

"Wireless" Traffic Control Solutions

APPLICATION: In-pavement lighting with Solar PED-X system LOCATION: Surprise, Arizona U.S.A.

Description

Solar Traffic Controls has integrated a SmartstudTM in-pavement lighting system into an existing Solar PED-X system for the City of Surprise. According to the manufacturer, Smartstud is a road marker guidance system: highly visible whatever the weather or road conditions.

The City of Surprise, a long-time user of Solar Traffic Controls equip-



Photo taken at 2 p.m. MST in slightly overcast conditions 100-150 feet from crosswalk.

ment, decided to beef up traffic safety around its expanding sports complex. The complex is the spring training facility for the Texas Rangers and Kansas City Royals, which draws large crowds of spectators for training season games. The site is also a popular playing field for many collegiate games.

The city has added solar-powered traffic control devices as the complex has developed. The first stage of the safety program was the installation of dual 12-inch amber LED 24-hour flashers in advance of the two crosswalks serving the ball field, library and water park. The second stage: to install a Solar PED-X wireless crosswalk system at the crosswalk serving foot traffic for the ticket window and main entrance. The city determined the addition of the Smartstud in-pavement lighting system would further enhance motorist's awareness of the crosswalk.

Applying standard design rules for calculating solar power systems, Solar Traffic Controls was able to re-allocate solar equipment resources in the city to accommodate the higher power draw of the combined Smartstud and solar flasher package. A power interface between the nominal 12VDC battery bank and the 24VDC Smartstud system was designed and integrated into the Solar PED-X system. The Smartstud controls were then integrated into the power interface. The installation and re-allocation of the equipment took approximately 2 days, and was performed by city personnel.



Take these steps to insure the success of your solar-powered project:

- 1. Location identify the site of the application; for example, the nearest town, village or city and state.
- 2. Load specify the number and size of lamps, timers or other controls (anything which draws power).
- 3. Duty Cycle determine how many hours per day and which days per week the load will be drawing power.

Go to "Send us your requirements" at www.SolarTrafficControls.com/support/requirements.php for more details.

Solar Power: a free source of energy

STC's solar-powered systems are designed for quick and easy installation in the field. Our careful front-end engineering minimizes your installation costs and provides years of trouble-free operation. The standard solar power system includes the solar array, system enclosure with all the necessary electronics, color-coded wiring harnesses, sealed batteries and full documentation. DC LED lamp kits can also be purchased. These include the LED beacon, lamp housing and mounting hardware.

STC Systems are Cost Effective

Our solar flasher systems allow you to stretch your budget to obtain the traffic safety devices you need at affordable prices. Most systems are equivalent to the cost of obtaining an AC power drop. Battery life is typically three to six years; less expensive than grid electricity for the same period of time.

Solar Traffic Controls (STC) provides solar-powered traffic control systems for city, state and federal DOTs; police, firefighting and public works departments; facility maintenance and plant safety industries. Our primary products are solar-powered flashing beacon systems used for school zones and 24-hour applications. We also supply specialized flasher systems using environmental sensors and custom communications packages to control the flashing beacon systems. Our product spectrum also includes wireless power systems for ITS, EMS and HAR. STC's products and services are sold through a network of regional distributors who offer technical support for your project.