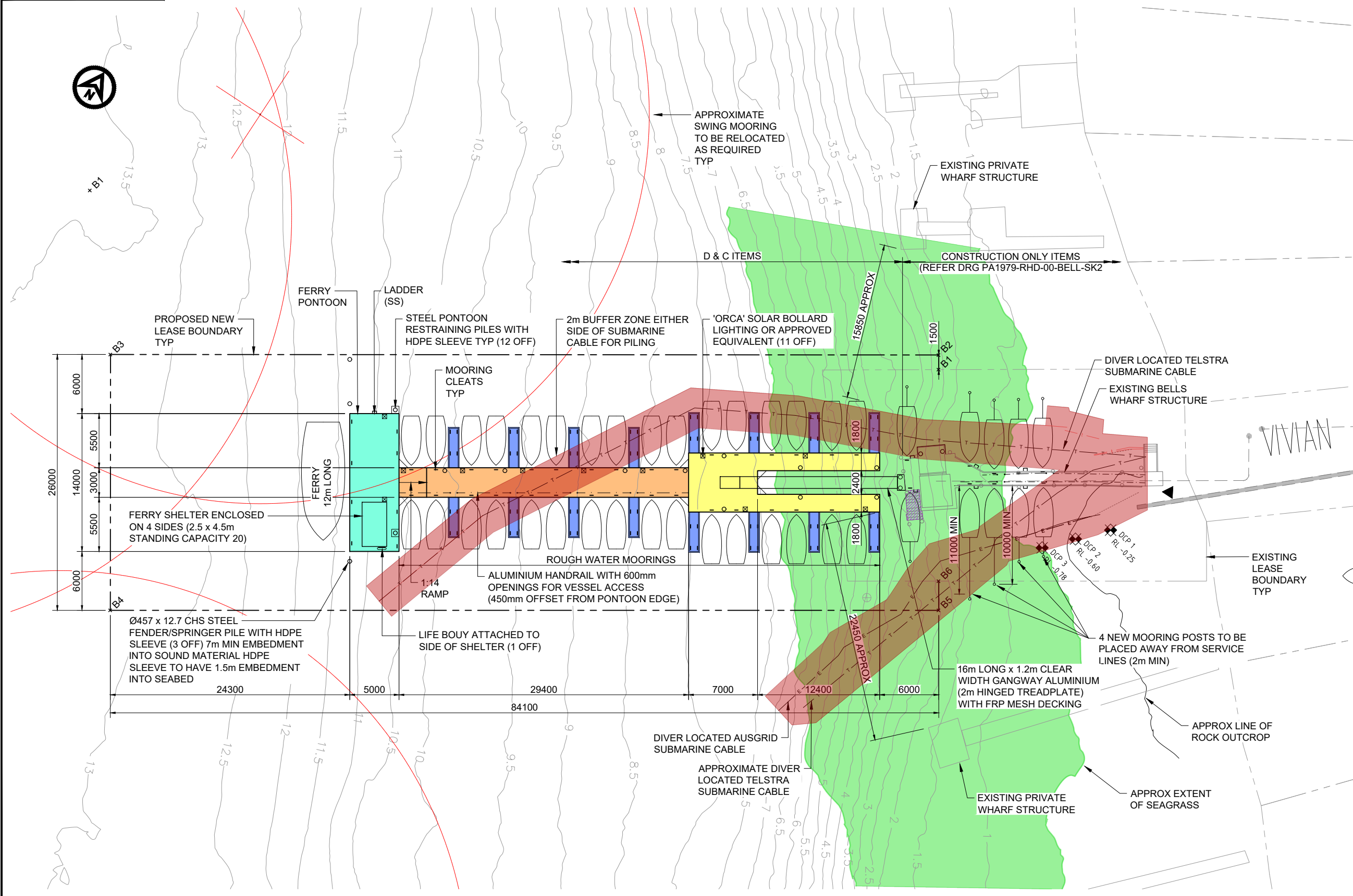


- NOTES:**
1. ALL DIMENSIONS ARE IN MILLIMETRES AND ALL LEVELS ARE IN METRES RELATIVE TO AUSTRALIAN HEIGHT DATUM (AHD) APPROX 0.925m ABOVE CHART DATUM (CD).
  2. THE LOCATION OF THE SWING MOORING POINTS HAS BEEN PROVIDED BY ROADS AND MARITIME SERVICES FROM A MOORING SURVEY UNDERTAKEN ON 12TH APRIL 2018.
  3. SWING CIRCLE RADIUS SHOWN FOR EACH MOORING HAS BEEN ESTIMATED BASED ON THE ADDITION OF A NOMINAL VESSEL LENGTH OF 20m TO 1.5 TIMES THE WATER DEPTH BELOW CHART DATUM.
  4. BELLS WHARF SURVEY TO AHD PROVIDED BY NORTHERN BEACHES COUNCIL DATED 1ST APRIL 2019.
  5. BATHYMETRIC SURVEY TO AHD PROVIDED BY PORT AUTHORITY OF NSW DATED 28TH MARCH 2019.
  6. SERVICES INFORMATION OBTAINED THROUGH DBYD, ENQUIRY DATED 11TH APRIL 2019 AND LOCATED ON SITE BY McLENNANS DIVING SERVICE 20TH JUNE 2019.

