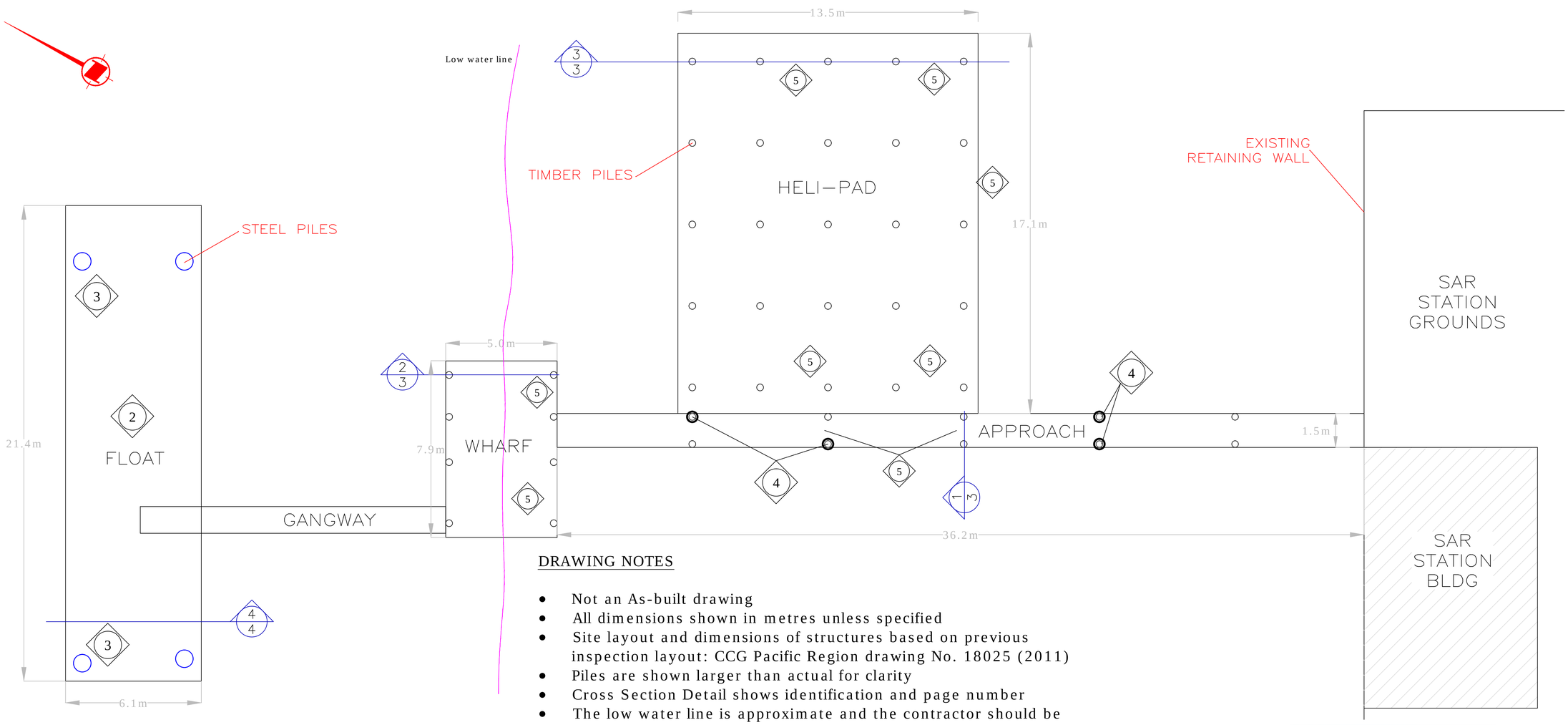


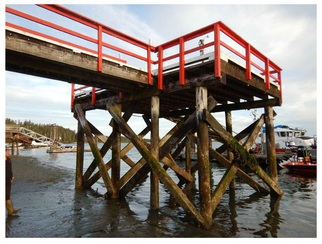
DRAWING NOTES

- Not an As-built drawing
- All dimensions shown in metres unless specified
- Site layout and dimensions of structures based on previous inspection layout: CCG Pacific Region drawing No. 18025 (2011)
- Piles are shown larger than actual for clarity
- Cross Section Detail shows identification and page number
- The low water line is approximate and the contractor should be aware that at low tide, majority of the structure will be above water as shown in photos below

