U.S. Department of Homeland Security
United States Coast Guard

BRIDGE PERMIT

27 SEP 2013

(2-13-13)

WHEREAS by Title V of an act of Congress approved August 2, 1946, entitled "General Bridge Act of 1946," as amended (33 U.S.C. 525-533), the consent of Congress was granted for the construction, maintenance and operation of bridges and approaches thereto over the navigable waters of the United States;

AND WHEREAS the Secretary of Homeland Security has delegated the authority of Section 502(b) of that act to the Commandant, U. S. Coast Guard by Department of Homeland Security Delegation Number: 0170.1;

AND WHEREAS before construction is commenced, the Commandant must approve the location and plans of any such bridge and may impose any specific conditions relating to the construction, maintenance and operation of the structure deemed necessary in the interest of public navigation, such conditions to have the force of law;

AND WHEREAS the - **STATE OF OREGON** - has submitted for approval the location and plans indicating a design-build concept of a bridge to be constructed across the Columbia River between Portland, Oregon and Vancouver, Washington;

NOW THEREFORE, This is to certify that the location and plans dated 15 August 2013 are hereby approved by the Commandant, subject to the following conditions:

1. No deviation from the approved plans may be made either before or after completion of the structure unless the modification of said plans has previously been submitted to and received the approval of the Commandant. Any deviation from the approved plans without approval from the Commandant will render this permit null and void.

2. The construction of falsework, pilings, cofferdams or other obstructions, shall be in accordance with plans submitted to and approved by the Commander, Thirteenth Coast Guard District, prior to construction of the bridge. All work shall be so conducted that the free navigation of the waterway is not unreasonably interfered with and the present navigable depths are not impaired. Timely notice of any and all events that may affect navigation shall be given to the District Commander during construction of the bridge. The channel or channels through the structure shall be promptly cleared of all obstructions placed therein or caused by the construction of the bridge to the satisfaction of the District Commander, when in the judgment of the District Commander the construction work has reached a point where such action should be taken.

3. Issuance of this permit does not relieve the permittee of the obligation or responsibility for compliance with the provisions of any other law or regulation as may be under the jurisdiction of the U.S. Department of Commerce, National Marine Fisheries Service, or any federal, state or local authority having cognizance of any aspect of the location, construction or maintenance of said bridge.

4. Prior to commencement of construction, the permittee shall submit to the Commandant for approval, plans showing the final design chosen for the construction of the bridge. The final design chosen shall, at a minimum, provide the navigational clearances as shown on the approved plan sheets 2 and 3 (of 7) dated 15 August 2013. Failure by the permittee to adhere to any part of this condition renders this permit null and void.

5. The location of, and materials to be used in construction of, the pier protection fender system as shown on the approved plan sheets 2 and 4 (of 7) dated 15 August 2013 shall be submitted to the District Commander prior to commencing construction of such system.

6. Clearance gauges shall be installed and maintained in a good and legible condition by and at the expense of the owner of the bridge when so required by the District Commander. The type of gauges and the locations in which they are to be installed will be submitted to the District Commander for approval.

7. All parts of the temporary work structures which are located within the limits of the existing or proposed navigational channels shall be removed down to a minimum of seven feet below the authorized navigational depth. All other parts of the temporary work structures shall be removed down to or below the mud line and the waterway cleared to the satisfaction of the District Commander when in the judgment of the District Commander the construction of the new bridge, mile 106.4, has reached a point where such action should be taken.

8. All parts of the existing to-be-replaced Interstate 5 Bridge across the Columbia River, mile 106.5, not utilized in the new bridge, which are located within the limits of the proposed navigational channels shall be removed down to a minimum of seven feet below the authorized navigational depth. All other parts located within the waterway shall be removed down to or below the mud line and the waterway cleared to the satisfaction of the District Commander. All parts located on land shall be removed to a minimum of two feet below the natural ground line. Such removal and clearance shall be completed when the District Commander determines that the construction of the new bridge, mile 106.4, has reached a point where such action should be taken.

9. When the proposed bridge is no longer used for transportation purposes, it shall be removed in its entirety or to an elevation deemed appropriate by the District Commander and the waterway cleared to the satisfaction of the District Commander. Such removal and clearance shall be completed by and at the expense of the owner of the bridge upon due notice from the District Commander.

10. The approval hereby granted shall cease and be null and void unless construction of the bridge is commenced within three years and completed within five years after the date of this permit.

JOHN P. CURRIER
Vice Admiral, U.S. Coast Guard
Acting Commandant

(2-13-13) 27 SEP 2013

WHEREAS by Title V of an act of Congress approved August 2, 1946, entitled "General Bridge Act of 1946," as amended (33 U.S.C. 525-533), the consent of Congress was granted for the construction, maintenance and operation of bridges and approaches thereto over the navigable waters of the United States;

AND WHEREAS the Secretary of Homeland Security has delegated the authority of Section 502(b) of that act to the Commandant, U. S. Coast Guard by Department of Homeland Security Delegation Number: 0170.1;

AND WHEREAS before construction is commenced, the Commandant must approve the location and plans of any such bridge and may impose any specific conditions relating to the construction, maintenance and operation of the structure deemed necessary in the interest of public navigation, such conditions to have the force of law;

AND WHEREAS the - **STATE OF OREGON** - has submitted for approval the location and plans indicating a design-build concept of a bridge to be constructed across the Columbia River between Portland, Oregon and Vancouver, Washington;

NOW THEREFORE, This is to certify that the location and plans dated 15 August 2013 are hereby approved by the Commandant, subject to the following conditions:

1. No deviation from the approved plans may be made either before or after completion of the structure unless the modification of said plans has previously been submitted to and received the approval of the Commandant. Any deviation from the approved plans without approval from the Commandant will render this permit null and void.

2. The construction of falsework, pilings, cofferdams or other obstructions, shall be in accordance with plans submitted to and approved by the Commander, Thirteenth Coast Guard District, prior to construction of the bridge. All work shall be so conducted that the free navigation of the waterway is not unreasonably interfered with and the present navigable depths are not impaired. Timely notice of any and all events that may affect navigation shall be given to the District Commander during construction of the bridge. The channel or channels through the structure shall be promptly cleared of all obstructions placed therein or caused by the construction of the bridge to the satisfaction of the District Commander, when in the judgment of the District Commander the construction work has reached a point where such action should be taken.

