



US Army Corps  
of Engineers  
Seattle District

# PUBLIC NOTICE

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Applicant:  
Bureau of Reclamation

Published: January 30, 2026  
Expires: March 2, 2026

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**Seattle District**  
**Permit Application No. NWS-2026-0057**

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Interested parties are hereby notified that an application has been received for a Department of the Army permit in accordance with Section 404 of the Clean Water Act (CWA) for certain work described below and shown on the enclosed drawings dated January 8, 2026.

APPLICANT: Matt Uranga  
Bureau of Reclamation  
1150 N. Curtis Road  
Boise Idaho 83706  
Telephone: (208) 378-5206

AGENT: Jason Sutter  
Bureau of Reclamation  
1150 N. Curtis Road  
Boise Idaho 83706  
Telephone: (208) 270-5921

LOCATION: In Conconully Reservoir and Salmon Creek near Conconully, Okanogan County, Washington.

WORK: The applicant proposes to construct a stability berm on the downstream face of Conconully Dam. The stability berm would be built on a foundation of deep soil mixing (DSM) reinforcement columns to improve the strength and resilience of the dam's foundation materials. In order to construct the project a boat ramp would be constructed to barge material to and from the stability berm worksite. The applicant also proposes to upgrade and extend the outlet to ensure compatibility with the proposed stability berm. Additionally, new water flow control systems and facilities would be installed to enhance operational functionality. These proposed project elements would result in 642 liner feet of loss of Salmon Creek, approximately .27 acre fill in Conconully reservoir, and .5 acres of wetland fill.

PURPOSE: The applicants stated purpose is to reduce the risk of dam failure in the event of seismic activity, maintain water deliveries and flows for irrigators and listed fish species, improve control of water flows through the outlet works, and continue to provide recreational benefits and fish and wildlife habitat.

Dredged Material Testing: The applicant has chosen not to complete the testing before this Public Notice was published. Prior to completing our review, the proposed dredged material must be tested according to the procedures specified by the Dredged Material Management Program (DMMP). The DMMP evaluation may include both chemical and biological testing of sediments. For this project, the DMMP agencies will determine whether the dredged material is suitable for disposal at a DMMP open-water disposal site or must be disposed of at an upland location. The sediment testing data will be available at the Corps, Seattle District, Dredged Material Management Office.

Disposal Site Use Conditions: The following standard site-use conditions will be specified by the Corps and the Washington Department of Natural Resources as part of the Federal/State permitting processes if a permit is issued: (1) disposal operations must not interfere with Indian treaty fishing at the disposal site, including gill nets and other fishing gear; (2) the permittee must coordinate any nighttime disposal with the Corps, Seattle District, Regulatory Division Project Manager; and (3) approval must be received from the District Engineer prior to conducting nighttime disposal. Other appropriate special conditions may be added as a result of comments received during the public review period for this public notice.

#### ADDITIONAL INFORMATION:

The work would be completed over a 4-year period of time.

Copies of this public notice which have been mailed or otherwise physically distributed feature project drawings in black and white. The electronic version features those drawings in color, which we think more accurately communicates the scope of project impacts. To access the electronic version of this public notice, go to the Seattle District's web page at <http://www.nws.usace.army.mil/> and under the heading Open Public Comment Periods select Regulatory Public Notices. Recently-issued public notices are listed in chronological order of the date of issuance. Select and view the listing for this project.

The wetland boundaries shown on the project drawings have not yet been verified by the U.S. Army Corps of Engineers (Corps). If the Corps determines the boundaries of the wetland/waters are substantially inaccurate a new public notice may be published.

MITIGATION: To address anticipated impacts to upland vegetation communities, wetlands, and in-stream aquatic habitats affected by construction activities, the applicant is proposing a suite of mitigation actions targeted at creation, restoration, enhancement, or maintenance of impacted vegetation communities within the project area.

#### *Upland Revegetation*

Revegetation efforts aimed at restoring upland vegetation communities, particularly in the borrow area. Revegetation activities would begin once construction activities have concluded and are expected to take 1 year post-construction to complete. It is assumed

that desired vegetation conditions would be successfully established within 10 years post-construction.

#### *Aquatic and Wetland Habitat Restoration*

The applicant proposes to replace, restore, and enhance protected in-stream and wetland habitats in a 9.8-acre area in the Salmon Creek floodplain directly downstream of the dam and outlet works to compensate for impacts on and losses of these vegetation and habitat types. Restoration activities would occur only on Reclamation-managed lands within the project area.

The following restoration components and features are being proposed in the restoration area of Salmon Creek:

- Multi-thread channel network creation
- Wood habitat structures (large and small wood)
- Constructed pools, riffles and gravel bar features
- Gravel augmentation and sediment additions
- Wetland and riparian/wetland bench creation

ENDANGERED SPECIES: The Endangered Species Act (ESA) requires federal agencies to consult with the National Marine Fisheries Service (NMFS) and/or U.S. Fish and Wildlife Service (USFWS) pursuant to Section 7 of the ESA on all actions that may affect a species listed (or proposed for listing) under the ESA as threatened or endangered or any designated critical habitat. The Bureau of Reclamation, as the lead agency for ESA consultation, will consult with the NMFS and/or the USFWS as required under Section 7 of the ESA.

ESSENTIAL FISH HABITAT: The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act of 1996, requires all Federal agencies to consult with the NMFS on all actions, or proposed actions, permitted, funded, or undertaken by the agency, that may adversely affect Essential Fish Habitat (EFH). The proposed action would impact EFH in the project area. The Bureau of Reclamation, as the lead agency for a determination regarding EFH, will consult with the National Marine Fisheries Services if necessary. [

CULTURAL RESOURCES: The Bureau of Reclamation, as the lead agency for determining compliance with Section 106 of the National Historic Preservation Act, will consult with the State Historic Preservation Officer and Native American Nations as appropriate.

WATER QUALITY CERTIFICATION: Section 401 of the Clean Water Act requires applicants proposing any activity that may result in a discharge into waters of the U.S. to provide the Corps with a certification from the jurisdiction in which the discharge originates that the discharge will comply with applicable water quality requirements. The Washington Department of Ecology is the certifying authority for this activity. The

Corps cannot make a final permit decision until the Washington Department of Ecology determines the activity would not result in a discharge, grants certification (with or without conditions), waives certification, or fails to act within the reasonable period of time. Conditions may be added to the Corps permit if the Washington Department of Ecology determines they are necessary to ensure compliance with the applicable water quality standards.

**PUBLIC HEARING:** Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing.

**EVALUATION:** The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts, of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefits, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered, including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people.

The U.S. Army Corps of Engineers is soliciting comments from the public; Native American Nations or tribal governments; Federal, State, and local agencies and officials; and other interested parties in order to consider and evaluate the impacts of this activity. Any comments received will be considered by the Corps to determine whether to issue, modify, condition or deny a permit for the work. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the activity.

**COMMENT AND REVIEW PERIOD:** Conventional mail or e-mail comments on this public notice will be accepted and made part of the record and will be considered in determining whether authorizing the work would not be contrary to the public interest. In order to be accepted, e-mail comments must originate from the author's e-mail account and must include on the subject line of the e-mail message the permit applicant's name and reference number as shown below. All e-mail comments should be sent to [dale.j.jordan@usace.army.mil](mailto:dale.j.jordan@usace.army.mil). Either conventional mail or e-mail comments must include the permit applicant's name and reference number, as shown below, and the commenter's name, address, and phone number. All comments received will become

part of the administrative record and are subject to public release under the Freedom of Information Act including any personally identifiable information such as names, phone numbers, and addresses. All comments whether conventional mail or e-mail must reach this office, no later than the expiration date of this public notice to ensure consideration.

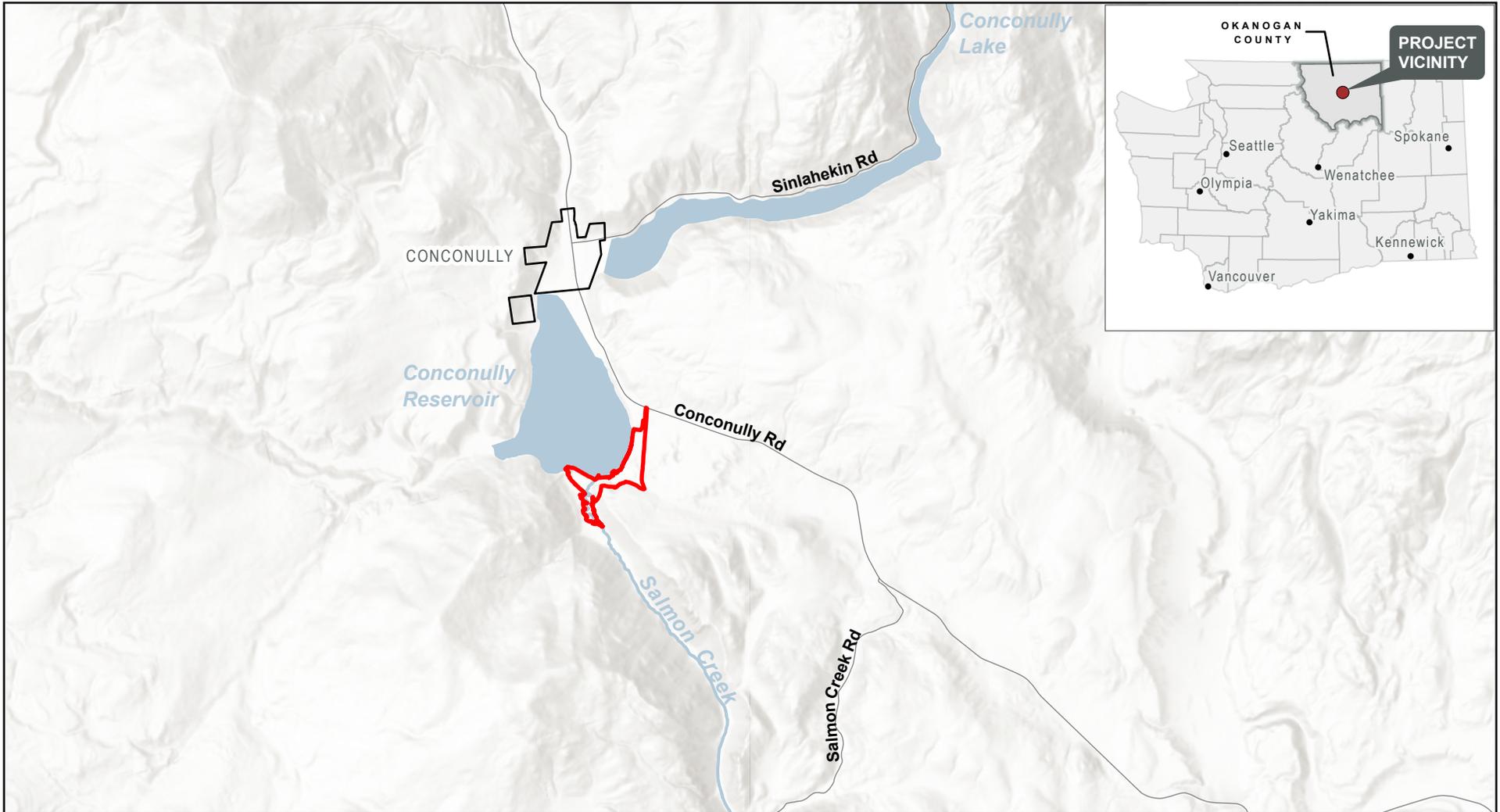
You may also now submit project specific comments to the Corps through the new Regulatory Request System (RRS) through this link: <https://rrs.usace.army.mil/rrs> ; Click Public Notices and filter to Washington State to see all current Seattle District Public Notices, including this notice. You may submit your comments directly through this portal.

Conventional mail comments should be sent to:

U.S. Army Corps of Engineers, Regulatory Division,  
Attention: Dale Jordan,  
4735 E. Marginal Way S, Bldg 1202,  
Seattle, Washington, 98134-2388.  
Telephone: (206) 316-3967

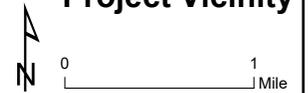
To ensure proper consideration of all comments, responders must include the following name and reference number in the text of their comments: Bureau of Reclamation; NWS-2026-0057

Encl: Figures (47 PAGES)



- Project Location
- Waterbody
- Stream

**Attachment 1  
Project Vicinity**



APPLICANT:



— BUREAU OF —  
**RECLAMATION**

ADJACENT PROPERTY OWNERS:

See Part 5h of the JARPA for a full list of adjacent property owners.

Project Name: Conconully Safety of Dams Modification Project

DATUM: D North American 1983

LAT/LONG: 48.537853 N, -119.759296 W

Section: 7 and 18

Township: 35N

Range: 5E

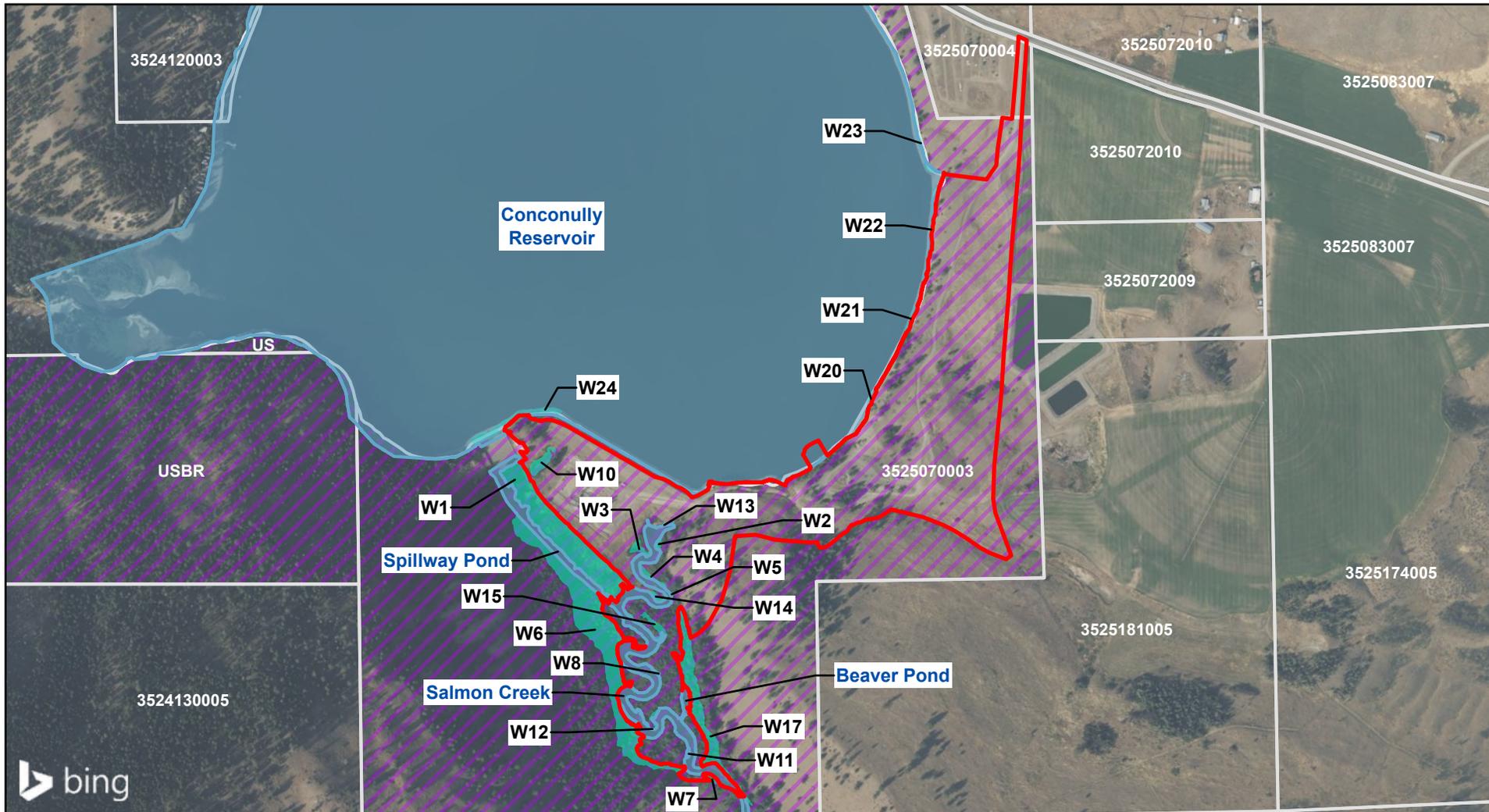
PROPOSED PROJECT: Construct stability berm on Conconully Dam, aquatic and wetland habitat restoration.

IN: Wetlands and Waterbodies  
COUNTY: Okanogan

SHEET: 1 of 47

NEAR/AT: City of  
Conconully  
STATE: WA

DATE: 01/08/2026



- Construction Limits
- Delineated Waterbody
- Parcel
- Delineated Wetland
- USBR Property

\* Okanogan County Parcel number 3525070003 was modified to reflect the Record of Survey for Bureau of Reclamation

### Attachment 1 Existing Conditions



APPLICANT:  

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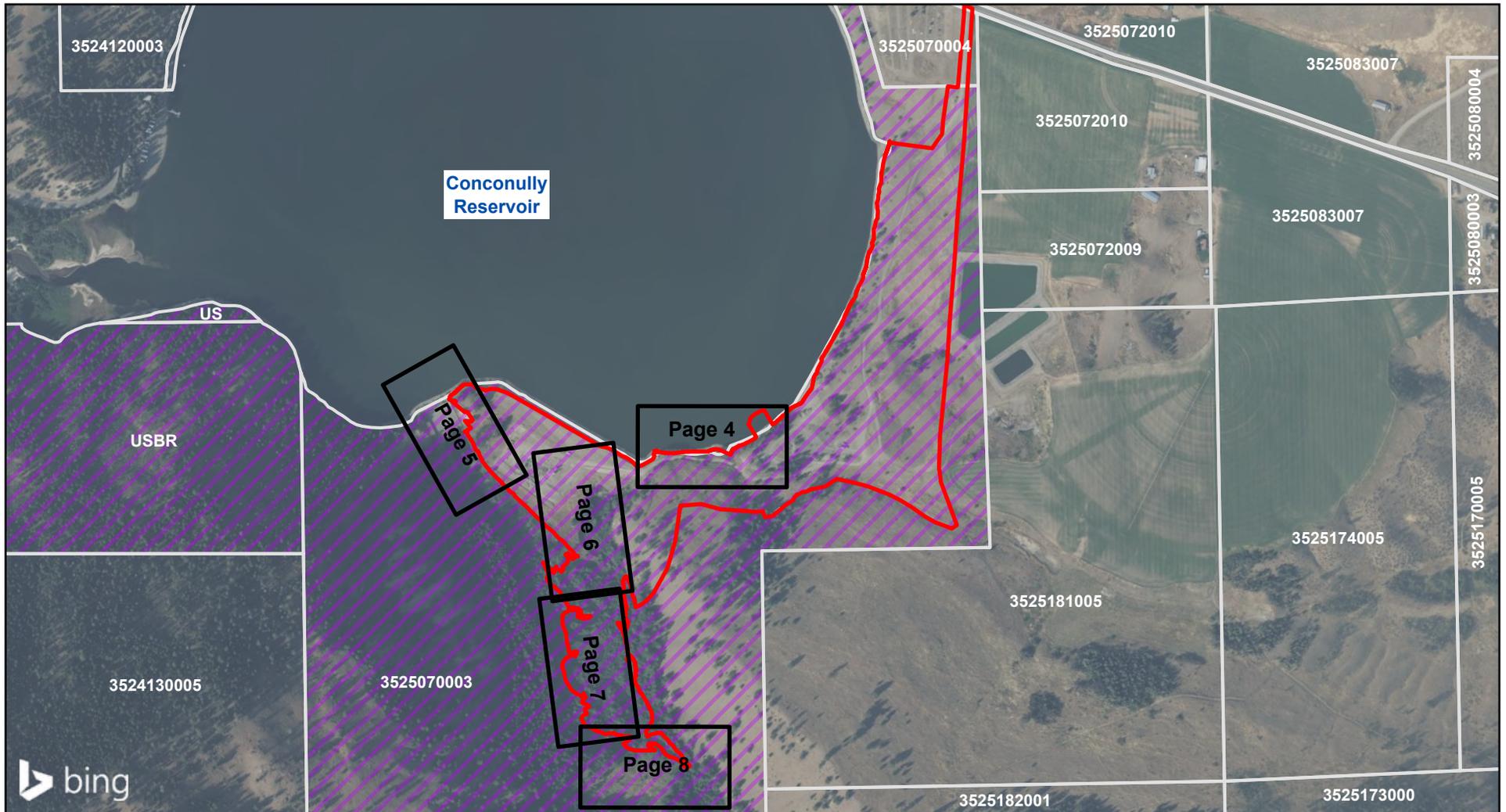
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IN: Wetlands and Waterbodies  
 COUNTY: Okanogan

SHEET: 2 of 47

NEAR/AT: City of Conconully  
 STATE: WA

DATE: 01/08/2026



-  Construction Limits
-  Impact Sheet
-  Parcel
-  USBR Property

*\* Okanogan County Parcel number 3525070003 was modified to reflect the Record of Survey for Bureau of Reclamation*

### Attachment 1 Proposed Project



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Township: 35N

Range: 5E

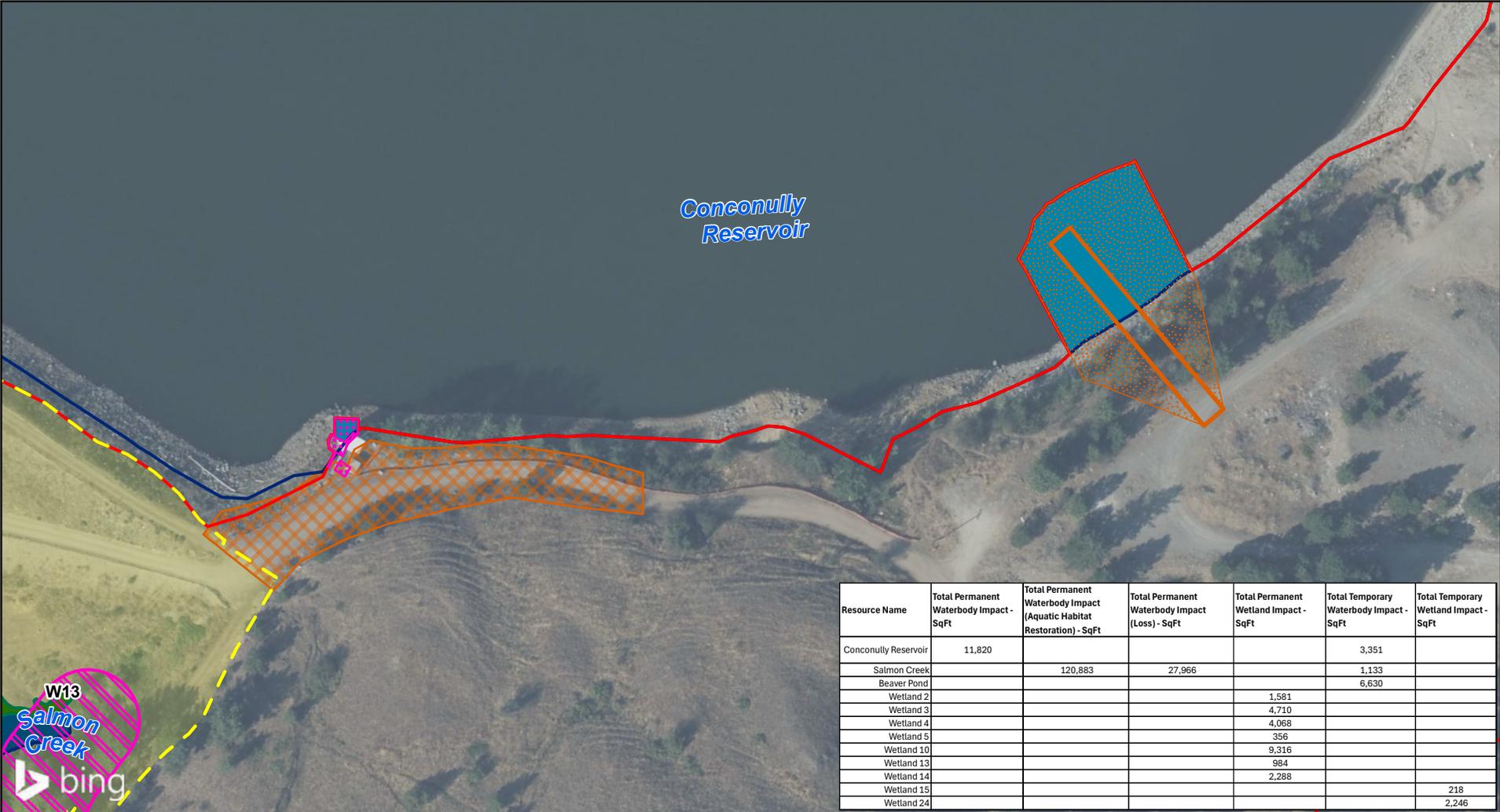
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IN: Wetlands and Waterbodies  
COUNTY: Okanogan

SHEET: 3 of 47

NEAR/AT: City of  
Conconully  
STATE: WA

DATE: 01/08/2026



- Construction Limits
- Outlet Works
- Intake Bulkhead Crane Area
- Foundation & Stability Berm
- Delineated Waterbody
- Boat Ramp
- Boat Ramp Excavation and Fill

- Wetland Stream Impacts
- Permanent Waterbody Impact
  - Permanent Waterbody Impact (Loss)
  - Permanent Wetland Impact

## Attachment 1 Proposed Project



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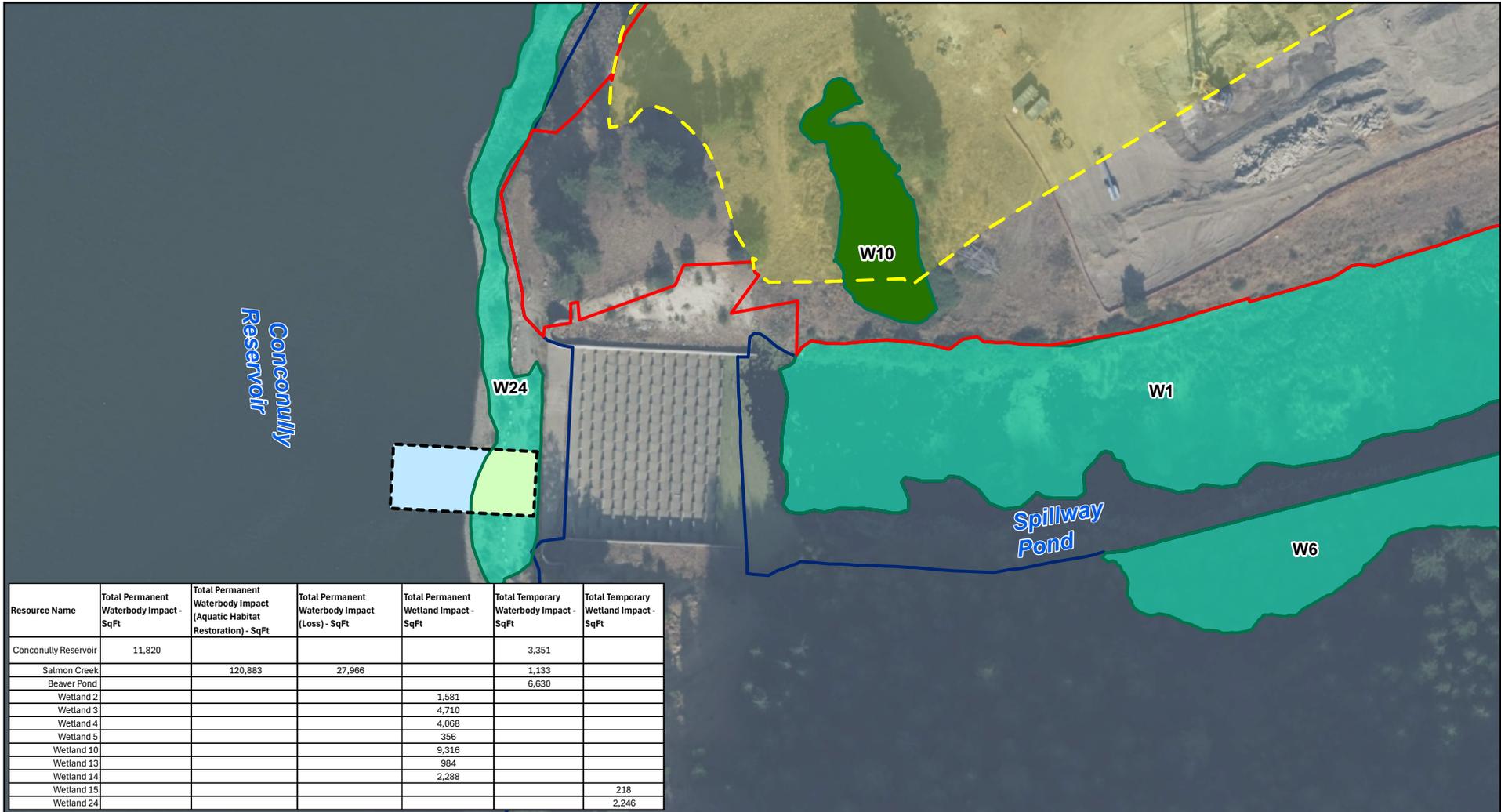
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NEAR/AT: City of Conconully  
 STATE: WA

IN: Wetlands and Waterbodies  
 COUNTY: Okanogan

SHEET: 4 of 47

DATE: 01/08/2026



| Resource Name        | Total Permanent Waterbody Impact - SqFt | Total Permanent Waterbody Impact (Aquatic Habitat Restoration) - SqFt | Total Permanent Waterbody Impact (Loss) - SqFt | Total Permanent Wetland Impact - SqFt | Total Temporary Waterbody Impact - SqFt | Total Temporary Wetland Impact - SqFt |
|----------------------|---|---|--|---------------------------------------|---|---------------------------------------|
| Conconully Reservoir | 11,820                                  |   |  |                                       | 3,351                                   |                                       |
| Salmon Creek         |   | 120,883   | 27,966   |                                       | 1,133                                   |                                       |
| Beaver Pond          |   |   |  |                                       | 6,630                                   |                                       |
| Wetland 2            |   |   |  | 1,581                                 |   |                                       |
| Wetland 3            |   |   |  | 4,710                                 |   |                                       |
| Wetland 4            |   |   |  | 4,068                                 |   |                                       |
| Wetland 5            |   |   |  | 356                                   |   |                                       |
| Wetland 10           |   |   |  | 9,316                                 |   |                                       |
| Wetland 13           |   |   |  | 984                                   |   |                                       |
| Wetland 14           |   |   |  | 2,288                                 |   |                                       |
| Wetland 15           |   |   |  |                                       |   | 218                                   |
| Wetland 24           |   |   |  |                                       |   | 2,246                                 |

