



## **“Wireless” Traffic Control Solutions**

**APPLICATION:** *Freeway Off Ramp Solar Flashers*

**LOCATION:** Arizona State Route 143

### **Description**

Valley Metro, the Phoenix area light rail agency, had a recurring problem at a freeway off ramp where the light rail line went under State Route 143. Despite being clearly signed for high voltage and railway wiring and height restrictions, large profile vehicles continued to exit the freeway and hit the wiring.

Valley Metro personnel decided the next step to enhance the signage was to add flashers. Solar Traffic Controls made a site visit to assess possible mounting locations for the equipment. It was determined that the flashers would be added to an existing sign assembly with both high voltage and height restriction information on it. The sign package was supported by a dual square tubing assembly on slip bases.

STC engineering staff designed a special enclosure mount and solar array mount to accommodate the non-standard installation. Staff from CS Construction were selected by Valley Metro to install the equipment under the supervision of STC personnel. The equipment was installed and put into operation at the beginning of March, 2008 and should not require any maintenance on the solar equipment for at least 5 years.

Valley METRO Light Rail will connect Phoenix, Tempe, Mesa and Glendale and Phoenix Sky Harbor Airport. It is expected to begin operation in December, 2008. Initially, the system will carry 3,000-5,000 passengers per hour. For more information, [www.valleymetro.org/METRO\\_light\\_rail](http://www.valleymetro.org/METRO_light_rail).



**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](http://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.

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