

السيد المهندس / رئيس قطاع التنفيذ والمناطق

تحية طيبة.. وبعد،،

بالإحالة إلى مشروع القطار الكهربائى فائق السرعة قطاع (برج العرب - العلمين)
نتشرف بأن نرفق لسيادتكم طيه المقاييس المعدلة بعد اعتماد لجنة المفاوضه
للقطاعات الأتية:

المسلسل	اسم الشركة	من المحطة	إلى المحطة	الاتجاه
1	شركة الصفا للمقاولات العامة وإنشاء الطرق	392+000	394+500	اتجاه مطروح

برجاء من سيادتكم التفضل بالأحاطه والتوجيه بالازم

وتفضلوا بقبول فائق الاحترام والتقدير،،

رئيس الادارة المركزية

المنطقة الخامسة- غرب الدلتا

عميد مهندس /
هانى محمد محمود طه "

مقارنة معدلة بعد المفاوضات بتاريخ ٢٠٢٢-١٢-١٨ الهيئة العامة للطرق والكباري - وزارة النقل مشروع : القطار السريع (السفينة - العلمين - مطروح) القطاع من الكم ٣٩٢٠٠٠٠ الى الكم ٣٩٤٠٠٠ بطول ٢.٥ كم اتجاه مطروح تنفيذ شركة: الصفا للمقاولات العامة وإنشاء الطرق				
الاجمالي	مسر القنة	القيمة	الوحدة	بيان الأصل
١				طبقات الاسفلت
			٣م	يشترى صاحب قوريد وتقليد ورم اعجاز وسطقات تتراوح بين ١ في ٢ سم او بين ١ في ٢ سم ١ في ١٠ سم نسبة ١:١:١ بنسبة ١٠٠٪ ولا تتعدى على أي المواد الخاصة أو التوراة (إبرة) من مثالي ٢٠٠ (نهرها أو مواد مثلية أو بيت التمل يتم تليها كطريقة لتسوية بقطاع فصل السية بعزل ١٠٠ سم حتى اعلى مشوب السية الأرضية بعرض ٢٠ سم ويتم التمل الجيد لطيفة بمراس الا بعد اعجاز واعتمد التجارب المعملية وتليد لمراس لمراس التجارب المعملية والحقيقية (اختبار التواج التصليل لمر ٣٠ سم) على ان لا تزيد نسبة EVI2EV عن ٢.٥ يستخدم حمل مقادير ٨ kN طبقا لما هو وارد بملصقات الخاصة وتصلية على كل السطح لتعود وتعود طبقا لملصقات الصناعة المستخدمة. ٢٠٢٢-١٢-١٨ بعد المداولة بتاريخ ٢٠٢٢-١٢-١٨ مسئلة ٢٠ كم ٣.١ حالة شاملة القيمة المعدلة المحسنة. جام احتساب ١,٣ جنية لقيم بزيادة أو نقصان.
3,963,463	324.1	12,229.14	٣م	عن شهر يناير ٢٠٢٢ بعد المداولة بتاريخ ٢٠٢٢-١٢-١٨
1,430,809	117.0	12,229.14	٣م	علاوة مسافة نقل من اللتر ١١٠ كم ١١٧٨ ١,٣٣٩,٠٠٠ (110) (مسافة نقلية من المسير للموقع) - 20 (المسافة على التربة) 1.3* (لقيم
305,728	25.0	12,229.14	٣م	علاوة تحصيل رسوم كثرية والموازين طبقا لائحة الشركة لوجستية
5,700,000				الاجمالي

رئيس الإدارة المركزية

رئيس الإدارة المركزية

الاستشارية - مرسى مطروح

صديق مهندس / هاني محمد محفوظ

مدير عام مشروعات المنطقة الخامسة

م / محمد حسني قرياش

مدير مشروع الهيئة

م / مارجريت مجدي



قائمة الكميات الواردة بالمستخلص جاري (2)

مشروع : القطار الكهربائي السريع (العين السخنة - العاصمة الادارية - العلمين - مطروح) قطاع غرب النيل في المسافة من الكم 392+000 الى الكم 500+394 بطول 2.5 كيلو متر اتجاه مطروح

رقم البند و بيانه : (3-4) بالمتر المكعب توريد وتنفيذ وردم احجار تتراوح بين 1 الى 2 الى 4 سم او بين 1 الى 2 الى 6 بنسبة 1:1:1 بنسبة امتصاص لاتزيد عن 3% ولا تحتوى على اى المواد الناعمة او البودرة (مارة من منخل 200) نهائيا
عن شهر يناير

تنفيذ : شركة الصفا للمقاولات العامة وانشاء الطرق

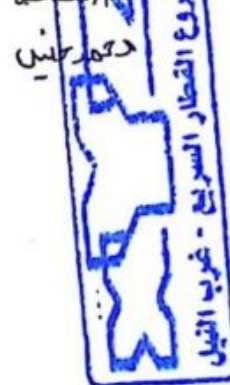
الكمية	الابعاد (متر)		التاريخ	الموقع الكيلومترى		رقم العنبر	بيان الاعمال بالمقاييس
	مساحة المقطع	طول		الى	من		
9120.00	38.00	240	3/1/2023	393+580	393+340	FF 1	بالمتر المكعب توريد وتنفيذ وردم احجار بسمكات تتراوح بين 1 الى 2 الى 4 سم او بين 1 الى 2 الى 6 بنسبة 1:1:1 بنسبة امتصاص لاتزيد عن 3% ولا تحتوى على اى المواد الناعمة او البودرة (مارة من منخل 200) نهائيا او مواد طفلية او بيت العمل يتم تنفيذها كطبقة تاسيس بالقطاع اسفل سطح المياه بعمق 100 سم حتى اعلى منسوب المياه الارضية بحوالى 50 سم ويتم الدمك الجيد للطبقة بهراس الا بعد اعتماد الاحجار واعتماد التجارب المعملية والبند يشمل اجراء التجارب المعملية والحقلية (اختبار الواح التحميل قطر 30 سم) على ان لا تزيد نسبة EV12EV عن 2.5 باستخدام حمل مقداره 8 kN طبقا لما هو وارد بالمواصفات الخاصة بالعملية على كل السطح العلوى ونهو العمل طبقا لاصول الصناعة الممتازة.
1069.50	35.65	30	3/1/2023	393+340	393+310	FF 2 REV 01	- مسافة النقل 20 كم . اللفة شاملة القيمة المادة المحجيرة.
10189.50	اجمالي الكميات خلال فترة المستخلص الحالية (م ²)						
2037.90	يوجد نسبة هالك لغرز وتداخل السن الخاص بالفلتر تم تحديدها بمقدار 20%						
12227.40	الاجمالي الكلي (م ²)						

مهندس الهيئة
م / مارجريت مجدي



مهندس الاستشاري

مكتب XY
م / محمد خليل



مشروع : القطار الكهربائي السريع (العين السخنة - العاصمة الادارية - العلمين - مطروح) قطاع غرب النيل في المسافة من الكم 392+000 الى الكم 394+500 بطول 2.5 كيلو متر
اتجاه مطروح

رقم البند و بيانه : (3-4) بالمتر المكعب توريد وتنفيذ وردم احجار (علاوة تحصيل رسوم وكارتات الموازن والرسوم الوطنية للطرق)

بعد المفاوضة بتاريخ 2023-12-18

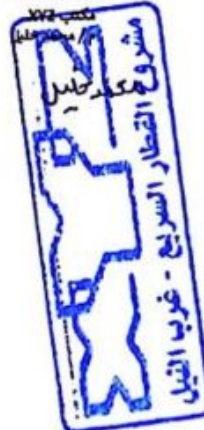
تنفيذ : شركة الصفا للمقاولات العامة وإنشاء الطرق

الكمية	الابعاد (متر)		التاريخ	الموقع الكيلومترى		رقم الطلب	بيان الاعمال بالمقاييس
	مساحة المقطع	طول		الى	من		
9120.00	38.00	240	3/1/2023	393+580	393+340	FF 1	بالمتر المكعب توريد وتنفيذ وردم احجار بسمكات تتراوح بين 1 الى 2 الى 4 سم او بين 1 الى 2 الى 6 بنسبة 1:1:1 بنسبة امتصاص لا تزيد عن 3% ولا تحتوي على اى المواد الناعمة او البودرة (مارة من داخل 200) نهائيا او مواد طفلية او بيت النمل يتم تثقيبها كطبقة تأسس بالقطاع اسفل سطح المعايه بعمل 100 سم حتى اعلى منسوب المياه الارضية بحوالى 50 سم ويتم الضمك الجيد للطبقة بهرس الا بعد اعتماد الاحجار واعتماد التجارب المعملية والبند يشمل اجراء التجارب المعملية والحقليية (اختبار الواج التحميل قطر 30 سم) على ان لا تزيد نسبة EV12EV عن 2.5 باستخدام حمل مقداره 8 kn طبقا لما هو وارد بالمواصفات الخاصة بالعملية على كل السطح العلوى ونهو العمل طبقا لاصول الصناعة الممتازة.
1069.50	35.65	30	3/1/2023	393+340	393+310	FF 2 REV 01	مسافة النقل 20 كم . المقدرة شاملة القيمة المادة المحجيرة.
10189.50	اجمالي الكميات خلال فترة المستخلص الحالية (م ³)						
2037.90	يوجد نسبة هالك لفرز وتداخل السن الخاص بالفلتر تم تحديدها بمقدار 20%						
12227.40	الاجمالي الكلى (م ³)						

مهندس الهيئة
م / مازجريت مجدي



مهندس الاستشاري



تنفيذ : شركة الصفا للمقاولات العامة وإنشاء الطرق

MATERIAL APPROVAL REQUEST			الهيئة العامة للطرق والكباري (GARB)				

Contractor Company	Al-Safa General Contracting Company			Designer Company	[SPECTRUM] Engineering Consulting Office						
Issued by Contractor	Name	Sign	Date/Serial Number	Time							
	Eng. Ahmed Ragab		16/9/2022 (SS-B-SF-QT-014)	10:00							
Received by GARB CONSULTANT	Eng. Mazen Essamy		MAR	C1	C2	C3	DD	MM	YY	HH	MM
				393	EW	CS	17	9	22	10	0

CODE-1	S15	D3	Kp 393+000
CODE-2	EW		
CODE-3	MS		

Description of Materials	Filter Layer (5000)m3.						
Location to be Used	From Station	REV29	392+900	To Station	REV29	393+600	
		REV35	393+084		REV35	393+784	
Sample only	Yes	Materials Type		Crushed stone #1-#2			
Supplier Name	ALBARAKA CRUSHER	Data Sheet provided		Yes attached			
Reference in BoQ		Specification		EARTHWORK SPECIFICATIONS & TESTING REPORT (CG21-122.1) VERSION1-2022 BY CIVECON GROUP			
Prequalification reference		Test Samples Results		Yes attached			
Reference Photos	No	Other					
Comments by: Eng. Mazen Essamy (SPECTRUM)				Comments by: Eng. Alaa Abd-Allatif (ER)			
1-Quality test Results by Third Party Lab (COMIBASSAL) IS Approved				1-All testes carried-out Third Party Lab (COMIBASSAL).			
2-This Sample Representative (5000 m3) only.				2-Results report attached and acceptable with the project specifications.			

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng. Ahmed Ragab			A
QA/QC	Eng. Mazen Essamy			A
GARB**	Eng. Mohammed Fayad			
Employers Representative	Eng. Alaa Abd-Allatif			A

* Designer
** Alignment/Bridges: Culvert only



Serial No.
QT
(14)



مكتب أ.د. عماد نبيل

Electrical Express Train From Borg
Alarab to Alamein
From Station 325+393 To Station



Date

17 / 9 / 2022

Material Inspection Request

We request your attendance to inspect the following works :

Discipline : ☒ Material submittal ☐ FIELD DENSITY TEST ☐ PLATE LOAD TEST

Location	Zone	From Station	To Station	Quantity
	alsafa CO. for Contracting	392+900	393+600	5000m3

References Specification: EET L1.1.Earthworks Specifications and Testing Report

Purpose of the inspection

1. Earthworks

- | | |
|--|--------------------------------------|
| ☐ Natural Sub Grade | ☐ Sub Ballast |
| ☒ Upper Embankment | ☐ Ballast |
| ☒ L / M Embankment | ☐ Excavation |



Attachments

1- Quality Tests Report

2-

3-

4-

5-

6-

7-

8-

Works To be Inspected

Quality Tests For Crushed Stone (1,2&3) by COMIBASSAL Laboratory

Submitted by: alsafa CO. for Contracting

Signature: Ahmed Ragab Abdel

GARP Consultant Engineer's Comments :

Date of Inspection: 24 / 9 / 2022

The quality test result by third party laboratory is OK for filter layer Lx + 2%

The works are :

☒ Approved (A)

☐ Approved as Noted (B)

☐ Revised (C)

☐ Rejected (D)

Name: Maren Gamy

Signature:

General Consultant's Comments:

Date:

1- one sample was selected for Quality test
2- Quality test was carried out by third party lab (Comibassal)
3- Results attached and found acceptable and comply with P&S
Final approval is subject to above mentioned comments

The works are :

☒ Approved (A)

☐ Approved as Noted (B)

☐ Revised (C)

☐ Rejected (D)

Name: Alaa Abdel

Signature:

GARP Engineer's Comments:

Date: 24 / 9 /

Name:

Signature:

General Consultant Eng.

GARP Eng.



