

Ref: CED/TFL/10/7687

Dated: 24-10-2025

Dated of Test: 29-10-2025 (Dr. Safer Abbas)

To

Mr. Hamad Ur Rehman (XEN E&M)

Garrison Engineer Services Okara.

CA No. CEA-CZ-45/2025-Provn/Upgrd of Sewerage Line, 14 Div at Okara Cantt.

Subject: **TESTING OF R.C.C. PIPE (Page-1/1)**

Reference to your letter no: 6624/5-A/E-6 on dated 23.04.2025 on the subject cited above. Three R.C.C. Pipes as received by us has been tested. The results are tabulated as under.

Sr. No	Nominal Size	Total Length	Loaded Length	External Diameter	Internal Diameter	Wall Thickness	Proof load	Ultimate Load	D-Load (0.01 inch)	D-Load Ultimate
	(inch)	(inch)	(inch)	(inch)	(inch)	(inch)	(kg)	(kg)	Lbs/Linear foot/foot	Lbs/Linear foot/foot
1	9	93.4	88.0	10.7	8.70	1.00	11500	12800	4769	5308
2	12	93.0	87.7	16.0	11.93	2.03	14500	16800	4398	5096
3	24	93.0	88.2	30.2	24.07	3.07	11600	17990	1735	2691

Test Performed and Verified by:

Ref: CED/TFL/10/7688

Dated: 24-10-2025

Dated of Test: 29-10-2025 (Dr. Usman Akmal)

To

Mr. Hasan Mehmood (Resident Engineer)
Nespak (Pvt.) Ltd.
ADP # 1562/210769 (2022-23) Feasibility Study & Construction of Burner Karakar Tunnel
Along With Approach Roads (Length 3.050 KM) District Buner

Subject: - CALIBRATION OF HYDRAULIC JACK (MARK: TFL/10/7688) (Page -1/1)

Reference to your Letter No. Nespak/4643/KT/PKHA/HM/325, dated: 19/10/2025 on the subject cited above. One Hydraulic Jack (Jack No. AES-J60, Gauge No. AES-J60) as received by us has been calibrated. The results are tabulated as under:

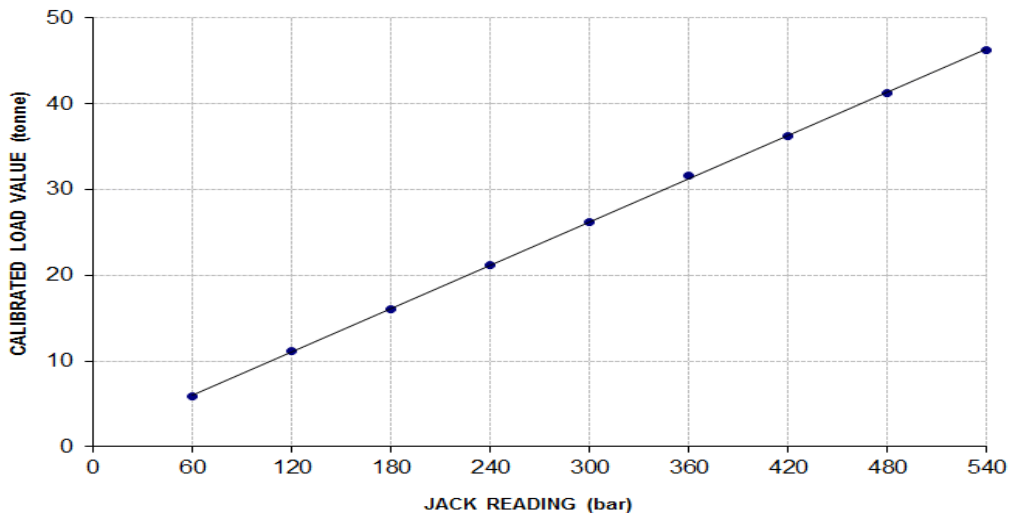
Total Range : Zero - 1000 (bar)
Calibrated Range : Zero - 540 (bar)

Hydraulic Jack Reading (bar)	60	120	180	240	300	360	420	480	540	
Calibrated Load	(kg)	5900	11100	16100	21200	26200	31600	36300	41250	46300
	(tonne)	5.90	11.10	16.10	21.20	26.20	31.60	36.30	41.25	46.30
Calibrated Pressure (bar)	70	132	192	253	312	377	433	492	552	

The Ram Area of Jack = 82.29 cm²

Calibration Curve For Jack No. AES-J60 Gauge AES J60

Calibrated Value (Tonne) = (0.0841 × Jack Reading (bar)) + 0.9792



Test Performed and Verified by:

To,

Mr. Mehmood Iqbal Asghar Cheema (Resident Engineer)
 Metroplan-Asian JV
 Re-Construction of Old P&D Building-Tower A
 (Aziz Steel)

Reference # CED/TFL 7695 (Dr. Usman Akmal)

Dated: 28-10-2025

Reference of the request letter # MetroplanAsian-JV/(Old P&D)/Tower-A/RE-4

Dated: 20-10-2025

Tension Test Report (Page-1/1)

Date of Test 29-10-2025

Gauge Length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Actual Weight Per Unit Length (lb/ft)	Nominal Size (#)	Actual Diameter (inch)	Area (in ²)		Yield Load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
				Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.375	3	0.375	0.110	0.1102	3200	4900	64116	64026	98178	98040	1.4	17.5	-
2	0.371	3	0.373	0.110	0.1091	3100	4900	62113	62650	98178	99027	1.3	16.3	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note: Only 2 Samples for Tensile and 1 Samples for Bend test

Bend Test	
# 3 Bar Bend Test Through 180 Degree is Satisfactory	

Test Performed and Verified by:

To,
 Ms. Sana Meraj (Lead Engineer)
 Building Standars Ltd.

Reference # CED/TFL 7696 (Dr. Usman Akmal)
 Reference of the request letter # BS/251028-060

Dated: 28-10-2025
 Dated: 28-10-2025

Tension Test Report (Page-1/1)

Date of Test 29-10-2025
 Gauge Length 8 inches
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Actual Weight Per Unit Length (lb/ft)	Nominal Size (mm)	Actual Diameter (inch)	Area (in ²)		Yield Load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
				Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.402	10	0.388	0.120	0.1181	3900	5200	71630	72777	95507	97036	1.3	16.3	-
2	0.415	10	0.394	0.120	0.122	4000	5300	73467	72267	97343	95754	1.4	17.5	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note: Only 2 Samples for Tensile and 1 Samples for Bend test

Bend Test	
10mm Bar Bend Test Through 180 Degree is Satisfactory	

Test Performed and Verified by:

To,

Engr. Irfan Ali (Manager: Projects)

Ittefaq Construction Services

Construction of Commercial Plaza (273-R2) Main Boulevard Johar Town Lahore

Reference # CED/TFL 7697 (Dr. Usman Akmal)

Dated: 28-10-2025

Reference of the request letter # ICS/H.O/J.T.L/001

Dated: 28-10-2025

Tension Test Report (Page-1/2)

Date of Test 29-10-2025

Gauge Length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Actual Weight Per Unit Length (lb/ft)	Nominal Size (#)	Actual Diameter (inch)	Area (in ²)		Yield Load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
				Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.371	3	0.373	0.110	0.1091	3300	5000	66120	66676	100182	101025	1.1	13.8	-
2	0.368	3	0.371	0.110	0.1081	3400	5000	68124	69335	100182	101964	1.1	13.8	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note: Only 2 Samples for Tensile and 1 Samples for Bend test

Bend Test

3 Bar Bend Test Through 180 Degree is Satisfactory

Test Performed and Verified by:

To,

Engr. Irfan Ali (Manager: Projects)

Ittefaq Construction Services

Construction of Commercial Plaza (273-R2) Main Boulevard Johar Town Lahore

Reference # CED/TFL 7697 (Dr. Usman Akmal)

Dated: 28-10-2025

Reference of the request letter # ICS/H.O/J.T.L/001

Dated: 28-10-2025

Tension Test Report (Page-2/2)

Date of Test 29-10-2025

Gauge Length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Actual Weight Per Unit Length (lb/ft)	Nominal Size (#)	Actual Diameter (inch)	Area (in ²)		Yield Load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
				Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.366	3	0.370	0.110	0.1074	3300	5000	66120	67719	100182	102605	1.1	13.8	-
2	0.383	3	0.379	0.110	0.1126	3400	5300	68124	66546	106193	103733	1.2	15.0	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note: Only 2 Samples for Tensile and 1 Samples for Bend test

Bend Test

3 Bar Bend Test Through 180 Degree is Satisfactory

Test Performed and Verified by:

To,

Mr. Jaffar Hussain Randhawa (Resident Engineer)
 Engineering Consultancy Services Punjab (Pvt.) Ltd.
 Rehabilitation / Reconstruction of Road From Zafarwal to Lehri Via Jandiala Deoli Sakror I/C
 Link Pir Phalahi to Village Kot Naju Length = 15.45

Reference # CED/TFL 7699 (Dr. Usman Akmal)
 Reference of the request letter # ECSP/RE/459/12

Dated: 28-10-2025
 Dated: 09-10-2025

Tension Test Report (Page-1/1)