- LEGEND:**
- 900 WIDE FINGER PONTOON 400-500mm FREEBOARD
  - LANDING PONTOON 500mm FREEBOARD
  - 3000 WIDE WALKWAY PONTOON 500mm FREEBOARD
  - 14000 LONG x 5000 WIDE PONTOON 700mm FREEBOARD
  - APPROX EXTENT OF SEAGRASS (ZOSTERA CAPRIORNI) AND MARINE ALGAE (CAULERPA TAXIFOLIA)
  - EXISTING STRUCTURE TO BE DEMOLISHED
  - DESIGN VESSEL: 5m LENGTH VESSEL WITH 2m BEAM



**PROPOSED NEW LEASE BOUNDARY COORDINATES**

- B1 E 341099.575, N 6276316.859
- B2 E 341098.756, N 6276318.105
- B3 E 341028.458, N 6276271.962
- B4 E 341042.711, N 6276250.237
- B5 E 341112.999, N 6276296.435
- B6 E 341111.369, N 6276298.915

**GENERAL ARRANGEMENT PLAN**

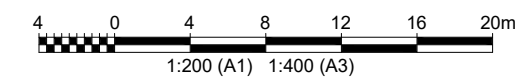
1:200 (A1)

**BERTH SCHEDULE**

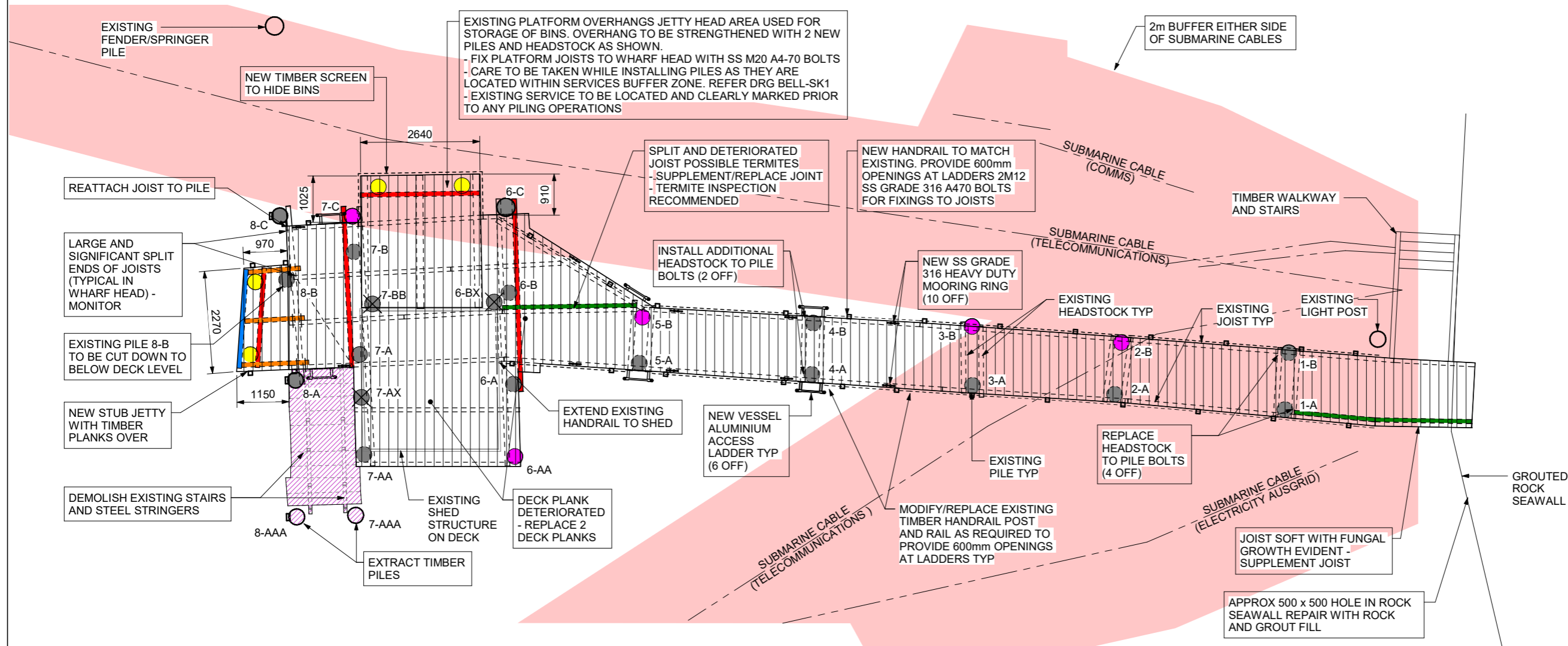
EXISTING	12
PROPOSED:	
FIXED MOORINGS	10
FLOATING MOORINGS	16
ROUGH WATER MOORINGS	16
<b>TOTAL:</b>	<b>42</b>

