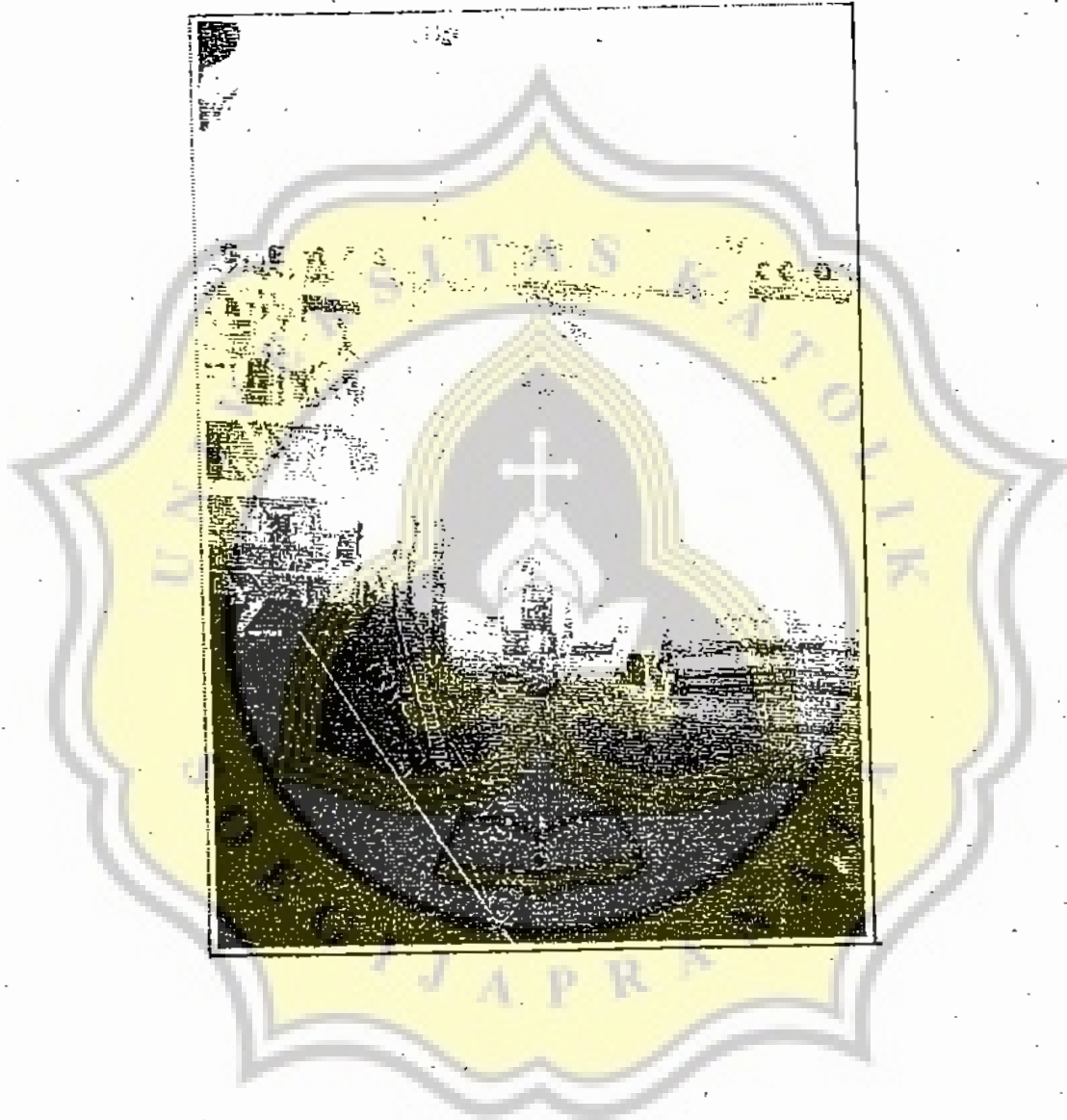


LAMPIRAN



TUGAS AKHIR
PERHITUNGAN STRUKTUR UNTUK DERMAGA PETI KEMAS
DI PELABUHAN TANJUNG EMAS - SEMARANG

Table Progress of Container Vessel Generation

	The First Generation	The Second Generation	The Third Generation	The Fourth Generation
Chronology	Age of domestic coastal services before 1960	Age of short international service across long ocean since 1960	Age of long international services through global oceans since 1971	Age of world-wide services since 1984
Examples of services	Coastal services in U.S.A. and Australia	Trans-Atlantic and Trans-Pacific services	Services between Europe and Far East, and U.S. West Coast and Europe	World-wide services by U.S.A. and Europe
Terminology	U.S.A.: Available	Advanced container ships such as U.S.A., Japan, Australia, Japan, etc.	Developing container lines such as U.S.A., Asia, Middle-East, South America, etc.	World-wide including China, India and Communist in Africa
Containers	Pre-ISO Standard size ... 13' x 7' x 35' long	ISO Standard size ... 20' x 8' x 26' x 40'	High cube type ... 9' x 9' x 6' high	Deviation from ISO Standard size ... 43' x 8' x long
Container-ships	Mainly converted ships with unadjusted capacity "Gateway City" 133,300 dwt 7,705 DWT 10,705 DWT on-board crane	Purpose-built ships of 700 - 1,300 TEU capacity "America Star" 133,300 dwt 13,540 DWT	Purpose-built ships over 1,000 TEU capacity "Panama Star" 200,000 dwt 19,914 DWT	Purpose-built ships over 3,000 TEU capacity "Possibility of over-Panama size" "Over-Panama" 279,000 dwt 37,000 DWT 37,000 DWT
Quay-side container cranes	Alameda, Boston Terminal Rated capacity 75,000 lbs (30,000 kg) Total weight 330,000 lbs (150,000 kg) 10.3m (34ft) x 13.6m (45ft)	75'-0" (22.86m) x 35'-0" (10.67m) 14'-0" (4.27m) Total 35'-276 Semi-container ships also engaged.	70' x 110' (21.3m x 33.5m) x 110' (33.5m) x 110' (33.5m) x 110' (33.5m) 1025 TEU 1025 TEU 1025 TEU	13 rows x 16 rows 10 rows x 13 rows 996 TEU (4) x 1337 TEU (11) 2228 TEU about 3300 TEU
Container terminals	Staddle cranes, Clark-325, 1 over 1, 163 ft (74')	6 x 1) x 3 over 1 Top-lift cranes, Side loader	Telescopically extended telescopic spreader 8501, 37,743, 3,319	Computerized, 2000-2000 Integrated service of surface with air transport
Remarks		Computerized	Computerized, 2000-2000 operation	Computerized, Advanced automatic operation

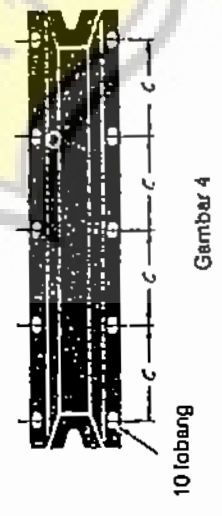
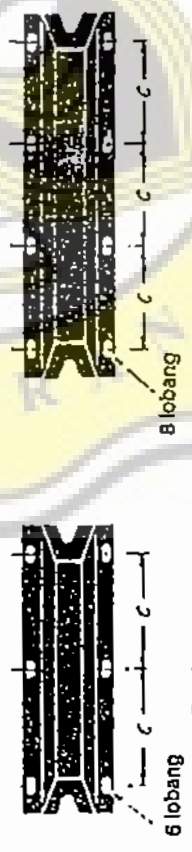
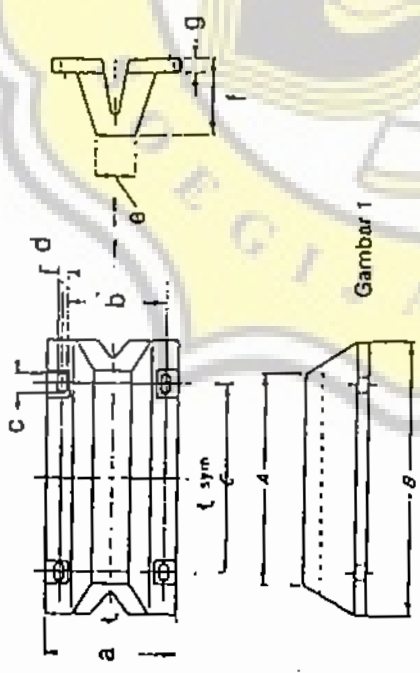
CONTAINER VESSEL EQUIVALENT TO 40,000 D/W
(Reference)

GENERAL ARRANGEMENTS



Dimensi dan kapasitas fender Bridgestone Super-Arch

Type	Gbr.	Dimensi (cm)			Gaya (t)	Energi (tm)	Bidang kontak (m ²)	R/E
		A	B	C				
FV006-1-1	1	100	125	93	43	7,1	0,327	6,06
	-1-2	100	125	93	38	6,3	0,327	6,03
	-1-3	100	125	93	29	4,7	0,327	6,17
	-1-4	100	125	93	19	3,1	0,327	6,13
FV006-2-1	2	150	175	71,5	65	10	0,490	6,50
	-2-2	150	175	71,5	56	9,4	0,490	5,96
	-2-3	150	175	71,5	43	7,0	0,490	6,14
	-2-4	150	175	71,5	28	4,7	0,490	5,96
FV006-3-1	3	200	225	64,5	86	14,0	0,654	6,14
	-3-2	200	225	64,5	75	12,0	0,654	6,25
	-3-3	200	225	64,5	57	9,5	0,654	6,00
	-3-4	200	225	64,5	38	6,3	0,654	6,03
FV006-4-1	3	250	275	81	108	17,0	0,817	6,35
	-4-2	250	275	81	94	15,0	0,817	6,27
	-4-3	250	275	81	71	11,0	0,817	6,45
	-4-4	250	275	81	47	7,9	0,817	5,95
FV006-5-1	4	300	325	73	129	21,0	0,981	6,14
	-5-2	300	325	73	112	18,0	0,981	6,22
	-5-3	300	325	73	85	14,0	0,981	6,07
	-5-4	300	325	73	56	9,4	0,981	5,96



GAYA-GAYA DALAM (HASIL ANALISA STRUKTUR)
BLOK A

As-Type	No.	Jarak	Akibat Beban Mati				Akibat Beban Hidup			
			Aksial	Gaya	Geser	Lenjur	Aksial	Gaya	Geser	Lenjur
			Torq	Aksial	(ton)	(t.m)	Torq	Aksial	(ton)	(t.m)
balok	balok	Pnmp (m)	(ton)	(ton)	(ton)	(t.m)	(ton)	(ton)	(ton)	(t.m)
G-4	36	0	0	0	0	0	0	0	0	0
		0.625			-2.19	-0.68			-1.56	-0.49
		1.25			-4.38	-2.73			-3.12	-1.95
G-4	37	0	-1.16	0	6.04	-2.76	-1.62	0	3.59	-0.55
		1.875			-0.52	2.41			-1.1	1.78
		3.75			-7.09	-4.73			-5.79	-4.67
G-4	38	0	1.82	0	9.19	-7.74	0.39	0	6.12	-4.23
		1.875			2.63	3.35			1.43	2.86
		3.75			-3.93	2.13			-3.25	1.15
G-4	39	0	-2.68	0	4.47	1.73	-2.76	0	2	2.79
		1.875			2.09	3.96			-2.69	2.14
		3.75			-8.65	-6.11			-7.38	-7.3
G-4	40	0	3.65	0	10.14	-9.47	2.87	0	7.74	-8.27
		1.875			3.58	3.4			3.05	1.84
		3.75			-2.98	3.95			-1.64	3.16
G-4	41	0	-0.74	0	4.26	2.11	-0.32	0	3.05	1.34
		1.875			-2.3	3.95			-1.64	2.67
		3.75			-8.86	-6.51			-6.32	-4.8
G-4	42	0	1.75	0	7.71	-5.87	1.67	0	6.01	-5.3
		1.875			1.15	2.43			1.33	1.58
		3.75			-5.42	-1.57			-3.36	-0.33
G-4	43	0	0	0	4.38	-2.73	0	0	3.13	-1.95
		0.625			2.19	-0.68			1.56	-0.49
		1.25			0	0			0	0
F-2	45	0	0	0	0	0	0	0	0	0
		0.625			-3.69	-1.15			-3.12	-0.98
		1.25			-7.38	-4.61			-6.25	-3.91
F-2	46	0	14.87	-0.02	15.75	-6.3	4.85	-0.01	13.51	-4.5
		1.875			4.69	12.87			4.14	12.05
		3.75			-6.37	11.29			-5.24	11.02
F-2	47	0	2.19	-0.04	9.28	12.01	-4.29	-0.03	8.28	10.67
		1.875			-1.78	19.03			-1.1	17.4
		3.75			-12.85	5.32			-10.47	6.55
F-2	48	0	20.2	-0.05	19.91	3.32	9.03	-0.03	12.36	4.48
		1.875			8.85	30.28			2.99	18.87
		3.75			-2.22	36.5			-6.39	15.68
F-3	49	0	-19.71	-0.05	8.66	39.01	-12.49	-0.03	6.49	16.76
		1.875			-6.34	41.19			-2.89	20.14
		3.75			-21.34	15.25			-12.26	5.94
F-3	50	0	1.54	-0.04	15.67	17.68	4.1	-0.02	10.56	8.18
		1.875			0.67	33			1.18	19.19
		3.75			-14.33	20.18			-8.19	12.62
F-3	51	0	-14.51	-0.02	7.46	20.39	-6.08	-0.01	4.75	12.89
		1.875			-7.54	20.3			-4.62	13.01
		3.75			-22.54	-7.9			-14	-4.45
F-3	52	0	0	0	10	-6.25	0	0	6.25	-3.91
		0.625			5	-1.56			3.13	-0.98
		1.25			0	0			0	0

As-Type balok	No. balok	Jarak Pnmp (m)	Akibat Beban Mati				Akibat Beban Hidup				
			Aksial Torq (ton)	Gaya Aksial (ton)	Geser (ton)	Lentur (tm)	Aksial Torq (ton)	Gaya Aksial (ton)	Geser (ton)	Lentur (tm)	
E-1	54	0	0	0	0	0	0	0	0	0	0
		0.625			-2.69	-0.84			-3.12	-0.98	
		1.25			-5.37	-3.36			-6.25	-3.91	
E-1	55	0	0.93	-0.02	8.08	-3	-0.66	-0.02	10.22	-5.24	
		1.875			0.01	4.58			0.85	5.14	
		3.75			-8.05	-2.96			-8.53	-2.07	
E-1	56	0	1.63	-0.03	7.51	-1.78	0.1	-0.03	9.03	-2.54	
		1.875			-0.56	4.74			-0.35	5.59	
		3.75			-8.62	-3.86			-9.72	-3.85	
E-1	57	0	0.75	-0.03	7.25	-2.09	-0.16	-0.03	8.88	-3.55	
		1.875			-0.81	3.95			-0.5	4.31	
		3.75			-8.87	-5.12			-9.87	-5.42	
E-1	58	0	0.37	-0.03	8.38	-4.3	-0.01	-0.03	9.77	-5.47	
		1.875			0.32	3.85			0.4	4.06	
		3.75			-7.75	-3.11			-8.98	-3.98	
E-1	59	0	-0.46	-0.03	8.32	-3.29	0.01	-0.03	9.8	-4.25	
		1.875			0.26	4.76			0.42	5.33	
		3.75			-7.8	-2.32			-8.95	-2.67	
E-1	60	0	-0.2	-0.02	7.63	-2.31	0.74	-0.02	8.47	-2.08	
		1.875			-0.44	4.43			-0.9	5.01	
		3.75			-8.5	-3.94			-10.28	-5.47	
E-1	61	0	0	0	5.38	-3.36	0	0	6.25	-3.91	
		0.625			2.69	-0.84			3.13	-0.98	
		1.25			0	0			0	0	
D-1	63	0	0	0	0	0	0	0	0	0	
		0.625			-2.69	-0.84			-3.13	-0.98	
		1.25			-5.38	-3.36			-6.25	-3.91	
D-1	64	0	0.3	-0.01	8.36	-3.67	0.6	-0.02	10.4	-5.53	
		1.875			0.3	4.46			1.02	5.17	
		3.75			-7.76	-2.54			-8.35	-1.71	
D-1	65	0	-0.32	-0.02	7.41	-2	0.07	-0.03	8.9	-2.36	
		1.875			-0.65	4.34			-0.47	5.54	
		3.75			-8.71	-4.44			-9.85	-4.13	
D-1	66	0	-0.6	-0.03	7.74	-3.51	-0.04	-0.03	9.14	-4.06	
		1.875			-0.32	3.44			-0.24	4.28	
		3.75			-8.39	-4.72			-9.61	-4.96	
D-1	67	0	-0.47	-0.03	8.16	-4.21	0.1	-0.03	9.6	-5.1	
		1.875			0.1	3.53			0.22	4.11	
		3.75			-7.96	-3.84			-9.15	-4.27	
D-1	68	0	-0.43	-0.02	8.43	-3.77	-0.11	-0.03	9.84	-4.36	
		1.875			0.36	4.47			0.47	5.31	
		3.75			-7.7	-2.41			-8.91	-2.6	
D-1	69	0	-0.72	-0.01	7.52	-2.19	-0.72	-0.02	8.36	-1.87	
		1.875			-0.55	4.35			-1.01	5.02	
		3.75			-8.61	-4.24			-10.39	-5.66	
D-1	70	0	0	0	5.38	-3.36	0	0	6.25	-3.91	
		0.625			2.69	-0.84			3.13	-0.98	
		1.25			0	0			0	0	
C-2	72	0	0	0	0	0	0	0	0	0	
		0.625			-3.75	-1.17			-3.13	-0.98	
		1.25			-7.5	-4.69			-6.25	-3.91	

As-Type	No.	Jarak	Akibat Beban Mati				Akibat Beban Hidup			
			Aksial	Gaya	Geser	Lentur	Aksial	Gaya	Geser	Lentur
			Torq	Aksial			Torq	Aksial		
balok	balok	Pmmp (m)	(ton)	(ton)	(ton)	(t m)	(ton)	(ton)	(ton)	(t m)
C-2	73	0	0.84	-0.01	12.75	-3.88	1.61	-0.02	12.02	-2.41
		1.875			1.5	9.48			2.65	11.35
		3.75			-9.75	1.74			-6.73	7.52
C-2	74	0	0.63	-0.02	11.09	1.04	1.12	-0.03	9.58	7.54
		1.875			-0.16	11.28			0.21	16.72
		3.75			-11.41	0.43			-9.17	8.32
C-2	75	0	0.26	-0.03	12.67	-1.11	0.23	-0.03	9.36	7.7
		1.875			1.42	12.09			-0.02	16.46
		3.75			-9.83	4.21			-9.39	7.64
C-3	76	0	-0.17	-0.03	16.91	3.1	-0.76	-0.03	9.83	7.9
		1.875			1.91	20.74			0.46	17.55
		3.75			-13.09	10.25			-8.92	9.61
C-3	77	0	-0.67	-0.02	14.62	9.87	-1.74	-0.03	9.14	10.28
		1.875			-0.38	23.22			-0.23	18.63
		3.75			-15.38	8.44			-9.61	9.41
C-3	78	0	-0.91	-0.01	11.64	7.92	-2.12	-0.01	6.38	9.18
		1.875			-3.36	15.69			-2.99	12.36
		3.75			-18.36	-4.67			-12.37	-2.03
C-3	79	0	0	0	10	-6.25	0	0	6.25	-3.91
		0.625			5	-1.56			3.12	-0.98
		1.25			0	0			0	0
B-1	81	0	0	0	0	0	0	0	0	0
		0.625			-2.69	-0.84			-3.06	-0.96
		1.25			-5.37	-3.36			-6.13	-3.83
B-1	82	0	0.49	-0.01	8.16	-3.65	0.21	-0.01	9.48	-4.42
		1.875			0.1	4.09			0.29	4.75
		3.75			-7.97	-3.29			-8.9	-3.32
B-1	83	0	1.02	-0.02	7.75	-2.8	0.46	-0.02	8.76	-3.12
		1.875			-0.5	3.83			-0.43	4.69
		3.75			-8.56	-4.65			-9.62	-4.73
B-1	84	0	1.07	-0.02	7.8	-3.81	0.19	-0.03	9	-4.35
		1.875			-0.26	3.26			-0.18	3.91
		3.75			-8.32	-4.79			-9.37	-5.04
B-1	85	0	0.64	-0.03	8.09	-4.19	-0.31	-0.03	9.36	-5.17
		1.875			0.02	3.41			0.17	3.77
		3.75			-8.04	-4.1			-9.01	-4.52
B-1	86	0	0.26	-0.02	8.26	-3.87	-0.42	-0.02	9.6	-4.9
		1.875			0.2	4.05			0.41	4.48
		3.75			-7.87	-3.14			-8.77	-3.36
B-1	87	0	0.28	-0.01	7.72	-2.88	-0.06	-0.01	8.87	-3.43
		1.875			-0.34	4.03			-0.31	4.59
		3.75			-8.41	-4.17			-9.5	-4.61
B-1	88	0	0	0	5.38	-3.36	0	0	6.13	-3.83
		0.625			2.69	-0.84			3.06	-0.96
		1.25			0	0			0	0
2-5	89	0	-0.02	0	-10.41	1.16	1.4	0	-6.71	1.62
		1.5			-17.39	-19.69			-13.46	-13.52
		3			-24.36	-51			-20.21	-38.77
3-6	90	0	-3.01	0	-16.28	-2.98	0.44	0	-11.91	-2.01
		1.5			-26.33	-34.94			-19.11	-25.27
		3			-36.38	-81.97			-26.31	-59.34
4-5	91	0	-0.4	0	-8.4	4.5	1.64	0	-5.25	3.16
		1.5			-16.88	-14.46			-12.45	-10.12
		3			-25.35	-46.14			-19.65	-34.19

As-Type	No.	Jarak	Akibat Beban Mati				Akibat Beban Hidup			
			Aksial	Gaya	Geser	Lenlur	Aksial	Gaya	Geser	Lenlur
			Torg	Aksial	(ton)	(m)	Torg	Aksial	(ton)	(m)
balok	balok	Primp (m)	(ton)	(ton)	(m)	(ton)	(ton)	(m)	(m)	
5-7	92	0	-3.36	0	-18.79	-6.33	-0.97	0	-15.11	-5.63
		1.5			-34.09	-45.99			-22.31	-33.7
		3			-49.39	-108.61			-29.51	-72.58
6-5	93	0	-1.84	0	-7.25	4.38	-1.82	0	-4.69	3.18
		1.5			-15.72	-12.84			-11.89	-9.25
		3			-24.2	-42.79			-19.09	-32.48
7-6	94	0	0.64	0	-16.57	-2.49	-0.5	0	-12.34	-1.98
		1.5			-26.62	-34.88			-19.54	-25.89
		3			-36.67	-82.34			-26.74	-60.59
8-5	95	0	-1.16	0	-9.79	1.75	-1.62	0	-6.49	1.67
		1.5			-16.77	-18.17			-13.24	-13.13
		3			-23.74	-48.55			-19.99	-38.05
2-1	96	0	-1.35	0.14	18.34	-63.85	1.04	0.06	18.48	-42.69
		2.65			6.54	-30.88			3.9	-13.04
		5.3			-5.25	-29.16			-10.67	-22.02
3-1	97	0	-1.98	0.15	19.69	-67.12	0.27	0.07	21.91	-49.22
		2.65			6.84	-31.96			5.22	-13.28
		5.3			-6.01	-30.86			-11.48	-21.58
4-1	98	0	-2.18	0.15	18.05	-61.96	-0.35	0.06	21.18	-46.58
		2.65			5.2	-31.16			4.48	-12.57
		5.3			-7.65	-34.41			-12.21	-22.81
5-1	99	0	-0.79	0.15	18.76	-66.31	0.09	0.07	21.94	-50.03
		2.65			5.91	-33.62			5.24	-14.02
		5.3			-6.94	-34.99			-11.45	-22.25
6-1	100	0	0.5	0.15	17.68	-61.76	0.34	0.07	21.55	-48.11
		2.65			4.82	-31.95			4.86	-13.13
		5.3			-8.03	-36.19			-11.84	-22.38
7-1	101	0	0.63	0.15	18.36	-64	-0.39	0.07	21.94	-49.44
		2.65			5.51	-32.37			5.25	-13.41
		5.3			-7.34	-34.81			-11.45	-21.63
8-1	102	0	0.21	0.15	16.81	-60.85	-1.27	0.06	18.52	-43.17
		2.65			5.01	-31.94			3.95	-13.4
		5.3			-6.78	-34.29			-10.63	-22.26
2-1	103	0	-0.72	0.11	15.83	-30.54	0	0.04	16.86	-21.76
		2.65			4.04	-4.22			2.28	3.59
		5.3			-7.76	-9.15			-12.29	-9.67
3-1	104	0	-0.64	0.12	16.91	-31.97	-0.03	0.04	18.98	-22.77
		2.65			4.05	-4.19			2.28	5.4
		5.3			-8.8	-10.47			-14.41	-10.67
4-1	105	0	-0.35	0.13	17.11	-33.86	0.01	0.04	19.05	-22.98
		2.65			4.26	-5.54			2.35	5.37
		5.3			-8.59	-11.28			-14.34	-10.51
5-1	106	0	0.02	0.13	17.16	-34.93	0.03	0.04	19.02	-22.84
		2.65			4.31	-6.48			2.33	5.46
		5.3			-8.54	-12.08			-14.37	-10.49
6-1	107	0	0.25	0.13	17.22	-35.65	0	0.04	19.05	-22.84
		2.65			4.36	-7.06			2.36	5.53
		5.3			-8.49	-12.53			-14.34	-10.34
7-1	108	0	0.46	0.13	17.12	-35.38	0.2	0.04	19.01	-22.8
		2.65			4.27	-7.04			2.31	5.45
		5.3			-8.58	-12.76			-14.38	-10.54

