

# PILE SECTION TENSION RESISTANCE RESULTS for ZONE 1

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## POT Data and Tests

Number of POT Tests: 5

POT Data: [15, 20, 25, 25, 25]

## Design Values

R\_t\_m\_mean: 22.00kN

R\_t\_m\_min: 15.00kN

R\_t\_k\_characteristic: 15.00kN

R\_t\_design\_R1: 15.00kN

R\_t\_design\_R4\_without\_SLS: 7.50kN

R\_t\_design\_R4\_with\_SLS: 8.82kN

## ADDITIONAL SECTIONS RESULTS

C Section 1: CSection: Width A = 250, Depth B = 110, Flange Length C = 55, Thickness T = 12,

Surface area = 0.58m<sup>2</sup>, CSection Pile Length = 1.8m

R\_t\_R1 for Section 1: 32.62kN

R\_t\_R4\_without\_SLS for Section 1: 16.31kN

R\_t\_R4\_with\_SLS for Section 1: 19.19kN

C Section 2: CSection: Width A = 200, Depth B = 100, Flange Length C = 50, Thickness T = 10,

Surface area = 0.5m<sup>2</sup>, CSection Pile Length = 1.8m

R\_t\_R1 for Section 2: 28.12kN

R\_t\_R4\_without\_SLS for Section 2: 14.06kN

R\_t\_R4\_with\_SLS for Section 2: 16.54kN

C Section 3: CSection: Width A = 180, Depth B = 90, Flange Length C = 45, Thickness T = 9, Surface area = 0.45m<sup>2</sup>, CSection Pile Length = 1.8m

R\_t\_R1 for Section 3: 25.31kN

R\_t\_R4\_without\_SLS for Section 3: 12.66kN

R\_t\_R4\_with\_SLS for Section 3: 14.89kN

C Section 4: CSection: Width A = 160, Depth B = 80, Flange Length C = 35, Thickness T = 7, Surface area = 0.39m<sup>2</sup>, CSection Pile Length = 1.8m

R\_t\_R1 for Section 4: 21.94kN

R\_t\_R4\_without\_SLS for Section 4: 10.97kN

R\_t\_R4\_with\_SLS for Section 4: 12.90kN

C Section 5: CSection: Width A = 140, Depth B = 60, Flange Length C = 30, Thickness T = 5, Surface area = 0.32m<sup>2</sup>, CSection Pile Length = 1.8m

R\_t\_R1 for Section 5: 18.00kN

R\_t\_R4\_without\_SLS for Section 5: 9.00kN

R\_t\_R4\_with\_SLS for Section 5: 10.59kN

C Section 6: CSection: Width A = 120, Depth B = 50, Flange Length C = 25, Thickness T = 5, Surface area = 0.27m<sup>2</sup>, CSection Pile Length = 1.8m

R\_t\_R1 for Section 6: 15.19kN

R\_t\_R4\_without\_SLS for Section 6: 7.59kN

R\_t\_R4\_with\_SLS for Section 6: 8.93kN

C Section 7: CSection: Width A = 100, Depth B = 45, Flange Length C = 25, Thickness T = 5, Surface  
area = 0.24m<sup>2</sup>, CSection Pile Length = 1.8m

R<sub>t\_R1</sub> for Section 7: 13.50kN

R<sub>t\_R4\_without\_SLS</sub> for Section 7: 6.75kN

R<sub>t\_R4\_with\_SLS</sub> for Section 7: 7.94kN

C Section 8: CSection: Width A = 80, Depth B = 40, Flange Length C = 12, Thickness T = 3, Surface  
area = 0.184m<sup>2</sup>, CSection Pile Length = 1.8m

R<sub>t\_R1</sub> for Section 8: 10.35kN

R<sub>t\_R4\_without\_SLS</sub> for Section 8: 5.17kN

R<sub>t\_R4\_with\_SLS</sub> for Section 8: 6.09kN

## PILE SECTION TENSION RESISTANCE RESULTS for ZONE 2

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### POT Data and Tests

Number of POT Tests: 5

POT Data: [25, 15, 12.5, 12, 15]

### Design Values

R\_t\_m\_mean: 15.90kN

R\_t\_m\_min: 12.00kN

R\_t\_k\_characteristic: 12.00kN

R\_t\_design\_R1: 12.00kN

R\_t\_design\_R4\_without\_SLS: 6.00kN

R\_t\_design\_R4\_with\_SLS: 7.06kN

### ADDITIONAL SECTIONS RESULTS

C Section 1: CSection: Width A = 250, Depth B = 110, Flange Length C = 55, Thickness T = 12,

Surface area = 0.58m<sup>2</sup>, CSection Pile Length = 1.8m

R\_t\_R1 for Section 1: 26.10kN

R\_t\_R4\_without\_SLS for Section 1: 13.05kN

R\_t\_R4\_with\_SLS for Section 1: 15.35kN

C Section 2: CSection: Width A = 200, Depth B = 100, Flange Length C = 50, Thickness T = 10,

Surface area = 0.5m<sup>2</sup>, CSection Pile Length = 1.8m

R\_t\_R1 for Section 2: 22.50kN

R\_t\_R4\_without\_SLS for Section 2: 11.25kN

R\_t\_R4\_with\_SLS for Section 2: 13.24kN

C Section 3: CSection: Width A = 180, Depth B = 90, Flange Length C = 45, Thickness T = 9, Surface area = 0.45m<sup>2</sup>, CSection Pile Length = 1.8m

R\_t\_R1 for Section 3: 20.25kN

R\_t\_R4\_without\_SLS for Section 3: 10.12kN

R\_t\_R4\_with\_SLS for Section 3: 11.91kN

C Section 4: CSection: Width A = 160, Depth B = 80, Flange Length C = 35, Thickness T = 7, Surface area = 0.39m<sup>2</sup>, CSection Pile Length = 1.8m