3. Issuance of this permit does not relieve the permittee of the obligation or responsibility for compliance with the provisions of any other law or regulation as may be under the jurisdiction of the U.S. Department of Commerce, National Marine Fisheries Service, or any federal, state or local authority having cognizance of any aspect of the location, construction or maintenance of said bridge.

4. Prior to commencement of construction, the permittee shall submit to the Commandant for approval, plans showing the final design chosen for the construction of the bridge. The final design chosen shall, at a minimum, provide the navigational clearances as shown on the approved plan sheets 2 and 3 (of 7) dated 15 August 2013. Failure by the permittee to adhere to any part of this condition renders this permit null and void.

5. The location of, and materials to be used in construction of, the pier protection fender system as shown on the approved plan sheets 2 and 4 (of 7) dated 15 August 2013 shall be submitted to the District Commander prior to commencing construction of such system.

6. Clearance gauges shall be installed and maintained in a good and legible condition by and at the expense of the owner of the bridge when so required by the District Commander. The type of gauges and the locations in which they are to be installed will be submitted to the District Commander for approval.

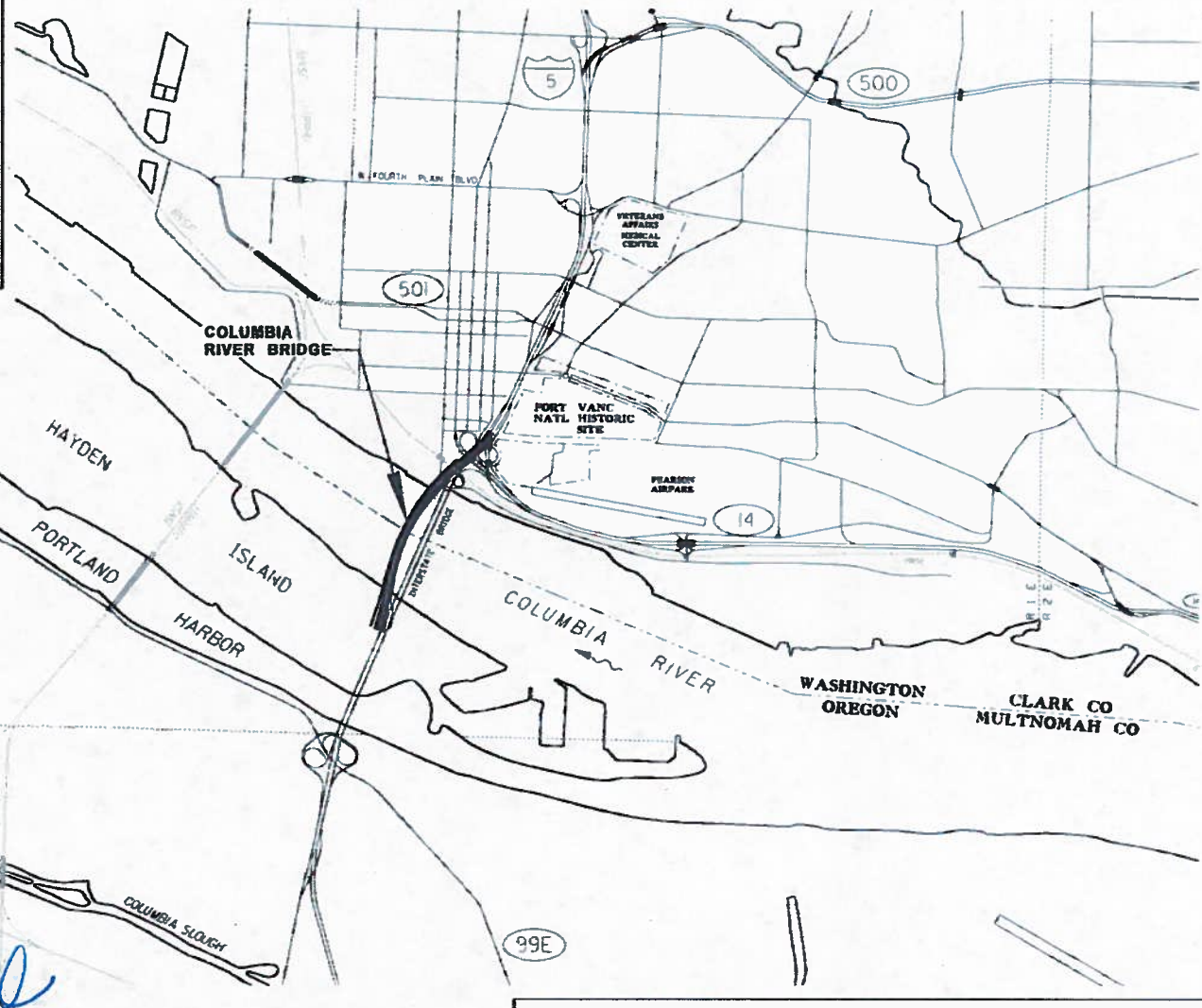
7. All parts of the temporary work structures which are located within the limits of the existing or proposed navigational channels shall be removed down to a minimum of seven feet below the authorized navigational depth. All other parts of the temporary work structures shall be removed down to or below the mud line and the waterway cleared to the satisfaction of the District Commander when in the judgment of the District Commander the construction of the new bridge, mile 106.4, has reached a point where such action should be taken.

8. All parts of the existing to-be-replaced Interstate 5 Bridge across the Columbia River, mile 106.5, not utilized in the new bridge, which are located within the limits of the proposed navigational channels shall be removed down to a minimum of seven feet below the authorized navigational depth. All other parts located within the waterway shall be removed down to or below the mud line and the waterway cleared to the satisfaction of the District Commander. All parts located on land shall be removed to a minimum of two feet below the natural ground line. Such removal and clearance shall be completed when the District Commander determines that the construction of the new bridge, mile 106.4, has reached a point where such action should be taken.

9. When the proposed bridge is no longer used for transportation purposes, it shall be removed in its entirety or to an elevation deemed appropriate by the District Commander and the waterway cleared to the satisfaction of the District Commander. Such removal and clearance shall be completed by and at the expense of the owner of the bridge upon due notice from the District Commander.

