الهيئة العامة
للطـرق والكبـاري

محضر استلام موقع

عملية: اعمال الجسر الترابي والاعمال الصناعية لمشروع القطار الكهربائى السريع الخط الاول(العين السخنة -العاصمة الادارية -العلمين -مطروح) قطاع فوكة - مطروح المسافة من الكم 160+557 الى الكم 260+556 بطول 0.100 كم

تنفيذ: مكتب مجدي بخيت متى بنيامين

إشراف : المنطقة الخامسة – منطقة غرب الدلتا

طبقاً للعقد رقم (2025/2024/196) بتاريخ : 2024/8/18

إنه في يوم الاربعاء الموافق 2024/8/19 اجتمع كل من:-

١- السيد المهندس / محمد حسني فياض مدير عام المشروعات - الهيئة العامة للطرق والكباري

٢- السيد المهندس /إبراهيم عبد الله الحناوي مهندس العملية - الهيئة العامة للطرق والكباري

٣- السيد المهندس / علي الشربيني مدير مشروع - مكتب مجدي بخيت متى بنيامين

وذلك للمرور على مسار العملية المذكورة عاليه لاستلام الموقع :-

وقد تبين أن الموقع خالياً من العوائق الظاهرية ويسمح بالبدء في التنفيذ وبناء عليه يعتبر تاريخ 2024/8/19 هو تاريخ استلام الموقع وبدء الأعمال بالعملية.

واقفل المحضر على ذلك ووقع الحضور

التوقيعات

3- علي الشربيني

2-

1-

رئيس الإدارة المركزية

منطقة غرب الدلتا

الاسكندرية – مرسى مطروح

عميد . مهندس /

"هاني محمد محمود طه"

الهيئة العامة
للطـرق والكبـاري

المنطقة الخامسة – (غرب الدلتا)

السيد المهندس / رئيس قطاع التنفيذ والمناطق

تحية طيبة وبعد،،

بالإحالة إلى مشروع القطار الكهربائى فائق السرعه (فوكة - مطروح) (القطاع السابع)
نتشرف بأن نرفق لسيادتكم طيه المقايسة المعدلة بعد اعتماد لجنة المفاوضة للقطاعات الأتية:

مسلسل	اسم الشركة	بداية القطاع (كم)	نهاية القطاع (كم)	الطول
1	مكتب مجدي بخيت متى بنيامين	556+160	556+260	0.100كم

برجاء من سيادتكم التفضل بالأحاطه والتوجيه باللازم

وتفضلوا بقبول فائق الأحترام والتقدير،،

رئيس الإدارة المركزية
منطـقة غـرب الـــدلتا
(الاسكندرية/مطروح)
عميد مهندس/
"هاني محمد محمود طه"

مشروع القطار الكهربائى السريع

المقايسة المعدلة لبنود الاعمال بعد التفاوض بتاريخ (٦ / ٢٠٢٤) للقطاع السابع (فوكه - مطروح) - مكتب مجدي بخيت متى بنيامين

القطاع من المحطة ١٦٠+٥٥٦ إلى المحطة ٢٦٠+٥٥٦ بطول ١٠٠,٠كم مرحلة تشكيل الجسور وطبقات التأسيس وخرسانات الميول

رقم البند	بيان الأعمال	الوحدة	الكمية	الفئة	الاجمالى
٣	اعمال الردم				
١-٣	بالمتر المكعب اعمال توريد وتشغيل اتربة صالحة للردم و مطابقة للمواصفات والتشغيل باستخدام الات التسوية بسمك لا يزيد عن ٥٠ سم حتي منسوب -٢ متر و بسمك لا يزيد عن ٢٥ سم لاستكمال المنسوب التصميمى 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 مشتملاتة طبقا لاصول الصناعة ومواصفات الهيئة العامة للطرق و الكبارى وتعليمات المهندس المشرف. **-في حالة طلب جهاز الإشراف زيادة نسبة الدمك عن ٩٥ % يحسب زيادة ١ جنية علي زيادة نسبة الدمك لكل ١ %** **- مسافة النقل حتي ٢ كم ويتم احتساب علاوة ١,٥ جنيه لكل ١ كم بالزيادة** **-السعر يشمل قيمة المادة المحجرية**	م٣	٢٧١٤٣,٨٠	١٠٨,٠٠	٢٩٣١٥٣٠,٤٠
	علاوة مسافة النقل ٣٢٤ كم	م٣	٢٧١٤٣,٨٠	٤٨٣	١٣١١٠٤٥٥,٤٠
	علاوة تحصيل رسوم الكارتة والموازين طبقا للائحة الشركة الوطنية	م٣	٢٧١٤٣,٨٠	١٣	٣٥٢٨٦٩,٤٠
	الاجمالى				١٦,٣٩٤,٨٥٥,٢٠

(ستة عشر مليوناً وثلاثمائة واربعة وتسعون الفاً وثمانمائة وخمسة وخمسون جنيهاً وعشرون قرشاً مصرياً فقط لاغير)

مدير المشروع المقاول
م / فتحى السعيد على

مدير المشروع الاستشاري
م / خالد فوزي محمد

مدير المشروع (الهيئة)
م / إبراهيم عبدالله الحناوي

مدير عام المشروعات
م / محمد حسني فياض

رئيس الإدارة المركزية
منطقة غرب الدلتا
الاسكندرية - مرســـى مطروح
عميد - مهندس /
" هانى محمد محمود طه "

الهيئة العامة
للطـرق والكبـاري

قائمة الكميات الواردة بالمستخلص جاري (١)

عملية: اعمال الجسر الترابي والاعمال الصناعية لمسار القطار الكهربائى السريع الخط الاول
(العين السخنة -العاصمة الادارية -العلمين -مطروح) قطاع فوكة - مطروح
المسافة من الكم ١٦٠+٥٥٦ الى الكم ٢٦٠+٥٥٦ بطول ٠,١٠٠ كم

(مرحلة تشكيل الجسور)

(المنطقة الخامسة - غرب الدلتا)

رقم البند و بيانه : (٣-١) علاوة مسافة النقل ٣٢٤ كم

تـــنفيـــذ : مكتب مجدي بخيت متى بنيامين

مقدار العمل السابق : ٠,٠ م٣

بيان بالكميات	الكمية	
الكمية طبقاً لقوائم الكميات	٢٧١٤٣,٨٠٠٠	
اجمالي الكميات خلال فترة المستخلص الحالية (م٣)		٢٧١٤٣,٨٠٠٠
الاجمالـي الكلـي (م٣)		٢٧١٤٣,٨٠٠٠

مهندس الشركة	مهندس الإستشارى	مهندس الإستشارى	مهندس الهيئة العامة
	مكتب XYZ	مكتب أ.د/خالد قنديل	للطرق والكبارى
م/ فتحى السعيد على	م/ محمد شهاب خليل	م/ خالد فوزى محمد	م/ إبراهيم عبدالله الحناوى

الهيئة العامة
للطـرق والكبـاري

قائمة كميات بالمستخلص جارى (١)

عملية: اعمال الجسر الترابي والاعمال الصناعية لمسار القطار الكهربائى السريع الخط الاول
(العين السخنة -العاصمة الادارية -العلمين -مطروح) قطاع فوكة - مطروح
المسافة من الكم ١٦٠+٥٥٦ الى الكم ٢٦٠+٥٥٦ بطول ٠,١٠٠ كم

(مرحلة تشكيل الجسور)
(المنطقة الخامسة - غرب الدلتا)
رقم البند و بياناته : (٣-١) رسوم الكارتة والموازين طبقاً للمادة (٣٦) من الشروط العامة والمواصفات طبقاً لما جاء بالقائمة الموحدة لأسعار الطرق لأعمال طبقة الأتربة

الكارتات والموازين

تـنفيـذ : مكتب مجدي بخيت متى بنيامين

مقدار العمل السابق : ٠ م٣

بيان بالكميات	الكمية	
الكمية طبقاً لقوائم الكميات	٢٧١٤٣,٨٠٠٠	
اجمالي الكميات خلال فترة المستخلص الحالية (م٣)		٢٧١٤٣,٨٠٠٠
الاجمالـي الكلي (م٣)		٢٧١٤٣,٨٠٠٠

مهندس الشركة
م/ فتحى السعيد على

مهندس الإستشارى
مكتب XYZ
م/ محمد شهاب خليل

مهندس الإستشارى
مكتب أ.د/خالد قنديل
م/ خالد فوزى محمد

مهندس الهيئة العامة
للطرق والكبارى
م/ إبراهيم عبدالله الحناوى

الهيئة العامة
للطـرق والكبـاري

قائمة الكميات الواردة بالمستخلص جاري (١)

عملية: اعمال الجسر الترابي والاعمال الصناعية لمسار القطار الكهربائى السريع الخط الاول
(العين السخنة -العاصمة الادارية -العلمين -مطروح) قطاع فوكة - مطروح
المسافة من الكم ١٦٠+٥٥٦ الى الكم ٢٦٠+٥٥٦ بطول ٠,١٠٠ كم

(مرحلة تشكيل الجسور)
(المنطقة الخامسة - غرب الدلتا)

رقم البند و بيانه : (٣-١) أعمال توريد و تشغيل اتربة صالحة للردم مطابقة للمواصفات

تـــنفيـــذ : مكتب مجدي بخيت متى بنيامين

مقدار العمل السابق : ٠,٠ م٣

بيان الاعمال	الموقع الكيلومتري		الابعاد (متر)		الكمية
	من	الى	طول	مساحة المقطع	
القطاع الأول	556+160	556+260	١٠٠	٢٧١,٤٣٨٠٠	٢٧١٤٣,٨٠٠٠
اجمالي الكميات خلال فترة المستخلص الحالية (م٣)					٢٧١٤٣,٨٠٠٠
الاجمالـي الكلـي (م٣)					٢٧١٤٣,٨٠٠٠

مهندس الشركة	مهندس الإستشارى	مهندس الإستشارى	مهندس الهيئة العامة
م/ فتحى السعيد على	مكتب XYZ	مكتب أ.د/خالد قنديل	للطرق والكبارى
	م/ محمد شهاب خليل	م/ خالد فوزى محمد	م/ إبراهيم عبدالله الحناوى

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

SYSTRA SHAGER

Electric Express Train - HSR

From El Ain El Sokhna City To El Alamein - MATROUH

Section - 7 From FOKA To MARSA MATROUH

From Station 504+000 To Station 568+177

الهيئة القومية للأنفاق

PARTICLE SIZE DISTRIBUTION OF SOIL

TESTING DATE:	17/6/2023	code	ZONE	556+000	556+500
LOCATION	k.p(555+500)	MB2-7			
NAME COMPANY	MAGDY BEKHIET 2				

1-visual inspection test .....

.....

2-Gradient test

A-gradation of bulk materials				SAMPLE WEIGHT [g]		18510.00		gm		table classify
sieve size	2	1.5	1	4/3	2/1	8/3	# 4	PASS		soil classify
Mass retained (g)	0.0	0.0	0.0	5390.0	0.0	2320.0	1135.0			A-1-a
Cumulative Retained (g)	0.0	0.0	0.0	5390.0	5390.0	7710.0	8845.0		PRO	2.154
Cumulative Retained %	0.0	0.0	0.0	29.1	29.1	41.7	47.8		WC	6.6%
Cumulative Passing %	100.0	100.0	100.0	70.9	70.9	58.3	52.2		CBR	40.3%

B-soft material gradation				WT.OF sample		500.00		gm
sieve size	10	40	200					
Cumulative Retained (g)	85.00	225.00	385.00					
Cumulative Retained %	17.00	45.00	77.00					
Cumulative Passing %	83.00	55.00	23.00					

C-General gradient										
sieve size(in)	2	1.5	1	3/4	1/2	3/8	# 4	# 10	# 40	# 200
sieve size(mm)	50.0	37.5	25.0	19.0	12.5	9.5	4.75	2.00	0.425	0.075
Cumulative Passing %	100.0	100.0	100.0	70.9	70.9	58.3	52.2	43.3	28.7	12.0

ATTERBERG LIMTS	LIQUID LIMIT (L.L.)	PLASTIC LIMIT (P.L.)	PLASTIC INDEX (P.I.)
	N.P	N.P	N.P

Contractor

معمل اختبارات وابحاث التربة
المحجوب - فوكه - مطروح

Consultant

Mohammed Al

Electric Express Train - HSR

From El Ain El Sokhna City To El Alamein - MATROUH

Section - 7 From FOKA TO MARSA MATROUH

From Station 504+000 To Station 568+177

PROCTOR TEST

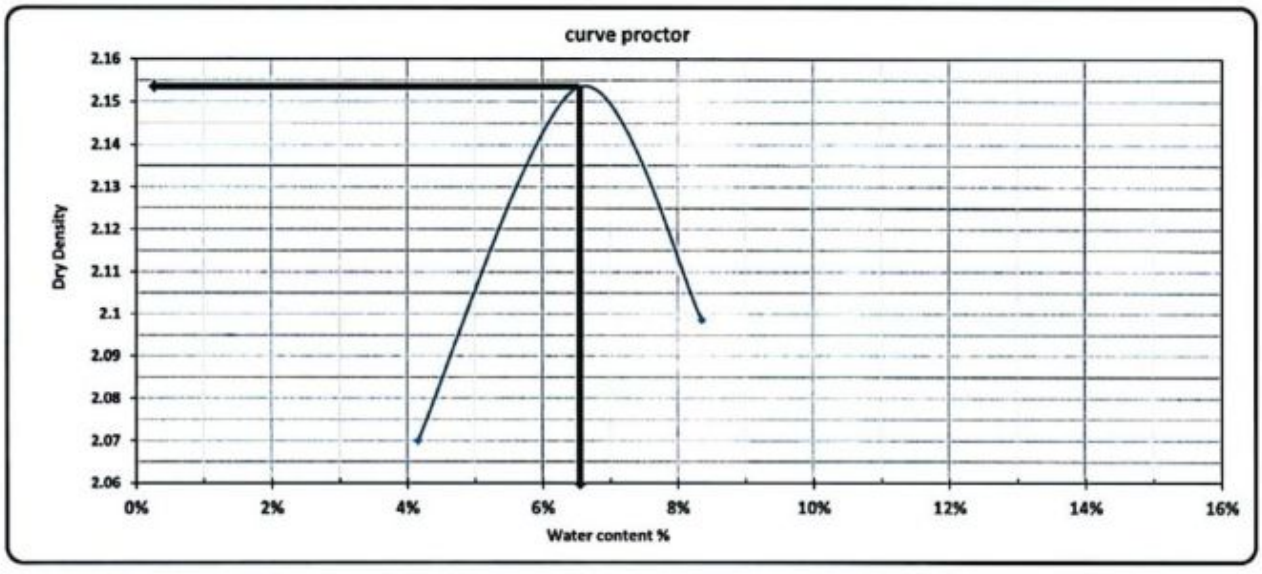
TESTING DATE:	18/6/2023	code	ZONE	556+000	556+500
LOCATION	k.p(555+500)	MB2-7			
NAME COMPANY	MAGDY BEKHIET 2				

Weight of empty mold :	6064.0
Mold Volume:	2032.0

MAX Dry Density	2.154
Water content %	6.6

trial no :	1	2	3	4	
Wt. Of Mold+ wet soil	10445.0	10725.4	10684.8		
WT. WET SOIL	4381.0	4661.4	4620.8		
Wt. Density	2.156	2.294	2.274		

Tare No.	1	2	3	4	5	6				
Tare wt.	34.08	28.44	22.23	28.98	34.87	22.88				
Wt. Of wet soil & tare	163.8	161.0	135.1	156.0	156.0	160.4				
Wt. Of dry soil & tare	158.4	155.9	128.4	148.0	147.2	149.2				
Wt. Of water	5.4	5.1	6.8	8.0	8.8	11.2				
Wt. Of dry soil	124.3	127.4	106.1	119.0	112.3	126.3				
Water content %	4.3%	4.0%	6.4%	6.7%	7.8%	8.9%				
AV.Water content %	4.2%		6.5%		8.4%					
Dry Density	2.070		2.153		2.099					



