GENERAL NOTES

1. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL AND OTHER CONSULTANTS' DRAWINGS, THE SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT.

2. ANY DISCREPANCY ON THE DRAWINGS OR BETWEEN THE DRAWINGS AND/OR THE SPECIFICATION AND/OR THE SPECIFIED AUSTRALIAN STANDARD SHALL BE REFERRED TO THE SUPERINTENDENT AND A WRITTEN INSTRUCTION RECEIVED PRIOR TO PROCEEDING WITH THE WORK. DURING TENDERING THE TENDERER SHALL ASSUME THE LARGER/GREATER CRITERIA IN TERMS OF COST IN THE ABSENCE OF OTHER INSTRUCTIONS.

3. THE DOCUMENTED DESIGN CONSTITUTES THE MAIN STRUCTURAL FRAMING BUT DOES NOT INCLUDE A FULL SCOPE OF SECONDARY STEEL TO SUPPORT FACADE CLADDING, HANDRAILS.

4. THESE DRAWINGS SHOW TYPICAL CONNECTION DETAILS ONLY. THE SHOP DRAFTER IS REQUIRED TO DEVELOP ALL CONNECTION DETAILS NOT SPECIFICALLY SHOWN. THE CONTRACTOR IS REQUIRED TO PRICE FOR ALL ASSOCIATED DETAILING FOR CONNECTIONS NOT SPECIFICALLY SHOWN.

5. THE STRUCTURAL DRAWINGS DO NOT SHOW ALL DETAILS OF FIXTURES, INSERTS, SLEEVES, OPENINGS, ETC. REQUIRED BY THE VARIOUS TRADES. ALL SUCH DETAILS, INCLUDING OPENINGS FOR CONSTRUCTION PURPOSES, MUST BE APPROVED BY THE SUPERINTENDENT BEFORE PROCEEDING WITH CONSTRUCTION.

6. WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE RELEVANT CURRENT AUSTRALIAN STANDARDS INCLUDING ALL AMENDMENTS CURRENT AT THE TIME OF CONTRACT AWARD AND THE REQUIREMENTS OF THE LOCAL STATUTORY AUTHORITIES, EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.

7. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE. ALL LEVELS ARE IN METRES UNLESS NOTED OTHERWISE.

8. ALL DIMENSIONS RELEVANT TO SETTING OUT AND OFF-SITE WORK SHALL BE VERIFIED BY THE CONTRACTOR BEFORE CONSTRUCTION OR FABRICATION IS COMMENCED. THE ENGINEER'S DRAWINGS SHALL NOT BE SCALED.

9. INNOVIS' ENGAGEMENT IS TO PROVIDE DOCUMENTED DESIGN FOR THE PERMANENT CONDITION SUITABLE FOR THE DOCUMENTED INTENDED OCCUPANCY USE ONLY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING THE STRUCTURE AND ANY ADJACENT STRUCTURES IN A SAFE AND STABLE CONDITION AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR IS TO DEVELOP A DETAILED SAFE WORK METHOD STATEMENT OUTLINING THE CONSTRUCTION SEQUENCE AND METHODOLOGY. THE CONTRACTOR IS TO ENGAGE A QUALIFIED AND SUITABLY EXPERIENCED ERECTION ENGINEER TO REVIEW THE CONSTRUCTION METHODOLOGY AND PROVIDE DESIGN OF TEMPORARY WORKS (SUCH AS PROPPING AND TEMPORARY BRACING) TO SUIT THE CONSTRUCTION SEQUENCE AND METHODOLOGY CHOSEN BY THE BUILDER.

10. THE APPROVAL OF A SUBSTITUTION SHALL BE SOUGHT FROM THE SUPERINTENDENT BUT IT IS NOT AN AUTHORISATION FOR A VARIATION. ANY CLAIM FOR A VARIATION MUST BE SUBMITTED TO THE SUPERINTENDENT BEFORE THE WORK COMMENCES.

