

Preface

The Structure Construction *Bridge Deck Construction Manual* is intended to serve as a guide and a reference source for Bridge Engineers and others involved in field engineering and inspection of bridge decks under construction. As this manual is intended solely as guidance material, contract documents should always prevail in case of conflicts.

Most of the manual is devoted to construction techniques that will produce the structural quality and ride characteristics required by the 2010 Standard Specifications. References are made to the 2010 Standard Specifications and the Bridge Construction Records and Procedures Manual throughout the text to facilitate the reader's use of this manual. There are also numerous tips and valuable information included within each chapter that are a compilation of the knowledge and wisdom gained from the experiences of Caltrans Bridge Engineers over the years.

The techniques and procedures involved in bridge deck construction have remained fairly consistent since the first publication of this manual in 1991. However, introduction of new materials, methods, and specifications such as the "Quiet Deck" and "Crack-Less Concrete Bridge Deck" specification have prompted a fresh look at how we prepare for the placement of deck concrete through the final application of the curing process. Early attention to details, along with sound engineering and construction practices, will help to ensure a bridge deck that will provide exceptional drivability and increased durability for the design life of the deck.