GENERAL

G1 THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL OTHER CONSULTANTS DRAWINGS AND SPECIFICATIONS. ALL DISCREPANCIES SHALL BE REFERRED TO THE ENGINEER FOR DECISION BEFORE PROCEEDING WITH THE WORK.

G2 DURING CONSTRUCTION THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE STRUCTURE IN A SAFE AND STABLE CONDITION AND SHALL ENSURE THAT NO PART IS OVERSTRESSED DUE TO CONSTRUCTION ACTIVITIES.

G3 ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE RELEVANT SAA CODES AND LOCAL STATUTORY AUTHORITIES.

G4 NO SUBSTITUTIONS SHALL BE MADE OR SIZES OF STRUCTURAL MEMBERS VARIED WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER. THE APPROVAL OF A SUBSTITUTION FROM THE ENGINEER SHALL NOT BE AN AUTHORISATION FOR AN EXTRA. ANY EXTRA INVOLVED SHALL BE APPROVED WITH THE ENGINEER BEFORE WORK COMMENCES.

G5 ALL DIMENSIONS ARE IN MILLIMETRES UNLESS STATED OTHERWISE. ALL LEVELS ARE EXPRESSED IN METRES, AND ARE TO THE STRUCTURAL SURFACE UNLESS NOTED OTHERWISE.

G6 ALL PROPRIETARY PRODUCTS SHALL BE USED STRICTLY IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS.

G7 CONSTRUCTION USING THESE STRUCTURAL DRAWINGS SHALL ONLY COMMENCE IF THE STRUCTURAL DRAWINGS ARE DESIGNATED "ISSUED FOR CONSTRUCTION".

G8 DIMENSIONS SHALL BE TAKEN FROM ARCHITECTURAL DRAWINGS ONLY. STRUCTURAL DRAWINGS SHALL NOT BE SCALED TO OBTAIN DIMENSIONS.

G9 FOR ALL PREFABRICATED STRUCTURAL ELEMENTS, AN EXPERIENCED SHOP DETAILER SHALL PREPARE SEPARATE WORKSHOP DETAIL DRAWINGS FOR ANY STEELWORK SPECIFIED ON THESE DRAWINGS. FABRICATION SHALL NOT COMMENCE UNTIL THE STRUCTURAL ENGINEER AND OTHER RELEVANT PARTIES SO ADVISE. ALLOW AT LEAST 10 WORKING DAYS FOR APPROVAL.

SURVEY

SV1 SURVEY DATE: 13/03/25

SV2 LEVEL DATUM AHD ADOPTED FROM PSM 6129/1003

SV3 COORDINATE DATUM MGA 2020 ORIGIN POINT: PSM 6129/1003

STORMWATER

ST1 THE SITE CIVIL PLAN IS AN ENGINEERING PLAN, AND SHOULD NOT BE TAKEN AS A CADASTRAL OR IDENTIFICATION SURVEY. BOUNDARY DATA SHOWN IS TO BE TAKEN AS A GUIDE ONLY.

ST2 ALL SITE LEVELS AND DETAILS MUST BE CHECKED AND APPROVED BY THE OWNER/BUSINESS PRIOR TO COMMENCEMENT OF ANY WORKS.

ST3 THE NOMINATED FINISHED FLOOR LEVEL SHALL BE CONFIRMED BY THE BUILDER PRIOR TO COMMENCING WORKS TO ENSURE MINIMUM PIPE GRADES CAN BE ACHIEVED. NOTIFY THIS OFFICE IF ALTERATIONS ARE REQUIRED.

ST4 INSTALLATION OF STORMWATER SYSTEMS TO COMPLY WITH AS/NZS 3500.

ST5 COVER TO PIPES SHALL COMPLY WITH AS/NZS 3500.1. PIPES LESS THAN 300mm BELOW THE FINISHED SURFACE SHALL BE ENCASED IN 100mm OF CONCRETE.

ST6 PROVIDE SUITABLE PROPRIETARY FIRST FLUSH SYSTEM TO RAINWATER TANK INLETS, INCLUDING LEAF SCREENS, ETC.

ST7 DOWNPIPE AND TANK LOCATIONS ARE SHOWN INDICATIVELY ONLY.

ST8 INSPECTION POINTS, TYPE AND LOCATIONS TO BE IN ACCORDANCE WITH AS/NZS 3500.

ST9 TWO PUMPS SHALL BE PROVIDED FOR EACH PUMP SPECIFIED IN THESE DRAWINGS. EACH PUMP SHALL BE CAPABLE OF ACHIEVING THE DESIGNATED FLOW RATE. THE PUMPS SHALL BE CONFIGURED TO AUTOMATICALLY ALTERNATE AS THE DUTY PUMP. THE SYSTEM SHALL BE CONFIGURED TO AUTOMATICALLY REVERT TO THE ALTERNATE PUMP SHOULD THE DUTY PUMP FAIL. ALL PUMPS SHOULD BE PROVIDED WITH A BACKUP POWER SUPPLY. PROVIDE AN AUDIBLE ALARM SYSTEM THAT SOUNDS WHEN ANY PUMP HAS FAILED.

ST10 PUMPS ARE TO BE SUPPORTED BY CHAINS TO ALLOW FOR LIFTING OF PUMPS FOR MAINTENANCE. PROVIDE FLEXIBLE PLUMBING CONNECTIONS.

ST11 ALL DRAINAGE PITS AND THEIR LIDS SHALL HAVE A MINIMUM LOAD RATING OF CLASS C TO AS 3996.

GEOTEXTILE SAND CONTAINERS

GSC1 ALL WORKS TO COMPLY WITH TECHNICAL SPECIFICATION, RELEVANT AUSTRALIAN STANDARDS AND MANUFACTURERS SPECIFICATIONS.

GSC2 SUPPLY AND INSTALL VANDAL-RESISTANT GEOSYNTHETIC SAND CONTAINERS (GSCS) AS PER DESIGN ALIGNMENT AND LEVELS.

GSC3 GSCS TO BE FILLED WITH LOCALLY SOURCED SAND USING PROPRIETARY FILLING EQUIPMENT (HOPPER SYSTEM AND J-BIN) AND WATER FOR HYDRAULIC COMPACTION.

GSC4 PLACE GSCS IN STRETCHER BOND LAYOUT, STARTING AT SLOPE TOE, WITH SUBSEQUENT LAYERS STAGGERED (HALF BAG WIDTH) TO AVOID CONTINUOUS VERTICAL JOINTS.

GSC5 MAINTAIN SPECIFIED FILLED DIMENSIONS AND ENSURE CORRECT OVERLAP AND ALIGNMENT FOR STABILITY.

GSC6 ALL GSCS TO BE INSTALLED USING MANUFACTURER'S INSTRUCTIONS AND APPROVED PLANT; HANDLE TO AVOID DAMAGE TO BAGS AND UNDERLYING LINER.

GSC7 MINIMUM 300MM OVERLAP FOR ALL GEOTEXTILE JOINTS, SEWN TO AS 3706.6 AND MANUFACTURER'S RECOMMENDATIONS.

GSC8 GEOTEXTILE LINER TO BE 1200R TEXCEL OR EQUIVALENT, LAID ON PREPARED FOUNDATION FREE OF DEBRIS, WITHOUT WRINKLES OR VOIDS.

