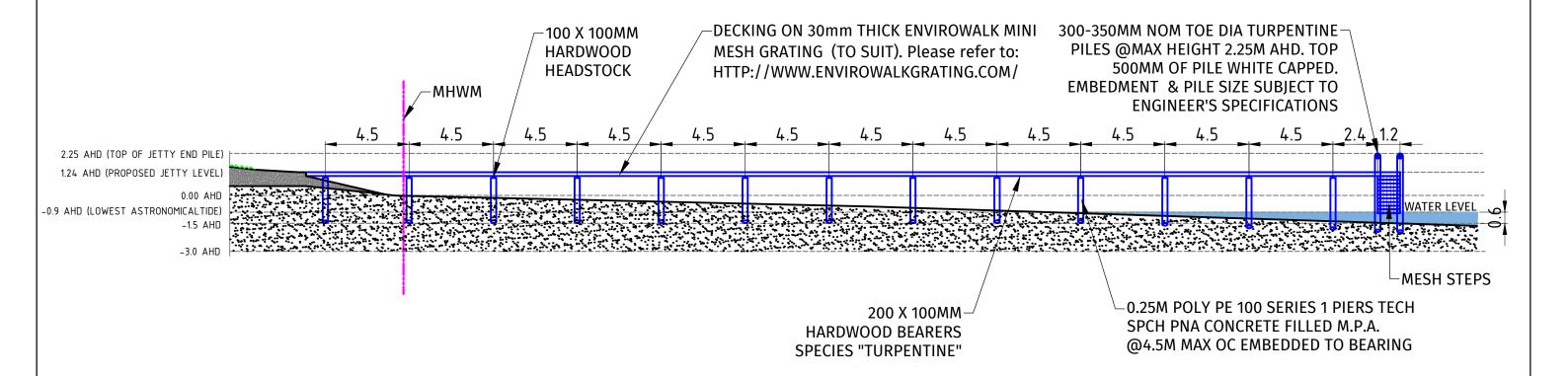
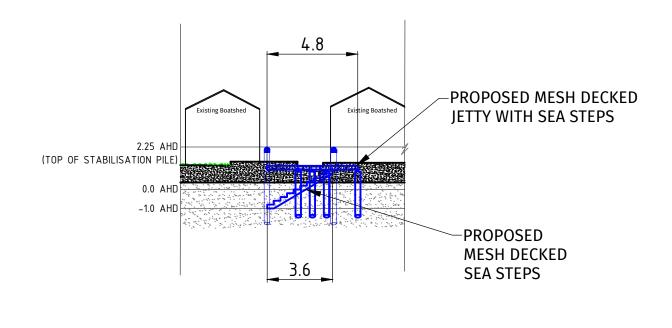


# SOUTHEAST ELEVATION



## **EASTERN ELEVATION**



DEVELOPMENT APPLICATION
FOR A SHARED JETTY WITH SEA STAIRS
AT
80, 82, 84 COVE BOULEVARD, NORTH ARM
COVE, NSW 2324

DWG 04 ELEVATION PLANS SCALE-1:200 @ A3/DATUM-AHD/DATE: JULY 2023

PLAN KEY:

PROPOSED STRUCTURES

MEAN HIGH WATER MARK



## HARBOUR PLANNING

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# Harbour Planning Ltd general specifications

