216-8205-14356

Section I
APPLICANT INFORMATION

Type in the information for Sections I and II.

Name of project: Upper Grande Ronde Culvert Replacements Project

OWEB funds requested: $87,505.00 **Total cost of project:** $472,842.00

PROJECT LOCATION:

This project occurs in one region only. Region 1 ☐ Region 2 ☐ Region 3 ☐ Region 4 ☐ Region 5 ☒ Region 6 ☐

This project occurs in multiple regions. Check all that apply. Region 1 ☐ Region 2 ☐ Region 3 ☐ Region 4 ☐ Region 5 ☐ Region 6 ☐

This project occurs statewide / in all regions. ☐

This project occurs at (check one): ☐ Site unknown at this time ☐ A single site ☒ Multiple sites

Watershed Name(s)	County or Counties
Upper Grande Ronde; Limber Jim Creek and Chicken Creek Subwatersheds	Union

Township, Range, Section(s) (e.g., T1N, R5E, S12)	Longitude, Latitude (e.g., -123.789, 45.613) (required for federal/state reporting)	Watershed code(s) – Please note the 10-digit hydrologic unit code, previously 5th Field HUC
T5S, R36E, S20, 29; T6S, R35E, S10	45.05099, -118.40574; 45.09447, -118.33499; 45.10931, -118.32576	1706010403

Applicant	**Project Manager**
Name: Jeff Oveson	**Name:** Joe Platz
Organization: Grande Ronde Model Watershed	**Organization:** US Forest Service
Address: 1114 J Ave	**Address:** 3502 HWY 30
La Grande, OR 97850	La Grande, OR 97850
Phone: 541-663-0570	**Phone:** 541-962-8571
Fax: 541-962-1585	**Fax:** 541-962-8580
Email: jeff@grmw.org	**Email:** jplatz@fs.fed.us

Payee	**Landowner(s)**
Name: Mary Estes	☒ **Public: Agency:** USFS
Organization: Grande Ronde Model Watershed	☐ **Private: Name(s):**
Address: 1114 J Ave	
La Grande, OR 97850	
Phone: 541-663-0570	
Fax: 541-962-1585	
Email: mary@grmw.org	

CERTIFICATION:

I certify that this application is a true and accurate representation of the proposed work for watershed restoration and that I am authorized to sign as the Applicant or Co-Applicant. By the following signature, the Applicant certifies that they are aware of the requirements (*see Application Instructions*) of an OWEB grant and are prepared to implement the project if awarded.

Applicant Signature: _____ Date: 10/31/2016

Print Name: JEFF OVESON Title: EXECUTIVE DIRECTOR

Co-Applicant Signature: _____ Date: 10/11/16

Print Name: Joe Platz Agency: USFS

Section II
PROJECT INFORMATION

1. **Abstract.** In approximately 200 words, 1) identify the project location, 2) state the watershed issue or problem to be addressed, 3) the proposed solution including the area or other measurable units to be treated, 4) any proposed effectiveness monitoring, and 5) how OWEB funds will be used.
Three culvert replacments are being proposed in the upper Grande Ronde River watershed within Union County; one on Limber Jim Creek, one on North Fork Limber Jim Creek and one on North Fork of West Chicken Creek. All three pipes are round, undersized, and without native streambed. This project would replace the culverts with arch pipes or concrete box culverts that will have native streambed, are capable of passing a 100 year flow event and meet ODFW fish passage criteria. Monitoring will include established photo points and culvert condition surveys. The culverts will be rehabilitated, seeded, mulched and planted. OWEB and BPA funds will be used for contracts and materials.

2. **Has this project or any element of this project, ever been submitted in a previous application(s) to OWEB?** ☐ Yes ☒ No

   If yes, what was the application number(s)?

3. **Is this project, or any element of this project, a continuation of a previously funded OWEB restoration project(s)?** ☐ Yes ☒ No

   If yes, what was the grant number(s)?

4. **Is this project a result of a previously funded OWEB Technical Assistance project(s)?** ☐ Yes ☒ No

   If yes, what was the grant number(s)?

5. **Does this application propose a grant for a property in which OWEB previously invested funds for purchase of fee title or a conservation easement; or is OWEB currently considering an acquisition grant for this property?** ☐ Yes ☒ No

   If yes, what is the grant number(s)?

6. **Is this project related to a proposed or funded Oregon State Weed Board grant application(s)?** ☐ Yes ☒ No

   If yes, list the month and year, or grant application(s) number, and briefly describe how this project is related to the Weed Board application or grant.

7. **Project Partners.** Show all anticipated funding sources, and indicate the dollar value for cash or in-kind contributions. Be sure to provide a dollar value for each funding source. If the funding source is providing in-kind contributions, briefly describe the nature of the contribution in the Funding Source Column. Check the appropriate box to denote if the funding status is secured or pending. In the Amount/Value Column, provide a total dollar amount or value for each funding source.

Funding Source Name the Partner and what their contribution is.	Cash	In-Kind	Secured (x)	Pending (x)	Amount/Value
OWEB	$87,499.00	$	☐	☒	$87,505.00
Landowner(s) or other partners: USFS	$3,225.00	$8,730.00	☒	☐	$11,955.00
CTUIR	$110,152.00	$	☒	☐	$110,152.00
GRMW/BPA	$263,230.00	$	☒	☐	$263,230.00
	$	$	☐	☐	$
	$	$	☐	☐	$

	$	**$**	☐	☐	**$**
	$	**$**	☐	☐	**$**
	$	**$**	☐	☐	**$**
	$	**$**	☐	☐	**$**
	$	**$**	☐	☐	**$**
	$	**$**	☐	☐	**$**
Total Estimated Funds (add all amounts in the far-right Column):					*$472,842.00

* The total should equal the total cost of the project on page 1 of the application.

8. Have any conditions been placed on other funds that may affect completion? ☐ **Yes** ☒ **No**

If yes, explain:

9. Are you requesting OWEB funds for Effectiveness Monitoring? ☐ **Yes** ☒ **No**

If you check "Yes", follow the instructions in Question R17

10. Are you requesting OWEB funds for Plant Establishment? ☐ **Yes** ☒ **No**

If you check "Yes", follow the instructions in Question R18

Section III
SPECIFIC RESTORATION PROJECT ACTIVITY

These essay questions and their answers are designed to guide you and reviewers through a logical process of understanding and identifying the problem to "fixing" the problem and measuring for success. **Refer to the Application Instructions for clarification and helpful examples.**

You may use the application form to respond to the questions, using additional sheets of paper as necessary.

All PDF pages should be 8½″ x 11″ page size. Do not use color highlights for text emphasis or in tables as the highlight turns black when the application is scanned. If the project involves multiple sites, be specific for each. If the question is in parts (e.g., "a" and "b"), make sure you answer in parts. **Refer to the Application Instructions for clarification and helpful examples.**

R1. Contextual Overview

Provide the location and significance of the project including why that location was chosen and a brief explanation of the history of the issues leading to the project. Describe the project in the context of the landscape including the key water quality, water quantity, species, habitat, land use and resource management issues (physical or social) that are proposed to be addressed in that watershed. **See the Application Instructions for clarification.**

Limber Jim, North Fork Limber Jim, and North Fork West Chicken Creeks are streams where culvert replacements would occur. All three of the pipes are round, undersized, and without native streambed. This project would replace the culverts with arch pipes or concrete box culverts that have native streambed, are capable of passing a 100 year event and meet ODFW fish passage criteria.

Miles of habitat by stream for listed fish species

Stream Name	Chinook Habitat (Miles)			Steelhead Habitat (Miles)			Bull Trout Habitat (Miles)			
	Spawn/ Rear	Rear Only	*DCH	Spawn	Rear	DCH	FMO	Spawn	Rear	DCH
Limber Jim Creek	1.7	0.8	4.6	4.6	4.6	4.6	4.3	3.8	3.8	8.1
N. Fk. Limber Jim	0	0	0	1.6	1.6	1.6	0	0	0	0
N. Fk. West Chicken Creek	0	0	0	0	1.0	1.0	0	0	0	0
TOTALS	**1.7**	**0.8**	**4.6**	**6.2**	**7.2**	**7.2**	**4.3**	**3.8**	**3.8**	**8.1**

DCH=designated critical habitat; FMO=foraging, migration, overwintering.

***DCH for chinook salmon includes all accessible waters upstream of distribution.**

The culvert replacement on Limber Jim Creek is approximately .6 miles upstream of the confluence with the Grande Ronde. Replacing this culvert will open up 1.1 miles of spawning and rearing (S&R) habitat for Chinook and 4 miles of DCH for Chinook, four miles of S&R and DCH for steelhead, and 3.7 miles of FMO, 3.2 miles of S&R and 7.5 miles of DCH for bull trout. The culvert replacement on North Fork West Chicken Creek will provide habitat to approximately 1 mile of steelhead habitat, rearing and migration.

Habitat surveys for Limber Jim Creek and North Fork Limber Jim Creek

Stream/Year Surveyed	Survey Length (miles)	Pools (#/mile)	Wetted Width (ft)	Stable Banks (%)	W/D Ratio	LWD (pcs/mi)	Pebble Counts <6 mm*
Limber Jim Creek/2013	3.2	61	8.7	97	13.0	25	24.28
N. Fk. Limber Jim Cr/1991	4.5	19	5.8	ND	9.6	88	ND

R2. Problems to be Addressed

Provide information specific to the project: a) The specific problem(s) you are addressing; and b) the *root* cause(s) of the problem(s). **DO NOT describe the project here; you will do so in question #R3.** You may add narrative in addition to the table.

Specific Problem(s)	Root Cause(s) of the Problem
Fish passage	All three of the pipes are round, undersized, and without native streambed. The culvert on North Fork West Chicken Creek is also perched with >12 inch drop on the outlet.

R3. Project Description

Using the table below, provide a description of the project that describes the restoration activities to occur (e.g., direct flow, remove 36″ culvert, construct free spanning bridge, place 12 three log clusters between RM 44 and 52, etc.), including a description of the methodologies (e.g., juniper – burning or cutting; tree release – manual or herbicide; etc.) and the equipment planned for use. In addition, describe any Project Management functions/ activities necessary to implement the project (e.g., acquire permits or landowner approval; solicit bids, award contracts, etc.). The degree of detail should match the project complexity and technical difficulty to allow for full evaluation of technical viability. For projects involving multiple sites, be sure to identify and describe them separately, as appropriate. **This is not the place to describe the benefits of the project, but rather the specific elements of the proposed project.** You may add narrative in addition to the table.

Project Element	Proposed Action
Restoration Activity	
Fish passage	Culvert removal/replacement will occur on Limber Jim Creek, North Fork Limber Jim Creek and North Fork West Fork Chicken Creek. All three of the pipes are round, undersized, and without native streambed. This project would replace the culverts with arch pipes or concrete box culverts that have native streambed, are capable of passing a 100 year event and meet ODFW fish passage criteria. Culvert replacements on Limber Jim and North Fork Limber Jim Creeks will provide full passage to 2 miles of chinook, 6.5 miles of steelhead, and 7 miles of bull trout habitat. The culvert replacement on North Fork West Chicken Creek will provide habitat to 1 mile of steelhead habitat. All disturbed areas would be seeded, mulched and planted with 300 conifer and deciduous seedlings. Highlighted Construction requirements: a. Finished road grade shall match the existing road grade. b. All tree, shrub, brush removal shall be coordinated with a Forest Service fish biologist or hydrologist prior to removal. c. When reconstructing the stream channel, consult with District resource specialists as necessary to achieve final grades and layouts as agreed to by the contracting officer. d. Contractor shall use the existing roadway for a staging area. e. All material within the existing bankfull width and the ordinary high water mark shall be streambed simulation material, other than the surface course aggregate under the footings. f. A USFS fish biologist or hydrologist will be on site when the stream channel and streambed are constructed. The biologist or hydrologist will ensure that the substrate is sufficient to pass

	fish and that the material is installed properly to streambed grade level. g. All instream work will be completed during the instream work window (July 1 – July 31) of one year. h. The dewatering plan shall minimize sediment from entering the stream, maintain stream flows downstream of the work area, and shall be designed to minimize impact on construction of the new culvert. i. Fish will be salvaged prior to project implementation with appropriate block nets installed. An electroshocker will be used to salvage the fish. The fish will be placed downstream of project operations. All fish salvage operations will be supervised by a Forest Service fish biologist.
Project Management Activity	
Contract and project administration	This will include preparing and administering contracts, purchasing materials, managing USFS crews, monitoring, and report writing.

R4. Project Objectives

What are the proposed project objectives? Provide specific objectives based on the location, size and significance of the project and provide information on how the objectives could be evaluated. The measurements should be able to be reported to document successful implementation. **See the Application Instructions for the distinction between project objectives and achievement of goals.**

Project Element	Specific Objectives	Measure for Evaluation
Fish Passage	Provide passage to aquatic species during all flows at the three culvert locations.	Visual inspection will confirm fish passage during all flows. Signs of excessive scour, drop height and/or high flow velocities through the culverts will be indicators of potential failure.

R5. Project Design

a) Provide a list of qualifications and experience you will require for the project designer. If a project design has been completed, identify the designer and what qualifications and experience they have.

Project design has or will be completed by Brett Yaw, civil engineer for the US Forest Service. He has been involved in designing/implementing culvert replacement projects on the Wallowa-Whitman since 2013.

b) Describe the design criteria used or proposed and how those criteria take into consideration natural events and conditions (e.g., culvert design to 100-year flood event, wood placement to readjust with higher than bankfull flows, cultivation to retain at least 75% stubble, 4-strand fence to allow for wildlife passage, etc.).

The culvert replacement would involve meeting ODFW criteria for fish passage, which includes a native streambed and appropriate culvert sizes. The culverts will be sized to pass 100 year events, and meet bankfull width criteria.

R6. Design Alternatives

Were alternative designs or solutions considered? (check one) ☒ **Yes** ☐ **No**

If yes, explain why the design or approach proposed was chosen. If no, explain why alternative approaches were not explored.

Alternatives were considered, inlcuding road closure and culvert removal with no replacement. Also, various culvert designs were considered including round pipes, box culverts and bottomless arch culverts. The designs chosen were based off of best desgin for fish passage, feasibility and cost. The chosen designs will provide the best passage, including a 100 year flow event, at the lowest expense. Road closure was not an option at this time.

R7. Proposed Project Schedule

Use the table below to show the anticipated schedule for the project. Add or change the list of project elements to fit your project. **See the Application Instructions for clarification and an example.**

Project Elements	Start Date	End Date	Description
Permit Applications	12/2016	2/2017	Need Army Corps and DSL permits.
Materials Acquisition	10/2016	3/2018	Seedlings, mulch
Bid Solicitation	12/2016	3/2017	Restoration IDIQ contracts
Contracting	12/2016	3/2017	Restoration IDIQ contracts
Construction	5/2017	11/2017	Culvert replacement.
Project Inspection	5/2017	11/2017	" "
Post Project Implementation Review	5/2017	2/2018	Monitoring and reports
Project Maintenance	5/2018	5/2023	Monitoring and maintenance of culverts.

R8. Salmon/Steelhead Populations Targeted and Expected Benefits to Salmon/Steelhead

The information provided will be used by OWEB to better meet federal and state reporting requirements. Completion of this section is required but will not be used to evaluate this application for funding.

☐ This project is **NOT** specifically designed to benefit salmon or steelhead.

► **If you check this box, STOP here and GO TO Question R9.**

Targeted Salmon/Steelhead Populations: Select one or more of the salmon ESUs (Evolutionary Significant Unit) or steelhead DPSs (Distinct Population Segment) that the project will address/benefit. For species where the ESU/DPS name is not known or determined, use the species name with unidentified ESU (e.g., Chinook salmon – unidentified ESU). Additional information on the designation and location of the salmon/steelhead populations can be found at http://www.westcoast.fisheries.noaa.gov/maps_data/species_population_boundaries.html

Chinook Salmon (*Oncorhynchus tshawytscha*)		**Coho Salmon** (*O. kisutch*)	
☐	Deschutes River summer/fall-run ESU	☐	Lower Columbia River ESU
☐	Lower Columbia River ESU	☐	Oregon Coast ESU
☐	Mid-Columbia River spring-run ESU	☐	Southern Oregon/Northern California ESU
☐	Oregon Coast ESU	☐	unidentified ESU
☐	Snake River Fall-run ESU	**Steelhead** (*O. mykiss*)	
☒	Snake River Spring/Summer-run ESU	☐	Klamath Mountains Province DPS
☐	Southern Oregon and Northern California Coastal ESU	☐	Lower Columbia River DPS
☐	Upper Klamath-Trinity Rivers ESU	☐	Middle Columbia River DPS
☐	Upper Willamette River ESU	☐	Oregon Coast DPS
☐	unidentified ESU	☒	Snake River Basin DPS

Chum Salmon (*O. keta*)		☐	Washington Coast DPS (SW Washington)
☐	Columbia River ESU	☐	Upper Willamette River DPS
☐	Pacific Coast ESU	☐	Steelhead/Trout unidentified DPS
☐	unidentified ESU		

Expected Benefits: Write a brief description of the goals and purpose of the project and how it is expected to benefit salmon/steelhead or salmon/steelhead habitat. This answer should be no longer than 2000 characters, which is approximately 330 words. **See Application Instructions for examples and ideas on how to calculate the number of words or characters in your answer.**

Benefits include: Adequate fish passage for all life stages.

R9. Project Relationship to Regional Priorities

If the project specifically implements a plan or larger conservation effort, identify the effort and the specific role of this project. Explain whether the project implements a regional plan (e.g., ESA Recovery Plan, Coastal Coho Assessment, NWPCC Subbasin Plan, and Groundwater Management Area). Specifically identify the relationship between the proposed project and the OWEB Basin Priorities. Priorities can be found on the OWEB website at: www.oregon.gov/OWEB/restoration_priorities.shtml. **(See the Application Instructions for helpful links to various regional plans.)**

The North Fork West Fork Chicken Creek and Limber Jim Creek watersheds are ranked as Tier 1 and Tier 2 watersheds, respectively, within the Upper Grande Ronde Atlas. This indicates that there is great benefit to completing this project for spring/summer chinook populations. The Bonneville Power Administration has indicated that this is a priority project and will be a partner in project funding. All three streams where culvert replacements will take place are identified as critical habitat for Snake River summer steelhead. Limber Jim Creek is also critical habitat for Snake River spring Chinook salmon and bull trout. The North Fork Limber Jim Creek also contains critical habitat for bull trout.

R10. List each component or activity of the project that requires a permit(s) and/or license(s) from a local, state or federal agency or governing body.

Use the table provided to list the activities and permit(s)/license(s) including the entity issuing the permit(s)/license(s). Every project will vary in the number and types of permits and licenses needed. In Column 1 and in separate rows, list the project activities requiring a permit or license. In Column 2, provide the name of the permit or license. In Column 3, provide the name of the entity issuing the permit or license. **See Application Instructions pages 10-12 for clarification and examples before completing the table.**

Project Activity Requiring a Permit/License	Permit or License Name	Entity Issuing Permit or License
NEPA (Environmental analysis)	Signed Decision Memo	USFS and is completed for the 2 Limber Jim culverts (only).
ESA	ESA concurrence	ARBOII (agreement that this programmatic consultation fits project criteria). This is completed for the 2 Limber Jim culverts, only.
Army Corps of Engineers	Permit	Programmatic permit
DSL	Permit	Programmatic permit

R11. Project Relationship to Watershed Processes and Functions

The restoration and protection of natural watershed process is the foundation of achieving watershed health. Since natural watershed processes have been eliminated, altered or reduced in many areas, habitat restoration activities are the primary method for reintroducing the necessary functions to watersheds that have been altered due to past management practices and/or disturbance events. Restoration activities are intended to address the watershed functions necessary to support natural processes that are indicative of healthy watersheds. This includes, but is not

limited to improving water quality, water quantity, habitat complexity, flood plain interaction, vegetation structure, and species diversity.

