

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

To.

Assistant Resident Engineer Prime Engineering Consultancy Kallurkot Bridge Project

Construction of 4 Lane Bridge over River Indus Connecting Kallur Kot with D.I Khan

(Nomee Steel)

Reference # CED/TFL **33184, 187** (Dr. Waseem Abbas) Dated: 06-05-2019 Reference of the request letter # PE-BA-JV/KK-DIK/2019/020 Dated: 06-05-2019

Tension Test Report (Page -1/1)

Date of Test 07-05-2019 Gauge length 8 inches

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

| Sr. No. | Weight | Si | neter/ ze m) | | rea n²) | Yield load | Breaking Load | | Stress si) | | e Stress si) | Elongation | % Elongation | Remarks |
|---------|----------|---------|--------------------|---------|------------|------------|------------------|---------|---------------|----------|-----------------|------------|--------------|---------|
| S | (lbs/ft) | Nominal | Actual | Nominal | Actual | (kg) | (kg) | Nominal | Actual | Nominal | Actual | (inch) | 3 % | Re |
| 1 | 0.415 | 10 | 10.01 | 0.11 | 0.122 | 3700 | 5700 | 74200 | 66800 | 114300 | 102900 | 1.10 | 13.8 | |
| 2 | 4.247 | 32 | 32.02 | 1.27 | 1.248 | 39800 | 51800 | 69100 | 70270 | 89900 | 91500 | 1.60 | 20.0 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | • | - | • | - | - | - | • | - | - | • | - | 1 | |
| - | - | • | - | • | - | - | - | • | - | - | • | - | 1 | |
| - | | - | - | - | - | - | - | - | - | - | - | - | - | |
| | | | No | te: onl | y two sa | amples fo | or tensile | and two | samples | for bend | test | I | | |
| | | | | | 1 1000 | a Catiafaa | Bend T | est | | | | | | |

10mm Dia Bar Bend Test Through 180° is Satisfactory

32mm Dia Bar Bend Test Through 180° is Satisfactory

I/C Testing Laboratoires UET Lahore, Pakistan.

- 1- You can See your reports On Internet in the following web site http://www.uet.edu.pk/faculties/facultiesinfo/civil/index.html?RID=testing_reports
- 2. The above results pertain to sample /samples supplied to this laboratory.
- 3- Sealed sample / Unsealed sample / Marked sample/Signed Samples



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

To, Acting Project Director Air University Multan Campus Construction of Academic Block-I

Reference # CED/TFL **33185** (Dr. Waseem Abbas)

Reference of the request letter # MUX/AUMC/AB1/2018/78

Dated: 06-05-2019

Dated: 02-05-2019

Tension Test Report (Page -1/1)

Date of Test 07-05-2019 Gauge length 8 inches

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

| Sr. No. | Weight | | neter/ ze | | rea n²) | Yield load | Breaking Load | | Stress si) | | e Stress si) | Elongation | % Elongation | Remarks |
|---------|----------|----------------|---------------|-----------|------------|------------|------------------|---------|---------------|---------|-----------------|------------|--------------|---------|
| S | (lbs/ft) | Nominal (#) | Actual (inch) | Nominal | Actual | (kg) | (kg) | Nominal | Actual | Nominal | Actual | (inch) | % E | R |
| 1 | 0.369 | 3 | 0.372 | 0.11 | 0.109 | 2900 | 4300 | 58200 | 58870 | 86200 | 87300 | 1.30 | 16.3 | |
| 2 | 0.364 | 3 | 0.369 | 0.11 | 0.107 | 2800 | 4300 | 56200 | 57620 | 86200 | 88500 | 1.30 | 16.3 | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| | | | N | ote: on | ly two s | amples f | or tensile | and one | sample f | or bend | test | | | |
| | | | | | | | | | | | | | | |
| #3 | Bar Ben | d Test | | n 180° is | s Satisfa | ctory | Bend T | est | | | | | | |
| | | | | | | J | | | | | | | | |

I/C Testing Laboratoires UET Lahore, Pakistan.

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

To,
Project Manager
Liberty Condominiums
Construction of Gulberg Grave, Lahore

Reference # CED/TFL **33188** (Dr. Waseem Abbas)

Reference of the request letter # LC/T/2/17

Dated: 06-05-2019

Dated: 06-05-2019

Tension Test Report (Page -1/1)

Date of Test 07-05-2019 Gauge length 8 inches

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

| Sr. No. | Weight | Diam Si | neter/ ze | | rea n ²) | Yield load | Breaking Load | | Stress si) | | te Stress si) | Elongation | % Elongation | Remarks | |
|---------|----------|----------------|---------------|---------|-------------------------|------------|------------------|---------|---------------|-----------|------------------|------------|--------------|---------|--|
| S | (lbs/ft) | Nominal (#) | Actual (inch) | Nominal | Actual | (kg) | (kg) | Nominal | Actual | Nominal | Actual | (inch) | % E | Re | |
| 1 | 0.357 | 3 | 0.365 | 0.11 | 0.105 | 3100 | 4400 | 62200 | 65140 | 88200 | 92500 | 1.20 | 15.0 | | |
| - | | - | - | - | - | - | - | - | - | - | - | - | - | | |
| - | | | | | | | | | | | | | | | |
| - | | | | | | | | | | | | | | | |
| - | • | • | • | 1 | - | - | - | - | - | - | - | - | - | | |
| - | • | • | 1 | • | - | - | • | - | - | - | - | - | • | | |
| | | | N | ote: on | ly one s | sample fo | r tensile | and one | sample fo | or bend t | est | T | Γ | | |
| | | | | | | | D 17 | | | | | | | | |
| #3 | Bar Ben | d Test | Γhrough | 180° is | s Satisfa | ctory | Bend T | est | | | | | | | |