GSC9 TOE AND CREST LEVELS OF SEAWALL NOT TO VARY BY MORE THAN 0.1M OVER ANY 5M LENGTH; BATTER SLOPES AS SHOWN ON DRAWINGS.

GSC10 BACKFILL SAND OVER TOE AND REVETMENT TO NATURAL BEACH LEVEL.

GSC11 ALL WORKS TO BE SURVEYED AND "AS CONSTRUCTED" DRAWINGS SUBMITTED IN AUTOCAD FORMAT.

GSC12 CONTRACTOR TO COORDINATE WITH SUPERINTENDENT FOR ALL HOLD/INSPECTION POINTS AS PER SPECIFICATION.

GSC13 ANY DAMAGED OR NON-CONFORMING GSCS OR GEOTEXTILE TO BE REPLACED AT CONTRACTOR'S EXPENSE.

STRUCTURAL TIMBER

T1 ALL STRUCTURAL TIMBER HAS BEEN DESIGNED FOR THE SEASONED CONDITION.

T2 UNLESS NOTED OTHERWISE IN THE MEMBER SCHEDULE, ALL STRUCTURAL TIMBER SHALL COMPLY WITH THE FOLLOWING AUSTRALIAN STANDARDS IN RESPECT OF GRADE AND CONDITIONS OF SUPPLY:

VISUALLY GRADED SAWN TIMBER	AS 2082 OR AS 2858
MECHANICALLY GRADED TIMBER	AS/NZS 1748
PROOF-GRADED TIMBER	AS 3519
STRUCTURAL PLYWOOD	AS/NZS 2269.0
STRUCTURAL LAMINATED VENEER LUMBER	AS/NZS 4357.0
GLUED LAMINATED TIMBER	AS/NZS 1328.1

T3 ALL MEMBERS SHALL BE SUPPLIED IN SINGLE LENGTH BY THE DISTRIBUTOR AND SPLICES SHALL ONLY BE PERMITTED IN THE LOCATIONS SHOWN ON THESE STRUCTURAL DRAWINGS.

T4 UNLESS NOTED OTHERWISE, PROTECTIVE TREATMENT SHALL COMPLY WITH AS 1604.1:

EXTERNAL ABOVE GROUND	H3
EXT. IN-GROUND (CONC. ENCASED PRIMARY, OR LOW RISK MEMBERS)	H4

T5 ALL BEAMS AND RAFTERS SHALL BE SUPPLIED WITH ANY NATURAL CAMBER UP. ADDITIONAL CAMBER SHALL BE AS NOTED ON THESE STRUCTURAL TIMBER DRAWINGS.

T6 ENSURE THAT THERE ARE NO LOOSE KNOTS, SEVERE SLOPING GRAIN, GUM VEINS, GUM OR ROT POCKETS, LYCTID-SUSCEPTIBLE SAPWOOD, HOLES OR SPLITS IN THE VICINITY OF ANY FASTENERS OR NOTCH ROOTS.

T7 BOLTING CATEGORIES SHOWN ON THESE STRUCTURAL TIMBER DETAILS SHALL BE 4.6/S. TEST CERTIFICATES CONFIRMING FULL COMPLIANCE WITH AS 1111.1 AND ANY OTHER AUSTRALIAN STANDARDS CITED THEREIN SHALL BE SUPPLIED TO THE STRUCTURAL ENGINEER.

T8 BOLTS SHALL BE INSTALLED IN ACCORDANCE WITH CLAUSE 15.2.3 OF AS 4100.

T9 UNLESS NOTED OTHERWISE ALL BOLTS, NUTS AND WASHERS SHALL BE GALVANISED.

T10 ALL BOLT HOLES SHALL BE PREBORED TO APPROXIMATELY 10% GREATER THAN THE BOLT DIAMETER.

T11 EVERY BOLT SHALL BE FITTED WITH A WASHER AT EACH END OF A SIZE NOT LESS THAN GIVEN IN TABLE 4.11 OF AS1720.1.

T12 ALL SCREWS SHOWN ON THESE STRUCTURAL TIMBER DETAILS SHALL FULLY COMPLY WITH AS 3566. ALL SCREW HOLES SHALL BE PREBORED. THE DIAMETER OF THE HOLE FOR THE SHANK SHALL BE EQUAL TO THE DIAMETER OF THE SHANK, AND THE LEAD HOLE FOR THE THREADED PORTION OF THE SCREW SHALL NOT BE GREATER THAN THE ROOT DIAMETER OF THE SCREW.

T13 ALL NAILS SHOWN ON THESE STRUCTURAL TIMBER DETAILS SHALL FULLY COMPLY WITH AS 2334.

T14 CONNECTION CLEATS SHOWN ON THE STRUCTURAL DRAWINGS WHERE NOT IDENTIFIED SPECIFICALLY, SHALL BE EITHER GRADE 250 PLATE TO AS/NZS 3678 OR GRADE 300 FLAT BAR TO AS/NZS 3679.1 OR GRADE 300 ROLLED SECTIONS TO AS/NZS 3679.1.

T15 CONNECTION CLEATS SHALL BE PROTECTED FROM CORROSION COMPLYING WITH AS/NZS 2312/HDG390 OR AS/NZS 2312/IZS1.

STEELWORK

S1 FABRICATION AND ERECTION OF THE STRUCTURAL STEEL SHALL COMPLY WITH SECTIONS 14 AND 15 RESPECTIVELY OF AS 4100. INSTALLATION SET-OUTS TO BE ACCURATELY SURVEYED AND PROVIDE SURVEY CERTIFICATES OF ALL ERECTED STEELWORK INDICATING CONFORMANCE WITH TOLERANCES SPECIFIED AS 4100.

S2 UNLESS NOTED OTHERWISE IN THE MEMBER SCHEDULE, ALL STRUCTURAL STEEL SHALL COMPLY WITH THE FOLLOWING AUSTRALIAN STANDARDS IN RESPECT OF GRADE AND CONDITIONS OF SUPPLY:
ROLLED SECTIONS AS/NZS 3679.1 GRADE 300
WELDED SECTIONS AS/NZS 3679.2 GRADE 300
HOLLOW SECTIONS AS/NZS 1163 GRADE C350

S3 ALL MEMBERS SHALL BE SUPPLIED IN SINGLE LENGTHS BY THE DISTRIBUTOR AND SPLICES SHALL ONLY BE PERMITTED IN THE LOCATIONS SHOWN ON THESE STRUCTURAL STEEL DRAWINGS.

S4 PROPRIETARY CLEATS SHALL BE PROVIDED BY THE FABRICATOR FOR THE CONNECTION OF COLD FORMED SECTIONS. USE 8mm THICK CLEATS AND 2M12 4.6/S BOLTS UNLESS NOTED OTHERWISE.

S5 BOLTING CATEGORIES SHOWN ON THESE STRUCTURAL STEEL DETAILS SHALL BE THOSE DEFINED IN CLAUSE 9.3.1 OF AS 4100 (NAMELY 4.6/S, 8.8/S, 8.8/TB, 8.8/TF). TEST CERTIFICATES CONFIRMING FULL COMPLIANCE WITH THE RELEVANT AUSTRALIAN STANDARDS (AS 1111 OR AS/NZS 1252) AND ANY OTHER AUSTRALIAN STANDARDS CITED THEREIN SHALL BE SUPPLIED TO THE STRUCTURAL ENGINEER.

