



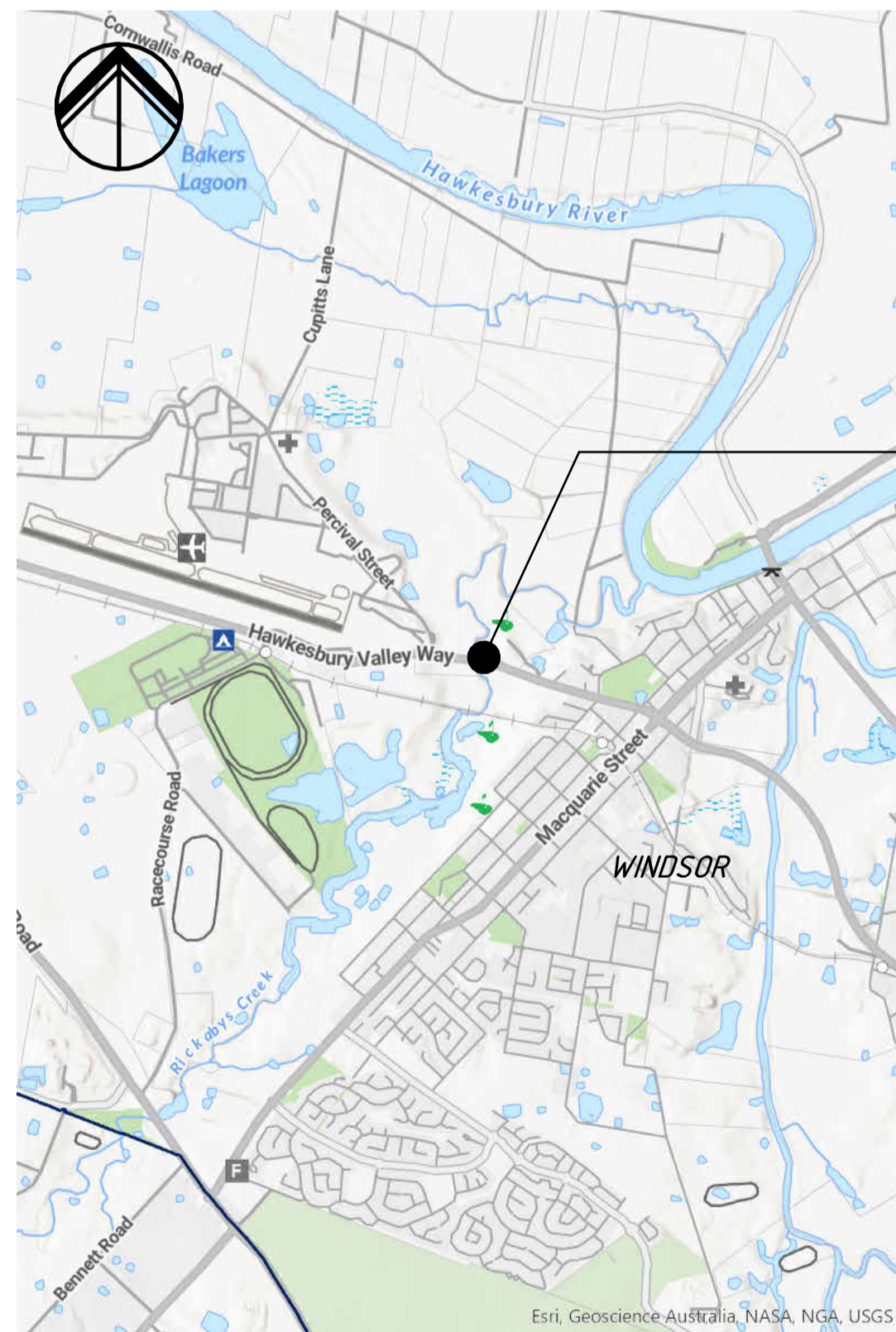
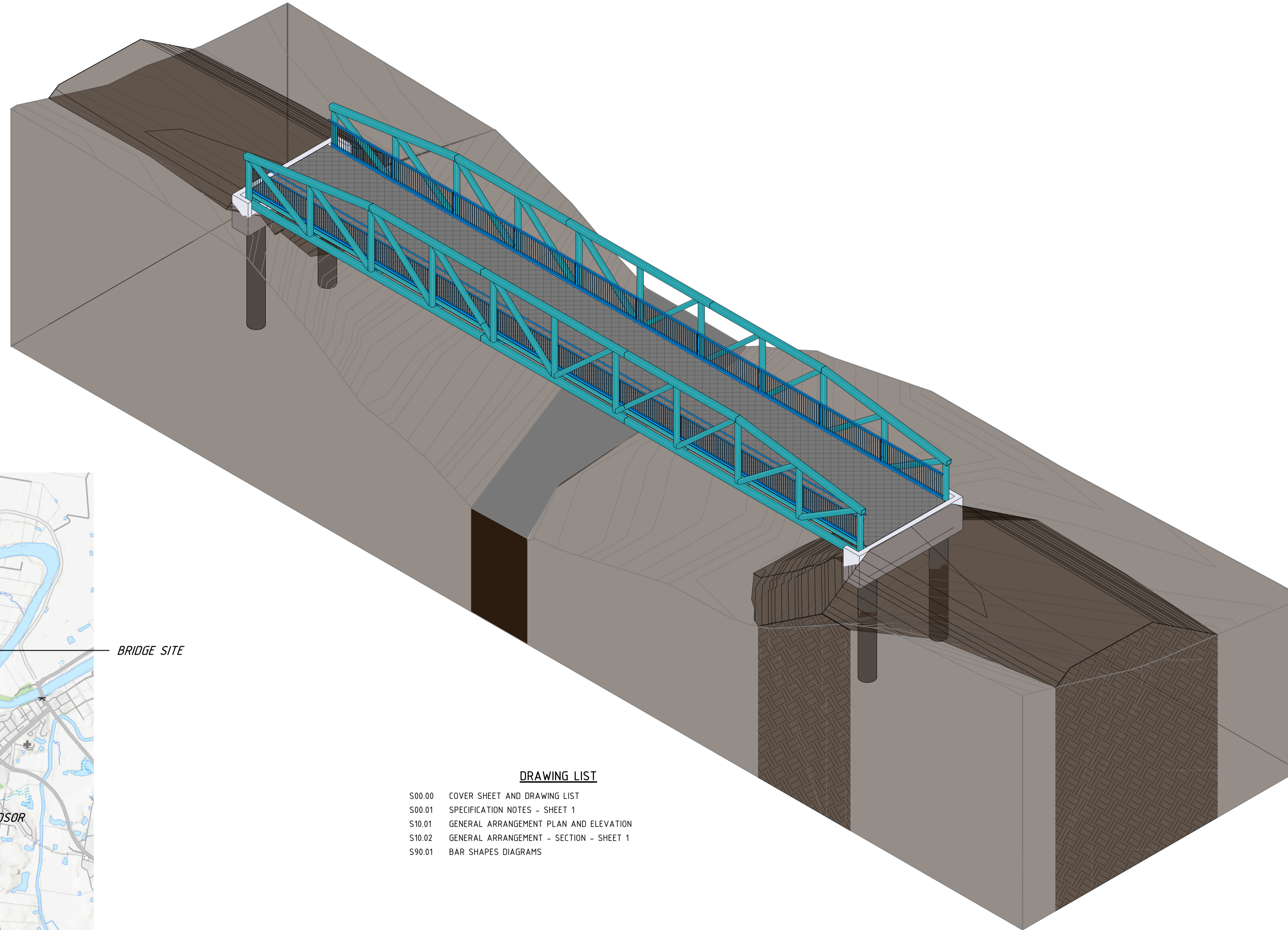
Attachment 4 to Item 10.5.1.

