



KITTITAS COUNTY COMMUNITY DEVELOPMENT SERVICES

411 N. Ruby St., Suite 2, Ellensburg, WA 98926
CDS@CO.KITTITAS.WA.US
Office (509) 962-7506
Fax (509) 962-7682

"Building Partnerships – Building Communities"

SHORELINE EXEMPTION PERMITTING

(For projects located within 200 feet of a body of water and/or associated floodway and wetlands under the jurisdiction of the Shoreline Master Program)

REQUIRED INFORMATION / ATTACHMENTS

- A scaled site plan is required showing location of all structures, driveways, well, septic, fences, etc. and proposed uses and distances from property lines, river, and Horizontal distance from OHWM. To show the Horizontal distance a profile view from the OHWM to the edge of structure/activity shall also be shown.
- Include JARPA or HPA forms *if required* for your project by a state or federal agency.
- SEPA Checklist, if not exempt per WAC 197-11-800.

SEPA Exempt per WAC 197-11-800(3), Repair, Remodeling, or Maintenance Activities

Please note a Shoreline Variance or Shoreline Conditional Use Permit may also be required. See Kittitas County Shoreline Master Program

APPLICATION FEES:

\$830.00 Fees due for this application when SEPA is **not** required (One check made payable to KCCDS)

\$1500.00 Fees due for this application when SEPA is required (One check made payable to KCCDS)

FOR STAFF USE ONLY

Application Received By (CDS Staff Signature): <i>Kaelin</i>	DATE: <i>2/22/2018</i>	RECEIPT #
<i>SX-18-00006</i>		

COMMUNITY PLANNING • BUILDING INSPECTION • PLAN REVIEW • ADMINISTRATION • PERMIT SERVICES • CODE ENFORCEMENT • FIRE INVESTIGATION

General Application Information

1. Name, mailing address and day phone of land owner(s) of record:

Landowner(s) signature(s) required on application form.

Name: Lucas Huck
Mailing Address: 411 North Ruby Street, Suite 1
City/State/ZIP: Ellensburg, WA
Day Time Phone: 509-962-7523
Email Address: mark.cook@co.kittitas.wa.us

2. Name, mailing address and day phone of authorized agent, if different from landowner of record:

If an authorized agent is indicated, then the authorized agent's signature is required for application submittal.

Agent Name: Craig Broadhead
Mailing Address: 32 North 3rd Street
City/State/ZIP: Yakima, WA
Day Time Phone: 509-312-0375
Email Address: craig.broadhead@jacobs.com

3. Name, mailing address and day phone of other contact person

If different than land owner or authorized agent.

Name: N/A
Mailing Address: _____
City/State/ZIP: _____
Day Time Phone: _____
Email Address: _____

4. Street address of property:

Address: Manastash Road
City/State/ZIP: Ellensburg, WA 989446

5. Legal description of property: (attach additional sheets as necessary)

T17NR16ES13, 46.959821 N, -120.785677 W

6. Tax parcel number(s): County right of way; adjacent to 449136, 584933, 464933, and 574933.

7. Property size: N/A (acres)

Project Description

1. Briefly summarize the purpose of the project:

The project will replace the Manastash Road Bridge over South Fork Manastash Creek. The bridge is rated as structurally deficient, and is currently load rated. The project will include the complete removal of the existing 30-foot span and abutments and the construction of a new structure on the same alignment.

2. What is the primary use of the project (e.g. Residential, Commercial, Public, Recreation)?

County maintained levee for flood hazard protection.

3. What is the specific use of the project (e.g. single family home, subdivision, boat launch, restoration project)?

The project replaces the bridge on Manastash Road over Manastash Creek.

4. Fair Market Value of the project, including materials, labor, machine rentals, etc. \$2.04 million

5. Anticipated start and end dates of project construction: Start June 15, 2018 **End** November 30, 2018

Authorization

Application is hereby made for permit(s) to authorize the activities described herein. I certify that I am familiar with the information contained in this application, and that to the best of my knowledge and belief such information is true, complete, and accurate. I further certify that I possess the authority to undertake the proposed activities. I hereby grant to the agencies to which this application is made, the right to enter the above-described location to inspect the proposed and or completed work.

All correspondence and notices will be transmitted to the Land Owner of Record and copies sent to the authorized agent or contact person, as applicable.

Signature of Authorized Agent:
(REQUIRED if indicated on application)

X Craig D Broadleaf

Date:

2/15/18

Signature of Land Owner of Record
(Required for application submittal):

X Mark R Cook

Date:

02-21-2018

FOR STAFF USE ONLY

1. Provide section, township, and range of project location:

¼ Section SW Section 13 Township 17 N. Range 15 E., W.M.

2. Latitude and longitude coordinates of project location (e.g. 47.03922 N lat. / -122.89142 W long.):

46.959821 N, -120.785677 W [use decimal degrees – NAD 83]

3. Type of Ownership: (check all that apply)

Private Federal State Local Tribal

4. Land Use Information:

Zoning: Forest and Range Comp Plan Land Use Designation: _____

5. Shoreline Designation: (check all that apply)

Urban Conservancy Shoreline Residential Rural Conservancy
 Natural Aquatic

6. Requested Shoreline Exemption per WAC 173.27.040:

WAC 173-27-040(2)(b), Normal Maintenance or Repair

Vegetation

7. Will the project result in clearing of tree or shrub canopy?

Yes No

If 'Yes', how much clearing will occur? 3,900 square feet (square feet and acres)

8. Will the project result in re-vegetation of tree or shrub canopy?

Yes No

If 'Yes', how much re-vegetation will occur? 3,900 square feet (square feet and acres)

Wetlands

9. Will the project result in wetland impacts?

Yes No

If 'Yes', how much wetland will be permanently impacted? _____ (square feet and acres)

10. Will the project result in wetland restoration?

Yes No

If 'Yes', how much wetland will be restored? _____ (square feet and acres)

Impervious Surfaces

11. Will the project result in creation of over 500 square feet of impervious surfaces?

Yes No

If 'Yes', how much impervious surface will be created? _____ (square feet and acres)

12. Will the project result in removal of impervious surfaces?

Yes No

If 'Yes', how much impervious surface will be removed? _____ (square feet and acres)

Shoreline Stabilization

13. Will the project result in creation of structural shoreline stabilization structures (revetment/bulkhead/riprap)?

Yes No

If 'Yes', what is the net linear feet of stabilization structures that will be created? 80 linear feet

14. Will the project result in removal of structural shoreline stabilization structures (revetment/bulkhead/riprap)?

Yes No

If 'Yes', what is the net linear feet of stabilization structures that will be removed? _____

Levees/Dikes

15. Will the project result in creation, removal, or relocation (setting back) of levees/dikes?

Yes No

If 'Yes', what is the net linear feet of levees/dikes that will be created? _____

If 'Yes', what is the net linear feet of levees/dikes that will be permanently removed? _____

If 'Yes', what is the linear feet of levees/dikes that will be reconstructed at a location further from the OHWM? _____

Floodplain Development

16. Will the project result in development within the floodplain? (check one)

Yes No

If 'Yes', what is the net square feet of structures to be constructed in the floodplain? _____

**Note: A floodplain development is required per KCC 14.08; please contact Kittitas County Public Works*

17. Will the project result in removal of existing structures within the floodplain? (check one)

Yes No

If 'Yes', what is the net square footage of structures to be removed from the floodplain? 720 sf

Overwater Structures

18. Will the project result in construction of an overwater dock, pier, or float? (check one)

- Yes No

If 'Yes', how many overwater structures will be constructed? _____

What is the net square footage of water-shading surfaces that will be created? _____

19. Will the project result in removal of an overwater dock, pier, or float? (check one)

- Yes No

If 'Yes', how many overwater structures will be removed? _____

What is the net square footage of water-shading surfaces that will be removed? _____

Summary/Conclusion

20. Will the proposed use be consistent with the policies of RCW 90.58.020 and the Kittitas County Shoreline Master Program? (attach additional sheets if necessary)

- Yes No

Please explain:

~~The existing bridge girders have deteriorated and are spalling in several locations, exposing structural rebar. In addition to deterioration to the bridge girders, the lateral movement of Manastash Creek has caused bank erosion and is undermining the northeastern bridge abutment. Scour will continue, as the current thalweg is directly against this abutment. Due to the deteriorated conditions and active scour, the immediate replacement of the bridge is necessary for continued access and use of Manastash Road.~~

21. Provide any additional information needed to verify the project's impacts to shoreline ecological functions: (attach additional sheets and relevant reports as necessary)



WASHINGTON STATE

Joint Aquatic Resources Permit Application (JARPA) Form^{1,2} [\[help\]](#)

USE BLACK OR BLUE INK TO ENTER ANSWERS IN THE WHITE SPACES BELOW.



US Army Corps of Engineers
Seattle District

AGENCY USE ONLY

Date received: _____

Agency reference #: _____

Tax Parcel #(s): _____

Part 1–Project Identification

1. Project Name (A name for your project that you create. Examples: Smith’s Dock or Seabrook Lane Development) [\[help\]](#)

Manastash Road Bridge Replacement Project

Part 2–Applicant

The person and/or organization responsible for the project. [\[help\]](#)

2a. Name (Last, First, Middle)

Huck, Lucas – Kittitas County Engineer

2b. Organization (If applicable)

Kittitas County Public Works

2c. Mailing Address (Street or PO Box)

411 N. Ruby St. Ste. 1

2d. City, State, Zip

Ellensburg, WA 98926

2e. Phone (1)

2f. Phone (2)

2g. Fax

2h. E-mail

509-962-7523

Lucas.huck@co.kittitas.wa.us

¹Additional forms may be required for the following permits:

- If your project may qualify for Department of the Army authorization through a Regional General Permit (RGP), contact the U.S. Army Corps of Engineers for application information (206) 764-3495.
- If your project might affect species listed under the Endangered Species Act, you will need to fill out a Specific Project Information Form (SPIF) or prepare a Biological Evaluation. Forms can be found at <http://www.nws.usace.army.mil/Missions/CivilWorks/Regulatory/PermitGuidebook/EndangeredSpecies.aspx>.
- Not all cities and counties accept the JARPA for their local Shoreline permits. If you need a Shoreline permit, contact the appropriate city or county government to make sure they accept the JARPA.

²To access an online JARPA form with [\[help\]](#) screens, go to

http://www.epermitting.wa.gov/site/alias_resourcecenter/jarpa_jarpa_form/9984/jarpa_form.aspx.

For other help, contact the Governor’s Office for Regulatory Innovation and Assistance at (800) 917-0043 or help@oria.wa.gov.

Part 3—Authorized Agent or Contact

Person authorized to represent the applicant about the project. (Note: Authorized agent(s) must sign 11b of this application.) [\[help\]](#)

3a. Name (Last, First, Middle)			
Broadhead, Craig D.			
3b. Organization (If applicable)			
Jacobs Engineering Group Inc.			
3c. Mailing Address (Street or PO Box)			
32 N. 3 rd St. Ste. 304			
3d. City, State, Zip			
Yakima, WA 98901			
3e. Phone (1)	3f. Phone (2)	3g. Fax	3h. E-mail
509-312-0375			Craig.Broadhead@jacobs.com

Part 4—Property Owner(s)

Contact information for people or organizations owning the property(ies) where the project will occur. Consider both **upland and aquatic** ownership because the upland owners may not own the adjacent aquatic land. [\[help\]](#)

- Same as applicant. (Skip to Part 5.)
- Repair or maintenance activities on existing rights-of-way or easements. (Skip to Part 5.)
- There are multiple upland property owners. Complete the section below and fill out [JARPA Attachment A](#) for each additional property owner.
- Your project is on Department of Natural Resources (DNR)-managed aquatic lands. If you don't know, contact the DNR at (360) 902-1100 to determine aquatic land ownership. If yes, complete [JARPA Attachment E](#) to apply for the Aquatic Use Authorization.

4a. Name (Last, First, Middle)			
4b. Organization (If applicable)			
4c. Mailing Address (Street or PO Box)			
4d. City, State, Zip			
4e. Phone (1)	4f. Phone (2)	4g. Fax	4h. E-mail

Part 5—Project Location(s)

Identifying information about the property or properties where the project will occur. [\[help\]](#)

- There are multiple project locations (e.g. linear projects). Complete the section below and use [JARPA Attachment B](#) for each additional project location.

