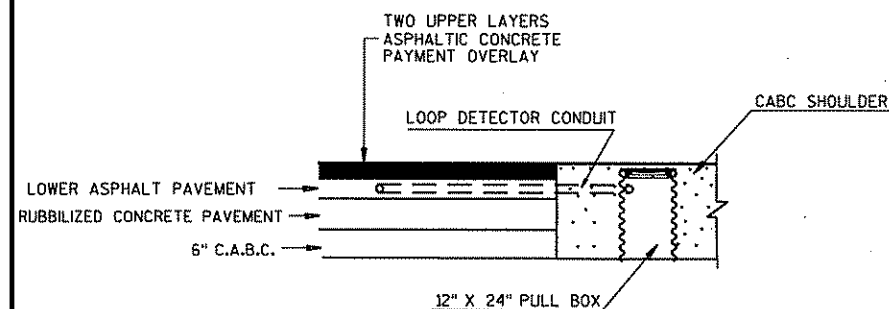


LOCATION OF LOOP DETECTORS  
AND CONCRETE CONTROL BASE  
TO BE DETERMINED BY  
KIM HEISE (920) 362-6360

#### GENERAL NOTE

THE LOCATION OF EXISTING AND PROPOSED UTILITY INSTALLATIONS AS SHOWN ON THE PLANS ARE APPROXIMATE. THERE MAY BE OTHER UTILITY INSTALLATIONS WITHIN THE PROJECT AREA THAT ARE NOT SHOWN. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF ALL UTILITIES PRIOR TO CONSTRUCTION.



#### STANDARD DETAIL DRAWINGS

See the following Standard Detail Drawings (SDD) for further guidance on this installation.

- Conduit
- Pull Box
- Loop Detector Installed in Existing or New Asphaltic Pavement with New Asphaltic Overlay

#### GENERAL NOTES

THE CONTRACTOR SHALL FURNISH THE FOLLOWING PER THIS DETAIL AND AS SHOWN ON CONSTRUCTION DETAIL SHEETS: 1-INCH LOOP DETECTOR CONDUIT, LOOP DETECTOR GROOVES, 3-INCH PVC CONDUIT, 24-INCH X 36-INCH PULL BOXES, 12 AWG LOOP DETECTOR WIRE, TWO CONDUCTOR 14 AWG LOOP DETECTOR LEAD-IN CABLE, AND "TYPE 10" CONCRETE CONTROL CABINET BASE.

THE CONTROL CABINET LOCATION SHALL BE SELECTED BY THE PROJECT ENGINEER IN COORDINATION WITH KIM HEISE (920) 362-6360.

NO TRANSVERSE SAW JOINTS OR PAVEMENT CORING IS ALLOWED 6-FEET EITHER OF THE LOOP AREA.

ALL LOOP INSTALLATIONS SHALL HAVE THE 1-INCH SCHEDULE 40 PVC CONDUIT PITCHED TO DRAIN TOWARD THE PULL BOX.

LOOP WIRE MUST BE INSTALLED IN LOOP DETECTOR CONDUIT BEFORE THE LOOP DETECTOR CONDUIT SYSTEM IS PUT IN PLACE.

EACH LOOP CIRCUIT SHALL BE CONTINUOUS TO THE PULL BOX WITHOUT SPLICES AND FREE FROM GROUNDS. THE RESISTANCE TO GROUND SHALL BE INFINITY AS DETERMINED WITH A MEGGER.

ALL LOOPS TO HAVE THE NUMBER OF TURNS INDICATED ON DETAIL. LOOP WIRE SHALL BE NO. 12 AWG STRANDED COPPER TYPE USE WITH XLP INSTALLATION. THE TWO SINGLE CONDUCTOR STRANDED LOOP WIRES, FROM THE CONDUIT TO PULL BOX SHALL BE TWISTED AT A RATE OF THREE TURNS PER FOOT.

ANTI-SEIZE LUBRICATING MATERIAL SHALL BE USED ON ALL BOLT THREADS BEFORE INSTALLATION.

ENTRANCE HOLES INTO PULL BOXES SHALL CUT WITH A CIRCULAR HOLE SAW OR HYDRAULIC PUNCH. THE HOLE SIZE SHALL BE THE OUTSIDE DIAMETER OF THE CONDUIT OR DUCT THAT IS TO FIT IN THE OPENING PLUS NO MORE THAN 1/4-INCH.

TWO CONDUCTOR NO. 14 AWG. SHIELDED CABLE SHALL BE USED FROM SPLICE CONNECTION AT THE PULL BOX TO THE CONTROL CABINET.

SPLICES OF LOOP WIRE TO LEAD-IN CABLE SHALL BE MADE ONLY IN THE PULL BOX WHICH IS NEAR THE EDGE OF THE ROAD. ALL SPLICES SHALL BE MADE AS SOON AS POSSIBLE AFTER THE WIRES ARE INSTALLED. THE PROPER SPLICE OF A TWO CONDUCTOR CABLE CONSISTS OF TWO SOLDERED JOINTS ENCLOSED IN SINGLE SPLICE KIT. EACH SOLDERED CONNECTION SHALL BE INSULATED FROM ONE ANOTHER. ALL SPLICES SHALL BE MADE WITH EPOXY TYPE SPLICE KITS SUCH AS (3M B2A1) OR APPROVED EQUAL.

IF A SPLICE TO THE LEAD-IN WIRE CANNOT BE MADE THE SAME DAY THAT THE LOOP WIRE OR LEAD-IN CABLE IS INSTALLED, THE WIRE/CABLE ENDS SHALL BE SEALED WITH TAR OR 3M SCOTCHKOTE TO KEEP WATER OUT OF THE INSULATING JACKET OF THE WIRE.

TO AVOID IMPROPER OPERATION OF DETECTOR AMPLIFIERS, LOOP WIRE/LEAD-IN CABLES SHALL BE CUT TO THE SHORTEST POSSIBLE LENGTH TO ELIMINATE ADDITIONAL WIRE OR CABLE LOOPS IN THE CABINET OR PULL BOXES.

DETECTOR LEADS SHALL BE IDENTIFIED WITH THEIR ASSOCIATED LOOP BY USE OF WATER PROOF TAGS IN THE PULL BOX AND CABINET.

A COMPLETE "AS BUILT" WIRING DIAGRAM SHOWING LOOP CONNECTIONS AND LEAD-IN CABLES SHALL BE PROVIDED TO STEVEN WISWELL, WISCONSIN DOT, TRAVEL SURVEYS SHOP, AT 3633 PIERSTORFF ST., MADISON, WI, 53704, TEL. 608-246-3266, UPON COMPLETION OF THE SYSTEM INSTALLATION.

ALL LOOP DETECTORS SHALL BE INSTALLED AFTER PAVING THE LOWER LAYER OF ASPHALT AND PRIOR TO PAVING THE TWO UPPER LAYERS OF ASPHALTIC PAVEMENT OVERLAY.