4. Minutes of Discussions

4-1. Basic Design Study

Minutes of Discussions

on

the Basic Design Study on the Project for the Improvement of Primary Education Facilities (phase IV) in Mongolia

In response to a request from the Government of Mongolia, the Government of Japan has decided to conduct a Basic Design Study on the Project for the Improvement of Primary Education Facilities (phase IV) (hereinafter referred to as "the Project") and entrusted the study to Japan International Cooperation Agency (hereinafter referred to as "JICA").

JICA sent to Mongolia the Basic Design Study Team (hereinafter referred to as "the Team") headed by Mr. Akihiko Hoshino, Director, Project Management Division II, Grant Aid and Loan Support Department, JICA, and is scheduled to stay in the country from 2 June to 28 June 2008.

The Team held discussions with the officials concerned of the Government of Mongolia and conducted a field survey at the study areas.

In the course of discussions and the field survey, both parties confirmed the main items described in the attached sheets. The Team will proceed to further works and prepare the Basic Design Study Report.

Ulaanbaatar, 9 June 2008

Mr. Akihiko Hoshino Leader Basic Design Study Team Japan International Cooperation Agency

Mr. Ganbaatar Jadambaa Acting Director Department of Finance and Economy Ministry of Education, Culture and Science Mongolia

Mr. Enkhbayar Demberel Superintendent Education Department of Ulaanbaatar City Mongolia

(witness)

Mr. Khurenbaatar Baavgai Director General Department of Economic Cooperation Policy and Coordination Ministry of Finance and Economy Mongolia

ATTACHMENT

1. Objective of the Project

The objective of the Project is to improve the physical educational environment of basic schools in Ulaanbaatar, Capital City of Mongolia (hereinafter referred to as "UBC") by extending the capacity of existing schools, constructing new schools and providing basic educational equipment.

2. Project Sites

The 27 sites listed in Annex-1 have been confirmed as the candidate sites to be surveyed for the Project.

- Responsible and Implementing Organization
- 3-1 The responsible organization is the Ministry of Education, Culture and Science of Mongolia (hereinafter referred to as "MECS"). The organization chart of the MECS is attached as Annex-2.
- 3-2 The implementing agency is the Department for Education of UBC.

The organization chart of the Department for Education of UBC is attached as Annex-3.

Items requested by the Government of Mongolia

After a series of discussions with the Team, the Mongolian side requested the items described in Annex-1 and Annex-4. JICA will assess the appropriateness of the request, and the final component of the Project will be determined after further study.

- 5. Japan's Grant Aid Scheme
- 5-1. The Mongolian side understood the Japan's grant aid scheme explained by the Team, as described in Annex-5.
- 5-2. The Mongolian side will take the necessary measures, described in Annex-6 for the smooth implementation of the Project on condition that the Japan's grant aid is extended to the Project.
- 6. Schedule of the Study
- 6-1. The consultant team will proceed to further studies in Mongolia until 28 June 2008. QX X

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- 6-2. JICA will prepare a Draft Report in English and dispatch a mission to explain the outline of the Basic Design around in October 2008.
- 6-3. In the event of the Draft Report being acceptable in principle by the Mongolian side, JICA will complete the Final Report and send it to the Government of Mongolia by around February 2009.

7. Other Relevant Items

7-1. Selection Criteria of the Project sites

Both sides agreed that the candidate schools would be selected according to the selection criteria listed in Annex-7.

7-2. The priority of candidate school

The Mongolian side explained that the new construction of schools takes precedence over the extension of existing schools.

7-3. Land for the Project

The Mongolian side agreed to provide the evidence of land ownership of the candidate schools authorized by the governor of UBC to the Japanese side by 27 June 2008.

7-4. Demolishing work

The Mongolian side agreed to implement demolishing works, which would be identified by the Japanese side as necessary, before the commencement of the construction to be implemented by the Japanese side.

7-5. Operation and maintenance

The Mongolian side agreed to allocate necessary budget for teaching and administrative staff members for the proper and effective operation and maintenance of facilities and equipment covered by the Project.

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Annex-1 List of Candidate Schools

	ension	
No.	School Name	District
1	School No.2	
2	School No.3	C. Hill (
3	School No.16	Sukhbaatar
4	School No.35	
5	School No.40	
6	School No.73	
7	School No.19	Bayangol
8	School No.20	
9	School No.21	
10	Amgalan School complex	
11	School No.79	Bayanzurkh
12	Shavi school complex	
101	School No.85	
14	School No.52	Khan-Uul
15	School No.5	
16	School No.57	Chingeltei
17	School No.12	Songinokhairkhan

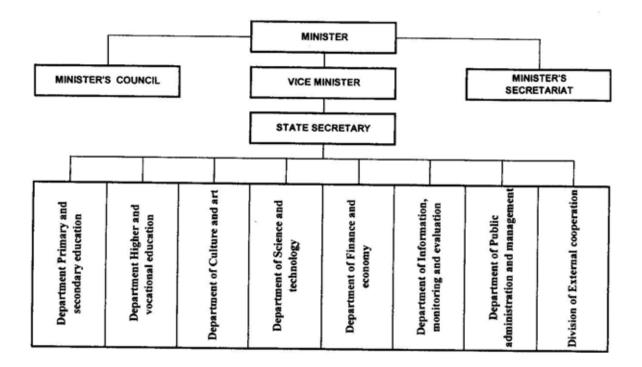
New Construction

No.	Location	District
1	Khujir-Bulan	
2	Nogooni zoori	Bayanzurkh
3	7th bus stop	Chingeltei
4	61th Garam	
5	Bayankhoshuu Western	
6	Near Bayangol	Songino-Khairkhan
7	Near Takhilt	
8	Yarmag	Khan-uul
9	Near 100 ail	
10	AZE School	Sukhbaatar

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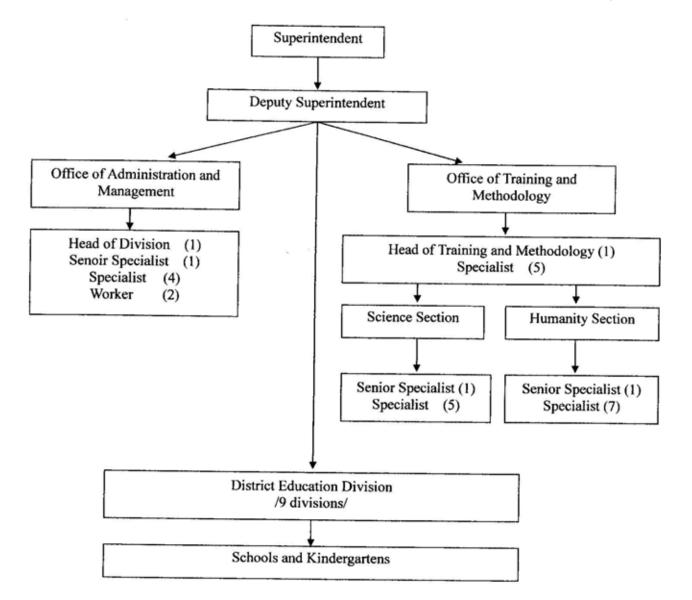


Annex-2 Organization Chart of the Ministry of Education, Culture and Science of Mongolia

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Annex-3 Organization Chart of Education Department of Ulaanbaatar City

Note: () indicates the number of the staff members.

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Annex-4 Major Components Requested for the Project

1. Facilities

1-1. Components for School Extension

Classroom

(2) Teacher's room

(3) Cloakroom

(4) Toilet and hand washing places

1-2. Components for New School Construction

(1) Classroom

(2) Teacher's room

(3) Cloakroom

(4)Toilet and hand washing places

(5) Gym

(6) Kitchen

(7)Computer room

(8)Chemistry room

(9)Physics room

(10)Vocational training room

2. Equipment

(1)Basic educational furniture

(2)Basic teaching material

·Geographical map of Mongolia

Administrative map of Mongolia

Mineral resources map of Mongolia

Botanical map of Mongolia

·Zoological map of Mongolia

World geographical map

·Chemical elements chart

·Unit chart

Human body dissection chart

·Cyrillic alphabet chart for Mongolia

Thermometer

Compass

Tape measure

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·Geometrical blocks

Abacus

•T-shape ruler

·Ruler set

Multiplication table

Overhead projector

(3)Maintenance tools

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Annex-5 The Japan's Grant Aid Scheme

The Grant Aid Scheme provides a recipient country with non-reimbursable funds to procure the facilities, equipment and services (engineering services and transportation of the products, etc.) for economic and social development of the country under principles in accordance with the relevant laws and regulation of Japan. The Grant Aid is not supplied through the donation of materials as such.

- 1. Japan's Grant Aid Procedures
- (1) The Japan's Grant Aid Program is executed by the following procedures.
- Application (request made by a recipient country)
- Study (Basic Design Study conducted by JICA)
- Appraisal & Approval (appraisal by the Government of Japan and approval by the Cabinet of Japan)

Determination of Implementation (Exchange of Notes between both Governments) Implementation (implementation of the Project)

(2) Firstly, an application or a request for a Grant Aid project submitted by the recipient country is examined by the Government of Japan (the Ministry of Foreign Affairs) to determine whether or not it is eligible for Japan's Grant Aid. If the request is deemed appropriate, the Government of Japan assigns JICA to conduct a study on the request. If necessary, JICA sends a Preliminary Study Team to the recipient country to confirm the contents of the request.

Secondly, JICA conducts the study (Basic Design Study), using (a) Japanese consulting firm(s).

Thirdly, the Government of Japan appraises the project to see whether or not it is suitable for Japan's Grant Aid Program, based on the Basic Design Study Report prepared by JICA and the results are then submitted to the cabinet for approval.

Fourthly, the project approved by the cabinet becomes official with the Exchange of Notes signed by the Government of Japan and the recipient country.

Finally, for the implementation of the Project, JICA assists the recipient country in preparing contracts and so on.

