

14. 当該国の社会経済状況

	インドネシア共和国
	Republic of Indonesia

一般指標					
政体	共和制	*1	首都	ジャカルタ (Jakarta)	*2
元首	大統領／メガワティ・スカルノプトリ	*1,3	主要都市名	スラバヤ、メダン、バンドン、スマラン	*3
			労働力総計	99,370千人 (1999年)	*6
独立年月日	1945年8月17日	*3,4	義務教育年数	9年間 (年)	*13
主要民族／部族名	マレー系 (ジャワ族、スダ族等)	*1,3	初等教育就学率	112.7% (1997年)	*6
主要言語	インドネシア語	*1,3	中等教育就学率	55.7% (1997年)	*6
宗教	イスラム教87.1%、キリスト教8.8%	*1,3	成人非識字率	13.0% (2000年)	*13
国連加盟年	1950年9月28日	*12	人口密度	114.28人/km2 (1999年)	*6
世銀加盟年	1954年4月15日	*7	人口増加率	1.8% (1980年)	*6
IMF加盟年	1967年2月21日	*7	平均寿命	平均 65.80 男 63.90 女 67.70	*10
国土面積	1,905.00 千km2	*1,6	5歳児未満死亡率	52 (1999年)	*6
総人口	207,022千人 (1999年)	*6	カロリー供給量	2,886.0 cal/日/人 (1997年)	*10

経済指標					
通貨単位	ルピア (Rupiah)	*3	貿易量	(1998年)	
為替レート	1 US \$ = 8,690.00 (2001年 9月)	*8	商品輸出	50,371 百万ドル	*15
会計年度	Mar. 31	*6	商品輸入	-31,942 百万ドル	*15
国家予算	(1998年)		輸入カバー率	5.9(月) (1999年)	*14
歳入総額	158,148 十億ルピア	*9	主要輸出品目	石油・天然ガス、繊維、合板、履物、ゴム	*1
歳出総額	168,614 十億ルピア	*9	主要輸入品目	石油製品、機械、自動車部品、鉄鋼板	*1
総合収支	-3,693 百万ドル (1998年)	*15	日本への輸出	16,442 百万ドル (2000年)	*16
ODA受取額	1,257.7 百万ドル (1998年)	*18	日本からの輸入	7,610 百万ドル (2000年)	*16
国内総生産(GDP)	142,510.56 百万ドル (1999年)	*6			
一人当たりのGNI	600.0 ドル (1999年)	*6	総国際準備	27,345.1 百万ドル (1999年)	*6
分野別GDP	農業 19.5% (1999年)	*6	対外債務残高	150,096.3 百万ドル (1999年)	*6
	鉱工業 43.3% (1999年)	*6	対外債務返済率(DSR)	30.3% (1999年)	*6
	サービス業 37.3% (1999年)	*6	インフレ率	13.1% (1990-99年)	*6
産業別雇用	農業 男 40.7% 女 42.0% (1996年)	*6	(消費者価格物価上昇率)		
	鉱工業 20.7% 16.3% (1996年)	*6			
	サービス業 38.6% 41.7% (1996年)	*6	国家開発計画	長期25カ年計画 (94年から)	
実質GDP成長率	4.7% (1990年)	*6			*11

気象 (1961年～1990年平均) 観測地：ジャカルタ (南緯6度11分、東経106度50分、標高8m)														*4,5
月	1	2	3	4	5	6	7	8	9	10	11	12	平均/計	
降水量	461.3	269.4	249.8	144.7	112.1	93.6	46.8	75.8	53.2	78.0	109.1	233.7	1927.5 mm	
平均気温	26.3	26.5	26.9	27.5	27.7	27.3	27.1	27.1	27.5	27.7	27.4	26.8	27.2 ℃	

- *1 各国概況 (外務省)
- *2 世界の国々一覧表 (外務省)
- *3 世界年鑑2000 (共同通信社)
- *4 最新世界各国要覧10訂版 (東京書籍)
- *5 理科年表2000 (国立天文台編)
- *6 World Development Indicators2001(WB)
- *7 BRD Membership List(WB)
- IMF Members' Financial Data by Country(IMF)
- *8 Universal Currency Converter

- *9 Government Finances Statistics Yearbook1999 (IMF)
 - *10 Human Development Report2000,2001(UNDP)
 - *11 Country Profile(EIU),外務省資料等
 - *12 United Nations Member States
 - *13 Statistical Yearbook 1999(UNESCO)
 - *14 Global Development Finance2001(WB)
 - *15 International Financial Statistics Yearbook 2000(IMF)
 - *16 世界各国経済情報ファイル2001(世界経済情報サービス)
- 注：商品輸入については複式簿記の計上方式を採用しているため
支払い額はマイナス表記になる

	インドネシア共和国
	Republic of Indonesia

我が国におけるODAの実績 (資金協力は約束額ベース、単位：億円)						*17
項目	暦年	1995	1996	1997	1998	1999
技術協力		120.31	115.39	123.09	109.27	101.78
無償資金協力		67.19	71.17	93.27	208.84	54.90
有償資金協力		1,700.67	1,900.50	2,152.48	2,304.80	719.28
総額		1,888.17	2,087.06	2,368.84	2,622.91	875.96

当該国に対する我が国ODAの実績 (支出純額、単位：百万ドル)						*17
項目	暦年	1995	1996	1997	1998	1999
技術協力		203.67	163.31	148.39	123.99	130.80
無償資金協力		66.46	64.41	66.57	114.59	1,374.49
有償資金協力		622.28	737.81	281.90	589.88	1,374.49
総額		892.42	965.53	496.86	828.47	1,605.83

