From:

Chief

## Memorandum

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To: DEPUTY DISTRICT DIRECTORS, Construction CONSTRUCTION MANAGERS SENIOR CONSTRUCTION ENGINEERS RESIDENT ENGINEERS DOLORES VALLS, Deputy Division Chief, Structure Construction Date: May 10, 2004

File: Division of Construction CPD 04-6

Subject: Application of the Tunnel Safety Orders

ROBERT PIEPLOW

DIVISION OF CONSTRUCTION

The California Department of Transportation (Department) is required to obtain tunnel classifications from the California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA), Mining and Tunneling unit before bid advertisement for all operations covered by Sections 8400 through 8469, "Tunnel Safety Orders," of the *California Code of Regulations*. The intent of the tunnel classification is to inform the contractor of the potential hazards and safety precautions required.

The Tunnel Safety Orders are available via the internet at the Department of Industrial Relations web site:

## http://www.dir.ca.gov/Title8/sub20.html

The Department has recently received clarification from the Cal/OSHA Mining and Tunneling unit citing which types of operations are applicable to the Tunnel Safety Orders. The Tunnel Safety Orders are applicable only when human entry will occur during a construction operation at any of the following locations:

- Tunnels: Culverts greater than 760 mm (30 inches) in diameter;
- Shafts: Excavations where the depth, (a) is at least twice the greatest cross-sectional dimension, and (b) exceeds 6.1 m (20 feet);
- Raises: Vertical or inclined underground excavation driven from bottom to top;
- Underground chambers and premises appurtenant thereto;
- Boring and pipe-jacking operations 760 mm (30 inches) in diameter or greater.

Some of the common types of activities where human entry is likely and often require a tunnel classification include:

• Pipe jacking or boring operations

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- Culvert rehabilitation
- Large diameter pile construction
- Pump house vaults
- Cut-and-cover operations connecting to an existing underground installation
- Well construction
- Deep structure footings/shafts
- Cofferdam excavations
- Waste slab construction

Review both on-going and already advertised projects for operations that may require a tunnel classification. Issue contract change orders on all projects where a tunnel classification is required and a tunnel classification was not included in the special provisions. Issue the change order as a "change in character of work" in accordance with Section 4-1.03C, "Changes in Character of Work," of the *Standard Specifications*. If a tunnel classification has not been obtained and the contractor is currently performing an operation where the Tunnel Safety Orders are applicable, halt operations until the Cal/OSHA Mining and Tunneling unit is contacted and a tunnel classification is obtained. Processing time for a tunnel classification can take up to two weeks so contact should be made as quickly as possible. Section 8422, "Tunnel Classifications," of the *California Code of Regulations* lists the information that must be submitted to the local Cal-OSHA Mining and Tunneling unit. A listing of the Cal/OSHA Mining and Tunneling unit offices is attached.

The contractor may be entitled to compensation for compliance with the requirements of the Tunnel Safety Orders only where the requirements exceed the requirements of the *Construction Safety Orders*. The *Construction Safety Orders* are available via the internet at the Department of Industrial Relations web site:

## http://www.dir.ca.gov/Title8/sub4.html

If you have any questions regarding this construction procedure directive, please contact Greg Berry, Safety Coordinator, Division of Construction, at (916) 654-4580.

Attachments: Mining and Tunneling unit offices