



#2036883
 GPC Reference: RR2025/015/01
 Your Reference: 2511-49100 SDA

21 January 2026

State Assessment and Referral Agency
 Wide Bay Burnett Regional Office
 Dept State Development, Infrastructure and Planning
 PO Box 979
 BUNDABERG QLD 4670

Email: WBBSARA@dndip.qld.gov.au

Dear Faith,

REFERRAL AGENCY RESPONSE – (2511-49100 SDA)- RR2025/015/01

(GIVEN UNDER S56 PLANNING ACT 2016)

1 Application Details

The development application was properly referred to the Gladstone Ports Corporation Limited under section 54 of the *Planning Act 2016* on **3 December 2025**.

Application Number:	RR2025/015/01
Applicant Name:	Bundaberg Regional Council
Applicant Contact Details:	C/- Marine Approval Specialists Tonia Richard PO Box 6185 MITCHELTON QLD 4053 Email: tonia@marineapprovals.com.au
Approval Sought (Port Limits):	Assessable development on land below high-water mark and within the limits of a port – GPC as Referral Agency (not limited)
Details of Proposed Development:	Operational Works – removal, destruction or damage of

Gladstone Ports Corporation Limited

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ACN 131 965 896 ABN 96 263 788 242

	marine plants (maintenance/ repairs to Saltwater Creek pedestrian bridge).
Street Address:	Quay Street East, Bundaberg
Real Property Description:	USL adjacent to Lot 15 RP24765
Land Owner:	Department of Resources

2 Description of Proposed Development

Operational works – removal, destruction or damage of marine plants (maintenance/ repairs to Saltwater Creek pedestrian bridge).

3 Referral Triggers

This development application was referred to the Gladstone Ports Corporation Limited under the following provisions of the *Planning Regulation 2017*:

Schedule 10, Part 13, Division 3, Table 1, Item 1 –

- a. Prescribed assessable development within limits of a port and
- b. On land below high-water mark and within the limits of a port under the Transport Infrastructure Act

4. Details of Referral Response

This development application has been assessed against port authority functions under the *Transport Infrastructure Act 1994*, Chapter 8, Part 3 as required in Schedule 10, Part 13, Division 3, Table 1, Item 4 of the *Planning Regulation 2017*.

The Gladstone Ports Corporation Limited requests the Assessment Manager, under section 56(3) of the *Planning Act 2016* to give the following advice stated in Attachment 1.

For further information please contact Trudi Smith, Planning Specialist on 07 4976 1314 or via email planning@gpcl.com.au.

Yours sincerely



Andrew Johnson

Chief Executive Officer

Cc: Applicant

Enc. Attachment 1: Referral Agency Advice

Attachment 1: Referral Agency Conditions

PART 1: REFERRAL AGENCY CONDITIONS

In general the development proposal is in compliance with the requirements of Gladstone Ports Corporation Limited (GPC). This development approval is subject to each the following conditions which are stated by GPC, the Referral Agency.

Part 1a: Approval sought under *Planning Act 2016* – assessable development within limits of another port and below high-water mark

General

1. Unless otherwise stated, all conditions must be complied with and completed prior to the commencement of the development.
2. Where additional “approval” is required under these conditions by the Referral Agency (Gladstone Ports Corporation Limited) for drawings or documentation the Applicant must submit for review, amend to the satisfaction of, and obtain written approval from the Referral Agency.

Furthermore, the Referral Agency will require no less than 10 business days, unless otherwise conditioned by the Referral Agency, to initially assess the drawings or documentation provided prior to the commencement of the works. Should further information be required for assessment, the Referral Agency will require a further 5 business days to complete the information request assessment and response.

3. The development must be a designed and constructed to mitigate potential adverse impacts to port functions, services and facilities, and to maintain safe navigable access within Port Limits.

Engineering

4. Upon completion of the works, the Applicant must supply the Referral Agency with RPEQ certified “As Constructed” plans in both hard copy (2 of PDF) and electronic (CAD format) which illustrate all infrastructure and services installed on, under or over Port limits associated with the activity unless otherwise approved in writing by the Referral Agency.
5. The Applicant must inform the Referral Agency of completion of works within Port Limits within 14 days of practical completion and certify that the site is fit for purpose.
6. Any site lighting used during construction should not negatively impact on the visibility of Navigational Aids utilised for the primary shipping channels within Port Limits nor illuminate a landward glare beyond the site boundary. Lighting must be reviewed during construction and use of the development with respect to navigation. Where an issue is identified or a validated complaint received, the Applicant must immediately rectify to the satisfaction of the Referral Agency.
7. Any material which is deposited (not authorised under this approval) or any debris which falls or is deposited within Port Limits during the construction of the approved development shall be removed by the applicant at their cost and expense prior to the commencement of the use of approved structure.

8. Upon completion of construction, the applicant shall provide the Referral Agency with written confirmation that the waterway is clear of foreign materials not authorised under this approval.
9. If, as a result of the works, or other cause attributable to the Applicant, any bank or tidal structure within Port Limits is displaced (excluding approved works), the Applicant at its cost and expense must restore the bank or structure to its former condition and take such other action as is necessary to ensure the stability of the bank or structure to the satisfaction of the Regional Harbour Master.
10. Prior to works commencing, provide the Referral Agency with copies of any Management Plans such as Acid Sulphate Soil Management Plans, Erosion and Sediment Control Plans, Construction, Operational Environmental Management Plans and Emergency Management Plans (required to be provided under the overarching approval) for our records.

Incident Notification

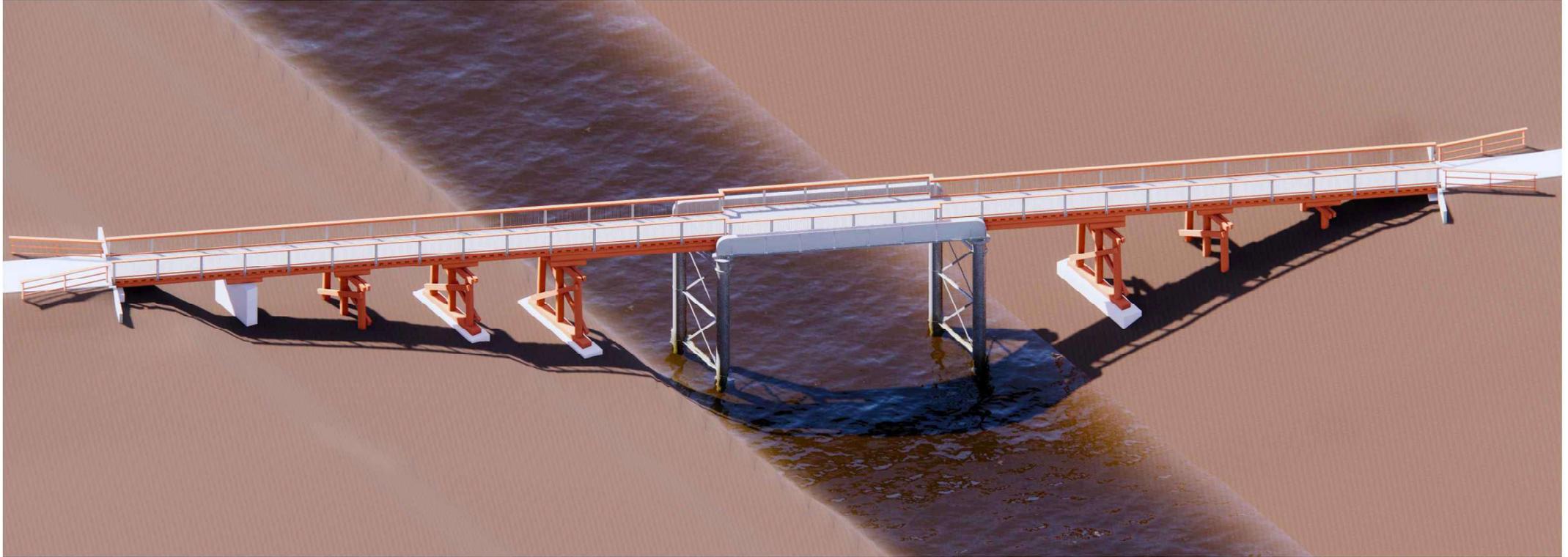
11. At all times, Gladstone Ports Corporation Environmental Hotline (07) 4976 1617 is to be notified of the occurrence of any:
 - a) Release / spill of contaminants (e.g. fuels / chemicals / sewerage) of any amount to water, and
 - b) Any environmental complaints received by the holder of this approval.
12. Environmental incident notification must be included in any Management Plans for the works within Port Limits.

Advice

- A. Where the Applicant is required to submit further documentation to the Referral Agency, this is to be directed to the Planning section at planning@gpcl.com.au, including reference to the allocated referral response number.
- B. All development should proceed in accordance with the duty of care guidelines under the *Aboriginal Cultural Heritage Act 2003*. Penalties may apply where duty of care under that Act has been breached.
- C. The *Environmental Protection Act 1994* states that a person must not carry out any activity that causes, or is likely to cause, environmental harm unless the person takes all reasonable and practicable measures to prevent or minimise the harm. Environmental harm includes environmental nuisance. In this regard persons and entities, involved in the civil, earthworks, construction, and operational phases of this development, are to adhere to their 'general environmental duty' to minimise the risk of causing environmental harm.

SALTWATER CREEK RAIL BRIDGE CONSERVATION

SALTWATER CREEK, BUNDABERG



STRUCTURAL DRAWING LIST

DRAWING No.	BRC DRAWING No.	DRAWING NAME	REV
S000	158134	COVER SHEET	C1
S001	158135	NOTES SHEET	C1
S005	158136	SAFETY IN DESIGN	C1
S010	158137	SALTWATER CREEK BRIDGE PLAN AND ELEVATION	C1
S101	158138	SPAN 3 TIMBER REMEDIATION WORK DETAILS	C1
S102	158139	SPAN 4 TIMBER REMEDIATION WORK DETAILS	C1
S103	158140	SPAN 5 TIMBER REMEDIATION WORK DETAILS	C1
S104	158141	SPAN 7 TIMBER REMEDIATION WORK DETAILS	C1
S105	158142	SPAN 8 TIMBER REMEDIATION WORK DETAILS	C1
S106	158143	SPAN 9 TIMBER REMEDIATION WORK DETAILS	C1
S200	158144	SPAN 6 STEEL REMEDIATION WORK DETAILS - SHEET 1	C1
S201	158145	SPAN 6 STEEL REMEDIATION WORK DETAILS - SHEET 2	C1
S202	158146	SPAN 6 STEEL REMEDIATION WORK DETAILS - SHEET 4	C1
S203	158147	SPAN 6 STEEL REMEDIATION WORK DETAILS - SHEET 5	C1
S204	158148	SPAN 6 STEEL REMEDIATION WORK DETAILS - SHEET 6	C1

Grand Total: 13

GPC Gladstone Ports Corporation

APPROVED

Name: Trudi Smith
Date: 8:34 am, 22/01/2026

BRC REFERENCE INFORMATION:	
PROJECT NUMBER:	IRD4383.2022
LOCALITY:	BUNDABERG CENTRAL
FACILITY NAME:	SALTWATER CREEK RAIL BRIDGE
DRAWING NUMBER:	158134

REV	DATE	DESCRIPTION	DESIGN	DRAWN	CHECKED	APPROVED	RPEQ No.	PROJECT	DRAWING TITLE	SCALES
C1	20.06.2025	CONSTRUCTION ISSUE	LW	JA	SK			SALTWATER CREEK RAIL BRIDGE CONSERVATION	COVER SHEET	AT A1
								LOCATION: SALTWATER CREEK, BUNDABERG	HERITAGE CONSULTANT: CONVERGE HERITAGE + COMMUNITY	PRINT THIS DRAWING IN COLOUR
								CLIENT: BUNDABERG REGIONAL COUNCIL	ASSOCIATE CONSULTANT	JOB NO: 2024.0351
										DRAWING NUMBER: S000
										REVISION: C1

BLIGH TANNER

LEVEL 9, 289 WICKHAM STREET, PO BOX 612
FORTITUDE VALLEY QLD 4006 AUS 194LVA
T 07 3201 8555 F 07 3251 8599

STRUCTURAL NOTES

GENERAL

- G1. THE BUILDER SHALL BE RESPONSIBLE FOR MAINTAINING STABILITY OF THE STRUCTURE UNTIL COMPLETION OF CONSTRUCTION AND SHALL ENSURE THAT NO PART OF THE STRUCTURE IS OVER STRESSED BY EXCESSIVE CONSTRUCTION LOADS.
- G2. TEMPORARY WORKS ARE THE RESPONSIBILITY OF THE CONTRACTOR, THESE INCLUDE SUCH ITEMS AS PROPPING, TEMPORARY SHORING & RETENTION, MAINTAINING TEMPORARY STABILITY OF THE STRUCTURE, FORMWORK, CRANE BASE, TEMPORARY WORKING PLATFORMS, FACADE RETENTION SYSTEMS AND GROUND IMPROVEMENT TO SUPPORT CONSTRUCTION PLANT.
- G3. THE DESIGN OF ALL TEMPORARY WORKS WILL BE UNDERTAKEN BY A RPEQ TEMPORARY WORKS ENGINEER APPOINTED BY THE CONTRACTOR.
- G4. ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE LATEST REVISIONS OF THE FOLLOWING CODES EXCEPT WHERE VARIED BY THE SPECIFICATION AND / OR DRAWINGS:
 - AS 1720 TIMBER STRUCTURES
 - AS 3600 CONCRETE SLAB STRUCTURES
 - AS 4100 STEEL STRUCTURES
 - AS 2269 STRUCTURAL PLYWOOD
- G5. DIMENSIONS NOT TO BE SCALED.
- G6. SET OUT DIMENSIONS ARE TO BE VERIFIED WITH ARCHITECT.
- G7. ALL FABRICATION SHOP DRAWINGS TO BE PREPARED AND SUBMITTED TO BLIQH TANNER FOR REVIEW & COMMENT IN ELECTRONIC AND HARD COPY A4 OR A3 FORMAT, ALLOW FIVE WORKING DAYS FOR REVIEW PRIOR TO COMMENCEMENT OF FABRICATION.
- G8. ANY SUBSTITUTIONS FOR FABRICATION PURPOSES ONLY AND DOES NOT CONSTITUTE PART OF THE CONTRACT DOCUMENTATION, REFER TO DRAWINGS FOR ALL ENGINEERING DETAIL WHERE STRUCTURAL ELEMENTS ARE DESIGNED AND CERTIFIED BY OTHER PARTIES, THE CONTRACTOR SHALL OBTAIN WRITTEN CERTIFICATION PRIOR TO PROCEEDING WITH ANY CONSTRUCTION WHICH MAY PREVENT INSPECTION OR REMEDIAL WORKS BEING UNDERTAKEN TO THESE ITEMS.
- G9. COMPLETE TERMITE INSPECTION AND TREATMENT OF ENTIRE BRIDGE WORK TO BE COMPLETED BY PROFESSIONAL LICENSED TERMITE TREATMENT CONTRACTOR, IMPLEMENT TERMITE MANAGEMENT PLAN AS ADVISED.
- G10. TENDERS MUST INSPECT ON-SITE AND PROVIDE PROPOSED METHODOLOGY AND SECURITY OF WORKS AS PART OF TENDER SUBMISSION. SPECIFIC CONSIDERATION SHOULD BE GIVEN TO ENVIRONMENTAL PROTECTIONS, SCAFFOLDING REQUIREMENTS, DECONSTRUCTION OF DECK AND REINSTATEMENT AFTER PAINTING HAS BEEN COMPLETED.
- G11. ALL TENDERING CONTRACTORS SHALL DEMONSTRATE EXPERIENCE IN WORKING WITH HERITAGE STRUCTURES AS PART OF TENDER SUBMISSION.
- G12. ALLOW FOR ALL CONSTRUCTION APPROVALS, SITE SHEDS, REINSTATEMENT MAKE GOOD, CLEAN UP AFTER WORKS COMPLETED.
- G13. ALLOW TO COMPLY WITH ALL OF BRC PROJECT AND CONSTRUCTION REQUIREMENTS

