

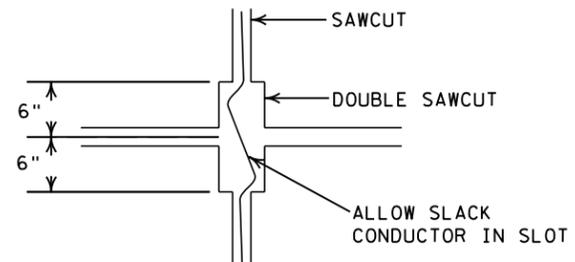
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 REVISED 6/27/18

- SAWCUT DETECTORS IN RAMPS & LOOPS ARE VARIABLE SIZED, AND INSTALLED IN THE CENTER OF THE LANE.
- THE LOOP DETECTOR CONDUCTOR IS 1/C NO.14 COPPER, XLPE OR XHHW INSULATED WIRE. THE WIRE IS CONTAINED IN A FLEXIBLE POLYETHYLENE TUBING.
- USE A SEALANT MADE SPECIFICALLY TO SEAL LOOP DETECTOR SAWCUTS IN CONCRETE ROADWAYS. USE AN APPROVED SEALANT IN BITUMINOUS ROADWAYS AND CONCRETE ROADWAYS THAT ARE TO BE OVERLAYS WITH BITUMINOUS.

