

## QUESTIONS & ANSWERS

### Question 1 : Toe Pins

Section 31 62 16.16, 2.1 Materials, identifies the size of the toe pins as:

“8.7 m long, 299 mm outside diameter, 12.7 mm min thickness”

Drawing 9 & 10, Note 4 identifies the size of the toe pins as:

“Circular HSS 324 piles to have thickness of 11.4 mm, length of 8.7 mm and outer diameter of 324 mm”

Please specify exactly what size is required in both metric and imperial dimensions.

Answer 1:

There is a discrepancy between the drawing and specification. Toe pins shall have the following final design specification:

<b>Dimension</b>	<b>Metric</b>	<b>Imperial</b>
Length	8.7 m	28.5 ft
Outer Diameter	324 mm	12.75 in
Wall Thickness	12.7 mm	0.5 in

### Question 2 : Steel Wale

- The Unit Price Table, Item No. 17, Supply and Install Steel Waler identifies the quantity as 41 metres. Our take off shows only approximately 21 metres +/- of double channel waler length. Please advise.
- Section 31 62 16.13, Steel Sheet Piles, 1.1.4 identifies that steel wales are to be included in the unit price of steel sheet piles. Please clarify.

Answer 2 :

- We will be using a double waler system. 41 m refers to the total meters of C channel. The quantity in the Unit Price Table is correct.
- Steel walers will be measured separately as per the Unit Price Table. Revise Section 31 62 16.13, Steel Sheet Piles, 1.1.4 to the following:

“Nuts, sleeve nuts, turnbuckles, pipe sleeves, bearing plates, washers, transfer bolts, and other associated hardware supplied and incorporated in Work, as indicated drawings, are to be included in unit price of steel sheet piles.”

### Question 3 : Tie Rods

Section 31 62 16.13, 2.1.5.1 identifies the tie rods as ASTM A615, Grade 413. Normally tie rods are expressed as ASTM A615, Grade 75/80 ksi. What yield stress are you looking for?

Answer 3 : Tie Rods

We are looking for a minimum Grade of 75 KSI. Minimum yield strength of 75 kips (334kN).

### Question 4 : Wale Bolts and Nuts

Section 31 62 16.13, 2.1.6 identifies material to ASTM A307. Section 05 50 00, 2.1.5 identifies Bolts and Anchor bolts to ASTM A307 galvanized. What exactly are you looking for?

Answer 4 : Wale Bolts and Nuts

Bolts and Anchor Bolts are not galvanized.

Question 5 : Galvanizing

Section 05 50 00, 2.3.1 identifies hot dip galvanizing. Please list the components that require galvanizing as nothing specifically is shown or identified as such on the plans.

Answer 5 : Galvanizing

No project items are to be galvanized.

Question 6: Elevation of Waler and Tie Rods at the Steel Sheet Pile Wall

Drawing 13 identifies the tie rod elevations as follows, N/S @ 173.45 metres and E/W @ 174.5 metres  
Exactly what is the elevation of the tie rod connection to the North steel sheet pile wall as the corner detail on Drawing 12 shows the walers meeting at the same elevation in both the NE and NW corners? Are there 2 levels of waler along the North wall of sheeting?

Answer 6: Elevation of Waler and Tie Rods at the Steel Sheet Pile Wall

Please refer to the revised drawings (12.2 & 13.2) for a corrected version of these pages. A slope of 6.6 degrees will be required for the N-S tie rod (sloping down towards the concrete anchor block).

Question 7:

Is there a safe berth provided for the floating plant required to carry out the work during the construction period? Is the Contractor subject to Harbour Fees?

Answer 7:

A suitable berth area will be arranged by DFO. More information will be provided after contract award. No Harbour Fee will be charged to the Contractor during construction.

Question 8:

Please identify the Contractor's storage area.

Answer 8:

On site storage/laydown area will be provided by DFO. More information will be provided after contract award.

Question 9:

Drawing 12 has a discrepancy between the tie rod space detailed on the section "Proposed North End of West Pier" and Note 6. Please confirm that the tie rods spacing is as shown on the detail, not note 6.

Answer 9:

The drawing detail is correct. Note 6 has been revised. Please refer to the revised drawings (12.2).