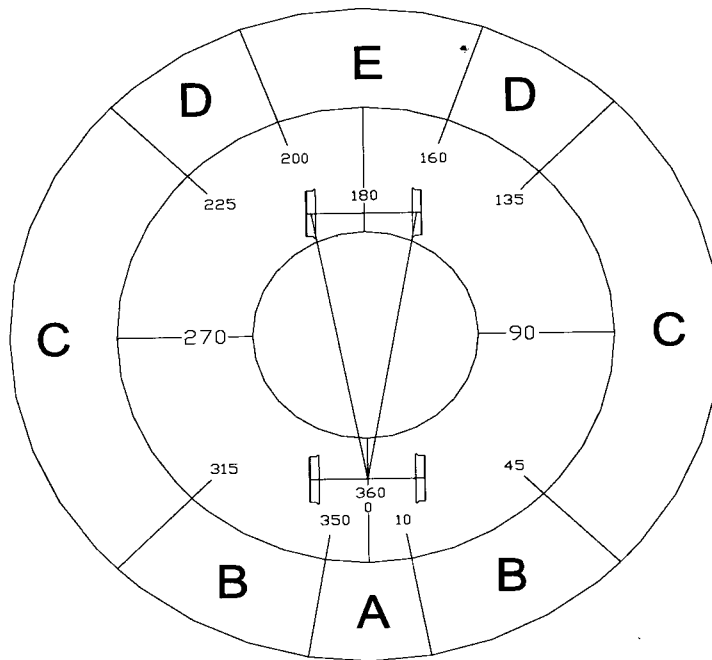


SUPERAILER

by REXQUOTE

Broadgauge Business Park
 Bishops Lydeard, Somerset. TA4 3RU
 TEL:01823 433398 FAX:01823 433725
 e-mail: sales@rexquote.co.uk Web: Rexquote.co.uk

Fixed Axle



Oscillating Axle

| | | |
|-------------------|-------|--------------------------------|
| Machine Type: | _____ | Case 988 |
| Serial Number: | _____ | CGG0232245 |
| Rail Axle Number: | _____ | 1576 |
| Equipment: | _____ | Boom 1.8m Artic 3.13m Arm 2.1m |
| Date: | _____ | 14 April 2010 |
| Issue: | _____ | 2 |
| Software Version: | _____ | V2.09 |

This machine is equipped with a Rexquote Rated Capacity Indicator. This system is designed to comply with RAILWAY SAFETY STANDARD RIS-1530-PLT Issue 1

Radius / Height are given in METRES. Loads are given in TONNES, and assume that the load is suspended vertically below the lifting point with no other equipment attached. This machine is fitted with a hydraulically adjustable boom. This allows the machine to reach the same point in space with a variety of different equipment angles, each combination has a different safe working load. The charts above show both the upper & lower limits of the loads achievable. Loads marked 'b' boom, 'r' articulation, and 'a' arm are limited by hydraulic capacity.
 All rail duties listed are valid for use on up to a 1:29 gradient, and with a maximum track twist of 27mm.


NETWORK RAIL DUTIES

SECTOR A

LOWER SAFE WORKING LOADS

UPPER SAFE WORKING LOADS


Road
Unlocked
71% SWL



| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|-------|------|------|-------|------|------|------|------|------|------|------|
| 7.0m | - | - | - | 3.81 | 3.2 | 2.7 | - | - | - | - | - |
| 6.0m | - | - | - | 3.64a | 3.22 | 2.75 | 2.37 | 2.06 | - | - | - |
| 5.0m | - | - | - | 3.24a | 3.16 | 2.71 | 2.36 | 2.06 | 1.81 | - | - |
| 4.0m | - | - | - | 3.69 | 3.04 | 2.61 | 2.28 | 2.01 | 1.79 | 1.59 | - |
| 3.0m | - | - | - | 3.61 | 2.97 | 2.5 | 2.19 | 1.95 | 1.74 | 1.56 | - |
| 2.0m | - | - | - | 3.45 | 2.85 | 2.4 | 2.1 | 1.88 | 1.69 | 1.52 | 1.38 |
| 1.0m | - | 5.07 | 3.97 | 3.23 | 2.7 | 2.3 | 2.03 | 1.82 | 1.64 | 1.49 | 1.36 |
| 0.0m | 5.89a | 4.6 | 3.69 | 3.05 | 2.57 | 2.24 | 1.99 | 1.79 | 1.62 | 1.48 | - |
| -1.0m | 5.18a | 4.41 | 3.86 | 2.97 | 2.54 | 2.23 | 1.98 | 1.78 | 1.62 | - | - |
| -2.0m | 5.81 | 4.49 | 3.64 | 3.05 | 2.82 | 2.29 | 2.05 | - | - | - | - |

| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|------|------|------|-------|------|------|------|------|------|------|------|
| 7.0m | - | - | - | 3.82 | 3.21 | 2.7 | - | - | - | - | - |
| 6.0m | - | - | - | 3.68a | 3.26 | 2.81 | 2.4 | 2.06 | - | - | - |
| 5.0m | - | - | - | 3.46a | 3.23 | 2.81 | 2.46 | 2.12 | 1.82 | - | - |
| 4.0m | - | - | - | 3.71 | 3.19 | 2.78 | 2.46 | 2.14 | 1.85 | 1.6 | - |
| 3.0m | - | - | - | 3.64 | 3.14 | 2.75 | 2.45 | 2.13 | 1.85 | 1.6 | - |
| 2.0m | - | - | - | 3.6 | 3.12 | 2.74 | 2.41 | 2.09 | 1.81 | 1.58 | 1.39 |
| 1.0m | - | 5.07 | 4.19 | 3.55 | 3.06 | 2.66 | 2.33 | 2.04 | 1.77 | 1.54 | 1.37 |
| 0.0m | 6.13 | 4.86 | 4.01 | 3.41 | 2.93 | 2.57 | 2.25 | 1.95 | 1.72 | 1.51 | - |
| -1.0m | 6.05 | 4.78 | 3.92 | 3.31 | 2.85 | 2.49 | 2.15 | 1.85 | 1.55 | - | - |
| -2.0m | 6.04 | 4.74 | 3.85 | 3.27 | 2.8 | 2.4 | 2.05 | - | - | - | - |


Road
Locked
71% SWL



| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|
| 7.0m | - | - | - | 4.67a | 4.49 | 3.86 | - | - | - | - | - |
| 6.0m | - | - | - | 3.64a | 3.99a | 3.91 | 3.42 | 3.01 | - | - | - |
| 5.0m | - | - | - | 3.24a | 3.66a | 3.86 | 3.4 | 3.02 | 2.69 | - | - |
| 4.0m | - | - | - | 4.33a | 4.34 | 3.77 | 3.33 | 2.97 | 2.67 | 2.41 | - |
| 3.0m | - | - | - | 5.07 | 4.26 | 3.66 | 2.99r | 2.91 | 2.63 | 2.38 | - |
| 2.0m | - | - | - | 4.61r | 3.79r | 2.95r | 2.49r | 2.84 | 2.57 | 2.34 | 2.14 |
| 1.0m | - | 5.67r | 4.42r | 3.72r | 3.25r | 2.93r | 2.79r | 2.79 | 2.53 | 2.31 | 2.12 |
| 0.0m | 5.89a | 6.46a | 5.39 | 4.52 | 3.88 | 3.4 | 3.05 | 2.75 | 2.51 | 2.3 | - |
| -1.0m | 4.16a | 6.01a | 5.27 | 4.45 | 3.85 | 3.4 | 3.04 | 2.75 | 2.5 | - | - |
| -2.0m | 5.25 | 6.5 | 5.35 | 4.53 | 3.82 | 3.48 | 3.11 | - | - | - | - |

| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|-------|-------|------|-------|-------|------|------|------|------|------|------|
| 7.0m | - | - | - | 4.77a | 4.5 | 3.86 | - | - | - | - | - |
| 6.0m | - | - | - | 3.68a | 4.25a | 3.97 | 3.45 | 3.02 | - | - | - |
| 5.0m | - | - | - | 3.46a | 4.01a | 3.96 | 3.51 | 3.07 | 2.71 | - | - |
| 4.0m | - | - | - | 4.34a | 4.48 | 3.94 | 3.5 | 3.1 | 2.73 | 2.42 | - |
| 3.0m | - | - | - | 5.1 | 4.43 | 3.91 | 3.47 | 3.08 | 2.73 | 2.42 | - |
| 2.0m | - | - | - | 5.03 | 4.36r | 3.84 | 3.41 | 3.04 | 2.7 | 2.39 | 2.15 |
| 1.0m | - | 5.67r | 5.78 | 4.92 | 4.28 | 3.76 | 3.35 | 3 | 2.65 | 2.36 | 2.13 |
| 0.0m | 7.59a | 6.86 | 5.7 | 4.85 | 4.22 | 3.72 | 3.3 | 2.91 | 2.6 | 2.33 | - |
| -1.0m | 6.48 | 6.35 | 5.81 | 4.78 | 4.18 | 3.85 | 3.2 | 2.84 | 2.54 | - | - |
| -2.0m | 6.45 | 6.74 | 5.95 | 4.74 | 4.1 | 3.85 | 3.14 | - | - | - | - |


Level Rail
0-50mm
67% SWL
Unlocked



| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|
| 7.0m | - | - | - | 3.89a | 4.14a | 4.16a | - | - | - | - | - |
| 6.0m | - | - | - | 3.09a | 3.41a | 3.72a | 3.78 | 3.25 | - | - | - |
| 5.0m | - | - | - | 2.90a | 3.28a | 3.60a | 3.45r | 3.24 | 2.84 | - | - |
| 4.0m | - | - | - | 4.31a | 4.39a | 4.11r | 3.13r | 2.80r | 2.8 | 2.49 | - |
| 3.0m | - | - | - | 5.05r | 4.16r | 3.34r | 2.41r | 2.58r | 2.74 | 2.45 | 2.2 |
| 2.0m | - | - | 4.44r | 3.72r | 3.03r | 2.30r | 2.22r | 2.34r | 2.69 | 2.41 | 2.18 |
| 1.0m | - | 5.53r | 4.11r | 3.47r | 2.93r | 2.66r | 2.55r | 2.97 | 2.85 | 2.38 | 2.16 |
| 0.0m | 4.95a | 5.44a | 5.62r | 4.43r | 3.71r | 3.37r | 3.33 | 2.94 | 2.63 | 2.37 | - |
| -1.0m | 4.83a | 5.35a | 5.41a | 4.45 | 4.51 | 3.85 | 3.82 | 2.94 | 2.85 | - | - |
| -2.0m | 10 | 9.88 | 7.06 | 5.6 | 4.82 | 3.84 | - | - | - | - | - |

| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|
| 7.0m | - | - | - | 3.94a | 4.42a | 4.40a | - | - | - | - | - |
| 6.0m | - | - | - | 3.16a | 3.68a | 4.08a | 3.83 | 3.26 | - | - | - |
| 5.0m | - | - | - | 3.15a | 3.62a | 3.99a | 3.86 | 3.32 | 2.86 | - | - |
| 4.0m | - | - | - | 4.34a | 4.47a | 4.43 | 3.82 | 3.32 | 2.88 | 2.51 | - |
| 3.0m | - | - | - | 5.64r | 5.12 | 4.34 | 3.75 | 3.28 | 2.87 | 2.5 | 2.2 |
| 2.0m | - | - | 4.81r | 6.01 | 4.99 | 4.25 | 3.68 | 3.23 | 2.83 | 2.47 | 2.19 |
| 1.0m | - | 6.57r | 7.42 | 5.92 | 4.9 | 4.18r | 3.62 | 3.18 | 2.77 | 2.44 | 2.16 |
| 0.0m | 7.60a | 9.93 | 7.38 | 5.87 | 4.86 | 4.13 | 3.59 | 3.1 | 2.71 | 2.4 | - |
| -1.0m | 10 | 9.82 | 7.39 | 6.85 | 4.85 | 4.09 | 3.49 | 3.03 | 2.85 | - | - |
| -2.0m | 10 | 9.91 | 7.37 | 5.83 | 4.74 | 4 | - | - | - | - | - |

Level Rail
0-50mm
90% SWL
Locked



| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 7.0m | - | - | - | 3.89a | 4.14a | 4.16a | - | - | - | - | - |
| 6.0m | - | - | - | 3.09a | 3.41a | 3.72a | 3.88a | 3.89a | - | - | - |
| 5.0m | - | - | - | 2.90a | 3.28a | 3.60a | 3.45r | 3.61a | 3.77a | - | - |
| 4.0m | - | - | - | 4.31a | 4.39a | 4.11r | 3.13r | 2.80r | 3.47a | 3.50a | - |
| 3.0m | - | - | - | 5.05r | 4.16r | 3.34r | 2.41r | 2.58r | 3.40r | 3.86a | 3.61a |
| Radius | - | - | 4.44r | 3.72r | 3.03r | 2.30r | 2.22r | 2.34r | 3.46r | 4.01a | 3.65a |
| the lift | - | 5.53r | 4.11r | 3.47r | 2.93r | 2.66r | 2.55r | 2.97r | 3.88r | 3.82a | 3.65 |
| the ma | 4.95a | 5.44a | 5.62r | 4.43r | 3.71r | 3.37r | 3.42r | 4.30r | 4.53 | 4.04 | - |
| safe w | 4.93a | 5.36a | 6.41a | 5.82r | 5.08r | 5.18r | 5.67r | 5.15 | 4.57 | - | - |
| r arbi | 10 | 10 | 10 | 9.49b | 6.07b | 7.03b | - | - | - | - | - |


| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|
| 7.0m | - | - | - | 3.94a | 4.42a | 4.40a | - | - | - | - | - |
| 6.0m | - | - | - | 3.16a | 3.68a | 4.08a | 4.09a | 4.09a | - | - | - |
| 5.0m | - | - | - | 3.15a | 3.62a | 3.99a | 4.10a | 4.11a | 4.08a | - | - |
| 4.0m | - | - | - | 4.34a | 4.47a | 4.49a | 4.50a | 4.47a | 4.38a | 4.17a | - |
| 3.0m | - | - | - | 5.64r | 6.56r | 6.92b | 6.28 | 5.45 | 4.78 | 4.22 | 3.71 |
| 2.0m | - | - | 4.81r | 6.26r | 7.23r | 7.3 | 6.21 | 5.37 | 4.72 | 4.19 | 3.68 |
| 1.0m | - | 6.57r | 8.00r | 9.10r | 8.73b | 7.24 | 6.14 | 5.32 | 4.68 | 4.13 | 3.65 |
| 0.0m | 7.60a | 10 | 10 | 10 | 8.78r | 7.22 | 6.12 | 5.3 | 4.66 | 4.09 | - |
| -1.0m | 10 | 10 | 10 | 10 | 8.81 | 7.24 | 6.15 | 5.26 | 4.59 | - | - |
| -2.0m | 10 | 10 | 10 | 10 | 8.83 | 7.26 | - | - | - | - | - |