11. THE STRUCTURAL WORK ON THESE DRAWINGS HAS BEEN DESIGNED FOR THE FOLLOWING LOADS:

a) SUPERIMPOSED DEAD AND LIVE LOAD

AREA	SDL kPa	LIVE LOAD kPa
DECK AND STAIRS	NIL	3
LOOKOUT DECK	NIL	4

b) WIND LOADING - AS1170.2:2011(R2016)

WIND LOADING	
REGION:	A5
TERRAIN CATEGORY:	TC1
WIND SPEED:	45m/s

3D AND ISOMETRIC VIEWS IN THESE DOCUMENTS ARE INDICATIVE ONLY AND SHOULD ONLY BE USED AS A VISUAL AID TO ASSIT IN THE INTERPETATION OF THE ORTHOGRAPHIC DRAWING VIEWS.

CONCRETE NOTES

1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENTEDITION OF AS3600 INCLUDING AMENDMENTS, EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.

2. SIZES OF CONCRETE ELEMENTS DO NOT INCLUDE THICKNESS OF APPLIED FINISHES.

3. HOLES, CHASES OR EMBEDMENT OF PIPES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL NOT BE MADE IN CONCRETE MEMBERS WITHOUT PRIOR APPROVAL OF THE SUPERINTENDENT.

4. CONSTRUCTION JOINTS SHALL BE PROPERLY FORMED AND USED ONLY WHERE SHOWN ON THE DRAWINGS OR SPECIFICALLY APPROVED BY THE SUPERINTENDENT.

5. ALL EXPOSED CONCRETE CORNERS TO HAVE 15 mm CHAMFER UNO.

6. FORMWORK AND BACK PROPPING SHALL BE DESIGNED BY A COMPETENT CHARTERED ENGINEER EXPERIENCED IN SUCH WORKS, CONSTRUCTED AND STRIPPED IN ACCORDANCE WITH AS3610. REFER TO ARCHITECTURAL DRAWINGS AND THE SPECIFICATION FOR CLASSES OF SURFACE FINISH.

7. CONCRETE COMPONENTS AND QUALITY SHALL BE AS FOLLOWS:

ELEMENT	f'c (MPa)	SPECIAL REQUIREMENT
CONCRETE PADS	N32	-

MAXIMUM AGGREGATE SIZE SHALL BE 20 mm

8. ALL CEMENT IS TO BE "GP" GENERAL PURPOSE PORTLAND CEMENT OR "GB" GENERAL PURPOSE BLENDED CEMENT OR TYPE "SR" SULPHATE-RESISTING CEMENT AS REQUIRED COMPLYING WITH AS3972 UNLESS NOTED OTHERWISE ON THE DRAWINGS. EXTRA RAPID HARDENING SUPERSULPHATED AND HIGH ALUMINA CEMENTS AND CEMENTS CONTAINING CHLORIDE SHALL NOT BE USED. THE USE OF FLY ASH AND/OR SILICA FUME AS A CEMENT SUBSTITUTE, OTHER THAN THAT PROPORTION ALLOWED AS PART OF THE "GB" CEMENT CONTENT WILL ONLY BE PERMITTED AS PART OF A DESIGNED CONCRETE MIX WHICH HAS BEEN APPROVED IN WRITING BY THE SUPERINTENDENT.

9. CONCRETE SLUMP TO BE A MAXIMUM OF 80 mm UNLESS NOTED OTHERWISE ON THE DRAWINGS.

10. FREE DROPPING OF CONCRETE FROM A HEIGHT GREATER THAN 1000 mm IS NOT PERMITTED.

11. SURFACES RECEIVING GROUT SHALL BE LEFT ROUGH AND FREE OF LAITANCE.

12. CONCRETE MUST BE CURED BY AN APPROVED METHOD IN ACCORDANCE WITH THE SPECIFICATION FOR SEVEN DAYS AFTER POURING.

13. REINFORCEMENT IS REPRESENTED DIAGRAMMATICALLY AND NOT NECESSARILY SHOWN IN TRUE PROJECTION OR SCALE.

14. REINFORCEMENT SYMBOLS:

N NORMAL DUCTILITY CLASS HOT ROLLED DEFORMED BARS OR MESH TO AS/NZS 4671 WITH fsy=500 MPa.

R NORMAL DUCTILITY CLASS 250N PLAIN ROUND BAR TO AS/NZS 4671 WITH fsy=250 MPa.

