

Company : Sun Rise Construction

Project : Electric Express Train, Al Ain Sokhna to Marsa Matrouh Priority Sector (6)
- Alamein to Foka
Subject : Determine the deformation and strength characteristics of soil by the plate loading test according specifications DIN 18134:2012-04 and project requirements
Test Location : (448+250 to 448+800)
Test Date : 06/03/2023
Report Date : 07/03/2023
Type of soil : A-1-a
Test level : **Upper Embankment (Ferma) .**
Report No. : 111:121

Dear Gentleman,

According to the above mentioned subject the test performed as follows:-

Apparatus

1. Loading plates consists of two plates with 600 mm and 300 mm diameter
2. The thickness of plates 30 mm
3. Dial gauges with accuracy 0.01 mm to measuring the settlement
4. Steel straightedges with magnetic supports to fixed the dial gauges
5. Hydraulic jack with pump to transfer reactive loads to the loading plates
6. Dial indicator measuring device with scale capacity 700 Bar (Enerbac)
7. Reaction loading system by roller compactor with weight approximately 15 ton
8. Calibration certificates are attached

Test Procedure

1. Clean the ground on test area to the required level with undisturbed soil
2. Install loading plates 600 mm and 300 mm diameter, hydraulic jack and 3 dial gauges
3. Prior to starting the test applied preloading about 30 seconds.
4. The strain gauge and the dial gauge shall be set to zero
5. For a 600 mm loading plate, the limit values are 2.5 kg/cm²
6. The load shall be applied in six stages, in approximately equal increments, until the required maximum normal stress is reached.
7. Each change in load (from stage to stage) shall be completed within one minute
8. The load shall be released in 3 stages, to 50 % , 25 % , and approximately 2 % of the maximum load.
9. Following unloading, a further (2nd) loading cycle shall be carried out, in which, however, the load is to be increased only to the penultimate stage of the first cycle (so that the full load is not reached).
10. At each stage the load shall be maintained until the rate of settlement of the plate becomes less than 0.02 mm/min.
11. Remove the loads



Report

1. Evaluation and representation of results
2. Load Settlement curve
3. The test report content the following:-
 - location of test site - Dimension of loading plate
 - Measuring device used - Type of soil
 - Type of Bedding material below the plate -Weathering condition
 - Time and date of measurements - Unusual observation made during test
 - Dial gauge reading and corresponding normal stress - Loading-settlement curve
 - Description of the soil condition below the plate after testing

Report

Type of soil: Upper Embankment (Ferma) . Test level: A-1-a

- Job requirement: $E_{v2} > 600 \text{ Kg/cm}^2$ (60 MPa).

Item	Descriptions
- Type of bedding material below the plate	Natural Soil
- Weather condition	Partly Sunny
- Plate Diameter (mm)	600
- date of measurement	06/03/2023
- Unusual observation made during test	NO
- Description of the soil conditions below the plate after testing	No deformation

Evaluation and representation of results

Test No.	Station		First Cycle	Second Cycle	E_{v2} / E_{v1} Ratio
	From	To	E_{v1} (kg/cm ²)	E_{v2} (kg/cm ²)	
1	448+250	448+300	882	2250	2.6
2	448+300	448+350	957	2250	2.4
3	448+350	448+400	1324	1957	1.5
4	448+400	448+450	1071	2250	2.1
5	448+450	448+500	1500	1800	1.2
6	448+500	448+550	1154	1957	1.7
7	448+550	448+600	1023	1957	1.9
8	448+600	448+650	1125	2250	2.0
9	448+650	448+700	1250	2368	1.9
10	448+700	448+750	1324	2368	1.8
11	448+750	448+800	1184	2500	2.1

Signature /



Company Name : Sun Rise Construction.
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh Priority Sector (6) – Alamein to Foka
Test Date : 06/03/2023
report date : 07/03/2023
Location : Station 448+250 to 448+300
Test No. : 01

Nonrepetitive Static Plate Load Tests of Soils
DIN 18134

Data sheet

Loading Stage (1)

Loading	Stress Kg/cm2	Dial 1	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
			mm		mm		mm	
0	0.00	20.00	0.00	20.00	0.00	20.00	0.00	0.00
1	0.42	19.90	0.10	19.90	0.10	19.81	0.19	0.13
2	0.83	19.81	0.19	19.62	0.38	19.30	0.70	0.42
3	1.25	19.69	0.31	19.30	0.70	19.07	0.93	0.65
4	1.67	19.55	0.45	19.03	0.97	18.87	1.13	0.85
5	2.08	19.44	0.56	18.79	1.21	18.71	1.29	1.02
6	2.50	19.31	0.69	18.55	1.45	18.45	1.55	1.23

Unloading Stage (1)

Loading	Stress Kg/cm2	Dial 1	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
			mm		mm		mm	
1	2.50	19.31	0.69	18.55	1.45	18.45	1.55	1.23
2	1.25	19.40	0.60	18.86	1.00	18.64	1.36	0.99
3	0.625	19.46	0.54	18.80	1.20	18.80	1.20	0.98
4	0.01	19.64	0.36	19.09	0.91	19.07	0.93	0.73

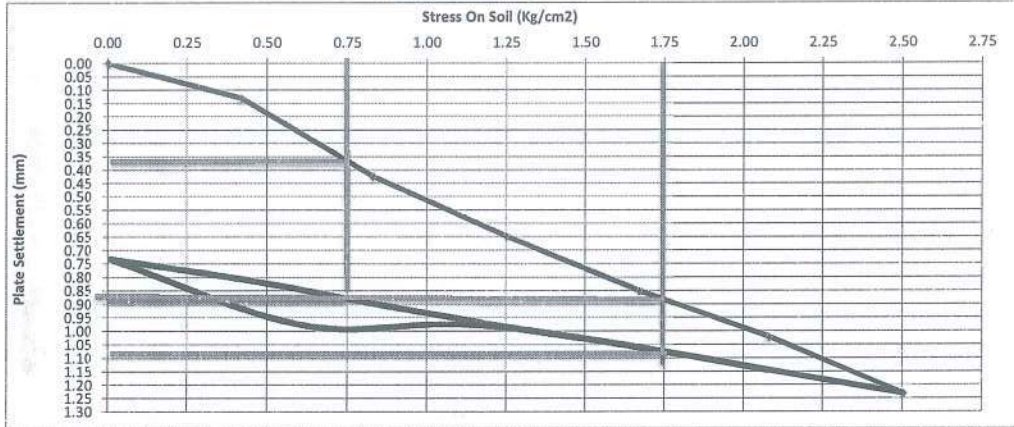
Loading Stage (2)

Loading	Stress Kg/cm2	Dial 1	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
			mm		mm		mm	
0	0.42	19.58	0.42	18.96	1.04	19.04	0.96	0.81
1	0.83	19.51	0.49	18.88	1.12	18.92	1.08	0.90
2	1.25	19.47	0.53	18.78	1.22	18.80	1.20	0.98
3	1.67	19.42	0.58	18.69	1.31	18.71	1.29	1.06
4	2.08	19.36	0.64	18.59	1.41	18.61	1.39	1.15



Company Name : Sun Rise Construction.
 Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh Priority Sector (6) – Alamein to Foka
 Test Date : 06/03/2023
 report date : 07/03/2023
 Location : Station 448+250 to 448+300
 Test No. : 01

Nonrepetitive Static Plate Load Tests of Soils
DIN 18134



Loading (1)	0	1	2	3	4	5	6
Stage(Kg)	0	1186.92	2345.6	3532.5	4719.4	5878.1	7065
Stress (Kg/cm2)	0.00	0.42	0.83	1.25	1.67	2.08	2.50
Settlement (mm)	0.00	0.13	0.42	0.65	0.85	1.02	1.23
D (mm) = 600		S1 (mm)= 0.37	S2(mm)= 0.88	ΔS = 0.51			
Ev1 (kg/cm2) = $(0.75 \cdot D \cdot \Delta\sigma) / \Delta S$		882					

UnLoading (1)	1	2	3	4
Stage(Kg)	7065	3533	1768	0
Stress (Kg/cm2)	2.50	1.25	0.625	0.01
Settlement (mm)	1.23	0.99	0.98	0.73

Ev2/Ev1 = 2.6

Loading (2)	0	1	2	3	4	5
Stage(Kg)	0	1186.92	2345.6	3532.5	4719.4	5878.1
Stress (Kg/cm2)	0.01	0.42	0.83	1.25	1.67	2.08
Settlement (mm)	0.73	0.81	0.90	0.98	1.06	1.15
D (mm) = 600		S1 (mm)= 0.88	S2(mm)= 1.08	ΔS = 0.20		
Ev2 (kg/cm2) = $(0.75 \cdot D \cdot \Delta\sigma) / \Delta S$		2250				

Ev1 = Modulus of deformation during the loading stage.
 Ev2 = Modulus of deformation during the Reloading stage.
 D = Plate diameter (mm)
 Δs = The difference between 0.3 and 0.7 from the maximum loading (smax) (kg/cm²)
 DS = Difference in settlements corresponding to 0.3 and 0.7 from the maximum loading (mm)



Company Name : Sun Rise Construction.
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh Priority Sector (6) – Alamein to Foka
Test Date : 06/03/2023
report date : 07/03/2023
Location : Station 448+300 to 448+350
Test No. : 02

Nonrepetitive Static Plate Load Tests of Soils
DIN 18134

Data sheet

Loading Stage (1)

Loading	Stress Kg/cm2	Dial 1	Settlement mm	Dial 2	Settlement mm	Dial 3	Settlement mm	Average
0	0.00	20.00	0.00	20.00	0.00	20.00	0.00	0.00
1	0.42	19.88	0.12	19.86	0.14	19.90	0.10	0.12
2	0.83	19.78	0.22	19.68	0.32	19.78	0.22	0.25
3	1.25	19.60	0.40	19.37	0.63	19.63	0.37	0.47
4	1.67	19.44	0.56	19.08	0.92	19.48	0.52	0.67
5	2.08	19.30	0.70	18.80	1.20	19.31	0.69	0.86
6	2.50	19.13	0.87	18.54	1.46	19.20	0.80	1.04

Unloading Stage (1)

Loading	Stress Kg/cm2	Dial 1	Settlement mm	Dial 2	Settlement mm	Dial 3	Settlement mm	Average
1	2.50	19.13	0.87	18.54	1.46	19.20	0.80	1.04
2	1.25	19.19	0.81	18.63	1.37	19.29	0.71	0.96
3	0.625	19.26	0.74	18.74	1.26	19.36	0.64	0.88
4	0.01	19.49	0.51	19.02	0.98	19.59	0.41	0.63

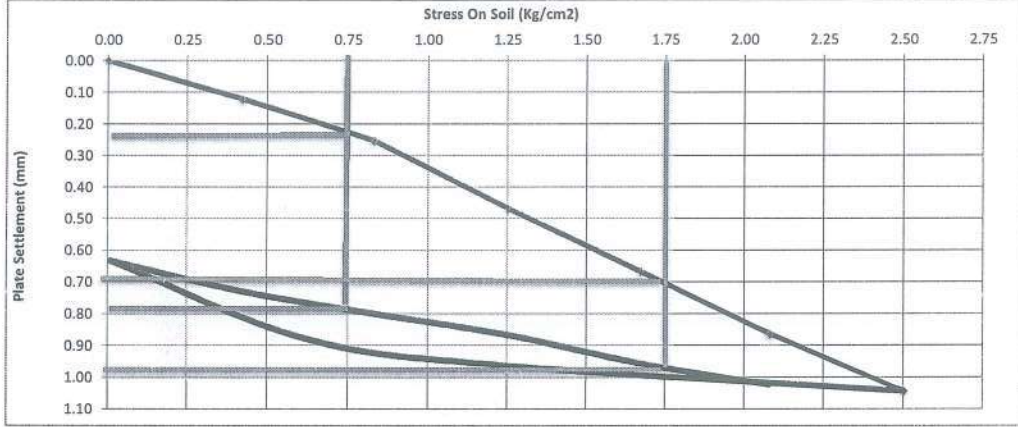
Loading Stage (2)

Loading	Stress Kg/cm2	Dial 1	Settlement mm	Dial 2	Settlement mm	Dial 3	Settlement mm	Average
0	0.42	19.41	0.59	18.87	1.13	19.53	0.47	0.73
1	0.83	19.35	0.65	18.79	1.21	19.46	0.54	0.80
2	1.25	19.28	0.72	18.71	1.29	19.41	0.59	0.87
3	1.67	19.21	0.79	18.62	1.38	19.30	0.70	0.96
4	2.08	19.15	0.85	18.54	1.46	19.24	0.76	1.02



Company Name : Sun Rise Construction.
 Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh Priority Sector (6) – Alamein to Foka
 Test Date : 06/03/2023
 report date : 07/03/2023
 Location : Station 448+300 to 448+350
 Test No. : 02

**Nonrepetitive Static Plate Load Tests of Soils
 DIN 18134**



Loading (1)	0	1	2	3	4	5	6
Stage(Kg)	0	1186.92	2345.6	3532.5	4719.4	5878.1	7065
Stress (Kg/cm2)	0.00	0.42	0.83	1.25	1.67	2.08	2.50
Settlement (mm)	0.00	0.12	0.25	0.47	0.67	0.86	1.04
D (mm) = 600		S1 (mm)= 0.23		S2(mm)= 0.70		ΔS = 0.47	
Ev1 (kg/cm2) = (0.75*D*Δσ)/ΔS		957					

UnLoading (1)	1	2	3	4
Stage(Kg)	7065	3533	1768	0
Stress (Kg/cm2)	2.50	1.25	0.625	0.01
Settlement (mm)	1.04	0.96	0.88	0.63

Ev2/Ev1 = 2.4

Loading (2)	0	1	2	3	4	5	
Stage(Kg)	0	1186.92	2345.6	3532.5	4719.4	5878.1	
Stress (Kg/cm2)	0.01	0.42	0.83	1.25	1.67	2.08	
Settlement (mm)	0.63	0.73	0.80	0.87	0.96	1.02	
D (mm) = 600		S1 (mm)= 0.78		S2(mm)= 0.98		ΔS = 0.20	
Ev2 (kg/cm2) = (0.75*D*Δσ)/ΔS		2250					

Ev1 = Modulus of deformation during the loading stage.
 Ev2 = Modulus of deformation during the Reloading stage.
 D = Plate diameter (mm)
 Ds = The difference between 0,3 and 0,7 from the maximum loading (smax) (kg/cm²)
 DS = Difference in settlements corresponding to 0,3 and 0,7 from the maximum loading (mm)



Company Name : Sun Rise Construction.
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh Priority Sector (6) – Alamein to Foka
Test Date : 06/03/2023
report date : 07/03/2023
Location : Station 448+350 to 448+400
Test No. : 03

Nonrepetitive Static Plate Load Tests of Soils
DIN 18134

Data sheet

Loading Stage (1)

Loading	Stress Kg/cm2	Dial 1	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
			mm		mm		mm	
0	0.00	20.00	0.00	20.00	0.00	20.00	0.00	0.00
1	0.42	19.89	0.11	19.91	0.09	19.86	0.14	0.11
2	0.83	19.78	0.22	19.79	0.21	19.75	0.25	0.23
3	1.25	19.64	0.36	19.65	0.35	19.58	0.42	0.38
4	1.67	19.51	0.49	19.54	0.46	19.39	0.61	0.52
5	2.08	19.42	0.58	19.44	0.56	19.22	0.78	0.64
6	2.50	19.31	0.69	19.30	0.70	19.04	0.96	0.78

Unloading Stage (1)

Loading	Stress Kg/cm2	Dial 1	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
			mm		mm		mm	
1	2.50	19.31	0.69	19.30	0.70	19.04	0.96	0.78
2	1.25	19.39	0.61	19.41	0.59	19.12	0.88	0.69
3	0.625	19.48	0.52	19.50	0.50	19.35	0.65	0.56
4	0.01	19.65	0.35	19.71	0.29	19.70	0.30	0.31

Loading Stage (2)

