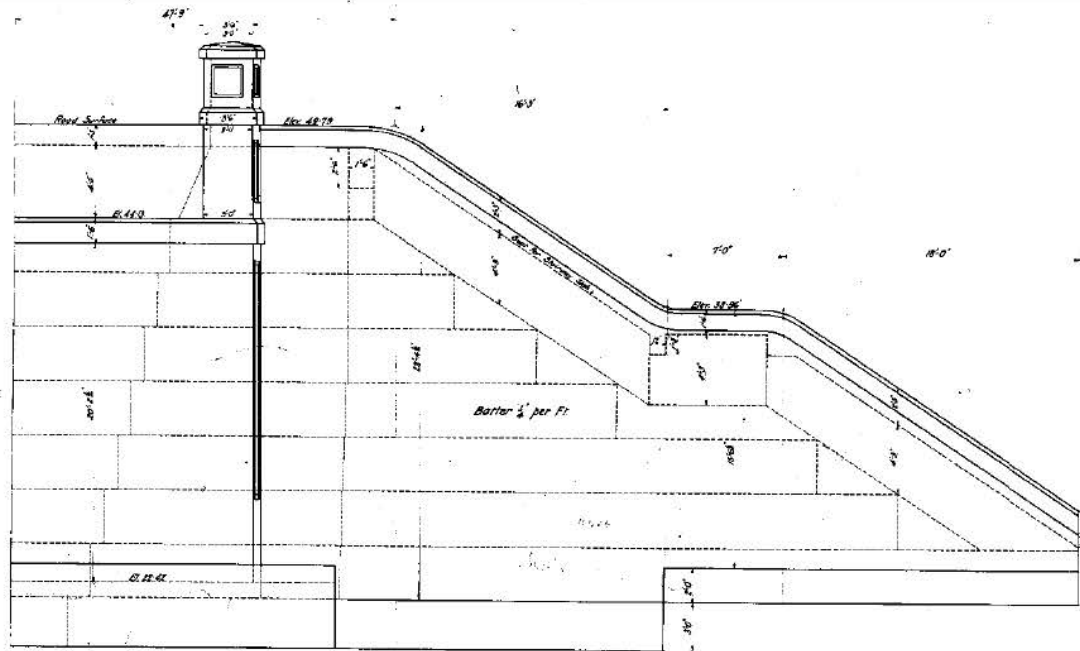


SECTION.

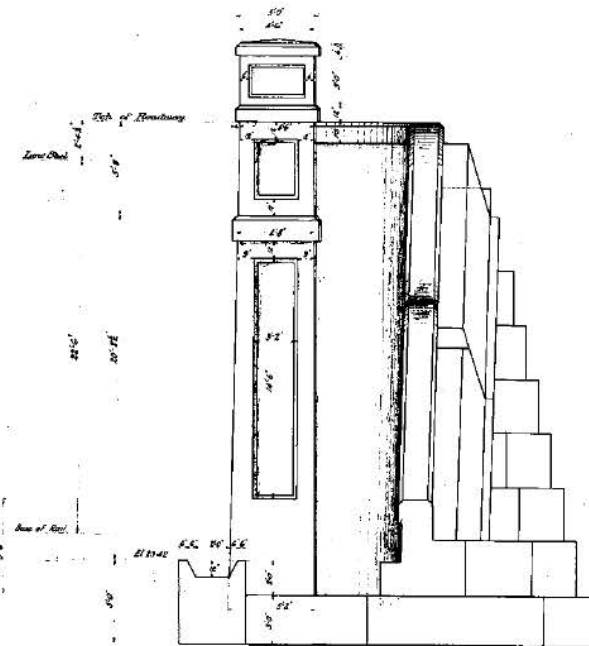
Approved *[Signature]*  
 City Engineer

Approved *[Signature]*  
 Chief Engineer  
*[Signature]*  
 Eng. Grade Separation

