#### COST-SHARE FUNDING PROGRAM AGREEMENT

#### **BETWEEN**

#### REUNION RANCH WCID

#### AND

#### THE LOWER COLORADO RIVER AUTHORITY

This Agreement is entered into by and between the Lower Colorado River Authority ("LCRA"), a conservation and reclamation district of the State of Texas, and the Reunion Ranch Water Control and Improvement District ("Recipient").

In consideration of the Recipient's commitments made in a cost-share application dated August 27, 2021 and executed October 28, 2021, attached hereto as Exhibit A and incorporated herein (the "Cost-share Application"), LCRA agrees to provide funding to Recipient in the amount of \$100,000.00 (the "Cost-share Funds") for a project that will allow Recipient to upgrade the existing treatment plant with an irrigation pump skid to enable use of all current wastewater flows to irrigate common areas instead of disposing the effluent using drip fields (the "Project").

#### I. Purpose

Recipient will perform, and will be solely responsible for, all work (including without limitation any labor, transportation, materials, and equipment) necessary to complete the Project in accordance with the Cost-share Application. Nothing contained herein requires LCRA to select, procure, install, maintain or repair any equipment or improvements, to supervise or train the Recipient's personnel with respect to any activities, or to participate in any programs or services funded with the Cost-share Funds. Cost-share Funds are to be used by Recipient solely for the Project purpose(s) stated in the Cost-share Application.

#### II. Recipient's Responsibilities

- A. Project Completion Date. Recipient agrees to complete the Project within twelve (12) months from the date the Cost-share Funds are awarded, or any other timeframe contained under the Cost-share Application and agreed to by LCRA. If the Project is not completed within 12 months, or any other timeframe agreed to by LCRA, Recipient shall return all of the Cost-share Funds to LCRA upon demand. Upon completion of the Project, Recipient agrees to provide LCRA with a completed status report, attached hereto as Exhibit B and incorporated herein. In addition, Recipient agrees to track and report annual water savings resulting from the Project to LCRA for a minimum of five (5) years.
- B. Use and Disposition of Equipment or Improvements. The obligations of the Recipient hereunder, including but not limited to the requirement to use equipment or improvements purchased or funded with the Cost-share Funds for the purposes stated in the Cost-share Application, shall continue for the useful life of the equipment or improvement. When equipment or improvements purchased or funded with the Cost-share Funds are no longer needed for the original Project purposes (regardless of whether the Project continues to be supported by LCRA funds), provided that LCRA approves, Recipient may use the equipment for other eligible or comparable activities or purposes; otherwise, Recipient shall request disposition instructions from LCRA.

- C. Acknowledgment of Support and Disclaimer. Unless advised to the contrary, all materials publicizing or resulting from cost-share activities should contain an acknowledgement of LCRA support.
- D. Record Keeping. Recipient shall maintain accurate records of all costs, payments, and related data as may be required by LCRA to verify proper use of the Cost-share Funds for the Project. Recipient shall maintain such records for at least two (2) years after completion of the Project, and shall make the records available to LCRA for inspection upon reasonable notice. Recipient will ensure that this clause concerning LCRA's audit of funds accepted under this Agreement is included in any subcontract awarded in connection with this Agreement.
- E. Right to Inspect. LCRA shall have the right to enter upon and photograph any Project-related sites at any reasonable time for the purpose of inspection, including but not limited to walk-throughs, on-site evaluations, and end of Project evaluations.
- F. Subcontractors. Recipient remains responsible for all performance requirements under this Agreement even though the performance may be carried out by a subcontractor or other person or organization. Nothing in this Agreement will create a contractual relationship between LCRA and any of Recipient's subcontractors, sub-recipients or other persons or organizations performing work related to this Agreement ("Subcontractors").