OWEB wants to be able to track how restoration projects are addressing watershed process and function. Please check all the boxes below that apply to your restoration project. You may add narrative in addition to checking the boxes.

	Project Element	Narrative
☐	Stream complexity	
☐	Riparian vegetation structure	
☐	Species diversity	
☐	Vegetative ground cover	
☐	Floodplain connectivity	
☒	Species migration patterns	
☐	Sediment transport	
☐	Nutrient cycling	
☐	Water quality	
☐	Water quantity	
☐	Water storage	
☐	Hydrologic cycle	
☒	Other (please describe)	This project will provide adequate fish passage for all life stages.

R12. Other Related Conservation Actions

a) Explain how the project complements other efforts under way or completed in the watershed. Identify other restoration, technical assistance, monitoring, assessment or outreach projects, conservation actions and ecological protection efforts in the watershed and explain how this project relates to those actions.

The Limber Jim Fuels Reduction Project is occurring within the Limber Jim Project Area. This will involve thinning (pre)commercially and prescribed fire to improve stand health. This will also improve watershed function. In addition, The Limber Jim Restoration project is scheduled in the same vicinity. This project will improve instream and riparian habitats.

If the project is a continuation of previously completed activities, describe the results of the previous project(s) and identify what you have learned from the implementation of similar project(s).

Not Applicable.

R13. Project Inspection

Identify who will inspect and sign off on the completed project.

Name of Person & Agency/Organization	*Telephone Number*	*Email Address*	*Project Element Inspected*
Joe Platz (USFS, W-W, LAG)	*541-962-8571*	*jplatz@fs.fed.us*	*All project elements.*
Add rows as needed			

R14. Outreach

If your project proposal includes outreach activities (e.g., a site tour for local citizens, landowner meetings, informational materials), please describe the proposed activities and products and why they are necessary for the overall success of the restoration proposal. **For clarification of eligible outreach costs, review the Budget Categories: Definitions and Policy document at:** forms

Not Applicable.

Regional review teams will evaluate the appropriateness of proposed outreach activities with respect to their necessity for success of the restoration project, budget, and other factors.

R15. Project Maintenance and Reporting

Use the table below to document how the project will be maintained over time. State who will maintain the project. Identify their affiliation and provide contact information. In addition, please indicate who will conduct Post-Implementation Status Reporting following project completion.

Name of Person & Agency/Organization and Addresses	Telephone Number Email Address	What will be done and for how long?
Joe Platz USFS, W-W, LAG 3502 HWY 30; LaGrande, OR 97850	541-962-8571 jplatz@fs.fed.us	Photo points and culvert condition surveys will continue, yearly, for 3 years after project completion. These surveys will determine if maintenance is needed.
Add rows as needed		

R16. Budget Development

As of December 26, 2014, the Federal Government released the Uniform Administrative Requirements (OMB Super Circular) that combines eight grant related circulars into one document (2 CFR). This document applies to federal agencies that make federal awards to non-federal entities which can flow down to sub recipients. In light of these changes, please review OWEB's Budget Categories Definitions and Policies before filling out your application budget. Review the full list of OWEB budget categories, definitions, ineligible activities and policies by going to our website and navigating to the forms page.

OWEB staff and application review teams carefully review application budgets and may question how costs were developed. Use this section of the application to explain how project costs were estimated.

Do not lump all contract costs into one row, except when a contractor bids a lump-sum amount for a discrete deliverable. Contract costs should be broken out and should match the scope of work described in the application.

a) Explain how costs were determined for the budget elements.

Brett Yaw used many years of past contract costs, amount and cost of materials, and time to complete implementation tasks to determine the cost for the project.

b) If the budget identifies a contingency amount for specific line item(s) within the Contracted Services and Materials and Supplies budget categories, explain the specific reasons a contingency is needed for each line item.

Not Applicable

◆ **R17. Effectiveness Monitoring.** If you plan to conduct Effectiveness Monitoring beyond post-implementation status reporting and you are requesting more than $3,500 in OWEB funds to support these EM activities, complete the R17 Effectiveness Monitoring Application Insert, print it out and add after Question R16. See the R17 Effectiveness Monitoring Insert Instructions for clarification.

We will be completing effectiveness monitoring beyond post- implementation, but are not requesting funding for post-implementation monitoring. USFS is cost sharing on this monitoring. Monitoring will include:

- Photo points: Monitoring will involve photo points of before and after operations occur. Follow up photo points will occur at year 1, 2 and 3 after project completion**.** This monitoring will occur by Joe Platz.

- Culvert Assessment: An assessment of culvert stability, erosion concerns, associated damage and debris clogs will occur on every year for 3 years. This monitoring will be conducted by Mark Gomez.

- Reports: A final report that describes the actual implementation will be completed in January of 2017/2018. Reports will be completed by Joe Platz.

◆ **R18. Planting Activities.** If you are proposing a Riparian, Upland or Wetland Planting activities and you are requesting more than $3,500 in OWEB funds for planting activities and/or for post-planting activities that are necessary for long-term survival of the plantings, you **must** complete the R18 Planting Activities Insert, print it out and add after Question R17 or R18 as appropriate. Please see the definition of "plant establishment activities" in R18. If you are asking for $3,500 or less, you may answer the questions if you would like the reviewers to have additional information on the planting component of the project. See the R18 Planting Activities Application Insert Instructions for clarification.

I could not find the R18 Activities Insert, so I provided the following information.

Planting funding requested from OWEB/BPA will consist of $735. All other costs will be funded through CTUIR and USFS.

Section IV
WATERSHED RESTORATION BUDGET

IMPORTANT: Read the application instructions and Budget Categories Definitions and Policy Document.

Add additional lines, if necessary.

Totals automatically round to the nearest dollar

A	B	C		D	E	F	G
Itemize projected costs under each of the following categories:	**Unit Number**	**Unit Cost**	**OWEB Funds**	**BPA Funds**	**Cash Match**	**In-Kind Match**	**Total Costs**
SALARIES, WAGES AND BENEFITS. List position titles, include only costs of employees charged to this grant.							
SUBTOTAL (1)			0	0	0	0	0
CONTRACTED SERVICES. Labor, supplies, and materials to be provided by *non-staff* for project implementation.							
Lead Engineer	40	480			19200		19,200
Engineer	180	360			64800		64,800
Fish Biologist	13	341			4433		4,433
Biological Technician (Project Lead)	5	343			1715		1,715
Survey Technician	30	415			12450		12,450
Technician(s)	15	135			2025		2,025
NEPA staff	19	291			5529	8730	14,259
Culvert Cost Estimate	3	54,333	49,000	113999			162,999
Planting, Seeding, & Site Restoration	3	6588	6000	13764			19,764
Clearing and Grubbing	3	2000	2000	4000			6,000
Contractor Surveying	3	3667	3000	8001			11,001
Soil and Erosion Control	3	2333	2000	4999			6,999
Stream Bypass	3	2833	2250	6249			8,499
Structural Excavation	3	3667	2500	8501			11,001
Structure Backfill	3	2267	2000	4801			6,801
General Excavation	3	2233	1500	5199			6,699
Foundation Fill	3	1300	1300	2600			3,900
Stream Simulation	3	3867	2700	8901			11,601
Associated Roadwork	3	2333	2000	4999			6,999
Aggregate Surfacing	3	1733	1800	3399			5,199
Disposal of Existing Structure	3	1567	1500	3201			4,701
Temporary Traffic Control	3	2083		6249			6,249
Misc Work (gates, fences, cattle guards, etc.)	3	2167		6501			6,501
Mobilization 10%	3	9522		28566			28,566
Contingency 10%	3	9522		28566			28,566
SUBTOTAL (2)			79,550	262,495	110,152	8,730	460,927
TRAVEL. Mileage, per diem, lodging, etc. Must use current State of Oregon rates.							
GSA Lease	5	275			1375		1,375
GSA mileage	3000	0.55			1650		1,650
SUBTOTAL (3)			0	0	3,025	0	3,025
MATERIALS/SUPPLIES. Refers to items that are "used up" in the course of the project.							
Native seed	20	10			200		200
Mulch	75	4		300			300
Conifer seedlings	150	1		150			150
Deciduous seedlings	150	1.9		285			285
SUBTOTAL (4)			0	735	200	0	935
EQUIPMENT/SOFTWARE. List portable equipment costing **$300** or more per unit.							
							0
							0
SUBTOTAL (5)			0	0	0	0	0

A	B	C		D	E	F	G
Itemize projected costs under each of the following categories:	Unit Number	Unit Cost	OWEB Funds	BPA Funds	Cash Match	In-Kind Match	Total Costs
OTHER. Costs must be necessary and reasonable for successful completion of this grant.							
SUBTOTAL (6)			0	0	0	0	0
[Add subtotals above] MODIFIED TOTAL DIRECT COSTS (7)			79,550	263,230	113,377	8,730	464,887

GRANT ADMIN. Select one of the methods below. Fill in the requested rate. Compute by multiplying MTDC (7) line by this rate.							
Federally Negotiated Indirect Cost Rate	☐						0
Federally Accepted 10% de minimis	x	10%	7,955				7955
OWEB Negotiated Indirect Cost Rate	☐						0
SUBTOTAL (8)			7955	0	0	0	7955
POST-GRANT. Pre-paid costs ($3,500 or less) that are associated with either post implementation status reporting or effectiveness monitoring or plant							
Post-Implementation Status Reporting ($3,500 or less)	/yr						0
Effectiveness Monitoring ($3,500 or less)	/yr						0
Plant Establishment ($3,500 or less)	/yr						0
SUBTOTAL (9)			0	0	0	0	0

RESTORATION BUDGET TOTAL Totals automatically round to the nearest dollar

RESTORATION BUDGET TOTAL (10) **[Add Category Totals (7), Subtotals (8) and (9)]**	87,505	263,230	113,377	8,730	472,842

EFFECTIVENESS MONITORING BUDGET TOTAL

EFFECTIVENESS MONITORING BUDGET TOTAL (11) **This only applies if you are doing Effectiveness Monitoring; see Application**	0	0	0	0	0

PLANT ESTABLISHMENT BUDGET TOTAL

PLANT ESTABLISHMENT BUDGET TOTAL (12) **This only applies if you are doing a planting project; see Application Instructions**	0	0	0	0	0

GRANT BUDGET TOTAL *Totals automatically round to the nearest dollar

GRANT BUDGET TOTAL **[Add Totals (10), (11), and (12) as applicable]**	87,505	263,230	113,377	8,730	472,842

* The totals for these two columns must mirror the match totals provided in Section II(7) of the application and on the Match

ATTACHMENT A

MATCH FUNDING FORM

Document here the match funding shown on the budget page of your grant application

OWEB accepts all non-OWEB funds as match. An applicant may not use *another OWEB grant* to match an OWEB grant; this includes ODA Weed Board projects because they are funded through OWEB grants. However, an applicant who benefits from a pass-through OWEB agreement with another state agency, by receiving either staff expertise or a grant from that state agency, may use those benefits as match for an OWEB grant. (Example: A grantee may use as match the effort provided by ODFW restoration biologists because OWEB funding for those positions is the result of a pass-through agreement). At the time of application, match funding for OWEB funds requested does not have to be *secured*, but you must show that at least 25% of match funding has been *sought*. On this form, you do not necessarily need to show authorized signatures ("secured match"), but the more match that is secured, the stronger the application. Identify the type of match (cash or in-kind), the status of the match (secured or pending), and either a dollar amount or a dollar value (based on local market rates) of the in-kind contribution. In the table below, the match may be identified as Effectiveness Monitoring (EM), Plant Establishment (PE) or Other (OTHER) Dollar Value. **If you are not requesting funds from OWEB to support effectiveness monitoring or plant establishment, disregard the EM column or the PE column and use only the OTHER column.**

EFFECTIVENESS MONITORING (EM): If you are requesting more than $3,500 in OWEB funds to support Effectiveness Monitoring activities as part of a Watershed Restoration Grant Application and filling out information for Question R17, you must include matching funds which will be used as match for the effectiveness monitoring portion of the project. This is identified in the table below as the EM Dollar Value.

PLANT ESTABLISHMENT (PE): If you are requesting more than $3,500 in OWEB funds to support Plant Establishment as part of a Watershed Restoration Grant Application and filling out information for Question R18, you must include matching funds which will be used as match for the Plant Establishment portion of the application. This is identified in the table below as the PE Dollar Value.

If you have questions about whether your proposed match is eligible or not, see Allowable Match document in OGMS http://apps.wrd.state.or.us/apps/oweb/fiscal/nologin.aspx under Restoration application or contact your local OWEB regional program representative (contact information available in the instructions to this application).

Project Name: Upper Grande Ronde Culvert Replacements Project Applicant: Jeff Oveson

Match Funding Source	Type (√ one)	Status (√ one)**	EM Dollar Value	PE Dollar Value	OTHER Dollar Value	Match Funding Source Signature/Date**
USFS	☐ cash ☒ in kind	☒ secured ☐ pending			$8,730.00	[signature] 11/16/16
USFS	☒ cash ☐ in kind	☒ secured ☐ pending			$3,225.00	[signature] 11/16/16
GRMW/BPA	☒ cash ☐ in kind	☒ secured ☐ pending			$263,230.00	[signature] 11/21/2016
CTUIR	☒ cash ☐ in kind	☐ secured ☒ pending			$110,152.00	
	☐ cash ☐ in kind	☐ secured ☐ pending				
	☐ cash ☐ in kind	☐ secured ☐ pending				
	☐ cash ☐ in kind	☐ secured ☐ pending				

** **IMPORTANT:** If you checked the "Secured" box in the Status Column for any match funding source, you must provide either the signature of an authorized representative of the match source in the final Column, or attach a letter of support from the match funding source that specifically mentions the dollar amount you show in the EM, PE or OTHER Dollar Value Column(s).

216-8205-14356

ATTACHMENT B

LAND USE INFORMATION FORM

This information is needed to determine if the proposed project complies with statewide planning goals and is compatible with local comprehensive plans (ORS 197.180). ***The form must be submitted at the time of application (OAR 695-050-0035(1)(a)) with the applicant completing at least #1 below.*** *The completed and signed form must be submitted before OWEB releases grant funds. OWEB will release grant funds only if the project either is not regulated by, or is compatible with, the local comprehensive plan and zoning ordinance. If a project is regulated by the local comprehensive plan and zoning ordinance, OWEB will void grant agreements for projects the county determines to be incompatible with the local comprehensive plan and zoning ordinance. If the county requires additional local approvals for a project regulated by the local comprehensive plan and zoning ordinance, OWEB will not release grant funds until these conditions are satisfied.*

1. TO BE COMPLETED BY THE APPLICANT/GRANTEE

Applicant/Grantee Name: Jeff Oveson

Project Name: Upper Grande Ronde Culvert Replacement Project

2. TO BE COMPLETED BY CITY/COUNTY OR TRIBAL PLANNING OFFICIAL

Complete this section only after section 1, above, has been completed. Check the box below that applies:

☐ This project is not regulated by the local comprehensive plan and zoning ordinance.

☒ This project has been reviewed and is compatible with the local comprehensive plan and zoning ordinance.

☐ This project has been reviewed and is not compatible with the local comprehensive plan and zoning ordinance.

☐ Compatibility of this project with the local planning ordinance cannot be determined until the following local approvals are obtained:

____ Conditional Use Permit
____ Plan Amendment
__X__ Other
____ Development Permit
____ Zone Change

An application has __X__ has not ____been made for the local approvals checked above.

Scott Hartell
* Signature of Local Official

10-31-16
Date

Print Name: Scott Hartell

Phone: 541 963 -1014

Title: Planning Director

Email: shartell@union-county.org

Must be an authorized signature from your local City/County or Tribal Planning Department, regardless of which box is checked above.

216-8205-14356

ATTACHMENT C

PUBLIC RECORD CERTIFICATION

Oregon Administrative Rule 695-005-0030(4) states that "All applications that involve physical changes or monitoring on private land must include certification from the applicant that the applicant has informed all landowners involved of the existence of the application and has also advised all landowners that all monitoring information obtained on their property is public record. If contact with all landowners was not possible at the time of application, explain why."

INSTRUCTIONS: All applicants must complete Part One. In Part One, if you check the first box, skip Part Two and sign and date in the signature box below. If you check the second box, you must complete Part Two and sign and date in the signature box below.

PART ONE

☒ Public land only (STOP: go to signature box and complete)

☐ Private land only, or a mix of public and private land (complete Part Two and sign and date in the signature box)

PART TWO

☐ I certify that I have informed all participating private landowners involved in the project of the existence of the application, and I have advised all of them that all monitoring information obtained on their property is public record. The following is a complete list of all participating private landowners.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

☐ I certify that contact with all participating private landowners was not possible at the time of application for the following reasons:

Furthermore, I understand that should this project be awarded, I will be required by the terms of the OWEB grant agreement to secure cooperative landowner agreements with all participating private landowners prior to expending Board funds on a property.

APPLICANT/CO-APPLICANT SIGNATURE

Applicant Signature

Date: 10/31/2016

Print Name: JEFF OVESON

Title: EXECUTIVE DIRECTOR

Co-Applicant Signature

Date: 11/1/16

Print Name: Joe Plate

Agency: USFS

ATTACHMENT D

RESTORATION METRICS FORM

OWEB receives a portion of its funds from the federal government and is required to report how its grantees have used both federal and state funds. The information you provide in the following form will be used for federal and state reporting purposes.

Please complete all portions of the form below as they apply to your project (that are funded with both OWEB and non-OWEB funding/inkind contributions; the reported metrics should reflect all of the activities described in this application and identified in the project budget). Submit all pages (do not exclude any pages). Please provide specific values, do not enter values like "2-3" or "<100". Enter your best approximation of what the project will accomplish.

If you have any questions, please contact Cecilia Noyes, OWEB Federal Reporting Coordinator, at 503-986-0204 (cecilia.noyes@state.or.us) or Ginger Lofftus, OWEB PCSRF Reporting Assistant, at 503-986-5372 (ginger.lofftus@state.or.us).

Section 1 - Project Overview

Answer all five questions below, even if you have answered a similar question in a previous section in the grant application.

1. Land Use Setting: CHECK ONE BOX ONLY.

☐ **Urban/Suburban/Exurban** *(Projects located within urban growth boundaries or rural residential areas)*	☒ **Rural** *(Projects located outside urban growth boundaries or rural residential areas.)*

2. Dominant Watershed Setting: CHECK ONE BOX ONLY. Example: Your project involves managing erosion in the upland area with some erosion control extended to the riparian area. Because most of the work is to occur in the upland area, you would check only the Upland box below.

