



STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

Ref: CED/TFL/05/4989

Dated: 15-05-2024

Dated of Test: 21-05-2024

To

APM
PMU Logistic Park
Nathe Khalsa NLC
Multan Road, Lahore
Nathe Khalsa Project.

Subject: **TESTING OF R.C.C. PIPE [ASTM-C76 - 08a]** (Page # 1/1)

Reference to your letter No. 60712/Proj/NLC, dated 02.05.2024 on the subject cited above. One 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	Proof Stress	Ultimate Stress
	(inch)	(foot)	(foot)	(inch)	(inch)	(inch)	(kg)	(kg)	Pound/Linear foot/foot	Pound/Linear foot/foot
1	12	7.78	7.36	16.06	12.24	1.91	10500	16000	3084	4700

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

- 1- You can See your reports On Internet in the following web site
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- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,
141 Road Maintenance Battalion
C/O Postmaster Gigit.
(Hunza Hydro Power Project 20/40 MW)

Reference # CED/TFL **5092** (Dr. Usman Akmal)
Reference of the request letter # 607/HHPP/P

Dated: 16-05-2024
Dated: 06-05-2024

Tension Test Report (Page -1/2)

Date of Test 21-05-2024
Gauge length 600 mm
Description Steel Strand Tensile Test as per ASTM A-416-94a

Sr. No.	Nominal Diameter	Nominal Weight	Measured weight	Yield strength clause (6.3)		Breaking strength clause (6.2)		Young's Modulus of Elasticity "E"	% Elongation	Remarks / Coil No.
	(mm)	(kg/km)	(kg/km)	(kg)	(kN)	(kg)	(kN)	GPa		
1	12.70 (1/2")	780.0	789.0	18300	179.52	20100	197.18	198	>3.50	xx
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	
Only one sample for Test										

Note:

1. Modulus of Elasticity is based on nominal steel area of the steel strand vide clause 13.3 of ASTM – A416a
2. Load versus percentage strain graphs are attached

I/C Testing Laboratoires
UET Lahore, Pakistan.

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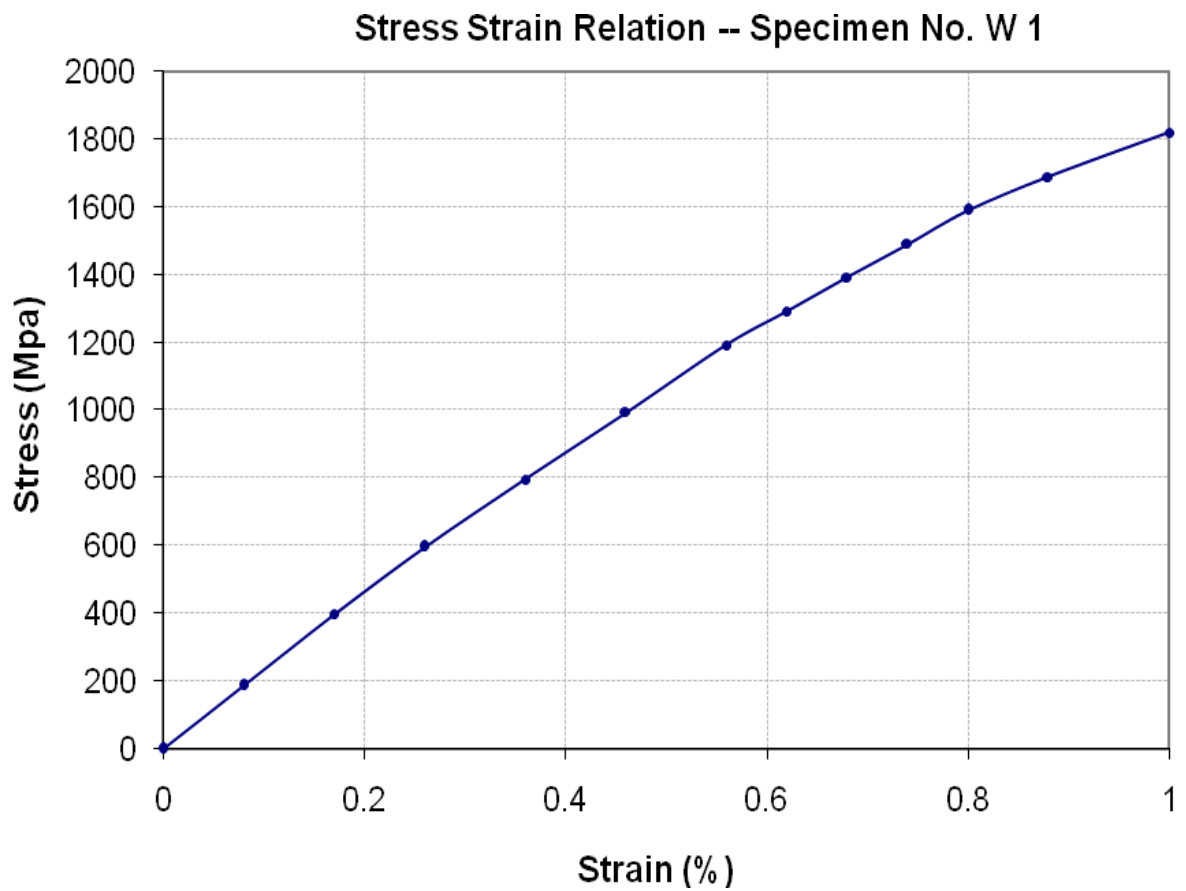
To,