S6 BOLTS SHALL BE INSTALLED IN ACCORDANCE WITH CLAUSE 15.2.3 OF AS 4100 AND BOLTS REQUIRING TENSIONING (8.8/TB AND 8.8/TF) SHALL BE INSTALLED IN ACCORDANCE WITH CLAUSES 15.2.4 AND 15.2.5 OF AS 4100 USING EITHER THE PART-TURN METHOD OR A DIRECT-TENSION INDICATION DEVICE. THE TORQUE CONTROL METHOD SHALL NOT BE USED.

S7 8.8 GRADE BOLTS SHALL NOT BE WELDED OR BENT.

S8 UNLESS NOTED OTHERWISE ALL BOLTED CONNECTIONS SHALL BE 2M16 4.6/S WITH 10mm THICK CLEATS.

S9 UNLESS NOTED OTHERWISE, ALL BOLTS, NUTS AND WASHERS SHALL BE GALVANISED.

S10 ALL WELDING SHALL COMPLY WITH AS/NZS 1554.1 UNLESS NOTED OTHERWISE ON THE STRUCTURAL STEEL DETAILS. WELDING CATEGORY SHALL BE SP UNLESS NOTED OTHERWISE. ALL WELD METAL SHALL HAVE A NOMINAL WELD METAL TENSILE STRENGTH OF 430 MPA UNLESS NOTED OTHERWISE.

S11 UNLESS OTHERWISE NOTED WELDS SHALL BE 6mm CONTINUOUS FILLET (CFW).

S12 ALL WELDING PERSONNEL SHALL BE QUALIFIED IN ACCORDANCE WITH AS/NZS 1554.1.

S13 CONNECTION CLEATS SHOWN ON THE STRUCTURAL DRAWINGS WHERE NOT IDENTIFIED SPECIFICALLY, SHALL BE EITHER GRADE 250 PLATE TO AS/NZS 3678 OR GRADE 300 FLAT BAR TO AS/NZS 3679.1.

CORROSION PROTECTION

C01 THE ATMOSPHERIC CORROSIVITY CATEGORY FOR THIS SITE IN ACCORDANCE WITH AS/NZS 2312 IS:

INTERNAL	C2
EXTERNAL (INCLUDING ELEMENTS NOT CLAD & FULLY-SEALED	C3

C02 THE SELECTED CORROSION PROTECTION SYSTEM SHALL BE IN ACCORDANCE WITH AS/NZS 2312.1 FOR PAINT COATINGS AND AS/NZS 2312.2 FOR HOT DIP GALVANIZING. PROTECTIVE COATING DURABILITY IS MEASURED BY THE TIME ELAPSED BEFORE THE FIRST MAJOR MAINTENANCE OF A COATING SYSTEM BECOMES NECESSARY TO ARREST CORROSION. WHEREVER POSSIBLE, A COATING SYSTEM WITH A DURABILITY OF 25+ YEARS TO FIRST MAINTENANCE SHOULD BE SELECTED.

C03 SURFACE PREPARATION SHALL BE IN ACCORDANCE WITH AS 1627.

C04 THE TABLE BELOW OUTLINES RECOMMENDED PAINT SYSTEMS FOR THE RESPECTIVE CORROSIVITY CATEGORIES. ALTERNATIVE SYSTEMS SHALL BE APPROVED PRIOR TO COATING.

CORROSIVITY CATEGORY	SURFACE PREP.	SYSTEM DESIGNATION	COATING DETAILS		DURABILITY (YEARS)
C1	Sa 2.5	IZS1	75µm INORGANIC ZINC SILICATE		25+
C2	Sa 2.5	IZS1	75µm INORGANIC ZINC SILICATE		25+
C3	Sa 2.5	IZS1	125µm INORGANIC ZINC SILICATE		25+
C4	Sa 2.5	EHB6	1ST:	75µm INORGANIC ZINC SILICATE	25+
			2ND:	125µm HIGH BUILD EPOXY WITH MICACEOUS IRON OXIDE.	
			3RD:	125µm HIGH BUILD EPOXY WITH MICACEOUS IRON OXIDE.	

C05 THE TABLE BELOW OUTLINES RECOMMENDED HOT DIP GALVANIZING SYSTEMS FOR THE RESPECTIVE CORROSIVITY CATEGORIES. ALTERNATIVE SYSTEMS SHALL BE APPROVED PRIOR TO COATING.

CORROSIVITY CATEGORY	OPEN SECTIONS		TUBE SECTIONS	
	MINIMUM THICKNESS	DURABILITY (YEARS)	MINIMUM THICKNESS	DURABILITY (YEARS)
C3	390g/m²	26-78	300g/m²	20-60
C4	900g/m²	30-60	NOT SUITABLE	–
C3	900g/m²	15-30	NOT SUITABLE	–

C06 DAMAGE TO THE COATING FROM WHAT EVER CAUSE SHALL BE REPAIRED TO THE SAME STANDARD USED FOR THE ORIGINAL COATING. SURFACES TO BE REPAIRED SHALL BE FREE OF DIRT OR GREASE, VISIBLE OXIDATION AND OTHER CONTAMINANTS BEFORE APPLYING THE PRIMER.

C07 EXTEND PAINT PROTECTION TO AT LEAST 100mm BELOW THE TOP OF CONCRETE (WHERE APPLICABLE).

C08 UNLESS NOTED OTHERWISE, STEEL ELEMENTS COVERED BY SOIL SHALL BE DENSO WRAPPED FROM 100mm BELOW THE TOP OF CONCRETE, TO 100mm ABOVE GROUND LEVEL. BASEPLATES COVERED BY SOIL CONNECTIONS SHALL BE DENSO WRAPPED TO 100mm ABOVE GROUND LEVEL.

PILING

PL1 ALL PILING SHALL BE IN ACCORDANCE WITH AS2159.

PL2 ALL PILES SHALL BE DRIVEN TO THE MINIMUM DEPTH SPECIFIED IN THE PILE SCHEDULE ON DWG. XXXXX-X, IN FIRM SAND OR CLAY STRATUM, OR UNTIL A SET OF 10mm PER BLOW OVER 1m OF DRIVING IS ACHIEVED, WHICHEVER IS DEEPER.

PL3 THE CONTRACTOR SHALL ESTABLISH AND MAINTAIN PERMANENT DATUM LEVEL POINTS, BASE LINES AND GRID LINES AND SHALL SET OUT THE POSITION OF EACH PILE.

PL4 THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CORRECT AND PROPER SETTING OUT OF THE PILES AND FOR THE CORRECTNESS OF THE POSITIONS, LEVELS, DIMENSIONS AND ALIGNMENT OF THE PILES.

PL5 PILES SHALL BE PITCHED TO THE CORRECT ALIGNMENT AND POSITION WITH THE FACE OF THE PILES PLUMB. ALLOWABLE TOLERANCES (mm) SHALL BE AS SHOWN IN THE TABLE BELOW:

TYPE	VERTICAL PILES
HORIZONTAL AFTER PITCHING, BEFORE DRIVING	50
HORIZONTAL AFTER DRIVING	100
DISTANCE BETWEEN PILES	100
DEVIATION FROM VERTICAL OR SPECIFIED RATE	1 IN 75

PL6 SHOULD ANY DRIVEN PILE EXCEED THE SPECIFIED TOLERANCE THEN THE SUPERINTENDENT MAY DIRECT AND THE CONTRACTOR SHALL EXTRACT AND DRIVE A REPLACEMENT PILE OR PILES AT HIS OWN EXPENSE IN THE CORRECT OR SOME ADJACENT POSITION.