HERITAGE TIMBER SPECIFICATIONS

- H51. ON EMULSION TO BE APPLIED IN A CONTINUOUS LIQUID COATING BETWEEN THE INTERFACE OF ALL TIMBER TO TIMBER CONNECTIONS AND JUNCTIONS, INCLUDING THE INTERFACE BETWEEN ALL REPLACED TIMBER JOISTS AND DOCKING AND BEARER TO JOIST INTERFACES.
- H52. ALL HARDWOOD AS SPECIFIED IS TO BE SEASONED RECYCLED TIMBER, DURABILITY CLASS 1 OR 2, AND JOINT GROUP J2 MINIMUM.
- H53. APPROVED SPECIES INCLUDE GREY IRONBARK, RED IRON BARK, TALLOW WOOD, TURPENTINE, SPOTTED GUM, EXCLUDING EXTERNAL NEW TIMBER DECK WHICH IS PERMITTED TO BE SUPPLIED AS UNSEASONED.
- H54. HARDWOOD IS NOT PERMITTED TO CONTAIN HEARTWOOD.
- H55. ALL TIMBER FASTENERS ARE TO BE STRICTLY INSTALLED IN ACCORDANCE WITH THE STRUCTURAL DOCUMENTATION.
- H56. EXPOSED TIMBER TO BE SUPPLIED AS F22 GRADE TIMBER, ALL OTHER HARDWOOD TO BE MIN. F17 HARDWOOD.
- H57. RECYCLED TIMBER TO BE GRADED TO SMALL END SECTION, RECYCLED GRADE 1 (R51) IN ACCORDANCE WITH WITSEM INDUSTRY STANDARD. RECYCLED TIMBER + VISUALLY STRESS GRADED RECYCLED TIMBER FOR STRUCTURAL PURPOSES - 2006.
- H58. TIMBER WITH VISUALLY STRESS GRADED IS NOT PERMITTED.
- H59. UNSEASONED TIMBER IS NOT PERMITTED.
- H60. ALL SAP WOOD IS TO BE H3 TREATED.
- H61. ALL NEW AND REPLACED TIMBER DOCKINGS IS TO BE LAID WITH 10mm GAPS.
- H62. THE BUILDER IS REQUIRED TO BRING TO THE ATTENTION OF BLIQH TANNER CONSULTING ENGINEERS ANY EXISTING TIMBER MEMBERS WITHIN THE STRUCTURE WHICH ARE IDENTIFIED TO BE IN A SIGNIFICANT STATE OF DETERIORATION THAT HAVE NOT ALREADY BEEN IDENTIFIED FOR REPLACEMENT. IN PARTICULAR, ANY TIMBER MEMBER WHERE ONE OR FACES HAVE BEEN PREVIOUSLY CONCEALED.
- H63. OVERCUTS AT NOTCHES ARE NOT PERMITTED.
- H64. NOTCHES TO GIRDERS ARE TO BE TAPEPPED AT 1 IN 4.
- H65. ALL NEW TIMBER THAT INSTALLED WITHIN THE BUILDING IS TO BE DATE STAMPED WITH MIN. 10MM HIGH NUMBERS MIN. STARTING 2018.
- H66. SURFACE FINISH TO HARDWOOD TO BE TO AS2701 - TABLE B1.
- H67. VISUAL GRADING OF SOFTWOOD TO BE IN ACCORDANCE WITH AS2858 - 2008.
- H68. VISUAL GRADING OF HARDWOOD TO BE IN ACCORDANCE WITH AS2082 - 2007.
- H69. ALL NEW HOLES FOR BOLTS IN TIMBER ARE TO BE DRILLED TIGHT.

ABBREVIATIONS

ABBREVIATION	DESCRIPTION	ABBREVIATION	DESCRIPTION
B or BTM	BOTTOM FACE	MIN	MINIMUM
CENT	CENTRALLY PLACED	NF	NEAR FACE
CL	CONTINUOUS FILLET WELD	NLB	NON LOAD BEARING
CPW	CENTRE LINE	NOM	NOMINAL
CPBW	COMPLETE PENETRATION	NSOP	NOT SHOWN ON PLAN
CS	BUTT WELD	NSD	NOT SHOWN ON ELEVATION
CW	CENTRES	NTS	NOT TO SCALE
d	DEPTH/DEEP	O	OPPOSITE
DRG	DRAWINGS	PL	PLATE
EF	EACH FACE	PT	POST TENSION
EQ	EQUAL	REQD	REQUIRED
EW	EACH WAY	REINP	REINFORCEMENT
FF	FAR FACE	SD	SUPERIMPOSED DEAD LOAD
FL	FLAT	SIM	SIMILAR
GA	GENERAL ARRANGEMENT	T	TOP FACE
GB	HEIGHT/HEIGHT	TAB	TOP & BOTTOM THROUGH
HORIZ	HORIZONTAL	THRU	THROUGH
HWD	HARDWOOD	TYP	TYPICAL
LD	LOAD	UNDR	UNDER
LG	LENGTH/LONG	UNO	UNLESS NOTED OTHERWISE
LL	LEAD LOAD	V	VERTICAL
LL	LEAD LOAD	W	WIDTH/WIDE
MAX	MAXIMUM		

ANCHOR NOTES

- A1. ALL ANCHORS MUST COMPLY WITH AS 52/2010. THE CONTRACTOR IS TO PROPOSE A COMPLIANT ALTERNATIVE AND SUBMIT TO THE ENGINEER FOR APPROVAL WITH RELEVANT TEST DATA.
- A2. ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURERS SPECIFICATIONS AND USING THE TOOLS WHICH ARE INDICATED IN THE PRODUCTS TEST REPORT.
- A3. CHEMICAL ANCHOR UNO.

	ANCHOR SIZE	MIN EDGE (mm)	MIN SPACING (mm)	TYPICAL EMBEDMENT (mm)
CONCRETE	M16	100	100	125
	M20	120	120	170
	M24	150	150	210
SOLID CONCRETE MASONRY	M12	80	80	110
	M16	100	100	125
	M20	120	120	170
HOLLOW CONCRETE MASONRY OR CLAY MASONRY	M12	100	100	80

	HILTI	RAMSET
CONCRETE	HILTI HIT HY200-R C/W HAS-U 5.8 STD	CHEMSET 801 EXTREM XC3 C/W GRADE 5.8 ANCHOR STD
SOLID CONCRETE	HILTI HIT HY 200-R MAX C/W HAS-U 5.8 STD	CHEMSET 801 EXTREM XC3 C/W GRADE 5.8 ANCHOR STD
HOLLOW CONCRETE MASONRY OR CLAY MASONRY	HILTI HIT HY 170 C/W HAS-U 5.8 STD. PROPRIETARY SLEEVE INTO HOLLOW	INJECTION 101 C/W GRADE 5.8 ANCHOR STD. PROPRIETARY SLEEVE INTO HOLLOW

- A4. MECHANICAL ANCHORS UNO, HILTI, RAMSET

STANDARD - CONCRETE	HSL-3	RAMSET TRIBOLT EXTREM
HEAVY DUTY - CONCRETE	HSL-3	RAMSET SPATC EXTREM
- A5. ALL ANCHORS TO SLAB SOFFITS SHALL BE MECHANICAL ANCHORS WITH LOCITE U.N.O. COATINGS AND CORROSION PROTECTION OF ANCHORS AND STUDS TO BE AS PER STEEL WORK NOTES AND ANCHOR MANUFACTURERS SPECIFICATION.
- A7. ALL ANCHOR HOLES MUST BE HAMMER DRILLED.
- A8. MUST REDUCING DRILLING SYSTEM TO BE USED FOR DRILLING OF HOLES.
- A9. 5% OF ALL ANCHORS TO BE LOAD TESTED. IN THE EVENT OF A FAILED TEST 100% OF ALL ANCHORS ARE TO BE TESTED.
- A10. ALL 1 FIBREX (R50) TO FIX REINFORCEMENT TO EXISTING SLABS SHALL BE CHEMSET R50 R50 PLUS OR HILTI HIT-RE500 V3 AND MUST BE COMPLIANT WITH AS3800.

STEELWORK

- D1. STEELWORK GRADES (UNLESS NOTED OTHERWISE) TO BE:
 - HOT ROLLED SECTIONS GRADE 300
 - RHS AND SHS GRADE 350
 - NEAR FACE GRADE 250
 - CHS GRADE 250
 - RODS AND PLATES GRADE 250
 - COL FORMED SECTION GRADE 460
- D2. WHERE SIZE SPECIFIED IS ONLY AVAILABLE IN A HIGHER GRADE, THE HIGHER GRADE SECTION IS TO BE USED.
- D3. UNLESS NOTED OTHERWISE:
 - PLATES, CLEATS, ETC. TO BE 10mm PURLIN CLEATS
 - > 300 HIGH TO BE 8 PLATE
 - > 400 HIGH TO BE 6mm EA
 - NUTS, BOLTS, WASHERS ETC. GENERAL REINFORCED STEEL HOT DIPPED GALVANISED 541 TAIR STAIN FSS STEEL
 - BOLTS MINIMUM 2 NO. BOLTS FOR STEEL TO STEEL CONNECTIONS UNO
 - M16 & 8.8 FOR SECTION DEPTH < 250mm
 - M20 & 8.8 FOR SECTION DEPTH > 250mm
 - FOR OVERSIZED OR SLOTTED HOLES PROVIDE PLATE WASHERS IN ACCORDANCE CL 14.3.5.2 OF AS4100 TO COMPLETELY COVER HOLE PLUS 0.5 TIMES HOLE DIAMETER
 - WELDS SHALL BE 6mm SP CONTINUOUS FILLET UNO.
 - SP DENOTES STRUCTURAL PURPOSE IN ACCORDANCE WITH AS 1554. WELDING CONSUMABLES TO HAVE A NOMINAL TENSILE STRENGTH (f_w) OF 490 MPa.
 - GP DENOTES GENERAL PURPOSE IN ACCORDANCE WITH AS 1554. WELDING CONSUMABLES TO HAVE A NOMINAL TENSILE STRENGTH (f_w) OF 490 MPa.

- D4. CORROSION PROTECTION (EXISTING & NEW STRUCTURAL STEELWORK INCLUDING CONNECTIONS) SHALL BE IN ACCORDANCE WITH INTERSPEC PAINT SPECIFICATION PROVIDED, PAINT SYSTEM SUMMARY BELOW.

COST SEQUENCE	PRODUCT NAME	BINDER	APPLICATION METHOD	WFT (µm)	DFI (µm)	THINNER
1.	INTERZINC S2	POLYAMIDE CURED EPOXY	ARLESS SPRAY AIR SPRAY, BRUSH	127	75	INTERNATIONAL GTA220
2.	INTERPLUS 356	POLYAMINE ADDUCT CURED EPOXY	ARLESS SPRAY ROLLER AIR SPRAY BRUSH	170	125	INTERNATIONAL GTA220
3.	INTERPLUS 356	POLYAMINE ADDUCT CURED EPOXY	ARLESS SPRAY ROLLER AIR SPRAY BRUSH	143	100	INTERNATIONAL GTA220
4.	INTERTHANE 87H	ALIPHATIC ACRYLIC POLYURETHANE	ARLESS SPRAY ROLLER AIR SPRAY BRUSH	134	75	INTERNATIONAL GTA713
5.	INTERTHANE 87H	ALIPHATIC ACRYLIC POLYURETHANE	ARLESS SPRAY ROLLER AIR SPRAY BRUSH	134	75	INTERNATIONAL GTA713
TOTAL				400		

EXTERIOR STEELWORK IN IMMERSED AND SPLASHZONE AREAS:

COST SEQUENCE	PRODUCT NAME	BINDER	APPLICATION METHOD	WFT (µm)	DFI (µm)	THINNER
1.	INTERZONE 954	POLYAMINE ADDUCT CURED EPOXY	ARLESS SPRAY ROLLER AIR SPRAY BRUSH	471	400	INTERNATIONAL GTA007
2.	INTERZONE 954	POLYAMINE ADDUCT CURED EPOXY	ARLESS SPRAY ROLLER AIR SPRAY BRUSH	471	400	INTERNATIONAL GTA007
TOTAL				800		

- S4. BOLT HOLES SHALL NOT BE ENLARGED DURING ERECTION.
- S5. ALL BOLTS, NUTS AND WASHERS ARE TO BE GRADE 8.8 STRUCTURAL STEEL UNLESS NOTED OTHERWISE AND COMPLY FULLY WITH AS1252:1996 ALL FOUNDATION BOLTS, NUTS AND WASHERS ARE TO BE GRADE 4.6 UNLESS OTHERWISE NOTED. BOLT LENGTHS TO BE SCHEDULED TO ENSURE THAT A MINIMUM OF TWO THREADS EXTEND PAST THE NUT. AS1252:1996 COMPLIANCE CERTIFICATES ARE TO BE PROVIDED TO THE SUPERINTENDENT FOR ALL STRUCTURAL STEEL BOLTS.
- S6. ALL STRUCTURAL STEEL HOT ROLLED BARS AND SECTIONS MUST CONFORM WITH ASNZS3679.1:2010 'STRUCTURAL STEEL HOT ROLLED BARS AND SECTIONS' AND STRUCTURAL STEEL WELDED SECTIONS MUST CONFORM WITH ASNZS3679.2:2010 'STRUCTURAL STEEL - WELDED SECTIONS'. ALL STRUCTURAL STEEL, HOLLOW SECTIONS MUST CONFORM WITH ASNZS1663:2006 'COL FORMED STEEL HOLLOW SECTION'.
- S8. THE STRUCTURAL STEEL FABRICATOR IS TO PROVIDE TO THE SUPERINTENDENT, AUSTRALIAN STANDARD COMPLIANCE CERTIFICATES FOR ALL STRUCTURAL STEELWORK PRIOR TO COMMENCING FABRICATION.
- S9. OVERSEAS SOURCED STRUCTURAL STEEL IS NOT PERMITTED UNLESS THE STRUCTURAL STEEL MATERIAL SUPPLIER IS CERTIFIED BY ACS (AUSTRALIAN STANDARDS CERTIFICATION) A VERIFICATION OF PERFORMANCE, PRESTRESSING & STRUCTURAL STEEL FOR THE SUPPLY OF STRUCTURAL STEEL. CURRENT ACS CERTIFICATES ARE TO BE SUBMITTED TO BLIQH TANNER. REFER WWW.steelcertification.com FOR CURRENT CERTIFICATE HOLDERS.
- S10. ALL STRUCTURAL STEELWORK SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH ASNZS 5131. ALL WORK ON THIS PROJECT SHALL BE UNDERTAKEN BY COMPETENT PERSONNEL. REQUIREMENTS AND EXAMPLES OF QUALIFICATIONS FOR COMPETENT PERSONNEL ARE CONTAINED IN ASNZS 5131.
- S11. IN ACCORDANCE WITH THE REQUIREMENTS OF ASNZS 5131 THE CONSTRUCTION CATEGORIES FOR THIS PROJECT ARE DEFINED IN THE TABLE BELOW.

	ELEMENT	IMPORTANCE LEVEL	SERVICE CATEGORY	FABRICATION CATEGORY	CONSTRUCTION CATEGORY
1.	ALL STRUCTURAL STEEL WORK UNO	IL2	SC1	FC1	CC2

BLASTING & PAINTING

- 1. THE CONTRACTOR SHALL PROVIDE FULL ENCAPSULATION DURING BLASTING & PAINTING TO COLLECT ALL DEBRIS FROM BLASTING AND LEAD PAINT.
- 2. THE CONTRACTOR SHALL PROVIDE QUALITY ASSURANCE DOCUMENT AND TESTING REPORTS TO ACCURATELY REPRESENT FACTS OF THE PROJECT.
- 3. THE CONTRACTOR SHALL PROVIDE FULL ENCAPSULATION DESIGN AND SUBMIT TO BLIQH TANNER FOR FINAL APPROVAL.
- 4. THE CONTRACTOR SHALL MANAGE THE QUANTITY OF LEAD SUFFICIENTLY TO NOT TRIGGER OLD WORK REQUIREMENTS.
- 5. ALL SURFACE PREPARATION SHALL BE IN ACCORDANCE WITH INTERNATIONAL PAINT SPECIFICATION.