#### III. Funds; Reimbursement

- A. Cost-share Project Funding. LCRA agrees to pay the Recipient the Cost-share Funds for the purpose of funding costs and expenses reasonably incurred in the completion of the Project, under the following terms:
  - a. Recipient acknowledges that the Cost-share Funds to be contributed by LCRA are based on projected Project costs submitted by Recipient as a part of the Cost-share Application (the "Projected Project Cost"), and are established as of the date of this Agreement.
  - b. In no event will the Cost-share Funds increase, regardless of the final cost of the Project (the "Actual Project Cost"). LCRA will not be responsible for any amounts in excess of the Cost-share Funds, for which the Recipient will be solely responsible.
  - c. The Cost-share Funds may constitute no more than 50 percent of the Actual Project Cost. If the Actual Project Cost is 90% of the Projected Project Cost or less, LCRA may require the Recipient to return a pro-rated portion of the Cost-share Funds in accordance with Section III.C.
  - d. As a condition of receiving Cost-share assistance for the Project, Recipient warrants that funds are available for the completion of the Project.
- B. Multiple LCRA Funding. Recipients may not submit multiple applications for the same project through this or any other LCRA funding opportunity.
- C. Return of Unspent Funds to LCRA. Any Cost-share Funds remaining unspent or becoming unencumbered after the end of the expiration date (See Section II.A. Project Completion Date) must be returned to LCRA within 30 days after the Project Completion Date.
- D. Interest on Cost-share Funds. Any interest earned by Recipient on the Cost-share Funds prior to its expenditure shall be considered Cost-share Funds and applied exclusively to the Project,

or included with any Cost-share Funds returned or refunded to LCRA under the terms of this Agreement, as applicable.

E. Breach. If Recipient breaches this Agreement, Recipient agrees that it shall refund to LCRA the full amount of the Cost-share Funds.

#### IV. Termination

If the Recipient fails to perform or complete the Project in accordance with the Cost-share Application, or fails to comply with any terms or conditions of this Agreement, LCRA may, upon written notice of default to Recipient, immediately terminate all or any part of this Agreement. Termination of this Agreement for breach will not constitute a waiver of any other rights or remedies. All remedies, either under this Agreement, at law, or in equity, are cumulative and not alternative and may be exercised or pursued separately or collectively in any order, sequence or combination.

#### V. Assumption of Risk and Indemnification

RECIPIENT WILL ASSUME ALL RISKS ASSOCIATED WITH RECIPIENT'S OR SUBCONTRACTORS' PERFORMANCE UNDER THIS AGREEMENT AND WILL WAIVE ANY CLAIM AGAINST LCRA FOR DAMAGES ARISING OUT OF THE PERFORMANCE OF THE PROJECT. TO THE EXTENT AUTHORIZED BY LAW, RECIPIENT SHALL DEFEND, INDEMNIFY AND HOLD HARMLESS LCRA, ITS DIRECTORS, EMPLOYEES AND AGENTS FROM AND AGAINST ANY AND ALL DAMAGES, LOSS OR LIABILITY OF ANY KIND WHATSOEVER, INCLUDING THE COSTS OF LITIGATION AND ATTORNEYS' FEES, ARISING FROM THE PROJECT, EXCEPT TO THE EXTENT CAUSED BY THE NEGLIGENCE OR WILLFUL MISCONDUCT OF LCRA.

TO THE EXTENT AUTHORIZED BY LAW, RECIPIENT SHALL REQUIRE ALL SUBCONTRACTORS TO INDEMNIFY, DEFEND, AND HOLD HARMLESS LCRA AND RECIPIENT AND THEIR RESPECTIVE DIRECTORS, EMPLOYEES AND AGENTS FROM AND AGAINST ANY AND ALL LOSSES, LIABILITIES, DAMAGES, AND OTHER CLAIMS OF ANY TYPE ARISING FROM THE PERFORMANCE OF ACTIVITIES RELATED TO THIS AGREEMENT BY THE SUBCONTRACTOR OR ANY OF ITS SUBCONTRACTORS, SUPPLIERS AND AGENTS OF ANY TIER, INCLUDING THOSE ARISING FROM DEFECT IN DESIGN, WORKMANSHIP, MATERIALS, OR FROM INFRINGEMENT OF ANY PATENT, TRADEMARK OR COPYRIGHT; OR FROM A BREACH OF APPLICABLE LAWS, REGULATIONS, SAFETY STANDARDS OR DIRECTIVES.

#### VI. Miscellaneous

A. Insurance. If requested by LCRA, Recipient shall obtain and maintain a policy of insurance for the useful life of any equipment or improvements purchased or funded with the Cost-share Funds which is sufficient to provide for replacement of any equipment or improvement which is lost, stolen, damaged, or destroyed. Any insurance proceeds received by or on behalf of Recipient under an insurance policy due to the damage or destruction of equipment or improvements must be utilized to acquire equivalent or better equipment, to repair or replace the improvement, or be paid to LCRA. If otherwise permissible under applicable law, governmental entities may use an established self-insurance program to satisfy this requirement. Recipient shall provide proof of insurance coverage. Unless prohibited by law, Recipient will require Subcontractors to obtain and maintain adequate insurance coverage sufficient to protect Recipient and LCRA from all claims and liability for injury to persons and for damage to property arising from this Agreement. Unless specifically waived by LCRA,

sufficient coverage will include Workers Compensation and Employer's Liability Insurance, Commercial Automobile Liability Insurance, and Commercial General Liability Insurance.