L LOW DUCTILITY CLASS 500L REINFORCING MESH OR BAR TO AS/NZS 4671 WITH fsy=500 MPa. LOW DUCTILITY CLASS L REINFORCEMENT IS NOT TO BE USED OTHER THAN WHERE SHOWN ON DRAWINGS.

THE NUMBER FOLLOWING THE BAR SYMBOL IS THE NORMAL BAR DIAMETER IN MILLIMETERS.

15. PULL OUT BARS OR OTHER BARS WHICH ARE SHOWN ON THE DRAWING TO BE RE-BENT ON SITE SHALL BE MADE FROM QUENCHED AND SELF TEMPERED STEEL. THE BARS SHALL BE POSITIONED WITH THE INITIAL BEND CLEAR OF THE CONCRETE FACE.

CONCRETE NOTES CONTINUED

16. SITE BENDING OF REINFORCEMENT BARS SHALL BE DONE WITHOUT HEATING USING A PROPER BAR RE-BENDING TOOL. THE BARS SHALL BE RE-BENT AGAINST A FLAT SURFACE OR A PIN WITH A DIAMETER NOT LESS THAN THE MINIMUM PIN SIZE PRESCRIBED IN AS 3600 - 2001. BARS SHOULD BE RE-BENT ONCE ONLY.

17. MINIMUM COVER (mm) TO ALL REINFORCEMENT UNLESS OTHERWISE SHOWN SHALL BE AS FOLLOWS

ELEMENT	FORMED & NOT EXPOSED TO WEATHER	FORMED & EXPOSED TO GROUND WATER & WEATHER	NOT FORMED CAST AGAINST GROUND
FOOTINGS	45	55	55

18. SPLICES IN REINFORCEMENT SHALL BE MADE IN THE POSITIONS SHOWN OR AS OTHERWISE APPROVED BY THE SUPERINTENDENT. MINIMUM LAP FOR ALL FABRICS SHALL BE THE SPACING OF TWO TRANSVERSE WIRES PLUS 25 mm. GRADE 500N BARS SHALL BE LAPPED IN ACCORDANCE WITH THE STANDARD LAP LENGTH TABLE IF NOT STATED OTHERWISE ON THE DRAWINGS.

19. WELDING OF REINFORCEMENT INCLUDING TACK WELDING SHALL NOT BE PERMITTED WITHOUT THE APPROVAL OF THE SUPERINTENDENT. WHERE APPROVED, ALL WELDING SHALL BE UNDERTAKEN STRICTLY IN ACCORDANCE WITH AS 1554.3

20. ALL REINFORCEMENT SHALL BE SECURELY SUPPORTED IN ITS CORRECT POSITION DURING CONCRETING BY APPROVED BAR CHAIRS, SPACERS OR SUPPORT BARS AT 1000 mm MAXIMUM CENTRES. THE CHAIR MATERIAL SHALL SUIT THE EXPOSURE CONDITIONS.

21. BARS SHALL BE EVENLY DISTRIBUTED OVER THE WIDTH OF THE STRIP INDICATED ON THE DRAWINGS UNLESS NOTED OTHERWISE.

22. ALL EMBEDMENTS SHALL BE HOT DIP GALVANIZED.

FIBREGLASS REINFORCED PLASTIC NOTES

SCOPE:

1. THE FIBREGLASS REINFORCED PLASTIC (FRP) SHALL CONFORM TO THE MATERIAL AND FABRICATION
REQUIREMENTS PER THIS SPECIFICATION FOR ALL COMPONENTS THROUGHOUT THE SITE AND NO DEVIATION FROM THIS STANDARD WILL BE ACCEPTED.

2. THE FRP STRUCTURAL SECTIONS MENTIONED ARE TO BE DESIGNED IN ACCORDANCE WITH THE RELEVANT AUSTRALIAN STANDARDS.

3. THE FRP DESIGN, ENGINEERING, DRAFTING, MANUFACTURE AND SUPPLY SHALL BE (MADE BY PULTRUSION, COMPRESSION MOULDING AND FABRICATION) FROM TREADWELL GROUP PTY LTD AND SHALL CONFORM TO FABRICATION REQUIREMENTS AS LISTED IN THIS SPECIFICATION. REFER NOTE D1 OF THIS SPECIFICATION.

