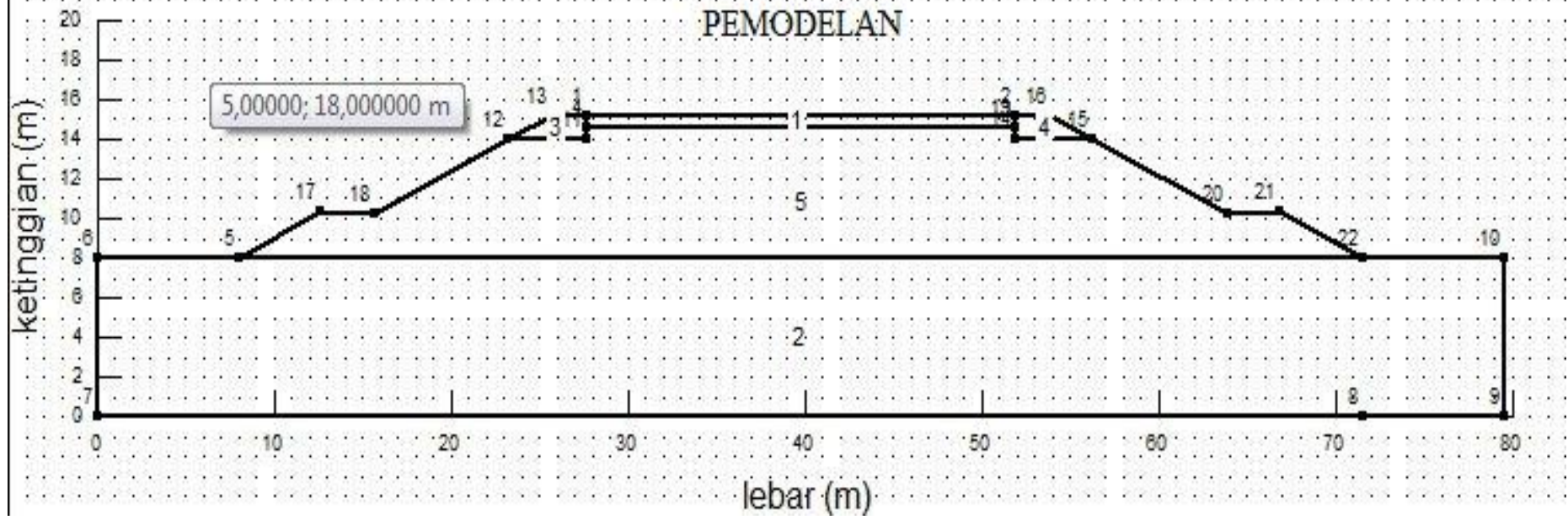


PEMODELAN



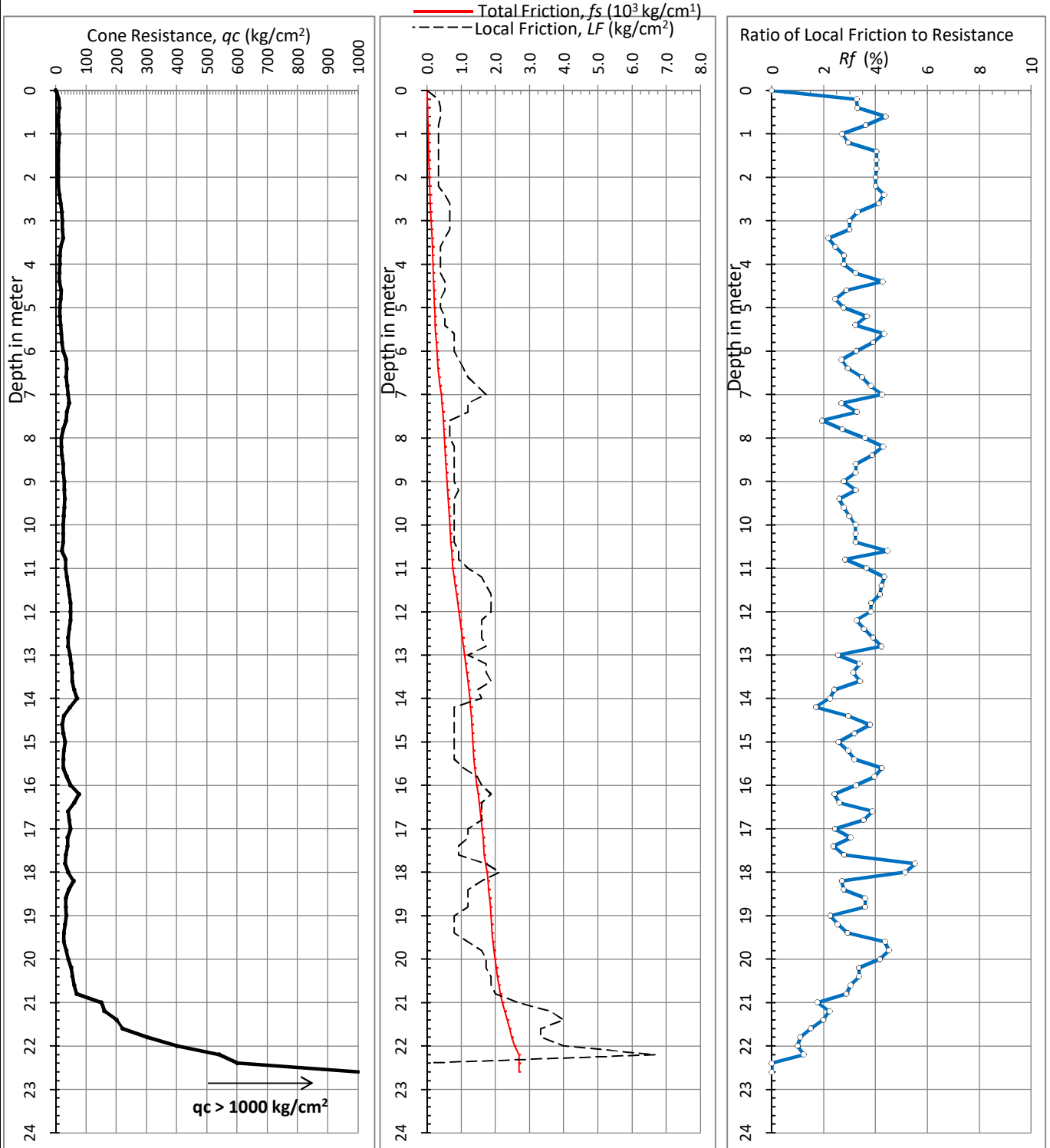
GRAPH OF CONE PENETRATION TEST (CPT)

ASTM D 3441 - 98

PROJECT : SOIL INVESTIGATION FOR PEMALANG-BATANG TOLL ROAD
 JOB NO. : 3389
 CLIENT : PT. SUMBER MITRA JAYA
 LOCATION : STA 344+650C
 POINT NO. : **SO-I-119** COORDINATES : E=336086.618; N=9233780.459
 PLACE : - ELEVATION : +10.27 m
 REMARKS : -

PT. SOILENS

DATE : 3-Oct-16
 WEATHER : Clear
 OPERATOR : Untung Suparman
 DRAWN BY : Tofocidy R
 CHECKED BY : -



Remarks:

Dutch Cone Penetrometer 10-ton Capacity :

Length of Rod	=	100 cm
Weight of inner Rod	=	1400 g
Weight of Cone	=	700 g
Projected area of Cone	=	10 cm^2
Area of Friction Sleeve	=	150 cm^2
Area of Plunger	=	20 cm^2

DATA

10 TON-CPT

PT, S O I L E N S

JOB NO. 3389
 PROJECT SOIL INVESTIGATION FOR PEMALANG-BATANG TOLL ROAD
 CLIENT PT. SUMBER MITRA JAYA
 POINT NO. SO-I-119
 LOCATION STA 344+650C
 COORDINATE E=336086.618; N=9233780.459
 ELEVATION + 10.27 m
 DATE 3-Oct-16
 OPERATOR Untung Suparman
 RECORDED BY
 DRAWN BY Tofocidy R
 CHECKED BY
 REMARKS CPT 10 TON CAPACITY

