



قائمة الكميات الواردة بالمستخلص جاري (٤)

مشروع : القطار الكهربائي السريع (العين السخنة - العاصمة الادارية - العلمين - مطروح) قطاع غرب النيل
في المسافة من الكم ٣٣٥+٠.٦٠ الى الكم ٣٣٥+٤٨٠ بطول ٤٢,٠ كم مرحلة الحفر وتشكيل الجسور

رقم البند و بيانه : (١-٣) بالمتر المكعب اعمال توريد وتشغيل اترية صالحة للردم ومطابقة للمواصفات والتشغيل باستخدام المعدات

تنفيذ : شركة محمد عبدالله محمد اسماعيل للانشاءات ورصف الطرق عقد رقم ٢٠٢٤/٢٠٢٣/٦١٧

٣م

43,483.20

مقدار العمل السابق :

51,749.00

كمية الاعمال بالمقايضة (م٣)

الكمية	المسطح	الطول	الى الكم	من الكم	التاريخ	رقم الطلب	بند المقايضة
384.00	1.92	200	335+480	335+280	19/02/2025	IR-F-62	بالمتر المكعب اعمال تحميل وتوريد ونقل اترية مطابقة للمواصفات وتشغيلها باستخدام الات التسوية بسمك لا يزيد عن ٥٠ سم حتى منسوب ٢- متر و بسمك لا يزيد عن ٢٥ سم لاستكمال المنسوب التصميمي لتشكيل الجسر والاكتاف (نسبة تحمل كاليفورنيا لا تقل عن ١٥%) و رشها بالمياه الاصولية للوصول الى نسبة الرطوبة المطلوبة والدمك الجيد بالهراسات للوصول الى اقصى كثافة جافة (95% من الكثافة الجافة القصوى) ويتم التنفيذ طبقا للمناسيب التصميمية والقطاعات العرضية النموذجية والرسومات التفصيلية المعتمدة والبند بجميع مشتملاته طبقا لاصول الصناعة ومواصفات الهيئة العامة للطرق والكباري وتعليمات المهندس المشرف.
115.20	1.92	60	335+280	335+220	15/02/2025	IR-F-68	
307.20	1.92	160	335+220	335+060	19/02/2025	IR-F-87	
115.20	1.92	60	335+280	335+220	17/02/2025	IR-F-88	
499.20	1.92	260	335+480	335+220	25/02/2025	IR-F-89	
308.80	1.93	160	335+220	335+060	26/02/2025	IR-F-90	
501.80	1.93	260	335+480	335+220	02/03/2025	IR-F-91	
308.80	1.93	160	335+220	335+060	04/03/2025	IR-F-92	
501.80	1.93	260	335+480	335+220	08/03/2025	IR-F-93	
810.60	1.93	420	335+480	335+060	11/03/2025	IR-F-94	
1,134.00	2.70	420	335+480	335+060	17/03/2025	IR-F-95	- في حالة طلب جهاز الاشراف زيادة نسبة الدمك ٩٥% بحسب زياده ١ جنيه على زياده نسبة الدمك لكل ١%
1,134.00	2.70	420	335+480	335+060	23/03/2025	IR-F-96	- مسافة النقل حتى ٢ كم و يتم احتساب علاوه ١,٥ جنيه لكل كم بالزيادة أو النقصان . - السعر يشمل عمل تشوينات و تخطيط و اختبارات و نقل لموقع العمل حتى مسافه ٢ كم .
6,120.60							اجمالي الكميات خلال فترة المستخلص الحالية (م٣)
49,603.80							الاجمالي الكلي (م٣)

مدير مشروع
الهيئة العامة للطرق والكباري

م / مارجرية مجدي زاهر

مدير المشروع الاستشاري
مكتب خالد الدين KK

م / السيد محمد سيف الدين

مهندس الاستشاري
مكتب XYZ

م / السيد شهاب خليل

مهندس الشركة
للانشاءات

م / محمد مصطفى عاشور

م / محمد مصطفیٰ عاشور

قائمة الكميات الواردة بالمستخلص جاري (٤)

مشروع : القطار الكهربائي السريع (العين السخنة - العاصمة الادارية - العلمين - مطروح) قطاع غرب النيل
في المسافة من الكم ٠.٦٠+٣٣٥ الى الكم ٤٨٠+٣٣٥ بطول ٤٢,٠ كم مرحلة الحفر وتشكيل الجسور

رقم البند و بيانه : (١-٣) بالمتر المكعب اعمال توريد وتشغيل اترية صالحة للردم ومطابقة للمواصفات والتشغيل باستخدام المعدات

تسفيد : شركة محمد عبدالله محمد اسماعيل للانشاءات ورصف الطرق عقد رقم ٢٠٢٤/٢٠٢٣/٦١٧

علاوة مسافة نقل رمل بنسبة ٢٥% من اجمالي الكمية

٣م

12,828.30

مقدار العمل السابق :

12,937.25

كمية الاعمال بالمقايضة (م٣)

بند المقايضة	رقم الطلب	التاريخ	من الكم	الى الكم	الطول	المسطح	نسبة التراب	الكمية
بالمتر المكعب اعمال تحميل وتوريد ونقل اترية مطابقة للمواصفات وتشغيلها باستخدام الات التسوية بسمك لا يزيد عن ٥٠ سم حتى منسوب - ٢ متر و بسمك لا يزيد عن ٢٥ سم لاستكمال المنسوب التصميمي لتشكيل الجسر والاكتاف (نسبة تحمل كاليفورنيا لا تقل عن ١٥%) ورشها بالمياه الاصلوية للوصول الى نسبة الرطوبة المطلوبة والدمك الجيد بالهراسات للوصول الى اقصى كثافة جافة (٩٥ % من الكثافة الجافة القصوى) ويتم التنفيذ طبقا للمناسيب التصميمية والقطاعات العرضية النموذجية والرسومات التفصيلية المعتمدة والبند جميع مشتملاته طبقا لاصول الصناعة ومواصفات الهيئة العامة للطرق والكباري وتعليمات المهندس المشرف - في حالة طلب جهاز الاشراف زيادة نسبة الدمك ٩٥% بحسب زياده ١ جنيه على زياده نسبة الدمك لكل ١%	IR-F-62	19/02/2025	335+280	335+480	200	1.92	25%	96.00
	IR-F-68	15/02/2025	335+220	335+280	60	1.92	25%	28.80
	IR-F-87	19/02/2025	335+060	335+220	160	1.92	25%	76.80
	IR-F-88	17/02/2025	335+220	335+280	60	1.92	25%	28.80
	IR-F-89	25/02/2025	335+220	335+480	260	1.92	25%	124.80
	IR-F-90	26/02/2025	335+060	335+220	160	1.93	25%	77.20
	IR-F-91	02/03/2025	335+220	335+480	260	1.93	25%	125.45
	IR-F-92	04/03/2025	335+060	335+220	160	1.93	25%	77.20
	IR-F-93	08/03/2025	335+220	335+480	260	1.93	25%	125.45
	IR-F-94	11/03/2025	335+060	335+480	420	1.93	25%	202.65
	IR-F-95	17/03/2025	335+060	335+480	420	2.70	25%	283.50
	IR-F-96	23/03/2025	335+060	335+480	420	2.70	25%	283.50
اجمالي الكميات خلال فترة المستخلص الحالية (م٣)								1,530.15
الاجمالي الكلي (م٣)								14,358.45

مدير مشروع
الهيئة العامة للطرق والكباري

م / مارجريت مجدي زاهر

مهندس الاستشاري
مكتب KK

م / السيد محمد سيف الدين

مهندس الاستشاري
مكتب XYZ

م / محمد شهاب خليل

مهندس الشركة

م / محمد مصطفى عاشور

م / محمد مصطفى عاشور

مشروع : القطر الكهربائي السريع (العين السخنة - العاصمة الادارية - العلمين - مطروح) قطاع غرب النيل
في المسافة من الكم ٣٣٥+٠.٦٠ الى الكم ٣٣٥+٤٨٠ بطول ٠,٤٢ كم مرحلة الحفر وتشكيل الجسور

رقم البند و بيانه : (١-٣) بالمتر المكعب اعمال توريد وتشغيل اترية صالحة للردم ومطابقة للمواصفات والتشغيل باستخدام المعدات

علاوة تحصيل رسوم الكارثة والموازن طبقا للائحة الشركة الوطنية

تنفيذ : شركة محمد عبدالله محمد اسماعيل للانشاءات ورصف الطرق عقد رقم ٢٠٢٤/٢٠٢٣/٦١٧

م ٣

43,483.20

مقدار العمل السابق :

51,749.00

كمية الاعمال بالمقايسة (م ٣)

الكمية	المسطح	الطول	الى الكم	من الكم	التاريخ	رقم الطلب	بند المقايسة
384.00	1.92	200	335+480	335+280	19/02/2025	IR-F-62	بالمتر المكعب اعمال تحميل وتوريد ونقل اترية
115.20	1.92	60	335+280	335+220	15/02/2025	IR-F-68	مطابقة للمواصفات وتشغيلها باستخدام الات التسوية
307.20	1.92	160	335+220	335+060	19/02/2025	IR-F-87	بسمك لا يزيد عن ٥٠ سم حتى منسوب ٢٠ متر و
115.20	1.92	60	335+280	335+220	17/02/2025	IR-F-88	بسمك لا يزيد عن ٢٥ سم لاستكمال المنسوب
499.20	1.92	260	335+480	335+220	25/02/2025	IR-F-89	التصميمي لتشكيل الجسر والاكتاف (نسبة تحمل
308.80	1.93	160	335+220	335+060	26/02/2025	IR-F-90	كاليفورنيا لا تقل عن ١٥%) و رشها بالمياد
501.80	1.93	260	335+480	335+220	02/03/2025	IR-F-91	الاصولية للوصول الى نسبة الرطوبة المطلوبة
308.80	1.93	160	335+220	335+060	04/03/2025	IR-F-92	والدمك الجيد بالهراسات للوصول الى اقصى كثافة
501.80	1.93	260	335+480	335+220	08/03/2025	IR-F-93	جافة (95% من الكثافة الجافة القصوى) ويتم
810.60	1.93	420	335+480	335+060	11/03/2025	IR-F-94	التنفيذ طبقا للمناسيب التصميمية والقطاعات العرضية
1,134.00	2.70	420	335+480	335+060	17/03/2025	IR-F-95	النموذجية والرسومات التفصيلية المعتمدة والبند
1,134.00	2.70	420	335+480	335+060	23/03/2025	IR-F-96	بجميع مشتملات طبقا لاصول الصناعة ومواصفات
							الهيئة العامة للطرق والكباري وتعليمات المهندس
							المشرف.
							- في حالة طلب جهاز الاشراف زيادة نسبة الدمك
							٩٥% يحسب زياده ١ جنيه على زياده نسبة الدمك
							لكل ١%
							- مسافة النقل حتى ٢ كم و يتم احتساب علاوة ١,٥
							جنيه لكل كم بالزيادة أو النقصان .
							- السعر يشمل عمل تشوينات وتخليط واختبارات و
							نقل لموقع العمل حتى مسافه ٢ كم .
6,120.60							اجمالي الكميات خلال فترة المستخلص الحالية (م ٣)
49,603.80							الاجمالي الكلي (م ٣)

مدير مشروع
الهيئة العامة للطرق والكباري

م / مارجرية مجدي زاهر

مدير المشروع الاستشاري
مكتبه داخدا قنديل KK

م / السيد محمد سيف الدين

مهندس الاستشاري
مكتب XYZ

م / محمد شهاب خليل

مهندس الشركة

م / محمد مصطفى عاشور

مهمة إضافية واردة من المنطقة الخامسة - غرب الدلتا

إسم العملية : مشروع اعمال الجسر الترابي والاعمال الصناعية قطاع (برج العرب - الـ
من الخط الاول من مشروع القطار الكهربائي السريع (العين السخنة - العاص
العلمين - مطروح) اعمال الحفر وتشكيل الجسور المسافة من الكم ٠٦٠
الى الكم ٣٣٥,٤٨٠ بطول ٠,٤٢٠ كم .

إسم الشركة المنفذة : مكتب محمد عبد الله محمد اسماعيل للانشاءات ورصف الطرق

عقد العملية : (٢٠٢٤/٢٠٢٣/٦١٧) المؤرخ ٢٠٢٣/١٠/٣١

قيمة العملية في التعاقد : ١٩,٤٤٨٢٠٠ مليون جنيه

تاريخ بدء العملية : ٢٠٢٤/١/٢٣

تاريخ النھو طبقا للتعاقد : ٢٠٢٤/٩/٢٣

المطلوب : مد مدة العملية لمدة (٩ أشهر) ليصبح تاريخ النھو : ٢٠٢٥/٦/٢٢ .

المبررات :-

- ورد خطاب المنطقة المشرفة بشأن مد مدة المشروع ٩ أشهر للأسباب الآتية :-

- توقف الاعمال بداية من تاريخ ٢٠٢٤/٥/١٦ وحتى ٢٠٢٥/٢/٨ في انتظار انتهاء شركة اوراسكو
اعمال انشاء الارصفة الخاصة بمحطة برج العرب لترتب اعمال المسار الخاصة بشركة محمد عبد
على اعمال انشاء الارصفة .

وموافقة المنطقة المشرفة بعد دراستها الطلب على منحها تلك المدة ليصبح تاريخ النھو ٢٠٢٥/٦/٢٢ .

إعداد مهندس :

مدير عام (صيانة / التنفيذ) :

رئيس الادارة المركزية للشئون المالية والادارية :

رأي الشئون القانونية (١) : تم اقرار المرافقة بالى ما أنشرك بالمحكمة

المقررة والمنتهية : اختتمت في هذا الشأن وفقاً لمقرر شئون

تعريف المشروع : اختتمت في هذا الشأن وفقاً لمقرر شئون

نائب رئيس الهيئة للتنفيذ والمناطق :

١٠ التأشير بالبلد على العمل بالية مع يعتمد ...

ما استعملت بالاعتبار المبالغة من العمل

المقرر المطلوب ج - مع بهر عمل مقابل تأخذ

م - ١٩٢٥/١٩٢٤ - ٢٠٢٥/١٩٢٤

١٩٢٥/١٩٢٤

التوقيع :

لواء مهندس / طارق محمد عبد الجواد

رئيس الهيئة العامة للطرق والكباري

MATERIAL APPROVAL REQUEST

محمد عبد الله
للدراسات ورصف الطرق

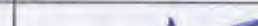
ENGINEERING CONSULTING OFFICE
المكتب الاستشاري الهندسي
أ.د. خالد قنديل

الهيئة العامة
للطرق والكباري
(GARB)



الهيئة القومية للإسكان
القومية للإسكان

SYSTRA
SHAKER

Contractor Company	Mohamed Abdallah 4 for constructions and roads paving			Designer Company				(KK) Engineering Consulting Office			
Issued by Contractor	Name	Sign		Date/Serial Number				Time			
	Eng. Mohamed moustafa			22/03/2025				08:00			
				BAS-MA-SYS-MAR-F-13							
Received by GARB CONSULTANT	Eng. Sayed Saif		MAR	C1	C2	C3	DD	MM	YY	HH	MM
				335	EW	CS	23	3	25	8	0

CODE 1	S1 to S21	D1 to S3	Kp XXX Note
	Station Reference	Depot Reference	For Kilometer point only Start Km is used
	Work Activity		
	Sub Element of Activity		

Description of Materials	Fill Layer			
Location to be Used	From	335+060	TO	335+480
		17+607		18+027
Sample only	Yes	Materials Type	Fill Layer	
Supplier Name	محاجر وادي النطرون - العلمين	Data Sheet provided	YES ATTACHED	
Reference in BoQ		Specification	EARTHWORK SPECIFICATIONS & TESTING REPORT (CG21-41.2) VERSION 2 BY CIVECON GROUP	
Prequalification reference		Test Samples Results		
Reference Photos	No/Yes	Other		
Comments by: Eng. SAYED SAIF (KK)		Comments by: if (ER)		
1-Quality test Result By third party lab (CEL) is Approved.		1-All tests were carried-out by third party lab (CEL).		
2-This Sample Representative (5000 m3) only.		2-Results report attached and acceptable with the project specifications.		
		3-Final approval is subject to above mentioned comments.		

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng. Mohamed moustafa			A
QA/QC *	Eng. Sayed Saif	for		A
SYSTRA Consultant	Eng. Hamouda Ali			A
GARB**	Eng. Margeret Magdy			
Employers Representative	Eng. Karim	23/3/2025		A

Company Name : محمد عبد الله للإنشاءات و رصف الطرق
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Type of sample : Soil Embankment
Location : St 335+060 : st 335+480
Delivery Date : 17/03/2025
Reporting Date : 23/03/2025
Reporting No. : 021
Sample No. : 01

Dear Gentleman,

Attached here with the Soil Embankment delivered on 17/03/2025

Materials test

1. Sieve analysis according to ASTM C-136.
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.
7. Organic Content ASTM D-2974.

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

Signature  مكتب معامل الاستشارات الهندسية
مشروعات الإستشارات والبحر العرب

Company Name : محمد عبد الله للإنشاءات و رصف الطرق
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Type of sample : Soil Embankment
Location : St 335+060 : st 335+480
Delivery Date : 17/03/2025
Reporting Date : 23/03/2025
Reporting No. : 021
Sample No. : 01

RESULTS OF SIEVE ANALYSIS According to ASTM C136.

Sieve Size (mm)	Passing %
50	100
37.5	100
25	92.9
19	87.4
12.50	73.9
9.50	67.0
4.75	52.9
2.36	50.6
2.00	49.7
1.18	42.5
0.600	34.1
0.425	29.3
0.300	21.6
0.150	16.2

Signature /

مكتب معامل الاستشارات الهندسية
مشروعات الاسكندرية ويزن الغرب

Company Name : محمد عبد الله للإنشاءات و رصف الطرق
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Type of sample : Soil Embankment
Location : St 335+060 : st 335+480
Delivery Date : 17/03/2025
Reporting Date : 23/03/2025
Reporting No. : 021
Sample No. : 01

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)	7.3

Signature /



Company Name : محمد عبد الله للإنشاءات و رصف الطرق
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Type of sample : Soil Embankment
Location : St 335+060 : st 335+480
Delivery Date : 17/03/2025
Reporting Date : 23/03/2025
Reporting No. : 021
Sample No. : 01

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 /



Company Name : محمد عبد الله للإنشاءات و رصف الطرق
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Type of sample : Soil Embankment
Location : St 335+060 : st 335+480
Delivery Date : 17/03/2025
Reporting Date : 23/03/2025
Reporting No. : 021
Sample No. : 01

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).	49.7	Max 50 %	-----
0.425 mm (No. 40).	29.3	Max 30 %	Max 50 %
0.075 mm (No. 200).	7.3	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 /
مكتب معامل الاستشارات الهندسية
مشروعات الإنشاءات و رصف الطرق

Company Name : محمد عبد الله للإنشاءات و رصف الطرق
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Type of sample : Soil Embankment
Location : St 335+060 : st 335+480
Delivery Date : 17/03/2025
Reporting Date : 23/03/2025
Reporting No. : 021
Sample No. : 01

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



- Max dry density (gm/cm²) : 2.16
- Optimum moisture content % : 7.2

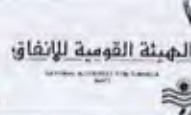
Signature /



MATERIAL INSPECTION REQUEST



الهيئة العامة
للطرق والكباري
(GARB)



Contractor Company	Mohamed Abdallah 4 for constructions and roads paving		Designer Company	(KK) Engineering Consulting Office						
Issued by Contractor	Name	Sign	Date/Serial Number	Time						
	Eng. Mohamed moustafa		16/02/2025 BAS-MA-SYS-FDT-F-62	3:00 PM						
Received by GARB CONSULTANT	Eng. Sayed Saif	MIR	C1	C2	C3	DD	MM	YY	HH	MM
			335	EW	CS	17	2	25	3	0

CODE-1	S1 to S21	D1 to S3	Kp XXX Note
	Station Reference	Depot Reference	For Kilometer point only Start Km is used
CODE-2	Work Activity		
CODE-3	Sub Element of Activity		

Description of Materials	Fill Layer at level (-1.75 m) from Ferma Under Left Railway				
Location to be Used	From	335+280	TO	335+480	
		17+827		17+887	
MAR & UIR Approval No	BAS-MA-SYS-IR-F-62 rev-2	Date	16/02/2025		
	BAS-MA-SYS-MAR-F-11				
Supplier Name	محاجر وادي النطرون - العلمين				
Test Requirement	F.D.T (ASTM D 1556)	Specification	EARTHWORK SPECIFICATIONS & TESTING REPORT (CG21-41.2) VERSION 2 BY CIVECON GROUP		
Reference Photos	No/Yes	Other			
Item	Description	Unit	Quantity	Arrival Date	Note
1	SAND CONE TEST	NUMBER	8	18/02/2025	
2					
3					
4					

Comments by: Eng. Sayed Saif (K.K)	Comments by: Eng. A (ER)
1-The Compaction Test Result F.D.T. (ASTM D 1556) is Approved.	1-F.D.T was carried- out by material engineer for both contractor and GARB Consultant 2-Results report attached and acceptable with project specifications. 3-Final approval is subject to above mentioned comments.

