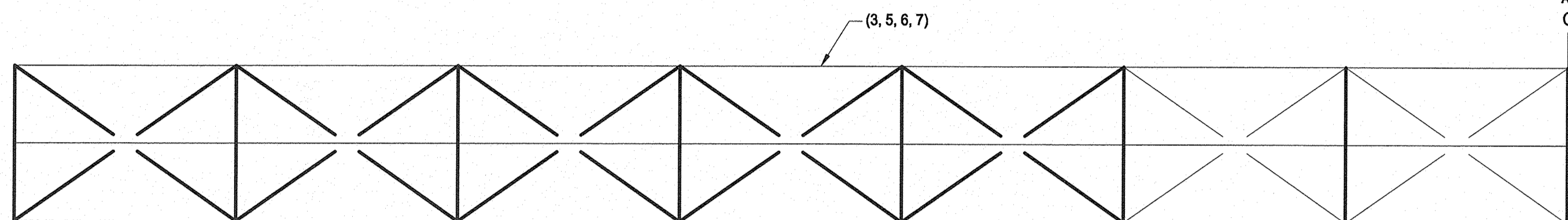


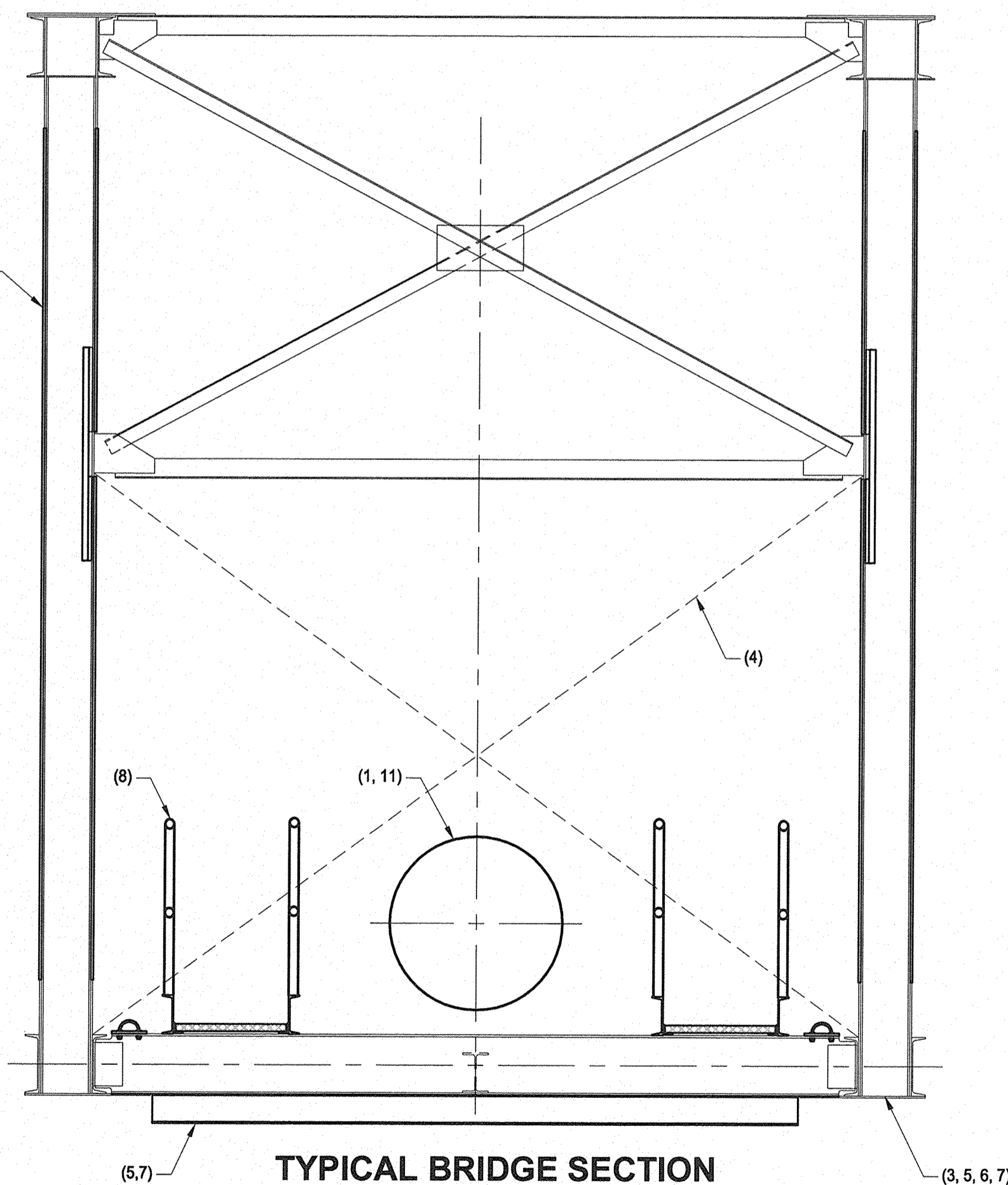
**TRUSS ELEVATION**

0 1200 2400 3600 mm SCALE 1:120



**HALF PLAN OF BOTTOM CHORD LATERALS**

0 1200 2400 3600 mm SCALE 1:120



**TYPICAL BRIDGE SECTION**

0 250 500 750 mm SCALE 1:25

(AT SWAY FRAMES)

