



January 24, 2023

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Subject: Certification of No-Rise and Description of Flood Hazard for Demolition of One Dolphin
Clark County, Washington

CERTIFICATION OF NO-RISE

The purpose of this letter is to certify that the demolition of one dolphin along the north bank of the Columbia River as proposed by Georgia-Pacific Consumer Operations LLC (GP), if performed in substantial accordance with the information in this letter, will not increase the base elevations of the base (100-year) flood, as shown in the Federal Emergency Management Agency's (FEMA's) Revised Flood Insurance Study for Clark County, Washington and Incorporated Areas, dated effective January 19, 2018.

The proposed demolition of the dolphin does not constitute "construction" or "development" within the floodplain or floodway of Clark County as defined by Clark County Ordinance. The proposed action does not involve any construction or temporary storage of materials in the floodway, and no fill would be placed in the floodway. The action exclusively is to demolish and remove a man-made encroachment—one "dolphin" consisting of multiple connected piles—along the north bank of the Columbia River. The ground and bathymetric elevations will not change, and no portion of the structure or its elements will remain above ground.

The remainder of this letter further describes the proposed demolition and the finding of no-rise.

PROJECT DESCRIPTION

GP is planning to remove one dolphin/pier structure that encroaches within the floodway along the north bank of the Columbia River in an area of unincorporated Clark County. The vicinity of this location is shown on Figure 1.

The structure to be removed lies approximately 65 feet west of the jurisdictional boundary between unincorporated Clark County and the City of Camas, near river mile 117.31. The structure lies immediately downstream (west) of an "L" shaped dock crossed by the city-county boundary. The dock is not part of the project and will not be demolished. A closer view of the area showing both the dolphin and the dock is shown on Figure 2.

The dolphin structure will be removed to below the ground (bathymetric) surface, and the ground elevations will be kept unchanged at their existing elevations.

The demolition of this dolphin will be done as part of a larger demolition project at the GP Camas Mill, the rest of which is entirely within the City of Camas, whereby GP will demolish other structures and obstructions (encroachments) upstream along the north bank of the Columbia River and both banks of Camas Slough. However, those actions have no relevance to this unincorporated area of Clark County because they are upstream.

GP is the sole organization responsible for maintaining, developing, removing, and deconstructing facilities at the GP Camas Mill.

FLOOD HAZARD DESCRIPTION

The dolphin structure to be demolished and removed is in the floodway on the north bank of the Columbia River. FEMA has studied this reach of the river in detail as part of the Flood Insurance Study for Clark County, Washington



and Incorporated Areas, dated January 19, 2018 (FEMA, 2018), and in the associated Flood Insurance Rate Maps (FIRMs).

Attachment 1 provides the following information from the FEMA (2018) Flood Insurance Study (FIS) annotated to show the project location:

- FEMA’s FIRM panel 529 showing flood zones in the vicinity of the project;
- Flood Profile 22P of the Columbia River from river mile 117.0 to 122.2 annotated to show the location of the dolphin at river mile 117.31; and
- Floodway Data table (FIS Table 9) highlighting lettered cross-sections AA through AB, which are located immediately downstream and upstream of the project area.

The demolition location is depicted on FIRM panel 529. The dolphin location corresponds to river mile 117.31. This location is slightly different from the location of the county–city boundary shown on the FEMA FIS flood profiles because the jurisdiction line crosses the river at an angle and is plotted on the FIS profile at the river mile where it crosses the profile baseline near the river center. Figure 3 shows a close-up view of FIRM panel 529 showing the location of the dolphin and the angled orientation of the county–city boundary. For comparison, Figures 2 and 3 show the same area at the same scale.

REGULATORY CONTEXT

Clark County Code 40.420.020-A-2 (Standards; Uses; Prohibited Uses in SFHA’s) states as follows:

b. Floodway encroachments are prohibited unless certification by a licensed professional engineer registered in the state of Washington is provided demonstrating through hydrologic and hydraulic analyses performed in accordance with standard engineering practice that encroachments shall not result in any increase in flood levels during the occurrence of the base flood discharge. If it has been adequately demonstrated through calculations that the encroachment will not result in increased flood levels, all new nonresidential construction and nonresidential substantial improvements shall comply with all applicable flood hazard reduction provisions of this chapter.