STEEL WELDING NOTES

- W1. SITE WELDS SHALL ONLY BE USED AT LOCATIONS SPECIFIED IN DRAWINGS.
- W2. OTHER THAN ANY SITE WELDS SPECIFIED IN DRAWINGS, DO NOT WELD ON SITE WITHOUT PRIOR APPROVAL FROM THE SUPERINTENDENT, WHEREVER POSSIBLE, LOCATE SITE WELDS IN POSITIONS FOR DOWN HAND WELDING.
- W3. ALL WELDING SHALL COMPLY WITH AS 1554 AND AS 4100
- W4. ALL WELDS ARE TO BE CATERGORY D UNO. IN ACCORDANCE WITH AS 1554, MINIMUM NOMINAL TENSILE STRENGTH OF WELD METAL TO BE 6w+490 MPa AND ALL BUTT WELDS SHALL BE FULL STRENGTH COMPLETE PENETRATION BUTT WELD UNLESS NOTED OTHERWISE.
- W5. ALL SITE WELDS ARE TO BE PREPPED AND COATED AS PER STEELWORK NOTES AND ARCHITECTURAL SPECIFICATIONS.
- W6. WELDING INSPECTIONS SHALL BE PERFORMED BY AN INDEPENDENT NATA APPROVED TESTING AUTHORITY AT THE CONTRACTORS EXPENSE. DEFAULT TESTING SHALL BE AS FOLLOWS:

WELD TYPE	NON-DESTRUCTIVE WELD EXAMINATION SCHEDULE			
	VISUAL SCANNING	VISUAL EXAMINATION	MAGNETIC PARTICLE OR LIQUID PENETRANT	ULTRASONIC OR RADIOGRAPHY
GP FILLET WELD	100%	10%	2%	NIL
SP FILLET WELD	100%	25%	10%	10%
BUTT WELDS IN TRUSSES, BRACES OR PORTALS	100%	100%	100%	10%
BUTT WELDS IN OTHER MEMBERS	100%	50%	10%	2%
SITE BUTT WELDS	100%	100%	N/A	100%

- W7. ALL WELD TESTING SHALL BE IN ACCORDANCE WITH ASNZS 1554.1
- W8. BEFORE COMMENCING FABRICATION SUBMIT DETAILS OF PROPOSED WELDING PROCEDURES USING THE FORM IN APPENDIX C OF AS 1554.1 DO NOT COMMENCE FABRICATION UNTIL WELDING PROCEDURES HAVE BEEN ACCEPTED.
- W9. WELDING SHALL BE CARRIED OUT UNDER THE IMMEDIATE AND CONTINUOUS SUPERVISION OF A SUPERVISOR EMPLOYED BY THE FABRICATOR. THIS PERSON SHALL HAVE QUALIFICATIONS AS DESCRIBED IN AS 1554 SECTION 4.12.1 AND THESE QUALIFICATIONS SHALL BE SUBMITTED TO THE SUPERINTENDENT UPON REQUEST.
- W10. WELDING SHALL BE PERFORMED ONLY BY WELDERS WITH QUALIFICATIONS AS DESCRIBED IN AS 1554 SECTION 4.12
- W11. ALL BUTT WELDS, EXCEPT WHEN PRODUCED WITH THE AID OF BACKING MATERIAL, SHALL HAVE THE ROOT OR INITIAL LAYER GOUGED OR CHIPPED OUT ON THE BACK SIDE BEFORE WELDING IS STARTED FROM THAT SIDE. BUTT WELD MADE WITH THE USE OF A BACKING STRIP SHALL HAVE THE WELD METAL FUSED WITH THE BACKING STRIP. ENDS OF BUTTS SHALL HAVE THE START AND STOP ZONES REMOVED BY THE USE OF RUN ON AND RUN OFF PLATES. SUCH PLATES SHALL BE REMOVED AFTER USE.

TIMBER FR

- T1. ALL TIMBER FRAMING TO BE MIN. H3 TREATED. H5 FOR IN-GROUND OR IN CONTACT WITH GROUND.
- T2. EXPOSED FRAMING (EXPOSED FRAMING REFERS TO ALL TIMBER FRAMING THAT MAY BE SUBJECT TO PERIODIC WETTING)
 - ALL EXPOSED FRAMING TO BE EITHER H3 PRESSURE TREATED OR DURABILITY CLASS 1 (MINIMUM SAWN TIMBER U.N.O.)
 - FRAMING MEMBERS EXPOSED TO MOISTURE (JOISTS, BEARERS, ETC.) ARE TO BE METHUOL DIPPED AND PENETRATING NAILS SHOULD BE CONSTRUCTED TO LIMIT MOISTURE PENETRATION ALONG NAIL SHANK.
 - MANUFACTURED TIMBER PRODUCTS, IF SPECIFIED, ARE TO BE MINIMUM H3 TREATED AND PROTECTED IN ACCORDANCE WITH MANUFACTURERS SPECIFICATION (EG HYNE TECH DATA SHEETS 8 AND 9). USE A HIGH QUALITY EXTERIOR PAINT FINISH TO EXPOSED SURFACES.
- T3. ALL FASTENERS TO BE HOT DIPPED GALVANISED. EXTERNAL ANCHORS WHERE SUBJECT TO SALT AIR TO BE STAINLESS STEEL.
 - NAILS TO BE 2.9mm DIA. x 30mm LONG.
 - SCREWS TO BE NO 14 TYPE 17 WITH SOME EXTERNAL U.N.O.
 - ALL JOIST HANGERS, FRAMING ANCHORS AND TRIPLE NAILS TO BE MANUFACTURED BY PRYDA OR EQUIVALENT. FULLY GALV. - 4 NAILS MINIMUM. INSTALL PER MANUFACTURERS SPECIFICATION.
- T4. WASHERS TO TIMBER TO BE M12 BOLTS 55.50 X 3 THK M16 BOLTS 65.50 X 5 THK
- T5. ALL BOLTS ARE TO BE HEX HEAD BOLTS WITH CORRECT SIZED WASHERS. DO NOT USE CURVED BOLTS.
- T6. BOLTS TO BE INSTALLED INTO PRE-DRILLED HOLES OF DIAMETER NOT EXCEEDING 10% OF BOLT DIAMETER.
- T7. COACH SCREWS SHALL BE SCREWED INTO PROF. DRILL HOLE END AND NOT HAMMERED.
- T8. PRE-DRILLED HOLES FOR THE SHANK SHALL NOT BE LESS THAN THE SHANK DIAMETER AND SHALL NOT EXCEED 110% BY MORE THAN 1mm.
- T9. PRE-DRILL HOLE END FOR THE THREAD PORTION SHALL NOT EXCEED THE ROOT DIAMETER OF THE SCREW.
- T10. FIXINGS SHALL BE INSTALLED TO THE DIMENSIONS SHOWN IN DETAILS. IN ANY CASE, ALL FIXINGS SHALL BE INSTALLED WITH MINIMUM END DISTANCES, END DISTANCES AND SPACINGS AS PER AS1210 (TYPICALLY 4d, 5d AND 5d RESPECTIVELY) U.N.O.
- T11. TIMBER BEARERS AND JOISTS WITH D/B >= 4
 - PROVIDE BLOCKING OVER SUPPORTS AT 1800mm MAX. CRS IN ACCORDANCE WITH AS184
 - FOR JOISTS WITH SPAN > 3000 AND BOTTOM OF JOIST UNRESTRAINED BY CEILING DIAPHRAGM
 - PROVIDE 1 ROW OF BLOCKING BETWEEN EACH JOIST AT MIDSPAN FOR SPANS < 4200.
 - PROVIDE 2 ROWS OF BLOCKING BETWEEN EACH JOIST AT MIDSPAN FOR SPANS > 4200.

REV	DATE	DESCRIPTION	DESIGN	DRAWN	CHECKED	APPROVED	RPEQ No.	PROJECT	DRAWING TITLE	SCALES
C1	20.06.2025	CONSTRUCTION ISSUE	LW	JA	SK			SALTWATER CREEK RAIL BRIDGE CONSERVATION	NOTES SHEET	AT A1
								LOCATION	HERITAGE CONSULTANT	PRINT THIS DRAWING IN COLOUR
								CLIENT	ASSOCIATE CONSULTANT	JOB NO
										2024.0351
										DRAWING NUMBER
										S001
										REVISION
										C1

STRUCTURAL ENGINEERING SAFETY IN DESIGN ASSESSMENT											
RISK ELEMENT	HAZARD	LIKELIHOOD PRE-MITIGATION	CONSEQUENCES PRE-MITIGATION	RISK SCORE PRE-MITIGATION	RECOMMENDED RISK CONTROL MEASURES	LIKELIHOOD POST-MITIGATION	CONSEQUENCES POST-MITIGATION	RISK SCORE POST-MITIGATION	RESPONSIBLE FOR RESIDUAL RISK	COMMENTS/REMARKS	
CONSTRUCTION											
SITE CONSTRAINTS AND ISSUES	CONGESTED SITE AND ACCESS PROBLEMS RESULTING IN CONFLICT BETWEEN MATERIALS, VEHICLES AND WORKERS RESULTING IN INJURY OR DEATH	POSSIBLE	MODERATE	MEDIUM	CONTRACTOR TO DEVELOP SITE LOGISTICS PLAN	RARE	MODERATE	LOW	CONTRACTOR	CONTRACTOR TO UNDERTAKE RISK ASSESSMENT AND INCLUDE MITIGATIONS IN SAFE WORK METHODS	
GROUND CONDITIONS AND EARTHWORKS	PLANT WORKING BASE RESULTING IN PLANT INSTABILITY AND COLLAPSE	POSSIBLE	MAJOR	MEDIUM	CONTRACTOR TO ENGAGE GEOTECHNICAL ENGINEER TO DESIGN AND CERTIFY SUITABLE WORKING BASES IF REQUIRED	RARE	MAJOR	LOW	CONTRACTOR	CONTRACTOR TO UNDERTAKE RISK ASSESSMENT AND INCLUDE MITIGATIONS IN SAFE WORK METHODS	
GROUND CONDITIONS AND EARTHWORKS	EXCAVATION ADJACENT EXISTING STRUCTURES RESULTING IN SUBSISTENCE OR INSTABILITY RESULTING IN DAMAGE TO STRUCTURE OR INJURY	POSSIBLE	MODERATE	MEDIUM	CONTRACTOR TO UNDERTAKE TEST PITS AS REQUIRED TO IDENTIFY EXISTING FOUNDATIONS OF BUILDINGS AND ENSURE NO EXCAVATION CAUSES UNDERMINING	RARE	MODERATE	LOW	CONTRACTOR	CONTRACTOR TO UNDERTAKE RISK ASSESSMENT AND INCLUDE MITIGATIONS IN SAFE WORK METHODS	
DEMOLITION OF EXISTING BUILDINGS AND STRUCTURES	UNCONTROLLED DEMOLITION RESULTING IN COLLAPSE OR INSTABILITY	LIKELY	CATASTROPHIC	VERY HIGH	CONTRACTOR TO PROVIDE WORK METHOD STATEMENTS AND TEMPORARY PROPPING OF ROOFS, FLOORS AND WALLS AS REQUIRED TO GUARANTEE STABILITY OF STRUCTURES DURING DEMOLITION	UNLIKELY	MAJOR	MEDIUM	CONTRACTOR	CONTRACTOR TO UNDERTAKE RISK ASSESSMENT AND INCLUDE MITIGATIONS IN SAFE WORK METHODS	
DEMOLITION AND REPAIR OF EXISTING STRUCTURES	FLYING OR MATERIALS CAUSING OVERLOAD OF EXISTING DEFECTIVE STRUCTURE AND COLLAPSE RESULTING IN INJURY OR DEATH	LIKELY	CATASTROPHIC	VERY HIGH	CONTRACTOR TO ASSESS LOADS ON EXISTING STRUCTURES, PARTICULARLY DEFECTIVE STRUCTURAL FRAMING, AND PROVIDE LOAD CONTROL, TO ENSURE THAT EXISTING STRUCTURES ARE NOT OVERLOADED	UNLIKELY	MAJOR	MEDIUM	CONTRACTOR	CONTRACTOR TO UNDERTAKE RISK ASSESSMENT AND INCLUDE MITIGATIONS IN SAFE WORK METHODS	
ERECTION AND TEMPORARY WORKS	COLLAPSE OF TEMPORARY SCAFFOLDING, ACCESS, FORMWORK OR PROPPING RESULTING IN INJURY OR DEATH	LIKELY	CATASTROPHIC	VERY HIGH	CONTRACTOR TO ENGAGE A TEMPORARY WORKS ENGINEER TO DESIGN AND CERTIFY ALL TEMPORARY WORKS (INCLUDING INSTALLATION)	UNLIKELY	MAJOR	MEDIUM	CONTRACTOR	CONTRACTOR TO UNDERTAKE RISK ASSESSMENT AND INCLUDE MITIGATIONS IN SAFE WORK METHODS	
ERECTION AND TEMPORARY WORKS	STRUCTURAL STEEL HANDLING AND ERECTION RISK OF COLLAPSE RESULTING IN INJURY OR DEATH	LIKELY	MAJOR	HIGH	CONTRACTOR TO CONSIDER TEMPORARY STABILITY AND STEELWORK ERECTION SEQUENCING TO ELIMINATE THE RISKS OF TEMPORARY INSTABILITY OF STRUCTURAL STEELWORK	UNLIKELY	MAJOR	MEDIUM	CONTRACTOR	CONTRACTOR TO UNDERTAKE RISK ASSESSMENT AND INCLUDE MITIGATIONS IN SAFE WORK METHODS	
ERECTION AND TEMPORARY WORKS	STRUCTURAL STEEL INSTABILITY DURING ERECTION RESULTING IN INJURY OR DEATH	LIKELY	MAJOR	HIGH	STRUCTURAL ENGINEER TO CONSIDER STEELWORK ERECTION SEQUENCING AND DETAIL FOR CONSTRUCTIBILITY	UNLIKELY	MAJOR	MEDIUM	DESIGNER	DESIGNER TO CONSIDER WITHIN DESIGN	
SITE WELDING	POSSIBLE CAST IRON PYLONS TO STEEL GIRDER DEFECTIVE WELD DUE TO INCORRECT WELD PROCEDURE LEADING TO PARTIAL OR COMPLETE FAILURE OF WELD	POSSIBLE	MAJOR	MEDIUM	CONTRACTOR TO ENGAGE QUALIFIED WELDER TO INVESTIGATE EXISTING STEELWORK AND PROVIDE WELD METHODOLOGY TO BLIGH TANNER FOR REVIEW AND APPROVAL PRIOR TO PROCEEDING WITH ANY SITE WELDING WORKS	RARE	MODERATE	LOW	CONTRACTOR	CONTRACTOR TO UNDERTAKE RISK ASSESSMENT AND INCLUDE MITIGATIONS IN SAFE WORK METHODS	
TEMPORARY STABILITY OF EXISTING BRIDGE STRUCTURE DURING REPAIR WORKS	TEMPORARY REMOVAL OF CRITICAL STRUCTURAL SUPPORT MEMBERS LEADING TO INSTABILITY OF BRIDGE	LIKELY	CATASTROPHIC	VERY HIGH	STRUCTURAL DOCUMENTATION PROVIDES METHODOLOGY FOR VARIOUS ASPECTS OF STEEL REPLACEMENT WORKS TO MANAGE RISK OF INSTABILITY. CONTRACTOR SHALL CONSIDER IN DEVELOPING SAFE WORK METHODS.	POSSIBLE	MAJOR	MEDIUM	CONTRACTOR	CONTRACTOR TO UNDERTAKE RISK ASSESSMENT AND INCLUDE MITIGATIONS IN SAFE WORK METHODS	
EXISTING STEELWORK CORROSION	EXCESSIVE CORROSION LOSS OF EXISTING STRUCTURAL STEEL FRAMING MEMBERS, LEADING TO STRUCTURAL OVERLOAD CAUSING DAMAGE OR COLLAPSE	LIKELY	MAJOR	HIGH	STRUCTURAL DOCUMENTATION SPECIFIES HOLD POINT FOLLOWING BLAST CLEANING WORKS FOR BLIGH TANNER TO RE-INSPECT STEELWORK AND MEASURE LOSSES TO CONFIRM IF ADDITIONAL PROVISIONAL SCOPE AS SPECIFIED IN THE DOCUMENTATION IS REQUIRED TO BE UNDERTAKEN.	POSSIBLE	MAJOR	MEDIUM	CONTRACTOR AND STRUCTURAL ENGINEER	ENGINEER TO ASSESS DURING CONSTRUCTION WITH CONTRACTOR FOLLOWING BLAST CLEANING WORKS AND CONFIRM IF ANY ADDITIONAL REPAIR WORKS ARE NECESSARY	
HAZARDOUS MATERIALS EXPOSURE	ORIGINAL STEEL WORK PAINT POSSIBLY LEAD BASED ENVIRONMENTAL WORKER AND PUBLIC RISKS ASSOCIATED WITH AIRBOURNE CONTAMINANTS DURING BLAST CLEANING FOR REPAINTING WORKS	LIKELY	MAJOR	HIGH	CONTRACTOR TO REFER TO SITE HAZARD REGISTER AND CONTAMINATION REPORTS. IF NO REPORT EXISTS, TAKE SUITABLE MEASURES TO PROTECT WORKERS. FULL ENCAPSULATION FOR BLAST CLEANING WORKS SPECIFIED IN THE STRUCTURAL DOCUMENTATION SHALL BE ACTIONED BY CONTRACTOR	RARE	MAJOR	LOW	CONTRACTOR	CONTRACTOR TO UNDERTAKE RISK ASSESSMENT AND INCLUDE MITIGATIONS IN SAFE WORK METHODS	
OPERATION AND MAINTENANCE											
MAINTENANCE ACCESS	SLIPS, TRIPS AND FALLS DURING ACCESS TO EXISTING MAINTENANCE PLATFORMS RESULTING IN INJURY OR DEATH	POSSIBLE	MODERATE	MEDIUM	OPERATOR TO NOTE THAT NECESSARY FALL RESTRAINT SYSTEMS ARE REQUIRED AND ENGAGE SUITABILITY QUALIFIED MAINTENANCE CONTRACTORS FOR SAFE ACCESS	UNLIKELY	MODERATE	MEDIUM	OPERATOR	OPERATOR TO DOCUMENT WITHIN A SUITABLE MAINTENANCE REGIME. ENGAGE SUITABILITY QUALIFIED MAINTENANCE CONTRACTORS FOR SAFE ACCESS	
MAINTENANCE ACCESS	FALL FROM HEIGHT OFF BRIDGE RESULTING IN INJURY OR DEATH	POSSIBLE	MODERATE	MEDIUM	OPERATOR TO ENSURE MAINTENANCE OF ALL BARRIERS AND GRATING ON WALKWAY FOR GENERAL FALL PROTECTION ATOP BRIDGE DECK. ENGAGE SUITABILITY QUALIFIED MAINTENANCE CONTRACTORS FOR SAFE ACCESS USING FALL RESTRAINT SYSTEMS OTHERWISE	UNLIKELY	MODERATE	MEDIUM	OPERATOR	OPERATOR TO DOCUMENT WITHIN A SUITABLE MAINTENANCE REGIME. ENGAGE SUITABILITY QUALIFIED MAINTENANCE CONTRACTORS FOR SAFE ACCESS	
MAINTENANCE OF STRUCTURE	LOSS OF STRUCTURAL INTEGRITY DUE TO ENVIRONMENTAL DEGRADATION OF STRUCTURAL MEMBERS OR CONNECTIONS	LIKELY	MAJOR	HIGH	OPERATOR TO UNDERTAKE A PROGRAMME OF REGULAR INSPECTION TO IDENTIFY ANY DAMAGE TO STRUCTURE AS A RESULT OF ENVIRONMENTAL CONDITIONS	UNLIKELY	MODERATE	MEDIUM	OPERATOR	OPERATOR TO DOCUMENT WITHIN A SUITABLE MAINTENANCE REGIME	
VEHICULAR ACCESS	DAMAGE AND POTENTIAL COLLAPSE OF STRUCTURE DUE TO STRUCTURAL OVERLOAD	POSSIBLE	MAJOR	MEDIUM	HERITAGE BRIDGE USAGE HAS BEEN RELEGATED TO PEDESTRIAN USAGE ONLY. BOLLARDS HAVE BEEN INSTALLED TO PREVENT VEHICULAR ACCESS	UNLIKELY	MODERATE	MEDIUM	DESIGNER	OPERATOR TO ENSURE BOLLARDS ARE MAINTAINED TO AVOID GENERAL VEHICULAR ACCESS AND OVERLOAD	
BRIDGE REFURBISHMENT AND MODIFICATION	DAMAGE OR INSTABILITY DUE TO ALTERATION OF EXISTING STRUCTURAL ELEMENTS DUE TO REFURBISHMENT WORKS POST-CONSTRUCTION	POSSIBLE	MAJOR	MEDIUM	OPERATOR TO MAINTAIN COPIES OF EXISTING STRUCTURAL DRAWINGS FOR REFERENCE BY ENGINEERS OR WORKERS UNDERTAKING FUTURE ALTERATIONS.	UNLIKELY	MAJOR	MEDIUM	OPERATOR	OPERATOR TO MAINTAIN GOOD RECORDS	
DECOMMISSIONING											
TEMPORARY STABILITY DURING DEMOLITION	UNCONTROLLED DEMOLITION RESULTING IN COLLAPSE OR INSTABILITY	LIKELY	MAJOR	HIGH	DESIGN DRAWINGS TO INDICATE FRAMING INCLUDING STABILITY ELEMENTS TO PERMIT UNDERSTANDING OF STRUCTURAL SYSTEMS FOR FUTURE SAFE DEMOLITION	UNLIKELY	MAJOR	MEDIUM	DESIGNER	DESIGNER TO CONSIDER WITHIN DESIGN	
TEMPORARY STABILITY DURING DEMOLITION	UNCONTROLLED DEMOLITION RESULTING IN COLLAPSE OR INSTABILITY	LIKELY	MAJOR	HIGH	CONTRACTOR TO PROVIDE WORK METHOD STATEMENTS AND TEMPORARY PROPPING OF ROOFS, FLOORS AND WALLS AS REQUIRED TO GUARANTEE STABILITY OF STRUCTURES DURING DEMOLITION	UNLIKELY	MAJOR	MEDIUM	CONTRACTOR	CONTRACTOR TO UNDERTAKE RISK ASSESSMENT AND INCLUDE MITIGATIONS IN SAFE WORK METHODS	