No.	Depth (meter)	1st Reading, M-1 (kg/cm ²)	2nd Reading, M-2 (kg/cm ²)	Local friction, LF (kg/cm ²)	Total friction, fs (kg/cm ¹)	(10 ³ kg/cm ¹)	Cone Resistance , qc (kg/cm ²)	Ratio LF/qc, Rf (%)
0	0.00			0.00	0	0	0	0
1	0.20	5		0.33	7	0.007	10.11	3.27
2	0.40	6	8.5	0.40	15	0.015	12.11	3.30
3	0.60	4.5	7.5	0.40	23	0.023	9.11	4.39
4	0.80	4.5	7.5	0.33	29	0.029	9.11	3.62
5	1.00	6	8.5	0.33	36	0.036	12.18	2.71
6	1.20	5.5	8	0.33	42	0.042	11.18	2.95
7	1.40	4	6.5	0.33	49	0.049	8.18	4.04
8	1.60	4	6.5	0.33	56	0.056	8.18	4.04
9	1.80	4	6.5	0.33	62	0.062	8.18	4.04
10	2.00	4	6.5	0.33	69	0.069	8.25	4.00
11	2.20	4	6.5	0.33	75	0.075	8.25	4.00
12	2.40	6	8.5	0.53	86	0.086	12.25	4.33
13	2.60	8	12	0.67	99	0.099	16.25	4.12
14	2.80	10	15	0.67	113	0.113	20.25	3.31
15	3.00	11	16	0.67	126	0.126	22.32	3.00
16	3.20	11	16	0.67	140	0.140	22.32	3.00
17	3.40	12	17	0.53	150	0.150	24.32	2.18
18	3.60	8	12	0.40	158	0.158	16.32	2.45
19	3.80	7	10	0.40	166	0.166	14.32	2.79
20	4.00	7	10	0.40	174	0.174	14.39	2.78
21	4.20	6	9	0.40	182	0.182	12.39	3.23
22	4.40	6	9	0.53	193	0.193	12.39	4.28
23	4.60	9	13	0.53	203	0.203	18.39	2.88
24	4.80	8	12	0.40	211	0.211	16.39	2.44
25	5.00	7	10	0.40	219	0.219	14.46	2.77
26	5.20	7	10	0.53	230	0.230	14.46	3.67
27	5.40	8	12	0.53	241	0.241	16.46	3.22
28	5.60	9	13	0.80	257	0.257	18.46	4.33
29	5.80	10	16	0.80	273	0.273	20.46	3.91
30	6.00	12	18	0.80	289	0.289	24.53	3.26
31	6.20	17	23	0.93	307	0.307	34.53	2.69
32	6.40	18	25	1.07	329	0.329	36.53	2.93
33	6.60	17	25	1.20	353	0.353	34.53	3.48
34	6.80	19	28	1.47	382	0.382	38.53	3.82
35	7.00	20	31	1.73	417	0.417	40.60	4.26
36	7.20	22	35	1.20	441	0.441	44.60	2.69
37	7.40	18	27	1.20	465	0.465	36.60	3.28
38	7.60	17	26	0.67	478	0.478	34.60	1.94
39	7.80	12	17	0.67	491	0.491	24.60	2.72
40	8.00	9	14	0.67	505	0.505	18.67	3.59
41	8.20	9	14	0.80	521	0.521	18.67	4.29
42	8.40	10	16	0.80	537	0.537	20.67	3.87

