1 Make this Section a part of the Standard Specifications: 2 3 SECTION 684 – SPOT SPEED SYSTEM 4 5 684.01 Description. This work includes furnishing labor, materials, tools, machinery, and equipment necessary to relocate the existing spot speed 6 7 devices onto new street light poles complete in place according to the contract. 8 9 684.02 **Materials.** The spot speed detection system includes: 10 The spot speed detection assembly, including sensor, solar 11 (A) 12 panels, batteries, modem, antennas, and mounting brackets. The contractor shall give the Engineer at least 10 working days' notice prior 13 14 to starting relocation work. 15 16 All costs for securing, packaging, wrapping, loading, where **(B)** applicable, transporting and off-loading materials shall be borne by the 17 18 Contractor. 19 20 (C) The Contractor shall replace any spot speed detection assembly 21 damaged during relocation work at no cost to the State. 22 23 The Contractor shall coordinate work and arranging for inspection (D) 24 of work with the Engineer and other agencies as required. 25 26 **(E)** The Contractor shall secure the operator/manufacturer's services to assist with alignment of the relocated spot speed sensor. 27 28 29 684.03 **Construction Requirements.** 30 31 (A) Relocation. 32 33 Confirm all locations with the Engineer prior to relocation. 34 35 Work requires the relocation of specialized equipment and systems. The Contractor is required to coordinate all work closely with the 36 Engineer and operator/manufacturer. The Contractor shall secure the 37 operator/manufacturer's services to assist with aligning, configuration 38 39 and testing of the relocated the spot speed assemblies. 40 41 Devices shall be friction or tension mounted. Care will be taken so that the surface of the poles are not pierced or damaged during the 42 43 relocation. 44 45 The spot speed detection system collects valuable data used to the monitor highway conditions. The Contractor shall insure that the devices 46 47 are relocated and reinstalled in a timely matter. A single device may be relocated one at a time and shall be fully operational before another 48

- 49 device is removed. Contractor will coordinate field relocation activity and 50 communicate progress to HDOT on a bi-weekly basis.
- 51 52

Existing detection sites are as follows:

53

Device	Route	Description
		Street light pole in the median just east of Ala Kapuna
1, 2, 3	H-201	overpass (Sheet E-6).
		Street light pole in the median at the Ala Aolani
4, 5	H-201	underpass (Sheet E-9).

54

55 **684.04** Method of Measurement. The Engineer will measure the

relocation of the spot speed detection assembly, which includes the relocation
of the spot speed sensor, solar panel, and pole mount adapter, per each,

58 complete-in-place.

60 684.05 Basis of Payment. The Engineer will pay for the accepted relocation of the spot speed detection assembly devices. The price includes 61 full compensation for relocating the traffic detection devices, solar panel and 62 pole mount adapter; temporary traffic control, furnishing, assembling, wiring, 63 and housing; testing; coordinating work with manufacturer; and furnishing 64 equipment's, tools, labor, materials and other incidentals necessary to 65 complete the work. 66

67

The Engineer will consider full compensation for additional materials and labor not specifically shown or called for that are necessary to complete the work incidental to the various contract items in the proposal.

71

Engineer will pay for following pay items when included in proposal
 schedule:

75 76	Pay Item	Pay Unit
77 78	Relocation Spot Speed Detection Assembly	Each"
70 79	END OF SECTION 684	