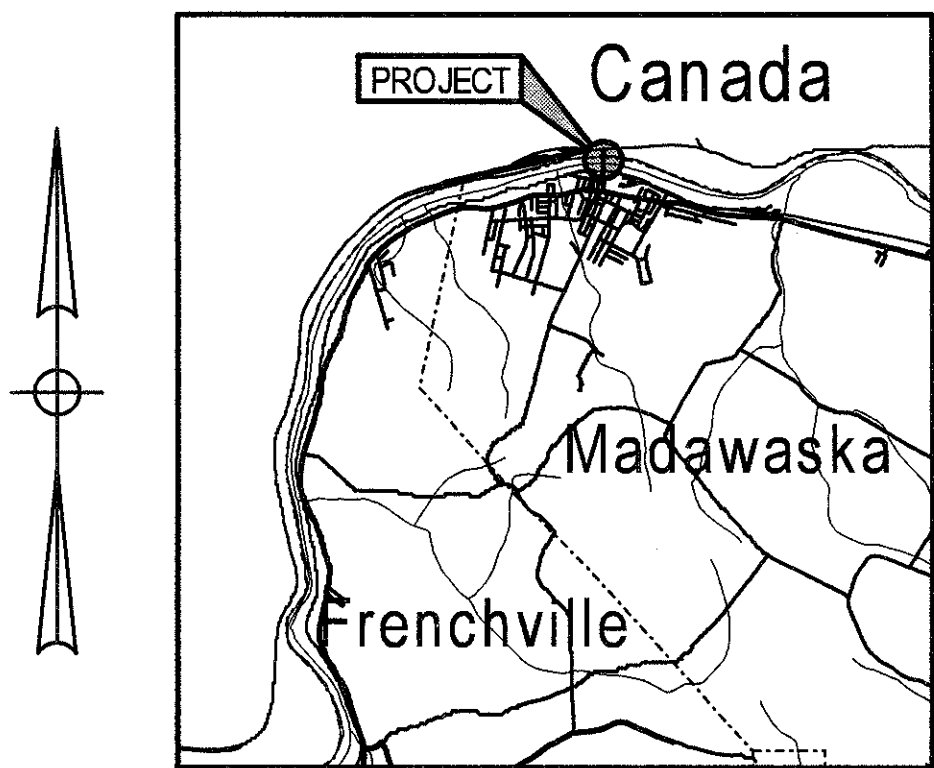


STATE OF MAINE
DEPARTMENT OF TRANSPORTATION



MADAWASKA
AROOSTOOK COUNTY
INTERNATIONAL BRIDGE
OVER
ST. JOHN RIVER
BRIDGE STREET

PROJECT LENGTH 0.287 km
BRIDGE PAINTING
BRIDGE NO. 2399



LOCATION MAP
1 0 1 2 3
Kilometers

SPECIFICATIONS

DESIGN: AASHTO LRFD Bridge Design Specifications, Second Edition
1998 and Interim Specifications 1999.

DESIGN LOADING

Live Load (Existing)..... MS18

TRAFFIC DATA

Current Average Annual Daily Traffic 2001..... 4330
Future Average Annual Daily Traffic 2021..... 5250
Design Hour Volume..... 10
Design Hour Volume (% AADT)..... 525
Heavy Trucks (% AADT)..... 3
Heavy Trucks (% DHV)..... 1
Directional Distribution (% DHV)..... 52
18 KIP Equivalent P 2.0..... 185
18 KIP Equivalent P 2.5..... 182
Design Speed (km/h)..... 40

BASIC DESIGN STRESSES

Concrete..... f 'c = 30 MPa
Structural Steel:..... f y = 250 MPa

UTILITIES

Adelphia
BARR
Madawaska Pollution Control
Madawaska Water District
Maine Public Service
Town of Madawaska
Verizon
Mill Sludge Pipes

MAINTENANCE OF TRAFFIC

1. A clear opening of 4.18 m (13'-9") X 3 m (9'-10") (Minimum Dimension)
shall be maintained for vehicular traffic at all times. No equipment , staging or
work shall encroach upon these limits.
2. A 0.9 m (3') pedestrian way will be protected from traffic and maintained at
all times.

SCOPE OF WORK

- The Bridge is composed of four spans. The two U.S.A. spans are to be
painted.
- 100 % removal of existing paint system. Approximate quantity of steel to be
painted is 7000 m² (75,000 ft.²) Excludes galvanized steel stringers.
For exact limits, see Special Provision 506 Lead Abatement and Coating
Application.
- Existing steel grid sidewalk to be removed and new sidewalk panels installed
on the two U.S.A. spans.

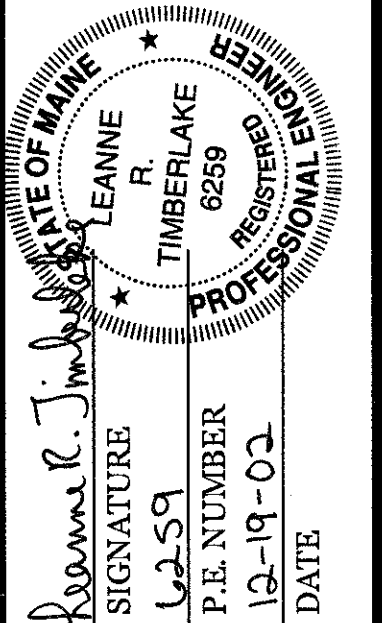
REFERENCE

Plans of the existing bridge are available for the Contractor's reference at
the Bridge Design Office in Augusta. The plans are reproductions of the
original drawings as prepared for the construction of the bridge. It is very
unlikely that the plans will show any construction field changes or any
alterations which may have been made to the bridge during its life span.

LIST OF DRAWINGS

Title Sheet 1
General Plan, Quantities & Notes 2
Sidewalk Plan 3
Sidewalk Details 4
Traffic Control Plan 5

STATE OF MAINE DEPARTMENT OF TRANSPORTATION		APPROVED	DATE
COMMISSIONER: <i>Stephen</i>		<i>John C. Vouty</i>	01/02/03
		CHIEF ENGINEER:	01/02/03



PROJECT INFORMATION		BRIDGE	PROGRAM
PROJECT MANAGER		JOEL KITTREDGE	
DESIGNER		MICHAEL WIGHT	
CONSULTANT		CASWELL ENGINEERING	
PROJECT RESIDENT			
CONTRACTOR			
PROJECT COMPLETION DATE			

MADAWASKA INTERNATIONAL BRIDGE	
TITLE SHEET	

SHEET NUMBER	
1	
OF 4	

METRIC

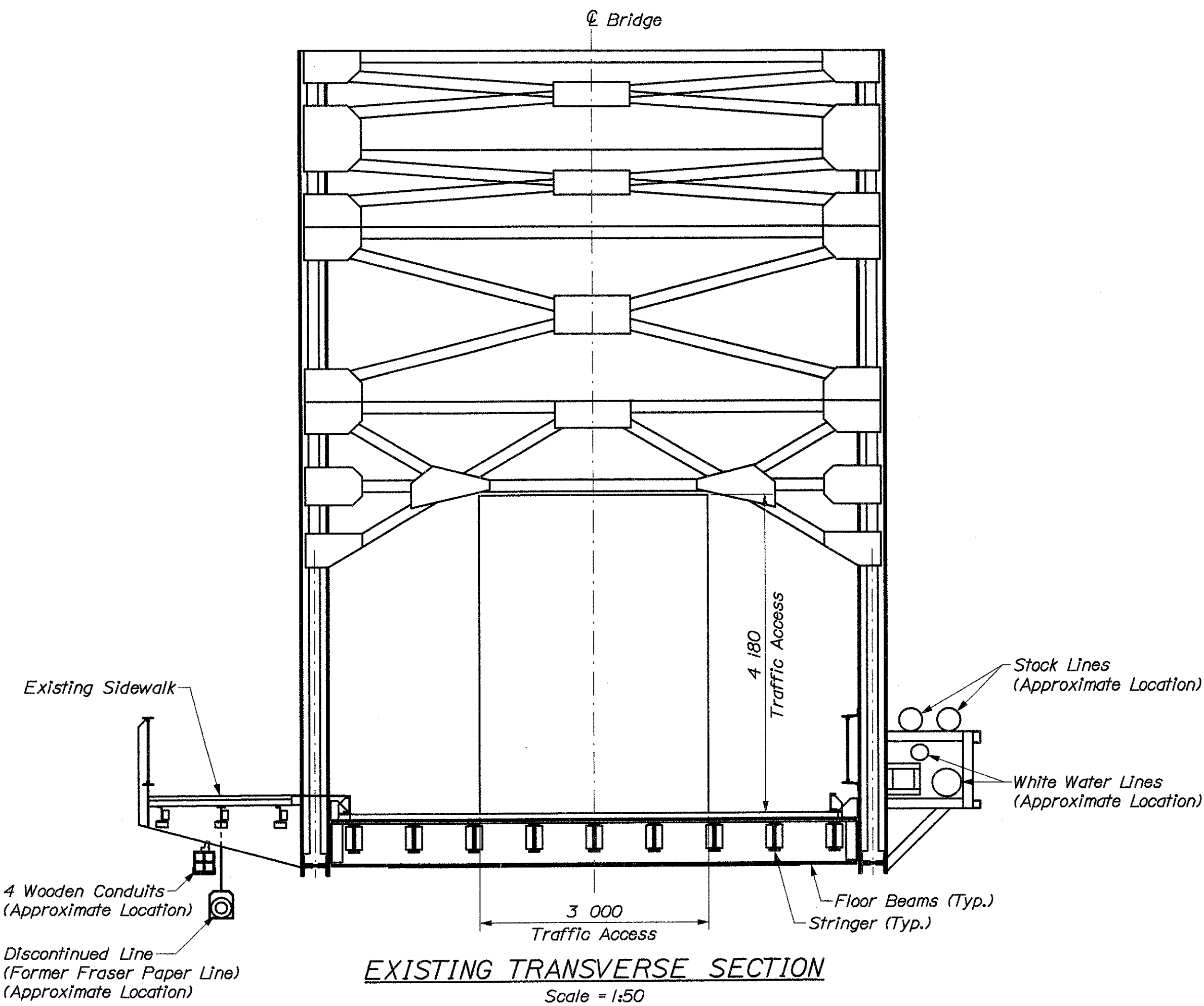
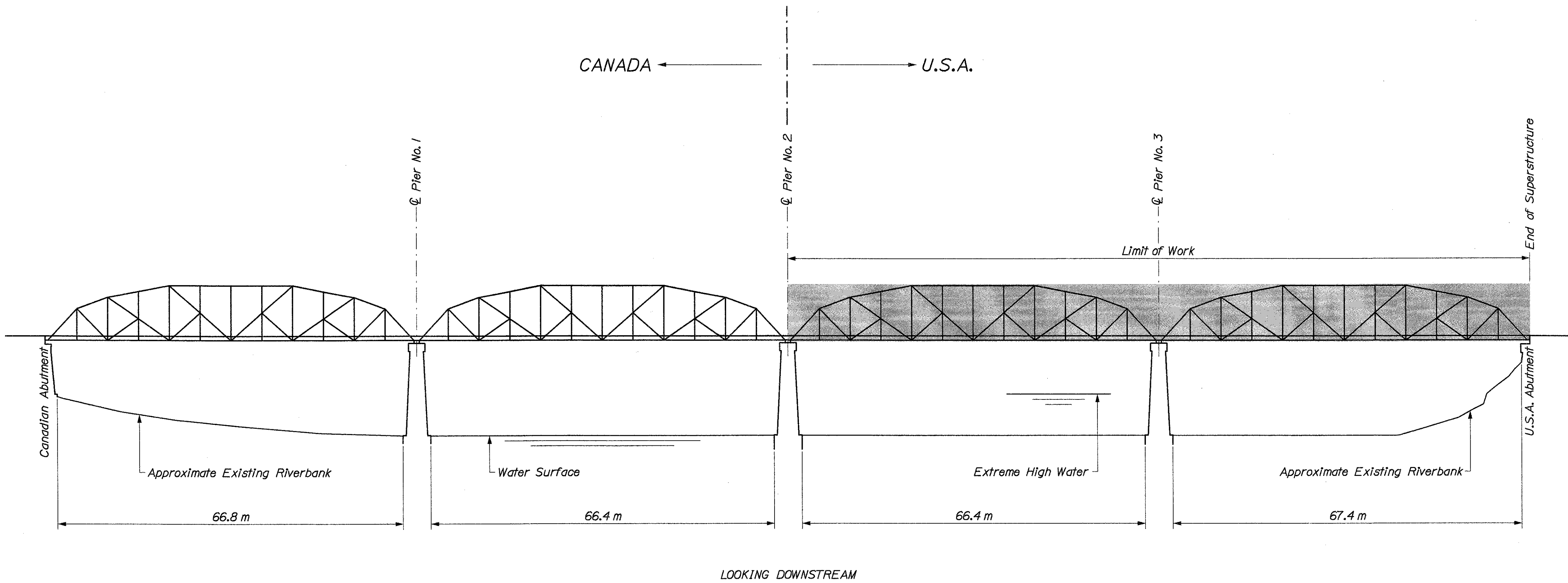
1. All dimensions are in millimeters unless otherwise noted.
2. All elevations and stations are in meters.

F.R.W.A. REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	BR-1623100E	2	5

007623.00

GENERAL CONSTRUCTION NOTES

- All utility facilities shall be adjusted by the respective utilities unless noted.
- All dimensions and details shown for the existing structure shall be verified in the field by the Contractor prior to bid.
- The Contractor shall take precautions to prevent any damage to the utility pipes, wires, insulation and covering. Any damages occurring as the result of the painting project shall be repaired in a manner approved by the Resident Engineer, at the Contractor's expense. No additional payment will be made for repairs to damaged lines or coverings.
- To protect and preserve the galvanized finish, new galvanized stringers shall be masked at the point of attachment to the old transverse floor beams in a manner approved by the Resident Engineer.