PL7 THE CONTRACTOR SHALL KEEP DAILY RECORD SHEETS OF PILE DRIVING IN SUCH DETAIL AND FORM AS SHOWN IN HIS METHOD STATEMENT. SUCH RECORD SHEETS SHALL RECORD THE FOLLOWING INFORMATION:

A. THE DATE AND TIME OF PILE DRIVING
B. POSITION OF THE PILE (NUMBER, TYPE, SIZE AND RAKE OF PILE)
C. TYPE AND SIZE OF HAMMER, FOR DROP OR SINGLE ACTING HAMMER, DETAILS OF RELEASE MECHANISM AND THE LENGTH OF THE DROP OR STROKES, FOR DIESEL HAMMER, THE LENGTH OF STROKE AND THE BLOWS PER MINUTE. FOR DOUBLE ACTING HAMMER THE NUMBER OF BLOWS PER MINUTE
D. ANY INITIAL GROUND TREATMENT TO FACILITATE INITIAL SEATING AND DRIVING
E. LENGTH OF PILE PITCHED AND RL OF TOE OF PILE WITH HAMMER IN PLACE BEFORE DRIVING
F. DRIVING LOG (DEPTH, BLOW COUNTS PER 250mm FOR WHOLE OF PENETRATION, INTERRUPTIONS OR BREAKS IN DRIVING)
G. THE SET (ADDITIONAL PILE PENETRATION IN mm PER BLOW) AND TEMPORARY COMPRESSION FOR EACH OF THE LAST TEN BLOWS
H. DEVIATIONS FROM TOLERANCES AND THE LINE AND LEVEL SHOWN ON THE DRAWINGS
I. DOLLY AND PACKING, TYPE AND CONDITION BEFORE AND AFTER DRIVING
J. DETAILS OF ANY MUCKING OUT OR OTHER WORKS AT THE PILE TOE TO ACHIEVE PENETRATION
K. DETAILS OF ANY RE-DRIVING OR RESTRIKE TESTING
L. LENGTHENING AND THE POSITION OF ANY SPLICE IN THE PILE
M. RL OF TOE OF PILE ON COMPLETION OF DRIVING
N. LENGTH OF COMPLETED PILE

COPIES OF THE RECORD SHEETS FOR EACH PILE SHALL BE SUBMITTED TO THE SUPERINTENDENT WITHIN 24 HOURS OF DRIVING.

SAFETY-IN-DESIGN REVIEW

MAGRYN & ASSOCIATES (MAGRYN) HAVE CONDUCTED A PRELIMINARY SAFETY-IN-DESIGN REVIEW OF THE DESIGN SHOWN ON THESE DRAWINGS. THE REVIEW IS BASED GENERALLY ON THE PROCEDURE OUTLINED IN THE SAFE WORK AUSTRALIA PUBLICATION "SAFE DESIGN OF STRUCTURES CODE OF PRACTICE" (JULY 2012).

THE DESIGN HAS NOT BEEN REVIEWED WITH A CONTRACTOR/BUILDER AT THE TIME OF ISSUE FOR TENDER OR CONSTRUCTION. CONSTRUCTION METHODS VARY BETWEEN CONTRACTORS SO IT IS NOT POSSIBLE FOR MAGRYN TO PERFORM AN EXHAUSTIVE SAFETY-IN-DESIGN OR SAFETY-IN-CONSTRUCTION REVIEW. ONCE APPOINTED, THE CONTRACTOR IS REQUIRED TO UNDERTAKE A THOROUGH REVIEW OF THE DESIGN WITH THEIR SUB-CONTRACTORS TO IDENTIFY SAFETY RISKS DURING CONSTRUCTION AND DURING THE LIFE OF THE BUILDING.

CONTRACTORS ARE RESPONSIBLE TO REVIEW THEIR PROPOSED ERECTION PROGRAMS/SEQUENCE AND FOR THE TEMPORARY FRAMING TO SUPPORT STRUCTURAL ELEMENTS. CONTRACTORS SHALL PROVIDE DOCUMENTATION THAT OUTLINE HOW THE PROJECT WAS BUILT SO THAT THE DEMOLITION CONTRACTOR CAN ADEQUATELY EVALUATE RISKS DURING DEMOLITION PLANNING AT THE END OF THE LIFE OF THE BUILDING.

LOCATION OF UNDERGROUND AND ABOVE GROUND SERVICES

1 MAGRYN HAS NOT CARRIED OUT A DIAL-BEFORE-YOU-DIG REVIEW DURING THE DESIGN PHASE. THE CONTRACTOR SHALL UNDERTAKE A REVIEW OF THEIR OWN TO VERIFY SERVICES ENTERING THE PROPERTY AND IN PROXIMITY TO THE BOUNDARY IN THE STREET/SURROUNDING THE PROPERTY.

2 DIAL-BEFORE-YOU-DIG DOES NOT CONFIRM THE LAYOUT OF SERVICES WITHIN THE SITE. THE CONTRACTOR SHALL ALLOW TO ENGAGE A SERVICES LOCATION CONTRACTOR TO CONDUCT A SURVEY OF ALL SERVICES ON THE SITE.

EXCAVATIONS

1 BATTER SLOPES SHALL BE IN ACCORDANCE WITH GEOTECHNICAL RECOMMENDATIONS AND SHALL BE INSPECTED BY THE GEOTECHNICAL ENGINEER TO CONFIRM ADEQUACY (INCLUDING REVIEW OF PROPOSED DURATION OF BATTER).

2 EXCAVATIONS GREATER THAN 1.0m DEEP REQUIRE SHORING AND SHALL NOT BE ACCESSED BY PERSONNEL WITHOUT APPROPRIATE CONFINED SPACE TRAINING.

3 PROVIDE BARRIERS TO ALL EXCAVATIONS TO PREVENT FALLS.

4 ENSURE MEASURES TO PROTECT ADJACENT PROPERTY / STRUCTURES ARE FOLLOWED STRICTLY IN ACCORDANCE WITH THESE DRAWINGS. IF IN DOUBT CONTACT MAGRYN.

5 CONTACT MAGRYN IF GROUND WATER IS ENCOUNTERED DURING EXCAVATION.

UNDERMINING

1 THE CONTRACTOR SHALL VERIFY THAT THE DOCUMENTED FOOTING DESIGN WILL NOT UNDERMINE THE EXISTING STRUCTURE BY UNCOVERING THE EXISTING FOOTINGS.

2 CONTACT MAGRYN IF IT APPEARS THAT THE DESIGN WILL UNDERMINE THE EXISTING FOOTINGS.

3 UNDERMINING WILL OCCUR IF THE EXCAVATION ENCROACHES WITHIN A 45° ANGLE OF THE BOTTOM OUTSIDE CORNER OF THE EXISTING FOOTING.

VERIFICATION OF SOIL CONDITIONS

1 THE GEOTECHNICAL INVESTIGATION WAS BASED ON A LIMITED SURVEY VIA BORE HOLES IN DISCRETE LOCATIONS AROUND THE SITE (REFER TO THE GEOTECHNICAL REPORT REFERENCED ON THESE DRAWINGS). THE CONTRACTOR SHALL HAVE THE SOIL DESIGN PARAMETERS VERIFIED DURING EXCAVATION. ALLOW TO ENGAGE THE GEOTECHNICAL ENGINEER TO CONDUCT A REVIEW OF THE SOIL DURING CLEARING / EXCAVATION OF THE SITE.