COMIBASSAL International Controllers

الجمعية التعاونية للإنتاجية لأعمال الوزن والمراجعة والبطرة الدولية (كوميباسال)

حاصلة على شهادة الأيزو 9001:2015

Accredited by:

Egyptian General Authority for Petroleum
Under No.: 34/29.11.2011

قطاع التفتيش الداخلي والمعامل

معتمد لدى الهيئة المصرية العامة للبترو
تحت رقم ٢٠١١/١١٠٢٩/٢٤

ABSORPTION AND SPECIFIC GRAVITY FOR COARSE AGGREGATE

ASTM C 127 - AASHTO T 85 - BS :812 part 107

PROJECT: Electric Express Train

DATE: 17/09/2022

General Consultant :- SYSTRA

Consultant :- SPECTRUM

CONTRACTOR: شركة الصفا للمقاولات

Material / Source of Soil :- Agg. Crushed Stone. (خليط ١، ٢، ٣ - ١:١)

LAB. REF. Q.C. 1263/1

TRIAL NO	1	2	AVERAGE
A. WEIGHT OF Oven Dry TEST SAMPLE IN AIR (g)	4000.0	4010.0	4005.0
B. WEIGHT OF S.S.D. TEST SAMPLE IN AIR. (g)	4050.0	4057.0	4053.5
C. WEIGHT OF S. TEST SAMPLE IN WATER. (g)	2453.0	2465.0	2459.0
D. ABSORPTION = (B - A)	50.0	47.0	48.5
E. ABSORPTION % = [(B - A)/A] X 100	1.25	1.17	1.21
F. SPECIFIC GRAVITY:			
a) Bulk sp. Gr. , Oven Dry (A / (B - C))	2.50	2.52	2.51
b) Bulk, Sat. Surface Dry (B / (B - C))	2.54	2.55	2.54
c) Apparent sp. Gr. (A / (A - C))	2.59	2.60	2.59

Tested By : Mostfa

Checked By : Eng. Eman E. Kandil

الإدارة: ٤٠ ش. صفية زحلول - الإسكندرية - ب ١٥٧
٤٨٧-٦٦٥ - ٤٨٦٩٧٩٨ - ف.ت. ٤٨٧-٥٧٢
40safia zaghoul st., p.o.Box 157 Alex, Egypt
Tel:4870573 - Fax + Tel : 4869798 - 4870665



القطاع ٤٩ طريق الحرية - الإسكندرية - مصر
ت. ٣٩٢٠١٧٦ - ٣٩٢١٤٨٢ - ف. ٣٩٠٠٤٧٦
49 EL Horria Ave., Alex, Egypt
Tel: 3920176 - 3931482 - Fax: 3900476
E-mail : internal-inspection@comibassal.com



COMIBASSAL International Controllers

الجمعية الدولية للتحكم في الجودة لأعمال الوزن والمراجعة والخبيرة الدولية (كوميباسال)

حاصلة على شهادة الأيزو ISO 9001:2015

Accredited by:

Egyptian General Authority for Petroleum
Under No.: 34/29.11.2011

قطاع التفتيش الداخلي والمعامل

مستند لدى الهيئة المصرية العامة للبترول
تحت رقم ٢٠١١/١١٠٢٩/٢٤

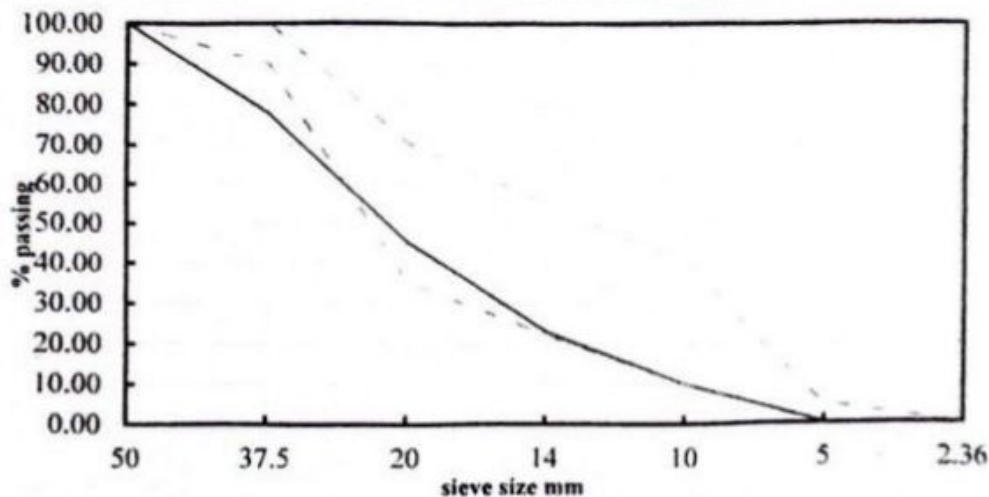
Report No: 1263 - 2 - center
Date: 25/09/2022

SIEVE ANALYSIS FOR COARSE AGGREGATE

General consultant : SYSTRA
Consultant : SPECTRUM
Contractor : شركة الصفا للمقاولات
Project : Electric express train
Test method : BS 882 Table 4. 40-5 mm
Sample : COARSE AGGREGATE (Mix Agg)
Date of Test : 22/09/2022



Results



sieve size mm	50	37.5	20	14	10	5	2.36
passing %	100	78	45	23	10	0	0



Civil. Eng Department

Eman
Eng : Eman. E. Kandil



الإدارة، ١٥٧ صفيحة زغلول - الإسكندرية - مصر

ت. ٤٨٧٠٥٧٢ - ف. ٤٨٦٩٧٩٨ - ٤٨٧٠٦٦٥

40safia zaghloul st .. p.o.Box 157 Alex, Egypt
Tel:4870573 - Fax + Tel : 4869798 - 4870665



القطاع ٢٩ طريق الحرية - الإسكندرية - مصر

ت. ٣٩٢٠١٧٦ - ف. ٣٩٢١٤٨٢ - ٣٩٢٠٤٧٦

49 EL Horria Ave -Alex.Egypt
Tel: 3920176 - 3931482 - Fax 3900476
E-mail : internal-inspection@comibassal.com



COMIBASSAL International Controllers

الجمعية التعاونية الاستشارية لأعمال الوزن والمراجعة والقياس الدولية (كوميباسال)

حاصلة على شهادة الأيزو ISO 9001:2015

Accredited by:

Egyptian General Authority for Petroleum
Under No.: 34/29.11.2011

Report no: 1263 / 3 /center
Date: 25 / 9 / 2022

قطاع التفتيش الداخلي والمعامل

معتمد لدى الهيئة المصرية العامة للبترول
تحت رقم ٢٤ / ٢٩ / ١١٠١١ / ٢٠١١

ABRASION AND IMPACT " LOS ANGELES " TEST

(For small size coarse aggregate)

ASTM- C 131-96 / AASHTO-T-96

General consultant :

SYSTRA

Consultan :

SPECTRUM

Contractor :

شركة الصفا للمقاولات

Project :

Electric express train

Sample :

COARSE AGGREGATE (Mix Agg)

Date of Test :

22/09/2022

Results

Speed	Rotate at 30 to 33 Rpm For 500 Revolution
Trial Grading	A
Intitial Weight (W1) gms	5000
Weight of tested sample (W2) gms Retained on sieve No.12	3462
% Wear By Weight Passing on Sieve No.12	30.8%

Civil Eng. Depart.

Eman

Eng: Eman E.Kandil



MATERIAL APPROVAL REQUEST



الهيئة العامة
للطرق والكباري
(GARB)



الهيئة العامة
للطرق والكباري
(GARB)



Contractor Company	Al-SAFA General Contracting Company			Designer Company				(SPECTRUM) Engineering Consulting Office			
Issued by Contractor	Name	Sign		Date/Serial Number				Time			
	Eng. Ahmed Ragab			14/10/2022				10:00			
				(SS-B-SF-QT-018)							
Received by GARB CONSULTANT	Eng. Mazen Essamy		MAR	C1	C2	C3	CO	MM	YY	HH	MM
				393	EW	CS	15	10	22	10	0

CODE 1	515	D3	Kp 393+000
		EW	
		MS	

Description of Materials	Filter Layer (10000)m3.						
Location to be Used	From Station	REV29	392+900	To Station	REV29	393+600	
		REV35	393+084		REV35	393+784	
Sample only	Yes		Materials Type		Crushed stone #1-#2		
Supplier Name	ALBARAKA CRUSHER		Data Sheet provided		Yes attached		
Reference in BoQ			Specification		EARTHWORK SPECIFICATIONS & TESTING REPORT (CG21-122.1) VERSION1-2022 BY CIVECON GROUP		
Prequalification reference			Test Samples Results		Yes attached		
Reference Photos	No		Other				
Comments by: Eng. Mazen Essamy (SPECTRUM)			Comments by: Eng. Alaa Abd-Allatif (ER)				
1-Quality test Results by Third Party Lab (COMIBASSAL) IS Approved			1-All testes carried-out Third Party Lab (COMIBASSAL).				
This Sample Representative (5000 m3) only .			2-Results report attached and acceptable with the project specifications.				



APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng. Ahmed Ragab			A
QA/QC	Eng. Mazen Essamy			A
GARB	Eng. Mohammed Fayad			
Employers Representative	Eng. Alaa Abd-Allatif			A

* Designer
** Alignment/Bridges Connectivity



الهيئة القومية للإتفاق

Serial No.
QT
(18)



مكتب أ.د. عماد نبيل

Electrical Express Train From Borg
Alarab to Alamein
From Station 325+393 To Station



Date
25/10/2022

Material Inspection Request

We request your attendance to inspect the following works :

Discipline : ☒ Material submittal ☐ FIELD DENSITY TEST ☐ PLATE LOAD TEST

Location :	Zone	From Station	To Station	Quantity
	alsafa CO. for Contracting	392+900	393+600	10000 M3

References Specification: EET L1.1. Earthworks Specifications and Testing Report

Purpose of the Inspection

1. Earthworks

- | | |
|--|--------------------------------------|
| ☐ Natural Sub Grade | ☐ Sub Ballast |
| ☐ Upper Embankment | ☐ Ballast |
| ☐ L / M Embankment | ☐ Excavation |

S5-B-SF

Attachments

- | | |
|-------------------------|----|
| 1- Quality Tests Report | 2- |
| 3- | 4- |
| 5- | 6- |
| 7- | 8- |

Works To be Inspected

Quality Tests For Crushed Stone Mix Aggregate(1-2&3) by COMIBASSAL Laboratory

Submitted by: alsafa CO. for Contracting

Signature: Ahmed Fagab

GARP Consultant Engineer's Comments :

Date of Inspection:- 25 / 10 /2022

The quality test result of filter aggregates 1, 2, 3 equal portion is OK
- This sample representative 5000 m³ only

The works are : ☒ Approved (A) ☐ Approved as Noted (B) ☐ Revised Resulting (C)

Name: Hazen Elany

Signature:

General Consultant's Comments:

Date:-

- 1- one sample was selected for Quality test.
- 2- Quality test was carried out by third party lab [Comibassal]
- 3- Results affected and found acceptable and comply with spec. spaces
- 4- final approval is subject to above mentioned comments.

The works are : ☒ Approved (A) ☐ Approved as Noted (B) ☐ Revised Resulting (C) ☐ Rejected (D)

Name: Alaa Abdelkader

Signature:

GARP Engineer's Comments:

Date:- 05/11

Name:

Signature:

General Consultant Eng.

GARP Eng.





COMIBASSAL International Controllers

الجمعية التعاونية للتحكم في الأعمال الوزن والمراجعة والخبرة الدولية (كوميباسال)

حاصلة على شهادة الأيزو ISO 9001:2015

Accredited by:

Egyptian General Authority for Petroleum
Under No.: 34/29.11.2011

قطاع التفتيش الداخلي والمعامل

معتمد لدى الهيئة المصرية العامة للبترو
تحت رقم ٢٠١١/١١٠٢٩/٢٤

ABSORPTION AND SPECIFIC GRAVITY FOR COARSE AGGREGATE

ASTM C 127 - AASHTO T 85 - BS :812 part 107

PROJECT: Electric Express Train

DATE: 15/10/2022

General Consultant :- SYSTRA

Consultant :- SPECTRUM

CONTRACTOR: شركة الصفا للمقاولات

Material / Source of Soil :- Agg. Crushed Stone. (خليط سن)

LAB. REF. Q.C. 1933/1

TRIAL NO	1	2	AVERAGE
A. WEIGHT OF Oven Dry TEST SAMPLE IN AIR (g)	5000.0	4010.0	4505.0
B. WEIGHT OF S.S.D. TEST SAMPLE IN AIR. (g)	5045.0	4047.0	4546.0
C. WEIGHT OF S. TEST SAMPLE IN WATER. (g)	3095.0	2475.0	2785.0
D. ABSORPTION = (B - A)	45.0	37.0	41.0
E. ABSORPTION % = [(B - A)/A] X 100	0.90	0.92	0.91
F. SPECIFIC GRAVITY:			
a) Bulk sp. Gr. , Oven Dry $\{A / (B - C)\}$	2.56	2.55	2.56
b) Bulk, Sat. Surface Dry $\{B / (B - C)\}$	2.59	2.57	2.58
c) Apparent sp. Gr. $\{A / (A - C)\}$	2.62	2.61	2.62
Tested By : Mostfa			
Checked By : Eng. Eman E. Kandil			

S5-B-SF

الإدارة العامة للتحكم في الجودة - الإسكندرية - مصر
40safia zaghloul st., p.o.Box 157 Alex, Egypt
Tel:4870573 - Fax + Tel : 4869798 - 4870665



القطاع ٤٩ طريق الحرية - الإسكندرية - مصر
49 EL Horria Ave. -Alex;Egypt
Tel: 3920176 - 3931482 Fax: 3900476
E-mail : internal-inspection@comibassal.com

CS CamScanner
المسوحة ضوئياً بـ CamScanner



COMIBASSAL International Controllers

الجمعية التعاونية لخدمات المعايرة والمراجعة والخبرة الدولية (كوميباسال)

حاصلة على شهادة الأيزو ISO 9001:2015

Accredited by:

Egyptian General Authority for Petroleum
Under No.: 34/29.11.2011

Report No:

1933 - 2 - center

Date:

26/12/2022

قطاع التفتيش الداخلي والمعامل

معتد لدى الهيئة المصرية العامة للبترو
تحت رقم ٢٠١١/١١٠٢٩/٢٤

SIEVE ANALYSIS FOR COARSE AGGREGATE

General consultant : SYSTRA
Consultant : SPECTRUM
Contractor : شركة الصفا للمقاولات
Project : Electric express train
Test method : BS 882 Table 4. 40-5 mm
Sample : COARSE AGGREGATE (Mix Agg)
Date of Test : 15/10/2022

Results



sieve size mm	50	37.5	20	14	10	5	2.36
passing %	100	100	37	24	21	1	0

Civil. Eng Department

S5-B-SF



Eng : Eman. E. Kandil

الإدارة: ٤٠ ش صفيية زغلول - الإسكندرية - ب ١٥٧

ت ٤٨٧٠٥٧٣ - ف ٤٨٧٠٥٧٣ - ب ٤٨٧٠٦٦٥

40safia zaghloul st., p.o.Box 157 Alex, Egypt

Tel:4870573 - Fax + Tel : 4869798 - 4870665



القطاع: خلف ٤٩ طريق الحرية - الإسكندرية - مصر

ت ٣٩٢٠١٧٦ - ف ٣٩٣١٤٨٢ - ب ٣٩٠٠٤٧٦

49 EL Horria Ave., Alex, Egypt

Tel: 3920176 - 3931482 Fax: 3900476

E-mail : internal-inspect



CamScanner

الممسوحة ضوئياً بـ CamScanner



COMIBASSAL International Controllers

الجمعية التعاونية الانتاجية لأعمال الوزن والمراجعة والخطيرة الدولية (كوميباسال)

ISO 9001:2015 حاصلة على شهادة الأيزو

Accredited by:

Egyptian General Authority for Petroleum
Under No.: 34/29.11.2011

قطاع التفقيش الداخلي والمعامل

معتمد لدى الهيئة المصرية العامة للبترول
تحت رقم ٢٠١١/١١٠٢٩/٢٤

Report no : 65 / 2 / center
Date : 5 / 1 / 2023

ABRASION AND IMPACT " LOS ANGELES " TEST

(For small size coarse aggregate)

ASTM- C 131-96 / AASHTO-T-96

General consultant :

SYSTRA

Consultan :

SPECTRUM

Contractor :

شركة الصفا للمقاولات

Project :

Electric express train

Sample :

COARSE AGGREGATE (Mix Agg)

Date of Test :

15/10/2022



Results

Speed	Rotate at 30 to 33 Rpm For 500 Revolution
Trial Grading	A
Intitial Weight (W1) gms	5000
Weight of tested sample (W2) gms Retained on sieve No.12	3755
% Wear By Weight Passing on Sieve No.12	24.9%

Civil Eng. Depart.



