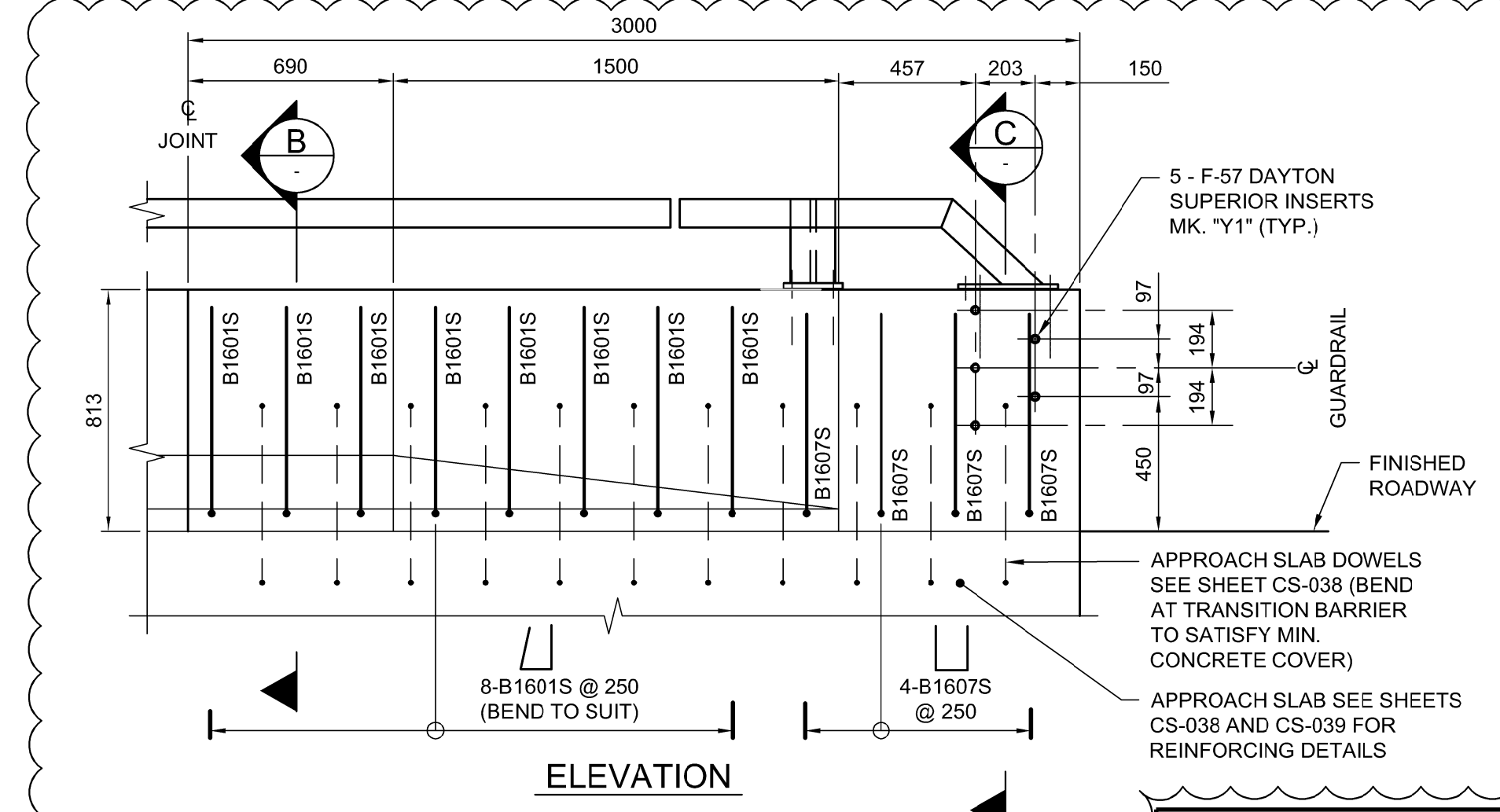