Rickabys Creek Cycleway Bridge Concept Design

Date of meeting: 8 April 2025
Location: Council Chambers
Time: 6:30pm

RICKABY'S CREEK PEDESTRIAN BRIDGE

HAWKESBURY VALLEY WAY WINDSOR NSW
STRUCTURAL



BRIDGE SITE

LOCALITY PLAN
NOT TO SCALE

BRIDGE SITE APPROX km NORTH OF SYDNEY BY ROAD

LOCALITY PLAN IMAGE: © State of New South Wales. For current information go to www.nsw.gov.au.

DRAWING LIST

- S00.00 COVER SHEET AND DRAWING LIST
- S00.01 SPECIFICATION NOTES - SHEET 1
- S10.01 GENERAL ARRANGEMENT PLAN AND ELEVATION
- S10.02 GENERAL ARRANGEMENT - SECTION - SHEET 1
- S90.01 BAR SHAPES DIAGRAMS

DESIGN DATA

THE BRIDGE HAS BEEN DESIGNED TO THE FOLLOWING INFORMATION OR ASSUMPTIONS.

| | |
|-----------------------------------|---------------------------------|
| DESIGN STANDARD: | AS5100 (2017) |
| TRAFFIC LOADING: | PEDESTRIAN 4kPa |
| DESIGN LIFE: | 100 YEARS |
| EARTHQUAKE DESIGN CLASSIFICATION: | BEDC-1 |
| WIND LOADING TO AS5100 Vdes: | 40m/s |
| DEPTH OF DEBRIS MAT: | 1.4m |
| MINIMUM DESIGN LATERAL LOAD: | 200kN (LOW FLOW VELOCITY CREEK) |

FLOODING DATA

THE FOLLOWING FLOODING INFORMATION HAS BEEN OBTAINED FROM NORTHROP AND HAWKESBURY NEPEAN FLOOD STUDY (RHELM/CSS, 2024).

| | |
|---|------------|
| 2000 YEAR ARI AVERAGE FLOW VELOCITY: | 1.8m/s |
| 2000 YEAR ARI FLOOD LEVEL: | 22.82m AHD |
| 2000 YEAR PEAK FLOW VELOCITY CORRESPONDING WITH SURFACE WATER LEVEL OF 9.1m AHD = | 2.7m/s |

DRAWN: A. CHESTERFIELD DESIGNED: J. CARDONA JOB MANAGER: R. OFFICER VERIFIER:

NOT FOR CONSTRUCTION

| REV | DESCRIPTION | ISSUED | VER'D | APP'D | DATE |
|-----|---------------------|--------|-------|-------|----------|
| 1 | PRELIMINARY ISSUE | A.H.C. | | J.C. | 26.11.24 |
| 2 | 100% CONCEPT DESIGN | A.H.C. | | J.C. | 06.02.25 |

CLIENT

Hawkesbury City Council

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PROJECT
RICKABY'S CREEK PEDESTRIAN BRIDGE
HAWKESBURY VALLEY WAY WINDSOR NSW

DRAWING TITLE
COVER SHEET AND DRAWING LIST

| | |
|---------------------------------|----------------------|
| JOB NUMBER NL241621 | |
| DRAWING NUMBER S00.00 | REVISION 2 |
| DRAWING SHEET SIZE = A1 | |

GENERAL

- G1. THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH THESE SPECIFICATIONS AND OTHER CONSULTANT'S DRAWINGS.
- G2. ALL DISCREPANCIES SHALL BE REFERRED TO THE PROJECT MANAGER AND RESOLVED BEFORE PROCEEDING WITH THE WORK.
- G3. ALL DIMENSIONS SHOWN SHALL BE VERIFIED BY THE BUILDER AND/OR CONTRACTOR ON SITE. THESE DRAWINGS SHALL NOT BE SCALED FOR DIMENSIONS. ALL LEVELS ARE IN METRES (m) AND DIMENSIONS ARE IN MILLIMETRES (mm)
- G4. ALL WORKMANSHIP, TESTING, MATERIALS AND SUPERVISION ARE TO BE IN ACCORDANCE WITH THESE SPECIFICATIONS, AND THE RELEVANT FEDERAL AND STATE WHS LEGISLATION
- G5. PROPRIETARY ITEMS SPECIFIED SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN RECOMMENDATIONS. DO NOT VARY SPECIFIED PROPRIETARY PRODUCTS WITHOUT WRITTEN APPROVAL FROM NORTHROP.
- G6. THE BUILDER SHALL PROVIDE CERTIFICATION BY A SUITABLY QUALIFIED CHARTERED PROFESSIONAL ENGINEER REGISTERED AS REQUIRED BY THE RELEVANT FEDERAL AND STATE LEGISLATION FOR ANY DESIGN AND CONSTRUCT COMPONENT USE ON THIS PROJECT .
- G7. NOTES ON ANY DRAWING APPLY TO ALL DRAWINGS IN THE SET UNLESS SPECIFIED OTHERWISE (U.S.O.)
- G8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE LOCATION OF ALL SERVICES IN THE VICINITY OF THE WORKS. ANY SERVICES SHOWN ARE PROVIDED FOR INFORMATION ONLY. THE CONTRACTOR SHALL CONFIRM THE LOCATION OF ALL SERVICES PRIOR TO COMMENCING AND SHALL BE RESPONSIBLE FOR THE REPAIR OF ANY DAMAGE CAUSED TO SERVICES, AS WELL AS ANY LOSS INCURRED AS A RESULT OF THE DAMAGE TO ANY SERVICE.
- G9. THE STRUCTURAL COMPONENTS DETAILED ON THESE STRUCTURAL DRAWINGS ARE JOB SPECIFIC AND HAVE BEEN DESIGNED IN ACCORDANCE WITH THE RELEVANT AUSTRALIAN STANDARDS.
- G10. NO CHANGES IN ANY STRUCTURAL ELEMENT SHALL BE MADE WITHOUT WRITTEN APPROVAL FROM NORTHROP CONSULTING ENGINEERS. IF THERE IS A DISCREPANCY THEN FOR TENDER PURPOSES ALLOW FOR THE MOST EXPENSIVE OPTION. NORTHROP CONSULTING ENGINEERS SHALL BE CONTACTED TO CONFIRM PRIOR TO CONSTRUCTION.
- G11. CONSTRUCTION USING THESE DRAWINGS SHALL NOT COMMENCE UNTIL THE DRAWINGS ARE DESIGNATED "ISSUED FOR CONSTRUCTION".
- G12. NORTHROP CONSULTING ENGINEERS ACCEPTS NO RESPONSIBILITY FOR ANY WORK NOT INSPECTED OR NOT APPROVED BY NORTHROP CONSULTING ENGINEERS DURING CONSTRUCTION.
- G13. THE BUILDER SHALL PROVIDE CERTIFICATION FOR ANY DESIGN AND CONSTRUCT COMPONENT BY A SUITABLY QUALIFIED CHARTERED PROFESSIONAL ENGINEER REGISTERED AS REQUIRED BY THE RELEVANT FEDERAL AND STATE LEGISLATION.
- G14. **ABBREVIATIONS:**

