

April 1, 2010

Michele McAleer
Water Resources Department
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Boatwright Engineering Inc.

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Re: **APPLICATION R-87591**
Inspection of Existing Dam
(formerly Brown-Harland Reservoir Appl. R-860382)

Dear Michele,

I met with Bryan Brown and George Robinson, PE of Water Resources Dam Safety, at the dam site on April 1, 2010 to inspect an existing dam that my father, Martin Boatwright, PE, designed for Ken Brown and Bill Harland known as the Brown-Harland Dam. Martin certified the dam in a letter dated April 6, 1981. At the field visit I did not see any obvious differences in the size of the dam from what was shown on the as-built plans. All the trees around the dam appear to be in native ground and not in any of the fill that creates the dam. The spillway was grassy and well maintained, showing no sign of erosion or brush/blackberries.

Bryan stated that he has only seen the spillway in use once, and that was during the 1996 flood. The trickle tube had a screen over it that didn't show any debris collecting on or around it. Water was discharging down the trickle tube during the time of our visit. The top of the dam appears to have 4-5 feet of free board that was grassy. There were no signs of livestock damage. Sheep have allowed on the dam, but it is not a usual practice. There were no signs that sheep had been on the dam. There were one foot high ant hills that were occasionally located on both sides of the dam. This is typical for the location. There was no indication of large rodent activity on the slopes of the dam. We walked the downstream side of the dam and didn't notice any seepage or soft spots. There were blackberries along the fence line only on the northeast of the dam and were only on the fence that was beyond the toe of the fill. The berry vines have been well controlled as there was no sign of spreading onto the dam itself

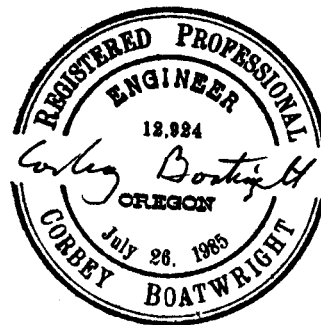
The outlet pipe discharged into a concrete box-like structure. The concrete, 12" CMP drain pipe and 6" CMP toe drain pipe all looked to be in good shape. There was a small amount of water coming out of the toe drain, but not enough to be concerned with. George asked how low the water would get behind the dam and Bryan thought maybe 18 inches. Based on "*Temperature And The Water Balance For Oregon Weather Station*" published by OSU in May 1963, the Dallas Station, Table 165, shows that the cumulative deficit for one year is 12.9 inches. This indicates that about 5 inches of the stored water surface area is lost to leakage. The condition of only one item is unknown; that thing the sluice gate. Bryan didn't know if it has been cycled.

I hope this inspection report will assist you with the application process. If you need any additional information don't hesitate to call.

Sincerely,

Corbey Boatwright, PE, CWRE

CC: Bryan Brown



Expires 12-31-11

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