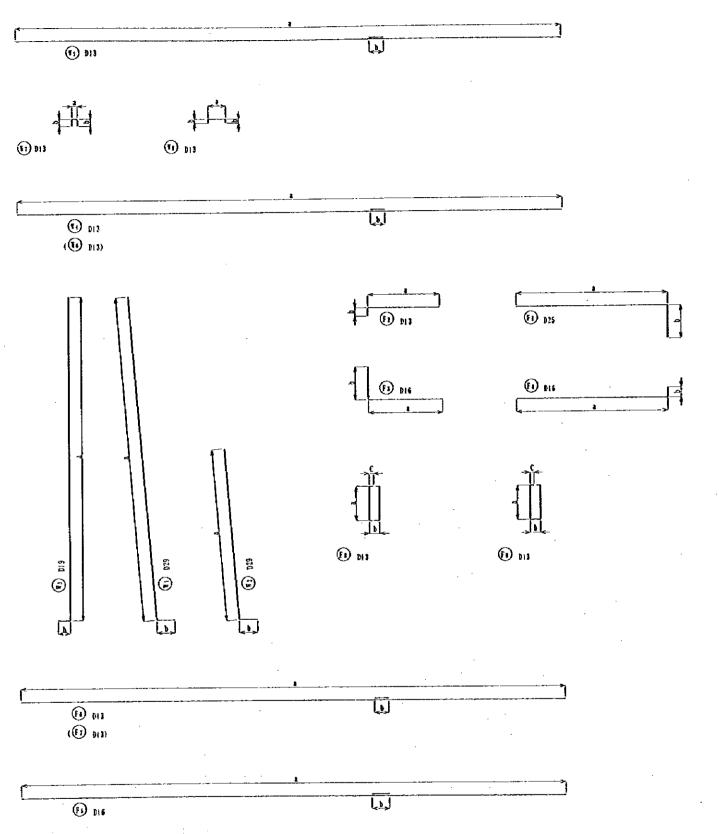
		Ţ-	6)		
		a – a		b - b	
ĺ	Ha 1	8 9 7 9	11 b 1	8 0 7 9	
_a	Ha2	7 8 7 9	H b 2	6 9 9 1	
B	H a 3	300250 = 7 500	ньз	270250 = 6750	
	Ha4	$\begin{array}{c} 150250 \\ = 3750 \end{array}$	Н Ъ 4	120250 = 3000	
4	Ha 5	20189.5 = 379	ньз	2 4 1	
L	Bal	898	Въз	825	
1	B a 2	3 4 0 2	B b 2	3 4 7 5	
N	Ва 3	6 4 8	В Ъ З	575	
E	8 a 4	2 0 4 2 0 . 0 = 8 4 0	8 b 4	20383.5	
	8 a 5	20145. 0 = 290	В ъ 5	20181.5	
	Ba6	100300	B b 6	100300	
	Ba7	766	В в 7	693	
	Ba8	2@182.0 = 364	въ8	2 @ 2 1 8 . 5 = 4 3 7	
	ļ	(T	-6)	· 	
		a a		b - b	
	Ha 1	8 8 3 0	H b i	7 9 4 6	
В	Ha2	7 730 30@250	1K b 2	6 8 4 6 2 7 @ 2 5 0	
	Ha 3	= 7 500 150250	нь з	= 6750 120250	
	Ha4	= 3 750	Hb4	= 3 0 0 0	
3	Ha5	230	11 b 5	9 6	
L	Bal	886	B b 1	814	
1	Ba2	3 4 1 4	В Ь 2	3 4 8 6	
N	ВаЗ	636	B b 3	5 6 4 2 0 3 7 8	
E	B a 4	= 828 -20151	B b 4	= 756 20187	
	Ba5	= 302 108300	B b 5	= 374 100300	
	Ba6	= 3 000	B b 6	= 3 000	
	B a 7	754 20188	B b 7	20224	
L:	Ba8	= 376	B b 8	= 448	



Slit Shape in Front of Wali (Thickness 1=30 mm)

IAPAN INTERNATIONAL COOPERATION AGENCY

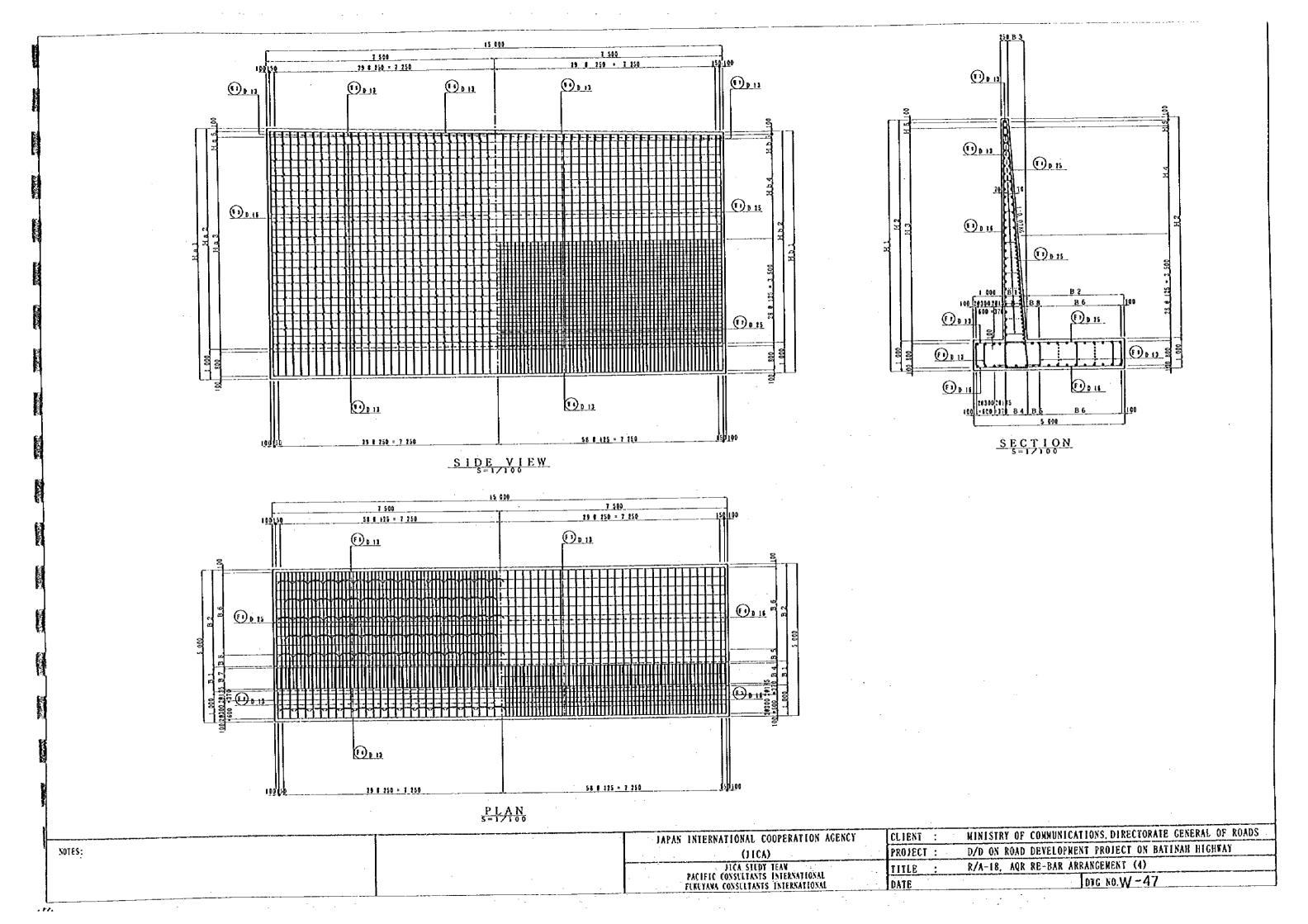
(JICA)



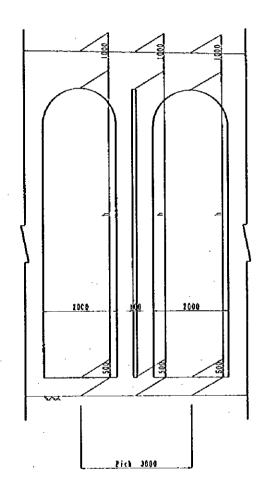
REIN NO.	φ (επ)	(e)		•	٠ د
16					
T 1	9 25	1 660	1 659~7 772	435	
1	,	4 000	4 166	435	
1	0 13	5 110	£ 029~5 609	285	
4	D 13	15 190	14 800	390	
5		1 430	3 851~12 222	350	
-	•	15 220	14 876	350	
- 1	1	500	110	195	
		710	771~135	111	<u> </u>
F 1	D 25	4 980	4 072	500	
- 1	0 13	2 C80	i 380	195	
1	9 16	2 460	1 589	900	
- (4 310	4 139	195	
	•	15 280	14 800	430	<u> </u>
(D 13	15 190	14 800	190	
	,	15 190	14 800	390	
		1 360	928	278	111
)	2 380	934	284	111

RE IN NO.	\$ (m)	LENGIH (EE)			c .
7 6					
Ŧ 1	D 19	\$ 800	B 809~7 905	435	
2	,	\$ 110	4 656	135	
3	D 15	B 520	8 179~1 179	240	
4	D 13	15 190	t4 800	390	
ş	•	5 180	3 116~14 455	390	
•		15 220	14 \$27	- 390	
7	•	540	110	195	
1	•	720	783~207	0	
Fi	D 25	5 869	4 151	900	
2	D 13	2 890	1 892	195	
3	D 16	2 489	1 580	900	
4	1	4 370	4 130	195	
5	T.	15 280	19 800	450	
6	D 13	15 190	14 800	390	
7	•	15 190	14 800	390	
	•	2 360	928	278	
3	•	2 380	934	284	111

٦	JAPAN INTERNATIONAL COOPERATION AGENCY	CLIENT	:	MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS
١	(JICA)	PROJECT	:	D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY
l	JICA STUDY TEN	TITLE	:	R/A-18, AQR RE-BAR ARRANGEMENT (3)
ĺ	PACIFIC CONSULTANTS INTERNATIONAL FUKUYANA CONSULTANTS INTERNATIONAL	DATE		DNC NO.W-46



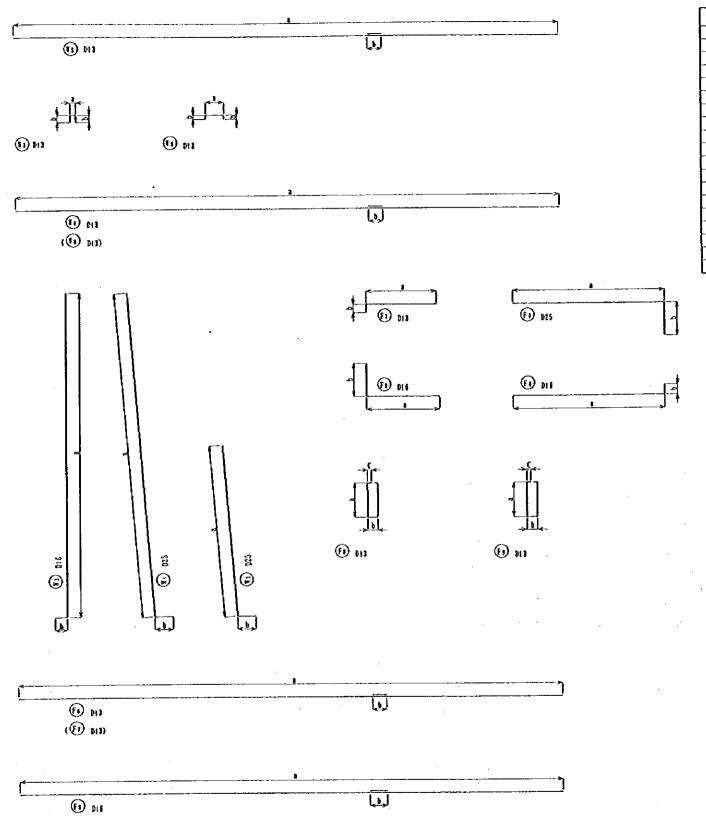
		(T-	<u>)</u>		
		a – a		b b	
	Hal	7 9 9 1	Hb1	7 215	
_	Ha 2	6 9 9 1	НЬ2	6 215	
В	НаЗ	26@250 = 6 500	ньз	249250 = 6 000	
ı	Ha4	120250	Н Ь 4	100250 = 2500	
4	На5	191	нь5	215	
L	8 8 1	799	B b 1	7 3 8	
ī	B a 2	3 2 0 1	B b 2	3 2 6 2	
N	Ba3	5 4 9	Въз	488	
	Ba4	20365.0	B b 4	2 @ 3 3 4. 5 = 6 6 9	
E	Ba5	20200	B b 5	2 0 2 3 0. 5 = 4 6 1	
	Ba6	98300	8 b 6	98300	
	B a 7	667	B b 7	606	
	B a 8	20231.5 = 463	B b 8	2 0 2 6 2. 0	
			1)		
		a - a		b - b	
İ	Hal	7 8 4 6	ньі	7 0 9 9	
B	На2	6 8 4 6	H b 2	6 0 9 9	
]	H a 3	260250 = 6 500	нь з	248250 = 6000	
	Ha4	120250	H b 4	10@250	
3	Ha5	= 3 000 20173 = 346	НЪ \$	9 9	
լ	Bal	788	B b 1	729	
1	8 a 2	3 2 1 7	Вь2	3 2 7 1	
N	ВаЗ	5 3 8	B b 3	479	
i	Ba4	26359.5	B b 4	20330 = 660	
E	Ba5	20205.5 = 411	B b 5	20235.0 = 470	
	8 a 6	98300	B b 6	98300	
	Ba7	656	B b 7	5 9 7	
,	1	20237	B b 8	20266. 5	