| | | | |
|------|--------------------------------------|------------------|---|
| AHD | DENOTES AUSTRALIAN HEIGHT DATUM | CHS | DENOTES CIRCULAR HOLLOW SECTION |
| FF | DENOTES FAR FACE | EA | DENOTES EQUAL ANGLE |
| NF | DENOTES NEAR FACE | PFC | DENOTES PARALLEL FLANGE CHANNEL |
| EF | DENOTES EACH FACE | SHS | DENOTES SQUARE HOLLOW SECTION |
| LV | DENOTES LENGTH VARIES | RHS | DENOTES RECTANGULAR HOLLOW SECTION |
| USD | DENOTES UNLESS SPECIFIED OTHERWISE | UA | DENOTES UNEQUAL ANGLE |
| NSOP | DENOTES NOT SHOWN ON PLAN | UB | DENOTES UNIVERSAL BEAM |
| NSOE | DENOTES NOT SHOWN ON ELEVATION | UC | DENOTES UNIVERSAL SECTION |
| CFW | DENOTES CONTINUOUS FILLET WELD | IP | DENOTES INTERSECTION POINT |
| CBW | DENOTES CONTINUOUS BUTT WELD | TP | DENOTES TANGENT POINT |
| AADT | DENOTES AVERAGE ANNUAL DAILY TRAFFIC | No | DENOTES NUMBER |
| HDG | DENOTES HOT DIP GALVANISED | PL | DENOTES PLATE |
| SOP | DENOTES SET OUT POINT | FL | DENOTES FLAT |
| SOL | DENOTES SET OUT LINE | PCD | DENOTES PITCH CIRCLE DIAMETER |
| ULS | DENOTES ULTIMATE LIMIT STATE | CSK | DENOTES COUNTERSUNK |
| UTS | DENOTES ULTIMATE TENSILE STRENGTH | CJ | DENOTES CONSTRUCTION JOINT |
| SLS | DENOTES SERVICEABILITY LIMIT STATE | EJ | DENOTES EXPANSION JOINT |
| DWS | DENOTES DECK WEARING SURFACE | R | DENOTES RADIUS |
| DRG | DENOTES DRAWING | DIA or ϕ | DENOTES DIAMETER |
| TBC | DENOTES TO BE CONFIRMED | ID | DENOTES INTERNAL DIAMETER |
| COS | DENOTES CONFIRM ON SITE | OD | DENOTES EXTERNAL DIAMETER |
| NTS | DENOTES NOT TO SCALE | CL or ϵ | DENOTES CENTERLINE |
| RL | DENOTES REDUCED LEVEL | C/C | DENOTES CENTRE TO CENTRE |
| FSL | DENOTES FINISHED SURFACE LEVEL | REQD | DENOTES REQUIRED |
| EGL | DENOTES EXISTING GROUND LEVEL | PTFE | DENOTES POLYTETRAFLURO-ETHYLENE |
| NGL | DENOTES NATURAL GROUND LEVEL | PVC | DENOTES POLYVINYLCHLORIDE |
| IL | DENOTES INVERT LEVEL | PSC | DENOTES PRESTRESSED CONCRETE |
| OL | DENOTES OVERT LEVEL | RC | DENOTES REINFORCED CONCRETE |
| TYP. | DENOTES TYPICAL | RSS | DENOTES REINFORCED SOIL WALL |
| MAX. | DENOTES MAXIMUM | ST | DENOTES STREET |
| MIN. | DENOTES MINIMUM | RD | DENOTES ROAD |
| NOM. | DENOTES NOMINAL | UPVC | DENOTES UNPLASTICISED POLYVINYLCHLORIDE |
| CTS | DENOTES CENTERS | VC | DENOTES VERTICAL CURVE |
| HSMS | DENOTES HIGH-STRENGTH, NON-SHRINK | EMB. | DENOTES EMBEDMENT |
| CH | DENOTES CHAINAGE | NCF. | DENOTES NO CHAMFER OR FILLET |
| OFF. | DENOTES OFFSET (FROM CONTROL LINE) | | |

TEMPORARY WORKS

- TW1. THESE DRAWINGS AND ISSUED WRITTEN INSTRUCTIONS DURING THE COURSE OF THE CONTRACT DEPICT THE COMPLETE STRUCTURE. THEY DO NOT DESCRIBE A WORK METHOD. THE ARRANGEMENT, DESIGN AND INSTALLATION OF TEMPORARY WORKS REMAINS THE RESPONSIBILITY OF THE CONTRACTOR.
- TW2. BUILDER AND/OR CONTRACTOR MUST ENGAGE A SUITABLY QUALIFIED STRUCTURAL ENGINEER FOR THE DESIGN OF ALL TEMPORARY WORKS NECESSARY TO SAFELY ERECT THIS STRUCTURE. AS A MINIMUM THE RELEVANT TNSW QA SPECIFICATIONS IN TABLE 1 AND THE AUSTRROADS SPECIFICATIONS IN TABLE 2 ON THIS DRAWING SHALL BE FOLLOWED IN RELATION TO THE TEMPORARY WORKS THAT REQUIRE ATTENTION.
- TW3. THE DETERMINATION OF A SAFE WORK METHOD REMAINS THE RESPONSIBILITY OF THE CONTRACTOR. ANY ELEMENT WHICH POSES AN UNACCEPTABLE LEVEL OF SAFETY RISK TO CONSTRUCT SHALL BE REFERRED TO THE STRUCTURAL ENGINEER. TEMPORARY BRACING AND SUPPORT OF STRUCTURE IS THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE MAINTAINED DURING ALL STAGES OF CONSTRUCTION.
- TW4. NOTE: ADDITIONAL REQUIREMENTS FOR WORKS DURING RAIL POSSESSION PERIODS AND AROUND OVERHEAD POWERLINES APPLY WHEN WORKING IN A RAIL CORRIDOR OR NEAR OVERHEAD POWER LINES. BUILDER AND/OR CONTRACTOR TO SEEK APPROPRIATE APPROVAL FROM THE ASSET OWNER PRIOR TO COMMENCING WORKS.

SAFETY IN DESIGN

- SID1. A SAFETY IN DESIGN RISK REGISTER HAS BEEN PREPARED BY NORTHROP CONSULTING ENGINEERS FOR THIS PROJECT. IF YOU ARE NOT IN RECEIPT OF THIS RISK REGISTER PLEASE CONTACT NORTHROP CONSULTING ENGINEERS TO OBTAIN A COPY OF OUR CURRENT REGISTER PRIOR TO UNDERTAKING THE DEMOLITION AND/OR CONSTRUCTION WORKS.