Contractor

Consultant

	Electric Express Train - HSR	

California Bearing Ratio TEST

Testing Date :	**19/6/2023**	**Code**	**ZONE**	**556+000**	**556+500**
Location :	**555+500**	**MB2-7**			
NAME COMPANY	**MAGDY BEKHET 2**				

- : Test Results

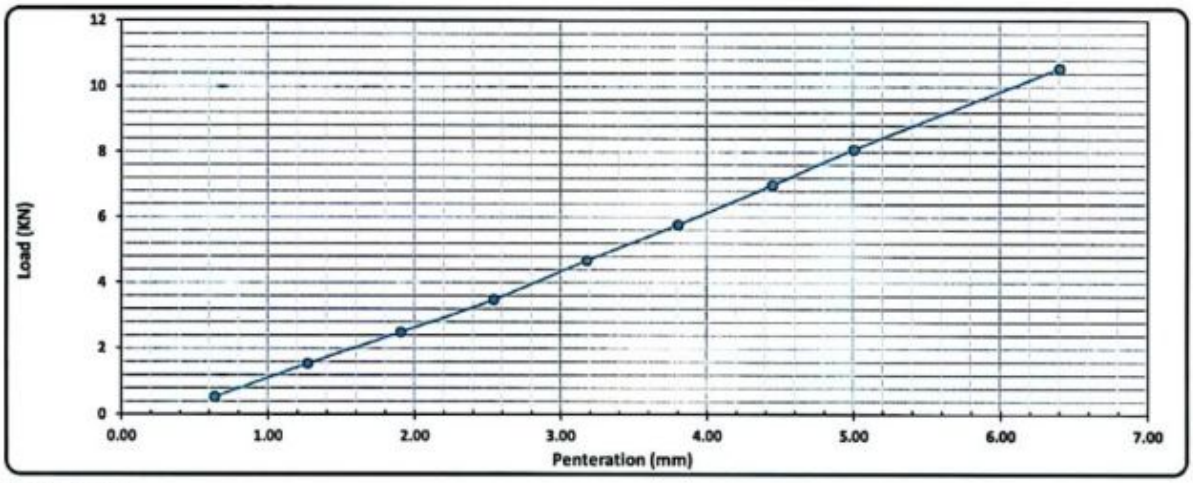
Compaction % for Mold	
Mold No.	55
Mold Vol. (cm^3)	2151
Mold WT. (gm)	15700
Mold WT. + Wet WT. (gm)	20530
Wet WT. (gm)	4830
Wet Density (g/cm^3)	2.245
Dry Density (g/cm^3)	2.106
Proctor Density (g/cm^3)	2.154
Compaction %	98

Mositure Ratio After Compacted Mold	
Tare No.	5
Tare WT. (gm)	31
Tare WT. +Wet WT. (gm)	233
Tare WT. +Dry WT. (gm)	222
Water WT. (gm)	11.0
Dry WT. (gm)	191.0
Moisture Content %	6.6

Swelling	
Mold No.	3
Date	19/6/2023
Intial Height (mm)	3.20
Final Height (mm)	3.20
Difference	0
Sample Height (mm)	120.0
Swelling Ratio %	0%

Loading Reading :

Penteration (mm)	0.64	1.27	1.91	2.54	3.18	3.80	4.45	5.00	6.40
Load Reading (kg)	53.00	156.00	253.00	354.00	475.00	587.00	711.00	822.00	1076.00
Load (KN)	0.5	1.5	2.5	3.5	4.7	5.8	7.0	8.1	10.5



Calculations : -

Penteration	Load	Standard Load	CBR	Mold - Compaction	Compaction	CBR
(mm)	(Kn)	(lb)	(%)	(%)	(%)	عند نسبة 98 %
2.50	3.47	13.4	26.0%	98	98	26.0%
5.00	8.06	20.0	40.2%			40.3%

Lab. Specialist	Lab. Engineer	Consultant Engineer
Name :	Name :	Name : Mohamed Ali
Sign :	Sign :	Sign :

شركة المقاولون العرب
معمل اختبارات وابحاث التربه
القطار السريع - فوكه - مطروح
المنجوب

MATERIAL INSPECTION REQUEST

Contractor Company	**Magdy Bekhet**			Designer Company						
Issued by Contractor	Name	Sign		Date				Time		
	Eng/ Omar									
Contractor refrence	**MB2-(7) 19-6-2023**									
Received by ER			MIR	C1	C2	C3	DD	MM	YY	HH	MM

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

Description of Materials	**Soil (A-1-a)**				
Location to be Used	From	To		From	To
	556+080	556+120 (-1.75)		556+080	556+120 (-1)
	556+220	556+360 (-0.25)		556+000	556+080 (-0.0)
	556+000	556+080 (-0.5)		556+080	556+120 (-0.75)
	556+080	556+120 (-1.25)		556+080	556+120 (-0.5)
	556+220	556+360 (-0.0)		556+080	556+120 (-0.25)
	556+000	556+080 (-0.25)		556+080	556+120 (-0.0)
MAR Approval No				Date	
Supplier Name					
Test Requirement		Specification		Clause	
Reference Photos	Yes attached / No	Other			

Item	Description	Unit	Quantity	Arrival Date	Note
1	SIEVE ANALYSIS	M3	5000		
2	CLSSIFICATION	M3	5000		
3	PROCTOR & O.M.C	M3	5000		
4	L.L & P.L & PI	M3	5000		
5	C.B.R	M3	5000		

Comments by:	**Comments by:**

APPROVAL STATUS

Organisation	Name	Sign	Date	A-AWC-R
Contractor	Refaat	Refaat		
QA/QC *	Mohammed Ali			
GARB**				
Employers Representative				

* Designer

** Alignment / Bridges: Culvert Only

MATERIAL APPROVAL REQUEST

Contractor Company	Magdy Bekhet			Designer Company									
Issued by Contractor	Name	Sign		Date						Time			
	Eng/ Omar	Refaat											
Contractor refrence	MB2-(7) 19-6-2023												
Received by ER			MAR	C1	C2	C3	DD	MM	YY	HH	MM		

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

Description of Materials	Soil (A-1-a)		
Location to be Used	K.p (556)		
Sample only	Yes / No	Materials Type	A-1-a
Supplier Name		Data Sheet provided	Yes attached / No
Reference in BoQ		Specification	Clause
Prequalification reference		Test Samples Results	AGGREGATE SAMPLING ACCORDING TOSPECS. SIEVE ANALYSIS ACCORDING TO SPECS. PASS NO 200 12.0 ATTEBERG LIMIT N.P MOISTURE CONTENT 6.6% MODIFIED PROCTOR 2.16 CBR 40.3%
Test Samples Results	Yes attached / No	Other	

Comments by:	Comments by:

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
Contractor	Refaat	Refaat		
QA/QC *	Mohammed Ali			
GARB**				
Employers Representative				

* Designer

** Alignment/Bridges: Culvert only

Electric Express Train - HSR
From El Ain El Sokhna City To El Alamein - MATROUH
Section - 7 From FOKA TO MARSA MATROUH
From Station 504+000 To Station 568+177

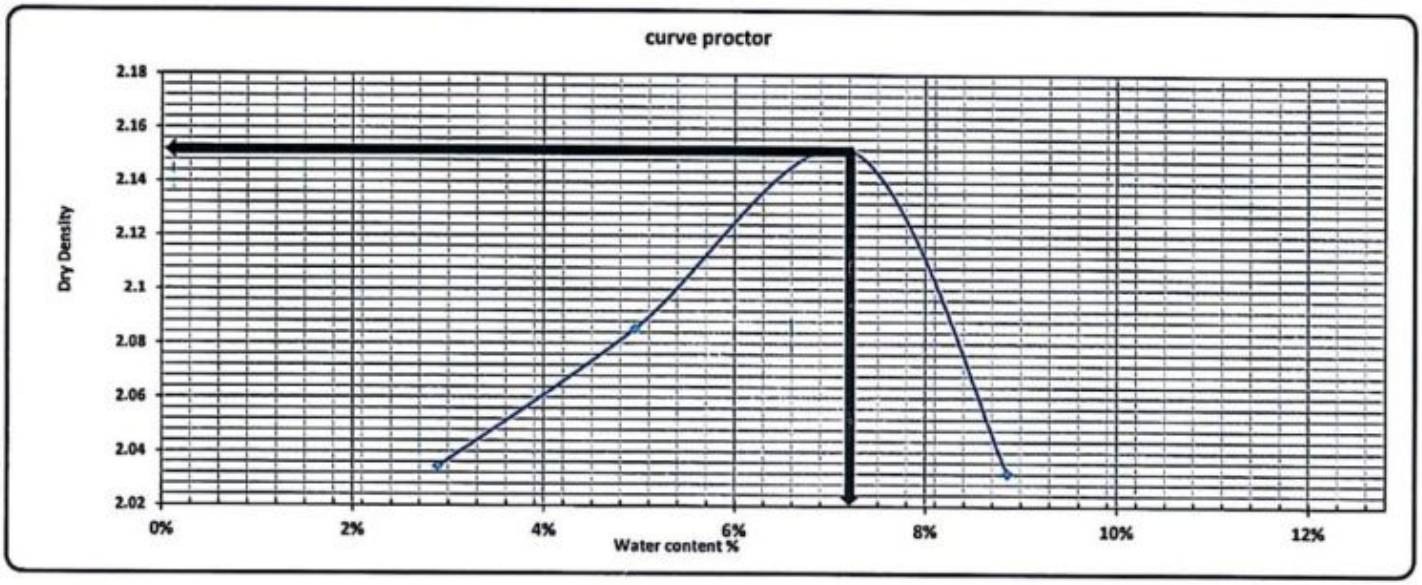
PROCTOR TEST

TESTING DATE:	25/5/2023	code	ZONE	556+000	556+500
location	K.P555+000	MB2-1			
NAME COMPANY	Magdy Bekheet 2				
	operate by	GOMAA BADR LAB			

Weight of empty mold :	6060.0	MAX Dry Density	2.152
Mold Volume:	2104.9	Water content %	7.40

trial no. :	1	2	3	4		
Wt. Of Mold+ wet soil	10474.0	10675.0	10925.0	10725		
WT. WET SOIL	4414.0	4615.0	4865.0	4665.0		
Wt. Density	2.097	2.193	2.311	2.216		

Tare No.	13	13	17	17	7	7	9	9				
Tare wt.	26.4	26.4	26.41	26.41	24.5	24.5	27.36	27.36				
Wt. Of wet soil & tare	136.4	136.4	124.7	124.7	137.5	137.5	126.5	126.5				
Wt. Of dry soil & tare	133.1	133.1	119.87	119.87	129.65	129.65	118.24	118.24				
Wt. Of water	3.3	3.3	4.8	4.8	7.8	7.8	8.2	8.2				
Wt. Of dry soil	106.7	106.7	93.5	93.5	105.2	105.2	90.9	90.9				
Water content %	3.1%	3.1%	5.2%	5.2%	7.4%	7.4%	9.1%	9.1%				
AV.Water content %	3.1%		5.2%		7.4%		9.1%					
Dry Density	2.034		2.085		2.152		2.032					



Contractor

المعمل المركزى
شركة جمعه بدر نوح

Consultant

Mohamed

Electric Express Train - HSR

California Bearing Ratio TEST

TESTING DATE:	25/5/2023	code	ZONE	556+000	556+500
location	K.P555+000	MB2-1			
NAME COMPANY	Magdy Bekheet 2				
	operate by	GOMAA BADR LAB			

-: Test Results

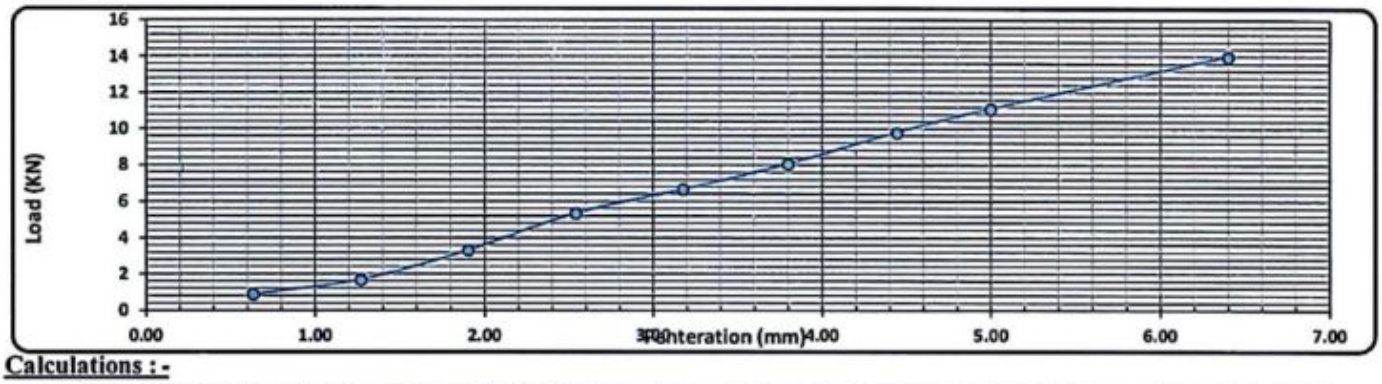
Compaction % for Mold	
Mold No.	2
Mold Vol. (cm^3)	2177.5
Mold WT. (gm)	16444
Mold WT. + Wet WT. (gm)	21410
Wet WT. (gm)	4966
Wet Density (g/cm^3)	2.281
Dry Density (g/cm^3)	2.130
Proctor Density (g/cm^3)	2.150
Compaction %	99

Mositure Ratio After Compacted Mold	
Tare No.	9
Tare WT. (gm)	26.4
Tare WT. +Wet WT. (gm)	134.6
Tare WT. +Dry WT. (gm)	127.45
Wt. Of water	7.1
Dry WT. (gm)	101.1
Moisture Content %	7.1

Swelling	
Mold No.	2
Date	24h
Intial Height (mm)	1.58
Final Height (mm)	1.47
Difference	0
Sample Height (mm)	180.00
Swelling Ratio %	0%

Loading Reading :

pentration	0.64	1.27	1.91	2.54	3.18	3.80	4.45	5.00	6.40
Load Reading (kg)	88.00	168.00	335.00	542.00	677.00	818.00	995.00	1130.00	1425.00
Load (KN)	0.9	1.6	3.3	5.3	6.6	8.0	9.8	11.1	14.0



Calculations : -

Penteration (mm)	Load (Kn)	Standard Load (lb)	CBR (%)	Mold - Compaction (%)	Compaction (%)	CBR عند نسبة 100 %
2.50	5.31	13.4	39.8%	99	100	40.2%
5.00	11.07	20.0	55.3%			55.8%

Lab. Specialist	Consultant Engineer
Name :	Name : Mohamed Ali
Sign :	Sign :

المعمل المركزى
شركة جمعه بدر نوح

MATERIAL INSPECTION REQUEST

Contractor Company	Magdy Bekhet 2			Designer Company							
Issued by Contractor	Name: Eng/ Omar Abd El Hakim	Sign		Date		Time					
Contractor refrence	MB2-(1) 25-5-2023										
Received by ER			MIR	C1	C2	C3	DD	MM	YY	HH	MM

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

Description of Materials	Soil (A-1-a)				
Location to be Used	From	To			
	556+220	556+360	(-2)		
	556+100	556+120	(-4.5)		
	556+020	556+060	(-1.75)		
	556+220	556+360	(-1.75)		
	556+360	556+500	(-1.25)		
	556+080	556+120	(-4)		
MAR Approval No			Date		
Supplier Name					
Test Requirement		Specification	Clause		
Reference Photos	Yes attached / No	Other			

Item	Description	Unit	Quantity	Arrival Date	Note
1	SIEVE ANALYSIS	M3	5000		
2	CLSSIFICATION	M3	5000		
3	PROCTOR & O.M.C	M3	5000		
4	L.L & P.L & PI	M3	5000		
5	C.B.R	M3	5000		