141 Road Maintenance Battalion
C/O Postmaster Gigit.
(Hunza Hydro Power Project 20/40 MW)

Reference # CED/TFL **5092** (Dr. Usman Akmal)
Reference of the request letter # 607/HHPP/P

Dated: 16-05-2024
Dated: 06-05-2024

Graph (Page – 2/2)



I/C Testing Laboratories
UET Lahore, Pakistan.

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STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
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To,
M/S Ibrahim Nizami Steel Wire (Pvt) Ltd.
Lahore

Reference # CED/TFL **5098** (Dr. Usman Akmal)
Reference of the request letter # Nil

Dated: 17-05-2024
Dated: 17-05-2024

Tension Test Report (Page – 1/1)

Date of Test 21-05-2024
Gauge length 600 mm
Description Steel Strand Tensile Test as per ASTM A-416-94a

Sr. No.	Nominal Diameter	Nominal Weight	Measured weight	Yield strength clause (6.3)		Breaking strength clause (6.2)		% Elongation	Remarks / Coil No.
	(mm)	(kg/km)	(kg/km)	(kg)	(kN)	(kg)	(kN)		
1	9.53 (3/8")	430.0	448.0	8600	84.37	11000	107.91	>3.50	xx
2	12.70 (1/2")	780.0	763.0	17800	174.62	19200	188.35	>3.50	xx
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
Only two samples for Test									

Ref: CED/TFL/05/5110

Dated: 20-05-2024
I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

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STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

Dated of Test: 21-05-2024

To

Resident Engineer
NESPAK

Infrastructure Development at Chahar Bagh under Ravi Riverfront Urban Development Project.

Subject: **TESTING OF R.C.C. PIPE [ASTM-C76 - 08a]** (Page # 1/1)

Reference to your letter No. 4559/13/MAA/09/292, dated 23.02.2024 on the subject cited above. One 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	Proof Stress	Ultimate Stress
	(inch)	(foot)	(foot)	(inch)	(inch)	(inch)	(kg)	(kg)	Pound/Linear foot/foot	Pound/Linear foot/foot
1	9	7.83	7.31	10.98	8.75	1.12	5000	6500	2068	2689

To,

I/C Testing Laboratoires
UET Lahore, Pakistan.

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Principal Engineer
NESPAK

Replacement of Elevator Ropes installed at NESPAK House, Islamabad.

Reference # CED/TFL **5114** (Dr. M Rizwan Riaz)
Reference of the request letter # 099/321/QAB/01/3207(B)

Dated: 20-05-2024

Dated: 17-05-2024

Tension Test Report (Page – 1/1)

Date of Test

21-05-2024

Description

Steel Wire Rope Tensile Test

Sr. No.	Nominal Diameter	Measured weight	Breaking Load	Remarks / Coil No.
	(mm)	(kg/m)	(kg)	
1	10	0.52	6800	
-	-	-	-	
-	-	-	-	
-	-	-	-	
-	-	-	-	
Only one sample for Test				

To,

I/C Testing Laboratoires
UET Lahore, Pakistan.

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M/S Meezan Developers
Lahore
(Construction of Jamia Tur Rasheed Lahore Campus.)

Reference # CED/TFL **5115** (Dr. M Rizwan Riaz)
Reference of the request letter # Nil

Dated: 20-05-2024
Dated: 20-05-2024

Tension Test Report (Page # 1/1)

Date of Test 21-05-2024
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.372	3	0.373	0.11	0.109	3500	4800	70200	70510	96200	96700	1.20	15.0	
2	0.371	3	0.372	0.11	0.109	3500	4600	70200	70820	92200	93100	1.50	18.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

To,

I/C Testing Laboratories
UET Lahore, Pakistan.

Note:

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M/S Ibrahim Nizami Steel Wire (Pvt) Ltd.
Lahore

Reference # CED/TFL **5116** (Dr. Usman Akmal)
Reference of the request letter # Nil

Dated: 20-05-2024
Dated: 20-05-2024

Tension Test Report (Page – 1/1)

Date of Test 21-05-2024
Gauge length 600 mm
Description Steel Strand Tensile Test as per ASTM A-416-94a

Sr. No.	Nominal Diameter	Nominal Weight	Measured weight	Yield strength clause (6.3)		Breaking strength clause (6.2)		% Elongation	Remarks / Coil No.
	(mm)	(kg/km)	(kg/km)	(kg)	(kN)	(kg)	(kN)		
1	9.53 (3/8")	430.0	446.0	7400	72.59	10300	101.04	>3.50	xx
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	
Only one sample for Test									

To,

I/C Testing Laboratoires
UET Lahore, Pakistan.