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng. Mohamed Moustafa			A
QA/QC *	Eng. Sayed Saif			A
QC SYSTRA	Eng. Hamouda Ali			A
GARB**	Eng. Margret magdy			
Employers Representative	Eng. Kareem Mostafa		16/02/2025	A

Project	Electrical Express Train From Borg Alarab to Alamein		STATION REPRESENTED
SAMPLE Date	17/02/2025	FINAL DATE	18/02/2025
STAGE OF WORK :	Fill Layer at level (-1.75 m) from Ferma Under Left Railway		
Request NO.	BAS-MA-SYS-IR-F-62 rev-2		

WORKSHEET FOR FIELD DENSITY TEST

BY SAND CONE METHOD ASTM D 1556

LAYER	Fill Layer at level (-1.75 m) from Ferma Under Left Railway								
DEPTH OF HOLE	cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm

SAMPLE No.	-	1	2	3	4	5	6	7	8
STATION	-	335+290	335+315	335+340	335+365	335+390	335+415	335+440	335+465
	-	17+837	17+862	17+887	17+912	17+937	17+962	17+987	18+012
CONTAINER No.	-	A-1	A-1	A-1	A-1	A-1	A-1	A-1	A-1
WEIGHT OF CAN	gms	33	29	33	32	30	33	29	29
WT. OF CAN+WET SOIL	gms	204	204	204	205	204	205	206	203
WT. OF CAN+DRY SOIL	gms	192	194	192	193	193	195	193	191
WT. OF WATER	gms	12.0	10.0	12.0	12.0	11.0	10.0	13.0	12.0
WT. OF DRY SOIL	gms	159.0	165.0	159.0	161.0	163.0	162.0	164.0	162.0
WATER CONTENT	%	7.5	6.1	7.5	7.5	6.7	6.2	7.9	7.4

WT. OF WET SOIL	gms	3860	3867	3775	3791	3869	3827	3793	3764
WT. OF INITIAL SAND+CONT.	gms	7850	7929	7900	7862	7863	7949	7792	7867
WT. OF RESIDUAL SAND + CONT.	gms	3755	3778	3787	3786	3705	3778	3721	3778
WT. OF SAND TO FILL CONE+HOLE	gms	4095	4151	4113	4076	4158	4171	4071	4089
WT. OF SAND TO FILL CONE	gms	1553	1553	1553	1553	1553	1553	1553	1553
WT. OF SAND TO FILL HOLE	gms	2542	2598	2560	2523	2605	2618	2518	2536
UNIT WT. OF SAND	gm/cc	1.47	1.47	1.47	1.47	1.47	1.47	1.47	1.47
GROSS VOLUME OF HOLE	ccs	1729.3	1767.3	1741.5	1716.3	1772.1	1781.0	1712.9	1725.2
WET UNIT WT. OF SOIL	gm/cc	2.23	2.19	2.17	2.21	2.18	2.15	2.21	2.18
DRY UNIT WT. OF SOIL	gm/cc	2.08	2.06	2.02	2.06	2.05	2.02	2.05	2.03
MAX. DRY DENSITY	gm/cc	2.12	2.12	2.12	2.12	2.12	2.12	2.12	2.12
OPTIMUM MOISTURE CONTENT	%	7.75	7.75	7.75	7.75	7.75	7.75	7.75	7.75
COMPACTION	%	97.90	97.31	95.07	96.96	96.47	95.47	96.78	95.82
REQUIRED COMPACTION	%	95	95	95	95	95	95	95	95
REMARKS		PASSED	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED

Eng. / CONSULTANT

Eng. / CONTRACTOR

Project	Electrical Express Train From Borg Alarab to Alamein		STATION REPRESENTED
SAMPLE Date	16/02/2025	FINAL DATE	17/02/2025
STAGE OF WORK	Fill Layer at level (-2 m) from Ferma Under Left Railway		
Request NO.	BAS-MA-SYS-IR-T-68 REV-1		

WORKSHEET FOR FIELD DENSITY TEST

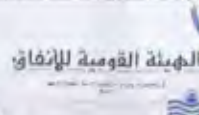
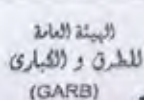
BY SAND CONE METHOD ASTM D 1556

LAYER	Fill Layer at level (-2 m) from Ferma Under Left Railway											
DEPTH OF HOLE	cm	15 cm	15 cm	15 cm								
AMOUNT		1	2	3								
STATION		335+225	335+250	335+275								
		17+772	17+797	17+822								
CONTAINER No.		A-1	A-1	A-1								
WEIGHT OF CAN	gms	29	29	31								
WT. OF CAN+WET SOIL	gms	205.0	204.0	203.0								
WT. OF CAN+DRY SOIL	gms	194.0	192.0	194.0								
WT. OF WATER	gms	11.0	12.0	9.0								
WT. OF DRY SOIL	gms	165.0	163.0	163.0								
WATER CONTENT	%	6.7	7.4	5.5								
WT. OF WET SOIL	gms	3751	3849	3848								
WT. OF INITIAL SAND+CONT	gms	7888	7766	7776								
WT. OF RESIDUAL SAND+CONT	gms	3803	3647	3625								
WT. OF SAND TO FILL CONE+HOLE	gms	4085	4119	4151								
WT. OF SAND TO FILL CONE	gms	1553	1553	1553								
WT. OF SAND TO FILL GOLF	gms	2532	2560	2591								
UNIT WT. OF SAND	gm/cc	1.47	1.47	1.47								
GROSS VOLUME OF HOLE	cc	1722.4	1746.6	1767.3								
WET UNIT WT. OF SOIL	gm/cc	2.18	2.21	2.18								
DRY UNIT WT. OF SOIL	gm/cc	2.04	2.05	2.05								
MAX. DRY DENSITY	gm/cc	2.12	2.12	2.12								
OPTIMUM MOISTURE CONTENT	%	7.75	7.75	7.75								
COMPACTION	%	96.30	96.88	97.33								
REQUIRED COMPACTION	%	95	95	95								
REMARKS		PASSED	PASSED	PASSED								

Eng. / CONSULTANT

Eng. / CONTRACTOR

MATERIAL INSPECTION REQUEST



Contractor Company	Mohamed Abdallah 4 for constructions and roads paving		Designer Company	(KK) Engineering Consulting Office							
Issued by Contractor	Name	Sign	Date/Serial Number	Time							
	Eng. Mohamed moustafa		17/02/2025	3:00 PM							
			BAS-MA-SYS-FDT-F-87								
Received by GARB CONSULTANT	Eng. Sayed Saif		MIR	C1	C2	C3	DD	MM	YY	HH	MM
				335	EW	CS	18	2	25	3	0

CODE-1	S1 to S21	D1 to S3	Kp XXX Note
CODE-2	Station Reference	Depot Reference	For Kilometer point only Start Km is used
CODE-3	Work Activity		
	Sub Element of Activity		

Description of Materials	Fill Layer at level (-1.5 m) from Ferma Under Left Railway			
Location to be Used	From	335+060	TO	335+220
		17+607		17+767
MAR & UIR Approval No	BAS-MA-SYS-IR-F-87	Date	17/02/2025	
	BAS-MA-SYS-MAR-F-11			
Supplier Name	محاجر وادي النطرون - العلمين			
Test Requirement	F.D.T (ASTM D 1556)	Specification	EARTHWORK SPECIFICATIONS & TESTING REPORT (CG21-41.2) VERSION 2 BY CIVECON GROUP	
Reference Photos	No/Yes	Other		

Item	Description	Unit	Quantity	Arrival Date	Note
1	SAND CONE TEST	NUMBER	7	18/02/2025	
2					
3					
4					

Comments by: Eng. Sayed Saif (K.K)	Comments by: Er : (ER)
1-The Compaction Test Result F.D.T. (ASTM D 1556) is Approved.	1-F.D.T was carried- out by material engineer for both contractor and GARB Consultant
	2-Results report attached and acceptable with project specifications.
	3-Final approval is subject to above mentioned comments.

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng. Mohamed Moustafa			A
QA/QC *	Eng. Sayed Saif			A
SYSTRA Consultant	Eng. Hamouda Ali			A
GARB**	Eng. Margret magdy			
Employers Representative	Eng.		18/2/2025	A

Project	Electrical Express Train From Borg Alarab to Alamein		STATION REPRESENTED
SAMPLE Date	18/02/2025	FINAL DATE	18/02/2025
STAGE OF WORK :	Fill Layer at level (-1.5 m) from Ferma Under Left Railway		
Request NO.	BAS-MA-SYS-IR-F-87		

WORKSHEET FOR FIELD DENSITY TEST

BY SAND CONE METHOD ASTM D 1556

LAYER	Fill Layer at level (-1.5 m) from Ferma Under Left Railway							
DEPTH OF HOLE	cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm

SAMPLE No.	-	1	2	3	4	5	6	7
STATION	-	335+070	335+095	335+120	335+145	335+170	335+195	335+220
	-	17+617	17+642	17+667	17+692	17+717	17+742	17+767
CONTAINER No.	-	A-1	A-1	A-1	A-1	A-1	A-1	A-1
WEIGHT OF CAN	gms	31	33	30	31	33	33	31
WT. OF CAN+WET SOIL	gms	203	206	203	206	204	203	203
WT. OF CAN+DRY SOIL	gms	194	195	194	195	192	190	190
WT. OF WATER	gms	9.0	11.0	9.0	11.0	12.0	13.0	13.0
WT. OF DRY SOIL	gms	163.0	162.0	164.0	164.0	159.0	157.0	159.0
WATER CONTENT	%	5.5	6.8	5.5	6.7	7.5	8.3	8.2

WT. OF WET SOIL	gms	3785	3809	3803	3821	3779	3873	3722
WT. OF INITIAL SAND+CONT.	gms	7782	7768	7765	7856	7796	7737	7755
WT. OF RESIDUAL SAND + CONT.	gms	3709	3702	3615	3773	3705	3672	3791
WT. OF SAND TO FILL CONE+HOLE	gms	4073	4066	4150	4083	4091	4065	3964
WT. OF SAND TO FILL CONE	gms	1553	1553	1553	1553	1553	1553	1553
WT. OF SAND TO FILL HOLE	gms	2520	2513	2597	2530	2538	2512	2411
UNIT WT. OF SAND	gm/cc	1.47	1.47	1.47	1.47	1.47	1.47	1.47
GROSS VOLUME OF HOLE	ccs	1714.3	1709.5	1766.7	1721.1	1726.5	1708.8	1640.1
WET UNIT WT. OF SOIL	gm/cc	2.21	2.23	2.15	2.22	2.19	2.27	2.27
DRY UNIT WT. OF SOIL	gm/cc	2.09	2.09	2.04	2.08	2.04	2.09	2.10
MAX. DRY DENSITY	gm/cc	2.12	2.12	2.12	2.12	2.12	2.12	2.12
OPTIMUM MOISTURE CONTENT	%	7.75	7.75	7.75	7.75	7.75	7.75	7.75
COMPACTION	%	98.70	98.42	96.26	98.14	96.00	98.73	98.95
REQUIRED COMPACTION	%	95	95	95	95	95	95	95
REMARKS		PASSED	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED

Eng. / CONSULTANT

Eng. / CONTRACTOR

MATERIAL INSPECTION REQUEST



الهيئة العامة
للطرق والكباري
(GARB)



Contractor Company	Mohamed Abdallah 4 for constructions and roads paving			Designer Company				(KK) Engineering Consulting Office			
Issued by Contractor	Name	Sign		Date/Serial Number				Time			
	Eng. Mohamed moustafa			17/02/2025				3:00 PM			
				BAS-MA-SYS-FDT-F-88							
Received by GARB CONSULTANT	Eng. Sayed Saif		MIR	C1	C2	C3	DD	MM	YY	HH	MM
				335	EW	CS	18	2	25	3	0

CODE-1	S1 to S21	D1 to S3	Kp XXX Note
	Station Reference	Depot Reference	For Kilometer point only Start Km is used
CODE-2	Work Activity		
CODE-3	Sub Element of Activity		

Description of Materials		Fill Layer at level (-1.75 m) from Ferma Under Left Railway				
Location to be Used		From	335+220	TO	335+280	
			17+767		17+827	
MAR & UIR Approval No		BAS-MA-SYS-IR-F-88	Date		17/02/2025	
		BAS-MA-SYS-MAR-F-11				
Supplier Name		محاجر وادي النظرون - العلمين				
Test Requirement		F.D.T(ASTM D 1556)		Specification		
				EARTHWORK SPECIFICATIONS & TESTING REPORT (CG21-41.2) VERSION 2 BY CIVECON GROUP		
Reference Photos		No/Yes		Other		
Item	Description		Unit	Quantity	Arrival Date	Note
1	SAND CONE TEST		NUMBER	3	18/02/2025	
2						
3						
4						

Comments by: Eng. Sayed Saif (K.K)	Comments by: Eng. (ER)
1-The Compaction Test Result F.D.T. (ASTM D 1556) is Approved.	1-F.D.T was carried- out by material engineer for both contractor and GARB Consultant
	2-Results report attached and acceptable with project specifications.
	3-Final approval is subject to above mentioned comments.

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng. Mohamed Moustafa			A
QA/QC *	Eng. Sayed Saif			A
SYSTRA Consultant	Eng. Hamouda Ali			A
GARB**	Eng. Margret magdy			
Employers Representative	Eng.		18/02/2025	A

Project	Electrical Express Train From Borg Alarab to Alamein		STATION REPRESENTED
SAMPLE Date	18/02/2025	FINAL DATE	18/02/2025
STAGE OF WORK :	Fill Layer at level (-1.75 m) from Ferma Under Left Railway		
Request NO.	BAS-MA-SYS-IR-F-88		

WORKSHEET FOR FIELD DENSITY TEST

BY SAND CONE METHOD ASTM D 1556

LAYER	Fill Layer at level (-1.75 m) from Ferma Under Left Railway							
DEPTH OF HOLE	cm	15 cm	15 cm	15 cm				

SAMPLE No.	-	1	2	3				
STATION	-	335+230	335+255	335+280				
		17+777	17+802	17+827				
CONTAINER No.	-	A-1	A-1	A-1				
WEIGHT OF CAN	gms	31	33	31				
WT. OF CAN+WET SOIL	gms	204	207	204				
WT. OF CAN+DRY SOIL	gms	190	194	194				
WT. OF WATER	gms	14.0	13.0	10.0				
WT. OF DRY SOIL	gms	159.0	161.0	163.0				
WATER CONTENT	%	8.8	8.1	6.1				

WT. OF WET SOIL	gms	3871	3728	3792				
WT. OF INITIAL SAND+CONT.	gms	7848	7760	7967				
WT. OF RESIDUAL SAND + CONT.	gms	3795	3756	3808				
WT. OF SAND TO FILL CONE+HOLE	gms	4053	4004	4159				
WT. OF SAND TO FILL CONE	gms	1553	1553	1553				
WT. OF SAND TO FILL HOLE	gms	2500	2451	2606				
UNIT WT. OF SAND	gm/cc	1.47	1.47	1.47				
GROSS VOLUME OF HOLE	ccs	1700.7	1667.3	1772.8				
WET UNIT WT. OF SOIL	gm/cc	2.28	2.24	2.14				
DRY UNIT WT. OF SOIL	gm/cc	2.09	2.07	2.02				
MAX. DRY DENSITY	gm/cc	2.12	2.12	2.12				
OPTIMUM MOISTURE CONTENT	%	7.75	7.75	7.75				
COMPACTION	%	98.68	97.59	95.06				
REQUIRED COMPACTION	%	95	95	95				
REMARKS		PASSED	PASSED	PASSED				

Eng. / CONSULTANT

Eng. / CONTRACTOR

MATERIAL INSPECTION REQUEST



الهيئة العامة
للطرق والكباري
(GARB)



Contractor Company	Mohamed Abdallah 4 for constructions and roads paving			Designer Company				(KK) Engineering Consulting Office				
Issued by Contractor	Name	Sign		Date/Serial Number				Time				
	Eng. Mohamed moustafa			25/02/2025				3:00 PM				
				BAS-MA-SYS-FDT-F-89								
Received by GARB CONSULTANT	Eng. Sayed Saif			MIR	C1	C2	C3	DD	MM	YY	HH	MM
					335	EW	CS	26	2	25	3	0

CODE-1	S1 to S21	D1 to S3	Kp XXX Note
	Station Reference	Depot Reference	For Kilometer point only Start Km is used
CODE-2	Work Activity		
CODE-3	Sub Element of Activity		

Description of Materials		Fill Layer at level (-1.5 m) from Ferma Under Left Railway				
Location to be Used		From	335+220	TO	335+480	
			17+767		18+027	
MAR & UIR Approval No		BAS-MA-SYS-IR-F-89	Date		25/02/2025	
		BAS-MA-SYS-MAR-F-12				
Supplier Name		محاجر وادي النطرون - العلمين				
Test Requirement		F.D.T(ASTM D 1556)		Specification	EARTHWORK SPECIFICATIONS & TESTING REPORT (CG21-41.2) VERSION 2 BY CIVECON GROUP	
Reference Photos		No/Yes		Other		
Item	Description		Unit	Quantity	Arrival Date	Note
1	SAND CONE TEST		NUMBER	11	27/02/2025	
2						
3						
4						

Comments by: Eng. Sayed Saif (K.K.)	Comments by: Eng. Karim (ER)
1-The Compaction Test Result F.D.T. (ASTM D 1556) is Approved.	1-F.D.T was carried- out by material engineer for both contractor and GARB Consultant 2-Results report attached and acceptable with project specifications. 3-Final approval is subject to above mentioned comments.

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng. Mohamed Moustafa			A
QA/QC *	Eng. Sayed Saif			A
SYSTRA Consultant	Eng. Hamouda Ali			A
GARB**	Eng. Margret magdy			
Employers Representative	Eng. Karim		27/2/25	A

Project	Electrical Express Train From Borg Alarab to Alamein		STATION REPRESENTED
SAMPLE Date	26/02/2025	FINAL DATE	27/02/2025
STAGE OF WORK :	Fill Layer at level (-1.5 m) from Ferma Under Left Railway		
Request NO.	BAS-MA-SYS-IR-F-89		

WORKSHEET FOR FIELD DENSITY TEST

BY SAND CONE METHOD ASTM D 1556

LAYER	Fill Layer at level (-1.5 m) from Ferma Under Left Railway								
DEPTH OF HOLE	cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm

SAMPLE No.	-	1	2	3	4	5	6	7	8
STATION	-	335+230	335+255	335+280	335+305	335+330	335+355	335+380	335+405
	-	17+777	17+802	17+827	17+852	17+877	17+902	17+927	17+952
CONTAINER No.	-	A-1	A-1	A-1	A-1	A-1	A-1	A-1	A-1
WEIGHT OF CAN	gms	33	32	33	31	33	32	32	29
WT. OF CAN+WET SOIL	gms	204	205	204	203	207	206	206	208
WT. OF CAN+DRY SOIL	gms	193	193	190	191	194	191	192	190
WT. OF WATER	gms	11.0	12.0	14.0	12.0	13.0	15.0	14.0	18.0
WT. OF DRY SOIL	gms	160.0	161.0	157.0	160.0	161.0	159.0	160.0	161.0
WATER CONTENT	%	6.9	7.5	8.9	7.5	8.1	9.4	8.8	11.2

WT. OF WET SOIL	gms	3778	3807	3865	3773	3855	3756	3800	3774
WT. OF INITIAL SAND+CONT.	gms	7848	7745	7756	7776	7797	7716	7747	7744
WT. OF RESIDUAL SAND + CONT.	gms	3819	3682	3712	3774	3693	3762	3758	3792
WT. OF SAND TO FILL CONE+HOLE	gms	4029	4063	4044	4002	4104	3954	3989	3952
WT. OF SAND TO FILL CONE	gms	1553	1553	1553	1553	1553	1553	1553	1553
WT. OF SAND TO FILL HOLE	gms	2476	2510	2491	2449	2551	2401	2436	2399
UNIT WT. OF SAND	gm/cc	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48
GROSS VOLUME OF HOLE	ccs	1673.0	1695.9	1683.1	1654.7	1723.6	1622.3	1645.9	1620.9
WET UNIT WT. OF SOIL	gm/cc	2.26	2.24	2.30	2.28	2.24	2.32	2.31	2.33
DRY UNIT WT. OF SOIL	gm/cc	2.11	2.09	2.11	2.12	2.07	2.12	2.12	2.09
MAX. DRY DENSITY	gm/cc	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15
OPTIMUM MOISTURE CONTENT	%	7.10	7.10	7.10	7.10	7.10	7.10	7.10	7.10
COMPACTION	%	98.28	97.17	98.06	98.65	96.25	98.40	98.74	97.40
REQUIRED COMPACTION	%	95	95	95	95	95	95	95	95
REMARKS		PASSED	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED

Eng. / CONSULTANT

Eng. / CONTRACTOR

Project	Electrical Express Train From Borg Alarab to Alamein		STATION REPRESENTED
SAMPLE Date	26/02/2025	FINAL DATE	27/02/2025
STAGE OF WORK :	Fill Layer at level (-1.5 m) from Ferma Under Left Railway		
Request NO.	BAS-MA-SYS-IR-F-89		

WORKSHEET FOR FIELD DENSITY TEST

BY SAND CONE METHOD ASTM D 1556

LAYER	Fill Layer at level (-1.5 m) from Ferma Under Left Railway							
DEPTH OF HOLE	cm	15 cm	15 cm	15 cm				

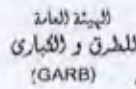
SAMPLE No.	-	9	10	11				
STATION	-	335+430	335+455	335+480				
		17+777	17+802	17+827				
CONTAINER No.	-	A-1	A-1	A-1				
WEIGHT OF CAN	gms	33	30	29				
WT. OF CAN+WET SOIL	gms	205	204	206				
WT. OF CAN+DRY SOIL	gms	192	191	190				
WT. OF WATER	gms	13.0	13.0	16.0				
WT. OF DRY SOIL	gms	159.0	161.0	161.0				
WATER CONTENT	%	8.2	8.1	9.9				

WT. OF WET SOIL	gms	3773	3874	3894				
WT. OF INITIAL SAND+CONT.	gms	7764	7789	7818				
WT. OF RESIDUAL SAND + CONT.	gms	3764	3682	3767				
WT. OF SAND TO FILL CONE+HOLE	gms	4000	4107	4051				
WT. OF SAND TO FILL CONE	gms	1553	1553	1553				
WT. OF SAND TO FILL HOLE	gms	2447	2554	2498				
UNIT WT. OF SAND	gm/cc	1.48	1.48	1.48				
GROSS VOLUME OF HOLE	ccs	1653.4	1725.7	1687.8				
WET UNIT WT. OF SOIL	gm/cc	2.28	2.24	2.31				
DRY UNIT WT. OF SOIL	gm/cc	2.11	2.08	2.10				
MAX. DRY DENSITY	gm/cc	2.15	2.15	2.15				
OPTIMUM MOISTURE CONTENT	%	7.10	7.10	7.10				
COMPACTION	%	98.12	96.61	97.61				
REQUIRED COMPACTION	%	95	95	95				
REMARKS		PASSED	PASSED	PASSED				

Eng. / CONSULTANT

Eng. / CONTRACTOR

MATERIAL INSPECTION REQUEST



Contractor Company	Mohamed Abdallah 4 for constructions and roads paving			Designer Company				(KK) Engineering Consulting Office				
Issued by Contractor	Name	Sign		Date/Serial Number				Time				
	Eng. Mohamed moustafa			26/02/2025				3:00 PM				
	BAS-MA-SYS-FDT-F-90											
Received by GARB CONSULTANT	Eng. Sayed Saif			MIR	C1	C2	C3	DD	MM	YY	HH	MM
					335	EW	CS	27	2	25	3	0

CODE-1	S1 to S21	D1 to S3	Kp XXX Note
	Station Reference	Depot Reference	For Kilometer point only Start Km is used
CODE-2	Work Activity		
CODE-3	Sub Element of Activity		

Description of Materials	Fill Layer at level (-1.25 m) from Ferma Under Left Railway				
Location to be Used	From	335+060	TO	335+220	
		17+607		17+767	
MAR & UIR Approval No	BAS-MA-SYS-IR-F-90		Date	26/02/2025	
	BAS-MA-SYS-MAR-F-12				
Supplier Name	محاجر وادي التطرون - العلمين				
Test Requirement	F.D.T(ASTM D 1556)		Specification	EARTHWORK SPECIFICATIONS & TESTING REPORT (CG21-41.2) VERSION 2 BY CIVECON GROUP	
Reference Photos	No/Yes		Other		

Item	Description	Unit	Quantity	Arrival Date	Note
1	SAND CONE TEST	NUMBER	7	28/02/2025	
2					
3					
4					

Comments by: Eng. Sayed Saif (K.K)	Comments by: (ER)
1-The Compaction Test Result F.D.T. (ASTM D 1556) is Approved.	1-F.D.T was carried-out by material engineer for both contractor and GARB Consultant 2-Results report attached and acceptable with project specifications. 3-Final approval is subject to above mentioned comments.