DATA

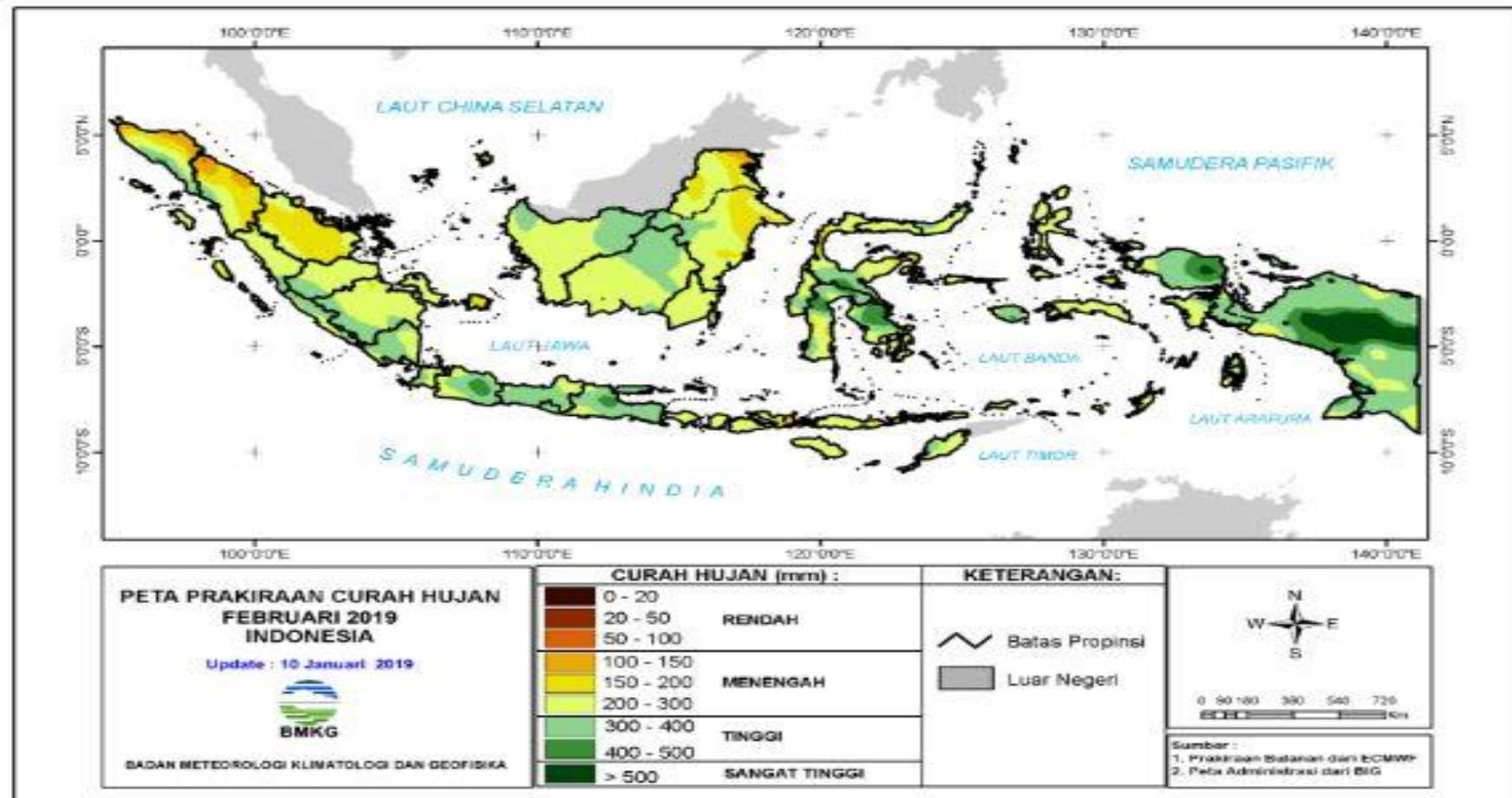
43	8.60	12	18	0.80	553	0.553	24.67	3.24
44	8.80	12	18	0.80	569	0.569	24.67	3.24
45	9.00	14	20	0.80	585	0.585	28.74	2.78
46	9.20	14	20	0.93	603	0.603	28.74	3.24
47	9.40	15	22	0.80	619	0.619	30.74	2.60
48	9.60	14	20	0.80	635	0.635	28.74	2.78
49	9.80	13	19	0.80	651	0.651	26.74	2.99
50	10.00	12	18	0.80	667	0.667	24.81	3.23
51	10.20	12	18	0.80	683	0.683	24.81	3.23
52	10.40	12	18	0.80	699	0.699	24.81	3.23
53	10.60	10	16	0.93	718	0.718	20.81	4.47
54	10.80	16	23	0.93	737	0.737	32.81	2.83
55	11.00	16	23	1.20	761	0.761	32.88	3.65
56	11.20	18	27	1.60	793	0.793	36.88	4.34
57	11.40	20	32	1.73	827	0.827	40.88	4.23
58	11.60	22	35	1.87	865	0.865	44.88	4.17
59	11.80	24	38	1.87	902	0.902	48.88	3.83
60	12.00	24	38	1.87	939	0.939	48.95	3.82
61	12.20	24	38	1.60	971	0.971	48.95	3.27
62	12.40	22	34	1.60	1003	1.003	44.95	3.56
63	12.60	20	32	1.60	1035	1.035	40.95	3.91
64	12.80	20	32	1.73	1070	1.070	40.95	4.23
65	13.00	23	36	1.20	1094	1.094	47.02	2.55
66	13.20	25	34	1.73	1129	1.129	51.02	3.39
67	13.40	27	40	1.73	1163	1.163	55.02	3.14
68	13.60	27	40	1.87	1201	1.201	55.02	3.40
69	13.80	30	44	1.47	1230	1.230	61.02	2.41
70	14.00	35	46	1.60	1262	1.262	71.09	2.25
71	14.20	23	35	0.80	1278	1.278	47.09	1.70
72	14.40	13	19	0.80	1294	1.294	27.09	2.95
73	14.60	10	16	0.80	1310	1.310	21.09	3.79
74	14.80	12	18	0.80	1326	1.326	25.09	3.19
