Client Reference No.: MMP/1095/Kamalia/SEW/132/2025 **Dated:** 08-07-2025

SOM Lab Ref: CED/SOM/1622 **Dated:** 07-08-2025

Test Type: Load Test of RPC Manhole Cover 24" Diameter

Test Standard: Non-standard test was performed as per requirement of the client [Application of load at the center of the Manhole Cover through circular steel plate of 15 Inches diameter]

Test Performed by: Dr. Ubaid Mughal

Muhammad Shafiq

Assistant Resident Engineer

PCP Pkg-III Kamalia, MM Pakistan

Improvement of Sewerage System and Construction of Waste Water Treatment Plant (WWTP)-Kamalia City Package-1 Sewerage System.

This is with reference to your above-mentioned letter and SOM receipt No. 1622 dated: 07-08-2025. The sample of RPC Manhole Cover submitted in the Laboratory has been tested and the result is provided below.

Load Test Result

Diameter of Manhole Cover	Average Thickness of Manhole Cover	Maximum Load	Observations/Remarks
640 mm	78.5 mm	12700 kg	Manhole Cover was cracked at this load

Witnessed by: Abdul Majid (R.E, MMP) Kamalia

Kashif Shahzad
Manager-Technical Gharibwal Cement Ltd.Lahore

Test Performed By: **Dr. /Engr.** Ubaid Mughal

Client Reference: GCL/Purchase/UET/008 **Dated:** 06-08-2025
SOM Lab Ref: CED/SOM/1620 (Page-1/1) **Dated:** 07-08-2025
Test: Tension Test & Bend Test **Test Specification:** ASTM-A 615
Sample Type: Deformed Bar **Gauge Length:** 200 mm

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	kg/m	mm	mm	mm^2	mm^2	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	3.866	25	25.05	491	493	251.00	353.00	511	510	719	717	37.5	200	18.8	H # 46
2	3.868	25	25.05	491	493	247.20	355.20	504	502	724	721	27.5	200	13.8	H # 46
3	3.868	25	25.05	491	493	213.20	309.00	434	433	629	628	32.5	200	16.3	H # 45
4	3.904	25	25.16	491	497	229.70	326.00	468	462	664	656	35.0	200	17.5	H # 45
5	3.802	25	24.83	491	484	241.00	349.70	491	498	712	722	32.5	200	16.3	H # 545
6	3.864	25	25.04	491	492	236.70	344.20	482	481	701	700	32.5	200	16.3	H # 545
7	3.792	25	24.80	491	483	211.70	312.20	431	439	636	647	32.5	200	16.3	H # 44
8	3.783	25	24.77	491	482	212.20	312.50	432	441	637	649	37.5	200	18.8	H # 44
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BEND TEST:

25mm	Sample bend through 180 degrees Satisfactorily without any crack
25mm	Sample bend through 180 degrees Satisfactorily without any crack
25mm	Sample bend through 180 degrees Satisfactorily without any crack
25mm	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Twelve Samples Received and Tested

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Javeed Aslam **Test Performed By:** **Dr. /Engr.** Irfan Ul Hassan

Material Engineer Banu Mukhtar Contracting (Pvt) Ltd.(Const Of Hyundai Nishat Extension-FSD)

Client Reference: HNM/BMC/10/2025 **Dated:** 04-08-2025

SOM Lab Ref: CED/SOM/1624(Page-1/1) **Dated:** 07-08-2025

Test: Tension Test & Bend Test **Test Specification:** ASTM-A 615

Sample Type: Deformed Bar (Ittehad Steel) **Gauge Length:** 200 mm

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	kg/m	mm	mm	mm^2	mm^2	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	1.654	16	16.39	201	211	109.70	141.50	546	520	704	671	32.5	200	16.3	
2	1.677	16	16.49	201	214	111.70	144.00	556	523	716	675	30.0	200	15.0	
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BEND TEST:

16mm	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Three Samples Received and Tested

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Peng Zhiwen **Test Performed By:** **Dr. /Engr.** Asad Ali Gillani

Executive Project Manager CCECC Pakistan Branch Office Islamabad.