NETWORK RAIL DUTIES

SECTOR A


LOWER SAFE WORKING LOADS

UPPER SAFE WORKING LOADS

Canted Rail
50-150mm
67% SWL
Unlocked



| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|
| 7.0m | - | - | - | 3.89a | 3.84 | 3.26 | - | - | - | - | - |
| 6.0m | - | - | - | 3.09a | 3.41a | 3.27 | 2.83 | 2.46 | - | - | - |
| 5.0m | - | - | - | 2.90a | 3.28a | 3.22 | 2.79 | 2.45 | 2.16 | - | - |
| 4.0m | - | - | - | 4.31a | 3.66 | 3.11 | 2.71 | 2.4 | 2.13 | 1.9 | - |
| 3.0m | - | - | - | 4.35 | 3.57 | 3 | 2.41r | 2.33 | 2.08 | 1.87 | 1.68 |
| 2.0m | - | - | 4.44r | 3.72r | 3.03r | 2.30r | 2.22r | 2.26 | 2.03 | 1.83 | 1.66 |
| 1.0m | - | 5.53r | 4.11r | 3.47r | 2.93r | 2.66r | 2.46 | 2.21 | 1.99 | 1.8 | 1.64 |
| 0.0m | 4.95a | 5.44a | 4.81 | 3.77 | 3.17 | 2.75 | 2.44 | 2.18 | 1.97 | 1.79 | - |
| -1.0m | 4.83a | 5.30a | 4.63 | 3.74 | 3.17 | 2.75 | 2.43 | 2.18 | 1.99 | - | - |
| -2.0m | 7.81 | 5.84 | 4.84 | 3.34 | 3.27 | 2.85 | - | - | - | - | - |

| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|-------|------|-------|-------|-------|------|-------|------|------|------|------|
| 7.0m | - | - | - | 3.94a | 3.87 | 3.26 | - | - | - | - | - |
| 6.0m | - | - | - | 3.16a | 3.68a | 3.34 | 2.87 | 2.47 | - | - | - |
| 5.0m | - | - | - | 3.15a | 3.62a | 3.33 | 2.92 | 2.52 | 2.18 | - | - |
| 4.0m | - | - | - | 4.34a | 3.81 | 3.3 | 2.91 | 2.54 | 2.2 | 1.92 | - |
| 3.0m | - | - | - | 4.41 | 3.76 | 3.28 | 2.86r | 2.52 | 2.18 | 1.91 | 1.68 |
| 2.0m | - | - | 4.81r | 4.31 | 3.68 | 3.2 | 2.8 | 2.47 | 2.15 | 1.89 | 1.67 |
| 1.0m | - | 6.29 | 5.05 | 4.21 | 3.6 | 3.13 | 2.74 | 2.41 | 2.1 | 1.86 | 1.64 |
| 0.0m | 7.60a | 6.16 | 4.97 | 4.14 | 3.54 | 3.07 | 2.68 | 2.32 | 2.04 | 1.82 | - |
| -1.0m | 8.02 | 6.08 | 4.88 | 4.07 | 3.46 | 2.98 | 2.58 | 2.26 | 2 | - | - |
| -2.0m | 8.06 | 6.08 | 4.86 | 4.02 | 3.37 | 2.9 | - | - | - | - | - |

Canted Rail
50-150mm
90% SWL
Locked



| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|
| 7.0m | - | - | - | 3.89a | 4.14a | 4.16a | - | - | - | - | - |
| 6.0m | - | - | - | 3.09a | 3.41a | 3.72a | 3.88a | 3.89a | - | - | - |
| 5.0m | - | - | - | 2.90a | 3.28a | 3.60a | 3.45r | 3.61a | 3.62 | - | - |
| 4.0m | - | - | - | 4.31a | 4.39a | 4.11r | 3.13r | 2.80r | 3.47a | 3.17 | - |
| 3.0m | - | - | - | 5.05r | 4.16r | 3.34r | 2.41r | 2.58r | 3.40r | 3.12 | 2.79 |
| 2.0m | - | - | 4.44r | 3.72r | 3.03r | 2.30r | 2.22r | 2.34r | 3.43 | 3.07 | 2.77 |
| 1.0m | - | 5.53r | 4.11r | 3.47r | 2.93r | 2.66r | 2.55r | 2.97r | 3.37 | 3.03 | 2.74 |
| 0.0m | 4.95a | 5.44a | 5.62r | 4.43r | 3.71r | 3.37r | 3.42r | 3.74 | 3.34 | 3.01 | - |
| -1.0m | 4.83a | 5.30a | 6.41a | 5.80r | 5.06r | 4.87r | 4.23 | 3.74 | 3.37 | - | - |
| -2.0m | 10 | 10 | 9.04 | 7.14 | 5.88 | 5.62 | - | - | - | - | - |

| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|
| 7.0m | - | - | - | 3.94a | 4.42a | 4.40a | - | - | - | - | - |
| 6.0m | - | - | - | 3.16a | 3.68a | 4.08a | 4.09a | 4.09a | - | - | - |
| 5.0m | - | - | - | 3.15a | 3.62a | 3.99a | 4.10a | 4.11a | 3.66 | - | - |
| 4.0m | - | - | - | 4.34a | 4.47a | 4.49a | 4.50a | 4.19 | 3.68 | 3.2 | - |
| 3.0m | - | - | - | 5.64r | 6.4 | 5.43 | 4.71 | 4.12 | 3.64 | 3.19 | 2.8 |
| 2.0m | - | - | 4.81r | 6.26r | 6.25 | 5.32 | 4.62 | 4.05 | 3.59 | 3.15 | 2.78 |
| 1.0m | - | 6.57r | 8.00r | 7.42 | 6.16 | 5.24 | 4.54 | 4 | 3.54 | 3.11 | 2.74 |
| 0.0m | 7.60a | 10 | 9.33 | 7.39 | 6.11 | 5.2 | 4.5 | 3.95 | 3.45 | 3.05 | - |
| -1.0m | 10 | 10 | 9.20r | 7.41 | 6.13 | 6.19 | 4.45 | 3.86 | 3.39 | - | - |
| -2.0m | 10 | 10 | 8.44 | 7.45 | 6.05 | 5.1 | - | - | - | - | - |

Max Cant + Twist
150-177mm
67% SWL
Unlocked


| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|------|------|------|------|------|------|------|------|------|------|------|
| 7.0m | - | - | - | 2.34 | 1.9 | 1.57 | - | - | - | - | - |
| 6.0m | - | - | - | 2.32 | 1.9 | 1.58 | 1.33 | 1.11 | - | - | - |
| 5.0m | - | - | - | 2.21 | 1.82 | 1.53 | 1.29 | 1.1 | 0.94 | - | - |
| 4.0m | - | - | - | 2.18 | 1.72 | 1.43 | 1.22 | 1.05 | 0.91 | 0.78 | - |
| 3.0m | - | - | - | 2.09 | 1.64 | 1.31 | 1.13 | 0.98 | 0.86 | 0.75 | 0.65 |
| 2.0m | - | - | 2.5 | 1.91 | 1.51 | 1.22 | 1.04 | 0.92 | 0.81 | 0.71 | 0.63 |
| 1.0m | - | 2.88 | 2.18 | 1.7 | 1.37 | 1.12 | 0.98 | 0.87 | 0.77 | 0.69 | 0.62 |
| 0.0m | 3.35 | 2.48 | 1.93 | 1.54 | 1.26 | 1.08 | 0.95 | 0.84 | 0.75 | 0.68 | - |
| -1.0m | 3.18 | 2.36 | 1.85 | 1.5 | 1.26 | 1.08 | 0.95 | 0.84 | 0.77 | - | - |
| -2.0m | 3.32 | 2.48 | 1.95 | 1.6 | 1.35 | 1.17 | - | - | - | - | - |

| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|------|------|------|------|------|------|------|------|------|------|------|
| 7.0m | - | - | - | 2.34 | 1.93 | 1.57 | - | - | - | - | - |
| 6.0m | - | - | - | 2.33 | 1.95 | 1.65 | 1.37 | 1.12 | - | - | - |
| 5.0m | - | - | - | 2.28 | 1.92 | 1.64 | 1.41 | 1.17 | 0.96 | - | - |
| 4.0m | - | - | - | 2.2 | 1.87 | 1.61 | 1.4 | 1.19 | 0.98 | 0.8 | - |
| 3.0m | - | - | - | 2.14 | 1.83 | 1.58 | 1.39 | 1.17 | 0.96 | 0.79 | 0.65 |
| 2.0m | - | - | 2.53 | 2.12 | 1.81 | 1.58 | 1.35 | 1.14 | 0.93 | 0.77 | 0.64 |
| 1.0m | - | 2.95 | 2.42 | 2.02 | 1.72 | 1.48 | 1.27 | 1.07 | 0.88 | 0.74 | 0.62 |
| 0.0m | 3.58 | 2.77 | 2.26 | 1.89 | 1.61 | 1.38 | 1.18 | 0.98 | 0.83 | 0.7 | - |
| -1.0m | 3.51 | 2.7 | 2.18 | 1.82 | 1.54 | 1.3 | 1.09 | 0.92 | 0.78 | - | - |
| -2.0m | 3.54 | 2.7 | 2.16 | 1.76 | 1.45 | 1.22 | - | - | - | - | - |

Max Cant + Twist
150-177mm
90% SWL
Locked


| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|
| 7.0m | - | - | - | 3.89a | 3.55 | 2.95 | - | - | - | - | - |
| 6.0m | - | - | - | 3.09a | 3.41a | 2.98 | 2.51 | 2.09 | - | - | - |
| 5.0m | - | - | - | 2.90a | 3.28a | 2.9 | 2.45 | 2.08 | 1.75 | - | - |
| 4.0m | - | - | - | 4.12 | 3.3 | 2.75 | 2.34 | 2 | 1.71 | 1.46 | - |
| 3.0m | - | - | - | 3.98 | 3.18 | 2.59 | 2.2 | 1.89 | 1.63 | 1.41 | 1.21 |
| 2.0m | - | - | 4.44r | 3.72r | 2.99 | 2.30r | 2.06 | 1.79 | 1.56 | 1.36 | 1.18 |
| 1.0m | - | 5.53r | 4.11r | 3.42 | 2.79 | 2.28 | 1.96 | 1.71 | 1.5 | 1.32 | 1.16 |
| 0.0m | 4.95a | 5.13 | 3.98 | 3.19 | 2.63 | 2.22 | 1.92 | 1.67 | 1.47 | 1.3 | - |
| -1.0m | 4.83a | 4.85 | 3.85 | 3.14 | 2.84 | 2.23 | 1.91 | 1.67 | 1.5 | - | - |
| -2.0m | 6.96 | 5.12 | 4.01 | 3.28 | 2.77 | 2.36 | - | - | - | - | - |

| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|------|------|------|-------|------|------|------|------|------|------|------|
| 7.0m | - | - | - | 3.94a | 3.59 | 2.96 | - | - | - | - | - |
| 6.0m | - | - | - | 3.16a | 3.62 | 3.07 | 2.58 | 2.11 | - | - | - |
| 5.0m | - | - | - | 3.15a | 3.57 | 3.05 | 2.64 | 2.18 | 1.79 | - | - |
| 4.0m | - | - | - | 4.15 | 3.5 | 3.01 | 2.62 | 2.21 | 1.82 | 1.49 | - |
| 3.0m | - | - | - | 4.06 | 3.44 | 2.98 | 2.59 | 2.18 | 1.79 | 1.48 | 1.22 |
| 2.0m | - | - | 4.8 | 3.97 | 3.37 | 2.9 | 2.5 | 2.13 | 1.74 | 1.44 | 1.2 |
| 1.0m | - | 5.78 | 4.62 | 3.84 | 3.26 | 2.8 | 2.41 | 2.02 | 1.67 | 1.4 | 1.16 |
| 0.0m | 7.37 | 5.56 | 4.46 | 3.7 | 3.14 | 2.69 | 2.28 | 1.89 | 1.58 | 1.34 | - |
| -1.0m | 7.27 | 5.46 | 4.34 | 3.6 | 3.04 | 2.56 | 2.13 | 1.79 | 1.52 | - | - |
| -2.0m | 7.32 | 5.45 | 4.32 | 3.54 | 2.9 | 2.44 | - | - | - | - | - |

Please see Information on front page

NETWORK RAIL DUTIES

SECTOR B

LOWER SAFE WORKING LOADS

UPPER SAFE WORKING LOADS

Road
 Unlocked
 71% SWL


| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|-------|------|------|-------|------|------|------|------|------|------|------|
| 7.0m | - | - | - | 3.81 | 3.2 | 2.7 | - | - | - | - | - |
| 6.0m | - | - | - | 3.64a | 3.22 | 2.75 | 2.37 | 2.06 | - | - | - |
| 5.0m | - | - | - | 3.24a | 3.16 | 2.71 | 2.36 | 2.06 | 1.81 | - | - |
| 4.0m | - | - | - | 3.69 | 3.04 | 2.61 | 2.28 | 2.01 | 1.79 | 1.59 | - |
| 3.0m | - | - | - | 3.61 | 2.97 | 2.5 | 2.19 | 1.95 | 1.74 | 1.56 | - |
| 2.0m | - | - | - | 3.45 | 2.85 | 2.4 | 2.1 | 1.88 | 1.69 | 1.52 | 1.38 |
| 1.0m | - | 5.07 | 3.97 | 3.23 | 2.7 | 2.3 | 2.03 | 1.82 | 1.64 | 1.49 | 1.36 |
| 0.0m | 5.89a | 4.6 | 3.69 | 3.05 | 2.57 | 2.24 | 1.99 | 1.79 | 1.62 | 1.48 | - |
| -1.0m | 5.15a | 4.41 | 3.55 | 2.87 | 2.54 | 2.23 | 1.98 | 1.78 | 1.62 | - | - |
| -2.0m | 5.81 | 4.49 | 3.64 | 3.05 | 2.82 | 2.29 | 2.05 | - | - | - | - |

| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|------|------|------|-------|------|------|------|------|------|------|------|
| 7.0m | - | - | - | 3.82 | 3.21 | 2.7 | - | - | - | - | - |
| 6.0m | - | - | - | 3.68a | 3.26 | 2.81 | 2.4 | 2.06 | - | - | - |
| 5.0m | - | - | - | 3.46a | 3.23 | 2.81 | 2.46 | 2.12 | 1.82 | - | - |
| 4.0m | - | - | - | 3.71 | 3.19 | 2.78 | 2.46 | 2.14 | 1.85 | 1.6 | - |
| 3.0m | - | - | - | 3.64 | 3.14 | 2.75 | 2.45 | 2.13 | 1.85 | 1.6 | - |
| 2.0m | - | - | - | 3.6 | 3.12 | 2.74 | 2.41 | 2.09 | 1.81 | 1.58 | 1.39 |
| 1.0m | - | 5.07 | 4.19 | 3.55 | 3.06 | 2.66 | 2.33 | 2.04 | 1.77 | 1.54 | 1.37 |
| 0.0m | 6.13 | 4.86 | 4.01 | 3.41 | 2.93 | 2.57 | 2.25 | 1.95 | 1.72 | 1.51 | - |
| -1.0m | 5.05 | 4.78 | 3.82 | 3.31 | 2.85 | 2.49 | 2.16 | 1.88 | 1.66 | - | - |
| -2.0m | 5.94 | 4.74 | 3.88 | 3.27 | 2.8 | 2.4 | 2.08 | - | - | - | - |

