

محضر استلام موقع

مشروع: القطار الكهربائي السريع (العين السخنة _ العاصمة الإدارية _ العلمين _ مطروح) قطاع
غرب النيل في المسافة من الكم ٤٠٧+٨٠٠ الي الكم ٤٠٧+٩٠٠ بطول ٠,١٠٠ كيلو متر

تنفيذ: شركة جلوبال سيلاي شين
إشراف: المنطقة الخامسة _ منطقة غرب الدلتا

طبقا للعقد رقم (٢٠٢٤/٢٠٢٣/٣٢٦) بتاريخ ٢٠٢٣/٠٩/٠٥

إنه في يوم الخميس الموافق ٢٠٢٣/٠٩/٠٧ اجتمع كل من :-

- | | |
|--|---|
| ١- السيد المهندس / محمد حسني فياض | مدير عام المشروعات - الهيئة العامة للطرق والكباري |
| ٢- السيد المهندس / ابراهيم عبدالله الحناوي | مهندس العملية - الهيئة العامة للطرق والكباري |
| ٣- السيد المهندس / هاني محمود همام | مدير مشروع - شركة جلوبال سيلاي شين |

وذلك للمرور علي مسار العملية المذكورة عاليه لاستلام الموقع :-

وقد تبين ان الموقع خاليا من العوائق الظاهرية ويسمح بالبدء في التنفيذ وبناء عليه يعتبر

تاريخ ٢٠٢٣/٠٩/٠٧ هو تاريخ استلام الموقع وبدء الأعمال بالعملية

واقفل المحضر علي ذلك ووقع الحضور

التوقيعات

٣- هاني همام

٢- محمد حسني فياض

١- ابراهيم عبدالله الحناوي

رئيس الإدارة المركزية

منطقة تطوير الدلتا

الابنكندرية - مرمى مطروح

عميد مهندس

هاني محمد محمود طه

مشروع القطار السريع (العلمين - طوكية)

شركة جلوبال سبلاي شين - من المحطة ٦٠+١٠٧ الى المحطة ٦٠+١٠٨

محضر تحديد مسافة نقل

(نقل الانربة)

انه في يوم الخميس الموافق :- ٢٠٢٢/١٢/٢٢

- بناء على طلب المقاول شركة جلوبال سبلاي شين لتحديد مسافة نقل الانربة من محجر (الفيروز).

على طريق وادي النظرون العلمين للمشروع المذكور اعلاه.

تم زيارة المحجر من قبل:-

- | | |
|------------------------------------|-------------------------------------|
| ١- السيد المهندس / ابراهيم الحناوي | ممثل الهيئة العامة للطرق والكباري |
| ٢- السيد المهندس / مصطفى نجم | ممثل الاستشاري مكتب د. سعد الجبوشي |
| ٣- السيد المهندس / محمد خليل | ممثل استشاري المساحة مكتب XYZ |
| ٤- السيد المهندس / احمد حمدي | مندوب الاستشاري مكتب د. سعد الجبوشي |
| ٥- السيد المهندس / احمد غلاب | مندوب شركة جلوبال سبلاي شين |

وتبين ان المحجر على مسافة ١٧٠ كم من منتصف قطاع شركة جلوبال سبلاي شين

احد اثني المحجر $N 30^{\circ} 30' 59.2''$ $E 29^{\circ} 57' 27.2''$

احد اثني منتصف القطاع $N 30^{\circ} 52' 15.62''$ $E 28^{\circ} 51' 34.82''$

وعلى ذلك تم توقيع،،

٥- ٢- غلاب

١- احمد غلاب

٢- محمد خليل

٢- مصطفى نجم

١- ابراهيم الحناوي

Company Name : Global Supply Chain
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Location : St. (408+000) : (408+160)
Type of sample : Soil Embankment
Delivery Date : 15/11/2022
Reporting Date : 22/11/2022
Reporting No. : 31
Sample No. : 06

Dear Gentleman,

Attached here with the Soil Embankment delivered on 15/11/2022

Materials test

1. Sieve analysis according to ASTM D-422.
2. Material finer than sieve No. 200 according to ASTM D-1140.
3. Liquid limits and plasticity index of soil according to ASTM D-4318.
4. Soil classification according to Project Specs.
5. Proctor Test according to ASTM D-1557

Note: The sample was brought by the client to our laboratory and the laboratory is not responsible for the way it is taken

Signature /


Company Name : Global Supply Chain
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Location : St. (408+000) : (408+160)
Type of sample : Soil Embankment
Delivery Date : 15/11/2022
Reporting Date : 22/11/2022
Reporting No. : 31
Sample No. : 06

RESULTS OF SIEVE ANALYSIS According to ASTM D-422.

Sieve Size (mm)	Passing %
50	100
37.5	93.2
25	85.8
19	78.6
12.50	68.9
9.50	56.7
4.75	43.3
2.36	40.0
2.00	38.9
1.18	34.0
0.600	29.6
0.425	27.7
0.300	22.2
0.150	13.9

Signature /



Company Name : Global Supply Chain
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Location : St. (408+000) : (408+160)
Type of sample : Soil Embankment
Delivery Date : 15/11/2022
Reporting Date : 22/11/2022
Reporting No. : 31
Sample No. : 06

**Materials finer than 75 μ m (no.200) sieve
by washing ASTM D-1140.**

Test	Results (%)
Percentage of material finer than Sieve Size 75 μ m (No.200)	9.6

Signature /

CEL
مكتب معامل الاستشارات الهندسية
الساحل الشمالي
إ. محمد عبد الله
م. أحمد محمد
م. أحمد محمد

Company Name : Global Supply Chain
 Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
 Location : St. (408+000) : (408+160)
 Type of sample : Soil Embankment
 Delivery Date : 15/11/2022
 Reporting Date : 22/11/2022
 Reporting No. : 31
 Sample No. : 06

Results of liquid limit and plasticity index
of soils according to ASTM D-4318

Test	Results (%)
Liquid Limit	22.1
Plastic Limit	16.8
Plasticity Index	5.3


 مكتب معامل الاستشارات الهندسية
 المهندس /
 رقم تسجيل المهندس :
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Signature /

Company Name : Global Supply Chain
 Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
 Location : St. (408+000) : (408+160)
 Type of sample : Soil Embankment
 Delivery Date : 15/11/2022
 Reporting Date : 22/11/2022
 Reporting No. : 31
 Sample No. : 06

Soil Classification According to Project Specs (Embankment)

