

## IX. BRIDGES

**A. CURRENT REGULATION:** Two fixed bridges (Vincent Thomas and Gerald Desmond) and two drawbridges (Commodore Schuyler Heim Highway Bridge and adjacent Badger Railroad Bridge) span the navigable channels of the ports. The latter two, crossing Cerritos Channel, are the only drawbridges within the Plan's geographical area. The narrow channel width combined with restrictions on passing under the drawbridges limit traffic through Cerritos Channel (with extremely rare exceptions) to pleasure vessels, tugs without tows and tugs with tows alongside or pushing ahead. However, tugs with bunker barges frequently pass under the bridges. The navigable channel was 180 feet wide with a vertical clearance (with bridges lifted) of 155 feet prior to the start of the current Heim Bridge Replacement Project.

*Note: Construction of the Heim drawbridge replacement is in progress until further notice. Falsework has been installed limiting navigational clearances through Cerritos Channel as indicated in the Weekly Coast Guard Local Notice to Mariners:*

<http://www.navcen.uscg.gov/?pageName=lnmDistrict&region=11>.

*The falsework has been lighted and marked in accordance with 33 CFR 118 and supersedes the lighting on the Heim drawbridge.*

*Brief COTP channel closures may occur during the bridge construction / demolition project, for critical periods of work, and will be coordinated in advance with waterway users and the Coast Guard Captain of the Port.*

*The existing drawbridge operation regulations remain in effect until the moveable span is removed from the waterway.*

*The proposed Gerald Desmond bridge replacement project will be reviewed, coordinated with waterway users and approved by the Eleventh Coast Guard District when the bridge owner provides their proposal for review. As of 24 February 2015, no in-water or over-water navigational impacts have been approved by the Coast Guard as part of this project.*

CFR Title 33, Subpart A to Part 117 (33 CFR 117.1-17.49) regulate general operation of all drawbridges across navigable U.S. waters. The Code addresses general duties of the bridge tender, signals to request openings, radiotelephone installation, operations during repair or maintenance, closure for natural disasters, etc. 33 CFR 117.147 specifically regulates operation of our drawbridges. Page 3 of this chapter is a U.S. Coast Guard "Report of Delay at Drawbridge" form which may be forwarded to USCG D11(dpw) Bridge Administration if needed. To summarize:

1. The highway draw shall open on signal except that the draw need not open for vessel passage from 0630 to 0800 and from 1530 to 1800 Monday through Friday (excluding

federal holidays). Use Channel 13 or other assigned frequencies to contact the bridge tender.

2. The railroad draw shall be kept open except for train crossings and maintenance. Use Channel 13 or other assigned frequencies to contact the bridge tender.

**B. BRIDGE LIGHTING AND CHART NOTES:** The Committee finds sufficient the systems to mark restricted horizontal bridge clearances and the information provided about restricted vertical overhead powerline clearance. Here is a summary of lighting and marking of the four bridges and associated information from chart notes and other nautical publications relating to both the bridges and powerline. [Note: Vertical clearances are given above Mean High Water (+4.6 Feet)]:

1. Vincent Thomas Bridge

- a. Bridge lighting (33 CFR 118): Two fixed green lights mark the center of the span. Four fixed red lights (two on each side) mark the margins of the channel.
- b. Chart Note: Horizontal clearance 1150', vertical clearance 165', with vertical clearance 185' for middle width of 500'. Two fixed green lights mark center of span. Four fixed red lights mark the margins of the channel.

2. Gerald Desmond Bridge

- a. Bridge lighting (33 CFR 118): Two fixed green lights mark the center of the span. Four fixed red lights (two on each side) mark the channel limits.
- b. Chart Note: Horizontal clearance 300', vertical clearance 155'.
- c. The Gerald Desmond replacement bridge is currently under construction and has been permitted by USCG at 204 feet minimum vertical clearance above Mean High Water (MHW) for the middle 300 feet of the channel. As of 24 February 2015, over-water construction/demolition plans have not been received and no over-water work has been approved. When received from Caltrans, over-water work proposals will be coordinated with waterway users prior to USCG approval.
- d. Both replacement bridges will be measured upon completion and "as built" minimum clearances above MHW will be updated on NOAA charts for navigational purposes. Maximum vertical bridge clearances will not be charted. However, they will be available upon request. Vessel transits through the Gerald Desmond Bridge with little or no safety margin should be coordinated in advance with Caltrans, California Highway Patrol, USCG and others as appropriate.

