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Lampiran 1. Profil Bor-log SPT

BORING LOG AND SPT TEST RESULT

GROUND ELEVATION	: + 0,00 m (Setempat)	STARTED	: 18 September 2022
GROUND WATER LEVEL	: +1,030	FINISHED	: 23 September 2022
TOTAL DEPTH	: 15 Meter	BORING METHOD	: Cone and Wash
BORE HOLE NO	: BH-03		
DRILL MASTER	: Bahri Sada		
LOGGED BY	: H. A. Muh. Idhil Maming		

SCALE	Elevation in Meter	Depth in Meter	Undisturbed Sample	Casing / Log	Colour	Soil/Rock Description	Relative Density	Standard Penetration Test: Depth/Depth After Total Blows	N1 Blows/cm	N2 Blows/cm	N3 Blows/cm	Numb of Blows (Blows/cm) = N2+N3
0						Pasir Kasar dan Pecahan Batu Karang						
1												
						Batu Karang						
2						Lempung Lunak dan Pasir Kasar	Padat	2,00	12	20	26	46
								2,45	15	15	15	30
3						Batu Karang						
						Lempung Padat	Padat	4,00	9	13	19	32
4								4,45	15	15	15	30
5						Lempung Lunak dan Sedikit Pasir						
						Lempung Lunak	Sedang	6,00	5	6	6	12
6								6,45	15	15	15	30
7							Lepas	8,00	3	4	4	8
8								8,45	15	15	15	30
9								10,00	2	3	4	7
10								10,45	15	15	15	30
11								12,00	2	3	4	7
12						Lempung Padat		12,42	15	15	15	30
13						Lempung						
						Batu Karang	Sangat Padat	14,00	>60	>60		>60
14								14,54	2	2	0	2
						Batu Lempung		15,00	>60	>60		>60
15						**End of Boring**		15,54	2	2	0	

N-Value (N/foot): 0 10 20 30 40 50 60

LEGEND : ■ Undisturbed Sample □ Disturbed Sample

▨ Clay ▥ Silt ⁘ Sand ▩ Conglomerate ▨ Sandstone

Lampiran 2. Data pemeriksaan kadar air

Tested By	: TIM CV. KONSULTAN ENJINIRING MULIADI
Checked By	: FADRIA HANDAYANI, ST
Date	: OKT 2020

WATER CONTENT

ASTM D2216

Titik Test			BH-03(P-02) 11,50-12,00	
No Container			B7	B2
Weight of container	(W1)	gram	36,54	32,27
Weight of container + wet soil	(W2)	gram	93,10	95,70
Weight container + dry soil	(W3)	gram	75,60	78,40
Weight of water	(Ww = W2-W3)	gram	17,50	17,30
Weight of dry sample	(Ws = W3-W1)	gram	39,06	46,13
Water content	(w)	(%)	44,80	37,50
Average water content	(w)	(%)	41,15	

Tested By	: TIM CV. KONSULTAN ENJINIRING MULIADI
Checked By	: FADRIA HANDAYANI, ST
Date	: OKT 2020

WATER CONTENT

ASTM D2216

Titik Test			BH-03(P-02) 14,00-14,50	
No Container			B4	B5
Weight of container	(W1)	gram	32,24	5,08
Weight of container + wet soil	(W2)	gram	71,70	22,80
Weight container + dry soil	(W3)	gram	62,40	17,20
Weight of water	(Ww = W2-W3)	gram	9,30	5,60
Weight of dry sample	(Ws = W3-W1)	gram	30,16	12,12
Water content	(w)	(%)	30,84	46,20
Average water content	(w)	(%)	38,52	

Lampiran 3. Data pemeriksaan berat isi

Tested By	: TIM CV. KONSULTAN ENJINIRING MULIADI
Checked By	: FADRIA HANDAYANI, ST
Date	: OKT 2020

