



BOARD OF DIRECTORS MEETING

Wednesday, September 23, 2020 - 9:00 A.M.

Call in phone number: (408) 418-9388

Meeting number (access code): 146 184 8198

Meeting password: AYpsyHee583

1. Mile Post 11.5 Main canal lining bid award.
2. Kachess Drought Relief Pumping Plant - Tier-2 environmental review design options.
3. Executive Session: (if needed)
 - a. Executive session pursuant to RCW 42.30.110(2)(a)(iii). To evaluate legal risk of a proposed action.

Item #1



To: Scott Revell, District Manager

From: Wayne Sonnichsen, Engineering Manager

Date: September 23, 2020

Re: Main Canal Lining Project – 2020/2021

Attachments

1. Roza Main Canal Lining Project Bid Proposals

Background

The District received bids until 2:30 pm, Tuesday, September 22, 2020 for the Roza Main Canal Lining Project in Terrace Heights. Seven bid proposals were received. Six bid proposals were responsive to all elements of the bidding requirements as noted in attachment 1. One bid proposal was missing the Non Collusion/Debarment Affidavit, but this did not affect the outcome of the bid opening.

Granit Construction Company had the lowest responsible bid at \$504,998.00. The next lowest responsible bid was submitted by DW Excavating at \$531,881.15. The Highest bid was \$830,915.90. The average price for the five lowest bids was \$539,904.24.

I have assessed the bid proposal for Grant Construction Company and talked with John Wind, from Granit Construction, about how he plans to accomplish the project and have concluded that he has the resources and experience necessary to carry out the project as required.