ISSUE	DATE	DESIGN	DRAWN	CHK'D	
H	20.02.26	BJ	TH	WS	NO CHANGES
G	28.01.26	BJ	TH	WS	AMENDMENTS
F	19.12.25	WS	AW	–	NO CHANGES
E	16.12.25	WS	AW	–	AMENDMENTS
D	22.07.25	BJ	TH	WS	AMENDMENTS
C	11.07.25	BJ	TH	WS	ISSUED FOR TENDER
B	10.06.25	BJ	TH	WS	PRELIMINARY ISSUE
A	14.04.25	BJ	TH	WS	CONCEPT ISSUE

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> COASTAL
> FORENSIC

CLIENT: DISTRICT COUNCIL OF TUMBY BAY

PROJECT: TEMPORARY GSC SEAWALL & FRP BEACH ACCESS RAMP DETAILED DESIGN

PROJECT ADDRESS: TUMBY BAY

TITLE: NOTES

PROJECT STATUS: **ISSUED FOR TENDER**

SHEET SIZE: A1
SCALE: AS SHOWN

DRAWING NUMBER: 25105-N1

REVISION: H



SITE PLAN
SCALE 1:250

ISSUE	DATE	DESIGN	DRAWN	CHK'D	
H	20.02.26	BJ	TH	WS	AMENDMENTS
G	28.01.26	BJ	TH	WS	AMENDMENTS
F	19.12.25	WS	AW	–	AMENDMENTS
E	16.12.25	WS	AW	–	AMENDMENTS
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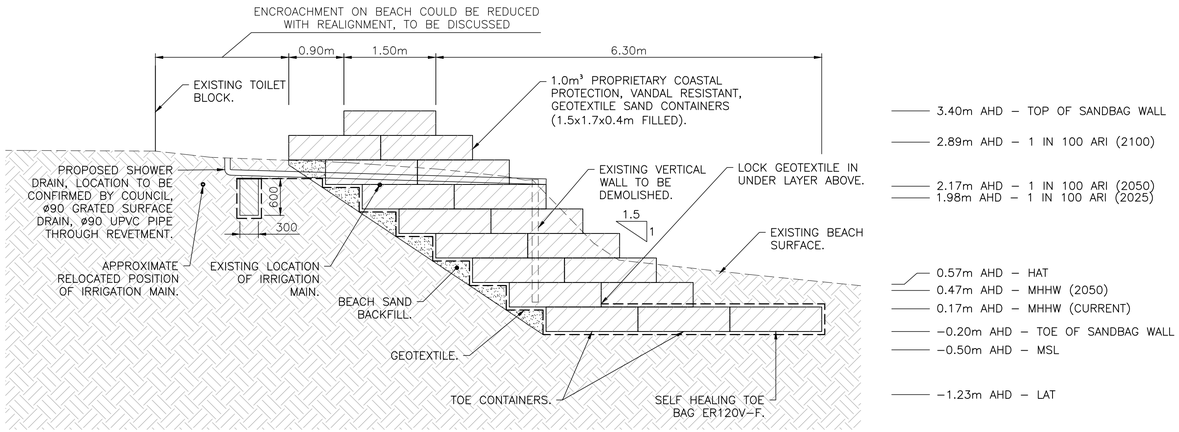
PROJECT: TEMPORARY GSC SEAWALL & FRP BEACH ACCESS RAMP DETAILED DESIGN

PROJECT ADDRESS: TUMBY BAY

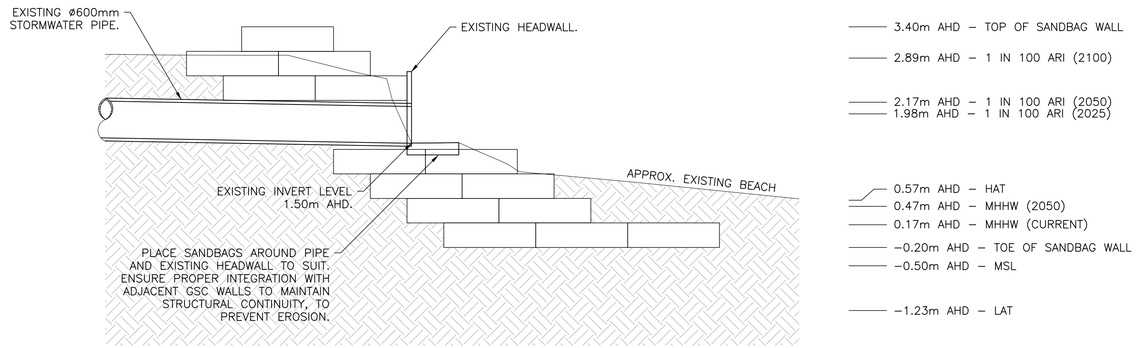
TITLE: SITE PLAN

PROJECT STATUS: **ISSUED FOR TENDER**

SHEET SIZE: A1 | SCALE: AS SHOWN | DRAWING NUMBER: 25105-1 | REVISION: H

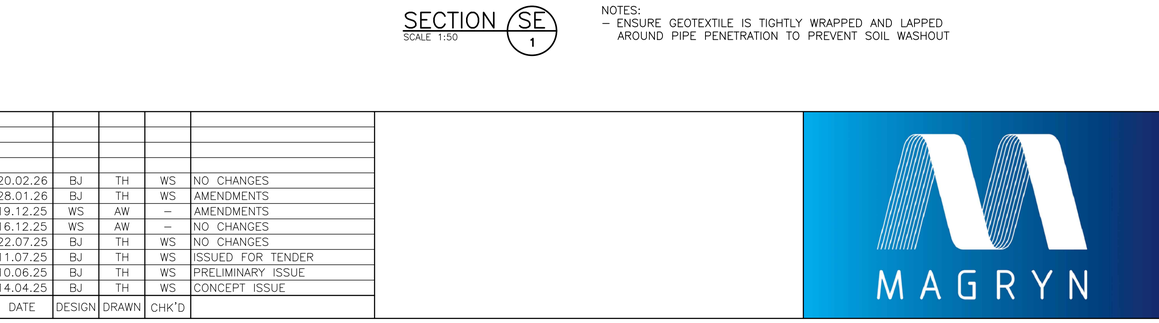


SECTION SA 1
SCALE 1:50



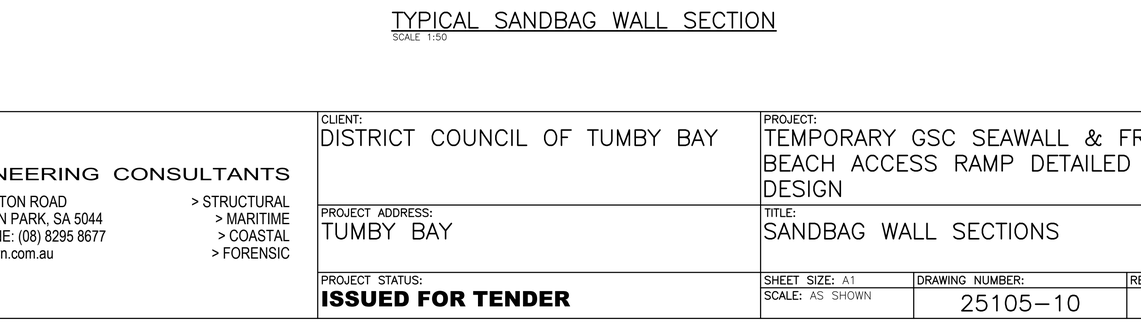
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NOTES:
– ENSURE GEOTEXTILE IS TIGHTLY WRAPPED AND LAPPED AROUND PIPE PENETRATION TO PREVENT SOIL WASHOUT.