TEST	Results (%)	Limits according Projects Specs	
		(A-1-a)	(A-1-b)
• Group Classification	(A-1-a)	(A-1-a)	(A-1-b)
2.00 mm (No.10).	38.9	Max 50 %	-----
0.425 mm (No. 40).	27.7	Max 30 %	Max 50 %
0.075 mm (No. 200).	9.6	Max 15 %	Max 15 %
Characteristics of fraction passing 0.425 mm (No.40)			
Liquid Limit	22.1	-----	-----
Plasticity index	5.3	Max 6 %	Max 6 %

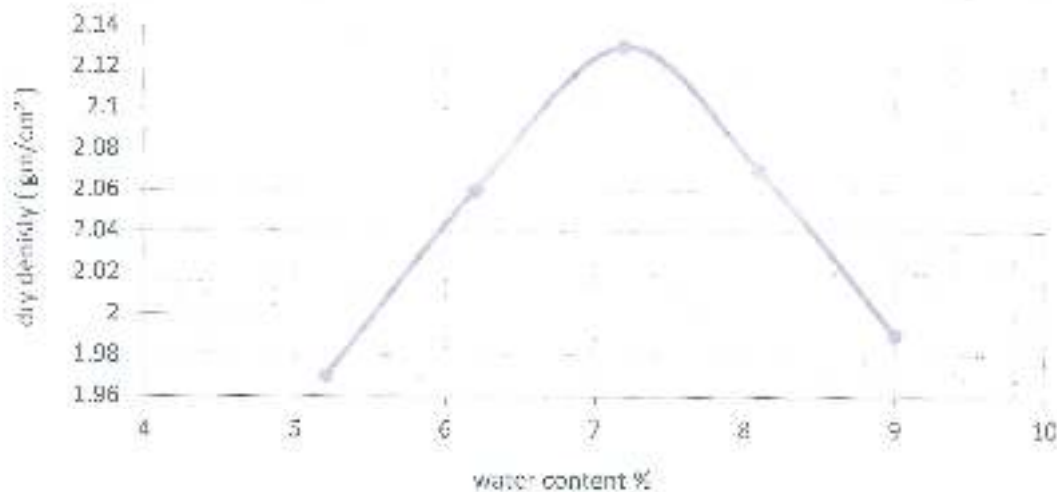
The test results are (☒ Comply - ☐ Not Comply) with specifications limits

Signature



Company Name : Global Supply Chain
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Location : St. (408+000) : (408+160)
Type of sample : Soil Embankment
Delivery Date : 15/11/2022
Reporting Date : 22/11/2022
Reporting No. : 31
Sample No. : 06

Moisture – Density relation of soil
Test result (Modified proctor test)
ASTM D-1557



- Max dry density (gm/cm³) : 2.13
- Optimum moisture content % : 7.2

Signature /



Company Name : Global Supply Chain
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Location : St. (406+940) : (407+060)
Type of sample : Soil Embankment
Delivery Date : 27/11/2022
Reporting Date : 04/12/2022
Reporting No. : 32
Sample No. : 07

Dear Gentleman,

Attached here with the Soil Embankment delivered on 27/11/2022

Materials test

1. Sieve analysis according to ASTM D-422.
2. Material finer than sieve No, 200 according to ASTM D-1140.
3. Liquid limits and plasticity index of soil according to ASTM D-4318.
4. Soil classification according to Project Specs.
5. Proctor Test according to ASTM D-1557
6. CBR according to ASTM D-1883

Note: The sample was brought by the client to our laboratory and the laboratory is not responsible for the way it is taken


مكتب معامل الاستشارات الهندسية
المساحل الشمالي
ر. محمد مصطفى
ش. محمد مصطفى
Signature /.....

Company Name : Global Supply Chain
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Location : St. (406+940) : (407+060)
Type of sample : Soil Embankment
Delivery Date : 27/11/2022
Reporting Date : 04/12/2022
Reporting No. : 32
Sample No. : 07

RESULTS OF SIEVE ANALYSIS According to ASTM D-422.

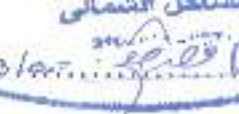
Sieve Size (mm)	Passing %
50	100
37.5	95.6
25	83.1
19	76.5
12.50	69.9
9.50	56.5
4.75	38.7
2.36	36.6
2.00	34.7
1.18	31.5
0.600	29.0
0.425	24.9
0.300	19.3
0.150	13.7

Signature

Company Name : Global Supply Chain
 Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
 Location : St. (406+940) : (407+060)
 Type of sample : Soil Embankment
 Delivery Date : 27/11/2022
 Reporting Date : 04/12/2022
 Reporting No. : 32
 Sample No. : 07

**Materials finer than 75 μ m (no.200) sieve
 by washing ASTM D-1140.**

Test	Results (%)
Percentage of material finer than Sieve Size 75 μ m (No.200)	8.7

Signature /  

Company Name : Global Supply Chain
 Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
 Location : St. (406+940) : (407+060)
 Type of sample : Soil Embankment
 Delivery Date : 27/11/2022
 Reporting Date : 04/12/2022
 Reporting No. : 32
 Sample No. : 07

Results of liquid limit and plasticity index
of soils according to ASTM D-4318

Test	Results (%)
Liquid Limit	23.6
Plastic Limit	18.7
Plasticity Index	4.9

Signature /



Company Name : Global Supply Chain
 Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
 Location : St. (406+940) : (407+060)
 Type of sample : Soil Embankment
 Delivery Date : 27/11/2022
 Reporting Date : 04/12/2022
 Reporting No. : 32
 Sample No. : 07

Soil Classification According to Project Specs (Embankment)

TEST	Results (%)	Limits according Projects Specs	
• Group Classification	(A-1-a)	(A-1-a)	(A-1-b)
2.00 mm (No.10).	34.7	Max 50 %	-----
0.425 mm (No. 40).	24.9	Max 30 %	Max 50 %
0.075 mm (No. 200).	8.7	Max 15 %	Max 15 %
Characteristics of fraction passing 0.425 mm (No.40)			
Liquid Limit	23.6	-----	-----
Plasticity index	4.9	Max 6 %	Max 6 %

