1-16 **USE OF BRIDGE STANDARD DETAIL SHEETS (XS-SHEETS)**

**General**

Bridge Standard Details (XS Sheets) contain pre-engineered details for a variety of structural components, such as earth retaining systems, soundwalls, and underground structures. The use of XS Sheets provides an efficient means of reducing engineering and detailing efforts for a specific project.

XS Sheets may be incorporated into the project “as is” (unmodified) or with modifications. XS Sheets inserted into the plans as detail sheets shall contain details and dimensions specific to a set of structure plans or roadway plans. XS Sheets are to be signed by the Project Engineer.

**Modifying Bridge Standard Details**

Modifications to an XS Sheet shall be denoted as follows:

1. Modifications shall be indicated by a pentagon shaped symbol (pentagon) placed near the revised portion of the detail. A modification number shall be placed inside the pentagon (e.g., (pentagon)). Consecutively numbered pentagons shall be used to indicate multiple changes.

2. “MODIFICATIONS SHOWN:” shall be added in the border at the bottom left center, directly adjacent to the Bridge Standard Detailing block.

3. Corresponding symbols and brief explanations shall be placed in the border at bottom left center, directly under the “MODIFICATIONS SHOWN:” notation.

4. Details and/or notes that do not apply shall be crossed out. Any details or notes that are removed and/or replaced shall be indicated as a modification.

5. “SPECIAL DETAILS” shall be added directly above the title block of the Bridge Standard Detail.

6. If more than one modified XS Sheet is needed for a project or structure, the modification numbers (e.g., (pentagon), (pentagon), etc.) shall start over with each modified XS Sheet.

7. When directed by the Specifications Engineer, “(MOD)” shall be added after the XS Sheet title to indicate that the modifications in the XS Sheet impact the bid item of the structural component and the standard bid item designation no longer applies.
See BDD ATTACHMENT 1-22F.1 for an example of a modified XS Sheet.

If significant modifications to the XS Sheet are required, the Project Engineer may place the modified details and notes on a new project plan sheet. The Project Engineer shall consult with the Technical Owner to fully discuss the design methodology and the impacts of the changes. If a new sheet is used, the project plans should be designed, detailed, and checked as a new project plan sheet.

The latest XS Sheets and associated Technical Owners can be found at the following web address: http://www.dot.ca.gov/hq/esc/techpubs/manual/bridgemanuals/bridge-standard-detail-sheets/index.html