#### **GENERAL NOTES**

- 1. ANY WITHDRAWAL OR INSTALLATION OF EXISTING PILES BY HARBOUR PLANNING PTY LTD AND PLACEMENT OF NEW PILES IS TO BE COMPLETED IN ACCORDANCE WITH ALL RELEVANT AUSTRALIAN CODES, STANDARDS AND AUTHORITIES. INCLUDING: THE NSW MARITIME AUTHORITY'S GUIDLINES, NSW PRIMARY INDUSTRIES RECOMMENDATIONS, DEPT. OF LANDS ASSESSMENT, LOCAL COUNCIL APPROVAL AND ALL RELEVANT CONSTRUCTION DRAWINGS.
- 2. ALL DIMENSIONS ARE IN IN MILLIMETRES. ALL LEVELS GENERALLY ARE IN METRES AND REFER TO INDIAN SPRING LOW WATER OR -0.925 AUSTRALIAN HEIGHT DATUM (AHD).
- 3. ALL DIMENSIONS AND LEVELS ARE TO BE CHECKED AND CONFIRMED ON SITE BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF WORK
- 4. DIMENSIONS ARE NOT TO BE SCALED OFF THESE DRAWINGS
- 5. THE CONTRACTOR MAY VARY DETAILS WHERE AN ALTERNATIVE IS SUPPLIED TO AND APPROVED BY AN ENGINEER. ALSO ANY DISCREPANCY SHALL BE REFERRED TO THE ENGINEER BEFORE PROCEEDING WITH THE WORK.
- 6. DURING CONSTRUCTION THE STRUCTURE SHALL BE MAINTAINED IN A STABLE CONDITION AND NO PART SHALL BE OVER STRESSED. TEMPORARY BRACING SHALL BE IMPLEMENTED TO KEEP THE WORKS AND EXCAVATIONS STABLE AT ALL TIMES.
- 7. THE CONTRACTOR IS TO ENSURE THAT NO POLLUTANTS ENTER THE WATER WAYS FROM THIS SITE AND THAT ALL CONSTRUCTION DEBRIS AND WASTE IS REMOVED FROM THE SITE AND SEABED AFTER CONSTRUCTION IS COMPLETE.
- 8. THE CONTRACTOR MAY NEED TO PROVIDE UNDER THE GUIDANCE OF THE CERTIFYING OFFICER A MAINTENANCE OR ENVIRONMENTAL PLAN FOR THE WATER FACILITY UPON COMPLETION OF CONSTRUCTION. THE PLAN MAY INCLUDE ITEMS FOR WEEKLY CLEANING, QUATERLY INSPECTIONS AND GENERAL MAINTENANCE REQUIREMENTS TO ENSURE THE LONGEVITY OF THE STRUCTURE.
- 9. PROPOSED USE OF THIS WATER FACILITY IS FOR LAUNCHING AND RETRIEVAL OF DINGHIES. CANOES, SAILING CRAFT AND SMALL MOTOR VESSELS. NOTE: SEE DESIGN LOADS. 10. CONSTRUCTION FROM THESE DRAWINGS, AND THEIR ASSOCIATED CONSULTANTS' DRAWINGS. IS NOT TO COMMENCE UNTIL APPROVED BY THE LOCAL AUTHORITIES. THIS PERFORMANCE SPECIFICATION DETAILS THE MINIMUM WORKMANSHIP STANDARDS & MATERIALS REQUIRED TO COMPLETE THE WORKS. IT IS NOT NECESSARILY PRESCRIPTIVE OF ALL ITEMS REQUIRED. THE CONTRACTOR SHALL COMPLY TO ALL MARITIME INDUSTRY STANDARDS AND DESIGN GUIDELINES AS WELL AS ALL RELEVANT AUSTRALIAN STANDARDS. 11. THE CONTRACTOR SHALL COMPLY WITH THE SAFE DESIGN OF STRUCTURES-CODE OF PRACTICE-SAFE WORK AUSTRALIA 2018 & THE NSW MARITIME AUTHORITY ENGINEERING STANDARDS & GUIDELINES FOR MARITIME STRUCTURES AND THE CROWN LANDS GUIDELINES.
- 12. INFORMATION/PLANS IS NOT NECESSARY THE SAME AS THE CROWN LANDS AND THE CONTRACTOR SHALL CHECK FOR DISCREPANCIES AS APPROPRIATE.

#### **DESIGN LOADS**

- 1. THE STANDARD PONTOON FACILITY HAS BEEN DESIGNED FOR THE FOLLOWING LOADINGS; - 5 TONNE MOTOR CRUISER UP TO 25FT OR 24FT YACHT.
- 2. NOTE: SOME PONTOON MODULES WILL VARY IN SIZE AND THEREFORE WILL SUSTAIN VARIOUS DESIGN LOADS. WHEN NECESSARY AND APPLICABLE THE RELEVANT DESIGN LOADS WILL BE INDICATED TO THE CONTRACTOR SO THAT CONSTRUCTION MAY BE CONDUCTED TO AUSTRALIAN STANDARDS.
- 3. THE ABOVE CLAUSES ARE SITE SPECIFIC AND WOULD VARY WITH FETCH, ASPECT AND
- 4. LIVE LOAD TO AS 3960 CL. 4.1

FIXED WHARF LIVE LOAD = 5 KPA or 4.5 KN PT LOAD RAMP LIVE LOAD FOR STRENGTH= 3 KPA OR 4 5 KN PT LOAD FLOATATION & BUOYANCY LIVE LOAD PONTOON 2.0KPA

STABILITY LIVE LOAD PONTOON- 1.5KPA

LIVE LOAD IS ASSUMED NOT TO APPLY THE STRUCTURE UNDER ADVERSE WEATHER CONDITIONS INCLUDING MAXIMUM DESIGN WIND AND WAVE CONDITIONS.

