



DISTRICT OF  
**Tofino**

August 2, 2023

**Request for Quotation  
Tonquin Trail Bridge Replacement**

The District of Tofino is inviting quotes from qualified contractors for the replacement of the Tonquin Trail bridge connecting the northern side of the trail with the southern end of the trail.

A lump sum together with a cost breakdown along with unit costs for extra work shall be quoted for the complete works, in accordance with the Request for Quote.

**The contractor assumes the role of Principal Contractor and will be responsible for site safety at all times as well as for the provision of all necessary safety devices and supervision at the site so as to protect the public. Pedestrian traffic must be safely managed at all times while the trail is closed in the bridge replacement area.**

**QUOTE SUBMISSION DATE AND TIME**

The District of Tofino reserves the right to reject any and all submissions, and the lowest price will not necessarily be accepted.

All quotes must be submitted to the District of Tofino office **no later than 2:00 pm, August 11, 2023**. After the closing date and time submissions will not be accepted.

Quotes are to be submitted in a sealed envelope and are to be clearly labelled:

**“Tonquin Trail Bridge Replacement”**

Submissions are to be sent in via mail, courier or hand delivered (emailed or faxed submissions will not be accepted) to:

**Attention: Todd Staley  
District of Tofino  
PO Box 9 / 121 Third Street  
Tofino BC,  
V0R 2Z0**

Questions are to be directed to Todd Staley, Project Manager – Community Services  
[tstaley@tofino.ca](mailto:tstaley@tofino.ca)

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## **1.0 SCHEDULE**

Work Schedule:

- All works to be completed prior to October 1, 2023.

## **2.0 SCOPE OF WORK**

The works to be completed are included in Appendix A.

## **3.0 GENERAL**

The drawings have been prepared assuming work to be completed in fairly dry conditions. Contractor to modify practices in wet weather as required at no additional cost.

Contractor to arrange for and receive all necessary permits required to complete the works exclusive of the environmental permitting which is to be issued to District of Tofino.

Construction notifications to the residents shall be provided by District of Tofino. The Contractor shall provide a minimum of 7 business days notice to the District prior to commencing work.

The contractor shall familiarize themselves with the site.

## **4.0 SITE PREPARATION/EARTHWORKS**

Dispose of excess material and vegetation off site.

## **5.0 EROSION AND SEDIMENT CONTROL**

The Contractor is responsible for ensuring that erosion and sediment control methods are in place and are maintained until the Final Completion is issued. Erosion and sediment control methods shall be in accordance with Fisheries and Oceans Canada and Ministry of Water, Lands and Air Protection Handbook entitled 'Land Development Guidelines for the Protection of Aquatic Habitat, September 1993'. It is incumbent upon the Bidder to acquire these guidelines and be familiar with the requirements therein. The document can be downloaded at <http://www.dfo-mpo.gc.ca/Library/165353.pdf>.

## **6.0 LAYOUT**

Layout will be the responsibility of the contractor.

## **7.0 MATERIALS TESTING**

Materials testing will be as required by the District. The District will retain a testing firm directly if required.

## **10.0 INSURANCE**

10.1 The Contractor shall procure and maintain, at its own expense and cost, the insurance policies listed below, with limits no less than those shown in the respective items, unless in connection with the performance of some particular part of the Work or Services, the District advises in writing that it has determined that the exposure to liability justifies less limits. The insurance policy or policies shall be maintained continuously from commencement of the Work or Services until total completion of the Work or Services or such longer period as may be specified by the District.

As a minimum, the contractor shall, without limiting its obligations or liabilities under any other contract with the District, procure and maintain, as its own expense and cost, the following insurance policies:

- a) Workers' Compensation Insurance covering all employees of contractor engaged in the Work or Services in accordance with the statutory requirements of the province or territory having jurisdiction over such employee.
- b) Comprehensive General Liability Insurance
  - (i) providing for an inclusive limit of not less than \$2,000,000 for each occurrence or accident;
  - (ii) providing for all sums which the contractor shall become legally obligated to pay for damages because of bodily injury (including death at any time resulting there from) sustained by any person or persons because of damage to or destruction of property sustained by an occurrence or accident arising out of or related to the Work of Services or any operations carried on in connection with this Contract;
- c) Automobile Liability Insurance covering all motor vehicles, owned, operated and used or to be used by the contractor directly or indirectly in the performance of the Work or Services. The Limit of Liability shall not be less than \$2,000,000 inclusive, for loss or damage including personal injuries and death resulting from any one accident or occurrence.

#### 10.2. THE DISTRICT NAMED AS ADDITIONAL INSURED

The policies required by Section 10.b) above shall provide that the District is named as an Additional Insured thereunder and that said policies are primary without any right contribution from any insurance otherwise maintained by the District.

#### 10.3 CERTIFICATES OF INSURANCE

Upon award, the Contractor agrees to submit Certificates of Insurance for itself and for all of its subcontractors to the District of Tofino prior to commencing the Work or providing the Services. Such Certificates shall provide that 30 days' written notice shall be given to the District, prior to any material changes or cancellations of any such policy or policies.

#### 10.4 ADDITIONAL INSURANCE

The Contractor may take out such additional insurance, as it may consider necessary and desirable. All such additional insurance shall be at no expense to the District.

#### 10.5 INSURANCE COMPANIES

All insurance, which the Contractor is required to obtain with respect to this contract, shall be with insurance companies registered in and licensed to underwrite such insurance in the province of British Columbia.

#### 10.6 FAILURE TO PROVIDE

If the Contractor fails to do all or anything which is required of it with regard to insurance, the District may do all that is necessary to effect and maintain such insurance, and any monies expended by the District shall be repayable by and recovered from the Contractor. The Contractor expressly authorizes the District to deduct from any monies owing the Contractor, any monies owing by the Contractor to the District.

#### 10.7 NONPAYMENT OF LOSSES

The failure or refusal to pay losses by any insurance on behalf of the Contractor or any subcontractor shall not be held to waive or release the Contractor or subcontractor from any of the provisions of the Insurance Requirements or this Contract, with respect to the liability of the Contractor otherwise. Any insurance deductible maintained by the Contractor or any subcontractor under any of the insurance policies is solely for their account and any such amount.

### **LIST OF DRAWINGS AND DOCUMENTS**

**Appendix A** - Description and location of work to be completed shown on drawings S01 to S03.

**Appendix B** – Drawing S03 to S07 Site Plan and Typical Section



# TONQUIN BRIDGE REPLACEMENT

DRAWING LIST

DRAWING NUMBER	DESCRIPTION
0755-026 S00	COVER SHEET AND DRAWING LIST
0755-026 S01	GENERAL NOTES
0755-026 S02	EXISTING SITE PLAN
0755-026 S03	GENERAL ARRANGEMENT
0755-026 S04	PLAN AND ELEVATION
0755-026 S05	SECTIONS AND DETAILS
0755-026 S06	GIRDERS, DIAPHRAGMS AND BRACING
0755-026-S07	PRECAST BALLAST WALL AND MISCELLANEOUS DETAILS



ARCHITECTURAL B 1/4" = 1' - 0"

File: H:\Projects\0718-028 Tonquin Bridge Replacement\028 Tonquin Bridge Replacement.dwg, 07/28/2023 11:01 AM User: Pamel Ungay

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GENERAL NOTES:

DESIGN CRITERIA

1.

DESIGN HAS BEEN COMPLETED TO CAN/CSA S6-19 STANDARD
2.

DESIGN LOADS:
- 2.1.

LIVE LOAD:
- 2.1.1.

4.0 kPa UNIFORM LOAD
- 2.1.2.

HITACHI EX40
- 2.1.3.

KUBOTA RTV-X1100C UTILITY VEHICLE
- 2.1.4.

MITSUBISHI S3L2 NA DIESEL MINI HYDRAULIC EXCAVATOR (302.5C)
- 2.1.5.

CANYCOM S25A DUMPER
- 2.2.

GUARDRAILS:
- 2.2.1.

1.2 KN/m PER CHDCC S6-19
- 2.2.2.

NOTE: GUARDRAIL DOES NOT CONFORM TO CAN/CSA S6-19 GEOMETRY REQUIREMENTS PER CLAUSE 12.4.4.2.
- 2.3.

WIND LOAD: 0.68 kPa
- 2.4.

SEISMIC:
- 2.4.1.

Sa(0.2)=1.46, Sa(0.5)=1.36, Sa(1.0)=0.891, Sa(2.0)=0.536, Sa(5.0)=0.170, Sa(10.0)=0.06
- 2.4.2.

PGA=0.695, PGV=0.945
- 2.4.3.

REFER TO GEOTECHNICAL ASSESSMENT AND ABUTMENT DESIGN SPECIFIED BY LEWKOWICH ENGINEERING ASSOCIATES LTD.
- 2.4.4.

SEISMIC PERFORMANCE CATEGORY: 2 (ABUTMENT CONNECTION DESIGN ONLY)
3.

READ STRUCTURAL DRAWINGS IN CONJUNCTION WITH ALL OTHER CONTRACT DRAWINGS AND DOCUMENTS. REPORT ANY CONFLICTS TO THE ENGINEER BEFORE COMMENCING WORK.
4.

VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION.
5.

THESE DRAWINGS SHOW COMPLETED STRUCTURAL COMPONENTS OF THE BRIDGES. TEMPORARY BRACING AND SHORING TO PERFORM THE WORK SAFELY IS THE RESPONSIBILITY OF THE CONTRACTOR.
6.

ENVIRONMENTAL WORK PROCEDURES, TIMING, AND SPECIAL PRECAUTIONS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS AND LIMITATIONS OF THE FEDERAL DEPARTMENT OF FISHERIES AND OCEANS, THE PROVINCIAL MINISTRY OF ENVIRONMENT AND THE DISTRICT OF TOFINO.
7.

QUALITY ASSURANCE QUALIFICATION OF CONTRACTOR AND SUPERINTENDENT: THE CONTRACTOR SHALL BE FULLY CONVERSANT WITH ALL SAFETY PROCEDURES AND REGULATIONS RELATING TO CONSTRUCTION, AND SHALL EMPLOY STAGING AND OTHER SAFETY PROVISIONS AS SPECIFIED ELSEWHERE AND REQUIRED BY THE WORKERS COMPENSATION BOARD REGULATIONS.
8.

ELEVATIONS IN METERS AND DIMENSIONS ARE IN MILLIMETERS, UNLESS OTHERWISE NOTED.
9.

SURVEY PERFORMED BY MCELHANNNEY LIMITED, AND IS IN LOCAL DATUM.
10.

DESIGN OF ANY REQUIRED EROSION CONTROL MEASURES AT ABUTMENTS IS BY OTHERS.

DEMOLITION

1.

ALL EXISTING MATERIAL TO BE DISPOSED OF OFF SITE IN ACCORDANCE WITH ALL LOCAL, PROVINCIAL AND FEDERAL REGULATIONS.
2.

DEMOLITION OF EXISTING STRUCTURES TO BE CARRIED OUT IN ACCORDANCE WITH CSA S350-M1580, CODE OF PRACTICE FOR SAFETY IN DEMOLITION OF STRUCTURES.
3.

DEMOLITION OF EXISTING STRUCTURE(S) SHALL BE PERFORMED BY CONTRACTOR PRIOR TO ERECTION OF NEW STRUCTURE.
4.

CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE SITE CONDITIONS AFTER THE EXISTING STRUCTURE(S) ARE DEMOLISHED AND ACCOUNT FOR ANY ADDITIONAL WORK REQUIRED AS A RESULT OF THAT DEMOLITION.

SUBMITTALS

1.

STRUCTURAL STEEL SHOP DRAWINGS MUST BE SUBMITTED FOR APPROVAL A MINIMUM OF 2 WEEKS PRIOR TO START OF FABRICATION, FABRICATION MUST NOT COMMENCE PRIOR TO APPROVAL OF THE SHOP DRAWINGS BY THE ENGINEER.
2.

PRECAST SHOP DRAWINGS MUST BE SUBMITTED FOR APPROVAL A MINIMUM OF 2 WEEKS PRIOR TO START OF FABRICATION, FABRICATION MUST NOT COMMENCE PRIOR TO APPROVAL OF THE SHOP DRAWING BY THE ENGINEER.
3.

STRUCTURAL STEEL MILL CERTIFICATES AND WELD INSPECTION REPORTS MUST BE SUBMITTED A MINIMUM OF 72 HOURS PRIOR TO TRANSPORTING STEEL COMPONENTS TO SITE, STEEL COMPONENTS MUST NOT BE SHIPPED PRIOR TO APPROVAL OF CERTIFICATES AND REPORT BY ENGINEER.
4.

CONCRETE TEST REPORTS MUST BE SUBMITTED A MINIMUM OF 72 HOURS PRIOR TO TRANSPORTING PRECAST COMPONENTS TO SITE, PRECAST COMPONENTS MUST NOT BE SHIPPED PRIOR TO APPROVAL OF THE REPORTS BY ENGINEER.

FIELD REVIEWS

1.

THE CONTRACTOR MUST PROVIDE 48 HOURS NOTICE TO THE ENGINEER FOR THE FOLLOWING REVIEWS TO BE PERFORMED.
- 1.1

STRUCTURAL STEEL FABRICATION REVIEW, TO BE PERFORMED ONCE FABRICATION IS SUBSTANTIALLY COMPLETE AND PRIOR TO SHIPPING OF COMPONENTS.
- 1.2

PRECAST CONCRETE PRE-POUR REVIEW, TO BE PERFORMED ONCE REINFORCEMENT IS PLACED AND PRIOR TO CASTING OF ITEMS.
- 1.3

FINAL INSTALLATION REVIEW, TO BE PERFORMED ONCE MAJORITY OF THE STRUCTURE IS INSTALLED.
2.

ANY DEFICIENCIES NOTED DURING A FIELD REVIEW MUST BE CORRECTED PRIOR TO THE COMPLETION OF THE AFFECTED STAGE OF WORK.
3.

ADDITIONAL FIELD REVIEWS MAY BE REQUIRED AT THE DISCRETION OF THE ENGINEER.

STEEL

1.

PROVIDE STRUCTURAL STEEL TO CSA G40.20-04/G40.21-04 OR ASTM A992 WITH THE FOLLOWING GRADES:
- WIDE FLANGE BEAMS AND COLUMNS

350W (50W) OR ASTM A992/A992M OR ASTM A913/A913M GRADE 50

CHANNELS AND ANGLES

300W (44W)

MISCELLANEOUS STEEL PLATES

300W (44W)
2.

ALL STEEL TO BE HOT DIPPED GALVANIZED.
3.

BOLTED CONNECTIONS BETWEEN STEEL COMPONENTS SHALL UTILIZE GALVANIZED ASTM A325 TYPE 1 BOLTS COMPLETE WITH MATCHING NUTS AND WASHERS, UNLESS OTHERWISE SHOWN ON DRAWINGS.
4.

FOR OTHER CONNECTIONS BOLTS, NUTS, MALLEABLE IRON WASHERS, LAG SCREWS, ARDOX SPIKES AND NAILS, SHALL BE HOT DIP GALVANIZED FOR EXTERIOR USE. NAILS AND SPIKES TO CONFORM TO CSA B111-1974, S406-92. BOLTS AND NUTS SHALL CONFORM TO ASTM A307.
5.

WELDING SHALL BE IN ACCORDANCE WITH CSA W59 BY FABRICATORS AND ERECTORS CERTIFIED BY THE CANADIAN WELDING BUREAU TO CSA W47.1 (DIVISION 1 OR DIVISION 2).
6.

ALL WELDS SHALL BE 6mm FILLET WELD, UNLESS NOTED OTHERWISE.
7.

ALL WELD INSPECTIONS ARE TO BE PERFORMED BY A THIRD PARTY COMPANY RETAINED BY THE CONTRACTOR AND CERTIFIED TO CSA W178.2
8.

WELDING SHALL BE INSPECTED AS FOLLOWS:
  - FILLET WELDS - MAIN GIRDER FABRICATION (SUB-ARC) - VISUAL - 100%
  - FILLET WELDS - OTHER - VISUAL - 25%
  - CP WELDS - RADIOGRAPHIC OR ULTRASONIC - 100%
9.

ANY FAILURES IDENTIFIED BY INSPECTOR SHALL BE CORRECTED AND RE-INSPECTED AT THE CONTRACTORS EXPENSE.

PRECAST CONCRETE

1.

ALL CONCRETE WORK SHALL CONFORM TO THE REQUIREMENTS OF CAN/CSA A23.1 AND A23.2, LATEST EDITION.
2.

CONCRETE MIXES SHALL CONFORM TO CAN/CSA A23.1 AND A23.2 AND SHALL HAVE THE FOLLOWING PROPERTIES:
- | CLASS               | 28 DAY STRENGTH | MAXIMUM AGGREGATE SIZE | EXPOSURE CLASS |
|---------------------|-----------------|------------------------|----------------|
| BALLAST WALLS       | 35 MPa          | 20mm                   | F-2            |
| INTERLOCKING BLOCKS | 25 MPa          | 20mm                   | F-2            |
3.

CONCRETE TESTING SHALL BE CARRIED OUT IN ACCORDANCE WITH CAN/CSA A23.1 AND A23.2. THE MINIMUM NUMBER OF TESTS PERFORMED SHALL BE AS PER CSA A23.2. ADDITIONAL TESTING SHALL BE PERFORMED AT THE DIRECTION OF THE STRUCTURAL ENGINEER. CONTRACTOR SHALL INCLUDE THE COSTS OF TESTING IN BID AND SHALL RETAIN AN INDEPENDENT TESTING AGENCY, CERTIFIED BY CSA TO DO THE WORK.
4.

PROVIDE A 20mm CHAMFER ON ALL EXPOSED EDGES OF CONCRETE, UNLESS NOTED OTHERWISE.
5.

CONCRETE FINISHES SHALL BE IN ACCORDANCE WITH CAN/CSA A23.1.
6.

ALL CONCRETE CURING SHALL BE IN ACCORDANCE WITH CAN/CSA A23.1. SPECIAL PRECAUTIONS SHALL BE TAKEN AS NOTED IN CSA A23.1 FOR PLACING AND CURING CONCRETE ABOVE 30° C AND BELOW 5° C.
7.

MINIMUM CONCRETE COVER TO REINFORCING SHALL BE 50mm, UNLESS NOTED OTHERWISE.
8.

REINFORCING STEEL SHALL CONFORM TO C.S.A. SPECIFICATION G30.18-M, GRADE 400.
9.

ALL LIFTING POINTS AND ANCHORS ARE TO BE DESIGNED BY A PROFESSIONAL ENGINEER REGISTERED IN BRITISH COLUMBIA. DESIGN AND SUPPLY OF LIFTING POINTS AND ANCHORS IS THE RESPONSIBILITY OF THE CONTRACTOR AND ARE TO BE INDICATED ON SHOP DRAWINGS FOR APPROVAL BY THE ENGINEER. LIFTING SHALL BE DONE ONLY BY APPROVED LIFTING ANCHORS.
10.

THE CONTRACTOR SHALL ENSURE THAT ALL PRECAST MEMBERS ARE CHECKED FOR STRIPPING AND HANDLING STRESSES.
11.

PRE-CAST CONCRETE SHALL BE IN ACCORDANCE WITH CSA A23.4, LATEST EDITION

ENVIRONMENTAL CONSTRUCTION REQUIREMENTS

1.

ALL TREES AND ROOTS TO BE PRESERVED WHERE POSSIBLE. ALL DISTURBED AREAS TO BE RESEEDDED WITH NATIVE GRASS MIX. ANY SHRUBS OR TREES REMOVED MUST BE REPLACED AND THE AREA IS TO BE COVERED IN STRAW MULCH UPON COMPLETION.
2.

ENVIRONMENTAL WORK PROCEDURES, TIMING AND SPECIAL PRECAUTIONS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS AND LIMITATIONS OF THE FEDERAL DEPARTMENT OF FISHERIES AND OCEANS, AND THE PROVINCIAL MINISTRY OF WATER, LAND AND AIR PROTECTION.



KEY PLAN  
N.T.S.

APPROXIMATE  
BRIDGE SITE

TIMBER

1.

ALL NEW TIMBER TO CONFORM TO CSA-O141 "SOFTWOOD LUMBER" TIMBER GRADES AND SPECIES AS FOLLOWS:
- | MEMBER           | SPECIES | GRADE                    |
|------------------|---------|--------------------------|
| POSTS (S4S)      | CEDAR   | GROUP A No. 1, OR BETTER |
| RAILS (S4S)      | CEDAR   | GROUP A No. 1, OR BETTER |
| DECKING (S1S)    | CEDAR   | GROUP A No. 1, OR BETTER |
| GUARDRAIL (R4S)  | CEDAR   | GROUP A No. 1, OR BETTER |
| CROSS TIES (R4S) | CEDAR   | GROUP A No. 1, OR BETTER |
| RISERS (R4S)     | CEDAR   | GROUP A No. 2, OR BETTER |
- (NOTE FOR DECKING: SURFACED SIDE=CUP SIDE=U/S OF DECK)
2.

ALL TIMBER CONSTRUCTION, DETAILS AND FASTENINGS SHALL CONFORM FULLY TO CSA O86, CURRENT EDITION.
3.

PRE-DRILL ALL BOLT AND LAG SCREW SHANK HOLES (BUT NOT LEAD HOLES). BOLT HOLES SHOULD BE FULL LENGTH AND SIZE FOR MACHINE BOLTS. LEAD HOLES FOR LAG SCREWS MUST BE PRE-DRILLED 5mm LESS THAN NOMINAL SCREW DIAMETER.
- ADHESIVE ANCHORS
1.

ALL ANCHORS ARE TO BE INSTALLED IN STRICT ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS.
2.

UNLESS NOTED OTHERWISE ADHESIVE ANCHORS SHALL BE HILTI 'HAS' ROD. REFER TO DRAWINGS FOR ANCHOR LOCATIONS, SIZES, CENTRES AND EMBEDMENT LENGTH. USE HILTI HY200 MAX OR HILTI HIT RE500 ADHESIVE AS NOTED BELOW.
- USE HILTI HIT HY200 MAX WHEN:  
A QUICK CURE IS REQUIRED, CONDITIONS ARE DRY, HOLES ARE HAMMER DRILLED,  
HOLES ARE NOT OVER-SIZED, BASE MATERIAL TEMPERATURE IS ABOVE 5° CELSIUS.
- USE HILTI HIT RE500 WHEN:  
EXTENDED WORKING TIME IS REQUIRED AND CURE TIME IS NOT CRITICAL,  
HOLES ARE DRILLED USING DIAMOND CORE, PNEUMATIC OR HAMMER DRILLS,  
DEEP EMBEDMENT IS SPECIFIED, THE APPLICATION IS UNDERWATER, OR HOLES ARE OVERSIZED.
3.

HOLES FOR ADHESIVE ANCHORS SHALL BE CLEANED OUT WITH HIGH PRESSURE AIR AND THEN A BRUSH PRIOR TO ANCHOR INSTALLATION.
4.

INSTALLERS OF HILTI PRODUCTS SHALL HAVE RECEIVED TRAINING BY HILTI (CANADA) CORP. IN THE USE OF THE SPECIFIED PRODUCTS. THE GENERAL CONTRACTOR SHALL PROVIDE THE DESIGN ENGINEER WITH A LETTER STATING THAT THIS TRAINING HAS BEEN COMPLETED.

LIST OF ABBREVIATIONS

ALT	---	ALTERNATE
B/S	---	BOTH SIDES
CW	---	COMPLETE WITH
C	---	CENTRE LINE
CLR	---	CLEAR
CIP	---	CAST IN PLACE
CONC	---	CONCRETE
COL	---	COLUMN
CONT	---	CONTINUOUS
CP	---	COMPLETE PENETRATION
DWG	---	DRAWING
E/F	---	EACH FACE
E/S	---	EACH SIDE
ELEV	---	ELEVATION
EW	---	EACH WAY
FF	---	FAR FACE
GALV	---	GALVANIZED
HORIZ	---	HORIZONTAL
LG	---	LONG
LL	---	LIVE LOAD
LLH	---	LONG LEG HORIZONTAL
LLV	---	LONG LEG VERTICAL
LW	---	LONG WAY
MAX	---	MAXIMUM
MIN	---	MINIMUM
No	---	NUMBER
NTS	---	NOT TO SCALE
o/c	---	ON CENTRE
OPP	---	OPPOSITE
PL	---	PLATE
PT	---	PRESSURE TREATED (LUMBER)
REINF	---	REINFORCE(MENT)
STL	---	STEEL
SIM	---	SIMILAR
S4S	---	SMOOTH FOUR SIDES
THK	---	THICK
T.O.	---	TOP OF
TYP	---	TYPICAL
U/S	---	UNDERSIDE
UNO	---	UNLESS NOTED OTHERWISE
VERT	---	VERTICAL
WP	---	WORK POINT

ISSUED FOR TENDER

NOT FOR  
CONSTRUCTION

ISSUES						SUB CONSULTANT
No.	DATE	ISSUED FOR	No.	DATE	ISSUED FOR	
A	2023.06.27	CLIENT REVIEW				
B	2023.07.28	TENDER				

DRAFTED PHU
DRAFTING REVIEW JPMC
DESIGNED SPS
DESIGN REVIEW MGCS

HEROLD  
ENGINEERING

3701 Shenton Rd, Nanaimo, BC V9T 2H1

Tel: 250-751-8558 Fax: 250-751-8559

Email: mail@heroldengineering.com

ENGINEERS SEAL

permit to practice  
no. 1000201

GENERAL NOTES

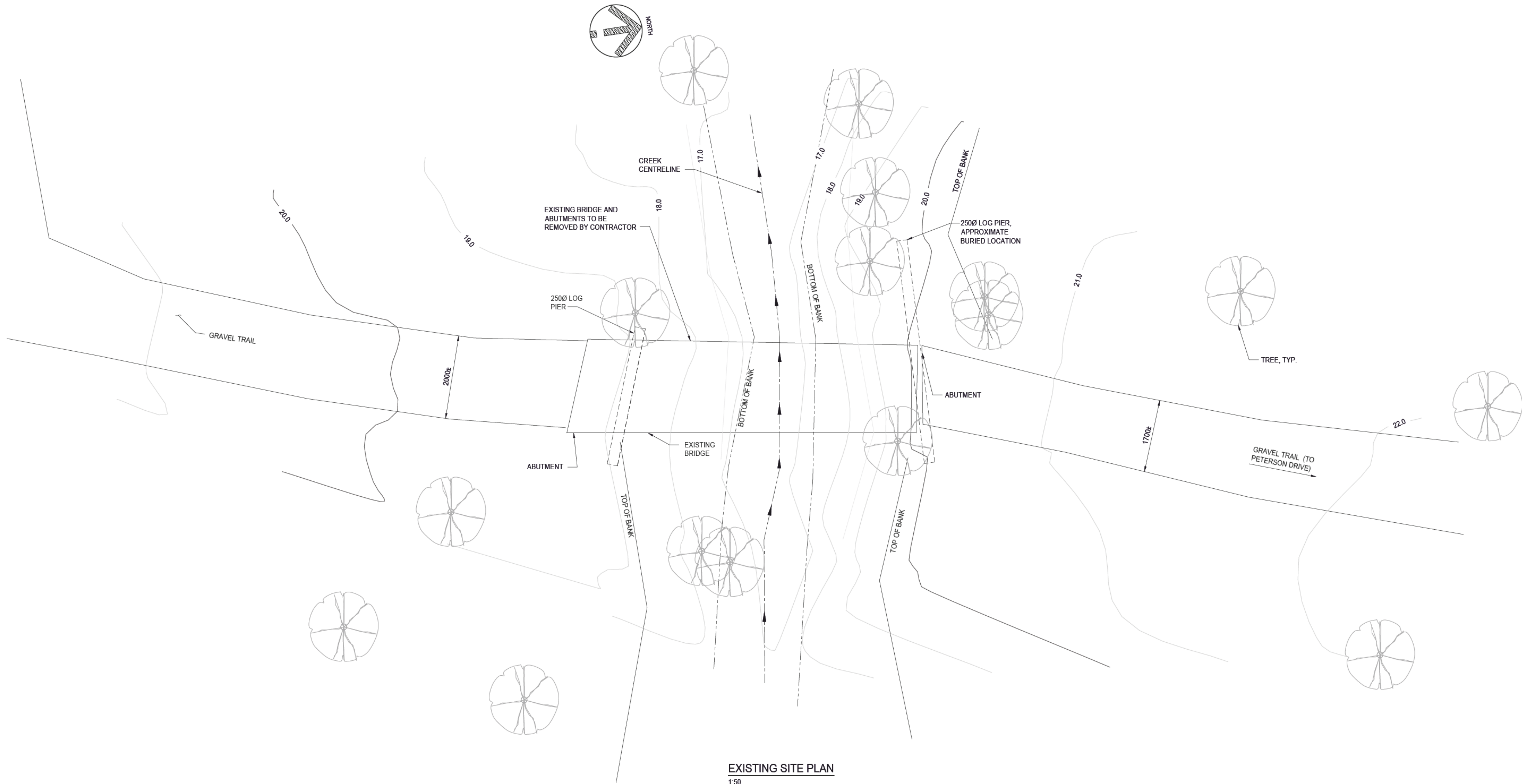
TONQUIN BRIDGE REPLACEMENT

Tonquin Trail, Tofino, BC V0R 0A4  
District of Tofino

HEL PROJECT No. 0755-026	CLIENT DWG. No. N/A
SCALE AS SHOWN	PERMIT No. N/A
HEL DRAWING No. S01	REVISION B

DESTROY ALL DRAWINGS SHOWING PREVIOUS REVISION





EXISTING SITE PLAN  
1:50

ISSUED FOR TENDER

NOT FOR  
CONSTRUCTION

NOTES:  
1. FOR GENERAL NOTES SEE DWG. S01.

ISSUES					
No.	DATE	ISSUED FOR	No.	DATE	ISSUED FOR
A	2023.06.27	CLIENT REVIEW			
B	2023.07.28	TENDER			

SUB CONSULTANT

DRAFTED PHU
DRAFTING REVIEW JPMC
DESIGNED SPS
DESIGN REVIEW MGCS

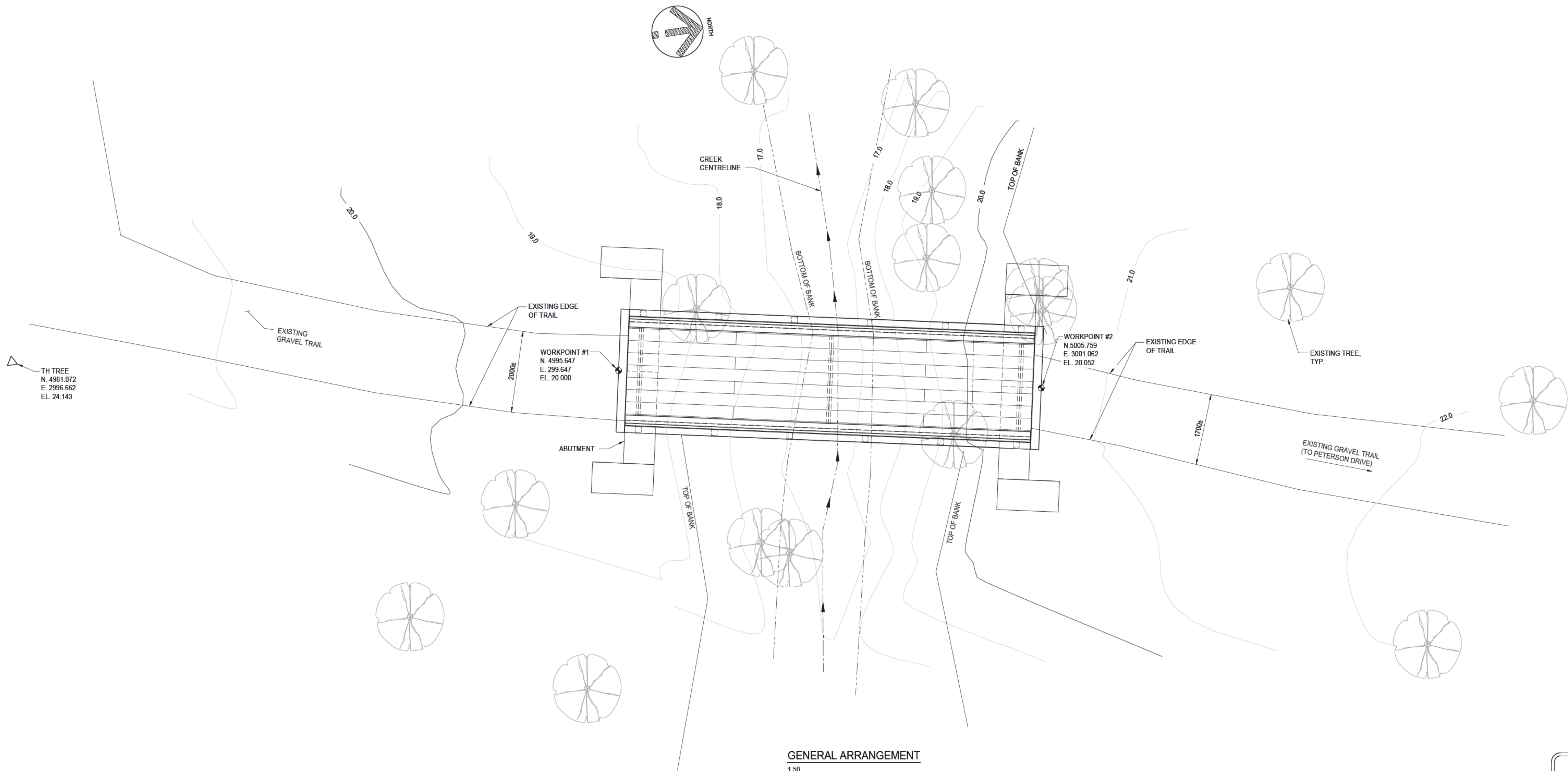
HEROLD  
ENGINEERING

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Tel: 250-751-8558 Fax: 250-751-8559  
Email: mail@heroldengineering.com

ENGINEERS SEAL
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EXISTING SITE PLAN
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TONQUIN BRIDGE REPLACEMENT	
Tonquin Trail, Tofino, BC V0R 0A4 District of Tofino	
HEL PROJECT No. 0755-026	CLIENT DWG. No. N/A
SCALE AS SHOWN	PERMIT No. N/A
HEL DRAWING No. S02	REVISION B



GENERAL ARRANGEMENT  
1:50

ISSUED FOR TENDER

NOT FOR  
CONSTRUCTION

NOTES:

1. FOR GENERAL NOTES SEE DWG. S01.

ISSUES					
No.	DATE	ISSUED FOR	No.	DATE	ISSUED FOR
A	2023.06.27	CLIENT REVIEW			
B	2023.07.28	TENDER			

SUB CONSULTANT

DRAFTED  
PHU  
DRAFTING REVIEW  
JPMC  
DESIGNED  
SPS  
DESIGN REVIEW  
MGCS



3701 Sherton Rd, Nanaimo, BC V9T 2H1  
Tel: 250-751-8558 Fax: 250-751-8559  
Email: mail@heroldengineering.com

ENGINEERS SEAL

permit to practice  
no. 1000201

GENERAL  
ARRANGEMENT

TONQUIN BRIDGE REPLACEMENT

Tonquin Trail, Tofino, BC V0R 0A4  
District of Tofino

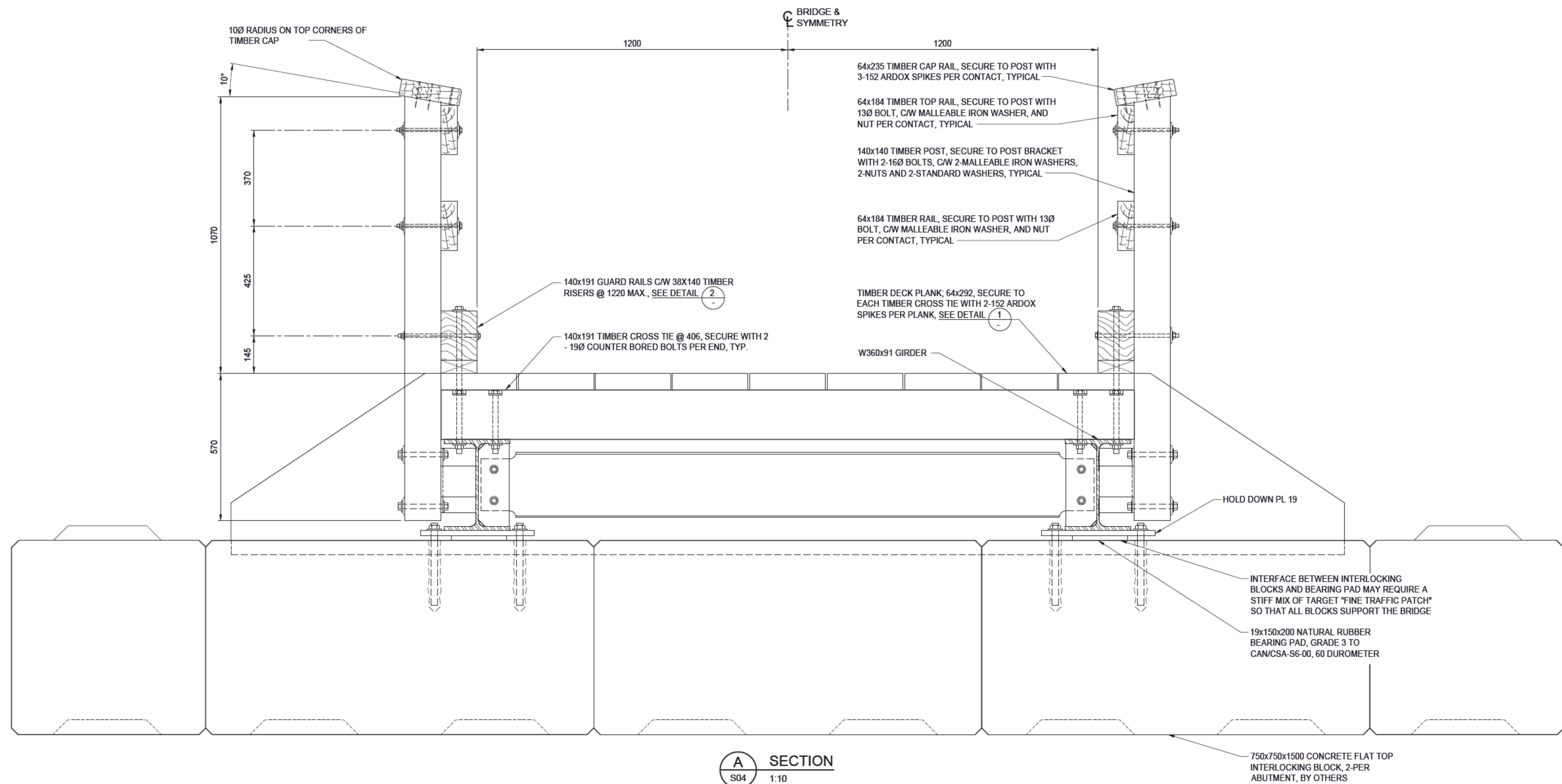
HEL PROJECT No. 0755-026	CLIENT DWG. No. N/A
SCALE AS SHOWN	PERMIT No. N/A
HEL DRAWING No. <b>S03</b>	REVISION B





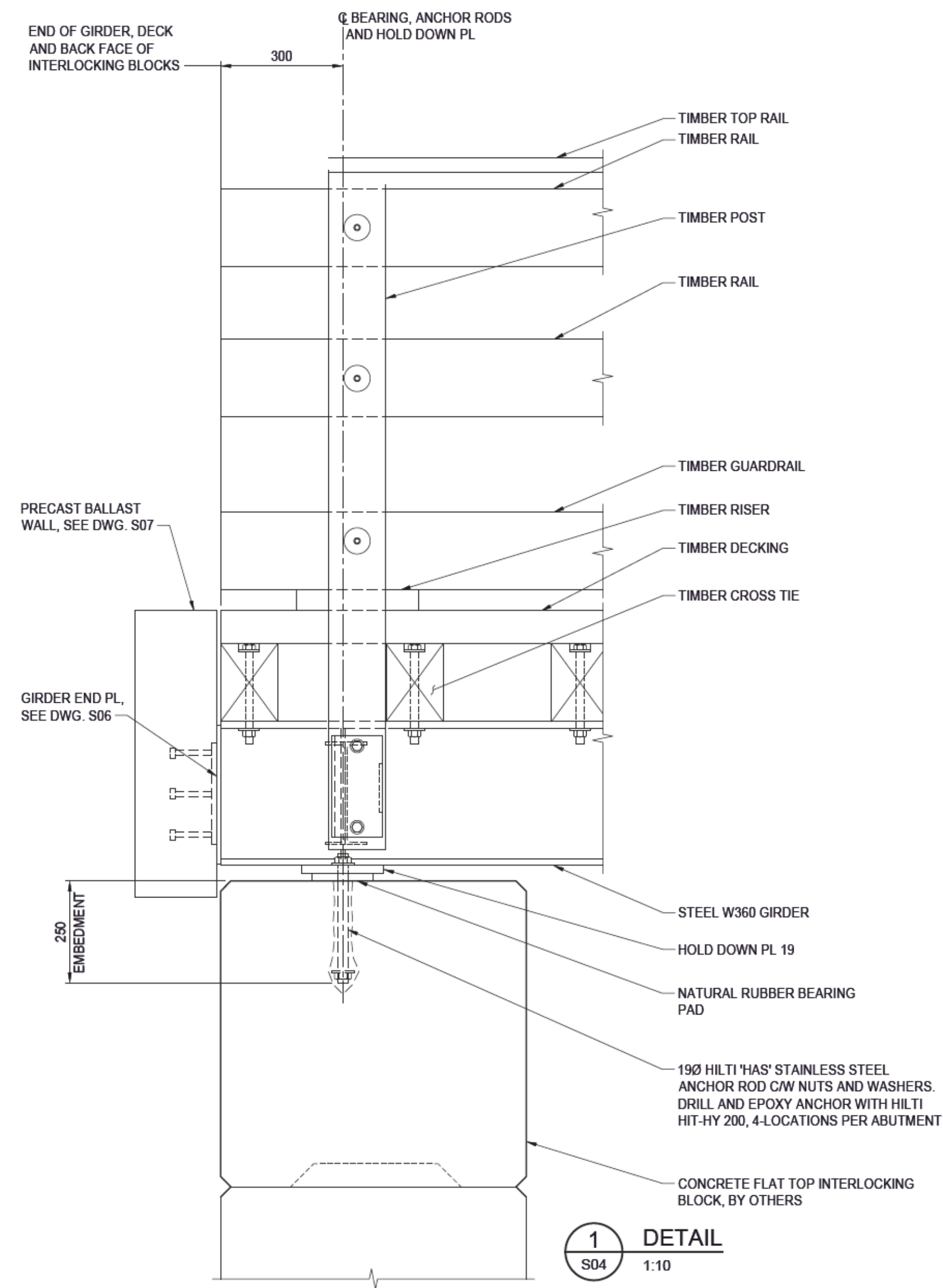
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SCALE AS SHOWN	PERMIT No. N/A
HEL DRAWING No. <b>S04</b>	REVISION <b>B</b>