As-Type	No.	Jarak	Akibat Beban Mati				Akibat Beban Hidup			
			Aksial	Gaya	Geser	Lentur	Aksial	Gaya	Geser	Lentur
			Torq	Aksial	(ton)	(t m)	Torq	Aksial	(ton)	(t m)
8-1	109	0	0.52	0.13	16.07	-34.81	0.01	0.04	16.88	-21.92
		2.65			4.27	-7.86			2.3	3.5
		5.3			-7.52	-12.16			-12.27	-9.71
2-1	110	0	-0.82	0.05	14.55	-10.54	-1.33	0	16.43	-10.87
		2.65			2.54	12.53			1.58	13.45
		5.3			-9.48	3.16			-13.27	-2.33
3-1	111	0	0.02	0.05	15.38	-10.93	-0.49	0	17.75	-10.71
		2.7			2.29	12.93			0.74	14.24
		5.4			-10.81	1.43			-16.27	-6.73
4-1	112	0	0.62	0.05	15.94	-12.11	0.14	0	17.89	-10.97
		2.7			2.84	13.34			0.88	14.36
		5.4			-10.25	3.23			-16.13	-6.23
5-1	113	0	0.52	0.05	16.56	-13.35	-0.11	0	18	-11.21
		2.7			3.47	13.69			0.99	14.42
		5.4			-9.63	5.36			-16.02	-5.87
6-1	114	0	0.26	0.05	16.81	-13.73	-0.16	0	17.76	-10.69
		2.7			3.72	13.99			0.75	14.3
		5.4			-9.38	6.35			-16.26	-6.63
7-1	115	0	0.52	0.05	16.88	-13.66	0.57	0	17.68	-10.51
		2.7			3.78	14.24			0.67	14.26
		5.4			-9.31	6.77			-16.34	-6.91
8-1	116	0	1.15	0.04	16.48	-14.11	1.49	0	16.56	-11.04
		2.7			4.47	14.17			1.71	13.63
		5.4			-7.55	10.01			-13.14	-1.81
2-1	117	0	0.14	0.01	8.54	1.73	0.37	-0.01	11.62	-4.07
		2.25			-1.14	10.05			-0.08	8.91
		4.5			-10.81	-3.39			-11.78	-4.43
3-1	118	0	-0.57	0.01	9.48	1.05	-0.33	-0.01	13.49	-6.35
		2.25			-0.98	10.61			0.44	9.31
		4.5			-11.44	-3.37			-12.61	-4.39
4-1	119	0	-0.86	0.01	8.93	3.01	-0.41	-0.01	13.16	-5.44
		2.25			-1.54	11.33			0.11	9.49
		4.5			-12	-3.9			-12.94	-4.94
5-1	120	0	-0.57	0.01	8.32	5.2	0.14	-0.01	13.01	-4.98
		2.25			-2.14	12.16			-0.04	9.6
		4.5			-12.6	-4.42			-13.09	-5.17
6-1	121	0	-0.16	0.01	8.1	6.25	0.44	-0.01	13.27	-5.76
		2.25			-2.37	12.7			0.22	9.42
		4.5			-12.83	-4.4			-12.83	-4.77
7-1	122	0	-0.12	0.01	8.15	6.41	0.21	-0.01	13.57	-6.64
		2.25			-2.32	12.97			0.52	9.22
		4.5			-12.78	-4.01			-12.53	-4.28
8-1	123	0	-0.6	0	6.83	8.49	-0.57	-0.01	11.58	-4.05
		2.25			-2.84	12.97			-0.12	8.85
		4.5			-12.52	-4.31			-11.82	-4.58
2-1	124	0	0	0	5.47	-4.11	0	0	6	-4.5
		0.75			2.74	-1.03			3	-1.12
		1.5			0	0			0	0
3-1	125	0	0	0	5.48	-4.11	0	0	6	-4.5
		0.75			2.74	-1.03			3	-1.12
		1.5			0	0			0	0
4-1	126	0	0	0	5.47	-4.11	0	0	6	-4.5
		0.75			2.74	-1.03			3	-1.12
		1.5			0	0			0	0

As-Type	No.	Jarak	Akibat Beban Mati				Akibat Beban Hidup			
			Aksial	Gaya	Geser	Lentur	Aksial	Gaya	Geser	Lentur
balok	balok	Pnmp	Torq	Aksial			Torq	Aksial		
		(m)	(ton)	(ton)	(ton)	(t m)	(ton)	(ton)	(ton)	(t m)
5-1	127	0	0	0	5.48	-4.11	0	0	6	-4.5
		0.75			2.74	-1.03			3	-1.12
		1.5			0	0			0	0
6-1	128	0	0	0	5.48	-4.11	0	0	6	-4.5
		0.75			2.74	-1.03			3	-1.12
		1.5			0	0			0	0
7-1	129	0	0	0	5.47	-4.11	0	0	6	-4.5
		0.75			2.74	-1.03			3	-1.12
		1.5			0	0			0	0
8-1	130	0	0	0	5.47	-4.11	0	0	6	-4.5
		0.75			2.74	-1.03			3	-1.12
		1.5			0	0			0	0



INPUT UNTUK PERHITUNGAN STRUKTUR DERMAGA BLOK A
 AKIBAT BEBAN HIDUP DAN BEBAN MATI
 DENGAN PROGRAM SAP90

FRAME - WHARF WA BLOCK - 3DIMENSI
 C UNITS ARE TON METER
 C AKIBAT BEBAN HIDUP DAN BEBAN MATI
 SYSTEM
 L=2

JOINTS

1	X=1.25	Y=3	Z=0	
7	X=23.75	Y=3	Z=0	G=1,7,1
8	X=1.25	Y=8.3	Z=0	
14	X=23.75	Y=8.3	Z=0	G=8,14,1
15	X=1.25	Y=13.6	Z=0	
21	X=23.75	Y=13.6	Z=0	G=15,21,1
22	X=1.25	Y=19	Z=0	
28	X=23.75	Y=19	Z=0	G=22,28,1
29	X=1.25	Y=23.5	Z=0	
35	X=23.75	Y=23.5	Z=0	G=29,35,1
36	X=0	Y=0	Z=15	
37	X=1.25	Y=0	Z=15	
43	X=23.75	Y=0	Z=15	G=37,43,1
44	X=25	Y=0	Z=15	
45	X=0	Y=3	Z=15	
46	X=1.25	Y=3	Z=15	
52	X=23.75	Y=3	Z=15	G=46,52,1
53	X=25	Y=3	Z=15	
55	X=1.25	Y=8.3	Z=15	
61	X=23.75	Y=8.3	Z=15	G=55,61,1
62	X=25	Y=8.3	Z=15	
63	X=0	Y=13.6	Z=15	G=45,63,9
64	X=1.25	Y=13.6	Z=15	
70	X=23.75	Y=13.6	Z=15	G=64,70,1
71	X=25	Y=13.6	Z=15	
72	X=0	Y=19	Z=15	
73	X=1.25	Y=19	Z=15	
79	X=23.75	Y=19	Z=15	G=73,79,1
80	X=25	Y=19	Z=15	
81	X=0	Y=23.5	Z=15	
82	X=1.25	Y=23.5	Z=15	
88	X=23.75	Y=23.5	Z=15	G=82,88,1
89	X=25	Y=23.5	Z=15	
90	X=0	Y=25	Z=15	
91	X=1.25	Y=25	Z=15	
97	X=23.75	Y=25	Z=15	G=91,97,1
98	X=25	Y=25	Z=15	

RESTRAINTS

1 98 1 R=0,0,0,0,0,0
 1 35 1 R=1,1,1,0,0,0

FRAME

NM=8 NL=16 NSEC=3
 1 SH=R T=1.30,.70 w=2.4

2 SH=R T=1.30,1.40 w=2.4
 3 SH=R T=1.90,1.40 w=2.4
 4 SH=R T=2.00,.50 w=2.4
 5 SH=R T=2.00,.70 w=2.4
 6 SH=R T=2.00,1.00 w=2.4
 7 SH=R T=2.00,2.00 w=2.4
 8 SH=P T=.812,.012 w=7.85

1 WL=0,0,-4 : DL
 2 WL=0,0,-5.6 : DL
 3 WL=0,0,-7.62 : DL
 4 WL=0,0,-7.42 : DL
 5 WL=0,0,-9.43 : DL
 6 WL=0,0,-3.21 : DL
 7 WL=0,0,-7.5 : DL
 8 WL=0,0,-9.17 : DL
 9 WL=0,0,-9.6 : DL
 10 WL=0,0,-3 : LL
 11 WL=0,0,-6.7 : LL
 12 WL=0,0,-9.74 : LL
 13 WL=0,0,-1.5 : LL
 14 WL=0,0,-8.3 : LL
 15 WL=0,0,-10.88 : LL
 16 WL=0,0,-2.4 : LL

1 1 46 G=6,1,1,1 M=8
 8 8 55 G=6,1,1,1 M=8
 15 15 64 G=6,1,1,1 M=8
 22 22 73 G=6,1,1,1 M=8
 29 29 82 G=6,1,1,1 M=8
 36 36 37 G=7,1,1,1 M=4 NSL=6,13
 45 45 46 G=3,1,1,1 M=2 NSL=4,12
 49 49 50 G=3,1,1,1 M=3 NSL=5,12
 54 54 55 G=7,1,1,1 M=1 NSL=1,10
 63 63 64 G=7,1,1,1 M=1 NSL=1,10
 72 72 73 G=3,1,1,1 M=2 NSL=2,11
 76 76 77 G=3,1,1,1 M=3 NSL=3,11
 81 81 82 G=7,1,1,1 M=1 NSL=1,10
 89 37 46 G=1,6,6,6 M=5 NSL=9,16
 90 38 47 G=1,4,4,4 M=6 NSL=9,16
 91 39 48 G=1,2,2,2 M=5 NSL=9,16
 92 40 49 M=7 NSL=9,16
 96 46 55 G=2,7,9,9 M=1 NSL=8,15
 97 47 56 G=2,7,9,9 M=1 NSL=8,15
 98 48 57 G=2,7,9,9 M=1 NSL=8,15
 99 49 58 G=2,7,9,9 M=1 NSL=8,15
 100 50 59 G=2,7,9,9 M=1 NSL=8,15
 101 51 60 G=2,7,9,9 M=1 NSL=8,15
 102 52 61 G=2,7,9,9 M=1 NSL=8,15
 117 73 82 G=6,1,1,1 M=1 NSL=7,14
 124 82 91 G=6,1,1,1 M=1 NSL=7,14

COMBO

1 C=1,0 : DL
 2 C=0,1 : LL

GAYA - GAYA DALAM (HASIL ANALISA STRUKTUR)
BLOK A

No. Balok	Jarak Pnmp (m)	AKIBAT BENTURAN 1				AKIBAT BENTURAN 2				AKIBAT TARIKAN				
		Gaya Axial (ton)	Geser (ton)	Momen (t m)	Torsi Axial (ton)	Gaya Axial (ton)	Geser (ton)	Momen (t m)	Torsi Axial (ton)	Gaya Axial (ton)	Geser (ton)	Momen (t m)	Torsi Axial (ton)	
1		2.4	-1.28	-19.23	0	3.02	-0.16	-2.41	0	-1.02	0	-0.04	0	
2		2.86	-1.09	-16.42	0	2.56	-0.35	-5.22	0	-1.46	0	-0.04	0	
3		2.9	-0.91	-13.62	0	2.52	-0.53	-8.02	0	-1.5	0	-0.03	0	
4		2.7	-0.72	-10.83	0	2.72	-0.72	-10.81	0	-0.2	0	0.01	0	
5		2.53	-0.53	-8.02	0	2.89	-0.91	-13.62	0	1.27	0	0.03	0	
6		2.59	-0.35	-5.21	0	2.83	-1.1	-16.43	0	1.53	0	0.04	0	
7		2.99	-0.16	-2.4	0	2.43	-1.28	-19.24	0	1.37	0	0.04	0	
8		-0.93	-1.3	-19.53	0	0.44	-0.17	-2.6	0	-0.2	0	-0.02	0	
9		-0.37	-1.11	-16.71	0	-0.12	-0.36	-5.43	0	-0.41	0	-0.03	0	
10		-0.22	-0.93	-13.88	0	-0.28	-0.55	-8.25	0	-0.45	0	-0.03	0	
11		-0.21	-0.74	-11.07	0	-0.28	-0.74	-11.07	0	-0.09	0	-0.01	0	
12		-0.23	-0.55	-8.25	0	-0.26	-0.93	-13.89	0	0.35	0	0.03	0	
13		-0.13	-0.36	-5.43	0	-0.36	-1.11	-16.71	0	0.45	0	0.03	0	
14		0.37	-0.17	-2.61	0	-0.86	-1.3	-19.53	0	0.36	0	0.03	0	
15		0.31	-1.31	-19.64	0	-0.02	-0.18	-2.64	0	0.07	0	0	0	
16		0.29	-1.12	-16.79	0	0	-0.37	-5.48	0	0	0	0	0	
17		0.22	-0.93	-13.96	0	0.07	-0.55	-8.31	0	-0.04	0	0	0	
18		0.13	-0.74	-11.13	0	0.16	-0.74	-11.14	0	-0.01	0	0	0	
19		0.06	-0.55	-8.31	0	0.23	-0.93	-13.96	0	0.02	0	0	0	
20		0	-0.37	-5.48	0	0.29	-1.12	-16.79	0	0.01	0	0	0	
21		0	-0.18	-2.64	0	0.29	-1.31	-19.63	0	-0.03	0	0	0	
22		1.5	-1.3	-19.49	0	-0.78	-0.17	-2.58	0	0.04	0	0.01	0	
23		0.85	-1.11	-16.66	0	-0.12	-0.36	-5.41	0	0.03	0	0	0	
24		0.51	-0.92	-13.85	0	0.21	-0.55	-8.22	0	0.01	0	0	0	
25		0.36	-0.74	-11.04	0	0.36	-0.74	-11.03	0	0	0	0	0	
26		0.19	-0.55	-8.22	0	0.53	-0.92	-13.85	0	-0.01	0	0	0	
27		-0.15	-0.36	-5.4	0	0.87	-1.11	-16.67	0	-0.03	0	0	0	
28		-0.73	-0.17	-2.57	0	1.46	-1.3	-19.5	0	-0.04	0	-0.01	0	
29		-3.06	-1.27	-19.1	0	-2.88	-0.17	-2.49	0	0.01	0	0.01	0	
30		-3.9	-1.09	-16.3	0	-2.04	-0.35	-5.29	0	0	0	0	0	
31		-3.61	-0.9	-13.54	0	-2.33	-0.54	-8.05	0	0	0	0	0	
32		-2.95	-0.72	-10.8	0	-2.99	-0.72	-10.8	0	0	0	0	0	
33		-2.32	-0.54	-8.05	0	-3.62	-0.9	-13.54	0	0	0	0	0	
34		-2.07	-0.35	-5.29	0	-3.87	-1.09	-16.3	0	0	0	0	0	
35		-2.89	-0.17	-2.49	0	-3.05	-1.27	-19.1	0	-0.01	0	-0.01	0	
36		0	0	0	0	0	0	0	0	0	0	0	-0.02	
		0.6	0	0			0	0			0	0		
		1.3	0	0			0	0			0	0		
37		0	-3.16	0.24	-0.73	0.25	0.81	-0.24	0.73	-0.25	0	0.08	0	-0.04
		1.9		0.24	-0.28			-0.24	0.28			0.06	0.12	
		3.8		0.24	0.16			-0.24	-0.16			0.06	0.23	
38		0	-3.21	0.49	-1.39	0.55	1.83	-0.49	1.39	-0.55	0	0.2	0.21	-0.71
		1.9		0.49	-0.47			-0.49	0.47			0.2	0.59	
		3.8		0.49	0.44			-0.49	-0.44			0.2	0.97	
39		0	0.31	0.67	-1.05	0.53	1.98	-0.67	1.05	-0.53	0	0.91	0.98	-0.58
		1.9		0.67	0.22			-0.67	-0.22			0.91	2.69	
		3.8		0.67	1.48			-0.67	-1.48			0.91	4.39	

No.	Balok	Jarak Pnmp (m)	AKIBAT BENTURAN 1				AKIBAT BENTURAN 2				AKIBAT TARIKAN			
			Gaya Axial (ton)	Geser (ton)	Momen (t.m)	Torsi Axial (ton)	Gaya Axial (ton)	Geser (ton)	Momen (t.m)	Torsi Axial (ton)	Gaya Axial (ton)	Geser (ton)	Momen (t.m)	Torsi Axial (ton)
40		0	1.93	0.44	-0.9	0.36	-0.07	-0.44	0.9	-0.36	0	1.01	-4.44	0.05
		1.9		0.44	-0.08			-0.44	0.08			1.01	-2.55	
		3.8		0.44	0.74			-0.44	-0.74			1.01	-0.65	
41		0	1.77	0.33	-0.25	0.36	-3.12	-0.33	0.25	-0.36	0	0.19	-0.88	-0.02
		1.9		0.33	0.36			-0.33	-0.36			0.19	-0.52	
		3.8		0.33	0.98			-0.33	-0.98			0.19	-0.15	
42		0	0.79	0.15	-0.07	0.17	-2.97	-0.15	0.07	-0.17	0	0.05	-0.21	0
		1.9		0.15	0.21			-0.15	-0.21			0.05	-0.12	
		3.8		0.15	0.5			-0.15	-0.5			0.05	-0.03	
43		0	0	0	0	0	0	0	0	0	0	0	0	0
		0.6		0	0			0	0			0	0	
		1.3		0	0			0	0			0	0	
45		0	0	0	0	0	0	0	0	0	0	0	0	-0.08
		0.6		0	0			0	0			0	0	
		1.3		0	0			0	0			0	0	
46		0	2.47	1.58	-7.46	2.6	-0.47	-1.58	7.46	-2.6	0	1.02	-0.25	-1.06
		1.9		1.58	-4.49			-1.58	4.49			1.02	1.67	
		3.8		1.58	-1.52			-1.58	1.52			1.02	3.59	
47		0	2.53	2.32	-8.05	3.57	-1.32	-2.32	8.05	-3.57	-0.01	2.62	3.45	-3.71
		1.9		2.32	-3.7			-2.32	3.7			2.62	8.36	
		3.8		2.32	0.65			-2.32	-0.65			2.62	13.27	
48		0	-0.28	2.49	-6.06	4.21	-1.55	-2.49	6.06	-4.21	-0.01	3.86	13.59	-4.74
		1.9		2.49	-1.4			-2.49	1.4			3.86	20.83	
		3.8		2.49	3.26			-2.49	-3.26			3.86	28.06	
49		0	-1.54	2.66	-2.63	5.52	0.1	-2.66	2.63	-5.52	0	4.11	-34.05	-1.91
		1.9		2.66	2.35			-2.66	-2.35			4.11	-26.34	
		3.8		2.66	7.34			-2.66	-7.33			4.11	-18.63	
50		0	-1.31	2.37	0.17	4.91	2.53	-2.37	-0.17	-4.92	0.01	3.26	-17.92	-0.57
		1.9		2.37	4.61			-2.37	-4.61			3.26	-11.81	
		3.8		2.37	9.04			-2.37	-9.04			3.26	-5.69	
51		0	-0.47	1.53	2.02	3.5	2.36	-1.53	-2.02	-3.5	0	1.54	-5.64	0
		1.9		1.53	4.9			-1.53	-4.9			1.54	-2.75	
		3.8		1.53	7.77			-1.53	-7.77			1.54	0.13	
52		0	0	0	0	0	0	0	0	0	0	0	0	0
		0.6		0	0			0	0			0	0	
		1.3		0	0			0	0			0	0	
54		0	0	0	0	0	0	0	0	0	0	0	0	0.18
		0.6		0	0			0	0			0	0	
		1.3		0	0			0	0			0	0	
55		0	0.16	0.94	-2.49	0.12	0.03	-0.94	2.49	-0.12	0	0.03	0.05	-0.02
		1.9		0.94	-0.74			-0.94	0.74			0.03	0.11	
		3.8		0.94	1.01			-0.94	-1.01			0.03	0.17	
56		0	0.2	0.95	-2.11	0.25	-0.04	-0.95	2.11	-0.25	0	0.11	0.2	-0.59
		1.9		0.95	-0.32			-0.95	0.32			0.11	0.42	
		3.8		0.95	1.47			-0.95	-1.47			0.11	0.63	
57		0	0.01	0.9	-1.78	0.34	-0.09	-0.9	1.78	-0.34	0	0.07	0.47	-0.73
		1.9		0.9	-0.1			-0.9	0.1			0.07	0.61	
		3.8		0.9	1.58			-0.9	-1.58			0.07	0.75	
58		0	-0.01	0.93	-1.69	0.38	-0.02	-0.93	1.69	-0.38	0	0.01	-0.45	-0.19
		1.9		0.93	0.06			-0.93	-0.06			0.01	-0.44	
		3.8		0.93	1.81			-0.93	-1.81			0.01	-0.42	
59		0	0	0.98	-1.53	0.3	0.22	-0.98	1.53	-0.3	0	0.1	-0.6	0.04

No.	Jarak	AKIBAT BENTURAN 1				AKIBAT BENTURAN 2				AKIBAT TARIKAN			
		Gaya	Geser	Momen	Torsl	Gaya	Geser	Momen	Torsl	Gaya	Geser	Momen	Torsl
Balok	Pnmp	Axial			Axial	Axial			Axial	Axial			Axial
	(m)	(ton)	(ton)	(t m)	(ton)	(ton)	(ton)	(t m)	(ton)	(ton)	(ton)	(t m)	(ton)
	1.9		0.98	0.3			-0.98	-0.3			0.1	-0.41	
	3.8		0.98	2.13			-0.98	-2.13			0.1	-0.21	
60	0	0.05	0.95	-1.07	0.19	0.18	-0.95	1.07	-0.19	0	0.06	-0.22	0
	1.9		0.95	0.72			-0.95	-0.72			0.06	-0.12	
	3.8		0.95	2.51			-0.95	-2.51			0.06	-0.01	
61	0	0	0	0	0	0	0	0	0	0	0	0	0
	0.6		0	0			0	0			0	0	
	1.3		0	0			0	0			0	0	
63	0	0	0	0	0	0	0	0	0	0	0	0	0.07
	0.6		0	0			0	0			0	0	
	1.3		0	0			0	0			0	0	
64	0	0.04	0	-0.11	-0.25	0.04	0	0.11	0.25	0	-0.02	0.08	0.01
	1.9		0	-0.1			0	0.1			-0.02	0.04	
	3.8		0	-0.1			0	0.1			-0.02	0	
65	0	0.01	0.04	-0.1	0.03	0.1	-0.04	0.1	-0.03	0	0.01	0.06	-0.1
	1.9		0.04	-0.04			-0.04	0.04			0.01	0.08	
	3.8		0.04	0.03			-0.04	-0.03			0.01	0.1	
66	0	-0.06	0.03	-0.05	0.18	0.12	-0.03	0.05	-0.18	0	0.07	-0.03	-0.12
	1.9		0.03	0.01			-0.03	-0.01			0.07	0.1	
	3.8		0.03	0.08			-0.03	-0.08			0.07	0.22	
67	0	-0.04	0	0	0.22	0.08	0	0	-0.22	0	0.08	-0.21	-0.04
	1.9		0	0.01			0	-0.01			0.08	-0.07	
	3.8		0	0.01			0	-0.01			0.08	0.08	
68	0	0	0.02	-0.01	0.07	0.08	-0.02	0.01	-0.07	0	0.03	-0.13	0.02
	1.9		0.02	0.04			-0.02	-0.04			0.03	-0.07	
	3.8		0.02	0.08			-0.02	-0.08			0.03	-0.01	
69	0	-0.01	0	0.1	-0.19	0.07	0	-0.1	0.19	0	0	-0.03	0
	1.9		0	0.11			0	-0.11			0	-0.03	
	3.8		0	0.12			0	-0.12			0	-0.02	
70	0	0	0	0	0	0	0	0	0	0	0	0	0
	0.6		0	0			0	0			0	0	
	1.3		0	0			0	0			0	0	
72	0	0	0	0	0	0	0	0	0	0	0	0	0.07
	0.6		0	0			0	0			0	0	
	1.3		0	0			0	0			0	0	
73	0	-0.05	-0.82	4.77	0.22	0.05	0.82	-4.77	-0.22	0	-0.01	0.04	0.07
	1.9		-0.82	3.23			0.82	-3.23			-0.01	0.03	
	3.8		-0.82	1.69			0.82	-1.69			-0.01	0.02	
74	0	-0.09	-1.42	5.53	1.78	0.14	1.42	-5.53	-1.78	0	0	0.04	0.06
	1.9		-1.42	2.87			1.42	-2.87			0	0.03	
	3.8		-1.42	0.2			1.42	-0.2			0	0.03	
75	0	0.01	-1.6	3.89	2.77	0.11	1.6	-3.89	-2.77	0	0.01	0	0.07
	1.9		-1.6	0.89			1.6	-0.89			0.01	0.02	
	3.8		-1.6	-2.11			1.6	2.11			0.01	0.04	
76	0	0.1	-1.63	1.61	3.34	0.01	1.63	-1.61	-3.34	0	0.02	-0.06	0.08
	1.9		-1.63	-1.44			1.63	1.44			0.02	-0.02	
	3.8		-1.63	-4.5			1.63	4.5			0.02	0.01	
77	0	0.11	-1.41	-0.78	2.42	-0.05	1.41	0.78	-2.43	0	0.01	-0.05	0.07
	1.9		-1.41	-3.43			1.41	3.43			0.01	-0.03	
	3.8		-1.41	-6.08			1.41	6.08			0.01	-0.01	
78	0	0.04	-0.75	-2.15	0.5	-0.01	0.75	2.15	-0.5	0	0	-0.01	0
	1.9		-0.75	-3.55			0.75	3.55			0	-0.01	

