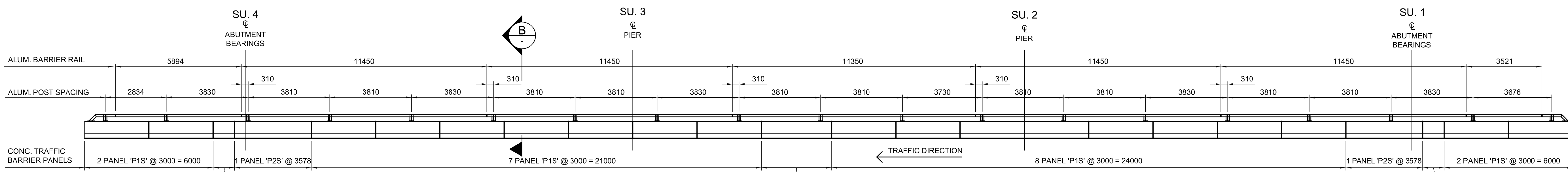


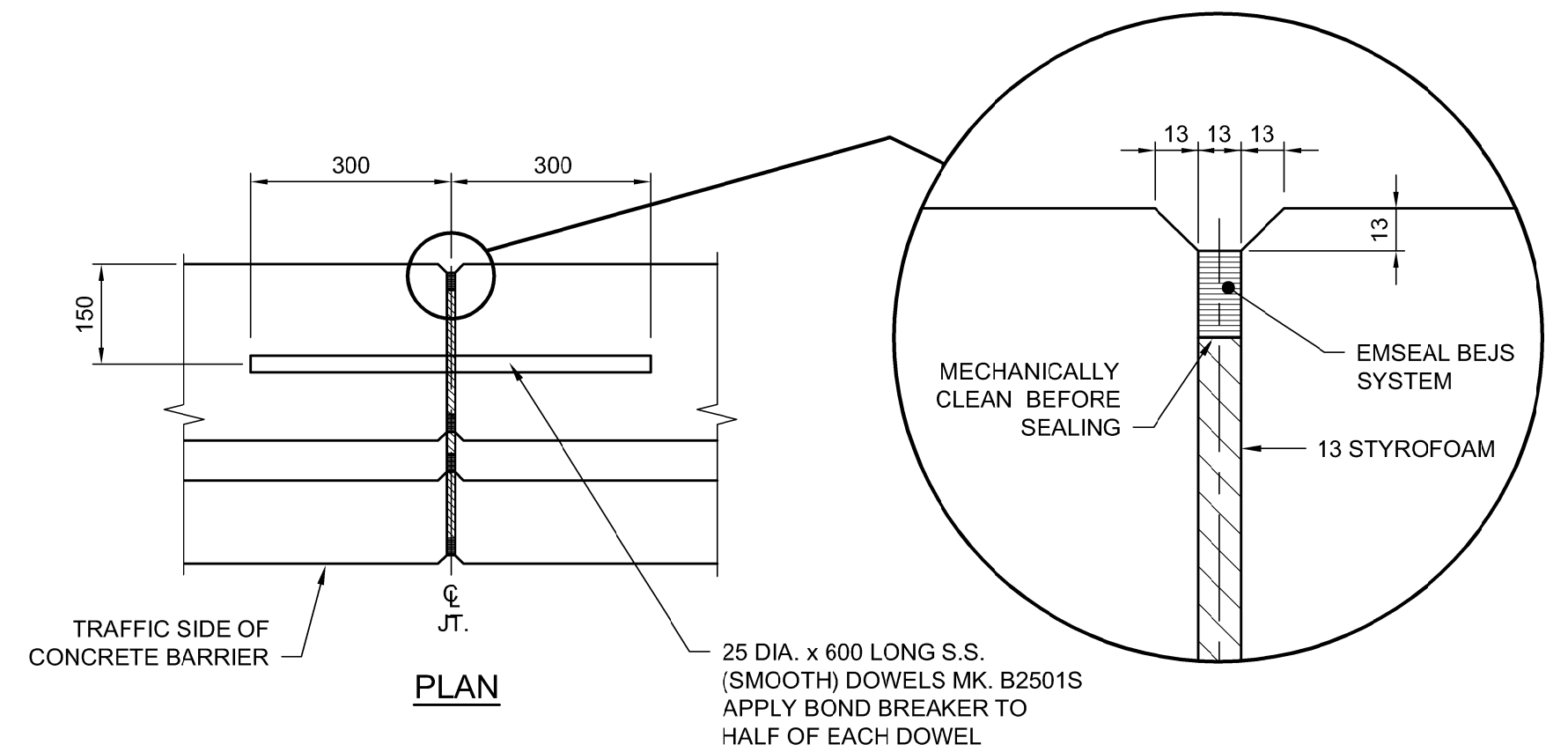
**NORTH SIDE SHOULDER BARRIER LAYOUT**

NOTE: CONCRETE BARRIER ELEVATION LOOKING NORTH



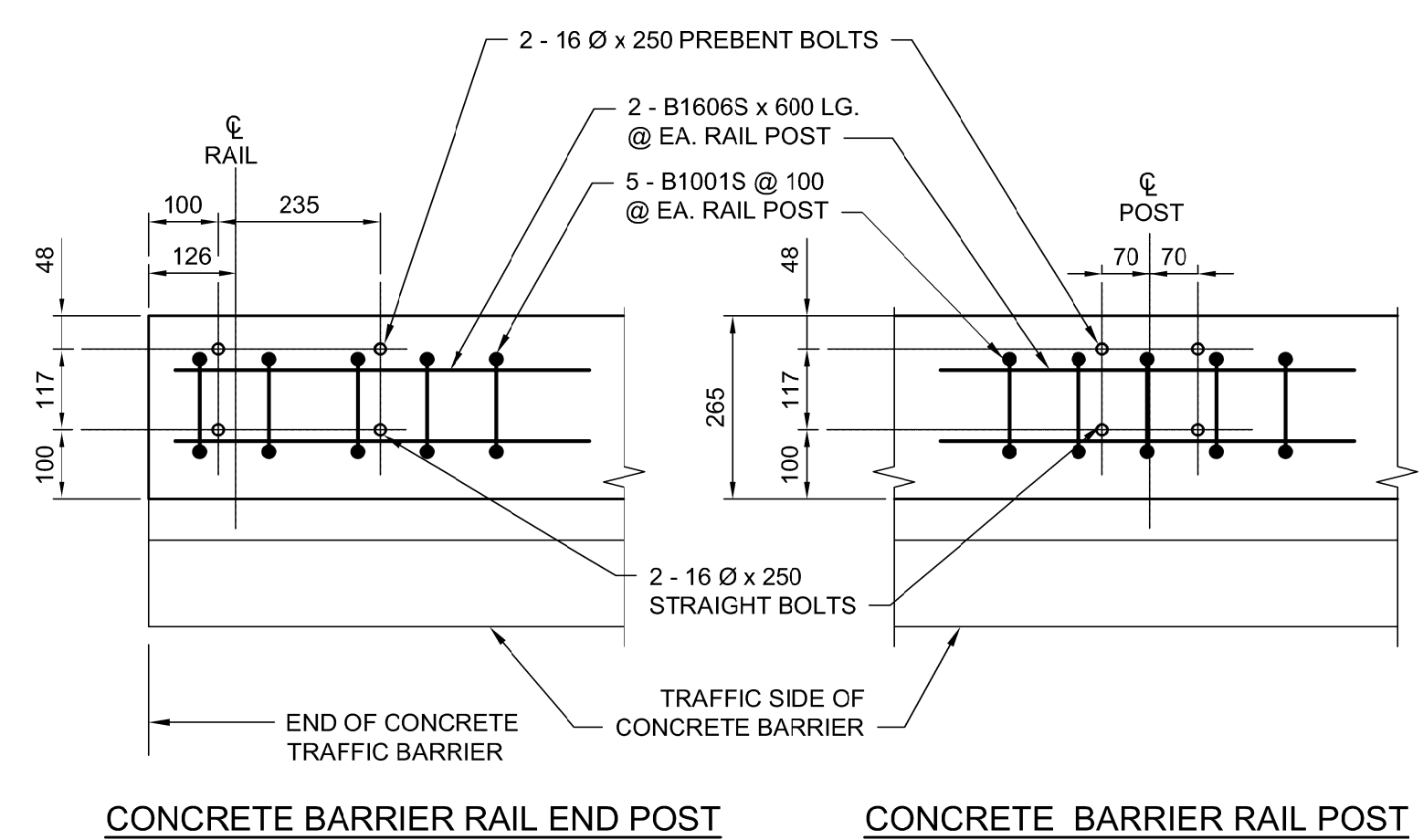
**SOUTH SIDE SHOULDER BARRIER / ALUMINUM RAIL LAYOUT**

NOTE: CONCRETE BARRIER ELEVATION LOOKING SOUTH



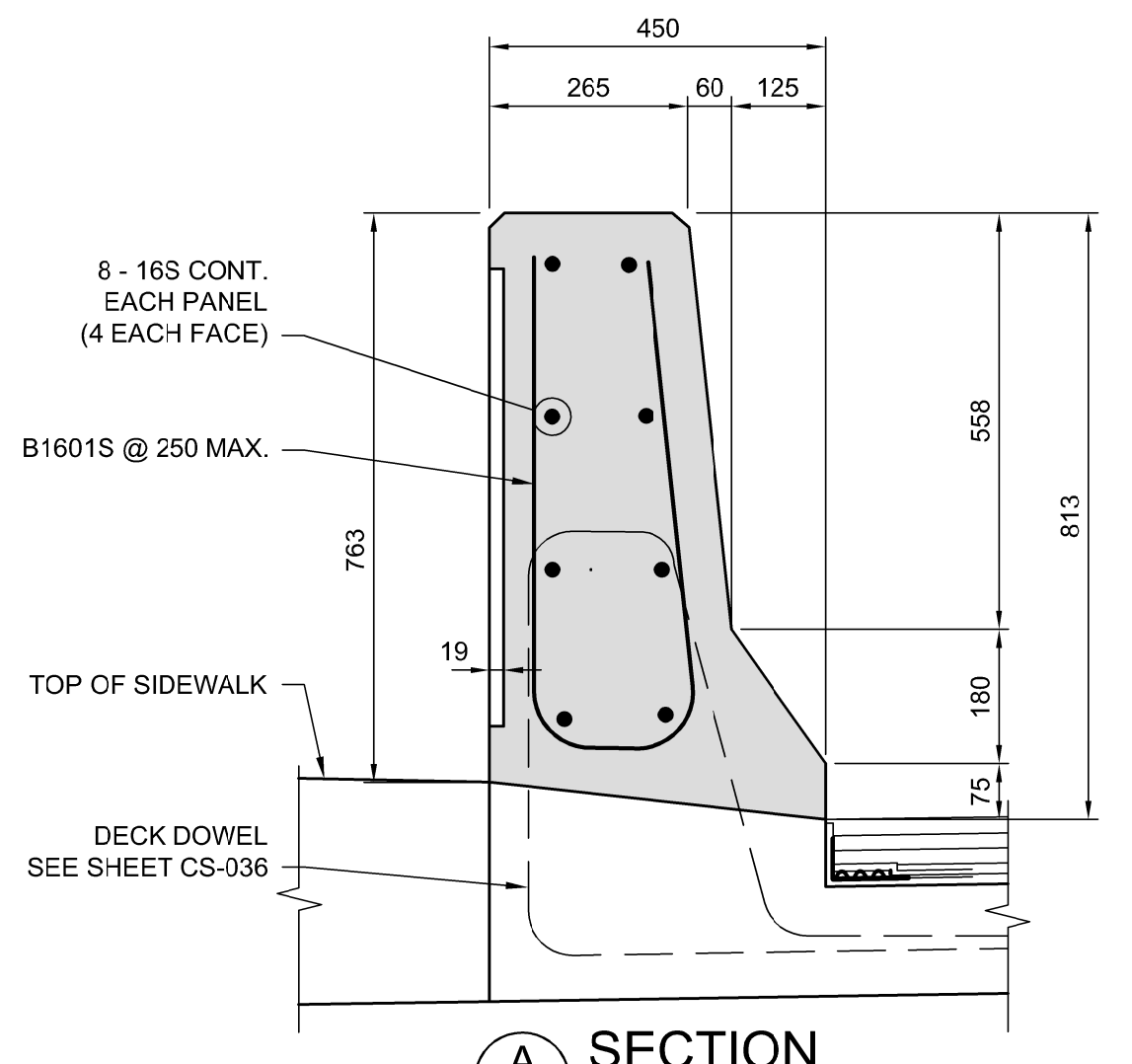
