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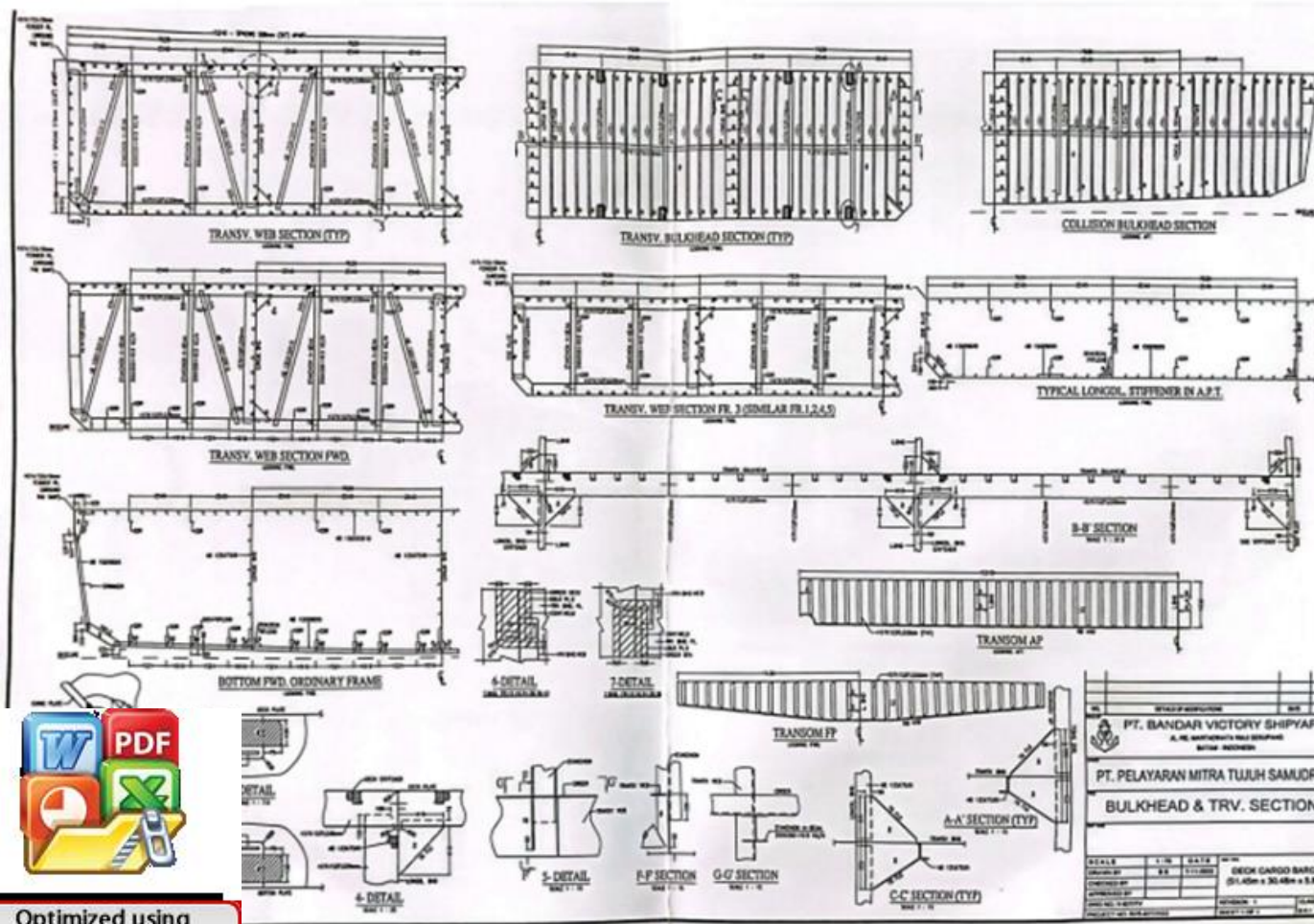