R\_t\_R1 for Section 4: 17.55kN

R\_t\_R4\_without\_SLS for Section 4: 8.78kN

R\_t\_R4\_with\_SLS for Section 4: 10.32kN

C Section 5: CSection: Width A = 140, Depth B = 60, Flange Length C = 30, Thickness T = 5, Surface area = 0.32m<sup>2</sup>, CSection Pile Length = 1.8m

R\_t\_R1 for Section 5: 14.40kN

R\_t\_R4\_without\_SLS for Section 5: 7.20kN

R\_t\_R4\_with\_SLS for Section 5: 8.47kN

C Section 6: CSection: Width A = 120, Depth B = 50, Flange Length C = 25, Thickness T = 5, Surface area = 0.27m<sup>2</sup>, CSection Pile Length = 1.8m

R\_t\_R1 for Section 6: 12.15kN

R\_t\_R4\_without\_SLS for Section 6: 6.08kN

R\_t\_R4\_with\_SLS for Section 6: 7.15kN

C Section 7: CSection: Width A = 100, Depth B = 45, Flange Length C = 25, Thickness T = 5, Surface  
area = 0.24m<sup>2</sup>, CSection Pile Length = 1.8m

R<sub>t\_R1</sub> for Section 7: 10.80kN

R<sub>t\_R4\_without\_SLS</sub> for Section 7: 5.40kN

R<sub>t\_R4\_with\_SLS</sub> for Section 7: 6.35kN

C Section 8: CSection: Width A = 80, Depth B = 40, Flange Length C = 12, Thickness T = 3, Surface  
area = 0.184m<sup>2</sup>, CSection Pile Length = 1.8m

R<sub>t\_R1</sub> for Section 8: 8.28kN

R<sub>t\_R4\_without\_SLS</sub> for Section 8: 4.14kN

R<sub>t\_R4\_with\_SLS</sub> for Section 8: 4.87kN

## PILE SECTION TENSION RESISTANCE RESULTS for ZONE 3

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### POT Data and Tests

Number of POT Tests: 5

POT Data: [25, 20, 25, 25, 15]

### Design Values

R\_t\_m\_mean: 22.00kN

R\_t\_m\_min: 15.00kN

R\_t\_k\_characteristic: 15.00kN

R\_t\_design\_R1: 15.00kN

R\_t\_design\_R4\_without\_SLS: 7.50kN

R\_t\_design\_R4\_with\_SLS: 8.82kN

### ADDITIONAL SECTIONS RESULTS

C Section 1: CSection: Width A = 250, Depth B = 110, Flange Length C = 55, Thickness T = 12,

Surface area = 0.58m<sup>2</sup>, CSection Pile Length = 1.8m

R\_t\_R1 for Section 1: 32.62kN

R\_t\_R4\_without\_SLS for Section 1: 16.31kN

R\_t\_R4\_with\_SLS for Section 1: 19.19kN

C Section 2: CSection: Width A = 200, Depth B = 100, Flange Length C = 50, Thickness T = 10,

Surface area = 0.5m<sup>2</sup>, CSection Pile Length = 1.8m

R\_t\_R1 for Section 2: 28.12kN

R\_t\_R4\_without\_SLS for Section 2: 14.06kN

R\_t\_R4\_with\_SLS for Section 2: 16.54kN

C Section 3: CSection: Width A = 180, Depth B = 90, Flange Length C = 45, Thickness T = 9, Surface area = 0.45m<sup>2</sup>, CSection Pile Length = 1.8m

R\_t\_R1 for Section 3: 25.31kN

R\_t\_R4\_without\_SLS for Section 3: 12.66kN

R\_t\_R4\_with\_SLS for Section 3: 14.89kN

C Section 4: CSection: Width A = 160, Depth B = 80, Flange Length C = 35, Thickness T = 7, Surface area = 0.39m<sup>2</sup>, CSection Pile Length = 1.8m

R\_t\_R1 for Section 4: 21.94kN

R\_t\_R4\_without\_SLS for Section 4: 10.97kN

R\_t\_R4\_with\_SLS for Section 4: 12.90kN

C Section 5: CSection: Width A = 140, Depth B = 60, Flange Length C = 30, Thickness T = 5, Surface area = 0.32m<sup>2</sup>, CSection Pile Length = 1.8m

R\_t\_R1 for Section 5: 18.00kN

R\_t\_R4\_without\_SLS for Section 5: 9.00kN

R\_t\_R4\_with\_SLS for Section 5: 10.59kN

C Section 6: CSection: Width A = 120, Depth B = 50, Flange Length C = 25, Thickness T = 5, Surface area = 0.27m<sup>2</sup>, CSection Pile Length = 1.8m

R\_t\_R1 for Section 6: 15.19kN

R\_t\_R4\_without\_SLS for Section 6: 7.59kN

R\_t\_R4\_with\_SLS for Section 6: 8.93kN



C Section 7: CSection: Width A = 100, Depth B = 45, Flange Length C = 25, Thickness T = 5, Surface  
area = 0.24m<sup>2</sup>, CSection Pile Length = 1.8m

R<sub>t\_R1</sub> for Section 7: 13.50kN

R<sub>t\_R4\_without\_SLS</sub> for Section 7: 6.75kN

R<sub>t\_R4\_with\_SLS</sub> for Section 7: 7.94kN

C Section 8: CSection: Width A = 80, Depth B = 40, Flange Length C = 12, Thickness T = 3, Surface  
area = 0.184m<sup>2</sup>, CSection Pile Length = 1.8m