☐ **Estuary** *(where freshwater meets and mixes with saltwater of ocean tides.)*	☐ **Riparian** *(adjacent to a water body, within the active floodplain.)*
☒ **Instream** *(below the ordinary high-water mark or within the active channel — includes fish passage.)*	☐ **Upland** *(above the floodplain.)*
	☐ **Groundwater** *(Projects that recharge groundwater or primarily affect the subsurface water table.)*
☐ **Wetland** *(areas inundated or saturated by surface or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions.*	

3. Total Acres Treated: 0.3 **Total Stream Miles Treated:** 0.05 ***(do not include** upstream stream miles made accessible to fish with passage improvements)*

4. Project Identified in Plan or Watershed Assessment: List the primary watershed/subbasin plan(s) or assessment(s) in which this project type is identified as a priority. The plans identified in Section III, question #R9 should include the plans or assessments listed below. Attach additional page, if needed.

Title	Author(s)	Date
Upper Grande Ronde Atlas	BPA, GRMW, BOR, CTUIR, USFS, USWCD, ODFW	2015

5. Project Monitoring: All OWEB funded restoration projects require post-implementation status reporting including photo point monitoring. Please indicate below: 1) the location of the monitoring activities relative to the project, including photo point locations, 2) whether effectiveness monitoring is planned, and 3) whether additional monitoring will be conducted for this project.

5.1) Identify the location for the planned monitoring activities relative to the restoration project location. Check as many boxes as apply.

☒ Onsite	☐ Downstream	☒ Upstream	☐ Upslope

5.2) ☒ Effectiveness monitoring will be conducted for this project, this can be selected regardless of whether the effectiveness monitoring is funded by OWEB (refer to definition of effectiveness monitoring in the Application Instructions under R17).

5.3) Will this project conduct monitoring activities beyond the required post-implementation status reporting and photo point monitoring?

☐ Yes ☒ No If you answer yes, select the monitoring activities below, if you answer no proceed to Section 2.

Check all proposed monitoring activities

☐ Adult Fish presence/absence/abundance/distribution survey(s)	☐ Riparian vegetation (Presence/Absence)
☐ Juvenile Fish presence/absence/abundance/distribution survey(s)	☐ Spawning surveys
☐ Instream Habitat surveys	☐ Upland vegetation (Presence/Absence)
☐ Macroinvertebrates	☐ Water quality
☐ Noxious weed (Presence/Absence)	☐ Water quantity
☐ Other Biological Monitoring (bird counts, amphibian surveys)	☐ Other (explain): _____

Section 2 - Project Activities

Provide values for each Project Activity applicable to your application. ***Leave blank any Project Activity or metric line that is not appropriate to your application.*** *All data entered in this form should be what you* ***plan*** *to do with the project. Data about* ***completed*** *projects will be reported at the end of the project to the Oregon Watershed Restoration Inventory (OWRI).*

For each activity type where you enter metrics, ***estimate*** *the percentage of the total cost of the project (OWEB and all other funding sources, shown on page 1 of this application) that applies to the activity. The sum of all of the activity cost percentages should equal 100%. Please distribute all administrative, project management and other general project costs among the various project activities when estimating percentages.*

Example*: A project will remove a fish passage barrier, place large boulders instream, and plant a riparian buffer. You would enter the appropriate metrics into the Fish Passage, Instream Habitat, and Riparian Habitat activity sections of this form. Then, estimate the percentage of the total cost of the project for each activity. For instance: 20% towards Fish Passage activities, 25% towards Instream Habitat activities, and 55% towards Riparian Habitat activities.*

Fish Screening Projects: *Projects that result in the installation or improvement of screening systems that prevent fish from passing into areas that do not support fish survival, for example into irrigation diversion channels.*

____ % Estimate the percentage of total cost of the project applied to fish screening activities

New Fish Screens Installed

____ # Estimate the number of new screens installed (do not count diversions where existing screens are replaced)

____ cfs Estimate the cubic feet per second of flow influenced by new screen(s) installed (to nearest 0.01 cfs)

Existing Screens Replaced, repaired or modified

____ # Estimate the number of existing screens replaced, repaired or modified

____ cfs Estimate the cubic feet per second of flow influenced by existing screen(s) screens (to nearest 0.01 cfs)

Fish Passage Improvement: *Projects that improve fish migration by addressing a migration barrier problem.*

Complete sections A-E as they apply to the proposed project. Projects that improve fish passage at road crossings should complete both sections A (define the problem) and B (define the treatment). Non-road crossing improvements are reported in sections C and D. Section E should be completed for all fish passage improvement projects. Refer to the application instructions for additional information and examples.

A. Road Crossings – Define *Existing* Fish Passage Problem

1. Culverts hindering fish passage	**3** # crossings
2. Bridges hindering fish passage	_____ # crossings
3. Fords hindering fish passage	_____ # crossings

B. Road Crossings – Define the Fish Passage *Improvements* to be implemented by this project

1. Culverts installed/improved - *Improvements may include installing baffles inside culverts or installing/improving engineered bypasses (e.g. weirs) directly below a culvert outlet to improve passage.*	**3** # crossings	**8** str. mi with improved access*
2. Bridges installed/improved - *Improvements may include installing/improving engineered bypasses (e.g. weirs) directly below a bridge crossing to improve passage.*	_____ # crossings	_____ str. mi with improved access*
3. Fords installed/improved	_____ # crossings	_____ str. mi with improved access*
4. Road Crossings removed and not replaced	_____ # crossings	_____ str. mi with improved access*

**Estimate stream miles in the main channel and tributaries made more accessible above the crossing(s) (to nearest 0.01 mile). If a barrier exists upstream, report the length made accessible up to that next upstream barrier.*

C. Fish Passage Barriers – Other than Road Crossings

1. Type(s) of barriers to be treated/removed to improve fish passage.	☐ Diversion Dam ☐ Push-up Dam ☐ Wood or Concrete Dam ☐ Weir (not associated with a road crossing) ☐ Logs (not weirs) ☐ Debris ☐ Tidegates ☐ Boulder/Rock Barrier (not weirs) ☐ Landslide Other (explain) _____
2. _____ # Estimate the total number of **non-road** crossing barriers (listed under C.1 above) to be removed or altered to improve passage.	

D. Fish Ladders or Engineered Bypasses (not associated with Road Crossings)

1. Fish ladders will be installed/improved	_____ # fish ladders to be installed/improved
2. Engineered bypasses will be installed/improved. *This includes weirs, rock boulder step pools, and chutes constructed/roughened in bed rock. Do not count engineered bypasses located at a road crossing to improve passage at the crossing. These types of improvements should be identified above in section B as a Road Crossing Fish Passage Improvement.*	_____ # engineered bypasses to be installed/improved

E. Fish Passage Summary Metrics

1. 100% Estimate the percentage of total cost of the project applied to fish passage improvements

2. 8 mi Estimate the total stream miles that will be made more accessible in the main channel and tributaries above the project (to nearest 0.01 mile). *This metric summarizes the stream miles for all of the proposed passage improvements (defined above in Sections A-D). If a barrier exists upstream of the project, report the length made accessible up to that next upstream barrier.*

3. 3 # Estimate the total number of barriers (this includes road crossings, diversion dams, push up dams, wood or concrete dams, weirs, tidegates, etc.) to be removed or altered to improve passage.

4. _____ % Estimate the percentage of fish passage activity costs applied to tidegates. If you do not select tidegate as a type of fish passage barrier for question C.1, leave this value blank. Example: Your project will remove a tidegate. You estimated that 100% of the total project cost will apply to fish passage improvements and one quarter of the fish passage improvements costs will apply to the tidegate removal, you would report 25%.

Instream Flow: *Projects that maintain and/or increase the instream flow of water.* Report irrigation improvements primarily designed to improve water quality under Upland – Agriculture Management Activities. Check all proposed activities.

☐ Irrigation practice improved to increase instream flows (e.g. install diversion headgate, replace open ditches with pipes)	☐ Instream water transfer lease/agreement
☐ This project will dedicate instream flow	☐ Other (explain): _____
☐ Water flow gauges installed to measure water use	

_____ % Estimate the percentage of total cost of the project applied to instream flow activities

_____ mi. Estimate the miles of stream where increased flow is the result of decreased/eliminated water withdrawals

_____ cfs Estimate the increase in flow of water in the stream as a result of conservation effort (cubic feet per second)

_____ mm/dd/yyyy Irrigation practice improvement initial start date

_____ mm/dd/yyyy Irrigation practice improvement final end date (if improvement is permanent enter 12/31/9999)

_____ mm/dd/yyyy Water lease/agreement initial start date of no withdrawal

_____ mm/dd/yyyy Water lease/agreement final end date of no withdrawal (if lease/agreement is permanent, enter 12/31/9999)

Instream Habitat: *Projects that are designed to improve instream habitat conditions.* Check all proposed activities.

☒ Channel reconfiguration and connectivity (e.g., creating instream pools, meanders, improving floodplain connectivity, off-channel habitat, removal or alteration of levee or berm, removal of sediment)	☐ Spawning gravel placement
☐ Channel structure - large wood placement	☐ Plant Removal/control (instream) List scientific names of plants _____
☐ Channel structure - boulder placement	☐ Beaver introduction
☐ Channel structure placement (other than large wood or boulder placements e.g., engineered structures or deflectors, barbs, weirs, etc.)	☐ Carcass or nutrient placement: ☐ salmonid carcass; ☐fish meal brick; ☐other nutrient
☐ Streambank stabilization through resloping and/or placing rocks, logs (e.g. revetments, gabions, barbs), or bioengineering on streambank	☐ Animal species removal (e.g. northern pike minnow, non-native fish, invasive animals)
	☐ Other (explain): _____

54 % Estimate the percentage of total cost of the project applied to instream habitat activities

0.05 mi. Estimate the miles of stream to be treated with instream habitat treatments (to nearest 0.01 mile)

_____ % Estimate the percentage of instream activity costs for carcass or nutrient placements. If you do not select carcass/nutrient placements as an instream habitat activity, leave this value blank. *Example: Your project will place salmon carcasses. You estimated that 25% of the total project cost will apply to instream habitat activities and one half of the instream improvements costs will apply to the carcass placement, you would report 50%.*

Riparian Habitat: *Projects above the ordinary high-water mark of the stream and within the floodplain of the stream.* This includes lakeshores of connected lakes. Check all proposed activities.

☐ Riparian planting (this does not include planting exclusively to repair areas disturbed by restoration activities of this project)	☐ Non-native/noxious plant control
☐ Riparian exclusion fencing (this does not include individual plant protection fencing)	☐ Vegetation management (e.g. prescribed burnings, stand thinning, stand conversions, silviculture)
☐ Water gap development (fenced livestock crossing or livestock bridge)	☐ Debris/structure removal (e.g. tires, appliances, old cars or buildings)
☐ Riparian exclusion by means other than fencing (includes placing obstacles to exclude livestock, people, vehicles, etc.)	☐ Other (explain): _____ *Do not report livestock water developments here; report livestock water developments under upland habitat treatments.*
☐ Conservation grazing management (e.g., rotation grazing)	

_____ % Estimate the percentage of total cost of the project applied to riparian habitat activities

_____ ac. Estimate the acres of riparian habitat to be planted (to nearest 0.1 acres)

_____ ac. Estimate the acres of riparian habitat to be treated for non-native/noxious weeds (to nearest 0.1 acres)

_____ ac. Estimate the total riparian acres to be treated. (to nearest 0.1 acres)

_____ mi. Estimate the miles of riparian streambank to be treated (to nearest 0.01 mi). Stream sides treated ☐ one ☐ two

(Do not double count miles if a second side is treated)

Upland Habitat: *Projects implemented above the floodplain.* Check all proposed activities.

☐ Planting/seeding for erosion control (e.g., convert from crops to native vegetation, plant area where non-native/noxious weeds removed, grassed waterways) List scientific names of plants _____	☐ Livestock Manure Management (e.g., feedlot improvements to reduce runoff , relocate/improve manure holding structures and manure piles to reduce/eliminate drainage into streams)
☐ Slope stabilization (e.g., grade stabilization, landslide reparation, terracing slopes)	☐ Livestock/Wildlife Water Developments
☐ Non-native/noxious plant control; List scientific names of plants: _____	☐ Upland Livestock Management (other than livestock water developments), e.g., grazing plans, fencing
☐ Juniper removal/control	☐ Restore Historic Upland Habitats (e.g. oak woodland, oak savannah, upland prairie restoration)
☐ Vegetation Management (other than non-native/noxious plant control or juniper removal, e.g. tree thinning, brush control, burning, stand conversion, silviculture) List scientific names of plants: _____	☐ Trail or Campground Improvements (to decrease upland erosion; these may extend into or are in the riparian zone)
☐ Upland Agriculture Management – (e.g., no/low-till, wind breaks, filter strips, crop rotation, terracing, water and sediment control basins, grade stabilization and irrigation improvements)	☐ Other (explain): _____
☐ Erosion control structures not already reported under Upland Agriculture Management or Road Drainage System and Surface Improvements.	

_____ % Estimate the percentage of total cost of the project will apply to upland habitat activities

_____ # Estimate the number of livestock/wildlife water developments

_____ac. Estimate the acres of upland habitat to be treated for non-native/noxious plants (to nearest 0.1 acres)

_____ac. Estimate the total acres of upland habitat to be treated (do not include acres of upland habitat affected by livestock water developments (to nearest 0.1 acres)

_____ % Estimate the percentage of upland activity costs applied to Livestock Manure Management. If you do not select Livestock Manure Management as an upland habitat activity, leave this value blank. *Example: Your project will relocate a feedlot to reduce livestock manure runoff. You estimated that 33% of the total project cost will apply to upland habitat activities and one half of the upland improvements costs will apply to the feedlot relocation, you would report 50%.*

Road Activities: *Projects designed to improve road impacts to watersheds.* Check all proposed activities.

☐ Road drainage system and surface improvements & reconstruction	☐ Other (explain): _____
☐ Road closure, relocation, obliteration (decommissioning)	

_____ % Estimate the percentage of total cost of the project applied to road activities

_____ mi. Estimate the miles of road treated (to nearest 0.01 mile)

Urban Impact Reduction: Check all of the urban impact related activities that will be used by this project:

☐ Sewage outfall clean-up or reducing outfall)	☐ Bioswales
☐ Pesticide reduction: list names of each pesticide: _____	☐ Detention Facility
☐ Toxin (other than pesticide) reduction (herbicides, mine dredge tailings, other toxics): list names of each toxic species, element or material: _____	☐ Other urban impact reduction (explain): _____
☐ Stormwater/wastewater modification or treatment (includes rain gardens)	

Check all of the water quality limiting factors addressed by the Urban Impact Reduction activities selected above**. Do not** select limiting factors addressed by other types of restoration activities:

☐ Bacteria	☐ Pesticides	☐ Nutrients
☐ Dissolved Oxygen	☐ Toxics	☐ Sediment
☐ Heavy Metals	☐ High Temperature	☐ Other (explain): _____

_____% Estimate the percentage of total cost of the project applied to urban impact activities

Wetland Habitat: *Projects designed to create or improve wetland or meadow areas.* Check all proposed activities.

☐ Wetland planting	☐ Artificial wetland area created from an area not formerly a wetland
☐ Non-native/noxious/invasive plant control	☐ Other (explain): _____
☐ Wetland improvement/restoration of existing or historic wetland (other than vegetation planting or removal)	

_____% Estimate the percentage of total cost of the project applied to wetland habitat activities

_____ac. Estimate the acres of wetland habitat to be treated for non-native/noxious/invasive plants (to nearest 0.1 acres)

_____ac. Estimate the acres of artificial wetland created (to nearest 0.1 acres)

_____ac. Estimate the total acres of wetland habitat (existing or historic) treated (to nearest 0.1 acres)

Estuarine Habitat: *Projects that result in improvement or increase in the availability of estuarine habitat.*
Check all proposed activities.

☐ Estuarine planting	☐ Non-native/noxious plant control
☐ Channel modification/creation (e.g., improve intertidal flow to existing estuarine habitat or create more habitat)	☐ Creation of new estuarine habitat where one did not exist previously by methods other than tidegates or dikes
☐ Dike or berm modification/removal	☐ Estuarine culvert modification / removal
☐ Removal of existing fill material	☐ Exclusion devices (commonly includes fencing, installation of mooring buoys, boardwalks/trails, etc. to keep public/animals away)
☐ Placement of fill material (for proper terrestrial function)	☐ Other (explain): _____

_____ % Estimate the percentage of total cost of the project applied to estuarine habitat activities

_____ ac. Estimate the acres of estuarine habitat to be treated for non-native/noxious plants (to nearest 0.1 acres)

_____ ac. Estimate the total acres of estuarine habitat (existing or historic) to be treated (to nearest 0.1 acres)

Racial and Ethnic Impact Statement

This form is used for information purposes only and must be included with the grant application.

Chapter 600 of the 2013 Oregon Laws require applicants to include with each grant application a racial and ethnic impact statement. The statement provides information as to the disproportionate or unique impact the proposed policies or programs may have on minority persons[1] in the State of Oregon if the grant is awarded to a corporation or other legal entity other than natural persons.

1. ☐ The proposed grant project policies or programs could have a disproportionate or unique positive impact on the following minority persons:

   Indicate all that apply:

   ☐ Women
   ☐ Persons with Disabilities
   ☐ African-Americans
   ☐ Hispanics
   ☐ Asians or Pacific Islanders
   ☐ American Indians
   ☐ Alaskan Natives

2. ☐ The proposed grant project policies or programs could have a disproportionate or unique negative impact on the following minority persons:

   Indicate all that apply:

   ☐ Women
   ☐ Persons with Disabilities
   ☐ African-Americans
   ☐ Hispanics
   ☐ Asians or Pacific Islanders
   ☐ American Indians
   ☐ Alaskan Natives

3. ☑ The proposed grant project policies or programs will have no disproportionate or unique impact on minority persons.

If you checked numbers 1 or 2 above, on a separate sheet of paper, provide the rationale for the existence of policies or programs having a disproportionate or unique impact on minority persons in this state. Further provide evidence of consultation with representative(s) of the affected minority persons.

I HEREBY CERTIFY on this 31 day of October, 20 16, the information contained on this form and any attachment is complete and accurate to the best of my knowledge.

Signature: Jeff Oveson

Printed Name: JEFF OVESON

Title: EXECUTIVE DIRECTOR

[1] "Minority persons" are defined in SB 463 (2013 Regular Session) as women, persons with disabilities (as defined in ORS 174.107), African-Americans, Hispanics, Asians or Pacific Islanders, American Indians and Alaskan Natives.

ATTACHMENT F
GRANT ADMINISTRATION AND INDIRECT COST SELECTION FORM

This form is to meet Federal 2 CFR requirements. Part One will certify the applicant is a legal entity. Part Two selects the type of indirect rate the applicant is requesting in the application. Part Three applies ***only*** if you select an OWEB Negotiated Indirect Cost Rate.

PART ONE:

Grantee Organization Legal Name: Grande Ronde Model Watershed Foundation

Sub-recipients or grantees ***must*** be legal entities. Identify your organizational type as one of the following:

☐ State or local government: FEIN _____ DUNS:_____

☒ Non-profit organization: FEIN 47-0909658 DUNS: 026753982

☐ Institution for Higher Education: FEIN _____ DUNS:_____

☐ Individual (not eligible for indirect or administrative costs)

If you do not have a DUNS number, please see http://fedgov.dnb.com/webform/index.jsp to obtain one.