No. Balok	Jarak Pmp (m)	AKIBAT BENTURAN 1				AKIBAT BENTURAN 2				AKIBAT TARIKAN			
		Gaya Axial (ton)	Geser (ton)	Momen (t m)	Torsi Axial (ton)	Gaya Axial (ton)	Geser (ton)	Momen (t m)	Torsi Axial (ton)	Gaya Axial (ton)	Geser (ton)	Momen (t m)	Torsi Axial (ton)
	3.8		-0.75	-4.94			0.75	4.94			0	-0.01	
79	0	0	0	0	0	0	0	0	0	0	0	0	0
	0.6		0	0			0	0			0	0	
	1.3		0	0			0	0			0	0	
81	0	0	0	0	0	0	0	0	0	0	0	0	0.01
	0.6		0	0			0	0			0	0	
	1.3		0	0			0	0			0	0	
82	0	0.53	-2.15	5.97	0.65	-0.46	2.15	-5.97	-0.65	0	0	0.01	0.01
	1.9		-2.15	1.94			2.15	-1.94			0	0	
	3.8		-2.15	-2.1			2.15	2.1			0	0	
83	0	0.55	-2.33	5.27	1.54	-0.69	2.33	-5.27	-1.54	0	0	0.01	0.01
	1.9		-2.33	0.89			2.33	-0.89			0	0	
	3.8		-2.33	-3.48			2.33	3.48			0	0	
84	0	0	-2.25	4.39	1.86	-0.57	2.25	-4.39	-1.86	0	0	0	0.01
	1.9		-2.25	0.17			2.25	-0.17			0	0	
	3.8		-2.25	-4.05			2.25	4.05			0	0	
85	0	-0.44	-2.19	3.88	1.91	-0.1	2.19	-3.88	-1.91	0	0	0	0.01
	1.9		-2.19	-0.23			2.19	0.23			0	0	
	3.8		-2.19	-4.35			2.19	4.35			0	0	
86	0	-0.57	-2.3	3.47	1.55	0.35	2.3	-3.47	-1.55	0	0	0	0.01
	1.9		-2.3	-0.84			2.3	0.84			0	0	
	3.8		-2.3	-5.15			2.3	5.15			0	0	
87	0	-0.39	-2.15	2.17	0.61	0.37	2.15	-2.17	-0.61	0	0	0	0
	1.9		-2.15	-1.86			2.15	1.86			0	0	
	3.8		-2.15	-5.9			2.15	5.9			0	0	
88	0	0	0	0	0	0	0	0	0	0	0	0	0
	0.6		0	0			0	0			0	0	
	1.3		0	0			0	0			0	0	
89	0	-3.64	-0.24	-0.25	-0.73	0.57	0.24	0.25	0.73	0	-0.06	0.02	0.03
	1.5		-0.24	-0.61			0.24	0.61			-0.06	-0.08	
	3		-0.24	-0.96			0.24	0.96			-0.06	-0.17	
95	0	0.49	0.15	0.17	-0.5	-2.94	-0.15	-0.17	0.5	0	0.05	-0.02	-0.02
	1.5		0.15	0.39			-0.15	-0.39			0.05	0.05	
	3		0.15	0.62			-0.15	-0.62			0.05	0.12	
90	0	-18.23	-0.25	-0.3	-1.55	-0.3	0.25	0.3	1.55	0	-0.14	0.02	-0.05
	1.5		-0.25	-0.68			0.25	0.68			-0.14	-0.19	
	3		-0.25	-1.06			0.25	1.06			-0.14	-0.4	
94	0	-0.25	0.18	0.19	-1.04	-19.8	-0.18	-0.19	1.04	0	0.15	0.07	0.01
	1.5		0.18	0.46			-0.18	-0.46			0.15	0.29	
	3		0.18	0.72			-0.18	-0.73			0.15	0.51	
91	0	-2.51	-0.18	0.02	-1.49	-0.63	0.18	-0.02	1.49	0	-0.71	0.67	-0.22
	1.5		-0.18	-0.26			0.18	0.26			-0.71	-0.39	
	3		-0.18	-0.53			0.18	0.53			-0.71	-1.45	
93	0	-0.37	0.11	-0.01	-0.99	-1.91	-0.11	0.01	0.99	0	0.82	-0.63	64.02
	1.5		0.11	0.16			-0.11	-0.16			0.82	0.6	
	3		0.11	0.32			-0.11	-0.32			0.82	1.83	
92	0	-1.09	0.24	0.18	-2.38	-0.58	-0.24	-0.18	2.38	0	-0.1	-0.13	-0.22
	1.5		0.24	0.53			-0.24	-0.53			-0.1	-0.28	
	3		0.24	0.89			-0.24	-0.89			-0.1	-0.43	
96	0	-5.39	-4.22	15.66	-0.33	1.15	-1.2	5.98	0.33	0	-0.07	-0.05	-0.15
	2.7		-4.22	4.48			-1.2	2.79			-0.07	-0.24	
	5.3		-4.22	-6.7			-1.2	-0.39			-0.07	-0.43	

No. Balok	AKIBAT BENTURAN 1				AKIBAT BENTURAN 2				AKIBAT TARIKAN				
	Jarak	Gaya	Geser	Momen	Torsi	Gaya	Geser	Momen	Torsi	Gaya	Geser	Momen	Torsi
	Pnmp (m)	Axial (ton)	(ton)	(t m)	Axial (ton)	Axial (ton)	(ton)	(t m)	Axial (ton)	Axial (ton)	(ton)	(t m)	Axial (ton)
103	0	-4.25	-4.22	12.72	1.01	0.72	-0.7	2.34	-1.01	0	0.09	-0.59	-0.07
	2.6		-4.22	1.53			-0.7	0.47			0.09	-0.35	
	5.3		-4.22	-9.67			-0.7	-1.39			0.09	-0.11	
110	0	-2.52	-4.54	10.22	0.8	0.1	-0.68	1	-0.8	0	0.04	-0.18	-0.01
	2.7		-4.54	-2.03			-0.68	-0.83			0.04	-0.06	
	5.4		-4.54	-14.28			-0.68	-2.67			0.04	0.06	
117	0	-1.16	-5.21	5	1.46	-0.14	-0.73	0.13	-1.46	0	0.01	-0.02	-0.15
	2.3		-5.21	-6.73			-0.73	-1.51			0.01	0	
	4.5		-5.21	-18.45			-0.73	-3.14			0.01	0.02	
97	0	-10.5	-3.85	14.39	-0.2	-0.36	-1.57	7.25	0.2	0	-0.27	0.62	-0.1
	2.7		-3.85	4.18			-1.57	3.09			-0.27	-0.1	
	5.3		-3.85	-6.03			-1.57	-1.06			-0.27	-0.82	
104	0	-7.19	-3.5	10.55	0.55	-0.21	-1.42	4.5	-0.55	0	0.06	-0.59	-0.04
	2.6		-3.5	1.27			-1.42	0.73			0.06	-0.43	
	5.3		-3.5	-8.01			-1.42	-3.04			0.06	-0.26	
111	0	-4.66	-3.83	8.51	0.45	-0.06	-1.39	2.71	-0.45	0	0.03	-0.19	-0.01
	2.7		-3.83	-1.83			-1.39	-1.03			0.03	-0.1	
	5.4		-3.83	-12.17			-1.39	-4.78			0.03	-0.01	
118	0	-1.88	-4.08	2.93	0.16	-0.11	-1.86	2.19	-0.16	0	0	-0.01	0.31
	2.3		-4.08	-6.24			-1.86	-2			0	0	
	4.5		-4.08	-15.41			-1.86	-6.19			0	0.01	
98	0	-3.52	-3.25	12.45	-0.3	-0.68	-2.17	9.19	0.3	0	-0.45	1.23	0.14
	2.7		-3.25	3.83			-2.17	3.45			-0.45	0.04	
	5.3		-3.25	-4.79			-2.17	-2.29			-0.45	-1.14	
105	0	-2.93	-2.98	9	0.34	-0.54	-1.95	6.05	-0.34	0	0.05	-0.53	0.01
	2.6		-2.98	1.11			-1.95	0.88			0.05	-0.41	
	5.3		-2.98	-6.77			-1.95	-4.28			0.05	-0.29	
112	0	-2.02	-3.19	7.03	0.17	-0.4	-2.02	4.19	-0.17	0	0.03	-0.17	-0.01
	2.7		-3.19	-1.59			-2.02	-1.28			0.03	-0.1	
	5.4		-3.19	-10.21			-2.02	-6.74			0.03	-0.02	
119	0	-1.02	-3.53	2.65	-0.3	-0.22	-2.41	2.47	0.3	0	0	-0.01	1.75
	2.3		-3.53	-5.28			-2.41	-2.95			0	0	
	4.5		-3.53	-13.22			-2.41	-8.37			0	0	
99	0	-1.19	-2.63	10.41	-0.35	-1.41	-2.79	11.23	0.35	0	-0.15	0.59	0.51
	2.7		-2.63	3.45			-2.79	3.83			-0.15	0.18	
	5.3		-2.63	-3.52			-2.79	-3.56			-0.15	-0.23	
106	0	-1.06	-2.45	7.5	0.26	-1	-2.47	7.55	-0.26	0	0	-0.08	0.08
	2.6		-2.45	1			-2.47	1			0	-0.07	
	5.3		-2.45	-5.51			-2.47	-5.55			0	-0.06	
113	0	-0.85	-2.56	5.59	0.09	-0.48	-2.66	5.63	-0.09	0	0.01	-0.03	-0.01
	2.7		-2.56	-1.31			-2.66	-1.55			0.01	-0.02	
	5.4		-2.56	-8.21			-2.66	-8.74			0.01	0	
120	0	-0.34	-2.89	2.26	-0.35	-0.65	-3.05	2.87	0.35	0	0	-0.01	0.44
	2.3		-2.89	-4.24			-3.05	-3.99			0	0	
	4.5		-2.89	-10.75			-3.05	-10.84			0	0	
100	0	-0.82	-2.13	8.95	-0.25	-3.91	-3.29	12.69	0.25	0	0.39	-1.03	0.24
	2.7		-2.13	3.31			-3.29	3.96			0.39	0.01	
	5.3		-2.13	-2.32			-3.29	-4.76			0.39	1.06	
107	0	-0.54	-1.93	6.01	0.3	-3.12	-2.99	9.04	-0.3	0	-0.05	0.48	0.03
	2.6		-1.93	0.89			-2.99	1.11			-0.05	0.35	
	5.3		-1.93	-4.24			-2.99	-6.81			-0.05	0.22	

No.	Balok	Jarak Prmp (m)	AKIBAT BENTURAN 1				AKIBAT BENTURAN 2				AKIBAT TARIKAN			
			Gaya	Geser	Momen	Torsi	Gaya	Geser	Momen	Torsi	Gaya	Geser	Momen	Torsi
			Axial (ton)	(ton)	(t m)	Axial (ton)	Axial (ton)	(ton)	(t m)	Axial (ton)	Axial (ton)	(ton)	(t m)	Axial (ton)
114	0	-0.25	-2.01	4.21	0.19	-2.14	-3.2	7	-0.19	0	-0.02	0.13	-0.01	
	2.7		-2.01	-1.22			-3.2	-1.64			-0.02	0.07		
	5.4		-2.01	-6.66			-3.2	-10.29			-0.02	0.01		
121	0	-0.39	-2.42	2.48	-0.26	-1.01	-3.52	2.85	0.26	0	0	0	0	
	2.3		-2.42	2.97			-3.52	-5.27			0	0		
	4.5		-2.42	-8.41			-3.52	-13.18			0	0		
101	0	-0.36	-1.58	7.36	-0.18	-9.25	-3.84	14.28	0.18	0	0.33	-0.87	0	
	2.7		-1.58	3.17			-3.84	4.11			0.33	0.02		
	5.3		-1.58	-1.02			-3.84	-6.06			0.33	0.9		
108	0	-0.16	-1.43	4.51	0.49	-8.6	-3.5	10.54	-0.49	0	-0.07	0.63	-0.01	
	2.6		-1.43	0.73			-3.5	1.27			-0.07	0.46		
	5.3		-1.43	-3.05			-3.5	-8.01			-0.07	0.28		
115	0	0.04	-1.41	2.69	0.42	-4.57	-3.81	8.52	-0.42	0	-0.04	0.21	-0.01	
	2.7		-1.41	-1.1			-3.81	-1.76			-0.04	0.11		
	5.4		-1.41	-4.9			-3.81	-12.06			-0.04	0		
122	0	-0.15	-1.92	2.42	0.21	-1.57	-4.01	2.7	-0.21	0	0	0.01	-0.09	
	2.3		-1.92	-1.91			-4.01	-6.33			0	0		
	4.5		-1.92	-6.24			-4.01	-15.36			0	-0.01		
102	0	1.23	-1.31	6.52	-0.4	-6.1	-4.11	15.12	0.4	0	0.22	-0.49	-0.06	
	2.7		-1.31	3.05			-4.11	4.23			0.22	0.09		
	5.3		-1.31	-0.42			-4.11	-6.67			0.22	0.66		
109	0	0.75	-0.72	2.38	0.93	-4.64	-4.2	12.67	-0.93	0	-0.09	0.67	-0.03	
	2.6		-0.72	0.47			-4.2	1.53			-0.09	0.44		
	5.3		-0.72	-1.45			-4.2	-9.61			-0.09	0.21		
116	0	0.08	-0.72	1.01	0.71	-2.64	-4.5	10.21	-0.71	0	-0.05	0.23	-0.01	
	2.7		-0.72	-0.94			-4.5	-1.93			-0.05	0.09		
	5.4		-0.72	-2.88			-4.5	-14.06			-0.05	-0.04		
123	0	-0.1	-0.73	0.19	1.53	-1.33	-5.21	4.93	-1.53	0	-0.01	0.03	0	
	2.3		-0.73	-1.45			-5.21	-6.78			-0.01	0.01		
	4.5		-0.73	-3.1			-5.21	-18.5			-0.01	-0.02		
124	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0.8		0	0			0	0			0	0		
	1.5		0	0			0	0			0	0		
125	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0.8		0	0			0	0			0	0		
	1.5		0	0			0	0			0	0		
126	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0.8		0	0			0	0			0	0		
	1.5		0	0			0	0			0	0		
127	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0.8		0	0			0	0			0	0		
	1.5		0	0			0	0			0	0		
128	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0.8		0	0			0	0			0	0		
	1.5		0	0			0	0			0	0		
129	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0.8		0	0			0	0			0	0		
	1.5		0	0			0	0			0	0		
130	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0.8		0	0			0	0			0	0		
	1.5		0	0			0	0			0	0		

**GAYA - GAYA DALAM (HASIL ANALISA STRUKTUR)
BLOK A**

As-Type	No.	Jarak	Akibat Gaya Gempa Arak X Ki				Akibat Gaya Gempa Arak X Ka			
			Gaya	Torsi	Geser	Lentur	Gaya	Torsi	Geser	Lentur
			(ton)	(ton)	(ton)	(t.m)	(ton)	(ton)	(ton)	(t.m)
batok	balok	Pnmp (m)	Aksial	Aksial			Aksial	Aksial		
			(ton)	(ton)			(ton)	(ton)		(t.m)
G-4	36	0	0	-18.4	0	0	0	0	0	0
		0.625			0	0			0	0
		1.25			0	0			0	0
G-4	37	0	-0.45	-16.35	-0.59	3.41	0.11	-0.27	0.24	-2.05
		1.875			-0.59	2.3			0.24	-1.61
		3.75			-0.59	1.18			0.24	-1.16
G-4	38	0	-0.31	-12.99	-1.15	4.84	-0.34	-0.7	0.43	-2.53
		1.875			-1.15	2.69			0.43	-1.73
		3.75			-1.15	0.54			0.43	-0.93
G-4	39	0	-0.09	-9.82	-1.36	2.88	-0.5	-0.95	0.41	-1.28
		1.875			-1.36	0.33			0.41	-0.51
		3.75			-1.36	-2.22			0.41	0.26
G-4	40	0	-0.11	-5.16	-0.98	1.33	-0.29	-1.06	0.35	-0.14
		1.875			-0.98	-0.52			0.35	0.52
		3.75			-0.98	-2.36			0.35	1.17
G-4	41	0	-0.26	-2.63	-0.81	-0.63	-0.17	-0.96	0.32	0.8
		1.875			-0.81	-2.15			0.32	1.41
		3.75			-0.81	-3.68			0.32	2.01
G-4	42	0	-0.34	-0.58	-0.35	-1.06	0.1	-0.61	0.13	0.96
		1.875			-0.35	-1.72			0.13	1.21
		3.75			-0.35	-2.39			0.13	1.46
G-4	43	0	0	0	0	0	0	0	0	0
		0.625			0	0			0	0
		1.25			0	0			0	0
F-2	45	0	0	-18.4	0	0	0	0	0	0
		0.625			0	0			0	0
		1.25			0	0			0	0
F-2	46	0	-5.76	-16.11	-12.66	63.37	2	-2.46	8.84	-44.77
		1.875			-12.66	39.63			8.84	-28.19
		3.75			-12.66	15.9			8.84	-11.61
F-2	47	0	-2.35	-14.49	-20.08	72.8	-1.88	-4.78	14.23	-51.99
		1.875			-20.08	35.16			14.23	-25.31
		3.75			-20.08	-2.49			14.23	1.37
F-2	48	0	-0.94	-12.24	-22.67	54.42	-3.75	-7.27	16.22	-38.81
		1.875			-22.67	11.9			16.22	-8.4
		3.75			-22.67	-30.61			16.22	22
F-3	49	0	-1.99	-11.34	-23.1	25.22	-4.28	-9.9	16.39	-18.18
		1.875			-23.1	-18.1			16.39	12.55
		3.75			-23.1	-61.42			16.39	43.29
F-3	50	0	-4.02	-8.16	-19.98	-3.89	-1.93	-12.62	14.1	3.06
		1.875			-19.98	-41.35			14.1	29.5
		3.75			-19.98	-78.81			14.1	55.93
F-3	51	0	-7.96	-4.62	-11.93	-20.53	2.87	-15.46	8.29	14.94
		1.875			-11.93	-42.9			8.29	30.48
		3.75			-11.93	-65.28			8.29	46.03
F-3	52	0	0	0	0	0	0	-18.4	0	0
		0.625			0	0			0	0
		1.25			0	0			0	0

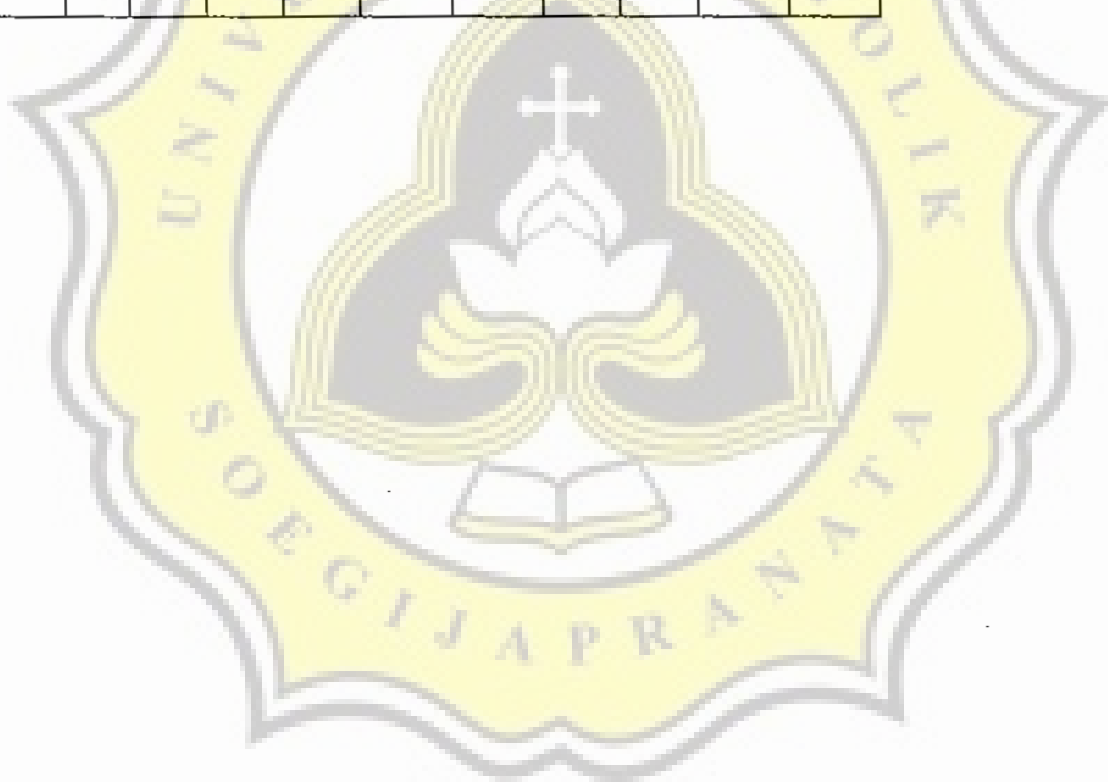
As. Type	No.	Jarak	Mabal Gaya Gempa Arah X Ki				Mabal Gaya Gempa Arah X Ka			
			Gaya	Torsi	Geser	Lenkur	Gaya	Torsi	Geser	Lenkur
balok	balok	Pnmp	Aksial	Aksial			Aksial	Aksial		
		(m)	(ton)	(ton)	(ton)	(t m)	(ton)	(ton)	(ton)	(t m)
E-1	54	0	-18.4	0	0	0	0	0	0	0
		0.625			0	0			0	0
		1.25			0	0			0	0
E-1	55	0	-1.96	-15.21	-14.57	41.22	1.5	-2.41	11.13	-31.66
		1.875			-14.57	13.9			11.13	-10.78
		3.75			-14.57	-13.42			11.13	10.09
E-1	56	0	0.04	-12.29	-15.37	35.32	-0.31	-4.81	11.78	-27.15
		1.875			-15.37	6.5			11.78	-5.07
		3.75			-15.37	-22.32			11.78	17.02
E-1	57	0	0.56	-9.62	-14.35	28.33	-0.83	-7.27	11	-21.69
		1.875			-14.35	1.41			11	-1.07
		3.75			-14.35	-25.5			11	19.55
E-1	58	0	0.68	-7.04	-14.23	25.19	-0.98	-9.81	10.85	-19.17
		1.875			-14.23	-1.49			10.85	1.18
		3.75			-14.23	-28.18			10.85	21.53
E-1	59	0	0.01	-4.7	-15.22	22.49	-0.33	-12.52	11.63	-17.1
		1.875			-15.22	-6.04			11.63	4.71
		3.75			-15.22	-34.57			11.63	26.51
E-1	60	0	-2.32	-2.37	-14.53	13.95	1.72	-15.42	11.08	-10.47
		1.875			-14.53	-13.3			11.08	10.31
		3.75			-14.53	-40.54			11.08	31.08
E-1	61	0	0	0	0	0	0	-18.4	0	0
		0.625			0	0			0	0
		1.25			0	0			0	0
D-1	63	0	0	-18.4	0	0	0	0	0	0
		0.625			0	0			0	0
		1.25			0	0			0	0
D-1	64	0	1.63	-15.25	-13.39	38.47	-1.09	-2.35	11.15	-31.94
		1.875			-13.39	13.36			11.15	-11.02
		3.75			-13.39	-11.75			11.15	9.89
D-1	65	0	-0.54	-12.44	-14.18	32.97	0.43	-4.73	11.78	-27.36
		1.875			-14.18	6.39			11.78	-5.28
		3.75			-14.18	-20.2			11.78	16.8
D-1	66	0	-1.12	-9.78	-13.21	26.14	0.74	-7.18	10.97	-21.72
		1.875			-13.21	1.37			10.97	-1.15
		3.75			-13.21	-23.39			10.97	19.42
D-1	67	0	-1.3	-7.23	-13.05	22.97	0.85	-9.71	10.88	-19.14
		1.875			-13.05	-1.51			10.88	1.25
		3.75			-13.05	-25.99			10.88	21.64
D-1	68	0	-0.61	-4.79	-14	20.3	0.43	-12.4	11.64	-16.91
		1.875			-14	-5.96			11.64	4.92
		3.75			-14	-32.21			11.64	26.76
D-1	69	0	1.84	-2.48	-13.3	12.17	-1.33	-15.3	11.08	-10.26
		1.875			-13.3	-12.76			11.08	10.52
		3.75			-13.3	-37.69			11.08	31.29
D-1	70	0	0	0	0	0	-18.4	0	0	0
		0.625			0	0			0	0
		1.25			0	0			0	0
C-2	72	0	-18.4	0	0	0	0	0	0	0
		0.625			0	0			0	0
		1.25			0	0			0	0
C-2	73	0	-0.47	-16.63	-9.91	57.78	0.15	-3.14	9.14	-53.29

