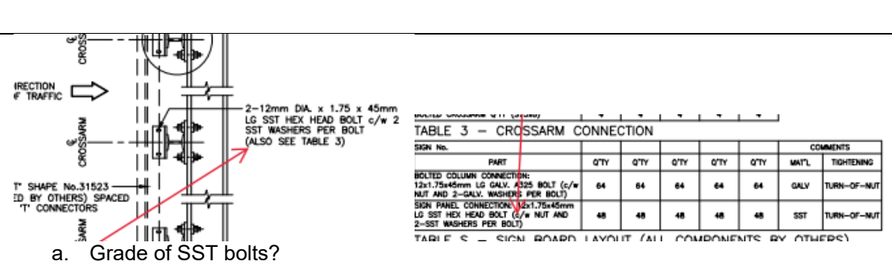
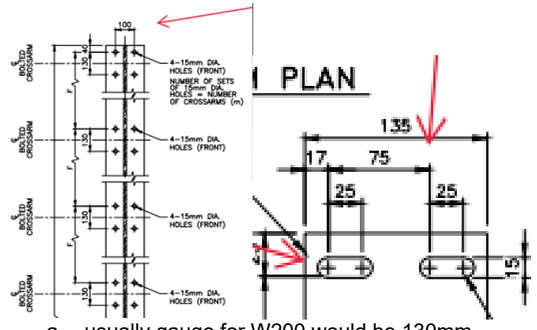
Comments (TCP# 000-0204)			
No.	**Office/Section**	**Comment**	**Discussion/ Response**
1	NER	1. As a suggestion add which OPSS the concrete and structural steel, should be bid and constructed under might be added to the Notes to Designer. If the expectation is OPSS.PROV 904, CAIS 904, then a statement to reflect this expectations. Or if only a portion of the OPSS.PROV would help OD staff tender and administer the works with a NSSP. 2. Notes: Point 8. “7 days later” or state a minimum 20 MPa strength to be achieved, thus the Constructor would know that early break cylinders are required. This strength may not be achieved if the placement is in late October or November in Northern Ontario.	1. OPSS 915 makes all appropriate references for the construction of roadside sign support structures. It is not common to make references to OPSS on the drawings as the drawings supersede the OPSS in the order of precedence. 2. It is preferable to avoid early break cylinders in this case and make the work flow more predictable. 20MPa concrete strength is not required for this operation.
2	W R	1. Question - Without breakaway connections this detail would require a 12m(+/-) (40’) long continuous column from bottom of footing to top of sign. This might be tricky to have 4 of them installed on the same plane with limited adjustments. In addition if a post is struck (if something gets through the barrier) how are we replacing / repairing? Would a bolted detail at the base allow for construction tolerance adjustments with a field drilled splice plate? 2. Scale of section 3 appears to be off, 210mm column in a 450mm drilled shaft would have 120mm edge distance from steel column to caisson face, is the footing 450mm diameter large enough? If the hole isn’t drilled perfectly the edge distance along the footing (Df) will likely be less than 120mm especially considering the above. 3. Should a spiral be incorporated in the top of the caisson around the steel column section to prevent edge breakout and confine the concrete (further to the above issue) in the “sonovoid” region.	1. The drawing has been modified to provide an optional field splice. 2. We have had good experience using 450mm diameter caissons with 210mm column size. 3. See response to 2 above.
3	NWR	1.  a. Grade of SST bolts? 2.  a. usually gauge for W200 would be 130mm	1. These comments have been incorporated into the revised drawing.

Ontario

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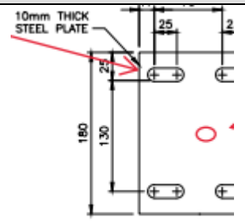
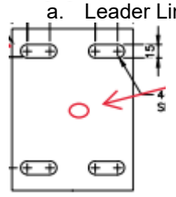
		3.  B CONNECTOR P a. Leader Line not on CL  4. NECTOR PLATE a. Consider drain hole for galv to prevent blow-out during dipping NOTES: 1. ALL STRUCTURAL STEEL SHALL CONFORM TO CSA 40.20/G40.21 GRADE 300W AND HOT DIP GALVANIZED.. 2. ALL BOLTS, NUTS, AND WASHERS FOR CROSSARM CONNECTIONS SHALL CONFORM TO ASTM F3125 GRADE A325M AND BE HOT DIP GALVANIZED. 3. SPECIFIED 28-DAY COMPRESSIVE STRENGTH OF CONCRETE SHALL BE 30 MPa. 4. CONCRETE TO BE PLACED AGAINST UNDISTURBED GROUND IN AUGERED HOLE. 5. TOP SURFACE OF FOOTING SHALL BE DOMED. 6. EL.P_1, EL.P_2, EL.P_3, OR EL.P_4 DENOTES ELEVATION OF TOP OF FOOTING CONCRETE. 7. THE COLUMNS SHALL BE INSTALLED AND HELD IN CORRECT POSITION UNTIL THE CONCRETE HAS PROPERLY SET. 8. SIGN BOARD SHALL NOT BE ERECTED UNTIL 7 DAYS AFTER CONCRETE HAS PROPERLY BEEN PLACED. 9. FOR TURN-OF-NUT TIGHTENING METHOD, THE BOLTS SHALL BE FIRST BROUGHT TO A SNUG-TIGHT CONDITION, AND THEN FURTHER TIGHTENED BY $\frac{1}{3}$ OF OF A TURN. SNUG-TIGHT IS THE TIGHTNESS ATTAINED BY THE FULL EFFORT OF A MAN USING A SPUD WRENCH. 10. COLUMN HEIGHT ABOVE GROUND SHALL NOT EXCEED 8.5m. 5. a. Gender?	
4	**Individual**	The wording "SIGN MUST NOT BE EXPOSED TO TRAFFIC OR PROTECTED BY A BARRIER..." is confusing, consider rewording, e.g. "SIGN MUST BE PROTECTED BY A BARRIER... OR NOT BE EXPOSED TO TRAFFIC...". Increase the size of the SBGR icon so it is more in scale with the 3.9x7.9 sign. The SBGR will generally not have the post placed in the paved shoulder like shown.	Comment incorporated in the revised drawing.