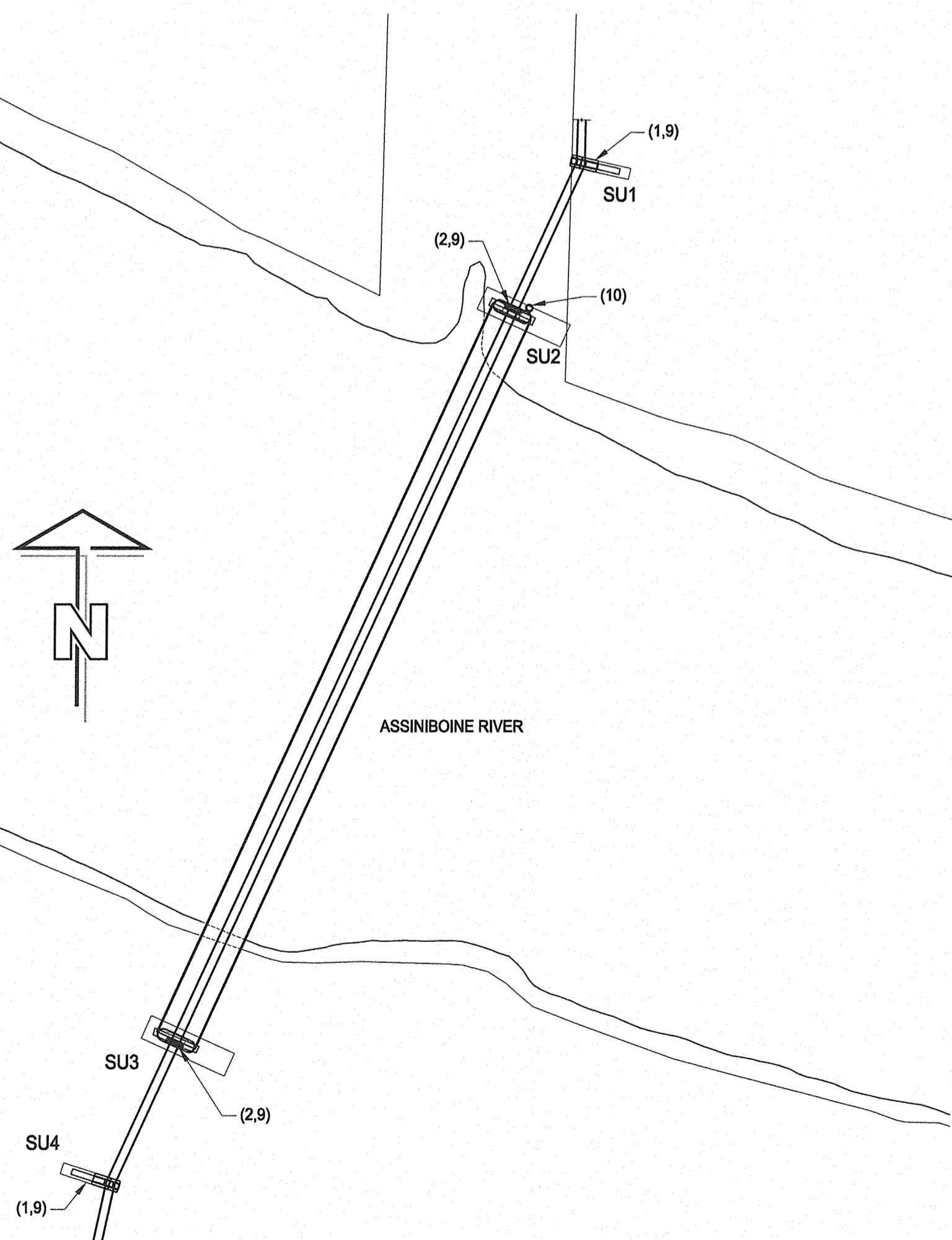
**DESIGN DATA:**

- DESIGN SPECIFICATIONS IN ACCORDANCE WITH CANADIAN HIGHWAY BRIDGE DESIGN CODE CAN/CSA-S6-06.
- ALL NEW STRUCTURAL STEEL SHALL CONFORM TO CSA-G40.21-04, GRADE 350W AND SHALL BE GALVANIZED TO CSA G184-M92 "HOT DIP GALVANIZING OF IRREGULARLY SHAPED ARTICLES" AFTER FABRICATION.
- ALL WELDING SHALL BE IN ACCORDANCE WITH CSA W47.1-03 "CERTIFICATION OF COMPANIES FOR FUSION WELDING OF STEEL STRUCTURES". WELDS SHALL HAVE A 4mm E49XX THROAT UNLESS OTHERWISE NOTED.
- BOLTS SHALL BE 3/4" Ø A325 TYPE 1 AND SHALL BE GALVANIZED. BOLT THREADS SHALL BE EXCLUDED FROM THE SHEAR PLANES OF ANY SURFACE UNLESS OTHERWISE NOTED.
- ANCHOR BOLTS SHALL BE 3/4" Ø A307 TYPE 1 THREAD ROD AND SHALL BE GALVANIZED.
- ALL CONCRETE WORK SHALL BE DONE IN ACCORDANCE WITH CSA A23.1-09. MINIMUM COMPRESSIVE STRENGTH @ 28 DAYS: 35 MPa CLASS OF EXPOSURE: C-1
- REINFORCING STEEL BARS SHALL BE IN ACCORDANCE WITH CAN/CSA G30.18-M92, GRADE 400W.
- CONCRETE CLEAR COVER SHALL BE 50mm UNLESS OTHERWISE NOTED.
- ALL EXPOSED CONCRETE CORNERS SHALL HAVE A 20mm CHAMFER OR FILLET UNLESS OTHERWISE NOTED.