Client Reference: DASU-KKH-01 **Dated:** 03-08-2025

SOM Lab Ref: CED/SOM/1626(Page-1/1) **Dated:** 07-08-2025

Test: Tension Test & Bend Test **Test Specification:** ASTM-A 615

Sample Type: Deformed Bar (FF Steel) **Gauge Length:** 200 mm

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	kg/m	mm	mm	mm^2	mm^2	kN	kN	MPa	MPa	MPa	MPa	mm	mm	%	
1	3.039	22	22.20	380	387	185.70	251.50	489	480	662	650	37.5	200	18.8	
2	3.027	22	22.16	380	386	178.70	245.50	470	464	646	637	32.5	200	16.3	
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BEND TEST:

22mm	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Three Samples Received and Tested

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Adeel Builders & Developers **Test Performed By:** **Dr. /Engr.** Ubaid Mughal
Faisalabad.(Gate Way & Boundary Wall Project for Chenab Club Faisalabad)

Client Reference: Nil **SOM Lab Ref:** 1619 (Page-1/1)
Dated: Nil **Dated:** 07-08-2025

Test: Tension Test & Bend Test **Test Specification:** ASTM-A-615
Gauge Length: 8 inch **Sample Type:** Deformed Bar (FF Steel)

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	lb/ft	#	in	in^2	in^2	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.654	8	0.997	0.79	0.780	25.15	34.12	70210	71110	95250	96470	1.40	8.0	17.5	
2	2.644	8	0.995	0.79	0.777	25.61	34.32	71490	72680	95820	97420	1.30	8.0	16.3	
3	1.474	6	0.743	0.44	0.433	14.17	19.59	71020	72170	98210	99790	1.20	8.0	15.0	
4	1.480	6	0.744	0.44	0.435	13.91	19.47	69750	70550	97590	98710	1.20	8.0	15.0	
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BEND TEST:

# 8	Sample bend through 180 degrees Satisfactorily without any crack
# 6	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Six Samples Received and Tested

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Muhammad Jamil Alam
Head Quailty Assurance FF Steel Lahore.

Test Performed By: **Dr. /Engr.** Irfan Ul Hassan

Client Reference: Nil
Dated: 22-07-2025

SOM Lab Ref: 1621 (Page-1/1)
Dated: 07-08-2025

Test: Tension Test & Bend Test
Gauge Length: 8 inch

Test Specification: ASTM-A-615
Sample Type: Deformed Bar (FF Steel)

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	lb/ft	#	in	in^2	in^2	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.029	5	0.620	0.31	0.302	9.70	13.22	69040	70870	94060	96550	1.30	8.0	16.3	No. 1
2	1.028	5	0.620	0.31	0.302	9.68	13.32	68900	70720	94790	97300	1.20	8.0	15.0	No. 2
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BEND TEST:

--	No Bend test performed

Note:-

Only Two Samples Received and Tested

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Muhammad Shafiq, ARE **Test Performed By:** **Dr. /Engr.** Nauman Khurram

MMP (Pvt) Ltd. Pkg -3 PCP Kamalia.(Const Of Waste Water Treatment Plant Kamalia City)

Client Reference: MMP/1095/KCM/WWTP/137/2025 **SOM Lab Ref:** 1623 (Page-1/1)

Dated: 06-07-2025 **Dated:** 07-08-2025

Test: Tension Test & Bend Test **Test Specification:** ASTM-A-615

Gauge Length: 8 inch **Sample Type:** Deformed Bar

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	lb/ft	#	in	in^2	in^2	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	0.664	4	0.498	0.20	0.195	5.91	8.15	65200	66870	89930	92230	1.60	8.0	20.0	
2	0.663	4	0.498	0.20	0.195	5.93	8.10	65420	67100	89370	91660	1.50	8.0	18.8	
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Witnessed By: Abdul Majid (RE MMP) Kamila

BEND TEST:

--	No Bend test performed

Note:-

Only Two Samples Received and Tested

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Khalid Bashir **Test Performed By:** **Dr. /Engr.** Asad Ali Gillani

Ittefaq Building Solution Pvt Ltd.(Project: COLORBUG 49-M-1,Kot Lakhpat,Lahore)

Client Reference: IBS/CGB/ST001 **SOM Lab Ref:** 1625 (Page-1/1)

Dated: 07-08-2025 **Dated:** 07-08-2025

Test: Tension Test & Bend Test **Test Specification:** ASTM-A-615

Gauge Length: 8 inch **Sample Type:** Deformed Bar

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	lb/ft	#	in	in^2	in^2	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.659	8	0.997	0.79	0.781	22.96	32.90	64090	64830	91840	92890	1.60	8.0	20.0	
2	1.472	6	0.743	0.44	0.433	13.51	19.39	67700	68800	97180	98750	1.30	8.0	16.3	
3	0.652	4	0.494	0.20	0.192	5.78	7.75	63740	66390	85430	88990	0.90	8.0	11.3	
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BEND TEST:

# 8	Sample bend through 180 degrees Satisfactorily without any crack
# 6	Sample bend through 180 degrees Satisfactorily without any crack
# 4	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Six Samples Received and Tested

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Manzoor Hussain Tahir **Test Performed By:** **Dr. /Engr.** Asad Ali Gillani

Dy GM Linker Developers (Pvt) Ltd.(Const Of Marketing Office Dream Garden Phase 2 Inter City Housing Scheme Multan)

Client Reference: Nil
Dated: 05-08-2025

SOM Lab Ref: 1627(Page-1/1)
Dated: 07-08-2024

Test: Tension Test & Bend Test **Test Specification:** ASTM-A-615
Gauge Length: 8 inch **Sample Type:** Deformed Bar

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	lb/ft	#	in	in^2	in^2	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	2.566	8	0.980	0.79	0.754	22.40	31.47	62520	65510	87850	92050	1.30	8.0	16.3	
2	1.036	5	0.622	0.31	0.304	8.63	13.17	61430	62640	93700	95550	1.40	8.0	17.5	
3	0.599	4	0.473	0.20	0.176	5.76	7.90	63510	72170	87120	99000	1.40	8.0	17.5	
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BEND TEST:

# 8	Sample bend through 180 degrees Satisfactorily without any crack
# 5	Sample bend through 180 degrees Satisfactorily without any crack
# 4	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Six Samples Received and Tested

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Assistant Manager (Civil) **Test Performed By:** **Dr. /Engr.** Asad Ali Gillani

NGC,G atti Faisalabad.(Reconst of Boundary Wall at 220KV Grid Station NGC Faisalabad)

Client Reference: 211-13 **SOM Lab Ref:** 1629 (Page-1/1)

Dated: 31-07-2025 **Dated:** 07-08-2025

Test: Tension Test & Bend Test **Test Specification:** ASTM-A-615

Gauge Length: 8 inch **Sample Type:** Deformed Bar (Sheikhoo Steel)

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	lb/ft	#	in	in^2	in^2	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.631	6	0.781	0.44	0.479	16.33	21.30	81860	75190	106790	98090	1.70	8.0	21.3	
2	1.636	6	0.783	0.44	0.481	16.38	21.41	82110	75110	107300	98150	1.50	8.0	18.8	
3	0.590	4	0.469	0.20	0.173	5.98	7.87	65990	76280	86780	100320	1.30	8.0	16.3	
4	0.584	4	0.468	0.20	0.172	5.96	7.87	65760	76470	86780	100910	1.20	8.0	15.0	
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BEND TEST:

# 6	Sample bend through 180 degrees Satisfactorily without any crack
# 4	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Six Samples Received and Tested

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk

Sub Divisional officer,
BSD Mandi Bahauddin.(M/R To Distt Jail "Main Boundary Wall" at Distt Jail Mandi Bahauddin)

Test Performed By: **Dr. /Engr.** Asad Ali Gillani

Client Reference: 417/MB
Dated: 29-07-2025

SOM Lab Ref: 1630 (Page-1/1)
Dated: 07-08-2025

Test: Tension Test & Bend Test
Gauge Length: 8 inch

Test Specification: ASTM-A-615
Sample Type: Deformed Bar

S.No.	Weight	Dia.		Area		Yield Load	Ultimate Load	Yield Stress		Ult. Stress		Elongation	Gauge Length	%age Elongation	Remarks
		Nominal	Calculated	Nominal	Calculated			(according to nominal area)	(according to measured area)	(according to nominal area)	(according to measured area)				
	lb/ft	#	in	in^2	in^2	Tons	Tons	psi	psi	psi	psi	in	in	%	
1	1.528	6	0.756	0.44	0.449	10.65	16.33	53400	52330	81860	80220	1.60	8.0	20.0	
2	0.643	4	0.491	0.20	0.189	4.96	7.46	54750	57930	82290	87070	1.20	8.0	15.0	
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BEND TEST:

# 6	Sample bend through 180 degrees Satisfactorily without any crack
# 4	Sample bend through 180 degrees Satisfactorily without any crack

Note:-

Only Four Samples Received and Tested

Note: Please always confirm the results of above report on web www.uet-civil.edu.pk