Comments by:	Comments by:
	تم اعتماد مشروب رمل ممثل لـ 5000m³ تقريبًا Mohammed Ali 25-5-2023

APPROVAL STATUS

Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng/ Omar Abd El Hakim			
QA/QC *	Mohammed Ali			
GARB**				
Employers Representative				

* Designer

** Alignment / Bridges: Culvert Only

MATERIAL APPROVAL REQUEST

Contractor Company	Magdy Bekhet 2			Designer Company					
Issued by Contractor	Name	Sign		Date		Time			
	Eng/ Omar Abd El Hakim								
Contractor refrence	MB2-(1) 25-5-2023								
Received by ER			MAR	G1	C2	C3	DD	MM	YY	HH	MM

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

Description of Materials	Soil (A-1-a)		
Location to be Used	K.p (555)		
Sample only	Yes / No	Materials Type	A-1-a
Supplier Name		Data Sheet provided	Yes attached / No
Reference in BoQ		Specification	Clause
Prequalification reference		Test Samples Results	AGGREGATE SAMPLING ACCORDING TOSPECS. SIEVE ANALYSIS ACCORDING TO SPECS. PASS NO 200 12.8% ATTEBERG LIMIT NP MOISTURE CONTENT 7.4% MODIFIED PROCTOR 2.15 CBR 55.3%
Test Samples Results	Yes attached / No	Other	

Comments by:	Comments by:
	تم اعتماد مشروع مثل لا Soooo Mohammed AU 25 - 5 - 2023

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng/ Omar Abd El Hakim			
QA/QC *	Mohammed AU			
GARB**				
Employers Representative				

* Designer

** Alignment/Bridges: Culvert only

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

SYSTRA SHAKER

Electric Express Train - HSR

From El Ain El Sokhna City To El Alamein - MATROUH

Section - 7 From FOKA To MARSA MATROUH

From Station 504+000 To Station 568+177

الهيئة القومية للأنفاق

PARTICLE SIZE DISTRIBUTION OF SOIL

TESTING DATE	24/5/2023	code	ZONE	556+000	556+500
location	K.P555+000	MB2-1			
NAME COMPANY	Magdy Bekheet 2				
1-visual inspection test	operate by	GOMAA BADER LAB			

2-Gradient test

A-gradation of bulk materials				SAMPLE WEIGHT [g]		20500.00		gm
sieve size	2	1.5	1	4/3	2/1	8/3	# 4	PASS
Mass retained (g)	1022.0	2840.0	3459.0	1210.0	1540.0	775.0	900.0	
Cumulative Retained (g)	1022.0	3862.0	7321.0	8531.0	10071.0	10846.0	11746.0	
Cumulative Retained %	5.0	18.8	35.7	41.6	49.1	52.9	57.3	
Cumulative Passing %	95.0	81.2	64.3	58.4	50.9	47.1	42.7	

	table classify
	soil classify
	A-1-a
PRO	2.152
PRO. CORR	2.28
WC	7.4
CBR	55.3%

B-soft material gradation				WT.OF sample		500.00		gm
sieve size	10	40	200					
Cumulative Retained (g)	119.00	232.00	350.00					
Cumulative Retained %	23.80	46.40	70.00					
Cumulative Passing %	76.20	53.60	30.00					

C-General gradient										
sieve size(in)	2	1.5	1	3/4	1/2	3/8	# 4	# 10	# 40	# 200
sieve size(mm)	50.0	37.5	25.0	19.0	12.5	9.5	4.75	2.00	0.425	0.075
Cumulative Passing %	95.0	81.2	64.3	58.4	50.9	47.1	42.7	32.5	22.9	12.8

ATTERBERG LIMTS	LIQUID LIMIT (L.L.)	PLASTIC LIMIT (P.L.)	PLASTIC INDEX (P.I.)
	N.P	N.P	N.P

Contractor

المعمل المركزى
شركة جمعه بدر نوح

Consultant

Mohammed AL

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

SYSTRA SHAKER

Electric Express Train - HSR

From El Ain El Sokhna City To El Alamein - MATROUH

Section - 7 From FOKA To MARSA MATROUH

From Station 504+000 To Station 568+177

الهيئة القومية للأنفاق

PARTICLE SIZE DISTRIBUTION OF SOIL

TESTING DATE	30/5/2023	code	ZONE	556+000	556+500
location	K.P555+000	MB2-3			
NAME COMPANY	Magdy Bekheet 2				

1-visual inspection test ..... operate by *GOMAA BADER LAB*

2-Gradient test

A-gradation of bulk materials				SAMPLE WEIGHT [g]		21220.00		gm		table classify
sieve size	2	1.5	1	4/3	2/1	8/3	# 4	PASS		soil classify
Mass retained (g)	1452.0	2953.0	1856.0	2404.0	1054.0	782.0	1424.0			A-1-a
Cumulative Retained (g)	1452.0	4405.0	6261.0	8665.0	9719.0	10501.0	11925.0		PRO	2.137
Cumulative Retained %	6.8	20.8	29.5	40.8	45.8	49.5	56.2		PRO. CORR	2.16
Cumulative Passing %	93.2	79.2	70.5	59.2	54.2	50.5	43.8		WC	7.4
									CBR	48.6%

B-soft material gradation				WT.OF sample		500.00		gm
sieve size	10	40	200					
Cumulative Retained (g)	64.00	189.00	362.00					
Cumulative Retained %	12.80	37.80	72.40					
Cumulative Passing %	87.20	62.20	27.60					

C-General gradient										
sieve size(in)	2	1.5	1	3/4	1/2	3/8	# 4	# 10	# 40	# 200
sieve size(mm)	50.0	37.5	25.0	19.0	12.5	9.5	4.75	2.00	0.425	0.075
Cumulative Passing %	93.2	79.2	70.5	59.2	54.2	50.5	43.8	38.2	27.2	12.1

ATTERBERG LIMTS	LIQUID LIMIT (L.L.)	PLASTIC LIMIT (P.L.)	PLASTIC INDEX (P.I.)
	N.P	N.P	N.P

Contractor

المعمل المركزي
شركة جمعه بدر نوح

Consultant

Mohammed Al

Electric Express Train - HSR

From El Ain El Sokhna City To El Alamein - MATROUH

Section - 7 From FOKA TO MARSA MATROUH

From Station 504+000 To Station 568+177

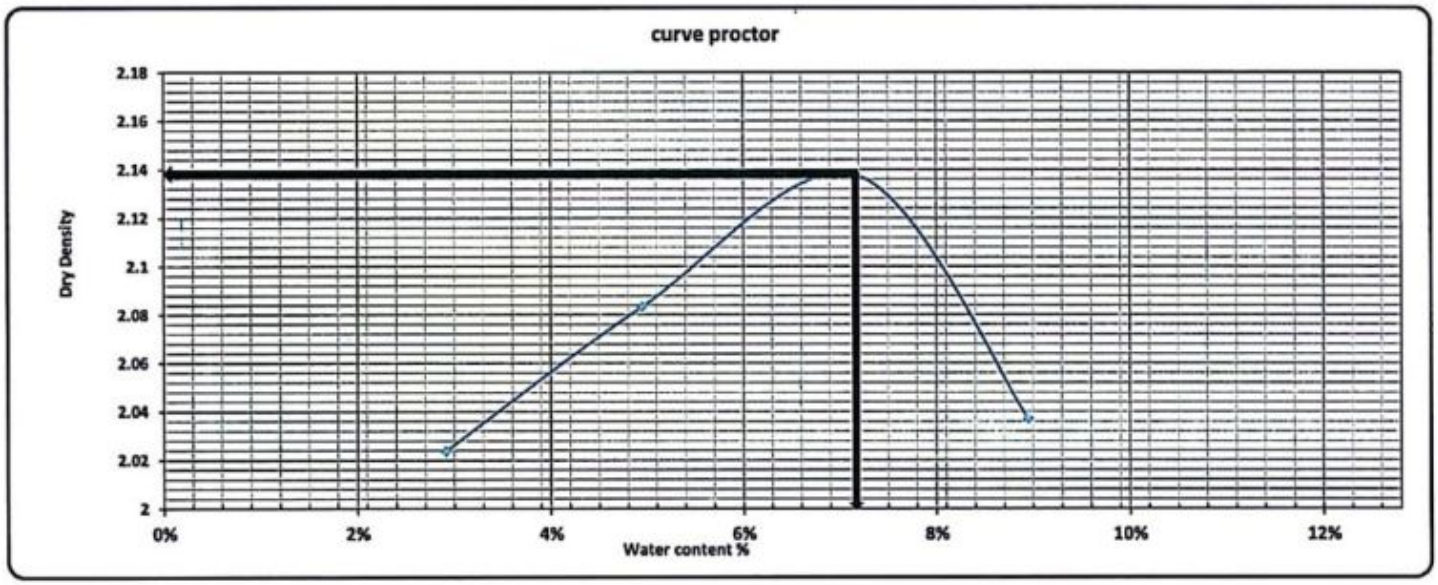
PROCTOR TEST

TESTING DATE:	30/5/2023	code	ZONE	556+000	556+500
location	K.P555+000	MB2-3			
NAME COMPANY	Magdy Bekheet 2				
	operate by	GOMAA BADR LAB			

Weight of empty mold :	6074.0	MAX Dry Density	2.137
Mold Volume:	2104.9	Water content %	7.40

trial no :	1	2	3	4		
Wt. Of Mold+ wet soil	10466.0	10685.0	10905.0	10754		
WT. WET SOIL	4392.0	4611.0	4831.0	4680.0		
Wt. Density	2.087	2.191	2.295	2.223		

Tare No.	14	14	16	16	9	9	12	12				
Tare wt.	26.4	26.4	25.45	25.45	25.2	25.2	26.5	26.5				
Wt. Of wet soil & tare	132.4	132.4	123.4	123.4	138.4	138.4	127.4	127.4				
Wt. Of dry soil & tare	129.21	129.21	118.6	118.6	130.62	130.62	118.95	118.95				
Wt. Of water	3.2	3.2	4.8	4.8	7.8	7.8	8.5	8.5				
Wt. Of dry soil	102.8	102.8	93.2	93.2	105.4	105.4	92.5	92.5				
Water content %	3.1%	3.1%	5.2%	5.2%	7.4%	7.4%	9.2%	9.2%				
AV.Water content %	3.1%		5.2%		7.4%		9.2%					
Dry Density	2.024		2.083		2.137		2.037					



Contractor

شركة جمعه بدر كوح

Consultant

Mohammed Al

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

Electric Express Train - HSR
From El Ain El Sokhna City To El Alamein - MATROUH
Section - 7 From FOKA To MARSA MATROUH
From Station 504+000 To Station 560+177

Absorbtion & Aggregate specific gravity AASHTO-T85

TESTING DATE	31/5/2023	code	ZONE	556+000	556+500
location	K.P555+000	MB2-3			
NAME COMPANY	Magdy Bekheet 2				

operate by: GOMAA BADR LAB

Weight of sample		gm
Weight of saturated -dry surface sample (B)	1989	gm
Weight of saturated sample in water (C)	1172	gm
Weight of dry sample after heating (A)	1925	gm

Results:-

Bulk specific gravity = A / (B-C)	2.356	
Apparent specific gravity = A /(A-C)	2.557	
Asorbtion = (B-A)/A	3.345	%

Los Anglos abrasion AASHTO-T96

Results:-

Weight of sample before test (gm)	Weight of sample after test (gm)	Abrasion ratio (%)
5000		#VALUE!

Lab. Engineer
Name :
Sign :

Consultant Engineer
Name : Mohammed Ali
Sign :

المعمل المركزى
شركة جمعه بدر نوح

Electric Express Train - HSR
From El Ain El Sokhna City To El Alamein - MATROUH
Section - 7 From FOKA TO MARSA MATROUH
From Station 504+000 To Station 568+177

PROCTOR CORRECTION

TESTING DATE	31/5/2023	code	ZONE	556+000	556+500
location	K.P 555+000	MB2-3			
NAME COMPANY	Magdy Bekheet 2				

Pro.	S.g.	C.R 3/4%	Proctor Correlation
2.137	2.35	40.8	2.157

Contractor

المعمل المركزي
شركة جمعه بدر نوح

Consultant

Electric Express Train - HSR

California Bearing Ratio TEST

TESTING DATE:	31/5/2023	code	ZONE	556+000	556+500
location	K.P555+000	MB2-3			
NAME COMPANY	Magdy Bekheet 2				
	operate by	GOMAA BADR LAB			

-: Test Results

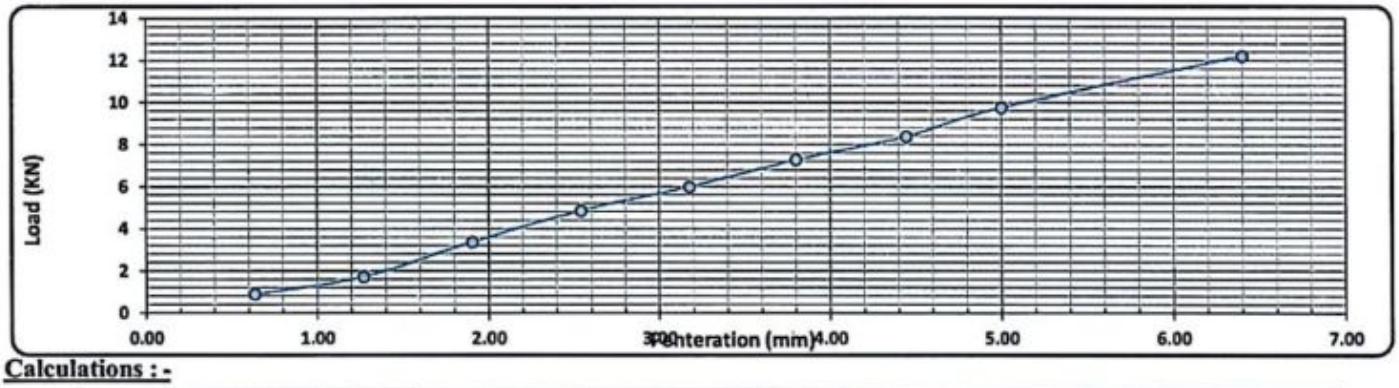
Compaction % for Mold	
Mold No.	2
Mold Vol. (cm^3)	2177.5
Mold WT. (gm)	16444
Mold WT. + Wet WT. (gm)	21385
Wet WT. (gm)	4941
Wet Density (g/cm^3)	2.269
Dry Density (g/cm^3)	2.112
Proctor Density (g/cm^3)	2.137
Compaction %	99

Mositure Ratio After Compacted Mold	
Tare No.	10
Tare WT. (gm)	27.4
Tare WT. +Wet WT. (gm)	136.5
Tare WT. +Dry WT. (gm)	128.95
Wt. Of water	7.6
Dry WT. (gm)	101.6
Moisture Content %	7.4

Swelling	
Mold No.	2
Date	24h
Intial Height (mm)	1.57
Final Height (mm)	1.48
Difference	0
Sample Height (mm)	180.00
Swelling Ratio %	0%

Loading Reading :

pentration	0.64	1.27	1.91	2.54	3.18	3.80	4.45	5.00	6.40
Load Reading (kg)	90.00	174.00	342.00	495.00	610.00	741.00	854.00	994.00	1245.00
Load (KN)	0.9	1.7	3.4	4.9	6.0	7.3	8.4	9.7	12.2



Calculations : -

Penteration (mm)	Load (Kn)	Standard Load (lb)	CBR (%)	Mold - Compaction (%)	Compaction (%)	CBR عند نسبة 100 %
2.50	4.85	13.4	36.3%	99	100	36.8%
5.00	9.74	20.0	48.6%			49.2%

Lab. Specialist	Consultant Engineer
Name :	Name : Mohamed Ali
Sign :	Sign :