UNIT WEIGHT

ASTM C29, AASHTO T19

Bore Hole			BH-03(P-02)
Depth (m)			11,50-12,00
Water content	(w)	(%)	41,15
Weight of mould	(W1)	gram	113,5
Weight of soil + ring	(W2)	gram	367,2
Weight of wet	(Wt)	gram	253,7
Volume of ring		cm^3	126,63
Unit weight	(ϒ)	$gram/cm^3$	2,003
Dry unit weight	(ϒd)	$gram/cm^3$	1,419

Tested By	: TIM CV. KONSULTAN ENJINIRING MULIADI
Checked By	: FADRIA HANDAYANI, ST
Date	: OKT 2020

UNIT WEIGHT

ASTM C29, AASHTO T19

Bore Hole			BH-03(P-02)
Depth (m)			14,00-14,50
Water content	(w)	(%)	38,52
Weight of mould	(W1)	gram	113,5
Weight of soil + ring	(W2)	gram	341,2
Weight of wet	(Wt)	gram	227,7
Volume of ring		cm^3	126,63
Unit weight	(ϒ)	$gram/cm^3$	1,798
Dry unit weight	(ϒd)	$gram/cm^3$	1,298

Lampiran 4. Pemeriksaan batas-batas atterberg

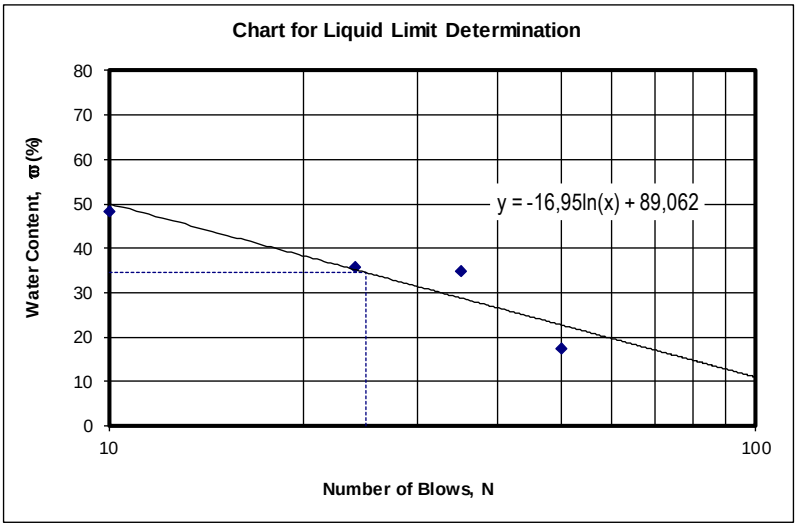
Tested By	: TIM CV. KONSULTAN ENJINIRING MULIADI
Checked By	: FADRIA HANDAYANI, ST
Date	: OKT 2020