4. SHOP DRAWING OF ALL FRP COMPONENTS SHALL BE SUBMITTED BY THE FRP MANUFACTURERS SHOP DETAILER, CLEARLY DISPLAYING DIMENSIONS, TYPES AND SIZES OF FASTENERS AND BRACKETS FOR FABRICATING THE STRUCTURE.

5. TECHNICAL DATA AND SAMPLE PIECES SHALL BE SUBMITTED IF REQUESTED.

6. ALL ENGINEERING AND DRAFTING IN ADDITION TO THIS DRAWING SET TO BE COMPLETED AND APPROVED BY THE FRP MANUFACTURER. REFER NOTE D1 OF THIS SPECIFICATION.

7. ALL FRP COMPONENTS SHALL BE MANUFACTURED WITH I-SERIES® RESIN SYSTEM, RESISTANT TO ULTRAVIOLET RAYS. ALL PULTRUDED COMPONENTS SHALL COMPLETELY POSSESS A SYNTHETIC VEIL AROUND THE OUTSIDE FACE OF THE COMPONENT. IN ADDITION, UV STABILIZATION SHALL BE PROVIDED AS INTEGRAL CONSTITUENT OF THE RESIN SYSTEM. CERTIFICATION ON THE USE OF EX-SERIES® RESIN SYSTEM OR SIMILAR APPROVED MUST BE PROVIDED TO THE SUPERINTENDANT.

8. GLASS REINFORCEMENT
- THE GLASS REINFORCEMENT SHALL BE A COMMERCIAL HIGH-GRADE E-GLASS
- THE GLASS FIBRE TO RESIN CONTENT SHALL BE:
- 50% - 55% WEIGHT IN ALL PULTRUDED COMPONENTS
- 25% - 40% BY WEIGHT IN ALL MOULDED FITTING AND ACCESSORY COMPONENTS.

9. COLOUR – REFER ARCHITECTURAL SPECIFICATION.
- ALL STRUCTURAL PROFILES/ GRATING MUST HAVE INTEGRALLY PIGMENTED RESIN SYSTEM. CERTIFICATION MUST BE PROVIDED TO SUPERINDENTENT.
- A PAINTED SURFACE WILL NOT BE ACCEPTED DUE TO DELAMINATION ISSUES.

10. ALL FRP MATERIAL MUST HAVE A MINIMUM DESIGN LIFE OF 55 YEARS "CASE PROVEN". CERTIFICATION MUST BE PROVIDED TO SUPERINDENTENT.

11. THE (FRP) STRUCTURES TO BE MANUFACTURED BY TREADWELL GROUP PTY LTD OF AUSTRALIA OR EQUIVALENT OTHER. REFER NOTE D1 OF THIS SPECIFICATION.

DISCLAIMERS:

D1. THE MEMBER SIZES DOCUMENTED IN THESE DRAWINGS HAVE
BEEN SIZED USING TREADWELL GROUP'S ARCHITEX™ PULTRUSION DESIGN GUIDE AND GRATEX® GRATING DESIGN GUIDE. ALL MEMBER SIZES TO BE CONFIRMED BY TREADWELL GROUP.

D2. ALL FRP-TO-FRP CONNECTIONS TO BE DESIGNED BY TREADWELL GROUP PTY LTD.

D3. FINAL DETAILED DESIGN OF THE FRP STRUCTURES ARE THE RESPONSIBILITY OF TREADWELL GROUP PTY LTD.

STAINLESS STEEL NOTES

1. ALL STAINLESS STEEL SHALL BE GRADE 316L, UNO.

2. REMOVE ALL WELD SPLATTER, SHARP EDGES, CORNERS AND BURRS. ALL COMPONENTS TOBE GENERALLY FREE FROM GRIND MARKS.

3. MARK ASSEMBLIES AND LOOSE ITEMS AS NOTED ON SHOP DETAIL DRAWINGS.

4. ALL PLASMA CUT STAINLESS STEEL SURFACES SHALL BE PASSIVATED.

5. ALL BOLTS AND NUTS SHALL BE STAINLESS STEEL GRADE 316 A4-70 UNO.

6. ALL WASHERS SHALL BE STAINLESS STEEL GRADE 316 A4-70 UNO.

7. THE TREADS OF ALL STAINLESS-STEEL BOLTS ARE TO BE COATED WITH A NICKLE BASED ANTI-SEIZE COMPOUND.

8. ALL BOLTS JOINING STELL TO STEEL SHALL BE 'SNUG' TIGHTED IN ACCORDANCE WITH AISC BOLTING PROCEDURES, UNO.

9. ALL BOLTS JOINGING STAINLESS STEEL TO FIBREGLASS REINFORCED PLASTIC PULTRUDED SECTIONS SHALL BE ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.