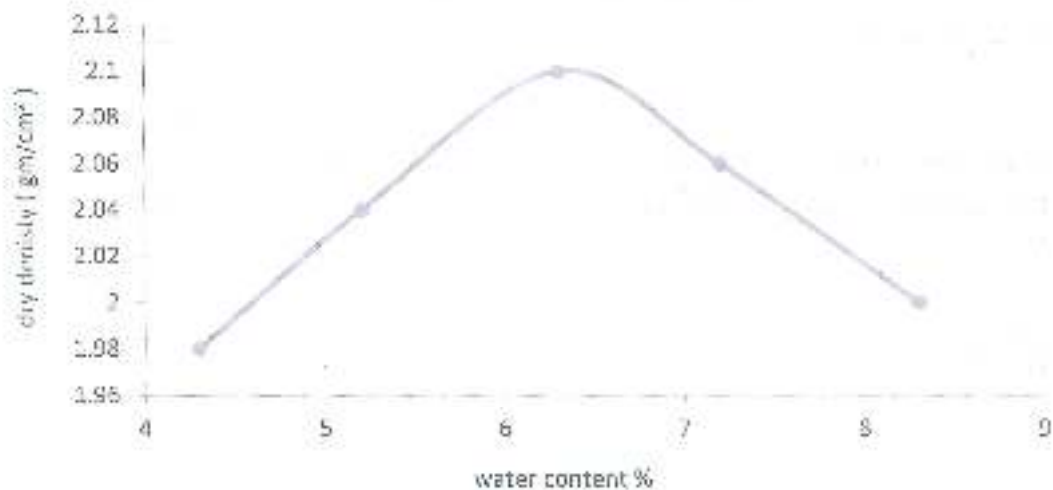
The test results are (☒ Comply - ☐ Not Comply) with specifications limits

Signature

CEL
 مكتب محامل الاستشارات الهندسية
 السجل الشهري
 رقم تسجيل: ٢٠١٩/٢٠٢٠
 رقم ترخيص: ٢٠٢١/٢٠٢٢

Company Name : Global Supply Chain
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Location : St. (406+940) : (407+060)
Type of sample : Soil Embankment
Delivery Date : 27/11/2022
Reporting Date : 04/12/2022
Reporting No. : 32
Sample No. : 07

Moisture – Density relation of soil
Test result (Modified proctor test)
ASTM D-1557



- Max dry density (gm/cm³) : 2.10
- Optimum moisture content % : 6.3

Signature /



Company Name : Global Supply Chain
 Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
 Location : St. (406+940) : (407+060)
 Type of sample : Soil Embankment
 Delivery Date : 27/11/2022
 Reporting Date : 04/12/2022
 Reporting No. : 32
 Sample No. : 07

Test Results of California Bearing Ratio on Base Materials
ASTM D 1883

penetration		stress on piston (Mpa)
mm	Inch	
0.64	0.025	1.91
1.27	0.050	2.13
1.91	0.075	2.33
2.54	0.100	2.49
3.18	0.125	2.64
3.81	0.150	2.79
4.45	0.175	2.94
5.08	0.200	3.09
5.71	0.225	3.20
6.35	0.250	3.25

CBR Result	Stress (Mpa)		CBR %
At 0.1 inch (2.54 mm) penetration	St. Value	Sample results	36.0
	6.90	2.49	

Notes :

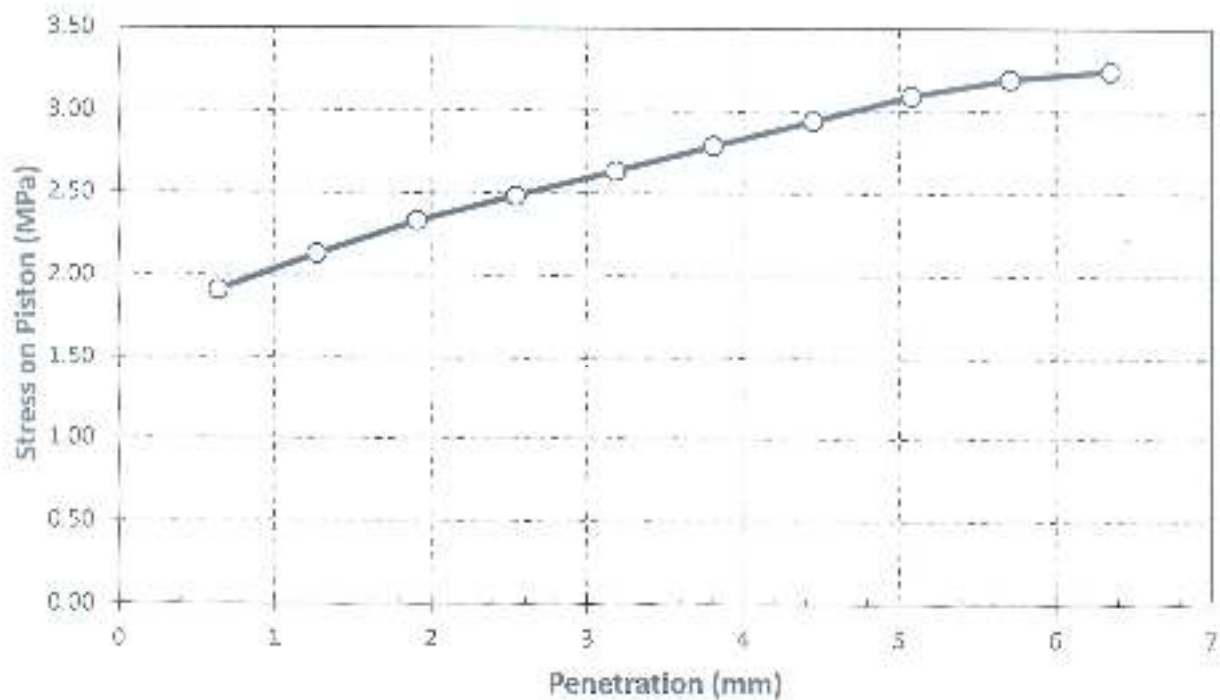
- 1- Attached graph shows penetration resistance versus penetration magnitude.
- 2- The sample was compacted to dry density of 2.10 (gm /cm³)
 At 6.3 % optimum water content.
- 3- Surcharge Road 4.50 kg.

