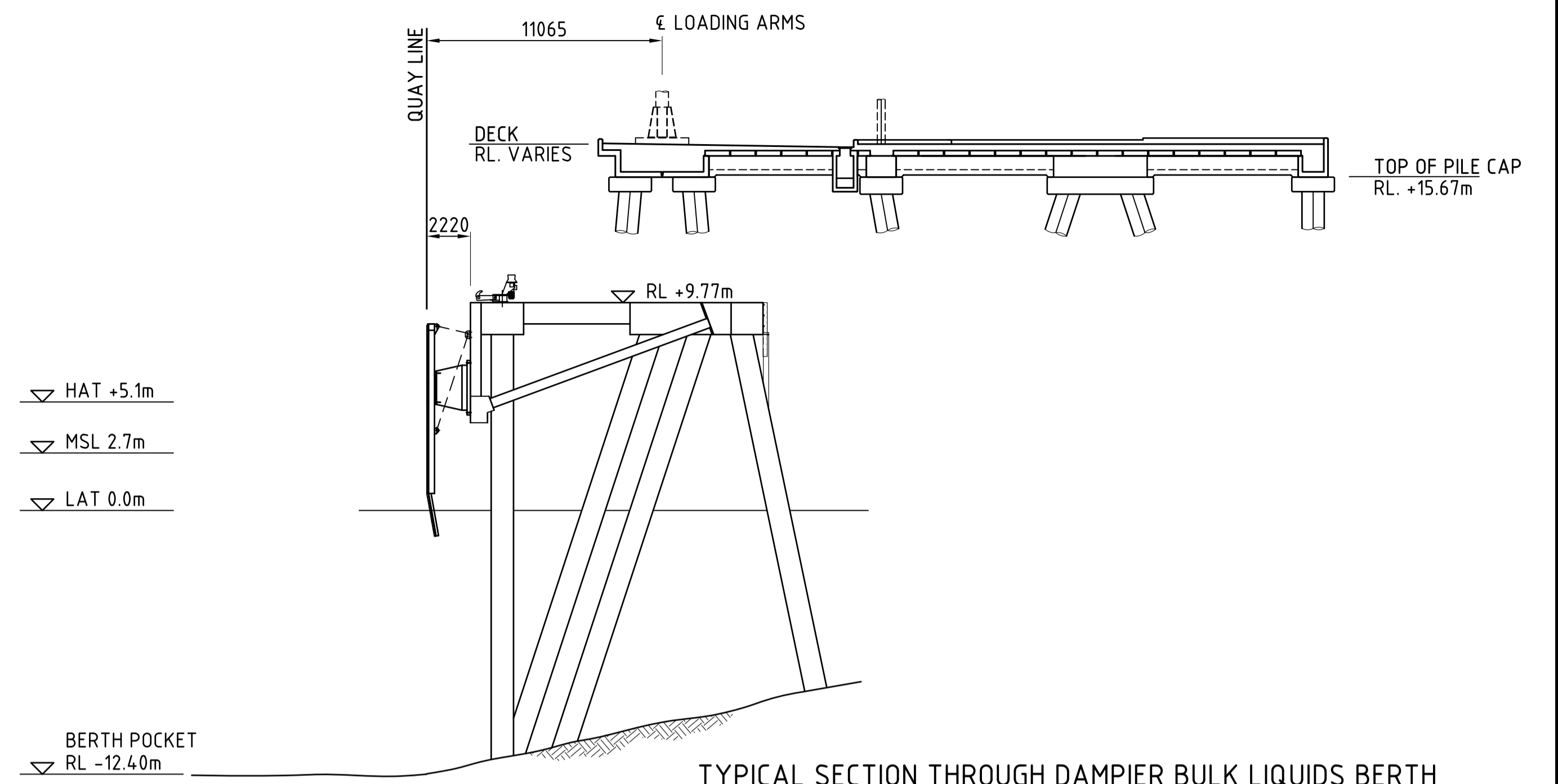
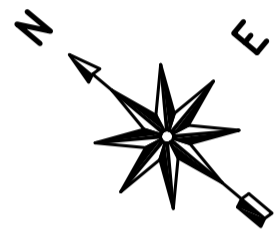