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2. Basic Design Study

(1)Contents of the Study

The aim of the Basic Design Study (hereinafter referred to as "the Study"), conducted by JICA on a requested project (hereinafter referred to as "the Project") is to provide a basic document necessary for appraisal of the project by the Japanese Government. The contents of the Study are as follows:

- a) Confirmation of the background, objectives, and benefits of the Project and also institutional capacity of agencies concerned of the recipient country necessary for the Project's implementation,
- b) Evaluation of the appropriateness of the Project for the Grant Aid Scheme from a technical, social and economical point of view,

c) Confirmation of items agreed on by the both parties concerning a basic concept of the Project,

- d) Preparation of a basic design of the Project,
- e) Estimation of cost of the Project,

The contents of the original request are not necessarily approved in their initial form as the contents of the Grant Aid project. The Basic Design of the project is confirmed considering the guidelines of Japan's Grant Aid Scheme.

The Government of Japan requests the Government of the recipient country to take whatever measures are necessary to ensure its self-reliance in the implementation of the Project. Such measures must be guaranteed even through they may fall outside of the jurisdiction of the organization in the recipient country actually implementing the Project. Therefore, the implementation of the Project is confirmed by all relevant organizations of the recipient country through the Minutes of Discussions.

(2)Selection of Consultants

For smooth implementation of the study, JICA uses (a) registered consultant firm(s). JICA selects (a) firm(s) based on proposals submitted by the interested firms. The firm(s) selected carry(ies) out a Basic Design Study and write(s) a report, based upon terms of reference set by JICA.

The consulting firm(s) used for the study is (are) recommended by JICA to a recipient country to also work in the Project's implementation after Exchange of Notes, in order to maintain technical consistency between the Basic Design and detailed Design.

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Japan's Grant Aid Scheme

(1) Exchange of Notes (E/N)

Japan's Grant Aid is extend in accordance with the Notes exchanged by the two Government concerned, in which the objectives of the Project, period of execution, conditions and amount of the Grant Aid etc., are confirmed.

(2)"The period of the Grant Aid" means one Japanese fiscal year which the Cabinet approves the Project for. Within the fiscal year, all procedure such as exchanging of the Notes, concluding a contract with (a) consulting firm(s) and (a) contractor(s) and final payment to them must be completed.

However, in case of delays in delivery, installation or construction due to unforeseen factors such as weather, the period of the Grant Aid can be further extended for a maximum of one fiscal year at most by mutual agreement between the two Governments.

(3) Under the Grant, in principle, Japanese products and services including transport or those of the recipient country are to be purchased.

When the two Governments deem it necessary, the Grant may be used for the purchase of products or services of a third country.

However the prime contractors, namely, consulting, contractor and procurement firms, are limited to "Japanese nationals". (The term "Japanese nationals" means persons of Japanese nationality or Japanese corporations controlled by persons of Japanese nationality.)

(4) Necessity of the "Verification"

The Government of the recipient country or its designated authority will conclude contracts denominated in Japanese yen with Japanese nationals. Those contracts shall be verified by the Government of Japan. This "Verification" is deemed necessary to secure accountability to Japanese tax payers.

(5)Undertakings Required to the Government of the Recipient Country

In the implementation of the Grant Aid project, the recipient country is required to undertake such necessary measures as the following:

a) To secure land necessary for the sites of the project, and to clear, level and reclaim the land prior to commencement for the construction,

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- b) To provide facilities for distribution of electricity, water supply and drainage and other incidental facilities in and around the sites,
- c) To secure buildings prior to the installation work in case the installation of the equipment,
- d) To ensure all the expenses and prompt execution for unloading, customs clearance at the port of disembarkation and internal transportation of the products purchased under the Grant Aid,
- e) To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which may be imposed in the recipient country with respect to the supply of the products and services under the Verified Contracts,
- f) To accord Japanese nationals whose services may be required in connection with the supply of the products and services under the Verified Contracts, such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work.

(6)Proper Use

The recipient country is required to maintain and use the facilities constructed and equipment purchased under the Grant Aid properly and effectively and to assign staff necessary for the operation and maintenance as well as to bear all expenses other than those covered by the Grant Aid.

(7) Re-export

The products purchased under the Grant Aid shall not be re-exported from the recipient country.

(8) Banking Arrangement (B/A)

a) The Government of the recipient country or its designated authority should open an account in the name of the Government of the recipient country in an authorized foreign exchange bank in Japan (hereinafter referred to as "the Bank"). The Government of Japan will execute the Grant Aid by making payments in Japanese yen to cover the obligations incurred by Government of the recipient country or its designated authority under the Verified Contracts.

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b) The payments will be made when payment requests are presented by the bank to the Government of Japan under an Authorization to Pay (A/P) issued by the Government of the recipient country or its designated authority.

(5) Authorization to Pay (A/P)

The Government of the recipient country should bear an advising commission of an Authorization to Pay and payment commissions to the Bank.

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No	Items	To be covered by Grant Aid	
1	To secure land		. Olde
2	To clear, level and reclaim the site when needed		•
3	To construct gates and fences in and around the site		•
4	To construct the parking lot when needed		•
5	To construct roads		
	1) Within the site	•	i
	2) Outside the site		•
6	To construct the building	•	
7	To provide facilities for the distribution of electricity, water supply, drainage and other incidental facilities		
	1) Electricity	1	
	a. The distributing line to the site		•
	b. The drop wiring and internal wiring within the site	•	
	c. The main circuit breaker and transformer	•	
	2) Water Supply		
	a. The city water distribution main to the site	i i	•
	b. The supply system within the site (receiving and elevated tanks)	i • i	-
	3) Drainage		
	a. The city drainage main (for storm sewer and others to the site)	i i	•
	 b. The drainage system (for toilet sewer, ordinary waste, storm drainage and others) within the site 	•	
	4) Heating	i	
	a. The public or private heating inlet and outlet pipes to the buildings		•
	b. The heating system inside buildings	•	-
	5) Telephone System		
i	 a. The telephone trunk line to the main distribution frame/panel (MDF) of the building 		٠
	b. The MDF and the extension after the frame/panel	•	
	6) Furniture and Equipment		
	a. General furniture	i	•
	b. Project equipment	•	•
8	To bear the following commissions to the Japanese bank for banking services based upon the B/A		
- 1	 Advising commission of A/P 	1	•
_	2) Payment commission		•
9	To ensure unloading and customs clearance at port of disembarkation in recipient country		
	1) Marine (Air) transportation of the products from Japan the recipient	•	
	2) Tax exemption and custom clearance of the products at the port of disembarkation	t	•
	 Internal transportation from the port of disembarkation to the project site 	•	
	To accord Japanese nationals, whose service may be required in connection with the supply of the products and the services under the verified contract, such facilities as may be necessary for their entry into the recipient country and stay therein for the performance of their work	1	•
u	To exempt Japanese nationals from customs duties, internal taxes and other fiscal levies which may be imposed in the recipient country with respect to the supply of the products and services under the verified contracts		٠
_	To maintain and use properly and effectively the facilities contracted and equipment provided under the Grant		•
	To bear all the expenses, other than those to be borne by the Grant, necessary for construction of the facilities as well as for the transportation and installation of the equipment		•

Annex - 6 Necessary Undertakings to be Taken by Each Government

(B/A : Banking Arrangement, A/P : Authorization to pay)

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The sites/schools to be covered by the Project shall fulfill the following criteria:

- (1) Land ownership or proper land use right for school construction is legally secured with the written evidence.
- (2) No dwelling or obstacle such as underground service line which need extensive relocation exists within the site.
- (3) No other classroom construction program at the same site planned by MECS, UBC, other donors, NGOs, etc.
- (4) Topographically safe and appropriately sized land for construction is secured.
- (5) Access road for construction works and transportation of materials is properly provided.
- (6) School is open to general public with no special qualification being required for admission.
- (7) Sufficient teachers, staff and budget for proper operation and maintenance of the facilities are secured by the relevant authorities.
- (8) Present and future facility demand can be quantitatively estimated by a set of data such as number of school-aged children in the catchment area, planned population of ongoing housing development, etc.

Among the sites/schools which satisfy the above conditions, order of priority will be given according the following criteria:

- (1) Priority will be given to the sites where recent population increase is remarkable or no school is established within the target school district.
- (2) Priority will be given to the sites where the school is forced to operate triple-shift sessions.
- (3) Priority will be given to the sites where extension of classrooms is urgently required because of overcrowding of existing facilities even after the introduction of double-shift classes.
- (4) Priority will be given to the sites where shortage of classrooms calculated based on the demand analysis is beyond the size for efficient operation and construction.

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Minutes of Discussions on the Basic Design Study on the Project for the Improvement of Primary Education Facilities (PhaseIV) in Mongolia (EXPLANATION ON DRAFT REPORT)

In June 2008, the Japan International Cooperation Agency (JICA) dispatched a Basic Design Study Team on the Project for the Improvement of Primary Education Facilities (Phase IV) (hereinafter referred to as "the Project") to Mongolia, and through discussions, site surveys and technical examination of the results in Japan, JICA prepared a draft report of the study.

In order to explain and to consult the Mongolian side on the components of the draft report, JICA sent to Mongolia the Draft Report Explanation Team (hereinafter referred to as "the Team"), which is headed by Mr. Kazutoshi ONUKI, Deputy Resident Representative, JICA Mongolia Office, from October 13th to 22nd, 2008.

As a result of discussions, both sides have confirmed the main items described on the attached sheet.

Ulaanbaatar, 17 October, 2008

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Mr. Kazutoshi Onuki Leader Basic Design Study Team Japan International Cooperation Agency

Mr. Narantsogt Sanjaa Director Department of Finance and Economy Ministry of Education, Culture and Science Mongolia

Mr. Enkhbayar Demberel Superintendent Education Department of Ulaanbaatar City Mongolia

(witness)

Mr. Dorjkhand Togmid Deputy Director Department of Policy and Coordination for Loans and Aid Ministry of Finance Mongolia

ATTACHMENT

1. Components of the draft report

The Mongolian side agreed and accepted in principle the contents of the draft report proposed by the Team.

2. Japan's Grant Aid Scheme

The Mongolian side understands the Japan's Grant Aid Scheme and the necessary measures to be taken by the Government of Mongolia as explained by the Team and described in Annex-4 and Annex-5 of the Minutes of Discussions signed by both parties on June 9th 2008.

3. Final Report

JICA will complete the final report in accordance with the result of discussions and forward it to the Mongolian side around February 2009.

