

7. その他

- 調査対象校運営状況一覧

調査対象校(既存校)学校運営状況

学校	区	ホロ	校舎	通学区	教室数	生徒/教室	シフト別クラス数				クラス当り生徒数				生徒数(2007-08)				クラス数				教員数			職員数	
							1部	2部	3部	計	PR	LS	HS	計	PR	LS	HS	計	PR	LS	HS	計	クラス担任	教科 教員	計		
1	No. 2 School	Sukhbaatar	6		SU-6,7,8	38	52.4	26	27	0	53	36.3	37.1	42.8	37.6	834	816	342	1,992	23	22	8	53	53	27	80	25
2	No. 3 School	Sukhbaatar	8		SU-8,9,10,11	33	50.4	33	12	1	46	36.3	36.3	35.4	36.2	654	726	283	1,663	18	20	8	46	46	28	74	25
3	No. 16 School	Sukhbaatar	10		SU-10,11,12	25	59.4	24	18	0	42	33.0	36.8	37.9	35.4	594	589	303	1,486	18	16	8	42	42	22	64	22
4	No. 35 School	Sukhbaatar	14		SU-14, CH-13,14	31	58.0	31	21	0	52	34.8	34.3	34.3	34.6	906	617	274	1,797	26	18	8	52	52	20	72	23
5	No. 19 School	Bayangol	20		BY-20, SO-20	17	66.8	16	17	0	33	33.5	36.0	33.0	34.4	502	468	165	1,135	15	13	5	33	33	11	44	20
6	No. 20 School	Bayangol	1		BY-1,4	32	72.5	32	31	0	63	37.1	36.7	36.6	36.8	854	955	512	2,321	23	26	14	63	63	32	95	24
7	No. 40 School	Bayangol	14		BY-14,15,11	27	58.6	27	25	0	52	29.9	31.0	30.2	30.4	598	652	332	1,582	20	21	11	52	52	36	88	17
8	No. 73 School	Bayangol	3		BY-3,1	15	73.7	15	15	3	33	31.1	34.2	36.5	33.5	373	513	219	1,105	12	15	6	33	33	16	49	20
9	Shavi Complex	Bayanzurkh	4	小学校	BZ-4,5,14,22	20	102.6	20	16	4	40	51.3	-	-	51.3	2,052			2,052	40			40				
				中学校		25	70.9	25	25	0	50	-	37.1	31.5	35.4		1,299	473	1,772		35	15	50				
				Total		45	85.0	45	41	4	90	51.3	37.1	31.5	42.5	2,052	1,299	473	3,824	40	35	15	90	90	48	138	38
10	Amgalan Complex	Bayanzurkh	8	I校舎	BZ-8,10,12,23	25	79.0	25	23	3	51	40.8	38.1	36.6	38.7	693	953	329	1,975	17	25	9	51				
				II校舎		3	108.7	3	3	3	9	36.2	-	-	-	326			326	9			9				
				Total		28	82.2	28	26	6	60	39.2	38.1	36.6	38.4	1,019	953	329	2,301	26	25	9	60	60	23	83	27
11	No. 21 School	Bayanzurkh	6		BZ-6,18	25	75.4	25	13	4	42	49.9	42.8	39.6	44.9	849	599	436	1,884	17	14	11	42	42	16	58	28
12	No. 79 School	Bayanzurkh	9	小学校	BZ-9,17	17	92.9	17	17	7	41	39.0	36.0	-	38.5	1,327	252		1,579	34	7		41				
				中学校		14	66.6	14	14	0	28	-	34.4	30.6	33.3		687	245	932		20	8	28				
				Total		31	81.0	31	31	7	69	39.0	34.8	30.6	36.4	1,327	939	245	2,511	34	27	8	69	69	20	89	39
13	No. 85 School	Bayanzurkh	20		BZ-20	14	66.6	14	12	0	26	31.1	38.3	44.0	35.8	373	383	176	932	12	10	4	26	26	14	40	22
14	No. 52 School	Khan-Uul	1		KU-1,2	25	64.3	25	21	0	46	36.0	32.8	37.6	35.0	684	623	301	1,608	19	19	8	46	46	16	62	25
15	No. 5 School	Chingeltei	4		CH-4,6	27	76.5	27	27	2	56	44.2	34.7	27.1	36.9	928	867	271	2,066	21	25	10	56	56	20	76	31
16	No. 57 School	Chingeltei	11		CH-11,12	29	68.9	29	21	0	50	39.4	40.8	39.1	39.9	827	857	313	1,997	21	21	8	50	50	25	75	25
17	No. 12 School	S. Khairkhan	18		SO-18,20	25	72.1	25	20	4	49	41.9	31.9	36.4	36.8	837	637	328	1,802	20	20	9	49	49	17	66	24
合計						467	68.5	453	378	31	862	38.9	36.0	35.3	37.1	14,211	12,493	5,302	32,006	365	347	150	862	862	391	1,253	435

□ 地盤状況調査結果（現地再委託）

79 番学校サイト

52 番学校サイト

12 番学校サイト

Tahilt 新設校サイト

Yarmag 新設校サイト

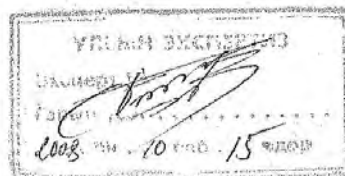
□ 地盤状況調査結果(自社負担による現地再委託)

a. No.79 サイト

Монгол Улс
Сойл Трейд ХХК



Архив№ 2008/076



**“Дунд сургуулийн барилгыг сайжруулах” төслийн
хүрээнд Баянзүрх дүүргийн 79 дугаар сургуулийн
шинээр баригдах хичээлийн
байрны барилгын талбайн инженер-геологийн
судалгааны дүгнэлт**