Loading	Stress Kg/cm2	Dial 1	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
			mm		mm		mm	
0	0.42	19.59	0.41	19.62	0.38	19.61	0.39	0.39
1	0.83	19.52	0.48	19.55	0.45	19.50	0.50	0.48
2	1.25	19.48	0.52	19.49	0.51	19.35	0.65	0.56
3	1.67	19.41	0.59	19.40	0.60	19.22	0.78	0.66
4	2.08	19.35	0.65	19.36	0.64	19.11	0.89	0.73

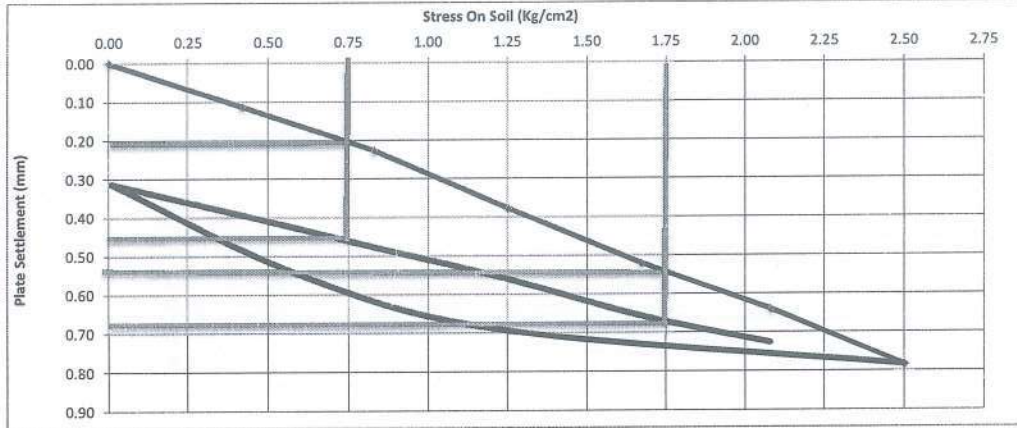


CEL

Consulting Engineering Bureau & Laboratories
مكتب معامل الاستشارات الهندسية

Company Name : Sun Rise Construction.
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh Priority Sector (6) – Alamein to Foka
Test Date : 06/03/2023
report date : 07/03/2023
Location : Station 448+350 to 448+400
Test No. : 03

Nonrepetitive Static Plate Load Tests of Soils DIN 18134



Loading (1)	0	1	2	3	4	5	6
Stage(Kg)	0	1186.92	2345.6	3532.5	4719.4	5878.1	7065
Stress (Kg/cm2)	0.00	0.42	0.83	1.25	1.67	2.08	2.50
Settlement (mm)	0.00	0.11	0.23	0.38	0.52	0.64	0.78
D (mm) = 600	S1 (mm)= 0.20		S2(mm)= 0.54		ΔS = 0.34		
Ev1 (kg/cm2) = (0.75*D*Δσ)/ΔS	1324						

UnLoading (1)	1	2	3	4
Stage(Kg)	7065	3533	1768	0
Stress (Kg/cm2)	2.50	1.25	0.625	0.01
Settlement (mm)	0.78	0.69	0.56	0.31

Loading (2)	0	1	2	3	4	5
Stage(Kg)	0	1186.92	2345.6	3532.5	4719.4	5878.1
Stress (Kg/cm2)	0.01	0.42	0.83	1.25	1.67	2.08
Settlement (mm)	0.31	0.39	0.48	0.56	0.66	0.73
D (mm) = 600	S1 (mm)= 0.45		S2(mm)= 0.68		ΔS = 0.23	
Ev2 (kg/cm2) = (0.75*D*Δσ)/ΔS	1957					

Ev2/Ev1 = 1.5

Ev1 = Modulus of deformation during the loading stage.
Ev2 = Modulus of deformation during the Reloading stage.
D = Plate diameter (mm)
Ds = The difference between 0.3 and 0.7 from the maximum loading (smax) (kg/cm²)
DS = Difference in settlements corresponding to 0.3 and 0.7 from the maximum loading (mm)



3 El Malek El Afdal Street
Zamalek, Cairo.
Tel.& Fax : 27367231 - 27363093



3 ش الملك الأفضل
الزمالك - القاهرة
تليفون + فاكس : ٢٧٣٦٧٢٣١ - ٢٧٣٦٣٠٩٣
www.cel-egypt.com

Company Name : Sun Rise Construction.
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh Priority Sector (6) – Alamein to Foka
Test Date : 06/03/2023
report date : 07/03/2023
Location : Station 448+4000 to 448+450
Test No. : 04

Nonrepetitive Static Plate Load Tests of Soils
DIN 18134

Data sheet

Loading Stage (1)

Loading	Stress Kg/cm2	Dial 1	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
			mm		mm		mm	
0	0.00	20.00	0.00	20.00	0.00	20.00	0.00	0.00
1	0.42	19.87	0.13	19.78	0.22	19.83	0.17	0.17
2	0.83	19.74	0.26	19.64	0.36	19.70	0.30	0.31
3	1.25	19.57	0.43	19.42	0.58	19.52	0.48	0.50
4	1.67	19.42	0.58	19.22	0.78	19.35	0.65	0.67
5	2.08	19.30	0.70	19.07	0.93	19.20	0.80	0.81
6	2.50	19.17	0.83	18.86	1.14	19.05	0.95	0.97

Unloading Stage (1)

Loading	Stress Kg/cm2	Dial 1	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
			mm		mm		mm	
1	2.50	19.17	0.83	18.86	1.14	19.05	0.95	0.97
2	1.25	19.28	0.72	19.03	0.97	19.17	0.83	0.84
3	0.625	19.37	0.63	19.15	0.85	19.31	0.69	0.72
4	0.01	19.63	0.37	19.45	0.55	19.57	0.43	0.45

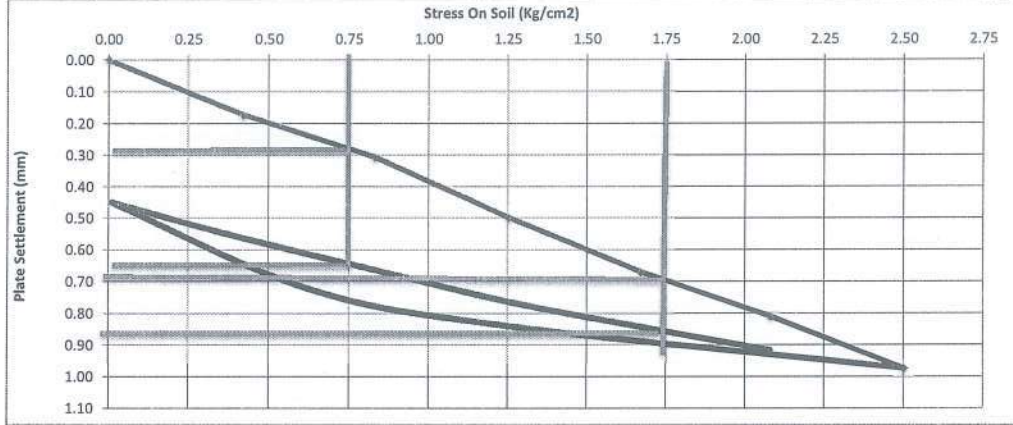
Loading Stage (2)

Loading	Stress Kg/cm2	Dial 1	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
			mm		mm		mm	
0	0.42	19.49	0.51	19.32	0.68	19.50	0.50	0.56
1	0.83	19.41	0.59	19.21	0.79	19.39	0.61	0.66
2	1.25	19.34	0.66	19.10	0.90	19.27	0.73	0.76
3	1.67	19.26	0.74	19.02	0.98	19.19	0.81	0.84
4	2.08	19.20	0.80	18.95	1.05	19.10	0.90	0.92



Company Name : Sun Rise Construction.
 Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh Priority Sector (6) – Alamein to Foka
 Test Date : 06/03/2023
 report date : 07/03/2023
 Location : Station 448+4000 to 448+450
 Test No. : 04

**Nonrepetitive Static Plate Load Tests of Soils
 DIN 18134**



Loading (1)	0	1	2	3	4	5	6
Stage(Kg)	0	1186.92	2345.6	3532.5	4719.4	5878.1	7065
Stress (Kg/cm2)	0.00	0.42	0.83	1.25	1.67	2.08	2.50
Settlement (mm)	0.00	0.17	0.31	0.50	0.67	0.81	0.97
D (mm) = 600		S1 (mm)= 0.28		S2(mm)= 0.70		ΔS = 0.42	
Ev1 (kg/cm2) = (0.75*D*Δσ)/ΔS		1071					

UnLoading (1)	1	2	3	4
Stage(Kg)	7065	3533	1768	0
Stress (Kg/cm2)	2.50	1.25	0.625	0.01
Settlement (mm)	0.97	0.84	0.72	0.45

Ev2/Ev1 = 2.1

Loading (2)	0	1	2	3	4	5	
Stage(Kg)	0	1186.92	2345.6	3532.5	4719.4	5878.1	
Stress (Kg/cm2)	0.01	0.42	0.83	1.25	1.67	2.08	
Settlement (mm)	0.45	0.56	0.66	0.76	0.84	0.92	
D (mm) = 600		S1 (mm)= 0.65		S2(mm)= 0.85		ΔS = 0.20	
Ev2 (kg/cm2) = (0.75*D*Δσ)/ΔS		2250					

Ev1 = Modulus of deformation during the loading stage.
 Ev2 = Modulus of deformation during the Reloading stage.
 D = Plate diameter (mm)
 Ds = The difference between 0.3 and 0.7 from the maximum loading (smax) (kg/cm²)
 DS = Difference in settlements corresponding to 0.3 and 0.7 from the maximum loading (mm)



Company Name : Sun Rise Construction.
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh Priority Sector (6) – Alamein to Foka
Test Date : 06/03/2023
report date : 07/03/2023
Location : Station 448+450 to 448+500
Test No. : 05

Nonrepetitive Static Plate Load Tests of Soils
DIN 18134

Data sheet

Loading Stage (1)

Loading	Stress Kg/cm2	Dial 1	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
			mm		mm		mm	
0	0.00	20.00	0.00	20.00	0.00	20.00	0.00	0.00
1	0.42	19.92	0.08	19.80	0.20	19.80	0.20	0.16
2	0.83	19.80	0.20	19.67	0.33	19.65	0.35	0.29
3	1.25	19.71	0.29	19.49	0.51	19.50	0.50	0.43
4	1.67	19.68	0.32	19.36	0.64	19.35	0.65	0.54
5	2.08	19.55	0.45	19.17	0.83	19.20	0.80	0.69
6	2.50	19.48	0.52	19.09	0.91	19.05	0.95	0.79

Unloading Stage (1)

Loading	Stress Kg/cm2	Dial 1	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
			mm		mm		mm	
1	2.50	19.48	0.52	19.09	0.91	19.05	0.95	0.79
2	1.25	19.53	0.47	19.14	0.86	19.11	0.89	0.74
3	0.625	19.59	0.41	19.26	0.74	19.24	0.76	0.64
4	0.01	19.77	0.23	19.49	0.51	19.51	0.49	0.41

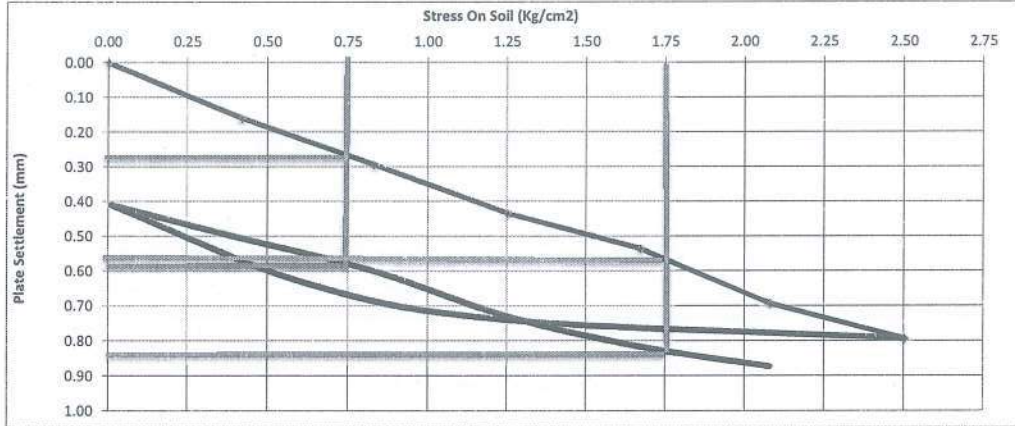
Loading Stage (2)

Loading	Stress Kg/cm2	Dial 1	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
			mm		mm		mm	
0	0.42	19.65	0.35	19.37	0.63	19.46	0.54	0.51
1	0.83	19.60	0.40	19.25	0.75	19.35	0.65	0.60
2	1.25	19.57	0.43	19.01	0.99	19.23	0.77	0.73
3	1.67	19.52	0.48	18.92	1.08	19.11	0.89	0.82
4	2.08	19.48	0.52	18.87	1.13	19.03	0.97	0.87



Company Name : Sun Rise Construction.
 Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh Priority Sector (6) – Alamein to Foka
 Test Date : 06/03/2023
 report date : 07/03/2023
 Location : Station 448+450 to 448+500
 Test No. : 05

**Nonrepetitive Static Plate Load Tests of Soils
 DIN 18134**



Loading (1)	0	1	2	3	4	5	6	
Stage(Kg)	0	1186.92	2345.6	3532.5	4719.4	5878.1	7065	
Stress (Kg/cm2)	0.00	0.42	0.83	1.25	1.67	2.08	2.50	
Settlement (mm)	0.00	0.16	0.29	0.43	0.54	0.69	0.79	
D (mm) =	600		S1 (mm)=	0.28	S2(mm)=	0.58	ΔS =	0.30
Ev1 (kg/cm2) =	(0.75*D*Δσ)/ΔS		1500					

UnLoading (1)	1	2	3	4
Stage(Kg)	7065	3533	1768	0
Stress (Kg/cm2)	2.50	1.25	0.625	0.01
Settlement (mm)	0.79	0.74	0.64	0.41

Ev2/Ev1 = 1.2

Loading (2)	0	1	2	3	4	5		
Stage(Kg)	0	1186.92	2345.6	3532.5	4719.4	5878.1		
Stress (Kg/cm2)	0.01	0.42	0.83	1.25	1.67	2.08		
Settlement (mm)	0.41	0.51	0.60	0.73	0.82	0.87		
D (mm) =	600		S1 (mm)=	0.58	S2(mm)=	0.83	ΔS =	0.25
Ev2 (kg/cm2) =	(0.75*D*Δσ)/ΔS		1800					

Ev1 = Modulus of deformation during the loading stage.
 Ev2 = Modulus of deformation during the Reloading stage.
 D = Plate diameter (mm)
 Ds = The difference between 0.3 and 0.7 from the maximum loading (smax) (kg/cm²)
 DS = Difference in settlements corresponding to 0.3 and 0.7 from the maximum loading (mm)



Company Name : Sun Rise Construction.
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh Priority Sector (6) – Alamein to Foka
Test Date : 06/03/2023
report date : 07/03/2023
Location : Station 448+500 to 448+550
Test No. : 06

Nonrepetitive Static Plate Load Tests of Soils
DIN 18134

Data sheet

Loading Stage (1)

Loading	Stress Kg/cm ²	Dial 1	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
			mm		mm		mm	
0	0.00	20.00	0.00	20.00	0.00	20.00	0.00	0.00
1	0.42	19.75	0.25	19.90	0.10	19.88	0.12	0.16
2	0.83	19.60	0.40	19.50	0.50	19.76	0.24	0.38
3	1.25	19.41	0.59	19.31	0.69	19.61	0.39	0.56
4	1.67	19.27	0.73	19.15	0.85	19.48	0.52	0.70
5	2.08	19.16	0.84	19.00	1.00	19.32	0.68	0.84
6	2.50	19.06	0.94	18.87	1.13	19.16	0.84	0.97

Unloading Stage (1)