TfNSW TECHNICAL SPECIFICATIONS

ALL WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE RELEVANT "TfNSW QA" SPECIFICATION AS NOMINATED IN TABLE 1 ON THIS DRAWING. ANY DEVIATIONS TO BE CONFIRMED WITH "NORTHROP" PRIOR TO COMMENCING.

| TABLE 1 - TfNSW REFERENCE SPECIFICATIONS | |
|--|---|
| TfNSW QA No. B58 (TS 01729.1) | BORED CAST-IN-PLACE REINFORCED CONCRETE PILES (WITH PERMANENT CASING) |
| TfNSW QA No. B80 (TS 01733.1) | CONCRETE WORK FOR BRIDGES |
| TfNSW QA No. B115 (TS 01738.1) | PRECAST CONCRETE MEMBERS (NOT PRETENSIONED) |
| TfNSW QA No. B119 (TS 01739) | APPROVAL OF POST-TENSIONING SYSTEMS |
| TfNSW QA No. B153 (TS 01742.1) | ERECTION OF PRECAST CONCRETE MEMBERS (NOT PRETENSIONED) |
| TfNSW QA No. B201 (TS 01744.1) | STEELWORK FOR BRIDGES |
| TfNSW QA No. B203 (TS 01745.1) | WELDING OF REINFORCING STEEL |
| TfNSW QA No. B220 (TS 01746) | PROTECTIVE OF STEELWORK BY THE USE OF PAINT COATINGS (ATS 5450) |
| TfNSW QA No. B223 (TS 01747) | REPAINTING OF STEEL BRIDGES (ATS 5453) |
| TfNSW QA No. B240 (TS 00033) | SUPPLY OF BOLTS NUTS AND WASHERS (ATS 5420-20) |
| TfNSW QA No. B242 (TS 01749.1) | MANUFACTURE AND SUPPLY OF ALUMINIUM BARRIERS |
| TfNSW QA No. B246 (TS 01751.1) | MANUFACTURE AND SUPPLY OF MINOR ALUMINIUM ITEMS |
| TfNSW QA No. B261 (TS 01752.1) | ERECTION OF STRUCTURAL ALUMINIUM |
| TfNSW QA No. B264 (TS 01753.1) | ERECTION OF BARRIER RAILINGS AND MINOR COMPONENTS |
| TfNSW QA No. B280 (TS 01754) | PLAIN ELASTOMERIC BEARING PADS AND STRIPS |
| TfNSW QA No. B281 (TS 01755.1) | LAMINATED ELASTOMERIC BEARINGS |
| TfNSW QA No. B284 (TS 01758.1) | INSTALLATION OF BRIDGE BEARINGS |
| TfNSW QA No. B310 (TS 01761.1) | COMPRESSION SEAL EXPANSION JOINTS |
| TfNSW QA No. B312 (TS 01762.1) | COLD APPLIED SEALANT JOINTS |
| TfNSW QA No. B316 (TS 01764.1) | MODULAR BRIDGE EXPANSION JOINTS |
| TfNSW QA No. B319 (TS 01764.1) | PROPRIETARY ALUMINIUM EXPANSION JOINTS |

AUSTRROADS TECHNICAL SPECIFICATIONS

ALL WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE RELEVANT "AUSTRROADS QA" SPECIFICATION AS NOMINATED IN TABLE 2 ON THIS DRAWING. ANY DEVIATIONS TO BE CONFIRMED WITH "NORTHROP" PRIOR TO COMMENCING.

| TABLE 2 - AUSTRROADS REFERENCE SPECIFICATIONS | |
|---|---|
| TS 00077 | SUPPLY AND PLACEMENT OF STEEL FOR REINFORCEMENT OF CONCRETE |
| TS 00078 | SUPPLY OF GEOPOLYMER CONCRETE |
| TS 00079 | CEMENTITIOUS PATCH REPAIR OF CONCRETE ATS 5340 |
| TS 00080 | REPAIR OF CONCRETE CRACKS ATS 5341 |
| TS 00081 | COATING OF CONCRETE |
| TS 00083 | FIBRE REINFORCED POLYMER COMPOSITE STRENGTHENING |
| TS 00102 | ANTI-GRAFFITI COATINGS ATS 5820 |
| TS 00171 | FABRICATION OF STAINLESS STEEL COMPONENTS ATS 5440 |
| TS 01750 | FABRICATION OF ALUMINIUM COMPONENTS (ATS 5430) |
| TS 03358 | SUPPLY OF PAINT FOR STEELWORK ATS 5451 |

BEARING REPLACEMENT PROCEDURE

THE FOLLOWING PROCESS FOR BEARING REPLACEMENT IS PROPOSED BY THE ORIGINAL BRIDGE DESIGNER (INCLUDING ASSUMPTIONS). A WRITTEN METHOD STATEMENT FOR BEARING REPLACEMENT SHALL BE SUBMITTED TO THE ASSET OWNER FOR APPROVAL PRIOR TO PROCEEDING WITH WORKS. JACKING SHALL OCCUR AT ONE HEADSTOCK AT A TIME.

BEFORE JACKING

1. INSTALL TEMPORARY TRAFFIC MANAGEMENT DEVICES AS REQUIRED.
2. INSTALL ANY TEMPORARY WORKS PLATFORMS REQUIRED TO CARRY OUT WORKS.
3. LOOSEN ANY BRIDGE FURNITURE BEFORE JACKING (eg. PROTECTIVE SCREENS, HAND RAILS, EXPANSION JOINTS, ETC). LOOSEN SERVICES AFTER OBTAINING WRITTEN APPROVAL FROM SERVICE OWNER.
4. CLEAN JACK BEARING SURFACES TO ENSURE THEY ARE FREE OF VEGETATION, DEBRIS AND UNNECESSARY GREASE, ETC.
5. BRIDGE SHALL BE RESTRAINED LONGITUDINALLY BY INSTALLATION OF PACKERS AT ENDS OF GIRDERS/TRUSS/PLANKS.
6. REMOVE RESTRAINT BOLTS AND WEDGES FROM BOTH SIDES AND ENDS OF GIRDERS/TRUSS/PLANKS BEING LIFTED.

TRIAL LIFT

7. A TRIAL LIFT IS REQUIRED PRIOR TO BEARING REPLACEMENT AS THIS ALLOWS FOR THE IDENTIFICATION OF POTENTIAL PROBLEMS AND MAY LEAD TO A REDESIGN, CHANGES TO THE WORK PROCEDURE OR EQUIPMENT. THE HEIGHT OF THE TRIAL LIFT SHALL BE DETERMINED BY THE BRIDGE ASSET OWNERS ENGINEER IN CHARGE.
8. THE BRIDGE SHALL BE CLEARED OF PEDESTRIAN AND VEHICULAR PRIOR TO AND DURING JACKING.
9. INSTALL HYDRAULIC JACKING EQUIPMENT AT THE LOCATIONS INDICATED ON THESE DESIGN DOCUMENTS. INSTALL THE JACKS IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS AND WRITTEN SPECIFICATIONS.
10. ALL JACKS ARE TO BE HYDRAULICALLY CONNECTED AND HAVE A CONTROL MECHNISM TO ENSURE THAT THE SAME VERTICAL DISPLACEMENTS OCCUR AT EACH JACKING POINT AT ALL TIMES DURING THE JACKING OPERATION. THE MAXIMUM DIFFERENTIAL TOLERANCE SHALL BE +-1MM.
11. JACK THE BRIDGE AS DIRECTED BY THE BRIDGE ASSET OWNERS ENGINEER IN CHARGE. PROVIDE STEEL PLATES AS REQUIRED TO ENSURE THE MAXIMUM BEARING PRESSURE UNDER THE JACK ON THE CONCRETE DOES NOT EXCEED 25MPa.
12. DIMENSION OF THE EXISTING BEARING SHALL BE CONFIRMED.
13. LOWER THE BRIDGE BACK TO ORIGINAL POSITION.