Уланбаатор хотын Баянзүрх дүүргийн 9 хороо 79 дугаар хороо газар дээр
барилгын талбайн инженер-геологийн судалгааны дүгнэлт

Улаанбаатар
2008

Soil Trade LLC

REPORT OF BOREHOLE: BH-1

and Standard Penetration Test (SPT)

CLIENT: Matsuda Consultants International Co., Ltd
PROJECT: Improvement of Primary Education Facilities (Phase IV)
LOCATION: 79th school, Bayanzurh District, Ulaanbaatar City

SURFACE RL: 1363.4 m
HOLE DEPTH: 10.0 m
GROUND WATER LEVEL: Detected m Stabilized m

DRILLER: Soil Trade LLC
DRILL RIG: UGB-1BS
HOLE DIA:
DATE: 15/07/2008
LOGGED: P.Erdenetsseg

Depth, m	Started depth, m	Ended depth, m	Thickness of stratum, m	Graphic log	Description of soil	Standard Penetration Test				Symbol of sampling	Ground water level	
						Depth, m	Number of blows every 15 cm	Penetration depth, cm	Penetration depth, m			
1	0.0	1.6	1.6		Embankment soil - Clayey SAND - Modern Quaternary age, Technogen deposit (Q _{uv}); dark grey, with domestic and construction wastes	-1.0						
2	1.6	2.5	0.9			-2.0	39/30	14	17	22		
3	2.5	3.7	1.2			Poorly graded GRAVEL with sand and clay (GP-GC) - Upper & Modern Quaternary age's deluvium-proluvium deposit (dpQ _{uv}); yellowish brown, hard consistency, angular gravel	-3.0	34/30	12	16	18	
4						Clayey SAND with gravel (SC) - Upper & Modern Quaternary age's elluvium-deluvium deposit (edQ _{uv}); yellowish brown to brownish grey, highly weathered, hard	-4.0	84/30	24	35	49	
5					SANDSTONE (C ₁) - fractured and weathered sedimentary effusive stone of Low Carbon age	-5.0	50/9	39	50			
6						-6.0						
7						-7.0						
8						-8.0						
9						-9.0						
10	3.7	10.0	6.3			-10.0						
11						-11.0						
12						-12.0						

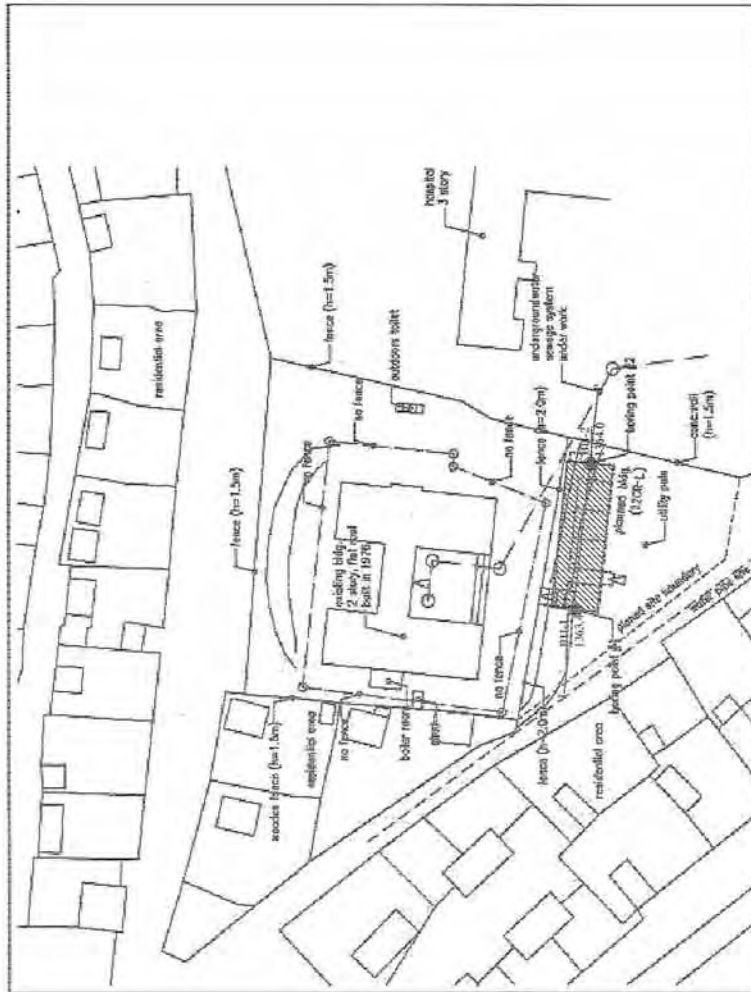
REPORT OF BOREHOLE: BH-2

and Standard Penetration Test (SPT)

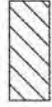



CLIENT: Matsuda Consultants
 International Co., LTD
PROJECT: Improvement of Primary Education Facilities (Phase IV)
LOCATION: 79th school, Bayanzurh District, Ulaanbaatar City
SURFACE RL: 1364.0 m
HOLE DEPTH: 10.0 m
GROUND WATER LEVEL: Detected m Stabilized m
DRILLER: Soil Trade LLC
DRILL RIG: UGB-IBS
HOLE DIA: 168, 146, 127, 112 mm
DATE: 15/07/2008
LOGGED: P.Erdeneetsseg


Depth, m	Started depth, m	Ended depth, m	Thickness of stratum, m	Graphic log	Description of soil	Standard Penetration Test						Symbol of sampling	Ground water level			
						Penetration m	Number of blows every 15 cm	15	30	45	60					
1					Embankment soil - dark grey. Modern Quaternary age, Technogen deposit (Q _{rv}). Clayey SAND.											
2	0.0	2.3	2.3													
3					Clayey SAND with gravel (SC) - Upper & Modern Quaternary age's deluvium-proluvium deposit, yellowish brown, angular, semihard	27	30	10	12	15						
4							33	30	12	17	18					
5	2.3	4.8	2.5		Clayey SAND with gravel (SC) - Upper & Modern Quaternary age's elluvium-deluvium deposit (edQ _{mv}); yellowish brown to brownish grey, highly weathered, hard	34	30	12	15	19						
6	4.8	6.3	1.5				45	30	10	18	27					
7					SANDSTONE (C _i) - fractured and weathered sedimentary effusive stone of Low Carbon age	66	30	27	30	36						
10	6.3	10.0	3.7													
11																
12																

