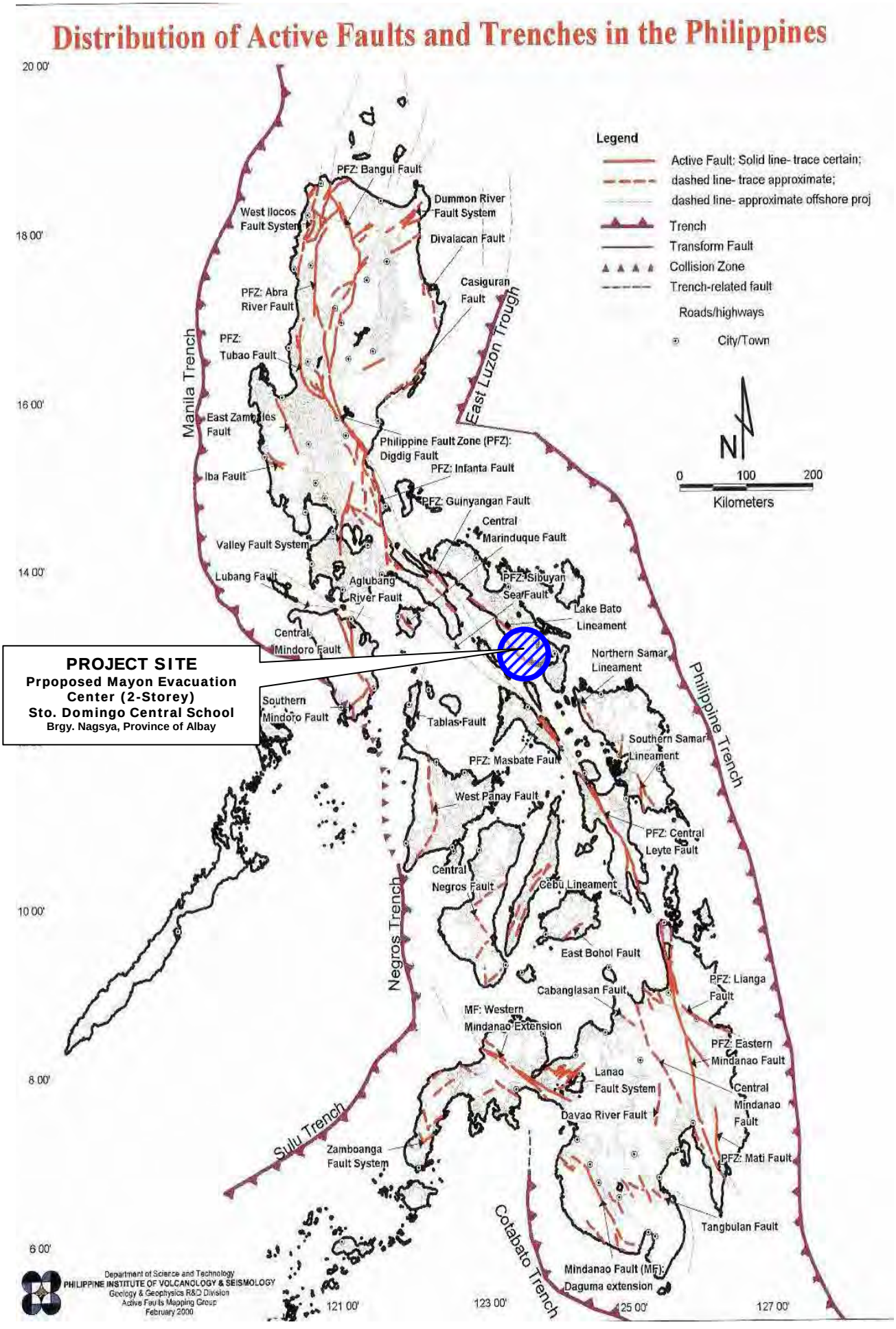
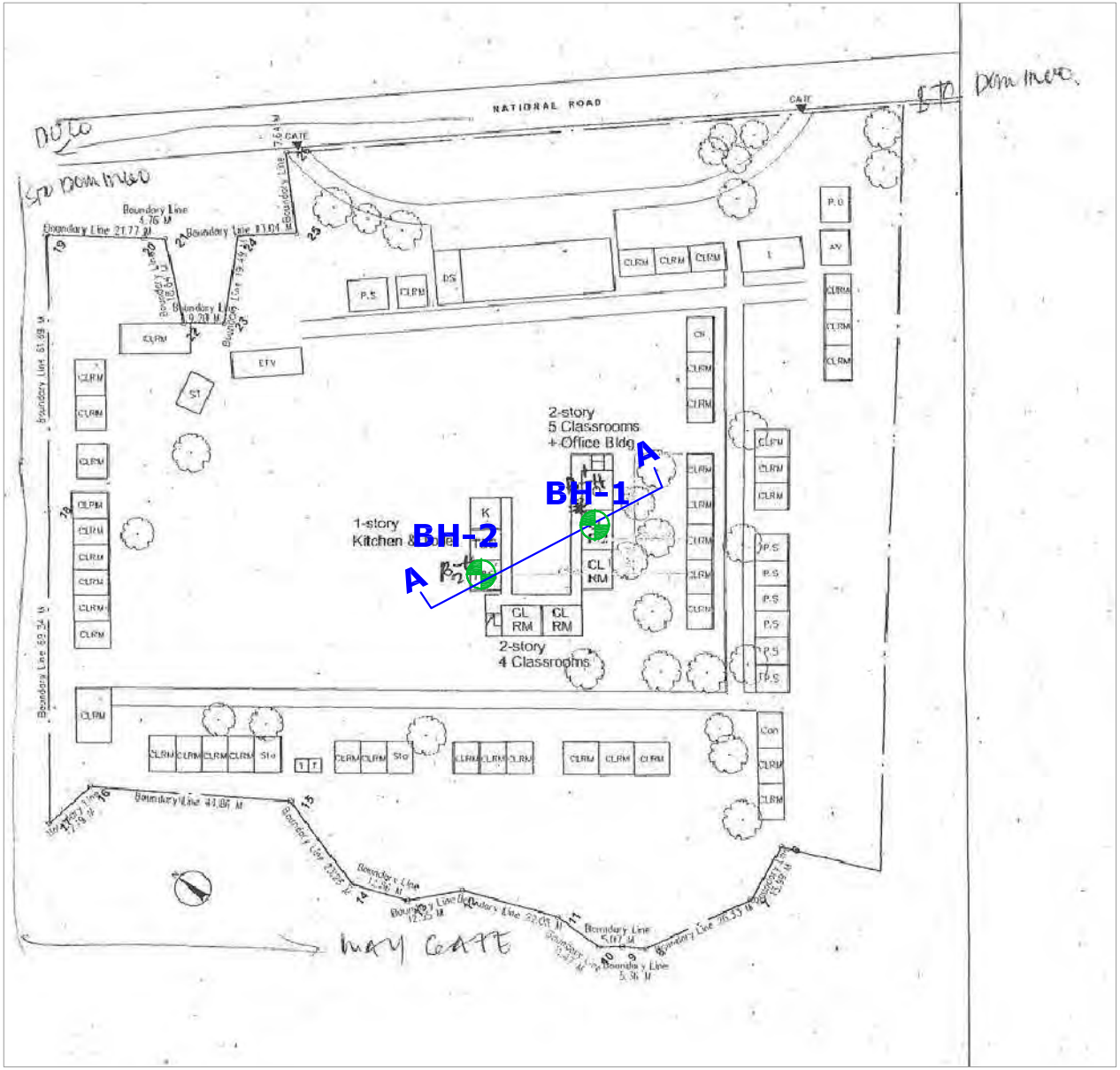
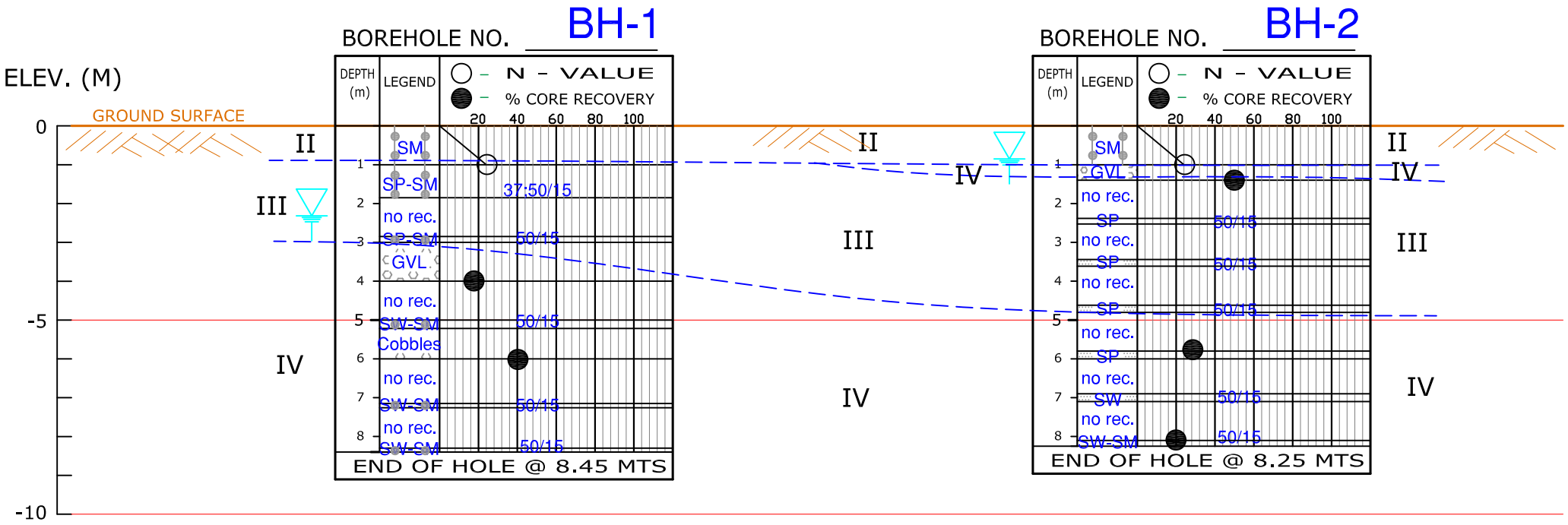
APPENDICES


Distribution of Active Faults and Trenches in the Philippines
Legend
Active Fault: Solid line- trace certain;
dashed line- trace approximate;
dashed line- approximate offshore proj
Trench
Transform Fault
Collision Zone
Trench-related fault
Roads/highways
City/Town
N
0
100
200
Kilometers
PROJECT SITE
Prpoposed Mayon Evacuation Center (2-Storey)
Sto. Domingo Central School
Brgy. Nagsya, Province of Albay
PFZ: Bangui Fault
West Ilocos Fault System
Dummon River Fault System
Divalacan Fault
Casiguran Fault
PFZ: Abra River Fault
PFZ: Tubao Fault
East Zambales Fault
Philippine Fault Zone (PFZ): Digdig Fault
PFZ: Infanta Fault
Iba Fault
PFZ: Guinyangan Fault
Central Marinduque Fault
Valley Fault System
Lubang Fault
Aglubang River Fault
PFZ: Sibuyan Sea Fault
Lake Bato Lineament
Central Mindoro Fault
Northern Samar Lineament
Southern Mindoro Fault
Tablas Fault
Southern Samar Lineament
PFZ: Masbate Fault
West Panay Fault
PFZ: Central Leyte Fault
Central Negros Fault
Cebu Lineament
East Bohol Fault
Cabanglasan Fault
PFZ: Lianga Fault
MF: Western Mindanao Extension
PFZ: Eastern Mindanao Fault
Lanao Fault System
Central Mindanao Fault
Davao River Fault
Zamboanga Fault System
PFZ: Mati Fault
Tangbulan Fault
Mindanao Fault (MF): Daguma extension
Manila Trench
East Luzon Trough
Philippine Trench
Negros Trench
Sulu Trench
Cotabato Trench
20 00'
18 00'
16 00'
14 00'
10 00'
8 00'
6 00'
121 00'
123 00'
125 00'
127 00'
Department of Science and Technology
PHILIPPINE INSTITUTE OF VOLCANOLOGY & SEISMOLOGY
Geology & Geophysics R&D Division
Active Faults Mapping Group
February 2000



VICINITY MAP

CONTRACTOR **GEOTECHNICS PHILIPPINES, INC.** 119 SAUYO ROAD, NOVALICHES, QUEZON CITY	PROJECT TITLE **Proposed Mayon Evacuation Center (Sto. Domingo Central School)** Brgy. Nagsya, Province of Albay	SCALE NTS	SHEET CONTENTS **LOCATION PLAN/VICINITY MAP** CLIENT **MOHRI, ARCHITECT & ASSOCIATES, INC.**	JOB NO. **2209-10.R1** SHEET NO. 1/1



SECTION A - A

L E G E N D :

- CH - Silty C L A Y
- CL - Sandy C L A Y
- MH - Clayey S I L T
- ML - Sandy S I L T
- SC - Clayey S A N D
- SM - Silty S A N D
- GM - Silty G R A V E L
- SC-SM - Clayey silty S A N D
- SP - Poorly graded SAND
- SW - Well graded SAND
- SP-SM - Poorly graded SAND w/ silt
- SW-SM - Well graded SAND w/ silt
- GP - Poorly graded GRAVEL
- GW - Well graded GRAVEL
- GP-GM - Poorly graded GRAVEL w/ silt
- GW-GM - Well graded GRAVEL w/ silt
- SD - SANDSTONE
- GC-GM - Clayey silty GRAVEL
- CBL - COBBLES
- GVL - GRAVEL
- STI - SILTSTONE
- TST - Silty TUFF
- TSD - Sandy TUFF
- SHL - SHALE

I - N-VALUE<10 (LIQUEFIABLE ZONE)
II - N-VALUE>10
III - REFUSAL (WEATHERED ZONE)
IV - CORING / HARD FORMATION

CONTRACTOR
GEOTECHNICS PHILIPPINES, INC.
119 SAUYO ROAD, NOVALICHES, QUEZON CITY

PROJECT TITLE:
Proposed Mayon Evacuation Center (Sto. Domingo Central School)
Brgy.Nagsya, Province of Albay

SHEET CONTENTS:
SOIL PROFILE
SCALE : N. T. S.

CLIENT:
MOHRI, ARCHITECT & ASSOCIATES, INC.

DRAWN BY:
MARIA ANTONIETTE P. CUNAHAP

CHECKED BY:
A. B. A. / M. R. R.

CERTIFIED BY:
AUTHORIZED SIGNATORY

JOB NO.
2209-10.R1

SHEET NO.
1/1

c

GEOTECHNICS PHILIPPINES, INCORPORATED
SOILS AND MATERIALS TESTING LABORATORY
119 SAUYO ROAD, NOVALICHES, QUEZON CITY
TEL. NO. 938-2124 \ 456-1140 \ 930-6555
DPWH-BRS Accredited

CLIENT	**MOHRI, ARCHITECT & ASSOCIATES, INC.**		BOREHOLE NO. **BH- 1**
PROJECT	**Proposed Mayon Evacuation Center (Sto. Domingo Central School)**		JOB NO. 2209-10.R1-FBL-01
LOCATION	Brgy. Nagsya, Province of Albay	DRILLED R. POLIDAN	SHEET 1 of 1
RIG	KSK SMALL	LOGGED R. POLIDAN	0.00 to 8.45 meters
	Hammer Weight 63.50 Kg.	DATE STARTED Oct. 20, 2010	GROUND LEVEL - m.
	Fall Height 76.20 cm.	DATE COMPLETED Oct. 20, 2010	WATER LEVEL 2.31 m.
METHOD	WASH BORING	NORTHING -	EASTING -

FINAL BORING LOG

DEPTH (m)	SOIL SYMBOL	SAMPLE NUMBER	TYPE OF SAMPLING	REC (cm)	RQD (%)	PL NMC LL (20 40 60 80 100)	PI	CONSISTENCY	N-VALUE / % Core Recovery (0 20 40 60 80 100)	SOIL DESCRIPTION	OTHER TEST DATA
1.00		S-1	SPT	45	-		NP	MEDIUM DENSE	25	(SM) Silty SAND, fine to coarse grained with little amount of gravel, dark gray, very moist NB: (10)(12)(13)	
		S-2	SPT	30	-		NP		37 50/15	(SP-SM) Poorly graded SAND with silt and little amount of gravel, dark gray, moist NB: (22)(37)(50/15)	
2.00		C-1	CRG	0	0		-		0	Sludge: recovered, fine to coarse grained sand, (pyroclastic materials), weakly cemented, highly weathered sandy tuff, hard drilling, dark gray	
3.00		S-3	SPT	10	-		NP		50/15	(SP-SM) Poorly graded SAND with silt, dark gray, moist NB: (50/15)	
4.00		C-2	CRG	50	0		-		17	GRAVEL to COBBLES, high strength, andesitic rock fragments ranges:1.0cm-10.3cm with iron oxide and silt on rough surfaces, brown NO RECOVERY	
5.00		C-3	CRG	0	0		-		0		
		S-4	SPT	10	-		NP	VERY DENSE	50/15	(SW-SM) Well graded SAND with silt and little amount of gravel, dark gray, moist NB: (50/15)	
6.00		C-4	CRG	40	0		-		40	COBBLE, ranges:9.6cm-10.4cm	
7.00		C-5	CRG	0	0		-		0	Sludge: recovered, fine to coarse grained sand, (pyroclastic materials), weakly cemented, highly weathered sandy tuff, hard drilling, dark gray	
		S-5	SPT	15	-		NP		50/15	(SW-SM) Well graded SAND with silt and little amount of gravel, dark gray, moist NB: (50/15)	
8.00		C-6	CRG	0	0		-		0	Sludge: recovered, fine to coarse grained sand, (pyroclastic materials), hard drilling, weakly cemented sandy tuff, brownish dark gray	
		S-6	SPT	15	-		NP		50/15	(SW-SM) Well graded SAND with silt and little amount of gravel, dark gray, moist NB: (50/15)	
9.00										END OF BORING AT 8.45 METERS	
10.00											

Type of Sampling

- STANDARD PENETRATION TEST (SPT)
- UNDISTURBED SAMPLING (UDS)
- CORING (CRG)

Type of Soil

- Silty CLAY
- Clayey SILT
- Clayey SAND
- Silty SAND
- Clayey silty SAND
- SAND
- Silty GRAVEL
- Well graded GRAVEL with silt
- GRAVEL
- SILTSTONE
- TUFF
- Tuffeceous SILTSTONE

CONSISTENCY

COHESIVE SOILS N-VALUE	CONSISTENCY	COHENSIONLESS SOILS N-VALUE	CONSISTENCY
0 - 2	VERY SOFT	0 - 4	VERY LOOSE
2 - 4	SOFT	4 - 10	LOOSE
4 - 8	FIRM	10 - 30	MEDIUM DENSE
8 - 15	STIFF	30 - 50	DENSE
15 - 30	VERY STIFF	> 50	VERY DENSE
> 30	HARD		

MOISTURE

MOISTURE CONTENT RANGES	VALUES
0 - 10	DRY
10 - 30	MOIST
30 - 70	VERY MOIST
70 - 100	WET
> 100	SATURATED

PERCENTAGE

% of SAND and GRAVEL RANGES	VALUES
0 - 5	TRACES
6 - 10	FEW
11 - 25	LITTLE
26 - 35	SOME
36 - 45	WITH

REMARKS: Rec = Recovery in Centimeters NB = No. of Blows HW = Hammer Weight

Reference Joint Spacing: #1 >30cm. 10 cm. >#3>3cm. #5 <1cm.

30 cm.>#2>10cm. 3 cm. >#4>1cm.