- Construction Limits
- Foundation & Stability Berm
- Spillway Pumps
- Delineated Wetland
- Delineated Waterbody
- Permanent Wetland Impact
- Temporary Waterbody Impact
- Temporary Wetland Impact

Wetland Stream Impacts

**Attachment 1  
Proposed Project**



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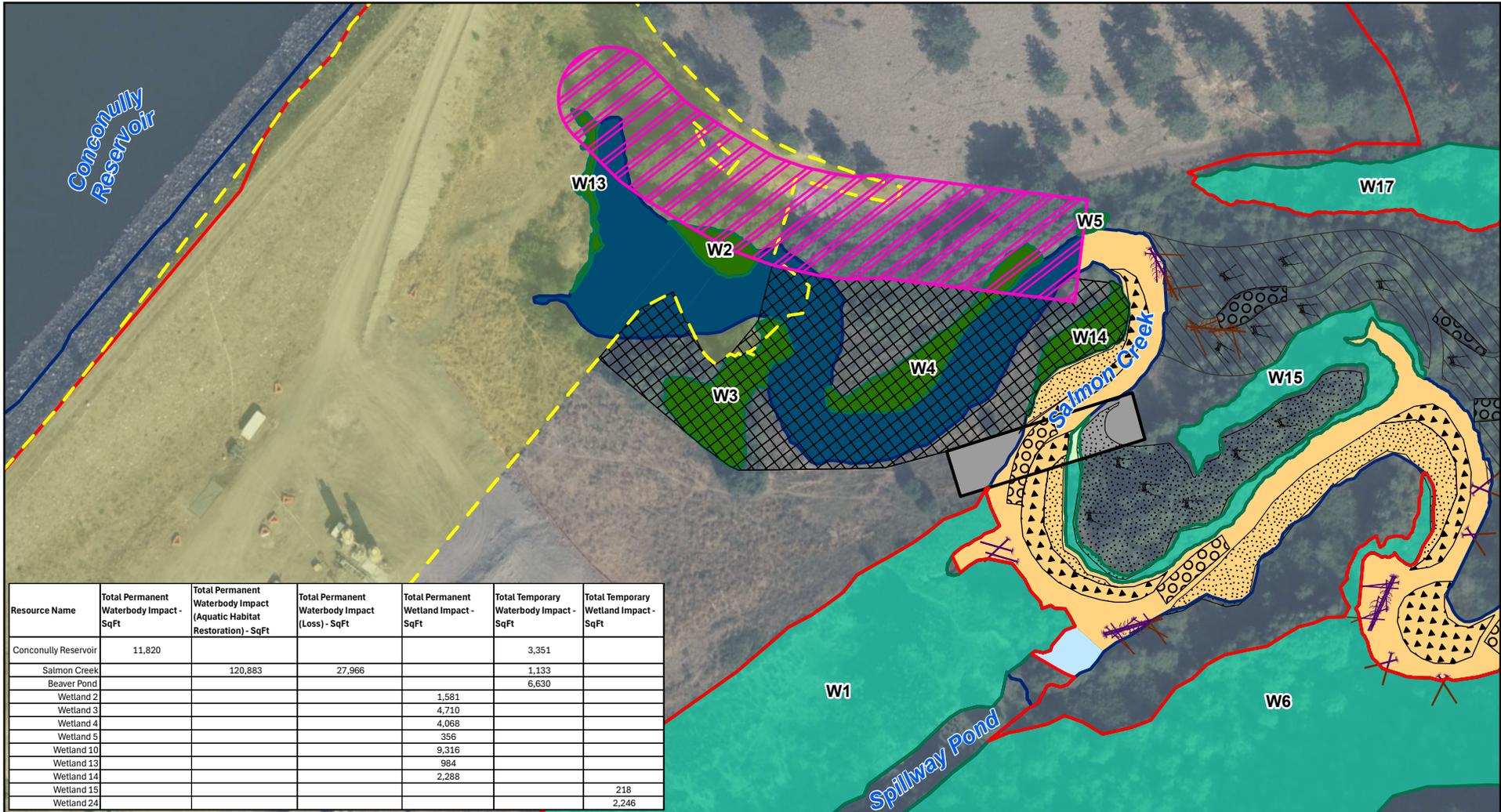
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NEAR/AT: City of Conconully  
 STATE: WA

IN: Wetlands and Waterbodies  
 COUNTY: Okanogan

SHEET: 5 of 47

DATE: 01/08/2026



| Resource Name        | Total Permanent Waterbody Impact - SqFt | Total Permanent Waterbody Impact (Aquatic Habitat Restoration) - SqFt | Total Permanent Waterbody Impact (Loss) - SqFt | Total Permanent Wetland Impact - SqFt | Total Temporary Waterbody Impact - SqFt | Total Temporary Wetland Impact - SqFt |
|----------------------|---|---|--|---------------------------------------|---|---------------------------------------|
| Conconully Reservoir | 11,820                                  |   |  |                                       | 3,351                                   |                                       |
| Salmon Creek         |   | 120,883   | 27,966   |                                       | 1,133                                   |                                       |
| Beaver Pond          |   |   |  |                                       | 6,630                                   |                                       |
| Wetland 2            |   |   |  | 1,581                                 |   |                                       |
| Wetland 3            |   |   |  | 4,710                                 |   |                                       |
| Wetland 4            |   |   |  | 4,068                                 |   |                                       |
| Wetland 5            |   |   |  | 356                                   |   |                                       |
| Wetland 10           |   |   |  | 9,316                                 |   |                                       |
| Wetland 13           |   |   |  | 984                                   |   |                                       |
| Wetland 14           |   |   |  | 2,288                                 |   |                                       |
| Wetland 15           |   |   |  |                                       |   | 218                                   |
| Wetland 24           |   |   |  |                                       |   | 2,246                                 |

|   |                                    |  |   |
|---|------------------------------------|--|---|
| Construction Limits                                       | Constructed Wetland                | <u>Wetland Stream Impacts</u>                            | Temporary Wetland Impact                  |
| Foundation & Stability Berm                               | Constructed Gravel Bar             | Permanent Waterbody Impact (Aquatic Habitat Restoration) | Large Woody Debris - In Waterbody         |
| Cofferdam   | Constructed Riffle                 | Permanent Waterbody Impact (Loss)                        | Large Woody Debris - Outside of Waterbody |
| Outlet Works  | Constructed Wetland/Riparian Bench | Permanent Wetland Impact                                 | Floodplain Roughness                      |
| Foundation & Stability Berm Construction Fill & Work Area | Delineated Wetland                 | Temporary Waterbody Impact                               |   |
|   | Delineated Waterbody               |  |   |

## Attachment 1 Proposed Project



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**Section:** 7 and 18  
**Township:** 35N  
**Range:** 5E

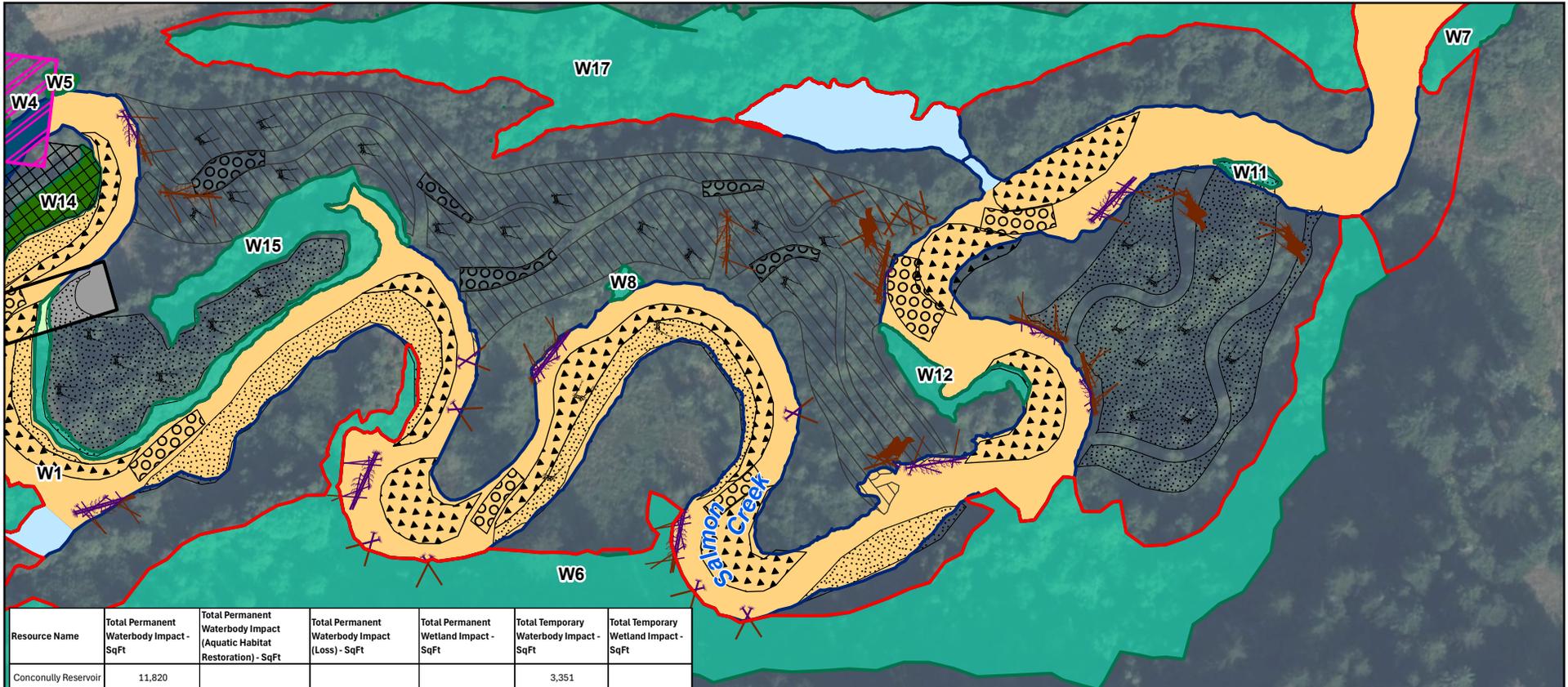
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**NEAR/AT:** City of Conconully  
**STATE:** WA

**IN:** Wetlands and Waterbodies  
**COUNTY:** Okanogan

**SHEET:** 6 of 47

**DATE:** 01/08/2026



| Resource Name        | Total Permanent Waterbody Impact - SqFt | Total Permanent Waterbody Impact (Aquatic Habitat Restoration) - SqFt | Total Permanent Waterbody Impact (Loss) - SqFt | Total Permanent Wetland Impact - SqFt | Total Temporary Waterbody Impact - SqFt | Total Temporary Wetland Impact - SqFt |
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| Beaver Pond          |   |   |  |                                       | 6,630                                   |                                       |
| Wetland 2            |   |   |  | 1,581                                 |   |                                       |
| Wetland 3            |   |   |  | 4,710                                 |   |                                       |
| Wetland 4            |   |   |  | 4,068                                 |   |                                       |
| Wetland 5            |   |   |  | 356                                   |   |                                       |
| Wetland 10           |   |   |  | 9,316                                 |   |                                       |
| Wetland 13           |   |   |  | 984                                   |   |                                       |
| Wetland 14           |   |   |  | 2,288                                 |   |                                       |
| Wetland 15           |   |   |  |                                       |   | 218                                   |
| Wetland 24           |   |   |  |                                       |   | 2,246                                 |

The Salmon Creek Aquatic and Wetland Habitat Restoration Design projection results in false impacts, such as W11. These false impacts would not be included as part of the project

- ▬ Construction Limits
- Cofferdam
- Outlet Works
- Foundation & Stability Berm
- Construction Fill & Work Area
- Constructed Wetland
- Constructed Gravel Bar
- Constructed Riffle
- Constructed Wetland/Riparian Bench
- Delineated Wetland
- Delineated Waterbody
- Wetland Stream Impacts
- Permanent Waterbody Impact (Aquatic Habitat Restoration)
- Permanent Waterbody Impact (Loss)
- Permanent Wetland Impact
- Temporary Waterbody Impact
- Temporary Wetland Impact
- ✕ Large Woody Debris - In Waterbody
- ✕ Large Woody Debris - Outside of Waterbody
- ✕ Floodplain Roughness

## Attachment 1 Proposed Project



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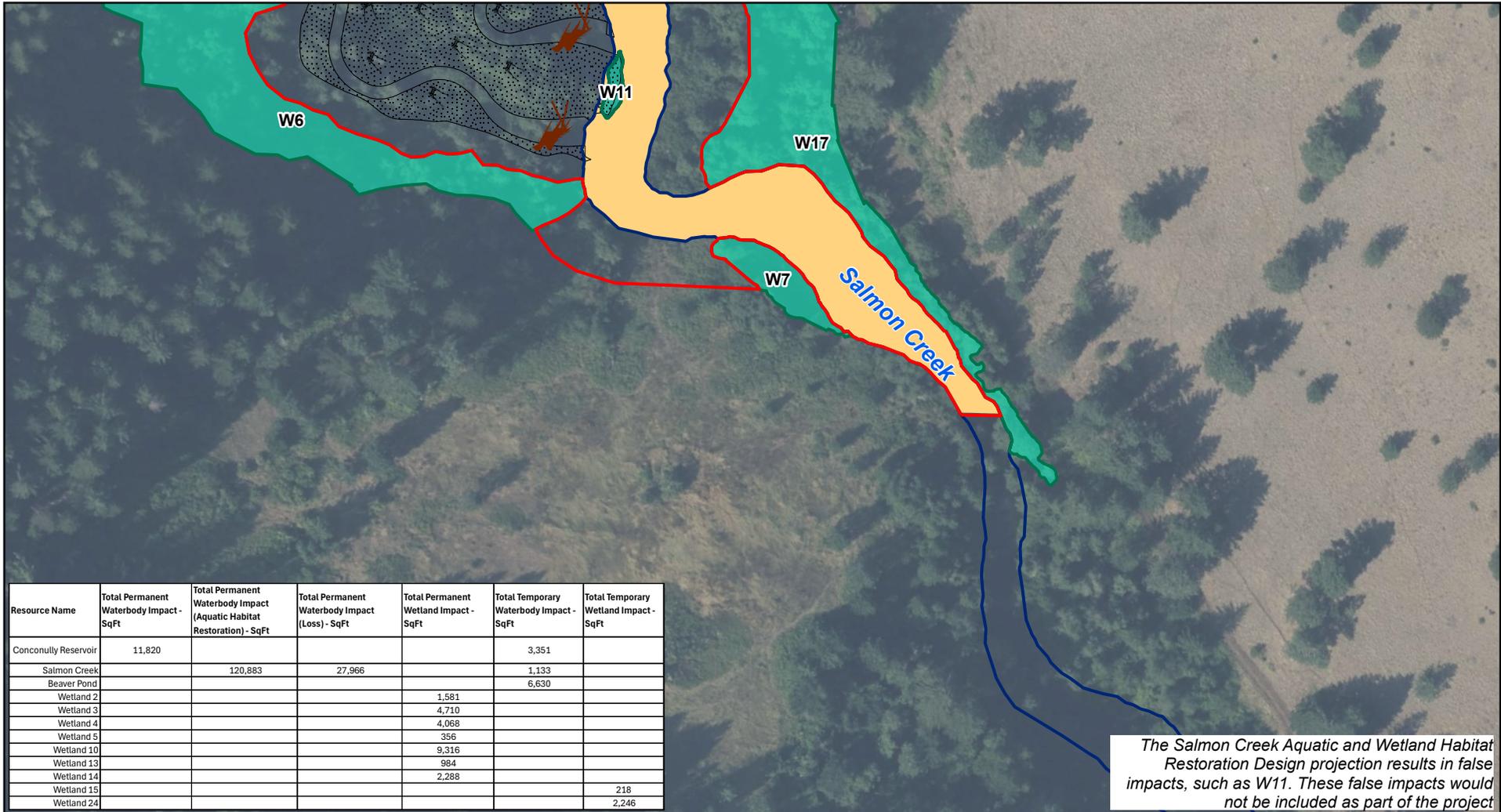
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**STATE:** WA

**IN:** Wetlands and Waterbodies  
**COUNTY:** Okanogan

**SHEET:** 7 of 47

**DATE:** 01/08/2026



| Resource Name        | Total Permanent Waterbody Impact - SqFt | Total Permanent Waterbody Impact (Aquatic Habitat Restoration) - SqFt | Total Permanent Waterbody Impact (Loss) - SqFt | Total Permanent Wetland Impact - SqFt | Total Temporary Waterbody Impact - SqFt | Total Temporary Wetland Impact - SqFt |
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| Wetland 13           |   |   |  | 984                                   |   |                                       |
| Wetland 14           |   |   |  | 2,288                                 |   |                                       |
| Wetland 15           |   |   |  |                                       |   | 218                                   |
| Wetland 24           |   |   |  |                                       |   | 2,246                                 |

*The Salmon Creek Aquatic and Wetland Habitat Restoration Design projection results in false impacts, such as W11. These false impacts would not be included as part of the project*

- Construction Limits
- Delineated Wetland
- Delineated Waterbody
- Permanent Waterbody Impact (Aquatic Habitat Restoration)
- Constructed Wetland
- ✕ Large Woody Debris - In Waterbody
- ✕ Large Woody Debris - Outside of Waterbody
- ✕ Floodplain Roughness
- Wetland Stream Impacts

## Attachment 1 Proposed Project



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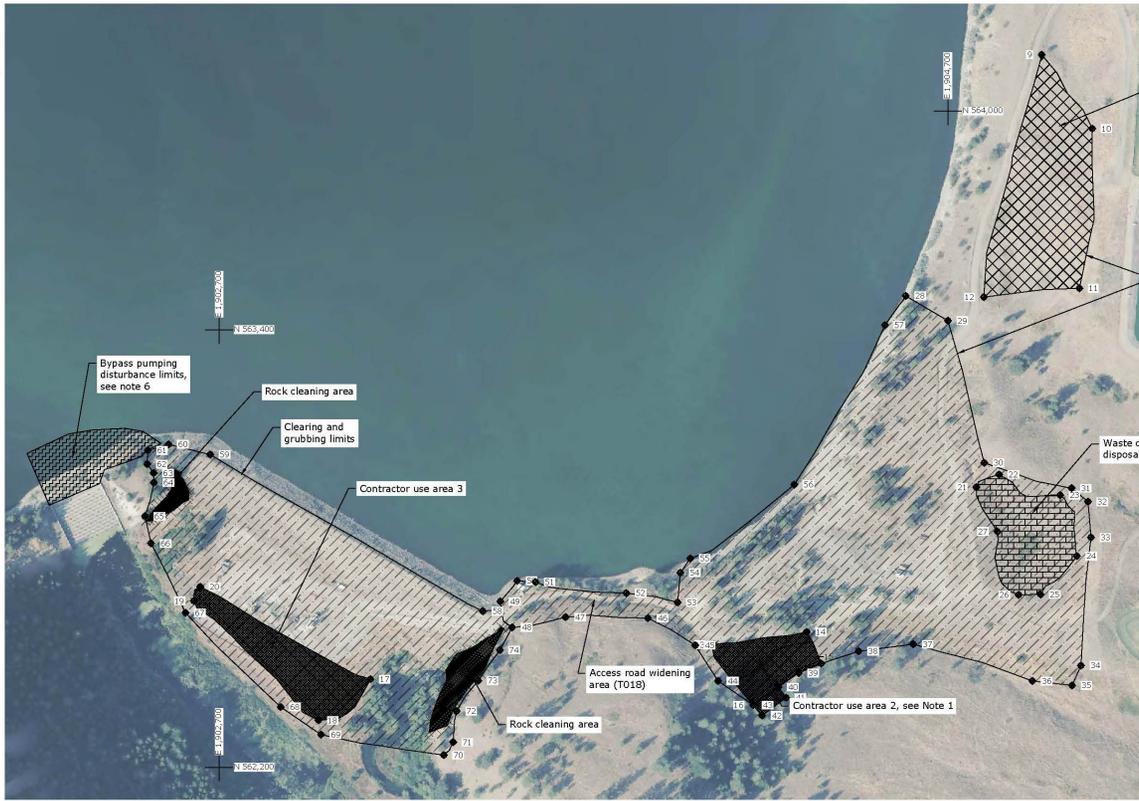
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**SHEET:** 8 of 47



PLAN - CONTRACTOR USE AREAS

| Control Points Contractor Use 1 |          |           |           |
|---------------------------------|----------|-----------|-----------|
| Point #                         | Northing | Easting   | Elevation |
| 9                               | 564154.2 | 1904957.3 | 2355.4    |
| 10                              | 563951.7 | 1905095.9 | 2356.8    |
| 11                              | 563513.8 | 1905060.9 | 2348.7    |
| 12                              | 563489.5 | 1904798.2 | 2346.1    |

| Control Points Contractor Use 2 |          |           |           |
|---------------------------------|----------|-----------|-----------|
| Point #                         | Northing | Easting   | Elevation |
| 13                              | 562536.6 | 1904058.3 | 2303.8    |
| 14                              | 562571.1 | 1904312.2 | 2313.0    |
| 15                              | 562484.8 | 1904352.5 | 2328.6    |
| 16                              | 562370.7 | 1904165.4 | 2332.2    |

| Control Points Contractor Use 3 |          |           |           |
|---------------------------------|----------|-----------|-----------|
| Point #                         | Northing | Easting   | Elevation |
| 17                              | 562441.7 | 1903116.0 | 2238.7    |
| 18                              | 562328.9 | 1902973.2 | 2239.5    |
| 19                              | 562856.5 | 1902630.7 | 2245.6    |
| 20                              | 562695.2 | 1902648.3 | 2246.7    |

| Control Points Concrete Disposal |          |           |           |
|----------------------------------|----------|-----------|-----------|
| Point #                          | Northing | Easting   | Elevation |
| 21                               | 562967.9 | 1904777.5 | 2342.1    |
| 22                               | 563083.1 | 1904840.0 | 2342.2    |
| 23                               | 562946.6 | 1905008.0 | 2343.1    |
| 24                               | 562779.5 | 1905053.7 | 2346.1    |
| 25                               | 562674.5 | 1904953.5 | 2346.3    |
| 26                               | 562673.0 | 1904894.0 | 2338.1    |
| 27                               | 562846.9 | 1904835.5 | 2342.3    |

| Control Points Clearing and Grubbing Limits |          |           |           |
|---|----------|-----------|-----------|
| Point #                                     | Northing | Easting   | Elevation |
| 28  | 563492.7 | 1904584.2 | 2275.0    |
| 29  | 563424.7 | 1904700.0 | 2352.7    |
| 30  | 563035.3 | 1904799.4 | 2347.0    |
| 31  | 562965.4 | 1905039.3 | 2344.2    |
| 32  | 562928.8 | 1905084.3 | 2345.6    |
| 33  | 562830.6 | 1905092.4 | 2349.4    |
| 34  | 562479.1 | 1905065.1 | 2324.3    |
| 35  | 562424.6 | 1905040.5 | 2320.7    |
| 36  | 562436.9 | 1904931.6 | 2321.0    |
| 37  | 562537.6 | 1904604.7 | 2319.6    |
| 38  | 562518.6 | 1904454.9 | 2327.7    |
| 39  | 562458.8 | 1904290.7 | 2329.4    |

| Control Points Clearing and Grubbing Limits |          |           |           |
|---|----------|-----------|-----------|
| Point #                                     | Northing | Easting   | Elevation |
| 40  | 562419.9 | 1904234.8 | 2331.4    |
| 41  | 562380.9 | 1904256.1 | 2342.3    |
| 42  | 562342.2 | 1904189.9 | 2340.0    |
| 43  | 562270.7 | 1904165.4 | 2332.2    |
| 44  | 562436.9 | 1904269.1 | 2318.5    |
| 45  | 562534.7 | 1904006.5 | 2309.9    |
| 46  | 562609.3 | 1903876.9 | 2317.6    |
| 47  | 562612.0 | 1903651.0 | 2317.8    |
| 48  | 562583.7 | 1903504.2 | 2308.9    |
| 49  | 562654.9 | 1903471.6 | 2284.1    |
| 50  | 562711.5 | 1903318.0 | 2278.3    |
| 51  | 562708.1 | 1903568.6 | 2278.5    |

| Control Points Clearing and Grubbing Limits |          |           |           |
|---|----------|-----------|-----------|
| Point #                                     | Northing | Easting   | Elevation |
| 52  | 562678.1 | 1903817.4 | 2296.6    |
| 53  | 562652.3 | 1903958.1 | 2299.1    |
| 54  | 562733.8 | 1903965.8 | 2281.6    |
| 55  | 562773.3 | 1903993.3 | 2274.0    |
| 56  | 562975.1 | 1904278.3 | 2274.0    |
| 57  | 563412.9 | 1904527.3 | 2274.0    |
| 58  | 562628.4 | 1903424.0 | 2294.3    |
| 59  | 563057.7 | 1902676.1 | 2292.9    |
| 60  | 563085.6 | 1902561.7 | 2283.9    |
| 61  | 563069.0 | 1902505.0 | 2291.5    |
| 62  | 563031.5 | 1902503.2 | 2301.2    |
| 63  | 563007.1 | 1902520.7 | 2310.2    |

| Control Points Clearing and Grubbing Limits |          |           |           |
|---|----------|-----------|-----------|
| Point #                                     | Northing | Easting   | Elevation |
| 64  | 562980.9 | 1902521.6 | 2316.0    |
| 65  | 562888.4 | 1902497.1 | 2254.0    |
| 66  | 562814.2 | 1902513.7 | 2242.0    |
| 67  | 562623.7 | 1902608.1 | 2239.4    |
| 68  | 562365.5 | 1902869.1 | 2235.0    |
| 69  | 562289.6 | 1902979.9 | 2239.2    |
| 70  | 562233.8 | 1903316.8 | 2271.7    |
| 71  | 562268.9 | 1903342.5 | 2297.6    |
| 72  | 562354.4 | 1903352.1 | 2296.9    |
| 73  | 562438.0 | 1903411.4 | 2308.3    |
| 74  | 562521.6 | 1903470.6 | 2314.9    |

**LEGEND**

- Contractor use areas
- Clearing and grubbing limits
- Concrete debris disposal area
- Rock cleaning area
- Winter bypass pumping area
- Control point

**NOTES**

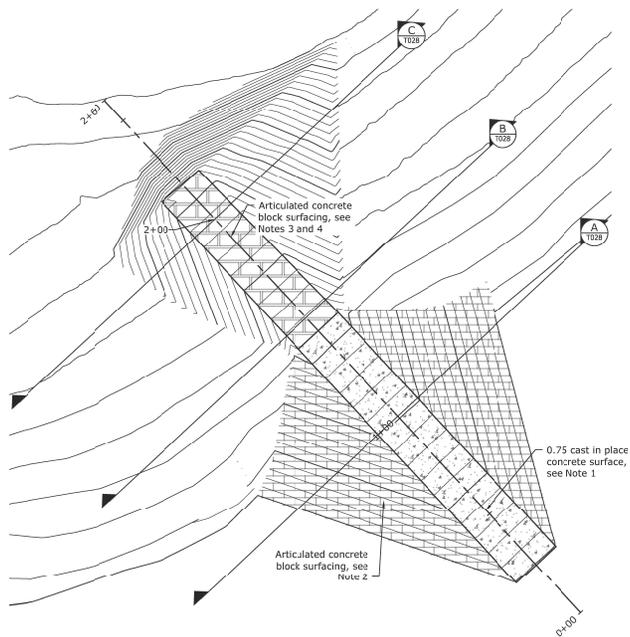
1. See 600XX for contractor use area details.
2. Concrete disposal only for existing concrete debris and concrete debris uncover by excavations. Cover with a minimum 2-feet of miscellaneous fill at end of construction in accordance with specifications.
3. Reservoir water available at locations approved by COR.
4. Additional contractor use area available as approved by COR.
5. Bypass pumping area for winter flows in accordance with specifications.

## Attachment 1 Contractor Use & Disturbance Limits

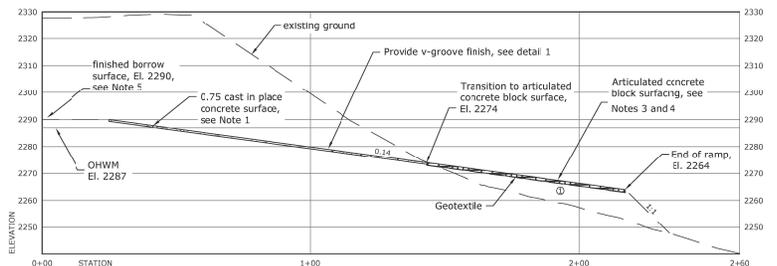
APPLICANT:  
 **BUREAU OF RECLAMATION**  
 ADJACENT PROPERTY OWNERS:  
 See Part 5h of the JARPA for a full list of adjacent property owners.