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,

M/S Defence Housing Authority.

Lahore Cantt

(External Elec Works (U/G) IVY Green, Sector-Z, DHA Ph-VIII)(M/s NLC)

Reference # CED/TFL **33189** (Dr. Waseem Abbas) Dated: 06-05-2019 Reference of the request letter # 408/241/E/Lab/552/102 Dated: 03-05-2019

Tension Test Report (Page -1/1)

Date of Test 07-05-2019 Gauge length 8 inches

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

| Sr. No. | Weight | | neter/ ze | | rea n²) | Yield load | Breaking Load | | Stress si) | | e Stress si) | Elongation | % Elongation | Remarks | |
|---------|----------|-------------|------------------|---------|------------|------------|------------------|---------|---------------|-----------|-----------------|------------|--------------|----------|--|
| S | (lbs/ft) | Nominal (#) | Actual (inch) | Nominal | Actual | (kg) | (kg) | Nominal | Actual | Nominal | Actual | (inch) | % E | Re | |
| 1 | 0.381 | 3 | 0.378 | 0.11 | 0.112 | 3700 | 5400 | 74200 | 72730 | 108200 | 106200 | 1.00 | 12.5 | el | |
| 2 | 0.379 | 3 | 0.377 | 0.11 | 0.111 | 3600 | 4600 | 72200 | 71210 | 92200 | 91000 | 1.00 | 12.5 | FF Steel | |
| - | | | | | | | | | | | | | | | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | | |
| | | Г | No | ote: on | ly two s | amples f | or tensile | and one | sample f | or bend t | test | 1 | | ı | |
| | | | | | | | Bend T | est est | | | | | | | |
| #3 | Bar Ben | d Test | Through | 180° is | s Satisfa | ctory | | | | | | | | | |

I/C Testing Laboratoires UET Lahore, Pakistan.

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

To,

M/S Defence Housing Authority.

Lahore Cantt

(Const. of Commercial Plaza DRGCC DHA Ph-VI)(M/s Construct)

Reference # CED/TFL **33191** (Dr. Waseem Abbas) Dated: 06-05-2019 Reference of the request letter # 408/241/E/Lab/548/2211 Dated: 30-04-2019

Tension Test Report (Page -1/2)

Date of Test 07-05-2019 Gauge length 8 inches

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

| Sr. No. | Weight | | neter/ ze | | rea n²) | Yield load | Breaking Load | | Stress si) | | e Stress si) | Elongation | % Elongation | Remarks | |
|---------|---|-------------|---------------|---------|------------|------------|------------------|---------|---------------|---------|-----------------|------------|--------------|-----------------|--|
| S | (lbs/ft) | Nominal (#) | Actual (inch) | Nominal | Actual | (kg) | (kg) | Nominal | Actual | Nominal | Actual | (inch) | % E | Re | |
| 1 | 0.359 | 3 | 0.367 | 0.11 | 0.106 | 3500 | 4600 | 70200 | 73050 | 92200 | 96100 | 1.20 | 15.0 | ın | |
| 2 | 0.360 | 3 | 0.367 | 0.11 | 0.106 | 3500 | 4600 | 70200 | 72930 | 92200 | 95900 | 1.10 | 13.8 | Kamran Steel | |
| - | | | | | | | | | | | | | | | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | | |
| | | | N | ote: on | ly two s | amples f | or tensile | and one | sample f | or bend | test | | | | |
| | | | | | | | | | | | | | | | |
| | Bend Test | | | | | | | | | | | | | | |
| #3 | #3 Bar Bend Test Through 180° is Satisfactory | | | | | | | | | | | | | | |

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,
M/S Defence Housing Authority.
Lahore Cantt
(Proposed Commercial Plaza, DRGCC Ph-III, DHA Ph-VI)(M/s Construct)

Reference # CED/TFL **33191** (Dr. Waseem Abbas) Dated: 06-05-2019 Reference of the request letter # 408/241/E/Lab/556/7321 Dated: 06-05-2019

Tension Test Report (Page -2/2)