RQD = Rock Quality Designation SCR = Solid Core Recovery

Description of Strata is according to Unified Soil Classification System

Prepared by : **R. T. LUSTRE**

Checked by : **A.B.A. / M.R.R.**

Certified by :

AUTHORIZED SIGNATORY

Date Issued :

GEOTECHNICS PHILIPPINES, INCORPORATED

SOILS AND MATERIALS TESTING LABORATORY

119 SAUYO ROAD, NOVALICHES, QUEZON CITY
TEL. NO. 938-2124 \ 456-1140 \ 930-6555

DPWH-BRS Accredited

CLIENT	**MOHRI, ARCHITECT & ASSOCIATES, INC.**		BOREHOLE NO. **BH- 2**
PROJECT	**Proposed Mayon Evacuation Center (Sto. Domingo Central School)**		JOB NO. 2209-10.R1-FBL-02
LOCATION	Brgy. Nagsya, Province of Albay	DRILLED R. POLIDAN	SHEET 1 of 1
RIG	KSK SMALL	LOGGED R. POLIDAN	0.00 to 8.25 meters
	Hammer Weight 63.50 Kg.	DATE STARTED Oct. 22, 2010	GROUND LEVEL - m.
	Fall Height 76.20 cm.	DATE COMPLETED Oct. 22, 2010	WATER LEVEL 0.73 m.
METHOD	WASH BORING	NORTHING -	EASTING -

FINAL BORING LOG

DEPTH (m)	SOIL SYMBOL	SAMPLE NUMBER	TYPE OF SAMPLING	REC (cm)	RQD (%)	PL NMC LL (20 40 60 80 100)	PI	CONSISTENCY	N-VALUE / % Core Recovery (0 20 40 60 80 100)	SOIL DESCRIPTION	OTHER TEST DATA
		S-1	SPT	25	-		NP	MEDIUM DENSE	10	(SM) Silty SAND, fine to coarse grained with little amount of gravel, dark gray, very moist NB: (3)(4)(6)	
1.00		C-1	CRG	50	0		-		50	GRAVEL to COBBLE, very high strength, andesitic rock fragments, ranges:3.6cm-13.6cm, angular with iron oxide with silt on rough surfaces, slightly to moderately weathered, dark gray	
2.00		C-2	CRG	0	0		-		0	Sludge: recovered fine to coarse grained sand, (pyroclastic materials), weakly cemented, highly weathered sandy tuff, hard drilling, dark gray	
		S-2	SPT	15	-		NP		50/15	(SP) Poorly graded SAND, dark gray, moist NB: (50/15)	
3.00		C-3	CRG	0	0		-		0	Sludge: recovered up to bottom	
		S-3	SPT	15	-		NP		50/15	(SP) Poorly graded SAND with little amount of gravel, dark gray, moist NB: (50/15)	
4.00		C-4	CRG	0	0		-		0		
		S-4	SPT	15	-		NP	VERY DENSE	50/15	(SP) Poorly graded SAND with few gravel, dark gray, moist NB: (50/15)	
5.00		C-5	CRG	0	0		-		28		
		S-5	SPT	15	-		NP		50/15	(SP) Poorly graded SAND with some gravel, dark gray, moist NB: (50/15)	
6.00		C-6	CRG	0	0		-		0		
7.00		S-6	SPT	15	-		NP		50/15	(SW) Well graded SAND with some gravel, dark gray, moist NB: (50/15)	
8.00		C-7	CRG	0	0		-		20		
		S-7	SPT	15	-		NP		50/15	(SW-SM) Well graded SAND with silt and little amount of gravel, dark gray, moist NB: (50/15)	
9.00										END OF BORING AT 8.25 METERS	
10.00											

Type of Sampling

- STANDARD PENETRATION TEST (SPT)
- UNDISTURBED SAMPLING (UDS)
- CORING (CRG)

Type of Soil

- Silty CLAY
- Clayey SILT
- Clayey SAND
- Silty SAND
- Clayey silty SAND
- SAND
- Silty GRAVEL
- Well graded GRAVEL with silt
- GRAVEL
- SILTSTONE
- TUFF
- Tuffeceous SILTSTONE

CONSISTENCY

COHESIVE SOILS			COHENSIONLESS SOILS		
N-VALUE		CONSISTENCY	N-VALUE		CONSISTENCY
0 - 2	–	VERY SOFT	0 - 4	–	VERY LOOSE
2 - 4	–	SOFT	4 - 10	–	LOOSE
4 - 8	–	FIRM	10 - 30	–	MEDIUM DENSE
8 - 15	–	STIFF	30 - 50	–	DENSE
15 - 30	–	VERY STIFF	> 50	–	VERY DENSE
> 30	–	HARD			

MOISTURE

MOISTURE CONTENT		
RANGES		VALUES
0 - 10	–	DRY
10 - 30	–	MOIST
30 - 70	–	VERY MOIST
70 - 100	–	WET
> 100	–	SATURATED

PERCENTAGE

% of SAND and GRAVEL		
RANGES		VALUES
0 - 5	–	TRACES
6 - 10	–	FEW
11 - 25	–	LITTLE
26 - 35	–	SOME
36 - 45	–	WITH

REMARKS: Rec = Recovery in Centimeters NB = No. of Blows HW = Hammer Weight

Reference Joint Spacing: #1 >30cm. 10 cm. >#3>3cm. #5 <1cm.

30 cm.>#2>10cm. 3 cm. >#4>1cm.

RQD = Rock Quality Designation SCR = Solid Core Recovery

Description of Strata is according to Unified Soil Classification System

Prepared by : **R. T. LUSTRE**

Checked by : **A.B.A. / M.R.R.**

Certified by :

AUTHORIZED SIGNATORY

Date Issued :

GEOTECHNICS PHILIPPINES, INC.
SOILS AND MATERIALS TESTING LABORATORY
119 Sauyo Road, Novaliches, Quezon City

DPWH-BRS Accredited

CLIENT..... **MOHRI, ARCHITECT & ASSOCIATES, INC.** JOB NUMBER..... 2209-10.R1-SUM-1
PROJECT..... **Proposed Mayon Evacuation Center (Sto. Domingo Central School)** DATE OF RECIEPT.... October 27, 2010
LOCATION.... Brgy. Nagsya, Province of Albay DATE OF TEST..... Oct. 27-Nov. 2, 2010

SUMMARY OF LABORATORY TESTS

SAMPLE NUMBER	DEPTH (m)	NMC (%)	ATTERBERG LIMIT, (%)			USCS Class.	SIEVE ANALYSIS (% FINER) PASSING SIEVE NO.										Remarks
			LL	PL	PI		1	3/4	3/8	4	10	20	40	60	140	200	
BH-1																	
1	0.55 - 1.00	30	-	NP	-	SM		100	92	84	76	64	49	39	27	24	-
2	1.55 - 1.85	19	-	NP	-	SP-SM		100	89	84	77	60	31	17	6	5	-
3	2.55 - 3.00	21	-	NP	-	SP-SM				100	98	75	48	28	9	7	-
4	5.00 - 5.15	19	-	NP	-	SW-SM		100	85	80	79	63	42	25	8	6	-
5	7.15 - 7.50	20	-	NP	-	SW-SM		100	89	86	83	64	41	25	9	6	-
6	8.30 - 8.45	20	-	NP	-	SW-SM		100	83	80	79	60	38	22	8	6	-
BH-2																	
1	0.55 - 0.85	30	-	NP	-	SM			100	96	86	72	53	37	21	18	-
2	2.36 - 2.41	23	-	NP	-	SP				100	94	70	35	17	6	4	-
3	3.41 - 3.56	17	-	NP	-	SP		100	88	83	62	46	24	11	4	3	-
4	4.65 - 4.80	21	-	NP	-	SP			100	90	42	13	9	6	4	3	-
5	5.80 - 5.95	14	-	NP	-	SP		100	82	65	44	28	17	11	5	4	-
6	6.95 - 7.10	15	-	NP	-	SW		100	85	65	38	19	12	9	4	4	-
7	8.10 - 8.25	19	-	NP	-	SW-SM		100	86	72	55	27	17	12	7	6	-

SAMPLE SUBMITTED BY :

☐ Walk-in Clients ☑ GPI Field Operator

R. POLIDAN

REMARKS: * with hydrometer

COMPUTER PRINT-OUT
By: *MARIA ANTONIETTE P. CUNAHAP*
Encoder

Data Chkd by: ABA / MRR
Quality Assurance

Date Issued

CERTIFIED BY:

AUTHORIZED SIGNATORY

ACCREDITED TESTING LABORATORY
PNS ISO/IEC 17025:2005
LA-2006-097B

GEOTECHNICS PHILIPPINES, INC.

SOILS AND MATERIALS TESTING LABORATORY
119 Sauyo Road, Novaliches, Quezon City

DPWH-BRS Accredited

Client..... **MOHRI, ARCHITECT & ASSOCIATES, INC.**	Job Number..... 2209-10.R1-NMC-01-1
Project..... **Proposed Mayon Evacuation Center (Sto. Domingo Central School)**	Date of Receipt..... October 27, 2010
Location..... Brgy. Nagsya, Province of Albay	Date of Test..... October 28-30, 2010

TEST REPORT FOR LABORATORY DETERMINATION OF WATER (MOISTURE) CONTENT OF SOIL & ROCK BY MASS

ASTM D 2216 - 05

Test Method ☑ A ☐ B

BOREHOLE NO...BH-1

SAMPLE NUMBER	DEPTH (m)	WET SOIL DISH (g)	DRY SOIL DISH (g)	WATER (g)	DISH MASS (g)	DRY SOIL (g)	WATER CONTENT (%)	REMARKS
NATURAL MOISTURE CONTENT								
1	0.55-1.00	90.00	71.51	18.49	9.99	61.52	30	
2	1.55-1.85	104.20	88.82	15.38	9.47	79.35	19	
3	2.55-3.00	98.10	82.61	15.49	9.56	73.05	21	
4	5.00-5.15	99.58	85.28	14.30	9.72	75.56	19	
5	7.15-7.50	100.30	85.43	14.87	9.61	75.82	20	
6	8.30-8.45	101.90	86.77	15.13	9.87	76.90	20	

TEST REPORT FOR LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX OF SOILS

ASTM Designation : D 4318 - 05, Method B

SAMPLE NUMBER	DEPTH (m)	BLOWS	WET SOIL DISH (g)	DRY SOIL DISH (g)	WATER (g)	DISH MASS (g)	DRY SOIL (g)	% Retained on 0.425 mm	ATTERBERG LIMIT		REMARKS
									LL	PL	
LIQUID LIMIT											
PLASTIC LIMIT											

Uncertainty Results: Water Content (%) = ± 0.0324 Liquid Limit = --- Plastic Limit = ---

Note: The reported expanded uncertainty is based on a combined uncertainty by a coverage factor of k=2, providing a level of confidence of approximately 95%.

LAB.FILE NO.:NMC-10-506

SAMPLE SUBMITTED BY :

☐ Walk-in Clients ☑ GPI Field Operator

R. POLIDAN

REMARKS: _____

COMPUTER PRINT-OUT

By: MARIA ANTONIETTE P. CUNAHAP
Encoder

Data Checked by: ABA/MRR
Quality Assurance

Date Issued: _____

TESTED BY : ARTURO Q. AQUINO
LABORATORY TECHNICIAN

CERTIFIED BY : _____
AUTHORIZED SIGNATORY

ACCREDITED TESTING LABORATORY
PNS ISO/IEC 17025:2005
LA-2006-097B

GEOTECHNICS PHILIPPINES, INC.

SOILS AND MATERIALS TESTING LABORATORY
119 Sauyo Road, Novaliches, Quezon City

DPWH-BRS Accredited

Client..... **MOHRI, ARCHITECT & ASSOCIATES, INC.**	Job Number..... 2209-10.R1-NMC-02-1
Project..... **Proposed Mayon Evacuation Center (Sto. Domingo Central School)**	Date of Receipt..... October 27, 2010
Location.....Brgy. Nagsya, Province of Albay	Date of Test..... October 28-30, 2010

TEST REPORT FOR LABORATORY DETERMINATION OF WATER (MOISTURE) CONTENT OF SOIL & ROCK BY MASS

ASTM D 2216 - 05

Test Method ☑ A ☐ B

BOREHOLE NO...BH-2

SAMPLE NUMBER	DEPTH (m)	WET SOIL DISH (g)	DRY SOIL DISH (g)	WATER (g)	DISH MASS (g)	DRY SOIL (g)	WATER CONTENT (%)	REMARKS
NATURAL MOISTURE CONTENT								
1	0.55-0.85	90.20	71.48	18.72	9.50	61.98	30	
2	2.36-2.41	106.00	88.15	17.85	9.77	78.38	23	
3	3.41-3.56	101.56	88.36	13.20	9.56	78.80	17	
4	4.65-4.80	103.29	86.86	16.43	10.40	76.46	21	
5	5.80-5.95	102.49	90.91	11.58	9.60	81.31	14	
6	6.95-7.10	105.10	92.94	12.16	9.25	83.69	15	
7	8.10-8.25	129.15	109.82	19.33	9.48	100.34	19	

TEST REPORT FOR LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX OF SOILS

ASTM Designation : D 4318 - 05, Method B

SAMPLE NUMBER	DEPTH (m)	BLOWS	WET SOIL DISH (g)	DRY SOIL DISH (g)	WATER (g)	DISH MASS (g)	DRY SOIL (g)	% Retained on 0.425 mm	ATTERBERG LIMIT		REMARKS
									LL	PL	
LIQUID LIMIT											
PLASTIC LIMIT											

Uncertainty Results: Water Content (%) = ± 0.0322 Liquid Limit = --- Plastic Limit = ---

Note: The reported expanded uncertainty is based on a combined uncertainty by a coverage factor of k=2, providing a level of confidence of approximately 95%.

LAB.FILE NO.:NMC-10-507

SAMPLE SUBMITTED BY :

☐ Walk-in Clients ☑ GPI Field Operator

R. POLIDAN

REMARKS:

COMPUTER PRINT-OUT

By: MARIA ANTONIETTE P. CUNAHAP
Encoder

Data Checked by: ABA/MRR
Quality Assurance

Date Issued: _____

TESTED BY : ARTURO Q. AQUINO
LABORATORY TECHNICIAN

CERTIFIED BY : _____
AUTHORIZED SIGNATORY

ACCREDITED TESTING LABORATORY
PNS ISO/IEC 17025:2005
LA-2006-097B

GEOTECHNICS PHILIPPINES, INC.

SOILS AND MATERIALS TESTING LABORATORY
119 Sauyo Road, Novaliches, Quezon City

DPWH-BRS Accredited

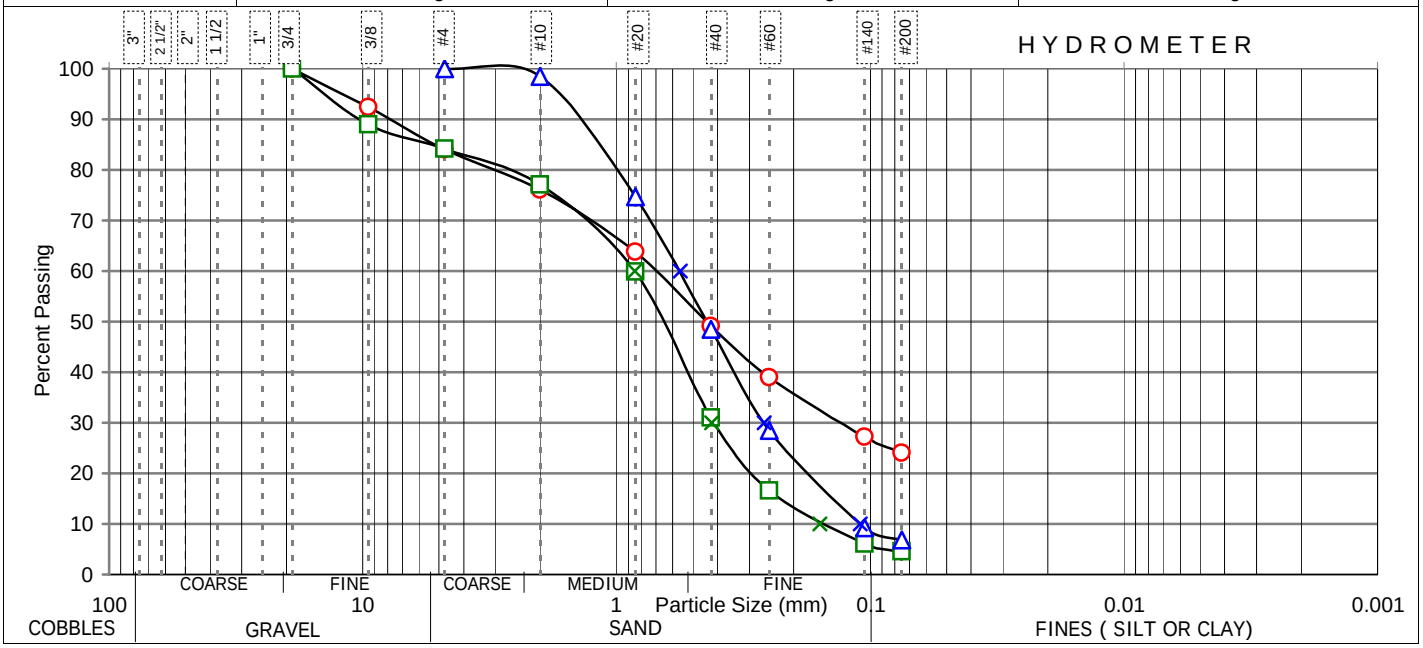
Client..... **MOHRI, ARCHITECT & ASSOCIATES, INC.**	Job Number..... 2209-10.R1-GSA-01-1
Project..... **Proposed Mayon Evacuation Center (Sto. Domingo Central School)**	Date of Receipt..... October 27, 2010
Location..... Brgy. Nagsya, Province of Albay	Date of Test..... November 2, 2010

TEST REPORT FOR GRAIN SIZE ANALYSIS

ASTM D 422 - 63 (Re-approved 2007)

		○ 1	□ 2	△ 3
BH / SAMPLE NO.....	**BH-1**			
DEPTH (m).....		0.55-1.00	1.55-1.85	2.55-3.00
SOIL DESCRIPTION.....		Silty SAND	Poorly graded SAND with silt	Poorly graded SAND with silt

SIEVE SIZE inches	SIEVE SIZE mm	Cumm.Mass Retained (g)	Cumm.% Retained	Percent Finer	Cumm.Mass Retained (g)	Cumm.% Retained	Percent Finer	Cumm.Mass Retained (g)	Cumm.% Retained	Percent Finer
2 1/2	62.5									
2	50.0									
1 1/2	37.5									
1	25.0									
3/4	19.0			100			100			
3/8	9.5	4.70	7.64	92	8.76	11.04	89			
4	4.75	9.80	15.93	84	12.55	15.82	84			100
10	2.0	14.68	23.86	76	18.16	22.89	77	1.12	1.53	98
20	0.8	22.29	36.23	64	31.81	40.09	60	18.50	25.33	75
40	0.425	31.33	50.93	49	54.75	69.00	31	37.65	51.54	48
60	0.25	37.52	60.99	39	66.21	83.44	17	52.29	71.58	28
140	0.105	44.80	72.82	27	74.50	93.89	6	66.27	90.72	9
200	0.075	46.70	75.91	24	75.69	95.39	5	68.10	93.22	7
OVEN DRIED MASS			61.52 gms			79.35 gms			73.05 gms	



* - with Hydrometer

REMARKS : S-2: Cu = 5.37 Cc = 1.33
S-3: Cu = 5.13 Cc = 1.12

SAMPLE SUBMITTED BY:
☐ Walk-in Clients ☑ GPI Field Operator
R. POLIDAN

COMPUTER PRINT-OUT
By: MARIA ANTONIETTE P. CUNAHAP
Encoder

Data Checked by: ABA/MRR
Quality Assurance

Date Issued: _____

TESTED BY : ARTURO Q. AQUINO
LABORATORY TECHNICIAN

CERTIFIED BY : _____
AUTHORIZED SIGNATORY

Uncertainty Results: % Finer = ± 0.0501 LAB.FILE NO.:GSA-10-406

Note: The reported expanded uncertainty is based on a combined uncertainty by a coverage factor of k=2, providing a level of confidence of approximately 95%.

ACCREDITED TESTING LABORATORY
PNS ISO/IEC 17025:2005
LA-2006-097B

GEOTECHNICS PHILIPPINES, INC.