5a. Indicate the type of ownership of the property. (Check all that apply.) [help]			
<input type="checkbox"/> Private <input type="checkbox"/> Federal <input checked="" type="checkbox"/> Publicly owned (state, county, city, special districts like schools, ports, etc.) <input type="checkbox"/> Tribal <input type="checkbox"/> Department of Natural Resources (DNR) – managed aquatic lands (Complete JARPA Attachment E)			
5b. Street Address (Cannot be a PO Box. If there is no address, provide other location information in 5p.) [help]			
Manastash Road (see Section 5p for driving directions).			
5c. City, State, Zip (If the project is not in a city or town, provide the name of the nearest city or town.) [help]			
Ellensburg, WA 98926			
5d. County [help]			
Kittitas			
5e. Provide the section, township, and range for the project location. [help]			
¼ Section	Section	Township	Range
SW	13	17N	16E
5f. Provide the latitude and longitude of the project location. [help]			
<ul style="list-style-type: none"> Example: 47.03922 N lat. / -122.89142 W long. (Use decimal degrees - NAD 83) 			
46.959821 N, -120.785677 W			
5g. List the tax parcel number(s) for the project location. [help]			
<ul style="list-style-type: none"> The local county assessor's office can provide this information. 			
There is no tax parcel number for the project location. Adjacent properties are listed in Section 5h.			
5h. Contact information for all adjoining property owners. (If you need more space, use JARPA Attachment C.) [help]			
Name	Mailing Address		Tax Parcel # (if known)
Department of Natural Resources	1111 Washington St. SE		449136
	Olympia, WA 98504		
Department of Natural Resources	1111 Washington St. SE		584933
	Olympia, WA 98504		
Gardinier, Lyle E. et al.	13730 15th Ave. NE Apt D102		464933
	Seattle WA 98125		
Camping Board of Stewards The Pac NW Annual Conf of the UMC	PO Box 13650		574933
	Des Moines WA 98198		

5i. List all wetlands on or adjacent to the project location. [\[help\]](#)

There are no wetlands present within the project footprint. However, there are riverine wetlands southeast and southwest of the project area (outside County Right of Way) adjacent to the South Fork of Manastash Creek.

5j. List all waterbodies (other than wetlands) on or adjacent to the project location. [\[help\]](#)

South Fork Manastash Creek is the only water body on or adjacent to the property.

5k. Is any part of the project area within a 100-year floodplain? [\[help\]](#)

Yes No Don't know

5l. Briefly describe the vegetation and habitat conditions on the property. [\[help\]](#)

Steep basalt outcroppings and open rock and grassland slopes characterize the local area. Vegetation and topography in the project vicinity are incised canyons with Douglas-fir (*Pseudotsuga menziesii*) and Ponderosa pine (*Pinus ponderosa*) associated ecotypes. Other slopes to the east are characteristic of rocky grassland, sagebrush (*Artemisia* spp.), antelope bitterbrush (*Purshia tridentata*), perennial bunch grasses, and non-native cheatgrass (*Bromus* spp). The bridge location is about 1.2 miles downstream of where South Fork Manastash Creek emerges from a narrower segment of the Manastash Creek Canyon. Approximately 6.3 miles downstream of the bridge location the Canyon opens to an active alluvial fan.

Habitat within the stream is good with an intact riparian zone that exists on an outwash terrace with relatively stable riparian buffers in the immediate project area that are somewhat altered from previous land uses. These riparian areas consist of willow (*Salix* spp.), cottonwood (*Populus balsamifera*), dogwood (*Cornus sericea*) and alder (*Alnus incana*). The canyon walls consist of steep basalt cliffs that terrace at the top to forested and shrub steppe habitat.

5m. Describe how the property is currently used. [\[help\]](#)

The property is currently used for public travel and right-of-way associated with Manastash Road. The project area occupies the roadway, an existing 30' bridge, and the South Fork Manastash Creek bed and streambank upstream and downstream of the project.

5n. Describe how the adjacent properties are currently used. [\[help\]](#)

There are several residences approximately 2,000 feet west of the project area. Adjacent properties are unimproved and are used for public recreation and private uses.

5o. Describe the structures (above and below ground) on the property, including their purpose(s) and current condition. [\[help\]](#)

The existing bridge was built in 1940 and reconstructed in 1975. The bridge is a concrete slab structure on girders, spanning 30 feet of stream with a roadway width of 28 feet. The bridge girders have deteriorated and are spalling in several locations, exposing structural rebar. In addition to deterioration to the bridge girders, the lateral movement of South Fork Manastash Creek has caused upstream bank erosion and is undermining the eastern bridge abutment. Due to the deteriorated conditions and active scour, the immediate replacement of the bridge is necessary for continued access and use of Manastash Road (See photos of bridge condition in attachment).

The bridge is built on spread footings, which are buried approximately 12 feet below the existing roadway. These footings will be removed with the existing bridge. The existing bridge is the only structure on the property.

5p. Provide driving directions from the closest highway to the project location, and attach a map. [\[help\]](#)

Exit from Interstate 90 at Exit 109 for Canyon Road. Travel north on Canyon Road for approximately 0.5 miles. Turn west onto Umptanum Road and follow for approximately 1.5 miles. Turn west onto Manastash Road and follow for 10.5 miles to the bridge location.

Part 6—Project Description

6a. Briefly summarize the overall project. You can provide more detail in 6b. [\[help\]](#)

The project replaces a bridge over South Fork Manastash Creek near Ellensburg, Washington. The existing structure is rated as structurally deficient and is in need of replacement.

6b. Describe the purpose of the project and why you want or need to perform it. [\[help\]](#)

Due to the deteriorated bridge condition and active bank erosion and footing scour, the immediate replacement of the bridge is necessary for continued access and use of Manastash Road. Manastash Road is the only access for several isolated rural residences and a priority arterial for access to US Forest Service property. The new bridge will provide safe and continued access for residents. In addition, the project will repair active bank erosion, and provide enhanced habitat benefits due to the added complexity and wider structure.

6c. Indicate the project category. (Check all that apply) [\[help\]](#)

- Commercial
 Residential
 Institutional
 Transportation
 Recreational
 Maintenance
 Environmental Enhancement

6d. Indicate the major elements of your project. (Check all that apply) [\[help\]](#)

- | | | | |
|--|---|--|--|
| <input type="checkbox"/> Aquaculture | <input type="checkbox"/> Culvert | <input type="checkbox"/> Float | <input type="checkbox"/> Retaining Wall (upland) |
| <input checked="" type="checkbox"/> Bank Stabilization | <input type="checkbox"/> Dam / Weir | <input type="checkbox"/> Floating Home | <input checked="" type="checkbox"/> Road |
| <input type="checkbox"/> Boat House | <input type="checkbox"/> Dike / Levee / Jetty | <input type="checkbox"/> Geotechnical Survey | <input type="checkbox"/> Scientific Measurement Device |
| <input type="checkbox"/> Boat Launch | <input type="checkbox"/> Ditch | <input type="checkbox"/> Land Clearing | <input type="checkbox"/> Stairs |
| <input type="checkbox"/> Boat Lift | <input type="checkbox"/> Dock / Pier | <input type="checkbox"/> Marina / Moorage | <input type="checkbox"/> Stormwater facility |
| <input checked="" type="checkbox"/> Bridge | <input type="checkbox"/> Dredging | <input type="checkbox"/> Mining | <input type="checkbox"/> Swimming Pool |
| <input type="checkbox"/> Bulkhead | <input type="checkbox"/> Fence | <input type="checkbox"/> Outfall Structure | <input type="checkbox"/> Utility Line |
| <input type="checkbox"/> Buoy | <input type="checkbox"/> Ferry Terminal | <input type="checkbox"/> Piling/Dolphin | |
| <input type="checkbox"/> Channel Modification | <input type="checkbox"/> Fishway | <input type="checkbox"/> Raft | |

Other:

6e. Describe how you plan to construct each project element checked in 6d. Include specific construction methods and equipment to be used. [\[help\]](#)

- Identify where each element will occur in relation to the nearest waterbody.
- Indicate which activities are within the 100-year floodplain.

Access, Staging, and Temporary Detour

Staging of equipment and materials will occur within the project area on the existing roadway or widened pull-outs, isolated from traffic (see attached drawings, Sheet 2 for a site overview plan). Equipment and material transport to the project site will occur via existing County roads. The contractor is responsible for obtaining permits and clearances for the use of any alternate staging areas.

The removal and replacement of the existing bridge will require a temporary detour be constructed just to the north of the existing bridge. The detour bridge will be a modular steel temporary structure that spans the OHWM and does not require any in-water support structures. However, the temporary detour structure requires

excavation and the placement of temporary sills adjacent to the stream to provide adequate load bearing and the appropriate safety factor (see attached drawings, Sheet 11). This excavation will occur on each bank, and within the same upstream area that is to be graded for the stream tie-in to the new wider structure. After excavation of the area adjacent to the stream, crushed rock will be imported to provide foundational support for the temporary bridge abutments. Crushed rock will be removed with the temporary structure, and replaced with large rock as part of the bank protection revetment (see *Stream construction, Grading, and Bank Protection* below).

Clearing and Grading

Approximately 3,900 square feet (sf) of upland and riparian vegetation will be cleared for the temporary detour and grading for the new, wider bridge and stream channel (attached drawings, sheet 3).

- Approximately 1,500 sf of the 3,900 sf area currently provides some riparian function. The riparian vegetation is mostly shrub-type willows and young alder, with little to no overwater structure.
- Grading includes the removal of two to three trees with a diameter at breast height (dbh) of greater than 6 inches, including one 12-inch dbh and two 30-inch dbh trees, all ponderosa pine. If possible, the larger trees will be avoided. These trees are located in the upland area near the roadway, and do not provide riparian function. If these trees cannot be avoided, they will likely be used as large wood in the bank protection revetment.
- Vegetation under 6 inches dbh that will be removed for the construction of the temporary detour will include aspen, willow, wood's rose, alder, snowberry, and ocean spray. Where possible, the contractor will clear vegetation to ground level but will not grub in the footprint of the temporary detour route. This will allow natural regeneration to occur after the detour is removed. After clearing, suitable fill material will be brought in and placed to the elevation necessary for the detour roadway. After the new bridge is open to traffic, all fill will be removed to native ground elevation. The temporary detour could be in place for approximately 3 months.

Work Area Isolation and Rewatering

Before construction occurs below the OHWM, the work area will be isolated from flowing water using a temporary stream bypass. The project will occur during low-flow conditions. At lower flows, the isolation area is relatively shallow (typically 6 to 12 inches deep). The construction area below the OHWM will be isolated from the flows of South Fork Manastash Creek to minimize the effects of turbidity and allow construction in isolation (see attached drawings, sheet 4 for proposed isolation plan). This will ensure the project meets and maintains State water quality standards.

Qualified biologists will first set block nets and seine the work area to remove fish. The upstream block net will be placed, and the downstream net will be used as a seine to herd fish from the work area without handling. When block nets are in place, the isolation structure will be constructed. The isolation structure is yet to be determined, but may consist of sandbags, super sacks, or water bladders, and may have one or more bypass culverts appropriately sized for expected flows of Manastash Creek during the in-water work window. For the purpose of permitting, it is assumed the isolation structure will consist of temporary fill such as sandbags or super sack(s) that are used to either span the creek in conjunction with bypass culverts, or are used to isolate the work area from the flows of the creek. The amount of temporary fill below the OHWM required for the isolation is approximately 7.5 cubic yards (cy). The duration of use will extend throughout the approved in-water work window (up to 14 weeks) from July through October.

The stream bypass will extend far enough upstream and downstream of the work area to effectively isolate the entire project area. This will ensure impacts associated with isolation occur only once. Isolation and bypass culvert construction will require the use of heavy equipment, likely a thumbed excavator, operating below the OHWM. Equipment will not operate in active flows, however, and use will be limited to the quiet area behind the isolation structure. For example, the first few super sacks will be placed from the bank, prior to equipment entering the channel behind the isolation structure. The equipment will only operate from behind the isolation to complete the stream bypass.

As the isolation structure and bypass are constructed, qualified biologists will be on-site to monitor flows as they recede and to remove any fish from the dewatered area. Though not anticipated due to shallow depths and gradient in the work area, small pumps may be used to completely dewater holding pools, if necessary, and manage any hyporheic flows that may be present behind the isolation structure. Electrofishing may be used to assist in fish removal if necessary, though it is likely dewatering with pumps will be effective. Once the isolation structure and bypass are in place and functioning, block nets will be removed.

The isolated area of South Fork Manastash Creek will be the minimum size necessary to allow complete removal of the existing bridge and construction of the new bridge, including construction of the rock revetment for bank protection and channel construction or grading areas. The total isolated footprint below the OHWM will be a maximum area encompassing approximately 4,200 square feet (attached drawings, Sheet 4).

After construction of the new bridge, stream channel, and bank protection revetment, the stream bypass will be removed and flows will be reintroduced into the dewatered area. A process known as ramping will be used to slowly reintroduce flow into the dewatered channel. The diversion barrier will be removed slowly over several hours to prevent velocity scour, minimize downstream turbidity, and allow the dewatered channel to return to a natural flow pattern. Any area of new or disturbed streambed will be washed with a low volume, high-pressure hose to work fines into the stream bed prior to the reintroduction of water. This will ensure flows stay on the surface and minimize sediment mobilization during rewatering. During this activity, BMPs will be used to ensure wash water does not mix with clean water downstream.