Road
 Locked
 71% SWL


| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|
| 7.0m | - | - | - | 4.67a | 4.49 | 3.86 | - | - | - | - | - |
| 6.0m | - | - | - | 3.64a | 3.99a | 3.91 | 3.42 | 3.01 | - | - | - |
| 5.0m | - | - | - | 3.24a | 3.66a | 3.86 | 3.4 | 3.02 | 2.69 | - | - |
| 4.0m | - | - | - | 4.33a | 4.34 | 3.77 | 3.33 | 2.97 | 2.67 | 2.41 | - |
| 3.0m | - | - | - | 5.07 | 4.26 | 3.66 | 2.99r | 2.91 | 2.63 | 2.38 | - |
| 2.0m | - | - | - | 4.61r | 3.79r | 2.95r | 2.49r | 2.84 | 2.57 | 2.34 | 2.14 |
| 1.0m | - | 5.67r | 4.42r | 3.72r | 3.25r | 2.93r | 2.79r | 2.79 | 2.53 | 2.31 | 2.12 |
| 0.0m | 5.89a | 6.46a | 5.39 | 4.52 | 3.88 | 3.4 | 3.05 | 2.75 | 2.51 | 2.3 | - |
| -1.0m | 5.75a | 5.61a | 5.27 | 4.45 | 3.85 | 3.4 | 3.04 | 2.75 | 2.5 | - | - |
| -2.0m | 6.25 | 6.8 | 5.87 | 4.83 | 3.92 | 3.49 | 3.11 | - | - | - | - |

| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|-------|-------|------|-------|-------|------|------|------|------|------|------|
| 7.0m | - | - | - | 4.77a | 4.5 | 3.86 | - | - | - | - | - |
| 6.0m | - | - | - | 3.68a | 4.25a | 3.97 | 3.45 | 3.02 | - | - | - |
| 5.0m | - | - | - | 3.46a | 4.01a | 3.96 | 3.51 | 3.07 | 2.71 | - | - |
| 4.0m | - | - | - | 4.34a | 4.48 | 3.94 | 3.5 | 3.1 | 2.73 | 2.42 | - |
| 3.0m | - | - | - | 5.1 | 4.43 | 3.91 | 3.47 | 3.08 | 2.73 | 2.42 | - |
| 2.0m | - | - | - | 5.03 | 4.36r | 3.84 | 3.41 | 3.04 | 2.7 | 2.39 | 2.15 |
| 1.0m | - | 5.67r | 5.78 | 4.92 | 4.28 | 3.76 | 3.35 | 3 | 2.65 | 2.36 | 2.13 |
| 0.0m | 7.59a | 6.86 | 5.7 | 4.85 | 4.22 | 3.72 | 3.3 | 2.91 | 2.6 | 2.33 | - |
| -1.0m | 6.46 | 6.78 | 5.61 | 4.78 | 4.16 | 3.65 | 3.2 | 2.84 | 2.54 | - | - |
| -2.0m | 6.46 | 6.74 | 5.56 | 4.74 | 4.1 | 3.59 | 3.14 | - | - | - | - |

Level Rail
 0-50mm
 67% SWL
 Unlocked


| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|-------|------|------|-------|------|------|------|------|------|------|------|
| 7.0m | - | - | - | 3.32 | 2.72 | 2.26 | - | - | - | - | - |
| 6.0m | - | - | - | 3.09a | 2.71 | 2.27 | 1.93 | 1.64 | - | - | - |
| 5.0m | - | - | - | 2.90a | 2.63 | 2.22 | 1.89 | 1.63 | 1.41 | - | - |
| 4.0m | - | - | - | 3.16 | 2.52 | 2.11 | 1.81 | 1.58 | 1.38 | 1.21 | - |
| 3.0m | - | - | - | 3.06 | 2.44 | 1.99 | 1.72 | 1.51 | 1.33 | 1.18 | 1.04 |
| 2.0m | - | - | 3.69 | 2.86 | 2.3 | 1.89 | 1.62 | 1.44 | 1.28 | 1.14 | 1.02 |
| 1.0m | - | 4.43 | 3.34 | 2.63 | 2.14 | 1.78 | 1.56 | 1.39 | 1.24 | 1.11 | 1 |
| 0.0m | 4.95a | 3.98 | 3.07 | 2.45 | 2.02 | 1.74 | 1.53 | 1.36 | 1.22 | 1.1 | - |
| -1.0m | 4.83a | 3.84 | 2.95 | 2.42 | 2.03 | 1.74 | 1.53 | 1.36 | 1.24 | - | - |
| -2.0m | 6.35 | 3.97 | 3.1 | 2.62 | 2.12 | 1.84 | - | - | - | - | - |

| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|------|------|------|-------|------|------|------|------|------|------|------|
| 7.0m | - | - | - | 3.33 | 2.75 | 2.26 | - | - | - | - | - |
| 6.0m | - | - | - | 3.16a | 2.77 | 2.35 | 1.97 | 1.65 | - | - | - |
| 5.0m | - | - | - | 3.15a | 2.73 | 2.33 | 2.02 | 1.7 | 1.43 | - | - |
| 4.0m | - | - | - | 3.18 | 2.68 | 2.3 | 2.01 | 1.72 | 1.45 | 1.23 | - |
| 3.0m | - | - | - | 3.11 | 2.63 | 2.28 | 2 | 1.7 | 1.44 | 1.22 | 1.04 |
| 2.0m | - | - | 3.73 | 3.08 | 2.62 | 2.27 | 1.95 | 1.67 | 1.4 | 1.2 | 1.03 |
| 1.0m | - | 4.51 | 3.61 | 2.98 | 2.52 | 2.16 | 1.86 | 1.59 | 1.35 | 1.17 | 1 |
| 0.0m | 5.75 | 4.31 | 3.44 | 2.84 | 2.4 | 2.06 | 1.78 | 1.5 | 1.3 | 1.13 | - |
| -1.0m | 5.86 | 4.23 | 3.34 | 2.76 | 2.33 | 1.97 | 1.67 | 1.44 | 1.25 | - | - |
| -2.0m | 5.71 | 4.22 | 3.33 | 2.72 | 2.23 | 1.89 | - | - | - | - | - |

Level Rail
 0-50mm
 90% SWL
 Locked


| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|----------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|
| 7.0m | - | - | - | 3.89a | 4.14a | 4.13 | - | - | - | - | - |
| 6.0m | - | - | - | 3.09a | 3.41a | 3.72a | 3.52 | 3.01 | - | - | - |
| 5.0m | - | - | - | 2.90a | 3.28a | 3.60a | 3.45r | 3 | 2.59 | - | - |
| 4.0m | - | - | - | 4.31a | 4.39a | 3.91 | 3.13r | 2.80r | 2.54 | 2.2 | - |
| 3.0m | - | - | - | 5.05r | 4.16r | 3.34r | 2.41r | 2.58r | 2.45 | 2.15 | 1.88 |
| Radius | - | - | 4.44r | 3.72r | 3.03r | 2.30r | 2.22r | 2.34r | 2.38 | 2.09 | 1.85 |
| the lift | - | 5.53r | 4.11r | 3.47r | 2.93r | 2.66r | 2.55r | 2.63 | 2.31 | 2.05 | 1.82 |
| the ma | 4.95a | 5.44a | 5.62r | 4.43r | 3.71r | 3.37r | 2.94 | 2.59 | 2.28 | 2.03 | - |
| safe w | 4.93a | 5.36a | 6.04 | 4.8 | 3.87 | 3.36 | 2.94 | 2.69 | 2.31 | - | - |
| artic | 10 | 6.26 | 6.22 | 4.86 | 4.11 | 3.52 | - | - | - | - | - |


| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|
| 7.0m | - | - | - | 3.94a | 4.42a | 4.15 | - | - | - | - | - |
| 6.0m | - | - | - | 3.16a | 3.68a | 4.08a | 3.59 | 3.03 | - | - | - |
| 5.0m | - | - | - | 3.15a | 3.62a | 3.99a | 3.64 | 3.1 | 2.63 | - | - |
| 4.0m | - | - | - | 4.34a | 4.47a | 4.19 | 3.59 | 3.11 | 2.66 | 2.23 | - |
| 3.0m | - | - | - | 5.64r | 4.79 | 4.07 | 3.51 | 3.06 | 2.63 | 2.22 | 1.88 |
| 2.0m | - | - | 4.81r | 5.54r | 4.63 | 3.95 | 3.42 | 2.99 | 2.57 | 2.18 | 1.86 |
| 1.0m | - | 6.57r | 6.7 | 5.41 | 4.52 | 3.86 | 3.35 | 2.94 | 2.49 | 2.13 | 1.82 |
| 0.0m | 7.60a | 8.76 | 6.65 | 5.35 | 4.45 | 3.8 | 3.3 | 2.81 | 2.41 | 2.07 | - |
| -1.0m | 10 | 8.88 | 6.6 | 5.32 | 4.42 | 3.71 | 3.18 | 2.72 | 2.33 | - | - |
| -2.0m | 10 | 8.67 | 6.58 | 5.25 | 4.27 | 3.6 | - | - | - | - | - |

NETWORK RAIL DUTIES

SECTOR B


LOWER SAFE WORKING LOADS

UPPER SAFE WORKING LOADS

Canted Rail
50-150mm
67% SWL
Unlocked



| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|------|------|------|------|------|------|------|------|------|------|------|
| 7.0m | - | - | - | 2.78 | 2.27 | 1.87 | - | - | - | - | - |
| 6.0m | - | - | - | 2.76 | 2.26 | 1.89 | 1.59 | 1.35 | - | - | - |
| 5.0m | - | - | - | 2.85 | 2.18 | 1.83 | 1.55 | 1.34 | 1.14 | - | - |
| 4.0m | - | - | - | 2.62 | 2.08 | 1.73 | 1.48 | 1.28 | 1.11 | 0.97 | - |
| 3.0m | - | - | - | 2.52 | 2 | 1.61 | 1.39 | 1.21 | 1.06 | 0.94 | 0.82 |
| 2.0m | - | - | 3.03 | 2.33 | 1.86 | 1.51 | 1.3 | 1.15 | 1.01 | 0.9 | 0.8 |
| 1.0m | - | 3.57 | 2.7 | 2.11 | 1.71 | 1.41 | 1.23 | 1.09 | 0.97 | 0.87 | 0.78 |
| 0.0m | 4.3 | 3.14 | 2.43 | 1.94 | 1.59 | 1.37 | 1.2 | 1.07 | 0.95 | 0.86 | - |
| -1.0m | 4.11 | 3.01 | 2.36 | 1.91 | 1.5 | 1.37 | 1.2 | 1.07 | 0.97 | - | - |
| -2.0m | 4.27 | 3.14 | 2.46 | 2.01 | 1.69 | 1.46 | - | - | - | - | - |

| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|------|------|------|------|------|------|------|------|------|------|------|
| 7.0m | - | - | - | 2.78 | 2.3 | 1.88 | - | - | - | - | - |
| 6.0m | - | - | - | 2.78 | 2.31 | 1.96 | 1.64 | 1.36 | - | - | - |
| 5.0m | - | - | - | 2.72 | 2.28 | 1.95 | 1.68 | 1.41 | 1.17 | - | - |
| 4.0m | - | - | - | 2.64 | 2.23 | 1.92 | 1.67 | 1.42 | 1.19 | 0.99 | - |
| 3.0m | - | - | - | 2.57 | 2.19 | 1.89 | 1.66 | 1.41 | 1.17 | 0.98 | 0.82 |
| 2.0m | - | - | 3.07 | 2.55 | 2.17 | 1.89 | 1.61 | 1.37 | 1.13 | 0.95 | 0.81 |
| 1.0m | - | 3.65 | 2.95 | 2.45 | 2.08 | 1.78 | 1.53 | 1.3 | 1.09 | 0.93 | 0.78 |
| 0.0m | 4.55 | 3.46 | 2.78 | 2.31 | 1.96 | 1.68 | 1.44 | 1.21 | 1.03 | 0.89 | - |
| -1.0m | 4.48 | 3.38 | 2.89 | 2.34 | 1.99 | 1.69 | 1.34 | 1.15 | 0.99 | - | - |
| -2.0m | 4.51 | 3.38 | 2.88 | 2.19 | 1.79 | 1.62 | - | - | - | - | - |

Canted Rail
50-150mm
90% SWL
Locked



| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|
| 7.0m | - | - | - | 3.89a | 4.14a | 3.53 | - | - | - | - | - |
| 6.0m | - | - | - | 3.09a | 3.41a | 3.56 | 2.97 | 2.48 | - | - | - |
| 5.0m | - | - | - | 2.90a | 3.28a | 3.47 | 2.91 | 2.47 | 2.07 | - | - |
| 4.0m | - | - | - | 4.31a | 4.03 | 3.3 | 2.8 | 2.38 | 2.02 | 1.71 | - |
| 3.0m | - | - | - | 5.02 | 3.9 | 3.12 | 2.41r | 2.26 | 1.93 | 1.66 | 1.42 |
| 2.0m | - | - | 4.44r | 3.72r | 3.03r | 2.30r | 2.22r | 2.14 | 1.85 | 1.6 | 1.39 |
| 1.0m | - | 5.53r | 4.11r | 3.47r | 2.93r | 2.66r | 2.38 | 2.06 | 1.79 | 1.56 | 1.37 |
| 0.0m | 4.95a | 5.44a | 5.27 | 4.05 | 3.25 | 2.74 | 2.33 | 2.01 | 1.75 | 1.54 | - |
| -1.0m | 4.83a | 5.30a | 5.12 | 4 | 3.28 | 2.74 | 2.33 | 2.01 | 1.75 | - | - |
| -2.0m | 10 | 7.27 | 6.32 | 4.16 | 3.41 | 2.89 | - | - | - | - | - |

| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|-------|-------|-------|-------|-------|-------|------|-------|------|------|------|
| 7.0m | - | - | - | 3.94a | 4.39 | 3.54 | - | - | - | - | - |
| 6.0m | - | - | - | 3.16a | 3.68a | 3.67 | 3.04 | 2.5 | - | - | - |
| 5.0m | - | - | - | 3.15a | 3.62a | 3.65 | 3.11 | 2.59 | 2.11 | - | - |
| 4.0m | - | - | - | 4.34a | 4.28 | 3.6 | 3.09 | 2.62 | 2.14 | 1.75 | - |
| 3.0m | - | - | - | 5.09 | 4.19 | 3.54r | 3.01 | 2.58r | 2.11 | 1.73 | 1.43 |
| 2.0m | - | - | 4.81r | 4.88 | 4.03 | 3.41 | 2.93 | 2.5 | 2.05 | 1.69 | 1.41 |
| 1.0m | - | 6.57r | 5.92 | 4.72 | 3.91 | 3.3 | 2.85 | 2.4 | 1.97 | 1.65 | 1.37 |
| 0.0m | 7.60a | 7.87 | 5.85r | 4.63 | 3.83 | 3.23 | 2.74 | 2.25 | 1.88 | 1.58 | - |
| -1.0m | 10 | 7.73 | 6.73 | 4.85 | 3.73 | 3.08 | 2.57 | 2.14 | 1.81 | - | - |
| -2.0m | 10 | 7.72 | 6.71 | 4.47 | 3.57 | 2.97 | - | - | - | - | - |