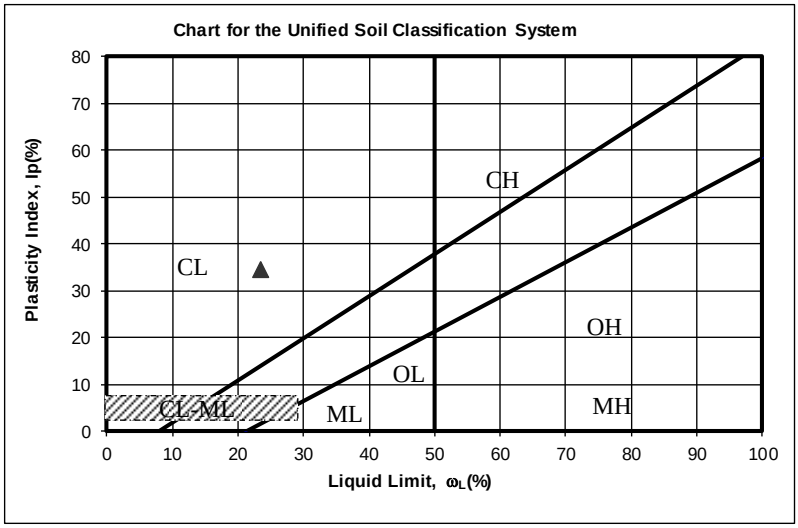
ATTERBERG LIMITS

ASTM D4318, D421, D423, D424, D2217, AASHTO T87, T89, T90, T416

Liquid Limit (LL)		10	24	35	50	Plastic Limit (PL)	
Container		A4	A15	A22	A2	A4	A15
Mass of wet soil+container	gram	16,22	12,83	16,54	17,66	14,98	13,99
Mass of dry soil+container	gram	12,55	10,75	13,54	15,76	13,96	13,11
Mass of moisture	gram	3,67	2,08	3,00	1,90	1,02	0,88
Mass of container	gram	4,96	4,96	4,96	4,96	4,96	4,92
Mass of dry soil	gram	7,59	5,79	8,58	10,80	9,00	8,19
Moisture content	(%)	48,35	35,92	34,97	17,59	11,33	10,74

Liquid Limit (%)	Plastic Limit (%)	Plasticity Index
34,50	11,04	23,46
USCS Classsification		CL





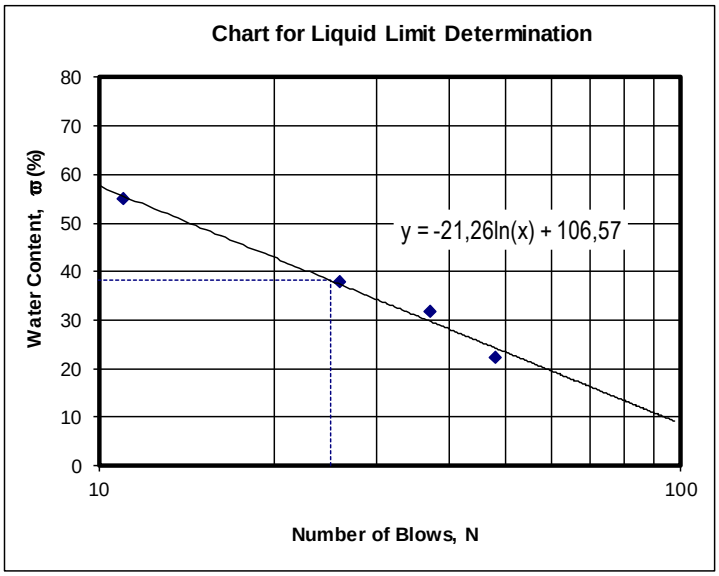
Tested By	: TIM CV. KONSULTAN ENJINIRING MULIADI
Checked By	: FADRIA HANDAYANI, ST
Date	: OKT 2020

