

## Bureau of Project Delivery Bridge Design and Technology Division

### BRADD

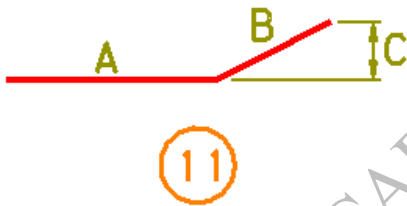
No. 039  
November 4, 2014

### Integral Abutments: "C" Dimension For Type 11 Wingwall Bars

Since the release of BRADD v3.2.1.0, an issue with a rebar dimension for integral abutment wingwall bars has been reported. This issue has been present in BRADD since BRADD v3.2.0.0. This issue, its symptoms, and any workarounds are listed below.

#### 1) Problem Statement:

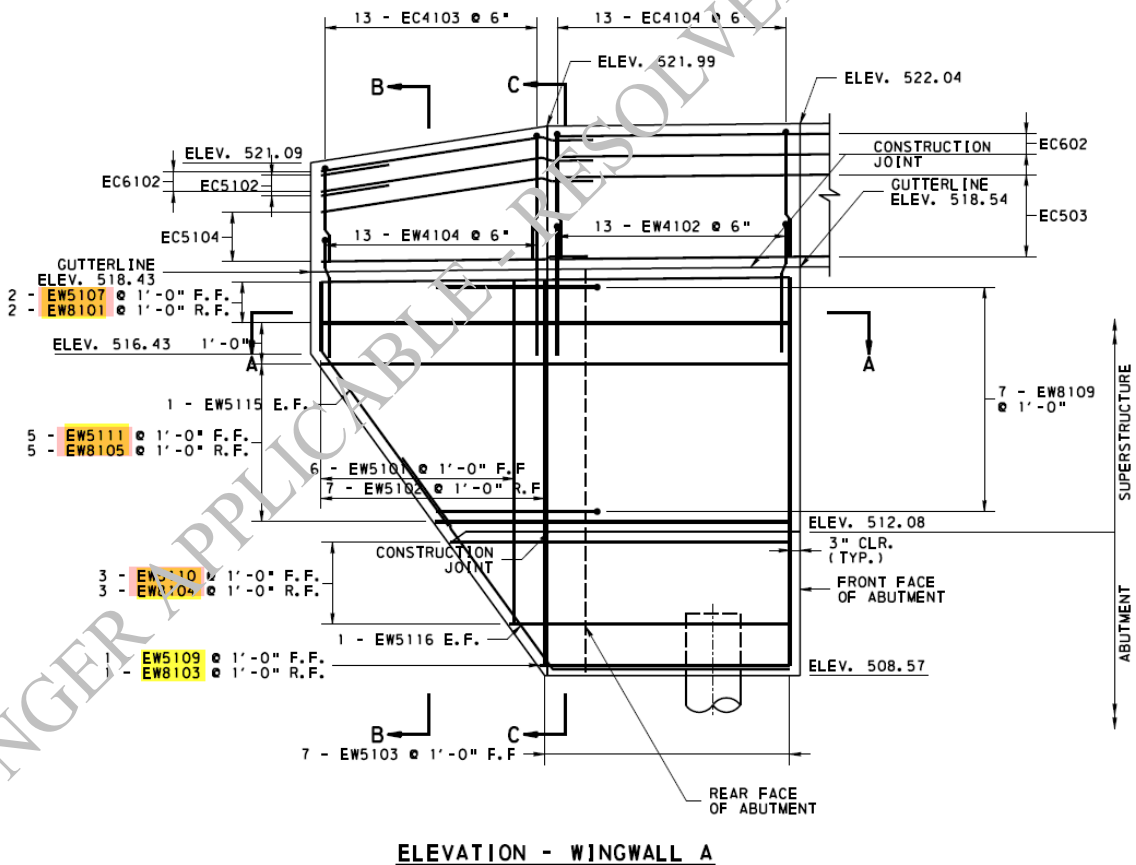
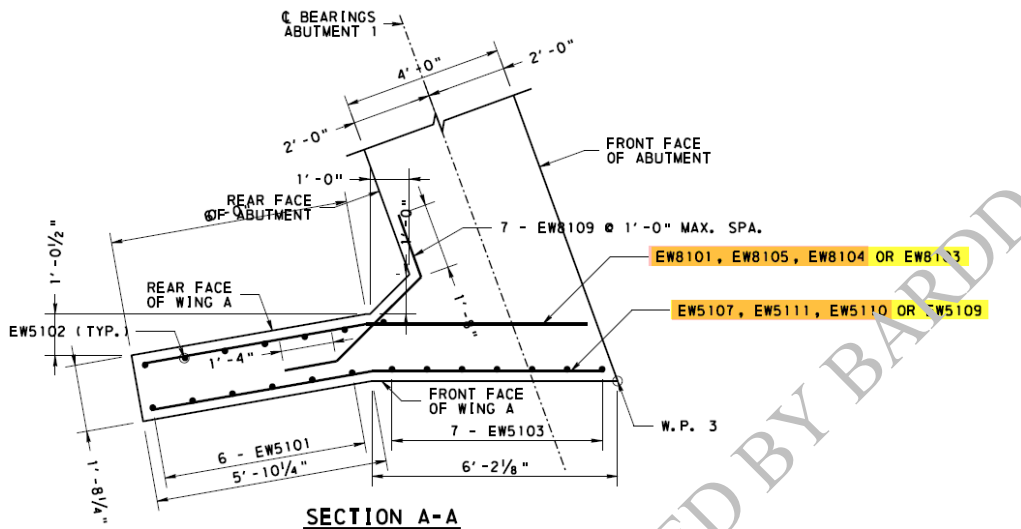
For integral abutment bridges, the "C" dimensions on Type 11 bar bends for the horizontal bars extending from the front face of the abutment to the end of the wingwall, are incorrect. The "C" dimension is not included in the total length of a Type 11 bar bend and is only used to describe the offset from the line of the "A" dimension that the "B" dimension is bent.