Location Map of Borehole M 1:500



LEGEND

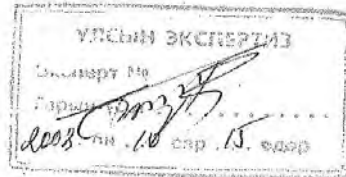
-  Proposed building
-  Existed building
-  Borehole's number and it's elevation
-  Engineering geological cross section and it's number

	SOIL TRADE LLC MONGOLIA		Order 2008
	Geotechnical Investigation & Construction Design		Design Stage Work Draw
Client	Matooda Consultants International Co., LTD	Transportation University Education Facility (Pharmacy 7th school)	Map number 3
Checked by	<i>A. Batsalhan</i>	A. Batsalhan	Scale
Drawn by	<i>T. Altanchimeg</i>	T. Altanchimeg	1:100 v 1:500

Монгол Улс
Сойл Трейд ХХК



Архив № 2008/078



**“Дунд сургуулийн барилгыг сайжруулах” төслийн
хүрээнд Хан-Уул дүүргийн 52 дугаар сургуулийн
шинээр баригдах хичээлийн байрны барилгын
талбайн инженер-геологийн
судалгааны дүгнэлт**

Уланбаатор хот Хан-Уул дүүргийн 1-р хороо 52-р хороо дунд сургуулийн
барилгын талбайн инженер-геологийн судалгааны дүгнэлт

Улаанбаатар
2008

Soil Trade LLC

REPORT OF BOREHOLE: BH-1

AND Standard Penetration Test (SPT)

Appendix 2.1

CLIENT: Maisada Consultants International Co., LTD
PROJECT: Improvement of Primary Education Facilities (Phase IV)
LOCATION: 52th school, Khan-Uul District, Ulaanbaatar City
SURFACE RL: 1286.82 m
HOLE DEPTH: 10.5 m
GROUND WATER LEVEL: Detected 4.0 m Stabilized 3.7 m
DRILLER: Soil Trade LLC
DRILL RIG: UGB-1
HOLE DIA:
DATE: 10/07/2008
LOGGED: P. Erdenetselsig

Depth, m	Started depth, m	Ended depth, m	Thickness of stratum, m	Graphic log	Description of soil	Standard Penetration Test				Symbol of sampling	Ground water level
						Depth, m	Number of blows every 15 cm	Blows	Blows		
1	0.0	1.1	1.1		Embankment soil - yellowish brown to dark brown, dark grey, hard consistency, Modern Quaternary age, Technogen deposit (tQv). Poorly graded GRAVEL with clay and sand, Clayey SAND. Poorly graded GRAVEL with sand (GP) - yellowish brown to dark brown, slightly moist, medium dense, well rounded. Upper & Modern Quaternary age's, Alluvium-Proluvium deposits (apQm-iv).	0.0	15	15	15		
2						1.0	13	13	13		
3						2.0	17	17	17		
4						3.0	19	19	19		
5						4.0	19	19	19		
6						5.0	18	18	18		
7						6.0	19	19	19		
8						7.0	22	22	22		
9						8.0	31	31	31		
10						9.0	29	29	29		

Soil Trade LLC

REPORT OF BOREHOLE: BH-2

AND Standard Penetration Test (SPT)

CLIENT: Matsuda Consultants International Co.,LTD
PROJECT: Improvement of Primary Education Facilities (Phase IV)
LOCATION: 52th school, Khan-Uul District, Ulaanbaatar City
SURFACE RL: 1286.84 m
HOLE DEPTH: 10.5 m
GROUND WATER LEVEL: Detected 4.0 m Stabilized 3.7 m
DRILLER: Soil Trade LLC
DRILL RIG: UGB-1
HOLE DIA: 10/67/2008
DATE: A.Batsaikhan
LOGGED:

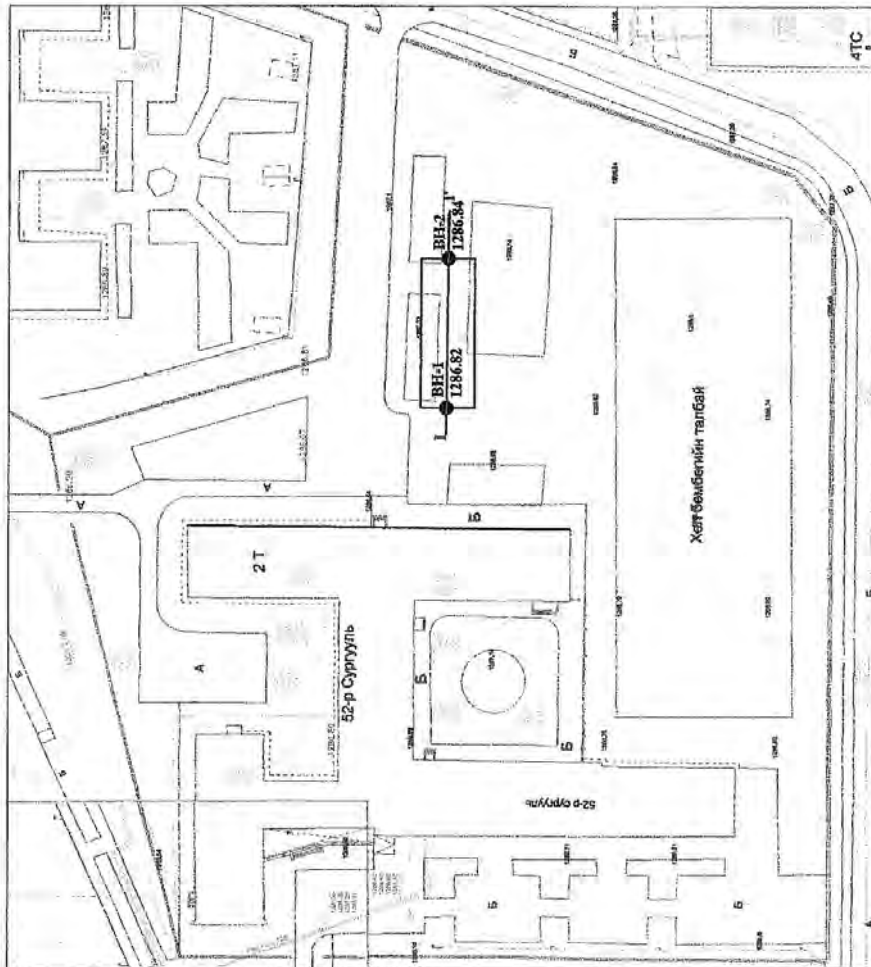
Depth, m	Started depth, m	Ended depth, m	Thickness of stratum, m	Graphic log	Description of soil	Standard Penetration Test				Symbol of sampling	Ground water level		
						Depth, m	Number of blows every 15 cm	Blows	Blows				
1	0.0	1.0	1.0		Embankment soil - yellowish brown to dark brown, dark gray, hard consistency, Modern Quaternary age, Technogen deposit (tQ _{iv}). Poorly graded GRAVEL with clay and sand, Clayey SAND.	0	1	2	3	4	5		
2						34/60	13	15	19				
3						37/60	11	17	20				
4						40/60	15	19	21				
5						45/60	11	21	24				
6						52/60	18	23	29				
7						57/60	14	24	28				
8						61/60	21	29	32				
9						66/60	27	32	41				
10	1.0	10.5	9.5			70/60	28	32	38				

Poorly graded GRAVEL with sand (GP) - yellowish brown to dark brown, slightly moist, medium dense, well rounded. Upper & Modern Quaternary age s. Alluvium-Proluvium deposits (apQ_{im-iv}).

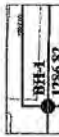
Location Map of Borehole

Appendix 1

M 1:1000



Legend

-  52-р Сургууль
-  BH-1
1286.82
-  BH-1
1286.82
-  I-I

Proposed building

Existed building

Borehole's number and it's elevation

Engineering geological cross section and it's number



SOIL TRADE LLC
Geotechnical
Investigation & Construction
Design

Client	Matsuda Consultants International Co., Ltd	Project name	Improvement of Primary Education Facilities (Phase IV) 57th School
Author	A. Batsalkhan	Date	Jul 16, 2008
Designer	J. Battsetseg	Date	Jul 16, 2008
1:1000		A-4	

Монгол Улс
Сойл Трейд ХХК



Архив№ 2008/075



**“Дунд сургуулийн барилгыг сайжруулах” төслийн
хүрээнд Сонгинохайрхан дүүргийн 12 дугаар
сургуулийн шинээр баригдах хичээлийн
байрны барилгын талбайн инженер-геологийн
судалгааны дүгнэлт**

Уланбаатар хот Сонгинохайрхан дүүргийн 12 дугаар
сургуулийн байрны барилгын талбайн инженер-геологийн
судалгааны дүгнэлт

Улаанбаатар
2008

Soil Trade LLC

REPORT OF BOREHOLE: BH-1

AND Standard Penetration Test (SPT)

CLIENT: Matsuda Consultants
PROJECT: International Co.,LTD
 The Project for Improvement of
 Primary Education Facilities
 (Phase IV)
LOCATION: UB-Songino
 Hairhan 18th horoo

SURFACE RL: 1270.43 m
HOLE DEPTH: 12.0 m
GROUND WATER LEVEL: Detected 7.7 m Stabilized 7.1 m

DRILLER: Soil Trade LLC
DRILL RIG: UGB-1
HOLE DIA: 168,146,127,112 mm
DATE: 28/06/2008
LOGGED: P.Erdenetssetseg

