



## 20-5 IDENTIFYING SEISMIC DESIGN CRITERIA IN THE GENERAL NOTES

### GENERAL NOTES EXAMPLES

The following examples show the format for presenting the seismic design criteria and seismic design loading in the General Notes on the contract plans. Each example illustrates a commonly used combination of design criteria and loading.

#### Example # 1:

General Notes for a bridge designed with the Bridge Design Specification (BDS), the SDC without modifications, and a standard SDC ARS curve.

#### GENERAL NOTES LOAD FACTOR DESIGN

*Design:* Caltrans Bridge Design Specifications-April 2000 (LFD)  
(1996 AASHTO with Interims and Revisions by Caltrans)

***Seismic Design:* Caltrans Seismic Design Criteria (SDC), Version 1.2 December 2001**

*Live Loading:* HS20-44 and alternative and permit design load

***Seismic Loading:* SDC ARS Curve For Soil Profile C ( $M=6.5 \pm .25$ )  
(Peak Rock Acceleration = 0.6g)**

#### *Reinforced*

*Concrete:*  $f_y = 420 \text{ MPa}$   
 $f'_c = 25 \text{ MPa}$   
 $n = 8$

#### *Prestressed*

*Concrete:* See "Prestressing Notes"

*Structural Steel:* ASTM A709 Grade 250



Example # 2:

General Notes for a bridge designed with the BDS, the SDC with modifications, and a standard SDC ARS curve. A copy of the final SDC modifications shall be routed to the Structure Design Office Chiefs and the Earthquake Committee at bridge PS&E.

GENERAL NOTES  
LOAD FACTOR DESIGN

*Design:* Caltrans Bridge Design Specifications-April 2000 (LFD)  
(1996 AASHTO with Interims and Revisions by Caltrans)

**Seismic Design:** Caltrans Seismic Design Criteria (SDC), Version 1.2 December 2001 with modifications

*Live Loading:* HS20-44 and alternative and permit design load

**Seismic Loading:** SDC ARS Curve For Soil Profile C ( $M=6.5 \pm .25$ )  
(Peak Rock Acceleration = 0.6g)

*Reinforced Concrete:*

$f_y$	=	420 MPa
$f'_c$	=	25 MPa
$n$	=	8

*Prestressed Concrete:* See "Prestressing Notes"

*Structural Steel:* ASTM A709 Grade 250



**ATTACHMENT A**

Example # 3:

General Notes for a bridge designed with the BDS, the SDC without modifications, and a site-specific ARS curve.

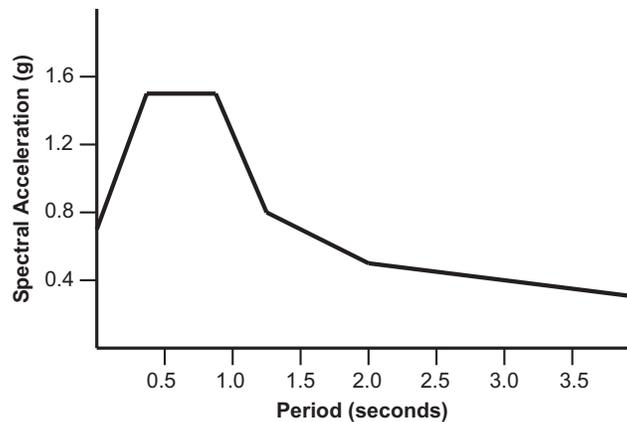
GENERAL NOTES  
LOAD FACTOR DESIGN

*Design:* Caltrans Bridge Design Specifications-April 2000 (LFD)  
(1996 AASHTO with Interims and Revisions by Caltrans)

**Seismic Design:** Caltrans Seismic Design Criteria (SDC), Version 1.2 December 2001 with modifications

*Live Loading:* HS20-44 and alternative and permit design load

**Seismic Loading:** Site Specific Acceleration Response Spectra Curve



*Reinforced Concrete:*

$$f_y = 420 \text{ MPa}$$
$$f'_c = 25 \text{ MPa}$$
$$n = 8$$

*Prestressed Concrete:* See "Prestressing Notes"

*Structural Steel:* ASTM A709 Grade 250



Example # 4:

General Notes for a bridge designed with a project specific design criteria. A final copy of the project seismic design criteria shall be routed to the Structure Design Office Chiefs and the Earthquake Committee at bridge PS&E.

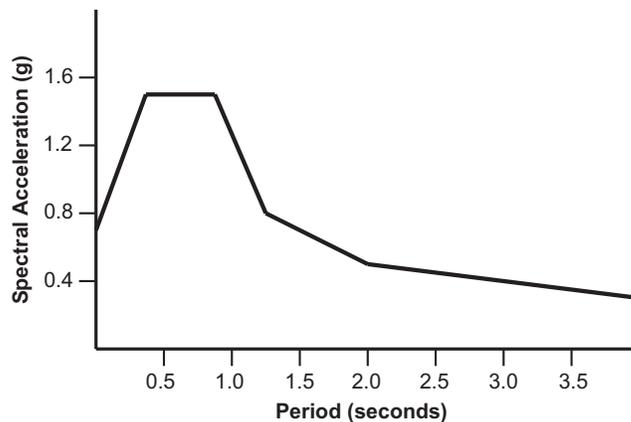
GENERAL NOTES  
LOAD FACTOR DESIGN

*Design:* Caltrans Bridge Design Specifications-April 2000 (LFD)  
(1996 AASHTO with Interims and Revisions by Caltrans)

**Seismic Design:** **Project Specific Seismic Design Criteria for the Dry Creek Bridge**  
**(Approved April 2001)**

*Live Loading:* HS20-44 and alternative and permit design load

**Seismic Loading:** **Site Specific Acceleration Response Spectra Curve**



*Reinforced Concrete:*  $f_y = 420 \text{ MPa}$   
 $f'_c = 25 \text{ MPa}$   
 $n = 8$

*Prestressed Concrete:* See "Prestressing Notes"

*Structural Steel:* ASTM A709 Grade 250