



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

**APPLICATION:** *Advanced High-Water Flasher Warning System*

**LOCATION:** Matteson, IL U.S.A.

### **Description**

Referred to as a distributed high-water flasher system, it is composed of 2 sensor stations located in the viaducts (the low point in the road) plus 4 flasher stations which are comprised of two 12-inch DC LED lamps, along with a variable message board preceding the viaducts in each direction. The message boards are set up to display a specific message.

Sensors in any of the viaducts can trip all 4 flasher stations. The physical configuration is such that if one viaduct floods, the other will flood shortly. One sensor tripping will cause the entire system to activate. Another feature on the sensor stations is the cellular alarm card which dials out to the monitoring service thus producing voice cell phone calls, faxes, emails and pages sent via email links to the paging company for the on-duty flashers.



*“Viaduct Flodded” flashes on Solar Traffic Controls advanced high-water flasher warning system which incorporates features suchas the ability to call the user with a verbal message announcing an alarm; also to email, fax and page. Uses Motorola police radios to pass the “on” command from the sensor stations to a combianition of flasher-variable message signs.*

Viaduct flooding has claimed two lives in Matteson since 1990. A 62-year-old Chicago man drowned after driving around two sets of barricades at the viaduct at 215th Street and Governors Highway. A 63-year-old Park Forest woman died in 1997 after her car was submerged under the flooded EJ&J Railroad viaduct on Governors Highway.

Viaduct flood gates installed in Matteson during 2003 have been equipped with Solar Traffic Controls’ advanced high-water flasher warning system. If water levels reach 6-inches they will trigger a sensor that sends a message to SouthCom Combined Dispatch Center and the on-duty department of public works employees.

The sensors also activate flashing caution beacons and electronic message boards to alert motorists of flooding conditions. There are four sets of gates: one at 214th Street, one in each direction at 216th Street and one at 219th Street.



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The village and state combined resources to pay for the gates, which is a pilot project in Illinois. The state provided \$42,000 through a grant from Illinois First funds and \$100,000 in Transportation Equity Act-21st Century funds. Matteson's contribution was \$75,000.

**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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