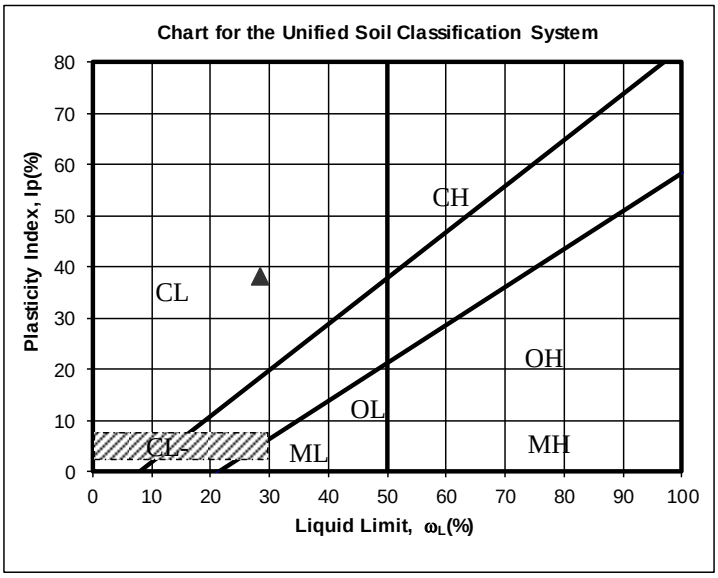
ATTERBERG LIMITS

ASTM D4318, D421, D423, D424, D2217, AASHTO T87, T89, T90, T416

Liquid Limit (LL)		11	26	37	48	Plastic Limit (PL)	
Container		A4	A15	A22	A2	A4	A15
Mass of wet soil+con	gram	17,22	15,44	16,44	15,4	13,44	13,22
Mass of dry soil+cont	gram	12,87	12,56	13,67	13,5	12,54	12,64
Mass of moisture	gram	4,35	2,88	2,77	1,90	0,90	0,58
Mass of container	gram	4,96	4,96	4,98	4,96	4,96	4,96
Mass of dry soil	gram	7,91	7,60	8,69	8,54	7,58	7,68
Moisture content	(%)	54,99	37,89	31,88	22,25	11,87	7,55

Liquid Limit (%)	Plastic Limit (%)	Plasticity Index
38,14	9,71	28,42
USCS Classsification		CL





Lampiran 5. Pemeriksaan berat jenis

Tested By	: TIM CV. KONSULTAN ENJINIRING MULIADI
Checked By	: FADRIA HANDAYANI, ST
Date	: OKT 2020

SPECIFIC GRAVITY

ASTM D854, C127, C128, AASHTO T84, T85, T100

Bore Hole			BH-03(P-02)	
Depth (m)			11,50-12,00	
No. Piknometer			8	5
Weight of piknometer	(W1)	gram	33,1	21
Weight of piknometer + soil	(W2)	gram	36,85	33,82
Weight of soil	(Wt=W2-W1)	gram	3,75	12,82
Temperature		°C	28	28
Weight of piknometer + water at T°C	(W4)	gram/cm³	72,8	75,4
W5 = W2-W1+W4		gram	76,55	88,22
Weight of piknometer+water+soil	(W3)	gram	75,11	83,22
Volume of soil	(W6=W5-W3)	gram	1,44	5,00
Specific gravity	(W7=Wt/W6)	gram	2,604	2,564
Average			2,584	

Tested By	: TIM CV. KONSULTAN ENJINIRING MULIADI
Checked By	: FADRIA HANDAYANI, ST
Date	: OKT 2020

SPECIFIC GRAVITY

ASTM D854, C127, C128, AASHTO T84, T85, T100

Bore Hole			BH-03(P-02)	
Depth (m)			14,00-14,50	
No. Piknometer			1	3
Weight of piknometer	(W1)	gram	21,4	31
Weight of piknometer + soil	(W2)	gram	36,23	35,89
Weight of soil	(Wt=W2-W1)	gram	14,83	4,89
Temperature		°C	29	28
Weight of piknometer + water at T°C	(W4)	gram/cm³	70,5	81,7
W5 = W2-W1+W4		gram	85,33	86,59
Weight of piknometer+water+soil	(W3)	gram	79,45	84,73
Volume of soil	(W6=W5-W3)	gram	5,88	1,86
Specific gravity	(W7=Wt/W6)	gram	2,522	2,629
Average			2,576	

Lampiran 6. Analisa saringan dan hirdrometer

Tested By : TIM CV. KONSULTAN ENJINIRING MULIADI
Checked By : FADRIA HANDAYANI, ST
Date : OKT 2020

SIEVE ANALYSIS & HYDROMETER

Sieve Analysis

Weight of soil : 338,00 gram

Titik Test : BH-03(P-02)
Depth : 11,50-12,00 m

Sieve No	Size	Mass Retained		∑ Mass Retained	Percent Cummulative	
	(mm)	(gram)	%	(gram)	Retained	Finer
3/8	5,660	0,00	0,00	0,00	0,00	100,00
4	4,750	4,66	1,38	4,66	1,38	98,62
10	2,000	11,67	3,45	16,33	4,83	95,17
20	0,850	31,94	9,45	36,60	10,83	89,17
40	0,425	22,90	6,78	59,50	17,60	82,40
80	0,180	18,50	5,47	78,00	23,08	76,92
100	0,150	4,50	1,33	82,50	24,41	75,59
200	0,075	25,10	7,43	107,60	31,83	68,17