- B. Signature Authority. By signing this Agreement, the Recipient's authorized representative warrants and represents that they are authorized by the Recipient to legally enter into this Agreement.
- C. Notices. Notices and communications under this Agreement shall be addressed as follows:

If to LCRA: LCRA Attn: Valerie Miller P.O. Box 220 Austin, TX 78767-0220 valerie.miller@lcra.org 512-578-4031 If to Recipient: Reunion Ranch WCID c/o Willatt & Flickinger 12912 Hill Country Blvd, STE F-232 Bee Cave, TX 78738 Bflickinger@wfaustin.com 512-476-6604

Either Party may designate an alternative addressee or address by sending written notice to the other Party.

- D. Entire Contract; Modifications. This Agreement supersedes all prior agreements, written or oral, between the Parties and shall constitute the entire agreement and understanding between the Parties with respect to the subject matter of this Agreement. This Agreement and each of its provisions shall be binding upon the Parties and may not be waived, modified, amended or altered except by a writing signed by both Parties.
- E. Assignment. This Agreement is not transferable or assignable except upon written approval by the Parties.
- F. Severability. If any one or more of the provisions contained in this Agreement shall for any reason be held to be invalid, illegal, or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provision thereof, and this Agreement shall be construed as if such invalid, illegal, or unenforceable provision had never been contained in this Agreement.
- G. Public Information. It shall be the independent responsibility of the Parties to comply with the provisions of Chapter 552, Texas Government Code (the "Public Information Act"), as those provisions apply to the Parties' respective information. Recipient is not authorized to receive public information requests or take any action under the Public Information Act on behalf of LCRA. Likewise, LCRA is not authorized to receive public information requests or take any other action under the Public Information Act on behalf of Recipient.
- H. Independent Contractor. LCRA and Recipient shall operate hereunder as independent contractors and not as an officer, agent, servant, or employee of the other. Nothing in this Agreement shall be construed to create a joint venture or partnership between the Parties.
- I. Applicable Laws. LCRA and Recipient will comply with all applicable federal, state, and local laws, ordinances, and regulations in the performance of this Agreement.

- J. Venue; Governing Law. The Agreement and all of the rights and obligations of the parties hereto and all of the terms and conditions hereof will be construed, interpreted and applied in accordance with and governed by and enforced under the laws of the State of Texas. In the event of litigation, exclusive venue shall be in a state court of competent jurisdiction in Travis County, Texas.
- K. Waiver. No action or failure to act by either Party shall be a waiver of a right or duty afforded under the Agreement, nor shall such action or failure to act constitute a breach of this Agreement, except as specifically agreed to in writing.
- L. Termination or expiration of this Agreement shall not relieve, reduce, or impair any rights or obligations of a Party that may arise under this Agreement.

If the terms and conditions stated above are in accordance with your understanding, please so indicate by signing both originals of this Agreement and returning one of them to LCRA.

IN WITNESS WHEREOF, Recipient and LCRA have made and executed this Agreement effective as of the date of the last signature below.

Lower Colorado River Authority:		Reunion Ranch Water Control and Improvement Distric		
Ву:	Monice P. Masters	By:		
Name:	Monica Masters	Name: Dennis Daniel		
Title:	Vice President, Water Resources	Title: President		
Date:	02/25/2022	Date: 2.15.3032		

