

3.2 CONSTRUCTION EQUIPMENT OVERLOAD REVIEWS

3.2.1 GENERAL

This policy applies to evaluation of operating or transporting overloads on structures and addresses cases beyond the scope of the load limitations set forth in the *Standard Specifications* (Caltrans 2018) and *Bridge Construction Memo (BCM) 150-1.0* (Caltrans 2018).

For the vehicular live load, overload combinations incorporate construction equipment loads exceeding the weight limits in the California Vehicle Code (CVC) Division 15.

3.2.2 POLICY

Structures must be evaluated for the submitted overload at the strength limit state using the Strength II load combination, per the AASHTO LRFD Bridge Design Specifications (AASHTO 2017) and California Amendments (Caltrans 2019) for new structures and SM&I (Structures Maintenance & Investigations) Bridge Load Rating Manual (Caltrans, 2020) for existing structures.

Equipment overload static effects shall be increased with the dynamic load allowance, IM, equal to 33%.

Reduced capacities in modified existing, partially constructed, and new structures that have not attained design strength per the contract must be accounted for.

3.2.3 REFERENCES

- 1. Caltrans (2018), *Standard Specifications*, California Department of Transportation, Sacramento, CA.
- 2. Caltrans (2018), Bridge Construction Memo 150-1.0, *Bridge Construction Records* and *Procedures Manual*, California Department of Transportation, Sacramento, CA.
- 3. California Vehicle Code Division 15.
- 4. AASHTO (2017), AASHTO LRFD Bridge Design Specifications, 8th Edition, American Association of State Highway and Transportation Officials, Washington DC.
- 5. Caltrans (2019), *California Amendments to AASHTO LRFD Bridge Design Specifications*, 8th Edition, California Department of Transportation, Sacramento, CA.
- 6. Caltrans (2020), *SM&I Bridge Load Rating Manual*, 1st Edition, California Department of Transportation, Sacramento, CA.