Eman

Eng: Eman E.Kandil

S5-B-SF

الإدارة، ٤٠ شارع صفية زغلول - الإسكندرية - ب ١٥٧

ت ٤٨٧٠٥٧٢ - ف ٤٨٧٩٣٩٨ - ٤٨٧٠٦٦٥

40safia zaghloul st ., p.o.Box 157 Alex, Egypt
Tel:4870573 - Fax + Tel : 4869798 - 4870665



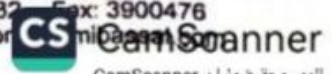
القطاع خلف ٤٩ طريق الحرية - الإسكندرية - مصر

ت ٣٩٢١٤٨٢ - ٣٩٢٠١٧٦ - ف ٣٩٠٠٤٧٦

49 EL Horria Ave .-Alex;Egypt

Tel: 3920176 - 3931482 - Fax: 3900476

E-mail :Internal-Inspection@comibassal.com



الممسوحة ضوئياً بـ CamScanner



COMIBASSAL International Controllers

الجمعية التعاونية للاتحادية لأعمال الوزن والمراجعة والطبيرة الدولية (كوميباسال)

حاصلة على شهادة الأيزو ISO 9001:2015

Accredited by:

Egyptian General Authority for Petroleum
Under No.: 34/29.11.2011

قطاع التفتيش الداخلي والمعامل

معتمد لدى الهيئة المصرية العامة للبترو
تحت رقم ٢٤/١١٠٢٩/٢٠١١

الرقم : ٠٢٢/١/٧٢٩ معام

التاريخ : ٢٠٢٢/١٠/١٧ م.

شهادة تحليل كيميائي

الإستشاري العام : سيسترا.

إستشاري هيئة الطرق والكباري : سيكترم للإستشارات الهندسية

المقاول : شركة الصفا للمقاولات

المشروع : القطار الكهربائي السريع

العينة : عينة من خليط بتاريخ ٢٠٢٢/١٠/١٥

• مقدمة بمعرفة العميل لتقدير المواد العضوية و الكلوريدات و الكبريتات.

درجة حرارة المعمل : ٢٠°م الرطوبة النسبية : ٥٠ %

تاريخ و مكان التحليل : ٢٠٢٢/١٠/١٦ - كوميبصل المركز الدولي للتحاليل والاختبارات - العامرية.

المواصفة المستخدمة	النتائج	التحليل
ASTM D 2974	٠,٠٠١٧ %	الكلوريدات Cl^-
	٠,٠٠٣٢ %	الكبريتات So_3
	لا يوجد	المواد العضوية

مدير إدارة المعامل

م. مصطفى عسكر



N

S5-B-SF

الإدارة: ٤٠ ش. صفية زغلول - الأسكندرية - ب ١٥٧

ت. ٤٨٧٠٥٧٢ - ف. ٤٨٧١٩٨٨ - ٤٨٧٠٦٦٥

40safia zaghloul st., p.o.Box 157 Alex, Egypt

Tel:4870573 - Fax + Tel : 4869798 - 4870665



القطاع: خلف ٤٩ طريق الحرية - الإسكندرية - مصر

ت. ٣٩٢٠١٧٦ - ٣٩٣١٤٨٢ - ف. ٣٩٠٠٤٧٦

49 EL Horria Ave. -Alex;Egypt

Tel: 3920176 - 3931482 - Fax: 3900476

E-mail : internal-inspection@comibassal.com

MATERIAL APPROVAL REQUEST



الهيئة العامة
للمطرق والكباري
(GARBU)



الهيئة العامة
للتخطيط والتنمية
الاقتصادية
(MPEDE)



Contractor Company	Al-Safa General Contracting Company		Designer Company	(SPECTRUM) Engineering Consulting Office							
Issued by Contractor	Name	Sign	Date/Serial Number	Time							
	Eng. Ahmed Ragab		4/11/2022	10:00							
			(SS-6-67-QT-020)								
Received by GARBU CONSULTANT	Eng. Mazen Essamy		MAR	CL	C2	C3	SO	MAX	PI	SH	MM
				293	EW	CS	5	11	22	10	0

CODE: 1	STS	03	Kp 393+000
		EW	
		MS	

Description of Materials	Filter Layer (15000)m3.						
Location to be Used	From Station	REV29	392+900	To Station	REV29	393+600	
		REV35	393+084		REV35	393+784	
Sample only	Yes	Materials Type		Crushed stone #1-#2			
Supplier Name	ALBARAKA CRUSHER	Data Sheet provided		Yes attached			
Reference in BoQ		Specification		EARTHWORK SPECIFICATIONS & TESTING REPORT (CG21-122.1) VERSION1-2022 BY CIVECON GROUP			
Prequalification reference		Test Samples Results		Yes attached			
Reference Photos	No	Other					
Comments by: Eng. Mazen Essamy (SPECTRUM)				Comments by: Eng. Alaa Abd-Allatif (ER)			
1-Quality test Results by Third Party Lab (COMIBASSAL) IS Approved. This Sample Representative (3000 m3) only.				1-All testes carried-out Third Party Lab (COMIBASSAL). 2-Results report attached and acceptable with the project specifications.			



APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
	Eng. Ahmed Ragab			A
	Eng. Mazen Essamy			A
	Eng. Mohammed Fayad			
	Eng. Alaa Abd-Allatif			A

* Designer

** Alignment/Bridges: Culvert only



الهيئة العامة للإسكان

Serial No.
QT
(20)

مكتب أ.د. عماد نليل

Date
8/11/2022Electrical Express Train From Borg
Alarah to Alamein
From Station 325+393 To Station

Material Inspection Request

We request your attendance to inspect the following works :

Discipline : ☒ Material submittal ☐ FIELD DENSITY TEST ☐ PLATE LOAD TEST

Location :	Zone	From Station	To Station	Quantity
	alsafa CO. for Contracting	392+900	393+600	15000 M3

References Specification: EET L1.1. Earthworks Specifications and Testing Report

Purpose of the Inspection

1. Earthworks

- | | |
|--|--------------------------------------|
| ☐ Natural Sub Grade | ☐ Sub Ballast |
| ☐ Upper Embankment | ☐ Ballast |
| ☒ L / M Embankment | ☐ Excavation |

S5-B-SF

Attachments

1- Quality Tests Report

2-

3-

4-

5-

6-

7-

8-

Works To be Inspected

Quality Tests For Crushed Stone Mix Aggregate(1-2&3) by COMIBASSAL Laboratory

Submitted by: alsafa CO. for Contracting

Signature: Ahmed Ragab

GARP Consultant Engineer's Comments :

Date of Inspection:- 08 / 11 /2022

The quality test result of filter Aggregates
equal portion is ok- This sample representative 5000 m³ onlyThe works are : ☒ Approved (A) ☐ Approved as Noted (B) ☐ Revised Resubmit (C)

Name:

Signature:

General Consultant's Comments:

Date:-

- 1- one sample was selected for Quality Test.
- 2- Quality test was carried out by third part Lab [Comibassal]
- 3- Results attached and found acceptable and comply with Proj. spec
- 4- final approval is subject to above mentioned comments

The works are : ☐ Approved (A) ☒ Approved as Noted (B) ☐ Revised Resubmit (C) ☐ Rejected (D)

Name:

Signature:

GARB Engineer's Comments:

Date:-

Name:

Signature:

General Consultant Eng.

GARP Eng.





COMIBASSAL International Controllers

الجمعية المتكافئة الانشائية لأعمال الوزن والمراجعة والخبرة الدولية (كوميباسال)

حاصلة على شهادة الأيزو ISO 9001:2015
Accredited by:
Egyptian General Authority for Petroleum
Under No.: 34/29.11.2011

قطاع التفتيش الداخلي والمعامل

معتد لدى الهيئة المصرية العامة للبترو
تحت رقم ٢٩ / ١١٠١١ / ٢٠١١

ABSORPTION AND SPECIFIC GRAVITY FOR COARSE AGGREGATE

ASTM C 127 - AASHTO T 85 - BS :812 part 107

PROJECT: Electric Express Train

DATE: 05/11/2022

General Consultant :- SYSTRA

Consultant :- SPECTRUM

CONTRACTOR: شركة الصفا للمقاولات

Material / Source of Soil :- Agg. Crushed Stone. (خليط من)

LAB. REF. Q.C. 1934/1

TRIAL NO	1	2	AVERAGE
A. WEIGHT OF Oven Dry TEST SAMPLE IN AIR (g)	5000.0	4010.0	4505.0
B. WEIGHT OF S.S.D. TEST SAMPLE IN AIR. (g)	5047.0	4048.0	4547.5
C. WEIGHT OF S. TEST SAMPLE IN WATER. (g)	3101.0	2485.0	2793.0
D. ABSORPTION = (B - A)	47.0	38.0	42.5
E. ABSORPTION % = [(B - A)/A] X 100	0.94	0.95	0.94
F. SPECIFIC GRAVITY:			
a) Bulk sp. Gr. , Oven Dry { A / (B - C) }	2.57	2.57	2.57
b) Bulk, Sat. Surface Dry { B / (B - C) }	2.59	2.59	2.59
c) Apparent sp. Gr. { A / (A - C) }	2.63	2.63	2.63

Tested By : Mostfa

Checked By : Eng. Eman E. Kandil

S5-B-SF

الإدارة العامة للشحن - ميناء الزمالة - الإسكندرية - مصر
ت: ٤٨٦٩٧٩٨ - ٤٨٦٩٧٩٩ - ف: ٤٨٧٠٦٦٥

40safia zaghloul st ., p.o.Box 157 Alex, Egypt
Tel:4870573 - Fax + Tel : 4869798 - 4870665



القطاع : خلف ٤٩ طريق الحرية - الإسكندرية - مصر
ت: ٣٩٢٠١٧٦ - ٣٩٢١٤٨٢ - ف: ٣٩٠٠٤٧٦

49 EL Horria Ave .-Alex; Egypt
Tel: 3920176 - 3921482 - Fax: 3900476
E-mail : internal-insp@comibassal.com





COMIBASSAL International Controllers

الجمعية التعاونية الاستشارية لأعمال التورق والمراجعة والتقدير الدولية (كوميباسال)

حاصلة على شهادة الأيزو ISO 9001:2015

Accredited by:

Egyptian General Authority for Petroleum
Under No: 34/29.11.2011

Report No:

1434 - 2 - center

Date:

26/12/2022

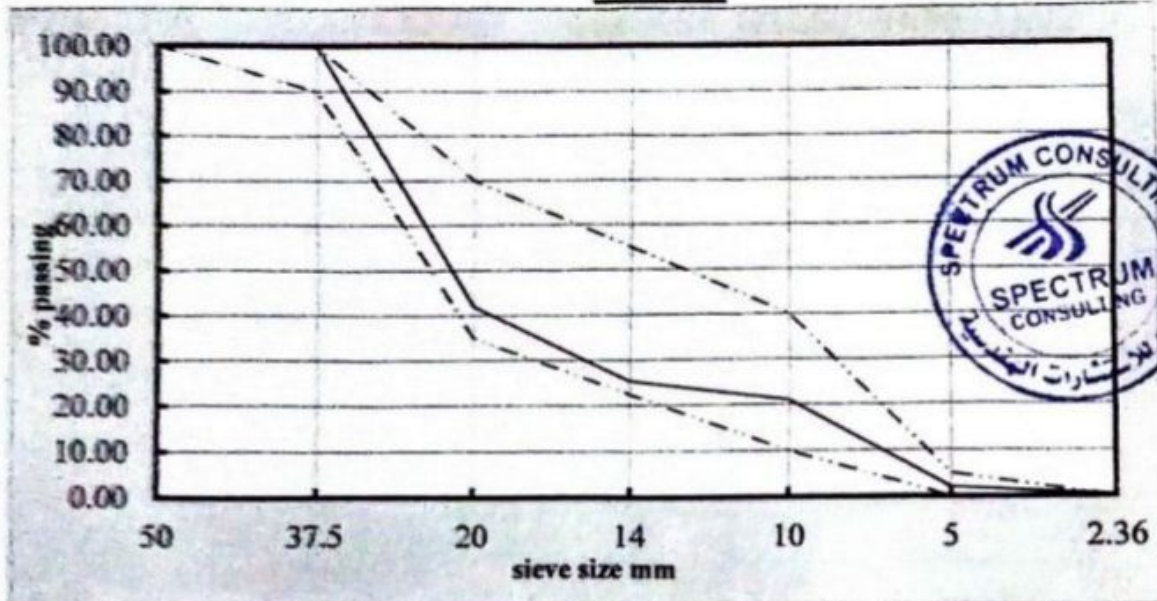
قطاع التفتيش الداخلي والمعامل

متمم لدى الهيئة المصرية العامة للبترو
تحت رقم ٢٠١١/١١٠٢٩/٢٤

SIEVE ANALYSIS FOR COARSE AGGREGATE

General consultant : SYSTRA
Consultant : SPECTRUM
Contractor : شركة الصفا للمقاولات
Project : Electric express train
Test method : BS 882 Table 4. 40-5 mm
Sample : COARSE AGGREGATE (Mix Agg)
Date of Test : 5/11/2022

Results



sieve size mm	50	37.5	20	14	10	5	2.36
passing %	100	100	42	25	21	2	0

S5-B-SF



Civil. Eng Department

Eng : Eman. E. Kandil





COMIBASSAL International Controllers

الجمعية التعاونية للاختبار والرقابة والمراجعة والخبرة الدولية (COMIBASSAL)

حاصلة على شهادة الأيزو 9001:2015

Accredited by:

Egyptian General Authority for Petroleum
Under No.: 34/29.11.2011

قطاع التفتيش الداخلي والمعامل

متمد لدى الهيئة المصرية العامة للبترو
تحت رقم ٢٠١١/١١٠٢٩/٢٤

Report no : 65 / 3 / center
Date : 5 / 1 / 2023

ABRASION AND IMPACT " LOS ANGELES " TEST

(For small size coarse aggregate)

ASTM- C 131-96 / AASHTO-T-96

General consultant :

SYSTRA

Consultan :

SPECTRUM

Contractor :

شركة الصفا للمقاولات

Project :

Electric express train

Sample :

COARSE AGGREGATE (Mix Agg)

Date of Test :

05/11/2022

Results

Speed	Rotate at 30 to 33 Rpm For 500 Revolution
Trial Grading	A
Initial Weight (W1) gms	5000
Weight of tested sample (W2) gms Retained on sieve No.12	3650
% Wear By Weight Passing on Sieve No.12	27.0%

Civil Eng. Depart.

S5-B-SF



Eng: Eman E.Kandil



الإدارة: ٤٠ ش صفية زغلول - الإسكندرية - مصر - ١٥٢
ت: ٤٨٧٠٦٦٥ - ٤٨٧١٣٨٨ - ف: ٤٨٧٠٦٦٥
40safia zaghloul st., p.o.Box 157 Alex, Egypt
Tel: 4870573 - Fax + Tel : 4869798 - 4870665



القطاع خلف ٤٩ طريق الحرية - الإسكندرية - مصر
ت: ٣٩٢١٤٨٢ - ٣٩٢٠١٧٦ - ف: ٣٩٠٠٤٧٦
49 EL Horria Ave .-Alex, Egypt
Tel: 3920176 - 3931482 - Fax: 3900476
E-mail : internal-inspection@comibassal.com

Eng. Alaa Abd-Allatif



COMIBASSAL International Controllers

الجمعية التعاونية الانتاجية لأعمال الوزن والمراجعة والظيرة الدولية (كوميباسال)

حاصلة على شهادة الأيزو 9001:2015
Accredited by:
Egyptian General Authority for Petroleum
Under No.: 34/29.11.2011

قطاع التفتيش الداخلي والمعامل

معتمد لدى الهيئة المصرية العامة للبترول
تحت رقم ٢٤ / ١١٠٢٩ / ٢٠١١

الرقم : ٢٢٢/٢/٧٢٩٠ معامل

التاريخ : ٢٠٢٢ / ١١ / ٧ م.

شهادة تحليل كيميائي

الإستشاري العام : سيسترا.

إستشاري هيئة الطرق والكباري : سيكترم للإستشارات الهندسية

المقاول : شركة الصفا للمقاولات

المشروع : القطار الكهربائي السريع

العينة : عينة سن خليط بتاريخ ٢٠٢٢/١١/٥

• مقدمة بمعرفة العميل لتقدير المواد العضوية و الكلوريدات و الكبريتات.

درجة حرارة المعمل : ٢٠ °م الرطوبة النسبية : ٥٠ %

تاريخ و مكان التحليل : ٢٠٢٢/١١/٦ - كوميبصل المركز الدولي للتحاليل والاختبارات - العامرية.

التحليل	النتائج	المواصفة المستخدمة
الكلوريدات Cl^-	٠,٠٠١٤ %	ASTM D 2974
الكبريتات SO_3	٠,٠٠٣٦ %	
المواد العضوية	لا يوجد	



مدير إدارة المعامل

ح. ك. / مصطفى عسكر

S5-B-SF



N

الإدارة، ٤٠ ش صفيّة زغلول - الإسكندرية - ب ١٥٧
ت: ٤٨٧٠٥٧٢ - ف: ٤٨٦٩٧٩٨ - ٤٨٧٠٦٦٥

40safia zaghloul st ., p.o.Box 157 Alex, Egypt
Tel:4870573 - Fax + Tel : 4869798 - 4870665



القطاع خلف ٤٩ طريق الحرية - الإسكندرية - مصر
ت: ٣٩٢٠١٧٦ - ٣٩٣١٤٨٢ - ف: ٣٩٠٠٤٧٦

49 EL Horria Ave .-Alex;Egypt
Tel: 3920176 - 3931482 - Fax: 3900476
E-mail : internal-inspection@comibassal.cc



CamScanner

المسوحة ضوئياً بـ CamScanner

MATERIAL INSPECTION REQUEST								
	الهيئة العامة للمواصلات (GARB)		وزارة التخطيط		وزارة التخطيط الاقتصادي		وزارة الإسكان	

Contractor Company	AL-Safa General Contracting & Road Construction			Designer Company	(SPECTRUM) Engineering Consulting Office						
Issued by Contractor	Name	Sign		Date/Serial Number	Time						
	Eng. Ahmed Ragab			16/1/2023 (SS-B-SF-PLT-007)	10:00 AM						
Received by GARB CONSULTANT	Eng. Mazen Essamy		MIR	C1	C2	C3	D0	MM	YY	HH	MM
				393	EW	CS	17	1	23	10	0

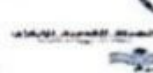
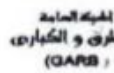
CODE-1	S1 to S21	D1 to S3	Kp XXX Note
	Station Reference	Depot Reference	For Kilometer point only Start Km is used
	Work Activity		
	Sub Element of Activity		

Description of Materials	Filter Layer (level 6.80)				REV
Location to be Used	From	392+900	TO	393+600	25
	From	393+084	TO	393+784	35
MAR & UIR Approval No	UIR (SS-B-SF-"FF-01-2-3&4"		Date	3-7/1/2023	
	MAR (SS-B-SF-"QY-14-18-20-24-28-34-36")			7/9/2022 : 7/1/2023	
Supplier Name	EL-BARAKA CRUCHER				
Test Requirement	PLT (DIN 18314)		Specification	EARTHWORK SPECIFICATIONS & TESTING REPORT (C321 41.2) VERSION 2 BY CIVECON GROUP	
Reference Photos	No/Yes		Other		
Item	Description	Unit	Quantity	Arrival Date	Note
1	PLT (DIN 18314)	NUMBER	7	18/1/2023	
2					
3					
4					

Comments by: Eng. Mazen Essamy (SPECTRUM)	Comments by: Eng. Alaa Abd-Allatif (ER)
 1-The plate load Test Result PLT is Approved	1-P.L.T was carried -out by EJUST Laboratory . 2-Results report attached and acceptable with project specification.

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
	Eng. Ahmed Ragab			A
	Eng. Mazen Essamy			A
	Eng. Mohammed Fayad			
	Eng. Alaa Abd-Allatif			A

* Designer
 ** Alignment/Bridges: Culvert only



Company	AL-Safa General Contracting Company		Designer Company		(SPECTRUM) Engineering Consulting Office						
Contractor	Name	Sign	Date/Serial Number		Time						
	Eng. Ahmed Ragab		17/1/2023 (PLT07)		10:00 AM						
Received by GARB CONSULTANT	Eng. Mazen Essamy		MIR	C1	C2	C3	D0	MM	YY	HH	MM
				392	EW	CS	17	1	23	10	0

CODE 1	S1 TO S21	D1 TO D3 Depot Reference	Kp 392-000
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	Filter Layer (Level 6.80)				
Location to be Used	From	392+900	TO	393+600	
MAR & UIR Approval No	F.(F.F 01-02-03 &4)		Date	1/17/2023	
	M.A.R.(14-18-20-24-28-34&36)				
Supplier Name	Crushed Stone				
Test Requirement	PLT (DIN 18314)		Specification	EARTHWORK SPECIFICATIONS & TESTING REPORT (CG21-122-1) VERSION 1 -2022 BY CIVECON GROUP	
Reference Photos	No/Yes		Other		
Item	Description	Unit	Quantity	Arrival Date	Note
1	PLT (DIN 18314)	NUMBER	7	17/1/2023	
2					
3					
4					

Comments by: Eng. Mazen Essamy (SPECTRUM)	Comments by: Eng. Alaa Abd-Allatif (ER)
 1-The Plate Load Test Result P.L.T (DIN 18314) is approved.	1-P.L.T was carried- out by EGYPT -JAPAN UNIVERSITY OF SCIENCE & TECHNOLOGY
	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. Ahmed Ragab		23/01/2023	A
QA/QC *	Eng. Mazen Essamy			A
GARB**	Eng. Mohammed Fayad			
Employers (Spectrum)	Eng. Alaa Abd-Allatif		27/01/2023	A-M.C



Technical Report

Plate Loading Tests

KM 393+550, KM 393+450,
KM 393+350, KM 393+250,
KM 393+150, KM 393+050,
and KM 392+950

Project

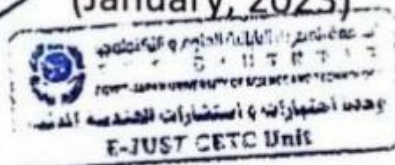
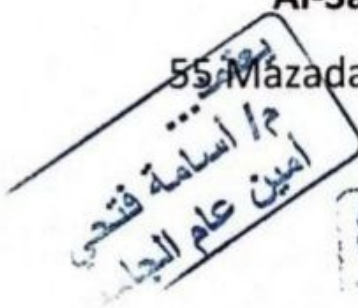
S5-B-SF

**Electric Express Train (Sokhna - New capital - 6th
of October city - New Elalamein city)**

Prepared for
Al-Safa Contracting Company

55 Mazadat land - Sheikh Zayed - Ismailia

(January, 2023)



4. Closure

Test results presented herein report the load-settlement data obtained from 7 plate loading tests conducted on the Crushed Stone Filter Layer of the Electric Express train project at 7 locations (KM 393+550, KM 393+450, KM 393+350, KM 393+250, KM 393+150, KM 393+050, and KM 392+950) in accordance with German Standard, DIN18134.

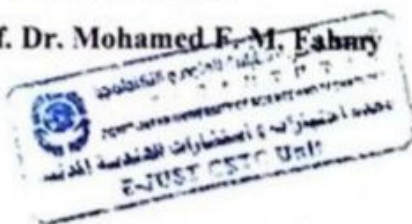
Location	E_{v1} MN/m ²	E_{v2} MN/m ²	E_{v2}/E_{v1} ratio
KM 393+550	57.89	109.42	1.89
KM 393+450	70.91	124.06	1.75
KM 393+350	35.44	106.17	3.00
KM 393+250	52.49	84.65	1.61
KM 393+150	63.77	103.99	1.63
KM 393+050	51.06	87.36	1.71
KM 392+950	48.19	94.44	1.96

• Note: Before interpreting these test results for future applications, the Crushed Stone Filter Layer in-situ variability between the testing locations should be considered.

Technical committee

Dr. Mahmoud Ahmed

Prof. Dr. Mohamed E. M. Fahmy



Lab Engineer

Mohamed A. Al-Najjar



S5-B-SF



1. Introduction

The Civil Engineering Testing & Consulting Unit (CETCU) of the Egypt-Japan University of Science and Technology (EJUST) was retained by Al-Safa Contracting Company to conduct 7 plate loading tests on the Crushed Stone Filter Layer of the Electric Express Train project at 7 locations (KM 393+550, KM 393+450, KM 393+350, KM 393+250, KM 393+150, KM 393+050, and KM 392+950) in accordance with the German Standard DIN18134. The mandate was communicated by Eng. Ahmed Rajab Abdeen of Al-Safa Contracting Company. Field team members (Mr. Mohamed Mamdouh) from the working CETCU team visited the project site on January 12, 2023 and performed the required tests. This report summarizes the plate loading test procedure according to DIN18134, the test results and their interpretations, and the CETCU pertaining recommendations.

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2. Test Set Up and Instrumentation

- The German standard DIN18134 was applied to define the test setup including the loading system, test conditions, and procedure for the plate loading tests.
- The tests were carried out to determine the Strain Moduli (E_{v1} and E_{v2}) and their ratio (E_{v2}/E_{v1}) from a stress – deformation relationship of two consecutive loading from Loading-Unloading-Loading regime.
- The loading plate has a diameter of 600 mm and a thickness of 25 mm and it is provided with equally spaced stiffeners. The upper plate face is parallel to the bottom face of the plate to allow a 300-mm plate to be placed on the 600-mm plate top.
- The loading system consisted of a hydraulic pump connected to a hydraulic jack of 700 bar capacity, which can apply and release the load increments.
- The dial gauge used to measure the plate settlement has a resolution of 0.01 mm and the lever ratio was equal to 1.
- The temperature at the time of the test was $16 \pm 1^\circ\text{C}$.
- The plate was carried out on a Crushed Stone Filter Layer (according to the company) at 7 points. The test surface area was levelled, and the plate was bedded on this surface.
- The hydraulic jack was placed on the middle of, and normal to, the loading plate beneath the reaction loading system and secured against tilting.
- The reaction loading system was a heavy multi-purpose Loader KAWSAKI



EJUST CETCU Unit



3. Test Procedure and Results

The plate load test was conducted in accordance with the DIN18134. Loading, unloading, and reloading regimes were considered to estimate the resilient modulus of the tested soil. Prior to the test, the force transducer and dial gauge were reset to zero, and then a load corresponding to a stress of 0.01 MN/m² was applied. The load was increased in the first loading cycle until a normal stress of 0.25 MN/m² was reached, and the loading increment was 0.025 MN/m². The load was gradually released in four stages. Following unloading, a second loading cycle was performed, but the load was only increased to the penultimate stage of the first cycle. 7 plate loading tests on the Crushed Stone Filter Layer of the Electric Express Train project were conducted at 7 locations (KM 393+550, KM 393+450, KM 393+350, KM 393+250, KM 393+150, KM 393+050, and KM 392+950) and the data collected at the 7 test points is included in Appendix A.

Table 1 presents the load-settlement data obtained at the first loading and unloading stages of the plate loading test performed at the location (KM 393+550), while Table 2 shows the data obtained at the second loading stage.

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Table 1: Load-settlement data obtained at the first loading and unloading stages of the plate loading test performed at the location (KM 393+550)

Loading stage	Load (F)	Normal	Settleme
	kN	MN/m ²	mm
0	1.414	0.005	0.00
1	7.07	0.025	0.18
2	14.14	0.050	0.34
3	21.21	0.075	0.61
4	28.28	0.100	0.85
5	35.35	0.125	1.00
6	42.42	0.150	1.20
7	49.49	0.175	1.38
8	56.56	0.200	1.53
9	63.63	0.225	1.70
10	70.7	0.250	1.90
11	56.56	0.200	1.90
12	49.49	0.175	1.89
13	35.35	0.125	1.74
14	21.21	0.075	1.54
15	1.414	0.005	0.97



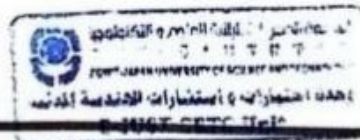
Table 2: Load-settlement data obtained at the second loading and unloading stages of the plate loading test performed at the location (KM 393+550)

Loading stage	Load (F) kN	Normal stress (σ_n) MN/m ²	Settlement (S) mm
0	1.414	0.005	0.97
1	7.07	0.025	1.20
2	14.14	0.050	1.30
3	21.21	0.075	1.40
4	28.28	0.100	1.53
5	35.35	0.125	1.64
6	42.42	0.150	1.72
7	49.49	0.175	1.83
8	56.56	0.200	1.90
9	63.63	0.225	1.97

The load-settlement data obtained in all loading and unloading stages for the test performed at the first location (KM 393+550) are shown in Figure 1. Table 3 shows the calculations of the resilient modulus of the tested soil according to DIN18134. The testing data corresponding to the second testing point (KM 393+450) is provided in Tables 4-6 and Figure 2. The testing data corresponding to the third testing point (KM 393+350) is provided in Tables 7-9 and Figure 3. The testing data corresponding to the fourth testing point (KM 393+250) is provided in Tables 10-12 and Figure 4. The testing data corresponding to the fifth testing point (KM 393+150) is provided in Tables 13-15 and Figure 5.