10. The approval hereby granted shall cease and be null and void unless construction of the bridge is commenced within three years and completed within five years after the date of this permit.

JOHN P. CURRIER
Vice Admiral, U.S. Coast Guard
Acting Commandant



APPROVED
27 SEP 2013
P(2-13-13)
U.S.
COAST GUARD

DATUM
NAVD 1988

0 2000 4000
FEET

RENEWS: 12-31-13

UNITED STATES COAST GUARD BRIDGE PERMIT DRAWINGS

COLUMBIA RIVER CROSSING
INTERSTATE 5 OVER COLUMBIA RIVER, MILE 106.4 AT
VANCOUVER, WA (CLARK COUNTY) & PORTLAND, OR (MULTNOMAH COUNTY)

APPLICATION BY: WASHINGTON STATE DEPARTMENT OF TRANSPORTATION & OREGON DEPARTMENT OF TRANSPORTATION
ROUTE: INTERSTATE 5 **DATE:** AUG. 15, 2013

VICINITY MAP

SHEET 1 OF 7 SHEETS

DATE: 8/12/2013 TIME: 8:58:35 AM PLOTTED BY: deguzma FILE NAME: c:\teswork\pw_workicrc\deguzmana\dms03873\CRC PS BG USCG Permit 01.dgn

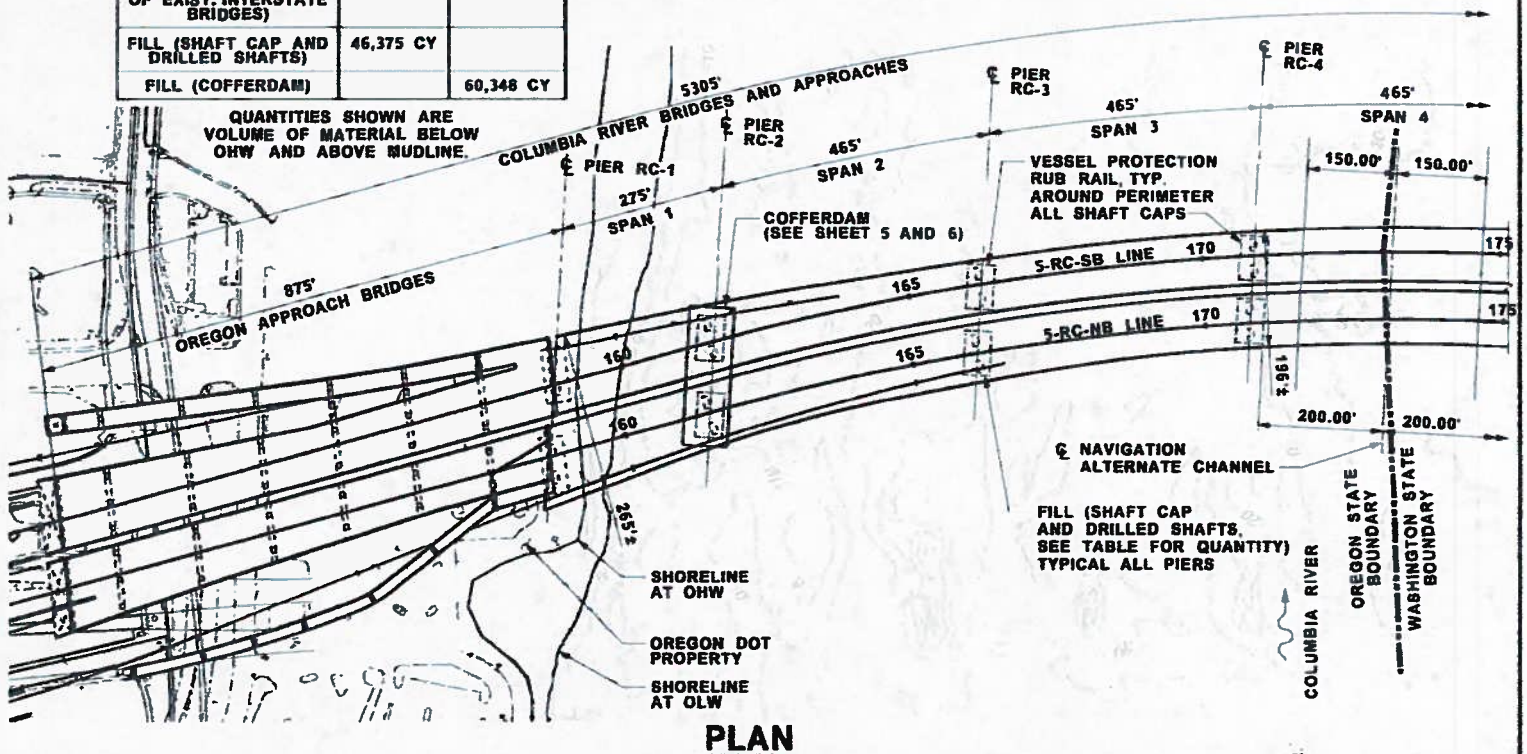
NOTES:

1. THE BRIDGE IS BEING DESIGNED IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 6TH EDITION. VESSEL COLLISION IS PER ARTICLE 3.14 WITH AN OPERATIONAL CLASSIFICATION OF "CRITICAL". THE LARGEST DESIGN VESSEL IS A 400-FT x 100-FT OCEAN BARGE WITH A DWT OF 21,500 TONNES.
2. THE BRIDGE IS BEING DESIGNED TO WITHSTAND THE COLLISION FORCES FROM THE VESSEL INDICATED IN NOTE 1 WITHOUT ANY ADDITIONAL PROTECTION SUCH AS FENDERS, DIKES OR DOLPHINS. THERFORE ADDITIONAL PROTECTION IS NOT REQUIRED.
3. THE OUT-TO-OUT WIDTH OF THE OREGON APPROACH BRIDGES VARIES FROM 189'+/- TO 270'+/-.