Date of Test 29-10-2025
 Gauge Length 8 inches
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A706

Sr. No.	Actual Weight Per Unit Length (lb/ft)	Nominal Size (#)	Actual Diameter (inch)	Area (in ²)		Yield Load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
				Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.377	3	0.375	0.110	0.1107	3700	4700	74135	73656	94171	93563	1.2	15.0	-
2	0.371	3	0.373	0.110	0.1091	3700	4700	74135	74726	94171	94923	1.2	15.0	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note: Only 2 Samples for Tensile and 1 Samples for Bend test

Bend Test	
# 3 Bar Bend Test Through 180 Degree is Satisfactory	

Test Performed and Verified by:

To,

Mr. M. Taimur Sarwar
T.S.M Design (Pvt.) Ltd.
UBL Gulshan Ravi Lahore

Reference # CED/TFL 7700 (Dr. Usman Akmal)
Reference of the request letter # Nil

Dated: 28-10-2025
Dated: 27-10-2025

Tension Test Report (Page-1/1)

Date of Test 29-10-2025
Gauge Length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A706

Sr. No.	Actual Weight Per Unit Length (lb/ft)	Nominal Size (#)	Actual Diameter (inch)	Area (in ²)		Yield Load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
				Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.365	3	0.369	0.110	0.1071	3400	4200	68124	69964	84153	86426	1.5	18.8	-
2	0.365	3	0.369	0.110	0.1071	3600	4400	72131	74079	88160	90541	1.2	15.0	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note: Only 2 Samples for Tensile and 1 Samples for Bend test

Bend Test	
# 3 Bar Bend Test Through 180 Degree is Satisfactory	

Test Performed and Verified by:

To,
 Mr. Hamza Hamid
 Armstrong Construction (Pvt.) Ltd.

Reference # CED/TFL 7701 (Dr. Usman Akmal)
 Reference of the request letter # Nil

Dated: 29-10-2025
 Dated: 28-10-2025

Tension Test Report (Page-1/1)

Date of Test 29-10-2025
 Gauge Length 8 inches
 Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Actual Weight Per Unit Length (lb/ft)	Nominal Size (#)	Actual Diameter (inch)	Area (in ²)		Yield Load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
				Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	4.130	10	1.243	1.270	1.2137	36000	57800	62476	65374	100308	104962	1.5	18.8	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note: Only 1 Samples for Tensile and 1 Samples for Bend test

Bend Test	
# 10 Bar Bend Test Through 180 Degree is Satisfactory	

Test Performed and Verified by:

To,

Executive Engineer
Highway Division, Mandi Bahauddin
Restoration of Mandi Bahaudin Bypass Near Pindi Purani (Taken Length = 2.70KM),
District Mandi Bahauddin

Reference # CED/TFL 7703 (Dr. Rizwan Riaz)
Reference of the request letter # 1023/DB

Dated: 29-10-2025
Dated: 10-05-2025

Tension Test Report (Page-1/1)

Date of Test 29-10-2025
Gauge Length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Actual Weight Per Unit Length (lb/ft)	Nominal Size (#)	Actual Diameter (inch)	Area (in ²)		Yield Load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
				Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.378	3	0.376	0.110	0.1112	3500	5100	70127	69402	102185	101128	1.4	17.5	-
2	4.318	10	1.271	1.270	1.2687	37600	51000	65252	65321	88507	88600	1.9	23.8	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note: Only 2 Samples for Tensile and 0 Samples for Bend test

Bend Test														

Test Performed and Verified by:

To,

Mr. Fayyaz Ahmad (Resident Engineer)

Nespak (Pvt.) Ltd.

Construction of Underground Water Tank (UGWT) Overhead Water Tank (OHWT) and Allied Works
Zone-2 Ahmad Nagar (FF Steel)

Reference # CED/TFL 7705 (Dr. Rizwan Riaz)

Dated: 29-10-2025

Reference of the request letter # 4707/11/FA/01/FSD/90

Dated: 24-10-2025

Tension Test Report (Page-1/1)

Date of Test 29-10-2025

Gauge Length 8 inches

Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A706

Sr. No.	Actual Weight Per Unit Length (lb/ft)	Nominal Size (#)	Actual Diameter (inch)	Area (in ²)		Yield Load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
				Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.370	3	0.372	0.110	0.1087	3700	4900	74135	75035	98178	99371	1.1	13.8	-
2	0.370	3	0.372	0.110	0.1087	3600	4800	72131	72972	96175	97296	1.2	15.0	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Note: Only 2 Samples for Tensile and 1 Samples for Bend test

Bend Test

3 Bar Bend Test Through 180 Degree is Satisfactory

Test Performed and Verified by: