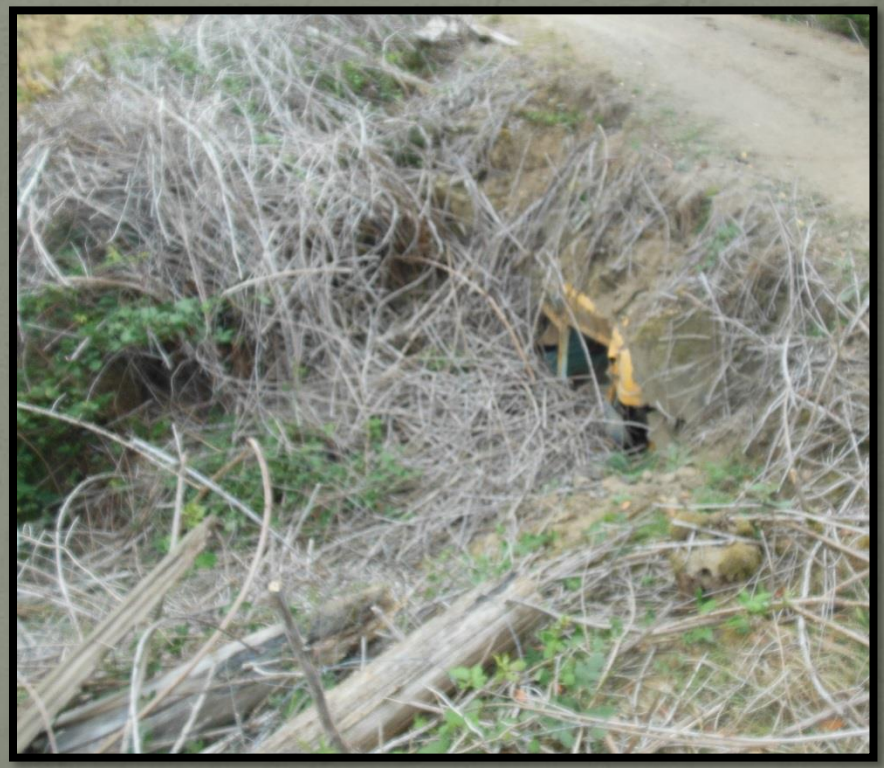
Cooperator of the Year:

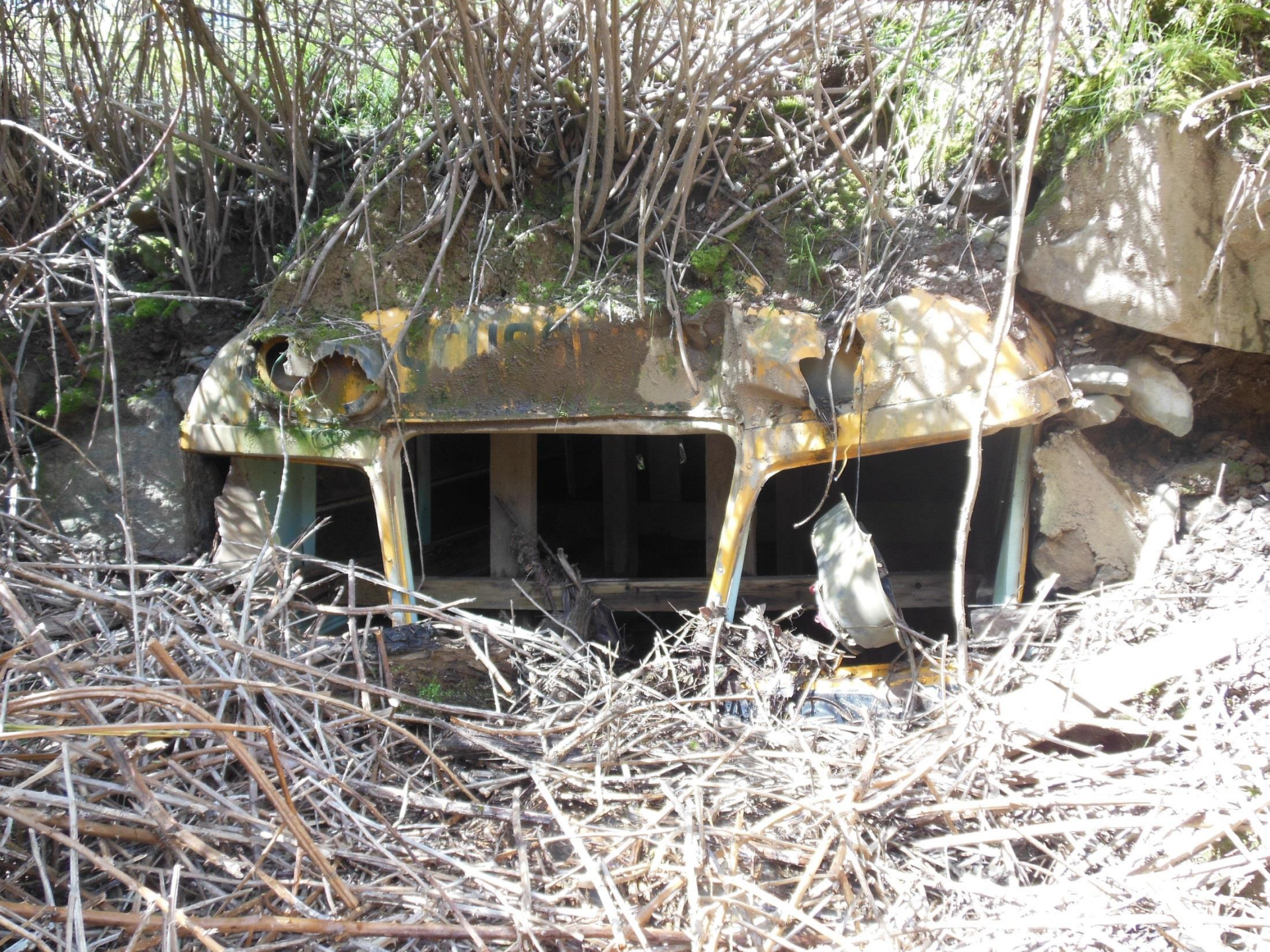
Keith Baker

Culvert Replacement and Off-Channel Watering Trough Project

Completed: October, 2013

Replacement of School Bus Culvert

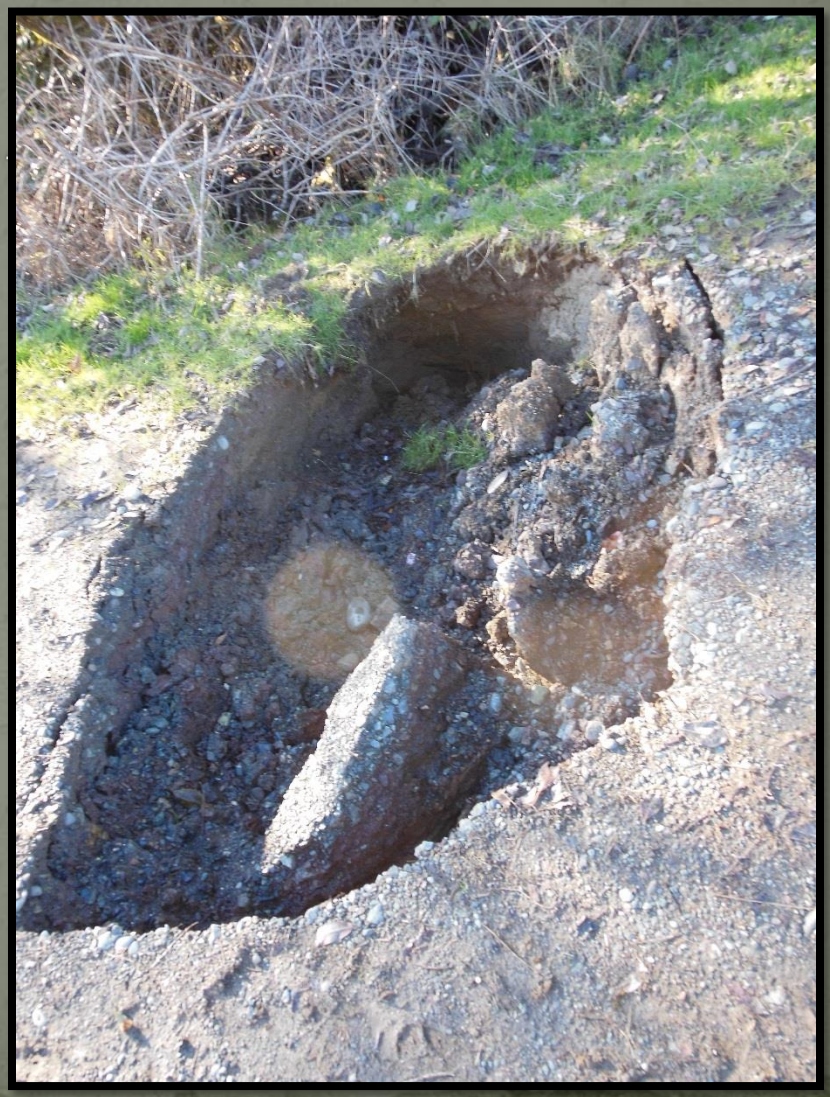


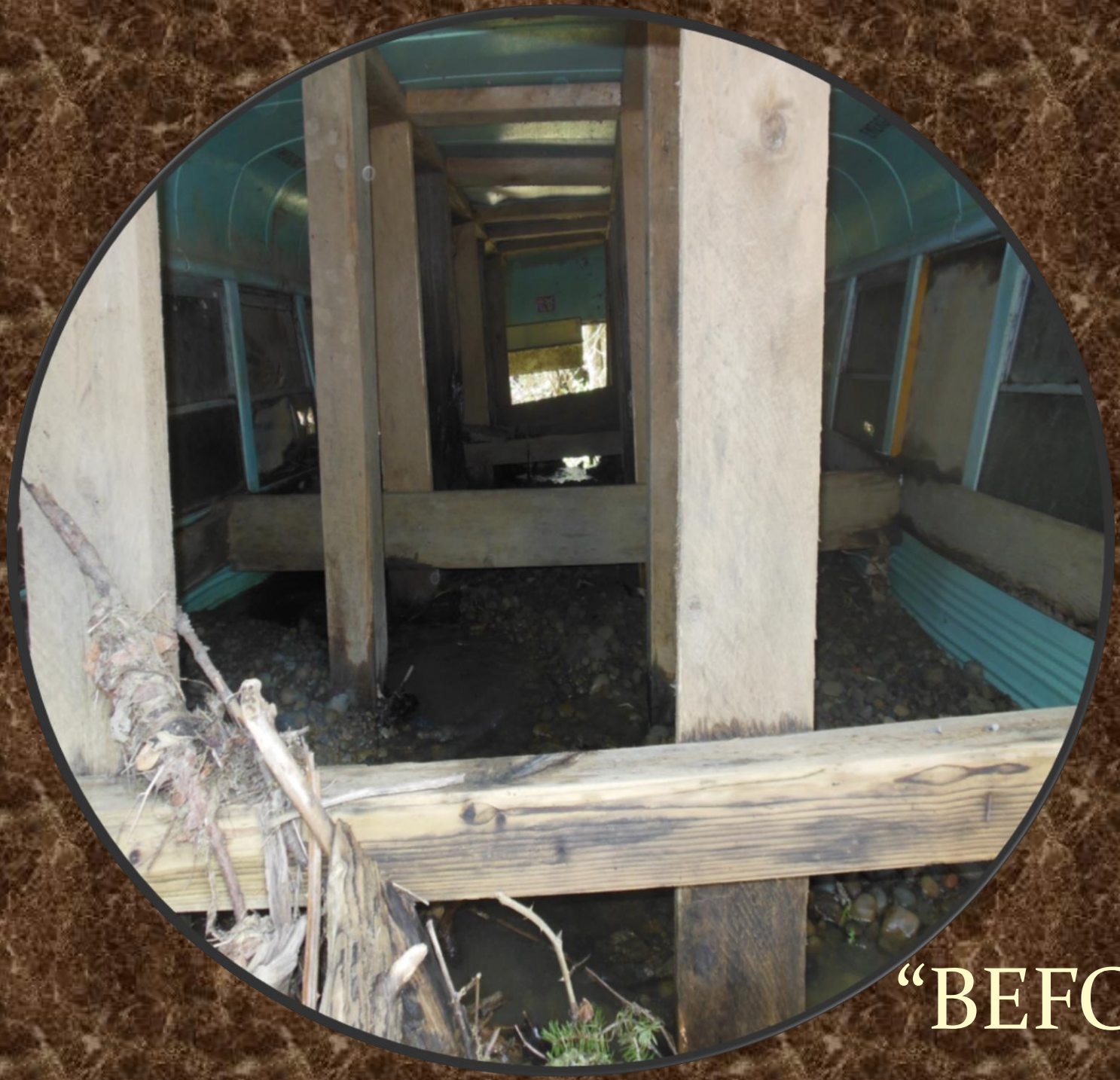


Mr. Baker had noticed a developing sink hole on the road crossing the creek and began clearing brush to see what condition the culvert was in. He discovered he did not have a culvert, but the shell of a school bus that must have been placed by a previous owner. The bus/culvert was also perched and was considered a fish barrier. It is not uncommon to find car bodies along the banks of the South Fork and other areas of the Coquille River. Back in the late 70's and early 80's this was an encouraged practice to prevent bank erosion. This road serves access to a hay barn and cattle access to a portion of the ranch. He contacted the Coos SWCD to find out what options he had. The Coos SWCD worked with the landowner and researched options and a small grant. Chris Claire of ODF&W assisted on the Fish Passage Plan and design of new culvert installation. The land owner saved rocks and natural bed materials from site that were replaced at the end of the project. The bus came out in pieces and the site was prepped for the new larger fish-friendly culvert that was installed and embedded.

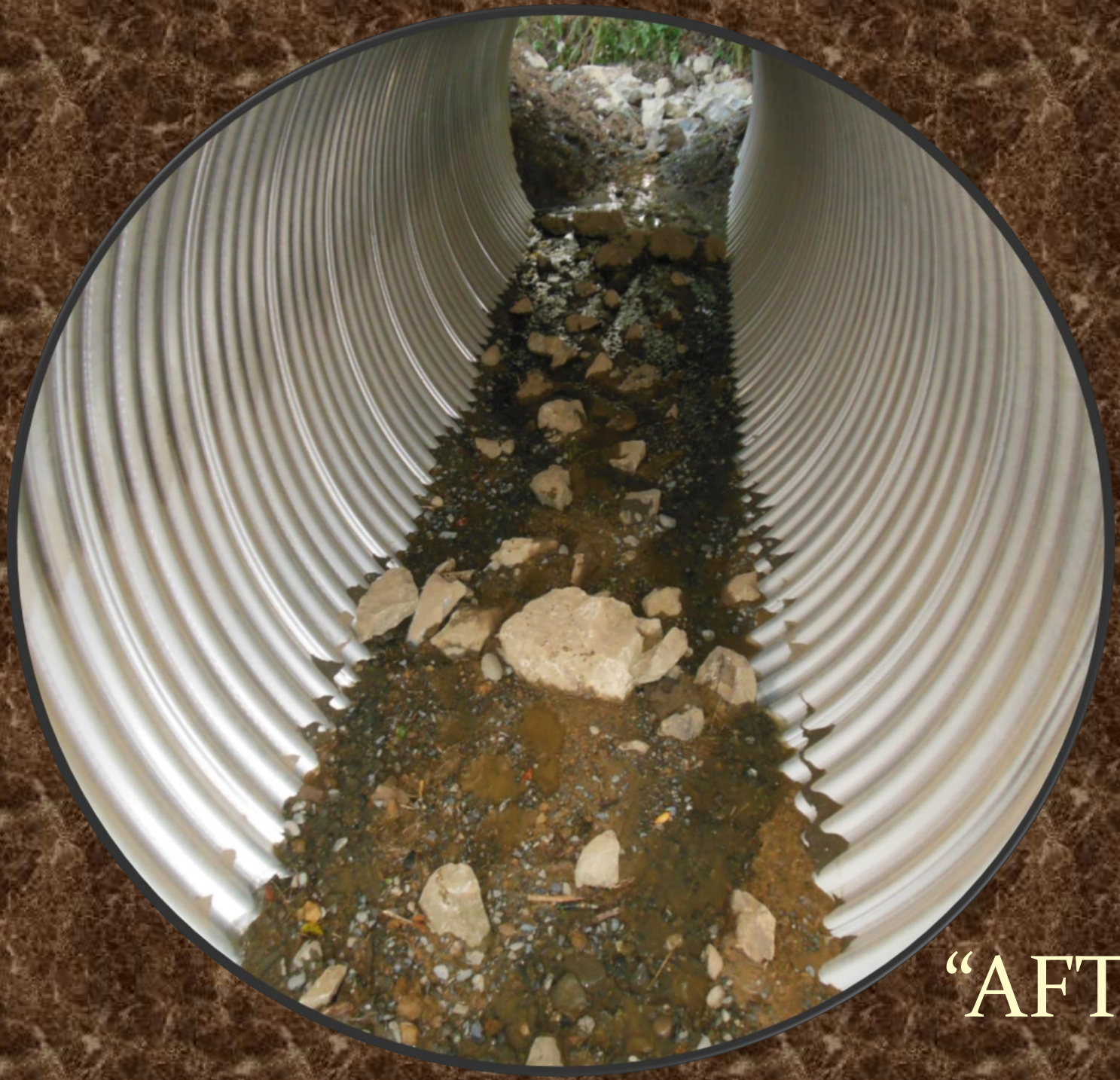
Before and After Photos:

Sink hole in road caused by failure of old school bus culvert



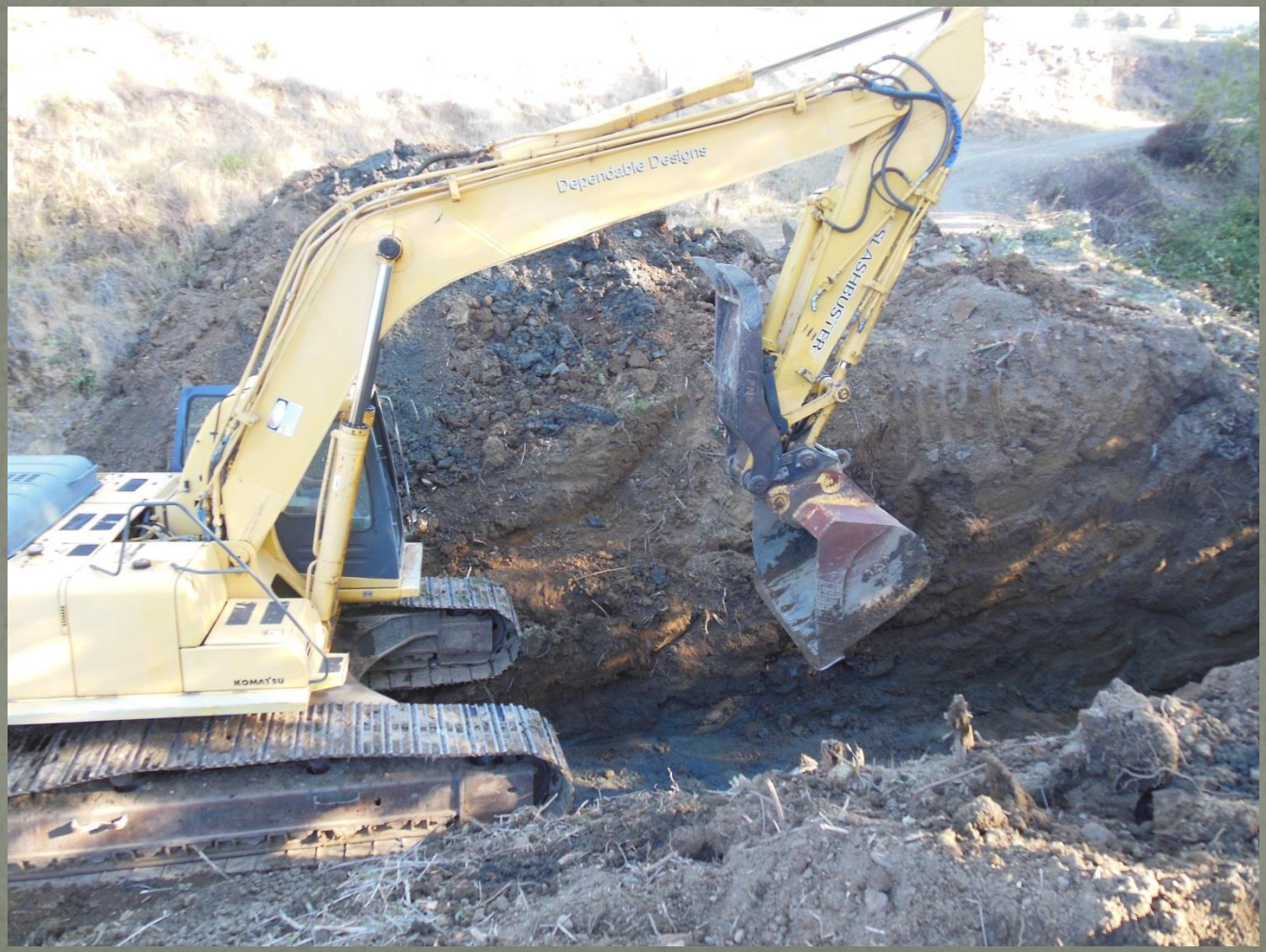


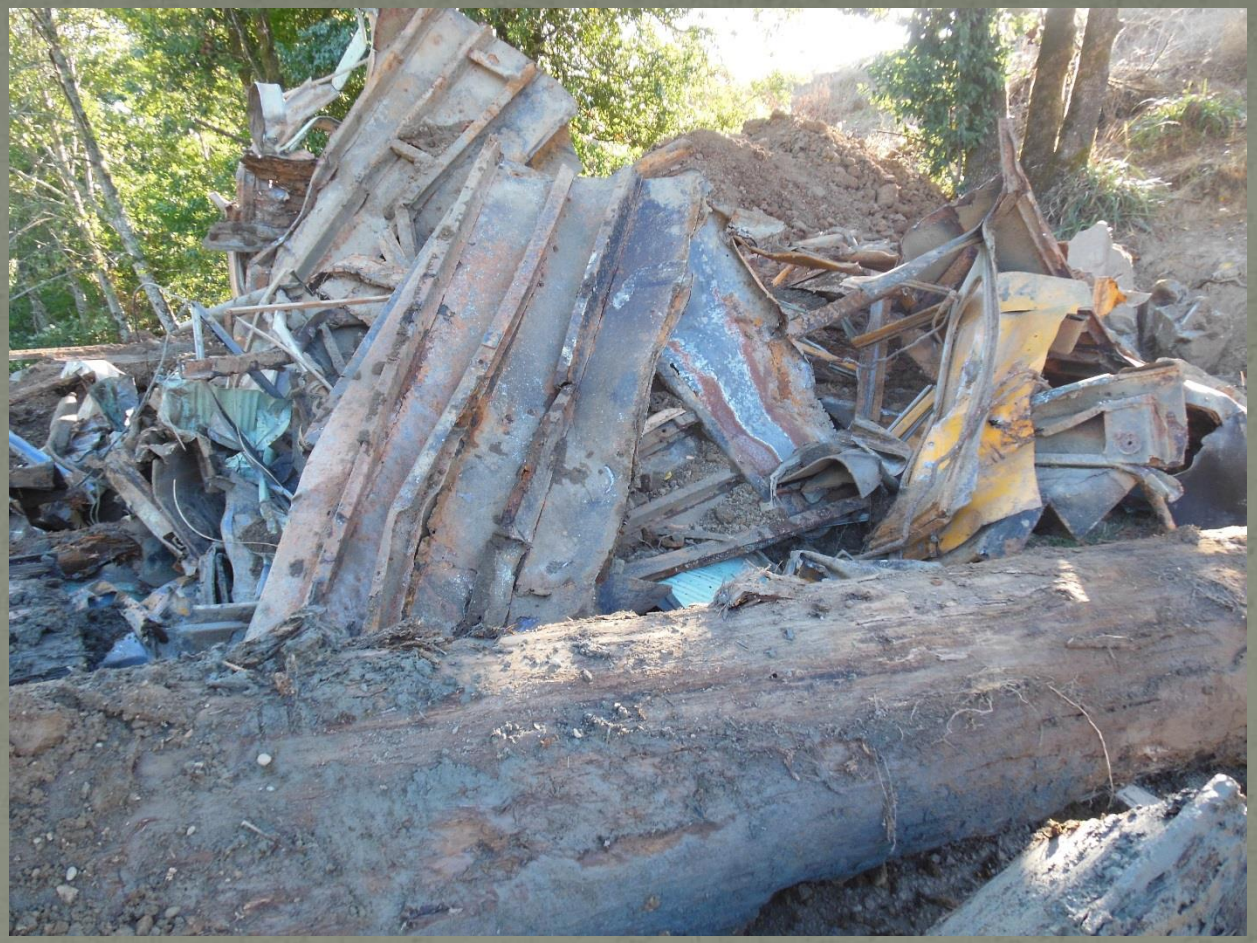
“BEFORE”



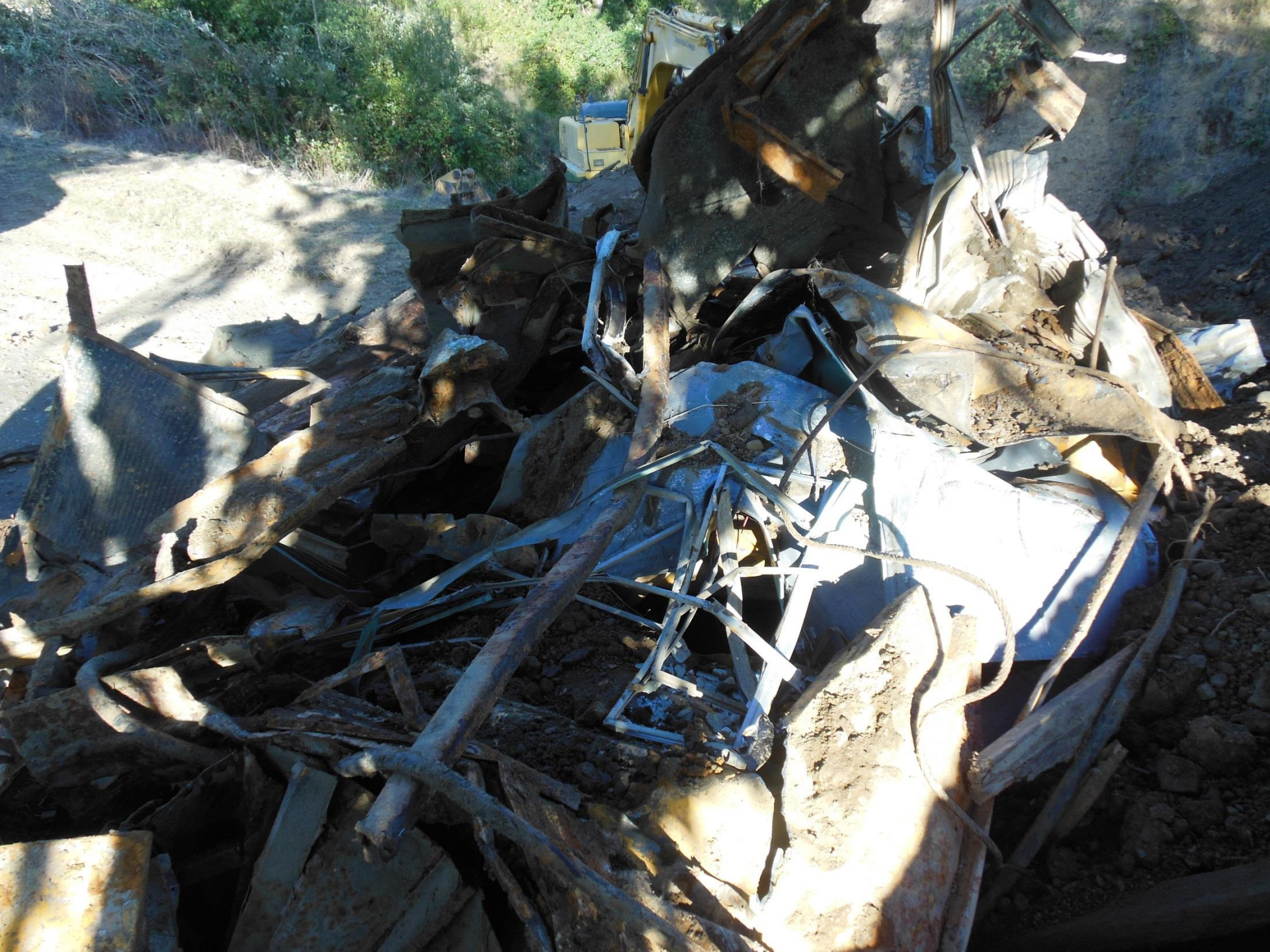
“AFTER”

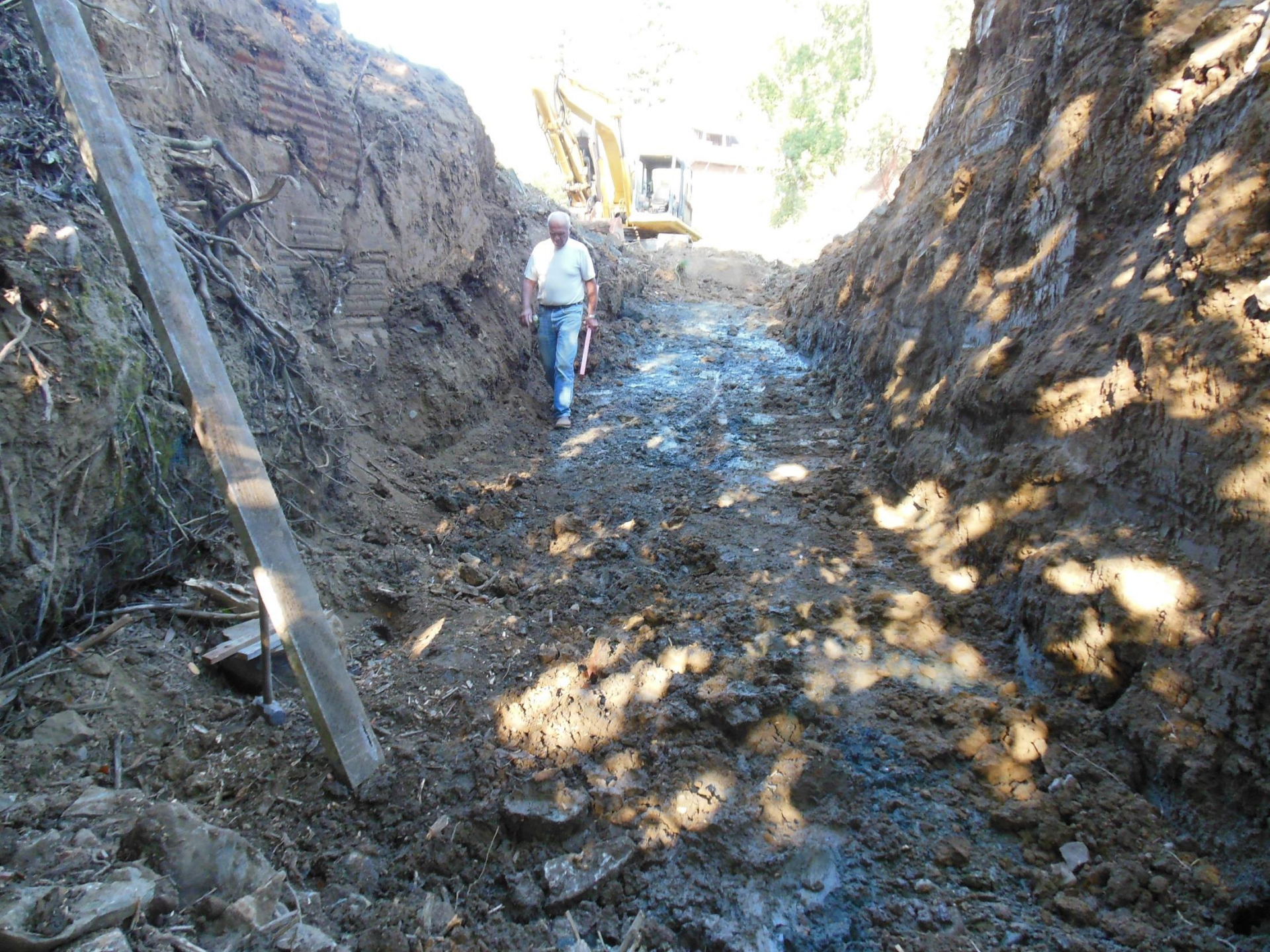
Installation Photos:

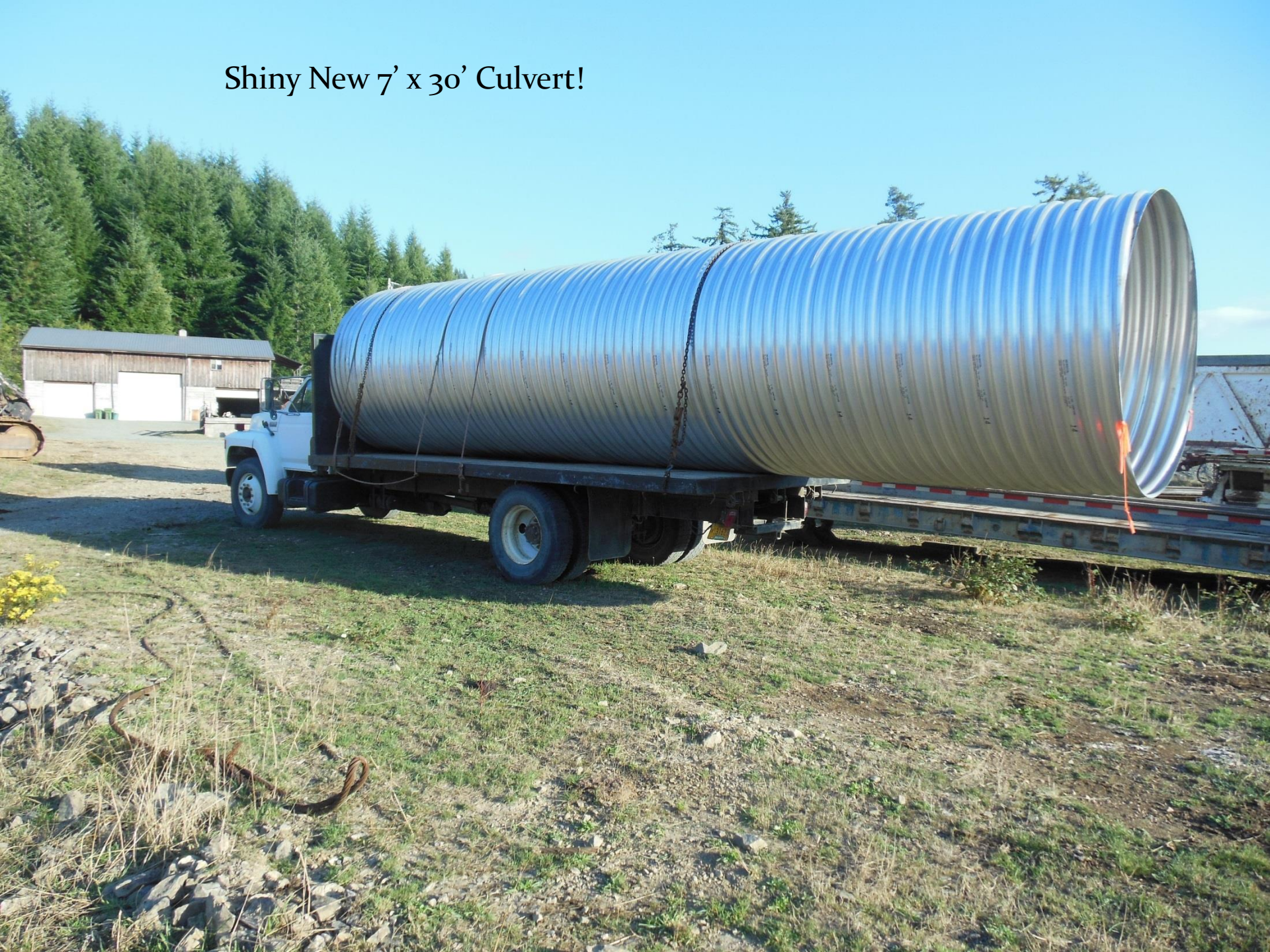


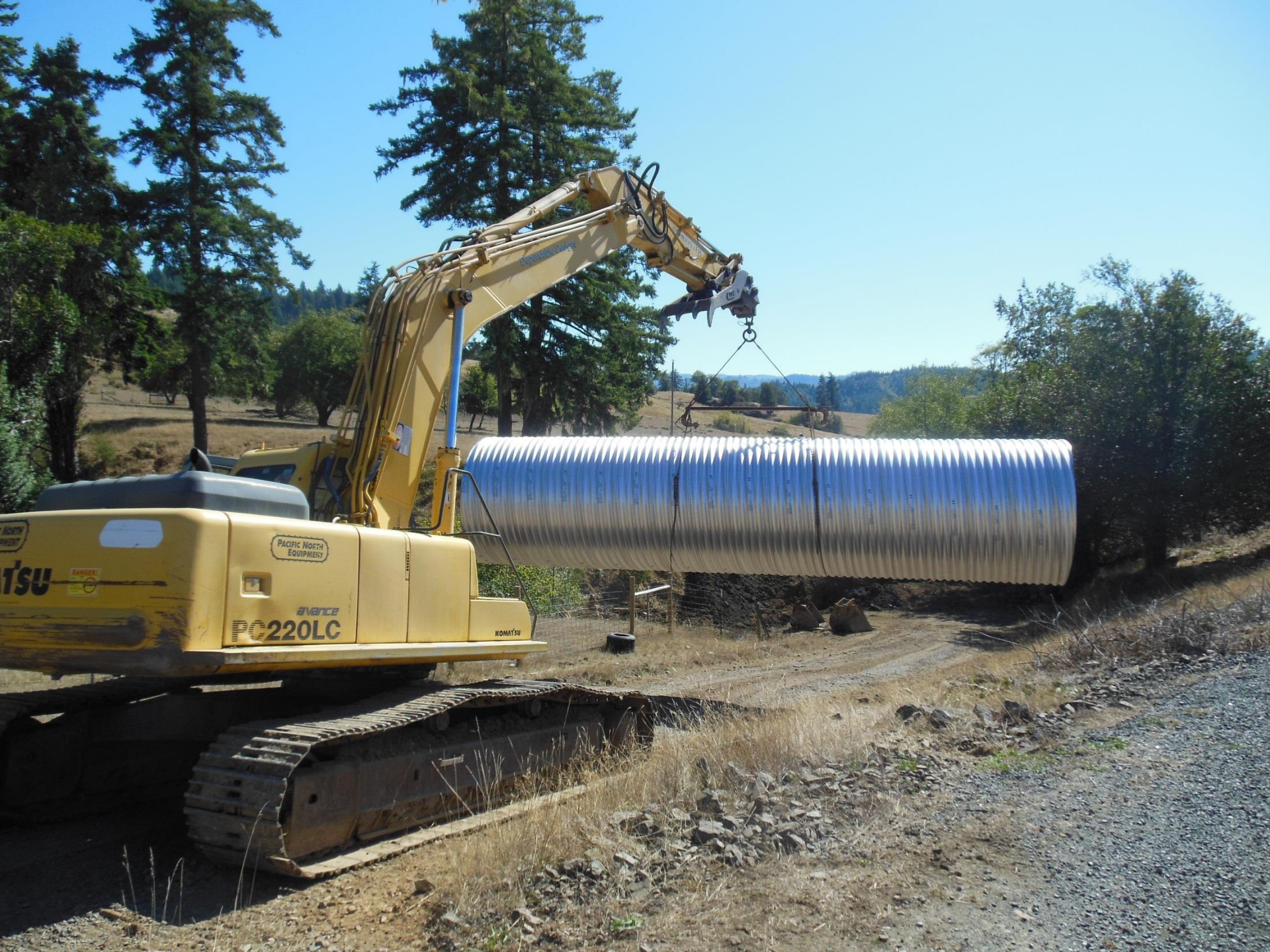


The old bus came out in pieces…






Shiny New 7’ x 30’ Culvert!


PACIFIC NORTH EQUIPMENT
avance
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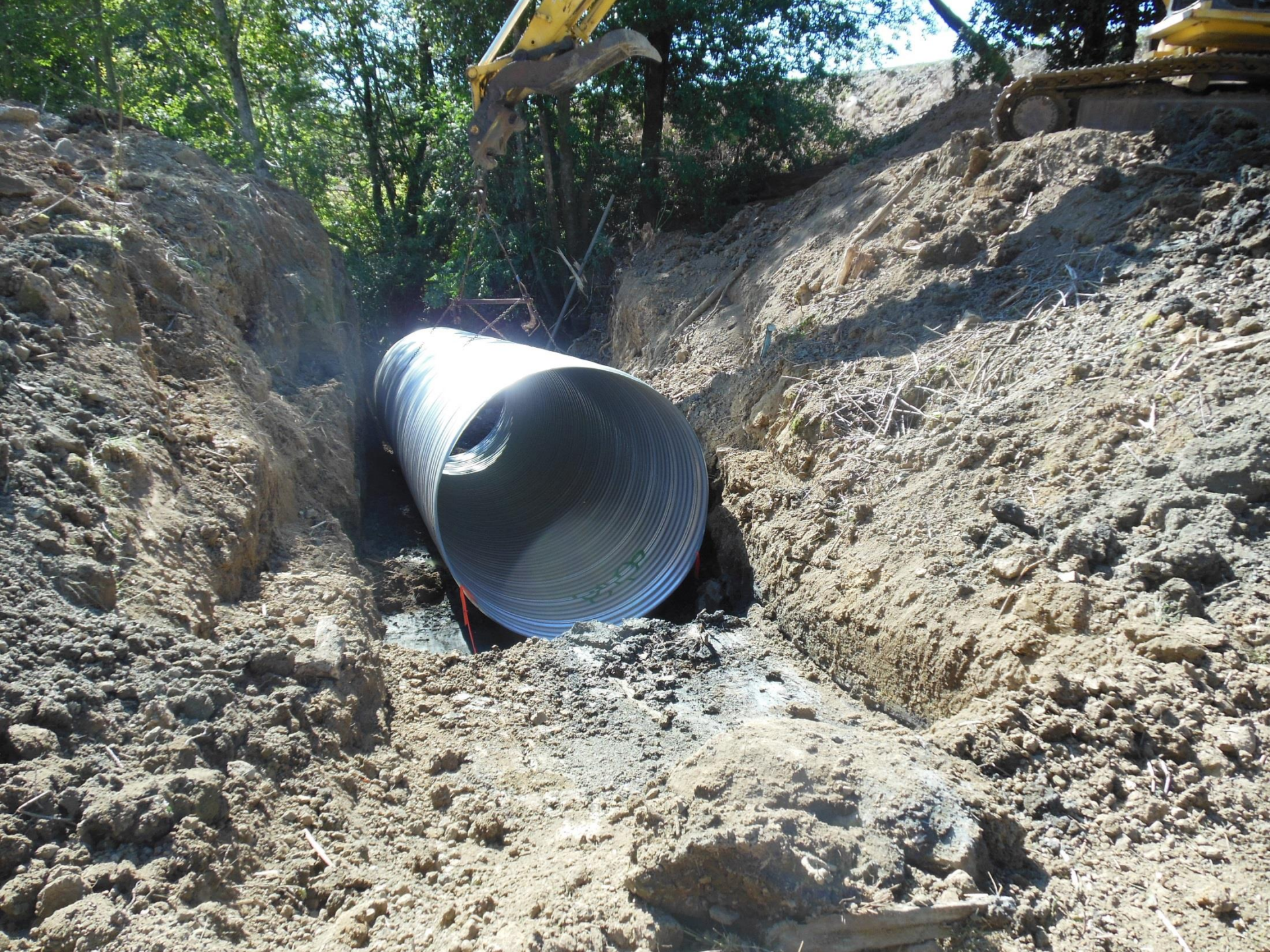
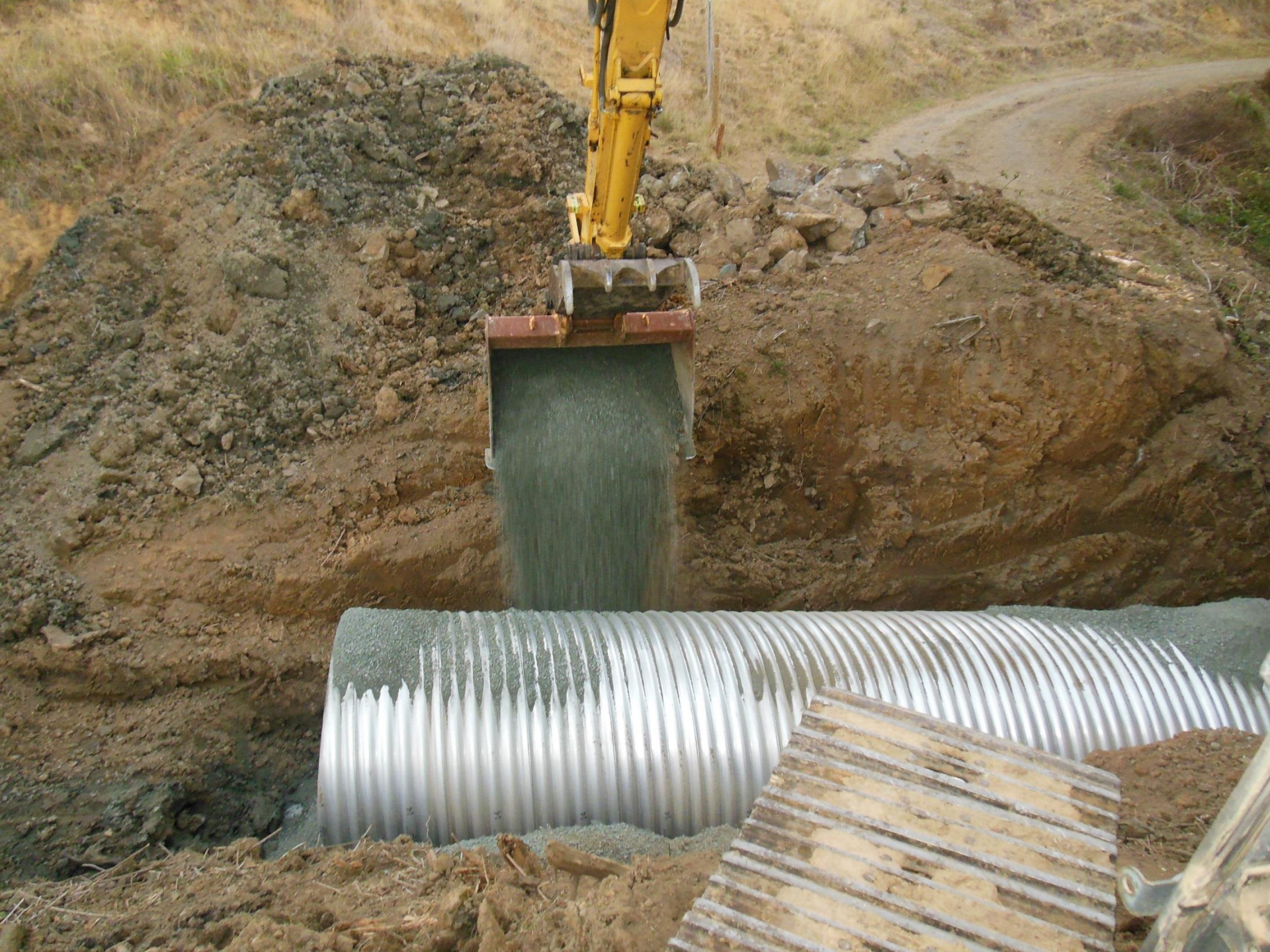
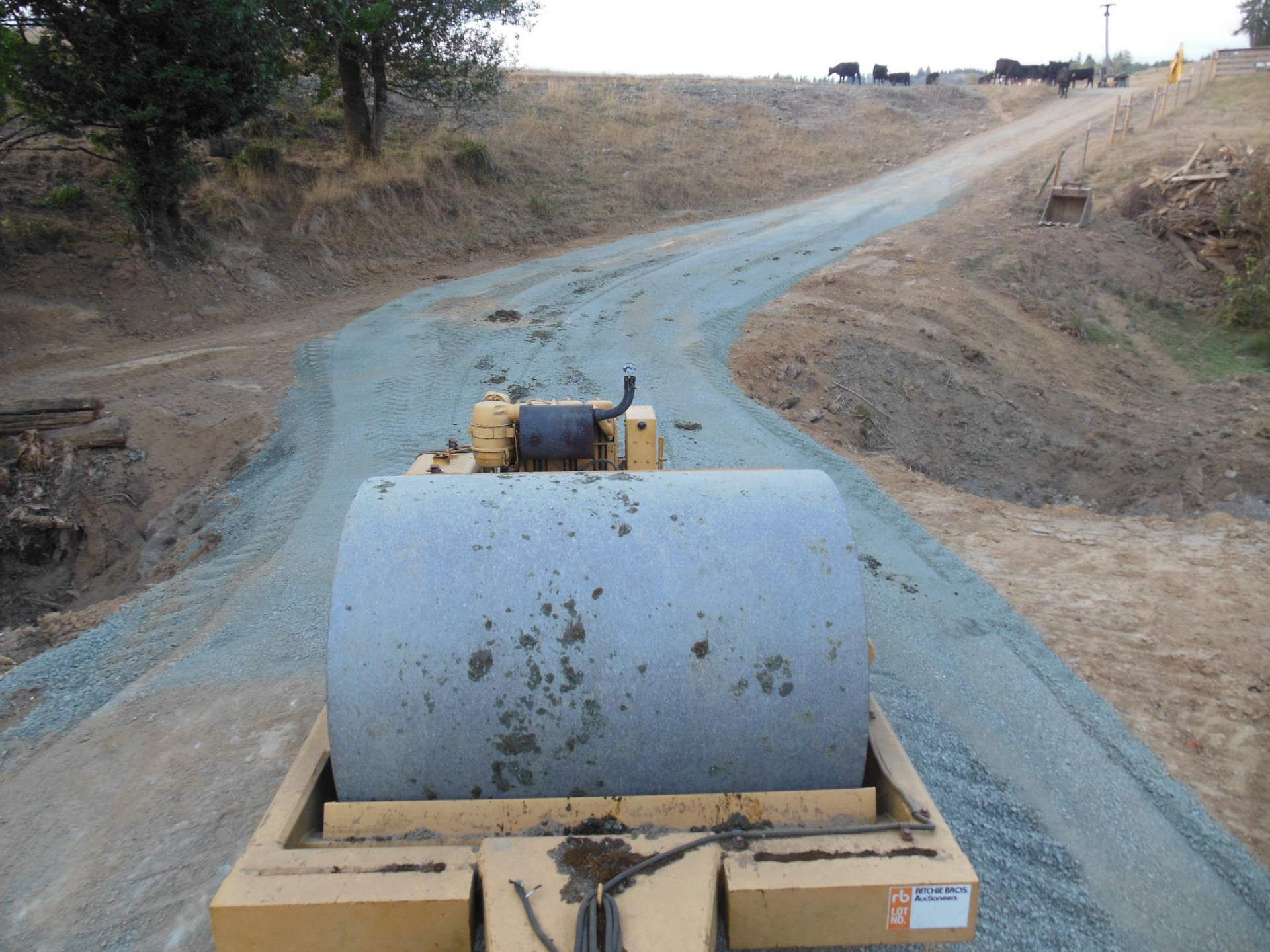
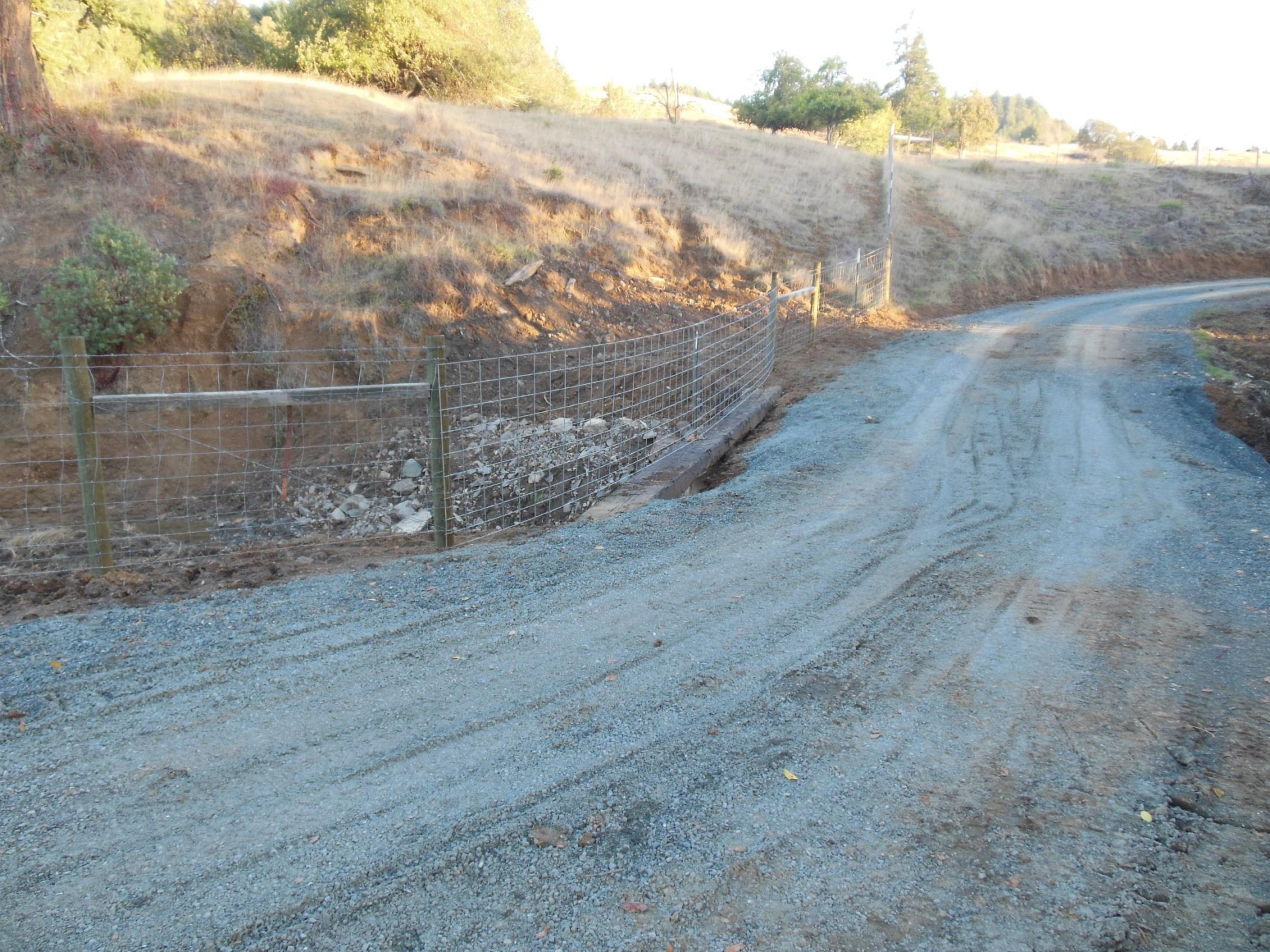