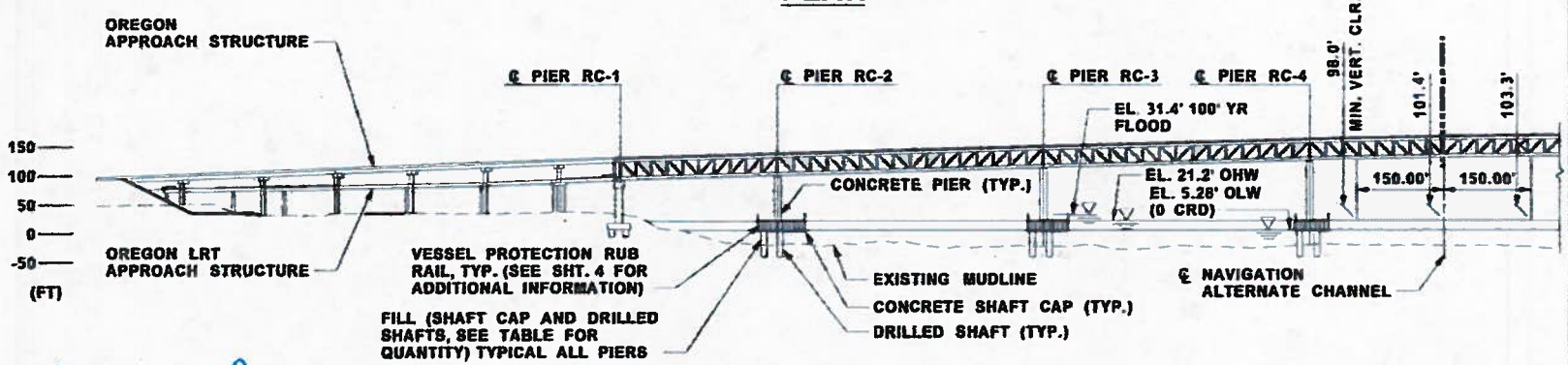
ITEM	PERMANENT	TEMPORARY
EXCAVATION (REMOVAL OF EXIST. INTERSTATE BRIDGES)	43,868 CY	
FILL (SHAFT CAP AND DRILLED SHAFTS)	46,375 CY	
FILL (COFFERDAM)		60,348 CY

QUANTITIES SHOWN ARE VOLUME OF MATERIAL BELOW OHW AND ABOVE MUDLINE.

APPROVED
27 SEP 2013
P(2-13-13)
U.S. COAST GUARD



PLAN



DEVELOPED ELEVATION

DATUM
NAVD 1988

0 150 300
FEET

UNITED STATES COAST GUARD BRIDGE PERMIT DRAWINGS

COLUMBIA RIVER CROSSING
INTERSTATE 5 OVER COLUMBIA RIVER, MILE 106.4 AT
VANCOUVER, WA (CLARK COUNTY) & PORTLAND, OR (MULTNOMAH COUNTY)

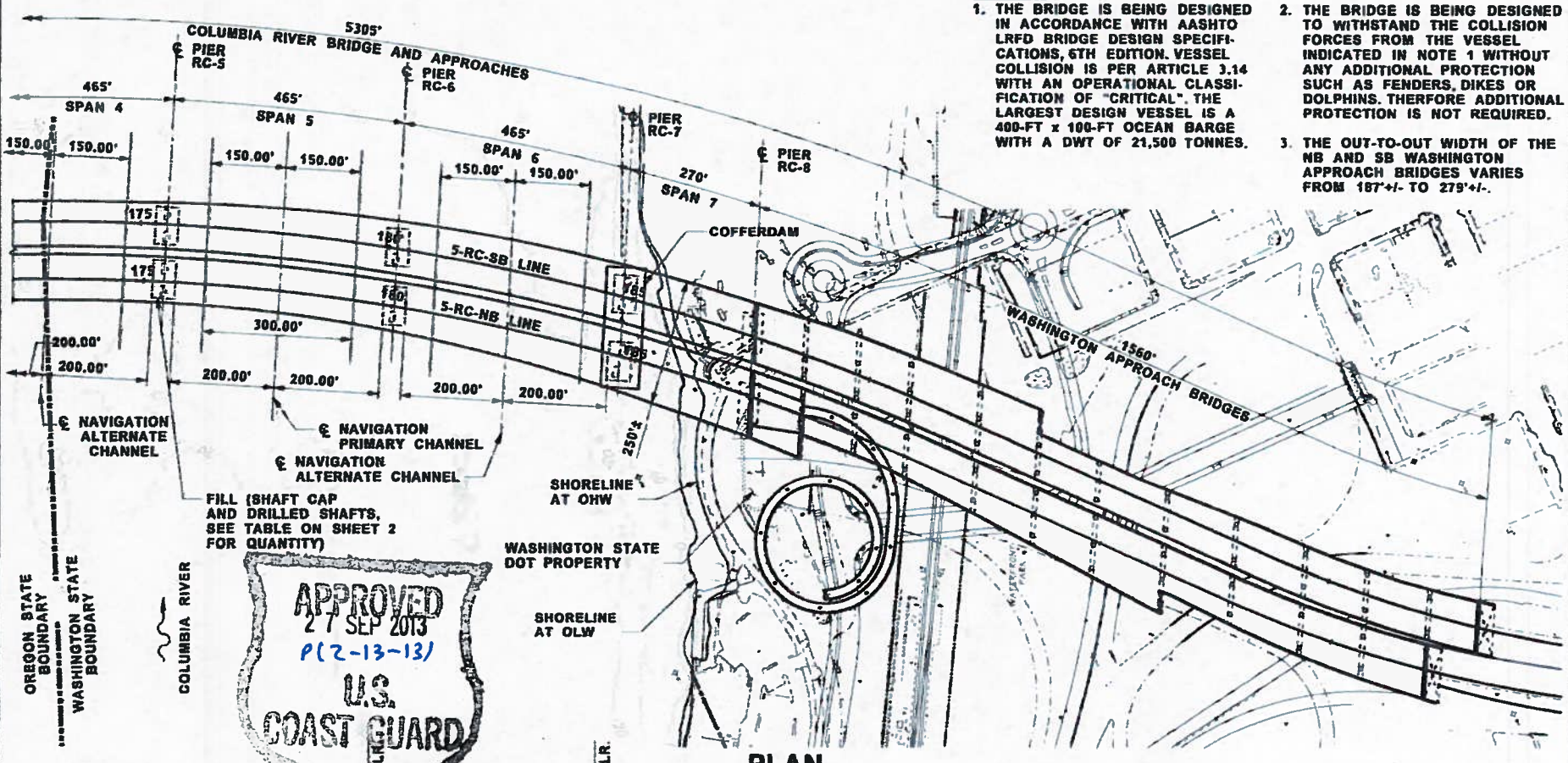
APPLICATION BY: WASHINGTON STATE DEPARTMENT OF TRANSPORTATION & OREGON DEPARTMENT OF TRANSPORTATION
ROUTE: INTERSTATE 5 DATE: AUG 15, 2013