# LAMPIRAN



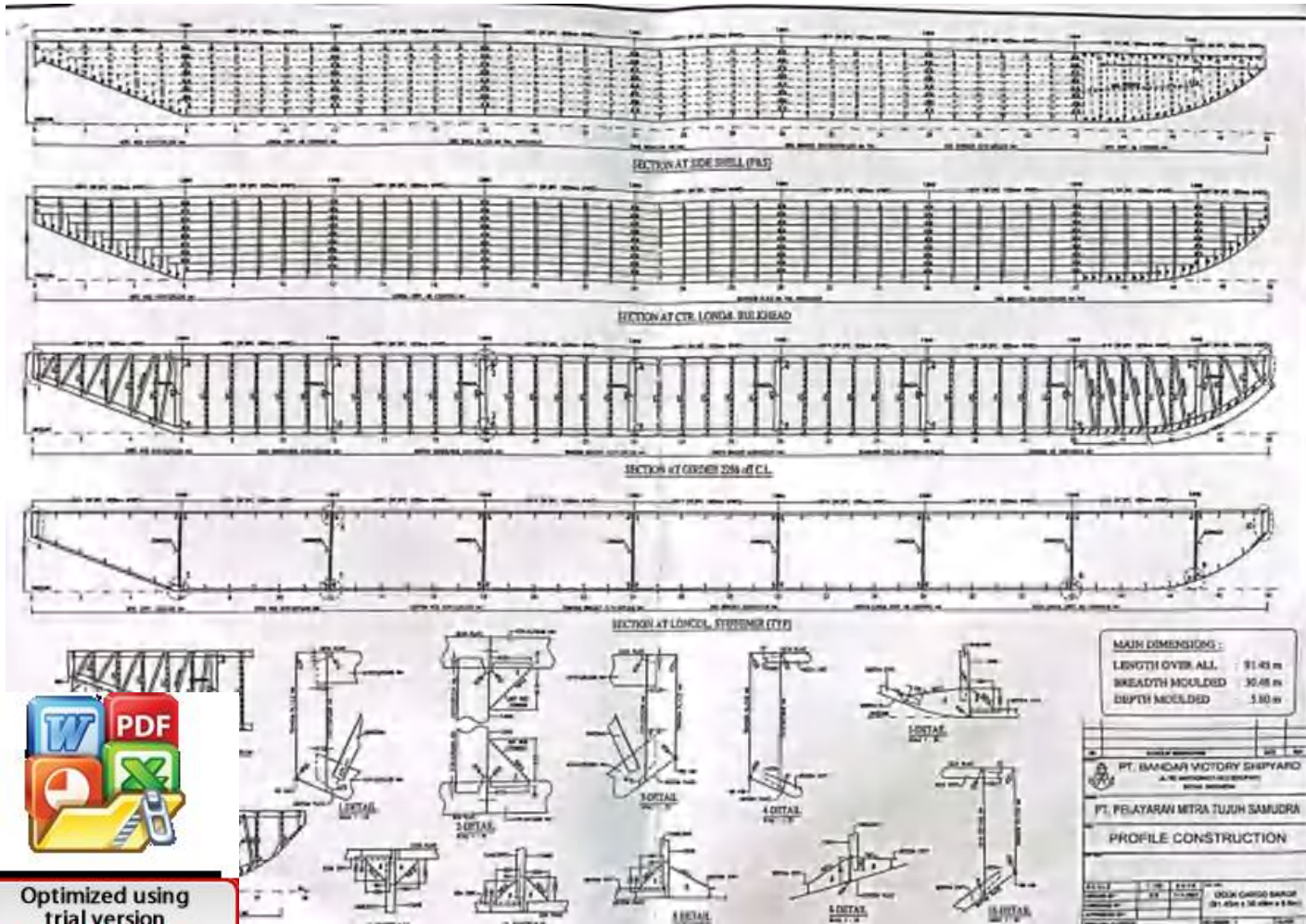
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Lampiran 1. Konstruksi *midship* 2D