ESTIMATED QUANTITIES				
ITEM NO.	DESCRIPTION	QUANTITY	UNIT	
504.70	STRUCTURAL STEEL FABRICATED & DELIVERED (2250 Kg)	1	L.S.	
504.71	STRUCTURAL STEEL ERECTION (2250 Kg)	1	L.S.	
504.79	STEEL GRID BRIDGE FLOORING	270	M²	
506.17	SURFACE PREPARATION OF EXISTING STRUCTURAL STEEL	1	L.S.	
506.144	FIELD PAINTING OF EXISTING AND NEW STRUCTURAL STEEL	1	L.S.	
506.18	CONTAINMENT AND POLLUTION CONTROL MEASURES	1	L.S.	
506.191	DISPOSAL OF SPECIAL WASTE OR HAZARDOUS WASTE	1	L.S.	
627.75	WHITE OR YELLOW PAVEMENT AND CURB MARKING	10	M²	
627.77	REMOVING PAVEMENT MARKING	10	M²	
627.791	TEMPORARY 100 mm PLASTIC PAVEMENT MARKING LINE YELLOW OR WHITE	100	M	
639.19	FIELD OFFICE TYPE B	1	L.S.	
643.72	TEMPORARY TRAFFIC SIGNAL	1	EA.	
652.381	UNIFORM TRAFFIC OFFICERS	1,100	MH	
652.39	WORK ZONE TRAFFIC CONTROL	1	L.S.	
659.10	MOBILIZATION	1	L.S.	
660.21	ON-THE-JOB TRAINING (BID)	1	L.S.	

BRIDGE NO. 2399
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION
INTERNATIONAL BRIDGE
OVER
ST. JOHN RIVER
IN THE TOWN OF
MADAWASKA
AROOSTOOK COUNTY
FINAL PLAN

SHEET 2 OF 4

AUGUSTA, MAINE

PROJECT DESIGN ENGINEER	BY	DATE
DESIGN-DETAILED	J. Kittredge	10/2001
CHECKED		
REVISIONS		
FIELD CHANGES		

Date:17 DEC 2002

Username: Ed

Division: BRIDGE

Filename: ... \003_Sup_SWPlan.dgn

PROJECT DESIGN ENGINEER	BY	DATE
DESIGN-DETAILED	J. CASWELL	Dec 2002
CHECKED	E. CASWELL	
REVISIONS		
FIELD CHANGES		

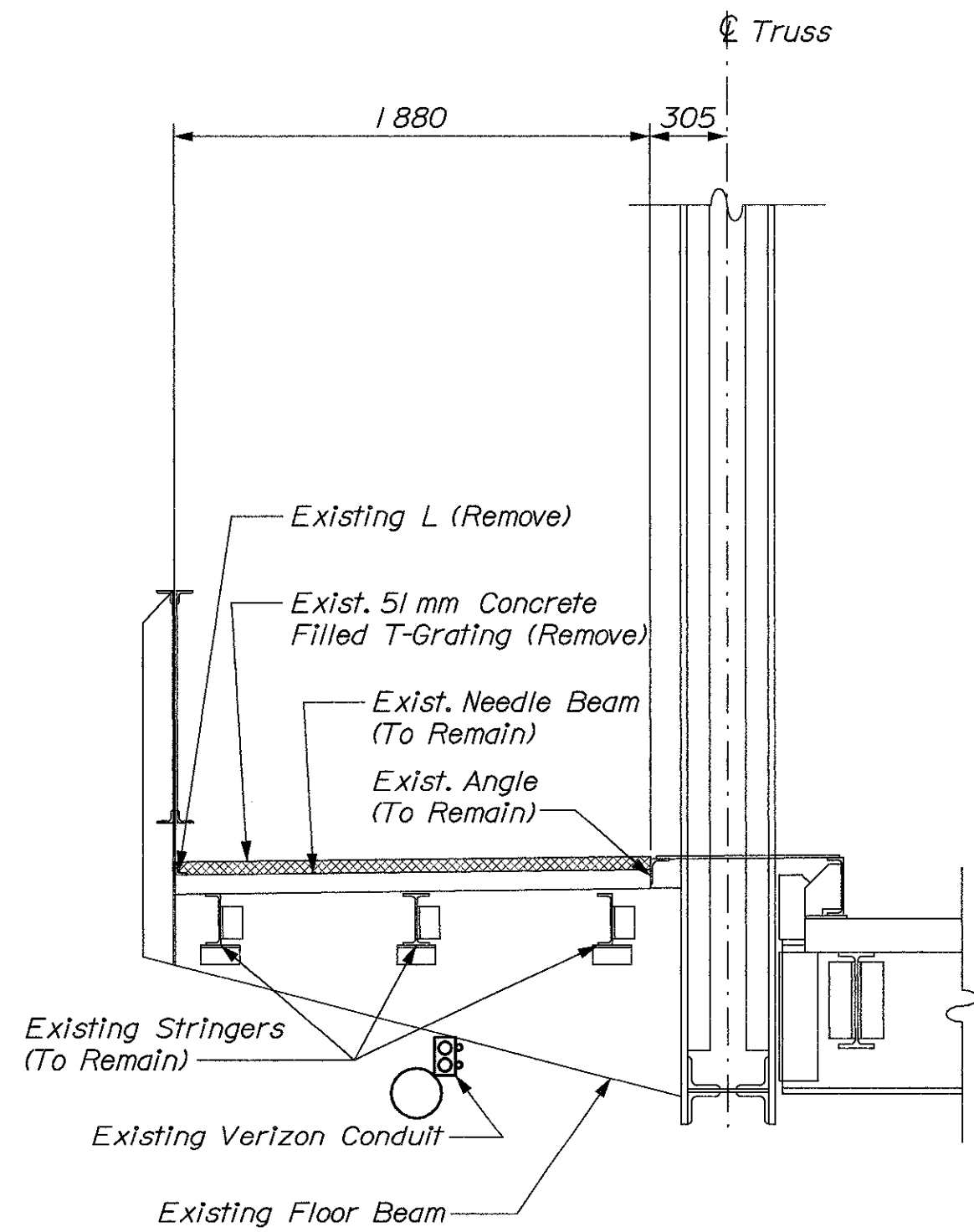
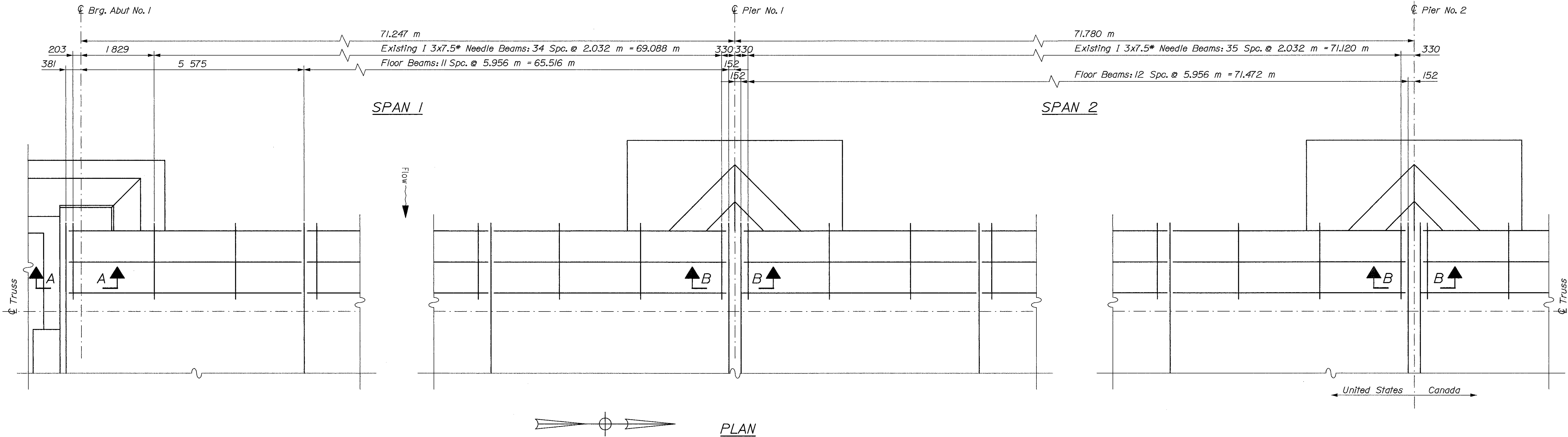
PLANS

METRIC

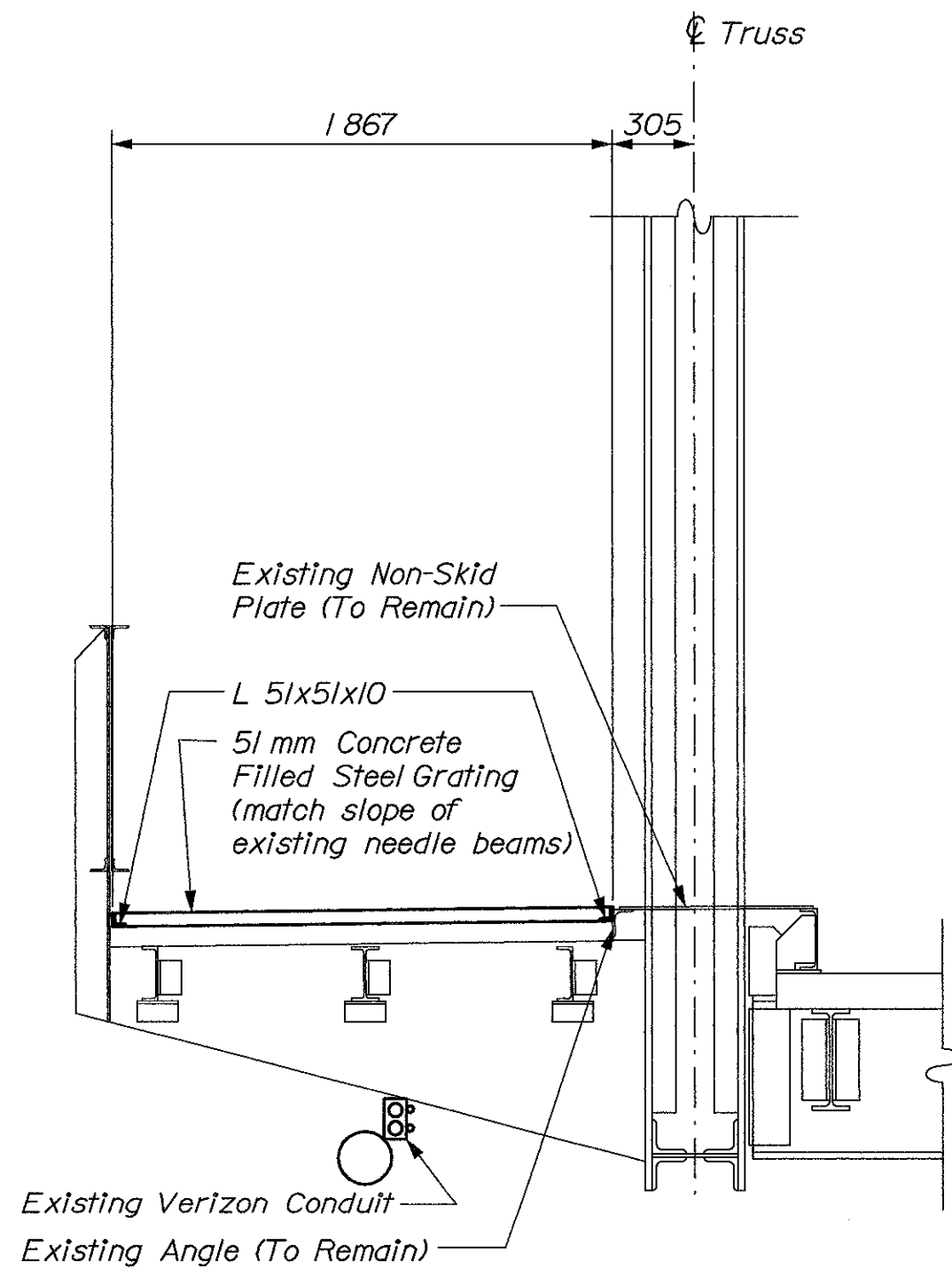
1. All dimensions are in millimeters unless otherwise noted.
2. All elevations and stations are in meters.

FWHA REG. NO.	STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
1	MAINE	NH-7623(10)X	3	5

7623.10



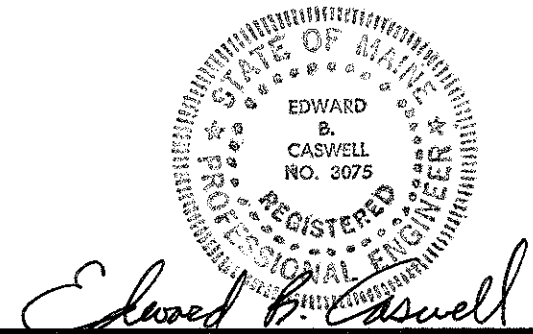
EXISTING TRANSVERSE SECTION



PROPOSED TRANSVERSE SECTION

SCOPE OF WORK

1. Remove existing concrete filled steel sidewalk T-Grating over Spans 1 & 2.
2. Remove sidewalk expansion joints at Abutment No. 1 and Pier No. 1 in total.
3. Remove the southerly half of the sidewalk expansion joint at Pier No. 2.
4. Install new expansion joints at Abutment No. 1 and Pier No. 1. Install partial expansion joint at Pier No. 2.
5. Install new concrete filled steel sidewalk grating over Spans 1 & 2.
6. Maintain pedestrian traffic at all times.

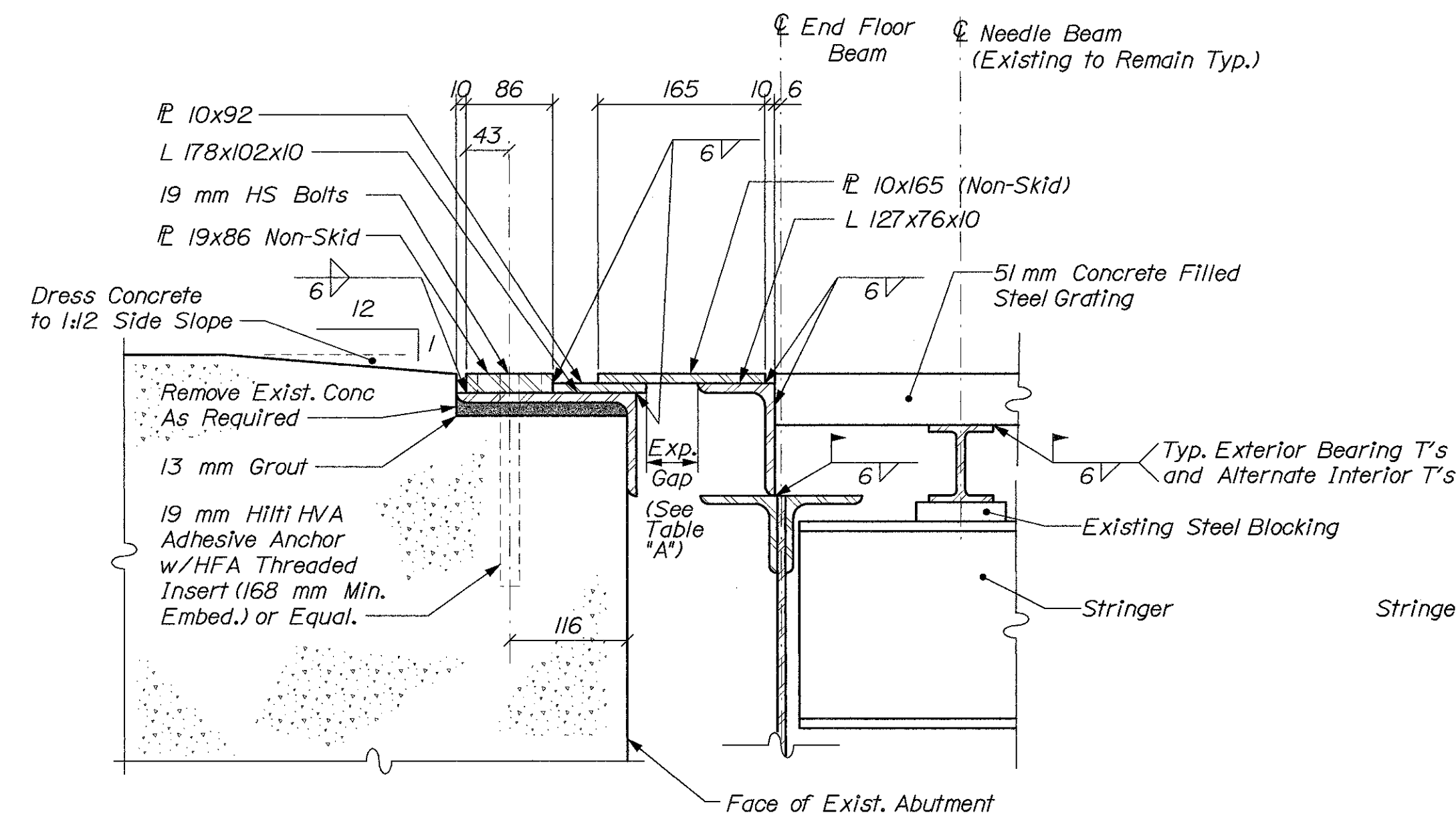


BRIDGE NO. 2399

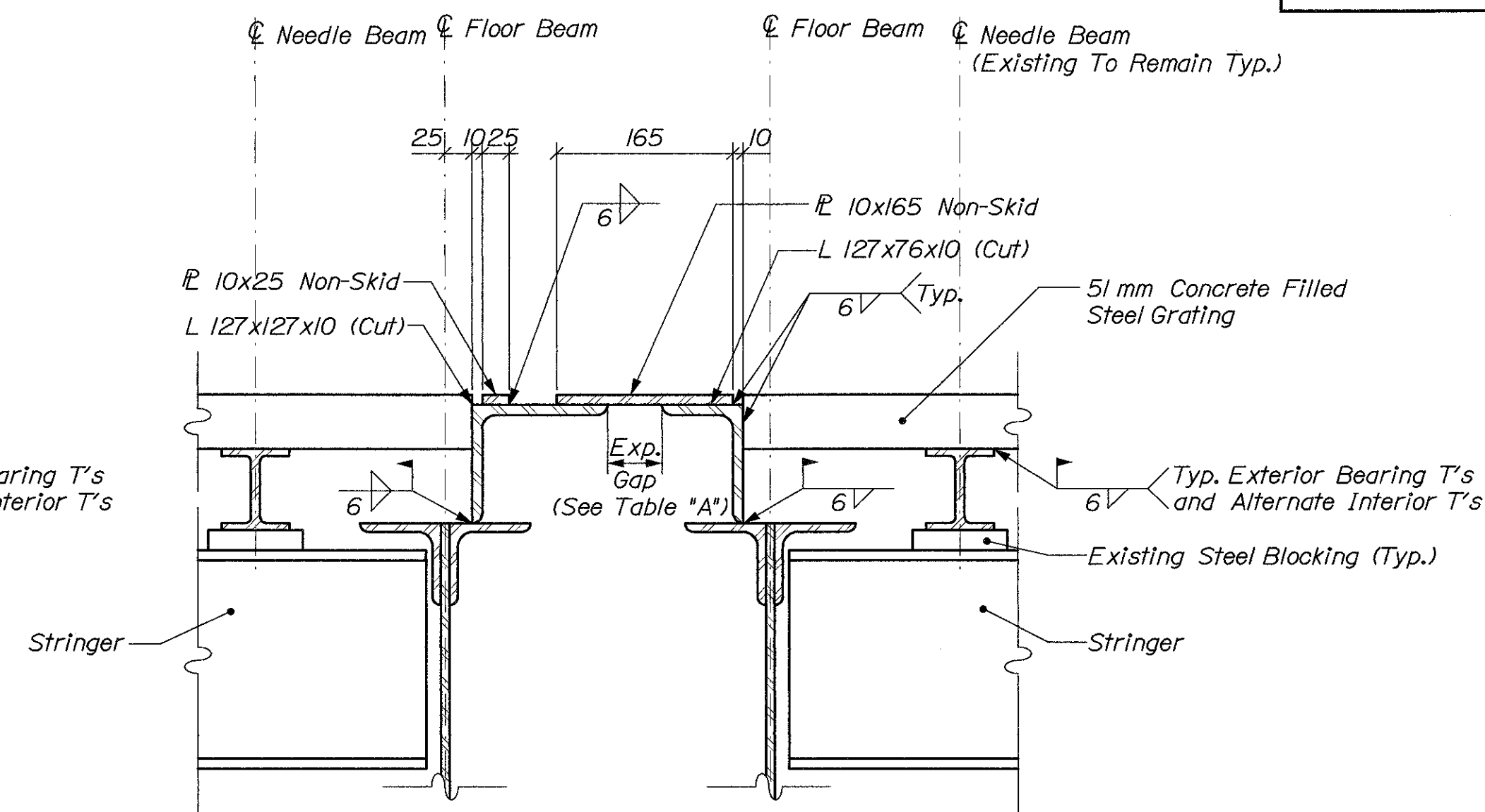
STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

INTERNATIONAL BRIDGE
OVER
ST. JOHN RIVER
IN THE TOWN OF
MADAWASKA
AROOSTOOK COUNTY
SIDEWALK PLAN

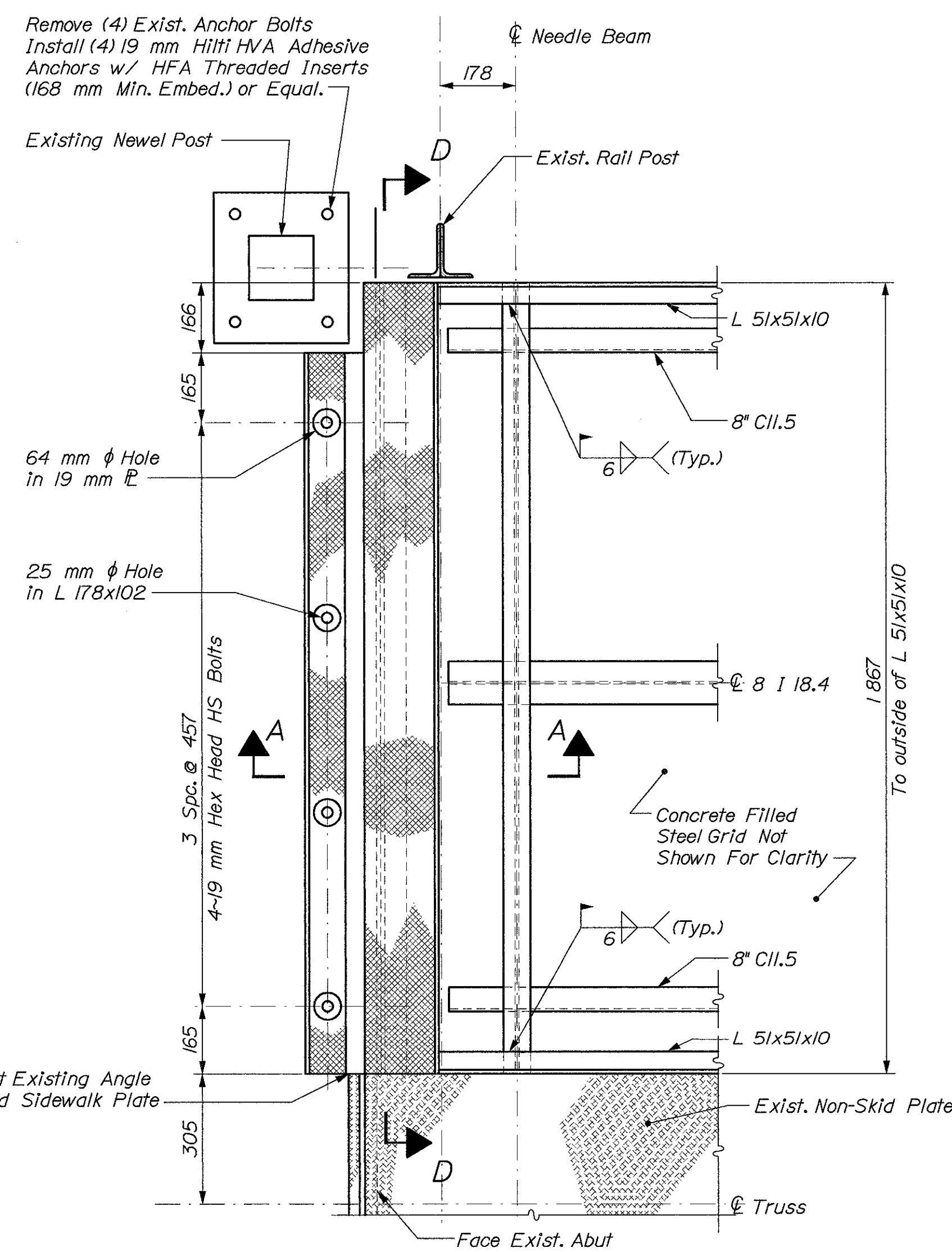
SHEET OF AUGUSTA, MAINE



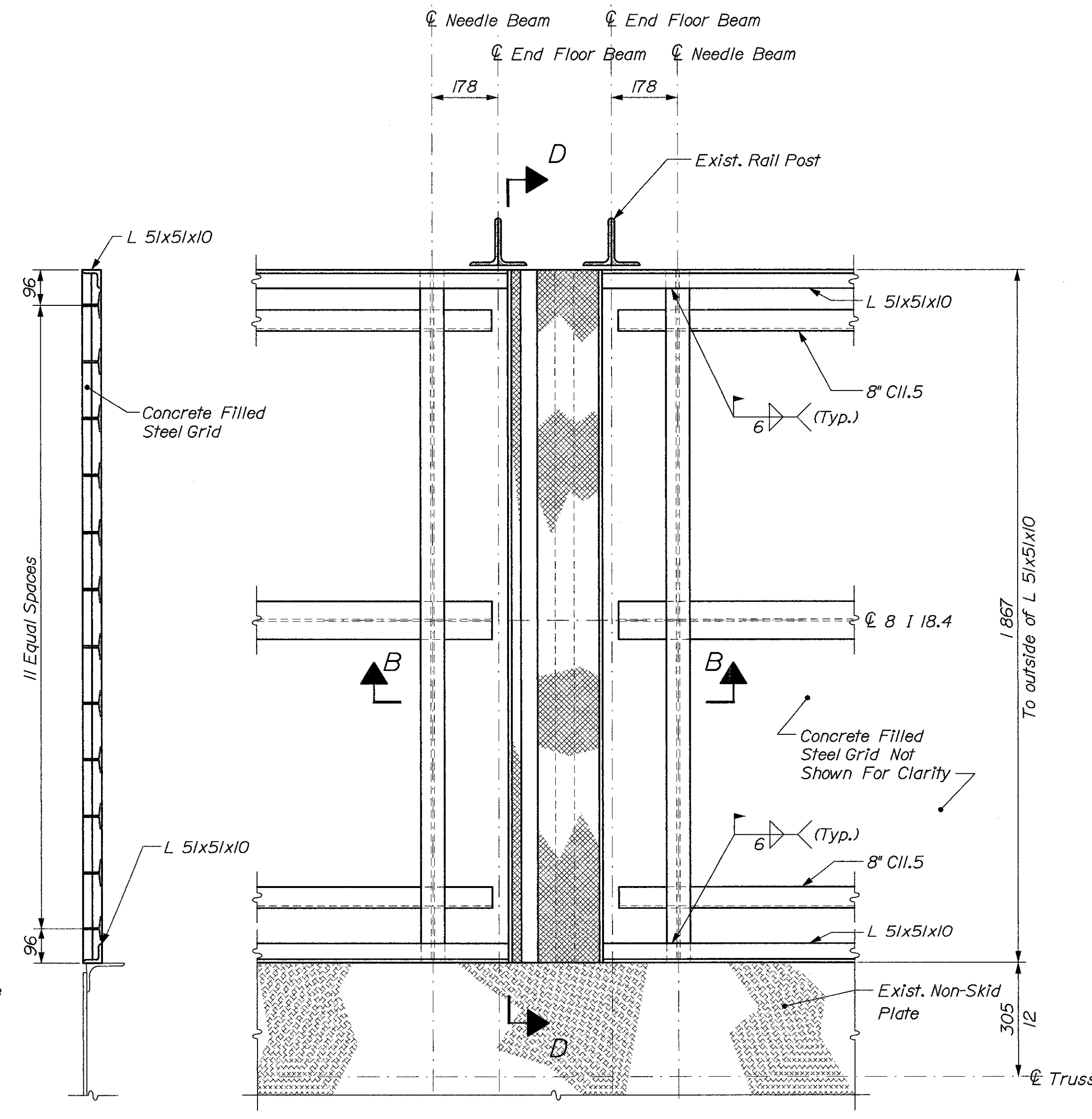
SECTION A-A



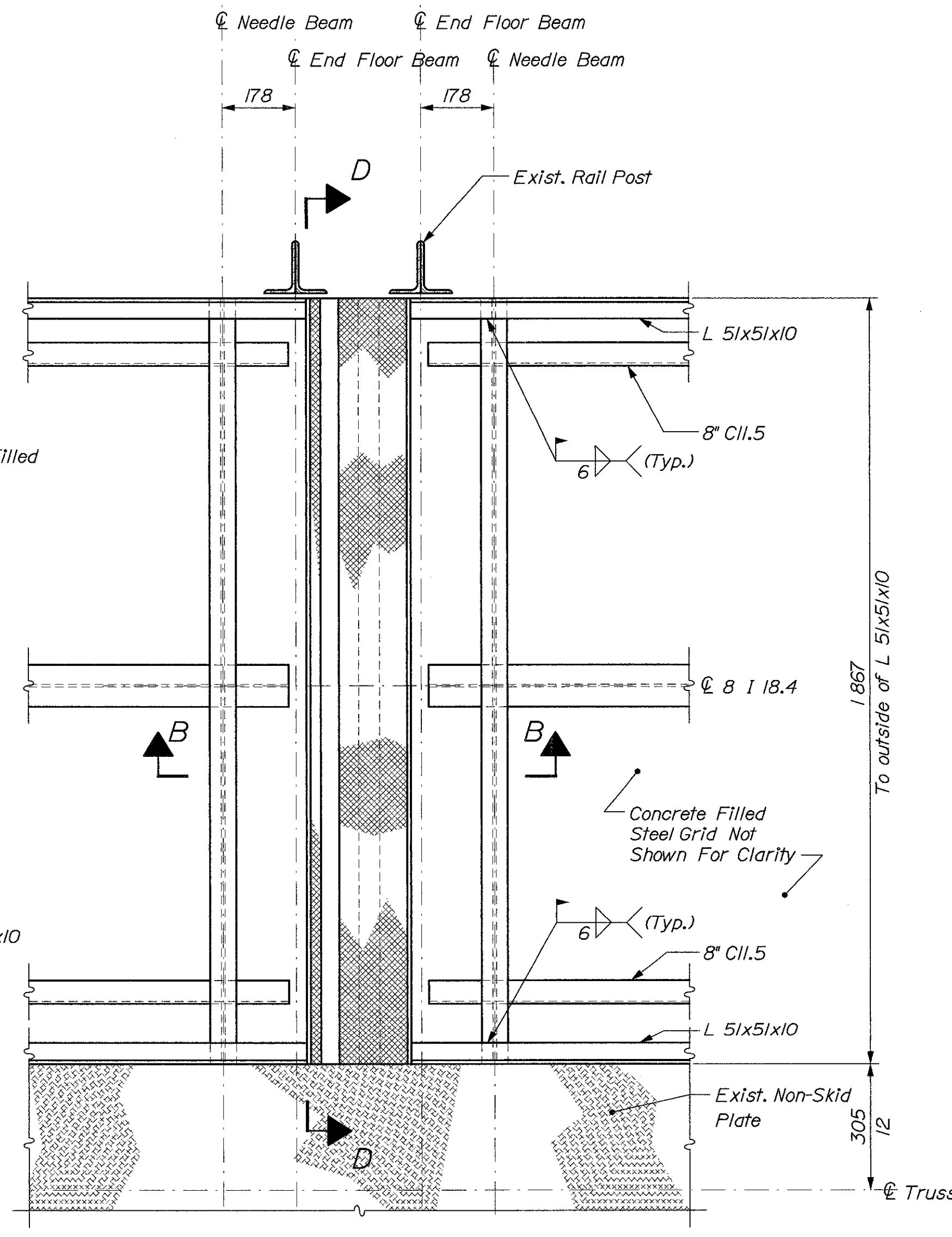
SECTION B-B



EXPANSION JOINT PLAN
ABUTMENT NO. 1



TYPICAL GRID
SECTION

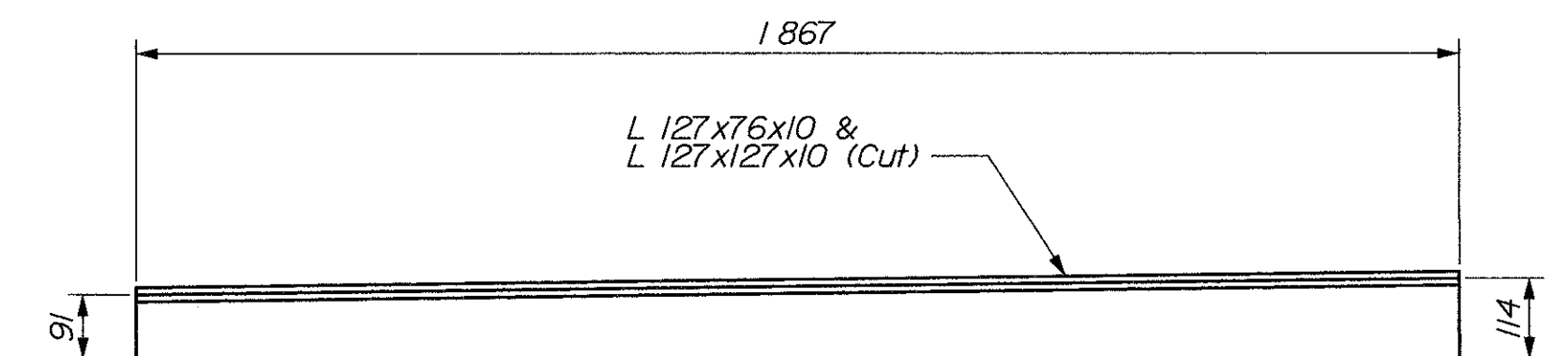


EXPANSION JOINT PLAN
PIERS

NOTE:
Pier No. 1 Shown. L 127x127x10 and P 10x25
Non-Skid only at Pier No. 2.

NOTES

1. *The Contractor shall field verify all dimensions prior to commencing the work.*
2. *Steel grating shall be ArmaDek 2 Inch T sidewalk flooring with 6" main bar spacing as manufactured by L.B. Foster Co., or approved equal. Grating panels shall be spliced.*
3. *Structural steel shapes, bars and plates shall conform to ASTM A709/A709M, Grade 250. Bolts shall conform to ASTM A325M.*
4. *All steel, including steel grating, shall be galvanized in accordance with ASTM A123 after fabrication.*
5. *All bolts, nuts and washers shall be galvanized in accordance with ASTM A153 after fabrication.*
6. *Concrete shall be class LP with a maximum aggregate size of 9.5 mm. Payment will be considered incidental to Item 504.79, Steel Grid Bridge Flooring.*
7. *The contractor may adjust the location of the abutment sidewalks plates to accommodate dimensional variations.*
8. *Paint all areas where galvanized surfaces are disturbed with two coats of Thiemec 90E-92 inorganic zinc rich paint or approved equal.*
9. *After abutment sidewalk plates are secured to the abutments fill bolt holes with approved sealant.*
10. *Payment for removal and disposal of the existing concrete filled steel grid flooring will be considered incidental to Item 504.79, Steel Grid Bridge Flooring*
11. *Payment for Adhesive Anchors and Sealant will be considered incidental to related Contract Items.*
12. *Lead paint shall be removed from existing needle beams as necessary to weld metal grating in accordance with the Specifications. Payment for lead paint removal shall be considered incidental to Related Contract Items.*
13. *The Contractor shall take care not to damage Verizon Fiber Optic Cables suspended below sidewalk in wooden conduit. Protection for the cables and conduits shall be provided as required. Payment for necessary protection will be considered incidental to Related Contract Items.*



SECTION D-D

TABLE "A" EXPANSION GAPS	
With Due Regard to other dimensions shown, set Gaps by this table.	
Temperature in Degrees C	Gap in mm
49	13
42	19
34	25
27	32
20	38
13	44
6	51
-2	57
-9	64
-16	70
-23	76
-31	83
-38	89

BRIDGE NO. 2399

STATE OF MAINE
DEPARTMENT OF TRANSPORTATION

INTERNATIONAL BRIDGE
OVER
ST. JOHN RIVER
IN THE TOWN OF
MADAWASKA
AROOSTOOK COUNTY
SIDEWALK DETAILS

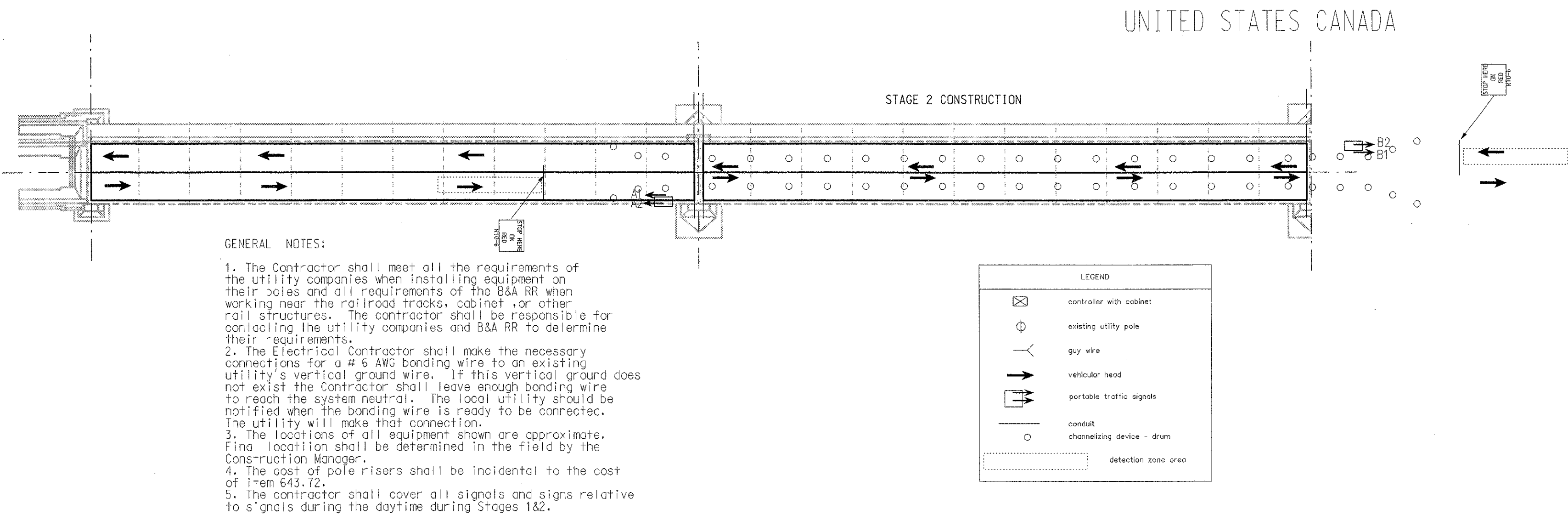
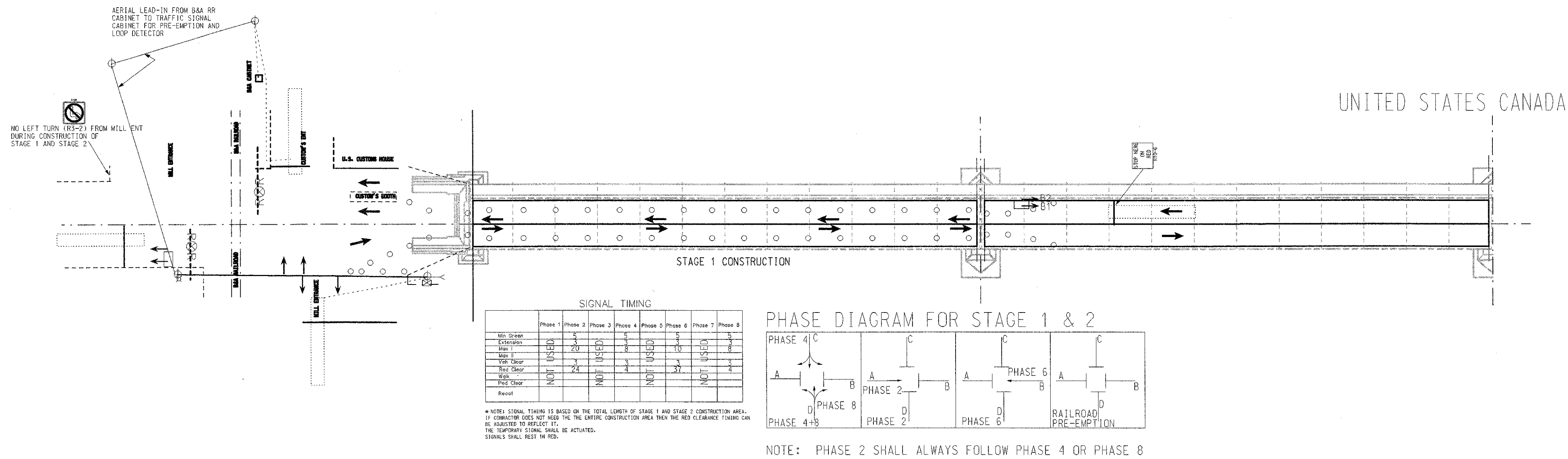
SHEET OF AUGUSTA, MAINE

39

STATE OF MAINE
EDWARD
B.
CASWELL
NO. 5075
REGISTERED
PROFESSIONAL ENGINEER

Edward B. Caswell

PROJECT DESIGN ENGINEER		BY	DATE
DESIGN-DETAILED	E. CASWELL	J. CASWELL	Dec 2002
CHECKED			
REVISIONS			
FIELD CHANGES			



PROJECT DESIGN ENGINEER	BY	DATE
DESIGN-DETAILED	MADEIRA	12/17/02
CHECKED	JOEL KITTREDGE	12/17/02
REVISIONS		
FIELD CHANGES		

PLANS