Bridge Removal

Once the diversion is in place, the existing bridge and wing walls will be removed by first cutting or breaking and removing the bridge superstructure, then excavating below the depth of bridge footings to remove the footings and abutment walls in their entirety. Bridge removal will occur by excavating and accessing from the existing roadway and from below in the isolated stream channel. The existing concrete structures will likely be cut or broken to facilitate removal. The contractor will place plastic or other BMPs to contain concrete debris and ensure all broken concrete and other debris is removed from the stream bed prior to rewatering.

Any groundwater encountered during excavation of the bridge footings will be pumped to an upland area such as roadside ditches for infiltration. Any water that reenters the creek will be clean. At no time will sediment-laden groundwater be pumped directly into the stream channel.

Bridge Construction

The current Manastash Creek Bridge has a span width of approximately 30 feet, and will be replaced by a longer structure that will span approximately 65 feet, completely spanning the OHWM.

Foundations and Substructure

The new bridge abutments will likely be built on drilled shafts. These shafts will be 4 to 5 feet in diameter, and there will be two shafts for each bridge abutment (four total). Drilled shafts of this diameter are most often constructed using a crane, which is used to operate an oscillator to remove material within a steel casing. As material is removed using the oscillator, the steel casing is advanced downward to the appropriate seating depth. Once the seating depth is reached, the steel casings are filled with structural rebar, and concrete is poured in the casing to form a concrete pile. While pouring the concrete, the shafts will be pulled vertically to a point approximately 6-10 feet below ground surface. After curing, the steel casing is typically cut off below the stream elevation and removed. As concrete is poured, any latent pH water within the casing will be pumped and hauled off-site.

A concrete pile cap will be poured in place on top of the drilled shafts, and the abutment will be constructed on top of the pile cap. No impact pile driving will be used. BMPs will be used to ensure concrete and any latent pH water is fully contained.

If drilled shafts are not feasible, the new bridge abutment may be placed on spread footings. If spread footings are used, the roadway approaches to the east and west will be excavated to the appropriate depth to install new bridge footings and allow equipment access within the existing roadway footprint. The new abutments for the bridge will consist of a reinforced rock and soil foundation, cast-in-place concrete spread footing, and a cast-in-place abutment wall. Regardless of spread footings or drilled shafts, the stream channel, grading, and methods

for scour protection will remain as described below.

Shoring may be required during excavation of the existing bridge footings or construction of the new bridge footings and, if needed, will likely be placed in coordination with excavation. Shoring will be removed as the new bridge footings and channel substrate is placed. Any groundwater intercepted during excavation will be pumped to an upland location for infiltration or hauled off-site to an upland area for infiltration. No turbid water will be allowed to enter the stream.

Superstructure and Roadway Reconstruction

The roadway profile will likely be raised to accommodate the longer and wider bridge. However, either head walls will be used or the roadway side slopes will be steepened where possible to match the existing toe of slope. The bridge deck will most likely be precast concrete girders that are placed directly on the abutment seat with a cast-in-place reinforced concrete surface. This eliminates the need for deeper girders and allows a longer span bridge while more closely matching the existing roadway profile, eliminating fill impacts to the adjacent riparian area and associated wetlands. Barrier and railing will be constructed just prior to roadway resurfacing, and will likely be cast-in-place barrier on the bridge with guardrail on the approaches. All concrete work will be completely contained with no discharge to the stream and will occur during stream isolation.

The roadway approaches will be reconstructed with fill, paved, striped, and signage placed as one of the last elements of work before completion. BMP placement will prevent any discharge during paving activities.

Stream Construction, Grading, and Bank Protection

Grading of the stream banks at each corner of the new bridge will be needed to transition the existing stream bank into the new, wider structure. A new stream channel will be constructed in the area between the existing bridge abutments and the new bridge abutments, and the bank area graded to transition the wider stream, and will be comprised of appropriately sized stream bed material (see attached drawings, Sheets 5-8 for stream and grading plans). The areas of both new and existing stream bed will incorporate 1-2 man stream boulders (16-20 inch diameter) into the design (attached drawings, Sheet 5). These stream bed boulders will be half-buried in stream material, and will be placed to maximize habitat value.

Large rock armoring will be needed at the new bridge corners, both at and above the OHWM. Large rock (approximately 42-inch diameter) will also be buried in front of the abutment under the bridge for roadway scour protection. A row of large rock will be placed approximately 9 feet horizontally from the abutment, and will be buried 3-5 feet deeper than the stream bottom (attached drawings, Sheet 7). Class B rock for scour and erosion control (average diameter 16-22 inches) will be placed at a 2:1 slope from the abutment to the large rock elevation. Appropriately sized stream bed material will be placed on top of the large rock and Class B rock to maintain natural stream appearance, function, and habitat value. The entire area beneath the new structure will be streambed material, with no exposed protection rock. Areas of new stream bed will have fines washed in prior to rewatering to ensure surface flows when the temporary bypass is removed.

Bank Protection Revetment

A rock revetment will be constructed upstream of the bridge to provide bank erosion and scour protection in the newly-graded transition area. Both the left and right banks upstream of the bridge have to be graded to transition to the new wider structure (attached drawings, Sheets 5, 6, and 9). This revetment will be built in the area excavated for the construction of the temporary detour structure and transitionally-graded areas, and is necessary to protect the newly-graded streambanks and prevent on-going and expected erosion. It is important to note the bank protection revetment will be constructed in the area that is currently stream bank, and will not be built water-ward of the existing banks. The revetment will not narrow the existing or proposed channel width.

Large rock (approximately 42-inch diameter) will be buried to the thalweg elevation at the toe of the newly-graded bank area, and a slope liner (either geotextile or close-weave mat) will be placed prior to the placement of Class B protection rock. Revetment rock will be placed at a 2:1 slope on the new banks (attached drawings, Sheet 9). Large rock below the OHWM will be covered with stream bed material. The stream banks will be planted at the time of grading and rock placement for enhanced plant success.

Large wood will be incorporated into the revetment as individual pieces or complex structures consisting of one or more pieces. Large wood pieces will be from trees removed on site, and will consist of stems or stems with root wads (See attached drawings, Sheet 10 for typical large wood detail). If additional large wood is required to meet approvals, it will be provided as part of the contract.

Planting and Site Restoration

The revetment area and graded areas at the new bridge corners will be planted with native vegetation (see attached drawings, Sheets 5 - 9 for planting areas and detail). Willow cuttings will provide the best likelihood for success in the new stream bank area, with dogwood and cottonwood also planted where suitable saturation occurs during the growing season. Plants will be harvested from a local source or purchased from a native plant nursery. Disturbed roadside and new embankment areas that are not rock will be seeded with a native roadside and erosion control mix and stabilized with mulch cover prior to project completion.

Demobilization

Any remaining non-biodegradable BMP's, accumulated sediment, stockpiled material, and equipment will be removed and fencing will be restored.

6f. What are the anticipated start and end dates for project construction? (Month/Year) [\[help\]](#)

- If the project will be constructed in phases or stages, use [JARPA Attachment D](#) to list the start and end dates of each phase or stage.

Start Date: July 2018

End Date: November 2018

See JARPA Attachment D

6g. Fair market value of the project, including materials, labor, machine rentals, etc. [\[help\]](#)

\$2,400,000

6h. Will any portion of the project receive federal funding? [\[help\]](#)

- If yes, list each agency providing funds.

Yes No Don't know

Part 7--Wetlands: Impacts and Mitigation

Check here if there are wetlands or wetland buffers on or adjacent to the project area.
(If there are none, skip to Part 8.) [\[help\]](#)

7a. Describe how the project has been designed to avoid and minimize adverse impacts to wetlands. [\[help\]](#)

Not applicable

Downstream of the bridge, just outside County Right of Way (ROW), is a high quality, forested riparian area with associated wetlands. These wetlands interact with Manastash Creek through both groundwater and overbank flows. Impacting these wetlands would be costly in terms of mitigation, and the project was designed in accordance with National Environmental Policy Act 40 CFR 1508.20, Clean Water Act Section 401/404, and Washington State Hydraulic Code avoidance and minimization protocols. In order to avoid these wetlands and the high-quality forested riparian area, the grading plan was shortened to a catch point just inside the County ROW. This eliminated the impact to the forested area and wetlands.

7b. Will the project impact wetlands? [\[help\]](#)

Yes No Don't know

7c. Will the project impact wetland buffers? [\[help\]](#)

Yes No Don't know

The project is designed to minimize vegetation impacts downstream of the bridge location by staying within County ROW and not impacting wetlands or wetland buffers. The new bridge corners will be graded to blend the wider structure and stream into the riparian area. These areas will be replanted with native vegetation.

7d. Has a wetland delineation report been prepared? [\[help\]](#)

- If Yes, submit the report, including data sheets, with the JARPA package.

Yes No

7e. Have the wetlands been rated using the Western Washington or Eastern Washington Wetland Rating System? [\[help\]](#)

- If Yes, submit the wetland rating forms and figures with the JARPA package.

Yes No Don't know

7f. Have you prepared a mitigation plan to compensate for any adverse impacts to wetlands? [\[help\]](#)

- If Yes, submit the plan with the JARPA package and answer 7g.
- If No, or Not applicable, explain below why a mitigation plan should not be required.

Yes No Don't know

No impacts will occur to wetlands or wetland buffers.

7g. Summarize what the mitigation plan is meant to accomplish, and describe how a watershed approach was used to design the plan. [\[help\]](#)

N/A

7h. Use the table below to list the type and rating of each wetland impacted, the extent and duration of the impact, and the type and amount of mitigation proposed. Or if you are submitting a mitigation plan with a similar table, you can state (below) where we can find this information in the plan. [\[help\]](#)

Activity (fill, drain, excavate, flood, etc.)	Wetland Name ¹	Wetland type and rating category ²	Impact area (sq. ft. or Acres)	Duration of impact ³	Proposed mitigation type ⁴	Wetland mitigation area (sq. ft. or acres)
N/A						

¹ If no official name for the wetland exists, create a unique name (such as "Wetland 1"). The name should be consistent with other project documents, such as a wetland delineation report.

² Ecology wetland category based on current Western Washington or Eastern Washington Wetland Rating System. Provide the wetland rating forms with the JARPA package.

³ Indicate the days, months or years the wetland will be measurably impacted by the activity. Enter "permanent" if applicable.

⁴ Creation (C), Re-establishment/Rehabilitation (R), Enhancement (E), Preservation (P), Mitigation Bank/In-lieu fee (B)

Page number(s) for similar information in the mitigation plan, if available: _____

7i. For all filling activities identified in 7h, describe the source and nature of the fill material, the amount in cubic yards that will be used, and how and where it will be placed into the wetland. [\[help\]](#)

N/A

7j. For all excavating activities identified in 7h, describe the excavation method, type and amount of material in cubic yards you will remove, and where the material will be disposed. [\[help\]](#)

N/A – there will be no excavation in wetlands for this project.

Part 8—Waterbodies (other than wetlands): Impacts and Mitigation

In Part 8, “waterbodies” refers to non-wetland waterbodies. (See Part 7 for information related to wetlands.) [\[help\]](#)

Check here if there are waterbodies on or adjacent to the project area. (If there are none, skip to Part 9.)

8a. Describe how the project is designed to avoid and minimize adverse impacts to the aquatic environment. [\[help\]](#)

Not applicable

Bridge removal work will be completed in isolation from the flows of South Fork Manastash Creek. Work to set the temporary isolation structure will require heavy equipment operation below the OHWM, but work will occur in the area behind the isolation structure and out of the flowing water of South Fork Manastash Creek. Water quality will be maintained at all times within the Washington State Department of Ecology guidelines in Washington Administrative Code (WAC) 173-201A. Minimization measures that will be required in the contract and will further minimize or prevent impacts are listed below:

MM 1 – Bridge and channel work below the OHWM will only occur in an isolated condition.

MM 2 – All work below the OHWM will be conducted during the identified in-water work window to remain protective of aquatic species.

MM 3 – All equipment will be inspected for leaks prior to work each day.

MM 4 – All equipment that works below the OHWM will contain vegetable oil or other biodegradable alternative to hydraulic fluid.

MM 5 – Equipment staging and fueling will occur more than 50 feet from the OHWM of the South Fork Manastash Creek.

MM 6 – Worksite isolation and fish exclusion will be conducted by qualified biologists in accordance with the 2016 Washington State Department of Transportation Fish Exclusion Protocols and Standards.

MM 7 – Small pumps, if used to dewater holding pools or hyporheic flows, will be screened to NMFS criteria.

MM 8 – Fines will be washed into areas of new streambed prior to the reintroduction of flows to ensure water stays on the surface, and to minimize downstream turbidity during rewatering.

MM 9 – Water will be reintroduced (ramped) to the stream channel slowly during removal of containment measures to minimize turbidity and allow natural equilibration to occur.

MM 10 – BMPs such as wattles or silt fence will be used to prevent the discharge of any sediment or material into flowing water.

MM 11 – Vegetation removal required for access or the temporary detour that is not part of the permanent impact limits will be cut, but not grubbed, to allow natural regeneration.