Clark County Code does not require a flood hazard permit if no construction or fill (“development”) is occurring in the Special Flood Hazard Area (100-year floodplain).

ANALYSIS

The proposed demolition of the dolphin does not constitute development in the floodplain because no construction or renovation of a structure will occur, nor will any fill be placed in the floodplain or floodway, and no change in grade will result following demolition and removal. The activity is solely to demolish and remove an existing multi-pile dolphin structure that currently encroaches flow in the floodway. The encroachment is small relative to the full cross-section of the Columbia River, and is further lessened because the dolphin is hydraulically “sheltered” by the “L”-shaped dock just upstream. That dock is not part of the project and will remain. Following removal of the dolphin, the bathymetry and bank elevations will be the same as before. As a result of this removal, hydraulic conveyance in this vicinity will either be unchanged or slightly improved, and the removal cannot result in an increase in base flood elevations both at this site and further away, either upstream or downstream.

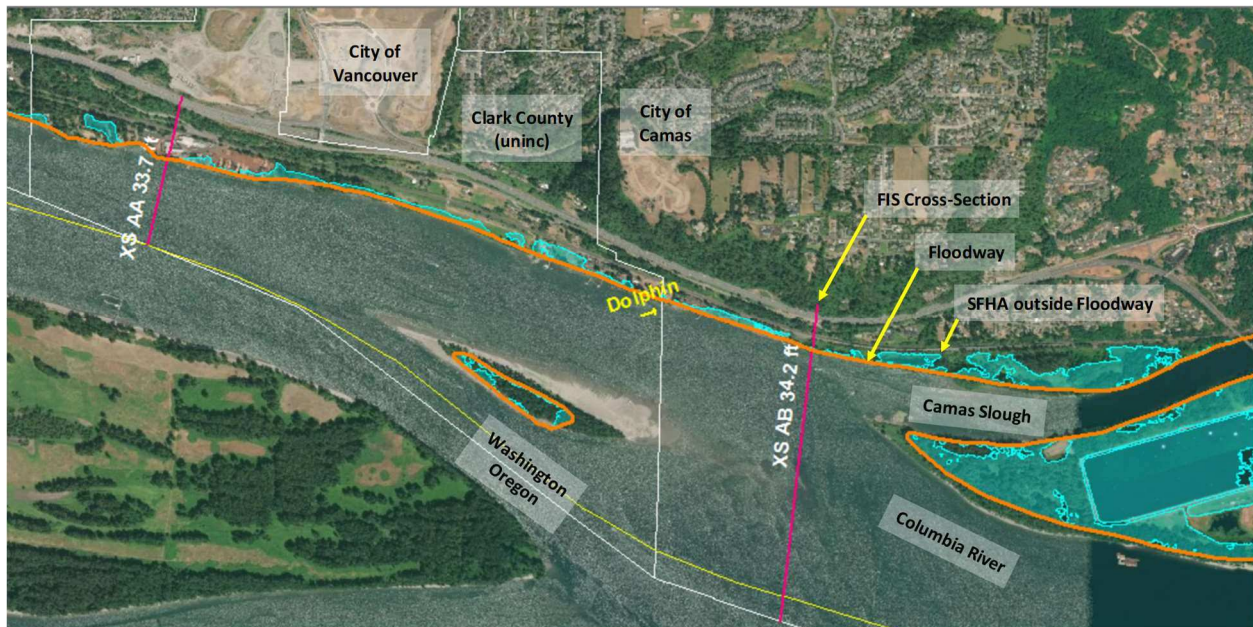


Figure 1. Vicinity of Dolphin Proposed for Demolition. Notes: Location is highlighted with yellow arrow labeled “Dolphin” and is between FEMA Cross-Sections AA and AB on the Columbia River about 65 feet west of the boundary between the City of Camas and unincorporated Clark County. Elevations are in feet relative to the North American Vertical Datum of 1988 (NAVD88). Flood hazard information is shown for the Washington side.