Slit Shape in Front of Vall
(Thickness 1=30 ma)

JAPAN INTERNATIONAL COOPERATION AGENCY

(JICA)



RE1) NO.	Ø (ez)	LENGTH (en)		b	(
17		·			
T 1	0 25	7 670	7 670~6 920	315	
		4 690	4 313	375	
	0 16	7 520	1 546 - 6 899	249	
	6 B 13	15 190	14 800	350	
	5 "	8 610	3 428~11 808	390	
		15 210	14 815	390	
	1 .	500	119	195	
	8 .	660	670~198	111	
F	D 25	4 760	3 954	100	
	2 D 13	1 790	1 589	195	
	3 D 16	2 189	1 380	800	
	4 .	4 976	3 830	240	
	5 D 13	15 190	\$4 800	390	
	,	15 199	14 600	390	
	7 ,	15 190	14 800	390	
	;	2 160	\$28	278	111
	9 .	2 160	834	284	111

RE IS NO.	\$ (m)	LENGTH (ea)	1	b	ε
11					
9 1	D 25	7 810 -	7 815~7 937	375	
1	,	4 690	4 3 13	375	
3	0 15	2 650	£ 354~5 982	240	
1	D 13	15 190	14 890	390	
5	•	1 1i0	3 643~13 169	390	
6	•	15 210	14 870	390	
7	•	500	118	195	
1	•	670	681~209	10	
FI	D 25	4 750	3 944	800	
1	D 13	1 800	1 599	195	
3	Dif	2 180	1 380	800	
- 1	,	4 470	3 130	240	
- 5	D 13	15 191	14 B06	390	
	•	15 150	14 809	330	
7	•	15 190	14 800	390	
1	•	2 160	\$28	171	Ot.
3	•	1 180	834	284	111
	•				

JAPAN INTERNATIONAL COOPERATION AGENCY

(JICA)

CLIENT: MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS

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

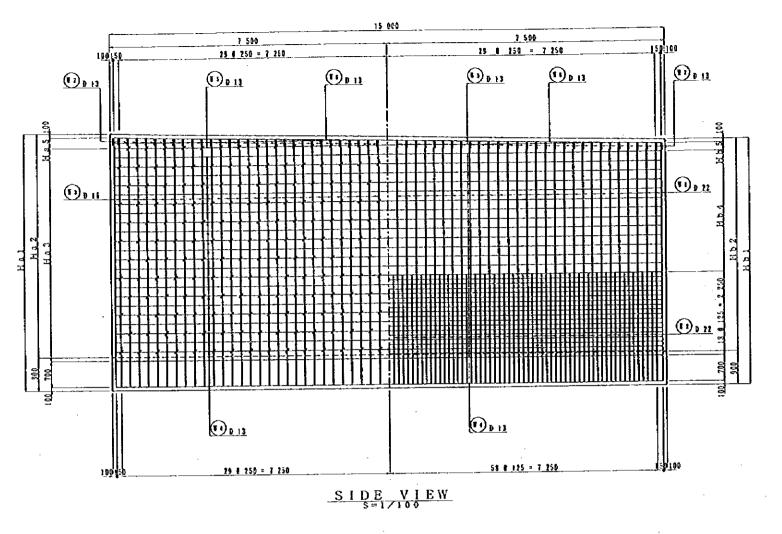
TITLE: R/A-18, AQR RE-BAR ARRANGEMENT (6)

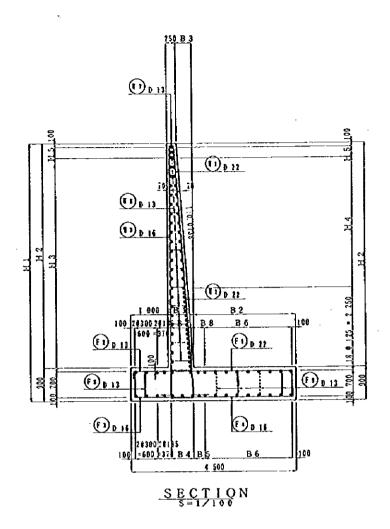
DATE

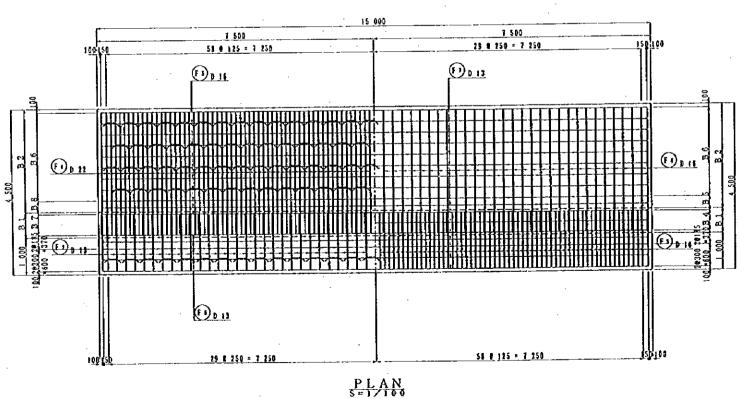
DATE

DATE

DATE







JAPAN INTERNATIONAL COOPERATION AGENCY

(11CA)

TICA STUDY TEAN

PACIFIC CONSULTANTS INTERNATIONAL
FUNCTIONAL CONSULTANTS INTERNATIONAL

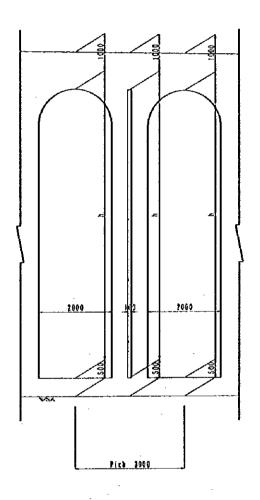
CLIENT: MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS
PROJECT: D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY

TITLE: R/A-18, AQR RE-BAR ARRANGEMENT (7)

DATE

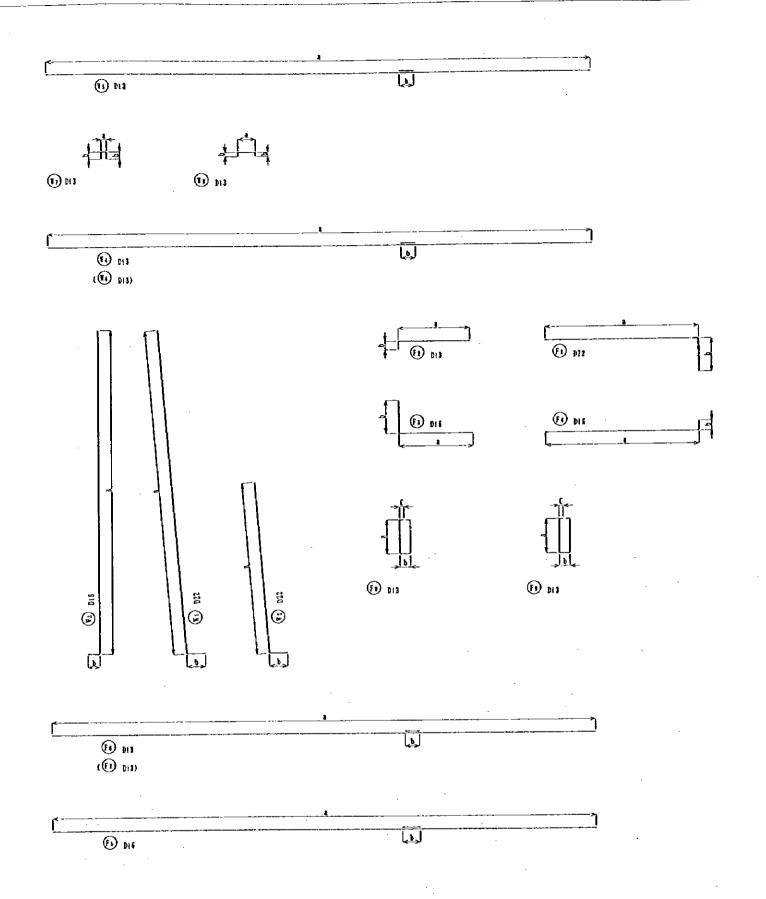
DWG NO. W-50

	(1-8)			
		a - a		р — р
	Ha1	7 115	Hb1	6 3 8 9
В	lia 2	6 2 1 5	Нъ2	5 4 8 9
1	H a 3	240250 = 6000	нь з	210250 = 5 250
	H = 4	150250 = 3750	Н Ь 4	12@250
4	H a 5	215	H b 5	239
L	Bal	7 0 9	B b 1	655
I	B a 2	2 791	В b 2	2 8 4 5
N	Ba3	459	В b 3	405
l	Ba4	20314.5 = 628	B b 4	20287. 0 = 574
E	Ba5	2 @ 1 5 1 = 3 0 2	В Ь 5	26178 = 356
	Ba6	8 @ 3 0 0 = 2 4 0 0	В в 6	8 9 3 0 0 = 2 4 0 0
	Ba7	5 7 6	Въ7	5 2 2
	B a 8	20177 = 354	Въ8	20204 = 408
	<u></u>	Ţ	- 8)	
		a - a		b - b
	Ha1	6 9 9 9	Hb 1	6 2 5 2
В	H a 2	6 0 9 9	H b 2	5 3 5 2
	Ha3	230250 = 5750	13 b 3	21@250 = 5 250
	Ha4	140250	Н Ь 4	126250 = 3000
3	II a S	20174.5 = 349	Н Ъ 5	102
L	Bal	700	8 b 1	6 4 5
1	Ba2	2 8 0 0	8 b 2	2 8 5 5
N	ВаЗ	450	8 b 3	3 9 5
E	Ba4	20309.5 = 619	B b 4	20282.0 = 564
E	B a 5	20155.5 = 311	8 b 5	20183 0 = 366
	Ba6	8 Ø 3 0 0 = 2 4 0 0	В ь 6	80300 = 2400
	B a 7	567	ВЬ7	5 1 2
Ĺ	Вав	2@181.5 = 363	Вь 8	2 9 2 0 9. 0 = 4 1 8



Slit Shape is Front of Tall
(Thickness t=30 mm)