As-Type	No.	Jarak	Aksial Gaya Gempa Arah X Ku				Aksial Gaya Gempa Arah X Ka			
			Gaya	Torsi	Geser	Lentur	Gaya	Torsi	Geser	Lentur
balok	balok	Primp	Aksial	Aksial			Aksial	Aksial	Geser	Lentur
		(m)	(ton)	(ton)	(ton)	(l m)	(ton)	(ton)	(ton)	(l m)
		1.875			-9.91	39.21			9.14	-36.15
		3.75			-9.91	20.64			9.14	-19.01
C-2	74	0	-2.03	-14.61	-17.47	98.14	-0.22	-6.32	16.09	-62.74
		1.875			-17.47	35.39			16.09	-32.58
		3.75			-17.47	2.63			16.09	-2.41
C-2	75	0	-3.3	-12.15	-19.94	48.5	-0.22	-9.4	18.34	-44.61
		1.875			-19.94	11.11			18.34	-10.22
		3.75			-19.94	-26.28			18.34	24.18
C-3	76	0	-3.93	-9.39	-20.12	19.86	-0.32	-12.33	18.52	-18.28
		1.875			-20.12	-17.87			18.52	16.45
		3.75			-20.12	-55.6			18.52	51.18
C-3	77	0	-2.76	-6.38	-17.16	-9.8	-0.3	-14.87	15.82	9.01
		1.875			-17.16	-41.98			15.82	38.68
		3.75			-17.16	-74.15			15.82	88.35
C-3	78	0	-0.89	-3.22	-8.9	-26.05	0.2	-16.87	8.22	24.03
		1.875			-8.9	-42.74			8.22	39.45
		3.75			-8.9	-59.44			8.22	54.87
C-3	79	0	0	0	0	0	-18.4	0	0	0
		0.625			0	0			0	0
		1.25			0	0			0	0
B-1	81	0	-18.4	0	0	0	0	0	0	0
		0.625			0	0			0	0
		1.25			0	0			0	0
B-1	82	0	-2.8	-15.21	-10.57	30.04	1.63	-2.39	11.13	-31.47
		1.875			-10.57	10.22			11.13	-10.6
		3.75			-10.57	-9.61			11.13	10.27
B-1	83	0	-1.22	-12.18	-10.92	25.44	-0.64	-4.82	11.61	-26.87
		1.875			-10.92	4.96			11.61	-5.1
		3.75			-10.92	-15.51			11.61	16.68
B-1	84	0	-0.99	-9.58	-10.18	20.24	-1.18	-7.3	10.9	-21.59
		1.875			-10.18	1.16			10.9	-1.15
		3.75			-10.18	-17.92			10.9	19.29
B-1	85	0	-0.84	-7.11	-10.09	17.69	-1.36	-9.8	10.77	-18.92
		1.875			-10.09	-1.23			10.77	1.28
		3.75			-10.09	-20.15			10.77	21.48
B-1	86	0	-1.2	-4.76	-10.77	15.66	-0.67	-12.44	11.45	-16.79
		1.875			-10.77	-4.53			11.45	4.68
		3.75			-10.77	-24.73			11.45	26.15
B-1	87	0	-3.15	-2.38	-10.48	10.06	1.97	-15.31	11.06	-10.72
		1.875			-10.48	-9.6			11.06	10.01
		3.75			-10.48	-29.26			11.06	30.75
B-1	88	0	0	0	0	0	0	-18.4	0	0
		0.625			0	0			0	0
		1.25			0	0			0	0
2-5	89	0	3.41	1.28	0.59	0.45	-2.05	-0.17	-0.24	-0.11
		1.5			0.59	1.34			-0.24	-0.47
		3			0.59	2.23			-0.24	-0.82
3-6	90	0	3.65	0.4	0.55	-0.15	-1.37	0.03	-0.19	0.44
		1.5			0.55	0.68			-0.19	0.16
		3			0.55	1.51			-0.19	-0.12
4-5	91	0	2.34	0.25	0.22	-0.22	-0.35	0.07	0.02	0.16
		1.5			0.22	0.11			0.02	0.19

As-Type	No.	Jarak	Aksial Gaya Gempa Arah X Ki				Aksial Gaya Gempa Arah X Ka			
			Gaya	Torsi	Geser	Lentur	Gaya	Torsi	Geser	Lentur
balok	balok	Pmp	Aksial	Aksial			Aksial	Aksial	Geser	Lentur
		(m)	(ton)	(ton)	(ton)	(t m)	(ton)	(ton)	(ton)	(t m)
		3			0.22	0.43			0.02	0.21
5-7	92	0	3.54	-0.6	-0.38	0.02	-0.39	0.09	0.06	-0.21
		1.5			-0.38	-0.55			0.06	-0.12
		3			-0.38	-1.11			0.06	-0.03
6-5	93	0	1.72	-0.26	-0.17	0.15	-0.37	0.09	0.03	-0.12
		1.5			-0.17	-0.11			0.03	-0.08
		3			-0.17	-0.37			0.03	-0.04
7-6	94	0	2.61	-0.58	-0.46	0.08	-1.05	0.08	0.19	-0.27
		1.5			-0.46	-0.61			0.19	0.01
		3			-0.46	-1.29			0.19	0.3
8-5	95	0	2.39	-0.5	-0.35	-0.34	-1.46	-0.19	0.13	0.1
		1.5			-0.35	-0.87			0.13	0.3
		3			-0.35	-1.4			0.13	0.5
2-1	96	0	9.42	2.33	0.95	-2.86	-0.75	-0.42	0.83	-2.83
		2.65			0.95	-0.33			0.83	-0.63
		5.3			0.95	2.19			0.83	1.56
3-1	97	0	2.96	0.47	3.14	-9.15	-2.26	0.08	-1.38	3.79
		2.65			3.14	-0.84			-1.38	0.12
		5.3			3.14	7.47			-1.38	-3.55
4-1	98	0	1.45	0.13	1.57	-4.62	-0.88	0.18	-0.72	2.1
		2.65			1.57	-0.47			-0.72	0.18
		5.3			1.57	3.69			-0.72	-1.73
5-1	99	0	1.5	0.24	0.05	-0.07	-0.87	0.21	-0.13	0.49
		2.65			0.05	0.06			-0.13	0.16
		5.3			0.05	0.18			-0.13	-0.18
6-1	100	0	1.46	-0.62	-1.74	5.29	-0.95	0.27	0.83	-2.4
		2.65			-1.74	0.67			0.83	-0.24
		5.3			-1.74	-3.95			0.83	1.98
7-1	101	0	3.27	-1.03	-3.37	9.9	-2.35	0.23	1.59	-4.52
		2.65			-3.37	0.97			1.59	-0.3
		5.3			-3.37	-7.96			1.59	3.92
8-1	102	0	10.21	-1.51	-0.59	1.5	-8.08	-0.56	-1.02	3.38
		2.65			-0.59	-0.06			-1.02	0.69
		5.3			-0.59	-1.63			-1.02	-2.01
2-1	103	0	-0.92	2.55	2.2	-6.72	-0.32	-0.4	0.06	0.01
		2.65			2.2	-0.88			0.06	0.17
		5.3			2.2	4.96			0.06	0.32
3-1	104	0	-0.54	0.47	1.31	-1.85	-0.14	0.08	0.03	-1.71
		2.65			1.31	1.61			0.03	-1.63
		5.3			1.31	5.07			0.03	-1.56
4-1	105	0	-0.46	0.14	0.64	-0.49	0.01	0.15	0.02	-1.17
		2.65			0.64	1.2			0.02	-1.13
		5.3			0.64	2.9			0.02	-1.08
5-1	106	0	-0.42	0.15	-0.01	0.06	0.07	0.2	0	-0.03
		2.65			-0.01	0.04			0	-0.04
		5.3			-0.01	0.02			0	-0.04
6-1	107	0	-0.41	-0.36	-0.65	0.4	0.02	0.28	-0.02	1.29
		2.65			-0.65	-1.33			-0.02	1.23
		5.3			-0.65	-3.06			-0.02	1.17
7-1	108	0	-0.47	-0.59	-1.3	1.69	-0.14	0.29	-0.03	1.83
		2.65			-1.3	-1.77			-0.03	1.76
		5.3			-1.3	-5.22			-0.03	1.69

As-Type	No.	Jarak	Akibat Gaya Gempa Arah X Ki				Akibat Gaya Gempa Arah X Ka			
			Gaya	Torsi	Geser	Lenkur	Gaya	Torsi	Geser	Lenkur
balok	balok	Pnmp	Aksial	Aksial			Aksial	Aksial		
		(m)	(ton)	(ton)	(ton)	(t m)	(ton)	(ton)	(ton)	(l m)
8-1	109	0	-0.86	-2.36	-2.19	6.91	-0.29	-0.6	-0.05	-0.22
		2.65			-2.19	1.12			-0.05	-0.36
		5.3			-2.19	-4.67			-0.05	-0.5
2-1	110	0	-8.93	2.38	3.06	-7.6	6.57	-0.04	-0.47	1.38
		2.65			3.06	0.66			-0.47	0.1
		5.3			3.06	8.92			-0.47	-1.18
3-1	111	0	-2.93	0.12	-0.21	0.04	1.96	-0.03	1.49	-3.15
		2.7			-0.21	-0.52			1.49	0.86
		5.4			-0.21	-1.08			1.49	4.88
4-1	112	0	-1.54	-0.01	-0.12	-0.11	1.11	0.04	0.73	-1.44
		2.7			-0.12	-0.44			0.73	0.54
		5.4			-0.12	-0.77			0.73	2.51
5-1	113	0	-1.56	-0.03	-0.14	0.21	1.2	0.04	0.06	-0.18
		2.7			-0.14	-0.16			0.06	0
		5.4			-0.14	-0.53			0.06	0.16
6-1	114	0	-1.54	-0.26	0.23	-0.16	1.09	0.07	-0.83	1.64
		2.7			0.23	0.45			-0.83	-0.6
		5.4			0.23	1.06			-0.83	-2.83
7-1	115	0	-3.22	-0.41	0.42	-0.48	2.23	-0.07	-1.65	3.53
		2.7			0.42	0.67			-1.65	-0.91
		5.4			0.42	1.81			-1.65	-5.35
8-1	116	0	-9.67	-1.8	-3.24	8.1	7.29	-0.03	0.67	-1.8
		2.7			-3.24	-0.65			0.67	0.01
		5.4			-3.24	-9.4			0.67	1.82
2-1	117	0	7.02	1.29	2.09	-1.5	-7.43	0.14	0.67	-1.37
		2.25			2.09	3.2			0.67	0.14
		4.5			2.09	7.9			0.67	1.65
3-1	118	0	2.5	0.06	3.45	-6.76	-2.25	-0.07	-1.68	5.23
		2.25			3.45	1			-1.68	1.45
		4.5			3.45	8.76			-1.68	-2.34
4-1	119	0	2.04	0.01	1.54	-3.12	-1.38	0	-0.69	2.5
		2.25			1.54	0.35			-0.69	0.98
		4.5			1.54	3.83			-0.69	-0.58
5-1	120	0	2.24	-0.02	0.02	0.08	-1.49	-0.03	-0.1	0.26
		2.25			0.02	0.12			-0.1	0.04
		4.5			0.02	0.16			-0.1	-0.18
6-1	121	0	1.98	-0.24	-1.66	3.51	-1.38	-0.09	0.79	-2.83
		2.25			-1.66	-0.23			0.79	-1.05
		4.5			-1.66	-3.97			0.79	0.74
7-1	122	0	2.79	-0.42	-3.63	7.18	-2.54	-0.25	1.9	-5.84
		2.25			-3.63	-0.98			1.9	-1.57
		4.5			-3.63	-9.14			1.9	2.71
8-1	123	0	7.84	-0.67	-1.81	0.6	-8.19	0.3	-0.9	2.05
		2.25			-1.81	-3.47			-0.9	0.02
		4.5			-1.81	-7.54			-0.9	-2
2-1	124	0	0	0	0	0	0	0	0	0
		0.75			0	0			0	0
		1.5			0	0			0	0
3-1	125	0	0	0	0	0	0	0	0	0
		0.75			0	0			0	0
		1.5			0	0			0	0

As-Type	No.	Jarak	Aksiol Gaya Gempa Arah X Ki				Aksiol Gaya Gempa Arah X Kii			
			Gaya	Torsi	Geser	Lentur	Gaya	Torsi	Geser	Lentur
balok	balok	Pnmp	Aksial	Aksial			Aksial	Aksial		
		(m)	(ton)	(ton)	(ton)	(t m)	(ton)	(ton)	(ton)	(t m)
4-1	126	0	0	0	0	0	0	0	0	0
		0.75			0	0			0	0
		1.5			0	0			0	0
5-1	127	0	0	0	0	0	0	0	0	0
		0.75			0	0			0	0
		1.5			0	0			0	0
6-1	128	0	0	0	0	0	0	0	0	0
		0.75			0	0			0	0
		1.5			0	0			0	0
7-1	129	0	0	0	0	0	0	0	0	0
		0.75			0	0			0	0
		1.5			0	0			0	0
8-1	130	0	0	0	0	0	0	0	0	0
		0.75			0	0			0	0
		1.5			0	0			0	0



**GAYA - GAYA DALAM (HASIL ANALISA STRUKTUR)
BLOK A**

As-Type	No.	Jarak	Aksial Gaya Gempa Arak Y Ka				Aksial Gaya Gempa Arak Y K1			
			Gaya	Torsi	Geser	Lentur	Gaya	Torsi	Geser	Lentur
balok	balok	Pnmp (m)	Aksial (ton)	Aksial (ton)	(ton)	(t m)	Aksial (ton)	Aksial (ton)	(ton)	(t m)
G-4	36	0	0	0	0	0	0	0	0	0
		0.625			0	0			0	0
		1.25			0	0			0	0
G-4	37	0	0	0.05	0	0	0	0	0	0
		1.875			0	0			0	0
		3.75			0	0			0	0
G-4	38	0	0	0.04	0	0	0	0	0	0
		1.875			0	0			0	0
		3.75			0	0			0	0
G-4	39	0	0	0.1	0	0	0	0	0	0
		1.875			0	0			0	0
		3.75			0	0			0	0
G-4	40	0	0	0.13	0	0	0	0	0	0
		1.875			0	0			0	0
		3.75			0	0			0	0
G-4	41	0	0	0.05	0	0	0	0	0	0
		1.875			0	0			0	0
		3.75			0	0			0	0
G-4	42	0	0	0.07	0	0	0	0	0	0
		1.875			0	0			0	0
		3.75			0	0			0	0
G-4	43	0	0	0	0	0	0	0	0	0
		0.625			0	0			0	0
		1.25			0	0			0	0
F-2	45	0	0	0	0	0	0	0	0	0
		0.625			0	0			0	0
		1.25			0	0			0	0
F-2	46	0	0	-0.06	0	0	0	0	0	0
		1.875			0	0			0	0
		3.75			0	0			0	0
F-2	47	0	0	-0.05	0	0	0	0	0	0
		1.875			0	0			0	0
		3.75			0	0			0	0
F-2	48	0	0	-0.12	0	0	0	0	0	0
		1.875			0	0			0	0
		3.75			0	0			0	0
F-3	49	0	0	-0.15	0	0	0	0	0	0
		1.875			0	0			0	0
		3.75			0	0			0	0
F-3	50	0	0	-0.06	0	0	0	0	0	0
		1.875			0	0			0	0
		3.75			0	0			0	0
F-3	51	0	0	-0.08	0	0	0	0	0	0
		1.875			0	0			0	0
		3.75			0	0			0	0
F-3	52	0	0	0	0	0	0	0	0	0
		0.625			0	0			0	0
		1.25			0	0			0	0

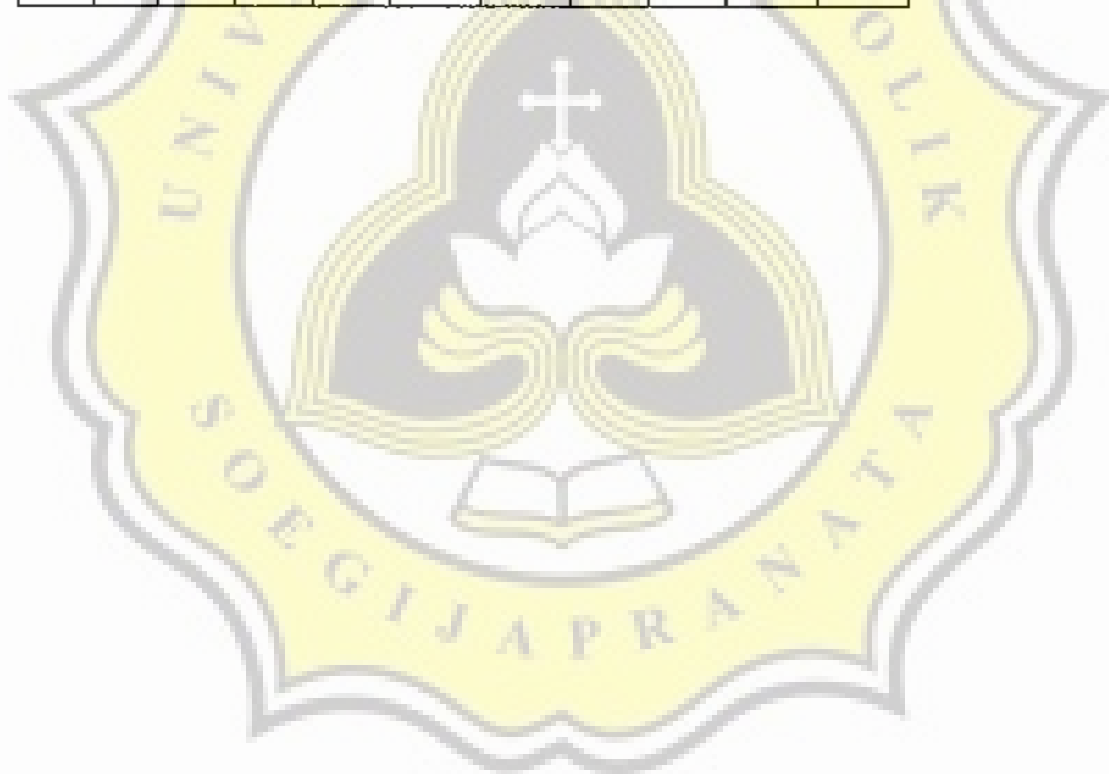
As-Type	No.	Jarak	Aksial Gaya Gempa Arah Y Ka				Aksial Gaya Gempa Arah Y Ki			
			Gaya	Torsi	Geser	Lentur	Gaya	Torsi	Geser	Lentur
balok	balok	Pnmp	Aksial	Aksial			Aksial	Aksial		
		(m)	(ton)	(ton)	(ton)	(l m)	(ton)	(ton)	(ton)	(l m)
E-1	54	0	0	0	0	0	0	0	0	0
		0.625			0	0			0	0
		1.25			0	0			0	0
E-1	55	0	0	0	0	0	0	0	0	0
		1.875			0	0			0	0
		3.75			0	0			0	0
E-1	56	0	0	0	0	0	0	0	0	0
		1.875			0	0			0	0
		3.75			0	0			0	0
E-1	57	0	0	0	0	0	0	0	0	0
		1.875			0	0			0	0
		3.75			0	0			0	0
E-1	58	0	0	-0.01	0	0	0	0	0	0
		1.875			0	0			0	0
		3.75			0	0			0	0
E-1	59	0	0	-0.01	0	0	0	0	0	0
		1.875			0	0			0	0
		3.75			0	0			0	0
E-1	60	0	0	0	0	0	0	0	0	0
		1.875			0	0			0	0
		3.75			0	0			0	0
E-1	61	0	0	0	0	0	0	0	0	0
		0.625			0	0			0	0
		1.25			0	0			0	0
D-1	63	0	0	0	0	0	0	0	0	0
		0.625			0	0			0	0
		1.25			0	0			0	0
D-1	64	0	0	0	0	0	0	0	0	0
		1.875			0	0			0	0
		3.75			0	0			0	0
D-1	65	0	0	0	0	0	0	0	0	0
		1.875			0	0			0	0
		3.75			0	0			0	0
D-1	66	0	0	0	0	0	0	0	0	0
		1.875			0	0			0	0
		3.75			0	0			0	0
D-1	67	0	0	0	0	0	0	0	0	0
		1.875			0	0			0	0
		3.75			0	0			0	0
D-1	68	0	0	0	0	0	0	0	0	0
		1.875			0	0			0	0
		3.75			0	0			0	0
D-1	69	0	0	0	0	0	0	0	0	0
		1.875			0	0			0	0
		3.75			0	0			0	0
D-1	70	0	0	0	0	0	0	0	0	0
		0.625			0	0			0	0
		1.25			0	0			0	0
C-2	72	0	0	0	0	0	0	0	0	0
		0.625			0	0			0	0
		1.25			0	0			0	0

As-Type	No.	Jarak	Aksial Gaya Gempa Arah Y Ka				Aksial Gaya Gempa Arah Y Ki			
			Gaya	Torsi	Geser	Lentur	Gaya	Torsi	Geser	Lentur
balok	balok	Pnmp	Aksial	Aksial	(ton)	(t.m)	Aksial	Aksial	(ton)	(t.m)
		(m)	(ton)	(ton)	(ton)	(t.m)	(ton)	(ton)	(ton)	(t.m)
C-2	73	0	0	0	0	0	0	0	0	0
		1.875			0	0			0	0
		3.75			0	0			0	0
C-2	74	0	0	0	0	0	0	0	0	0
		1.875			0	0			0	0
		3.75			0	0			0	0
C-2	75	0	0	0	0	0	0	0	0	0
		1.875			0	0			0	0
		3.75			0	0			0	0
C-3	76	0	0	0	0	0	0	0	0	0
		1.875			0	0			0	0
		3.75			0	0			0	0
C-3	77	0	0	0	0	0	0	0	0	0
		1.875			0	0			0	0
		3.75			0	0			0	0
C-3	78	0	0	0	0	0	0	0	0	0
		1.875			0	0			0	0
		3.75			0	0			0	0
C-3	79	0	0	0	0	0	0	0	0	0
		0.625			0	0			0	0
		1.25			0	0			0	0
B-1	81	0	0	0	0	0	0	0	0	0
		0.625			0	0			0	0
		1.25			0	0			0	0
B-1	82	0	0	0.01	0	0	0	0	0	0
		1.875			0	0			0	0
		3.75			0	0			0	0
B-1	83	0	0	0.01	0	0	0	0	0	0
		1.875			0	0			0	0
		3.75			0	0			0	0
B-1	84	0	0	0.02	0	0	0	0	0	0
		1.875			0	0			0	0
		3.75			0	0			0	0
B-1	85	0	0	0.02	0	0	0	0	0	0
		1.875			0	0			0	0
		3.75			0	0			0	0
B-1	86	0	0	0.01	0	0	0	0	0	0
		1.875			0	0			0	0
		3.75			0	0			0	0
B-1	87	0	0	0.01	0	0	0	0	0	0
		1.875			0	0			0	0
		3.75			0	0			0	0
B-1	88	0	0	0	0	0	0	0	0	0
		0.625			0	0			0	0
		1.25			0	0			0	0
2.5	89	0	0	-25.52	0	0	0	0	0	0
		1.5			0	0			0	0
		3			0	0			0	0
3-6	90	0	0	-26.48	0	0	0	0	0	0
		1.5			0	0			0	0
		3			0	0			0	0
4-5	91	0	0	-24.65	0	0	0	0	0	0

As-Type	No.	Jarak	Akibat Gaya Gempa Arah Y Ka				Akibat Gaya Gempa Arah Y Ki			
			Gaya	Torsi	Geser	Lentur	Gaya	Torsi	Geser	Lentur
balok	balok	Pnmp	Aksial	Aksial			Aksial	Aksial		
		(m)	(ton)	(ton)	(ton)	(t m)	(ton)	(ton)	(ton)	(t m)
		1.5			0	0			0	0
		3			0	0			0	0
5-7	92	0	0	27.38	0	0	0	0	0	0
		1.5			0	0			0	0
		3			0	0			0	0
6-5	93	0	0	-24.48	0	0	0	0	0	0
		1.5			0	0			0	0
		3			0	0			0	0
7-6	94	0	0	-26.6	0	0	0	0	0	0
		1.5			0	0			0	0
		3			0	0			0	0
8-5	95	0	0	-25.48	0	0	0	0	0	0
		1.5			0	0			0	0
		3			0	0			0	0
2-1	96	0	0	-20.62	-19.12	76.33	0	-5.09	19.12	-76.32
		2.65			-19.12	25.67			19.12	-25.66
		5.3			-19.12	-24.99			19.12	24.99
3-1	97	0	0	-20.93	-19.12	76.33	0	-5.09	19.12	-76.32
		2.65			-19.12	25.67			19.12	-25.66
		5.3			-19.12	-24.99			19.12	24.99
4-1	98	0	0	-20.32	-19.12	76.33	0	-5.09	19.12	-76.32
		2.65			-19.12	25.67			19.12	-25.66
		5.3			-19.12	-24.99			19.12	24.99
5-1	99	0	0	-21.16	-19.12	76.33	0	-5.09	19.12	-76.32
		2.65			-19.12	25.67			19.12	-25.66
		5.3			-19.12	-24.99			19.12	24.99
6-1	100	0	0	-20.46	-19.12	76.33	0	-5.09	19.12	-76.32
		2.65			-19.12	25.67			19.12	-25.66
		5.3			-19.12	-24.99			19.12	24.99
7-1	101	0	0	-20.85	-19.12	76.33	0	-5.09	19.12	-76.32
		2.65			-19.12	25.67			19.12	-25.66
		5.3			-19.12	-24.99			19.12	24.99
8-1	102	0	0	-20.63	-19.12	76.33	0	-5.09	19.12	-76.32
		2.65			-19.12	25.67			19.12	-25.66
		5.3			-19.12	-24.99			19.12	24.99
2-1	103	0	0	-15.46	-17.37	53.09	0	-10.29	17.37	-53.09
		2.65			-17.37	7.05			17.37	-7.05
		5.3			-17.37	-38.99			17.37	38.99
3-1	104	0	0	-15.62	-17.37	53.09	0	-10.29	17.37	-53.09
		2.65			-17.37	7.05			17.37	-7.05
		5.3			-17.37	-38.99			17.37	38.99
4-1	105	0	0	-15.29	-17.37	53.09	0	-10.29	17.37	-53.09
		2.65			-17.37	7.05			17.37	-7.05
		5.3			-17.37	-38.99			17.37	38.99
5-1	106	0	0	-15.76	-17.37	53.09	0	-10.29	17.37	-53.09
		2.65			-17.37	7.05			17.37	-7.05
		5.3			-17.37	-38.99			17.37	38.99
6-1	107	0	0	-15.38	-17.37	53.09	0	-10.29	17.37	-53.09
		2.65			-17.37	7.05			17.37	-7.05
		5.3			-17.37	-38.99			17.37	38.99
7-1	108	0	0	-15.57	-17.37	53.09	0	-10.29	17.37	-53.09
		2.65			-17.37	7.05			17.37	-7.05