MM 12 - Isolation and BMPs will be sufficient to contain turbidity within State water quality standards. No untreated dewatering water, latent pH water, or concrete materials will be discharged to flowing water or remain in the stream channel prior to re-introduction of the stream.

MM 13 – The contractor will be required to develop and follow a Temporary Erosion and Sediment Control Plan, Spill Prevention, Control, and Containment Plan, and Water Quality Monitoring Plan. These plans will ensure protection of the aquatic resource during construction.

8b. Will your project impact a waterbody or the area around a waterbody? [\[help\]](#)

Yes No

8c. Have you prepared a mitigation plan to compensate for the project’s adverse impacts to non-wetland waterbodies? [\[help\]](#)

- If Yes, submit the plan with the JARPA package and answer 8d.
- If No, or Not applicable, explain below why a mitigation plan should not be required.

Yes No Don’t know

The project replaces an approximate 30-foot wide structure with an approximate 65-foot wide structure, and the wider stream channel is designed to meet WDFW stream crossing guidance. The removal of the smaller bridge and new, wider stream bed area will provide a functional uplift to the current hydraulic and habitat condition of the creek. In addition, the erosion of the upstream bank area will be stabilized due to the wider channel and construction of a planted rock revetment. When integrated as part of the design, these measures provide a functional uplift and are self-mitigating. See attached drawings, Sheets 5-9 for stream design and cross sections.

8d. Summarize what the mitigation plan is meant to accomplish. Describe how a watershed approach was used to design the plan.

- If you already completed 7g you do not need to restate your answer here. [\[help\]](#)

N/A

8e. Summarize impact(s) to each waterbody in the table below. [\[help\]](#)

Activity (clear, dredge, fill, pile drive, etc.)	Waterbody name ¹	Impact location ²	Duration of impact ³	Amount of material (cubic yards) to be placed in or removed from waterbody	Area (sq. ft. or linear ft.) of waterbody directly affected
Temporary fill (Isolation structure)	South Fork Manastash Creek	Below OWHM	Temporary (July-Oct)	Appx. 7.5 cy, in supersacks	100 sf
Excavation (includes removal of existing bridge)	South Fork Manastash Creek	Below OHWM	Permanent	155 cy	1,150 sf
Fill (includes replacement with native material)	South Fork Manastash Creek	Below OHWM	Permanent	157 cy	1,150 sf
Dewatered Area	South Fork Manastash Creek	Below OHWM	Temporary (July-Oct)	N/A	4,200 sf 125 linear feet

¹ If no official name for the waterbody exists, create a unique name (such as “Stream 1”) The name should be consistent with other documents provided.

² Indicate whether the impact will occur in or adjacent to the waterbody. If adjacent, provide the distance between the impact and the waterbody and indicate whether the impact will occur within the 100-year flood plain.

³ Indicate the days, months or years the waterbody will be measurably impacted by the work. Enter “permanent” if applicable.

8f. For all activities identified in 8e, describe the source and nature of the fill material, amount (in cubic yards) you will use, and how and where it will be placed into the waterbody. [\[help\]](#)

Temporary Fill

If filled sandbags or super sacks are used for the isolation structure and temporary bypass, approximately 7.5 cy will be considered fill below the OWHM.

Fill

A new stream channel will be constructed in the area between the existing bridge abutments and the new bridge abutments and in the transitionally-graded areas, and will be comprised of appropriately sized stream bed material. Large rock armoring will be needed on the upstream banks and at the new bridge corners, both at and above the OHWM. Large rock will also be buried in front of the abutments under the bridge for roadway scour protection, but will be covered with stream bed material. Material will be placed while the work area is isolated from the stream, likely by end-dumping and placing with small equipment.

The majority of earthwork on the project is replacing current road fill with new stream bed material in the footprint of the new, wider bridge. Approximately 155 cy will be excavated below the OHWM, and approximately 157 cy will be placed. This 157 cy estimate includes native material that may be removed to allow access and removal of the existing bridge, but is then replaced in the same footprint.

8g. For all excavating or dredging activities identified in 8e, describe the method for excavating or dredging, type and amount of material you will remove, and where the material will be disposed. [\[help\]](#)

Excavation

The project will excavate approximately 155 cy of material below the OHWM. The existing bridge footings and abutments will also be removed in their entirety and are included in this estimate. As stated above, some of this material will be replaced in the same footprint. Excavation will occur during isolation, and material, if suitable, will be re-used or hauled off and disposed of at a permitted facility. The project results in a net increase of only 2 cy of fill below the OHWM, as imported stream bed material.

Part 9–Additional Information

Any additional information you can provide helps the reviewer(s) understand your project. Complete as much of this section as you can. It is ok if you cannot answer a question.

9a. If you have already worked with any government agencies on this project, list them below. [\[help\]](#)

Agency Name	Contact Name	Phone	Most Recent Date of Contact
WDFW	Jennifer Nelson	509-952-1013	12/15/17
NMFS	Sean Gross	509-962-8911	12/19/17
NMFS	Roman Pittman	509-962-8911	12/19/17
USFWS	Greg VanStralen	509-665-3508	1/3/2018
WSDOT	Jodie Beall	360-705-6975	1/3/2018

9b. Are any of the wetlands or waterbodies identified in Part 7 or Part 8 of this JARPA on the Washington Department of Ecology’s 303(d) List? [\[help\]](#)

- If Yes, list the parameter(s) below.
- If you don’t know, use Washington Department of Ecology’s Water Quality Assessment tools at: <http://www.ecy.wa.gov/programs/wq/303d/>.

Yes No

N/A. This section of South Fork Manastash Creek is not 303d listed for any parameter.

9c. What U.S. Geological Survey Hydrological Unit Code (HUC) is the project in? [\[help\]](#)

- Go to <http://cfpub.epa.gov/surf/locate/index.cfm> to help identify the HUC.

17030001 – Upper Yakima

9d. What Water Resource Inventory Area Number (WRIA #) is the project in? [\[help\]](#)

- Go to <http://www.ecy.wa.gov/water/wria/index.htm> to find the WRIA #.

39 – Upper Yakima

9e. Will the in-water construction work comply with the State of Washington water quality standards for turbidity? [\[help\]](#)

- Go to <http://www.ecy.wa.gov/programs/wq/swqs/criteria.htm> for the standards.

Yes No Not applicable

9f. If the project is within the jurisdiction of the Shoreline Management Act, what is the local shoreline environment designation? [\[help\]](#)

- If you don’t know, contact the local planning department.
- For more information, go to: http://www.ecy.wa.gov/programs/sea/sma/laws_rules/173-26/211_designations.html.

Urban Natural Aquatic Conservancy Other: Rural conservancy

9g. What is the Washington Department of Natural Resources Water Type? [\[help\]](#)

- Go to <http://www.dnr.wa.gov/forest-practices-water-typing> for the Forest Practices Water Typing System.

Shoreline Fish Non-Fish Perennial Non-Fish Seasonal

9h. Will this project be designed to meet the Washington Department of Ecology’s most current stormwater manual? [\[help\]](#)

- If No, provide the name of the manual your project is designed to meet.

Yes No N/A – minor increase in impervious surface from the roadway taper to the new bridge is 100% infiltrated with no discharge to South Fork Manastash Creek.

Name of manual: _____

9i. Does the project site have known contaminated sediment? [\[help\]](#)

- If Yes, please describe below.

Yes No

9j. If you know what the property was used for in the past, describe below. [\[help\]](#)

The project site has been maintained County right-of-way and structure since 1940.

9k. Has a cultural resource (archaeological) survey been performed on the project area? [\[help\]](#)

- If Yes, attach it to your JARPA package.

Yes No – The assessment is in review with DAHP as a FHWA action.

9l. Name each species listed under the federal Endangered Species Act that occurs in the vicinity of the project area or might be affected by the proposed work. [\[help\]](#)

Common Name	Listing Status	Determination
U.S. Fish and Wildlife Service		
Gray wolf	Endangered	No effect
Canada lynx	Threatened	No effect
Yellow-billed cuckoo	Threatened	No effect
Marbled murrelet	Threatened	No effect
North American wolverine	Proposed Threatened	No effect
Bull trout – Columbia River DPS	Threatened	May affect, not likely to adversely affect
Bull trout – Critical Habitat	Designated	No effect
National Marine Fisheries Service		
Steelhead – Middle Columbia River (MCR) Summer-run DPS	Threatened	May affect, likely to adversely affect
Steelhead – Critical Habitat	Designated	No effect

Project is in consultation with USFWS and NMFS.

9m. Name each species or habitat on the Washington Department of Fish and Wildlife’s Priority Habitats and Species List that might be affected by the proposed work. [\[help\]](#)

The project is within a management buffer for northern spotted owl and regular concentration areas for elk and mule deer. Rainbow trout and westslope cutthroat have occurrence/migration areas within the project area. However, the project will not affect any priority habitat or species.

Part 10—SEPA Compliance and Permits

Use the resources and checklist below to identify the permits you are applying for.

- Online Project Questionnaire at <http://apps.oria.wa.gov/opas/>.
- Governor's Office for Regulatory Innovation and Assistance at (800) 917-0043 or help@oria.wa.gov.
- For a list of addresses to send your JARPA to, click on [agency addresses for completed JARPA](#).

10a. Compliance with the State Environmental Policy Act (SEPA). (Check all that apply.) [\[help\]](#)

- For more information about SEPA, go to www.ecy.wa.gov/programs/sea/sepa/e-review.html.
- A copy of the SEPA determination or letter of exemption is included with this application.
- A SEPA determination is pending with _____ (lead agency). The expected decision date is _____.
- I am applying for a Fish Habitat Enhancement Exemption. (Check the box below in 10b.) [\[help\]](#)
- This project is exempt (choose type of exemption below).
 - Categorical Exemption. Under what section of the SEPA administrative code (WAC) is it exempt?
WAC 197-11-800(27) Replacement of structurally deficient city, town and county bridges
 - Other: _____
- SEPA is pre-empted by federal law.

10b. Indicate the permits you are applying for. (Check all that apply.) [\[help\]](#)

LOCAL GOVERNMENT

Local Government Shoreline permits:

- Substantial Development Conditional Use Variance
- Shoreline Exemption Type (explain): WAC 173-27-040(2)(b) – Normal maintenance or repair

Other City/County permits:

- Floodplain Development Permit Critical Areas Ordinance

STATE GOVERNMENT

Washington Department of Fish and Wildlife:

- Hydraulic Project Approval (HPA) Fish Habitat Enhancement Exemption – [Attach Exemption Form](#)

Washington Department of Natural Resources:

- Aquatic Use Authorization
Complete [JARPA Attachment E](#) and submit a check for \$25 payable to the Washington Department of Natural Resources.
Do not send cash.

Washington Department of Ecology:

- Section 401 Water Quality Certification

FEDERAL GOVERNMENT

United States Department of the Army permits (U.S. Army Corps of Engineers):

Section 404 (discharges into waters of the U.S.) Section 10 (work in navigable waters)

Anticipated Nationwide Permit 14

United States Coast Guard permits:

General Bridge Act Permit

Private Aids to Navigation (for non-bridge projects)

Part 11—Authorizing Signatures

Signatures are required before submitting the JARPA package. The JARPA package includes the JARPA form, project plans, photos, etc. [\[help\]](#)

11a. Applicant Signature (required) [\[help\]](#)

I certify that to the best of my knowledge and belief, the information provided in this application is true, complete, and accurate. I also certify that I have the authority to carry out the proposed activities, and I agree to start work only after I have received all necessary permits.

I hereby authorize the agent named in Part 3 of this application to act on my behalf in matters related to this application. SLA (initial)

By initialing here, I state that I have the authority to grant access to the property. I also give my consent to the permitting agencies entering the property where the project is located to inspect the project site or any work related to the project. SLA (initial)

<u>G. Lucas Slack</u>	<u>Lucas Slack</u>	<u>Jan 19, 2018</u>
Applicant Printed Name	Applicant Signature	Date

11b. Authorized Agent Signature [\[help\]](#)

I certify that to the best of my knowledge and belief, the information provided in this application is true, complete, and accurate. I also certify that I have the authority to carry out the proposed activities and I agree to start work only after all necessary permits have been issued.

<u>Craig D. Broadhead</u>	<u>Craig D. Broadhead</u>	<u>Jan 19, 2018</u>
Authorized Agent Printed Name	Authorized Agent Signature	Date

11c. Property Owner Signature (if not applicant) [\[help\]](#)

Not required if project is on existing rights-of-way or easements (provide copy of easement with JARPA).

I consent to the permitting agencies entering the property where the project is located to inspect the project site or any work. These inspections shall occur at reasonable times and, if practical, with prior notice to the landowner.

