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P (1a-12-13)

SUPPLEMENTAL FINDINGS OF FACT

**REPLACEMENT
OF THE
STATE ROUTE 520 BRIDGE
ACROSS LAKE WASHINGTON
AT
SEATTLE, KING COUNTY, WASHINGTON**

P (1a-12-13)

APPLICANT:

State of Washington
(Washington State Department of Transportation)
WSDOT
600 Stewart Street Suite 520
Seattle, Washington 98101

Prepared by:

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Bridge Administrator

4/08/2014
Date

THIRTEENTH COAST GUARD DISTRICT (dpw)
915 SECOND AVENUE (RM3510)
SEATTLE, WA 98174-1067

SUPPLEMENTAL FINDINGS OF FACT

REVISED PLANS FOR THE WEST APPROACH BRIDGE NORTH (WABN) OF THE Proposed Replacement of the STATE ROUTE 520 BRIDGE ACROSS LAKE WASHINGTON AT SEATTLE, KING COUNTY,

P (1a-12-13)

1. **Previous permit action:** On 09 March 2012 the Commandant issued P (1-12-13) approving the location and plans for construction of a bridge across the Lake Washington, between the Cities of Seattle and Medina, King County, Washington.
2. **Application under consideration:** The permittee, the State of Washington, has requested approval of design refinements to the WABN segment of the approved State Route 520 Bridge replacement project (**encl 1 and 1a**).
3. **Effect on the environment:**
 - a. The Federal Highway Administration (FHWA) is the Lead Federal Agency for National Environmental Policy Act (NEPA) compliance for the project. The Washington State Department of Transportation (WSDOT) is lead for State Environmental Policy Act (SEPA) compliance. The U.S. Coast Guard, in addition to 19 other agencies, is listed as a cooperating agency on the EIS. A complete list of cooperating agencies can be found in Section 1.6 (page 1-10) of the Final Environmental Impact Statement (FEIS) and in the FEIS Executive Summary on page 6. Find FEIS on webpage <http://www.wsdot.wa.gov/projects/SR520Bridge/>. The Coast Guard adopted the FEIS and NEPA reevaluation on February 27, 2012 (**encl 20**) and issued a ROD March 9, 2012. Environmental documentation for the SR 520, I-5 to Medina: Bridge Replacement and HOV Project includes the Final Environmental Impact Statement (June 2011) and supporting discipline reports, the Record of Decision (August 2011), NEPA Environmental Reevaluations (December 2011, January 2012, July 2012, October 2012, February 2013, and February 2013), and other memoranda.
 - b. The FHWA/WSDOT January 23, 2014 Memorandum (**encl 5 and 12**) documents NEPA, SEPA, Endangered Species Act (ESA), and Section 106 and 4(f) compliance for WABN design refinements. The FEIS adopted by the Coast Guard February 27, 2012 has not been supplemented and remains valid for the approved and proposed bridge permit action.
 - c. **Permit action Being Considered:** The State of Washington proposes to amend the current design of the “West Approach Bridge North” portion of the State Route 520 (SR 520) Bridge project. The bridge is also known as the Governor Albert D. Rosellini Bridge, across Lake Washington. The amendment would amend the United States Coast Guard General Bridge Permit 1-12-13. The proposed changes apply only to the west approach span, and specifically to the final design of the west approach bridge north (WABN) structure. The WABN alignment has been shifted approximately 30 feet orthward through the Union Bay area (i.e., toward Marsh Island), and the bridge

abutment has been relocated approximately 50 feet west, compared to the original design. The bridge height and the profile of the WABN structure (0.7 percent grade between the high point at the western high rise to the low point at Montlake) remains the same. The designated navigation channels of the west approach span are located at pier spans 41 and 42. The vertical clearances of the navigation channels have not changed from the conceptual design and remain at 47.50 feet and 44.27 feet for spans 41 and 42 respectively. The horizontal clearance of span 41 has increased from 142 feet to 144 feet compared with the original design. Horizontal clearance at span 42 has not changed and remains at 142 feet. The width of the combined overhead bridge decks has been reduced from 151.47 feet to 139.45 feet for span 41 and from 135.70 feet to 133.72 feet for span 42.