Table 3: Calculations of the resilient modulus of the tested soil according to DIN18134: (KM 393+550)

Parameters	1st loading cycle	2nd loading cycle
$(\sigma_0 \text{ max}) \text{ MN/m}^2$	0.25	0.25
$a_0 \text{ (mm)}$	-0.07	0.99
$a_1 \text{ (mm/(MN/m}^2\text{))}$	9.39	6.35
$a_2 \text{ (mm/(MN}^2\text{/m}^2\text{))}$	-6.49	-8.95
$E = 1.5 \text{ r/}(a_1 + a_2 \cdot \sigma_0 \text{ max})$	57.89	109.42
E_y/E_v	1.89	



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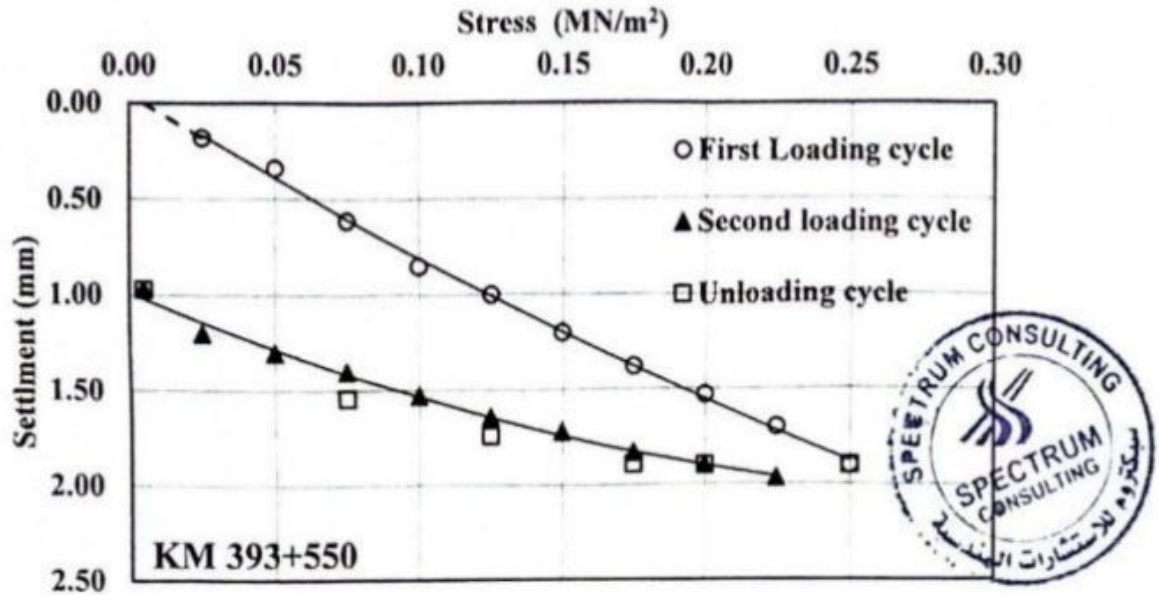


Figure 1: Load-settlement data: plate loading test performed at (KM 393+550)

Table 4: Load-settlement data obtained at the first loading and unloading stages of the plate loading test performed at the location (KM 393+450)

Loading stage	Load (F)	Normal stress (σ_0)	Settlement (S)
	kN	MN/m ²	mm
0	1.414	0.005	0.00
1	7.07	0.025	0.10
2	14.14	0.050	0.22
3	21.21	0.075	0.41
4	28.28	0.100	0.64
5	35.35	0.125	0.79
6	42.42	0.150	0.95
7	49.49	0.175	1.10
8	56.56	0.200	1.20
9	63.63	0.225	1.33
10	70.7	0.250	1.43
11	56.56	0.200	1.43
12	49.49	0.175	1.39
13	35.35	0.125	1.29
14	21.21	0.075	1.14
15	1.414	0.005	0.63

Table 5: Load-settlement data obtained at the second loading and unloading stages of the plate loading test performed at the location (KM 393+450)

Loading stage	Load (F) kN	Normal stress (s_0) MN/m ²	Settlement (S) mm
0	1.414	0.005	0.63
1	7.07	0.025	0.78
2	14.14	0.050	0.88
3	21.21	0.075	0.97
4	28.28	0.100	1.09
5	35.35	0.125	1.19
6	42.42	0.150	1.28
7	49.49	0.175	1.33
8	56.56	0.200	1.41
9	63.63	0.225	1.49

Table 6: Calculations of the resilient modulus of the tested soil according to DIN18134: (KM 393+450)

Parameters	1st loading cycle	2nd loading cycle
$[s_0, \max]$ MN/m ²	0.25	0.25
s_0 (mm)	-0.15	0.62
s_1 (mm/(MN/m ²))	8.63	5.33
s_2 (mm/(MN/m ²))	-9.16	-6.79
$E_{v1} = 1.5 r / (s_1 + s_2 \cdot s_0, \max)$	70.91	124.06
E_{v2}/E_{v1}	1.75	

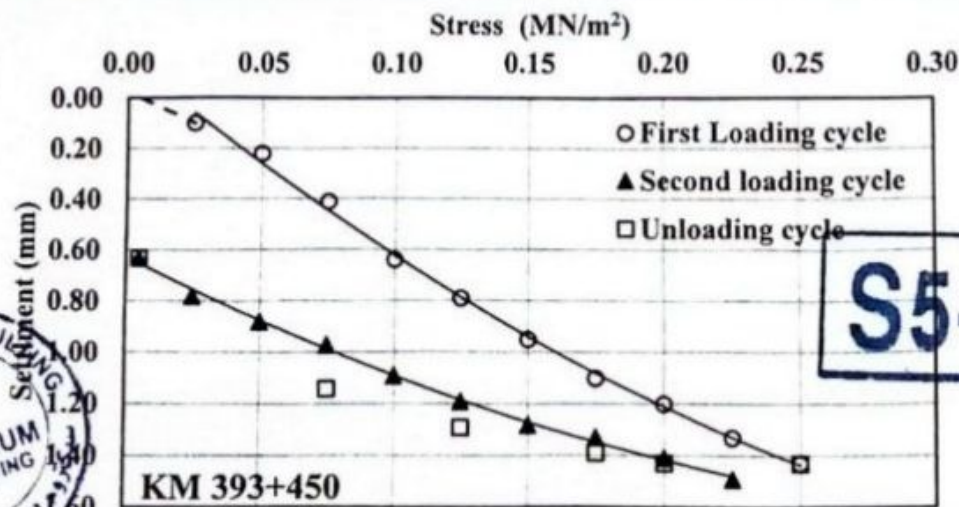


Figure 2: Load-settlement data: plate loading test performed at (KM 393+450)

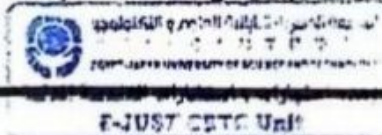


Table 7: Load-settlement data obtained at the first loading and unloading stages of the plate loading test performed at the location (KM 393+350)

Loading stage	Load (F)	Normal stress (s_v)	Settlement (S)
	kN	MN/m ²	mm
0	1.414	0.005	0.00
1	7.07	0.025	0.30
2	14.14	0.050	0.46
3	21.21	0.075	0.84
4	28.28	0.100	1.33
5	35.35	0.125	1.69
6	42.42	0.150	1.95
7	49.49	0.175	2.30
8	56.56	0.200	2.50
9	63.63	0.225	2.68
10	70.7	0.250	2.88
11	56.56	0.200	2.88
12	49.49	0.175	2.83
13	35.35	0.125	2.73
14	21.21	0.075	2.59
15	1.414	0.005	2.03

Table 8: Load-settlement data obtained at the second loading and unloading stages of the plate loading test performed at the location (KM 393+350)

Loading stage	Load (F)	Normal stress (s_v)	Settlement (S)
	kN	MN/m ²	mm
0	1.414	0.005	2.03
1	7.07	0.025	2.33
2	14.14	0.050	2.41
3	21.21	0.075	2.50
4	28.28	0.100	2.60
5	35.35	0.125	2.70
6	42.42	0.150	2.79
7	49.49	0.175	2.88
8	56.56	0.200	3.00
9	63.63	0.225	3.12

Table 9: Calculations of the resilient modulus of the tested soil according to DIN18134: (KM 393+350)

Parameters	1st loading cycle	2nd loading cycle
($s_{v,max}$) MN/m ²	0.25	0.25
a_0 (mm)	-0.27	2.10
a_1 (mm/(MN/m ²))	17.90	5.57
a_2 (mm/(MN ² /m ⁴))	-20.80	-5.33
$E_v = 1.5 r / (a_1 + a_2 \cdot s_{v,max})$	35.44	106.17
E_{v1}/E_{v2}	3.00	

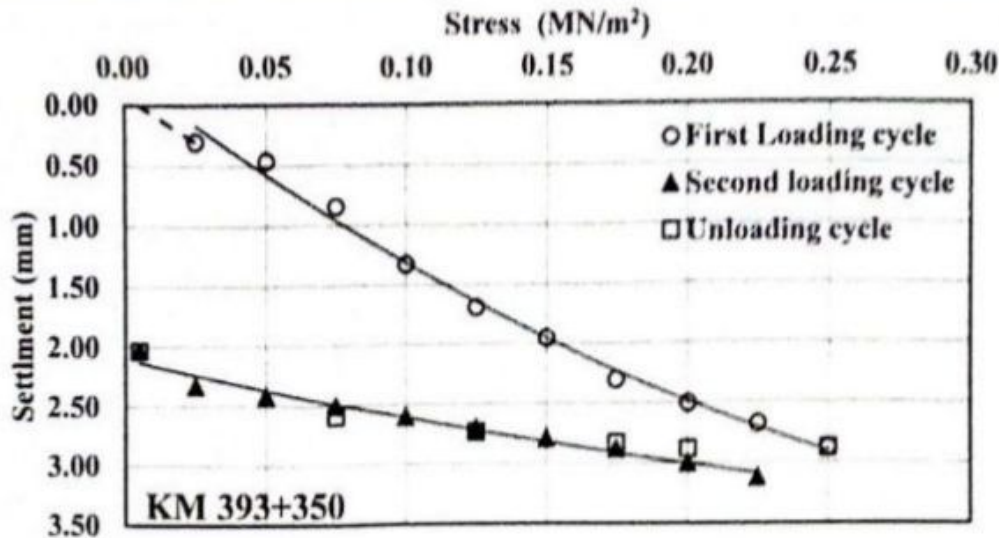


Figure 3: Load-settlement data: plate loading test performed at (KM 393+350)

Table 10: Load-settlement data obtained at the first loading and unloading stages of the plate loading test performed at the location (KM 393+250)

Loading stage	Load (F)	Normal stress (σ_0)	Settlement (S)
	kN	MN/m ²	mm
0	1.414	0.005	0.00
1	7.07	0.025	0.23
2	14.14	0.050	0.31
3	21.21	0.075	0.49
4	28.28	0.100	0.72
5	35.35	0.125	0.91
6	42.42	0.150	1.20
7	49.49	0.175	1.47
8	56.56	0.200	1.66
9	63.63	0.225	1.89
10	70.7	0.250	2.07
11	56.56	0.200	2.07
12	49.49	0.175	2.03
13	35.35	0.125	1.87
14	21.21	0.075	1.70
15	1.414	0.005	1.02

Table 11: Load-settlement data obtained at the second loading and unloading stages of the plate loading test performed at the location (KM 393+250)

Loading stage	Load (F)	Normal stress (σ_n)	Settlement (S)
	kN	MN/m ²	mm
0	1.414	0.005	1.02
1	7.07	0.025	1.13
2	14.14	0.050	1.35
3	21.21	0.075	1.45
4	28.28	0.100	1.59
5	35.35	0.125	1.76
6	42.42	0.150	1.86
7	49.49	0.175	1.97
8	56.56	0.200	2.10
9	63.63	0.225	2.23

Table 12: Calculations of the resilient modulus of the tested soil according to DIN18134: (KM 393+250)

Parameters	1st loading cycle	2nd loading cycle
$(\sigma_{n,max})$ MN/m ²	0.25	0.25
s_0 (mm)	-0.02	0.99
s_1 (mm/(MN/m ²))	7.00	6.66
s_2 (mm/(MN ² /m ⁴))	6.31	-5.38
$E_v = 1.5 r / (s_1 + s_2 \cdot \sigma_{n,max})$	52.49	84.65
E_{v2}/E_{v1}	1.61	

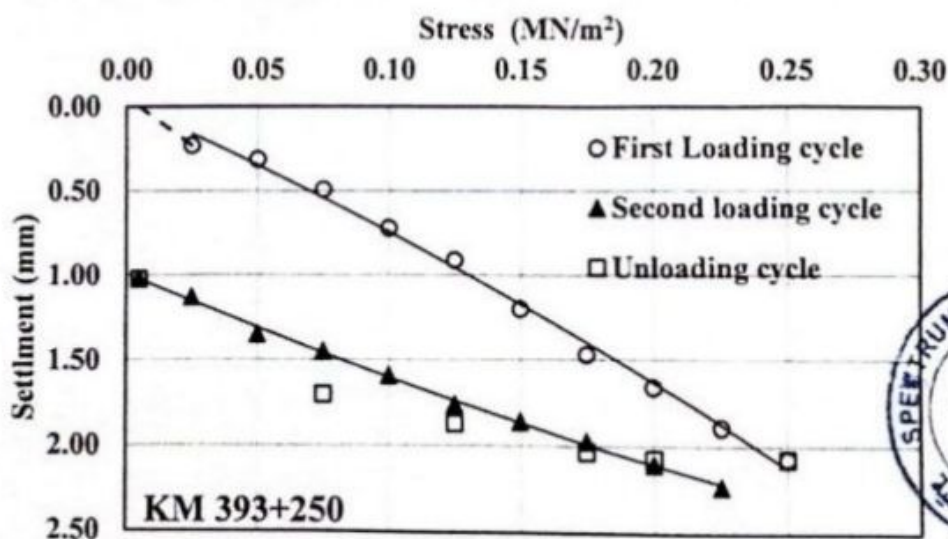


Figure 4: Load-settlement data: plate loading test performed at (KM 393+250)

Table 13: Load-settlement data obtained at the first loading and unloading stages of the plate loading test performed at the location (KM 393+150)

Loading stage	Load (F)	Normal stress (s_0)	Settlement (S)
	kN	MN/m ²	mm
0	1.414	0.005	0.00
1	7.07	0.025	0.25
2	14.14	0.050	0.35
3	21.21	0.075	0.49
4	28.28	0.100	0.70
5	35.35	0.125	0.87
6	42.42	0.150	1.05
7	49.49	0.175	1.27
8	56.56	0.200	1.45
9	63.63	0.225	1.65
10	70.7	0.250	1.77
11	56.56	0.200	1.77
12	49.49	0.175	1.69
13	35.35	0.125	1.60
14	21.21	0.075	1.44
15	1.414	0.005	0.80

Table 14: Load-settlement data obtained at the second loading and unloading stages of the plate loading test performed at the location (KM 393+150)

Loading stage	Load (F)	Normal stress (s_0)	Settlement (S)
	kN	MN/m ²	mm
0	1.414	0.005	0.80
1	7.07	0.025	1.00
2	14.14	0.050	1.12
3	21.21	0.075	1.21
4	28.28	0.100	1.35
5	35.35	0.125	1.45
6	42.42	0.150	1.55
7	49.49	0.175	1.64
8	56.56	0.200	1.74
9	63.63	0.225	1.84

Table 15: Calculations of the resilient modulus of the tested soil according to DIN18134: (KM 393+150)

Parameters	1st loading cycle	2nd loading cycle
($s_{0,max}$) MN/m ²	0.25	0.25
s_0 (mm)	0.05	0.81
a_1 (mm/(MN/m ²))	6.16	5.93
a_2 (mm/(MN ² /m ⁴))	3.58	-6.42
$E_v = 1.5 r / (a_1 + a_2 \cdot s_{0,max})$	63.77	103.99
E_{v1}/E_{v2}	1.63	

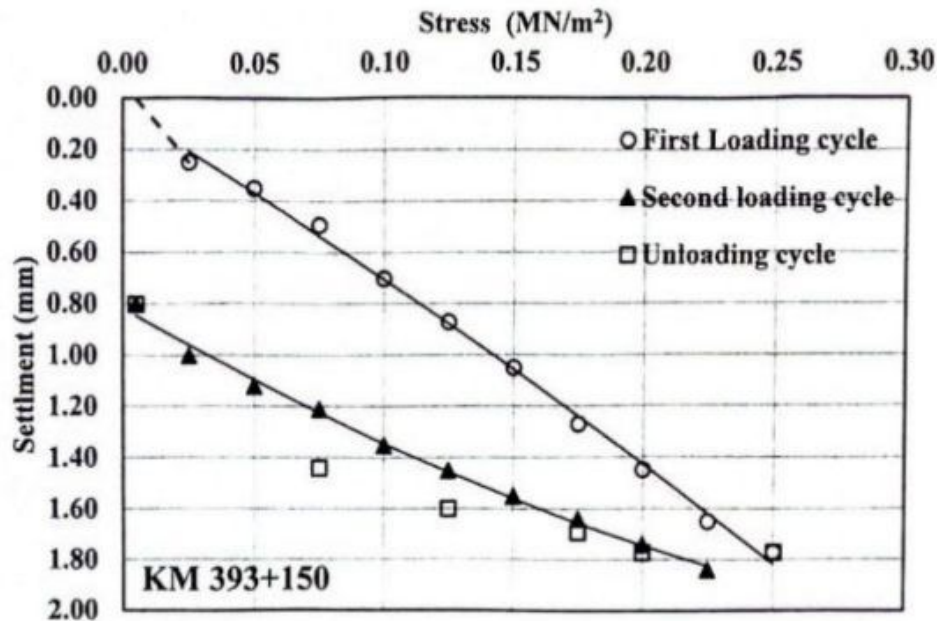


Figure 5: Load-settlement data: plate loading test performed at (KM 393+150)

The testing data corresponding to the sixth testing point (KM 393+050) is provided in Tables 16-18 and Figure 6. The testing data corresponding to the seventh testing point (KM 392+950) is provided in Tables 19-21 and Figure 7.

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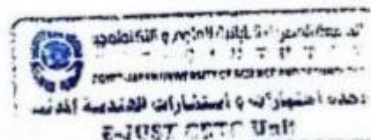


Table 16: Load-settlement data obtained at the first loading and unloading stages of the plate loading test performed at the location (KM 393+050)

Loading stage	Load (F)	Normal stress (s_0)	Settlement (S)
	kN	MN/m ²	mm
0	1.414	0.005	0.00
1	7.07	0.025	0.20
2	14.14	0.050	0.32
3	21.21	0.075	0.46
4	28.28	0.100	0.73
5	35.35	0.125	1.00
6	42.42	0.150	1.20
7	49.49	0.175	1.48
8	56.56	0.200	1.69
9	63.63	0.225	1.90
10	70.7	0.250	2.10
11	56.56	0.200	2.10
12	49.49	0.175	2.03
13	35.35	0.125	1.90
14	21.21	0.075	1.73
15	1.414	0.005	0.99

Table 17: Load-settlement data obtained at the second loading and unloading stages of the plate loading test performed at the location (KM 393+050)

Loading stage	Load (F)	Normal stress (s_0)	Settlement (S)
	kN	MN/m ²	mm
0	1.414	0.005	0.99
1	7.07	0.025	1.22
2	14.14	0.050	1.31
3	21.21	0.075	1.45
4	28.28	0.100	1.60
5	35.35	0.125	1.72
6	42.42	0.150	1.84
7	49.49	0.175	1.97
8	56.56	0.200	2.08
9	63.63	0.225	2.20

Table 18: Calculations of the resilient modulus of the tested soil according to DIN18134: (KM 393+050)

Parameters	1st loading cycle	2nd loading cycle
($s_{0,max}$) MN/m ²	0.25	0.25
a_0 (mm)	-0.06	1.00
a_1 (mm/(MN/m ²))	7.81	6.43
a_2 (mm/(MN ² /m ⁴))	-51.06	-5.11
$E_v = 1.5 r / (a_1 + a_2 \cdot s_{0,max})$	51.06	87.36
E_{v1}/E_{v2}	1.71	



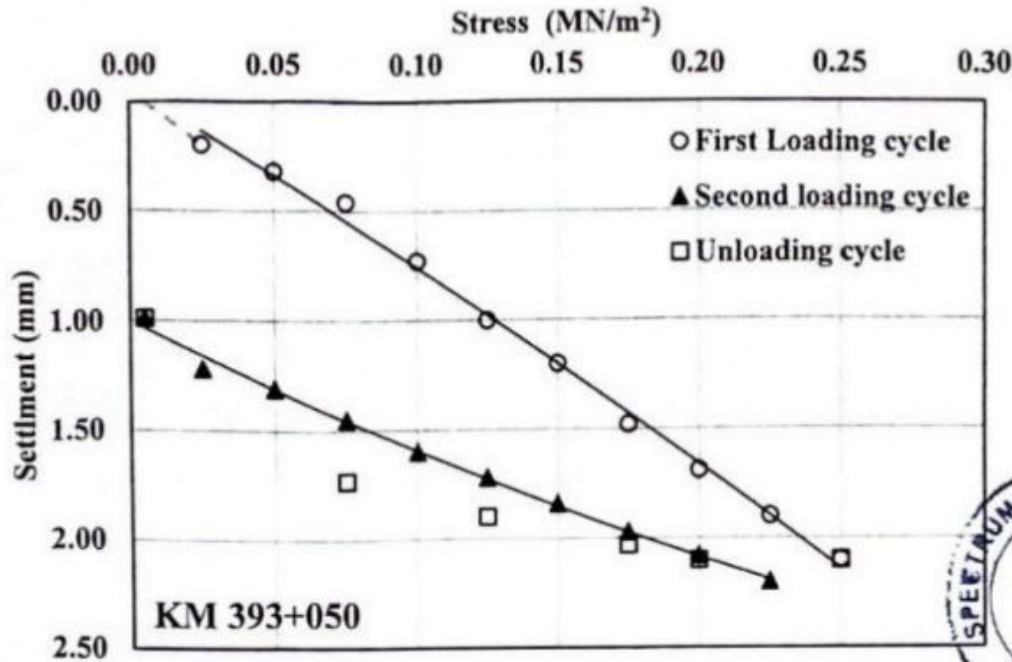


Figure 6: Load-settlement data: plate loading test performed at (KM 393+050)

Table 19: Load-settlement data obtained at the first loading and unloading stages of the plate loading test performed at the location (KM 392+950)

Loading stage	Load (F)	Normal stress (s_n)	Settlement (S)
	kN	MN/m ²	mm
0	1.414	0.005	0.00
1	7.07	0.025	0.24
2	14.14	0.050	0.40
3	21.21	0.075	0.50
4	28.28	0.100	0.70
5	35.35	0.125	0.97
6	42.42	0.150	1.25
7	49.49	0.175	1.59
8	56.56	0.200	1.80
9	63.63	0.225	2.08
10	70.7	0.250	2.32
11	56.56	0.200	2.32
12	49.49	0.175	2.30
13	35.35	0.125	2.17
14	21.21	0.075	1.95
15	1.414	0.005	1.31

Table 20: Load-settlement data obtained at the second loading and unloading stages of the plate loading test performed at the location (KM 392+950)

Loading stage	Load (F)	Normal stress (σ_n)	Settlement (S)
	kN	MN/m ²	mm
0	1.414	0.005	1.31
1	7.07	0.025	1.58
2	14.14	0.050	1.67
3	21.21	0.075	1.75
4	28.28	0.100	1.90
5	35.35	0.125	2.02
6	42.42	0.150	2.11
7	49.49	0.175	2.24
8	56.56	0.200	2.35
9	63.63	0.225	2.47

Table 21: Calculations of the resilient modulus of the tested soil according to DIN18134: (KM 392+950)

Parameters	1st loading cycle	2nd loading cycle
$(\sigma_{p,max})$ MN/m ²	0.25	0.25
a_p (mm)	0.04	1.35
a_s (mm/(MN/m ²))	5.90	5.89
a_u (mm/(MN2/m ²))	13.76	-4.49
$E_{vm} = 1.5 r / (a_s + a_u \cdot \sigma_{p,max})$	48.19	94.44
E_{v2}/E_{v1}	1.96	

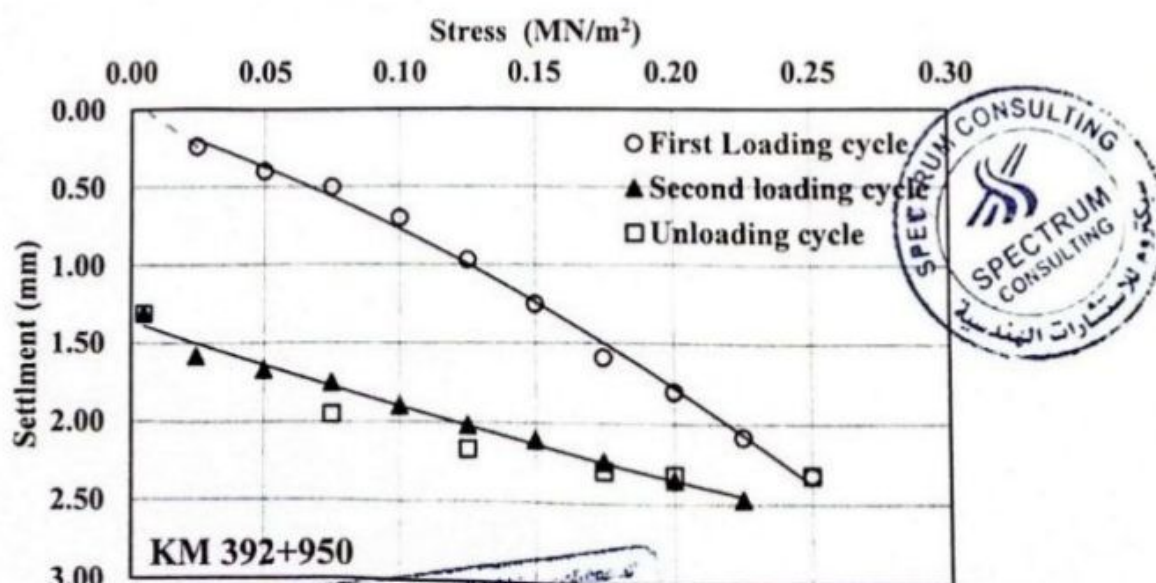
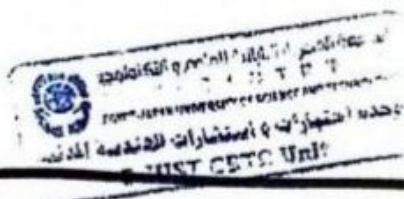


Figure 7: Load-settlement data: plate loading test performed at (KM 392+950)

Appendix A



S5-B-SF



Location of test site:	KM 393+550		Field team	Mr.Mohamed Mamdouh
Project title:	Electric Express Train Project - Al-Safa Contracting Company		Date:	12/1/2023
Diameter of loading plate	600		Time	1:03:00 pm 1:30:00 pm
Lever ratio	1		Note: KAWSAKI	
Type of Soil	Crushed Stone Filter Layer			
Bedding material	---			
Temperature	16°C			
Test regime	Loading Stage No.	Load (kN)	Dial Gauge Reading (mm)	
Loading Stage	0	1.414	10.00	
	1	7.07	9.82	
	2	14.14	9.66	
	3	21.21	9.39	
	4	28.28	9.15	
	5	35.35	9.00	
	6	42.42	8.80	
	7	49.49	8.62	
	8	56.56	8.47	
	9	63.63	8.30	
Unloading Stage	10	70.7	8.10	
	11	56.56	8.10	
	12	49.49	8.11	
	13	35.35	8.26	
	14	21.21	8.46	
Reloading Stage	15	1.414	9.03	
	0	1.414	9.03	
	1	7.07	8.80	
	2	14.14	8.70	
	3	21.21	8.60	
	4	28.28	8.47	
	5	35.35	8.36	
	6	42.42	8.28	
	7	49.49	8.17	
	8	56.56	8.10	
9	63.63	8.03		



S5-B-SF

Civil Engineering Testing &
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المدنية

Location of test site:	KM 393+450		Field team	Mr.Mohamed Mamdouh
Project title:	Electric Express Train Project - Al-Safa Contracting Company		Date:	12/1/2023
Diameter of loading plate	600		Time	1:38:00 pm 2:09:00 pm
Lever ratio	1		Note: KAWSAKI	
Type of Soil	Crushed Stone Filter Layer			
Bedding material	---			
Temperature	16°C			
Test regime	Loading Stage No.	Load (kN)	Dial Gauge Reading (mm)	
Loading Stage	0	1.414	10.00	
	1	7.07	9.90	
	2	14.14	9.78	
	3	21.21	9.59	
	4	28.28	9.36	
	5	35.35	9.21	
	6	42.42	9.05	
	7	49.49	8.90	
	8	56.56	8.80	
	9	63.63	8.63	
Unloading Stage	10	70.7	8.57	
	11	56.56	8.52	
	12	49.49	8.61	
	13	35.35	8.71	
	14	21.21	8.86	
Reloading Stage	15	1.414	9.37	
	0	1.414	9.37	
	1	7.07	9.22	
	2	14.14	9.12	
	3	21.21	9.03	
	4	28.28	8.91	
	5	35.35	8.81	
	6	42.42	8.72	
	7	49.49	8.67	
	8	56.56	8.59	
	9	63.63	8.51	