- HOARDING OF THE STRUCTURE SHALL BE MADE IN 4 STAGES: 31.5m - 14m - 14m - 31.5m. FACTORED HOARDING AND CONSTRUCTION LIVE LOAD SHALL NOT BE GREATER THAN 5kN PER LINEAR METER OF THE BRIDGE. HOARDING SHALL BE SUPPORTED ONLY AT THE SWAY FRAME LOCATIONS. SEE DRAWING D-13054

**DESIGN NOTES:**

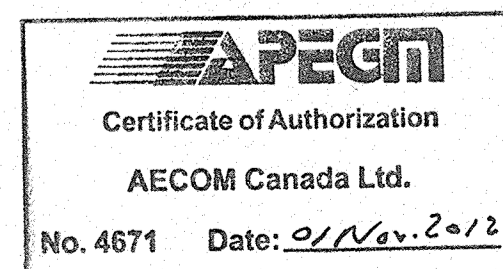
- FABRICATORS SHALL BE CERTIFIED IN ACCORDANCE WITH CSA W47.1-03 "CERTIFICATION OF COMPANIES FOR FUSION WELDING OF STEEL STRUCTURES".
- THE CONTACT SURFACES OF BOLTED PARTS SHALL BE HOT DIP GALVANIZED OR ZINC METALIZED AND THEN HAND WIRE BRUSHED.
- OBTAIN ENGINEERS APPROVAL PRIOR TO MAKING ANY MEMBER SUBSTITUTIONS OR CONNECTION DETAIL CHANGES.
- WHERE EXISTING RIVETS ARE TO BE REMOVED, THEY SHALL BE REMOVED BY MECHANICAL MEANS ONLY. NO HEAT SHALL BE APPLIED TO THE RIVETS UNLESS APPROVED BY THE CONTRACT ADMINISTRATOR.
- ACCESS AND LAY DOWN AREA TO BE APPROVED BY CONTRACT ADMINISTRATOR.
- ALL DIMENSIONS SHOWN ON THESE DRAWINGS ARE BASED ON AVAILABLE INFORMATION. CONTRACTOR SHALL FIELD MEASURE AND VERIFY ALL DETAILS AND DIMENSIONS. THE CONTRACTOR SHALL REPORT ANY DISCREPANCIES TO THE CONTRACT ADMINISTRATOR PRIOR TO COMMENCING WORK.