PART TWO:

Applicant must select one of the following indirect rates. This rate will apply for the life of this grant, including any future extensions for time, and cannot be changed.

☐ **Federally Negotiated Indirect Cost Rate.** We have an approved indirect cost rate with a Federal (cognizant) agency. A copy of our most recently approved rate agreement is attached; if necessary, we will provide a more current rate once it is approved. No additional receipts will be required for this indirect cost rate.

Our current Federally Negotiated Indirect Cost Rate is _____%.

☒ **Federally Accepted *de minimis* Indirect Rate.** We have never received a federally negotiated indirect cost rate. We request as a condition of this grant to charge a flat *de minimis* indirect cost rate of 10% of modified total direct costs (MTDC). No additional receipts will be required for this indirect cost rate.

☐ **OWEB Negotiated Indirect Cost Rate.** We do not currently plan to obtain a federally negotiated indirect rate. We would like to negotiate an indirect rate of modified total direct costs (MTDC.) Receipts for our indirect cost pool will be required for rates above 10%.

We request an indirect rate of _____% (not over 15%) (fill out Part Three.)

PART THREE (select only if you are asking for an OWEB Negotiated ICR:

Applicants who select an OWEB Negotiated Indirect Cost Rate must select a cost allocation plan.

☐ **Less than 10%, no receipts required.** If the rate is below 10%, OWEB will allow the billing to follow the *de minimis* rules (no receipts.)

☐ **Receipt billing.** Grant administration costs are charged to grants on an item-by-item basis. Receipts for items $250 and over must be submitted. All receipts must be kept and provided to OWEB on request.

☐ **Cost allocation.** The applicant has accounting practices in place that support charging costs to a cost allocation pool and must submit cost allocation supporting documentation for allocations $250 and over. Most agencies divide administration costs either on FTE, time worked, or as a percentage of their modified total direct costs (MTDC.)

216-8205-14356

Figure 2

Upper Grande Ronde Assessment Area

Limber Jim - Muir
Management Project
Steelhead & Chinook Distribution

Watermelon Creek
Jordan Creek
Beaver Creek
Hoodoo Creek
West Fork Beaver Creek
Cove Creek
Grande Ronde River
North Fork Limber Jim Creek
Limber Jim Creek
170601040102
Marion Creek
South Fork Limber Jim Creek
Muir Creek
Meadowbrook Creek
Little Meadow Creek
East Fork Grande Ronde River
Meadowbrook Creek-Grande Ronde River
170601040103
Grande Ronde River
North Fork Anthony Creek
Webfoot Creek
Tanner Gulch-Grande Ronde River
170601040101

Limber Jim - Muir Vegetation Project

- Steelhead
- Chinook
- Main Streams
- Limber Jim - Muir Project Boundary
- Subwatershed
- National Forest Land
- Private
- Ranger District

N W E S

1 : 45,000

0 0.8 1.6 Miles

40 Foot Contour Interval

Author: msutton
Date: 1/20/2015

Path: T:\FS\NFS\WallowaWhitman\Project\lagLimberJim2012\GIS\MapProduct\Brads_BA_Maps\BA_Detail_Map_01_2015.mxd

216-8205-14356

Figure 3

Upper Grande Ronde Assessment Area

Limber Jim - Muir
Management Project
Bull Trout Distribution

Limber Jim Creek
170601040102

Meadowbrook Creek-Grande Ronde River
170601040103

Tanner Gulch-Grande Ronde River
170601040101

Limber Jim - Muir Vegetation Project

- Bull Trout
- Main Streams
- Limber Jim - Muir Project Boundary
- Subwatershed
- National Forest Land
- Private
- Ranger District

1 : 45,000

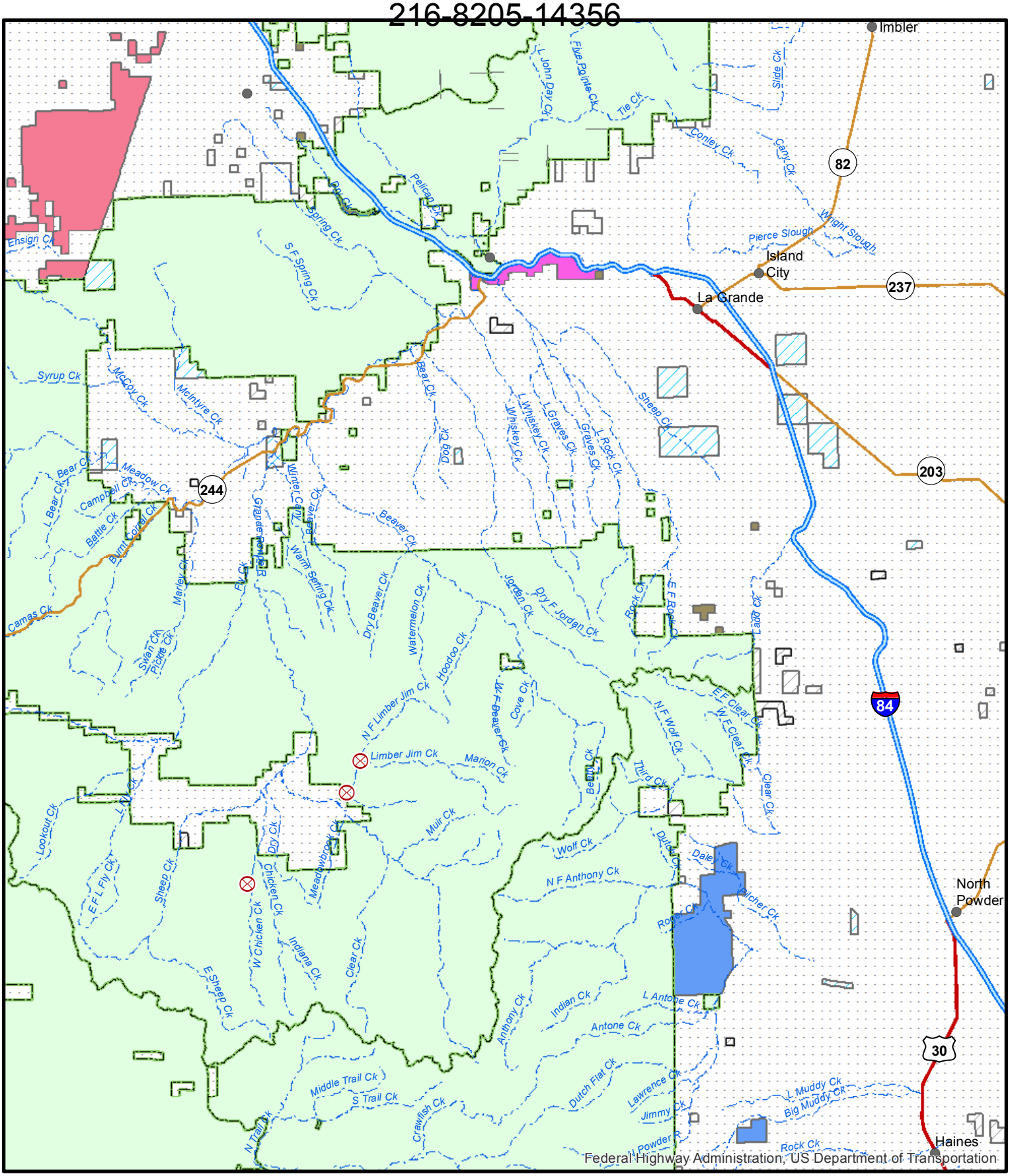
0 0.8 1.6 Miles

40 Foot Contour Interval

Author: msutton
Date: 1/20/2015

Path: T:\FS\NFS\WallowaWhitman\Project\lagLimberJim2012\GIS\MapProduct\Brads_BA_Maps\BA_Detail_Map_01_2015.mxd

216-8205-14356



Date: 8/12/2016

UPPER GRANDE RONDE CULVERT REPLACEMENT PROJECT
Vicinity Map

1:270,000

0 4.5 9 13.5 Miles

Culvert Replacement Locations
Interstate
US Highway
State and County
Main Streams
District Boundary

Bureau of Indian Affairs
Bureau of Land Management
Bureau of Reclamation
Private Land
State Agency
State Dept. of Fish and Wildlife
State Dept. of Parks and Recreation
U.S. Forest Service
Undetermined

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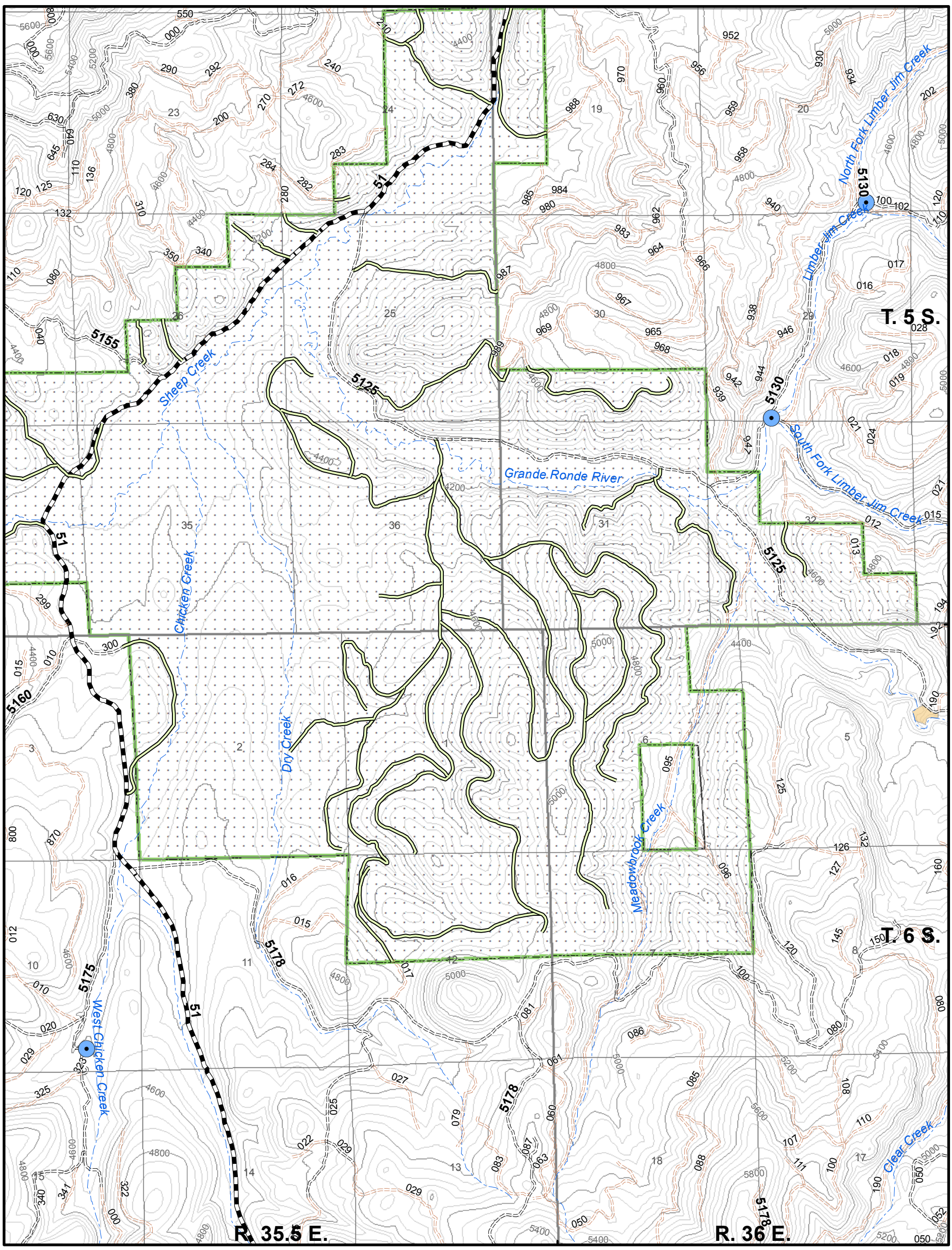


Date: 8/12/2016

Culvert Replacement Locations

Upper Grande Ronde Culvert Replacement Project

1:30,000

0 0.2 0.4 0.8 1.2 1.6 Miles

40 Foot Contour Interval

Existing Roads; OPML

- 1 - BASIC CUSTODIAL CARE (CLOSED)
- 2 - HIGH CLEARANCE VEHICLES
- 5 - HIGH DEGREE OF USER COMFORT
- Other Non USFS Roads

Main Streams

Campground

District Boundary

Ownership

- Private Land
- U.S. Forest Service
- Undetermined

Author: MSutton
Path: T:\FS\NFS\WallowaWhitman\Program\ResourceInfoMgmt\GIS\Workspace\msutton\LagRD_Stuff\JPlatz_Work\UpperGrandeRonde_CulvertReplace_Projectmap.mxd

UNITED STATES DEPARTMENT OF AGRICULTURE

FOREST SERVICE – REGION SIX

WALLOWA–WHITMAN NATIONAL FOREST

SHEEP CREEK WATERSHED – LA GRANDE RANGER DISTRICT

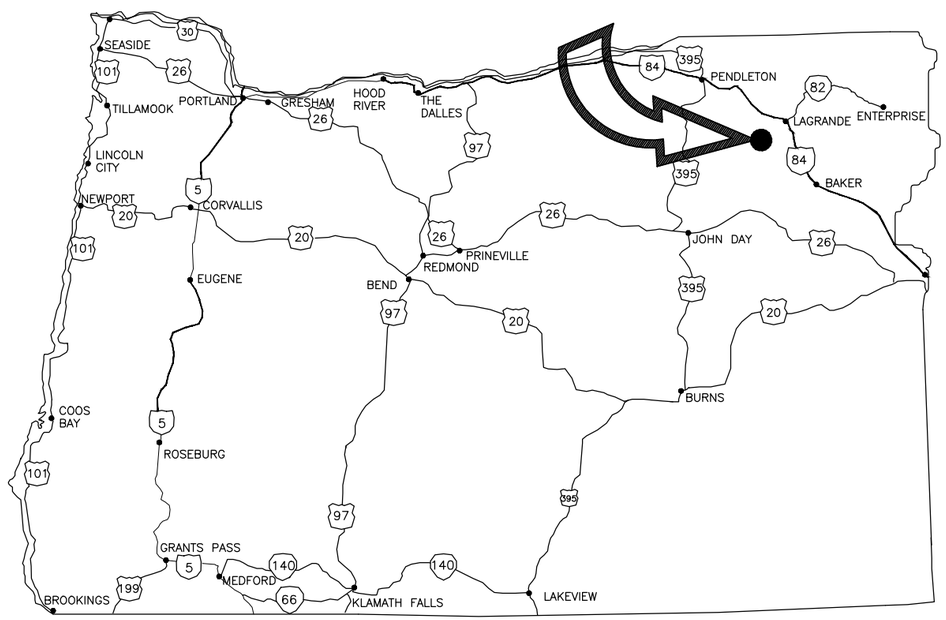
DRAWINGS FOR PROPOSED

LIMBERJIM CREEK CULVERT REPLACEMENTS

FSR 5130, 5130015, & 5130100

Sheet List Table

AREA LOCATION MAP



KEY MAP OF OREGON SHOWING LOCATION OF PROJECT

DESIGN APPROVED BY

BILL GAMBLE, DISTRICT RANGER — DATE

CERTIFIED TECHNICALLY ADEQUATE

DAVID PLUMMER, FOREST ENGINEER — DATE

U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
R–6
PACIFIC NORTHWEST REGION

Forest: WALLOWA–WHITMAN NATIONAL FOREST

DISTRICT: LA GRANDE RANGER DISTRICT

Drawn	B. YAW
Design	B. YAW
Checked	B. YAW
Reviewed	D. TAYLOR

Project: LIMBERJIM CREEK CULVERT REPLACEMENTS

Location: FSR 5130, 5130015, & 5130100

Sheet Title: TITLE SHEET

Scale: NTS

Sheet Number: 1 OF 14

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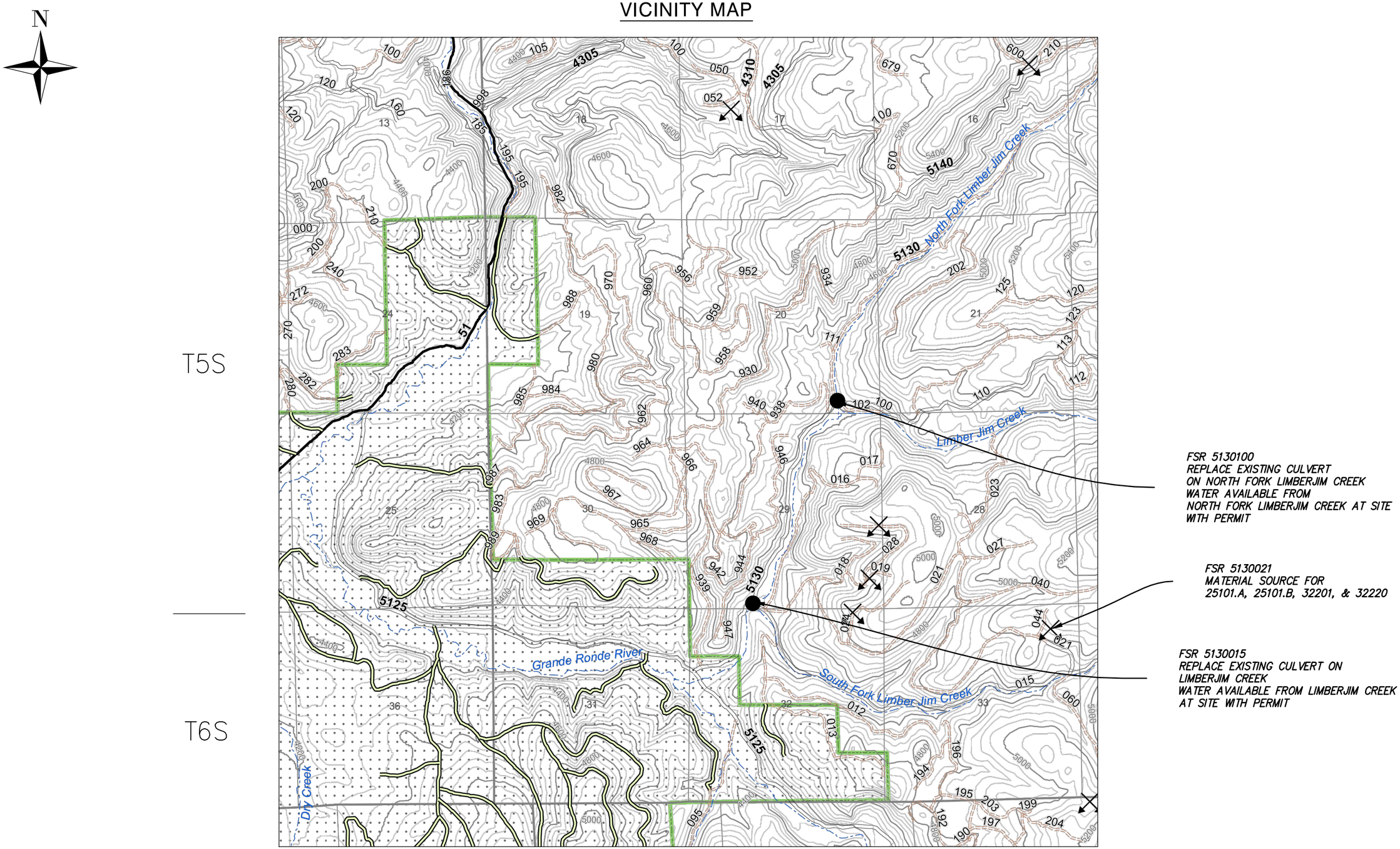
216-8205-14356