SOILS AND MATERIALS TESTING LABORATORY
119 Sauyo Road, Novaliches, Quezon City

DPWH-BRS Accredited

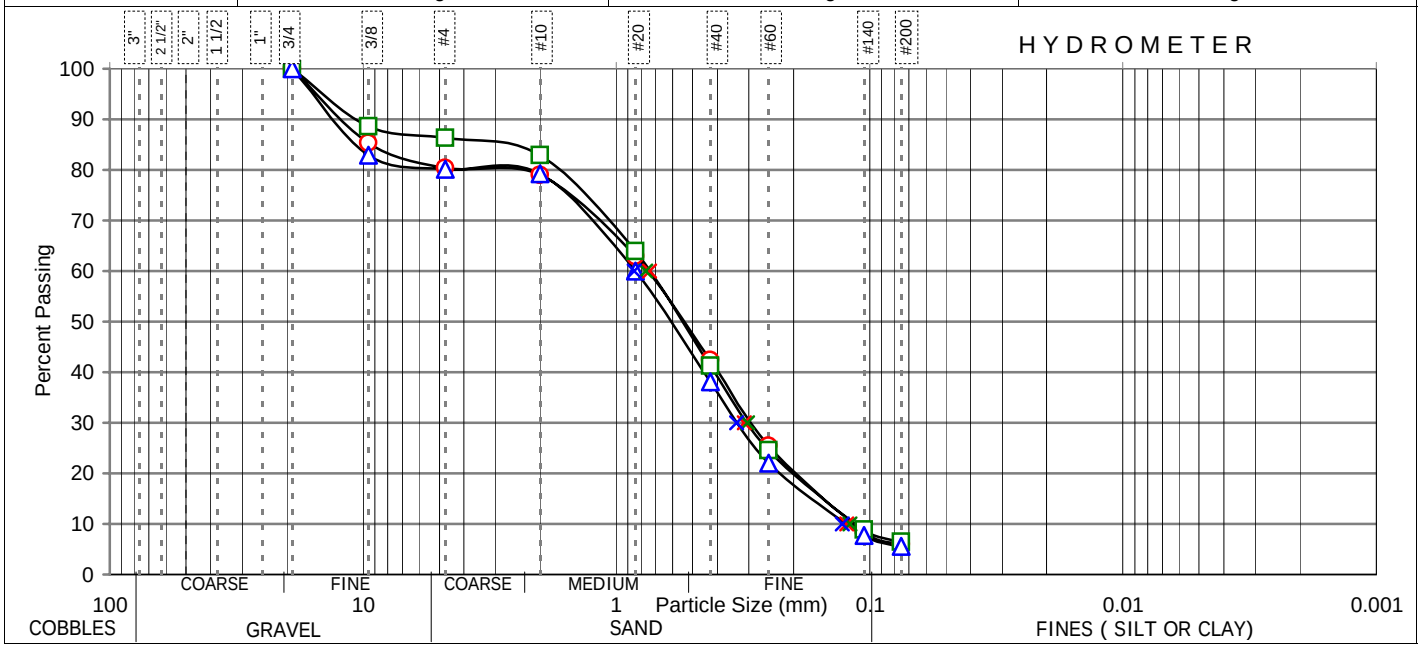
Client..... **MOHRI, ARCHITECT & ASSOCIATES, INC.**	Job Number..... 2209-10.R1-GSA-01-2
Project..... **Proposed Mayon Evacuation Center (Sto. Domingo Central School)**	Date of Receipt..... October 27, 2010
Location..... Brgy. Nagsya, Province of Albay	Date of Test..... November 2, 2010

TEST REPORT FOR GRAIN SIZE ANALYSIS

ASTM D 422 - 63 (Re-approved 2007)

BH / SAMPLE NO.....	**BH-1**	○ 4	□ 5	△ 6
DEPTH (m).....		5.00-5.15	7.15-7.50	8.30-8.45
SOIL DESCRIPTION.....		Well graded SAND with silt	Well graded SAND with silt	Well graded SAND with silt

SIEVE SIZE		Cumm.Mass	Cumm.%	Percent	Cumm.Mass	Cumm.%	Percent	Cumm.Mass	Cumm.%	Percent Finer
inches	mm	Retained (g)	Retained	Finer	Retained (g)	Retained	Finer	Retained (g)	Retained	
2 1/2	62.5									
2	50.0									
1 1/2	37.5									
1	25.0									
3/4	19.0			100			100			100
3/8	9.5	11.05	14.62	85	8.59	11.33	89	13.10	17.04	83
4	4.75	14.83	19.63	80	10.37	13.68	86	15.28	19.87	80
10	2.0	15.92	21.07	79	12.98	17.12	83	15.94	20.73	79
20	0.8	28.00	37.06	63	27.36	36.09	64	30.78	40.03	60
40	0.425	43.48	57.54	42	44.56	58.77	41	47.59	61.89	38
60	0.25	56.36	74.59	25	57.19	75.43	25	59.96	77.97	22
140	0.105	69.21	91.60	8	69.12	91.16	9	71.00	92.33	8
200	0.075	71.11	94.11	6	70.95	93.58	6	72.65	94.47	6
OVEN DRIED MASS			75.56 gms			75.82 gms			76.90 gms	



* - with Hydrometer

SAMPLE SUBMITTED BY:

☐ Walk-in Clients ☑ GPI Field Operator

R. POLIDAN

REMARKS :

S-4:	Cu =	6.00	Cc =	1.07
S-5:	Cu =	6.40	Cc =	1.00
S-6:	Cu =	6.64	Cc =	1.04

TESTED BY : ARTURO Q. AQUINO
LABORATORY TECHNICIAN

CERTIFIED BY : _____
AUTHORIZED SIGNATORY

COMPUTER PRINT-OUT

By: MARIA ANTONIETTE P. CUNAHAP
Encoder

Data Checked by: ABA/MRR
Quality Assurance

Date Issued: _____

Uncertainty Results: % Finer = ± 0.0447 LAB.FILE NO.:GSA-10-407

Note: The reported expanded uncertainty is based on a combined uncertainty by a coverage factor of k=2, providing a level of confidence of approximately 95%.

ACCREDITED TESTING LABORATORY
PNS ISO/IEC 17025:2005
LA-2006-097B

GEOTECHNICS PHILIPPINES, INC.

SOILS AND MATERIALS TESTING LABORATORY
119 Sauyo Road, Novaliches, Quezon City

DPWH-BRS Accredited

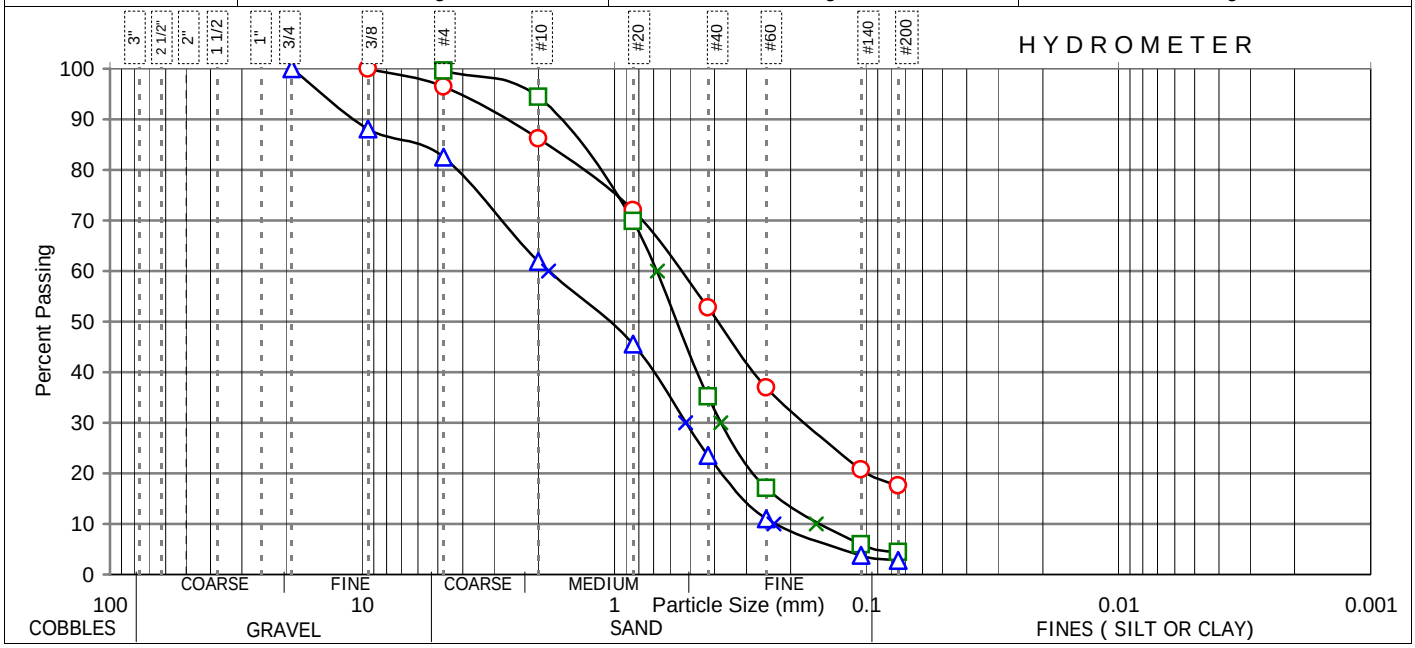
Client..... **MOHRI, ARCHITECT & ASSOCIATES, INC.**	Job Number..... 2209-10.R1-GSA-02-1
Project..... **Proposed Mayon Evacuation Center (Sto. Domingo Central School)**	Date of Receipt..... October 27, 2010
Location..... Brgy. Nagsya, Province of Albay	Date of Test..... November 2, 2010

TEST REPORT FOR GRAIN SIZE ANALYSIS

ASTM D 422 - 63 (Re-approved 2007)

		○ 1	□ 2	△ 3
BH / SAMPLE NO.....	**BH-2**			
DEPTH (m).....		0.55-0.85	2.36-2.41	3.41-3.56
SOIL DESCRIPTION.....		Silty SAND	Poorly graded SAND	Poorly graded SAND

SIEVE SIZE		Cumm.Mass	Cumm.%	Percent	Cumm.Mass	Cumm.%	Percent	Cumm.Mass	Cumm.%	Percent
inches	mm	Retained (g)	Retained	Finer	Retained (g)	Retained	Finer	Retained (g)	Retained	Finer
2 1/2	62.5									
2	50.0									
1 1/2	37.5									
1	25.0									
3/4	19.0									100
3/8	9.5			100				9.40	11.93	88
4	4.75	2.18	3.52	96	0.31	0.40	100	13.74	17.44	83
10	2.0	8.53	13.76	86	4.33	5.52	94	29.98	38.05	62
20	0.8	17.37	28.03	72	23.58	30.08	70	42.93	54.48	46
40	0.425	29.25	47.19	53	50.82	64.84	35	60.25	76.46	24
60	0.25	39.06	63.02	37	65.02	82.95	17	70.14	89.01	11
140	0.105	49.12	79.25	21	73.70	94.03	6	75.80	96.19	4
200	0.075	51.11	82.46	18	74.86	95.51	4	76.57	97.17	3
OVEN DRIED MASS			61.98 gms			78.38 gms			78.80 gms	



* - with Hydrometer

REMARKS : S-2: Cu = 4.27 Cc = 1.34
S-3: Cu = 7.83 Cc = 0.64

SAMPLE SUBMITTED BY:
☐ Walk-in Clients ☑ GPI Field Operator
R. POLIDAN

COMPUTER PRINT-OUT
By: MARIA ANTONIETTE P. CUNAHAP
Encoder

Data Checked by: ABA/MRR
Quality Assurance

Date Issued: _____

TESTED BY : ARTURO Q. AQUINO
LABORATORY TECHNICIAN

CERTIFIED BY : _____
AUTHORIZED SIGNATORY

Uncertainty Results: % Finer = ± 0.0514 LAB.FILE NO.:GSA-10-408

Note: The reported expanded uncertainty is based on a combined uncertainty by a coverage factor of k=2, providing a level of confidence of approximately 95%.

ACCREDITED TESTING LABORATORY
PNS ISO/IEC 17025:2005
LA-2006-097B

GEOTECHNICS PHILIPPINES, INC.

SOILS AND MATERIALS TESTING LABORATORY
119 Sauyo Road, Novaliches, Quezon City

DPWH-BRS Accredited

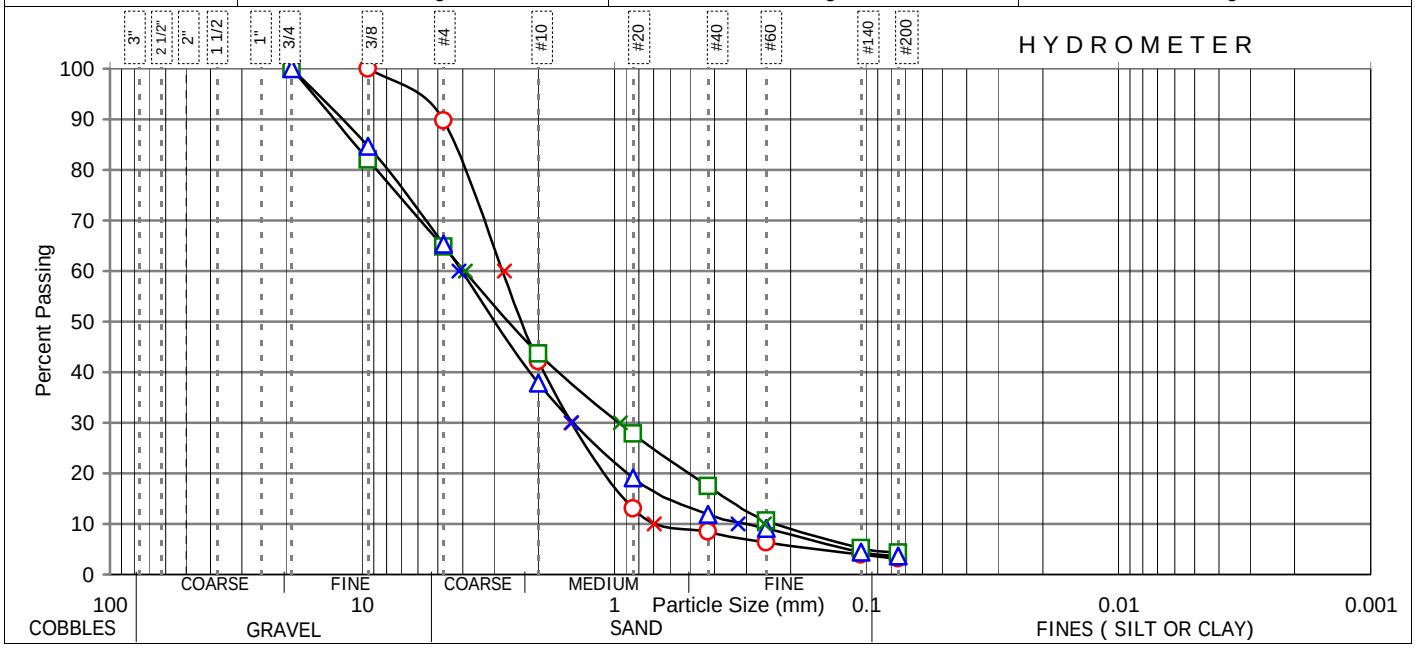
Client..... **MOHRI, ARCHITECT & ASSOCIATES, INC.**	Job Number..... 2209-10.R1-GSA-02-2
Project..... **Proposed Mayon Evacuation Center (Sto. Domingo Central School)**	Date of Receipt..... October 27, 2010
Location..... Brgy. Nagsya, Province of Albay	Date of Test..... November 2, 2010

TEST REPORT FOR GRAIN SIZE ANALYSIS

ASTM D 422 - 63 (Re-approved 2007)

		○ 4	□ 5	△ 6
BH / SAMPLE NO.....	**BH-2**			
DEPTH (m).....		4.65-4.80	5.80-5.95	6.95-7.10
SOIL DESCRIPTION.....		Poorly graded SAND	Poorly graded SAND	Well graded SAND

SIEVE SIZE		Cumm.Mass	Cumm.%	Percent	Cumm.Mass	Cumm.%	Percent	Cumm.Mass	Cumm.%	Percent
inches	mm	Retained (g)	Retained	Finer	Retained (g)	Retained	Finer	Retained (g)	Retained	Finer
2 1/2	62.5									
2	50.0									
1 1/2	37.5									
1	25.0									
3/4	19.0						100			100
3/8	9.5			100	14.59	17.94	82	12.83	15.33	85
4	4.75	7.87	10.29	90	28.61	35.19	65	29.05	34.71	65
10	2.0	44.26	57.89	42	45.82	56.35	44	52.06	62.21	38
20	0.8	66.49	86.96	13	58.70	72.19	28	67.70	80.89	19
40	0.425	69.96	91.50	9	67.10	82.52	17	73.72	88.09	12
60	0.25	71.60	93.64	6	72.64	89.34	11	76.09	90.92	9
140	0.105	73.50	96.13	4	77.10	94.82	5	80.00	95.59	4
200	0.075	74.08	96.89	3	77.83	95.72	4	80.62	96.33	4
OVEN DRIED MASS			76.46 gms			81.31 gms			83.69 gms	



* - with Hydrometer

REMARKS :

S-4:	Cu = 3.94	Cc = 1.17
S-5:	Cu = 15.31	Cc = 0.91
S-6:	Cu = 12.74	Cc = 1.63

SAMPLE SUBMITTED BY:

☐ Walk-in Clients ☑ GPI Field Operator

R. POLIDAN

TESTED BY : ARTURO Q. AQUINO
LABORATORY TECHNICIAN

CERTIFIED BY : _____
AUTHORIZED SIGNATORY

COMPUTER PRINT-OUT

By: MARIA ANTONIETTE P. CUNAHAP
Encoder

Data Checked by: ABA/MRR
Quality Assurance

Date Issued: _____

Uncertainty Results: % Finer = ± 0.0447 LAB.FILE NO.:GSA-10-408

Note: The reported expanded uncertainty is based on a combined uncertainty by a coverage factor of k=2, providing a level of confidence of approximately 95%.

ACCREDITED TESTING LABORATORY
PNS ISO/IEC 17025:2005
LA-2006-097B

GEOTECHNICS PHILIPPINES, INC.

SOILS AND MATERIALS TESTING LABORATORY
119 Sauyo Road, Novaliches, Quezon City

DPWH-BRS Accredited

Client..... **MOHRI, ARCHITECT & ASSOCIATES, INC.**	Job Number..... 2209-10.R1-GSA-02-3
Project..... **Proposed Mayon Evacuation Center (Sto. Domingo Central School)**	Date of Receipt..... October 27, 2010
Location..... Brgy. Nagsya, Province of Albay	Date of Test..... November 2, 2010

TEST REPORT FOR GRAIN SIZE ANALYSIS

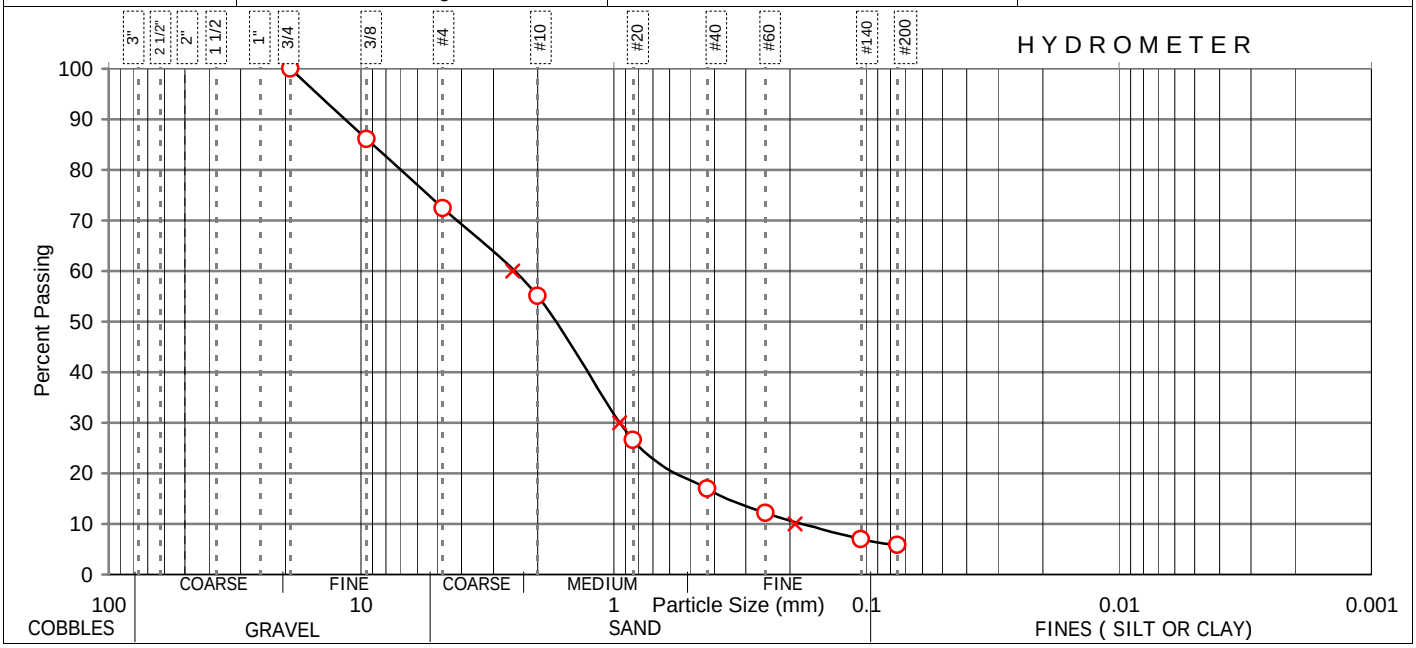
ASTM D 422 - 63 (Re-approved 2007)

BH / SAMPLE NO..... **BH-2** ○ 7 □ △
DEPTH (m)..... 8.10-8.25
SOIL DESCRIPTION..... Well graded SAND with silt

SIEVE SIZE inches	SIEVE SIZE mm	Cumm.Mass Retained (g)	Cumm.% Retained	Percent Finer
2 1/2	62.5			
2	50.0			
1 1/2	37.5			
1	25.0			
3/4	19.0			100
3/8	9.5	14.00	13.95	86
4	4.75	27.73	27.64	72
10	2.0	45.14	44.99	55
20	0.8	73.68	73.43	27
40	0.425	83.32	83.04	17
60	0.25	88.10	87.80	12
140	0.105	93.40	93.08	7
200	0.075	94.46	94.14	6
OVEN DRIED MASS		100.34 gms		

Cumm.Mass Retained (g)	Cumm.% Retained	Percent Finer

Cumm.Mass Retained (g)	Cumm.% Retained	Percent Finer



* - with Hydrometer

REMARKS : S-7: Cu = 13.09 Cc = 1.87

SAMPLE SUBMITTED BY:
☐ Walk-in Clients ☑ GPI Field Operator
R. POLIDAN

COMPUTER PRINT-OUT
By: MARIA ANTONIETTE P. CUNAHAP
Encoder

Data Checked by: ABA/MRR
Quality Assurance

Date Issued: _____

TESTED BY : ARTURO Q. AQUINO
LABORATORY TECHNICIAN

CERTIFIED BY : _____
AUTHORIZED SIGNATORY

Uncertainty Results: % Finer = ± 0.0336 LAB.FILE NO.:GSA-10-408

Note: The reported expanded uncertainty is based on a combined uncertainty by a coverage factor of k=2, providing a level of confidence of approximately 95%.