R<sub>t\_R1</sub> for Section 8: 10.35kN

R<sub>t\_R4\_without\_SLS</sub> for Section 8: 5.17kN

R<sub>t\_R4\_with\_SLS</sub> for Section 8: 6.09kN

## PILE SECTION TENSION RESISTANCE RESULTS for ZONE 4

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### POT Data and Tests

Number of POT Tests: 5

POT Data: [20, 16, 12.5, 20, 15]

### Design Values

R\_t\_m\_mean: 16.70kN

R\_t\_m\_min: 12.50kN

R\_t\_k\_characteristic: 12.50kN

R\_t\_design\_R1: 12.50kN

R\_t\_design\_R4\_without\_SLS: 6.25kN

R\_t\_design\_R4\_with\_SLS: 7.35kN

### ADDITIONAL SECTIONS RESULTS

C Section 1: CSection: Width A = 250, Depth B = 110, Flange Length C = 55, Thickness T = 12,

Surface area = 0.58m<sup>2</sup>, CSection Pile Length = 1.8m

R\_t\_R1 for Section 1: 27.19kN

R\_t\_R4\_without\_SLS for Section 1: 13.59kN

R\_t\_R4\_with\_SLS for Section 1: 15.99kN

C Section 2: CSection: Width A = 200, Depth B = 100, Flange Length C = 50, Thickness T = 10,

Surface area = 0.5m<sup>2</sup>, CSection Pile Length = 1.8m

R\_t\_R1 for Section 2: 23.44kN

R\_t\_R4\_without\_SLS for Section 2: 11.72kN

R\_t\_R4\_with\_SLS for Section 2: 13.79kN

C Section 3: CSection: Width A = 180, Depth B = 90, Flange Length C = 45, Thickness T = 9, Surface area = 0.45m<sup>2</sup>, CSection Pile Length = 1.8m

R\_t\_R1 for Section 3: 21.09kN

R\_t\_R4\_without\_SLS for Section 3: 10.55kN

R\_t\_R4\_with\_SLS for Section 3: 12.41kN

C Section 4: CSection: Width A = 160, Depth B = 80, Flange Length C = 35, Thickness T = 7, Surface area = 0.39m<sup>2</sup>, CSection Pile Length = 1.8m

R\_t\_R1 for Section 4: 18.28kN

R\_t\_R4\_without\_SLS for Section 4: 9.14kN

R\_t\_R4\_with\_SLS for Section 4: 10.75kN

C Section 5: CSection: Width A = 140, Depth B = 60, Flange Length C = 30, Thickness T = 5, Surface area = 0.32m<sup>2</sup>, CSection Pile Length = 1.8m

R\_t\_R1 for Section 5: 15.00kN

R\_t\_R4\_without\_SLS for Section 5: 7.50kN

R\_t\_R4\_with\_SLS for Section 5: 8.82kN

C Section 6: CSection: Width A = 120, Depth B = 50, Flange Length C = 25, Thickness T = 5, Surface area = 0.27m<sup>2</sup>, CSection Pile Length = 1.8m

R\_t\_R1 for Section 6: 12.66kN

R\_t\_R4\_without\_SLS for Section 6: 6.33kN

R\_t\_R4\_with\_SLS for Section 6: 7.44kN

C Section 7: CSection: Width A = 100, Depth B = 45, Flange Length C = 25, Thickness T = 5, Surface  
area = 0.24m<sup>2</sup>, CSection Pile Length = 1.8m

R<sub>t</sub>R<sub>1</sub> for Section 7: 11.25kN

R<sub>t</sub>R<sub>4</sub>without\_SLS for Section 7: 5.62kN

R<sub>t</sub>R<sub>4</sub>with\_SLS for Section 7: 6.62kN

C Section 8: CSection: Width A = 80, Depth B = 40, Flange Length C = 12, Thickness T = 3, Surface  
area = 0.184m<sup>2</sup>, CSection Pile Length = 1.8m

R<sub>t</sub>R<sub>1</sub> for Section 8: 8.62kN

R<sub>t</sub>R<sub>4</sub>without\_SLS for Section 8: 4.31kN

R<sub>t</sub>R<sub>4</sub>with\_SLS for Section 8: 5.07kN

# PILE SECTION LATERAL RESISTANCE RESULTS for ZONE 1

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## POT Data and Tests

Number of POT Tests: 5

POT Data: [5, 5, 5, 5, 5]

## Design Values

R\_I\_m\_mean: 5.00kN

R\_I\_m\_min: 5.00kN

R\_I\_k\_characteristic: 4.07kN

R\_I\_design\_R1: 4.07kN

R\_I\_design\_R4\_without\_SLS: 2.72kN

R\_I\_design\_R4\_with\_SLS: 2.72kN

## Lateral Resistance Results

C Section 1: CSection: Width A = 250, Depth B = 110, Flange Length C = 55, Thickness T = 12,

Surface area = 0.58m<sup>2</sup>, CSection Pile Length = 1.8m

R\_I\_R1 for Section 1: 10.19kN

R\_I\_R4\_without\_SLS for Section 1: 6.79kN

R\_I\_R4\_with\_SLS for Section 1: 6.79kN

C Section 2: CSection: Width A = 200, Depth B = 100, Flange Length C = 50, Thickness T = 10,

Surface area = 0.5m<sup>2</sup>, CSection Pile Length = 1.8m

R\_I\_R1 for Section 2: 8.15kN

R\_I\_R4\_without\_SLS for Section 2: 5.43kN

R\_I\_R4\_with\_SLS for Section 2: 5.43kN

C Section 3: CSection: Width A = 180, Depth B = 90, Flange Length C = 45, Thickness T = 9, Surface area = 0.45m<sup>2</sup>, CSection Pile Length = 1.8m