75	15.00	15	21	0.80	1342	1.342	31.16	2.57
76	15.20	13	19	0.80	1358	1.358	27.16	2.95
77	15.40	12	18	0.80	1374	1.374	25.16	3.18
78	15.60	12	18	1.07	1395	1.395	25.16	4.25
79	15.80	18	26	1.47	1425	1.425	37.16	3.96
80	16.00	24	35	1.60	1457	1.457	49.23	3.25
81	16.20	38	50	1.87	1494	1.494	77.23	2.42
82	16.40	30	44	1.60	1526	1.526	61.23	2.61
83	16.60	20	32	1.60	1558	1.558	41.23	3.88
84	16.80	22	34	1.60	1590	1.590	45.23	3.54
85	17.00	24	36	1.20	1614	1.614	49.30	2.43
86	17.20	19	28	1.20	1638	1.638	39.30	3.05
87	17.40	19	28	0.93	1657	1.657	39.30	2.37
88	17.60	16	23	0.93	1675	1.675	33.30	2.79
89	17.80	15	22	1.73	1710	1.710	31.30	5.53
90	18.00	20	33	2.13	1753	1.753	41.37	5.15
91	18.20	29	45	1.60	1785	1.785	59.37	2.70
92	18.40	21	33	1.20	1809	1.809	43.37	2.77
93	18.60	16	25	1.20	1833	1.833	33.37	3.60
94	18.80	16	25	1.20	1857	1.857	33.37	3.60
95	19.00	17	26	0.80	1873	1.873	35.44	2.26
96	19.20	15	21	0.80	1889	1.889	31.44	2.54
97	19.40	13	19	0.80	1905	1.905	27.44	2.92
98	19.60	13	19	1.20	1929	1.929	27.44	4.37
99	19.80	17	26	1.60	1961	1.961	35.44	4.52
100	20.00	20	32	1.73	1995	1.995	41.51	4.17
101	20.20	25	38	1.73	2030	2.030	51.51	3.36
102	20.40	27	40	1.87	2067	2.067	55.51	3.37
103	20.60	30	44	1.87	2105	2.105	61.51	3.04
104	20.80	34	48	2.00	2145	2.145	69.51	2.88
105	21.00	75	90	2.67	2198	2.198	151.58	1.76
106	21.20	80	100	3.60	2270	2.270	161.58	2.23