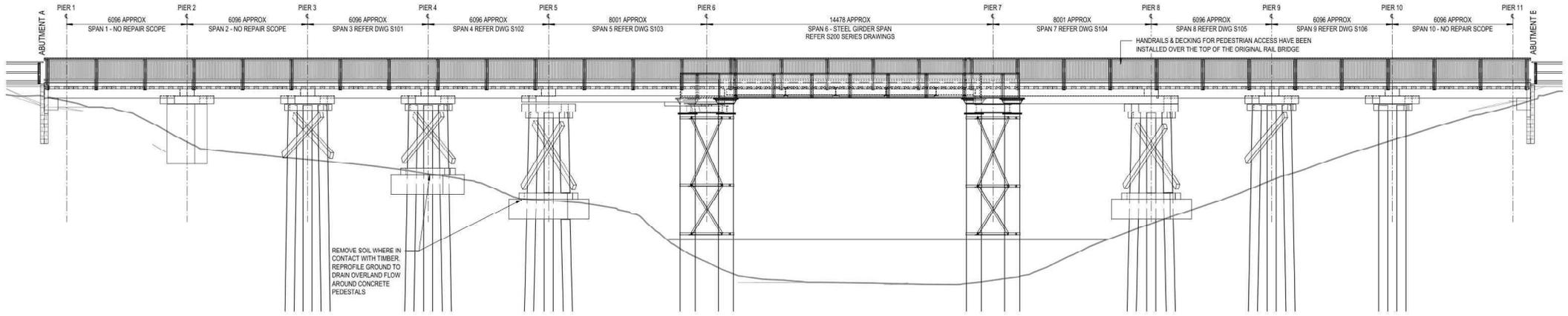
- NOTES:**
- THIS DOCUMENT HAS BEEN PREPARED TO MEET A DESIGNERS OBLIGATIONS UNDER THE WORK HEALTH AND SAFETY (WHS) ACT 2011 AS DESIGNERS OF STRUCTURES THAT WILL OR COULD BE USED AS A WORKPLACE.
 - IN ACCORDANCE WITH THE REGULATION, THIS DOCUMENT LISTS RISKS THAT ARE SPECIFIC TO THE PARTICULAR DESIGN AND DOES NOT ADDRESS COMMON RISKS THAT WOULD APPLY TO NORMAL BUILDING WORK.
 - IT IS ASSUMED THAT A COMPETENT AND EXPERIENCED CONTRACTOR AND/OR BUILDING OPERATOR WILL UNDERTAKE THEIR OWN RISK ASSESSMENTS AND APPLY GOOD WORK PRACTICES TO THEIR ACTIVITIES AND THE ACTIVITIES OF THEIR SUB-CONTRACTORS ON SITE.
 - THE FOLLOWING ASSESSMENT SEEKS TO IDENTIFY RISKS AND RECOMMEND MITIGATIONS TO REDUCE THE RISKS WHERE POSSIBLE. RESIDUAL RISKS ARE EXPECTED AND ARE COMMUNICATED WITHIN THIS DOCUMENT SO THAT THE CONTRACTOR AND/OR BUILDING OPERATOR CAN DEVELOP APPROPRIATE SAFE WORK METHODS FOR SITE ACTIVITIES.
 - THIS SAFETY IN DESIGN ASSESSMENT HAS BEEN CARRIED OUT IN RELATION TO THE STRUCTURAL ASPECTS OF THIS PROJECT ONLY. OTHER RISKS WILL APPLY TO OTHER BUILDING ACTIVITIES NOT RELATED TO THE STRUCTURAL DISCIPLINE AND THESE WILL BE SUBJECT TO AN ASSESSMENT CARRIED OUT BY THE RELEVANT DESIGN CONSULTANT.
 - THE ASSESSMENT ASSUMES THAT THE CONTRACTOR/OPERATOR WILL UNDERTAKE WORK IN ACCORDANCE WITH CURRENT LEGISLATION, INDUSTRY STANDARDS AND GOOD BUILDING PRACTICE.
 - THE CONTRACTOR/OPERATOR SHALL UNDERTAKE THEIR OWN SAFETY IN DESIGN ASSESSMENTS PRIOR TO COMMENCING WORK.
 - RISKS ARE GRADED IN ACCORDANCE WITH THE RISK ASSESSMENT MATRIX BELOW.

LIKELIHOOD	CONSEQUENCES				
	INSIGNIFICANT	MINOR	MODERATE	MAJOR	CATASTROPHIC
RARE	NEGLECTABLE	NEGLECTABLE	LOW	LOW	MEDIUM
UNLIKELY	NEGLECTABLE	LOW	LOW	MEDIUM	MEDIUM
POSSIBLE	NEGLECTABLE	LOW	MEDIUM	MEDIUM	HIGH
LIKELY	LOW	MEDIUM	MEDIUM	HIGH	VERY HIGH
ALMOST CERTAIN	LOW	MEDIUM	HIGH	VERY HIGH	CATASTROPHIC

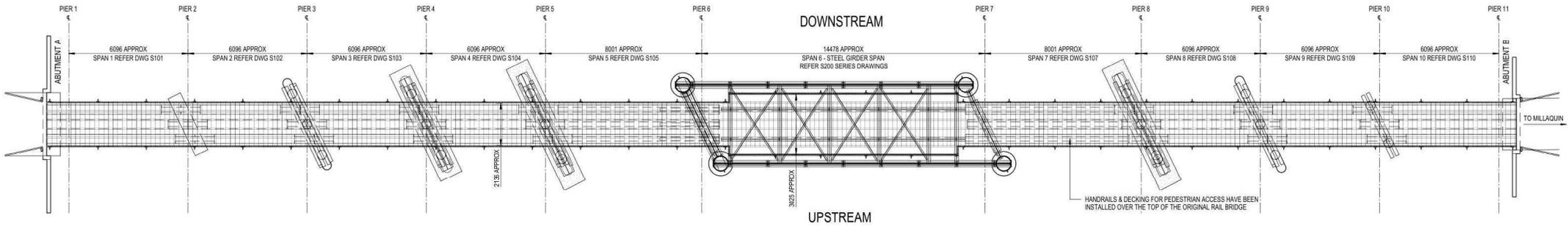


BUNDABERG REGIONAL COUNCIL		BRC REFERENCE INFORMATION:	
PROJECT NUMBER:	IRDA383.2022	LOCALITY:	BUNDABERG CENTRAL
FACILITY NAME:	SALTWATER CREEK RAIL BRIDGE	DRAWING NUMBER:	158136

<p>1 FVRI 9, 288 WICKHAM STREET, PO BOX 417 FORTITUDE VALLEY QLD 4006 AUSTRALIA T 07 3251 8555 F 07 3251 8599</p>	REV	DATE	DESCRIPTION	DESIGN	DRAWN	CHECKED	APPROVED	REFD No.	PROJECT	DRAWING TITLE	SCALE			
	C1	20.06.2025	CONSTRUCTION ISSUE	LW	JA	SK				SALTWATER CREEK RAIL BRIDGE CONSERVATION	SAFETY IN DESIGN	AT A1		
										LOCATION	SALTWATER CREEK, BUNDABERG	JOB NO	2024.0351	
									CLIENT	BUNDABERG REGIONAL COUNCIL	DRAWING NUMBER	S005	REVISION	C1



SALTWATER CREEK RAIL BRIDGE ELEVATION
SCALE 1 : 100



SALTWATER CREEK RAIL BRIDGE PLAN
SCALE 1 : 100

GPC Gladstone Ports Corporation

APPROVED

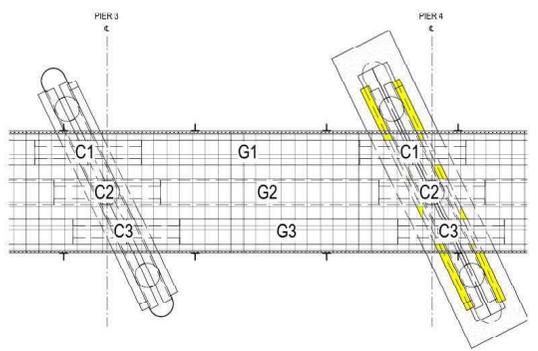
Name: Trudi Smith
Date: 8:37 am, 22/01/2026

BUNDABERG REGIONAL COUNCIL

BRC REFERENCE INFORMATION:

PROJECT NUMBER:	IRD4383.2022
LOCALITY:	BUNDABERG CENTRAL
FACILITY NAME:	SALTWATER CREEK RAIL BRIDGE
DRAWING NUMBER:	158137

REV	DATE	DESCRIPTION	DESIGN	DRAWN	CHECKED	APPROVED	RFQD No.	PROJECT	DRAWING TITLE	SCALES
C1	20.06.2025	CONSTRUCTION ISSUE	LW	JA	SK			SALTWATER CREEK RAIL BRIDGE CONSERVATION	SALTWATER CREEK BRIDGE PLAN AND ELEVATION	1 : 100 AT A1 PRINT THIS DRAWING IN COLOUR
								LOCATION	SALTWATER CREEK, BUNDABERG	HERITAGE CONSULTANT CONVERGE HERITAGE + COMMUNITY
								CLIENT	BUNDABERG REGIONAL COUNCIL	ASSOCIATE CONSULTANT
										JOB NO 2024.0351
										DRAWING NUMBER S010
										REVISION C1



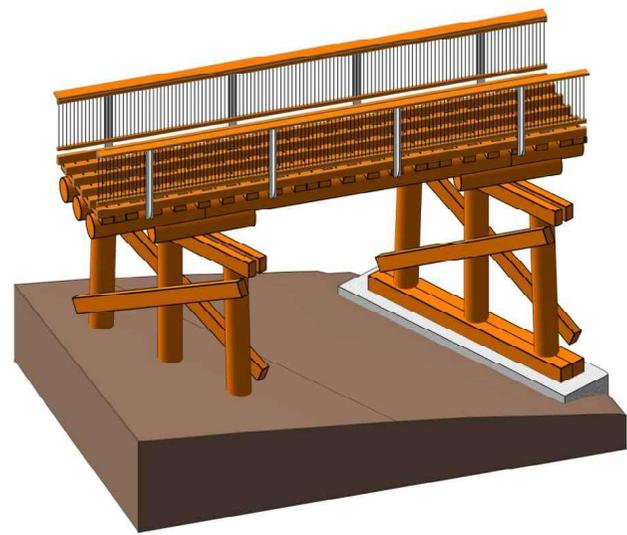
SPAN 3 PLAN
SCALE 1:50

LEGEND

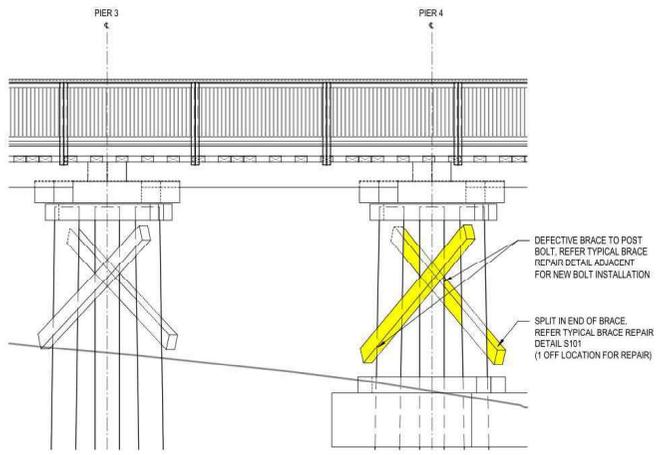
DENOTES EXISTING DEFECTIVE TIMBER MEMBER REQUIRING REPAIRS AS SPECIFIED.

REPLACED MEMBER NOTES

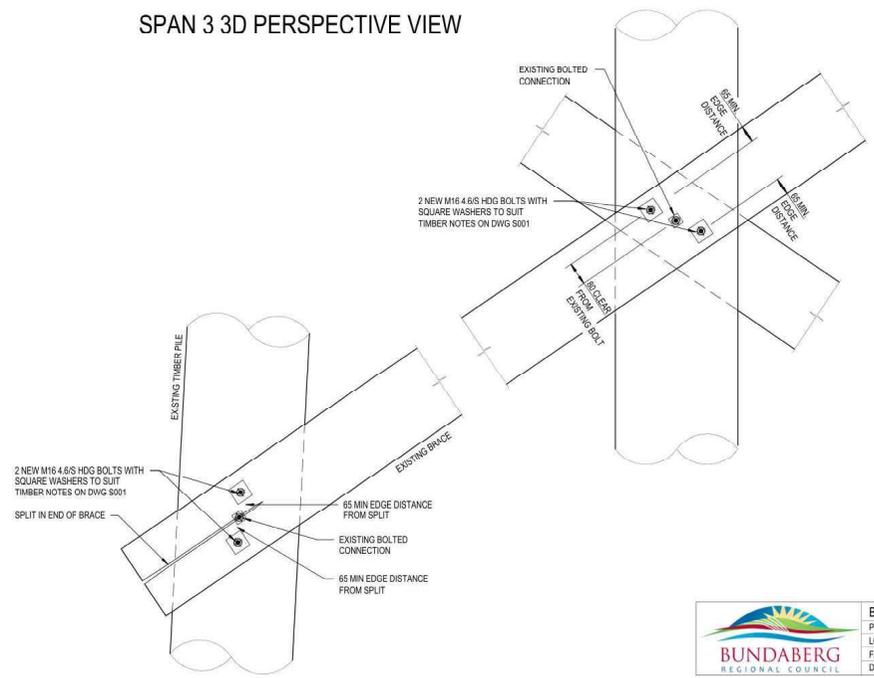
1. EXISTING MEMBER SIZES TO BE MEASURED ON SITE AND REPLACED TO MATCH EXISTING (IF REQUIRED).
2. REPLACEMENT TIMBER TO BE DURABILITY CLASS 1, F27 SEASONED HARDWOOD OR RECYCLED TIMBER (NEW SLEEPERS ARE PERMITTED TO BE F17).
3. WHERE TIMBER MEMBERS ARE REPLACED CONNECTIONS ARE TO MATCH EXISTING.
4. REPLACEMENT TIMBERS TO BE PROFILED TO MATCH EXISTING.
5. WHERE EXISTING GIRDER IS ROUND, REPLACEMENT GIRDER IS PERMITTED TO BE OCTAGONAL IF NEW MEMBER HAS SAME CAPACITY.