_____ Property Owner Printed Name	_____ Property Owner Signature	_____ Date
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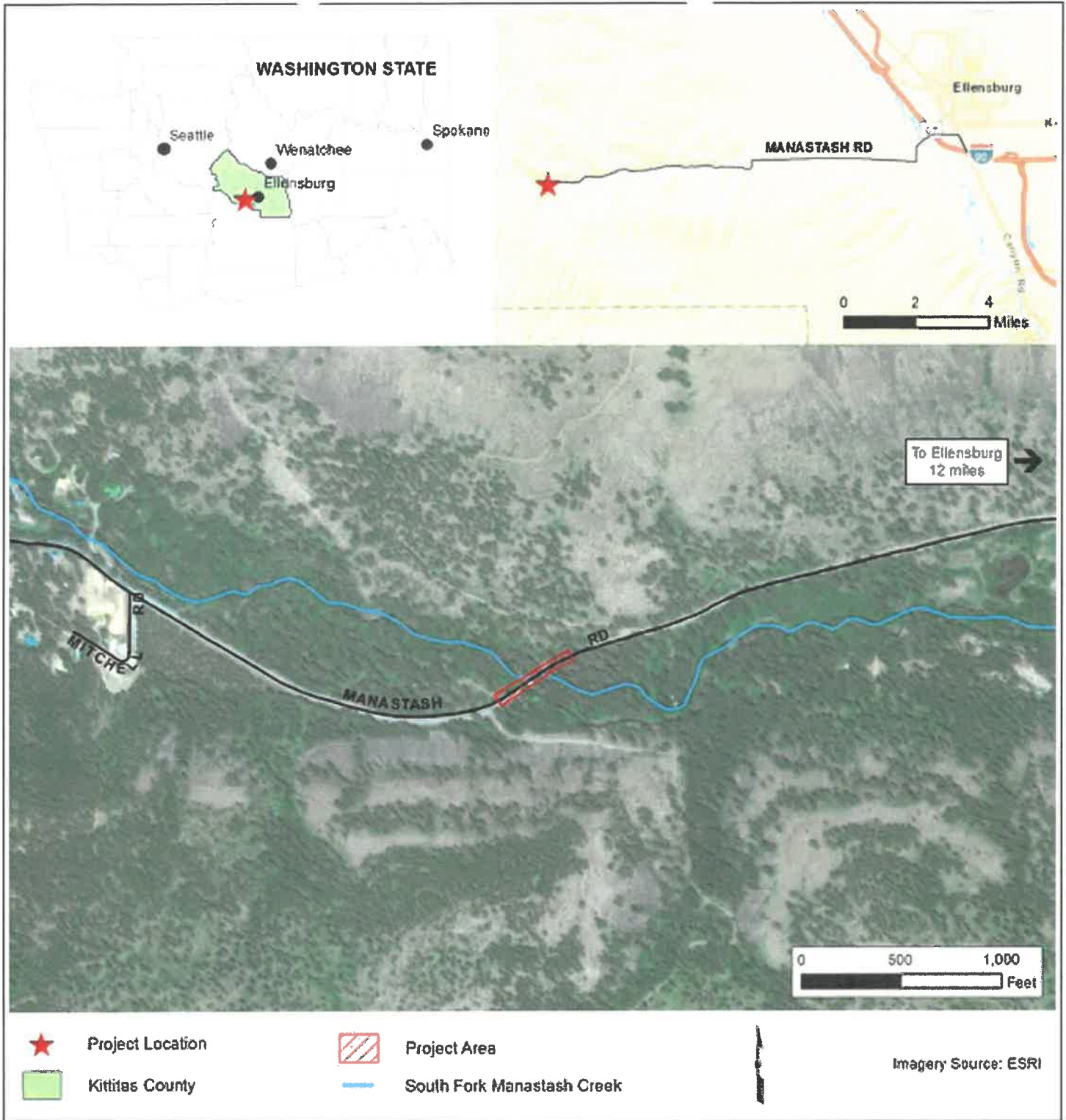
18 U.S.C §1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly falsifies, conceals, or covers up by any trick, scheme, or device a material fact or makes any false, fictitious, or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious, or fraudulent statement or entry, shall be fined not more than \$10,000 or imprisoned not more than 5 years or both.

If you require this document in another format, contact the Governor's Office for Regulatory Innovation and Assistance (ORIA) at (800) 917-0043. People with hearing loss can call 711 for Washington Relay Service. People with a speech disability can call (877) 833-6341. ORIA publication number: ORIA-16-011 rev. 09/2016