**TYPICAL CONSTRUCTION JOINT DETAIL FOR CONCRETE BARRIER**

1:10



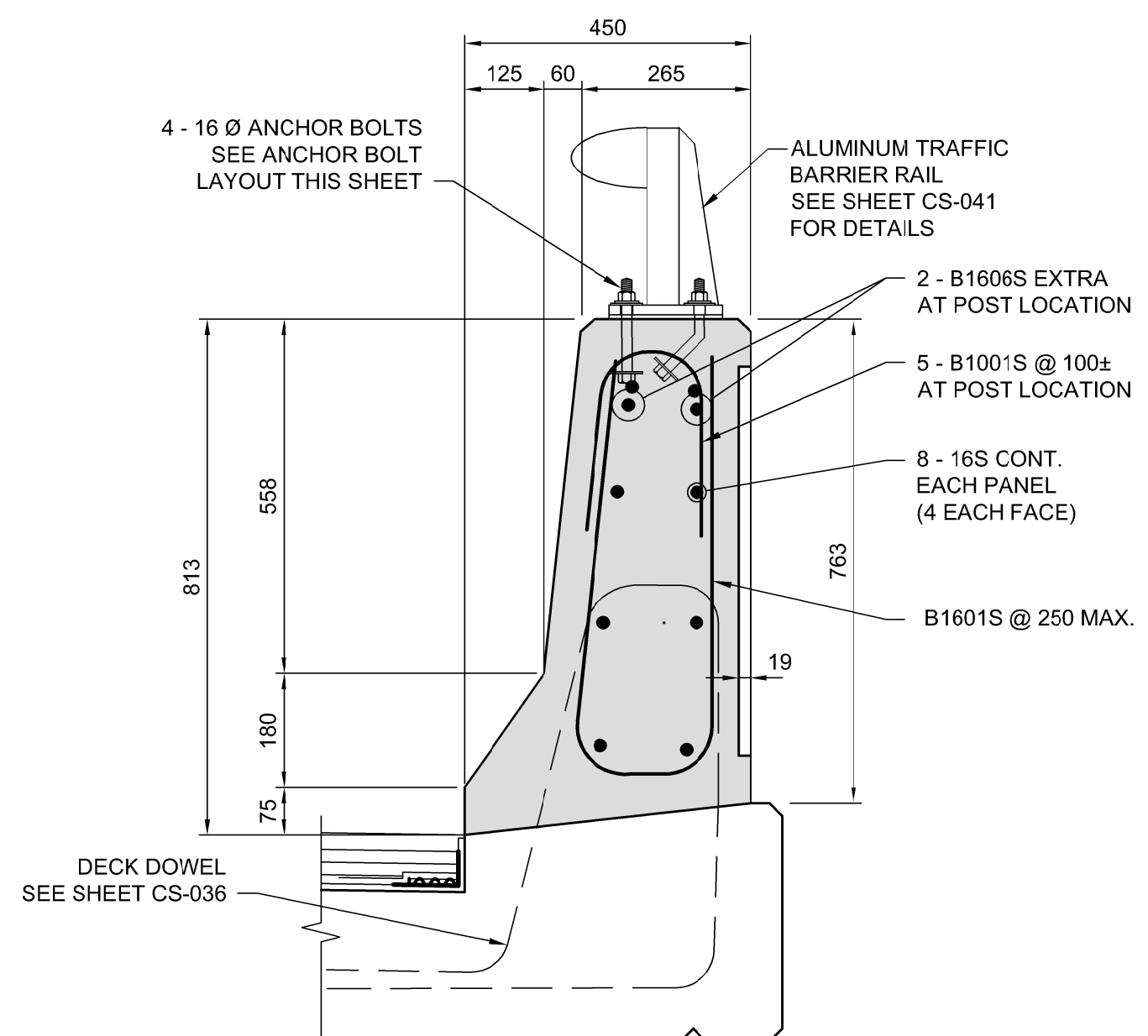
**TYPICAL ANCHOR BOLT LAYOUT FOR ALUMINUM RAIL POST**

1:10



**SECTION A**

1:10 TYPICAL NORTH SIDE SHOULDER BARRIER DETAIL



**SECTION B**

1:10 TYPICAL SOUTH SIDE SHOULDER BARRIER DETAIL

NORTH SIDE SHOULDER BARRIER		
PANEL TYPE	QTY	No. OF B1601S STIRRUP BARS
'P1N'	19	13
'P2N'	2	15
'P3N'	2	5
'P4N'	1	14