VICINITY MAP



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U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
R-6
PACIFIC NORTHWEST REGION

Forest
WALLOWA-WHITMAN NATIONAL FOREST
DISTRICT
LA GRANDE RANGER DISTRICT

Drawn	R. MILLS
Design	R. MILLS
Checked	B. YAW
Reviewed	D. TAYLOR

Project
LIMBERJIM CREEK CULVERT REPLACEMENTS
Location
FSR 5130, 5130015, & 5130100

Sheet Title
VICINITY MAP
Scale
NTS
Sheet Number
2 OF 14

ESTIMATE OF QUANTITIES

ITEM NO.	DESCRIPTION	METHOD OF MEASURE	UNIT	QUANTITY	REMARKS
Base Items: Culvert Replacements					
15101	Mobilization		LS	All	Includes equipment cleaning.
15201.A	Construction Survey and Staking, 5130015 Limberjim Creek Culvert		LS	All	See FSSS Table 152-1 Precision Class B
15201.B	Construction Survey and Staking, 5130100 North Fork Limberjim Creek Culvert		LS	All	See FSSS Table 152-1 Precision Class B
15701	Soil Erosion Control		LS	All	Provide Soil and Erosion Control Plan for approval by CO. Straw Wattles, Straw Bales, Sedimats, Sediment Traps, etc. may be used as approved in the Soil and Erosion Control Plan
15702	Soil Erosion Control, Stream Bypass		Each	2	Dewatering two large culvert replacements. See FSSS 156 for periods of closure. Contractor to submit dewatering plan.
15901	Reconstruction Staking		MI	0	
20101.A	Clearing and Grubbing, 5130015 Culvert Replacement		LS	All	Deck all merchantable logs at a location approved by the CO. Dispose of construction slash, logs, and stumps under FSSS 201.06 (4) scattering.
20101.B	Clearing and Grubbing, 5130100 Culvert Replacement		LS	All	Deck all merchantable logs at a location approved by the CO. Dispose of construction slash, logs, and stumps under FSSS 201.06 (4) scattering.
20301	Removal of Obstructions, Disposal method A		Each	3	Removal of the existing culverts on FSR 5130015, FSR 5130100, and existing gate on 5130015
20401.A	Excavation and Embankment, 5130015, compaction method B	CQ	CY	250	Excavation and Embankment to construct roadway for 5130015 Limberjim Creek Culvert replacement. All yardages are compacted and in place.
20401.B	Excavation and Embankment, 5130100, compaction method B	CQ	CY	80	Excavation and Embankment to construct roadway for 5130100 North Fork Limberjim Creek Culvert replacement.
20901.A	Structural Excavation, 5130015	CQ	CY	345	
20901.B	Structural Excavation, 5130100	CQ	CY	150	
20903.A	Structural Backfill, 5130015, Compaction method B	CQ	CY	100	Structural backfill to meet manufacturers recommendation. Suitable material from excavation may be used.
20903.B	Structural Backfill, 5130100, Compaction method B	CQ	CY	90	Structural backfill to meet manufacturers recommendation. Suitable material from excavation may be used.
20907.A	Foundation Fill, 5130015, Compaction method B	CQ	CY	10	Government furnished material from pit on FSR 5130021
20907.B	Foundation Fill, 5130100Compaction method B	CQ	CY	10	Government furnished material from pit on FSR 5130021
25101.A	Placed Rip Rap, 5130015, Class 4	CQ	CY	25	5 CY at each wing wall of FSR 5130015 Limberjim Creek Culvert
25101.B	Placed Rip Rap, 5130100, Class 4	CQ	CY	25	5 CY at each corner of FSR 5130100 Limberjim Creek Culvert with two yards on the outer edge of each culvert end.
32201	Aggregate Base, grading D, compaction method B, haul and place	CQ	CY	100	Government furnished material from source at FSR 5130021
32220	Pit-run, Max size 3", compaction method B	CQ	CY	115	Government furnished material from source at 5130021
55201	Structural Concrete Class A(AE)		LS	All	Footings for 5130100 culvert replacement. Item includes design, materials, and installation. See sheet 9 for footing dimensions
55701	Pre-Cast Concrete Culvert		LS	All	19'-0" span, 6'-0" Rise, 16' out to out length. Pay item includes culvert, labor, materials and equipment needed for construction.
60301	Singe Radius Multi-Plate Arch		LS	All	11' Span, 3'-6" Rise, 33'-4" Length, minimum cover requirements of 18 inches or less. Pay item include culvert, labor, materials, and equipment needed for construction.
61901	Fence and Gate Installation		LS	All	Install three steel tube posts and stockyard gate on FSR 5130015. See Sheet 13 for details.
63301	Permanent Traffic Control		LS	All	Installation of four type 2 object markers & four type three object markers.
63501	Temporary Traffic Control		LS	All	Contractor to submit temporary traffic control plan.
64804.A	Stream Simulation, 5130015 Limberjim Creek		LF	145	Material may be sorted from excavation.
64804.B	Stream Simulation, 5130100 North Fork Limberjim Creek		LF	130	Material may be sorted from excavation.
65101	Development of Pits and Quarries		LS	All	Includes improvements necessary for pit access and shaping pit and stockpiles at conclusion of project.

ROAD CONSTRUCTION EQUIPMENT OPERATING IN KNOWN AREAS OF NOXIOUS WEED INFESTATIONS SHALL BE REQUIRED TO BE CLEANED PRIOR TO LEAVING THE AREA. CLEANING OF THIS EQUIPMENT IS INCIDENTAL TO SECTION 151. ALL ROAD MAINTENANCE ASSOCIATED WITH THESE PROJECT ACTIVITIES SHALL BE CONSIDERD INCIDENTAL TO THE PROJECT.

Utilization Standards

Non-Saw				Saw			
	DBH	Length	Min. Top DIB*		DBH	Length	Min. Top DIB*
Ponderosa	5"	12'	3"	Ponderosa	9"	16'	5"
Douglas Fir / Larch	5"	12'	3"	Douglas Fir / Larch	7"	8'	5"
White Fir / Other	5"	12'	3"	White Fir / Other	7"	8'	5"
*Measured Inside Bark				*Measured Inside Bark			

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U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
R-6
PACIFIC NORTHWEST REGION

Forest: WALLOWA-WHITMAN NATIONAL FOREST
DISTRICT: La Grande Ranger District

Drawn R. MILLS
Design R. MILLS
Checked B. YAW
Reviewed D. TAYLOR

Project: Limberjim Creek Culvert Replacements
Location: FSR 5130, 5130015, & 5130100

Sheet Title: ESTIMATE OF QUANTITIES
Scale: NTS
Sheet Number: 3 OF 14

GENERAL NOTES:

SPECIFICATIONS
DESIGN: DESIGN STRUCTURES ACCORDING TO AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 7TH EDITION
CONSTRUCTION: MATERIALS AND CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE FP-03 STANDARD SPECIFICATIONS FOR CONSTRUCTION OF ROADS AND BRIDGES ON FEDERAL HIGHWAY PROJECTS WITH APPLICABLE SPECIAL PROJECT SPECIFICATIONS

DESIGN LOADS
LIVE LOAD: HL93 (LRFD)
DEAD LOAD: CONCRETE @ 150 PCF, SOIL LOAD 120 PCF

MATERIALS
CONCRETE: REINFORCED CONCRETE SHALL BE AIR ENTRAINED CLASS A(AE) WITH A 28 DAY COMPRESSIVE STRENGTH OF 4000 PSI. ALL EXPOSED CAST-IN-PLACE CONCRETE SHALL BE GIVEN A CLASS 2 "RUBBED FINISH". ALL CONCRETE TO BE MADE IN ACCORDANCE WITH AN APPROVED MIX DESIGN. CHAMFER ALL EXPOSED EDGES AND RE-ENTRANT CORNERS $\frac{3}{4}$" (UNLESS NOTED OTHERWISE). GRINDING TO ACHIEVE CHAMFERS WILL NOT BE ACCEPTED.

REINFORCING STEEL: ALL NON-PRESTRESSED REINFORCING STEEL SHALL BE OF THE DEFORMED TYPE CONFORMING TO AASHTO M31 (ASTM A 615), GRADE 60. CONCRETE COVER SHALL BE 2-INCHES UNLESS SHOWN OTHERWISE; WHERE NOT SHOWN IT SHALL CONFORM TO AASHTO. CUTTING AND BENDING SHALL CONFORM TO ACI 315.

GROUT: USE NON-SHRINK GROUT FOR SEALING GROUT POCKETS, SECTION CHANNELS AND FOOTING CHANNELS, PER MANUFACTURERS RECOMMENDATIONS. ENSURE GROUT IS INCLUDED ON THE ODOT QUALIFIED PRODUCTS LIST.

WATER: WATER IS AVAILABLE WITH A VALID LIMITED WATER USE LICENSE FROM THE OREGON WATER RESOURCES DEPARTMENT. LOCATION FOR WATER WITHDRAWAL FROM FOREST SERVICE LANDS SHALL BE COORDINATED WITH CONTRACTING OFFICER.

ALL YARDAGE QUANTITIES ARE ESTIMATED AS COMPACTED & IN PLACE.

THREE SIDED CONCRETE BOX:
5130015 LIMBERJIM CREEK: CULVERT SHALL BE A PRE-CAST CONCRETE BOX CULVERT WITH A 6'-0" INTERIOR RISE X 16'-0" OUT TO OUT LENGTH X 19'-5" SPAN ℄ FOOTING TO ℄ FOOTING ON SKEW (19'-0" PERPENDICULAR). STRUCTURE SHALL HAVE SLOPED BOLT-ON CURBS (HEIGHT VARIES FROM 2'-0" TO 2'-4") AND 4 - 8' LONG WINGWALLS.

CERTIFICATIONS WILL BE REQUIRED UPON DELIVERY CONTRACTOR MAY SUBMIT ALTERNATE CONFIGURATIONS OR MATERIALS FOR APPROVAL DURING BIDDING IN ACCORDANCE WITH FEDERAL ACQUISITION REGULATIONS. DESIGN AND ASSEMBLE ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS. PLACE BACKFILL IN ACCORDANCE WITH FSSS, SECTION 204 AND STRUCTURAL BACKFILL IN ACCORDANCE WITH FSSS, SECTION 209.

CONCRETE CURB SECTIONS SHALL MEET TEST LEVEL 1 STANDARDS AS ESTABLISHED IN AASHTO'S MANUAL FOR ASSESSING SAFETY HARDWARE.

5130100 NORTH FORK LIMBERJIM CREEK: CULVERT SHALL BE A STEEL MULTI-PLATE STRUCTURE WITH A 11' SPAN X 3'-6" RISE X 33'-4" LENGTH OR APPROVED EQUAL. MINIMUM CULVERT COVER REQUIREMENTS OF 1'-6" OR LESS. STRUCTURE SHALL HAVE 1.5H:1V BEVELED ENDS WITH A BOTTOM STEP. CERTIFICATIONS WILL BE REQUIRED UPON DELIVERY. CONTRACTOR MAY SUBMIT ALTERNATE CONFIGURATIONS OR MATERIALS FOR APPROVAL DURING BIDDING IN ACCORDANCE WITH FEDERAL ACQUISITION REGULATIONS. DESIGN AND ASSEMBLE ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS. PLACE BACKFILL IN ACCORDANCE WITH FSSS, SECTION 204 AND STRUCTURAL BACKFILL IN ACCORDANCE WITH FSSS, SECTION 209.

TOLERANCE
WORK PERFORMED UNDER 20401 SHALL CONFORM TO TOLERANCE CLASS 'C.' CONTRACTOR RESPONSIBLE FOR PROTECTING OR REFERENCE STAKING ALL CONTROL POINTS.

SOIL VISUAL CLASSIFICATION
5130015 LIMBERJIM CREEK:
THE STREAMBED AND SURROUNDING AREA IS COMPOSED PRIMARILY OF COBBLES, SAND, AND GRAVEL. MEADOW ENVIRONMENTS ARE KNOWN TO CONTAIN CLAY DEPOSITS. UNSUITABLE MATERIAL MAY BE ENCOUNTERED.

5130100 NORTH FOR LIMBERJIM CREEK:
THE STREAMBED AND SURROUNDING AREA IS COMPOSED PRIMARILY OF SAND AND COBBLES WITH SCATTERED LARGE BOULDERS.

PRELIMINARY SOIL INVESTIGATION
NO SUBSURFACE INVESTIGATION WAS CONDUCTED. OBSERVATION OF SURFACE MATERIAL AT THESE SITES CATEGORIZES MATERIALS AS GRAVELS AND COBBLES WITH AN ASSUMED BEARING CAPACITY OF 5 TSF USING A SAFETY FACTOR OF 3.

DETERMINATION OF UNSUITABLE MATERIAL IS THE SOLE DISCRETION OF THE CO.
DISPOSE OF UNSUITABLE MATERIAL ACCORDING TO FSSS 204.14 IN THE FOREST SERVICE DESIGNATED MATERIAL SOURCES.

RIPRAP
PLACE CLASS 4 RIPRAP ADJACENT TO THE WINGWALLS OR CULVERT CORNERS WITHOUT DAMAGING THE STRUCTURE.

REMOVAL OF STRUCTURES AND OBSTRUCTIONS
REMOVE AND DISPOSE OF EXISTING CULVERTS LEGALLY OFF FOREST SYSTEM LANDS
STAGING
KEEP EQUIPMENT AT LEAST 200' FROM STREAMS WHEN NOT IN USE OR PROVIDE ALTERNATE PLAN FOR APPROVAL

SUBMITTALS
SHOP DRAWINGS AND DESIGN CALCULATIONS FOR STRUCTURE AND FOOTINGS SHALL BE STAMPED BY A REGISTERED PROFESSIONAL ENGINEER. SUBMIT SHOP DRAWINGS INCLUDING REBAR DETAILS AND LOCATIONS FOR WELD PLATES ON FOOTINGS AND BRIDGE SECTIONS TO THE GOVERNMENT IN ACCORDANCE WITH SECTION H-6.

EXCAVATION
SALVAGE, STOCKPILE SEPARATELY, AND UTILIZE SUITABLE STREAM MATERIAL REMOVED DURING EXCAVATION IN THE STREAM SIMULATION PROCESS.
ALL OTHER SUITABLE MATERIAL SHALL BE USED AS UNCLASSIFIED BORROW IN EMBANKMENT CONSTRUCTION AND/OR BACKFILL OF CULVERT EXCAVATION.
FILL VOIDS ADJACENT TO FOOTING AND COMPACT SUCH THAT WATER IS NOT ALLOWED TO FLOW SUBSURFACE.

IN-STREAM WORK
THE IN-STREAM WORK WINDOW FOR LIMBERJIM AND NORTH FORK LIMBERJIM CREEK IS JULY 1 - JULY 31. ALL LIVE IN-STREAM WORK MUST BE COMPLETED WITHIN THIS TIME FRAME.

FISH REMOVAL WILL BE DONE BY THE FOREST SERVICE AND TAKE PLACE ON THE FIRST DAY OF THE IN-WATER WORK PERIOD. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAKE ACCOMMODATIONS FOR THIS PROCESS AND TO PROVIDE A MINIMUM 5 DAYS ADVANCE NOTICE TO CONTRACTING OFFICER.

INSPECTION
RECEIVE WRITTEN APPROVAL FROM CO PRIOR TO ANY OF THE FOLLOWING ACTIVITIES:
- PLACEMENT OF FOOTINGS
- PLACEMENT OF STREAM SIMULATION MATERIAL
- PLACEMENT OF MULTI-PLATE/BOX CULVERTS
- BACKFILLING OF MULTI-PLATE/BOX CULVERTS
- PLACEMENT OF BASE COURSE ROCK ON SUBGRADE

TRAFFIC CONTROL
SEE FSSS TABLE 156-1 FOR ROAD CLOSURE LOCATION AND PERIODS.

PLACE TRAFFIC CONTROL SIGNS AS APPROPRIATE ON ALL ROADS WHERE CONSTRUCTION TRAFFIC MAY CREATE A HAZARD OR WHERE CONSTRUCTION TRAFFIC MAY IMPEDE THE NORMAL FLOW OF VEHICLES. SUBMIT A TRAFFIC CONTROL PLAN FOR APPROVAL TO THE CO AT LEAST 14 DAYS PRIOR TO COMMENCEMENT OF WORK.