FINAL REPORT

SUBSURFACE INVESTIGATION
PROPOSED MAYON EVACUATION CENTER (2-STOREY)
GOGON CENTRAL SCHOOL
BRGY. GOGON, PROVINCE OF ALBAY

MOHRI, ARCHITECT & ASSOCIATES, INC.

OCTOBER 2010
JOB NO. 2209-10.R1

GEOTECHNICS PHILIPPINES, INC.
GEOTECHNICAL & FOUNDATION CONSULTANTS

DPWH-BRS Accredited

FINAL REPORT

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119 Sauyo Road, Novaliches
Quezon City, Philippines

GEOTECHNICS PHILIPPINES, INC.
Geotechnical Contractor

Business development : 9306555
Customer Service : 9382124/9353730
Fax : 4561140
Homepage : www.geogpi.com
Email : jmcgpi@gmail.com

FINAL REPORT

SUB-SURFACE INVESTIGATION FOR THE PROPOSED MAYON EVACUATION CENTER (3-STOREY) LOCATED AT BRGY. GOGON, PROVINCE OF ALBAY

1.0 Introduction:

Geotechnics Philippines, Incorporated (GPI) completed the subsurface soil investigation for the Proposed Mayon Evacuation Center. The proposed site explored is located at Brgy. Gogon, Province of Albay.

Two (2) boreholes were drilled at the proposed site on October 23, 2010. Borings were undertaken down to 10m for both BH-1 and BH-2 below existing natural grade line. Borehole locations are as indicated on the accompanying Boring Plan and Soil Profile Sheets.

The subsurface soil exploration was undertaken upon the request of Mohri, Architect & Associates, Inc. in order to gain information on the subsurface conditions and bearing characteristics of the underlying soils at site.

The undersigned was tasked to evaluate the results of the completed subsurface soil exploration and to recommend a suitable foundation solution for the proposed structure.

This report embodies the undersigned's engineering analysis and recommendations based mainly on the results of the geotechnical soil borings and pertinent laboratory tests performed on extracted samples.

The results of geotechnical soil borings and laboratory tests can be referred to in the Attachments accompanying this report.

2.0 Objectives:

The geotechnical investigation aims to determine the following:

- Soil Profile
- Engineering properties of the Soil Strata
- Bearing Capacities and Foundation Types
- Settlement conditions of critical areas
- Comment on ground stability and liquefaction potential of the site
- Provide Excavation and Fill Guidelines

In addition to the above mentioned items, matters on implementation and construction shall be given as required.

3.0 Field Exploration and Investigation

The field exploration implored continuous was boring as the Standard Penetration Test (SPT) was performed at the last 45cm of every change strata or 1.0 meter intervals. The blow counts (N value or NB) were recorded as disturbed samples from the split spoon sampler were retrieved for laboratory testing. The recovered samples were described semi qualitative in terms of extracted length. The extracted soil samples were wrapped in double plastic bags for moisture and sample protection and were transported to the laboratory for further testing of engineering properties.

Advancing through the hard strata, the same technique was implored. Hard strata are defined over a series of high blow count layers of more than 50 blows or the inability of driving the hammer to penetrate at high blow counts termed as refusal.

3.1 Standard Penetration Test

The Standard Penetration Test (SPT) is a field test used in determining the shear strength of soils from an established correlation. The SPT requires the count of the number of blows that it would take a standard split spoon sampler to penetrate its last 30.5cm (12inches) of the sampler. The standard mass is 63.5 kilograms and the height of the drop is 76.2cm specified as a free drop.

3.3 Ground Water Table

The ground water table (GWT) elevation was observed at least 4 hours from the completion of the borehole up to demobilization.

4.0 Laboratory Investigation

The retrieved samples were brought to the laboratory in 119 Sauyo Road, Novaliches, Quezon City. Various tests were conducted on all extracted samples with test procedures conforming to the American Standards for Testing Materials (ASTM). The following are the laboratory tests conducted on the soil samples.

Type of Test	ASTM Designation	Description of Test
Soil Classification for Engineering Purposes – Unified Soil Classification System	ASTM D 2487-05	• Standard in classifying the type of soil based on composition and physical properties • These were classified in accordance to grain size, composition, percentage of size in the distribution
Particle Size Distribution – Sieve Analysis	ASTM D 422-63 (Reapproved 2002)	• The test allows the dried or wet soil to pass through a series of sieves in order to determine the distribution of grain sizes • The distributions of the particles are graphed on a semi log scale • This test aids the previous test in classification
Moisture Content	ASTM D 2216-05	• The test aims to determine the natural content of water in the soil • This is taken as the ratio of water to the ratio of the soil particles • The test uses a weighing scale measuring the initial weight of the soil and the final weight of the soil after drying it in the oven
Atterberg Limits Liquid Limit, Plastic Limit and Plasticity Index	ASTM D4318-05	• Tests determining the limits of cohesive soils in behaving as a plastic or a flowing medium by incrementally changing the water content • The plastic limit is determined by rolling a clay sample to around 1/8 of an inch or 3mm • The liquid limit uses the liquid limit device and determines the number of blows it would take for the slit to close • Correlative values can be used for settlement relations

The results of the laboratory investigation are appended.

5.0 Borehole Statigraphy

Two (2) boreholes were driven to investigate the subsurface. The following are the findings:

5.1 Borehole - BH-1

Depth (m)	Soil Classification	Consistency	N-Value
0.00 - 4.00	Silty SAND	Firm	11 ~ 19
4.00 - 5.00	Poorly graded SAND	Loose	8
5.00 - 6.00	Elastic SILT	Firm	13
6.00 - 9.00	SAND	Firm	12 ~ 17
9.00 - 10.00	SAND	Dense	>50

The ground water was measured at 0.81 meters from the existing ground.

5.2 Borehole - BH-2

Depth (m)	Soil Classification	Consistency	N-Value
0.00 - 2.00	Silty SAND	Loose	8
2.00 - 4.00	SAND	Firm	13 ~ 28
4.00 - 5.00	Clayey SAND	Loose	8
5.00 - 6.00	Elastic SAND	Very Stiff	27
6.00 - 7.00	Silty SAND	Firm	16
7.00 - 8.00	SAND	Dense	32
8.00 - 10.00	SAND	Firm	10~17

The ground water table was measured at 0.8 ~ 0.83 meters from the existing ground.

6.0 Soil Properties

The following are the adapted soil properties for the investigated strata:

Soil Parameters			
Gravels, Sands, Silty Sands and Clayey Sands (Non-cohesive)			
Sands	c	φ	γ (kcf)
Very Loose	0	26	0.085
Loose	0	28	0.100
Medium Dense	0	30	0.110
Dense	0	32	0.120
Very Dense	0	35	0.130
Silts and Clays (Cohesive)			
Silts and Clays	c	φ	γ (kcf)
Very Soft	=(N*10)/2 from Braja Das	0	0.100
Soft		0	0.105
Firm		0	0.115
Stiff		0	0.120
Very Stiff		0	0.125
Hard		0	0.130

7.0 Liquefaction Potential

The two boreholes showed thin layered of potentially liquefiable materials between 4~5 m. The effect would be minimal due to the presence of dense layer in between loose formation.

8.0 Bearing Capacity and Foundation Type

Shallow Foundations

Shallow Foundation is suggested to the proposed 2-storey building. The following are the allowable net bearing capacities based on Terzaghi's Bearing Capacity Equation:

BH-1:

Depth (m)	Bearing Capacity (kPa)
0.5	48
1.0	72

BH-2:

Depth (m)	Bearing Capacity (kPa)
0.5	24
1.0	48

The associated settlement on the other hand is within the tolerable engineering settlement of 25mm. Structural tie beam is suggested to hold the foundation rigid and minimize the effect of differential settlement due to different soil bearing capacity.

9.0 Excavation and Fill

The contractor of the proposed structure is advised to rail the excavation at night and during break times so as to ensure the general safety of the students within school premises. Existing structures, whether temporary or permanent that are adjacent, the excavation should be protected from damages. Dewatering shall be necessary as the water table is shallow.

Fill for the excavation for footings may utilize the same materials. On the other hand, grade and subgrade materials should be sandy frictional materials.

Fill should be compacted at 95% its maximum dry density. Should the amount of soil be inept, sandy fill may be utilized and should be compacted in the same degree. In both cases, the height of fill should he reviewed and adjusted accordingly to adapt minimal settlements.

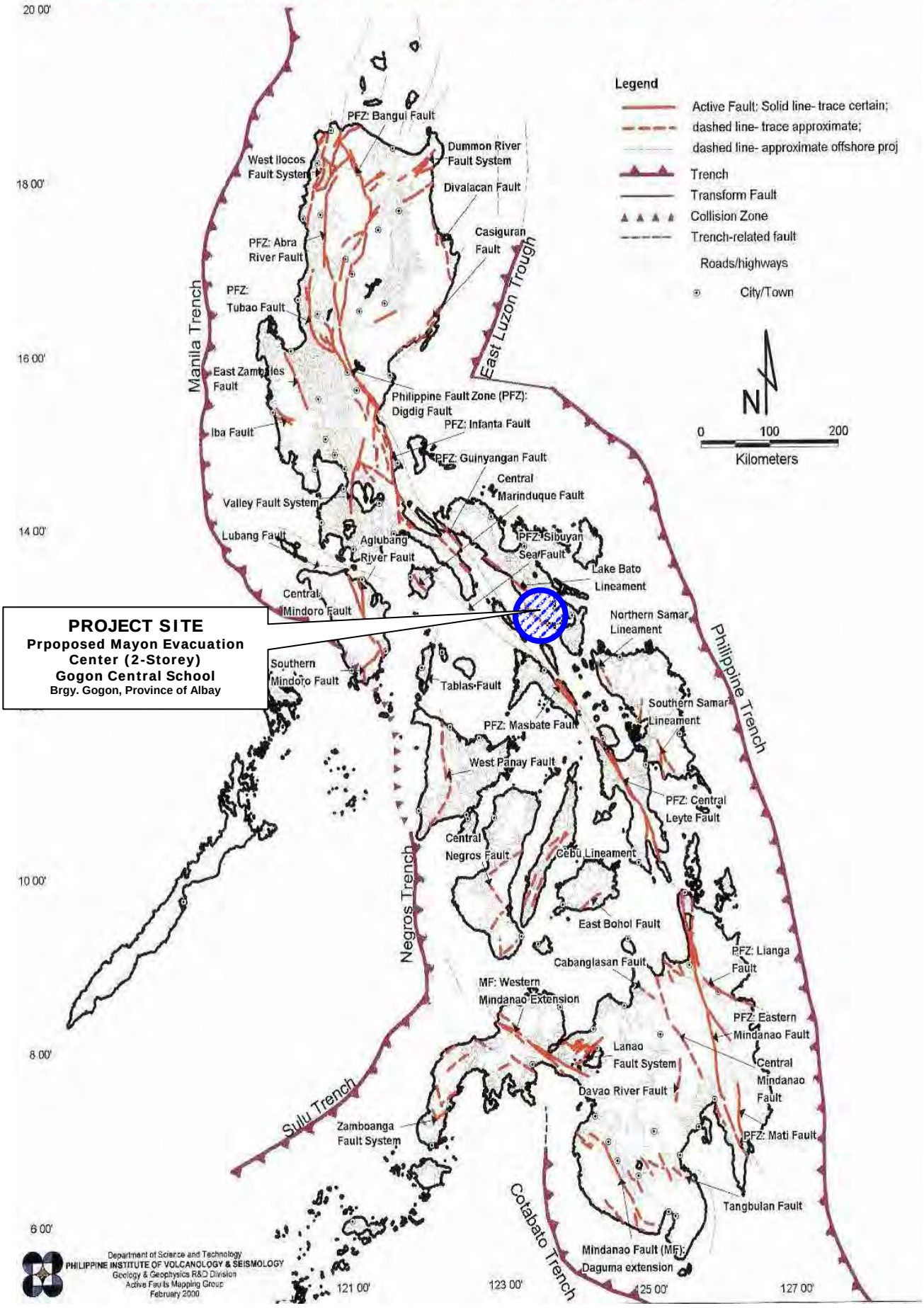
Borehole Conclusions and Recommendations

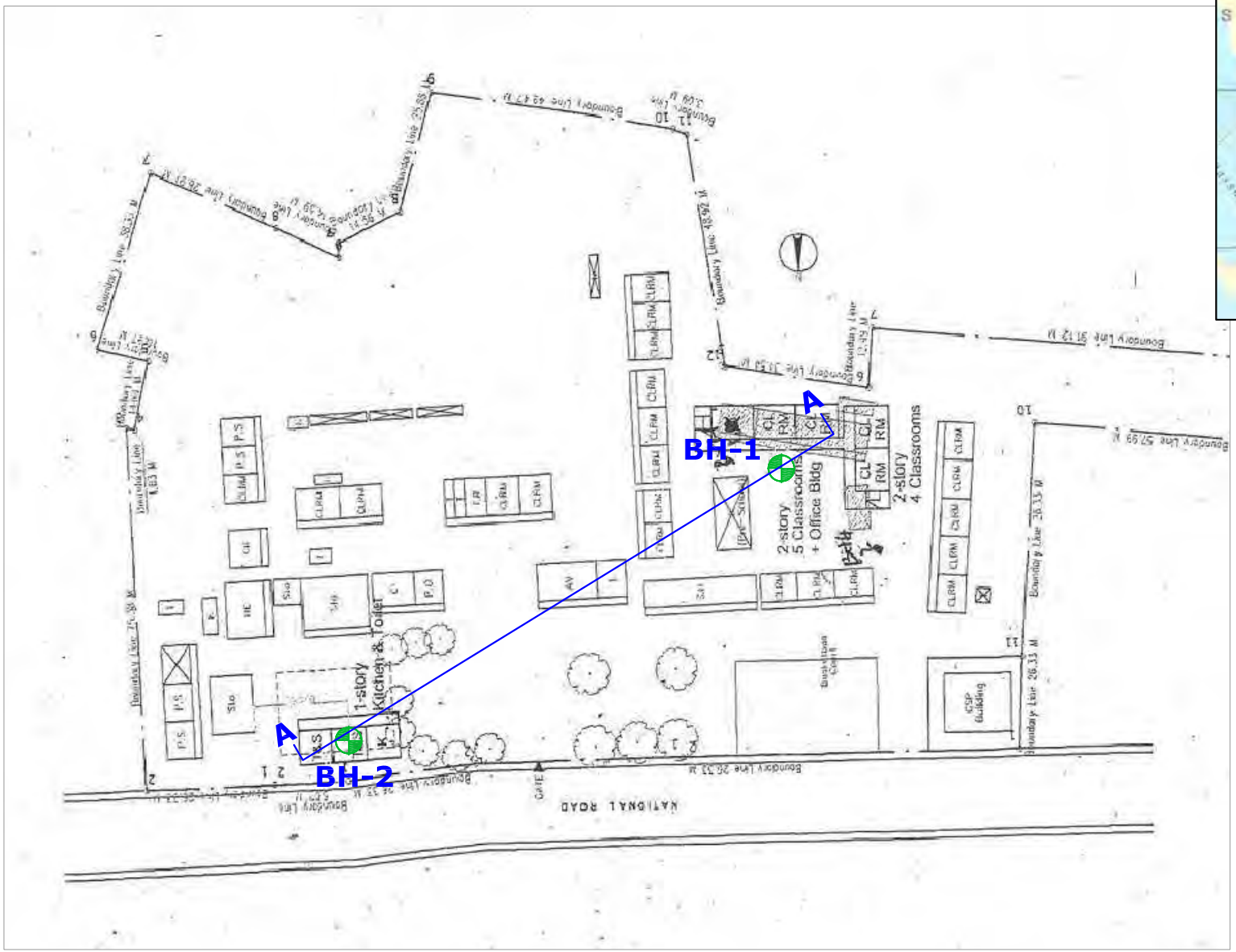
The conclusions and recommendations are based on the data of two (2) boreholes and the geologic map. Deviations from these are expected and should be minimal as the boreholes are typical of an alluvial formation. Should there be any major deviation in the substrata be detected during the excavation phase, may the undersigned thru Geotechnics Philippines Inc (02-930-6555) be contacted immediately for proper reassessment.

DIOSDADO A. URENA
CE Reg. No. 053884
PTR No. 3228274
Issued on January 8, 2010
Issued at Quezon City

APPENDICES

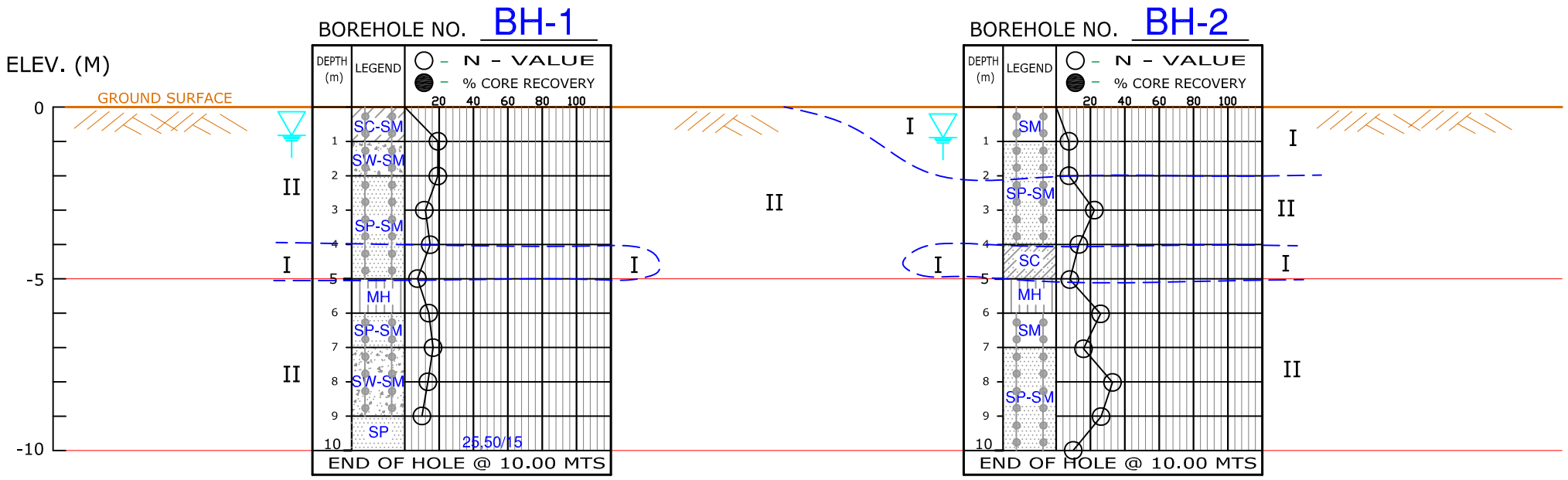
Distribution of Active Faults and Trenches in the Philippines





VICINITY MAP

CONTRACTOR **GEOTECHNICS PHILIPPINES, INC.** 119 SAUYO ROAD, NOVALICHES, QUEZON CITY	PROJECT TITLE **Proposed Mayon Evacuation Center (Gogon Central School)** Brgy. Gogon, Province of Albay	SCALE NTS	SHEET CONTENTS **LOCATION PLAN/VICINITY MAP** CLIENT **MOHRI, ARCHITECT & ASSOCIATES, INC.**	JOB NO. **2209-10.R1** SHEET NO. 1/1



SECTION A - A

L E G E N D :

- CH - Silty C L A Y
- CL - Sandy C L A Y
- MH - Clayey S I L T
- ML - Sandy S I L T
- SC - Clayey S A N D
- SM - Silty S A N D
- GM - Silty G R A V E L
- SC-SM - Clayey silty S A N D
- SP - Poorly graded SAND
- SW - Well graded SAND
- SP-SM - Poorly graded SAND w/ silt
- SW-SM - Well graded SAND w/ silt
- GP - Poorly graded GRAVEL
- GW - Well graded GRAVEL
- GP-GM - Poorly graded GRAVEL w/ silt
- GW-GM - Well graded GRAVEL w/ silt
- SD - SANDSTONE
- GC-GM - Clayey silty GRAVEL
- CBL - COBBLES
- GVL - GRAVEL
- ST - SILTSTONE
- TST - Silty TUFF
- TSD - Sandy TUFF
- SHL - SHALE

I - N-VALUE<10 (LIQUEFIABLE ZONE)
II - N-VALUE>10
III - REFUSAL (WEATHERED ZONE)
IV - CORING / HARD FORMATION

CONTRACTOR
GEOTECHNICS PHILIPPINES, INC.
119 SAUYO ROAD, NOVALICHES, QUEZON CITY

PROJECT TITLE:
Proposed Mayon Evacuation Center (Gogon Central School)
Brgy. Gogon, Province of Albay

SHEET CONTENTS:
S O I L P R O F I L E
SCALE : N. T. S.