OECD 諸国の経済協力実績 (支出純額、単位：百万ドル)						*18
	贈与 (1) (無償資金協力・ 技術協力)	有償資金協力 (2)	政府開発援助 (ODA) (1)+(2)=(3)	その他政府資金 及び民間資金(4)	経済協力総額 (3)+(4)	
二国間援助 (主要供与国)	530.1	713.2	1,243.3	4,031.0	5,274.3	
1. Japan	238.6	589.9	828.5	3,176.5	4,005.0	
2. Germany	66.9	145.9	212.8	537.5	750.3	
3. Australia	74.1	0.0	74.1	54.7	128.8	
4. United Kingdom	39.4	0.7	40.1	-61.3	-21.2	
多国間援助 (主要援助機関)	39.5	-26.2	13.3	1,323.5	1,336.8	
1. EC			14.9	0.0	14.9	
2. UNICEF			7.1	0.0	7.1	
その他			1.1	0.0	1.1	
合計	569.6	688.1	1,257.7	5,354.4	6,612.1	

援助受入窓口機関		*19
技術協力：プロ技，開調／国家開発企画庁（BAPPENAS） 専門家／国家官房（SEKNEG）技術協力局		
無償：国家開発企画庁（SEKNEG）		
協力隊：国家官房（SEKNEG）技術協力局"		

*17 我が国の政府開発援助2000(国際協力推進協会) 東チモールを含む

*18 International Development Statistics (CD-ROM) 2000 OECD

*19 JICA資料

1. DGHE 関連

No.	Title	Date
DG-1	Development Program of Information and communication Technology (ICT) Under Directorate General of Higher Education (DGHE)	010520
DG-2	Rough Participation of Higher Education & the Increasing No. of Students	010523
DG-3	Development of Government owned unit, private unit Study Program	010523
DG-4	Each Polytechnic Data	010523
DG-5	DGHE Brochure	010523
DG-6	Position Paper of the Directorate General of DGHE Recent issues on the Higher Education Development in Relation with the Second Phase Development of the EEPIS-ITS Surabaya	010523
DG-7	Organization Chart, Ministry of National Education	010523
DG-8	Budget of the Directorate General of higher Education (in Thousand Rp.) 1996-2000	010523
DG-9	Indonesia Educational Statistics in Brief 1999/2000	010523
DG-10	Final Report (Main report and Appendixes) for Technological and Professional Skills Development Project Indonesia	010525
DG-11	Report and Recommendation of the President to the board of Directors on a Proposed Loan to the Republic of Indonesia for the Technological and Professional Skills Development Sector Project, Nov. 2000	010525
DG-12	Loan Agreement between Republic of Indonesia and Asian Development Bank, Dated Mar. 2001	010525
DG-13	The shortly Programs have been site visit by DGHE/TPSDP Team under Batch I	010525
DG-14	DGHE's Overseas Assisted Projects 1979-2000	010608

2. EEPIS 関連資料

No.	Title	Date
EE-1	Development of Information Technology Dept. At Polytechnics Project	010518
EE-2	EEPIS Master Plan	010519
EE-3	Presentation Material	010519
EE-4	List of Laboratory Subject Dept.	010519
EE-5	Tentative Curriculum Development Plan	010519
EE-6	List of Laboratory Subject Dept. (Update)	010520
EE-7	Explanation Concerning Laboratory, Class and Support Facility	010520
EE-8	Computer Network System	010520
EE-9	Education System in Indonesia	010520
EE-10	Laboratory data	010520
EE-11	Peraturan Pemerintah Republik Indonesia No.60 1999	010521
EE-12	Student Center Dwg. (Proposal)	010521
EE-13	Bldg. Facilities DIPLOMA IV Program in Engineering Institute of SUB	010521
EE-14	Master Plan of ITS & EEPIS	010521
EE-15	Building Facility Area	010521
EE-16	Staff List	010521
EE-17	Revised Plan of The Establishment of 155 New Polytechnics	010521
EE-18	Diploma IV Program Justification	010522
EE-19	Purchase List (1999-2000)	010528
EE-20	Proposed Lab. Layout-1	010530
EE-21	Student Center Dwg. (Newestl)	010531
EE-22	Proposed Lab. Layout-2	010531
EE-23	Proposed Lab. Layout-3	010601
EE-24	Organization Chart of EEPIS After Project	010601
EE-25	Administration & General Facilities Plan	010601

EE-26	The Necessity of New Library	010601
EE-27	Training Program for Engineers Module Course	010601
EE-28	TPSDP- Self Evaluation Report by EEPIS Nov. 2000	010605
EE-29	Number of Student (D3)	010606
EE-30	National Development Program (PROPENAS) of 2000-2004	010608
EE-31	Long-Term Guidelines of Higher Education Development 1996-2005	010608
EE-32	Ministry of Finance of Republic of Indonesia	010612
EE-33	Usulan Perubahan Organisasi dan Tata Kerja	011006
EE-34	EEPIS Teaching Staff Development Plan (Long Term)	011006
EE-35	Lampiran Bab VIII Perencanaan Poerasional Program Dan Anggaran	011007
EE-36	Proposal Program Peningkatan Pendidikan Tinggi Politeknik Elektronika Negeri Surabaya Berdasarkan SP4	011007