Signature

مكتب معامل الاستشارات الهندسية
 المعامل الشمالي
 رقم الترخيص 837 - 891 - 895
 1 - المهندس أحمد - المهندس أحمد - المهندس أحمد

Company Name : Global Supply Chain
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Location : St. (406+940) : (407+060)
Type of sample : Soil Embankment
Delivery Date : 27/11/2022
Reporting Date : 04/12/2022
Reporting No. : 32
Sample No. : 07

Load Penetration Curve of CBR Test
ASTM D-1883



Signature /  **CEL**
مكتب معامل الاستشارات الهندسية
الاسم: **الاسم: المهندس**
رقم الترخيص: **637 - 637**
البريد الإلكتروني: **cel@cel-egypt.com**

Company Name : Global Supply Chain
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Location : St. (407+820) : (407+980)
Type of sample : Soil Embankment
Delivery Date : 05/12/2022
Reporting Date : 12/12/2022
Reporting No. : 33
Sample No. : 08

Dear Gentleman,

Attached here with the Soil Embankment delivered on 05/12/2022

Materials test

1. Sieve analysis according to ASTM D-422.
2. Material finer than sieve No. 200 according to ASTM D-1140.
3. Liquid limits and plasticity index of soil according to ASTM D-4318.
4. Soil classification according to Project Specs.
5. Proctor Test according to ASTM D-1557

Note: The sample was brought by the client to our laboratory and the laboratory is not responsible for the way it is taken

Signature /


Company Name : Global Supply Chain
 Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
 Location : St. (407+820) : (407+980)
 Type of sample : Soil Embankment
 Delivery Date : 05/12/2022
 Reporting Date : 12/12/2022
 Reporting No. : 33
 Sample No. : 08

RESULTS OF SIEVE ANALYSIS According to ASTM D-422.

Sieve Size (mm)	Passing %
50	100
37.5	93.9
25	86.2
19	73.1
12.50	68.3
9.50	57.7
4.75	40.6
2.36	38.2
2.00	36.4
1.18	31.9
0.600	29.0
0.425	26.2
0.300	23.7
0.150	14.4

Signature /

 مكتب معامل الاستشارات الهندسية
 السجل التجاري
 رقم الترخيص 2437-1594-2437
 العنوان الرئيسي : شارع شوك السخنة - بورسعيد

Company Name : Global Supply Chain
 Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
 Location : St. (407+820) : (407+980)
 Type of sample : Soil Embankment
 Delivery Date : 05/12/2022
 Reporting Date : 12/12/2022
 Reporting No. : 33
 Sample No. : 08

**Materials finer than 75 μ m (no.200) sieve
 by washing ASTM D-1140.**

Test	Results (%)
Percentage of material finer than Sieve Size 75 μ m (No.200)	9.1

Signature 
 مكتب معامل الاستشارات الهندسية
 الساحل الشمالي
 رقم هاتفه 053 - 053 - 053
 الفاكس 053 - 053 - 053

Company Name : Global Supply Chain
 Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
 Location : St. (407+820) : (407+980)
 Type of sample : Soil Embankment
 Delivery Date : 05/12/2022
 Reporting Date : 12/12/2022
 Reporting No. : 33
 Sample No. : 08

**Results of liquid limit and plasticity index
of soils according to ASTM D-4318**

Test	Results (%)
Liquid Limit	22.9
Plastic Limit	18.1
Plasticity Index	4.8

Signature /



Company Name : Global Supply Chain
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Location : St. (407+820) ; (407+980)
Type of sample : Soil Embankment
Delivery Date : 05/12/2022
Reporting Date : 12/12/2022
Reporting No. : 33
Sample No. : 08

Soil Classification According to Project Specs (Embankment)

TEST	Results (%)	Limits according Projects Specs	
* Group Classification	(A-1-a)	(A-1-a)	(A-1-b)
2.00 mm (No.10).	36.4	Max 50 %	-----
0.425 mm (No. 40).	26.2	Max 30 %	Max 50 %
0.075 mm (No. 200).	9.1	Max 15 %	Max 15 %
Characteristics of fraction passing 0.425 mm (No.40)			
Liquid Limit	22.9	—	-----
Plasticity index	4.8	Max 6 %	Max 6 %

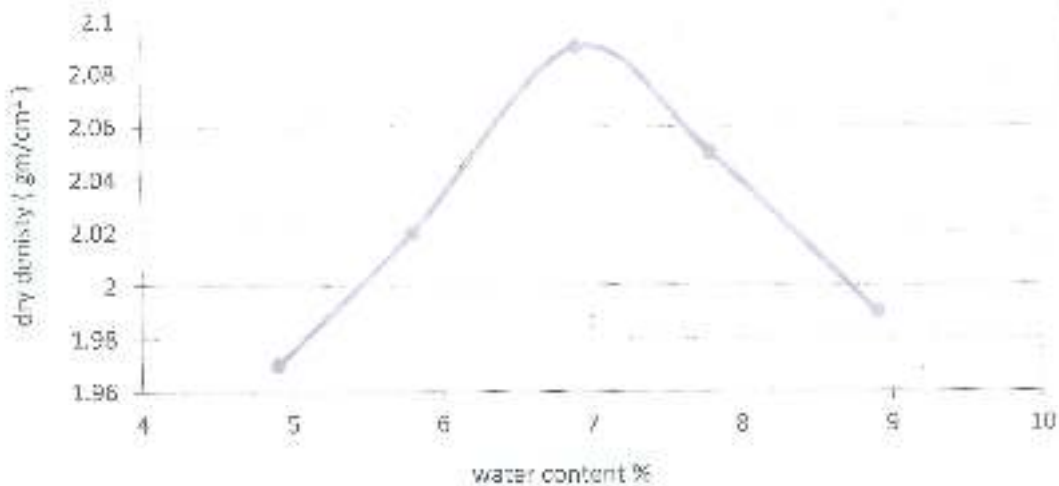
The test results are (✓ Comply - □ Not Comply) with specifications limits

Signature /

مكتب محامل الاستشارات الهندسية
المباني السكنية
338-339 - 337-336 - 335-334
333-332 - 331-330 - 329-328
327-326 - 325-324 - 323-322 - 321-320

Company Name : Global Supply Chain
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Location : St. (407+820) : (407+980)
Type of sample : Soil Embankment
Delivery Date : 05/12/2022
Reporting Date : 12/12/2022
Reporting No. : 33
Sample No. : 08

Moisture – Density relation of soil
Test result (Modified proctor test)
ASTM D-1557



- Max dry density (gm/cm³) : 2.09
- Optimum moisture content % : 6.9

Signature /



Company Name : Global Supply Chain
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Location : St. (408+280) : (408+440)
Type of sample : Soil Embankment
Delivery Date : 08/11/2022
Reporting Date : 15/11/2022
Reporting No. : 30
Sample No. : 05

Dear Gentleman,

Attached here with the Soil Embankment delivered on 08/11/2022

Materials test

1. Sieve analysis according to ASTM D-422.
2. Material finer than sieve No. 200 according to ASTM D-1140.
3. Liquid limits and plasticity index of soil according to ASTM D-4318.
4. Soil classification according to Project Specs.
5. Proctor Test according to ASTM D-1557
6. CBR according to ASTM D-1883

Note: The sample was brought by the client to our laboratory and the laboratory is not responsible for the way it is taken

Signature



Company Name : Global Supply Chain
 Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
 Location : St. (408+280) : (408+440)
 Type of sample : Soil Embankment
 Delivery Date : 08/11/2022
 Reporting Date : 15/11/2022
 Reporting No. : 30
 Sample No. : 05

RESULTS OF SIEVE ANALYSIS According to ASTM D-422.