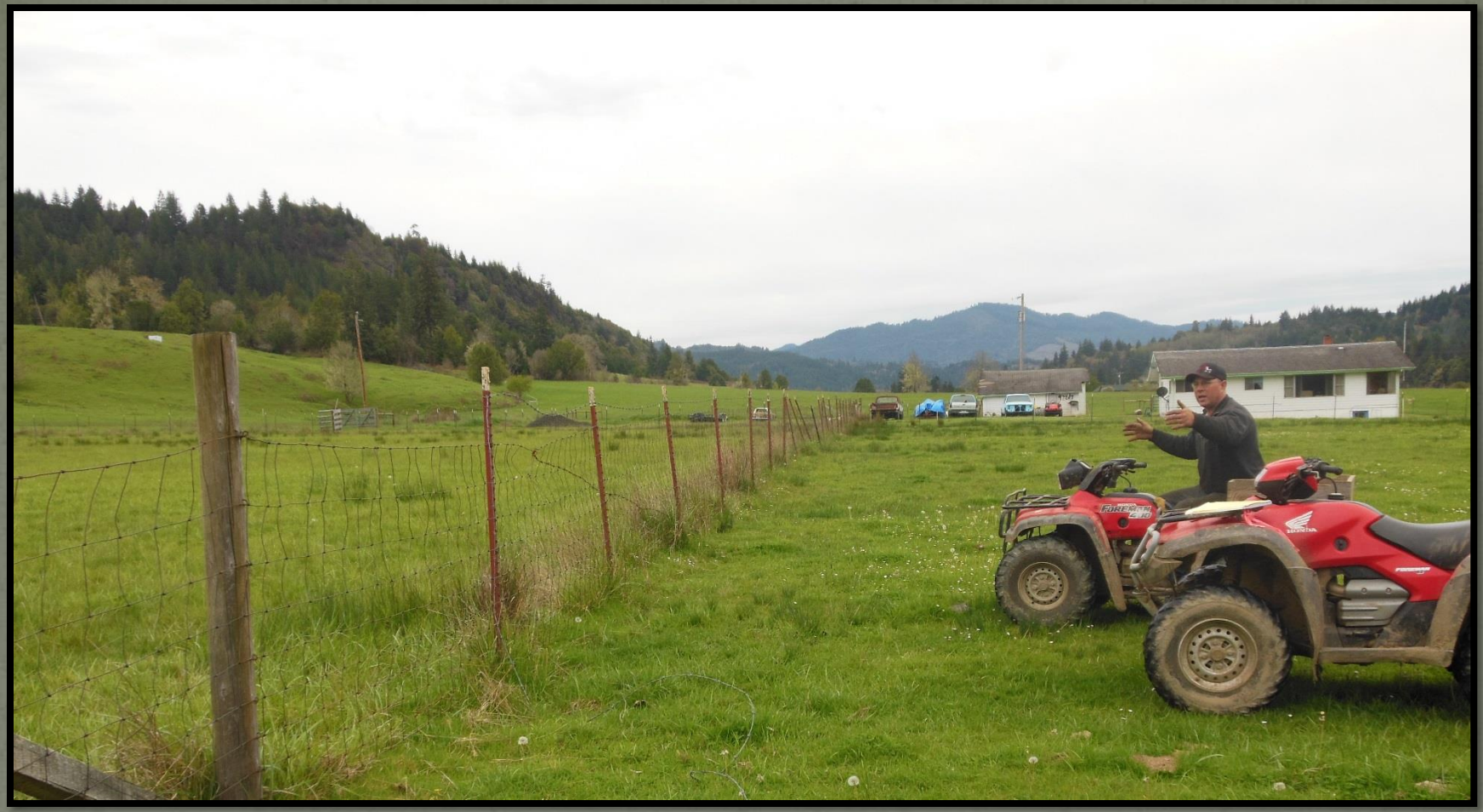



RITCHIE BROS.
Auctioneers
LOT NO.

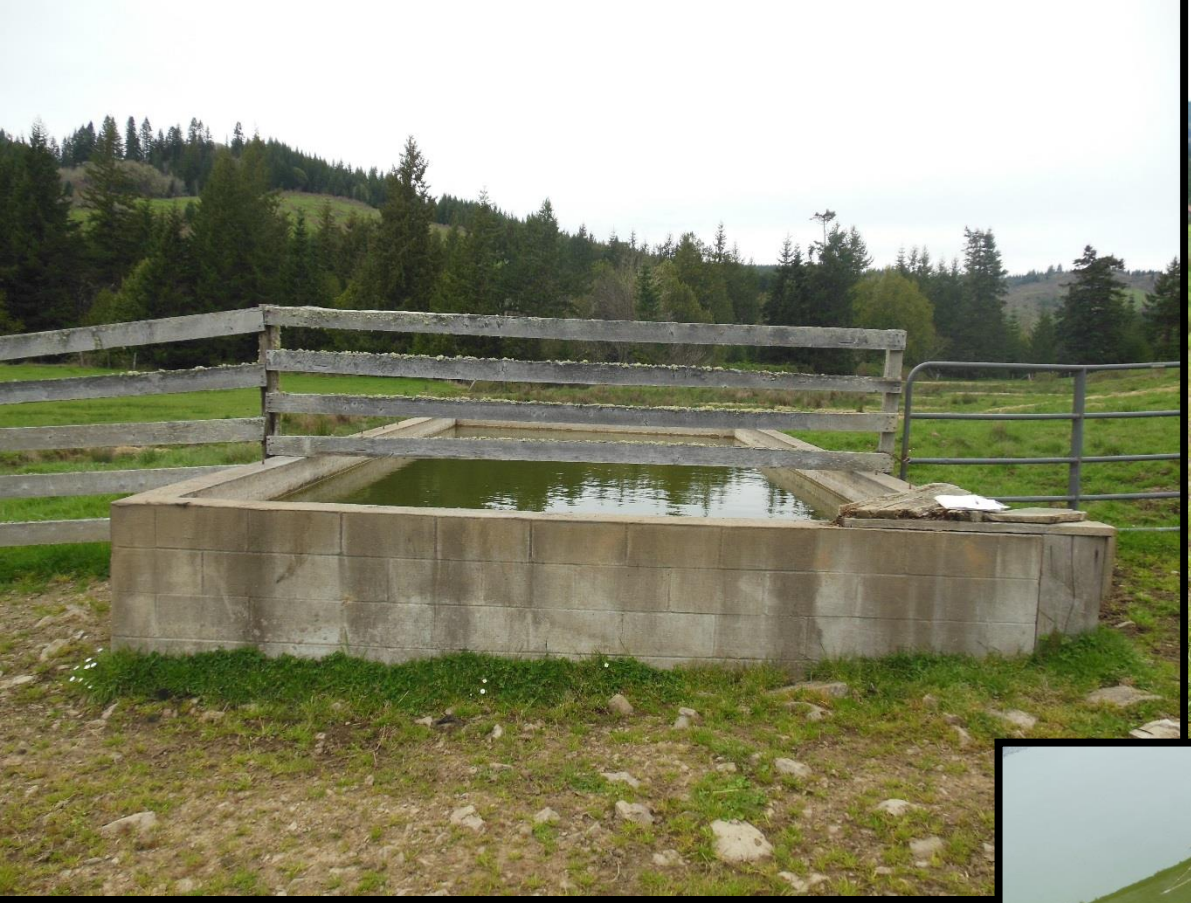


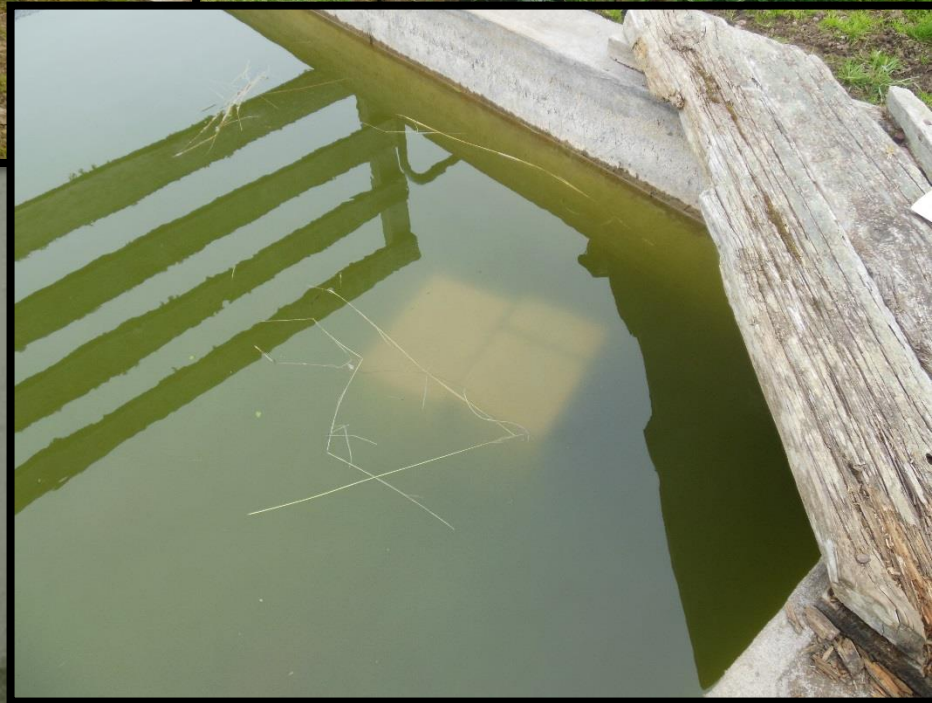
The Finished Culvert:

The second part of this project involved the installation of two new water troughs