المعمل المركزى
شركة جمعه بدر نوح

MATERIAL INSPECTION REQUEST

Contractor Company	Magdy Bekhet 2			Designer Company						
Issued by Contractor	Name: Eng/ Omar Abd El Hakim	Sign		Date		Time				
Contractor refrence	MB2-(3) 31-5-2023									
Received by ER			MIR	C1	C2	C3	DD	MM	YY	HH	MM

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

Description of Materials	Soil (A-1-a)				
Location to be Used	From	To			
	556+020	556+080	(-1.5)		
	556+220	556+360	(-1.5)		
	556+360	556+500	(-1)		
	556+080	556+120	(-3.5)		
	556+000	556+080	(-1.25)		
	556+220	556+360	(-1.25)		
	556+360	556+500	(-0.75)		
MAR Approval No			Date		
Supplier Name					
Test Requirement		Specification	Clause		
Reference Photos	Yes attached / No	Other			

Item	Description	Unit	Quantity	Arrival Date	Note
1	SIEVE ANALYSIS	M3	5000		
2	CLSSIFICATION	M3	5000		
3	PROCTOR & O.M.C	M3	5000		
4	L.L & P.L & PI	M3	5000		
5	C.B.R	M3	5000		

Comments by:	Comments by:
	تم اعتماد مشروه / رمل مقبل لـ 5000 m³ تقريباً Mohammed Ali 31-5-2023

APPROVAL STATUS

Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng/ Omar Abd El Hakim			
QA/QC *	Mohammed Ali			
GARB**				
Employers Representative				

* Designer

** Alignment / Bridges: Culvert Only

MATERIAL APPROVAL REQUEST

Contractor Company	Magdy Bekhet 2			Designer Company							
Issued by Contractor	Name	Sign		Date				Time			
	Eng/ Omar Abd El Hakim										
Contractor refrence	MB2-(3) 31-5-2023										
Received by ER			MAR	C1	C2	C3	DD	MM	YY	HH	MM

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

Description of Materials	Soil (A-1-a)		
Location to be Used	K.p (555)		
Sample only	Yes / No	Materials Type	A-1-a
Supplier Name		Data Sheet provided	Yes attached / No
Reference in BoQ		Specification	Clause
Prequalification reference		Test Samples Results	AGGREGATE SAMPLING ACCORDING TOSPECS. SIEVE ANALYSIS ACCORDING TO SPECS. PASS NO 200 12.1% ATTEBERG LIMIT NP MOISTURE CONTENT 7.4% MODIFIED PROCTOR 2.137 CBR 48.6%
Test Samples Results	Yes attached / No	Other	

Comments by:	Comments by:

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng/ Omar Abd El Hakim			
QA/QC *	Mohammed Ali			
GARB**				
Employers Representative				

* Designer

** Alignment/Bridges: Culvert only

MATERIAL APPROVAL REQUEST

Contractor Company	Magdy Bekhet			Designer Company					
Issued by Contractor	Name	Sign		Date			Time		
	Eng/ Omar								
Contractor refrence	MB2-(4) 12-4-2023								
Received by ER			MAR	C1	C2	C3	DD	MM	YY	HH	MM

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

Description of Materials	Soil (A-1-a)		
Location to be Used	K.p (556)		
Sample only	Yes / No	Materials Type	A-1-a
Supplier Name		Data Sheet provided	Yes attached / No
Reference in BoQ		Specification	Clause
Prequalification reference		Test Samples Results	AGGREGATE SAMPLING ACCORDING TOSPECS. SIEVE ANALYSIS ACCORDING TO SPECS. PASS NO 200 14.1 ATTEBERG LIMIT N.P MOISTURE CONTENT 7.6% MODIFIED PROCTOR 2.165 CBR 52.1%
Test Samples Results	Yes attached / No	Other	

Comments by:	Comments by:

APPROVAL STATUS

Organisation	Name	Sign	Date	A-AWC-R
Contractor	Refaat			
QA/QC *	Ahmed Abo Zaid			
GARB**				
Employers Representative				

* Designer

** Alignment/Bridges: Culvert only

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

SYSTRA SHAKER

Electric Express Train - HSR

From El Ain El Sokhna City To El Alamein - MATROUH

Section - 7 From FOKA To MARSA MATROUH

From Station 504+000 To Station 568+177

الهيئة القومية للأنفاق

PARTICLE SIZE DISTRIBUTION OF SOIL

TESTING DATE	7/6/2023	code	ZONE	556+000	556+500
location	K.P555+000	MB2-4			
NAME COMPANY	Magdy Bekheet 2				
1-visual inspection test	operate by	GOMAA BADER LAB	Quantity	2500	

2-Gradient test

A-gradation of bulk materials				SAMPLE WEIGHT [g]		20000.00		gm		table classify
sieve size	2	1.5	1	4/3	2/1	8/3	# 4	PASS		soil classify
Mass retained (g)	469.0	2046.0	2893.0	1322.0	2463.0	1634.0	1683.0			A-1-a
Cumulative Retained (g)	469.0	2515.0	5408.0	6730.0	9193.0	10827.0	12510.0		PRO	2.155
Cumulative Retained %	2.3	12.6	27.0	33.7	46.0	54.1	62.6		PRO. CORR	2.165
Cumulative Passing %	97.7	87.4	73.0	66.4	54.0	45.9	37.5		WC	7.6
									CBR	52.1%

B-soft material gradation				WT.OF sample		500.00		gm
sieve size	10	40	200					
Cumulative Retained (g)	77.00	227.00	311.80					
Cumulative Retained %	15.40	45.40	62.36					
Cumulative Passing %	84.60	54.60	37.64					

C-General gradient										
sieve size(in)	2	1.5	1	3/4	1/2	3/8	# 4	# 10	# 40	# 200
sieve size(mm)	50.0	37.5	25.0	19.0	12.5	9.5	4.75	2.00	0.425	0.075
Cumulative Passing %	97.7	87.4	73.0	66.4	54.0	45.9	37.5	31.7	20.4	14.1

ATTERBERG LIMTS	LIQUID LIMIT (L.L.)	PLASTIC LIMIT (P.L.)	PLASTIC INDEX (P.I.)
	N.P	N.P	N.P

Contractor

المعمل المركزى
شركة جمعه بدر نوح

Consultant

Electric Express Train - HSR
From El Ain El Sokhna City To El Alamein - MATROUH
Section - 7 From FOKA TO MARSA MATROUH
From Station 504+000 To Station 568+177

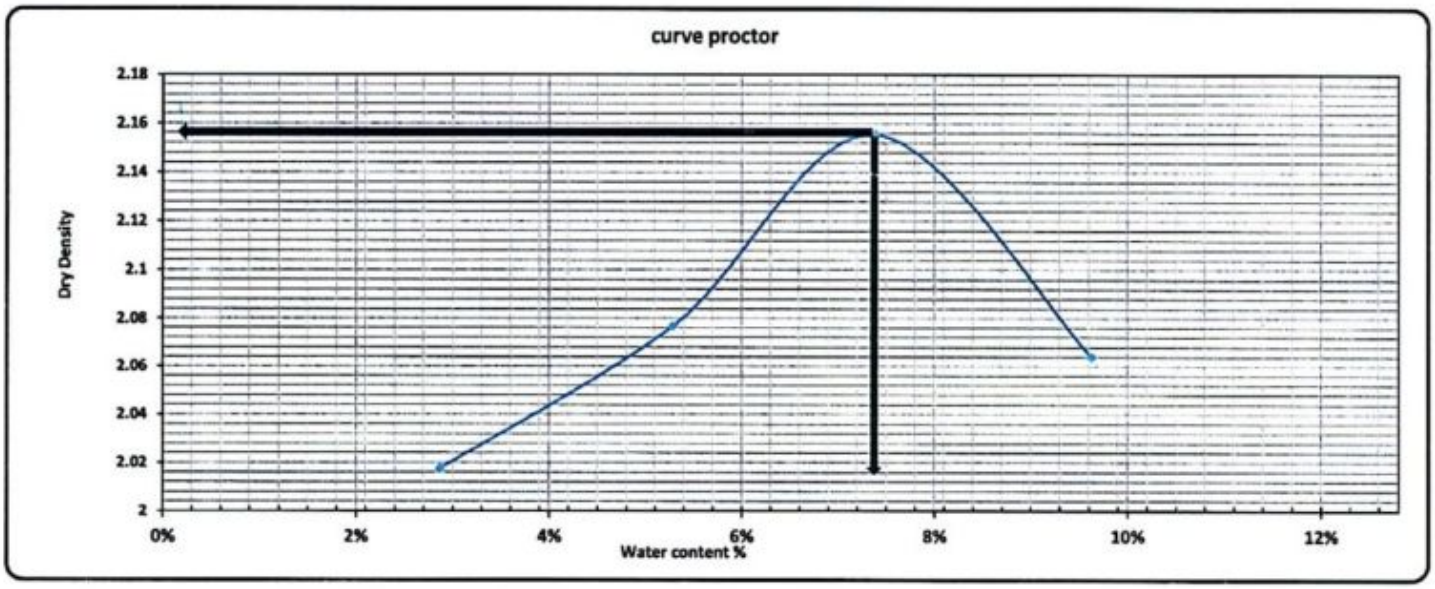
PROCTOR TEST

TESTING DATE:	7/6/2023	code	ZONE	556+000	556+500
location	K.P555+000	MB2-4			
NAME COMPANY	Magdy Bekheet 2				
	operate by	GOMAA BADR LAB			

Weight of empty mold :	6089.0	MAX Dry Density	2.155
Mold Volume:	2104.9	Water content %	7.60

trial no :	1	2	3	4		
Wt. Of Mold+ wet soil	10466.0	10700.0	10970.0	10860		
WT. WET SOIL	4377.0	4611.0	4881.0	4771.0		
Wt. Density	2.079	2.191	2.319	2.267		

Tare No.	5	5	7	7	11	11	13	13				
Tare wt.	26.06	26.06	25.37	25.37	24.41	24.41	26.71	26.71				
Wt. Of wet soil & tare	133.4	133.4	141.0	141.0	138.8	138.8	132.7	132.7				
Wt. Of dry soil & tare	130.2	130.2	135	135	130.68	130.68	123.16	123.16				
Wt. Of water	3.2	3.2	6.0	6.0	8.1	8.1	9.5	9.5				
Wt. Of dry soil	104.1	104.1	109.6	109.6	106.3	106.3	96.5	96.5				
Water content %	3.1%	3.1%	5.5%	5.5%	7.6%	7.6%	9.8%	9.8%				
AV.Water content %	3.1%		5.5%		7.6%		9.8%					
Dry Density	2.017		2.077		2.155		2.064					



Contractor

المعمل المركزى
شركة جمعه بدر نوح

Consultant

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

Electric Express Train - HSR
From El Ain El Sokhna City To El Alamein - MATROUH
Section - 7 From FOKA To MARSA MATROUH
From Station 504+000 To Station 558+177

Absorbtion & Aggregate specific gravity AASHTO-T85

TESTING DATE	8/6/2023	code	ZONE	556+000	556+500
location	K.P555+000	MB2-4			
NAME COMPANY	Magdy Bekheet 2				

operate by	GOMAA BADR LAB	
Weight of sample	2000	gm
Weight of saturated -dry surface sample (B)	2076	gm
Weight of saturated sample in water (C)	1238	gm
Weight of dry sample after heating (A)	1984	gm

Results:-

Bulk specific gravity = A / (B-C)	2.368	
Apparent specific gravity = A /(A-C)	2.660	
Asorbtion = (B-A)/A	4.637	%

Los Anglos abrasion AASHTO-T96

Results:-

Weight of sample before test (gm)	Weight of sample after test (gm)	Abrasion ratio (%)
5000		#VALUE!

Lab. Engineer
Name :
Sign :

Consultant Engineer
Name :
Sign :

المعمل المركزى
شركة جمعه بدر نوح

Electric Express Train - HSR
From El Ain El Sokhna City To El Alamein - MATROUH
Section - 7 From FOKA TO MARSA MATROUH
From Station 504+000 To Station 568+177

PROCTOR CORRECTION

TESTING DATE	8/6/2023	code	ZONE	556+000	556+500
location	K.P 555+000	MB2-4			
NAME COMPANY	Magdy Bekheet 2				

Pro.	S.g.	C.R 3/4%	Proctor Correlation
2.155	2.37	33.7	2.165

Contractor

المعمل المركزى
شركة جمعه بدر نوح

Consultant

Electric Express Train - HSR

California Bearing Ratio TEST

TESTING DATE:	10/6/2023	code	ZONE	556+000	556+500
location	K.P555+000	MB2-4			
NAME COMPANY	Magdy Bekheet 2				
	operate by	GOMAA BADR LAB			

-: Test Results

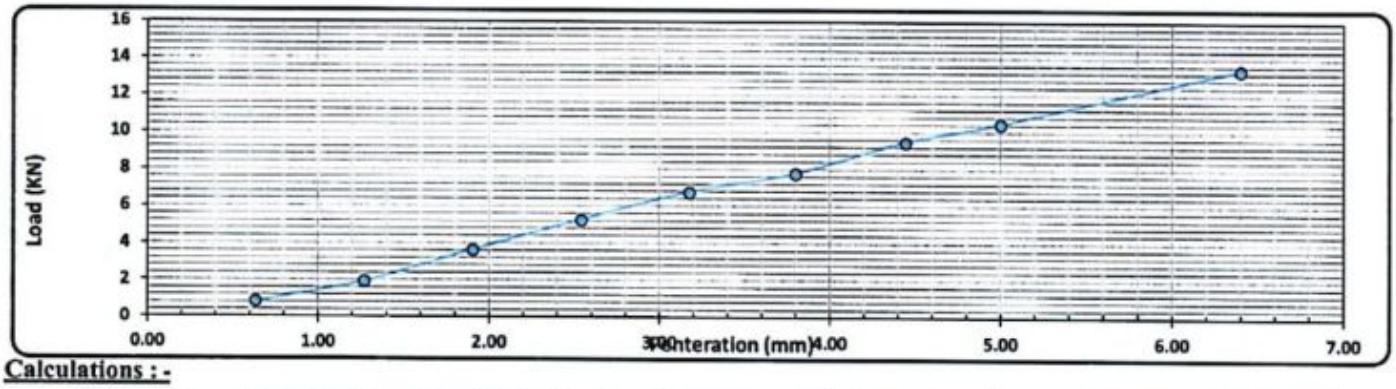
Compaction % for Mold	
Mold No.	2
Mold Vol. (cm^3)	2177.5
Mold WT. (gm)	16444
Mold WT. + Wet WT. (gm)	21416
Wet WT. (gm)	4972
Wet Density (g/cm^3)	2.283
Dry Density (g/cm^3)	2.129
Proctor Density (g/cm^3)	2.155
Compaction %	99

Mositure Ratio After Compacted Mold	
Tare No.	11
Tare WT. (gm)	26
Tare WT. +Wet WT. (gm)	163.15
Tare WT. +Dry WT. (gm)	153.9
Wt. Of water	9.3
Dry WT. (gm)	127.9
Moisture Content %	7.2

Swelling	
Mold No.	2
Date	24h
Intial Height (mm)	1.82
Final Height (mm)	1.87
Difference	0
Sample Height (mm)	180.00
Swelling Ratio %	0%

Loading Reading :

pentration	0.64	1.27	1.91	2.54	3.18	3.80	4.45	5.00	6.40
Load Reading (kg)	82.00	193.00	368.00	534.00	687.00	791.00	964.00	1064.00	1364.00
Load (KN)	0.8	1.9	3.6	5.2	6.7	7.8	9.4	10.4	13.4



Calculations : -

Penteration (mm)	Load (Kn)	Standard Load (lb)	CBR (%)	Mold - Compaction (%)	Compaction (%)	CBR عند نسبة 100 %
2.50	5.23	13.4	39.2%	99	100	39.7%
5.00	10.43	20.0	52.1%			52.7%

Lab. Specialist	Consultant Engineer
Name :	Name :
Sign :	Sign :

