

WEIGH-IN-MOTION (WIM) SYSTEM TYPICAL LAYOUT Not To Scale

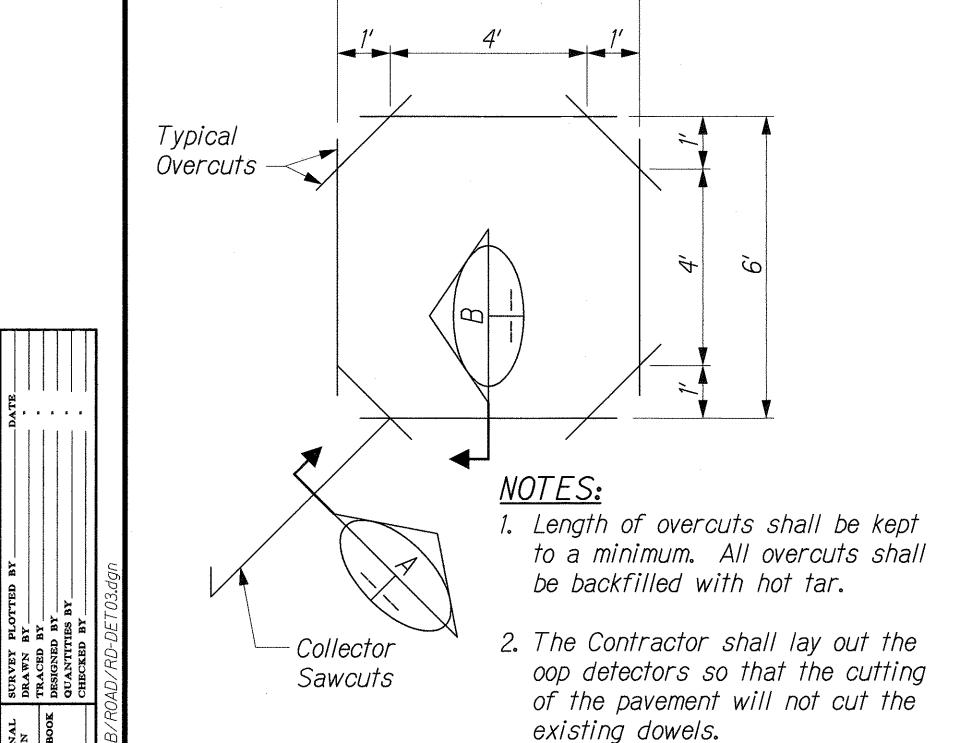
Typ. Shoulder Pavement Section (or As Applicable) - See Shoulder PCC Pavement Typical Sections and Beyond Deepen Sawcut CLSM Backfill Near Conduit (as reg'd) - Hot Tar Pullbox — Sealant Loop Cables or Peizo Sensor Cables 2" Steel Conduit

NOTES ON CONSTRUCTION AT END OF SAWCUT:

- 1. Seal roadway end of conduit after installation of conductors.
- 2. Place hot tar in sawcut.
- 3. Backfill over conduit with new CLSM and reconstruct pavement as required.

DETAIL OF CONDUIT TO SAWCUT TRANSITION FOR LOOP DETECTORS AND PIEZO SENSORS

Not To Scale



TYPICAL SENSOR LOOP SAWCUT DETAIL

Not To Scale

Top of Pavement 3/8" Typ. Min. 1/4" Typ. Hot Tar Sealant 4 Turns Loop Cables Sand Min. 4 Turns Loop Cables 2-Cables Conforming 4-Cables Embedded Lead in Cables Shall to IMSA Conforming be Twisted 2 Turns Per Foot Spec 51-5 to IMSA Spec 51-5 SECTION Mark "IN" <u>PLAN</u> SECTION TYPICAL SENSOR LOOP WIRING DIAGRAM Not To Scale

NOTES:

1. All loop and piezo lead in cables shall be pulled through the existing WIM system conduits to the existing Model 332 WIM controller cabinet located at & Sta. 136+50±, o/s Lt. on the Westbound H-1 slope. Once drawn, they shall be integrated into the existing WIM system.

FED. ROAD DIST. NO.

STATE

FEDERAL AID

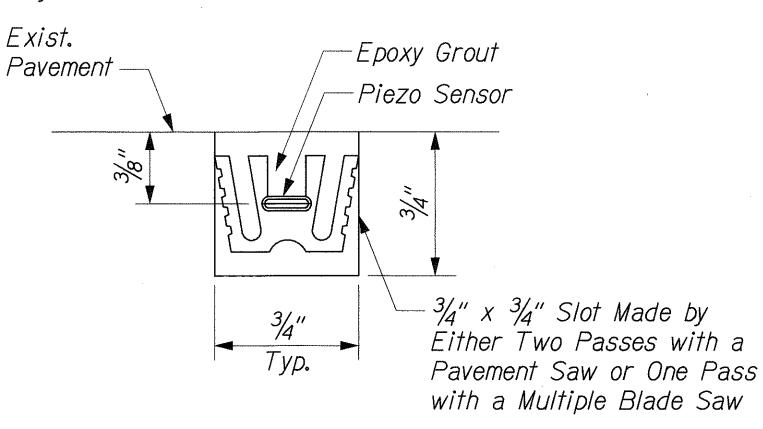
PROJ. NO.

HAW. IM-H1-1(245) 2005

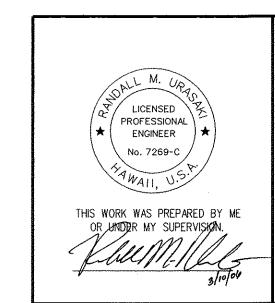
FISCAL SHEET TOTAL

YEAR

- 2. Testing, installation, connection, and calibration of the additional piezo and loop sensors shall be supervised and or performed by an authorized representative of the WIM system manufacturer. All labor and travel expenses for said representative shall be incidental to the installation of the additional sensors.
- 3. The Contractor shall note that additional pull lines have been placed within the existing conduits expressly for the installation of the additional sensors. However, the Contractor shall not use these pull lines for the pulling of the lead in cables. Rather they shall be used to draw new pull lines that shall then be used for the installation of the sensor lead ins.
- 4. Two (2) additional pull lines shall be drawn through and left in the existing WIM conduit for future use.
- 5. All piezo sensors shall be tested according to the specifications before and after installation.
- 6. All piezo sensors shall be BL Class 1 Type and rated for use in WIM systems.
- 7. Sensor spacings shall match those of the existing sensors as they are in the field.
- 8. The Contractor shall test and calibrate the entire WIM system per Section 696.03(D) to verify functionality of the new sensors, as well as the integrity of the existing sensors. All costs incurred as a result of testing and calibration of the WIM system shall be incidental to the contract.



PIEZO SENSOR DETAIL Not To Scale



STATE OF HAWAII **DEPARTMENT OF TRANSPORTATION**

WEIGH-IN-MOTION STATION

<u>DETAILS</u> INTERSTATE ROUTE H-1 REHABILITATION

EASTBOUND LANES WAIAU INTERCHANGE TO KAIMAKANI STREET Scale: As Shown Date: Jan. 24, 2006

SHEET No. C38 OF 39 SHEETS

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