Max Cant + Twist
150-177mm
67% SWL
Unlocked


| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|------|------|------|------|------|------|------|------|------|------|------|
| 7.0m | - | - | - | 2.34 | 1.9 | 1.57 | - | - | - | - | - |
| 6.0m | - | - | - | 2.32 | 1.9 | 1.58 | 1.33 | 1.11 | - | - | - |
| 5.0m | - | - | - | 2.21 | 1.82 | 1.53 | 1.29 | 1.1 | 0.94 | - | - |
| 4.0m | - | - | - | 2.18 | 1.72 | 1.43 | 1.22 | 1.05 | 0.91 | 0.78 | - |
| 3.0m | - | - | - | 2.09 | 1.64 | 1.31 | 1.13 | 0.98 | 0.86 | 0.75 | 0.65 |
| 2.0m | - | - | 2.5 | 1.91 | 1.51 | 1.22 | 1.04 | 0.92 | 0.81 | 0.71 | 0.63 |
| 1.0m | - | 2.88 | 2.18 | 1.7 | 1.37 | 1.12 | 0.98 | 0.87 | 0.77 | 0.69 | 0.62 |
| 0.0m | 3.35 | 2.48 | 1.93 | 1.54 | 1.26 | 1.08 | 0.95 | 0.84 | 0.75 | 0.68 | - |
| -1.0m | 3.18 | 2.36 | 1.85 | 1.5 | 1.26 | 1.08 | 0.95 | 0.84 | 0.77 | - | - |
| -2.0m | 3.32 | 2.48 | 1.95 | 1.6 | 1.35 | 1.17 | - | - | - | - | - |

| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|------|------|------|------|------|------|------|------|------|------|------|
| 7.0m | - | - | - | 2.34 | 1.93 | 1.57 | - | - | - | - | - |
| 6.0m | - | - | - | 2.33 | 1.95 | 1.65 | 1.37 | 1.12 | - | - | - |
| 5.0m | - | - | - | 2.28 | 1.92 | 1.64 | 1.41 | 1.17 | 0.96 | - | - |
| 4.0m | - | - | - | 2.2 | 1.87 | 1.61 | 1.4 | 1.19 | 0.98 | 0.8 | - |
| 3.0m | - | - | - | 2.14 | 1.83 | 1.58 | 1.39 | 1.17 | 0.96 | 0.79 | 0.65 |
| 2.0m | - | - | 2.53 | 2.12 | 1.81 | 1.58 | 1.35 | 1.14 | 0.93 | 0.77 | 0.64 |
| 1.0m | - | 2.95 | 2.42 | 2.02 | 1.72 | 1.48 | 1.27 | 1.07 | 0.88 | 0.74 | 0.62 |
| 0.0m | 3.58 | 2.77 | 2.26 | 1.89 | 1.61 | 1.38 | 1.18 | 0.98 | 0.83 | 0.7 | - |
| -1.0m | 3.51 | 2.7 | 2.16 | 1.82 | 1.54 | 1.3 | 1.09 | 0.92 | 0.78 | - | - |
| -2.0m | 3.54 | 2.7 | 2.16 | 1.78 | 1.45 | 1.22 | - | - | - | - | - |

Max Cant + Twist
150-177mm
90% SWL
Locked


| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|
| 7.0m | - | - | - | 3.89a | 3.55 | 2.95 | - | - | - | - | - |
| 6.0m | - | - | - | 3.09a | 3.41a | 2.98 | 2.51 | 2.09 | - | - | - |
| 5.0m | - | - | - | 2.90a | 3.28a | 2.9 | 2.45 | 2.08 | 1.75 | - | - |
| 4.0m | - | - | - | 4.12 | 3.3 | 2.75 | 2.34 | 2 | 1.71 | 1.46 | - |
| 3.0m | - | - | - | 3.98 | 3.18 | 2.59 | 2.2 | 1.89 | 1.63 | 1.41 | 1.21 |
| 2.0m | - | - | 4.44r | 3.72r | 2.99 | 2.30r | 2.06 | 1.79 | 1.56 | 1.36 | 1.18 |
| 1.0m | - | 5.53r | 4.11r | 3.42 | 2.79 | 2.28 | 1.96 | 1.71 | 1.5 | 1.32 | 1.16 |
| 0.0m | 4.95a | 5.13 | 3.98 | 3.19 | 2.63 | 2.22 | 1.92 | 1.67 | 1.47 | 1.3 | - |
| -1.0m | 4.83a | 4.95 | 3.85 | 3.14 | 2.64 | 2.23 | 1.91 | 1.67 | 1.5 | - | - |
| -2.0m | 6.98 | 5.12 | 4.01 | 3.28 | 2.77 | 2.36 | - | - | - | - | - |

| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|------|------|------|-------|------|------|------|------|------|------|------|
| 7.0m | - | - | - | 3.94a | 3.59 | 2.96 | - | - | - | - | - |
| 6.0m | - | - | - | 3.16a | 3.62 | 3.07 | 2.58 | 2.11 | - | - | - |
| 5.0m | - | - | - | 3.15a | 3.57 | 3.05 | 2.64 | 2.18 | 1.79 | - | - |
| 4.0m | - | - | - | 4.15 | 3.5 | 3.01 | 2.62 | 2.21 | 1.82 | 1.49 | - |
| 3.0m | - | - | - | 4.06 | 3.44 | 2.98 | 2.59 | 2.18 | 1.79 | 1.48 | 1.22 |
| 2.0m | - | - | 4.8 | 3.97 | 3.37 | 2.9 | 2.5 | 2.13 | 1.74 | 1.44 | 1.2 |
| 1.0m | - | 5.78 | 4.62 | 3.84 | 3.26 | 2.8 | 2.41 | 2.02 | 1.67 | 1.4 | 1.16 |
| 0.0m | 7.37 | 5.56 | 4.46 | 3.7 | 3.14 | 2.69 | 2.28 | 1.89 | 1.58 | 1.34 | - |
| -1.0m | 7.27 | 5.46 | 4.34 | 3.6 | 3.04 | 2.56 | 2.13 | 1.79 | 1.52 | - | - |
| -2.0m | 7.32 | 5.45 | 4.32 | 3.54 | 2.9 | 2.44 | - | - | - | - | - |


NETWORK RAIL DUTIES

SECTOR C

LOWER SAFE WORKING LOADS

UPPER SAFE WORKING LOADS


Road
Unlocked
71% SWL



| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|-------|------|------|-------|------|------|------|------|------|------|------|
| 7.0m | - | - | - | 3.81 | 3.2 | 2.7 | - | - | - | - | - |
| 6.0m | - | - | - | 3.64a | 3.22 | 2.75 | 2.37 | 2.06 | - | - | - |
| 5.0m | - | - | - | 3.24a | 3.16 | 2.71 | 2.36 | 2.06 | 1.81 | - | - |
| 4.0m | - | - | - | 3.69 | 3.04 | 2.61 | 2.28 | 2.01 | 1.79 | 1.59 | - |
| 3.0m | - | - | - | 3.61 | 2.97 | 2.5 | 2.19 | 1.95 | 1.74 | 1.56 | - |
| 2.0m | - | - | - | 3.45 | 2.85 | 2.4 | 2.1 | 1.88 | 1.69 | 1.52 | 1.38 |
| 1.0m | - | 5.07 | 3.97 | 3.23 | 2.7 | 2.3 | 2.03 | 1.82 | 1.64 | 1.49 | 1.36 |
| 0.0m | 5.89a | 4.6 | 3.69 | 3.05 | 2.57 | 2.24 | 1.99 | 1.79 | 1.62 | 1.48 | - |
| -1.0m | 5.14a | 4.41 | 3.56 | 2.87 | 2.54 | 2.23 | 1.98 | 1.78 | 1.62 | - | - |
| -2.0m | 5.81 | 4.48 | 3.64 | 3.05 | 2.82 | 2.29 | 2.05 | - | - | - | - |

| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|------|------|------|-------|------|------|------|------|------|------|------|
| 7.0m | - | - | - | 3.82 | 3.21 | 2.7 | - | - | - | - | - |
| 6.0m | - | - | - | 3.68a | 3.26 | 2.81 | 2.4 | 2.06 | - | - | - |
| 5.0m | - | - | - | 3.46a | 3.23 | 2.81 | 2.46 | 2.12 | 1.82 | - | - |
| 4.0m | - | - | - | 3.71 | 3.19 | 2.78 | 2.46 | 2.14 | 1.85 | 1.6 | - |
| 3.0m | - | - | - | 3.64 | 3.14 | 2.75 | 2.45 | 2.13 | 1.85 | 1.6 | - |
| 2.0m | - | - | - | 3.6 | 3.12 | 2.74 | 2.41 | 2.09 | 1.81 | 1.58 | 1.39 |
| 1.0m | - | 5.07 | 4.19 | 3.55 | 3.06 | 2.66 | 2.33 | 2.04 | 1.77 | 1.54 | 1.37 |
| 0.0m | 6.13 | 4.86 | 4.01 | 3.41 | 2.93 | 2.57 | 2.25 | 1.95 | 1.72 | 1.51 | - |
| -1.0m | 5.06 | 4.78 | 3.92 | 3.31 | 2.85 | 2.48 | 2.15 | 1.88 | 1.68 | - | - |
| -2.0m | 6.04 | 4.74 | 3.88 | 3.27 | 2.8 | 2.4 | 2.09 | - | - | - | - |


Road
Locked
71% SWL



| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|
| 7.0m | - | - | - | 4.67a | 4.49 | 3.86 | - | - | - | - | - |
| 6.0m | - | - | - | 3.64a | 3.99a | 3.91 | 3.42 | 3.01 | - | - | - |
| 5.0m | - | - | - | 3.24a | 3.66a | 3.86 | 3.4 | 3.02 | 2.69 | - | - |
| 4.0m | - | - | - | 4.33a | 4.34 | 3.77 | 3.33 | 2.97 | 2.67 | 2.41 | - |
| 3.0m | - | - | - | 5.07 | 4.26 | 3.66 | 2.99r | 2.91 | 2.63 | 2.38 | - |
| 2.0m | - | - | - | 4.61r | 3.79r | 2.95r | 2.49r | 2.84 | 2.57 | 2.34 | 2.14 |
| 1.0m | - | 5.67r | 4.42r | 3.72r | 3.25r | 2.93r | 2.79r | 2.79 | 2.53 | 2.31 | 2.12 |
| 0.0m | 5.89a | 6.46a | 5.39 | 4.52 | 3.88 | 3.4 | 3.05 | 2.75 | 2.51 | 2.3 | - |
| -1.0m | 5.19a | 5.81a | 5.27 | 4.45 | 3.85 | 3.4 | 3.04 | 2.75 | 2.5 | - | - |
| -2.0m | 6.25 | 5.6 | 4.85 | 4.33 | 3.82 | 3.46 | 3.11 | - | - | - | - |

| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|-------|-------|------|-------|-------|------|------|------|------|------|------|
| 7.0m | - | - | - | 4.77a | 4.5 | 3.86 | - | - | - | - | - |
| 6.0m | - | - | - | 3.68a | 4.25a | 3.97 | 3.45 | 3.02 | - | - | - |
| 5.0m | - | - | - | 3.46a | 4.01a | 3.96 | 3.51 | 3.07 | 2.71 | - | - |
| 4.0m | - | - | - | 4.34a | 4.48 | 3.94 | 3.5 | 3.1 | 2.73 | 2.42 | - |
| 3.0m | - | - | - | 5.1 | 4.43 | 3.91 | 3.47 | 3.08 | 2.73 | 2.42 | - |
| 2.0m | - | - | - | 5.03 | 4.36r | 3.84 | 3.41 | 3.04 | 2.7 | 2.39 | 2.15 |
| 1.0m | - | 5.67r | 5.78 | 4.92 | 4.28 | 3.76 | 3.35 | 3 | 2.65 | 2.36 | 2.13 |
| 0.0m | 7.59a | 6.86 | 5.7 | 4.85 | 4.22 | 3.72 | 3.3 | 2.91 | 2.6 | 2.33 | - |
| -1.0m | 6.46 | 5.78 | 5.61 | 4.78 | 4.16 | 3.65 | 3.2 | 2.84 | 2.54 | - | - |
| -2.0m | 6.41 | 5.73 | 5.63 | 4.74 | 4.1 | 3.58 | 3.18 | - | - | - | - |


Level Rail
0-50mm
67% SWL
Unlocked



| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|------|------|------|------|------|------|------|------|------|------|------|
| 7.0m | - | - | - | 2.81 | 2.3 | 1.91 | - | - | - | - | - |
| 6.0m | - | - | - | 2.8 | 2.3 | 1.92 | 1.63 | 1.38 | - | - | - |
| 5.0m | - | - | - | 2.68 | 2.22 | 1.87 | 1.59 | 1.37 | 1.18 | - | - |
| 4.0m | - | - | - | 2.66 | 2.12 | 1.76 | 1.52 | 1.32 | 1.15 | 1 | - |
| 3.0m | - | - | - | 2.56 | 2.04 | 1.65 | 1.43 | 1.25 | 1.1 | 0.97 | 0.85 |
| 2.0m | - | - | 3.07 | 2.37 | 1.9 | 1.55 | 1.33 | 1.18 | 1.05 | 0.93 | 0.83 |
| 1.0m | - | 3.61 | 2.74 | 2.15 | 1.75 | 1.45 | 1.27 | 1.13 | 1.01 | 0.91 | 0.82 |
| 0.0m | 4.32 | 3.18 | 2.48 | 1.99 | 1.64 | 1.41 | 1.24 | 1.1 | 0.99 | 0.89 | - |
| -1.0m | 4.14 | 3.06 | 2.4 | 1.95 | 1.64 | 1.41 | 1.24 | 1.11 | 1.01 | - | - |
| -2.0m | 4.29 | 3.18 | 2.6 | 2.05 | 1.73 | 1.51 | - | - | - | - | - |

| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|------|------|------|------|------|------|------|------|------|------|------|
| 7.0m | - | - | - | 2.82 | 2.33 | 1.92 | - | - | - | - | - |
| 6.0m | - | - | - | 2.81 | 2.35 | 2 | 1.67 | 1.39 | - | - | - |
| 5.0m | - | - | - | 2.75 | 2.32 | 1.98 | 1.72 | 1.44 | 1.2 | - | - |
| 4.0m | - | - | - | 2.68 | 2.27 | 1.95 | 1.71 | 1.46 | 1.22 | 1.02 | - |
| 3.0m | - | - | - | 2.61 | 2.22 | 1.93 | 1.7 | 1.44 | 1.2 | 1.01 | 0.85 |
| 2.0m | - | - | 3.11 | 2.58 | 2.21 | 1.92 | 1.65 | 1.41 | 1.17 | 0.99 | 0.84 |
| 1.0m | - | 3.68 | 2.99 | 2.49 | 2.12 | 1.82 | 1.57 | 1.33 | 1.12 | 0.96 | 0.82 |
| 0.0m | 4.56 | 3.49 | 2.82 | 2.35 | 2 | 1.72 | 1.48 | 1.25 | 1.07 | 0.92 | - |
| -1.0m | 4.49 | 3.42 | 2.74 | 2.28 | 1.93 | 1.63 | 1.39 | 1.18 | 1.02 | - | - |
| -2.0m | 4.62 | 3.41 | 2.72 | 2.24 | 1.83 | 1.56 | - | - | - | - | - |