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng. Mohamed Moustafa			A
QA/QC *	Eng. Sayed Saif			A
SYSTRA Consultant	Eng. Hamouda Ali			A
GARB**	Eng. Margret magdy			
Employers Representative	Eng.			A

Project	Electrical Express Train From Borg Alarab to Alamein		STATION REPRESENTED
SAMPLE Date	27/02/2025	FINAL DATE	28/02/2025
STAGE OF WORK :	Fill Layer at level (-1.25 m) from Ferma Under Left Railway		
Request NO.	BAS-MA-SYS-IR-F-90		

WORKSHEET FOR FIELD DENSITY TEST

BY SAND CONE METHOD ASTM D 1556

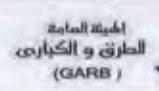
LAYER	Fill Layer at level (-1.25 m) from Ferma Under Left Railway							
DEPTH OF HOLE	cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm

SAMPLE No.	-	1	2	3	4	5	6	7
STATION	-	335+070	335+095	335+120	335+145	335+170	335+195	335+220
		17+617	17+642	17+667	17+692	17+717	17+742	17+767
CONTAINER No.	-	A-1	A-1	A-1	A-1	A-1	A-1	A-1
WEIGHT OF CAN	gms	32	30	31	32	30	33	32
WT. OF CAN+WET SOIL	gms	206	205	206	205	206	207	207
WT. OF CAN+DRY SOIL	gms	192	194	193	193	193	195	195
WT. OF WATER	gms	14.0	11.0	13.0	12.0	13.0	12.0	12.0
WT. OF DRY SOIL	gms	160.0	164.0	162.0	161.0	163.0	162.0	163.0
WATER CONTENT	%	8.8	6.7	8.0	7.5	8.0	7.4	7.4

WT. OF WET SOIL	gms	3782	3859	3806	3848	3796	3840	3886
WT. OF INITIAL SAND+CONT.	gms	7714	7948	7745	7817	7734	7923	7877
WT. OF RESIDUAL SAND + CONT.	gms	3693	3793	3683	3701	3728	3831	3798
WT. OF SAND TO FILL CONE+HOLE	gms	4021	4155	4062	4116	4006	4092	4079
WT. OF SAND TO FILL CONE	gms	1553	1553	1553	1553	1553	1553	1553
WT. OF SAND TO FILL HOLE	gms	2468	2602	2509	2563	2453	2539	2526
UNIT WT. OF SAND	gm/cc	1.48	1.48	1.48	1.48	1.48	1.48	1.48
GROSS VOLUME OF HOLE	ccs	1667.6	1758.1	1695.3	1731.8	1657.4	1715.5	1706.8
WET UNIT WT. OF SOIL	gm/cc	2.27	2.19	2.25	2.22	2.29	2.24	2.28
DRY UNIT WT. OF SOIL	gm/cc	2.09	2.06	2.08	2.07	2.12	2.08	2.12
MAX. DRY DENSITY	gm/cc	2.15	2.15	2.15	2.15	2.15	2.15	2.15
OPTIMUM MOISTURE CONTENT	%	7.10	7.10	7.10	7.10	7.10	7.10	7.10
COMPACTION	%	97.00	95.67	96.66	96.18	98.66	96.93	98.64
REQUIRED COMPACTION	%	95	95	95	95	95	95	95
REMARKS		PASSED	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED

Eng. / CONSULTANT

Eng. / CONTRACTOR

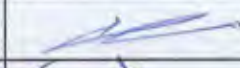
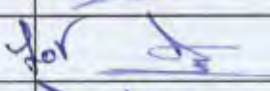
MATERIAL INSPECTION REQUEST	    	
	محمد عبد الله 4 للإنشاءات ورصف الطرق K.K. ENGINEERING CONSULTING OFFICE المكتب الاستشاري للإنشاءات ورصف الطرق الشركة العامة للطرق والكباري (GARB) شركة النكر الشركة العامة للطرق والكباري SYSTRA SYSTRA	

Contractor Company	Mohamed Abdallah 4 for constructions and roads paving			Designer Company	(KK) Engineering Consulting Office		
Issued by Contractor	Name	Sign		Date/Serial Number	Time		
	Eng. Mohamed moustafa			2 / 3 / 2025	3:00 PM		
				BAS-MA-SYS-FDT-F-91			
Received by GARB CONSULTANT	Eng.		MIR	01 335 02 EW 03 CS 04 3 05 3 06 25 07 3 08 0			

CODE-1	S1 to S21	D1 to S3	Kp XXX Note
	Station Reference	Depot Reference	For Kilometer point only Start Km is used
CODE-2	Work Activity		
CODE-3	Sub Element of Activity		

Description of Materials	Fill Layer at level (-1.25 m) from Ferma Under Left Railway				
Location to be Used	From	335+220	TO	335+480	
		17+767		18+027	
MAR & UIR Approval No	BAS-MA-SYS-IR-F-91	Date	2 / 3 / 2025		
	BAS-MA-SYS-MAR-F-12				
Supplier Name	محاجر وادي النظرون - العلمين				
Test Requirement	F.D.T(ASTM D 1556)	Specification	EARTHWORK SPECIFICATIONS & TESTING REPORT (CG21-41.2) VERSION 2 BY CIVECON GROUP		
Reference Photos	No/Yes	Other			
Item	Description	Unit	Quantity	Arrival Date	Note
1	SAND CONE TEST	NUMBER	11	04/03/2025	
2					
3					
4					

Comments by: Eng. Sayed Saif (K.K)	Comments by: Eng. Kareem Mostafa (ER)
1-The Compaction Test Result F.D.T. (ASTM D 1556) is Approved.	1-F.D.T was carried- out by material engineer for both contractor and GARB Consultant 2-Results report attached and acceptable with project specifications. 3-Final approval is subject to above mentioned comments.

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng. Mohamed moustafa			A
QA/QC *	Eng. Sayed Saif			A
Systra Consultant	Eng. Hamouda Ali			A
GARB**	Eng. Margret magdy			
Employers Representative	Eng. Kareem Mostafa			A

Project	Electrical Express Train From Borg Alarab to Alamein		STATION REPRESENTED
SAMPLE Date	03/03/2025	FINAL DATE	04/03/2025
STAGE OF WORK :	Fill Layer at level (-1.25 m) from Ferma Under Left Railway		
Request NO.	BAS-MA-SYS-IR-F-91		

WORKSHEET FOR FIELD DENSITY TEST

BY SAND CONE METHOD ASTM D 1556

LAYER	Fill Layer at level (-1.25 m) from Ferma Under Left Railway								
DEPTH OF HOLE	cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm

SAMPLE No.	-	1	2	3	4	5	6	7	8
STATION	-	335+225	335+250	335+275	335+300	335+325	335+350	335+375	335+400
	-	17+772	17+797	17+822	17+847	17+872	17+897	17+922	17+947
CONTAINER No.	-	A-1	A-1	A-1	A-1	A-1	A-1	A-1	A-1
WEIGHT OF CAN	gms	33	31	33	29	32	33	29	30
WT. OF CAN+WET SOIL	gms	207.0	206.0	205.0	205.0	203.0	208.0	208.0	207.0
WT. OF CAN+DRY SOIL	gms	193.0	195.0	191.0	191.0	195.0	193.0	195.0	194.0
WT. OF WATER	gms	14.0	11.0	14.0	14.0	8.0	15.0	13.0	13.0
WT. OF DRY SOIL	gms	160.0	164.0	158.0	162.0	163.0	160.0	166.0	164.0
WATER CONTENT	%	8.8	6.7	8.9	8.6	4.9	9.4	7.8	7.9

WT. OF WET SOIL	gms	3784	3784	3832	3814	3834	3850	3779	3787
WT. OF INITIAL SAND+CONT.	gms	7714	7751	7747	7891	7887	7812	7782	7777
WT. OF RESIDUAL SAND + CONT.	gms	3662	3722	3724	3837	3728	3738	3804	3743
WT. OF SAND TO FILL CONE+HOLE	gms	4052	4029	4023	4054	4159	4074	3978	4034
WT. OF SAND TO FILL CONE	gms	1553	1553	1553	1553	1553	1553	1553	1553
WT. OF SAND TO FILL HOLE	gms	2499	2476	2470	2501	2606	2521	2425	2481
UNIT WT. OF SAND	gm/cc	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48
GROSS VOLUME OF HOLE	ccs	1688.5	1673.0	1668.9	1689.9	1760.8	1703.4	1638.5	1676.4
WET UNIT WT. OF SOIL	gm/cc	2.24	2.26	2.30	2.26	2.18	2.26	2.31	2.26
DRY UNIT WT. OF SOIL	gm/cc	2.06	2.12	2.11	2.08	2.08	2.07	2.14	2.09
MAX. DRY DENSITY	gm/cc	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15
OPTIMUM MOISTURE CONTENT	%	7.10	7.10	7.10	7.10	7.10	7.10	7.10	7.10
COMPACTION	%	95.85	98.59	98.10	96.63	96.54	96.12	99.48	97.36
REQUIRED COMPACTION	%	95	95	95	95	95	95	95	95
REMARKS		PASSED	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED

Eng. / CONSULTANT

Eng. / CONTRACTOR

Project	Electrical Express Train From Borg Alarab to Alamein		STATION REPRESENTED
SAMPLE Date	03/03/2025	FINAL DATE	04/03/2025
STAGE OF WORK :	Fill Layer at level (-1.25 m) from Ferma Under Left Railway		
Request NO.	BAS-MA-SYS-IR-F-91		

WORKSHEET FOR FIELD DENSITY TEST

BY SAND CONE METHOD ASTM D 1556

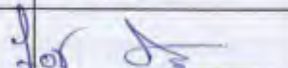
LAYER	Fill Layer at level (-1.25 m) from Ferma Under Left Railway							
DEPTH OF HOLE	cm	15 cm	15 cm	15 cm				

SAMPLE No.	-	9	10	11				
STATION	-	335+425	335+450	335+475				
	-	17+972	17+997	18+022				
CONTAINER No.	-	A-1	A-1	A-1				
WEIGHT OF CAN	gms	32	31	32				
WT. OF CAN+WET SOIL	gms	203.0	204.0	204.0				
WT. OF CAN+DRY SOIL	gms	190.0	191.0	193.0				
WT. OF WATER	gms	13.0	13.0	11.0				
WT. OF DRY SOIL	gms	158.0	160.0	161.0				
WATER CONTENT	%	8.2	8.1	6.8				

WT. OF WET SOIL	gms	3871	3836	3843				
WT. OF INITIAL SAND+CONT.	gms	7860	7736	7888				
WT. OF RESIDUAL SAND + CONT.	gms	3761	3664	3801				
WT. OF SAND TO FILL CONE+HOLE	gms	4099	4072	4087				
WT. OF SAND TO FILL CONE	gms	1553	1553	1553				
WT. OF SAND TO FILL HOLE	gms	2546	2519	2534				
UNIT WT. OF SAND	gm/cc	1.48	1.48	1.48				
GROSS VOLUME OF HOLE	ccs	1720.3	1702.0	1712.2				
WET UNIT WT. OF SOIL	gm/cc	2.25	2.25	2.24				
DRY UNIT WT. OF SOIL	gm/cc	2.08	2.08	2.10				
MAX. DRY DENSITY	gm/cc	2.15	2.15	2.15				
OPTIMUM MOISTURE CONTENT	%	7.10	7.10	7.10				
COMPACTION	%	96.71	96.95	97.72				
REQUIRED COMPACTION	%	95	95	95				
REMARKS		PASSED	PASSED	PASSED				

Eng. / CONSULTANT

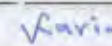
Eng. / CONTRACTOR

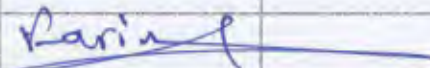
Contractor Company	Mohamed Abdallah 4 for constructions and roads paving			Designer Company	(KK) Engineering Consulting Office						
Issued by Contractor	Name	Sign	Date/Serial Number	Time							
	Eng. Mohamed moustafa		04/03/2025	3:00 PM							
	BAS-MA-SYS-FDT-F-92										
Received by GARB CONSULTANT	Eng. Sayed Saif		MIR	C1 335	C2 EW	C3 CS	DD 5	MM 3	YY 25	HH 3	MM 0

CODE-1	S1 to S21	D1 to S3	Kp XXX Note
	Station Reference	Depot Reference	For Kilometer point only Start Km is used
CODE-2	Work Activity		
CODE-3	Sub Element of Activity		

Description of Materials	Fill Layer at level (-1 m) from Ferma Under Left Railway			
Location to be Used	From	335+060	TO	335+220
		17+607		17+767
MAR & UIR Approval No	BAS-MA-SYS-IR-F-92	Date	04/03/2025	
	BAS-MA-SYS-MAR-F-12			
Supplier Name	محاجر وادي النطرون - العلمين			
Test Requirement	F.D.T (ASTM D 1556)	Specification	EARTHWORK SPECIFICATIONS & TESTING REPORT (CG21-41.2) VERSION 2 BY CIVECON GROUP	
Reference Photos	No/Yes	Other		

Item	Description	Unit	Quantity	Arrival Date	Note
1	SAND CONE TEST	NUMBER	7	06/03/2025	
2					
3					
4					

Comments by: Eng. Sayed Saif (K.K)	Comments by:  (ER)
1-The Compaction Test Result F.D.T. (ASTM D 1556) is Approved.	1-F.D.T was carried- out by material engineer for both contractor and GARB Consultant 2-Results report attached and acceptable with project specifications. 3-Final approval is subject to above mentioned comments.

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng. Mohamed Moustafa			A
QA/QC *	Eng. Sayed Saif			A
SYSTRA Consultant	Eng. Hamouda Ali			A
GARB**	Eng. Margret magdy			
Employers Representative	Eng. Karin			A

Project	Electrical Express Train From Borg Alarab to Alamein		STATION REPRESENTED
SAMPLE Date	05/03/2025	FINAL DATE	06/03/2025
STAGE OF WORK :	Fill Layer at level (-1 m) from Ferma Under Left Railway		
Request NO.	BAS-MA-SYS-IR-F-92		

WORKSHEET FOR FIELD DENSITY TEST

BY SAND CONE METHOD ASTM D 1556

LAYER	Fill Layer at level (-1 m) from Ferma Under Left Railway							
DEPTH OF HOLE	cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm

SAMPLE No.	-	1	2	3	4	5	6	7	
STATION	-	335+070	335+095	335+120	335+145	335+170	335+195	335+220	
	-	17+617	17+642	17+667	17+692	17+717	17+742	17+767	
CONTAINER No.	-	A-1	A-1	A-1	A-1	A-1	A-1	A-1	
WEIGHT OF CAN	gms	33	33	32	31	31	31	29	
WT. OF CAN+WET SOIL	gms	205	205	205	203	207	205	203	
WT. OF CAN+DRY SOIL	gms	192	191	193	190	193	192	193	
WT. OF WATER	gms	13.0	14.0	12.0	13.0	14.0	13.0	10.0	
WT. OF DRY SOIL	gms	159.0	158.0	161.0	159.0	162.0	161.0	164.0	
WATER CONTENT	%	8.2	8.9	7.5	8.2	8.6	8.1	6.1	

WT. OF WET SOIL	gms	3765	3785	3871	3783	3883	3748	3865	
WT. OF INITIAL SAND+CONT.	gms	7783	7791	7837	7766	7848	7741	7722	
WT. OF RESIDUAL SAND + CONT.	gms	3765	3735	3695	3736	3726	3733	3641	
WT. OF SAND TO FILL CONE+HOLE	gms	4018	4056	4142	4030	4122	4008	4081	
WT. OF SAND TO FILL CONE	gms	1553	1553	1553	1553	1553	1553	1553	
WT. OF SAND TO FILL HOLE	gms	2465	2503	2589	2477	2569	2455	2528	
UNIT WT. OF SAND	gm/cc	1.48	1.48	1.48	1.48	1.48	1.48	1.48	
GROSS VOLUME OF HOLE	ccs	1665.5	1691.2	1749.3	1673.6	1735.8	1658.8	1708.1	
WET UNIT WT. OF SOIL	gm/cc	2.26	2.24	2.21	2.26	2.24	2.26	2.26	
DRY UNIT WT. OF SOIL	gm/cc	2.09	2.06	2.06	2.09	2.06	2.09	2.13	
MAX. DRY DENSITY	gm/cc	2.15	2.15	2.15	2.15	2.15	2.15	2.15	
OPTIMUM MOISTURE CONTENT	%	7.10	7.10	7.10	7.10	7.10	7.10	7.10	
COMPACTION	%	97.19	95.62	95.78	97.19	95.77	97.24	99.20	
REQUIRED COMPACTION	%	95	95	95	95	95	95	95	
REMARKS		PASSED	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED	

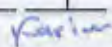
Eng. / CONSULTANT

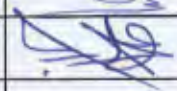
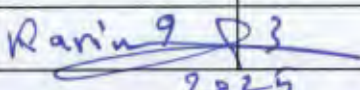
Eng. / CONTRACTOR

MATERIAL INSPECTION REQUEST			الهيئة العامة للطرق والكباري (GARB)		الهيئة القومية للإسكان والسكن	
	ENGINEERING CONSULTING OFFICE المكتب الاستشاري الهندسي أ.م. خالد عبدويل	محمد عبد الله للإنشاءات ورصف الطرق		وزارة النقل		SYSTRA

Contractor Company	Mohamed Abdallah 4 for constructions and roads paving		Designer Company	(KK) Engineering Consulting Office							
Issued by Contractor	Name	Sign	Date/Serial Number	Time							
	Eng. Mohamed moustafa		8/3/2025	3:00 PM							
			BAS-MA-SYS-FDT-F-93								
Received by GARB CONSULTANT	Eng. Sayed Salf		MIR	C1 335	C2 EW	C3 CS	D0 9	MM 3	YY 25	HH 3	MM 0

CODE-1 CODE-2 CODE-3	S1 to S21	D1 to S3	Kp XXX Note
	Station Reference	Depot Reference	For Kilometer point only Start Km is used
	Work Activity		
Sub Element of Activity			

Description of Materials	Fill Layer at level (-1 m) from Ferma Under Left Railway				
Location to be Used	From	335+220	TO	335+480	
		17+767		18+027	
MAR & UIR Approval No	BAS-MA-SYS-IR-F-93		Date	8/3/2025	
	AS-MA-SYS-MAR-F-12				
Supplier Name	محاجر وادي النطرون - العلمين				
Test Requirement	F.D.T (ASTM D 1556)		Specification	EARTHWORK SPECIFICATIONS & TESTING REPORT (CG21-41.2) VERSION 2 BY CIVECON GROUP	
Reference Photos	No/Yes		Other		
Item	Description	Unit	Quantity	Arrival Date	Note
1	SAND CONE TEST	NUMBER	11	10/03/2025	
2					
3					
4					
Comments by: Eng. Sayed Salf (K.K)			Comments by: Eng.  (ER)		
1-The Compaction Test Result F.D.T. (ASTM D 1556) is Approved.			1-F.D.T was carried- out by material engineer for both contractor and GARB Consultant 2-Results report attached and acceptable with project specifications. 3-Final approval is subject to above mentioned comments.		