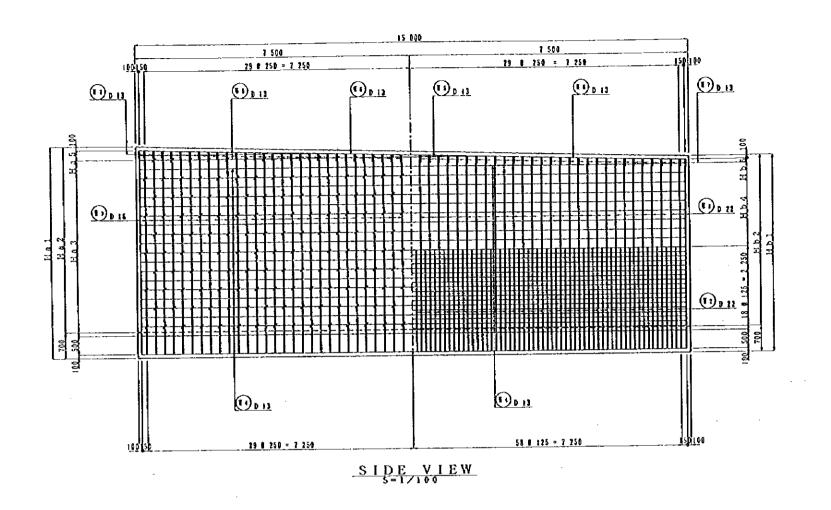
•		. · ·		
NOTES:		JAPAN INTERNATIONAL COOPERATION AGENCY	CLIENT :	MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS
	·	(JICA)	PROJECT :	D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY
		JICA STUDY TEAN	TITLE :	R/A-18, AQR RE-BAR ARRANGEMENT (8)
•		PACIFIC CONSULTANTS INTERNATIONAL	DATE	DYG NO W-51

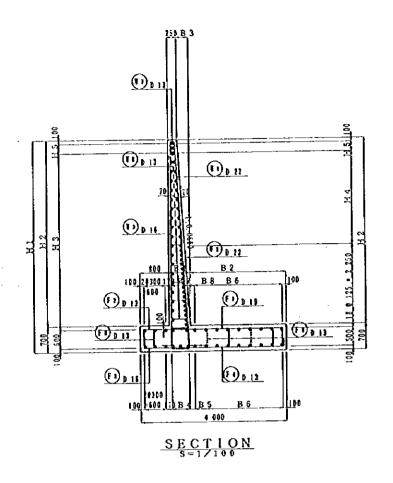


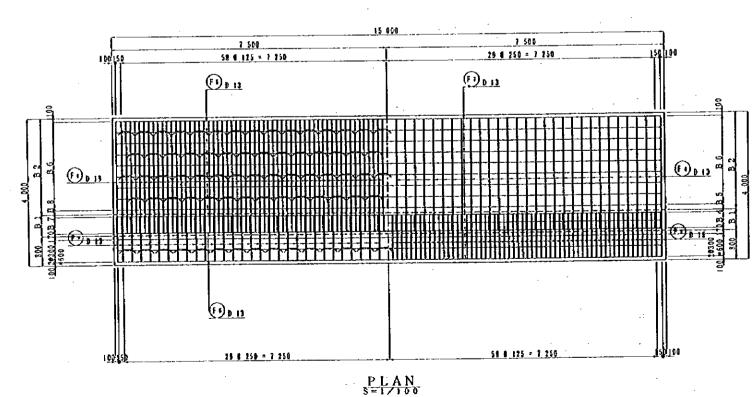
REIN NO.	φ (ss)	(sa)	ı	b	¢
11					
F 1	D 22	6 760	6 617~6 068	330	
2		3 290	2 958	330	
3	D 16	6 670	6 799~6 052	240	
ł	D tJ	15 150	14 BOD	390	
\$	•	8 060	3 457~11 868	390	
6	•	15 110	11 819	390	
7	•	500	110	135	
8	,	620	581~212	. 411	
Fi	D 22	4 150	3 451	709	—
1	D 13	1 700	1 503	195	
3	D 16	2 050	1 350	700	
4	•	3 576	3 330	195	<u> </u>
5	,	15 260	34 800	450	
	D 13	15 190	14 800	350	
7	•	15 199	14 600	390	
8	,	1 960	728	278	111
3	,	1 979	731	183	111
l	I	- -	•		

NO. T 5	D 22	(20) 6 510			
		6 410			
		4 314	6 934~6 206	330	
;	• 1 • 1	3 290	2 958	330	
	3 D 16	£ 800	6 915~6 185	248	
-	L D 13	15 150	14 800	390	
	5	5 870	4 333~14 576	390	
- 1		15 210	14 818	390	
	7	500	110	195	
		630	590~271	111	
F 1	D 22	4 150	3 (4)	200	
-	2 D 13	1 710	1 512	155	
	3 9 16	2 050	1 380	760	
	4	3 570	3 330	240	
_	5 .	15 260	14 800	480	
	6 0 13	15 198	14 800	390	
	7	15 190	14 200	390	
_		1 560	728	171	111
	9 .	1 970	732	2 82	Bt

JAPAN INTERNATIONAL COOPERATION AGENCY	CLIENT	: .	MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS
(11CA)	PROJECT	:	D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY
LICA STEDY TEAN	TITIE		R/A-18, AQR RE-BAR ARRANGEMENT (9)
PACIFIC CONSULTANTS INTERNATIONAL	DATE		DWG NO.W-52
FURLYANA CONSULTANTS INTERNATIONAL	IDVIE		Dec 10. 11 22







MOTES::

JAPAN INTERNATIONAL COOPERATION AGENCY

(JICA)

PROJECT: MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS

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

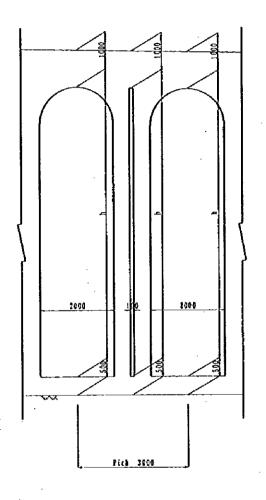
TITLE: R/A-18, AQR RE-BAR ARRANGEMENT (10)

PACIFIC CONSULTANTS INTERNATIONAL DATE

DATE

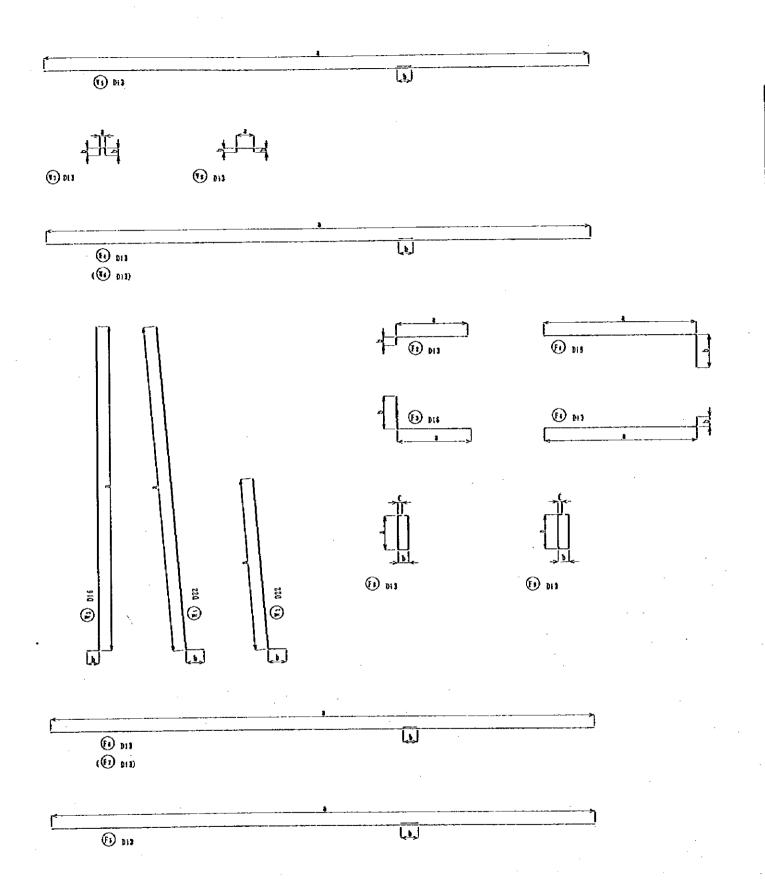
DATE

	1-9				
		a – a		b - b	
	Ha i	6 189	Нъі	5 4 3 9	
_	lia 2	5 4 8 9	нь2	4 739	
В	НаЗ	210250	нь3	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	
ı	Ha4	120250	Н Ъ 4	90250 = 2250	
4	Ha 5	2 3 9	11 b 5	2 3 9	
L	Bal	6 1 2	ВЬ1	5 6 3	
1	8 a 2	2 5 8 8	8 b 2	2 6 3 7	
N	Ba3	362	В b 3	313	
	Ba4	20255.5	B b 4	2 0 2 3 1. 0 = 4 6 2	
E	Ba5	119	Въ5	168	
-	Ваб	8 9 3 0 0 = 2 4 0 0	B b 6	80300 = 2400	
1	Ba7	478	B b 7	4 2 9	
	Ba8	1 5 2	Въ8	201	
	(T-9)				
Į		a – a		b - b	
İ	Ha)	6 0 5 2	нь 1	5 3 0 5	
В	H a 2	5 3 5 2	H b 2	4 6 0 5	
l .	H a 3	208250	11 6 3	180250 = 4500	
	Ha4	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	H b 4	9 @ 2 5 0 = 2 2 5 0	
3	Ha5	20176	нь 5	105	
L	8 a i	603	ВЬ1	\$ 5 4	
ı	B a 2	2 5 9 7	В Ь 2	2 6 4 6	
N	Ва 3	3 5 3	8 b 3	304	
E	Ba4	20251.0 = 502	В b 4	2@236.5 = 473	
E	Ва5	. 128	В в 5	157	
	B a 6	8 9 3 0 0 = 2 4 0 0	въб	80300 = 2400	
	B a 7	469	B b 7	420	
	B a 8	161	B b 8	210	



Slit Shape in Front of Tall
(Thickness (=30 #3)

JAPAN INTERNATIONAL COOPERATION AGE	ENCY CLIENT :	MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS
(JICA)	PROJECT :	D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY
JICA STEDY TEAN	TITLE :	R/A-18. ÁQR RE-BAR ARRANGEMENT (11)
PACIFIC CONSULTANTS INTERNATIONAL FUNEYAYA CONSULTANTS INTERNATIONAL	DATE	DWG NO. W-54

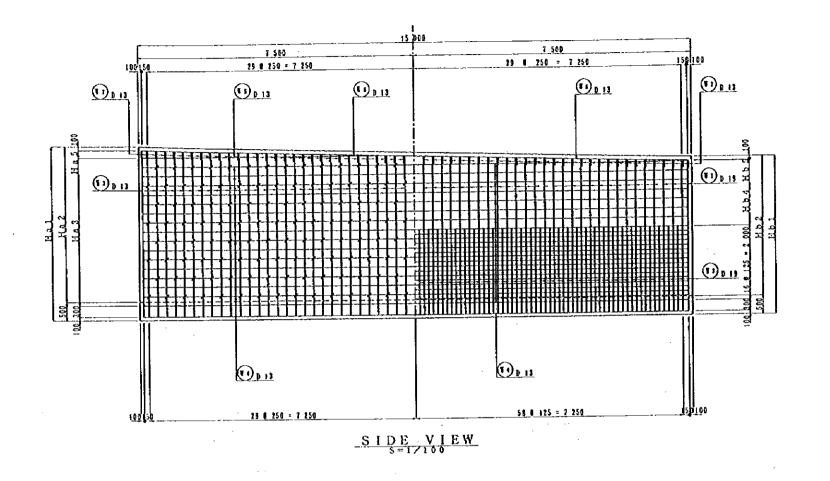


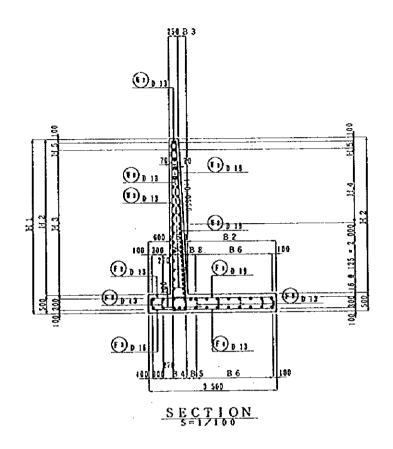
Notes:

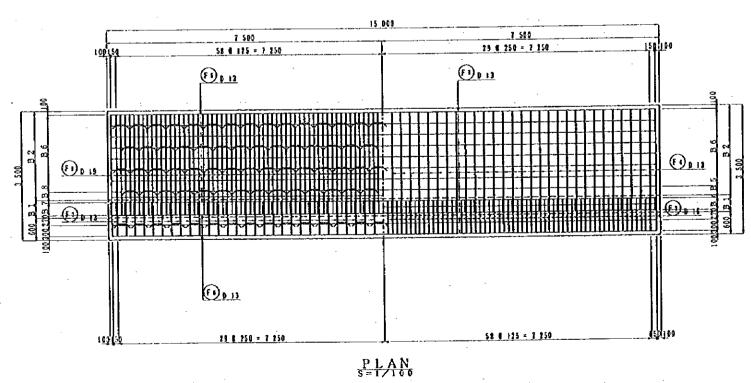
NELX NO.	ộ (EI)	187678 (ve)	ŧ	b	c
7 9					
1 1	D 22	\$ 830	5 863~5 113	330	
2	•	3 090	1 756	330	
1	D 16	\$ 720	5 652~\$ 105	249	
•	D 13	15 190	14 600	390	
\$,	\$ LOG	3 487~11 927	350	
f	•	15 21 0	14 813	390	
1	•	500	150	195	
8	•	579	473~209	111	
FΙ	D 15	3 660	3 156	500	
3	0 13	1 410	1 203	135	
3	9 16	1 650	I 150	500	
4	0 13	3 230	3 030	195	
\$	•	15 150	14 800	390	
6		15 190	14 600	390	
1		15 190	14 800	390	
1	•	1 560	521	272	111
9	5	1 560	529	279	Dt
			<u></u>		

RE LX	\$ (11)	LEXETB (21)	ı	b	· ·
3 9					
1	D 22	\$ 960	6 002~5 250	331	
2	•	3 D9Ó	2 754	330	
3	D 16	5 860	5 983~5 235	246	
4	D 13	15 198	14 839	390	
Ş	,	1# C4D	4 716~14 583	190	
6	,	15 210	14 819	398	
1		\$00	110	195	
1		620	494-230	111	_
FI	D 15	3 450	3 (47	500	
2	D 13	1 420	1 218	195	
3	DIE	1 680	1 180	500	
4	D 13	3 230	3 030	195	
5	•	15 199	COB #1	190	
8		15 190	14 800	390	
7	•	15 190	14 800	399	
8	•	1 550	\$78	278	111
. 9	,	1 580	523	279	116

JAPAN INTERNATIONAL COOPERATION AGENCY	CLIENT : MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS
(JICA)	PROJECT: D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY
JICA STUDY TEAN	TITLE: R/A-18, AQR RE-BAR ARRANGEMENT (12)
PACIFIC CONSULTANTS INTERNATIONAL FURLYANA CONSULTANTS INTERNATIONAL	DATE DWG NO. W-55







IAPAN INTERNATIONAL COOPERATION AGENCY

(JICA)

PROJECT: MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS

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

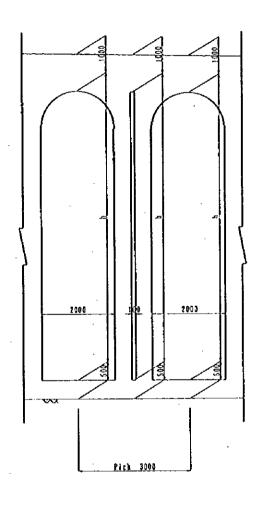
TITLE: R/A-18, AQR RE-BAR ARRANGEMENT (13)

PACIFIC CONSULTANTS INTERNATIONAL DATE

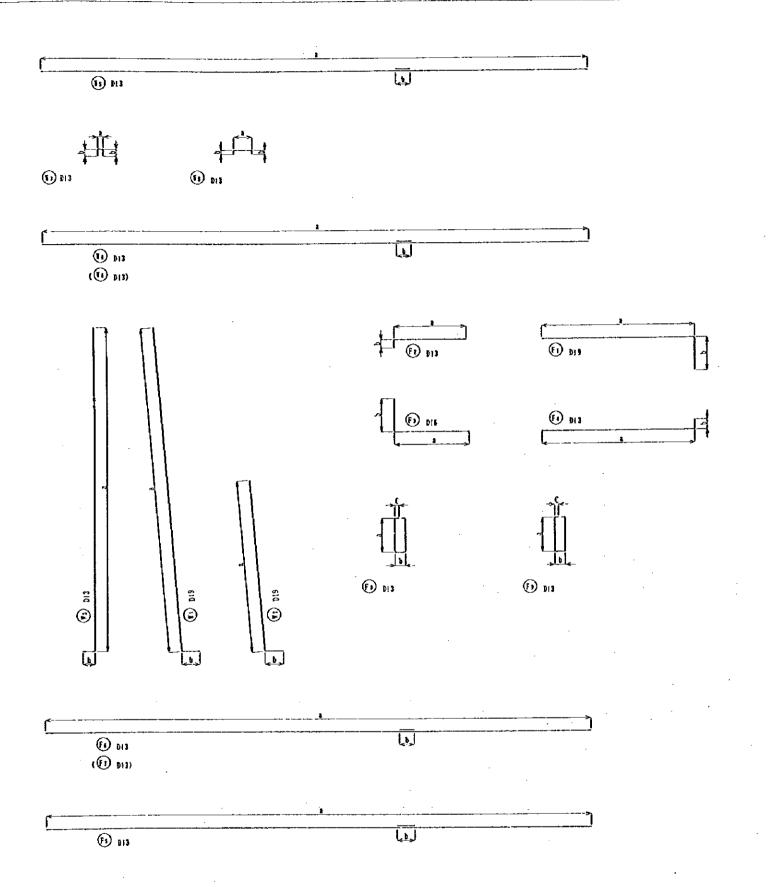
DATE

DATE

		(-	10	
		a – a		b - b
	Ha 1	5 2 3 9	H b 1	4 4 8 8
n	Ha2	4 739	Нъ2	3 988
В	На3	180250 = 4500	11 b 3	15@250 = 3 750
ı	На4	100250	H b 4	7 @ 2 5 0 = 1 7 5 0
4	HaS	2 3 9	нь5	2 3 8
L	3 a l	513	B b 1	472
I	B a 2	2 387	В ъ 2	2 4 2 8
N	ВаЗ	263	Въз	222
E	Ba4	20197.5 = 395	B b 4	$ \begin{array}{r} 20177.0 \\ = 354 \\ 20138.0 \end{array} $
L.	B a 5	$\begin{array}{c} 20117.5 \\ = 235 \end{array}$	B b 5	≈ 276 <u> </u>
	Ваб	70300 = 2 100	B b 6	70300 = 2 100
	Ba7	378	В Ъ 7	3 3 7
	Ba8	20125.0 = 252	B b 8	2 1 4 6. 5 = 2 9 3
	L.,	€-	10	
		a - a		b - b
	Hal	5 1 0 5	H b 1	4 3 5 8
В	H & 2	4 6 0 5	Н Ъ 2	3 8 5 8
_	11 a 3	180250 = 4500	H b 3	150250
	Ha4	100250	H b 4	7 @ 2 5 0 = 1 7 5 0
3	Ha5	105	11 b 5	108
L	Bal	506	Въз	492
I	B a 2	2 3 9 4	B b 2	2 4 0 8
N	8 8 3	256	B b 3	242
E	8 a 4	20194 = 388	B b 4	= 374
˜	Ва 5	242	B b 5	256 70300
	Ba6	= 2 1 6 0	B b 6	= 2 100
1	B a 7	371	B b 7	357
L	Ba8	20129. 5 = 259	Вь8	= 273



Slit Shape in Front of Watt (Thickness t=30 mm)



RETS NO.	(11)	LESGIA (ex)		•	٠,			
1 19								
1 1	D 19	4 830	6 845~6 469	285	-			
1	,	2 590	3 662	285				
3	0 13	4 730	6 823~6 451	195				
4	-	IS 190	14 500	390				
\$	· 1	7 430	2 050~11 587	330				
	•	15 210	14 819	399				
1	,	500	110	195	-			
1		520	387~192	111				
Fi	D 15	3 390	2 536	309				
1	D 13	1 740	929	195				
3	D 16	2 600	980	350				
4	D 13	2 530	2 730	195				
5	•	15 190	14 805	390				
1	•	15 190	14 890	390				
7	•	15 190	L4 809	390				
t	•	1 160	328	278	111			
9	•	1 160	329	279	111			

RELX No.	φ (m)	B1913) (es)	<u> </u>	6	¢
T 10					
1 1	D 13	4 560	\$ 047~4 295	285	
1	,	2 590	2 304	285	—
3	D 13	4 860	5 039~4 288	240	
- (3	Į\$ 19 0	14 800	390	
5		19 630	4 718~14 554	390	
F	,	15 214	14 413	390	
7		500	119	195	
- 1	•	520	394~199	111	 -
FI	D 19	3 250	2 943	390	
3	D 13	1 150	953	195	
1	D 16	1 280	980	300	
4	D 13	2 939	2 730	195	
\$,	15 190	14 800	390	
	,	15 190	14 800	390	
7	•	15 190	14 800	390	
1	,	1 160	328	278	111
•		3 160	325	279	111
	1J				
		-			

	JAPAN INTERNATIONAL COOPERATION AGENCY (CLIENT: MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS
NOTES:	(JICA)	PROJECT: D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY
	DICA STUDY TEAM	TITLE : R/A-18, AQR RE-BAR ARRANGEMENT (15)
	PACIFIC CONSULTANTS INTERNATIONAL FUNCTIONAL CONSULTANTS INTERNATIONAL	DATE DEC NO. W-58

B-3LINE REIS O (ca) LENGTH BONINAL MAN L TRICAL RELEAT BENARES 5 1 D 23 1 660 5.059 61 1 499.4 3 D 19 58 25. 851 5 110 2 480 2. 235 18. 953 1 155. 1 15 150 D. 994 15. 099 | D41. 8 63 4 D 13 \$ 430 8, 319 50.3 ----5 15. [25 30.3 • 15 120 500 710 6 7 9. 437 30.3 • 302.2 428 0. 206 2 354.5 4 389 3, 573 119 19, 786 F 1 D 25 126.1 2 D 13 2 050 0.994 61 1. 058 1 480 1. 552 115 3. 843 458. 0 L_ 3 0 16 413.7 61 6. 752 4 310 15 280 13 23, 715 308. 3 15.099 75. 5 6 D 13 15 190 6. 994 ş 186. 3 15 190 19 15. 099 116.1 (1) 58 2. 346 2 160 345. (D 1. 366 61 30. 473 | 858. 5 7 670 3, 573 T 1 D 25 2 J 4 650 51 18. 613 I 050.7 7 520 1. 235 61 7(1.9 11. 671 15 190 0.954 62 15. 099 936. 1 4 0 13 7, 962 47.1 B 010 -15 210 15. 109 30. 2 **6**1 0. 497 30.3 - 500 241.1 560 " 363 0. 656 18. 91 i 2 250.4 4 760 3, 973 119 F 1 D 25 2 D 13 108. \$ L 790 0. 994 61 1. 775 1 180 1.552 119 1. 383 492.€ 4 , 5 D 13 6. 317 335.3 4 070 12 15. 099 181. 2 15 190 0. 394 15. 059 75.5 15 190 18 (5.059 271. 5 15 190 29 2. 543 62.3 0 2 160 314. 2 2 180 145 2. 863 6 780 3.042 61 3 290 • 58 1 1 D 22 20. 625 1 258. 1 10.008 580.5 631.5 6 670 1.552 61 10. 352 3 D 16 4 D 13 IS 190 9.594 \$1 15. 099 374. 0 8. 012 (8.1 . 1 060 15 210 -15, 119 30.2 0. 497 30.3 . . - 61 500 9. 616 151.0 620 110 4 160 3. 642 119 12. 655 1 505. 9 F 1 0 22 163.1 1 700 0.994 51 1.490 2 0 13 111 3. 228 334. 1 2 080 1.552 3 0 16 138. 9 , . 5. \$41 3 510 15 280 11 23, 715 75. 5 5 15, 099 15 150 B. 994 6 D 13 17 15. 099 29 7 15 190 * 1 960 * 1 970 * 1 258. 7 \$6. \$ C3 116 1.958 227.1 G