Project Name: Conconully Safety of Dams Modification Project  
 DATUM: D North American 1983  
 LAT/LONG: 48.537853 N, -119.759296 W  
 Section: 7 and 18  
 Township: 35N  
 Range: 5E

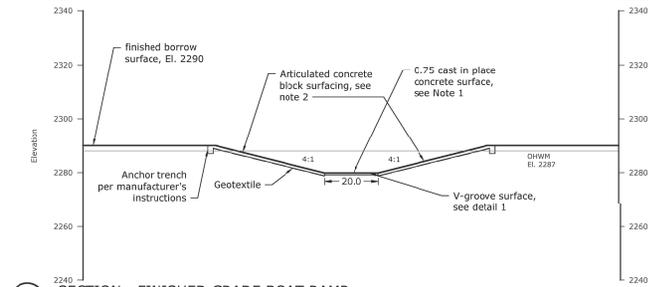
PROPOSED PROJECT: Construct stability berm on Conconully Dam, aquatic and wetland habitat restoration.  
 NEAR/AT: City of Conconully  
 STATE: WA  
 IN: Wetlands and Waterbodies  
 COUNTY: Okanogan  
 SHEET: 9 of 47  
 DATE: 01/08/2026



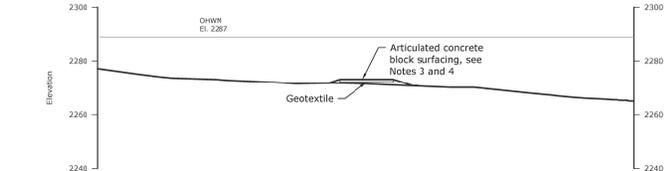
PLAN - FINISHED BOAT RAMP



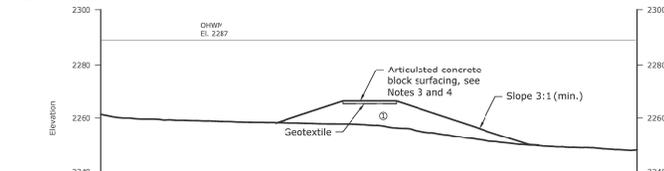
PROFILE - BOAT RAMP



SECTION - FINISHED GRADE BOAT RAMP



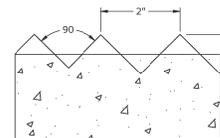
SECTION - FINISHED GRADE BOAT RAMP



SECTION - FINISHED GRADE BOAT RAMP

EMBANKMENT MATERIAL DESCRIPTION

Zone 1 Miscellaneous fill consisting of silt, sand, gravel and cobbles



DETAIL - V-GROOVE FINISH

NOTES

- See 600XX for reinforcement detail. Provide grooved surface per detail 1.
- Use cable tied articulated concrete blocks on side slopes.
- Anchor cable tied articulated concrete blocks to cast in place slab.
- Fill articulated concrete block surface with miscellaneous fill flush to driving surface.
- Access road surfacing not shown, see 600XX.

## Attachment 1 Boat Ramp Finished Plan & Details

APPLICANT:



BUREAU OF  
RECLAMATION

ADJACENT PROPERTY OWNERS:

See Part 5h of the JARPA for a full list of adjacent property owners.

Project Name: Conconully Safety of Dams Modification Project  
 DATUM: D North American 1983  
 LAT/LONG: 48.537853 N, -119.759296 W  
 Section: 7 and 18  
 Township: 35N  
 Range: 5E

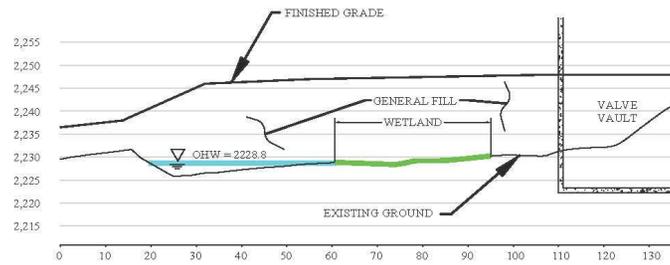
PROPOSED PROJECT: Construct stability berm on Conconully Dam, aquatic and wetland habitat restoration.

IN: Wetlands and Waterbodies  
 COUNTY: Okanogan

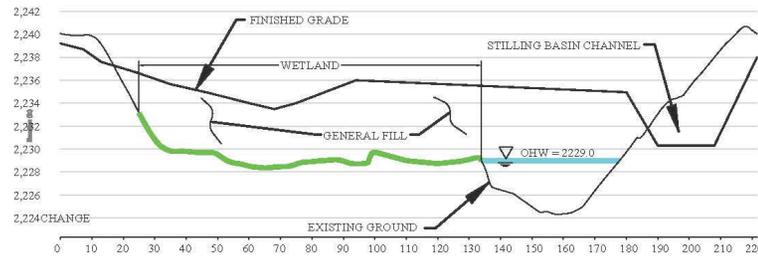
SHEET: 10 of 47

NEAR/AT: City of  
 Conconully  
 STATE: WA

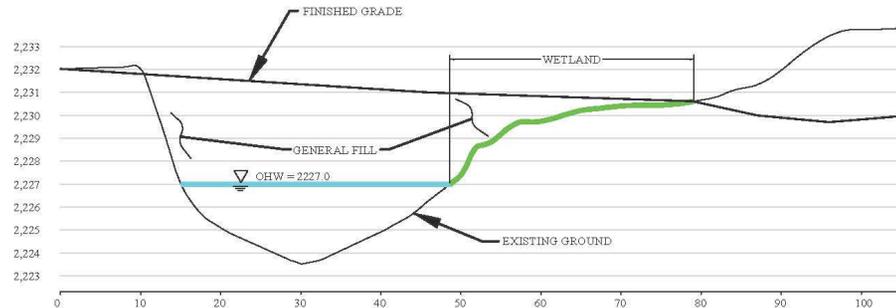
DATE: 01/08/2026



WETLAND 2



WETLAND 3



WETLAND 4

**Attachment 1**  
**Typical Cross Section for Stability Berm, Outlet Works, & Work Area**

APPLICANT:



— BUREAU OF —  
**RECLAMATION**

ADJACENT PROPERTY OWNERS:

See Part 5h of the JARPA for a full list of adjacent property owners.

Project Name: Conconully Safety of Dams Modification Project

DATUM: D North American 1983

LAT/LONG: 48.537853 N, -119.759296 W

Section: 7 and 18

Township: 35N

Range: 5E

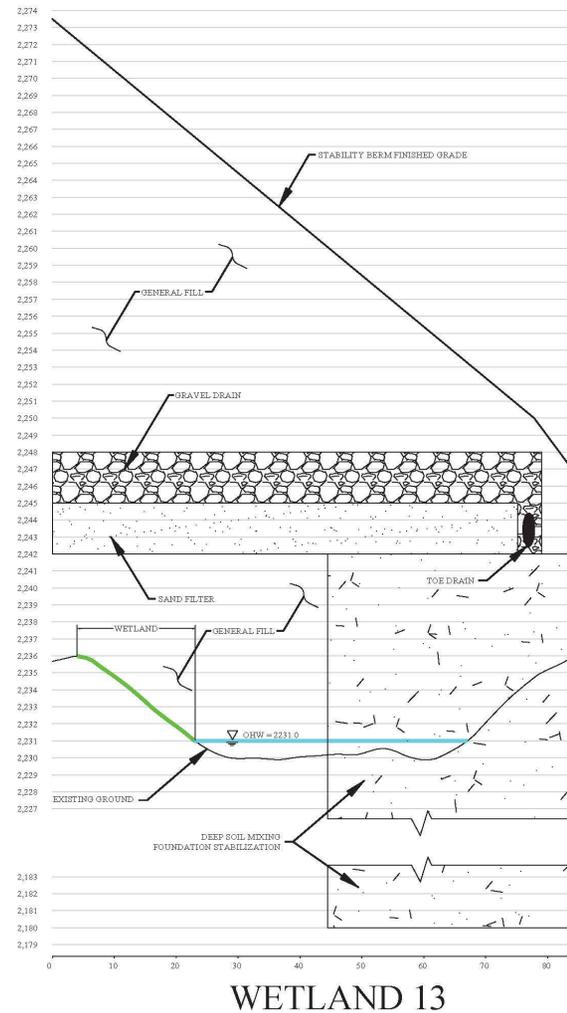
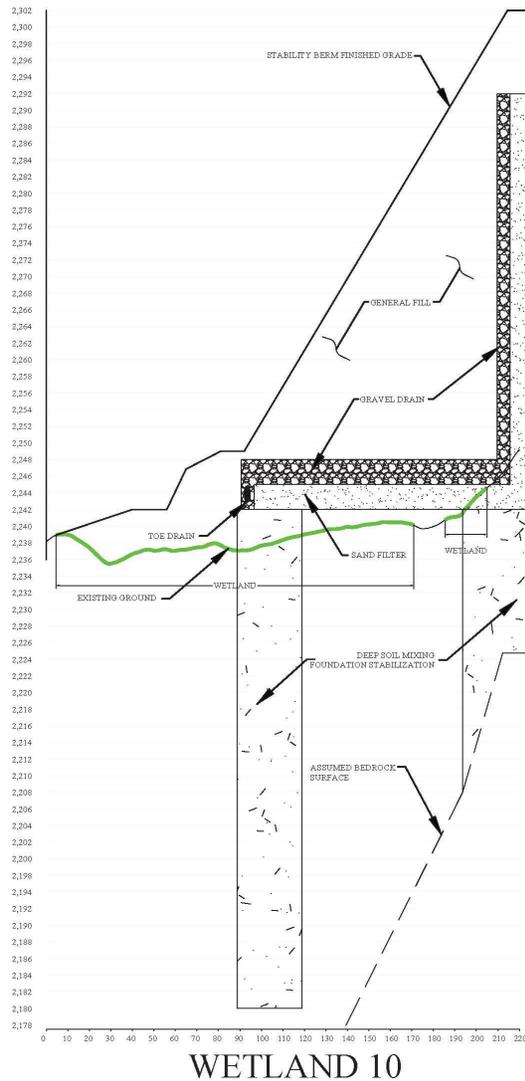
PROPOSED PROJECT: Construct stability berm on Conconully Dam, aquatic and wetland habitat restoration.

IN: Wetlands and Waterbodies  
COUNTY: Okanogan

SHEET: 11 of 47

NEAR/AT: City of  
Conconully  
STATE: WA

DATE: 01/08/2026



## Attachment 1

### Typical Cross Section for Stability Berm, Outlet Works, & Work Area

APPLICANT:



— BUREAU OF —  
**RECLAMATION**

ADJACENT PROPERTY OWNERS:

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Project Name: Conconully Safety of Dams Modification Project

DATUM: D North American 1983

LAT/LONG: 48.537853 N, -119.759296 W

Section: 7 and 18

Township: 35N

Range: 5E

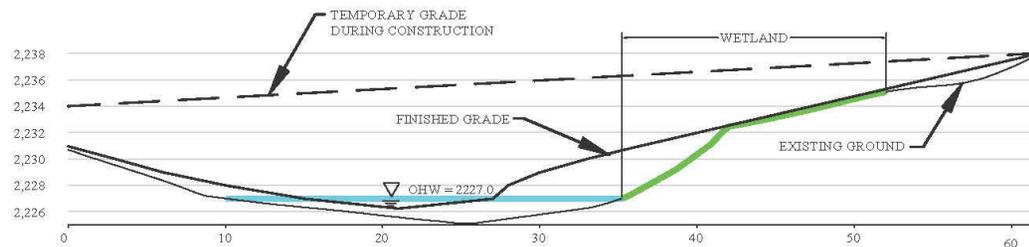
PROPOSED PROJECT: Construct stability berm on Conconully Dam, aquatic and wetland habitat restoration.

IN: Wetlands and Waterbodies  
COUNTY: Okanogan

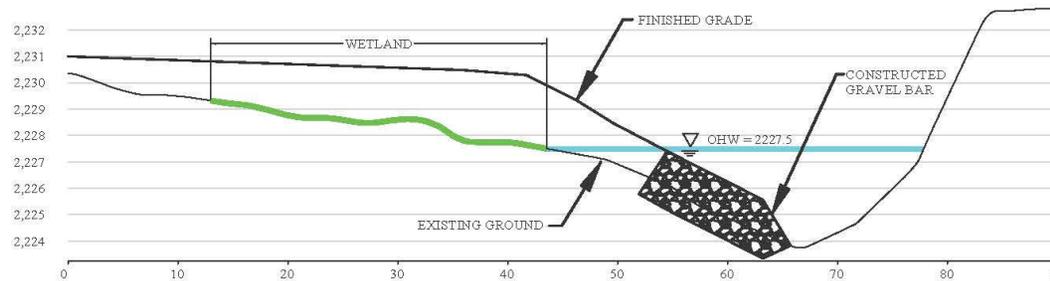
SHEET: 12 of 47

NEAR/AT: City of  
Conconully  
STATE: WA

DATE: 01/08/2026



WETLAND 5



WETLAND 14

**Attachment 1**  
**Typical Cross Section for Stability Berm, Outlet Works, & Work Area**

APPLICANT:



— BUREAU OF —  
**RECLAMATION**

ADJACENT PROPERTY OWNERS:

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LAT/LONG: 48.537853 N, -119.759296 W  
Section: 7 and 18  
Township: 35N  
Range: 5E

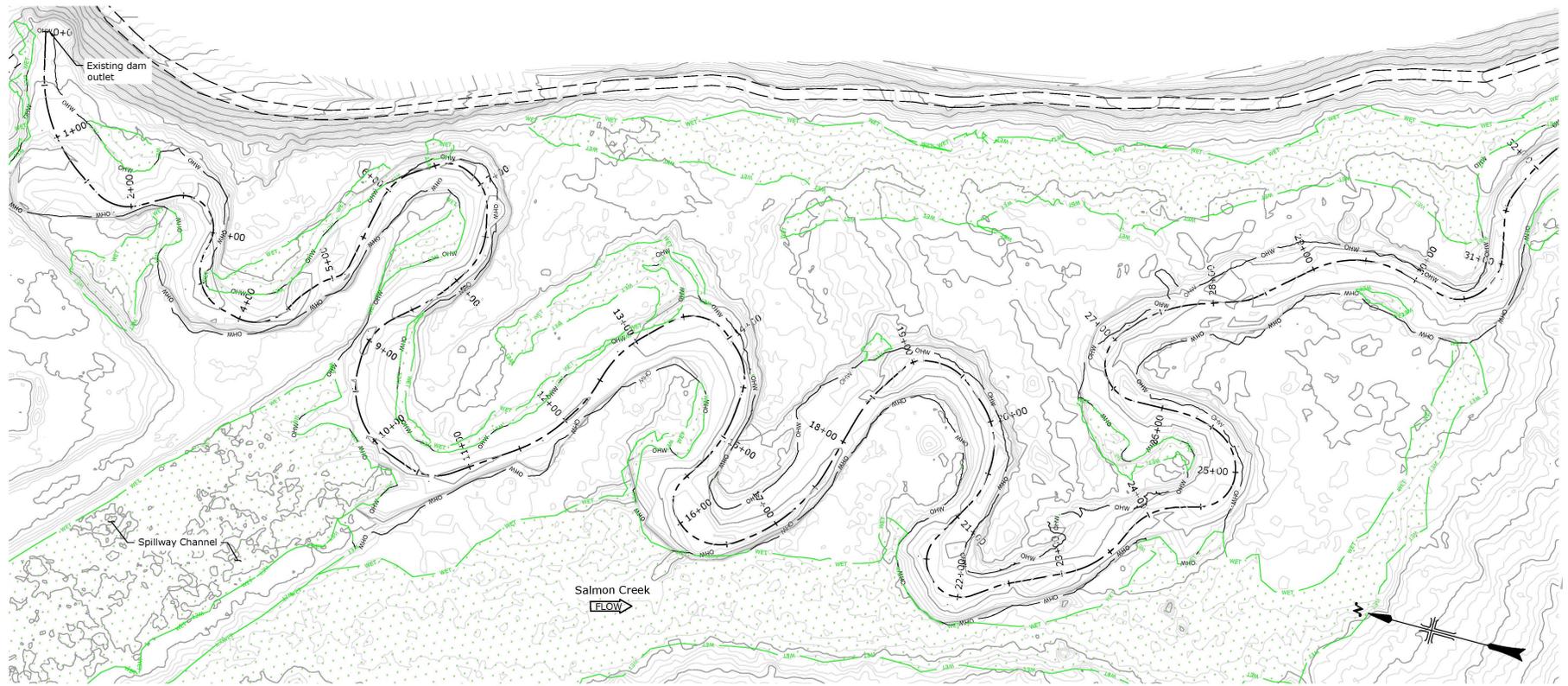
PROPOSED PROJECT: Construct stability berm on Conconully Dam, aquatic and wetland habitat restoration.

IN: Wetlands and Waterbodies  
COUNTY: Okanogan

SHEET: 13 of 47

NEAR/AT: City of Conconully  
STATE: WA

DATE: 01/08/2026



| LEGEND   |                           |
|----------|---------------------------|
| — ELEV — | OG Major Contour          |
| — ELEV — | OG Minor Contour          |
| — ELEV — | FG Major Contour          |
| — ELEV — | FG Minor Contour          |
| ---      | Existing Access Road      |
| ---      | Thalweg                   |
| WET      | Existing Wetlands         |
| OHW      | Ordinary High Water (OHW) |
| ---      | Property Line             |

## Attachment 1 Salmon Creek Aquatic & Wetland Habitat Restoration

APPLICANT:



— BUREAU OF —  
**RECLAMATION**

ADJACENT PROPERTY OWNERS:

See Part 5h of the JARPA for a full list of adjacent property owners.

Project Name: Conconully Safety of Dams Modification Project

DATUM: D North American 1983

LAT/LONG: 48.537853 N, -119.759296 W

Section: 7 and 18

Township: 35N

Range: 5E

PROPOSED PROJECT: Construct stability berm on Conconully Dam, aquatic and wetland habitat restoration.

IN: Wetlands and Waterbodies  
COUNTY: Okanogan

SHEET: 14 of 47

NEAR/AT: City of  
Conconully  
STATE: WA

DATE: 01/08/2026



**Wetland Mitigation Metrics**

| Wetlands        | Required for Mitigation | Proposed for Creation |
|-----------------|-------------------------|-----------------------|
| Type II and III | 1.3 Acres*              | 1.3                   |

Data source: \*Safety of Dams

**Instream Habitat Metrics**

| Instream/Floodplain Habitat Feature | Existing Conditions: Main Channel Station D+00 - 6+42 (Filled Channel Habitat Loss) | Proposed Conditions New Habitat: Main Channels, Side Channels and Floodplain Area | Net Gain   | Habitat Mitigation Ratio (New Habitat:Lost Habitat) |
|-------------------------------------|---|---|------------|---|
| Stream length (Main Channel)        | 642 feet*   | 1744 feet (Side Channel network)  | 1,074'     | 2.72  |
| Pool                                | 3**   | 7   | 4          | 2.33  |
| Riffle (with gravel)                | 4**   | 12  | 8          | 3.00  |
| Small wood                          | 21 (pieces)**   | 565 (pieces)  | 544 Pieces | 23  |
| Large wood                          | 1 (pieces)**  | 207 (pieces)  | 206 Pieces | 260   |
| Floodplain (proposed bench)         | None**  | 1.2 ac  | 1.2 acre   | Infinite  |
| Bars                                | Noted twice** (No Acreage Given)  | 0.6 Acres   | TBD        | TBD   |

Data source: \*\*CTCR Salmon Crk\_HabEval\_2023 data; \*Safety of Dams

**NOTES:**

1. Proposed conditions represent the post construction finished project conditions.
2. Plan and profile sheets provide detailed grading, individual large wood structure locations, bank treatment locations, and streambed materials types.
3. Individual large wood structures are uniquely identified on the plan and profile sheets.

**LEGEND**

|          |   |
|----------|---|
| — ELEV — | OG Major Contour                            |
| — ELEV — | OG Minor Contour                            |
| — ELEV — | FG Major Contour                            |
| — ELEV — | FG Minor Contour                            |
| —        | Thalweg                                     |
| — WET —  | Existing Wetlands                           |
| — OHW —  | Ordinary High Water (OHW)                   |
| —        | Property Line                               |
| —        | Constructed Riffle                          |
| —        | Constructed Gravel Bar                      |
| —        | Riparian Bench                              |
| —        | Constructed Wetland                         |
| —        | Brush Bank - See Sheet D-16                 |
| —        | Willow Baffle - See Sheet D-15              |
| —        | LWM - See Sheet D-5 thru D-13               |
| —        | HS-10 Floodplain Roughness - See Sheet D-14 |

## Attachment 1 Salmon Creek Aquatic & Wetland Habitat Restoration

APPLICANT:



— BUREAU OF —  
**RECLAMATION**

ADJACENT PROPERTY OWNERS:

See Part 5h of the JARPA for a full list of adjacent property owners.

Project Name: Conconully Safety of Dams Modification Project

DATUM: D North American 1983  
LAT/LONG: 48.537853 N, -119.759296 W  
Section: 7 and 18  
Township: 35N  
Range: 5E

PROPOSED PROJECT: Construct stability berm on Conconully Dam, aquatic and wetland habitat restoration.

IN: Wetlands and Waterbodies  
COUNTY: Okanogan

SHEET: 15 of 77

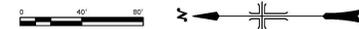
NEAR/AT: City of  
Conconully  
STATE: WA

DATE: 01/08/2026



**NOTES**

1. Temporary access routes are approximate. Some routes are existing roads. Others are shown as potential routes and subject to approval by the COR.
2. Temporary access shall be limited to within the limits of disturbance. Access within such limits may vary depending on construction sequencing plans.
3. At project completion, temporary access routes and staging areas shall be rehabilitated in accordance with specifications.
4. Staging areas (used for construction equipment storage, vehicle storage, fueling, servicing, and hazardous material storage) shall be 150 feet or more from any natural water body or wetland.
5. Natural materials used for implementation of aquatic restoration, such as large wood, gravel, and boulders, may be staged within 150 feet if clearly indicated in the plans that area is for natural materials only.
6. Excess cut shall be placed in designated spoils areas. Contractor shall blend spoils material in with adjacent ground and prepare surface for seeding by others.



## Attachment 1 Salmon Creek Aquatic & Wetland Habitat Restoration

APPLICANT:



— BUREAU OF —  
**RECLAMATION**

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DATUM: D North American 1983  
 LAT/LONG: 48.537853 N, -119.759296 W  
 Section: 7 and 18  
 Township: 35N  
 Range: 5E

PROPOSED PROJECT: Construct stability berm on Conconully Dam, aquatic and wetland habitat restoration.

IN: Wetlands and Waterbodies  
 COUNTY: Okanogan

SHEET: 16 of 47

NEAR/AT: City of Conconully  
 STATE: WA

DATE: 01/08/2026



| LEGEND |                           |
|--------|---------------------------|
|        | Existing BLDG             |
|        | Existing Overhead Power   |
|        | Property Line             |
|        | Ordinary High Water (OHW) |
|        | Existing Access Route     |
|        | Temporary Access Route    |
|        | Existing Wetlands         |
|        | Limits Of Disturbance     |
|        | Staging Area              |
|        | Equipment Staging Area    |
|        | Spills Area               |
|        | Proposed Channel          |
|        | Temporary Bridge          |

**NOTES**

1. Temporary access routes are approximate. Some routes are existing roads. Others are shown as potential routes and subject to approval by the COR.
2. Temporary access shall be limited to within the limits of disturbance. Access within such limits may vary depending on construction sequencing plans.
3. At project completion, temporary access routes and staging areas shall be rehabilitated in accordance with specifications.
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## Attachment 1 Salmon Creek Aquatic & Wetland Habitat Restoration

APPLICANT:



— BUREAU OF —  
**RECLAMATION**

ADJACENT PROPERTY OWNERS:

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DATUM: D North American 1983

LAT/LONG: 48.537853 N, -119.759296 W

Section: 7 and 18

Township: 35N

Range: 5E

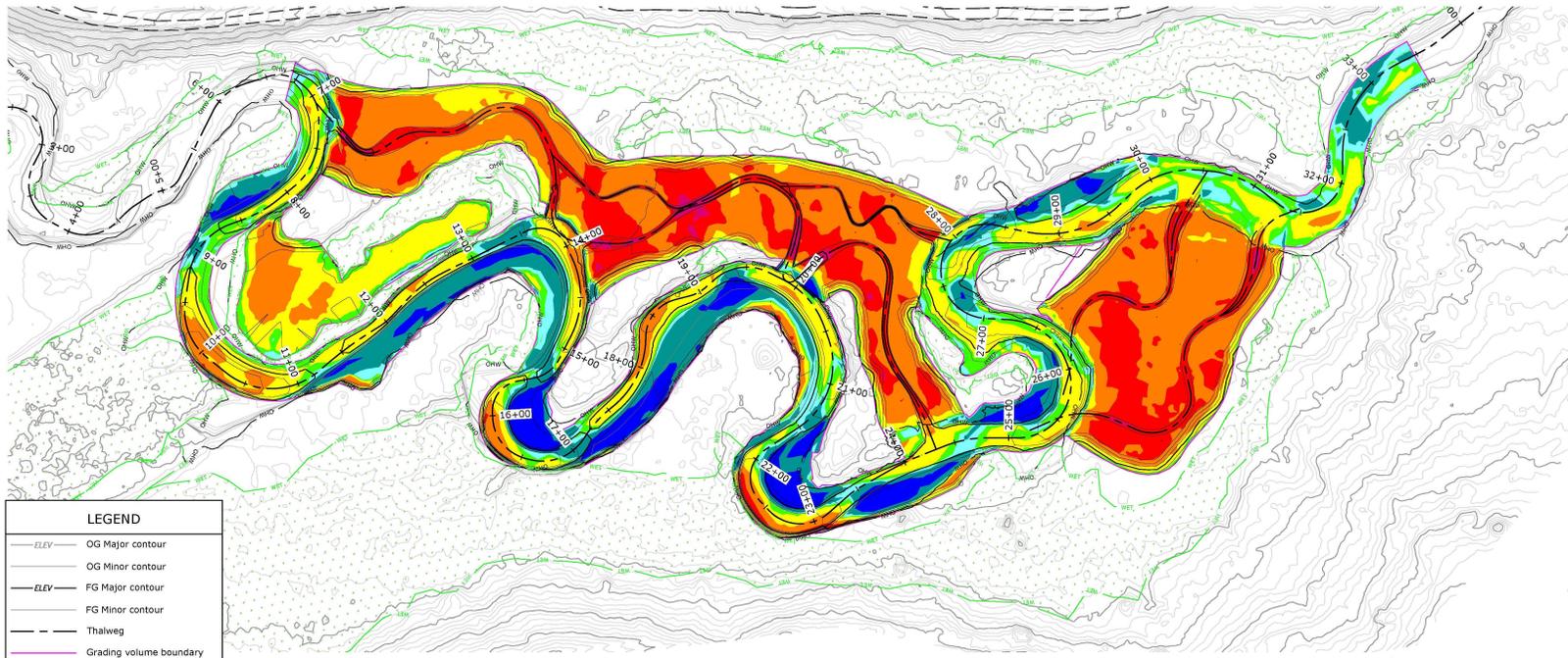
PROPOSED PROJECT: Construct stability berm on Conconully Dam, aquatic and wetland habitat restoration.

IN: Wetlands and Waterbodies  
COUNTY: Okanogan

SHEET: 17 of 47

NEAR/AT: City of  
Conconully  
STATE: WA

DATE: 01/08/2026



**LEGEND**

— ELEV — OG Major contour  
 — OG Minor contour  
 — ELEV — FG Major contour  
 — FG Minor contour  
 - - - Thalweg  
 Grading volume boundary

**CUT/FILL LEGEND**

-8ft to -6 ft  
 -6 ft to -4 ft  
 -4 ft to -2ft  
 -2 ft to -0.5 ft  
 -0.5 ft to OG  
 OG to 0.5 ft  
 0.5 ft to 2 ft  
 2 ft to 5 ft

**CUT/FILL VOLUMES:**

| SITE                       | AREA (ACRES) | CUT (CY)       | FILL (CY)     | NET (CY)      | CUT/FILL   |
|----------------------------|--------------|----------------|---------------|---------------|------------|
| Constructed Wetlands       | 1.4          | 1067.8         | 835.7         | 232.1         | Cut        |
| Riparian Bench             | 1.4          | 6831.3         | 6.0           | 6825.4        | Cut        |
| Side Channels              | 0.4          | 844.2          | 8.1           | 836.1         | Cut        |
| Main Channel Rough Grading | 1.8          | 2463.5         | 1052.1        | 1411.4        | Cut        |
| <b>Total</b>               | <b>5.0</b>   | <b>11206.9</b> | <b>1901.9</b> | <b>9305.0</b> | <b>Cut</b> |

**GENERAL FILL NOTES:**

- All fill within this project must meet material specifications and placement requirements.
- Unless otherwise noted on other drawings, at locations where the grading requires fill to create the shape and topography shown on the drawings, the contractor shall place fill in one (1) foot maximum lifts and compact by using mechanical compaction equipment such as tracking by dozer or excavator, a vibratory compactor head or roller. The intent is to achieve an 85% relative density; acceptance will be by the COR observing fill placement and compaction effort. Compaction testing may be conducted if needed.
- The last 6-inches of fill (organic layer) will not be compacted and care will be taken by the contractor to avoid compaction of organic layer. Contracting Officer may require contractor to rip (min 8-in depth) any area over compacted by the contractor to allow for better establishment of vegetation.

**GENERAL EXCAVATION NOTES:**

- Excavation shall be completed to the lines and grades shown on the Drawings unless otherwise approved by the COR.
- The quantity of material to be excavated or placed has been measured by surface subtraction in AutoCAD and is therefore assumed to be compacted in-place and not factored for any potential expansion.
- Shape, trim, and finish cut slopes to conform with lines, grades, and cross-sections shown on the Drawings unless otherwise approved by the COR.
- Stockpile excavated material and sort for use as fill or channel material until material is needed.
- Dry excavated material may be stockpiled near each work site. Wet excavated material shall be hauled to a stockpile area where turbid water draining from the material cannot enter the waterway.
- As boulders larger than 12 inches in diameter are discovered during excavation, remove and stock pile at locations to be used in riffle construction.
- Excavation shall be completed in three separate steps including removal of top

6-inch organic layer (separate stockpile), fine grained top soil (separate stockpile), and coarse gravel/cobble material (separate material).

**FINISH GRADING NOTES:**

- Finish grading shall be within ±0.50 feet Horizontal and ±0.10 feet Vertical of the locations and elevations shown on the Drawings.
- Where 6 inches of topsoil (organic layer) is applied, the topsoil shall not be over compacted. Contracting Officer may require contractor to rip (min. 8-in depth) any area over compacted by the contractor.
- Finish grade shall be flush with adjacent surfaces unless otherwise indicated.
- Finish Grade shall be inspected and approved by the COR prior to seeding or other activity that would hinder adjustments to the finish grading.
- Compaction of finished surface is not required where the finished surface is achieved through only excavation, except in main channel excavation areas through riffles where specific construction is required, see channel detail sheets.

