(Adopted 10-21-21)

### Description

This work shall consist of furnishing, installing, and maintaining a solar powered, temporary speed feedback assembly to increase driver awareness of their speed at the locations shown on the plans or where directed by the Engineer, in accordance with 105.03.

#### Materials

Materials shall be in accordance with 801.02 and the Indiana MUTCD. The temporary speed feedback assembly shall be an all-weather, self-contained unit. The signs shall be installed on a mounted moveable stand or trailers in accordance with 910.14(f). Signs shall be in accordance with 919.01

#### Construction Requirements

Each temporary speed feedback assembly shall be installed in accordance with 801.15(c) and the manufacturer recommendations. Each unit installed shall consist of a driver speed feedback digital display and a static legend that reads "YOUR SPEED" or "YOUR SPEED IS". Each temporary speed feedback assembly shall require solar power and be normally dark. The display shall be illuminated and have reflective properties for day readability and automatic dimming for nighttime readability. Speed measurement shall be by radar and provide a detection distance of 1/4 to 1/2 mile. The radar speed display sign assembly shall be FCC Part 15 compliant.

The speed indicator display shall face approaching traffic and shall have a static sign legend of either "Your Speed" or "Your Speed is" above the speed display. The static sign legend and border shall he black on either white or yellow background. "The digital display between the fixed messages shall show two digits, 00 to 99. The minimum height of the numerals shall be 11 in. for conventional roads and 18 in. for freeways and expressways, and the nominal legibility distance shall be at least 750 ft. An R2-1-B sign displaying either the worksite speed limit with a "Worksite" plaque, or the work zone speed limit as established by temporary official action, or the permanently posted speed limit, whichever is applicable, shall be placed above the digital display.

The unit shall be programmable for the posted speed limit and threshold speed. The threshold speed shall be set at 10 mph above the posted speed for roadways with speeds under 45 mph and at 20 mph above the posted speed for roadways with speeds 45 mph or greater. The sign shall activate when the speed limit of the roadway is exceeded by one mph and flash the driver speed at a rate of 50 cycles per minute. When the detected speed exceeds the threshold speed the display shall go dark or display the message "SLOW DOWN". If the detected speed is less than or equal to the posted speed, the message "THANK YOU" may be displayed.

The speed indicator measurement and display functions shall be equipped with a power supply capable of providing 24 hours of uninterrupted service.

The Contractor shall provide all preventive maintenance effort in accordance with 107.12.

#### Method of Measurement

Temporary speed feedback assemblies will be measured by the number of units installed.

## Basis of Payment

Temporary speed feedback assemblies will be paid for at the contract unit price per each.

Payment will be made under:

# Pay Item

Pay Unit Symbol

Temporary Speed Feedback Assembly.....EACH