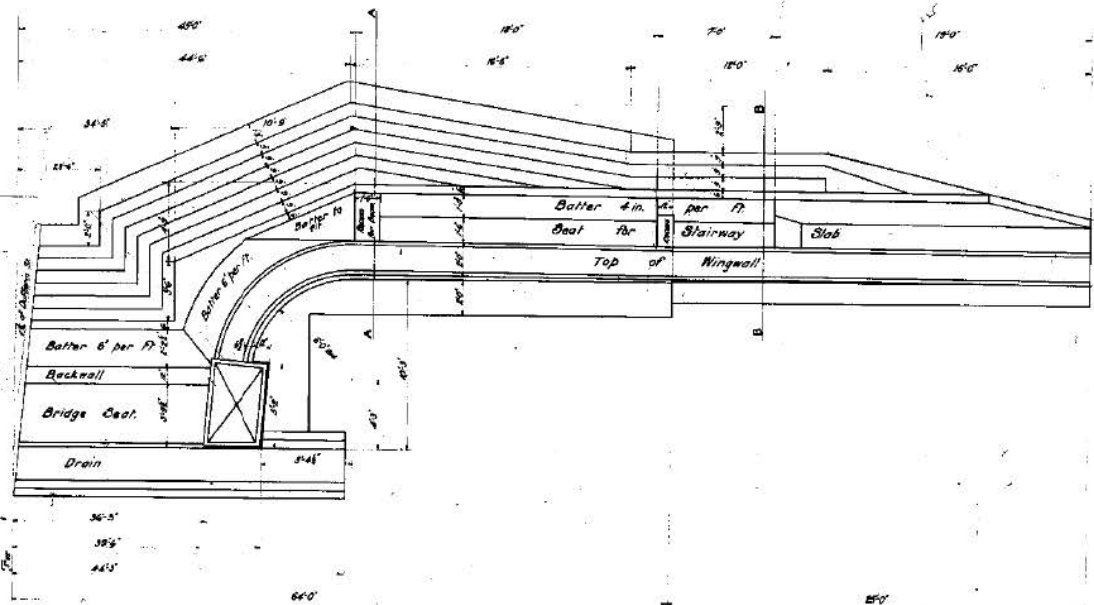
**GRAND TRUNK RAILWAY SYSTEM**  
**TORONTO GRADE SEPARATION**  
 Plan showing Platforms & Stairways  
 EXHIBITION GROUNDS  
 Scales: 40' & 10' to 1'  
 Office of Eng. Grade Separation  
 Mi. 2.38.0A



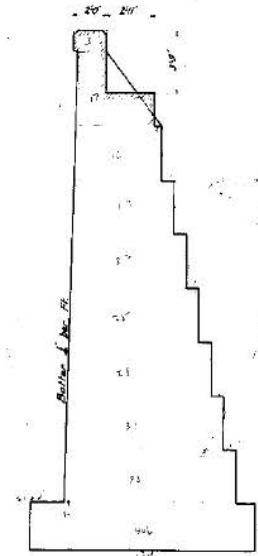
FRONT ELEVATION



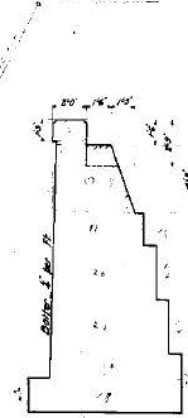
END ELEVATION



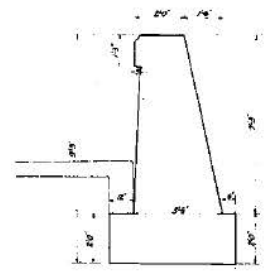
PLAN



SECTION A.A.



SECTION B.B.