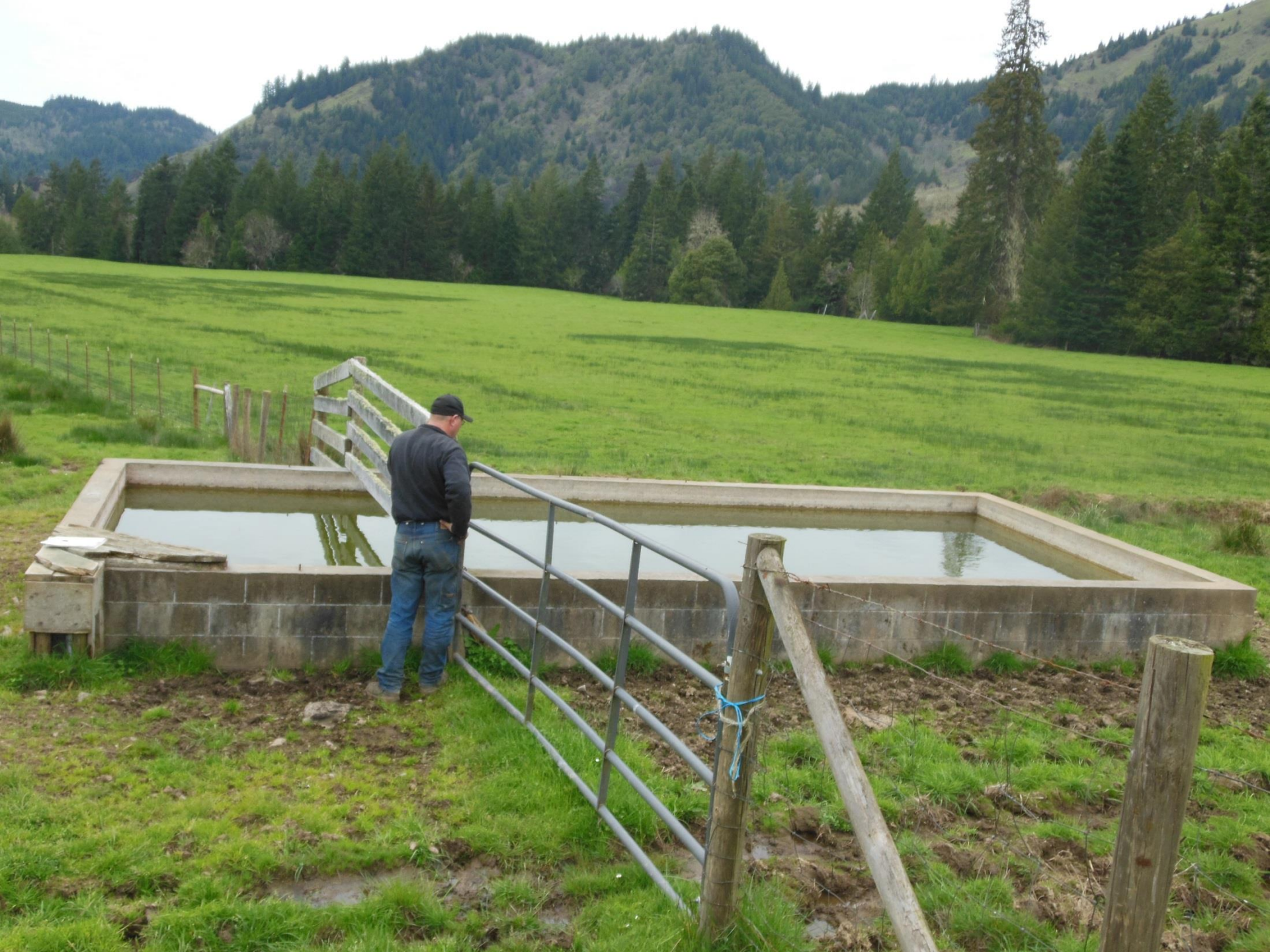


The proposed site for the new lower water trough: photo take 4/5/13

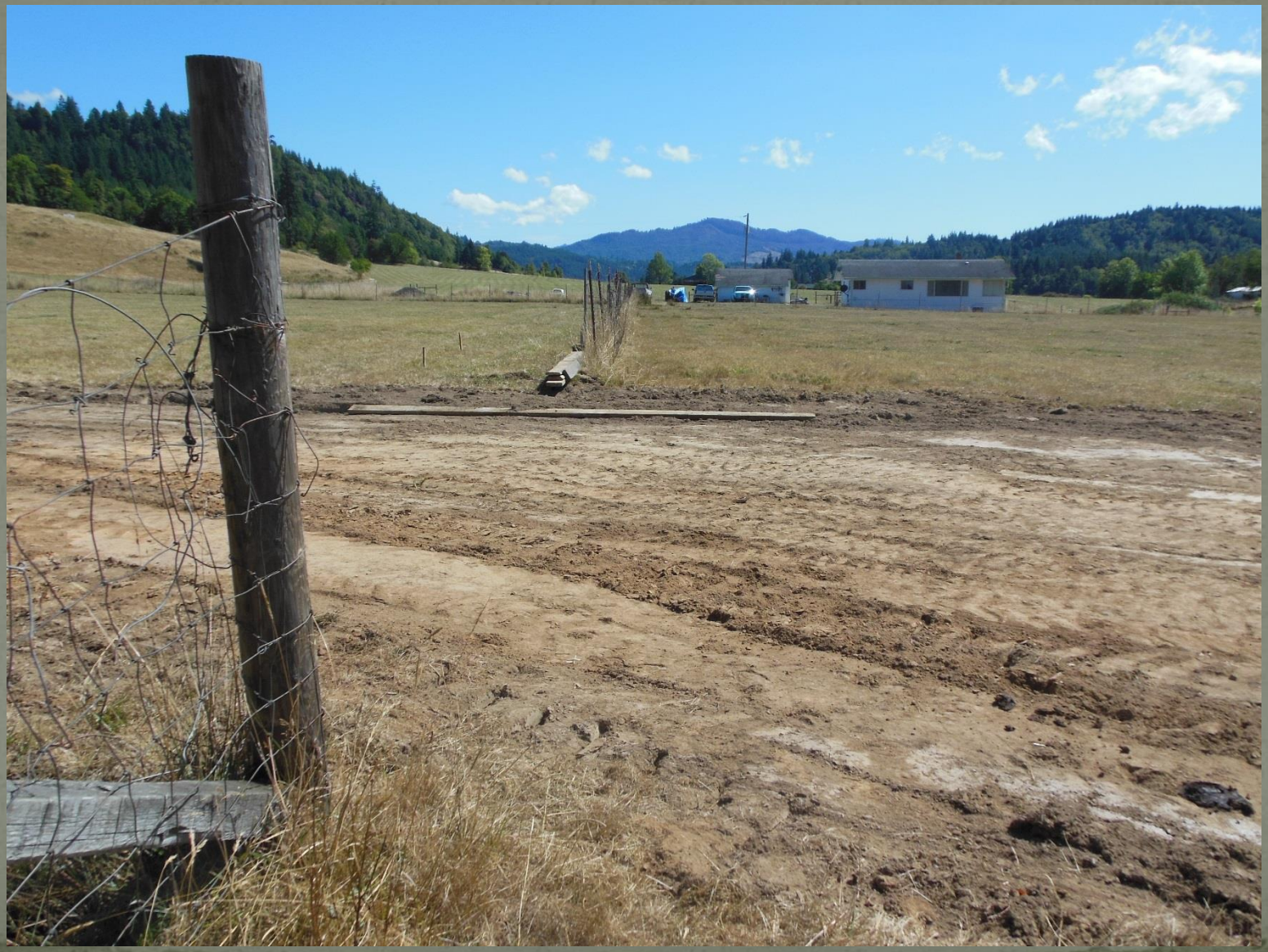


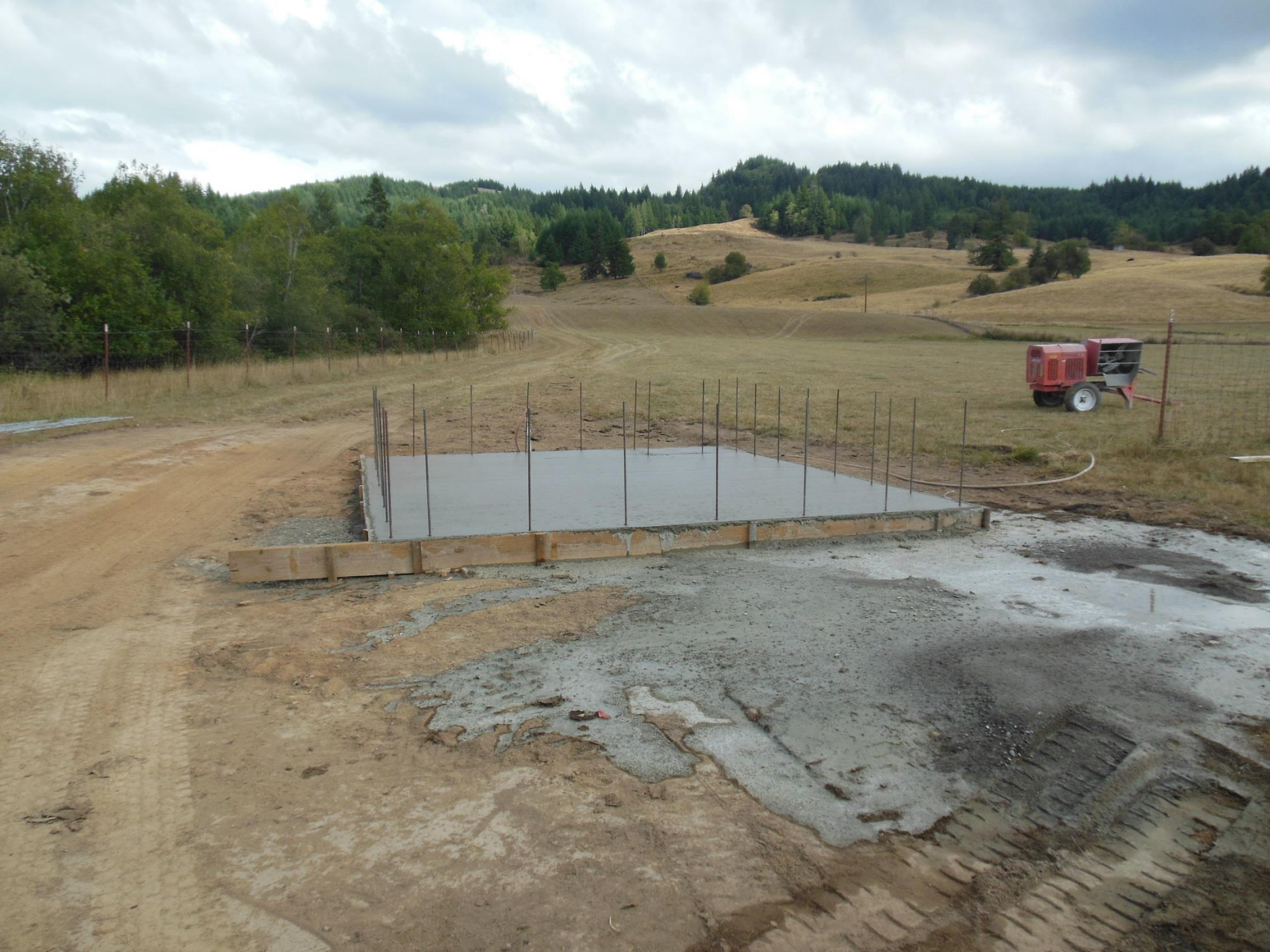


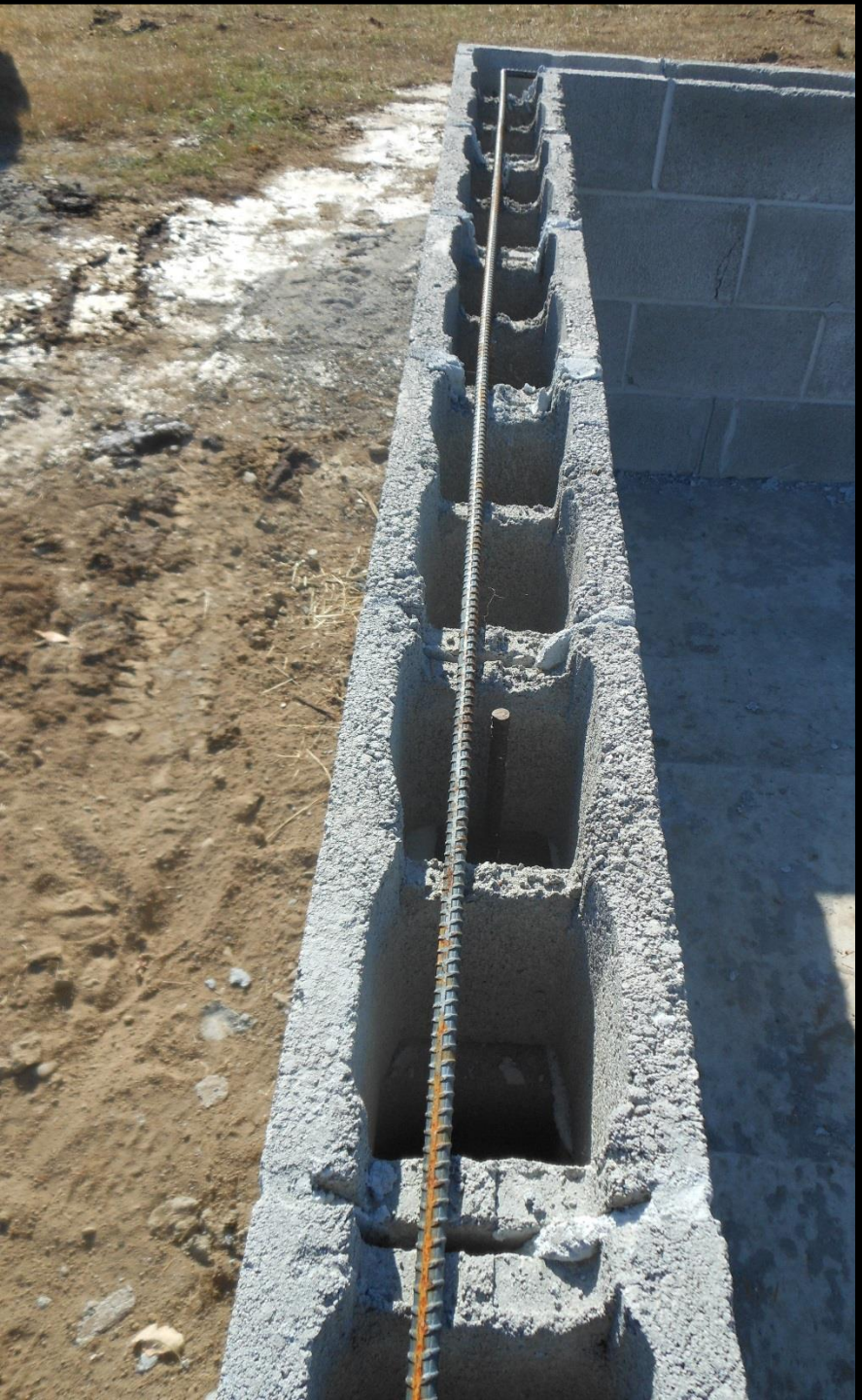
An older existing water trough shown as an example

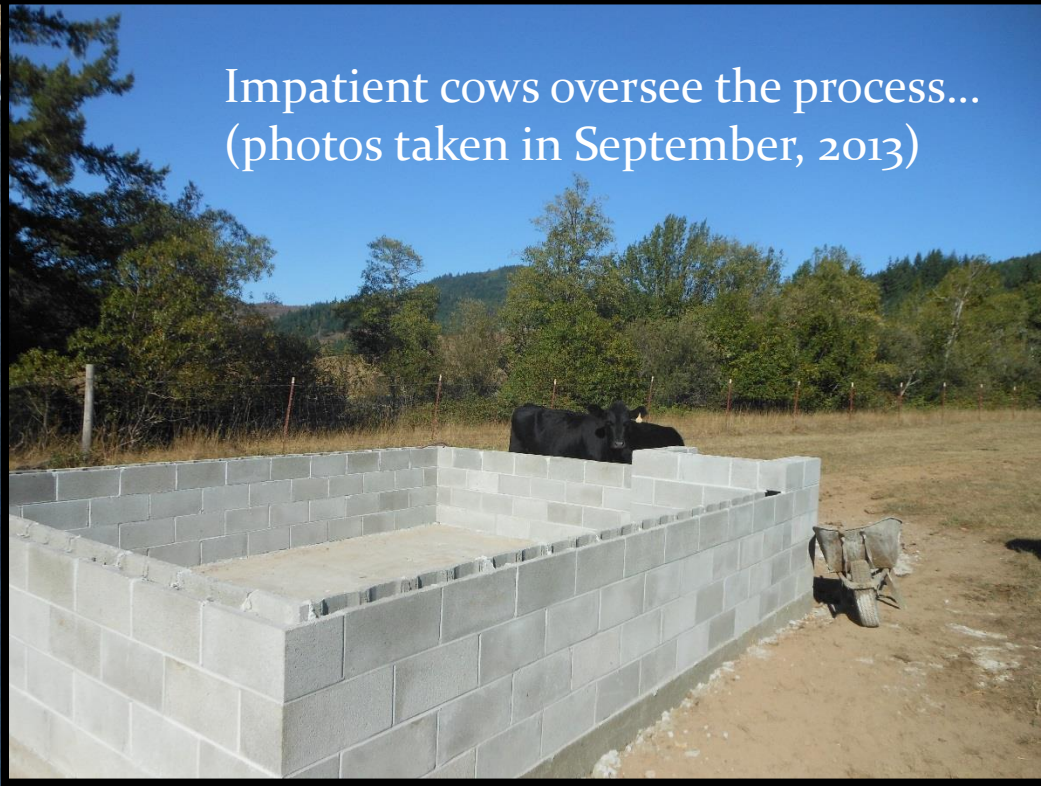


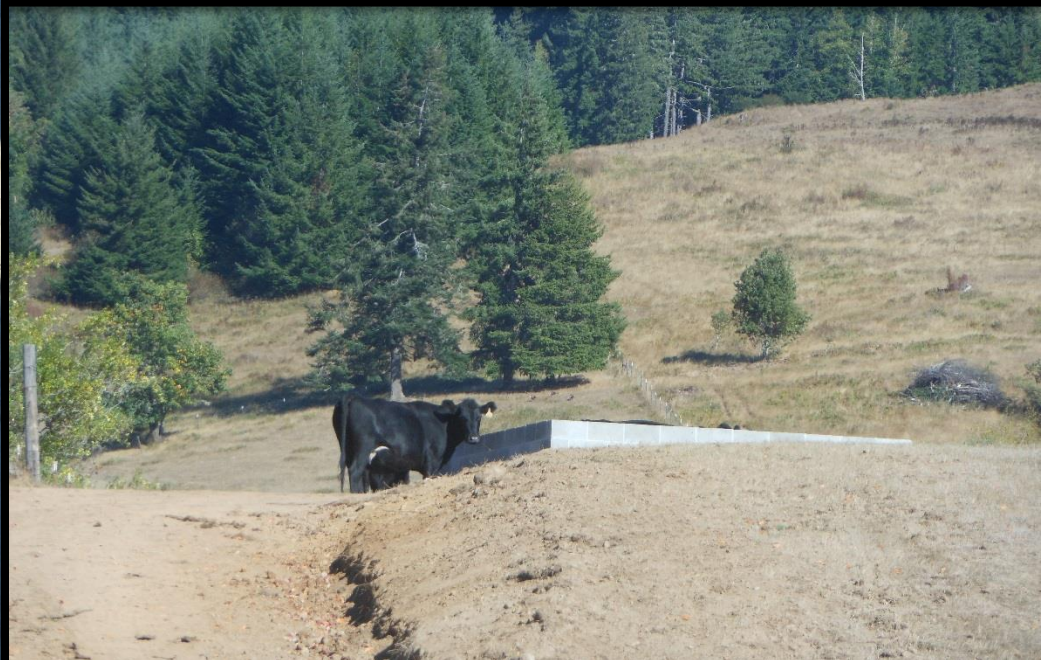
The Installation:

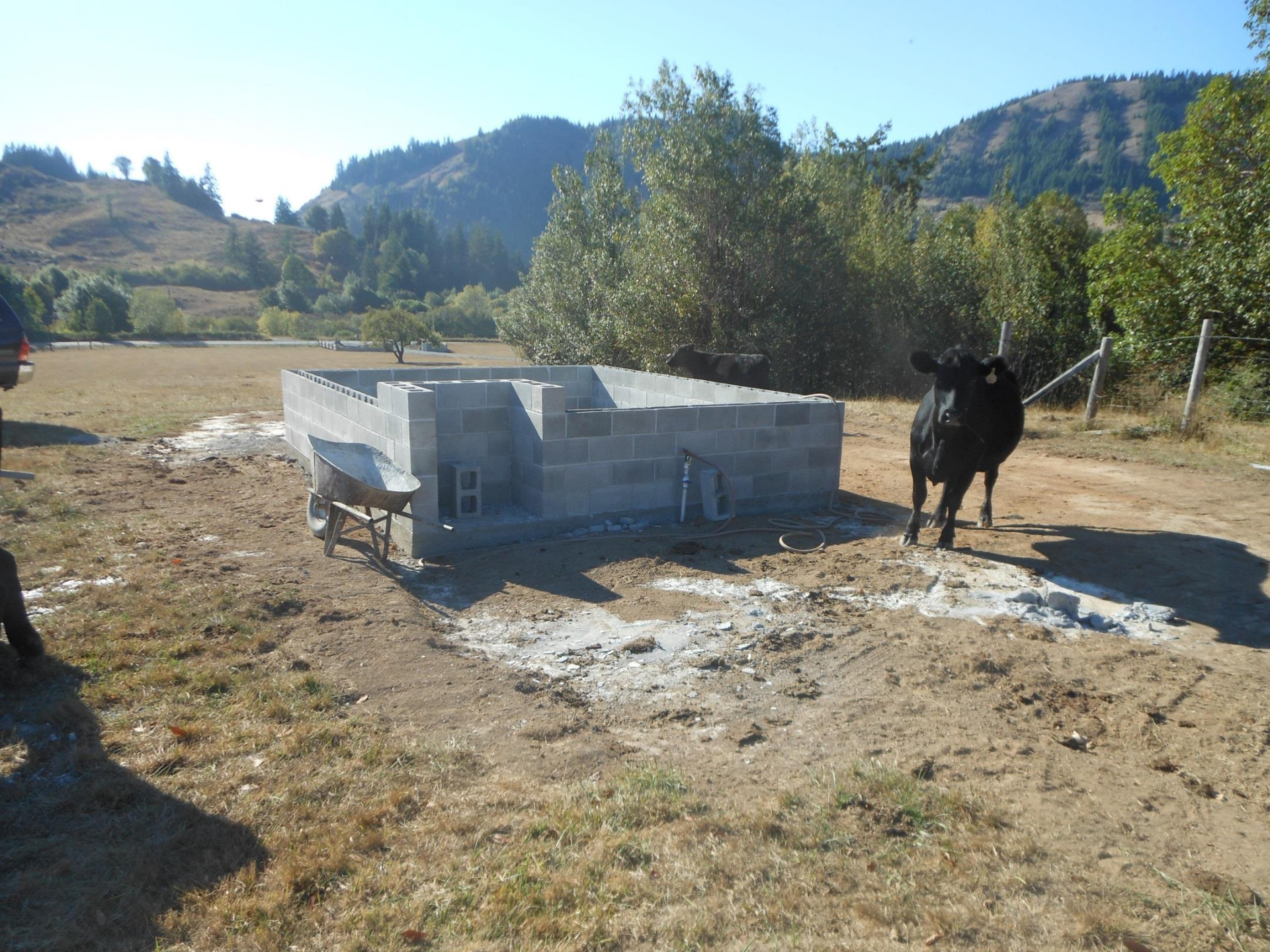




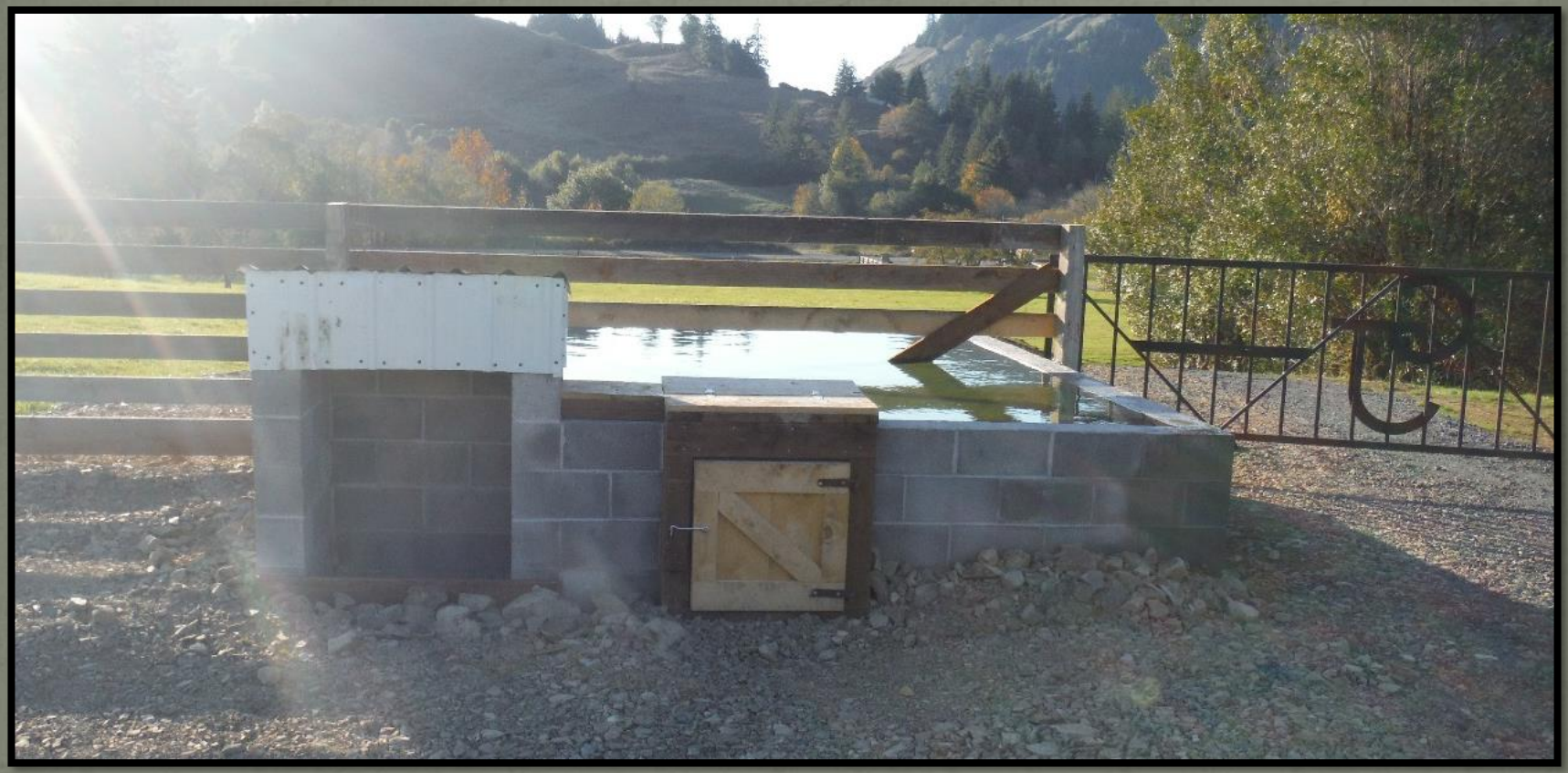



Impatient cows oversee the process…
(photos taken in September, 2013)

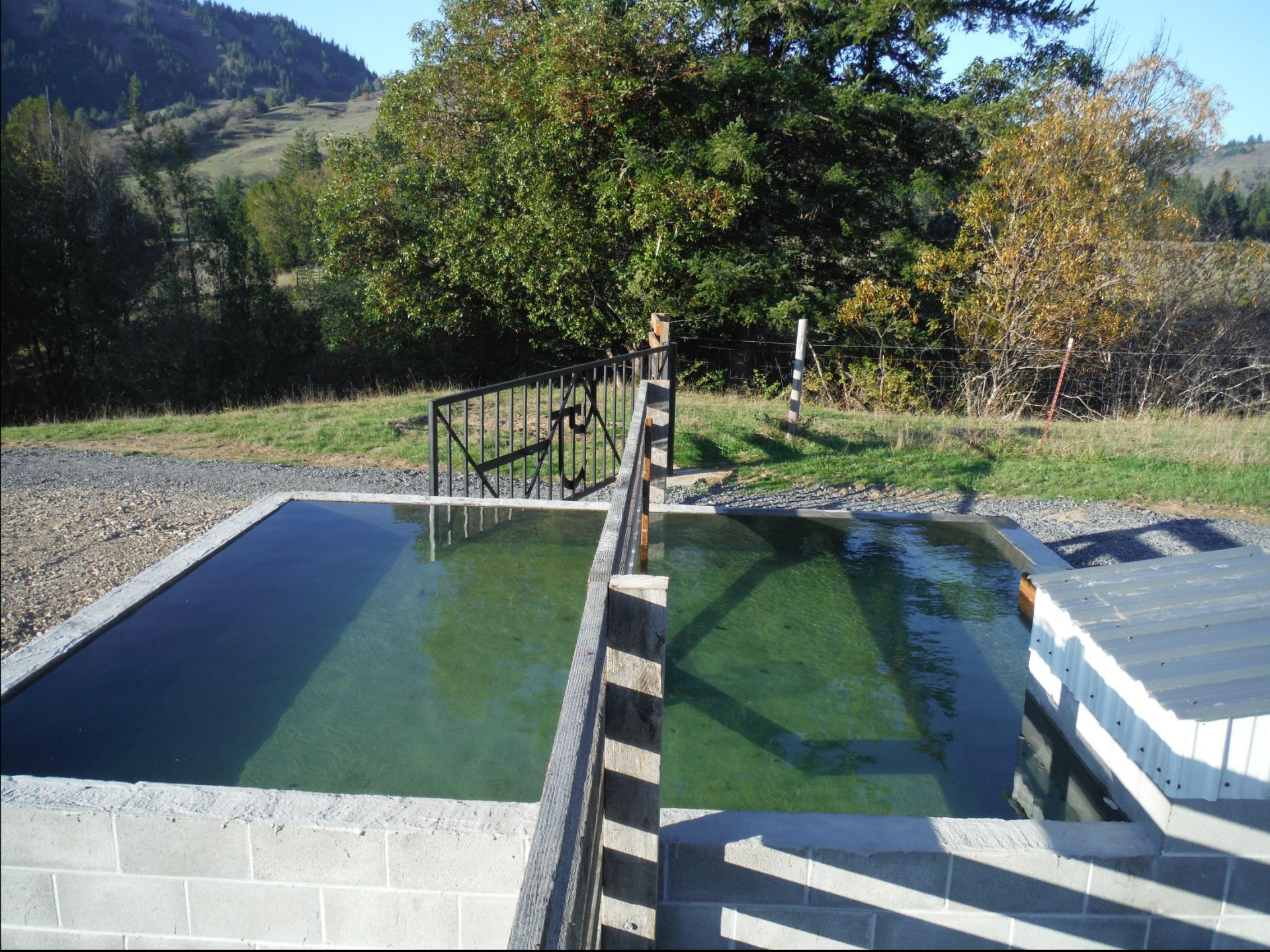


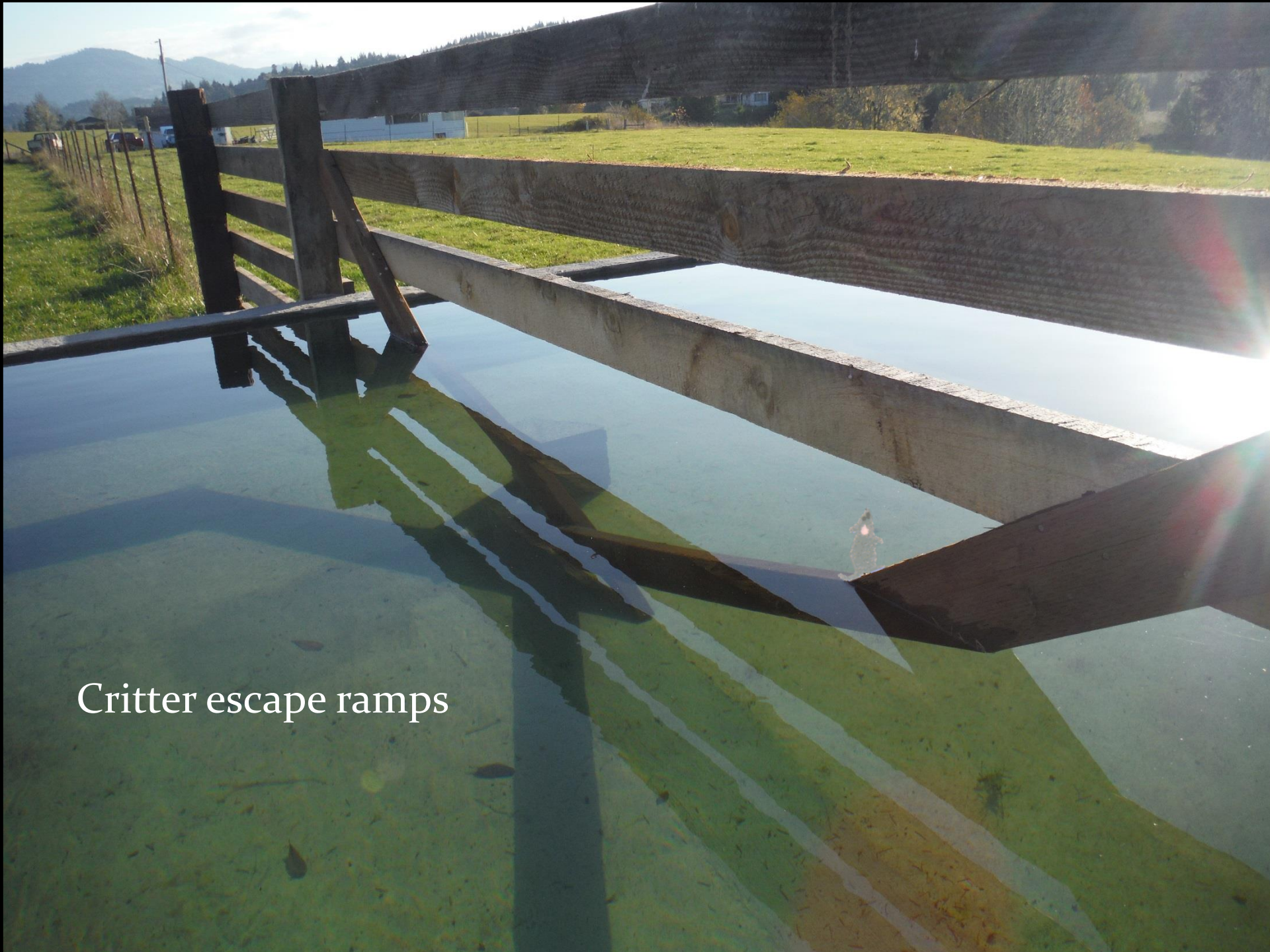


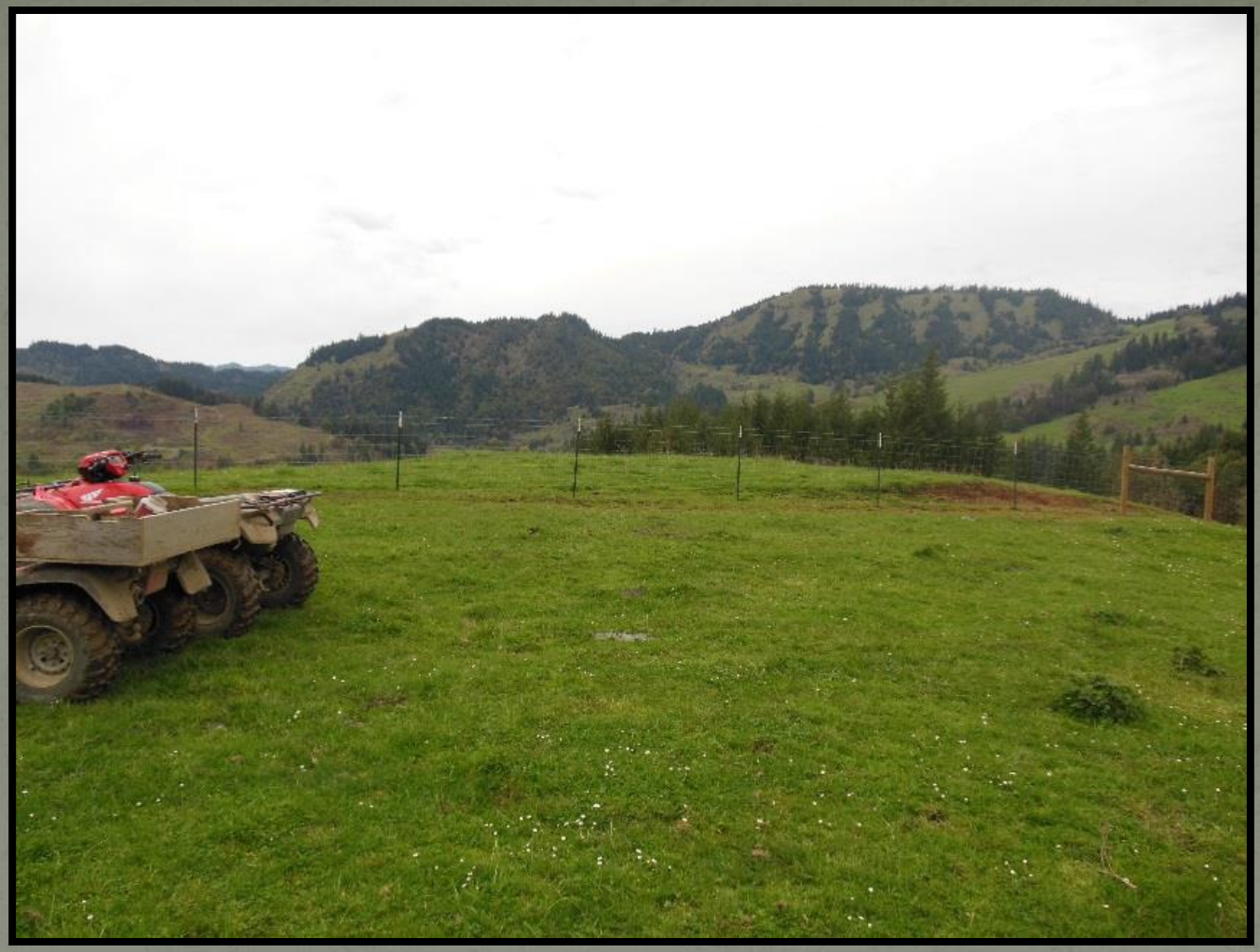
The finished lower trough:



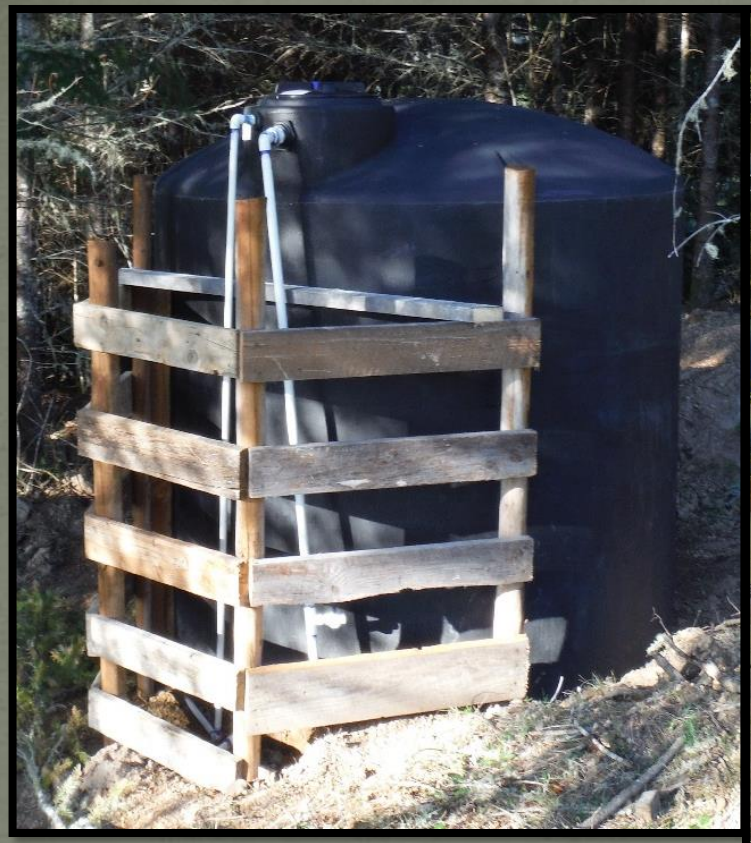
completed trough with enclosed water lines and float, and with a covered mineral and salt lick area.