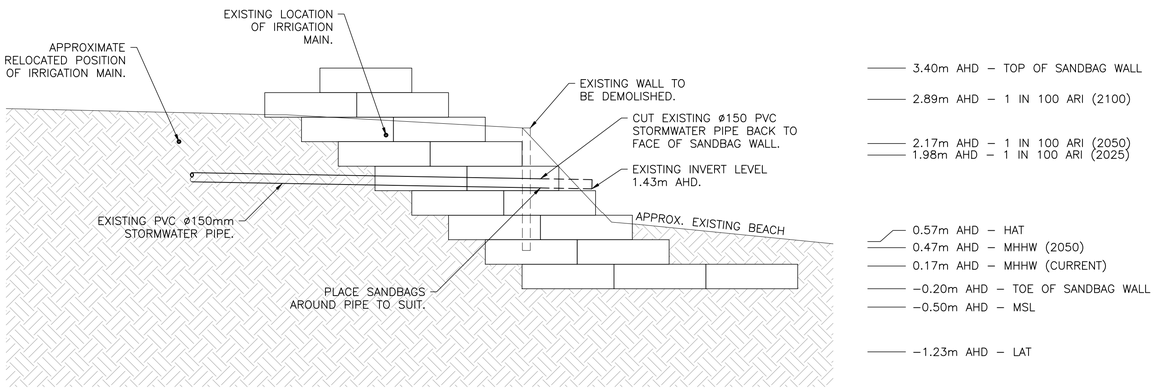
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NOTES:
– ENSURE GEOTEXTILE IS TIGHTLY WRAPPED AND LAPPED AROUND PIPE PENETRATION TO PREVENT SOIL WASHOUT.



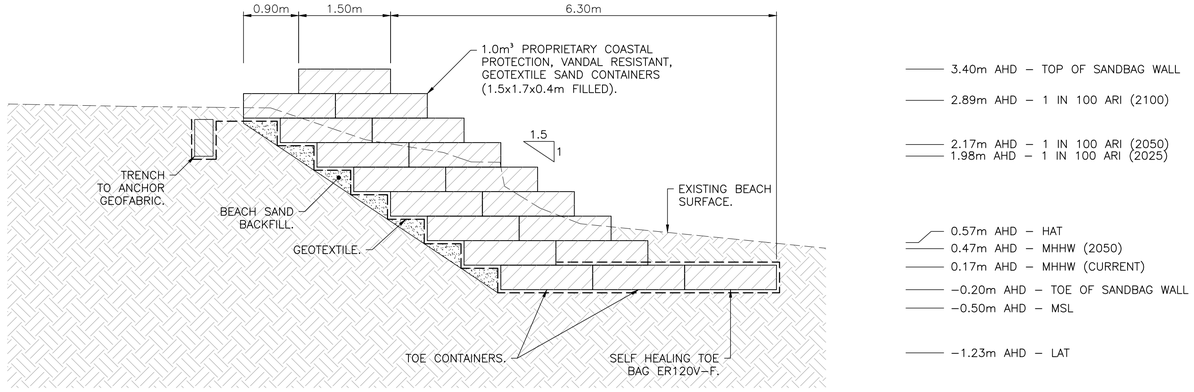
SECTION SD 1
SCALE 1:50

NOTES:
– MARINE GRADE PIPE TO BE PROPRIETARY TO SUIT TIDAL/SPLASH ZONE COASTAL EXPOSURE.
– ENSURE GEOTEXTILE IS TIGHTLY WRAPPED AND LAPPED AROUND PIPE PENETRATION TO PREVENT SOIL WASHOUT.



SECTION SE 1
SCALE 1:50

NOTES:
– ENSURE GEOTEXTILE IS TIGHTLY WRAPPED AND LAPPED AROUND PIPE PENETRATION TO PREVENT SOIL WASHOUT



TYPICAL SANDBAG WALL SECTION
SCALE 1:50

ISSUE	DATE	DESIGN	DRAWN	CHK'D	
H	20.02.26	BJ	TH	WS	NO CHANGES
G	28.01.26	BJ	TH	WS	AMENDMENTS
F	19.12.25	WS	AW	–	AMENDMENTS
E	16.12.25	WS	AW	–	NO CHANGES
D	22.07.25	BJ	TH	WS	NO CHANGES
C	11.07.25	BJ	TH	WS	ISSUED FOR TENDER
B	10.06.25	BJ	TH	WS	PRELIMINARY ISSUE
A	14.04.25	BJ	TH	WS	CONCEPT ISSUE

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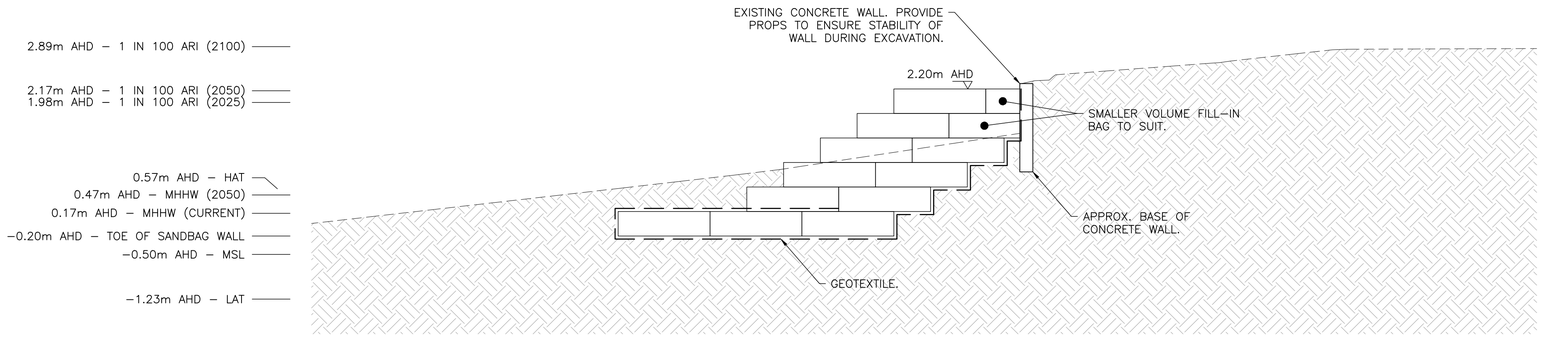
PROJECT: TEMPORARY GSC SEAWALL & FRP BEACH ACCESS RAMP DETAILED DESIGN