المعمل المركزى
شركة جمعه بدر نوح

MATERIAL INSPECTION REQUEST

Contractor Company	Magdy Bekhet			Designer Company								
Issued by Contractor	Name	Sign		Date						Time		
	Eng/ Omar											
Contractor refrence	MB2-(4) 10-6-2023											
Received by ER			MIR	C1	C2	C3	DD	MM	YY	HH	MM	

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

Description of Materials	Soil (A-1-a)				
Location to be Used	From	To			
	556+360	556+500	(-0.5)		
	556+220	556+360	(-1)		
	556+080	556+120	(-3)		
MAR Approval No			Date		
Supplier Name					
Test Requirement		Specification	Clause		
Reference Photos	Yes attached / No	Other			

Item	Description	Unit	Quantity	Arrival Date	Note
1	SIEVE ANALYSIS	M3	2500		
2	CLSSIFICATION	M3	2500		
3	PROCTOR & O.M.C	M3	2500		
4	L.L & P.L & PI	M3	2500		
5	C.B.R	M3	2500		

Comments by:	Comments by:

APPROVAL STATUS

Organisation	Name	Sign	Date	A-AWC-R
Contractor	Kehaab	Kehaab		
QA/QC *	Ahmed Abo Zaid			
GARB**				
Employers Representative				

* Designer

** Alignment / Bridges: Culvert Only

MATERIAL INSPECTION REQUEST

Contractor Company	Magdy Bekhet 2			Designer Company					
Issued by Contractor	Name	Sign		Date				Time	
	Eng/ Omar Abd El Hakim								
Contractor refrence	MB2-(5) 14-6-2023								
Received by ER			MIR	C1	C2	C3	DD	MM	YY	HH	MM

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

Description of Materials	Soil (A-1-a)				
Location to be Used	From	To			
	556+360	556+500	(-0.25)		
	556+360	556+500	(Ferma)		
	556+080	556+120	(-2.5)		
	556+080	556+120	(-2)		
	556+220	556+360	(-0.75)		
MAR Approval No			Date		
Supplier Name					
Test Requirement		Specification	Clause		
Reference Photos	Yes attached / No	Other			

Item	Description	Unit	Quantity	Arrival Date	Note
1	SIEVE ANALYSIS	M3	3500		
2	CLSSIFICATION	M3	3500		
3	PROCTOR & O.M.C	M3	3500		
4	L.L & P.L & PI	M3	3500		
5	C.B.R	M3	3500		

Comments by:	Comments by:

APPROVAL STATUS

Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng/ Omar Abd El Hakim			
QA/QC *	Ahmed Abo Zaid			
GARB**				
Employers Representative				

* Designer

** Alignment / Bridges: Culvert Only

MATERIAL APPROVAL REQUEST

Contractor Company	Magdy Bekhet 2			Designer Company									
Issued by Contractor	Name	Sign		Date						Time			
	Eng/ Omar Abd El Hakim												
Contractor refrence	MB2-(5) 14-6-2023												
Received by ER			MAR	C1	C2	C3	DD	MM	YY	HH	MM		

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

Description of Materials	Soil (A-1-a)		
Location to be Used	K.p (555)		
Sample only	Yes / No	Materials Type	A-1-a
Supplier Name		Data Sheet provided	Yes attached / No
Reference in BoQ		Specification	Clause
Prequalification reference		Test Samples Results	AGGREGATE SAMPLING ACCORDING TOSPECS. SIEVE ANALYSIS ACCORDING TO SPECS. PASS NO 200 13.2% ATTEBERG LIMIT NP MOISTURE CONTENT 6.5% MODIFIED PROCTOR 2.16 CBR 44.1%
Test Samples Results	Yes attached / No	Other	

Comments by:	Comments by:

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng/ Omar Abd El Hakim			
QA/QC *	Ahmed Abo Zaid			
GARB**				
Employers Representative				

* Designer

** Alignment/Bridges: Culvert only

Electric Express Train - HSR

From El Ain El Sokhna City To El Alamein - MATROUH

Section - 7 From FOKA To MARSA MATROUH

From Station 504+000 To Station 568+177

PARTICLE SIZE DISTRIBUTION OF SOIL

TESTING DATE:	13\6\2023	code	ZONE	556+000	556+500
LOCATION	K.P(555+500)	MB2-5			
NAME COMPANY	MAGDY BEKHET 2		QUANTITY	3500 M3	

1-visual inspection test

2-Gradient test

A-gradation of bulk materials				SAMPLE WEIGHT [g]		28533.00		gm		table classify
sieve size	2	1.5	1	4/3	2/1	8/3	# 4	PASS		soil classify
Mass retained (g)	634.0	499.0	3865.0	3359.0	2124.0	2431.0	3212.0			A-1-a
Cumulative Retained (g)	634.0	1133.0	4998.0	8357.0	10481.0	12912.0	16124.0		PRO	2.160
Cumulative Retained %	2.2	4.0	17.5	29.3	36.7	45.3	56.5		WC	6.5%
Cumulative Passing %	97.8	96.0	82.5	70.7	63.3	54.7	43.5		CBR	44.1%

B-soft material gradation				WT.OF sample		500.00		gm
sieve size	10	40	200					
Cumulative Retained (g)	98.00	187.00	348.00					
Cumulative Retained %	19.60	37.40	69.60					
Cumulative Passing %	80.40	62.60	30.40					

C-General gradient										
sieve size(in)	2	1.5	1	3/4	1/2	3/8	# 4	# 10	# 40	# 200
sieve size(mm)	50.0	37.5	25.0	19.0	12.5	9.5	4.75	2.00	0.425	0.075
Cumulative Passing %	97.8	96.0	82.5	70.7	63.3	54.7	43.5	35.0	27.2	13.2

ATTERBERG LIMTS	LIQUID LIMIT (L.L.)	PLASTIC LIMIT (P.L.)	PLASTIC INDEX (P.I.)
	N.P	N.P	N.P

Contractor

Consultant

شركة المحجوب للمقاولات العمومية والبترولية

معمل اختبارات وأبحاث التربة - مطاوع المحجوب

القطار السريع - فوكه - مطاوع

Electric Express Train - HSR

From El Ain El Sokhna City To El Alamein - MATROUH

Section - 7 From FOKA TO MARSA MATROUH

From Station 504+000 To Station 568+177

PROCTOR TEST

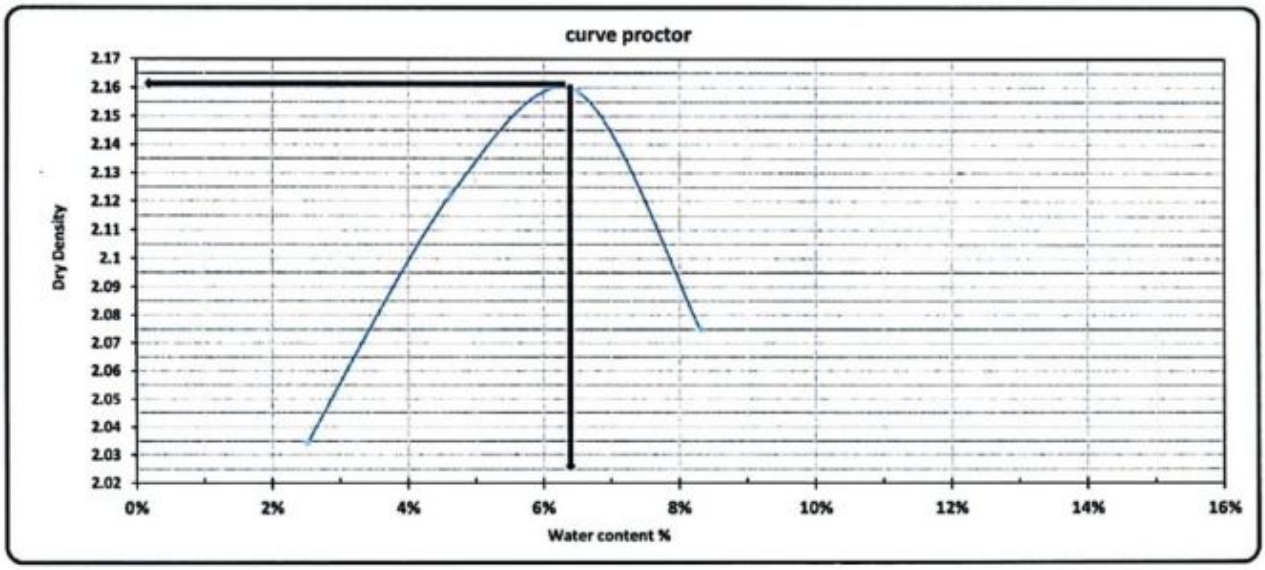
TESTING DATE:	14\6\2023	code	ZONE	556+000	556+500
LOCATION	K.P(555+600)	MB2-5			
NAME COMPANY	MAGDY BEKHET 2		QUANTITY	3500 M3	

Weight of empty mold :	6077.0
Mold Volume:	2032.0

MAX Dry Density	2.16
Water content %	6.5

trial no :	1	2	3	4	5
Wt. Of Mold+ wet soil	10313.7	10589.0	10748.0	10643	
WT. WET SOIL	4236.7	4512.0	4671.0	4565.9	
Wt. Density	2.085	2.220	2.299	2.247	

Tare No.	2	2	5	6	20	12	7	6	15	9
Tare wt.	32	30.57	22.82	23.23	21.39	22.79	34.18	35.26		
Wt. Of wet soil & tare	161.0	191.9	118.8	139.1	114.5	121.0	160.2	154.4		
Wt. Of dry soil & tare	158.3	187.3	114.7	133.6	109.0	115.2	150.4	145.3		
Wt. Of water	2.7	4.6	4.1	5.5	5.5	5.7	9.8	9.0		
Wt. Of dry soil	126.3	156.7	91.9	110.4	87.6	92.4	116.2	110.1		
Water content %	2.1%	2.9%	4.5%	4.8%	6.8%	6.2%	8.4%	8.2%		
AV.Water content %	2.5%		4.6%		6.5%		8.3%			
Dry Density	2.034		2.122		2.158		2.075			



Contractor

شركة المحجوب للمقاولات العامة
معمل اختبارات وأبحاث التربة
القطار السريع - فوكه - مطروح
المحجوب

Consultant

Electric Express Train - HSR

California Bearing Ratio TEST

Testing Date :	2023\6\14	Code	ZONE	556+000	556+500
Location :	(555+500)K.P	MB2-5			
NAME COMPANY	MAGDY BEKHET 2		QUANTITY	3500.00	

-: Test Results

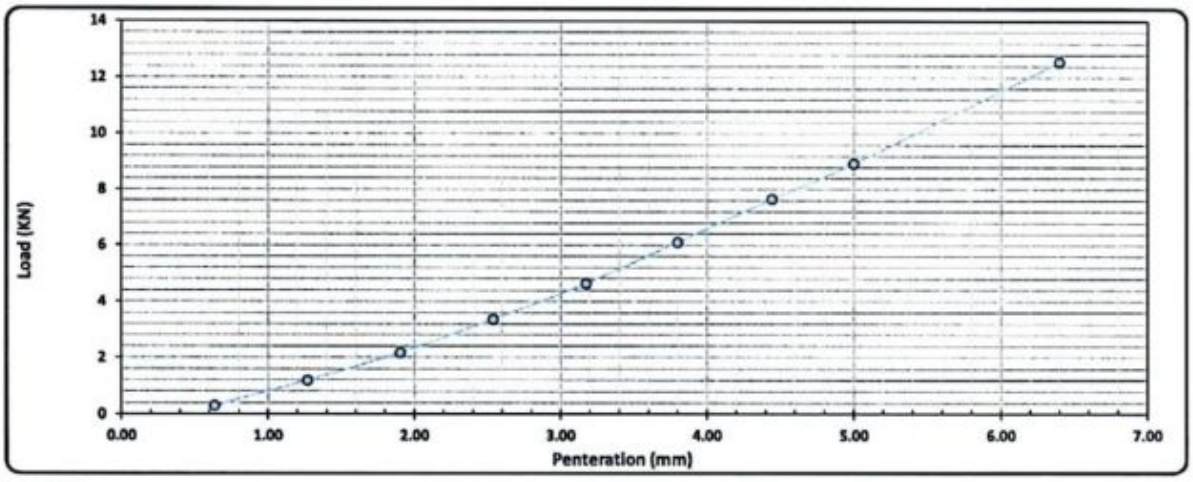
Compaction % for Mold	
Mold No.	55
Mold Vol. (cm^3)	2151
Mold WT. (gm)	15700
Mold WT. + Wet WT. (gm)	20550
Wet WT. (gm)	4850
Wet Density (g/cm^3)	2.255
Dry Density (g/cm^3)	2.117
Proctor Density (g/cm^3)	2.158
Compaction %	98

Mositure Ratio After Compacted Mold	
Tare No.	5
Tare WT. (gm)	31
Tare WT. +Wet WT. (gm)	233
Tare WT. +Dry WT. (gm)	222
Water WT. (gm)	11.0
Dry WT. (gm)	191.0
Moisture Content %	6.5

Swelling	
Mold No.	5
Date	15/5/2023
Intial Height (mm)	5.80
Final Height (mm)	5.80
Difference	0
Sample Height (mm)	120.00
Swelling Ratio %	0%

Loading Reading :

Penteration (mm)	0.64	1.27	1.91	2.54	3.18	3.80	4.45	5.00	6.40
Load Reading (kg)	30.00	121.00	221.00	343.00	473.00	623.00	781.00	911.00	1281.00
Load (KN)	0.3	1.2	2.2	3.4	4.6	6.1	7.7	8.9	12.6



Calculations : -

Penteration	Load	Standard Load	CBR	Mold - Compaction	Compaction	CBR
(mm)	(Kn)	(lb)	(%)	(%)	(%)	عند نسبة 98 %
2.50	3.36	13.4	25.2%	99	98	24.9%
5.00	8.93	20.0	44.6%			44.1%

Lab. Specialist	Lab. Engineer	Consultant Engineer
Name :	Name :	Name :
Sign :	Sign :	Sign :

معمل اختبارات وأبحاث التربة
القطار الكهربائي - فوكه - مطروح
المحجوب

Contarctor

Owner

Plate Load Test Results

Layer: -1.5

Station: 556+220 TO 556+360

Date: 4/6/20233

COMPANY	magdy bekhet
SAMPLE LOCATION	556+320

Loading	Load	Load	Stress	Dial 1	Dial 2	Dial 3	Sett. 1	Sett. 2	Sett . 3	Avg. Sett.
Stage No.	Bar	KN	MN/M2	mm	mm	mm	mm	mm	mm	mm
0.000	0.0	0.000	0.00	16.90	15.80		0.000	0.000		0.000
1.000	2.4	0.707	0.01	16.45	15.40		0.450	0.400		0.425
2.000	18.8	5.652	0.08	16.50	14.90		0.400	0.900		0.650
0.080	37.7	11.304	0.16	16.10	14.80		0.800	1.000		0.900
4.000	58.9	17.663	0.25	15.50	14.75		1.400	1.050		1.225
5.000	77.7	23.315	0.33	15.42	14.40		1.480	1.400		1.440
6.000	98.9	29.673	0.42	15.30	14.05		1.600	1.750		1.675
7.000	117.8	35.325	0.50	15.15	13.60		1.750	2.200		1.975
8.000	58.9	17.663	0.25	15.25	13.75		1.650	2.050		1.850
9.000	29.4	8.831	0.12	15.35	13.90		1.550	1.900		1.725
9.000	2.4	0.707	0.01	15.80	14.70		1.100	1.100		1.100
10.000	2.4	0.707	0.01	15.80	14.70		1.100	1.100		1.100
11.000	18.8	5.652	0.08	15.63	14.40		1.270	1.400		1.335
12.000	37.7	11.304	0.16	15.43	14.22		1.470	1.580		1.525
13.000	58.9	17.663	0.25	15.33	14.00		1.570	1.800		1.685
14.000	77.7	23.315	0.33	15.20	13.84		1.700	1.960		1.830
15.000	98.9	29.673	0.42	15.05	13.70		1.850	2.100		1.975