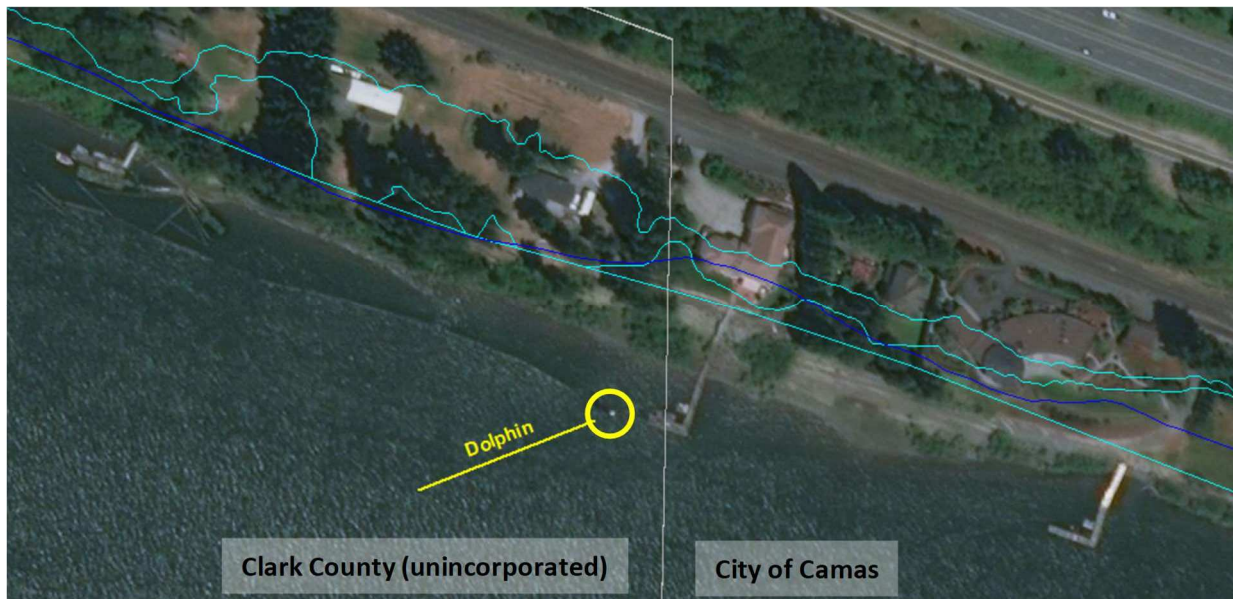


Figure 2. Location of Dolphin Proposed for Demolition. Note: Dolphin is about 65 feet west of the boundary between the City of Camas and unincorporated Clark County. The “L”-shaped dock upstream is not part of the project.