3. ITS 関連資料

No.	Title	Date
ITS-1	School Information of ITS	010521
ITS-2	Review Master Plan ITS Surabaya 1996-2006	010601
ITS-3	ITS NET Vlan Logical View	010601
ITS-4	Review Master Plan (ITS) 1996-2006	010601
ITS-5	Menyongsong fajar milenium ketiga	010601
ITS-6	Executive Summery Impact and Project Completion Report Higher Education Project ADB Loan 1253-INO ITS Surabaya	010601
ITS-7	ITS net Today by Team Central Computer	010601

4. POLBAN 関連資料

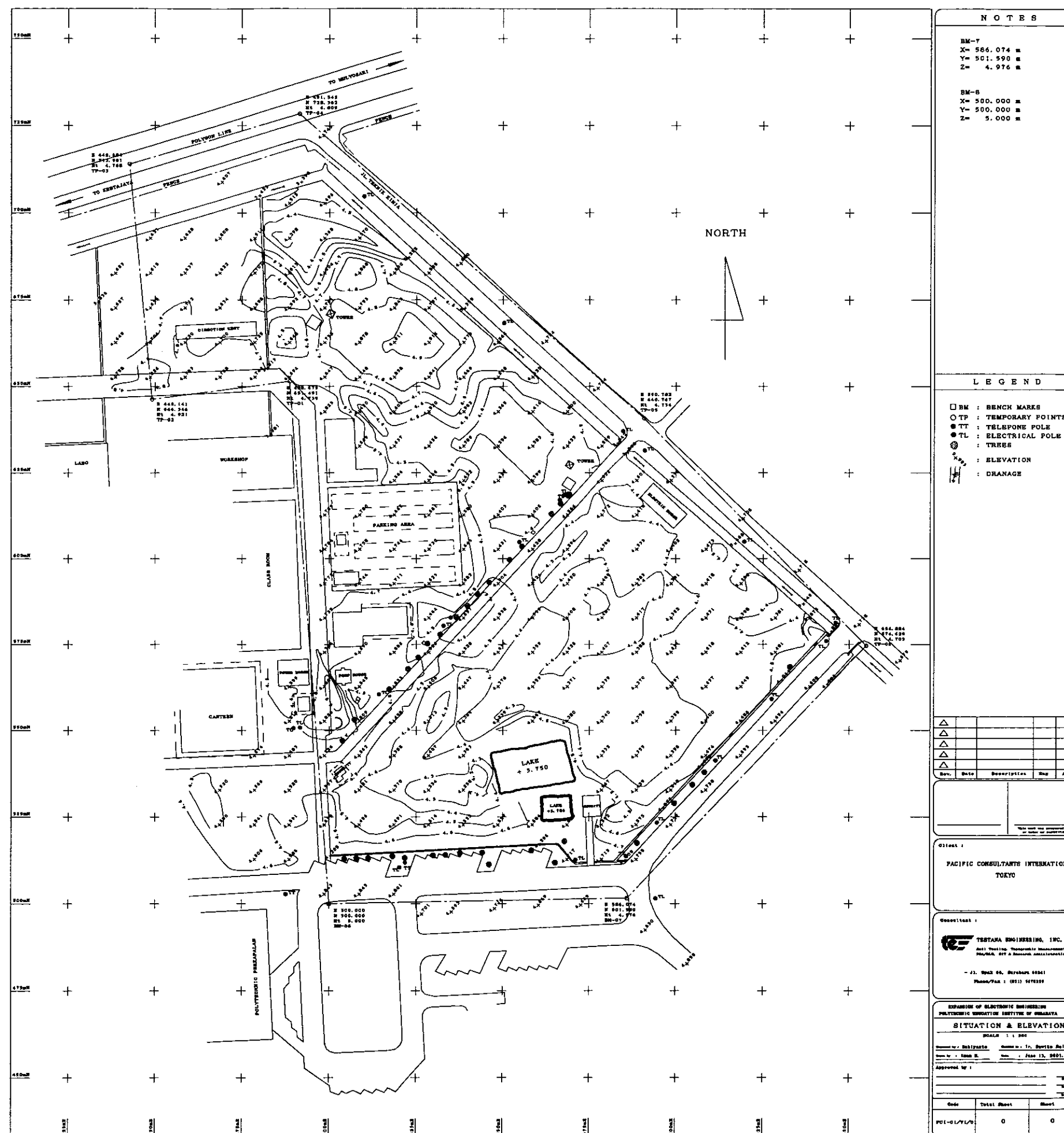
No.	Title	Date
PB-1	POLBAN Brochure	010602
PB-2	Organization Chart of POLBAN	010602
PB-3	Computer Science Program	010602
PB-4	Construction of Technical Information	010602