COLUMBIA RIVER BRIDGE

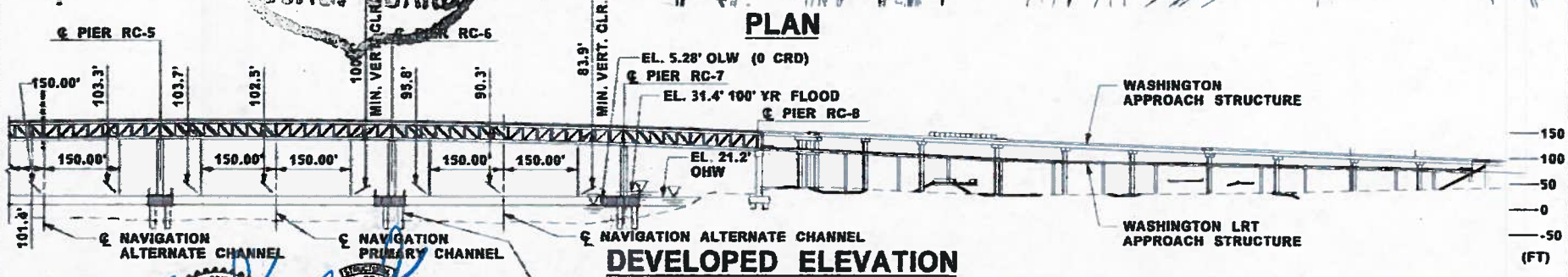
SHEET 2 OF 7 SHEETS

NOTES:

1. THE BRIDGE IS BEING DESIGNED IN ACCORDANCE WITH AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 6TH EDITION. VESSEL COLLISION IS PER ARTICLE 3.14 WITH AN OPERATIONAL CLASSIFICATION OF "CRITICAL". THE LARGEST DESIGN VESSEL IS A 400-FT x 100-FT OCEAN BARGE WITH A DWT OF 21,500 TONNES.
2. THE BRIDGE IS BEING DESIGNED TO WITHSTAND THE COLLISION FORCES FROM THE VESSEL INDICATED IN NOTE 1 WITHOUT ANY ADDITIONAL PROTECTION SUCH AS FENDERS, DIKES OR DOLPHINS. THERFORE ADDITIONAL PROTECTION IS NOT REQUIRED.
3. THE OUT-TO-OUT WIDTH OF THE NB AND SB WASHINGTON APPROACH BRIDGES VARIES FROM 187'+/- TO 279'+/-.



PLAN



DEVELOPED ELEVATION

DATUM
NAVD 1988

FILL (SHAFT CAP AND DRILLED SHAFTS, SEE TABLE ON SHEET 2 FOR QUANTITY

0 150 300
FEET

ADDENDUM: 12-31-2013

UNITED STATES COAST GUARD BRIDGE PERMIT DRAWINGS

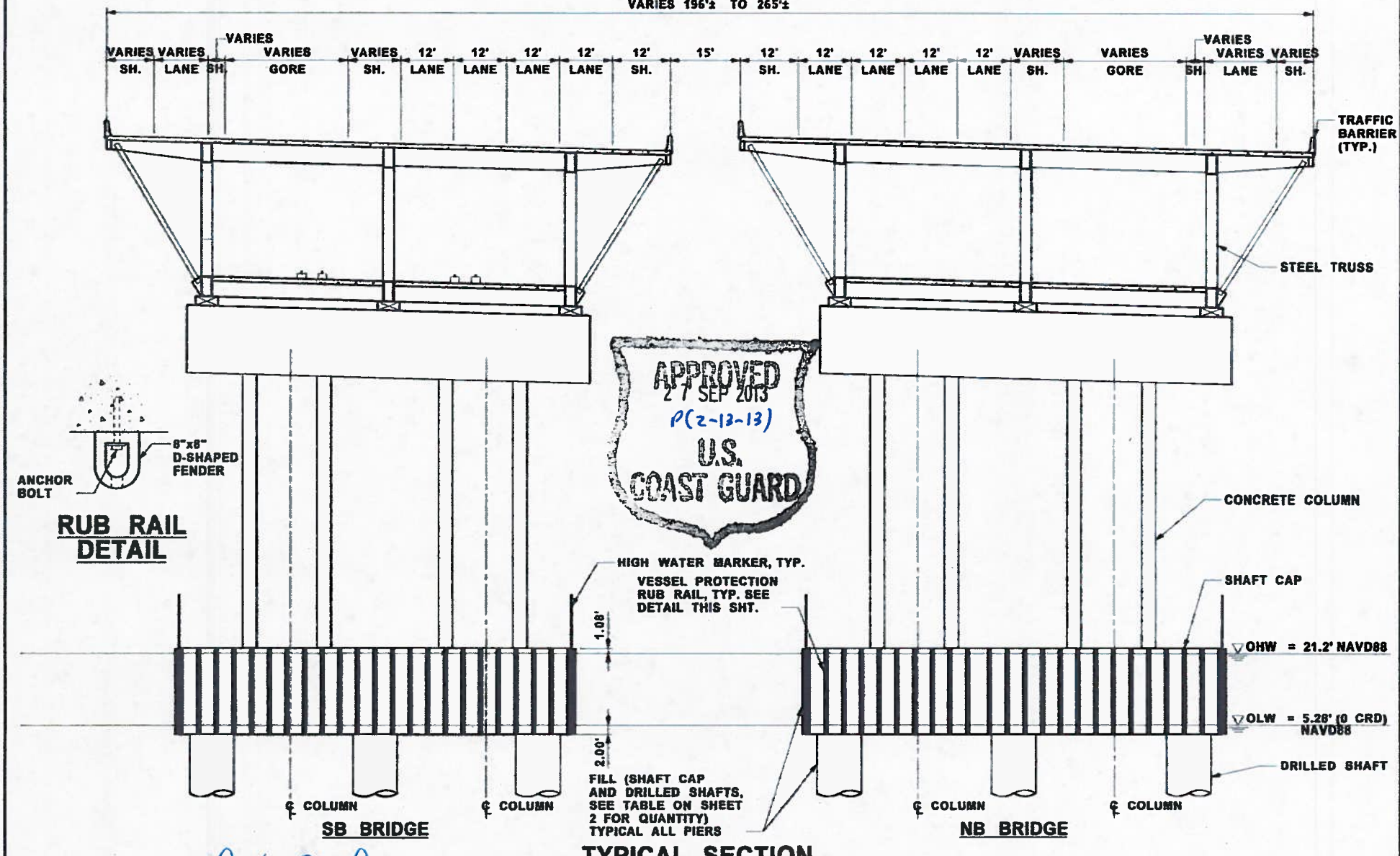
COLUMBIA RIVER CROSSING
INTERSTATE 5 OVER COLUMBIA RIVER, MILE 106.4 AT
VANCOUVER, WA (CLARK COUNTY) & PORTLAND, OR (MULTNOMAH COUNTY)