5. VESSELS ARE ASSUMED NOT TO BERTH UNDER ADVERSE WEATHER CONDITIONS INCLUDING MAXIMUM DESIGN WIND AND WAVE CONDITIONS.

#### FOUNDATIONS/PILING

- 1. SEABED LEVELS ARE APPROXIMATE ONLY (AND ARE SUBJECT TO TIDAL VARIANCE) IT IS THE CONTRACTORS RESPONSIBILITY TO CONFIRM ALL LEVELS PRIOR TO CONSTRUCTION. ANY VARIATION TO THOSE LEVELS SHOWN ON THE DRAWINGS IS TO BE BROUGHT TO THE ATTENTION OF THE CONTRACTOR PRIOR TO CONSTRUCTION
- 2. CONCRETE OR ENCASED TIMBER PILES WITH HDPE MUST BE PREPARED TO ENSURE THAT THEY WILL NOT BE DAMAGED DURING INSTALLATION. PILES DAMAGED DURING INSTALLATION MAY BE REJECTED AND RECYCLE INTO REUSABLE MATERIALS. NOT WITHSTANDING MINOR CRACKS MAY APPEAR FROM TIME TO TIME, MINIMUM WALL THICKNESS 9.0MM HDPE, DIAMETER OF SLEEVE TO SUIT PILE, CONTRACTOR SHALL ESTABLISH THE GROUND CONDITIONS AND DETERMINE SLEEVE LENGTHS IN ADVANCE.
- 3. PILES SHALL BE INSTALLED IN ACCORDANCE WITH THE PROVISIONS OF SECTION 4 OF AUSTRALIAN STANDARDS 2159
- 4. THE CONTRACTOR SHALL ALLOW FOR SUFFICIENT PILE LENGTH TO ACHIEVE A STANDARD OF EMBEDMENT THAT COMPLIES WITH THE AUSTRALIAN STANDARDS OF CONSTRUCTION.
- A) TO SATISFY LATERAL LOAD REQUIREMENTS, PILES ARE TO BE CONSTRUCTED AND INSTALLED TO THE MINIMUM DEPTHS AS DETAILED ON DWG DRAWINGS.
- B) GENERALLY, PILE DRIVING SHALL BE CARRIED OUT CONTINUOUSLY AND EFFICIENTLY UNTIL THE REQUIRED SET OR DEPTH IS ACHIEVED. PILES NOT DRIVEN CONTINUOUSLY AND LEFT FOR LONG PERIODS MAY NEED TO BE LOAD TESTED.
- C) TO SATISFY THE BEARING CAPACITY REQUIREMENTS. PILES ARE TO BE DRIVEN TO A SET CALCULATION (AN AUSTRALIAN RECOGNISED PILE DRIVING FORMULA).
- 5. ALL PIERS SHALL BE FOUNDED INTO THE SUBSTRATE BELOW (WHETHER ROCK OR SAND) AND PILED IN AN APPROPRIATE FORM TO COMPLY WITH AUSTRALIAN STANDARDS OF CONSTRUCTION, SAFETY AND
- DURABILITY.