Hydrometer Analysis

Gs : 2,599
Hydrometer No : 151 H

N' = % lolos saringan No. 200 X N ------- 0,682
Berat tanah kering : 50 gram

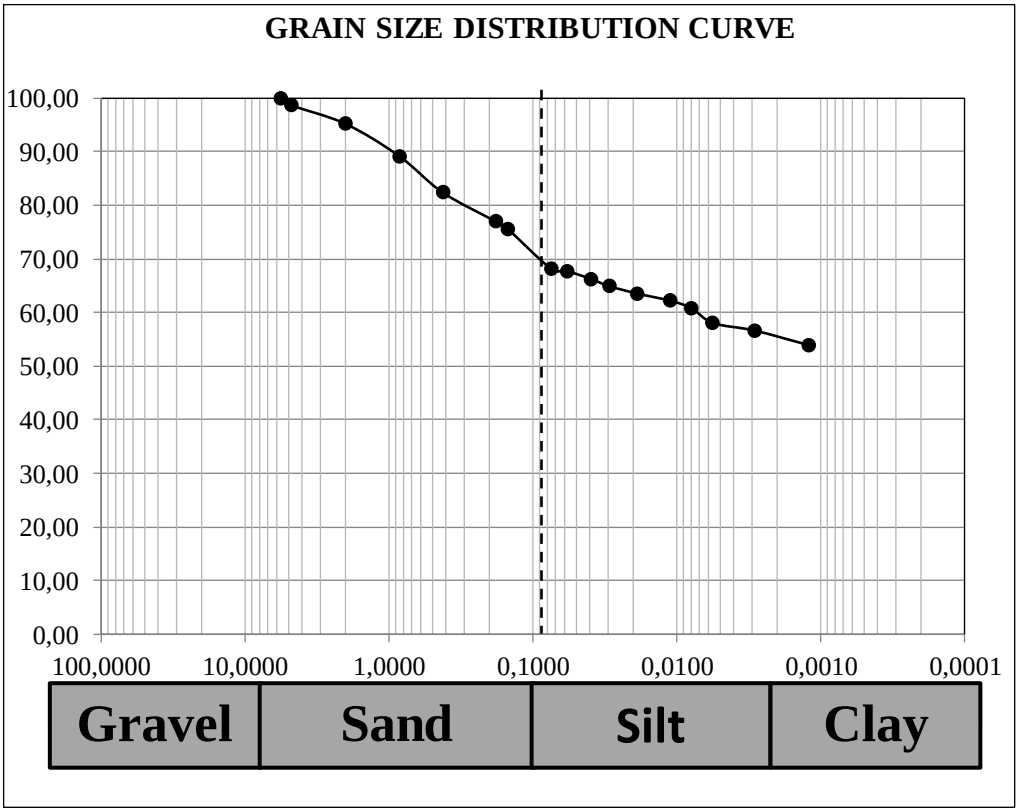
Time (min.)	RH	Tm	Temp. C	R-Rw	N %	Zr (cm)	Zr t	D (mm)	N' (%)
0,5	46	1	28	47	99,280	10,60	4,604	0,0575	67,6751
1	45	1	28	46	97,256	10,20	3,194	0,0399	66,2954
2	44	1	28	45	95,232	11,20	2,366	0,0296	64,9157
5	43	1	28	44	93,208	11,40	1,510	0,0189	63,536
15	42	1	28	43	91,184	11,70	0,883	0,0110	62,1563
30	41	1	28	42	89,160	12,00	0,632	0,0079	60,7765
60	39	1	28	40	85,112	12,20	0,451	0,0056	58,0171
240	38	1	28	39	83,088	12,50	0,228	0,0029	56,6374
1440	36	1	28	37	79,040	12,90	0,095	0,0012	53,8779