As-Type	No.	Jarak	Akibat Gaya Gempa Arah Y Ke				Akibat Gaya Gempa Arah Y Ki			
			Gaya	Torsi	Geser	Lentur	Gaya	Torsi	Geser	Lentur
balok	balok	Pnmp	Aksial	Aksial			Aksial	Aksial		
		(m)	(ton)	(ton)	(ton)	(t m)	(ton)	(ton)	(ton)	(t m)
		5.3			-17.37	-38.99			17.37	38.99
8-1	109	0	0	-15.46	-17.37	53.09	0	-10.29	17.37	-53.09
		2.65			-17.37	7.05			17.37	-7.05
		5.3			-17.37	-38.99			17.37	38.99
2-1	110	0	0	-10.24	-18.4	39.57	0	-15.53	18.4	-39.57
		2.65			-18.4	-10.1			18.4	10.11
		5.3			-18.4	-59.78			18.4	59.78
3-1	111	0	0	-10.33	-18.4	39.37	0	-15.53	18.4	-39.57
		2.7			-18.4	-10.1			18.4	10.11
		5.4			-18.4	-59.78			18.4	59.78
4-1	112	0	0	-10.15	-18.4	39.57	0	-15.53	18.4	-39.57
		2.7			-18.4	-10.1			18.4	10.11
		5.4			-18.4	-59.78			18.4	59.78
5-1	113	0	0	-10.42	-18.4	39.57	0	-15.53	18.4	-39.57
		2.7			-18.4	-10.1			18.4	10.11
		5.4			-18.4	-59.78			18.4	59.78
6-1	114	0	0	-10.2	-18.4	39.57	0	-15.53	18.4	-39.57
		2.7			-18.4	-10.1			18.4	10.11
		5.4			-18.4	-59.78			18.4	59.78
7-1	115	0	0	-10.3	-18.4	39.57	0	-15.53	18.4	-39.57
		2.7			-18.4	-10.1			18.4	10.11
		5.4			-18.4	-59.78			18.4	59.78
8-1	116	0	0	-10.24	-18.4	39.57	0	-15.53	18.4	-39.57
		2.7			-18.4	-10.1			18.4	10.11
		5.4			-18.4	-59.78			18.4	59.78
2-1	117	0	0	-5.07	-20.94	18.08	0	-20.72	20.95	-18.08
		2.25			-20.94	-29.04			20.95	29.05
		4.5			-20.94	-76.17			20.95	76.18
3-1	118	0	0	-5.09	-20.94	18.08	0	-20.72	20.95	-18.08
		2.25			-20.94	-29.04			20.95	29.05
		4.5			-20.94	-76.17			20.95	76.18
4-1	119	0	0	-5.05	-20.94	18.08	0	-20.75	20.95	-18.08
		2.25			-20.94	-29.04			20.95	29.05
		4.5			-20.94	-76.17			20.95	76.18
5-1	120	0	0	-5.11	-20.94	18.08	0	-20.72	20.95	-18.08
		2.25			-20.94	-29.04			20.95	29.05
		4.5			-20.94	-76.17			20.95	76.18
6-1	121	0	0	-5.07	-20.94	18.08	0	-20.72	20.95	-18.08
		2.25			-20.94	-29.04			20.95	29.05
		4.5			-20.94	-76.17			20.95	76.18
7-1	122	0	0	-5.08	-20.94	18.08	0	-20.72	20.95	-18.08
		2.25			-20.94	-29.04			20.95	29.05
		4.5			-20.94	-76.17			20.95	76.18
8-1	123	0	0	-5.07	-20.94	18.08	0	-20.72	20.95	-18.08
		2.25			-20.94	-29.04			20.95	29.05
		4.5			-20.94	-76.17			20.95	76.18
2-1	124	0	0	0	0	0	0	-25.8	0	0
		0.75			0	0			0	0
		1.5			0	0			0	0
3-1	125	0	0	0	0	0	0	-25.8	0	0
		0.75			0	0			0	0
		1.5			0	0			0	0

As.Type	No.	Jarak	Akbal Gaya Gempa Arah Y Ka				Akbal Gaya Gempa Arah Y Ki			
			Gaya	Torsi	Geser	Lentur	Gaya	Torsi	Geser	Lentur
balok	balok	Pmmp	Aksial	Aksial			Aksial	Aksial		
		(m)	(ton)	(ton)	(ton)	(t.m)	(ton)	(ton)	(ton)	(t.m)
4-1	126	0	0	0	0	0	0	-25.8	0	0
		0.75			0	0			0	0
		1.5			0	0			0	0
5-1	127	0	0	0	0	0	0	-25.8	0	0
		0.75			0	0			0	0
		1.5			0	0			0	0
6-1	128	0	0	0	0	0	0	-25.8	0	0
		0.75			0	0			0	0
		1.5			0	0			0	0
7-1	129	0	0	0	0	0	0	-25.8	0	0
		0.75			0	0			0	0
		1.5			0	0			0	0
8-1	130	0	0	0	0	0	0	-25.8	0	0
		0.75			0	0			0	0
		1.5			0	0			0	0



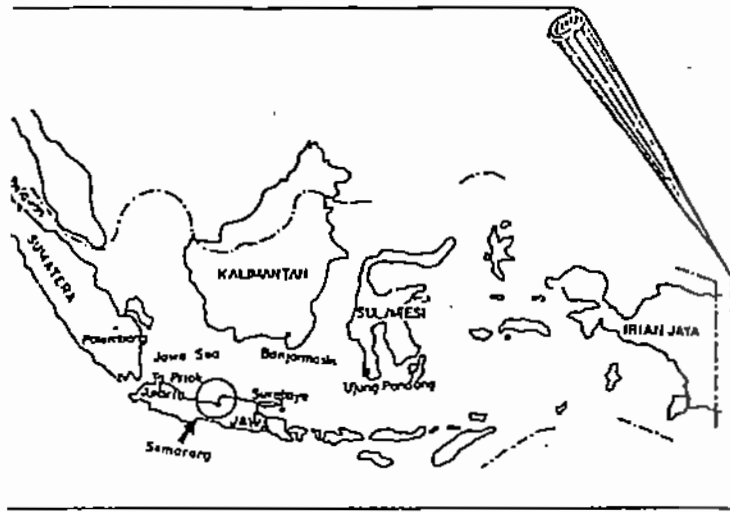
1 1 46 G=6,1,1,1 M=8
 8 8 55 G=6,1,1,1 M=8
 15 15 64 G=6,1,1,1 M=8
 22 22 73 G=6,1,1,1 M=8
 29 29 82 G=6,1,1,1 M=8
 36 36 37 G=7,1,1,1 M=4
 45 45 46 G=3,1,1,1 M=2
 49 49 50 G=2,1,1,1 M=3
 54 54 55 G=7,1,1,1 M=1
 63 63 64 G=7,1,1,1 M=1
 72 72 73 G=3,1,1,1 M=2
 76 76 77 G=3,1,1,1 M=3
 81 81 82 G=7,1,1,1 M=1
 89 37 46 G=1,6,6,6 M=5
 90 38 47 G=1,4,4,4 M=6
 91 39 48 G=1,2,2,2 M=5
 92 40 49 M=7
 96 46 55 G=3,7,9,9 M=1
 97 47 56 G=3,7,9,9 M=1
 98 48 57 G=3,7,9,9 M=1
 99 49 58 G=3,7,9,9 M=1
 100 50 59 G=3,7,9,9 M=1
 101 51 60 G=3,7,9,9 M=1
 102 52 61 G=3,7,9,9 M=1
 124 82 91 G=6,1,1,1 M=1

LOADS

C AKIBAT GAYA BENTURAN
 38 L=1 F=0,25.600,0,0,0,0
 42 L=2 F=0,25.600,0,0,0,0
 C AKIBAT GAYA TARIKAN KAPAL
 40 L=3 F=0,0,0,0,-72.85,0
 C AKIBAT GAYA GEMPA ARAH X KIRI
 36 81 9 L=4 F=18.4,0,0,0,0,0
 C AKIBAT GAYA GEMPA ARAH X KANAN
 44 89 9 L=5 F=-18.4,0,0,0,0,0
 C AKIBAT GAYA GEMPA ARAH Y KANAN
 37 43 1 L=6 F=0,25.8,0,0,0,0
 C AKIBAT GAYA GEMPA ARAH Y KIRI
 91 97 1 L=7 F=0,-25.8,0,0,0,0

COMBO

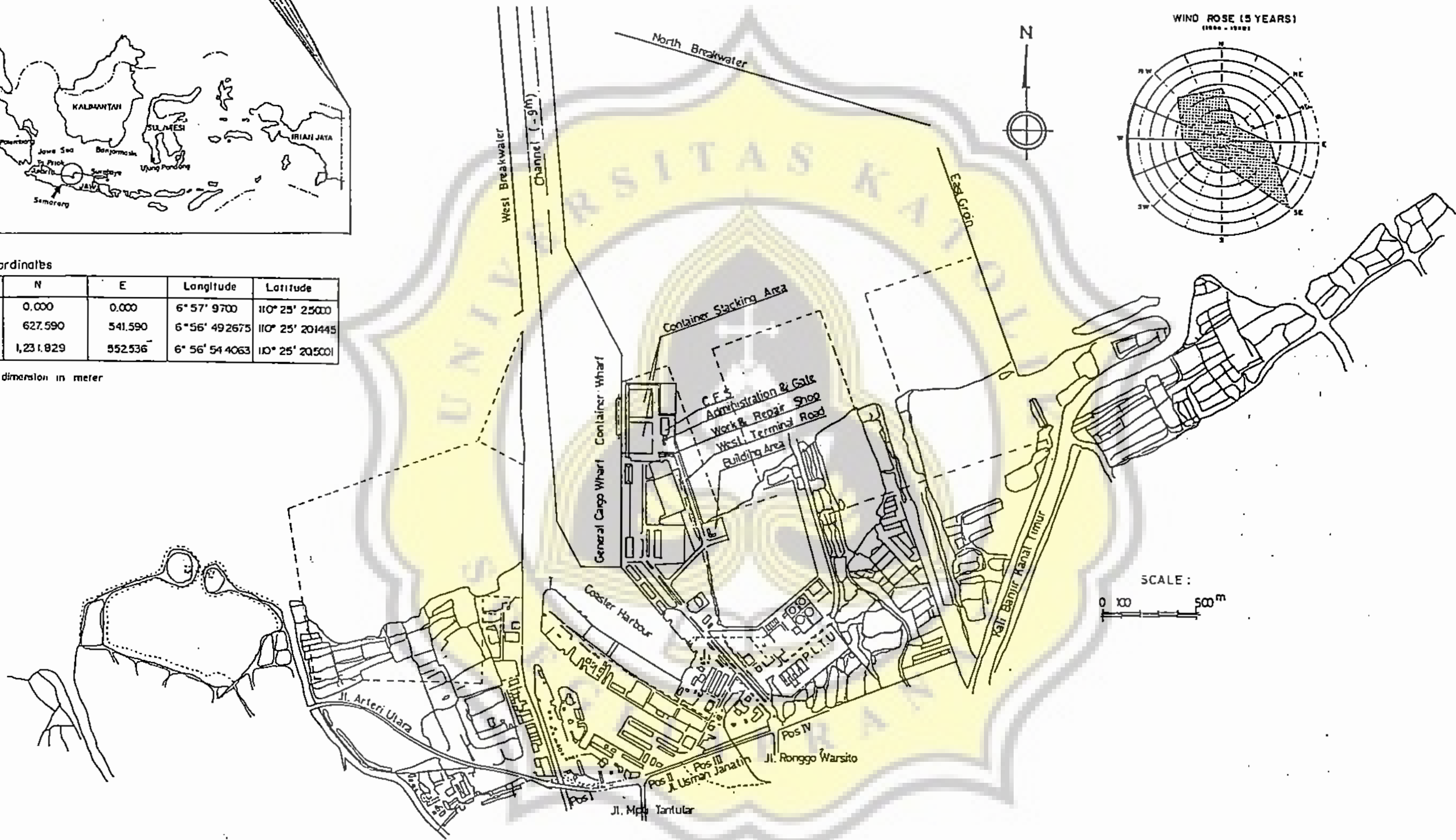
1 C=1,0,0,0,0,0,0
 2 C=0,1,0,0,0,0,0
 3 C=.50,-.50,0,0,0,0
 4 C=0,0,1,0,0,0,0
 5 C=0,0,0,1,0,0,0
 6 C=0,0,0,0,1,0,0
 7 C=0,0,0,0,0,1,0
 8 C=0,0,0,0,0,0,1



Coordinates

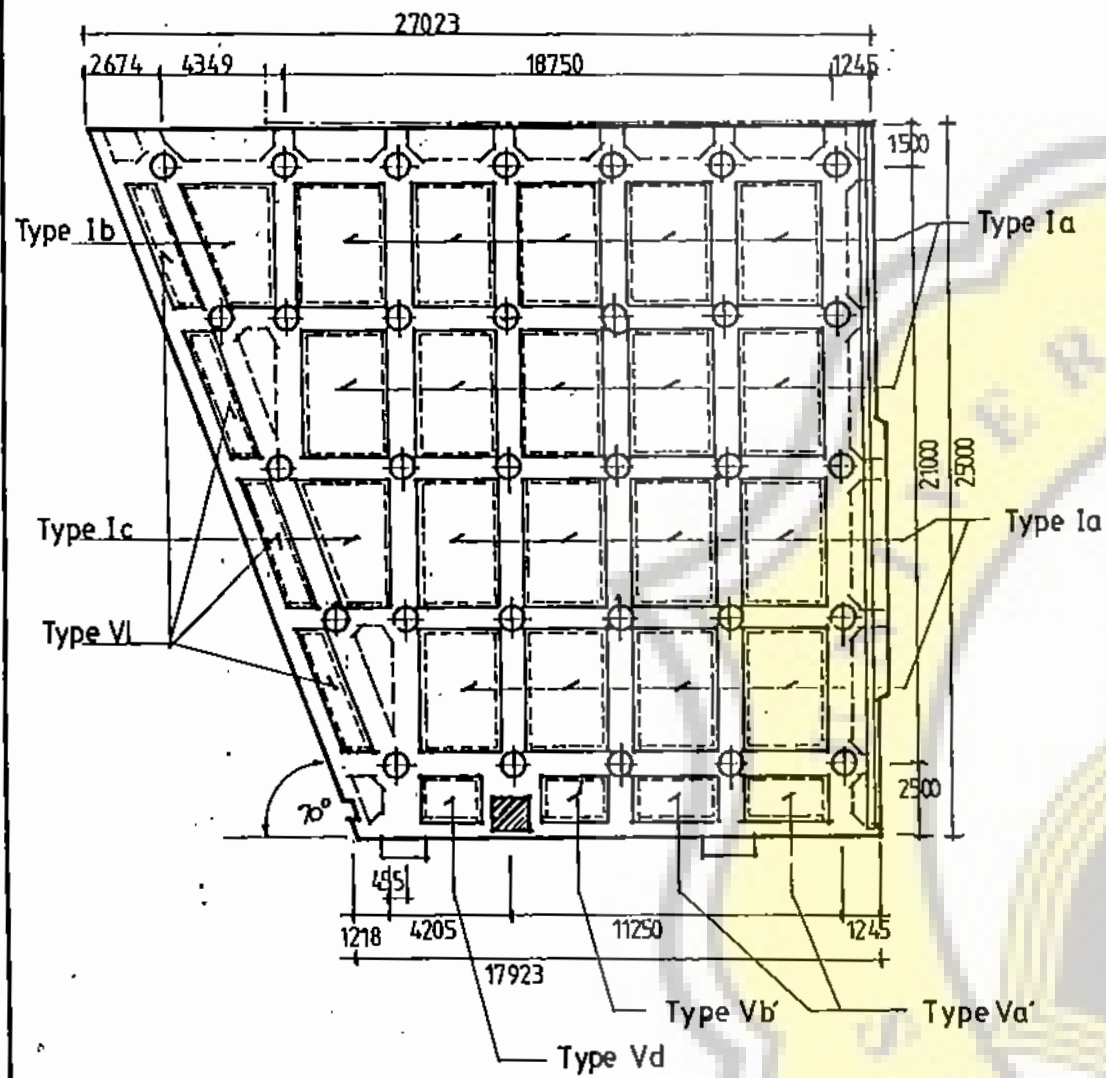
Point	N	E	Longitude	Latitude
L-H	0.000	0.000	6° 57' 9700	110° 25' 25000
M-2	627.590	541.590	6° 56' 492675	110° 25' 201445
PW-4	1,231.829	552.536	6° 56' 544063	110° 25' 205001

N,E; dimension in meter

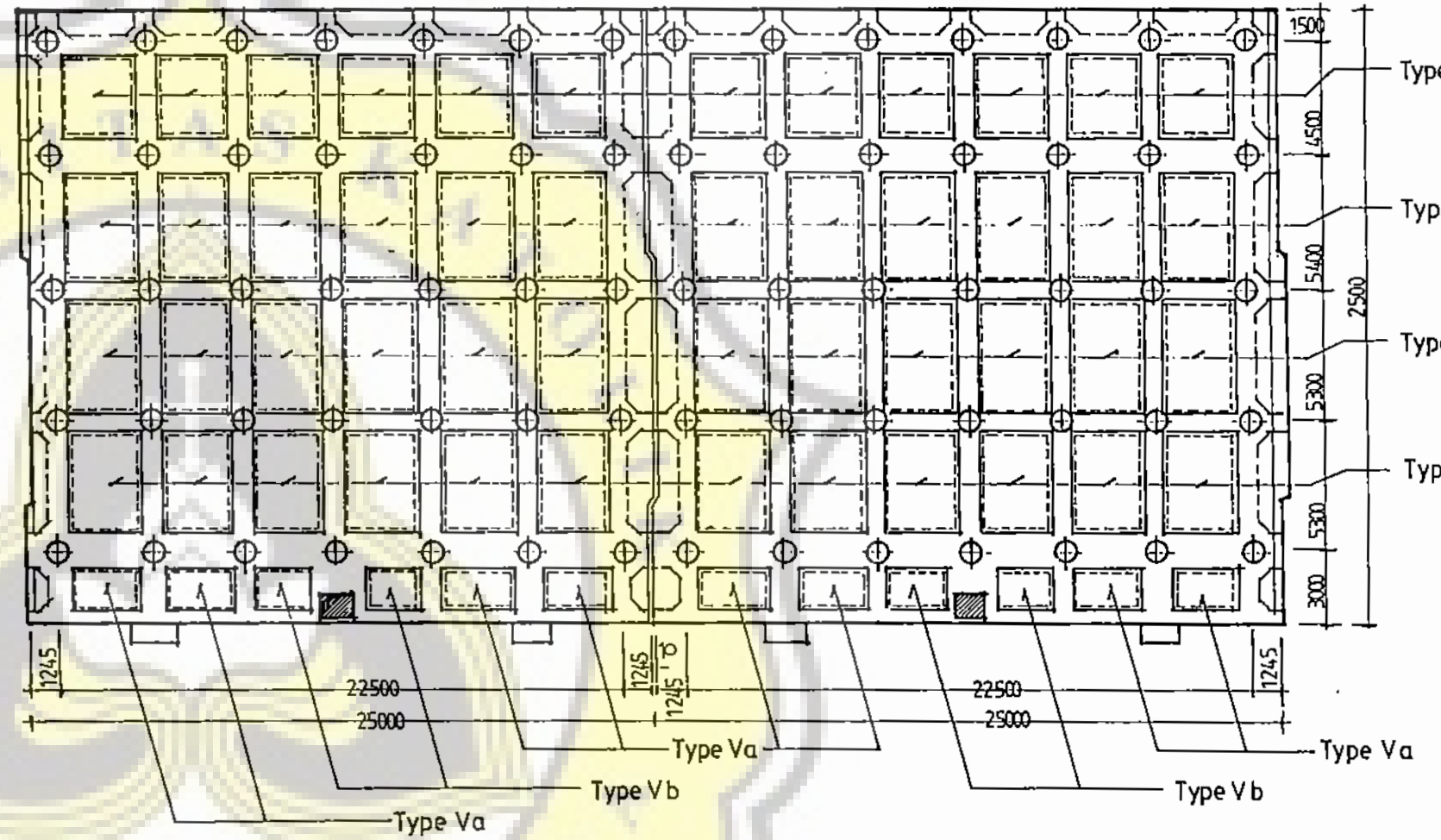


UNIKA SOEGIJAPRANATA SEMARANG	TUGAS	JUDUL GAMBAR	DIBUAT	ERON ANDY W
	TUGAS AKHIR	GENERAL LAYOUT	NIRM	05.12.812
			DIPERIKSA	Ir. SUHARNO G., MS
			DISETUIJI	Ir. NIRMOLLO, S.
			KET.	NO

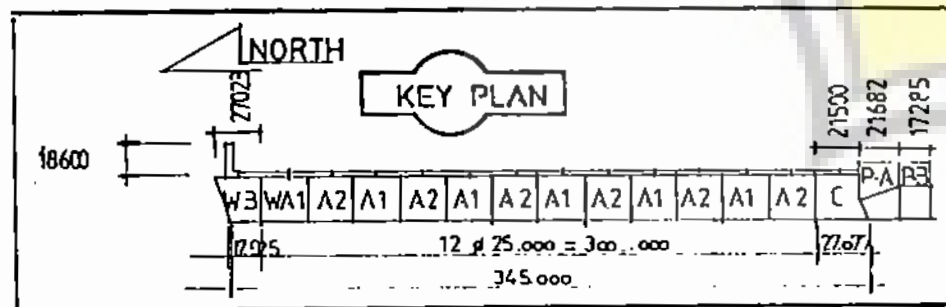
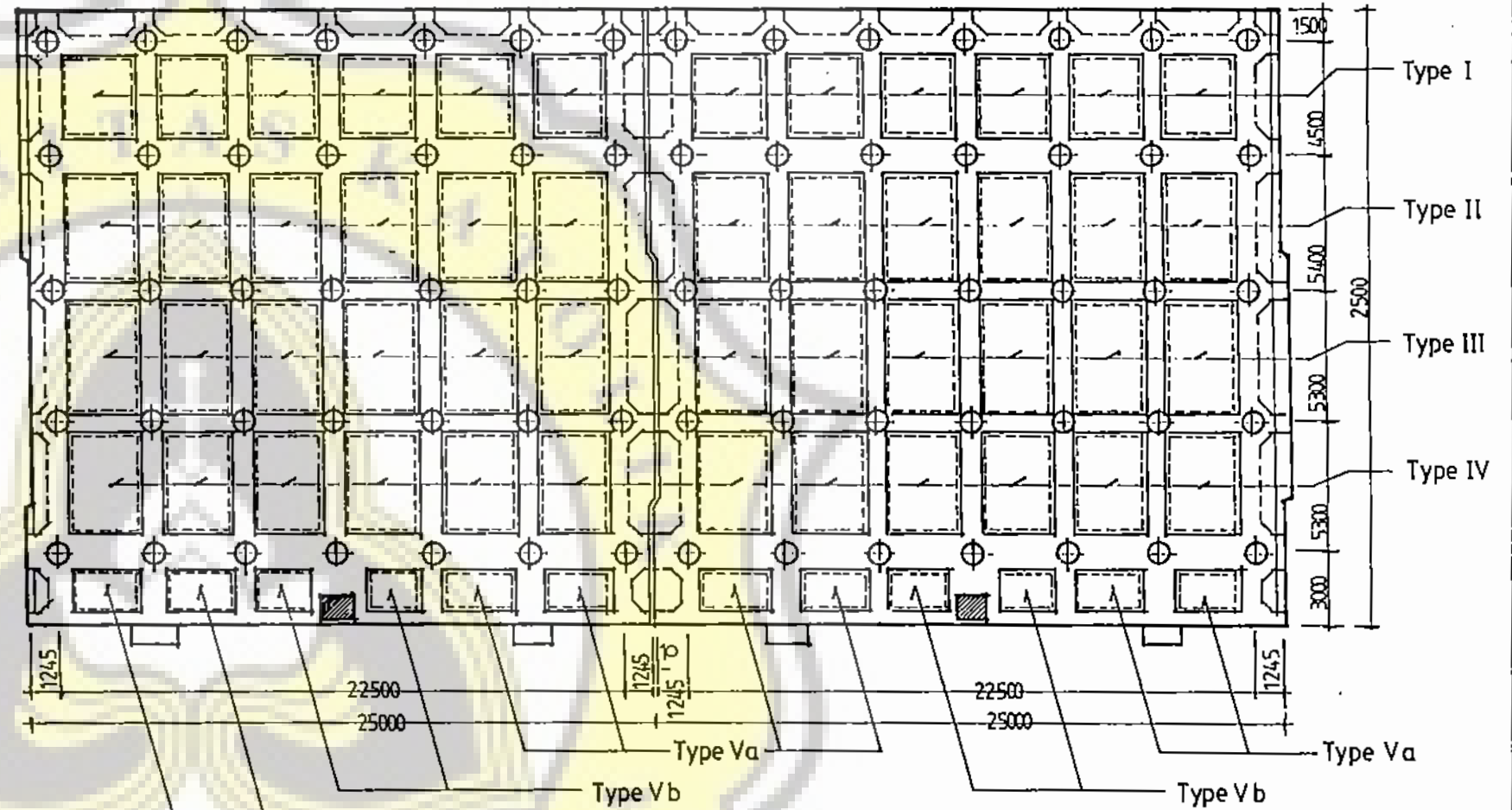
W-3 BLOCK



