

SOLAR TRAFFIC CONTROLS

“Wireless” Traffic Control Solutions

APPLICATION: *Pedestrian-activated, in-pavement lighting and advance flashing beacons*

LOCATION: *Marana, Arizona U.S.A.*

Description

The Town of Marana, AZ has heightened public safety at a neighborhood crosswalk by adding pedestrian activated in-pavement lighting and advance flashing beacons.

According to Scott Leska, P.E. (Project Manager / Traffic Engineer, Marana Public Works Department), "This crosswalk warning light system was installed to increase the margin of safety for pedestrians crossing the four-lane collector road to access a parking lot and a community center." In addition to being all solar electric, Mr. Leska said, "The system is the first of its kind in the southern Arizona/Tucson metropolitan region, and we anticipate this system will be effective for motorists and pedestrians at all times of the night and day."



Photo of system was taken during final testing at approximately 2 p.m. with a slight overcast.

Traffic Safety Corporation furnished the in-pavement lighting system for the project. It incorporates 12 of the TS500 in-pavement fixtures with high intensity LED lamps, which have a maximum optical output of 600,000 candela. The in-pavement system is a 12VDC parallel circuit powered by a 40W solar power adapter package with a single sealed battery. It includes an LCD screen to display the system's status and allow the user to make adjustments to the run time and flash rate of the lamps, as well as a running count of the button inputs.

Included is a contact closure radio transmitter to activate the flashers located in advance of the crosswalk. The in-pavement system has Polara Engineering Model X series buttons on each side of the crosswalk with built-in speakers to play an audio message for visually impaired pedestrians when the system is activated. Each Model X button assembly includes embedded LED lamps in the faceplate, above the button, to provide a visual indication that the system is operating.

The advance solar flashers use dual 12-inch LED lamps. The solar flasher units were originally designed to function as 24-hour flashers. To operate in conjunction with this project the flasher system controls were modified to a Solar Traffic Controls XSR model flasher with radio receiver and control logic prior to installation at the site. When the in-pavement system is activated the advance flashers are activated via the contact closure radio signal transmitted from the power adapter at the crosswalk.

The Town of Marana is located northwest of Tucson, AZ. Installation was done by Hanmar Energy of Tucson, AZ with both Traffic Safety and Solar Traffic personnel on hand for technical guidance.

Provide Your Requirements to Solar Traffic Controls

Name _____
Company _____
Address _____
City _____ State _____ Zip _____
Telephone (____) _____ Fax (____) _____
Cellular (____) _____
e-mail _____

The success of your solar-powered project is based on three things:

- **Location: where your application site is - nearest town and state**
- **Load: number and size of lamps, timers and other controls - anything which draws power.**
- **Duty Cycle: hours per day and number of days per week the load is active (on).**

The above information enables us to provide you with a Sizing Report which forms the basis of your warranty.

Type of System

(please check your requirements)

Solar Flasher

Lamp Size: 12 inches 8 inches Other - Please indicate size _____
Lamps per pole: 1 2 Other - Please indicate quantity _____
Lamp Color: Amber Red
Type: School Zone 24-Hour Sensor Activated
Run time: _____ hours per day _____ # of days per week
Module Option: Vandal Resistant Activation: Timer Pager

DCUPS Flasher

Lamp Size: 12 inches 8 inches Other - Please indicate size _____
Lamps per pole: 1 2 Other - Please indicate quantity _____
Lamp Color: Amber Red
Type: School Zone 24-Hour Sensor Activated
Run time: _____ hours per day _____ # of days per week
Module Option: Vandal Resistant Activation: Timer Pager

Sensor Power System

Sensor load: _____ amps/watts
Communications Load: _____ amps/watts

Location

Application Site (nearest town): _____
State/Province: _____

Please fill in your requirements with **blue or black pen**. Please **fax** to Solar Traffic Controls at 480-449-9367.

Questions? Please call us at 480-449-0222. We will contact you with a quote for your system.



For more information

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