**NOT FOR CONSTRUCTION**

**AUSTRALIAN HEIGHT DATUM**



REV	DATE	DESCRIPTION	BY	CHK	APP
A	29.05.2020	ISSUED FOR REVIEW		SC	SH
REVISIONS					
CLIENT					
 <b>northern beaches council</b>					
PROJECT					
<b>SCOTLAND ISLAND WHARF FACILITY UPGRADE</b>					
TITLE					
<b>BELL WHARF GENERAL ARRANGEMENT CONCEPT PLAN</b>					
DRAWN					
 <b>Royal HaskoningDHV</b> <i>Enhancing Society Together</i>					
DATE					
29.05.2020					
COORD. SYSTEM					
MGA AHD					
SCALE					
AT A1 AS SHOWN					
DRAWING No.					
PA1979-RHD-00-DR-MA-1001					
REVISION					
A					



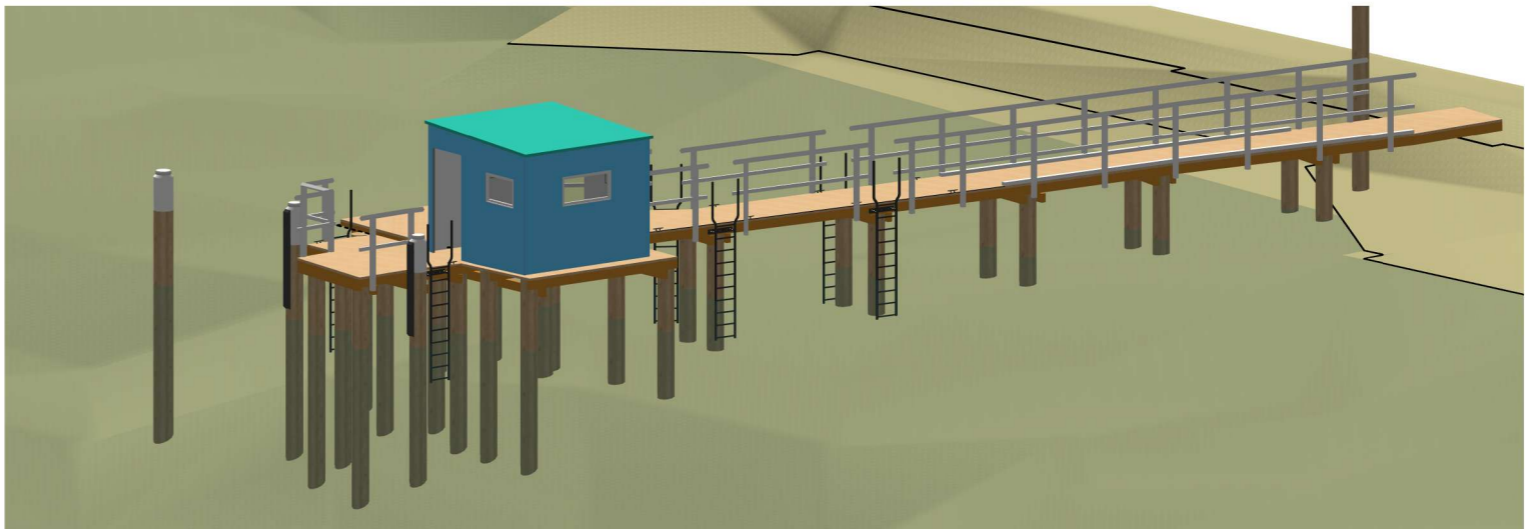
**LEGEND:**

- NEW TIMBER HEADSTOCK (4 OFF)  
- 180 H x 100 W F17 HARDWOOD  
- 2M20 SS GRADE 316 A4-70 BOLTS TO PILE
- NEW TIMBER GANGWAY FIXING BEAM (1 OFF)  
- 240 H x 100 W F17 HARDWOOD  
- 2M24 SS GRADE 316 A4-70 BOLTS TO EACH PILE
- NEW TIMBER JOIST (3 OFF)  
- 180 H x 90 W F17 HARDWOOD  
- 1M20 SS GRADE 316 A4-70 RECESSED BOLT TO HEADSTOCKS AND 2M20 SS GRADE 316 A4-70 TO EXISTING JOIST OR PILE
- EXISTING TIMBER JOIST SUPPLEMENTED (2 OFF)  
- 180 H x 90 W F17 HARDWOOD  
- 1M20 SS GRADE 316 A4-70 RECESSED BOLT TO HEADSTOCKS
- NEW TIMBER PILE (4 OFF)  
- Ø350 F27 DOUBLE TREATED HARDWOOD  
- DRIVEN WITH 300 kN ULS AXIAL CAPACITY (MIN 6m EMBEDMENT INTO SOUND MATERIAL)
- EXISTING PILE TO BE REPLACED (5 OFF) WITH  
- Ø350 F27 DOUBLE TREATED HARDWOOD  
- DRIVEN WITH 300 kN ULS AXIAL CAPACITY (MIN 6m EMBEDMENT INTO SOUND MATERIAL)  
- REFER GENERAL COMMENTS
- EXISTING REDUNDANT PILE  
- IN POOR CONDITION NO WORK REQUIRED
- EXISTING TIMBER PILES (2 OFF) TO BE EXTRACTED
- EXISTING STAIRS TO BE DEMOLISHED
- 2m BUFFER ZONE EITHER SIDE OF SUBMARINE CABLES

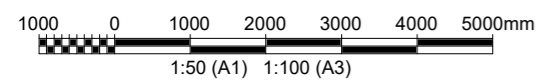
