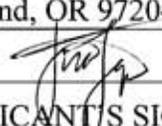
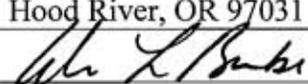


USDA. FOREST SERVICE
 COLUMBIA RIVER GORGE NATIONAL SCENIC AREA
 902 WASCO AVENUE, SUITE 200
 HOOD RIVER, OR 97031

Telephone: 541-308-1700
 Fax: 541-386-1916

PROJECT REVIEW APPLICATION

DATE OF APPLICATION: 12/19/2011

APPLICANT(S)			PROPERTY OWNERS		
Lower Columbia Estuary Partnership (partner with US Forest Service)			US Forest Service		
MAILING ADDRESS			MAILING ADDRESS		
811 SW Naito Parkway, Suite 410 Portland, OR 97204			902 Wasco Ave, Suite 200 Hood River, OR 97031		
					
12/21/2011			12/19/11		
APPLICANT'S SIGNATURE AND DATE			PROPERTY OWNER'S SIGNATURE AND DATE		
PHONE: 503-226-1565 ext 235			PHONE: 541-308-1700		
E-MAIL: cCollins@lcrep.org			E-MAIL: crgnsa@fs.fed.us		
LOCATION OF PROPERTY			PROPERTY ADDRESS (IF APPLICABLE)		
TOWNSHIP: IN	RANGE: 6E	SECTION: 4	Horsetail wetlands		
QUARTER SECTION:		TAX LOT: 1N6E04- 00100			
PARCEL SIZE (ACRES): 200			COUNTY: Multnomah		
EXISTING LAND USE: Open Space			STATE:OR		

PROJECT DESCRIPTION: Describe your proposed project, including details (plans, elevations, and/or photos) on structures to be built, location and types of utilities and infrastructure, drainfields, accessory buildings, ground leveling, and filling, or any other relevant activity or mitigation measures proposed. Use additional sheets as necessary:

This PIT tag reader and solar panel will be installed temporarily to collect data on listed fish species using the Horsetail wetlands. LCREP will be installing this in collaboration with NOAA. The unit will be installed by hand this winter (2011-2012) to begin collecting data before the high flows on the Columbia River in June and before the restoration work begins in Aug. 2010. The location of the solar panels is within the buffer zones of the wetland and is in an area being evaluated for earth work as a result of the planned restoration. The soil disturbance associated with this pit tag reader is located in an

area that has been surveyed for resource concerns as a result of the NEPA being completed for the restoration project (to be reviewed in Jan-Feb 2012).

Description of Pit Tag Array Design:

The Lower Columbia River Estuary Partnership (Estuary Partnership) has funding through the Bonneville Power Administration to install a Passive Induced Transponder (PIT) tag array at Horsetail Creek in the Columbia River Gorge. The PIT tag array will be installed on either end of the culvert to record fish going into and out of the I-84 culvert. The purpose of the PIT tag array is to assess fish passage through the culvert, residence times in Horsetail creek and gauge effects of the potential restoration work upstream and in the culvert. The first year of data from the PIT tag array will provide pre-construction, baseline data at the culvert in order to assess the effectiveness of the restoration effort. NOAA NMFS (NOAA) will be conducting the PIT tag array installation, maintenance and data collection.

NOAA will be using the IS1001-MTS PIT tag array system at Horsetail Creek. The power requirements for the FS1001-MTS Master Controller unit and 10 antenna control nodes (ACNs; 5 on each end of the culvert) is 50 watts per hour. NOAA will need to install a solar array at the site capable of producing about 1.2 kilowatts of power. The proposed solar array will require about 81 square feet of solar panels (approximately 8 feet by 10 feet) and will consist of either four 280 watt panels or six 190 watt panels. The panels will be mounted atop a 4 or 6 inch pole and sit approximately 10-12 feet above ground level. Such a height is necessary due to the extremely high water levels observed in late June early July. Placement of the solar array will be along the North bank of Horsetail Creek (Lat/Long is 45.591301°/-122.075767°) as high up the bank and near the tree line as possible, without compromising (shading) the panels. The solar panels will be obscured by leaf cover in the spring/summer but may be slightly more visible in the fall/winter when deciduous trees have shed their leaves.

Attached are photos showing a satellite view of the approximate location of the solar panels and a representation of what the proposed solar array will look like at this site:





Schedule:

- Drill the required holes in culvert and install strike anchors (January)
- Build a test antenna and install with MUX unit and batteries in 'job box' to test for noise, interference (from steel rebar) and sensitivity (January)
- Have antennas fabricated and mounted at the site (January)
- Install solar power generation (pole/platform and panels) (January, contingent on USFS approval)
- Placement of the Master control unit, modem and batteries and final hook-up and performance testing (March)

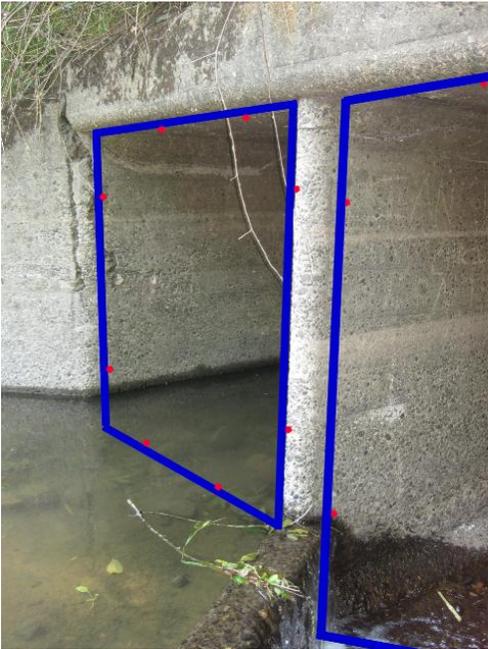
Culvert Installation Figures:



Downstream view of culvert and mounting locations



Upstream view of culvert and mounting locations



Upstream close-up view of culvert and mounting locations



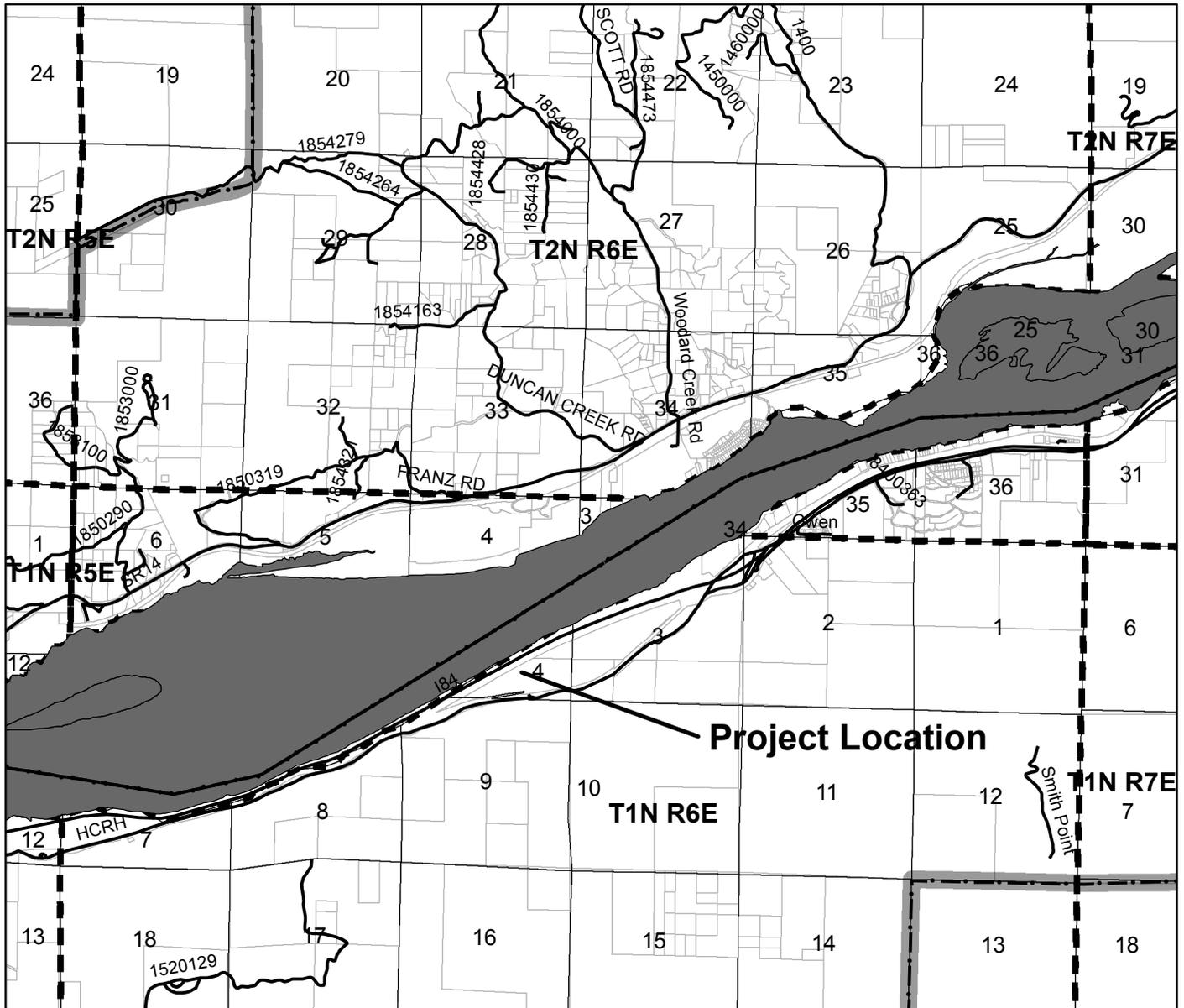
Eye on bolt attachment



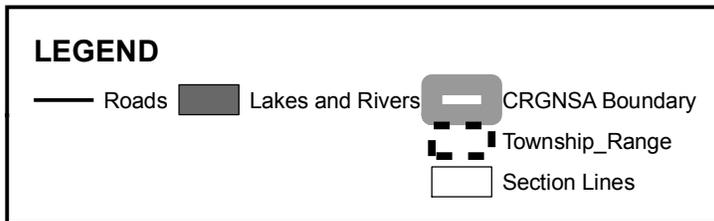
Lashing for attaching pipe antennas to eyebolt

Temporary Fish Pit Tag Reading Monitor, CD-12-01-S

Lower Columbia River Estuary Partnership



0 0.25 0.5 1 1.5 2 Miles



This map was produced by the Columbia River Gorge National Scenic Area (CRGNSA). It is compiled from many different data sources. The CRGNSA is not responsible for the use or misuse of any information represented here. For additional information contact the Columbia River Gorge National Scenic Area office at: (541) 308-1700.

PIT Tag Reader Temporary Installation Site Plan