The bars in question are displayed in the example plan and elevation details on the following pages as the orange-highlighted FW bars.

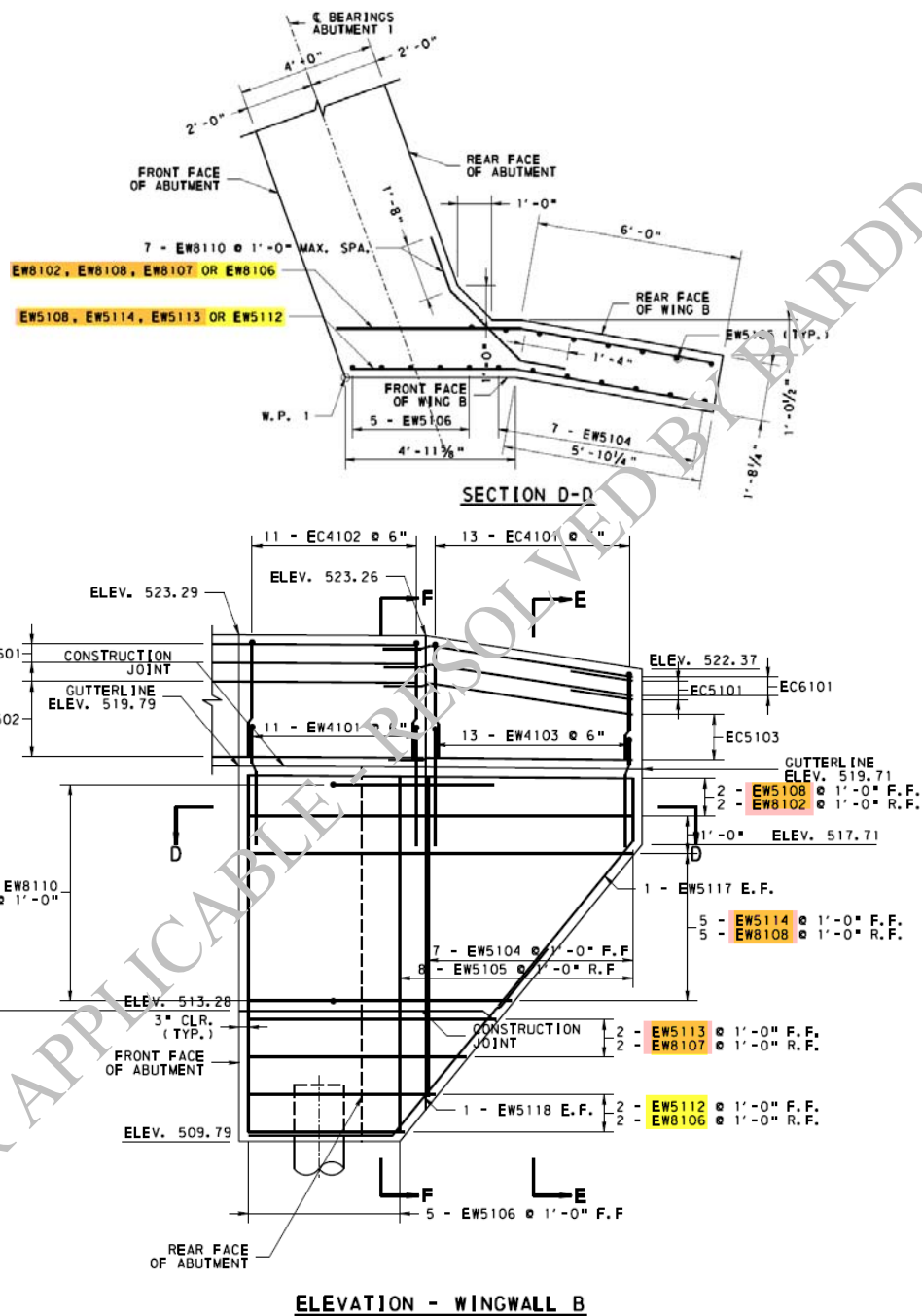
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This error does not appear to affect any other bars or dimensions.