S5-B-SF

Civil Engineering Testing & Consulting Unit

وحدة اختبارات واستشارات الهندسة المدنية

Location of test site:	KM 393+350		Field team	Mr.Mohamed Mamdouh
Project title:	Electric Express Train Project - Al-Safa Contracting Company		Date:	12/1/2023
Diameter of loading plate	600		Time	2:20:00 pm 2:47:00 pm
Lever ratio	1		Note: KAWSAKI	
Type of Soil	Crushed Stone Filter Layer			
Bedding material	---			
Temperature	16°C			
Test regime	Loading Stage No.	Load (kN)	Dial Gauge Reading (mm)	
Loading Stage	0	1.414	10.00	
	1	7.07	9.70	
	2	14.14	9.54	
	3	21.21	9.16	
	4	28.28	8.67	
	5	35.35	8.31	
	6	42.42	8.05	
	7	49.49	7.70	
	8	56.56	7.50	
	9	63.63	7.32	
Unloading Stage	10	70.7	7.12	
	11	56.56	7.12	
	12	49.49	7.17	
	13	35.35	7.27	
	14	21.21	7.41	
Test regime	Loading Stage No.	Load (kN)	Dial Gauge Reading (mm)	
	0	1.414	7.97	
	1	7.07	7.67	
	2	14.14	7.59	
	3	21.21	7.50	
	4	28.28	7.40	
	5	35.35	7.30	
	6	42.42	7.21	
	7	49.49	7.12	
	8	56.56	7.00	
9	63.63	6.88		



Location of test site:	KM 393+250		Field team	Mr.Mohamed Mamdouh
Project title:	Electric Express Train Project - Al-Safa Contracting Company		Date:	12/1/2023
Diameter of loading plate	600		Time	2:57:00 pm 3:25:00 pm
Lever ratio	1		Note: KAWSAKI	
Type of Soil	Crushed Stone Filter Layer			
Bedding material	—			
Temperature	16°C			
Test regime	Loading Stage No.	Load (kN)	Dial Gauge Reading (mm)	
Loading Stage	0	1.414	10.00	
	1	7.07	9.77	
	2	14.14	9.69	
	3	21.21	9.51	
	4	28.28	9.28	
	5	35.35	9.09	
	6	42.42	8.80	
	7	49.49	8.53	
	8	56.56	8.34	
	9	63.63	8.11	
	10	70.7	7.93	
Unloading Stage	11	56.56	7.93	
	12	49.49	7.97	
	13	35.35	8.13	
	14	21.21	8.30	
	15	1.414	8.98	
Test regime	Loading Stage No.	Load (kN)	Dial Gauge Reading (mm)	
Reloading Stage	0	1.414	8.98	
	1	7.07	8.87	
	2	14.14	8.65	
	3	21.21	8.55	
	4	28.28	8.41	
	5	35.35	8.24	
	6	42.42	8.14	
	7	49.49	8.03	
	8	56.56	7.90	
	9	63.63	7.77	



Location of test site:	KM 393+150		Field team	Mr.Mohamed Mamdouh
Project title:	Electric Express Train Project - Al-Safa Contracting Company		Date:	12/1/2023
Diameter of loading plate	600		Time	3:34:00 pm 4:02:00 pm
Lever ratio	1		Note: KAWSAKI	
Type of Soil	Crushed Stone Filter Layer			
Bedding material	---			
Temperature	16°C			
Test regime	Loading Stage No.	Load (kN)	Dial Gauge Reading (mm)	
Loading Stage	0	1.414	10.00	
	1	7.07	9.75	
	2	14.14	9.65	
	3	21.21	9.51	
	4	28.28	9.30	
	5	35.35	9.13	
	6	42.42	8.95	
	7	49.49	8.73	
	8	56.56	8.55	
	9	63.63	8.35	
Unloading Stage	10	70.7	8.23	
	11	56.56	8.23	
	12	49.49	8.31	
	13	35.35	8.40	
	14	21.21	8.56	
Reloading Stage	15	1.414	9.20	
	0	1.414	9.20	
	1	7.07	9.00	
	2	14.14	8.88	
	3	21.21	8.79	
	4	28.28	8.65	
	5	35.35	8.55	
	6	42.42	8.45	
	7	49.49	8.36	
	8	56.56	8.26	
9	63.63	8.16		





University of Science and Technology
الجامعة المصرية للعلوم والتكنولوجيا
エジプト日本科学技術大学

S5-B-SF

Civil Engineering Testing & Consulting Unit

وحدة الاختبارات واستشارات الهندسة المدنية

Location of test site:	KM 393+050		Field team	Mr.Mohamed Mamdouh
Project title:	Electric Express Train Project - Al-Safa Contracting Company		Date:	12/1/2023
Diameter of loading plate	600		Time	4:10:00 pm 4:37:00 pm
Lever ratio	1		Note: KAWSAKI	
Type of Soil	Crushed Stone Filter Layer			
Bedding material	---			
Temperature	16°C			
Test regime	Loading Stage No.	Load (kN)	Dial Gauge Reading (mm)	
Loading Stage	0	1.414	10.00	
	1	7.07	9.80	
	2	14.14	9.68	
	3	21.21	9.54	
	4	28.28	9.27	
	5	35.35	9.00	
	6	42.42	8.80	
	7	49.49	8.52	
	8	56.56	8.31	
	9	63.63	8.10	
	10	70.7	7.90	
Unloading Stage	11	56.56	7.90	
	12	49.49	7.97	
	13	35.35	8.10	
	14	21.21	8.27	
	15	1.414	9.01	
Test regime	Loading Stage No.	Load (kN)	Dial Gauge Reading (mm)	
Reloading Stage	0	1.414	9.01	
	1	7.07	8.78	
	2	14.14	8.69	
	3	21.21	8.55	
	4	28.28	8.40	
	5	35.35	8.28	
	6	42.42	8.16	
	7	49.49	8.03	
	8	56.56	7.92	
	9	63.63	7.80	



SPECTRUM CONSULTING
الاستشارات الهندسية





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エジプト日本科学技術大学

S5-B-SF

Civil Engineering Testing & Consulting Unit

وحدة الاختبارات واستشارات الهندسة المدنية

Location of test site:	KM 392+950		Field team	Mr.Mohamed Mamdouh
Project title:	Electric Express Train Project - Al-Safa Contracting Company		Date:	12/1/2023
Diameter of loading plate	600		Time	4:45:00 pm 5:13:00 pm
Lever ratio	1		Note: KAWSAKI	
Type of Soil	Crushed Stone Filter Layer			
Bedding material	---			
Temperature	16°C			
Test regime	Loading Stage No.	Load (kN)	Dial Gauge Reading (mm)	
Loading Stage	0	1.414	10.00	
	1	7.07	9.76	
	2	14.14	9.60	
	3	21.21	9.50	
	4	28.28	9.30	
	5	35.35	9.03	
	6	42.42	8.75	
	7	49.49	8.41	
	8	56.56	8.20	
	9	63.63	7.92	
	10	70.7	7.68	
Unloading Stage	11	56.56	7.68	
	12	49.49	7.70	
	13	35.35	7.83	
	14	21.21	8.05	
	15	1.414	8.69	
Test regime	Loading Stage No.	Load (kN)	Dial Gauge Reading (mm)	
Reloading Stage	0	1.414	8.69	
	1	7.07	8.42	
	2	14.14	8.33	
	3	21.21	8.25	
	4	28.28	8.10	
	5	35.35	7.98	
	6	42.42	7.89	
	7	49.49	7.76	
	8	56.56	7.65	
	9	63.63	7.53	



SPECTRUM CONSULTING
مستشارات الطيف



UNIVERSAL INSPECTION REQUEST



الهيئة العامة
للمواصلات
والبنية التحتية
(GARBU)



الهيئة العامة
للتخطيط
والتطوير
الاقتصادي
(MPEDE)



RECEIPT of NOTIFICATION-Minimum Notice Period not less than 24 Hours

The Work described below will be complete and ready for inspection at planned time shown

Contractor Company	AL-Safa for General Contracting and Road Construction			Designer Company*	(SPECTRUM) Engineering Consulting Office		
Issued by Contractor	Name	Sign	Date/Serial Number	Time			
	Eng. Ahmed Abbas		06/01/2023 (S5-B-SF-FF-04)	10:00 AM			
Received by GARB CONSULTANT	Eng. Saied Saif		UIR	C1	C2	C3	DD
				393	EW	CS	07
				MM	YY	HH	MM
				01	2023	01	00
CODE-1	S1 to S21 Station Reference			D1 to D3 Depot Reference		Kp XXX Note For Kilo meter point only Start Km is used	
CODE - 2	Work Activity						
CODE - 3	Sub Element of Activity						

EXPLANATION OF WORK TO BE INSPECTED

Description	REV	Element	Item
From St. 393+140 To St. 393+300	29	At level (6.80) m .	FILTER LAYER
From St. 393+324 To St. 393+484	35		

INSPECTION DETAILS The Following will be ready at the Planned Inspection Time

Planned Inspection Date	Planned Inspection Time

COMPLIANCE EVIDENCE Must be included as appropriate

Checklist Attached	Test Results Attached	Calibration Attached	Other as indicated
Drawing Reference	References	MS Reference	
Plan and Profile REV. 35	MAR (QT-36) - MIR (PLT-07)	-Specification: EARTHWORK SPECIFICATIONS & TESTING REPORT (CG21-41.2)VERSION2 BY CIVECON GROUP. -TECHNICAL REPORT (CG21-122.1) VERSION 1 BY CIVECON GROUP.	

Comments by: Eng. Mohamed Mansour (XYZ)

Attached Master Sheet approved by SPECTRUM.



Comments by: Eng. Saied Saif (SPECTRUM)

Comments by: Eng. Alaa Abd-Allatif (ER)

1- تم استلام القطاع فحص 2- تم مراجعة شيت الملاحظات SPECTRUM CONSULTING	I-Coordinates & level and width checked by GARB consultant
--	--

INSPECTION RESULT

Organisation	Name	Sign	Date	Time	Approval Status	Please Tick if Not Attend
Contractor	Eng. Ahmed Abbas				A	
XYZ Survey	Eng. Mohamed Mansour				A	
QA/QC	Eng. Saied Saif				A	
GARB	Eng. Mohammed Fayad					
Employers Representative	Eng. Alaa Abd-Allatif				A	

UNIVERSAL INSPECTION REQUEST



إمارة دبي
المساحة
(GARU)



المساحة
المساحة
(GARU)



RECEIPT of NOTIFICATION-Minimum Notice Period not less than 24 Hours

The Work described below will be complete and ready for inspection at planned time shown

Contractor Company	AL-Safa for General Contracting and Road Construction		Designer Company*	(SPECTRUM) Engineering Consulting Office	
Issued by Contractor	Name	Sign	Date/Serial Number	Time	
	Eng. Ahmed Abbas		06/01/2023 (S5-B-SF-FF-03)	10:00 AM	
Received by GARU CONSULTANT	Eng. Saied Saif		UIR	C1	C2
				C3	DD
				MM	YY
				HH	MM
				393	07
				EW	01
				CS	2023
				01	00

CODE-1	S1 to S21 Station Reference	D1 to D3 Depot Reference	Kp XXX Note For Kilo meter point only Start Km is used
CODE - 2	Work Activity		
CODE - 3	Sub Element of Activity		

EXPLANATION OF WORK TO BE INSPECTED

Description	REV	Element	Item
From St. 392+900 To St. 393+140	29	At level (6.80) m .	FILTER LAYER
From St. 393+084 To St. 393+324	35		

INSPECTION DETAILS The Following will be ready at the Planned Inspection Time

Planned Inspection Date	Planned Inspection Time

COMPLIANCE EVIDENCE Must be Included as appropriate

Checklist Attached	Test Results Attached	Calibration Attached	Other as indicated
Drawing Reference	References	MS Reference	
Plan and Profile REV. 35	MAR (QT-28& 34) - MIR (PLT-07)	-Specification: EARTHWORK SPECIFICATIONS & TESTING REPORT (CG21-41.2) VERSION2 BY CIVECON GROUP -TECHNICAL REPORT (CG21-122.1) VERSION 1 BY CIVECON GROUP.	

Comments by: Eng. Mohamed Mansour (XYZ)

Attached Master Sheet approved by SPECTRUM.



Comments by: Eng. Saied Saif (SPECTRUM)

Comments by: Eng. Alaa Abd-Allatif (ER)

1-Coordinates & level and width checked by GARU consultant



INSPECTION RESULT

Organisation	Name	Sign	Date	Time	Approval Status	Please Tick if Not Attend
Contractor	Eng. Ahmed Abbas				A	
XYZ Survey	Eng. Mohamed Mansour				A	
QA/QC	Eng. Saied Saif				A	
GARU	Eng. Mohammed Fayad					
Employer Representative	Eng. Alaa Abd-Allatif				A	



UNIVERSAL INSPECTION REQUEST



الهيئة العامة
للمواصلات
والبنية التحتية
(GARB)



الهيئة العامة
للمواصلات
والبنية التحتية
(GARB)



RECEIPT of NOTIFICATION-Minimum Notice Period not less than 24 Hours

The Work described below will be complete and ready for inspection at planned time shown

Contractor Company	AL-Safa for General Contracting and Road Construction		Designer Company*	(SPECTRUM) Engineering Consulting Office			
Issued by Contractor	Name	Sign	Date/Serial Number	Time			
	Eng. Ahmed Abbas		02/01/2023 (S5-B-SF-FF-01)	10:00 AM			
Received by GARB CONSULTANT	Eng. Saied Saif		C1	C2	C3	DD	MM
		DIR	393	EW	CS	03	01
							YY
							HH
							MM

CODE-1	S1 to S21 Station Reference	D1 to D3 Depot Reference	Kp XXX Note For Kilo meter point only Start Km is used
CODE-2	Work Activity		
CODE-3	Sub Element of Activity		

EXPLANATION OF WORK TO BE INSPECTED

Description	REV	Element	Item
From St. 393+340 To St. 393+580	29	At level (6.80) m .	FILTER LAYER
From St. 393+524 To St. 393+764	35		

INSPECTION DETAILS The Following will be ready at the Planned Inspection Time

Planned Inspection Date	Planned Inspection Time

COMPLIANCE EVIDENCE Must be included as appropriate

Checklist Attached	Test Results Attached	Calibration Attached	Other as indicated
Drawing Reference	References	MS Reference	
Plan and Profile REV. 35	MAR (QT-14 & 18) - MIR (PLT-07)	-Specification: EARTHWORK SPECIFICATIONS & TESTING REPORT (CG21-41.2)VERSION2 BY CIVECON GROUP. -TECHNICAL REPORT (CG21-122.1) VERSION 1 BY CIVECON GROUP.	

Comments by: Eng. Mohamed Mansour (XYZ)

Attached Master Sheet approved by SPECTRUM.

مشروع القطار السريع شرب النيل

Comments by: Eng. Saied Saif (SPECTRUM)

Comments by: Eng. Alaa Abd-Allatif (ER)

1-Coordinates & level and width checked by GARB consultant
2-تم مراجعة شيت الهندسي .