**TABLE NOTES:**

- Volumes are approximate and represent FG minus OG only.
- Volumes do not include additional over excavation required for placement of topsoil, gravel bar materials, riffle materials, or installation of LWM structures.
- The cut and fill volumes were calculated using a comparison of the composite design surface of the entire project compared to the existing ground surface and do not account for any temporary placement or additional movement.
- The Contractor shall place excess material as directed by the COR to blend the excess material in spoils location with the existing grade.

**Attachment 1  
 Salmon Creek Aquatic & Wetland Habitat Restoration**

**APPLICANT:**  
  
 — BUREAU OF —  
**RECLAMATION**

**ADJACENT PROPERTY OWNERS:**  
 See Part 5h of the JARPA for a full list of adjacent property owners.

**Project Name:** Conconully Safety of Dams Modification Project  
**DATUM:** D North American 1983  
**LAT/LONG:** 48.537853 N, -119.759296 W  
**Section:** 7 and 18  
**Township:** 35N  
**Range:** 5E

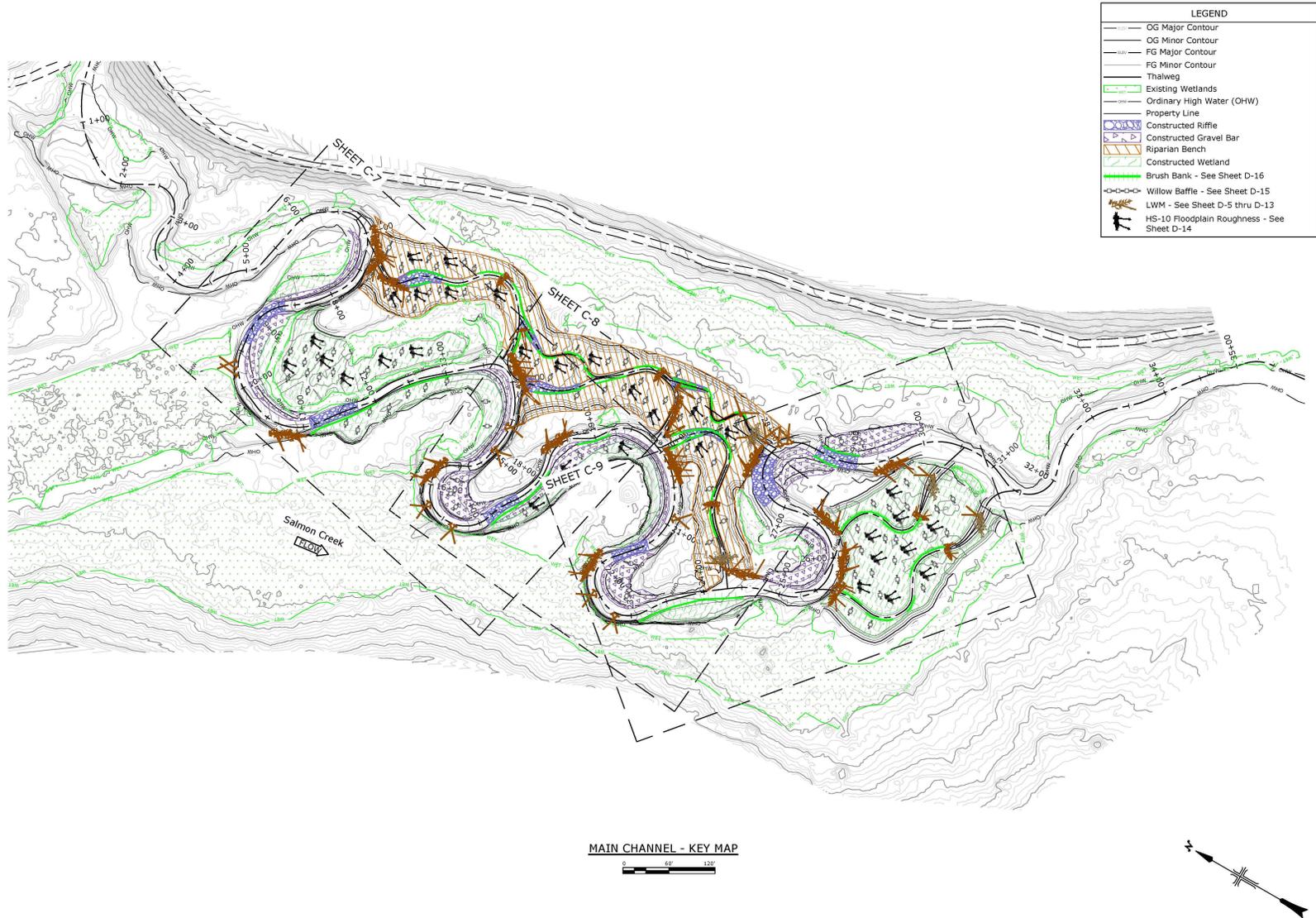
**PROPOSED PROJECT:** Construct stability berm on Conconully Dam, aquatic and wetland habitat restoration.

**IN:** Wetlands and Waterbodies  
**COUNTY:** Okanogan

**NEAR/AT:** City of Conconully  
**STATE:** WA

**DATE:** 01/08/2026

**SHEET:** 18 of 47



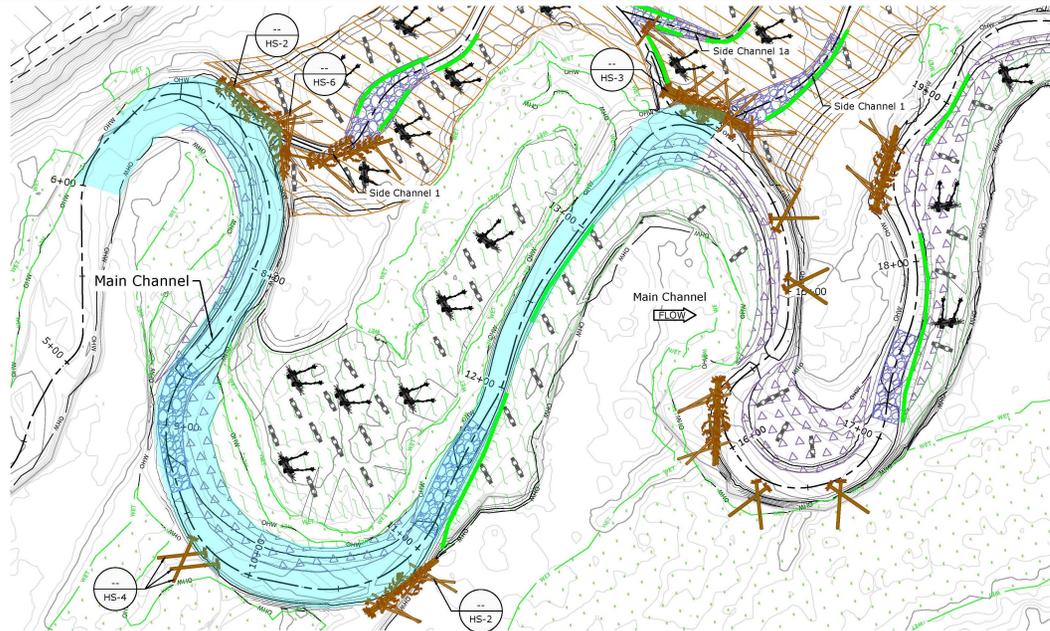
## Attachment 1 Salmon Creek Aquatic & Wetland Habitat Restoration

**APPLICANT:**  

**BUREAU OF RECLAMATION**  
**ADJACENT PROPERTY OWNERS:**  
 See Part 5h of the JARPA for a full list of adjacent property owners.

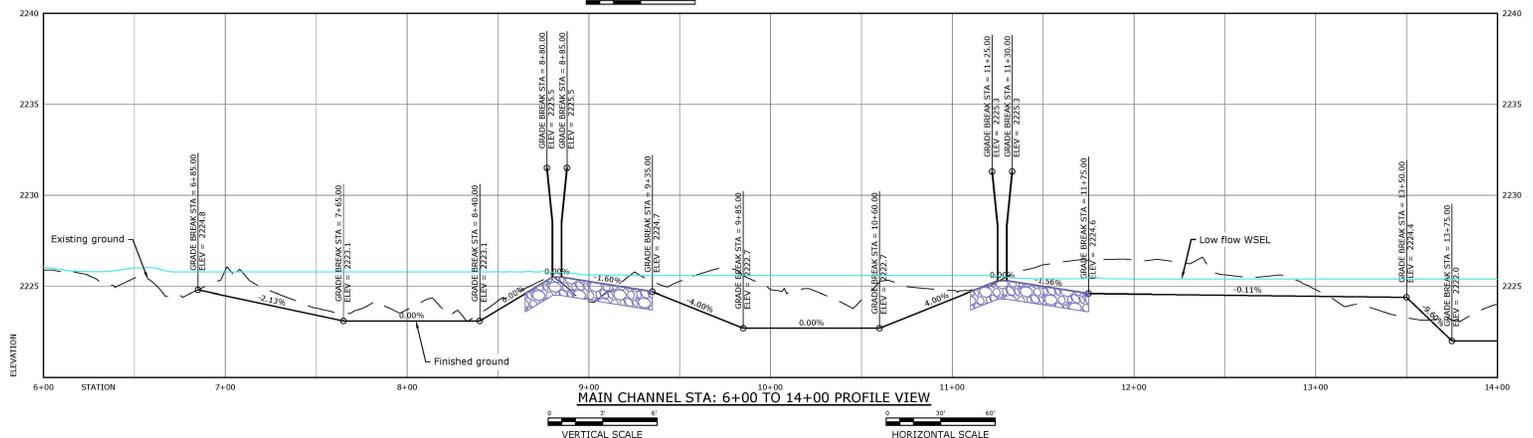
**Project Name:** Conconully Safety of Dams Modification Project  
**DATUM:** D North American 1983  
**LAT/LONG:** 48.537853 N, -119.759296 W  
**Section:** 7 and 18  
**Township:** 35N  
**Range:** 5E

**PROPOSED PROJECT:** Construct stability berm on Conconully Dam, aquatic and wetland habitat restoration.  
**IN:** Wetlands and Waterbodies  
**COUNTY:** Okanogan  
**SHEET:** 19 of 47  
**NEAR/AT:** City of Conconully  
**STATE:** WA  
**DATE:** 01/08/2026



| LEGEND |   |
|--------|---|
|        | OG Major Contour                            |
|        | OG Minor Contour                            |
|        | FG Major Contour                            |
|        | FG Minor Contour                            |
|        | Thalweg                                     |
|        | Existing Wetlands                           |
|        | Ordinary High Water (OHW)                   |
|        | Property Line                               |
|        | Constructed Riffle                          |
|        | Constructed Gravel Bar                      |
|        | Riparian Bench                              |
|        | Constructed Wetland                         |
|        | Brush Bank - See Sheet D-16                 |
|        | Willow Baffle - See Sheet D-15              |
|        | LWM - See Sheet D-5 thru D-13               |
|        | HS-10 Floodplain Roughness - See Sheet D-14 |

MAIN CHANNEL STA: 6+00 TO 14+00 PLAN VIEW



MAIN CHANNEL STA: 6+00 TO 14+00 PROFILE VIEW

## Attachment 1 Salmon Creek Aquatic & Wetland Habitat Restoration

APPLICANT:



— BUREAU OF —  
**RECLAMATION**

ADJACENT PROPERTY OWNERS:  
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Project Name: Conconully Safety of Dams Modification Project  
 DATUM: D North American 1983  
 LAT/LONG: 48.537853 N, -119.759296 W  
 Section: 7 and 18  
 Township: 35N  
 Range: 5E

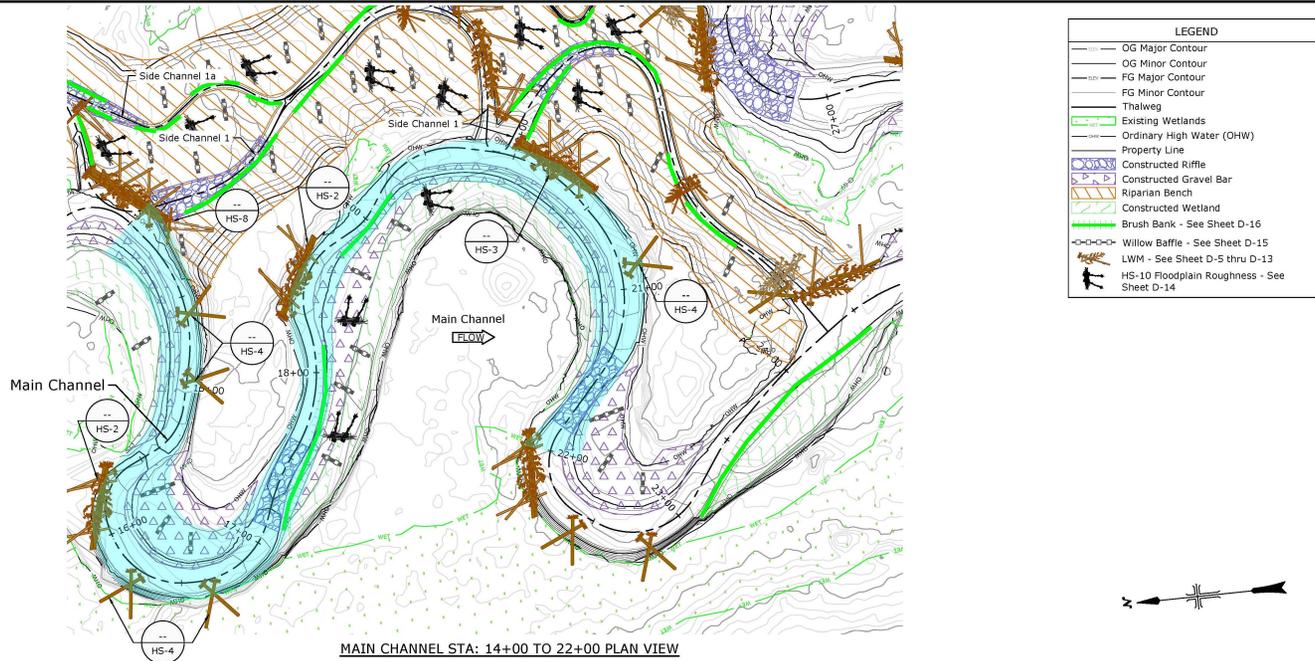
PROPOSED PROJECT: Construct stability berm on Conconully Dam, aquatic and wetland habitat restoration.

IN: Wetlands and Waterbodies  
 COUNTY: Okanogan

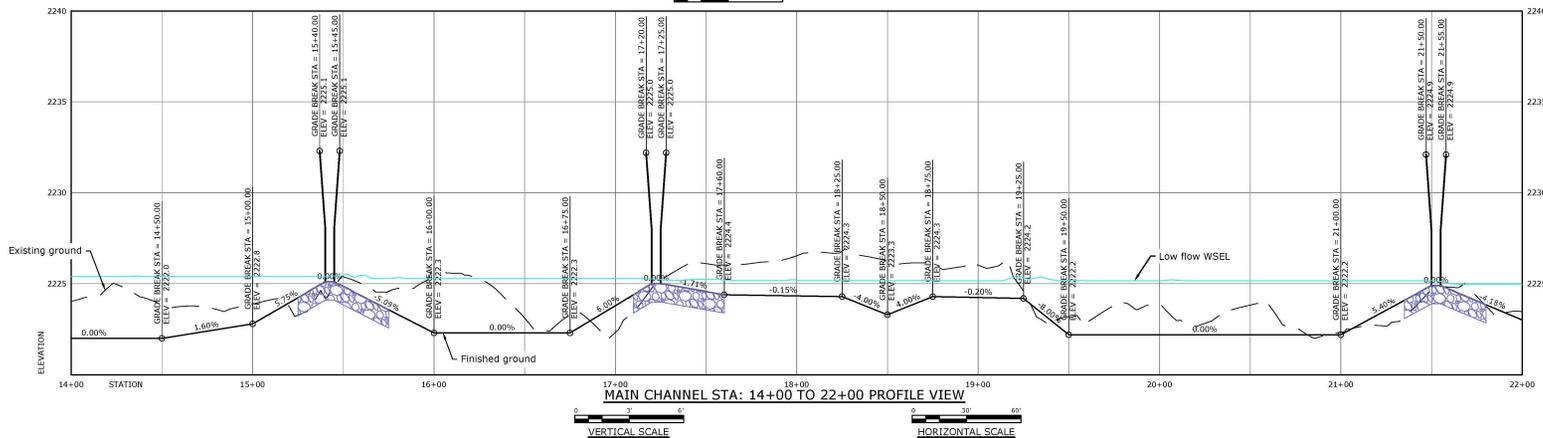
NEAR/AT: City of Conconully  
 STATE: WA

SHEET: 20 of 47

DATE: 01/08/2026



MAIN CHANNEL STA: 14+00 TO 22+00 PLAN VIEW



MAIN CHANNEL STA: 14+00 TO 22+00 PROFILE VIEW

## Attachment 1 Salmon Creek Aquatic & Wetland Habitat Restoration

**APPLICANT:**  
 **BUREAU OF RECLAMATION**

**ADJACENT PROPERTY OWNERS:**  
 See Part 5h of the JARPA for a full list of adjacent property owners.

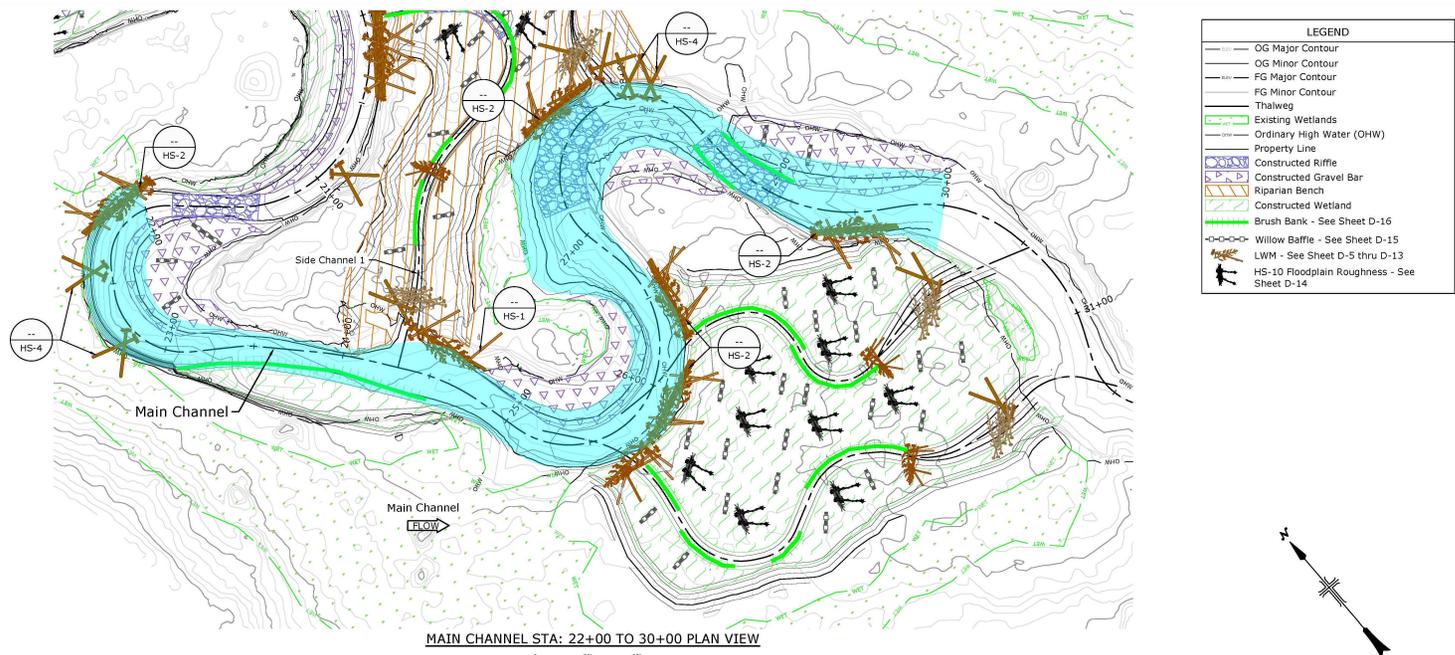
**Project Name:** Conconully Safety of Dams Modification Project  
**DATUM:** D North American 1983  
**LAT/LONG:** 48.537853 N, -119.759296 W  
**Section:** 7 and 18  
**Township:** 35N  
**Range:** 5E

**PROPOSED PROJECT:** Construct stability berm on Conconully Dam, aquatic and wetland habitat restoration.

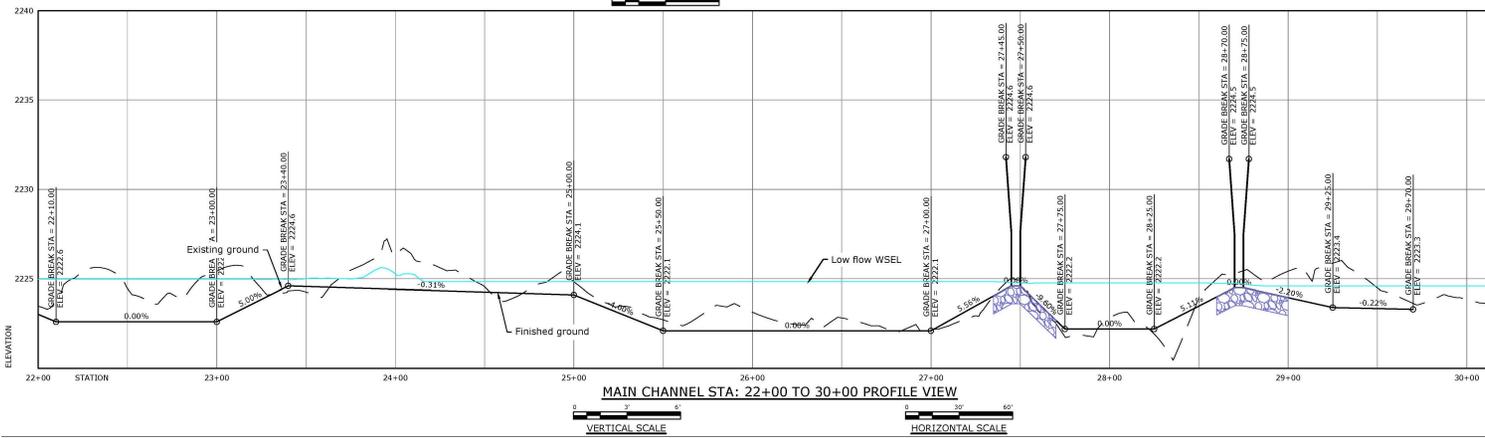
**IN:** Wetlands and Waterbodies  
**COUNTY:** Okanogan

**NEAR/AT:** City of Conconully  
**STATE:** WA

**SHEET:** 21 of 77  
**DATE:** 01/08/2026



MAIN CHANNEL STA: 22+00 TO 30+00 PLAN VIEW



MAIN CHANNEL STA: 22+00 TO 30+00 PROFILE VIEW

## Attachment 1 Salmon Creek Aquatic & Wetland Habitat Restoration

**APPLICANT:**  
 **BUREAU OF RECLAMATION**

**ADJACENT PROPERTY OWNERS:**  
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**Project Name:** Conconully Safety of Dams Modification Project  
**DATUM:** D North American 1983  
**LAT/LONG:** 48.537853 N, -119.759296 W  
**Section:** 7 and 18  
**Township:** 35N  
**Range:** 5E

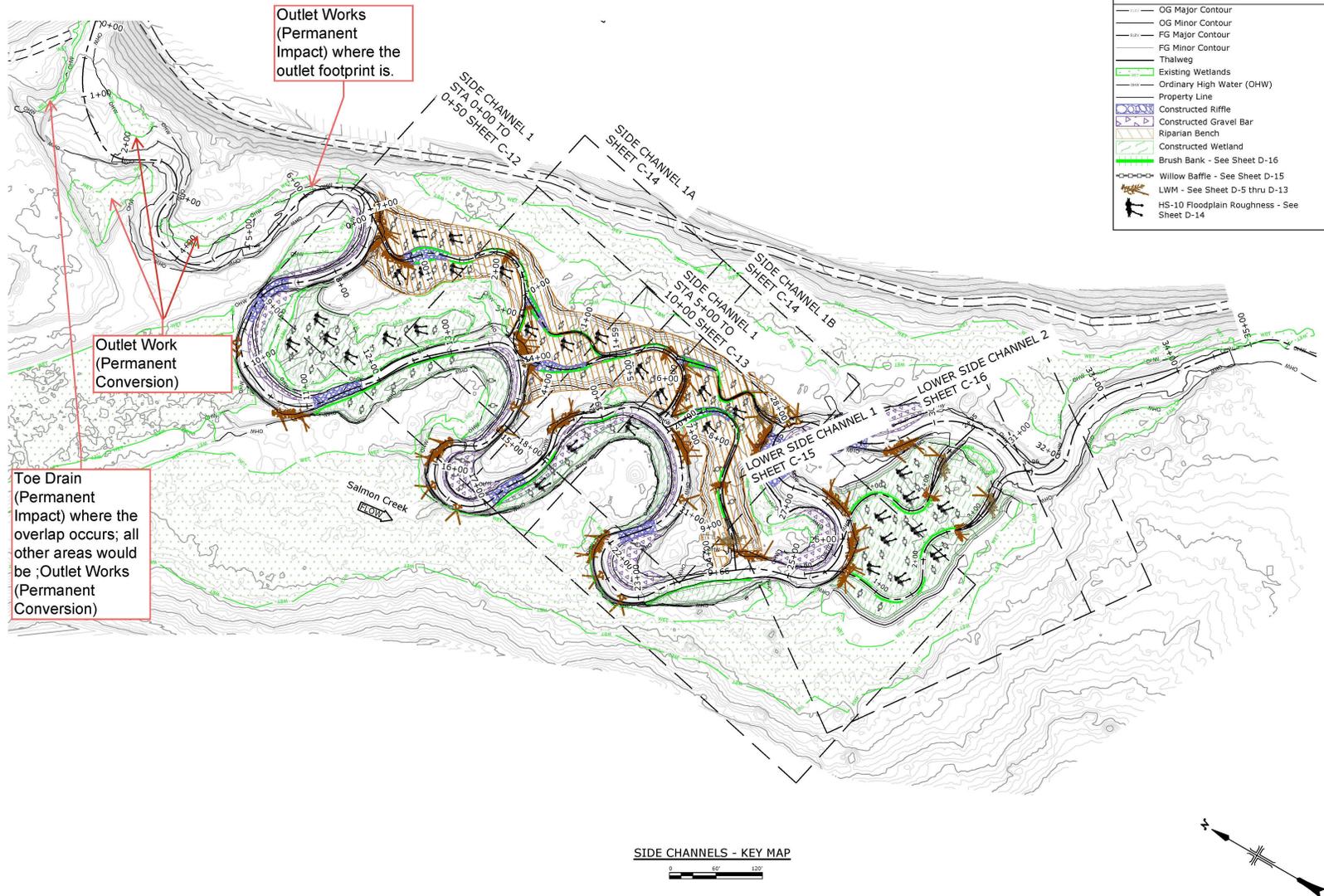
**PROPOSED PROJECT:** Construct stability berm on Conconully Dam, aquatic and wetland habitat restoration.

**NEAR/AT:** City of Conconully  
**STATE:** WA

**IN:** Wetlands and Waterbodies  
**COUNTY:** Okanogan

**SHEET:** 22 of 47

**DATE:** 01/08/2026



SIDE CHANNELS - KEY MAP

## Attachment 1 Salmon Creek Aquatic & Wetland Habitat Restoration

APPLICANT:



— BUREAU OF —  
**RECLAMATION**

ADJACENT PROPERTY OWNERS:  
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 DATUM: D North American 1983  
 LAT/LONG: 48.537853 N, -119.759296 W  
 Section: 7 and 18  
 Township: 35N  
 Range: 5E

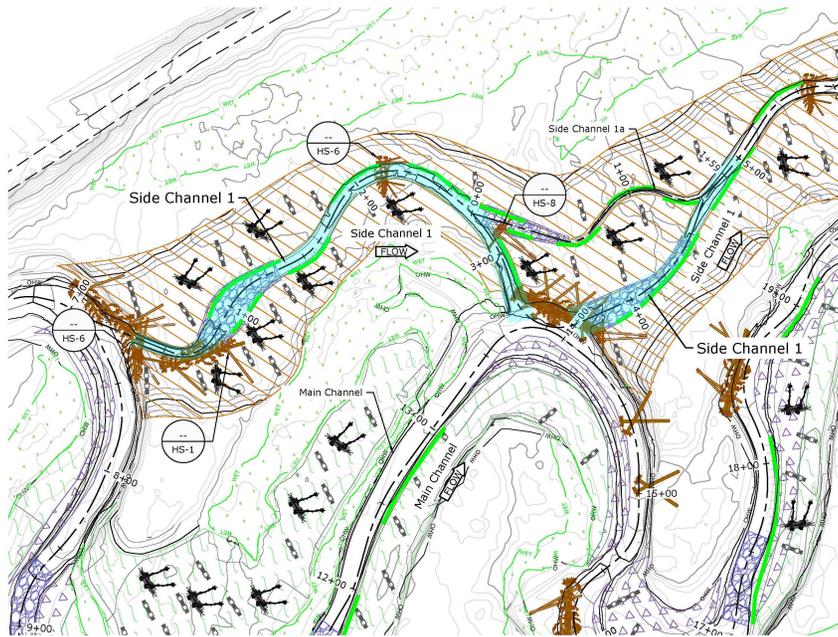
PROPOSED PROJECT: Construct stability berm on Conconully Dam, aquatic and wetland habitat restoration.