Critter escape ramps



The proposed site for the new upper water trough: photo take 4/5/13



The holding tank and pipeline:

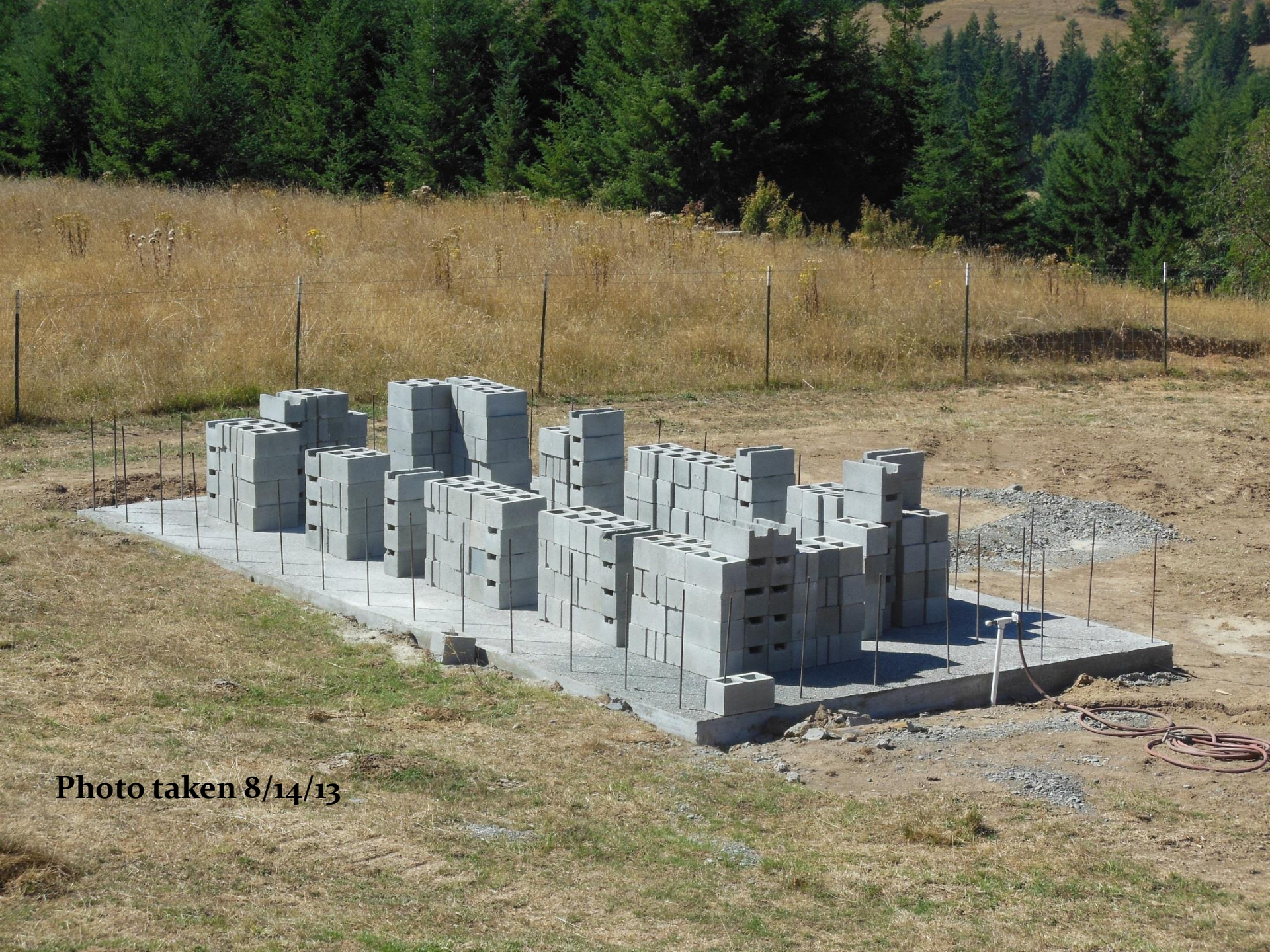
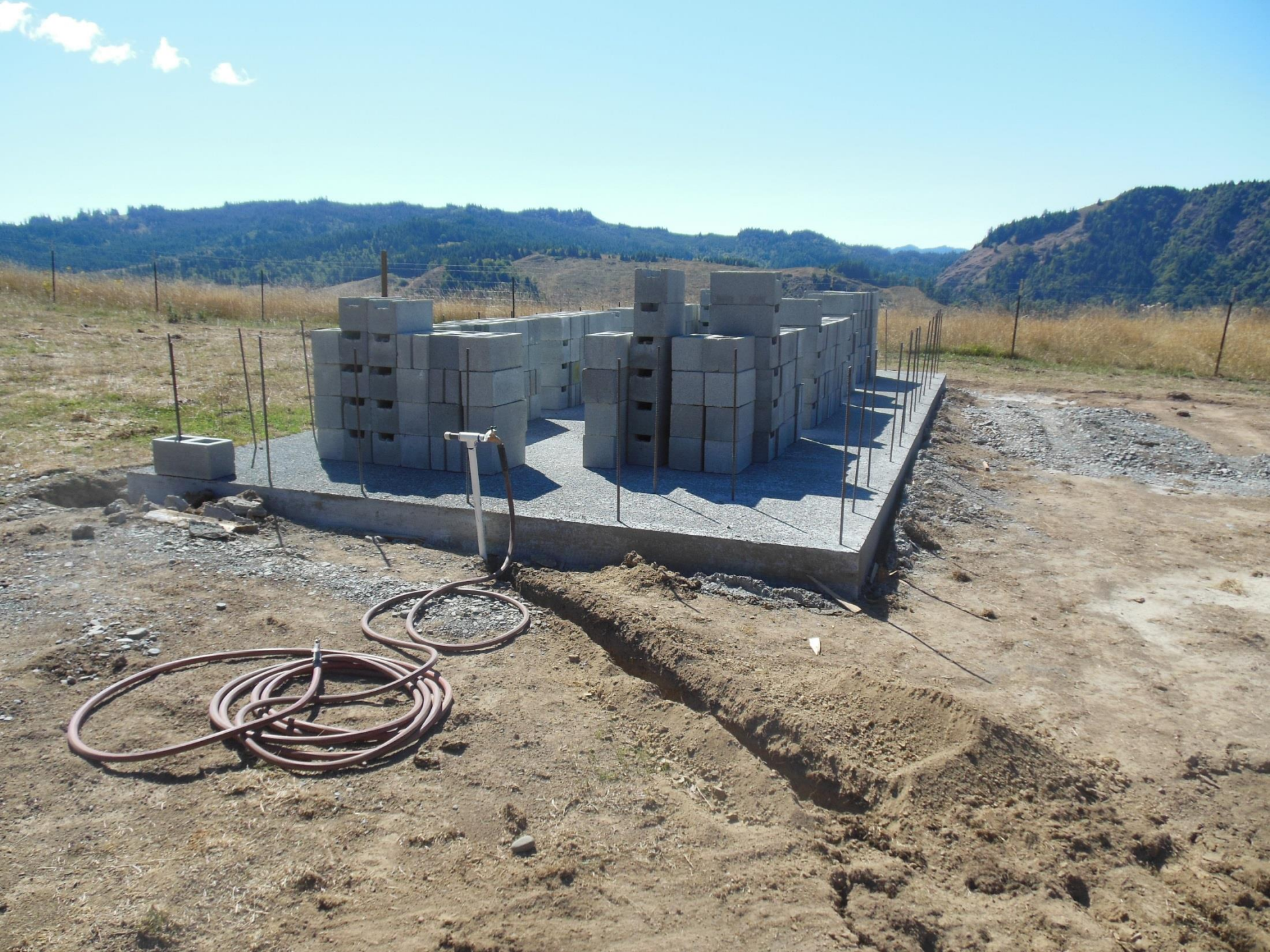
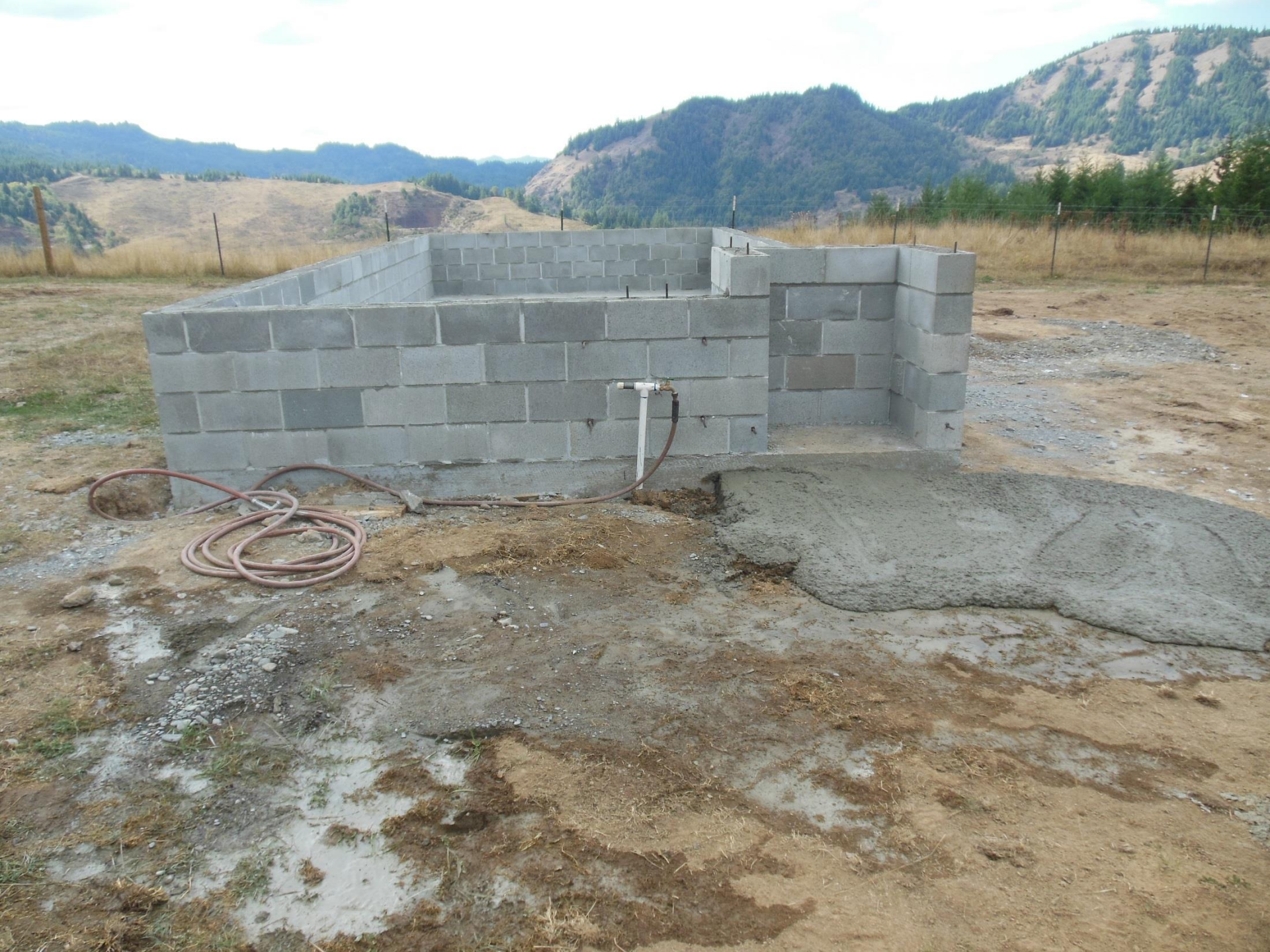
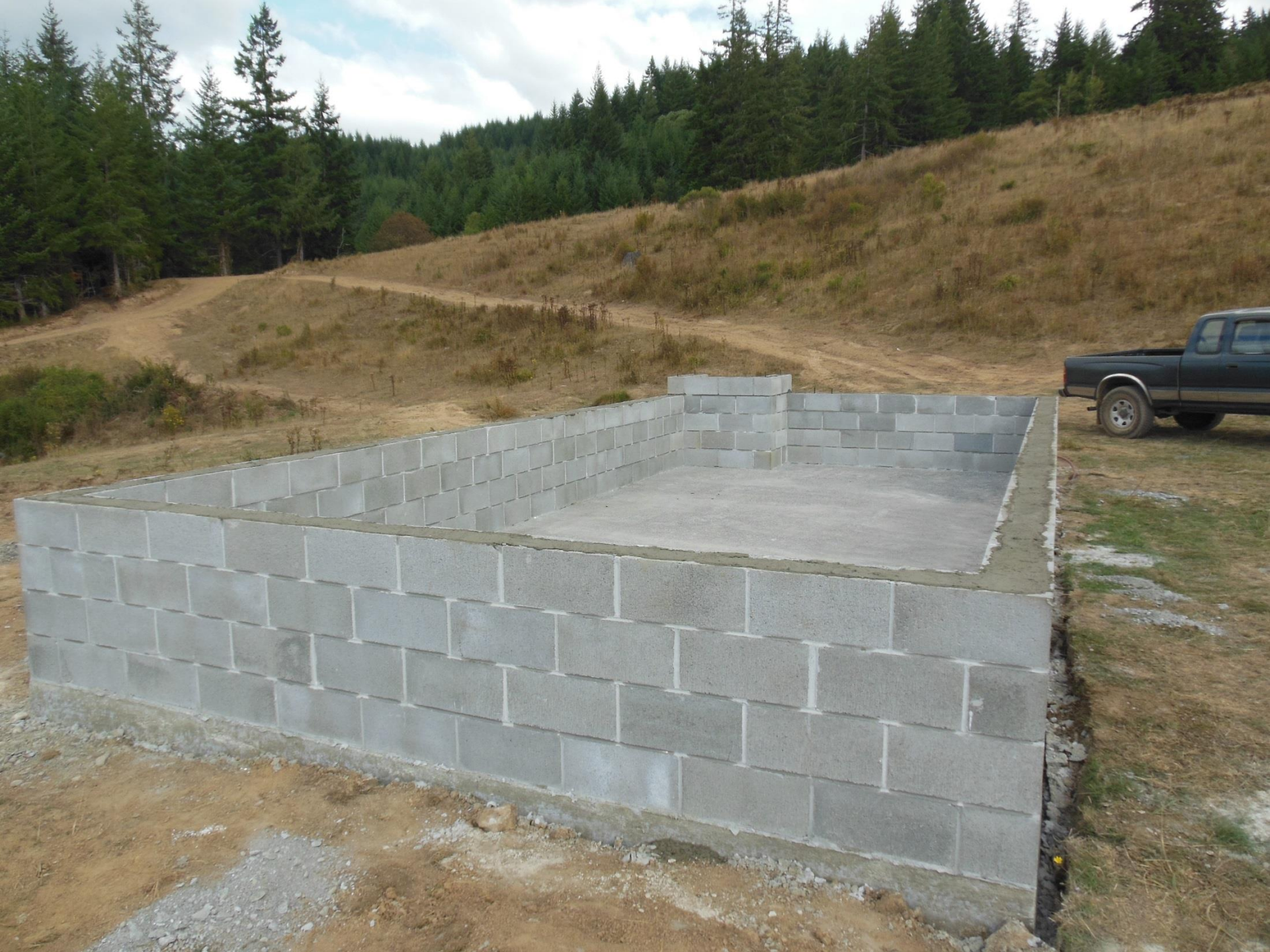
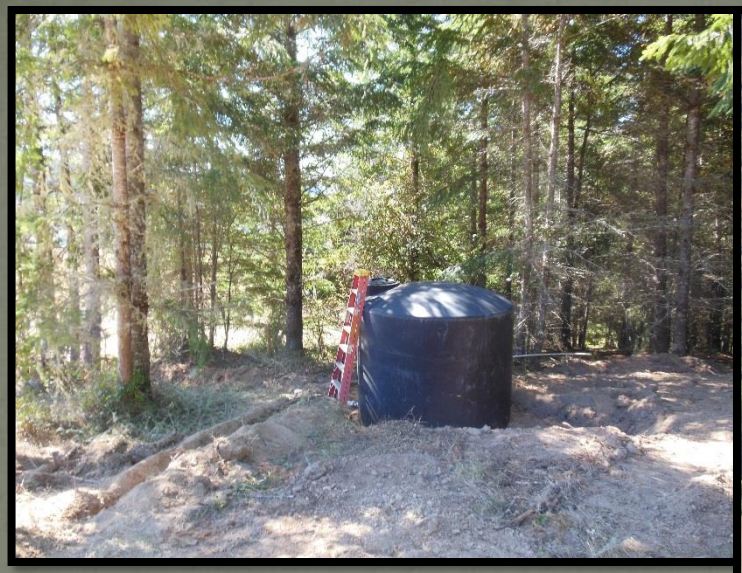