Depth, m	Started depth, m	Ended depth, m	Thickness of stratum, m	Graphic log	Description of soil	Standard Penetration Test				Symbol of sampling	Ground water level	
						Depth, m	Number of blow every 15 cm	15cm	30cm			
1												
2	0.0	1.8	1.8		Embankment soil - yellowish brown to dark brown, dark gray, hard consistency, Modern Quaternary age, Technogen deposit (Q _{IV}). Poorly graded GRAVEL with clay and sand, Clayey SAND.	1.0	29/30	10	13	16	•	
3					Poorly graded GRAVEL with sand and clay (GP-GC) - yellowish brown to light yellowish brown, hard to stiff consistency, subrounded. Upper & Modern Quaternary age's, Alluvium-Proluvium deposits (apQ _{III-IV}).	3.0	37/50	12	17	20	•	
4					Poorly graded GRAVEL with sand and clay (GP-GC) - yellowish brown to light yellowish brown, hard to stiff consistency, subrounded. Upper & Modern Quaternary age's, Alluvium-Proluvium deposits (apQ _{III-IV}).	4.0	41/50	15	19	22	•	
5	1.8	4.7	2.9		Poorly graded GRAVEL with sand (GP) - yellowish brown to dark brown, slightly moist, medium dense, subrounded. Upper & Modern Quaternary age's, Alluvium-Proluvium deposits (apQ _{III-IV}).	5.0	29/30	11	13	16	•	
6	4.7	5.9	1.2		Poorly graded GRAVEL with sand and clay (GP-GC) - yellowish brown to light yellowish brown, hard to stiff consistency, subrounded. Upper & Modern Quaternary age's, Alluvium-Proluvium deposits (apQ _{III-IV}).	6.0	40/30	14	18	22	•	
7					Poorly graded GRAVEL with sand and clay (GP-GC) - yellowish brown to light yellowish brown, hard to stiff consistency, subrounded. Upper & Modern Quaternary age's, Alluvium-Proluvium deposits (apQ _{III-IV}).	7.0	42/30	15	19	23	•	
8					Poorly graded GRAVEL with sand and clay (GP-GC) - yellowish brown to light yellowish brown, hard to stiff consistency, subrounded. Upper & Modern Quaternary age's, Alluvium-Proluvium deposits (apQ _{III-IV}).	8.0	41/30	12	17	24	•	
9					Poorly graded GRAVEL with sand and clay (GP-GC) - yellowish brown to light yellowish brown, hard to stiff consistency, subrounded. Upper & Modern Quaternary age's, Alluvium-Proluvium deposits (apQ _{III-IV}).	9.0	45/30	16	20	25	•	
10					Poorly graded GRAVEL with sand and clay (GP-GC) - yellowish brown to light yellowish brown, hard to stiff consistency, subrounded. Upper & Modern Quaternary age's, Alluvium-Proluvium deposits (apQ _{III-IV}).	10.0	49/30	19	22	26	•	
11					Poorly graded GRAVEL with sand and clay (GP-GC) - yellowish brown to light yellowish brown, hard to stiff consistency, subrounded. Upper & Modern Quaternary age's, Alluvium-Proluvium deposits (apQ _{III-IV}).	11.0	49/30	16	20	29	•	
12	5.9	12.0	6.1		Poorly graded GRAVEL with sand and clay (GP-GC) - yellowish brown to light yellowish brown, hard to stiff consistency, subrounded. Upper & Modern Quaternary age's, Alluvium-Proluvium deposits (apQ _{III-IV}).	12.0	52/50	20	23	29	•	









REPORT OF BOREHOLE: BH-2

AND Standard Penetration Test (SPT)

CLIENT: Matsuda Consultants
PROJECT: International Co.,LTD
 The Project for Improvement of
 Primary Education Facilities
 (Phase IV)
LOCATION: UB-Songino
 Hairham 18th honoo

SURFACE RL: 1270.43 m
HOLE DEPTH: 12.0 m
GROUND WATER LEVEL: Detected 7.8 m Stabilized 7.2 m

DRILLER: Soil Trade LLC
DRILL RIG: UGB-1
HOLE DIA: 168,146,127,112 mm
DATE: 28/06/2008
LOGGED: P.Erdensetseg





Depth, m	Started depth, m	Ended depth, m	Thickness of stratum, m	Graphic log	Description of soil	Standard Penetration Test				Symbol of sampling	Ground water level	
						Depth, m	Number of blows every 15 cm	Penetration rate, m/s	Penetration rate, cm/s			
1												
2	0.0	2.1	2.1		Embankment soil - yellowish brown to dark brown, dark gray, hard consistency, Modern Quaternary age, Technogen deposit (Q _{IV}), Poorly graded GRAVEL with clay and sand, Clayey SAND.	-1.0	39/20	22	19	20		
3					Poorly graded GRAVEL with sand and clay (GP-GC) - yellowish brown to light yellowish brown, hard to stiff consistency, subrounded. Upper & Modern Quaternary age's, Alluvium-Proluvium deposits (apQ _{III-IV}).	-2.0						
4					Poorly graded GRAVEL with sand (GP) - yellowish brown to dark brown, slightly moist, medium dense, subrounded. Upper & Modern Quaternary age's, Alluvium-Proluvium deposits (apQ _{III-IV}).	-3.0	44/26	20	22	22		
5	2.1	5.0	2.9		Poorly graded GRAVEL with sand and clay (GP-GC) - yellowish brown to light yellowish brown, hard to stiff consistency, subrounded. Upper & Modern Quaternary age's, Alluvium-Proluvium deposits (apQ _{III-IV}).	-4.0	27/20	22	12	15		
6	5.0	6.1	1.1		Poorly graded GRAVEL with sand and clay (GP-GC) - yellowish brown to light yellowish brown, hard to stiff consistency, subrounded. Upper & Modern Quaternary age's, Alluvium-Proluvium deposits (apQ _{III-IV}).	-5.0	35/20	11	17	19		
7					Poorly graded GRAVEL with sand and clay (GP-GC) - yellowish brown to light yellowish brown, hard to stiff consistency, subrounded. Upper & Modern Quaternary age's, Alluvium-Proluvium deposits (apQ _{III-IV}).	-6.0	39/20	15	18	21		
8					Poorly graded GRAVEL with sand and clay (GP-GC) - yellowish brown to light yellowish brown, hard to stiff consistency, subrounded. Upper & Modern Quaternary age's, Alluvium-Proluvium deposits (apQ _{III-IV}).	-7.0	41/20	16	19	22		
9					Poorly graded GRAVEL with sand and clay (GP-GC) - yellowish brown to light yellowish brown, hard to stiff consistency, subrounded. Upper & Modern Quaternary age's, Alluvium-Proluvium deposits (apQ _{III-IV}).	-8.0	44/20	14	21	25		
10					Poorly graded GRAVEL with sand and clay (GP-GC) - yellowish brown to light yellowish brown, hard to stiff consistency, subrounded. Upper & Modern Quaternary age's, Alluvium-Proluvium deposits (apQ _{III-IV}).	-9.0	45/20	17	20	25		
11					Poorly graded GRAVEL with sand and clay (GP-GC) - yellowish brown to light yellowish brown, hard to stiff consistency, subrounded. Upper & Modern Quaternary age's, Alluvium-Proluvium deposits (apQ _{III-IV}).	-10.0	49/20	19	22	27		
12	6.1	12.0	5.9		Poorly graded GRAVEL with sand and clay (GP-GC) - yellowish brown to light yellowish brown, hard to stiff consistency, subrounded. Upper & Modern Quaternary age's, Alluvium-Proluvium deposits (apQ _{III-IV}).	-11.0	20/20	19	21	30		