R\_I\_R1 for Section 3: 7.33kN

R\_I\_R4\_without\_SLS for Section 3: 4.89kN

R\_I\_R4\_with\_SLS for Section 3: 4.89kN

C Section 4: CSection: Width A = 160, Depth B = 80, Flange Length C = 35, Thickness T = 7, Surface area = 0.39m<sup>2</sup>, CSection Pile Length = 1.8m

R\_I\_R1 for Section 4: 6.52kN

R\_I\_R4\_without\_SLS for Section 4: 4.35kN

R\_I\_R4\_with\_SLS for Section 4: 4.35kN

C Section 5: CSection: Width A = 140, Depth B = 60, Flange Length C = 30, Thickness T = 5, Surface area = 0.32m<sup>2</sup>, CSection Pile Length = 1.8m

R\_I\_R1 for Section 5: 5.70kN

R\_I\_R4\_without\_SLS for Section 5: 3.80kN

R\_I\_R4\_with\_SLS for Section 5: 3.80kN

C Section 6: CSection: Width A = 120, Depth B = 50, Flange Length C = 25, Thickness T = 5, Surface area = 0.27m<sup>2</sup>, CSection Pile Length = 1.8m

R\_I\_R1 for Section 6: 4.89kN

R\_I\_R4\_without\_SLS for Section 6: 3.26kN

R\_I\_R4\_with\_SLS for Section 6: 3.26kN

C Section 7: CSection: Width A = 100, Depth B = 45, Flange Length C = 25, Thickness T = 5, Surface  
area = 0.24m<sup>2</sup>, CSection Pile Length = 1.8m

R\_I\_R1 for Section 7: 4.07kN

R\_I\_R4\_without\_SLS for Section 7: 2.72kN

R\_I\_R4\_with\_SLS for Section 7: 2.72kN

C Section 8: CSection: Width A = 80, Depth B = 40, Flange Length C = 12, Thickness T = 3, Surface  
area = 0.184m<sup>2</sup>, CSection Pile Length = 1.8m

R\_I\_R1 for Section 8: 3.26kN

R\_I\_R4\_without\_SLS for Section 8: 2.17kN

R\_I\_R4\_with\_SLS for Section 8: 2.17kN

## PILE SECTION LATERAL RESISTANCE RESULTS for ZONE 2

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### POT Data and Tests

Number of POT Tests: 5

POT Data: [5, 5, 5, 5, 5]

### Design Values

R\_I\_m\_mean: 5.00kN

R\_I\_m\_min: 5.00kN

R\_I\_k\_characteristic: 4.07kN

R\_I\_design\_R1: 4.07kN

R\_I\_design\_R4\_without\_SLS: 2.72kN

R\_I\_design\_R4\_with\_SLS: 2.72kN

### Lateral Resistance Results

C Section 1: CSection: Width A = 250, Depth B = 110, Flange Length C = 55, Thickness T = 12,

Surface area = 0.58m<sup>2</sup>, CSection Pile Length = 1.8m

R\_I\_R1 for Section 1: 10.19kN

R\_I\_R4\_without\_SLS for Section 1: 6.79kN

R\_I\_R4\_with\_SLS for Section 1: 6.79kN

C Section 2: CSection: Width A = 200, Depth B = 100, Flange Length C = 50, Thickness T = 10,

Surface area = 0.5m<sup>2</sup>, CSection Pile Length = 1.8m

R\_I\_R1 for Section 2: 8.15kN



R\_I\_R4\_without\_SLS for Section 2: 5.43kN

R\_I\_R4\_with\_SLS for Section 2: 5.43kN

C Section 3: CSection: Width A = 180, Depth B = 90, Flange Length C = 45, Thickness T = 9, Surface area = 0.45m<sup>2</sup>, CSection Pile Length = 1.8m

R\_I\_R1 for Section 3: 7.33kN

R\_I\_R4\_without\_SLS for Section 3: 4.89kN

R\_I\_R4\_with\_SLS for Section 3: 4.89kN

C Section 4: CSection: Width A = 160, Depth B = 80, Flange Length C = 35, Thickness T = 7, Surface area = 0.39m<sup>2</sup>, CSection Pile Length = 1.8m

R\_I\_R1 for Section 4: 6.52kN

R\_I\_R4\_without\_SLS for Section 4: 4.35kN

R\_I\_R4\_with\_SLS for Section 4: 4.35kN

C Section 5: CSection: Width A = 140, Depth B = 60, Flange Length C = 30, Thickness T = 5, Surface area = 0.32m<sup>2</sup>, CSection Pile Length = 1.8m

R\_I\_R1 for Section 5: 5.70kN

R\_I\_R4\_without\_SLS for Section 5: 3.80kN

R\_I\_R4\_with\_SLS for Section 5: 3.80kN

C Section 6: CSection: Width A = 120, Depth B = 50, Flange Length C = 25, Thickness T = 5, Surface area = 0.27m<sup>2</sup>, CSection Pile Length = 1.8m

R\_I\_R1 for Section 6: 4.89kN

R\_I\_R4\_without\_SLS for Section 6: 3.26kN

R\_I\_R4\_with\_SLS for Section 6: 3.26kN

C Section 7: CSection: Width A = 100, Depth B = 45, Flange Length C = 25, Thickness T = 5, Surface  
area = 0.24m<sup>2</sup>, CSection Pile Length = 1.8m

R\_I\_R1 for Section 7: 4.07kN

R\_I\_R4\_without\_SLS for Section 7: 2.72kN

R\_I\_R4\_with\_SLS for Section 7: 2.72kN

C Section 8: CSection: Width A = 80, Depth B = 40, Flange Length C = 12, Thickness T = 3, Surface  
area = 0.184m<sup>2</sup>, CSection Pile Length = 1.8m

