

Client Reference No.: 4084/103/LDP/SMZ(S-11)/04/36

Dated: 11-04-2025

SOM Lab Ref: CED/SOM/1157

Dated: 05-05-2025

Test Type: Load Test of RPC Manhole Cover

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 thick steel plate of 377mm diameter]

Test Performed by: Dr. Asad Ali Gillani

M.Hassan Khan

Resident Engineer

NESPAK (Pvt.) Ltd.

(Scheme # 11 Rehb/Improvement Of Ehsan Road Faiz Bagh Shahi Road Macca Chowk to Khushi Marriage Ghulam Hussain Park Road Shalamar Zone MCL)

This is with reference to your above-mentioned letter and SOM receipt No.1157 dated: 05-05-2025. 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 | 71.0 mm | 11600 kg | The sample was cracked at this load |

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

Client Reference: Nil

Dated: 05-05-2025

Test: Tension Test & Bend Test

Gauge Length: 8 inch

SOM Lab

Ref: 1156 (Page-1/1)

Dated: 05-05-2025

ASTM-A-615

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 | 2.625 | 8 | 0.991 | 0.79 | 0.771 | 24.92 | 34.66 | 69580 | 71300 | 96760 | 99140 | 1.20 | 8.0 | 15.0 | |
| 2 | 2.623 | 8 | 0.991 | 0.79 | 0.771 | 25.08 | 34.63 | 70010 | 71730 | 96670 | 99060 | 1.50 | 8.0 | 18.8 | |
| 3 | 1.482 | 6 | 0.745 | 0.44 | 0.436 | 13.53 | 18.93 | 67810 | 68430 | 94880 | 95760 | 1.40 | 8.0 | 17.5 | |
| 4 | 1.481 | 6 | 0.744 | 0.44 | 0.435 | 13.32 | 18.91 | 66780 | 67550 | 94780 | 95870 | 1.40 | 8.0 | 17.5 | |
| 5 | 0.666 | 4 | 0.500 | 0.20 | 0.196 | 6.09 | 8.46 | 67110 | 68480 | 93300 | 95200 | 1.20 | 8.0 | 15.0 | |
| 6 | 0.674 | 4 | 0.502 | 0.20 | 0.198 | 6.03 | 8.61 | 66550 | 67220 | 94990 | 95950 | 1.40 | 8.0 | 17.5 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| | | | | | | | | | | | | | | | |
| <u>BEND TEST:</u> | | | | | | | | | | | | | | | |
| # 8 | Sample bend through 180 degrees Satisfactorily without any crack | | | | | | | | | | Note:- Only Nine Samples Received and Tested | | | | |
| # 6 | Sample bend through 180 degrees Satisfactorily without any crack | | | | | | | | | | | | | | |
| # 4 | Sample bend through 180 degrees Satisfactorily without any crack | | | | | | | | | | | | | | |
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| Note: Please always confirm the results of above report on web www.uet-civil.edu.pk | | | | | | | | | | | | | | | |

Ali Raza
Site Engineer Park Diamond Vista Lahore.

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

Client Reference: Nil

Dated: 05-05-2025

Test: Tension Test & Bend Test

Gauge Length: 8 inch

SOM Lab

Ref: 1158 (Page-1/1)

Dated: 05-05-2025

Test Specification:

Sample Type:

ASTM-A-615

Deformed Bar

[illegible]

Muhammad Shabbir Sandhu,ME

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

NESPAK,EPCM Consul Swl.(Trunk Main Sewer,Effluent Pumping Station And Allied Work)(Lot-03)

Client Reference: 3976/11/MSS/SWL/Lot-03/01/1282

Dated: 02-05-2025

Test: Tension Test & Bend Test

Gauge Length: 8 inch

SOM Lab

Ref: 1160 (Page-1/1)

Dated: 05-05-2025

ASTM-A-615

| | |
|----------------------------|-------------------------|
| Test Specification: | ASTM-A-615 |
| Sample Type: | Deformed Bar (AF 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 | 2.628 | 8 | 0.991 | 0.79 | 0.772 | 18.88 | 28.80 | 52710 | 53940 | 80400 | 82270 | 2.10 | 8.0 | 26.3 | |
| 2 | 2.588 | 8 | 0.984 | 0.79 | 0.761 | 20.10 | 29.33 | 56120 | 58260 | 81880 | 85000 | 1.10 | 8.0 | 13.8 | |
| 3 | 1.459 | 6 | 0.739 | 0.44 | 0.429 | 13.68 | 19.34 | 68570 | 70330 | 96930 | 99410 | 1.00 | 8.0 | 12.5 | |
| 4 | 1.474 | 6 | 0.743 | 0.44 | 0.433 | 13.20 | 18.83 | 66170 | 67240 | 94370 | 95900 | 1.10 | 8.0 | 13.8 | |
| 5 | 0.639 | 4 | 0.489 | 0.20 | 0.188 | 6.95 | 8.87 | 76660 | 81560 | 97800 | 104040 | 0.80 | 8.0 | 10.0 | |
| 6 | 0.639 | 4 | 0.489 | 0.20 | 0.188 | 7.24 | 9.04 | 79810 | 84910 | 99710 | 106070 | 0.80 | 8.0 | 10.0 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| | | | | | | | | | | | | | | | |
| <u>BEND TEST:</u> | | | | | | | | | | | | | | | |
| # 8 | Sample bend through 180 degrees Satisfactorily without any crack | | | | | | | | | | Note:- Only Nine Samples Received and Tested | | | | |
| # 6 | Sample bend through 180 degrees Satisfactorily without any crack | | | | | | | | | | | | | | |
| # 4 | Sample bend through 180 degrees Satisfactorily without any crack | | | | | | | | | | | | | | |
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| Note: Please always confirm the results of above report on web www.uet-civil.edu.pk | | | | | | | | | | | | | | | |

Sub Divisional Officer

Test Performed By:

Dr. /Engr.

Asad Ali Gillani

PHE Sub Div Faisalabad.(Pump House Of Water Supply Scheme Chak No.275/RB)

Client Reference: 23

Dated: 15-02-2025

SOM Lab

Ref:

1162 (Page-1/1)

Dated:

05-05-2025

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 | 0.642 | 4 | 0.491 | 0.20 | 0.189 | 5.32 | 7.87 | 58680 | 62100 | 86780 | 91830 | 1.00 | 8.0 | 12.5 | |
| 2 | 0.588 | 4 | 0.469 | 0.20 | 0.173 | 5.91 | 9.17 | 65200 | 75370 | 101170 | 116960 | 1.10 | 8.0 | 13.8 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| | | | | | | | | | | | | | | | |
| <u>BEND TEST:</u> | | | | | | | | | | | | | | | |
| -- | No Bend test performed | | | | | | | | | | Note:- Only Two Samples Received and Tested | | | | |
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| Note: Please always confirm the results of above report on web www.uet-civil.edu.pk | | | | | | | | | | | | | | | |

