

MATERIAL INSPECTION REQUEST	
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Contractor Company	Yousef Negida (3)			Designer Company							
Issued by Contractor	Name	Sign	Date	Time							
	Eng/Shehab Hamdi		08-01-2024								
Contractor Reference	YN3-80										
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	Fill Material Result		
Location to be Used	547+940	548+000	-1.25
	547+920	548+000	-1.00
	547+920	548+000	-0.75
	547+920	548+000	-0.50
	547+920	548+000	-0.25
	547+920	548+000	0.00
	547+220	547+260	-1.00
	547+220	547+260	-0.75
	547+220	547+260	-0.50
	547+220	547+260	-0.25
	547+220	547+260	0.00

MAR Approval No	YN3-80		Date	
Supplier Name				
Test Requirement	Specification	Clause		
Reference Photos	Yes attached / No	Other		

Item	Description	Unit	Quantity	Arrival Date	Note
1	L.L & P.L & O.M.C %	m3	4500	06-01-2024	
2	Proctor	m3	4500	07-01-2024	
3	Classification	m3	4500	06-01-2024	
4	Sieve Analysis	m3	4500	06-01-2024	
5	C.B.R	m3	4500	08-01-2024	

Comments by:	Comments by:

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng/ Shehab Hamdi			
QA/QC *			31-01-2024	
GARB**				
Employers Representative				

* Designer
** Alignment / Bridges: Culvert Only

MATERIAL APPROVAL REQUEST



ENGINEERING CONSULTING OFFICE
المكتب الاستشاري الهندسي
إ.د. خالد شهاب

الهيئة القومية للإسكان



Location Name	Contractor Company			Designer Company							
Electric express train	Yousef Negida (3)			k.k							
Issued by Contractor	Name	Sign	Date	Time							
	Eng/Shehab Hamdi		08-01-2024								
Contractor Reference	YN3-80										
Received by ER			MAR	C1	C2	C3	DO	M	YY	HH	M

The Following Test Result are Attached For Review				
Description of Materials	Soil (A-1-b)			
Location Of Stock	547+500			
Item	Specification	Test requirement	Test result attachment	Remarks
1	ASTM D 75	Aggregate Sampling	According to specifications	
2	ASTM C 136	Sieve Analysis	According to specifications	
3	ASTM D 1440	Passing Sieve, No 200	13.5 %	
4	ASTM D 4318	Atterberg limit	N.P	
5	ASTM D 2974	Moisture content	6.3	
6	ASTM D 1557	Modified proctor	2.224	
7	ASTM D 1883	CBR	66.12%	
Comments by:			Comments by:	

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng/Shehab Hamdi			
Contractor QA/QC *			8/01/2024	
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



Operating Lab: **Negida Central Lab**

PARTICLE SIZE DISTRIBUTION OF SOIL

Description of Materials: **Embankment**

Testing Date	06-01-24	code	Zone	From Station	TO Station
Location	K.P 547+500	YN3-80		546+000	549+000
Company Name	Yousef Negida 3				
QUANTITY	4500 M3				

1-visual inspection test :-

2-Gradient test :-

A-gradation of bulk materials				SAMPLE WEIGHT (g)		29841.00	gm	table classify
sieve size	2	1.5	1	3/4	1/2	3/8	# 4	PASS
Mass retained (g)	0.0	211.0	1454.0	1491.0	3165.0	1463.0	5532.0	soil classify
Cumulative Retained (g)	0.0	211.0	1665.0	3156.0	6321.0	7784.0	13316.0	A-1-b
Cumulative Retained %	0.0	0.7	5.6	10.6	21.2	26.1	44.6	2.224
Cumulative Passing %	100.0	99.3	94.4	89.4	78.8	73.9	55.4	WC 6.3
								CBR 66.12%

B-soft material gradation				WT.OF sample		500.00	gm
sieve size	10	40	200				
Cumulative Retained (g)	36.00	226.00	378.00				
Cumulative Retained %	7.20	45.20	75.60				
Cumulative Passing %	92.80	54.80	24.40				

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 %	100.0	99.3	94.4	89.4	78.8	73.9	55.4	51.4	30.3	13.5

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

Contractor

SHEHAB HAMDY

Consultant

[Signature]

شركة شهاب حمدي
 مشروع المطار الجديد - فوكا - مطروح
 2024



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 559+177



PROCTOR TEST

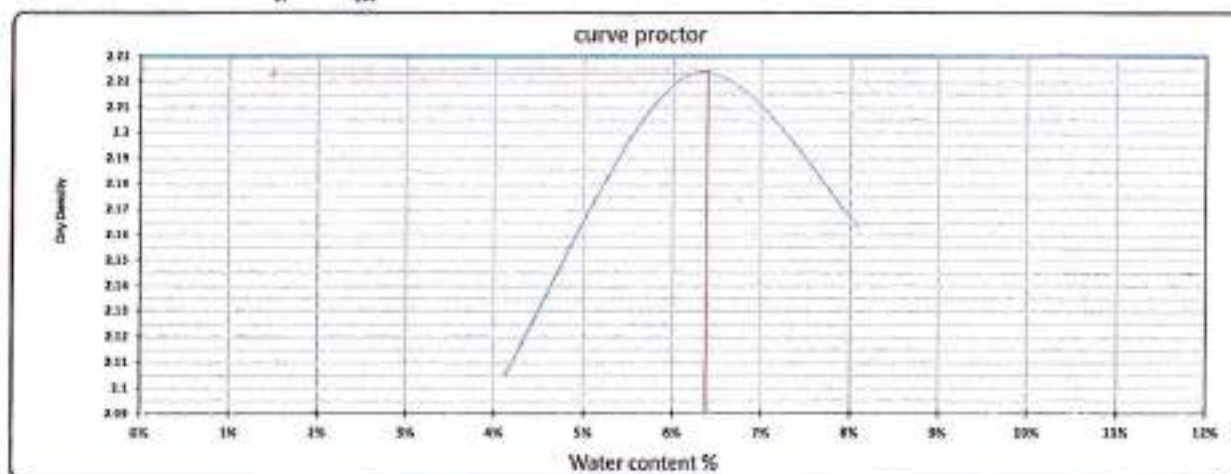
Testing Date	07-01-24	code	Zone	From Station	To Station
Location	K.P 547+500	YN3-80		546+000	549+000
Youssef Nagida 3	Youssef Nagida 3				

Weight of empty mold	5660.0	MAX Dry Density	2.224
Mold Volume	2122.0	Water content %	6.3

trial no :	1	2	3		
Wt. Of Mold+ wet soil	10313.0	10669.0	10525.0		
WT. WET SOIL	4653.0	5009.0	4965.0		
Wt. Density	2.193	2.361	2.340		

Tare No.	8	6	7	4	5	6				
Tare wt.	36.26	38.82	35.99	36.28	35.35	38.8				
Wt. Of wet soil & tare	160.0	160.0	160.0	160.0	160.0	160.0				
Wt. Of dry soil & tare	155.02	155.26	152.79	152.80	150.75	150.87				
Wt. Of water	5.0	4.7	7.2	7.2	9.3	9.1				
Wt. Of dry soil	118.8	116.4	116.8	116.5	115.4	112.1				
Water content %	4.19%	4.07%	6.17%	6.18%	8.02%	8.15%				
AV. Water content %	4.12%	6.10%	8.06%							
Dry Density	2.106	2.223	2.165							

81 200



Contractor

SHEHAB HAMDY

Consultant

08/01/24

شركة شهاب هاندي
المهندسين المدنيين
مشاريع البنية التحتية - مطروح



Electric Express Train - HSR



California Bearing Ratio TEST

Testing Date	08-01-24	code		From Station		To station
Location	K.P. 547+500	YN3-80	Zone	546+000		549+000
Company Name	Yousef Negida 3					

Test Results:

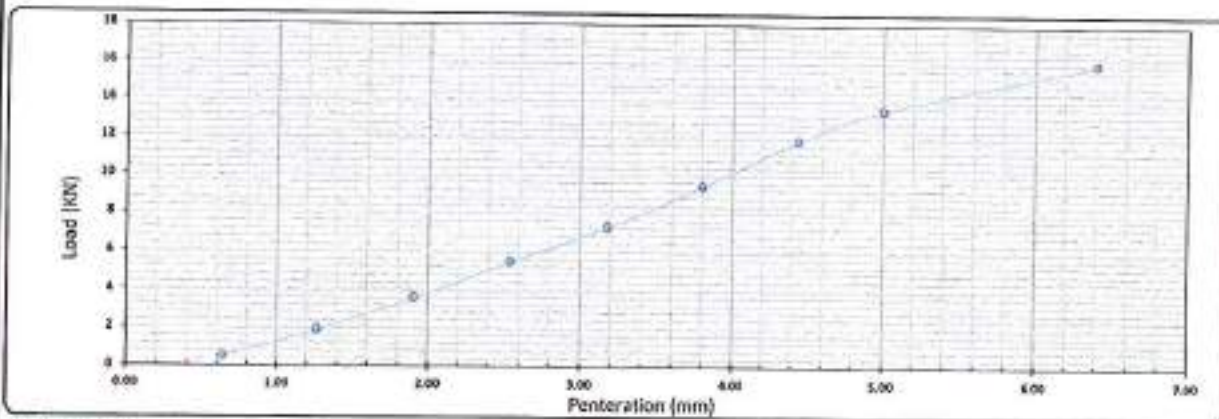
Compaction % for Mold	
Mold No.	1
Mold Vol. (cm ³)	2103
Mold WT. (gm)	7615
Mold WT. + Wet WT. (gm)	12574
Wet WT. (gm)	4959
Wet Density (g/cm ³)	2.358
Dry Density (g/cm ³)	2.220
Proctor Density (g/cm ³)	2.224
Compaction %	100

Moisture Ratio After Compacted Mold	
Tare No.	4
Tare WT. (gm)	36.28
Tare WT. + Wet WT. (gm)	172.5
Tare WT. + Dry WT. (gm)	164.5
Water WT. (gm)	8.0
Dry WT. (gm)	128.2
Moisture Content %	6.2

Swelling	
Mold No.	1
Date	8-1-2024
Initial Height (mm)	0.11
Final Height (mm)	0.13
Difference	0
Sample Height (mm)	116.40
Swelling Ratio %	0%

Loading Reading :

Penetration (mm)	0.64	1.27	1.91	2.54	3.18	3.80	4.45	5.00	6.40
Load Reading (kg)	55	106	160	201	244	286	321	350	401
Load (KN)	0.5	1.0	1.6	2.0	2.4	2.8	3.2	3.5	4.0



Calculations :-

Penetration (mm)	Load (Kn)	Standard Load (lb)	CBR (%)	Mold - Compaction (%)	Compaction (%)	CBR
2.50	5.52	13.4	41.3%	100	98	40.6%
5.00	13.48	20.0	67.3%			66.1%

Lab. Specialist

Lab. Engineer

Consultant Engineer

Name :

Name : HEHAB HAMDY

Name :

Sign :

Sign :

Sign :

MATERIAL INSPECTION REQUEST				
	الهيئة العامة للتخطيط القومية للإسكان الهيئة العامة للتخطيط القومية للإسكان الهيئة العامة للتخطيط القومية للإسكان			

Contractor Company	Yousef Negida (3)		Designer Company																	
Issued by Contractor	Name	Sign	Date	Time																
	Eng/Shehab Hamdi		06-12-2023																	
Contractor Reference	YN3-74																			
Received by ER		MIR	<table border="1"> <tr> <td>C1</td> <td>C2</td> <td>C3</td> <td>DD</td> <td>MM</td> <td>YY</td> <td>HH</td> <td>MM</td> </tr> <tr> <td></td> <td></td> <td></td> <td>06</td> <td>12</td> <td>2023</td> <td></td> <td></td> </tr> </table>	C1	C2	C3	DD	MM	YY	HH	MM				06	12	2023			
C1	C2	C3	DD	MM	YY	HH	MM													
			06	12	2023															

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	Fill Material Result				
Location to be Used	546+880	546+940	-0.50		
	547+000	547+060	-0.25		
	547+060	547+140	-0.25		
	546+760	546+860	-0.25		
	546+860	546+940	-0.25		
	547+000	547+060	0.00		
	547+060	547+140	0.00		
	546+760	546+860	0.00		
	546+860	546+940	0.00		
MAR Approval No	YN3-74		Date		
Supplier Name					
Test Requirement	Specification		Clause		
Reference Photos	Yes attached / No	Other			
Item	Description	Unit	Quantity	Arrival Date	Note
1	L.L & P.L & O.M.C %	m3	4500	04-12-2023	
2	Proctor	m3	4500	05-12-2023	
3	Classification	m3	4500	04-12-2023	
4	Sieve Analysis	m3	4500	04-12-2023	
5	C.B.R	m3	4500	06-12-2023	

Comments by:	Comments by:

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng/ Shehab Hamdi			
QA/QC *	Ahmed Abou Zaid			
GARB**				
Employers Representative				

* Designer
** Alignment / Bridges: Culvert Only

MATERIAL APPROVAL REQUEST

الهيئة العامة
للتنظيم والإشراف
(GARB)



KK
ENGINEERING CONSULTING OFFICE
المكتب الاستشاري الهندسي
أ.د. خالد منديل

الهيئة العامة للإعطاء
SARAF



Location Name	Contractor Company			Designer Company						
Electric express train	Yousef Negida (3)			k.k						
Issued by Contractor	Name	Sign	Date	Time						
	Eng/Shehab Hamdi		06-12-2023							
Contractor Reference	YN3-74									
Received by ER		MAR	C1	C2	C3	DD	M	YY	HH	M
						06	12	2023		

The Following Test Result are Attached For Review

Description of Materials	Soil (A-1-b)			
Location Of Stock	547+500			
Item	Specification	Test requirement	Test result attachment	Remarks
1	ASTM D 75	Aggregate Sampling	According to specifications	
2	ASTM C 136	Sieve Analysis	According to specifications	
3	ASTM D 1440	Passing Sieve, No 200	12.1 %	
4	ASTM D 4318	Atterberg limit	N.P	
5	ASTM D 2974	Moisture content	6.2	
6	ASTM D 1557	Modified proctor	2.215	
7	ASTM D 1883	CBR	62.3 %	
Comments by:			Comments by:	

APPROVAL STATUS

Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng/Shehab Hamdi			
Contractor QA/QC *	Ahmed Abu 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



Operating Lab: **Negida Central Lab**

PARTICLE SIZE DISTRIBUTION OF SOIL

Description of Materials: **Embankment**

Testing Date	04-12-23	code	Zone	From Station	TO Station
Location	K.P. 547+500	YN3-74		546+000	549+000
Company Name	Yousef Negida 3				

1-visual inspection test :-

2-Gradient test :-

A-gradation of bulk materials				SAMPLE WEIGHT (g)		57806.00	gm	table classify
sieve size	2	1.5	1	3/4	1/2	3/8	# 4	PASS
Mass retained (g)	0.0	321.0	2331.0	2973.0	5922.0	4778.0	7145.0	
Cumulative Retained (g)	0.0	321.0	2652.0	5625.0	11547.0	16325.0	23470.0	PRO
Cumulative Retained %	0.0	0.6	4.6	9.7	20.0	28.2	40.6	WC
Cumulative Passing %	100.0	99.4	95.4	90.3	80.0	71.8	59.4	CBR
								soil classify
								A-1-b
								2.215
								6.2
								62.3%

B-soft material gradation				WT.OF sample		500.00	gm
sieve size	10	40	200				
Cumulative Retained (g)	27.00	166.00	398.00				
Cumulative Retained %	5.40	33.20	79.60				
Cumulative Passing %	94.60	66.80	20.40				

C-General gradation										
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	99.4	95.4	90.3	80.0	71.8	59.4	56.2	38.7	12.1

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

Contractor

Consultant

شركة نسيج للهندسة والبناء
 مشروع تار السويح / فوكا - مطروح

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

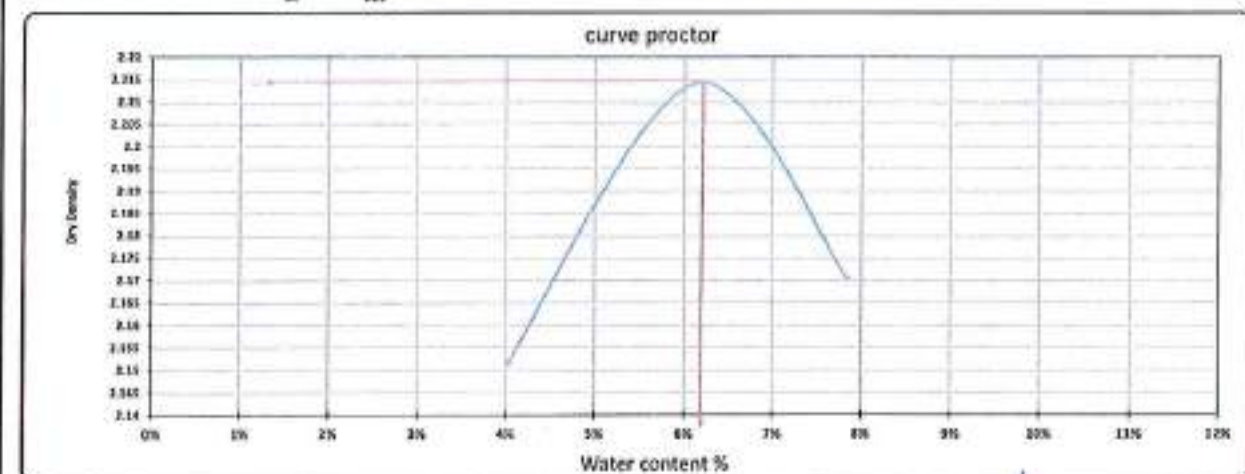
Testing Date	05-12-23	code	Zone	From Station	To Station
Location	K.P 547+500	YN3-74		546+000	549+000
Yousef Negida 3	Yousef Negida 3				

Weight of empty mold	5665.0	MAX Dry Density	2.215
Mold Volume	2122.0	Water content %	6.2

trial no :	1	2	3		
Wt. Of Mold+ wet soil	10415.0	10651.0	10632.0		
WT. WET SOIL	4750.0	4986.0	4967.0		
Wt. Density	2.238	2.350	2.341		

Tare No.	8	6	7	4	5	6				
Tare wt.	36.26	38.82	35.99	36.28	35.35	38.8				
Wt. Of wet soil & tare	160.0	160.0	160.0	160.0	160.0	160.0				
Wt. Of dry soil & tare	155.15	155.36	152.79	152.94	151.00	151.13				
Wt. Of water	4.8	4.6	7.2	7.1	9.0	8.9				
Wt. Of dry soil	118.9	116.5	116.8	116.7	115.7	112.3				
Water content %	4.08%	3.98%	6.17%	6.05%	7.78%	7.90%				
AV. Water content %	4.01%		6.11%		7.84%					
Dry Density	2.132		2.319		2.171					

41 260



Contractor

Consultant

شركة مصر للطرق
مشاريع الطرق - مطروح

6
17 12 2023



Electric Express Train - HSR



California Bearing Ratio TEST

Testing Date	6-12-2023	code		From Station		To station
Location	K.P. 547+500	YN3-74	Zero	546+000		549+000
Company Name	Yousef Negida 3					

Test Results:

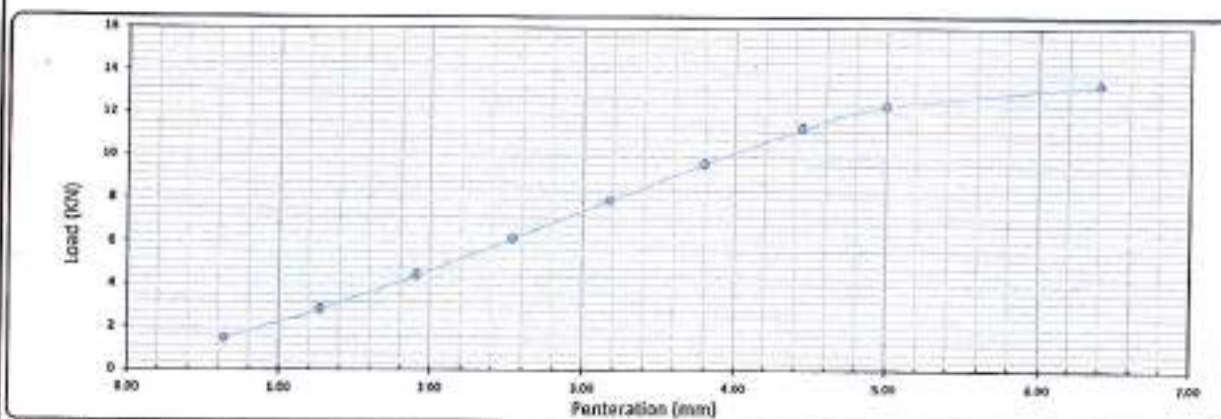
Compaction % for Mold	
Mold No.	1
Mold Vol. (cm ³)	2140
Mold WT. (gm)	7971
Mold WT. + Wet WT. (gm)	12865
Wet WT. (gm)	4894
Wet Density (g/cm ³)	2.287
Dry Density (g/cm ³)	2.152
Proctor Density (g/cm ³)	2.215
Compaction %	97

Moisture Ratio After Compacted Mold	
Tare No.	5
Tare WT. (gm)	35.5
Tare WT. + Wet WT. (gm)	296.3
Tare WT. + Dry WT. (gm)	280.9
Water WT. (gm)	15.4
Dry WT. (gm)	245.4
Moisture Content %	6.3

Swelling	
Mold No.	1
Date	6-12-2023
Initial Height (mm)	0.00
Final Height (mm)	0.00
Difference	0
Sample Height (mm)	116.40
Swelling Ratio %	0%

Loading Reading :

Penetration (mm)	0.64	1.27	1.91	2.54	3.18	3.80	4.45	5.00	6.40
Load Reading (kg)	17.0	29.5	45.5	63.3	81.1	99.0	117.2	135.7	155.5
Load (KN)	1.5	2.6	4.1	5.7	7.3	8.9	10.5	12.3	13.9



Calculations :-

Penetration (mm)	Load (KN)	Standard Load (lb)	CBR (%)	Mold - Compaction (%)	Compaction (%)	CBR
2.50	6.20	13.4	46.5%	97	98	46.9%
5.00	12.37	20.0	61.8%			62.3%

Lab. Specialist

Name :

Sign :

Lab. Engineer

Name : *Yousef Negida 3*

Sign : *Yousef Negida 3*

مستشار السويح / فؤاد - مطروح

Consultant Engineer

Name : *Yousef Negida 3*

Sign : *Yousef Negida 3*

MATERIAL INSPECTION REQUEST	
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Contractor Company	Yousef Negida (3)		Designer Company								
Issued by Contractor	Name	Sign	Date	Time							
	Eng/Shehab Hamdi		29-11-2023								
Contractor Reference	YN3-73										
Received by ER			MIR	C1	C2	C3	DD	MM	YY	HH	MM
							29	11	2023		

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

Description of Materials	Fill Material Result		
Location to be Used	546+760	546+860	-1.00
	546+860	546+940	-1.00
	547+000	547+060	-0.75
	547+060	547+140	-0.75
	546+760	546+860	-0.75
	546+860	546+940	-0.75
	547+000	547+060	-0.50
	547+060	547+140	-0.50
	546+760	546+880	-0.50

MAR Approval No	YN3-73		Date	
Supplier Name				
Test Requirement	Specification		Clause	
Reference Photos	Yes attached / No	Other		

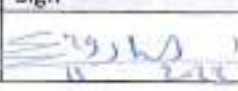
Item	Description	Unit	Quantity	Arrival Date	Note
1	L.L & P.L & O.M.C %	m3	5000	27-11-2023	
2	Proctor	m3	5000	28-11-2023	
3	Classification	m3	5000	27-11-2023	
4	Sieve Analysis	m3	5000	27-11-2023	
5	C.B.R	m3	5000	29-11-2023	

Comments by:	Comments by:

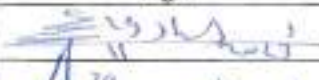
APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng/ Shehab Hamdi			
QA/QC *	Ahmed Abotaid			
GARB**				
Employers Representative				

* Designer
 ** Alignment / Bridges: Culvert Only

MATERIAL APPROVAL REQUEST				

Location Name	Contractor Company		Designer Company							
Electric express train	Yousef Negida (3)		k.k							
Issued by Contractor	Name	Sign	Date	Time						
	Eng/Shehab Hamdi		29-11-2023							
Contractor Reference	YN3-73									
Received by ER		MAR	C1	C2	C3	DD	M	YY	HH	M
						29	11	2023		

The Following Test Result are Attached For Review				
Description of Materials	Soil (A-1-b)			
Location Of Stock	547+500			
Item	Specification	Test requirement	Test result attachment	Remarks
1	ASTM D 75	Aggregate Sampling	According to specifications	
2	ASTM C 136	Sieve Analysis	According to specifications	
3	ASTM D 1440	Passing Sieve, No 200	10.2 %	
4	ASTM D 4318	Atterberg limit	N.P	
5	ASTM D 2974	Moisture content	6.05	
6	ASTM D 1557	Modified proctor	2.207	
7	ASTM D 1883	CBR	48.2 %	
Comments by:			Comments by:	

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng/Shehab Hamdi			
Contractor QA/QC *	Ahmed Abo Zaid			
GARB**				
Employers Representative				

* Designer

** Alignment/Bridges: Culvert only

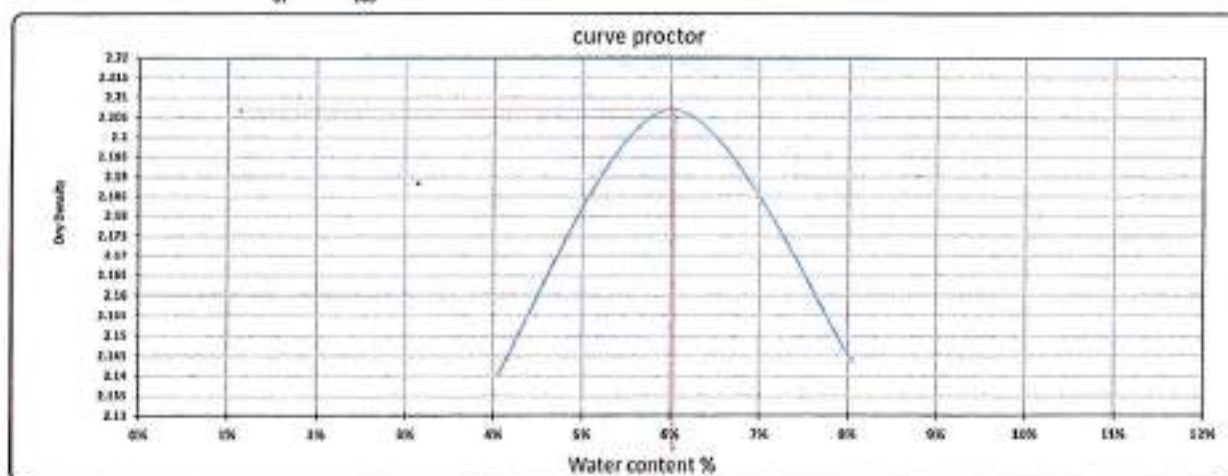
PROCTOR TEST

Testing Date	28-11-23	code	Zone	From Station	To Station	
Location	K.P 547+500			YN3-73	546+000	549+000
Yousef Negida 3	Yousef Negida 3					

Weight of empty mold	5665.0	MAX Dry Density	2.207
Mold Volume	2122.0	Water content %	6.05

trial no :	1	2	3		
WL Of Mold+ wet soil	10391.0	10630.0	10581.0		
WT, WET SOIL	4726.0	4965.0	4916.0		
Wt. Density	2.227	2.340	2.317		

Tare No.	8	6	7	4	5	6				
Tare wt.	36.26	38.82	35.99	36.28	35.35	38.8				
Wt. Of wet soil & tare	160.0	160.0	160.0	160.0	160.0	160.0				
Wt. Of dry soil & tare	155.22	155.26	152.88	153.10	150.70	150.99				
Wt. Of water	4.8	4.7	7.1	6.9	9.3	9.0				
Wt. Of dry soil	119.0	116.4	116.9	116.8	115.4	112.2				
Water content %	4.02%	4.07%	6.09%	5.91%	8.06%	8.03%				
A.V. Water content %	4.04%		6.05%		8.03%					
Dry Density	2.141		2.187		2.148					



Contractor

Consultant

24

1

2022



Electric Express Train - HSR



California Bearing Ratio TEST

Testing Date	29-11-2023	code		From Station		To station
Location	K.P. 547+500	YN3-73	Zone	546+000		549+000
Company Name	Yousef Negida 3					

Test Results:

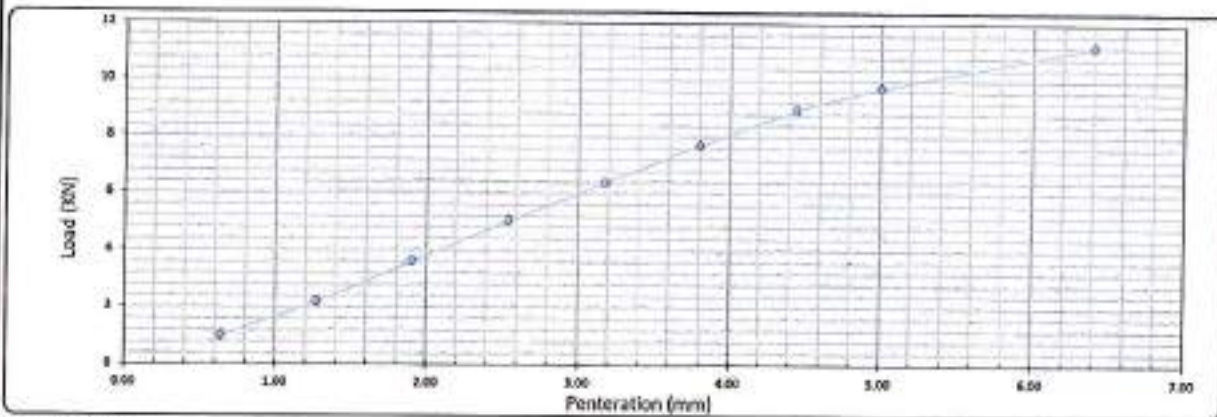
Compaction % for Mold	
Mold No.	1
Mold Vol. (cm ³)	2140
Mold WT. (gm)	7971
Mold WT. + Wet WT. (gm)	12923
Wet WT. (gm)	4952
Wet Density (g/cm ³)	2.314
Dry Density (g/cm ³)	2.182
Proctor Density (g/cm ³)	2.207
Compaction %	99

Moisture Ratio After Compacted Mold	
Tare No.	4
Tare WT. (gm)	36.28
Tare WT. + Wet WT. (gm)	250.63
Tare WT. + Dry WT. (gm)	238.4
Water WT. (gm)	12.2
Dry WT. (gm)	202.1
Moisture Content %	6.1

Swelling	
Mold No.	1
Date	29-11-2023
Initial Height (mm)	0.00
Final Height (mm)	0.00
Difference	0
Sample Height (mm)	116.40
Swelling Ratio %	0%

Loading Reading :

Penetration (mm)	0.64	1.27	1.91	2.54	3.18	3.80	4.43	5.00	6.40
Load Reading (kg)	1011	225	371	512	653	786	911	983	1141
Load (KN)	1.0	2.2	3.6	5.0	6.4	7.7	8.8	9.7	11.2



Calculations :-

Penetration (mm)	Load (KN)	Standard Load (lb)	CBR (%)	Mold - Compaction (%)	Compaction (%)	CBR
2.50	5.03	13.4	37.7%	99	98	37.3%
5.00	9.73	20.0	48.6%			48.2%

Lab. Specialist

Name :

Sign :

Lab. Engineer

Name :

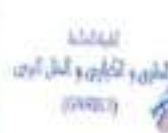
Sign :

Consultant Engineer

Name :

Sign :

MATERIAL INSPECTION REQUEST



الهيئة العامة للإعانة
الهندسة الاستشارية



Contractor Company	Yousef Negida (3)		Designer Company																	
Issued by Contractor	Name Eng/Shehab Hamdi	Sign 	Date 22-11-2023	Time																
Contractor Reference	YN3-72																			
Received by ER		MIR	<table border="1"> <tr> <td>C1</td> <td>C2</td> <td>C3</td> <td>DD</td> <td>MM</td> <td>YY</td> <td>HH</td> <td>MM</td> </tr> <tr> <td></td> <td></td> <td></td> <td>22</td> <td>11</td> <td>2023</td> <td></td> <td></td> </tr> </table>	C1	C2	C3	DD	MM	YY	HH	MM				22	11	2023			
C1	C2	C3	DD	MM	YY	HH	MM													
			22	11	2023															

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	Fill Material Result		
	Location to be Used	547+060	547+140
		547+060	-1.50
		546+760	-1.50
		546+860	-1.50
		547+000	-1.25
		547+060	-1.25
		546+760	-1.25
		546+860	-1.25
		547+000	-1.00
		547+060	-1.00
		547+140	-1.00

MAR Approval No	YN3-72	Date	
Supplier Name			
Test Requirement		Specification	Clause
Reference Photos	Yes attached / No	Other	

Item	Description	Unit	Quantity	Arrival Date	Note
1	L.L & P.L & O.M.C %	m3	5000	20-11-2023	
2	Proctor	m3	5000	21-11-2023	
3	Classification	m3	5000	20-11-2023	
4	Sieve Analysis	m3	5000	20-11-2023	
5	C.B.R	m3	5000	22-11-2023	

Comments by:	Comments by:

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng/ Shehab Hamdi			
QA/QC *	Ahmed Abou Zaid			
GARB**				
Employers Representative				

* Designer
** Alignment / Bridges: Culvert Only

MATERIAL APPROVAL REQUEST

المجلس
التقني
للمواد
(GARB)



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

الهيئة العامة للإعانة



Location Name	Contractor Company		Designer Company																
Electric express train	Yousef Negida (3)		k.k																
Issued by Contractor	Name	Sign	Date	Time															
	Eng/Shehab Hamdi		22-11-2023																
Contractor Reference	YN3-72																		
Received by ER		MAR	<table border="1"> <tr> <td>C1</td> <td>C2</td> <td>C3</td> <td>DD</td> <td>M</td> <td>YY</td> <td>HH</td> <td>M</td> </tr> <tr> <td></td> <td></td> <td></td> <td>22</td> <td>11</td> <td>2023</td> <td></td> <td></td> </tr> </table>	C1	C2	C3	DD	M	YY	HH	M				22	11	2023		
C1	C2	C3	DD	M	YY	HH	M												
			22	11	2023														

The Following Test Result are Attached For Review

Description of Materials

Soil (A-1-b)

Location Of Stock

547+500

Item	Specification	Test requirement	Test result attachment	Remarks
1	ASTM D 75	Aggregate Sampling	According to specifications	
2	ASTM C 136	Sieve Analysis	According to specifications	
3	ASTM D 1440	Passing Sieve, No 200	13.8 %	
4	ASTM D 4318	Atterberg limit	N.P	
5	ASTM D 2974	Moisture content	6.1	
6	ASTM D 1557	Modified proctor	2.214	
7	ASTM D 1883	CBR	60.14 %	
Comments by:			Comments by:	

APPROVAL STATUS

Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng/Shehab Hamdi			
Contractor QA/QC *	Ahmed Abdo 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



Operating Lab Negida Central Lab

PARTICLE SIZE DISTRIBUTION OF SOIL

Description of Materials Embankment

Testing Date	20-11-23	code		From Station		TO Station
Location	K.P 547+500					
Company Name	Yousef Negida 3	YN3-72	Zone	546+000		549+000

1-visual inspection test :-

2-Gradient test :-

A-gradation of bulk materials

			SAMPLE WEIGHT (g)		64763.00	gm			table classify
sieve size	2	1.5	1	3/4	1/2	3/8	# 4	PASS	soil classify
Mass retained (g)	0.0	616.0	5025.0	2276.0	7095.0	6348.0	4974.0		A-1-b
Cumulative Retained (g)	0.0	616.0	5641.0	7917.0	15012.0	21360.0	26334.0	PRO	2,214
Cumulative Retained %	0.0	1.0	8.7	12.2	23.2	33.0	40.7	WC	6.1
Cumulative Passing %	100.0	99.0	91.3	87.8	76.8	67.0	59.3	CBR	60.14%

B-soft material gradation

			WT.OF sample		500.00	gm
sieve size	10	40	200			
Cumulative Retained (g)	36.00	182.00	384.00			
Cumulative Retained %	7.20	36.40	76.80			
Cumulative Passing %	92.80	63.60	23.20			

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	99.0	91.3	87.8	76.8	67.0	59.3	65.1	37.7	13.8