**EXISTING JETTY MEMBERS:**

- HEADSTOCKS - 180 H x 100 W HARDWOOD  
1M20 BOLT TO PILE (WHARF HEAD)  
2M20 BOLTS TO PILE (WALKWAY)
- JOISTS - 185 H x 90 W HARDWOOD
- STAIR STRINGER - 200 PFC GALVANISED
- PILE TIMBER (SIZE VARIES Ø350 APPROX)
- TIMBER HANDRAIL - 90 x 90 POST AT 2m CTRS  
90 x 90 TOP RAIL AND 75 H x 45 W MID RAIL

**REPAIR PLAN**  
1 : 50(A1)



**ISOMETRIC VIEW REPAIR WORKS**  
(A1)



**GENERAL COMMENTS**

- ALL DIMENSIONS HAVE BEEN TAKEN FROM COUNCIL SURVEY AND SITE MEASUREMENTS AND ARE APPROXIMATE ONLY.
- BOLTS SHALL BE REPLACED AS NOMINATED WITH SS M20 316 A4-70.
- CLEAN AND RECOAT ALL GALVANISED BOLTS WITH SURFACE TOLERANT HIGH BUILD EPOXY PAINT. IF WHEN CLEANING THE BOLTS, IT IS DEEMED THAT THE INDIVIDUAL BOLT IS NOT ADEQUATE THEN THE SUPERINTENDENT SHALL BE NOTIFIED AND BOLTS REPLACED WITH SS M20 GRADE 316 A4-70.
- WHERE EXISTING JOISTS DO NOT BEAR ON HEADSTOCKS PACK WITH HDPE SHEETS.
- EXISTING PILES 2-B, 3-B & 5B TO BE REPLACED, INSTALL TEMPORARY PROPS BENEATH WHARF, REMOVE DECK/JOISTS AS REQUIRED, REMOVE EXISTING PILES AND DRIVE NEW PILES. EXISTING PILES 6-AA AND 7C, TO BE RETAINED, LOCALLY REMOVE DECK PLANKS AS REQUIRED, DRIVE NEW PILES NEXT TO EXISTING AND EXTEND STRUCTURAL CONNECTIONS.
- REMOVE EXISTING FAILED & CORRODE MOORING RINGS AND LADDERS.
- ALL CUT TIMBER SHALL BE TREATED IN ACCORDANCE WITH THE TECHNICAL SPECIFICATION.

**D5 FOR CONSTRUCTION**

**AUSTRALIAN HEIGHT DATUM**

0	29.05.2020	ISSUED FOR CONSTRUCTION	SC	SH	CS
REV	DATE	DESCRIPTION	BY	CHK	APP

REVISIONS

CLIENT



PROJECT  
**SCOTLAND ISLAND WHARF FACILITY UPGRADE**

TITLE  
**BELLS WHARF REPAIR DETAILS**



DRAWN	COORD. SYSTEM	DATUM
DATE	SCALE	REF.
05/12/20	AT A1	1 : 50
DRAWING No.	REVISION	
PA1979-RHD-00-DR-MA-1011	0	