IN: Wetlands and Waterbodies  
 COUNTY: Okanogan

NEAR/AT: City of Conconully  
 STATE: WA

SHEET: 23 of 47

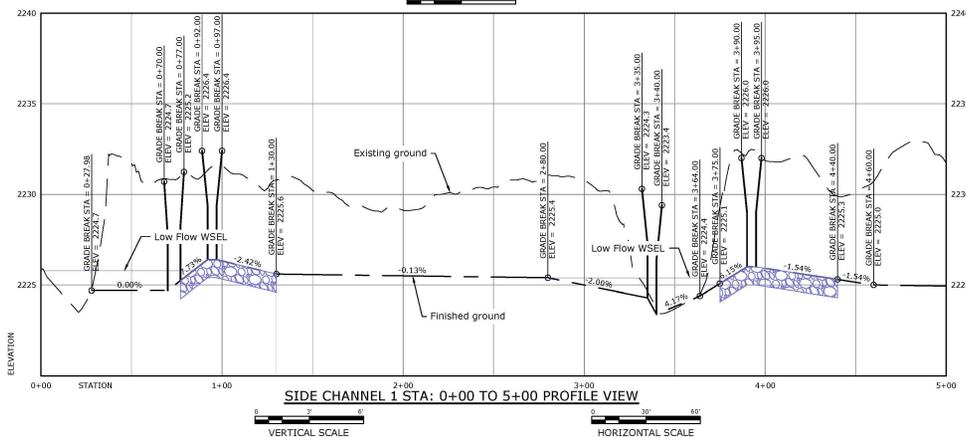
DATE: 01/08/2026



| LEGEND |   |
|--------|---|
|        | OG Major Contour                            |
|        | OG Minor Contour                            |
|        | FG Major Contour                            |
|        | FG Minor Contour                            |
|        | Thalweg                                     |
|        | Existing Wetlands                           |
|        | Ordinary High Water (OHW)                   |
|        | Property Line                               |
|        | Constructed Riffle                          |
|        | Constructed Gravel Bar                      |
|        | Riparian Bench                              |
|        | Constructed Wetland                         |
|        | Brush Bank - See Sheet D-16                 |
|        | Willow Baffle - See Sheet D-15              |
|        | LWM - See Sheet D-5 thru D-13               |
|        | HS-10 Floodplain Roughness - See Sheet D-14 |



SIDE CHANNEL 1 STA: 0+00 TO 5+00 PLAN VIEW



SIDE CHANNEL 1 STA: 0+00 TO 5+00 PROFILE VIEW

## Attachment 1 Salmon Creek Aquatic & Wetland Habitat Restoration

APPLICANT:



— BUREAU OF —  
**RECLAMATION**

ADJACENT PROPERTY OWNERS:

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 DATUM: D North American 1983  
 LAT/LONG: 48.537853 N, -119.759296 W  
 Section: 7 and 18  
 Township: 35N  
 Range: 5E

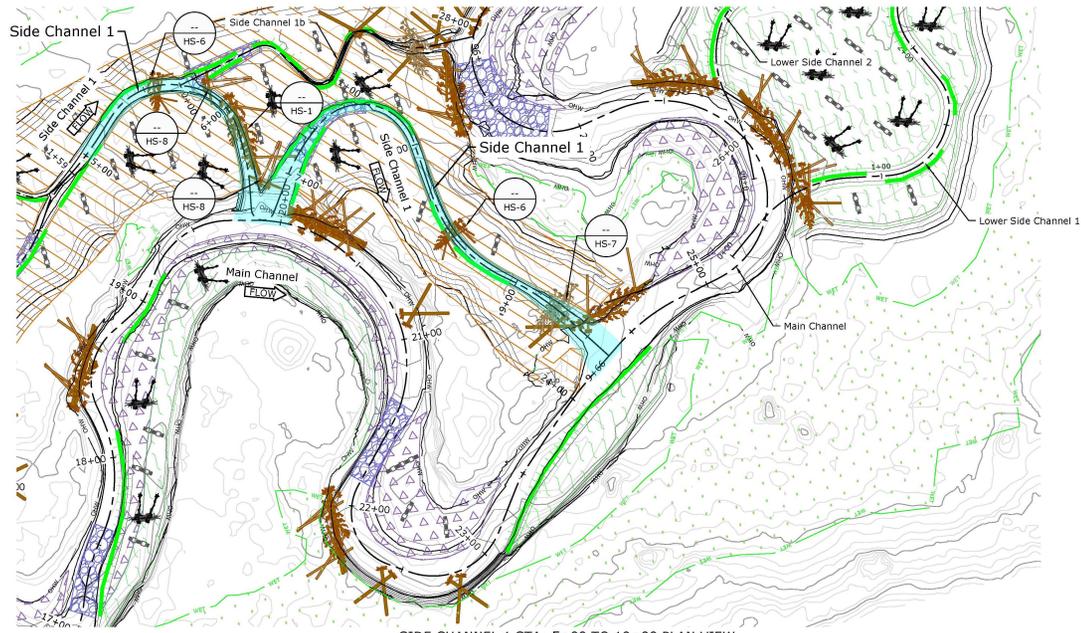
PROPOSED PROJECT: Construct stability berm on Conconully Dam, aquatic and wetland habitat restoration.

IN: Wetlands and Waterbodies  
 COUNTY: Okanogan

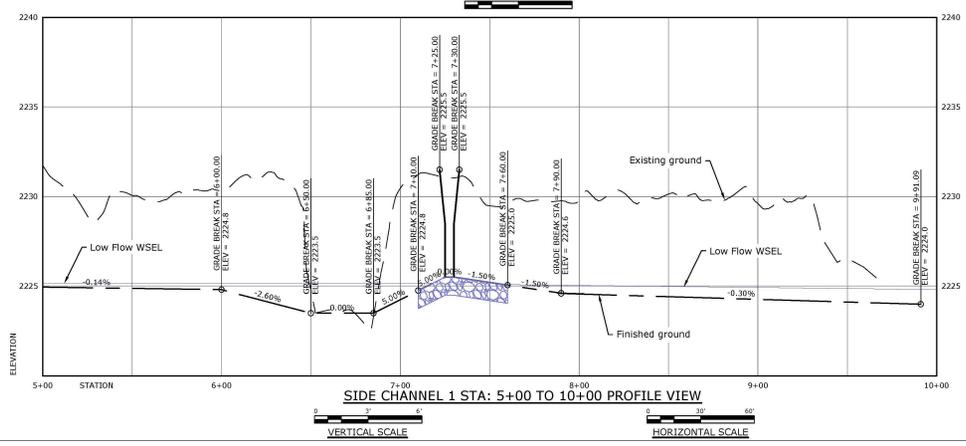
SHEET: 24 of 47

NEAR/AT: City of Conconully  
 STATE: WA

DATE: 01/08/2026



SIDE CHANNEL 1 STA: 5+00 TO 10+00 PLAN VIEW



SIDE CHANNEL 1 STA: 5+00 TO 10+00 PROFILE VIEW

## Attachment 1 Salmon Creek Aquatic & Wetland Habitat Restoration

APPLICANT:  
 **BUREAU OF RECLAMATION**

ADJACENT PROPERTY OWNERS:  
 See Part 5h of the JARPA for a full list of adjacent property owners.

Project Name: Conconully Safety of Dams Modification Project  
 DATUM: D North American 1983  
 LAT/LONG: 48.537853 N, -119.759296 W  
 Section: 7 and 18  
 Township: 35N  
 Range: 5E

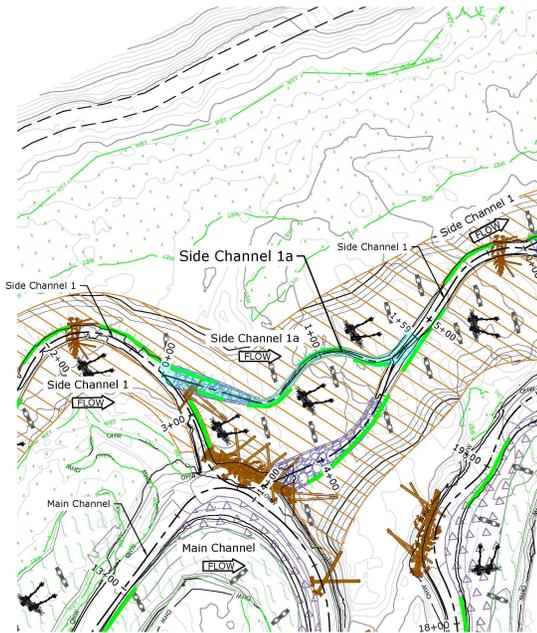
PROPOSED PROJECT: Construct stability berm on Conconully Dam, aquatic and wetland habitat restoration.

IN: Wetlands and Waterbodies  
 COUNTY: Okanogan

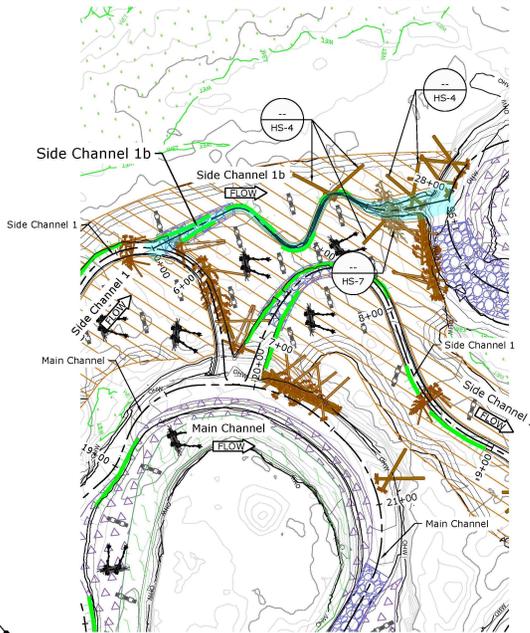
SHEET: 25 of 47

NEAR/AT: City of Conconully  
 STATE: WA

DATE: 01/08/2026

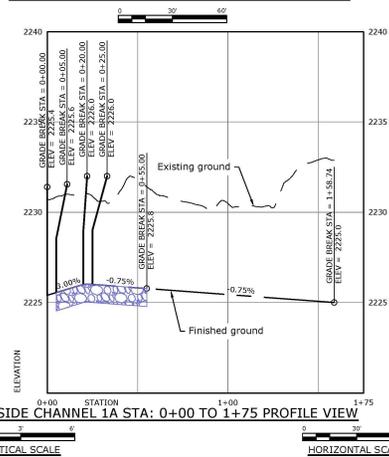


SIDE CHANNEL 1A STA: 0+00 TO 1+75 PLAN VIEW

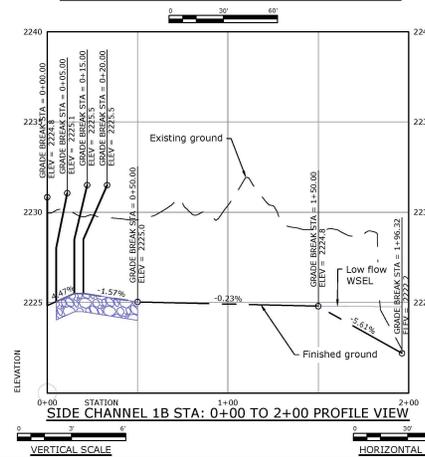


SIDE CHANNEL 1B STA: 0+00 TO 2+00 PLAN VIEW

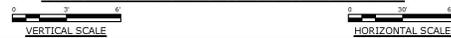
| LEGEND |   |
|--------|---|
|        | OG Major Contour                            |
|        | OG Minor Contour                            |
|        | FG Major Contour                            |
|        | FG Minor Contour                            |
|        | Thalweg                                     |
|        | Existing Wetlands                           |
|        | Ordinary High Water (OHW)                   |
|        | Property Line                               |
|        | Constructed Riffle                          |
|        | Constructed Gravel Bar                      |
|        | Riparian Bench                              |
|        | Constructed Wetland                         |
|        | Brush Bank - See Sheet D-16                 |
|        | Willow Baffle - See Sheet D-15              |
|        | LWM - See Sheet D-5 thru D-13               |
|        | HS-10 Floodplain Roughness - See Sheet D-14 |



SIDE CHANNEL 1A STA: 0+00 TO 1+75 PROFILE VIEW



SIDE CHANNEL 1B STA: 0+00 TO 2+00 PROFILE VIEW



## Attachment 1 Salmon Creek Aquatic & Wetland Habitat Restoration

APPLICANT:



— BUREAU OF —  
**RECLAMATION**

ADJACENT PROPERTY OWNERS:

See Part 5h of the JARPA for a full list of adjacent property owners.

Project Name: Conconully Safety of Dams Modification Project

DATUM: D North American 1983

LAT/LONG: 48.537853 N, -119.759296 W

Section: 7 and 18

Township: 35N

Range: 5E

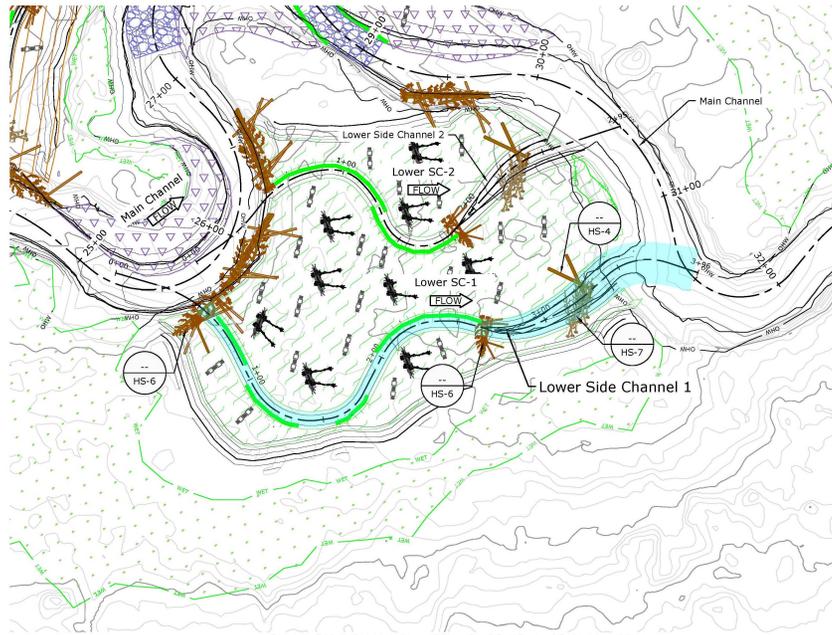
PROPOSED PROJECT: Construct stability berm on Conconully Dam, aquatic and wetland habitat restoration.

IN: Wetlands and Waterbodies  
COUNTY: Okanogan

SHEET: 26 of 77

NEAR/AT: City of  
Conconully  
STATE: WA

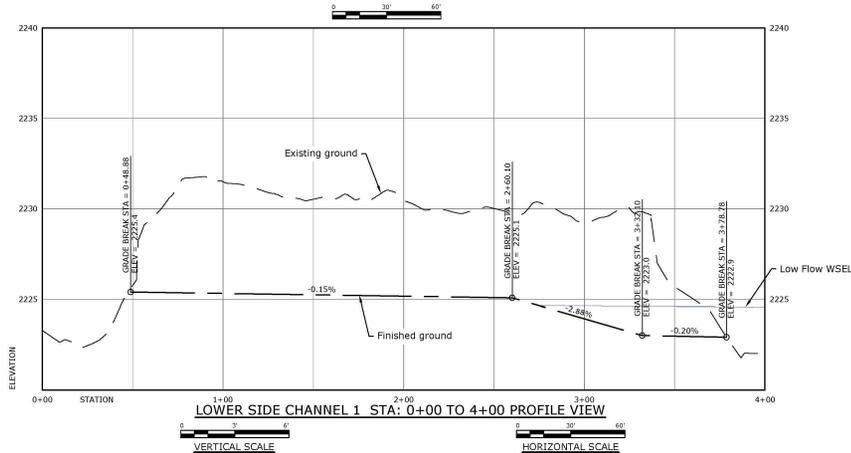
DATE: 01/08/2026



| LEGEND |   |
|--------|---|
|        | OG Major Contour                            |
|        | OG Minor Contour                            |
|        | FG Major Contour                            |
|        | FG Minor Contour                            |
|        | Thalweg                                     |
|        | Existing Wetlands                           |
|        | Ordinary High Water (OHW)                   |
|        | Property Line                               |
|        | Constructed Riffle                          |
|        | Constructed Gravel Bar                      |
|        | Riparian Bench                              |
|        | Constructed Wetland                         |
|        | Brush Bank - See Sheet D-16                 |
|        | Willow Baffle - See Sheet D-15              |
|        | LWM - See Sheet D-5 thru D-13               |
|        | HS-10 Floodplain Roughness - See Sheet D-14 |



LOWER SIDE CHANNEL 1 STA: 0+00 TO 4+00 PLAN VIEW



LOWER SIDE CHANNEL 1 STA: 0+00 TO 4+00 PROFILE VIEW

## Attachment 1 Salmon Creek Aquatic & Wetland Habitat Restoration

APPLICANT:



— BUREAU OF —  
**RECLAMATION**

ADJACENT PROPERTY OWNERS:

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Project Name: Conconully Safety of Dams Modification Project

DATUM: D North American 1983

LAT/LONG: 48.537853 N, -119.759296 W

Section: 7 and 18

Township: 35N

Range: 5E

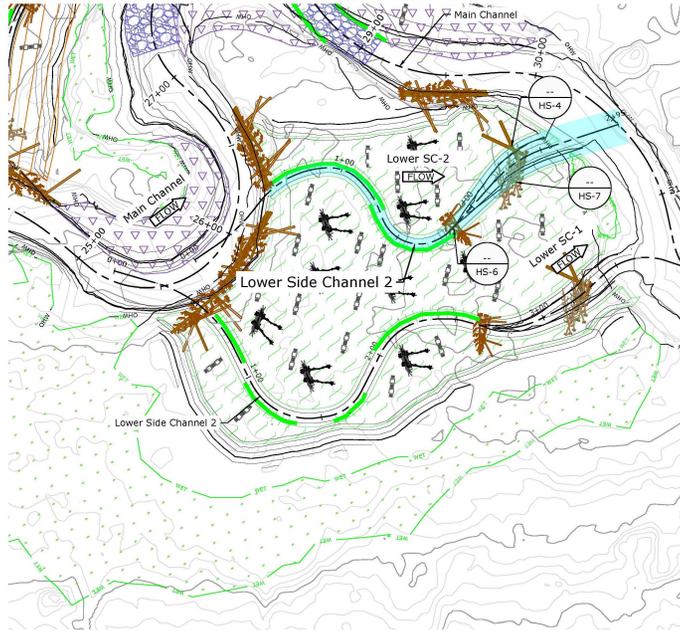
PROPOSED PROJECT: Construct stability berm on Conconully Dam, aquatic and wetland habitat restoration.

IN: Wetlands and Waterbodies  
COUNTY: Okanogan

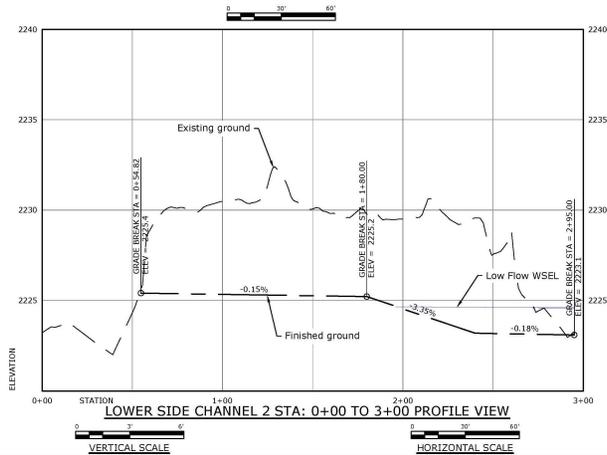
SHEET: 27 of 47

NEAR/AT: City of  
Conconully  
STATE: WA

DATE: 01/08/2026



LOWER SIDE CHANNEL 2 STA: 0+00 TO 3+00 PLAN VIEW



LOWER SIDE CHANNEL 2 STA: 0+00 TO 3+00 PROFILE VIEW

| LEGEND |   |
|--------|---|
|        | OG Major Contour                            |
|        | OG Minor Contour                            |
|        | FG Major Contour                            |
|        | FG Minor Contour                            |
|        | Thalweg                                     |
|        | Existing Wetlands                           |
|        | Ordinary High Water (OHW)                   |
|        | Property Line                               |
|        | Constructed Riffle                          |
|        | Constructed Gravel Bar                      |
|        | Riparian Bench                              |
|        | Constructed Wetland                         |
|        | Brush Bank - See Sheet D-16                 |
|        | Willow Baffle - See Sheet D-15              |
|        | LWM - See Sheet D-5 thru D-13               |
|        | HS-10 Floodplain Roughness - See Sheet D-14 |



## Attachment 1 Salmon Creek Aquatic & Wetland Habitat Restoration

APPLICANT:



— BUREAU OF —  
**RECLAMATION**

ADJACENT PROPERTY OWNERS:

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Project Name: Conconully Safety of Dams Modification Project

DATUM: D North American 1983

LAT/LONG: 48.537853 N, -119.759296 W

Section: 7 and 18

Township: 35N

Range: 5E

PROPOSED PROJECT: Construct stability berm on Conconully Dam, aquatic and wetland habitat restoration.

IN: Wetlands and Waterbodies  
COUNTY: Okanogan

SHEET: 28 of 47

NEAR/AT: City of  
Conconully  
STATE: WA

DATE: 01/08/2026

**GENERAL FILL MATERIAL OVERVIEW**

Fill material and placement requirements for this project, with the exception of channel materials, are detailed on this sheet. For this project, fill has been delineated into three types: compacted channel fill, general fill, and channel materials with specific material and compaction requirements for each type. This sheet provides material and placement details for general and compacted channel fill types. Details for channel materials can be found on sheets D-2 through D-3.

**COMPACTED CHANNEL FILL MATERIAL**

Critical locations within the project require compacted fill. Excavated materials that are uniform in size and type will require mixing to create a well-graded and compactable fill that meets the following requirements:

| COMPACTED CHANNEL FILL MATERIAL GRADATION    |                              |  |
|--|------------------------------|--|
| Material Class (approximate size range)      | "Idealized" Percent Passing* | Range of Acceptable Compacted Fill as Class Percentage** |
| Cobble (3-inches to 5-inches)                | 100%                         | 0% to 20%  |
| Course Gravel (1-inches to 3-inches)         | 80%                          | 0% to 60%  |
| Medium Gravel (0.375-inches to 1-inches)     | 50%                          | 20% to 80%   |
| Sands to Fine Gravel (0.187 to 0.375 inches) | 30%                          | 10% to 30%   |
| Sands and Fines (<No. 4 Sieve)               | 10%                          | 5% to 40%  |
| Moisture Content                             | 10%                          | 5% to 10%  |

\*Note - Idealized Percent Passing is intended to show a well-graded alluvial mix that contains all size classes along with optimum fine material and water content for compaction and support of vegetative plants. This example is for illustration only.

\*\*Note -The COR will utilize this range for approval of acceptable materials for Compacted Fill.

**COMPACTED CHANNEL FILL PLACEMENT NOTES:**

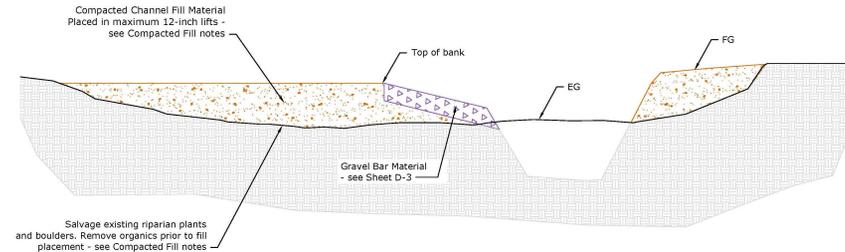
- Treat fill area prior to fill placement as follows:
  - Salvage and use proper care and handling to preserve existing vegetation for re-use
  - Salvage exposed boulders greater than 12-inches for re-use
  - Remove organics from subgrade
  - Salvage sod and soil
- Prepare Compacted Channel Fill Material:
  - Compacted Fill material shall be a well graded mix and be near optimum moisture content for compaction. Fill material shall be approved by the COR before placement at each compacted fill area.
- Place compacted channel fill material in maximum of 12-inch lifts, and compact thoroughly. No testing of compacted density will be performed; acceptance will be by the COR or Engineer observing fill placement and compaction effort. The intent of compaction will be to achieve approximately 85% relative density.
- Place additional lifts and repeat until finish grade is met.
- Where indicated on plans, place topsoil to finished grade per topsoil specifications, elsewhere, scarify top 3-inches of fill

**GENERAL FILL MATERIAL**

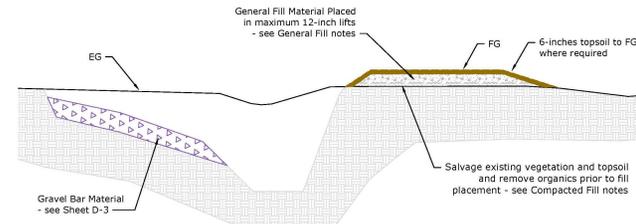
General Fill can be placed in all required floodplain or upland fill areas outside of constructed channel features that are not identified as requiring Compacted Fill. All General Fill shall be approved by the Engineer or COR for use as fill material prior to placement. General Fill has a broad range of acceptable material properties, but shall be well-graded, shall be compactable and not contain greater than 10% water content.

**GENERAL FILL NOTES:**

- Treat fill area prior to fill placement as follows:
  - Salvage and use proper care and handling to preserve existing vegetation for re-use
  - Salvage exposed boulders greater than 12-inches for re-use
  - Remove organics from subgrade
  - Salvage sod and soil
- Place general fill material in maximum of 12-inch lifts, and compact with tracks of machine to meet finish grade. No testing of compacted density will be performed; acceptance will be by the COR observing fill placement and compaction effort. Place additional lifts and repeat until finish grade is met.
- Where indicated on plans, place topsoil to finished grade per topsoil specifications, elsewhere, scarify top 3-inches of fill



**EXISTING CHANNEL FILL TYPICAL SECTION VIEW**  
NOT TO SCALE



**FLOODPLAIN FILL TYPICAL SECTION VIEW**  
NOT TO SCALE

**Attachment 1**  
**Salmon Creek Aquatic & Wetland Habitat Restoration**

APPLICANT:



— BUREAU OF —  
**RECLAMATION**

ADJACENT PROPERTY OWNERS:

See Part 5h of the JARPA for a full list of adjacent property owners.

Project Name: Conconully Safety of Dams Modification Project

DATUM: D North American 1983

LAT/LONG: 48.537853 N, -119.759296 W

Section: 7 and 18

Township: 35N

Range: 5E

PROPOSED PROJECT: Construct stability berm on Conconully Dam, aquatic and wetland habitat restoration.

IN: Wetlands and Waterbodies  
COUNTY: Okanogan

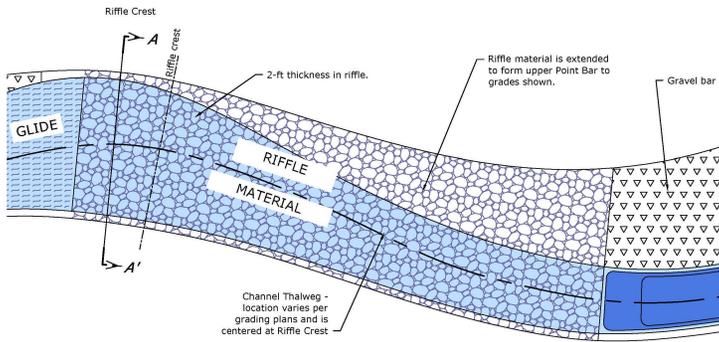
SHEET: 29 of 47

NEAR/AT: City of Conconully  
STATE: WA

DATE: 01/08/2026

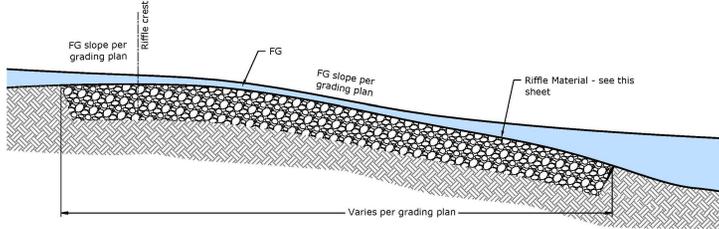
**RIFFLE OVERVIEW:**

Constructed riffles are to be installed at locations shown in the grading plans. All constructed riffles will be over-excavated and replaced with riffle material as specified on this sheet.



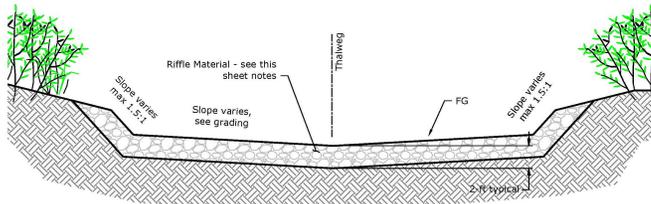
TYPICAL CONSTRUCTED RIFFLE PLAN VIEW

NOT TO SCALE



TYPICAL CONSTRUCTED RIFFLE PROFILE VIEW

NOT TO SCALE



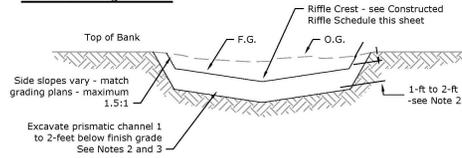
TYPICAL CONSTRUCTED RIFFLE MATERIAL SECTION A - A'

NOT TO SCALE

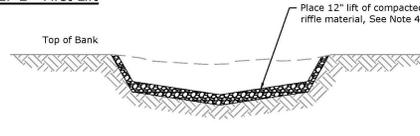
**CONSTRUCTED RIFFLE CONSTRUCTION STEPS**

Not to Scale

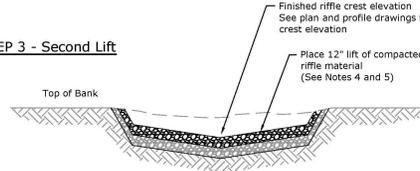
**STEP 1 - Rough Grade**



**STEP 2 - First Lift**



**STEP 3 - Second Lift**



**CONSTRUCTED RIFFLE NOTES:**

1. Stockpile channel materials per design specifications. Materials are to be stockpiled in the immediate project area or transported from the sorting area as needed.
2. Treat existing channel bed by removing organics and creating a prismatic working surface following channel thalweg and design contours on grading drawings. Rough grade from finish grade to specified Riffle Material depth in channel bed in accordance with plan and profile drawings. Rough grade banks by 1-ft to slopes shown on grading plans and not exceeding 1.5:1.
3. Rip existing channel bed at minimum 6-inches deep to create a better bonding surface between the two layers.
4. Import well-mixed Riffle Material and/or create material from native alluvium from project excavations meeting the specifications for Constructed Riffle Material. Compact riffle material in 12-inch lifts using tracked 300 Series Excavator, or similar equipment as approved by the COR. Track on matrix material sufficiently to compact material.
5. Repeat riffle construction by placing another 12-inch lift to achieve 2-ft thickness. Add a layer of additional fines on the surface. Wash fines into matrix material using a trash pump and 2-inch hose until water ponds on the surface.
6. Top dress with a single layer of coarse riffle material to add some initial roughness to the channel and form a natural appearance.
7. For those areas where habitat structures or bank treatments are to be placed adjacent to the constructed riffle, the riffle will be constructed before placement of habitat structures or bank treatments.
8. Riffles and channels that are marked as complete by the Contractor shall not be driven on by machinery to prevent over compaction or movement of material.

| Riffle Material |                     |
|-----------------|---------------------|
| Percent Passing | Size Class (inches) |
| 100%            | 7.5                 |
| 84%             | 5                   |
| 50%             | 3                   |
| 30%             | 1                   |
| 16%             | 0.25                |
| 10%*            | <0.08               |

\* See Riffle Material Note 2

**RIFFLE MATERIAL NOTES:**

1. Riffle Material shall be imported or developed by Contractor onsite by screening and mixing of native alluvium from project excavations to form a well graded and uniformly mixed substrate.
2. Fines (10% passing) shall consist of a mixture of cohesive materials and sands with a minimum of 50% of fines to be cohesive material (loess, silt, clay) as approved by Engineer.