4. Other relevant issues

4-1. Schools and facilities covered by the Project

Both sides agreed on schools and components covered by the Project as shown in Annex-1. The Mongolian side agreed that the Japanese side would make final decision on this matter through further study in Japan.

4-2. Allocation of necessary budget and personnel

The Mongolian side agreed to allocate enough budget and personnel (teachers and general staff) to properly operate and maintain the facilities and equipment covered by the Project.

4-3. Securing proposed building sites

The Mongolian side confirmed that they would secure the identified building sites in the recipient schools by the actual construction work starts.

4-4. Proper use and maintenance

Both sides understood that proper use and maintenance of the facilities would be indispensable for the lifelong use. The Mongolian side assured the Japanese side that it will facilitate the proper use and maintenance the of facilities in the schools covered by the Project with

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the active involvement of concerned parties such as District education officer, schools, communities and so on.

4-5. Students transferring plan for newly built schools

In order to operate newly built schools properly, the Mongolian side assured the Japanese side to reorganize the student catchment area for new schools before the completion of construction, and relocate students accordingly after the completion.

4-6. Site preparation works to be covered by the Mongolian side

The Japanese side explained the content of the site preparation works to be covered by the Mongolian side as described in Annex-2. The Mongolian side confirmed to complete the required works before the commencement of construction.

4-7. Contents of Draft Report

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Both sides agreed that the contents of the draft report would be confidential, be dealt with carefully and not be disclosed to any third parties.

4-8 Confidentiality of the Project Cost Estimation

The Team explained the cost estimation of the Project as described in Annex-3. Both sides agreed that the Project Cost Estimation should never be duplicated or released to any outside parties before signing of all the Contracts for the Project. The Mongolian side understood that the Project Cost Estimation attached as Annex-3 is not final and is subject to change.

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Annex-1. Schools and Components covered by the Project

1. Schools

Site	District	No. of class- rooms	Facili	ties	B	uilding ser	vices
			Classroom building	Gym	Water tank	Sewage tank	Boiler
Existing schools (7)						
1 No.35 School	Sukhbaatar	8	0	-	-	0	2
2 No.19 School	Bayangol	8	0		-	1.00	
3 Shavi CS	Bayanzurkh	19	0				
4 Amgalan CS	Bayanzurkh	12	0	1.1	+	0	÷.
5 No.79 School	Bayanzurkh	12	0		-	0	0
6 No.52 School	Khan-Uul	8	.0		÷	÷	
7 No.12 School	Songinokhairkhan	8	Ó	-			•
New schools (5)							
1 Khujir Bulan	Bayanzurkh	16	0	0	0	0	0
2 361st Garam	Songinokhairkhan	16	0	0	0	0	0
3 Near Tahilt	Songinokhairkhan	16	0	0	0	0	0
4 Near Bayangol	Songinokhairkhan	16	0	0	2	-	0
5 Yarmag	Khan-Uul	16	0	0	1	1 6	0
Total		155	17	5	3	6	6

2. Facilities

2.1. Components for School Extension

(1) Classroom

(2) Teacher's room

(3) Cloakroom

(4) Toilet and hand washing places

2-2. Components for New School Construction

(1) Classroom

(2) Teacher's room

(3) Cloakroom

(4)Toilet and hand washing places

(5) Gym

(6) Kitchen

(7)Computer room

(8)Multipurpose room

3. Equipment(1)Basic educational furniture(2)Basic teaching material

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- ·Geographical map of Mongolia
- ·Administrative map of Mongolia
- ·Mineral resources map of Mongolia
- ·Botanical map of Mongolia
- ·Zoological map of Mongolia
- •World geographical map
- •Chemical elements chart
- \cdot Unit chart
- ·Human body dissection chart
- •Cyrillic alphabet chart for Mongolia
- •Thermometer
- •Compass
- •Tape measure
- ·Geometrical blocks
- •Abacus
- •T-shape ruler
- •Ruler set
- •Multiplication table
- ·Projector set
- (3)Maintenance tools

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Si	te	Works to be done p construction	prior to the c	omme	ncement of	Works to	be done a	after the c	ommencei	ment of construction
		Removal or relocat obstacles	ion of	Site clear-	Improve- ment of		on and co cture (*1/2		of	Provision of external facilities
		Removal	Relocation	ance	access road	Electri- city	Heating	Water supply	Sewer- age	
E:	kisting sch	ools								
1	No.35 School	Paving, curbs, fences, play equipment, trees	Aerial power line & poles	0		New connec- tion	1		-	-
2	No.19 School	Paving, curbs, play equipment	•	0	Partial improve- ment	Ditto	Branch- ing at the site		-	-
3	Shavi CS	Curbs, wooden fences	•	0		Ditto	Ditto	-	-	Approach path after relocating guards' huts (ger)
4	Amgalan CS	Buried pipes (unused), curbs	Aerial line	0		Ditto	Ditto		+	-
5	No.79 School	Buried pipes (unused), fences, play equipment	Aerial power line & poles	0		Ditto	-	New connec- tion		Gates, fences, approach path, coal shed, slope protection
6	No.52 School	Curbing, play equipment	-	0	-	Ditto	Branch- ing at the site	-	3	-
7	No.12 School	Buried pipes (unused), paving, curbs, play equipment	Aerial line	0	Partial improve- ment	Ditto	Ditto	-		
Ne	ew schools									
t	Kujir Bulan	Supports of fences	-	0		New connec- tion	÷.	-	-	Gates, fences, approach path, coal shed, slope protectior
2	361st Garam		-	0	Construc- tion	Ditto	2	-	-	Gates, fences, approach path, coal shed
3	Near Tahilt		•	0	Ditto	Ditto	-	-	-	Ditto
4	Near Bayangol		1	0	Ditto	Ditto	-	New connec- tion	New connec- tion	Ditto
5	Yarmag	-	•	0	Ditto	Ditto	-	Ditto	Ditto	Ditto

Annex-2. Site Preparation to be covered by the Mongolian side

*1 The Mongolian side will complete the application for and the provision of electricity and heating by the time when the utilities will be needed temporarily for the construction.

The demarcation of work between the Japanese and the Mongolian side with respect to the *2 installation of infrastructure is defined as follows:

· Electricity: Where buried line is concerned, the Japanese side will cover up to the installation of an lead-in panel within the site and the Mongolian side will extend power line into the site and connect it to the panel. In case of aerial line, the Japanese side will provide a lead-in pole within the site and the Mongolian side will extend power line to the pole.

· Heating: The Mongolian side will cover up to the branching at the existing main pipe inside the site and the Japanese side will undertake the rest of work. The Japanese side will provide an inspection pit at the branching point.

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- Water supply: As far as the connection with the existing water pipe inside the site is possible, the Japanese side will undertake all works associated with water supply. Otherwise, the Japanese side will provide an inspection pit inside the site and the Mongolian side will extend water pipe from the main to the inspection pit.
- Sewerage: Where the connection with the existing sewage pit inside the site is possible, the Japanese side will undertake all the works associated with sewage. Otherwise, the Japanese side will provide a sewage pit inside the site and the Mongolian side will extend sewer pipe from the main to the pit.

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5. Other Relevant Data

5-1. Cost Estimation for the Works Borne by the Recipient Country

Code	e Item	Content	QTY	Unit Cost	Total ('000Tg.)
	o. 35 School				4,315.0
	Removal of obstacles	Pavement, PC curbstones, steel fences,		-	360.0
	Delete the state of the last	playground equipment & trees	405		4 075 0
	Relocation of obstacles	Aerial power line & pole	105m	-	1,875.0
	Clearance & leveling of the constru		1200sq.m	1.4	1,680.0
	Connection of electricity	Buried line	<u>5</u> m	80.0	400.0
_	o. 19 School				3,790.0
A	Removal of obstacles	Pavement, PC curbstones & playground equipment		-	360.0
В	Clearance & leveling of the constru		1150sq.m	1.4	1,610.0
	Improvement of access road	Gravel pavement	15m	28.0	420.0
	Connection of electricity	Buried line	5m	80.0	400.0
	Connection of heating		1 unit	1,000.0	1,000.0
	avi CS			.,	7,070.0
A	Removal of obstacles	PC curbstones & wooden fence		-	180.0
B	Clearance & leveling of the constru		1350sq.m	1.4	1,890.0
	Connection of electricity	Buried line	5m	80.0	400.0
E		Builde line	1 unit	1,000.0	1,000.0
	Construction of external facilities	Relocation of the guard's house (gher)	1 unit	1,000.0	360.0
	Construction of external facilities	Approach path	27m	120.0	3,240.0
4 4 10	ngalan CS		27111	120.0	5,435.0
	Removal of obstacles	Pavement, PC curbstones, playground			<u> </u>
A		equipment & buried water pipe		-	300.0
	Relocation of obstacles	Aerial power line	65 m	-	1,275.0
В	Clearance & leveling of the constru	iction area	1000sq.m	1.4	1,400.0
D	Connection of electricity	Aerial line	20m	70.0	1,400.0
E	Connection of heating		1 unit	1,000.0	1,000.0
5 No	o. 79 School				32,560.0
A	Removal of obstacles	Pavement, steel fences, playground equipment & buried sewage pipe		-	360.0
	Relocation of obstacles	Aerial power line & pole	50m	-	1,050.0
В	Clearance & leveling of the constru		2250sq.m	4.0	9,000.0
	Connection of electricity	Aerial line	20m	70.0	1,400.0
F		from the main under the front road	10m	110.0	1,100.0
Н	Construction of external facilities	Boundary fence	80 m	35.0	2,800.0
		School gate	1 unit	350.0	350.0
		Approach path	50m	120.0	6,000.0
		Slope protection	400sq.m	5.0	2,000.0
		Slope toe drainage	70m	50.0	3,500.0
		Coal shed	1 unit	5,000.0	5,000.0
6 No	. 52 School			-,	3,580.0
	Removal of obstacles	Pavement, PC curbstones & playground		-	360.0
D	Clearance & loveling of the constru	equipment	120000	1 /	1 020 0
	Clearance & leveling of the constru	Buried line	<u>1300sq.m</u> 5m	<u> </u>	<u>1,820.0</u> 400.0
	Connection of electricity	Buried life			
	Connection of heating		1 unit	1,000.0	1,000.0
	Removal of obstacles	Pavement, PC curbstones & playground equipment			7,110.0 180.0
	Relocation of obstacles	Aerial communication line	120m	70.0	2,100.0
R	Clearance & leveling of the constru		1950sq.m	1.4	2,730.0
	Improvement of access road	Gravel pavement	25m	28.0	700.0
	Connection of electricity	Buried line	25m 5m	80.0	400.0
E	Connection of heating		1 unit	1,000.0	1,000.0
Fvie	ting Schools	TOTAL			63,860.0
					03,000.0