Sieve Size (mm)	Passing %
50	100
37.5	94.4
25	86.1
19	81.2
12.50	70.6
9.50	57.1
4.75	45.0
2.36	43.9
2.00	40.4
1.18	35.8
0.600	30.3
0.425	28.8
0.300	22.2
0.150	14.9

Signature /

 مكتب معامل الاستشارات الهندسية
 السجل المهنى
 رقم الترخيص 257 - 258 - 259
 المركز القومى : 3 شارع الملك فيصل - القاهرة - مصر

Company Name : Global Supply Chain
 Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
 Location : St. (408+280) : (408+440)
 Type of sample : Soil Embankment
 Delivery Date : 08/11/2022
 Reporting Date : 15/11/2022
 Reporting No. : 30
 Sample No. : 05

Materials finer than 75 μ m (no.200) sieve
by washing ASTM D-1140.

Test	Results (%)
Percentage of material finer than Sieve Size 75 μ m (No.200)	10

Signature /



Company Name : Global Supply Chain
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Location : St. (408+280) : (408+440)
Type of sample : Soil Embankment
Delivery Date : 08/11/2022
Reporting Date : 15/11/2022
Reporting No. : 30
Sample No. : 05

**Results of liquid limit and plasticity index
of soils according to ASTM D-4318**

Test	Results (%)
Liquid Limit	22.3
Plastic Limit	17.4
Plasticity Index	4.9

Signature /



Company Name : Global Supply Chain
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Location : St. (408+280) : (408+440)
Type of sample : Soil Embankment
Delivery Date : 08/11/2022
Reporting Date : 15/11/2022
Reporting No. : 30
Sample No. : 05

Soil Classification According to Project Specs (Embankment)

TEST	Results (%)	Limits according Projects Specs	
• Group Classification	(A-1-a)	(A-1-a)	(A-1-b)
2.00 mm (No.10).	40.4	Max 50 %	
0.425 mm (No. 40).	28.8	Max 30 %	Max 50 %
0.075 mm (No. 200).	10.0	Max 15 %	Max 15 %
Characteristics of fraction passing 0.425 mm (No.40)			
Liquid Limit	22.3	-----	-----
Plasticity index	4.9	Max 6 %	Max 6 %

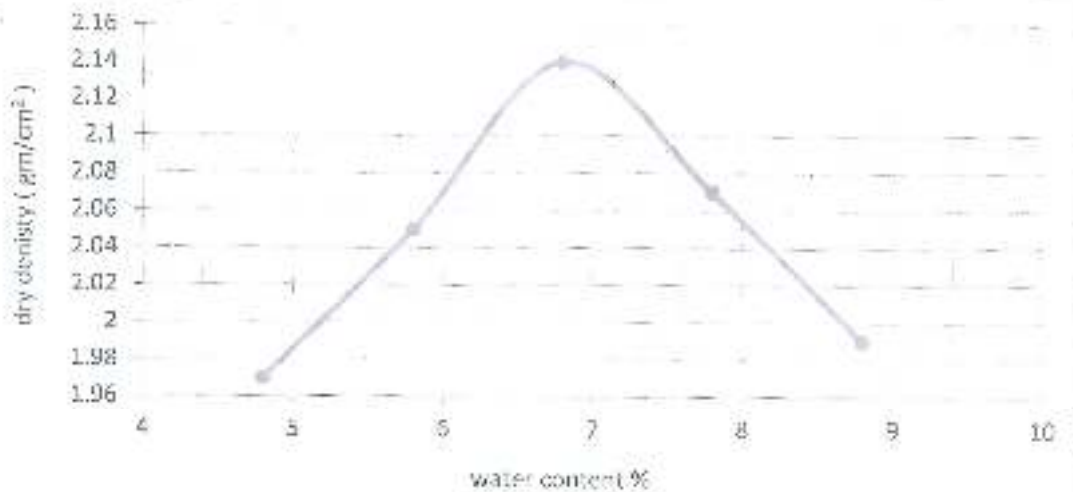
The test results are ☒ Comply - ☐ Not Comply) with specifications limits

Signature

CEL
مكتب معامل الاستشارات الهندسية
الساحل الشمالي
رقم تسجيل مهنى: 27367231 - 27363093
م.م. محمد عبد الله محمد - م.م. محمد عبد الله محمد

Company Name : Global Supply Chain
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Location : St. (408+280) : (408+440)
Type of sample : Soil Embankment
Delivery Date : 08/11/2022
Reporting Date : 15/11/2022
Reporting No. : 30
Sample No. : 05

Moisture – Density relation of soil
Test result (Modified proctor test)
ASTM D-1557



- Max dry density (gm/cm³) : 2.14
- Optimum moisture content % : 6.8

Signature /



Company Name : Global Supply Chain
 Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
 Location : St. (408+280) : (408+440)
 Type of sample : Soil Embankment
 Delivery Date : 08/11/2022
 Reporting Date : 15/11/2022
 Reporting No. : 30
 Sample No. : 05

Test Results of California Bearing Ratio on Base Materials
ASTM D 1883

penetration		stress on piston (Mpa)
mm	Inch	
0.64	0.025	2.26
1.27	0.050	2.41
1.91	0.075	2.61
2.54	0.100	2.81
3.18	0.125	3.02
3.81	0.150	3.22
4.45	0.175	3.47
5.08	0.200	3.63
5.71	0.225	3.75
6.35	0.250	3.85

CBR Result	Stress (Mpa)		CBR %
At 0.1 inch (2.54 mm) penetration	SL Value	Sample results	40.8
	6.90	2.81	

