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Caltrans Division of Research, Innovation and System Information

Research Results

Updating the Guide for Highway Lighting Pole Hardware

A new electronic guide provides the latest specifications and allows for timely updates

Geotechnical/ Structures

NOVEMBER 2013

Project Title:
Updating "Guide to Standardized Highway Lighting Pole Hardware"

Task Number: 0366

Start Date: February 2, 2002

Completion Date: March 29, 2013

Product Category: Improved technical standard, improved manual, improved decision support tool

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WHAT WAS THE NEED?

Caltrans, as well as other state departments of transportation, rely on federally approved standards for all types of roadside materials and technology, such as guardrails, crash cushions, small sign supports, luminaire supports, and bridge railings, when purchasing for highway and bridge construction projects. These standards are developed and published by the national Task Force 13 (TF13), a joint committee of representatives experienced in transportation. These guides, which essentially serve as catalogs, have helped standardize technical specifications and criteria for the roadside hardware industry.

In 1980, TF13 published *A Guide to Standardized Highway Lighting Pole Hardware*. Much of the information in the 1980 guide is now obsolete: It does not reflect current requirements nor include materials currently being used. A Transportation Pooled Fund (TPF) study was formed to update the guide and create an electronic version.

WHAT WAS OUR GOAL?

The goal was to update the guide for luminaire supports and develop an online version that can be easily and continually updated with the latest information.

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DRISI provides solutions and knowledge that improve California's transportation system.

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WHAT DID WE DO?

Caltrans, as part of the pooled fund study lead by the Wyoming Department of Transportation and in partnership with other states, accomplished the following tasks:

- Obtained and reviewed relevant research and testing information completed since 1980
- Identified all items related to lighting and signal poles to include in the updated guide, such as concrete, fiber-reinforced plastic, and wood
- Requested standard pole details from all states and determined which information to include, reviewing all crash-worthy systems in use as well as new hardware expected to be used in the future
- Developed a web-based content management system incorporating the data gathered
- Developed a process for continuously updating the guide

WHAT WAS THE OUTCOME?

The updated guide has been converted to the same digital format used by the other TF13 guides. The online format facilitates searching, and it is easy to update and maintain. Instructions on how to use the guide, submit data for inclusion, and maintain it are included. All luminaire support systems in the guide meet the American Association of State Highway and Transportation Officials (AASHTO) *Standard Specification for Structural Supports for Highway Signs, Luminaires and Traffic Signals* and the FHWA eligibility requirements for federally funded projects.

Users can easily get information about a manufacturer and search for products that meet specific criteria.

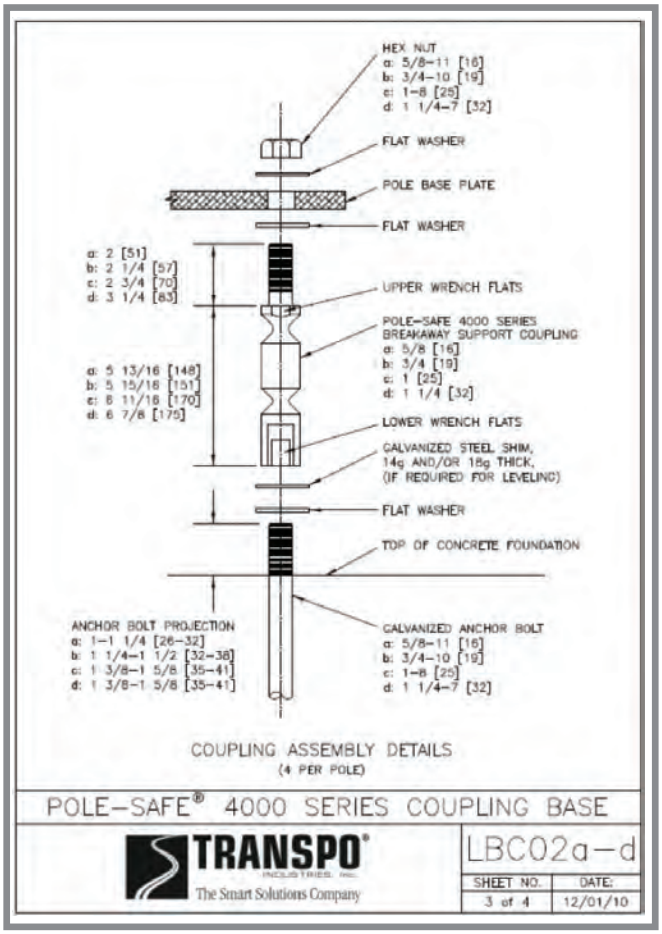
WHAT IS THE BENEFIT?

The online *Guide to Standardized Highway Lighting Pole Hardware* allows Caltrans, other agencies, and consultants to quickly and efficiently get the most current information and specifications for luminaire projects. All states having access to the same information contributes to defining standards that translate to increased safety, reliability, and consistency. The ability to perform ongoing updates means that the latest information is available so that the public will have the most current and safest highway lighting pole facilities.

LEARN MORE

For more information on this TPF:
www.pooledfund.org/Details/Study/124

To view the online version of the guide:
http://guides.roadsafellc.com



The online guide includes components specifications.