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**Problem Workaround:**

Manually correct the values of the "C" dimension in the bar table for these type 11 bars shown with orange highlighting. Note, for this example, the bars EW5109, EW5112, EW8103, and EW8106 are too short to be bent. As straight bars they do not need to be changed.

EW5107	5	2	11'-5 3/8"	11	5'-10"	5'-7 3/8"	3'-4 1/2"				
EW5108	5	2	10'-5 1/8"	11	4'-9 3/4"	5'-7 3/8"	3'-3 3/8"				
EW5109	5	1	5'-10"	STR							
EW5110	5	3	7'-8 3/8"	11	5'-10"	1'-10 3/8"	3'-4 1/2"				
EW5111	5	5	10'-2 3/8" TO 10'-1 1/8"	11	5'-10"	VARIES	3'-4 1/2"				B VARIES 4'-4 3/4" TO 5'-1 1/8" VARIES 1 EA. BY 2 1/2" VARIES 1 EA. BY 9 3/8"
EW5112	5	2	3'-10 3/8" TO 4'-8 1/4"	STR							
EW5113	5	2	5'-9 3/8" TO 6'-7 1/2"	11	4'-9 3/4"	VARIES	3'-3 3/8"				B VARIES 1'-0" TO 1'-9 3/4" VARIES 1 EA. BY 9 3/4"
EW5114	5	5	8'-8 1/8" TO 10'-3 1/2"	11	4'-9 3/4"	VARIES	3'-3 3/8"				B VARIES 3'-10 1/2" TO 5'-5 3/4" VARIES 1 EA. BY 4 3/8"
EW5115	5	2	5'-10 3/4"	STR							
EW5116	5	2	10'-7 1/2"	56	5'-10 1/4"	1 3/8"	4'-7 7/8"	1 1/8"	4'-7 1/2"		
EW5117	5	2	6'-3 3/8"	STR							
EW5118	5	2	9'-11 1/8"	56	3'-10 3/8"	1'-3 3/8"	4'-8 1/8"	11 1/8"	11 1/8"		
EW8101	8	2	11'-2 3/4"	11	5'-6 1/8"	5'-8 3/8"	1'-11"				
EW8102	8	2	11'-0 3/8"	11	5'-4 1/4"	5'-8 3/8"	4'-10 3/8"				
EW8103	8	1	5'-10"	STR							
EW8104	8	3	7'-6"	11	5'-6 1/8"	1'-11 1/8"	1'-11"				
EW8105	8	5	5'-9 3/8" TO 10'-0"	11	5'-6 1/8"	VARIES	1'-11"				B VARIES 4'-6" TO 5'-2 3/8" VARIES 1 EA. BY 2 1/2" VARIES 1 EA. BY 9 3/8"
EW8106	8	2	3'-10 3/8" TO 4'-8 1/4"	STR							
EW8107	8	2	4'-8 1/4" TO 14'-3 3/8"	11	VARIES	VARIES	VARIES				A VARIES 5'-2 1/4" TO 5'-2 3/8" VARIES 1 EA. BY 3/8" B VARIES 9'-1 1/2" TO 5'-8 3/8" VARIES 1 EA. BY 3'-5 3/8" C VARIES 4'-9 1/2" TO 4'-9 3/4" VARIES 1 EA. BY 1/4"
EW8108	8	5	4'-8 1/4" TO 11'-5 3/8"	11	VARIES	VARIES	VARIES				A VARIES 5'-3 1/4" TO 5'-3 1/2" VARIES 1 EA. BY 1/8" B VARIES 6'-2 1/2" TO 7'-5" VARIES 1 EA. BY 3 3/8" C VARIES 4'-10" TO 4'-10 1/4" VARIES 1 EA. BY 1/8"
EW8109	8	7	6'-8 1/4"	54	1'-8"	3'-8 1/4"	1'-8"	9 1/8"	1'-6 1/8"		
EW8110	8	7	6'-4 1/4"	54	4"	3'-4 1/4"	1'-8"	9 1/8"	8 3/8"		

**Problem Resolution:**

This issue will be resolved in the next release of BRADD, Version v3.2.2.0, which is due to be released in the summer of 2015.

Please direct any questions to:

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