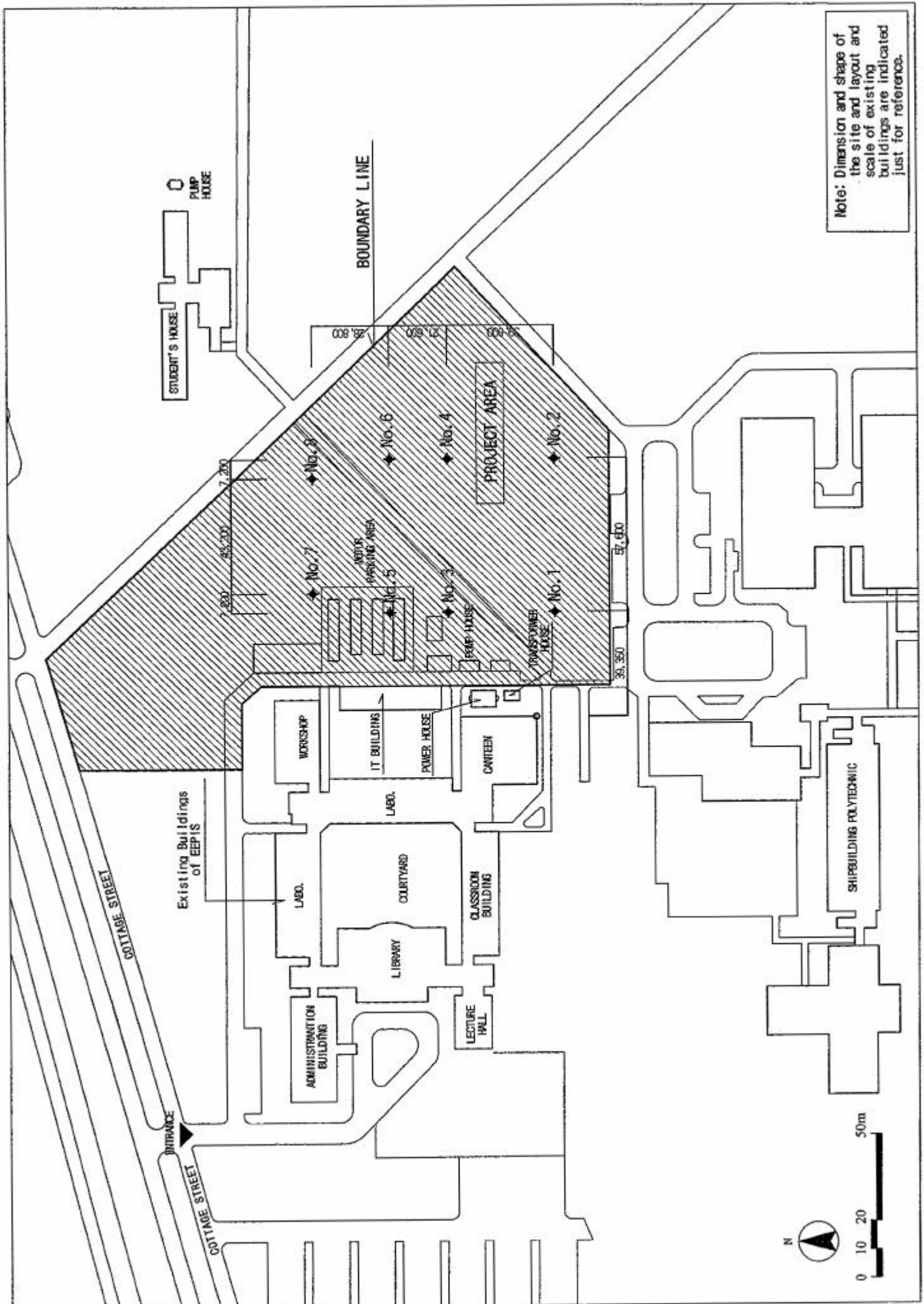
5. POLMAN 関連資料

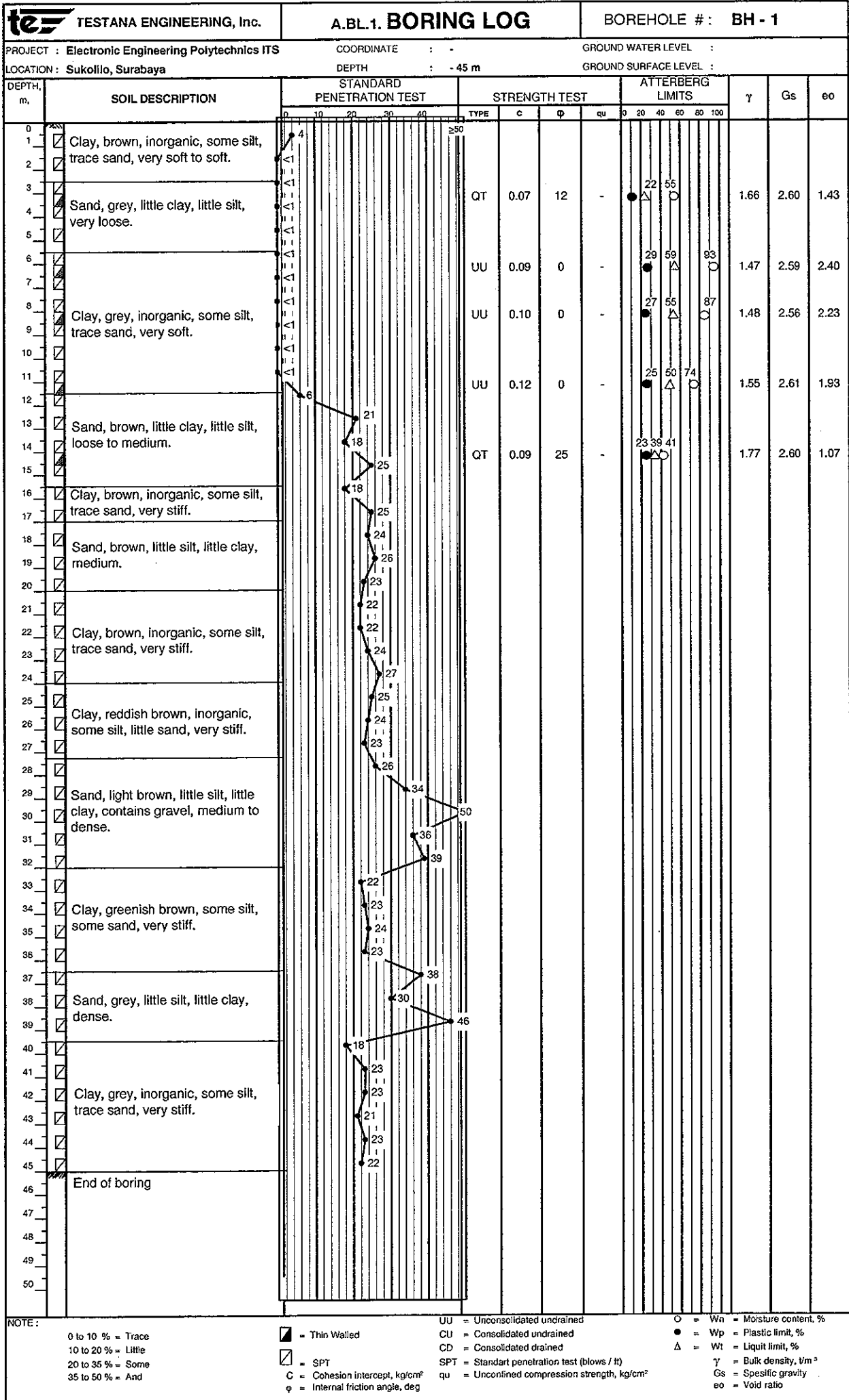
No.	Title	Date
PM-1	POLMAN Brochure (5 Divisions)	010602
PM-2	Academic Program	010602
PM-3	Curriculum	010602

