![The Land Group logo]

THE LAND GROUP

September 24, 2024

Nick Kraus
QRS Consulting LLC
3380 West Americana Terrace, Suite 220
Boise, ID 83706

**RE: Boise State University Pump Station | Response to DD3 – Drain "A" Existing Capacity
              PN 118145**

Dear Nick:

On Monday September 23rd we performed a full shut down of the BSU head gate for a period of 2 hours to perform a verification test of Drain "A"'s existing capacity to allow 1,500 gpm (3.34 cfs) when the delivery to the BSU campus is shut down. The existing weir structure was used to measure the water flow into Drain "A", see attached weir report. During this time the existing weir measured the water flow going into Drain "A" to be approximately 3.31 cfs. During the 2-hour period that the entire flow was directed into Drain "A". Photos were taken at all visible locations between 2015 and 2201 West Boise Avenue. Water levels initially increased and leveled out over the course of the test. No additional increases were observed from the 1-hour mark to the 2-hour mark. This indicates that the existing system can convey the proposed Phase 1 Pump station design of 3.34 cfs. Below are photos taken during the test at all stages. Additionally, we can provide videos of each location if necessary.

2015 West Boise Ave	No noticeable change		
Start of test	1 hour	2 hour
2125 West Boise Ave	Water level increased and leveled out during the test		
Start of Test	1 hour	2 hour

2133 West Boise Ave | Difficult to determine any change in water level		
Start of test	1 hour	2 hour
2201 West Boise Ave | No noticeable increase		
Start of test	1 hour	
		No additional photo taken. Water level never increased or changed.

Should you have any further questions, don't hesitate to contact us.

Sincerely,

Michael Thomas, Landscape Architect

The Land Group, Inc.

Weir Report

\<Name\>

Rectangular Weir

Crest	= Sharp
Bottom Length (ft)	= 3.00
Total Depth (ft)	= 1.00

Calculations

Weir Coeff. Cw	= 3.33
Compute by:	Known Depth
Known Depth (ft)	= 0.48

Highlighted

Depth (ft)	= 0.48
Q (cfs)	= 3.312
Area (sqft)	= 1.44
Velocity (ft/s)	= 2.30
Top Width (ft)	= 3.00

\<Name\>