APPLICATION BY: WASHINGTON STATE DEPARTMENT OF TRANSPORTATION & OREGON DEPARTMENT OF TRANSPORTATION
ROUTE: INTERSTATE 5 DATE: AUG 15, 2013

SHEET 3 OF 7 SHEETS

COLUMBIA RIVER BRIDGE

DATE: 9/24/2013 TIME: 9:59:29 AM PLOTTED BY: deguzma FILE NAME: c:\sswork\pw workdir\crcridgeguzmana\dms03873\CRC PS BG USCG Permit 03.dgn



DATUM
NAVD 1988

REVISED: 12-31-13

UNITED STATES COAST GUARD BRIDGE PERMIT DRAWINGS

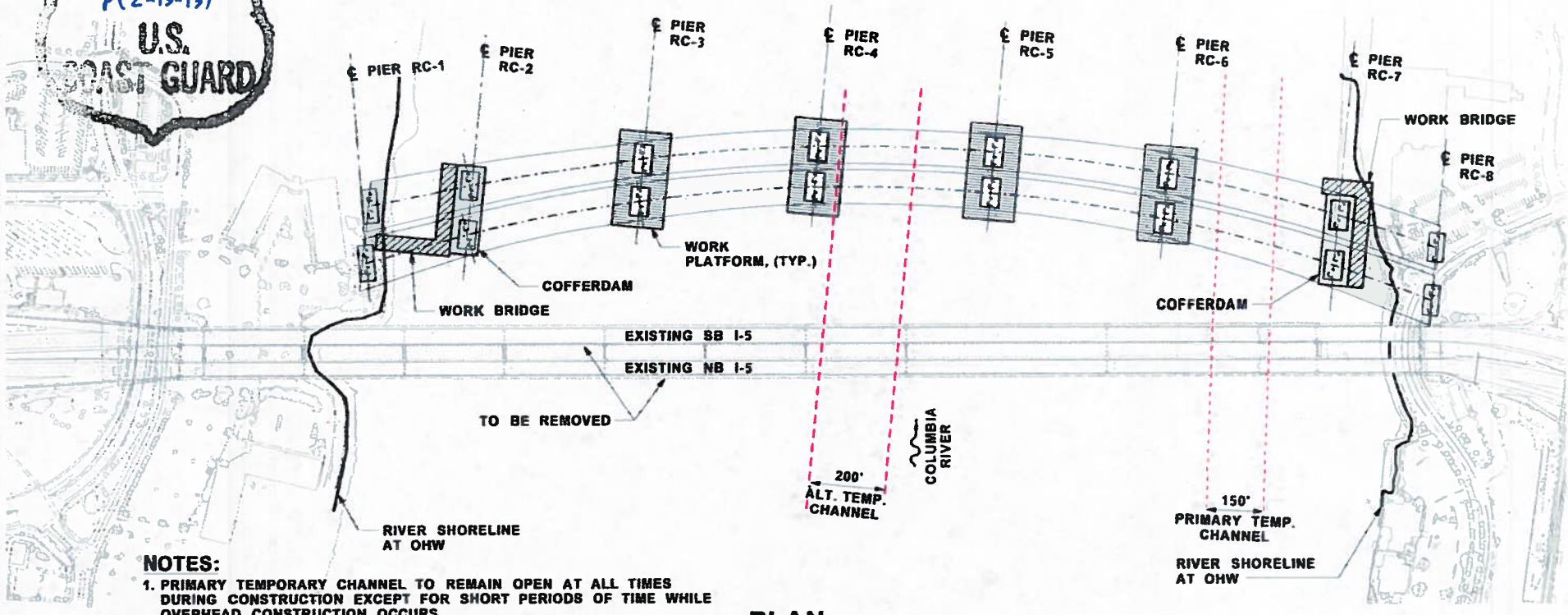
COLUMBIA RIVER CROSSING
INTERSTATE 5 OVER COLUMBIA RIVER, MILE 106.4 AT
VANCOUVER, WA (CLARK COUNTY) & PORTLAND, OR (MULTNOMAH COUNTY)

APPLICATION BY: WASHINGTON STATE DEPARTMENT OF TRANSPORTATION & OREGON DEPARTMENT OF TRANSPORTATION
ROUTE: INTERSTATE 5 DATE: AUG. 15, 2013

SHEET 4 OF 7 SHEETS

COLUMBIA RIVER BRIDGE - TYPICAL SECTION

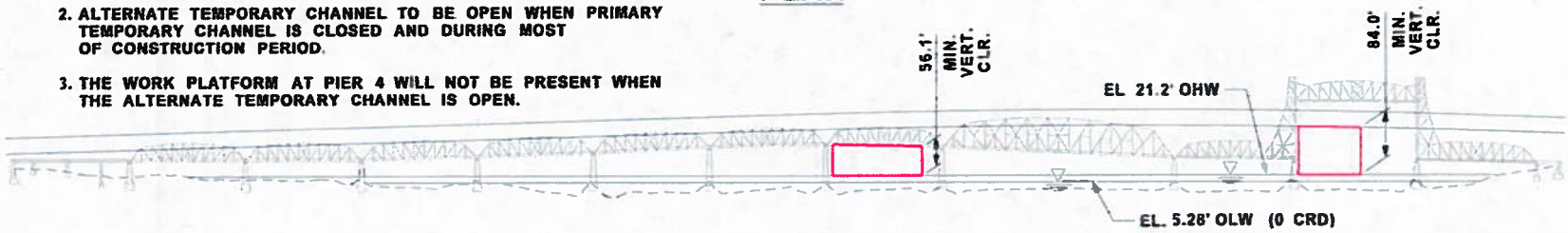
APPROVED
27 SEP 2013
P(2-13-13)
U.S. COAST GUARD