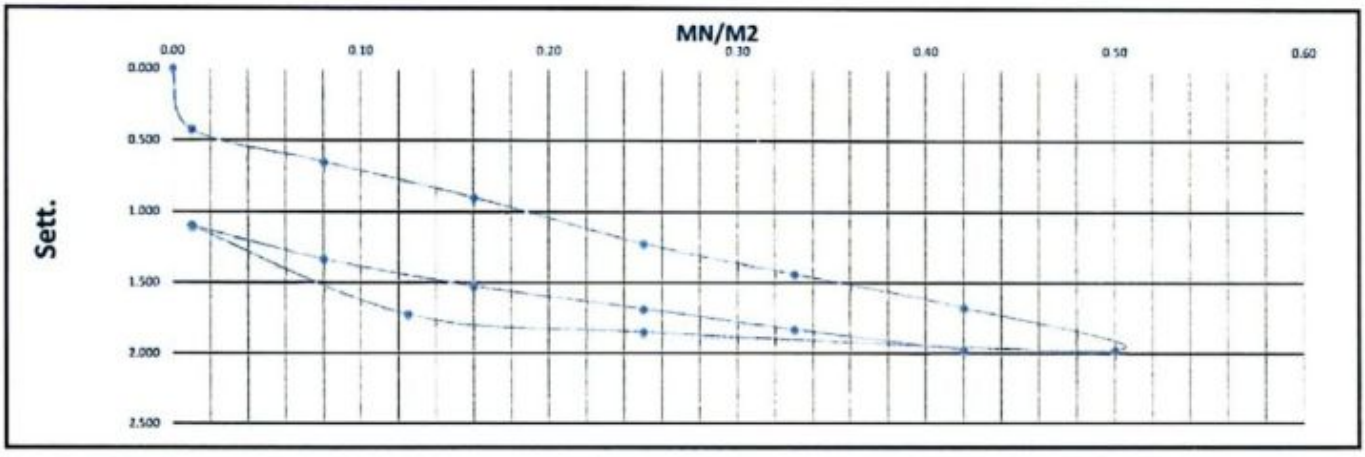
		s	ΔS	Δσ
0.7 σ_1	0.35	1.4125	0.54375	0.2
0.3 σ_1	0.15	0.86875		
0.7σ_2	0.35	1.86222	0.2922	0.2
0.3σ_2	0.15	1.57002		
D (mm)	300			
Ev_1	82.76			
Ev_2	154.00			
Area (Sq.m)	0.07065			

Ev2/Ev1	1.86		

LOAD

UN LOAD

RE LOAD



Lab. Specialist	Lab. Engineer	Consultant Engineer
Name :	Name :	Name :
Sign :	Sign :	Sign :

معمل اختبارات وانشاءات الطرق
القطار السريع - فرع مطبوع المحجوب

MATERIAL INSPECTION REQUEST	ENGINEERING CONSULTING OFFICE	الهيئة القومية للأنفاق	الهيئة العامة للطرق و الكباري و النقل البري (GARBLT)	SYSTRA · SHAKER

Contractor Company	Magdy Bekhet			Designer Company							
Issued by Contractor	Name: Eng/ Omar	Sign: Refaat		Date: 18-6-2023				Time:			
Contractor refrence	MB2-(6) 18-6-2023										
Received by ER			MIR	C1	C2	C3	DD	MM	YY	HH	MM

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

Description of Materials	Soil (A-1-a)				
Location to be Used	From 556+000 To 556+080 (-0.75) 556+220 556+360 (-0.5) 556+080 556+120 (-1.5)				
MAR Approval No				Date	
Supplier Name					
Test Requirement			Specification	Clause	
Reference Photos	Yes attached / No		Other		

Item	Description	Unit	Quantity	Arrival Date	Note
1	SIEVE ANALYSIS	M3	1500		
2	CLSSIFICATION	M3	1500		
3	PROCTOR & O.M.C	M3	1500		
4	L.L & P.L & PI	M3	1500		
5	C.B.R	M3	1500		

Comments by:	Comments by: تؤخذ العينات والمواصفات ~ الكميات تمثل حوالى 1500 متر

APPROVAL STATUS

Organisation	Name	Sign	Date	A-AWC-R
Contractor	Refaat	Refaat		
QA/QC *	Mohammed Ali	[signature]		
GARB**				
Employers Representative				

* Designer
** Alignment / Bridges: Culvert Only

MATERIAL APPROVAL REQUEST

Contractor Company	Magdy Bekhet			Designer Company							
Issued by Contractor	Name	Sign		Date				Time			
	Eng/ Omar	Rehab									
Contractor refrence	MB2-(6) 18-6-2023										
Received by ER			MAR	C1	C2	C3	DD	MM	YY	HH	MM

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

Description of Materials	Soil (A-1-a)		
Location to be Used	K.p (556)		
Sample only	Yes / No	Materials Type	A-1-a
Supplier Name		Data Sheet provided	Yes attached / No
Reference in BoQ		Specification	Clause
Prequalification reference		Test Samples Results	AGGREGATE SAMPLING ACCORDING TOSPECS. SIEVE ANALYSIS ACCORDING TO SPECS. PASS NO 200 13.3 ATTEBERG LIMIT N.P MOISTURE CONTENT 7.35% MODIFIED PROCTOR 2.18 CBR 44.1%
Test Samples Results	Yes attached / No	Other	
Comments by:		**Comments by:**	

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
Contractor	Rehab	Rehab		
QA/QC *	Mohammed Ali			
GARB**				
Employers Representative				

* Designer

** Alignment/Bridges: Culvert only

Electric Express Train - HSR

From El Ain El Sokhna City To El Alamein - MATROUH

Section - 7 From FOKA To MARSA MATROUH

From Station 504+000 To Station 568+177

PARTICLE SIZE DISTRIBUTION OF SOIL

TESTING DATE:	13\6\2023	code	ZONE	556+000	556+500
LOCATION	k.p 555+500	MB2-6			
NAME COMPANY	magdy bekhiet 2		QUANTITY	M3 1500	

1-visual Inspection test

2-Gradient test

A-gradation of bulk materials				SAMPLE WEIGHT [g]		23461.00		gm		table classify
sieve size	2	1.5	1	4/3	2/1	8/3	# 4	PASS		soil classify
Mass retained (g)	0.0	855.0	3297.0	4364.3	2411.0	1338.0	169.0			A-1-a
Cumulative Retained (g)	0.0	855.0	4152.0	8516.3	10927.3	12265.3	12434.3		PRO	2.180
Cumulative Retained %	0.0	3.6	17.7	36.3	46.6	52.3	53.0		WC	7.35%
Cumulative Passing %	100.0	96.4	82.3	63.7	53.4	47.7	47.0		CBR	44.1%

B-soft material gradation				WT.OF sample		500.00		gm
sieve size	10	40	200					
Cumulative Retained (g)	85.00	215.00	359.00					
Cumulative Retained %	17.00	43.00	71.80					
Cumulative Passing %	83.00	57.00	28.20					

C-General gradient										
sieve size(in)	2	1.5	1	3/4	1/2	3/8	# 4	# 10	# 40	# 200
sieve size(mm)	50.0	37.5	25.0	19.0	12.5	9.5	4.75	2.00	0.425	0.075
Cumulative Passing %	100.0	96.4	82.3	63.7	53.4	47.7	47.0	39.0	26.8	13.3

ATTERBERG LIMTS	LIQUID LIMIT (L.L.)	PLASTIC LIMIT (P.L.)	PLASTIC INDEX (P.I.)
	N.P	N.P	N.P

Contractor

معمل اختبارات وابحاث التربة
القطار السريع - فوكه - مطروح

Consultant

19/8/2023

Electric Express Train - HSR

From El Ain El Sokhna City To El Alamein - MATROUH

Section - 7 From FOKA TO MARSA MATROUH

From Station 504+000 To Station 568+177

PROCTOR TEST

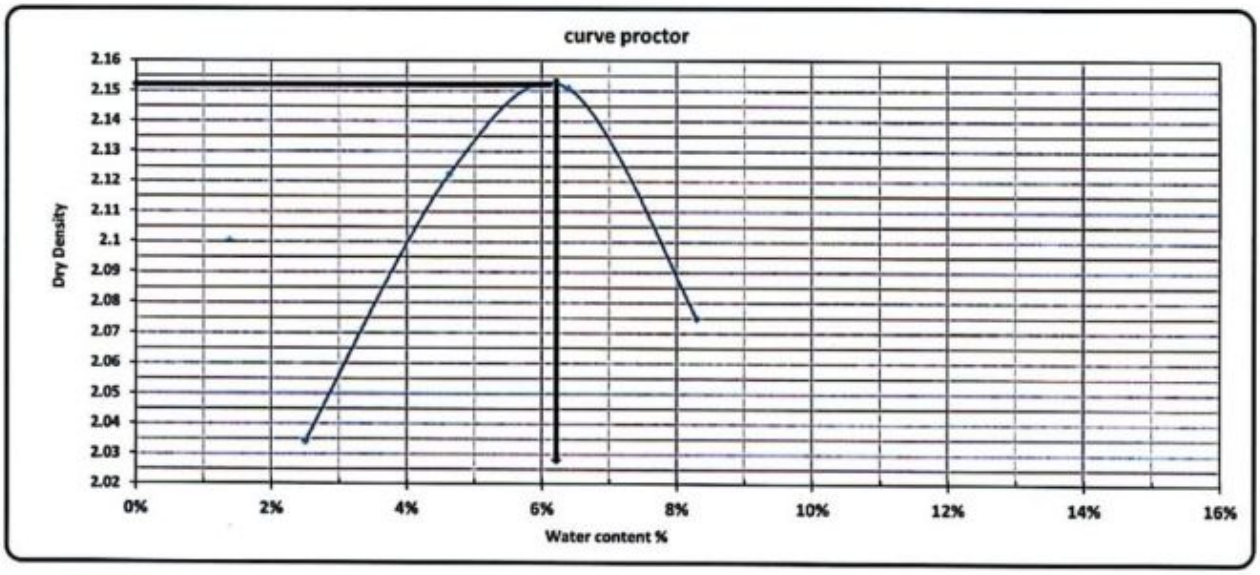
TESTING DATE:	14\6\2023	code	ZONE	556+000	556+500
LOCATION	k.p 555+500	MB2-6			
NAME COMPANY	magdy bekhiet 2		QUANTITY	M3 1500	

Weight of empty mold :	6077.0
Mold Volume:	2032.0

MAX Dry Density	2.152
Water content %	6.4

trial no :	1	2	3	4	5
Wt. Of Mold+ wet soil	10313.7	10589.0	10727.0	10643	
WT. WET SOIL	4236.7	4512.0	4650.0	4565.9	
Wt. Density	2.085	2.220	2.288	2.247	

Tare No.	2	2	5	6	20	12	7	6	15	9
Tare wt.	32	30.57	22.82	23.23	21.39	22.79	34.18	35.26		
Wt. Of wet soil & tare	161.0	191.9	118.8	139.1	114.5	121.0	160.2	154.4		
Wt. Of dry soil & tare	158.3	187.3	114.7	133.6	109.0	115.2	150.4	145.3		
Wt. Of water	2.7	4.6	4.1	5.5	5.5	5.7	9.8	9.0		
Wt. Of dry soil	126.3	156.7	91.9	110.4	87.6	92.4	116.2	110.1		
Water content %	2.1%	2.9%	4.5%	4.8%	6.6%	6.2%	8.4%	8.2%		
AV.Water content %	2.5%		4.6%		6.4%		8.3%			
Dry Density	2.034		2.122		2.151		2.075			



Contractor

Consultant

19 / 6 / 2023

Correction of Unit Weight and Water Content For Soils Containing oversize Particles (ASTM D-4718)

Dry Unit Weight of Fine Fraction (Y_{DF}) (gm/cm^3)	2.150	Company	MAGDY BEKHIET 2
Optimum Moisture Content (O.M.C) (%)	6.50	Date of Sample	15/5/2023
Specific Gravity of over Size Fraction (G_M)	2.267	Project	Express Train Project
Specific Gravity of Water (Y_W)	0.980	Sector	Foka - Matrouh

Sample Data	UNIT	VALUE
Total Weight of Wet Sample	gm	10000
Weight of Wet oversize Fraction (Retained 3/4)	gm	3630
Weight of Wet Fine Fraction (Passing 3/4)	gm	6370
Weight of Dry oversize Fraction (M_{DC})	gm	3405
Weight of Dry Fine Fraction (M_{DF})	gm	5910
Total Weight of Dry Sample	gm	9315
Water Content of oversize Fraction (W_C)	%	0.07
Water Content of Fine Fraction (W_F)	%	0.08
Percent of oversize Fraction By Mass (P_C)	%	36.55
Percent of Fine Fraction By Mass (P_F)	%	63.45

Calculations of Corrected Water for oversize Fraction & Finer Fraction (W_T) :-

Corrected Water for oversize Fraction & Finer Fraction (C_W)		$W_F P_F + W_C P_C$	7.35
Specific Gravity of over Size Fraction (G_M)	2.267		
Specific Gravity of Fine Fraction (Y_{DF})	2.150	gm/cm^3	
Specific Gravity of Water (Y_W)	0.980		

Calculations of Correctd Unit Dry Weight of the Total Material (combined finer and oversize fractions) (Y_{DT}):-

Corrected Dry Unit Weight of Total Material (Y_{DT})	(YDF * GM * YW) / ((YDF * PC) + (GM * YW * PF))	2.18

Corrected Maximum Dry Density (M.D.D)	2.18	gm/cm^3
Corrected Optimum Moisture Content (O.M.C)	7.35	%

QC Manager

AHMED EL-ALFY

معمل اختبارات وابحاث التربة
القطار السريع - فوكه - مطروح

19/8/2023

Electric Express Train - HSR

California Bearing Ratio TEST

Testing Date :	18-6-2023	Code	ZONE	556+000	556+500
Location :	(551+000)k.p	MB2-6			
NAME COMPANY	MAGDY BEKHIET 2				

-: Test Results

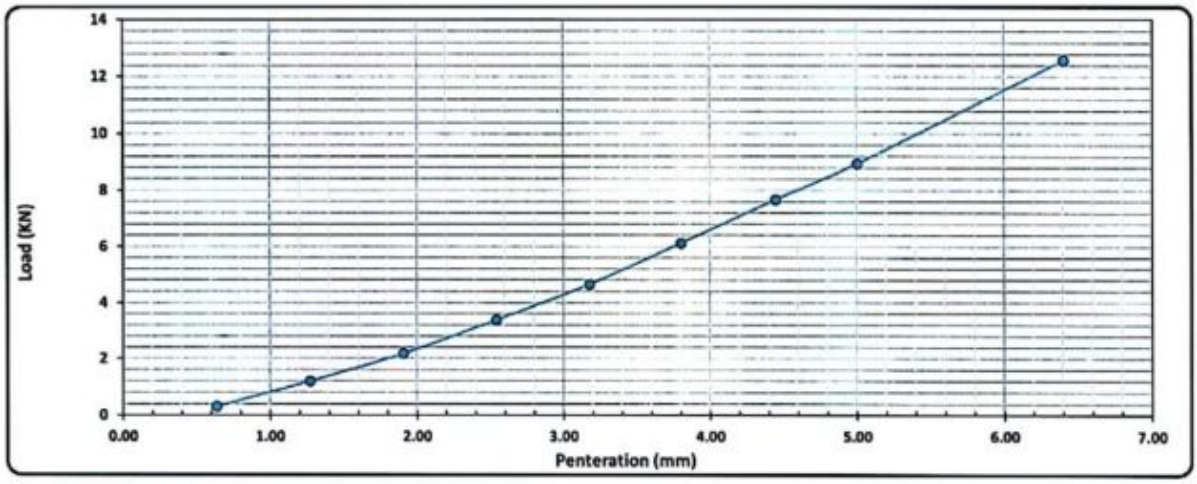
Compaction % for Mold	
Mold No.	55
Mold Vol. (cm^3)	2151
Mold WT. (gm)	15700
Mold WT. + Wet WT. (gm)	20550
Wet WT. (gm)	4850
Wet Density (g/cm^3)	2.255
Dry Density (g/cm^3)	2.119
Proctor Density (g/cm^3)	2.152
Compaction %	98