Loading	Stress Kg/cm ²	Dial 1	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
			mm		mm		mm	
1	2.50	19.06	0.94	18.87	1.13	19.16	0.84	0.97
2	1.25	19.13	0.87	19.05	0.95	19.22	0.78	0.87
3	0.625	19.25	0.75	19.14	0.86	19.29	0.71	0.77
4	0.01	19.53	0.47	19.41	0.59	19.62	0.38	0.48

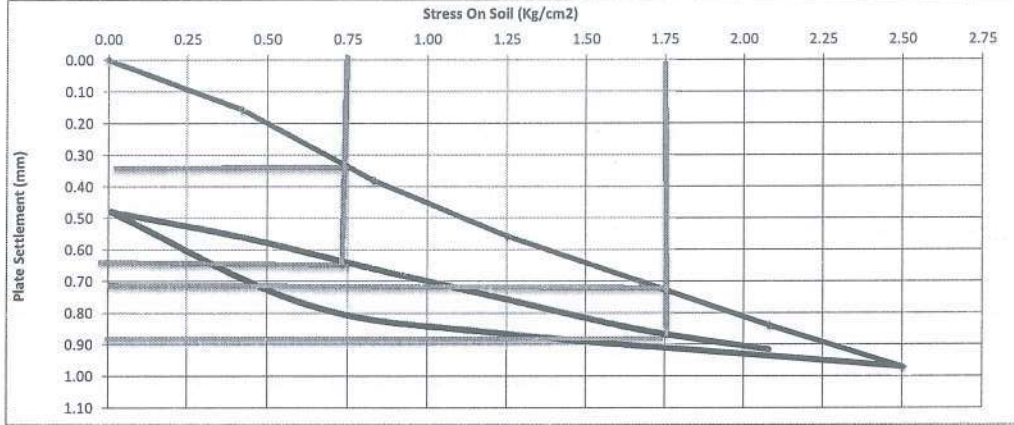
Loading Stage (2)

Loading	Stress Kg/cm ²	Dial 1	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
			mm		mm		mm	
0	0.42	19.45	0.55	19.33	0.67	19.54	0.46	0.56
1	0.83	19.36	0.64	19.24	0.76	19.42	0.58	0.66
2	1.25	19.26	0.74	19.18	0.82	19.29	0.71	0.76
3	1.67	19.18	0.82	19.10	0.90	19.16	0.84	0.85
4	2.08	19.12	0.88	19.05	0.95	19.08	0.92	0.92



Company Name : Sun Rise Construction.
 Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh Priority Sector (6) – Alamein to Foka
 Test Date : 06/03/2023
 report date : 07/03/2023
 Location : Station 448+500 to 448+550
 Test No. : 06

Nonrepetitive Static Plate Load Tests of Soils
DIN 18134



Loading (1)	0	1	2	3	4	5	6
Stage(Kg)	0	1186.92	2345.6	3532.5	4719.4	5878.1	7065
Stress (Kg/cm2)	0.00	0.42	0.83	1.25	1.67	2.08	2.50
Settlement (mm)	0.00	0.16	0.38	0.56	0.70	0.84	0.97
D (mm) = 600		S1 (mm)= 0.33		S2(mm)= 0.72		ΔS = 0.39	
Ev1 (kg/cm2) = (0.75*D*Δσ)/ΔS		1154					

UnLoading (1)	1	2	3	4
Stage(Kg)	7065	3533	1768	0
Stress (Kg/cm2)	2.50	1.25	0.625	0.01
Settlement (mm)	0.97	0.87	0.77	0.48

Ev2/Ev1 = 1.7

Loading (2)	0	1	2	3	4	5	
Stage(Kg)	0	1186.92	2345.6	3532.5	4719.4	5878.1	
Stress (Kg/cm2)	0.01	0.42	0.83	1.25	1.67	2.08	
Settlement (mm)	0.48	0.56	0.66	0.76	0.85	0.92	
D (mm) = 600		S1 (mm)= 0.65		S2(mm)= 0.88		ΔS = 0.23	
Ev2 (kg/cm2) = (0.75*D*Δσ)/ΔS		1957					

Ev1 = Modulus of deformation during the loading stage.
 Ev2 = Modulus of deformation during the Reloading stage.
 D = Plate diameter (mm)
 Ds = The difference between 0.3 and 0.7 from the maximum loading (smax) (kg/cm²)
 DS = Difference in settlements corresponding to 0.3 and 0.7 from the maximum loading (mm)



Company Name : Sun Rise Construction.
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh Priority Sector (6) – Alamein to Foka
Test Date : 06/03/2023
report date : 07/03/2023
Location : Station 448+550 to 448+600
Test No. : 07

Nonrepetitive Static Plate Load Tests of Soils
DIN 18134

Data sheet

Loading Stage (1)

Loading	Stress Kg/cm2	Dial 1	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
			mm		mm		mm	
0	0.00	20.00	0.00	20.00	0.00	20.00	0.00	0.00
1	0.42	19.90	0.10	19.75	0.25	19.81	0.19	0.18
2	0.83	19.63	0.37	19.56	0.44	19.50	0.50	0.44
3	1.25	19.41	0.59	19.38	0.62	19.33	0.67	0.63
4	1.67	19.19	0.81	19.25	0.75	19.20	0.80	0.79
5	2.08	18.98	1.02	19.16	0.84	19.08	0.92	0.93
6	2.50	18.79	1.21	19.03	0.97	18.95	1.05	1.08

Unloading Stage (1)

Loading	Stress Kg/cm2	Dial 1	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
			mm		mm		mm	
1	2.50	18.79	1.21	19.03	0.97	18.95	1.05	1.08
2	1.25	18.88	1.12	19.11	1.00	19.05	0.95	1.02
3	0.625	18.99	1.01	19.18	0.82	19.14	0.86	0.90
4	0.01	19.30	0.70	19.45	0.55	19.44	0.56	0.60

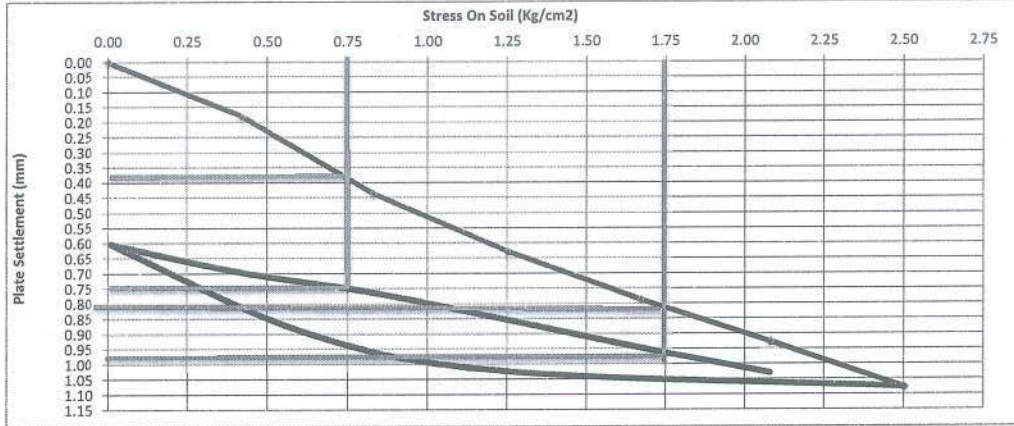
Loading Stage (2)

Loading	Stress Kg/cm2	Dial 1	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
			mm		mm		mm	
0	0.42	19.22	0.78	19.37	0.63	19.32	0.68	0.70
1	0.83	19.14	0.86	19.30	0.70	19.27	0.73	0.76
2	1.25	19.06	0.94	19.22	0.78	19.16	0.84	0.85
3	1.67	18.97	1.03	19.12	0.88	19.07	0.93	0.95
4	2.08	18.90	1.10	19.08	0.92	18.93	1.07	1.03



Company Name : Sun Rise Construction.
 Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh Priority Sector (6) – Alamein to Foka
 Test Date : 06/03/2023
 report date : 07/03/2023
 Location : Station 448+550 to 448+600
 Test No. : 07

**Nonrepetitive Static Plate Load Tests of Soils
 DIN 18134**



Loading (1)	0	1	2	3	4	5	6
Stage(Kg)	0	1186.92	2345.6	3532.5	4719.4	5878.1	7065
Stress (Kg/cm2)	0.00	0.42	0.83	1.25	1.67	2.08	2.50
Settlement (mm)	0.00	0.18	0.44	0.63	0.79	0.93	1.08
D (mm) =	600	S1 (mm)=	0.38	S2(mm)=	0.82	ΔS =	0.44
Ev1 (kg/cm2) = (0.75*D*Δσ)/ΔS							1023

UnLoading (1)	1	2	3	4
Stage(Kg)	7065	3533	1768	0
Stress (Kg/cm2)	2.50	1.25	0.625	0.01
Settlement (mm)	1.08	1.02	0.90	0.60

Ev2/Ev1 = 1.9

Loading (2)	0	1	2	3	4	5	
Stage(Kg)	0	1186.92	2345.6	3532.5	4719.4	5878.1	
Stress (Kg/cm2)	0.01	0.42	0.83	1.25	1.67	2.08	
Settlement (mm)	0.60	0.70	0.76	0.85	0.95	1.03	
D (mm) =	600	S1 (mm)=	0.75	S2(mm)=	0.98	ΔS =	0.23
Ev2 (kg/cm2) = (0.75*D*Δσ)/ΔS							1957

Ev1 = Modulus of deformation during the loading stage.
 Ev2 = Modulus of deformation during the Reloading stage.
 D = Plate diameter (mm)
 Ds = The difference between 0.3 and 0.7 from the maximum loading (smax) (kg/cm²)
 DS = Difference in settlements corresponding to 0.3 and 0.7 from the maximum loading (mm)



Company Name : Sun Rise Construction.
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh Priority Sector (6) – Alamein to Foka
Test Date : 06/02/2023
report date : 07/02/2023
Location : Station 448+600 to 448+650
Test No. : 08

Nonrepetitive Static Plate Load Tests of Soils
DIN 18134

Data sheet

Loading Stage (1)

Loading	Stress Kg/cm2	Dial 1	Settlement mm	Dial 2	Settlement mm	Dial 3	Settlement mm	Average
0	0.00	20.00	0.00	20.00	0.00	20.00	0.00	0.00
1	0.42	19.77	0.23	19.80	0.20	19.80	0.20	0.21
2	0.83	19.50	0.50	19.65	0.35	19.48	0.52	0.46
3	1.25	19.30	0.70	19.51	0.49	19.29	0.71	0.63
4	1.67	19.17	0.83	19.37	0.63	19.15	0.85	0.77
5	2.08	19.05	0.95	19.25	0.75	18.97	1.03	0.91
6	2.50	18.88	1.12	19.13	0.87	18.85	1.15	1.05

Unloading Stage (1)

Loading	Stress Kg/cm2	Dial 1	Settlement mm	Dial 2	Settlement mm	Dial 3	Settlement mm	Average
1	2.50	18.88	1.12	19.13	0.87	18.85	1.15	1.05
2	1.25	18.96	1.04	19.19	0.81	18.92	1.08	0.98
3	0.625	19.09	0.91	19.32	0.68	19.05	0.95	0.85
4	0.01	19.38	0.62	19.47	0.53	19.32	0.68	0.61

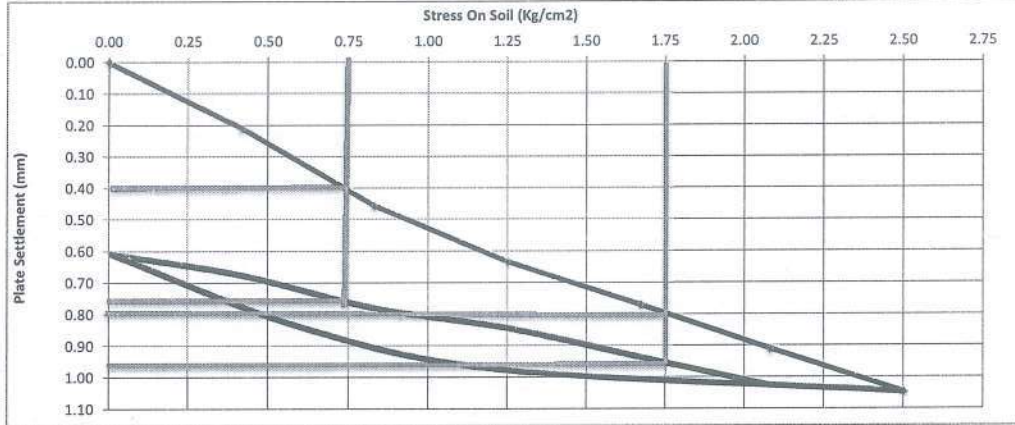
Loading Stage (2)

Loading	Stress Kg/cm2	Dial 1	Settlement mm	Dial 2	Settlement mm	Dial 3	Settlement mm	Average
0	0.42	19.29	0.71	19.44	0.56	19.24	0.76	0.68
1	0.83	19.18	0.82	19.32	0.68	19.16	0.84	0.78
2	1.25	19.10	0.90	19.29	0.71	19.08	0.92	0.84
3	1.67	19.02	0.98	19.17	0.83	19.00	1.00	0.94
4	2.08	18.95	1.05	19.02	0.98	18.95	1.05	1.03



Company Name : Sun Rise Construction.
 Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh Priority Sector (6) – Alamein to Foka
 Test Date : 06/02/2023
 report date : 07/02/2023
 Location : Station 448+600 to 448+650
 Test No. : 08

Nonrepetitive Static Plate Load Tests of Soils
DIN 18134



Loading (1)	0	1	2	3	4	5	6
Stage(Kg)	0	1186.92	2345.6	3532.5	4719.4	5878.1	7065
Stress (Kg/cm2)	0.00	0.42	0.83	1.25	1.67	2.08	2.50
Settlement (mm)	0.00	0.21	0.46	0.63	0.77	0.91	1.05
D (mm) = 600	S1 (mm)= 0.40		S2(mm)= 0.80		ΔS = 0.40		
Ev1 (kg/cm2) = (0.75*D*Δσ)/ΔS			1125				

UnLoading (1)	1	2	3	4
Stage(Kg)	7065	3533	1768	0
Stress (Kg/cm2)	2.50	1.25	0.625	0.01
Settlement (mm)	1.05	0.98	0.85	0.61

Ev2/Ev1 = 2.0

Loading (2)	0	1	2	3	4	5
Stage(Kg)	0	1186.92	2345.6	3532.5	4719.4	5878.1
Stress (Kg/cm2)	0.01	0.42	0.83	1.25	1.67	2.08
Settlement (mm)	0.61	0.68	0.78	0.84	0.94	1.03
D (mm) = 600	S1 (mm)= 0.75		S2(mm)= 0.95		ΔS = 0.20	
Ev2 (kg/cm2) = (0.75*D*Δσ)/ΔS			2250			

Ev1 = Modulus of deformation during the loading stage.
 Ev2 = Modulus of deformation during the Reloading stage.
 D = Plate diameter (mm)
 Ds = The difference between 0.3 and 0.7 from the maximum loading (smax) (kg/cm²)
 DS = Difference in settlements corresponding to 0.3 and 0.7 from the maximum loading (mm)



Company Name : Sun Rise Construction.
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh Priority Sector (6) – Alamein to Foka
Test Date : 06/03/2023
report date : 07/03/2023
Location : Station 448+650 to 448+700
Test No. : 09

Nonrepetitive Static Plate Load Tests of Soils
DIN 18134

Data sheet

Loading Stage (1)

Loading	Stress	Dial 1	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
	Kg/cm2		mm		mm		mm	
0	0.00	20.00	0.00	20.00	0.00	20.00	0.00	0.00
1	0.42	19.82	0.18	19.85	0.15	19.88	0.12	0.15
2	0.83	19.70	0.30	19.58	0.42	19.65	0.35	0.36
3	1.25	19.55	0.45	19.36	0.64	19.52	0.48	0.52
4	1.67	19.43	0.57	19.22	0.78	19.38	0.62	0.66
5	2.08	19.30	0.70	19.11	0.89	19.16	0.84	0.81
6	2.50	19.18	0.82	18.87	1.13	19.04	0.96	0.97