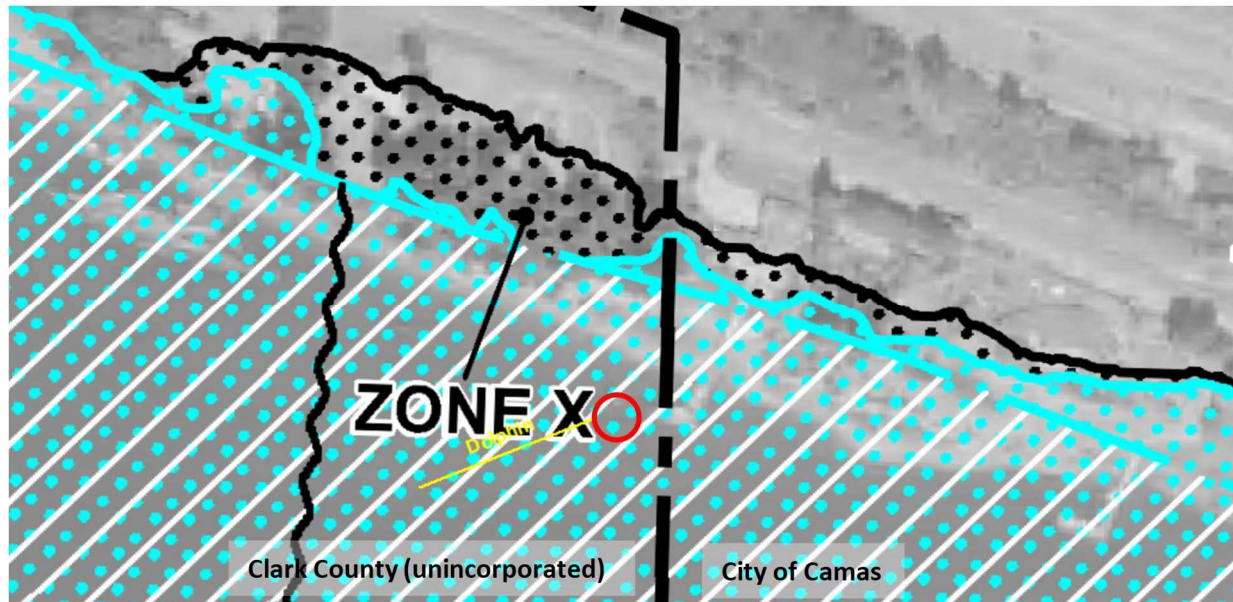


Figure 3. Location of Dolphin Proposed for Demolition on FEMA FIRM Panel. Note: Dolphin is about 65 feet west of the boundary between the City of Camas and unincorporated Clark County. A portion of FIRM panel 529 is shown; the full panel showing the location is included in Attachment 1. Figures 2 and 3 show approximately the same area at the same scale.

If you have any questions, please do not hesitate to contact me.

Sincerely,

WSP USA Environment & Infrastructure Inc.