Mositure Ratio After Compacted Mold	
Tare No.	5
Tare WT. (gm)	31
Tare WT. +Wet WT. (gm)	233
Tare WT. +Dry WT. (gm)	222
Water WT. (gm)	11.0
Dry WT. (gm)	191.0
Moisture Content %	6.4

Swelling	
Mold No.	5
Date	18/6/2023
Intial Height (mm)	5.80
Final Height (mm)	5.80
Difference	0
Sample Height (mm)	120.00
Swelling Ratio %	0%

Loading Reading :

Penteration (mm)	0.64	1.27	1.91	2.54	3.18	3.80	4.45	5.00	6.40
Load Reading (kg)	30.00	121.00	221.00	343.00	473.00	623.00	781.00	911.00	1281.00
Load (KN)	0.3	1.2	2.2	3.4	4.6	6.1	7.7	8.9	12.6



Calculations : -

Penteration	Load	Standard Load	CBR	Mold - Compaction	Compaction	CBR
(mm)	(Kn)	(lb)	(%)	(%)	(%)	% عند نسبة 98
2.50	3.36	13.4	25.2%	99	98	24.9%
5.00	8.93	20.0	44.6%			44.1%

Lab. Specialist	Lab. Engineer	Consultant Engineer
Name :	Name :	Name :
Sign :		Sign :

معمل اختبارات وأبحاث التربة

Electric Express Train - HSR

From El Ain El Sokhna City To El Alamein - MATROUH

Section - 7 From FOKA TO MARSA MATROUH

From Station 504+000 To Station 568+177

PROCTOR TEST

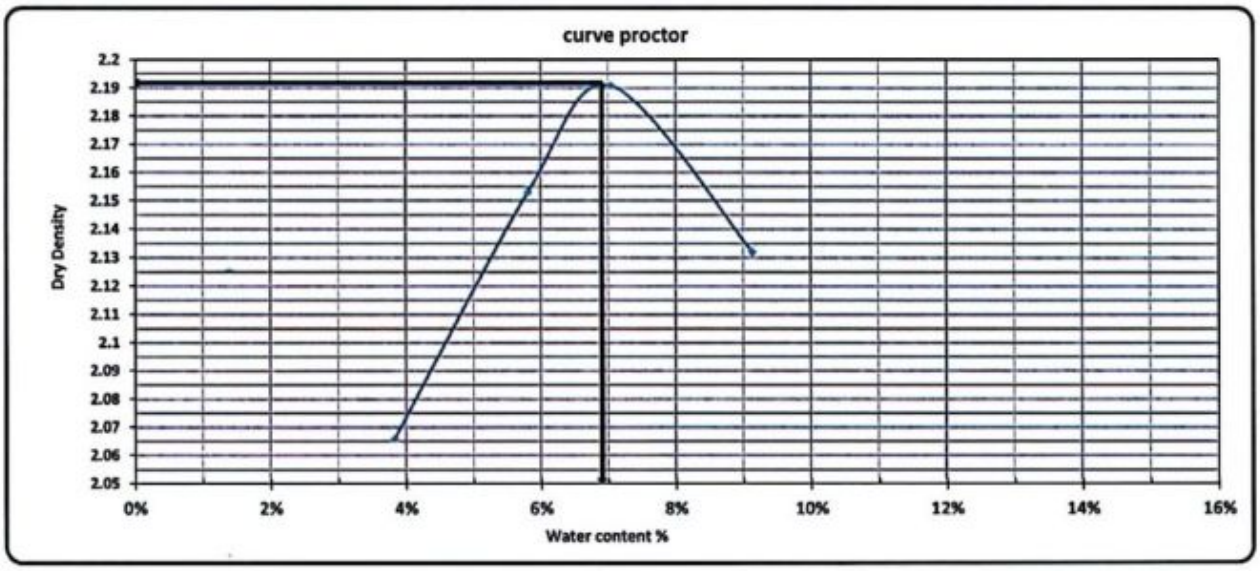
TESTING DATE:	24\7\2023	code	Station	556+000	556+500
LOCATION	K.P(556+000)	MB2-P1	Material	PERPARED	
NAME COMPANY	magdy bekhiet		layer thickness	25 cm	

Weight of empty mold :	6078.0
Mold Volume:	2032.0

MAX Dry Density	2.191
Water content %	6.9%

trial no :	1	2	3	4	5
Wt. Of Mold+ wet soil	10436.6	10706.9	10843.0	10806.0	
WT. WET SOIL	4358.6	4628.9	4765.0	4728.0	
Wt. Density	2.145	2.278	2.345	2.327	

Tare No.	1	2	3	4	5	6	7	8		
Tare wt.	30.6	34.21	34.18	23.97	32.69	33.14	33.01	34.1		
Wt. Of wet soil & tare	176.4	171.1	151.7	145.1	176.5	161.2	167.5	163.9		
Wt. Of dry soil & tare	171.4	165.8	145.3	138.3	166.7	153.1	156.3	153.0		
Wt. Of water	5.1	5.4	6.3	6.8	9.8	8.2	11.2	10.9		
Wt. Of dry soil	140.8	131.5	111.1	114.4	134.0	119.9	123.3	118.9		
Water content %	3.6%	4.1%	5.7%	5.9%	7.3%	6.8%	9.1%	9.2%		
AV.Water content %	3.8%		5.8%		7.0%		9.1%			
Dry Density	2.066		2.153		2.191		2.132			



Contractor

معمل اختبارات وابحاث التربة
القطار السريع - فوكة

Consultant

25/7/2023

Electric Express Train - HSR

California Bearing Ratio TEST

Testing Date :	2023\7\25	Code	FROM STA :		556+000	556+500
Location :	K.P(556+000)	MB2-P1	: Material		PERPARED	
NAME COMPANY	magdy bekhiet		: Layer Thickness		25 cm	

-: Test Results

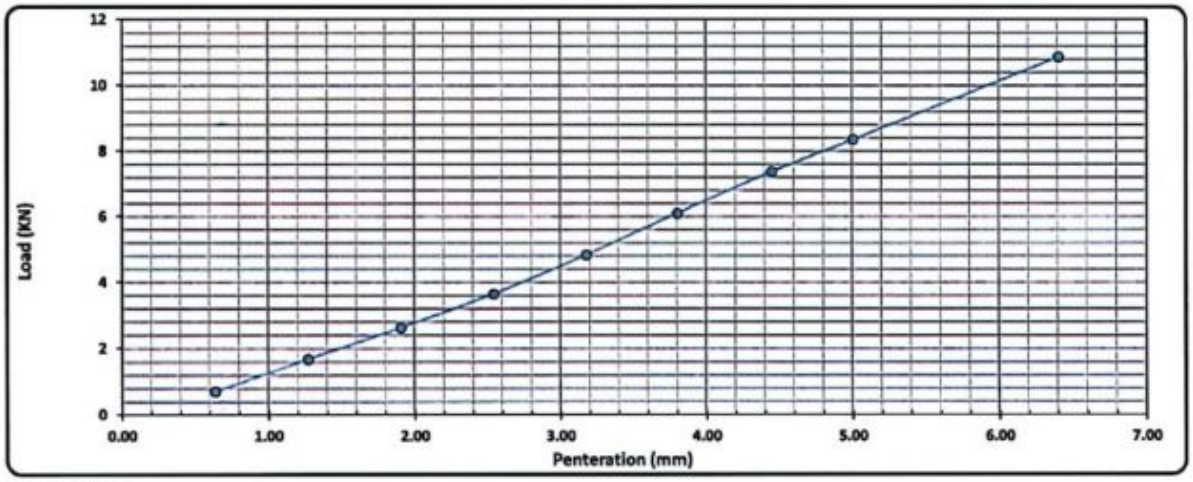
Compaction % for Mold	
Mold No.	55
Mold Vol. (cm^3)	2151
Mold WT. (gm)	7810
Mold WT. + Wet WT. (gm)	12850
Wet WT. (gm)	5040
Wet Density (g/cm^3)	2.343
Dry Density (g/cm^3)	2.194
Proctor Density (g/cm^3)	2.191
Compaction %	100

Mositure Ratio After Compacted Mold	
Tare No.	5
Tare WT. (gm)	34
Tare WT. +Wet WT. (gm)	160
Tare WT. +Dry WT. (gm)	152
Water WT. (gm)	8.0
Dry WT. (gm)	118.0
Moisture Content %	6.8

Swelling	
Mold No.	3
Date	2023\7\25
Intial Height (mm)	2.20
Final Height (mm)	2.20
Difference	0
Sample Height (mm)	120.00
Swelling Ratio %	0%

Loading Reading :

Penteration (mm)	0.64	1.27	1.91	2.54	3.18	3.80	4.45	5.00	6.40
Load Reading (kg)	71.00	170.00	266.00	370.00	491.00	620.00	750.00	850.00	1107.00
Load (KN)	0.7	1.7	2.6	3.6	4.8	6.1	7.4	8.3	10.8



Calculations : -

Penteration (mm)	Load (Kn)	Standard Load (lb)	CBR (%)	Mold - Compaction (%)	Compaction (%)	CBR عند نسبة 98 %
2.50	3.63	13.4	27.2%	100	98	26.6%
5.00	8.33	20.0	41.6%			40.7%

Lab. Specialist	Lab. Engineer	Consultant Engineer
Name :	Name :	Name : 25/7/2023
Sign :	Sign :	Sign :

EL Mahgoub company

Express Electric Trian project

El Mahjoub lab

Absorbtion & Aggregate specific gravity AASHTO-T85

Testing date :-	23\7\2023
location :-	K.P(556+000)
material :-	PREPARED SUBGRADE

Weight of sample		gm
Weight of saturated -dry surface sample (B)		gm
Weight of saturated sample in water (C)		gm
Weight of dry sample aftre heating (A)		gm

Results:-

Bulj spicific gravity = A / (B-C)		
Apparent spicific gravity = A /(A-C)		
Asorbtion = (B-A)/A		

Los Anglos abrasion AASHTO-T96

Results:-

Weight of sample before	Weight of sample before test (gm)	Abrasion ratio (%)
5000	3342	33.16

Lab Engineer/

معمل اختبارات وأبحاث التربة
القطار السريع - فوكه - مطروح
المحجوب

25 / 7 / 2023

MATERIAL INSPECTION REQUEST

ENGINEERING CONSULTING OFFICE
المكتب الاستشاري الهندسي
د. خالد عبدل

وزارة النقل
الهيئة العامة للقطار الكهربائي

SYSTRA SHAKER

Contractor Company	MAGDI –BKHEIT 2			Designer Company							
Issued by Contractor	Name	Sign		Date				Time			
	Eng/ OMAR										
Contractor refrence	MB2 – P1 25-7-2023										
Received by ER			MIR	C1	C2	C3	DD	MM	YY	HH	MM

CODE-1	S1 to S21 Station Reference	D1 to S3 Depot Reference	Kp 556 Note For Kilometer point only Start Km is used
CODE - 2	Work Activity		
CODE - 3	Sub Element of Activity		

Description of Materials	REPLACMENT FILL MATERIAL RESULTS		
Location to be Used	556+000 556+120 (+0.25) 556+000 556+120 (+0.50) 556+220 556+360 (+0.25) 556+220 556+360 (+0.50) 556+360 556+500 (+0.25) 556+360 556+500 (+0.50)		
MAR Approval No		Date	
Supplier Name			
Test Requirement		Specification	Clause
Reference Photos	Yes attached / No	Other	

Item	Description	Unit	Quantity	Arrival Date	Note
1	Sieve analysis	M3	5000		
2	Classification	M3	5000		
3	Proctor & O.m.c	M3	5000		
4	L.L & P.L & PI	M3	5000		
5	C.B.R	M3	5000		

Comments by:	Comments by:

APPROVAL STATUS

Organisation	Name	Sign	Date	A-AWC-R
Contractor	Refaat	Refaat		
QA/QC *	Ahmed Abo Zaid	25/7/2023	25/7/2023	
GARB**				
Employers Representative				

* Designer

** Alignment / Bridges: Culvert Only

MATERIAL APPROVAL REQUEST

ENGINEERING CONSULTING OFFICE
المكتب الاستشاري الهندسي

وزارة النقل
الهيئة العامة للقطار الكهربائي

SYSTRA SHAKER

Contractor Company	MAGDI – BKHEIT 2			Designer Company			k.k				
Issued by Contractor	Name	Sign		Date			Time				
	Eng / Omar	Refaat									
Contractor Refrence	MB2 – P1 25-7-2023										
Received by ER			MAR	C1	C2	C3	DD	MM	YY	HH	MM

CODE-1	S1 to S21 Station Reference	D1 to S3 Depot Reference	Kp 556 Note For Kilometer point only Start Km is used
CODE - 2	Work Activity		
CODE - 3	Sub Element of Activity		

Description of Materials			
Location to be Used			
Sample only	Yes / No	Materials Type	A-1-a
Supplier Name		Data Sheet provided	Yes attached / No
Reference in BoQ		Specification	Clause
Prequalification reference		Test Samples Results	AGGREGATE SAMPLING ACCORDING TO SPECS. SIEVE ANALYSIS ACCORDING TO SPECS. PASS NO 200 10 ATTEBERG LIMIT NP MOISTURE CONTENT 6.9 % MODIFIED PROCTOR 2.191 CBR 40.7%
Reference Photos	Yes attached / No	Other	

Comments by:	Comments by:

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
Contractor	Refaat	Refaat		
QA/QC *	Ahmed Abo Zaid	25/7/2023	25/7/2023	
GARB**				
Employers Representative				

* Designer

** Alignment/Bridges: Culvert only

Electric Express Train - HSR

From El Ain El Sokhna City To El Alamein - MATROUH

Section - 7 From FOKA To MARSA MATROUH

From Station 504+000 To Station 568+177

PARTICLE SIZE DISTRIBUTION OF SOIL

TESTING DATE:	23\7\2023	code	ZONE	556+000	556+500
LOCATION	K.P(556+000)	MB2-P1	Material	PERPARED	
NAME COMPANY	magdy bekhiet		layer thickness	25 cm	

1-visual inspection test

2-Gradient test

A-gradation of bulk materials				SAMPLE WEIGHT [g]		23305.00		gm		table classify
sieve size	2	1.5	1	4/3	2/1	8/3	# 4	PASS		soil classify
Mass retained (g)	414.0	1415.0	2515.0	2154.0	4270.0	1960.0	3026.0			A-1-a
Cumulative Retained (g)	414.0	1829.0	4344.0	6498.0	10768.0	12728.0	15754.0		PRO	2.191
Cumulative Retained %	1.8	7.8	18.6	27.9	46.2	54.6	67.6		WC	6.9%
Cumulative Passing %	98.2	92.2	81.4	72.1	53.8	45.4	32.4		CBR	40.7%

B-soft material gradation				WT.OF sample		500.00		gm
sieve size	10	40	200					
Cumulative Retained (g)	127.00	228.00	346.00					
Cumulative Retained %	25.40	45.60	69.20					
Cumulative Passing %	74.60	54.40	30.80					

C-General gradient										
sieve size(in)	2	1.5	1	3/4	1/2	3/8	# 4	# 10	# 40	# 200
sieve size(mm)	50.0	37.5	25.0	19.0	12.5	9.5	4.75	2.00	0.425	0.075
Cumulative Passing %	98.2	92.2	81.4	72.1	53.8	45.4	32.4	24.2	17.6	10.0
REMARKS		97-50		75-20		60-15		0-35		0-12