B Clearance & leveling of the construction area 2800sq.m 4.0 11.2C C Improvement of access road Gravel pavement 50m 28.0 1.4C C Connection of electricity Aerial line 15m 70.0 10.0 F Connection of severage to the main under the front road 10m 110.0 1.1C G Connection of severage to the main under the front road 10m 110.0 1.1C G Connection of external facilities Boundary fence 390m 35.0 13.65 G Coal shed 1 unit 5,000.0 5.00 5.00 9Khujir Bulan (New School) Coal shed 1 unit 5,000.0 5.00 9K Cearance & leveling of the construction area 2,000sq.m 4.0 10.42 1 Construction of external facilities Boundary fence 400m 35.0 14.00 1 School gate 1 unit 5,000.0 9.00 13.50 1 School gate 1 unit 5,000.0 <td< th=""><th>Code</th><th>Item</th><th>Content</th><th>QTY</th><th>Unit Cost</th><th>Total</th></td<>	Code	Item	Content	QTY	Unit Cost	Total
C Improvement of access road Gravel pavement 50m 28.0 1.42 D Connection of electricity Aerial line 15m 70.0 100 F Connection of electricity Aerial line 10m 110.0 1,10 G Connection of external facilities Boundary fence 380m 38.0 38.6 H Construction of external facilities School gate 1 unit 350.0 38 Approach path 140m 120.0 6.68 38 3.6 3.6 School gate 1 unit 5.000.0 5.00 3.6 3.8 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6 3.6						51,650.0
D Connection of electricity Aerial line 15m 70.0 1.00 F Connection of city water from the main under the front road 10m 110.0 1,10 G Construction of external facilities Boundary fence 330m 35.0 13.66 Coal shed 1unit 350.0 35.0 13.66 Within Suma (New School) Coal shed 1unit 50.00 63.33 A Removal of obstacles Wooden poles 16 18 Clearance & leveling of the construction area 2600sq.m 4.0 10.42 Construction of external facilities Boundary fence 400m 35.0 13.50 School gate 1unit 50.00 32.0 13.50 Coal shed 1unit 50.00 30.0 14.00 Slope protection 2700sq.m 5.0 13.50 Coal shed 1unit 5.00 9.00 136 ist Garam (New School) 0 47.77 10 47.77 B Clearance & leveling of the constru						11,200.0
F Connection of city water from the main under the front road 10m 110.0 1.10 G Connection of severage to the main under the front road 390m 35.0 13.65 H Construction of external facilities Boundary fence 390m 35.0 13.65 Approach path 140m 120.0 36.0 36.0 Coal shed 1 unit 5.000.0 5.00 Shujir Bulan (New School) 63.83 63.83 A Removal of obstacles Wooden poles 19 B Clearance & leveling of the construction area 2600sq.m 4.0 10.40 C Consciton of electricity Aerial line 60m 70.0 4.22 H Construction of external facilities Boundary fence 400m 35.0 14.00 Construction of external facilities Boundary fence 100m 50.00 72.0 B Clearance & leveling of the construction area 2800sq.m 4.0 11.20 C Ingrovement of access road Gravel pavement 40m	-					1,400.0
G Connection of severage to the main under the front road 10m 110.0 1.11 H Construction of external facilities Boundary fence 390m 35.0 13.65 Approach path 140m 120.0 16.86 Coal shed 1 unit 5,000.0 500 9Khujir Bulan (New School) 63.83 A Removal of obstacles Wooden poles 16 Clearance & leveling of the construction area 2600sq.m 4.0 0.42 D Construction of external facilities Mondary fence 400m 35.0 13.50 Slope protection 2700sq.m 5.0.0 33.50 13.55 14.00 Coal shed 1 unit 5.000.0 7.22 Slope protection 2700sq.m 5.0.0 9.00 Coal shed 1 unit 5.000.0 9.00 7.22 13.55 Slope protection Calished 1 unit 5.000.0 9.00 13.65 Construction of external facilities Boundary fence 520m 7.77 0 120 35.0						1,050.0
H Construction of external facilities Boundary fence 390m 35.0 13.65 School gate 1 unit 360.0 35 36 Approach path 140m 120.0 16.60 700 350 9Khujir Bulan (New School) Gal shed 1 unit 5,000.0 63.83 A Removal of obstacles Wooden poles 18 60m 70.0 4,22 B Clearance & leveling of the construction area 2600sq.m 4.0 10,40 D Connection of electricity Aerial line 60m 70.0 4,22 H Construction of external facilities Boundary fence 180m 50.0 90.0 School gate 1 unit 350.0 90.0 7.20 Slope protection 2700sq.m 5.0 13.65 C Inprovement of access road Gravel pavement 40m 28.0 1,12 C Improvement of access road Gravel pavement 40m 28.0 1,26 Coal shed 1 unit						1,100.0
School gate 1 unit 360.0 35 Approach path 140m 120.0 16.80 Ocal shed 1 unit 5,000.0 50.00 9Khujir Bulan (New School) 63.83 7 7 7 A Removal of obstacles Wooden poles 10 10.40 D Connection of electricity Aerial line 60m 70.0 4.20 H Construction of external facilities Boundary fence 400m 35.0 14.00 Approach path 60m 120.0 7.22 Slope protection 2700sq.m 5.0 13.50 Call shed 1 unit 5.000.0 5.00 1361st Garam (New School) Coal shed 1 unit 5.000.0 5.00 B Clearance & leveling of the construction area 2800sq.m 4.0 11.20 C Improvement of access road Gravel pavement 40m 120.0 35.0 H Construction of external facilities Boundary fence 520m 70.0 3.50 H Construction area						1,100.0
Approach path 140m 120.0 16,80 Coal shed 1 unit 5,000.0 5,000 9Khujir Bulan (New School) G338 Removal of obstacles Wooden poles 18 B Clearance & leveling of the construction area 2600sq.m 4.0 10,40 D Connection of electricity Aerial line 60m 70.0 4,22 H Construction of external facilities Boundary fence 400m 35.0 13,60 Stope protection 2700sq.m 5.0 13,60 Stope toe drainage 180m 50.0 9.00 Coal shed 1 unit 35.00 9.00 1361st Garam (New School) 47,77 0 40m 28.0 1,12 C Improvement of access road Gravel pavement 40m 28.0 1,12 D Connection of electricity Aerial line 50m 70.0 3.50 H Construction of external facilitiesBoundary fence 520m 35.0 18.22 D Connection of electri	Η	Construction of external facilities				13,650.0
Coal shed 1 unit 5,000.0 5,00 9Khujir Bulan (New School) 63,83 63,83 63,83 A Removal of obstacles Wooden poles 10,40 B Clearance & leveling of the construction area 2600sq.m 4.0 10,40 D Connection of electricity Araital line 60m 70.0 4,22 H Construction of external facilities Boundary fence 400m 35.0 14,00 Approach path 60m 120.0 7,22 Slope protection 2700sq.m 5.00 300 Coal shed 1 unit 5,000.0 5,00 1361st Garam (New School) 0 77.77 0 77.77 B Clearance & leveling of the construction area 2800sq.m 4.0 11,22 C Improvement of access road Gravel pavement 40m 28.0 1,12 D Connection of electricity Aerial line 50m 70.0 3,50 H Construction of electricity Aerial line 50m 70.0 3,50 C Improvement of access road Gravel pave						350.0
9Khujir Bulan (New School) 63,83 A Removal of obstacles Wooden poles 16 Clearance & leveling of the construction area 2600sq.m 4.0 10,4C D Connection of electricity Aerial line 60m 70.0 4,2C H Construction of electricity Aerial line 60m 70.0 4,2C H Construction of electricity Aerial line 60m 70.0 4,2C H Construction of external facilities Boundary fence 1unit 350.0 350 Slope protection 2700sq.m 5.0 13,65 360 300 Cal shed 1 unit 5,000.0 5,00 700 70 B Clearance & leveling of the construction area 2800sq.m 4.0 11,22 D Connection of electricity Aerial line 50m 70.0 3.50 H Construction of external facilities Boundary fence 520m 35.0 18,22 C Improvement of access road Gravel pavement 70m <td< td=""><td></td><td></td><td></td><td></td><td></td><td>16,800.0</td></td<>						16,800.0
A Removal of obstacles Wooden poles 18 B Clearance & leveling of the construction area 2600sq.m 4.0 10,42 C Connection of electricity Aerial line 60m 70.0 4,22 H Construction of external facilities Boundary fence 400m 35.0 14,00 Stope protection 2709sq.m 5.0 13,55 13,55 Stope protection 2709sq.m 5.0 13,55 Stope toe drainage 180m 50.0 9,00 Coal shed 1 unit 5,000.0 5,000 5,000 1361st Garam (New School) 0 47,77 0 47,77 B Clearance & leveling of the construction area 2800sq.m 4.0 11,20 C Improvement of access road Gravel pavement 40m 28.0 18,20 C Improvement of access road Gravel pavement 40m 28.0 35.0 H Construction of external facilities Boundary fence 520m 70.0 35.0 <			Coal shed	1 unit	5,000.0	5,000.0
B Clearance & leveling of the construction area 2600sq.m 4.0 10.42 D Connection of electricity Aerial line 60m 70.0 4.22 H Construction of external facilities Boundary fence 400m 35.0 14.00 School gate 1 unit 350.0 35.0 14.00 Approach path 60m 120.0 7.22 Slope protection 2700sq.m 5.0 9.00 Coal shed 1 unit 5.000.0 9.00 1361st Garam (New School) 47.77 0 4.0 11.22 C Improvement of access road Gravel pavement 40m 28.0 1.12 D Connection of external facilities Boundary fence 520m 3.0 18.22 School gate 1 unit 55.000.0 5.00 12.0 8.40 Iterarance & leveling of the construction area 2800sq.m 4.0 11.22 C Improvement of access road Gravel pavement 10m 28.0 2.0 Iterarance & le	9Kht					63,830.0
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Approach path 60m 120.0 7,20 Slope tor derainage 180m 5.0 13,50 Slope tor derainage 180m 5.0 9,00 Coal shed 1 unit 5,000.0 5,00 1361st Garam (New School) 47,77 47,77 B Clearance & leveling of the construction area 2800sq.m 4.0 11,20 C Improvement of access road Gravel pavement 40m 28.0 1,11 D Connection of electricity Aerial line 50m 70.0 3,50 H Construction of external facilities Boundary fence 520m 35.0 18,20 Approach path 70m 120.0 8,44 Coal shed 1 unit 5,000.0 5,000 1 Coal shed 1 unit 5,000.0 5,000 1 Coal shed 1 unit 5,000.0 5,000 1 Coal shed 1 unit 5,000.0 3,50 1 Coal shed 1 unit 350.0 3,6	Н	Construction of external facilitie	esBoundary fence	400 m	35.0	14,000.0