Level Rail
0-50mm
90% SWL
Locked



| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|----------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|
| 7.0m | - | - | - | 3.89a | 4.14a | 3.67 | - | - | - | - | - |
| 6.0m | - | - | - | 3.09a | 3.41a | 3.7 | 3.15 | 2.7 | - | - | - |
| 5.0m | - | - | - | 2.90a | 3.28a | 3.60a | 3.1 | 2.68 | 2.29 | - | - |
| 4.0m | - | - | - | 4.31a | 4.14 | 3.47 | 2.99 | 2.6 | 2.25 | 1.95 | - |
| 3.0m | - | - | - | 5.01 | 4.02 | 3.3 | 2.41r | 2.5 | 2.17 | 1.9 | 1.66 |
| Radius | - | - | 4.44r | 3.72r | 3.03r | 2.30r | 2.22r | 2.34r | 2.1 | 1.84 | 1.63 |
| the lift | - | 5.53r | 4.11r | 3.47r | 2.93r | 2.66r | 2.55r | 2.31 | 2.04 | 1.8 | 1.6 |
| the ma | 4.95a | 5.44a | 5.21 | 4.17 | 3.44 | 2.96 | 2.59 | 2.27 | 2 | 1.78 | - |
| safe w | 4.93a | 5.39a | 5.09 | 4.12 | 3.45 | 2.97 | 2.59 | 2.27 | 2.05 | - | - |
| articl | 5.42 | 5.77 | 5.25 | 4.26 | 3.58 | 3.1 | - | - | - | - | - |

| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|
| 7.0m | - | - | - | 3.94a | 4.42a | 3.68 | - | - | - | - | - |
| 6.0m | - | - | - | 3.16a | 3.68a | 3.8 | 3.21 | 2.71 | - | - | - |
| 5.0m | - | - | - | 3.15a | 3.62a | 3.78 | 3.28 | 2.79 | 2.33 | - | - |
| 4.0m | - | - | - | 4.34a | 4.35 | 3.74 | 3.24 | 2.8 | 2.36 | 1.98 | - |
| 3.0m | - | - | - | 5.07 | 4.27r | 3.66 | 3.18 | 2.76 | 2.34 | 1.97 | 1.66 |
| 2.0m | - | - | 4.81r | 4.88r | 4.12 | 3.55r | 3.09r | 2.7 | 2.28 | 1.93 | 1.64 |
| 1.0m | - | 6.57r | 5.77 | 4.74 | 4.01 | 3.45 | 3.02r | 2.63 | 2.21 | 1.88 | 1.6 |
| 0.0m | 7.60a | 7.25 | 5.71 | 4.67 | 3.94 | 3.39 | 2.94 | 2.49 | 2.12 | 1.82 | - |
| -1.0m | 9.74 | 7.13 | 5.59 | 4.6 | 3.87 | 3.28 | 2.8 | 2.39 | 2.06 | - | - |
| -2.0m | 9.8 | 7.13 | 5.68 | 4.53 | 3.73 | 3.17 | - | - | - | - | - |


NETWORK RAIL DUTIES

SECTOR C

LOWER SAFE WORKING LOADS

UPPER SAFE WORKING LOADS


Canted Rail
50-150mm
67% SWL
Unlocked



| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|------|------|------|------|------|------|------|------|------|------|------|
| 7.0m | - | - | - | 2.43 | 1.99 | 1.65 | - | - | - | - | - |
| 6.0m | - | - | - | 2.41 | 1.99 | 1.66 | 1.4 | 1.18 | - | - | - |
| 5.0m | - | - | - | 2.31 | 1.91 | 1.61 | 1.37 | 1.17 | 1 | - | - |
| 4.0m | - | - | - | 2.28 | 1.81 | 1.51 | 1.3 | 1.12 | 0.97 | 0.84 | - |
| 3.0m | - | - | - | 2.19 | 1.74 | 1.4 | 1.21 | 1.06 | 0.92 | 0.81 | 0.71 |
| 2.0m | - | - | 2.6 | 2.01 | 1.6 | 1.3 | 1.12 | 0.99 | 0.88 | 0.78 | 0.69 |
| 1.0m | - | 3.01 | 2.29 | 1.8 | 1.46 | 1.2 | 1.06 | 0.94 | 0.84 | 0.75 | 0.67 |
| 0.0m | 3.5 | 2.61 | 2.05 | 1.64 | 1.35 | 1.17 | 1.03 | 0.91 | 0.82 | 0.74 | - |
| -1.0m | 3.33 | 2.49 | 1.87 | 1.61 | 1.36 | 1.17 | 1.03 | 0.92 | 0.84 | - | - |
| -2.0m | 3.46 | 2.81 | 2.07 | 1.7 | 1.44 | 1.26 | - | - | - | - | - |

| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|------|------|------|------|------|------|------|------|------|------|------|
| 7.0m | - | - | - | 2.44 | 2.02 | 1.65 | - | - | - | - | - |
| 6.0m | - | - | - | 2.43 | 2.04 | 1.73 | 1.45 | 1.19 | - | - | - |
| 5.0m | - | - | - | 2.37 | 2 | 1.72 | 1.49 | 1.24 | 1.02 | - | - |
| 4.0m | - | - | - | 2.3 | 1.96 | 1.69 | 1.48 | 1.26 | 1.04 | 0.86 | - |
| 3.0m | - | - | - | 2.24 | 1.91 | 1.66 | 1.47 | 1.24 | 1.03 | 0.85 | 0.71 |
| 2.0m | - | - | 2.64 | 2.21 | 1.9 | 1.66 | 1.42 | 1.21 | 0.99 | 0.83 | 0.7 |
| 1.0m | - | 3.07 | 2.53 | 2.12 | 1.81 | 1.56 | 1.34 | 1.14 | 0.95 | 0.8 | 0.67 |
| 0.0m | 3.71 | 2.9 | 2.37 | 1.99 | 1.7 | 1.47 | 1.26 | 1.05 | 0.89 | 0.76 | - |
| -1.0m | 3.65 | 2.83 | 2.29 | 1.82 | 1.63 | 1.38 | 1.16 | 0.99 | 0.85 | - | - |
| -2.0m | 3.66 | 2.83 | 2.28 | 1.88 | 1.54 | 1.31 | - | - | - | - | - |


Canted Rail
50-150mm
90% SWL
Locked



| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|
| 7.0m | - | - | - | 3.89a | 4.14a | 3.37 | - | - | - | - | - |
| 6.0m | - | - | - | 3.09a | 3.41a | 3.39 | 2.82 | 2.32 | - | - | - |
| 5.0m | - | - | - | 2.90a | 3.28a | 3.31 | 2.76 | 2.3 | 1.91 | - | - |
| 4.0m | - | - | - | 4.31a | 3.86 | 3.13 | 2.63 | 2.21 | 1.86 | 1.56 | - |
| 3.0m | - | - | - | 4.85 | 3.72 | 2.95 | 2.41r | 2.09 | 1.77 | 1.51 | 1.28 |
| 2.0m | - | - | 4.44r | 3.72r | 3.03r | 2.30r | 2.22r | 1.97 | 1.69 | 1.45 | 1.25 |
| 1.0m | - | 5.53r | 4.11r | 3.47r | 2.93r | 2.61 | 2.19 | 1.88 | 1.62 | 1.41 | 1.22 |
| 0.0m | 4.95a | 5.44a | 5.07 | 3.84 | 3.05 | 2.54 | 2.14 | 1.83 | 1.59 | 1.38 | - |
| -1.0m | 4.89a | 5.39a | 4.92 | 3.79 | 3.05 | 2.54 | 2.14 | 1.84 | 1.62 | - | - |
| -2.0m | 10 | 7.14 | 5.12 | 3.96 | 3.21 | 2.71 | - | - | - | - | - |

| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|-------|-------|-------|-------|-------|-------|------|-------|------|------|------|
| 7.0m | - | - | - | 3.94a | 4.23 | 3.38 | - | - | - | - | - |
| 6.0m | - | - | - | 3.16a | 3.68a | 3.51 | 2.89 | 2.33 | - | - | - |
| 5.0m | - | - | - | 3.15a | 3.62a | 3.49 | 2.96 | 2.42 | 1.95 | - | - |
| 4.0m | - | - | - | 4.34a | 4.11 | 3.44 | 2.94 | 2.45 | 1.98 | 1.6 | - |
| 3.0m | - | - | - | 4.94 | 4.04 | 3.39 | 2.87 | 2.42 | 1.95 | 1.59 | 1.29 |
| 2.0m | - | - | 4.81r | 4.73 | 3.87 | 3.26 | 2.78 | 2.34r | 1.89 | 1.55 | 1.27 |
| 1.0m | - | 6.57r | 5.78 | 4.55 | 3.75 | 3.15r | 2.7 | 2.23 | 1.81 | 1.5 | 1.22 |
| 0.0m | 7.60a | 7.78 | 5.7 | 4.47 | 3.66 | 3.06 | 2.57 | 2.08 | 1.72 | 1.43 | - |
| -1.0m | 10 | 7.63 | 5.66 | 4.36 | 3.54 | 2.91 | 2.39 | 1.87 | 1.64 | - | - |
| -2.0m | 10 | 7.62 | 5.53 | 4.28 | 3.36 | 2.79 | - | - | - | - | - |


Max Cant + Twist
150-177mm
67% SWL
Unlocked



| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|------|------|------|------|------|------|------|------|------|------|------|
| 7.0m | - | - | - | 2.34 | 1.9 | 1.57 | - | - | - | - | - |
| 6.0m | - | - | - | 2.32 | 1.9 | 1.58 | 1.33 | 1.11 | - | - | - |
| 5.0m | - | - | - | 2.21 | 1.82 | 1.53 | 1.29 | 1.1 | 0.94 | - | - |
| 4.0m | - | - | - | 2.18 | 1.72 | 1.43 | 1.22 | 1.05 | 0.91 | 0.78 | - |
| 3.0m | - | - | - | 2.09 | 1.64 | 1.31 | 1.13 | 0.98 | 0.86 | 0.75 | 0.65 |
| 2.0m | - | - | 2.5 | 1.91 | 1.51 | 1.22 | 1.04 | 0.92 | 0.81 | 0.71 | 0.63 |
| 1.0m | - | 2.88 | 2.18 | 1.7 | 1.37 | 1.12 | 0.98 | 0.87 | 0.77 | 0.69 | 0.62 |
| 0.0m | 3.35 | 2.48 | 1.93 | 1.54 | 1.26 | 1.08 | 0.95 | 0.84 | 0.75 | 0.68 | - |
| -1.0m | 3.18 | 2.36 | 1.85 | 1.5 | 1.26 | 1.08 | 0.95 | 0.84 | 0.77 | - | - |
| -2.0m | 3.32 | 2.48 | 1.95 | 1.6 | 1.35 | 1.17 | - | - | - | - | - |

| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|------|------|------|------|------|------|------|------|------|------|------|
| 7.0m | - | - | - | 2.34 | 1.93 | 1.57 | - | - | - | - | - |
| 6.0m | - | - | - | 2.33 | 1.95 | 1.65 | 1.37 | 1.12 | - | - | - |
| 5.0m | - | - | - | 2.28 | 1.92 | 1.64 | 1.41 | 1.17 | 0.96 | - | - |
| 4.0m | - | - | - | 2.2 | 1.87 | 1.61 | 1.4 | 1.19 | 0.98 | 0.8 | - |
| 3.0m | - | - | - | 2.14 | 1.83 | 1.58 | 1.39 | 1.17 | 0.96 | 0.79 | 0.65 |
| 2.0m | - | - | 2.53 | 2.12 | 1.81 | 1.58 | 1.35 | 1.14 | 0.93 | 0.77 | 0.64 |
| 1.0m | - | 2.95 | 2.42 | 2.02 | 1.72 | 1.48 | 1.27 | 1.07 | 0.88 | 0.74 | 0.62 |
| 0.0m | 3.58 | 2.77 | 2.26 | 1.89 | 1.61 | 1.38 | 1.18 | 0.98 | 0.83 | 0.7 | - |
| -1.0m | 5.51 | 2.7 | 2.16 | 1.82 | 1.54 | 1.3 | 1.06 | 0.82 | 0.78 | - | - |
| -2.0m | 3.54 | 2.7 | 2.16 | 1.78 | 1.45 | 1.22 | - | - | - | - | - |

Max Cant + Twist
150-177mm
90% SWL
Locked



| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|
| 7.0m | - | - | - | 3.89a | 3.55 | 2.95 | - | - | - | - | - |
| 6.0m | - | - | - | 3.09a | 3.41a | 2.98 | 2.51 | 2.09 | - | - | - |
| 5.0m | - | - | - | 2.90a | 3.28a | 2.9 | 2.45 | 2.08 | 1.75 | - | - |
| 4.0m | - | - | - | 4.12 | 3.3 | 2.75 | 2.34 | 2 | 1.71 | 1.46 | - |
| 3.0m | - | - | - | 3.98 | 3.18 | 2.59 | 2.2 | 1.89 | 1.63 | 1.41 | 1.21 |
| 2.0m | - | - | 4.44r | 3.72r | 2.99 | 2.30r | 2.06 | 1.79 | 1.56 | 1.36 | 1.18 |
| 1.0m | - | 5.53r | 4.11r | 3.42 | 2.79 | 2.28 | 1.96 | 1.71 | 1.5 | 1.32 | 1.16 |
| 0.0m | 4.95a | 5.13 | 3.98 | 3.19 | 2.63 | 2.22 | 1.92 | 1.67 | 1.47 | 1.3 | - |
| -1.0m | 4.93a | 4.95 | 3.89 | 3.14 | 2.64 | 2.23 | 1.91 | 1.67 | 1.5 | - | - |
| -2.0m | 6.89 | 5.12 | 4.01 | 3.28 | 2.77 | 2.36 | - | - | - | - | - |

| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|------|------|------|-------|------|------|------|------|------|------|------|
| 7.0m | - | - | - | 3.94a | 3.59 | 2.96 | - | - | - | - | - |
| 6.0m | - | - | - | 3.16a | 3.62 | 3.07 | 2.58 | 2.11 | - | - | - |
| 5.0m | - | - | - | 3.15a | 3.57 | 3.05 | 2.64 | 2.18 | 1.79 | - | - |
| 4.0m | - | - | - | 4.15 | 3.5 | 3.01 | 2.62 | 2.21 | 1.82 | 1.49 | - |
| 3.0m | - | - | - | 4.06 | 3.44 | 2.98 | 2.59 | 2.18 | 1.79 | 1.48 | 1.22 |
| 2.0m | - | - | 4.8 | 3.97 | 3.37 | 2.9 | 2.5 | 2.13 | 1.74 | 1.44 | 1.2 |
| 1.0m | - | 5.78 | 4.62 | 3.84 | 3.26 | 2.8 | 2.41 | 2.02 | 1.67 | 1.4 | 1.16 |
| 0.0m | 7.37 | 5.56 | 4.46 | 3.7 | 3.14 | 2.69 | 2.28 | 1.89 | 1.58 | 1.34 | - |
| -1.0m | 7.27 | 5.48 | 4.34 | 3.6 | 3.04 | 2.56 | 2.13 | 1.79 | 1.52 | - | - |
| -2.0m | 7.32 | 5.45 | 4.32 | 3.54 | 2.9 | 2.44 | - | - | - | - | - |

NETWORK RAIL DUTIES

SECTOR D

LOWER SAFE WORKING LOADS

UPPER SAFE WORKING LOADS

Road
 Unlocked
 71% SWL



| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|
| 7.0m | - | - | - | 4.67a | 4.94a | 4.99a | - | - | - | - | - |
| 6.0m | - | - | - | 3.64a | 3.99a | 4.19b | 4.31a | 4.41 | - | - | - |
| 5.0m | - | - | - | 3.24a | 3.66a | 4.00a | 3.63b | 4.15a | 3.88 | - | - |
| 4.0m | - | - | - | 4.33a | 4.44a | 4.15b | 3.62b | 3.56r | 3.86 | 3.43 | - |
| 3.0m | - | - | - | 5.59b | 4.74b | 4.03r | 2.99r | 3.04r | 3.62r | 3.4 | - |
| 2.0m | - | - | - | 4.61r | 3.79r | 2.95r | 2.49r | 2.89r | 3.72r | 3.36 | 3.03 |
| 1.0m | - | 5.67r | 4.42r | 3.72r | 3.25r | 2.93r | 2.79r | 3.18r | 3.68 | 3.32 | 3.01 |
| 0.0m | 5.89a | 6.46a | 6.04r | 4.64r | 4.09r | 3.56r | 3.64r | 4.09 | 3.66 | 3.3 | - |
| -1.0m | 5.19a | 5.81a | 6.34a | 6.30r | 5.06r | 4.84r | 4.82 | 4.08 | 3.85 | - | - |
| -2.0m | 10 | 10 | 8.82 | 7.73 | 8.36 | 5.41 | 4.71 | - | - | - | - |

| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|
| 7.0m | - | - | - | 4.77a | 5.13a | 5.08a | - | - | - | - | - |
| 6.0m | - | - | - | 3.68a | 4.25a | 4.58b | 4.63a | 4.42 | - | - | - |
| 5.0m | - | - | - | 3.46a | 4.01a | 4.38a | 4.54b | 4.48 | 3.9 | - | - |
| 4.0m | - | - | - | 4.34a | 4.62a | 4.78a | 4.86a | 4.46b | 3.93 | 3.45 | - |
| 3.0m | - | - | - | 5.96b | 6.68b | 5.8 | 5.04 | 4.43 | 3.92 | 3.44 | - |
| 2.0m | - | - | - | 6.67r | 6.75 | 5.73 | 4.97 | 4.37 | 3.88 | 3.42 | 3.04 |
| 1.0m | - | 5.67r | 7.86r | 8.04 | 6.65 | 5.66 | 4.91 | 4.32 | 3.83 | 3.38 | 3.02 |
| 0.0m | 7.59a | 10 | 10 | 8 | 6.6 | 5.61 | 4.87 | 4.28 | 3.77 | 3.34 | - |
| -1.0m | 10 | 10 | 10 | 8 | 6.6 | 5.6 | 4.83 | 4.2 | 3.7 | - | - |
| -2.0m | 10 | 10 | 10 | 8.04 | 6.6 | 5.64 | 4.76 | - | - | - | - |