**NOTES:**

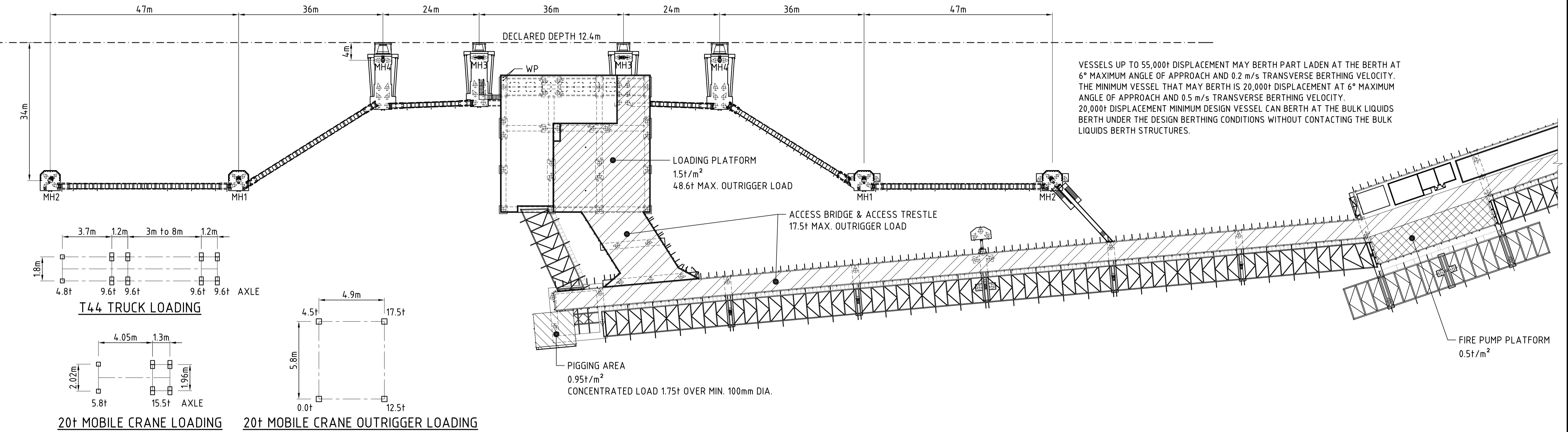
- MOBILE CRANES SHOULD BE OPERATED WITH MAXIMUM LOADED OUTRIGGER PLACED OVER PILE/PILE CAP WHEREVER POSSIBLE. LOCATIONS OF PILE/PILE CAP TO BE CONFIRMED WITH LANDSIDE OPERATIONS/PORT ENGINEER IF NECESSARY.
- LOADING PLATFORM MAXIMUM OPERATING MOBILE CRANE SHALL BE 60t CAPACITY WITH A MAXIMUM OUTRIGGER LOAD NOT TO EXCEED 48.6t.
- ACCESS BRIDGE AND TRESTLE MAXIMUM OPERATING MOBILE CRANE SHALL BE 20t CAPACITY WITH A MAXIMUM OUTRIGGER LOAD NOT TO EXCEED 17.5t.
- FOR CRANE OUTRIGGER LOADS, USE OUTRIGGER PADS IN THE FORM OF 100mm MINIMUM THICKNESS HARDWOOD PLANKS (OR EQUIVALENT) UNDER CRANE OUTRIGGERS GIVING A DECK BEARING AREA OF 900mm x 900mm. THIS THICKNESS HAS BEEN CALCULATED ASSUMING AN OUTRIGGER PLATE OF SIZE 500mm x 500mm. IF THE OUTRIGGER PLATE IS 300mm x 300mm, THEN 150mm TIMBER THICKNESS IS REQUIRED. ANYTHING IN BETWEEN CAN BE LINEARLY INTERPOLATED. THE OUTRIGGER PAD MAY BE PLACED ANYWHERE ON THE DECK WITHIN REASON. THE CRANE OUTRIGGER MUST BE CENTRALLY PLACED ON THE OUTRIGGER PAD.
- LANDSIDE OPERATIONS RESERVES THE RIGHT TO STOP ANY OPERATIONS WHICH ARE NOT IN ACCORDANCE WITH THE ABOVE REQUIREMENTS OR DEEMED TO BE DETRIMENTAL TO THE LONG TERM DURABILITY OF THE WHARF STRUCTURES.