6. PEDC 関連資料

No.	Title	Date
PE-1	Relevant National Plans and Present Situation of Higher Engineering Education	010604
PE-2	Number of Teacher & Student (Polytechnic)	010606
PE-3	Rekapitulasi Dip, Dic & Dics Pada Ptn, Kopertis dan Proyek Pusat di Lingkungan Ditjen Pendidikan Tinggi 1996/1997 s/d 2000	010606
PE-4	Brief explanation concerning with National Development Plan in the sector of Higher Education	010606
PE-5	The Study of Engineering Manpower Development Planning in the Republic of Indonesia Final Report mar.20 1996	010607
PE-6	DRAFT National Development program PROPENAS 2001-2005 3.20 2000	010607







te TESTANA ENGINEERING, Inc.		A.BL.2. BORING LOG				BOREHOLE # : BH - 2													
PROJECT : Electronic Engineering Polytechnics ITS		COORDINATE : -		GROUND WATER LEVEL :															
LOCATION : Sukolilo, Surabaya		DEPTH : - 45 m		GROUND SURFACE LEVEL :															
DEPTH, m,	SOIL DESCRIPTION	STANDARD PENETRATION TEST					STRENGTH TEST			ATTERBERG LIMITS					γ	Gs	eo		
		0	10	20	30	40	TYPE	c	ϕ	qu	0	20	40	60				80	100
0																			
1	Clay, brown, inorganic, some silt, little sand, very soft.																		
2																			
3																			
4	Sand, grey, some clay, little silt, very loose.						QT	0.06	13	-				58			1.64	2.61	1.51
5																			
6							QT	0.08	12	-				56			1.65	2.60	1.46
7																			
8	Clay, grey, inorganic, some silt, trace sand, very soft.						UU	0.08	0	-			25	49	83		1.50	2.58	2.15
9																			
10																			
11							UU	0.11	0	-			23	48	80		1.52	2.59	2.07
12																			
13	Sand, brown, little clay, little silt, medium to dense.						QT	0.14	30	-			25	35	50		1.77	2.60	1.20
14																			
15	Clay, brown, inorganic, some silt, trace sand, very stiff to hard.																		
16																			
17																			
18	Sand, brown, little clay, little silt, contains gravel, dense.																		
19																			
20																			
21	Clay, brown, inorganic, some silt, trace sand, very stiff to hard.																		
22																			
23																			
24																			
25	Clay, reddish brown, inorganic, some silt, little sand, very stiff.																		
26																			
27																			
28	Sand, light brown, little silt, little clay, dense.																		
29																			
30																			
31																			
32																			
33	Clay, light brown, inorganic, some silt, trace sand, very stiff.																		
34																			
35																			
36																			
37																			
38	Sand, brownish grey, little silt, little clay, medium.																		
39																			
40																			
41																			
42	Clay, grey, inorganic, some silt, trace sand, very stiff.																		
43																			
44																			
45	End of Boring																		
46																			
47																			
48																			
49																			
50																			

NOTE:

0 to 10 % = Trace
10 to 20 % = Little
20 to 35 % = Some
35 to 50 % = And

SPT

C = Cohesion intercept, kg/cm²
 ϕ = Internal friction angle, deg

UU = Unconsolidated undrained
CU = Consolidated undrained
CD = Consolidated drained
SPT = Standart penetration test (blows / ft)
qu = Unconfined compression strength, kg/cm²

Wn = Moisture content, %
Wp = Plastic limit, %
Wt = Liquid limit, %
 γ = Bulk density, t/m³
Gs = Specific gravity
eo = Void ratio

NOTE:

0 to 10 % = Trace
10 to 20 % = Little
20 to 35 % = Some
35 to 50 % = And

 = Thin Walled
 = SPT
C = Cohesion intercept, kg/cm²
 ϕ = Internal friction angle, deg

UU = Unconsolidated undrained
CU = Consolidated undrained
CD = Consolidated drained
SPT = Standard penetration test (blows / ft)
qu = Unconfined compression strength, kg/cm²

○ = Wn = Moisture content, %
● = Wp = Plastic limit, %
△ = Wt = Liquid limit, %
 γ = Bulk density, t/m³
Gs = Specific gravity
eo = Void ratio