Slope protection 2700sq.m 5.0 13,50 Slope toe drainage 180m 5.0.0 9,00 Coal shed 1 unit 5,000.0 5,00 1361st Garam (New School) 47,77 47,77 B Clearance & leveling of the construction area 2800sq.m 4.0 11,22 C Improvement of access road Gravel pavement 40m 28.0 1,12 D Connection of electricity Aerial line 50m 70.0 3,50 H Construction of external facilities Boundary fence 520m 35.0 18,20 School gate 1 unit 35.00 35.0 18,20 Coal shed 1 unit 5,000.0 5,000 Near Tahilt (New School) 1 47,77 47,77 1 Clearance & leveling of the construction area 2800sq.m 4.0 11,20 C Improvement of access road Gravel pavement 10m 28.0 22 D Connection of electricity Aerial line 50m 70.0						350.0
Slope toe drainage 180m 50.0 9.00 Coal shed 1 unit 5,000.0 5,000 1361st Garam (New School) 47,77 47,77 B Clearance & leveling of the construction area 2800sq.m 4.0 11,20 C Improvement of access road Gravel pavement 40m 28.0 1,11 D Connection of electricity Aerial line 50m 70.0 3,50 H Construction of external facilities Boundary fence 520m 35.0 18,20 School gate 1 unit 350.00 35.0 18,20 INear Tahitt (New School) 47,77 47.77 47.77 B Clearance & leveling of the construction area 2800sq.m 4.0 11,20 C Improvement of access road Gravel pavement 10m 28.0 28.0 D Connection of electricity Aerial line 50m 70.0 3,50 D Connection of electricity Aerial line 50m 70.0 3,50 D <td></td> <td></td> <td></td> <td></td> <td>120.0</td> <td>7,200.0</td>					120.0	7,200.0
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1361st Garam (New School) 47,77 0 B Clearance & leveling of the construction area 2800sq.m. 4.0 11,20 C Improvement of access road Gravel pavement 40m 28.0 1,11 D Connection of electricity Aerial line 50m 70.0 3,50 H Construction of external facilities Boundary fence 520m 35.0 18,20 Call School gate 1 unit 350.0 35 Approach path 70m 120.0 8,40 Coal shed 1 unit 5,000.0 5,000 1 10mit 5,000.0 5,000 1 Call shed 1 unit 5,000.0 5,000 1 Construction of external facilities Boundary fence 390m 35.0 13,60 2 Construction of external facilities Boundary fence 390m 35.0 13,60 2 School gate 1 unit 350.0 35.0 13,60 2 Coal shed 1 unit 5,000.0 5,			· · ·			9,000.0
0 2800sq.m 4.0 11,20 C Improvement of access road Gravel pavement 40m 28.0 1,12 D Connection of electricity Aerial line 50m 70.0 3,50 H Construction of external facilitiesBoundary fence 520m 35.0 18,20 Colored path 70m 120.0 8,40 70m 120.0 8,40 Coal shed 1 unit 5,000.0 5,000 70.0 3,50 18,20 28 Improvement of access road Gravel pavement 70m 120.0 8,40 77 B Clearance & leveling of the construction area 2800sq.m 4.0 11,20 7,80 C Improvement of access road Gravel pavement 10m 28.0 28 D Connection of electricity Aerial line 50m 70.0 3,50 H Construction of external facilitiesBoundary fence 390m 35.0 13,60 Coal shed 1 unit 5,000.0 5,000 35,			Coal shed	1 unit	5,000.0	5,000.0
C Improvement of access road Gravel pavement 40m 28.0 1,12 D Connection of electricity Aerial line 50m 70.0 3,50 H Construction of external facilities Boundary fence 520m 35.0 18,20 School gate 1 unit 35.00 35.0 18,20 Approach path 70m 120.0 8,40 Coal shed 1 unit 5,000.0 5,00 1 Coal shed 1 unit 5,000.0 5,000 1 E Clearance & leveling of the construction area 2800sq.m 4.0 11,20 2 Improvement of access road Gravel pavement 10m 28.0 22 D Connection of electricity Aerial line 50m 70.0 3,50 3 School gate 1 unit 350.0 13,65 School gate 1 unit 360.0 36.0 4 Approach path 115m 120.0 13,86 Coal shed 1 unit		st Garam (New School)				47,770.0
C Improvement of access road Gravel pavement 40m 28.0 1,12 D Connection of electricity Aerial line 50m 70.0 3,50 H Construction of external facilities Boundary fence 520m 35.0 18,20 School gate 1 unit 35.00 35.0 18,20 Approach path 70m 120.0 8,40 Coal shed 1 unit 5,000.0 5,00 1 Coal shed 1 unit 5,000.0 5,000 1 E Clearance & leveling of the construction area 2800sq.m 4.0 11,20 2 Improvement of access road Gravel pavement 10m 28.0 22 D Connection of electricity Aerial line 50m 70.0 3,50 3 School gate 1 unit 350.0 13,65 School gate 1 unit 360.0 36.0 4 Approach path 115m 120.0 13,86 Coal shed 1 unit	В	Clearance & leveling of the cor	struction area	2800sq.m	4.0	11,200.0
D Connection of electricity Aerial line 50m 70.0 3,50 H Construction of external facilities Boundary fence 520m 35.0 18,20 School gate 1 unit 350.0 35 Approach path 70m 120.0 8,44 Coal shed 1 unit 5,000.0 5,000 1Near Tahilt (New School) 47,76 47,77 1 Coal shed 1 unit 5,000.0 5,000 1 Connection of electricity Aerial line 50m 70.0 3,50 1 Construction of external facilities Boundary fence 390m 35.0 13,80 2 School gate 1 unit 35.00 35 1 Near Bayangol (New School) 49,77 49,77 2 Coal shed 1 unit	С			40m	28.0	1,120.0
H Construction of external facilities Boundary fence 520 m 35.0 18.20 School gate 1 unit 350.0 35 Approach path 70 m 120.0 8,40 Coal shed 1 unit 5,000.0 5,00 1Near Tahilt (New School) 47,78 47,78 B Clearance & leveling of the construction area 2800sq.m 4.0 11,20 C Improvement of access road Gravel pavement 10m 28.0 28 D Connection of electricity Aerial line 50m 70.0 3,50 H Construction of external facilities Boundary fence 390m 35.0 13,65 School gate 1 unit 350.0 35 13,65 Mapproach path 115m 120.0 13,80 Coal shed 1 unit 5,000.0 5,00 School gate 1 unit 5,000.0 5,00 Calearance & leveling of the construction area 2600sq.m 4.0 10,40 C Improvement of access road <td></td> <td>Connection of electricity</td> <td></td> <td>50m</td> <td>70.0</td> <td>3,500.0</td>		Connection of electricity		50m	70.0	3,500.0
School gate 1 unit 350.0 35 Approach path 70m 120.0 8,40 Coal shed 1 unit 5,000.0 5,000 1 1 1 47,78 47,78 B Clearance & leveling of the construction area 2800sq.m 4.0 11,20 C Improvement of access road Gravel pavement 10m 28.0 28 D Connection of electricity Aerial line 50m 70.0 3,50 H Construction of external facilitiesBoundary fence 390m 35.0 13,65 School gate 1 unit 350.0 35 350.0 35 Approach path 115m 120.0 13,80 360.0 5,000 Coal shed 1 unit 5,000.0 5,000 5,000 5,000 5,000 L Coal shed 1 unit 5,000.0 5,000 5,000 5,000 5,000 5,000 5,000 5,000 5,000 5,000 5,000 5,000 <td< td=""><td>Н</td><td></td><td>sBoundary fence</td><td>520m</td><td>35.0</td><td>18,200.0</td></td<>	Н		sBoundary fence	520m	35.0	18,200.0
Approach path 70m 120.0 8,40 Coal shed 1 unit 5,000.0 5,00 1Near Tahilt (New School) 47,78 47,78 1 2800sq.m 4.0 11,20 C Improvement of access road Gravel pavement 10m 28.0 28 D Connection of electricity Aerial line 50m 70.0 3,50 H Construction of external facilitiesBoundary fence 390m 35.0 13,86 School gate 1 unit 350.0 38 Approach path 115m 120.0 13,86 Coal shed 1 unit 5,000.0 5,000 5,000 360 38 Approach path 115m 120.0 13,86 10,40 49,77 B Clearance & leveling of the construction area 2600sq.m 4.0 10,40 C Improvement of access road Gravel pavement 75m 28.0 2,10 D Connection of electricity Aerial line 80m 70.0 5,60				1 unit	350.0	350.0
Coal shed 1 unit 5,000.0 5,000 1 Near Tahilt (New School) 47,78 47,78 B Clearance & leveling of the construction area 2800sq.m 4.0 11,20 C Improvement of access road Gravel pavement 10m 28.0 28 D Connection of electricity Aerial line 50m 70.0 3,50 H Construction of external facilities Boundary fence 390m 35.0 13,65 School gate 1 unit 350.0 35 Approach path 115m 120.0 13,86 Coal shed 1 unit 5,000.0 5,000 1 Near Bayangol (New School) 2 49,77 B Clearance & leveling of the construction area 2600sq.m 4.0 10,40 C Improvement of access road Gravel pavement 75m 28.0 2,10 D Connection of exerrage to the main under the front road 10m 110.0 1,10 G Connection of sewerage to the main under the front road				70m		8,400.0
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CImprovement of access roadGravel pavement10m28.028DConnection of electricityAerial line50m70.03.50HConstruction of external facilities Boundary fence390m35.013.65School gate1 unit350.035Approach path115m120.013.86Coal shed1 unit5,000.05,0001 Near Bayangol (New School)Coal shed1 unit5,000.02T49,77BClearance & leveling of the construction area2600sq.m4.010.400CImprovement of access roadGravel pavement75m28.02,100DConnection of electricityAerial line80m70.05,600FConnection of city waterfrom the main under the front road10m110.01,100GConnection of external facilities Boundary fence535m35.018,72School gate1 unit350.03535Approach path45m120.05,400GRAND TOTALTOTAL260,80035	1Nea 1	r Tahilt (New School)				47,780.0
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H Construction of external facilities Boundary fence 390 m 35.0 13,65 School gate 1 unit 350.0 35 Approach path 115 m 120.0 13,80 Coal shed 1 unit 5,000.0 5,000 1Near Bayangol (New School) 49,77 2 2 49,77 B Clearance & leveling of the construction area 2600sq.m 4.0 10,400 C Improvement of access road Gravel pavement 75m 28.0 2,100 D Connection of electricity Aerial line 80m 70.0 5,600 F Connection of sewerage to the main under the front road 10m 110.0 1,100 G Connection of external facilities Boundary fence 535 m 35.0 18,72 School gate 1 unit 350.0 35 Approach path 45 m 120.0 5,400 Coal shed 1 unit 5,000.0 35.0 Memode Coal shed 1 unit 5,000.0 35.0 Maproach path 45 m 120.0 <td< td=""><td></td><td></td><td></td><td></td><td></td><td>3,500.0</td></td<>						3,500.0
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GRAND TOTAL 324,66						5,400.0 5,000.0
	New	Schools	TOTAL			260,805.0
		GRAND TOTAL				324 665 (
		Commission to the bank				36,620.0