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107	21.40	100	127	4.00	2350	2.350	201.58	1.98
108	21.60	110	140	3.33	2417	2.417	221.58	1.50
109	21.80	150	175	3.33	2483	2.483	301.58	1.10
110	22.00	200	225	4.00	2563	2.563	401.65	1.00
111	22.20	270	300	6.67	2697	2.697	541.65	1.23
112	22.40	300	350	0.00	2697	2.697	601.65	0.00
113	22.60	500	500	0.00	2697	2.697	1001.65	0.00

No	Parameter	N-SPT	E	γ_{un}	γ_{sat}	c	ϕ
			(KN/m ³)	(KN/m ³)	(KN/m ³)	(Kpa)	(°)
1	Timbunan		11000	17	19	5	25
2	Tanah dasar	11	5,00E+04	20	21	2,5	16

Prakiraan Curah Hujan



Data Curah Hujan Februari 2019	
konversi dari mm/bulan ke m/detik untuk input geostudio 2012	
400 mm/bulan = 1,522E-07 m/detik	
waktu (detik)	Curah hujan (m/detik)
87.600	5,1E-09
131.400	1,01E-08
175.200	5,07E-09
262.800	2,54E-09
350.400	5,07E-09
438.000	5,07E-09
525.600	5,07E-09
613.200	2,54E-09
700.800	2,54E-09
788.400	0
876.000	5,07E-09
963.600	5,07E-09
1.051.200	5,07E-09
1.138.800	1,01E-08
1.226.400	5,07E-09
1.314.000	0
1.401.600	1,01E-08
1.489.200	5,07E-09
1.576.800	1,01E-08
1.664.400	0
1.752.000	5,07E-09
1.839.600	5,07E-09
1.927.200	2,54E-09
2.014.800	5,07E-09
2.102.400	2,54E-09
2.190.000	5,07E-09
2.277.600	2,54E-09
2.365.200	5,07E-09
2.452.800	1,01E-08
2.540.400	5,07E-09
2.628.000	5,07E-09
Total 1 bulan =	1,52E-07



