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/02/6491 (Dr. M Kashif) Dated: 06-02-2025

Dated of Test: 17-02-2025

To

Engr. Sikandar Hayat Wattoo
Project Manager
Soul City by Mawa Developers
Soul City Exective Housing Scheme Located at Halloki Raiwind Railway Road, Falling in Jia Bagga & JHdu, Thesil Raiwind & Model Town, Lahore.

Subject: **TESTING OF R.C.C. PIPE [ASTM-C76]**

Reference to your letter No. Nil, dated 06.02.2025 on the subject cited above. Three R.C.C. Pipes as received by us have 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)	Lbs/Linear foot/foot	Lbs/Linear foot/foot
1	12	7.69	7.00	16.00	11.94	2.03	13000	17500	4115	5539
2	15	7.75	7.28	19.30	14.96	2.17	10600	14400	2574	3496
3	18	7.75	7.30	23.10	18.30	2.40	13800	18200	2733	3604

I/C Testing Laboratoires
UET Lahore, Pakistan.

Note:

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2. The above results pertain to sample /samples supplied to this laboratory.

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,

Resident Engineer
Metroplan - Asian Jv
Establishment Nawaz Shrif Institute of Cancer Treatment and Research, Lahore Package-B.

Reference # CED/TFL **6511** (Dr. M Kashif) Dated: 10-02-2025
Reference of the request letter # Metroplan-Asian JV/NSICTR/RE-71 Dated: 23-01-2025

Tension Test Report (Page – 1/2)

Date of Test 17-02-2025
Gauge length 2 inches
Description M.S Seamless Pipe Steel Strip Tensile Test

Sr. No.	Designation		Size of Strip	X Section Area	Yield load	Breaking Load	Yield Stress	Ultimate Stress	Elongation	% Elongation	Remarks
	(inch)		(mm)	(mm^2)	(kg)	(kg)	(MPa)	(MPa)	(in)		
1	M.S Seamless Pipe	4	25.20x5.20	131.04	6100	7600	457	569	0.60	30.00	
2			25.00x5.50	137.50	6100	7700	435	549	0.60	30.00	
-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	
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-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	
Only Two Samples for Tensile Test											
Bend Test											

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

To,

Resident Engineer
Metroplan - Asian Jv
Establishment Nawaz Shrif Institute of Cancer Treatment and Research, Lahore Package-B.

Reference # CED/TFL **6511** (Dr. M Kashif) Dated: 10-02-2025
Reference of the request letter # Metroplan-Asian JV/NSICTR/RE-71 Dated: 23-01-2025

Weight &Size Test Report (Page – 2/2)

Date of Test 17-02-205
Description M.S Seamless Pipe Weight and Size Test

Sr. No.	Designation	Weight	Length	Weight per Unit Length	External Diameter	Internal Diameter	Wall Thickness	Remark
	(inch)	(g)	(cm)	(kg/m)	(mm)	(mm)	(mm)	
1	**4**	**9571**	**61.90**	**15.46**	**101.60**	**91.60**	**5.00**	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	
Only one Sample for Test								

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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

Ref: CED/TFL/02/6535 Dated: 12-02-2025

Date of Test: 12-02-2025

To,

Muhammad Zahid Aziz
Resident Engineer, NESPAK
Improvement of Water Supply / Swewrage System UC-129, Shalimar Zone, Lahore.

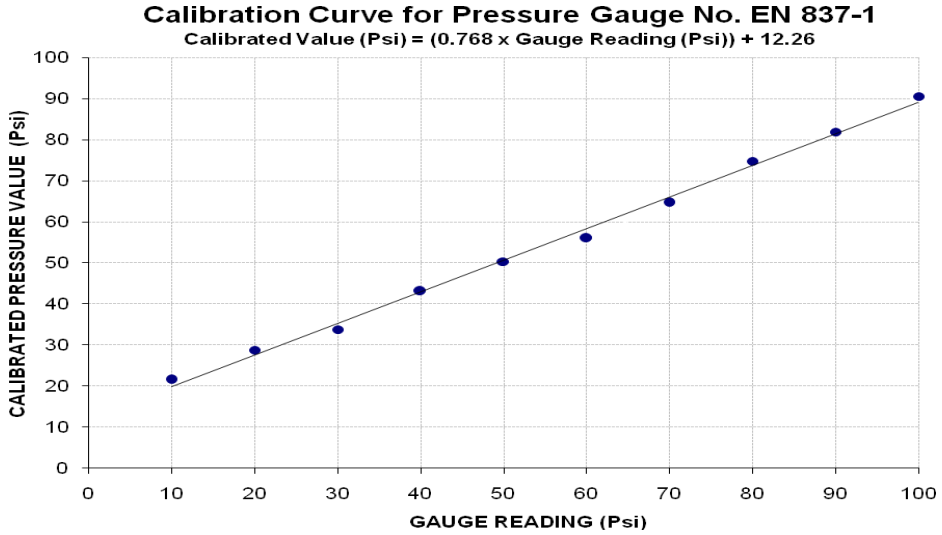
Subject: **- CALIBRATION OF PRESSURE GAUGE (MARK: TFL/02/6535)** (Page # 1/1)

