

Wesley Seale Dewatering System and Spillway Gates Rehabilitation



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Director of Water Systems and Support Services

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Wesley Seale Dam

- Located 32 miles northwest of Corpus Christi on the Nueces River, approximately four miles southwest of Mathis
- Construction completed and began to impound water in 1958
- 5,680 feet long
- Structural height is 80 feet with dam crest elevation at 106 feet
- The north spillway is regulated by 33 crest gates, and the south spillway is regulated by 27 crest gates



Wesley Seale Dam

- All gates and hinges are original
- Current infrastructure does not include a dewatering system, making it impossible to efficiently and effectively isolate each of the 60 crest gates for maintenance or evaluation
- The gates were last rehabilitated in 1999
- During the last rehabilitation, temporary steel bulkheads were utilized while each gate was removed
- This process allowed for water to pass through as it was not fully controlled
- It is best practice to rehabilitate gates every 15 to 20 years



Dewatering System

Includes two main features:

- A set of three individual stoplogs for isolating each individual gates
- Mobile gantry crane system used to deploy the logs
- The new stoplogs will pin together and be lowered into place as a single unit by the traveling gantry crane
- The gantry crane travels longitudinally across the length of the spillway to move, lift, and lower the stoplogs in front of any individual gate



Spillway Gates

Replacement of two existing crest gates in the south spillway:

- New crest gates will be fabricated and designed per United States Army Corps of Engineers (USACE) guidelines
- Existing two crest gates will be removed from the dam for inspection and evaluation
 - The evaluation includes an assessment of the structural capacity of the existing crest gate components compared to current design standards
 - The evaluation will provide information to allow the City to select its preferred strategies for rehabilitating/replacing the remaining crest gates



Competitive Solicitation and Bid

BID SUMMARY	
CONTRACTOR	BASE BID
Zachry Construction Corporation 2330 North 1604 Loop West San Antonio, TX 78248	\$25,493,495.00
Orion Construction, LLC 4440 Hwy 225, Ste 180 Dear Park, TX 77536	\$30,254,800.00
Engineer's Opinion of Probable Construction Cost	\$22,938,699.00

- Project cost \$25,493,495.00
 - \$25,000,00.00 from the Water Capital Funds
 - Additional \$493,495.00 from CIP project savings

Staff Recommendation

- Staff recommends awarding the construction contract for the Wesley Seale Dewatering System and Spillway Gates Rehabilitation project to Zachry Construction Corporation in the amount of \$25,493,495.00
- Construction duration is planned for 35 months from issuance of the Notice to Proceed to begin construction in October 2024

2022 - 2024	2024					2024 - 2027
April - February	A	M	J	J	A	October - September
Design	Bid/Award					Construction

The top half of the slide features four horizontal, wavy bands of varying shades of blue, ranging from a light cyan to a darker blue, creating a sense of movement and water.

Thank you!