#### **EXHIBIT A**

Firm Water Conservation Cost-share Application

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Date August 27, 2021

## Firm Water Conservation Cost-Share Program Application

CUSTOMER PROFILE				
Organization Name: Reunion Ranch Water Control of	and Improvements District C/O Willa	itt & Flickinger	Tax ID Number: 77-0673282	
Mailing Address: 12912 Hill Country Blvd, STE F-	232			
City: Bee Cave		Zip: 7873	В	
Physical Address: Same		_		
City:		_Zip:		
Please provide the name and contact implementation of this project.	information of the pr	oject man	nager who will oversee the	
Contact Name: Andrea Wyatt Title: Engineer	<del></del>			
Mailing Address: 1101 Capital of Texas Hwy Sout	h, Bidg. D			
City: Austin		: _ Zip: <u>_<sup>78740</sup></u>	6	
Phone: 512-327-9204	_Fax: 512-327-2947			
Mail should be sent to: 4 Organization  PROJECT PROFILE	Address Primary	/ Contact	Address	
Project Title and Brief Description: The treated effluent from the Distriction in the development and reduce the currently being disposed using drip longer be watered regularly after the Amount of Cost-Share Funding Reque	use of purchased via fields permitted via e completion of this	water for a a TLAP s project.	irrigation. The effluent is 7. Those fields will no	
Will the requested funds enable the completion of the overall project? 4 Yes No				
Is this an emerging technology project	? Yes 4 M	No		
A 0	Signature: 12 627	2	rson authorized to represent Date:1G ~ 2& - 202 [ Email:_dbdd7-@guail.co	

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#### **PROJECT NARRATIVE**

The narrative must include the following, if applicable:

1. A concise overview of the proposed project, including the need for the project, project objectives, the target group, the primary strategies for implementation, the conceptual design and/or specifications, and the expected equipment life:

The proposed project will install an irrigation pump skid at the existing WWTP site. The skid will pump treated effluent from the ground storage tank into a network of pipe installed during the development of the neighborhood that serves the common areas. Currently the common areas are temporarily water by above ground connections to hydrants. These connections will require modification to connect the irrigation system in place to the pipe network in place. This project will significantly reduce the amount of LCRA water used for irrigation common areas.

The pump skid will have on-board filtration in order to avoid damaging the irrigation system and will be operated using VFDs in order to address the varying flow and head required for each of the irrigation zones. The filters will incorporate an automated flushing sequence based on pressure differential and the flushing water will drain to the head works of the WWTP.

The expected equipment life is approximately 20 years at which point the pumps may need replaced along with appurtenances such as valves and strainer baskets.

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2. How the cost-share funds will be used:

The cost-share funds will be used to purchase and install the pump skid that will pump effluent to the existing irrigation areas.

3. Population of the community in which the project is located:

Approximately 1600

- 4. The amount of estimated annual water savings associated with project implementation.
  - a. Water savings estimate (in acre-feet): 65 at current WW flows, 85 at full build-out
  - b. Cost per acre-foot of water saved: Approximately water cost is \$920/acre-foot water delivered
  - c. Total up-front cost per acre-foot of water saved and the cost per acre-foot annualized over the lifetime of the project using a discount rate of 5% (not applicable to emerging technology projects):
    - Total up-front cost is approximately \$242,000, approximately \$3,700 per acre-foot of water saved, annualized to ~\$360 given a 15 year equipment life
  - d. Methodology used to calculate savings and references to any studies or research that helps support these savings estimates. If available, use five years of water use data for recycled water projects (not applicable to emerging technology projects):

The current flow data for existing irrigation systems were used to determine the current water savings. Additional water savings can be obtained by converting other irrigation areas to reuse water systems up to the capacity of the WWTP. The cost of water is set by the LCRA for raw water and the West Travis County PUA for treatment and distribution.

e. All assumptions used must include descriptions and/or back-up information:

Attached to this application is the available historical water use data for the currently connected irrigation system along with the map showing the areas that can be added to the system as the flow at the WWTP increases.

f. Estimated duration of water savings in the calculations:

The system is assumed to operate for 15 years with minimal cost of upkeep at which point rehabilitation will be required. Water savings will continue for additional time with proper equipment replacement and upgrades.

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- 5. How the project will be monitored to quantify savings for the final report and how savings will be tracked over time:
  - Flow will be measured from the WWTP to determine how much water is being saved by using effluent for irrigation. The cost will be calculated by using the applicable rate schedules and the maintenance costs associated with the pump skid for any repairs or upkeep efforts.
- 6. Information on multiple benefits, if any, associated with the project (e.g., energy efficiency, water quality improvement, stormwater control, resiliency of water supply during drought restrictions):
  - By using the WWTP effluent for irrigation purposes, the community will be less impacted by droughts with conservation efforts limited to the residential lots.
- 7. How the project will be maintained after completion:

The pump skid will be maintained as part of the WWTP.

- 8. Emerging technology project requirements:
  - a. Percentage of population impacted within service area: NA
  - b. Evidence of innovation (e.g., not widely adopted in region):

NA

c. Availability on multiple technology platforms (e.g., mobile, web):

NA

Replicability (the program can be implemented for other water suppliers):
 NA

#### **PROJECT TIMELINE**

Must include the estimated completion dates of all phases of the project. Project must be completed within 12 months, unless otherwise noted.

Project is anticipated to be complete by September 2022

Project Budget	Amount		
Engineering and Permitting Costs	\$ 20,700.00		
Equipment Capital Cost	\$ 180,000.00		
Installation Cost	\$ 27,000.00		
Total	\$ 227,700.00		
Funding Sources			
Cost-Share Fund Request	\$ 100,000.00		
District Engineering Budget`	\$ 30,000.00		
District Construction Budget	\$ 100,000.00		
Total	\$ 230,000.00		

# REUNION RANCH WATER CONTROL AND IMPROVEMENT DISTRICT

c/o Willatt & Flickinger, PLLC 12912 Hill Country Blvd., Suite F-232, Austin, TX 78738

Lower Colorado River Authority C/O Stacy Pandey P.O. Box 220 Austin, TX 78767-0220

October 27, 2021

Re: Lower Colorado River Authority Firm Water Conservation Cost-Share Program

Certification of Available Funds

Ms. Pandey:

The Reunion Ranch Water Control and Improvement District (District) is applying for the direct funding available through the Firm Water Conservation Cost-Share Program. The District is planning to install an irrigation system that would reuse the effluent produced by the District's wastewater treatment plant to water the landscaping in the associated neighborhood. The landscaping is currently irrigated using approximately 65 acre-feet per year of water purchased from the LCRA. In addition to irrigating community landscape, the District is interested in offering effluent to residents for irrigation of their private lawns; there are approximately 195 homes that would be suitable for effluent irrigation representing approximately 20 additional acre-feet of purchased water.

The District has budgeted \$130,000 dollars for the design and construction of this project; with \$100,000 budgeted for construction and \$30,000 for design. The approved budget including these line items is attached, along with a proposed budget for the project showing the District's contribution and the LCRA's cost-share contribution.

1/1

Dennis Daniel
President, RRWCID

Attachment:

**Adopted Budget** 

#### REUNION RANCH WATER CONTROL AND IMPROVEMENT DISTRICT

#### ORDER ADOPTING BUDGET

WHEREAS, it is necessary for Reunion Ranch Water Control and Improvement District to adopt a budget for the fiscal year beginning October 1, 2021.

NOW, THEREFORE, BE IT ORDERED BY THE BOARD OF DIRECTORS OF REUNION RANCH WATER CONTROL AND IMPROVEMENT DISTRICT THAT:

1. The budget for the fiscal year beginning October 1, 2021, attached hereto, is hereby approved and adopted.

PASSED AND APPROVED this 14th day of September/202

Dennis Daniel

President, Board of Directors

ATTEST:

Ronald F. Meyer

Secretary, Board of Directors

[SEAL]

# Reunion Ranch WCID Proposed Budget: FY 2021 - 2022 DRAFT

	\$0.275	FY 20-2	1		Audited	
	2021-2022	Budgeted	Projected	FY 19-20	FY 18-19	FY 17-18
Revenues:						
Property Taxes, Including penalties	\$ 778,917	\$ 327,832 \$	344,193	\$ 259,178	248,016	\$ 343,143
Service Accounts -						<del> </del>
Water Service Fees	548,871	480,879	590,705	606,438	437,351	389,101
Sewer Service Fees	305,109	254,505	304,112	268,597	204,593	177,109
Service Account Penaltles	8,540	7,354	6,379	9,275	5,069	5,047
Total Service Accounts	862,519	742,738	901,196	884,310	647,013	571,257
Tap Connection Fees	*	36,000	36,000	67,000	89,000	62,500
Inspection Fees Interest/Other		27,000	28,350	55,500	71,200	50,000
Total Revenues	1,647,436	11,400	9,104	10,148	23,222 1,078,451	1,039,035
Expenditures:						
District Facilities -						
Water/Wastewater/Garbage -	25 200	25 200	25 224	84.475		
LCRA Firm Water Reservation Fee WTPUA Monthly Charge	25,380	25,380	25,376	26,475	20,995	18,995
Water Purchases	156,384	138,444	138,440	116,037	67,019	67,019
Operations -	204,482	163,787	198,338	198,625	157,712	156,299
Operations Fee	102 560	100 500	05 400	07.004	04.455	72.754
Utilities	102,660	100,590	95,180	97,904	91,165	72,754
Lab Testing	33,600	16,800	16,872	16,329	14,675	13,263
Inspections	23,400	22,200	18,916	24,741	17,116	15,636
Chemicals	20,400	23,400	30,154	51,598	52,564	46,012
	30,000	21,000	26,583	23,351	14,317	9,903
Sludge hauling	48,000	48,000	322,739	127,622	129,373	53,677
Permit fees	1,500	1,500	1,328	1,328	1,979	1,440
Routine Repairs & Maintenance -						
Water System	57,000	36,000	39,842	32,371	31,964	19,807
Wastewater/Lift Station	156,000	132,000	290,103	342,858	127,122	50,960
Irrigation	30,000	24,000	28,912	19,994	18,833	3,028
Ponds	27,000	22,000	22,281	9,988	10,534	3,170
Pond/Irrigation Mowing	57,000	48,000	55,173	46,090	39,978	26,255
One-Time Repairs & Maintenance -						
Ponds	10,000	XI	365	29	50	242
Trails	2,500	¥.	- W-		2:	592
210 Conversion	135,000	20,000	20,000		×	198
Odor Control	10,000	10	1.00	19		(4)
Non-Routine Maintenance Reserve-						
Ponds/Drainage	12,000	¥1	198	14	-	1965
Wastewater/Lift Station	58,000	- 8	160	34		100
Water System	20,000		16	740	(2)	12
Miscellaneous	5,000	¥	7.0	Tax 1		1.0
Subtotal - District Facilities	1,225,306	843,101	1,330,237	1,135,311	795,346	558,218
Administrative Services -						
Director Fees, including payroll taxes	13,038	9,779	11,646	10,819	8,558	9,204
Director Reimbursements	780	780	195	369	631	691
Tax Appraisal/Collection Fees	4,000	4,000	2,748	1,828	1,654	2,273
Insurance	20,000	15,000	14,903	14,673	12,796	10,881
Public Notices/Elections	7,500	1,450	2,188	323	1,027	321
Website Development	14,400	3,000	13,921		:*:	
Lobbyist Consulting			100	190		
Miscellaneous	1,200	1,200		8,399	1,700	423
Subtotal - Administrative Services	60,917	35,208	45,600	36,412	26,367	23,791
Professional Fees -					3.3	
Legal Fees	102,000	69,000	88,497	75,890	71,854	64,483
Accounting Fees	24,750	24,750	24,750	24,750	21,750	21,750
Engineering Fees - General	42,000	34,200	44,385	34,938	40,692	19,988
Financial Advisor Fees	600	429	429	ودرادد	40,092	15,300
Engineering Fees - Special	24,000	24,000	15,284	19,358		31,872
Audit Fees	12,250				58,323	
Subtotal - Professional Services	205,600	11,750	11,500	11,500	203 619	10,500
and the first of the second of	203,000	104,123	103,043	166,436	203,619	148,593
Total Expenditures	1,491,823	1,042,438	1,561,682	1,338,159	1,025,332	730,602
Excess / (Deficiency) of Revenues						
over Expenditures	\$ 155,613	\$ 102,532 \$	(242,839)	\$ (62,023)	\$ 53,120	\$ 308,433
				FY 21-22	FY 20-21	
Key Assumptions:		Reserve Analysis:		Budgeted	Projected	
<ul> <li>Assessed Valuation = \$289,022,999</li> </ul>		Est. Beg Fund Balar			\$ 1,022,592	
Total Tax Rate = \$0.825 / \$100 AV						
		Surplus/(Deficit)+N		250,613	(242,839)	
		Est. Ending Fund Ba	lance	\$ 1,030,366	\$ 779,753	
200 A 200 MA						
98% Collection Rate		Oper. Reserve 1yr		\$ 1,239,323		
O New Taps for Year		NR-Maint. Reserve		1,205,000	1,205,000	
				\$ 2,444,323	\$ 2,766,682	
		Surplus/(Deficit) O		\$ (303,957)		
		Surplus/(Deficit) O Surplus/(Deficit) N		\$ (303,957) (1,110,000) \$ (1,413,957)		

#### Item 2:

Project Budget	Amount		
Engineering and Permitting Costs	\$ 20,700.00		
Electrical Engineer	\$ 8,800.00		
Process Engineer	\$ 5,000.00		
TCEQ Permit Update	\$ 6,900.00		
Pump Skid Capital Cost (Quote Attached)	\$ 180,000.00		
Installation Cost	\$ 27,000.00		
Contractor Labor	\$ 10,000.00		
Accessories	\$ 10,000.00		
Contractor Overhead	\$ 7,000.00		
Total	\$ 227,700.00		
Funding Sources			
Cost-Share Fund Request	\$ 100,000.00		
District Engineering Budget	\$ 30,000.00		
District Construction Budget	\$ 100,000.00		
Total	\$ 230,000.00		