DEWATERING NOTES

SUBMIT DIVERSION & DEWATERING PLAN TO CONTRACTING OFFICER IN WRITING FOR APPROVAL

U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
R-6
PACIFIC NORTHWEST REGION

Forest
WALLOWA-WHITMAN NATIONAL FOREST
DISTRICT
LA GRANDE RANGER DISTRICT

Drawn	B. YAW
Design	B. YAW
Checked	D. TAYLOR
Reviewed	D. PLUMMER

Project
LIMBERJIM CREEK CULVERT REPLACEMENTS
Location
FSR 5130, 5130015, & 5130100

Sheet Title
GENERAL NOTES
Scale
NTS
Sheet Number
4 OF 14

216-8205-14356

FSR 5130015
LIMBERJIM CREEK CULVERT

N

FSR 5130

FSR 5130015

LIMBERJIM CREEK

0+00

10+00

11+00

12+00

13+00

1+00

2+00

1004'
1002'
1000'
998'
996'
994'
992'
990'
988'
986'

CP1
EL: 995.73'
STA: 0+05.24
OFF: 30.67R
N: 5148.32
E: 4871.06

CP2
EL: 1000.00'
STA: 2+01.81
OFF: 6.56L
N: 5000.00
E: 5000.00

CP3
EL: 993.21'
STA: 1+03.33
OFF: 82.07L
N: 5120.68
E: 5021.11

EXISTING WILDLIFE FENCE
DO NOT DAMAGE

STA 0+75 TAPER TO EXISTING GRADE
25 FEET BACK

10'

14'

INSTALL NEW POSTS 10' TOWARDS INTERSECTION
INSTALL NEW GATE, SEE GATE DETAIL SHEET 13
61901

REMOVE GATE POSTS
AND SALVAGE GATE
20301

℄ INTERSECTION
STA 12+14.85
Limberjim Creek FG

STA 1+11.05
5130015

STA 11+60
INSTALL ROCK GRADE CONTROL STRUCTURE
SEE SHEET 7
64804.A

STA 12+25 TO 12+90
SHIFT STREAM 3–5' NORTH
TIE UPSTREAM REALIGNMENT IN BEFORE WILDLIFE FENCE
64804.A

STA 12+60
INSTALL ROCK GRADE CONTROL STRUCTURE
SEE SHEET 7
64804.A

EXISTING STREAM BANKS

EXISTING STREAM THALWEG

REMOVE EXISTING CMPA
20301

STA 11+45 TO 12+00
SHIFT STREAM 3–5 FEET SOUTH
64804.A

PLACE 5 CY CLASS 4
RIP RAP EACH WINGWALL
25101.A
(TYP)

STA 1+50 TAPER TO EXISTING GRADE
AND WIDTH 50' AHEAD

0 25 50 FEET

C:\Users\richardmills\Desktop\Projects\2015-2016 Culverts\Limberjim\Limber Jim Creek\5130 Main Fork Template NOT a Crab with concrete box.dwg Plot Date: 10/5/2016 8:21 AM

U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
R-6
PACIFIC NORTHWEST REGION

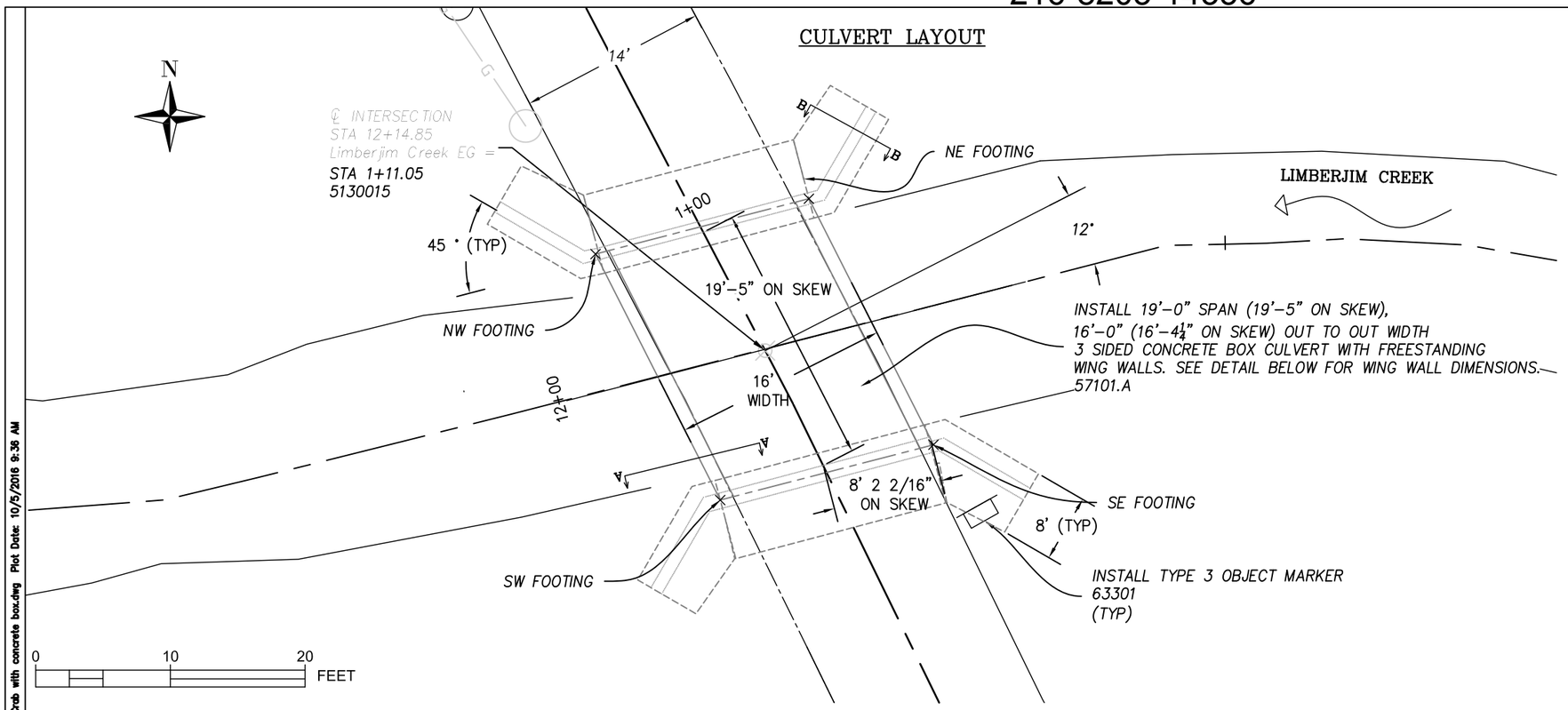
Forest
WALLOWA-WHITMAN NATIONAL FOREST
DISTRICT
LA GRANDE RANGER DISTRICT

Drawn	R. MILLS
Design	R. MILLS
Checked	B. YAW
Reviewed	D. TAYLOR

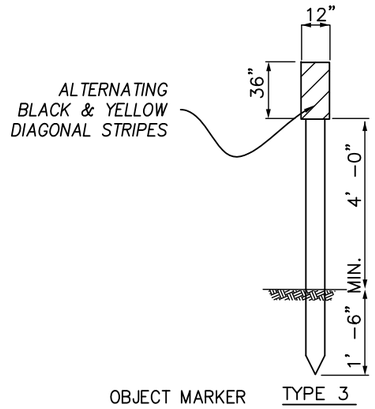
Project
LIMBERJIM CREEK CULVERT REPLACEMENTS
Location
FSR 5130, 5130015, & 5130100

Sheet Title
5130015 Culvert Site
Scale
1" = 20'
Sheet Number
5 OF 14

CULVERT LAYOUT



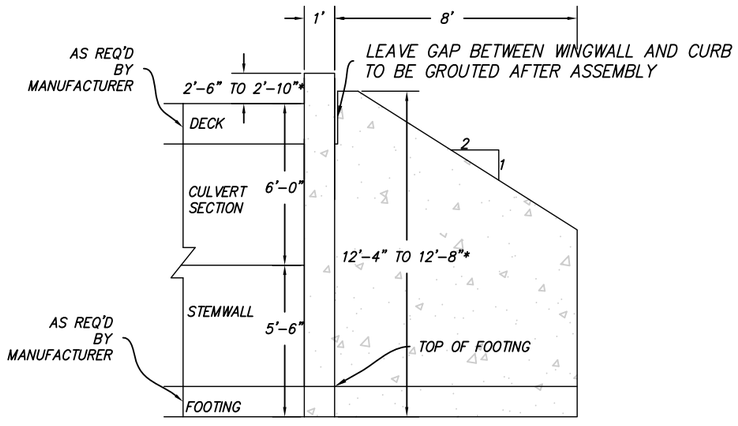
TYPE 3 OBJECT MARKER



TYPE 3 – 4X4 TREATED TIMBER OR GALVANIZED STEEL POST 1.1 LBS/FT

BOTTOM OF FOOTING ELEVATION				
Point #	FOOTIING LOCATION	Northing	Easting	Elevation
60	NE FOOTING	5087.09	4955.20	984.30
61	SE FOOTING	5068.82	4964.45	984.30
62	SW FOOTING	5064.72	4948.62	984.30
63	NW FOOTING	5082.98	4939.36	984.30

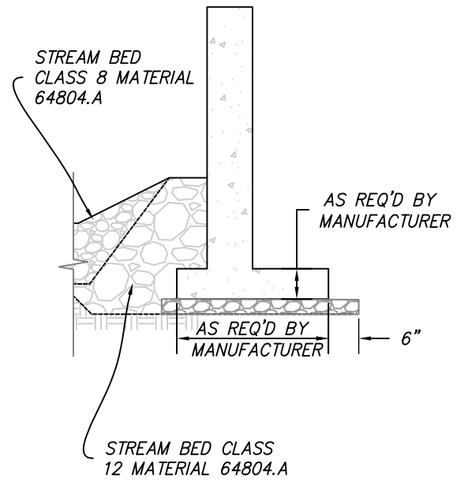
WING WALL DIMENSIONS



*WING WALL AND CURB HEIGHTS:
NORTH END WING WALLS: 12'–4"
SOUTH END WING WALLS: 12'–8"
SLOPED CURBS FROM 2'–6" ON THE SOUTH END TO 2'–10" ON THE NORTH END

SECTION A–A

FOOTING DIMENSIONS



SECTION B–B

U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
R–6
PACIFIC NORTHWEST REGION

Forest: WALLOWA–WHITMAN NATIONAL FOREST
DISTRICT: LA GRANDE RANGER DISTRICT

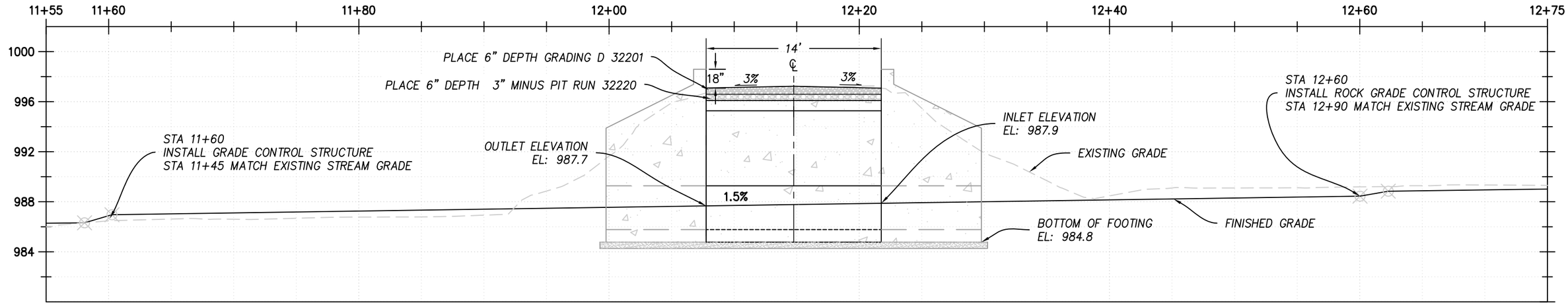
Drawn R. MILLS
Design R. MILLS
Checked B. YAW
Reviewed D. TAYLOR

Project: LIMBERJIM CREEK CULVERT REPLACEMENTS
Location: FSR 5130, 5130015, & 5130100

Sheet Title: 5130015 Culvert Layout
Scale: VARIES
Sheet Number: 6 OF 14

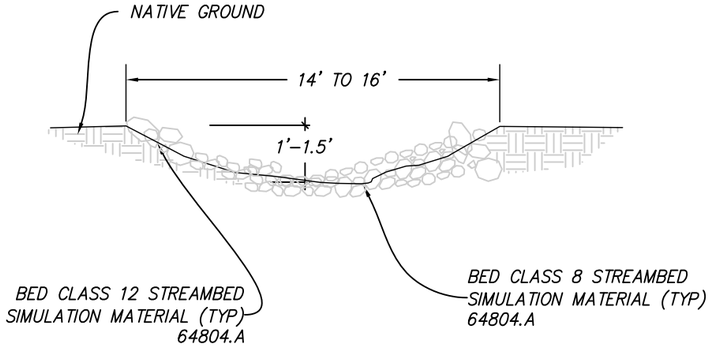
LIMBERJIM CREEK CULVERT PROFILE

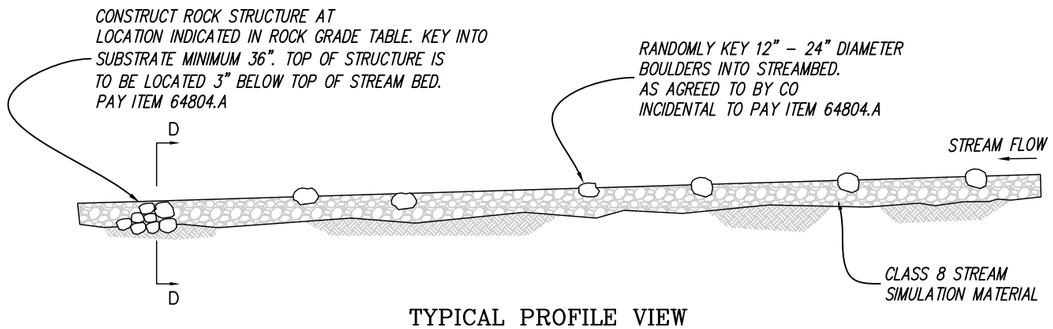
NOTES:
STREAM ELEVATIONS, SLOPES, AND LOCATIONS OF GRADE BREAKS ARE APPROXIMATE AND WILL BE AGREED TO WITH CO.



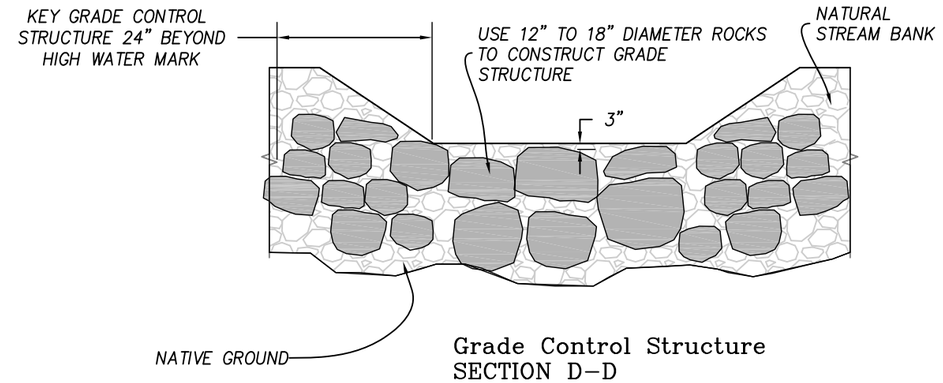
STREAM SIMULATION DETAILS

LIMBERJIM CREEK TYPICAL CHANNEL





TYPICAL PROFILE VIEW
STREAM CENTERLINE



Grade Control Structure
SECTION D-D

LIMBERJIM CREEK CULVERT REPLACEMENT STREAM SIMULATION NOTES:

PLACE STREAM SIMULATION TO REFLECT UNDISTURBED CONDITIONS UPSTREAM AND DOWNSTREAM OF THE PROJECT AREA. THIS INCLUDES BUT IS NOT LIMITED TO INCORPORATING WOOD AND BOULDERS IN THE FINAL STREAM STRUCTURE.

USE EXCAVATED MATERIAL AS STREAM SIMULATION MATERIAL TO THE EXTENT POSSIBLE. FILL ALL VOIDS WITH FINES.

WHEN PLACING STREAM SIMULATION MATERIAL IN A CHANNEL FOR RESTORATION OUTSIDE THE STRUCTURE, EXCAVATE OR FILL TO ACHIEVE THE DESIGN CHANNEL SHAPE SHOWN ON THIS SHEET.

VARY HORIZONTAL LOCATION OF THALWEG (DEEPEST PART OF CHANNEL) WITHIN THE CHANNEL TO REFLECT A NATURAL MEANDER.

ROCK GRADE STRUCTURE LOCATION
LIMBERJIM CREEK STATION 11+60
LIMBERJIM CREEK STATION 12+60

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U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
R-6
PACIFIC NORTHWEST REGION

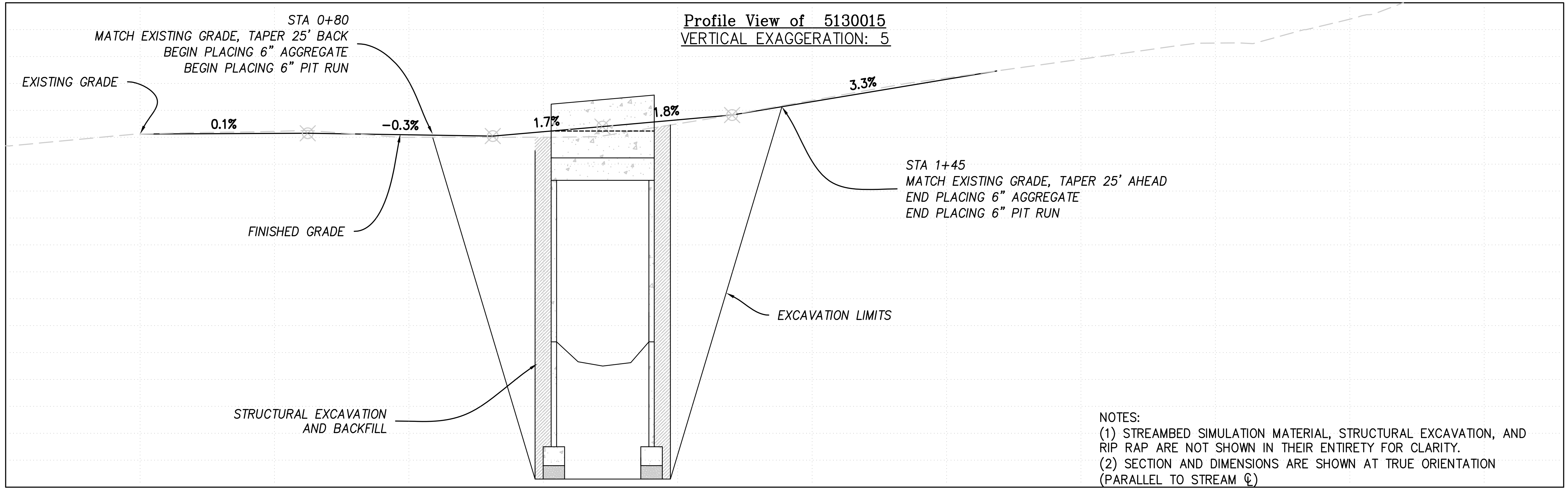
Forest
WALLOWA-WHITMAN NATIONAL FOREST
DISTRICT
LA GRANDE RANGER DISTRICT

Drawn	R. MILLS
Design	R. MILLS
Checked	B. YAW
Reviewed	D. TAYLOR

Project
LIMBERJIM CREEK CULVERT REPLACEMENTS
Location
FSR 5130, 5130015, & 5130100

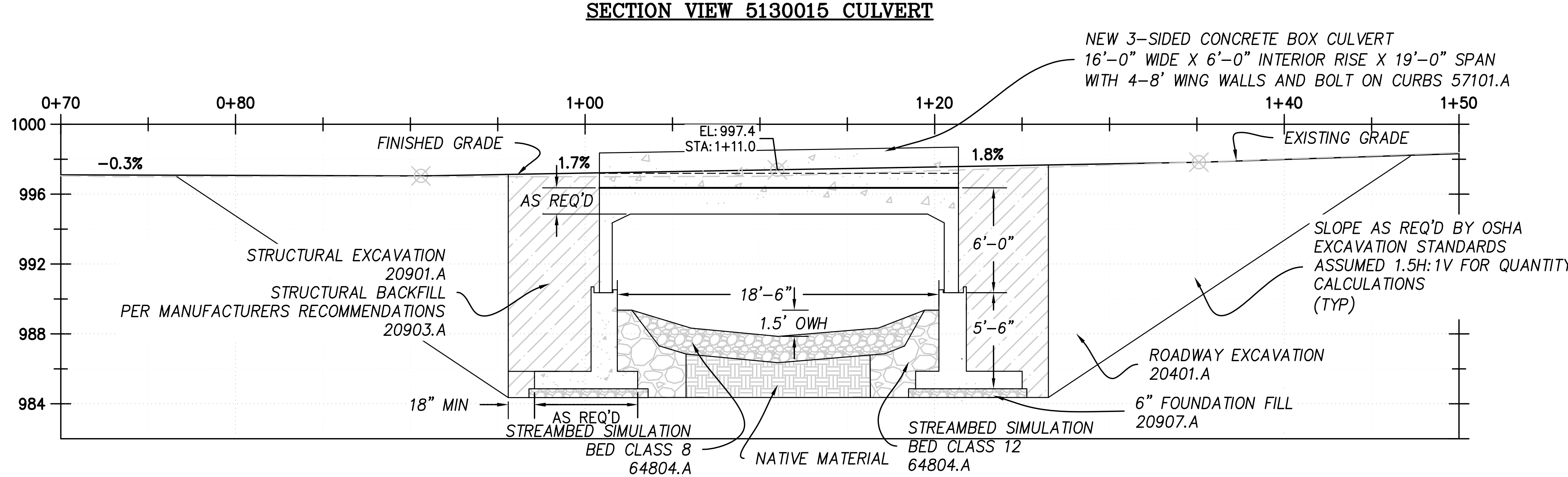
Sheet Title
5130015 CULVERT PROFILE
Scale
NTS
Sheet Number
7 OF 14