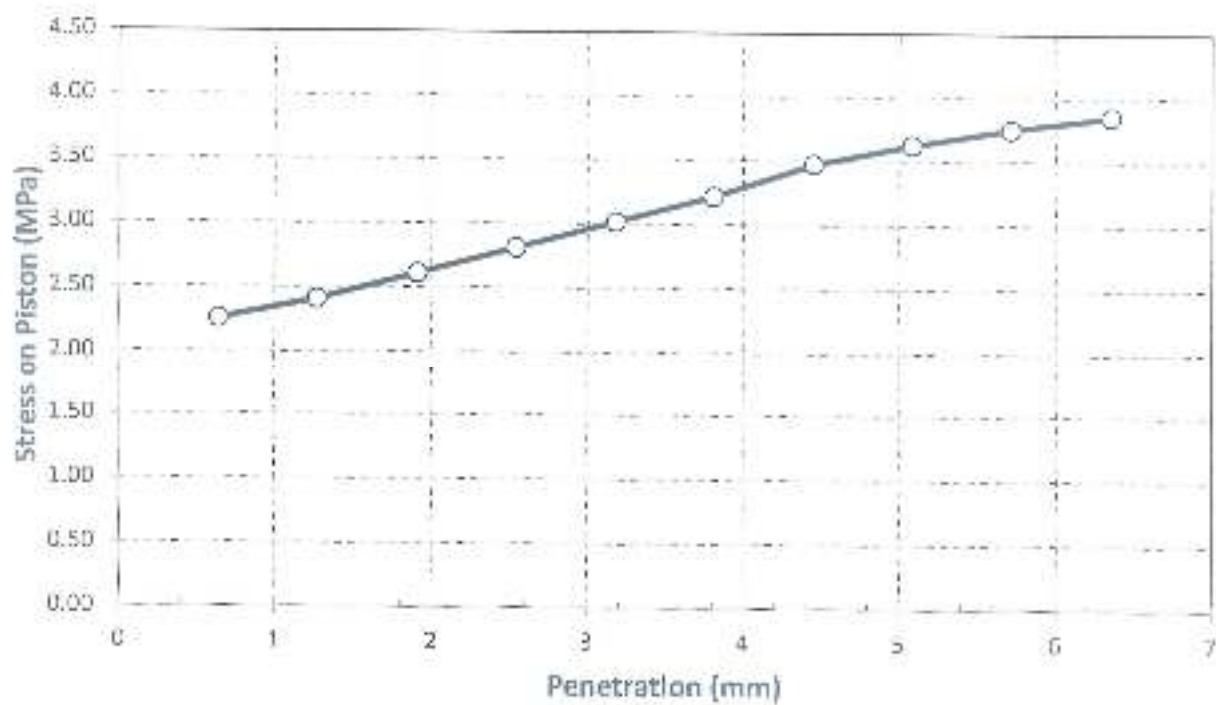
Notes :

- 1- Attached graph shows penetration resistance versus penetration magnitude.
- 2- The sample was compacted to dry density of 2.14 (gm /cm³) at 6.8 % optimum water content.
- 3- Surcharge ~~4.50 Kg~~ 4.50 Kg

Signature / 

Company Name : Global Supply Chain
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Location : St. (408+280) : (408+440)
Type of sample : Soil Embankment
Delivery Date : 08/11/2022
Reporting Date : 15/11/2022
Reporting No. : 30
Sample No. : 05

Load Penetration Curve of CBR Test
ASTM D-1883



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210-009-887
3 شارع الملك فيصل - القاهرة - مصر

Company Name : Global Supply Chain
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Location : St. (409+100) : (409+260)
Type of sample : Soil Embankment
Delivery Date : 08/09/2022
Reporting Date : 15/09/2022
Reporting No. : 25
Sample No. : 07

Dear Gentleman,

Attached here with the Soil Embankment delivered on 08/09/2022

Materials test

1. Sieve analysis according to ASTM D-422.
2. Material finer than sieve No. 200 according to ASTM D-1140.
3. Liquid limits and plasticity index of soil according to ASTM D-4318.
4. Soil classification according to Project Specs.
5. Proctor Test according to ASTM D-1557

Note: The sample was brought by the client to our laboratory and the laboratory is not responsible for the way it is taken.

Signature /
The stamp is an oval shape with the CEL logo at the top. Below the logo, it says 'مكتب معامل الاستشارات الهندسية' (Consulting Engineering Bureau & Laboratories) and 'الساحل الشمالي' (North Coast). The signature is written in blue ink over the stamp.

Company Name : Global Supply Chain
 Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
 Location : St. (409+100) ; (409+260)
 Type of sample : Soil Embankment
 Delivery Date : 08/09/2022
 Reporting Date : 15/09/2022
 Reporting No. : 25
 Sample No. : 07

RESULTS OF SIEVE ANALYSIS According to ASTM D-422.

Sieve Size (mm)	Passing %
50	100
37.5	95.6
25	91.4
19	86.2
12.50	70.1
9.50	61.3
4.75	48.6
2.36	44.1
2.00	41.6
1.18	38.2
0.600	33.3
0.425	32.7
0.300	26.0
0.150	14.8

Signature /  **CEL**
 مكتب معامل الاستشارات الهندسية
 السجل المقيم
 رقم التسجيل 839 - 841 - 842
 البريد الإلكتروني : 3 شارع شوكه المنيل - القاهرة - 11564

Company Name : Global Supply Chain
 Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
 Location : St. (409+100) : (409+260)
 Type of sample : Soil Embankment
 Delivery Date : 08/09/2022
 Reporting Date : 15/09/2022
 Reporting No. : 25
 Sample No. : 07

Materials finer than 75 μ m (no.200) sieve
by washing ASTM D-1140.

Test	Results (%)
Percentage of material finer than Sieve Size 75 μ m (No.200)	12.8

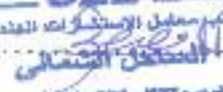
Signature /



Company Name : Global Supply Chain
 Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
 Location : St. (409+100) : (409+260)
 Type of sample : Soil Embankment
 Delivery Date : 08/09/2022
 Reporting Date : 15/09/2022
 Reporting No. : 25
 Sample No. : 07

**Results of liquid limit and plasticity index
of soils according to ASTM D-4318**

Test	Results (%)
Liquid Limit	NP
Plastic Limit	NP
Plasticity Index	NP

Signature : 
 المهندس محمد عبد الله السيد
 رقم الترخيص 240 - 201 - 207
 مقر العمل : شارع الملك فيصل - القاهرة - مصر

Company Name : Global Supply Chain
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Location : St. (409+100) : (409+260)
Type of sample : Soil Embankment
Delivery Date : 08/09/2022
Reporting Date : 15/09/2022
Reporting No. : 25
Sample No. : 07

Soil Classification According to Project Specs (Embankment)

TEST	Results (%)	Limits according Projects Specs	
• Group Classification	(A-1-b)	(A-1-a)	(A-1-b)
2.00 mm (No.10).	41.6	Max 50 %	-----
0.425 mm (No. 40).	32.7	Max 30 %	Max 50 %
0.075 mm (No. 200).	12.8	Max 15 %	Max 15 %
Characteristics of fraction passing 0.425 mm (No.40)			
Liquid Limit	NP	-----	-----
Plasticity index	NP	Max 6 %	Max 6 %