DETAIL OF WALL ALONG PLATFORM  
Scale 1/2" = 1' - 0"

*J. Swainson*  
Eng. Grade Separation

7  
M.C. 350A

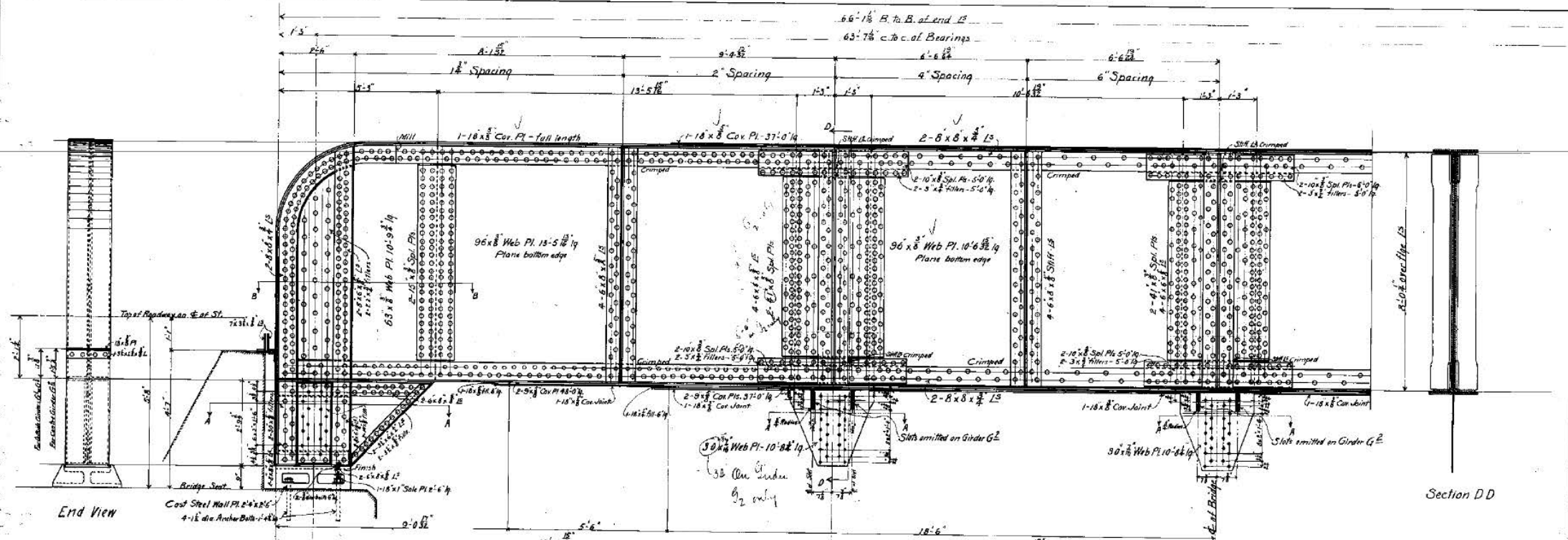
GRAND TRUNK RAILWAY SYSTEM  
TORONTO GRADE SEPARATION  
DUFFERIN STREET HIGHWAY BRIDGE

AMENDED PLAN OF WEST WING  
SOUTH ABUTMENT.

Scale 1/2" = 1' - 0"

Drawn by L.H.H.  
Checked by W.R.S.

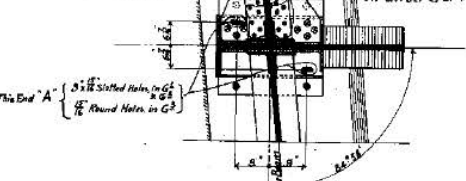
Office of  
Eng. Grade Separation  
Toronto, Ontario



INSIDE ELEVATION OF GIRDER G<sup>1</sup>

Centre Girder G<sup>2</sup>, same as Girder G<sup>1</sup>, except difference in location of shelf Angle as shown in End View, also Bottom Flange connection at Shoe & Slots in Web omitted, as noted -  
 Girder G<sup>3</sup> same as Girder G<sup>1</sup>, except difference in location of Expansion Holes, as noted -

END "A"