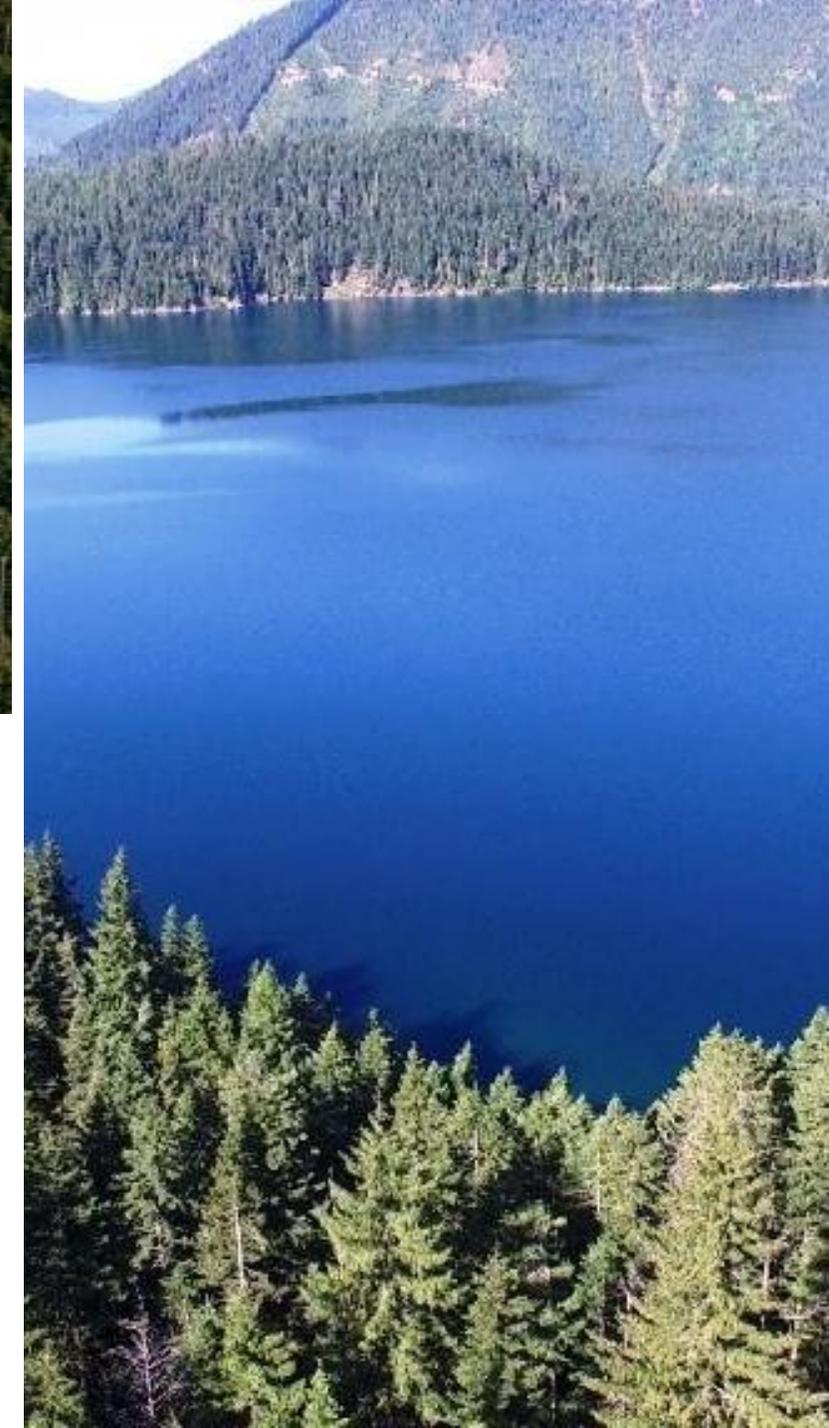
Recommended

I recommend awarding the Main Canal Lining Project to Grant Construction Company.

Roza Main Canal Lining Project Bid Proposals

Company	Signed Proposal	Bid Bond	Non Collusion/Debarment	Bid Amount
TTC Construction	x	x	x	\$ 830,915.90
Double J Excavating	x	x	none	\$ 630,033.34
Belsaas & Smith Construction	x	x	x	\$ 533,121.00
Thayer Excavating	x	x	x	\$ 551,806.54
Tapani	x	x	x	\$ 577,714.50
DW Excavating	x	x	x	\$ 531,881.15
Granit Construction Company	x	x	x	\$ 504,998.00

Item #2



Kachess Reservoir

Pumping Plant Alternatives



September 23, 2020

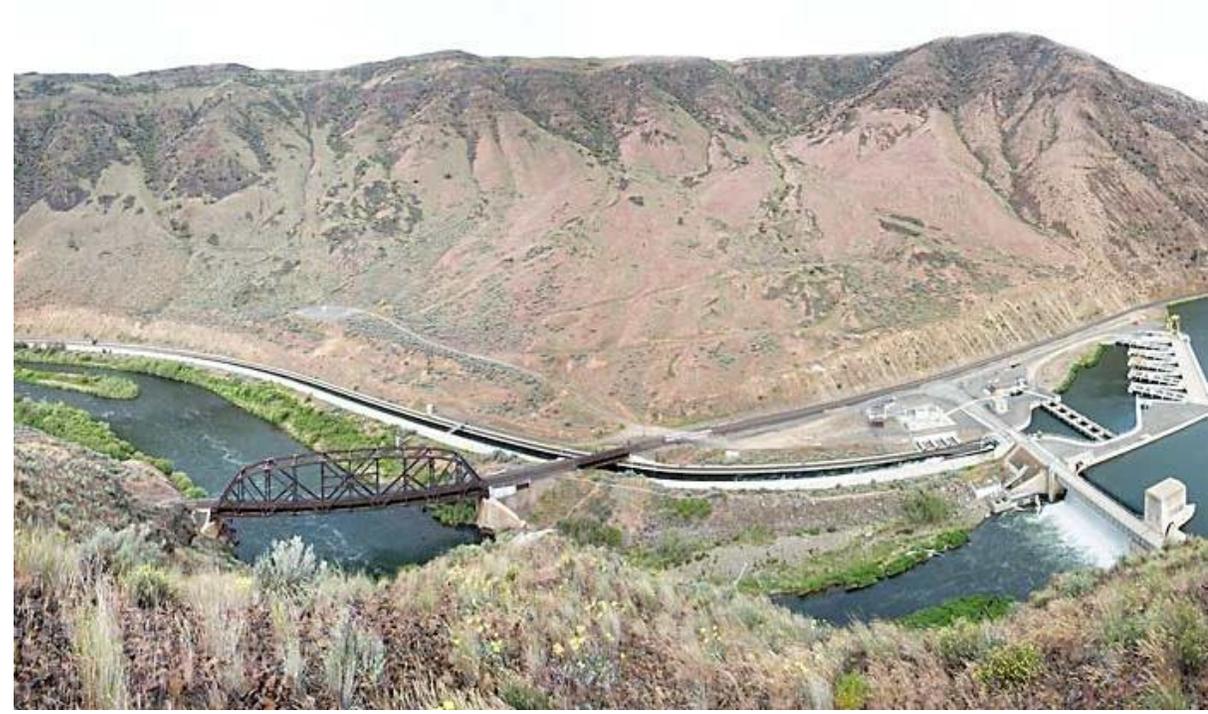


Project Overview and History

- The project goal: Access 200,000 acre-feet of the dead storage in Kachess Lake during drought conditions to provide supplemental water to the irrigators.
- Reclamation looked at a variety of options including gravity discharge to the Yakima River using a lake tap, a three-mile tunnel, and pump station downstream of the dam.
- Costs of these alternatives were in the \$300M-\$500M range and the Roza Irrigation District (District) began to look for lesser cost alternatives.
- Drought conditions in 2015 required the District to look at an expedited alternative. Initial focus was on a floating pump station that would discharge flows through the existing outlet works of Kachess dam.