Road
 Locked
 71% SWL



| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|
| 7.0m | - | - | - | 4.67a | 4.49 | 3.86 | - | - | - | - | - |
| 6.0m | - | - | - | 3.64a | 3.99a | 3.91 | 3.42 | 3.01 | - | - | - |
| 5.0m | - | - | - | 3.24a | 3.66a | 3.86 | 3.4 | 3.02 | 2.69 | - | - |
| 4.0m | - | - | - | 4.33a | 4.34 | 3.77 | 3.33 | 2.97 | 2.67 | 2.41 | - |
| 3.0m | - | - | - | 5.07 | 4.26 | 3.66 | 2.99r | 2.91 | 2.63 | 2.38 | - |
| 2.0m | - | - | - | 4.61r | 3.79r | 2.95r | 2.49r | 2.84 | 2.57 | 2.34 | 2.14 |
| 1.0m | - | 5.67r | 4.42r | 3.72r | 3.25r | 2.93r | 2.79r | 2.79 | 2.53 | 2.31 | 2.12 |
| 0.0m | 5.89a | 6.46a | 5.39 | 4.52 | 3.88 | 3.4 | 3.05 | 2.75 | 2.51 | 2.3 | - |
| -1.0m | 5.19a | 5.81a | 5.27 | 4.45 | 3.95 | 3.4 | 3.04 | 2.75 | 2.5 | - | - |
| -2.0m | 8.25 | 8.5 | 8.35 | 4.83 | 3.82 | 3.46 | 3.11 | - | - | - | - |

| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|-------|-------|------|-------|-------|------|------|------|------|------|------|
| 7.0m | - | - | - | 4.77a | 4.5 | 3.86 | - | - | - | - | - |
| 6.0m | - | - | - | 3.68a | 4.25a | 3.97 | 3.45 | 3.02 | - | - | - |
| 5.0m | - | - | - | 3.46a | 4.01a | 3.96 | 3.51 | 3.07 | 2.71 | - | - |
| 4.0m | - | - | - | 4.34a | 4.48 | 3.94 | 3.5 | 3.1 | 2.73 | 2.42 | - |
| 3.0m | - | - | - | 5.1 | 4.43 | 3.91 | 3.47 | 3.08 | 2.73 | 2.42 | - |
| 2.0m | - | - | - | 5.03 | 4.36r | 3.84 | 3.41 | 3.04 | 2.7 | 2.39 | 2.15 |
| 1.0m | - | 5.67r | 5.78 | 4.92 | 4.28 | 3.76 | 3.35 | 3 | 2.65 | 2.36 | 2.13 |
| 0.0m | 7.59a | 6.86 | 5.7 | 4.85 | 4.22 | 3.72 | 3.3 | 2.91 | 2.6 | 2.33 | - |
| -1.0m | 8.48 | 6.75 | 5.51 | 4.78 | 4.16 | 3.65 | 3.2 | 2.84 | 2.54 | - | - |
| -2.0m | 8.48 | 6.75 | 5.51 | 4.78 | 4.1 | 3.65 | 3.14 | - | - | - | - |

Level Rail
 0-50mm
 67% SWL
 Unlocked



| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m | |
|-------|-------|-------|-------|-------|-------|------|-------|------|------|------|------|-----|
| 7.0m | - | - | - | 3.89a | 3.45 | 2.89 | - | - | - | - | - | |
| 6.0m | - | - | - | 3.09a | 3.41a | 2.91 | 2.49 | 2.14 | - | - | - | |
| 5.0m | - | - | - | 2.90a | 3.28a | 2.85 | 2.45 | 2.13 | 1.86 | - | - | |
| 4.0m | - | - | - | 4.02 | 3.25 | 2.74 | 2.37 | 2.08 | 1.83 | 1.62 | - | |
| 3.0m | - | - | - | 3.92 | 3.17 | 2.62 | 2.28 | 2.01 | 1.78 | 1.59 | 1.42 | |
| 2.0m | - | - | - | 4.44r | 3.72 | 3.02 | 2.30r | 2.18 | 1.94 | 1.73 | 1.55 | 1.4 |
| 1.0m | - | 5.53r | 4.11r | 3.47r | 2.87 | 2.41 | 2.11 | 1.88 | 1.69 | 1.52 | 1.38 | |
| 0.0m | 4.95a | 5.3 | 4.11 | 3.31 | 2.74 | 2.37 | 2.08 | 1.86 | 1.67 | 1.51 | - | |
| -1.0m | 4.93a | 5.16 | 4.02 | 3.27 | 2.75 | 2.37 | 2.08 | 1.86 | 1.69 | - | - | |
| -2.0m | 7.29 | 5.3 | 4.13 | 3.37 | 2.85 | 2.47 | - | - | - | - | - | |

| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m | |
|-------|------|------|------|-------|------|-------|------|------|------|------|------|------|
| 7.0m | - | - | - | 3.94a | 3.48 | 2.9 | - | - | - | - | - | |
| 6.0m | - | - | - | 3.16a | 3.5 | 2.98 | 2.53 | 2.15 | - | - | - | |
| 5.0m | - | - | - | 3.15a | 3.46 | 2.97 | 2.58 | 2.2 | 1.89 | - | - | |
| 4.0m | - | - | - | 4.04 | 3.41 | 2.94 | 2.57 | 2.22 | 1.91 | 1.64 | - | |
| 3.0m | - | - | - | 3.97 | 3.36 | 2.91 | 2.54 | 2.2 | 1.89 | 1.63 | 1.42 | |
| 2.0m | - | - | - | 4.74 | 3.92 | 3.32 | 2.85 | 2.48 | 2.17 | 1.85 | 1.61 | 1.41 |
| 1.0m | - | 5.81 | 4.61 | 3.81 | 3.22 | 2.78r | 2.42 | 2.09 | 1.8 | 1.58 | 1.38 | |
| 0.0m | 7.6 | 5.64 | 4.48 | 3.7 | 3.13 | 2.69 | 2.33 | 2 | 1.75 | 1.54 | - | |
| -1.0m | 7.52 | 5.66 | 4.39 | 3.62 | 3.05 | 2.6 | 2.23 | 1.94 | 1.7 | - | - | |
| -2.0m | 7.59 | 5.66 | 4.37 | 3.67 | 2.95 | 2.62 | - | - | - | - | - | |

Level Rail
 0-50mm
 75% SWL
 Locked



| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m | |
|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|
| 7.0m | - | - | - | 3.89a | 4.14a | 4.16a | - | - | - | - | - | |
| 6.0m | - | - | - | 3.09a | 3.41a | 3.72a | 3.88a | 3.89a | - | - | - | |
| 5.0m | - | - | - | 2.90a | 3.28a | 3.60a | 3.45r | 3.61a | 3.51 | - | - | |
| 4.0m | - | - | - | 4.31a | 4.39a | 4.11r | 3.13r | 2.80r | 3.47 | 3.1 | - | |
| 3.0m | - | - | - | 5.05r | 4.16r | 3.34r | 2.41r | 2.58r | 3.40r | 3.06 | 2.76 | |
| Radius | - | - | - | 4.44r | 3.72r | 3.03r | 2.30r | 2.22r | 2.34r | 3.35 | 3.02 | 2.74 |
| the lift | - | 5.53r | 4.11r | 3.47r | 2.93r | 2.66r | 2.55r | 2.97r | 3.3 | 2.99 | 2.72 | |
| the ma | 4.95a | 5.44a | 5.62r | 4.43r | 3.71r | 3.37r | 3.42r | 3.65 | 3.28 | 2.97 | - | |
| safe se | 4.93a | 5.36a | 6.41a | 5.88r | 5.08r | 4.89 | 4.11 | 3.85 | 3.3 | - | - | |
| r axles | 10 | 10 | 8.28 | 6.68 | 5.66 | 4.81 | - | - | - | - | - | |


| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m | |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|
| 7.0m | - | - | - | 3.94a | 4.42a | 4.40a | - | - | - | - | - | |
| 6.0m | - | - | - | 3.16a | 3.68a | 4.08a | 4.09a | 4 | - | - | - | |
| 5.0m | - | - | - | 3.15a | 3.62a | 3.99a | 4.10a | 4.04 | 3.54 | - | - | |
| 4.0m | - | - | - | 4.34a | 4.47a | 4.49a | 4.50a | 4.02 | 3.55 | 3.13 | - | |
| 3.0m | - | - | - | 5.64r | 6.02 | 5.16 | 4.5 | 3.96r | 3.53 | 3.11 | 2.76 | |
| 2.0m | - | - | - | 4.81r | 6.26r | 5.9 | 5.06 | 4.42r | 3.91 | 3.48 | 3.08 | 2.75 |
| 1.0m | - | 6.57r | 8.00r | 6.93 | 5.81 | 4.99 | 4.36 | 3.87 | 3.44 | 3.05 | 2.72 | |
| 0.0m | 7.60a | 10 | 8.53 | 6.89 | 5.78 | 4.96 | 4.33 | 3.82 | 3.37 | 3 | - | |
| -1.0m | 10 | 10 | 8.58 | 6.91 | 5.78 | 4.96 | 4.28 | 3.75 | 3.32 | - | - | |
| -2.0m | 10 | 10 | 8.58 | 6.92 | 5.71 | 4.97 | - | - | - | - | - | |

NETWORK RAIL DUTIES

SECTOR D


LOWER SAFE WORKING LOADS

UPPER SAFE WORKING LOADS

Canted Rail
50-150mm
67% SWL
Unlocked



| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|------|------|------|-------|------|------|------|------|------|------|------|
| 7.0m | - | - | - | 3.21 | 2.69 | 2.29 | - | - | - | - | - |
| 6.0m | - | - | - | 3.09a | 2.69 | 2.3 | 1.99 | 1.72 | - | - | - |
| 5.0m | - | - | - | 2.90a | 2.62 | 2.25 | 1.95 | 1.71 | 1.5 | - | - |
| 4.0m | - | - | - | 3.07 | 2.52 | 2.15 | 1.88 | 1.66 | 1.47 | 1.31 | - |
| 3.0m | - | - | - | 2.98 | 2.45 | 2.05 | 1.8 | 1.6 | 1.43 | 1.28 | 1.15 |
| 2.0m | - | - | 3.5 | 2.81 | 2.32 | 1.96 | 1.71 | 1.54 | 1.38 | 1.25 | 1.13 |
| 1.0m | - | 4.05 | 3.21 | 2.61 | 2.19 | 1.86 | 1.65 | 1.49 | 1.35 | 1.22 | 1.11 |
| 0.0m | 4.75 | 3.69 | 2.98 | 2.46 | 2.09 | 1.83 | 1.63 | 1.46 | 1.33 | 1.21 | - |
| -1.0m | 4.6 | 3.56 | 2.9 | 2.44 | 2.09 | 1.83 | 1.63 | 1.47 | 1.34 | - | - |
| -2.0m | 4.72 | 3.68 | 3 | 2.62 | 2.17 | 1.91 | - | - | - | - | - |

| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|------|------|------|-------|------|-------|------|------|------|------|------|
| 7.0m | - | - | - | 3.21 | 2.72 | 2.29 | - | - | - | - | - |
| 6.0m | - | - | - | 3.16a | 2.73 | 2.37 | 2.03 | 1.73 | - | - | - |
| 5.0m | - | - | - | 3.15a | 2.7 | 2.35 | 2.07 | 1.78 | 1.52 | - | - |
| 4.0m | - | - | - | 3.08 | 2.66 | 2.33 | 2.06 | 1.8 | 1.54 | 1.33 | - |
| 3.0m | - | - | - | 3.03 | 2.62 | 2.3 | 2.05 | 1.78 | 1.53 | 1.32 | 1.15 |
| 2.0m | - | - | 3.53 | 3 | 2.61 | 2.30r | 2.01 | 1.75 | 1.49 | 1.3 | 1.14 |
| 1.0m | - | 4.11 | 3.43 | 2.91 | 2.52 | 2.2 | 1.93 | 1.68 | 1.45 | 1.27 | 1.11 |
| 0.0m | 4.95 | 3.95 | 3.28 | 2.79 | 2.42 | 2.11 | 1.85 | 1.6 | 1.4 | 1.23 | - |
| -1.0m | 4.89 | 3.89 | 3.21 | 2.73 | 2.35 | 2.03 | 1.76 | 1.54 | 1.36 | - | - |
| -2.0m | 4.92 | 3.98 | 3.19 | 2.69 | 2.26 | 1.96 | - | - | - | - | - |

Canted Rail
50-150mm
90% SWL
Locked



| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|
| 7.0m | - | - | - | 3.89a | 4.14a | 4.16a | - | - | - | - | - |
| 6.0m | - | - | - | 3.09a | 3.41a | 3.72a | 3.87 | 3.34 | - | - | - |
| 5.0m | - | - | - | 2.90a | 3.28a | 3.60a | 3.45r | 3.32 | 2.91 | - | - |
| 4.0m | - | - | - | 4.31a | 4.39a | 4.11r | 3.13r | 2.80r | 2.86 | 2.52 | - |
| 3.0m | - | - | - | 5.05r | 4.16r | 3.34r | 2.41r | 2.58r | 2.79 | 2.47 | 2.18 |
| 2.0m | - | - | 4.44r | 3.72r | 3.03r | 2.30r | 2.22r | 2.34r | 2.72 | 2.42 | 2.15 |
| 1.0m | - | 5.53r | 4.11r | 3.47r | 2.93r | 2.66r | 2.55r | 2.97r | 2.67 | 2.38 | 2.13 |
| 0.0m | 4.95a | 5.44a | 5.62r | 4.43r | 3.71r | 3.37r | 3.31 | 2.94 | 2.63 | 2.36 | - |
| -1.0m | 4.53a | 5.39a | 6.41a | 6.25 | 4.38 | 3.71 | 3.31 | 2.84 | 2.66 | - | - |
| -2.0m | 10 | 8.84 | 6.86 | 5.38 | 4.83 | 3.91 | - | - | - | - | - |

| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|
| 7.0m | - | - | - | 3.94a | 4.42a | 4.40a | - | - | - | - | - |
| 6.0m | - | - | - | 3.16a | 3.68a | 4.08a | 3.93 | 3.35 | - | - | - |
| 5.0m | - | - | - | 3.15a | 3.62a | 3.99a | 3.96 | 3.42 | 2.94 | - | - |
| 4.0m | - | - | - | 4.34a | 4.47a | 4.48 | 3.91 | 3.42 | 2.97 | 2.56 | - |
| 3.0m | - | - | - | 5.64r | 5.13r | 4.4 | 3.82 | 3.36 | 2.94 | 2.54 | 2.19 |
| 2.0m | - | - | 4.81r | 5.91 | 4.98 | 4.29 | 3.74 | 3.3 | 2.89 | 2.5 | 2.17 |
| 1.0m | - | 6.57r | 7.09 | 5.79r | 4.87r | 4.2 | 3.67 | 3.25 | 2.83 | 2.46 | 2.13 |
| 0.0m | 7.60a | 9.07 | 7.04 | 5.74 | 4.82 | 4.15 | 3.63 | 3.14 | 2.75 | 2.4 | - |
| -1.0m | 10 | 9.01 | 7.02 | 5.74 | 4.82 | 4.09 | 3.51 | 3.09 | 2.69 | - | - |
| -2.0m | 10 | 9 | 7 | 5.87 | 4.88 | 3.98 | - | - | - | - | - |