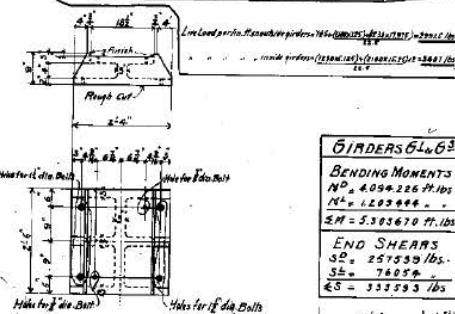


SECTIONAL PLAN ON LINES AA

DISTRIBUTION OF LIVE LOADS

Span	1st	2nd	3rd	4th	5th	6th	7th	8th	9th	10th
100'	100'	100'	100'	100'	100'	100'	100'	100'	100'	100'

All loads per lin. ft. of bridge



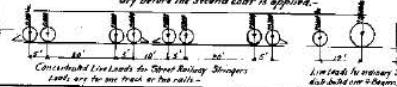
Wall Plate WP  
 6 Req'd. - Cast Steel

GIRDERS G <sup>1</sup> & G <sup>3</sup>	GIRDER G <sup>2</sup>
<b>BENDING MOMENTS</b>	<b>BENDING MOMENTS</b>
M <sub>0</sub> = 4,094,226 Ft. lbs.	M <sub>0</sub> = 4,094,226 Ft. lbs.
M <sub>1</sub> = 1,203,444 "	M <sub>1</sub> = 1,713,108 "
M <sub>2</sub> = 5,903,670 Ft. lbs.	M <sub>2</sub> = 5,811,334 Ft. lbs.
<b>END SHEARS</b>	<b>END SHEARS</b>
S <sub>2</sub> = 257,539 lbs.	S <sub>2</sub> = 257,539 lbs.
S <sub>3</sub> = 78,074 "	S <sub>3</sub> = 108,103 "
S <sub>5</sub> = 333,593 lbs.	S <sub>5</sub> = 365,162 lbs.

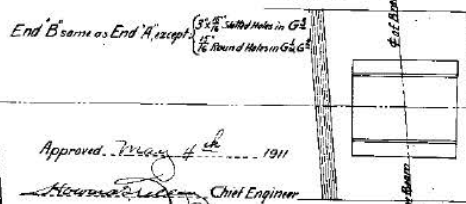
GENERAL NOTES

Specifications: City of Toronto general specifications for Bridges  
 & Structures dated 1909  
 Class A loadings -  
 Girders G<sup>1</sup>, G<sup>2</sup>, G<sup>3</sup> 230 lbs. per lin. ft. per girder -  
 Girder G<sup>4</sup> 340 lbs. per lin. ft. per girder -  
 Floor Beams Concentrated Loads as per diagram  
 Stringers as shown  
 Dead Loads -  
 Girders Assumed at 800 lbs. per lin. ft. per girder -  
 Decking 100 lbs. per sq. ft. -  
 Material -  
 Rivets - Open holes 1/2 in. diam. in flanges shall be repaired & larger than the size used in punching the holes. All holes in steel members shall be thick and in the flanges of rolled beams shall be drilled from the solid.  
 Painting -  
 Steel work before leaving the shop shall be given one coat of painted lead mixed with pure linseed oil - After erection all surfaces in contact with concrete or masonry shall be given two coats of pure red lead mixed with pure linseed oil, and all other surfaces are to be given three coats of approved black carbonyl paint the first coat being allowed to dry before the second coat is applied.

Position of Loads for Maximum Floor Beam Concentration.



END "B"



Approved: [Signature] 1911  
 Chief Engineer  
 Approved: [Signature] 1911  
 City Engineer of Toronto

G.T.R.Y.  
 TORONTO GRADE SEPARATION  
 MIDDLE DIVISION 15th DISTRICT  
 BRIDGE No. \_\_\_\_\_ MILE \_\_\_\_\_  
 HIGHWAY BRIDGE  
 DUFFERIN ST. TORONTO  
 DETAILS OF MAIN GIRDERS  
 April 20, 1911  
 Revised Aug. 16, 1911  
 Scale 1/4" = 1'-0"  
 Drawn by P.G.  
 Checked by  
 Drawing No.