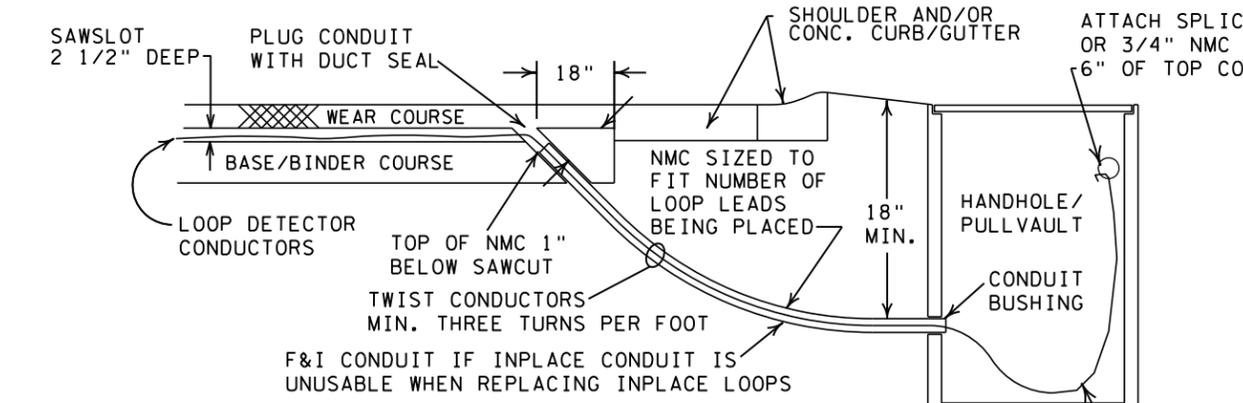
### METHOD

- CLEAN ALL DEBRIS FROM THE ENTIRE LOOP DETECTOR AREA.
- MARK THE LOOP SAWCUTS ON THE ROADWAY.  
NOTE: LOCATE LOOPS IN PAVEMENT TO MINIMIZE THE CROSSING OF JOINTS AND CRACKS WITHIN THE PAVEMENT.
- SAW THE CUT TO 2 1/2" +/- 1/4" DEEP BY 1/8" WIDER THAN THE "OD" OF THE CONDUCTOR. SMOOTH THE BOTTOM AND ANGLES TO PREVENT DAMAGE TO INSULATION.
- REAM THE CONDUIT ENDS. PLUG THE CONDUIT IN THE ROADWAY TO PREVENT THE LOOP SEALANT FROM ENTERING THE CONDUIT.
- DRILL THE CORNERS 1/4" DEEPER THAN THE SAW SLOT AND SMOOTH THE HOLE CORNERS.
- CLEAN AND DRY THE ENTIRE LOOP DETECTOR AREA.
- F&I BEAD OF LOOP DETECTOR SEALANT TO WITHIN 6" OF LOOP CONDUCTORS CONDUIT. PLACE CLEAN, DRY LOOP CONDUCTOR STAYING TO THE OUTSIDE OF THE CORNERS. DO NOT PLACE THE CONDUCTOR TIGHT. PUSH THE CONDUCTORS TO THE BOTTOM OF THE SAWSLIT WITH A BLUNT TOOL.
- PLACE 3/4" DIAMETER BY 2" FOAM BACKER ROD AT 2.0' INTERVALS TO HOLD THE CONDUCTOR AT THE BOTTOM OF THE SAWCUT. PLACE LOOP SEALANT.
- F&I CONDUCTOR PER JOINT/CRACK DETAIL EACH TIME A JOINT OR PAVEMENT CRACK IS CROSSED.
- TWIST THE CONDUCTORS 3 TURNS PER FOOT IN THE CONDUIT FROM THE ROADWAY TO THE SPLICE WITHIN THE HANDHOLE.
- SOLDER THE LOOP CONDUCTOR TO LEAD-IN LEAVING THE JOINTS STAGGERED. ROUGHEN CABLE JACKET WITH SANDPAPER. PLACE IT INTO SPLICE ENCAPSULATOR WITH A PLASTIC TUBE AND END CAPS THAT FUNCTION AS SPOUTS. USE A TWO PART INSULATING RESIN, CONFINED IN A UNIPAK, THAT TURNS BLACK WHEN MIXED AND BECOMES HARD WHEN CURED. F&I BOTH LOOP CONDUCTORS AND LEAD-IN WIRE INTO THE SAME END OF THE TUBE AND ENCAPSULATE THE SPLICE.
- SAWCUTS SHALL REMAIN 2.0' FROM OTHER SAWCUTS.
- FILL SAW SLOT UNIFORMLY ACCORDING TO THE LOOP SEALANT MANUFACTURERS RECOMMENDED DEPTH. WIPE ALL EXCESS SEALANT MATERIAL FROM THE ROADWAY SURFACE.