Max Cant + Twist
150-177mm
67% SWL
Unlocked


| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|------|------|------|------|------|------|------|------|------|------|------|
| 7.0m | - | - | - | 2.34 | 1.9 | 1.57 | - | - | - | - | - |
| 6.0m | - | - | - | 2.32 | 1.9 | 1.58 | 1.33 | 1.11 | - | - | - |
| 5.0m | - | - | - | 2.21 | 1.82 | 1.53 | 1.29 | 1.1 | 0.94 | - | - |
| 4.0m | - | - | - | 2.18 | 1.72 | 1.43 | 1.22 | 1.05 | 0.91 | 0.78 | - |
| 3.0m | - | - | - | 2.09 | 1.64 | 1.31 | 1.13 | 0.98 | 0.86 | 0.75 | 0.65 |
| 2.0m | - | - | 2.5 | 1.91 | 1.51 | 1.22 | 1.04 | 0.92 | 0.81 | 0.71 | 0.63 |
| 1.0m | - | 2.88 | 2.18 | 1.7 | 1.37 | 1.12 | 0.98 | 0.87 | 0.77 | 0.69 | 0.62 |
| 0.0m | 3.35 | 2.48 | 1.93 | 1.54 | 1.26 | 1.08 | 0.95 | 0.84 | 0.75 | 0.68 | - |
| -1.0m | 3.18 | 2.36 | 1.85 | 1.5 | 1.26 | 1.08 | 0.95 | 0.84 | 0.77 | - | - |
| -2.0m | 3.32 | 2.48 | 1.95 | 1.6 | 1.35 | 1.17 | - | - | - | - | - |

| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|------|------|------|------|------|------|------|------|------|------|------|
| 7.0m | - | - | - | 2.34 | 1.93 | 1.57 | - | - | - | - | - |
| 6.0m | - | - | - | 2.33 | 1.95 | 1.65 | 1.37 | 1.12 | - | - | - |
| 5.0m | - | - | - | 2.28 | 1.92 | 1.64 | 1.41 | 1.17 | 0.96 | - | - |
| 4.0m | - | - | - | 2.2 | 1.87 | 1.61 | 1.4 | 1.19 | 0.98 | 0.8 | - |
| 3.0m | - | - | - | 2.14 | 1.83 | 1.58 | 1.39 | 1.17 | 0.96 | 0.79 | 0.65 |
| 2.0m | - | - | 2.53 | 2.12 | 1.81 | 1.58 | 1.35 | 1.14 | 0.93 | 0.77 | 0.64 |
| 1.0m | - | 2.95 | 2.42 | 2.02 | 1.72 | 1.48 | 1.27 | 1.07 | 0.88 | 0.74 | 0.62 |
| 0.0m | 3.58 | 2.77 | 2.26 | 1.89 | 1.61 | 1.38 | 1.18 | 0.98 | 0.83 | 0.7 | - |
| -1.0m | 3.51 | 2.7 | 2.18 | 1.82 | 1.54 | 1.3 | 1.09 | 0.92 | 0.78 | - | - |
| -2.0m | 3.54 | 2.7 | 2.18 | 1.78 | 1.45 | 1.22 | - | - | - | - | - |

Max Cant + Twist
150-177mm
90% SWL
Locked


| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|
| 7.0m | - | - | - | 3.89a | 3.55 | 2.95 | - | - | - | - | - |
| 6.0m | - | - | - | 3.09a | 3.41a | 2.98 | 2.51 | 2.09 | - | - | - |
| 5.0m | - | - | - | 2.90a | 3.28a | 2.9 | 2.45 | 2.08 | 1.75 | - | - |
| 4.0m | - | - | - | 4.12 | 3.3 | 2.75 | 2.34 | 2 | 1.71 | 1.46 | - |
| 3.0m | - | - | - | 3.98 | 3.18 | 2.59 | 2.2 | 1.89 | 1.63 | 1.41 | 1.21 |
| 2.0m | - | - | 4.44r | 3.72r | 2.99 | 2.30r | 2.06 | 1.79 | 1.56 | 1.36 | 1.18 |
| 1.0m | - | 5.53r | 4.11r | 3.42 | 2.79 | 2.28 | 1.96 | 1.71 | 1.5 | 1.32 | 1.16 |
| 0.0m | 4.95a | 5.13 | 3.98 | 3.19 | 2.63 | 2.22 | 1.92 | 1.67 | 1.47 | 1.3 | - |
| -1.0m | 4.83a | 4.96 | 3.86 | 3.14 | 2.84 | 2.23 | 1.91 | 1.67 | 1.5 | - | - |
| -2.0m | 6.98 | 5.12 | 4.01 | 3.28 | 2.77 | 2.36 | - | - | - | - | - |

| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|------|------|------|-------|------|------|------|------|------|------|------|
| 7.0m | - | - | - | 3.94a | 3.59 | 2.96 | - | - | - | - | - |
| 6.0m | - | - | - | 3.16a | 3.62 | 3.07 | 2.58 | 2.11 | - | - | - |
| 5.0m | - | - | - | 3.15a | 3.57 | 3.05 | 2.64 | 2.18 | 1.79 | - | - |
| 4.0m | - | - | - | 4.15 | 3.5 | 3.01 | 2.62 | 2.21 | 1.82 | 1.49 | - |
| 3.0m | - | - | - | 4.06 | 3.44 | 2.98 | 2.59 | 2.18 | 1.79 | 1.48 | 1.22 |
| 2.0m | - | - | 4.8 | 3.97 | 3.37 | 2.9 | 2.5 | 2.13 | 1.74 | 1.44 | 1.2 |
| 1.0m | - | 5.78 | 4.62 | 3.84 | 3.26 | 2.8 | 2.41 | 2.02 | 1.67 | 1.4 | 1.16 |
| 0.0m | 7.37 | 5.56 | 4.46 | 3.7 | 3.14 | 2.69 | 2.28 | 1.89 | 1.58 | 1.34 | - |
| -1.0m | 7.27 | 5.46 | 4.34 | 3.6 | 3.04 | 2.56 | 2.13 | 1.79 | 1.52 | - | - |
| -2.0m | 7.32 | 5.45 | 4.32 | 3.54 | 2.9 | 2.44 | - | - | - | - | - |

NETWORK RAIL DUTIES

SECTOR E

LOWER SAFE WORKING LOADS

UPPER SAFE WORKING LOADS

Road
 Unlocked
 71% SWL



| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|
| 7.0m | - | - | - | 4.67a | 4.94a | 4.99a | - | - | - | - | - |
| 6.0m | - | - | - | 3.64a | 3.99a | 4.19b | 4.31a | 4.41 | - | - | - |
| 5.0m | - | - | - | 3.24a | 3.66a | 4.00a | 3.63b | 4.15a | 3.88 | - | - |
| 4.0m | - | - | - | 4.33a | 4.44a | 4.15b | 3.62b | 3.56r | 3.86 | 3.43 | - |
| 3.0m | - | - | - | 5.59b | 4.74b | 4.03r | 2.99r | 3.04r | 3.62r | 3.4 | - |
| 2.0m | - | - | - | 4.61r | 3.79r | 2.95r | 2.49r | 2.89r | 3.72r | 3.36 | 3.03 |
| 1.0m | - | 5.67r | 4.42r | 3.72r | 3.25r | 2.93r | 2.79r | 3.18r | 3.68 | 3.32 | 3.01 |
| 0.0m | 5.89a | 6.46a | 6.04r | 4.64r | 4.09r | 3.56r | 3.64r | 4.09 | 3.66 | 3.3 | - |
| -1.0m | 5.15a | 5.81a | 6.34a | 6.30r | 5.00r | 4.84r | 4.82 | 4.06 | 3.85 | - | - |
| -2.0m | 10 | 10 | 9.82 | 7.73 | 6.36 | 5.41 | 4.71 | - | - | - | - |

| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|
| 7.0m | - | - | - | 4.77a | 5.13a | 5.08a | - | - | - | - | - |
| 6.0m | - | - | - | 3.68a | 4.25a | 4.56b | 4.63a | 4.42 | - | - | - |
| 5.0m | - | - | - | 3.46a | 4.01a | 4.38a | 4.54b | 4.48 | 3.9 | - | - |
| 4.0m | - | - | - | 4.34a | 4.62a | 4.78a | 4.86a | 4.46b | 3.93 | 3.45 | - |
| 3.0m | - | - | - | 5.96b | 6.68b | 5.8 | 5.04 | 4.43 | 3.92 | 3.44 | - |
| 2.0m | - | - | - | 6.67r | 6.75 | 5.73 | 4.97 | 4.37 | 3.88 | 3.42 | 3.04 |
| 1.0m | - | 5.67r | 7.86r | 8.04 | 6.65 | 5.66 | 4.91 | 4.32 | 3.83 | 3.38 | 3.02 |
| 0.0m | 7.59a | 10 | 10 | 8 | 6.6 | 6.61 | 4.87 | 4.28 | 3.77 | 3.34 | - |
| -1.0m | 10 | 10 | 10 | 8 | 6.6 | 6.8 | 4.83 | 4.2 | 3.7 | - | - |
| -2.0m | 10 | 10 | 10 | 8.04 | 6.6 | 6.54 | 4.76 | - | - | - | - |

Road
 Locked
 71% SWL



| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|
| 7.0m | - | - | - | 4.67a | 4.94a | 4.73 | - | - | - | - | - |
| 6.0m | - | - | - | 3.64a | 3.99a | 4.19b | 4.12 | 3.59 | - | - | - |
| 5.0m | - | - | - | 3.24a | 3.66a | 4.00a | 3.63b | 3.59 | 3.18 | - | - |
| 4.0m | - | - | - | 4.33a | 4.44a | 4.15b | 3.62b | 3.54 | 3.15 | 2.82 | - |
| 3.0m | - | - | - | 5.59b | 4.74b | 4.03r | 2.99r | 3.04r | 3.1 | 2.79 | - |
| 2.0m | - | - | - | 4.61r | 3.79r | 2.95r | 2.49r | 2.89r | 3.04 | 2.75 | 2.49 |
| 1.0m | - | 5.67r | 4.42r | 3.72r | 3.25r | 2.93r | 2.79r | 3.18r | 2.99 | 2.71 | 2.47 |
| 0.0m | 5.89a | 6.46a | 6.04r | 4.64r | 4.09r | 3.56r | 3.64r | 3.29 | 2.97 | 2.7 | - |
| -1.0m | 5.15a | 5.81a | 6.34a | 6.30r | 5.00r | 4.84r | 4.82 | 4.06 | 3.85 | - | - |
| -2.0m | 10 | 10 | 9.82 | 7.73 | 6.36 | 5.41 | 4.71 | - | - | - | - |

| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|-------|-------|------|-------|-------|-------|------|------|------|------|------|
| 7.0m | - | - | - | 4.77a | 5.13a | 4.73 | - | - | - | - | - |
| 6.0m | - | - | - | 3.68a | 4.25a | 4.56b | 4.16 | 3.59 | - | - | - |
| 5.0m | - | - | - | 3.46a | 4.01a | 4.38a | 4.19 | 3.66 | 3.19 | - | - |
| 4.0m | - | - | - | 4.34a | 4.62a | 4.76 | 4.17 | 3.68 | 3.22 | 2.83 | - |
| 3.0m | - | - | - | 5.96b | 5.46b | 4.73 | 4.13 | 3.64 | 3.22 | 2.83 | - |
| 2.0m | - | - | - | 6.35 | 5.37 | 4.64 | 4.06 | 3.6 | 3.18 | 2.8 | 2.5 |
| 1.0m | - | 5.67r | 7.6 | 6.24 | 5.28 | 4.55 | 4 | 3.54 | 3.13 | 2.77 | 2.48 |
| 0.0m | 7.59a | 9.65 | 7.53 | 6.18 | 5.22 | 4.51 | 3.95 | 3.47 | 3.07 | 2.73 | - |
| -1.0m | 10 | 9.89 | 7.52 | 6.16 | 5.2 | 4.49 | 3.87 | 3.4 | 3.01 | - | - |
| -2.0m | 10 | 9.86 | 7.48 | 6.12 | 5.14 | 4.38 | 3.81 | - | - | - | - |

Level Rail
 0-50mm
 87% SWL
 Unlocked



| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 7.0m | - | - | - | 3.89a | 4.14a | 4.16a | - | - | - | - | - |
| 6.0m | - | - | - | 3.09a | 3.41a | 3.72a | 3.88a | 3.89a | - | - | - |
| 5.0m | - | - | - | 2.90a | 3.28a | 3.60a | 3.45r | 3.61a | 3.77a | - | - |
| 4.0m | - | - | - | 4.31a | 4.39a | 4.11r | 3.13r | 2.80r | 3.47a | 3.50a | - |
| 3.0m | - | - | - | 5.05r | 4.16r | 3.34r | 2.41r | 2.58r | 3.40r | 3.86a | 3.61a |
| 2.0m | - | - | 4.44r | 3.72r | 3.03r | 2.30r | 2.22r | 2.34r | 3.46r | 4.01a | 3.65a |
| 1.0m | - | 5.53r | 4.11r | 3.47r | 2.93r | 2.66r | 2.55r | 2.97r | 3.88r | 3.82a | 4.14a |
| 0.0m | 4.95a | 5.44a | 5.62r | 4.43r | 3.71r | 3.37r | 3.42r | 4.30r | 4.86r | 4.59a | - |
| -1.0m | 4.83a | 5.36a | 6.41a | 6.88r | 5.00r | 5.18r | 5.87r | 5.46b | 4.97b | - | - |
| -2.0m | 10 | 10 | 10 | 9.48b | 8.07b | 7.03b | - | - | - | - | - |

| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 7.0m | - | - | - | 3.94a | 4.42a | 4.40a | - | - | - | - | - |
| 6.0m | - | - | - | 3.16a | 3.68a | 4.08a | 4.09a | 4.09a | - | - | - |
| 5.0m | - | - | - | 3.15a | 3.62a | 3.99a | 4.10a | 4.11a | 4.08a | - | - |
| 4.0m | - | - | - | 4.34a | 4.47a | 4.49a | 4.50a | 4.47a | 4.38a | 4.17a | - |
| 3.0m | - | - | - | 5.64r | 6.56r | 6.92b | 6.30b | 5.68a | 5.15a | 4.69a | 3.86a |
| 2.0m | - | - | 4.81r | 6.26r | 7.23r | 7.40b | 6.73b | 6.05b | 5.52b | 5.09b | 4.23a |
| 1.0m | - | 6.57r | 8.00r | 9.10r | 8.73b | 7.78b | 6.88b | 6.17b | 5.59b | 5.11b | 4.14a |
| 0.0m | 7.60a | 10 | 10 | 10 | 8.98b | 7.82b | 6.92b | 6.21b | 5.60r | 4.93b | - |
| -1.0m | 10 | 10 | 10 | 10 | 9.00b | 7.80b | 6.94b | 6.12b | 5.10b | - | - |
| -2.0m | 10 | 10 | 10 | 10 | 8.95b | 7.46b | - | - | - | - | - |