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

Contractor

Mohamed Mohamed
22/11/2023
مشروع القطار السريع / فوكة - مطروح

Consultant

22/11/2023



Electric Express Train - HSR
From El Ain El Sokhna City To El Namsin - MATROUH
Section - 7 From FOKA TO MARSA MATROUH
From Station 504+000 To Station 508+177



PROCTOR TEST

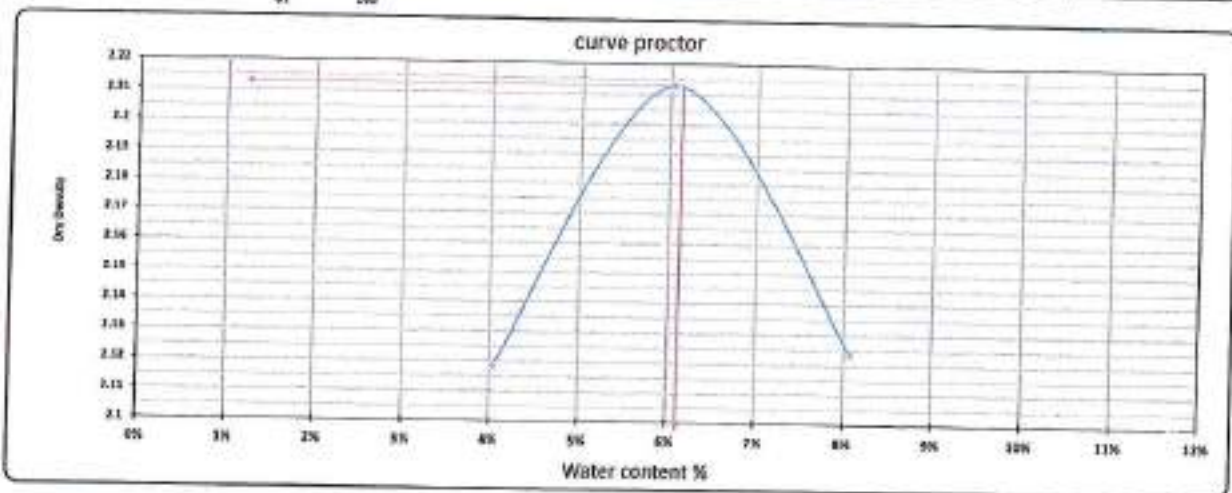
Testing Date	21-11-23	code		From Station	To Station
Location	K.P. 547+900	YN3-72	Zone	546+000	549+000
Yousef Negida 3	Yousef Negida 3				

Weight of empty mold	5747.0	MAX Dry Density	2.214
Mold Volume	2115.0	Water content %	6.1

trial no :	1	2	3		
Wt. Of Mold+ wet soil	10409.0	10711.0	10601.0		
WT. WET SOIL	4662.0	4964.0	4854.0		
Wt. Density	2.204	2.347	2.295		

Tare No.	8	6	7	4	5	6				
Tare wt.	36.26	38.82	35.99	36.28	35.35	38.8				
Wt. Of wet soil & tare	160.0	160.0	160.0	160.0	160.0	160.0				
Wt. Of dry soil & tare	155.12	155.36	152.88	153.00	150.74	150.89				
Wt. Of water	4.9	4.6	7.1	7.0	9.3	9.1				
Wt. Of dry soil	118.9	116.5	116.9	116.7	115.4	112.1				
Water content %	4.11%	3.98%	6.09%	6.00%	8.02%	8.13%				
AV. Water content %	4.04%	5.04%	8.08%							
Dry Density	2.119	2.313	2.124							

41 200



Contractor

Mohamed Hamed
22/11/2023
مشروع التطوير السريع / فوكة - مطروح

Consultant

22/11/2023



Electric Express Train - HSR



California Bearing Ratio TEST

Testing Date	22-11-2023	code		From Station		To station
Location	K.P. 547+500	YN3-72	Zone	546+000		549+000
Company Name	Yousef Negida J					

Test Results:

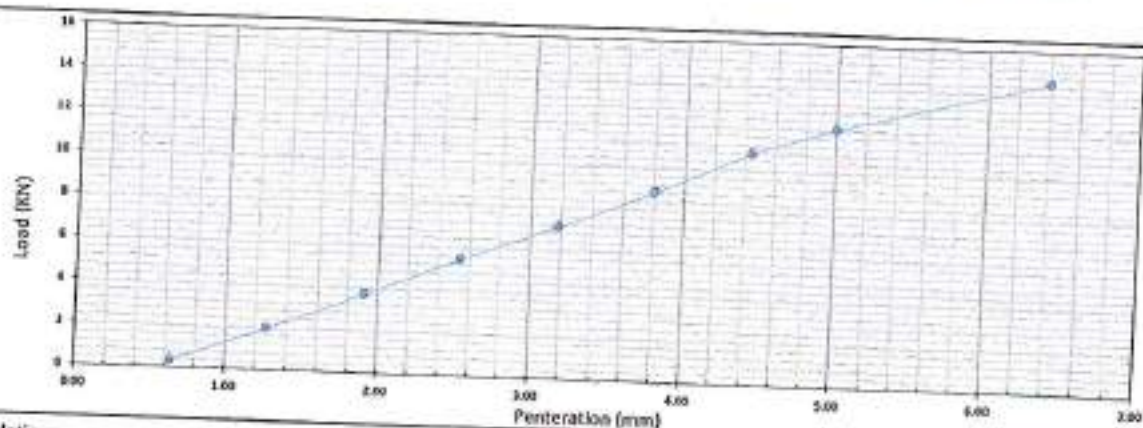
Compaction % for Mold	
Mold No.	1
Mold Vol. (cm ³)	2133
Mold WT. (gm)	7724
Mold WT. + Wet WT. (gm)	12644
Wet WT. (gm)	4920
Wet Density (g/cm ³)	2.307
Dry Density (g/cm ³)	2.172
Proctor Density (g/cm ³)	2.214
Compaction %	98

Moisture Ratio After Compacted Mold	
Tare No.	5
Tare WT. (gm)	35.35
Tare WT. + Wet WT. (gm)	276.4
Tare WT. + Dry WT. (gm)	262.3
Water WT. (gm)	14.1
Dry WT. (gm)	227.6
Moisture Content %	6.2

Swelling	
Mold No.	1
Date	22-11-2023
Initial Height (mm)	0.00
Final Height (mm)	0.00
Difference	0
Sample Height (mm)	116.40
Swelling Ratio %	0%

Loading Reading:

Penetration (mm)	0.64	1.27	1.91	2.54	3.18	3.80	4.45	5.08	5.70
Load Reading (kg)	39	79	118	157	196	235	274	313	352
Load (KN)	0.4	0.8	1.2	1.6	2.0	2.4	2.8	3.2	3.6



Calculations:

Penetration (mm)	Load (KN)	Standard Load (lb)	CBR (%)	Mold - Compaction (%)	Compaction (%)	CBR (%)
2.50	5.50	13.4	41.2%	98	98	41.1%
5.00	12.05	20.0	60.2%			60.1%

Lab. Specialist

Name:

Sign:

Lab. Engineer

Name: Mohamed Hamed

Sign: [Signature]

المهندس محمد حامد

مشروع القطار السريع / طوكية - مطار

Consultant Engineer

Name: [Signature]

Sign: [Signature]

INSPECTION REQUEST

الهيئة العامة
للتنظيمات
(GARBI)



REGISTRATION & REGISTRATION OFFICE
المكتب التسجيلي والتنظيمي
أو مكتب التسجيل

الهيئة العامة
للتنظيمات
(GARBI)



Contractor Company	Yousef Negida (3)			Designer Company							
Issued by Contractor	Name	Sign	Date	Time							
	Eng/Shehab Hamdi	<i>[Signature]</i>	14-11-2023								
Contractor Reference	YN3-71										
Received by ER			MIR	C1	C2	C3	DD	MM	YY	HH	MM
							14	11	2023		

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	Fill Material Result					
Location to be Used	546+860	546+940	-2.00			
	547+000	547+060	-1.75			
	547+060	547+140	-1.75			
	546+760	546+860	-1.75			
	546+860	546+940	-1.75			
	547+000	547+060	-1.50			
MAR Approval No	YN3-71			Date		
Supplier Name						
Test Requirement				Specification	Clause	
Reference Photos	Yes attached / No			Other		
Item	Description	Unit	Quantity	Arrival Date	Note	
1	L.I. & P.L. & O.M.C %	m3	4000	09-11-2023		
2	Proctor	m3	4000	10-11-2023		
3	Classification	m3	4000	09-11-2023		
4	Sieve Analysis	m3	4000	09-11-2023		
5	C.B.R	m3	4000	14-11-2023		
Comments by:			Comments by:			
APPROVAL STATUS						
Organisation	Name	Sign	Date	A-AWC-R		
Contractor	Eng/ Shehab Hamdi	<i>[Signature]</i>				
QA/QC *	Abdullah SAM-3	<i>[Signature]</i>				
GARB**						
Employers Representative						

* Designer

** Alignment / Bridges: Culvert Only

MATERIAL APPROVAL REQUEST

الهيئة العامة
للتنظيم والرقابة
(G.A.R.B.)



ENGINEERING CONSULTANTS OFFICE
المكتب الاستشاري الهندسي
أ.د. هادي هادي

الهيئة العامة
للتنظيم والرقابة



Location Name	Contractor Company				Designer Company						
Electric express train	Yousef Negida (3)				k.k						
Issued by Contractor	Name	Sign	Date	Time							
	Eng/Shehab Hamdi	<i>[Signature]</i>	14-11-2023								
Contractor Reference	YN3-71										
Received by ER			MAR	C1	C2	C3	DD	M	YY	HH	M
							14	11	2023		

The Following Test Result are Attached For Review

Description of Materials		Soil (A-1-a)		
Location Of Stock		547+500		
Item	Specification	Test requirement	Test result attachment	Remarks
1	ASTM D 75	Aggregate Sampling	According to specifications	
2	ASTM C 136	Sieve Analysis	According to specifications	
3	ASTM D 1440	Passing Sieve, No 200	13.2 %	
4	ASTM D 4318	Atterberg limit	4.41	
5	ASTM D 2974	Moisture content	7.7	
6	ASTM D 1557	Modified proctor	2.17	
7	ASTM D 1883	CBR	48.5 %	
Comments by:			Comments by:	

APPROVAL STATUS

Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng/Shehab Hamdi	<i>[Signature]</i>		
Contractor QA/QC *	Abdallah SAMY	<i>[Signature]</i>		
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 505+177



Operating lap: Al Tawkol Central Lab

PARTICLE SIZE DISTRIBUTION OF SOIL

TESTING DATE:	09-11-2023	code	ZONE	545+000	549+000	
LOCATION	K.P (547+500)		YN 3 (71)	Material	fill material	
NAME COMPANY	Yousef Nigida 3			quantity	5000 m³	
1-visual inspection test						

2-Gradient test

A-gradation of bulk materials				SAMPLE WEIGHT [gm]		26855.00		gm	table classify
sieve size	2	1.5	1	4/3	2/1	8/3	# 4	PASS	soil classify
Mass retained (g)	0.0	530.0	1020.0	1700.0	2320.0	3560.0	4595.0		CLASS
Cumulative Retained (g)	0.0	530.0	1550.0	3250.0	5570.0	9130.0	13725.0		PRO
Cumulative Retained %	0.0	2.0	5.8	12.1	20.7	34.0	51.1		WC
Cumulative Passing %	100.0	98.0	94.2	87.9	79.3	66.0	48.9		CBR
									48.5 %

B-soft material gradation				WT.OF sample		500.00	gm
sieve size	10	40	200				
Cumulative Retained (g)	55.00	225.00	365.00				
Cumulative Retained %	11.00	45.00	73.00				
Cumulative Passing %	89.00	55.00	27.00				

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	98.0	94.2	87.9	79.3	66.0	48.9	43.5	26.9	13.8

ATTERBERG LIMITS	LIQUID LIMIT (L.L.)	PLASTIC LIMIT (P.L.)	PLASTIC INDEX (P.I.)
	24.61%	20.20%	4.41%

Contractor

ENG AHMED HALEEM

Consultant

(Signature)



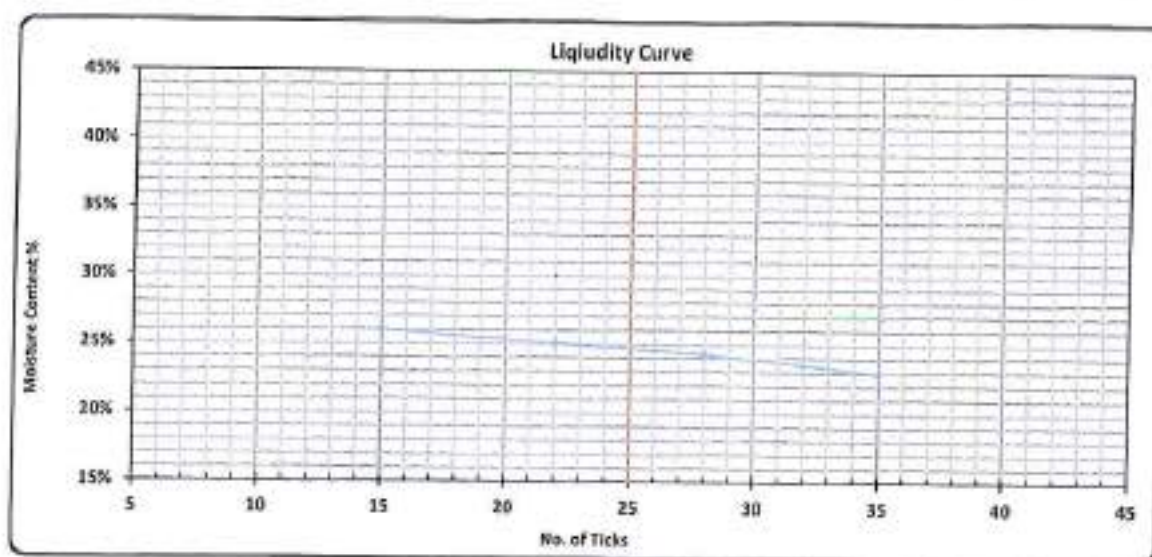
 	Electric Express Train - HSR	 
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Plasticity and Liquidity Test -Atterberg Limits

Testing Date:	09-11-23	Code:	FROM STA:	540+000	TO STA:	549+000
Location:	K.P(547+500)	YN 3 (71)	Material:		fill material	
Company Name	Yousef Nigida 3		quantity		5000m³	

Testing Results :-

Test	Liquid Limit				Plastic Limit	
No. of Ticks	35	28	22	15	-	-
Tare No.	4	5	6	7	2	17
Tare WT. (gm)	57.92	53.93	55.88	53.47	52.75	56.57
Tare WT. + Wet WT. (gm)	79.17	71.11	74.22	67.69	55.17	58.50
Tare WT. + Dry WT. (gm)	75.20	67.75	70.54	64.75	54.8	58.2
Water WT. (gm)	3.97	3.36	3.68	2.94	0.40	0.33
Dry WT. (gm)	17.28	13.82	14.66	11.28	1.02	1.60
Moisture Content %	23.0%	24.3%	25.1%	26.1%	19.8%	20.6%
Average %					20.20%	



L.L	P.L	P.I
24.61%	20.20%	4.41%

Lab. Specialist	Lab. Engineer	Consultant Engineer
-----------------	---------------	---------------------

Name :

Name :

Name :

Sign :

Sign :

Sign :





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



PROCTOR TEST

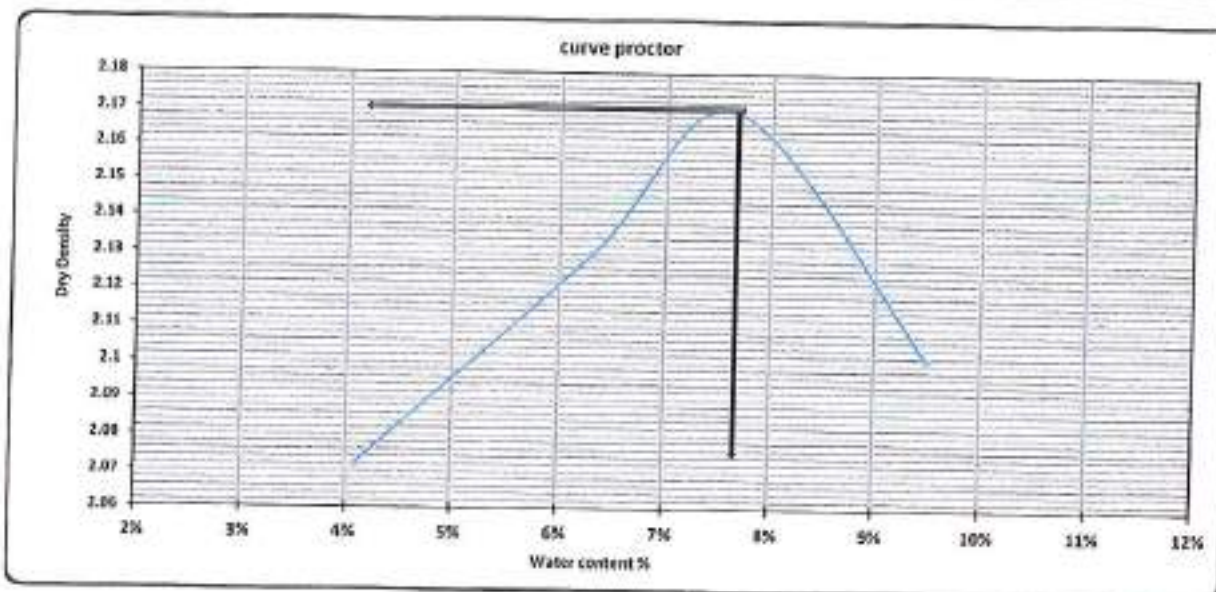
TESTING DATE:	10-11-2023	code	ZONE	546+000	549+000
LOCATION	K.P (547+500)	YN 3 (71)	Material	fill material	
NAME COMPANY	Youssef Nigida 3		quantity	5000 m³	

Weight of empty mold :	5620.0
Mold Volume:	2100.0

MAX Dry Density	2.17
Water content %	7.7%

trial no :	1	2	3	4	
Wt. Of Mold + wet soil	10150.0	10375.0	10525.0	10452	
WT. WET SOIL	4530.0	4755.0	4905.0	4832.0	
Wt. Density	2.157	2.264	2.336	2.301	

Tare No.	18	19	20	21	22	23	24	25		
Tare wt.	55.32	54.1	54.4	53.55	54.2	54.6	53.3	54.25		
Wt. Of wet soil & tare	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0		
Wt. Of dry soil & tare	146.3	146.2	144.2	144.4	143.3	143.1	141.6	141.7		
Wt. Of water	3.7	3.8	5.8	5.6	6.7	6.9	8.4	8.3		
Wt. Of dry soil	91.1	92.0	89.8	90.9	89.1	88.5	88.3	87.5		
Water content %	4.1%	4.1%	6.5%	6.2%	7.5%	7.8%	9.5%	9.5%		
AV. Water content %	4.1%		6.3%		7.7%		9.5%			
Dry Density	2.072		2.139		2.170		2.101			



Contractor

ENG AHMED HALEEM



Consultant

Abdelhak

California Bearing Ratio TEST

Testing Date :	14-11-2023	Code	FROM STA :	545+000	549+000
Location :	K.P (547+500)	YH 2 (71)	Material	fill material	
Company Name	Yamou Nigda 3		quantity	500m ³	

:- Test Results

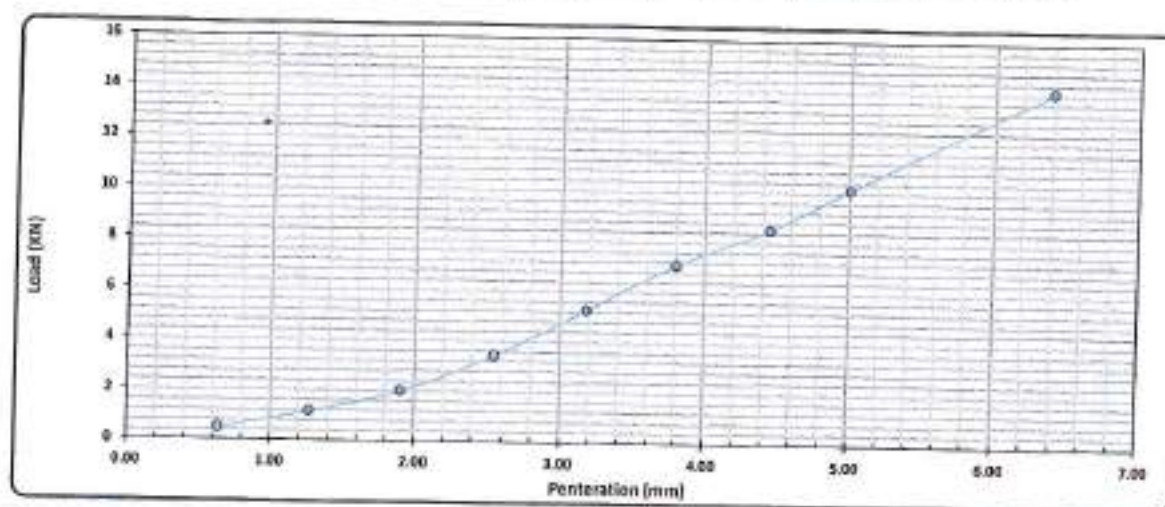
Compaction % for Mould	
Mold No.	1
Mold Vol (cm ³)	1129
Mold Wt. (gm)	5510
Mold Wt. + Wet Wt. (gm)	19203
Wet Wt. (gm)	4003
Wet Density (g/cm ³)	3.508
Dry Density (g/cm ³)	2.147
Proctor Density (g/cm ³)	2.170
Compaction %	88.9

Moisture Ratio After Compacted Mold	
Tare No.	25
Tare Wt. (gm)	55.32
Tare Wt. + Wet Wt. (gm)	159
Tare Wt. + Dry Wt. (gm)	143.4
Water Wt. (gm)	6.4
Dry Wt. (gm)	88.1
Moisture Content %	7.5

Swelling	
Mold No.	1
Date	14-11-2023
Initial Height (mm)	10.00
Final Height (mm)	10.05
Difference	0.05
Sample Height (mm)	120
Swelling Ratio %	0.042%

Loading Reading :

Penetration (mm)	0.64	1.17	1.91	3.54	3.18	3.86	4.45	5.03	6.40
Load Reading (Kg)	55	120	221	380	585	789	946	1125	1503
Load (KN)	0.5	1.2	2.0	3.4	5.3	7.1	8.5	10.3	14.1



Calculations :-

Penetration (mm)	Load (KN)	Standard Load (kN)	CBR (%)	Mold - Compaction (%)	Compaction (%)	CBR (%)
2.50	3.42	13.4	25.6%	88	95	24.6%
5.00	10.13	20.0	50.6%			48.5%

Lab. Specialist

Name :

Sign :

Lab. Engineer

Name :

Sign :

Signature of Lab. Engineer: AHMED HALEEM

Consultant Engineer

Name :

Sign :

Signature of Consultant Engineer

MATERIAL INSPECTION REQUEST



Contractor Company	Yousef Negida (3)			Designer Company							
Issued by	Name	Sign	Date	Time							
Contractor	Eng/Shehab Hamdi	<i>[Signature]</i>	13-11-2023								
Contractor Reference	YN3-70										
Received by			MIR	C1	C2	C3	DO	MM	YY	HH	MM
ER							13	11	2023		

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	Fill Material Result		
Location to be Used	546+860	546+940	-2.50
	547+000	547+060	-2.00
	547+060	547+140	-2.00
	546+760	546+820	-2.00
	546+820	546+860	-2.00

MAR Approval No	YN3-70		Date	
Supplier Name				
Test Requirement	Specification	Clause		
Reference Photos	Yes attached / No	Other		

Item	Description	Unit	Quantity	Arrival Date	Note
1	L.L & P.L & O.M.C %	m3	5000	11-11-2023	
2	Proctor	m3	5000	12-11-2023	
3	Classification	m3	5000	11-11-2023	
4	Sieve Analysis	m3	5000	11-11-2023	
5	C.B.R	m3	5000	13-11-2023	

Comments by:	Comments by:

APPROVAL STATUS

Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng/ Shehab Hamdi	<i>[Signature]</i>		
QA/QC *	Abdelbq SAMY	<i>[Signature]</i>		
GARB**				
Employers Representative				

* Designer

** Alignment / Bridges: Culvert Only

MATERIAL APPROVAL REQUEST

الهيئة العامة
للتنظيم والرقابة
(GARB)



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

الهيئة العامة للإسكان



Location Name	Contractor Company			Designer Company							
Electric express train	Yousef Negida (3)			k.k							
Issued by Contractor	Name Eng/Shehab Hamdi	Sign 	Date 13-11-2023	Time							
Contractor Reference	YN3-70										
Received by ER			MAR	C1	C2	C3	DD	MM	YY	HH	MM
							13	11	2023		

The Following Test Result are Attached For Review

Description of Materials	Soil (A-1-b)			
Location Of Stock	547+500			
Item	Specification	Test requirement	Test result attachment	Remarks
1	ASTM D 75	Aggregate Sampling	According to specifications	
2	ASTM C 136	Sieve Analysis	According to specifications	
3	ASTM D 1440	Passing Sieve, No 200	13.2 %	
4	ASTM D 4318	Atterberg limit	4.6	
5	ASTM D 2974	Moisture content	6.1	
6	ASTM D 1557	Modified proctor	2.206	
7	ASTM D 1883	CBR	53.66 %	
Comments by:			Comments by:	

APPROVAL STATUS

Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng/Shehab Hamdi			
Contractor QA/QC *	Abdallah SAMY			
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



Operating Lab Negida Central Lab

PARTICLE SIZE DISTRIBUTION OF SOIL

Description of Materials Embankment

Testing Date	11-11-23	code	Zone	From Station		TO Station
Location	K.P 547+500	YN3-70		546+000		549+000
Company Name	Yousef Negida 3					

1-visual inspection test :-

2-Gradient test :-

A-gradation of bulk materials

				SAMPLE WEIGHT (g)		53790.00	gm	table classify soil classify A-1-b 2.206 6.1 53.66%
sieve size	2	1.5	1	3/4	1/2	3/8	# 4	
Mass retained (g)	0.0	594.0	4828.0	1826.0	7224.0	5812.0	3464.0	
Cumulative Retained (g)	0.0	594.0	5422.0	7250.0	14474.0	20286.0	23750.0	PRO
Cumulative Retained %	0.0	1.1	10.1	13.5	26.9	37.7	44.2	WC
Cumulative Passing %	100.0	98.9	89.9	86.5	73.1	62.3	55.8	CBR

B-soft material gradation

				WT.OF sample		500.00	gm
sieve size	10	40	200				
Cumulative Retained (g)	22.50	170.00	382.00				
Cumulative Retained %	4.50	34.00	76.40				
Cumulative Passing %	95.50	65.00	23.60				

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	98.9	89.9	86.5	73.1	62.3	55.8	53.3	36.9	13.2

ATTERBERG LIMITS	LIQUID LIMIT (L.L.)	PLASTIC LIMIT (P.L.)	PLASTIC INDEX (P.I.)
	22.7%	18.1%	4.6%

Contractor

Consultant

Signature of Contractor
المهندس محمد هاشم
مشروع القطار السريع / فوكة - مطروح

Signature of Consultant



Electric Express Train - HSR



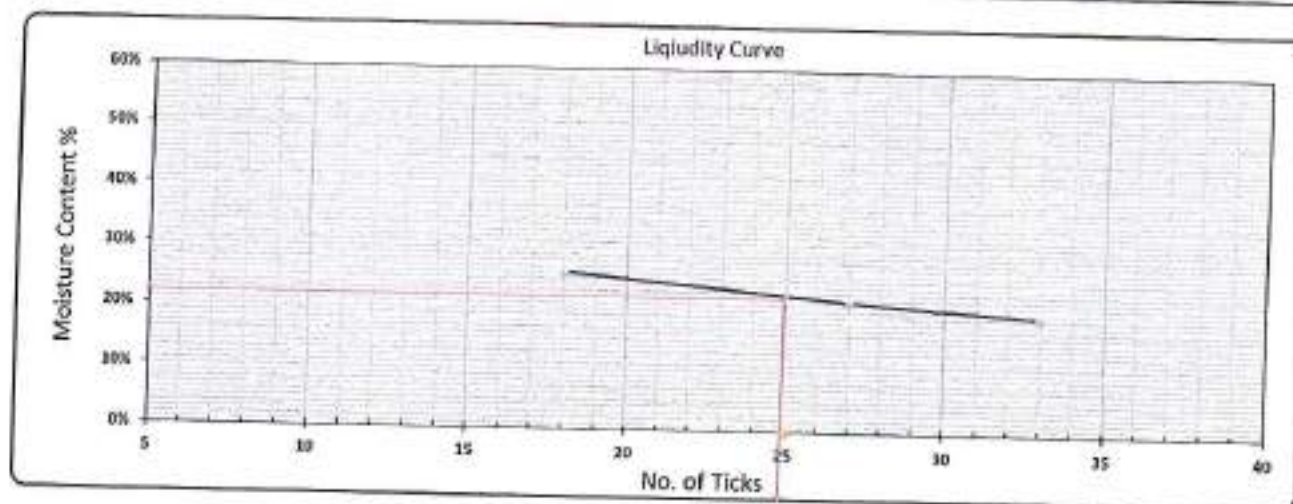
المملكة العربية السعودية
الهيئة العامة للطرق والنقل
المجتمعي

Plasticity and Liquidity Test - Atterberg Limits

Testing Date	12-11-23	Code		From Station		To Station
Location	K.P. 547+500					
Company Name	Yousef Nogida 3	YN3-70	Zone	546+000		549+000

Testing Results :-

Test	Liquid Limit				Plastic Limit	
No. of Ticks	33	27	18		-	-
Tare No.	12	6	8		3	4
Tare WT. (gm)	35.31	34.14	32.77		36.17	35.01
Tare WT. + Wet WT. (gm)	54.32	54.02	51.25		44.07	43.48
Tare WT. + Dry WT. (gm)	51.25	50.50	47.45		42.89	42.15
Water WT. (gm)	3.07	3.52	3.80		1.18	1.33
Dry WT. (gm)	15.94	16.36	14.68		6.72	7.14
Moisture Content %	19.3%	21.5%	25.9%		17.6%	18.6%
Average %					18.1%	



L.L.	P.L.	P.I.
22.7%	18.1%	4.6%

Lab. Specialist	Lab. Engineer	Consultant Engineer
Name :	Name : <u>Mohammed Hamed</u>	Name : <u>Mohammed</u>
Sign :	Sign : <u>محمد الحميد</u>	Sign : <u>محمد</u>



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



PROCTOR TEST

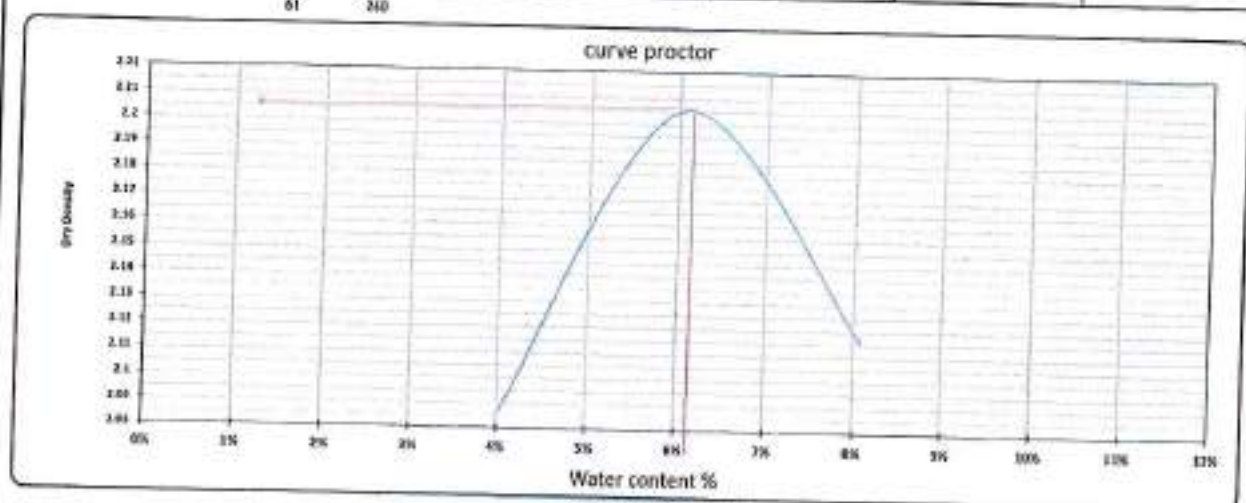
Testing Date	12-11-23	code	Zone	From Station	To Station
Location	KP 547+500	YN3-70		546+000	549+000
Yousef Negida 3	Yousef Negida 3				

Weight of empty mold	5747.0	MAX Dry Density	2.206
Mold Volume	2115.0	Water content %	6.1

trial no :	1	2	3		
Wt. Of Mold+ wet soil	10342.0	10694.0	10586.0		
WT. WET SOIL	4595.0	4947.0	4839.0		
Wt. Density	2.173	2.339	2.288		

Tare No.	8	6	7	4	5	6				
Tare wt.	36.26	38.82	35.99	36.28	35.35	38.8				A-I-b
Wt. Of wet soil & tare	160.0	160.0	160.0	160.0	160.0	160.0				
Wt. Of dry soil & tare	155.12	155.36	152.88	153.00	150.74	150.89				
Wt. Of water	4.9	4.6	7.1	7.0	9.3	9.1				
Wt. Of dry soil	118.9	116.5	116.9	116.7	115.4	112.1				
Water content %	4.11%	3.98%	6.09%	6.00%	8.02%	8.13%				
A.V. Water content %	4.04%		6.04%		8.08%					
Dry Density	2.083		2.306		2.117					

61 210



Contractor

Mohamed Hamed
مهندس محمد حامد
المصمم
مشروع القطار السريع / فوكا - مطروح

Consultant

Mohamed



Electric Express Train - HSR



California Bearing Ratio TEST

Testing Date	13-11-2023	code		From Station		To station
Location	K.P. 547+580	YN3-70	Zone	546+000		549+000
Company Name	Youssef Negida 3					

Test Results:

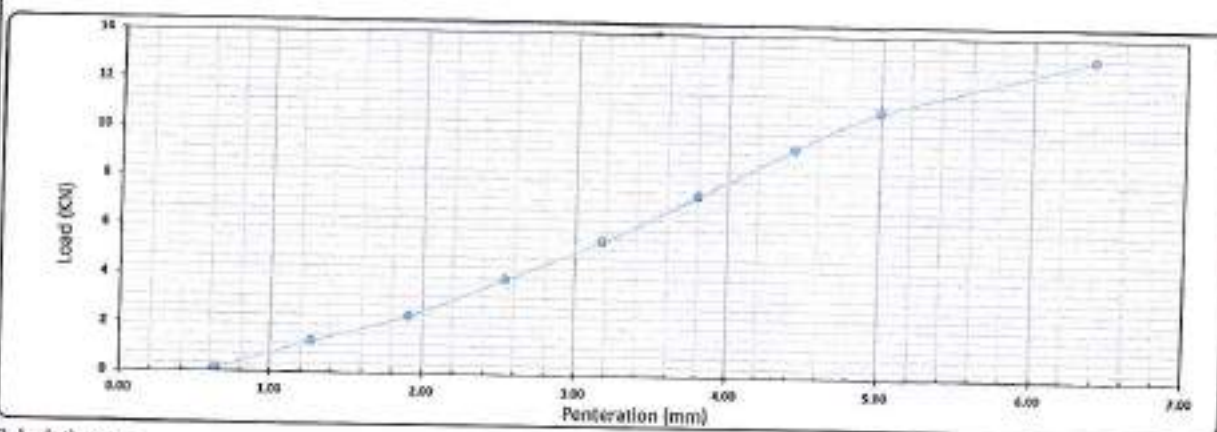
Compaction % for Mold	
Mold No.	1
Mold Vol. (cm ³)	2133
Mold WT. (gm)	7724
Mold WT. + Wet WT. (gm)	12691
Wet WT. (gm)	4967
Wet Density (g/cm ³)	2.329
Dry Density (g/cm ³)	2.195
Proctor Density (g/cm ³)	2.206
Compaction %	99

Moisture Ratio After Compacted Mold	
Tare No.	6
Tare WT. (gm)	38.8
Tare WT. + Wet WT. (gm)	275
Tare WT. + Dry WT. (gm)	261.4
Water WT. (gm)	13.6
Dry WT. (gm)	222.6
Moisture Content %	6.1

Swelling	
Mold No.	1
Date	13-11-2023
Initial Height (mm)	0.00
Final Height (mm)	0.00
Difference	0
Sample Height (mm)	116.40
Swelling Ratio %	0%