BOREHOLE LOCATION MAP

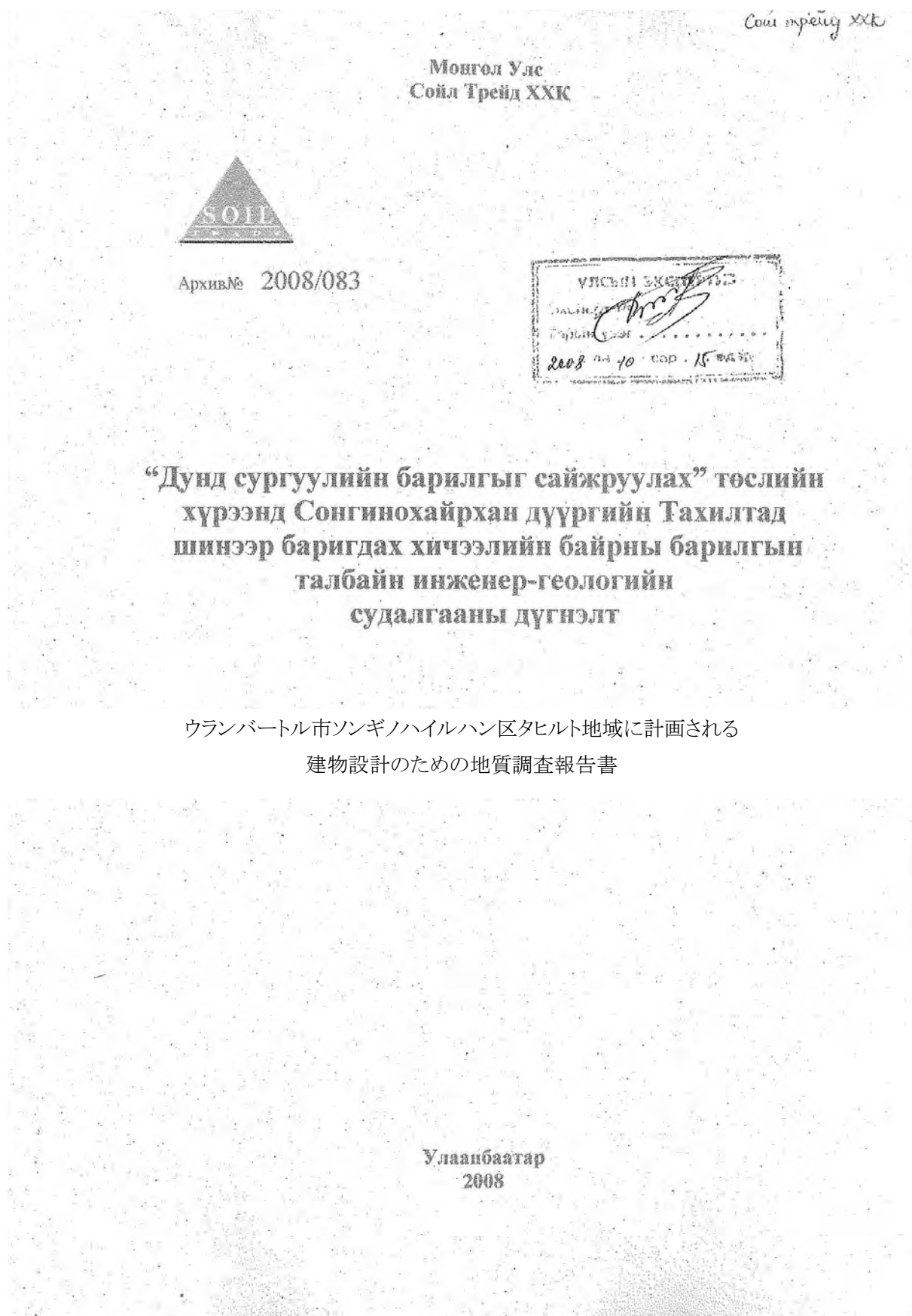
Scale 1:500



LEGEND

-  Existing Building
-  Existing building
-  Borehole Number, Aperture of Elevation, m
-  Number of Engineering-Geological cross section

	SOIL TRADE LLC MONGOLIA	Order 2008
	Geotechnical Investigation & Construction Design	Design Stage Work Draw
Client Matauda Consultants International Co., LTD	The Project for improvement of Heavy Machinery Facilities (Phase IV)	Map number 2
Checked by A. Baisaihan		Scale 1:500
Drawn by P. Erdeneitsseg		



Soil Trade LLC

REPORT OF BOREHOLE: BH-1
and Standard Penetration Test (SPT)

Appendix I

CLIENT: Matsuda Consultants International LLC
 PROJECT: Improvement of Primary Education Facilities
 LOCATION: School at Takhilt, Songinokhairkhan District, Ulaanbaatar City

SURFACE RL: 1295.1 m
 HOLE DEPTH: 10.0 m
 GROUND WATER LEVEL: Detected m Stabilized m

HOLE DIA: 168, 146, 127 mm
 DRILL RIG: URB-50M
 DRILLER: Soil Trade LLC
 DATE: 07.04.2008
 LOGGED: T.Altanchimeg

