

DEPARTMENT OF TRANSPORTATION

DIVISION OF STRUCTURES
OFFICE OF STRUCTURE CONSTRUCTION
11229 South Woodruff Avenue
DOWNEY, CA 90241

Date: May 7, 1986

Mr. Dave Moody
Project Engineer
Malcom Drilling Company Inc.
11043 Olinda Street
Sun Valley Ca. 91352

Gentlemen:

This letter is to detail the State of California, Department of Transportation's (CALTRANS) experience with Malcom Drilling Company's installation of pin piles for contract 07-119824 at the 91/405 interchange.

The project was a seismic retrofit of a major interchange in the southern portion of the Los Angeles metropolitan area. Some of the bridges to be retrofitted were adjacent to the Los Angeles river necessitating the retrofit work be done on top of the levy.

Installation of the piles involved limited access and extremely reduced overhead clearance. Malcom proposed a pin pile of their own design for this application. Not only did they design the piles but they custom modified some of their standard drilling equipment to accommodate the limited access and low overhead requirements of this project.

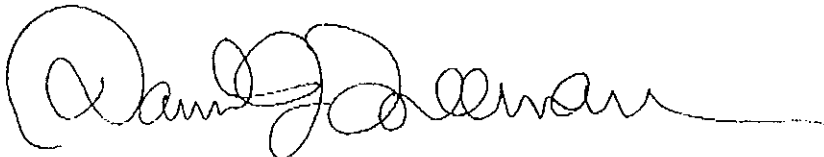
Malcom's installation was safe, professional, proceeded on schedule, and was completed with the attention to detail necessary to ensure a sound pile of this type. The project personnel were experienced and appeared to be well trained. All equipment utilized on this project was well maintained and appropriate for the work involved. There was no down time do to equipment malfunctions.

The project specifications required testing of one set of test piles for each footing (to be installed outside the footing for testing purposes only) and two randomly selected production piles to be tested in each footing (these were incorporated into the finished work). No failures occurred in any of the piles tested. All piles tested were tested to well in excess of the design capacity. Testing to ultimate failure was not done because test equipment capable of withstanding the forces involved in ultimate failure of these piles was not commonly available.

Malcom did an excellent job on this project under some difficult constraints. I would not hesitate to recommend them for any type of similar work.

If you require additional information I can be reached at (310)401-3349.

Sincerely:



Daniel J. Freeman P.E.
Senior Bridge Engineer
Structure Representative