SPAN 3 3D PERSPECTIVE VIEW

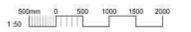


SPAN 3 ELEVATION
SCALE 1:50

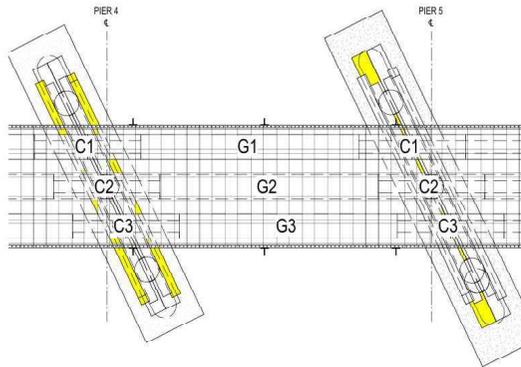


TYPICAL BRACE REPAIR DETAIL
SCALE 1:10

BUNDABERG REGIONAL COUNCIL		BRC REFERENCE INFORMATION:	
PROJECT NUMBER:	IRD4383.2022	LOCALITY:	BUNDABERG CENTRAL
FACILITY NAME:	SALTWATER CREEK RAIL BRIDGE	DRAWING NUMBER:	158138



<p>BLIGH TANNER</p> <p>LEVEL 9, 289 WICKHAM STREET, PO BOX 612 FORTITUDE VALLEY QLD 4006 AUS 1961A T 07 3201 8555 F 07 3251 8599</p>	REV	DATE	DESCRIPTION	DESIGN	DRAWN	CHECKED	APPROVED	RPEQ No.	PROJECT	DRAWING TITLE	SCALES				
	C1	20.06.2025	CONSTRUCTION ISSUE	LW	JA	SK			SALTWATER CREEK RAIL BRIDGE CONSERVATION	SPAN 3 TIMBER REMEDIATION WORK DETAILS	As indicated AT A1 PRINT THIS DRAWING IN COLOUR				
										LOCATION	SALTWATER CREEK, BUNDABERG	HERITAGE CONSULTANT	CONVERGE HERITAGE + COMMUNITY	JOB NO	2024.0351
										CLIENT	BUNDABERG REGIONAL COUNCIL	ASSOCIATE CONSULTANT	DRAWING NUMBER	S101	REVISION



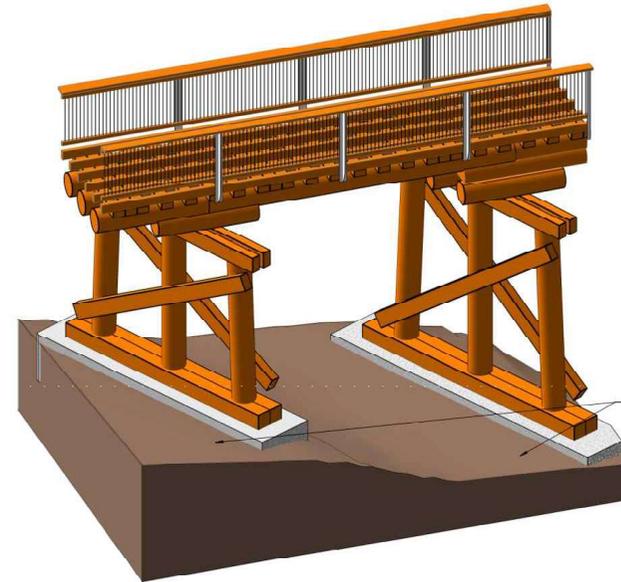
SPAN 4 PLAN
SCALE 1:50

LEGEND

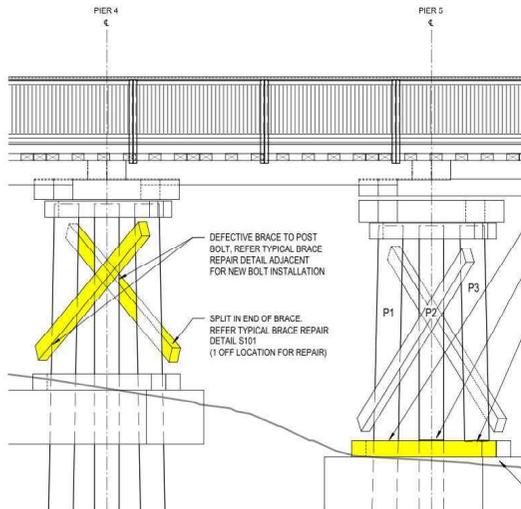
DENOTES EXISTING DEFECTIVE TIMBER MEMBER REQUIRING REPAIRS AS SPECIFIED.

REPLACED MEMBER NOTES

- EXISTING MEMBER SIZES TO BE MEASURED ON SITE AND REPLACED TO MATCH EXISTING (IF REQUIRED).
- REPLACEMENT TIMBER TO BE DURABILITY CLASS 1, F27 SEASONED HARDWOOD OR RECYCLED TIMBER (NEW SLEEPERS ARE PERMITTED TO BE F17).
- WHERE TIMBER MEMBERS ARE REPLACED CONNECTIONS ARE TO MATCH EXISTING.
- REPLACEMENT TIMBERS TO BE PROFILED TO MATCH EXISTING.
- WHERE EXISTING GIRDER IS ROUND, REPLACEMENT GIRDER IS PERMITTED TO BE OCTAGONAL, IF NEW MEMBER HAS SAME CAPACITY.



SPAN 4 3D PERSPECTIVE VIEW



SPAN 4 ELEVATION
SCALE 1:50

REMOVE CORROSION FROM EXISTING STEEL TIE DOWN PLATES AND REINSTATE SUITABLE PROTECTIVE COATING SYSTEM. REFER PHOTO BELOW FOR CONTEXT.



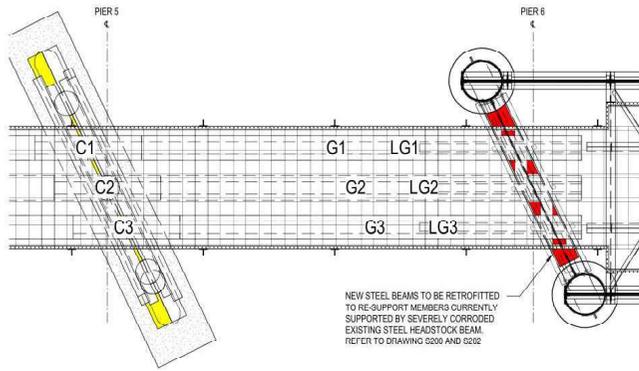
REMOVE SOIL WHERE IN CONTACT WITH TIMBER. REPROFILE GROUND TO DRAIN OVERLAND FLOW AROUND CONCRETE PEDESTALS

	BRC REFERENCE INFORMATION:	
	PROJECT NUMBER:	IRD4383.2022
	LOCALITY:	BUNDABERG CENTRAL
	FACILITY NAME:	SALTWATER CREEK RAIL BRIDGE
	DRAWING NUMBER:	158139



500mm 0 500 1000 1500 2000
1:50

REV	DATE	DESCRIPTION	DESIGN	DRAWN	CHECKED	APPROVED	RFEP No.	PROJECT	DRAWING TITLE	SCALES
C1	20.06.2025	CONSTRUCTION ISSUE	LW	JA	SK			SALTWATER CREEK RAIL BRIDGE CONSERVATION	SPAN 4 TIMBER REMEDIATION WORK DETAILS	As indicated AT A1 PRINT THIS DRAWING IN COLOUR
								LOCATION	SALTWATER CREEK, BUNDABERG	HERITAGE CONSULTANT
								CLIENT	BUNDABERG REGIONAL COUNCIL	ASSOCIATE CONSULTANT
										JOB NO
										2024.0351
										DRAWING NUMBER
										S102
										REVISION
										C1



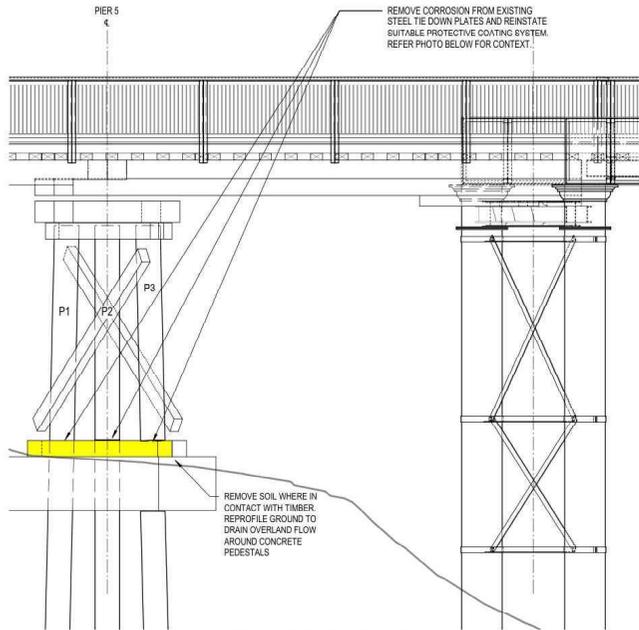
SPAN 5 PLAN
SCALE 1:50

LEGEND

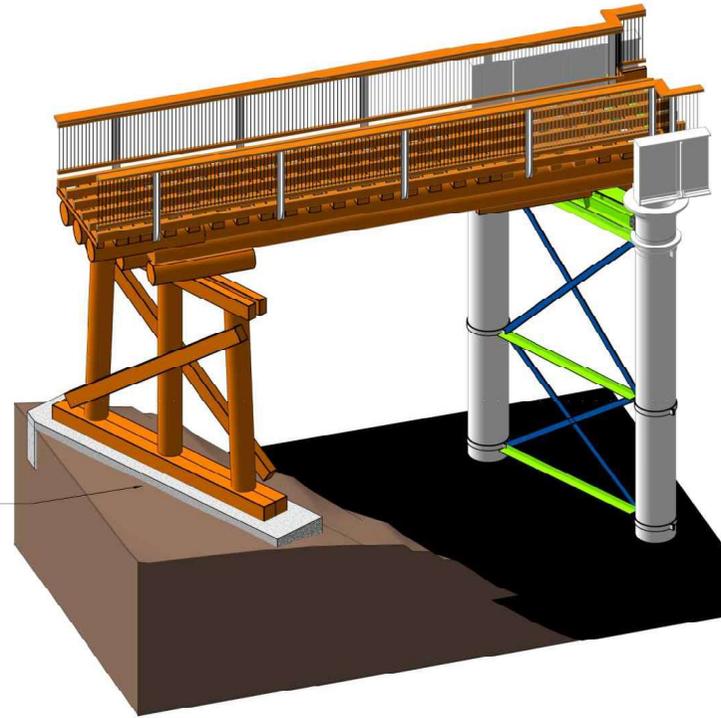
DENOTES EXISTING DEFECTIVE TIMBER MEMBER REQUIRING REPAIRS AS SPECIFIED.

REPLACED MEMBER NOTES

- EXISTING MEMBER SIZES TO BE MEASURED ON SITE AND REPLACED TO MATCH EXISTING (IF REQUIRED).
- REPLACEMENT TIMBER TO BE DURABILITY CLASS 1, F27 SEASONED HARDWOOD OR RECYCLED TIMBER (NEW SLEEPERS ARE PERMITTED TO BE F17).
- WHERE TIMBER MEMBERS ARE REPLACED CONNECTIONS ARE TO MATCH EXISTING.
- REPLACEMENT TIMBERS TO BE PROFILED TO MATCH EXISTING.
- WHERE EXISTING GIRDER IS ROUND, REPLACEMENT GIRDER IS PERMITTED TO BE OCTAGONAL IF NEW MEMBER HAS SAME CAPACITY.



SPAN 5 ELEVATION
SCALE 1:50



SPAN 5 3D PERSPECTIVE VIEW

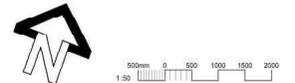
REMOVE DIRT FROM WHERE IN CONTACT WITH TIMBER. REPROFILE GROUND TO DRAIN OVERLAND FLOW AROUND CONCRETE PEDESTALS

GPC Gladstone Ports Corporation

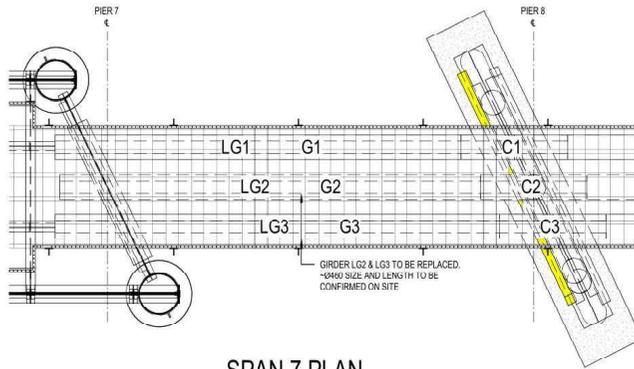
APPROVED

Name: Trudi Smith
Date: 8:38 am, 22/01/2026

	BRC REFERENCE INFORMATION:
	PROJECT NUMBER: IRD4383.2022
	LOCALITY: BUNDABERG CENTRAL
	FACILITY NAME: SALTWATER CREEK RAIL BRIDGE DRAWING NUMBER: 158140



<p>BLIGH TANNER</p> <p>LEVEL 9, 289 WICKHAM STREET, PO BOX 612 FORTITUDE VALLEY QLD 4006 AUS 1904LA T 07 3201 8505 F 07 3201 8599</p>	REV	DATE	DESCRIPTION	DESIGN	DRAWN	CHECKED	APPROVED	RPEQ No.	PROJECT	DRAWING TITLE	SCALES	
	C1	20.06.2025	CONSTRUCTION ISSUE	LW	JA	SK			SALTWATER CREEK RAIL BRIDGE CONSERVATION	SPAN 5 TIMBER REMEDIATION WORK DETAILS	As indicated AT A1 PRINT THIS DRAWING IN COLOUR	
										LOCATION	HERITAGE CONSULTANT	JOB NO
										SALTWATER CREEK, BUNDABERG	CONVERGE HERITAGE + COMMUNITY	2024.0351
										CLIENT	ASSOCIATE CONSULTANT	DRAWING NUMBER
									BUNDABERG REGIONAL COUNCIL		S103	
											REVISION	
											C-1	



SPAN 7 PLAN

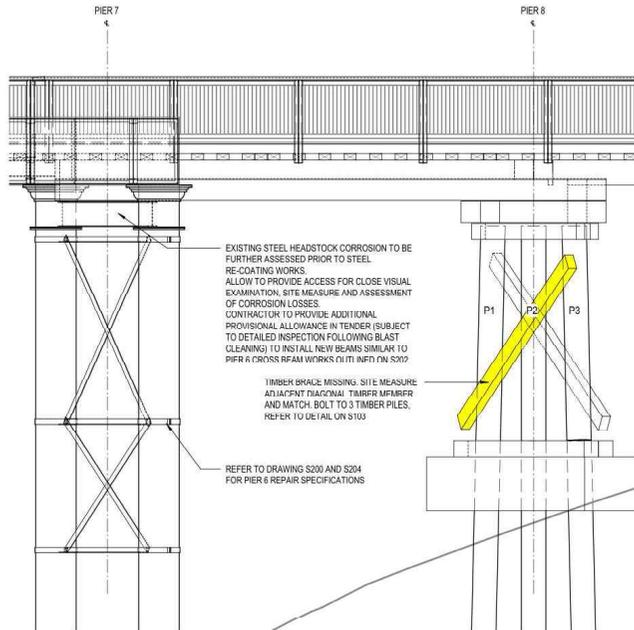
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LEGEND

DENOTES EXISTING DEFECTIVE TIMBER MEMBER REQUIRING REPAIRS AS SPECIFIED.

