

Memorandum

To: ROBERT PIEPLOW, Acting Program Manager
Construction Program

Date: April 11, 2000

DISTRICT DIRECTORS

File:

From: **DEPARTMENT OF TRANSPORTATION
ENGINEERING SERVICE CENTER
DIVISION OF MATERIALS ENGINEERING AND TESTING SERVICES- MS #5**

Subject: Changeable Message Sign Post-Installation Start Up at the Job Site

The Division of Materials Engineering and Testing Services is expanding their CMS Quality Assurance (QA) program to include post-installation start up at the job site. This service is being offered to all district resident engineers to ensure their CMS are completely operational after installation.

Currently, the Department exercises 100% QA testing at the manufacturer's facility. This verifies all CMS are functioning properly before delivery to the warehouse and installation in the field. However, most problems encountered with CMS occur on the job site after installation. Over the past few months, several district resident engineers have contacted our office requesting assistance with their CMS. Some requests involved disputes with installation contractors concerning operational problems. In most cases, contractors were assuming the problems were related to faulty sign components. Meeting with the resident engineer at the job site allowed us to successfully identify which issues were related to system performance, and others relating to the contractor's installation. Once the problems were corrected, the sign was completely operational. This led to fewer surprises and quicker resolution of disputes with the contractors.

It is anticipated that all districts would be able to utilize this service to their advantage. An outline of the services we are offering has been included as Attachment A, and represents efforts to actively improve quality. Our goal is to ensure complete conformance with all CMS.

If you have any questions or would like to make a request for this service, please contact Mr. Christopher Tan at (916) 227-7028.

PHILIP J. STOLARSKI, Chief
Division of Materials Engineering and Testing Services

Attachment A (CMS Post-Installation Start Up at the Job Site)

ATTACHMENT A

TO ALL DISTRICT RESIDENT ENGINEERS

CMS POST-INSTALLATION START UP

The Division of Materials Engineering and Testing Services is expanding their CMS Quality Assurance (QA) program to include post-installation start up at the job site. This service is being offered to all district resident engineers to ensure their CMS are completely operational after installation.

- Resident Engineer and Contractor should be present at the job site during start up and testing. Testing will include, but not limited to the following items:
 1. Physical inspection of all wiring from the cabinet to the CMS sign to ensure proper hook-up.
 2. Verify proper utility service is provided from power company to the CMS cabinet.
 3. Initial turn-on of CMS system to ensure the sign is energized properly.
 4. Verify and measure proper operating voltage and current to ensure no short circuits, open circuits and proper grounding.
 5. Verify 170 controller keypad operations to ensure controller is communicating properly with the sign.
 6. Verify sign intensity can be controlled in both manual and automatic modes.
 7. Ensure that CMS system can be fully controlled by using laptop running SIGNVIEW software.
 8. If problems are encountered due to defective components, the Division of Materials Engineering and Testing Services will make arrangements with the manufacturer for replacement and warranty work. Operational problems and damage caused by sign installation will be referred to the Contractor for correction.
- Under normal conditions, expect a maximum of 8 hours testing time to be charged directly to the Contract. Travel time and expenses will not be charged.

TWO WEEKS NOTICE IS REQUIRED TO ENSURE AVAILABILITY. ALL REQUEST WILL BE SCHEDULED ON A FIRST COME, FIRST SERVE BASIS.

If you have any questions or would like to make a request for this service, please contact Mr. Christopher Tan at (916) 227-7028.