Project Overview and History

- The 2019 EIS identified the floating pump station as the preferred alternative. Concerns about the impacts of winter conditions and the limited amount of known experience with design, construction and maintenance moved the District to consider additional alternatives.
- Better known construction techniques led to the development of the Near Shore Pumping Plant (NSPP) and was developed to almost a 30% design level. Estimated costs were almost \$300M and Reclamation Dam Safety Group expressed some concerns about the proximity of the vertical shaft to the dam.
- A Value Engineering (VE) session effort was able to reduce the cost estimate of the NSPP to \$238M by relocating the pump station downstream of the dam.
- Due to the estimated costs of the NSPP, the District reconsidered the floating pumping plant alternative. A feasibility and due diligence process on the floating pumping plant has now been completed.



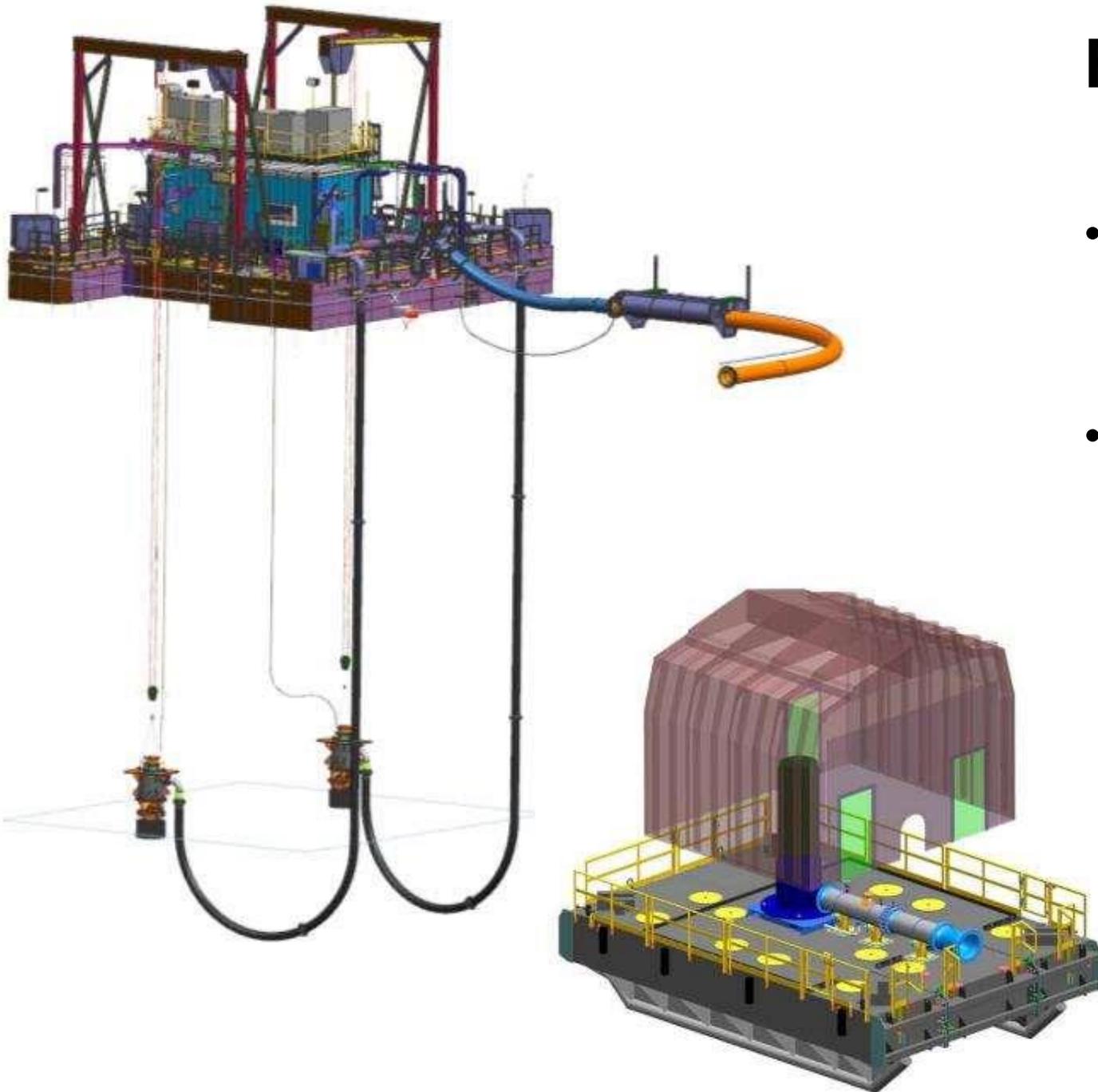
An aerial photograph of a vast agricultural landscape. The foreground is dominated by a large field with distinct, parallel rows of crops, likely corn, showing alternating bands of green and brown soil. To the right, a dense, dark green row of trees or shrubs runs parallel to the main field. In the background, there are more green fields, a small body of water, and distant, hazy hills under a clear sky. The overall scene depicts a well-organized and productive farming operation.