5-2. Abstract of Geotechnical Investigation Reports

- No. 79 School (existing school site, Bayanzurkh District)
- No. 52 School (existing school site, Khan-Uul District)
- No. 12 School (existing school site, Sogino-khairkhan District)
- New school site near Tahilt (Sogino-khairkhan District)
- New school site at Yarmag (Khan-Uul District)

Монгол Улс Сойл Трейд ХХК

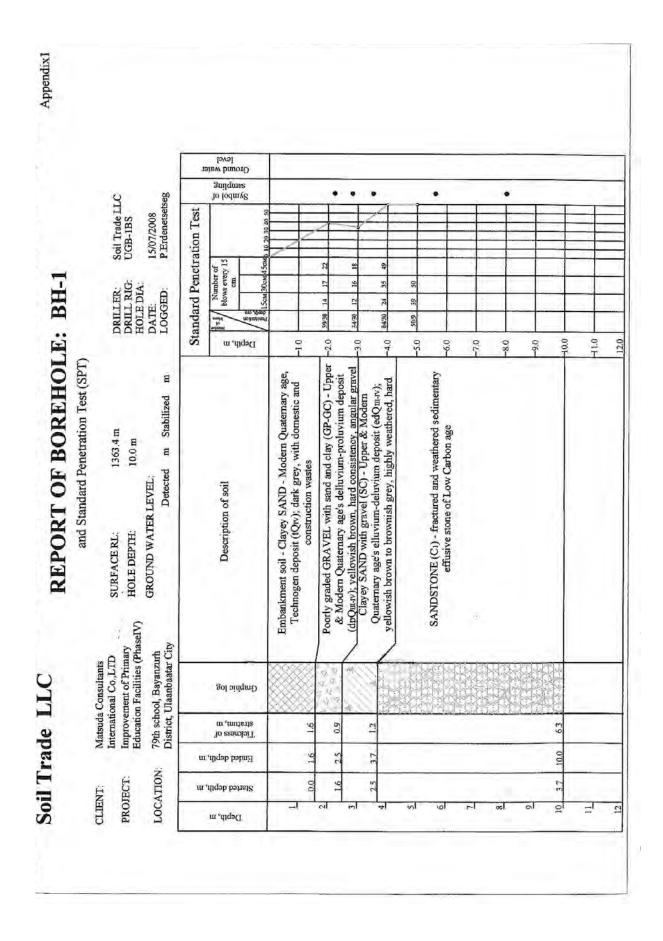


Архив№ 2008/076

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

> Улаанбаатар 2008



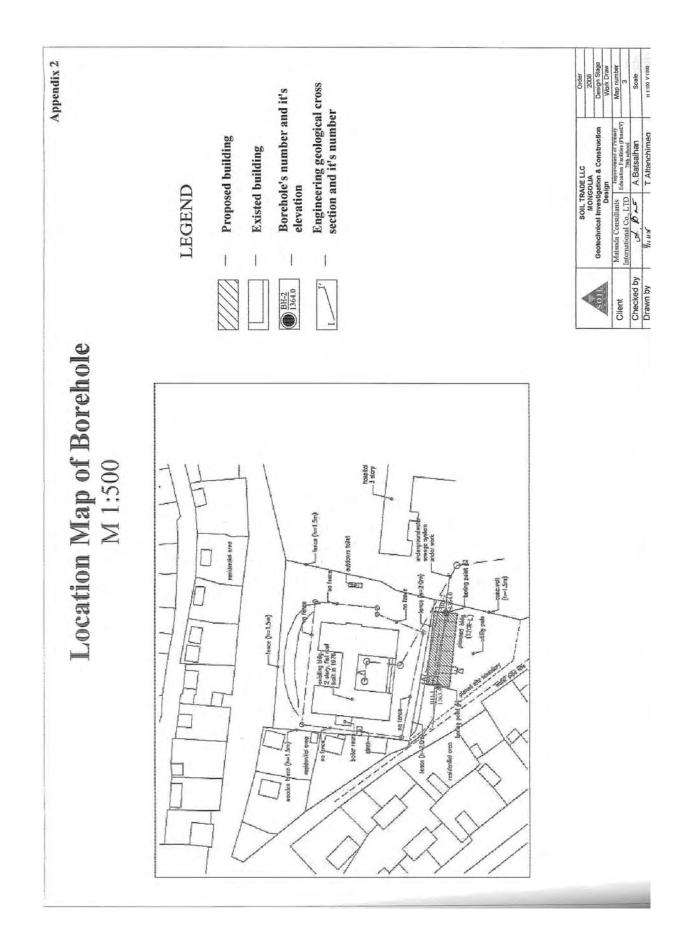
A33

Appendix1 Ground water level 168, 146, 127, 112 mm 15/07/2008 P.Erdenetsetseg to lodary2 gailqates è Soil Trade LLC UGB-IBS . . Standard Penetration Test Number of blows every 15 em #15cm 30cm 45cm 2 27 **REPORT OF BOREHOLE: BH-2** DRULER: DRUL RIG: HOLE DIA: 81 30 21 17 15 LOGGED: 22 35/30 12 12 10 27/30 10 DATE: Pipers P 34/30 45/30 66/30 Depth, m -1.0 -20 -3.0 -4.0 -5.0 0.1--8.0 10.0 11.0 -6.0 0.6and Standard Penetration Test (SPT) 8 Clayey SAND with gravel (SC) - Upper & Modern Quaternary age's deluvium-proluvium deposit, yellowish brown, angular, semihard SANDSTONE (C1) - fractured and weathered sedimentary Quaternary age's elluvium-deluvium deposit (edQm.w); yellowish brown to brownish grey, highly weathered, hard Embankment soil - dark grey. Modern Quaternary age, Technogen deposit (tQrv). Clayey SAND. Stabilized Clayey SAND with gravel (SC) - Upper & Modern effusive stone of Low Carbon age 1364.0 m 10.0 m H Detected GROUND WATER LEVEL: Description of soil HOLE DEPTH: SURFACE RL: Education Facilities (PhaseIV) 79th school, Bayanzurh District, Ulaanbaatar City Improvement of Primary International Co.,LTD Matsuda Consultants à Soil Trade LLC Graphic log 3 m ,mulatie 2.3 25 1.5 3.7 Tickness of 10.0 2.3 4.8 6.3 Ended depth, m LOCATION: PROJECT: 4.8 29 00 2.3 CLIENT: Started depth, m 01 6 3 0 Ξ Depth_₅ m