R\_I\_R1 for Section 8: 3.26kN

R\_I\_R4\_without\_SLS for Section 8: 2.17kN

R\_I\_R4\_with\_SLS for Section 8: 2.17kN

## PILE SECTION LATERAL RESISTANCE RESULTS for ZONE 3

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### POT Data and Tests

Number of POT Tests: 5

POT Data: [5, 5, 5, 5, 7.5]

### Design Values

R\_I\_m\_mean: 5.50kN

R\_I\_m\_min: 5.00kN

R\_I\_k\_characteristic: 4.48kN

R\_I\_design\_R1: 4.48kN

R\_I\_design\_R4\_without\_SLS: 2.99kN

R\_I\_design\_R4\_with\_SLS: 2.99kN

### Lateral Resistance Results

C Section 1: CSection: Width A = 250, Depth B = 110, Flange Length C = 55, Thickness T = 12,

Surface area = 0.58m<sup>2</sup>, CSection Pile Length = 1.8m

R\_I\_R1 for Section 1: 11.20kN

R\_I\_R4\_without\_SLS for Section 1: 7.47kN

R\_I\_R4\_with\_SLS for Section 1: 7.47kN

C Section 2: CSection: Width A = 200, Depth B = 100, Flange Length C = 50, Thickness T = 10,

Surface area = 0.5m<sup>2</sup>, CSection Pile Length = 1.8m

R\_I\_R1 for Section 2: 8.96kN

R\_I\_R4\_without\_SLS for Section 2: 5.98kN

R\_I\_R4\_with\_SLS for Section 2: 5.98kN

C Section 3: CSection: Width A = 180, Depth B = 90, Flange Length C = 45, Thickness T = 9, Surface area = 0.45m<sup>2</sup>, CSection Pile Length = 1.8m

R\_I\_R1 for Section 3: 8.07kN

R\_I\_R4\_without\_SLS for Section 3: 5.38kN

R\_I\_R4\_with\_SLS for Section 3: 5.38kN

C Section 4: CSection: Width A = 160, Depth B = 80, Flange Length C = 35, Thickness T = 7, Surface area = 0.39m<sup>2</sup>, CSection Pile Length = 1.8m

R\_I\_R1 for Section 4: 7.17kN

R\_I\_R4\_without\_SLS for Section 4: 4.78kN

R\_I\_R4\_with\_SLS for Section 4: 4.78kN

C Section 5: CSection: Width A = 140, Depth B = 60, Flange Length C = 30, Thickness T = 5, Surface area = 0.32m<sup>2</sup>, CSection Pile Length = 1.8m

R\_I\_R1 for Section 5: 6.27kN

R\_I\_R4\_without\_SLS for Section 5: 4.18kN

R\_I\_R4\_with\_SLS for Section 5: 4.18kN

C Section 6: CSection: Width A = 120, Depth B = 50, Flange Length C = 25, Thickness T = 5, Surface area = 0.27m<sup>2</sup>, CSection Pile Length = 1.8m

R\_I\_R1 for Section 6: 5.38kN

R\_I\_R4\_without\_SLS for Section 6: 3.59kN

R\_I\_R4\_with\_SLS for Section 6: 3.59kN

C Section 7: CSection: Width A = 100, Depth B = 45, Flange Length C = 25, Thickness T = 5, Surface  
area = 0.24m<sup>2</sup>, CSection Pile Length = 1.8m

R\_I\_R1 for Section 7: 4.48kN

R\_I\_R4\_without\_SLS for Section 7: 2.99kN

R\_I\_R4\_with\_SLS for Section 7: 2.99kN

C Section 8: CSection: Width A = 80, Depth B = 40, Flange Length C = 12, Thickness T = 3, Surface  
area = 0.184m<sup>2</sup>, CSection Pile Length = 1.8m

R\_I\_R1 for Section 8: 3.59kN

R\_I\_R4\_without\_SLS for Section 8: 2.39kN

R\_I\_R4\_with\_SLS for Section 8: 2.39kN

# PILE SECTION LATERAL RESISTANCE RESULTS for ZONE 4

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## POT Data and Tests

Number of POT Tests: 5

POT Data: [7.5, 7.5, 5, 5, 7.5]

## Design Values

R\_I\_m\_mean: 6.50kN

R\_I\_m\_min: 5.00kN

R\_I\_k\_characteristic: 5.00kN

R\_I\_design\_R1: 5.00kN

R\_I\_design\_R4\_without\_SLS: 3.33kN

R\_I\_design\_R4\_with\_SLS: 3.33kN

## Lateral Resistance Results

C Section 1: CSection: Width A = 250, Depth B = 110, Flange Length C = 55, Thickness T = 12,

Surface area = 0.58m<sup>2</sup>, CSection Pile Length = 1.8m

R\_I\_R1 for Section 1: 12.50kN

R\_I\_R4\_without\_SLS for Section 1: 8.33kN

R\_I\_R4\_with\_SLS for Section 1: 8.33kN

C Section 2: CSection: Width A = 200, Depth B = 100, Flange Length C = 50, Thickness T = 10,

Surface area = 0.5m<sup>2</sup>, CSection Pile Length = 1.8m

R\_I\_R1 for Section 2: 10.00kN

R\_I\_R4\_without\_SLS for Section 2: 6.67kN

R\_I\_R4\_with\_SLS for Section 2: 6.67kN

C Section 3: CSection: Width A = 180, Depth B = 90, Flange Length C = 45, Thickness T = 9, Surface area = 0.45m<sup>2</sup>, CSection Pile Length = 1.8m

R\_I\_R1 for Section 3: 9.00kN

R\_I\_R4\_without\_SLS for Section 3: 6.00kN

R\_I\_R4\_with\_SLS for Section 3: 6.00kN

C Section 4: CSection: Width A = 160, Depth B = 80, Flange Length C = 35, Thickness T = 7, Surface area = 0.39m<sup>2</sup>, CSection Pile Length = 1.8m