NOTE: ALL SAWCUT LOOP DETECTORS SHALL HAVE 4 TURNS

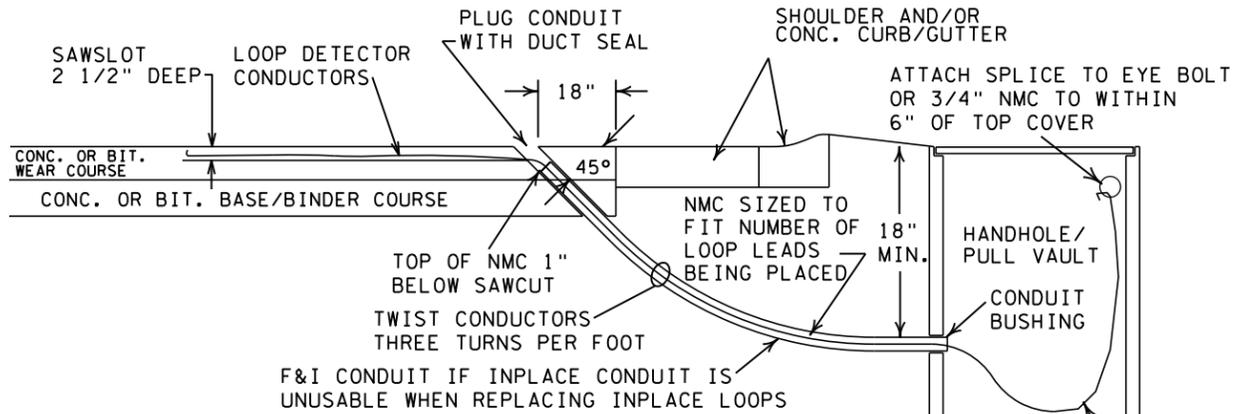


### JOINT/CRACK INSTALLATION



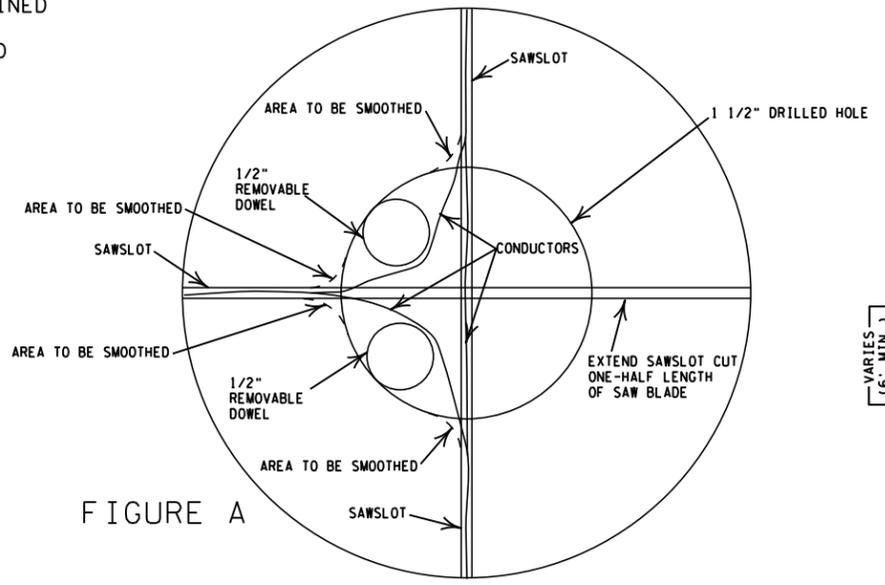
### LOOP/HANDHOLE INSTALLATION (MILL & OVERLAY CONSTRUCTION)

\* NOTE: SAWCUT LOOP DETECTOR BETWEEN BINDER AND WEAR COURSES



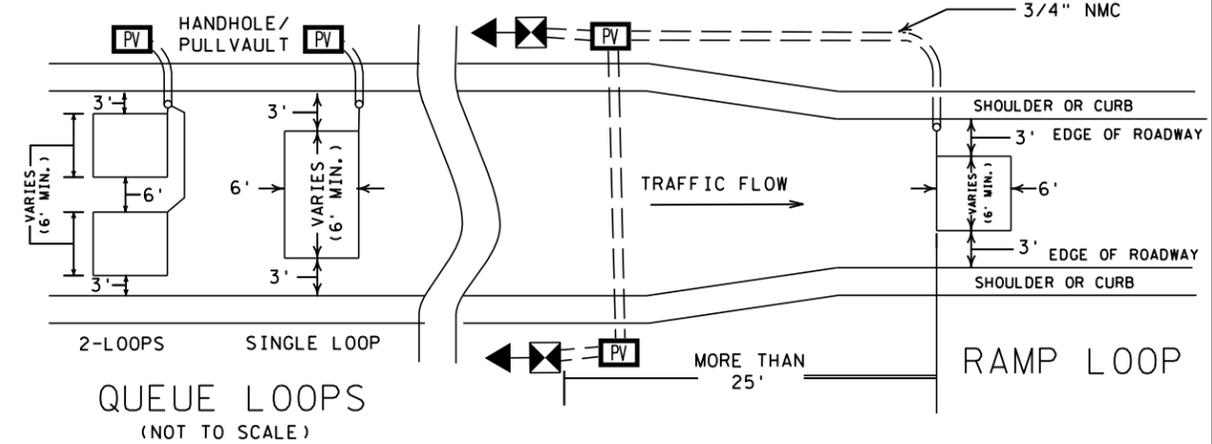
### LOOP/HANDHOLE INSTALLATION (INPLACE ROADWAYS)