12.0

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Монгол Улс Сойл Трейд ХХК

VIICHIN BRCHSPILAB

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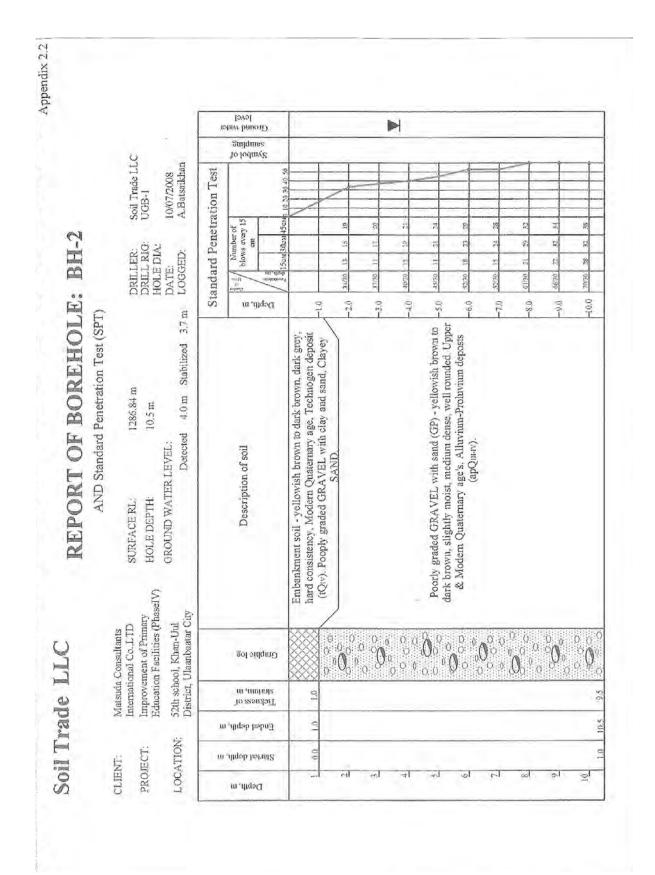
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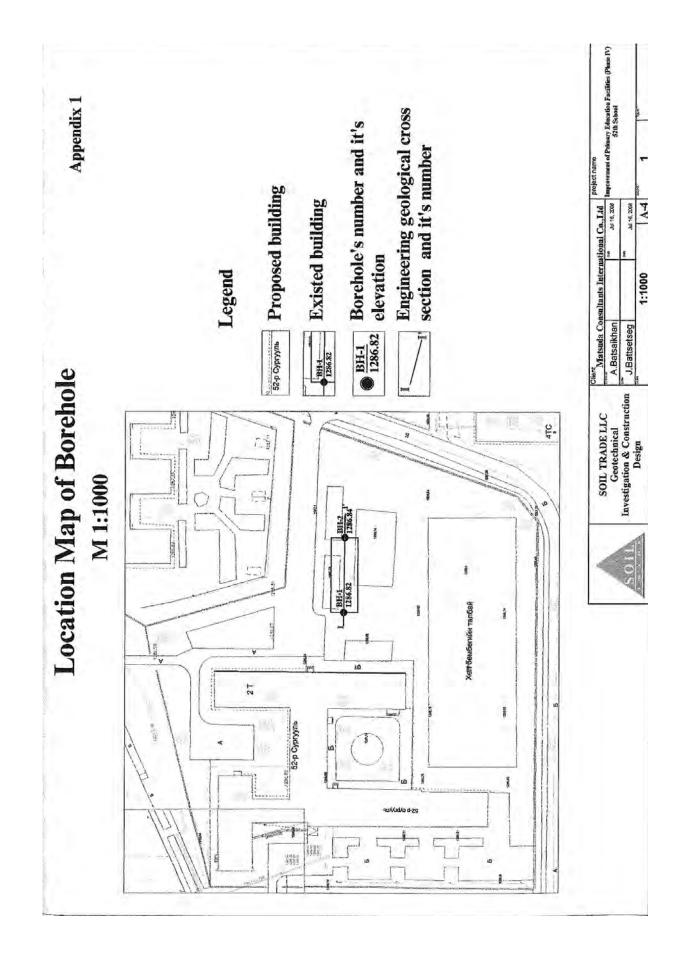
"Дунд сургуулийн барилгыг сайжруулах" төслийн хүрээнд Хан-Уул дүүргийн 52 дугаар сургуулийн шинээр баригдах хичээлийн байрны барилгын талбайн инженер-геологийн судалгааны дүгнэлт

Улаанбаатар 2008

Appendix 2.1		49	Ground war			1							
	C) (0)		Suilquies Suilquies										
E: BH-1	DRILLER: Soil Trade LLC DRILL RIG: UGB-1 HOLE DIA: UGB-1 DATE: 10/07/2008 n LOGGED: P.Erdenetsetseg	Standard Penetration Test	Depth, m Provention Performent Provention Proventi	-10	-2.0 2956 10 13 16	-3.0 27 11 21 0575	4.0 4030 15 19 22	-5.0 4030 11 19 21	-0.0 <u>41930 14 18 26</u>	-7,0 22.90 15 19 25 0.7-	-8.0 5030 12 22 25 5030	-9.0 66930 22 31 35	10.0 52.30 19 39 35
REPORT OF BOREHOLE: AND Standard Penetration Test (SPT)	Y SURFACE RL: 1286.82 m AaseIV) HOLE DEPTH: 10.5 m AaseIV) GROUND WATER LEVEL: Detected hy Detected 4.0 m		Description of soil	Entbankment soil - yellowish brown to dark brown, dark grey, hard consistency, Modern Quaternary age, Technogen deposit (tQw). Pooply graded GRAVEL with clay and sand, Clayey				Poorly graded GRAVEL with sand (GP) - yellowish brown to dark brown, slightly moist, medium dense, well rounded. Upper & MAADA	се теочени учавеннату адо 5, или улип-я поциунини черозко (ардили).				
Soil Trade LLC	Matsuda Consultants International Co.,LTD Improvement of Primary Education Facilities (PhaseIV) 52th school, Khan-Uul District, Ulaanbaatar Crty		gol oidqaiD			0:.0 Ø:0	0°0 0°0 0°0	0.0 0.0 0.0	0 0 0 0	0°°	0 0 0 0 0 6 0 0		
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rad		u	Ended depth. I	11									
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000	CLIENT: PROJECT: LOCATIO		Depth, m		cit	mt	न	lov.	10	7	loo	e)	10



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Cour mpeting XXK

Монгол Улс Сойл Трейд ХХК



Архив№ 2008/075

VRUBAH 3XC NSEL 10:00 lon 10 cáp 15 maop

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

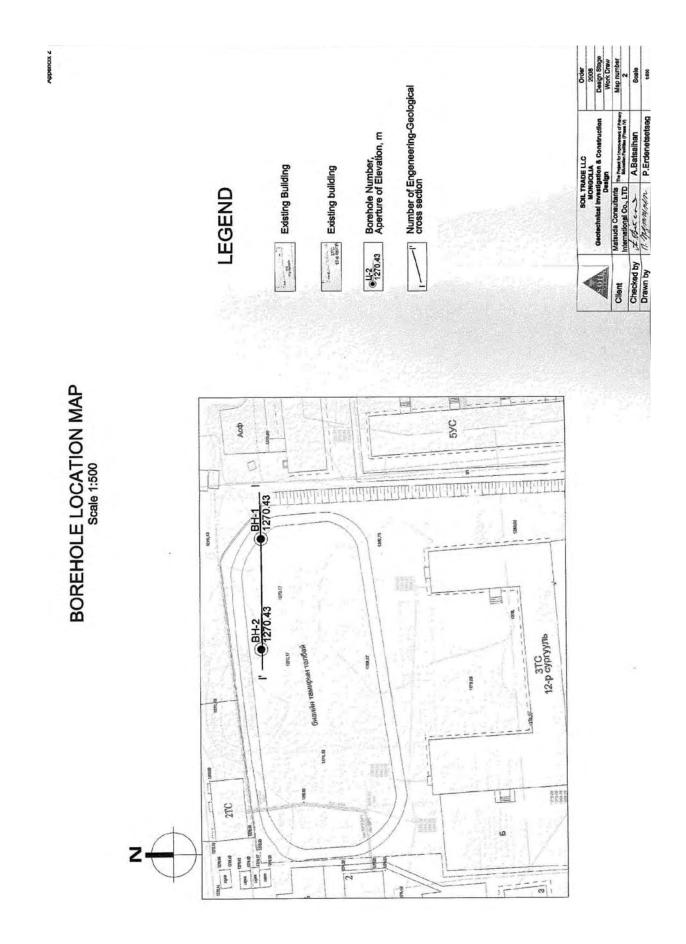
> Улаанбаатар 2008

	g	101	fround war lovel						
	.C 112.mu		lo lodiny2 guilquis		•			•	
H-1	ER: Soil Trade LLC . RIG: UGB-1 DIA: 168,146,127,112 mm 28/06/2008 .ED: P.Erdenotsetseg	Standard Penetration Test	s i / Number of blown every 15 cm i i i i i i i i i i i i i i i i i i i	2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	A 12	11 13 16 14 18 22	13 19 23	8 8 1	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
8	DRILLER: DRILL RIG: HOLE DIA: DATE: LOGGED: LOGGED:	tandar	estimiti	<u> </u>	97/30 61/30	29/30	42/30		49/30
E	7.1 m	ŝ	Depth, m	1	-3.0 -4.0	5 9 I	-7.0	0'0H	H10
REPORT OF BOREHOLE: BH-1 AND Standard Penetration Test (SPT)	ement of SURVACE RL: 1270.43 m ement of HOLE DEPTH: 12.0 m GROUND WATER LEVEL: Detected 7.7 m Stabilized		Description of soil	Embankment soil - yellowish brown to dark brown, dark gray, hard consistency, Modern Quaternary age, Technogen deposit (tQuV). Pooply graded GRAVEL with clay and sand, Clayey SAND.	Poorly graded GRAVEL with sand and clay (GP-GC) - yellowish brown to light yellowish brown, hard to stiff consistency, subrounded. Upper & Modem Quaternary age's, Alluvium-Proluvium deposits (apQ m-w).	Poorly graded GRAVEL with sand (GP) - yellowish brown to dark brown, slightly moist, medium dense, subrounded. Upper & Modern Quaternary age's, Alluvium-Proluvium deposts (apQm-tv).	Poorly graded GRAVEL with sand and clay (GP-GC) - yellowish brown to light yellowish brown, hard to stiff consistency, subrounded. Upper & Modem Quatemary age's,	Alluvium-Proluvium deposits (apQ uray).	
	Matsuda Consultants International Co.J.TJD The Project for Improvement of Primary Education Facilities (PhaseIV) UB-Songino Hairhan 18th horoo		gol sidqanD					$ \begin{array}{c} 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \\ 0 & 0 & 0 & 0 & 0 \end{array} $	
Soli Iraue In	Matsuda Con International Primary Educ (PasselV) UB-Songino Hairhan 18th		Tickness of m ,mutatiz	8					
a		w	Ended depth,	1.8		5.9	С.,		
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Appendix1

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E: BH-2	DRILLER: DRILL RIG:
REPORT OF BOREHOLE: BH-2 AND Standard Penetration Test (SPT)	1270.43 m 12.0 m
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Soil Tr	CLENT: PROJECT:

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Soil Trade LLC UGB-1 168,146,127,112 mm 28/06/2008 P.Erdenetsetseg	stration Test	រុំ Number of blows every 15 cm ខ្លាំ ទី គ្នាំ 15 cut30cad 45cato 10 20 30 40 20		20	22	15 1	39	31	8	8	2	21	
DRILLER: DRILL RIG: HOLE DIA: DATE: LOGGED:	Standard Penetration Test	1 - 5 Number of blow every 15 cm every 15 cm		61 22 06/86	44/30 20 22	27/30 22 13	35/30 11 17	39/30 15 18	41/30 16 19	44/30 [4 2]	45/30 17 20	49/30 19 22	
7.2 m	St	Depth, m	-1.0	-3.0	40	60	-6.0	-7,0	-8.0	0.6-	10.0	H1.0	0.01
SURVACE RL: 1270.43 m HOLE DEPTH: 12.0 m GROUND WATER LEVEL: Detected 7.8 m Stabilized		Description of soil	Embankment soil - yellowish brown to dark brown, dark gray, hard consistency, Modern Quaternary age, Technogen deposit (1Qtv). Poophy graded GRAVEL with clay and sand, Claycy SAND.	Poorly graded GRAVEL with sand and clay (GP-GC) - yellowish brown to light yellowish brown, hard to stiff		Poorly graded GRAVEL with sand (GP) - vellowish brown to	dark brown, slightly moist, medium dense, subrounded. Upper & Modern Quaternary age's, Alluvium-Proluvium deposts (apQu-1v).	Provely orgoted GRAVEL with sand and clav (GP-GC) -					
International Co., L TD The Project for Improvement of Primary Education Facilities (PhaseIV) UB-Songino Hairhan 18th horoo		gol oidqenĐ		0000		0,0,0		0 0. 0 0 0.	0 0 0 0 0 0 0 0 0		000		10100
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EN DI		Depth, m	-1 01	m	41	s	10	1	100	al	10	Ę	÷



NEW SCHOOL SITE NEAR TAHILT

Монгол Улс Сойл Трейд ХХК



Архив№ 2008/083

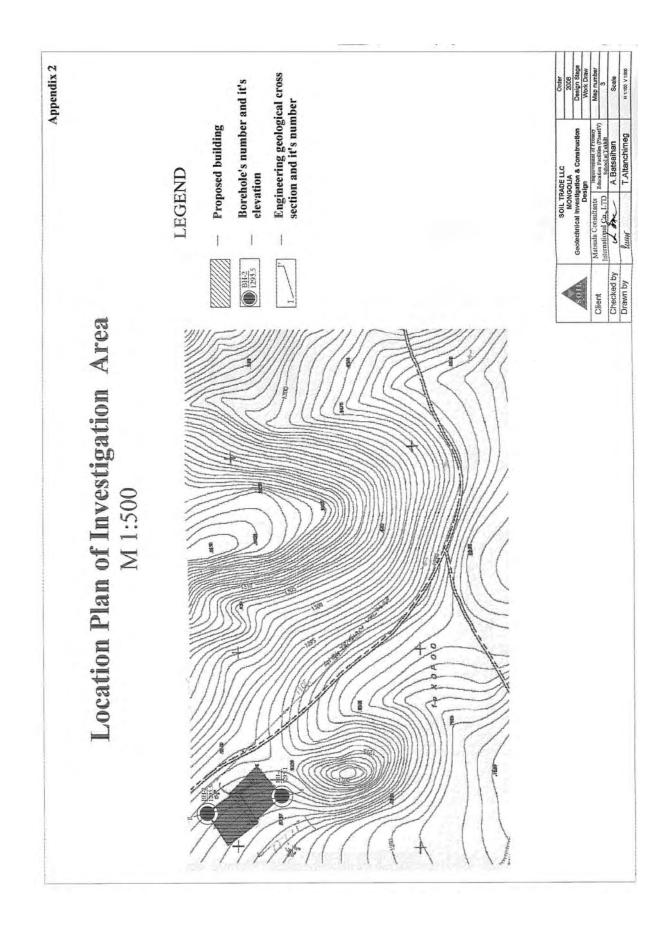
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"Дунд сургуулийн барилгыг сайжруулах" төслийн хүрээнд Сонгинохайрхан дүүргийн Тахилтад шинээр баригдах хичээлийн байрны барилгын талбайн инженер-геологийн судалгааны дүгнэлт

> Улаанбаатар 2008

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					and Standard Penetration Test	(SPI)											
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		15	477777	sc	Clayey SAND with gravel - Upper & Modern Quaterniny ages, Profavium deposit, yellowish brown, hard consistency, angular	- 1.0	42/30	18	21	19		T		T.			
23	28	10	4	GP SC	Clayey SAND with gravel - Ehrital deposit, yellowish brown to yellowish green, weathered, with lense of Poorly graded GRAVEI.	- 3,0	54/30	19	36	28	$\left \right $	+	-	A		23	
						- 4.0	71/30 79/30	30	29 36	42				İ	1		
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NEW SCHOOL SITE AT YARMAG

Монгол Улс Сойл Трейд ХХК



VINISH SKCIEFTHS DRUMOUT Plo JONN TON 200 Ann. 10 cap. 15. 2000

Архив№ 2008/081

"Дунд сургуулийн барилгыг сайжруулах" төслийн хүрээнд Хан-Уул дүүргийн Яармагт шинээр баригдах сургуулийн хичээлийн байрны барилгын талбайн инженер-геологийн судалгааны дүгнэлт

> Улаанбаатар 2008

Soil Trade LLC

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

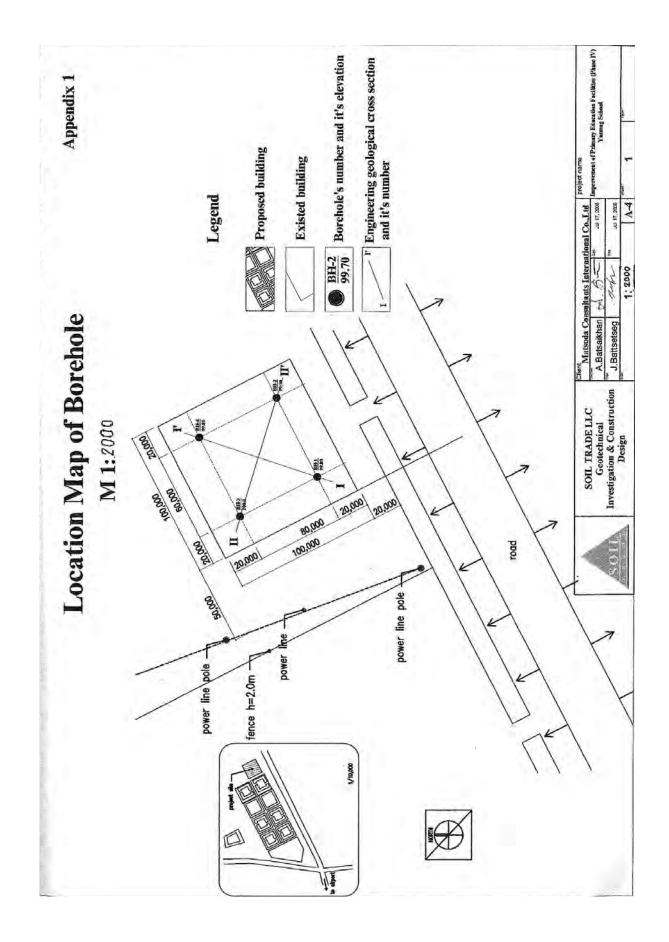
Appendix 2.1

u II	Sampling	Jo lo	samt Symb Dept	• •	- 20		4.0 •	•			•		•	
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99 10 LEVEL Stab		a,die	Det	-10	- 50	- 3.0	- 4.0	- 5.0	- 6.0	- 7.0	- 80	0.6 -	-10.0	2
Matsuda Consaltants SURFACE RL; 99. International LLC HOLE DEPTH: 10. Facilities (phase4) GROUND WATER LEVEL: District, Ulaanbaatar City Detected m Stabil	Soil / Rock Material Description	Description of soil		Poorly graded GRAVEL with send - Upper & Modern Quaternary age's, deluvium-proluvium deposit, yellowish brown, mendium dense, slightly moist	Poorly graded GRAVEL with sand and clay - Upper & Modem Quaternary age's, deluvium-proluvium deposit, brownish grey, mendium dense, hard consistency	Poorty graded GRA VEL with sand - Upper & Modern Quaternary age's, delavium-proluvium deposit, vellowish brown, medium dense, slightly moist		Clayey SAND and clayey Sand with gravel - Upper & Modem Quatemary age's, deluvium-proluvium deposit, yellowish brown, Ionor Just and an element	Christiansteinu Hann Seoun		Clayev SAND - Neogene age's, hmwnich ned lones hard	consistency		
Matsuda Consaltants International LLC Improvement of Primary Facitities (phase4) Yarmag school, Khan-U District, Ulaanbaatar City		Symbol		GP	GP-GC	GP		sc			US	2		
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PR PR		ın ,the	Del	1.0_	2.0	3.0	4 2	5.0	6.0	7.0	8.0	0.6	10.0	

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Material Consolutions SURFACE RL: 99.7 m HOLE DM: 168.146, 137 mm International LLC International LLC International LLC HOLE DEPTH: 10.5 m DRILL RIG: UBBLILLER: Soil / Reaction Antimicity Sphase/Given BADDIA International LLC DRILLER: Soil / Reaction Soil / Reac					REFORT and Stan	REPORT OF BOREHOLE: BH-2 and Standard Penetration Test (SPT)	(TTS)	1	BH-	2			
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Total End Filt Filt <td>d depth</td> <td></td> <td></td> <td>Symbol</td> <td>Description of soil</td> <td></td> <td>m,tt</td> <td>Number</td> <td>Numbe</td> <td>of every cm</td> <td></td> <td></td> <td>-</td>	d depth			Symbol	Description of soil		m,tt	Number	Numbe	of every cm			-
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SC Cleyey SAND - Noogen age's, deposits, brownish red, slim dense, hand consistency. - 7.0 - 31/30 11 14 15	62	2.6	U)				- 6.0	27/30	-	-			0.9
SC Cleyey SAND - Noogen age's, deposits, brownish red, slim dense, hard consistency. -9.0 29/30 8 11 18		1223	U)				- 7.0	31/30		-			
SC Clevery SAND - Noogen ages, deposits, brownish red, slim dense, hard consistency. -10.0 31/30 10 13 18	·	1723	11)	Ţ			- 8.0	23/30		-+			8.0
-10.0 31/20 10 13 18		1113	HH.	SC	Cleyey SAND - Neogen age's, deposits, bro hard consistency.	ownish red, slim dense,	0.6 -	29/30	-			-	
		2777	111				-10.0	31/30	-				10.0

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