R\_I\_R1 for Section 4: 8.00kN

R\_I\_R4\_without\_SLS for Section 4: 5.33kN

R\_I\_R4\_with\_SLS for Section 4: 5.33kN

C Section 5: CSection: Width A = 140, Depth B = 60, Flange Length C = 30, Thickness T = 5, Surface area = 0.32m<sup>2</sup>, CSection Pile Length = 1.8m

R\_I\_R1 for Section 5: 7.00kN

R\_I\_R4\_without\_SLS for Section 5: 4.67kN

R\_I\_R4\_with\_SLS for Section 5: 4.67kN

C Section 6: CSection: Width A = 120, Depth B = 50, Flange Length C = 25, Thickness T = 5, Surface area = 0.27m<sup>2</sup>, CSection Pile Length = 1.8m

R\_I\_R1 for Section 6: 6.00kN

R\_I\_R4\_without\_SLS for Section 6: 4.00kN

R\_I\_R4\_with\_SLS for Section 6: 4.00kN

C Section 7: CSection: Width A = 100, Depth B = 45, Flange Length C = 25, Thickness T = 5, Surface  
area = 0.24m<sup>2</sup>, CSection Pile Length = 1.8m

R\_I\_R1 for Section 7: 5.00kN

R\_I\_R4\_without\_SLS for Section 7: 3.33kN

R\_I\_R4\_with\_SLS for Section 7: 3.33kN

C Section 8: CSection: Width A = 80, Depth B = 40, Flange Length C = 12, Thickness T = 3, Surface  
area = 0.184m<sup>2</sup>, CSection Pile Length = 1.8m

R\_I\_R1 for Section 8: 4.00kN

R\_I\_R4\_without\_SLS for Section 8: 2.67kN

R\_I\_R4\_with\_SLS for Section 8: 2.67kN



# PILE SECTION COMPRESSION RESISTANCE RESULTS for ZONE 1

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## POT Data and Tests

Number of POT Tests: 5

POT Data: [15, 20, 25, 25, 25]

## Design Values

R\_c\_m\_mean: 22.00kN

R\_c\_m\_min: 15.00kN

R\_c\_k\_characteristic: 15.00kN

R\_c\_design\_R1: 15.00kN

R\_c\_design\_R4\_without\_SLS: 10.00kN

R\_c\_design\_R4\_with\_SLS: 11.54kN

## Lateral Resistance Results

C Section 1: CSection: Width A = 250, Depth B = 110, Flange Length C = 55, Thickness T = 12,

Surface area = 0.58m<sup>2</sup>, CSection Pile Length = 1.8m

R\_c\_R1 for Section 1: 36.25kN

R\_c\_R4\_without\_SLS for Section 1: 24.17kN

R\_c\_R4\_with\_SLS for Section 1: 27.88kN

C Section 2: CSection: Width A = 200, Depth B = 100, Flange Length C = 50, Thickness T = 10,

Surface area = 0.5m<sup>2</sup>, CSection Pile Length = 1.8m

R\_c\_R1 for Section 2: 31.25kN

R\_c\_R4\_without\_SLS for Section 2: 20.83kN

R\_c\_R4\_with\_SLS for Section 2: 24.04kN

C Section 3: CSection: Width A = 180, Depth B = 90, Flange Length C = 45, Thickness T = 9, Surface area = 0.45m<sup>2</sup>, CSection Pile Length = 1.8m

R\_c\_R1 for Section 3: 28.12kN

R\_c\_R4\_without\_SLS for Section 3: 18.75kN

R\_c\_R4\_with\_SLS for Section 3: 21.63kN

C Section 4: CSection: Width A = 160, Depth B = 80, Flange Length C = 35, Thickness T = 7, Surface area = 0.39m<sup>2</sup>, CSection Pile Length = 1.8m

R\_c\_R1 for Section 4: 24.38kN

R\_c\_R4\_without\_SLS for Section 4: 16.25kN

R\_c\_R4\_with\_SLS for Section 4: 18.75kN

C Section 5: CSection: Width A = 140, Depth B = 60, Flange Length C = 30, Thickness T = 5, Surface area = 0.32m<sup>2</sup>, CSection Pile Length = 1.8m

R\_c\_R1 for Section 5: 20.00kN

R\_c\_R4\_without\_SLS for Section 5: 13.33kN

R\_c\_R4\_with\_SLS for Section 5: 15.38kN

C Section 6: CSection: Width A = 120, Depth B = 50, Flange Length C = 25, Thickness T = 5, Surface area = 0.27m<sup>2</sup>, CSection Pile Length = 1.8m

R\_c\_R1 for Section 6: 16.88kN

R\_c\_R4\_without\_SLS for Section 6: 11.25kN

R\_c\_R4\_with\_SLS for Section 6: 12.98kN

C Section 7: CSection: Width A = 100, Depth B = 45, Flange Length C = 25, Thickness T = 5, Surface area = 0.24m<sup>2</sup>, CSection Pile Length = 1.8m

R\_c\_R1 for Section 7: 15.00kN

R\_c\_R4\_without\_SLS for Section 7: 10.00kN

R\_c\_R4\_with\_SLS for Section 7: 11.54kN

C Section 8: CSection: Width A = 80, Depth B = 40, Flange Length C = 12, Thickness T = 3, Surface area = 0.184m<sup>2</sup>, CSection Pile Length = 1.8m

R\_c\_R1 for Section 8: 11.50kN

R\_c\_R4\_without\_SLS for Section 8: 7.67kN

R\_c\_R4\_with\_SLS for Section 8: 8.85kN

## PILE SECTION COMPRESSION RESISTANCE RESULTS for ZONE 2

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### POT Data and Tests

Number of POT Tests: 5

POT Data: [25, 15, 12.5, 12, 15]