  6. THE CONTRACTOR SHALL NOTE THAT LAYOUT AND SITING DIMENSIONS WILL VARY DEPENDING ON STEELWORK NOTES EXACT PONTOON DIMENSIONS, RELATIONSHIP WITH THE SEA SUBSTRATE AND CHANGING TIDAL PATTERNS AND WILL THEREFORE BE REQUIRED TO ADJUST LAYOUT DIMENSIONS ON SITE TO SUIT.
- TIMBER PILES SHALL BE CIRCULAR, NATURALLY TAPERED AND STRAIGHT. PILES ARE TO BE FREE FROM SHAKES, FRACTURES, SPLITS, DECAY, DECAY POCKETS AND ALL OTHER DEFECTS LIKELY TO IMPAIR THE PILES STRENGTH AND SERVICEABILITY.
- 8. THE CONTRACTOR MUST PROVIDE SUFFICIENT RECORDS AND TO CERTIFY THAT THE FOUNDATION REQUIREMENTS HAVE BEEN ACHIEVED.
- 9 PILES SHALL NOT BE CUT OFF AT SEABED LINESS APPROVED IN WRITING BY THE ENGINEER
- 10. THE FINAL SET OF EACH PILE SHALL BE RECORDED AS THE PENETRATION IN MILLIMETERS PER BELOW OVER AN AVERAGE OF TEN (10) BLOWS. DETAILED SET RECORDS FOR THE WHOLE DRIVE SHALL BE MAINTAINED AND PROVIDED FOR EACH PILE.
- 11. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE THE CERTIFIER OR THE ENGINEER WITH SUFFICIENT RECORDS TO ESTABLISH THAT THE DESIGN EMBODIMENTS AND CAPACITIES HAVE BEEN MET. 12. ALL PILES SHALL BE TURPENTINE TIMBER PILES UNO F22 STRESS GRADE UNSEASONED TURPENTINE HARDWOOD S2 STRENGTH GROUP, DURABILITY CLASS 1 (MARINE BORER RESISTANCE) JOINT GROUP> J2. LEAVE BARK ON ALL EXPOSED TURPENTINE PILES. ALL TIMBER PILE HEADS TO BE RINGED WITH SNUG FIT GAL STEEL RING 50\*8MM FITTED ANTI SPLIT RING.

#### PONTOON NOTES

- 1. ALL PONTOON PODS ARE TO BE SOURCED FROM AND INSTALLED BY HARBOUR PLANNING, MDS. RIVERIA PONTOONS, AQUATIC PONTOONS OR EQUIVALENT CONTRACTOR AS APPROVED BY THE AUSTRALIAN STANDARDS.
- CONTRACTORS MAY PROVIDE ALTERNATIVE PONTOON DESIGNS FOR THE PROJECT. ALTERNATIVE DESIGNS MUST MEET LOAD, ERFEROARD AND DRAFT CRITERIA
- 3. PONTOONS ARE TO BE DESIGNED STRICTLY IN ACCORDANCE WITH AUSTRALIAN STANDARDS.
- 4. RUBBER FENDERING IS TO BE FIXED STRICTLY IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN

#### LIGHTING AND SERVICES NOTES

1. A NAVIGATION LIGHT MAY BE INSTALLED ON THE JETTY, IN ACCORDANCE WITH COUNCIL REGULATION AND ROADS AND MARITIME SERVICES SPECIFICATIONS, AS DIRECTED.

### **TIMBER NOTES**

- 1. ALL TIMBER AND TIMBER WORK IS TO MEET RELEVANT CURRENT AUSTRALIAN STANDARS. 2. ALL HARDWOOD IS TO BE STRESS GRADE F14, OR BETTER DURABILITY CLASS 1 OR 2.
- 3. ALL TIMBERS SHALL BE STRAIGHT WITH ENDS CUT SQUARE, ALL TIMBERS SHALL BE FREE FROM GRUB HOLES, LIVE INSECTS, TERMITE GALLERIES, DECAY, KNOTS, KNOT HOLES, HEART SPLITS, TRANSVERSE OR RING SHAKES, GUM POCKETS, GUM VEINS, SAPWOOD, WAVE OR WANT AND ANY OTHER DEFECT THAT MAY IMPAIR THE STRENGTH AND SERVICEABILITY OF THE STRUCTURE.
- 4. ALL CONSTRUCTION AND THE USE OF TIMBER MATERIAL, IS SOURCED FROM PLANTATION FORESTS WHERE POSSIBLE IN NSW AND QLD. THE USE OF RAINFOREST TIMBER OR ENDANGERED TIMBER SPECIES WILL NOT BE INCORPORATED OR INCLUDED. INTO ANY CONSTRUCTION WORK CONDUCTED BY HARBOUR PLANNING PTY, LTD.
- 5. TIMBER WORK TO BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF SAA CODE
- 6. BOLTS SHALL BE M20 BOLTS. UNLESS NOTED OTHERWISE, THEY ARE TO BE FITTED WITH SQUARE WASHERS UNDER HEAD & NUTS.
- 7. THE WHOLE OF THE TIMBER WORK SHALL BE FINISHED IN THE BEST STYLE OF BRIDGE AND WHARF CARPENTRY. ALL JOINTS SHALL BE CUT TO FIT ACCURATELY AND TIGHTLY WITHOUT WEDGING OR PACKING DECKING SHALL BE EVEN & THE TOP CORNERS OF PLANKS SHALL BE LIGHTLY CHAMFERED
- 8. TIMBER DAMAGED DURING INSTALLATION MAY BE REJECTED AND RECYCLED INTO REUSABLE