Manastash Bridge Replacement Project

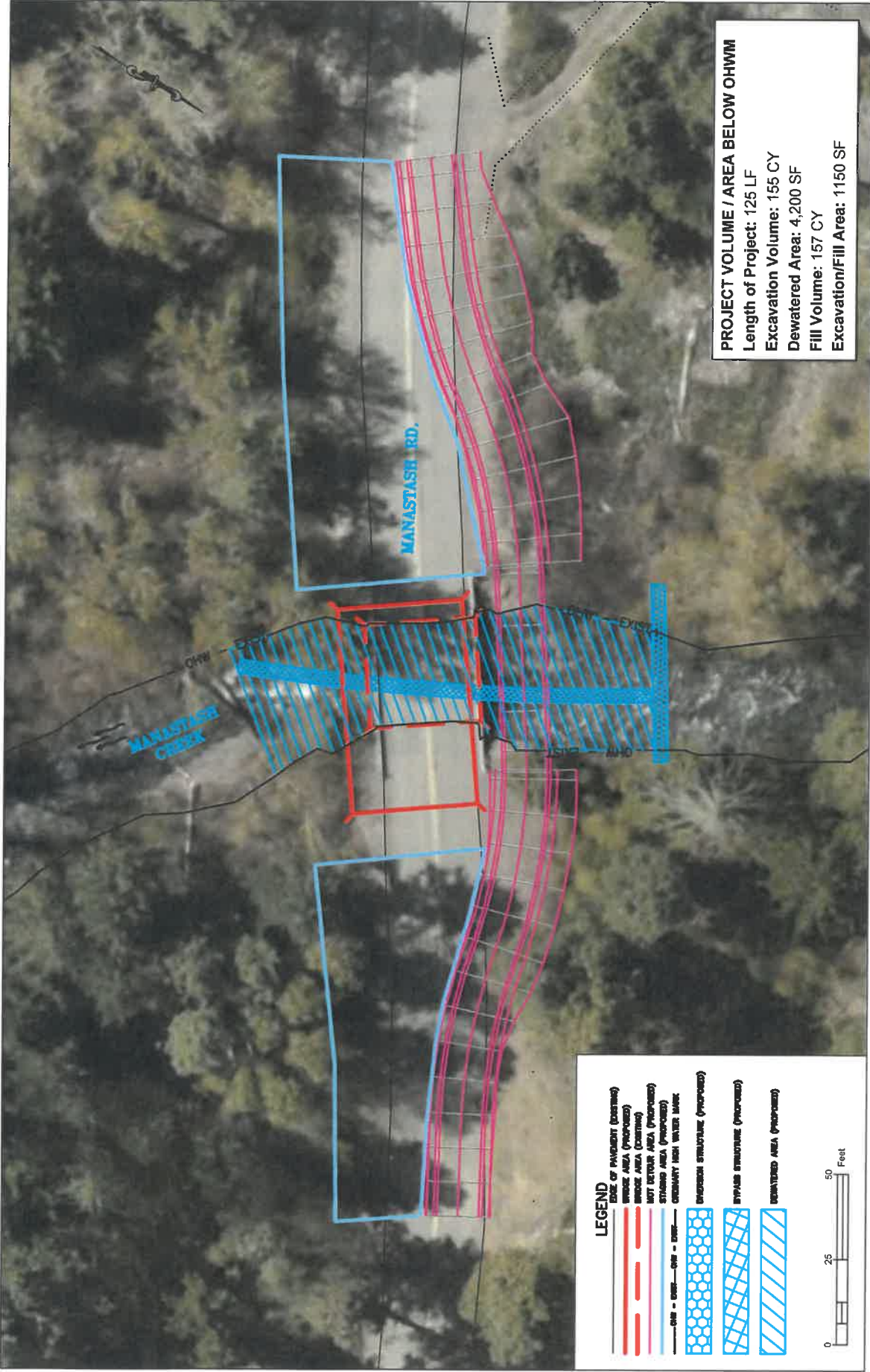
JARPA Attachment

Plans, Drawings, and Photographs



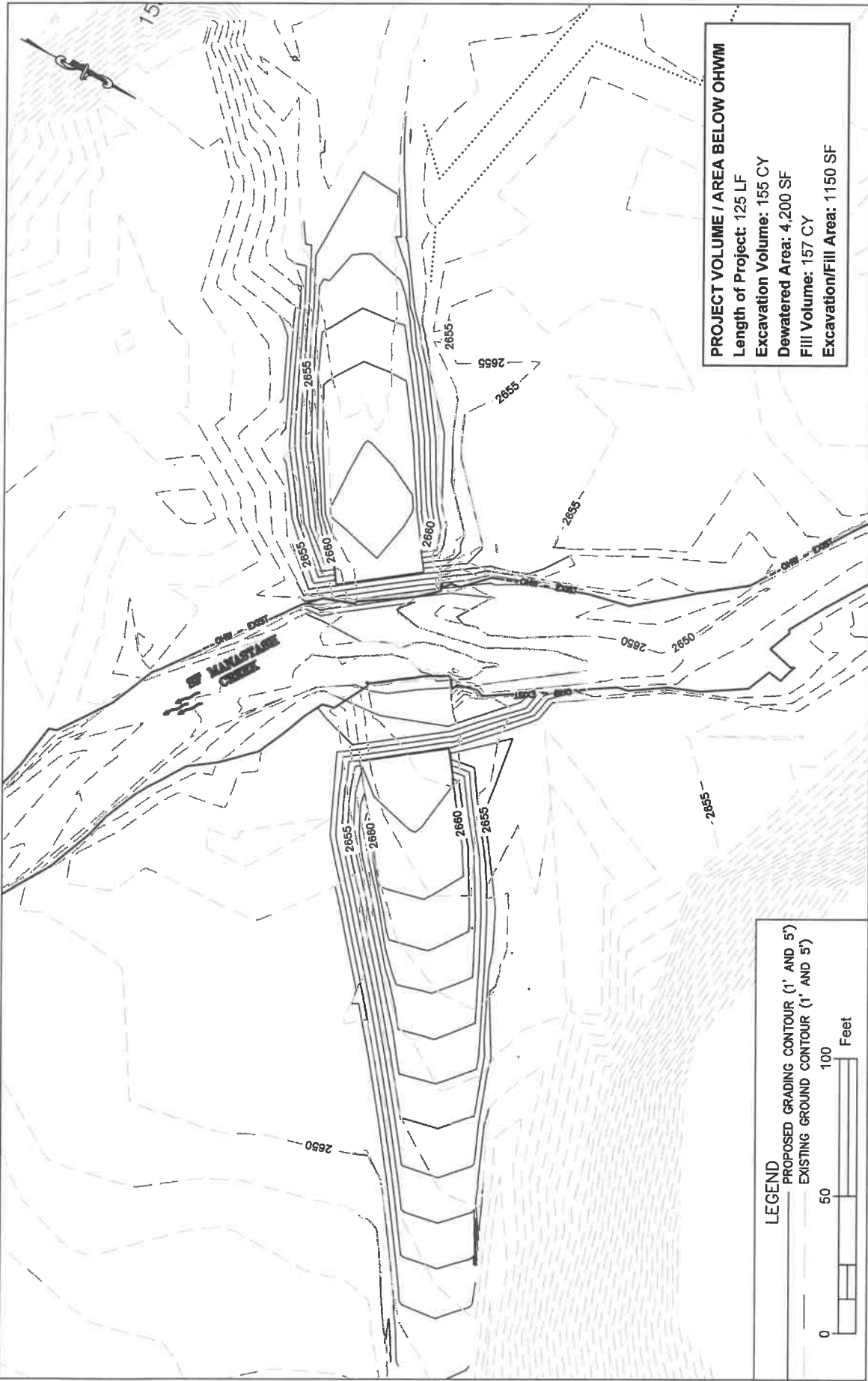
MANASTASH ROAD BRIDGE REPLACEMENT VICINITY MAP

<p>USACE REF. #:</p> <p>ADJACENT PROPERTY OWNERS: See JARPA</p> <p>APPLICANT: Kittitas County Public Works</p> <p>JACOBS</p>	<p>LOCATION: T17N, R16E, S13</p> <p>PARCEL NUMBER: N/A</p> <p>LATITUDE: 46.959821° N LONGITUDE: -120.785677° W</p> <p>SHEET: 1 of 11</p> <p>DATE: Jan. 15, 2018</p>	<p>PROPOSED PROJECT: The project replaces a bridge over South Fork Manastash Creek near Ellensburg, Washington. The existing structure is structurally deficient and is in need of replacement.</p> <p>IN: SF Manastash Creek</p> <p>NEAR: Ellensburg</p> <p>COUNTY: Kittitas</p> <p>STATE: WA</p>
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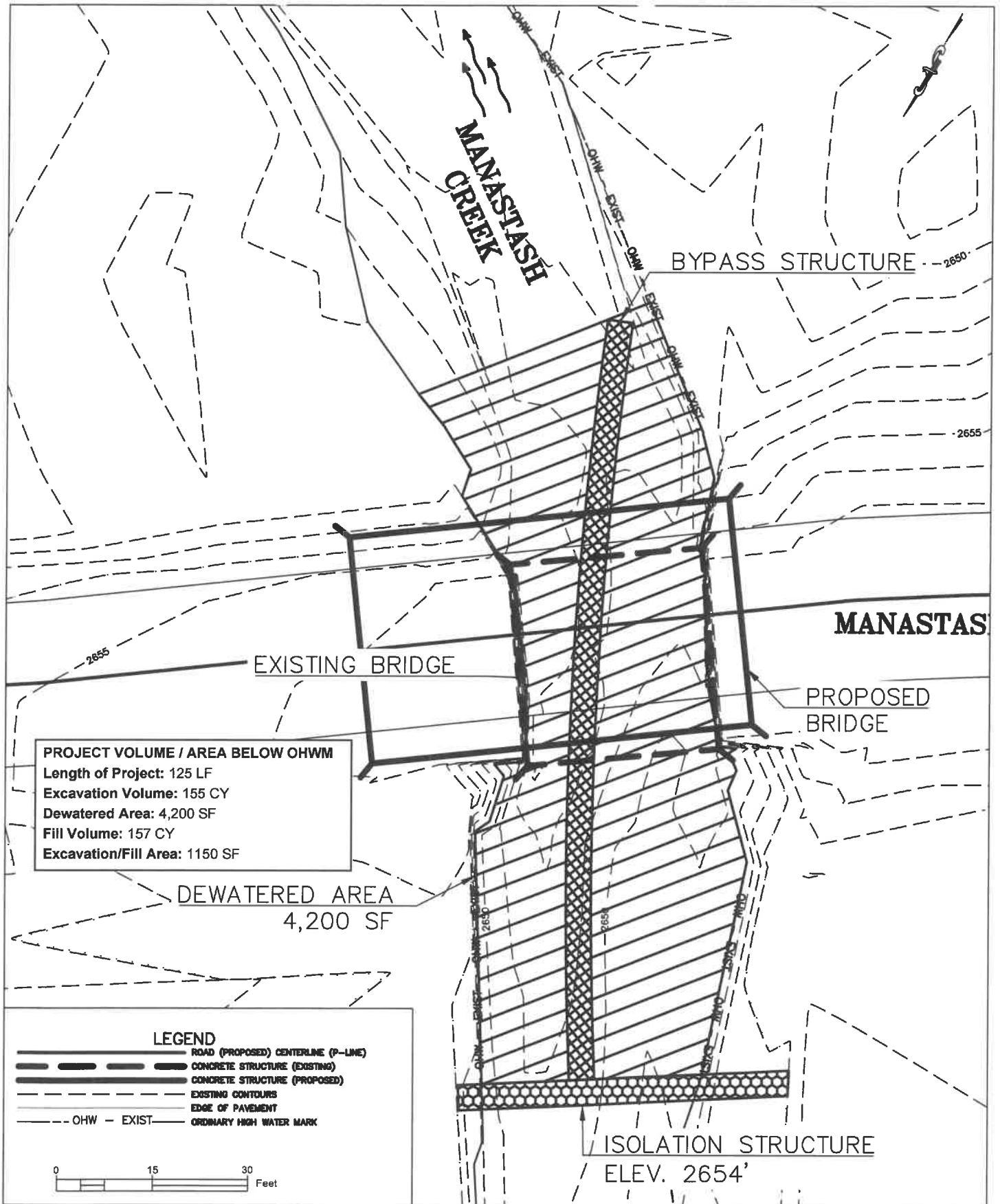
MANASTASH ROAD BRIDGE REPLACEMENT - SITE OVERVIEW PLAN

<p>USACE REF. #:</p> <p>APPLICANT: Kittitas County Public Works</p>	<p>LOCATION: T17N, R16E, S13</p> <p>SHEET: 2 OF 11 DATE: 01/16/2018</p>	<p>PROPOSED PROJECT: The project replaces a bridge over Manastash Creek near Ellensburg, Washington. The existing structure is structurally deficient and is in need of replacement.</p>
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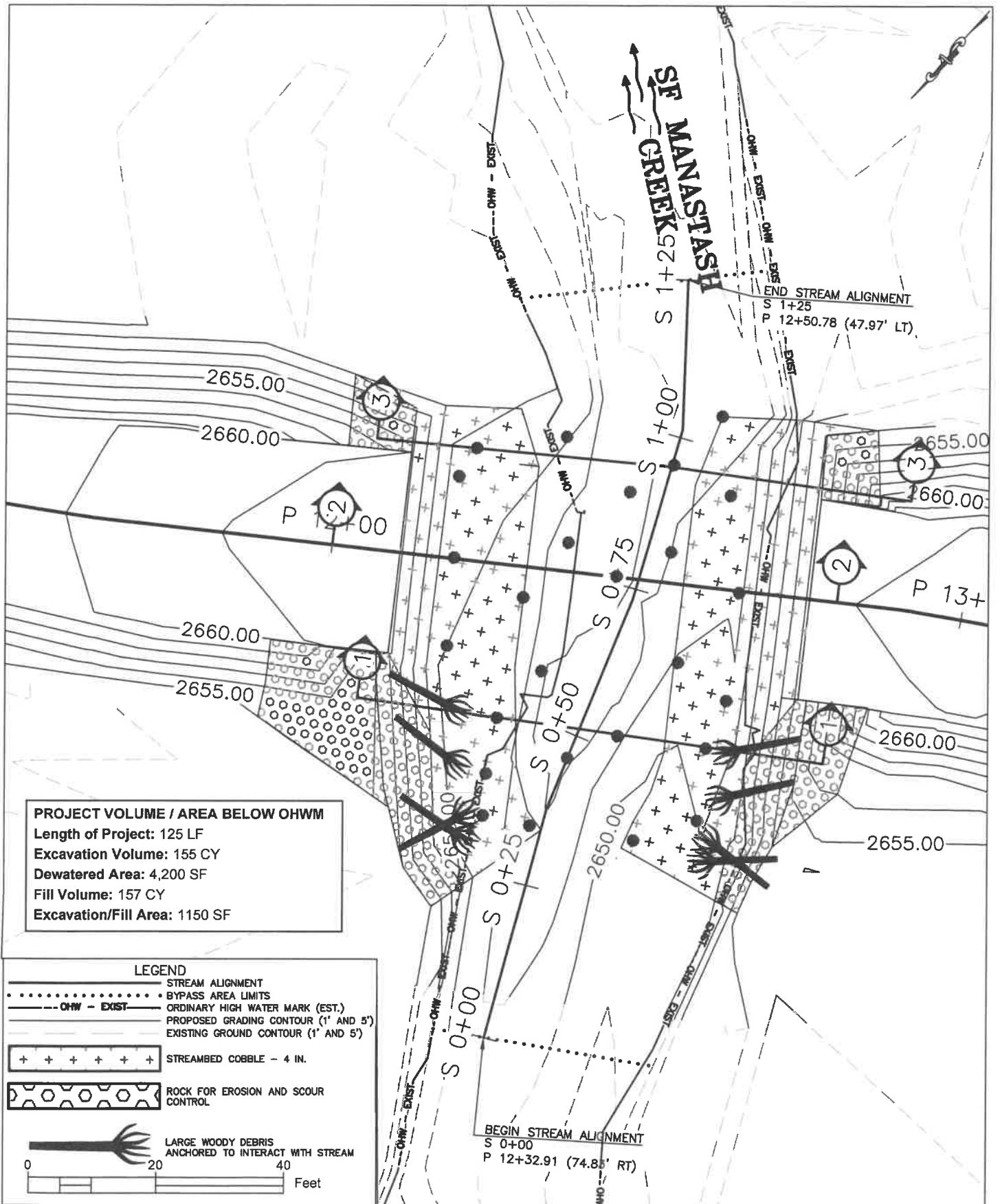
MANASTASH ROAD BRIDGE REPLACEMENT - GRADING PLAN

<p>USACE REF. #:</p>	<p>LOCATION: T17N, R16E, S13</p>	<p>PROPOSED PROJECT: The project replaces a bridge over South Fork Manastash Creek near Ellensburg, Washington. The existing structure is structurally deficient and is in need of replacement.</p>
<p>APPLICANT: Kittitas County Public Works</p>	<p>SHEET: 3 OF 11</p>	<p>DATE: 01/16/2018</p>



MANASTASH ROAD BRIDGE REPLACEMENT - PROPOSED ISOLATION PLAN

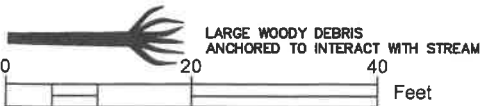
<p>USACE REF. #: APPLICANT NAME: Kittitas County Public Works</p>	<p>PROPOSED PROJECT: The project replaces a bridge over South Fork Manastash Creek near Ellensburg, Washington. The existing structure is structurally deficient and is in need of replacement.</p>	<p>LOCATION: T17N, R16E, S13 SHEET: 4 OF 11 DATE: 01/16/2018</p>
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PROJECT VOLUME / AREA BELOW OHWM
 Length of Project: 125 LF
 Excavation Volume: 155 CY
 Dewatered Area: 4,200 SF
 Fill Volume: 157 CY
 Excavation/Fill Area: 1150 SF

LEGEND

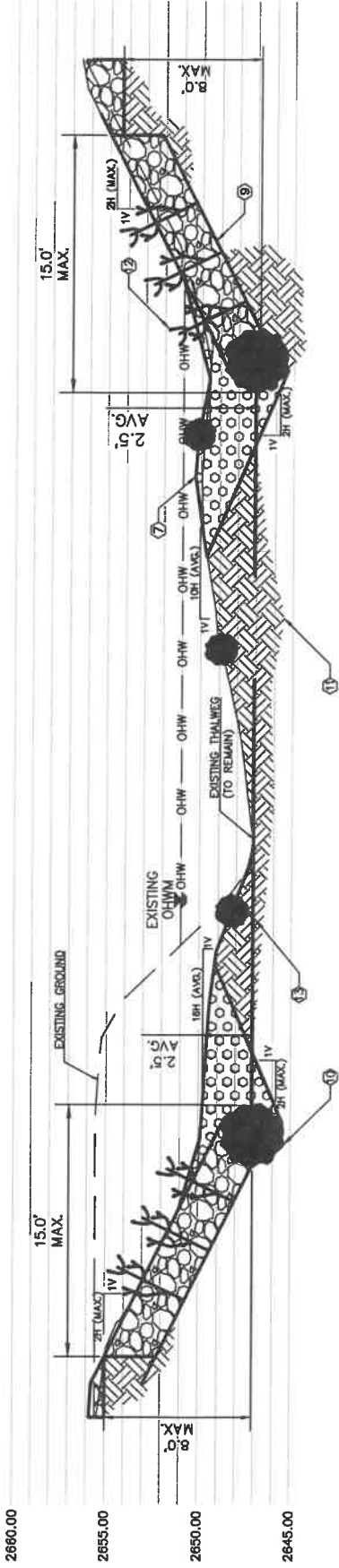
- STREAM ALIGNMENT
- BYPASS AREA LIMITS
- OHW --- EXIST --- ORDINARY HIGH WATER MARK (EST.)
- PROPOSED GRADING CONTOUR (1' AND 5')
- EXISTING GROUND CONTOUR (1' AND 5')
- + + + + + STREAMBED COBBLE - 4 IN.
- ○ ○ ○ ○ ROCK FOR EROSION AND SCOUR CONTROL



MANASTASH ROAD BRIDGE REPLACEMENT - STREAMBED MATERIAL PLACEMENT PLAN

<p>USACE REF. #: APPLICANT NAME: Kittitas County Public Works</p>	<p>PROPOSED PROJECT: The project replaces a bridge over South Fork Manastash Creek near Ellensburg, Washington. The existing structure is structurally deficient and is in need of replacement.</p>	<p>LOCATION: T17N, R16E, S13 SHEET: 5 OF 11 DATE: 01/16/2018</p>
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TYPICAL STREAM CROSS-SECTION 1
 STA. S 0+60 TO STA. S 0+92



PROJECT VOLUME / AREA BELOW OHWM
 Length of Project: 125 LF
 Excavation Volume: 155 CY
 Dewatered Area: 4,200 SF
 Fill Volume: 157 CY
 Excavation/Fill Area: 1150 SF

LEGEND:

- 7 STREAMBED COBBLES - 10 IN.
- 8 ROCK FOR EROSION AND SCOUR PROTECTION - CLASS B
- 9 FILTER BLANKET
- 10 BOULDER - FOUR MAN
- 11 NATIVE MATERIAL
- 13 STREAMBED BOULDER - ONE MAN



MANASTASH ROAD BRIDGE REPLACEMENT - TYPICAL STREAM CROSS SECTION 1

USACE REF. #:

APPLICANT: Kittitas County Public Works

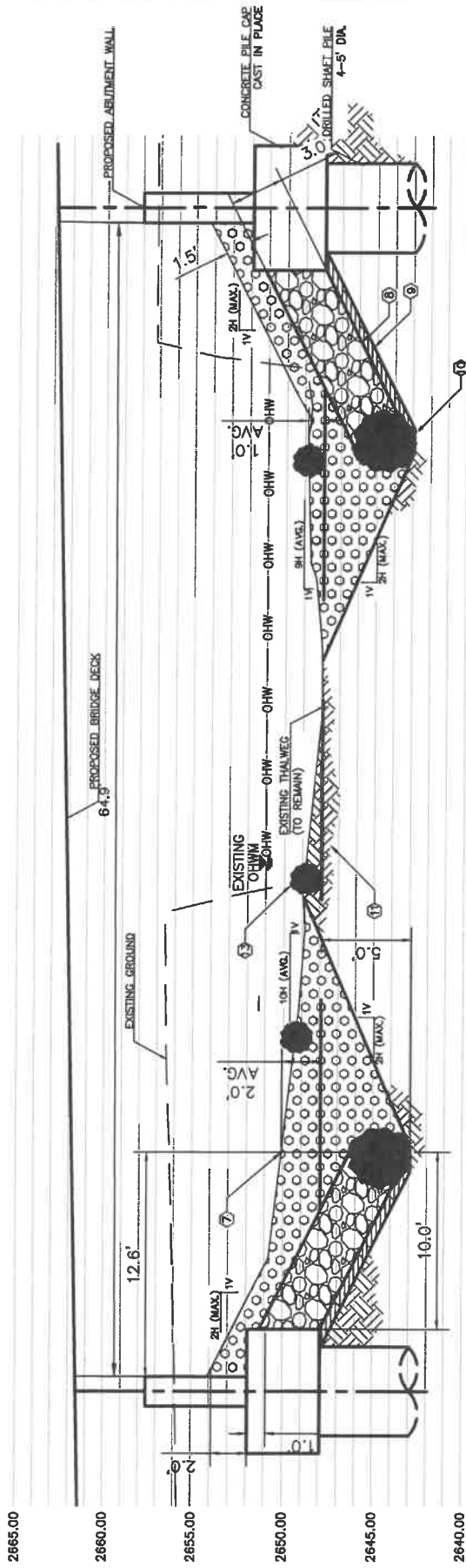
LOCATION: T17N, R16E, S13

SHEET: 6 OF 11

DATE: 01/16/2018

PROPOSED PROJECT: The project replaces a bridge over South Fork Manastash Creek near Ellensburg, Washington. The existing structure is structurally deficient and is in need of replacement.

TYPICAL STREAM CROSS-SECTION 2
 STA. S 0+80 TO STA. S 0+92



LEGEND:

- 7 STREAMBED COBBLES - 10 IN.
- 8 ROCK FOR EROSION AND SCOUR PROTECTION - CLASS B
- 9 FILTER BLANKET
- 10 BOULDER - FOUR MAN
- 11 NATIVE MATERIAL
- 13 STREAMBED BOULDER - ONE MAN



PROJECT VOLUME / AREA BELOW OHWM
 Length of Project: 125 LF
 Excavation Volume: 155 CY
 Dewatered Area: 4,200 SF
 Fill Volume: 157 CY
 Excavation/Fill Area: 1150 SF

MANASTASH ROAD BRIDGE REPLACEMENT - TYPICAL STREAM CROSS SECTION 2

USACE REF. #:

APPLICANT: Kittitas County Public Works

LOCATION: T17N, R16E, S13

SHEET: 7 OF 11

DATE: 01/16/2018

PROPOSED PROJECT: The project replaces a bridge over South Fork Manastash Creek near Ellensburg, Washington. The existing structure is structurally deficient and is in need of replacement.

TYPICAL STREAM CROSS-SECTION 3
 STA. S 0+60 TO STA. S 0+92

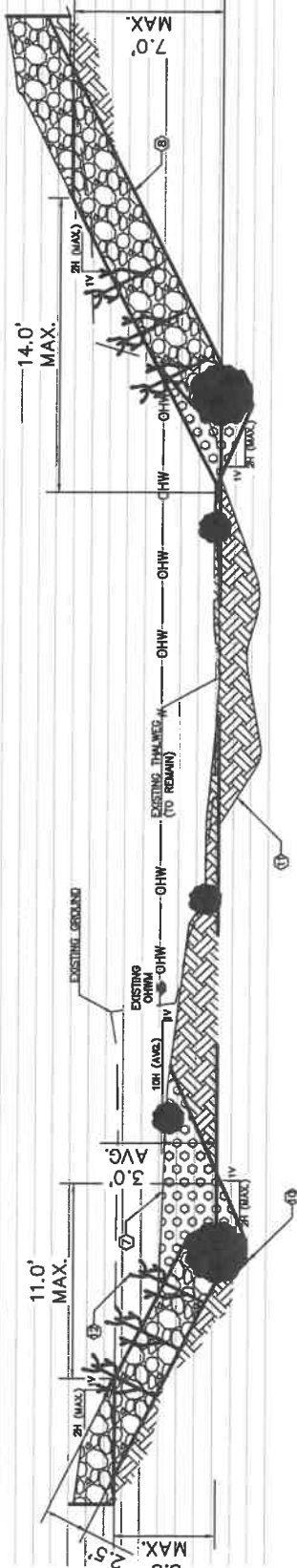
2665.00

2660.00

2655.00

2650.00

2645.00



LEGEND:

- (7) STREAMBED COBBLES - 10 IN.
- (8) ROCK FOR EROSION AND SCOUR PROTECTION - CLASS B
- (9) FILTER BLANKET
- (10) BOULDER - FOUR MAN
- (11) NATIVE MATERIAL
- (12) WILLOW STAKES
- (13) STREAMBED BOULDER - ONE MAN



PROJECT VOLUME / AREA BELOW OHWM
 Length of Project: 125 LF
 Excavation Volume: 155 CY
 Dewatered Area: 4,200 SF
 Fill Volume: 157 CY
 Excavation/Fill Area: 1150 SF

MANASTASH ROAD BRIDGE REPLACEMENT - TYPICAL STREAM CROSS SECTION 3

USACE REF. #:

APPLICANT: Kittitas County Public Works

LOCATION: T17N, R16E, S13

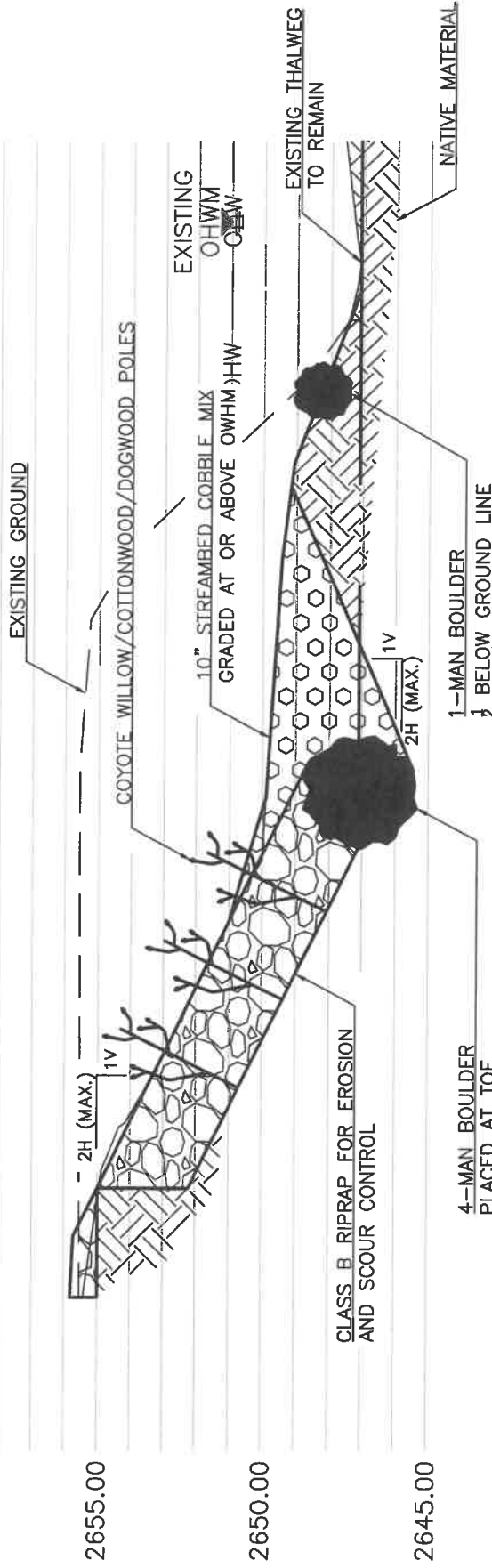
SHEET: 8 OF 11

DATE: 01/16/2018

PROPOSED PROJECT: The project replaces a bridge over South Fork Manastash Creek near Ellensburg, Washington. The existing structure is structurally deficient and is in need of replacement.

TYPICAL BANK REVETMENT DETAIL

2660.00



2655.00

2650.00

2645.00

PROJECT VOLUME / AREA BELOW OHWM
 Length of Project: 125 LF
 Excavation Volume: 155 CY
 Dewatered Area: 4,200 SF
 Fill Volume: 157 CY
 Excavation/Fill Area: 1150 SF



MANASTASH ROAD BRIDGE REPLACEMENT - BANK PROTECTION DETAIL

USACE REF. #:

LOCATION: T17N, R16E, S13

PROPOSED PROJECT: The project replaces a bridge over South Fork Manastash Creek near Ellensburg, Washington. The existing structure is structurally deficient and is in need of replacement.

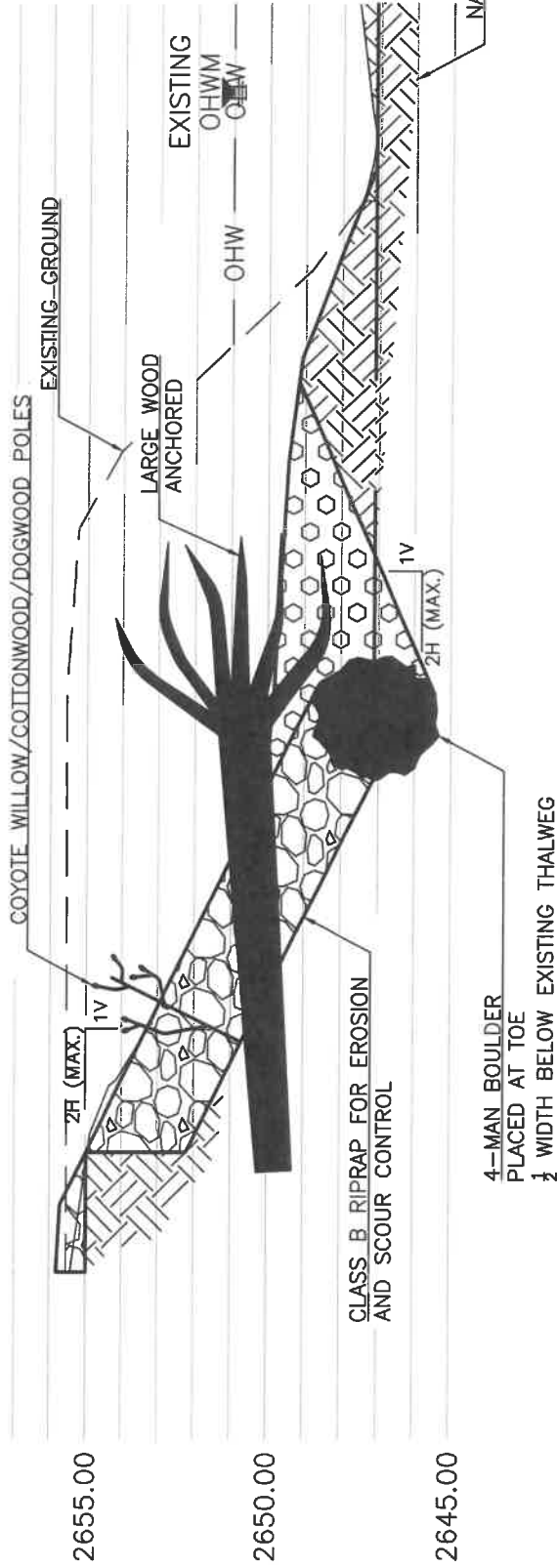
APPLICANT: Kittitas County Public Works

SHEET: 9 OF 11

DATE: 01/16/2018

TYPICAL LARGE WOOD DETAIL

2660.00



2655.00

2650.00

2645.00



PROJECT VOLUME / AREA BELOW OHWM
 Length of Project: 125 LF
 Excavation Volume: 155 CY
 Dewatered Area: 4,200 SF
 Fill Volume: 157 CY
 Excavation/Fill Area: 1150 SF

MANASTASH ROAD BRIDGE REPLACEMENT - LARGE WOOD DETAIL

USACE REF. #:

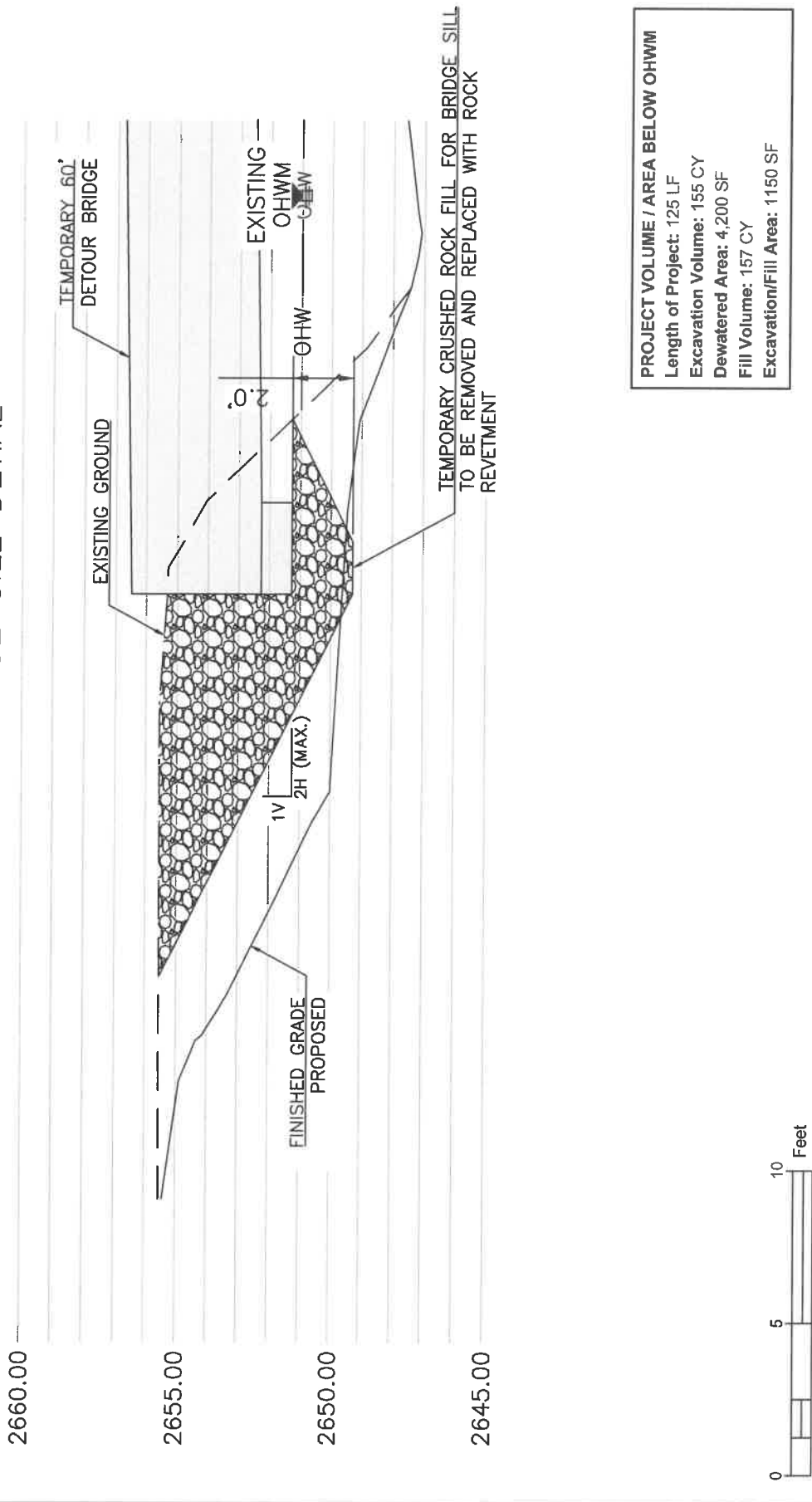
APPLICANT: Kittitas County Public Works

LOCATION: T17N, R16E, S13

SHEET: 10 OF 11 DATE: 01/16/2018

PROPOSED PROJECT: The project replaces a bridge over South Fork Manastash Creek near Ellensburg, Washington. The existing structure is structurally deficient and is in need of replacement.

TYPICAL DETOUR BRIDGE SILL DETAIL



PROJECT VOLUME / AREA BELOW OHWM
 Length of Project: 125 LF
 Excavation Volume: 155 CY
 Dewatered Area: 4,200 SF
 Fill Volume: 157 CY
 Excavation/Fill Area: 1150 SF

MANASTASH ROAD BRIDGE REPLACEMENT - TEMPORARY BRIDGE SILL DETAIL

<p>USACE REF. #:</p> <p>APPLICANT: Kittitas County Public Works</p>	<p>LOCATION: T17N, R16E, S13</p> <p>SHEET: 11 OF 11 DATE: 01/16/2018</p>	<p>PROPOSED PROJECT: The project replaces a bridge over Manastash Creek near Ellensburg, Washington. The existing structure is structurally deficient and is in need of replacement.</p>
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Photo 1. Manastash Road Bridge.



Photo 2. Damaged bridge girder.



Photo 3. Damaged bridge girder and exposed rebar.



Photo 4. Damaged bridge girder and exposed rebar.



Photo 5. Scour on the north bank of Manastash Creek.



Photo 6. Proposed detour route on north side of bridge.



Photo 7. Vegetation on north side of bridge.



32 North 3rd Street
Suite 304
Yakima, WA 98901
www.jacobs.com

February 15, 2018

Attention: Dan Carlson
Kittitas County Community Development Services
411 N. Ruby Street, Suite 2
Ellensburg, WA 98926

**Subject: Kittitas County Public Works; Manastash Creek Bridge Replacement Project
Request for SEPA, Critical Areas, and Shoreline Permit Exemptions**

Dear Dan:

The intent of this letter is to request exemption status for SEPA, Critical Areas Ordinances, and Shoreline Development Permits for replacement of the Manastash Creek Bridge by Kittitas County Public Works. Documentation and justification for these exemptions are provided herein and in the enclosed information. The project Joint Aquatic Resources Permit Application (JARPA) is enclosed for your reference. These forms provide documentation of project effects on environmental resources.

Also enclosed is a Kittitas County Shoreline Exemption Permitting application.

Project Description

The project will replace the Manastash Road Bridge over South Fork Manastash Creek. The bridge is rated as structurally deficient, and is currently load rated. The project will include the complete removal of the existing 30-foot span and abutments and the construction of a new structure on the same alignment. Manastash Road serves as access to rural residences, a Washington Department of Natural Resources snow park during the winter months, and a main arterial for public access to U.S. Forest Service roads.

The existing bridge girders have deteriorated and are spalling in several locations, exposing structural rebar. In addition to deterioration to the bridge girders, the lateral movement of Manastash Creek has caused bank erosion and is undermining the northeastern bridge abutment. Scour will continue, as the current thalweg is directly against this abutment. Due to the deteriorated conditions and active scour, the immediate replacement of the bridge is necessary for continued access and use of Manastash Road.

SEPA

Washington Administrative Code (WAC) 197-11-800 defines categorical exemptions from threshold determinations for proposed actions.

WAC 197-11-800(27) **Structurally deficient city, town and county bridges.** The repair, reconstruction, restoration, retrofitting, or replacement of a structurally deficient city, town or county bridge shall be exempt as long as the action:



February 15, 2018

Request for SEPA, Critical Areas, and Shoreline Permit Exemptions

(a) Occurs within the existing right of way and in a manner that substantially conforms to the preexisting design, function, and location as the original except to meet current engineering standards or environmental permit requirements; and

(b) The action does not result in addition of automobile lanes, a change in capacity, or a change in functional use of the facility.

"Structurally deficient" means a bridge that is classified as in poor condition under the state bridge condition rating system and is reported by the state to the national bridge inventory as having a deck, superstructure, or substructure rating of 4 or below. Structurally deficient bridges are characterized by deteriorated conditions of significant bridge elements and potentially reduced load-carrying capacity.

The project meets this SEPA exemption because:

- The current bridge is rated at 4 for substructure elements and is therefore classified as structurally deficient.
- The project will occur within existing right of way and the new structure will have the same design and function.
- The new structure is designed in accordance with Washington Department of Fish and Wildlife stream crossing design guidelines
- There will be no change in capacity of the roadway as a result of the new structure.

Shoreline Development Permit

The project is located within a Rural Conservancy Shoreline designation area. The project is exempt from Shoreline Development Permits as described below.

WAC 173-27-040(2)(b) and Kittitas County Code (KCC) 17B.07.030(2)(b) define actions which are exempt from substantial development permits under the Shoreline Management Act.

These codes state: The following developments shall not require substantial development permits: Normal maintenance or repair of existing structures or developments, including damage by accident, fire or elements. "Normal maintenance" includes those usual acts to prevent a decline, lapse, or cessation from a lawfully established condition. "Normal repair" means to restore a development to a state comparable to its original condition, including but not limited to its size, shape, configuration, location and external appearance, within a reasonable period after decay or partial destruction, except where repair causes substantial adverse effects to shoreline resource or environment. Replacement of a structure or development may be authorized as repair where such replacement is the common method of repair for the type of structure or development and the replacement structure or development is comparable to the original structure or development including but not limited to its size, shape, configuration, location and external appearance and the replacement does not cause substantial adverse effects to shoreline resources or environment.

The proposed project is required due to the structural deficiency and unsafe condition of the bridge. The replacement of the structure is in accordance with Washington Department of Fish and Wildlife stream



February 15, 2018

Request for SEPA, Critical Areas, and Shoreline Permit Exemptions

crossing guidelines, which define the common method of repair. The new structure is similar in appearance and function, and will not cause adverse effects to the shoreline environment. The project is considered beneficial in that it removes a constriction, restores channel processes with a wider structure, and improves aquatic habitat.

A Shoreline Exemption Permitting Application is attached for your review and use.

Critical Areas

The project is located in the 100-year floodplain of South Fork Manastash Creek. The project will not affect wetlands or other critical areas.

Revised Code of Washington (RCW) 36.70A.170 and 36.70A.060, and KCC Chapter 17A.03.020 define the management of Critical Areas.

KCC 17A.03.020(5) states activities are exempt when: *Reconstruction as a result of destruction by a natural disaster or disintegration over time, maintenance, or remodeling of structures, provided that such reconstruction, maintenance, or remodeling does not involve an expansion of the structure's footprint when located within a critical area. Any such activity shall nevertheless comply with the county's flood damage prevention ordinance, No. 93-18.*

Through the project will provide a bridge with a larger hydraulic opening, the proposed project meets the criteria for this exemption because the footprint remains the same and the replacement bridge will not expand into any critical areas. The large wood placed as part of the project will benefit aquatic habitat, and re-planting will occur of any impacted riparian areas. Public Works completed a hydraulic model of the replacement structure, which will result in no impact to frequently flooded areas (on file with Public Works).

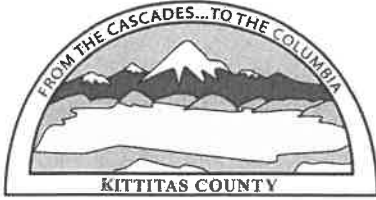
Jacobs, as an agent for Kittitas County Public Works, is requesting exemptions from SEPA, Shoreline Development Permits, and Growth Management Act Critical Areas Ordinance permits for the proposed project. Please let me know of any questions, or if you require any additional information.

Sincerely,

Craig Broadhead
Eastern WA Environmental Practice Lead
Jacobs Engineering Group

Encl: Kittitas County Shoreline Exemption Application
Project JARPA and drawings

Cc w/encl: Lucas Huck, Kittitas County Engineer



Kittitas County

411 N. Ruby St., Suite 2, Ellensburg WA
98926
509-962-7506
<https://www.co.kittitas.wa.us/cds/>
cds@co.kittitas.wa.us

INVOICE

Date: 22-Feb-18

Lucas Huck
411 NORTH RUBY STREET SUITE 1
ELLENSBURG, WA 98926

Application No.: SX-18-00006

Parcel No.: 449136

Project:

Subdivision:

Permit Type: Shorelines Exemption

BLOCK / LOT

Site Address: UNKNOWN
Kittitas County, WA UNKNOWN

Description	Fee Amount	Paid/Credit	Balance Due
Shoreline Exemption	\$590.00	\$0.00	\$590.00

Total Fee Amount:	\$590.00
Total Paid Credits:	\$0.00
Balance Due:	\$590.00

PAYMENT DUE UPON RECEIPT

Contacts:

Type	Name	Address
OWNER	STATE OF WASHINGTON	PO BOX 47014 DEPT. NATURAL RESOURCES OLYMPIA, WA 98504-7014
AUTHORIZED AGENT	BROADHEAD, CRAIG 509-312-0375	32 NORTH 3RD STREET YAKIMA, WA 98901
APPLICANT	Lucas Huck 509-962-7523	411 NORTH RUBY STREET SUITE 1 ELLENSBURG, WA 98926