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng. Mohamed Moustafa			A
QA/QC *	Eng. Sayed Salf			A
SYSTRA Consultant	Eng. Hamouda Ali			A
GARB**	Eng. Margret magdy			
Employers Representative	Eng. 		2025	A

Project	Electrical Express Train From Borg Alarab to Alamein		STATION REPRESENTED
SAMPLE Date	09/03/2025	FINAL DATE	10/03/2025
STAGE OF WORK :	Fill Layer at level (-1 m) from Ferma Under Left Railway		
Request NO.	BAS-MA-SYS-IR-F-93		

WORKSHEET FOR FIELD DENSITY TEST

BY SAND CONE METHOD ASTM D 1556

LAYER	Fill Layer at level (-1 m) from Ferma Under Left Railway								
DEPTH OF HOLE	cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm

SAMPLE No.	-	1	2	3	4	5	6	7	8
STATION	-	335+230	335+255	335+280	335+305	335+330	335+355	335+380	335+405
	-	17+117	17+802	17+827	17+852	17+877	17+902	17+927	17+952
CONTAINER No.	-	A-1	A-1	A-1	A-1	A-1	A-1	A-1	A-1
WEIGHT OF CAN	gms	29	32	29	31	32	29	30	30
WT. OF CAN+WET SOIL	gms	205	206	204	207	207	204	204	207
WT. OF CAN+DRY SOIL	gms	190	192	195	191	192	191	193	192
WT. OF WATER	gms	15.0	14.0	9.0	16.0	15.0	13.0	11.0	15.0
WT. OF DRY SOIL	gms	161.0	160.0	166.0	160.0	160.0	162.0	163.0	160.2
WATER CONTENT	%	9.3	8.8	5.4	10.0	9.4	8.0	6.7	9.4

WT. OF WET SOIL	gms	3854	3887	3845	3896	3764	3763	3845	3868
WT. OF INITIAL SAND+CONT.	gms	7868	7888	7971	7722	7846	7726	7728	7718
WT. OF RESIDUAL SAND + CONT.	gms	3823	3792	3845	3700	3843	3749	3646	3629
WT. OF SAND TO FILL CONE+HOLE	gms	4045	4096	4126	4022	4003	3977	4082	4089
WT. OF SAND TO FILL CONE	gms	1553	1553	1553	1553	1553	1553	1553	1553
WT. OF SAND TO FILL HOLE	gms	2492	2543	2573	2469	2450	2424	2529	2536
UNIT WT. OF SAND	gm/cc	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48
GROSS VOLUME OF HOLE	ccs	1683.8	1718.2	1738.5	1668.2	1655.4	1637.8	1708.8	1713.5
WET UNIT WT. OF SOIL	gm/cc	2.29	2.26	2.21	2.34	2.27	2.30	2.25	2.26
DRY UNIT WT. OF SOIL	gm/cc	2.0	2.08	2.10	2.12	2.08	2.13	2.11	2.06
MAX. DRY DENSITY	gm/cc	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15
OPTIMUM MOISTURE CONTENT	%	7.10	7.10	7.10	7.10	7.10	7.10	7.10	7.1
COMPACTION	%	97.39	96.75	97.58	98.75	96.69	98.92	98.04	96.00
REQUIRED COMPACTION	%	95	95	95	95	95	95	95	95
REMARKS		PASSED	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED

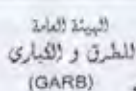
Eng. / CONSULTANT

Eng. / CONTRACTOR

WT. OF WET SOIL	gms	3849	3755	3838
WT. OF INITIAL SAND+CONT.	gms	7812	7824	7900
WT. OF RESIDUAL SAND + CONT.	gms	3772	3836	3768
WT. OF SAND TO FILL CONE+HOLE	gms	4040	3988	4132
WT OF SAND TO FILL CONE	gms	1553	1553	1553
WT OF SAND TO FILL HOLE	gms	2487	2435	2579
UNIT WT. OF SAND	gm/cc	1.4	1.48	1.48
GROSS VOLUME OF HOLE	ccs	1680.4	1645.3	1742.6
WET UNIT WT. OF SOIL	gm/cc	2.29	2.28	2.20
DRY UNIT WT. OF SOIL	gm/cc	2.11	2.13	2.07
MAX. DRY DENSITY	gm/cc	2.15	2.15	2.15
OPTIMUM MOISTURE CONTENT	%	7.10	7.10	7.10
COMPACTION	%	98.11	99.00	96.42
REQUIRED COMPACTION	%	95	95	95
REMARKS		PASSED	PASSED	PASSED

Eng. / CONTRACTOR

MATERIAL INSPECTION REQUEST



Contractor Company	Mohamed Abdallah 4 for constructions and roads paving		Designer Company	(KK) Engineering Consulting Office							
Issued by Contractor	Name	Sign	Date/Serial Number	Time							
	Eng. Mohamed moustafa		11/3/2025	3:00 PM							
			BAS-MA-SYS-FDT-F-94								
Received by GARB CONSULTANT	Eng. Sayed Saif	for	MIR	CL	C2	C3	CD	MM	YY	HH	MM
				335	EW	C5	12	3	25	3	0

CODE-1	S1 to S21	D1 to S3	Kp XXX Note
	Station Reference	Depot Reference	For Kilometer point only Start Km is used
TYPE-1	Work Activity		
TYPE-2	Sub Element of Activity		

Description of Materials	Fill Layer at level (-0.75 m) from Ferma Under Left Railway				
Location to be Used	From	335+060	TO	335+480	
		17+607		18+027	
MAR & UIR Approval No	BAS-MA-SYS-IR-F-94		Date	11/3/2025	
	BAS-MA-SYS-MAR-F-12				
Supplier Name	محاجر وادي النظرون - العلمين				
Test Requirement	F.D.T (ASTM D 1556)		Specification	EARTHWORK SPECIFICATIONS & TESTING REPORT (CG21-41.2) VERSION 2 BY CIVECON GROUP	
Reference Photos	No/Yes		Other		

Item	Description	Unit	Quantity	Arrival Date	Note
1	SAND CONE TEST	NUMBER	17	13/03/2025	
2					
3					
4					

Comments by: Eng. Sayed Saif (K.K)	Comments by: (ER)
1-The Compaction Test Result F.D.T. (ASTM D 1556) is Approved.	1-F.D.T was carried- out by material engineer for both contractor and GARB Consultant 2-Results report attached and acceptable with project specifications. 3-Final approval is subject to above mentioned comments.

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng. Mohamed Moustafa			A
QA/QC *	Eng. Sayed Saif	for		A
SYSTRA Consultant	Eng. Hamouda Ali			A
GARB**	Eng. Margret magdy			
Employers Representative	Eng. Karim		13/3/2025	A

Project	Electrical Express Train From Borg Alarab to Alamein		STATION REPRESENTED
SAMPLE Date	12/03/2025	FINAL DATE	13/03/2025
STAGE OF WORK :	Fill Layer at level (-0.75 m) from Ferma Under Left Railway		
Request NO.	BAS-MA-SYS-IR-F-94		

WORKSHEET FOR FIELD DENSITY TEST

BY SAND CONE METHOD ASTM D 1556

LAYER	Fill Layer at level (-0.75 m) from Ferma Under Left Railway								
DEPTH OF HOLE	cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm

SAMPLE No.	-	1	2	3	4	5	6	7	8
STATION	-	335+070	335+095	335+120	335+145	335+170	335+195	335+220	335+245
	-	17+617	17+642	17+667	17+692	17+717	17+742	17+767	17+792
CONTAINER No.	-	A-1	A-1	A-1	A-1	A-1	A-1	A-1	A-1
WEIGHT OF CAN	gms	33	30	33	31	31	29	29	31
WT. OF CAN+WET SOIL	gms	205	205	208	207	206	208	207	205
WT. OF CAN+DRY SOIL	gms	195	192	190	191	191	192	190	194
WT. OF WATER	gms	10.0	13.0	18.0	16.0	15.0	16.0	17.0	11.0
WT. OF DRY SOIL	gms	162.0	162.0	157.0	160.0	160.0	163.0	161.0	160.2
WATER CONTENT	%	6.2	8.0	11.5	10.0	9.4	9.8	10.6	6.9

WT. OF WET SOIL	gms	3860	3859	3844	3841	3887	3856	3812	3879
WT. OF INITIAL SAND+CONT.	gms	7796	7756	7827	7802	7813	7753	7787	7807
WT. OF RESIDUAL SAND + CONT.	gms	3695	3657	3835	3771	3786	3707	3839	3734
WT. OF SAND TO FILL CONE+HOLE	gms	4101	4099	3992	4031	4027	4046	3948	4073
WT. OF SAND TO FILL CONE	gms	1553	1553	1553	1553	1553	1553	1553	1553
WT. OF SAND TO FILL HOLE	gms	2548	2546	2439	2478	2474	2493	2395	2520
UNIT WT. OF SAND	gm/cc	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48
GROSS VOLUME OF HOLE	ccs	1721.6	1720.3	1648.0	1674.3	1671.6	1684.5	1618.2	1702.7
WET UNIT WT. OF SOIL	gm/cc	2.24	2.24	2.33	2.29	2.33	2.29	2.36	2.28
DRY UNIT WT. OF SOIL	gm/cc	2.11	2.08	2.09	2.09	2.13	2.08	2.13	2.13
MAX. DRY DENSITY	gm/cc	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15
OPTIMUM MOISTURE CONTENT	%	7.10	7.10	7.10	7.10	7.10	7.10	7.10	7.10
COMPACTION	%	98.22	96.59	97.33	97.00	98.88	96.96	99.10	99.15
REQUIRED COMPACTION	%	95	95	95	95	95	95	95	95
REMARKS		PASSED	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED

Eng. / CONSULTANT

Eng. / CONTRACTOR

Project	Electrical Express Train From Borg Alarab to Alamein		STATION REPRESENTED
SAMPLE Date	12/03/2025	FINAL DATE	13/03/2025
STAGE OF WORK :	Fill Layer at level (-0.75 m) from Ferma Under Left Railway		
Request NO.	BAS-MA-SYS-IR-F-94		

WORKSHEET FOR FIELD DENSITY TEST

BY SAND CONE METHOD ASTM D 1556

LAYER	Fill Layer at level (-0.75 m) from Ferma Under Left Railway								
DEPTH OF HOLE	cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm

SAMPLE No.	-	9	10	11	12	13	14	15	16
STATION	-	335+270	335+295	335+320	335+345	335+370	335+395	335+420	335+445
	-	17+817	17+842	17+867	17+892	17+917	17+942	17+967	17+992
CONTAINER No.	-	A-1	A-1	A-1	A-1	A-1	A-1	A-1	A-1
WEIGHT OF CAN	gms	33	33	30	29	32	31	32	30
WT. OF CAN+WET SOIL	gms	207	207	208	204	204	203	207	208
WT. OF CAN+DRY SOIL	gms	195	192	195	195	191	195	191	193
WT. OF WATER	gms	12.0	15.0	13.0	9.0	13.0	8.0	16.0	15.0
WT. OF DRY SOIL	gms	162.0	159.0	165.0	166.0	159.0	164.0	163.0	160.2
WATER CONTENT	%	7.4	9.4	7.9	5.4	8.2	4.9	9.8	9.4

WT. OF WET SOIL	gms	3877	3878	3718	3721	3866	3714	3816	3736
WT. OF INITIAL SAND+CONT.	gms	7815	7776	7828	7859	7834	7901	7817	7834
WT. OF RESIDUAL SAND + CONT.	gms	3726	3733	3844	3760	3725	3840	3850	3832
WT. OF SAND TO FILL CONE+HOLE	gms	4089	4043	3984	4099	4109	4061	3967	4002
WT. OF SAND TO FILL CONE	gms	1553	1553	1553	1553	1553	1553	1553	1553
WT. OF SAND TO FILL HOLE	gms	2536	2490	2431	2546	2556	2508	2414	2449
UNIT WT. OF SAND	gm/cc	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48
GROSS VOLUME OF HOLE	ccs	1713.5	1682.4	1642.6	1720.3	1727.0	1694.6	1631.1	1654.7
WET UNIT WT. OF SOIL	gm/cc	2.26	2.30	2.26	2.16	2.24	2.19	2.34	2.26
DRY UNIT WT. OF SOIL	gm/cc	2.11	2.11	2.10	2.05	2.07	2.09	2.13	2.06
MAX. DRY DENSITY	gm/cc	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15
OPTIMUM MOISTURE CONTENT	%	7.10	7.10	7.10	7.10	7.10	7.10	7.10	7.10
COMPACTION	%	97.98	97.97	97.59	95.43	96.25	97.20	99.09	96.02
REQUIRED COMPACTION	%	95	95	95	95	95	95	95	95
REMARKS		PASSED	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED

Eng. / CONSULTANT

Eng. / CONTRACTOR

Project	Electrical Express Train From Borg Alarab to Alamein		STATION REPRESENTED
SAMPLE Date	12/03/2025	FINAL DATE	13/03/2025
STAGE OF WORK :	Fill Layer at level (-0.75 m) from Ferma Under Left Railway		
Request NO.	BAS-MA-SYS-IR-F-94		

WORKSHEET FOR FIELD DENSITY TEST

BY SAND CONE METHOD ASTM D 1556

LAYER	Fill Layer at level (-0.75 m) from Ferma Under Left Railway							
DEPTH OF HOLE	cm	15 cm						

SAMPLE No.	-	17						
STATION	-	335+470						
		18+017						
CONTAINER No.	-	A-1						
WEIGHT OF CAN	gms	29						
WT. OF CAN+WET SOIL	gms	205						
WT. OF CAN+DRY SOIL	gms	195						
WT. OF WATER	gms	10.0						
WT. OF DRY SOIL	gms	166.0						
WATER CONTENT	%	6.0						

WT. OF WET SOIL	gms	3869						
WT. OF INITIAL SAND+CONT.	gms	7823						
WT. OF RESIDUAL SAND + CONT.	gms	3718						
WT. OF SAND TO FILL CONE+HOLE	gms	4105						
WT. OF SAND TO FILL CONE	gms	1553						
WT. OF SAND TO FILL HOLE	gms	2552						
UNIT WT. OF SAND	gm/cc	1.48						
GROSS VOLUME OF HOLE	ccs	1724.3						
WET UNIT WT. OF SOIL	gm/cc	2.24						
DRY UNIT WT. OF SOIL	gm/cc	2.12						
MAX. DRY DENSITY	gm/cc	2.15						
OPTIMUM MOISTURE CONTENT	%	7.10						
COMPACTION	%	98.43						
REQUIRED COMPACTION	%	95						
REMARKS		PASSED						

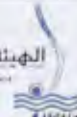
Eng. / CONSULTANT

Eng. / CONTRACTOR

MATERIAL INSPECTION REQUEST



الهيئة العامة
للطرق والكباري
(GARB)



Contractor Company	Mohamed Abdallah 4 for constructions and roads paving		Designer Company	(KK) Engineering Consulting Office							
Issued by Contractor	Name	Eng. Mohamed moustafa	Date/Serial Number	17/3/2025							
	Sign			Time 3:00 PM							
Received by GARB CONSULTANT	Eng. Sayed Saif		MIR	C1	C2	C3	DD	MM	YY	HH	MM
				335	EW	CS	18	3	25	3	0

CODE-1	S1 to S21	D1 to S3	Kp XXX Note
	Station Reference	Depot Reference	For Kilometer point only Start Km is used
CODE-2	Work Activity		
CODE-3	Sub Element of Activity		

Description of Materials	Fill Layer at level (-0.5 m) from Ferma Under Left Railway				
Location to be Used	From	335+060	TO	335+480	
		17+607		18+027	
MAR & UIR Approval No	BAS-MA-SYS-IR-F-95	Date	17/3/2025		
	BAS-MA-SYS-MAR-F-12				
Supplier Name	محاجر وادي النطرون - العلمين				
Test Requirement	F.D.T (ASTM D 1556)	Specification	EARTHWORK SPECIFICATIONS & TESTING REPORT (CG21-41.2) VERSION 2 BY CIVECON GROUP		
Reference Photos	No/Yes	Other			
Item	Description	Unit	Quantity	Arrival Date	Note
1	SAND CONE TEST	NUMBER	17	19/03/2025	
2					
3					
4					

Comments by: Eng. Sayed Saif (K.K)	Comments by: Eng. (ER)
1-The Compaction Test Result F.D.T. (ASTM D 1556) is Approved.	1-F.D.T was carried- out by material engineer for both contractor and GARB Consultant 2-Results report attached and acceptable with project specifications. 3-Final approval is subject to above mentioned comments.

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng. Mohamed Moustafa			A
QA/QC *	Eng. Sayed Saif			A
SYSTRA Consultant	Eng. Hamouda Ali			A
GARB**	Eng. Margret magdy			
Employers Representative	Eng. Karim		17/3/2025	A

Project	Electrical Express Train From Borg Alarab to Alamein		STATION REPRESENTED
SAMPLE Date	18/03/2025	FINAL DATE	19/03/2025
STAGE OF WORK :	Fill Layer at level (-0.5 m) from Ferma Under Left Railway		
Request NO.	BAS-MA-SYS-IR-F-95		

WORKSHEET FOR FIELD DENSITY TEST

BY SAND CONE METHOD ASTM D 1556

LAYER	Fill Layer at level (-0.5 m) from Ferma Under Left Railway								
DEPTH OF HOLE	cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm

SAMPLE No.	-	1	2	3	4	5	6	7	8
STATION	-	335+070	335+095	335+120	335+145	335+170	335+195	335+220	335+245
	-	17+617	17+642	17+667	17+692	17+717	17+742	17+767	17+792
CONTAINER No.	-	A-1	A-1	A-1	A-1	A-1	A-1	A-1	A-1
WEIGHT OF CAN	gms	30	29	29	30	33	31	31	32
WT. OF CAN+WET SOIL	gms	203	204	206	205	207	208	208	208
WT. OF CAN+DRY SOIL	gms	193	195	192	195	195	190	193	191
WT. OF WATER	gms	10.0	9.0	14.0	10.0	12.0	18.0	15.0	17.0
WT. OF DRY SOIL	gms	163.0	166.0	163.0	165.0	162.0	159.0	162.0	160.2
WATER CONTENT	%	6.1	5.4	8.6	6.1	7.4	11.3	9.3	10.6

WT. OF WET SOIL	gms	3761	3850	3784	3750	3892	3890	3712	3894
WT. OF INITIAL SAND+CONT.	gms	7796	7772	7722	7917	7782	7774	7730	7934
WT. OF RESIDUAL SAND + CONT.	gms	3737	3694	3765	3811	3626	3781	3731	3836
WT. OF SAND TO FILL CONE+HOLE	gms	4059	4078	3957	4106	4156	3993	3999	4098
WT. OF SAND TO FILL CONE	gms	1553	1553	1553	1553	1553	1553	1553	1553
WT. OF SAND TO FILL HOLE	gms	2506	2525	2404	2553	2603	2440	2446	2545
UNIT WT. OF SAND	gm/cc	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48
GROSS VOLUME OF HOLE	ccs	1693.2	1706.1	1624.3	1725.0	1758.8	1648.6	1652.7	1719.6
WET UNIT WT. OF SOIL	gm/cc	2.22	2.26	2.33	2.17	2.21	2.36	2.25	2.26
DRY UNIT WT. OF SOIL	gm/cc	2.09	2.14	2.15	2.05	2.06	2.12	2.06	2.05
MAX. DRY DENSITY	gm/cc	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15
OPTIMUM MOISTURE CONTENT	%	7.10	7.10	7.10	7.10	7.10	7.10	7.10	7.10
COMPACTION	%	97.34	99.56	99.78	95.33	95.83	98.58	95.61	95.22
REQUIRED COMPACTION	%	95	95	95	95	95	95	95	95
REMARKS		PASSED	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED

Eng. / CONSULTANT

Eng. / CONTRACTOR

Project	Electrical Express Train From Borg Alarab to Alamein		STATION REPRESENTED
SAMPLE Date	18/03/2025	FINAL DATE	19/03/2025
STAGE OF WORK :	Fill Layer at level (-0.5 m) from Ferma Under Left Railway		
Request NO.	BAS-MA-SYS-IR-F-95		

WORKSHEET FOR FIELD DENSITY TEST

BY SAND CONE METHOD ASTM D 1556

LAYER	Fill Layer at level (-0.5 m) from Ferma Under Left Railway								
DEPTH OF HOLE	cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm

SAMPLE No.	-	9	10	11	12	13	14	15	16
STATION	-	335+270	335+295	335+320	335+345	335+370	335+395	335+420	335+445
	-	17+817	17+842	17+867	17+892	17+917	17+942	17+967	17+992
CONTAINER No.	-	A-1	A-1	A-1	A-1	A-1	A-1	A-1	A-1
WEIGHT OF CAN	gms	31	32	33	29	29	30	30	30
WT. OF CAN+WET SOIL	gms	206	208	203	203	206	206	205	206
WT. OF CAN+DRY SOIL	gms	195	194	192	191	190	193	191	192
WT. OF WATER	gms	11.0	14.0	11.0	12.0	16.0	13.0	14.0	14.0
WT. OF DRY SOIL	gms	164.0	162.0	159.0	162.0	161.0	163.0	163.0	160.2
WATER CONTENT	%	6.7	8.6	6.9	7.4	9.9	8.0	8.6	8.7

WT. OF WET SOIL	gms	3791	3829	3819	3830	3899	3806	3786	3770
WT. OF INITIAL SAND+CONT.	gms	7759	7860	7750	7814	7843	7727	7729	7875
WT. OF RESIDUAL SAND + CONT.	gms	3709	3821	3686	3725	3800	3699	3697	3820
WT. OF SAND TO FILL CONE+HOLE	gms	4050	4039	4064	4089	4043	4028	4032	4055
WT. OF SAND TO FILL CONE	gms	1553	1553	1553	1553	1553	1553	1553	1553
WT. OF SAND TO FILL HOLE	gms	2497	2486	2511	2536	2490	2475	2479	2502
UNIT WT. OF SAND	gm/cc	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48
GROSS VOLUME OF HOLE	ccs	1687.2	1679.7	1696.6	1713.5	1682.4	1672.3	1675.0	1690.5
WET UNIT WT. OF SOIL	gm/cc	2.25	2.28	2.25	2.24	2.32	2.28	2.26	2.23
DRY UNIT WT. OF SOIL	gm/cc	2.11	2.10	2.11	2.08	2.11	2.11	2.08	2.05
MAX. DRY DENSITY	gm/cc	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15
OPTIMUM MOISTURE CONTENT	%	7.10	7.10	7.10	7.10	7.10	7.10	7.10	7.10
COMPACTION	%	97.94	97.59	97.92	96.79	98.05	98.04	96.81	95.39
REQUIRED COMPACTION	%	95	95	95	95	95	95	95	95
REMARKS		PASSED	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED

Eng. / CONSULTANT

Eng. / CONTRACTOR

Project	Electrical Express Train From Borg Alarab to Alamein		STATION REPRESENTED
SAMPLE Date	18/03/2025	FINAL DATE	19/03/2025
STAGE OF WORK :	Fill Layer at level (-0.5 m) from Ferma Under Left Railway		
Request NO.	BAS-MA-SYS-IR-F-95		

WORKSHEET FOR FIELD DENSITY TEST

BY SAND CONE METHOD ASTM D 1556

LAYER	Fill Layer at level (-0.5 m) from Ferma Under Left Railway						
DEPTH OF HOLE	cm	15 cm					

SAMPLE No.	-	17							
STATION	-	335+470							
		18+017							
CONTAINER No.	-	A-1							
WEIGHT OF CAN	gms	30							
WT. OF CAN+WET SOIL	gms	207							
WT. OF CAN+DRY SOIL	gms	190							
WT. OF WATER	gms	17.0							
WT. OF DRY SOIL	gms	160.0							
WATER CONTENT	%	10.6							

WT. OF WET SOIL	gms	3840							
WT. OF INITIAL SAND+CONT.	gms	7719							
WT. OF RESIDUAL SAND + CONT.	gms	3742							
WT. OF SAND TO FILL CONE+HOLE	gms	3977							
WT. OF SAND TO FILL CONE	gms	1553							
WT. OF SAND TO FILL HOLE	gms	2424							
UNIT WT. OF SAND	gm/cc	1.48							
GROSS VOLUME OF HOLE	ccs	1637.8							
WET UNIT WT. OF SOIL	gm/cc	2.34							
DRY UNIT WT. OF SOIL	gm/cc	2.12							
MAX. DRY DENSITY	gm/cc	2.15							
OPTIMUM MOISTURE CONTENT	%	7.10							
COMPACTION	%	98.58							
REQUIRED COMPACTION	%	95							
REMARKS		PASSED							

Eng. / CONSULTANT

Eng. / CONTRACTOR

Company Name : محمد عبد الله للإنشاءات و رصف الطرق
 Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
 Type of sample : Soil Embankment
 Location : St 335+060 : st 335+480
 Delivery Date : 17/03/2025
 Reporting Date : 23/03/2025
 Reporting No. : 021
 Sample No. : 01

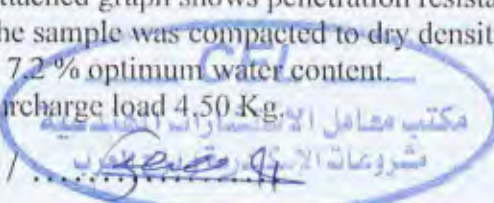
Test Results of California Bearing Ratio on Base Materials
ASTM D 1883

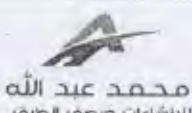
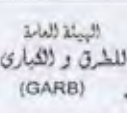
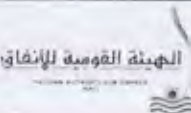
Penetration		Stress on piston (MPa)
mm	Inch	
0.64	0.025	0.74
1.27	0.050	1.36
1.91	0.075	2.28
2.54	0.100	3.20
3.18	0.125	3.51
3.81	0.150	3.88
4.45	0.175	4.19
5.08	0.200	4.67
5.71	0.225	5.07
6.35	0.250	5.54

CBR Result	Stress (MPa)		CBR %
	St. Value	Sample results	
At 0.1 inch (2.54 mm) penetration	6.90	3.20	45.3

Notes:

- 1- Attached graph shows penetration resistance versus penetration magnitude.
- 2- The sample was compacted to dry density of 2.16 (gm /cm³) at 7.2 % optimum water content.
- 3- Surcharge load 4.50 Kg.