Unloading Stage (1)

Loading	Stress	Dial 1	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
	Kg/cm2		mm		mm		mm	
1	2.50	19.18	0.82	18.87	1.13	19.04	0.96	0.97
2	1.25	19.25	0.75	18.95	1.05	19.10	0.90	0.90
3	0.625	19.37	0.63	19.05	0.95	19.23	0.77	0.78
4	0.01	19.66	0.34	19.36	0.64	19.50	0.50	0.49

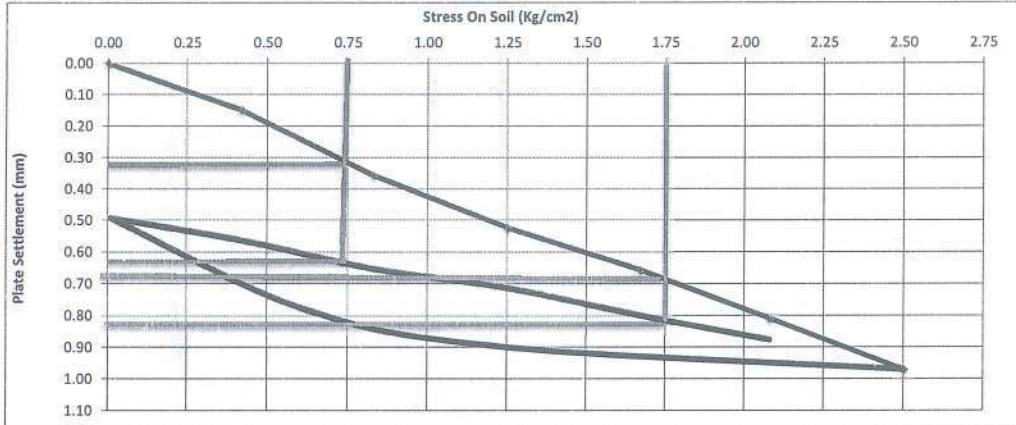
Loading Stage (2)

Loading	Stress	Dial 1	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
	Kg/cm2		mm		mm		mm	
0	0.42	19.59	0.41	19.28	0.72	19.44	0.56	0.56
1	0.83	19.49	0.51	19.19	0.81	19.36	0.64	0.65
2	1.25	19.40	0.60	19.18	0.82	19.28	0.72	0.71
3	1.67	19.31	0.69	19.11	0.89	19.18	0.82	0.80
4	2.08	19.22	0.78	19.05	0.95	19.10	0.90	0.88



Company Name : Sun Rise Construction.
 Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh Priority Sector (6) – Alamein to Foka
 Test Date : 06/03/2023
 report date : 07/03/2023
 Location : Station 448+650 to 448+700
 Test No. : 09

Nonrepetitive Static Plate Load Tests of Soils
DIN 18134



Loading (1)	0	1	2	3	4	5	6
Stage(Kg)	0	1186.92	2345.6	3532.5	4719.4	5878.1	7065
Stress (Kg/cm2)	0.00	0.42	0.83	1.25	1.67	2.08	2.50
Settlement (mm)	0.00	0.15	0.36	0.52	0.66	0.81	0.97
D (mm) = 600	S1 (mm)= 0.32		S2(mm)= 0.68		ΔS = 0.36		
Ev1 (kg/cm2) = (0.75*D*Δσ)/ΔS	1250						

UnLoading (1)	1	2	3	4
Stage(Kg)	7065	3533	1768	0
Stress (Kg/cm2)	2.50	1.25	0.625	0.01
Settlement (mm)	0.97	0.90	0.78	0.49

Ev2/Ev1 = 1.9

Loading (2)	0	1	2	3	4	5
Stage(Kg)	0	1186.92	2345.6	3532.5	4719.4	5878.1
Stress (Kg/cm2)	0.01	0.42	0.83	1.25	1.67	2.08
Settlement (mm)	0.49	0.56	0.65	0.71	0.80	0.88
D (mm) = 600	S1 (mm)= 0.63		S2(mm)= 0.82		ΔS = 0.19	
Ev2 (kg/cm2) = (0.75*D*Δσ)/ΔS	2368					

Ev1 = Modulus of deformation during the loading stage.
 Ev2 = Modulus of deformation during the Reloading stage.
 D = Plate diameter (mm)
 Ds = The difference between 0.3 and 0.7 from the maximum loading (smax) (kg/cm²)
 DS = Difference in settlements corresponding to 0.3 and 0.7 from the maximum loading (mm)



Company Name : Sun Rise Construction.
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh Priority Sector (6) – Alamein to Foka
Test Date : 06/03/2023
report date : 07/03/2023
Location : Station 448+700 to 448+750
Test No. :10

Nonrepetitive Static Plate Load Tests of Soils
DIN 18134

Data sheet

Loading Stage (1)

Loading	Stress Kg/cm2	Dial 1	Settlement mm	Dial 2	Settlement mm	Dial 3	Settlement mm	Average
0	0.00	20.00	0.00	20.00	0.00	20.00	0.00	0.00
1	0.42	19.89	0.11	19.90	0.10	19.81	0.19	0.13
2	0.83	19.75	0.25	19.58	0.42	19.62	0.38	0.35
3	1.25	19.60	0.40	19.45	0.55	19.45	0.55	0.50
4	1.67	19.48	0.52	19.33	0.67	19.31	0.69	0.63
5	2.08	19.33	0.67	19.22	0.78	19.22	0.78	0.74
6	2.50	19.21	0.79	19.10	0.90	19.09	0.91	0.87

Unloading Stage (1)

Loading	Stress Kg/cm2	Dial 1	Settlement mm	Dial 2	Settlement mm	Dial 3	Settlement mm	Average
1	2.50	19.21	0.79	19.10	0.90	19.09	0.91	0.87
2	1.25	19.29	0.71	19.18	0.82	19.16	0.84	0.79
3	0.625	19.37	0.63	19.30	0.70	19.22	0.78	0.70
4	0.01	19.65	0.35	19.59	0.41	19.51	0.49	0.42

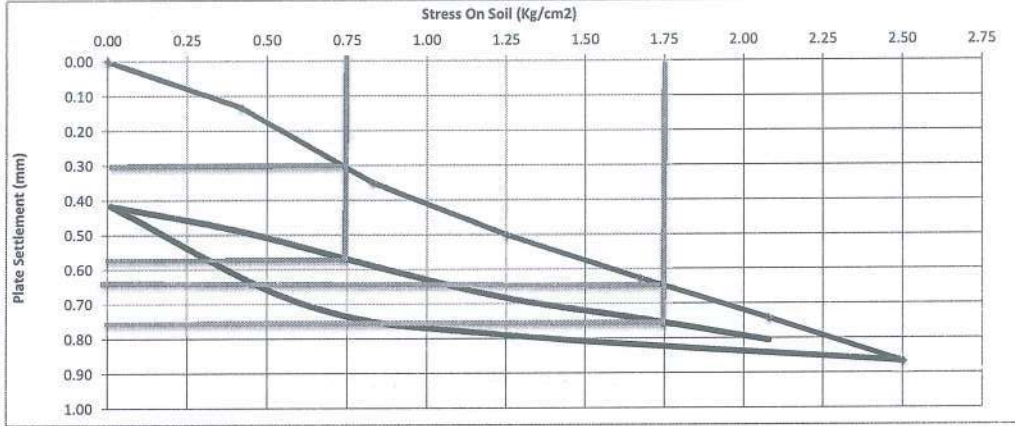
Loading Stage (2)

Loading	Stress Kg/cm2	Dial 1	Settlement mm	Dial 2	Settlement mm	Dial 3	Settlement mm	Average
0	0.42	19.58	0.42	19.51	0.49	19.44	0.56	0.49
1	0.83	19.48	0.52	19.40	0.60	19.35	0.65	0.59
2	1.25	19.40	0.60	19.31	0.69	19.24	0.76	0.68
3	1.67	19.33	0.67	19.25	0.75	19.19	0.81	0.74
4	2.08	19.25	0.75	19.18	0.82	19.15	0.85	0.81



Company Name : Sun Rise Construction.
 Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh Priority Sector (6) – Alamein to Foka
 Test Date : 06/03/2023
 report date : 07/03/2023
 Location : Station 448+700 to 448+750
 Test No. :10

Nonrepetitive Static Plate Load Tests of Soils
DIN 18134



Loading (1)	0	1	2	3	4	5	6
Stage(Kg)	0	1186.92	2345.6	3532.5	4719.4	5878.1	7065
Stress (Kg/cm2)	0.00	0.42	0.83	1.25	1.67	2.08	2.50
Settlement (mm)	0.00	0.13	0.35	0.50	0.63	0.74	0.87
D (mm) = 600	S1 (mm)= 0.30		S2(mm)= 0.64		ΔS = 0.34		
Ev1 (kg/cm2) = (0.75*D*Δσ)/ΔS	1324						

UnLoading (1)	1	2	3	4
Stage(Kg)	7065	3533	1768	0
Stress (Kg/cm2)	2.50	1.25	0.625	0.01
Settlement (mm)	0.87	0.79	0.70	0.42

Ev2/Ev1 = 1.8

Loading (2)	0	1	2	3	4	5
Stage(Kg)	0	1186.92	2345.6	3532.5	4719.4	5878.1
Stress (Kg/cm2)	0.01	0.42	0.83	1.25	1.67	2.08
Settlement (mm)	0.42	0.49	0.59	0.68	0.74	0.81
D (mm) = 600	S1 (mm)= 0.58		S2(mm)= 0.77		ΔS = 0.19	
Ev2 (kg/cm2) = (0.75*D*Δσ)/ΔS	2368					

Ev1 = Modulus of deformation during the loading stage.
 Ev2 = Modulus of deformation during the Reloading stage.
 D = Plate diameter (mm)
 Ds = The difference between 0.3 and 0.7 from the maximum loading (smax) (kg/cm²)
 DS = Difference in settlements corresponding to 0.3 and 0.7 from the maximum loading (mm)



Company Name : Sun Rise Construction.
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh Priority Sector (6) – Alamein to Foka
Test Date : 06/03/2023
report date : 07/03/2023
Location : Station 448+750 to 448+800
Test No. : 11

Nonrepetitive Static Plate Load Tests of Soils
DIN 18134

Data sheet

Loading Stage (1)

Loading	Stress Kg/cm2	Dial 1	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
			mm		mm		mm	
0	0.00	20.00	0.00	20.00	0.00	20.00	0.00	0.00
1	0.42	19.75	0.25	19.80	0.20	19.83	0.17	0.21
2	0.83	19.52	0.48	19.62	0.38	19.71	0.29	0.38
3	1.25	19.31	0.69	19.44	0.56	19.60	0.40	0.55
4	1.67	19.16	0.84	19.31	0.69	19.43	0.57	0.70
5	2.08	19.04	0.96	19.16	0.84	19.21	0.79	0.86
6	2.50	18.90	1.10	19.04	0.96	19.08	0.92	0.99

Unloading Stage (1)

Loading	Stress Kg/cm2	Dial 1	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
			mm		mm		mm	
1	2.50	18.90	1.10	19.04	0.96	19.08	0.92	0.99
2	1.25	18.98	1.02	19.09	0.91	19.11	0.89	0.94
3	0.625	19.10	0.90	19.15	0.85	19.19	0.81	0.85
4	0.01	19.38	0.62	19.44	0.56	19.43	0.57	0.58

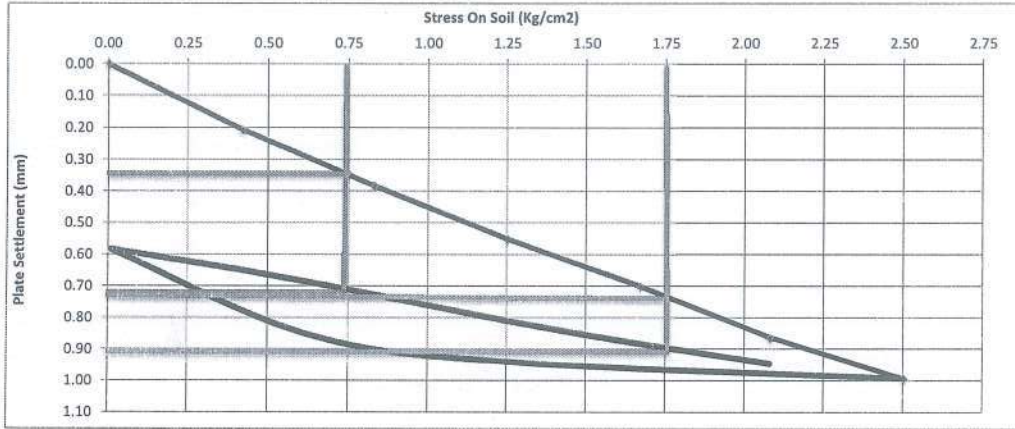
Loading Stage (2)

Loading	Stress Kg/cm2	Dial 1	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
			mm		mm		mm	
0	0.42	19.31	0.69	19.36	0.64	19.38	0.62	0.65
1	0.83	19.23	0.77	19.29	0.71	19.30	0.70	0.73
2	1.25	19.14	0.86	19.21	0.79	19.22	0.78	0.81
3	1.67	19.08	0.92	19.13	0.87	19.14	0.86	0.88
4	2.08	19.03	0.97	19.05	0.95	19.08	0.92	0.95



Company Name : Sun Rise Construction.
 Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh Priority Sector (6) – Alamein to Foka
 Test Date : 06/03/2023
 report date : 07/03/2023
 Location : Station 448+750 to 448+800
 Test No. : 11

Nonrepetitive Static Plate Load Tests of Soils
DIN 18134



Loading (1)	0	1	2	3	4	5	6
Stage(Kg)	0	1186.92	2345.6	3532.5	4719.4	5878.1	7065
Stress (Kg/cm2)	0.00	0.42	0.83	1.25	1.67	2.08	2.50
Settlement (mm)	0.00	0.21	0.38	0.55	0.70	0.86	0.99
D (mm) = 600		S1 (mm)= 0.35		S2(mm)= 0.73		ΔS = 0.38	
Ev1 (kg/cm2) = (0.75*D*Δσ)/ΔS		1184					

UnLoading (1)	1	2	3	4
Stage(Kg)	7065	3533	1768	0
Stress (Kg/cm2)	2.50	1.25	0.625	0.01
Settlement (mm)	0.99	0.94	0.85	0.58

Ev2/Ev1 = 2.1

Loading (2)	0	1	2	3	4	5	
Stage(Kg)	0	1186.92	2345.6	3532.5	4719.4	5878.1	
Stress (Kg/cm2)	0.01	0.42	0.83	1.25	1.67	2.08	
Settlement (mm)	0.58	0.65	0.73	0.81	0.88	0.95	
D (mm) = 600		S1 (mm)= 0.72		S2(mm)= 0.90		ΔS = 0.18	
Ev2 (kg/cm2) = (0.75*D*Δσ)/ΔS		2500					

Ev1 = Modulus of deformation during the loading stage.
 Ev2 = Modulus of deformation during the Reloading stage.
 D = Plate diameter (mm)
 Ds = The difference between 0.3 and 0.7 from the maximum loading (smax) (kg/cm²)
 DS = Difference in settlements corresponding to 0.3 and 0.7 from the maximum loading (mm)



Company : Sun Rise Construction

Project : Electric Express Train, Al Ain Sokhna to Marsa Matrouh Priority Sector (6)
- Alamein to Foka
Subject : Determine the deformation and strength characteristics of soil by the plate loading test according specifications DIN 18134:2012-04 and project requirements
Test Location : Station 448+800 to 449+200
Test Date : 23/02/2023
Repot Date : 25/02/2023
Type of soil : A-1-a
Test level : Upper Embankment (Ferma) .
Report No. : 95:102

Dear Gentleman,

According to the above mentioned subject the test performed as follows:-

Apparatus

1. Loading plates consists of two plates with 600 mm and 300 mm diameter
2. The thickness of plates 30 mm
3. Dial gauges with accuracy 0.01 mm to measuring the settlement
4. Steel straightedges with magnetic supports to fixed the dial gauges
5. Hydraulic jack with pump to transfer reactive loads to the loading plates
6. Dial indicator measuring device with scale capacity 700 Bar (Enerbac)
7. Reaction loading system by roller compactor with weight approximately 15 ton
8. Calibration certificates are attached

Test Procedure

1. Clean the ground on test area to the required level with undisturbed soil
2. Install loading plates 600 mm and 300 mm diameter, hydraulic jack and 3 dial gauges
3. Prior to starting the test applied preloading about 30 seconds.
4. The strain gauge and the dial gauge shall be set to zero
5. For a 600 mm loading plate, the limit values are 2.5 kg/cm²
6. The load shall be applied in six stages, in approximately equal increments, until the required maximum normal stress is reached.
7. Each change in load (from stage to stage) shall be completed within one minute
8. The load shall be released in 3 stages, to 50 % , 25 % , and approximately 2 % of the maximum load.
9. Following unloading, a further (2nd) loading cycle shall be carried out, in which, however, the load is to be increased only to the penultimate stage of the first cycle (so that the full load is not reached).
10. At each stage the load shall be maintained until the rate of settlement of the plate becomes less than 0.02 mm/min.
11. Remove the loads



Report

1. Evaluation and representation of results
2. Load Settlement curve
3. The test report content the following:-
 - location of test site - Dimension of loading plate
 - Measuring device used - Type of soil
 - Type of Bedding material below the plate -Weathering condition
 - Time and date of measurements - Unusual observation made during test
 - Dial gauge reading and corresponding normal stress - Loading-settlement curve
 - Description of the soil condition below the plate after testing

Report

Type of soil: Upper Embankment (Ferma) .Test level: A-1-a

- Job requirement: $E_{v2} > 600 \text{ Kg/cm}^2$ (60 MPa).