### Design Values

R\_c\_m\_mean: 15.90kN

R\_c\_m\_min: 12.00kN

R\_c\_k\_characteristic: 12.00kN

R\_c\_design\_R1: 12.00kN

R\_c\_design\_R4\_without\_SLS: 8.00kN

R\_c\_design\_R4\_with\_SLS: 9.23kN

### Lateral Resistance Results

C Section 1: CSection: Width A = 250, Depth B = 110, Flange Length C = 55, Thickness T = 12,

Surface area = 0.58m<sup>2</sup>, CSection Pile Length = 1.8m

R\_c\_R1 for Section 1: 29.00kN

R\_c\_R4\_without\_SLS for Section 1: 19.33kN

R\_c\_R4\_with\_SLS for Section 1: 22.31kN

C Section 2: CSection: Width A = 200, Depth B = 100, Flange Length C = 50, Thickness T = 10,

Surface area = 0.5m<sup>2</sup>, CSection Pile Length = 1.8m

R\_c\_R1 for Section 2: 25.00kN

R\_c\_R4\_without\_SLS for Section 2: 16.67kN

R\_c\_R4\_with\_SLS for Section 2: 19.23kN

C Section 3: CSection: Width A = 180, Depth B = 90, Flange Length C = 45, Thickness T = 9, Surface area = 0.45m<sup>2</sup>, CSection Pile Length = 1.8m

R\_c\_R1 for Section 3: 22.50kN

R\_c\_R4\_without\_SLS for Section 3: 15.00kN

R\_c\_R4\_with\_SLS for Section 3: 17.31kN

C Section 4: CSection: Width A = 160, Depth B = 80, Flange Length C = 35, Thickness T = 7, Surface area = 0.39m<sup>2</sup>, CSection Pile Length = 1.8m

R\_c\_R1 for Section 4: 19.50kN

R\_c\_R4\_without\_SLS for Section 4: 13.00kN

R\_c\_R4\_with\_SLS for Section 4: 15.00kN

C Section 5: CSection: Width A = 140, Depth B = 60, Flange Length C = 30, Thickness T = 5, Surface area = 0.32m<sup>2</sup>, CSection Pile Length = 1.8m

R\_c\_R1 for Section 5: 16.00kN

R\_c\_R4\_without\_SLS for Section 5: 10.67kN

R\_c\_R4\_with\_SLS for Section 5: 12.31kN

C Section 6: CSection: Width A = 120, Depth B = 50, Flange Length C = 25, Thickness T = 5, Surface area = 0.27m<sup>2</sup>, CSection Pile Length = 1.8m

R\_c\_R1 for Section 6: 13.50kN

R\_c\_R4\_without\_SLS for Section 6: 9.00kN

R\_c\_R4\_with\_SLS for Section 6: 10.38kN

C Section 7: CSection: Width A = 100, Depth B = 45, Flange Length C = 25, Thickness T = 5, Surface  
area = 0.24m<sup>2</sup>, CSection Pile Length = 1.8m

R\_c\_R1 for Section 7: 12.00kN

R\_c\_R4\_without\_SLS for Section 7: 8.00kN

R\_c\_R4\_with\_SLS for Section 7: 9.23kN

C Section 8: CSection: Width A = 80, Depth B = 40, Flange Length C = 12, Thickness T = 3, Surface  
area = 0.184m<sup>2</sup>, CSection Pile Length = 1.8m

R\_c\_R1 for Section 8: 9.20kN

R\_c\_R4\_without\_SLS for Section 8: 6.13kN

R\_c\_R4\_with\_SLS for Section 8: 7.08kN

## PILE SECTION COMPRESSION RESISTANCE RESULTS for ZONE 3

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### POT Data and Tests

Number of POT Tests: 5

POT Data: [25, 20, 25, 25, 15]

### Design Values

R\_c\_m\_mean: 22.00kN

R\_c\_m\_min: 15.00kN

R\_c\_k\_characteristic: 15.00kN

R\_c\_design\_R1: 15.00kN

R\_c\_design\_R4\_without\_SLS: 10.00kN

R\_c\_design\_R4\_with\_SLS: 11.54kN

### Lateral Resistance Results

C Section 1: CSection: Width A = 250, Depth B = 110, Flange Length C = 55, Thickness T = 12,

Surface area = 0.58m<sup>2</sup>, CSection Pile Length = 1.8m

R\_c\_R1 for Section 1: 36.25kN

R\_c\_R4\_without\_SLS for Section 1: 24.17kN

R\_c\_R4\_with\_SLS for Section 1: 27.88kN

C Section 2: CSection: Width A = 200, Depth B = 100, Flange Length C = 50, Thickness T = 10,

Surface area = 0.5m<sup>2</sup>, CSection Pile Length = 1.8m

R\_c\_R1 for Section 2: 31.25kN

R\_c\_R4\_without\_SLS for Section 2: 20.83kN

R\_c\_R4\_with\_SLS for Section 2: 24.04kN

C Section 3: CSection: Width A = 180, Depth B = 90, Flange Length C = 45, Thickness T = 9, Surface area = 0.45m<sup>2</sup>, CSection Pile Length = 1.8m

R\_c\_R1 for Section 3: 28.12kN

R\_c\_R4\_without\_SLS for Section 3: 18.75kN

R\_c\_R4\_with\_SLS for Section 3: 21.63kN

C Section 4: CSection: Width A = 160, Depth B = 80, Flange Length C = 35, Thickness T = 7, Surface area = 0.39m<sup>2</sup>, CSection Pile Length = 1.8m