\* NOTE: SAWCUT LOOP DETECTOR INTO WEAR COURSE OR CONC. SURFACE

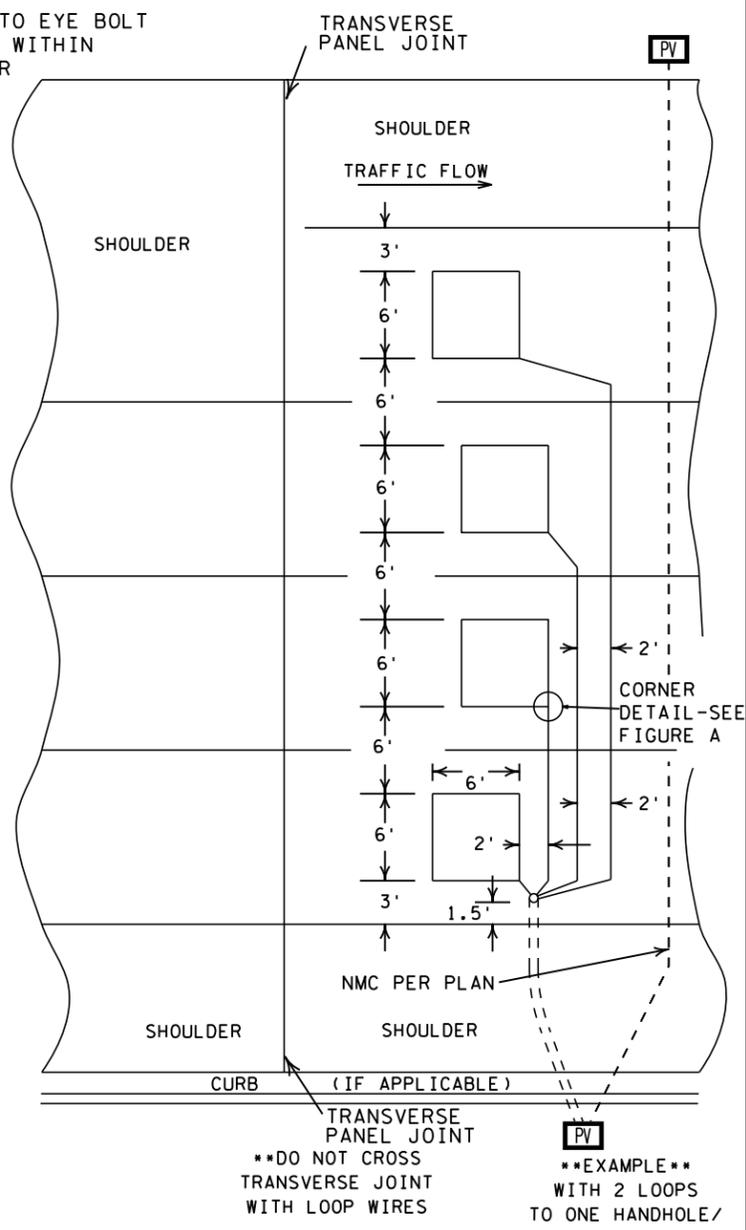


### DRILL SAWCUT CORNERS

NOTE: LOOP LEADS SHALL NOT CROSS TRANSVERSE JOINTS IN CONCRETE PAVEMENT. MOVE A LOOP TO THE NEXT PANEL AND F&I A SEPARATE CONDUIT TO THE HH IF ALL LOOPS WILL NOT FIT ONE PANEL AND MAINTAIN SEPARATIONS SHOWN



### TMS SAWCUT LOOP DETECTOR TYPICAL - PART ONE



### MAINLINE DETECTORS

\*\*DO NOT CROSS TRANSVERSE JOINT WITH LOOP WIRES  
 \*\*EXAMPLE\*\* WITH 2 LOOPS TO ONE HANDHOLE/PULL VAULT