The WABN substructure will consist of 42 overall pier bents, including the abutment at Montlake, 39 in-water pier bents (13 in Union Bay and 26 in Lake Washington), and two additional pier bents on Foster Island. Most span lengths will be 150 feet, although the spans between pier bents 17 and 18 (just east of Foster Island) will be 135 feet in length, and span 41 (the easternmost span before the transition span) will be 160 feet in length. The primary change to the design with respect to span lengths is that spans that were previously variable lengths east of Foster Island are now standardized at 150 feet each. The sizes, spacing, and configuration of the shafts / columns have also been changed to minimize impacts. As a result, the number of shafts / columns needed to support the bridge structure has been reduced by at least one shaft / column at each pier bent for a total reduction of 42 columns.

Based on full consideration of the preceding facts and the environmental documentation presented by Federal Highway Administration and the Washington State Department of Transportation it has been determined that the proposed project's impacts of the selected (preferred) alternative *and WABN modification* cannot be avoided, and all planning and mitigation to minimize these impacts have been accomplished.

d. Water Quality Certification: The Washington Department of Ecology (WDOE) issued a Water Quality Certification pursuant to Section 401 under the Clean water Act. The WDOE Water Quality Certification order number is 9011 dated February 15, 2012. WDOE issued its 4th amendment to Water Quality Certification order number 901 dated February 19, 2014 (**encl 4**). Krista Rave-Perkins of Environmental Protection Agency (EPA) Region 10, Regional Aquatic Resources Unit was notified, March 31, 2014, of the WDOE issuance of the amendments to the WQC pursuant to section 401. Ms Rave-Perkins, EPA Region 10 stated that the EPA was closely engaged with WDOE during review of and issuance of WQC for the project. Ms. Rave-Perkins also stated the EPA had no object to the issuance of the WQC amendments for the project (**encl 6**).

4. Effect on navigation: The vertical clearances of the navigation channels have not changed from the conceptual design and remain at 47.50 feet and 44.27 feet for spans 41 and 42 respectively. The horizontal clearance of span 41 has increased from 142 feet to 144 feet compared with the original design. Horizontal clearance at span 42 has not changed and remains at 142 feet.

5. Public Notice: The Coast Guard Thirteenth District issued public notice PN 2-14 (**encl 9**) February 27, 2014. PN 2-14 availability notification (**encl 10**) was mailed to all resource agencies and to all adjacent property owners on March 4, 2014. The USCG PN 2-14 was posted to website:

<http://www.navcen.uscg.gov/?pageName=pnBridges&Active=1®ion=13> per current standard distribution

6. Summary of responses to Coast Guard Public Notice: The Coast Guard received no comments or concerns in response to the public notice concerning the proposed bridge replacement project permit amendment.

7. Conclusion:

Navigation: The proposed design refinements to the WABN segment of the approved State Route 520 Bridge replacement project, based on the preceding facts, meets the reasonable needs of existing and prospective navigation.

Environment: Based on full consideration of the preceding facts and the environmental documentation presented by Federal Highway Administration and the Washington State Department of Transportation it has been determined that the proposed project's impacts, including those resulting from WABN modification, cannot be avoided, and all planning and mitigation to minimize these impacts have been accomplished.

8. Strategic Goals, Priorities and Contributions: The estimated total yearly commercial shipping on the Lake Washington Ship Canal as captured in Part 4 of the USACE Waterborne Commerce of the United States published by the Waterborne Commerce Statistics Center for CY 2009 is approximately 584,700 short tons and consist primarily of crude materials. The proposed project will contribute to the Commandant's strategic goals and the Department of Homeland Security's national security goals by providing a safe structure for both navigation and vehicular traffic.

9. Recommendation: It is recommended that a bridge permit amendment approving the location and plans for the SR 520 Western Approach Bridge North be issued under permit number P(1a-12-13). It is further recommended that the following conditions be included in the permit:

1. Recommend using the exact conditions, in their entirety, of the original permit P(1-12-13) dated 9 March 2012.