PROJECT ADDRESS: TUMBY BAY

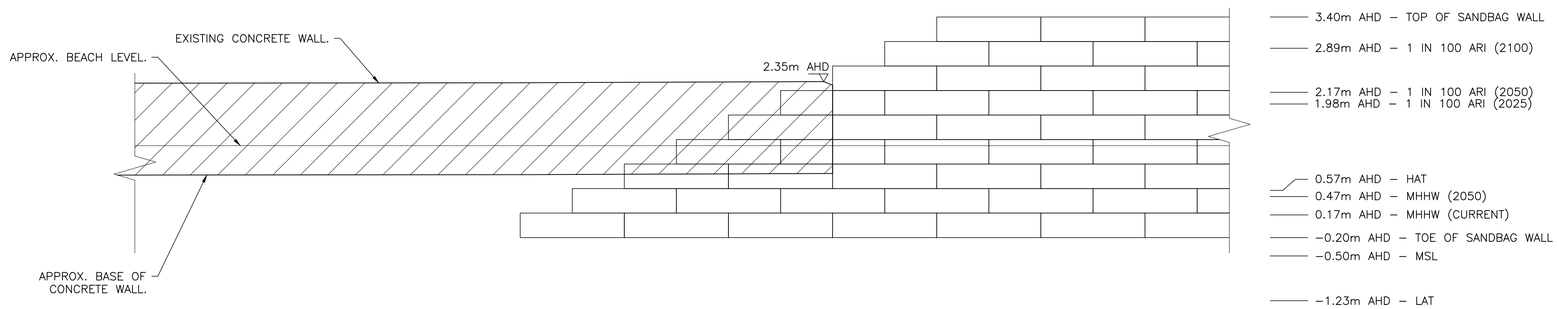
TITLE: SANDBAG WALL SECTIONS

PROJECT STATUS: **ISSUED FOR TENDER**

SHEET SIZE: A1 | SCALE: AS SHOWN | DRAWING NUMBER: 25105–10 | REVISION: H



SECTION R
SCALE 1:50



SECTION S
SCALE 1:50

ISSUE	DATE	DESIGN	DRAWN	CHK'D	
H	20.02.26	BJ	TH	WS	NO CHANGES
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PROJECT ADDRESS: TUMBY BAY

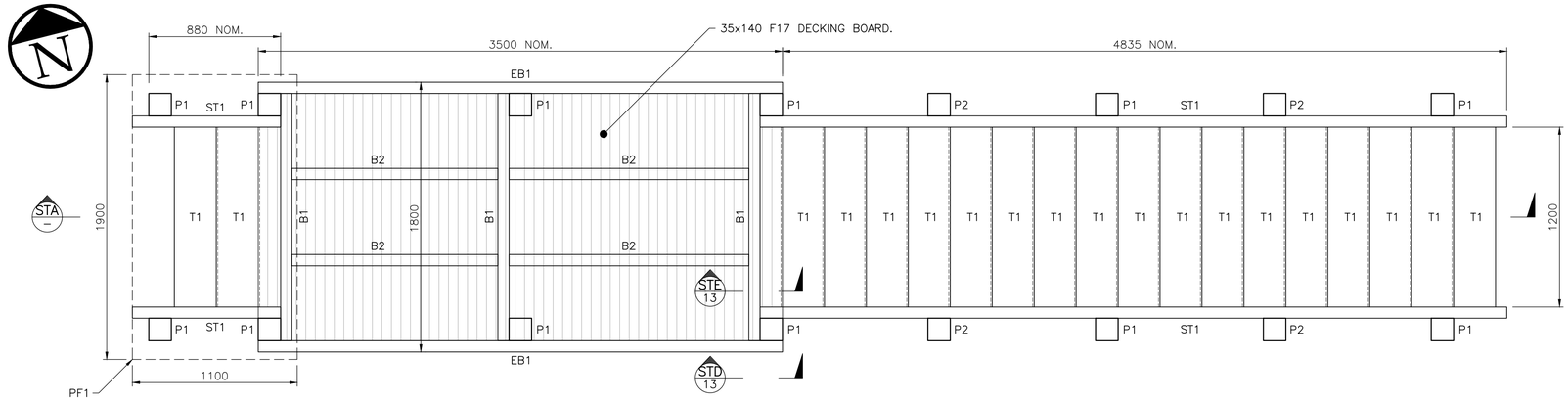
TITLE: SANDBAG WALL SECTIONS

PROJECT STATUS: **ISSUED FOR TENDER**

SHEET SIZE: A1
SCALE: AS SHOWN

DRAWING NUMBER: 25105–11

REVISION: H



TIMBER BEACH ACCESS STAIRS – PLAN VIEW

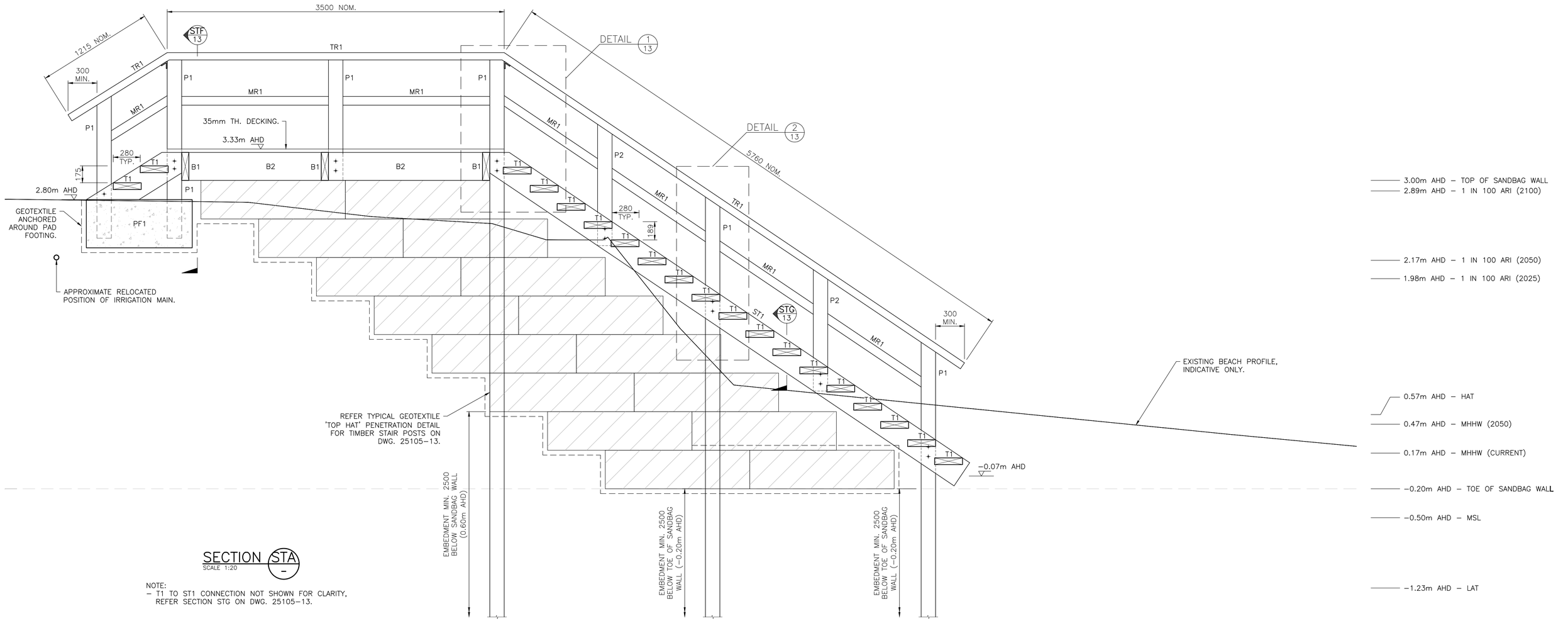
SCALE 1:20

NOTES:
- HANDRAIL/MID-RAIL NOT SHOWN FOR CLARITY.
- SANDBAG WALL NOT SHOWN FOR CLARITY.