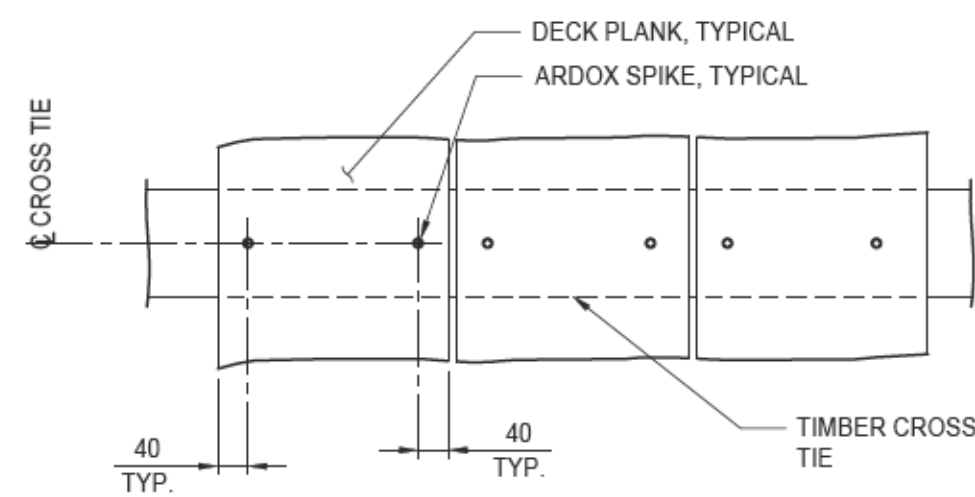
**A** SECTION

S04 1:10

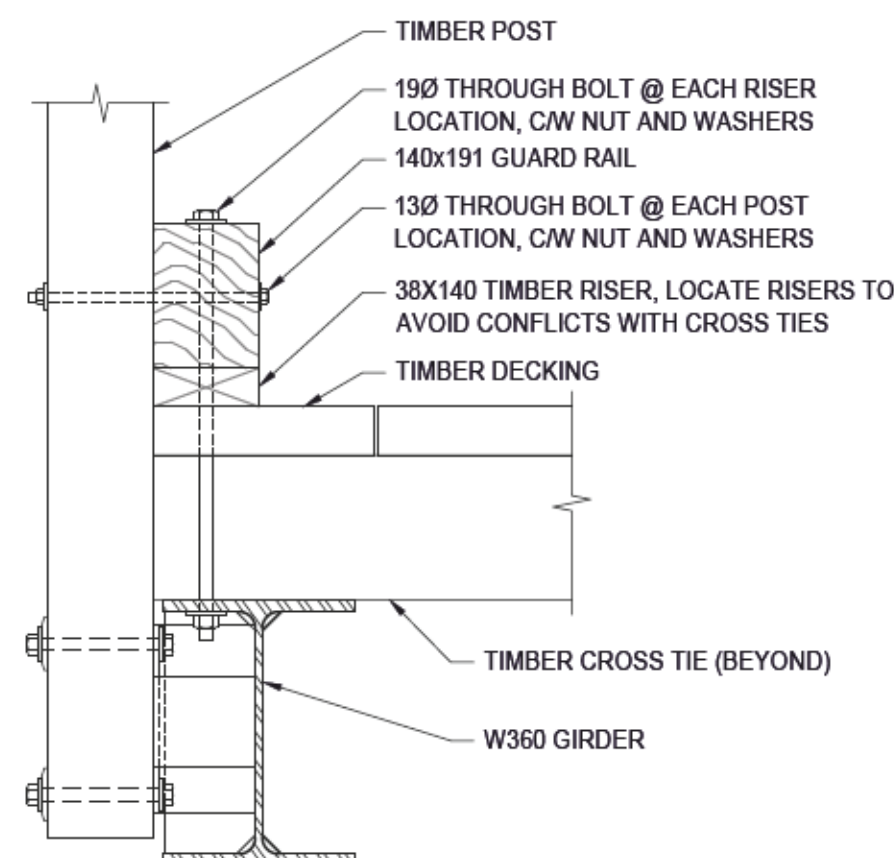
NOTE: ONLY TOP COURSE OF INTERLOCKING BLOCKS SHOWN.

**1** DETAIL

S04 1:10

**1** DETAIL - PLAN

1:10

**2** DETAIL

1:10

ISSUED FOR TENDER

NOT FOR  
CONSTRUCTION

## NOTES:

1. FOR GENERAL NOTES SEE DWG. S01.

ISSUES						SUB CONSULTANT
No.	DATE	ISSUED FOR	No.	DATE	ISSUED FOR	
A	2023.06.27	CLIENT REVIEW				
B	2023.07.28	TENDER				

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DRAFTED PHU
DRAFTING REVIEW JUMC
DESIGNED SPS
DESIGN REVIEW MGCS

3701 Sheraton Rd, Nanaimo, BC V9T 2H1  
Tel: 250-751-8558 Fax: 250-751-8559  
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ENGINEERS SEAL