Depth, m	Soil / Rock Material Description			Standard Penetration Test											Ground water level	Sampling						
	Started depth, m	Ended depth, m	Thickness of stratum, m Graphic log	Symbol	Description of soil	Depth, m	Number of blows every 15 cm											Depth, m	Symbol of sampling			
								15cm	30cm	45cm	0	10	20	30		40	50			60		
0.0	0.4	0.4			Top soil - clayey SAND with gravel, dark brown, with vegetation roots, hard consistency	0.0																
1.0	1.0	1.0		SC	Clayey SAND with gravel - Upper & Modern Quaternary age's, Pleistocene deposit, yellowish brown, hard consistency, angular	1.0	42/30	15	23	19												
2.0	2.0	2.0		GP	Clayey SAND with gravel - Ehnial deposit, yellowish brown to yellowish green, weathered, with lens of Poorly graded GRAVEL.	2.0	45/30	17	22	23												
3.0	3.0	3.0		SC		3.0	50/30	19	26	28												
4.0	4.0	4.0				4.0	71/30	30	29	42												
5.0	5.0	5.0				5.0	79/30	28	36	43												
6.0	6.0	6.0				6.0																
7.0	7.0	7.0			SANDSTONE - Highly weathered sedimentary effusive stone of Low Carbon age, bluish grey	7.0																
8.0	8.0	8.0				8.0																
9.0	9.0	9.0				9.0																
10.0	10.0	10.0				10.0																
11.0	11.0	11.0				11.0																

Soil Trade LLC

REPORT OF BOREHOLE: BH-2
and Standard Penetration Test (SPT)

CLIENT: Matsuda Consultants International LLC
 PROJECT: Improvement of Primary Education Facilities
 LOCATION: School, District, Ulaanbaatar City

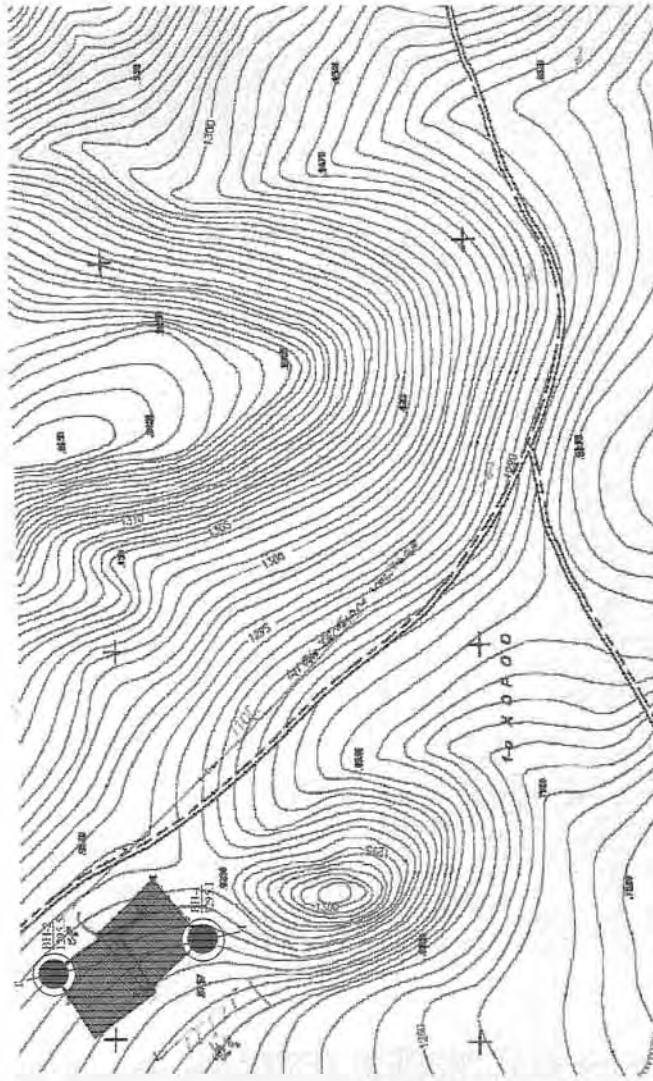
SURFACE RL: 1295.5 m
 HOLE DEPTH: 10.0 m
 GROUND WATER LEVEL: Detected m Stabilized m

HOLE DIA: 168, 146, 127 mm
 DRILL RIG: URB-50M
 DRILLER: Soil Trade LLC
 DATE: 07.04.2008
 LOGGED: T.Altanchimeg




Depth, m	Soil / Rock Material Description			Standard Penetration Test											Ground water level	Sampling						
	Started depth, m	Ended depth, m	Thickness of stratum, m Graphic log	Symbol	Description of soil	Depth, m	Number of blows every 15 cm											Depth, m	Symbol of sampling			
								15cm	30cm	45cm	0	10	20	30		40	50			60		
0.0	0.5	0.5			Top soil - Dark brown, with vegetation roots, hard consistency, clayey SAND with gravel	0.0																
1.0	1.0	1.0		SC	Clayey SAND with gravel - Upper & Modern Quaternary age's, Pleistocene deposit, yellowish brown, hard consistency, angular	1.0	43/30	17	23	20												
2.0	2.0	2.0		SC	Clayey SAND with gravel - Ehnial deposit, yellowish brown to yellowish green, weathered	2.0	46/30	18	22	24												
3.0	3.0	3.0				3.0	52/30	19	25	27												
4.0	4.0	4.0				4.0	74/30	31	30	44												
5.0	5.0	5.0				5.0	82/30	27	37	45												
6.0	6.0	6.0				6.0																
7.0	7.0	7.0			SANDSTONE - Highly weathered sedimentary effusive stone of Low Carbon age, bluish grey	7.0																
8.0	8.0	8.0				8.0																
9.0	9.0	9.0				9.0																
10.0	10.0	10.0				10.0																
11.0	11.0	11.0				11.0																




Location Plan of Investigation Area

M 1:500



LEGEND

-  Proposed building
-  Borehole's number and it's elevation
-  Engineering geological cross section and it's number

	SOIL TRADE LLC MONGOLIA		Order	2008
	Geotechnical Investigation & Construction Design		Design Stage	Work Draw
Client	Matsuda Consultants International Co., LTD	Improvement of Primary Education in Ulaanbaatar	Map number	3
Checked by		A. Batsaihan	Scale	1:500
Drawn by		T. Altanchimeg		