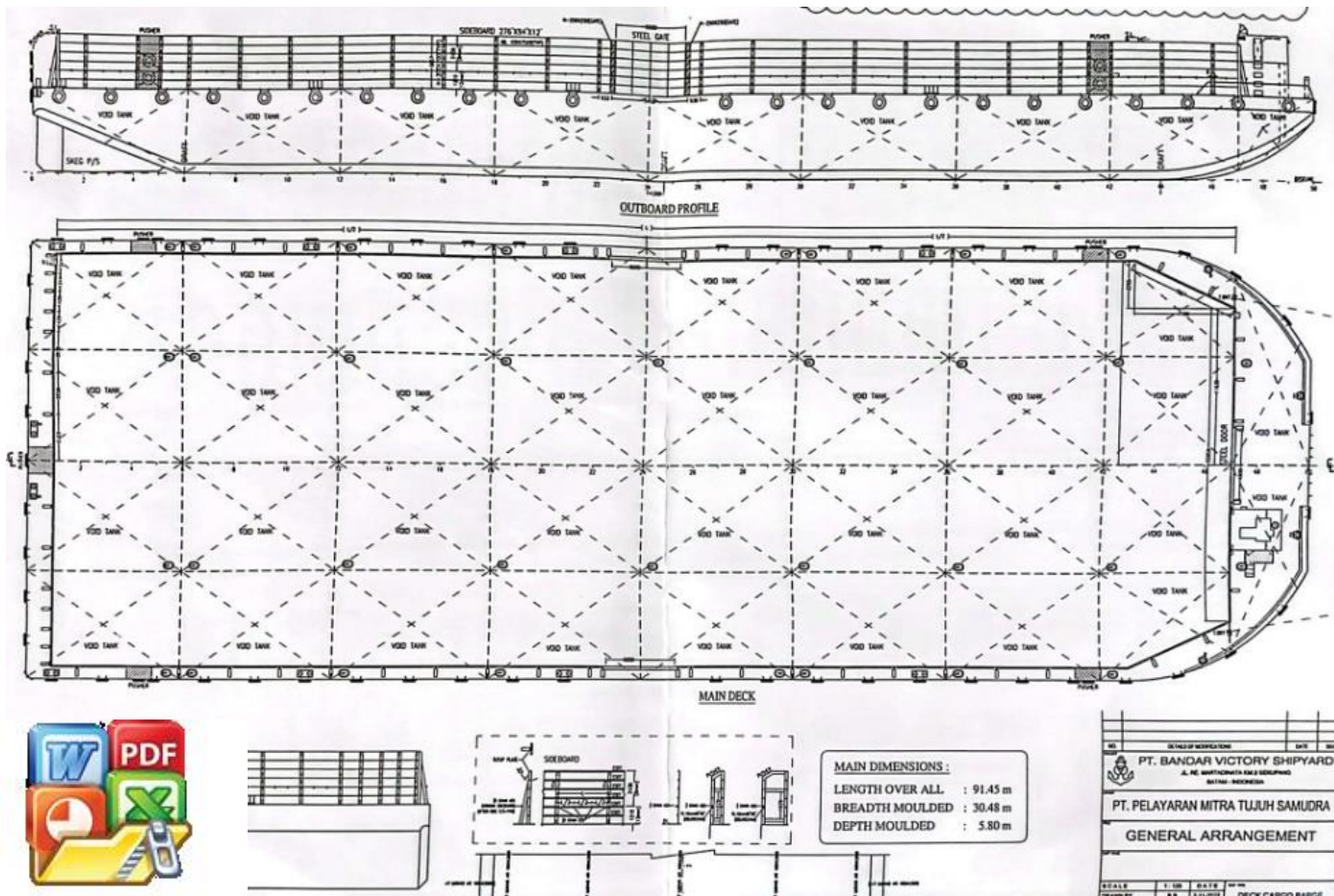
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Lampiran 2. Konstruksi longitudinal 2D



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Lampiran 3. General arragement



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Lampiran 4. Ukuran konstruksi profil *deck barge* DANNY 131