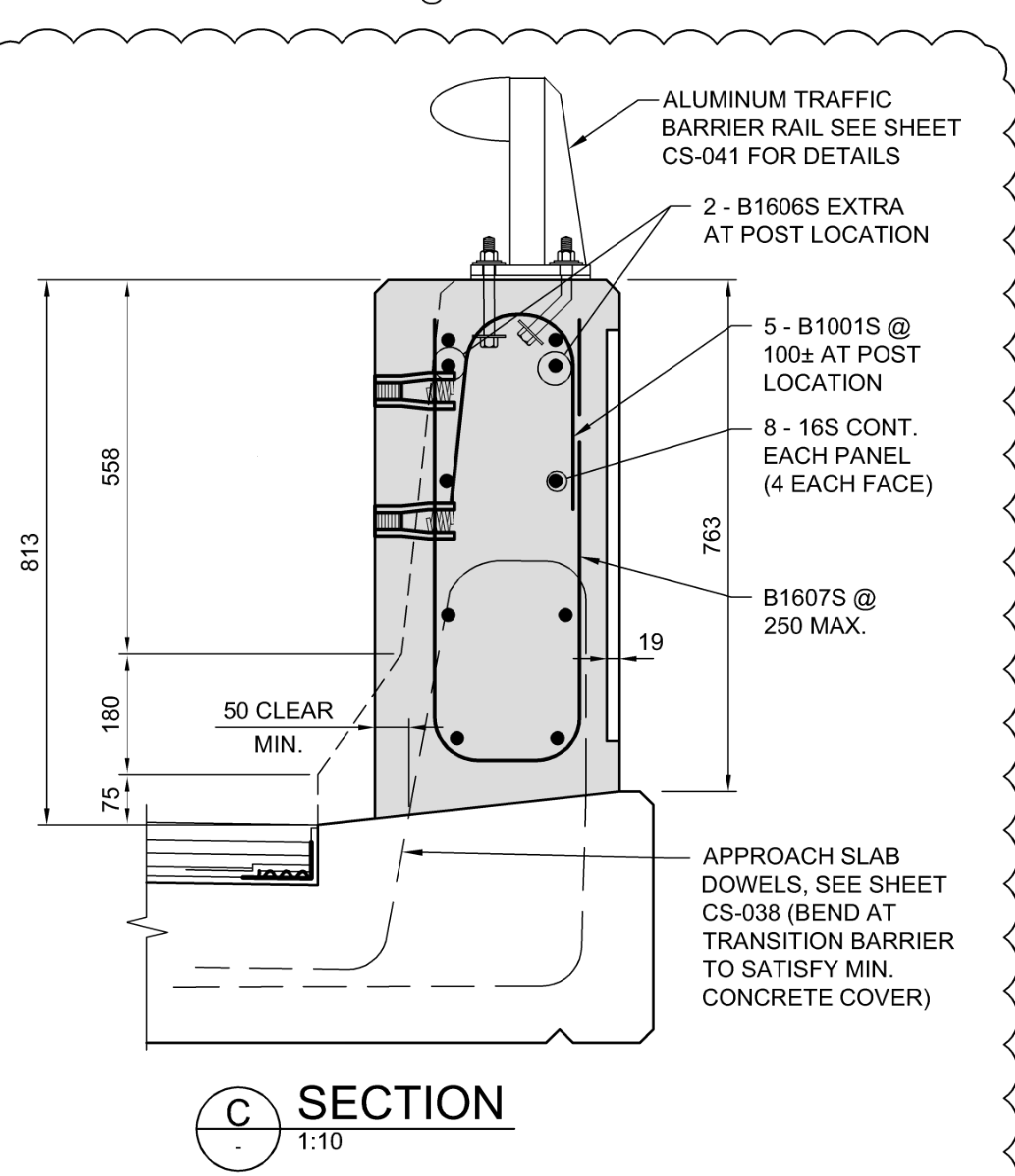
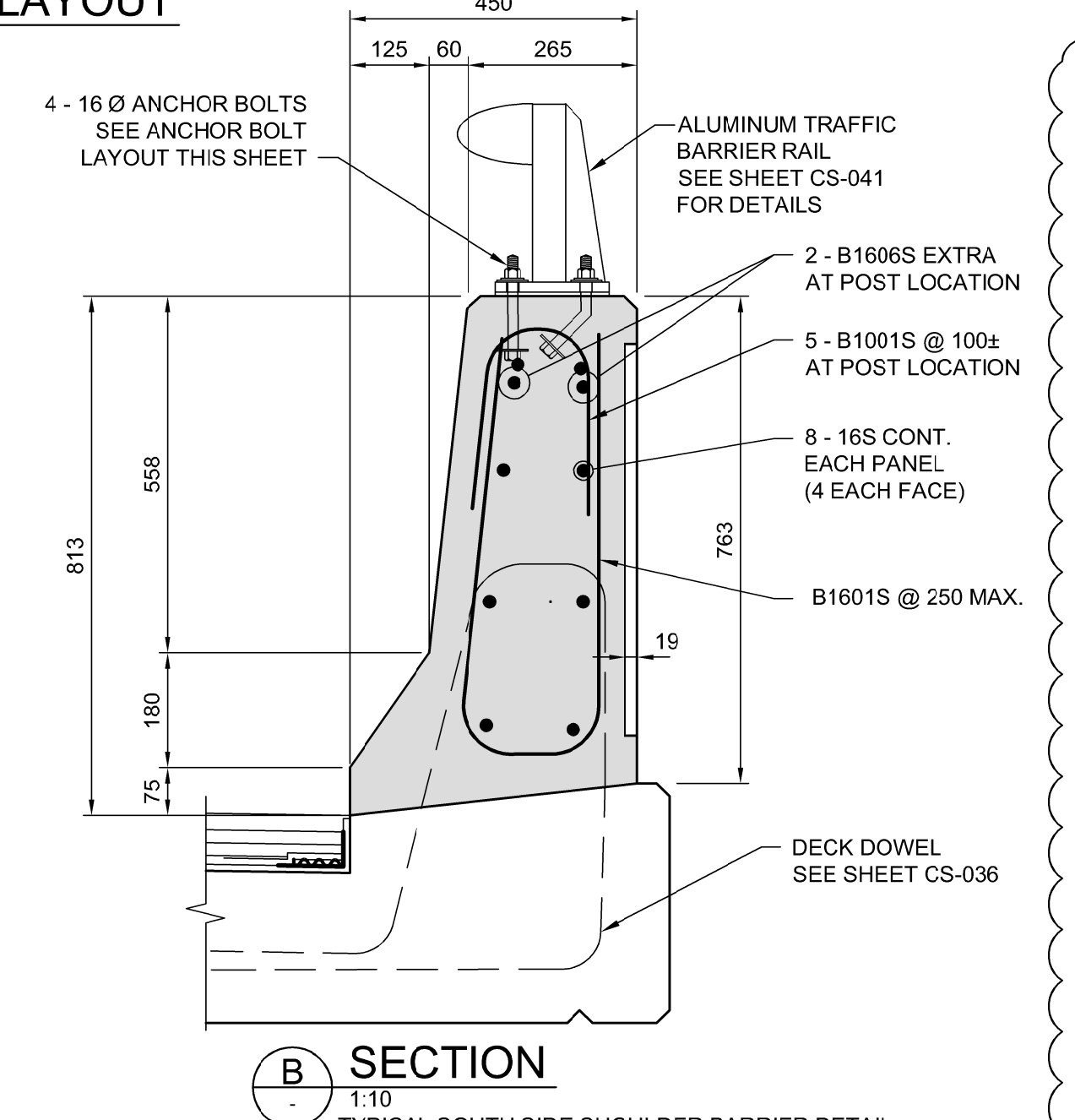