Date of Test 07-05-2019 Gauge length 8 inches

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

| | Sr. No. | Weight | | neter/ ze | | rea n²) | Yield load | Breaking Load | | Stress si) | | te Stress si) | Elongation | % Elongation | Remarks |
|--|---------|----------|-------------|---------------|---------|------------|------------|------------------|---------|---------------|---------|------------------|------------|--------------|---------|
| 2 0.365 3 0.369 0.11 0.107 3300 4600 66200 67870 92200 94600 1.20 15.0 | S | (lbs/ft) | Nominal (#) | Actual (inch) | Nominal | Actual | (kg) | (kg) | Nominal | Actual | Nominal | Actual | (inch) | % E | R |
| | 1 | 0.365 | 3 | 0.370 | 0.11 | 0.107 | 3400 | 4700 | 68200 | 69790 | 94200 | 96500 | 1.30 | 16.3 | m |
| | 2 | 0.365 | 3 | 0.369 | 0.11 | 0.107 | 3300 | 4600 | 66200 | 67870 | 92200 | 94600 | 1.20 | 15.0 | amra |
| - - - - - - - - - - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | K |
| Note: only two samples for tensile and one sample for bend test | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Note: only two samples for tensile and one sample for bend test | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| | - | - | - | - | - | - | | - | - | - | - | - | - | - | |
| Bend Test | | | | N | ote: on | ly two s | amples f | or tensile | and one | sample f | or bend | test | 1 | ı | |
| #3 Bar Bend Test Through 180° is Satisfactory | #3 | Rar Ren | d Test ' | Fhrough | 180° i | Satisfa | uctory | Bend T | est | | | | | | |

I/C Testing Laboratoires UET Lahore, Pakistan.

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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,

M/S Defence Housing Authority.

Lahore Cantt

(Infra Dev Works Sector-M (Extension), DHA PH-V)(M/s AAJ Engrs)

Reference # CED/TFL **33192** (Dr. Ali Ahmed) Dated: 06-05-2019 Reference of the request letter # 408/241/E/Lab/559/18 Dated: 06-05-2019

Tension Test Report (Page -1/1)

Date of Test 07-05-2019

Gauge length

Description Deformed Steel Bar Tensile Test as per ASTM-A496

| Sr. No. | Weight | Diam siz | | | rea m²) | Yield load | Breaking Load | Yield (M | Stress pa) | | e Stress pa) | Remarks | | |
|---------|-----------|-----------------|-------------|---------|------------|------------|------------------|-------------|---------------|---------|-----------------|---------|--|--|
| S | (Kg/m) | Nominal (in) | Actual (mm) | Nominal | Actual | (kg) | (kg) | Nominal | Actual | Nominal | Actual | Re | | |
| 1 | 0.254 | 1/4 | 6.42 | 32.26 | 32.42 | 1100 | 1700 | 335 | 333 | 517 | 514 | | | |
| 2 | 0.254 | 1/4 | 6.42 | 32.26 | 32.33 | 1100 | 1700 | 335 | 334 | 517 | 516 | | | |
| | | | | | | | | | | | | | | |
| - | | | | | | | | | | | | | | |
| - | - | - | - | - | - | - | - | - | - | - | - | | | |
| - | - | - | - | - | - | • | - | - | • | - | - | | | |
| | | | | No | te: only | two san | nples for | tensile te | st | | Ι | | | |
| | Bend Test | | | | | | | | | | | | | |
| | Dona Tost | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

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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,
Project Manager
Liberty Builders
Construction of Zee Avenue Project, 17-A, Cooper Road, Lahore
(Model Steel)

Reference # CED/TFL **33195** (Dr. Waseem Abbas)

Reference of the request letter # CONC-20190507

Dated: 07-05-2019

Tension Test Report (Page -1/1)

Date of Test 07-05-2019 Gauge length 8 inches

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

| Sr. No. | Weight | Diam si | | | rea n²) | Yield load | Breaking Load | | Stress si) | | te Stress si) | Elongation | % Elongation | Remarks | |
|---------|----------|----------------|------------------|-----------|------------|------------|------------------|---------|---------------|---------|------------------|------------|--------------|---------|--|
| S | (1J/sqI) | Nominal (#) | Actual (inch) | Nominal | Actual | (kg) | (kg) | Nominal | Actual | Nominal | Actual | (inch) | Э% | R | |
| 1 | 0.358 | 3 | 0.366 | 0.11 | 0.105 | 3800 | 4800 | 76200 | 79700 | 96200 | 100700 | 0.65 | 8.1 | | |
| 2 | 0.371 | 3 | 0.372 | 0.11 | 0.109 | 3300 | 4300 | 66200 | 66780 | 86200 | 87100 | 1.00 | 12.5 | | |
| - | | | | | | | | | | | | | | | |
| - | • | - | - | - | - | - | - | - | - | - | - | - | - | | |
| - | • | - | - | - | - | - | - | - | - | - | - | - | - | | |
| - | - | - | - | - | - | - | - | - | - | - | - | - | - | | |
| | | | N | ote: on | ly two s | amples f | or tensile | and one | sample f | or bend | test | ī | | ı | |
| | | | | | | | | | | | | | | | |
| #3 | Bar Ben | d Test 7 | Through | n 180° is | s Satisfa | ctory | Bend T | est | | | | | | | |

I/C Testing Laboratoires UET Lahore, Pakistan.

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

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