Item	Konstruksi	Dimensi	Satuan	Material
Tebal Plat	Deck	14	mm	Plat
	Bottom	12	mm	Plat
	Side	12	mm	Plat
	Longitudinal bulkhead	12	mm	Plat
	Transversal bulkhead	9	mm	Plat
	Sideboard	12	mm	Plat
Tranversal dan Longitudinal Web	Deck	457 x 152 x FLG8	mm	Flange
	Bottom	457 x 152 x FLG8	mm	Flange
	Side	457 x 152 x FLG8	mm	Flange
	Longitudinal bulkhead	457 x 152 x FLG8	mm	Flange
	Transversal bulkhead	457 x 152 x FLG8	mm	Flange
Stiffener	Deck	150 x 90 x 10	mm	Angel bar
	Bottom	150 x 90 x 9	mm	Angel bar
	Side	150 x 90 x 9	mm	Angel bar
	Longitudinal bulkhead	150 x 90 x 9	mm	Angel bar
	Transversal bulkhead	150 x 90 x 9	mm	Angel bar
Stanchion	Sideboard	125 x 75 x 9	mm	Angel bar
	Hull	200 x 200 x 8	mm	H - Beam
	Sideboard	200 x 200 x 8	mm	H - Beam
	Hull	175 x 175 x 12	mm	Angel bar
Diagonal	Sideboard	200 x 200 x 8	mm	H - Beam
		1829	mm	



Lampiran 5. Distribusi momen pada variasi ketinggian sarat

Kondisi 1 (Sarat 4.885 m)

Section	g <sub>x</sub> Ton/m	a <sub>x</sub> Ton/m	1 P(x) Ton/m	2 ΣP(x) Ton/m 0	3 Koreksi Ton/m E <sub>0</sub> JNS	4 ΣP(x) Ton/m	5 ΣΣP(x) Ton/m 0	6 Q <sub>1</sub> (x) Ton	7 M <sub>1</sub> (x) Ton.M	8 Σ <sub>2</sub> (x) Ton/m 0	9 Δ <sub>2</sub> Q(x) Ton	10 AM(x) Ton.M	11 Q(x) Ton	12 M(x) Ton.m	13 Q(x) N	14 M(x) Nmm
0	54.55	30.77455	23.78	23.78	0.00	23.78	23.78	108.73	497.16	30.77	574.80	2628.28	683.53	0.00	6.84E+06	0.00E+00
1	112.22	95.32773	16.89	40.67	-41.83	-1.16	22.62	-5.31	472.86	126.10	1780.52	10769.69	1775.20	11242.55	1.78E+07	1.12E+11
2	115.36	138.1789	-22.82	17.85	-83.66	-65.82	-43.20	-300.94	-903.19	264.28	2580.88	22570.77	2279.94	21667.58	2.28E+07	2.17E+11
3	115.35	147.5762	-32.23	-14.38	-125.49	-139.87	-183.07	-639.57	-3827.61	411.86	2756.40	35174.43	2116.84	31346.82	2.12E+07	3.13E+11
4	115.31	147.8837	-32.57	-46.95	-167.32	-214.27	-397.34	-979.76	-8307.56	559.74	2762.15	47804.34	1782.39	39496.78	1.78E+07	3.95E+11
5	115.35	148.1564	-32.81	-79.76	-209.15	-288.91	-686.25	-1321.04	-14348.02	707.90	2767.24	60457.55	1446.20	46109.52	1.45E+07	4.61E+11