Tested By	: TIM CV. KONSULTAN ENJINIRING MULIADI
Checked By	: FADRIA HANDAYANI, ST
Date	: OKT 2020

SIEVE ANALYSIS & HYDROMETER

Titik Test : BH-03(P-02)
Depth : 11,50-12,00 m

Grafik



Tested By : TIM CV. KONSULTAN ENJINIRING MULIADI
Checked By : FADRIA HANDAYANI, ST
Date : OKT 2020

SIEVE ANALYSIS & HYDROMETER

Sieve Analysis

Weight of soil : 140,70 gram

Titik Test : BH-03(P-02)
Depth : 14,00-14,50 m

Sieve No	Size	Mass Retained		∑ Mass Retained	Percent Cummulative	
	(mm)	(gram)	%	(gram)	Retained	Finer
3/8	5,660	0,00	0,00	0,00	0,00	100,00
4	4,750	1,50	1,07	1,50	1,07	98,93
10	2,000	2,06	1,46	3,56	2,53	97,47
20	0,850	3,84	2,73	5,34	3,80	96,20
40	0,425	2,99	2,13	8,33	5,92	94,08
80	0,180	2,52	1,79	10,85	7,71	92,29
100	0,150	0,70	0,5	11,55	8,21	91,79
200	0,075	3,85	2,74	15,40	10,95	89,05

Hydrometer Analysis

Gs : 2,599
Hydrometer No : 151 H

N' = % lolos saringan No. 200 X N ------- 0,891
Berat tanah kering : 50 gram

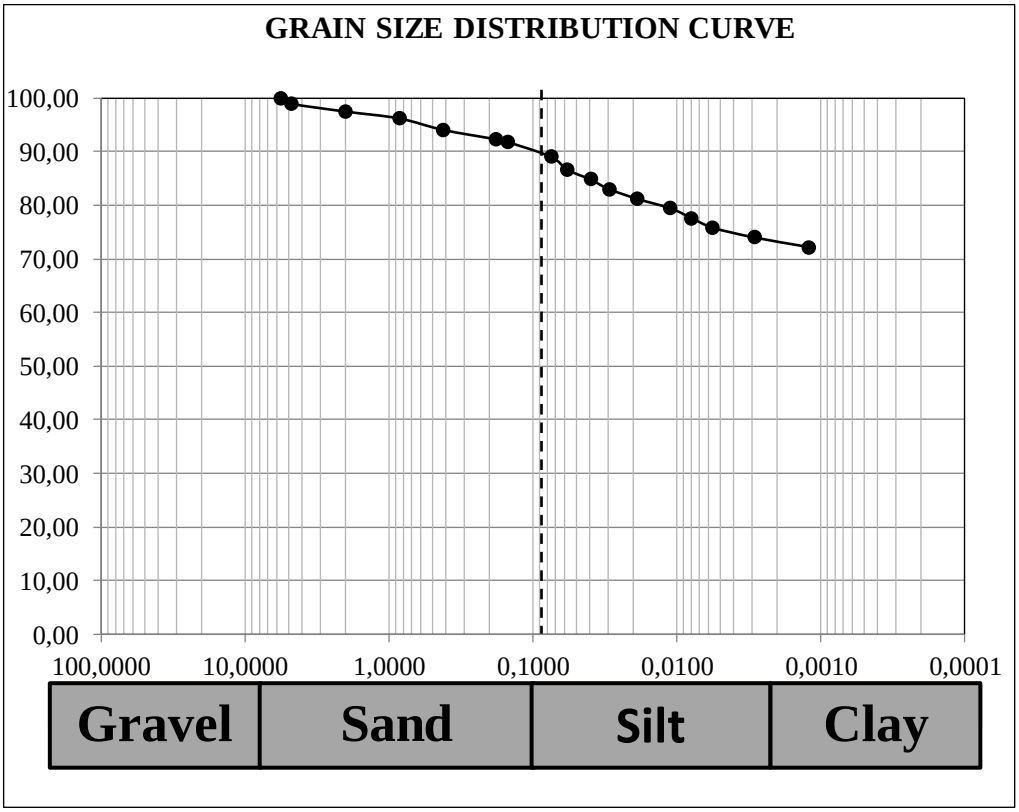
Time (min.)	RH	Tm	Temp. C	R-Rw	N %	Zr (cm)	Zr t	D (mm)	N' (%)
0,5	45	1	28	46	97,256	10,60	4,604	0,0575	86,6113
1	44	1	28	45	95,232	10,20	3,194	0,0399	84,8088
2	43	1	28	44	93,208	11,20	2,366	0,0296	83,0063
5	42	1	28	43	91,184	11,40	1,510	0,0189	81,2037
15	41	1	28	42	89,160	11,70	0,883	0,0110	79,4012
30	40	1	28	41	85,112	12,00	0,632	0,0079	77,5987
60	39	1	28	40	83,088	12,20	0,451	0,0056	75,7962
240	38	1	28	39	81,064	12,50	0,228	0,0029	73,9936
1440	37	1	28	38	79,040	12,90	0,095	0,0012	72,1911