Notes: Italicized amounts are the values for individual items that constitute the subcategory. Installation costs cover piping modifications and contractor time. All engineering costs are included in the Engineering and Permitting category. We estimate that the pump skid can be put in place by a two man crew in fewer than 8 hours and that the electrical work will require two electricians approximately 16 hours each. Accessories include wiring, pipe fittings, bolts, etc. The pump skid is fully self contained and requires no additional equipment to function.

#### **Irrigation Potential Calculations**

There is some historical data available for the irrigation currently occurring in the common areas. The data is summarized in the following table:

Month	Volume	acrefeet
Aug-21	2,773,000.00	8.51
Jul-21	1,157,000.00	3.55
Jun-21	1,005,000.00	3.08
May-21	1,258,000.00	3.86
Apr-21	493,000.00	1.51
Mar-21	265,000.00	0.81
Feb-21	487,000.00	1.49
Jan-21	812,000.00	2.49
Dec-20	1,456,000.00	4.47
Nov-20	1,998,000.00	6.13
Oct-20	2,914,000.00	8.94
Sep-20	3,632,000.00	11.15
Aug-20	3,125,000.00	9.59
Jul-20	2,416,000.00	7.41
Jun-20	1,829,000.00	5.61
May-20	934,000.00	2.87
Apr-20	204,000.00	0.63
Mar-20	483,000.00	1.48
Feb-20	669,000.00	2.05
Jan-20	428,000.00	1.31
Dec-19	2,214,000.00	6.79
Nov-19	3,536,000.00	10.85
Oct-19	3,167,000.00	9.72
Sep-19	3,626,000.00	11.13
Aug-19	2,849,000.00	8.74

Analysis of the data yielded the following information regarding the total volume of water used for irrigation in a calendar year:

Year	acrefeet/yr
2019-2020	68.61
2020	68.44
2020-2021	57.09

There was excessive rainfall in the summer of 2021 yielding a significantly lower total water usage for that year. However, the irrigation areas represent approximately 45 total acres of vegetation requiring

approximately 18 inches of irrigation (based on typical rainfall and one inch of water required per week) or approximately 67.5 acrefeet. Given the lower water use in the 2021 summer, we believe that a savings of 67 acrefeet is reasonable.

In addition to the common areas, the purple pipe installed in the community is capable of supplying treated effluent to approximately 200 residential lots. This represents approximately 12 acres of grass that could be irrigated with effluent. Given the same requirement of approximately 18 inches, this is an additional 18 acrefeet of saved water. Adding these lots to the effluent distribution system would require disconnecting the individual resident's irrigation system from the potable water supply line and connecting it to the effluent line. The Board is currently reviewing their options for setting up this type of service to the residents. The total land available for irrigation is approximately 57 acres for a total of 85 acrefeet.

The wastewater treatment plant is currently receiving approximately 61,000 gpd (68 acrefeet per year). The total capacity of the WWTP is 80,000 gpd (89 acft/yr). It is uncertain how much wastewater will be treated as the trend tracking has shifted significantly in the last two years and the current trend shows a maximum WW production of the community of approximately 75,000 gpd (85 acft/yr) is likely.

#### Item 4:

The typical life span of pumps is between 15 and 20 years; however, due to the nature of outdoor installations, a 15 year lifespan is more probable. The other components of the pumps skid will likely last longer as they have few movable parts. The pumps represent a significant portion of the cost of the skid, but they can be replaced/rebuilt fairly easily. Electrical components may require piecemeal replacement as they fail during the 15 year lifespan of the pumps. Application page 2 of 6 has been updated to reflect this information.



806 Tradesmens Park Loop Hutto, Texas 78634 Phone: (512) 846-2600 Fax: (512) 846-1163

www.pumpsolutions.net

THIS TRANSMITTAL CONSISTS OF \_4\_ PAGE(S) INCLUDING THIS PAGE.

