2.3.2.2.3—Geometric Standards

Revise as follows:

Requirements of the *Caltrans Highway Design Manual* ~~AASHTO publication *A Policy on Geometric Design of Highways and Streets*~~ shall either be satisfied or exceptions thereto shall be justified and documented. Width of shoulders and geometry of traffic barriers shall meet the specifications of the Owner.

2.3.2.2.4—Road Surfaces

Revise as follows:

Road surfaces on a bridge shall be given antiskid characteristics, crown, drainage, and super elevation in accordance with ~~*A Policy on Geometric Design of Highways and Streets*~~ the *Caltrans Highway Design Manual* or local requirements.

2.3.3.2—Highway Vertical

Revise the 1st and 2nd Paragraphs as follows:

The vertical clearance of highway structures shall be in conformance with the ~~AASHTO publication *A Policy on Geometric Design of Highways and Streets*~~ *Caltrans Highway Design Manual* for the Functional Classification of the Highway or exceptions thereto shall be justified. Possible reduction of vertical clearance, due to settlement of an overpass structure, shall be investigated. If the expected settlement exceeds 1.0 in., it shall be added to the specified clearance.

The vertical clearance to sign supports and pedestrian overpasses shall be in conformance with the *Caltrans Highway Design Manual*. ~~should be 1.0 ft. greater than the highway structure clearance. The vertical clearance from the roadway to the overhead cross bracing of through truss structures should not be less than 17.5 ft.~~

The vertical clearance from the roadway to the overhead cross bracing of through truss structures should not be less than 17.5 ft.

2.3.3.3—Highway Horizontal

Revise the 2nd Paragraph as follows:

Horizontal clearance under a bridge should meet the requirements of Article 2.3.2.2.1 and 2.3.2.2.3.

2.6.4.4.2—Bridge Scour

C2.6.4.4.2

Add the following after 3rd Paragraph:

Total scour is the cumulative sum of contraction, degradation, and local scour. Figure C2.6.4.4.2-1 shows a typical spread footing foundation.

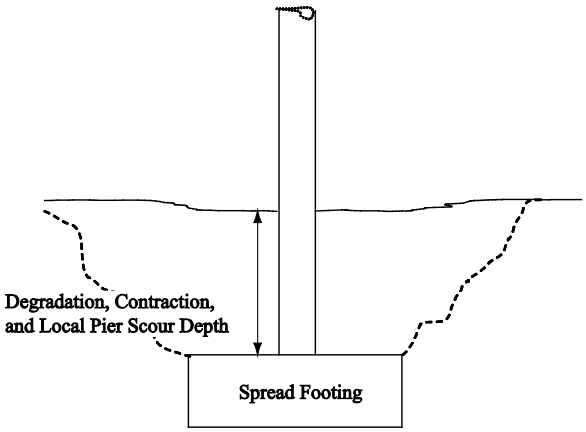

Figure C2.6.4.4.2-1—Spread Footing Location

2.6.4.4.2—Bridge Scour

Revise the 3rd Paragraph as follows:

Spread footings on soil or erodible rock shall be located so that the top of footing is below the design scour elevation and the bottom of footing is below the scour depths determined for the check flood for scour. Spread footings on scour-resistant rock shall be designed and constructed to maintain the integrity of the supporting rock.

Revise the 4th Paragraph as follows:

Deep foundations with footings shall be designed to place the top of the footing below the estimated degradation plus contraction scour depth where practical to minimize obstruction to flood flows and resulting local scour. Even lower elevations should be considered for pile-supported footings where the piles could be damaged by erosion and corrosion from exposure to stream currents. Where conditions dictate a need to construct the top of a footing to an elevation above the ~~streambed~~ total scour elevation, attention shall be given to the scour potential of the design.

C2.6.4.4.2

Add a bullet to the 4th Paragraph:

- Service life for a new construction project is assumed to be 75 years.

Add the following after the 4th Paragraph:

Foundations should be designed to withstand the conditions of scour. In general, this will result in deep foundations. Figure C2.6.4.4.2-2 shows a typical deep foundation.

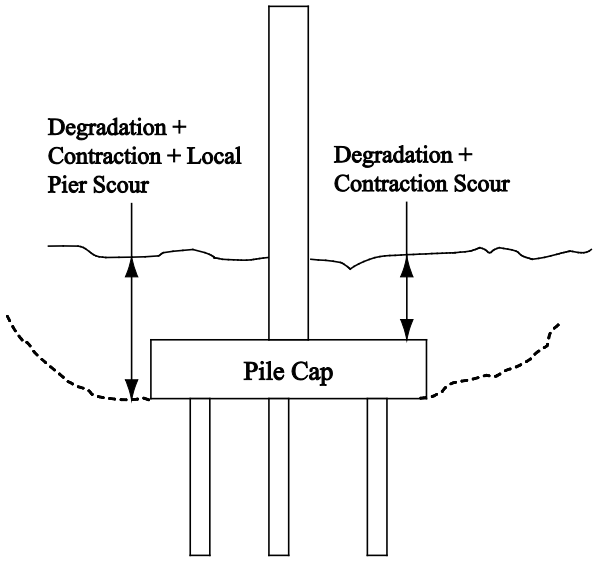

Figure C2.6.4.4.2-2—Deep Foundation Location

C2.6.6.3

Revise as follows:

For further guidance or design criteria on bridge deck drainage, see the ~~"Storm Drainage" chapter of the AASHTO *Model Drainage Manual, Policy on Geometric Design of Highways and Streets* and AASHTO/FHWA Research Report RD-87-014, *Bridge Deck Drainage Guidelines.*~~ , *Caltrans Highway Design Manual, Bridge Memo to Designers, and Bridge Design Aids.*

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