Photo taken 8/14/13

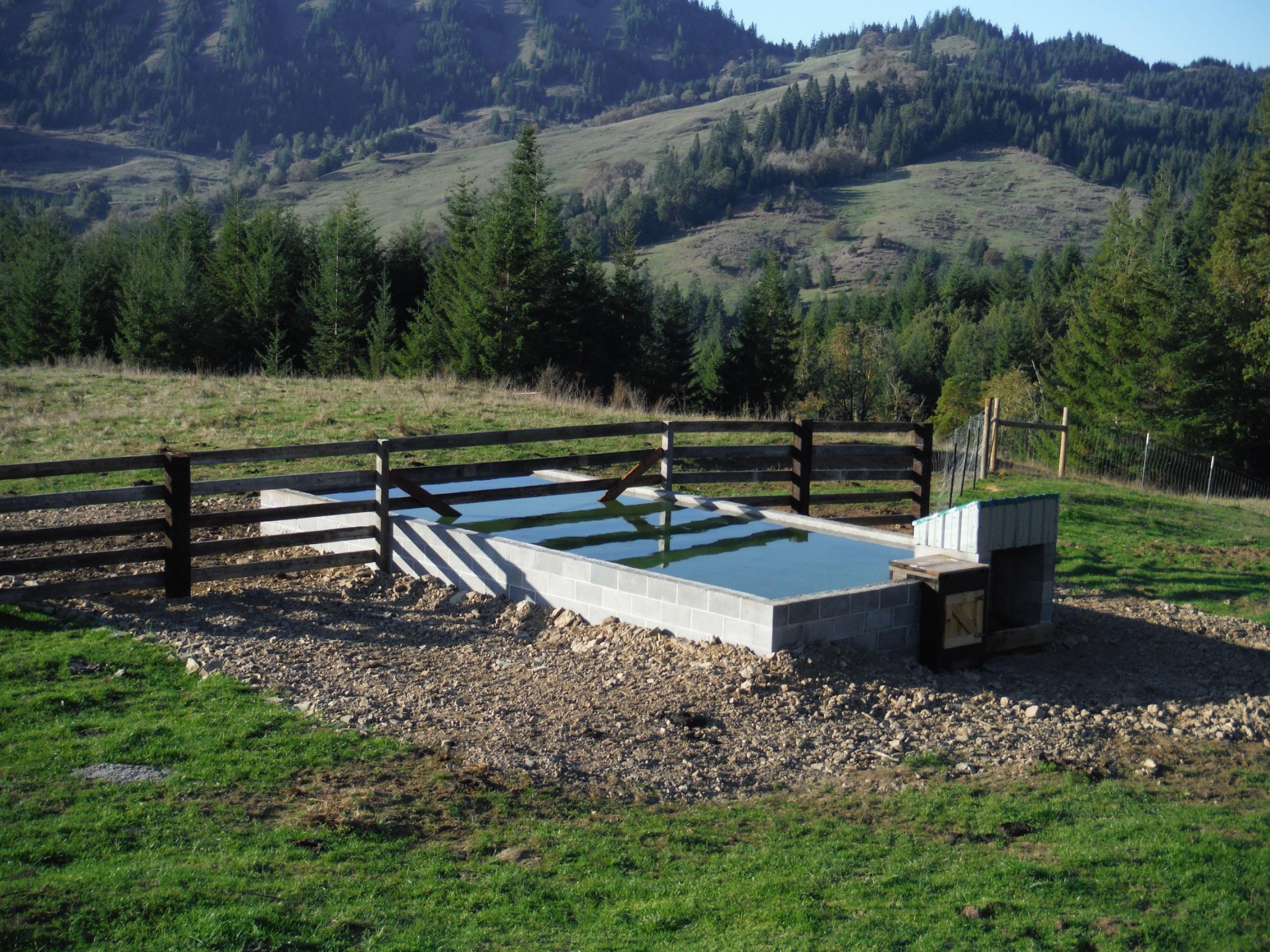


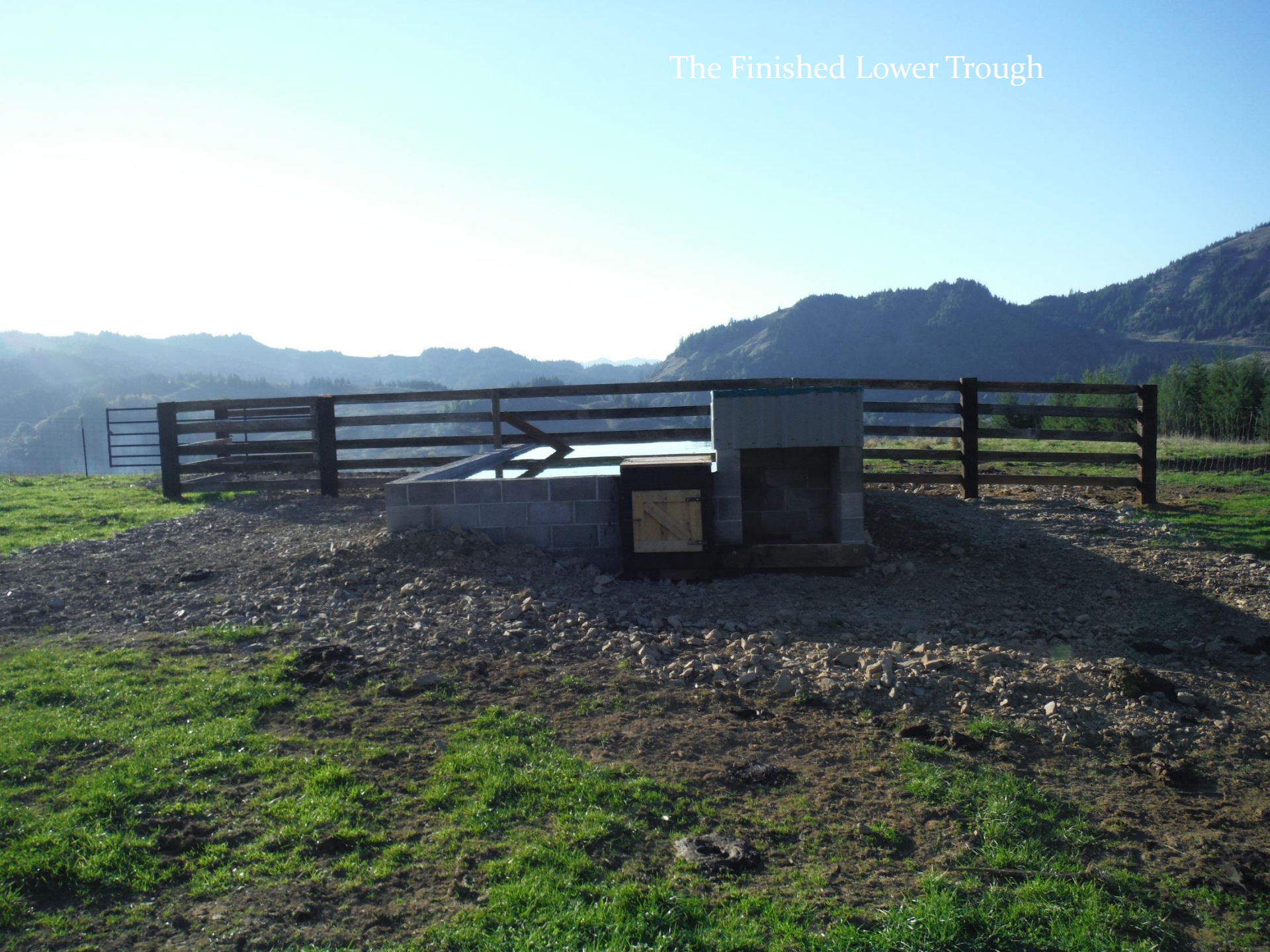


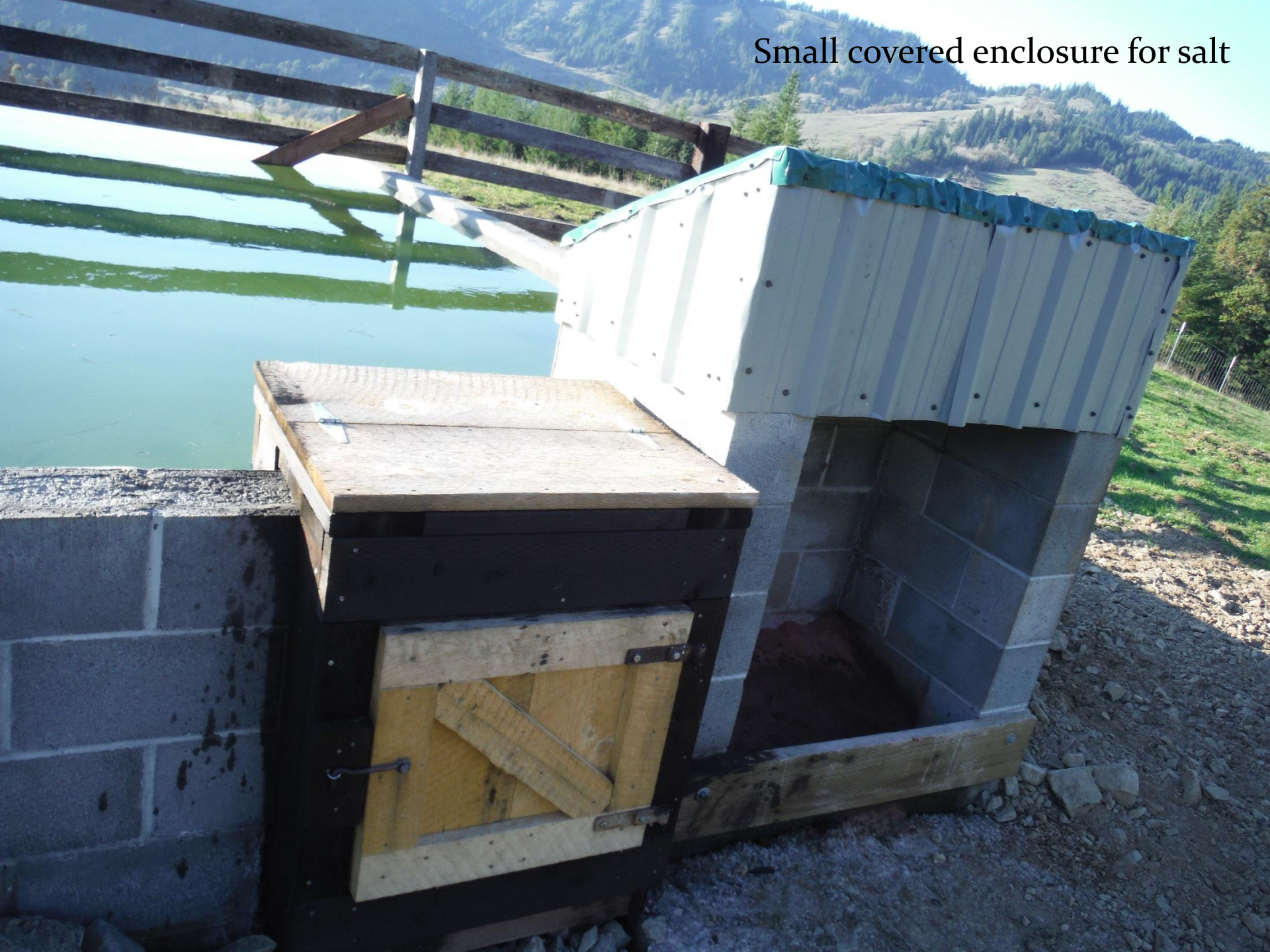


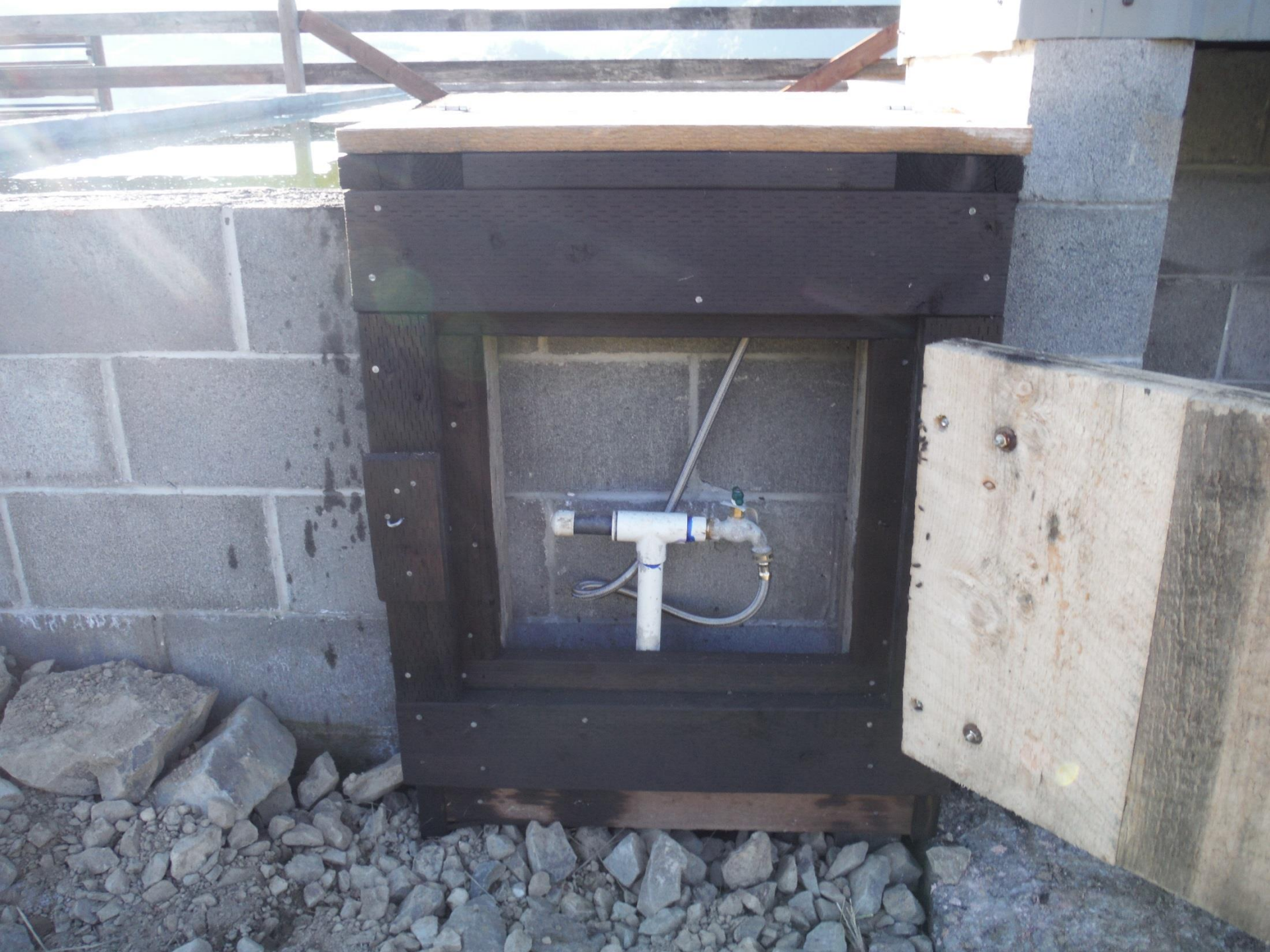


The upper holding tank and view of pipeline looking south to lower site:




The Finished Lower Trough


Small covered enclosure for salt



The off channel water system was designed to reduce surface erosion and direct over flow back to the creek for increased water in stream, and improve off channel watering away from the creek for cattle, elk, and deer. These sites also serve as a watering location for bats because of their larger sizes. The watering structures the landowner designed were based on NRCS specification and have been implemented on the back section of the ranch. The large trough can hold up to 6700 gallons but is run at 5000. The medium size trough is 3000 and is run at 2700. This land owner is not only watering his cattle herd but also supplies water for 2-3 large deer herds and 1-2 medium sized elk herds intermittently throughout the year.

Total Project Cost: $31,606.00
Total OWEB Project Match: $21,606.00

- OWEB: $10,000
- Keith Baker: $20,806 (in-kind/labor/materials)
- ODFW: $800 (in-kind, site survey and technical)

Category	Amount
In-kind (labor)	5,623.00
County Planning Fee	100.00
Contracted Services	14,798.00
Supplies/Materials	1,085.00
Total Project Cost:	$31,606.00

A BIG THANK YOU!

TO THE BAKER FAMILY

AS WELL AS:

OWEB, ODFW, THE SMALL GRANT TEAM,
AND DAWN WEEKLY
FOR MAKING THIS PROJECT POSSIBLE.

Presentation By: Caley Sowers
Photos Taken By: Dawn Weekly