10. ALL WELDS TO BE PICKLED AND PASSIVATED.

11. ALL STAINLESS-STEEL MATERIAL MUST BE FREE FROM IRON AND CARBON CONTAMINATION.

TIMBER NOTES

1. ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS1684, AS1684.1 AND AS1720 EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.

2. ALL TIMBER CONNECTIONS TO BE IN ACCORDANCE WITH AS1684 UNLESS NOTED OTHERWISE ON THE DRAWINGS.

3. ALL PROPRIETARY CONNECTORS AND FIXINGS ARE TO BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS.

4. TIMBER MEMBERS SHALL HAVE THE FOLLOWING MINIMUM STRESS GRADES UNLESS NOTED OTHERWISE ON THE DRAWINGS .
   - MGP10 FOR SEASONED PINE
   - F8 FOR UNSEASONED HARDWOOD
   - F8 FOR OREGON
   - F17 FOR SEASONED HARDWOOD

5. MAXIMUM UNDERSIDE FOR ALL TIMBER MEMBERS SHALL BE AS FOLLOWS:
   - (i) 0mm FOR SEASONED PINE SPECIES AND OTHER SEASONED SOFTWOODS
   - (ii) 3mm FOR UNSEASONED HARDWOOD
   - (iii) 0mm FOR SEASONED HARDWOOD
   - (iv) 4mm FOR OREGON

6. TIMBER MEMBERS NOT SIZED OR SCHEDULED ON THE DRAWINGS SHALL BE SELECTED USING AS1684.1

7. TIMBER JOINTS SHALL BE FREE OF DEFECTS.

8. ALL NAILS, BOLTS AND SCREWS SHALL BE 316 STAINLESS STEEL.

9. ALL TIMBER TO HAVE HAZARD CLASS OF H5.

FOOTING NOTES

1. THE ASSUMED FOUNDING LEVELS OF THE FOOTINGS ARE TO BE AS INDICATED ON THE DRAWINGS. BEFORE ANY REINFORCEMENT OR CONCRETE IS PLACED, THE SAFE BEARING CAPACITY OF THE GROUND IS TO BE VERIFIED BY THE GEOTECHNICAL ENGINEER. EXCAVATION SHALL CONTINUE UNTIL THE REQUIRED BEARING CAPACITY IS FOUND. THE OVER-EXCAVATION SHALL BE BACK-FILLED WITH BLINDING CONCRETE TO THE ASSUMED FOUNDING LEVEL.

2. OVER-EXCAVATION WITHIN THE INFLUENCE ZONE (45 DEGREE LINE DOWN FROM BASE OF WALL) OF ANY RETAINING WALL IS NOT ALLOWED WITHOUT THE PRIOR APPROVAL OF THE EXCAVATION SEQUENCE BY THE SUPERINTENDENT.

IFC

CLIENT:	REV:	DATE:	DESCRIPTION:	IVR:	APR'D:	TITLE:	NAME:
ASPECT Studios™						DRAFTER	ESA
						DRAFTING CHECK	TM
						DESIGNER	LHP
						DESIGN CHECK	JA
	C1	06/07/2022	ISSUED FOR CONSTRUCTION		JA	PROJECT MANAGER	JSH

MARION COASTAL WALKWAY UPGRADE
CELL 5 AND 6
HALLETT COVE, SA 5158
STRUCTURAL STANDARD NOTES

INNOVIS Agile Outcomes

SCALE:	DATE:	PHASE:	SHT SIZE:
N.T.S.	06/07/2022	IFC	A1

DRAWING NUMBER: J0439- STR- DRG- S0005 REVISION: C1

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10mm AT A1
0 20 30 40 50 60 70 80 90 100