Reconstruction item

- 2 — Float Decking Repairs
- 3 — Flotation Repairs
- 4 — Replacement of Timber Bearing Piles
- 5 — Cross Brace Replacement
- # / pg — Cross Section Detail

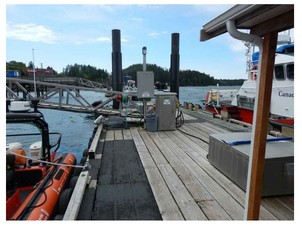
A. West side of the Approach



B. South side of the Wharfhead

C. Southern edge of the Heli-pad

D. Float overview including wharfhead and gangway



E. West view across float

FISHERIES AND OCEANS CANADA
REAL PROPERTY AND SAFETY AND SECURITY

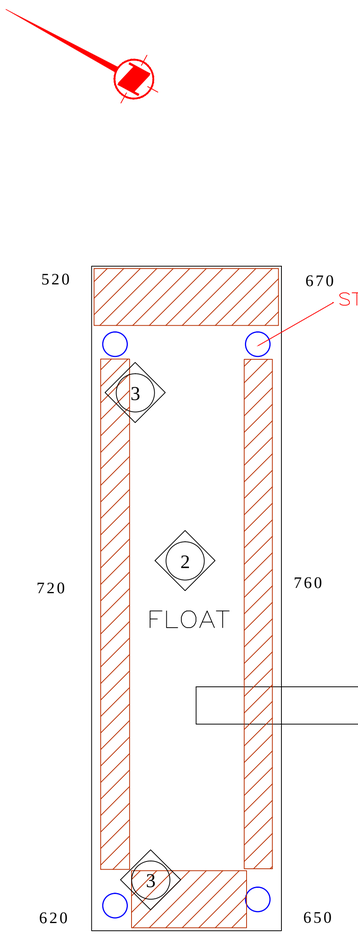
PELAGIC TECHNOLOGIES

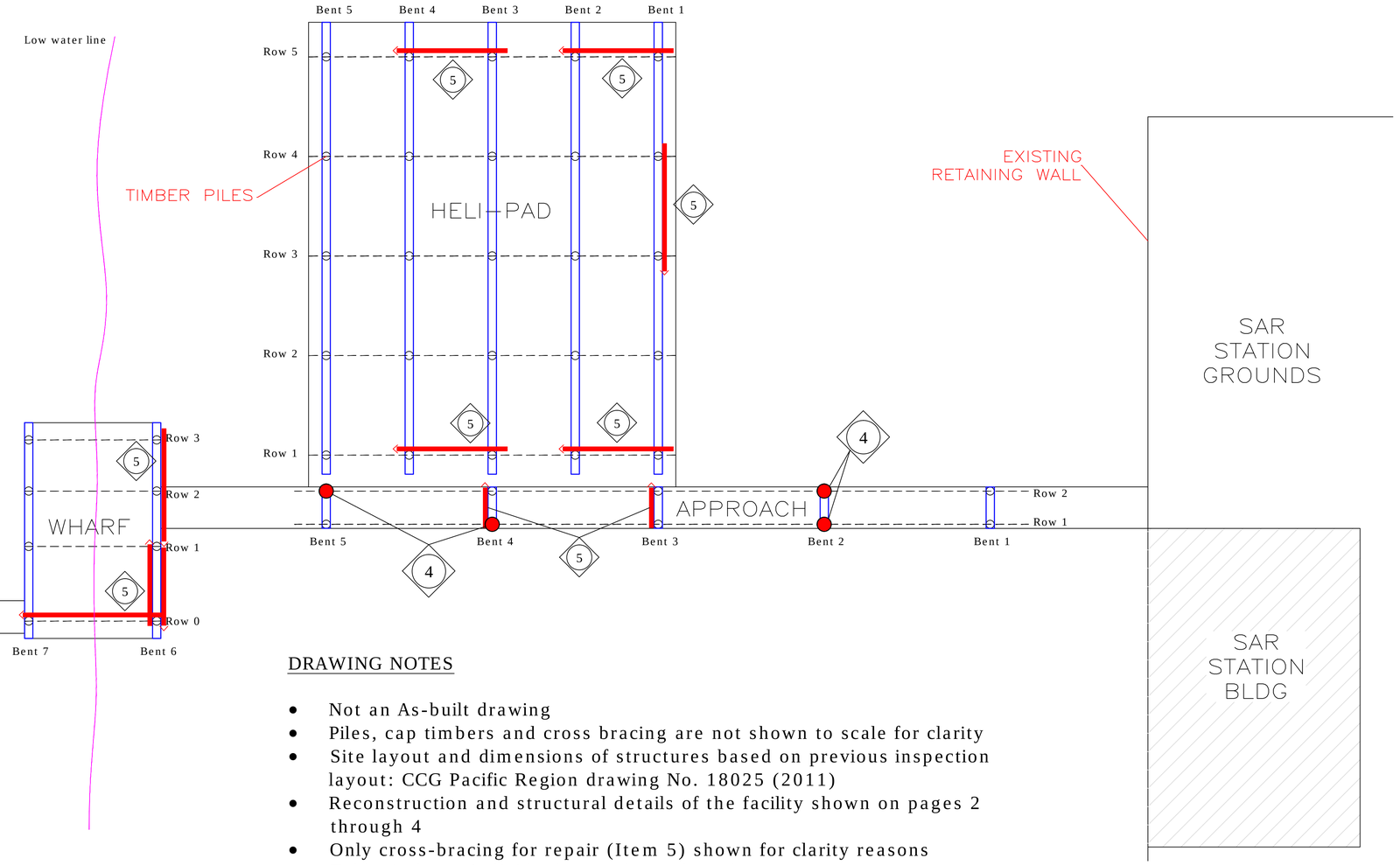
DWG. NO.	DRAWING REFERENCES	NOTES	NO.	DATE	REVISIONS

DESIGNED –
DRAWN KS
CHECKED GH
RECOMMENDED
APPROVED DL

FACILITY OVERVIEW AND RECONSTRUCTION ITEMS AT DFO SAR FACILITY TOFINO, B.C.

SCALE AS NOTED
START DATE .
DRAWING NUMBER TR-1717.1
1 of 4 .5





Reconstruction item

- 2 — Float Decking Repairs
- 3 — Flotation Repairs
- 4 — Replacement of Timber Bearing Piles
- 5 — Cross Brace Replacement

DRAWING NOTES

- Not an As-built drawing
- Piles, cap timbers and cross bracing are not shown to scale for clarity