Loading Reading :

Penetration (mm)	0.64	1.27	1.91	2.54	3.18	3.80	4.45	5.00	6.40
Load Reading (kg)	20	133	243	363	503	755	938	1113	1383
Load (KN)	0.2	1.3	2.4	3.6	5.0	7.1	9.4	10.7	13.7



Calculations :-

Penetration (mm)	Load (Kn)	Standard Load (lb)	CBR (%)	Mold - Compaction (%)	Compaction (%)	CBR
2.50	3.94	13.4	29.3%	99	98	29.1%
5.00	10.91	20.0	54.5%			53.7%

Lab. Specialist

Name :

Sign :

Lab. Engineer

Name: Mohamed Hamed
Sign: [Signature]

Consultant Engineer

Name :

Sign :

[Signature]

مشروع القطر السريع / فوكة - مطروح

MATERIAL INSPECTION REQUEST



Contractor Company	YOUSSEF NEGIDA 3			Designer Company															
Issued by Contractor	Name Eng/Shehab Hamdi	Sign <i>[Signature]</i>	Date 16-12-2023	Time															
Contractor Reference	YN3-SUB 4																		
Received by ER		MIR	<table border="1"> <tr> <td>C1</td> <td>C2</td> <td>C3</td> <td>DD</td> <td>M</td> <td>YY</td> <td>HH</td> <td>M</td> </tr> <tr> <td></td> <td></td> <td></td> <td>16</td> <td>12</td> <td>2023</td> <td></td> <td></td> </tr> </table>	C1	C2	C3	DD	M	YY	HH	M				16	12	2023		
C1	C2	C3	DD	M	YY	HH	M												
			16	12	2023														

CODE - 1	51 to 521 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	Curshed Stone SUB-Ballast Material Result					
Location to be Used	546+760	546+860	0.70+			
	546+860	546+940	0.70+			
	547+000	547+060	0.70+			
	547+060	547+140	0.70+			
	546+760	546+860	0.90+			
	546+860	546+940	0.90+			
	547+000	547+060	0.90+			
	547+060	547+140	0.90+			
MAR Approval No	YN3-SUB 4			Date		
Supplier Name						
Test Requirement	Specification			Clause		
Reference Photos	Yes attached / No			Other		
Item	Description	Unit	Quantity	Arrival Date	Note	
1	L.L & P.L & O.M.C %	m3	2000	13-12-2023		
2	Proctor	m3	2000	14-12-2023		
3	Classification	m3	2000	13-12-2023		
4	Sieve Analysis	m3	2000	13-12-2023		
5	C.B.R	m3	2000	16-12-2023		
6	LA	m3	2000	14-12-2023		
Comments by:			Comments by:			
APPROVAL STATUS						
Organisation	Name	Sign	Date	A-AWC-R		
Contractor	Eng/ Shehab Hamdi	<i>[Signature]</i>				
QA/QC *	<i>[Signature]</i>	<i>[Signature]</i>				
GARB**						
Employers Representative						

* Designer

** Alignment / Bridges: Culvert Only

MATERIAL APPROVAL REQUEST



Location Name	Contractor Company		Designer Company	
Electric express train	YUSEF NEGIDA3		k,k	
Issued by Contractor	Name	Sign	Date	Time
	Eng/Shehab Hamdi		16-12-2023	
Contractor Reference	YN3-SUB 4			
Received by ER			MAR	
			C1	C2
			C3	DD
			M	M
			YY	HH
			MM	MM
			16	12
			2023	

The Following Test Result are Attached For Review				
Description of Materials	SUB -BALLAST (A-1-a)			
Location to be Used	547+500			
Item	Specification	Test requirement	Test result attachment	Remarks
1	ASTM D 75	Aggregate Sampling	According to specifications	
2	ASTM C 136	Sieve Analysis	According to specifications	
3	ASTM D 1440	Passing Sieve, No 200	6.00 %	
4	ASTM D 4318	Atterberg limit	N,P	
5	ASTM D 2974	Moisture content	7.9 %	
6	ASTM D 1557	Modified proctor	2.242	
7	ASTM D 1883	CBR	98.5%	
8	AASHTO-T96	LA	20 %	
Comments by:			Comments by:	

APPROVAL STATUS				
Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng/Shehab Hamdi			
QA/QC *	Abdullah SAMY			
GARB**				
Employers Representative				

* Designer

** Alignment/Bridges: Civil/ert only

 Karama Karama كراما كراما كراما كراما	Electric Express Train - HSR From El Ain El Sokhna City To El Alamein - MATROUH Section - 7 From FOKA To MARSA MATROUH From Station 544+000 To Station 548+177	 الهيئة العامة للنقل وزارة النقل (MOT)
	Operating Lab Negida Central Lab	
	PARTICLE SIZE DISTRIBUTION OF SUB-BALLAST	

TESTING DATE:	13-12-2023	Code	Zone	FROM STATION	TO STATION
LOCATION	K.P 547+500	YN3-SUB 4		546+000	549+000
COMPANY NAME	YOUSEF NEGIDA 3				
MATERIALS	SUB-BALLAST				
Quantity	2000 M3				

1-visual inspection test

2-Gradient test

A-gradation of bulk materials				SAMPLE WEIGHT (g)		61858.00		gm	Table classify	
sieve size	2	1.5	1	4/3	2/1	8/3	# 4	PASS	Soil Classify	A-1-a
Mass retained (g)	0.0	2501.0	6397.0	8873.0	5890.0	6469.0	8680.0		PRO	2.242
Cumulative Retained (g)	0.0	2501.0	8898.0	17771.0	23661.0	30120.0	38800.0		WC	7.90
Cumulative Retained %	0.0	4.0	14.4	28.7	38.2	48.7	62.7		CBR	98.5%
Cumulative Passing %	100.0	96.0	85.6	71.3	61.8	51.3	37.3		Los Angeles	20
									Absorption	1.814
									SP.Gravity	2.527

B-soft material gradation				WT.OF sample		500.00		gm
sieve size	10	40	200					
Cumulative Retained (g)	140.00	325.00	420.00					
Cumulative Retained %	28.00	65.20	84.00					
Cumulative Passing %	72.00	34.80	16.00					

C-General gradation										
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	96.0	85.6	71.3	61.8	51.3	37.3	26.8	13.0	6.0
SPECIFICATION	—	97	—	70 — 75	—	15 — 60	—	0 — 35	—	0 — 7

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

Contractor

Consultant

شركة نجيب نسيب وشركاه
 المعمل المركزي
 مشروع القطار السريع - مطروح
 2023

Abdelhak



Electric Express Train - HSR
From El Ain El Sokhna City To El Alamein - MATROUH
Section - 7 From FOKA TO MARSA MATROUH
From Station 604+000 To Station 608+177



PROCTOR TEST (SUB-BALLAST)

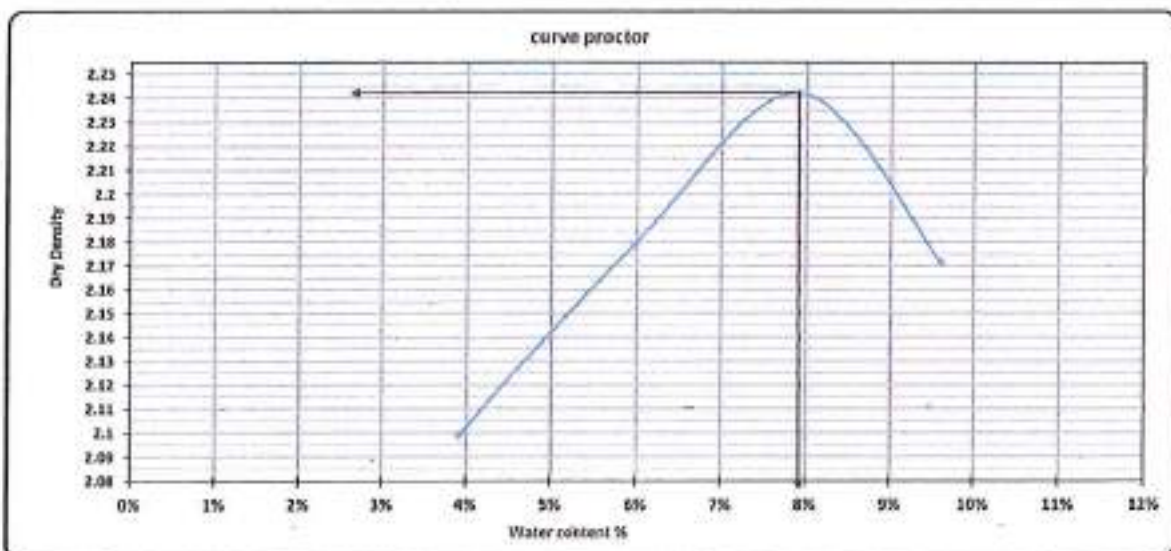
TESTING DATE:	14-12-2023	Code	zone	FROM	TO
LOCATION	K.P 547+500	YN3-SUB 4		546+000	549+000
COMPANY NAME	YOUSEF NEGIDA 3				

Weight of empty mold :	5861.0
Mold Volume:	2118.0

MAX Dry Density	2.242
Water content %	7.9

trial no :	1	2	3	4	
Wt. Of Mold + wet soil	10481.0	10752.0	10386.0	10382.0	
WT. WET SOIL	4620.0	4891.0	4515.0	4561.0	
Wt. Density	2.183	2.309	2.120	2.180	

Tare No.	6	19	13	17	15	7	15	40		
Tare wt.	42.1	44.1	51.6	53.2	30.9	46	39.8	46.2		
Wt. Of wet soil & tare	150.0	150.0	150.0	150.0	150.0	150.0	150.0	150.0		
Wt. Of dry soil & tare	145.84	146.11	144.81	144.50	141.32	142.33	139.50	140.95		
Wt. Of water	4.2	3.9	5.5	5.4	8.7	7.7	10.5	9.0		
Wt. Of dry soil	103.6	102.0	90.9	91.4	110.4	96.3	100.7	94.8		
Water content %	4.0%	3.8%	6.0%	5.9%	7.9%	8.0%	9.1%	9.5%		
AV. Water content %	3.9%		6.0%		7.9%		9.6%			
Dry Density	2.099		2.179		2.242		2.172			



Contractor



Consultant

(Signature)

 ENGINEERING CONSULTING OFFICE المكتب الاستشاري الهندسي أ.د. خالد شحوبل	 مصر السكك الحديدية مطروحات	Electric Express Train - HSR	 مطروحات السكك الحديدية مصر
		From El Ain El Sokhna City To El Alamein - MATROUH	
		Section - 7 From FOKA To MARSA MATROUH	

From Station 554+000 To Station 558+177

**Absorption & Aggregate specific gravity
AASHTO-T85**

SUB-BALLAST

TESTING DATE:	14-12-2023	code	zone	FROM	TO
LOCATION	KP 547+500	YN3-SUB 4		546+000	549+000
COMPANY NAME	YOUSEF NEGIDA 3				

Weight of sample Before Test	—	gm
Weight of saturated -dry surface sample (B)	4770	gm
Weight of saturated sample in water (C)	2016	gm
Weight of dry sample after heating (A)	4685	gm

Results:-

Bulk specific gravity = $A / (B-C)$	2.527	
Apparent specific gravity = $A / (A-C)$	2.648	
Absorption = $(B-A)/A$	1.814	%

Los Anglos abrasion AASHTO-T96

Results:-

Weight of sample before test (gm)	Weight of sample after test (gm)	Abrasion ratio (%)
5000	3996	20

Lab. Specialist

Name :

Sign :

Lab. Engineer

Name :

Sign :

Shehab Hamed



Consultant Engineer

Name :

Sign :

(Handwritten signature)

 	Electric Express Train - HSR		 
	Operating Lab:	Nagide Control Lab	

California Bearing Ratio TEST

SUB-BALLAST			
Testing Date :	16-12-2023	Code	
Location :	K.P 547+500	ZONE	
COMPANY NAME :	YOUSSEF NEGIDA 3	FROM	546+000
		TO	549+000

Test Results

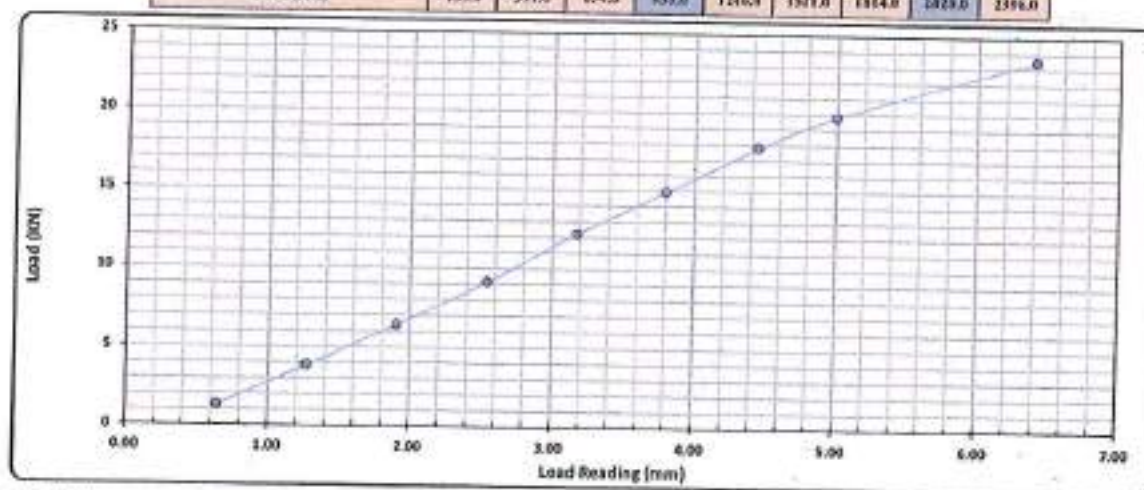
Compaction % for Mold	
Mold No.	5
Mold Vol. (cm ³)	1000
Mold WT. (gm)	8888
Mold WT. + Wet WT. (gm)	13825
Wet WT. (gm)	5937
Wet Density (g/cm ³)	2.431
Dry Density (g/cm ³)	2.251
Proctor Density (g/cm ³)	2.142
Compaction %	100

Moisture Ratio After Compacted Mold	
Tare No.	15
Tare WT. (gm)	39.8
Tare WT. + Wet WT. (gm)	321
Tare WT. + Dry WT. (gm)	306.9
Water WT. (gm)	14.1
Dry WT. (gm)	176.1
Moisture Content %	8.0

Swelling	
Mold No.	5
Date	16-12-2023
Initial Height (mm)	0.00
Final Height (mm)	0.00
Difference	0
Sample Height (mm)	115.40
Swelling Ratio %	0.0%

Loading Reading :

Load Reading (mm)	0.64	1.27	1.91	2.54	3.18	3.80	4.43	5.08	5.69
Load (KN)	1.2	3.8	6.4	9.1	12.2	14.9	17.8	19.8	23.5
Load (KG)	123.8	391.0	654.0	933.0	1246.8	1521.0	1814.0	2029.0	2396.0



Calculations :-

Penetration (mm)	Load (KN)	Standard Load (lb)	CBR (%)	Mold - Compaction (%)	Compaction (%)	CBR (%)
2.50	9.14	13.4	68.5%			68.2%
5.00	19.80	20.0	99.0%	100	100	99.5%

Lab. Specialist

Lab. Engineer

Consultant Engineer

Name :

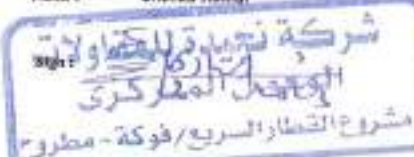
Name : Shabab Hamdi

Name :

Sign :

Sign :

Sign :



MATERIAL INSPECTION REQUEST	    			
	الهيئة القومية للإنفاق القومية للإنفاق الهيئة القومية للإنفاق الهيئة القومية للإنفاق الهيئة القومية للإنفاق			

Contractor Company	Yousef Negida (3)		Designer Company	
Issued by Contractor	Name	Sign	Date	Time
	Eng/Shehab Hamdi		11/12/2023	
Contractor Reference	YN3 (P-5)			
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		Curshed Stone P.S.G Material Result			
Location to be Used	546+760	546+860	0.25+		
	546+860	546+940	0.25+		
	547+000	547+060	0.25+		
	547+060	547+140	0.25+		
	546+760	546+860	0.50+		
	546+860	546+940	0.50+		
	547+000	547+060	0.50+		
	547+060	547+140	0.50+		
MAR Approval No	YN3 (P-5)		Date		
Supplier Name					
Test Requirement	Specification		Clause		
Reference Photos	Yes attached / No		Other		
Item	Description	Unit	Quantity	Arrival Date	Note
1	LL & P.L & G.M.C.W	m3	3000	09-12-2023	
2	Proctor	m3	3000	10-12-2023	
3	Classification	m3	3000	09-12-2023	
4	Sieve Analysis	m3	3000	09-12-2023	
5	C.B.R	m3	3000	11-12-2023	
6	L.A	m3	3000	10-12-2023	
7	SP.Gravity	m3	3000	10-12-2023	
8	Absorption	m3	3000	10-12-2023	
Comments by:			Comments by:		
APPROVAL STATUS					
Organisation	Name	Sign	Date	A-AWC-R	
Contractor	Eng/ Shehab Hamdi		11/12/2023		
QA/QC *					
GARD**					
Employers Representative					

* Designer

** Alignment / Bridges: Culvert Only

MATERIAL APPROVAL REQUEST

المجلس
للمواصلات
والبنية التحتية
(QARBT)



KK
ENGINEERING CONSULTING OFFICE
المكتب الاستشاري الهندسي
أ.د. خالد الشاذلي

الهيئة العامة للتأهيل
والإشراف



Location Name	Contractor Company			Designer Company								
Electric express train	Yousef Negida (3)			k.k								
Issued by Contractor	Name Eng/Shehab Hamdi	Sign 	Date 11/12/2023	Time								
Contractor Reference	YN3 (P-5)											
Received by ER			MAR	C1	C2	C3	DD	M	YY	HH	M	M

The Following Test Result are Attached For Review

Description of Materials	P.S.G (A-1-a)			
Location Of Stock	S47+500			
Item	Specification	Test requirement	Test result attachment	Remarks
1	ASTM D 75	Aggregate Sampling	According to specifications	
2	ASTM C 136	Sieve Analysis	According to specifications	
3	ASTM D 1440	Passing Sieve, No 200	10.5 %	
4	ASTM D 4318	Atterberg limit	N.P	
5	ASTM D 2974	Moisture content	6.3 %	
6	ASTM D 1557	Modified proctor	2.227	
7	ASTM D 1883	CBR	85.1 %	
8	AASHTO-T96	L.A	26.5 %	
9	AASHTO-T85	Absorbition	3.00 %	
10	AASHTO-T85	SP.Gravity	2.467	
Comments by:			Comments by:	

APPROVAL STATUS

Organisation	Name	Sign	Date	A-AWC-R
Contractor	Eng/Shehab Hamdi			
Contractor QA/QC *			11/12/2023	
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 509+177



Operating Lab: **NEGIDA CENTRAL LAB**

PARTICLE SIZE DISTRIBUTION OF Prepared Subgrade

Description of Materials	Prepared Subgrade	Code	Zone	FROM STATION	TO STATION
TESTING DATE:	09-12-2023	YMS (P-3)		546+000	549+000
LOCATION	K.P 547+500				
COMPANY NAME	YOUSSEF NEGIDA 3				

1-visual inspection test

2-Gradient test

A-gradation of bulk materials

				SAMPLE WEIGHT (g)		53654.00		gm	Table classify	
sieve size	2	1.5	1	4/3	2/1	8/3	# 4	PASS	Soil Classify	A-1-a
Mass retained (g)	0.0	2132.0	6193.0	9729.0	5160.0	6440.0	7000.0		PRO	2.227
Cumulative Retained (g)	0.0	2132.0	8325.0	18054.0	23214.0	29694.0	35694.0		WC	6.30
Cumulative Retained %	0.0	4.0	15.5	28.1	37.7	53.4	66.5		CBR	85.1%
Cumulative Passing %	100.0	96.0	84.5	71.9	62.3	46.6	33.5		Los Angeles	26.5
									SP. Gravity	2.467
									Absorption	3.00

B-soft material gradation

			WT. OF sample		500.00		gm
sieve size	10	40	200				
Cumulative Retained (g)	171.00	235.00	344.00				
Cumulative Retained %	34.20	47.00	68.80				
Cumulative Passing %	65.80	53.00	31.20				

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	95.0	84.5	71.9	62.3	46.6	33.5	22.1	17.8	10.5
SPECIFICATION	—	97	—	70 — 75	—	15 — 60	—	0 — 35	—	0 — 12

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

Contractor

Consultant

شركة نهجدا للتنمية
 العمل في مصر
 مشروع خط السكك الحديدية - مطروح

11/12/23
 [Signature]

 	Electric Express Train - MSR 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 (Prepared Subgrade)

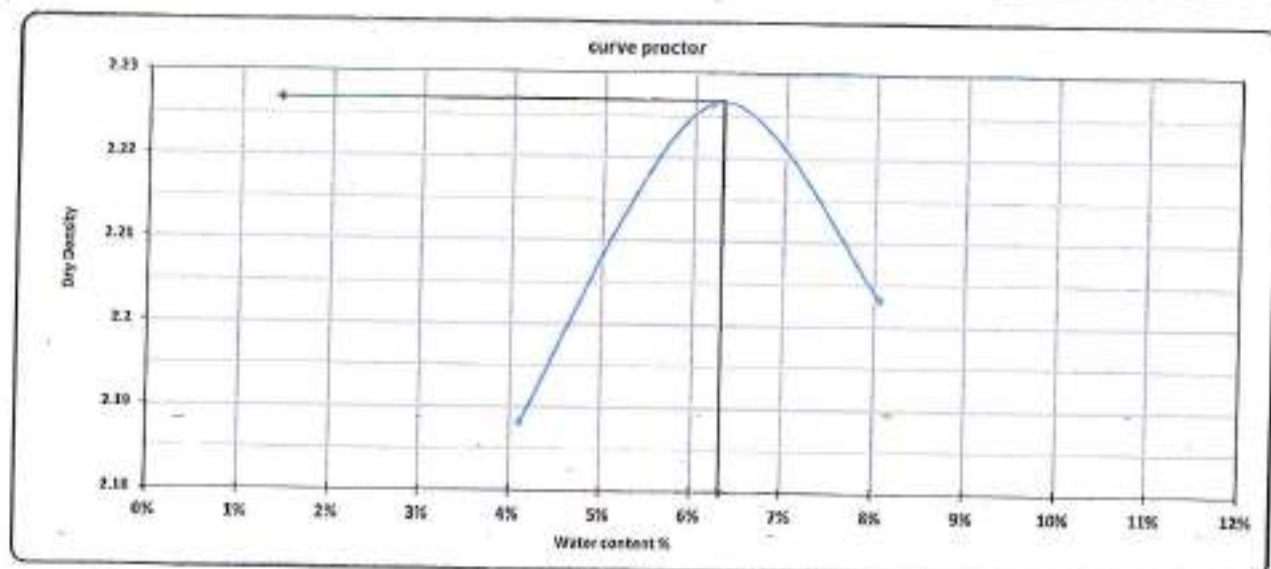
TESTING DATE:	10-12-2023	Code		FROM	TO
LOCATION:	K.P 567+500	YN3 (P.C)	ZONE	545+000	549+000
NAME COMPANY	YOUSSEF NEGIDA 3				

Weight of empty mold :	5652.0
Mold Volume:	2125.0

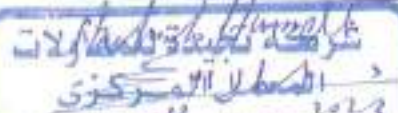
MAX Dry Density	2.227
Water content %	6.3

trial no :	1	2	3		
WL Of Mold + wet soil	10493.0	10676.0	10711.0		
WT. WET SOIL	4841.0	5024.0	5039.0		
Wt. Density	2.278	2.364	2.381		

Tare No.	7	19	13	17	15	40			
Tare wt.	42.2	44.1	54.6	53.2	30.9	46.2			
WL Of wet soil & tare	150.0	158.0	150.0	150.0	150.0	150.0			
WL Of dry soil & tare	145.75	145.82	141.40	144.35	141.89	142.29			
WL Of water	4.3	4.2	5.6	5.7	8.9	7.7			
WL Of dry soil	103.6	101.7	90.8	91.2	110.2	96.1			
Water content %	4.1%	4.1%	6.2%	6.2%	8.1%	8.0%			
AV. Water content %	4.1%		6.2%		8.1%				
Dry Density	2.188		2.227		2.203				



Contractor


 شركة تخطيط وتصميم
 المهندس المعماري
 2023
 مشروع القطار السريع / فوكا - مطروح

Consultant


 11/12

 ENGINEERING CONSULTING OFFICE المشقة الاستشاري الهندسي أ.د. خالد شندبل	 مصر EGYPT	Electric Express Train - HSR From El Aia El Solhna City To El Mansh - MATROUH Section - 7 From PONA To MARSA MATROUH From Station 501+000 To Station 503+117	

**Absorbion & Aggregate specific gravity
AASHTO-T85**

Prepared Subgrade

TESTING DATE:	18-12-2023	code	ZONE	FROM	TO
LOCATION	K.P 547+500	YNS (P-5)		5+5+000	549+000
NAME COMPANY	YOUSSEF NEGIDA 3				

Absorbion & specific gravity AASHTO-T85

Weight of sample	—	gm
Weight of saturated -dry surface sample (B)	4493	gm
Weight of saturat: 1 sample in water (C)	2725	gm
Weight of dry sample after heating (A)	4362	gm

Results:-

Bulk specific gravity = $A / (B-C)$	2.467	
Apparent specific gravity = $A / (A-C)$	2.665	
Absorbion = $(B-A)/A$	3.003	

Los Angeles abrasion AASHTO-T96

Results:-

Weight of sample before test (gm)	Weight of sample after test (gm)	Abrasion ratio (%)
5000	3676	26.5

Lab. Specialist

Name :

Sign :

Lab. Engineer

Name :

Sign :

Name : *[Signature]*
 Sign : *[Signature]*
 مشرق القطار السريع / فوكة - مطروح

Consultant Engineer

Name :

Sign :

Name : *[Signature]*
 Sign : *[Signature]*



NIGDA CENTRAL LAB

California Bearing Ratio TEST

		Prepared Subgrade			
Testing Date :	11-12-23	Code	ZONE	FROM	TO
Location :	K.P 547+500	YNS (P-5)		546+000	549+000
Company Name	YOUSSEF NEGIDA 3				

4.2 Test Results

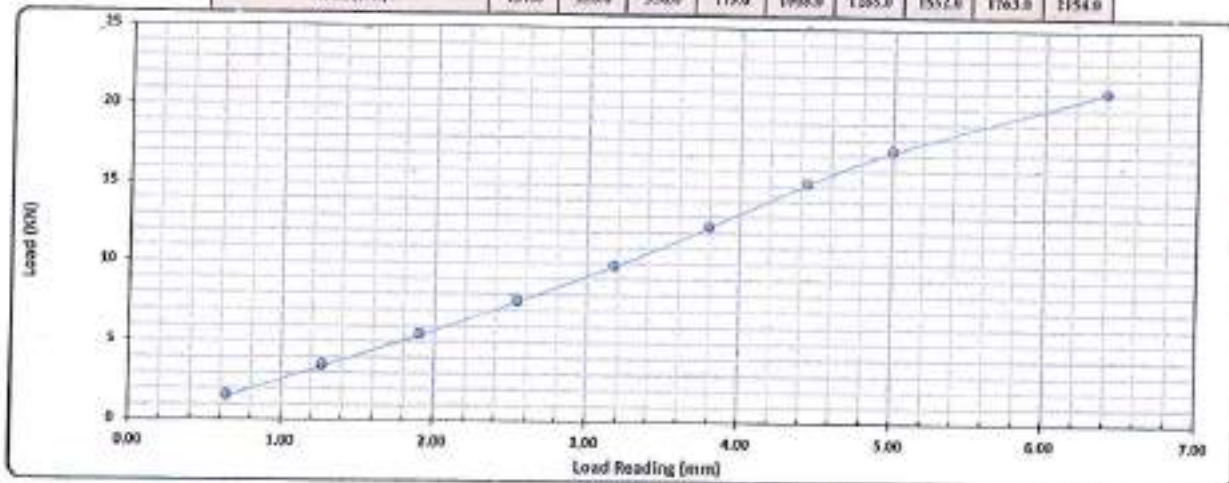
Compaction % Standard	
Mold No.	4
Mold Vol.	2088
Mold WT. (gm)	7898
Mold WT. + Wet WT. (gm)	12649
Wet WT. (gm)	4759
Wet Density (g/cm^3)	2.279
Dry Density (g/cm^3)	2.146
Proctor Density (g/cm^3)	2.227
Compaction %	96

Tare No.	17
Tare WT. (gms)	53.2
Tare WT. + Wet WT. (gms)	235.63
Tare WT. + Dry WT. (gms)	224.4
Water WT. (gms)	10.6
Dry WT. (gms)	171.2
Moisture Content %	6.2

Swelling	
Mold No.	4
Date	11-12-2023
Initial Height (mm)	4.60
Final Height (mm)	6.40
Difference	1.8
Sample Height (mm)	116.40
Swelling Ratio %	0.0%

Loading Reading :

Food Handling (mm)	0.00	1.25	1.50	2.50	3.18	3.89	4.45	5.20	6.35
Load (kN)	1.5	3.5	5.5	7.6	9.8	12.4	15.2	17.3	22.1
Load (kg)	157.6	366.4	558.0	775.0	1000.0	1285.0	1552.0	1763.0	2154.0



Calculations :-

Penetration	Load	Standard Load	CBR	Mold - Compaction	Compaction	CBR
(mm)	(Kg)	(N)	(%)	(%)	(%)	95 % and abn %
2.50	7.60	13.4	16.3%	85	85	58.3%
5.00	13.16	23.0	33.3%			85.8%

Lab. Specialist

Figure 1

Sign :

Enb, Hmgln.com

المعمل المعوكزة
مطورو

Consultant Engineer

Name: _____

Sign :



Plate Load Test Results

Layer: EMBANKMENT -1.50
 Station: 546+760 TO 546+860
 Date: 30-11-23

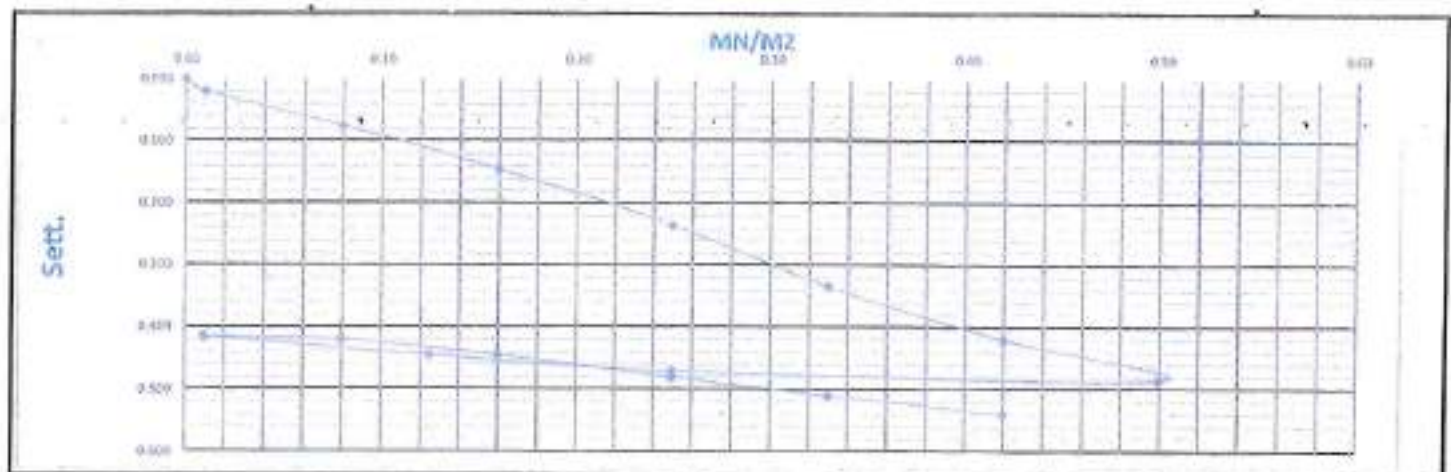
COMPANY	VOUSSEF NEGIDA 3
Location	546+800

Loading	Load	Load	Stress	Dist 1	Dist 2	Dist 3	Sett. 1	Sett. 2	Sett. 3	ASp Sett.
Stage No.	Bar	KN	MM/M2	mm	mm	mm	mm	mm	mm	mm
0.000	0.0	0.000	0.00	6.95	7.21		0.000	0.000		0.000
1.000	1.0	0.707	0.01	6.93	7.19		0.020	0.020		0.020
2.000	7.9	5.652	0.08	6.91	7.10		0.040	0.110		0.075
0.080	15.8	11.304	0.16	6.84	7.03		0.110	0.180		0.145
4.000	24.7	17.663	0.25	6.73	6.96		0.220	0.250		0.235
5.000	32.6	23.315	0.33	6.61	6.88		0.340	0.330		0.335
6.000	41.5	29.673	0.42	6.52	6.80		0.430	0.410		0.420
7.000	49.4	35.325	0.50	6.45	6.74		0.500	0.470		0.485
8.000	24.7	17.663	0.25	6.47	6.75		0.480	0.460		0.470
9.000	12.4	8.831	0.12	6.49	6.78		0.460	0.430		0.445
9.000	1.0	0.707	0.01	6.52	6.81		0.430	0.400		0.415
10.000	1.0	0.707	0.01	6.52	6.81		0.430	0.400		0.415
11.000	7.9	5.652	0.08	6.52	6.80		0.430	0.410		0.420
12.000	15.8	11.304	0.16	6.50	6.77		0.450	0.440		0.445
13.000	24.7	17.663	0.25	6.46	6.74		0.490	0.470		0.480
14.000	32.6	23.315	0.33	6.43	6.71		0.520	0.500		0.510
15.000	41.5	29.673	0.42	6.40	6.68		0.550	0.530		0.540

		s	AS	AS
0.7 σ_1	0.35	0.36313	0.22688	0.2
0.3 σ_1	0.15	0.13625		
0.7 σ_2	0.35	0.51607	0.09167	0.2
0.3 σ_2	0.15	0.425		
D (mm)	300			
E_{v1}	198.35			
E_{v2}	490.91			
Area (Sq.m)	0.07065			

$E_{v2} \times 1$	2.48		
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LOAD
 UNLOAD
 RELOAD



Lab. Specialist

Name :

Sign :

Lab. Engineer

Name: *أحمد محمد*
 Sign: *أحمد محمد*
 مشرف مختبر الطرق / شركة - مطروح

Consultant Engineer

Name :

Sign :



Plate Load Test Results

Layer:
Station:
Date:

EMBANKMENT -1.50		
546+860	TO	546+940
30-11-23		

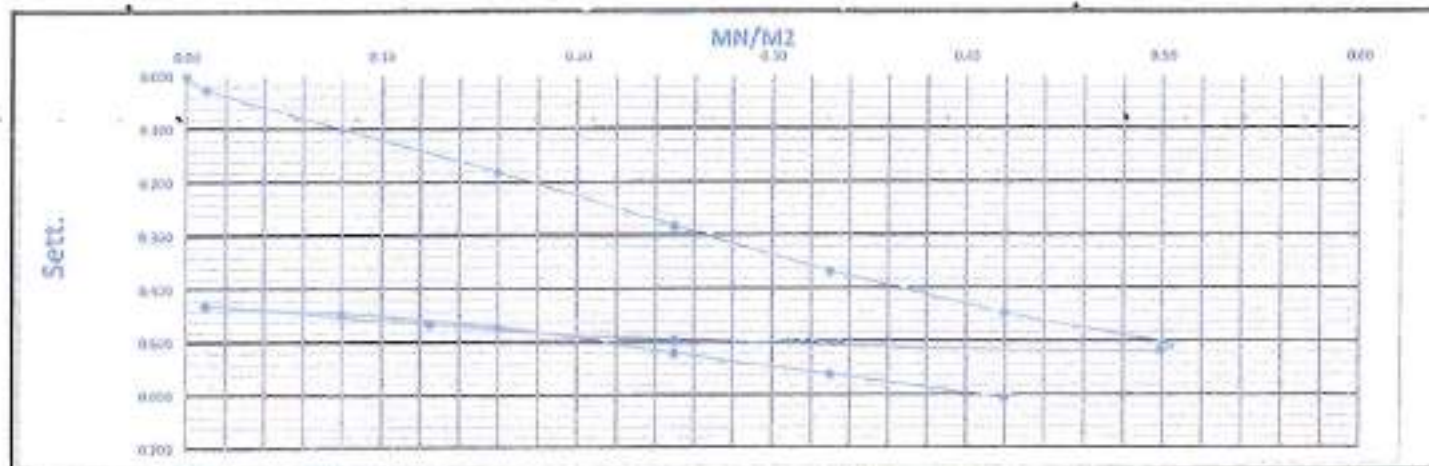
COMPANY	YOUSSEF NEGIDA
Location	546+900

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	8.61	7.49		0.000	0.000		0.000
1.000	1.0	0.707	0.01	8.59	7.46		0.020	0.030		0.025
2.000	7.9	5.652	0.08	8.51	7.39		0.100	0.100		0.100
0.080	15.8	11.304	0.16	8.43	7.31		0.180	0.180		0.180
4.000	24.7	17.663	0.25	8.30	7.24		0.310	0.250		0.280
5.000	32.6	23.315	0.33	8.24	7.13		0.370	0.360		0.365
6.000	41.5	29.673	0.42	8.14	7.07		0.470	0.420		0.445
7.000	49.4	35.325	0.50	8.10	6.97		0.510	0.520		0.515
8.000	24.7	17.663	0.25	8.12	6.99		0.490	0.500		0.495
9.000	12.4	8.831	0.12	8.15	7.02		0.460	0.470		0.465
9.000	1.0	0.707	0.01	8.19	7.05		0.420	0.440		0.430
10.000	1.0	0.707	0.01	8.19	7.05		0.420	0.440		0.430
11.000	7.9	5.652	0.08	8.17	7.04		0.440	0.450		0.445
12.000	15.8	11.304	0.16	8.15	7.01		0.460	0.480		0.470
13.000	24.7	17.663	0.25	8.11	6.95		0.500	0.540		0.520
14.000	32.6	23.315	0.33	8.05	6.93		0.560	0.560		0.560
15.000	41.5	29.673	0.42	8.02	6.87		0.590	0.620		0.605

		s	SS	Sp
0.7 σ_1	0.35	0.38375	0.21375	0.2
0.3 σ_1	0.15	0.17		
0.7 σ_2	0.35	0.57	0.11	0.2
0.3 σ_2	0.15	0.46		
D (mm)	309			
E_v	210.53			
E_v	409.10			
Area (Sq.m)	0.07165			

Ex20Ex1	1.54		
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LOAD
UN LOAD
RE LOAD



Lab. Specialist

Name :

Sign :

Lab. Engineer

Name :

Sign :

Consultant Engineer

Name :

Sign :



Plate Load Test Results

Layer: EMBANKMENT -1.50
 Station: 547+000 TO 547+060
 Date: 27-11-23

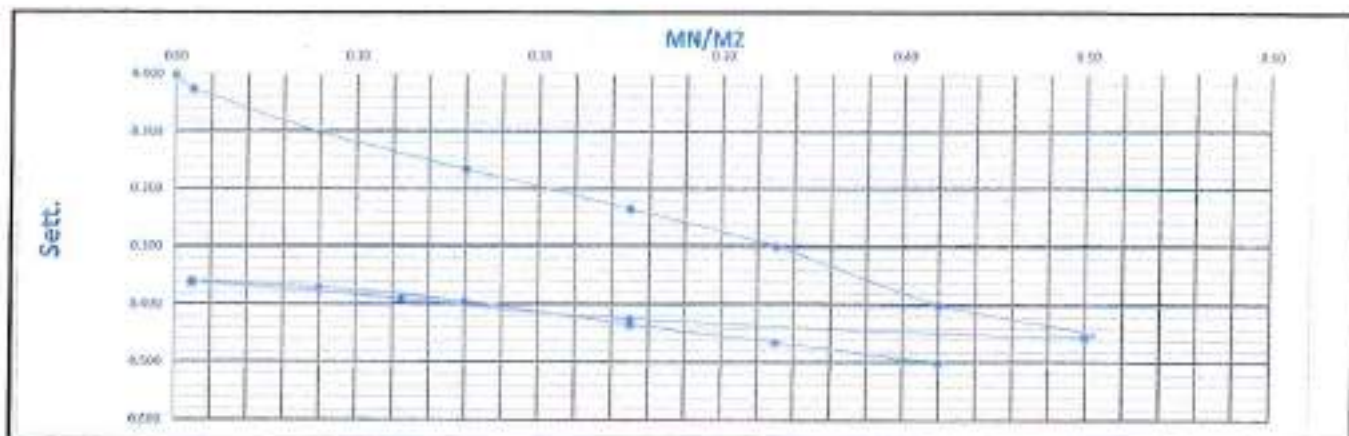
COMPANY: YOUSSEF NEGIDA J
 Location: 547+030

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	6.29	6.98		0.000	0.000		0.000
1.000	1.0	0.707	0.01	6.28	6.94		0.010	0.040		0.025
2.000	7.9	5.652	0.08	6.22	6.85		0.070	0.130		0.100
0.080	15.8	11.304	0.16	6.14	6.80		0.150	0.180		0.165
4.000	24.7	17.663	0.25	6.08	6.72		0.210	0.260		0.235
5.000	32.6	23.315	0.33	6.02	6.65		0.270	0.330		0.300
6.000	41.5	29.673	0.42	5.92	6.55		0.370	0.430		0.400
7.000	49.4	35.325	0.50	5.86	6.50		0.430	0.480		0.455
8.000	24.7	17.663	0.25	5.88	6.54		0.410	0.440		0.425
9.000	12.4	8.831	0.12	5.91	6.58		0.380	0.400		0.390
9.000	1.0	0.707	0.01	5.94	6.61		0.350	0.370		0.360
10.000	1.0	0.707	0.01	5.94	6.61		0.350	0.370		0.360
11.000	7.9	5.652	0.08	5.93	6.60		0.360	0.380		0.370
12.000	15.8	11.304	0.16	5.91	6.57		0.380	0.410		0.395
13.000	24.7	17.663	0.25	5.86	6.54		0.430	0.440		0.435
14.000	32.6	23.315	0.33	5.83	6.51		0.460	0.470		0.465
15.000	41.5	29.673	0.42	5.81	6.46		0.480	0.520		0.500

		s	SS	Sp
0.7 σ_1	0.15	0.35185	0.195	0.2
0.3 σ_1	0.15	0.15688		
0.7 σ_2	0.35	0.47278		
0.3 σ_2	0.15	0.18	0.09278	0.2
D (mm)	300			
E_{v1}	230.77			
E_{v2}	485.04			
Area (Sq.m)	0.07065			

E_{v2}/E_{v1}	2.10		
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LOAD
 UNLOAD
 RELOAD



Lab. Specialist

Name :

Sign :

Lab. Engineer
 Name: *Abdullah Al-Mutairi*
 Sign: *Abdullah Al-Mutairi*
 مهندس المختبر / مهندس

Consultant Engineer

Name :

Sign :



Plate Load Test Results

Layer:
Station:
Date:

EMBANKMENT -1.50

547+060	TO	547+140
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27-11-23

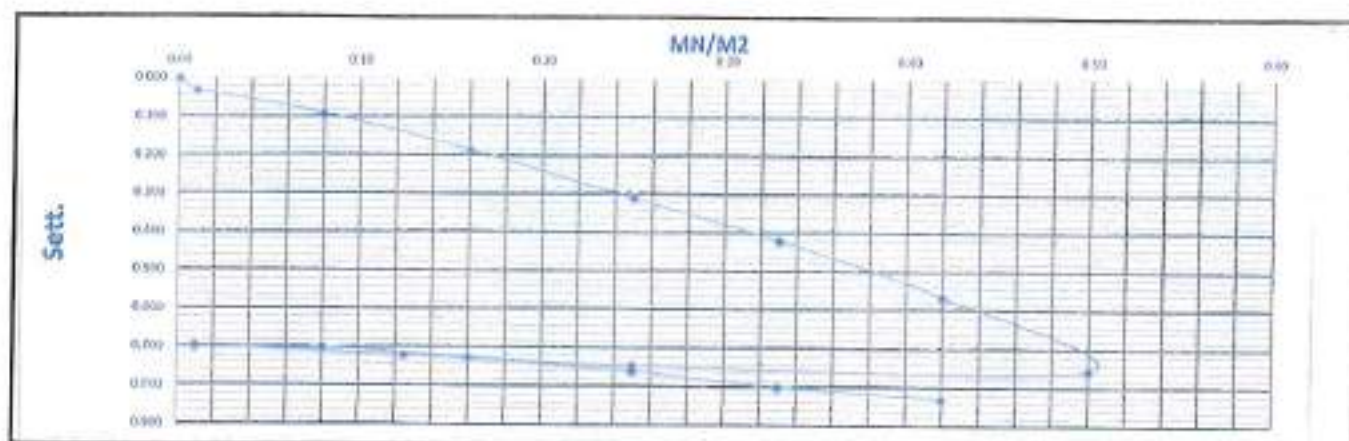
COMPANY	YOUSSEF NEGIDA 5
Location	547+100

Loading	Load	Load	Stress	Dist 1	Dist 2	Dist 3	Sett. 1	Sett. 2	Sett. 3	Avg. Sett.
Stage No.	Bar	KN	MM/M2	mm	mm	mm	mm	mm	mm	mm
0.000	0.0	0.000	0.00	7.92	5.56		0.000	0.000		0.000
1.000	1.0	0.707	0.01	7.88	5.54		0.040	0.020		0.030
2.000	7.9	5.652	0.08	7.79	5.51		0.130	0.050		0.090
3.000	15.8	11.304	0.16	7.68	5.43		0.240	0.130		0.185
4.000	24.7	17.663	0.25	7.53	5.33		0.390	0.230		0.310
5.000	32.6	23.315	0.33	7.41	5.23		0.510	0.330		0.420
6.000	41.5	29.673	0.42	7.25	5.10		0.670	0.460		0.565
7.000	49.4	35.325	0.50	7.05	4.92		0.870	0.640		0.755
8.000	24.7	17.663	0.25	7.06	4.93		0.860	0.630		0.745
9.000	12.4	8.831	0.12	7.09	4.95		0.830	0.610		0.720
9.000	1.0	0.707	0.01	7.11	4.98		0.810	0.580		0.695
10.000	1.0	0.707	0.01	7.11	4.98		0.810	0.580		0.695
11.000	7.9	5.652	0.08	7.11	4.97		0.810	0.590		0.700
12.000	15.8	11.304	0.16	7.08	4.95		0.840	0.610		0.725
13.000	24.7	17.663	0.25	7.05	4.91		0.870	0.650		0.760
14.000	32.6	23.315	0.33	7.01	4.87		0.910	0.690		0.800
15.000	41.5	29.673	0.42	6.98	4.84		0.940	0.720		0.830

		σ	ΔS	$\Delta \sigma$
0.7 σ_1	0.35	0.39875	0.11563	0.1
0.3 σ_1	0.15	0.17313		
0.7 σ_2	0.35	0.80667	0.10167	0.2
0.3 σ_2	0.15	0.705		
D (mm)	380			
E_{v1}	199.45			
E_{v2}	442.63			
Area (Sq. cm)	0.07068			

Ex-20x1	2.21		
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LOAD
UN LOAD
RE LOAD



Lab. Specialist

Name :

Sign :

Lab. Engineer

Name :

Sign :

Consultant Engineer

Name :

Sign :



Contractor



Client



Plate Load Test Results

Layer:
Station:
Date:

FERMA

0.00

546+760

TO

546+860

COMPANY

VOUSSEF NEGIDA J

Location

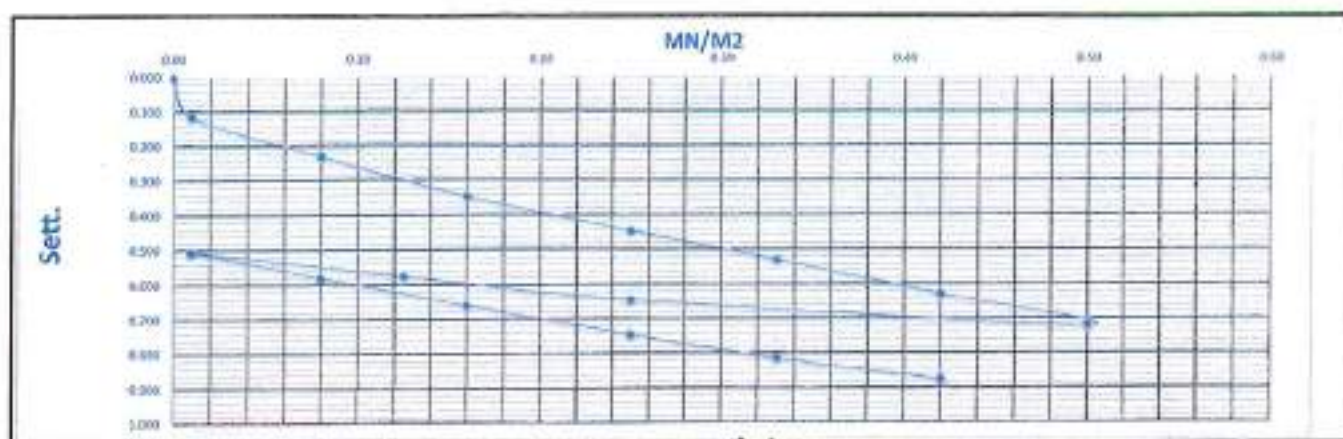
546+800

Loading	Load	Load	Stress	Dial 1	Dial 2	Dial 3	Sett. 1	Sett. 2	Sett. 3	Avg. Sett.
Stage No.	Rat	NN	MM/01	mm	mm	mm	mm	mm	mm	mm
0.000	0.0	0.000	0.00	7.22	6.66		0.000	0.000		0.000
1.000	1.0	0.707	0.01	7.05	6.60		0.170	0.060		0.115
2.000	7.9	5.652	0.08	6.89	6.53		0.330	0.130		0.230
0.080	15.8	11.304	0.16	6.75	6.44		0.470	0.220		0.345
4.000	24.7	17.663	0.25	6.63	6.36		0.590	0.300		0.445
5.000	32.6	23.315	0.33	6.52	6.30		0.700	0.360		0.530
6.000	41.5	29.673	0.42	6.39	6.23		0.830	0.430		0.630
7.000	49.4	35.325	0.50	6.27	6.17		0.950	0.490		0.720
8.000	24.7	17.663	0.25	6.35	6.24		0.870	0.420		0.645
9.000	12.4	8.831	0.12	6.43	6.30		0.790	0.360		0.575
9.000	1.0	0.707	0.01	6.50	6.37		0.720	0.290		0.505
10.000	1.0	0.707	0.01	6.50	6.37		0.720	0.290		0.505
11.000	7.9	5.652	0.08	6.41	6.31		0.810	0.350		0.580
12.000	15.8	11.304	0.16	6.32	6.24		0.900	0.420		0.660
13.000	24.7	17.663	0.25	6.23	6.16		0.990	0.500		0.745
14.000	32.6	23.315	0.33	6.14	6.11		1.080	0.550		0.815
15.000	41.5	29.673	0.42	6.09	6.04		1.130	0.620		0.875

0.7 σ_1	0.35	0.55125	0.22063	0.2
0.3 σ_1	0.15	0.33063		
0.7 σ_2	0.35	0.82833	0.17333	0.2
0.3 σ_2	0.15	0.65581		
D (mm)	300			
E_{v1}	203.97			
E_{v2}	259.63			
Area (Sq.m)	0.07065			

E_{v1}/E_{v2}	1.27		
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LOAD
UN LOAD
RE LOAD



Lab. Specialist

Name:

Sign:

Lab. Engineer

Name: محمد بن عبد الله

Sign: محمد بن عبد الله

Consultant Engineer

Name: 16

Sign: 12/2013



Contractor



المشرف على المشروع

Owner



Plate Load Test Results

Layer:
Station:
Date:

FERMA

0.00

546+760

TO

546+860

COMPANY

YOUSSEF NEGIDA 3

Location

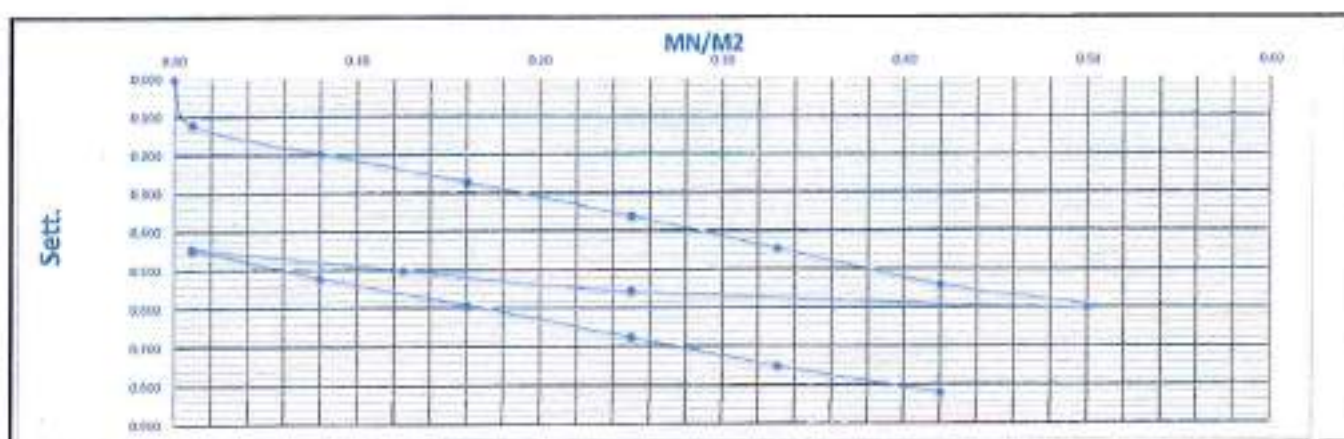
546+858

Loading	Load	Load	Stress	Dial 1	Dial 2	Dial 3	Sett. 1	Sett. 2	Sett. 3	Avg. Sett.
Stage No.	Bar	KN	MM/M2	mm	mm	mm	mm	mm	mm	mm
0.000	0.0	0.000	0.00	8.32	7.93		0.000	0.000		0.000
1.000	1.0	0.707	0.01	8.18	7.83		0.140	0.100		0.120
2.000	7.9	5.652	0.08	8.10	7.76		0.220	0.170		0.195
3.000	15.8	11.304	0.16	8.03	7.68		0.290	0.250		0.270
4.000	24.7	17.663	0.25	7.93	7.60		0.390	0.330		0.360
5.000	32.6	23.315	0.33	7.84	7.52		0.480	0.410		0.445
6.000	41.5	29.673	0.42	7.79	7.38		0.530	0.550		0.540
7.000	49.4	35.325	0.50	7.69	7.36		0.630	0.570		0.600
8.000	24.7	17.663	0.25	7.74	7.40		0.580	0.530		0.555
9.000	12.4	8.831	0.12	7.80	7.45		0.520	0.480		0.500
9.000	1.0	0.707	0.01	7.85	7.51		0.470	0.420		0.445
10.000	1.0	0.707	0.01	7.85	7.51		0.470	0.420		0.445
11.000	7.9	5.652	0.08	7.77	7.44		0.550	0.490		0.520
12.000	15.8	11.304	0.16	7.71	7.36		0.610	0.570		0.590
13.000	24.7	17.663	0.25	7.60	7.30		0.720	0.630		0.675
14.000	32.6	23.315	0.33	7.52	7.23		0.800	0.700		0.750
15.000	41.5	29.673	0.42	7.44	7.17		0.880	0.760		0.820

$0.7 \sigma_1$	$0.3 \sigma_1$	σ_1	ΔS	$\Delta \sigma$
0.7 σ_1	0.35	0.4875	0.12688	0.2
0.3 σ_1	0.15	0.26063		
0.7 σ_2	0.35	0.76556	0.17055	0.2
0.3 σ_2	0.15	0.59501		
D (mm)	300			
E_{v1}	198.35			
E_{v2}	263.86			
Area (Sq.m)	0.07065			

E_{v2}/E_{v1}	1.33		
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LOAD
UN LOAD
RE LOAD



Lab. Specialist

Name :

Sign :

Lab. Engineer

Name : shahab hamdi

Sign :

شركة نهجدة للمقاولات
المعمل المركزي
مشروع القطار السريع / فوكة - مطروح

Consultant Engineer

Name :

Sign :

16
12/2021



Contractor



Plate Load Test Results

Layer:

FERMA

0.00

Station:

546+860

TO

546+940

Date:

16-12-23

COMPANY

VOUSSEF NEGIDA J

Location

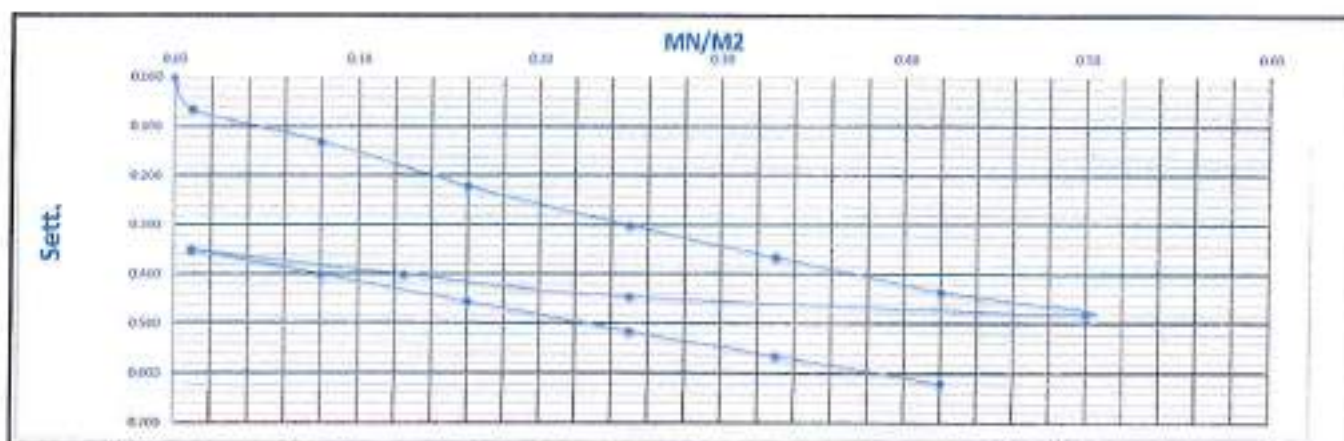
546+900

Loading	Load	Load	Stress	Dial 1	Dial 2	Dial 3	Sett. 1	Sett. 2	Sett. 3	Avg. Sett.
Stage No.	Bar	KN	MM/MT	mm	mm	mm	mm	mm	mm	mm
0.000	0.0	0.000	0.00	7.80	9.11		0.000	0.000		0.000
1.000	1.0	0.707	0.01	7.75	9.03		0.050	0.080		0.065
2.000	7.9	5.652	0.08	7.69	8.96		0.110	0.150		0.130
3.000	15.8	11.304	0.16	7.60	8.87		0.200	0.240		0.220
4.000	24.7	17.663	0.25	7.54	8.77		0.260	0.340		0.300
5.000	32.6	23.315	0.33	7.47	8.71		0.330	0.400		0.365
6.000	41.5	29.673	0.42	7.38	8.66		0.420	0.450		0.435
7.000	49.4	35.325	0.50	7.33	8.62		0.470	0.490		0.480
8.000	24.7	17.663	0.25	7.36	8.65		0.440	0.450		0.445
9.000	12.4	8.831	0.12	7.40	8.71		0.400	0.400		0.400
9.000	1.0	0.707	0.01	7.46	8.75		0.340	0.360		0.350
10.000	1.0	0.707	0.01	7.46	8.75		0.340	0.360		0.350
11.000	7.9	5.652	0.08	7.41	8.70		0.390	0.410		0.400
12.000	15.8	11.304	0.16	7.37	8.63		0.430	0.480		0.455
13.000	24.7	17.663	0.25	7.33	8.55		0.470	0.560		0.515
14.000	32.6	23.315	0.33	7.27	8.51		0.530	0.600		0.565
15.000	41.5	29.673	0.42	7.21	8.46		0.590	0.650		0.620

0.7 σ_1	0.35	0.39562	0.18687	0.2
0.3 σ_1	0.15	0.20875		
0.7 σ_2	0.35	0.57722	0.12722	0.2
0.3 σ_2	0.15	0.45001		
D (mm)	300			
E_{v1}	140.89			
E_{v2}	353.73			
Area (Sq.m)	0.07065			

E_{v1}/E_{v2}	1.47		
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LOAD
UN LOAD
RE LOAD



Lab. Specialist

Name :

Sign :

Lab. Engineer

Name : shahab handi

Sign :

شركة هندسة الجدران والاساس
للمصطفى المركزي
مشروع القطر السريع / فوكة - مطروح

Consultant Engineer

Name : 16

Sign : 12/2021



Contractor Consultant

Contractor

Plate Load Test Results

Layer:

FERMA

0.00

Station:

546+860

TO

546+940

Date:

16-12-23

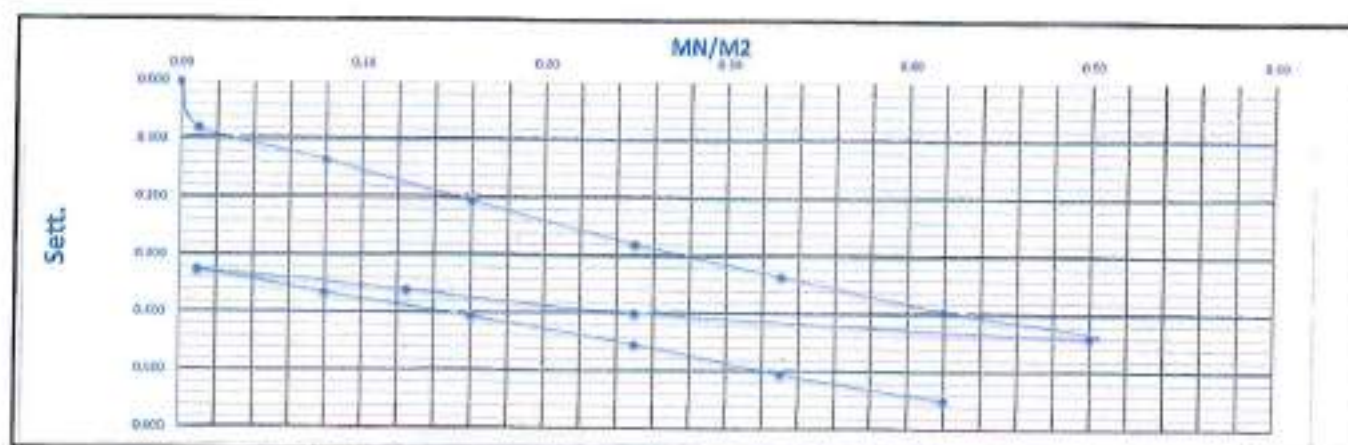
COMPANY	VOUSSEF NEGIDA & ASSOCIATES
Location	546+939

Loading	Load	Load	Stress	Dial 1	Dial 2	Dial 3	Sett. 1	Sett. 2	Sett. 3	Avg. Sett.
Stage No.	Bar	KN	MM/M2	mm	mm	mm	mm	mm	mm	mm
0.000	0.0	0.000	0.00	7.05	7.39		0.000	0.000		0.000
1.000	1.0	0.707	0.01	6.96	7.32		0.090	0.070		0.080
2.000	7.9	5.652	0.08	6.90	7.27		0.150	0.120		0.135
0.080	15.8	11.304	0.16	6.82	7.21		0.230	0.180		0.205
4.000	24.7	17.663	0.25	6.72	7.16		0.330	0.230		0.280
5.000	32.6	23.315	0.33	6.66	7.11		0.390	0.280		0.335
6.000	41.5	29.673	0.42	6.60	7.05		0.450	0.340		0.395
7.000	49.4	35.325	0.50	6.54	7.02		0.510	0.370		0.440
8.000	24.7	17.663	0.25	6.58	7.06		0.470	0.330		0.400
9.000	12.4	8.831	0.12	6.62	7.10		0.430	0.290		0.360
9.000	1.0	0.707	0.01	6.65	7.14		0.400	0.250		0.325
10.000	1.0	0.707	0.01	6.65	7.14		0.400	0.250		0.325
11.000	7.9	5.652	0.08	6.61	7.10		0.440	0.290		0.365
12.000	15.8	11.304	0.16	6.57	7.06		0.480	0.330		0.405
13.000	24.7	17.663	0.25	6.52	7.01		0.530	0.380		0.455
14.000	32.6	23.315	0.33	6.48	6.95		0.570	0.440		0.505
15.000	41.5	29.673	0.42	6.43	6.91		0.620	0.480		0.550

		σ	AS	AS
0.7 σ_1	0.35	0.35563	0.15938	0.3
0.3 σ_1	0.15	0.19625		
0.7 σ_2	0.35	0.515	0.11	0.2
0.3 σ_2	0.15	0.405		
D (mm)	300			
E_{v1}	282.35			
E_{v2}	409.11			
Area (Sqr)	0.07865			

End/E=1	1.45		
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LOAD
UNLOAD
RE LOAD



Lab. Specialist

Name :

Sign :

Lab. Engineer

Name : shehab hand

Sign :

Consultant Engineer

Name :

Sign :



Plate Load Test Results

Layer:
Station:
Date:

FERMA	0.00	
547+000	TO	547+060
11-12-23		

COMPANY	YOUSSEF NEGIDA 3
Location	547+030

Loading	Load	Load	Stress	Dial 1	Dial 2	Dial 3	Sett. 1	Sett. 2	Sett. 3	Avg. Sett.
Stage No.	Bar	KN	MM/ME	mm	mm	mm	mm	mm	mm	mm
0.000	0.0	0.000	0.00	8.56	7.73		0.000	0.000		0.000
1.000	1.0	0.707	0.01	8.37	7.70		0.190	0.030		0.110
2.000	7.9	5.652	0.08	8.31	7.62		0.250	0.110		0.180
0.080	15.8	11.304	0.16	8.23	7.56		0.330	0.170		0.250
4.000	24.7	17.663	0.25	8.15	7.48		0.410	0.250		0.330
5.000	32.6	23.315	0.33	8.04	7.41		0.520	0.320		0.420
6.000	41.5	29.673	0.42	7.94	7.33		0.620	0.400		0.510
7.000	49.4	35.325	0.50	7.87	7.25		0.690	0.480		0.585
8.000	24.7	17.663	0.25	7.89	7.27		0.670	0.460		0.565
9.000	12.4	8.831	0.12	7.93	7.31		0.630	0.420		0.525
9.000	1.0	0.707	0.01	7.98	7.36		0.580	0.370		0.475
10.000	1.0	0.707	0.01	7.98	7.36		0.580	0.370		0.475
11.000	7.9	5.652	0.08	7.93	7.33		0.630	0.400		0.515
12.000	15.8	11.304	0.16	7.87	7.28		0.690	0.450		0.570
13.000	24.7	17.663	0.25	7.81	7.22		0.750	0.510		0.630
14.000	32.6	23.315	0.33	7.77	7.17		0.790	0.560		0.675
15.000	41.5	29.673	0.42	7.73	7.12		0.830	0.610		0.720

		S	AS	Ar
0.7 σ_1	0.35	0.44438	0.20313	0.2
0.3 σ_1	0.15	0.24125		
0.7 σ_2	0.35	0.685	0.13	0.2
0.3 σ_2	0.15	0.555		
D (mm)	360			
Ev ₁	221.54			
Ev ₂	346.16			
Area (Square)	0.81665			

E _{v2} /E _{v1}	1.56		
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LOAD
UN LOAD
RE LOAD



Lab. Specialist

Name :

Sign :

Lab. Engineer

Name :

Sign :

Consultant Engineer

Name :

Sign :



Plate Load Test Results

Layer:
Station:
Date:

FERMA	0.00	
547+000	TO	547+060
11-12-23		

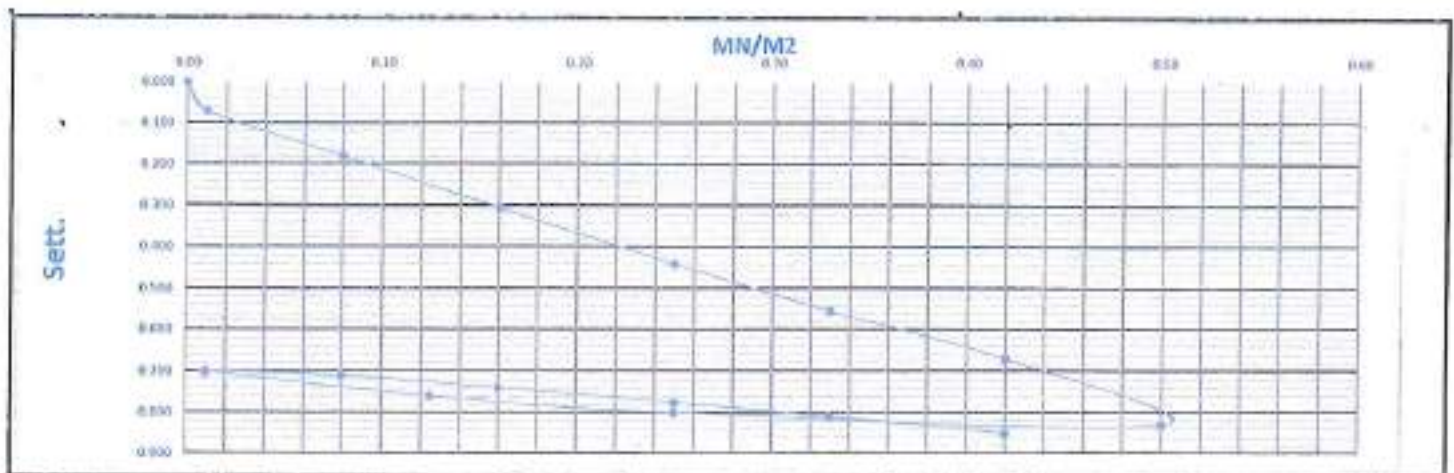
COMPANY	YOUSSEF NEGIDA 3
Location	547+060

Loading	Load	Load	Stress	Dist 1	Dist 2	Dist 3	Sett. 1	Sett. 2	Sett. 3	Avg. Sett.
Stage No.	Bar	KN	MM2/2	mm	mm	mm	mm	mm	mm	mm
0.000	0.0	0.000	0.00	8.72	7.75		0.000	0.000		0.000
1.000	1.0	0.707	0.01	8.64	7.69		0.000	0.060		0.070
2.000	7.9	5.652	0.08	8.52	7.59		0.200	0.160		0.180
0.080	15.8	11.304	0.16	8.41	7.45		0.310	0.300		0.305
4.000	24.7	17.663	0.25	8.28	7.31		0.440	0.440		0.440
5.000	32.6	23.315	0.33	8.15	7.21		0.570	0.540		0.555
6.000	41.5	29.673	0.42	8.04	7.09		0.680	0.660		0.670
7.000	49.4	35.325	0.50	7.97	6.94		0.850	0.810		0.830
8.000	24.7	17.663	0.25	7.89	6.98		0.830	0.770		0.800
9.000	12.4	8.831	0.12	7.93	7.02		0.790	0.730		0.760
9.000	1.0	0.707	0.01	7.98	7.09		0.740	0.660		0.700
10.000	1.0	0.707	0.01	7.98	7.09		0.740	0.660		0.700
11.000	7.9	5.652	0.08	7.97	7.08		0.750	0.670		0.710
12.000	15.8	11.304	0.16	7.94	7.05		0.780	0.700		0.740
13.000	24.7	17.663	0.25	7.90	7.02		0.820	0.730		0.775
14.000	32.6	23.315	0.33	7.87	6.98		0.850	0.770		0.810
15.000	41.5	29.673	0.42	7.83	6.94		0.890	0.810		0.850

		s	AS	As
0.7 σ_1	0.35	0.53	0.24063	0.2
0.3 σ_1	0.15	0.28938		
0.7 σ_2	0.35	0.81839	0.49889	0.2
0.3 σ_2	0.15	0.72		
D (mm)	300			
Ev ₁	187.01			
Ev ₂	455.06			
Area (Sq.m)	0.07065			

Ev2/Ev1	2.43		
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LOAD
UN LOAD
RE LOAD



Lab. Specialist

Name :

Sign :

Lab. Engineer

Name :

Sign :

Consultant Engineer

Name :

Sign :



Contractor Consultant

Contractor

Owner

Plate Load Test Results

Layer:
Station:
Date:

FERMA

0.00

547+060

TO

547+140

11-12-23

COMPANY

YUSEF NEGIDA 3

Location

547+090

Loading	Load	Load	Stress	Dial 1	Dial 2	Dial 3	Sett. 1	Sett. 2	Sett. 3	Avg. Sett.
Stage No.	Bar	KN	MPa	mm	mm	mm	mm	mm	mm	mm
0.000	0.0	0.000	0.00	7.49	6.50		0.000	0.000		0.000
1.000	1.0	0.707	0.01	7.36	6.31		0.130	0.190		0.160
2.000	7.9	5.652	0.08	7.29	6.16		0.200	0.340		0.270
0.080	15.8	11.304	0.16	7.21	5.99		0.280	0.510		0.395
4.000	24.7	17.663	0.25	7.12	5.78		0.370	0.720		0.545
5.000	32.6	23.315	0.33	7.04	5.60		0.450	0.900		0.675
6.000	41.5	29.673	0.42	6.99	5.41		0.500	1.090		0.795
7.000	49.4	35.325	0.50	6.93	5.19		0.560	1.310		0.935
8.000	24.7	17.663	0.25	6.97	5.27		0.520	1.230		0.875
9.000	12.4	8.831	0.12	7.01	5.38		0.480	1.120		0.800
9.000	1.0	0.707	0.01	7.08	5.53		0.410	0.970		0.690
10.000	1.0	0.707	0.01	7.08	5.53		0.410	0.970		0.690
11.000	7.9	5.652	0.08	7.07	5.51		0.420	0.990		0.705
12.000	15.8	11.304	0.16	7.04	5.46		0.450	1.040		0.745
13.000	24.7	17.663	0.25	7.01	5.38		0.480	1.120		0.800
14.000	32.6	23.315	0.33	6.97	5.32		0.520	1.180		0.850
15.000	41.5	29.673	0.42	6.94	5.25		0.550	1.250		0.900

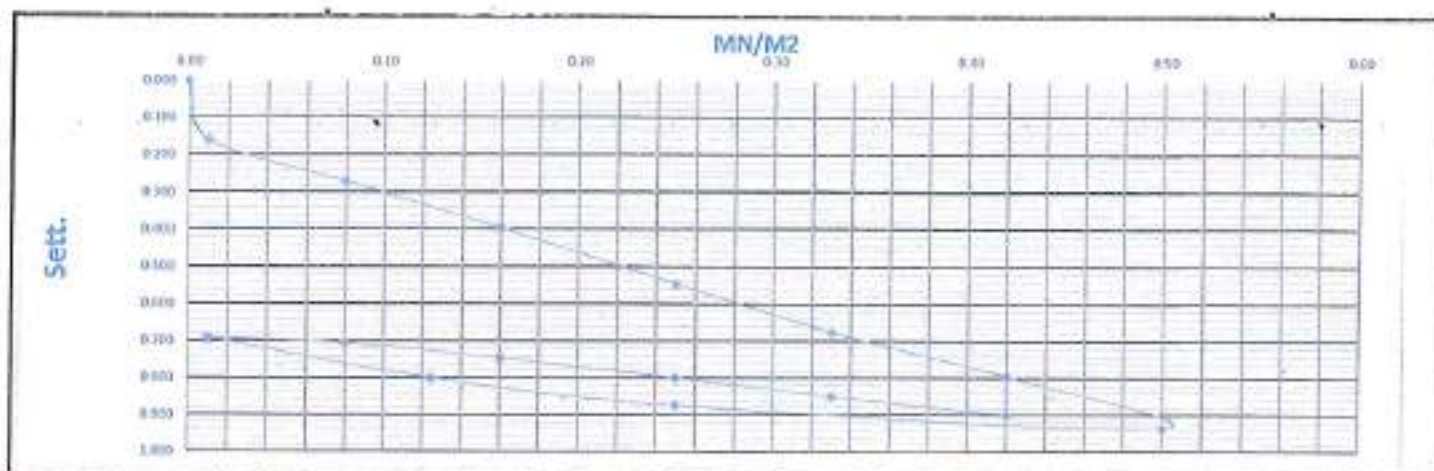
		s	SS	Sp
0.7 σ_1	0.35	0.6725	0.29313	0.2
0.3 σ_1	0.15	0.37938		
0.7 σ_2	0.35	0.36111	0.14111	0.2
0.3 σ_2	0.15	0.72		
D (mm)	300			
E _{v1}	153.52			
E _{v2}	318.90			
Area (Sqmm)	0.07065			

E _{v2} /E _{v1}	2.08		
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LOAD

UNLOAD

RELOAD



Lab. Specialist

Name :

Sign :

Lab. Engineer

Name :

Sign :

Consultant Engineer

Name :

Sign :



Contractor



Plate Load Test Results

Layer:
Station:
Date:

FERMA	0.00	
547+060	TO	547+140
11-12-23		

COMPANY	YOUSSEF NEGIDA & PARTNERS
Location	547+130

Loading	Load	Load	Stress	Dial 1	Dial 2	Dial 3	Sett. 1	Sett. 2	Sett. A	Arg. Sett.
Stage No.	Bar	kN	MPa	mm	mm	mm	mm	mm	mm	mm
0.000	0.0	0.000	0.00	9.22	8.85		0.000	0.000		0.000
1.000	1.0	0.707	0.01	9.14	8.79		0.080	0.060		0.070
2.000	7.9	5.652	0.08	9.02	8.69		0.200	0.160		0.180
3.000	15.8	11.304	0.16	8.91	8.55		0.310	0.300		0.305
4.000	24.7	17.663	0.25	8.78	8.41		0.440	0.440		0.440
5.000	32.6	23.315	0.33	8.63	8.32		0.590	0.530		0.560
6.000	41.5	29.673	0.42	8.51	8.21		0.710	0.640		0.675
7.000	49.4	35.325	0.50	8.37	8.07		0.850	0.780		0.815
8.000	24.7	17.663	0.25	8.39	8.10		0.830	0.750		0.790
9.000	12.4	8.831	0.12	8.43	8.14		0.790	0.710		0.750
9.000	1.0	0.707	0.01	8.48	8.21		0.740	0.640		0.690
10.000	1.0	0.707	0.01	8.48	8.21		0.740	0.640		0.690
11.000	7.9	5.652	0.08	8.47	8.19		0.750	0.660		0.705
12.000	15.8	11.304	0.16	8.43	8.15		0.790	0.700		0.745
13.000	24.7	17.663	0.25	8.38	8.11		0.840	0.740		0.790
14.000	32.6	23.315	0.33	8.34	8.07		0.880	0.780		0.830
15.000	41.5	29.673	0.42	8.30	8.04		0.920	0.810		0.865

	s	AS	AS
0.7 σ_1	0.35	0.5525	0.26312
0.3 σ_2	0.15	0.28938	
0.7 σ_2	0.35	0.83778	0.11778
0.3 σ_1	0.15	0.72	
D (mm)	300		
E_{v1}	171.82		
E_{v2}	382.08		
Area (Sq. cm)	0.07065		

$E_{v2/E_{v1}}$	2.23		
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LOAD
UNLOAD
RELOAD



Lab. Specialist

Name :
Sign :

Lab. Engineer

Name : *Abdelhakim El-Hachimi*
Sign : *Abdelhakim El-Hachimi*
مشروع القطار السريع / فوكة - مطروح

Consultant Engineer

Name : *Abdelhakim El-Hachimi*
Sign : *Abdelhakim El-Hachimi*



Contractor



شركة المهندسين
المصريين



Plate Load Test Results

Layer: Prepared Subgrade 2 0.50+
Station: 546+760 TO 546+860
Date: 20-12-23

COMPANY	YOUSSEF NEGIDA 3
Location	546+775

Loading	Load	Load	Stress	Dial 1	Dial 2	Dial 3	Sett. 1	Sett. 2	Sett. 3	Avg. Sett.
Stage No.	Bar	kN	MPa	mm	mm	mm	mm	mm	mm	mm
0.000	0.0	0.000	0.00	7.65	6.70		0.000	0.000		0.000
1.000	1.0	0.707	0.01	7.63	6.67		0.020	0.030		0.025
2.000	7.9	5.652	0.08	7.57	6.61		0.080	0.090		0.085
0.080	15.8	11.304	0.16	7.50	6.55		0.150	0.150		0.150
4.000	24.7	17.663	0.25	7.42	6.49		0.230	0.210		0.220
5.000	32.6	23.315	0.33	7.35	6.40		0.300	0.300		0.300
6.000	41.5	29.673	0.42	7.29	6.34		0.360	0.360		0.360
7.000	49.4	35.325	0.50	7.22	6.27		0.430	0.430		0.430
8.000	24.7	17.663	0.25	7.24	6.28		0.410	0.420		0.415
9.000	12.4	8.831	0.12	7.27	6.32		0.380	0.380		0.380
9.000	1.0	0.707	0.01	7.32	6.37		0.330	0.330		0.330
10.000	1.0	0.707	0.01	7.32	6.37		0.330	0.330		0.330
11.000	7.9	5.652	0.08	7.30	6.36		0.350	0.340		0.345
12.000	15.8	11.304	0.16	7.28	6.33		0.370	0.370		0.370
13.000	24.7	17.663	0.25	7.25	6.30		0.400	0.400		0.400
14.000	32.6	23.315	0.33	7.23	6.27		0.420	0.430		0.425
15.000	41.5	29.673	0.42	7.20	6.25		0.450	0.450		0.450

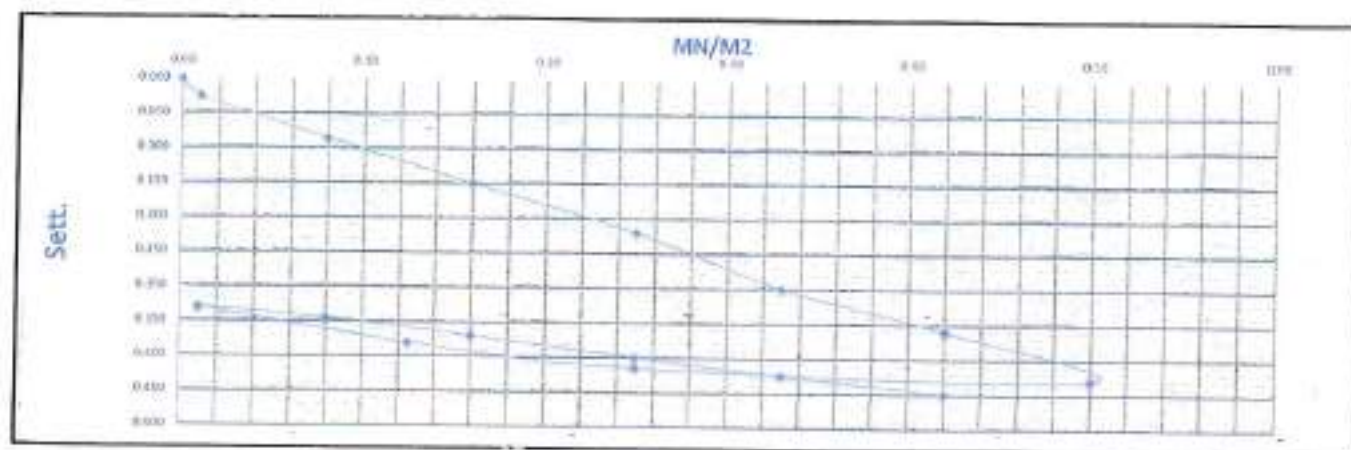
		σ	ΔS	$\Delta \sigma$
0.7 σ_1	0.35	0.29875	0.15688	0.2
0.3 σ_1	0.15	0.14188		
0.7 σ_2	0.35	0.43056	0.07055	0.2
0.3 σ_2	0.15	0.36		
D (mm)	300			
E_{v1}	246.45			
E_{v2}	637.81			
Area (Sq.m)	0.67865			

E_{v2}/E_{v1}	2.58		
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LOAD

UN LOAD

RE LOAD



Lab. Specialist

Name :

Sign :

Lab. Engineer

Name : *محمد عبد الله*
Sign : *محمد عبد الله*
مشروع القطار السريع / فوكة - مطروح

Consult Engineer

Name : *علي*

Sign : *علي*



Contractor



Owner



Plate Load Test Results

Layer:

Prepared Subgrade 2 0.50+

Station:

546+760

TO

546+860

Date:

20-12-23

COMPANY

YOUSSEF NEGIDA J

Location

546+800

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	7.70	6.34		0.000	0.000		0.000
1.000	1.0	0.707	0.01	7.68	6.31		0.020	0.030		0.025
2.000	7.9	5.652	0.08	7.62	6.24		0.080	0.100		0.090
0.080	15.8	11.304	0.16	7.57	6.10		0.130	0.240		0.185
4.000	24.7	17.663	0.25	7.49	5.97		0.210	0.370		0.290
5.000	32.6	23.315	0.33	7.38	5.85		0.320	0.490		0.405
6.000	41.5	29.673	0.42	7.31	5.76		0.390	0.580		0.485
7.000	49.4	35.325	0.50	7.19	5.63		0.510	0.710		0.610
8.000	24.7	17.663	0.25	7.23	5.69		0.470	0.650		0.560
9.000	12.4	8.831	0.12	7.27	5.73		0.430	0.610		0.520
9.000	1.0	0.707	0.01	7.32	5.77		0.380	0.570		0.475
10.000	1.0	0.707	0.01	7.32	5.77		0.380	0.570		0.475
11.000	7.9	5.652	0.08	7.30	5.76		0.400	0.580		0.490
12.000	15.8	11.304	0.16	7.27	5.73		0.430	0.610		0.520
13.000	24.7	17.663	0.25	7.24	5.70		0.460	0.640		0.550
14.000	32.6	23.315	0.33	7.20	5.67		0.500	0.670		0.585
15.000	41.5	29.673	0.42	7.16	5.63		0.540	0.710		0.625

	S	SS	G _o
0.7 σ_1	0.35	0.37563	0.2025
0.3 σ_1	0.15	0.17383	
0.7 σ_2	0.35	0.59389	0.08889
0.3 σ_2	0.15	0.505	
D (mm)	300		
E _{v1}	222.22		
E _{v2}	806.26		
Area (Sq.m)	0.07065		

E _{v2} /E _{v1}	1.28		
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LOAD

UNLOAD

RELOAD



Lab. Specialist

Name :

Sign :

Lab. Engineer

Name :

Sign :

Consultant Engineer

Name :

Sign :

2023



Contractor



Plate Load Test Results

Layer: Prepared Subgrade 2 0.50+
Station: 546+760 TO 546+860
Date: 20-12-23

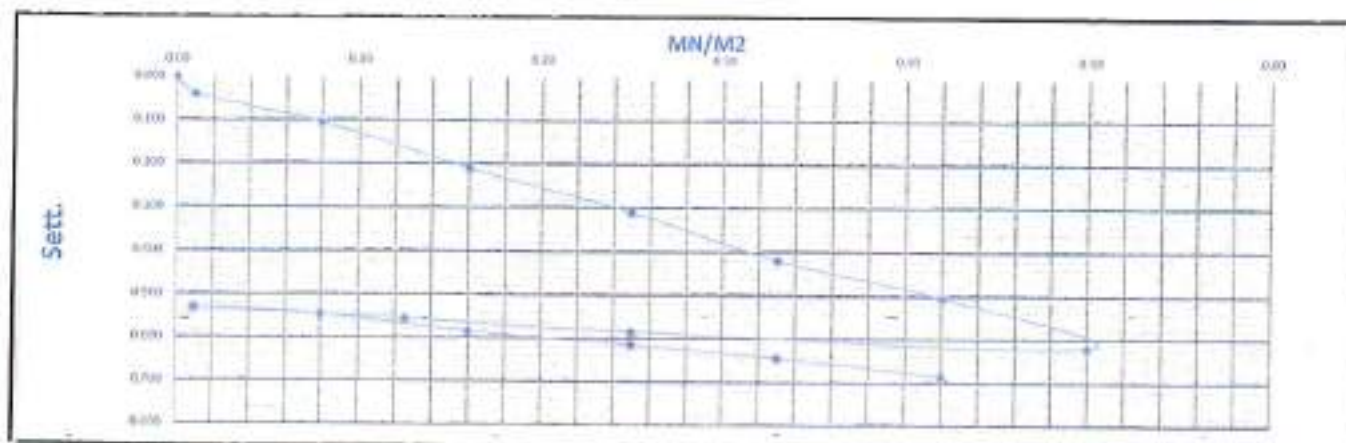
COMPANY	YOUSSEF NEGIDA 2
Location	546+825

Loading	Load	Load	Stress	Dial 1	Dial 2	Dial 3	Sett. 1	Sett. 2	Sett. 3	Avg. Sett.
Stage No.	Bar	KN	MM/M2	mm	mm	mm	mm	mm	mm	mm
0.000	0.0	0.000	0.00	8.73	8.56		0.000	0.000		0.000
1.000	1.0	0.707	0.01	8.70	8.51		0.030	0.050		0.040
2.000	7.9	5.652	0.08	8.63	8.45		0.100	0.110		0.105
3.000	15.8	11.304	0.16	8.54	8.33		0.190	0.230		0.210
4.000	24.7	17.663	0.25	8.43	8.24		0.300	0.320		0.310
5.000	32.6	23.315	0.33	8.32	8.13		0.410	0.430		0.420
6.000	41.5	29.673	0.42	8.24	8.04		0.490	0.520		0.505
7.000	49.4	35.325	0.50	8.12	7.93		0.610	0.630		0.620
8.000	24.7	17.663	0.25	8.15	7.97		0.580	0.590		0.585
9.000	12.4	8.831	0.12	8.19	7.99		0.540	0.570		0.555
9.000	1.0	0.707	0.01	8.21	8.02		0.520	0.540		0.530
10.000	1.0	0.707	0.01	8.21	8.02		0.520	0.540		0.530
11.000	7.9	5.652	0.08	8.19	8.01		0.540	0.550		0.545
12.000	15.8	11.304	0.16	8.15	7.97		0.580	0.590		0.585
13.000	24.7	17.663	0.25	8.12	7.94		0.610	0.620		0.615
14.000	32.6	23.315	0.33	8.09	7.91		0.640	0.650		0.645
15.000	41.5	29.673	0.42	8.05	7.87		0.680	0.690		0.685

		σ	ΔS	$\Delta \sigma$
0.7 σ_2	0.35	0.40438	0.2075	0.2
0.3 σ_2	0.15	0.19688		
0.7 σ_1	0.35	0.65389	0.09389	0.1
0.3 σ_1	0.15	0.56		
D (mm)	300			
E_{v1}	216.87			
E_{v2}	479.30			
Area (Sq.m)	0.07865			

E_{vd1-1}	2.21		
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LOAD
UN LOAD
RE LOAD



Lab. Specialist

Name :

Sign :

Lab. Engineer

Name: *ش. محمد عبدالمجيد*
Sign: *محمد عبدالمجيد*
مشروع القطار السريع / فوكة - مطر

Consultant Engineer

Name (2) :

Sign: 2

20-23



Contractor



Plate Load Test Results

Layer:
Station:
Date:

Prepared Subgrade 2 0.50+
546+760 TO 546+860
20-12-23

COMPANY YOUSSEF NEGIDA J
Location 546+858

Loading	Load	Load	Stress	Dial 1	Dial 2	Dial 3	Sett. 1	Sett. 2	Sett. 3	Avg. Sett.
Stage No.	Bar	KN	MM/M2	mm	mm	mm	mm	mm	mm	mm
0.000	0.0	0.000	0.00	7.48	8.61		0.000	0.000		0.000
1.000	1.0	0.707	0.01	7.44	8.58		0.040	0.030		0.035
2.000	7.9	5.652	0.08	7.38	8.53		0.100	0.080		0.090
0.080	15.8	11.304	0.16	7.31	8.46		0.170	0.150		0.160
4.000	24.7	17.663	0.25	7.22	8.35		0.260	0.260		0.260
5.000	32.6	23.315	0.33	7.15	8.22		0.330	0.390		0.360
6.000	41.5	29.673	0.42	7.06	8.13		0.420	0.480		0.450
7.000	49.4	35.325	0.50	6.99	8.04		0.490	0.570		0.530
8.000	24.7	17.663	0.25	7.00	8.06		0.480	0.550		0.515
9.000	12.4	8.831	0.12	7.04	8.09		0.440	0.520		0.480
9.000	1.0	0.707	0.01	7.09	8.12		0.390	0.490		0.440
10.000	1.0	0.707	0.01	7.09	8.12		0.390	0.490		0.440
11.000	7.9	5.652	0.08	7.06	8.10		0.420	0.510		0.465
12.000	15.8	11.304	0.16	7.02	8.06		0.460	0.550		0.505
13.000	24.7	17.663	0.25	6.98	8.02		0.500	0.590		0.545
14.000	32.6	23.315	0.33	6.94	7.98		0.540	0.630		0.585
15.000	41.5	29.673	0.42	6.91	7.94		0.570	0.670		0.620

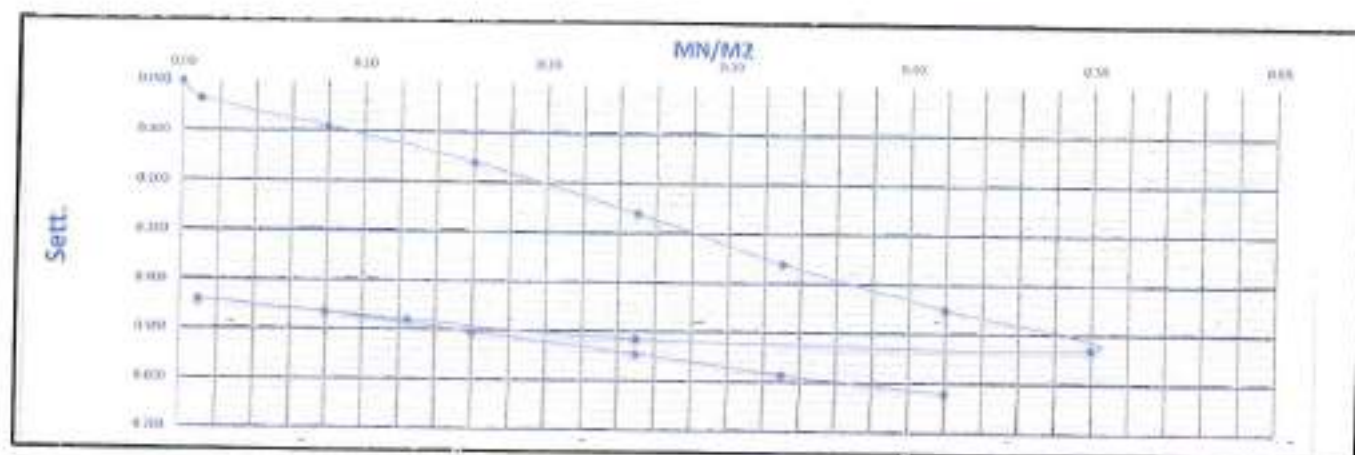
$0.7 \sigma_1$	0.35	0.38	AS	Av
$0.3 \sigma_2$	0.15	0.15125	0.12875	0.2
$0.7 \sigma_2$	0.35	0.59278	0.10278	0.2
$0.3 \sigma_2$	0.15	0.49		
D (mm)	300			
E_{v1}	196.71			
E_{v2}	437.85			
Area (Sq.m)	0.07068			

E_{vd}/E_{v1}	1.21		
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LOAD

UNLOAD

RELOAD



Lab. Specialist

Name :

Sign :

Lab. Engineer

Name : *Mohamed El-Negida*
Sign : *Mohamed El-Negida*
مشروع القطار السريع - فوكة - مطروح

Consultant Engineer

Name :

Sign :

20-23



Contractor



Plate Load Test Results

Layer:
Station:
Date:

Prepared Subgrade 2 0.50+

546+860

TO

546+940

20-12-23

COMPANY

VOUSSEF NEGIDA 3

Location

546+870

Loading	Load	Load	Stress	Dist.1	Dist.2	Dist.3	Sett.1	Sett.2	Sett.3	Avg. Sett.
Stage No.	Bar	KN	MPa	mm	mm	mm	mm	mm	mm	mm
0.000	0.0	0.000	0.00	8.37	6.82		0.000	0.000		0.000
1.000	1.0	0.707	0.01	8.34	6.78		0.030	0.040		0.035
2.000	7.9	5.652	0.08	8.28	6.71		0.090	0.110		0.100
0.080	15.8	11.304	0.16	8.19	6.63		0.180	0.190		0.185
4.000	24.7	17.663	0.25	8.07	6.53		0.300	0.290		0.295
5.000	32.6	23.315	0.33	7.97	6.42		0.400	0.400		0.400
6.000	41.5	29.673	0.42	7.88	6.33		0.490	0.490		0.490
7.000	49.4	35.325	0.50	7.81	6.24		0.560	0.580		0.570
8.000	24.7	17.663	0.25	7.82	6.26		0.550	0.560		0.555
9.000	12.4	8.831	0.12	7.86	6.29		0.510	0.530		0.520
9.000	1.0	0.707	0.01	7.90	6.34		0.470	0.480		0.475
10.000	1.0	0.707	0.01	7.90	6.34		0.470	0.480		0.475
11.000	7.9	5.652	0.08	7.89	6.33		0.480	0.490		0.485
12.000	15.8	11.304	0.16	7.86	6.30		0.510	0.520		0.515
13.000	24.7	17.663	0.25	7.82	6.26		0.550	0.560		0.555
14.000	32.6	23.315	0.33	7.79	6.22		0.580	0.600		0.590
15.000	41.5	29.673	0.42	7.76	6.18		0.610	0.640		0.625

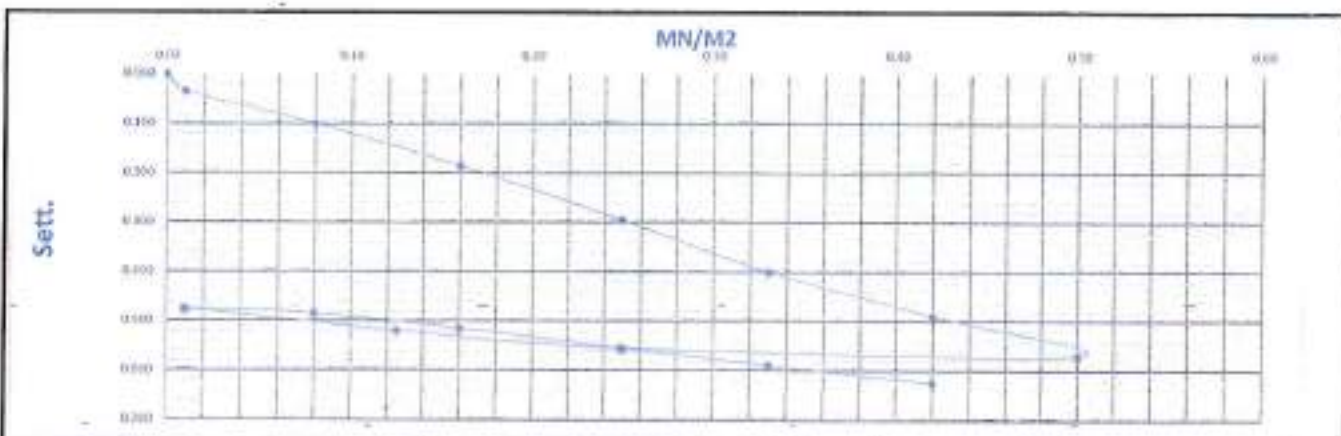
0.7 σ_1	0.35	0.42	0.24563	0.1
0.3 σ_1	0.15	0.17438		
0.7 σ_2	0.35	0.59778	0.10278	0.2
0.3 σ_2	0.15	0.495		
D (mm)	300			
Ev ₁	181.21			
Ev ₂	437.84			
Area (Sqmm)	0.07065			

Ev2/Ev1	2.39		
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LOAD

UNLOAD

RE LOAD



Lab. Specialist

Name :

Sign :

Lab. Engineer

Name :

Sign :

Consultant Engineer

Name :

Sign :



Contractor



Plate Load Test Results

Layer:
Station:
Date:

Prepared Subgrade 2 0.50+

546+860

TO

546+940

20-12-23

COMPANY

YOUSSEF NEGIDA J

Location

546+895

Loadlag	Load	Load	Stress	Dial 1	Dial 2	Dial 3	Sett. 1	Sett. 2	Sett. 3	Avg. Sett.
Stage No.	Bar	KN	MM/M2	mm	mm	mm	mm	mm	mm	mm
0.000	0.0	0.000	0.00	8.43	7.85		0.000	0.000		0.000
1.000	1.0	0.707	0.01	8.38	7.79		0.050	0.060		0.055
2.000	7.9	5.652	0.08	8.31	7.69		0.120	0.160		0.140
0.080	15.8	11.304	0.16	8.20	7.58		0.230	0.270		0.250
4.000	24.7	17.663	0.25	8.11	7.47		0.320	0.380		0.350
5.000	32.6	23.315	0.33	8.03	7.36		0.400	0.490		0.445
6.000	41.5	29.673	0.42	7.93	7.26		0.500	0.590		0.545
7.000	49.4	35.325	0.50	7.82	7.15		0.610	0.700		0.655
8.000	24.7	17.663	0.25	7.84	7.18		0.590	0.670		0.630
9.000	12.4	8.831	0.12	7.87	7.21		0.560	0.640		0.600
9.000	1.0	0.707	0.01	7.90	7.25		0.530	0.600		0.565
10.000	1.0	0.707	0.01	7.90	7.25		0.530	0.600		0.565
11.000	7.9	5.652	0.08	7.87	7.22		0.560	0.630		0.595
12.000	15.8	11.304	0.16	7.83	7.18		0.600	0.670		0.635
13.000	24.7	17.663	0.25	7.80	7.14		0.630	0.710		0.670
14.000	32.6	23.315	0.33	7.76	7.10		0.670	0.750		0.710
15.000	41.5	29.673	0.42	7.72	7.06		0.710	0.790		0.750

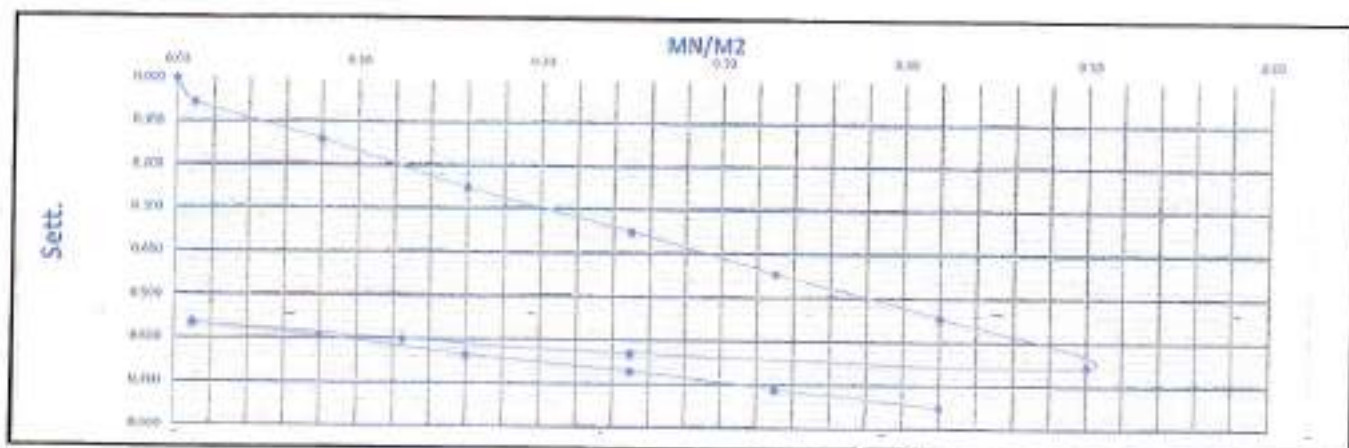
		σ_1	σ_2	σ_3
0.7 σ_1	0.35	0.44875		
0.3 σ_2	0.15	0.23625		
0.7 σ_2	0.35	0.71889		
0.3 σ_3	0.15	0.625		
D (mm)	300			
E_{v1}	111.76			
E_{v2}	479.31			
Area (Sq.m)	0.07865			

$k = \frac{Q}{S}$	2.26		
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LOAD

UN LOAD

RE LOAD



Lab. Specialist

Name :

Sign :

Lab. Engineer

Name : Mohamed Hamed
 Sign : [Signature]
 مشروع القطار السريع / فوكة - مطروح

Consultant Engineer

Name :

Sign :

20.27



Contractor



Plate Load Test Results

Layer:
Station:
Date:

Prepared Subgrade 2 0.50+

546+860

TO

546+940

20-12-23

COMPANY

YOUSSEF NEGHDA J

Location

546+915

Reading	Load	Load	Stress	Dist 1	Dist 2	Dist 3	Sett. 1	Sett. 2	Sett. 3	Avg. Sett.
Stage No.	Bar	kN	MM/M2	mm	mm	mm	mm	mm	mm	mm
0.000	0.0	0.000	0.00	8.51	8.84		0.000	0.000		0.000
1.000	1.0	0.707	0.01	8.47	8.79		0.040	0.050		0.045
2.000	7.9	5.652	0.08	8.41	8.73		0.160	0.110		0.105
0.080	15.8	11.304	0.16	8.33	8.65		0.180	0.190		0.185
4.000	24.7	17.663	0.25	8.24	8.57		0.270	0.270		0.270
5.000	32.6	23.315	0.33	8.14	8.45		0.370	0.390		0.380
6.000	41.5	29.673	0.42	8.05	8.33		0.460	0.510		0.485
7.000	49.4	35.325	0.50	7.96	8.25		0.550	0.590		0.570
8.000	24.7	17.663	0.25	7.98	8.27		0.530	0.570		0.550
9.000	12.4	8.831	0.12	8.02	8.30		0.490	0.540		0.515
9.000	1.0	0.707	0.01	8.07	8.34		0.440	0.500		0.470
10.000	1.0	0.707	0.01	8.07	8.34		0.440	0.500		0.470
11.000	7.9	5.652	0.08	8.06	8.34		0.450	0.500		0.475
12.000	15.8	11.304	0.16	8.03	8.31		0.480	0.530		0.505
13.000	24.7	17.663	0.25	8.00	8.27		0.510	0.570		0.540
14.000	32.6	23.315	0.33	7.97	8.24		0.540	0.600		0.570
15.000	41.5	29.673	0.42	7.95	8.21		0.560	0.630		0.595

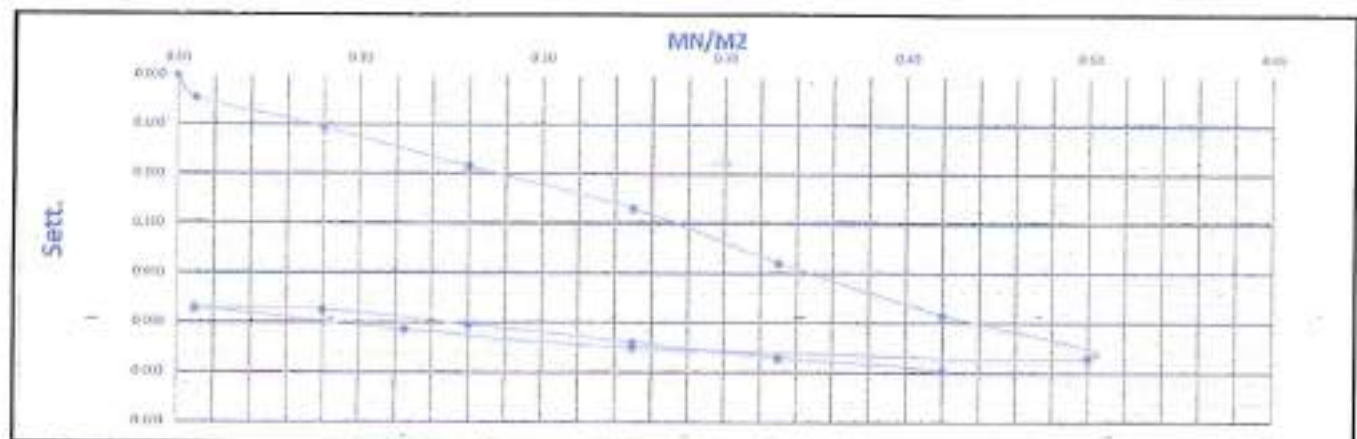
			AS	IS
0.7 σ_1	0.35	0.41862	0.23562	0.2
0.3 σ_2	0.15	0.175		
0.7 σ_2	0.35	0.57556	0.09556	0.2
0.3 σ_3	0.15	0.48		
D (mm)	300			
Ev ₁	150.98			
Ev ₂	470.93			
Area (Sq.m)	0.07865			

Ev/Ev ₁	2.47		
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LOAD

UN LOAD

RE LOAD



Lab. Specialist

Name :

Sign :

Lab. Engineer

Name : Mohamed Hamed
 Sign : *[Signature]*
 مشروع القطار السريع / فوكة - مطروح

Consultant Engineer

Name :

Sign :