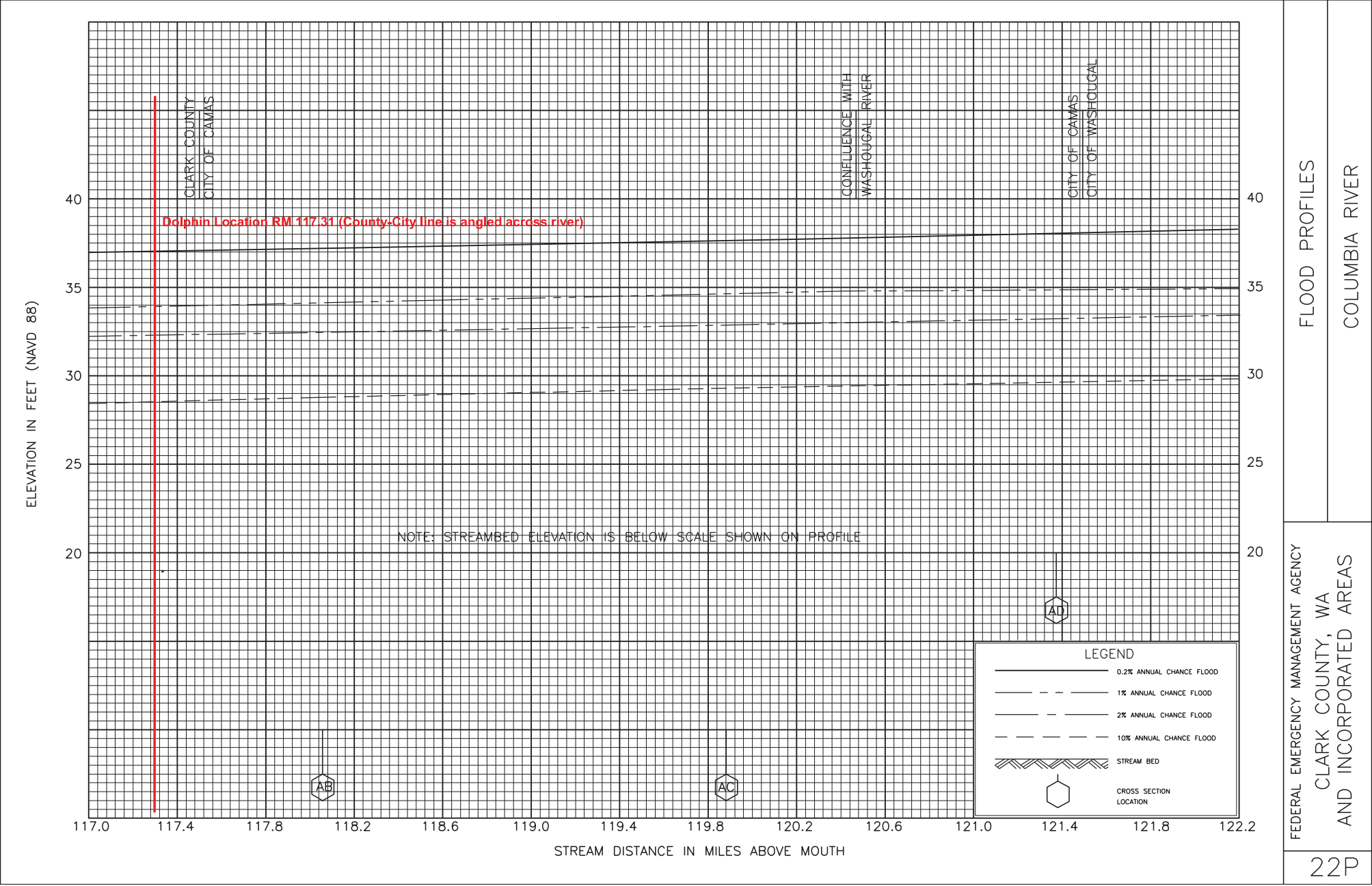


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Attachments: Attachment 1-1: Flood Insurance Map (FIRM) 529
Attachment 1-2: Columbia River Flood Profiles
Attachment 1-3: Columbia River Floodway Data

ATTACHMENTS



FLOODING SOURCE		FLOODWAY			1-PERCENT ANNUAL CHANCE FLOOD WATER SURFACE ELEVATION			
CROSS SECTION	DISTANCE ¹	WIDTH (FT.)	SECTION AREA (SQ. FT.)	MEAN VELOCITY (F. P. S.)	REGULATORY (NAVD88)	WITHOUT FLOODWAY (NAVD88)	WITH FLOODWAY (NAVD88)	INCREASE
COLUMBIA RIVER	AA	4,773 / 1,206 ²	178,406	3.2	33.7	33.2	34.1	0.9
	AB	6,731 / 3,745 ²	210,779	2.7	34.2	33.6	34.4	0.8
	AC	2,280 / 1,367 ²	127,035	4.4	34.6	33.9	35.0	0.9
	AD	4,250 / 1,101 ²	157,277	3.6	34.9	34.3	35.1	0.8
	AE	5,500 / 1,856 ²	189,310	2.9	35.1	34.7	35.5	0.8
	AF	5,700 / 2,039 ²	197,499	2.8	35.3	34.8	35.7	0.9
	AG	5,800 / 2,475 ²	206,916	2.7	35.4	34.8	35.7	0.9
	AH	6,950 / 4,728 ²	198,505	2.8	35.6	35.1	36.0	0.9
	AI	5,900 / 5,498 ²	173,646	3.2	35.8	35.2	36.1	0.9

⁽¹⁾Stream distance in miles above mouth⁽⁴⁾Width/width within county limits⁽²⁾Elevations computed without consideration of backwater from Columbia River⁽⁵⁾Width excluding island/right channel width looking downstream/width of right channel within corporate limits⁽³⁾Elevations based on HEC-2 hydraulic model

TABLE 9

FEDERAL EMERGENCY MANAGEMENT AGENCY
CLARK COUNTY, WASHINGTON
 AND INCORPORATED AREAS

FLOODWAY DATA

COLUMBIA RIVER