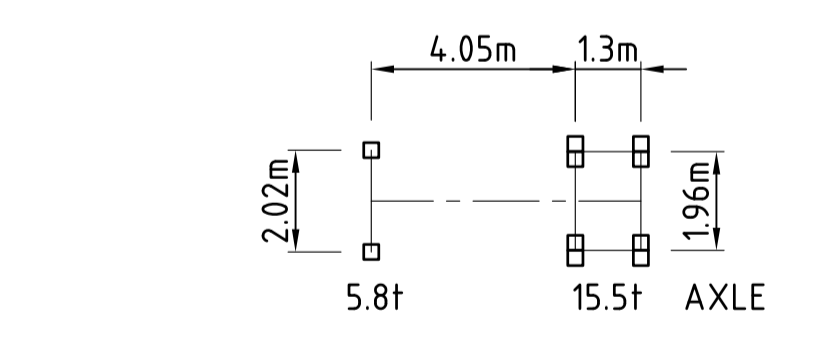
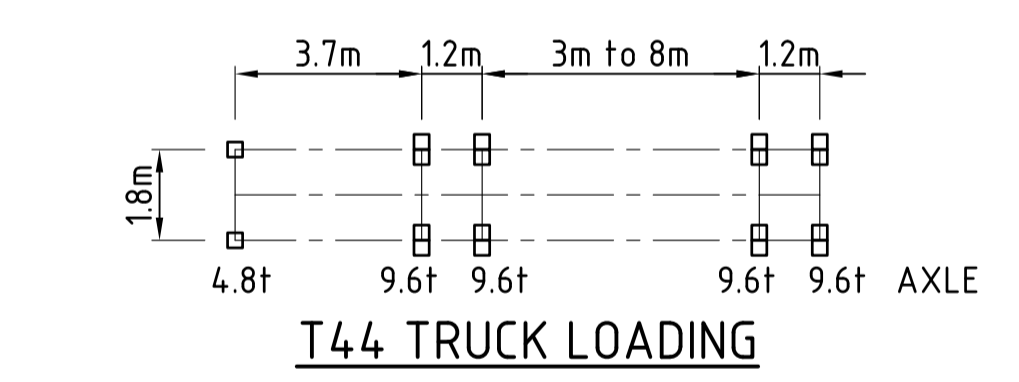
**TYPICAL SECTION THROUGH DAMPIER BULK LIQUIDS BERTH**