- 1. BOLTING SHALL BE IN ACCORDANCE WITH AS1684.
- 2, STEELWORK SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH THE REQUIREMENTS OF AS 4100 - STEEL STRUCTURES CODE.
- 3. ALL STAINLESS STEEL IS TO BE GRADE 316 AND USED WHERE SPECIFIED BY HARBOUR PLANNING PTY, LTD. 4. ALL WELDING IS TO BE IN ACCORDANCE WITH HARBOUR PLANNING PTY LTD SPECIFICATIONS,
- DRAWINGS AND ALL RELEVANT AUSTRALIAN CODES AND STANDARDS 5. ALL STEELWORK IS TO BE HOT DIP GALVANISED. ANY DAMAGE TO THE COAT IS TO BE
- RECTIFIED ON SITE PRIOR TO THE INSTALLATION OF THE STEEL MEMBER. ALL STEELWORK SHALL BE GRADED IN ACCORDANCE WITH AS4100 EXCEPT FOR THE STAINLESS STEEL BOLTS AND SECTIONS WHERE GRADE 316 STAINLESS STEEL IS TO BE USED,
- AND THE MOORING BOLLARDS THAT ARE TO BE GRADE 350. ALL PAINT SHALL BE APPLIED STRICTLY IN ACCORDANCE WITH THE MANUFACTURER'S

#### CONCRETE NOTES

- 1. CONCRETE WORK SHALL BE CARRIED OUT IN ACCORDANCE WITH THE REQUIREMENTS OF AS 3600 - CONCRETE STRUCTURES CODE
- 2. THE DESIGN, CERTIFICATION, CONSTRUCTION AND PERFORMANCE OF THE FORM WORK IS THE RESPONSIBILITY OF THE BUILDER.
- 3. ALL REINFORCEMENT TO BE ACCURATELY PLACED IN POSITION SHOWN ON DWGS. TIED AND ADEQUATELY SUPPORTED TO GIVE THE REQUIRED COVER 4. WHERE POSSIBLE ALL CONCRETE STRUCTURES TO BE POURED IN THE DRY. WHERE
- NECESSARY CONCRETE PLACED UNDER WATER TO BE POURED USING A TREMIE STYLED
- 5. CONCRETE TO BE GRADED TO SUIT SITE CONDITIONS, COVER TO REINFORCEMENT TO BE 50mm MIN.
- 6. REINFORCEMENT SHALL BE FIXED IN POSITION WITH TIES AT EACH BAR CROSSING REINFORCEMENT SHALL BE SUPPORTED ON CHAIRS SUFFICIENT TO MAINTAIN IT IN POSITION WHILE CONCRETE IS PLACED, METAL CHAIRS TO HAVE PLASTIC TIPS.
- 7. CONCRETE TO BE CURED A MINIMUM OF 7 DAYS AFTER POURING. APPROVED CURING COMPOUNDS MAY BE USED IF COMPATIBLE WITH FLOOR FINISHES.

#### **BOATSHED NOTES**

- 1. BRICKWORK 200MM BLOCK WORK, CONCRETE CORE FILLED (INCLUSIVE OF GALVANISED Y12) BARS) (BAINS STVLES) TO SUIT INDUSTRY/ENGINEER'S SPECIFICAITONS.
- 2. ALL NECESSARY FORM WORKS, FOR PROPOSED ROOF SLAB CONSTRUCTION.
- 3. 110 TO 150MM REINFORCED CONCRETE ROOF SLAB OVER WALLS OF BOATSHED.
- 4. TIMBER ROOF FRAMES, CUSTOM MADE FOR THE FRONT FALSE GABLE END AND SIDE SKILLION 5. COLOURBOND CUSTOM ORB ROOFING SHEETS OR EQUIVALENT
- 6. COLOURBOND, GUTTER AND DOWN PIPES.
- 7. SOLID CORE SIDE ENTRY DOOR WITH SUITABLE DEAD LOCK OR DOUBLE GLASS SLIDERS.
- 8. PANEL LIFT DOOR 2730 WIDE 2400 HIGH (ASSUMED SIZE).
- 9. WINCH PAD IN BOATSHED INCLUDED OR OUTSIDE, ON THE OUTSIDE SOUTHERN CORNER.

