# Red Signal Ahead Sign with Led Light NJSP-17-10A

**1.0 Description.** This work shall consist of providing and installing red signal ahead sign with an attached LED assembly at locations shown on the plans for the signalized intersection.

**2.0 Materials**

**2.1** The red signal ahead sign shall conform to the material requirements as outlined in Sec 1042. The sign shall have black lettering over yellow sheeting conforming to the dimensions as shown in the plans.

**2.2** The LED assembly shall consist of a singular sealed polycarbonate modular unit. The modular unit shall have a red lens with either a red or black background. The word “RED” shall be illuminated using the red LED lights. Each letter of the word “RED” shall consist of two rows of 1/8 inch LED lights arranged in a sequence so no adjacent LEDs are in series. Each row of LED lights used for the letters shall be spaced so that the out to out dimension for the LED rows is 5/8 inch (3/8 inch clear spacing between the 1/8 inch LED lights). Each letter in the word “RED” shall have an out to out dimension of 6-1/8 inches tall by 4-1/8 inches wide. The letters in the word “RED” shall be spaced to provide 2-5/8 inch gap between the “R” and the “E” and the “E” and the “D”. The modular unit shall be securely mounted to the Signal Ahead sign with a minimum of four anchoring screws.

**2.3** The LEDs used in the modular unit shall have an intensity of 4500 millicandela per LED at a 30 degree viewing angle and be powered by 12 volt alternating current at less than 3 amps. The power to the LEDs shall be supplied by means of an electric transformer mounted in the pedestal base where 120 volt alternating current will be provided from the signal controller cabinet.

**3.0 Construction Requirements.** The contractor shall install the signal ahead sign with the LED assembly at the location shown in the plans. The red signal ahead sign shall be mounted to the signal posts supported by a Type C base. Rubber grommets shall be used to protect the LED leads going through the signal post. The contractor shall mount the transformer inside the pedestal base. All splices shall be waterproof.

**4.0 Method of Measurement.** For the basis of this contract, the red signal ahead sign and attached LED assembly shall be considered as a single unit. Both the sign component and the LED assembly component must be satisfied before any acceptance can be made. Measurement will be made per each unit installed by the contractor and accepted by the engineer.

**5.0 Basis of Payment.** Accepted red signal ahead sign and LED assembly will be paid for at the contract unit bid price for the item 903-99.02, “Red Signal Ahead Sign with LED Light”, per each. No additional payment will be made for any labor, equipment, mounting hardware, time, or materials necessary to fulfill the requirements of this special provision.