Signature / 

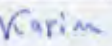
MATERIAL INSPECTION REQUEST						
	ENGINEERING CONSULTING OFFICE المكتب الاستشاري الهندسي أ.د. خالد شنديل	محمد عبد الله للإنشاءات ورصف الطرق	الهيئة العامة للشرق والكباري (GARB)	وزارة النقل	الهيئة القومية للبيئة	SYSTRA SARIN SHAKIR

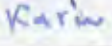
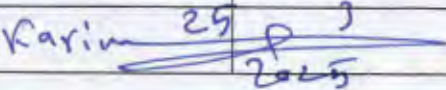
Contractor Company	Mohamed Abdallah 4 for constructions and roads paving			Designer Company	(KK) Engineering Consulting Office					
Issued by Contractor	Name	Sign	Date/Serial Number	Time						
	Eng. Mohamed moustafa		23/3/2025	3:00 PM						
	BAS-MA-SYS-FDT-F-96									
Received by GARB CONSULTANT	Eng. Sayed Saif	MIR	C1	C2	C3	DD	MM	YY	HH	MM
			335	EW	CS	24	3	25	3	0

CODE-1	S1 to S21	D1 to S3	Kp XXX Note
	Station Reference	Depot Reference	For Kilometer point only Start Km is used
CODE-2	Work Activity		
CODE-3	Sub Element of Activity		

Description of Materials	Fill Layer at level (-0.25 m) from Ferma Under Left Railway			
Location to be Used	From	335+060	TO	335+480
		17+607		18+027
MAR & UIR Approval No	BAS-MA-SYS-IR-F-96	Date	23/3/2025	
	BAS-MA-SYS-MAR-F-13			
Supplier Name	محاجر وادي النطرون - العلمين			
Test Requirement	F.D.T (ASTM D 1556)	Specification	EARTHWORK SPECIFICATIONS & TESTING REPORT (CG21-41.2) VERSION 2 BY CIVECON GROUP	
Reference Photos	No/Yes	Other		

Item	Description	Unit	Quantity	Arrival Date	Note
1	SAND CONE TEST	NUMBER	17	25/03/2025	
2					
3					
4					

Comments by: Eng. Sayed Saif (K.K)	Comments by:  (ER)
1-The Compaction Test Result F.D.T. (ASTM D 1556) is Approved.	1-F.D.T was carried- out by material engineer for both contractor and GARB Consultant 2-Results report attached and acceptable with project specifications. 3-Final approval is subject to above mentioned comments.

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng. Mohamed Moustafa			A
QA/QC *	Eng. Sayed Saif			A-w-c
SYSTRA Consultant	Eng. Hamouda Ali			
GARB**	Eng. Margret magdy			
Employers Representative	Eng. 		25/3/2025	A-w-c

Project	Electrical Express Train From Borg Alarab to Alamein		STATION REPRESENTED
SAMPLE Date	24/03/2025	FINAL DATE	25/03/2025
STAGE OF WORK :	Fill Layer at level (-0.25 m) from Ferma Under Left Railway		
Request NO.	BAS-MA-SYS-IR-F-96		

WORKSHEET FOR FIELD DENSITY TEST

BY SAND CONE METHOD ASTM D 1556

LAYER	Fill Layer at level (-0.25 m) from Ferma Under Left Railway								
DEPTH OF HOLE	cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm
SAMPLE No.	-	1	2	3	4	5	6	7	8
STATION	-	335+070	335+095	335+120	335+145	335+170	335+195	335+220	335+245
		17+617	17+642	17+667	17+692	17+717	17+742	17+767	17+792
CONTAINER No.	-	A-1	A-1	A-1	A-1	A-1	A-1	A-1	A-1
WEIGHT OF CAN	gms	29	30	33	32	30	33	29	30
WT. OF CAN+WET SOIL	gms	208	204	206	203	205	207	203	204
WT. OF CAN+DRY SOIL	gms	194	194	194	193	191	191	194	194
WT. OF WATER	gms	14.0	10.0	12.0	10.0	14.0	16.0	9.0	10.0
WT. OF DRY SOIL	gms	165.0	164.0	161.0	161.0	161.0	158.0	165.0	160.2
WATER CONTENT	%	8.5	6.1	7.5	6.2	8.7	10.1	5.5	6.2
WT. OF WET SOIL	gms	3777	3765	3792	3882	3768	3844	3828	3859
WT. OF INITIAL SAND+CONT.	gms	7828	7792	7751	7705	7711	7780	7809	7816
WT. OF RESIDUAL SAND + CONT.	gms	3765	3685	3699	3531	3754	3796	3745	3649
WT. OF SAND TO FILL CONE+HOLE	gms	4063	4107	4052	4174	3957	3984	4064	4167
WT. OF SAND TO FILL CONE	gms	1553	1553	1553	1553	1553	1553	1553	1553
WT. OF SAND TO FILL HOLE	gms	2510	2554	2499	2621	2404	2431	2511	2614
UNIT WT. OF SAND	gm/cc	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48
GROSS VOLUME OF HOLE	ccs	1695.9	1725.7	1688.5	1770.9	1624.3	1642.6	1696.6	1766.2
WET UNIT WT. OF SOIL	gm/cc	2.23	2.18	2.25	2.19	2.32	2.34	2.26	2.18
DRY UNIT WT. OF SOIL	gm/cc	2.05	2.06	2.09	2.06	2.13	2.13	2.14	2.06
MAX. DRY DENSITY	gm/cc	2.16	2.16	2.16	2.16	2.16	2.16	2.16	2.16
OPTIMUM MOISTURE CONTENT	%	7.20	7.20	7.20	7.20	7.20	7.20	7.20	7.20
COMPACTION	%	95.04	95.20	96.76	95.55	98.80	98.38	99.05	95.21
REQUIRED COMPACTION	%	95	95	95	95	95	95	95	95
REMARKS		PASSED	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED

Eng. / CONSULTANT

Eng. / CONTRACTOR

Project	Electrical Express Train From Borg Alarab to Alamein		STATION REPRESENTED
SAMPLE Date	24/03/2025	FINAL DATE	25/03/2025
STAGE OF WORK :	Fill Layer at level (-0.25 m) from Ferma Under Left Railway		
Request NO.	BAS-MA-SYS-IR-F-96		

WORKSHEET FOR FIELD DENSITY TEST

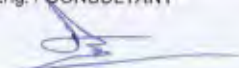
BY SAND CONE METHOD ASTM D 1556

LAYER	Fill Layer at level (-0.25 m) from Ferma Under Left Railway								
DEPTH OF HOLE	cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm

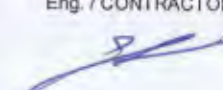
SAMPLE No.	-	9	10	11	12	13	14	15	16
STATION	-	335+270	335+295	335+320	335+345	335+370	335+395	335+420	335+445
		17+817	17+842	17+867	17+892	17+917	17+942	17+967	17+992
CONTAINER No.	-	A-1	A-1	A-1	A-1	A-1	A-1	A-1	A-1
WEIGHT OF CAN	gms	31	29	30	31	33	30	31	32
WT. OF CAN+WET SOIL	gms	203	208	203	203	203	205	203	207
WT. OF CAN+DRY SOIL	gms	192	190	190	194	194	190	190	190
WT. OF WATER	gms	11.0	18.0	13.0	9.0	9.0	15.0	13.0	17.0
WT. OF DRY SOIL	gms	161.0	161.0	160.0	163.0	161.0	160.0	163.0	160.2
WATER CONTENT	%	6.8	11.2	8.1	5.5	5.6	9.4	8.0	10.6

WT. OF WET SOIL	gms	3762	3788	3778	3822	3815	3881	3866	3855
WT. OF INITIAL SAND+CONT.	gms	7783	7713	7779	7867	7869	7742	7878	7738
WT. OF RESIDUAL SAND + CONT.	gms	3711	3782	3738	3715	3724	3663	3816	3736
WT. OF SAND TO FILL CONE+HOLE	gms	4072	3931	4041	4152	4145	4079	4062	4002
WT. OF SAND TO FILL CONE	gms	1553	1553	1553	1553	1553	1553	1553	1553
WT. OF SAND TO FILL HOLE	gms	2519	2378	2488	2599	2592	2526	2509	2449
UNIT WT. OF SAND	gm/cc	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48
GROSS VOLUME OF HOLE	ccs	1702.0	1606.8	1681.1	1756.1	1751.4	1706.8	1695.3	1654.7
WET UNIT WT. OF SOIL	gm/cc	2.21	2.36	2.25	2.18	2.18	2.27	2.28	2.33
DRY UNIT WT. OF SOIL	gm/cc	2.07	2.12	2.08	2.06	2.06	2.08	2.11	2.11
MAX. DRY DENSITY	gm/cc	2.16	2.16	2.16	2.16	2.16	2.16	2.16	2.16
OPTIMUM MOISTURE CONTENT	%	7.20	7.20	7.20	7.20	7.20	7.20	7.20	7.20
COMPACTION	%	95.78	98.17	96.23	95.49	95.51	96.25	97.78	97.51
REQUIRED COMPACTION	%	95	95	95	95	95	95	95	95
REMARKS		PASSED	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED

Eng. / CONSULTANT



Eng. / CONTRACTOR



Project	Electrical Express Train From Borg Alarab to Almarai		STATION REPRESENTED
SAMPLE Date	24/03/2025	FINAL DATE	25/03/2025
STAGE OF WORK :	Fill Layer at level (-0.25 m) from Ferma Under Left Railway		
Request NO.	BAS-MA-SYS-IR-F-96		

WORKSHEET FOR FIELD DENSITY TEST			
BY SAND CONE METHOD ASTM D 1558			
LAYER	Fill Layer at level (-0.25 m) from Ferma Under Left Railway		
DEPTH OF HOLE	cm	15 cm	

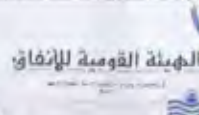
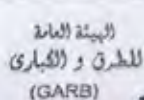
SAMPLE No.	-	17							
STATION	-	335+470							
		18+017							
CONTAINER No.	-	A-1							
WEIGHT OF CAN	gms	32							
WT. OF CAN+WET SOIL	gms	207							
WT. OF CAN+DRY SOIL	gms	190							
WT. OF WATER	gms	17.0							
WT. OF DRY SOIL	gms	158.0							
WATER CONTENT	%	10.8							

WT. OF WET SOIL	gms	3781							
WT. OF INITIAL SAND+CONT.	gms	7769							
WT. OF RESIDUAL SAND + CONT.	gms	3764							
WT. OF SAND TO FILL CONE+HOLE	gms	4005							
WT. OF SAND TO FILL CONE	gms	1553							
WT. OF SAND TO FILL HOLE	gms	2452							
UNIT WT. OF SAND	gm/cc	1.48							
GROSS VOLUME OF HOLE	ccs	1656.8							
WET UNIT WT. OF SOIL	gm/cc	2.28							
DRY UNIT WT. OF SOIL	gm/cc	2.06							
MAX. DRY DENSITY	gm/cc	2.16							
OPTIMUM MOISTURE CONTENT	%	7.20							
COMPACTION	%	95.39							
REQUIRED COMPACTION	%	95							
REMARKS		PASSED							

Eng. / CONSULTANT

Eng. / CONTRACTOR

MATERIAL INSPECTION REQUEST



Contractor Company	Mohamed Abdallah 4 for constructions and roads paving		Designer Company	(KK) Engineering Consulting Office							
Issued by Contractor	Name	Sign	Date/Serial Number	Time							
	Eng. Mohamed moustafa		17/02/2025	3:00 PM							
			BAS-MA-SYS-FDT-F-87								
Received by GARB CONSULTANT	Eng. Sayed Saif		MIR	C1	C2	C3	DD	MM	YY	HH	MM
				335	EW	CS	18	2	25	3	0

CODE-1	S1 to S21	D1 to S3	Kp XXX Note
CODE-2	Station Reference	Depot Reference	For Kilometer point only Start Km is used
CODE-3	Work Activity		
	Sub Element of Activity		

Description of Materials	Fill Layer at level (-1.5 m) from Ferma Under Left Railway			
Location to be Used	From	335+060	TO	335+220
		17+607		17+767
MAR & UIR Approval No	BAS-MA-SYS-IR-F-87	Date	17/02/2025	
	BAS-MA-SYS-MAR-F-11			
Supplier Name	محاجر وادي النطرون - العلمين			
Test Requirement	F.D.T (ASTM D 1556)	Specification	EARTHWORK SPECIFICATIONS & TESTING REPORT (CG21-41.2) VERSION 2 BY CIVECON GROUP	
Reference Photos	No/Yes	Other		

Item	Description	Unit	Quantity	Arrival Date	Note
1	SAND CONE TEST	NUMBER	7	18/02/2025	
2					
3					
4					

Comments by: Eng. Sayed Saif (K.K)	Comments by: Er : (ER)
1-The Compaction Test Result F.D.T. (ASTM D 1556) is Approved.	1-F.D.T was carried- out by material engineer for both contractor and GARB Consultant
	2-Results report attached and acceptable with project specifications.
	3-Final approval is subject to above mentioned comments.

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng. Mohamed Moustafa			A
QA/QC *	Eng. Sayed Saif			A
SYSTRA Consultant	Eng. Hamouda Ali			A
GARB**	Eng. Margret magdy			
Employers Representative	Eng. /		18/2/2025	A

Project	Electrical Express Train From Borg Alarab to Alamein		STATION REPRESENTED
SAMPLE Date	18/02/2025	FINAL DATE	18/02/2025
STAGE OF WORK :	Fill Layer at level (-1.5 m) from Ferma Under Left Railway		
Request NO.	BAS-MA-SYS-IR-F-87		

WORKSHEET FOR FIELD DENSITY TEST

BY SAND CONE METHOD ASTM D 1556

LAYER	Fill Layer at level (-1.5 m) from Ferma Under Left Railway							
DEPTH OF HOLE	cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm

SAMPLE No.	-	1	2	3	4	5	6	7
STATION	-	335+070	335+095	335+120	335+145	335+170	335+195	335+220
	-	17+617	17+642	17+667	17+692	17+717	17+742	17+767
CONTAINER No.	-	A-1	A-1	A-1	A-1	A-1	A-1	A-1
WEIGHT OF CAN	gms	31	33	30	31	33	33	31
WT. OF CAN+WET SOIL	gms	203	206	203	206	204	203	203
WT. OF CAN+DRY SOIL	gms	194	195	194	195	192	190	190
WT. OF WATER	gms	9.0	11.0	9.0	11.0	12.0	13.0	13.0
WT. OF DRY SOIL	gms	163.0	162.0	164.0	164.0	159.0	157.0	159.0
WATER CONTENT	%	5.5	6.8	5.5	6.7	7.5	8.3	8.2
WT. OF WET SOIL	gms	3785	3809	3803	3821	3779	3873	3722
WT. OF INITIAL SAND+CONT.	gms	7782	7768	7765	7856	7796	7737	7755
WT. OF RESIDUAL SAND + CONT.	gms	3709	3702	3615	3773	3705	3672	3791
WT. OF SAND TO FILL CONE+HOLE	gms	4073	4066	4150	4083	4091	4065	3964
WT. OF SAND TO FILL CONE	gms	1553	1553	1553	1553	1553	1553	1553
WT. OF SAND TO FILL HOLE	gms	2520	2513	2597	2530	2538	2512	2411
UNIT WT. OF SAND	gm/cc	1.47	1.47	1.47	1.47	1.47	1.47	1.47
GROSS VOLUME OF HOLE	ccs	1714.3	1709.5	1766.7	1721.1	1726.5	1708.8	1640.1
WET UNIT WT. OF SOIL	gm/cc	2.21	2.23	2.15	2.22	2.19	2.27	2.27
DRY UNIT WT. OF SOIL	gm/cc	2.09	2.09	2.04	2.08	2.04	2.09	2.10
MAX. DRY DENSITY	gm/cc	2.12	2.12	2.12	2.12	2.12	2.12	2.12
OPTIMUM MOISTURE CONTENT	%	7.75	7.75	7.75	7.75	7.75	7.75	7.75
COMPACTION	%	98.70	98.42	96.26	98.14	96.00	98.73	98.95
REQUIRED COMPACTION	%	95	95	95	95	95	95	95
REMARKS		PASSED	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED

Eng. / CONSULTANT

Eng. / CONTRACTOR

MATERIAL INSPECTION REQUEST



الهيئة العامة
للطرق والكباري
(GARB)



Contractor Company	Mohamed Abdallah 4 for constructions and roads paving		Designer Company	(KK) Engineering Consulting Office	
Issued by Contractor	Name	Sign	Date/Serial Number	Time	
	Eng. Mohamed moustafa		17/02/2025	3:00 PM	
			BAS-MA-SYS-FDT-F-88		
Received by GARB CONSULTANT	Eng. Sayed Saif		MIR	C1 335	C2 EW
				C3 CS	DD 18
				MM 2	YY 25
				HH 3	MM 0

CODE-1	S1 to S21	D1 to S3	Kp XXX Note
	Station Reference	Depot Reference	For Kilometer point only Start Km is used
CODE-2	Work Activity		
CODE-3	Sub Element of Activity		

Description of Materials	Fill Layer at level (-1.75 m) from Ferma Under Left Railway				
Location to be Used	From	335+220	TO	335+280	
		17+767		17+827	
MAR & UIR Approval No	BAS-MA-SYS-IR-F-88	Date	17/02/2025		
	BAS-MA-SYS-MAR-F-11				
Supplier Name	محاجر وادي النظرون - العلمين				
Test Requirement	F.D.T (ASTM D 1556)	Specification	EARTHWORK SPECIFICATIONS & TESTING REPORT (CG21-41.2) VERSION 2 BY CIVECON GROUP		
Reference Photos	No/Yes	Other			
Item	Description	Unit	Quantity	Arrival Date	Note
1	SAND CONE TEST	NUMBER	3	18/02/2025	
2					
3					
4					

Comments by: Eng. Sayed Saif (K.K)	Comments by: Eng. (ER)
1-The Compaction Test Result F.D.T. (ASTM D 1556) is Approved.	1-F.D.T was carried- out by material engineer for both contractor and GARB Consultant 2-Results report attached and acceptable with project specifications. 3-Final approval is subject to above mentioned comments.