216-8205-14356



			0+50		1+00		1+50		2+00		2+50		2+90
EXISTING CL GRADE	996.68	997.12	997.22	997.00	997.00	997.50	998.38	999.21	999.90	1000.50	1001.39	1003.19	1004.53
PROPOSED CL GRADE		997.12	997.15	997.09	997.21	997.65	998.32	999.16					

SECTION VIEW 5130015 CULVERT



20401.A – 116 CY | 20901.A – 345 CY & 20903.A – 50 CY | 20401.A – 133 CY

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U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
R-6
PACIFIC NORTHWEST REGION

Forest: WALLOWA-WHITMAN NATIONAL FOREST
DISTRICT: LA GRANDE RANGER DISTRICT

Drawn: R. MILLS
Design: R. MILLS
Checked: B. YAW
Reviewed: D. TAYLOR

Project: SHEEP CREEK WATERSHED ROAD IMPROVEMENTS
Location: FSR 5130, 5130015, & 5130100

Sheet Title: 5130015 ROAD PROFILE
Scale: NTS
Sheet Number: 8 OF 14

216-8205-14356

FSR 5130100
NORTH FORK LIMBERJIM CREEK CULVERT

N

CP1
EL: 1000.00'
STA: 1+18.69
OFF: 78.97L
N: 5000.00
E: 5000.00

STA 13+30 MATCH EXISTING STREAM

13+00

STA 13+00 INSTALL GRADE CONTROL STRUCTURE SEE SHEET 11 64804.B

NORTH FORK LIMBERJIM CREEK SHIFT THALWEG 3' 64804.B

REMOVE EXISTING 24" x 28' CULVERT 20301

℄ INTERSECTION
STA 1+60.03
5130100 =
STA 12+43.73
NORTH FOR LIMBERJIJM EG

FINISHED GRADE CONTOURS

STA 2+09
END CURVE

STA 3+00 MATCH EXISTING GRADE
TAPER 25' AHEAD

Δ=44.26
L=177.66
R=230.00

BM
EL: 998.93'
STA: 1+38.64
OFF: 10.47R
N: 4916.61
E: 5039.44

FSR 5130100

FSR 5130

RAISE GRADE OF INTERSECTION 8" TO MATCH FINISHED GRADE 20401.B

PLACE 5 CY OF CLASS 4 RIP RAP 25101.B (TYP)

CP2
EL: 1003.89'
STA: 2+54.73
OFF: 24.22R
N: 4895.44
E: 5149.32

STA 0+80 MATCH EXISTING GRADE
TAPER 25' BACK

STA 12+00
INSTALL GRADE CONTROL STRUCTURE SEE SHEET 11
MATCH EXISTING STREAM
64804.B

12+00

STA 0+31 BEGIN CURVE

50' AFTER INTERSECTION WITH FSR 5130100
MATCH EXISTING GRADE

FSR 5130102

11+00

NORTH FORK LIMBERJIM CREEK

EXISTING STREAM BANKS

0 25 50 FEET

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U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
R-6
PACIFIC NORTHWEST REGION

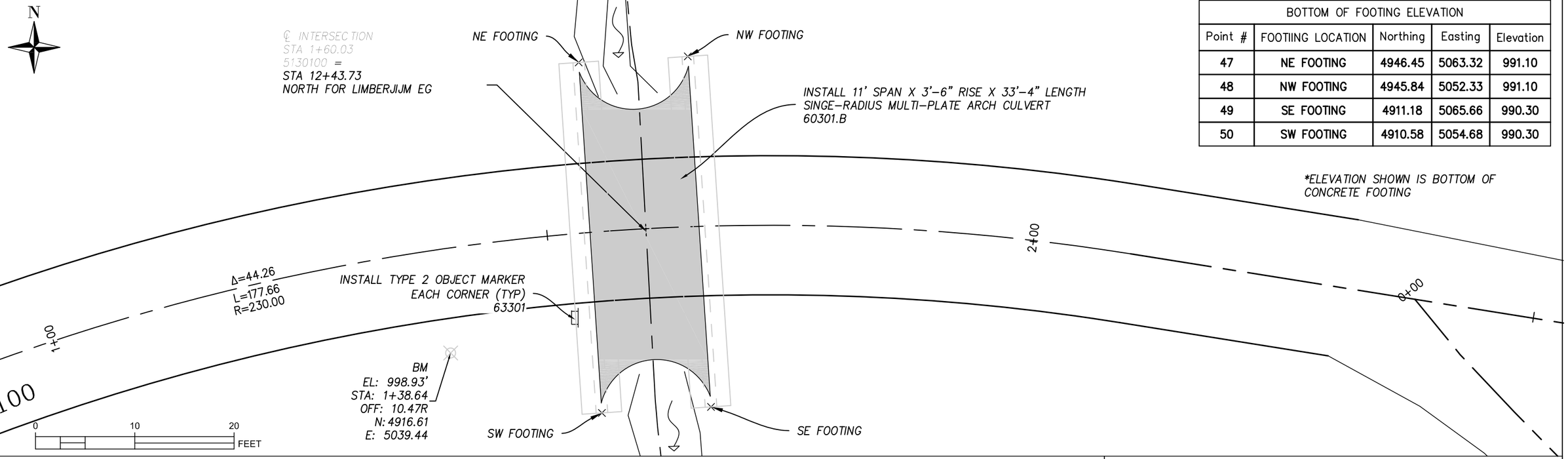
Forest: WALLOWA-WHITMAN NATIONAL FOREST
DISTRICT: LA GRANDE RANGER DISTRICT

Drawn R. MILLS
Design R. MILLS
Checked B. YAW
Reviewed D. TAYLOR

Project: LIMBERJIM CREEK CULVERT REPLACEMENTS
Location: FSR 5130, 5130015, & 5130100

Sheet Title: 5130100 CULVERT SITE
Scale: 1" = 20'
Sheet Number: 9 OF 14

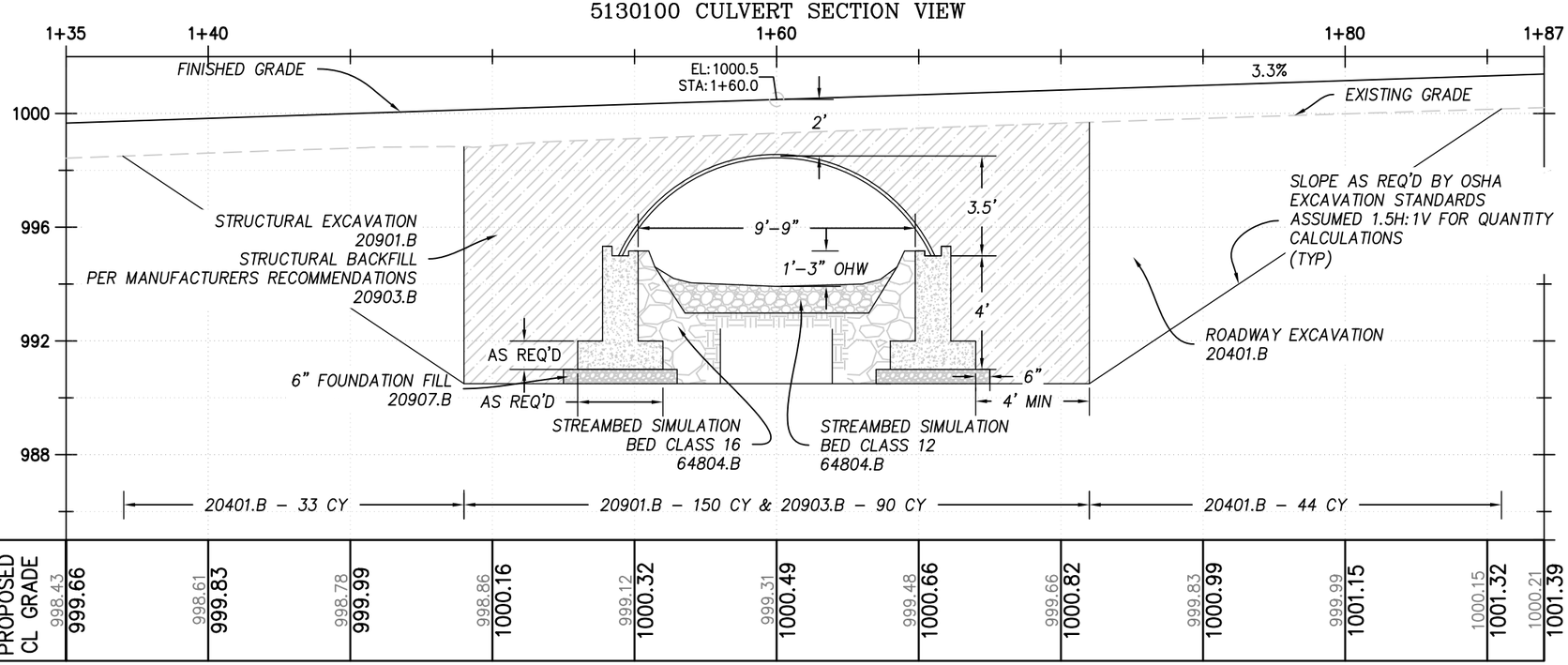
CULVERT LAYOUT



BOTTOM OF FOOTING ELEVATION				
Point #	FOOTIING LOCATION	Northing	Easting	Elevation
47	NE FOOTING	4946.45	5063.32	991.10
48	NW FOOTING	4945.84	5052.33	991.10
49	SE FOOTING	4911.18	5065.66	990.30
50	SW FOOTING	4910.58	5054.68	990.30

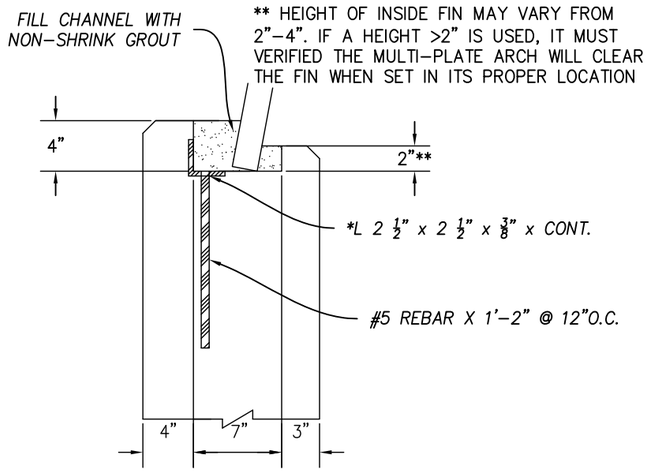
*ELEVATION SHOWN IS BOTTOM OF CONCRETE FOOTING

5130100 CULVERT SECTION VIEW



EXISTING CL GRADE	998.43		998.61		998.78		998.86		999.12		999.31		999.48		999.66		999.83		999.99		1000.15		1000.21	
PROPOSED CL GRADE		999.66		999.83		999.99		1000.16		1000.32		1000.49		1000.66		1000.82		1000.99		1001.15		1001.32		1001.39

FOOTING CHANNEL DETAIL



* L 2 1/2"X 2 1/2" X 3/8" IS THE MINIMUM SIZE ANGLE ALLOWED. A LARGER ANGLE, IN EITHER LEG DIMENSION, THICKNESS, OR BOTH MAY BE USED AT CONTRACTOR'S DISCRETION. UNEQUAL LEG ANGLES ARE ACCEPTABLE. ANGLE AND DOWEL ASSEMBLY SHALL BE CAST-IN-PLACE.

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U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
R-6
PACIFIC NORTHWEST REGION

Forest: WALLOWA-WHITMAN NATIONAL FOREST
DISTRICT: LA GRANDE RANGER DISTRICT

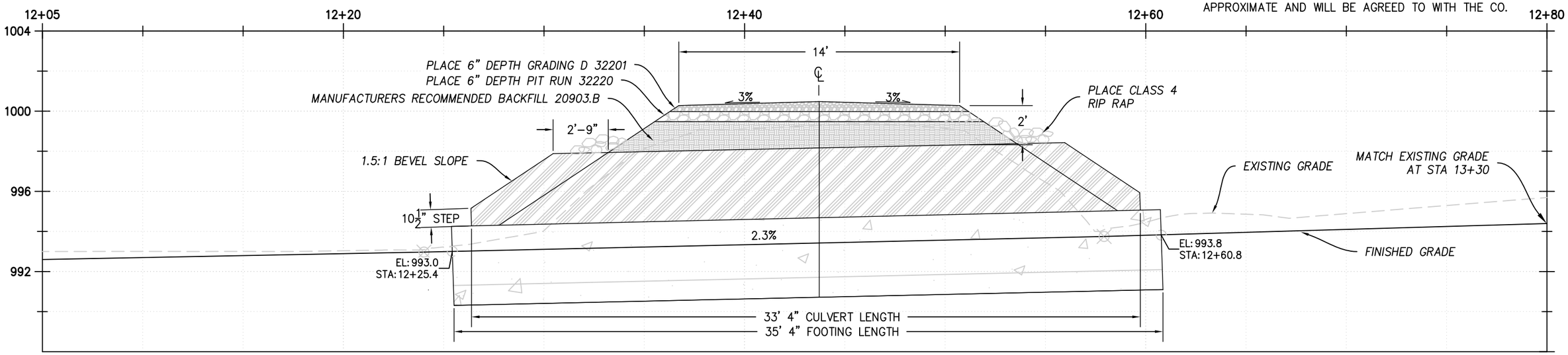
Drawn: R. MILLS
Design: R. MILLS
Checked: B. YAW
Reviewed: D. TAYLOR

Project: LIMBERJIM CREEK CULVERT REPLACEMENTS
Location: FSR 5130, 5130015, & 5130100

Sheet Title: 5130100 CULVERT LAYOUT
Scale: VARIES
Sheet Number: 10 OF 14

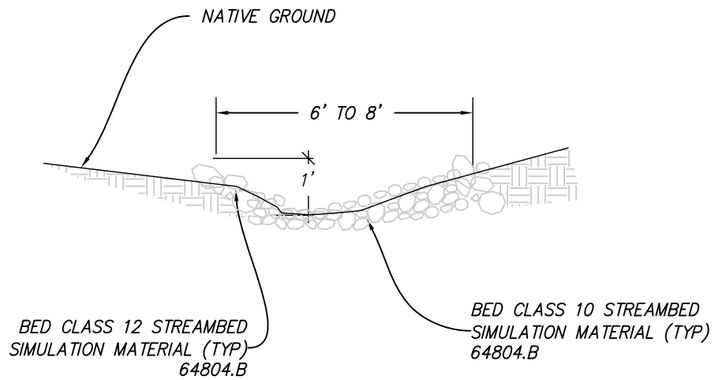
NORTH FORK LIMBERJIM CREEK CULVERT PROFILE

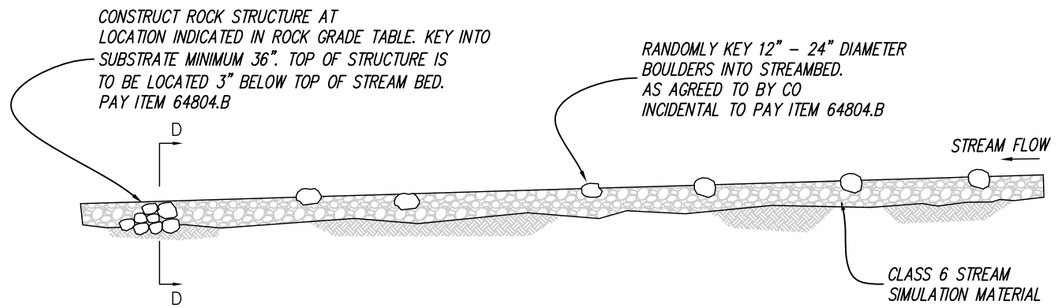
NOTES:
STREAM ELEVATIONS, SLOPES, AND LOCATIONS OF GRADE BREAK ARE APPROXIMATE AND WILL BE AGREED TO WITH THE CO.



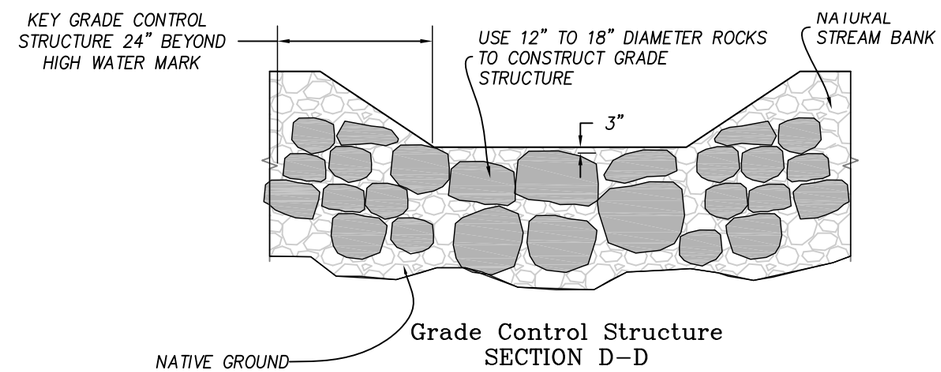
STREAM SIMULATION DETAILS

NORTH FORK LIMBERJIM CREEK TYPICAL CHANNEL





TYPICAL PROFILE VIEW
STREAM CENTERLINE



Grade Control Structure
SECTION D–D

NORTH FORK LIMBERJIM CREEK CULVERT REPLACEMENT STREAM SIMULATION NOTES:

PLACE STREAM SIMULATION TO REFLECT UNDISTURBED CONDITIONS UPSTREAM AND DOWNSTREAM OF THE PROJECT AREA. THIS INCLUDES BUT IS NOT LIMITED TO INCORPORATING WOOD AND BOULDERS IN THE FINAL STREAM STRUCTURE.

USE EXCAVATED MATERIAL AS STREAM SIMULATION MATERIAL TO THE EXTENT POSSIBLE. FILL ALL VOIDS WITH FINES.

WHEN PLACING STREAM SIMULATION MATERIAL IN A CHANNEL FOR RESTORATION OUTSIDE THE STRUCTURE, EXCAVATE OR FILL TO ACHIEVE THE DESIGN CHANNEL SHAPE SHOWN ON THIS SHEET.

VARY HORIZONTAL LOCATION OF THALWEG (DEEPEST PART OF CHANNEL) WITHIN THE CHANNEL TO REFLECT A NATURAL MEANDER.

