Comments received by TCP (000-00152)			
TCP Comment ID	Organization	Comment	Discussion/ Response
1	Individual	R3 (with note 4) seems to be insufficiently embedded. The hook should be embedded ldh at least, probably longer due to >90 degree bend. Clearly the SSD is intending R4 to be fully developed, so likewise R3 should also be fully developed. As drawn (not to scale) LD3 for R1, R2 seems too short to compensate for deficiency in R3, and arguably would need the extra moment arm since the wingwall design is for length L, and L+1m creates much greater flexural tension on rebar (hence the cleat is needed). The principle at stake can be viewed at the other end of the same rebar, where the bar extends to the outside face of the wingwall, which is appropriate. Otherwise, the wingwall will be weaker in flexure than needed. Recommend changing SSD and especially Note 4 to indicate appropriate hook embedment, or to say "front face".	**Agreed with the comment.** **R3 reinforcing bars need full embedment like R4 reinforcing bars.** **The SSD is revised with an instruction to the designer to detail R3, R4 reinforcing bars providing sufficient embedment into the abutment as required by the design of the wingwall.**

Comments received by email			
Number	Organization	Comment	Response
1	MTO West Region	The length of the wingwall is usually shown from the centreline of the bearings. See sketch below. On rigid frame bridges, the length is shown to the front face of the abutment. In the wingwall design memo, Figure 1 shows the length of the wingwall (Lw) to the back of the abutment. I think this should revised to the centre of the bearings or front face of the abutment, depending on the type of bridge?	**The dimension Lw is changed and now it is the distance of the end of the wingwall from front face of the abutment. Also, a new equation included in the memo under the "Length of the Wingwall" to calculate the wingwall design length, L form Lw.**
2	MTO West Region	In WINGWALL DESIGN TABLE, e.g., Page 7, h and slope should be assumed to be 1500mm and 2:1 respectively. S should be 800mm. Otherwise, Mf and Vf can't be developed in the table. I see h and slope are specified in the drawing attached, but not in the design tables.	**Agreed and the values for h, S and the bottom slope of the wingwalls added in the design aids.**
3	MTO West Region	Consider R6@150 on wingwall abutment side	**Closely spaced R6 bars at the expansion joint area not feasible. It will create difficulty to build the deck/curb in in the block out area. Also, this end of the wingwall is not considered as an end panel as it is fully supported on abutment and ballast wall.**
4	MTO Northwestern Region	May consider showing elevation view of R6 bars at post locations. Similar to SS110-37 shown above, you may consider showing the desired locations of the R6 bars.	**SS105-11 and SS105-12 are revised with new language.**