**GRADATION NOTES:**

1. Percent passing size class is based on the nominal diameter of rock.
2. Nominal diameter shall be measured as the intermediate axis where the small and large axis shall not be more than 3 times less than or greater than the nominal diameter.
3. Size Class is unique to these drawings and is not the Unified Soil Classification.
4. Acceptable riffle material may be created from stockpiles of various sized screened materials.

**Attachment 1  
Salmon Creek Aquatic & Wetland Habitat Restoration**

APPLICANT:



BUREAU OF RECLAMATION

ADJACENT PROPERTY OWNERS:

See Part 5h of the JARPA for a full list of adjacent property owners.

Project Name: Conconully Safety of Dams Modification Project

DATUM: D North American 1983

LAT/LONG: 48.537853 N, -119.759296 W

Section: 7 and 18

Township: 35N

Range: 5E

PROPOSED PROJECT: Construct stability berm on Conconully Dam, aquatic and wetland habitat restoration.

IN: Wetlands and Waterbodies  
COUNTY: Okanogan

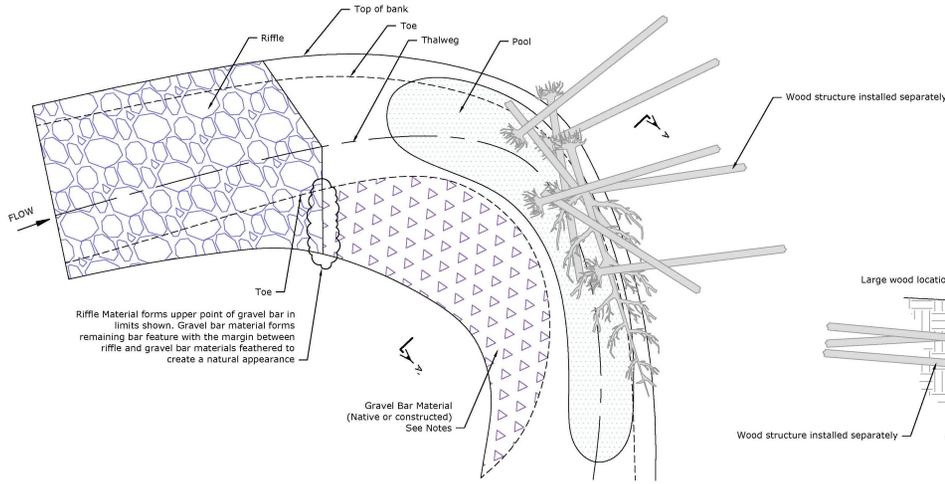
SHEET: 30 of 47

NEAR/AT: City of Conconully  
STATE: WA

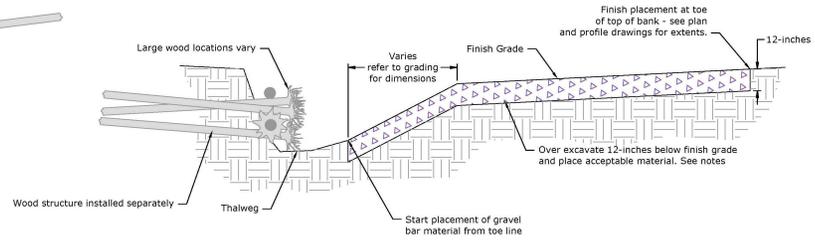
DATE: 01/08/2026

**GRAVEL BAR OVERVIEW:**

Bars are located along the inside of meander bends and in zones of frequent inundation. These areas consist of well-graded alluvium that is stored by the stream and mobilized during large runoff events. This material replenishes spawning material in glides and riffles.



**GRAVEL BAR - PLAN**  
NOT TO SCALE



**SECTION A - A'**  
NOT TO SCALE

**NOTES:**

1. Refer to channel plan and profile drawings for Gravel Bar extents, design elevations, and offsets of pool sections.
2. Gravel bar extents are shown on channel plan and profile drawings and shall generally extend from toe of channel to top of bank and feather into adjacent riffle features.
3. Gravel bars shall consist of 12-inches thickness of constructed point bar material placed to finish grade.
4. Where gravel bar material is placed, material shall be placed by spreading piles without tracking on the finished surface to prevent over compaction of gravel bar material.
5. Once a gravel bar is completed no travel by machinery on that gravel bar is acceptable. If machinery has traveled across a gravel bar, the Contractor shall rip at a minimum depth of 1-ft to decompact the gravel bar material.
6. Estimated volumes of gravel bars, assuming all require fill, are tabulated below. Volume calculations assume areas shown in these plans are excavated to a depth of 12-inches.
7. The COR and Engineer will work with the Contractor to develop a constructed gravel bar material mixture that meets specifications with materials found on site.

| CORSTRUCTED GRAVEL BAR MATERIAL |                 |
|---------------------------------|-----------------|
| Percent Passing                 | Min. Size Class |
| 100%                            | 6 inches        |
| 84%                             | 2 - 4 inches    |
| 50%                             | 1 - 2 inches    |
| 16%                             | 0.25 - 1 inches |

**GRADATION NOTES:**

1. Percent passing size class is based on the nominal diameter of rock.
2. Nominal diameter shall be measured as the intermediate axis where the small and large axis shall not be more than 3 times less than or greater than the nominal diameter.
3. Acceptable placed gravel bar material may be created from stockpiles of various sized screened materials. The COR and Engineer shall work with the Contractor to develop an acceptable mixture to meet the requirements shown on this drawing.

**Attachment 1**  
**Salmon Creek Aquatic & Wetland Habitat Restoration**

APPLICANT:



— BUREAU OF —  
**RECLAMATION**

ADJACENT PROPERTY OWNERS:

See Part 5h of the JARPA for a full list of adjacent property owners.

Project Name: Conconully Safety of Dams Modification Project

DATUM: D North American 1983

LAT/LONG: 48.537853 N, -119.759296 W

Section: 7 and 18

Township: 35N

Range: 5E

PROPOSED PROJECT: Construct stability berm on Conconully Dam, aquatic and wetland habitat restoration.

IN: Wetlands and Waterbodies  
COUNTY: Okanogan

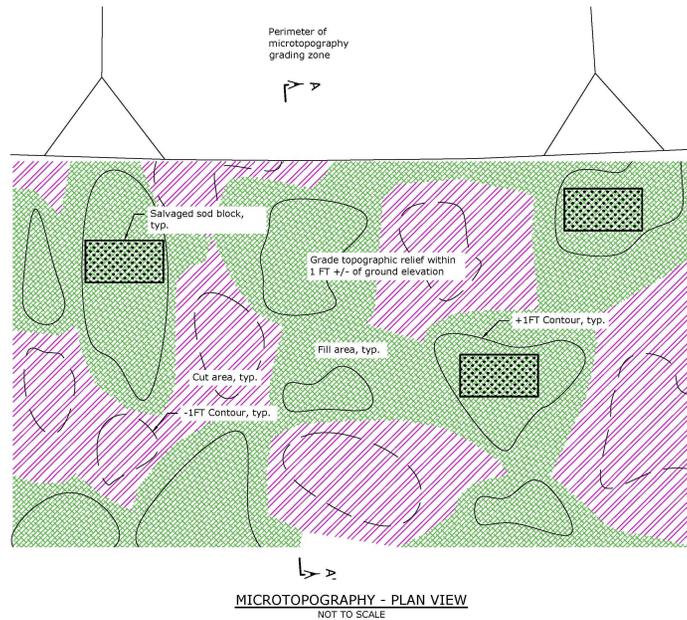
SHEET: 31 of 77

NEAR/AT: City of Conconully  
STATE: WA

DATE: 01/08/2026

**MICROTOPOGRAPHY OVERVIEW:**

Floodplain microtopography is intended to break up preferential flow across the floodplain, and given the variation in topography and proximity to groundwater, is expected to mature into a diverse riparian/wetland vegetation mosaic. This treatment may be applied to constructed floodplains or other disturbed, low lying areas adjacent to the river or channels. It is also considered an effective treatment for rehabilitation of low lying access routes or material staging areas.



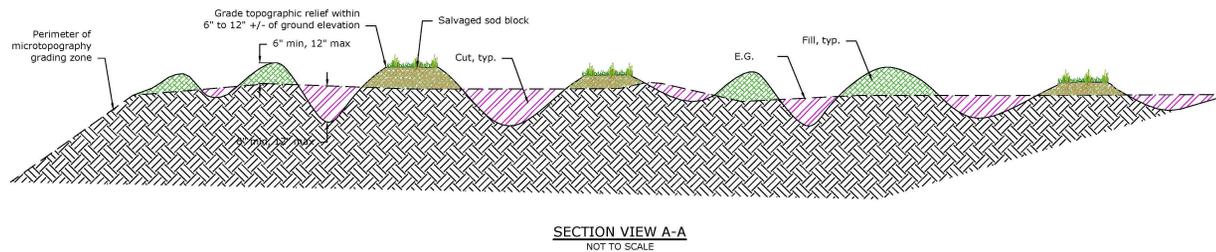
**MICROTOPOGRAPHY COMPLETE**

**NOTES:**

1. The contractor shall work around willow trenches and floodplain wood features located in the designated footprint for microtopography grading.
2. Density of transplanted sod mats depends upon available salvaged sod mats and shall be as approved by the COR.
3. Micro-topography treatment shall be constructed to discourage potential stranding of fish as flow recedes back into the active channels.

**CONSTRUCTION SEQUENCE:**

1. Rough grade floodplain to 0.5 foot below finished grade.
2. Thoroughly scarify/rip rough graded areas to a minimum depth of 1 foot.
3. Work in areas small enough to allow finishing work without tracking over the finished surface:
- 4.3. Place salvaged sod mats on finished surface. If sod mats are thicker than 1ft, excavate footprint for sod mats such that the top of the mat is not greater than 1ft above design finished grade.
- 4.4. Use excavator bucket to dig random troughs to 1ft below finished grade. Scatter material in adjacent areas to 1ft above finished grade, in the vicinity of salvaged sod blocks.
- 4.5. Scatter topsoil to 0.5 foot depth in areas without sod.
5. Do not track over ground once micro-topography treatment is complete. Contractor shall work in one direction and shall not track over ground once micro-topography treatment is complete.



**Attachment 1  
Salmon Creek Aquatic & Wetland Habitat Restoration**

APPLICANT:



BUREAU OF RECLAMATION

ADJACENT PROPERTY OWNERS:

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Project Name: Conconully Safety of Dams Modification Project

DATUM: D North American 1983  
LAT/LONG: 48.537853 N, -119.759296 W  
Section: 7 and 18  
Township: 35N  
Range: 5E

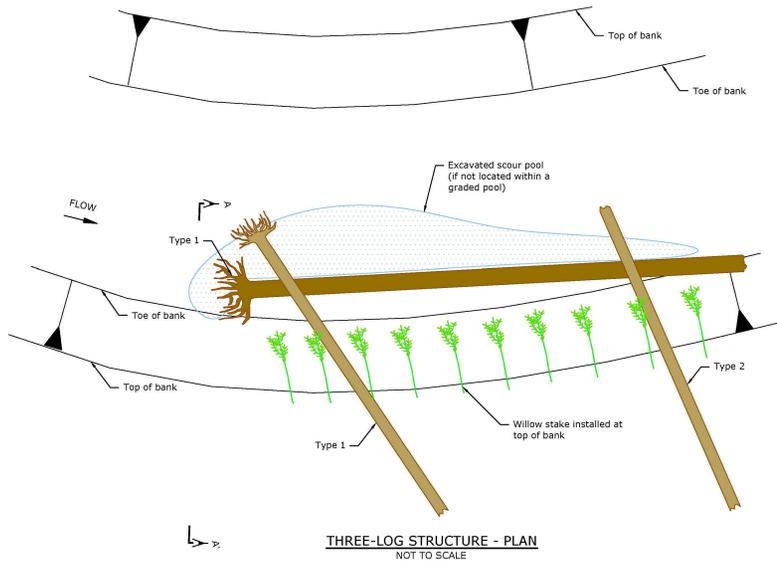
PROPOSED PROJECT: Construct stability berm on Conconully Dam, aquatic and wetland habitat restoration.

IN: Wetlands and Waterbodies  
COUNTY: Okanogan

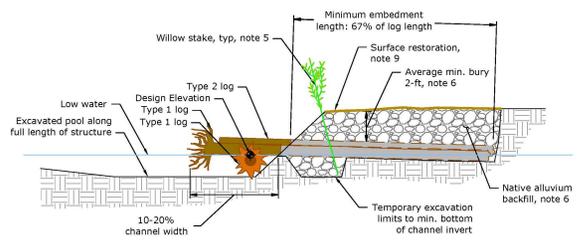
SHEET: 32 of 47

NEAR/AT: City of Conconully  
STATE: WA

DATE: 01/08/2026



**THREE-LOG STRUCTURE - PLAN**  
NOT TO SCALE

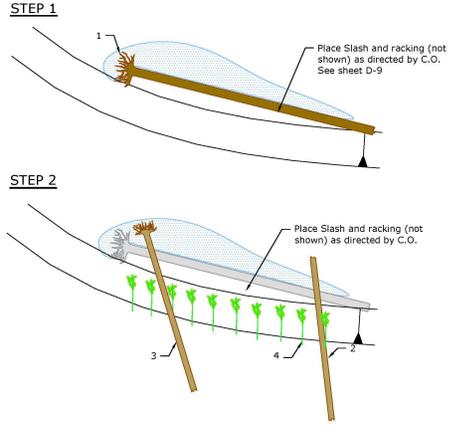


**SECTION A - A'**  
NOT TO SCALE

**NOTES:**

1. Install structures at locations identified in the Plans.
2. Where pool excavation is not specified in the grading plan, excavate a 2' deep pool adjacent to the structure and extend pool out past rootwad extending into channel.
3. Rough grading of channel shall be complete prior to construction of structure including construction of riffles and placement of bar materials.
4. Racking, slash, and live stakes shall be incorporated into the structure by weaving it in between placed logs, filling voids, etc. at each step throughout construction. Racking can be placed first to lift the log off channel bed as needed to achieve structure design height. See detail, drawing D-9 for racking and slash placement.
5. Live stakes shall be installed prior to and/or during backfilling to ensure a minimum of 1-ft submergence in ground water or to the adjacent channel invert, whichever is shallower. Live stakes shall have continuous contact with soil along the length of the stake leaving no voids. See live stake planting detail on detail sheet D-15.
6. Average minimum bury depth increases to 2.5-ft with 18 inch or larger DBH Type 1 or Type 2 logs. Backfill using native excavated material unless native material is unsuitable. Unsuitable is defined as anything classified as a clay, silt, or sand. Place backfill in 1-foot maximum lifts. Compact each lift using mechanical equipment such as an excavator bucket or equipment tracking making certain to not damage or change the elevation of the structure material during compaction.
7. All exposed ends of logs shall be broken and not saw cut to appear natural.
8. Log and racking placement shall be performed to provide variability from structure to structure, while maintaining design elevations.
9. See Drawing TBD and Specifications for planting and seeding requirements.

**STRUCTURE SEQUENCING**  
NOT TO SCALE



| HS-1: Three-Log Structure Material Schedule |            |             |          |                        |          |          |
|---|------------|-------------|----------|------------------------|----------|----------|
| Material Type                               | Size (DBH) | Length (ft) | Rootwad  | Min. Rootwad Dia. (ft) | Branches | Quantity |
| Type 1                                      | 13" - 18"  | 30 - 40     | Yes      | 4.5                    | No       | 2 EA     |
| Type 2                                      | 13" - 18"  | 30 - 40     | No       | NA                     | No       | 1 EA     |
| Racking-1                                   | 4" - 12"   | 15 - 25     | Yes      | 2.5                    | Yes      | 3 EA     |
| Racking-2                                   | 4" - 12"   | 15 - 25     | Optional | NA                     | Yes      | 3 EA     |
| Slash-1                                     | 1" - 4"    | 5 - 15      | NA       | NA                     | Yes      | 10 CY    |
| Live Stakes                                 | 1/2" - 2"  | 6 - 8       | NA       | NA                     | NA       | 15 EA    |

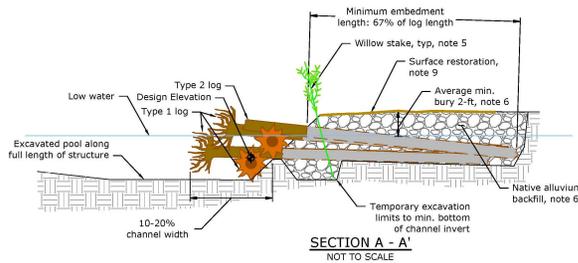
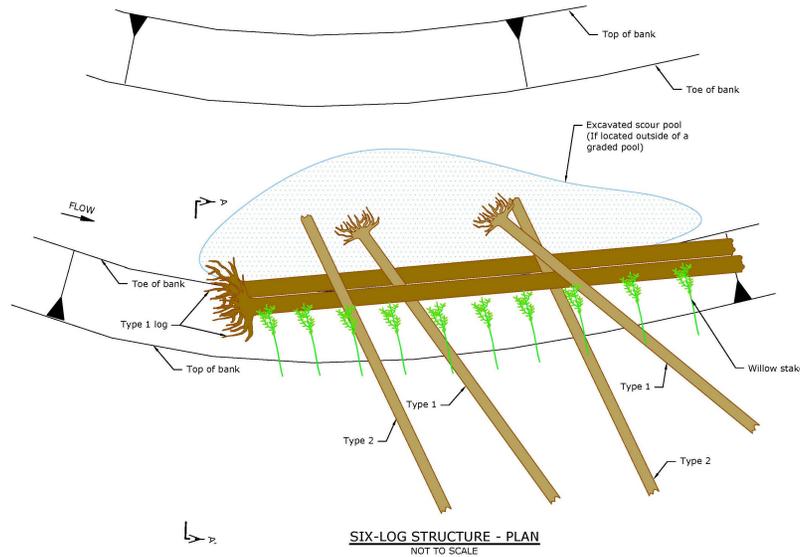
**Attachment 1**  
**Salmon Creek Aquatic & Wetland Habitat Restoration**

**APPLICANT:**  

**BUREAU OF RECLAMATION**  
**ADJACENT PROPERTY OWNERS:**  
 See Part 5h of the JARPA for a full list of adjacent property owners.

**Project Name:** Conconully Safety of Dams Modification Project  
**DATUM:** D North American 1983  
**LAT/LONG:** 48.537853 N, -119.759296 W  
**Section:** 7 and 18  
**Township:** 35N  
**Range:** 5E

**PROPOSED PROJECT:** Construct stability berm on Conconully Dam, aquatic and wetland habitat restoration.  
**IN:** Wetlands and Waterbodies  
**COUNTY:** Okanogan  
**SHEET:** 33 of 47  
**NEAR/AT:** City of Conconully  
**STATE:** WA  
**DATE:** 01/08/2026



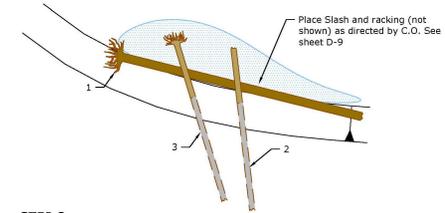
**NOTES:**

1. Install structures at locations identified in the Plans.
2. Where pool excavation is not specified in the grading plan, excavate a 2' deep pool adjacent to the structure and extend pool out past rootwad extending into channel.
3. Rough grading of channel shall be complete prior to construction of structure including construction of riffles and placement of bar materials.
4. Racking, slash, and live stakes shall be incorporated into the structure by weaving it in between placed logs, filling voids, etc. at each step throughout construction. Racking can be placed first to lift the log off channel bed as needed to achieve structure design height. See detail, drawing D-9 for racking and slash placement.
5. Live stakes shall be installed prior to and/or during backfilling to ensure a minimum of 1-ft submergence in ground water or to the adjacent channel invert, whichever is shallower. Live stakes shall have continuous contact with soil along the length of the stake leaving no voids. See live stake planting detail on detail sheet D-15.
6. Average minimum bury depth increases to 2.5-ft with 18 inch or larger DBH Type 1 or Type 2 logs. Backfill using native excavated material unless native material is unsuitable. Unsuitable is defined as anything classified as a clay, silt, or sand. Place backfill in 1-foot maximum lifts. Compact each lift using mechanical equipment such as an excavator bucket or equipment tracking making certain to not damage or change the elevation of the structure material during compaction.
7. All exposed ends of logs shall be broken and not saw cut to appear natural.
8. Log and racking placement shall be performed to provide variability from structure to structure, while maintaining design elevations.
9. See Drawing TBD and Specifications for planting and seeding requirements.

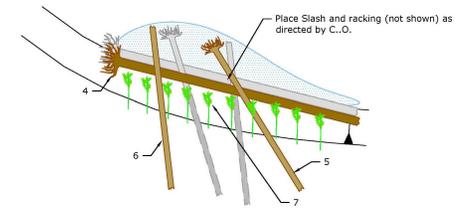
**STRUCTURE SEQUENCING**

NOT TO SCALE

**STEP 1**



**STEP 2**



| HS-2: Six-Log Structure Material Schedule |            |             |          |                        |          |          |
|---|------------|-------------|----------|------------------------|----------|----------|
| Material Type                             | Size (DBH) | Length (ft) | Rootwad  | Min. Rootwad Dia. (ft) | Branches | Quantity |
| Type 1                                    | 13" - 18"  | 30 - 40     | Yes      | 4.5                    | No       | 4 EA     |
| Type 2                                    | 13" - 18"  | 30 - 40     | No       | NA                     | No       | 2 EA     |
| Racking-1                                 | 4" - 12"   | 15 - 25     | Yes      | 2.5                    | Yes      | 6 EA     |
| Racking-2                                 | 4" - 12"   | 15 - 25     | Optional | NA                     | Yes      | 6 EA     |
| Slash-1                                   | 1" - 4"    | 5 - 15      | NA       | NA                     | Yes      | 20 CY    |
| Live Stakes                               | 1/2" - 2"  | 6 - 8       | NA       | NA                     | NA       | 15 EA    |

**Attachment 1**  
**Salmon Creek Aquatic & Wetland Habitat Restoration**

APPLICANT:



— BUREAU OF —  
**RECLAMATION**

ADJACENT PROPERTY OWNERS:

See Part 5h of the JARPA for a full list of adjacent property owners.

Project Name: Conconully Safety of Dams Modification Project

DATUM: D North American 1983

LAT/LONG: 48.537853 N, -119.759296 W

Section: 7 and 18

Township: 35N

Range: 5E

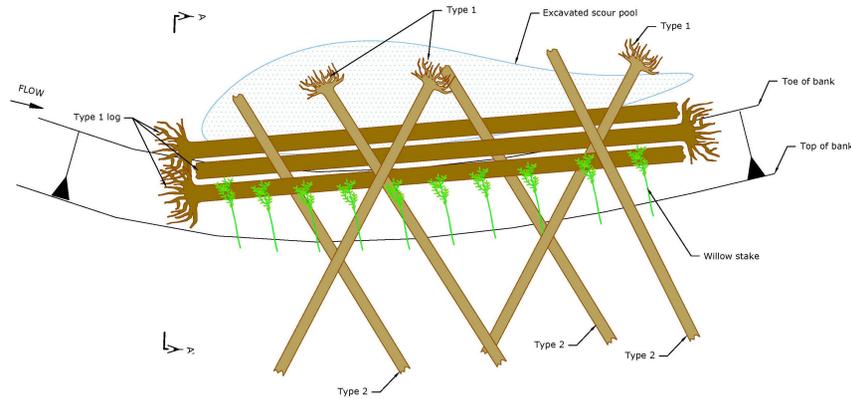
PROPOSED PROJECT: Construct stability berm on Conconully Dam, aquatic and wetland habitat restoration.

IN: Wetlands and Waterbodies  
COUNTY: Okanogan

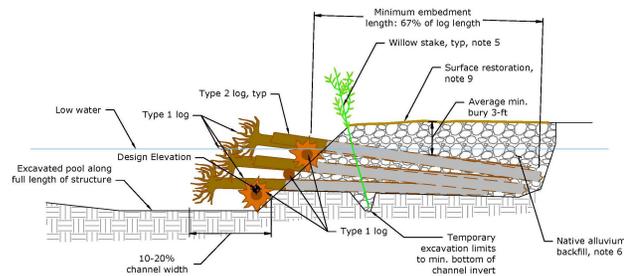
SHEET: 34 of 77

NEAR/AT: City of  
Conconully  
STATE: WA

DATE: 01/08/2026



**NINE-LOG STRUCTURE - PLAN**  
NOT TO SCALE

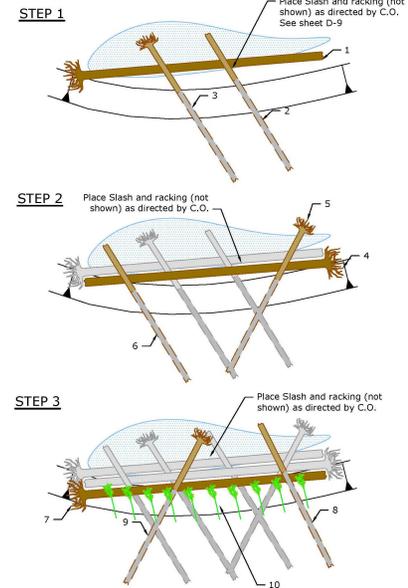


**SECTION A - A'**  
NOT TO SCALE

**NOTES:**

1. Install structures at locations identified in the Plans.
2. Where pool excavation is not specified in the grading plan, excavate a 2' deep pool adjacent to the structure and extend pool out past rootwad extending into channel.
3. Rough grading of channel shall be complete prior to construction of structure including construction of riffles and placement of bar materials.
4. Racking, slash, and live stakes shall be incorporated into the structure by weaving it in between placed logs, filling voids, etc. at each step throughout construction. Racking can be placed first to lift the log off channel bed as needed to achieve structure design height. See detail, drawing D-9 for racking and slash placement.
5. Live stakes shall be installed prior to and/or during backfilling to ensure a minimum of 1-ft submergence in ground water or to the adjacent channel invert, whichever is shallower. Live stakes shall have continuous contact with soil along the length of the stake leaving no voids. See live stake planting detail on detail sheet D-15.
6. Backfill using native excavated material unless native material is unsuitable. Unsuitable is defined as anything classified as a clay, silt, or sand. Place backfill in 1-foot maximum lifts. Compact each lift using mechanical equipment such as an excavator bucket or equipment tracking making certain to not damage or change the elevation of the structure material during compaction.
7. All exposed ends of logs shall be broken and not saw cut to appear natural.
8. Log and racking placement shall be performed to provide variability from structure to structure, while maintaining design elevations.
9. See Drawing TBD and Specifications for planting and seeding requirements.

**STRUCTURE SEQUENCING**  
NOT TO SCALE



| HS-3: Nine-Log Structure Material Schedule |            |             |          |                        |          |          |
|--|------------|-------------|----------|------------------------|----------|----------|
| Material Type                              | Size (DBH) | Length (ft) | Rootwad  | Min. Rootwad Dia. (ft) | Branches | Quantity |
| Type 1                                     | 13" - 18"  | 30 - 40     | Yes      | 4.5                    | No       | 6 EA     |
| Type 2                                     | 13" - 18"  | 30 - 40     | No       | NA                     | No       | 3 EA     |
| Racking-1                                  | 4" - 12"   | 15 - 25     | Yes      | 2.5                    | Yes      | 9 EA     |
| Racking-2                                  | 4" - 12"   | 15 - 25     | Optional | NA                     | Yes      | 9 EA     |
| Slash-1                                    | 1" - 4"    | 5 - 15      | NA       | NA                     | Yes      | 45 CY    |
| Live Stakes                                | 1/2" - 2"  | 6 - 8       | NA       | NA                     | NA       | 20 EA    |

**Attachment 1**  
**Salmon Creek Aquatic & Wetland Habitat Restoration**

APPLICANT:



— BUREAU OF —  
**RECLAMATION**

ADJACENT PROPERTY OWNERS:

See Part 5h of the JARPA for a full list of adjacent property owners.

Project Name: Conconully Safety of Dams Modification Project  
 DATUM: D North American 1983  
 LAT/LONG: 48.537853 N, -119.759296 W  
 Section: 7 and 18  
 Township: 35N  
 Range: 5E

PROPOSED PROJECT: Construct stability berm on Conconully Dam, aquatic and wetland habitat restoration.