ATTERBERG LIMTS	LIQUID LIMIT (L.L.)	PLASTIC LIMIT (P.L.)	PLASTIC INDEX (P.I.)
	N.P	N.P	N.P

Contractor

معمل اختبارات وأبحاث التربة
القطار السريع - فوكة - مطروح
المحجوب

Consultant

25/7/2023

EL Mahqoub company

Express Electric Trian project

Absorbtion & Aggregate specific gravity AASHTO-T85

Testing date :-	10\8\2023
location :-	555+500
material :-	sub ballast

Weight of sample	2000	gm
Weight of saturated -dry surface sample (B)	2030.70	gm
Weight of saturated sample in water (C)	1243.90	gm
Weight of dry sample aftre heating (A)	1988.00	gm

Results:-

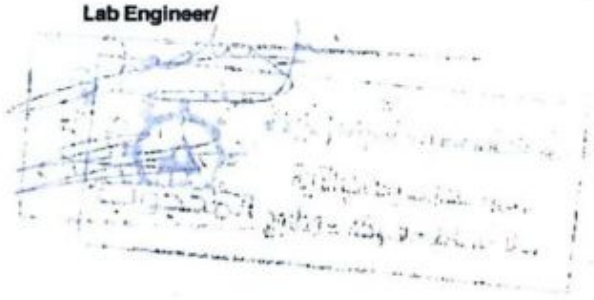
Bulj spicific gravity = A / (B-C)	2.527	
Apparent spicific gravity = A /(A-C)	2.672	
Asorbtion = (B-A)/A	2.148	

Los Anglos abrasion AASHTO-T96

Results:-

Weight of sample before	Weight of sample before test (gm)	Abrasion ratio (%)
5000	3610	27.80

Lab Engineer/



Youssef Ragab
2023

EL Mahgoub company

Express Electric Trian project

Absorbtion & Aggregate specific gravity AASHTO-T85

Testing date :-	10\8\2023
location :-	558+300
material :-	sub ballast

Weight of sample	2000	gm
Weight of saturated -dry surface sample (B)	2029.20	gm
Weight of saturated sample in water (C)	1249.80	gm
Weight of dry sample aftre heating (A)	1993.00	gm

Results:-

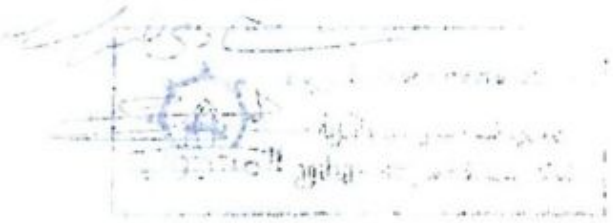
Bulj spicific gravity = A / (B-C)	2.557	
Apparent spicific gravity = A /(A-C)	2.682	
Asorbtion = (B-A)/A	1.816	

Los Angles abrasion AASHTO-T96

Results:-

Weight of sample before	Weight of sample before test (gm)	Abrasion ratio (%)
5000	3677	26.46

Lab Engineer/



Youssef 12/8/2023

MATERIAL INSPECTION REQUEST

Contractor Company	Magdy Bekhit			Designer Company	K.K						
Issued by Contractor	Name	Sign		Date	Time						
	Eng. Omar Abd El-Hakem										
Contractor refrence	MB-SB-1 12-08-2023										
Received by ER			MIR	C1	C2	C3	DD	MM	YY	HH	MM

Codes	S1 to S21 Station Reference	D1 to S3 Depot Reference	Kp 558 Note For Kilometer point only Start Km is used
CODE - 2	Work Activity		
CODE - 3	Sub Element of Activity		

Description of Materials	**Replacement Fill Material Results**		
Location to be Used	556+000 556+120 (+0.70) 556+240 556+360 (+0.70) 556+360 556+500 (+0.70) 556+000 556+120 (+0.90) 556+240 556+360 (+0.90) 556+360 556+500 (+0.90)		
MAR Approval No		Date	
Supplier Name			
Test Requirement		Specification	Clause
Reference Photos	Yes attached / No	Other	

Item	Description	Unit	Quantity	Arrival Date	Note
1	Sieve analysis	M3	1000		
2	Classification	M3	1000		
3	Proctor & O.m.c	M3	1000		
4	L.L & P.L & PI	M3	1000		
5	C.B.R	M3	1000		

Comments by:	**Comments by:**

APPROVAL STATUS

Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng. Omar Abd El-Hakem			
QA/QC *	Yousef Rafik	Yousef Rafik		
GARB**				
Employers Representative				

* Designer

** Alignment / Bridges: Culvert Only

MATERIAL APPROVAL REQUEST

Contractor Company	Magdy Bekhit			Designer Company	K.K							
Issued by Contractor	Name	Sign		Date	Time							
	Eng. Omar Abd El-Hakem											
Contractor Refrence	MB-SB-1 12-08-2023											
Received by ER			MAR	C1	C2	C3	DD	MM	YY	HH	MM	

CODES	S1 to S21 Station Reference	D1 to S3 Depot Reference	Kp 558 Note For Kilometer point only Start Km is used
CODE - 2	Work Activity		
CODE - 3	Sub Element of Activity		

Description of Materials	Replacement Fill Material Results		
Location to be Used	KP. 556		
Sample only	Yes / No	Materials Type	A-1-a
Supplier Name		Data Sheet provided	Yes attached / No
Reference in BoQ		Specification	Clause
Prequalification reference		Test Samples Results	AGGREGATE SAMPLING ACCORDING TO SPECS. SIEVE ANALYSIS ACCORDING TO SPECS. PASS NO 200 6.70 ATTEBERG LIMIT NP MOISTURE CONTENT 6.40 % MODIFIED PROCTOR 2.215 CBR 97.80 %
Reference Photos	Yes attached / No	Other	

Comments by:	Comments by:

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng. Omar Abd El-Hakem			
QA/QC *	Yousef Raafat			
GARB**				
Employers Representative				

* Designer

** Alignment/Bridges: Culvert only

Electric Express Train - HSR

From El Ain El Sokhna City To El Alamein - MATROUH

Section - 7 From FOKA To MARSA MATROUH

From Station 504+000 To Station 565+177

PARTICLE SIZE DISTRIBUTION OF SOIL

TESTING DATE:	8\8\2023	code	ZONE	556+000	556+500
LOCATION	K.P 555+500	MB2-SB-1	MATERIAL	SUB BALLAST	
NAME COMPANY	MAGDY BEKHIET		QUANTITY	3000 M3	

1-visual inspection test .....

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2-Gradient test

A-gradation of bulk materials				SAMPLE WEIGHT [g]		21330.00		gm		table classify
sieve size	2	1.5	1	4/3	2/1	8/3	# 4	PASS		soil classify
Mass retained (g)	0.0	139.0	2120.0	3406.0	1962.0	1804.0	4181.0			A-1-a
Cumulative Retained (g)	0.0	139.0	2259.0	5665.0	7627.0	9431.0	13612.0		PRO	2.215
Cumulative Retained %	0.0	2.7	10.6	26.6	35.8	44.2	63.8		WC	6.4%
Cumulative Passing %	100.0	97.3	89.4	73.4	64.2	55.8	36.2		CBR	97.8%
									S.G	2.527
B-soft material gradation				WT.OF sample		500.00		gm	LOS	27.80
sieve size	10	40	200							
Cumulative Retained (g)	221.00	331.00	407.00							
Cumulative Retained %	44.20	66.20	81.40							
Cumulative Passing %	55.80	33.80	18.60							

C-General gradient										
sieve size(in)	2	1.5	1	3/4	1/2	3/8	# 4	# 10	# 40	# 200
sieve size(mm)	50.0	37.5	25.0	19.0	12.5	9.5	4.75	2.00	0.425	0.075
Cumulative Passing %	100.0	97.3	89.4	73.4	64.2	55.8	36.2	20.2	12.2	6.7
REMARKS		50-97		20-75		15-60		0-35		0-7

ATTERBERG LIMITS	LIQUID LIMIT (L.L.)	PLASTIC LIMIT (P.L.)	PLASTIC INDEX (P.I.)
	N.P	N.P	N.P

Contractor

Consultant

Electric Express Train - HSR

From El Ain El Sokhna City To El Alamein - MATROUH

Section - 7 From FOKA TO MARSA MATROUH

From Station 504+000 To Station 568+177

PROCTOR TEST

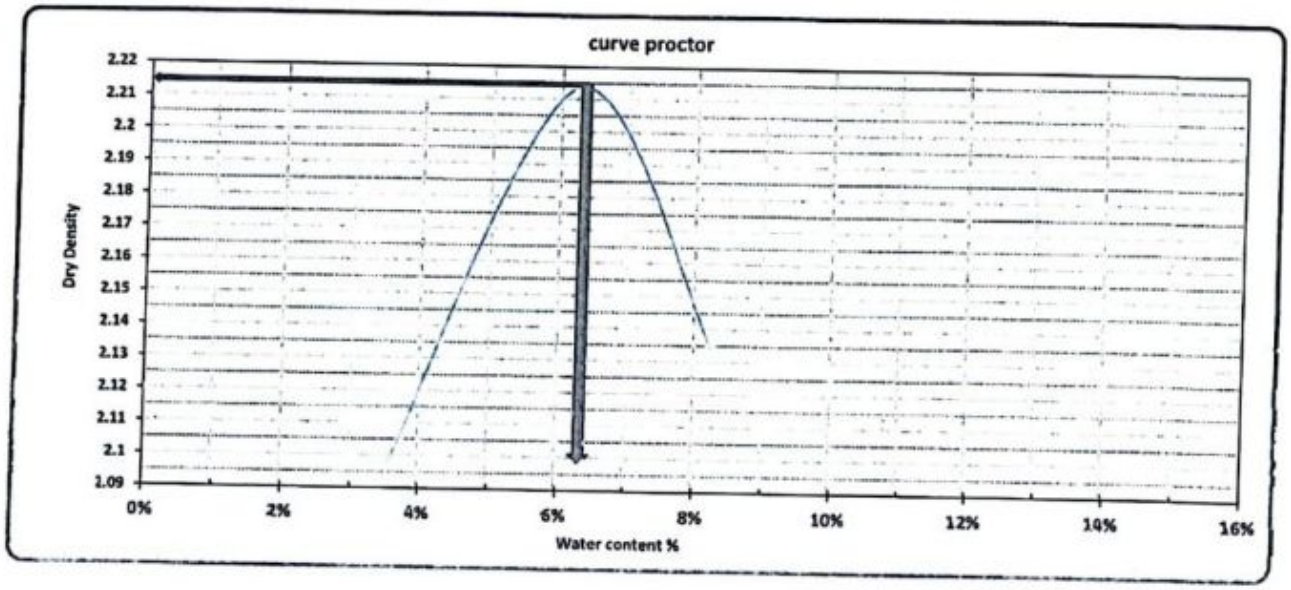
TESTING DATE:	10\8\2023	code	ZONE	556+000	556+500
LOCATION	K.P 555+500	MB2-S6-1	MATERIAL	SUB BALLAST	
NAME COMPANY	MAGDY BEKHIET		QUANTITY	3000 M3	

Weight of empty mold :	6069.0
Mold Volume:	2032.0

MAX Dry Density	2.215
Water content %	6.4%

trial no :	1	2	3		
Wt. Of Mold+ wet soil	10487.0	10846.0	10765.0		
WT. WET SOIL	4418.0	4777.0	4696.0		
Wt. Density	2.174	2.351	2.311		

Tare No.	1	2	3	4	5	6				
Tare wt.	34.15	23.25	22.87	32.56	29.09	30.64				
Wt. Of wet soil & tare	171.6	177.93	155.41	154.35	166	164.25				
Wt. Of dry soil & tare	167.11	172.27	147.91	146.98	155.86	153.77				
Wt. Of water	4.5	5.7	7.5	7.4	10.1	10.5				
Wt. Of dry soil	133.0	149.0	125.0	114.4	126.8	123.1				
Water content %	3.4%	3.8%	6.0%	6.4%	8.0%	8.5%				
AV.Water content %	3.6%		6.2%		8.3%					
Dry Density	2.099		2.213		2.135					



Contractor

Consultant

Electric Express Train - HSR

California Bearing Ratio TEST

Testing Date :	2023\8\12	Code	FROM STA :	556+000 -	556+500
Location :	K.P 555+500	MB2-SB-1	: Material	SUB BALLAST	
Layer No. :	MAGDY BEKHIET		QUANTITY	3000 M3	

- : Test Results

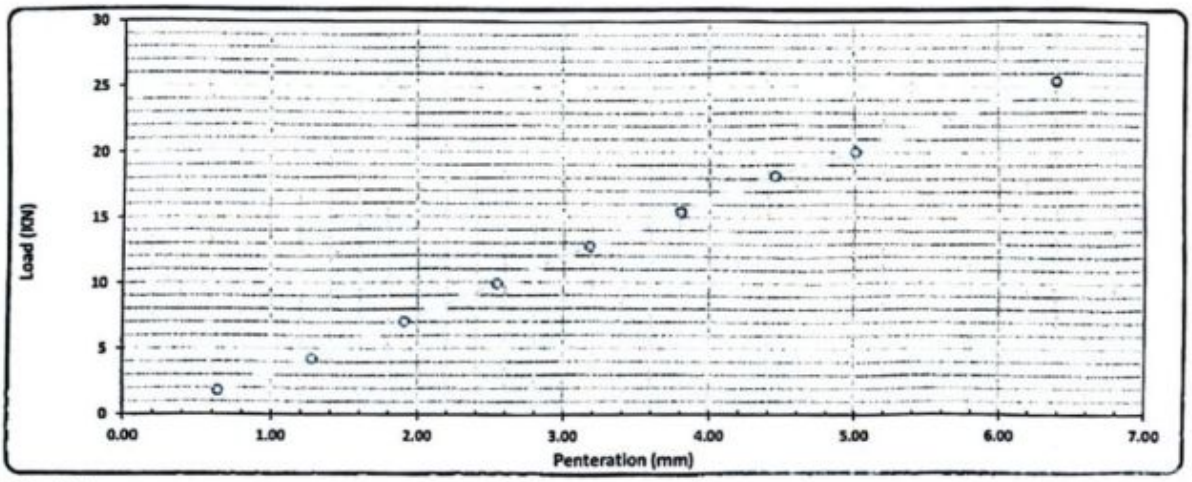
Compaction % for Mold	
Mold No.	55
Mold Vol. (cm^3)	2151
Mold WT. (gm)	7350
Mold WT. + Wet WT. (gm)	12380
Wet WT. (gm)	5030
Wet Density (g/cm^3)	2.338
Dry Density (g/cm^3)	2.198
Proctor Density (g/cm^3)	2.215
Compaction %	99

Mositure Ratio After Compacted Mold	
Tare No.	5
Tare WT. (gm)	31
Tare WT. +Wet WT. (gm)	160
Tare WT. +Dry WT. (gm)	152.2407
Water WT. (gm)	7.8
Dry WT. (gm)	121.2
Moisture Content %	6.4

Swelling	
Mold No.	4
Date	2023\8\12
Intial Height (mm)	2.20
Final Height (mm)	2.20
Difference	0
Sample Height (mm)	120.00
Swelling Ratio %	0%

Loading Reading :

Penteration (mm)	0.64	1.27	1.91	2.54	3.18	3.80	4.45	5.00	6.40
Load Reading (kg)	181.00	430.00	720.00	1005.00	1299.00	1572.00	1853.00	2040.00	2590.00
Load (KN)	1.8	4.2	7.1	9.8	12.7	15.4	18.2	20.0	25.4



Calculations : -

Penteration	Load	Standard Load	CBR	Mold - Compaction	Compaction	CBR
(mm)	(Kn)	(lb)	(%)	(%)	(%)	عند نسبة 98 %
2.50	9.85	13.4	73.8%	100	98	72.3%
5.00	19.99	20.0	99.8%			97.8%

Lab. Specialist	Lab. Engineer	Consultant Engineer
Name :	Name :	Name :
Sign :	Sign :	Sign :