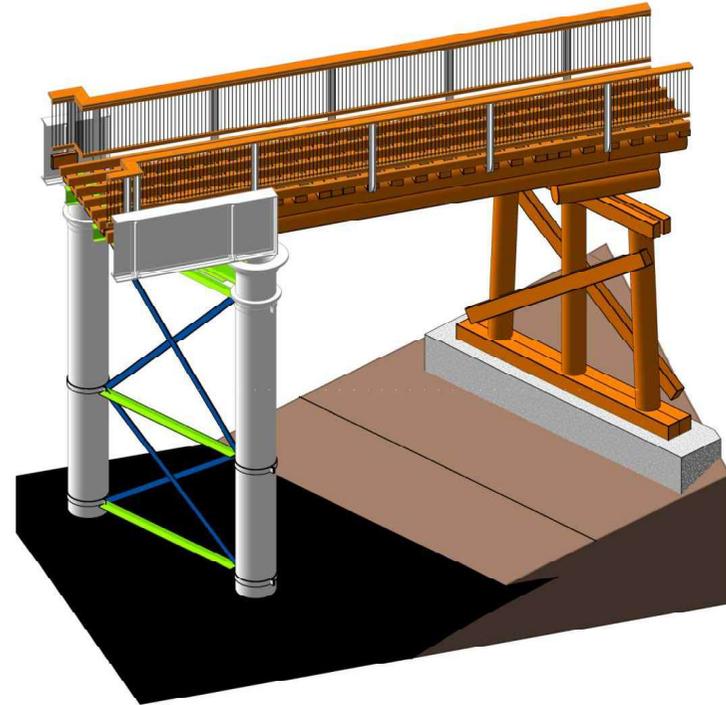
REPLACED MEMBER NOTES

- EXISTING MEMBER SIZES TO BE MEASURED ON SITE AND REPLACED TO MATCH EXISTING (IF REQUIRED).
- REPLACEMENT TIMBER TO BE DURABILITY CLASS 1, F27 SEASONED HARDWOOD OR RECYCLED TIMBER (NEW SLEEPERS ARE PERMITTED TO BE F17).
- WHERE TIMBER MEMBERS ARE REPLACED CONNECTIONS ARE TO MATCH EXISTING.
- REPLACEMENT TIMBERS TO BE PROFILED TO MATCH EXISTING.
- WHERE EXISTING GIRDER IS ROUND, REPLACEMENT GIRDER IS PERMITTED TO BE OCTAGONAL IF NEW MEMBER HAS SAME CAPACITY.



SPAN 7 ELEVATION

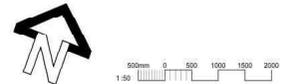
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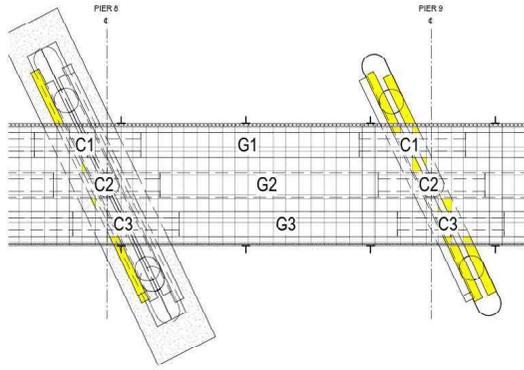
SPAN 7 3D PERSPECTIVE VIEW

APPROVED
 Name: Trudi Smith
 Date: 8:38 am, 22/01/2026

	BRC REFERENCE INFORMATION:	
	PROJECT NUMBER:	IRD4383.2022
	LOCALITY:	BUNDABERG CENTRAL
	FACILITY NAME:	SALTWATER CREEK RAIL BRIDGE
	DRAWING NUMBER:	158141



 LEVEL 9, 289 WICKHAM STREET, PO BOX 612 FORTITUDE VALLEY QLD 4006 AUS 1961A T 07 3201 8555 F 07 3251 8599	REV	DATE	DESCRIPTION	DESIGN	DRAWN	CHECKED	APPROVED	RPEQ No.	PROJECT	DRAWING TITLE	SCALES					
	C1	20.06.2025	CONSTRUCTION ISSUE	LW	JA	SK			SALTWATER CREEK RAIL BRIDGE CONSERVATION	SPAN 7 TIMBER REMEDIATION WORK DETAILS	As indicated AT A1 PRINT THIS DRAWING IN COLOUR					
									LOCATION	SALTWATER CREEK, BUNDABERG	HERITAGE CONSULTANT	CONVERGE HERITAGE + COMMUNITY	JOB NO	2024.0351		
									CLIENT	BUNDABERG REGIONAL COUNCIL	ASSOCIATE CONSULTANT		DRAWING NUMBER	S104	REVISION	C1



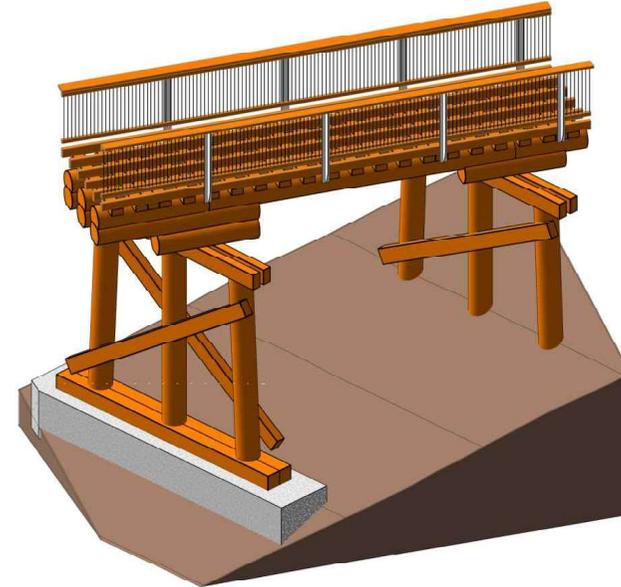
SPAN 8 PLAN
SCALE 1:50

LEGEND

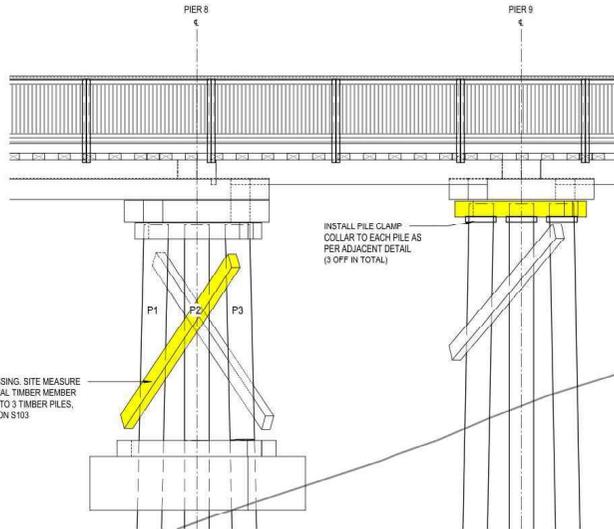
DENOTES EXISTING DEFECTIVE TIMBER MEMBER REQUIRING REPAIRS AS SPECIFIED.

REPLACED MEMBER NOTES

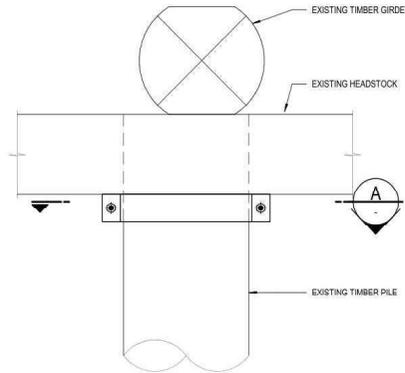
- EXISTING MEMBER SIZES TO BE MEASURED ON SITE AND REPLACED TO MATCH EXISTING (IF REQUIRED).
- REPLACEMENT TIMBER TO BE DURABILITY CLASS 1, F27 SEASONED HARDWOOD OR RECYCLED TIMBER (NEW BLEEPERS ARE PERMITTED TO BE F17).
- WHERE TIMBER MEMBERS ARE REPLACED CONNECTIONS ARE TO MATCH EXISTING.
- REPLACEMENT TIMBERS TO BE PROFILED TO MATCH EXISTING.
- WHERE EXISTING GIRDER IS ROUND, REPLACEMENT GIRDER IS PERMITTED TO BE OCTAGONAL IF NEW MEMBER HAS SAME CAPACITY.



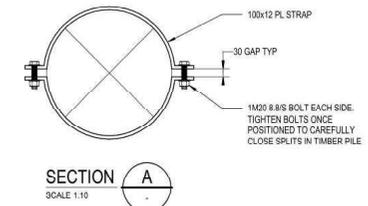
SPAN 8 3D PERSPECTIVE VIEW



SPAN 8 ELEVATION
SCALE 1:50

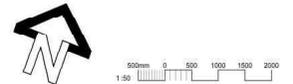


TYPICAL TIMBER PILE CLAMP DETAIL
SCALE 1:10

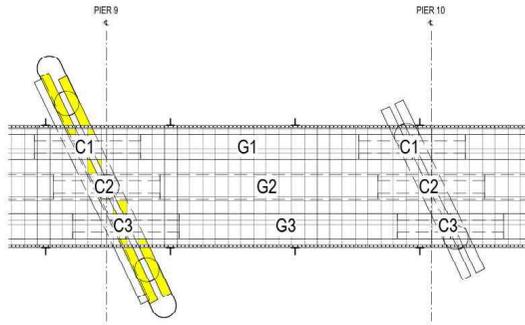


SECTION A
SCALE 1:10

	BRC REFERENCE INFORMATION:
	PROJECT NUMBER: IRD4383.2022
	LOCALITY: BUNDABERG CENTRAL
	FACILITY NAME: SALTWATER CREEK RAIL BRIDGE
	DRAWING NUMBER: 158142



REV	DATE	DESCRIPTION	DESIGN	DRAWN	CHECKED	APPROVED	RPEQ No.	PROJECT	DRAWING TITLE	SCALES
C1	20.06.2025	CONSTRUCTION ISSUE	LW	JA	SK			SALTWATER CREEK RAIL BRIDGE CONSERVATION	SPAN 8 TIMBER REMEDIATION WORK DETAILS	As indicated AT A1 PRINT THIS DRAWING IN COLOUR
								LOCATION	SALTWATER CREEK, BUNDABERG	HERITAGE CONSULTANT
								CLIENT	BUNDABERG REGIONAL COUNCIL	ASSOCIATE CONSULTANT
										JOB NO
										2024.0351
										DRAWING NUMBER
										S105
										REVISION
										C1



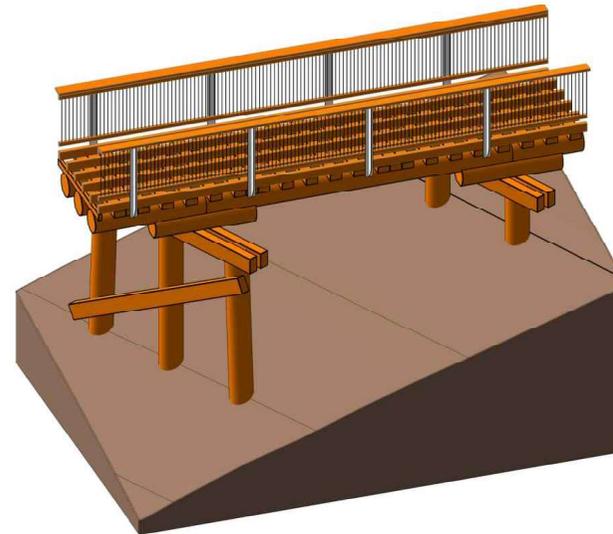
SPAN 9 PLAN
SCALE 1:50

LEGEND

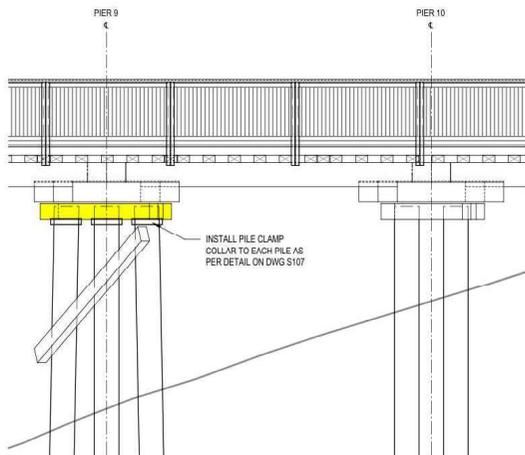
DENOTES EXISTING DEFECTIVE TIMBER MEMBER REQUIRING REPAIRS AS SPECIFIED.

REPLACED MEMBER NOTES

1. EXISTING MEMBER SIZES TO BE MEASURED ON SITE AND REPLACED TO MATCH EXISTING (IF REQUIRED)
2. REPLACEMENT TIMBER TO BE DURABILITY CLASS 1, F27 SEASONED HARDWOOD OR RECYCLED TIMBER (NBY SLEEPERS ARE PERMITTED TO BE F17)
3. WHERE TIMBER MEMBERS ARE REPLACED CONNECTIONS ARE TO MATCH EXISTING
4. REPLACEMENT TIMBERS TO BE PROFILED TO MATCH EXISTING
5. WHERE EXISTING GIRDER IS ROUND REPLACEMENT GIRDER IS PERMITTED TO BE OCTAGONAL IF NEW MEMBER HAS SAME CAPACITY.



SPAN 9 3D PERSPECTIVE VIEW



SPAN 9 ELEVATION
SCALE 1:50

GPC Gladstone Ports Corporation

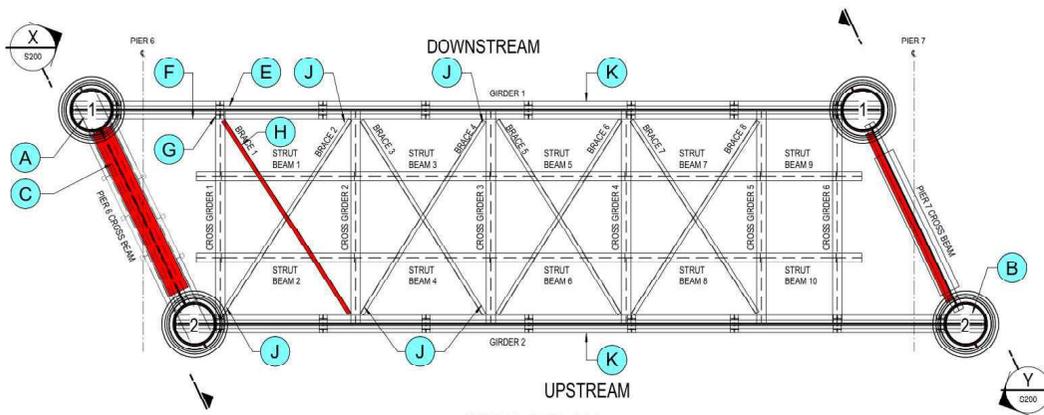
APPROVED

Name: Trudi Smith
Date: 8:39 am, 22/01/2026

	BRC REFERENCE INFORMATION:	
	PROJECT NUMBER:	IRD4383.2022
	LOCALITY:	BUNDABERG CENTRAL
	FACILITY NAME:	SALTWATER CREEK RAIL BRIDGE
	DRAWING NUMBER:	158143



<p>BLIGH TANNER</p> <p>LEVEL 9, 289 WICKHAM STREET, PO BOX 612 FORTITUDE VALLEY QLD 4006 AUS 1964JA T 07 3201 8555 F 07 3251 8599</p>	REV	DATE	DESCRIPTION	DESIGN	DRAWN	CHECKED	APPROVED	RPEQ No.	PROJECT	DRAWING TITLE	SCALES	
	C1	20.06.2025	CONSTRUCTION ISSUE	LW	JA	SK			SALTWATER CREEK RAIL BRIDGE CONSERVATION	SPAN 9 TIMBER REMEDIATION WORK DETAILS	As indicated AT A1 PRINT THIS DRAWING IN COLOUR	
										LOCATION	HERITAGE CONSULTANT	JOB NO
										SALTWATER CREEK, BUNDABERG	CONVERGE HERITAGE + COMMUNITY	2024.0351
										CLIENT	ASSOCIATE CONSULTANT	DRAWING NUMBER
										BUNDABERG REGIONAL COUNCIL		S106
											REVISION	
											C1	



SPAN 6 PLAN

SCALE 1 : 50

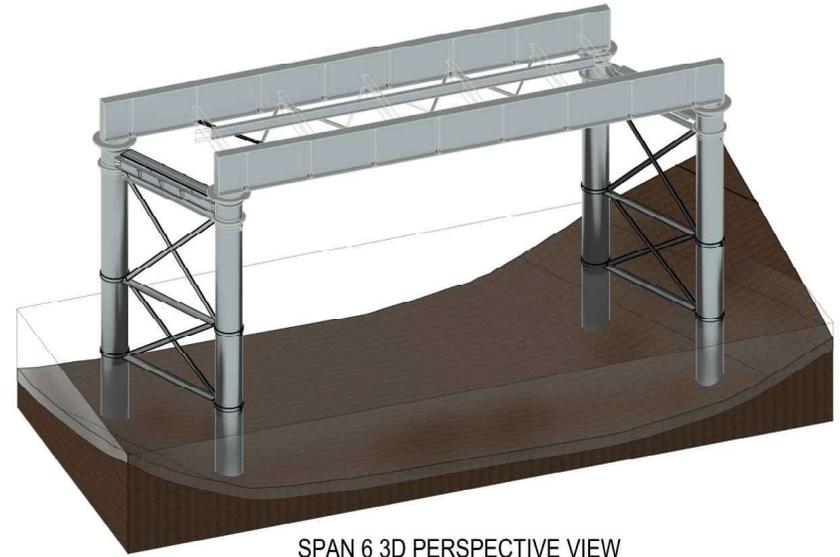
TIMBER CORBELS, GIRDERS, SLEEPERS, JOISTS AND DECKING OMITTED FOR CLARITY

LEGEND

- DENOTES EXISTING DAMAGED/CORRODED MEMBER TO BE REPLACED/REPAIRED
- DENOTES REPAIR ITEM CODE REFERENCE. REFER SCHEDULE ON DWG S201 FOR DETAILS

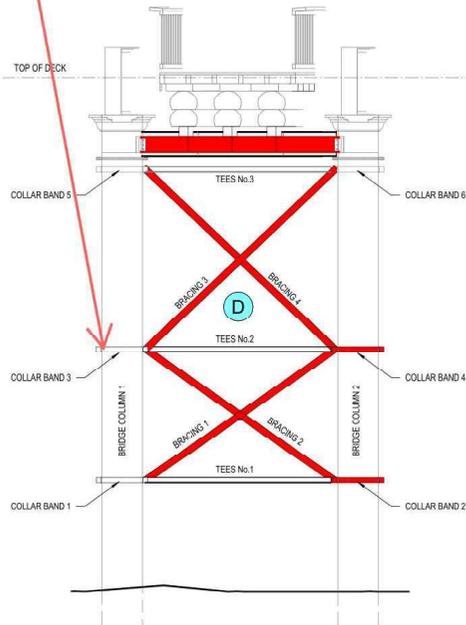
REPLACED MEMBER NOTES

1. EXISTING MEMBER SIZES TO BE MEASURED ON SITE AND REPLACED TO MATCH EXISTING
2. REPLACEMENT STEEL TO BE HOT DIPPED GALVANISED AND PAINTED IN ACCORDANCE WITH PAINT SPECIFICATION
3. WHERE MEMBERS ARE REPLACED GRADE 8.8 BOLTS ARE TO REPLACE EXISTING RIVETS.
4. ALL EXISTING DAMAGED RIVETS ARE TO BE REPLACED WITH GRADE 8.8 BOLTS TYP.