[Signature]
 2-21



Contractor



المشرف الفني
المهندس
المهندس



Plate Load Test Results

Layer: Prepared Subgrade 2 0.50+
Station: 546+860 TO 546+940
Date: 20-12-23

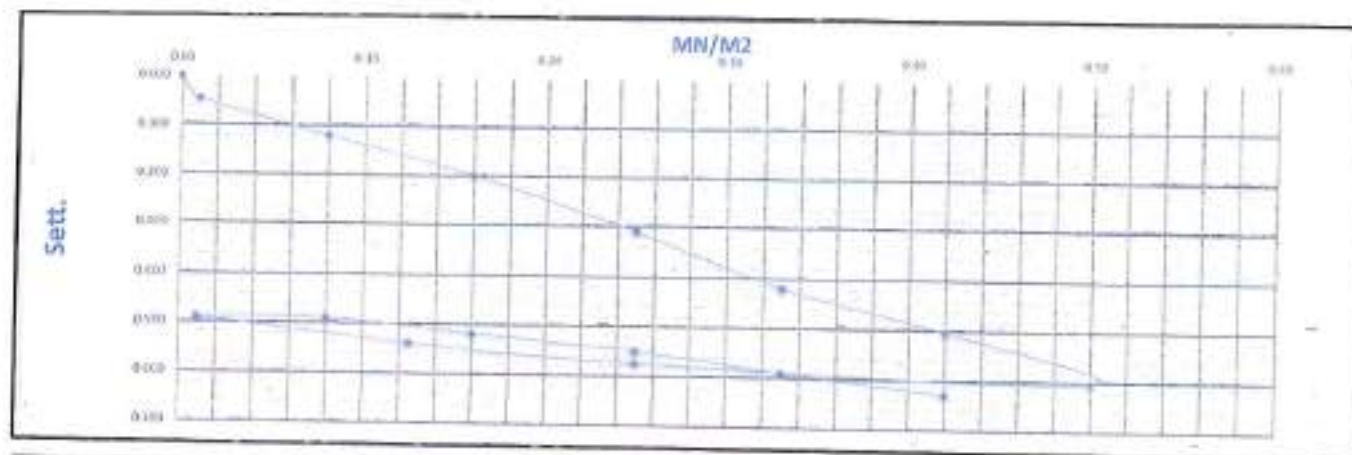
COMPANY	YOUSSEF NEGIDA
Location	546+930

Load	Load	Load	Stress	Dial 1	Dial 2	Dial 3	Sett. 1	Sett. 2	Sett. 3	Avg. Sett.
Stage No.	Bar	KN	MM/M2	mm	mm	mm	mm	mm	mm	mm
0.000	0.0	0.000	0.00	7.96	6.53		0.000	0.000		0.000
1.000	1.0	0.707	0.01	7.92	6.48		0.040	0.050		0.045
2.000	7.9	5.652	0.08	7.84	6.41		0.120	0.120		0.120
0.080	15.8	11.304	0.16	7.75	6.34		0.210	0.190		0.200
4.000	24.7	17.663	0.25	7.63	6.24		0.330	0.290		0.310
5.000	32.6	23.315	0.33	7.52	6.13		0.440	0.400		0.420
6.000	41.5	29.673	0.42	7.44	6.04		0.520	0.490		0.505
7.000	49.4	35.325	0.50	7.32	5.96		0.640	0.570		0.605
8.000	24.7	17.663	0.25	7.35	5.99		0.610	0.560		0.575
9.000	12.4	8.831	0.12	7.38	6.03		0.580	0.560		0.540
9.000	1.0	0.707	0.01	7.44	6.07		0.520	0.460		0.490
10.000	1.0	0.707	0.01	7.44	6.07		0.520	0.460		0.490
11.000	7.9	5.652	0.08	7.44	6.07		0.520	0.460		0.490
12.000	15.8	11.304	0.16	7.41	6.04		0.550	0.490		0.520
13.000	24.7	17.663	0.25	7.37	6.02		0.590	0.510		0.550
14.000	32.6	23.315	0.33	7.33	5.98		0.630	0.550		0.590
15.000	41.5	29.673	0.42	7.29	5.94		0.670	0.590		0.630

0.7 σ_1	0.35	0.4175	AS	3m
0.3 σ_1	0.15	0.19	0.2275	0.1
0.7 σ_2	0.35	0.59889	0.10889	0.2
0.3 σ_2	0.15	0.49		
D (mm)	300			
Ev ₁	197.80			
Ev ₂	413.27			
Area (Sq.m)	0.07065			

Ex/Ex1	2.04		
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LOAD
UNLOAD
RELOAD



Lab. Specialist

Name :

Sign :

Lab. Engineer

Name : *Youssef Negida*
Sign : *[Signature]*
المهندس
المشرف الفني
مشروع القطار السريع / فوكة - مطروح

Consultant Engineer

Name : *21*

Sign : *[Signature]*

2023



Contractor Consultant

Contractor



Contractor



Plate Load Test Results

Layer:
Station:
Date:

Prepared Subgrade 2 0.50+

547+000 TO 547+060
16-12-23

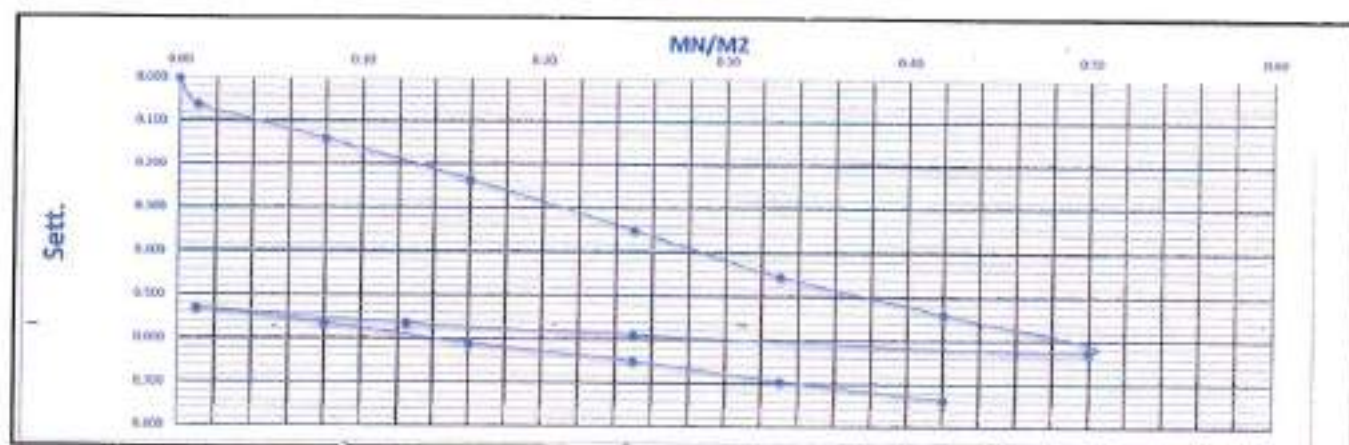
COMPANY	VOUSEF NEGIDA J.
Location	547+015

Loading	Load	Load	Stress	Dial 1	Dial 2	Dial 3	Sett. 1	Sett. 2	Sett. 3	Avg. Sett.
Stage No.	Bar	KN	MPa	mm	mm	mm	mm	mm	mm	mm
0.000	0.0	0.000	0.00	8.91	8.44		0.000	0.000		0.000
1.000	1.0	0.707	0.01	8.85	8.38		0.060	0.060		0.060
2.000	7.9	5.652	0.08	8.77	8.30		0.140	0.140		0.140
3.000	15.8	11.304	0.16	8.67	8.21		0.240	0.239		0.235
4.000	24.7	17.663	0.25	8.53	8.12		0.380	0.320		0.350
5.000	32.6	23.315	0.33	8.42	8.02		0.490	0.420		0.455
6.000	41.5	29.673	0.42	8.36	7.91		0.550	0.530		0.540
7.000	49.4	35.325	0.50	8.28	7.82		0.630	0.620		0.625
8.000	24.7	17.663	0.25	8.30	7.87		0.610	0.570		0.590
9.000	12.4	8.831	0.12	8.33	7.89		0.580	0.550		0.565
9.000	1.0	0.707	0.01	8.37	7.92		0.540	0.520		0.530
10.000	1.0	0.707	0.01	8.37	7.92		0.540	0.520		0.530
11.000	7.9	5.652	0.08	8.34	7.88		0.570	0.560		0.565
12.000	15.8	11.304	0.16	8.29	7.84		0.620	0.600		0.610
13.000	24.7	17.663	0.25	8.25	7.80		0.660	0.640		0.650
14.000	32.6	23.315	0.33	8.21	7.75		0.700	0.690		0.695
15.000	41.5	29.673	0.42	8.17	7.71		0.740	0.730		0.735

q	AS	IS
0.7 q ₁	0.35	0.46503
0.3 q ₁	0.15	0.22312
0.7 q ₂	0.35	0.70389
0.3 q ₂	0.15	0.6
D (mm)	300	
E _{v1}	185.57	
E _{v2}	433.17	
Area (Sq.m)	0.07065	

E _{v2} /E _{v1}	2.33		
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LOAD
UN LOAD
RE LOAD



Lab. Specialist

Name :

Sign :

Lab. Engineer

المهندس/م.عبدالله بن محمد
شركة المقاولات
شركة المقاولات
شركة المقاولات

Contract Engineer

Name :

Sign :



Contractor



Director



Plate Load Test Results

Layer:
Station:
Date:

Prepared Subgrade 2 0.50+

547+000	TO	547+060
16-12-23		

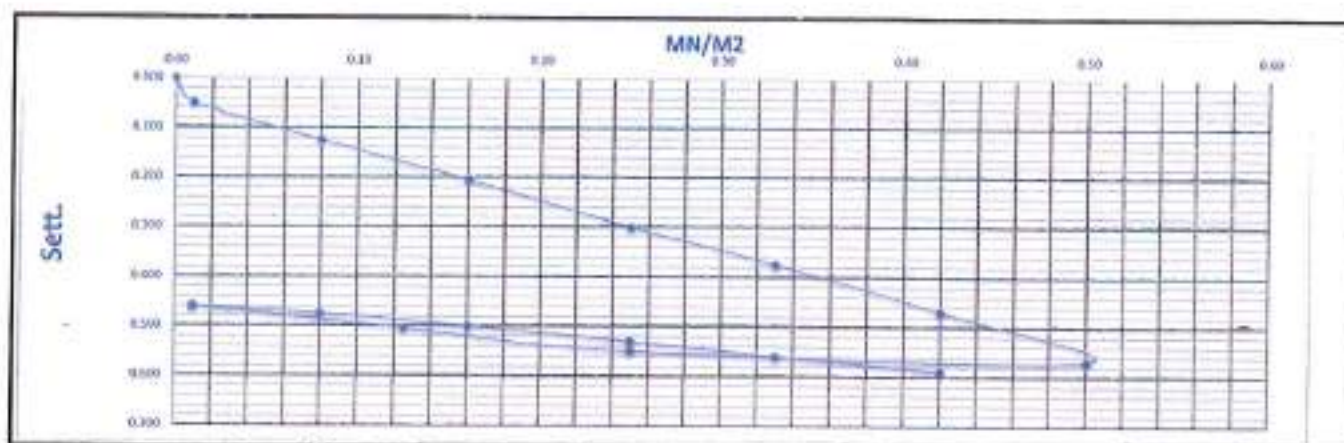
COMPANY	YOUSSEF NEGIDA J
Location	547+040

Loading	Load	Load	Stress	Dial 1	Dial 2	Dial 3	Sett. 1	Sett. 2	Sett. 3	ΔIR Sett.
Stage No.	Bar	kN	kN/M2	mm	mm	mm	mm	mm	mm	mm
0.000	0.0	0.000	0.00	7.86	8.39		0.000	0.000		0.000
1.000	1.0	0.707	0.01	7.81	8.34		0.050	0.050		0.050
2.000	7.9	5.652	0.08	7.73	8.27		0.130	0.120		0.125
0.080	15.8	11.304	0.16	7.65	8.19		0.210	0.200		0.205
4.000	24.7	17.663	0.25	7.55	8.10		0.310	0.290		0.300
5.000	32.6	23.315	0.33	7.46	8.04		0.400	0.350		0.375
6.000	41.5	29.673	0.42	7.37	7.94		0.490	0.450		0.470
7.000	49.4	35.325	0.50	7.26	7.85		0.600	0.540		0.570
8.000	24.7	17.663	0.25	7.28	7.87		0.580	0.520		0.550
9.000	12.4	8.831	0.12	7.32	7.92		0.540	0.470		0.505
9.000	1.0	0.707	0.01	7.37	7.96		0.490	0.430		0.460
10.000	1.0	0.707	0.01	7.37	7.96		0.490	0.430		0.460
11.000	7.9	5.652	0.08	7.36	7.94		0.500	0.450		0.475
12.000	15.8	11.304	0.16	7.33	7.92		0.530	0.470		0.500
13.000	24.7	17.663	0.25	7.30	7.89		0.560	0.500		0.530
14.000	32.6	23.315	0.33	7.27	7.86		0.590	0.530		0.560
15.000	41.5	29.673	0.42	7.24	7.83		0.620	0.560		0.590

σ ₁	σ ₃	ε	ΔS	Δε
0.7 σ ₁	0.35	0.3825	0.1875	0.1
0.3 σ ₁	0.15	0.195		
0.7 σ ₂	0.35	0.56667	0.07667	0.1
0.3 σ ₂	0.15	0.49		
D (mm)	300			
E _{v1}	240.00			
E _{v2}	880.91			
Area (Sq.m)	0.01665			

E _{v2} /E _{v1}	2.45		
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LOAD
UN LOAD
RE LOAD



Lab. Specialist

Name:

Sign:

Lab. Engineer

Signature of Lab. Engineer

Consultant Engineer

Name: 16/

Sign: 11/2/23



Contractor Consultant

Contractor



Contractor



Plate Load Test Results

Layer:
Station:
Date:

Prepared Subgrade 2 0.50+

547+000	TO	547+060
16-12-23		

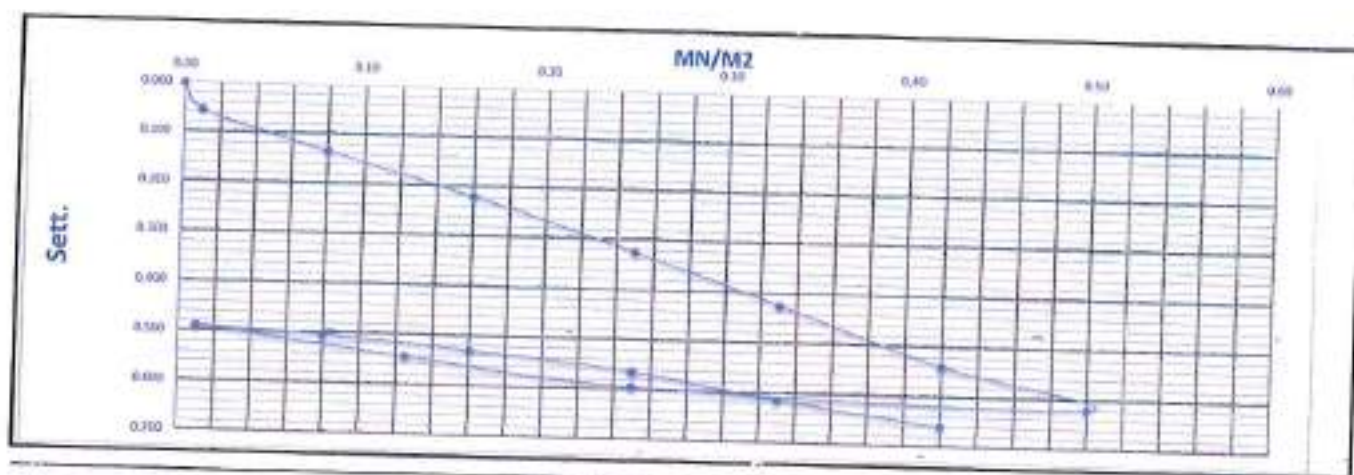
COMPANY	YOUSSEF NEGIDA 3
Location	547+055

Loading	Load	Load	Stress	Dial 1	Dial 2	Dial 3	Sett. 1	Sett. 2	Sett. 3	Avg. Sett.
Stage No.	Bar	KN	MM/12	mm	mm	mm	mm	mm	mm	mm
0.000	0.0	0.000	0.00	7.91	8.33		0.000	0.000		0.000
1.000	1.0	0.707	0.01	7.86	8.27		0.050	0.060		0.055
2.000	7.9	5.652	0.08	7.78	8.19		0.130	0.140		0.135
3.000	15.8	11.304	0.16	7.69	8.11		0.220	0.220		0.220
4.000	24.7	17.663	0.25	7.59	8.00		0.320	0.330		0.325
5.000	32.6	23.315	0.33	7.48	7.91		0.430	0.420		0.425
6.000	41.5	29.673	0.42	7.36	7.80		0.550	0.530		0.540
7.000	49.4	35.325	0.50	7.27	7.73		0.640	0.600		0.620
8.000	24.7	17.663	0.25	7.29	7.76		0.620	0.570		0.595
9.000	12.4	8.831	0.12	7.36	7.79		0.550	0.540		0.545
9.000	1.0	0.707	0.01	7.42	7.84		0.490	0.490		0.490
10.000	1.0	0.707	0.01	7.42	7.84		0.490	0.490		0.490
11.000	7.9	5.652	0.08	7.40	7.83		0.510	0.500		0.505
12.000	15.8	11.304	0.16	7.38	7.80		0.530	0.530		0.530
13.000	24.7	17.663	0.25	7.35	7.76		0.560	0.570		0.565
14.000	32.6	23.315	0.33	7.30	7.71		0.610	0.620		0.615
15.000	41.5	29.673	0.42	7.25	7.67		0.660	0.660		0.660

0.7 σ_1	0.35	0.47	AS	0.2
0.3 σ_2	0.15	0.20938		
0.7 σ_2	0.35	0.625	0.105	0.2
0.3 σ_2	0.15	0.52		
D (mm)	340			
E_{v1}	172.66			
E_{v2}	428.58			
Area (Sq.m)	0.07065			

End/Bar	248		
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LOAD
UN LOAD
RE LOAD



Lab. Specialist

Name :

Sign :

Lab. Engineer

Name : *المهندس محمد قنديل*
Sign : *المهندس محمد قنديل*
مشروع إنشاء الطرق في منطقة "مطروح"

Consultant Engineer

Name : 16

Sign : 12



Contractor

Youssef Negm & Partners
Civil Engineering

Plate Load Test Results

Layer:
Station:
Date:

Prepared Subgrade 2 0.50+

547+060

TO

547+140

16-12-23

COMPANY

YOUSSEF NEGMA J

Location

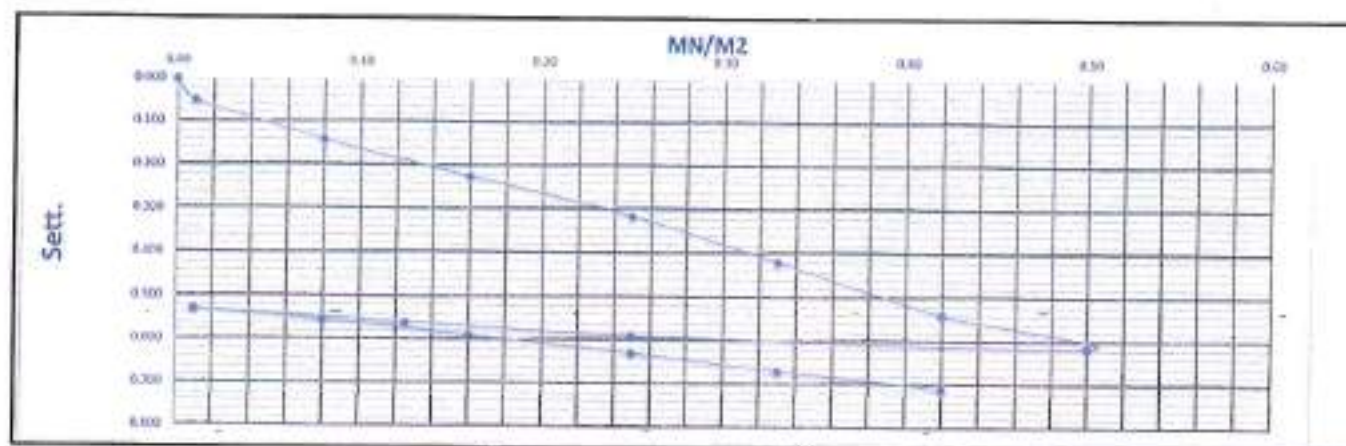
547+070

Loading	Load	End	Stress	Dist 1	Dist 2	Dist 3	Sett. 1	Sett. 2	Sett. 3	Avg. Sett.
Stage No.	Bar	KN	MPa	mm	mm	mm	mm	mm	mm	mm
0.000	0.0	0.000	0.00	9.14	8.87		0.000	0.000		0.000
1.000	1.0	0.707	0.01	9.09	8.82		0.050	0.050		0.050
2.000	7.9	5.652	0.08	8.99	8.74		0.150	0.130		0.140
0.080	15.8	11.304	0.16	8.91	8.65		0.230	0.220		0.225
4.000	24.7	17.663	0.25	8.83	8.55		0.310	0.320		0.315
5.000	32.6	23.315	0.33	8.73	8.44		0.410	0.430		0.420
6.000	41.5	29.673	0.42	8.61	8.32		0.530	0.550		0.540
7.000	49.4	35.325	0.50	8.53	8.25		0.610	0.620		0.615
8.000	24.7	17.663	0.25	8.56	8.27		0.580	0.600		0.590
9.000	12.4	8.831	0.12	8.58	8.31		0.560	0.560		0.560
9.000	1.0	0.707	0.01	8.61	8.34		0.530	0.530		0.530
10.000	1.0	0.707	0.01	8.61	8.34		0.530	0.530		0.530
11.000	7.9	5.652	0.08	8.58	8.32		0.560	0.550		0.555
12.000	15.8	11.304	0.16	8.55	8.28		0.590	0.590		0.590
13.000	24.7	17.663	0.25	8.51	8.24		0.630	0.630		0.630
14.000	32.6	23.315	0.33	8.47	8.20		0.670	0.670		0.670
15.000	41.5	29.673	0.42	8.43	8.16		0.710	0.710		0.710

		ΔS	$\Delta \sigma$
0.7 σ_1	0.35	0.47438	0.26
0.3 σ_2	0.15	0.21438	
0.7 σ_2	0.35	0.67889	0.2
0.3 σ_1	0.15	0.58	
D (mm)	300		
E_{v1}	173.08		
E_{v2}	455.07		
Area (Sq.m)	0.07065		

$E = 2E_{v1}$	2.43	
---------------	------	--

LOAD
UN LOAD
RE LOAD



Lab. Specialist

Name :

Sign :

Lab. Engineer

Name: *Amr Mohamed El-Hamdy*
Sign: *Amr Mohamed El-Hamdy*
مشروع القطار السريع - رفوكة - مطروح

Consultant Engineer

Name : 16

Sign : 12 / 2023



Contractor



Youssef Negida & Partners



Plate Load Test Results

Layer:
Station:
Date:

Prepared Subgrade 2 0.50+

547+060

TO

547+140

16-12-23

COMPANY

YOUSSEF NEGIDA & PARTNERS

Location

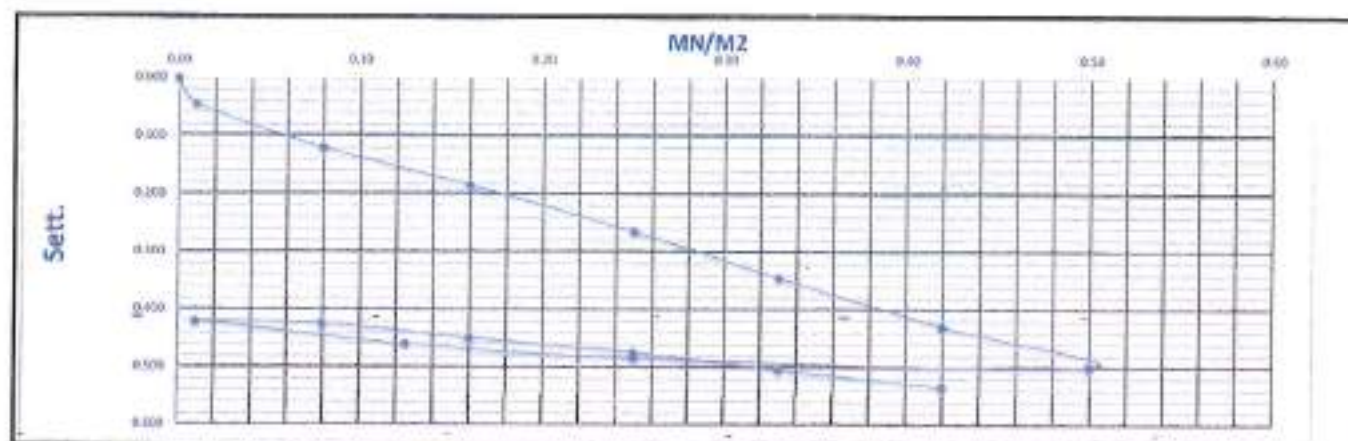
547+095

Loading	Load	Load	Stress	Dial 1	Dial 2	Dial 3	Sett. 1	Sett. 2	Sett. 3	Avg. Sett.
Stage No.	Bar	KN	MPa/M2	mm	mm	mm	mm	mm	mm	mm
0.000	0.0	0.000	0.00	8.34	7.87		0.000	0.000		0.000
1.000	1.0	0.707	0.01	8.29	7.83		0.050	0.040		0.045
2.000	7.9	5.652	0.08	8.21	7.76		0.130	0.110		0.120
0.080	15.8	11.304	0.16	8.15	7.69		0.190	0.180		0.185
4.000	24.7	17.663	0.25	8.07	7.61		0.270	0.260		0.265
5.000	32.6	23.315	0.33	8.00	7.52		0.340	0.350		0.345
6.000	41.5	29.673	0.42	7.91	7.44		0.430	0.430		0.430
7.000	49.4	35.325	0.50	7.84	7.37		0.500	0.500		0.500
8.000	24.7	17.663	0.25	7.96	7.38		0.480	0.490		0.485
9.000	12.4	8.831	0.12	7.88	7.41		0.460	0.460		0.460
9.000	1.0	0.707	0.01	7.93	7.44		0.410	0.430		0.420
10.000	1.0	0.707	0.01	7.93	7.44		0.410	0.430		0.420
11.000	7.9	5.652	0.08	7.92	7.44		0.420	0.430		0.425
12.000	15.8	11.304	0.16	7.90	7.41		0.440	0.460		0.450
13.000	24.7	17.663	0.25	7.87	7.39		0.470	0.480		0.475
14.000	32.6	23.315	0.33	7.84	7.36		0.500	0.510		0.505
15.000	41.5	29.673	0.42	7.81	7.33		0.530	0.540		0.535

		e	AS	AS
0.7 σ_1	0.35	0.35875	0.19188	0.2
0.3 σ_1	0.15	0.17688		
0.7 σ_2	0.35	0.51167	0.08167	0.2
0.3 σ_2	0.15	0.43		
D (mm)	380			
E _{v1}	234.53			
E _{v2}	551.02			
Area (Sqmm)	0.07065			

E _v E _{v1}	2.35		
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LOAD
UN LOAD
RE LOAD



Lab. Specialist

Name :

Sign :

Lab. Engineer

Name :

Sign :

مشروع انشاء الطريق - بطريق

Consultant Engineer

Name :

Sign :

16/12/2023



Contractor



المهندس احمد ابو حيدر
In-charge of the project



Plate Load Test Results

Layer:
Station:
Date:

Prepared Subgrade 2 0.50+

547+060	TO	547+140
16-12-23		

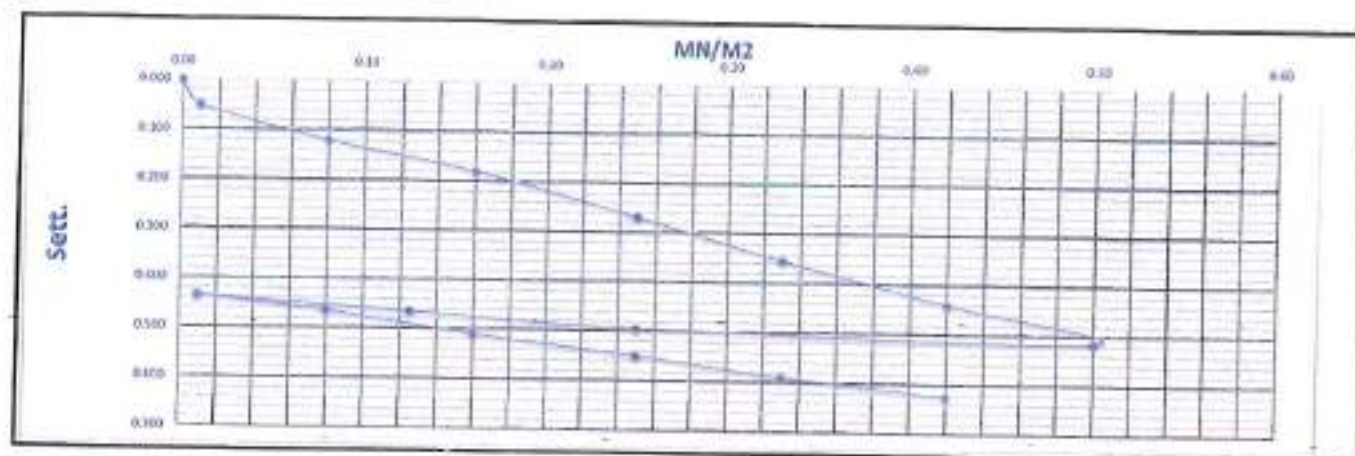
COMPANY	YOUSSEF NEGIDA J
Location	547+120

Loading	Load	Load	Stress	Dial 1	Dial 2	Dial 3	Sett. 1	Sett. 2	Sett. 3	Avg. Sett.
Stage No.	Bar	KN	MM/M2	mm	mm	mm	mm	mm	mm	mm
0.000	0.0	0.000	0.00	7.82	8.45		0.000	0.000		0.000
1.000	1.0	0.707	0.01	7.78	8.39		0.040	0.060		0.050
2.000	7.9	5.652	0.08	7.72	8.31		0.100	0.140		0.120
3.000	15.8	11.304	0.16	7.65	8.26		0.170	0.190		0.180
4.000	24.7	17.663	0.25	7.57	8.16		0.250	0.290		0.270
5.000	32.6	23.315	0.33	7.48	8.08		0.340	0.370		0.355
6.000	41.5	29.673	0.42	7.39	8.00		0.430	0.450		0.440
7.000	49.4	35.325	0.50	7.31	7.93		0.510	0.520		0.515
8.000	24.7	17.663	0.25	7.33	7.95		0.450	0.500		0.495
9.000	12.4	8.831	0.12	7.36	7.98		0.460	0.470		0.465
9.000	1.0	0.707	0.01	7.39	8.01		0.430	0.440		0.435
10.000	1.0	0.707	0.01	7.39	8.01		0.430	0.440		0.435
11.000	7.9	5.652	0.08	7.36	7.98		0.460	0.470		0.465
12.000	15.8	11.304	0.16	7.31	7.94		0.510	0.510		0.510
13.000	24.7	17.663	0.25	7.27	7.90		0.550	0.550		0.550
14.000	32.6	23.315	0.33	7.23	7.86		0.590	0.590		0.590
15.000	41.5	29.673	0.42	7.19	7.83		0.630	0.620		0.625

		I	AS	So
0.7 σ_1	0.35	0.37438	0.20188	0.2
0.3 σ_1	0.15	0.1725		
0.7 σ_2	0.35	0.59178		
0.3 σ_2	0.15	0.495	0.10177	0.2
D (mm)	300			
E_{v1}	232.91			
E_{v2}	417.85			
Area (Sq.m)	0.61065			

Ex-20x1	L.98		
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LOAD
UN LOAD
RE LOAD



Lab. Specialist

Name :
Sign :

Lab. Engineer

Name: Dr. Hamed al-Hamed
Sign: [Signature]
مشروع: الطريق السريع / ذوقية - معارون

Consultant Engineer

Name: 16
Sign: 12/2023



Contractor



Plate Load Test Results

Layer:
Station:
Date:

Prepared Subgrade 2 0.50+

547+060

TO

547+140

16-12-23

COMPANY

YOUSSEF NEGIDA & PARTNERS

Location

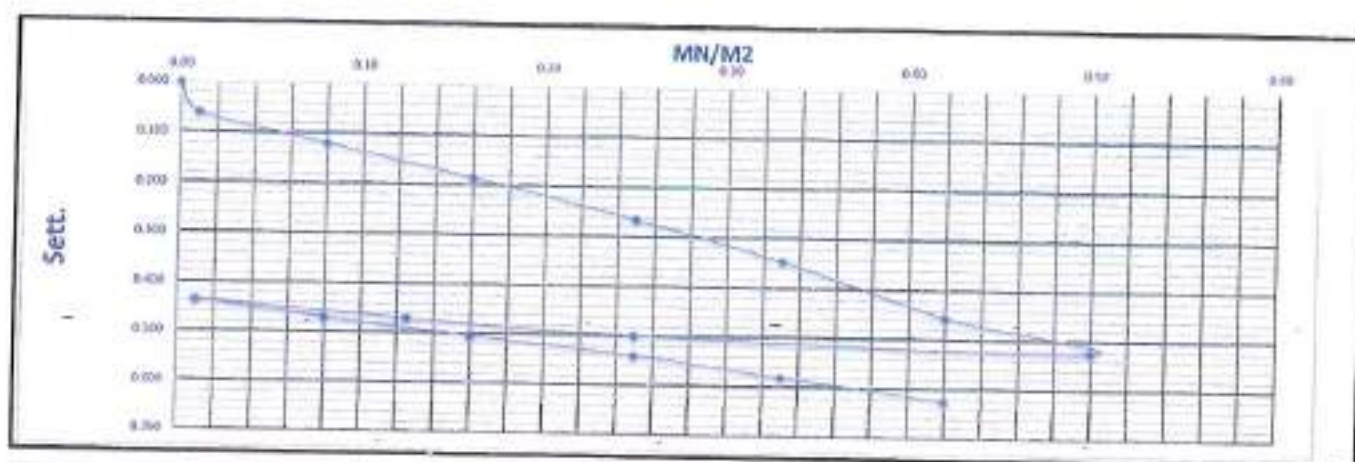
547+140

Loading	Load	Load	Stress	Dist 1	Dist 2	Dist 3	Sett. 1	Sett. 2	Sett. 3	Avg. Sett.
Stage No.	Bar	kN	MPa	mm	mm	mm	mm	mm	mm	mm
0.000	0.0	0.000	0.00	7.45	8.62		0.000	0.000		0.000
1.000	1.0	0.707	0.01	7.38	8.57		0.070	0.050		0.060
2.000	7.9	5.652	0.08	7.31	8.52		0.140	0.100		0.120
3.000	15.8	11.304	0.16	7.24	8.46		0.210	0.160		0.185
4.000	24.7	17.663	0.25	7.16	8.38		0.290	0.240		0.265
5.000	32.6	23.315	0.33	7.09	8.29		0.360	0.330		0.345
6.000	41.5	29.673	0.42	6.97	8.19		0.480	0.430		0.455
7.000	49.4	35.325	0.50	6.90	8.12		0.550	0.500		0.525
8.000	24.7	17.663	0.25	6.92	8.13		0.530	0.470		0.500
9.000	12.4	8.831	0.12	6.95	8.18		0.500	0.440		0.470
9.000	1.0	0.707	0.01	6.99	8.21		0.460	0.410		0.435
10.000	1.0	0.707	0.01	6.99	8.21		0.460	0.410		0.435
11.000	7.9	5.652	0.08	6.95	8.18		0.500	0.440		0.470
12.000	15.8	11.304	0.16	6.91	8.15		0.540	0.470		0.505
13.000	24.7	17.663	0.25	6.86	8.13		0.590	0.490		0.540
14.000	32.6	23.315	0.33	6.81	8.10		0.640	0.520		0.580
15.000	41.5	29.673	0.42	6.75	8.07		0.700	0.550		0.625

		σ	ΔS	$\Delta \sigma$
0.7 σ_1	0.35	0.39375	0.21688	0.2
0.3 σ_2	0.15	0.17687		
0.7 σ_2	0.35	0.59	0.485	0.2
0.3 σ_1	0.15	0.505		
D (mm)	300			
E_{v1}	207.49			
E_{v2}	529.43			
Area (Sq. cm)	60700			

Ex. No.	255		
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LOAD
UN LOAD
RE LOAD



Lab. Specialist

Name :

Sign :

Lab. Engineer

Name : *Mohamed El-Hamdy*
Sign : *Mohamed El-Hamdy*
مشروع القطار السكك الحديدية - محاور