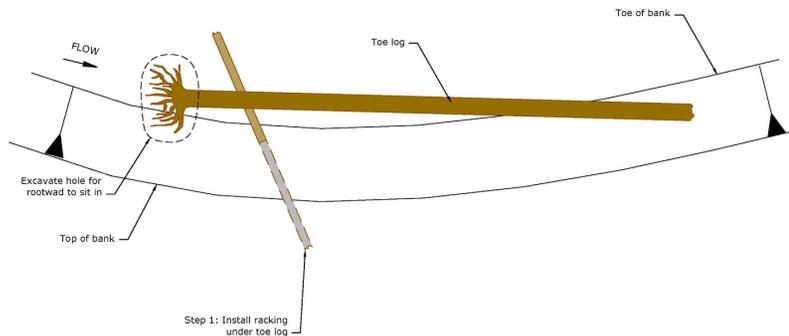
IN: Wetlands and Waterbodies  
 COUNTY: Okanogan

SHEET: 35 of 47

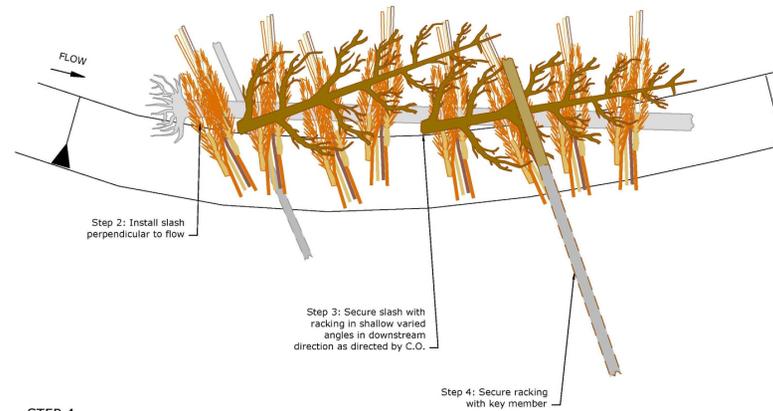
NEAR/AT: City of Conconully  
 STATE: WA

DATE: 01/08/2026

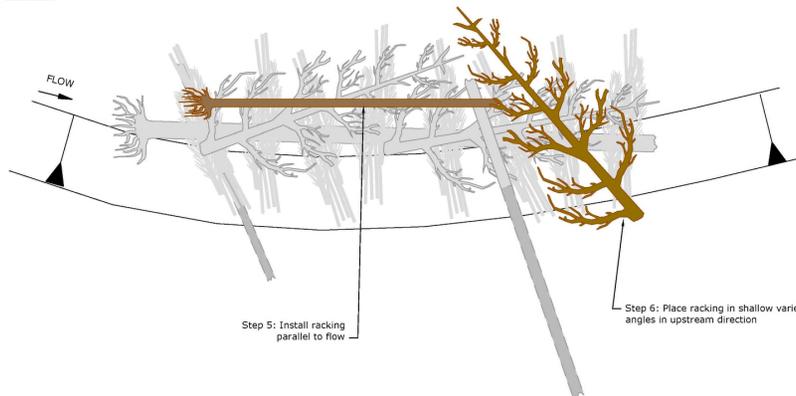
**STEP 1**



**STEP 2**

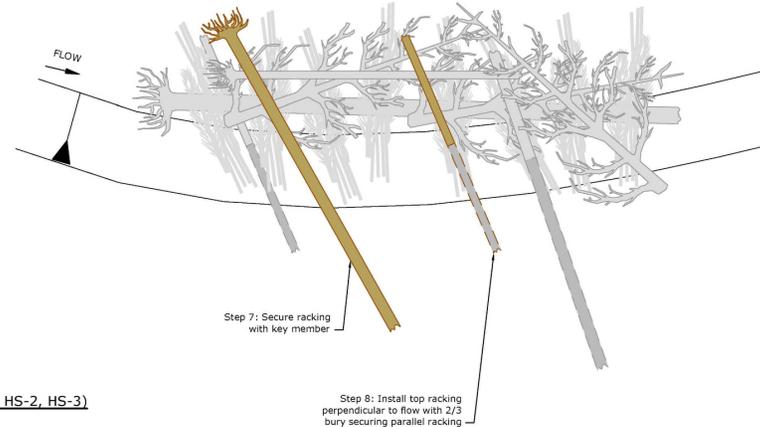


**STEP 3**



**STEP 4**

(HS-1 Completed in step 4. Repeat steps 1 through 4 for each layer is HS-2 and HS-3.)



**RACKING PLACEMENT PLAN (HS-1, HS-2, HS-3)**  
NOT TO SCALE

**NOTES:**

1. Racking members placed in parallel or at shallow angles to flow shall be secured by key member or racking member with bury.
2. Racking, slash, and live stakes shall be incorporated into the structure by weaving it in between placed logs, filling voids, etc. at each step throughout construction.
3. All exposed ends of racking shall be broken and not saw cut to appear natural.
8. Racking and slash placement shall be performed to provide variability from structure to structure, while maintaining design elevations.
9. Repeat steps 1 through 4 for each layer on HS-2 and HS-3 structures.

**Attachment 1**  
**Salmon Creek Aquatic & Wetland Habitat Restoration**

APPLICANT:



— BUREAU OF —  
**RECLAMATION**

ADJACENT PROPERTY OWNERS:

See Part 5h of the JARPA for a full list of adjacent property owners.

Project Name: Conconully Safety of Dams Modification Project

DATUM: D North American 1983  
LAT/LONG: 48.537853 N, -119.759296 W  
Section: 7 and 18  
Township: 35N  
Range: 5E

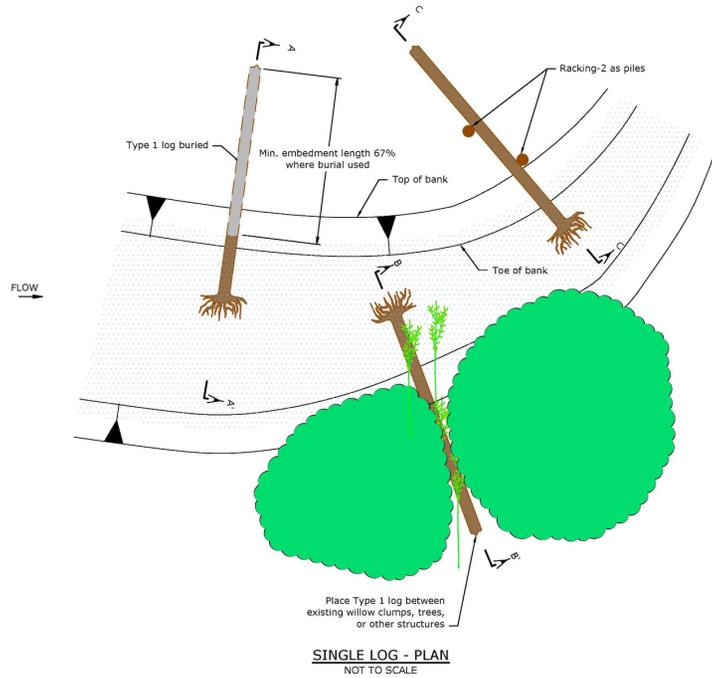
PROPOSED PROJECT: Construct stability berm on Conconully Dam, aquatic and wetland habitat restoration.

IN: Wetlands and Waterbodies  
COUNTY: Okanogan

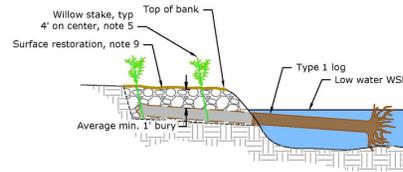
SHEET: 36 of 47

NEAR/AT: City of Conconully  
STATE: WA

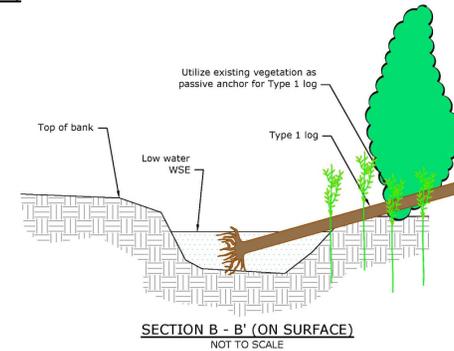
DATE: 01/08/2026



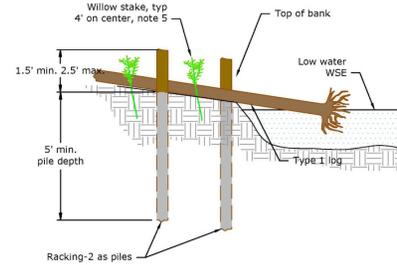
**SINGLE LOG - PLAN**  
NOT TO SCALE



**SECTION A - A' (BURIED)**  
NOT TO SCALE



**SECTION B - B' (ON SURFACE)**  
NOT TO SCALE



**SECTION C - C' (PILES)**  
NOT TO SCALE

**NOTES:**

1. Install structures at locations identified on plan and profile drawings.
2. Rough grading of channel shall be complete prior to construction of structure including riffle construction and placement of bar material.
3. See structure schedule for number of structures, locations, logs, and associated material quantities.
4. All cut ends of logs that will be exposed upon completion of structure shall be marred prior to installation. The Contractor shall use an excavator, or other heavy equipment to tear apart wood fibers at the cut end of the log to create the appearance of a log that has naturally broken apart.
5. Racking, slash, and live stakes shall be incorporated into the structure while placing layers such that it is woven into structure in between placed logs, filling voids, etc. at each step throughout construction.
6. When excavated into ground, backfill using native excavated material unless native material is unsuitable for backfill. Place backfill in 1-foot maximum lifts. Compact each lift using mechanical equipment such as an excavator bucket or equipment tracking.
7. When utilizing existing vegetation as passive anchors there shall be at a minimum a willow clump on the downstream side, but preferably on the upstream side as well. The C.O. shall agree to placement areas of structures that are not buried.
8. See Drawing TBD and Specifications for planting and seeding requirements.

| HS-4: Single-Log Structure Material Schedule |            |             |          |                        |          |          |
|--|------------|-------------|----------|------------------------|----------|----------|
| Material Type                                | Size (DBH) | Length (ft) | Rootwad  | Min. Rootwad Dia. (ft) | Branches | Quantity |
| Type 1                                       | 13" - 18"  | 30 - 40     | Yes      | 4.5                    | No       | 1 EA     |
| Racking-2                                    | 4" - 12"   | 15 - 25     | Optional | NA                     | Yes      | 3 EA     |
| Slash-1                                      | 1" - 4"    | 5 - 15      | NA       | NA                     | Yes      | 3 CY     |
| Live Stakes                                  | 1/2" - 2"  | 6 - 8       | NA       | NA                     | NA       | 4 EA     |

## Attachment 1 Salmon Creek Aquatic & Wetland Habitat Restoration

APPLICANT:



— BUREAU OF —  
**RECLAMATION**

ADJACENT PROPERTY OWNERS:

See Part 5h of the JARPA for a full list of adjacent property owners.

Project Name: Conconully Safety of Dams Modification Project

DATUM: D North American 1983

LAT/LONG: 48.537853 N, -119.759296 W

Section: 7 and 18

Township: 35N

Range: 5E

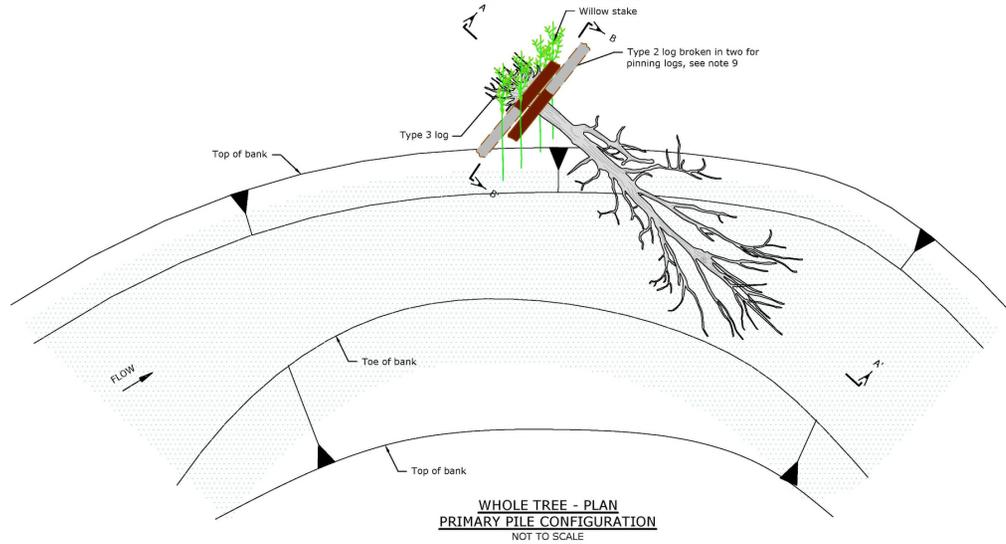
PROPOSED PROJECT: Construct stability berm on Conconully Dam, aquatic and wetland habitat restoration.

IN: Wetlands and Waterbodies  
COUNTY: Okanogan

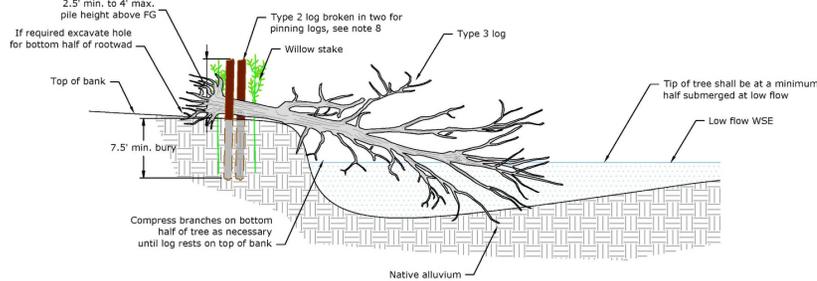
SHEET: 37 of 47

NEAR/AT: City of  
Conconully  
STATE: WA

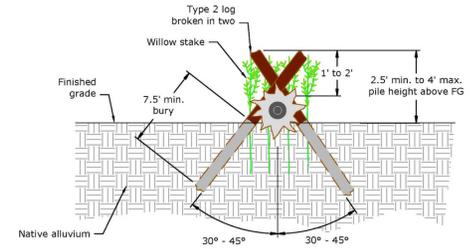
DATE: 01/08/2026



**WHOLE TREE - PLAN  
PRIMARY PILE CONFIGURATION**  
NOT TO SCALE

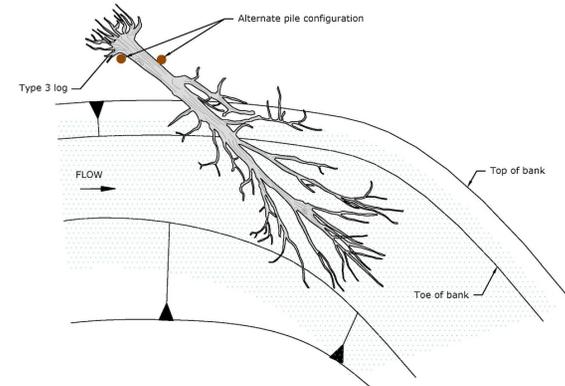


**SECTION A - A'**  
NOT TO SCALE



**SECTION B - B'**  
NOT TO SCALE

1. All cut ends of logs that will be exposed upon completion of structure shall be marked. The Contractor shall use an excavator, or other heavy equipment to tear apart wood fibers at the cut end of the log to create the appearance of a log that has naturally broken apart.



**ALTERNATE PILE CONFIGURATION - PLAN**  
NOT TO SCALE

1. Alternate pile locations can be used where other structures prohibit use of primary method.

**NOTES:**

1. Install structures at locations identified on plan and profile drawings.
2. Rough grading of channel shall be complete prior to construction of structure including riffle construction and placement of bar material.
3. See structure schedule for number of structures, locations, logs, and associated material quantities.
4. All cut ends of logs that will be exposed upon completion of structure shall be marked prior to installation. The Contractor shall use an excavator, or other heavy equipment to tear apart wood fibers at the cut end of the log to create the appearance of a log that has naturally broken apart.
5. Live stakes shall be installed prior to and/or during backfilling to ensure a minimum of 1-ft submergence in ground water or to the adjacent channel invert, whichever is shallower. Live stakes shall have continuous contact with soil along the length of the stake leaving no voids. See live stake planting detail on detail sheet D-15.
6. Type 3 log shall be handled a minimum number of times to reduce loss of limbs, foliage, etc. If more than 15% of tree branches are removed or damaged during handling the Contractor shall replace at no cost to the Contracting Agency.
7. Slash material shall be incorporated into the structure by placing it upstream and under Type 3 log.
8. Pinning logs to be driven.

| HS-5: Whole Tree Structure Material Schedule |            |             |          |                        |          |          |
|--|------------|-------------|----------|------------------------|----------|----------|
| Material Type                                | Size (DBH) | Length (ft) | Rootwad  | Min. Rootwad Dia. (ft) | Branches | Quantity |
| Type 2                                       | 13" - 18"  | 30 - 40     | No       | NA                     | No       | 1 EA     |
| Type 3                                       | 13" - 18"  | 40 - 60     | Yes      | 4                      | Yes      | 1 EA     |
| Racking-2                                    | 4" - 12"   | 15 - 25     | Optional | NA                     | Yes      | 2 EA     |
| Slash-1                                      | 1" - 4"    | 5 - 15      | NA       | NA                     | Yes      | 5 CY     |
| Live Stakes                                  | 1/2" - 2"  | 6 - 8       | NA       | NA                     | NA       | 4 EA     |

**Attachment 1  
Salmon Creek Aquatic & Wetland Habitat Restoration**

APPLICANT:



**BUREAU OF  
RECLAMATION**

ADJACENT PROPERTY OWNERS:

See Part 5h of the JARPA for a full list of adjacent property owners.

Project Name: Conconully Safety of Dams Modification Project

DATUM: D North American 1983

LAT/LONG: 48.537853 N, -119.759296 W

Section: 7 and 18

Township: 35N

Range: 5E

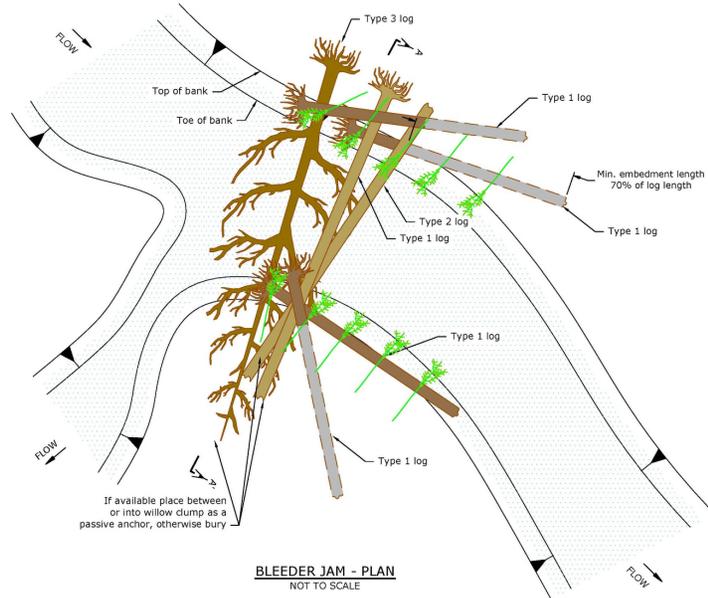
PROPOSED PROJECT: Construct stability berm on Conconully Dam, aquatic and wetland habitat restoration.

IN: Wetlands and Waterbodies  
COUNTY: Okanogan

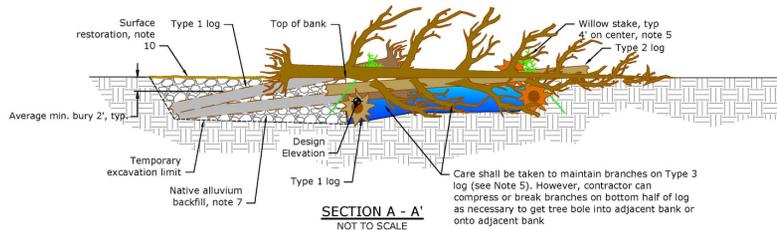
SHEET: 38 of 47

NEAR/AT: City of  
Conconully  
STATE: WA

DATE: 01/08/2026



**BLEEDER JAM - PLAN**  
NOT TO SCALE



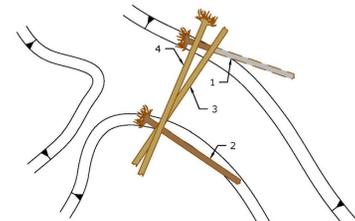
**SECTION A - A'**  
NOT TO SCALE

**NOTES:**

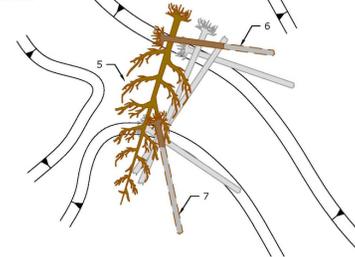
1. Install structure at location identified on plan and profile drawings.
2. Rough grading of channel shall be complete prior to construction of structure including riffle construction and placement of bar material.
3. See structure schedule for number of structures, locations, logs, and associated material quantities.
4. All cut ends of logs that will be exposed upon completion of structure shall be marred prior to or upon completion of installation. The Contractor shall use an excavator, or other heavy equipment to tear apart wood fibers at the cut end of the log to create the appearance of a log that has naturally broken apart.
5. Type 3 log shall be handle directly to reduce loss of limbs, foliage, etc.. If more than 15% of tree branches are removed or damaged during handling the Contractor shall replace at not cost to the Contracting Agency.
6. Racking and slash material shall be incorporated into the structure while placing layers such that it is woven into structure in between placed logs, filling voids, etc. at each step throughout construction.
7. Backfill using native excavated material unless native material is unsuitable. Unsuitable material classifies as a clay, silt or sand. Place backfill as structure is constructed in 1-foot maximum lifts. Compact each lift using mechanical equipment such as an excavator bucket or equipment tracking making certain to not damage or change the elevation of the structure material during compaction.
8. When utilizing existing vegetation as passive anchors there shall be at a minimum a willow clump or tree on the downstream side, but preferably on the upstream side as well.
9. See Drawing TBD and Specifications for planting and seeding requirements.

**STRUCTURE SEQUENCING**  
NOT TO SCALE

**STEP 1**



**STEP 2**



| HS-6' Channel Spanner Jam Structure Material Schedule |            |             |          |                        |          |          |
|---|------------|-------------|----------|------------------------|----------|----------|
| Material Type   | Size (DBH) | Length (ft) | Rootwad  | Min. Rootwad Dia. (ft) | Branches | Quantity |
| Type 1  | 13" - 18"  | 30 - 40     | Yes      | 4.5                    | No       | 5 EA     |
| Type 2  | 13" - 18"  | 30 - 40     | No       | NA                     | No       | 1 EA     |
| Type 3  | 13" - 18"  | 40 - 60     | Yes      | 4                      | Yes      | 1 EA     |
| Racking-1   | 4" - 12"   | 15 - 25     | Yes      | NA                     | Yes      | 2 EA     |
| Racking-2   | 4" - 12"   | 15 - 25     | Optional | NA                     | Yes      | 7 EA     |
| Slash-1   | 1" - 4"    | 5 - 15      | NA       | NA                     | Yes      | 10 CY    |
| Live Stakes   | 1/2" - 2"  | 6 - 8       | NA       | NA                     | NA       | 10 EA    |

**Attachment 1**  
**Salmon Creek Aquatic & Wetland Habitat Restoration**

APPLICANT:



— BUREAU OF —  
**RECLAMATION**

ADJACENT PROPERTY OWNERS:

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Project Name: Conconully Safety of Dams Modification Project

DATUM: D North American 1983

LAT/LONG: 48.537853 N, -119.759296 W

Section: 7 and 18

Township: 35N

Range: 5E

PROPOSED PROJECT: Construct stability berm on Conconully Dam, aquatic and wetland habitat restoration.

IN: Wetlands and Waterbodies  
COUNTY: Okanogan

SHEET: 39 of 47

NEAR/AT: City of Conconully  
STATE: WA

DATE: 01/08/2026

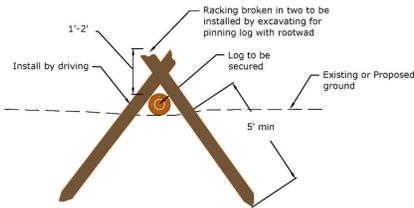
**Eight Log Habitat Structure Overview:**

This structure is intended to increase hydraulic roughness of channel, encourage sediment deposition and provide cover habitat.

**Construction Notes:**

- Structures are to be placed at locations shown in plans.
- Protect existing trees. Remove only trees as marked.
- Type 3 pinning logs to be driven.
- All visible ends of logs shall be cut or broken off to create natural appearance. No flat cuts allowed.

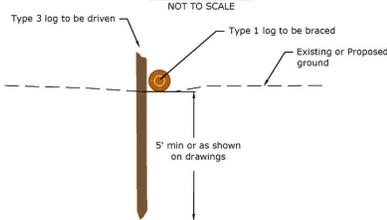
| HS-7: Eight Log Habitat Structure Material Schedule |            |             |         |                        |          |          |
|---|------------|-------------|---------|------------------------|----------|----------|
| Material Type                                       | Size (DBH) | Length (ft) | Rootwad | Min. Rootwad Dia. (ft) | Branches | Quantity |
| Type 1  | 13" - 18"  | 30 - 40     | Yes     | 4.5                    | No       | EA       |
| Type 2  | 13" - 18"  | 30 - 40     | No      | NA                     | No       | EA       |
| Type 4  | 13" - 18"  | 40 - 60     | Yes     | 4                      | Yes      | EA       |
| Racking-1   | 4" - 12"   | 15 - 25     | Yes     | 2.5                    | Optional | EA       |
| Slash-2   | 1" - 4"    | 5 - 15      | NA      | NA                     | Yes      | EA       |



**Construction Notes:**

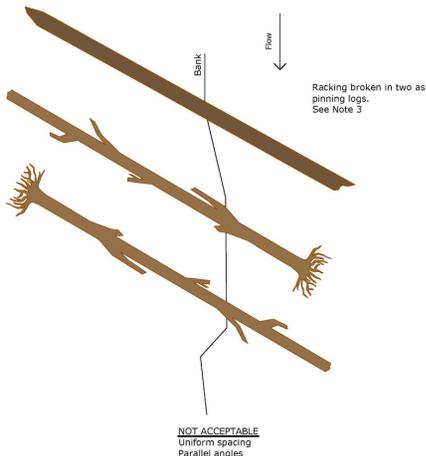
- All driven piles to be marked with paint or other appropriate method 5' from bottom prior to installation to ensure proper embedment.
- Pinning logs to be driven. If pinning logs cannot be driven to minimum burial, then pinning logs shall be installed by excavation with approval by C.O.
- If bedrock is encountered and minimum burial is not achievable by means of excavation, Contractor shall immediately contact the Engineer.

**PINNING LOGS**

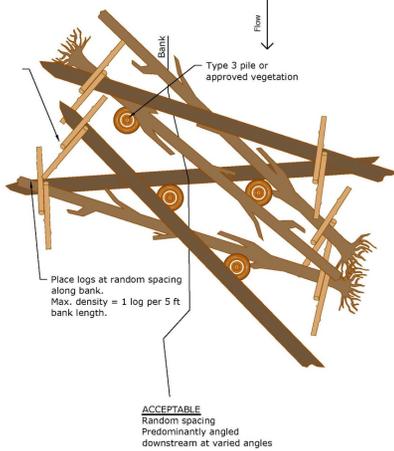


**PILE LOGS**

NOT TO SCALE

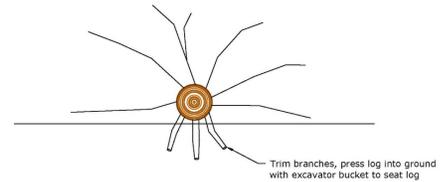


NOT ACCEPTABLE  
Uniform spacing  
Parallel angles

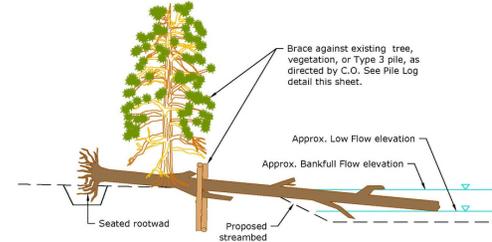


ACCEPTABLE  
Random spacing  
Predominantly angled  
downstream at varied angles

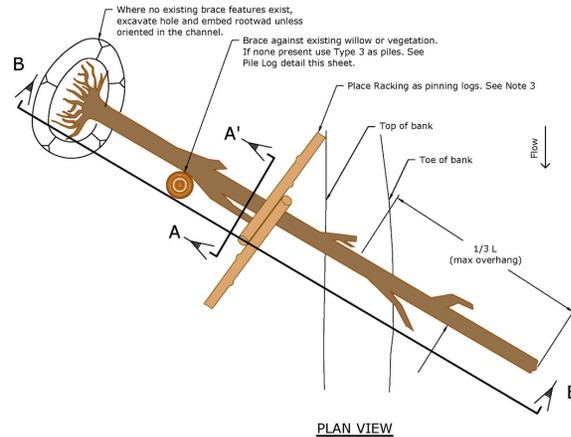
**CONFIGURATIONS - PLAN**



**SECTION A-A'**



**SECTION B-B'**



**PLAN VIEW**

**Attachment 1  
Salmon Creek Aquatic & Wetland Habitat Restoration**

APPLICANT:



BUREAU OF  
RECLAMATION

ADJACENT PROPERTY OWNERS:

See Part 5h of the JARPA for a full list of adjacent property owners.

Project Name: Conconully Safety of Dams Modification Project

DATUM: D North American 1983  
LAT/LONG: 48.537853 N, -119.759296 W  
Section: 7 and 18  
Township: 35N  
Range: 5E

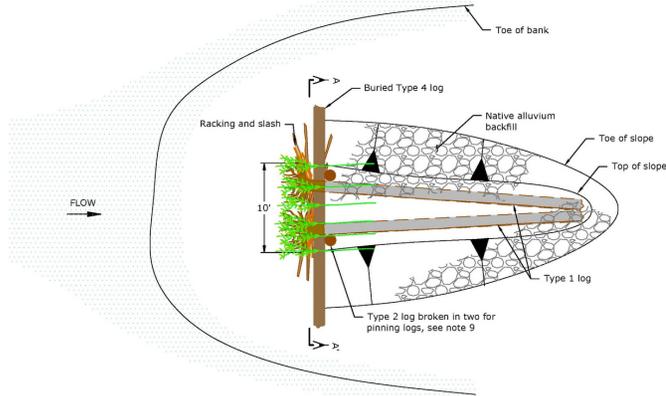
PROPOSED PROJECT: Construct stability berm on Conconully Dam, aquatic and wetland habitat restoration.