The test results are (✓ Comply - □ Not Comply) with specifications limits

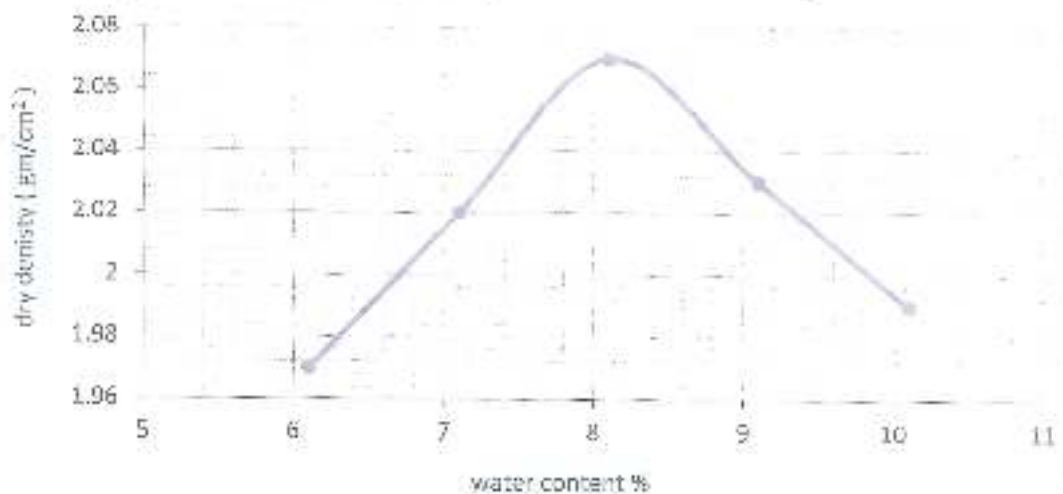
Signature /



5

Company Name : Global Supply Chain
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Location : St. (409+100) : (409+260)
Type of sample : Soil Embankment
Delivery Date : 08/09/2022
Reporting Date : 15/09/2022
Reporting No. : 25
Sample No. : 07

Moisture – Density relation of soil
Test result (Modified proctor test)
ASTM D-1557



- Max dry density (gm/cm³) : 2.07
- Optimum moisture content % : 8.1

Signature /



Company Name : Global Supply Chain
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Location : St. (408+020) : (408+160)
Type of sample : Soil Embankment
Delivery Date : 05/11/2022
Reporting Date : 13/11/2022
Reporting No. : 29
Sample No. : 04

Dear Gentleman,

Attached here with the Soil Embankment delivered on 05/11/2022

Materials test

1. Sieve analysis according to ASTM D-422.
2. Material finer than sieve No. 200 according to ASTM D-1140.
3. Liquid limits and plasticity index of soil according to ASTM D-4318.
4. Soil classification according to Project Specs.
5. Proctor Test according to ASTM D-1557

Note: The sample was brought by the client to our laboratory and the laboratory is not responsible for the way it is taken

Signature /


Company Name : Global Supply Chain
 Project : Electric Express Train, from Al Ain Sokhna to Marsa Matruh
 Location : St. (408+020) : (408+160)
 Type of sample : Soil Embankment
 Delivery Date : 05/11/2022
 Reporting Date : 13/11/2022
 Reporting No. : 29
 Sample No. : 04

RESULTS OF SIEVE ANALYSIS According to ASTM D-422.

Sieve Size (mm)	Passing %
50	100
37.5	97.1
25	82.5
19	73.3
12.50	65.2
9.50	56.5
4.75	38.1
2.36	36.2
2.00	34.7
1.18	30.3
0.600	26.9
0.425	24.4
0.300	19.0
0.150	12.8

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 السجل التجاري
 رقم التسجيل التجارية 27363093
 الجواز المهنى 27363093

Company Name : Global Supply Chain
 Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
 Location : St. (408+020) : (408+160)
 Type of sample : Soil Embankment
 Delivery Date : 05/11/2022
 Reporting Date : 13/11/2022
 Reporting No. : 29
 Sample No. : 04

Materials finer than 75 μ m (no.200) sieve
by washing ASTM D-1140.

Test	Results (%)
Percentage of material finer than Sieve Size 75 μ M (No.200)	8.6

Signature /



Company Name : Global Supply Chain
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Location : St. (408+020) : (408+160)
Type of sample : Soil Embankment
Delivery Date : 05/11/2022
Reporting Date : 13/11/2022
Reporting No. : 29
Sample No. : 04

**Results of liquid limit and plasticity index
of soils according to ASTM D-4318**

Test	Results (%)
Liquid Limit	22.5
Plastic Limit	17.2
Plasticity Index	5.3

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الساحل الشمالي
رقم تسجيل مصر 27367231 - 27363093
الشارع رقم 1 في طريق مكة الجبلية بالإسكندرية

Company Name : Global Supply Chain
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Location : St. (408+020) : (408+160)
Type of sample : Soil Embankment
Delivery Date : 05/11/2022
Reporting Date : 13/11/2022
Reporting No. : 29
Sample No. : 04

Soil Classification According to Project Specs (Embankment)

TEST	Results (%)	Limits according Projects Specs	
• Group Classification	(A-I-a)	(A-I-a)	(A-I-b)
2.00 mm (No.10).	34.7	Max 50 %	-----
0.425 mm (No. 40).	24.4	Max 30 %	Max 50 %
0.075 mm (No. 200).	8.6	Max 15 %	Max 15 %
Characteristics of fraction passing 0.425 mm (No.40)			
Liquid Limit	22.5	-----	-----
Plasticity index	5.3	Max 6 %	Max 6 %

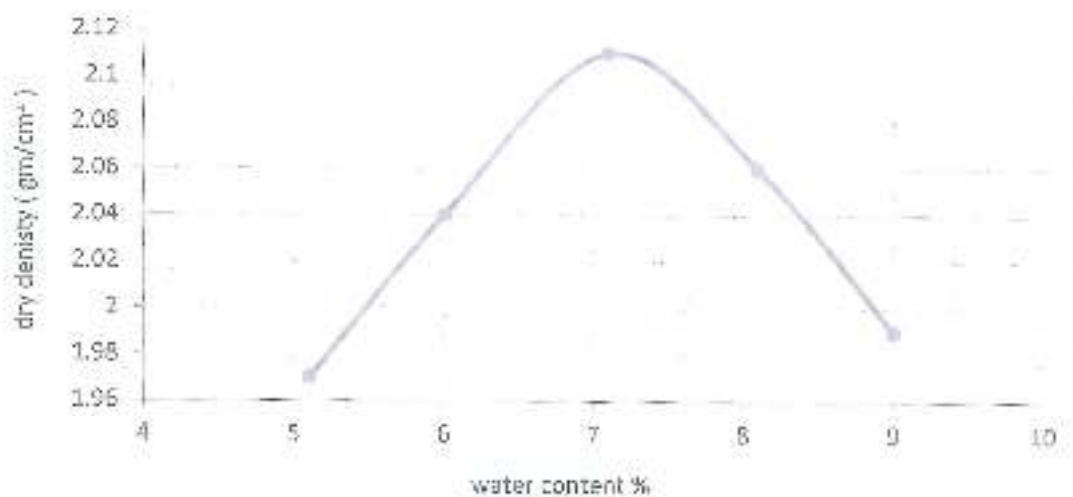
The test results are (☒ Comply - ☐ Not Comply) with specifications limits