### 3. Schuyler Heim Highway SR-47 Lift Bridge

- a. Bridge Lighting (33 CFR 118): One fixed red light on each end (four in all) mark the fender system. Two fixed red axis lights (one on each side) mark the available horizontal opening. Two fixed red/green lights (one on each side) mark the center of the vertical lift. The lights change from red to green when the lift is fully raised.

*Note: Installation of falsework for the bridge replacement will supersede the navigational lighting on the Heim Drawbridge due to the reduced navigational clearances until the project is complete.*

- b. Chart Note: Refer to the Weekly Coast Guard Local Notice to Mariners for adjustments to navigational clearances in Cerritos Channel during the Heim Bridge replacement project.
- c. The bridge was coming due for replacement. Caltrans hosted a scoping meeting on February 13, 2002 to gather input regarding possible alternatives for a new bridge. The bridge replacement project is currently under construction.
- d. After completion (anticipated in 2016), the navigable channel will be 180 feet wide and the vertical clearance will be 47 feet.
- e. During construction, a temporary trestle limits the navigable channel to 75 feet wide. The vertical clearance will be reduced to 43 feet above MHW while construction falsework is in place (Reference; Caltrans submitted plans and letter dated August 13, 2014).

### 4. Badger Railroad Lift Bridge

- a. Bridge Lighting (33 CFR 118): One fixed red light on each end (four in all) mark the fender system. Two fixed red/green lights (one on each side) mark the center of the vertical lift. The lights change from red to green when the lift is in the full open to navigation position.
- b. Chart Note: Horizontal clearance 180 feet, vertical clearance 6.7 feet down and 165 feet up. Note: Refer to the Weekly Coast Guard Local Notice to Mariners for restricted navigational clearances due to falsework during the Heim Bridge replacement project.

U.S. COAST GUARD  
REPORT OF DELAY AT DRAWBRIDGE  
PER 33 CFR 117.5

BRIDGE NAME \_\_\_\_\_ DATE \_\_\_\_\_

MILE \_\_\_\_\_ WATERWAY \_\_\_\_\_

1. Name/ Type of Vessel \_\_\_\_\_ Direction of Travel \_\_\_\_\_

2. Vessel Owner (Name) \_\_\_\_\_  
(Address) \_\_\_\_\_

3. Name of Pilot (if applicable) \_\_\_\_\_  
(Address) \_\_\_\_\_

4. Time vessel signaled for bridge opening \_\_\_\_\_

5. Location of vessel when signal was given \_\_\_\_\_

6. Time and location of vessel when delay began \_\_\_\_\_

7. Method of signal for bridge opening ( ) Radio ( ) Sound ( ) Visual  
(If sound or visual signal was used, specify \_\_\_\_\_)

8. Time bridge operator acknowledged signal \_\_\_\_\_

9. Method of bridge operator acknowledgement ( ) Radio ( ) Sound ( ) Visual  
(If sound or visual signal was used, specify \_\_\_\_\_)

10. Did bridge operator acknowledgement indicate the bridge  
( ) Could be opened immediately  
( ) Could not be opened immediately

11. If land traffic crossed the bridge:  
Time land traffic started across the bridge \_\_\_\_\_  
Time land traffic stopped crossing the bridge \_\_\_\_\_  
Did land traffic stop on the bridge? \_\_\_\_\_  
Duration land traffic stopped on the bridge \_\_\_\_\_

12. Time drawbridge opened for navigation \_\_\_\_\_

14. Additional comments \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I certify the above information is true to the best of my knowledge and understand this statement may be used by the U.S. Coast Guard in levying fines against the bridge owner.

Signature \_\_\_\_\_

Telephone \_\_\_\_\_

Mariners may complete and send via fax or mail to:

USCG D11(dpw) Bridge Administration  
Building 50-2  
Coast Guard Island  
Alameda, CA 94501-5100  
Cellular: (510) 219-4366, Work Phone: (510) 437-3516  
Work Fax: (510) 437-5836

Mariners are reminded not to require bridge openings for appurtenances nonessential to navigation, per 33 CFR 117.11