FOOTING SCHEDULE		
MARK	SIZE	DESCRIPTION
PF1	1100x1900x500 DEEP	UNREINFORCED PAD FOOTING, CAST POSTS P1 INTO FOOTING. PROVIDE 100mm COVER TO BASE. N32 CONCRETE

MEMBER SCHEDULE		
MARK	SIZE	COMMENTS
B1	290x75	TIMBER LANDING BEAM.
B2	290x75	TIMBER SUPPORTING LANDING BEAM.
P1	150x150	TIMBER POSTS. REFER SECTION STA FOR EMBEDMENT DEPTH.
P2	150x150	TIMBER POSTS.
ST1	290x75	TIMBER STAIR STRINGER.
EB1	290x75	TIMBER LANDING EDGE BEAM.
TR1	150x75 ON FLAT	TIMBER TOP RAIL.
MR1	90x90	TIMBER MID RAIL.
T1	290x70 ON FLAT + 100x100x10 EA H.D. GALVANIASED TREAD SUPPORT	TIMBER STAIR TREAD.

NOTES:
- ALL TIMBER MEMBERS TO BE F17 HARDWOOD.



SECTION STA

SCALE 1:20

NOTE:
- T1 TO ST1 CONNECTION NOT SHOWN FOR CLARITY, REFER SECTION STG ON DWG. 25105-13.

ISSUE	DATE	DESIGN	DRAWN	CHK'D	
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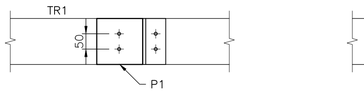
PROJECT: TEMPORARY GSC SEAWALL & FRP BEACH ACCESS RAMP DETAILED DESIGN

PROJECT ADDRESS: TUMBY BAY

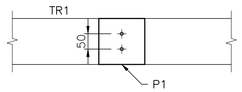
TITLE: TIMBER ACCESS STAIRS PLAN VIEW & SECTION

PROJECT STATUS: **ISSUED FOR TENDER**

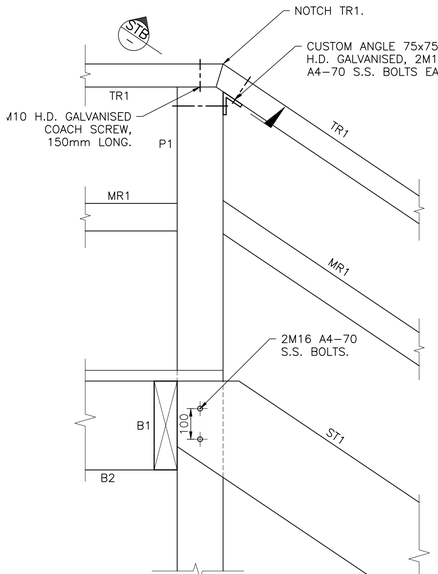
SHEET SIZE: A1 | SCALE: AS SHOWN | DRAWING NUMBER: 25105-12 | REVISION: H



SECTION STB
SCALE 1:10

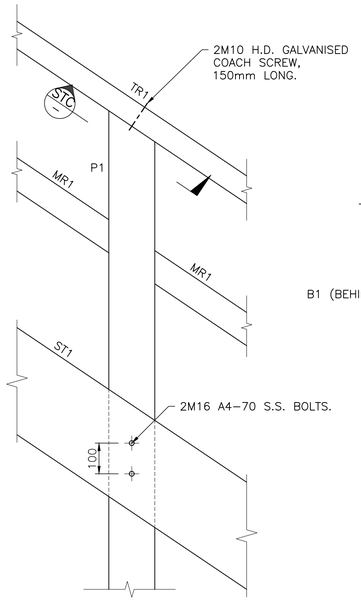


SECTION STC
SCALE 1:10



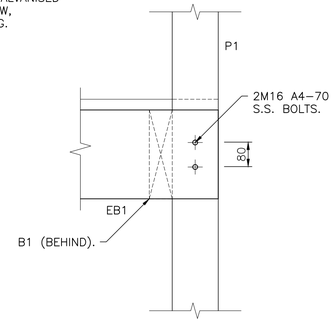
DETAIL 1
SCALE 1:10

NOTE: T1 NOT SHOWN FOR CLARITY.



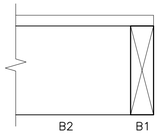
DETAIL 2
SCALE 1:10

NOTE: T1 NOT SHOWN FOR CLARITY.



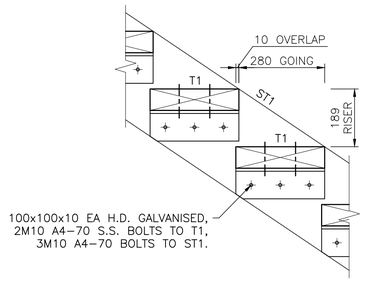
SECTION STD
SCALE 1:10

NOTE: ST1 NOT SHOWN FOR CLARITY.

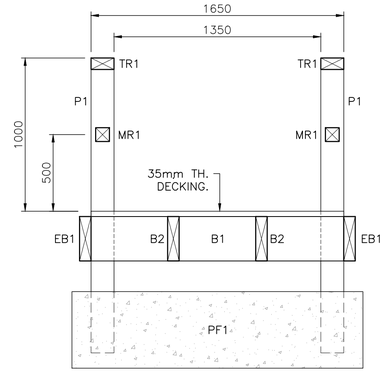


SECTION STE
SCALE 1:10

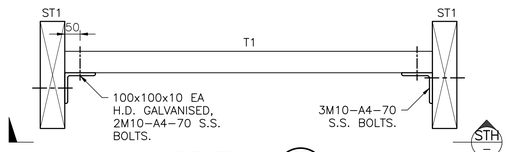
NOTE: T1 NOT SHOWN FOR CLARITY.



T1 TO ST1 DETAIL
SCALE 1:20



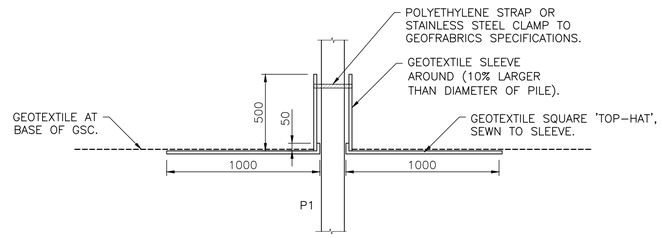
SECTION STF
SCALE 1:20



SECTION STG
SCALE 1:10



SECTION STH
SCALE 1:10



TYPICAL GEOTEXTILE 'TOP–HAT' DETAIL FOR TIMBER STAIR POSTS
SCALE 1:20

NOTE:
– THE ABOVE DETAIL IS TO SEAL AROUND THE POSTS WHERE THERE IS PENETRATION THROUGH GEOTEXTILE.

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CLIENT: DISTRICT COUNCIL OF TUMBY BAY

PROJECT ADDRESS: TUMBY BAY

PROJECT STATUS: **ISSUED FOR TENDER**

PROJECT: TEMPORARY GSC SEAWALL & FRP BEACH ACCESS RAMP DETAILED DESIGN

TITLE: TIMBER ACCESS STAIRS SECTIONS & DETAILS

SHEET SIZE: A1	DRAWING NUMBER:	REVISION:
SCALE: AS SHOWN	25105–13	H