Level Rail
 0-50mm
 87% SWL
 Locked



| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 7.0m | - | - | - | 3.89a | 4.14a | 4.16a | - | - | - | - | - |
| 6.0m | - | - | - | 3.09a | 3.41a | 3.72a | 3.88a | 3.89a | - | - | - |
| 5.0m | - | - | - | 2.90a | 3.28a | 3.60a | 3.45r | 3.61a | 3.77a | - | - |
| 4.0m | - | - | - | 4.31a | 4.39a | 4.11r | 3.13r | 2.80r | 3.47a | 3.50a | - |
| 3.0m | - | - | - | 5.05r | 4.16r | 3.34r | 2.41r | 2.58r | 3.40r | 3.86a | 3.61a |
| Radius | - | - | 4.44r | 3.72r | 3.03r | 2.30r | 2.22r | 2.34r | 3.46r | 4.01a | 3.65a |
| the lift | - | 5.53r | 4.11r | 3.47r | 2.93r | 2.66r | 2.55r | 2.97r | 3.88r | 3.82a | 4.14a |
| the ma | 4.95a | 5.44a | 5.62r | 4.43r | 3.71r | 3.37r | 3.42r | 4.30r | 4.86r | 4.59a | - |
| safe w | 4.83a | 5.36a | 6.41a | 6.88r | 5.00r | 5.18r | 5.87r | 5.46b | 4.97b | - | - |
| partic | 10 | 10 | 10 | 9.48b | 8.07b | 7.03b | - | - | - | - | - |


| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 7.0m | - | - | - | 3.94a | 4.42a | 4.40a | - | - | - | - | - |
| 6.0m | - | - | - | 3.16a | 3.68a | 4.08a | 4.09a | 4.09a | - | - | - |
| 5.0m | - | - | - | 3.15a | 3.62a | 3.99a | 4.10a | 4.11a | 4.08a | - | - |
| 4.0m | - | - | - | 4.34a | 4.47a | 4.49a | 4.50a | 4.47a | 4.38a | 4.17a | - |
| 3.0m | - | - | - | 5.64r | 6.56r | 6.92b | 6.30b | 5.68a | 5.15a | 4.69a | 3.86a |
| 2.0m | - | - | 4.81r | 6.26r | 7.23r | 7.40b | 6.73b | 6.05b | 5.52b | 5.09b | 4.23a |
| 1.0m | - | 6.57r | 8.00r | 9.10r | 8.73b | 7.78b | 6.88b | 6.17b | 5.59b | 5.11b | 4.14a |
| 0.0m | 7.60a | 10 | 10 | 10 | 8.98b | 7.82b | 6.92b | 6.21b | 5.60r | 4.93b | - |
| -1.0m | 10 | 10 | 10 | 10 | 9.00b | 7.80b | 6.94b | 6.12b | 5.10b | - | - |
| -2.0m | 10 | 10 | 10 | 10 | 8.95b | 7.46b | - | - | - | - | - |

NETWORK RAIL DUTIES

SECTOR E


LOWER SAFE WORKING LOADS

UPPER SAFE WORKING LOADS

Canted Rail
50-150mm
87% SWL
Unlocked



| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 7.0m | - | - | - | 3.89a | 4.14a | 4.16a | - | - | - | - | - |
| 6.0m | - | - | - | 3.09a | 3.41a | 3.72a | 3.88a | 3.89a | - | - | - |
| 5.0m | - | - | - | 2.90a | 3.28a | 3.60a | 3.45r | 3.61a | 3.77a | - | - |
| 4.0m | - | - | - | 4.31a | 4.39a | 4.11r | 3.13r | 2.80r | 3.47a | 3.50a | - |
| 3.0m | - | - | - | 5.05r | 4.16r | 3.34r | 2.41r | 2.58r | 3.40r | 3.86a | 3.61a |
| 2.0m | - | - | 4.44r | 3.72r | 3.03r | 2.30r | 2.22r | 2.34r | 3.46r | 4.01a | 3.65a |
| 1.0m | - | 5.53r | 4.11r | 3.47r | 2.93r | 2.66r | 2.55r | 2.97r | 3.88r | 3.82a | 4.14a |
| 0.0m | 4.95a | 5.44a | 5.62r | 4.43r | 3.71r | 3.37r | 3.42r | 4.30r | 4.86r | 4.59a | - |
| -1.0m | 4.93a | 5.36a | 5.41a | 5.02r | 5.06r | 5.18r | 5.87r | 5.46b | 4.97b | - | - |
| -2.0m | 10 | 10 | 10 | 8.49b | 8.07b | 7.03b | - | - | - | - | - |

| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 7.0m | - | - | - | 3.94a | 4.42a | 4.40a | - | - | - | - | - |
| 6.0m | - | - | - | 3.16a | 3.68a | 4.08a | 4.09a | 4.09a | - | - | - |
| 5.0m | - | - | - | 3.15a | 3.62a | 3.99a | 4.10a | 4.11a | 4.08a | - | - |
| 4.0m | - | - | - | 4.34a | 4.47a | 4.49a | 4.50a | 4.47a | 4.38a | 4.17a | - |
| 3.0m | - | - | - | 5.64r | 6.56r | 6.92b | 6.30b | 5.68a | 5.15a | 4.69a | 3.86a |
| 2.0m | - | - | 4.81r | 6.26r | 7.23r | 7.40b | 6.73b | 6.05b | 5.52b | 5.09b | 4.23a |
| 1.0m | - | 6.57r | 8.00r | 9.10r | 8.73b | 7.78b | 6.88b | 6.17b | 5.59b | 5.11b | 4.14a |
| 0.0m | 7.60a | 10 | 10 | 10 | 8.98b | 7.82b | 6.92b | 6.21b | 5.60r | 4.93b | - |
| -1.0m | 10 | 10 | 10 | 10 | 9.00b | 7.80b | 6.94b | 6.12b | 5.10b | - | - |
| -2.0m | 10 | 10 | 10 | 10 | 8.95b | 7.46b | - | - | - | - | - |

Canted Rail
50-150mm
87% SWL
Locked



| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 7.0m | - | - | - | 3.89a | 4.14a | 4.16a | - | - | - | - | - |
| 6.0m | - | - | - | 3.09a | 3.41a | 3.72a | 3.88a | 3.89a | - | - | - |
| 5.0m | - | - | - | 2.90a | 3.28a | 3.60a | 3.45r | 3.61a | 3.77a | - | - |
| 4.0m | - | - | - | 4.31a | 4.39a | 4.11r | 3.13r | 2.80r | 3.47a | 3.50a | - |
| 3.0m | - | - | - | 5.05r | 4.16r | 3.34r | 2.41r | 2.58r | 3.40r | 3.86a | 3.61a |
| 2.0m | - | - | 4.44r | 3.72r | 3.03r | 2.30r | 2.22r | 2.34r | 3.46r | 4.01a | 3.65a |
| 1.0m | - | 5.53r | 4.11r | 3.47r | 2.93r | 2.66r | 2.55r | 2.97r | 3.88r | 3.82a | 4.14a |
| 0.0m | 4.95a | 5.44a | 5.62r | 4.43r | 3.71r | 3.37r | 3.42r | 4.30r | 4.86r | 4.59a | - |
| -1.0m | 4.93a | 5.36a | 5.41a | 5.02r | 5.06r | 5.18r | 5.87r | 5.46b | 4.97b | - | - |
| -2.0m | 10 | 10 | 10 | 8.49b | 8.07b | 7.03b | - | - | - | - | - |

| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 7.0m | - | - | - | 3.94a | 4.42a | 4.40a | - | - | - | - | - |
| 6.0m | - | - | - | 3.16a | 3.68a | 4.08a | 4.09a | 4.09a | - | - | - |
| 5.0m | - | - | - | 3.15a | 3.62a | 3.99a | 4.10a | 4.11a | 4.08a | - | - |
| 4.0m | - | - | - | 4.34a | 4.47a | 4.49a | 4.50a | 4.47a | 4.38a | 4.17a | - |
| 3.0m | - | - | - | 5.64r | 6.56r | 6.92b | 6.30b | 5.68a | 5.15a | 4.69a | 3.86a |
| 2.0m | - | - | 4.81r | 6.26r | 7.23r | 7.40b | 6.73b | 6.05b | 5.52b | 5.09b | 4.23a |
| 1.0m | - | 6.57r | 8.00r | 9.10r | 8.73b | 7.78b | 6.88b | 6.17b | 5.59b | 5.11b | 4.14a |
| 0.0m | 7.60a | 10 | 10 | 10 | 8.98b | 7.82b | 6.92b | 6.21b | 5.60r | 4.93b | - |
| -1.0m | 10 | 10 | 10 | 10 | 9.00b | 7.80b | 6.94b | 6.12b | 5.10b | - | - |
| -2.0m | 10 | 10 | 10 | 10 | 8.95b | 7.46b | - | - | - | - | - |

Max Cant + Twist
150-177mm
67% SWL
Unlocked


| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|------|------|------|------|------|------|------|------|------|------|------|
| 7.0m | - | - | - | 2.34 | 1.9 | 1.57 | - | - | - | - | - |
| 6.0m | - | - | - | 2.32 | 1.9 | 1.58 | 1.33 | 1.11 | - | - | - |
| 5.0m | - | - | - | 2.21 | 1.82 | 1.53 | 1.29 | 1.1 | 0.94 | - | - |
| 4.0m | - | - | - | 2.18 | 1.72 | 1.43 | 1.22 | 1.05 | 0.91 | 0.78 | - |
| 3.0m | - | - | - | 2.09 | 1.64 | 1.31 | 1.13 | 0.98 | 0.86 | 0.75 | 0.65 |
| 2.0m | - | - | 2.5 | 1.91 | 1.51 | 1.22 | 1.04 | 0.92 | 0.81 | 0.71 | 0.63 |
| 1.0m | - | 2.88 | 2.18 | 1.7 | 1.37 | 1.12 | 0.98 | 0.87 | 0.77 | 0.69 | 0.62 |
| 0.0m | 3.35 | 2.48 | 1.93 | 1.54 | 1.26 | 1.08 | 0.95 | 0.84 | 0.75 | 0.68 | - |
| -1.0m | 3.18 | 2.36 | 1.85 | 1.5 | 1.26 | 1.08 | 0.95 | 0.84 | 0.77 | - | - |
| -2.0m | 3.32 | 2.48 | 1.95 | 1.6 | 1.35 | 1.17 | - | - | - | - | - |

| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|------|------|------|------|------|------|------|------|------|------|------|
| 7.0m | - | - | - | 2.34 | 1.93 | 1.57 | - | - | - | - | - |
| 6.0m | - | - | - | 2.33 | 1.95 | 1.65 | 1.37 | 1.12 | - | - | - |
| 5.0m | - | - | - | 2.28 | 1.92 | 1.64 | 1.41 | 1.17 | 0.96 | - | - |
| 4.0m | - | - | - | 2.2 | 1.87 | 1.61 | 1.4 | 1.19 | 0.98 | 0.8 | - |
| 3.0m | - | - | - | 2.14 | 1.83 | 1.58 | 1.39 | 1.17 | 0.96 | 0.79 | 0.65 |
| 2.0m | - | - | 2.53 | 2.12 | 1.81 | 1.58 | 1.35 | 1.14 | 0.93 | 0.77 | 0.64 |
| 1.0m | - | 2.95 | 2.42 | 2.02 | 1.72 | 1.48 | 1.27 | 1.07 | 0.88 | 0.74 | 0.62 |
| 0.0m | 3.58 | 2.77 | 2.26 | 1.89 | 1.61 | 1.38 | 1.18 | 0.98 | 0.83 | 0.7 | - |
| -1.0m | 3.51 | 2.7 | 2.16 | 1.82 | 1.54 | 1.3 | 1.09 | 0.92 | 0.78 | - | - |
| -2.0m | 3.54 | 2.7 | 2.16 | 1.78 | 1.46 | 1.22 | - | - | - | - | - |

Max Cant + Twist
150-177mm
90% SWL
Locked


| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|
| 7.0m | - | - | - | 3.89a | 3.55 | 2.95 | - | - | - | - | - |
| 6.0m | - | - | - | 3.09a | 3.41a | 2.98 | 2.51 | 2.09 | - | - | - |
| 5.0m | - | - | - | 2.90a | 3.28a | 2.9 | 2.45 | 2.08 | 1.75 | - | - |
| 4.0m | - | - | - | 4.12 | 3.3 | 2.75 | 2.34 | 2 | 1.71 | 1.46 | - |
| 3.0m | - | - | - | 3.98 | 3.18 | 2.59 | 2.2 | 1.89 | 1.63 | 1.41 | 1.21 |
| 2.0m | - | - | 4.44r | 3.72r | 2.99 | 2.30r | 2.06 | 1.79 | 1.56 | 1.36 | 1.18 |
| 1.0m | - | 5.53r | 4.11r | 3.42 | 2.79 | 2.28 | 1.96 | 1.71 | 1.5 | 1.32 | 1.16 |
| 0.0m | 4.95a | 5.13 | 3.98 | 3.19 | 2.63 | 2.22 | 1.92 | 1.67 | 1.47 | 1.3 | - |
| -1.0m | 4.93a | 4.95 | 3.86 | 3.14 | 2.64 | 2.23 | 1.81 | 1.67 | 1.5 | - | - |
| -2.0m | 6.88 | 5.12 | 4.01 | 3.28 | 2.77 | 2.36 | - | - | - | - | - |

| | 2.0m | 2.5m | 3.0m | 3.5m | 4.0m | 4.5m | 5.0m | 5.5m | 6.0m | 6.5m | 7.0m |
|-------|------|------|------|-------|------|------|------|------|------|------|------|
| 7.0m | - | - | - | 3.94a | 3.59 | 2.96 | - | - | - | - | - |
| 6.0m | - | - | - | 3.16a | 3.62 | 3.07 | 2.58 | 2.11 | - | - | - |
| 5.0m | - | - | - | 3.15a | 3.57 | 3.05 | 2.64 | 2.18 | 1.79 | - | - |
| 4.0m | - | - | - | 4.15 | 3.5 | 3.01 | 2.62 | 2.21 | 1.82 | 1.49 | - |
| 3.0m | - | - | - | 4.06 | 3.44 | 2.98 | 2.59 | 2.18 | 1.79 | 1.48 | 1.22 |
| 2.0m | - | - | 4.8 | 3.97 | 3.37 | 2.9 | 2.5 | 2.13 | 1.74 | 1.44 | 1.2 |
| 1.0m | - | 5.78 | 4.62 | 3.84 | 3.26 | 2.8 | 2.41 | 2.02 | 1.67 | 1.4 | 1.16 |
| 0.0m | 7.37 | 5.56 | 4.46 | 3.7 | 3.14 | 2.69 | 2.28 | 1.89 | 1.58 | 1.34 | - |
| -1.0m | 7.27 | 5.46 | 4.34 | 3.6 | 3.04 | 2.66 | 2.13 | 1.79 | 1.62 | - | - |
| -2.0m | 7.32 | 5.45 | 4.32 | 3.54 | 2.8 | 2.44 | - | - | - | - | - |