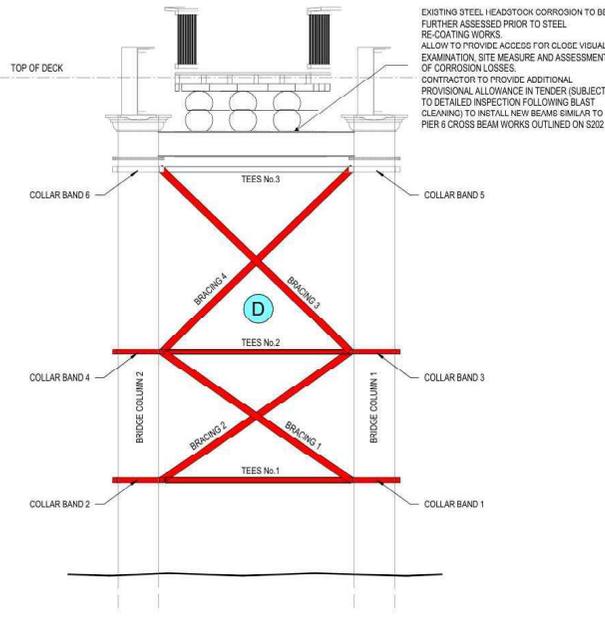


SPAN 6 3D PERSPECTIVE VIEW

Collar band 1 and 3 to be highlighted red.



SECTION X
SCALE: 1 : 50



SECTION Y
SCALE: 1 : 50

EXISTING STEEL HEADSTOCK CORROSION TO BE FURTHER ASSESSED PRIOR TO STEEL RE-COATING WORKS
ALLOW TO PROVIDE ACCESS FOR CLOSE VISUAL EXAMINATION, SITE MEASURE AND ASSESSMENT OF CORROSION LOSSES
CONTRACTOR TO PROVIDE ADDITIONAL PROVISIONAL ALLOWANCE IN TENDER SUBJECT TO DETAILED INSPECTION FOLLOWING BLAST CLEANING TO INSTALL NEW BEAMS SIMILAR TO PIER 6 CROSS BEAM WORKS OUTLINED ON S202

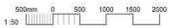
SPAN 6 & PIER 6 AND 7 STEELWORK REPAIR METHODOLOGY:

1. ERECT SCAFFOLDING AND ENCAPSULATION (BY CONTRACTOR) AS REQUIRED.
2. ABRASIVELY BLAST CLEAN EXISTING COATINGS AND CORROSION MATERIAL FROM ALL EXISTING STEELWORK BRIDGE MEMBERS.
3. HOLD POINT: DETAILED VISUAL INSPECTION TO BE UNDERTAKEN BY BLIGH TANNER STRUCTURAL ENGINEERS TO ASSESS AND CONFIRM THE SCOPE OF STEEL MEMBER REPLACEMENT OR REPAIR WORKS. COORDINATE WITH ENGINEER AND ALLOW FOR ENGINEERING TIME TO COMPLETE AS PART OF PROGRAMME OF WORKS. BLIGH TANNER WILL PROVIDE INSPECTION REPORT WITHIN 3 WORKING DAYS OF COMPLETING INSPECTION WORK.
4. APPLY PROTECTIVE STEELWORK COATING IN ACCORDANCE WITH SPECIFICATION
5. STEELWORK FABRICATOR SHALL INCLUDE SITE INSPECTION AS PART OF SHOP DETAILING PROCESS TO FULLY SITE MEASURE AND COORDINATE ALL NEW STEELWORK TO SUIT EXISTING GEOMETRY.
6. PROGRESSIVE Y COMPT FTF A1 REPAIR OR REPAIR WORKS IN ACCORDANCE WITH THE STRUCTURAL DOCUMENTATION.

Application of protective coating to be applied after steel repairs have been completed?



BUNDABERG REGIONAL COUNCIL	
BRC REFERENCE INFORMATION:	
PROJECT NUMBER:	IRD4383.2022
LOCALITY:	BUNDABERG CENTRAL
FACILITY NAME:	SALTWATER CREEK RAIL BRIDGE
DRAWING NUMBER:	158144



BLIGH TANNER <small>LEVEL 9, 289 WICKHAM STREET, PO BOX 612 FORTITUDE VALLEY QLD 4006 AUS 1961A T 07 3251 8555 F 07 3251 8599</small>	REV	DATE	DESCRIPTION	DESIGN	DRAWN	CHECKED	APPROVED	RPEQ No.	PROJECT	DRAWING TITLE	SCALES
	C1	20.06.2025	CONSTRUCTION ISSUE	KW	JA	SK			SALTWATER CREEK, BUNDABERG	SPAN 6 STEEL REMEDIATION WORK DETAILS - SHEET 1	As indicated AT A1 PRINT THIS DRAWING IN COLOUR
									SALTWATER CREEK, BUNDABERG	HERITAGE CONSULTANT CONVERGE HERITAGE + COMMUNITY	JOB NO 2024.0351
									BUNDABERG REGIONAL COUNCIL	ASSOCIATE CONSULTANT	DRAWING NUMBER S200 REVISION C1

SCHEDULE OF DAMAGE AND REPAIR			
ANNOTATION	IMAGE	NOTED DAMAGE	DAMAGE REPAIR
A		PIER 6, COLUMN 1 - CORRODED BEARING PLATES AND BOLTS (PIER 7 COLUMN 1 SIMILAR)	REMOVE EXISTING BOLTS. ABRASIVE BLAST AND THOROUGHLY CLEAN EXISTING SURFACE. INSTALL NEW SAE GRADE 8 BOLTS TO MATCH EXISTING. APPLY PROTECTIVE PAINT COATING AS PER SPECIFICATION.
B		PIER 7, COLUMN 2 - CORRODED BEARING PLATES AND BOLTS (PIER 6 COLUMN 2 SIMILAR)	REMOVE EXISTING BOLTS. ABRASIVE BLAST AND THOROUGHLY CLEAN EXISTING SURFACE. INSTALL NEW SAE GRADE 8 BOLTS TO MATCH EXISTING. APPLY PROTECTIVE PAINT COATING AS PER SPECIFICATION.
C		PIER 6 CROSS BEAM - SEVERELY CORRODED TOP PLATE TO EXISTING BEAM	REFER DETAIL AND METHODOLOGY ON DWG S202.
D		PIER 6 & 7 VERTICAL BRACING, PIER COLLARS AND TEES - SEVERELY CORRODED	REFER DETAIL AND METHODOLOGY ON DWG S203
E		GIRDER 1 - TOP FLANGE RIVETS SEVERELY CORRODED	REMOVE EXISTING SEVERELY CORRODED RIVETS ONE AT A TIME. ABRASIVE BLAST AND THOROUGHLY CLEAN EXISTING GIRDER LOCALLY. INSTALL NEW HUCK C50L DOME HEAD BOLT TO REPLACE EXISTING RIVET. APPLY PROTECTIVE PAINT COATING IN ACCORDANCE WITH SPECIFICATION. REPEAT FOR ALL SEVERLEY CORRODED RIVETS.

SCHEDULE OF DAMAGE AND REPAIR			
ANNOTATION	IMAGE	NOTED DAMAGE	DAMAGE REPAIR
F		MAIN GIRDERS - CREVICE CORROSION BETWEEN BOTTOM PLATES	ABRASIVE BLAST AND THOROUGHLY CLEAN EXISTING GIRDER. APPLY PROTECTIVE PAINT COATING AS PER SPECIFICATION.
G		CROSS GIRDER CONNECTION TO MAIN GIRDER - CORRODED RIVETS AND ANGLE	REFER DETAIL AND METHODOLOGY ON DWG S204.
H		DIAGONAL HORIZONTAL BRACE 1 - SEVERELY CORRODED	REFER DETAIL AND METHODOLOGY ON DWG S204.
J		DIAGONAL HORIZONTAL BRACING CLEATS - CREVICE CORROSION AND CORRODED RIVETS	REFER DETAIL AND METHODOLOGY ON DWG S204.
K		GIRDER 1 & GIRDER 2 - CORROSION TO RIVETS.	REPLACE EXISTING CORRODED RIVETS WITH HUCK C50L DOME HEAD BOLTS TO MATCH RIVET DIAMETER ONE AT A TIME. ABRASIVE BLAST AND THOROUGHLY CLEAN EXISTING GIRDER AS REQUIRED. APPLY PROTECTIVE PAINT COATING IN ACCORDANCE WITH SPECIFICATION. ALLOW FOR: GIRDER 1 - 55 BOLTS TO TOP PLATE AND 18 BOLTS TO BOTTOM PLATE. GIRDER 2 - 9 BOLTS TO TOP PLATE AND 14 BOLTS TO BOTTOM PLATE

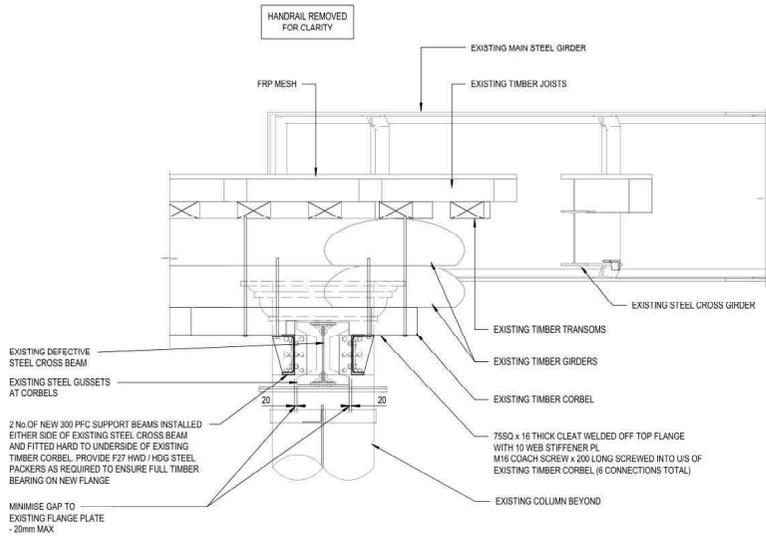
Prov Sum on drawing S204 for potential additional top flange plate required. These need to talk like other in the table.

GPC Gladstone Ports Corporation
APPROVED
 Name: Trudi Smith
 Date: 8:44 am, 22/01/2026

BUNDABERG REGIONAL COUNCIL
 BRC REFERENCE INFORMATION:
 PROJECT NUMBER: IRD4383.2022
 LOCALITY: BUNDABERG CENTRAL
 FACILITY NAME: SALT WATER CREEK RAIL BRIDGE
 DRAWING NUMBER: 156146

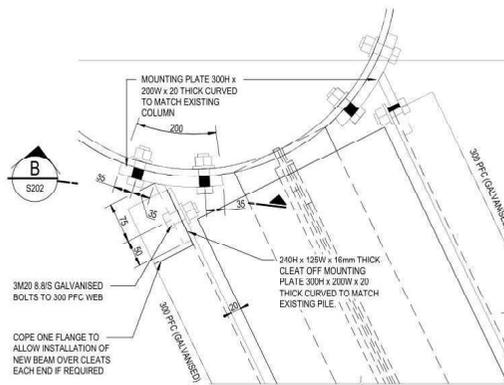
BLIGH TANNER
 LEVEL 9, 269 WICKHAM STREET, PO BOX 612
 FORTITUDE VALLEY QLD 4006 AUS 19ALIA
 T 07 3201 8505 F 07 3251 8599

REV	DATE	DESC	DESIGN	DRAWN	CHECKED	APPROVED	RPEQ No.	PROJECT	DRAWING TITLE	SCALES	REVISION		
C1	20.06.2025	CO	LW	JA	SK			SALT WATER CREEK RAIL BRIDGE CONSERVATION	SPAN 6 STEEL REMEDIATION WORK DETAILS - SHEET 2		AT A1		
								LOCATION	SALT WATER CREEK, BUNDABERG	HERITAGE CONSULTANT	CONVERGE HERITAGE + COMMUNITY	JOB NO	2024.0351
								CLIENT	BUNDABERG REGIONAL COUNCIL	ASSOCIATE CONSULTANT		DRAWING NUMBER	S201
												REVISION	C1



SECTION A
SCALE: 1:20

PIER 6 CROSS BEAM REPLACEMENT - SECTION

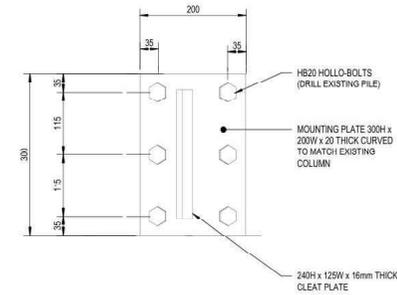


DETAIL 1
SCALE: 1:5

NOTE: OPTIONAL SITE WELDED MOUNTING PLATE

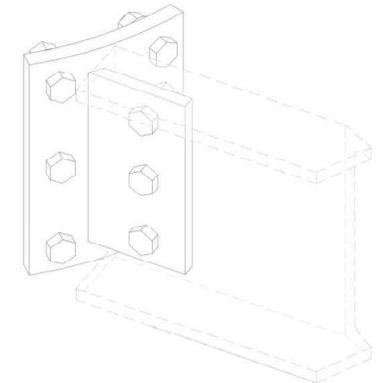
240H x 125W x 16mm THICK CLEAT PL OFF MOUNTING PLATE 250H x 150W x 20 THICK CURVED TO MATCH EXISTING PILE GRADE 300 PLATES QUALIFIED WELDER TO INVESTIGATE EXISTING STEEL PILE (SUSPECTED CAST IRON) AND CONFIRM APPROPRIATE SITE WELDING METHODOLOGY TO SITE WELD CLEAT ALL AROUND TO EXISTING (8mm CFW ALL ROUND REQUIRED)

HOLD POINT:
SUBMIT WELD METHODOLOGY TO BLIGH TANNER FOR REVIEW AND APPROVAL.



