Volume II

FIELD REVIEW OF TEMPORARY STRUCTURES (FALSEWORK)

Temporary structures erected by contractors in connection with the construction of state highway structures need to remain safe, stable, and serviceable throughout their design life. Failure of these temporary structures (falsework) could be catastrophic. The OSC practice is to use all contract requirements, experience, and ‘best engineering practice’ to prevent falsework failures.

OSC staff will have the following responsibilities as a minimum to ensure a safely constructed system:

Structure Representative / Assistant Structure Representative

- Ensure that falsework plan(s), materials incorporated, and construction methods meet contract requirements and the best general practices represented in the Falsework Manual.
- Ensure that falsework is designed for the intended loads that may act upon it.
- Perform an independent stress analysis of the contractor’s submitted falsework system.
- Ensure that all pertinent load tests are performed and properly documented.
- Ensure that falsework is constructed as per the approved plan.
- Ensure that the contractor’s falsework plan demonstrates stability during all phases of erection and removal.
- Ensure that the falsework plan and construction meets all California Department of Occupational Safety and Health (Cal OSHA) applicable safety orders.
- Ensure that the falsework is inspected and certified by the contractor’s falsework designer or his authorized representative pursuant to the requirements in Article 1717 of the Construction Safety Orders, the Caltrans Standard Specifications, and the contract special provisions.
- Ensure that jacking and displacement monitoring systems are approved and in place prior to jacking.
- Work closely with the contractor’s falsework foreman to coordinate all aspects of erecting, grading, and removing the falsework safely.

OSC Oversight Engineer

- With Local Agency Structure Representative, perform a field review of falsework installations prior to placing or removing concrete, or jacking of temporary support systems. (See BCM 2-19.0, “Administration of Special Funded Projects.”)
Bridge Construction Engineers

- With Structure Representatives perform a field review of falsework installations prior to placing or removing concrete, or jacking of temporary support system.

Area Construction Managers

- Periodically perform a field review of falsework installations with Bridge Construction Engineers in their areas.