IN: Wetlands and Waterbodies  
COUNTY: Okanogan

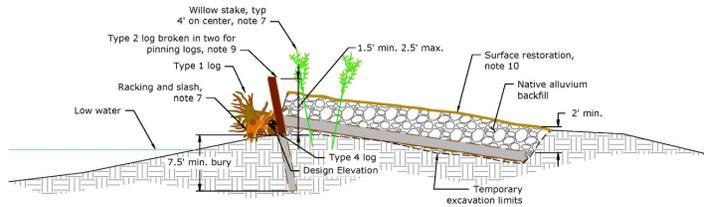
SHEET: 40 of 47

NEAR/AT: City of  
Conconully  
STATE: WA

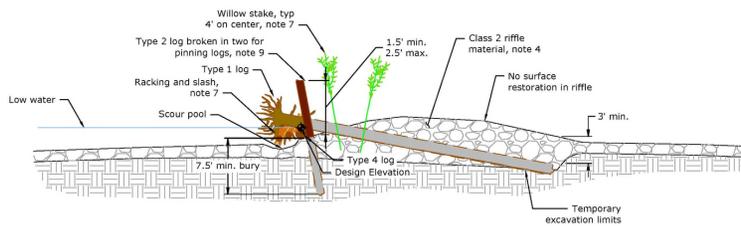
DATE: 01/08/2026



**SMALL APEX JAM - PLAN**  
NOT TO SCALE

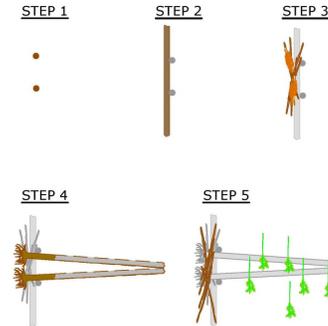


**SECTION A-A' WHEN LOCATED ON BAR**  
NOT TO SCALE



**SECTION A-A' WHEN LOCATED IN RIFFLE**  
NOT TO SCALE

**STRUCTURE SEQUENCING**  
NOT TO SCALE



**NOTES:**

1. Construction will differ when structure is placed at flow splits (i.e. on a bar) or within a riffle, see sections.
2. Install structures at locations identified on plan and profile drawings.
3. Rough grading of channel shall be complete prior to construction of structure. When built in riffle, riffle shall be constructed prior to construction of structure. For structures in riffles, a small scour pool shall be placed underneath the Type 1 rootwads, while still maintaining specified material depth per riffle specifications.
4. See structure schedule for number of structures, locations, logs, and associated material quantities. When placed at flow splits (i.e. on a bar) the Type 1 logs should have a minimum burial depth of 2 feet. When placed in riffles, the minimum burial depth is 3 feet using Class 2 riffle material placed behind the rootwad.
5. Place backfill as the structure is constructed in 1-foot maximum lifts. Compact each lift using mechanical equipment such as an excavator bucket or equipment tracking making certain to not damage or change the elevation of the structure material during compaction. Backfill shall be native material unless unsuitable, unsuitable material is anything that classifies as clay, silt or sand.
6. All cut ends of logs that will be exposed upon completion of structure shall be marred prior to installation. The Contractor shall use an excavator, or other heavy equipment to tear apart wood fibers at the cut end of the log to create the appearance of a log that has naturally broken apart.
7. Racking, slash, and live stakes shall be incorporated into the structure while placing layers such that it is woven into structure in between placed logs, filling voids, etc. at each step throughout construction.
8. Pinning logs to be driven.
9. See Drawing TBD and Specifications for planting and seeding requirements. Topsoil and planting and seeding are not required when placed in riffles.

| HS-8: Small Apex Jam Structure Material Schedule |            |             |          |                        |          |          |
|--|------------|-------------|----------|------------------------|----------|----------|
| Material Type                                    | Size (DBH) | Length (ft) | Rootwad  | Min. Rootwad Dia. (ft) | Branches | Quantity |
| Type 1   | 13" - 18"  | 30 - 40     | Yes      | 4.5                    | No       | 2 EA     |
| Type 2   | 13" - 18"  | 30 - 40     | No       | NA                     | No       | 1 EA     |
| Type 4   | 12" - 14"  | 20 - 35     | No       | NA                     | No       | 1 EA     |
| Racking-1  | 4" - 12"   | 15 - 25     | Yes      | NA                     | Yes      | 2 EA     |
| Racking-2  | 4" - 12"   | 15 - 25     | Optional | NA                     | Yes      | 4 EA     |
| Slash-1  | 1" - 4"    | 5 - 15      | NA       | NA                     | Yes      | 10 CY    |
| Live Stakes                                      | 1/2" - 2"  | 6 - 8       | NA       | NA                     | NA       | 8 EA     |

**Attachment 1**  
**Salmon Creek Aquatic & Wetland Habitat Restoration**

APPLICANT:



BUREAU OF  
RECLAMATION

ADJACENT PROPERTY OWNERS:

See Part 5h of the JARPA for a full list of adjacent property owners.

Project Name: Conconully Safety of Dams Modification Project

DATUM: D North American 1983

LAT/LONG: 48.537853 N, -119.759296 W

Section: 7 and 18

Township: 35N

Range: 5E

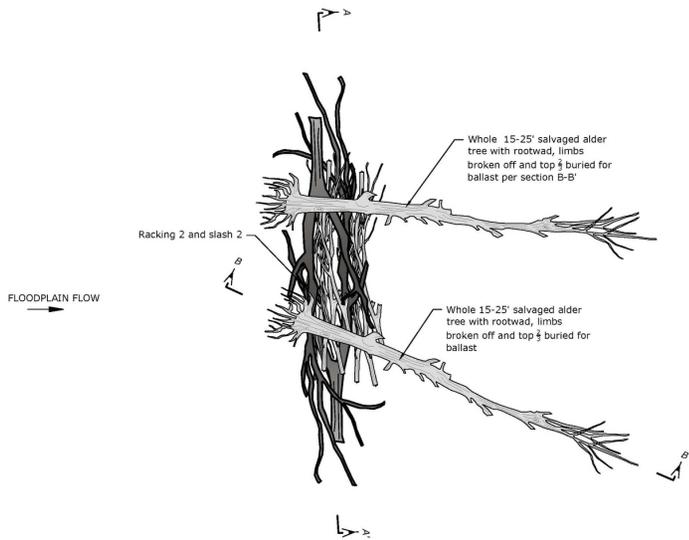
PROPOSED PROJECT: Construct stability berm on Conconully Dam, aquatic and wetland habitat restoration.

IN: Wetlands and Waterbodies  
COUNTY: Okanogan

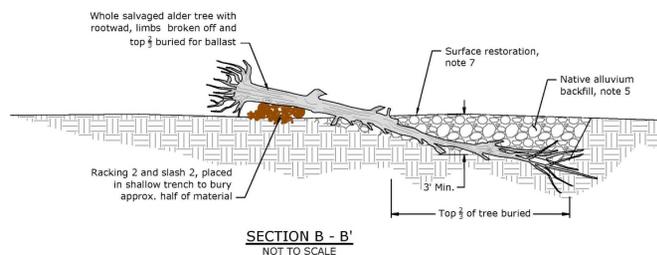
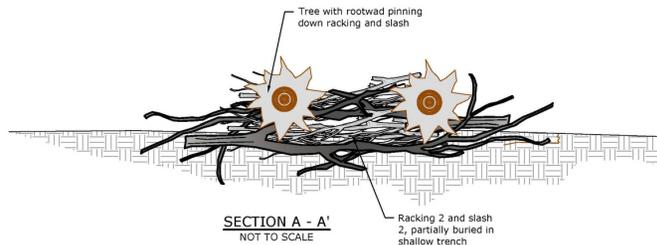
SHEET: 41 of 47

NEAR/AT: City of  
Conconully  
STATE: WA

DATE: 01/08/2026



**FLOODPLAIN ROUGHNESS - PLAN**  
NOT TO SCALE



**NOTES:**

1. Install structures at locations identified on proposed conditions drawings.
2. Final grading of floodplain shall be near complete prior to construction of structure.
3. See structure schedule for number of structures, locations, logs, and associated material quantities.
4. All cut ends of logs that will be exposed upon completion of structure shall be marred prior to installation. The Contractor shall use an excavator, or other heavy equipment to tear apart wood fibers at the cut end of the log to create the appearance of a log that has naturally broken apart.
5. Backfill using native excavated material unless native material is unsuitable. Unsuitable material classifies as a clay, silt or sand. Place backfill as the structure is constructed in 1-foot maximum lifts. Compact each lift using mechanical equipment such as an excavator bucket or equipment tracking making certain to not damage or change the elevation of the structure material during compaction.
6. See Drawing TBD and Specifications for planting and seeding requirements.

## Attachment 1 Salmon Creek Aquatic & Wetland Habitat Restoration

APPLICANT:



— BUREAU OF —  
**RECLAMATION**

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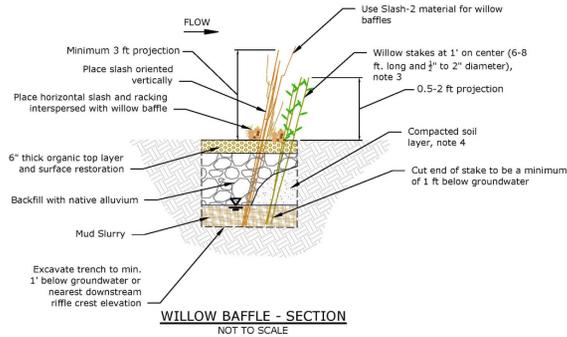
PROPOSED PROJECT: Construct stability berm on Conconully Dam, aquatic and wetland habitat restoration.

IN: Wetlands and Waterbodies  
COUNTY: Okanogan

SHEET: 42 of 47

NEAR/AT: City of  
Conconully  
STATE: WA

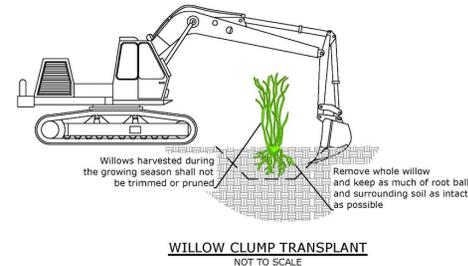
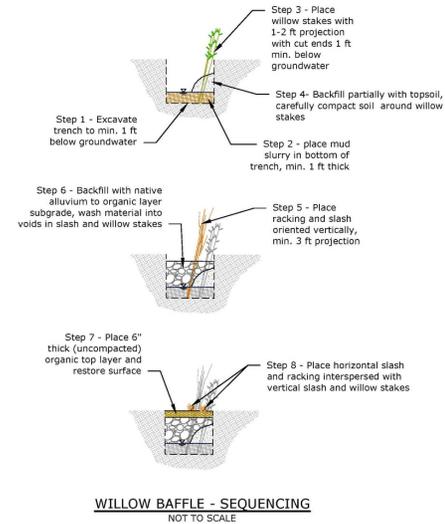
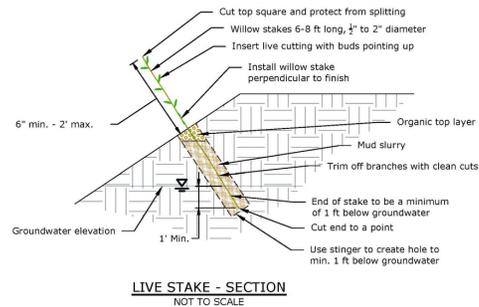
DATE: 01/08/2026



**NOTES:**

1. Install willow baffle at locations shown in the plans.
2. Excavate temporary trench to 1' below local groundwater.
3. Install live willow stakes with cut ends at 1 ft on center in toe of trench.
4. Place mud slurry in bottom of trench to aid in stem to soil contact.
5. Compact a small layer of soil to ensure stem to soil contact.
6. Place 4.5 c.y. Slash-2 material (per 20' of trench) in trench oriented vertically and angled in the downstream direction. Placed slash form a continuous 6-8" thick wall of "stems" protruding from the ground the entire length of the trench.
7. Backfill trench with native alluvium material and compact in maximum lifts of 1'. Use water to wash material into voids in slash and willow stakes at each lift.
8. Install racking between willow stakes and vertical slash largely parallel to the trench.
9. Install top 1.5 c.y. of Slash-2 (per 20' trench) on top of the backfilled trench oriented parallel to the trench and interspersed amongst the vertical slash and willow stakes.
10. Lengths of willow baffles are 20 feet or as shown on plans. Quantities shown in the schedule reflect a 20 foot segment.

| Willow Baffle Floodplain Treatment (Per 20-ft Length) Material Schedule |            |             |          |                        |          |          |
|---|------------|-------------|----------|------------------------|----------|----------|
| Material Type   | Size (DBH) | Length (ft) | Rootwad  | Min. Rootwad Dia. (ft) | Branches | Quantity |
| Racking-2   | 4" - 12"   | 15 - 25     | Optional | NA                     | Yes      | 1 EA     |
| Slash-2   | 1" - 4"    | 5 - 15      | NA       | NA                     | Yes      | 6 EA     |
| Live Stakes   | 1/2" - 2"  | 6 - 8       | NA       | NA                     | NA       | 16 EA    |



**NOTES:**

1. Willow clump transplants shall consist of locally harvested live willow clumps with intact rootballs. Live willows for harvesting shall be marked in the field.
2. Live willow clumps shall be harvested and transplanted with care to maintain the integrity of the rootball and promote long-term survival.
3. Blend with the adjacent ground and/or backfill the hole from the harvest site.
4. Harvested willows shall not be allowed to dry out; they must be planted immediately upon harvest.
5. Transplant live willow clumps to locations identified on the plans.
6. Willow clumps shall be transplanted with the crown of the rootball proud of the final grade by 0.2-0.4 feet.

**Attachment 1**

**Salmon Creek Aquatic & Wetland Habitat Restoration**

APPLICANT:



BUREAU OF RECLAMATION

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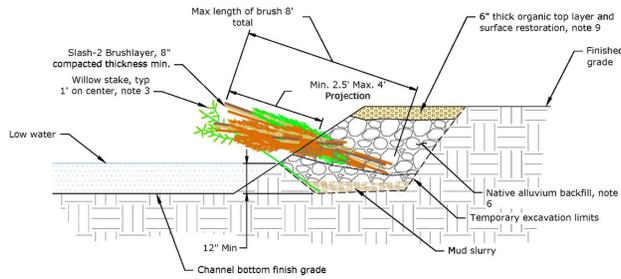
PROPOSED PROJECT: Construct stability berm on Conconully Dam, aquatic and wetland habitat restoration.

IN: Wetlands and Waterbodies  
COUNTY: Okanogan

SHEET: 43 of 47

NEAR/AT: City of Conconully  
STATE: WA

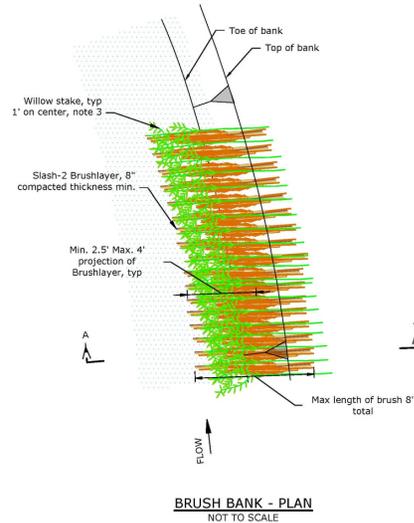
DATE: 01/08/2026



**SECTION A - A'**  
NOT TO SCALE

**NOTES:**

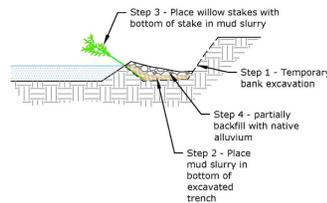
1. Complete finish grading of channel bottom and rough grading of bank including riffle construction and placement of bar materials prior to installing brush bank.
2. Locate toe of slope and excavate temporary trench starting at the anticipated low flow water surface (see plan and profiles for water surface elevations).
3. Install willow stakes at a spacing of 1' on center a minimum of 1' below anticipated low water surface elevations.
4. Place a 6-12" thick mud slurry into trench to provide good material for soil to stem contact.
5. Place Slash-2 material from the elevation of the low water surface elevation to form a compacted 8" thick layer up. Place slash material in layers with greater than 50% of individual pieces aligned perpendicular to flow with a minimum of 2.5' embedment.
6. Fill voids of slash material by sprinkling native alluvium backfill over the buried portion of slash material per the detail and lightly tamp using excavator bucket and water.
7. Backfill over willow stakes and slash material by placing native alluvium fill in 6" lifts and tamp with excavator bucket to fill any additional voids in slash material and to ensure good stem to soil contact of willow stakes. Continue to place additional native alluvium fill as necessary to achieve subgrade of organic layer top dressing.
8. Water willow stakes thoroughly within 4 hours of installation.
9. Install top 6" thick layer of organic material, uncompacted.
10. Slash greater than 8" shall be broken or cut to meet install intent without running over volume of slash estimate.
11. See Drawing TBD and Specifications for planting and seeding requirements.



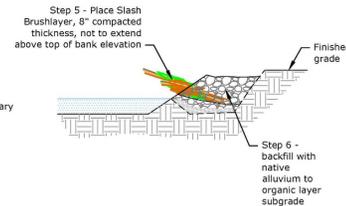
**BRUSH BANK - PLAN**  
NOT TO SCALE

**STRUCTURE SEQUENCING**  
NOT TO SCALE

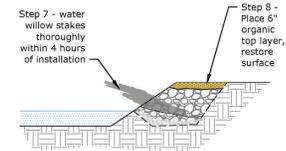
**STAGE 1**



**STAGE 2**



**STAGE 3**



**Attachment 1**  
**Salmon Creek Aquatic & Wetland Habitat Restoration**

APPLICANT:



— BUREAU OF —  
**RECLAMATION**

ADJACENT PROPERTY OWNERS:

See Part 5h of the JARPA for a full list of adjacent property owners.

Project Name: Conconully Safety of Dams Modification Project

DATUM: D North American 1983

LAT/LONG: 48.537853 N, -119.759296 W

Section: 7 and 18

Township: 35N

Range: 5E

PROPOSED PROJECT: Construct stability berm on Conconully Dam, aquatic and wetland habitat restoration.

IN: Wetlands and Waterbodies  
COUNTY: Okanogan

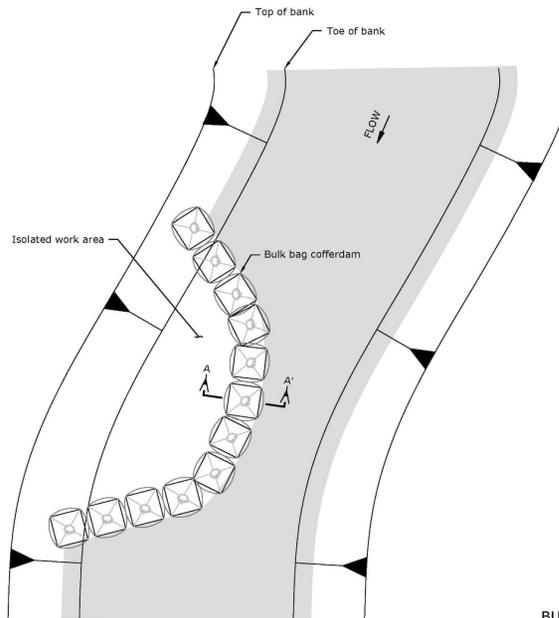
SHEET: 44 of 47

NEAR/AT: City of  
Conconully  
STATE: WA

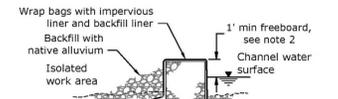
DATE: 01/08/2026

**NOTES:**

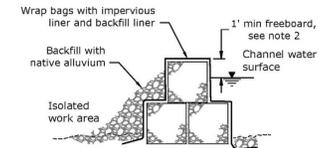
1. The detail shown on this drawing is an example of acceptable methods to use during construction of this project. As per the specifications, the contractor is responsible for developing and submitting a cofferdam plan, pumping and dewatering plan for review and approval by the contracting agency or engineer. The plan shall include sufficient detail of means and methods satisfyingly meeting the project specifications and permit requirements. If approved, other methods may be used such as utilizing inflatable bladders, plates, or barriers of various materials. Cofferdams shall include plastic liner or fine mesh silt fence to reduce turbidity and fines from entering the free flowing portion of live water. All cofferdam (water isolation) methods shall not include loose native or non-native earthen material in contact with active water. If earthen material is to be utilized it will need to be contained within a bulk bag or other containment method so that water does not interact with loose material causing the potential for releases of sediment and increases in turbidity.
2. Cofferdams shall be constructed to accommodate all flow conditions and water surface elevations expected during construction plus a minimum of 1-foot of freeboard. The contractor shall be solely and completely responsible for compliance with water quality standards, safety and construction standards, damage or loss to equipment, materials, and damages to private property.
3. The contractor shall notify the owner and COR at least 5 days before each cofferdam installation date so that fish salvage activities can be scheduled. Anticipated cofferdam locations are shown in the plans.
4. Fill material for bulk bags shall be clean, washed, and rounded material meeting standard specifications for drain rock, streambed aggregates, streambed sediments, or streambed cobbles. Material used to fill bulk bags shall be disposed of in accordance with the permits.
5. Dewatering pump discharge from within cofferdam work areas shall be released onto floodplain areas away from wetlands and construction activities. Discharge shall be completely infiltrated prior to reaching wetlands or surface waters unless approved by the COR. All return flows must meet permit requirements for turbidity.
6. Excavations associated with channel, floodplain, and wood habitat structures shall be dewatered in accordance with the specifications.
7. All pump intakes shall be screened for fish protection as required by NOAA.
8. All earthwork activities and wood habitat structure construction within the ordinary high water channel shall conform to the water quality standards established by regulatory agency permits for this project.



**BULK BAG COFFERDAM - PLAN**  
NOT TO SCALE



**SECTION VIEW A-A' (SINGLE BULK BAG)**



**SECTION VIEW A-A' (DOUBLE BULK BAG)**

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Township: 35N

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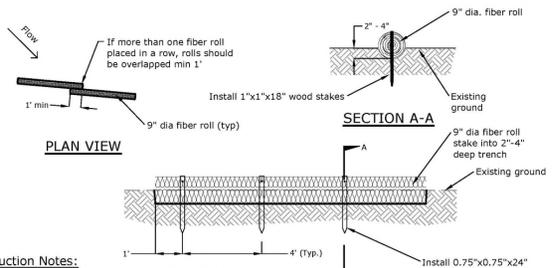
PROPOSED PROJECT: Construct stability berm on Conconully Dam, aquatic and wetland habitat restoration.

IN: Wetlands and Waterbodies  
COUNTY: Okanogan

SHEET: 45 of 47

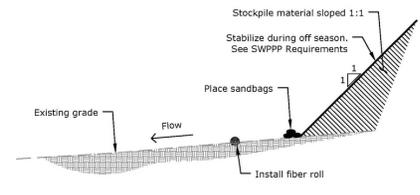
NEAR/AT: City of  
Conconully  
STATE: WA

DATE: 01/08/2026



**Construction Notes:**

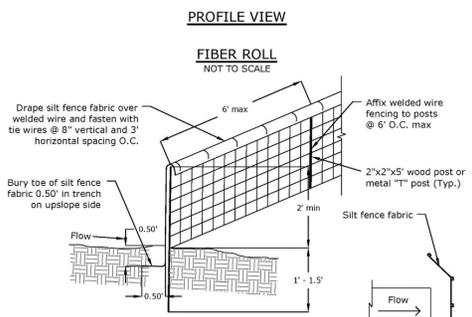
1. Placement of fiber rolls is subject to existing conditions.
2. Place fiber rolls as shown on plan.
3. Fiber rolls shall be completely made of bio-degradable material.
4. Place gravel bags over fiber roll when stakes cannot be used due to bedrock.



**Construction Notes:**

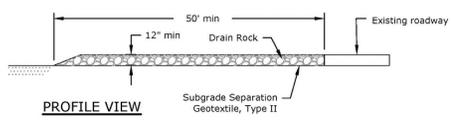
1. All stockpiles shall be covered and protected with a temporary perimeter sediment barrier prior to the onset of precipitation.
2. Repair and/or replace perimeter controls and covers as needed, or as directed by engineer, to keep them functioning properly.
3. Stockpiles must be stabilized utilizing plastic covers, straw placement (min 2 tons/acre watered and track walked in place), or other as directed by SWPPP if left unattended.
4. Locate stockpiles away from concentrated flows of storm water, drainage courses, and inlets.
5. Protect all stockpiles from storm water run-on using a temporary perimeter sediment barrier such as berm, dikes, fiber rolls, silt fences, sandbag or gravel bag barriers.
6. Implement wind erosion control practices as appropriate on all stockpiled material.

**STAGING AND STOCKPILE AREA**  
NOT TO SCALE

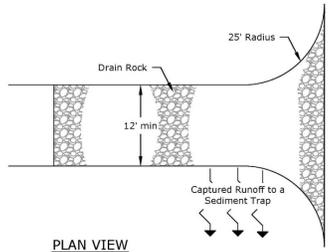


**Construction Notes:**

1. Contractor may use Silt Fence with or without wire backing according to the SWPPP.
2. Contractor may use pre-manufactured sediment control fence as approved by the C.O.
3. Place fencing such that storm runoff cannot pass around or under fence.



**PROFILE VIEW**

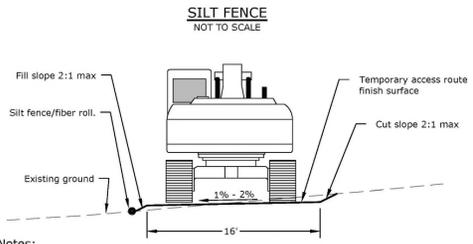


**PLAN VIEW**

**Construction Notes:**

1. Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public right-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and/or cleanout of any measures used to trap sediment. All sediment spilled, dropped, washed or tracked onto public rights-of-way must be removed immediately.
2. Periodic inspection and needed maintenance shall be provided after each rain.
3. When necessary, wheels shall be cleaned prior to entrance onto public right-of-way.
4. When washing is required, it shall be done on an area stabilized with crushed stone or native tailings that drains into an approved sediment trap or sediment basin.
5. Use sandbags or other approved methods to channelize runoff to basin as required.
6. Contractor shall remove any material used to construct temporary roadways, parking areas, construction entrances, and access roads prior to contract completion that are requested by the Contracting Officer to be removed. All materials removed shall become property of the Contractor and shall be disposed of at an approved disposal location.

**STABILIZED CONSTRUCTION ENTRANCE**  
NOT TO SCALE



**Construction Notes:**

1. Temporary access routes shall follow previously established routes where available.
2. Place temporary access routes as far as possible away from streams, surface waters and wetlands.

**TEMPORARY ACCESS ROUTE**  
NOT TO SCALE

**General Notes:**

1. Details shown are considered suggested examples of Best Management Practices (BMPs) to be employed during construction activities taking place in the vicinity of any flowing or dry watercourse, lake, wetland, reservoir, or underground water source as required by pertinent permitting agencies.
2. Contractor to obtain and follow SWPPP as detailed in the specifications.
3. Stabilized Construction Entrances shall be utilized to minimize tracking sediment onto Highways, county roads, and private driveways.

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**Salmon Creek Aquatic & Wetland Habitat Restoration**

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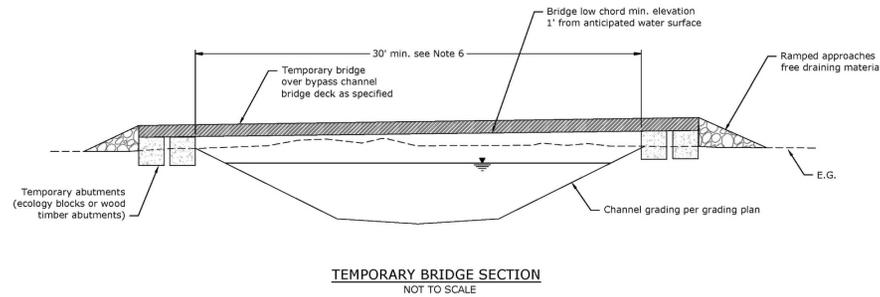
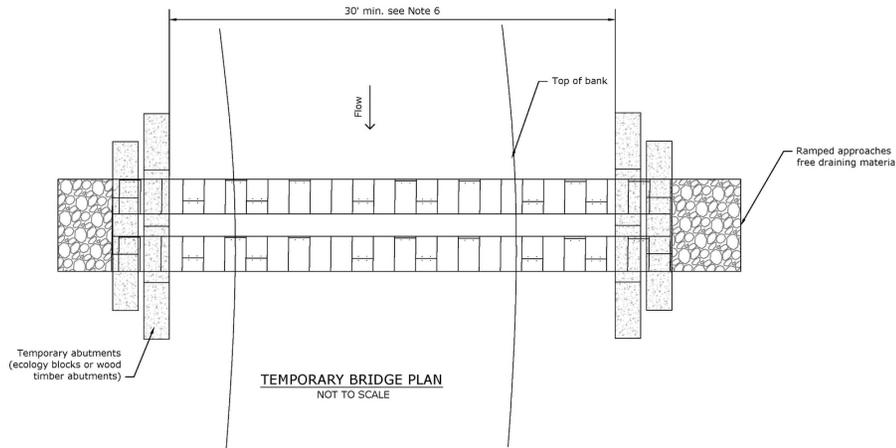
PROPOSED PROJECT: Construct stability berm on Conconully Dam, aquatic and wetland habitat restoration.

IN: Wetlands and Waterbodies  
 COUNTY: Okanogan

SHEET: 46 of 47

NEAR/AT: City of Conconully  
 STATE: WA

DATE: 01/08/2026



**NOTES:**

1. Contractor to design temporary bridges for channel crossings as necessary.
2. Bridge shall be located such that only one span is used to at bypass channel crossings.
3. End of bridge shall bear on high banks with sufficient bearing capacity to prevent sloughing or collapse of bypass channel banks.
4. Concrete ecology blocks or wood abutments may be used to support ends of temporary bridge as needed.
5. Bridges may be constructed from logs, rail car beds or approved equal and decked with steel drawing, wood lagging or approved equal.
6. 30ft minimum span may require encroachment of banks within existing, proposed, or bypass channels.

## Attachment 1 Salmon Creek Aquatic & Wetland Habitat Restoration

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