PLAN

NOTES:

1. PRIMARY TEMPORARY CHANNEL TO REMAIN OPEN AT ALL TIMES DURING CONSTRUCTION EXCEPT FOR SHORT PERIODS OF TIME WHILE OVERHEAD CONSTRUCTION OCCURS.
2. ALTERNATE TEMPORARY CHANNEL TO BE OPEN WHEN PRIMARY TEMPORARY CHANNEL IS CLOSED AND DURING MOST OF CONSTRUCTION PERIOD.
3. THE WORK PLATFORM AT PIER 4 WILL NOT BE PRESENT WHEN THE ALTERNATE TEMPORARY CHANNEL IS OPEN.



ELEVATION

DATUM
NAVD 1988

0 200 400
FEET

RENEWS: 12-31-13

UNITED STATES COAST GUARD BRIDGE PERMIT DRAWINGS

COLUMBIA RIVER CROSSING
INTERSTATE 5 OVER COLUMBIA RIVER, MILE 106.4 AT
VANCOUVER, WA (CLARK COUNTY) & PORTLAND, OR (MULTNOMAH COUNTY)

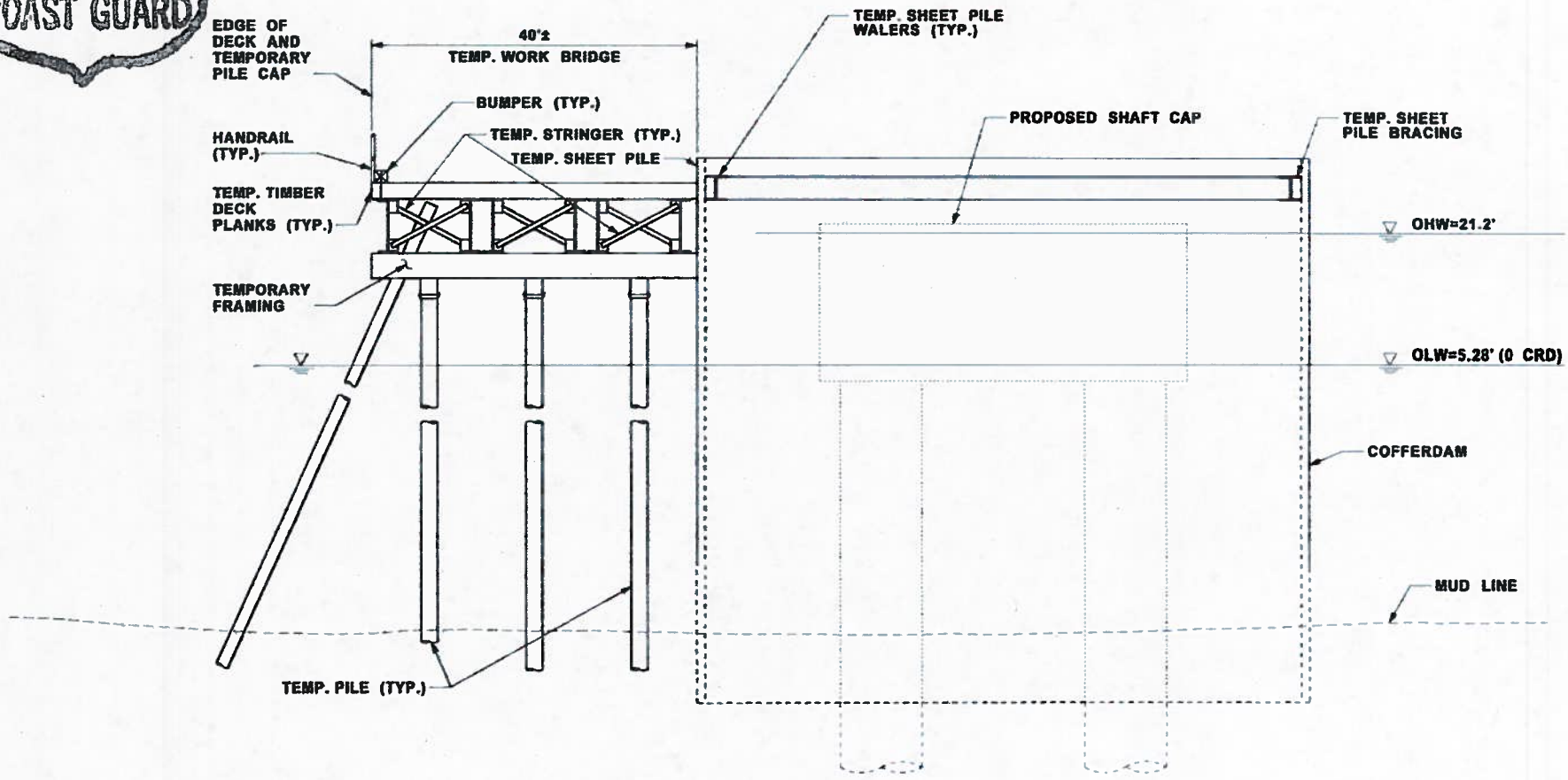
APPLICATION BY: WASHINGTON STATE DEPARTMENT OF TRANSPORTATION & OREGON DEPARTMENT OF TRANSPORTATION
ROUTE: INTERSTATE 5 **DATE:** AUG. 15, 2013

TEMPORARY STRUCTURES/FALSEWORK PLAN

SHEET 5 OF 7 SHEETS

DATE: 8/9/2013 TIME: 10:58:33 AM PLOTTED BY: deguzma FILE NAME: c:\sswork\pw_workdir\deguzmana\dms03875\CRC PS BG USCG Permit 05.dgn