SCALE 1:200

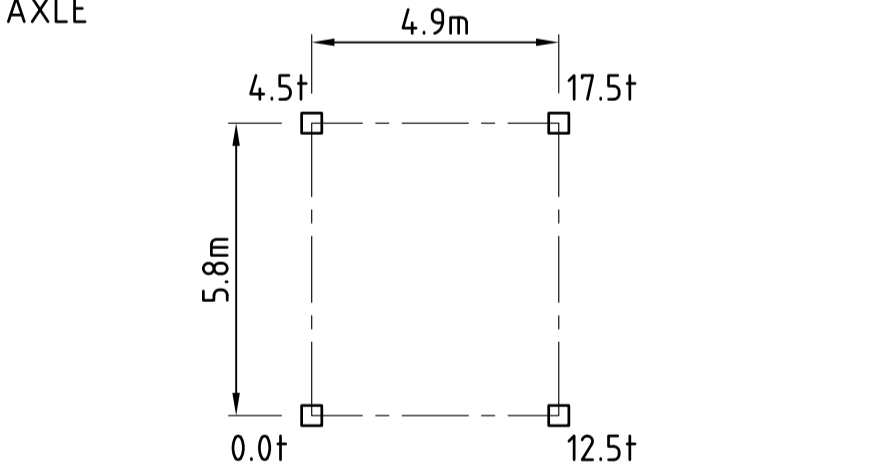
NOTE: ALL LEVELS ARE RELATIVE TO 0.0m CHART DATUM (CD)



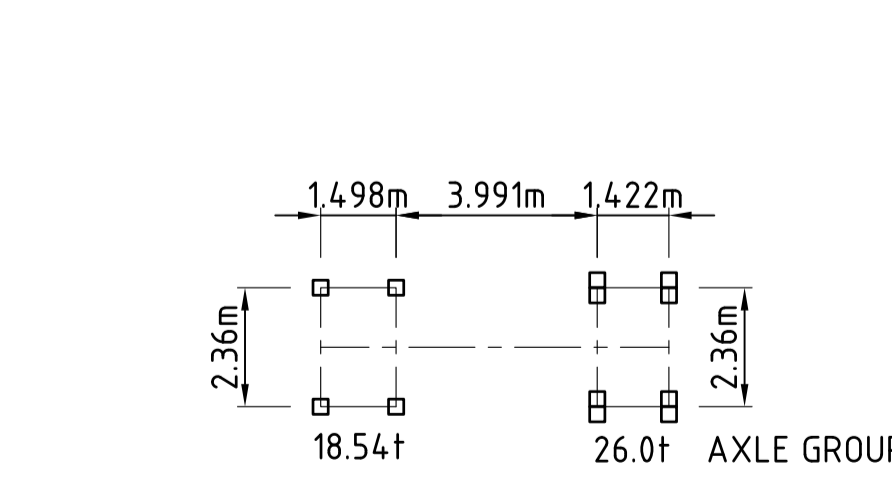
VESSELS UP TO 55,000t DISPLACEMENT MAY BERTH PART LADEN AT THE BERTH AT 6° MAXIMUM ANGLE OF APPROACH AND 0.2 m/s TRANSVERSE BERTHING VELOCITY. THE MINIMUM VESSEL THAT MAY BERTH IS 20,000t DISPLACEMENT AT 6° MAXIMUM ANGLE OF APPROACH AND 0.5 m/s TRANSVERSE BERTHING VELOCITY. 20,000t DISPLACEMENT MINIMUM DESIGN VESSEL CAN BERTH AT THE BULK LIQUIDS BERTH UNDER THE DESIGN BERTHING CONDITIONS WITHOUT CONTACTING THE BULK LIQUIDS BERTH STRUCTURES.