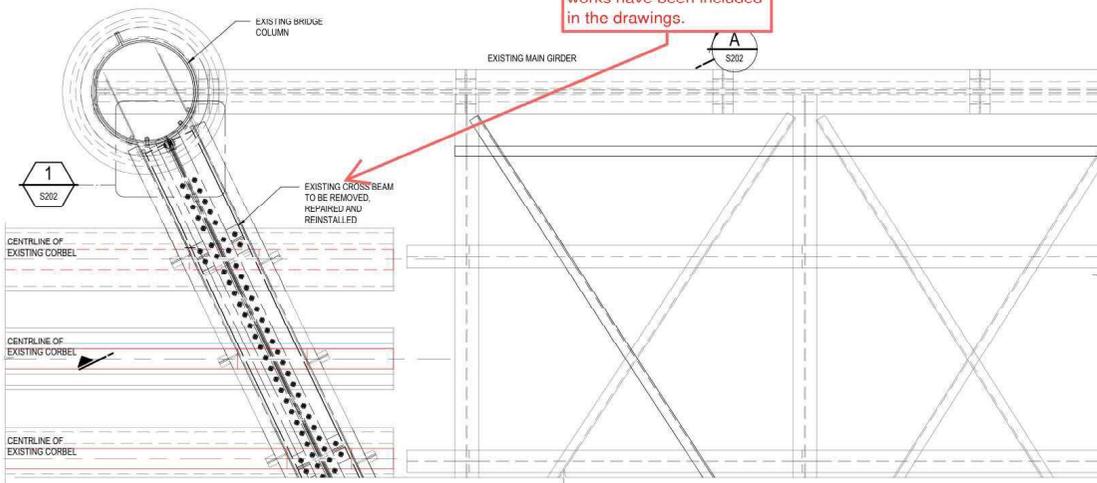
NOTE:
GRADE 300 STEEL REQUIRED FOR BRACKETS

SECTION B
SCALE: 1:5



3D VIEW MOUNTING PLATE

Is this a hangover from previous drawings or is removing and repair to existing cross beam an option? Noting no temp works have been included in the drawings.



PIER 6 CROSS BEAM TOP PLATE REPLACEMENT - PART PLAN
SCALE: 1:20

PIER 6 CROSS BEAM REPAIR METHODOLOGY:

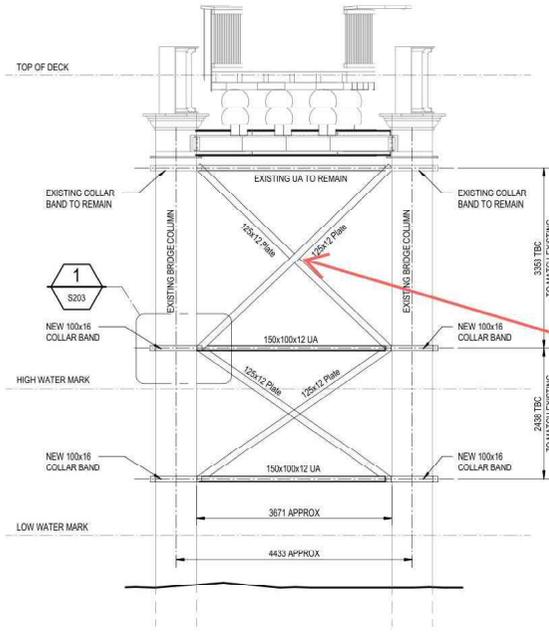
1. ABRASSIPLY BLAST CLEAN EXISTING COATINGS AND CORROSION MATERIAL FROM ALL EXISTING STEELWORK BRIDGE MEMBERS.
2. HOLD POINT: DETAILED VISUAL INSPECTION TO BE UNDERTAKEN BY BLIGH TANNER STRUCTURAL ENGINEERS TO ASSESS AND CONFIRM THE SCOPE OF STEEL MEMBER REPLACEMENT OR REPAIR WORKS. COORDINATE WITH ENGINEER AND ALLOW FOR ENGINEERING TIME TO COMPLETE AS PART OF PROGRAMME OF WORKS. BLIGH TANNER WILL PROVIDE INSPECTION REPORT WITHIN 3 WORKING DAYS OF COMPLETING INSPECTION WORK.
3. APPLY PROTECTIVE STEELWORK COATING IN ACCORDANCE WITH SPECIFICATION
4. STEELWORK FABRICATOR SHALL INCLUDE SITE INSPECTION AS PART OF SHOP DETAILING PROCESS TO FULLY SITE MEASURE AND COORDINATE ALL NEW STEEL WORK TO SUIT EXISTING GEOMETRY
5. CONFIRM MOUNTING PLATE CONNECTION TO EXISTING PILE, SUBMIT WELD METHODOLOGY TO BLIGH TANNER FOR REVIEW AND APPROVAL.
6. COMPLETE MOUNTING PLATE INSTALLATION WORKS AND INSTALL NEW BEAMS, ENSURING FULL BEARING ACHIEVED TO ALL EXISTING TIMBER CORBELS ABOVE.

Application of protective coating to be applied after steel repairs have been completed?

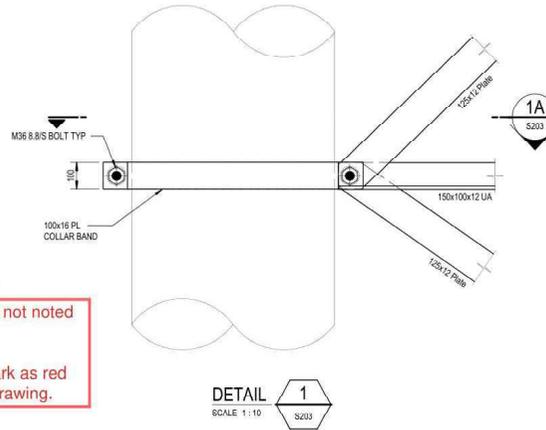


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	LOCALITY:	BUNDABERG CENTRAL
	FACILITY NAME:	SALTWATER CREEK RAIL BRIDGE
	DRAWING NUMBER:	158146

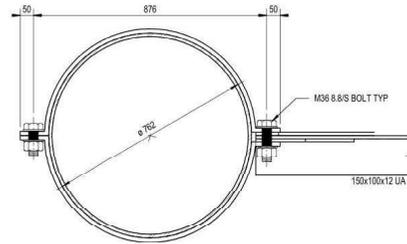
 LEVEL 9, 289 WICKHAM STREET, PO BOX 612 FORTITUDE VALLEY QLD 4006 AUS 19614A T 07 3201 8200 F 07 3201 8299	REV	DATE	DESCRIPTION	DESIGN	DRAWN	CHECKED	APPROVED	RPEQ No.	PROJECT	DRAWING TITLE	SCALES				
	C1	20.06.2025	CONSTRUCTION ISSUE	LW	JA	SK			SALTWATER CREEK RAIL BRIDGE CONSERVATION	SPAN 6 STEEL REMEDIATION WORK DETAILS - SHEET 4	As indicated AT A1				
									LOCATION	SALTWATER CREEK, BUNDABERG	HERITAGE CONSULTANT	CONVERGE HERITAGE + COMMUNITY	JOB NO	2024.0351	
									CLIENT	BUNDABERG REGIONAL COUNCIL	ASSOCIATE CONSULTANT		DRAWING NUMBER	S202	REVISION



125x12 plates not noted as new.
Alternately mark as red as per S200 drawing.



DETAIL 1
SCALE 1:10
S203



SECTION 1A
SCALE 1:10
S203

PIER 6 & 7 VERTICAL BRACING TYPICAL REPAIR ELEVATION

SCALE 1:50

PIER 6 & 7 VERTICAL BRACING REPAIR METHODOLOGY:

- WORKS TO BE COMPLETED ONE PIER AT A TIME. REMOVAL AND REINSTATEMENT OF BRACING SHALL BE COORDINATED DURING A PERIOD OF FORECASTED CLEAR WEATHER CONDITIONS.
- REMOVE VERTICAL BRACING, PIER COLLARS AND TEES AS INDICATED.
- ABRASIVE BLAST AND THOROUGHLY CLEAN EXISTING BRIDGE COLUMNS.
- INSPECT ALL BOLT HOLES WITHIN THE EXISTING UPPER COLLAR BANDS PROPOSED TO REMAIN AND CONFIRM THE BOLT HOLE SIZE IS WITHIN TOLERANCE OF +1.2mm. IF BOLT HOLES ARE ENLARGED OVER 3mm DUE TO CORROSION, REPLACE THE COLLAR BAND AS NEEDED.
- APPLY PROTECTIVE PAINT COATING IN ACCORDANCE WITH SPECIFICATION.
- INSTALL NEW VERTICAL BRACING, PIER COLLARS AND TEES.
- APPLY FURTHER PROTECTIVE PAINT COATING IN ACCORDANCE WITH SPECIFICATION.

Gladstone Ports Corporation

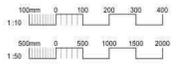
APPROVED

Name: Trudi Smith
Date: 8:44 am, 22/01/2026

BUNDABERG REGIONAL COUNCIL

BRC REFERENCE INFORMATION:

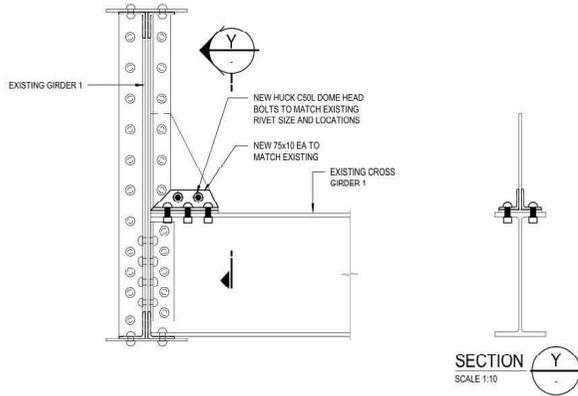
PROJECT NUMBER: IRD3411.2019
LOCALITY: BUNDABERG CENTRAL
FACILITY NAME: SALTWATER CREEK RAIL BRIDGE
DRAWING NUMBER: 158147



REV	DATE	DESCRIPTION	DESIGN	DRAWN	CHECKED	APPROVED	RPEQ No.	PROJECT	DRAWING TITLE	SCALES
C1	20.06.2025	CONSTRUCTION ISSUE	LW	JA	SK			SALTWATER CREEK RAIL BRIDGE CONSERVATION	SPAN 6 STEEL REMEDIATION WORK DETAILS - SHEET 5	As indicated AT A1
								LOCATION	SALTWATER CREEK, BUNDABERG	HERITAGE CONSULTANT CONVERGE HERITAGE + COMMUNITY
								CLIENT	BUNDABERG REGIONAL COUNCIL	ASSOCIATE CONSULTANT
										JOB NO 2024.0351
										DRAWING NUMBER S203
										REVISION C1

BLIGH TANNER

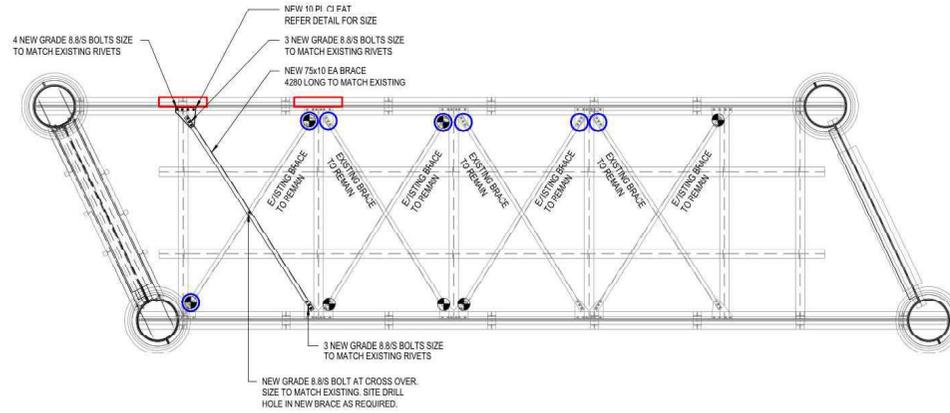
LEVEL 9, 289 WICKHAM STREET, PO BOX 612
FORTITUDE VALLEY QLD 4006 AUS 194/UA
T 07 3201 8505 F 07 3201 8599



TYPICAL CROSS GIRDER REPAIR DETAIL
SCALE 1:10

CROSS GIRDER REPAIR METHODOLOGY:

1. REMOVE EXISTING CORRODED RIVETS AND ANGLE.
2. ABRASIVE BLAST AND THOROUGHLY CLEAN EXISTING CROSS GIRDER AND MAIN GIRDER LOCALLY.
3. APPLY PROTECTIVE PAINT COATING IN ACCORDANCE WITH PAINT SPECIFICATION.
4. INSTALL NEW EA TO MATCH EXISTING WITH NEW GRADE 8.8 BOLTS.
5. APPLY FURTHER PROTECTIVE PAINT COATING IN ACCORDANCE WITH SPECIFICATION.



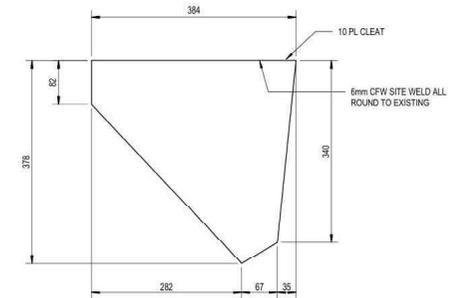
DIAGONAL HORIZONTAL BRACING AND CLEAT REPAIR PLAN
SCALE 1:50

LEGEND

- DENOTES LOCATION OF EXISTING CORRODED RIVET/RIVETS REQUIRING REPLACEMENT WITH NEW GRADE 8.8'S BOLTS SIZED TO MATCH EXISTING RIVET
- DENOTES HEAVILY CORRODED CLEAT PL - ALLOW PROVISIONAL SUM TO REMOVE AND REPLACE WITH NEW BRACING CLEAT PLATE. BLIGH TANNER SHALL INSPECT LOSS OF SECTION FOLLOWING BLAST CLEANING WORKS TO CONFIRM IF REQUIRED.
- DENOTES HEAVY PITTING CORROSION INTO STEEL GIRDER TOP FLANGE. ALLOW PROVISIONAL SUM TO SITE WELD ONE OF NEW 600Lx200Wx10THK & ONE OF NEW 200Lx150W x10THK REINFORCEMENT PLATES (WITH HOLES FOR RIVETS SITE MEASURED AS NEEDED). SITE WELDED 9 CFW ALL AROUND TO EXISTING. BLIGH TANNER SHALL INSPECT LOSS OF SECTION FOLLOWING BLAST CLEANING WORKS TO CONFIRM IF REQUIRED.

DIAGONAL HORIZONTAL BRACING AND CLEAT REPAIR METHODOLOGY:

1. REMOVE EXISTING CORRODED RIVETS AT BRACING CLEATS AS INDICATED. ONE AT A TIME ONLY.
2. ABRASIVE BLAST AND THOROUGHLY CLEAN EXISTING CLEAT PLATE LOCALLY.
3. INSPECT ALL BOLT HOLES WITHIN THE EXISTING CLEATS AND ANGLES PROPOSED TO REMAIN AND CONFIRM THE BOLT HOLE SIZE IS WITHIN TOLERANCE OF +1-2mm. IF BOLT HOLES ARE ENLARGED OVER 3mm DUE TO CORROSION, REPLACE THE ANGLE OR CLEAT, MATCHING EXISTING SIZE, AS ALIGNMENT REQUIRED.
4. APPLY PROTECTIVE PAINT COATING IN ACCORDANCE WITH PAINT SPECIFICATION.
5. INSTALL NEW GRADE 8.8 BOLT TO MATCH EXISTING RIVET.
6. APPLY FURTHER PROTECTIVE PAINT COATING IN ACCORDANCE WITH SPECIFICATION.
7. REPEAT STAGES 1 TO 5 FOR ALL CORRODED EXISTING RIVETS.
8. REMOVE EXISTING CORRODED HORIZONTAL BRACE AND CLEAT PLATE.
9. ABRASIVE BLAST EXISTING GIRDER 1 AND GIRDER 2 LOCALLY AROUND EXISTING CLEAT PLATES.
10. APPLY PROTECTIVE PAINT COATING IN ACCORDANCE WITH PAINT SPECIFICATION.
11. INSTALL NEW CLEAT PLATE TO GIRDER 1.
12. INSTALL NEW EA HORIZONTAL BRACE.
13. APPLY FURTHER PROTECTIVE PAINT COATING IN ACCORDANCE WITH SPECIFICATION.



NOTE: ALL HOLES TO BE SITE DRILLED TO SUIT EXISTING LOCATIONS AND SIZES

NEW BRACING CLEAT PLATE DETAIL
SCALE 1:5



BUNDABERG REGIONAL COUNCIL		BRC REFERENCE INFORMATION:	
PROJECT NUMBER:	IRD3411.2019	LOCALITY:	BUNDABERG CENTRAL
FACILITY NAME:	SALTWATER CREEK RAIL BRIDGE	DRAWING NUMBER:	158148



REV	DATE	DESCRIPTION	DESIGN	DRAWN	CHECKED	APPROVED	RPEQ No.	PROJECT	DRAWING TITLE	SCALES
C1	20.06.2025	CONSTRUCTION ISSUE	LW	JA	SK			SALTWATER CREEK RAIL BRIDGE CONSERVATION	SPAN 6 STEEL REMEDIATION WORK DETAILS - SHEET 6	As indicated AT A1
								LOCATION	SALTWATER CREEK, BUNDABERG	HERITAGE CONSULTANT
								CLIENT	BUNDABERG REGIONAL COUNCIL	ASSOCIATE CONSULTANT
										JOB NO
										2024.0351
										DRAWING NUMBER
										S204
										REVISION
										C1