Item	Descriptions
- Type of bedding material below the plate	Natural Soil
- Weather condition	Partly Sunny
- Plate Diameter (mm)	600
- date of measurement	23/02/2023
- Unusual observation made during test	NO
- Description of the soil conditions below the plate after testing	No deformation

Evaluation and representation of results

Test No.	Station		First Cycle	Second Cycle	E_{v2}/ E_{v1} Ratio
	From	To	E_{v1} (kg/cm ²)	E_{v2} (kg/cm ²)	
1	448+800	448+850	1731	2647	1.5
2	448+850	448+900	1607	2143	1.3
3	448+900	448+950	1216	1552	1.3
4	448+950	449+000	1800	1286	0.7
5	449+000	449+050	1324	1552	1.2
6	449+050	449+100	1875	1154	0.6
7	449+100	449+150	1250	1800	1.4
8	449+150	449+200	1324	1957	1.5

Signature /



Company Name : Sun Rise Construction.
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh Priority Sector (6) – Alamein to Foka
Test Date : 23/02/2023
report date : 25/02/2023
Location : Station 448+800 to 448+850
Test No. : 01

Nonrepetitive Static Plate Load Tests of Soils
DIN 18134

Data sheet

Loading Stage (1)

Loading	Stress Kg/cm ²	Dial 1	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
			mm		mm		mm	
0	0.00	20.00	0.00	20.00	0.00	20.00	0.00	0.00
1	0.42	19.76	0.24	19.74	0.26	19.72	0.28	0.26
2	0.83	19.71	0.29	19.63	0.37	19.69	0.31	0.32
3	1.25	19.58	0.42	19.44	0.56	19.40	0.60	0.53
4	1.67	19.54	0.46	19.39	0.61	19.36	0.64	0.57
5	2.08	19.51	0.49	19.37	0.63	19.33	0.67	0.60
6	2.50	19.25	0.75	19.17	0.83	19.09	0.91	0.83

Unloading Stage (1)

Loading	Stress Kg/cm ²	Dial 1	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
			mm		mm		mm	
1	2.50	19.25	0.75	19.17	0.83	19.09	0.91	0.83
2	1.25	19.28	0.72	19.19	1.00	19.14	0.86	0.86
3	0.625	19.31	0.69	19.32	0.68	19.24	0.76	0.71
4	0.01	19.39	0.61	19.47	0.53	19.40	0.60	0.58

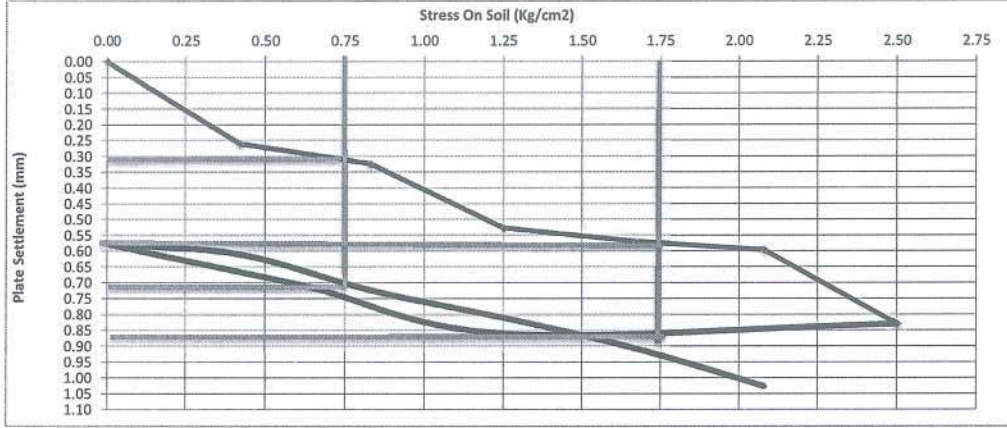
Loading Stage (2)

Loading	Stress Kg/cm ²	Dial 1	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
			mm		mm		mm	
0	0.42	19.37	0.63	19.44	0.56	19.36	0.64	0.61
1	0.83	19.24	0.76	19.32	0.68	19.27	0.73	0.72
2	1.25	19.12	0.88	19.29	0.71	19.16	0.84	0.81
3	1.67	19.04	0.96	19.17	0.83	19.07	0.93	0.91
4	2.08	18.97	1.03	19.02	0.98	18.93	1.07	1.03



Company Name : Sun Rise Construction.
 Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh Priority Sector (6) – Alamein to Foka
 Test Date : 23/02/2023
 report date : 25/02/2023
 Location : Station 448+800 to 448+850
 Test No. : 01

Nonrepetitive Static Plate Load Tests of Soils
DIN 18134



Loading (1)	0	1	2	3	4	5	6
Stage(Kg)	0	1186.92	2345.6	3532.5	4719.4	5878.1	7065
Stress (Kg/cm2)	0.00	0.42	0.83	1.25	1.67	2.08	2.50
Settlement (mm)	0.00	0.26	0.32	0.53	0.57	0.60	0.83
D (mm) = 600		S1 (mm)= 0.30		S2(mm)= 0.56		ΔS = 0.26	
Ev1 (kg/cm2) = (0.75*D*Δσ)/ΔS		1731					

UnLoading (1)	1	2	3	4
Stage(Kg)	7065	3533	1768	0
Stress (Kg/cm2)	2.50	1.25	0.625	0.01
Settlement (mm)	0.83	0.86	0.71	0.58

Loading (2)	0	1	2	3	4	5	
Stage(Kg)	0	1186.92	2345.6	3532.5	4719.4	5878.1	
Stress (Kg/cm2)	0.01	0.42	0.83	1.25	1.67	2.08	
Settlement (mm)	0.58	0.61	0.72	0.81	0.91	1.03	
D (mm) = 600		S1 (mm)= 0.71		S2(mm)= 0.88		ΔS = 0.17	
Ev2 (kg/cm2) = (0.75*D*Δσ)/ΔS		2647					

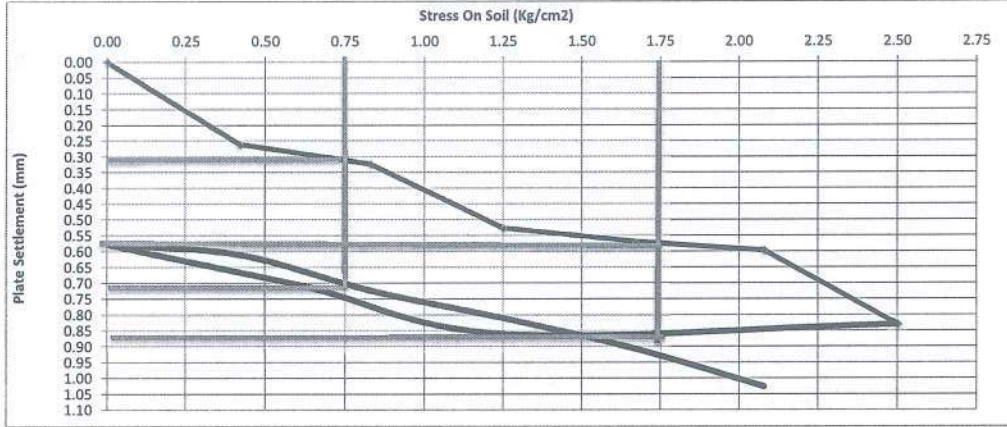
Ev2/Ev1 = 1.5

Ev1 = Modulus of deformation during the loading stage.
 Ev2 = Modulus of deformation during the Reloading stage.
 D = Plate diameter (mm)
 Ds = The difference between 0.3 and 0.7 from the maximum loading (smax) (kg/cm²)
 DS = Difference in settlements corresponding to 0.3 and 0.7 from the maximum loading (mm)



Company Name : Sun Rise Construction.
 Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh Priority Sector (6) – Alamein to Foka
 Test Date : 23/02/2023
 report date : 25/02/2023
 Location : Station 448+800 to 448+850
 Test No. : 01

Nonrepetitive Static Plate Load Tests of Soils
DIN 18134



Loading (1)	0	1	2	3	4	5	6
Stage(Kg)	0	1186.92	2345.6	3532.5	4719.4	5878.1	7065
Stress (Kg/cm2)	0.00	0.42	0.83	1.25	1.67	2.08	2.50
Settlement (mm)	0.00	0.26	0.32	0.53	0.57	0.60	0.83
D (mm) = 600	S1 (mm)= 0.30		S2(mm)= 0.56		ΔS = 0.26		
Ev1 (kg/cm2) = $(0.75 \cdot D \cdot \Delta\sigma) / \Delta S$			1731				

UnLoading (1)	1	2	3	4
Stage(Kg)	7065	3533	1768	0
Stress (Kg/cm2)	2.50	1.25	0.625	0.01
Settlement (mm)	0.83	0.86	0.71	0.58

Ev2/Ev1 = 1.5

Loading (2)	0	1	2	3	4	5
Stage(Kg)	0	1186.92	2345.6	3532.5	4719.4	5878.1
Stress (Kg/cm2)	0.01	0.42	0.83	1.25	1.67	2.08
Settlement (mm)	0.58	0.61	0.72	0.81	0.91	1.03
D (mm) = 600	S1 (mm)= 0.71		S2(mm)= 0.88		ΔS = 0.17	
Ev2 (kg/cm2) = $(0.75 \cdot D \cdot \Delta\sigma) / \Delta S$			2647			

Ev1 = Modulus of deformation during the loading stage.
 Ev2 = Modulus of deformation during the Reloading stage.
 D = Plate diameter (mm)
 Ds = The difference between 0.3 and 0.7 from the maximum loading (smax) (kg/cm²)
 DS = Difference in settlements corresponding to 0.3 and 0.7 from the maximum loading (mm)



Company Name : Sun Rise Construction.
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh Priority Sector (6) – Alamein to Foka
Test Date : 23/02/2023
report date : 25/02/2023
Location : Station 448+850 to 448+900
Test No. : 02

Nonrepetitive Static Plate Load Tests of Soils
DIN 18134

Data sheet

Loading Stage (1)

Loading	Stress Kg/cm2	Dial 1	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
			mm		mm		mm	
0	0.00	20.00	0.00	20.00	0.00	20.00	0.00	0.00
1	0.42	19.76	0.24	19.74	0.26	19.72	0.28	0.26
2	0.83	19.71	0.29	19.63	0.37	19.69	0.31	0.32
3	1.25	19.58	0.42	19.44	0.56	19.40	0.60	0.53
4	1.67	19.54	0.46	19.39	0.61	19.36	0.64	0.57
5	2.08	19.51	0.49	19.37	0.63	19.33	0.67	0.60
6	2.50	19.25	0.75	19.17	0.83	19.09	0.91	0.83

Unloading Stage (1)

Loading	Stress Kg/cm2	Dial 1	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
			mm		mm		mm	
1	2.50	19.25	0.75	19.17	0.83	19.09	0.91	0.83
2	1.25	19.28	0.72	19.19	0.81	19.14	0.86	0.80
3	0.625	19.31	0.69	19.32	0.68	19.24	0.76	0.71
4	0.01	19.39	0.61	19.47	0.53	19.40	0.60	0.58

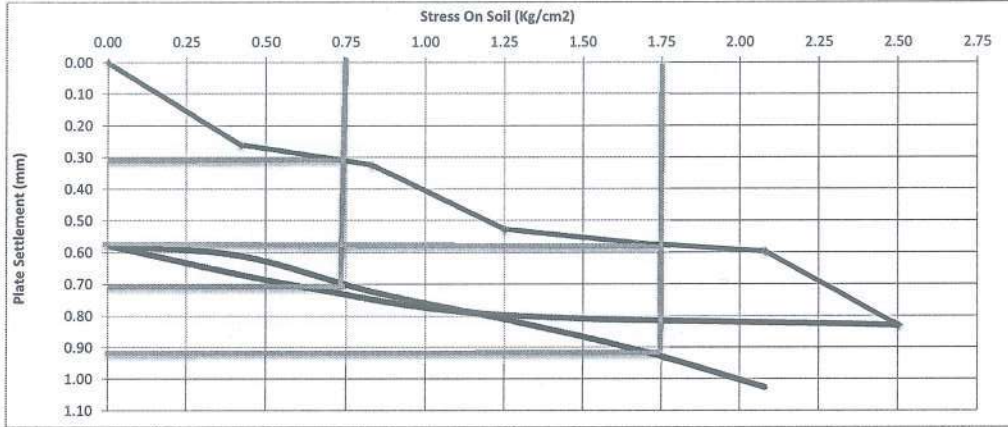
Loading Stage (2)

Loading	Stress Kg/cm2	Dial 1	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
			mm		mm		mm	
0	0.42	19.37	0.63	19.44	0.56	19.36	0.64	0.61
1	0.83	19.24	0.76	19.32	0.68	19.27	0.73	0.72
2	1.25	19.12	0.88	19.29	0.71	19.16	0.84	0.81
3	1.67	19.04	0.96	19.17	0.83	19.07	0.93	0.91
4	2.08	18.97	1.03	19.02	0.98	18.93	1.07	1.03



Company Name : Sun Rise Construction.
 Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh Priority Sector (6) – Alamein to Foka
 Test Date : 23/02/2023
 report date : 25/02/2023
 Location : Station 448+850 to 448+900
 Test No. : 02

Nonrepetitive Static Plate Load Tests of Soils
DIN 18134



Loading (1)	0	1	2	3	4	5	6	
Stage(Kg)	0	1186.92	2345.6	3532.5	4719.4	5878.1	7065	
Stress (Kg/cm ²)	0.00	0.42	0.83	1.25	1.67	2.08	2.50	
Settlement (mm)	0.00	0.26	0.32	0.53	0.57	0.60	0.83	
D (mm) =	600		S1 (mm)=	0.30	S2(mm)=	0.58	ΔS =	0.28
Ev1 (kg/cm ²) =	(0.75*D*Δσ)/ΔS		1607					

UnLoading (1)	1	2	3	4
Stage(Kg)	7065	3533	1768	0
Stress (Kg/cm ²)	2.50	1.25	0.625	0.01
Settlement (mm)	0.83	0.80	0.71	0.58