Tested By	: TIM CV. KONSULTAN ENJINIRING MULIADI
Checked By	: FADRIA HANDAYANI, ST
Date	: OKT 2020

SIEVE ANALYSIS & HYDROMETER

Titik Test : BH-03(P-02)
Depth : 14,00-14,50 m

Grafik

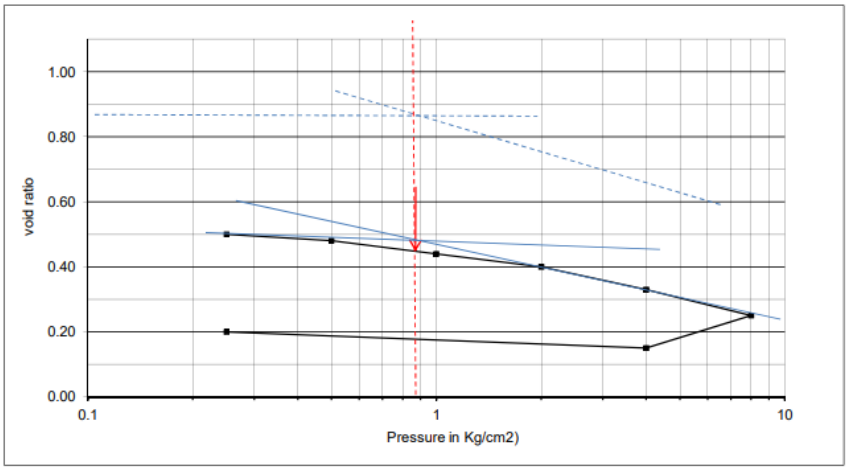


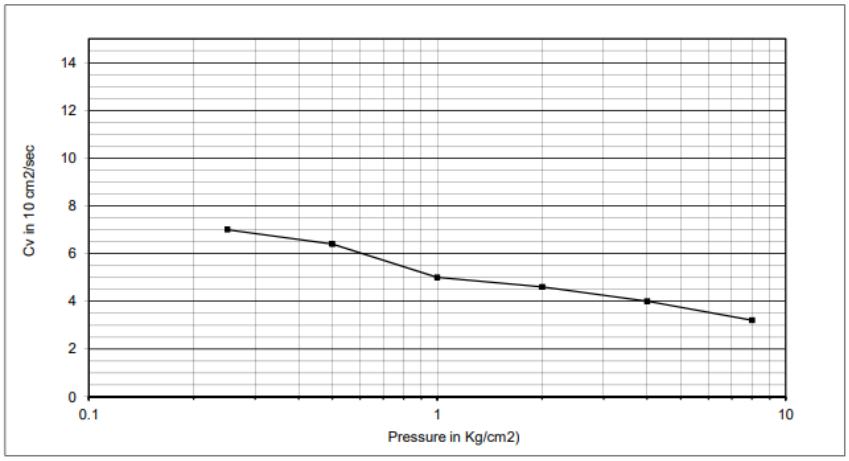
Lampiran 7. Pengujian konsolidasi

Tested By	: TIM CV. KONSULTAN ENJINIRING MULIADI
Checked By	: FADRIA HANDAYANI, ST
Date	: OKT 2020

CONSOLIDATION TEST

Borehole No	: BH-03(P-02)	Sample Type	: Undisturbed
Sample No	: 3	Depth	: 11,50-12,00 m



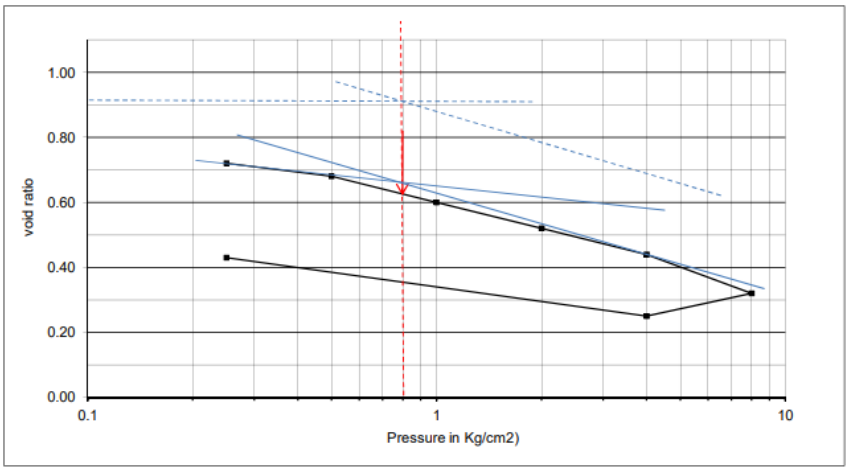


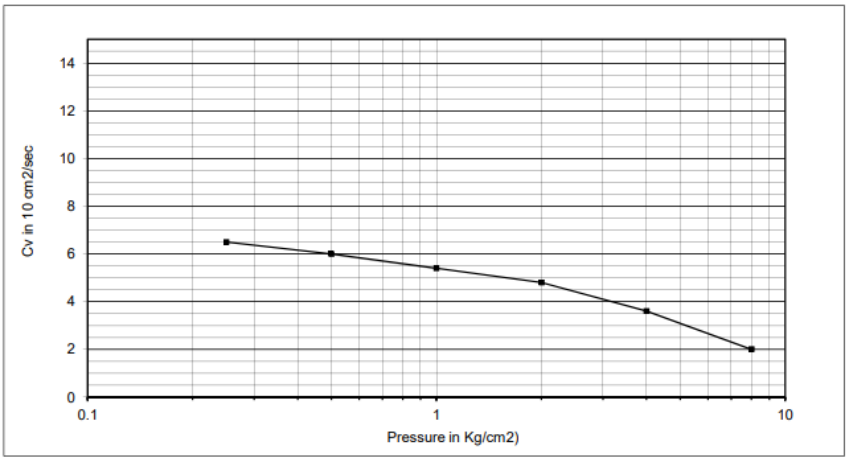
Max Precompression	0,89	Sample Area	19,28 cm²
Insitu Void Ratio (e)	0,45	Sample Height	2 cm
Coef Consolidation, Cv	0,0053		
Compression Index, Cc	0,073		

Tested By	: TIM CV. KONSULTAN ENJINIRING MULIADI
Checked By	: FADRIA HANDAYANI, ST
Date	: OKT 2020

CONSOLIDATION TEST

Borehole No	: BH-03(P-02)	Sample Type	: Undisturbed
Sample No	: 4	Depth	: 14,00-14,50 m





Max Precompression	0,81	Sample Area	19,28 cm²
Insitu Void Ratio (e)	0,63	Sample Height	2 cm
Coef Consolidation, Cv	0,0056		
Compression Index, Cc	0,13		