- Site layout and dimensions of structures based on previous inspection layout: CCG Pacific Region drawing No. 18025 (2011)
- Reconstruction and structural details of the facility shown on pages 2 through 4
- Only cross-bracing for repair (Item 5) shown for clarity reasons
- Table 1 shows individual cross-brace lengths
- Heli-pad cross bracing only exists on perimeter piling
- Perimeter Zones are priority areas for decking removal to facilitate access to flotation units necessary for Repair Item 3. These zones incorporate three (3) adjacent deck timbers not including the outer most timber which is secured under the bull rail
- Decking in this perimeter zone is to be replaced with new timber during re-installation of the decking in Item 3

Perimeter Zone

Pile for full replacement

Cross Brace for replacement

650 Freeboard measurement (mm)

Table 1.

Replacement Cross-Brace Lengths			
Location	**Bent**	**Row**	**Length (m)**
Approach			
	3	2 to 1	3.5
	4	2 to 1	3.5
Heli-Pad			
	1	3 to 4	4.7
	2 to 1	1	5.25
	2 to 1	5	5.25
	4 to 3	1	5.25
	4 to 3	5	5.25
Wharfhead			
	6	0 to 1	4.2
	6	1 to 0	4.2
	6	1 to 3	5.7
	7 to 6	0	6.2