- IO. NO PC ITEMS (INCLUDED IN TOTAL), EG. POWER, WATER AND PLUMBING.
- 11. BLOCKS TO SUIT PLANS, SUBJECT TO ANY ENGINEER'S DRAWINGS, REGARDS RETAINING WORKS, INCLUDES ANY FOOTINGS OR BUTTRESSES.
- 12. SIDE ENTRY DEADLOCK ON HARDCORE DOOR, AS REQUIRED.
- 14. FOUNDATIONS ARE DESIGNED FOR THE FOLLOWING ALLOWABLE PRESSURES:

ELEMENT	BEARING PRES	SSURE	SHAFT ADHESION	LATERAL CAPACITY
SLAB ON GROUP	ND .	100 KPA	N/A	N/A
FOOTINGS ON G	ROUND	100 KPA	N/A	N/A
FOOTINGS ON G	ROUND	150 KPA	N/A	N/A
FOOTINGS ON G	ROUND	400 KPA	N/A	N/A
FOOTINGS ON G	ROUND	650 KPA	N/A	N/A
PILES ON WEAK	ROCK	1500 KPA	N/A	N/A
PILES ON GRADE	3 SANDSTONE	3500 KP	A 350 KPA	1000 KPA

#### DEMOLITION

- 1. THE CONTRACTOR SHALL CARRY OUT ALL DEMOLITION ACTIVITIES. IN A CAREFUL AND SYSTEMATIC MANNER, INCLUDING BUT NOT LIMITED TO: THE PROTECTION OF THE PUBLIC, THE PROTECTION OF THE ADJOINING PREMISES AND TENTACLES AND DEMOLITION METHOD AS ADVISED.
- 2. ALL DEMOLITION SHALL BE IN STRICT ACCORDANCE WITH THE AUSTRALIAN STANDARD AS 2601 -THE DEMOLITION OF STRUCTURES, AND ALL RELEVANT WORK COVER GUIDELINES, CODES OF PRACTICE AND REQUIREMENTS AND ALL RELEVANT STATE AND LOCAL AUTHORITIES; REGULATIONS (EPA, CROWN LANDS ETC), SPECIFICATIONS AND REQUIREMENTS.
- 3. DISPOSE OF DEMOLISHED MATERIAL APPROPRIATELY & LAWFULLY.
- 4. ALL COMPONENTS SPECIFIED FOR REUSE SHALL BE CAREFULLY REMOVED &
- 5. ALL DEMOLISHED STRUCTURES SHALL BE FULLY REMOVED FROM THE SEABED AND FROM THE SITE INCLUDING PILE STUMPS

#### COMPLETION AND MAINTENANCE

- 1. THE CONTRACTOR SHALL LEAVE SITE CLEAN AND TIDY OF ALL CONSTRUCTION DEBRIS OR SURPLUS OR DEMOLISHED MATERIAL OR ITEMS.
- 2. THE OWNER SHALL RECOGNISE THAT ALL MARINE STRUCTURES ARE ACTIVE AND IN CONSTANT MOTION, BOATS AND FLOATING VESSELS MOVE IN THE WATER COLUMN AND WAVES AND CYCLIC LOADS IMPACT STRUCTURES.
- THE AS DESIGNED STRUCTURES REQUIRE ACTIVE AND ENGAGED MANAGEMENT AND MAINTENANCE, THEY ARE NOT SET AND FORGET STRUCTURES.
- 4. KEEP ADEQUATE RECORDS OF INSPECTION ROUTINES.
- 5. TIGHTEN ANY LOOSE BOLTS OR FIXINGS OR REPLACE DAMAGED MEMBERS IF DISCOVERED AT ANY TIME
- 6. CONDUCT THOROUGH VISUAL CHECK AFTER STORM EVENT FOR ANY DAMAGE AND REPORT AND RECTIFY.

**DEVELOPMENT APPLICATION** FOR A SHARED JETTY WITH SEA STAIRS

80, 82, 84 COVE BOULEVARD, NORTH ARM COVE, NSW 2324

**DWG 05 SPECIFICATION** SCALE-1:200 @ A3/DATUM-AHD/DATE: JULY 2023



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