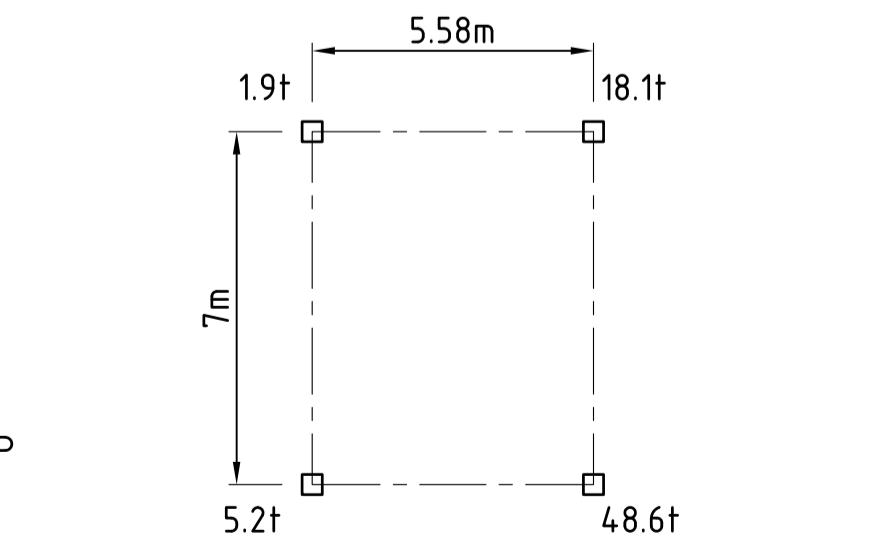
**20t MOBILE CRANE LOADING**



**20t MOBILE CRANE OUTRIGGER LOADING**

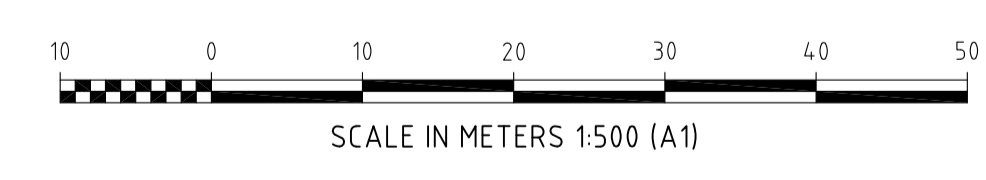


**60t MOBILE CRANE LOADING**



**60t MOBILE CRANE OUTRIGGER LOADING**

**PLAN ON DAMPIER BULK LIQUIDS BERTH**  
SCALE 1:500



- LEGEND**
- MH1 60t TRIPLE HOOK QUICK RELEASE MOORING HOOK
  - MH2 75t TRIPLE HOOK QUICK RELEASE MOORING HOOK
  - MH3 60t DOUBLE HOOK + 60t SINGLE HOOK QUICK RELEASE MOORING HOOK
  - MH4 60t DOUBLE HOOK QUICK RELEASE MOORING HOOK
  - WP WATER POINT

**FOR INFORMATION ONLY**  
DOCUMENT CONTROL STATUS

REV.	BY	DATE	APPROVED FOR CONSTRUCTION DRAWING HISTORY	CKD	APP	REV.	BY	DATE	PRE-CONSTRUCTION DRAWING HISTORY	CKD	APP
0	DJG	22.10.24	ISSUED FOR USE	JAM	LM	A	MJB	25.02.15	ISSUED FOR APPROVAL	LM	L.P.M.
						B	MJB	03.03.15	ISSUED FOR APPROVAL	LM	L.P.M.
						C	DJG	17.10.24	ISSUED FOR INFORMATION	JAM	LM

<p><b>Madsen Giersing</b> CONSULTING ENGINEERS Excellence in marine structural design</p> <p>Postal address: Suite 4.1 Modular, 4 Kyabra Street, Newstead Qld Australia 4006 www.madsengiersing.com.au mgce@madsengiersing.com.au</p> <p>ABN 76 010 769 909 Phone (617) 3606 6200 Fax (617) 3606 6280</p>	<p>CLIENT: </p>	<p>DRAWN: MJB</p> <p>CHECKED: LM</p> <p>DESIGNED: LM</p> <p>APP. FOR CONSTRUCTION:</p> <p>CLIENT APPROVED:</p>	<p>PROJECT: PILBARA PORTS - BULK LIQUIDS BERTH</p> <p>TITLE: MAXIMUM WHARF LOADING &amp; BERTHING CAPACITIES</p> <p>SCALE: AS SHOWN</p> <p>JOB No.: 1280D</p> <p>DRAWING No.: 1280D-DWG-001</p>	<p>DWG. SIZE: A1</p> <p>REV.: 0</p>
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