FISHERIES AND OCEANS CANADA
REAL PROPERTY AND SAFETY AND SECURITY

PELAGIC TECHNOLOGIES

DWG. NO.	DRAWING REFERENCES	NOTES	NO.	DATE	REVISIONS

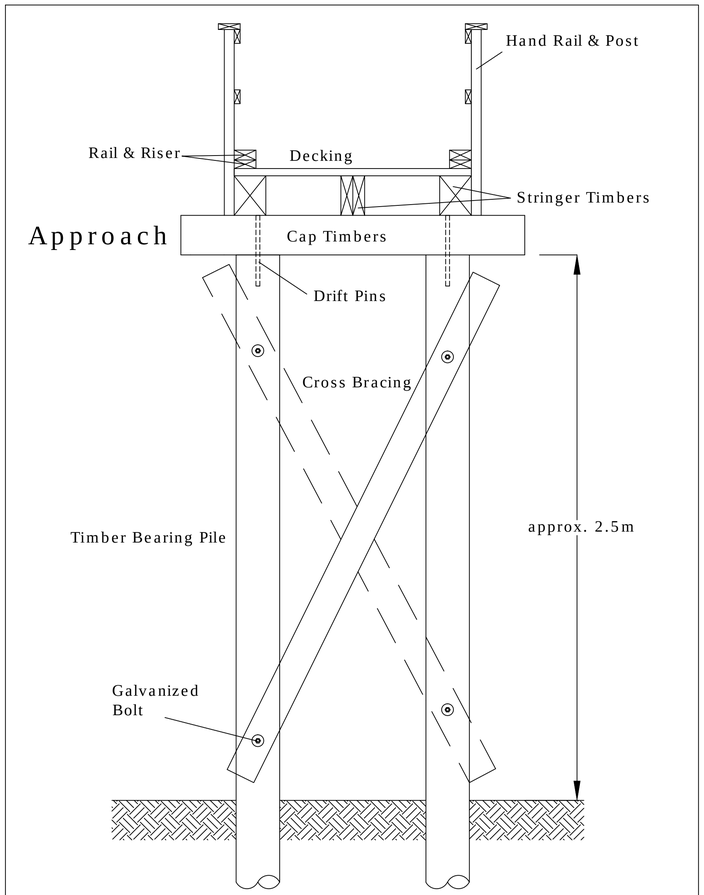
DESIGNED –
DRAWN KS
CHECKED GH
RECOMMENDED
APPROVED DL

RECONSTRUCTION DETAIL AT
DFO SAR FACILITY
AT TOFINO, BC

SCALE AS NOTED
START DATE .
DRAWING NUMBER TR-1717.2

GENERAL & APPROACH NOTES

- Elevations shown are approximate only
- Timber piles to adhere to specifications for Timber Piles, Section 31 62 19
- Piles marked for replacement are to be removed completely
- Cross-brace timbers to be replaced to specifications for Timber Repairs, Section 06 10 10
- Contractor to use new 25.4mm or 19mm galvanized hardware for cross-brace replacements as indicated
- Existing hardware throughout the facility is a mix of 25.4mm and 19.05mm hex head and square head bolts
- All hardware is to adhere to specifications of Steel Hardware, Section 05 90 00
- Cross-brace timbers shall extend beyond the attachment point by 300-450mm



SECTION 1/1

APPROACH NOTES
All dimensions given in mm (vertical x horizontal x length)

- Pile height shown is an average of heights found at Bents 1 to 3
- New piles to be driven to a minimum penetration of 6.1m or refusal as directed by Project Engineer
- Cross-brace timbers: 145 x 205 x 3550
- Contractor to remove old cross-brace attachment hardware and install new 19.0mm galvanized attachment hardware in bracing located in Bents 3 through 6

Wharfhead

WHARFHEAD NOTES
All dimensions given in mm (vertical x horizontal x length)