CLIENT:
MOHRI, ARCHITECT & ASSOCIATES, INC.

DRAWN BY:
MARIA ANTONIETTE P. CUNAHAP

CHECKED BY:
A. B. A. / M. R. R.

CERTIFIED BY:
AUTHORIZED SIGNATORY

JOB NO.
2209-10.R1

SHEET NO.
1/1

GEOTECHNICS PHILIPPINES, INCORPORATED

SOILS AND MATERIALS TESTING LABORATORY

119 SAUYO ROAD, NOVALICHES, QUEZON CITY
TEL. NO. 938-2124 \ 456-1140 \ 930-6555

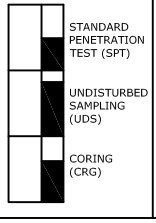
DPWH-BRS Accredited

CLIENT	**MOHRI, ARCHITECT & ASSOCIATES, INC.**		BOREHOLE NO. **BH- 1**
PROJECT	**Proposed Mayon Evacuation Center (Gogon Central School)**		JOB NO. 2209-10.R1-FBL-01
LOCATION	Brgy. Gogon, Province of Albay	DRILLED R. POLIDAN	SHEET 1 of 1
RIG	KSK SMALL	LOGGED R. POLIDAN	0.00 to 10.00 meters
	Hammer Weight 63.50 Kg.	DATE STARTED Oct. 23, 2010	GROUND LEVEL - m.
	Fall Height 76.20 cm.	DATE COMPLETED Oct. 23, 2010	WATER LEVEL 0.81 m.
METHOD	WASH BORING	NORTHING -	EASTING -

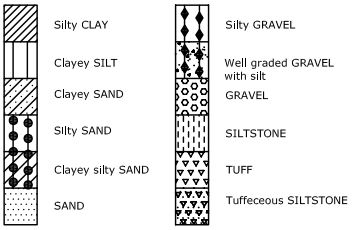
FINAL BORING LOG

DEPTH (m)	SOIL SYMBOL	SAMPLE NUMBER	TYPE OF SAMPLING	REC (cm)	RQD (%)	PL NMC LL (20 40 60 80 100)	PI	CONSISTENCY	N-VALUE / % Core Recovery (0 20 40 60 80 100)	SOIL DESCRIPTION	OTHER TEST DATA
1.00		S-1	SPT	45	-		4		19	(SC-SM) Clayey silty SAND with traces of gravel, dark gray, moist NB: (8)(9)(10)	
2.00		S-2	SPT	45	-		NP		19	(SW-SM) Well graded SAND with silt and few gravel, dark gray, moist NB: (9)(9)(10)	
3.00		S-3	SPT	45	-		NP	MEDIUM DENSE	11	(SP-SM) Poorly graded SAND with silt and traces of gravel, dark gray, moist NB: (3)(5)(6)	
4.00		S-4	SPT	45	-		NP		15	(SP-SM)...with few gravel NB: (3)(6)(9)	
5.00		S-5	SPT	45	-		NP	LOOSE	8	(SP-SM)...moist NB: (6)(5)(3)	
6.00		S-6	SPT	45	-		30	STIFF	13	(MH) Elastic SILT with little amount of sand, dark gray, very moist NB: (3)(5)(8)	
7.00		S-7	SPT	45	-		NP		17	(SP-SM) Poorly graded SAND with silt and traces of gravel, dark gray, moist NB: (13)(9)(8)	
8.00		S-8	SPT	45	-		NP	MEDIUM DENSE	12	(SW-SM) Well graded SAND with silt and traces of gravel, dark gray, very moist NB: (10)(7)(5)	
9.00		S-9	SPT	45	-		NP		10	(SW-SM)...moist NB: (9)(5)(5)	
10.00		S-10	SPT	30	-		NP	VERY DENSE	25/50/15	(SP) Poorly graded SAND, dark gray, moist NB: (15)(25)(50/15) END OF BORING AT 10.00 METERS	

Type of Sampling



Type of Soil



CONSISTENCY

COHESIVE SOILS N-VALUE	CONSISTENCY	COHENSIONLESS SOILS N-VALUE	CONSISTENCY
0 - 2	VERY SOFT	0 - 4	VERY LOOSE
2 - 4	SOFT	4 - 10	LOOSE
4 - 8	FIRM	10 - 30	MEDIUM DENSE
8 - 15	STIFF	30 - 50	DENSE
15 - 30	VERY STIFF	> 50	VERY DENSE
> 30	HARD		

MOISTURE

MOISTURE CONTENT RANGES	VALUES
0 - 10	DRY
10 - 30	MOIST
30 - 70	VERY MOIST
70 - 100	WET
> 100	SATURATED

PERCENTAGE

% of SAND and GRAVEL RANGES	VALUES
0 - 5	TRACES
6 - 10	FEW
11 - 25	LITTLE
26 - 35	SOME
36 - 45	WITH

REMARKS: Rec = Recovery in Centimeters NB = No. of Blows HW = Hammer Weight

Reference Joint Spacing: #1 >30cm. 10 cm. >#3>3cm. #5 <1cm.

30 cm.>#2>10cm. 3 cm. >#4>1cm.

RQD = Rock Quality Designation SCR = Solid Core Recovery

Description of Strata is according to Unified Soil Classification System

Prepared by : **M. P. CUNAHAP**

Checked by : **A.B.A. / M.R.R.**

Certified by :

AUTHORIZED SIGNATORY

Date Issued :

GEOTECHNICS PHILIPPINES, INCORPORATED

SOILS AND MATERIALS TESTING LABORATORY

119 SAUYO ROAD, NOVALICHES, QUEZON CITY
TEL. NO. 938-2124 \ 456-1140 \ 930-6555

DPWH-BRS Accredited

CLIENT	**MOHRI, ARCHITECT & ASSOCIATES, INC.**		BOREHOLE NO. **BH- 2**
PROJECT	**Proposed Mayon Evacuation Center (Libon Community College)**		JOB NO. 2209-10.R1-FBL-02
LOCATION	Brgy. Gogon, Province of Albay	DRILLED R. POLIDAN	SHEET 1 of 1
RIG	KSK SMALL	LOGGED R. POLIDAN	0.00 to 10.00 meters
	Hammer Weight 63.50 Kg.	DATE STARTED Oct. 18, 2010	GROUND LEVEL - m.
	Fall Height 76.20 cm.	DATE COMPLETED Oct. 18, 2010	WATER LEVEL 0.83 m.
METHOD	WASH BORING	NORTHING -	EASTING -

FINAL BORING LOG

DEPTH (m)	SOIL SYMBOL	SAMPLE NUMBER	TYPE OF SAMPLING	REC (cm)	RQD (%)	PL NMC LL	PI	CONSISTENCY	N-VALUE / % Core Recovery	SOIL DESCRIPTION	OTHER TEST DATA
1.00		S-1	SPT	40	-		NP	LOOSE	8	(SM) Silty SAND, fine to coarse grained with little amount of gravel, dark gray, moist NB: (5)(4)(4)	
2.00		S-2	SPT	45	-		NP		8	(SP-SM) Poorly graded SAND with silt and traces of gravel, dark gray, moist NB: (4)(3)(5)	
3.00		S-3	SPT	32	-		NP	MEDIUM DENSE	23	(SP-SM)...with traces of gravel NB: (10)(10)(13)	
4.00		S-4	SPT	40	-		NP		13	(SP-SM)...with little amount of gravel NB: (5)(5)(8)	
5.00		S-5	SPT	45	-		13	LOOSE	8	(SC) Clayey SAND, dark gray, very moist NB: (2)(3)(5)	
6.00		S-6	SPT	45	-		20	VERY STIFF	27	(MH) Elastic SILT with sand and traces of gravel, dark gray, very moist NB: (10)(12)(15)	
7.00		S-7	SPT	45	-		NP	MEDIUM DENSE	16	(SM) Silty SAND, fine to coarse grained with little amount of gravel, dark gray, very moist NB: (5)(6)(10)	
8.00		S-8	SPT	39	-		NP	DENSE	32	(SP-SM) Poorly graded SAND with silt and little amount of gravel, dark gray, moist NB: (12)(15)(17)	
9.00		S-9	SPT	37	-		NP	MEDIUM DENSE	27	(SP-SM)...with traces of gravel NB: (10)(12)(15)	
10.00		S-10	SPT	45	-		NP		10	(SP-SM)...very moist NB: (7)(5)(5)	
										END OF BORING AT 10.00 METERS	

Type of Sampling

- STANDARD PENETRATION TEST (SPT)
- UNDISTURBED SAMPLING (UDS)
- CORING (CRG)

Type of Soil

- Silty CLAY
- Clayey SILT
- Clayey SAND
- Silty SAND
- Clayey silty SAND
- SAND
- Silty GRAVEL
- Well graded GRAVEL with silt
- GRAVEL
- SILTSTONE
- TUFF
- Tuffeceous SILTSTONE

CONSISTENCY

COHESIVE SOILS			COHENSIONLESS SOILS	
N-VALUE		CONSISTENCY	N-VALUE	CONSISTENCY
0 - 2	–	VERY SOFT	0 - 4	– VERY LOOSE
2 - 4	–	SOFT	4 - 10	– LOOSE
4 - 8	–	FIRM	10 - 30	– MEDIUM DENSE
8 - 15	–	STIFF	30 - 50	– DENSE
15 - 30	–	VERY STIFF	> 50	– VERY DENSE
> 30	–	HARD		

MOISTURE

MOISTURE CONTENT		
RANGES		VALUES
0 - 10	–	DRY
10 - 30	–	MOIST
30 - 70	–	VERY MOIST
70 - 100	–	WET
> 100	–	SATURATED

PERCENTAGE

% of SAND and GRAVEL		
RANGES		VALUES
0 - 5	–	TRACES
6 - 10	–	FEW
11 - 25	–	LITTLE
26 - 35	–	SOME
36 - 45	–	WITH

REMARKS: Rec = Recovery in Centimeters NB = No. of Blows HW = Hammer Weight

Reference Joint Spacing: #1 >30cm. 10 cm. >#3>3cm. #5 <1cm.

30 cm.>#2>10cm. 3 cm. >#4>1cm.

RQD = Rock Quality Designation SCR = Solid Core Recovery

Description of Strata is according to Unified Soil Classification System

Prepared by : **M. P. CUNAHAP**

Checked by : **A.B.A. / M.R.R.**

Certified by :

AUTHORIZED SIGNATORY

Date Issued :

GEOTECHNICS PHILIPPINES, INC.
SOILS AND MATERIALS TESTING LABORATORY
119 Sauyo Road, Novaliches, Quezon City

DPWH-BRS Accredited

CLIENT..... **MOHRI, ARCHITECT & ASSOCIATES, INC.** JOB NUMBER..... 2209-10.R1-SUM-1
PROJECT..... **Proposed Mayon Evacuation Center (Gogon Central School)** DATE OF RECIEPT.... October 27, 2010
LOCATION.... Brgy. Gogon, Province of Albay DATE OF TEST..... October 27-29, 2010

SUMMARY OF LABORATORY TESTS

SAMPLE NUMBER	DEPTH (m)	NMC (%)	ATTERBERG LIMIT, (%)			USCS Class.	SIEVE ANALYSIS (% FINER) PASSING SIEVE NO.										Remarks
			LL	PL	PI		1	3/4	3/8	4	10	20	40	60	140	200	
BH-1																	
1	0.55 - 1.00	29	37	33	4	SC-SM			100	98	92	82	65	49	37	35	-
2	1.55 - 2.00	20	-	NP	-	SW-SM			100	94	83	68	51	33	14	11	-
3	2.55 - 3.00	27	-	NP	-	SP-SM			100	97	89	70	43	22	9	7	-
4	3.55 - 4.00	29	-	NP	-	SP-SM		100	96	92	86	77	65	32	9	7	-
5	4.55 - 5.00	21	-	NP	-	SP-SM		100	97	93	85	75	49	24	9	6	-
6	5.55 - 6.00	48	62	32	30	MH					100	98	95	90	83	80	-
7	6.55 - 7.00	25	-	NP	-	SP-SM			100	97	93	72	35	15	6	5	-
8	7.55 - 8.00	30	-	NP	-	SW-SM		100	99	97	95	78	46	24	13	11	-
9	8.55 - 9.00	25	-	NP	-	SW-SM		100	98	96	85	64	45	24	9	7	-
10	9.55 - 10.00	26	-	NP	-	SP				100	99	90	51	21	4	3	-
BH-2																	
1	0.55 - 1.00	29	-	NP	-	SM		100	95	80	74	63	49	36	22	20	
2	1.55 - 2.00	28	-	NP	-	SP-SM		100	99	95	90	82	68	52	14	10	
3	2.55 - 3.00	26	-	NP	-	SP-SM			100	97	92	80	61	37	11	7	
4	3.55 - 4.00	28	-	NP	-	SP-SM		100	95	87	78	68	56	42	14	10	
5	4.55 - 5.00	40	46	33	13	SC				100	97	89	75	65	52	49	
6	5.55 - 6.00	46	51	31	20	MH			100	99	98	91	80	70	59	55	
7	6.55 - 7.00	30	-	NP	-	SM		100	94	80	64	50	41	33	22	21	
8	7.55 - 8.00	27	-	NP	-	SP-SM		100	92	86	80	70	44	26	9	7	
9	8.55 - 9.00	25	-	NP	-	SP-SM			100	98	95	81	51	31	13	10	
10	9.55 - 10.00	30	-	NP	-	SP-SM				100	98	87	48	23	9	7	

SAMPLE SUBMITTED BY :

☐ Walk-in Clients ☑ GPI Field Operator

R. POLIDAN

REMARKS: * with hydrometer

COMPUTER PRINT-OUT
By: *MARIA ANTONIETTE P. CUNAHAP*
Encoder

Data Chkd by: ABA / MRR
Quality Assurance

Date Issued _____

CERTIFIED BY: _____
AUTHORIZED SIGNATORY

ACCREDITED TESTING LABORATORY
PNS ISO/IEC 17025:2005
LA-2006-097B

GEOTECHNICS PHILIPPINES, INC.
SOILS AND MATERIALS TESTING LABORATORY
119 Sauyo Road, Novaliches, Quezon City

DPWH-BRS Accredited

Client..... **MOHRI, ARCHITECT & ASSOCIATES, INC.**	Job Number..... 2209-10.R1-NMC-01-1
Project..... **Proposed Mayon Evacuation Center (Gogon Central School)**	Date of Receipt..... October 27, 2010
Location..... Brgy. Gogon, Province of Albay	Date of Test..... October 27-28, 2010

TEST REPORT FOR LABORATORY DETERMINATION OF WATER (MOISTURE) CONTENT OF SOIL & ROCK BY MASS

ASTM D 2216 - 05

Test Method ☑ A ☐ B

BOREHOLE NO...BH-1

SAMPLE NUMBER	DEPTH (m)	WET SOIL DISH (g)	DRY SOIL DISH (g)	WATER (g)	DISH MASS (g)	DRY SOIL (g)	WATER CONTENT (%)	REMARKS
NATURAL MOISTURE CONTENT								
1	0.55-1.00	98.45	78.46	19.99	9.80	68.66	29	
2	1.55-2.00	107.30	91.14	16.16	10.27	80.87	20	
3	2.55-3.00	110.90	89.59	21.31	9.64	79.95	27	
4	3.55-4.00	117.40	93.12	24.28	9.70	83.42	29	
5	4.55-5.00	103.64	87.27	16.37	9.68	77.59	21	
6	5.55-6.00	115.38	81.01	34.37	9.72	71.29	48	

TEST REPORT FOR LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX OF SOILS

ASTM Designation : D 4318 - 05, Method B

SAMPLE NUMBER	DEPTH (m)	BLOWS	WET SOIL DISH (g)	DRY SOIL DISH (g)	WATER (g)	DISH MASS (g)	DRY SOIL (g)	% Retained on 0.425 mm	ATTERBERG LIMIT		REMARKS
									LL	PL	
LIQUID LIMIT											
1	0.55-1.00	20 20	37.80 37.94	30.32 30.44	7.48 7.50	10.60 10.65	19.72 19.79		37 37		37
PLASTIC LIMIT											
1	0.55-1.00	P P	22.74 22.76	19.46 19.47	3.28 3.29	9.53 9.54	9.93 9.93			33 33	33

Uncertainty Results: Water Content (%) = ± 0.0298 Liquid Limit = ± 0.0948 Plastic Limit = ± 0.2027

Note: The reported expanded uncertainty is based on a combined uncertainty by a coverage factor of k=2, providing a level of confidence of approximately 95%.

LAB.FILE NO.:NMC-10-500

SAMPLE SUBMITTED BY :

☐ Walk-in Clients ☑ GPI Field Operator

R. POLIDAN

REMARKS: _____

COMPUTER PRINT-OUT

By: MARIA ANTONIETTE P. CUNAHAP
Encoder

Data Checked by: ABA/MRR
Quality Assurance

Date Issued: _____

TESTED BY : ARTURO Q. AQUINO
LABORATORY TECHNICIAN

CERTIFIED BY : _____
AUTHORIZED SIGNATORY

ACCREDITED TESTING LABORATORY
PNS ISO/IEC 17025:2005
LA-2006-097B

GEOTECHNICS PHILIPPINES, INC.

SOILS AND MATERIALS TESTING LABORATORY
119 Sauyo Road, Novaliches, Quezon City

DPWH-BRS Accredited

Client..... **MOHRI, ARCHITECT & ASSOCIATES, INC.**	Job Number..... 2209-10.R1-NMC-01-2
Project..... **Proposed Mayon Evacuation Center (Gogon Central School)**	Date of Receipt..... October 27, 2010
Location..... Brgy. Gogon, Province of Albay	Date of Test..... October 27-28, 2010

TEST REPORT FOR LABORATORY DETERMINATION OF WATER (MOISTURE) CONTENT OF SOIL & ROCK BY MASS

ASTM D 2216 - 05

Test Method ☑ A ☐ B

BOREHOLE NO...BH-1

SAMPLE NUMBER	DEPTH (m)	WET SOIL DISH (g)	DRY SOIL DISH (g)	WATER (g)	DISH MASS (g)	DRY SOIL (g)	WATER CONTENT (%)	REMARKS
NATURAL MOISTURE CONTENT								
7	6.55-7.00	108.34	88.51	19.83	9.72	78.79	25	
8	7.55-8.00	104.60	82.80	21.80	9.71	73.09	30	
9	8.55-9.00	111.40	91.31	20.09	9.88	81.43	25	
10	9.55-10.00	105.10	85.20	19.90	9.64	75.56	26	

TEST REPORT FOR LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX OF SOILS

ASTM Designation : D 4318 - 05, Method B

SAMPLE NUMBER	DEPTH (m)	BLOWS	WET SOIL DISH (g)	DRY SOIL DISH (g)	WATER (g)	DISH MASS (g)	DRY SOIL (g)	% Retained on 0.425 mm	ATTERBERG LIMIT		REMARKS
									LL	PL	
LIQUID LIMIT											
PLASTIC LIMIT											

Uncertainty Results: Water Content (%) = ± 0.0273 Liquid Limit = --- Plastic Limit = ---

Note: The reported expanded uncertainty is based on a combined uncertainty by a coverage factor of k=2, providing a level of confidence of approximately 95%.

LAB.FILE NO.:NMC-10-500

SAMPLE SUBMITTED BY :

☐ Walk-in Clients ☑ GPI Field Operator

R. POLIDAN

REMARKS: _____

COMPUTER PRINT-OUT

By: MARIA ANTONIETTE P. CUNAHAP
Encoder

Data Checked by: ABA/MRR
Quality Assurance

Date Issued: _____

TESTED BY : ARTURO Q. AQUINO
LABORATORY TECHNICIAN

CERTIFIED BY : _____
AUTHORIZED SIGNATORY

ACCREDITED TESTING LABORATORY
PNS ISO/IEC 17025:2005
LA-2006-097B

GEOTECHNICS PHILIPPINES, INC.