R\_c\_R1 for Section 4: 24.38kN

R\_c\_R4\_without\_SLS for Section 4: 16.25kN

R\_c\_R4\_with\_SLS for Section 4: 18.75kN

C Section 5: CSection: Width A = 140, Depth B = 60, Flange Length C = 30, Thickness T = 5, Surface area = 0.32m<sup>2</sup>, CSection Pile Length = 1.8m

R\_c\_R1 for Section 5: 20.00kN

R\_c\_R4\_without\_SLS for Section 5: 13.33kN

R\_c\_R4\_with\_SLS for Section 5: 15.38kN

C Section 6: CSection: Width A = 120, Depth B = 50, Flange Length C = 25, Thickness T = 5, Surface area = 0.27m<sup>2</sup>, CSection Pile Length = 1.8m

R\_c\_R1 for Section 6: 16.88kN

R\_c\_R4\_without\_SLS for Section 6: 11.25kN

R\_c\_R4\_with\_SLS for Section 6: 12.98kN



C Section 7: CSection: Width A = 100, Depth B = 45, Flange Length C = 25, Thickness T = 5, Surface  
area = 0.24m<sup>2</sup>, CSection Pile Length = 1.8m

R\_c\_R1 for Section 7: 15.00kN

R\_c\_R4\_without\_SLS for Section 7: 10.00kN

R\_c\_R4\_with\_SLS for Section 7: 11.54kN

C Section 8: CSection: Width A = 80, Depth B = 40, Flange Length C = 12, Thickness T = 3, Surface  
area = 0.184m<sup>2</sup>, CSection Pile Length = 1.8m

R\_c\_R1 for Section 8: 11.50kN

R\_c\_R4\_without\_SLS for Section 8: 7.67kN

R\_c\_R4\_with\_SLS for Section 8: 8.85kN

# PILE SECTION COMPRESSION RESISTANCE RESULTS for ZONE 4

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## POT Data and Tests

Number of POT Tests: 5

POT Data: [20, 16, 12.5, 20, 15]

## Design Values

R\_c\_m\_mean: 16.70kN

R\_c\_m\_min: 12.50kN

R\_c\_k\_characteristic: 12.50kN

R\_c\_design\_R1: 12.50kN

R\_c\_design\_R4\_without\_SLS: 8.33kN

R\_c\_design\_R4\_with\_SLS: 9.62kN

## Lateral Resistance Results

C Section 1: CSection: Width A = 250, Depth B = 110, Flange Length C = 55, Thickness T = 12,

Surface area = 0.58m<sup>2</sup>, CSection Pile Length = 1.8m

R\_c\_R1 for Section 1: 30.21kN

R\_c\_R4\_without\_SLS for Section 1: 20.14kN

R\_c\_R4\_with\_SLS for Section 1: 23.24kN

C Section 2: CSection: Width A = 200, Depth B = 100, Flange Length C = 50, Thickness T = 10,

Surface area = 0.5m<sup>2</sup>, CSection Pile Length = 1.8m

R\_c\_R1 for Section 2: 26.04kN

R\_c\_R4\_without\_SLS for Section 2: 17.36kN

R\_c\_R4\_with\_SLS for Section 2: 20.03kN

C Section 3: CSection: Width A = 180, Depth B = 90, Flange Length C = 45, Thickness T = 9, Surface area = 0.45m<sup>2</sup>, CSection Pile Length = 1.8m

R\_c\_R1 for Section 3: 23.44kN

R\_c\_R4\_without\_SLS for Section 3: 15.63kN

R\_c\_R4\_with\_SLS for Section 3: 18.03kN

C Section 4: CSection: Width A = 160, Depth B = 80, Flange Length C = 35, Thickness T = 7, Surface area = 0.39m<sup>2</sup>, CSection Pile Length = 1.8m

R\_c\_R1 for Section 4: 20.31kN

R\_c\_R4\_without\_SLS for Section 4: 13.54kN

R\_c\_R4\_with\_SLS for Section 4: 15.63kN

C Section 5: CSection: Width A = 140, Depth B = 60, Flange Length C = 30, Thickness T = 5, Surface area = 0.32m<sup>2</sup>, CSection Pile Length = 1.8m

R\_c\_R1 for Section 5: 16.67kN

R\_c\_R4\_without\_SLS for Section 5: 11.11kN

R\_c\_R4\_with\_SLS for Section 5: 12.82kN

C Section 6: CSection: Width A = 120, Depth B = 50, Flange Length C = 25, Thickness T = 5, Surface area = 0.27m<sup>2</sup>, CSection Pile Length = 1.8m

R\_c\_R1 for Section 6: 14.06kN

R\_c\_R4\_without\_SLS for Section 6: 9.38kN

R\_c\_R4\_with\_SLS for Section 6: 10.82kN

C Section 7: CSection: Width  $A = 100$ , Depth  $B = 45$ , Flange Length  $C = 25$ , Thickness  $T = 5$ , Surface area =  $0.24\text{m}^2$ , CSection Pile Length =  $1.8\text{m}$

R\_c\_R1 for Section 7:  $12.50\text{kN}$

R\_c\_R4\_without\_SLS for Section 7:  $8.33\text{kN}$

R\_c\_R4\_with\_SLS for Section 7:  $9.62\text{kN}$

C Section 8: CSection: Width  $A = 80$ , Depth  $B = 40$ , Flange Length  $C = 12$ , Thickness  $T = 3$ , Surface area =  $0.184\text{m}^2$ , CSection Pile Length =  $1.8\text{m}$

R\_c\_R1 for Section 8:  $9.58\text{kN}$

R\_c\_R4\_without\_SLS for Section 8:  $6.39\text{kN}$

R\_c\_R4\_with\_SLS for Section 8:  $7.37\text{kN}$