**LOOP INSTALLATION NOTES**

1. Install the Junction Box and the stub-out conduit with Sch. 80 PVC stub-out sleeve. Conduit for the loop stub-out shall be as required in the conduit size table shown on sheet 1 of this set.

2. Lay out loops and loop lead-ins to miss cracks/joints in road, when possible. Maintain 18" (in) minimum clearance from manholes and valve boxes.

3. The opening around the loop stub shall be patched with matching paving material if opened larger than PVC sleeve + 2" (in).

4. Sawout the loop slots and the lead-in slots. File edges to remove burr of all saw-cuts into stub out sleeve.

5. Lay out the loop wire starting at the Junction Box, allowing 5' (ft) minimum slack.

6. Install the wire in the loop slot as shown.

7. Finish laying out the wire at the Junction Box and identify the leads with the loop number, the “5” for start and the “F” for the finish, the loop series number, and the loop lead-in conductor number.

8. Twist each pair of the lead-in wires a minimum of two times per foot each foot, from the loop to the Junction Box. Reverse the direction of the twist for each successive pair installed. Seal loops/sawcuts.

9. Construct a supplemental splice containing any series loop connections in the adjacent junction box as required in the plans. Supplemental splices are subject to the same requirements shown for the loop lead-in and the shielded cable splice.

10. Splice the loop lead-ins to the shielded cable as noted in the Contract. See Standard Plan J-50.05 for Loop Splice details.

11. All loop circuits shall be tested per Standard Specification Section 8-20.3(14D) once installation is complete.

12. Existing stub-out shall be upgraded as necessary to conform to the conduit size table shown on sheet 1.

13. All loop lead-in sawcuts parallel to lane edge shall be at least 12" (in) from edge of pavement and within six inches outside of lane or fog line when possible. Maintain 12" (in) separation between parallel cuts or joints.

14. The loop stub-out sleeve shall have an inside diameter of 1" (in) larger than the outside diameter of the End Bell Bushing. Sleeve shall be notched 5/8" (in) to 3/4" (in) to accommodate loop wires. Plug conduit and fill sleeve with sand until loops are installed to keep out Hot Asphalt during paving operations.

**INDUCTION LOOP DETAILS**

**STANDARD PLAN J-50.15-01**

Sheets 2 of 3

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Washington State Department of Transportation

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