TESTANA ENGINEERING, Inc.		A.BL.3. BORING LOG				BOREHOLE #: BH - 3.														
PROJECT : Electronic Engineering Polytechnics ITS		COORDINATE : -		GROUND WATER LEVEL :																
LOCATION : Sukolilo, Surabaya		DEPTH : - 45 m		GROUND SURFACE LEVEL :																
DEPTH, m,	SOIL DESCRIPTION	STANDARD PENETRATION TEST				STRENGTH TEST			ATTERBERG LIMITS					γ	Gs	eo				
		0	10	20	30	40	TYPE	c	φ	qu	0	20	40				60	80	100	
0																				
1	Clay, yellowish brown, some silt, trace sand, soft.																			
2																				
3	Sand, grey, trace clay, trace silt, loose.						QT	0.07	19	-				53				1.67	2.60	1.38
4																				
5																				
6																				
7	Clay, grey, inorganic, some silt, trace sand, very soft.						UU	0.10	0	-				29	57	88		1.49	2.60	2.28
8																				
9																				
10																				
11							UU	0.11	0	-				30	62	86		1.50	2.61	2.24
12																				
13	Clay and sand, grey, some silt, soft.																			
14																				
15																				
16	Sand, light brown, little silt, little clay, medium.						QT	0.14	29	-				23	38	48		1.71	2.59	1.24
17																				
18																				
19																				
20							UU	0.72	0	-				30	48	61		1.74	2.63	1.21
21																				
22	Clay, yellowish brown, inorganic, some silt, trace to little sand, stiff to very stiff.																			
23																				
24																				
25																				
26																				
27																				
28																				
29	Sand, brownish grey, little clay, little silt, medium to dense.																			
30																				
31																				
32																				
33	Clay, greyish brown, inorganic, some silt, trace to little sand, very stiff.																			
34																				
35																				
36																				
37																				
38	Sand, light brown, little clay, little silt, medium.																			
39																				
40																				
41																				
42	Clay, grey, inorganic, some silt, trace sand, very stiff.																			
43																				
44																				
45	End of Boring																			
46																				
47																				
48																				
49																				
50																				

NOTE :

0 to 10 % = Trace

10 to 20 % = Little

20 to 35 % = Some

35 to 50 % = And

C = Cohesion intercept, kg/cm²

φ = Internal friction angle, deg

UU = Unconsolidated undrained

CU = Consolidated undrained

CD = Consolidated drained

SPT = Standart penetration test (blows / ft)

qu = Unconfined compression strength, kg/cm²

○ = Wn = Moisture content, %

● = Wp = Plastic limit, %

Δ = Wt = Liquid limit, %

γ = Bulk density, t/m³

Gs = Specific gravity

eo = Void ratio

NOTE:

0 to 10 % = Trace
10 to 20 % = Little
20 to 35 % = Some
35 to 50 % = And

 = Thin Wall
 = SPT
C = Cohesion intercept, kg/cm²
 ϕ = Internal friction angle, deg

UU = Unconsolidated undrained
CU = Consolidated undrained
CD = Consolidated drained
SPT = Standard penetration test (blows / ft)
qu = Unconfined compression strength, kg/cm²

 = Wn = Moisture content, %
 = Wp = Plastic limit, %
 = Wt = Liquit limit, %
 γ = Bulk density, t/m³
Gs = Specific gravity
eo = Void ratio

TESTANA ENGINEERING, Inc.		A.BL.4. BORING LOG				BOREHOLE #: BH - 4													
PROJECT : Electronic Engineering Polytechnics ITS		COORDINATE : -		GROUND WATER LEVEL :															
LOCATION : Sukolilo, Surabaya		DEPTH : - 45 m		GROUND SURFACE LEVEL :															
DEPTH, m,	SOIL DESCRIPTION	STANDARD PENETRATION TEST				STRENGTH TEST			ATTERBERG LIMITS					γ	Gs	eo			
		0	10	20	30	40	TYPE	c	φ	qu	0	20	40				60	80	100
0																			
1	Clay, brownish grey, some silt, inorganic, little sand, very soft.						UU	0.08	0	-		27	52		91		1.47	2.60	2.38
2																			
3																			
4	Sand, grey, little clay, little silt, very soft to soft.						QT	0.09	14	-			55				1.66	2.60	1.43
5							QT	0.07	19	-			53				1.67	2.60	1.38
6																			
7																			
8	Clay, grey, inorganic, some silt, trace sand, very soft.						UU	0.09	0	-		28	58		77		1.54	2.65	2.05
9																			
10																			
11																			
12																			
13	Silt and sand, light brown, little clay, contains gravel at 15 to 15,5 m, loose to medium.			5			QT	0.20	27	-		28	44		48		1.71	2.60	1.25
14				7															
15				8															
16																			
17																			
18																			
19																			
20																			
21																			
22																			
23	Clay, brown, inorganic, some silt, trace to little sand, very stiff.																		
24																			
25																			
26																			
27																			
28	Sand, brownish grey, little clay, little silt, contains gravel at 29 m depth, medium to very dense.																		
29																			
30																			
31																			
32																			
33	Clay and silt, greyish brown, trace to little sand, very stiff.																		
34																			
35																			
36																			
37																			
38																			
39	Sand, grey, little clay, little silt, medium.																		
40																			
41																			
42	Clay, grey, inorganic, some silt, trace sand, very stiff.																		
43																			
44																			
45																			
46	End of boring.																		
47																			
48																			
49																			
50																			

NOTE:

0 to 10 % = Trace
10 to 20 % = Little
20 to 35 % = Some
35 to 50 % = And

SPT

C = Cohesion intercept, kg/cm²
φ = Internal friction angle, deg

UU = Unconsolidated undrained
CU = Consolidated undrained
CD = Consolidated drained
SPT = Standard penetration test (blows / ft)
qu = Unconfined compression strength, kg/cm²

○ = Wn = Moisture content, %
● = Wp = Plastic limit, %
△ = Wt = Liquid limit, %
γ = Bulk density, t/m³
Gs = Specific gravity
eo = Void ratio

NOTE:

0 to 10 % = Trace
10 to 20 % = Little
20 to 35 % = Some
35 to 50 % = And

 = Thin Wall
 = SPT
C = Cohesion intercept, kg/cm²
 ϕ = Internal friction angle, deg

UU = Unconsolidated undrained
CU = Consolidated undrained
CD = Consolidated drained
SPT = Standard penetration test (blows / ft)
qu = Unconfined compression strength, kg/cm²

 = Wn = Moisture content, %
 = Wp = Plastic limit, %
 = Wt = Liquid limit, %
 γ = Bulk density, t/m³
Gs = Specific gravity
eo = Void ratio

TESTANA ENGINEERING, Inc.		A.BL.5. BORING LOG				BOREHOLE # : BH - 5.														
PROJECT : Electronic Engineering Polytechnics ITS		COORDINATE : -		GROUND WATER LEVEL :																
LOCATION : Sukolilo, Surabaya		DEPTH : - 45 m		GROUND SURFACE LEVEL :																
DEPTH, m.	SOIL DESCRIPTION	STANDARD PENETRATION TEST				STRENGTH TEST			ATTERBERG LIMITS					γ	Gs	eo				
		0	10	20	30	40	TYPE	c	ϕ	qu	0	20	40				60	80	100	
0	Clay, yellowish brown, inorganic, some silt, little sand, very soft.																			
1																				
2																				
3																				
4																				
5	Clay, grey, some silt, trace to little sand, contains lime at the upper part, very soft to soft.																			
6																				
7																				
8																				
9																				
10	Sand, dark grey, trace silt, loose																			
11																				
12																				
13																				
14																				
15	Sand, light brown, trace silt, loose																			
16																				
17																				
18																				
19																				
20	Sand, brown, little silt, little clay, loose to medium.																			
21																				
22																				
23																				
24																				
25	Clay, yellowish brown, inorganic, some silt, trace to some sand, stiff to hard.																			
26																				
27																				
28																				
29																				
30	Sand, light brown, little clay, little silt, medium to dense.																			
31																				
32																				
33																				
34																				
35	Clay, greyish brown, inorganic, some silt, trace to little sand, very stiff.																			
36																				
37																				
38																				
39																				
40	Sand, light brown, little silt, little clay, dense.																			
41																				
42																				
43																				
44																				
45	Clay, grey, inorganic, some silt, trace sand, very stiff.																			
46																				
47																				
48																				
49																				
50	End of Boring																			
51																				
52																				
53																				
54																				

NOTE :

0 to 10 % = Trace
10 to 20 % = Little
20 to 35 % = Some
35 to 50 % = And

Thin Walled

SPT

C = Cohesion intercept, kg/cm²

ϕ = Internal friction angle, deg

UU = Unconsolidated undrained
CU = Consolidated undrained
CD = Consolidated drained
SPT = Standart penetration test (blows / ft)
qu = Unconfined compression strength, kg/cm²

Wn = Moisture content, %
Wp = Plastic limit, %
Wt = Liquid limit, %
 γ = Bulk density, t/m³
Gs = Specific gravity
eo = Void ratio