permit to practice  
no. 1000201SECTIONS AND  
DETAILS

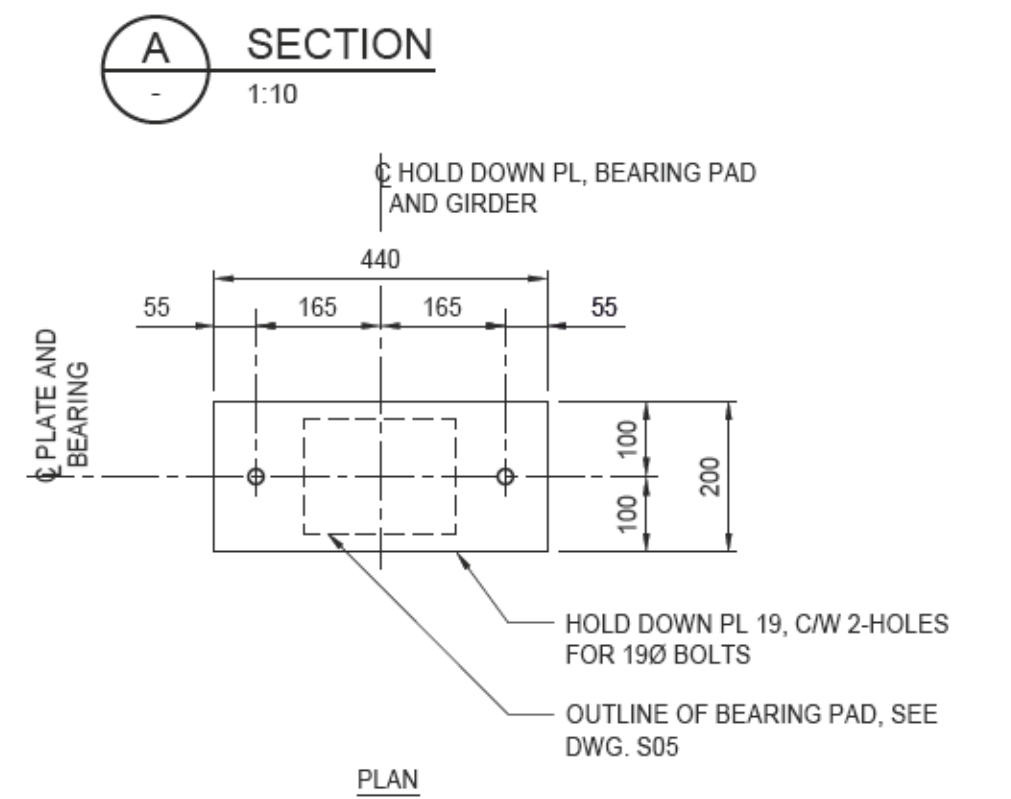
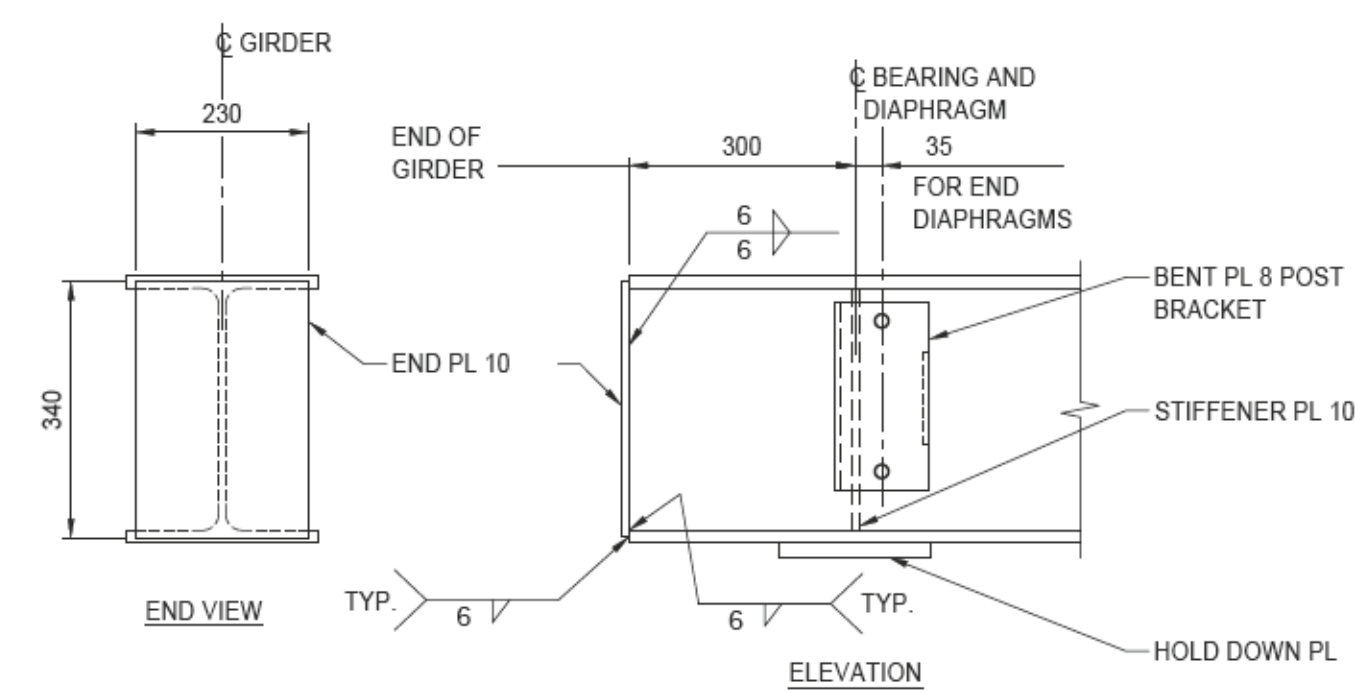
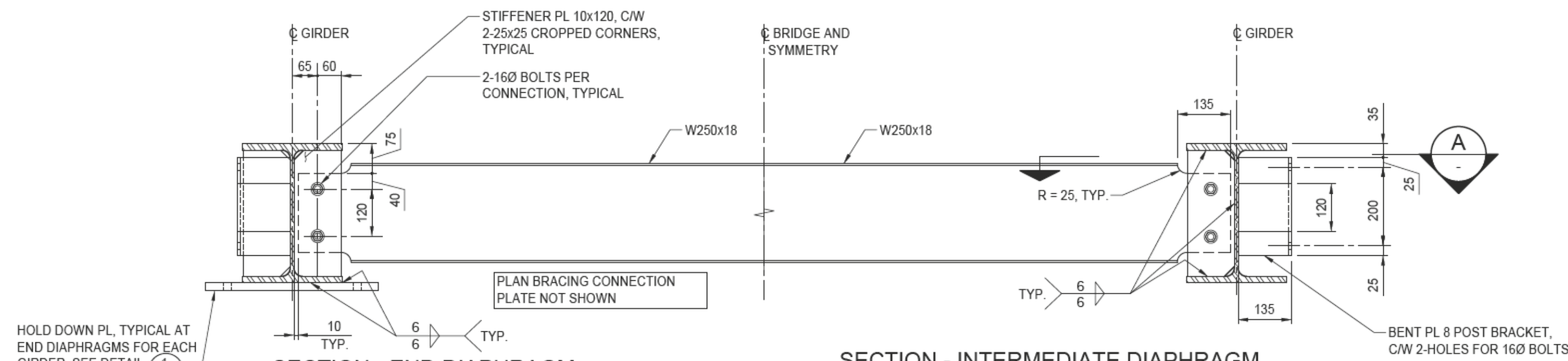
TONQUIN BRIDGE REPLACEMENT

Tonquin Trail, Tofino, BC V0R 0A4  
District of Tofino

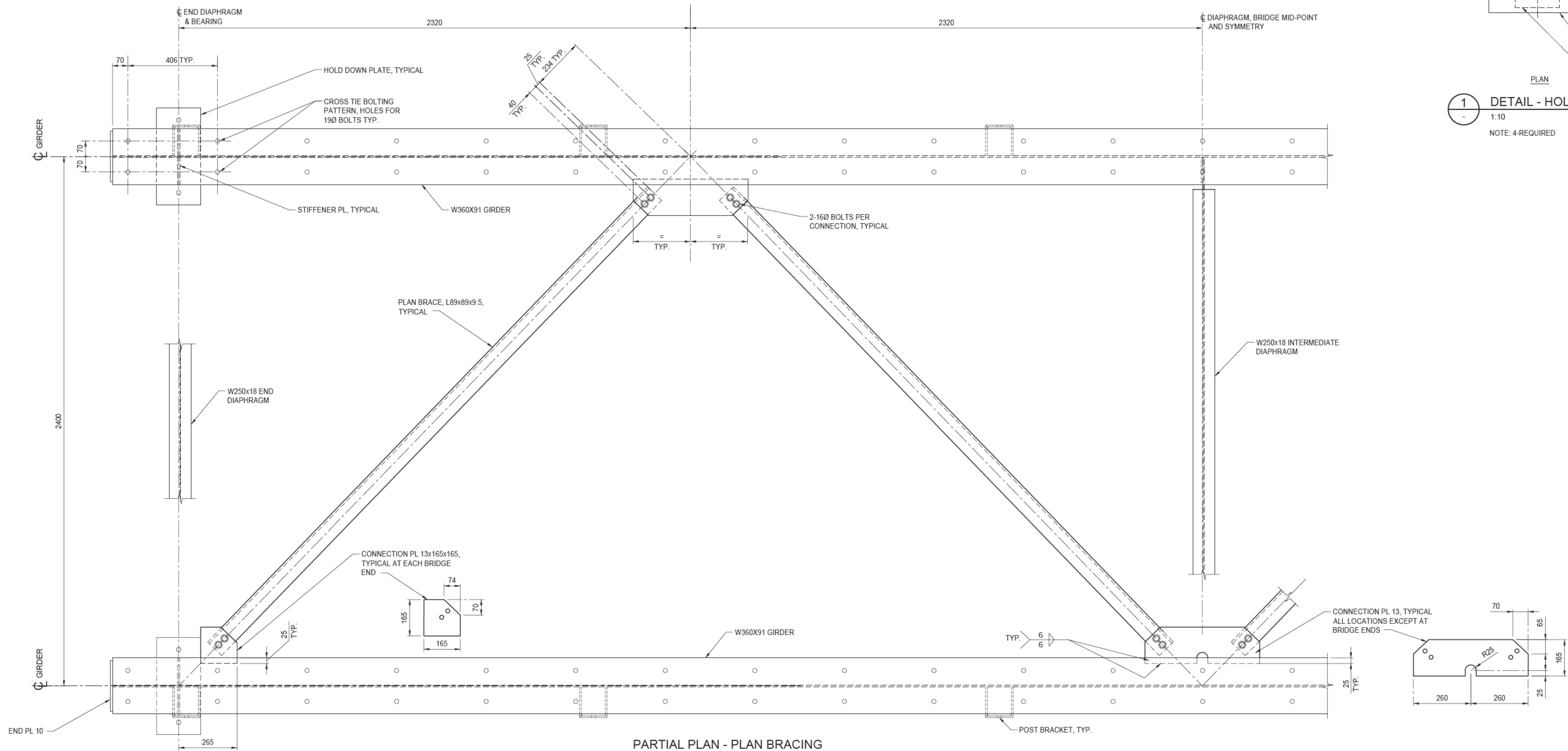
HEL PROJECT No. 0755-026	CLIENT DWG. No. N/A
SCALE AS SHOWN	PERMIT No. N/A
HEL DRAWING No. <b>S05</b>	REVISION <b>B</b>

DESTROY ALL DRAWINGS SHOWING PREVIOUS REVISION





1  
DETAIL - HOLD DOWN PLATE  
1:10  
NOTE: 4 REQUIRED



ISSUED FOR TENDER

NOT FOR CONSTRUCTION

NOTES:  
1. FOR GENERAL NOTES SEE DWG. S01.