Consultant Engineer

Name :

Sign :

16/12/2023



Contractor

Ministry of Transport and Infrastructure
State of Palestine

Plate Load Test Results

Layer:
Station:
Date:

SUB-BALLAST 0.90+

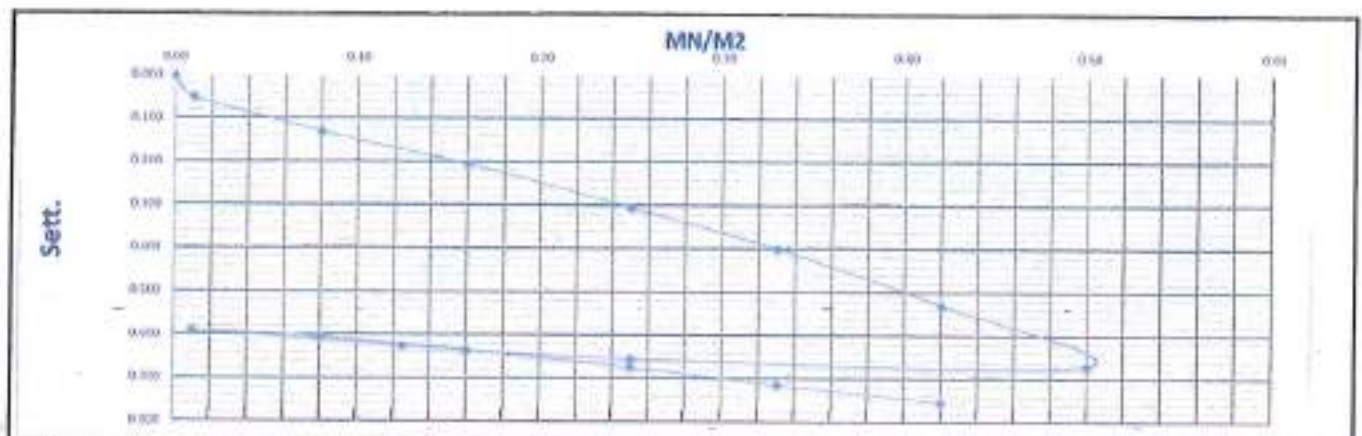
546+760	TO	546+860
26-12-23		

COMPANY	YOUSSEF NEGIDA J
Location	546+789

Loading	Load	Load	Stress	Dia1	Dia12	Dia13	Sett. 1	Sett. 2	Sett. 3	Avg. Sett.
Stage No.	Rat	kN	MM/M2	mm	mm	mm	mm	mm	mm	mm
0.000	0.0	0.000	0.00	7.39	8.17		0.000	0.000		0.000
1.000	1.0	0.707	0.01	7.33	8.13		0.040	0.040		0.050
2.000	7.9	5.652	0.08	7.26	8.04		0.130	0.130		0.130
3.000	15.8	11.304	0.16	7.17	7.98		0.220	0.190		0.205
4.000	24.7	17.663	0.25	7.08	7.87		0.310	0.300		0.305
5.000	32.6	23.315	0.33	6.98	7.78		0.410	0.390		0.400
6.000	41.5	29.673	0.42	6.88	7.62		0.510	0.550		0.530
7.000	49.4	35.325	0.50	6.72	7.50		0.670	0.670		0.670
8.000	24.7	17.663	0.25	6.73	7.52		0.660	0.650		0.655
9.000	12.4	8.831	0.12	6.76	7.55		0.630	0.620		0.625
9.000	1.0	0.707	0.01	6.80	7.58		0.590	0.590		0.590
10.000	1.0	0.707	0.01	6.80	7.58		0.590	0.590		0.590
11.000	7.9	5.652	0.08	6.79	7.56		0.600	0.610		0.605
12.000	15.8	11.304	0.16	6.77	7.52		0.620	0.650		0.635
13.000	24.7	17.663	0.25	6.72	7.49		0.670	0.680		0.675
14.000	32.6	23.315	0.33	6.66	7.47		0.730	0.700		0.715
15.000	41.5	29.673	0.42	6.64	7.41		0.750	0.760		0.755

		s	ΔS	Ar
0.7 σ ₁	0.35	0.4075	0.21188	0.2
0.3 σ ₁	0.15	0.19563		
0.7 σ ₂	0.35	0.72389		
0.3 σ ₂	0.15	0.62	0.10189	0.2
D (mm)	304			
E _{v1}	212.39			
E _{v2}	433.16			
Area (Sq. m)	0.07865			

Ex-2 Ex-1	2.04		
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LOAD
UN LOAD
RE LOAD

Lab. Specialist

Name :

Sign :

Lab. Engineer

Name : SHEHAB HANDY

شركة نجدة للتقنية والبناء
المباني السكنية
مشروع التطوير السريع / فوكة - منطوق

Consultant Engineer

Name :

Sign :

27/12
2023



Plate Load Test Results

Layer:
Station:
Date:

SUB-BALLAST 0.90+

546+760 TO 546+860

26-12-23

COMPANY

YOUSSEF NODIAS

Location

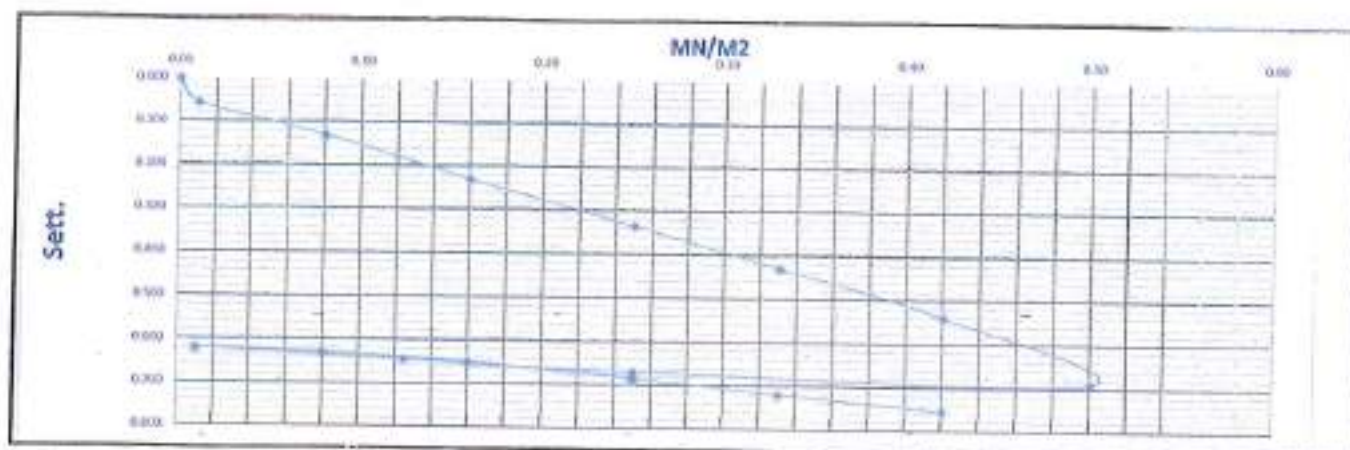
Station

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	6.80	7.69		0.000	0.000		0.000
1.000	1.0	0.707	0.01	6.72	7.66		0.080	0.030		0.055
2.000	7.9	5.652	0.08	6.65	7.58		0.150	0.110		0.130
3.000	15.8	11.304	0.16	6.53	7.50		0.270	0.190		0.230
4.000	24.7	17.663	0.25	6.44	7.38		0.360	0.310		0.335
5.000	32.6	23.315	0.33	6.36	7.27		0.440	0.420		0.430
6.000	41.5	29.673	0.42	6.24	7.17		0.560	0.520		0.540
7.000	49.4	35.325	0.50	6.10	7.01		0.700	0.680		0.690
8.000	24.7	17.663	0.25	6.12	7.03		0.680	0.660		0.670
9.000	12.4	8.831	0.12	6.15	7.05		0.650	0.640		0.645
9.000	1.0	0.707	0.01	6.18	7.07		0.620	0.620		0.620
10.000	1.0	0.707	0.01	6.18	7.07		0.620	0.620		0.620
11.000	7.9	5.652	0.08	6.17	7.06		0.630	0.630		0.630
12.000	15.8	11.304	0.16	6.15	7.04		0.650	0.650		0.650
13.000	24.7	17.663	0.25	6.12	7.00		0.680	0.690		0.685
14.000	32.6	23.315	0.33	6.09	6.96		0.710	0.730		0.720
15.000	41.5	29.673	0.42	6.06	6.92		0.740	0.770		0.755

0.7 σ_1	0.35	0.408
0.3 σ_1	0.15	0.217
0.7 σ_2	0.35	0.7277
0.3 σ_2	0.15	0.64
D (mm)	300	
E_{v1}	235.29	
E_{v2}	312.65	
Area (Sqmm)	0.07065	

E_{v2}/E_{v1}	2.18	
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LOAD
UN LOAD
RE LOAD



Lab. Specialist

Name :

Sign :

Lab. Engineer

Name : SHEHAB HAMDY

Sign :

مشروع القطر السريع / فوكة - مطروح
مهندس الاستشارات الهندسية
ش. هاشم هاشم

Consultant E

Name :

Sign :

27/12
2023



Plate Load Test Results

Layer:
Station:
Date:

SUB-BALLAST 0.90+

546+760	TO	546+860
26-12-23		

COMPANY	YOUSSEF NEGIDA J
Location	546+830

Loading	Load	Load	Stress	Dial 1	Dial 2	Dial 3	Sett. 1	Sett. 2	Sett. 3	Avg. Sett.
Stage No.	Bar	KN	MIN/ML	mm	mm	mm	mm	mm	mm	mm
0.000	0.0	0.000	0.00	7.14	6.81		0.000	0.000		0.000
1.000	1.0	0.707	0.01	7.05	6.72		0.090	0.090		0.090
2.000	7.9	5.652	0.08	6.96	6.66		0.180	0.150		0.165
0.080	15.8	11.304	0.16	6.87	6.58		0.270	0.230		0.250
4.000	24.7	17.663	0.25	6.80	6.48		0.340	0.330		0.335
5.000	32.6	23.315	0.33	6.72	6.42		0.420	0.390		0.405
6.000	41.5	29.673	0.42	6.66	6.33		0.480	0.480		0.480
7.000	49.4	35.325	0.50	6.55	6.26		0.590	0.550		0.570
8.000	24.7	17.663	0.25	6.57	6.29		0.570	0.520		0.545
9.000	12.4	8.831	0.12	6.59	6.31		0.550	0.500		0.525
9.000	1.0	0.707	0.01	6.62	6.34		0.520	0.470		0.495
10.000	1.0	0.707	0.01	6.62	6.34		0.520	0.470		0.495
11.000	7.9	5.652	0.08	6.61	6.32		0.530	0.490		0.510
12.000	15.8	11.304	0.16	6.58	6.29		0.560	0.520		0.540
13.000	24.7	17.663	0.25	6.56	6.25		0.580	0.560		0.570
14.000	32.6	23.315	0.33	6.54	6.21		0.600	0.600		0.600
15.000	41.5	29.673	0.42	6.51	6.18		0.630	0.630		0.630

0.7 σ_c	0.35	0.40125	AS	At
0.3 σ_c	0.15	0.21918	0.16188	0.2
0.7 σ_c	0.35	0.61667	0.08167	0.2
0.3 σ_c	0.15	0.515		
D (mm)	300			
E_{v1}	212.99			
E_{v2}	551.03			
Area (Square)	0.01963			

Ex-201	1.50		
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LOAD
UN LOAD
RE LOAD



Lab. Specialist

Name :
Sign :

Lab. Engineer

Name: SHEHAB HANOUY

شركة لتأجير المعدات
والجمل العسكري
مشروع القطر السريع / فوكة - مطروح

Consultant Engineer

Name :
Sign :

27/12
2023



Plate Load Test Results

Layer:
Station:
Date:

SUB-BALLAST 0.90+

546+760

TO

546+860

26-12-23

COMPANY

YOUSSEF NEGIDA & PARTNERS

Location

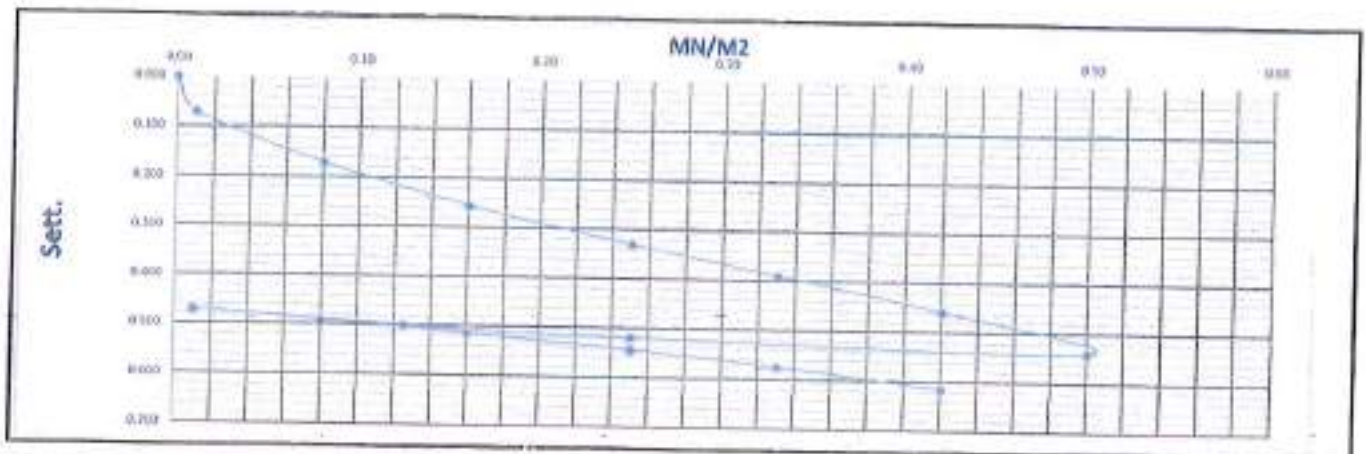
846+855

Loding	Load	Load	Stress	Dial 1	Dial 2	Dial 3	Sett. 1	Sett. 2	Sett. 3	Avg. Sett.
Stage No.	Bar	KN	MM/M2	mm	mm	mm	mm	mm	mm	mm
0.000	0.0	0.000	0.00	8.08	9.10		0.000	0.000		0.000
1.000	1.0	0.707	0.01	8.00	9.04		0.080	0.060		0.070
2.000	7.9	5.652	0.08	7.91	8.93		0.170	0.170		0.170
0.080	15.8	11.304	0.16	7.83	8.84		0.250	0.260		0.255
4.000	24.7	17.663	0.25	7.76	8.76		0.320	0.340		0.330
5.000	32.6	23.315	0.33	7.70	8.70		0.380	0.400		0.390
6.000	41.5	29.673	0.42	7.63	8.63		0.450	0.470		0.460
7.000	49.4	35.325	0.50	7.55	8.55		0.530	0.550		0.540
8.000	24.7	17.663	0.25	7.58	8.56		0.500	0.540		0.520
9.000	12.4	8.831	0.12	7.60	8.58		0.480	0.520		0.500
9.000	1.0	0.707	0.01	7.63	8.61		0.450	0.490		0.470
10.000	1.0	0.707	0.01	7.63	8.61		0.450	0.490		0.470
11.000	7.9	5.652	0.08	7.61	8.59		0.470	0.510		0.490
12.000	15.8	11.304	0.16	7.58	8.57		0.500	0.530		0.515
13.000	24.7	17.663	0.25	7.56	8.53		0.520	0.570		0.545
14.000	32.6	23.315	0.33	7.53	8.50		0.550	0.600		0.575
15.000	41.5	29.673	0.42	7.49	8.46		0.590	0.640		0.615

		σ	ΔS	Δs
0.7 σ_1	0.35	0.39	0.14563	0.2
0.3 σ_1	0.15	0.24438		
0.7 σ_2	0.35	0.58389	0.07389	0.2
0.3 σ_2	0.15	0.51		
D (mm)	300			
E_{v1}	389.01			
E_{v2}	609.04			
Area (Square)	0.07065			

Ev/Est	1.97		
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LOAD
UN LOAD
RE LOAD



Lab. Specialist

Name :

Sign :

Lab. Engineer

Name : SHEHAB HAMDI

شركة نجيدة الهندسة
المعمل المركزي
مشروع القطار السريع / فوكة - مطروح

Consultant Engineer

Name :

Sign :

27/12
2023



Plate Load Test Results

Layer:
Station:
Date:

SUB-BALLAST 0.90+

546+860	TO	546+940
26-12-23		

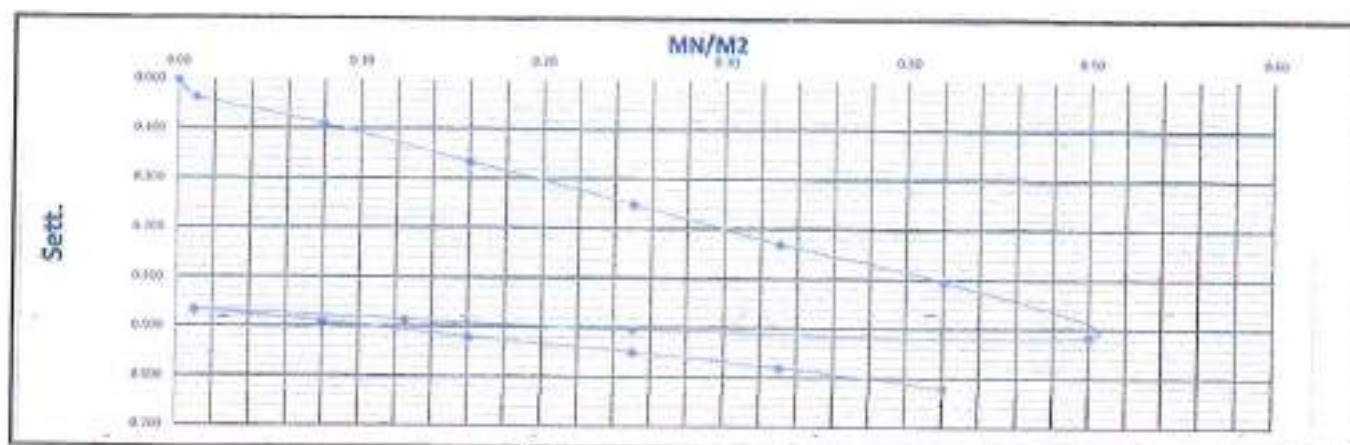
COMPANY	YOUSSEF NEGIDA J
Location	546+880

Loading	Load	Load	Stress	Dial 1	Dial 2	Dial 3	Sett. 1	Sett. 2	Sett. 3	Avg. Sett.
Stage No.	Bar	KN	MM/MT	mm	mm	mm	mm	mm	mm	mm
0.000	0.0	0.000	0.00	8.64	8.82		0.000	0.000		0.000
1.000	1.0	0.707	0.01	8.61	8.78		0.030	0.040		0.035
2.000	7.9	5.652	0.08	8.56	8.72		0.080	0.100		0.090
0.080	15.8	11.304	0.16	8.48	8.65		0.160	0.170		0.165
4.000	24.7	17.663	0.25	8.40	8.56		0.240	0.260		0.250
5.000	32.6	23.315	0.33	8.33	8.47		0.310	0.350		0.330
6.000	41.5	29.673	0.42	8.27	8.38		0.370	0.440		0.405
7.000	49.4	35.325	0.50	8.14	8.29		0.500	0.530		0.515
8.000	24.7	17.663	0.25	8.15	8.30		0.490	0.520		0.505
9.000	12.4	8.831	0.12	8.17	8.32		0.470	0.500		0.485
9.000	1.0	0.707	0.01	8.19	8.34		0.450	0.480		0.465
10.000	1.0	0.707	0.01	8.19	8.34		0.450	0.480		0.465
11.000	7.9	5.652	0.08	8.17	8.31		0.470	0.510		0.490
12.000	15.8	11.304	0.16	8.13	8.29		0.510	0.530		0.520
13.000	24.7	17.663	0.25	8.10	8.26		0.540	0.560		0.550
14.000	32.6	23.315	0.33	8.08	8.22		0.560	0.600		0.580
15.000	41.5	29.673	0.42	8.05	8.17		0.590	0.650		0.620

0.7 σ_1	0.35	0.30875	AS	3e
0.3 σ_2	0.15	0.15563	0.07389	0.2
0.7 σ_2	0.35	0.58889		
0.3 σ_3	0.15	0.515		
D (mm)	300			
E_{v1}	293.88			
E_{v2}	609.01			
Area (Sq.m)	0.07065			

Ex 2023	2.07		
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LOAD
UN LOAD
RE LOAD



Lab. Specialist

Name :

Sign :

Lab. Engineer

Name : SHEHAB HAMDY

شركة نهجهاوة للمقاولات
المعمل المركزي
مشروع القطر السريع / فوكة - مطروح

Consultant Engineer

Name :

Sign :

27/12
2023



Contractor

VUSSEF NEGIDA J
Qatar

Plate Load Test Results

Layer:

SUB-BALLAST 0.90+

Station:

546+860

TO

546+940

Date:

26-12-23

COMPANY

VUSSEF NEGIDA J

Location

546+895

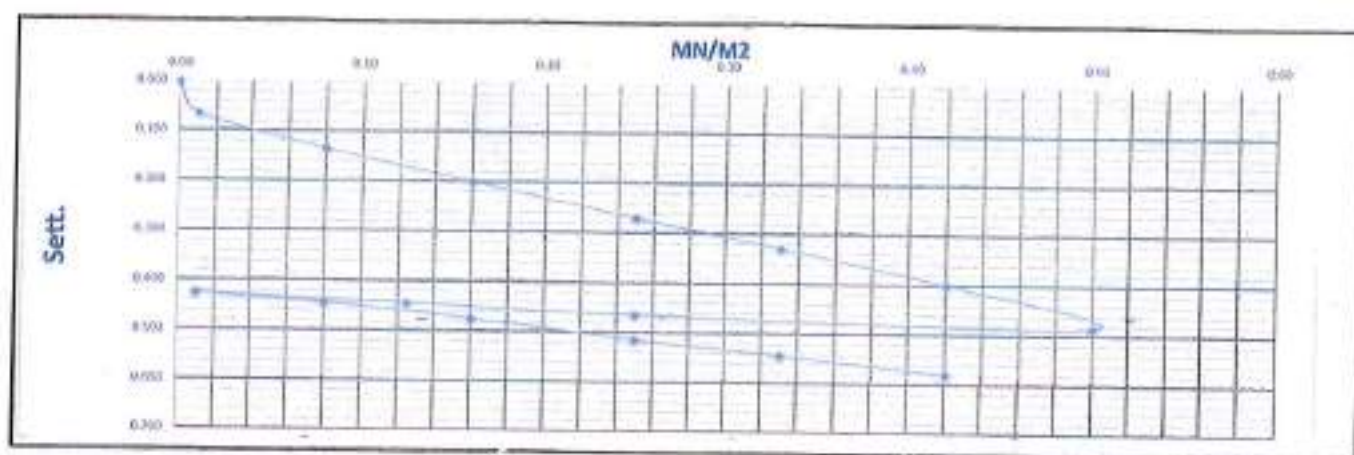
Loading	Load	Load	Stress	Dial 1	Dial 2	Dial 3	Sett. 1	Sett. 2	Sett. 3	Avg. Sett.
Stage No.	Bar	KN	NEN/M2	mm	mm	mm	mm	mm	mm	mm
0.000	0.0	0.000	0.00	7.43	8.52		0.000	0.000		0.000
1.000	1.0	0.707	0.01	7.38	8.44		0.050	0.080		0.065
2.000	7.9	5.652	0.08	7.32	8.36		0.110	0.160		0.135
0.080	15.8	11.304	0.16	7.25	8.30		0.180	0.220		0.200
4.000	24.7	17.663	0.25	7.18	8.23		0.250	0.290		0.270
5.000	32.6	23.315	0.33	7.12	8.17		0.310	0.350		0.330
6.000	41.5	29.673	0.42	7.04	8.11		0.390	0.410		0.400
7.000	49.4	35.325	0.50	6.95	8.03		0.480	0.490		0.485
8.000	24.7	17.663	0.25	6.97	8.05		0.460	0.470		0.465
9.000	12.4	8.831	0.12	6.99	8.07		0.440	0.450		0.445
9.000	1.0	0.707	0.01	7.02	8.08		0.410	0.440		0.425
10.000	1.0	0.707	0.01	7.02	8.08		0.410	0.440		0.425
11.000	7.9	5.652	0.08	7.00	8.06		0.430	0.460		0.445
12.000	15.8	11.304	0.16	6.97	8.03		0.460	0.490		0.475
13.000	24.7	17.663	0.25	6.93	7.99		0.500	0.530		0.515
14.000	32.6	23.315	0.33	6.89	7.97		0.540	0.550		0.545
15.000	41.5	29.673	0.42	6.85	7.94		0.580	0.580		0.580

7.00

	σ	ϵ	ΔS	S_r
0.7 σ_1	0.35	0.32563	0.13375	0.2
0.3 σ_1	0.15	0.19187		
0.7 σ_2	0.35	0.55278	0.08778	0.2
0.3 σ_2	0.15	0.465		
D (mm)	300			
E_{r1}	336.45			
E_{r2}	612.67			
Area (Sq.m)	0.07065			

E_{r2}/E_{r1}	1.52		
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LOAD
UN LOAD
RE LOAD



Lab. Specialist

Name :

Sign :

Lab. Engineer

Name : SHEHAB HAMOY

شركة تخطيط وتطوير
المباني السكنية
مشروع القطار السريع - قطرة - مطروح

Consultant Engineer

Name :

Sign :

27/12
2023



Contractor

Ministry of Transport and Public Works
State of Palestine

Plate Load Test Results

Layer:
Station:
Date:

SUB-BALLAST 0.90+

546+860	TO	546+940
26-12-23		

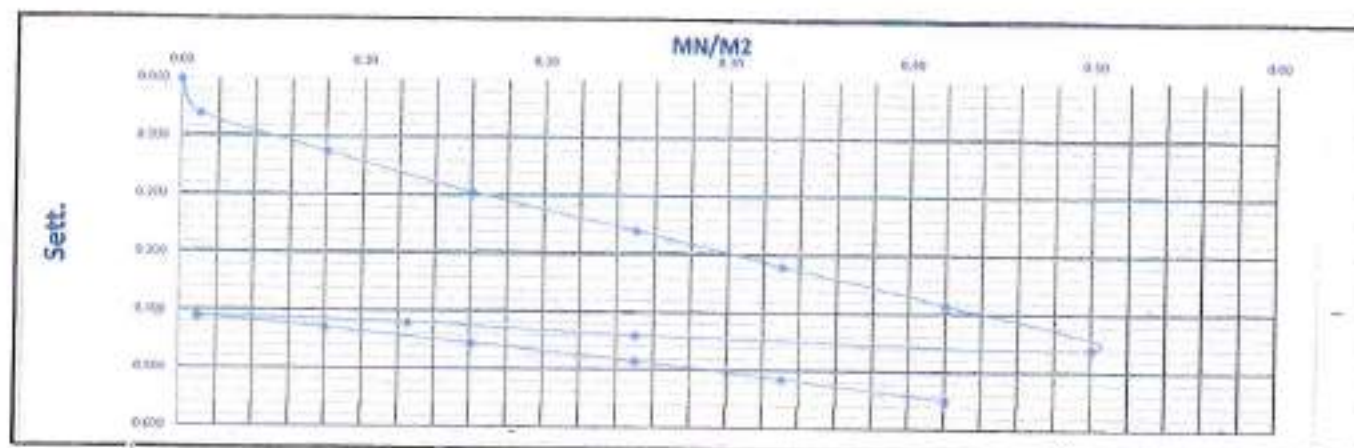
COMPANY	VOUSSEF NEGIDA J
Location	546+905

Loading	Load	Load	Stress	Defl. 1	Defl. 2	Defl. 3	Sett. 1	Sett. 2	Sett. 3	ΔSett. Sett.
Stage No.	Bar	KN	MIN/M2	mm	mm	mm	mm	mm	mm	mm
0.000	0.0	0.000	0.00	7.63	8.86		0.000	0.000		0.000
1.000	1.0	0.707	0.01	7.57	8.80		0.060	0.060		0.060
2.000	7.9	5.652	0.08	7.51	8.73		0.120	0.130		0.125
0.080	15.8	11.304	0.16	7.44	8.66		0.190	0.200		0.195
4.000	24.7	17.663	0.25	7.37	8.60		0.260	0.260		0.260
5.000	32.6	23.315	0.33	7.30	8.55		0.330	0.310		0.320
6.000	41.5	29.673	0.42	7.24	8.48		0.390	0.380		0.385
7.000	49.4	35.325	0.50	7.16	8.41		0.470	0.450		0.460
8.000	24.7	17.663	0.25	7.18	8.43		0.450	0.430		0.440
9.000	12.4	8.831	0.12	7.20	8.45		0.430	0.410		0.420
9.000	1.0	0.707	0.01	7.21	8.46		0.420	0.400		0.410
10.000	1.0	0.707	0.01	7.21	8.46		0.420	0.400		0.410
11.000	7.9	5.652	0.08	7.19	8.44		0.440	0.420		0.430
12.000	15.8	11.304	0.16	7.16	8.42		0.470	0.440		0.455
13.000	24.7	17.663	0.25	7.12	8.40		0.510	0.460		0.485
14.000	32.6	23.315	0.33	7.09	8.37		0.540	0.490		0.515
15.000	41.5	29.673	0.42	7.05	8.34		0.580	0.520		0.550

T.O

		S	SS	Av
0.7 σ_1	0.35	0.31937	0.13313	0.2
0.3 σ_1	0.15	0.18625		
0.7 σ_2	0.35	0.52178	0.07278	0.1
0.3 σ_2	0.15	0.45		
D (mm)	300			
E_{v1}	318.03			
E_{v2}	618.34			
Area (Sq.m)	0.07065			

Ex20x1	LD		
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LOAD
UN LOAD
RE LOAD

Lab. Specialist

Name :

Sign :

Lab. Engineer

Name : SHEHAB HAMDY

Sign :

شركة فتيحة للتقانة
للعمل المشترك
مشروع القطار السريع / فوكة - مطروح

Consultant Engineer

Name :

Sign :

27/12
2023



Plate Load Test Results

Layer:
Station:
Date:

SUB-BALLAST 0.90+

546+860

TO

546+940

26-12-23

COMPANY

YOUSSEF NEGIDA 3

Location

546+920

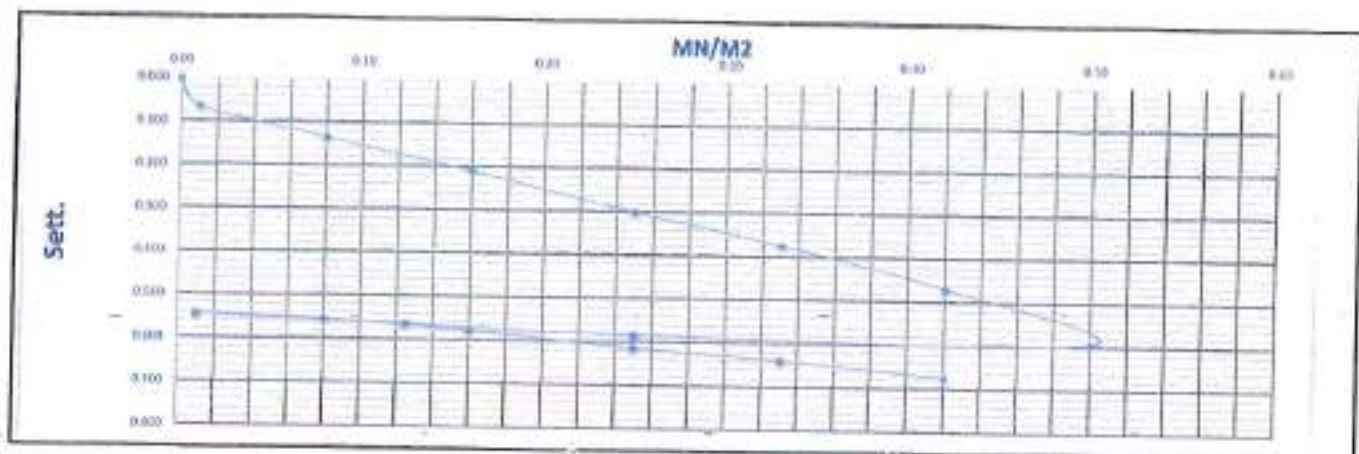
Leading	Load	Load	Stress	Dial 1	Dial 2	Dial 3	Sett. 1	Sett. 2	Sett. 3	Avg. Sett.
Stage No.	Bar	KN	MIN/SH	mm	mm	mm	mm	mm	mm	mm
0.000	0.0	0.000	0.00	6.84	7.92		0.000	0.000		0.000
1.000	1.0	0.707	0.01	6.76	7.87		0.080	0.050		0.065
2.000	7.9	5.652	0.08	6.70	7.79		0.140	0.130		0.135
0.080	15.8	11.304	0.16	6.63	7.71		0.210	0.210		0.210
4.000	24.7	17.663	0.25	6.55	7.61		0.290	0.310		0.300
5.000	32.6	23.315	0.33	6.48	7.53		0.360	0.390		0.375
6.000	41.5	29.673	0.42	6.42	7.40		0.420	0.520		0.470
7.000	49.4	35.325	0.50	6.35	7.22		0.490	0.700		0.595
8.000	24.7	17.663	0.25	6.36	7.23		0.480	0.690		0.585
9.000	12.4	8.831	0.12	6.37	7.26		0.470	0.660		0.565
9.000	1.0	0.707	0.01	6.38	7.29		0.460	0.630		0.545
10.000	1.0	0.707	0.01	6.38	7.29		0.460	0.630		0.545
11.000	7.9	5.652	0.08	6.37	7.28		0.470	0.640		0.555
12.000	15.8	11.304	0.16	6.34	7.26		0.500	0.660		0.580
13.000	24.7	17.663	0.25	6.30	7.23		0.540	0.690		0.615
14.000	32.6	23.315	0.33	6.28	7.20		0.560	0.720		0.640
15.000	41.5	29.673	0.42	6.24	7.17		0.600	0.750		0.675

7.90

		S	ΔS	Δy
0.7 σ_1	0.35	0.36062	0.16	0.2
0.3 σ_1	0.15	0.20063		
0.7 σ_2	0.35	0.64778		
0.3 σ_2	0.15	0.565	0.08178	0.2
D (mm)	300			
E_{v1}	281.25			
E_{v2}	513.63			
Area (Sq. cm)	0.07065			

E=20x1	L=3		
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LOAD
UN LOAD
RE LOAD



Lab. Specialist

Name :

Sign :

Lab. Engineer

Name : SHEHAB HAMDY

Sign :

شركة توريد للمواد
الموجودة في
مشروع القطار السريع / فوكة - محرو

Consultant Engineer

Name :

Sign :

27/12
2023



Contractor



Youssef Negida J.
Engineering & Consulting



Plate Load Test Results

Layer:
Station:
Date:

SUB-BALLAST 0.90+

547+000

TO

547+060

24-12-23

COMPANY

YOUSSEF NEGIDA J

Location

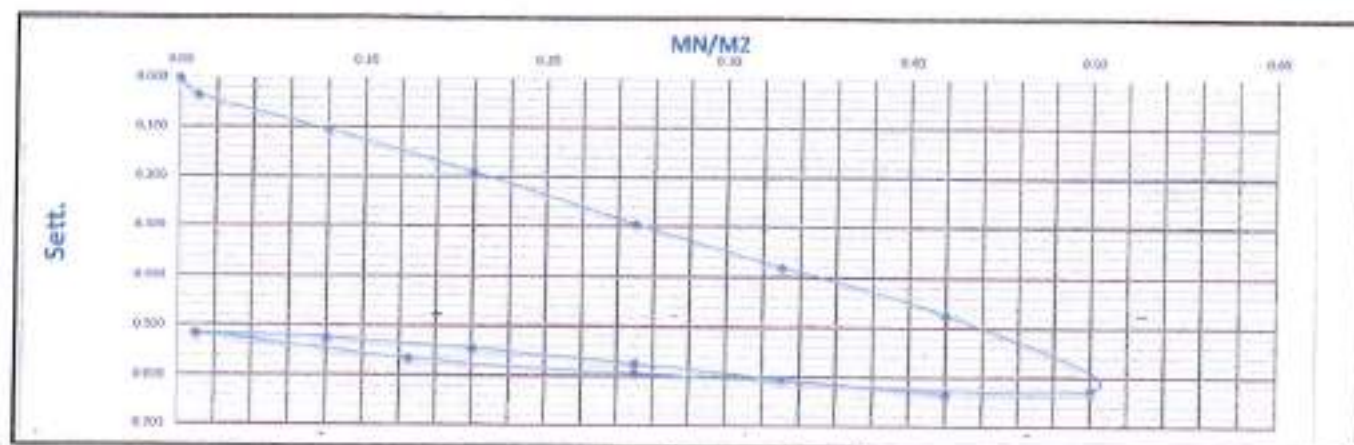
547+050

Loading	Load	Load	Stress	Dial 1	Dial 2	Dial 3	Sett. 1	Sett. 2	Sett. 3	Ave. Sett.
Stage No.	Bar	KN	MPa	mm	mm	mm	mm	mm	mm	mm
0.000	0.0	0.000	0.00	8.62	8.14		0.000	0.000		0.000
1.000	1.0	0.707	0.01	8.58	8.11		0.040	0.030		0.035
2.000	7.9	5.652	0.08	8.54	8.01		0.080	0.130		0.105
0.080	15.8	11.304	0.16	8.49	7.89		0.130	0.250		0.190
4.000	24.7	17.663	0.25	8.39	7.78		0.230	0.360		0.295
5.000	32.6	23.315	0.33	8.33	7.67		0.290	0.470		0.380
6.000	41.5	29.673	0.42	8.27	7.54		0.350	0.600		0.475
7.000	49.4	35.325	0.50	8.15	7.36		0.470	0.780		0.625
8.000	24.7	17.663	0.25	8.18	7.39		0.440	0.750		0.595
9.000	12.4	8.831	0.12	8.21	7.42		0.410	0.720		0.565
9.000	1.0	0.707	0.01	8.27	7.46		0.350	0.680		0.515
10.000	1.0	0.707	0.01	8.27	7.46		0.350	0.680		0.515
11.000	7.9	5.652	0.08	8.26	7.45		0.360	0.690		0.525
12.000	15.8	11.304	0.16	8.24	7.43		0.380	0.710		0.545
13.000	24.7	17.663	0.25	8.21	7.40		0.410	0.740		0.575
14.000	32.6	23.315	0.33	8.18	7.37		0.440	0.770		0.605
15.000	41.5	29.673	0.42	8.15	7.34		0.470	0.800		0.635

0.7 σ_1	0.35	0.34375	AS	0.2
0.3 σ_1	0.15	0.17938		
0.7 σ_2	0.35	0.61167	0.07667	0.2
0.3 σ_2	0.15	0.535		
D (mm)	300			
Ev ₁	273.76			
Ev ₂	586.96			
Area (Square)	0.07065			

Ev/Ev ₁	2.14		
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LOAD
UN LOAD
RE LOAD



Lab. Specialist

Name :

Sign :

Lab. Engineer

Name : SHEHAB HANDY

Sign :

المعمل المركزي
مشروع المطار السريع/شركة - مطروح

Consultant Engineer

Name :

Sign :



Contractor



المكتب الاستشاري
Youssef Negida & Partners
شارع
Dokki



Plate Load Test Results

Layer:
Station:
Date:

SUB-BALLAST 0.90+

547+000	TO	547+060
24-12-23		

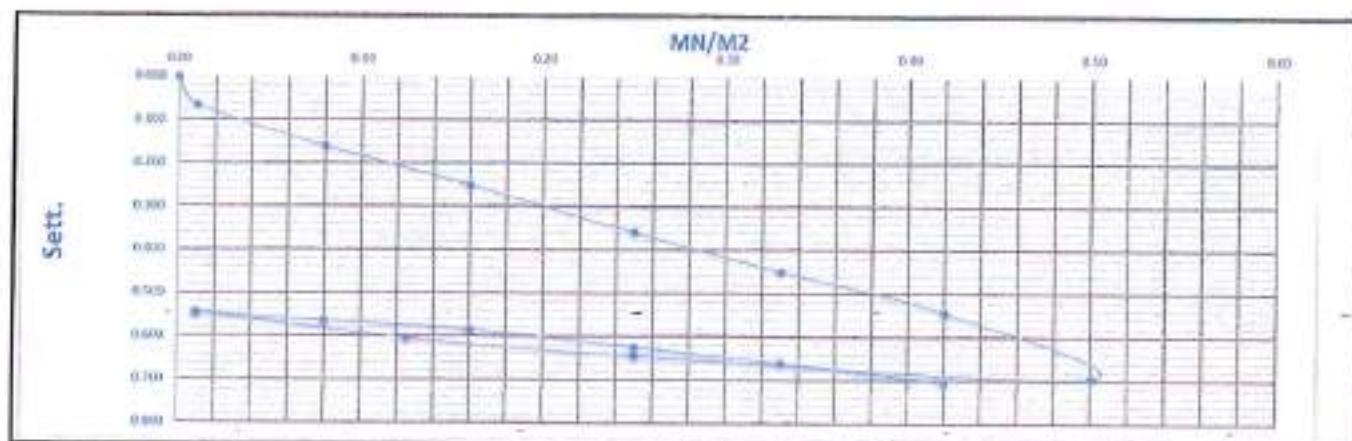
COMPANY	YOUSSEF NEGIDA & PARTNERS
Location	547+035

Loading Stage No.	Load Bar	Load KN	Stress MN/M2	Dist 1 mm	Dist 2 mm	Dist 3 mm	Sett. 1 mm	Sett. 2 mm	Sett. 3 mm	Avg. Sett. mm
0.000	0.0	0.000	0.00	7.88	8.68		0.000	0.000		0.000
1.000	1.0	0.707	0.01	7.81	8.62		0.070	0.040		0.065
2.000	7.9	5.652	0.08	7.70	8.54		0.180	0.140		0.160
0.080	15.8	11.304	0.16	7.60	8.46		0.280	0.220		0.250
4.000	24.7	17.663	0.25	7.48	8.36		0.400	0.320		0.360
5.000	32.6	23.315	0.33	7.39	8.27		0.490	0.410		0.450
6.000	41.5	29.673	0.42	7.32	8.15		0.560	0.530		0.545
7.000	49.4	35.325	0.50	7.16	8.01		0.720	0.670		0.695
8.000	24.7	17.663	0.25	7.23	8.04		0.650	0.640		0.645
9.000	12.4	8.831	0.12	7.27	8.08		0.610	0.600		0.605
9.000	1.0	0.707	0.01	7.33	8.14		0.550	0.540		0.545
10.000	1.0	0.707	0.01	7.33	8.14		0.550	0.540		0.545
11.000	7.9	5.652	0.08	7.32	8.11		0.560	0.570		0.565
12.000	15.8	11.304	0.16	7.30	8.09		0.580	0.590		0.585
13.000	24.7	17.663	0.25	7.25	8.06		0.630	0.620		0.625
14.000	32.6	23.315	0.33	7.21	8.03		0.670	0.650		0.660
15.000	41.5	29.673	0.42	7.17	7.98		0.710	0.702		0.706

		σ	ΔS	$\Delta \sigma$
0.7 σ_1	0.35	0.41375	0.175	0.2
0.3 σ_1	0.15	0.23875		
0.7 σ_2	0.35	0.67022	0.08522	0.2
0.3 σ_2	0.15	0.585		
D (mm)	309			
$E v_1$	357.14			
$E v_2$	528.04			
Area (Sq.m)	0.01005			

Ext/Int	1.05		
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LOAD
UN LOAD
RE LOAD



Lab. Specialist

Name :

Sign :

Lab. Engineer

Name : SHEHAB HANDY

المعمل المركزي
مشروع التطوير / فوكة - مطروح

Consultant Engineer

Name :

Sign :



Plate Load Test Results

Layer: SUB-BALLAST 0.90+
 Station: 547+000 TO 547+060
 Date: 24-12-23

COMPANY: YOUSSEF NEGIDA & PARTNERS
 Location: 547+020

Loading	Load	Load	Stress	Dist 1	Dist 2	Dist 3	Sett. 1	Sett. 2	Sett. 3	Avg. Sett.
Stage No.	Bar	KN	MPa	mm	mm	mm	mm	mm	mm	mm
0.000	0.0	0.000	0.00	8.77	7.90		0.000	0.000		0.000
1.000	1.0	0.707	0.01	8.76	7.87		0.010	0.030		0.020
2.000	7.9	5.652	0.08	8.72	7.78		0.050	0.120		0.085
3.000	15.8	11.304	0.16	8.67	7.66		0.100	0.240		0.170
4.000	24.7	17.663	0.25	8.60	7.50		0.170	0.400		0.285
5.000	32.6	23.315	0.33	8.57	7.38		0.200	0.520		0.360
6.000	41.5	29.673	0.42	8.51	7.26		0.260	0.640		0.450
7.000	49.4	35.325	0.50	8.42	7.10		0.350	0.800		0.575
8.000	24.7	17.663	0.25	8.44	7.12		0.330	0.780		0.555
9.000	12.4	8.831	0.12	8.47	7.15		0.300	0.750		0.525
9.000	1.0	0.707	0.01	8.51	7.19		0.260	0.710		0.485
10.000	1.0	0.707	0.01	8.51	7.19		0.260	0.710		0.485
11.000	7.9	5.652	0.08	8.47	7.15		0.300	0.750		0.525
12.000	15.8	11.304	0.16	8.43	7.11		0.340	0.790		0.565
13.000	24.7	17.663	0.25	8.39	7.07		0.380	0.830		0.605
14.000	32.6	23.315	0.33	8.35	7.04		0.420	0.860		0.640
15.000	41.5	29.673	0.42	8.31	7.01		0.460	0.890		0.675

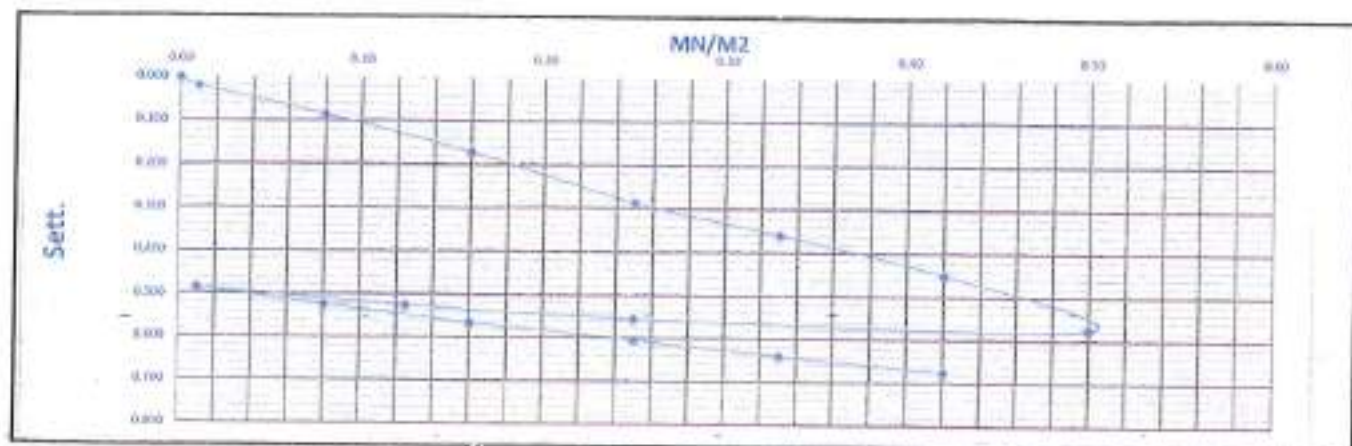
$0.7 \sigma_1$	0.35	s	DS	DS
$0.3 \sigma_1$	0.15	0.15938	0.18125	0.2
$0.7 \sigma_2$	0.35	0.64778	0.08277	0.2
$0.3 \sigma_2$	0.15	0.565		
D (mm)	200			
E_{v1}	248.38			
E_{v2}	543.65			
Area (Sq.m)	0.07065			

E_{v2}/E_{v1}	2.19		
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LOAD

UN LOAD

RE LOAD



Lab. Specialist

Name :

Sign :

Lab. Engineer

Name : SHEHAB HAMDY

Sign :
 المشروع القطر السريع / ذوق - مطروح
 المعمل المركزي

Consultant Engineer

Name :

Sign :



Contractor



YOUSSEF NEGIDA 3
Owner



Plate Load Test Results

Layer:
Station:
Date:

SUB-BALLAST 0.90+
547+060 TO 547+140
24-12-23

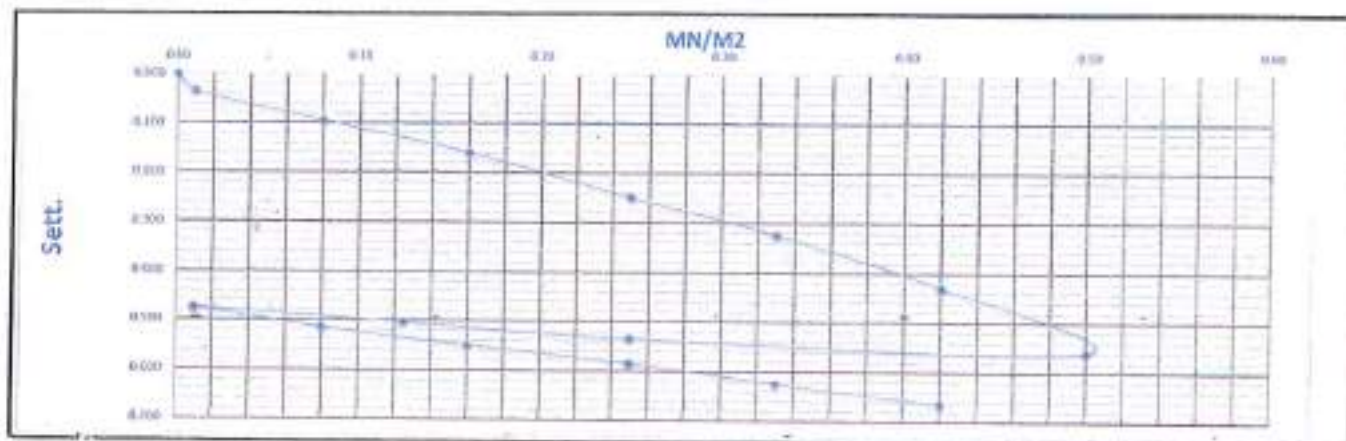
COMPANY	YOUSSEF NEGIDA 3
Location	547+060

Loading	Load	Load	Strain	Dial 1	Dial 2	Dial 3	Sett. 1	Sett. 2	Sett. 3	Avg. Sett.
Stage No.	Bar	KN	MM/MM	mm	mm	mm	mm	mm	mm	mm
0.000	0.0	0.000	0.00	7.81	8.48		0.000	0.000		0.000
1.000	1.0	0.707	0.01	7.77	8.45		0.040	0.030		0.035
2.000	7.9	5.652	0.08	7.73	8.37		0.080	0.110		0.095
0.080	15.8	11.304	0.16	7.67	8.30		0.140	0.180		0.160
4.000	24.7	17.663	0.25	7.60	8.19		0.210	0.290		0.250
5.000	32.6	23.315	0.33	7.56	8.08		0.250	0.400		0.325
6.000	41.5	29.673	0.42	7.47	7.96		0.340	0.520		0.430
7.000	49.4	35.325	0.50	7.39	7.78		0.420	0.700		0.560
8.000	24.7	17.663	0.25	7.42	7.80		0.390	0.680		0.535
9.000	12.4	8.831	0.12	7.46	7.82		0.350	0.660		0.505
9.000	1.0	0.707	0.01	7.49	7.85		0.320	0.630		0.475
10.000	1.0	0.707	0.01	7.49	7.85		0.320	0.630		0.475
11.000	7.9	5.652	0.08	7.45	7.81		0.360	0.670		0.515
12.000	15.8	11.304	0.16	7.42	7.77		0.390	0.710		0.550
13.000	24.7	17.663	0.25	7.38	7.74		0.430	0.740		0.585
14.000	32.6	23.315	0.33	7.34	7.70		0.470	0.780		0.625
15.000	41.5	29.673	0.42	7.30	7.66		0.510	0.820		0.665

		σ	AS	AS
0.7 σ_1	0.35	0.31625	0.16418	0.2
0.3 σ_2	0.15	0.15188		
0.7 σ_1	0.35	0.63389	0.07888	0.2
0.3 σ_2	0.15	0.555		
D (mm)	300			
E_{v1}	273.76			
E_{v2}	570.45			
Area (Sq. m)	0.07065			

Ex/Ex1	2.04		
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LOAD
UN LOAD
RE LOAD



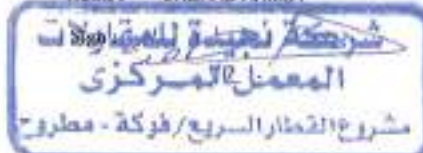
Lab. Specialist

Name:

Sign:

Lab. Engineer

Name: SHEHAB HAMDY



Consultant Engineer

Name:

Sign:

Abdelhakim



Contractor



Youssef Negida J.

Owner



Plate Load Test Results

Layer:
Station:
Date:

SUB-BALLAST 0.90+

547+060	TO	547+140
24-12-23		

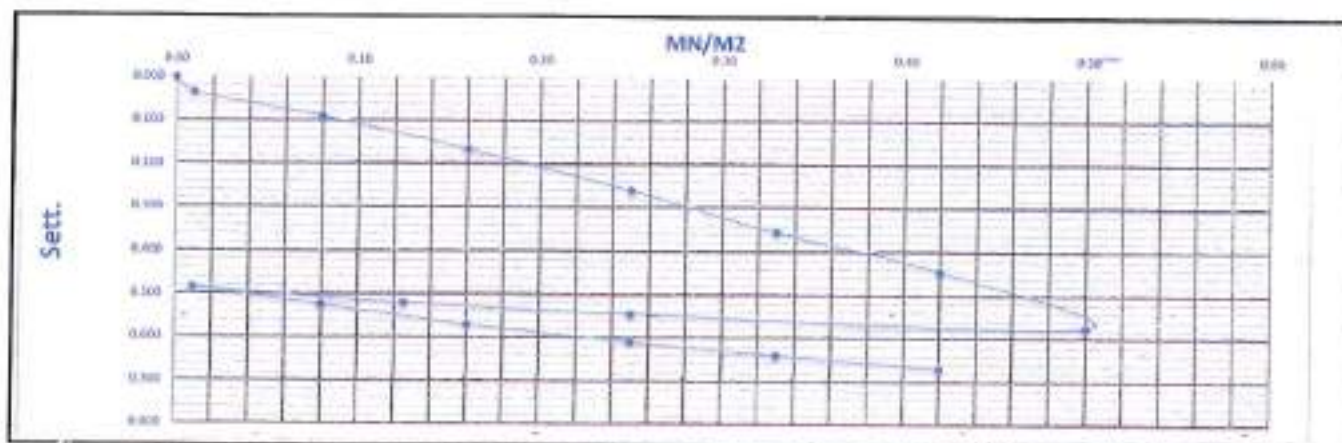
COMPANY	YOUSSEF NEGIDA J
Location	547+080

Loading	Load	Load	Stress	Dial 1	Dial 2	Dial 3	Sett. 1	Sett. 2	Sett. 3	Avg. Sett.
Stage No.	Bar	KN	MM/M2	mm	mm	mm	mm	mm	mm	mm
0.000	0.0	0.000	0.00	8.79	7.62		0.000	0.000		0.000
1.000	1.0	0.707	0.01	8.75	7.59		0.040	0.030		0.035
2.000	7.9	5.652	0.08	8.71	7.52		0.080	0.100		0.090
0.080	15.8	11.304	0.16	8.67	7.41		0.120	0.210		0.165
4.000	24.7	17.663	0.25	8.62	7.27		0.170	0.350		0.260
5.000	32.6	23.315	0.33	8.56	7.14		0.230	0.480		0.355
6.000	41.5	29.673	0.42	8.48	7.04		0.310	0.580		0.445
7.000	49.4	35.325	0.50	8.34	6.92		0.450	0.700		0.575
8.000	24.7	17.663	0.25	8.37	6.95		0.420	0.670		0.545
9.000	12.4	8.831	0.12	8.39	6.98		0.400	0.640		0.520
9.000	1.0	0.707	0.01	8.43	7.01		0.360	0.610		0.485
10.000	1.0	0.707	0.01	8.43	7.01		0.360	0.610		0.485
11.000	7.9	5.652	0.08	8.39	6.97		0.400	0.650		0.525
12.000	15.8	11.304	0.16	8.34	6.93		0.450	0.690		0.570
13.000	24.7	17.663	0.25	8.30	6.89		0.490	0.730		0.610
14.000	32.6	23.315	0.33	8.27	6.86		0.520	0.760		0.640
15.000	41.5	29.673	0.42	8.24	6.83		0.550	0.790		0.670

		σ	ΔS	A_v
0.7 σ_1	0.35	0.33125	0.17563	0.2
0.3 σ_1	0.15	0.15563		
0.7 σ_2	0.35	0.44667	0.08166	0.2
0.3 σ_2	0.15	0.1665		
D (mm)	300			
E_{v1}	258.23			
E_{v2}	551.45			
Area (Sqmm)	0.07065			

$E_{vb/Ev1}$	2.15		
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LOAD
UN LOAD
RE LOAD



Lab. Specialist

Name :

Sign :

Lab. Engineer

Name : SHEHAB HAMDY

شركة جندة للمواد
المعمل المركزي
مشروع القطار السريع / طوكية - مطروح

Consultant Engineer

Name :

Sign :



Contractor



المهندس يوسف نعيدا 3
Chenr



Plate Load Test Results

Layer:
Station:
Date:

SUB-BALLAST 0.90+

547+060	TO	547+140
24-12-23		

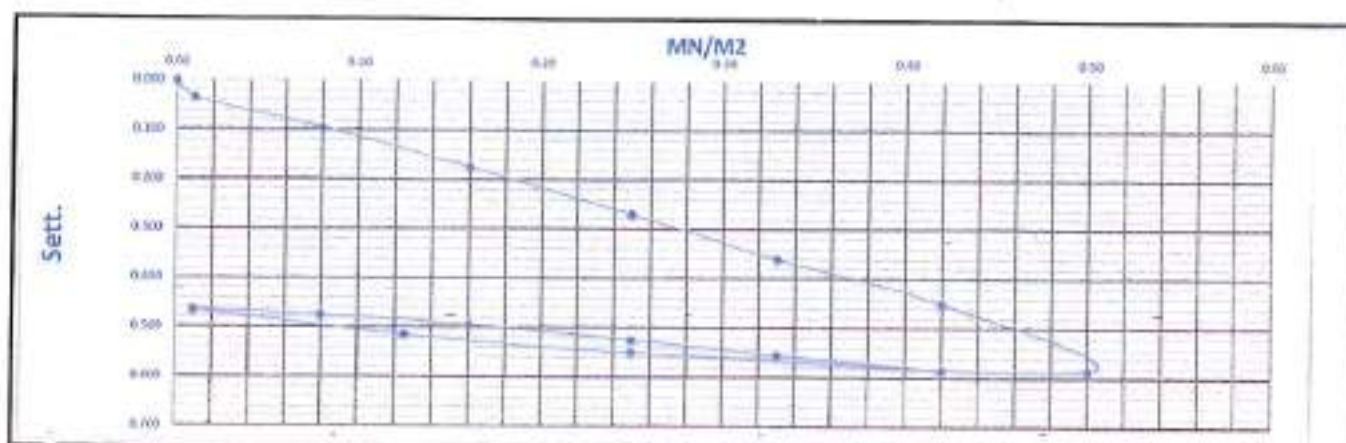
COMPANY	YOUSSEF NEGIDA 3
Location	547+100

Loading	Load	Load	Stress	Dial 1	Dial 2	Dial 3	Sett. 1	Sett. 2	Sett. 3	ΔSR Sett.
Stage No.	Bar	KN	MM/M2	mm	mm	mm	mm	mm	mm	mm
0.000	0.0	0.000	0.00	8.35	8.60		0.000	0.000		0.000
1.000	1.0	0.707	0.01	8.32	8.56		0.030	0.040		0.035
2.000	7.9	5.652	0.08	8.28	8.48		0.070	0.120		0.095
0.080	15.8	11.304	0.16	8.23	8.37		0.120	0.230		0.175
4.000	24.7	17.663	0.25	8.16	8.25		0.190	0.350		0.270
5.000	32.6	23.315	0.33	8.09	8.14		0.260	0.460		0.360
6.000	41.5	29.673	0.42	8.03	8.02		0.320	0.580		0.450
7.000	49.4	35.325	0.50	7.90	7.88		0.450	0.720		0.585
8.009	24.7	17.663	0.25	7.94	7.91		0.410	0.690		0.550
9.000	12.4	8.831	0.12	7.97	7.95		0.380	0.650		0.515
9.000	1.0	0.707	0.01	8.03	7.99		0.320	0.610		0.465
10.000	1.0	0.707	0.01	8.03	7.99		0.320	0.610		0.465
11.000	7.9	5.652	0.08	8.02	7.98		0.330	0.620		0.475
12.000	15.8	11.304	0.16	8.00	7.96		0.350	0.640		0.495
13.000	24.7	17.663	0.25	7.97	7.93		0.380	0.670		0.525
14.000	32.6	23.315	0.33	7.94	7.90		0.410	0.700		0.555
15.000	41.5	29.673	0.42	7.91	7.87		0.440	0.730		0.585

σ ₁	σ ₂	σ ₃	ΔS	Δσ
0.7 σ ₁	0.35	0.33188	0.16588	0.2
0.3 σ ₁	0.15	0.165		
0.7 σ ₂	0.35	0.56167	0.07667	0.2
0.3 σ ₂	0.15	0.485		
D (mm)	300			
E _{v1}	269.66			
E _{v2}	586.36			
Area (Sq.m)	0.07065			

E _{v2} /E _{v1}	2.18		
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LOAD
UN LOAD
RE LOAD



Lab. Specialist

Name :

Sign :

Lab. Engineer

Name : SHEHAB HAMDY

المهندس شهاب حامدي
المعمل المركزي
مشروع القطار السريع / طوكية - مطروح

Consultant Engineer

Name :

Sign :



Contractor



Plate Load Test Results

Layer:
Station:
Date:

SUB-BALLAST 0.90+

547+060	TO	547+140
24-12-23		

COMPANY	YOUSSEF NEGIDA & PARTNERS
Location	547+120

Loading	Lead	Load	Stress	Dial 1	Dial 2	Dial 3	Sett. 1	Sett. 2	Sett. 3	Avg. Sett.
Stage No.	Bar	KN	MS/M2	mm	mm	mm	mm	mm	mm	mm
0.000	0.0	0.000	0.00	6.54	6.88		0.000	0.000		0.000
1.000	1.0	0.707	0.01	6.48	6.82		0.060	0.060		0.060
2.000	7.9	5.652	0.08	6.41	6.74		0.130	0.140		0.135
0.080	15.8	11.304	0.16	6.33	6.64		0.210	0.240		0.225
4.000	24.7	17.663	0.25	6.26	6.56		0.280	0.320		0.300
5.000	32.6	23.315	0.33	6.21	6.48		0.330	0.400		0.365
6.000	41.5	29.673	0.42	6.15	6.42		0.390	0.460		0.425
7.000	49.4	35.325	0.50	6.08	6.34		0.460	0.540		0.500
8.000	24.7	17.663	0.25	6.10	6.37		0.440	0.510		0.475
9.000	12.4	8.831	0.12	6.13	6.41		0.410	0.470		0.440
9.000	1.0	0.707	0.01	6.19	6.47		0.350	0.410		0.380
10.000	1.0	0.707	0.01	6.19	6.47		0.350	0.410		0.380
11.000	7.9	5.652	0.08	6.17	6.45		0.370	0.430		0.400
12.000	15.8	11.304	0.16	6.14	6.43		0.400	0.450		0.425
13.000	24.7	17.663	0.25	6.10	6.41		0.440	0.470		0.455
14.000	32.6	23.315	0.33	6.07	6.38		0.470	0.500		0.485
15.000	41.5	29.673	0.42	6.04	6.35		0.500	0.530		0.515

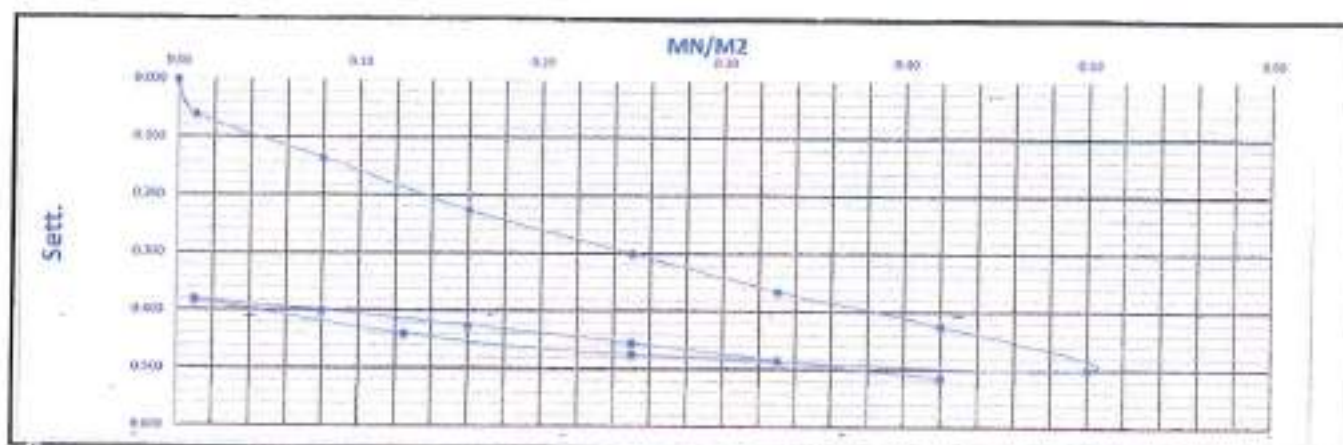
		α	AS	Av
0.7 σ_1	0.35	0.35938	0.14563	0.2
0.3 σ_1	0.15	0.21375		
0.7 σ_2	0.35	0.49167	0.07166	0.1
0.3 σ_2	0.15	0.42		
D (mm)	300			
Ev ₁	309.01			
Ev ₂	627.92			
Area (Sq.m)	0.07065			

Ev2/Ev1	2.03		
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LOAD

UN LOAD

RE LOAD



Lab. Specialist

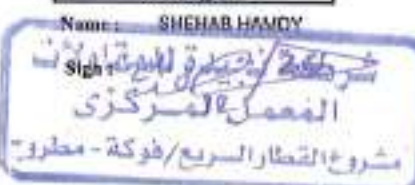
Name :

Sign :

Lab. Engineer

Name: SHEHAB HAMDY

Sign:



Consultant Engineer

Name :

Sign :



المنطقة الخامسة - (غرب الدلتا)

الهيئة العامة
للطرق والكباري

السيد المهندس / رئيس قطاع التنفيذ والمناطق

تحية طيبة .. وبعد،،

بالإحالة إلى مشروع القطار السريع (الحين السخنه- العاصمة الإدارية - برج العرب
مرسى مطروح)

نتشرف بأن نرفق لسيادتكم طيه المقاييسات المعدلة للقطاعات الآتية:

أولاً : القطاع السابع (فوكه / مطروح) :

م	المسافة		الطول (كم)	الشركة	التكلفة (مليون)	الاتجاه
	من	إلى				
1	546+000	549+000	3.0	شركة يوسف نجيدة للمقاولات	188.044	الاتجاهين

برجاء من سيادتكم التفضل بالإحاطة والتوجيه بالازم

وتفضلوا بقبول فائق الاحترام والتقدير،،

رئيس الإدارة المركزية

المنطقة الخامسة - غرب الدلتا

عبدالله مهندس

"عائلي محمد محمود طه"

X

مشروع القطار الكهربائي السريع
المقايضة المحملة لينود الاعمال بعد التفاوض بتاريخ (18/12/2023) لشق الطرق السريعة (فوكا - مطروح) - شركة يوسف لجنحة للمقاولات
القطاع من المحطة 546+000 إلى المحطة 549+000 بالاتجاهين

رقم البند	بيان الأصل	الوحدة	الكمية	ثمنه	الإجمالي
3	إعمال المكبب				
3-1	إعمال المكبب إعمال توريد والتفصيل التربة صالحة للردم و معالجة التماسكات والتفصيل باستخدام آلات التربة بمسك لا يزيد عن 50 مم حتى عمق 2- متر و بمسك لا يزيد عن 25 مم لاستكمال التماسك المتبقي لتشكل الجسر والاتلاف (مادة لمل كالفور عا لا تقل عن 15%) و رشها بالمادة الاسفلتية الوصول الى نسبة التربة المتبقية وفتح الجود والكومات الوصول الى النسب 30% حقا 30% حقا (95 % من التكلفة المضافة المتضمنة والتدبير يصمم مستقلة طبقا لاصول الصناعة ومواصفات الهيئة العامة للطرق والكباري وتعليمات المهندس المشرف على حالة قلب جهز (التشرف زيادة نسبة التمسك عن 88 % بحسب زيادة 1 جنيه على زيادة نسبة التمسك لكل 1 %	3+	297,980.69	181.40	30,215,242
	- مسافة النقل حالي 2 كم ويتم الحساب عبارة 9.4 جنيه لكل 1 كم بقرينة السعر بإثبات قيمة المادة المحررة				
	ماترعة مسافة النقل 325 كم	3+	297,980.69	452.20	134,746,867
	ماترعة تحميل رسوم ككارة والموازن طبقا لائحة التكلفة الوطنية	3+	297,980.69	13.00	3,873,749
4	طبقات الأساس				
4-1	إعمال المكبب إعمال توريد وفرش طبقة (Subgrade prepared) من الاحجار الصلبة المترجة لتحت تجميع الكسرات والمطابقة للمواصفات والفسي حجم الحبيبات 100 مم والا يزيد نسبة التماسك من مثقل 200 عن 12 % و التدرج الفردي بالاشراط الخاصة بالمشروع لا تقل نسبة لمل كالفور عا 25 % و لا تزيد عن 30 % حقا 30% حقا (95 % من التكلفة المضافة المتضمنة والتدبير يصمم مستقلة طبقا لاصول الصناعة ومواصفات الهيئة العامة للطرق والكباري وتعليمات المهندس المشرف على حالة قلب جهز (التشرف زيادة نسبة التمسك عن 88 % بحسب زيادة 1 جنيه على زيادة نسبة التمسك لكل 1 %	3+	20,896.20	144.40	3,059,204
	- يتم الحساب عبارة 1.3 جنيه لكل 1 كم بقرينة أو التقييم				
	قيمة المادة المحررة بمساحتها	3+	20,896.20	161.00	3,364,288
	ماترعة مسافة النقل 104 كم	3+	20,896.20	199.20	2,281,885
	ماترعة تحميل رسوم ككارة والموازن طبقا لائحة التكلفة الوطنية	3+	20,896.20	25.00	522,466
4-2	إعمال المكبب إعمال توريد وفرش طبقة (Subgrade prepared) من الاحجار الصلبة المترجة لتحت تجميع الكسرات والمطابقة للمواصفات والفسي حجم الحبيبات ما بين 15 إلى 30 مم والا يزيد نسبة التماسك من مثقل 200 عن 5 % و التدرج الفردي بالاشراط الخاصة بالمشروع لا تقل نسبة لمل كالفور عا 80 % والا يقل سمك الطبقة (Ev2) من تدرج توج التماسك عن 120 ميجاباسكال والا يزيد نسبة التماسك بيهات توج التماسك عن 30 % حقا 30% حقا (95 % من التكلفة المضافة المتضمنة والتدبير يصمم مستقلة طبقا لاصول الصناعة ومواصفات الهيئة العامة للطرق والكباري وتعليمات المهندس المشرف على حالة قلب جهز (التشرف زيادة نسبة التمسك عن 88 % بحسب زيادة 1 جنيه على زيادة نسبة التمسك لكل 1 %	3+	16,226.60	161.30	2,303,633
	- يتم الحساب عبارة 1.3 جنيه لكل 1 كم بقرينة أو التقييم				
	قيمة المادة المحررة بمساحتها	3+	16,226.60	175.00	2,864,480
	ماترعة مسافة النقل 254 كم	3+	16,226.60	394.20	4,631,828
	ماترعة تحميل رسوم ككارة والموازن طبقا لائحة التكلفة الوطنية	3+	16,226.60	25.00	380,640
	الإجمالي				168,044,060.000

مطور: عامر المشهور
م / محمد حسني الهادي

منور المشور
عبدالله المشور

KK

المشروع / خالد قنديل
التقارير الكهربائية
القطاع الصناعي

مفاتيح جبر الدبوسى جبر
١٤٧٠ هـ / ١٤١٠ / ٢٠ / ١٨٨٠ هـ

دمشق
 رئيس الإدارة المركزية
 مصلحة الطب الوقائي
 الإسكندرية - مصر
 محمد جويش
 * هاني محمد محمود مله *