Project Site Inspection

Project Name: Abell bridge installation/culvert removal

Project Number: 04-1056

Inspection Date: 11-19-06

Person present for site visit (name and affiliation): Steve DeCook, DNR

Stream flow conditions (high, normal, low flow): normal

Photos (usually five angles – upstream looking at structure, downstream looking at structure, road approach photo, stream habitat up and down, construction photos if available): Provide electronic jpeg images. Provide a CD of photos attached to this report.

List:

Engineering Firm completing design – Name, address, phone number

- 1. Engineers Inc. 11680 Slater Ave. NE Kirkland, WA 98034 (425) 823-9903
- 2. Central Pre-mix 922 N. Carnahan Spokane, WA 99212 (509) 533-0262
 - a. Spokane Crane Service 1800 E. Trent Ave. Spokane, WA 99202 (509) 533-6692

Contractor - Name, address, phone number

- 1. CTSC PO Box 184 Coulee Dam, WA 99116 (509) 634-2537
 - a. Whitelaw Const. 807 Spruce St. Coulee Dam, WA 99116 (509) 633-0499
- 2. Mid Mt. Surveyors 669 W. Curlew Lake Rd. Republic, WA 99166 (509) 775-3563
- 3. Water Natural Resources Group PO Box 28755 Spokane, WA 99228 (509) 468-4876

Notes from sponsor: (Construction challenges, change orders, things they learned, or would do differently next time):

The Project Implementation process began in mid-July of 2006. Colville Tribal Service Corporation (CTSC) was the selected contractor to carry out "Work Elements 1 and 2". Work Element 1 was the removal of the existing 90 inch diameter culvert and contouring of the stream channel back to a natural state. This also included LWD placement at two locations which included the culvert removal area and downstream of the bridge replacement area. The LWD placement strategy was designed by Larry Domiguez WADNR and implementation was reviewed by myself and Steve DeCook WADNR. Work Element 2 included appropriate excavation and onsite construction of bridge piers and footings to bridge specifications. The excavation portion, large rock armoring of the piers, and rock mat placement was performed by CTSC, while the footing and pier construction was sub-contracted by CTSC to Whitelaw

Construction. Bridge piers and footings were completed, including the appropriate curing time for the cement, by approximately the first week of October.

Placement of the bridge structure proved to be a challenge due to weight load restrictions for the appropriate size cranes needed to complete the task. Central Pre-mix Pre-stress Co. was the company contracted to construct the bridge, transport the bridge structures to the site and final placement of the bridge structures, including appropriate welding, bolt placement and patching of the bridge surface after placement. Spokane Crane was sub-contracted by Central Pre-mix Pre-stress Co. for the structure placement. Originally a crane had been selected to do the work but was unable to reach the site due to the weight load restrictions on a Ferry County bridge located on the Inchelium Hwy crossing over Sherman Cr. At this time CTSC had completed their contracted LWD placement located in the side channel downstream of the proposed bridge location. Through coordination with Central Pre-mix Pre-stress Co. and Spokane Crane the decision was made to use two smaller 50 ton cranes, including a 50 ton Hydro and a 50 ton all-terrain crane. At the request of Central Pre-mix Pre-stress Co. we made an amendment to the CTSC Contract, adding approximately \$4,426 for an excavator to prepare the site for the all-terrain crane to cross Barnaby CR. and gain access to the south side of the bridge placement location. In addition, some of the LWD previously placed within a side channel had to be temporarily removed to allow the all-terrain crane access to the south side of the creek. During the bridge installation the CTSC excavator remained onsite to assist Spokane Crane and to replace the LWD that had been removed for the crane access to the south side of the Creek after installation was completed. The placement of the Bridge structures was completed by approximately the second week in October. Whitelaw Construction, sub-contracted under CTSC, then returned to the site the third week in October to form up the final top portion of the piers. At this time Central Pre-mix Pre-stress Co. returned to the site to finish bolting and patching of the bridge surface. CTSC then back-filled the approaches and seeded all disturbed areas.

Sponsor Name, Eric Krausz, CCT F&W Bilogist

Project Inspection: Note what was observed – short description Visited site on 11-19-06. Recent November rains increased the water flow. Pictures were taken. Wood placement was completed. Old removed culvert was still on site and is scheduled to be re-installed in another creek on the property. Bridge (45' x 16') looked fine. Backfill on the approaches looked good – some settling may occur over winter. Grass seeding was completed at all designated locations.

No additional FREP trees were cut down during the project. Ford was abandoned.