BEARING REPLACEMENT LIFT

14. JACK BRIDGE TO REMOVE EXISTING BEARINGS. ENSURE THE MAXIMUM BEARING PRESURE OF THE JACK ON THE CONCRETE DOES NOT EXCEED 25MPa.
15. INSTALL NON-COMPRESSIBLE TEMPORARY PACKERS ON TOP OF THE HEADSTOCK TO SUPPORT THE GIRDERS/TRUSS/PLANKS. PACKERS TO BE OF SUFFICIENT STRENGTH TO SUPPORT THE WEIGHT OF THE SUPERSTRUCTURE
16. LOWER THE GIRDERS / TRUSS/ PLANKS UNIFORMLY ON TO THE PACKERS.
17. REMOVE THE EXISTING BEARING AND INSTALL THE NEW BEARING.
18. LOWER THE BRIDGE DECK UNIFORMLY ONTO THE BEARINGS.
19. ENSURE THAT THE GIRDERS / TRUSS/ PLANKS SIT FLUSH WITH THE SURFACE OF THE BEARING.
20. REMOVE THE JACKING EQUIPMENT.
21. RE-TIGHTEN ANY BRIDGE FURNITURE LOSSEMED IN STEPS ABOVE.
22. REMOVE THE TEMPORARY PACKERS FROM UNDER THE TRUSS/GIRDERS/PLANKS. REMOVAL OF NON-COMPRESSIBLE TEMPORARY PACKERS TO TAKE PLACE AFTER THE EPOXY PUTTY HAS FULLY CURED OVER A PERIOD NOT LESS THAN 48 HOURS WITHOUT DISLOGGING THE TRUSS/GIRDERS/PLANKS.
23. REPLACE RESTRAINT BOLTS AND WEDGES TO BOTH SIDES OF TRUSS/GIRDERS/PLANKS.


VERIFIER:

JOB MANAGER: R. OFFICER

DESIGNED: J. CARDONA

DRAWN: A. CHESTERFIELD

| REV | DESCRIPTION | ISSUED | VER'D | APP'D | DATE |
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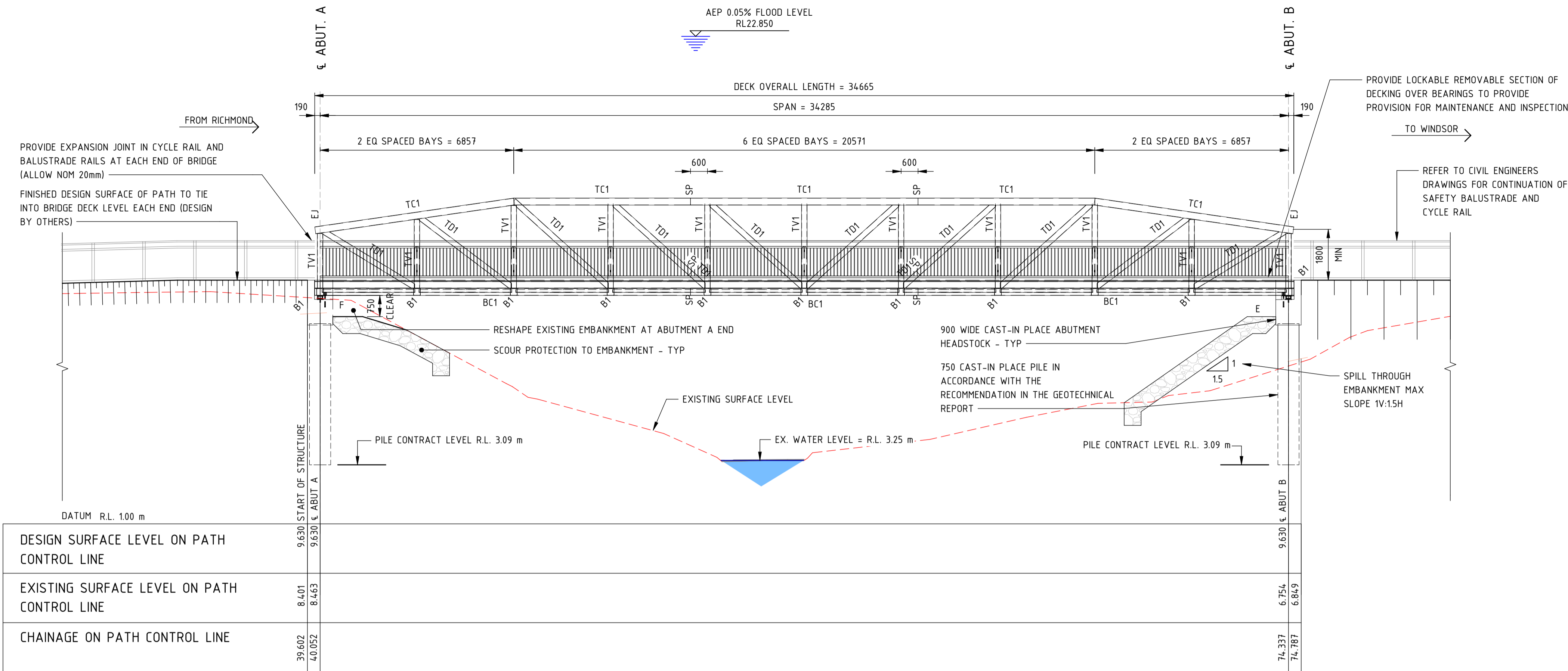
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| PROJECT RICKABY'S CREEK PEDESTRIAN BRIDGE HAWKESBURY VALLEY WAY WINDSOR NSW |
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| DRAWING TITLE SPECIFICATION NOTES - SHEET 1 |
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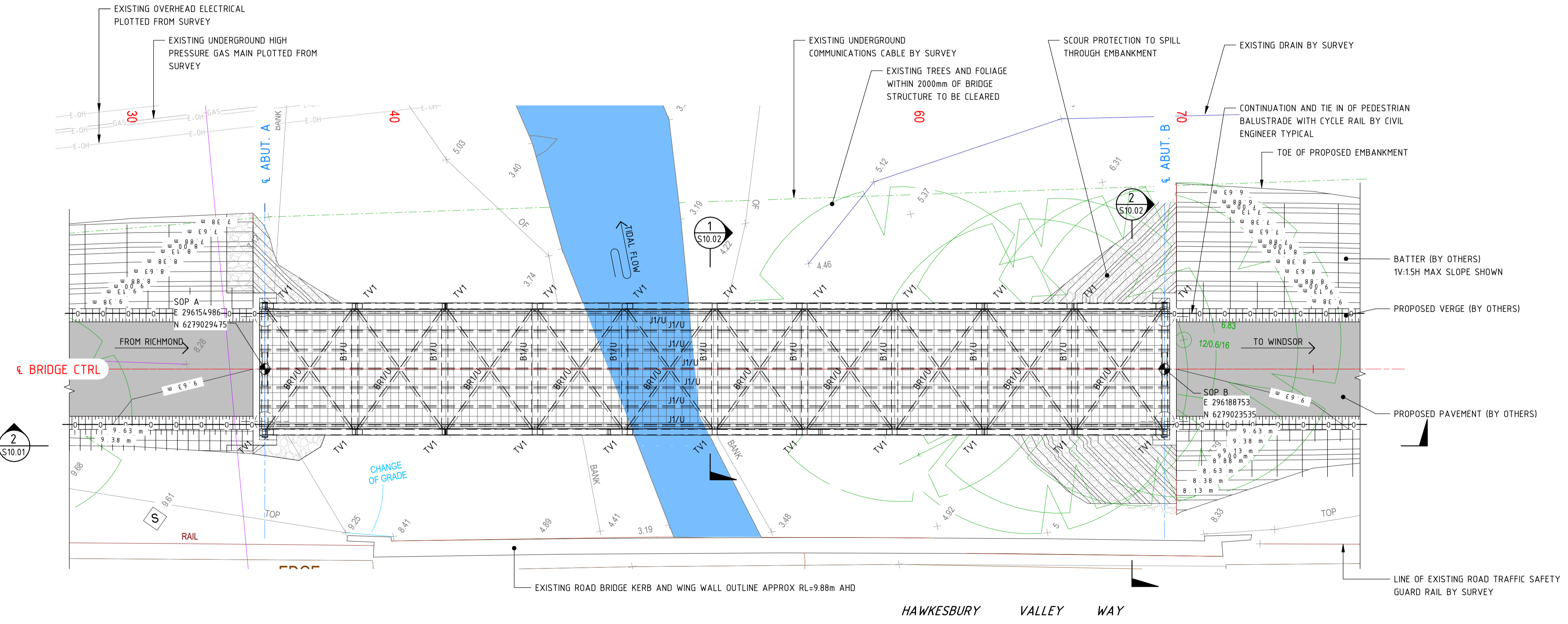
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| DRAWING NUMBER S00.01 |
| REVISION 2 |
| DRAWING SHEET SIZE = A1 |