W-A1 BLOCK

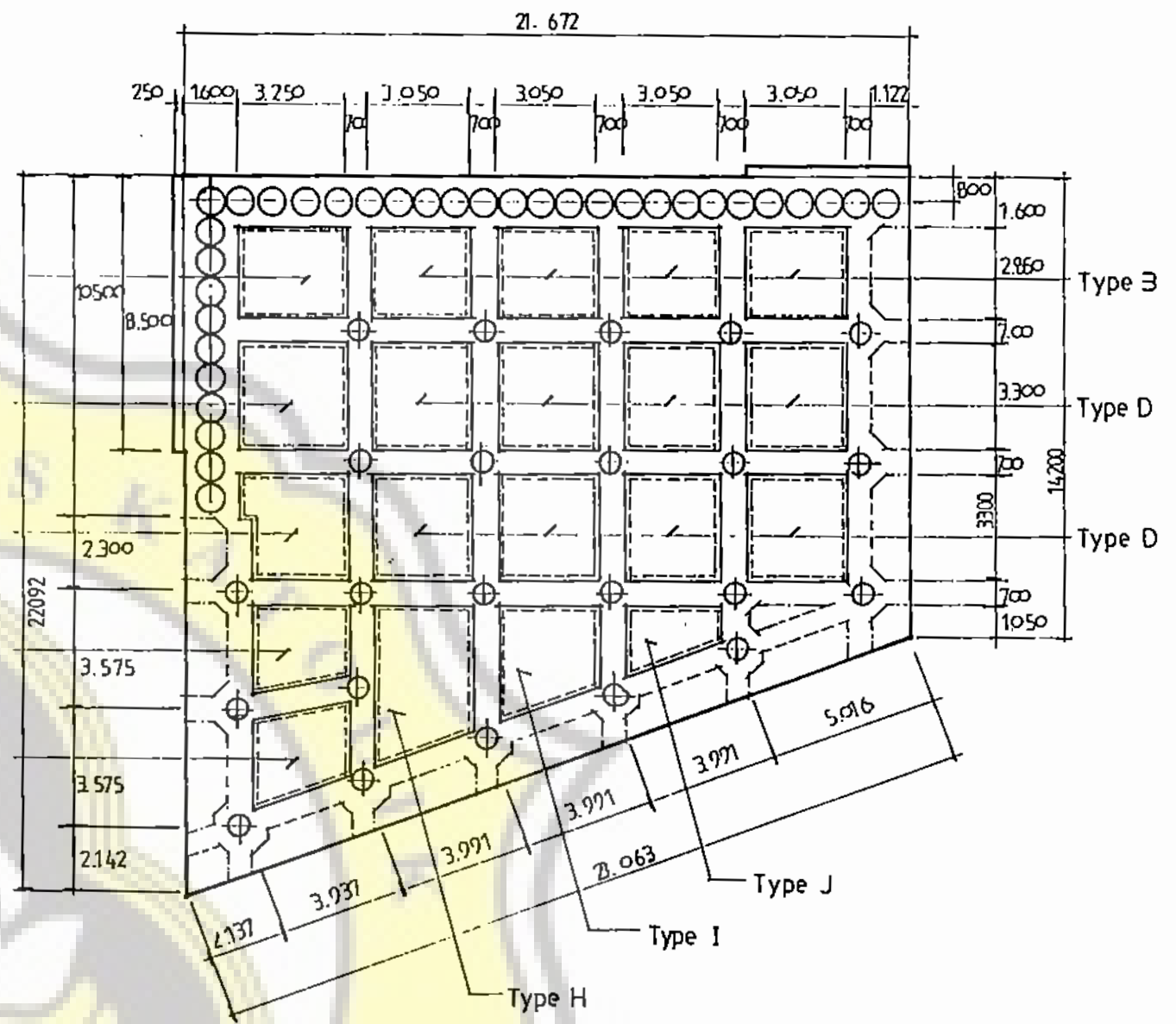
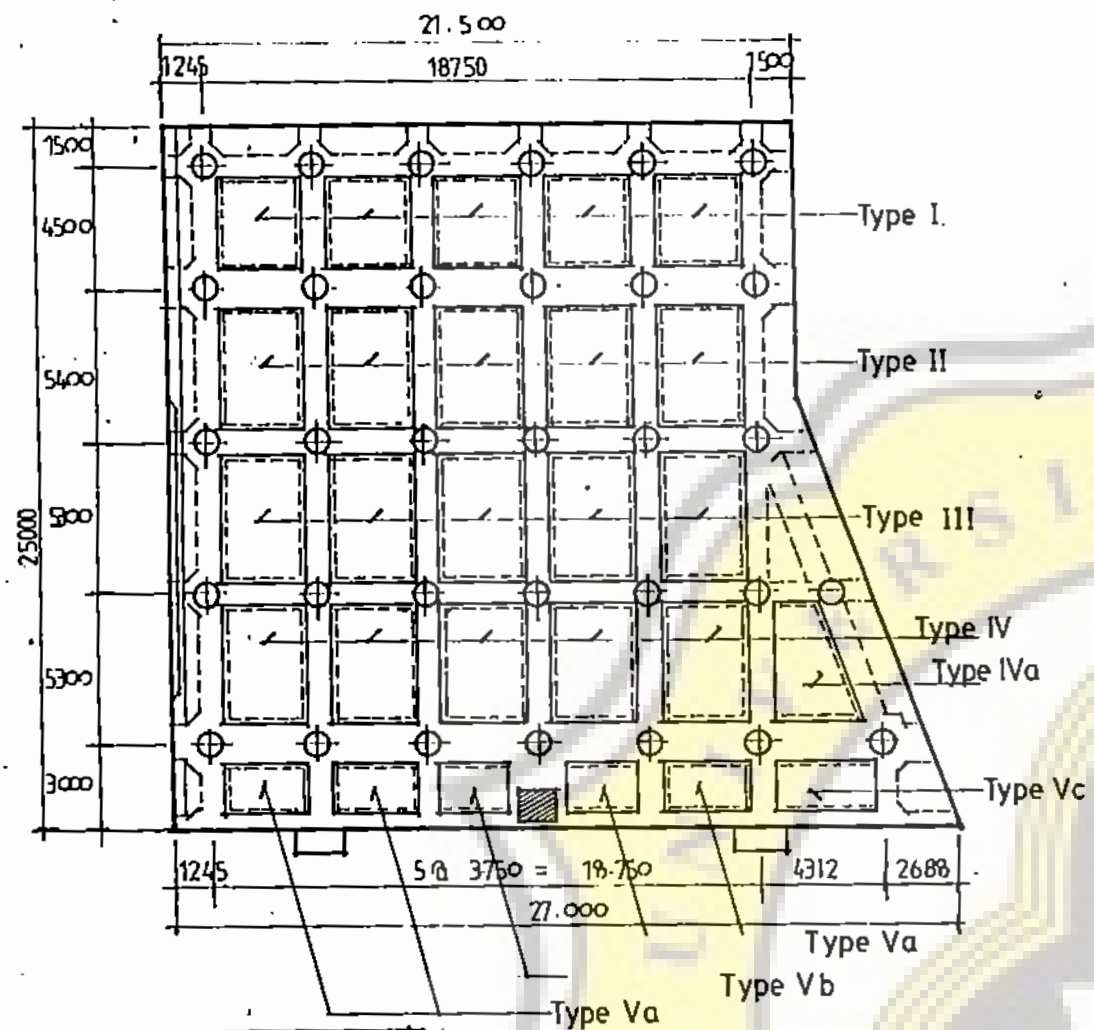


W-A2 BLOCK

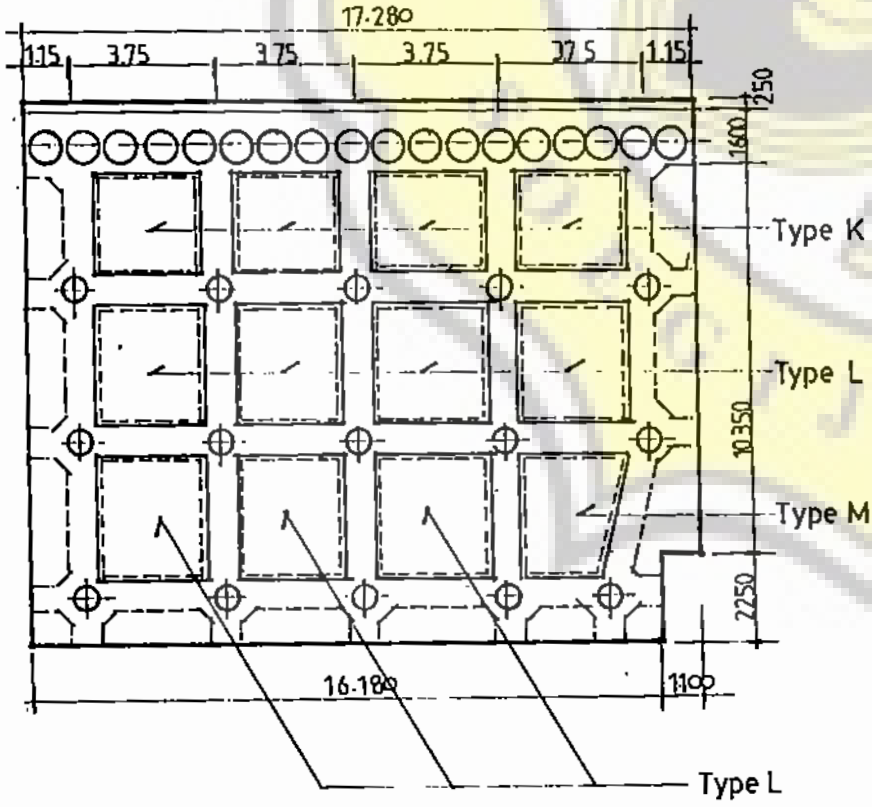


UNIKA SOEGIJAPRANATA SEMARANG	TUGAS	JUDUL GAMBAR	DIBUAT	ERON ANDY W.
	TUGAS AKHIR	LAYOUT PLAT BETON PRECAST DERMAGA BLOK A & B	NIM	90 12 812
			DIPERIKSA	Ir. SUHARNO G., MS
			DISETUJUI	Ir. NIRMOLO S.
			KET.	NO.
			SKALA 1:265	3

**W - C
BLOCK**



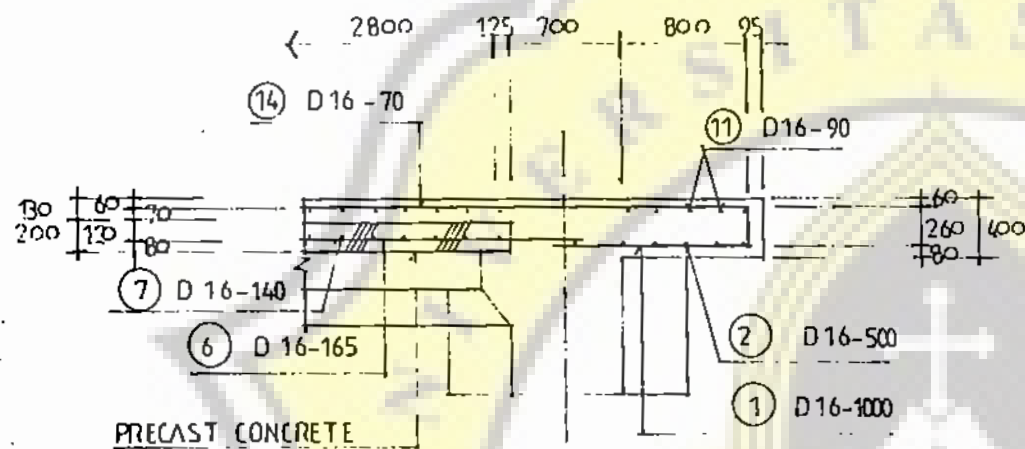
**P - 3
BLOCK**



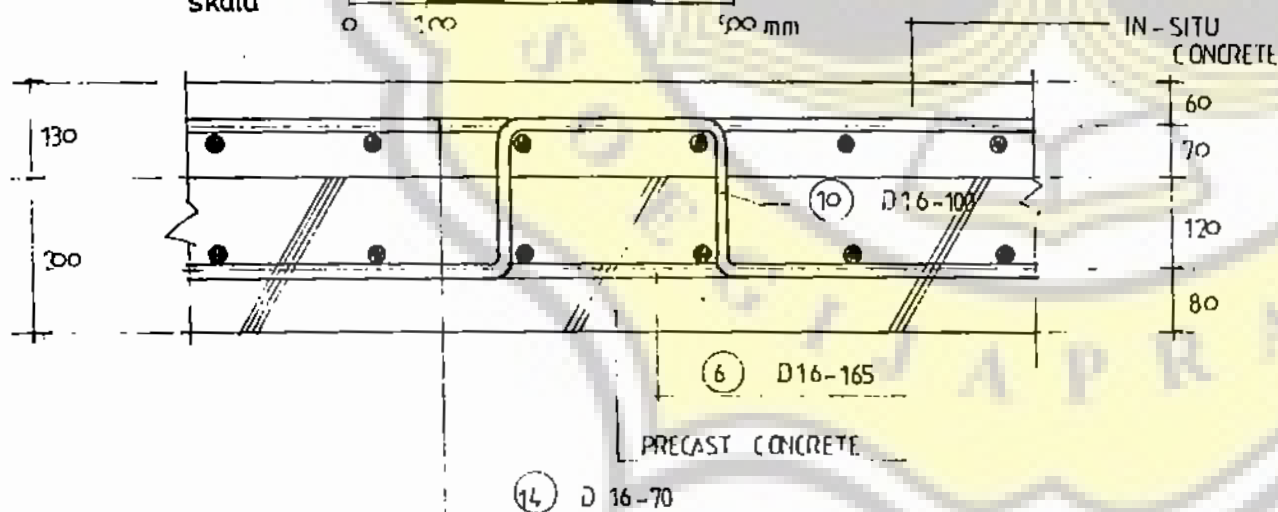
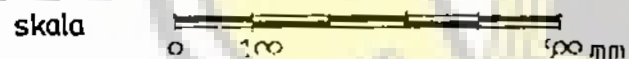
**P - A
BLOCK**

UNIKA SOEGIJAPRANATA SEMARANG	TUGAS	JUDUL GAMBAR	DIBUAT	ERON ANDY W.
	TUGAS AKHIR	LAYOUT PLAT BETON PRECAST DERMAGA BLOK C, PA & P3	N I M	90 12 812
			DIPERIKSA	Ir. SUHARNO G., MS
			DISETUJUI	Ir. NIRMOLO S.
			KET.	NO.
			SKALA 1:265	4

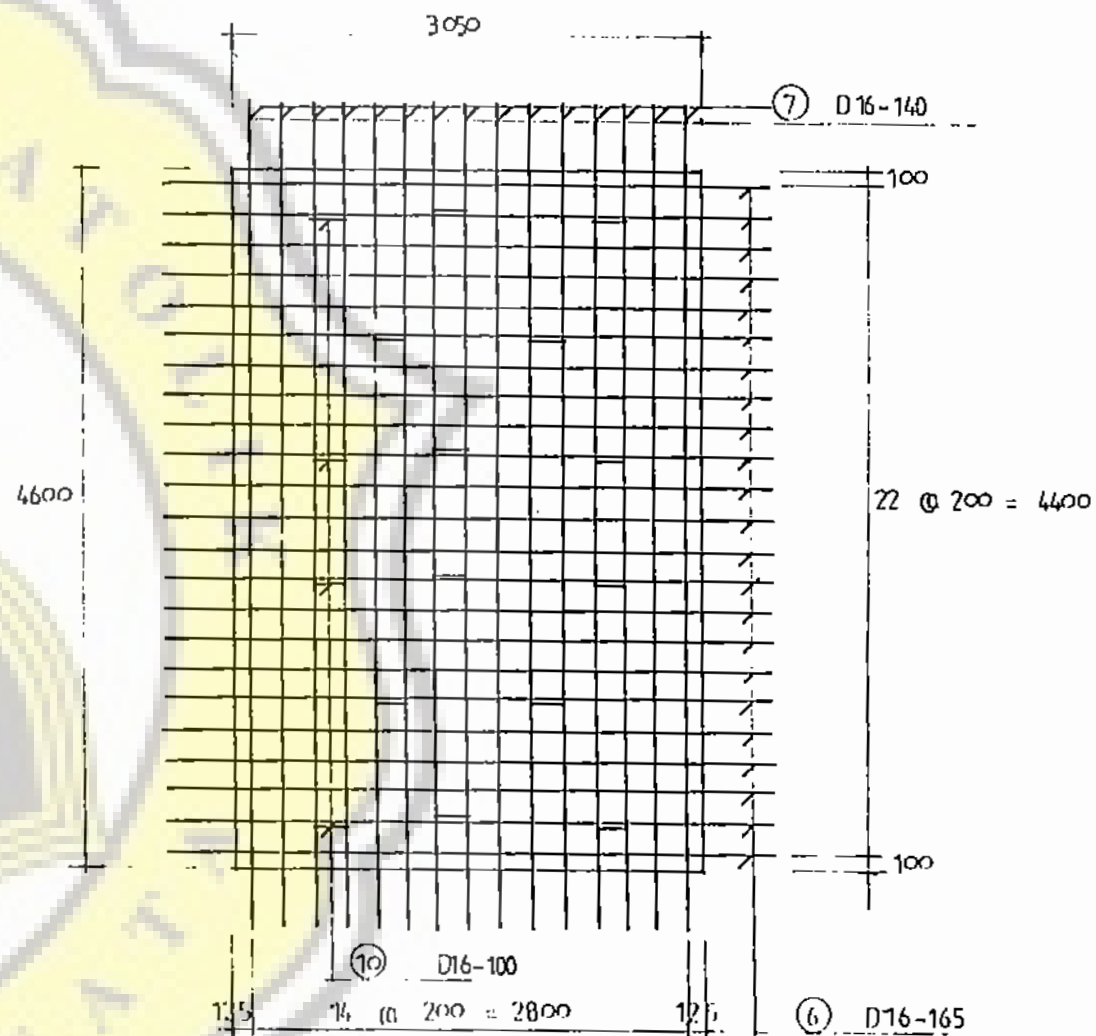
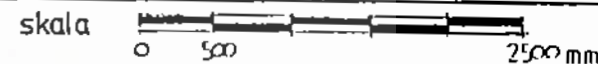
POTONGAN E E



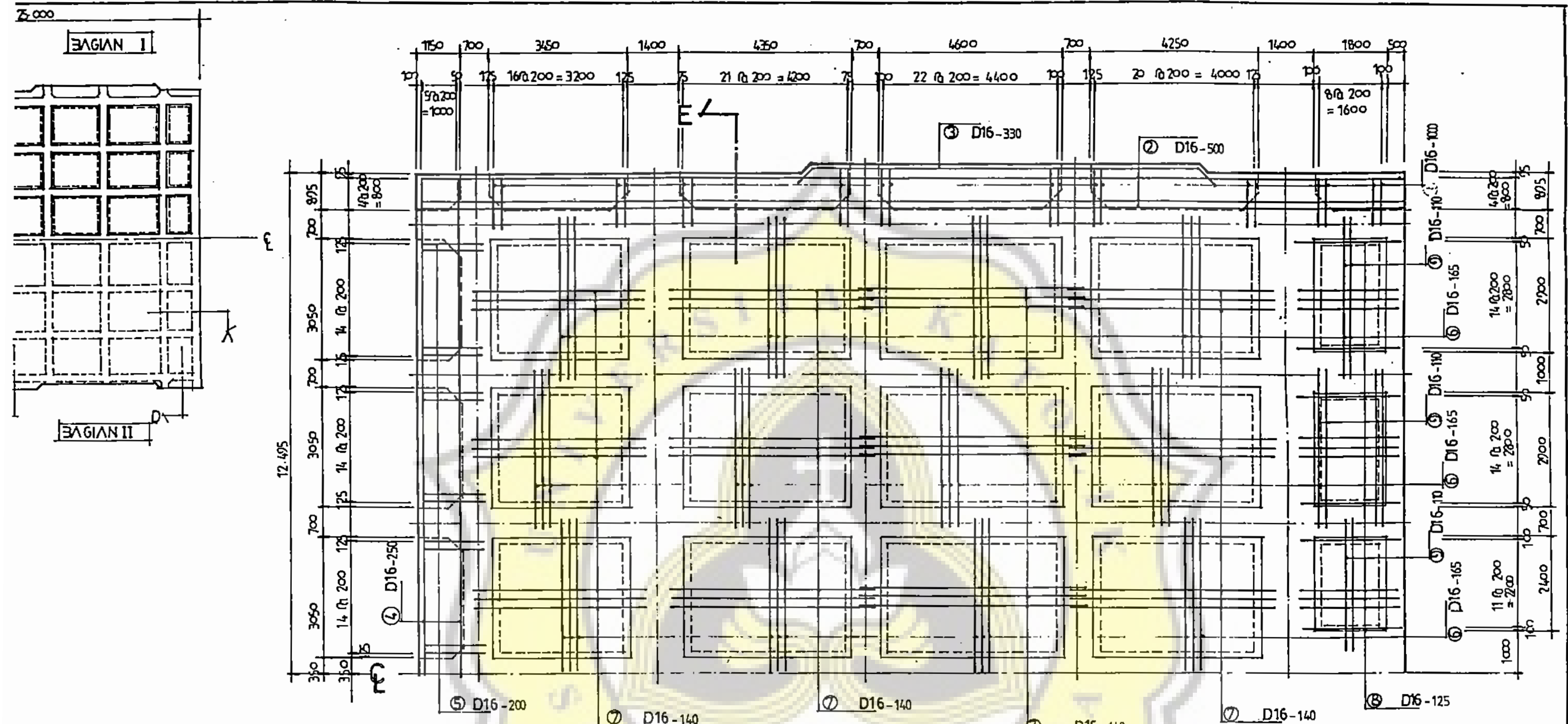
PRECAST CONCRETE STANDARD SECTION



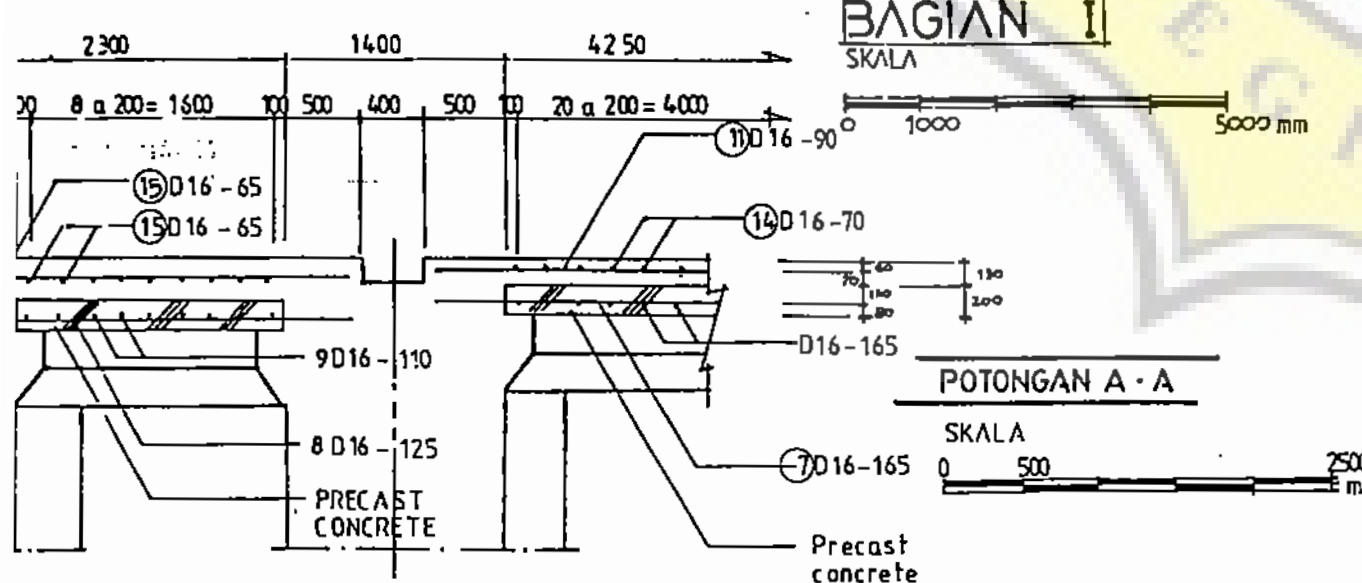
PRECAST CONCRETE PLAN



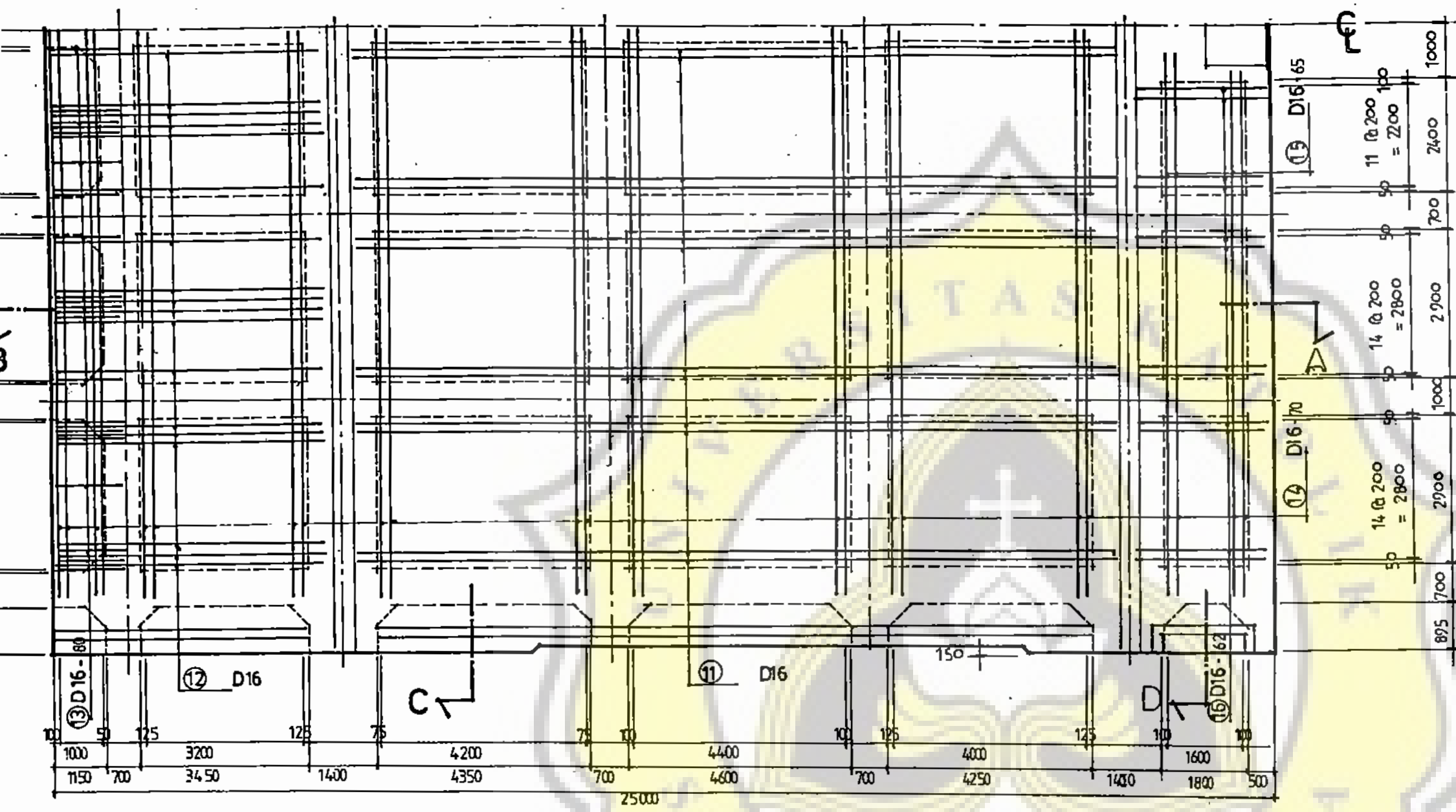
UNIKA SOEGIJAPRANATA SEMARANG	TUGAS	JUDUL GAMBAR	DIBUAT	ERON ANDY W.
	TUGAS AKHIR	PRECAST C. PLAN PRECAST C. STANDARD SECTION POT. E E	N I M	90 12 812
			DIPERIKSA	Ir. SUHARNO G., MS
			DISETUJUI	Ir. NIRMOLO S.
			KET.	NO.
				5