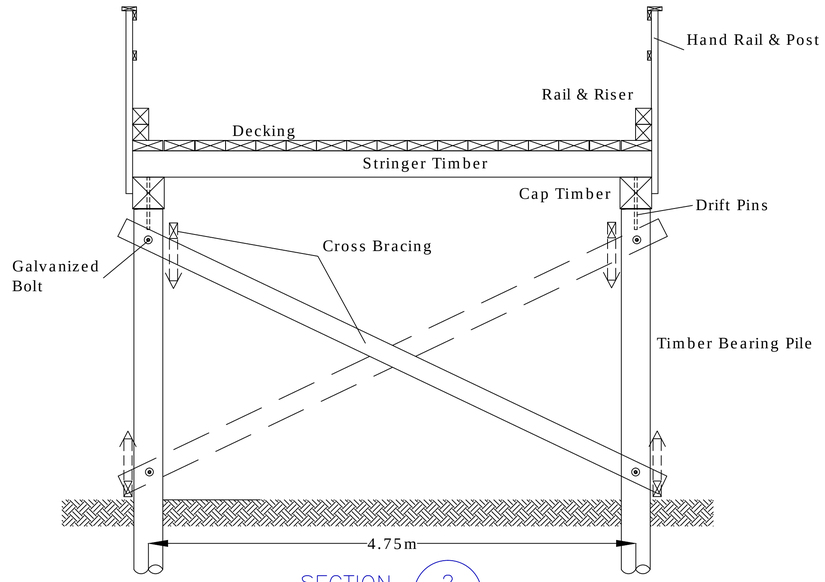
- Cross-section shows typical cross-bracing spanning bents
- Cross-brace dimensions: 120 x 300
- Cross-brace lengths within the wharfhead are variable and the specific pile row spacing is provided in the table below
- New hardware to be 25.4mm galvanized

Symbol indicates butt-end of cross-brace along bent

Wharfhead Pile Spacing

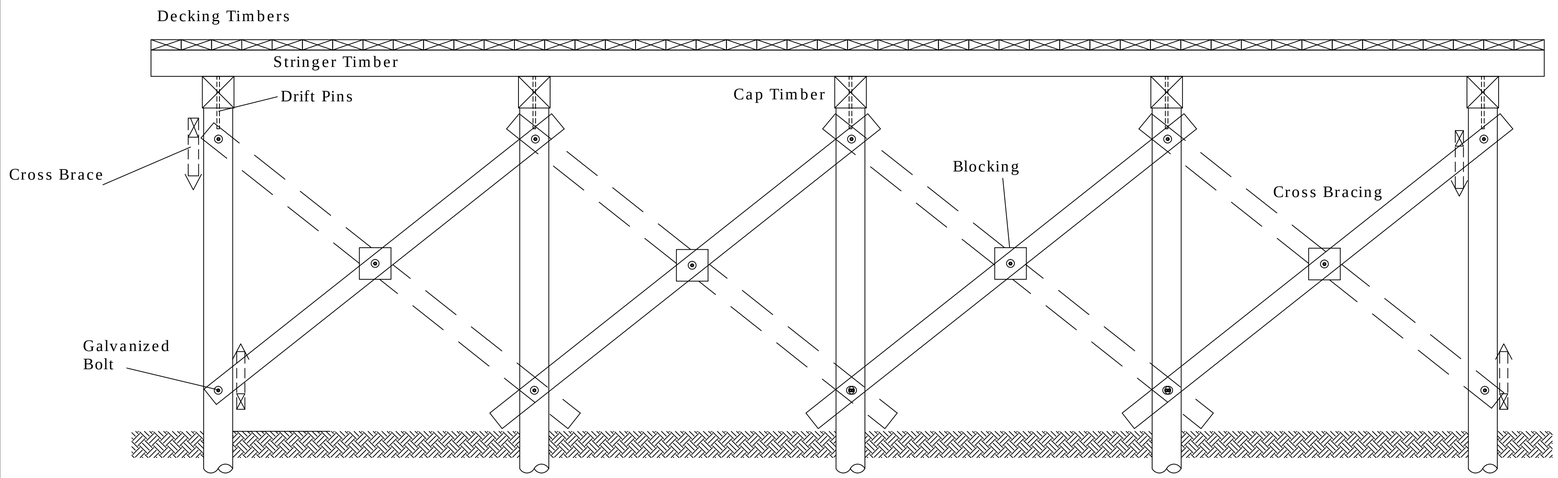
Location	Distance (m)*
Row 0 to 1	2.75
Row 1 to 2	2.1
Row 2 to 3	1.85
Bent 6 to 7	4.75

*Distance measured from pile centre line



SECTION 2/1

Heli-Pad



HELI-PAD NOTES
All dimensions given in mm (vertical x horizontal x length)