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng. Mohamed Moustafa			A
QA/QC *	Eng. Sayed Saif			A
SYSTRA Consultant	Eng. Hamouda Ali			A
GARB**	Eng. Margret magdy			
Employers Representative	Eng.		18/2/25	A

Project	Electrical Express Train From Borg Alarab to Alamein		STATION REPRESENTED
SAMPLE Date	18/02/2025	FINAL DATE	18/02/2025
STAGE OF WORK :	Fill Layer at level (-1.75 m) from Ferma Under Left Railway		
Request NO.	BAS-MA-SYS-IR-F-88		

WORKSHEET FOR FIELD DENSITY TEST

BY SAND CONE METHOD ASTM D 1556

LAYER	Fill Layer at level (-1.75 m) from Ferma Under Left Railway							
DEPTH OF HOLE	cm	15 cm	15 cm	15 cm				

SAMPLE No.	-	1	2	3				
STATION	-	335+230	335+255	335+280				
		17+777	17+802	17+827				
CONTAINER No.	-	A-1	A-1	A-1				
WEIGHT OF CAN	gms	31	33	31				
WT. OF CAN+WET SOIL	gms	204	207	204				
WT. OF CAN+DRY SOIL	gms	190	194	194				
WT. OF WATER	gms	14.0	13.0	10.0				
WT. OF DRY SOIL	gms	159.0	161.0	163.0				
WATER CONTENT	%	8.8	8.1	6.1				

WT. OF WET SOIL	gms	3871	3728	3792				
WT. OF INITIAL SAND+CONT.	gms	7848	7760	7967				
WT. OF RESIDUAL SAND + CONT.	gms	3795	3756	3808				
WT. OF SAND TO FILL CONE+HOLE	gms	4053	4004	4159				
WT. OF SAND TO FILL CONE	gms	1553	1553	1553				
WT. OF SAND TO FILL HOLE	gms	2500	2451	2606				
UNIT WT. OF SAND	gm/cc	1.47	1.47	1.47				
GROSS VOLUME OF HOLE	ccs	1700.7	1667.3	1772.8				
WET UNIT WT. OF SOIL	gm/cc	2.28	2.24	2.14				
DRY UNIT WT. OF SOIL	gm/cc	2.09	2.07	2.02				
MAX. DRY DENSITY	gm/cc	2.12	2.12	2.12				
OPTIMUM MOISTURE CONTENT	%	7.75	7.75	7.75				
COMPACTION	%	98.68	97.59	95.06				
REQUIRED COMPACTION	%	95	95	95				
REMARKS		PASSED	PASSED	PASSED				

Eng. / CONSULTANT

Eng. / CONTRACTOR

MATERIAL INSPECTION REQUEST



الهيئة العامة
للطرق والكباري
(GARB)



Contractor Company	Mohamed Abdallah 4 for constructions and roads paving			Designer Company				(KK) Engineering Consulting Office				
Issued by Contractor	Name	Sign		Date/Serial Number				Time				
	Eng. Mohamed moustafa			25/02/2025				3:00 PM				
				BAS-MA-SYS-FDT-F-89								
Received by GARB CONSULTANT	Eng. Sayed Saif			MIR	C1	C2	C3	DD	MM	YY	HH	MM
					335	EW	CS	26	2	25	3	0

CODE-1	S1 to S21	D1 to S3	Kp XXX Note
	Station Reference	Depot Reference	For Kilometer point only Start Km is used
CODE-2	Work Activity		
CODE-3	Sub Element of Activity		

Description of Materials		Fill Layer at level (-1.5 m) from Ferma Under Left Railway				
Location to be Used		From	335+220	TO	335+480	
			17+767		18+027	
MAR & UIR Approval No		BAS-MA-SYS-IR-F-89	Date		25/02/2025	
		BAS-MA-SYS-MAR-F-12				
Supplier Name		محاجر وادي النطرون - العلمين				
Test Requirement		F.D.T(ASTM D 1556)		Specification	EARTHWORK SPECIFICATIONS & TESTING REPORT (CG21-41.2) VERSION 2 BY CIVECON GROUP	
Reference Photos		No/Yes		Other		
Item	Description		Unit	Quantity	Arrival Date	Note
1	SAND CONE TEST		NUMBER	11	27/02/2025	
2						
3						
4						

Comments by: Eng. Sayed Saif (K.K.)	Comments by: Eng. Karim (ER)
1-The Compaction Test Result F.D.T. (ASTM D 1556) is Approved.	1-F.D.T was carried- out by material engineer for both contractor and GARB Consultant 2-Results report attached and acceptable with project specifications. 3-Final approval is subject to above mentioned comments.

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng. Mohamed Moustafa			A
QA/QC *	Eng. Sayed Saif			A
SYSTRA Consultant	Eng. Hamouda Ali			A
GARB**	Eng. Margret magdy			
Employers Representative	Eng. Karim		27/2/2025	A

Project	Electrical Express Train From Borg Alarab to Alamein		STATION REPRESENTED
SAMPLE Date	26/02/2025	FINAL DATE	27/02/2025
STAGE OF WORK :	Fill Layer at level (-1.5 m) from Ferma Under Left Railway		
Request NO.	BAS-MA-SYS-IR-F-89		

WORKSHEET FOR FIELD DENSITY TEST

BY SAND CONE METHOD ASTM D 1556

LAYER	Fill Layer at level (-1.5 m) from Ferma Under Left Railway								
DEPTH OF HOLE	cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm

SAMPLE No.	-	1	2	3	4	5	6	7	8
STATION	-	335+230	335+255	335+280	335+305	335+330	335+355	335+380	335+405
	-	17+777	17+802	17+827	17+852	17+877	17+902	17+927	17+952
CONTAINER No.	-	A-1	A-1	A-1	A-1	A-1	A-1	A-1	A-1
WEIGHT OF CAN	gms	33	32	33	31	33	32	32	29
WT. OF CAN+WET SOIL	gms	204	205	204	203	207	206	206	208
WT. OF CAN+DRY SOIL	gms	193	193	190	191	194	191	192	190
WT. OF WATER	gms	11.0	12.0	14.0	12.0	13.0	15.0	14.0	18.0
WT. OF DRY SOIL	gms	160.0	161.0	157.0	160.0	161.0	159.0	160.0	161.0
WATER CONTENT	%	6.9	7.5	8.9	7.5	8.1	9.4	8.8	11.2

WT. OF WET SOIL	gms	3778	3807	3865	3773	3855	3756	3800	3774
WT. OF INITIAL SAND+CONT.	gms	7848	7745	7756	7776	7797	7716	7747	7744
WT. OF RESIDUAL SAND + CONT.	gms	3819	3682	3712	3774	3693	3762	3758	3792
WT. OF SAND TO FILL CONE+HOLE	gms	4029	4063	4044	4002	4104	3954	3989	3952
WT. OF SAND TO FILL CONE	gms	1553	1553	1553	1553	1553	1553	1553	1553
WT. OF SAND TO FILL HOLE	gms	2476	2510	2491	2449	2551	2401	2436	2399
UNIT WT. OF SAND	gm/cc	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48
GROSS VOLUME OF HOLE	ccs	1673.0	1695.9	1683.1	1654.7	1723.6	1622.3	1645.9	1620.9
WET UNIT WT. OF SOIL	gm/cc	2.26	2.24	2.30	2.28	2.24	2.32	2.31	2.33
DRY UNIT WT. OF SOIL	gm/cc	2.11	2.09	2.11	2.12	2.07	2.12	2.12	2.09
MAX. DRY DENSITY	gm/cc	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15
OPTIMUM MOISTURE CONTENT	%	7.10	7.10	7.10	7.10	7.10	7.10	7.10	7.10
COMPACTION	%	98.28	97.17	98.06	98.65	96.25	98.40	98.74	97.40
REQUIRED COMPACTION	%	95	95	95	95	95	95	95	95
REMARKS		PASSED	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED

Eng. / CONSULTANT

Eng. / CONTRACTOR

Project	Electrical Express Train From Borg Alarab to Alamein		STATION REPRESENTED
SAMPLE Date	26/02/2025	FINAL DATE	27/02/2025
STAGE OF WORK :	Fill Layer at level (-1.5 m) from Ferma Under Left Railway		
Request NO.	BAS-MA-SYS-IR-F-89		

WORKSHEET FOR FIELD DENSITY TEST

BY SAND CONE METHOD ASTM D 1556

LAYER	Fill Layer at level (-1.5 m) from Ferma Under Left Railway							
DEPTH OF HOLE	cm	15 cm	15 cm	15 cm				

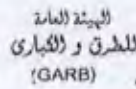
SAMPLE No.	-	9	10	11				
STATION	-	335+430	335+455	335+480				
		17+777	17+802	17+827				
CONTAINER No.	-	A-1	A-1	A-1				
WEIGHT OF CAN	gms	33	30	29				
WT. OF CAN+WET SOIL	gms	205	204	206				
WT. OF CAN+DRY SOIL	gms	192	191	190				
WT. OF WATER	gms	13.0	13.0	16.0				
WT. OF DRY SOIL	gms	159.0	161.0	161.0				
WATER CONTENT	%	8.2	8.1	9.9				

WT. OF WET SOIL	gms	3773	3874	3894				
WT. OF INITIAL SAND+CONT.	gms	7764	7789	7818				
WT. OF RESIDUAL SAND + CONT.	gms	3764	3682	3767				
WT. OF SAND TO FILL CONE+HOLE	gms	4000	4107	4051				
WT. OF SAND TO FILL CONE	gms	1553	1553	1553				
WT. OF SAND TO FILL HOLE	gms	2447	2554	2498				
UNIT WT. OF SAND	gm/cc	1.48	1.48	1.48				
GROSS VOLUME OF HOLE	ccs	1653.4	1725.7	1687.8				
WET UNIT WT. OF SOIL	gm/cc	2.28	2.24	2.31				
DRY UNIT WT. OF SOIL	gm/cc	2.11	2.08	2.10				
MAX. DRY DENSITY	gm/cc	2.15	2.15	2.15				
OPTIMUM MOISTURE CONTENT	%	7.10	7.10	7.10				
COMPACTION	%	98.12	96.61	97.61				
REQUIRED COMPACTION	%	95	95	95				
REMARKS		PASSED	PASSED	PASSED				

Eng. / CONSULTANT

Eng. / CONTRACTOR

MATERIAL INSPECTION REQUEST



Contractor Company	Mohamed Abdallah 4 for constructions and roads paving		Designer Company	(KK) Engineering Consulting Office							
Issued by Contractor	Name	Sign	Date/Serial Number	Time							
	Eng. Mohamed moustafa		26/02/2025	3:00 PM							
			BAS-MA-SYS-FDT-F-90								
Received by GARB CONSULTANT	Eng. Sayed Saif		MIR	C1	C2	C3	DD	MM	YY	HH	MM
				335	EW	CS	27	2	25	3	0

CODE-1	S1 to S21	D1 to S3	Kp XXX Note
	Station Reference	Depot Reference	For Kilometer point only Start Km is used
CODE-2	Work Activity		
CODE-3	Sub Element of Activity		

Description of Materials	Fill Layer at level (-1.25 m) from Ferma Under Left Railway				
Location to be Used	From	335+060	TO	335+220	
		17+607		17+767	
MAR & UIR Approval No	BAS-MA-SYS-IR-F-90	Date	26/02/2025		
	BAS-MA-SYS-MAR-F-12				
Supplier Name	محاجر وادي التطرون - العلمين				
Test Requirement	F.D.T (ASTM D 1556)	Specification	EARTHWORK SPECIFICATIONS & TESTING REPORT (CG21-41.2) VERSION 2 BY CIVECON GROUP		
Reference Photos	No/Yes	Other			

Item	Description	Unit	Quantity	Arrival Date	Note
1	SAND CONE TEST	NUMBER	7	28/02/2025	
2					
3					
4					

Comments by: Eng. Sayed Saif (K.K)	Comments by: (ER)
1-The Compaction Test Result F.D.T. (ASTM D 1556) is Approved.	1-F.D.T was carried-out by material engineer for both contractor and GARB Consultant 2-Results report attached and acceptable with project specifications. 3-Final approval is subject to above mentioned comments.

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng. Mohamed Moustafa			A
QA/QC *	Eng. Sayed Saif			A
SYSTRA Consultant	Eng. Hamouda Ali			A
GARB**	Eng. Margret magdy			
Employers Representative	Eng.			A

Project	Electrical Express Train From Borg Alarab to Alamein		STATION REPRESENTED
SAMPLE Date	27/02/2025	FINAL DATE	28/02/2025
STAGE OF WORK :	Fill Layer at level (-1.25 m) from Ferma Under Left Railway		
Request NO.	BAS-MA-SYS-IR-F-90		

WORKSHEET FOR FIELD DENSITY TEST

BY SAND CONE METHOD ASTM D 1556

LAYER	Fill Layer at level (-1.25 m) from Ferma Under Left Railway							
DEPTH OF HOLE	cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm

SAMPLE No.	-	1	2	3	4	5	6	7
STATION	-	335+070	335+095	335+120	335+145	335+170	335+195	335+220
		17+617	17+642	17+667	17+692	17+717	17+742	17+767
CONTAINER No.	-	A-1	A-1	A-1	A-1	A-1	A-1	A-1
WEIGHT OF CAN	gms	32	30	31	32	30	33	32
WT. OF CAN+WET SOIL	gms	206	205	206	205	206	207	207
WT. OF CAN+DRY SOIL	gms	192	194	193	193	193	195	195
WT. OF WATER	gms	14.0	11.0	13.0	12.0	13.0	12.0	12.0
WT. OF DRY SOIL	gms	160.0	164.0	162.0	161.0	163.0	162.0	163.0
WATER CONTENT	%	8.8	6.7	8.0	7.5	8.0	7.4	7.4

WT. OF WET SOIL	gms	3782	3859	3806	3848	3796	3840	3886
WT. OF INITIAL SAND+CONT.	gms	7714	7948	7745	7817	7734	7923	7877
WT. OF RESIDUAL SAND + CONT.	gms	3693	3793	3683	3701	3728	3831	3798
WT. OF SAND TO FILL CONE+HOLE	gms	4021	4155	4062	4116	4006	4092	4079
WT. OF SAND TO FILL CONE	gms	1553	1553	1553	1553	1553	1553	1553
WT. OF SAND TO FILL HOLE	gms	2468	2602	2509	2563	2453	2539	2526
UNIT WT. OF SAND	gm/cc	1.48	1.48	1.48	1.48	1.48	1.48	1.48
GROSS VOLUME OF HOLE	ccs	1667.6	1758.1	1695.3	1731.8	1657.4	1715.5	1706.8
WET UNIT WT. OF SOIL	gm/cc	2.27	2.19	2.25	2.22	2.29	2.24	2.28
DRY UNIT WT. OF SOIL	gm/cc	2.09	2.06	2.08	2.07	2.12	2.08	2.12
MAX. DRY DENSITY	gm/cc	2.15	2.15	2.15	2.15	2.15	2.15	2.15
OPTIMUM MOISTURE CONTENT	%	7.10	7.10	7.10	7.10	7.10	7.10	7.10
COMPACTION	%	97.00	95.67	96.66	96.18	98.66	96.93	98.64
REQUIRED COMPACTION	%	95	95	95	95	95	95	95
REMARKS		PASSED	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED

Eng. / CONSULTANT

Eng. / CONTRACTOR

MATERIAL INSPECTION REQUEST								

Contractor Company	Mohamed Abdallah 4 for constructions and roads paving			Designer Company	(KK) Engineering Consulting Office																
Issued by Contractor	Name	Sign		Date/Serial Number	Time																
	Eng. Mohamed moustafa			2 / 3 / 2025 BAS-MA-SYS-FDT-F-91	3:00 PM																
Received by GARB CONSULTANT	Eng.		MIR	<table border="1"> <tr> <td>01</td> <td>02</td> <td>03</td> <td>DD</td> <td>MM</td> <td>YY</td> <td>HH</td> <td>MM</td> </tr> <tr> <td>335</td> <td>EW</td> <td>CS</td> <td>3</td> <td>3</td> <td>25</td> <td>3</td> <td>0</td> </tr> </table>	01	02	03	DD	MM	YY	HH	MM	335	EW	CS	3	3	25	3	0	
01	02	03	DD	MM	YY	HH	MM														
335	EW	CS	3	3	25	3	0														

CODE-1	S1 to S21	D1 to S3	Kp XXX Note
	Station Reference	Depot Reference	For Kilometer point only Start Km is used
CODE-2	Work Activity		
CODE-3	Sub Element of Activity		

Description of Materials	Fill Layer at level (-1.25 m) from Ferma Under Left Railway				
Location to be Used	From	335+220	TO	335+480	
		17+767		18+027	
MAR & UIR Approval No	BAS-MA-SYS-IR-F-91	Date	2 / 3 / 2025		
	BAS-MA-SYS-MAR-F-12				
Supplier Name	محاجر وادي النظرون - العلمين				
Test Requirement	F.D.T(ASTM D 1556)	Specification	EARTHWORK SPECIFICATIONS & TESTING REPORT (CG21-41.2) VERSION 2 BY CIVECON GROUP		
Reference Photos	No/Yes	Other			
Item	Description	Unit	Quantity	Arrival Date	Note
1	SAND CONE TEST	NUMBER	11	04/03/2025	
2					
3					
4					

Comments by: Eng. Sayed Saif (K.K)	Comments by: Eng. Kareem Mostafa (ER)
1-The Compaction Test Result F.D.T. (ASTM D 1556) is Approved.	1-F.D.T was carried- out by material engineer for both contractor and GARB Consultant 2-Results report attached and acceptable with project specifications. 3-Final approval is subject to above mentioned comments.

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng. Mohamed moustafa			A
QA/QC *	Eng. Sayed Saif			A
Systra Consultant	Eng. Hamouda Ali			A
GARB**	Eng. Margret magdy			
Employers Representative	Eng. Kareem Mostafa			A

Project	Electrical Express Train From Borg Alarab to Alamein		STATION REPRESENTED
SAMPLE Date	03/03/2025	FINAL DATE	04/03/2025
STAGE OF WORK :	Fill Layer at level (-1.25 m) from Ferma Under Left Railway		
Request NO.	BAS-MA-SYS-IR-F-91		

WORKSHEET FOR FIELD DENSITY TEST

BY SAND CONE METHOD ASTM D 1556

LAYER	Fill Layer at level (-1.25 m) from Ferma Under Left Railway								
DEPTH OF HOLE	cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm

SAMPLE No.	-	1	2	3	4	5	6	7	8
STATION	-	335+225	335+250	335+275	335+300	335+325	335+350	335+375	335+400
	-	17+772	17+797	17+822	17+847	17+872	17+897	17+922	17+947
CONTAINER No.	-	A-1	A-1	A-1	A-1	A-1	A-1	A-1	A-1
WEIGHT OF CAN	gms	33	31	33	29	32	33	29	30
WT. OF CAN+WET SOIL	gms	207.0	206.0	205.0	205.0	203.0	208.0	208.0	207.0
WT. OF CAN+DRY SOIL	gms	193.0	195.0	191.0	191.0	195.0	193.0	195.0	194.0
WT. OF WATER	gms	14.0	11.0	14.0	14.0	8.0	15.0	13.0	13.0
WT. OF DRY SOIL	gms	160.0	164.0	158.0	162.0	163.0	160.0	166.0	164.0
WATER CONTENT	%	8.8	6.7	8.9	8.6	4.9	9.4	7.8	7.9

WT. OF WET SOIL	gms	3784	3784	3832	3814	3834	3850	3779	3787
WT. OF INITIAL SAND+CONT.	gms	7714	7751	7747	7891	7887	7812	7782	7777
WT. OF RESIDUAL SAND + CONT.	gms	3662	3722	3724	3837	3728	3738	3804	3743
WT. OF SAND TO FILL CONE+HOLE	gms	4052	4029	4023	4054	4159	4074	3978	4034
WT. OF SAND TO FILL CONE	gms	1553	1553	1553	1553	1553	1553	1553	1553
WT. OF SAND TO FILL HOLE	gms	2499	2476	2470	2501	2606	2521	2425	2481
UNIT WT. OF SAND	gm/cc	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48
GROSS VOLUME OF HOLE	ccs	1688.5	1673.0	1668.9	1689.9	1760.8	1703.4	1638.5	1676.4
WET UNIT WT. OF SOIL	gm/cc	2.24	2.26	2.30	2.26	2.18	2.26	2.31	2.26
DRY UNIT WT. OF SOIL	gm/cc	2.06	2.12	2.11	2.08	2.08	2.07	2.14	2.09
MAX. DRY DENSITY	gm/cc	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15
OPTIMUM MOISTURE CONTENT	%	7.10	7.10	7.10	7.10	7.10	7.10	7.10	7.10
COMPACTION	%	95.85	98.59	98.10	96.63	96.54	96.12	99.48	97.36
REQUIRED COMPACTION	%	95	95	95	95	95	95	95	95
REMARKS		PASSED	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED

Eng. / CONSULTANT

Eng. / CONTRACTOR

Project	Electrical Express Train From Borg Alarab to Alamein		STATION REPRESENTED
SAMPLE Date	03/03/2025	FINAL DATE	04/03/2025
STAGE OF WORK :	Fill Layer at level (-1.25 m) from Ferma Under Left Railway		
Request NO.	BAS-MA-SYS-IR-F-91		

WORKSHEET FOR FIELD DENSITY TEST

BY SAND CONE METHOD ASTM D 1556

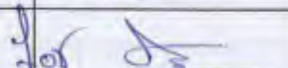
LAYER	Fill Layer at level (-1.25 m) from Ferma Under Left Railway							
DEPTH OF HOLE	cm	15 cm	15 cm	15 cm				

SAMPLE No.	-	9	10	11				
STATION	-	335+425	335+450	335+475				
	-	17+972	17+997	18+022				
CONTAINER No.	-	A-1	A-1	A-1				
WEIGHT OF CAN	gms	32	31	32				
WT. OF CAN+WET SOIL	gms	203.0	204.0	204.0				
WT. OF CAN+DRY SOIL	gms	190.0	191.0	193.0				
WT. OF WATER	gms	13.0	13.0	11.0				
WT. OF DRY SOIL	gms	158.0	160.0	161.0				
WATER CONTENT	%	8.2	8.1	6.8				

WT. OF WET SOIL	gms	3871	3836	3843				
WT. OF INITIAL SAND+CONT.	gms	7860	7736	7888				
WT. OF RESIDUAL SAND + CONT.	gms	3761	3664	3801				
WT. OF SAND TO FILL CONE+HOLE	gms	4099	4072	4087				
WT. OF SAND TO FILL CONE	gms	1553	1553	1553				
WT. OF SAND TO FILL HOLE	gms	2546	2519	2534				
UNIT WT. OF SAND	gm/cc	1.48	1.48	1.48				
GROSS VOLUME OF HOLE	ccs	1720.3	1702.0	1712.2				
WET UNIT WT. OF SOIL	gm/cc	2.25	2.25	2.24				
DRY UNIT WT. OF SOIL	gm/cc	2.08	2.08	2.10				
MAX. DRY DENSITY	gm/cc	2.15	2.15	2.15				
OPTIMUM MOISTURE CONTENT	%	7.10	7.10	7.10				
COMPACTION	%	96.71	96.95	97.72				
REQUIRED COMPACTION	%	95	95	95				
REMARKS		PASSED	PASSED	PASSED				

Eng. / CONSULTANT

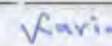
Eng. / CONTRACTOR

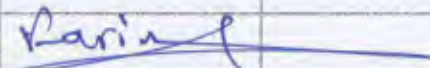
Contractor Company	Mohamed Abdallah 4 for constructions and roads paving		Designer Company	(KK) Engineering Consulting Office																	
Issued by Contractor	Name	Sign	Date/Serial Number	Time																	
	Eng. Mohamed moustafa		04/03/2025	3:00 PM																	
			BAS-MA-SYS-FDT-F-92																		
Received by GARB CONSULTANT	Eng. Sayed Saif		MIR	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>C1</td><td>C2</td><td>C3</td><td>DD</td><td>MM</td><td>YY</td><td>HH</td><td>MM</td></tr> <tr> <td>335</td><td>EW</td><td>CS</td><td>5</td><td>3</td><td>25</td><td>3</td><td>0</td></tr> </table>	C1	C2	C3	DD	MM	YY	HH	MM	335	EW	CS	5	3	25	3	0	
C1	C2	C3	DD	MM	YY	HH	MM														
335	EW	CS	5	3	25	3	0														

CODE-1	S1 to S21	D1 to S3	Kp XXX Note
	Station Reference	Depot Reference	For Kilometer point only Start Km is used
CODE-2	Work Activity		
CODE-3	Sub Element of Activity		

Description of Materials	Fill Layer at level (-1 m) from Ferma Under Left Railway			
Location to be Used	From	335+060	TO	335+220
		17+607		17+767
MAR & UIR Approval No	BAS-MA-SYS-IR-F-92	Date	04/03/2025	
	BAS-MA-SYS-MAR-F-12			
Supplier Name	محاجر وادي النطرون - العلمين			
Test Requirement	F.D.T (ASTM D 1556)	Specification	EARTHWORK SPECIFICATIONS & TESTING REPORT (CG21-41.2) VERSION 2 BY CIVECON GROUP	
Reference Photos	No/Yes	Other		

Item	Description	Unit	Quantity	Arrival Date	Note
1	SAND CONE TEST	NUMBER	7	06/03/2025	
2					
3					
4					

Comments by: Eng. Sayed Saif (K.K)	Comments by  (ER)
1-The Compaction Test Result F.D.T. (ASTM D 1556) is Approved.	1-F.D.T was carried- out by material engineer for both contractor and GARB Consultant 2-Results report attached and acceptable with project specifications. 3-Final approval is subject to above mentioned comments.