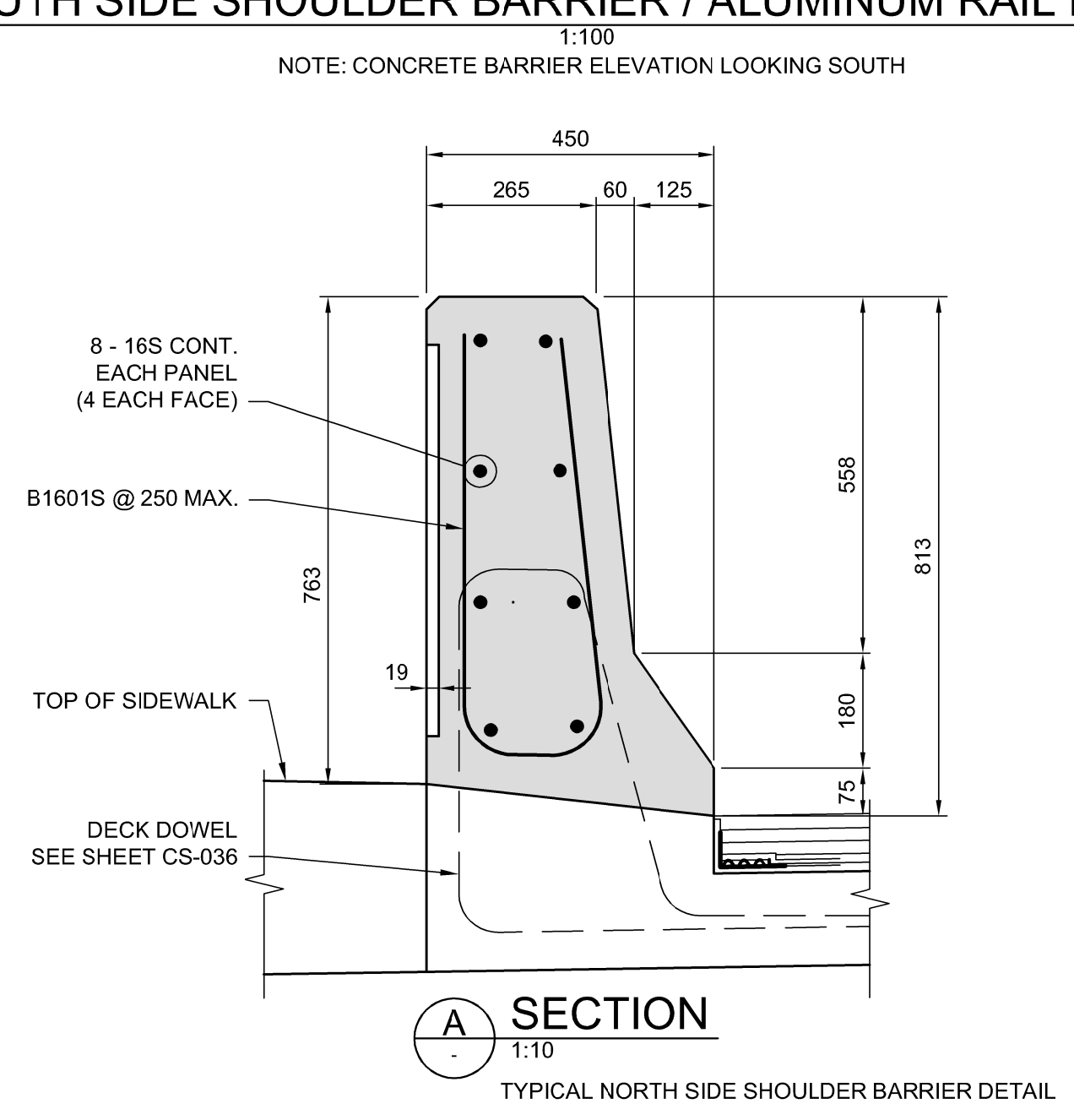