- Cross-brace timbers (spanning bents): 195 x 100 x 5250
- Cross-brace timbers (spanning rows): 195 x 100 x 4700
- Cross-brace blocking all 305 x 305 x 305. Blocking exists between braces
- All blocking to be reused at cross-brace replacement locations
- New hardware to be 25.4mm galvanized as per specifications for Steel Hardware, Section 05 90 00

SECTION 3/1

Symbol indicates butt-end of cross-brace along bent

FISHERIES AND OCEANS CANADA
REAL PROPERTY AND SAFETY AND SECURITY

PELAGIC TECHNOLOGIES

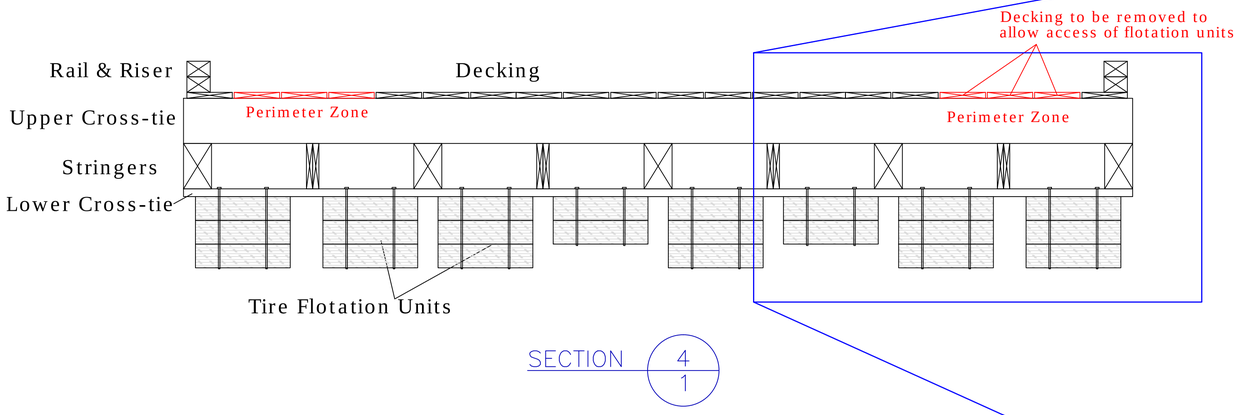
DWG. NO.	DRAWING REFERENCES	NOTES	NO.	DATE	REVISIONS

DESIGNED –
DRAWN KS
CHECKED GH
RECOMMENDED
APPROVED DL

APPROACH, HELIPAD & WHARFHEAD
CROSS SECTION DETAIL
DFO SAR FACILITY
TOFINO, B.C.