Loading (2)	0	1	2	3	4	5		
Stage(Kg)	0	1186.92	2345.6	3532.5	4719.4	5878.1		
Stress (Kg/cm ²)	0.01	0.42	0.83	1.25	1.67	2.08		
Settlement (mm)	0.58	0.61	0.72	0.81	0.91	1.03		
D (mm) =	600		S1 (mm)=	0.70	S2(mm)=	0.91	ΔS =	0.21
Ev2 (kg/cm ²) =	(0.75*D*Δσ)/ΔS		2143					

Ev2/Ev1 = 1.3

Ev1 = Modulus of deformation during the loading stage.
 Ev2 = Modulus of deformation during the Reloading stage.
 D = Plate diameter (mm)
 Ds = The difference between 0.3 and 0.7 from the maximum loading (smax) (kg/cm²)
 DS = Difference in settlements corresponding to 0.3 and 0.7 from the maximum loading (mm)



Company Name : Sun Rise Construction.
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh Priority Sector (6) – Alamein to Foka
Test Date : 23/02/2023
report date : 25/02/2023
Location : Station 448+900 to 448+950
Test No. : 03

Nonrepetitive Static Plate Load Tests of Soils
DIN 18134

Data sheet

Loading Stage (1)

Loading	Stress Kg/cm2	Dial 1	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
			mm		mm		mm	
0	0.00	20.00	0.00	20.00	0.00	20.00	0.00	0.00
1	0.42	19.92	0.08	19.78	0.22	19.87	0.13	0.14
2	0.83	19.81	0.19	19.63	0.37	19.79	0.21	0.26
3	1.25	19.66	0.34	19.54	0.46	19.60	0.40	0.40
4	1.67	19.51	0.49	19.32	0.68	19.41	0.59	0.59
5	2.08	19.43	0.57	19.27	0.73	19.17	0.83	0.71
6	2.50	19.22	0.78	19.16	0.84	19.09	0.91	0.84

Unloading Stage (1)

Loading	Stress Kg/cm2	Dial 1	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
			mm		mm		mm	
1	2.50	19.22	0.78	19.16	0.84	19.09	0.91	0.84
2	1.25	19.29	0.71	19.24	0.76	19.13	0.87	0.78
3	0.625	19.37	0.63	19.26	0.74	19.12	0.88	0.75
4	0.01	19.62	0.38	19.51	0.49	19.33	0.67	0.51

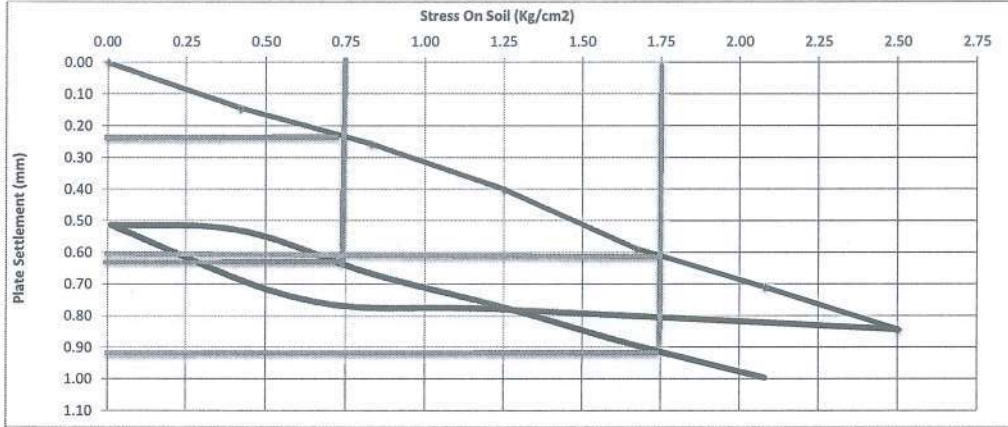
Loading Stage (2)

Loading	Stress Kg/cm2	Dial 1	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
			mm		mm		mm	
0	0.42	19.49	0.51	19.63	0.37	19.29	0.71	0.53
1	0.83	19.35	0.65	19.48	0.52	19.17	0.83	0.67
2	1.25	19.27	0.73	19.33	0.67	19.08	0.92	0.77
3	1.67	19.14	0.86	19.18	0.82	19.00	1.00	0.89
4	2.08	19.03	0.97	19.05	0.95	18.93	1.07	1.00



Company Name : Sun Rise Construction.
 Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh Priority Sector (6) – Alamein to Foka
 Test Date : 23/02/2023
 report date : 25/02/2023
 Location : Station 448+900 to 448+950
 Test No. : 03

Nonrepetitive Static Plate Load Tests of Soils
DIN 18134



Loading (1)	0	1	2	3	4	5	6
Stage(Kg)	0	1186.92	2345.6	3532.5	4719.4	5878.1	7065
Stress (Kg/cm2)	0.00	0.42	0.83	1.25	1.67	2.08	2.50
Settlement (mm)	0.00	0.14	0.26	0.40	0.59	0.71	0.84
D (mm) = 600	S1 (mm)= 0.23		S2(mm)= 0.60		ΔS = 0.37		
Ev1 (kg/cm2) = (0.75*D*Δσ)/ΔS	1216						

UnLoading (1)	1	2	3	4
Stage(Kg)	7065	3533	1768	0
Stress (Kg/cm2)	2.50	1.25	0.625	0.01
Settlement (mm)	0.84	0.78	0.75	0.51

Ev2/Ev1 = 1.3

Loading (2)	0	1	2	3	4	5
Stage(Kg)	0	1186.92	2345.6	3532.5	4719.4	5878.1
Stress (Kg/cm2)	0.01	0.42	0.83	1.25	1.67	2.08
Settlement (mm)	0.51	0.53	0.67	0.77	0.89	1.00
D (mm) = 600	S1 (mm)= 0.62		S2(mm)= 0.91		ΔS = 0.29	
Ev2 (kg/cm2) = (0.75*D*Δσ)/ΔS	1552					

Ev1 = Modulus of deformation during the loading stage.
 Ev2 = Modulus of deformation during the Reloading stage.
 D = Plate diameter (mm)
 Ds = The difference between 0.3 and 0.7 from the maximum loading (smax) (kg/cm²)
 DS = Difference in settlements corresponding to 0.3 and 0.7 from the maximum loading (mm)



Company Name : Sun Rise Construction.
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh Priority Sector (6) – Alamein to Foka
Test Date : 23/02/2023
report date : 25/02/2023
Location : Station 448+950 to 449+000
Test No. : 04

Nonrepetitive Static Plate Load Tests of Soils
DIN 18134

Data sheet

Loading Stage (1)

Loading	Stress	Dial 1	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
	Kg/cm2		mm		mm		mm	
0	0.00	20.00	0.00	20.00	0.00	20.00	0.00	0.00
1	0.42	19.86	0.14	19.92	0.08	19.78	0.22	0.15
2	0.83	19.62	0.38	19.84	0.16	19.65	0.35	0.30
3	1.25	19.54	0.46	19.76	0.24	19.54	0.46	0.39
4	1.67	19.43	0.57	19.64	0.36	19.42	0.58	0.50
5	2.08	19.29	0.71	19.52	0.48	19.30	0.70	0.63
6	2.50	19.20	0.80	19.39	0.61	19.17	0.83	0.75

Unloading Stage (1)

Loading	Stress	Dial 1	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
	Kg/cm2		mm		mm		mm	
1	2.50	19.20	0.80	19.39	0.61	19.17	0.83	0.75
2	1.25	19.27	0.73	19.45	0.55	19.22	0.78	0.69
3	0.625	19.34	0.66	19.52	0.48	19.29	0.71	0.62
4	0.01	19.58	0.42	19.75	0.25	19.62	0.38	0.35

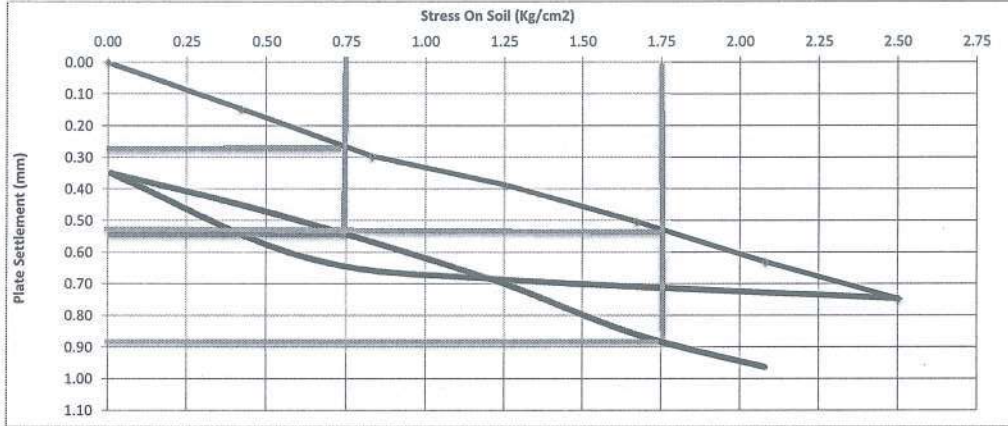
Loading Stage (2)

Loading	Stress	Dial 1	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
	Kg/cm2		mm		mm		mm	
0	0.42	19.42	0.58	19.69	0.31	19.54	0.46	0.45
1	0.83	19.31	0.69	19.57	0.43	19.42	0.58	0.57
2	1.25	19.18	0.82	19.43	0.57	19.29	0.71	0.70
3	1.67	19.05	0.95	19.21	0.79	19.16	0.84	0.86
4	2.08	18.93	1.07	19.10	0.90	19.08	0.92	0.96



Company Name : Sun Rise Construction.
 Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh Priority Sector (6) – Alamein to Foka
 Test Date : 23/02/2023
 report date : 25/02/2023
 Location : Station 448+950 to 449+000
 Test No. : 04

Nonrepetitive Static Plate Load Tests of Soils
DIN 18134



Loading (1)	0	1	2	3	4	5	6
Stage(Kg)	0	1186.92	2345.6	3532.5	4719.4	5878.1	7065
Stress (Kg/cm2)	0.00	0.42	0.83	1.25	1.67	2.08	2.50
Settlement (mm)	0.00	0.15	0.30	0.39	0.50	0.63	0.75
D (mm) =	600	S1 (mm)=	0.28	S2(mm)=	0.53	ΔS =	0.25
Ev1 (kg/cm2) =	(0.75*D*Δσ)/ΔS		1800				

UnLoading (1)	1	2	3	4
Stage(Kg)	7065	3533	1768	0
Stress (Kg/cm2)	2.50	1.25	0.625	0.01
Settlement (mm)	0.75	0.69	0.62	0.35

Ev2/Ev1 = 0.7

Loading (2)	0	1	2	3	4	5	
Stage(Kg)	0	1186.92	2345.6	3532.5	4719.4	5878.1	
Stress (Kg/cm2)	0.01	0.42	0.83	1.25	1.67	2.08	
Settlement (mm)	0.35	0.45	0.57	0.70	0.86	0.96	
D (mm) =	600	S1 (mm)=	0.54	S2(mm)=	0.89	ΔS =	0.35
Ev2 (kg/cm2) =	(0.75*D*Δσ)/ΔS		1286				

Ev1 = Modulus of deformation during the loading stage.
 Ev2 = Modulus of deformation during the Reloading stage.
 D = Plate diameter (mm)
 Ds = The difference between 0.3 and 0.7 from the maximum loading (smax) (kg/cm²)
 DS = Difference in settlements corresponding to 0.3 and 0.7 from the maximum loading (mm)



Company Name : Sun Rise Construction.
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh Priority Sector (6) – Alamein to Foka
Test Date : 23/02/2023
report date : 25/02/2023
Location : Station 449+000 to 449+050
Test No. : 05

Nonrepetitive Static Plate Load Tests of Soils
DIN 18134

Data sheet

Loading Stage (1)

Loading	Stress Kg/cm2	Dial 1	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
			mm		mm		mm	
0	0.00	20.00	0.00	20.00	0.00	20.00	0.00	0.00
1	0.42	19.86	0.14	19.79	0.21	19.78	0.22	0.19
2	0.83	19.62	0.38	19.61	0.39	19.92	0.08	0.28
3	1.25	19.54	0.46	19.49	0.51	19.69	0.31	0.43
4	1.67	19.43	0.57	19.36	0.64	19.43	0.57	0.59
5	2.08	19.29	0.71	19.17	0.83	19.21	0.79	0.78
6	2.50	19.20	0.80	19.09	0.91	19.03	0.97	0.89

Unloading Stage (1)

Loading	Stress Kg/cm2	Dial 1	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
			mm		mm		mm	
1	2.50	19.20	0.80	19.09	0.91	19.03	0.97	0.89
2	1.25	19.27	0.73	19.14	0.86	19.11	0.89	0.83
3	0.625	19.34	0.66	19.26	0.74	19.19	0.81	0.74
4	0.01	19.58	0.42	19.49	0.51	19.43	0.57	0.50

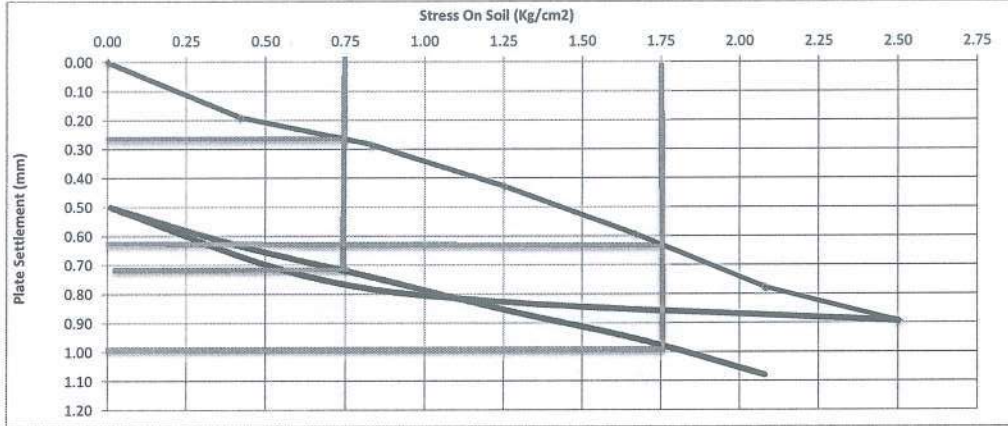
Loading Stage (2)

Loading	Stress Kg/cm2	Dial 1	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
			mm		mm		mm	
0	0.42	19.42	0.58	19.37	0.63	19.31	0.69	0.63
1	0.83	19.31	0.69	19.25	0.75	19.22	0.78	0.74
2	1.25	19.18	0.82	19.13	0.87	19.13	0.87	0.85
3	1.67	19.05	0.95	19.02	0.98	19.07	0.93	0.95
4	2.08	18.96	1.04	18.91	1.09	18.89	1.11	1.08



Company Name : Sun Rise Construction.
 Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh Priority Sector (6) – Alamein to Foka
 Test Date : 23/02/2023
 report date : 25/02/2023
 Location : Station 449+000 to 449+050
 Test No. : 05

Nonrepetitive Static Plate Load Tests of Soils
DIN 18134



Loading (1)	0	1	2	3	4	5	6
Stage(Kg)	0	1186.92	2345.6	3532.5	4719.4	5878.1	7065
Stress (Kg/cm2)	0.00	0.42	0.83	1.25	1.67	2.08	2.50
Settlement (mm)	0.00	0.19	0.28	0.43	0.59	0.78	0.89
D (mm) = 600	S1 (mm)= 0.28		S2(mm)= 0.62		ΔS = 0.34		
Ev1 (kg/cm2) = (0.75*D*Δσ)/ΔS	1324						

UnLoading (1)	1	2	3	4
Stage(Kg)	7065	3533	1768	0
Stress (Kg/cm2)	2.50	1.25	0.625	0.01
Settlement (mm)	0.89	0.83	0.74	0.50

Ev2/Ev1 = 1.2

Loading (2)	0	1	2	3	4	5
Stage(Kg)	0	1186.92	2345.6	3532.5	4719.4	5878.1
Stress (Kg/cm2)	0.01	0.42	0.83	1.25	1.67	2.08
Settlement (mm)	0.50	0.63	0.74	0.85	0.95	1.08
D (mm) = 600	S1 (mm)= 0.71		S2(mm)= 1.00		ΔS = 0.29	
Ev2 (kg/cm2) = (0.75*D*Δσ)/ΔS	1552					