Reference to your Letter No. NESPAK/LDP/LHR/TS/43101/148-A, Dated: 03/02/2025 on the subject cited above. One Pressure Gauge "UNITHERM" no. EN 837-1 as received by us has been calibrated. The results are tabulated as under:

Total Range : Zero - 150 (Psi)
Calibrated Range : Zero - 100 (Psi)

Pressure Gauge Reading (Psi)	**10**	**20**	**30**	**40**	**50**	**60**	**70**	**80**	**90**	**100**
Calibrated Load (kg)	**300**	**400**	**470**	**600**	**700**	**780**	**900**	**1040**	**1140**	**1260**
Calibrated Pressure (Psi)	**22**	**29**	**34**	**43**	**50**	**56**	**65**	**75**	**82**	**91**

The Ram Area for Calibration = 198 cm^2



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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

To,

Engr. Ghulam Rasool
Resident Engineer, NESPAK
Rehabilitation / Improvement of Streets (P.C.C), Sewerage / Drainage UC-250 Theh Pannju Nishtar Zone MCL.

Reference # CED/TFL **6546** (Dr. M Kashif) Dated: 13-02-2025
Reference of the request letter # 4084/103/LDP/NZ/04/184 Dated: 30-01-2025

Tension Test Report (Page -1/1)

Date of Test 17-02-2025
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size		Area (in^2)		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)		
1	0.370	3	0.372	0.11	0.109	3400	4700	68200	68890	94200	95300	1.40	17.5	
2	0.369	3	0.372	0.11	0.109	3500	4700	70200	71070	94200	95500	1.40	17.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
#3 Bar Bend Test Through 180º is Satisfactory														

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

To,

Aqeel Aslam
Manager Projects, Fatima Memorial Hospital
Construction of New Building at Fatima Memorial Hospital Lahore.

Reference # CED/TFL **6549** (Dr. M Kashifi) Dated: 14-02-2025
Reference of the request letter # FMH/RAF/STE/38 Dated: 12-02-2025

Tension Test Report (Page -1/1)

Date of Test 17-02-2025
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size		Area (in^2)		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)		
1	0.368	3	0.371	0.11	0.108	4300	5000	86200	87530	100200	101800	0.90	11.3	
2	0.372	3	0.373	0.11	0.109	4300	5100	86200	86770	102200	103000	0.80	10.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only two samples for tensile and one sample for bend test														
Bend Test														
#3 Bar Bend Test Through 180º is Satisfactory														

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

To,

QAQC Manager
Zameen Dvelopment
Zameen ARX
Construction of ARX (CBD) Project by Zameen Development, Lahore.

Reference # CED/TFL **6550** (Dr. M KAshif) Dated: 14-02-2025
Reference of the request letter # ZD/QAQC/ARX/04 Dated: 14-02-2025

Tension Test Report (Page -1/1)

Date of Test 17-02-2025
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size		Area (in^2)		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Heat No.
	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)		
1	0.380	3	0.377	0.11	0.112	3700	4900	74200	73080	98200	96800	0.80	10.0	Feb 41, 42
2	0.363	3	0.369	0.11	0.107	3300	4500	66200	68130	90200	92900	1.20	15.0	
3	0.367	3	0.370	0.11	0.108	3500	4600	70200	71610	92200	94200	1.00	12.5	Feb 46, 48
4	0.391	3	0.383	0.11	0.115	3800	4900	76200	72800	98200	93900	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Note: only four samples for tensile and two samples for bend test														
Bend Test														
#3 Bar Bend Test Through 180º is Satisfactory														
#3 Bar Bend Test Through 180º is Satisfactory														

I/C Testing Laboratoires
UET Lahore, Pakistan.