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REFER TO TABLE 1 ON DRG S10.02 FOR MEMBER SCHEDULE

ELEVATION



PLAN

LEGEND

- COMMUNICATIONS SERVICE U/G WITH SERVICE PIT AS SURVEYED
 - ELECTRICAL SERVICE U/G WITH SERVICE PIT AS SURVEYED
 - ELECTRICAL SERVICE O/H WITH POLE AS SURVEYED
 - RAIL AS SURVEYED TO BE RETAINED WITHOUT CHANGE
 - RAIL AS SURVEYED TO BE ABANDONED
 - NEW TRACK AND RAILS AS DESIGNED
 - WATER SERVICE U/G WITH HYDRANT AS SURVEYED
 - SEWER SERVICE U/G WITH ACCESS CHAMBER AS SURVEYED
 - STORMWATER SERVICE U/G WITH INLET PIT AS SURVEYED
 - PROPERTY BOUNDARY AS SURVEYED
 - PROPERTY EASEMENT BOUNDARY AS SURVEYED
 - EXISTING BRIDGE STRUCTURE AS SURVEYED
 - PROPOSED PEDESTRIAN SAFETY BARRIER BY CIVIL DESIGNERS
 - EXISTING HIGH PRESSURE GAS MAIN AS SURVEYED
 - RIP RAP / SCOUR PROTECTION PROPOSED
 - SEWER PIPELINE (ABOVE/BELOW) PROPOSED WITH AIR VALVE
 - RECYCLED WATER PIPELINE (ABOVE/BELOW) PROPOSED WITH AIR VALVE
 - POTABLE WATER PIPELINE (ABOVE/BELOW) PROPOSED WITH AIR VALVE
 - STORMWATER PIPE (REFER CIVIL ENGINEER DRW'S) PROPOSED
 - *O DENOTES STRUCTURAL MEMBER OVER
 - *U DENOTES STRUCTURAL MEMBER UNDER
- VERTICAL STRUCTURAL ELEMENTS WITHOUT A SUFFIX (*O OR *U) SHALL BE READ AS OVER & UNDER. REFER TO MEMBER SCHEDULE FOR ADDITIONAL INFORMATION.

NOTES

SCALE: 0 1000 2000 3000 4000 5000 OR AS SHOWN.

REFER TO DRG. S00.01 FOR GENERAL NOTES.
DIMENSIONS IN MILLIMETRES.
CHAINAGES, REDUCED LEVELS AND COORDINATES IN METRES.
REDUCED LEVELS ARE TO AUSTRALIAN HEIGHT DATUM (AHD).
E DENOTES EXPANSION BEARING
F DENOTES FIXED BEARING
R DENOTES RESTRAINED BEARING
EJ DENOTES EXPANSION JOINT
SP DENOTES BOLTED SPLICE
WATERWAY AREA UNDER EXISTING ROAD BRIDGE HAS BEEN MAINTAINED AND THE WATERWAY AREA UNDER THE NEW BRIDGE IS A SLIGHT INCREASE ON THAT OF THE EXISTING BRIDGE.
DESIGN IS SUBJECT TO FURTHER REVIEW PENDING FLOODING DATA.
ALL EXISTING SERVICES SHALL BE LOCATED AND EXPOSED PRIOR TO COMMENCEMENT OF EARTHWORKS AND PILING OPERATIONS

NOT FOR CONSTRUCTION

DRAWN: A. CHESTERFIELD
DESIGNED: J. CARDONA
JOB MANAGER: R. OFFICER
VERIFIER:

| REV | DESCRIPTION | ISSUED | VER'D | APP'D | DATE | CLIENT |
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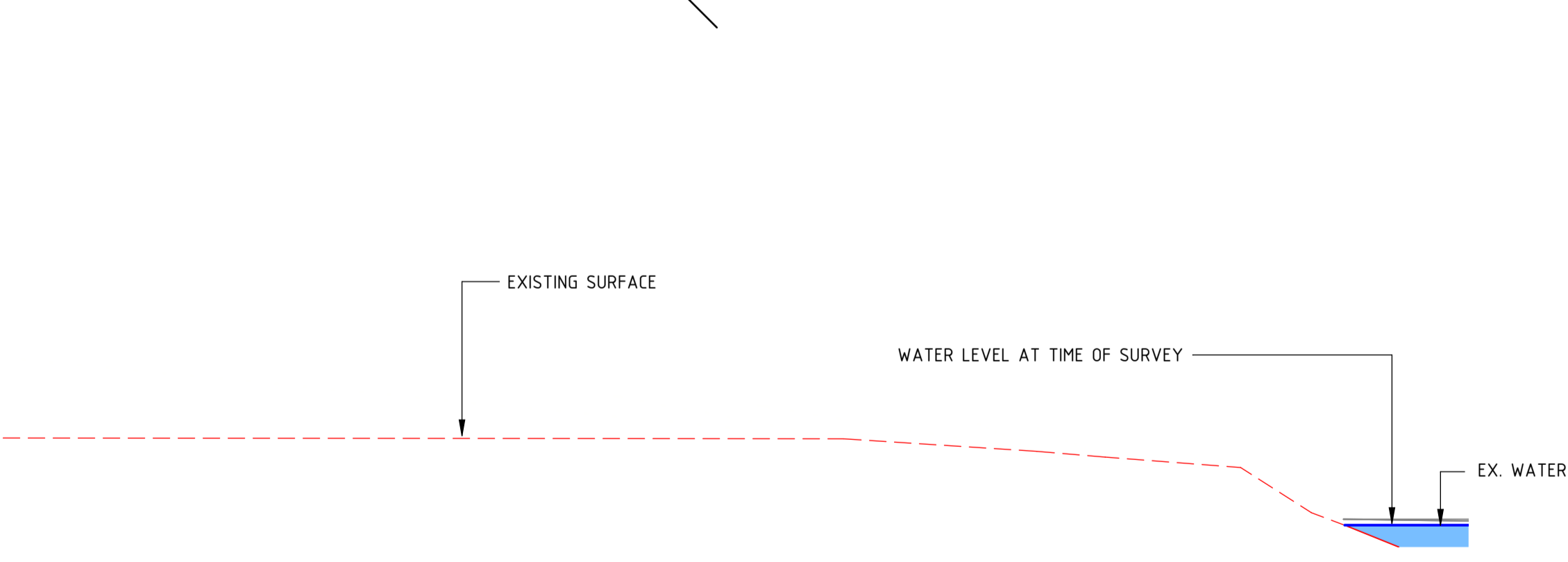
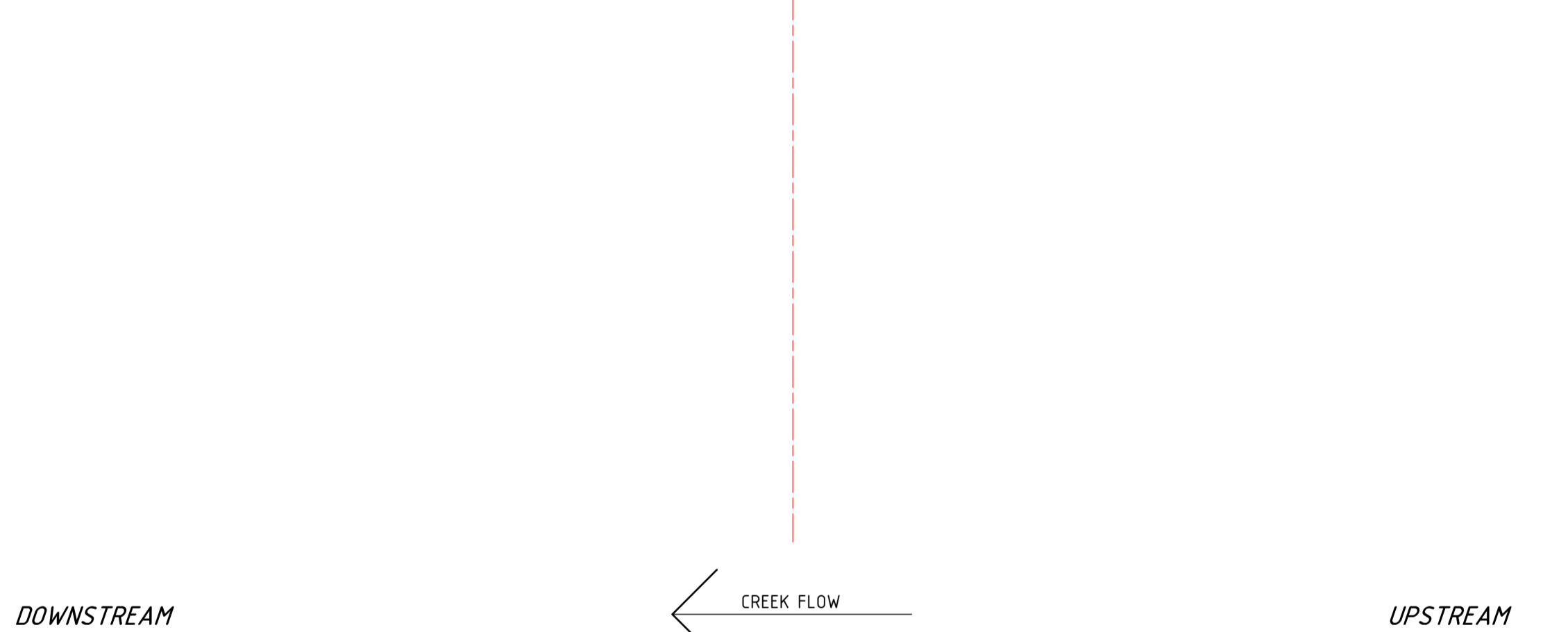
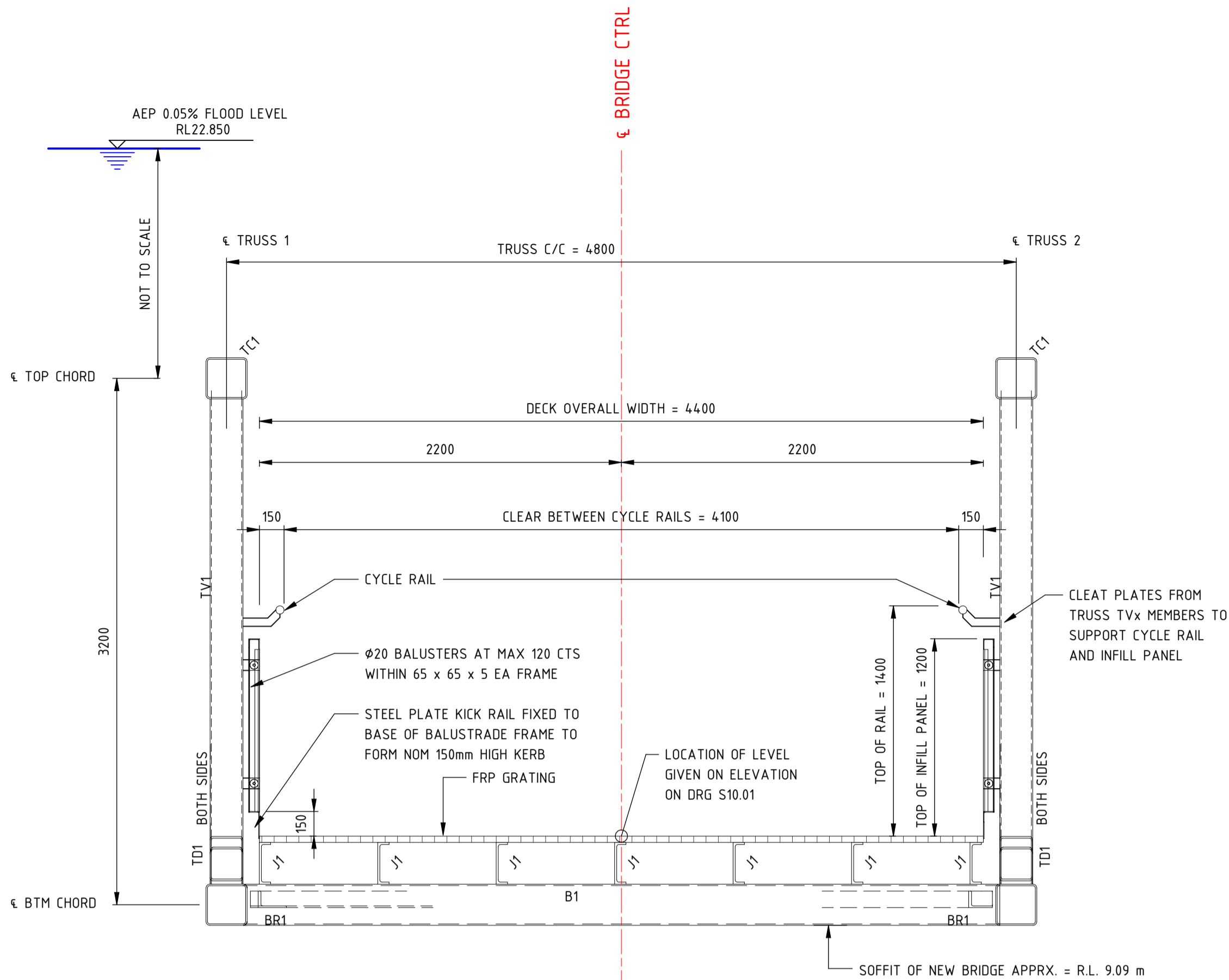
PROJECT
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HAWKESBURY VALLEY WAY WINDSOR NSW