DETAIL BAGIAN I
SKALA

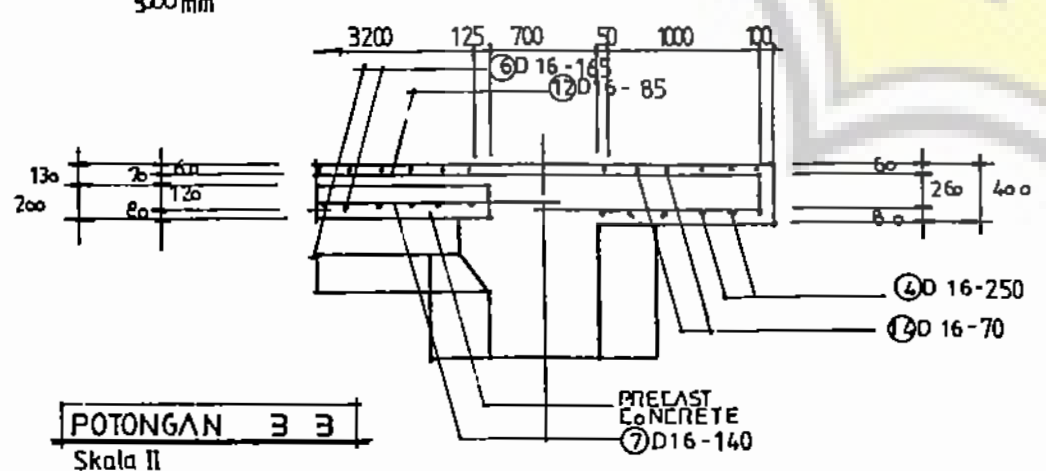


UNIKA SOEGIJAPRANATA SEMARANG	TUGAS TUGAS AKHIR	JUDUL GAMBAR DETAIL BAGIAN I POTONGAN A-A	DIBUAT ERON ANDY W.
			N I M 90 12 812
			DIPERIKSA Ir. SUHARNO G., MS
			DISETUJUI Ir. NIRMALO S.
			KET.
			NO. 6

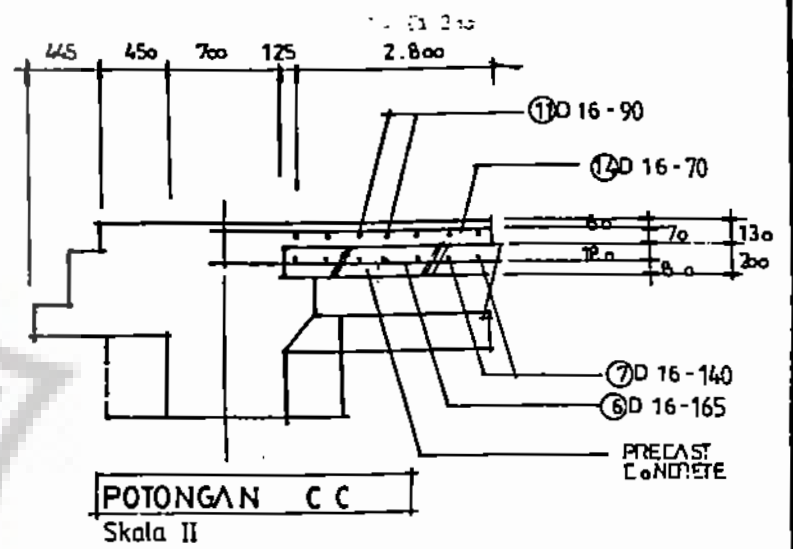


DETAIL BAGIAN II

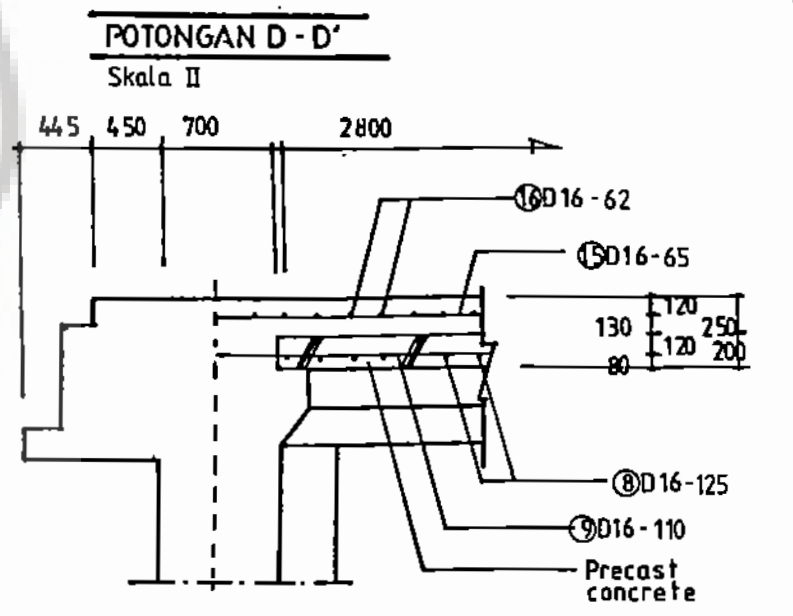
Skala I
0 1000 5000 mm



POTONGAN B-B
Skala II

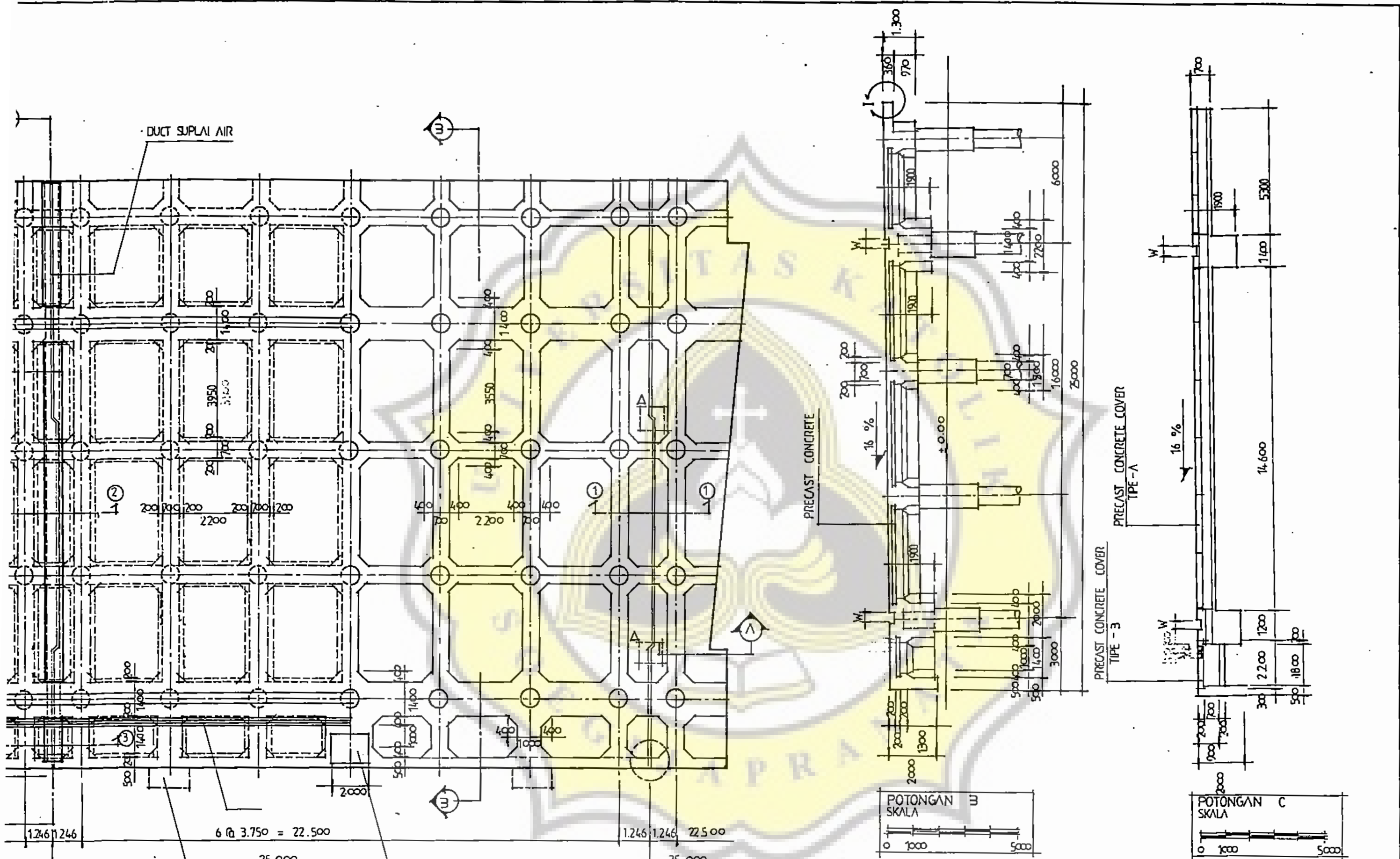


POTONGAN C-C
Skala II



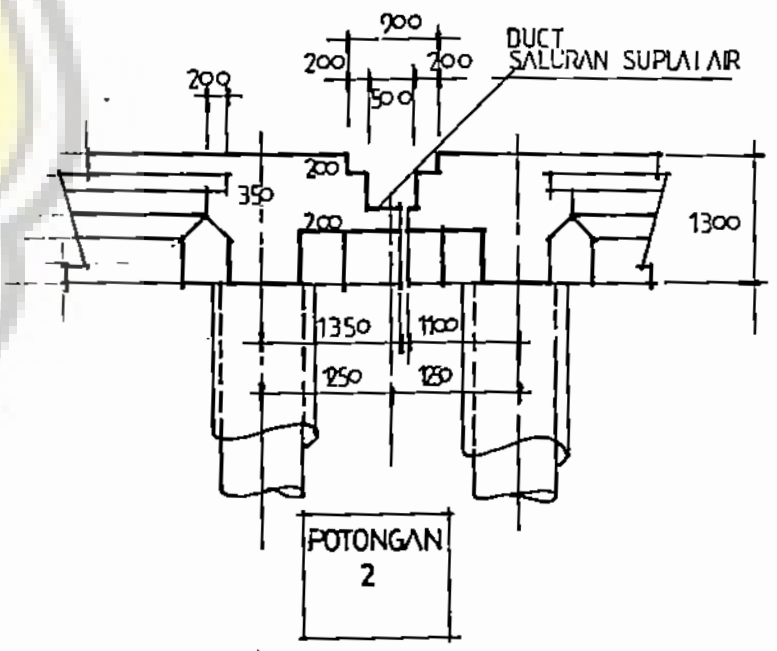
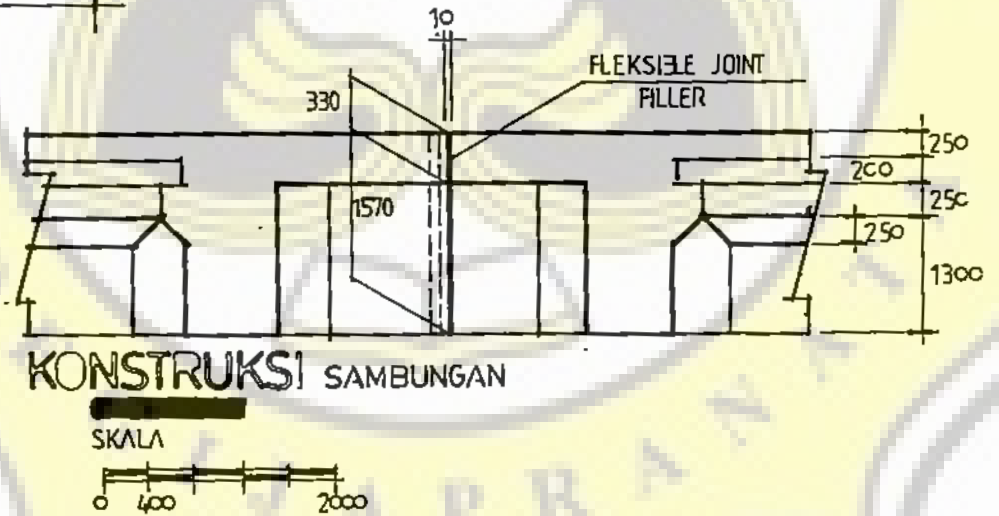
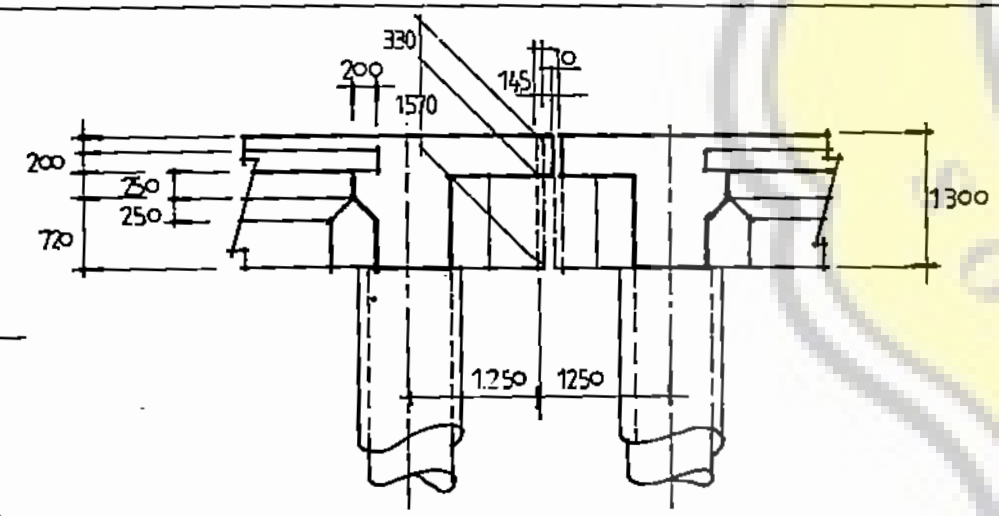
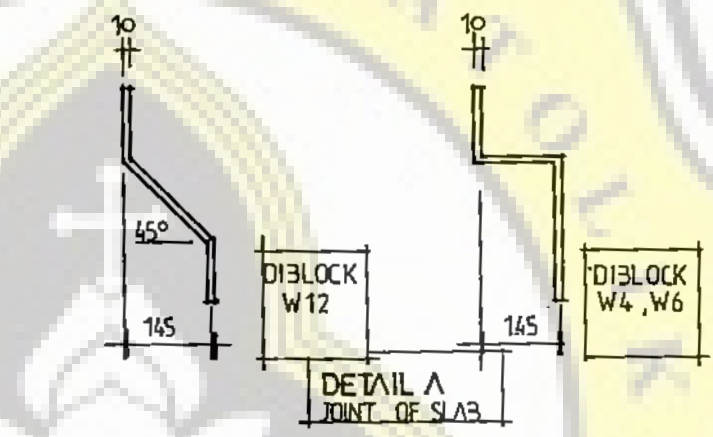
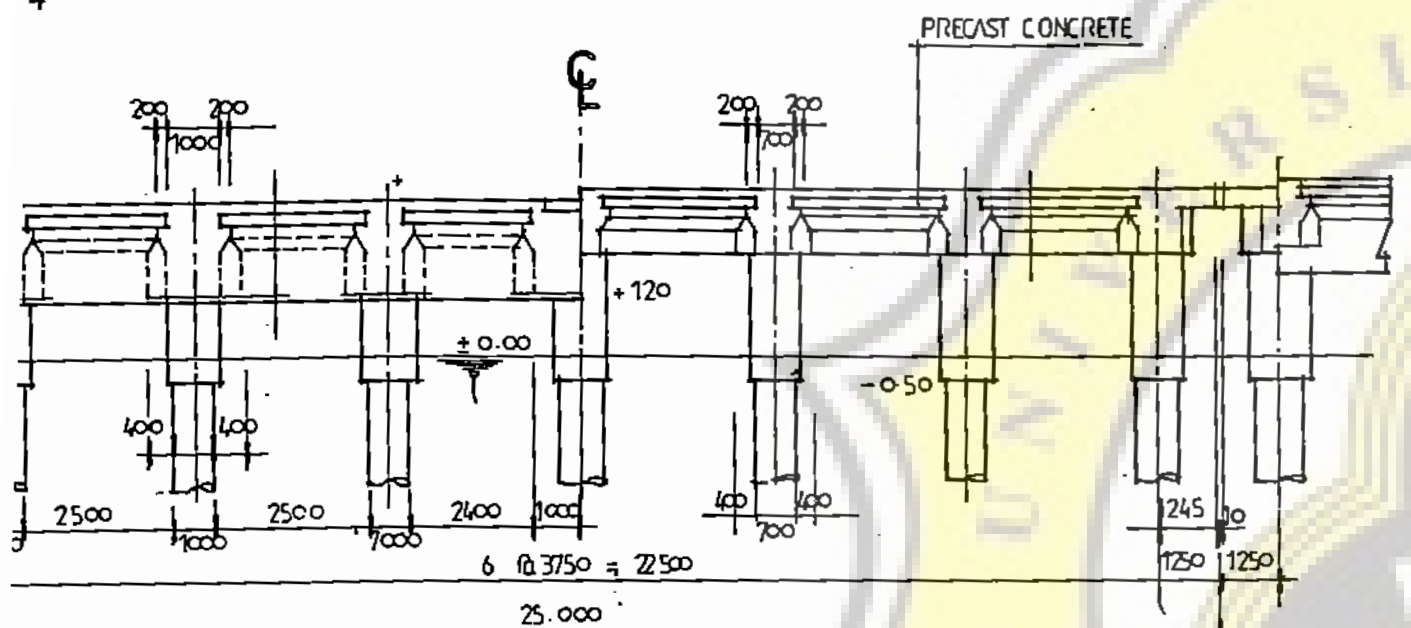
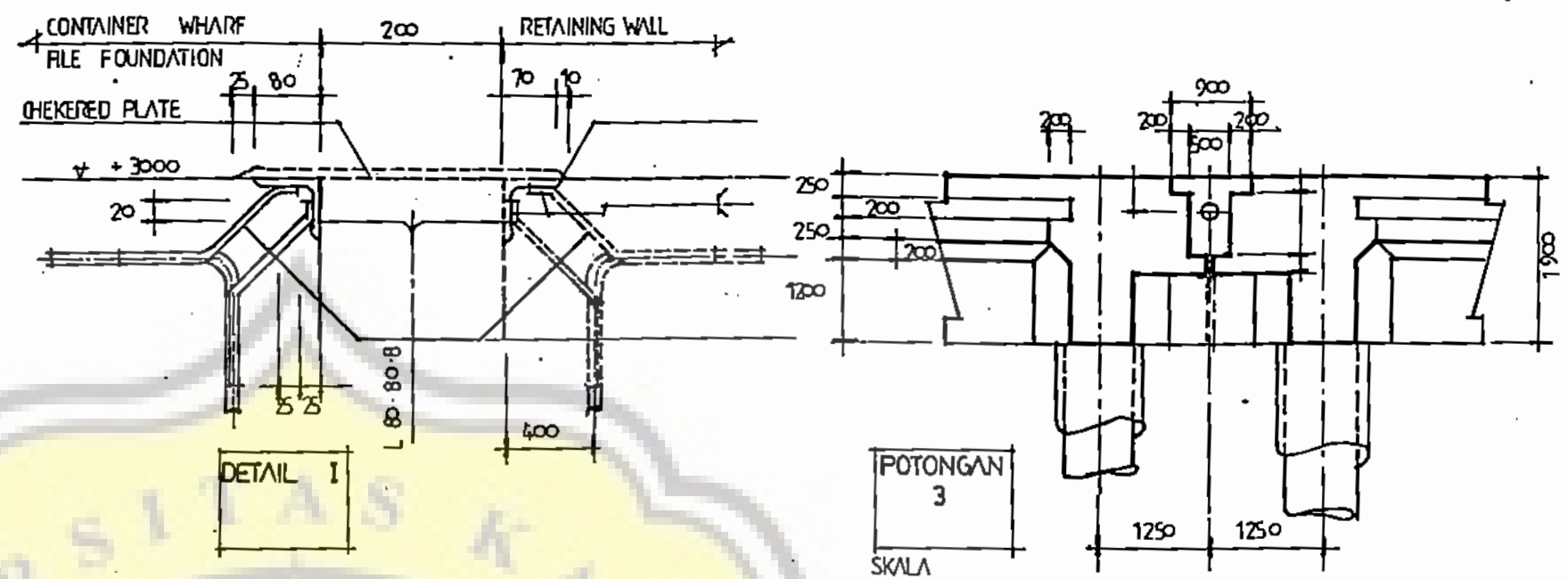
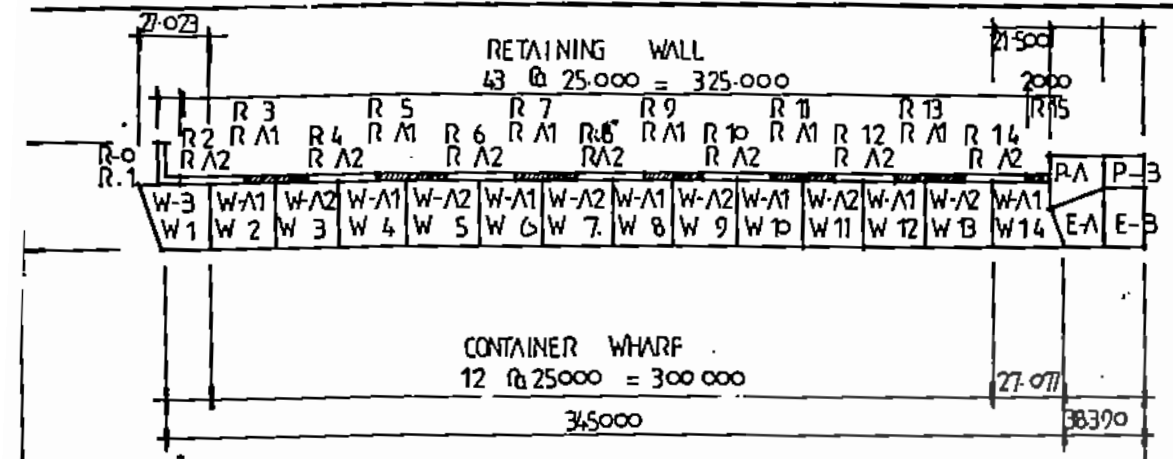
POTONGAN D-D'
Skala II

UNIKA SOEGIJAPRANATA SEMARANG	TUGAS	JUDUL GAMBAR	DIBUAT	ERON ANDY W.
	TUGAS AKHIR	DETAIL BAGIAN II POT. B-B POT. C-C POT. D-D	N I M	90 12 812
			DIPERIKSA	Ir. SUHARNO G., MS
			DISETUJUI	Ir. NIRMALO S.
			KET.	NO. 7