SOILS AND MATERIALS TESTING LABORATORY
119 Sauyo Road, Novaliches, Quezon City

DPWH-BRS Accredited

Client..... **MOHRI, ARCHITECT & ASSOCIATES, INC.**	Job Number..... 2209-10.R1-NMC-02-1
Project..... **Proposed Mayon Evacuation Center (Gogon Central School)**	Date of Receipt..... October 27, 2010
Location..... Brgy. Gogon, Province of Albay	Date of Test..... October 27-28, 2010

TEST REPORT FOR LABORATORY DETERMINATION OF WATER (MOISTURE) CONTENT OF SOIL & ROCK BY MASS

ASTM D 2216 - 05

Test Method ☑ A ☐ B

BOREHOLE NO...BH-2

SAMPLE NUMBER	DEPTH (m)	WET SOIL DISH (g)	DRY SOIL DISH (g)	WATER (g)	DISH MASS (g)	DRY SOIL (g)	WATER CONTENT (%)	REMARKS
NATURAL MOISTURE CONTENT								
1	0.55-1.00	87.34	69.84	17.50	9.66	60.18	29	
2	1.55-2.00	116.50	93.10	23.40	9.90	83.20	28	
3	2.55-3.00	108.00	88.00	20.00	9.64	78.36	26	
4	3.55-4.00	110.10	88.39	21.71	9.52	78.87	28	
5	4.55-5.00	97.80	72.66	25.14	9.56	63.10	40	
6	5.55-6.00	90.55	65.02	25.53	9.65	55.37	46	

TEST REPORT FOR LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX OF SOILS

ASTM Designation : D 4318 - 05, Method B

SAMPLE NUMBER	DEPTH (m)	BLOWS	WET SOIL DISH (g)	DRY SOIL DISH (g)	WATER (g)	DISH MASS (g)	DRY SOIL (g)	% Retained on 0.425 mm	ATTERBERG LIMIT		REMARKS
									LL	PL	
LIQUID LIMIT											
PLASTIC LIMIT											

Uncertainty Results: Water Content (%) = ± 0.0380 Liquid Limit = --- Plastic Limit = ---

Note: The reported expanded uncertainty is based on a combined uncertainty by a coverage factor of k=2, providing a level of confidence of approximately 95%.

LAB.FILE NO.:NMC-10-501

SAMPLE SUBMITTED BY :

☐ Walk-in Clients ☑ GPI Field Operator

R. POLIDAN

REMARKS: _____

COMPUTER PRINT-OUT

By: MARIA ANTONIETTE P. CUNAHAP
Encoder

Data Checked by: ABA/MRR
Quality Assurance

Date Issued: _____

TESTED BY : ARTURO Q. AQUINO
LABORATORY TECHNICIAN

CERTIFIED BY : _____
AUTHORIZED SIGNATORY

ACCREDITED TESTING LABORATORY
PNS ISO/IEC 17025:2005
LA-2006-097B

GEOTECHNICS PHILIPPINES, INC.

SOILS AND MATERIALS TESTING LABORATORY
119 Sauyo Road, Novaliches, Quezon City

DPWH-BRS Accredited

Client..... **MOHRI, ARCHITECT & ASSOCIATES, INC.**	Job Number..... 2209-10.R1-NMC-02-2
Project..... **Proposed Mayon Evacuation Center (Gogon Central School)**	Date of Receipt..... October 27, 2010
Location..... Brgy. Gogon, Province of Albay	Date of Test..... October 27-28, 2010

TEST REPORT FOR LABORATORY DETERMINATION OF WATER (MOISTURE) CONTENT OF SOIL & ROCK BY MASS

ASTM D 2216 - 05

Test Method ☑ A ☐ B

BOREHOLE NO...BH-2

SAMPLE NUMBER	DEPTH (m)	WET SOIL DISH (g)	DRY SOIL DISH (g)	WATER (g)	DISH MASS (g)	DRY SOIL (g)	WATER CONTENT (%)	REMARKS
NATURAL MOISTURE CONTENT								
7	6.55-7.00	121.90	96.10	25.80	9.64	86.46	30	
8	7.55-8.00	121.40	97.34	24.06	9.81	87.53	27	
9	8.55-9.00	112.30	91.91	20.39	10.85	81.06	25	
10	9.55-10.00	117.00	91.99	25.01	9.58	82.41	30	

TEST REPORT FOR LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX OF SOILS

ASTM Designation : D 4318 - 05, Method B

SAMPLE NUMBER	DEPTH (m)	BLOWS	WET SOIL DISH (g)	DRY SOIL DISH (g)	WATER (g)	DISH MASS (g)	DRY SOIL (g)	% Retained on 0.425 mm	ATTERBERG LIMIT		REMARKS
									LL	PL	
LIQUID LIMIT											
PLASTIC LIMIT											

Uncertainty Results: Water Content (%) = ± 0.0243 Liquid Limit = --- Plastic Limit = ---

Note: The reported expanded uncertainty is based on a combined uncertainty by a coverage factor of k=2, providing a level of confidence of approximately 95%.

LAB.FILE NO.:NMC-10-501

SAMPLE SUBMITTED BY :

☐ Walk-in Clients ☑ GPI Field Operator

R. POLIDAN

REMARKS: _____

COMPUTER PRINT-OUT

By: MARIA ANTONIETTE P. CUNAHAP
Encoder

Data Checked by: ABA/MRR
Quality Assurance

Date Issued: _____

TESTED BY : ARTURO Q. AQUINO
LABORATORY TECHNICIAN

CERTIFIED BY : _____
AUTHORIZED SIGNATORY

ACCREDITED TESTING LABORATORY
PNS ISO/IEC 17025:2005
LA-2006-097B

GEOTECHNICS PHILIPPINES, INC.

SOILS AND MATERIALS TESTING LABORATORY
119 Sauyo Road, Novaliches, Quezon City

DPWH-BRS Accredited

Client..... **MOHRI, ARCHITECT & ASSOCIATES, INC.**	Job Number..... 2209-10.R1-AL-01-1
Project..... **Proposed Mayon Evacuation Center (Gogon Central School)**	Date of Receipt..... October 27, 2010
Location.... Brgy. Gogon, Province of Albay	Date of Test..... October 28-29, 2010

TEST REPORT FOR LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX OF SOILS

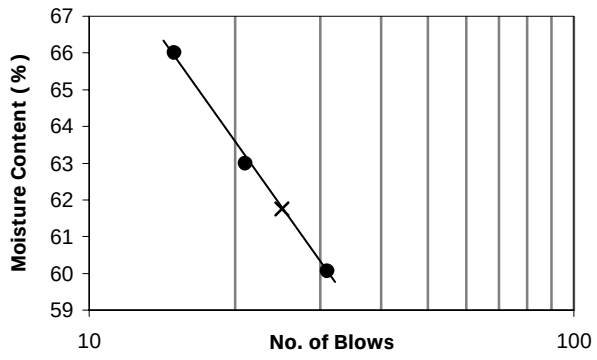
ASTM D 4318 - 05

Method : A ☑ Wet Preparation ☐ Dry Preparation

BOREHOLE NO..... **BH-1** DEPTH (m)..... 5.55-6.00 SOIL DESCRIPTION.....
SAMPLE NO..... S-6 USCS CLASS..... MH Elastic SILT

MOISTURE CONTENT DETERMINATION	LIQUID LIMIT TRIAL 1	LIQUID LIMIT TRIAL 2	LIQUID LIMIT TRIAL 3	PLASTIC LIMIT TRIAL 1	PLASTIC LIMIT TRIAL 2
DISH NUMBER	D24	D1	D26	C23	C72
WET SOIL + DISH (g)	32.54	35.16	38.22	22.68	22.71
DRY SOIL + DISH (g)	23.94	25.32	26.92	19.52	19.53
WATER (g)	8.60	9.84	11.30	3.16	3.18
DISH MASS (g)	9.62	9.70	9.80	9.54	9.55
DRY SOIL (g)	14.32	15.62	17.12	9.98	9.98
MOISTURE CONTENT	60.06	63.00	66.00	31.66	31.86
NUMBER OF BLOWS	31	21	15	32	

% RETAINED ON 0.425mm 5.37

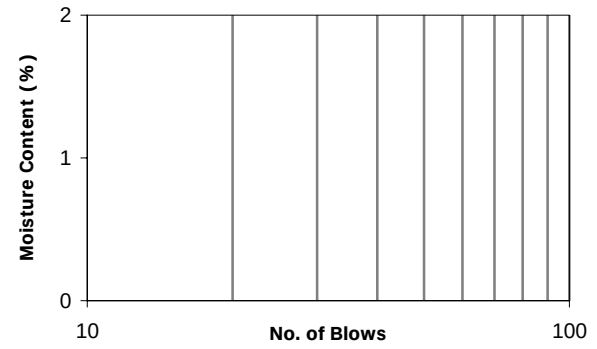


LL = 62 PL = 32 PI = 30

BOREHOLE NO..... DEPTH (m)..... SOIL DESCRIPTION.....
SAMPLE NO..... USCS CLASS.....

MOISTURE CONTENT DETERMINATION	LIQUID LIMIT TRIAL 1	LIQUID LIMIT TRIAL 2	LIQUID LIMIT TRIAL 3	PLASTIC LIMIT TRIAL 1	PLASTIC LIMIT TRIAL 2
DISH NUMBER					
WET SOIL + DISH (g)					
DRY SOIL + DISH (g)					
WATER (g)					
DISH MASS (g)					
DRY SOIL (g)					
MOISTURE CONTENT					
NUMBER OF BLOWS					

% RETAINED ON 0.425mm .....



LL = PL = PI =

Uncertainty Results: I Liquid Limit = ± 0.1384 Plastic Limit = ± 0.2008
II Liquid Limit = --- Plastic Limit = ---

Note: The reported expanded uncertainty is based on a combined uncertainty by a coverage factor of k=2, providing a level of confidence of approximately 95%.

LAB.FILE NO.:AL-10-648

SAMPLE SUBMITTED BY :
☐ Walk-in Clients ☑ GPI Field Operator
R. POLIDAN

REMARKS:

COMPUTER PRINT-OUT
By: MARIA ANTONIETTE P. CUNAHAP
Encoder

Data Checked by: ABA / MRR
Quality Assurance

Date Issued:

TESTED BY : ARTURO Q. AQUINO
LABORATORY TECHNICIAN

CERTIFIED BY :
AUTHORIZED SIGNATORY

ACCREDITED TESTING LABORATORY
PNS ISO/IEC 17025:2005
LA-2006-097B

GEOTECHNICS PHILIPPINES, INC.

SOILS AND MATERIALS TESTING LABORATORY
119 Sauyo Road, Novaliches, Quezon City

DPWH-BRS Accredited

Client..... **MOHRI, ARCHITECT & ASSOCIATES, INC.**	Job Number..... 2209-10.R1-AL-02-1
Project..... **Proposed Mayon Evacuation Center (Gogon Central School)**	Date of Receipt..... October 27, 2010
Location.... Brgy. Gogon, Province of Albay	Date of Test..... October 28-29, 2010

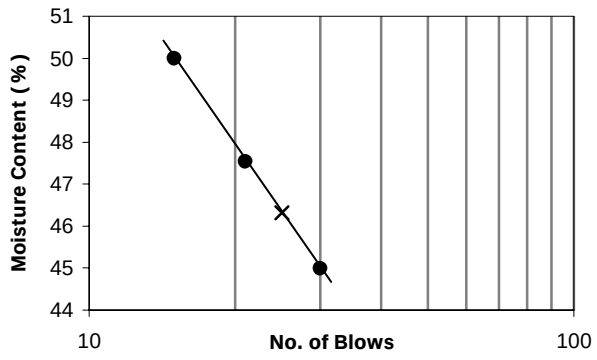
TEST REPORT FOR LIQUID LIMIT, PLASTIC LIMIT AND PLASTICITY INDEX OF SOILS

ASTM D 4318 - 05

Method : A ☑ Wet Preparation ☐ Dry Preparation

BOREHOLE NO..... **BH-2** DEPTH (m)..... 4.55-5.00 SOIL DESCRIPTION.....
SAMPLE NO..... S-5 USCS CLASS..... SC Clayey SAND

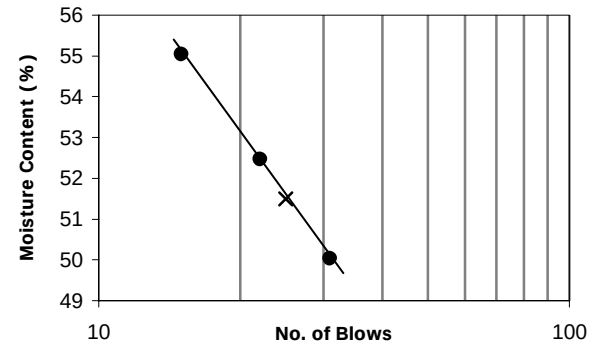
MOISTURE CONTENT DETERMINATION	LIQUID LIMIT TRIAL 1	LIQUID LIMIT TRIAL 2	LIQUID LIMIT TRIAL 3	PLASTIC LIMIT TRIAL 1	PLASTIC LIMIT TRIAL 2
DISH NUMBER	C68	C80	C31	D16	D45
WET SOIL + DISH (g)	32.64	35.40	38.29	22.67	22.69
DRY SOIL + DISH (g)	25.49	27.12	28.80	19.42	19.42
WATER (g)	7.15	8.28	9.49	3.25	3.27
DISH MASS (g)	9.60	9.70	9.82	9.45	9.47
DRY SOIL (g)	15.89	17.42	18.98	9.97	9.95
MOISTURE CONTENT	45.00	47.53	50.00	32.60	32.86
NUMBER OF BLOWS	30	21	15	33	
% RETAINED ON 0.425mm					24.63



LL = 46 PL = 33 PI = 13

BOREHOLE NO..... **BH-2** DEPTH (m)..... 5.55-6.00 SOIL DESCRIPTION.....
SAMPLE NO..... S-6 USCS CLASS..... MH Elastic SILT

MOISTURE CONTENT DETERMINATION	LIQUID LIMIT TRIAL 1	LIQUID LIMIT TRIAL 2	LIQUID LIMIT TRIAL 3	PLASTIC LIMIT TRIAL 1	PLASTIC LIMIT TRIAL 2
DISH NUMBER	D14	D39	D7	C50	C93
WET SOIL + DISH (g)	32.50	35.28	38.20	22.66	22.68
DRY SOIL + DISH (g)	24.87	26.47	28.11	19.52	19.54
WATER (g)	7.63	8.81	10.09	3.14	3.14
DISH MASS (g)	9.62	9.68	9.78	9.51	9.52
DRY SOIL (g)	15.25	16.79	18.33	10.01	10.02
MOISTURE CONTENT	50.03	52.47	55.05	31.37	31.34
NUMBER OF BLOWS	31	22	15	31	
% RETAINED ON 0.425mm					19.72



LL = 51 PL = 31 PI = 20

Uncertainty Results:	I	Liquid Limit = ± 0.1245	Plastic Limit = ± 0.2015
	II	Liquid Limit = ± 0.1301	Plastic Limit = ± 0.2000

Note: The reported expanded uncertainty is based on a combined uncertainty by a coverage factor of k=2, providing a level of confidence of approximately 95%.

LAB.FILE NO.:AL-10-649

SAMPLE SUBMITTED BY :
☐ Walk-in Clients ☑ GPI Field Operator
R. POLIDAN

REMARKS:

COMPUTER PRINT-OUT
By: MARIA ANTONIETTE P. CUNAHAP
Encoder

Data Checked by: ABA / MRR
Quality Assurance

Date Issued:

TESTED BY : ARTURO Q. AQUINO
LABORATORY TECHNICIAN

CERTIFIED BY :
AUTHORIZED SIGNATORY

ACCREDITED TESTING LABORATORY
PNS ISO/IEC 17025:2005
LA-2006-097B

GEOTECHNICS PHILIPPINES, INC.

SOILS AND MATERIALS TESTING LABORATORY
119 Sauyo Road, Novaliches, Quezon City

DPWH-BRS Accredited

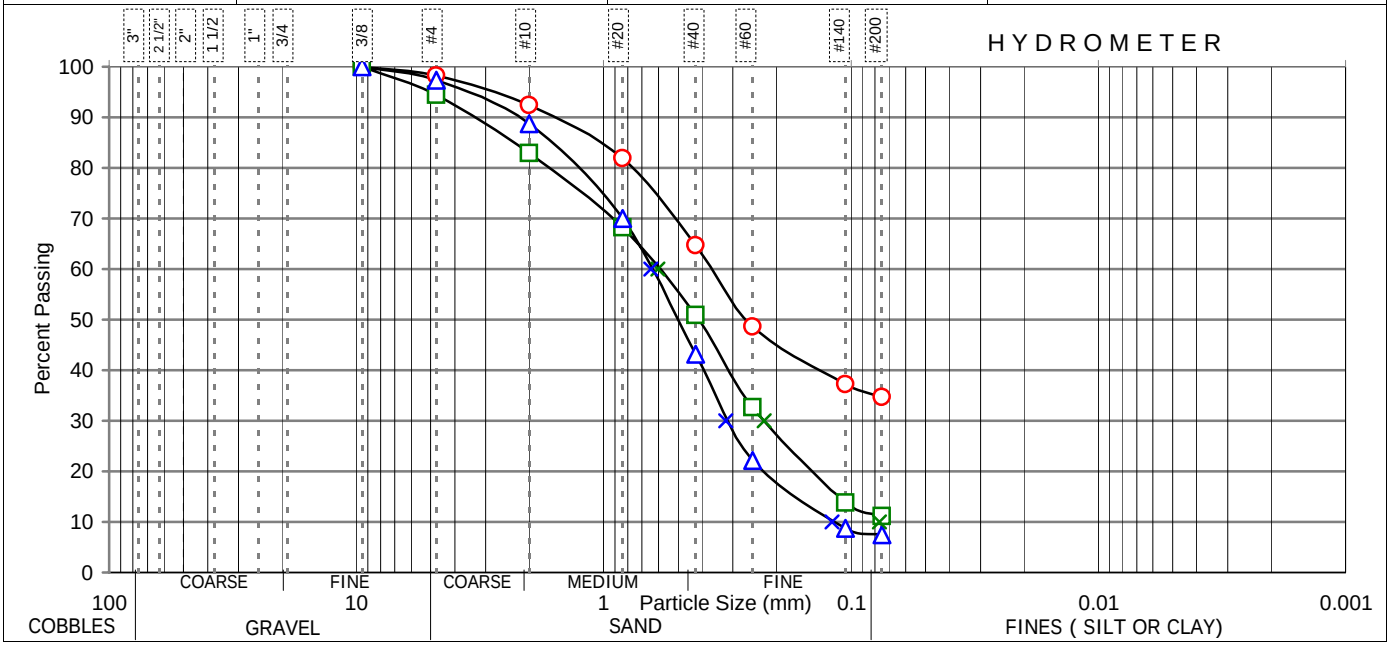
Client..... **MOHRI, ARCHITECT & ASSOCIATES, INC.**	Job Number..... 2209-10.R1-GSA-01-1
Project..... **Proposed Mayon Evacuation Center (Gogon Central School)**	Date of Receipt..... October 27, 2010
Location..... Brgy. Gogon, Province of Albay	Date of Test..... October 28, 2010

TEST REPORT FOR GRAIN SIZE ANALYSIS

ASTM D 422 - 63 (Re-approved 2007)

BH / SAMPLE NO.....	**BH-1**	○ 1	□ 2	△ 3
DEPTH (m).....		0.55-1.00	1.55-2.00	2.55-3.00
SOIL DESCRIPTION.....		Clayey Silty SAND	Well graded SAND with silt	Poorly graded SAND with silt

SIEVE SIZE inches	SIEVE SIZE mm	Cumm.Mass Retained (g)	Cumm.% Retained	Percent Finer	Cumm.Mass Retained (g)	Cumm.% Retained	Percent Finer	Cumm.Mass Retained (g)	Cumm.% Retained	Percent Finer
2 1/2	62.5									
2	50.0									
1 1/2	37.5									
1	25.0									
3/4	19.0									
3/8	9.5			100			100			100
4	4.75	1.26	1.84	98	4.48	5.54	94	2.12	2.65	97
10	2.0	5.25	7.65	92	13.86	17.14	83	9.05	11.32	89
20	0.8	12.40	18.06	82	25.70	31.78	68	23.97	29.98	70
40	0.425	24.24	35.30	65	39.71	49.10	51	45.49	56.90	43
60	0.25	35.31	51.43	49	54.45	67.33	33	62.27	77.89	22
140	0.105	43.10	62.77	37	69.71	86.20	14	72.96	91.26	9
200	0.075	44.84	65.31	35	71.87	88.87	11	74.02	92.58	7
OVEN DRIED MASS		68.66 gms			80.87 gms			79.95 gms		



* - with Hydrometer

REMARKS : S-2: Cu = 7.85 Cc = 1.09
S-3: Cu = 5.40 Cc = 1.34

SAMPLE SUBMITTED BY:
☐ Walk-in Clients ☑ GPI Field Operator
R. POLIDAN

COMPUTER PRINT-OUT
By: MARIA ANTONIETTE P. CUNAHAP
Encoder

Data Checked by: ABA/MRR
Quality Assurance

Date Issued: _____

TESTED BY : ARTURO Q. AQUINO
LABORATORY TECHNICIAN

CERTIFIED BY : _____
AUTHORIZED SIGNATORY

Uncertainty Results: % Finer = ± 0.0427 LAB.FILE NO.:GSA-10-402

Note: The reported expanded uncertainty is based on a combined uncertainty by a coverage factor of k=2, providing a level of confidence of approximately 95%.

ACCREDITED TESTING LABORATORY
PNS ISO/IEC 17025:2005
LA-2006-097B

GEOTECHNICS PHILIPPINES, INC.

SOILS AND MATERIALS TESTING LABORATORY
119 Sauyo Road, Novaliches, Quezon City

DPWH-BRS Accredited

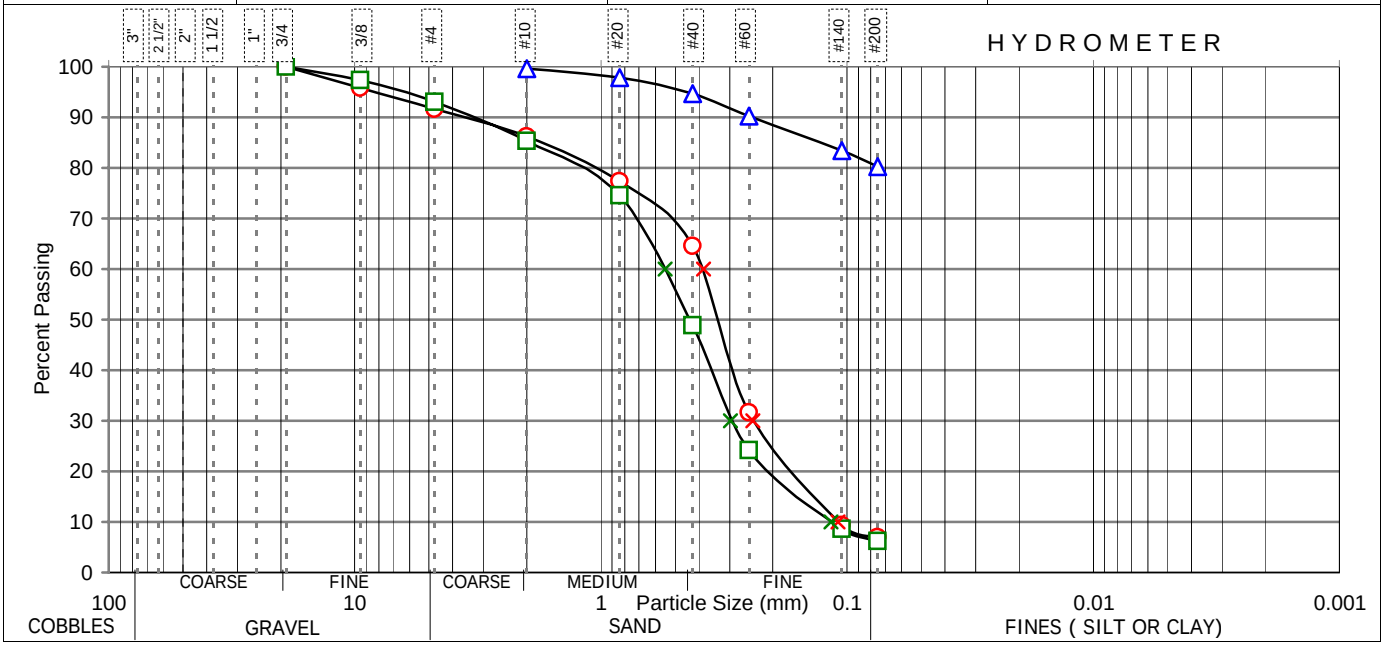
Client..... **MOHRI, ARCHITECT & ASSOCIATES, INC.**	Job Number..... 2209-10.R1-GSA-01-2
Project..... **Proposed Mayon Evacuation Center (Gogon Central School)**	Date of Receipt..... October 27, 2010
Location..... Brgy. Gogon, Province of Albay	Date of Test..... October 28, 2010

TEST REPORT FOR GRAIN SIZE ANALYSIS

ASTM D 422 - 63 (Re-approved 2007)

BH / SAMPLE NO.....	**BH-1**	○ 4	□ 5	△ 6
DEPTH (m).....		3.55-4.00	4.55-5.00	5.55-6.00
SOIL DESCRIPTION.....		Poorly graded SAND with silt	Poorly graded SAND with silt	Elastic SILT

SIEVE SIZE		Cumm.Mass	Cumm.%	Percent	Cumm.Mass	Cumm.%	Percent	Cumm.Mass	Cumm.%	Percent
inches	mm	Retained (g)	Retained	Finer	Retained (g)	Retained	Finer	Retained (g)	Retained	Finer
2 1/2	62.5									
2	50.0									
1 1/2	37.5									
1	25.0									
3/4	19.0			100			100			
3/8	9.5	3.48	4.17	96	2.07	2.67	97			
4	4.75	6.93	8.31	92	5.44	7.01	93			
10	2.0	11.55	13.85	86	11.39	14.68	85	0.30	0.42	100
20	0.8	18.94	22.70	77	19.71	25.40	75	1.52	2.13	98
40	0.425	29.58	35.46	65	39.69	51.15	49	3.83	5.37	95
60	0.25	57.00	68.33	32	58.83	75.82	24	6.97	9.78	90
140	0.105	75.64	90.67	9	70.94	91.43	9	11.78	16.52	83
200	0.075	77.65	93.08	7	72.82	93.85	6	14.10	19.78	80
OVEN DRIED MASS			83.42 gms			77.59 gms			71.29 gms	



* - with Hydrometer

REMARKS : S-4: Cu = 3.53 Cc = 1.40

S-5: Cu = 4.72 Cc = 1.39

SAMPLE SUBMITTED BY:

☐ Walk-in Clients ☑ GPI Field Operator

R. POLIDAN

TESTED BY : ARTURO Q. AQUINO

LABORATORY TECHNICIAN

COMPUTER PRINT-OUT

By: MARIA ANTONIETTE P. CUNAHAP
Encoder

Data Checked by: ABA/MRR
Quality Assurance

Date Issued: _____

CERTIFIED BY : _____

AUTHORIZED SIGNATORY

Uncertainty Results: % Finer = ± 0.0434 LAB.FILE NO.:GSA-10-402

Note: The reported expanded uncertainty is based on a combined uncertainty by a coverage factor of k=2, providing a level of confidence of approximately 95%.

ACCREDITED TESTING LABORATORY
PNS ISO/IEC 17025:2005
LA-2006-097B

GEOTECHNICS PHILIPPINES, INC.

SOILS AND MATERIALS TESTING LABORATORY
119 Sauyo Road, Novaliches, Quezon City

DPWH-BRS Accredited

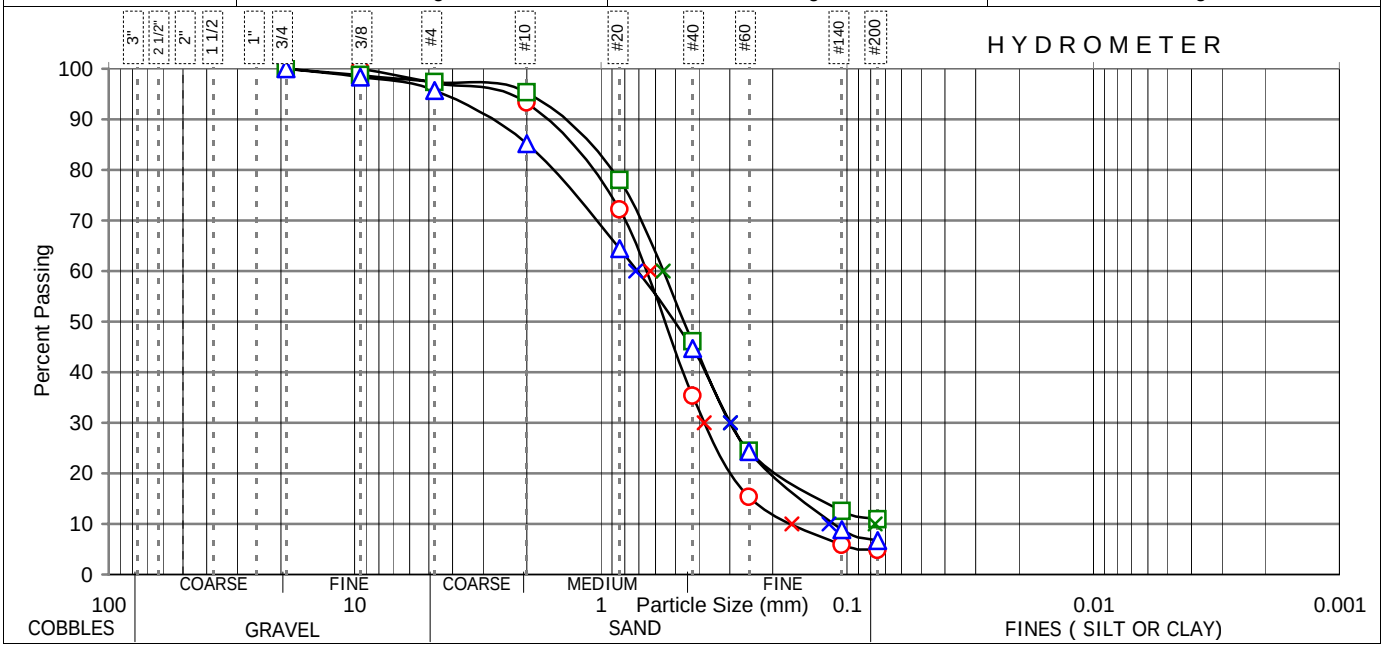
Client..... **MOHRI, ARCHITECT & ASSOCIATES, INC.**	Job Number..... 2209-10.R1-GSA-01-3
Project..... **Proposed Mayon Evacuation Center (Gogon Central School)**	Date of Receipt..... October 27, 2010
Location..... Brgy. Gogon, Province of Albay	Date of Test..... October 28, 2010

TEST REPORT FOR GRAIN SIZE ANALYSIS

ASTM D 422 - 63 (Re-approved 2007)

BH / SAMPLE NO.....	**BH-1**	○ 7	□ 8	△ 9
DEPTH (m).....		6.55-7.00	7.55-8.00	8.55-9.00
SOIL DESCRIPTION.....		Poorly graded SAND with silt	Well graded SAND with silt	Well graded SAND with silt

SIEVE SIZE		Cumm.Mass	Cumm.%	Percent	Cumm.Mass	Cumm.%	Percent	Cumm.Mass	Cumm.%	Percent
inches	mm	Retained (g)	Retained	Finer	Retained (g)	Retained	Finer	Retained (g)	Retained	Finer
2 1/2	62.5									
2	50.0									
1 1/2	37.5									
1	25.0									
3/4	19.0						100			100
3/8	9.5			100	0.90	1.23	99	1.35	1.66	98
4	4.75	2.20	2.79	97	1.97	2.70	97	3.47	4.26	96
10	2.0	5.31	6.74	93	3.38	4.62	95	12.08	14.83	85
20	0.8	21.98	27.90	72	16.10	22.03	78	28.94	35.54	64
40	0.425	50.95	64.67	35	39.40	53.91	46	45.02	55.29	45
60	0.25	66.70	84.66	15	55.24	75.58	24	61.61	75.66	24
140	0.105	74.23	94.21	6	63.89	87.41	13	74.19	91.11	9
200	0.075	75.04	95.24	5	65.11	89.08	11	75.96	93.28	7
OVEN DRIED MASS		78.79 gms			73.09 gms			81.43 gms		



* - with Hydrometer

REMARKS :

S-7:	Cu =	3.77	Cc =	1.37
S-8:	Cu =	7.28	Cc =	2.06
S-9:	Cu =	6.10	Cc =	1.04

SAMPLE SUBMITTED BY:

☐ Walk-in Clients ☑ GPI Field Operator

R. POLIDAN

TESTED BY : ARTURO Q. AQUINO
LABORATORY TECHNICIAN

CERTIFIED BY : _____
AUTHORIZED SIGNATORY

COMPUTER PRINT-OUT

By: MARIA ANTONIETTE P. CUNAHAP
Encoder

Data Checked by: ABA/MRR
Quality Assurance

Date Issued: _____

Uncertainty Results: % Finer = ± 0.0450 LAB.FILE NO.:GSA-10-402

Note: The reported expanded uncertainty is based on a combined uncertainty by a coverage factor of k=2, providing a level of confidence of approximately 95%.

ACCREDITED TESTING LABORATORY
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LA-2006-097B

GEOTECHNICS PHILIPPINES, INC.

SOILS AND MATERIALS TESTING LABORATORY
119 Sauyo Road, Novaliches, Quezon City

DPWH-BRS Accredited

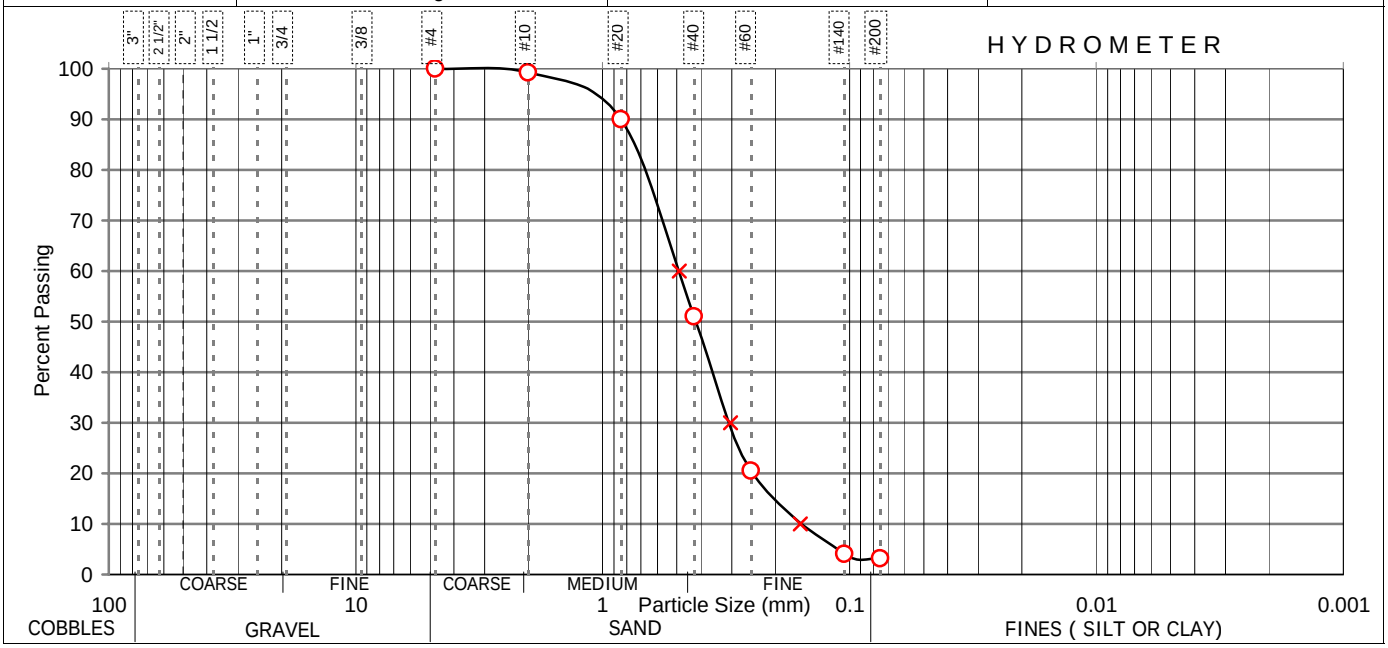
Client..... **MOHRI, ARCHITECT & ASSOCIATES, INC.**	Job Number..... 2209-10.R1-GSA-01-4
Project..... **Proposed Mayon Evacuation Center (Gogon Central School)**	Date of Receipt..... October 27, 2010
Location..... Brgy. Gogon, Province of Albay	Date of Test..... October 28, 2010

TEST REPORT FOR GRAIN SIZE ANALYSIS

ASTM D 422 - 63 (Re-approved 2007)

BH / SAMPLE NO..... **BH-1** ○10 □ △
DEPTH (m)..... 9.55-10.00
SOIL DESCRIPTION..... Poorly graded SAND

SIEVE SIZE inches	SIEVE SIZE mm	Cumm.Mass Retained (g)	Cumm.% Retained	Percent Finer	Cumm.Mass Retained (g)	Cumm.% Retained	Percent Finer	Cumm.Mass Retained (g)	Cumm.% Retained	Percent Finer
2 1/2	62.5									
2	50.0									
1 1/2	37.5									
1	25.0									
3/4	19.0									
3/8	9.5									
4	4.75			100						
10	2.0	0.53	0.70	99						
20	0.8	7.53	9.97	90						
40	0.425	36.98	48.94	51						
60	0.25	60.02	79.43	21						
140	0.105	72.50	95.95	4						
200	0.075	73.20	96.88	3						
OVEN DRIED MASS		75.56 gms								



* - with Hydrometer

REMARKS : S-10: Cu = 3.09 Cc = 1.19

SAMPLE SUBMITTED BY:
☐ Walk-in Clients ☑ GPI Field Operator
R. POLIDAN

TESTED BY : ARTURO Q. AQUINO
LABORATORY TECHNICIAN

CERTIFIED BY :
AUTHORIZED SIGNATORY

COMPUTER PRINT-OUT
By: MARIA ANTONIETTE P. CUNAHAP
Encoder

Data Checked by: ABA/MRR
Quality Assurance

Date Issued:

Uncertainty Results: % Finer = ± 0.0453 LAB.FILE NO.:GSA-10-402

Note: The reported expanded uncertainty is based on a combined uncertainty by a coverage factor of k=2, providing a level of confidence of approximately 95%.

ACCREDITED TESTING LABORATORY
PNS ISO/IEC 17025:2005
LA-2006-097B

GEOTECHNICS PHILIPPINES, INC.