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STRUCTURAL ENGINEERING DIVISION

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Pakistan. Ph: 92-42-99029202

To,

Sub Divisional Officer
Highway Sub Division
Mianwali
(Re-Construction / Construction / Widening / Improvement of Road from Harnoli Wanbhachran Road to Watto I/C Bridge on Dulla Branch Length 5.00 km District Mianwali.)

Reference # CED/TFL **6553** (Dr. M Kashifi) Dated: 14-02-2025
Reference of the request letter # 28/SDO/MWI Dated: 11-01-2025

Tension Test Report (Page -1/1)

Date of Test 17-02-2025
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size		Area (in^2)		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)		
1	0.373	3	0.374	0.11	0.110	3400	4800	68200	68340	96200	96500	1.30	16.3	
2	0.375	3	0.375	0.11	0.110	3300	4700	66200	65980	94200	94000	1.40	17.5	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Note: only two samples for tensile and one sample for bend test

Bend Test

#3 Bar Bend Test Through 180º is Satisfactory

I/C Testing Laboratoires
UET Lahore, Pakistan.

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Ref: CED/TFL/02/6557 (Dr. M Kashif) Dated: 14-02-2025

Dated of Test: 17-02-2025

To

Engr. Ghulam Rasool
Resident Engineer, NESPAK
Rehabilitation / Improvement of Streets (P.C.C), Sewerage / Drainage, UC-246, 249 Nishatr Zone MCL.

Subject: **TESTING OF R.C.C. PIPE**

Reference to your letter No. 4084/103/LDP/NZ/04/214, dated 12.02.2025 on the subject cited above. Two R.C.C. Pipes as received by us have 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)	Lbs/Linear foot/foot	Lbs/Linear foot/foot
1	12	7.77	7.36	16.20	12.20	2.00	8500	11000	2505	3242
2	18	7.75	7.28	23.20	18.46	2.37	8500	9500	1673	1869

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Pakistan. Ph: 92-42-99029202

To

Muhammad Azmat
Resident Engineer, NESPAK – TurkPak JV
Reconstruction of Lady Willingdon Hospital, Lahore.

Reference # CED/TFL **6559** (Dr. M Kashif) Dated: 17-02-2025
Reference of the request letter # 4729/13/MA/04/209 Dated: 14-02-2025

Tension Test Report (Page -1/1)

Date of Test 17-02-2025
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size		Area (in^2)		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kg)	(kg)	Nominal	Actual	Nominal	Actual	(inch)		
1	0.374	3	0.374	0.11	0.110	3400	5100	68200	68230	102200	102400	1.30	16.3	AF Steel
2	0.375	3	0.375	0.11	0.110	3500	5100	70200	70020	102200	102100	1.20	15.0	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Note: only two samples for tensile and one sample for bend test

Bend Test

#3 Bar Bend Test Through 180º is Satisfactory

I/C Testing Laboratoires
UET Lahore, Pakistan.

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STRUCTURAL ENGINEERING DIVISION

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Department of Civil Engineering
University of Engineering and Technology Lahore, 54890
Pakistan. Ph: 92-42-99029202

To,

Muhammad Irfan
Engr, Dy Dir Infra, DHA Gujranwala
"Sec C."

Reference # CED/TFL **6564** (Dr. Asad Ali) Dated: 17-02-2025
Reference of the request letter # 111/3/Infra/DD/Lab/C/2515 Dated: 15-02-2025

Tension Test Report (Page -1/1)

Date of Test 17-02-2025
Gauge length 8 inches
Description Deformed Steel Bar Tensile and Bend Test as per ASTM-A615

Sr. No.	Weight	Diameter/ Size		Area (in^2)		Yield load	Breaking Load	Yield Stress (psi)		Ultimate Stress (psi)		Elongation	% Elongation	Remarks
	(lbs/ft)	Nominal (#)	Actual (inch)	Nominal	Actual	(kN)	(kN)	Nominal	Actual	Nominal	Actual	(inch)		
1	0.375	3	0.375	0.11	0.110	34.20	47.00	69900	69700	96000	95800	1.00	12.5	FF Steel
2	0.377	3	0.376	0.11	0.111	34.20	46.50	69900	69380	95000	94400	1.10	13.8	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	-	-	
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-	-	-	-	-	-	-	-	-	-	-	-	-	-	

Note: only two samples for tensile and one sample for bend test

Bend Test

#3Bar Bend Test Through 180º is Satisfactory

I/C Testing Laboratoires
UET Lahore, Pakistan.

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