DRAWING TITLE
GENERAL ARRANGEMENT PLAN AND ELEVATION

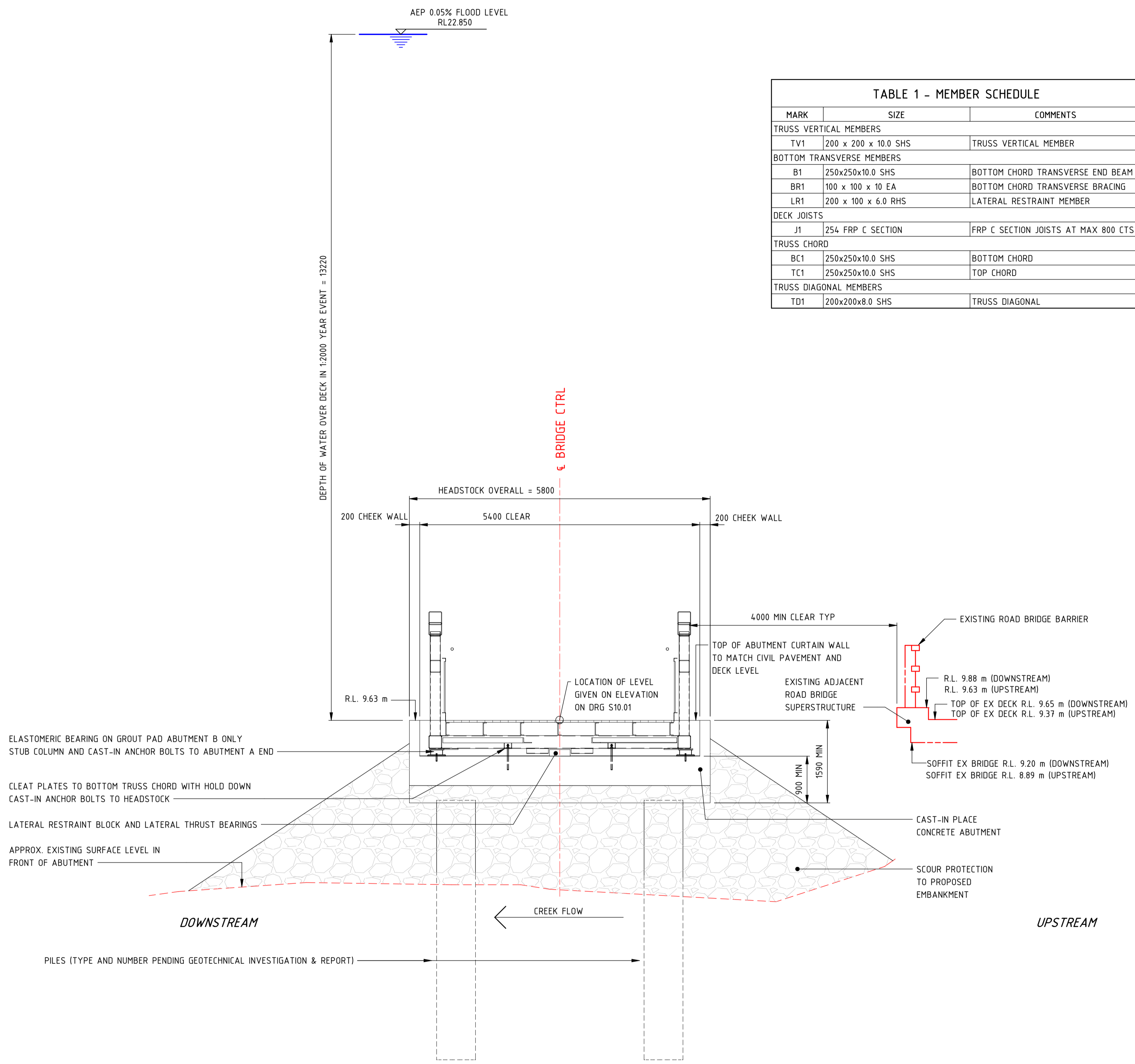
JOB NUMBER
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| DRAWING NUMBER | REVISION |
| S10.01 | 2 |

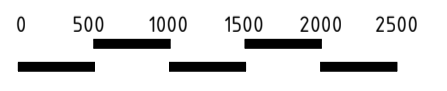
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SECTION 1
S10.01



ABUTMENT B ELEVATION



| TABLE 1 - MEMBER SCHEDULE | | |
|---------------------------|----------------------|-------------------------------------|
| MARK | SIZE | COMMENTS |
| TRUSS VERTICAL MEMBERS | | |
| TV1 | 200 x 200 x 10.0 SHS | TRUSS VERTICAL MEMBER |
| BOTTOM TRANSVERSE MEMBERS | | |
| B1 | 250x250x10.0 SHS | BOTTOM CHORD TRANSVERSE END BEAM |
| BR1 | 100 x 100 x 10 EA | BOTTOM CHORD TRANSVERSE BRACING |
| LR1 | 200 x 100 x 6.0 RHS | LATERAL RESTRAINT MEMBER |
| DECK JOISTS | | |
| J1 | 254 FRP C SECTION | FRP C SECTION JOISTS AT MAX 800 CTS |
| TRUSS CHORD | | |
| BC1 | 250x250x10.0 SHS | BOTTOM CHORD |
| TC1 | 250x250x10.0 SHS | TOP CHORD |
| TRUSS DIAGONAL MEMBERS | | |
| TD1 | 200x200x8.0 SHS | TRUSS DIAGONAL |

NOTES
 SCALE: 0 250 500 750 1000 1250 OR AS SHOWN.
 REFER TO DRG. S10.01 FOR GENERAL NOTES
 FOR ADDITIONAL NOTES REFER TO DRG.

NOT FOR CONSTRUCTION

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PROJECT: **RICKABY'S CREEK PEDESTRIAN BRIDGE**
HAWKESBURY VALLEY WAY WINDSOR NSW

DRAWING TITLE: **GENERAL ARRANGEMENT - SECTION - SHEET 1**

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