ROCK GRADE STRUCTURE LOCATION
N. FORK LIMBERJIM CREEK STATION 12+00
N. FORK LIMBERJIM CREEK STATION 13+00

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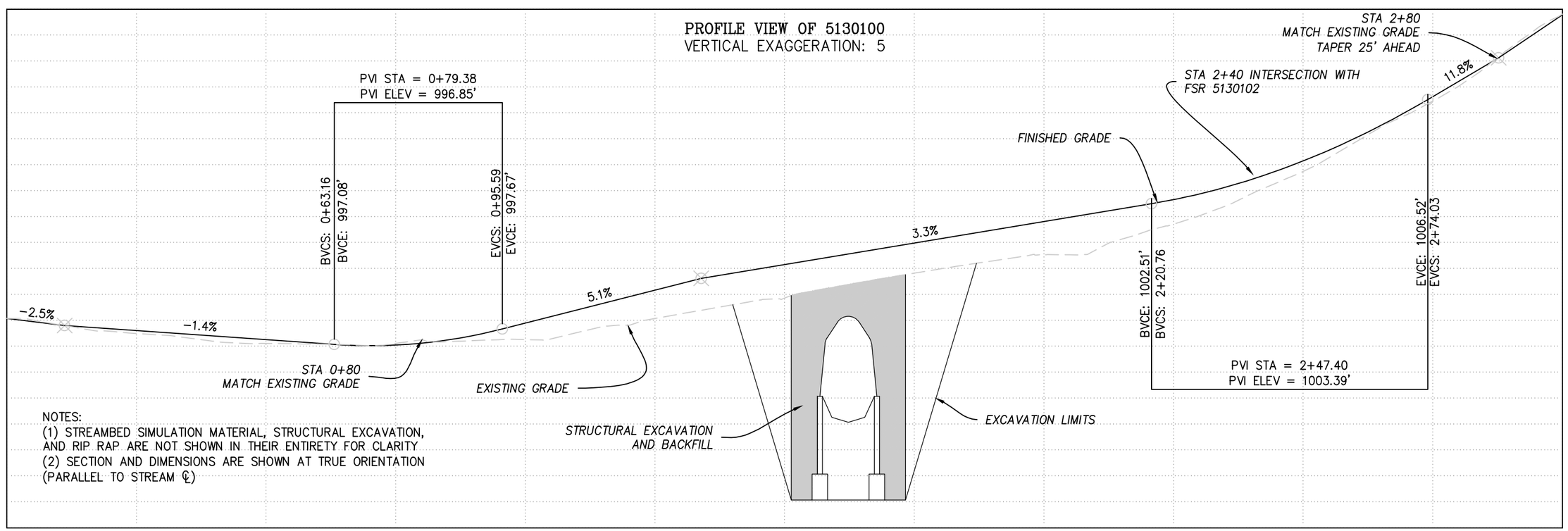
U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
R-6
PACIFIC NORTHWEST REGION

Forest: WALLOWA-WHITMAN NATIONAL FOREST
DISTRICT: LA GRANDE RANGER DISTRICT

Drawn R. MILLS
Design R. MILLS
Checked B. YAW
Reviewed D. TAYLOR

Project: LIMBERJIM CREEK CULVERT REPLACEMENTS
Location: FSR 5130, 5130015, & 5130100

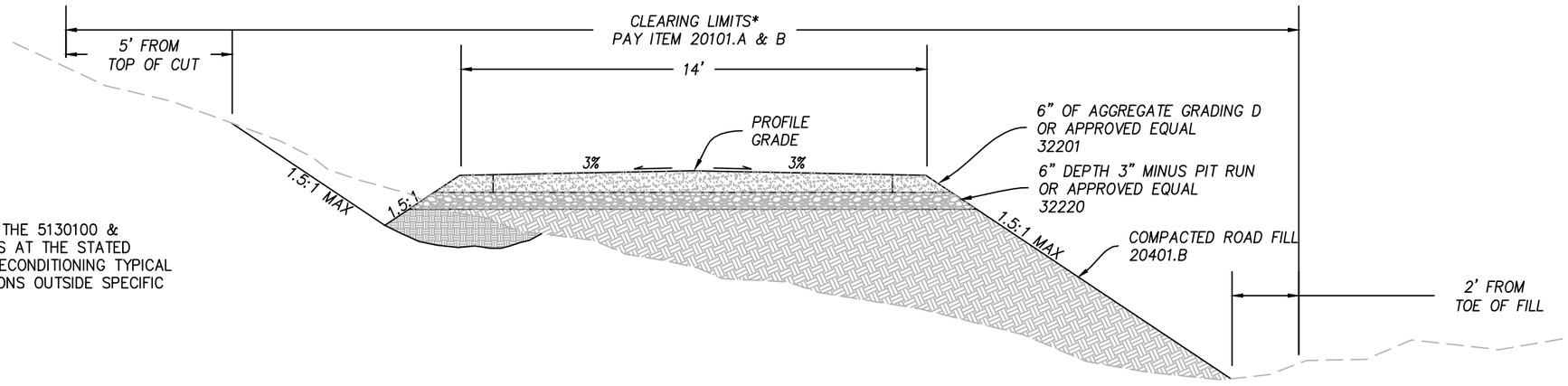
Sheet Title: 5130100 CULVERT PROFILE
Scale: NTS
Sheet Number: 11 OF 14



	0+00	0+50	1+00	1+50	2+00	2+50	3+00
EXISTING CL GRADE	998.08	997.50	997.11	997.27	998.08	998.86	999.83	1000.53	1001.72	1003.75	1006.46	1009.82
PROPOSED CL GRADE	998.08	997.61	997.26	997.90	999.17	1000.16	1000.99	1001.82	1002.66	1004.15	1006.63	1009.79

CULVERT REPLACEMENT ROAD STRUCTURE DETAIL

5130100 STA 0+80 – 3+00 & 5130015 STA 0+80 – 1+45



*DIMENSIONS SHOWN ARE SPECIFIC TO THE 5130100 & 5130015 CULVERT REPLACEMENT AREAS AT THE STATED STATIONS. SEE SHEET XX FOR ROAD RECONDITIONING TYPICAL DETAIL FOR ROAD STRUCTURE DIMENSIONS OUTSIDE SPECIFIC PROJECT AREAS.

U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
R–6
PACIFIC NORTHWEST REGION

Forest: WALLOWA–WHITMAN NATIONAL FOREST
DISTRICT: LA GRANDE RANGER DISTRICT

Drawn R. MILLS
Design R. MILLS
Checked B. YAW
Reviewed D. TAYLOR

Project: LIMBERJIM CREEK CULVERT REPLACEMENTS
Location: FSR 5130, 5130015, & 5130100

Sheet Title: 5130100 ROAD PROFILE
Scale: NTS
Sheet Number: 12 OF 14

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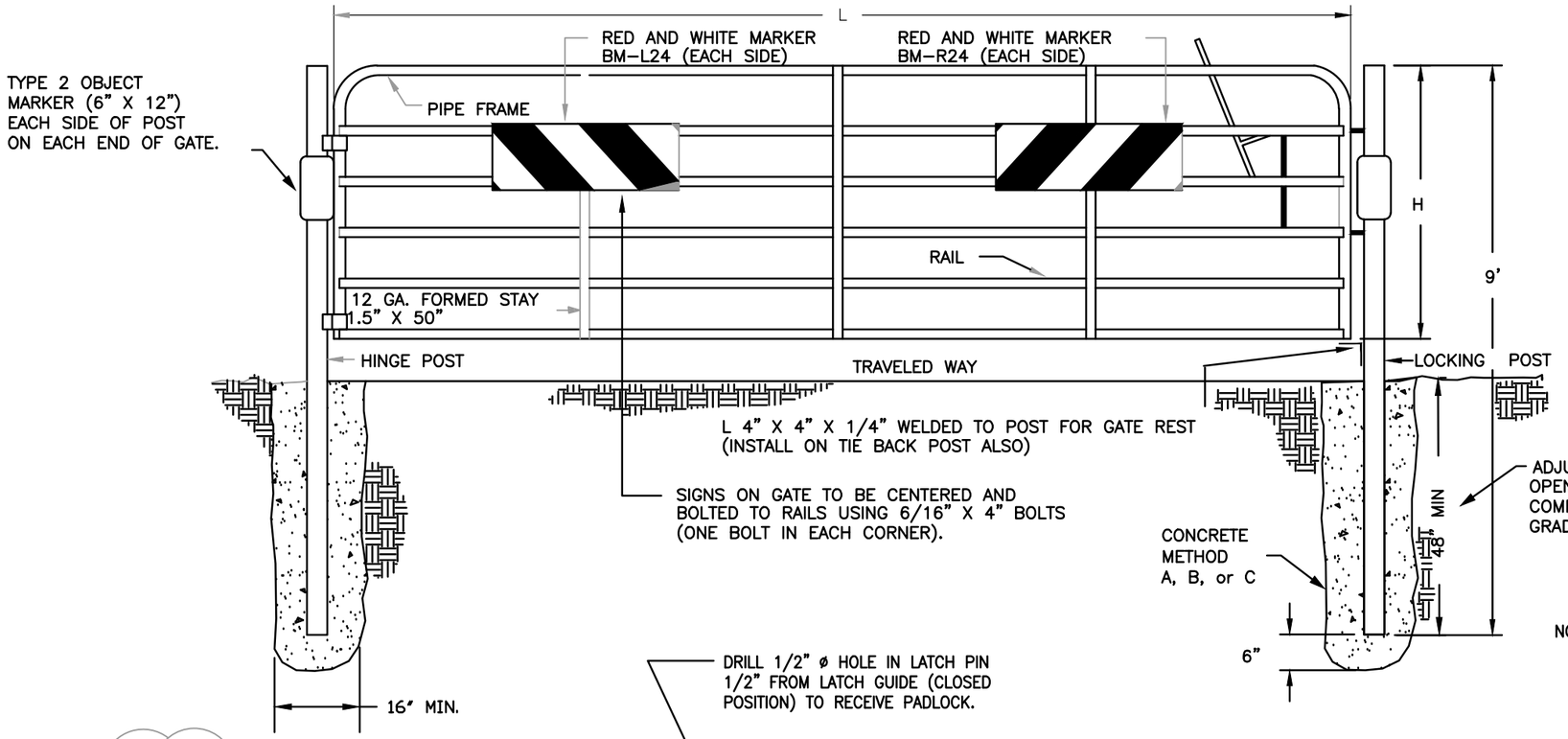
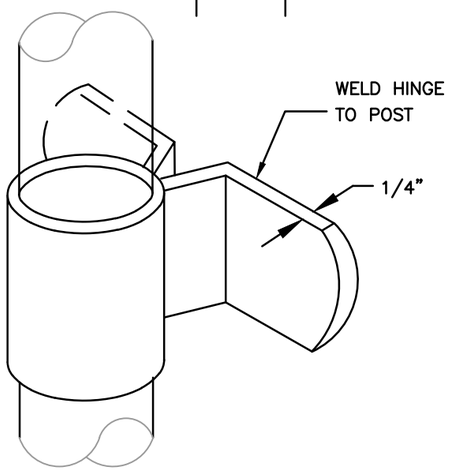


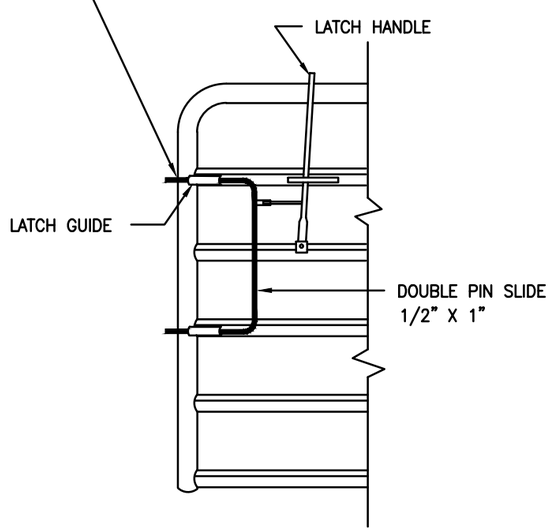
OPENING	HEIGHT(H)	LENGTH(L)	NO. FORM STAYS
10'	52"	9' 8"	1
12'	52"	11' 8"	2
14'	52"	13' 8"	2
16'	52"	15' 8"	3
18'	52"	17' 8"	4
20'	52"	19' 9"	4

SIZE CHART

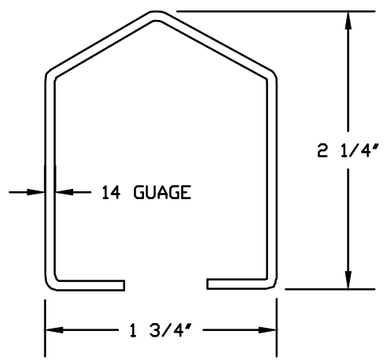
NOTES:
1/ GATE FRAME IS MADE OF 1 1/4" HIGH STRENGTH TUBING, 1 1/2" O.D.(MIN. YIELD STRENGTH 50 ksi).
2/ UNLESS OTHERWISE DESIGNATED ON THE PLANS OR IN THE SCHEDULE OF ITEMS, THE IRON GATE WITH A 16' OPENING WILL BE USED.
3/ ALL METAL PARTS SHALL BE PAINTED LIGHT GREEN.
4/ ALL SIGNS AND OBJECT MARKERS REQUIRED ARE INCIDENTAL TO GATE CONSTRUCTION.
5/ ALL POSTS SHALL BE 5" I.D. STEEL PIPE. CAP ALL POSTS BY WELDING A 5 1/2" DIAMETER BY 2/16" THICK STEEL PLATE TO TOP OF POST. INSTALL A TIE BACK (EQUIVALENT TO HINGE AND LOCKING POST) TO SECURE GATE IN OPEN POSITION. TIE BACK POST MUST BE SET TO RECEIVE LATCH PINS IN ORDER THAT GATE MAY BE LOCKED OPEN. INSTALL TYPE 2 OBJECT MARKER (6" X 12") ON SIDE OF TIE BACK POST AWAY FROM GATE.



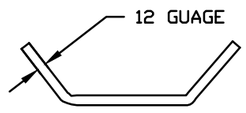
HINGE DETAIL



LATCH DETAIL



RAIL SECTION DETAIL



FORMED STAY DETAIL

U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
R-6
PACIFIC NORTHWEST REGION

Forest: WALLOWA-WHITMAN NATIONAL FOREST
DISTRICT: LA GRANDE RANGER DISTRICT

Drawn R. MILLS
Design B. YAW
Checked B. YAW
Reviewed D. TAYLOR

Project: LIMBERJIM CREEK CULVERT REPLACEMENTS
Location: FSR 5130015

Sheet Title: GATE DETAIL
Scale: NTS
Sheet Number: 13 OF 14

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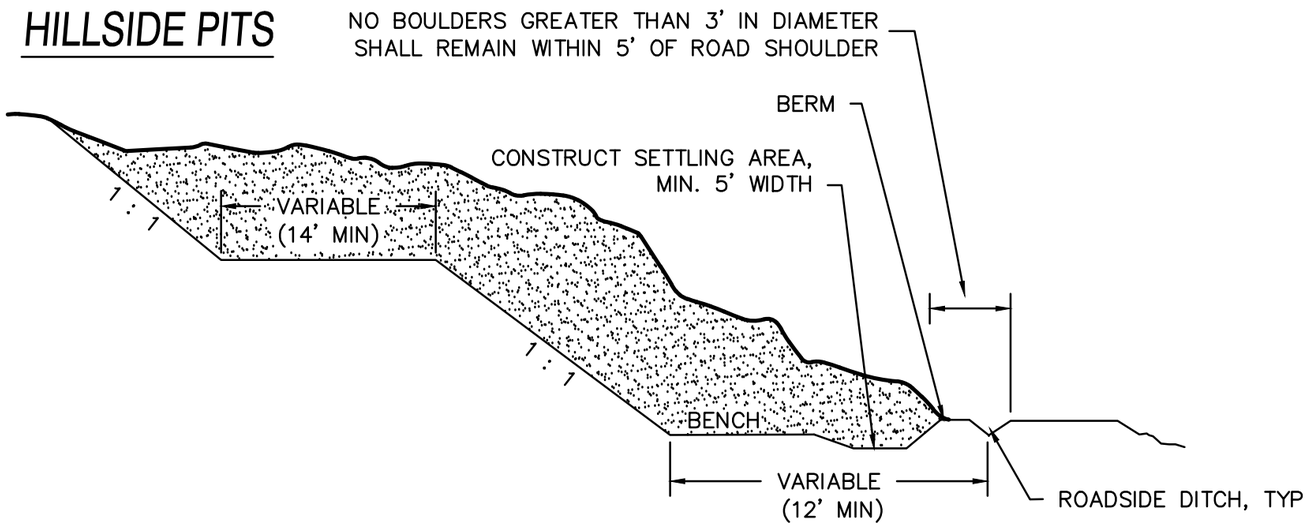
PIT DEVELOPMENT PLAN: 65101

HILLSIDE PITS



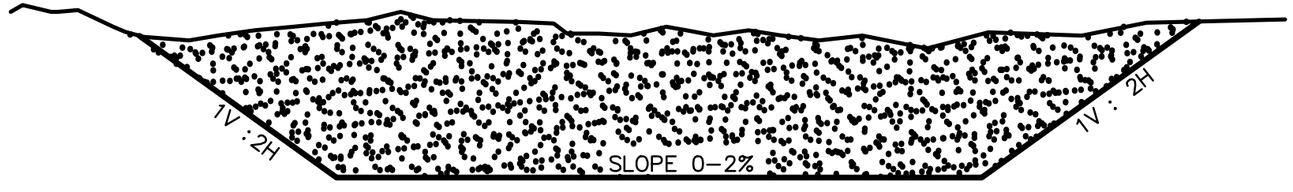
AGGREGATE SOURCE/ USE LOCATIONS

SOURCE	LOCATION	PAY ITEM
#1	FSR 5130021	20903.A, 20903.B, 20907.A, 20907.B, 25101.A, 25101.B, 32201, 32220

GENERAL NOTES:

1. EXACT PIT LOCATION, LIMITS, ETC. WILL BE STAKED BY THE FOREST SERVICE.
2. CLEARING, GRUBBING, AND SLASH REMOVAL METHODS SHALL BE IN ACCORDANCE WITH SECTION 201 AND SHALL BE INCIDENTAL TO ITEM 65101. SLASH DISPOSAL METHODS SHALL BE IN ACCORDANCE WITH FSSS 203.05, METHOD (f), SCATTER.
3. PIT SLOPES SHALL BE AS SHOWN, OR AS APPROVED BY THE CONTRACTING OFFICER.
4. UNSUITABLE AND EXCESS EXCAVATION DISPOSAL AREAS WILL BE STAKED ON GROUND BY CO.

OTHER AREAS



U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE
R-6
PACIFIC NORTHWEST REGION

Forest: WALLOWA–WHITMAN NATIONAL FOREST
DISTRICT: LA GRANDE RANGER DISTRICT

Drawn B. YAW
Design B. YAW
Checked D. TAYLOR
Reviewed D. PLUMMER

Project: Limberjim Creek Culvert Replacements
Location: FSR 5130, 5130015, & 5130100

Sheet Title: PIT DEV. DETAIL
Scale: NTS
Sheet Number: 14 OF 14