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng. Mohamed Moustafa			A
QA/QC *	Eng. Sayed Saif			A
SYSTRA Consultant	Eng. Hamouda Ali			A
GARB**	Eng. Margret magdy			
Employers Representative	Eng. Karin			A

Project	Electrical Express Train From Borg Alarab to Alamein		STATION REPRESENTED
SAMPLE Date	05/03/2025	FINAL DATE	06/03/2025
STAGE OF WORK :	Fill Layer at level (-1 m) from Ferma Under Left Railway		
Request NO.	BAS-MA-SYS-IR-F-92		

WORKSHEET FOR FIELD DENSITY TEST

BY SAND CONE METHOD ASTM D 1556

LAYER	Fill Layer at level (-1 m) from Ferma Under Left Railway							
DEPTH OF HOLE	cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm

SAMPLE No.	-	1	2	3	4	5	6	7	
STATION	-	335+070	335+095	335+120	335+145	335+170	335+195	335+220	
	-	17+617	17+642	17+667	17+692	17+717	17+742	17+767	
CONTAINER No.	-	A-1	A-1	A-1	A-1	A-1	A-1	A-1	
WEIGHT OF CAN	gms	33	33	32	31	31	31	29	
WT. OF CAN+WET SOIL	gms	205	205	205	203	207	205	203	
WT. OF CAN+DRY SOIL	gms	192	191	193	190	193	192	193	
WT. OF WATER	gms	13.0	14.0	12.0	13.0	14.0	13.0	10.0	
WT. OF DRY SOIL	gms	159.0	158.0	161.0	159.0	162.0	161.0	164.0	
WATER CONTENT	%	8.2	8.9	7.5	8.2	8.6	8.1	6.1	

WT. OF WET SOIL	gms	3765	3785	3871	3783	3883	3748	3865	
WT. OF INITIAL SAND+CONT.	gms	7783	7791	7837	7766	7848	7741	7722	
WT. OF RESIDUAL SAND + CONT.	gms	3765	3735	3695	3736	3726	3733	3641	
WT. OF SAND TO FILL CONE+HOLE	gms	4018	4056	4142	4030	4122	4008	4081	
WT. OF SAND TO FILL CONE	gms	1553	1553	1553	1553	1553	1553	1553	
WT. OF SAND TO FILL HOLE	gms	2465	2503	2589	2477	2569	2455	2528	
UNIT WT. OF SAND	gm/cc	1.48	1.48	1.48	1.48	1.48	1.48	1.48	
GROSS VOLUME OF HOLE	ccs	1665.5	1691.2	1749.3	1673.6	1735.8	1658.8	1708.1	
WET UNIT WT. OF SOIL	gm/cc	2.26	2.24	2.21	2.26	2.24	2.26	2.26	
DRY UNIT WT. OF SOIL	gm/cc	2.09	2.06	2.06	2.09	2.06	2.09	2.13	
MAX. DRY DENSITY	gm/cc	2.15	2.15	2.15	2.15	2.15	2.15	2.15	
OPTIMUM MOISTURE CONTENT	%	7.10	7.10	7.10	7.10	7.10	7.10	7.10	
COMPACTION	%	97.19	95.62	95.78	97.19	95.77	97.24	99.20	
REQUIRED COMPACTION	%	95	95	95	95	95	95	95	
REMARKS		PASSED	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED	

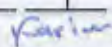
Eng. / CONSULTANT

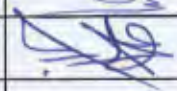
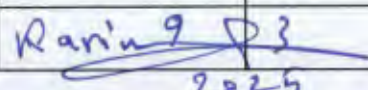
Eng. / CONTRACTOR

MATERIAL INSPECTION REQUEST					
	ENGINEERING CONSULTING OFFICE المكتب الاستشاري الهندسي أ.م. خالد عبدويل	محمد عبد الله للانشآت ورصف الطرقات	الهيئة العامة للطرق والكباري (GARB)	الهيئة القومية للإسكان وزارة النقل	SYSTRA

Contractor Company	Mohamed Abdallah 4 for constructions and roads paving		Designer Company	(KK) Engineering Consulting Office							
Issued by Contractor	Name	Sign	Date/Serial Number	Time							
	Eng. Mohamed moustafa		8/3/2025	3:00 PM							
			BAS-MA-SYS-FDT-F-93								
Received by GARB CONSULTANT	Eng. Sayed Salf		MIR	C1 335	C2 EW	C3 CS	D0 9	MM 3	YY 25	HH 3	MM 0

CODE-1 CODE-2 CODE-3	S1 to S21	D1 to S3	Kp XXX Note
	Station Reference	Depot Reference	For Kilometer point only Start Km is used
	Work Activity		
Sub Element of Activity			

Description of Materials	Fill Layer at level (-1 m) from Ferma Under Left Railway				
Location to be Used	From	335+220	TO	335+480	
		17+767		18+027	
MAR & UIR Approval No	BAS-MA-SYS-IR-F-93		Date	8/3/2025	
	AS-MA-SYS-MAR-F-12				
Supplier Name	محاجر وادي النطرون - العلمين				
Test Requirement	F.D.T (ASTM D 1556)		Specification	EARTHWORK SPECIFICATIONS & TESTING REPORT (CG21-41.2) VERSION 2 BY CIVECON GROUP	
Reference Photos	No/Yes		Other		
Item	Description	Unit	Quantity	Arrival Date	Note
1	SAND CONE TEST	NUMBER	11	10/03/2025	
2					
3					
4					
Comments by: Eng. Sayed Salf (K.K)			Comments by: Eng.  (ER)		
1-The Compaction Test Result F.D.T. (ASTM D 1556) is Approved.			1-F.D.T was carried- out by material engineer for both contractor and GARB Consultant 2-Results report attached and acceptable with project specifications. 3-Final approval is subject to above mentioned comments.		

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng. Mohamed Moustafa			A
QA/QC *	Eng. Sayed Salf			A
SYSTRA Consultant	Eng. Hamouda Ali			A
GARB**	Eng. Margret magdy			
Employers Representative	Eng. 		2025	A

Project	Electrical Express Train From Borg Alarab to Alamein		STATION REPRESENTED
SAMPLE Date	09/03/2025	FINAL DATE	10/03/2025
STAGE OF WORK :	Fill Layer at level (-1 m) from Ferma Under Left Railway		
Request NO.	BAS-MA-SYS-IR-F-93		

WORKSHEET FOR FIELD DENSITY TEST

BY SAND CONE METHOD ASTM D 1556

LAYER	Fill Layer at level (-1 m) from Ferma Under Left Railway								
DEPTH OF HOLE	cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm

SAMPLE No.	-	1	2	3	4	5	6	7	8
STATION	-	335+230	335+255	335+280	335+305	335+330	335+355	335+380	335+405
	-	17+117	17+802	17+827	17+852	17+877	17+902	17+927	17+952
CONTAINER No.	-	A-1	A-1	A-1	A-1	A-1	A-1	A-1	A-1
WEIGHT OF CAN	gms	29	32	29	31	32	29	30	30
WT. OF CAN+WET SOIL	gms	205	206	204	207	207	204	204	207
WT. OF CAN+DRY SOIL	gms	190	192	195	191	192	191	193	192
WT. OF WATER	gms	15.0	14.0	9.0	16.0	15.0	13.0	11.0	15.0
WT. OF DRY SOIL	gms	161.0	160.0	166.0	160.0	160.0	162.0	163.0	160.2
WATER CONTENT	%	9.3	8.8	5.4	10.0	9.4	8.0	6.7	9.4

WT. OF WET SOIL	gms	3854	3887	3845	3896	3764	3763	3845	3868
WT. OF INITIAL SAND+CONT.	gms	7868	7888	7971	7722	7846	7726	7728	7718
WT. OF RESIDUAL SAND + CONT.	gms	3823	3792	3845	3700	3843	3749	3646	3629
WT. OF SAND TO FILL CONE+HOLE	gms	4045	4096	4126	4022	4003	3977	4082	4089
WT. OF SAND TO FILL CONE	gms	1553	1553	1553	1553	1553	1553	1553	1553
WT. OF SAND TO FILL HOLE	gms	2492	2543	2573	2469	2450	2424	2529	2536
UNIT WT. OF SAND	gm/cc	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48
GROSS VOLUME OF HOLE	ccs	1683.8	1718.2	1738.5	1668.2	1655.4	1637.8	1708.8	1713.5
WET UNIT WT. OF SOIL	gm/cc	2.29	2.26	2.21	2.34	2.27	2.30	2.25	2.26
DRY UNIT WT. OF SOIL	gm/cc	2.0	2.08	2.10	2.12	2.08	2.13	2.11	2.06
MAX. DRY DENSITY	gm/cc	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15
OPTIMUM MOISTURE CONTENT	%	7.10	7.10	7.10	7.10	7.10	7.10	7.10	7.1
COMPACTION	%	97.39	96.75	97.58	98.75	96.69	98.92	98.04	96.00
REQUIRED COMPACTION	%	95	95	95	95	95	95	95	95
REMARKS		PASSED	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED

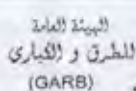
Eng. / CONSULTANT

Eng. / CONTRACTOR

WT. OF WET SOIL	gms	3849	3755	3838
WT. OF INITIAL SAND+CONT.	gms	7812	7824	7900
WT. OF RESIDUAL SAND + CONT.	gms	3772	3836	3768
WT. OF SAND TO FILL CONE+HOLE	gms	4040	3988	4132
WT OF SAND TO FILL CONE	gms	1553	1553	1553
WT OF SAND TO FILL HOLE	gms	2487	2435	2579
UNIT WT. OF SAND	gm/cc	1.4	1.48	1.48
GROSS VOLUME OF HOLE	ccs	1680.4	1645.3	1742.6
WET UNIT WT. OF SOIL	gm/cc	2.29	2.28	2.20
DRY UNIT WT. OF SOIL	gm/cc	2.11	2.13	2.07
MAX. DRY DENSITY	gm/cc	2.15	2.15	2.15
OPTIMUM MOISTURE CONTENT	%	7.10	7.10	7.10
COMPACTION	%	98.11	99.00	96.42
REQUIRED COMPACTION	%	95	95	95
REMARKS		PASSED	PASSED	PASSED

Eng. / CONTRACTOR

MATERIAL INSPECTION REQUEST



Contractor Company	Mohamed Abdallah 4 for constructions and roads paving			Designer Company				(KK) Engineering Consulting Office			
Issued by Contractor	Name	Sign		Date/Serial Number				Time			
	Eng. Mohamed moustafa			11/3/2025				3:00 PM			
				BAS-MA-SYS-FDT-F-94							
Received by GARB CONSULTANT	Eng. Sayed Saif 		MIR	C1	C2	C3	C4	MM	YY	HH	MM
				335	EW	CS	12	3	25	3	0

CODE-1	S1 to S21	D1 to S3	Kp XXX Note
	Station Reference	Depot Reference	For Kilometer point only Start Km is used
Level	Work Activity		
Activity	Sub Element of Activity		

Description of Materials	Fill Layer at level (-0.75 m) from Ferma Under Left Railway			
Location to be Used	From	335+060	TO	335+480
		17+607		18+027
MAR & UIR Approval No	BAS-MA-SYS-IR-F-94		Date	11/3/2025
	BAS-MA-SYS-MAR-F-12			
Supplier Name	محاجر وادي النظرون - العلمين			
Test Requirement	F.D.T(ASTM D 1556)		Specification	EARTHWORK SPECIFICATIONS & TESTING REPORT (CG21-41.2) VERSION 2 BY CIVECON GROUP
Reference Photos	No/Yes		Other	

Item	Description	Unit	Quantity	Arrival Date	Note
1	SAND CONE TEST	NUMBER	17	13/03/2025	
2					
3					
4					

Comments by: Eng. Sayed Saif (K.K)	Comments by: (ER)
1-The Compaction Test Result F.D.T. (ASTM D 1556) is Approved.	1-F.D.T was carried- out by material engineer for both contractor and GARB Consultant 2-Results report attached and acceptable with project specifications. 3-Final approval is subject to above mentioned comments.

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng. Mohamed Moustafa			A
QA/QC *	Eng. Sayed Saif			A
SYSTRA Consultant	Eng. Hamouda Ali			A
GARB**	Eng. Margret magdy			
Employers Representative	Eng. Karim		13/3/2025	A

Project	Electrical Express Train From Borg Alarab to Alamein		STATION REPRESENTED
SAMPLE Date	12/03/2025	FINAL DATE	13/03/2025
STAGE OF WORK :	Fill Layer at level (-0.75 m) from Ferma Under Left Railway		
Request NO.	BAS-MA-SYS-IR-F-94		

WORKSHEET FOR FIELD DENSITY TEST

BY SAND CONE METHOD ASTM D 1556

LAYER	Fill Layer at level (-0.75 m) from Ferma Under Left Railway								
DEPTH OF HOLE	cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm

SAMPLE No.	-	1	2	3	4	5	6	7	8
STATION	-	335+070	335+095	335+120	335+145	335+170	335+195	335+220	335+245
	-	17+617	17+642	17+667	17+692	17+717	17+742	17+767	17+792
CONTAINER No.	-	A-1	A-1	A-1	A-1	A-1	A-1	A-1	A-1
WEIGHT OF CAN	gms	33	30	33	31	31	29	29	31
WT. OF CAN+WET SOIL	gms	205	205	208	207	206	208	207	205
WT. OF CAN+DRY SOIL	gms	195	192	190	191	191	192	190	194
WT. OF WATER	gms	10.0	13.0	18.0	16.0	15.0	16.0	17.0	11.0
WT. OF DRY SOIL	gms	162.0	162.0	157.0	160.0	160.0	163.0	161.0	160.2
WATER CONTENT	%	6.2	8.0	11.5	10.0	9.4	9.8	10.6	6.9

WT. OF WET SOIL	gms	3860	3859	3844	3841	3887	3856	3812	3879
WT. OF INITIAL SAND+CONT.	gms	7796	7756	7827	7802	7813	7753	7787	7807
WT. OF RESIDUAL SAND + CONT.	gms	3695	3657	3835	3771	3786	3707	3839	3734
WT. OF SAND TO FILL CONE+HOLE	gms	4101	4099	3992	4031	4027	4046	3948	4073
WT. OF SAND TO FILL CONE	gms	1553	1553	1553	1553	1553	1553	1553	1553
WT. OF SAND TO FILL HOLE	gms	2548	2546	2439	2478	2474	2493	2395	2520
UNIT WT. OF SAND	gm/cc	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48
GROSS VOLUME OF HOLE	ccs	1721.6	1720.3	1648.0	1674.3	1671.6	1684.5	1618.2	1702.7
WET UNIT WT. OF SOIL	gm/cc	2.24	2.24	2.33	2.29	2.33	2.29	2.36	2.28
DRY UNIT WT. OF SOIL	gm/cc	2.11	2.08	2.09	2.09	2.13	2.08	2.13	2.13
MAX. DRY DENSITY	gm/cc	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15
OPTIMUM MOISTURE CONTENT	%	7.10	7.10	7.10	7.10	7.10	7.10	7.10	7.10
COMPACTION	%	98.22	96.59	97.33	97.00	98.88	96.96	99.10	99.15
REQUIRED COMPACTION	%	95	95	95	95	95	95	95	95
REMARKS		PASSED	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED

Eng. / CONSULTANT

Eng. / CONTRACTOR

Project	Electrical Express Train From Borg Alarab to Alamein		STATION REPRESENTED
SAMPLE Date	12/03/2025	FINAL DATE	13/03/2025
STAGE OF WORK :	Fill Layer at level (-0.75 m) from Ferma Under Left Railway		
Request NO.	BAS-MA-SYS-IR-F-94		

WORKSHEET FOR FIELD DENSITY TEST

BY SAND CONE METHOD ASTM D 1556

LAYER	Fill Layer at level (-0.75 m) from Ferma Under Left Railway								
DEPTH OF HOLE	cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm

SAMPLE No.	-	9	10	11	12	13	14	15	16
STATION	-	335+270	335+295	335+320	335+345	335+370	335+395	335+420	335+445
	-	17+817	17+842	17+867	17+892	17+917	17+942	17+967	17+992
CONTAINER No.	-	A-1	A-1	A-1	A-1	A-1	A-1	A-1	A-1
WEIGHT OF CAN	gms	33	33	30	29	32	31	32	30
WT. OF CAN+WET SOIL	gms	207	207	208	204	204	203	207	208
WT. OF CAN+DRY SOIL	gms	195	192	195	195	191	195	191	193
WT. OF WATER	gms	12.0	15.0	13.0	9.0	13.0	8.0	16.0	15.0
WT. OF DRY SOIL	gms	162.0	159.0	165.0	166.0	159.0	164.0	163.0	160.2
WATER CONTENT	%	7.4	9.4	7.9	5.4	8.2	4.9	9.8	9.4

WT. OF WET SOIL	gms	3877	3878	3718	3721	3866	3714	3816	3736
WT. OF INITIAL SAND+CONT.	gms	7815	7776	7828	7859	7834	7901	7817	7834
WT. OF RESIDUAL SAND + CONT.	gms	3726	3733	3844	3760	3725	3840	3850	3832
WT. OF SAND TO FILL CONE+HOLE	gms	4089	4043	3984	4099	4109	4061	3967	4002
WT. OF SAND TO FILL CONE	gms	1553	1553	1553	1553	1553	1553	1553	1553
WT. OF SAND TO FILL HOLE	gms	2536	2490	2431	2546	2556	2508	2414	2449
UNIT WT. OF SAND	gm/cc	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48
GROSS VOLUME OF HOLE	ccs	1713.5	1682.4	1642.6	1720.3	1727.0	1694.6	1631.1	1654.7
WET UNIT WT. OF SOIL	gm/cc	2.26	2.30	2.26	2.16	2.24	2.19	2.34	2.26
DRY UNIT WT. OF SOIL	gm/cc	2.11	2.11	2.10	2.05	2.07	2.09	2.13	2.06
MAX. DRY DENSITY	gm/cc	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15
OPTIMUM MOISTURE CONTENT	%	7.10	7.10	7.10	7.10	7.10	7.10	7.10	7.10
COMPACTION	%	97.98	97.97	97.59	95.43	96.25	97.20	99.09	96.02
REQUIRED COMPACTION	%	95	95	95	95	95	95	95	95
REMARKS		PASSED	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED

Eng. / CONSULTANT

Eng. / CONTRACTOR

Project	Electrical Express Train From Borg Alarab to Alamein		STATION REPRESENTED
SAMPLE Date	12/03/2025	FINAL DATE	13/03/2025
STAGE OF WORK :	Fill Layer at level (-0.75 m) from Ferma Under Left Railway		
Request NO.	BAS-MA-SYS-IR-F-94		

WORKSHEET FOR FIELD DENSITY TEST

BY SAND CONE METHOD ASTM D 1556

LAYER	Fill Layer at level (-0.75 m) from Ferma Under Left Railway							
DEPTH OF HOLE	cm	15 cm						

SAMPLE No.	-	17						
STATION	-	335+470						
		18+017						
CONTAINER No.	-	A-1						
WEIGHT OF CAN	gms	29						
WT. OF CAN+WET SOIL	gms	205						
WT. OF CAN+DRY SOIL	gms	195						
WT. OF WATER	gms	10.0						
WT. OF DRY SOIL	gms	166.0						
WATER CONTENT	%	6.0						

WT. OF WET SOIL	gms	3869						
WT. OF INITIAL SAND+CONT.	gms	7823						
WT. OF RESIDUAL SAND + CONT.	gms	3718						
WT. OF SAND TO FILL CONE+HOLE	gms	4105						
WT. OF SAND TO FILL CONE	gms	1553						
WT. OF SAND TO FILL HOLE	gms	2552						
UNIT WT. OF SAND	gm/cc	1.48						
GROSS VOLUME OF HOLE	ccs	1724.3						
WET UNIT WT. OF SOIL	gm/cc	2.24						
DRY UNIT WT. OF SOIL	gm/cc	2.12						
MAX. DRY DENSITY	gm/cc	2.15						
OPTIMUM MOISTURE CONTENT	%	7.10						
COMPACTION	%	98.43						
REQUIRED COMPACTION	%	95						
REMARKS		PASSED						

Eng. / CONSULTANT

Eng. / CONTRACTOR

MATERIAL INSPECTION REQUEST



الهيئة العامة
للطرق والكباري
(GARB)



Contractor Company	Mohamed Abdallah 4 for constructions and roads paving		Designer Company	(KK) Engineering Consulting Office							
Issued by Contractor	Name	Eng. Mohamed moustafa	Date/Serial Number	17/3/2025							
	Sign			Time 3:00 PM							
Received by GARB CONSULTANT	Eng. Sayed Saif		MIR	C1	C2	C3	DD	MM	YY	HH	MM
				335	EW	CS	18	3	25	3	0

CODE-1	S1 to S21	D1 to S3	Kp XXX Note
	Station Reference	Depot Reference	For Kilometer point only Start Km is used
CODE-2	Work Activity		
CODE-3	Sub Element of Activity		

Description of Materials	Fill Layer at level (-0.5 m) from Ferma Under Left Railway				
Location to be Used	From	335+060	TO	335+480	
		17+607		18+027	
MAR & UIR Approval No	BAS-MA-SYS-IR-F-95	Date	17/3/2025		
	BAS-MA-SYS-MAR-F-12				
Supplier Name	محاجر وادي النطرون - العلمين				
Test Requirement	F.D.T (ASTM D 1556)	Specification	EARTHWORK SPECIFICATIONS & TESTING REPORT (CG21-41.2) VERSION 2 BY CIVECON GROUP		
Reference Photos	No/Yes	Other			
Item	Description	Unit	Quantity	Arrival Date	Note
1	SAND CONE TEST	NUMBER	17	19/03/2025	
2					
3					
4					

Comments by: Eng. Sayed Saif (K.K)	Comments by: Eng. (ER)
1-The Compaction Test Result F.D.T. (ASTM D 1556) is Approved.	1-F.D.T was carried- out by material engineer for both contractor and GARB Consultant 2-Results report attached and acceptable with project specifications. 3-Final approval is subject to above mentioned comments.