6	115.38	148.4493	-33.07	-112.82	-250.98	-363.81	-1050.06	-1663.50	-21954.39	856.35	2772.71	73135.77	1109.21	51181.37	1.11E+07	5.12E+11
7	115.38	148.4523	-33.07	-145.89	-292.81	-438.70	-1488.76	-2005.98	-31126.73	1004.80	2772.77	85814.25	766.79	54687.52	7.67E+06	5.47E+11
8	115.38	148.4525	-33.07	-178.96	-334.65	-513.60	-2002.37	-2348.45	-41865.02	1153.25	2772.77	98492.75	424.32	56627.72	4.24E+06	5.66E+11
9	115.38	148.4526	-33.07	-212.03	-376.48	-588.50	-2590.87	-2690.93	-54169.29	1301.70	2772.77	111171.25	81.85	57001.96	8.18E+05	5.70E+11
10	115.38	148.4527	-33.07	-245.09	-418.31	-663.40	-3254.27	-3033.40	-68039.53	1450.16	2772.77	123849.77	-260.63	55810.23	-2.61E+06	5.58E+11
11	115.38	0	115.38	-129.71	-460.14	-589.85	-3844.12	-2697.08	-80371.93	1450.16	0.00	123849.77	-2697.08	43477.84	-2.70E+07	4.35E+11
12	115.38	0	115.38	-14.33	-501.97	-516.29	-4360.41	-2360.76	-91166.48	1450.16	0.00	123849.77	-2360.76	32683.28	-2.36E+07	3.27E+11
13	115.38	0	115.38	101.06	-543.80	-442.74	-4803.16	-2024.43	-100423.19	1450.16	0.00	123849.77	-2024.43	23426.57	-2.02E+07	2.34E+11
14	115.38	0	115.38	216.44	-585.63	-369.19	-5172.34	-1688.11	-108142.06	1450.16	0.00	123849.77	-1688.11	15707.70	-1.69E+07	1.57E+11
15	115.38	0	115.38	331.83	-627.46	-295.63	-5467.98	-1351.78	-114323.09	1450.16	0.00	123849.77	-1351.78	9526.67	-1.35E+07	9.53E+10
16	115.38	0	115.38	447.21	-669.29	-222.08	-5690.06	-1015.47	-118966.31	1450.16	0.00	123849.77	-1015.47	4883.46	-1.02E+07	4.88E+10
17	115.38	0	115.38	562.59	-711.12	-148.53	-5838.58	-679.14	-122071.69	1450.16	0.00	123849.77	-679.14	1778.08	-6.79E+06	1.78E+10
18	114.67	0	114.67	677.26	-752.95	-75.69	-5914.27	-346.08	-123654.16	1450.16	0.00	123849.77	-346.08	195.61	-3.46E+06	1.96E+09
19	108.16	0	108.16	785.43	-794.78	-9.36	-5923.63	-42.78	-123849.77	1450.16	0.00	123849.77	-42.78	0.00	-4.28E+05	0.00E+00
20	51.19	0	51.2	836.61	-836.61	0.00	-5923.63	0.00	-123849.77	1450.16	0.00	123849.77	0.00	0.00	0.00E+00	0.00E+00

