GENERAL NOTES:

1) Inductive loop installation shall be in conformance with the following.

2) A single 9.53mm (3/8") saw blade shall be used for all sawcuts unless determined otherwise by the engineer.

3) No more than four (4) loop detector conductors shall be installed in one sawcut.

4) All inductive loops shall have separate conductors to the terminal pullbox and shall be tagged with START (S) and FINISH (F) of conductors, and for corresponding phase and lane identification as shown in the diagrams. All conductors shall be tagged in the terminal pullbox per Standard Detail E/44.

5) As directed by the electrical inspector, each loop shall be joined to their respective cable in the pullbox in series, so that optimum sensitivity is obtained at the sensor unit.

6) Splices shall be soldered with a soldering iron (NO PROPANE TORCHES SHALL BE USED) and a resin-core solder acceptable to the engineer. All splices shall conform with County Standard Specification 86.02.090.

7) Saw cut slots shall be of sufficient depth to provide a minimum of 25mm (1") of clearance over the top of wire. All corners shall be cored to the depth of the sawcut, including angles for home run and entrance/exit to circular loops. The cording shall provide a minimum conductor radius of 19mm (3/4") by using a 38mm (1 1/2") diameter coring bit.

8) The installed inductive loop detector circuits shall be insulation tested, which shall have an insulation resistance of not less than 100 megohms. Testing shall be done in the presence of the electrical inspector.

9) After the loop conductors are installed, the sawcuts shall be filled with an approved sealant. The loop sealant shall be submitted to the County for approval prior to installation in the field and shall conform to County Standard Specifications 86.05.04.

10) The placing of loop wire, testing of loop circuits, and the placing of loop sealant fill shall be done in the presence of and subject to the approval of the electrical inspector.

11) The contractor shall use the proper tools for mixing and applying sealant. Installation shall be in accordance with the manufacturer’s recommendations.

12) Residue resulting from slot cutting shall not be permitted to flow across shoulders or lanes occupied by public traffic or into storm drainage facilities. The roadway shall be cleaned of all residue during and after installation.

NOTES:

J1) 1m (3') slack in the loop conductors shall be provided in the pullbox. Loop conductors shall be twisted together 5 turns per foot from point of exit at sawcut to splice at lead-in cable.

J2) Conduit ends shall be sealed with an approved sealant upon splicing of conductors.

J3) Refer to Standard Detail E/8 for pullbox installation.

INDUCTIVE LOOP TERMINATION DETAIL

SPICE DETECTOR LOOP WIRE TO DETECTOR LEAD-IN CABLE

CURB AND GUTTER

TYPE A DETECTOR HANDHOLE

SEE STATE STANDARD PLAN ES-5E

DETECTOR LOOP WIRES

ROADWAY FINISH GRADE

53mm (2") DIA. MIN. SCH. 80 PVC CONDUIT BEND SHALL BE AS PER COUNTY STANDARD SPECS.

BUSHING

BUSHING SEAL CO WITH DUCT SEAL

CONDUIT WITH

DETECTOR LEAD-IN CABLE

750mm (30") MIN.

SANTA CLARA COUNTY ROADS AND AIRPORTS DEPARTMENT

STANDARD DETAILS

INDUCTIVE LOOP Detectors

METRIC (& ENGLISH) UNITS