TYPICAL CONSTRUCTION JOINT DETAIL FOR CONCRETE BARRIER
 1:10



TRANSITION BARRIER PANEL "P5S" (1 REQUIRED)
 1:20

NORTH SIDE SHOULDER BARRIER

PANEL TYPE	QTY	No. OF B1601S STIRRUP BARS	LONGITUDINAL BARS
'P1N'	19	13	4-B1602S EA. FACE
'P2N'	2	15	4-B1603S EA. FACE
'P3N'	2	5	4-B1604S EA. FACE
'P4N'	1	14	4-B1605S EA. FACE

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	EXTRA REBAR @ RAILPOSTS
'P1S'	18	13	4-B1602S EA. FACE	
'P2S'	2	15	4-B1603S EA. FACE	2-B1606S
'P3S'	2	5	4-B1604S EA. FACE	5-B1001S EA. OF 19 POST LOCATIONS
'P4S'	1	14	4-B1605S EA. FACE	
'P5S'	1	8 - B1601S 4 - B1607S	4-B1602S EA. FACE	

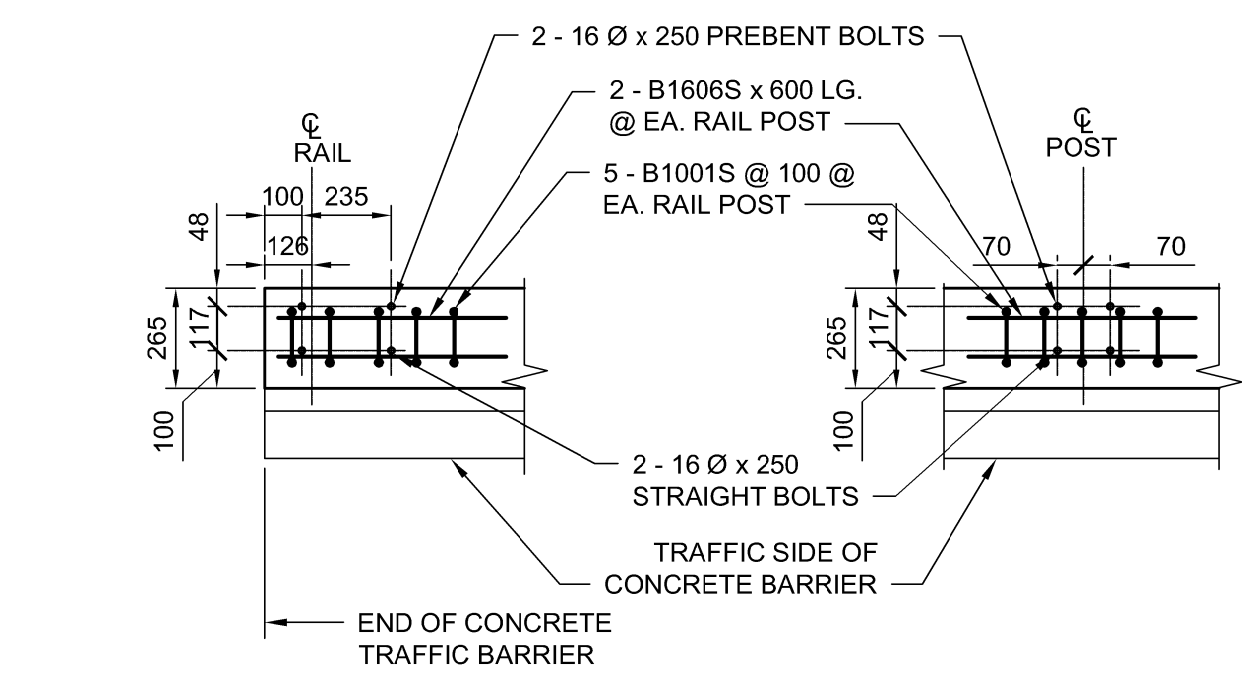
CONSTRUCTION JOINT DOWELS

NO. OF JOINTS	REBAR DOWELS EACH JOINT
23	3 - B2501S

BILL OF MISCELLANEOUS METAL FOR BRIDGE SOUTH BARRIERS

MARK	QTY	DESCRIPTION	UNIT MASS	TOTAL MASS
Y1	5	19 DIA. F-57 DAYTON SUPERIOR STAINLESS STEEL EXPANDED COIL FERRULE INSERT C/W 1 PLATE WASHER	0.38	1.90

TOTAL MASS (kg) = 1.90



TYPICAL ANCHOR BOLT LAYOUT FOR ALUMINUM RAIL POST
 1:20

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

NO.	REVISIONS	DATE	BY	DATE
1	ADDENDUM #5	18/03/16	DRA	
0	ISSUED FOR TENDER	18/02/09	DRA	

DESIGNED BY	CHECKED BY
MS	SSR

DRAWN BY	APPROVED BY
NBG / DB	MBL

HOR. SCALE	RELEASED FOR CONSTRUCTION
AS SHOWN	
VERTICAL	DATE
AS SHOWN	2018/02/09

ENGINEER'S SEAL
 PROVINCE OF MANITOBA
D.R.C. AMORIM
 Member 33215
 REGISTERED PROFESSIONAL ENGINEER
 CONSULTANT PROJECT NUMBER
 17-5932

THE CITY OF WINNIPEG
 PUBLIC WORKS DEPARTMENT

FERMOR AVENUE BRIDGE OVER SEINE RIVER
 BRIDGE RE-ABILITATION, 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

SHOULDER BARRIER DETAILS 1 OF 2

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