Kondisi 2 (Sarat 4.385 m)

Section	g <sub>x</sub> Ton/m	a <sub>x</sub> Ton/m	1 P(x) Ton/m	2 ΣP(x) Ton/m 0	3 Koreksi Ton/m E <sub>0</sub> JNS	4 ΣP(x) Ton/m	5 ΣΣP(x) Ton/m 0	6 Q <sub>1</sub> (x) Ton	7 M <sub>1</sub> (x) Ton.M	8 Σ <sub>2</sub> (x) Ton/m 0	9 Δ <sub>2</sub> Q(x) Ton	10 AM(x) Ton.M	11 Q(x) Ton	12 M(x) Ton.m	13 Q(x) N	14 M(x) Nmm
0	54.55	24.0298	30.52	30.52	0.00	30.52	30.52	139.57	638.17	24.03	428.95	1961.36	568.52	0.00	5.69E+06	0.00E+00
1	112.22	79.60869	32.61	63.13	-41.83	21.30	51.82	97.40	1083.54	103.64	1421.07	8459.20	1518.47	9542.74	1.52E+07	9.54E+10
2	115.36	119.5305	-4.17	58.96	-83.66	-24.70	27.12	-112.95	567.06	223.17	2133.70	18215.53	2020.74	18782.59	2.02E+07	1.88E+11
3	115.35	128.1828	-12.83	46.12	-154.99	-108.87	-81.75	-497.80	-1709.12	351.35	2288.15	28678.09	1790.35	26968.97	1.79E+07	2.70E+11
4	115.31	128.4454	-13.13	32.99	-206.66	-173.66	-255.41	-794.07	-5340.01	479.80	2292.84	39162.08	1498.76	33822.07	1.50E+07	3.38E+11
5	115.35	128.7093	-13.36	19.63	-258.32	-238.69	-494.10	-1091.40	-10330.42	608.51	2297.55	49667.60	1206.15	39337.18	1.21E+07	3.93E+11
6	115.38	128.9929	-13.61	6.03	-309.99	-303.96	-798.06	-1389.86	-16685.54	737.50	2302.61	60196.28	912.75	43510.74	9.13E+06	4.35E+11
7	115.38	128.9961	-13.61	-7.59	-361.65	-369.24	-1167.29	-1688.33	-24405.44	866.50	2302.67	70725.22	614.33	46319.78	6.14E+06	4.63E+11
8	115.38	128.9966	-13.61	-21.20	-413.31	-434.51	-1601.80	-1986.81	-33490.12	995.49	2302.67	81254.20	315.87	47764.08	3.16E+06	4.77E+11
9	115.38	128.9969	-13.61	-34.81	-464.98	-499.79	-2101.59	-2285.29	-43939.59	1124.49	2302.68	91783.21	17.39	47843.62	1.74E+05	4.78E+11
10	115.38	128.9972	-13.61	-48.42	-516.64	-565.07	-2666.66	-2583.77	-55753.86	1253.49	2302.69	102312.24	-281.08	46558.38	-2.81E+06	4.66E+11
11	115.38	0	115.38	66.96	-568.31	-501.35	-3168.01	-2292.41	-66235.89	1253.49	0.00	102312.24	-2292.41	36076.35	-2.29E+07	3.61E+11
12	115.38	0	115.38	182.34	-619.97	-437.63	-3605.63	-2001.05	-75385.67	1253.49	0.00	102312.24	-2001.05	26926.57	-2.00E+07	2.69E+11
13	115.38	0	115.38	297.73	-671.63	-373.91	-3979.54	-1709.68	-83203.20	1253.49	0.00	102312.24	-1709.68	19109.04	-1.71E+07	1.91E+11
14	115.38	0	115.38	413.11	-723.30	-310.19	-4289.72	-1418.32	-89688.49	1253.49	0.00	102312.24	-1418.32	12623.75	-1.42E+07	1.26E+11
15	115.38	0	115.38	528.50	-774.96	-246.47	-4536.19	-1126.96	-94841.54	1253.49	0.00	102312.24	-1126.96	7470.70	-1.13E+07	7.47E+10
16	115.38	0	115.38	643.88	-826.63	-182.75	-4718.94	-835.61	-98662.36	1253.49	0.00	102312.24	-835.61	3649.88	-8.36E+06	3.65E+10
17	115.38	0	115.38	759.26	-878.29	-119.03	-4837.96	-544.25	-101150.95	1253.49	0.00	102312.24	-544.25	1161.29	-5.44E+06	1.16E+10
18	114.67	0	114.67	873.93	-929.96	-56.02	-4893.98	-256.16	-102322.23	1253.49	0.00	102312.24	-256.16	-9.99	-2.56E+06	-9.99E+07
19	108.16	0	108.16	982.10	-981.62	0.48	-4893.51	2.18	-102312.24	1253.49	0.00	102312.24	2.18	0.00	2.18E+04	0.00E+00
20	51.19	0	51.2	1033.28	-1033.28	0.00	-4893.51	0.00	-102312.24	1253.49	0.00	102312.24	0.00	0.00	0.00E+00	0.00E+00



Kondisi 3 (Sarat 3.885 m)