INSPECTION RESULT

Organisation	Name	Sign	Date	Time	Approval Status	Please Tick if Not Attend
Contractor	Eng. Ahmed Abbas				A	
XYZ Survey	Eng. Mohamed Mansour				A	
QA/QC*	Eng. Saied Saif				A	
GARB	Eng. Mohammed Fayad					
Employers Representative	Eng. Alaa Abd-Allatif				A	

MATERIAL APPROVAL REQUEST			الهيئة العامة للطرق والكباري (GARB)		المخطط المجهز للإنشاء مزارع شحور		مخطط المدن مزارع شحور

Contractor Company	Al-Safa General Contracting Company		Designer Company	[SPECTRUM] Engineering Consulting Office							
Issued by Contractor	Name	Sign	Date/Serial Number	Time							
	Eng. Ahmed Ragab		16/9/2022 (SS-B-SF-QT-014)	10:00							
Received by GARB CONSULTANT	Eng. Mazen Essamy		MAR	C1	C2	C3	DD	MM	YY	HH	MM
				393	EW	CS	17	9	22	10	0

CODE-1	S15	D3	Kp 393+000
		EW	
		MS	

Description of Materials	Filter Layer (5000)m3.					
Location to be Used	From Station	REV29	392+900	To Station	REV29	393+600
		REV35	393+084		REV35	393+784
Sample only	Yes	Materials Type		Crushed stone #1-#2		
Supplier Name	ALBARAKA CRUSHER	Data Sheet provided		Yes attached		
Reference in BoQ		Specification		EARTHWORK SPECIFICATIONS & TESTING REPORT (CG21-122.1) VERSION1-2022 BY CIVECON GROUP		
Prequalification reference		Test Samples Results		Yes attached		
Reference Photos	No	Other				
Comments by: Eng. Mazen Essamy (SPECTRUM)				Comments by: Eng. Alaa Abd-Allatif (ER)		
1-Quality test Results by Third Party Lab (COMIBASSAL) IS Approved				1-All testes carried-out Third Party Lab (COMIBASSAL).		
2-This Sample Representative (5000 m3) only .				2-Results report attached and acceptable with the project specifications.		

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng. Ahmed Ragab			A
QA/QC *	Eng. Mazen Essamy			A
GARB**	Eng. Mohammed Fayad			
Employers Representative	Eng. Alaa Abd-Allatif			A

* Designer

** Alignment/Bridges: Culvert only

MATERIAL APPROVAL REQUEST								

Contractor Company	Al-SAFA General Contracting Company			Designer Company	(SPECTRUM) Engineering Consulting Office						
Issued by Contractor	Name	Sign		Date/Serial Number	Time						
	Eng. Ahmed Ragab			14/10/2022	10:00						
				(SS-B-SF-QT-018)							
Received by GARB CONSULTANT	Eng. Mazen Essamy		MAR	CL	CS	DO	MM	YY	HH	MM	
				393	EW	CS	15	10	22	10	0

CODE-1	S15	D3	Kp 393+000
		EW	
		MS	

Description of Materials	Filter Layer (10000)m3.						
Location to be Used	From Station	REV29	392+900	To Station	REV29	393+600	
		REV35	393+084		REV35	393+784	
Sample only	Yes	Materials Type		Crushed stone #1-#2			
Supplier Name	ALBARAKA CRUSHER	Data Sheet provided		Yes attached			
Reference in BoQ		Specification		EARTHWORK SPECIFICATIONS & TESTING REPORT (CG21-122.1) VERSION1-2022 BY CIVECON GROUP			
Prequalification reference		Test Samples Results		Yes attached			
Reference Photos	No	Other					
Comments by: Eng. Mazen Essamy (SPECTRUM)				Comments by: Eng. Alaa Abd-Allatif (ER)			
1-Quality test Results by Third Party Lab (COMIBASSAL) IS Approved				1-All testes carried-out Third Party Lab (COMIBASSAL).			
This Sample Representative (5000 m3) only .				2-Results report attached and acceptable with the project specifications.			

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng. Ahmed Ragab			A
QA/QC	Eng. Mazen Essamy			A
GARB	Eng. Mohammed Fayad			
Employers Representative	Eng. Alaa Abd-Allatif			A

* Designer
** Alignment/Bridges: Cover Only

MATERIAL APPROVAL REQUEST						
	المجلس الأعلى للمهندسين SPECTRUM	الجمعية العامة للطرق والكباري (GARB)	الجمعية المصرية للطرق والكباري SPECTRUM	الجمعية المصرية للطرق والكباري SPECTRUM	الجمعية المصرية للطرق والكباري SPECTRUM	الجمعية المصرية للطرق والكباري SPECTRUM

Contractor Company	Al-SAFA General Contracting Company		Designer Company	(SPECTRUM) Engineering Consulting Office	
Issued by Contractor	Name	Sign	Date/Serial Number	Time	
	Eng. Ahmed Ragab		4/11/2022 (55-B-SF-QT-020)	10:00	
Received by GARB CONSULTANT	Eng. Mazen Essamy		MAR	C1	C2
				C3	DD
				MM	YY
				HH	MM
				393	EW
				CS	S
				11	22
				10	0

CODE-1	S15	D3	Kp 393+000
CODE-2		EW	
CODE-3		MS	

Description of Materials	Filter Layer (15000)m3.					
Location to be Used	From Station	REV29	392+900	To Station	REV29	393+600
		REV35	393+084		REV35	393+784
Sample only	Yes	Materials Type		Crushed stone #1-#2		
Supplier Name	ALBARAKA CRUSHER	Data Sheet provided		Yes attached		
Reference in BoQ		Specification		EARTHWORK SPECIFICATIONS & TESTING REPORT (CG21-122.1) VERSION1-2022 BY CIVECON GROUP		
Prequalification reference		Test Samples Results		Yes attached		
Reference Photos	No	Other				
Comments by: Eng. Mazen Essamy (SPECTRUM)				Comments by: Eng. Alaa Abd-Allatif (ER)		
1-Quality test Results by Third Party Lab (COMIBASSAL) IS Approved.				1-All testes carried-out Third Party Lab (COMIBASSAL).		
This Sample Representative (5000 m3) only.				2-Results report attached and acceptable with the project specifications.		

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng. Ahmed Ragab			A
QA/QC	Eng. Mazen Essamy			A
GARB**	Eng. Mohammed Fayad			
Employers Representative	Eng. Alaa Abd-Allatif			A

* Designer

** Alignment/Bridges: Culvert only

MATERIAL APPROVAL REQUEST			الهيئة العامة للطرق والكباري (GARB)		الهيئة العامة للطرق والكباري (GARB)				

Contractor Company	Al-Safa General Contracting Company			Designer Company	(SPECTRUM) Engineering Consulting Office						
Issued by Contractor	Name	Sign		Date/Serial Number	Time						
	Eng. Ahmed Ragab			30/11/2022	10:00						
				(SS-B-SF-QT-024)							
Received by GARB CONSULTANT	Eng. Mazen Essamy		MAR	C1	C2	C3	DD	MM	YY	HH	MM
				393	EW	CS	1	12	22	10	0

CODE-1	S15	D3	Kp 393+000
		EW	
		MS	

Description of Materials	Filter Layer (20000)m3.						
Location to be Used	From Station	REV29	392+900	To Station	REV29	393+600	
		REV35	393+084		REV35	393+784	
Sample only	Yes	Materials Type		Crushed stone #1-#2			
Supplier Name	ALBARAKA CRUSHER	Data Sheet provided		Yes attached			
Reference in BoQ		Specification		EARTHWORK SPECIFICATIONS & TESTING REPORT (CG21-122.1) VERSION1-2022 BY CIVECON GROUP			
Prequalification reference		Test Samples Results		Yes attached			
Reference Photos	No	Other					
Comments by: Eng. Mazen Essamy (SPECTRUM)				Comments by: Eng. Alaa Abd-Allatif (ER)			
1-Quality test Results by Third Party Lab (COMIBASSAL) IS Approved This Sample Representative (5000 m3) only . 				1-All testes carried-out Third Party Lab (COMIBASSAL). 2-Results report attached and acceptable with the project specifications.			

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
	Eng. Ahmed Ragab			A
	Eng. Mazen Essamy			A
	Eng. Mohammed Fayad			
	Eng. Alaa Abd-Allatif			A

* Designer

** Alignment/Bridges: Culvert only

MATERIAL APPROVAL REQUEST							

Contractor Company	Al-SAFA General Contracting Company			Designer Company	(SPECTRUM) Engineering Consulting Office						
Issued by Contractor	Name	Sign		Date/Serial Number	Time						
	Eng. Ahmed Ragab			14/12/2022 (SS-B-SF-QT-028)	10:00						
Received by GARB CONSULTANT	Eng. Mazen Essamy		MAR	C1	C2	C3	DD	MM	YY	HH	MM
				393	EW	CS	15	12	22	10	0

CODE-1	S15	D3	Kp 393+000
CODE-2	EW		
CODE-3	MS		

Description of Materials	Filter Layer (25000)m3.						
Location to be Used	From Station	REV29	392+900	To Station	REV29	393+600	
		REV35	393+084		REV35	393+784	
Sample only	Yes	Materials Type		Crushed stone #1-#2			
Supplier Name	ALBARAKA CRUSHER	Data Sheet provided		Yes attached			
Reference in BoQ		Specification		EARTHWORK SPECIFICATIONS & TESTING REPORT (LG21-122.1) VERSION1-2022 BY CIVECON GROUP			
Prequalification reference		Test Samples Results		Yes attached			
Reference Photos	No	Other					
Comments by: Eng. Mazen Essamy (SPECTRUM) 1-Quality test Results by Third Party Lab (COMIBASSAL) IS Approved. his Sample Representative (5000 m3) only .				Comments by: Eng. Alaa Abd-Allatif (ER) 1-All testes carried-out Third Party Lab (COMIBASSAL). 2-Results report attached and acceptable with the project specifications.			

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
	Contractor	Eng. Ahmed Ragab		A
	QA/QC *	Eng. Mazen Essamy		A
	GARB**	Eng. Mohammed Fayad		
	Employers Representative	Eng. Alaa Abd-Allatif		

* Designer

** Alignment/Bridges: Culvert only

MATERIAL APPROVAL REQUEST			الهيئة العامة للطرق والكباري (GARB)			

Contractor Company	Al-SAFA General Contracting Company			Designer Company	(SPECTRUM) Engineering Consulting Office						
Issued by Contractor	Name	Sign		Date/Serial Number	Time						
	Eng. Ahmed Ragab			27/12/2022	10:00						
				(SS-B-SF-QT-034)							
Received by GARB CONSULTANT	Eng. Mazen Essamy		MAR	C1	C2	C3	DO	MM	YY	HH	MM
				393	EW	C5	28	12	22	10	0

CODE-1	S15	D3	Kp 393+000
		EW	
		MS	

Description of Materials	Filter Layer (30000)m3.					
Location to be Used	From Station	REV29	392+900	To Station	REV29	393+600
		REV35	393+084		REV35	393+784
Sample only	Yes	Materials Type		Crushed stone #1-#2		
Supplier Name	ALBARAKA CRUSHER	Data Sheet provided		Yes attached		
Reference in BoQ		Specification		EARTHWORK SPECIFICATIONS & TESTING REPORT (CG21-122.1) VERSION1-2022 BY CIVECON GROUP		
Prequalification reference		Test Samples Results		Yes attached		
Reference Photos	No	Other				
Comments by: Eng. Mazen Essamy (SPECTRUM)				Comments by: Eng. Alaa Abd-Allatif (ER)		
Quality test Results by Third Party Lab (COMIBASSAL) IS Approved This Sample Representative (5000 m3) only.				1-All testes carried-out Third Party Lab (COMIBASSAL). 2-Results report attached and acceptable with the project specifications.		

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
	Eng. Ahmed Ragab			A
	Eng. Mazen Essamy			A
	Eng. Mohammed Fayad			
	Eng. Alaa Abd-Allatif			A

* Designer
 ** Alignment/Bridges: Culvert only

**MATERIAL
APPROVAL
REQUEST**



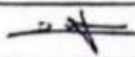


**المكتب العامة
للمطرق والكباري
(GARB)**



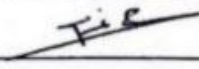
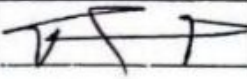




Contractor Company		Al-SAFA General Contracting Company		Designer Company		(SPECTRUM) Engineering Consulting Office	
Issued by Contractor	Name	Sign	Date/Serial Number		Time		
	Eng. Ahmed Ragab		4/1/2023		10:00		
			(SS-B-SF- QT-036)				
Received by GARB CONSULTANT	Eng. Mazen Essamy	Sign	MAR	C1	C2	C3	DO
				393	EW	CS	S
				MM	YY	HH	MM
				1	23	10	0

CODE-1	S15	D3	Kp 393+000
		EW	
		MS	

Description of Materials		Filter Layer (35000)m3.					
Location to be Used	From Station	REV29	392+900	To Station	REV29	393+600	
		REV35	393+084		REV35	393+784	
Sample only	Yes	Materials Type		Crushed stone #1-#2			
Supplier Name	ALBARAKA CRUSHER	Data Sheet provided		Yes attached			
Reference in BoQ		Specification		EARTHWORK SPECIFICATIONS & TESTING REPORT (CG21-122.1) VERSION1-2022 BY CIVECON GROUP			
Prequalification reference		Test Samples Results		Yes attached			
Reference Photos	No	Other					
Comments by: Eng. Mazen Essamy (SPECTRUM) 1-Quality test Results by Third Party Lab (COMIBASSAL) is approved. This Sample Representative (5000 m3) only .				Comments by: Eng. Alaa Abd-Allatif (ER) 1-All testes carried-out Third Party Lab (COMIBASSAL). 2-Results report attached and acceptable with the project specifications.			

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng. Ahmed Ragab			A
QA/QC *	Eng. Mazen Essamy			A
GARB	Eng. Mohammed Fayad			
Employers Representative	Eng. Alaa Abd-Allatif			A

* Designer
** Alignment Engineer Only



محضر إستلام موقع

مشروع: أعمال الجسر الترابى لمشروع القطار الكهربائى السريع قطاعات غرب النيل فى المسافة من كم ٣٩٢+٠٠٠ إلى كم ٣٩٤+٥٠٠ بطول ٢.٥ كم إتجاه مطروح.

تنفيذ: شركة الصفا للمقاولات العمومية

إشراف: المنطقة الخامسة - منطقة غرب الدلتا

طبقاً للعقد رقم (٢٠٢٣ / ٢٠٢٢ / ١٠١٣) بتاريخ ٢٠٢٢/١٢/١٩

إنه فى يوم/ الخميس الموافق ٢٠٢٢/١٢/٢٩ اجتمع كلاً من:-

مهندس العملية - الهيئة العامة للطرق والكبارى

١- السيد المهندس /محمد حسنى فياض

مدير الشركة

٢- السيد المهندس / محمود سالم شتيوى

وذلك للمرور على مسار العملية المذكورة عاليه لإستلام الموقع :-
وقد تبين أن الموقع خالياً من العوائق الظاهرية ويسمح بالبداًء فى التنفيذ وبناء عليه يعتبر تاريخ ٢٠٢٢/١٢/٢٩ هو تاريخ إستلام الموقع وبداًء الأعمال بالعملية.
وأقفل المحضر على ذلك ووقع الحضور

التوقيعات

١- 
٢- محمود سالم شتيوى

رئيس الإدارة المركزية

منطقة غرب الدلتا

الاسكندرية - م. ر. ك. و. ن. ب. مطروح

عقيد مهندس / ه

"هاني محمد محمود طه"