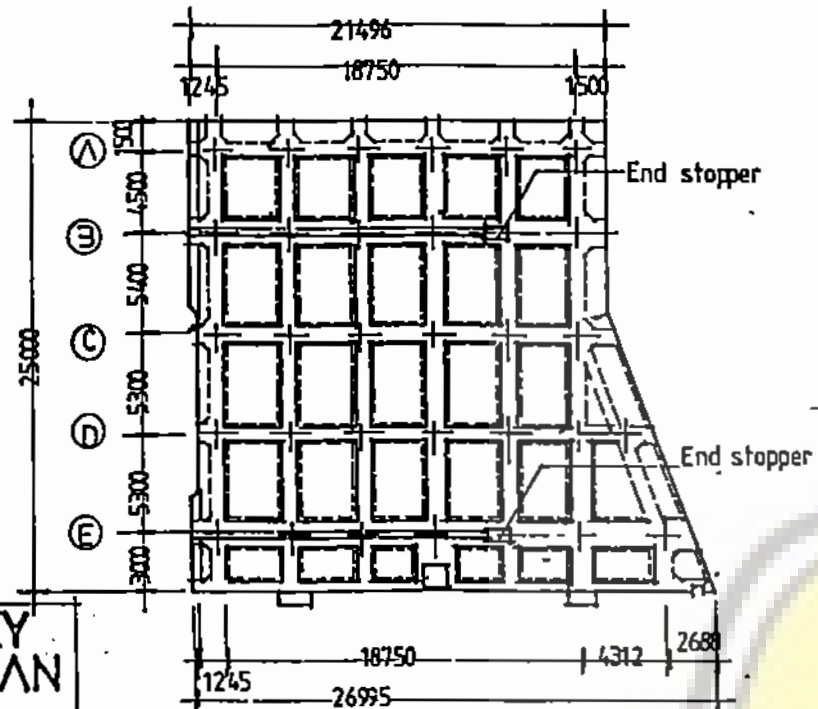
NCANA
 0 5000

UNIKA SOEJIAPRAMATA	TUGAS	JUDUL GAMBAR	DIBUAT	ERON ANDY W
	TUGAS AKHIR	RENCANA BALOK POT. B DAN C	DIPERIKSA	Ir. SUHARNO G. MS
SEMARANG			DISETUIJI	Ir. NIRMALO S. ...
			KET	NO 8

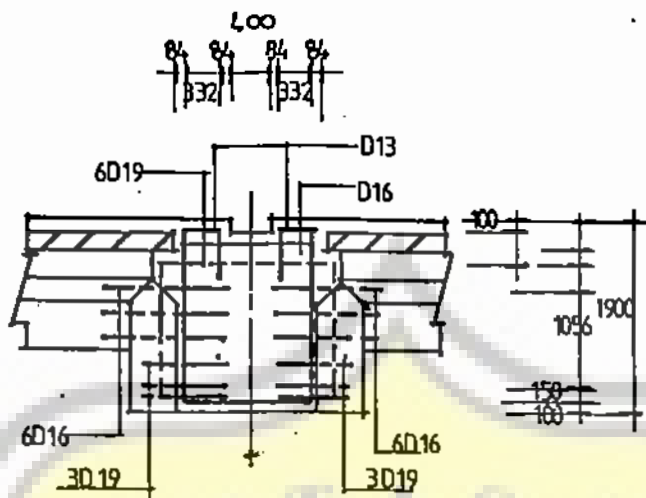


UNIKA SCEGIJAPRANATA SEMARANG	TUGAS	JUDUL GAMBAR	DIBUAT	ERON ANDY W
	TUGAS AKHIR	POT. A POT. 1, 2, 3. DETAIL I DAN 1 DETAIL KONST. SAMBUNGAN	N.I.M	90.12.812
			DIPERIKSA	Ir. SUHARNO G.MS
			DISETUIJI	Ir. NIRMALO S. ...
			KET.	NO
				9

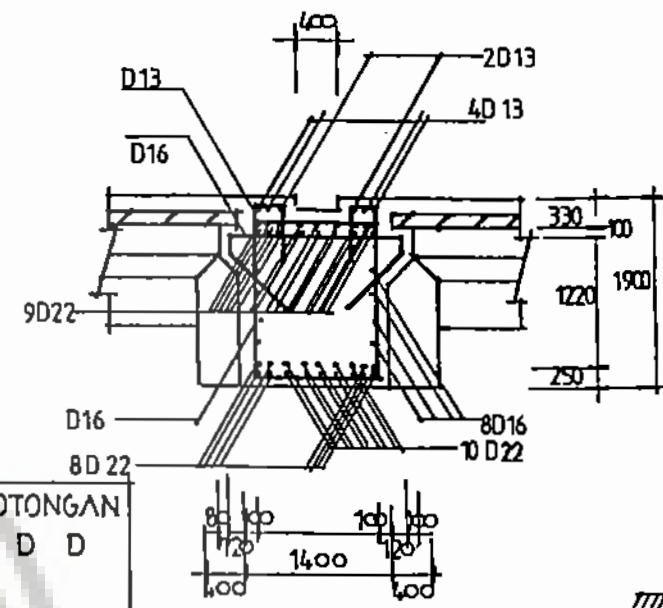
KEY PLAN



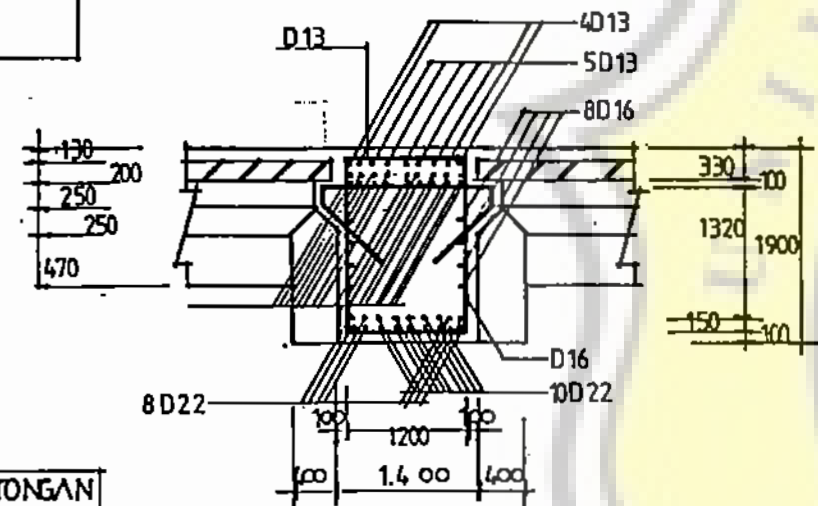
POTONGAN E E



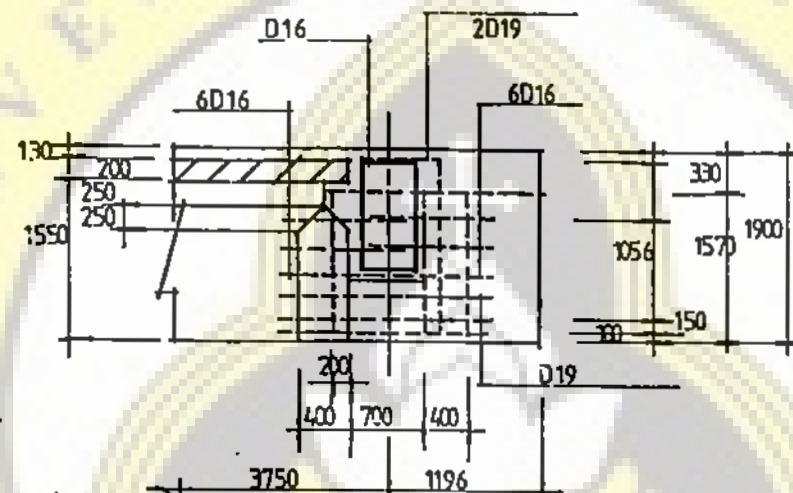
POTONGAN D D



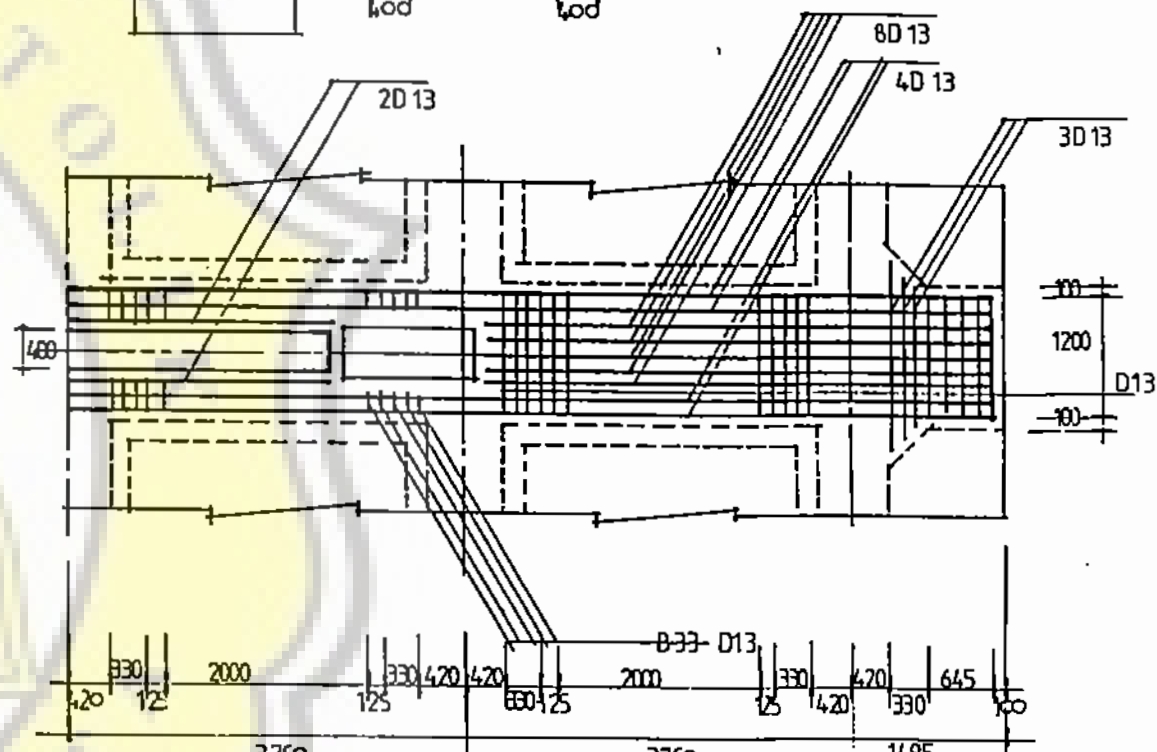
POTONGAN C C



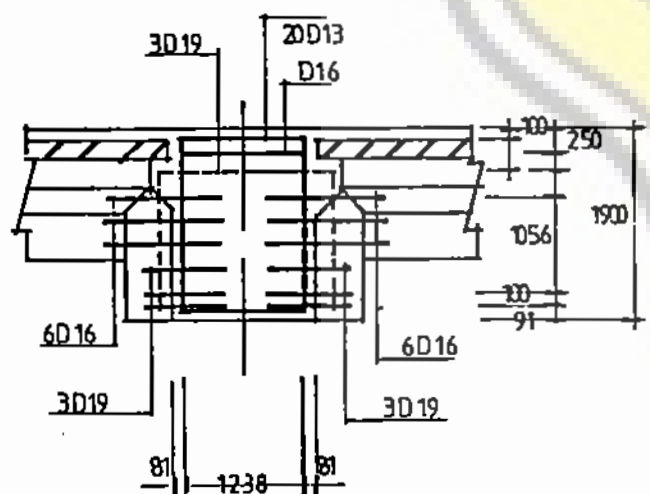
POTONGAN G G



POTONGAN K K



POTONGAN L L

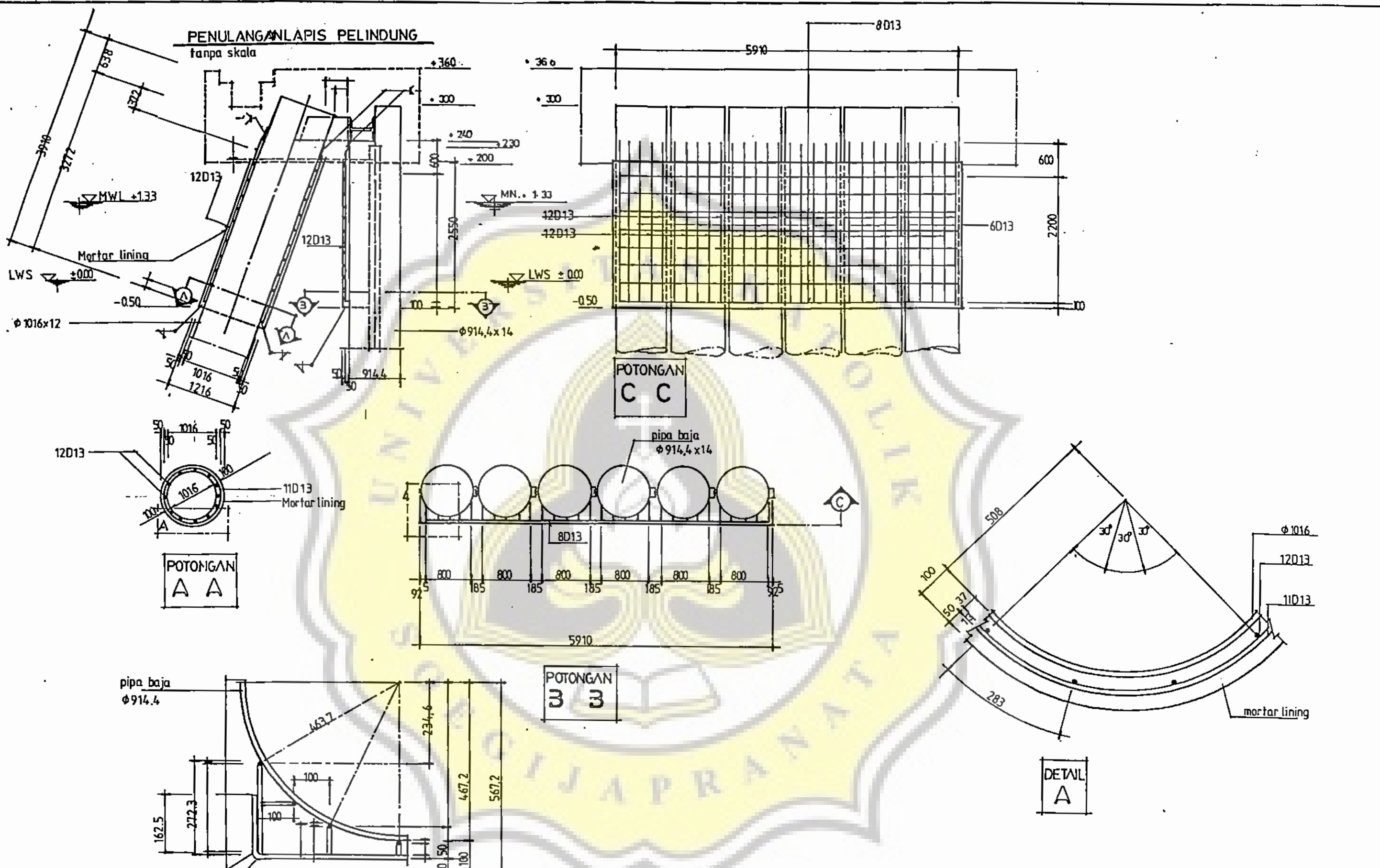


POTONGAN C' C'



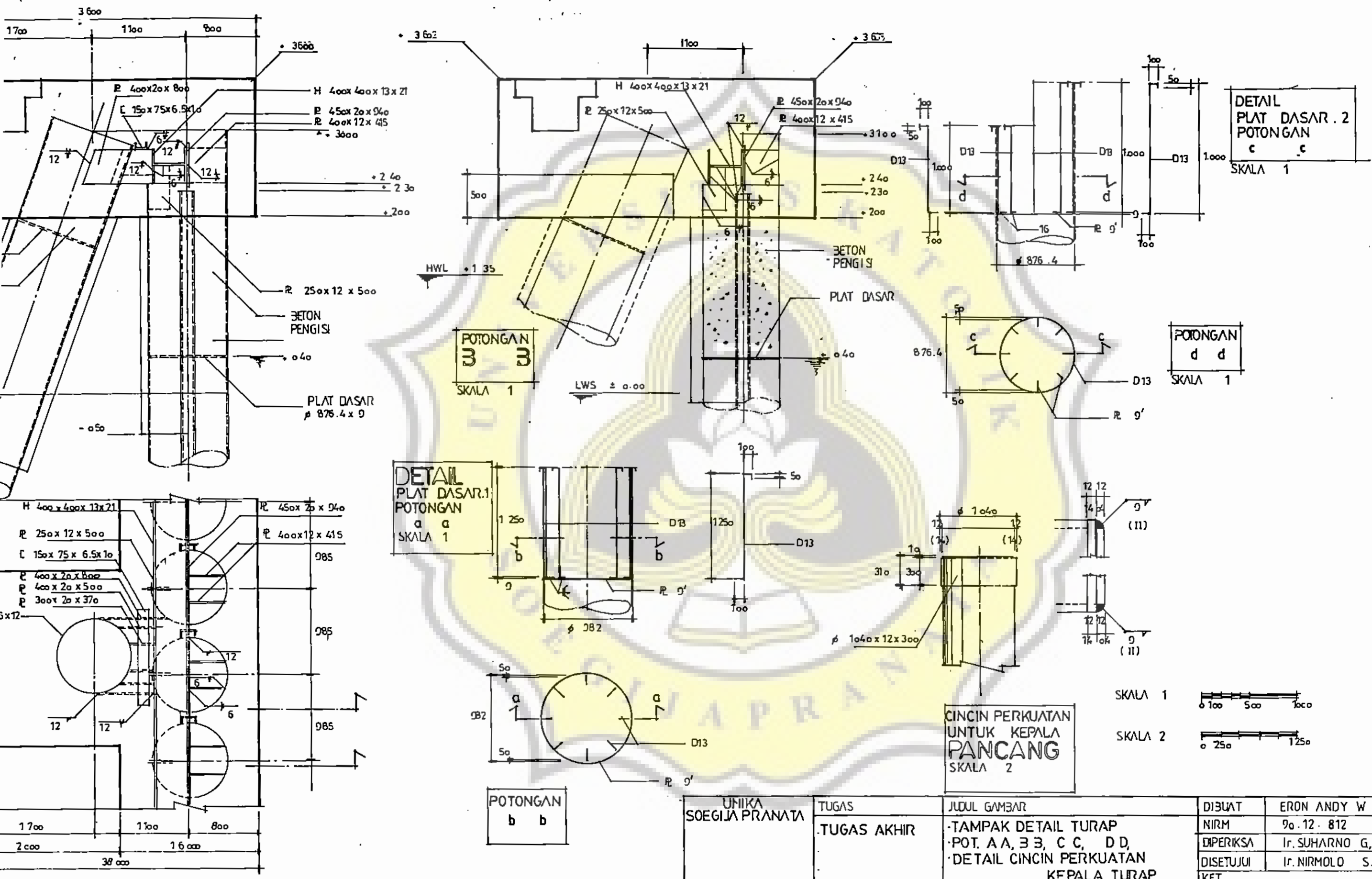
SKALA 0 500 1250 2500mm

UNIKA SOEGIJAPRANATA SEMARANG	TUGAS	JUDUL GAMBAR	DIBUAT	ERON ANDY W.
	TUGAS AKHIR	PENULANGAN BALOK POT. C C, C' C', D D, E E, G G POT. K K, L L.	N I M	90 12 812
			DIPERIKSA	Ir. SUHARNO G., MS
			DISETUJUI	Ir. NIRMOLLO S.
			KET.	NO.
				12



UNIKA SOEGIJAPRANATA SEMARANG	TUGAS	JUDUL GAMBAR	DIBUAT	ERON ANDY W.
	TUGAS AKHIR	PENULANGAN LAPIS PELINDUNG POTONGAN A, 3 DETAIL A, 4	N I M	90 12 812
			DIPERIKSA	Ir. SUHARNO G., MS
			DISETUJUI	Ir. NIRMOLO S.
			KET.	
				NO. 18

**DETAIL
LEMBAR KEPALA PIPA PANCANG BAJA**

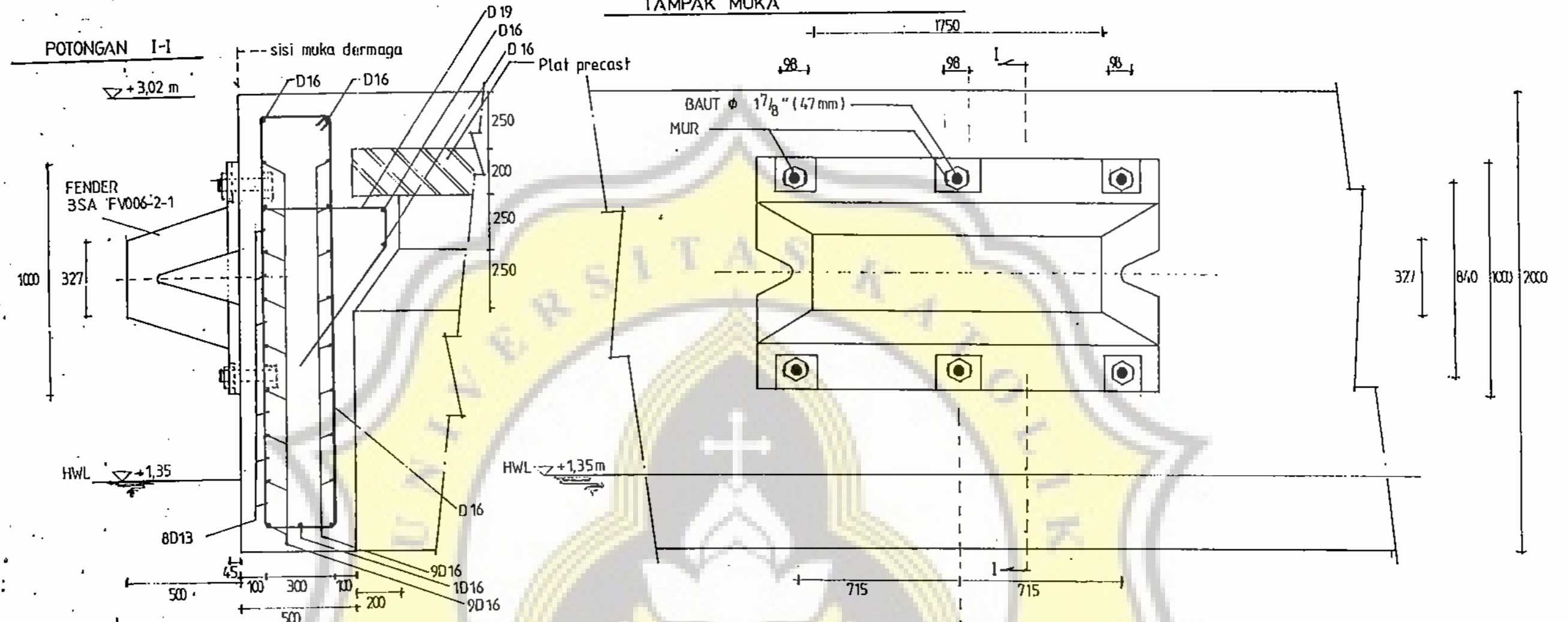


SKALA 1
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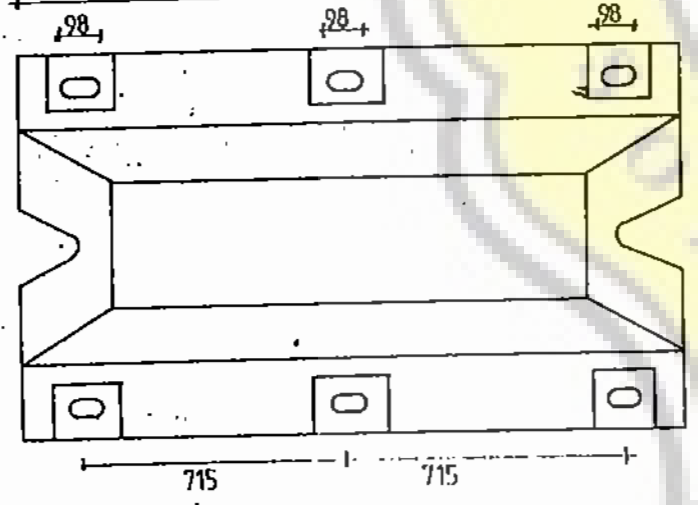
SKALA 2
0 250 1250

UNIKA SOEGIJA PRANATA	TUGAS	JUDUL GAMBAR	DIBUAT	ERON ANDY W
	TUGAS AKHIR	TAMPAK DETAIL TURAP POT. A A, B B, C C, D D, DETAIL CINCIN PERKUATAN KEPALA TURAP	NIRM	90.12.812
SEMARANG			DIPERIKSA	Ir. SUHARNO G, MS
			DISETUJUI	Ir. NIRMALO S.
			KET.	NO
				19

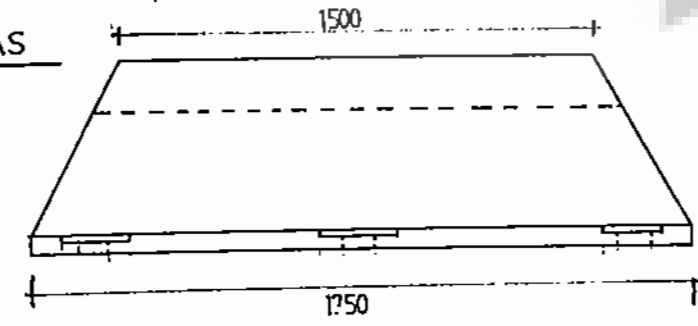
PEMASANGAN FENDER (TYPICAL)
TAMPAK MUKA



DIMENSI FENDER
TAMPAK MUKA



T. ATAS



UNIKA SOEJAPRANATA SEMARANG	TUGAS	JUDUL GAMBAR	DIBUAT	ERON ANDY W.
	TUGAS AKHIR	PEMASANGAN FENDER DIMENSI FENDER	NIM	90 12 812
			DIPERIKSA	Ir. SUHARNO G., M.S.
			DISETUIJI	Ir. NIRMALO S.
			KET.	SKALA 1"200
			NO.	20