Section	gx Ton/m	ax Ton/m	1 P(x) Ton/m	2 ΣP(x) Ton/m	3 Koreksi Ton/m E <sub>0</sub> /JNS	4 ΣP(x) Ton/m	5 ΣΣP(x) Ton/m	6 Q <sub>i</sub> (x) Ton	7 M <sub>i</sub> (x) Ton.M	8 Σ <sub>i</sub> (x) Ton/m	9 Δ2.Q(x) Ton	10 ΔM(x) Ton.M	11 Q(x) Ton	12 M(x) Ton.m	13 Q(x) N	14 M(x) Nmm
0	54.55	17.89159	36.66	36.66	0.00	36.66	36.66	167.63	766.51	17.89	307.25	1404.88	474.88	0.00	4.75E+06	0.00E+00
1	112.22	66.41782	45.80	82.46	-59.27	23.19	59.85	106.02	1251.30	84.31	1140.57	6620.14	1246.59	7871.44	1.25E+07	7.87E+10
2	115.36	105.1119	10.24	92.71	-118.55	-25.84	34.01	-118.17	710.98	189.42	1805.05	14873.74	1686.88	15584.71	1.69E+07	1.56E+11
3	115.35	113.3463	2.00	94.71	-177.82	-83.11	-49.11	-380.04	-1026.76	302.77	1946.46	23773.92	1566.42	22747.16	1.57E+07	2.27E+11
4	115.31	113.5181	1.80	96.51	-237.10	-140.59	-189.70	-642.86	-3966.23	416.29	1949.41	32687.59	1306.55	28721.36	1.31E+07	2.87E+11
5	115.35	113.8569	1.49	98.00	-296.37	-198.37	-388.08	-907.07	-8113.80	530.14	1955.23	41627.86	1048.16	33514.06	1.05E+07	3.35E+11
6	115.38	114.2021	1.18	99.18	-355.65	-256.47	-644.54	-1172.70	-13475.95	644.34	1961.15	50959.24	788.46	37119.29	7.88E+06	3.71E+11
7	115.38	114.2216	1.16	100.34	-414.92	-314.58	-959.12	-1438.41	-20053.10	758.57	1961.49	59564.15	523.08	39511.05	5.23E+06	3.95E+11
8	115.38	114.2379	1.15	101.49	-474.20	-372.71	-1331.83	-1704.20	-27845.57	872.80	1961.77	68534.33	257.56	40688.77	2.58E+06	4.06E+11
9	115.38	114.2379	1.15	102.64	-533.47	-430.84	-1762.66	-1969.99	-36853.36	987.04	1961.77	77504.52	-8.23	40651.15	-8.23E+04	4.06E+11
10	115.38	114.2379	1.15	103.78	-592.75	-488.96	-2251.63	-2335.78	-47076.49	1101.28	1961.77	86474.70	-274.02	39398.22	-2.74E+02	3.94E+11
11	115.38	0	115.38	219.17	-652.02	-432.85	-2684.48	-1979.22	-56126.48	1101.28	0.00	86474.70	-1979.22	30348.22	-1.98E+07	3.03E+11
12	115.38	0	115.38	334.55	-711.29	-376.74	-3061.22	-1722.66	-64003.34	1101.28	0.00	86474.70	-1722.66	22471.36	-1.72E+07	2.25E+11
13	115.38	0	115.38	449.94	-770.57	-320.63	-3381.86	-1466.10	-70707.07	1101.28	0.00	86474.70	-1466.10	15767.63	-1.47E+07	1.58E+11
14	115.38	0	115.38	565.32	-829.84	-264.52	-3646.38	-1209.54	-76237.68	1101.28	0.00	86474.70	-1209.54	10237.03	-1.21E+07	1.02E+11
15	115.38	0	115.38	680.70	-889.12	-208.41	-3854.80	-952.97	-80595.15	1101.28	0.00	86474.70	-952.97	5879.56	-9.53E+06	5.88E+10
16	115.38	0	115.38	796.09	-948.39	-152.31	-4007.10	-696.42	-83779.52	1101.28	0.00	86474.70	-696.42	2695.19	-6.96E+06	2.70E+10
17	115.38	0	115.38	911.47	-1007.67	-96.20	-4103.30	-439.86	-85790.76	1101.28	0.00	86474.70	-439.86	683.94	-4.40E+06	6.84E+09
18	114.67	0	114.67	1026.14	-1066.94	-40.80	-4144.10	-186.56	-86643.81	1101.28	0.00	86474.70	-186.56	-169.10	-1.87E+06	-1.09E+09
19	108.16	0	108.16	1134.30	-1126.22	8.09	-4136.01	36.98	-86474.70	1101.28	0.00	86474.70	36.98	0.00	3.70E+05	0.00E+00
20	51.19	0	51.2	1185.49	-1185.49	0.00	-4136.01	0.00	-86474.70	1101.28	0.00	86474.70	0.00	0.00	0.00E+00	0.00E+00

Kondisi 4 (Sarat 3.385 m)