Soil Trade LLC

REPORT OF BOREHOLE: BH-1

and Standard Penetration Test (SPT)

CLIENT: Matsuda Consultants International LLC
PROJECT: Improvement of Primary Education Facilities (phase4)
LOCATION: Y armag school, Khan-Uul District, Ulaanbaatar City
SURFACE RL: 99.8 m
HOLE DEPTH: 10.5 m
GROUND WATER LEVEL: Detected m Stabilized m
HOLE DIA: 168, 146, 127 mm
DRILL RIG: URB-50M
DRILLER: Soil Trade LLC
DATE: 07.17.2008
LOGGED: J.Battsetseg

Depth, m	Started depth, m	Ended depth, m	Thickness of stratum, m	Visual classification	Symbol	Description of soil	Standard Penetration Test				Ground water (Stabilized)	Sampling		
							Depth, m	Number Blows	Number of every 15 cm			Depth, m	Symbol of sampling	
									1.5cm	30cm	45cm			
1.0	0.2	0.7	0.2	VS-S	GP	Poorly graded GRAVEL with sand - Upper & Modern Quaternary age's, deluvium-proluvium deposit, yellowish brown, medium dense, slightly moist	1.0	28/30	12	12	14		1.0	•
2.0	0.2	1.3	1.1	VS-S	GP-GC	Poorly graded GRAVEL with sand and clay - Upper & Modern Quaternary age's, deluvium-proluvium deposit, brownish grey, medium dense, hard consistency	2.0	29/30	7	14	15		2.0	•
3.0	1.3	2.7	1.4	VS-S	GP	Poorly graded GRAVEL with sand - Upper & Modern Quaternary age's, deluvium-proluvium deposit, yellowish brown, medium dense, slightly moist	3.0	52/30	17	23	29			
4.0	2.7	3.8	1.1	VS-S	GP	Poorly graded GRAVEL with sand - Upper & Modern Quaternary age's, deluvium-proluvium deposit, yellowish brown, medium dense, slightly moist	4.0	37/30	12	19	18			
5.0				VS-S	SC	Clayey SAND and clayey Sand with gravel - Upper & Modern Quaternary age's, deluvium-proluvium deposit, yellowish brown, loose, hard consistency	5.0	18/30	6	7	11			
6.0	3.8	6.1	2.3	VS-S	SC	Clayey SAND - Neogene age's, brownish red, loose, hard consistency	6.0	24/30	8	12	12			
7.0				VS-S	SC	Clayey SAND - Neogene age's, brownish red, loose, hard consistency	7.0	23/30	11	11	12			
8.0				VS-S	SC	Clayey SAND - Neogene age's, brownish red, loose, hard consistency	8.0	27/30	7	14	13			
9.0				VS-S	SC	Clayey SAND - Neogene age's, brownish red, loose, hard consistency	9.0	24/30	8	11	13			
10.0	6.1	10.5	4.4	VS-S	SC	Clayey SAND - Neogene age's, brownish red, loose, hard consistency	10.0	24/30	10	11	14			
11.0				VS-S			11.0							

Soil Trade LLC

REPORT OF BOREHOLE: BH-2

and Standard Penetration Test (SPT)

CLIENT: Matsuda Consultants International LLC
PROJECT: Improvement of Primary Education Facilities (phase4)
LOCATION: Yarnag school, Khan-Uul District, Ulaanbaatar City
SURFACE RL: 99.7 m
HOLE DEPTH: 10.5 m
GROUND WATER LEVEL: Detected m Stabilized m
HOLE DIA: 168, 146, 127 mm
DRILL RIG: URB-50M
DRILLER: Soil Trade LLC
DATE: 07.17.2008
LOGGED: J.Battsetseg

Depth, m	Started depth, m	Ended depth, m	Thickness of stratum, m	Visual classification	Symbol	Description of soil	Standard Penetration Test				Ground water (Stabilized)	Sampling			
							Depth, m	Number Blows Per 30cm Penetration depth	Number of every 15 cm			Depth, m	Symbol of		
0.0	0.0	0.2	0.2	SC		Unconsolidated soil - dark brown, silty with occasional									
1.0	0.2	1.3	1.1	GP	GP	Poorly graded GRAVEL with sand - Upper & Modern Quaternary age's, Deluvium-Proluvium deposits, yellowish brown, medium dense, slightly moist	23/30	10	11	12			1.0	•	
2.0	1.3	2.7	1.4	GP-GC	GP-GC	Poortly graded GRAVEL with sand and clay - Upper & Modern Quaternary age's, Deluvium-Proluvium deposits, brownish grey, medium dense, hard consistency.	31/30	12	13	18			2.0	•	
3.0	2.7	3.5	0.9	GP	GP	Poorly graded GRAVEL with sand - Upper & Modern Quaternary age's, Deluvium-Proluvium deposits, yellowish brown, medium dense, slightly moist	51/30	21	25	26			4.0	•	
4.0	3.5	6.2	2.6	SC	SC	Clayey SAND and clayey with gravel SAND - Upper & Modern Quaternary age's, Deluvium-Proluvium deposits, yellowish brown, silty dense, hard consistency.	33/30	7	16	17			6.0	•	
5.0	6.2	10.5	4.3	SC	SC	Clayey SAND - Neogen age's, deposits, brownish red, silty dense, hard consistency.	31/30	12	19	12			8.0	•	
6.0	6.2	10.5	4.3	SC	SC	Clayey SAND - Neogen age's, deposits, brownish red, silty dense, hard consistency.	27/30	10	11	16			10.0	•	
7.0							31/30	11	14	15					
8.0							23/30	14	13	10					
9.0							29/30	8	11	18					
10.0							31/30	10	13	18					
11.0															

Location Map of Borehole

Appendix 1

M 1:2000