NOTES;

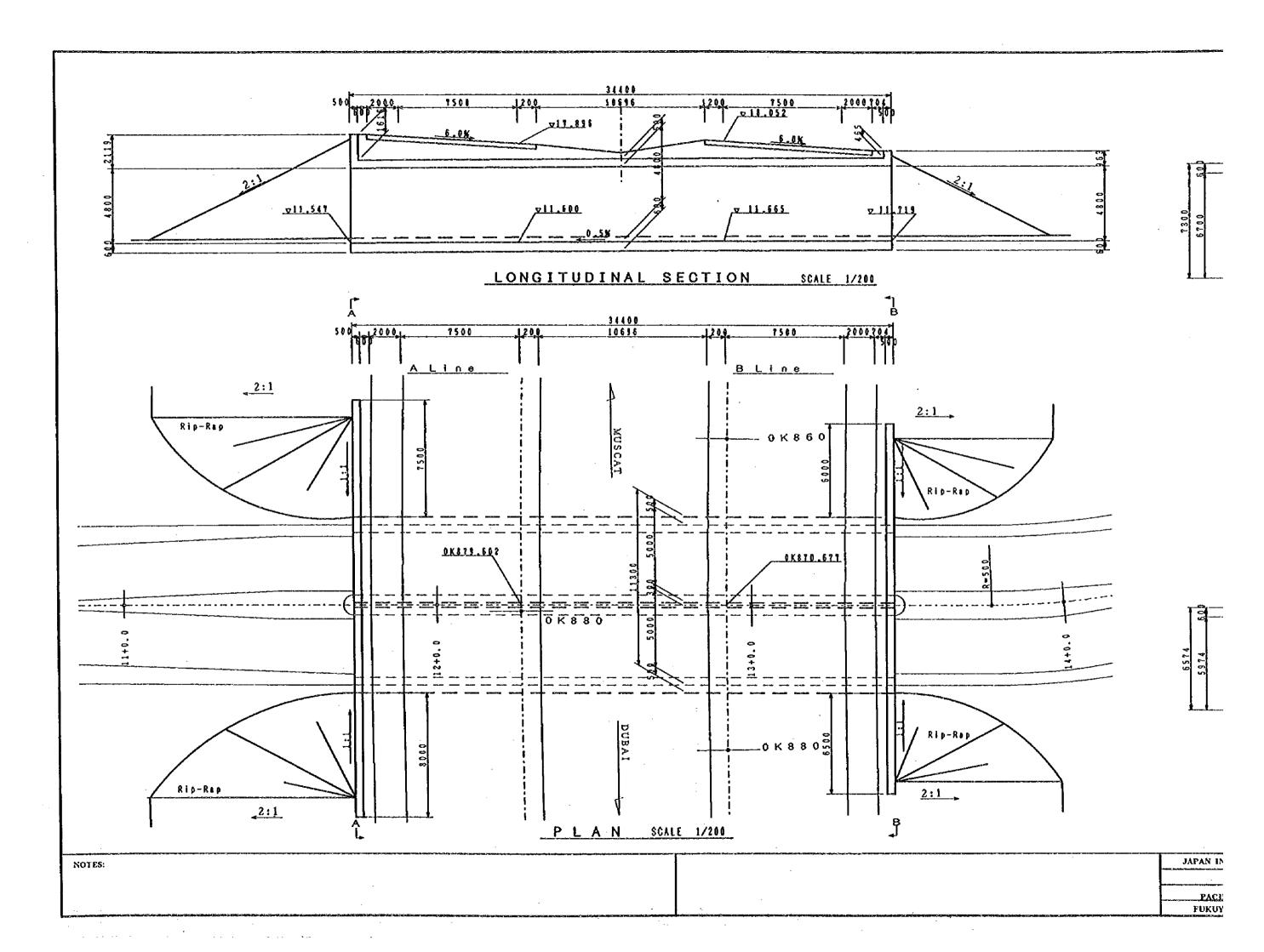
T () 22		\$ (EE)			KENB	E BEIGHT	TEICHT	RENAIRS
T D D S 390 S 642 61 17, 725 1 081 8 1 2 7 2 3090 7 58 9 9, 600 545 7 1 1 1 1 1 1 1 1 1								
2		D 22	5 139	3. 842	11	17. 735	1 081.1	<u> </u>
			3 430		51	9, 400	\$45. 2	
4 0 13 15 190 0, 254 45 15, 099 679, 5	- 1	D 16	5 120	1.552	61	4. 877	541.5	j
S				0. 394	45	15. 099	679. 5	
		-			6	8. 051	48. 3	
T S S S S S S S S S					2	15, 115	30. 2	
## 1 D 13 # 239					61	D. 437	30. 3	
E 1 D 19 3 649 2.225 119 3.110 573.4 3 2 D 13					 			-
T 10							973.4	
3 D 16 1 640 1.552 119 2.601 318.2 L 4 D 13 3 230 8.994 61 3.211 195.9					-			<u></u>
Told Told								
\$, 15 150								
T		-					 -	
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T 18				ļ		 		<u>-</u> -
T 18				<u> </u>				
T 18 T 18 T 1 0 13		L <u>.'</u>	1 280	L'	113	1. 951		
B 1 D 13 B 339 2.235 61 10.755 658.5 1 2							3 333. 4	
B 1 D 13 B 339 2.235 61 10.755 658.5 1 2								
2						1	410.5	
1 D 18		0 13			+			
4 " 15 198	2							
\$ " 2 926 " 5 7.385 44.3	. 1	D 13	£ 100	1.394	1	+	 	ļ. <u>!</u>
4 " 15 200 " 2 15.169 30.2	1							
T	. \$,	7 926		1			
\$ " \$90 " 251 0.517 129.8 " F 1 D 15 3 240 2.225 119 7.241 851.7 "] 2 D 13 1 139 0.554 51 1.123 60.5 ["] 3 D 16 1 289 1.552 119 1.987 235.5 [] 4 D 13 2 330 0.534 61 2.512 177.6] 5 " 15 190 " 10 15.635 151.0] 6 " 15 190 " 3 15.035 45.3] 7 " 15 180 " 13 15.035 153.0] 8 " 1 160 " 25 1.153 32.4 Cl 9 " 1 160 " 116 1.153 132.7 [] 3 \$53.5 D 23 4 171.5 D 25 4 971.5 D 15 4 635.1 D 16 5 332.5 D 17 16 5 332.5	- 4	*	15 249	<u> </u>	1 2	1		
F 1 D 15 3 240 2.225 119 7.241 B51.7 7 2 D 13 1 139 0.554 61 1.173 68.5 r 3 D 16 1 283 1.552 119 1.987 236.5 L 4 D 13 2 530 0.534 61 2.512 177.6 — 5 r 15 190 r 10 15.638 151.0 — 6 r 15 190 r 3 15.035 45.3 — 7 r 15 190 r 13 15.039 196.3 — 8 r 1 160 r 25 1.153 32.4 C1 9 r 1 160 r 25 1.153 132.7 L1 3 553.5 D 23 4 171.5 D 25 7 544.5 D 22 4 971.5 D 15 5 332.5 D 13 10 171.6	7	,	500		61	0. 457		
2 D 13	8	•	690	-	251	9. 517	1	
3 D 16	FI	0 15	3 140	2. 235	1115	7. 241		
4 D 13 2 930 0.534 61 2.512 177.6 — 5 5 " 15 190 " 10 15.639 151.0 — 6 6 " 15 190 " 3 15.035 45.3 — 7 7 " 15 190 " 13 15.095 198.3 — 7 8 " 1 160 " 25 1.153 33.4 Cl 9 " 1 160 " 116 1.153 133.7 Cl 3 953.5 D 25 4 171.5 D 25 4 971.5 D 15 4 639.1 D 16 5 332.5 D 17 10 171.6 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	7	D 13	1 133	0. 994	61	1. 123		
1	3	D 16	1 213		115	1. 987	235.5	
6	4	P 13	2 539	0.334	61	2, 3)2	177.6	
1	5	•	15 190		10	15. 039	151.0	
B	6	1	15 190	·	3	15. 093	45.3	
9 • 1 168 • 116 i.153 113.7 L1 3 553.5 D 25 4 171.5 D 25 4 571.5 D 12 4 971.5 D 13 4 619.1 D 16 5 312.5 D 13 10 171.6 107AL VELGET 36 881.1	1	,	15 190	<u> </u>	13	15.093	194.3	
3 553.5 D 23 4 171.5 D 25 7 544.5 D 22 4 971.5 D 13 4 639.1 D 16 5 332.5 D 13 10 171.6 TOTAL VELORY 36 881.4	ı		1 169	7	25	1, 153	33.4	
D 23 4 171. \$ D 25 7 544. 5 D 22 4 971. 5 D 13 4 639. 1 D 16 5 332. 5 D 19 10 171. 6 TOTAL VELORY 36 881. 4	9	•	1 160		116	1, 153	133.7	<u> </u>
D 23 4 171. 5 D 25 7 544. 5 D 22 4 971. 5 D 15 4 639. 1 D 16 5 332. 5 D 13 10 171. 6 TOTAL VELCET 36 881. 4							1 551.5	
D 25 7 544.5 D 22 4 971.5 D 15 4 639.1 D 16 5 332.5 D 10 171.6 TOTAL VELCET 36 881.4			-					
D 12 4 971. 5 D 15 4 639. 1 D 16 5 332. 5 D 10 171. 6 TOTAL VELGET 36 881. 1						D 23	4 171.3	
D 15 4 639. 1 D 16 5 382. 5 D 13 10 171. 6 TOTAL VELGET 36 881. 1	Γ	D 25 - 7 See. S						
D 16 5 332.5 D 13 10 171.6 TOTAL VELIGET 36 881.1		D 12 4 971. \$						
D 13 10 171.6 Total veight 36 881.1								
TOTAL VELGET 36 881.1								
		TOTAL BEIGHT 36 881.4						
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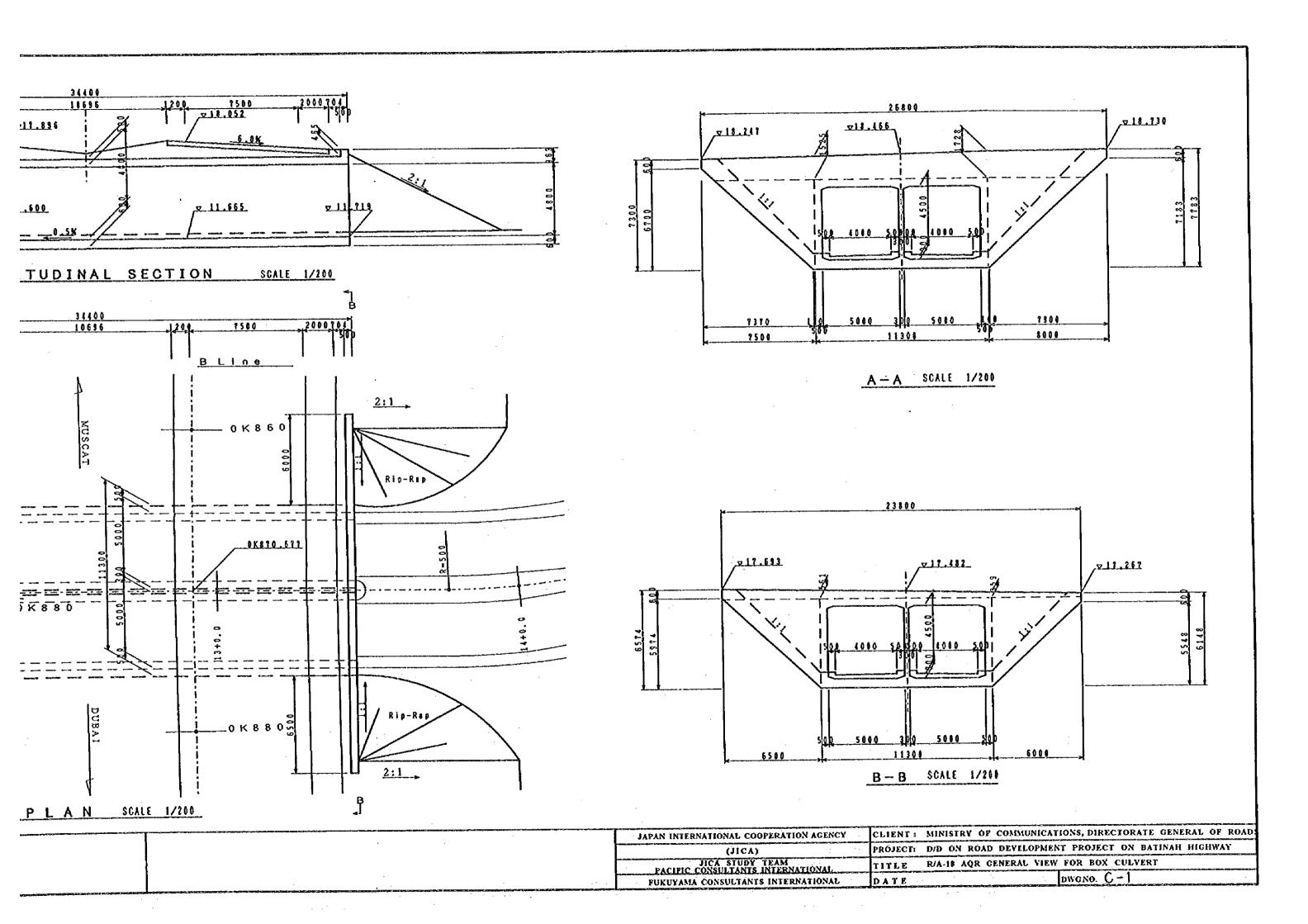
В –	4 L	INE					
REIS	ð (81)	LENGTH	ROWINAL	NUN3	O RESCRI	TEIGHT	REMARKS
10.	\$ (a1)	(11)	BEIGHT		4 963681		
16				r			
V i	D 59	8 B0Q	S. 059	61	43, 513	2 715. 7	
1	. •	5 110	•	- 51	25. 851	1 495. 4	
3	D 13	8 620	2. 235	61	19. 266	1 785. 2	J
- 4	D 13	15 490	0. 994	63	15. 093	1 041. 1	
\$	*	9 180			9. 125	73.0	
í		15 220	,	2	15. 129	30. 2	
7	,	500	ı	61	0.437	30.3	•
		720	,	428	4, 716	106.4	~
FĪ	D 25	5 060	3. 973	113	20, 183	2 352 3	
1	D 13	2 990	D. 994	11	2, 07?	126.7	<u></u>
3	9 16	1 480	1. \$52	119	3, \$43	458. 0	<u> </u>
	7 10	4 310	, ,	61	6, 781	413.7	
4				1		308. 3	
\$		15 280		- 13	23.715		
- 6	0 13	15 190	0. 994	5	15.099	75.5	
7		15 190	.	13	15.093	286. 9	
1	_ •	2 368		58	2. 346	116.1	
,	•	2 180		146	2. 366	345.4	Ü
						12 025, 0	
					<u></u>		
1.5							
T i	D 25	7 110	3. 573	61	31, 429	1 891. 8	i i
1		4 690	•	51	18, 633	1 089.7	i
3	D 16	7 650	1, 552	- 61	11, 873	724. 3	J
- 1	D 13	15 190	0.594	12	15, 059	936, 1	
		8 810			8. 757	52.5	
	,		,	1	15, 113	38.1	
	-	15 219 500		61	0. 497	30.3	
1				363	0. 596	245. 8	
. !	2 22	670		+	 		
F 1	D 25	4 750	3.971	115	18. 172	1 245. 8	
1	D 13	1 600	0. 994	61	1. 783	109.1	ļ
. 1	D 16	1 160	1.552	119	3. 383	402.6	L
		4 070	<u> </u>	- 61	8. 317	385.3	
. 5	D 13	45 150	0. 594	12	15. 033	181.1	
	<u> </u>	15 190	<u> </u>	5	15. 099	75.5	
7		15 190	<u> </u>	8.1	15.099	271. 8	
8	•	1 160	<u></u>	23	3, 147	62.3	D
5	,	2 180		115	2. 16?	\$14.2	0
-						11597. 2	
				_			
7 B						-	
T (D 22	6 900	3. 042	63	20. 990	1 280.4	I
2	-	3 290		51		580.5	<u> </u>
	0 16	6 800	1	61	1 . :-	613.8	1 1
- ;	D 13	15 130	}	51	 	770. C	
5	 	9 170	1.327	1		58.9	
	╄—-	15 210	+	+-;		30.2	
	1			6		30.3	
	+	500			· 		 -
- 1	+	630		- 21			
F 1	D 22	4 150		113			
		1 710	9. 994	1 11		103.7	
3	D 16	2 083	·	1115			↓└
- 4	<u> </u>	3 570	1	61		338.0	
5		15 280	•	1 11	23.715	160. 9	
6	D 13	15 190	0. 951	5	15. 099	75. 5	
7	,	15 190	•	17	35. 099	256. 1	
1	,	1 960	,	19	1.548	56. 5	0
			+		· • · · · · · · · · · · · · · · · · · ·	+	
3		1 970		116	1.958	227, 1	1 0