Section	gx Ton/m	ax Ton/m	1 P(x) Ton/m	2 ΣP(x) Ton/m	3 Koreksi Ton/m E <sub>0</sub> /JNS	4 ΣP(x) Ton/m	5 ΣΣP(x) Ton/m	6 Q <sub>i</sub> (x) Ton	7 M <sub>i</sub> (x) Ton.M	8 Σ <sub>i</sub> (x) Ton/m	9 Δ2.Q(x) Ton	10 ΔM(x) Ton.M	11 Q(x) Ton	12 M(x) Ton.m	13 Q(x) N	14 M(x) Nmm
0	54.55	13.58724	40.97	40.97	0.00	40.97	40.97	187.32	856.50	13.59	221.31	1011.95	408.63	0.00	4.09E+06	0.00E+00
1	112.22	55.43265	56.79	97.75	-66.59	31.16	72.12	142.47	1507.96	69.02	902.90	5140.46	1045.37	6648.42	1.05E+07	6.65E+10
2	115.36	91.11934	24.24	121.99	-133.18	-11.20	60.93	-51.20	1273.87	160.14	1484.17	11926.83	1432.98	13200.70	1.43E+07	1.32E+11
3	115.35	98.87645	16.47	138.46	-199.78	-61.32	-0.39	-280.37	-8.11	259.02	1610.52	19290.95	1330.16	19282.84	1.33E+07	1.93E+11
4	115.31	99.18811	16.13	154.59	-266.37	-111.78	-112.17	-511.12	-2345.20	358.20	1615.60	26678.27	1104.48	24333.07	1.10E+07	2.43E+11
5	115.35	99.32288	16.03	170.61	-332.96	-162.35	-274.52	-742.33	-5739.52	457.53	1617.79	34075.63	875.46	28336.11	8.75E+06	2.83E+11
6	115.38	99.47733	15.91	186.52	-399.55	-213.03	-487.55	-974.09	-10193.57	557.00	1620.31	41484.49	646.22	31290.93	6.46E+06	3.13E+11
7	115.38	99.48017	15.90	202.42	-466.15	-263.72	-751.27	-1205.87	-15707.38	656.48	1620.36	48893.57	414.49	33186.19	4.14E+06	3.32E+11
8	115.38	99.48024	15.90	218.33	-532.74	-314.41	-1065.68	-1437.64	-22280.98	755.96	1620.36	56302.65	182.72	34021.67	1.83E+06	3.40E+11
9	115.38	99.48024	15.90	234.23	-599.33	-365.10	-1430.78	-1669.41	-29914.35	855.44	1620.36	63711.73	-49.05	33797.38	-4.91E+05	3.38E+11
10	115.38	99.48024	15.90	250.14	-665.92	-415.79	-1846.56	-1901.18	-38607.49	954.92	1620.36	71120.81	-280.82	32513.32	-2.81E+06	3.25E+11
11	115.38	0	115.38	365.52	-732.52	-366.99	-2213.56	-1678.08	-46280.51	954.92	0.00	71120.81	-1678.08	24840.30	-1.68E+07	2.48E+11
12	115.38	0	115.38	480.91	-799.11	-318.20	-2531.76	-1454.98	-52933.39	954.92	0.00	71120.81	-1454.98	18187.42	-1.45E+07	1.82E+11
13	115.38	0	115.38	596.29	-865.70	-269.41	-2801.17	-1231.87	-58566.13	954.92	0.00	71120.81	-1231.87	12554.68	-1.23E+07	1.26E+11
14	115.38	0	115.38	711.67	-932.29	-220.62	-3021.79	-1008.77	-63178.75	954.92	0.00	71120.81	-1008.77	7942.06	-1.01E+07	7.94E+10
15	115.38	0	115.38	827.06	-998.88	-171.83	-3193.61	-785.67	-66771.23	954.92	0.00	71120.81	-785.67	4349.58	-7.86E+06	4.35E+10
16	115.38	0	115.38	942.44	-1065.48	-123.03	-3316.65	-562.58	-69343.61	954.92	0.00	71120.81	-562.58	1777.20	-5.63E+06	1.78E+10
17	115.38	0	115.38	1057.83	-1132.07	-74.24	-3390.89	-339.48	-70895.86	954.92	0.00	71120.81	-339.48	224.95	-3.39E+06	2.25E+09
18	114.67	0	114.67	1172.50	-1198.66	-26.17	-3417.05	-119.64	-71442.91	954.92	0.00	71120.81	-119.64	-322.10	-1.20E+06	-3.22E+09
19	108.16	0	108.16	1280.66	-1265.25	15.41	-3401.65	70.44	-71120.81	954.92	0.00	71120.81	70.44	0.00	7.04E+05	0.00E+00
20	51.19	0	51.2	1331.85	-1331.85	0.00	-3401.65	0.00	-71120.81	954.92	0.00	71120.81	0.00	0.00	0.00E+00	0.00E+00