Ev1 = Modulus of deformation during the loading stage.
 Ev2 = Modulus of deformation during the Reloading stage.
 D = Plate diameter (mm)
 Ds = The difference between 0.3 and 0.7 from the maximum loading (smax) (kg/cm²)
 DS = Difference in settlements corresponding to 0.3 and 0.7 from the maximum loading (mm)



Company Name : Sun Rise Construction.
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh Priority Sector (6) – Alamein to Foka
Test Date : 23/02/2023
report date : 25/02/2023
Location : Station 449+050 to 449+100
Test No. : 06

Nonrepetitive Static Plate Load Tests of Soils
DIN 18134

Data sheet

Loading Stage (1)

Loading	Stress Kg/cm2	Dial 1	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
			mm		mm		mm	
0	0.00	20.00	0.00	20.00	0.00	20.00	0.00	0.00
1	0.42	19.86	0.14	19.91	0.09	19.76	0.24	0.16
2	0.83	19.64	0.36	19.84	0.16	19.65	0.35	0.29
3	1.25	19.53	0.47	19.76	0.24	19.54	0.46	0.39
4	1.67	19.42	0.58	19.64	0.36	19.42	0.58	0.51
5	2.08	19.28	0.72	19.52	0.48	19.30	0.70	0.63
6	2.50	19.21	0.79	19.40	0.60	19.17	0.83	0.74

Unloading Stage (1)

Loading	Stress Kg/cm2	Dial 1	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
			mm		mm		mm	
1	2.50	19.21	0.79	19.40	0.60	19.17	0.83	0.74
2	1.25	19.28	0.72	19.46	0.54	19.22	0.78	0.68
3	0.625	19.35	0.65	19.52	0.48	19.29	0.71	0.61
4	0.01	19.59	0.41	19.75	0.25	19.62	0.38	0.35

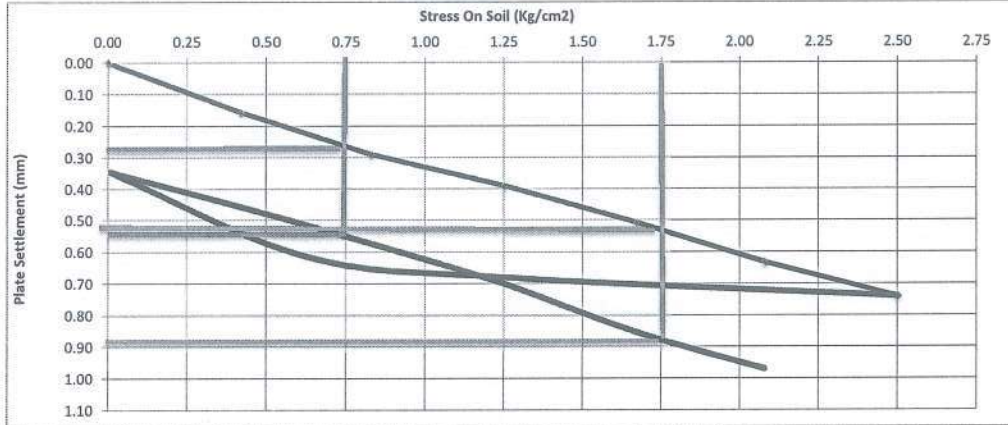
Loading Stage (2)

Loading	Stress Kg/cm2	Dial 1	Settlement	Dial 2	Settlement	Dial 3	Settlement	Average
			mm		mm		mm	
0	0.42	19.40	0.60	19.69	0.31	19.54	0.46	0.46
1	0.83	19.29	0.71	19.57	0.43	19.42	0.58	0.57
2	1.25	19.18	0.82	19.43	0.57	19.29	0.71	0.70
3	1.67	19.07	0.93	19.21	0.79	19.16	0.84	0.85
4	2.08	18.92	1.08	19.09	0.91	19.08	0.92	0.97



Company Name : Sun Rise Construction.
 Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh Priority Sector (6) – Alamein to Foka
 Test Date : 23/02/2023
 report date : 25/02/2023
 Location : Station 449+050 to 449+100
 Test No. : 06

**Nonrepetitive Static Plate Load Tests of Soils
 DIN 18134**



Loading (1)	0	1	2	3	4	5	6
Stage(Kg)	0	1186.92	2345.6	3532.5	4719.4	5878.1	7065
Stress (Kg/cm2)	0.00	0.42	0.83	1.25	1.67	2.08	2.50
Settlement (mm)	0.00	0.16	0.29	0.39	0.51	0.63	0.74
D (mm) =	600	S1 (mm)=	0.28	S2(mm)=	0.52	ΔS =	0.24
Ev1 (kg/cm2) =	(0.75*D*Δσ)/ΔS		1875				

UnLoading (1)	1	2	3	4
Stage(Kg)	7065	3533	1768	0
Stress (Kg/cm2)	2.50	1.25	0.625	0.01
Settlement (mm)	0.74	0.68	0.61	0.35

Ev2/Ev1 = 0.6

Loading (2)	0	1	2	3	4	5	
Stage(Kg)	0	1186.92	2345.6	3532.5	4719.4	5878.1	
Stress (Kg/cm2)	0.01	0.42	0.83	1.25	1.67	2.08	
Settlement (mm)	0.35	0.46	0.57	0.70	0.85	0.97	
D (mm) =	600	S1 (mm)=	0.51	S2(mm)=	0.90	ΔS =	0.39
Ev2 (kg/cm2) =	(0.75*D*Δσ)/ΔS		1154				

Ev1 = Modulus of deformation during the loading stage.
 Ev2 = Modulus of deformation during the Reloading stage.
 D = Plate diameter (mm)
 Ds = The difference between 0.3 and 0.7 from the maximum loading (smax) (kg/cm²)
 DS = Difference in settlements corresponding to 0.3 and 0.7 from the maximum loading (mm)



Company Name : Sun Rise Construction.
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh Priority Sector (6) – Alamein to Foka
Test Date : 23/02/2023
report date : 25/02/2023
Location : Station 449+100 to 449+150
Test No. : 07

Nonrepetitive Static Plate Load Tests of Soils
DIN 18134

Data sheet

Loading Stage (1)

Loading	Stress Kg/cm2	Dial 1	Settlement mm	Dial 2	Settlement mm	Dial 3	Settlement mm	Average
0	0.00	20.00	0.00	20.00	0.00	20.00	0.00	0.00
1	0.42	19.78	0.22	19.73	0.27	19.87	0.13	0.21
2	0.83	19.69	0.31	19.51	0.49	19.73	0.27	0.36
3	1.25	19.53	0.47	19.34	0.66	19.59	0.41	0.51
4	1.67	19.44	0.56	19.17	0.83	19.43	0.57	0.65
5	2.08	19.31	0.69	19.09	0.91	19.31	0.69	0.76
6	2.50	19.20	0.80	18.93	1.07	19.20	0.80	0.89

Unloading Stage (1)

Loading	Stress Kg/cm2	Dial 1	Settlement mm	Dial 2	Settlement mm	Dial 3	Settlement mm	Average
1	2.50	19.20	0.80	18.93	1.07	19.20	0.80	0.89
2	1.25	19.28	0.72	19.03	0.97	19.24	0.76	0.82
3	0.625	19.35	0.65	19.14	0.86	19.32	0.68	0.73
4	0.01	19.65	0.35	19.38	0.62	19.58	0.42	0.46

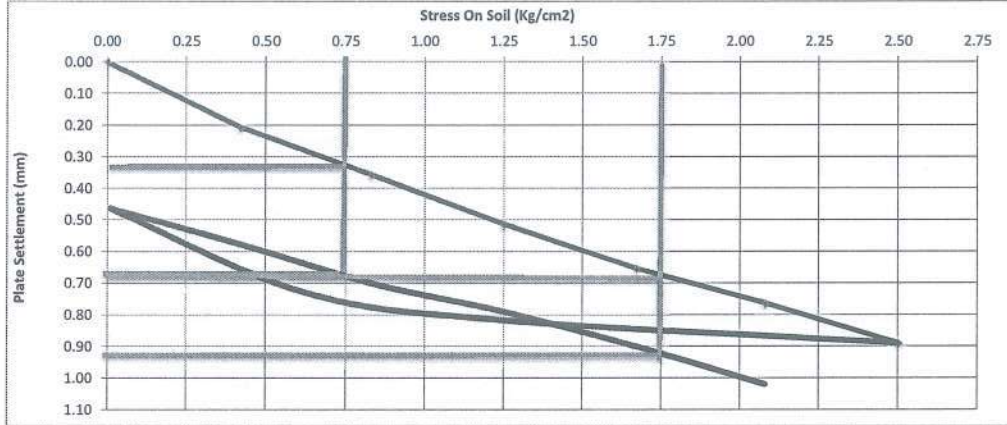
Loading Stage (2)

Loading	Stress Kg/cm2	Dial 1	Settlement mm	Dial 2	Settlement mm	Dial 3	Settlement mm	Average
0	0.42	19.57	0.43	19.27	0.73	19.43	0.57	0.58
1	0.83	19.43	0.57	19.16	0.84	19.31	0.69	0.70
2	1.25	19.32	0.68	19.09	0.91	19.22	0.78	0.79
3	1.67	19.21	0.79	18.96	1.04	19.13	0.87	0.90
4	2.08	19.09	0.91	18.83	1.17	19.02	0.98	1.02



Company Name : Sun Rise Construction.
 Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh Priority Sector (6) – Alamein to Foka
 Test Date : 23/02/2023
 report date : 25/02/2023
 Location : Station 449+100 to 449+150
 Test No. : 07

Nonrepetitive Static Plate Load Tests of Soils
DIN 18134



Loading (1)	0	1	2	3	4	5	6
Stage(Kg)	0	1186.92	2345.6	3532.5	4719.4	5878.1	7065
Stress (Kg/cm2)	0.00	0.42	0.83	1.25	1.67	2.08	2.50
Settlement (mm)	0.00	0.21	0.36	0.51	0.65	0.76	0.89
D (mm) =	600	S1 (mm)=	0.32	S2(mm)=	0.68	ΔS =	0.36
Ev1 (kg/cm2) =	(0.75*D*Δσ)/ΔS		1250				

UnLoading (1)	1	2	3	4
Stage(Kg)	7065	3533	1768	0
Stress (Kg/cm2)	2.50	1.25	0.625	0.01
Settlement (mm)	0.89	0.82	0.73	0.46

Ev2/Ev1 = 1.4

Loading (2)	0	1	2	3	4	5	
Stage(Kg)	0	1186.92	2345.6	3532.5	4719.4	5878.1	
Stress (Kg/cm2)	0.01	0.42	0.83	1.25	1.67	2.08	
Settlement (mm)	0.46	0.58	0.70	0.79	0.90	1.02	
D (mm) =	600	S1 (mm)=	0.67	S2(mm)=	0.92	ΔS =	0.25
Ev2 (kg/cm2) =	(0.75*D*Δσ)/ΔS		1800				

Ev1 = Modulus of deformation during the loading stage.
 Ev2 = Modulus of deformation during the Reloading stage.
 D = Plate diameter (mm)
 Ds = The difference between 0.3 and 0.7 from the maximum loading (smax) (kg/cm²)
 DS = Difference in settlements corresponding to 0.3 and 0.7 from the maximum loading (mm)



Company Name : Sun Rise Construction.
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh Priority Sector (6) – Alamein to Foka
Test Date : 23/02/2023
report date : 25/02/2023
Location : Station 449+150 to 449+200
Test No. : 08

Nonrepetitive Static Plate Load Tests of Soils
DIN 18134

Data sheet

Loading Stage (1)

Loading	Stress Kg/cm2	Dial 1	Settlement mm	Dial 2	Settlement mm	Dial 3	Settlement mm	Average
0	0.00	20.00	0.00	20.00	0.00	20.00	0.00	0.00
1	0.42	19.81	0.19	19.73	0.27	19.87	0.13	0.20
2	0.83	19.68	0.32	19.51	0.49	19.73	0.27	0.36
3	1.25	19.59	0.41	19.35	0.65	19.59	0.41	0.49
4	1.67	19.46	0.54	19.17	0.83	19.43	0.57	0.65
5	2.08	19.32	0.68	19.09	0.91	19.31	0.69	0.76
6	2.50	19.20	0.80	19.00	1.00	19.20	0.80	0.87

Unloading Stage (1)

Loading	Stress Kg/cm2	Dial 1	Settlement mm	Dial 2	Settlement mm	Dial 3	Settlement mm	Average
1	2.50	19.20	0.80	19.00	1.00	19.20	0.80	0.87
2	1.25	19.29	0.71	19.07	0.93	19.24	0.76	0.80
3	0.625	19.37	0.63	19.15	0.85	19.32	0.68	0.72
4	0.01	19.65	0.35	19.39	0.61	19.58	0.42	0.46

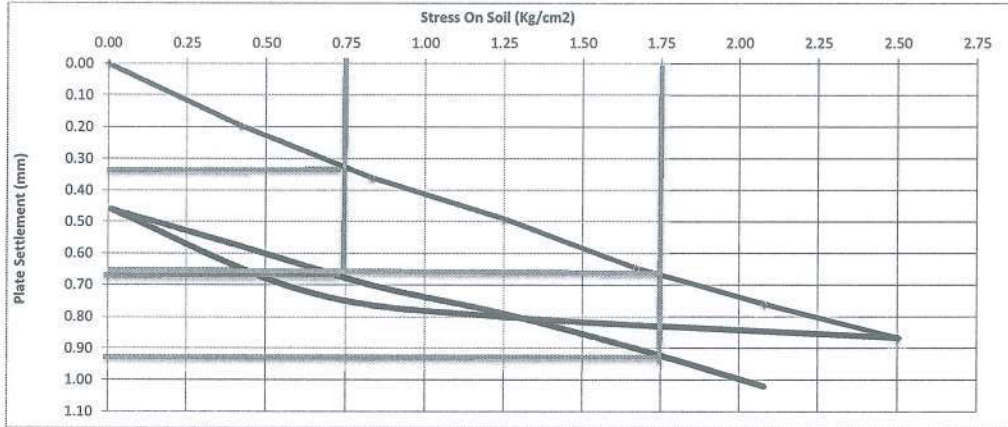
Loading Stage (2)

Loading	Stress Kg/cm2	Dial 1	Settlement mm	Dial 2	Settlement mm	Dial 3	Settlement mm	Average
0	0.42	19.57	0.43	19.27	0.73	19.43	0.57	0.58
1	0.83	19.43	0.57	19.16	0.84	19.31	0.69	0.70
2	1.25	19.32	0.68	19.09	0.91	19.22	0.78	0.79
3	1.67	19.21	0.79	18.96	1.04	19.13	0.87	0.90
4	2.08	19.09	0.91	18.83	1.17	19.02	0.98	1.02



Company Name : Sun Rise Construction.
 Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh Priority Sector (6) – Alamein to Foka
 Test Date : 23/02/2023
 report date : 25/02/2023
 Location : Station 449+150 to 449+200
 Test No. : 08

Nonrepetitive Static Plate Load Tests of Soils
DIN 18134



Loading (1)	0	1	2	3	4	5	6
Stage(Kg)	0	1186.92	2345.6	3532.5	4719.4	5878.1	7065
Stress (Kg/cm2)	0.00	0.42	0.83	1.25	1.67	2.08	2.50
Settlement (mm)	0.00	0.20	0.36	0.49	0.65	0.76	0.87
D (mm) = 600	S1 (mm)= 0.33		S2(mm)= 0.67		ΔS = 0.34		
Ev1 (kg/cm2) = (0.75*D*Δσ)/ΔS	1324						

UnLoading (1)	1	2	3	4
Stage(Kg)	7065	3533	1768	0
Stress (Kg/cm2)	2.50	1.25	0.625	0.01
Settlement (mm)	0.87	0.80	0.72	0.46

Ev2/Ev1 = 1.5

Loading (2)	0	1	2	3	4	5
Stage(Kg)	0	1186.92	2345.6	3532.5	4719.4	5878.1
Stress (Kg/cm2)	0.01	0.42	0.83	1.25	1.67	2.08
Settlement (mm)	0.46	0.58	0.70	0.79	0.90	1.02
D (mm) = 600	S1 (mm)= 0.69		S2(mm)= 0.92		ΔS = 0.23	
Ev2 (kg/cm2) = (0.75*D*Δσ)/ΔS	1957					

Ev1 = Modulus of deformation during the loading stage.
 Ev2 = Modulus of deformation during the Reloading stage.
 D = Plate diameter (mm)
 Δσ = The difference between 0.3 and 0.7 from the maximum loading (smax) (kg/cm²)
 ΔS = Difference in settlements corresponding to 0.3 and 0.7 from the maximum loading (mm)



Company Name : Sun Rise
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Location : St. (448+600) :(449+100)
Type of sample : Soil Replacement (Embankment)
Delivery Date : 01 / 12 / 2022
Reporting Date : 09 / 12 / 2022
Reporting No. : 25
Sample No. : 15

Dear Gentleman,

Attached here with the Soil Replacement delivered on 01/12/2022

Materials test

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

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

Signature /



Company Name : Sun Rise
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Location : St. (448+600) :(449+100)
Type of sample : Soil Replacement (Embankment)
Delivery Date : 01 / 12 / 2022
Reporting Date : 09 / 12 / 2022
Reporting No. : 25
Sample No. : 15

Results of Sieve Analysis According to ASTM D-422.