ISSUES						SUB CONSULTANT
No.	DATE	ISSUED FOR	No.	DATE	ISSUED FOR	
A	2023.06.27	CLIENT REVIEW				
B	2023.07.28	TENDER				

DRAFTED PHU	<b>HEROLD ENGINEERING</b>  3701 Sheraton Rd, Nanaimo, BC V9T 2H1 Tel: 250-751-8558 Fax: 250-751-8559 Email: mail@heroldengineering.com
DRAFTING REVIEW JPMC	
DESIGNED SPS	
DESIGN REVIEW MGCS	

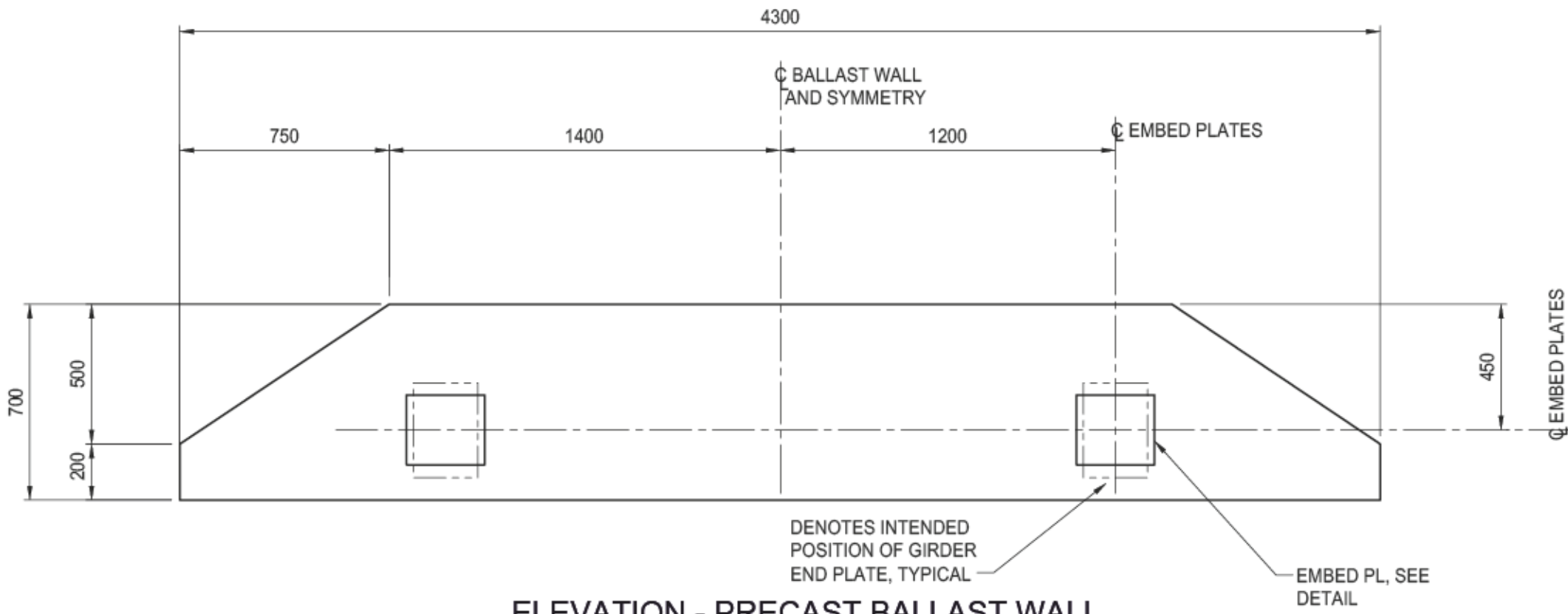
ENGINEERS SEAL
permit to practice no. 1000201

GIRDERS, DIAPHRAGMS AND BRACING
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TONQUIN BRIDGE REPLACEMENT
Tonquin Trail, Tofino, BC V0R 0A4 District of Tofino

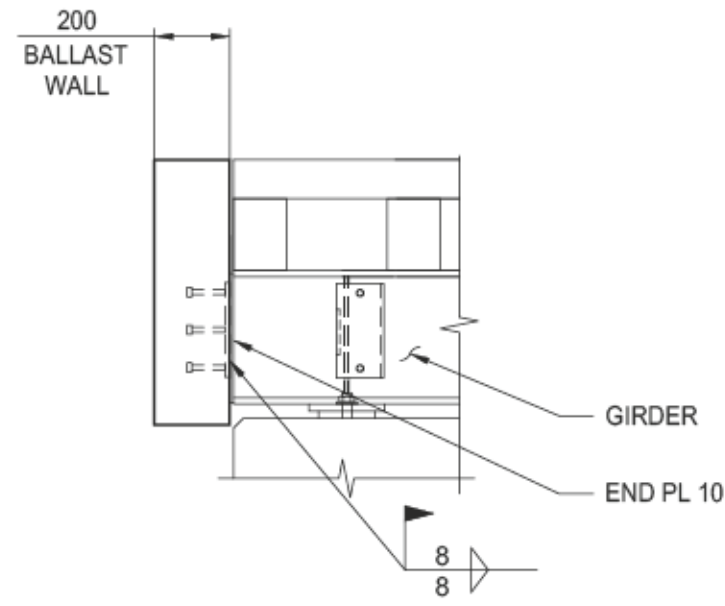
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SCALE AS SHOWN	PERMIT No. N/A
HEL DRAWING No. <b>S06</b>	REVISION <b>B</b>





ELEVATION - PRECAST BALLAST WALL

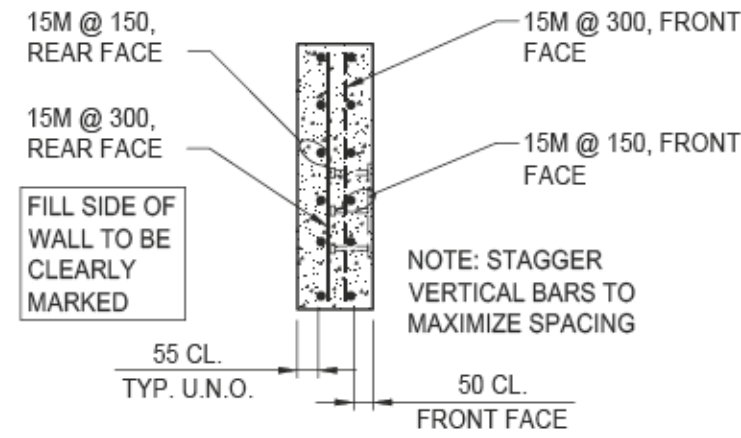
1:20  
NOTE: 2 - REQUIRED



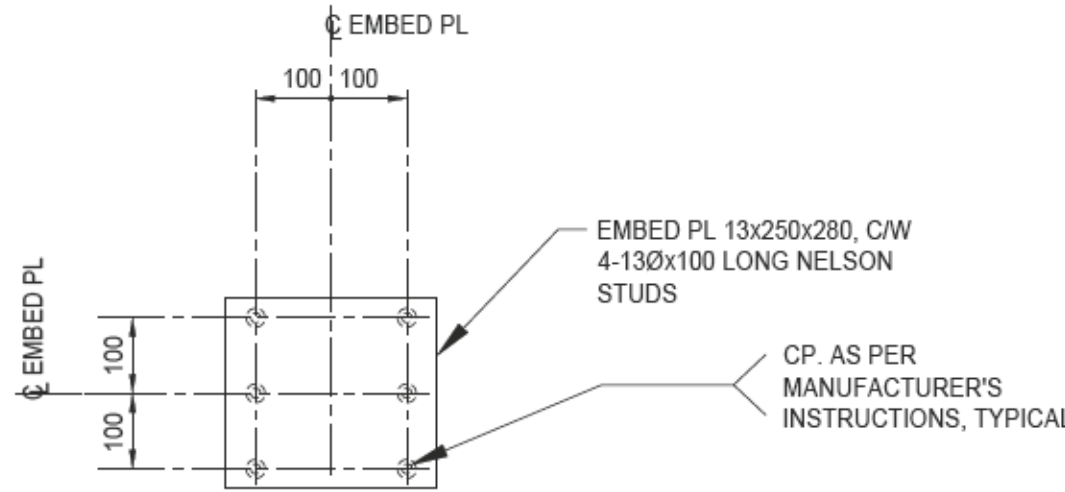
CONNECTION

SECTIONS - BALLAST WALL

1:20



REINFORCEMENT



DETAIL - EMBED PLATE

1:10

NOTE: 4-REQUIRED PER BALLAST WALL.

ISSUED FOR TENDER

NOT FOR  
CONSTRUCTION

NOTES:  
1. FOR GENERAL NOTES SEE DWG. S01.

ISSUES						SUB CONSULTANT
No.	DATE	ISSUED FOR	No.	DATE	ISSUED FOR	
A	2023.06.27	CLIENT REVIEW				
B	2023.07.28	TENDER				

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PRECAST BALLAST  
WALL AND  
MISCELLANEOUS  
DETAILS

TONQUIN BRIDGE REPLACEMENT

Tonquin Trail, Tofino, BC V0R 0A4  
District of Tofino

HEL PROJECT No. 0755-026	CLIENT DWG. No. N/A
SCALE AS SHOWN	PERMIT No. N/A
HEL DRAWING No. S07	REVISION B