EXISTING STRUCTURE AND SUMMARY OF REHABILITATION WORKS			
SEQUENCE OF CONSTRUCTION	WORK ITEMS	DRAWING	SPECIFICATIONS
1	REMOVE PIPE AND EXISTING CRADLES AT SU1 AND SU4	D-12237	
2	DEMOLISH CRADLES OF EXISTING PIERS (SU2 AND SU3)	D-12236	
3	REPLACE EXISTING RIVETS WITH GALV. STEEL A325 BOLTS WHERE BRIDGE STRENGTHENING REQUIRES RIVETS TO BE REPLACED WITH BOLTS	D-12233, D-12235	
4	ADD TEMPORARY CROSS-BRACING TO ALL SWAY FRAMES	D-12232, D-12234, D-13054	
5	STRENGTHENING FOR STEEL BRIDGE STRUCTURE	D-12233, D-12234, D-12235, D-13054	
6	ZINC METALIZE ENTIRE EXISTING STEEL BRIDGE STRUCTURE	D-12233, D-13054	
7	TOUCH UP DAMAGED GALVANIZING AND METALIZING	D-12233, D-12234, D-12235, D-13054	
8	INSTALL WALKWAYS	D-12233, D-12234	
9	RE-BUILD CONCRETE CRADLES (SU1, SU2, SU3 AND SU4)	D-12236, D-12237	
10	INSTALL STEEL LADDER AT SU2	D-12236	
11	INSTALL NEW PIPE	D-12233, D-12234	



**LOCATION PLAN**

0 5000 10000 15000 mm SCALE 1:500



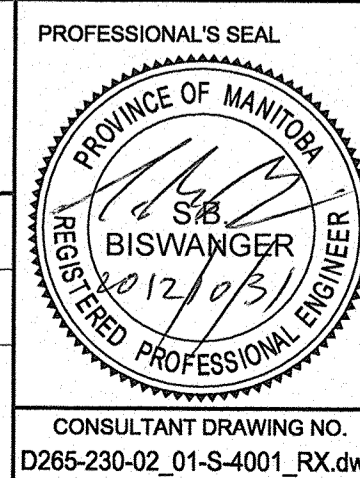
**LOCATION APPROVED UNDERGROUND STRUCTURES**

SUPR. U/G STRUCTURES DATE COMMITTEE  
NOTE: LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE. BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT. CONFIRMATION OF EXISTENCE AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES BEFORE PROCEEDING WITH CONSTRUCTION.

NO.	REVISIONS	YYMMDD	BY
1	RE-ISSUED FOR CONSTRUCTION	12/10/31	KC
0	ISSUED FOR CONSTRUCTION	11/05/09	KC



DESIGNED BY	FT/ARB	CHECKED BY	SBB/KC
DRAWN BY	DJH	APPROVED BY	EBL
HOR. SCALE	AS NOTED	RELEASED FOR CONSTRUCTION	
VERT. SCALE	AS NOTED		
DATE		DATE	



BID OPPORTUNITY NO. 830-2012

**THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT**

**REHABILITATION / REPLACEMENT OF THE MID TOWN FEEDERMAIN AT THE ASSINIBOINE RIVER**

STRUCTURAL SCOPE OF WORK

SHEET 6 OF 19  
CITY DRAWING NUMBER  
**D-12232** REV 1