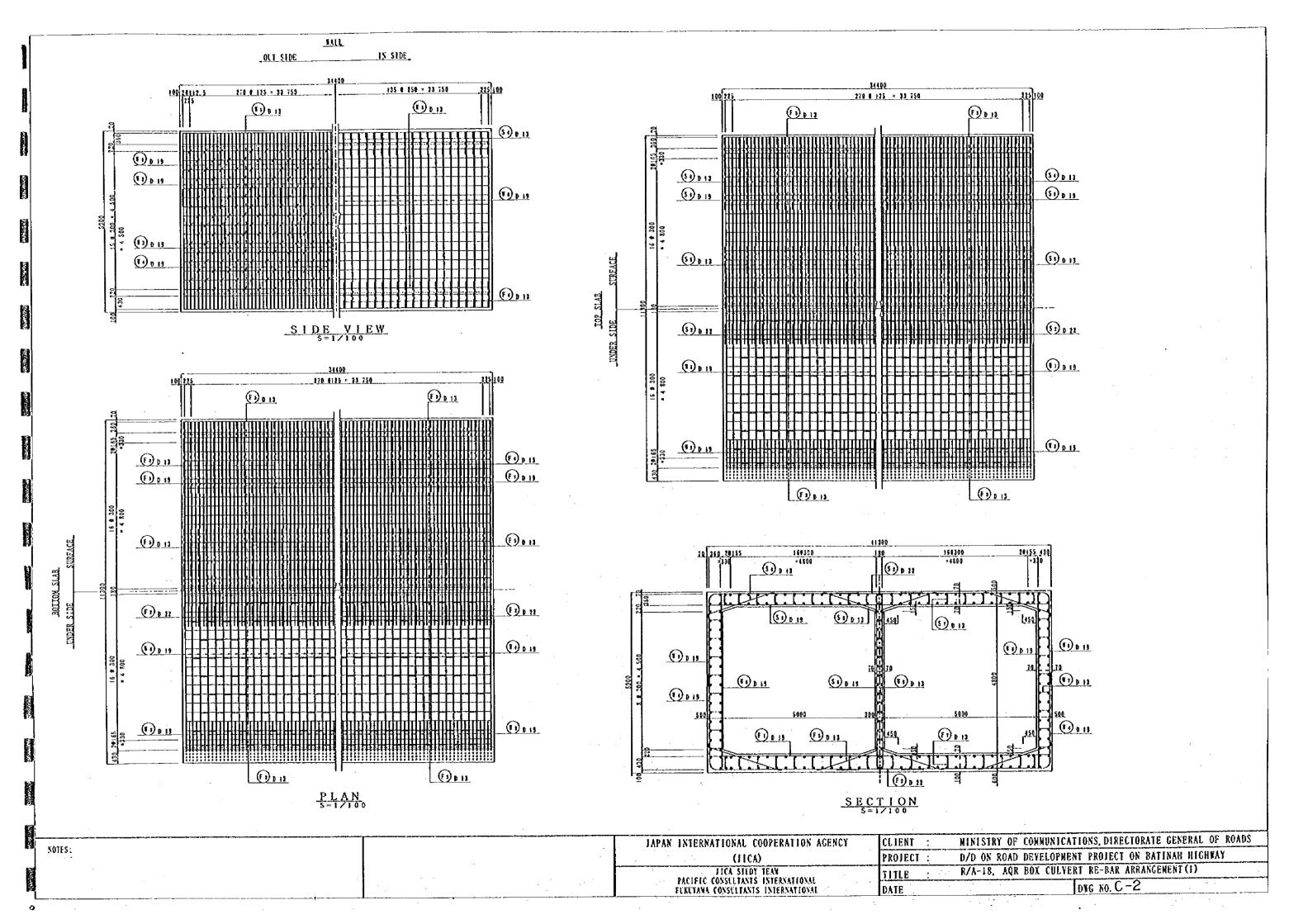
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	-3	1				10 475	1 105 B	1
1 1	-1	D 22	\$ 960	3, 042	65	18.130	1 (05.)	
2	4		3 090	•	58	9, 248	545. 1	
	!	D 16	5 860	1.551	61	3. 095	554. 8	
- 1	Ц	B 13	15 190	0. 311	45	15. 099	675.5	
- 5	ij	•	10 010	•		9. 980	\$9. 9	
	<u>.</u>	•	15 114		1	18. 119	36. 1	
1	۱)	•	500		61	0. 497	30. 3	
1	1	•	\$90	•	266	0. 567	150. 1	
F	П	D 19	3 650	2. 235	113	1.158	970. 1	
	П	9 13	1 429	0. 534	61	1.411	86. 1	<u>r-</u>
1	П	D 16	1 689	1.552	113	2, 607	310. 2	<u> </u>
	ı	D 13	3 230	0, 994	61	3, 211	195. 9	<u> </u>
-	5		15 190	•	15	IS. 093	151. 0	
	1	,	15 190		4	15, 493	69. 4	
	7		15 190		15	15. \$53	216.5	
•		-	1 560	-	19	1. 143	45. D	Ü
_	•		1 560		116	2. 863	179.9	U
	_	لــــــا		 _	L	1	5 381.4	
	_							
1	_		1 826	2 225	61	11.086	675. 2	1
	4	0 15	4 950	2. 235	58	5. 789	335. 1	i
	2	-	2 590	ļ			294. 7	
	3	0 13	4 860	0.994	<u>!!</u>	4, \$31	573. 8	
	1		15 190	ļ <u></u> -	33	15. 693		+==
	5		10 439			9. 370	55. B	 -
	6		15 11B		1	15. 113	30. 2	
	7		\$00		61	9. 497	30. 3	<u></u> -
- 1	1		520	<u>, , , , , , , , , , , , , , , , , , , </u>	221	1.517	114.3	
F	l	D 19	3 150	2. 235	119	7, 264	114. 1	
	2	D 13	1 150	0.994	13	1. 143	53. 7	
	3	9 15	1 280	1.551	113	1.987	216. 5	<u> </u>
	4	D 13	1 530	0. 534	61	2. 912	177. \$	
	5	•	15 190	,	10	15. 499	151. 0	
	6	,	15 190	•	3	15.493	45. 3	
	ī	-	15 190	•	13	15. 495	196. 3	
	i	,	1 160		29	1.153	23. 4	Ð
	Ì	-	1 160	,	116	1.15\$	133. 7	Ð
	_	·					4 623. 0	
- -						D 19	4 215, 1	
	-					D 25	7 613. 6	
	-					D 22	5 DL4. 7	
						D 19	4 632.4	
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						OTAL TEICHT	94 111.3	
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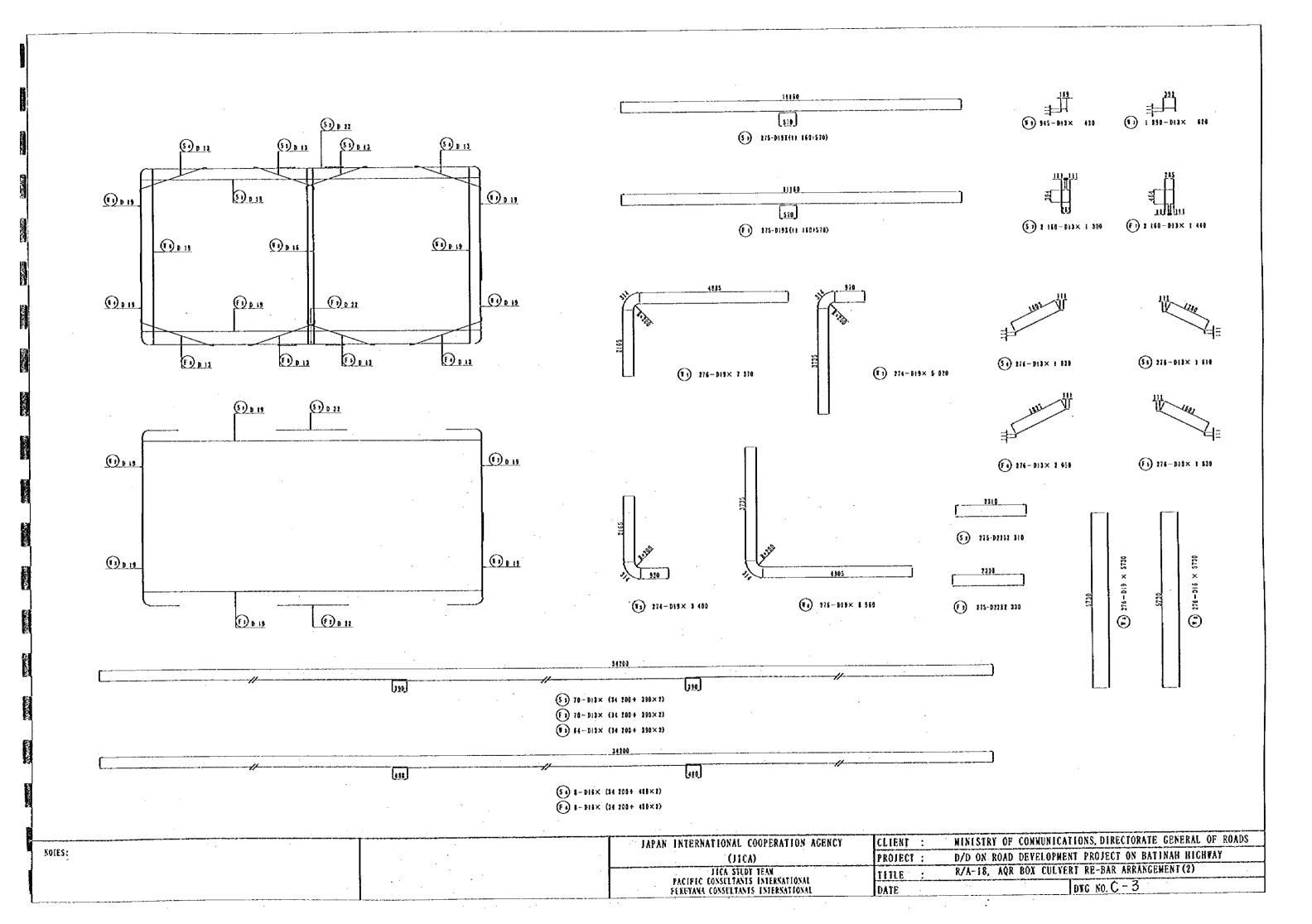
 JAPAN INTERNATIONAL COOPERATION AGENCY		MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS
(J1CA)	PROJECT:	D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY
JICA SILDY TEAN	TITLE :	R/A-18, AQR RE-BAR ARRANGEMENT (16)
PACIFIC CONSULTANTS INTERNATIONAL FUKUYANA CONSULTANTS INTERNATIONAL	DATE	DNG NO. W-59