Signature /



Company Name : Global Supply Chain
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Location : St. (408+020) : (408+160)
Type of sample : Soil Embankment
Delivery Date : 05/11/2022
Reporting Date : 13/11/2022
Reporting No. : 29
Sample No. : 04

Moisture – Density relation of soil
Test result (Modified proctor test)
ASTM D-1557



- Max dry density (gm/cm³) : 2.11
- Optimum moisture content % : 7.1

Signature /

Company Name : Global Supply Chain
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Location : St. (408+440) : (408+600)
Type of sample : Soil Embankment
Delivery Date : 27/10/2022
Reporting Date : 02/11/2022
Reporting No. : 27
Sample No. : 02

Dear Gentleman,

Attached here with the Soil Embankment delivered on 27/10/2022

Materials test

1. Sieve analysis according to ASTM D-422.
2. Material finer than sieve No, 200 according to ASTM D-1140.
3. Liquid limits and plasticity index of soil according to ASTM D-4318.
4. Soil classification according to Project Specs.
5. Proctor Test according to ASTM D-1557

Note: The sample was brought by the client to our laboratory and the laboratory is not responsible for the way it is taken

Signature / 

Company Name : Global Supply Chain
 Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
 Location : St. (408+440) : (408+600)
 Type of sample : Soil Embankment
 Delivery Date : 27/10/2022
 Reporting Date : 02/11/2022
 Reporting No. : 27
 Sample No. : 02

RESULTS OF SIEVE ANALYSIS According to ASTM D-422.

Sieve Size (mm)	Passing %
50	100
37.5	94.6
25	85.5
19	79.1
12.50	68.3
9.50	55.5
4.75	45.1
2.36	42.9
2.00	40.7
1.18	34.9
0.600	30.9
0.425	28.7
0.300	22.2
0.150	13.9

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 الزمالة - القاهرة
 27363093 - 27363093
 شارع الملك فيصل - الزمالة - القاهرة

Company Name : Global Supply Chain
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Location : St. (408+440) : (408+600)
Type of sample : Soil Embankment
Delivery Date : 27/10/2022
Reporting Date : 02/11/2022
Reporting No. : 27
Sample No. : 02

**Materials finer than 75 μ m (no.200) sieve
by washing ASTM D-1140.**

Test	Results (%)
Percentage of material finer than Sieve Size 75 μ M (No.200)	10.2

Signature / 

Company Name : Global Supply Chain
 Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
 Location : St. (408+440) : (408+600)
 Type of sample : Soil Embankment
 Delivery Date : 27/10/2022
 Reporting Date : 02/11/2022
 Reporting No. : 27
 Sample No. : 02

Results of liquid limit and plasticity index
of soils according to ASTM D-4318

Test	Results (%)
Liquid Limit	22.8
Plastic Limit	17.7
Plasticity Index	5.1

Signature /



Company Name : Global Supply Chain
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Location : St. (408+440) : (408+600)
Type of sample : Soil Embankment
Delivery Date : 27/10/2022
Reporting Date : 02/11/2022
Reporting No. : 27
Sample No. : 02

Soil Classification According to Project Specs (Embankment)

TEST	Results (%)	Limits according Projects Specs	
• Group Classification	(A-1-a)	(A-1-a)	(A-1-b)
2.00 mm (No.10).	40.7	Max 50 %	-----
0.425 mm (No. 40).	28.7	Max 30 %	Max 50 %
0.075 mm (No. 200).	10.2	Max 15 %	Max 15 %
Characteristics of fraction passing 0.425 mm (No.40)			
Liquid Limit	22.8	-----	-----
Plasticity index	5.1	Max 6 %	Max 6 %

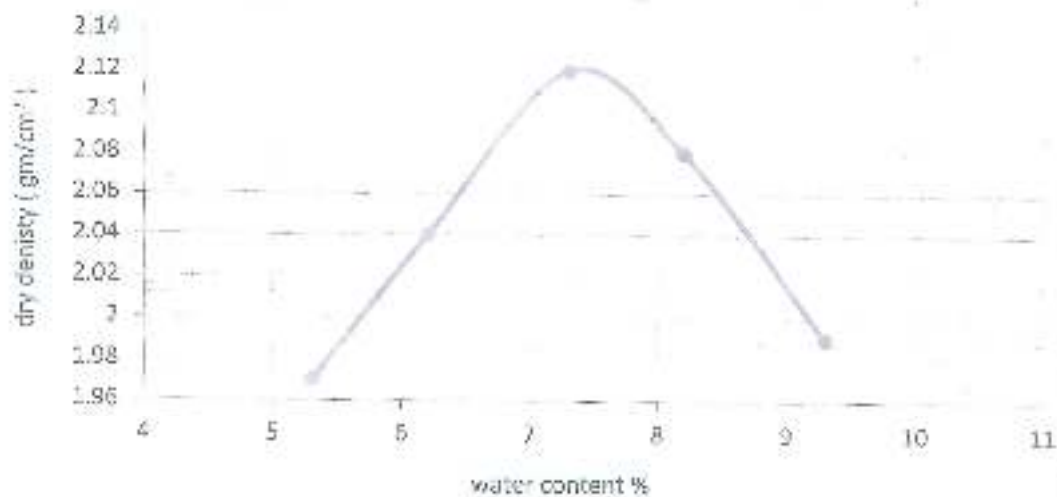
The test results are (☒ Comply - ☐ Not Comply) with specifications limits

Signature /



Company Name : Global Supply Chain
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Location : St. (408+440) : (408+600)
Type of sample : Soil Embankment
Delivery Date : 27/10/2022
Reporting Date : 02/11/2022
Reporting No. : 27
Sample No. : 02

Moisture – Density relation of soil
Test result (Modified proctor test)
ASTM D-1557



- Max dry density (gm/cm³) : 2.12
- Optimum moisture content % : 7.3

Signature