Transitioning to the Future



Floating Pumping Plant (FPP) Alternative

- Due diligence identifying, vetting, and working with multiple vendors
- Addressed uncertainties through examples and proofs in similar environments
- Found proven options to consider



FPP Alternative *continued*

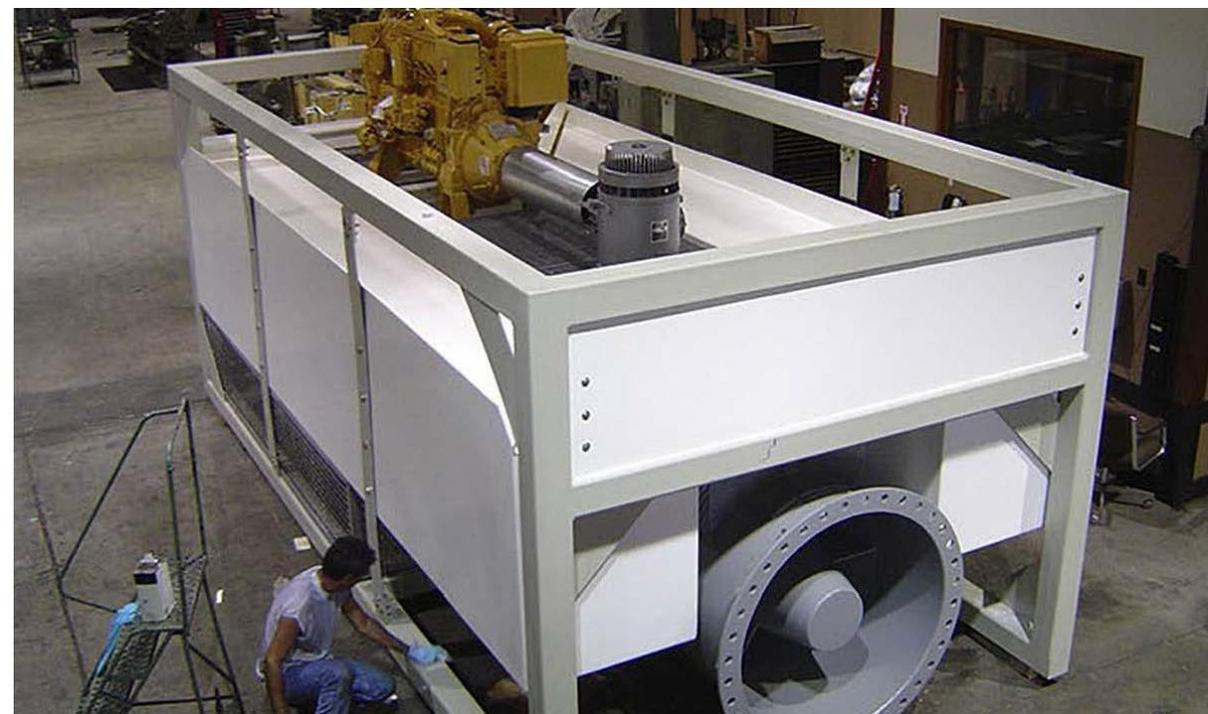
- Basic configuration is the same; floating pump using a barge configuration
- “Footprint” relatively the same between the vendor options

All the vendors offered examples where they have incorporated owner preferences for equipment and/or adjusted their standard design to accommodate specific site conditions.