STRUCTURE -BOX CULVERT









REIS Corp. Corp. Select Selec						,			
S 1 D 15 11,730 2.235 175 26,217 7,209,7		\$ (cz)			MYB	E VERGAT	REIGHT	RENATIS	
2 D 22 2, 316 3.042 275 7, 027 1, 532.4 — 3 D 13 24, 584 0.934 70 34.770 2, 433.9 — 4		<u>v. 1 (187) 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1</u>							
3	3 1	D 13	11, 730	2. 235	175	- 26, 217	7, 209, 1		
### 1	2	D 22	2, 310	3.042	275	7, 927	3, 532. 4		
4	3	D 13		9. 934	70	34.770	2, 433. 9		
6 D 16 35, 16D 1.552 8 54.568 436.5	4	•	1, 130		276	1. 113	502. 0	/	
T D 13 1,300 0.594 2.160 1.292 2.790.2 [] T D 13 1,300 0.594 2.160 1.292 2.790.2 [] T D 13 7,379 2.225 276 18.472 4.546.3 [2	5		1,610	,	276	1.600	441. €	_	
### 1 D 13 7,379 2,235 276 18,472 4,548.3 7 2 4 5,527 2 274 11,229 3,874.3 7 3 4 4 4 4 4 4 4 4 4		D 16		1. 552	1	54.568	136, \$		
1 4 5,620 * 274 11.228 3,874.3 [3 * 2,400 * 274 7,533 2,687.1 [4 * 2,860 * 226 20.026 5,527.2 [5 D 13 34,820 9,594 64 34,770 2,225.3 * 6 D 19 5,730 2,235 226 12.807 3,534.7 [1 7 D 13 620 0.594 189 1.850 1,184.8 * * 8 D 16 5,730 1.552 276 4.892 2,454.5 [* 9 D 13 470 0.994 545 0.417 234.1 * * 2 D 22 2,330 3.042 275 7.688 1,599.2 * 3 0 13 34,530 0.534 70 34.170 2,432.5 * 4 * 2,050 * 216 2,038 562.5 * 5 * </td <td>7</td> <td>D 13</td> <td>1,300</td> <td>Ø. 594</td> <td>2. 160</td> <td>i. 292</td> <td>2, 790, 1</td> <td>(1)</td>	7	D 13	1,300	Ø. 594	2. 160	i. 292	2, 790, 1	(1)	
1 4 5,620 * 274 11.228 3,874.3 [3 * 2,400 * 274 7,533 2,687.1 [4 * 2,860 * 226 20.026 5,527.2 [5 D 13 34,820 9,594 64 34,770 2,225.3 * 6 D 19 5,730 2,235 226 12.807 3,534.7 [1 7 D 13 620 0.594 189 1.850 1,184.8 * * 8 D 16 5,730 1.552 276 4.892 2,454.5 [* 9 D 13 470 0.994 545 0.417 234.1 * * 2 D 22 2,330 3.042 275 7.688 1,599.2 * 3 0 13 34,530 0.534 70 34.170 2,432.5 * 4 * 2,050 * 216 2,038 562.5 * 5 * </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>·</td>								·	
1 4 5,020 * 274 11,228 3,074,3 \$ 3 * 2,400 * 274 7,533 2,687,1 \$ 4 * 2,960 * 226 20,026 5,527,2 \$ 5 D 13 34,520 0.594 64 34,770 2,225,3 * 6 D 19 5,720 2,235 226 12,807 3,534,7 \$ 7 D 13 620 0.594 189 1.850 1,184,8 * 8 D 16 5,720 1.552 276 4.893 2,454,5 \$ 9 D 13 470 0.994 545 6.417 234,1 * 2 D 22 2,320 3.042 275 7,488 1,549,2 * 3 0.13 24,530 9.554 70 34,170 2,432,5 * 4 * 2,050 * 276 2,088 1,599,2 * 5 * 1,610 * 276								-	
1	7 1	D 13	7, 979	2. 235	276	16.471	4, 546. 3	Γ.	
3		1		,	274	11. 229	3, 074. 3	<u> </u>	
\$ D 13	3	,	3, 400	,	274	7.553	2, 682. i		
6 D 19 5,730 1,235 126 12,807 3,534.7 1 7 D 13 620 0.594 183 1,890 1,164.8 11 8 D 16 5,730 1,552 276 4,892 2,454.5 1 9 D 13 420 0,994 545 6,617 234.1 1 2 D 22 2,330 3,641 275 7,682 1,549.2 1 3 0 13 34,550 0.334 70 24,770 2,433.9 1 4 2,050 216 2,038 567.5 1 5 1,610 276 1,600 441.6 1 6 D 16 25,160 3,552 8 54,568 426.5 1 7 D 13 1,440 D.994 2,160 1,431 3,091.9 1 D 16 3,277.5 D 13 16,481.4	4		1, 960	,	276	20. 026	5, 527, 2	L	
7 D 13	S	D 13	34, 980	0. 554	11	34. 770	2, 225, 3		
B D 16 5.730 1.552 276 2.892 2.454.5 9 D 13 420 0.994 545 0.417 234.1 473 F 1 D 15 14,730 2.235 275 26.217 7.209.7 — 2 D 22 2.320 3.042 275 7.482 4.599.2 — 3 D 13 34,550 0.394 70 24.770 2.433.9 — 4 # 2.050 # 216 2.038 567.5 5 # 1,610 # 276 1.600 441.6 6 D 16 35.160 2.552 8 54.568 428.5 — 7 D 13 1.440 0.994 2.160 1.431 3.691.0 [] D 22 3.881.6 D 19 33.184.8 D 16 3.327.5 D 13 16.481.4		D 19	5,730	2.235	276	12.867	3, 534, 7		
9 0 13	1	D 13	628	0.551	1119	1.890	1, 154, 8	רח	
F I D 13	8	D 16	5.730	1.552	276	1. 892	2, 451. 5	Ī	
2 D 22 2,330 3,641 275 7,482 1,549,2 — 3 D 13 34,550 0.534 70 24,770 2,433.9 — 4	9	0 13	420	0.994	545	9. 417	394, 1	r1	
2 D 22 2 33D 3.641 275 7.482 1.549.2 — 3 D 13 34.55D 9.534 7D 24.17D 2.433.9 — 4		•							
2 D 22 2,330 3,641 275 7,482 (,549,2 — 3 D 13 34,550 0.534 76 24,770 2,433.9 — 4									
3 0 13 14, 350 0 354 70 24, 170 2, 433, 9 4	FI	0 13	14, 739	1. 235	275	26. 217	7, 289, 7		
4	1	D 22	2, 330	3.041	175	7, 488	1, 549, 2		
5 " 1,610 " 276 1.600 441.6 6 D 16 25,160 1.552 8 54,558 426.5 7 D 13 1.440 D.994 2.160 1.43t 3,691.0	3	9 13	34, 580	9. 354	7.0	34. 170	2, 433, 5		
6 D 16 25, 160 1.552 8 54, 568 436.5 7 D 13 1.440 D.994 2.160 1.43t 3.69t.0 □ D 22 3, 891.6 D 19 23, 184.6 D 16 3, 297.5 D 13 16, 481.4	4	,	2, 050	•	276	2, 038	562. 5		
7 D 13 1.440 D.994 2.160 1.43t 3.69t.0] D 22 2.891.6 D 19 32.184.6 D 16 3.927.5 D 13 16.481.4	5	•	1,610	•	276	1. 600	₹₹1. 6	1	
D 22 1, 891. 6 D 19 31, 184. 8 D 16 3, 327. 5 D 13 16, 481. 4	6	D 16	35, 160	1. \$52	8	54. 568	435.5	<u> </u>	
D 19 33,184.8 D 16 3,327.5 D 13 16,481.4	7	D 13	1, 440	D. 994	2.160	1. 431	3, 091. 0		
D 19 33, 184. 8 D 16 3, 327. 5 D 13 16, 481. 4									
D 19 33,184.8 D 16 3,327.5 D 13 16,481.4						·			
D 14 3,327.5 D 13 16.481.4		D 22 3, 811. 6							
D 13 16.481.4		D 19 33, 184. 6							
		D 14 3, 317. \$							
TOTAL BEIGHT \$6, 874. 5						D 13	16.495.4		
IVAL POINT 25, 6(5, 2						TAT TELEGY	56 954 5		
						ATUR SCIEST	39, 015. 2		

JAPAN INTERNATIONAL COOPERATION AGENCY

(JICA)