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M/S S & S Associates

Lahore.

(Extension of Washing Area & Boiler Located at Designtex (smc) Pvt Ltd. Of Sapphire Textile Mills.)

Reference # CED/TFL **5117** (Dr. M Rizwan Riaz)

Dated: 20-05-2024

Reference of the request letter # SS/TST/0021

Dated: 20-05-2024

Tension Test Report (Page # 1/1)

Date of Test 21-05-2024

Gauge length 8 inches

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

Sr. No.	Weight (lbs/ft)	Diameter/ Size (mm)		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	Nominal	Actual			
1	0.369	10	9.43	0.12	0.108	3800	4800	69812	77300	88184	97700	0.75	9.4	
2	0.370	10	9.45	0.12	0.109	4100	5000	75324	83130	91858	101400	0.90	11.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
10mm Dia Bar Bend Test Through 180° is Satisfactory														

To,

I/C Testing Laboratoires
UET Lahore, Pakistan.

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STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
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Pakistan. Ph: 92-42-99029202

Resident Engineer
AZ Engineering Associates
Rehabilitation of Gujrat Noora Mandiala Road, Length = 16.90 kms District Gujrat.

Reference # CED/TFL **5119** (Dr. M Rizwan Riaz)
Reference of the request letter # RE AZEA/GT-934

Dated: 20-05-2024
Dated: 20-03-2024

Tension Test Report (Page -1/1)

Date of Test 21-05-2024
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.378	3	0.376	0.11	0.111	3500	4600	70200	69360	92200	91200	1.50	18.8	
2	0.378	3	0.376	0.11	0.111	3800	5700	76200	75330	114300	113000	0.90	11.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

To,

I/C Testing Laboratoires
UET Lahore, Pakistan.

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STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

Sub Divisional Officer
Buildings Sub Division
Bhera
(Construction of Multipurpose Hall at Govt. High School Bhera District Sargodha)

Reference # CED/TFL **5121** (Dr. M Rizwan Riaz)
Reference of the request letter # 285/Bhera

Dated: 20-05-2024
Dated: 28-02-2024

Tension Test Report (Page # 1/1)

Date of Test 21-05-2024
Gauge length 8 inches
Description Deformed Steel Bar Tensile Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size (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	Nominal	Actual			
1	0.378	3/8	0.376	0.11	0.111	4000	5600	80200	79440	112300	111300	0.75	9.4	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only one sample for tensile test														
Bend Test														

To,

I/C Testing Laboratoires
UET Lahore, Pakistan.

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STRUCTURAL ENGINEERING DIVISION
Test Floor Laboratory
Department of Civil Engineering
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Pakistan. Ph: 92-42-99029202

Resident Engineer,
Orbit Developers Private Limited
The Spring Atrium, Gulberg Lahore.

Reference # CED/TFL **5123** (Dr. M Rizwan Riaz)
Reference of the request letter# NIL

Dated: 21-05-2024
Dated: 21-05-2024

Tension Test Report (Page -1/1)

Date of Test 21-05-2024
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight (lbs/ft)	Diameter/ Size		Area (in ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (psi)		Ultimate Stress (psi)		Elongation (inch)	% Elongation	Remarks
		Nominal (#)	Actual (inch)	Nominal	Actual			Nominal	Actual	Nominal	Actual			
1	0.372	3	0.373	0.11	0.109	3100	4900	62200	62410	98200	98700	1.10	13.8	
2	0.366	3	0.370	0.11	0.108	3400	5300	68200	69700	106200	108700	1.30	16.3	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
#3 Bar Bend Test Through 180° is Satisfactory														

To,

I/C Testing Laboratories
UET Lahore, Pakistan.

Note:

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M/S AF Steel.
Lahore

Reference # CED/TFL **5124** (Dr. Ali Ahmmed)
Reference of the request letter # Nil

Dated: 21-05-2024
Dated: 21-05-2024

Tension Test Report (Page -1/1)

Date of Test 21-05-2024
Gauge length 8 inches
Description Wire Tensile Test

Sr. No.	Weight (kg/m)	Diameter/ Size (mm)		Area (mm ²)		Yield load (kg)	Breaking Load (kg)	Yield Stress (MPa) Actual	Ultimate Stress (MPa) Actual	Elongation (inch)	% Elongation	Remarks	
		Nominal	Actual	Nominal	Actual								
1	0.101	4	4.04	-----	12.8	-----	520	-----	398	1.30	16.3		
-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only one sample for tensile test													
Bend Test													

I/C Testing Laboratoires
UET Lahore, Pakistan.

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