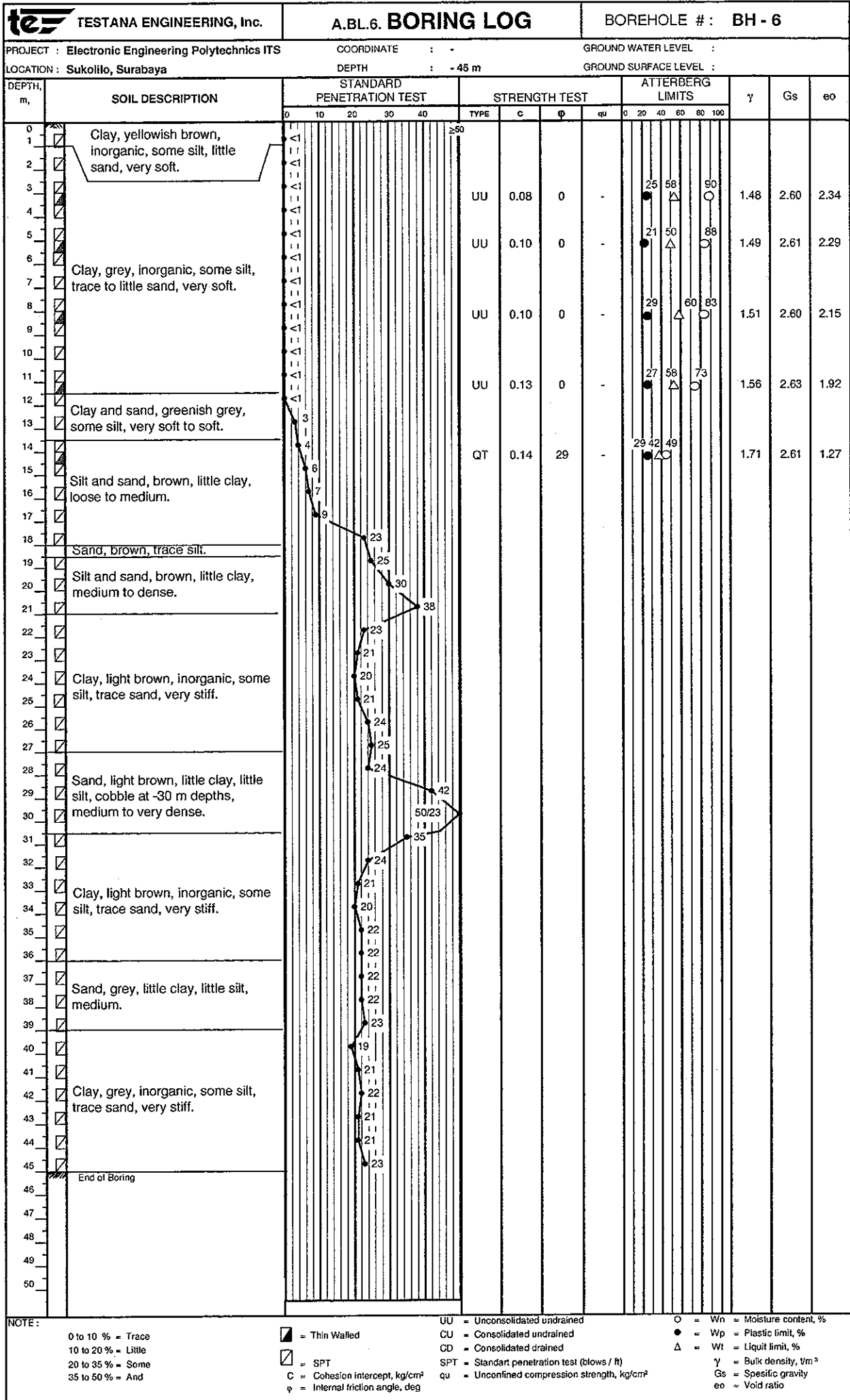
NOTE:

0 to 10 % = Trace
10 to 20 % = Little
20 to 35 % = Some
35 to 50 % = And

 = Thin Wall
 = SPT
C = Cohesion intercept, kg/cm²
 ϕ = Internal friction angle, deg

UU = Unconsolidated undrained
CU = Consolidated undrained
CD = Consolidated drained
SPT = Standard penetration test (blows / ft)
qu = Unconfined compression strength, kg/cm²

○ = Wn = Moisture content, %
● = Wp = Plastic limit, %
△ = Wt = Liquid limit, %
 γ = Bulk density, t/m³
Gs = Specific gravity
eo = Void ratio





TESTANA ENGINEERING, Inc.

A.BL.7. BORING LOG

BOREHOLE #: BH - 7

PROJECT : Electronic Engineering Polytechnics ITS
LOCATION : Sukolilo, SurabayaCOORDINATE : -
DEPTH : - 45 mGROUND WATER LEVEL :
GROUND SURFACE LEVEL :

DEPTH, m,	SOIL DESCRIPTION	STANDARD PENETRATION TEST				STRENGTH TEST				ATTERBERG LIMITS				γ	Gs	eo	
		0	10	20	30	40	TYPE	c	ϕ	qu	0	20	40				60
0	Clay, yellowish brown, inorganic, some silt, little sand.											27	59	89	1.48	2.60	2.32
1							UU	0.09	0	-							
2																	
3	Clay, brownish grey, inorganic, some silt, little sand, very soft.														1.65	2.61	1.47
4	Clay, grey, some silt, trace sand.						QT	0.07	15	-		20	32	56			
5	Sand, grey, little silt, little clay.																
6															1.49	2.61	2.29
7							UU	0.09	0	-		29	58	88			
8																	
9	Clay, grey, inorganic, some silt, trace sand, very soft.														1.52	2.60	2.08
10							UU	0.10	0	-		24	51	80			
11																	
12															1.73	2.62	1.23
13	Silt and sand, brown, some clay, loose to dense.						QT	0.28	29	-		27	41	47			
14																	
15																	
16																	
17																	
18																	
19																	
20																	
21																	
22	Clay, brown, inorganic, some silt, trace sand, very stiff to hard.																
23																	
24																	
25																	
26																	
27	Sand, brown, little clay, little silt.																
28	Clay, light brown, inorganic, some silt, some sand, very stiff.																
29																	
30																	
31																	
32	Clay, greyish brown, inorganic, some silt, trace sand, very stiff.																
33																	
34																	
35																	
36																	
37	Sand, light brown, little clay, little silt, medium to dense.																
38																	
39																	
40	Clay and silt, greyish brown, contains gravel, very stiff.																
41																	
42	Clay, grey, inorganic, some silt, trace sand, very stiff.																
43																	
44																	
45																	
46	End of boring																
47																	
48																	
49																	
50																	

NOTE:

0 to 10 % = Trace
10 to 20 % = Little
20 to 35 % = Some
35 to 50 % = And

▣ = Thin Walled

▣ = SPT

C = Cohesion intercept, kg/cm² ϕ = Internal friction angle, deg

UU = Unconsolidated undrained

CU = Consolidated undrained

CD = Consolidated drained

SPT = Standard penetration test (blows / ft)

qu = Unconfined compression strength, kg/cm²

○ = Wn = Moisture content, %

● = Wp = Plastic limit, %

△ = Wt = Liquid limit, %

 γ = Bulk density, t/m³

Gs = Specific gravity

eo = Void ratio