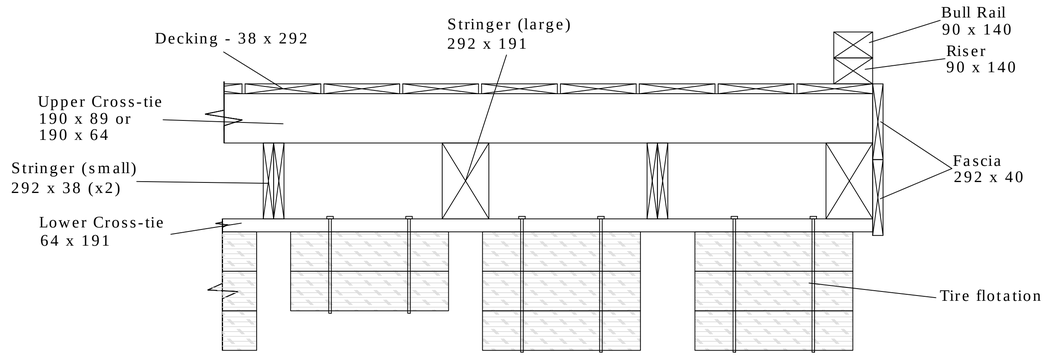
SCALE AS NOTED
START DATE .
DRAWING NUMBER TR-1717.3

Float



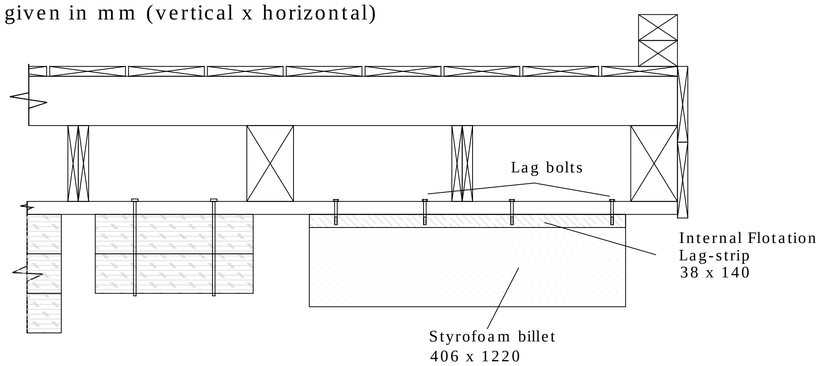
Cross Section of Existing Flotation

All dimensions given in mm (vertical x horizontal)



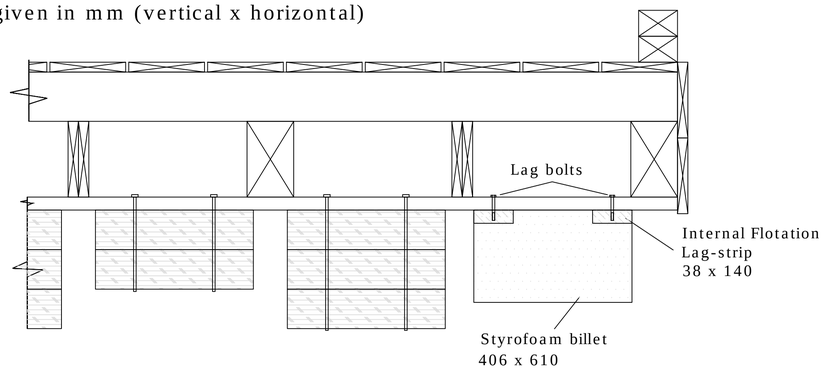
New Flotation - Orientation 1

All dimensions given in mm (vertical x horizontal)



New Flotation - Orientation 2

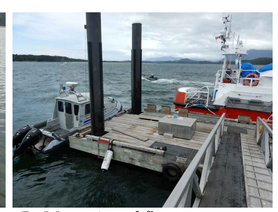
All dimensions given in mm (vertical x horizontal)



DRAWING NOTES

- Not an as-built drawing
- Locations of the internal stringers and the quantity may vary when compared to actual structure.
- Internal stringer thickness was observed to alternate between 191mm and 76mm
- Additional timbers do exist within this structure and are not shown for clarity. These timbers exist at the stringer's elevation and can be seen in Photo C below creating boxes above each set of flotation units.
- The spacing of tire flotation is approximated for clarity reasons and deviations may be found on-site
- Tire flotation units were observed as either stacks of 3 or 2 tires. No pattern was noted. Large amounts of marine growth were observed during an underwater inspection
- The float width is composed of 8 flotation units and the length has 22. The east end of the float is mainly composed of UHMW wrapped billets (0.4m x 0.6m x 2.4m).
- Perimeter Zones include 3 decking timbers adjacent to the edge timber which is secured by the bull rail.
- New flotation installation may follow either of 2 orientations shown to the right and will be dependant on what is observed once decking is removed to allow thorough inspection of the attachment hardware.
- Lag bolts to be 19mm galvanized with a minimum length of 102mm
- New billets will be lagged through the lower cross-brace and into billet lagging strips

A. East side of float



B. West site of float

C. Cross section showing upper cross tie and internal blocking timbers

D. Lower cross ties and floatation attachement hardware

E. Vertical cross section of decking, upper cross tie internal stringer and lower cross tie including blocking timber

FISHERIES AND OCEANS CANADA
REAL PROPERTY AND SAFETY AND SECURITY

PELAGIC TECHNOLOGIES

DWG. NO.	DRAWING REFERENCES	NOTES	NO.	DATE	REVISIONS

DESIGNED --
DRAWN KS
CHECKED GH
RECOMMENDED
APPROVED DL

TIMBER FLOAT
CROSS SECTION DETAIL
DFO SAR FACILITY
TOFINO, B.C.

SCALE 1:300
START DATE .
DRAWING NUMBER TR-1717.4
4 of 4 .5