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

JICA SILDY IEAN
PACIFIC CONSULTANTS INTERNATIONAL
FURTURANA CONSULTANTS INTERNATIONAL
DATE

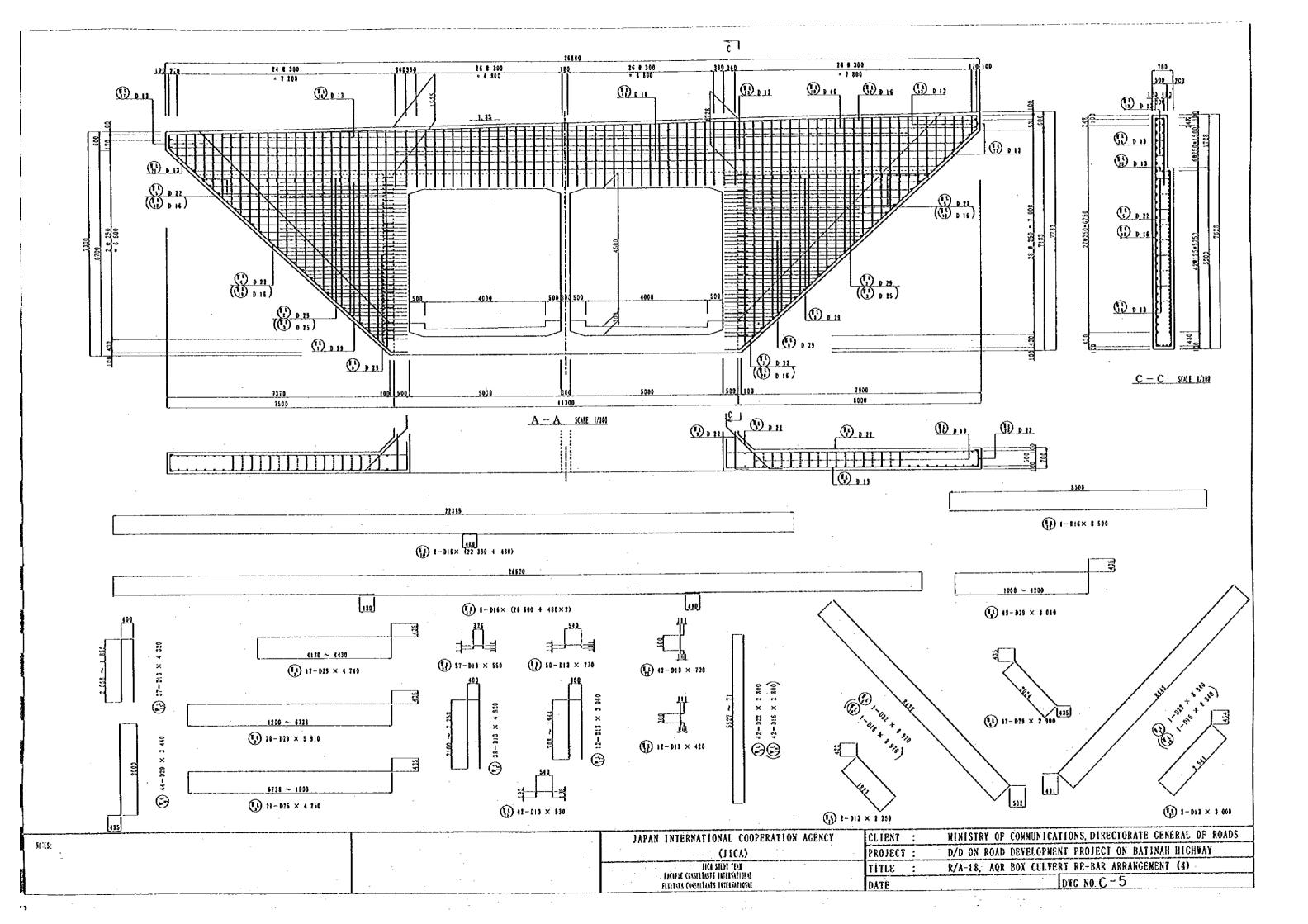
CLIENT: MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS

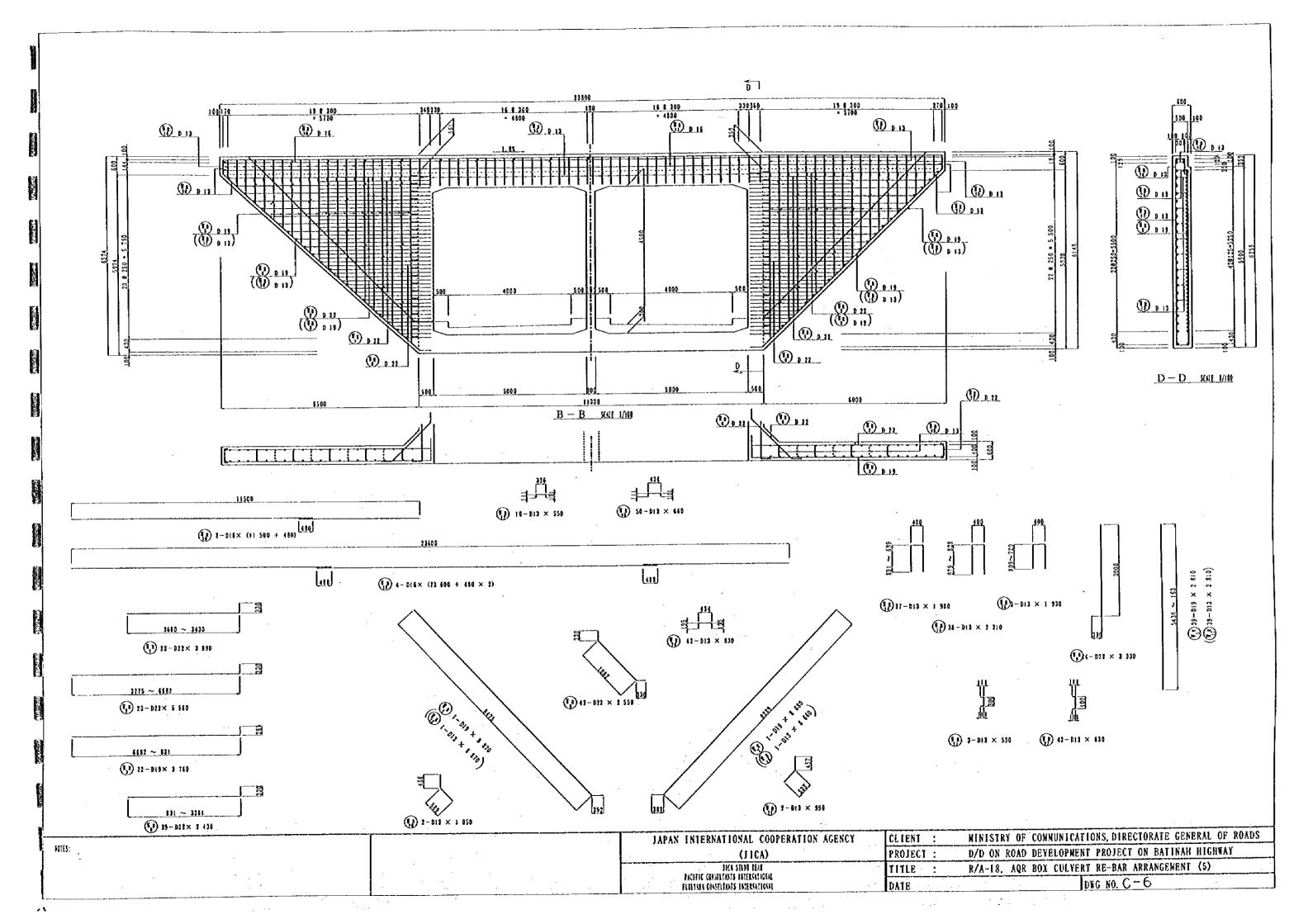
PROJECT: D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY

TITLE: R/A-18, AQR BOX CULVERT RE-BAR ARRANGEMENT (3)

DATE

DATE





REIN SO.	\$ (vs)	LEKGIE (1e)	NOXINGL BEIGET	MENB	& TEIGHT	TEIGHT	REMARKS
30.	نـــــــــــــــــــــــــــــــــــــ	1112/	011021				
51.1	D 29	4, 748	5, 059	17	23. SEQ	401.7	
1		S, 910		20	23. B93	558. 0	
	D 25	4. 258	3, 973	22	15. 885	371.5	
1	D 22	8. 370	3.042	1	27, 287	27.3	
5		2, 800		42	8. 518	157. 8	1
	D 23	2, 900	5. 053	42	14. 671	\$15.2	\ \
7	D 22	8 940	3. 041	1	27. 195	27, 2	
1	D 23	3, 040	5. 059	45	15. 379	753. 6	
3		3, 410	,	11	17. (03	765. 7	i J
10	D 16	22, 870	1. 552	2	35, 434	71.4	
11		27, 560	•	5	42, 273	256, 4	
12	•	2, 500		2	13, 132	26. 4	
13	D 13	550	0. 994	57	0. \$47	31. 1	П
14		270	,	50	4, 765	28, 3	<u></u>
15		4. 320	,	37	4. 254	158. 3	N
16	,	4, \$20	,	31	4. 791	112. 1	U
17		3, 069	,	12	3. D42	36.5	N.
18	D I 6	2, 200	1. 552	41	1.346	182.5	
19	•	8, 979	,	ı	13.921	19.9	
20	•	8, \$48	•	1	13. 875	13. 3	/
11	D 13	2, 250	D. 954	2	1. 237	4.5	<u> </u>
22		3, 600		1	1.911	6.1	
13	•	196		12	9. 726	10.5	C
24		420		13	9, 417	\$. 0	C
25	·	530		12	0. 924	33. 8	
ļ							
<u> </u>							
<u> </u>		·					
					D 79	3, 143. 2	
<u> </u>			·- 		D 25	271.5 412.3	
						· · · · · · -	
<u> </u>					D 16	564. 3	
		·			D 13	496. 3	
\vdash				7/	TAL SEIGHT	5, 921, 1	
			· · · · · · · · · · · · · · · · · · ·		LINE ACTABL	3, 941. 1	
L							

RELN	φ (z a)	LENGTH	NONINAL	NEMB	fi KEJCOT	TEICHT	PENARKS	
NO.	W (31/	(21)	BEIGHT	N(NO	C #11041			
TR I	D 53	3, 890	3.641	23	11. 831	172.1		
1	•	5, 560		13	16.511	389.0	<u> </u>	
3	D 15	3 769	2.235	22	8.404	184, 9		
- 4	,	8, 870	•	1	19.024	15. 8		
5		2, \$10		33	6. 210	244.5		
	D 22	2, \$50	3.042	42	7, 751	315.1		
7	D 15	8, 689	2. 235	1	19.400	19.4	/_	
8	D 12	2, 439	3, 842	33	7. 391	288.3		
9		3, 330		- 44	10.130	415.7		
10	D 16	11, 320	1.552	1	18, 593	37, 2		
11	,	24, 560	•	1	31. 117	157.5		
12	D 13	\$50	0.994	10	. 0. 547	5. \$		
13	•	660	,	50	0, 656	32.1		
14	•	1, 580	,	37	1.968	71.8	<u> </u>	
15	•	2, 210		38	1. 197	83.5	<u> </u>	
16	•	1, 930	, , , , , ,	1	1.918	5. B	<u> </u>	
17		2, 810	, , ,	39	7. 793	108.3	<u> </u>	
1\$	•	8, 870	,	1	8. 117	1. 6		
13	•	B, 680		1	B. 628	B. 6		
20	,	1, 050		1	1.444	2.1		
24	•	990	,	2	0. 584	1.0		
12	•	630		- (2	B. 626	26.3		
23		530		3	0.527	1,6	3_	
14	•	830	•	42	0. 825	34.7	n	
			. <u></u>					
	D 22 1, 721. 0							
	D 15 469. Q							
			·		D 14	189.7		
					D 13	393.4	<u> </u>	
		-	• •				<u> </u>	
				TO	TAL RETGET	2, 273. 1	·	

JAPAN INTERNATIONAL COOPERATION AGENCY	CLIENT :	MINISTRY OF COMMUNICATIONS, DIRECTORATE GENERAL OF ROADS
(JICA)	PROJECT :	D/D ON ROAD DEVELOPMENT PROJECT ON BATINAH HIGHWAY
lica sadi ted	TITLE :	R/A-18, AQR BOX CULVERT RE-BAR ARRANGEMENT (6)
PACIFIC CONSCRIANTS ENTERBATIONAL	D. Lie D.	DEC VAC -7

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