CONSTRUCTION JOINT DOWELS		
NO. OF JOINTS	REBAR DOWELS EACH JOINT	
23	3 - B2501S	

SOUTH SIDE SHOULDER BARRIER			
PANEL TYPE	QTY	No. OF B1601S STIRRUP BARS	LONGITUDINAL BARS
'P1S'	19	13	4-B1602S EA. FACE
'P2S'	2	15	4-B1603S EA. FACE
'P3S'	2	5	4-B1604S EA. FACE
'P4S'	1	14	4-B1605S EA. FACE
CONSTRUCTION JOINT DOWELS			
NO. OF JOINTS	REBAR DOWELS EACH JOINT		
23	3 - B2501S		

G:\CAD\175932\Drawings\Structural\BRIDGE-CON-CS-TRAFFIC BARRIER 1.dwg

**APEGM**  
Certificate of Authorization  
Dillon Consulting Limited (MB)  
No. 1789 Date: 2018/02/09

DESIGNED BY	MS	CHECKED BY	SSR
DRAWN BY	NBG / DB	APPROVED BY	MBL
HOR. SCALE	AS SHOWN	RELEASED FOR CONSTRUCTION	
VERTICAL	AS SHOWN		
ISSUED FOR TENDER	18/02/09	DRA	
NO. REVISIONS	DATE	BY	DATE
	2018/02/09		

ENGINEER'S SEAL  
PROVINCE OF MANITOBA  
**D.R.C. AMORIM**  
Member 33215  
REGISTERED PROFESSIONAL ENGINEER

**THE CITY OF WINNIPEG**  
PUBLIC WORKS DEPARTMENT  
**Winnipeg**  
FERMOR AVENUE BRIDGE OVER SEINE RIVER  
BRIDGE RE-HABILITATION, PEDESTRIAN-CYCLIST UNDERPASS STRUCTURE AND ROADWORKS FROM ST. ANNE'S ROAD TO ARCHIBALD STREET  
CITY DRAWING NUMBER B-118-2017-CS-040  
SHEET 040 OF 100  
CONSULTANT DRAWING NUMBER CS-040