Sieve Size (mm)	Passing %
50	100
37.5	98.7
25	97.4
19	95.1
12.50	72.3
9.50	46.7
4.75	35.5
2.36	34.2
2.00	33.2
1.18	29.7
0.600	24.6
0.425	21.2
0.300	19.2
0.150	15.4

مكتب معامل الإستشارات الهندسية
الساحل الشمالي
رقم التسجيل الفردي: 197
المركز الرئيسي: القاهرة

Signature

Company Name : Sun Rise
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Location : St. (448+600) :(449+100)
Type of sample : Soil Replacement (Embankment)
Delivery Date : 01 / 12 / 2022
Reporting Date : 09 / 12 / 2022
Reporting No. : 25
Sample No. : 15

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

Test	Results (%)
Percentage of material finer than Sieve Size 75 μ M (No.200)	9.5

Signature /



Company Name : Sun Rise
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Location : St. (448+600) :(449+100)
Type of sample : Soil Replacement (Embankment)
Delivery Date : 01 / 12 / 2022
Reporting Date : 09 / 12 / 2022
Reporting No. : 25
Sample No. : 15

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

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

Signature /



Company Name : Sun Rise
 Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
 Location : St. (448+600) :(449+100)
 Type of sample : Soil Replacement (Embankment)
 Delivery Date : 01 / 12 / 2022
 Reporting Date : 09 / 12 / 2022
 Reporting No. : 25
 Sample No. : 15

Soil Classification According to Project Specs (Embankment)

TEST	Results (%)	Limits according Projects Specs	
		(A-1-a)	(A-1-b)
• Group Classification	(A-1-a)	(A-1-a)	(A-1-b)
2.00 mm (No.10).	33.2	Max 50 %	-----
0.425 mm (No. 40).	21.2	Max 30 %	Max 50 %
0.075 mm (No. 200).	9.5	Max 15 %	Max 15 %
Characteristics of fraction passing 0.425 mm (No.40)			
Liquid Limit	NP	-----	-----
Plasticity index	NP	Max 6 %	Max 6 %

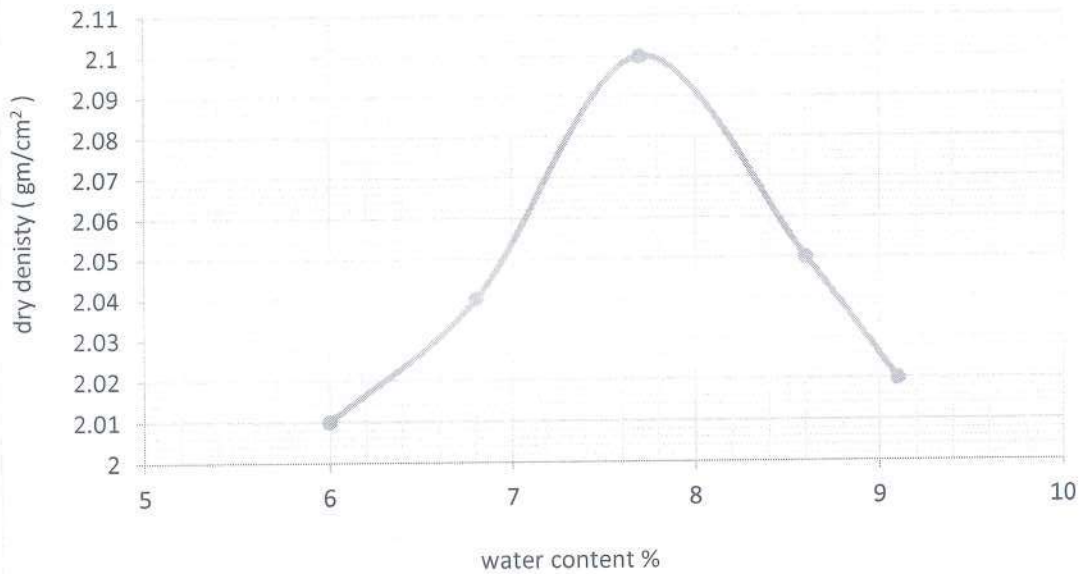
The test results are (Comply / Not Comply) with specifications limits

Signature /


 مكتب معامل الاستشارات الهندسية
 رقم الترخيص: 537 - 601 - 248
 العنوان: 3 شارع الملك الأفطال - الزمالك - القاهرة

Company Name : Sun Rise
Project : Electric Express Train, from Al Ain Sokhna to Marsa Matrouh
Location : St. (448+600) :(449+100)
Type of sample : Soil Replacement (Embankment)
Delivery Date : 01 / 12 / 2022
Reporting Date : 09 / 12 / 2022
Reporting No. : 25
Sample No. : 15

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



- Max dry density (gm/cm²) : 2.10
- Optimum moisture content % : 8.1

Signature /



مشروع القطار السريع (العلمين - فوكة)

شركة صن رايز للمقاولات العامة - من المحطة ٤٤٧+٦٠٠ الى المحطة ٤٤٨+٦٠٠

محضر تحديد مسافة نقل

(نقل الاترابة)

انه في يوم السبت الموافق :- ٢٠٢٣/١/٧

- بناء على طلب المقاول شركة صن رايز للمقاولات العامة لتحديد مسافة نقل الاترابة من محجر (الفيروز) على طريق وادي النظرون العلمين للمشروع المذكور اعلاه

تم زيارة الموقع من قبل:-

ممثل الهيئة العامة الطرق والكباري
ممثل الاستشاري مكتب د سعد الجيوشي
ممثل استشاري المساحة مكتب (XYZ)
استشاري مكتب د. سعد الجيوشي
ممثل شركة صن رايز للمقاولات العامة

١- السيد المهندس / ابراهيم الحناوي
٢- السيد المهندس / مصطفى نجم
٣- السيد المهندس / محمد خليل
٤- السيد المهندس / مصطفى نبيل
٥- السيد المهندس / سعيد رجب

وتبين ان المحجر علي مسافة ٢١٣ كم من منتصف القطاع الشركة صن رايز للمقاولات العامة

N 30 ° 3 ' 44.778 " E 29 ° 58 ' 30.158"
N 30 ° 59 ' 42.374 " E 28 ° 28 ' 46.653"

احداثي محجر الفيروز
احداثي منتصف القطاع

وعلي ذلك تم توقيع،،

٥- سعيد رجب
٤- مصطفى نجم
٣- محمد خليل
٢- مصطفى نبيل
١- ابراهيم الحناوي

قائمة الكميات الواردة بالمستخلص جاري (١)

مشروع : القطار الكهربائي السريع (العين السخنة -العاصمة الادارية -العلمين -مطروح) قطاع غرب النيل في المسافة من الكم ٤٤٨+٦٠٠ الى الكم ٤٤٩+٨٥٠ بطول ١,٢٥ كيلو متر

رقم البند و بيانه : ١-١ اعمال حفر باستخدام المعدات الميكانيكية في جميع أنواع التربة عدا التربة الصخرية

تنفيذ : شركة صن رايز للمقولات العمومية

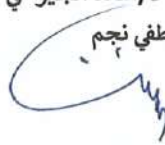
٣م .

مقدار العمل السابق :

الكمية	الابعاد (متر)		الموقع الكيلومتری		بيان الاعمال بالمقايسة
	مساحة المقطع	طول	الى	من	
٣٢٠٠٠	٦٤,٠٠٠	٥٠٠	٤٤٩+١٠٠	٤٤٨+٦٠٠	القطاع الأول
٣٨٠٠٠	٧٦,٠٠٠	٥٠٠	٤٤٩+٦٠٠	٤٤٩+١٠٠	القطاع الثاني
٧٠٠٠٠,٠٠	اجمالي الكميات خلال فترة المستخلص الحالية (م ^٣)				
٧٠٠٠٠,٠٠	الاجمالي الكلي (م ^٣)				

مهندس الاستشاري

مكتب د/سعد الجيوشي
م/مصطفى نجم



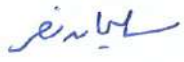
مهندس الاستشاري

مكتب XYZ
م / محمد خليل



مهندس الشركة

م / سليمان نصر



مهندس الهيئة

م/إبراهيم الحناوى



قائمة الكميات الواردة بالمستخلص جاري (١)

مشروع : القطار الكهربائي السريع (العين السخنة -العاصمة الادارية -العلمين -مطروح) قطاع غرب النيل في المسافة من الكم ٤٤٨+٦٠٠ الى الكم ٤٤٩+٨٥٠ بطول ١,٢٥ كيلو متر

رقم البند و بيانه : ٢-١ اعمال حفر باستخدام المعدات الميكانيكية في التربة المتماسكة عدا التربة الصخرية (باستخدام البلدوزر)

تنفيذ : شركة صن رايز للمقولات العمومية

مقدار العمل السابق : ٣م .

الكمية	الابعاد (متر)		الموقع الكيلومتری		بيان الاعمال بالمقايسة
	مساحة المقطع	طول	الى	من	
١٨٠٠٠	٧٢,٠٠٠	٢٥٠	٤٤٨+٨٥٠	٤٤٨+٦٠٠	القطاع الأول
١٨٠٠٠,٠٠	اجمالي الكميات خلال فترة المستخلص الحالية (م ^٣)				
١٨٠٠٠,٠٠	الاجمالي الكلي (م ^٣)				

مهندس الهيئة
م / إبراهيم الحناوى

مهندس الاستشاري
مكتب د/ سعد الجيوشي
م / مصطفى نجم

مهندس الاستشاري
مكتب XYZ
م / محمد خليل

مهندس الشركة
م / سليمان نصر

قائمة الكميات الواردة بالمستخلص جاري (٢)

مشروع : القطار الكهربائي السريع (العين السخنة -العاصمة الادارية -العلمين -مطروح) قطاع غرب النيل في المسافة من الكم ٤٤٨+٦٠٠ الى الكم ٤٤٩+٨٥٠ بطول ١,٢٥ كيلو متر

رقم البند و بيانه : ٣-١ اعمال توريد وتشغيل اترية صالحة للردم

تنفيذ : شركة صن رايز للمقولات العمومية

مقدار العمل السابق : ٣م .

الكمية	الابعاد (متر)		الموقع الكيلومتری		بيان الاعمال بالمقايسة
	مساحة المقطع	طول	الى	من	
١١٨٧٧	٢٣,٧٥٤	٥٠٠	٤٤٩+٤٠٠	٤٤٨+٩٠٠	القطاع الأول
١٢٨٦٢	٢٤,٧٣٥	٥٢٠	٤٤٩+٩٢٠	٤٤٩+٤٠٠	القطاع الثاني
٨٦١٦	١٦,٥٦٩	٥٢٠	٤٥٠+٦٠٠	٤٥٠+١٢٠	القطاع الثالث
٣٣٣٥٥,٠٠	اجمالي الكميات خلال فترة المستخلص الحالية (م ^٣)				
٣٣٣٥٥,٠٠	الاجمالي الكلي (م ^٣)				

مهندس الهيئة
م / إبراهيم الحناوى

مهندس الاستشاري
مكتب د/سعد الجيوشي
م /مصطفى نجم

مهندس الاستشاري
مكتب XYZ
م / محمد خليل

مهندس الشركة
م / سعيد رجب سعيد

قائمة الكميات الواردة بالمستخلص جاري (٢)

مشروع : القطار الكهربائى السريع (العين السخنة -العاصمة الادارية -العلمين -مطروح) قطاع غرب النيل فى المسافة من
الكم ٤٤٨+٦٠٠ الى ٤٤٩+٨٥٠ بطول ١,٢٥ كيلو متر

رقم البند و بيانه : ١/٣ علاوة مسافة النقل ١٥ كم

تنفيذ : شركة صن رايز للمقولات العمومية

٣م

مقدار العمل السابق :

الكمية	الابعاد (متر)		الموقع الكيلومترى		بيان الاعمال بالمقايسة
	مساحة المقطع	طول	الى	من	
١١٨٧٧	٢٣,٧٥٤	٥٠٠	٤٤٩+٤٠٠	٤٤٨+٩٠٠	القطاع الأول
١٢٨٦٢	٢٤,٧٣٥	٥٢٠	٤٤٩+٩٢٠	٤٤٩+٤٠٠	القطاع الثانى
٨٦١٦	١٦,٥٦٩	٥٢٠	٤٥٠+٦٠٠	٤٥٠+١٢٠	القطاع الثالث
٣٣,٣٥٥,٠٠	اجمالي الكميات خلال فترة المستخلص الحالية (م ^٣)				
٣٣,٣٥٥,٠٠	الاجمالي الكلي (م ^٣)				

مهندس الاستشارى

مكتب د/سعد الجيوشى

م/مصطفى نجم



مهندس الاستشارى

مكتب XYZ

م / محمد خليل



مهندس الشركة

م / سليمان نصر



مهندس الهيئة

م / ابراهيم العنناوى



قائمة الكميات الواردة بالمستخلص جاري (٢)

مشروع : القطار الكهربائى السريع (العين السخنة -العاصمة الادارية -العلمين -مطروح) قطاع غرب النيل فى المسافة من الكم ٤٤٨+٦٠٠ الى الكم ٤٤٩+٨٥٠ بطول ١,٢٥ كيلو متر

رقم البند و بيانه : ١/٣ علاوة رسوم تحصيل الكارثة والموازن طبقاً للائحة الشركة الوطنية

تنفيذ : شركة صن رايز للمقولات العمومية

٣م

مقدار العمل السابق :

الكمية	الابعاد (متر)		الموقع الكيلومترى		بيان الاعمال بالمقايسة
	مساحة المقطع	طول	الى	من	
١١٨٧٧	٢٣,٧٥٤	٥٠٠	٤٤٩+٤٠٠	٤٤٨+٩٠٠	القطاع الأول
١٢٨٦٢	٢٤,٧٣٥	٥٢٠	٤٤٩+٩٢٠	٤٤٩+٤٠٠	القطاع الثانى
٨٦١٦	١٦,٥٦٩	٥٢٠	٤٥٠+٦٠٠	٤٥٠+١٢٠	القطاع الثالث
٣٣٣٥٥,٠٠	اجمالي الكميات خلال فترة المستخلص الحالية (م ^٣)				
٣٣٣٥٥,٠٠	الاجمالي الكلي (م ^٣)				

مهندس الاستشارى

مهندس الاستشارى

مهندس الهيئة

مكتب د/سعد الجيوشى

مكتب XYZ

مهندس الشركة

م / إبراهيم الحناوى

م /مصطفى نجم

م / محمد خليل

م / سعيد رجب سعيد