FPP Alternative *continued*

Variations and configuration options between vendors include:

- Variations in on-site fabrication complexity
- “Modular” approach to configuration versus more fabrication on-site (i.e. plug and play)
- Barge size and number depending on vendor configuration



FPP Vendor Estimates

Received five vendor information responses; three provided budgetary cost information

	Unique Attributes	Cost
Vendor 1	Modular approach to configuration and assembly Benefit in reduced on-site fabrication and O&M costs	\$174M
Vendor 2	More on site fabrication required Less modular in configuration and less expensive	\$112M
Vendor 3	Modular and top of line. Very detailed analysis performed by vendor This is the “Cadillac” equipment and configuration	\$211M
	Modified Near Shore Plant (MNSPP VE)	\$238M
	Delta between MNSPP VE and FPP high estimate	\$27M

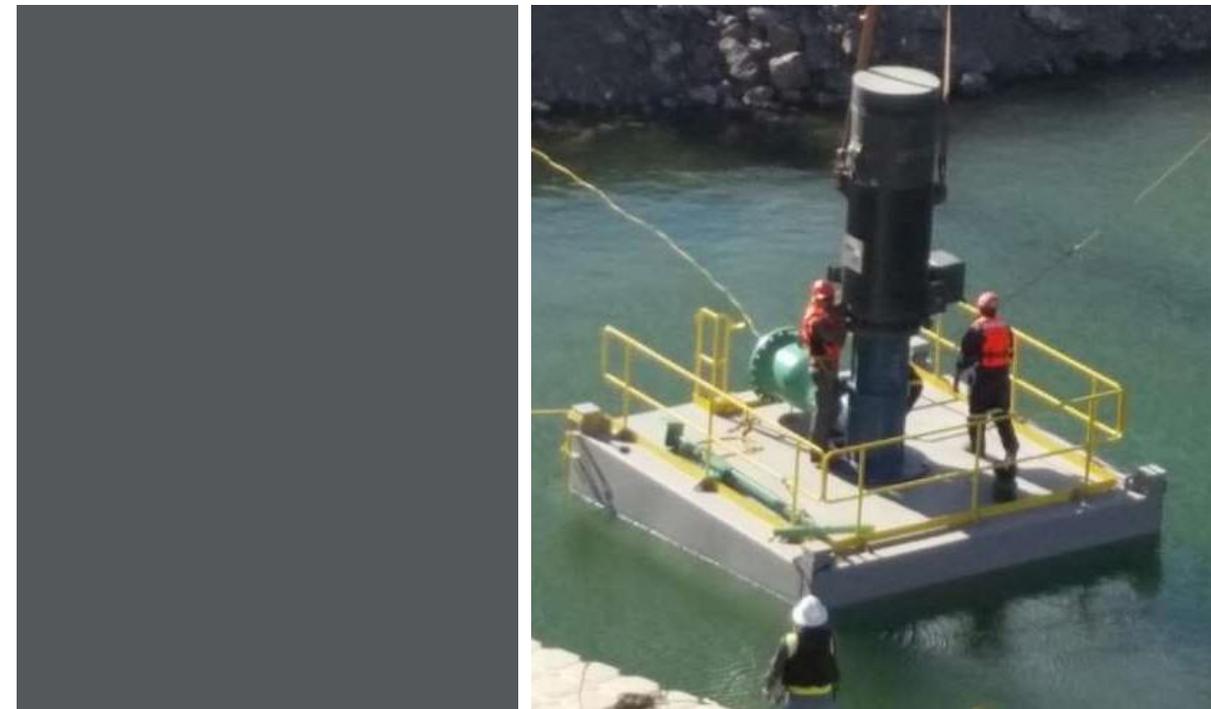
FPP Due Diligence Summary

- Solicited estimates from five vendors based on performance specifications
- Received five responses and three complete budgetary estimates and back-up
- “Cadillac” estimate is \$27M less than MNSPP VE
- Many of the installed examples from vendors were in very harsh environmental conditions (i.e. Alaska and Northern Canada)



FPP Due Diligence Summary *continued*

- We anticipate future competitive bid costs to be lower on the two highest estimates and will raise the estimate on the lowest
- Savings between the MNSPP and FPP is estimated to be between \$30M - \$70M based on today's information
- Refining performance specifications and options will aid in cost certainty





FPP Recommendation

- Proceed with developing the FPP option and an alternative in the EIS that includes a feasibility report
- Develop messaging for District users and key stakeholders
- Revisit alternative delivery options and associated benefit and schedule implications
- Refine performance specifications and special provisions for a solicitation
- Secure an owner's engineer to manage the process