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng. Mohamed Moustafa			A
QA/QC *	Eng. Sayed Saif			A
SYSTRA Consultant	Eng. Hamouda Ali			A
GARB**	Eng. Margret magdy			
Employers Representative	Eng. Karim		17/3/2025	A

Project	Electrical Express Train From Borg Alarab to Alamein		STATION REPRESENTED
SAMPLE Date	18/03/2025	FINAL DATE	19/03/2025
STAGE OF WORK :	Fill Layer at level (-0.5 m) from Ferma Under Left Railway		
Request NO.	BAS-MA-SYS-IR-F-95		

WORKSHEET FOR FIELD DENSITY TEST

BY SAND CONE METHOD ASTM D 1556

LAYER	Fill Layer at level (-0.5 m) from Ferma Under Left Railway								
DEPTH OF HOLE	cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm

SAMPLE No.	-	1	2	3	4	5	6	7	8
STATION	-	335+070	335+095	335+120	335+145	335+170	335+195	335+220	335+245
	-	17+617	17+642	17+667	17+692	17+717	17+742	17+767	17+792
CONTAINER No.	-	A-1	A-1	A-1	A-1	A-1	A-1	A-1	A-1
WEIGHT OF CAN	gms	30	29	29	30	33	31	31	32
WT. OF CAN+WET SOIL	gms	203	204	206	205	207	208	208	208
WT. OF CAN+DRY SOIL	gms	193	195	192	195	195	190	193	191
WT. OF WATER	gms	10.0	9.0	14.0	10.0	12.0	18.0	15.0	17.0
WT. OF DRY SOIL	gms	163.0	166.0	163.0	165.0	162.0	159.0	162.0	160.2
WATER CONTENT	%	6.1	5.4	8.6	6.1	7.4	11.3	9.3	10.6

WT. OF WET SOIL	gms	3761	3850	3784	3750	3892	3890	3712	3894
WT. OF INITIAL SAND+CONT.	gms	7796	7772	7722	7917	7782	7774	7730	7934
WT. OF RESIDUAL SAND + CONT.	gms	3737	3694	3765	3811	3626	3781	3731	3836
WT. OF SAND TO FILL CONE+HOLE	gms	4059	4078	3957	4106	4156	3993	3999	4098
WT. OF SAND TO FILL CONE	gms	1553	1553	1553	1553	1553	1553	1553	1553
WT. OF SAND TO FILL HOLE	gms	2506	2525	2404	2553	2603	2440	2446	2545
UNIT WT. OF SAND	gm/cc	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48
GROSS VOLUME OF HOLE	ccs	1693.2	1706.1	1624.3	1725.0	1758.8	1648.6	1652.7	1719.6
WET UNIT WT. OF SOIL	gm/cc	2.22	2.26	2.33	2.17	2.21	2.36	2.25	2.26
DRY UNIT WT. OF SOIL	gm/cc	2.09	2.14	2.15	2.05	2.06	2.12	2.06	2.05
MAX. DRY DENSITY	gm/cc	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15
OPTIMUM MOISTURE CONTENT	%	7.10	7.10	7.10	7.10	7.10	7.10	7.10	7.10
COMPACTION	%	97.34	99.56	99.78	95.33	95.83	98.58	95.61	95.22
REQUIRED COMPACTION	%	95	95	95	95	95	95	95	95
REMARKS		PASSED	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED

Eng. / CONSULTANT

Eng. / CONTRACTOR

Project	Electrical Express Train From Borg Alarab to Alamein		STATION REPRESENTED
SAMPLE Date	18/03/2025	FINAL DATE	19/03/2025
STAGE OF WORK :	Fill Layer at level (-0.5 m) from Ferma Under Left Railway		
Request NO.	BAS-MA-SYS-IR-F-95		

WORKSHEET FOR FIELD DENSITY TEST

BY SAND CONE METHOD ASTM D 1556

LAYER	Fill Layer at level (-0.5 m) from Ferma Under Left Railway								
DEPTH OF HOLE	cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm

SAMPLE No.	-	9	10	11	12	13	14	15	16
STATION	-	335+270	335+295	335+320	335+345	335+370	335+395	335+420	335+445
	-	17+817	17+842	17+867	17+892	17+917	17+942	17+967	17+992
CONTAINER No.	-	A-1	A-1	A-1	A-1	A-1	A-1	A-1	A-1
WEIGHT OF CAN	gms	31	32	33	29	29	30	30	30
WT. OF CAN+WET SOIL	gms	206	208	203	203	206	206	205	206
WT. OF CAN+DRY SOIL	gms	195	194	192	191	190	193	191	192
WT. OF WATER	gms	11.0	14.0	11.0	12.0	16.0	13.0	14.0	14.0
WT. OF DRY SOIL	gms	164.0	162.0	159.0	162.0	161.0	163.0	163.0	160.2
WATER CONTENT	%	6.7	8.6	6.9	7.4	9.9	8.0	8.6	8.7

WT. OF WET SOIL	gms	3791	3829	3819	3830	3899	3806	3786	3770
WT. OF INITIAL SAND+CONT.	gms	7759	7860	7750	7814	7843	7727	7729	7875
WT. OF RESIDUAL SAND + CONT.	gms	3709	3821	3686	3725	3800	3699	3697	3820
WT. OF SAND TO FILL CONE+HOLE	gms	4050	4039	4064	4089	4043	4028	4032	4055
WT. OF SAND TO FILL CONE	gms	1553	1553	1553	1553	1553	1553	1553	1553
WT. OF SAND TO FILL HOLE	gms	2497	2486	2511	2536	2490	2475	2479	2502
UNIT WT. OF SAND	gm/cc	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48
GROSS VOLUME OF HOLE	ccs	1687.2	1679.7	1696.6	1713.5	1682.4	1672.3	1675.0	1690.5
WET UNIT WT. OF SOIL	gm/cc	2.25	2.28	2.25	2.24	2.32	2.28	2.26	2.23
DRY UNIT WT. OF SOIL	gm/cc	2.11	2.10	2.11	2.08	2.11	2.11	2.08	2.05
MAX. DRY DENSITY	gm/cc	2.15	2.15	2.15	2.15	2.15	2.15	2.15	2.15
OPTIMUM MOISTURE CONTENT	%	7.10	7.10	7.10	7.10	7.10	7.10	7.10	7.10
COMPACTION	%	97.94	97.59	97.92	96.79	98.05	98.04	96.81	95.39
REQUIRED COMPACTION	%	95	95	95	95	95	95	95	95
REMARKS		PASSED	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED

Eng. / CONSULTANT

Eng. / CONTRACTOR

Project	Electrical Express Train From Borg Alarab to Alamein		STATION REPRESENTED
SAMPLE Date	18/03/2025	FINAL DATE	19/03/2025
STAGE OF WORK :	Fill Layer at level (-0.5 m) from Ferma Under Left Railway		
Request NO.	BAS-MA-SYS-IR-F-95		

WORKSHEET FOR FIELD DENSITY TEST

BY SAND CONE METHOD ASTM D 1556

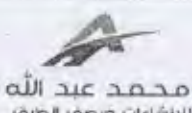
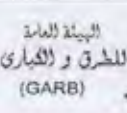
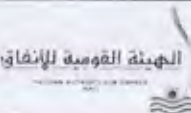
LAYER	Fill Layer at level (-0.5 m) from Ferma Under Left Railway						
DEPTH OF HOLE	cm	15 cm					

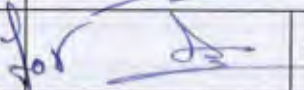
SAMPLE No.	-	17							
STATION	-	335+470							
		18+017							
CONTAINER No.	-	A-1							
WEIGHT OF CAN	gms	30							
WT. OF CAN+WET SOIL	gms	207							
WT. OF CAN+DRY SOIL	gms	190							
WT. OF WATER	gms	17.0							
WT. OF DRY SOIL	gms	160.0							
WATER CONTENT	%	10.6							

WT. OF WET SOIL	gms	3840							
WT. OF INITIAL SAND+CONT.	gms	7719							
WT. OF RESIDUAL SAND + CONT.	gms	3742							
WT. OF SAND TO FILL CONE+HOLE	gms	3977							
WT. OF SAND TO FILL CONE	gms	1553							
WT. OF SAND TO FILL HOLE	gms	2424							
UNIT WT. OF SAND	gm/cc	1.48							
GROSS VOLUME OF HOLE	ccs	1637.8							
WET UNIT WT. OF SOIL	gm/cc	2.34							
DRY UNIT WT. OF SOIL	gm/cc	2.12							
MAX. DRY DENSITY	gm/cc	2.15							
OPTIMUM MOISTURE CONTENT	%	7.10							
COMPACTION	%	98.58							
REQUIRED COMPACTION	%	95							
REMARKS		PASSED							

Eng. / CONSULTANT

Eng. / CONTRACTOR

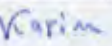
MATERIAL INSPECTION REQUEST						
	ENGINEERING CONSULTING OFFICE المكتب الاستشاري الهندسي أ.د. خالد شنديل	محمد عبد الله للإنشاءات ورصف الطرق	الهيئة العامة للشرق والكباري (GARB)	وزارة النقل	الهيئة القومية للإنتاج الصناعي والتعدين	SYSTRA شركة

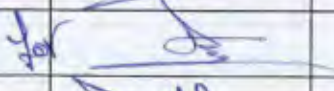
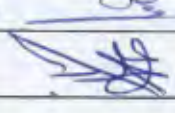
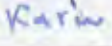
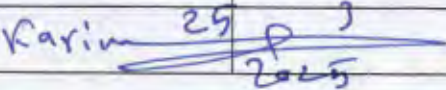
Contractor Company	Mohamed Abdallah 4 for constructions and roads paving			Designer Company	(KK) Engineering Consulting Office						
Issued by Contractor	Name	Sign		Date/Serial Number	Time						
	Eng. Mohamed moustafa			23/3/2025	3:00 PM						
				BAS-MA-SYS-FDT-F-96							
Received by GARB CONSULTANT	Eng. Sayed Saif		MIR	C1	C2	C3	DD	MM	YY	HH	MM
				335	EW	CS	24	3	25	3	0

CODE-1	S1 to S21	D1 to S3	Kp XXX Note
	Station Reference	Depot Reference	For Kilometer point only Start Km is used
CODE-2	Work Activity		
CODE-3	Sub Element of Activity		

Description of Materials	Fill Layer at level (-0.25 m) from Ferma Under Left Railway				
Location to be Used	From	335+060	TO	335+480	
		17+607		18+027	
MAR & UIR Approval No	BAS-MA-SYS-IR-F-96	Date	23/3/2025		
	BAS-MA-SYS-MAR-F-13				
Supplier Name	محاجر وادي النطرون - العلمين				
Test Requirement	F.D.T (ASTM D 1556)	Specification	EARTHWORK SPECIFICATIONS & TESTING REPORT (CG21-41.2) VERSION 2 BY CIVECON GROUP		
Reference Photos	No/Yes	Other			

Item	Description	Unit	Quantity	Arrival Date	Note
1	SAND CONE TEST	NUMBER	17	25/03/2025	
2					
3					
4					

Comments by: Eng. Sayed Saif (K.K)	Comments by:  (ER)
1-The Compaction Test Result F.D.T. (ASTM D 1556) is Approved.	1-F.D.T was carried- out by material engineer for both contractor and GARB Consultant 2-Results report attached and acceptable with project specifications. 3-Final approval is subject to above mentioned comments.

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng. Mohamed Moustafa			A
QA/QC *	Eng. Sayed Saif			A m c
SYSTRA Consultant	Eng. Hamouda Ali			
GARB**	Eng. Margret magdy			
Employers Representative	Eng. 		25/3/2025	A-m-c

Project	Electrical Express Train From Borg Alarab to Alamein		STATION REPRESENTED
SAMPLE Date	24/03/2025	FINAL DATE	25/03/2025
STAGE OF WORK :	Fill Layer at level (-0.25 m) from Ferma Under Left Railway		
Request NO.	BAS-MA-SYS-IR-F-96		

WORKSHEET FOR FIELD DENSITY TEST

BY SAND CONE METHOD ASTM D 1556

LAYER	Fill Layer at level (-0.25 m) from Ferma Under Left Railway								
DEPTH OF HOLE	cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm
SAMPLE No.	-	1	2	3	4	5	6	7	8
STATION	-	335+070	335+095	335+120	335+145	335+170	335+195	335+220	335+245
		17+617	17+642	17+667	17+692	17+717	17+742	17+767	17+792
CONTAINER No.	-	A-1	A-1	A-1	A-1	A-1	A-1	A-1	A-1
WEIGHT OF CAN	gms	29	30	33	32	30	33	29	30
WT. OF CAN+WET SOIL	gms	208	204	206	203	205	207	203	204
WT. OF CAN+DRY SOIL	gms	194	194	194	193	191	191	194	194
WT. OF WATER	gms	14.0	10.0	12.0	10.0	14.0	16.0	9.0	10.0
WT. OF DRY SOIL	gms	165.0	164.0	161.0	161.0	161.0	158.0	165.0	160.2
WATER CONTENT	%	8.5	6.1	7.5	6.2	8.7	10.1	5.5	6.2
WT. OF WET SOIL	gms	3777	3765	3792	3882	3768	3844	3828	3859
WT. OF INITIAL SAND+CONT.	gms	7828	7792	7751	7705	7711	7780	7809	7816
WT. OF RESIDUAL SAND + CONT.	gms	3765	3685	3699	3531	3754	3796	3745	3649
WT. OF SAND TO FILL CONE+HOLE	gms	4063	4107	4052	4174	3957	3984	4064	4167
WT. OF SAND TO FILL CONE	gms	1553	1553	1553	1553	1553	1553	1553	1553
WT. OF SAND TO FILL HOLE	gms	2510	2554	2499	2621	2404	2431	2511	2614
UNIT WT. OF SAND	gm/cc	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48
GROSS VOLUME OF HOLE	ccs	1695.9	1725.7	1688.5	1770.9	1624.3	1642.6	1696.6	1766.2
WET UNIT WT. OF SOIL	gm/cc	2.23	2.18	2.25	2.19	2.32	2.34	2.26	2.18
DRY UNIT WT. OF SOIL	gm/cc	2.05	2.06	2.09	2.06	2.13	2.13	2.14	2.06
MAX. DRY DENSITY	gm/cc	2.16	2.16	2.16	2.16	2.16	2.16	2.16	2.16
OPTIMUM MOISTURE CONTENT	%	7.20	7.20	7.20	7.20	7.20	7.20	7.20	7.20
COMPACTION	%	95.04	95.20	96.76	95.55	98.80	98.38	99.05	95.21
REQUIRED COMPACTION	%	95	95	95	95	95	95	95	95
REMARKS		PASSED	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED

Eng. / CONSULTANT

Eng. / CONTRACTOR

Project	Electrical Express Train From Borg Alarab to Alamein		STATION REPRESENTED
SAMPLE Date	24/03/2025	FINAL DATE	25/03/2025
STAGE OF WORK :	Fill Layer at level (-0.25 m) from Ferma Under Left Railway		
Request NO.	BAS-MA-SYS-IR-F-96		

WORKSHEET FOR FIELD DENSITY TEST

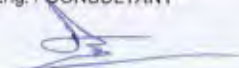
BY SAND CONE METHOD ASTM D 1556

LAYER	Fill Layer at level (-0.25 m) from Ferma Under Left Railway								
DEPTH OF HOLE	cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm	15 cm

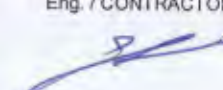
SAMPLE No.	-	9	10	11	12	13	14	15	16
STATION	-	335+270	335+295	335+320	335+345	335+370	335+395	335+420	335+445
		17+817	17+842	17+867	17+892	17+917	17+942	17+967	17+992
CONTAINER No.	-	A-1	A-1	A-1	A-1	A-1	A-1	A-1	A-1
WEIGHT OF CAN	gms	31	29	30	31	33	30	31	32
WT. OF CAN+WET SOIL	gms	203	208	203	203	203	205	203	207
WT. OF CAN+DRY SOIL	gms	192	190	190	194	194	190	190	190
WT. OF WATER	gms	11.0	18.0	13.0	9.0	9.0	15.0	13.0	17.0
WT. OF DRY SOIL	gms	161.0	161.0	160.0	163.0	161.0	160.0	163.0	160.2
WATER CONTENT	%	6.8	11.2	8.1	5.5	5.6	9.4	8.0	10.6

WT. OF WET SOIL	gms	3762	3788	3778	3822	3815	3881	3866	3855
WT. OF INITIAL SAND+CONT.	gms	7783	7713	7779	7867	7869	7742	7878	7738
WT. OF RESIDUAL SAND + CONT.	gms	3711	3782	3738	3715	3724	3663	3816	3736
WT. OF SAND TO FILL CONE+HOLE	gms	4072	3931	4041	4152	4145	4079	4062	4002
WT. OF SAND TO FILL CONE	gms	1553	1553	1553	1553	1553	1553	1553	1553
WT. OF SAND TO FILL HOLE	gms	2519	2378	2488	2599	2592	2526	2509	2449
UNIT WT. OF SAND	gm/cc	1.48	1.48	1.48	1.48	1.48	1.48	1.48	1.48
GROSS VOLUME OF HOLE	ccs	1702.0	1606.8	1681.1	1756.1	1751.4	1706.8	1695.3	1654.7
WET UNIT WT. OF SOIL	gm/cc	2.21	2.36	2.25	2.18	2.18	2.27	2.28	2.33
DRY UNIT WT. OF SOIL	gm/cc	2.07	2.12	2.08	2.06	2.06	2.08	2.11	2.11
MAX. DRY DENSITY	gm/cc	2.16	2.16	2.16	2.16	2.16	2.16	2.16	2.16
OPTIMUM MOISTURE CONTENT	%	7.20	7.20	7.20	7.20	7.20	7.20	7.20	7.20
COMPACTION	%	95.78	98.17	96.23	95.49	95.51	96.25	97.78	97.51
REQUIRED COMPACTION	%	95	95	95	95	95	95	95	95
REMARKS		PASSED	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED	PASSED

Eng. / CONSULTANT



Eng. / CONTRACTOR



Project	Electrical Express Train From Borg Alarab to Almarai		STATION REPRESENTED
SAMPLE Date	24/03/2025	FINAL DATE	25/03/2025
STAGE OF WORK :	Fill Layer at level (-0.25 m) from Ferma Under Left Railway		
Request NO.	BAS-MA-878-IR-F-96		

WORKSHEET FOR FIELD DENSITY TEST

BY SAND CONE METHOD ASTM D 1558

LAYER	Fill Layer at level (-0.25 m) from Ferma Under Left Railway							
DEPTH OF HOLE	cm	15 cm						

SAMPLE No.	-	17						
STATION	-	335+470						
		18+017						
CONTAINER No.	-	A-1						
WEIGHT OF CAN	gms	32						
WT. OF CAN+WET SOIL	gms	207						
WT. OF CAN+DRY SOIL	gms	190						
WT. OF WATER	gms	17.0						
WT. OF DRY SOIL	gms	158.0						
WATER CONTENT	%	10.8						

WT. OF WET SOIL	gms	3781						
WT. OF INITIAL SAND+CONT.	gms	7769						
WT. OF RESIDUAL SAND + CONT.	gms	3764						
WT. OF SAND TO FILL CONE+HOLE	gms	4005						
WT. OF SAND TO FILL CONE	gms	1553						
WT. OF SAND TO FILL HOLE	gms	2452						
UNIT WT. OF SAND	gm/cc	1.48						
GROSS VOLUME OF HOLE	ccs	1656.8						
WET UNIT WT. OF SOIL	gm/cc	2.28						
DRY UNIT WT. OF SOIL	gm/cc	2.06						
MAX. DRY DENSITY	gm/cc	2.16						
OPTIMUM MOISTURE CONTENT	%	7.20						
COMPACTION	%	95.39						
REQUIRED COMPACTION	%	95						
REMARKS		PASSED						

Eng. / CONSULTANT

Eng. / CONTRACTOR