SOILS AND MATERIALS TESTING LABORATORY
119 Sauyo Road, Novaliches, Quezon City

DPWH-BRS Accredited

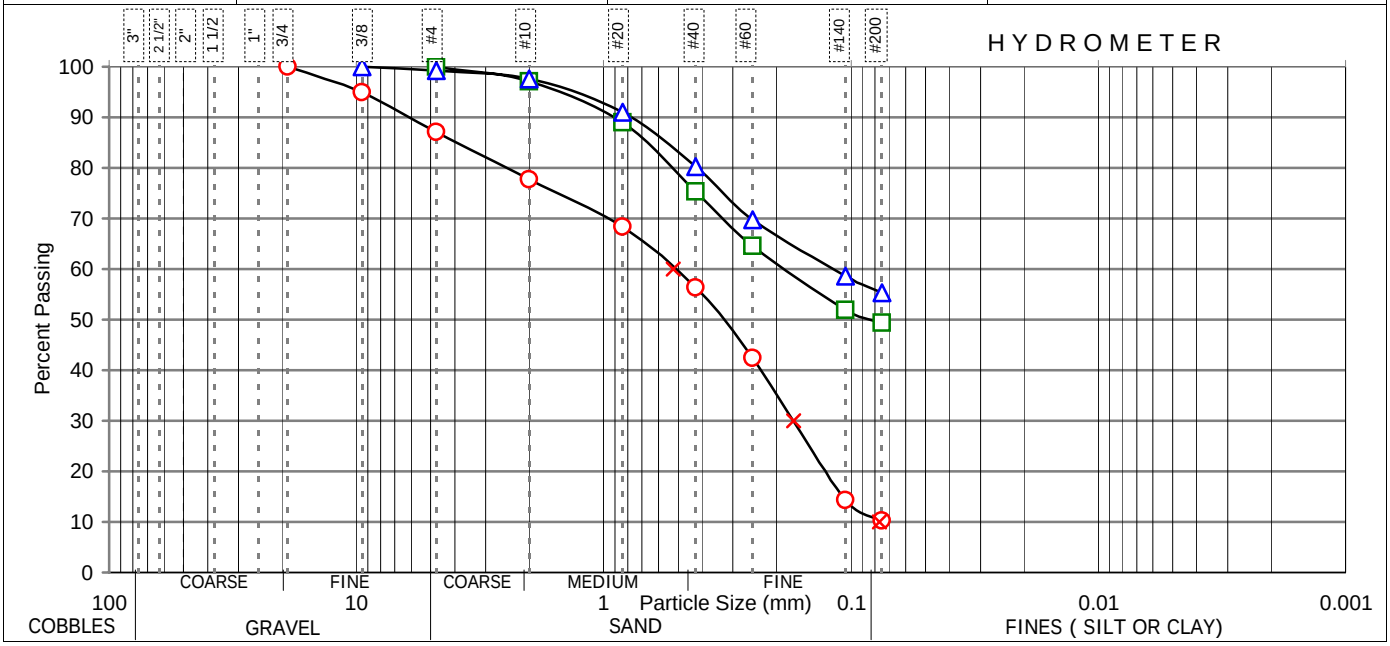
Client..... **MOHRI, ARCHITECT & ASSOCIATES, INC.**	Job Number..... 2209-10.R1-GSA-02-2
Project..... **Proposed Mayon Evacuation Center (Gogon Central School)**	Date of Receipt..... October 27, 2010
Location..... Brgy. Gogon, Province of Albay	Date of Test..... October 28, 2010

TEST REPORT FOR GRAIN SIZE ANALYSIS

ASTM D 422 - 63 (Re-approved 2007)

BH / SAMPLE NO.....	**BH-2**	○ 4	□ 5	△ 6
DEPTH (m).....		3.55-4.00	4.55-5.00	5.55-6.00
SOIL DESCRIPTION.....		Poorly graded SAND with silt	Clayey SAND	Elastic SILT

SIEVE SIZE inches	SIEVE SIZE mm	Cumm.Mass Retained (g)	Cumm.% Retained	Percent Finer	Cumm.Mass Retained (g)	Cumm.% Retained	Percent Finer	Cumm.Mass Retained (g)	Cumm.% Retained	Percent Finer
2 1/2	62.5									
2	50.0									
1 1/2	37.5									
1	25.0									
3/4	19.0			100						
3/8	9.5	4.00	5.07	95						100
4	4.75	10.14	12.86	87			100	0.42	0.76	99
10	2.0	17.59	22.30	78	1.82	2.88	97	1.33	2.40	98
20	0.8	24.95	31.63	68	6.97	11.05	89	4.98	8.99	91
40	0.425	34.46	43.69	56	15.54	24.63	75	10.92	19.72	80
60	0.25	45.42	57.59	42	22.39	35.48	65	16.72	30.20	70
140	0.105	67.58	85.69	14	30.38	48.15	52	22.91	41.38	59
200	0.075	70.82	89.79	10	31.95	50.63	49	24.73	44.66	55
OVEN DRIED MASS			78.87 gms			63.10 gms			55.37 gms	



* - with Hydrometer

REMARKS : S-4: Cu = 6.82 Cc = 0.72

SAMPLE SUBMITTED BY:

☐ Walk-in Clients ☑ GPI Field Operator

R. POLIDAN

COMPUTER PRINT-OUT

By: MARIA ANTONIETTE P. CUNAHAP
Encoder

Data Checked by: ABA/MRR
Quality Assurance

Date Issued: _____

TESTED BY : ARTURO Q. AQUINO
LABORATORY TECHNICIAN

CERTIFIED BY : _____
AUTHORIZED SIGNATORY

Uncertainty Results: % Finer = ± 0.0486 LAB.FILE NO.:GSA-10-402

Note: The reported expanded uncertainty is based on a combined uncertainty by a coverage factor of k=2, providing a level of confidence of approximately 95%.

ACCREDITED TESTING LABORATORY
PNS ISO/IEC 17025:2005
LA-2006-097B

GEOTECHNICS PHILIPPINES, INC.

SOILS AND MATERIALS TESTING LABORATORY
119 Sauyo Road, Novaliches, Quezon City

DPWH-BRS Accredited

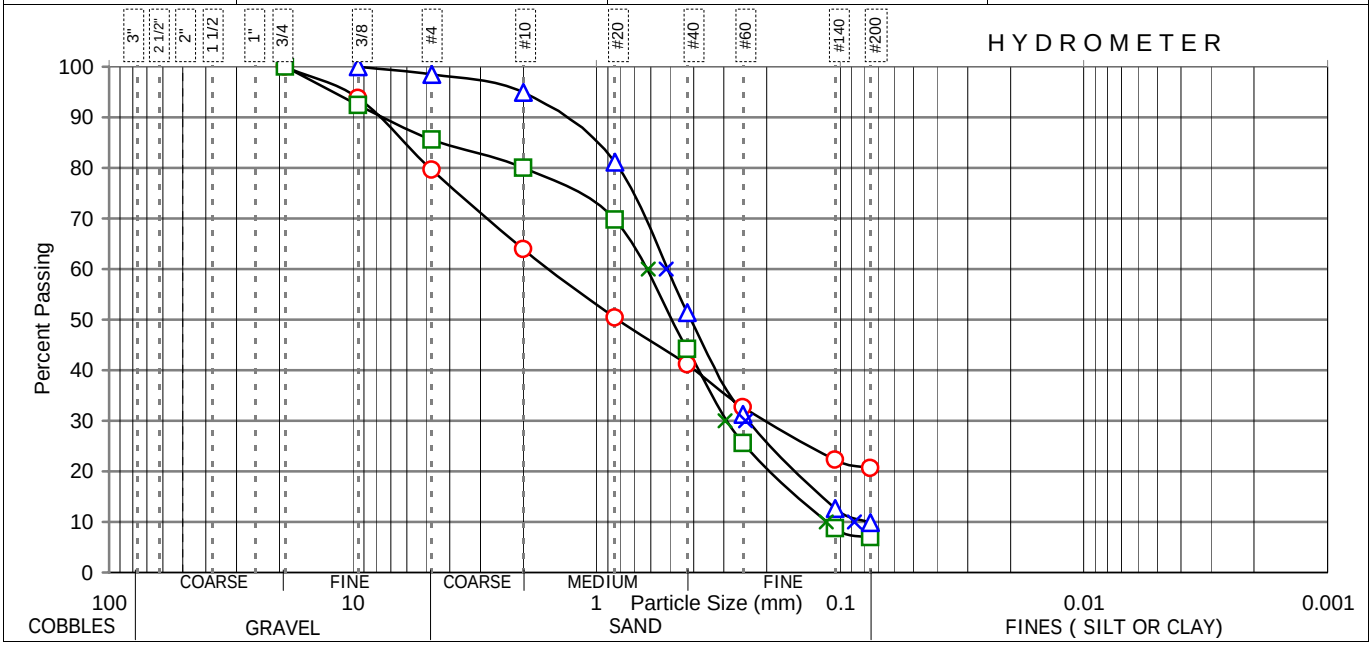
Client..... **MOHRI, ARCHITECT & ASSOCIATES, INC.**	Job Number..... 2209-10.R1-GSA-02-3
Project..... **Proposed Mayon Evacuation Center (Gogon Central School)**	Date of Receipt..... October 27, 2010
Location..... Brgy. Gogon, Province of Albay	Date of Test..... October 28, 2010

TEST REPORT FOR GRAIN SIZE ANALYSIS

ASTM D 422 - 63 (Re-approved 2007)

BH / SAMPLE NO.....	**BH-2**	○ 7	□ 8	△ 9
DEPTH (m).....		6.55-7.00	7.55-8.00	8.55-9.00
SOIL DESCRIPTION.....		Silty SAND	Poorly graded SAND with silt	Poorly graded SAND with silt

SIEVE SIZE		Cumm.Mass	Cumm.%	Percent	Cumm.Mass	Cumm.%	Percent	Cumm.Mass	Cumm.%	Percent
inches	mm	Retained (g)	Retained	Finer	Retained (g)	Retained	Finer	Retained (g)	Retained	Finer
2 1/2	62.5									
2	50.0									
1 1/2	37.5									
1	25.0									
3/4	19.0			100			100			
3/8	9.5	5.35	6.19	94	6.62	7.56	92			100
4	4.75	17.63	20.39	80	12.64	14.44	86	1.24	1.53	98
10	2.0	31.20	36.09	64	17.54	20.04	80	4.10	5.06	95
20	0.8	42.90	49.62	50	26.44	30.21	70	15.30	18.87	81
40	0.425	50.87	58.84	41	48.81	55.76	44	39.40	48.61	51
60	0.25	58.23	67.35	33	65.14	74.42	26	55.69	68.70	31
140	0.105	67.22	77.75	22	79.85	91.23	9	70.85	87.40	13
200	0.075	68.67	79.42	21	81.48	93.09	7	73.07	90.14	10
OVEN DRIED MASS			86.46 gms			87.53 gms			81.06 gms	



* - with Hydrometer

REMARKS : S-8: Cu = 5.40 Cc = 1.26
S-9: Cu = 5.93 Cc = 1.32

SAMPLE SUBMITTED BY:
☐ Walk-in Clients ☑ GPI Field Operator
R. POLIDAN

TESTED BY : ARTURO Q. AQUINO
LABORATORY TECHNICIAN

CERTIFIED BY : _____
AUTHORIZED SIGNATORY

COMPUTER PRINT-OUT
By: MARIA ANTONIETTE P. CUNAHAP
Encoder

Data Checked by: ABA/MRR
Quality Assurance

Date Issued: _____

Uncertainty Results: % Finer = ± 0.0408 LAB.FILE NO.:GSA-10-402

Note: The reported expanded uncertainty is based on a combined uncertainty by a coverage factor of k=2, providing a level of confidence of approximately 95%.

ACCREDITED TESTING LABORATORY
PNS ISO/IEC 17025:2005
LA-2006-097B

GEOTECHNICS PHILIPPINES, INC.

SOILS AND MATERIALS TESTING LABORATORY
119 Sauyo Road, Novaliches, Quezon City

DPWH-BRS Accredited

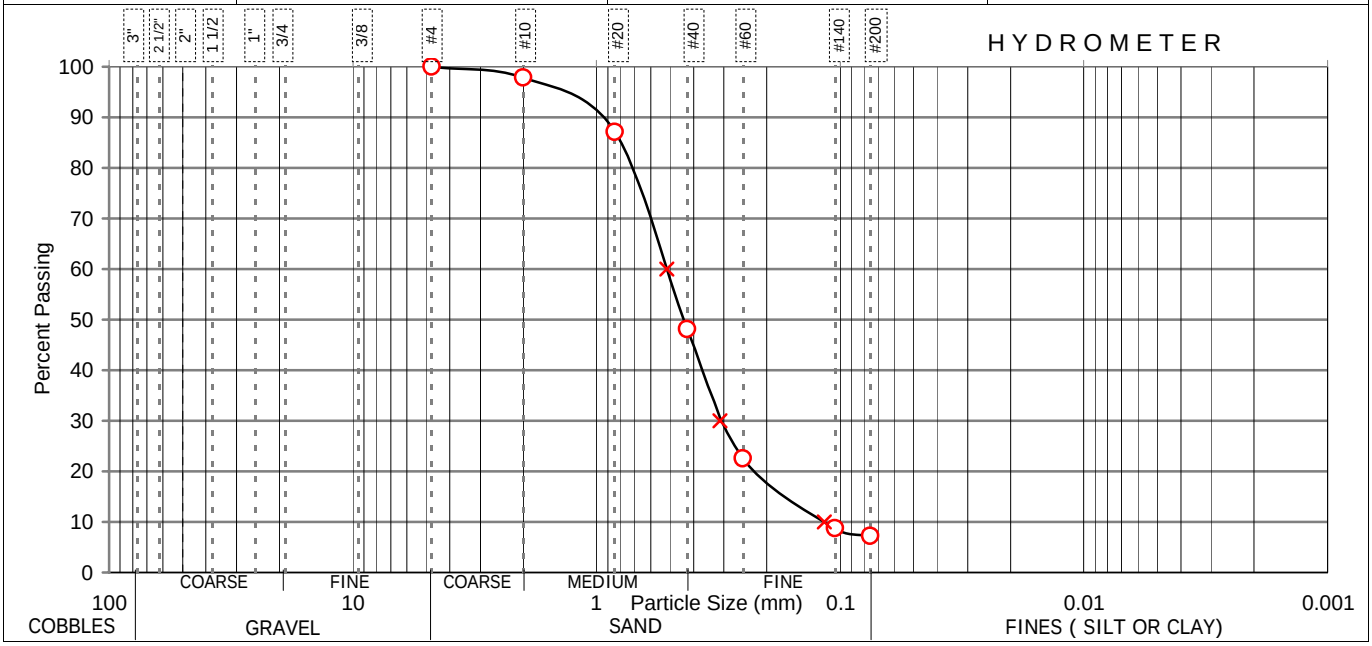
Client..... **MOHRI, ARCHITECT & ASSOCIATES, INC.**	Job Number..... 2209-10.R1-GSA-02-4
Project..... **Proposed Mayon Evacuation Center (Gogon Central School)**	Date of Receipt..... October 27, 2010
Location..... Brgy. Gogon, Province of Albay	Date of Test..... October 28, 2010

TEST REPORT FOR GRAIN SIZE ANALYSIS

ASTM D 422 - 63 (Re-approved 2007)

BH / SAMPLE NO..... **BH-2** ○10 □ △
DEPTH (m)..... 9.55-10.00
SOIL DESCRIPTION..... Poorly graded SAND with silt

SIEVE SIZE		Cumm.Mass	Cumm.%	Percent	Cumm.Mass	Cumm.%	Percent	Cumm.Mass	Cumm.%	Percent
inches	mm	Retained (g)	Retained	Finer	Retained (g)	Retained	Finer	Retained (g)	Retained	Finer
2 1/2	62.5									
2	50.0									
1 1/2	37.5									
1	25.0									
3/4	19.0									
3/8	9.5									
4	4.75			100						
10	2.0	1.73	2.10	98						
20	0.8	10.61	12.87	87						
40	0.425	42.78	51.91	48						
60	0.25	63.81	77.43	23						
140	0.105	75.23	91.29	9						
200	0.075	76.45	92.77	7						
OVEN DRIED MASS			82.41 gms							



* - with Hydrometer

REMARKS : S-10: Cu = 4.43 Cc = 1.63

SAMPLE SUBMITTED BY:
☐ Walk-in Clients ☑ GPI Field Operator
R. POLIDAN

COMPUTER PRINT-OUT
By: MARIA ANTONIETTE P. CUNAHAP
Encoder

Data Checked by: ABA/MRR
Quality Assurance

Date Issued: _____

TESTED BY : ARTURO Q. AQUINO
LABORATORY TECHNICIAN

CERTIFIED BY : _____
AUTHORIZED SIGNATORY

Uncertainty Results: % Finer = ± 0.0407 LAB.FILE NO.:GSA-10-403
Note: The reported expanded uncertainty is based on a combined uncertainty by a coverage factor of k=2, providing a level of confidence of approximately 95%.

ACCREDITED TESTING LABORATORY
PNS ISO/IEC 17025:2005
LA-2006-097B

GEOTECHNICS PHILIPPINES, INC.

SOILS AND MATERIALS TESTING LABORATORY
119 Sauyo Road, Novaliches, Quezon City

DPWH-BRS Accredited

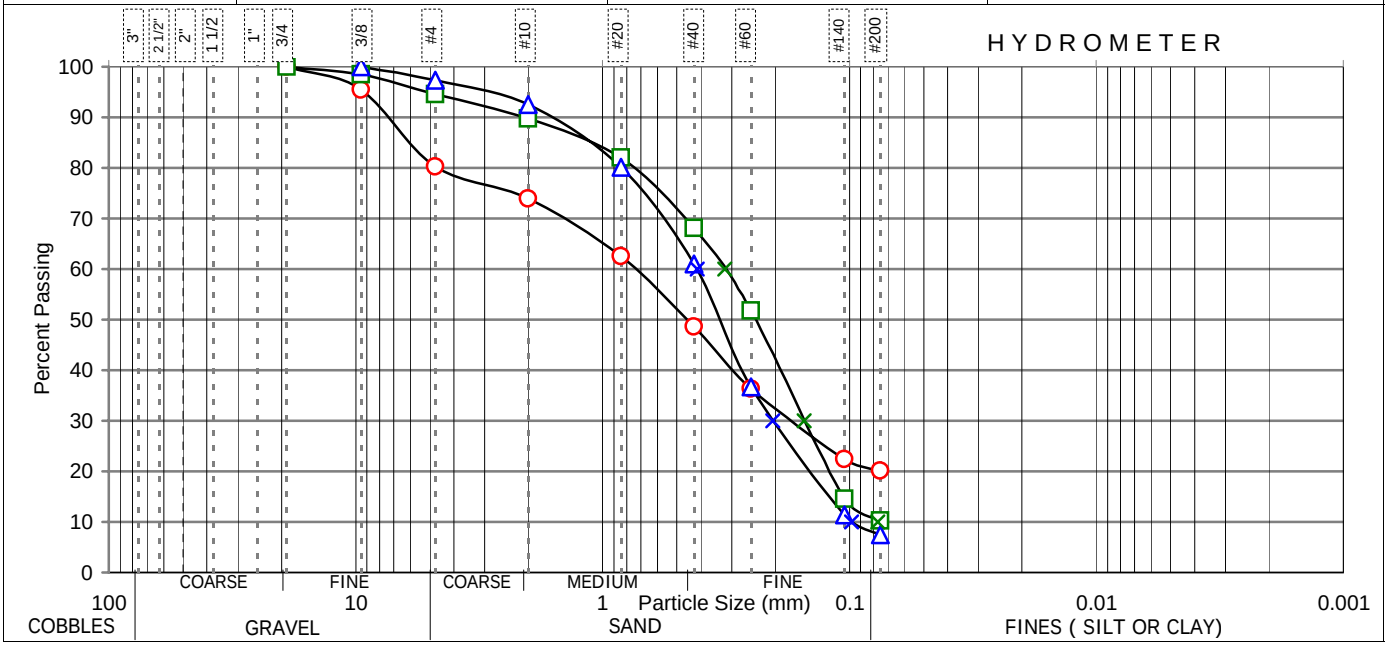
Client..... **MOHRI, ARCHITECT & ASSOCIATES, INC.**	Job Number..... 2209-10.R1-GSA-02-1
Project..... **Proposed Mayon Evacuation Center (Gogon Central School)**	Date of Receipt..... October 27, 2010
Location..... Brgy. Gogon, Province of Albay	Date of Test..... October 28, 2010

TEST REPORT FOR GRAIN SIZE ANALYSIS

ASTM D 422 - 63 (Re-approved 2007)

BH / SAMPLE NO.....	**BH-2**	○ 1	□ 2	△ 3
DEPTH (m).....		0.55-1.00	1.55-2.00	2.55-3.00
SOIL DESCRIPTION.....		Silty SAND	Poorly graded SAND with silt	Poorly graded SAND with silt

SIEVE SIZE		1			2			3		
inches	mm	Cumm.Mass Retained (g)	Cumm.% Retained	Percent Finer	Cumm.Mass Retained (g)	Cumm.% Retained	Percent Finer	Cumm.Mass Retained (g)	Cumm.% Retained	Percent Finer
2 1/2	62.5									
2	50.0									
1 1/2	37.5									
1	25.0									
3/4	19.0			100			100			
3/8	9.5	2.71	4.50	95	1.23	1.48	99			100
4	4.75	11.87	19.72	80	4.57	5.49	95	2.08	2.65	97
10	2.0	15.73	26.14	74	8.52	10.24	90	5.89	7.52	92
20	0.8	22.56	37.49	63	14.98	18.00	82	15.54	19.83	80
40	0.425	30.90	51.35	49	26.54	31.90	68	30.56	39.00	61
60	0.25	38.32	63.68	36	40.10	48.20	52	49.60	63.30	37
140	0.105	46.68	77.57	22	71.14	85.50	14	69.43	88.60	11
200	0.075	48.10	79.93	20	74.68	89.76	10	72.49	92.51	7
OVEN DRIED MASS		60.18 gms			83.20 gms			78.36 gms		



* - with Hydrometer

REMARKS : S-2: Cu = 4.18 Cc = 0.94
S-3: Cu = 4.23 Cc = 1.03

SAMPLE SUBMITTED BY:
☐ Walk-in Clients ☑ GPI Field Operator
R. POLIDAN

COMPUTER PRINT-OUT
By: MARIA ANTONIETTE P. CUNAHAP
Encoder

Data Checked by: ABA/MRR
Quality Assurance

Date Issued: _____

TESTED BY : ARTURO Q. AQUINO
LABORATORY TECHNICIAN

CERTIFIED BY : _____
AUTHORIZED SIGNATORY

Uncertainty Results: % Finer = ± 0.0523 LAB.FILE NO.:GSA-10-402

Note: The reported expanded uncertainty is based on a combined uncertainty by a coverage factor of k=2, providing a level of confidence of approximately 95%.