APPROVED
2 7 SEP 2013
P(2-13-13)
U.S.
COAST GUARD



TYPICAL FOUNDATION SECTION ~ PIER RC-2 & RC-7

DATUM
NAVD 1988

REVIEWED: 12-31-13

0 10 20
FEET

UNITED STATES COAST GUARD BRIDGE PERMIT DRAWINGS

COLUMBIA RIVER CROSSING
INTERSTATE 5 OVER COLUMBIA RIVER, MILE 106.4 AT
VANCOUVER, WA (CLARK COUNTY) & PORTLAND, OR (MULTNOMAH COUNTY)

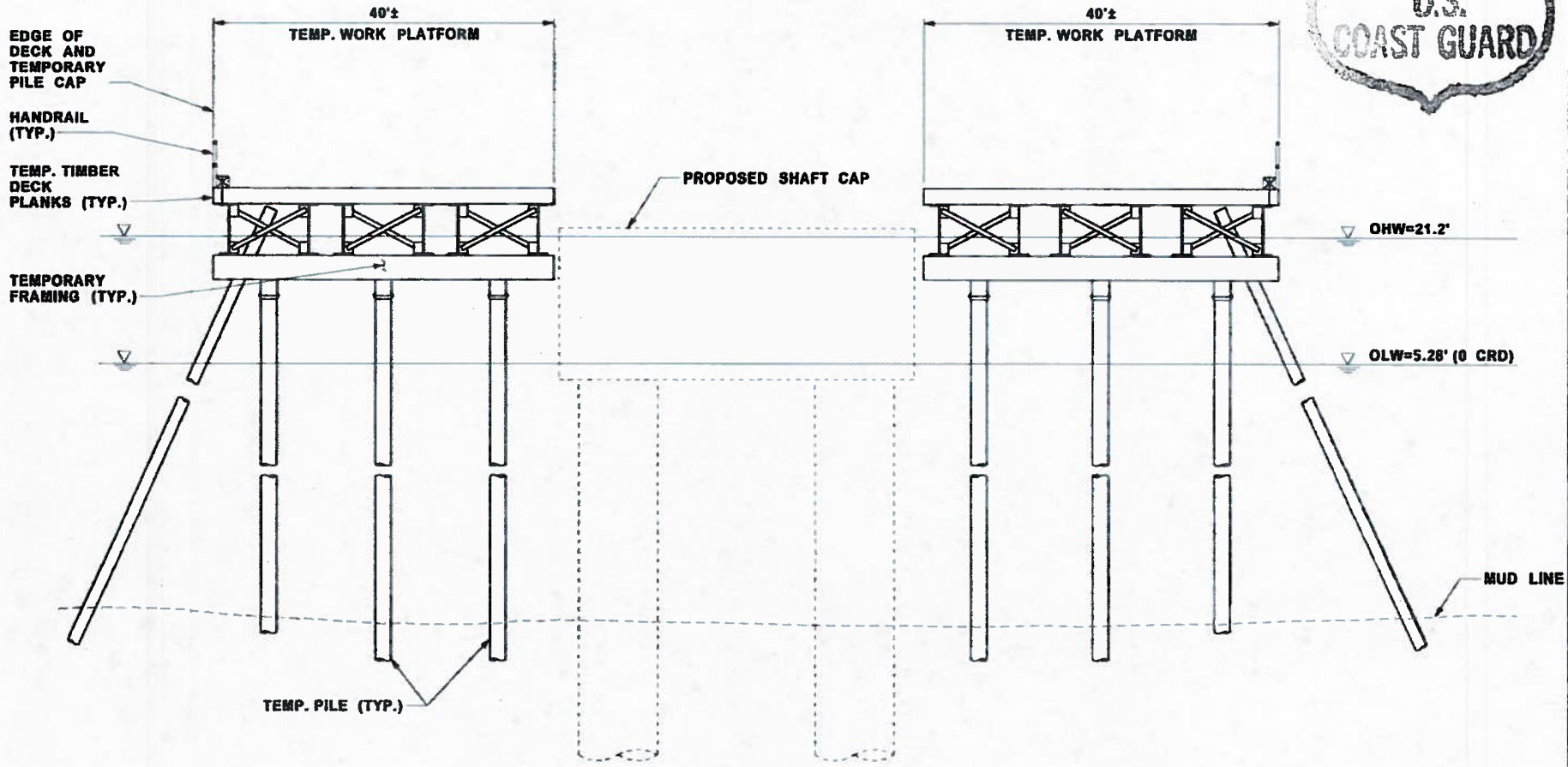
APPLICATION BY: WASHINGTON STATE DEPARTMENT OF TRANSPORTATION & OREGON DEPARTMENT OF TRANSPORTATION
ROUTE: INTERSTATE 5 DATE: AUG. 15, 2013

TEMPORARY STRUCTURES/FALSEWORK DETAILS

SHEET 6 OF 7 SHEETS

DATE: 8/13/2013 TIME: 10:38:59 AM PLOTTED BY: deguzma FILE NAME: c:\teswork\pw_work\crc\deguzmans\dms03878\CRC PS BG USCG Permit 06.dgn

APPROVED
2 7 SEP 2013
P(2-13-13)
U.S.
COAST GUARD



TYPICAL FOUNDATION SECTION ~ PIER RC-3 - RC-6

DATUM
NAVD 1988

REVISED: 12-31-13

0 10 20
FEET

UNITED STATES COAST GUARD BRIDGE PERMIT DRAWINGS

COLUMBIA RIVER CROSSING
INTERSTATE 5 OVER COLUMBIA RIVER, MILE 106.4 AT
VANCOUVER, WA (CLARK COUNTY) & PORTLAND, OR (MULTNOMAH COUNTY)

APPLICATION BY: WASHINGTON STATE DEPARTMENT OF TRANSPORTATION & OREGON DEPARTMENT OF TRANSPORTATION
ROUTE: INTERSTATE 5 DATE: AUG. 15, 2013

SHEET 7 OF 7 SHEETS

TEMPORARY STRUCTURES/FALSEWORK DETAILS

DATE: 8/9/2013 TIME: 11:00:17 AM PLOTTED BY: deguzma FILE NAME: c:\usework\pw_work\crc\deguzmans\dms03878\CRC PS BG USCG Permit 07.dgn