TO:

**BIDDING ESTIMATOR** 

FROM:

James Mansfield BID DATE: November 16<sup>th</sup>, 2021

RE:

Reunion Ranch WWTP - Irrigation Pump System

#### Scope of Equipment – Description of equipment supplied by Pump Solutions Inc.

Factory built, booster pumping system, MCI Model PPS UL Listed QCZJ Packaged Pump Station, Part Number PPS-N-VMS3-370-123-DV-P-46-3-6

UL Listed pump Station complete with pump skid, sch40 steel manifolds, isolation valves, vertical multistage pumps/motors, check valves, filter, filter bypass and discharge flow meter. Standard APC controls with dedicated VFD per pump. Built under ISO9001:2008 certification.

Requirements: 370 GPM at 123 PSI at station discharge

Supply Power: 460/3/60 Inlet Pressure: Unconfirmed

#### Mechanical

- Qty (3) 25 HP Grundfos Model CR45-3-1 Vertical multistage pumps, (75% Efficiency), each rated for 185 GPM @ 285'TDH including station losses. To include;
  - Cast Iron Casing
  - 304SS impellers
  - Stainless Steel Shafting
  - Mechanical Seal
  - 25 HP, 3600 RPM, 460/3/60, TEFC, premium efficient, Motors with space heaters

#### \$40,838.00 For Pumps/Motors

#### **Filtration**

- 4" VAF V500 system filter, 100 micron, with 2" Bray 31H electrically actuated flush valve
- 4" Wye strainer filter bypass with 2" Toro Lead-free bronze flush valve
- 3" X 4" Station magnetic flowmeter piping
- Individual pump ClaVal X43 suction strainer with differential pressure switches

#### \$24,785.00 Station Filtration

#### PUMP STATION MECHANICAL and INSTRUMENTATION

#### **Skid System:**

- Structural skid system
- Steel Grit blasting to SSPC-6 of station structural steel.
- PPG Enviracryl Zinc epoxy powder coat Primer
- Poly Powder coated non-skid paint system

#### Piping and Ancillary

- Sch40 Station piping
- 6" Station suction manifold
- 6" Station discharge manifold
- Hose Bibb connection
- Zinc Coated station nuts, bolts and washers

#### **Valves**

- 3" Bray 31H lug butterfly pump isolation valves with lever actuator, 316SS disc and EPDM elastomers.
- 3" Flomatic 888VFD Pump silent wafer check valves coated with fusion bonded epoxy and SS disc.
- 4" Bray 31H filter and Wye strainer isolation valves with lever actuators, 316SS disc and EPDM elastomers
- 4" Flomatic 888VFD filter silent wafer check valve with fusion bonded body epoxy and 316SS disc
- 316SS instrumentation and air release valve isolation ball valves
- 2" Claval 50-01 flanged pressure relief valve with lead-free bronze piloting
- 2" Bray 31H lug isolation valves for pressure relief isolation, with lever actuator, 316SS disc and EPDM elastomers
- Individual pump ½" Air release valves
- Suction manifold 1" Air release valve
- Discharge 1" Air Release/Vacuum relief valve

#### **Instrumentation:**

- SS IFM Pressure Transmitters with local indication LED display
  - Suction manifold
  - Before and after filter
- 3" Siemens 5100W Magnetic Flowmeter with local access display, flanged connections, ebonite liner and an accuracy of .4% of indicated value
- Individual pump suction strainer differential pressure switches
- VAF Filter position indication sensor
- Wika 4" Pressure Gauges w/isolation ball valves
  - Each pump suction
  - Each pump discharge
  - Suction manifold
  - Before and after filter

#### \$68,369.00 Skid, valves, piping and Instrumentation

#### Controls:

- UL 508a Listed Control Panel
- Short Circuit Current Rating 100 ka
- NEMA 4 Enclosure w/3 Point Latch with dead front
- UL Listed Air conditioning unit
- 500Watt Panel Heater
- 200 amp Main Fused Disconnect
- Type 1 Surge Protection w/status indicators
- Incoming Line Phase Monitor w/primary fusing
- Qty (3) 25hp Danfoss Aqua Drive w/high speed DFJ fuse protection
  - 3 ½% DC Input Link Reactor
- AB Micrologix 1400 PLC Platform
- AB 6" Color HMI
- AB 5 Port Ethernet Switches
- AB DC Power Supply
- AB "Full Size" 30 mm N4 Door Devices
  - Green Illuminated Switch per pump
  - System Switches: System Control, Low Discharge, Speed Pots and Red Illuminated Fault Push Button
- GFCI Outlet
- Control Power Transformer w/primary/secondary fusing
- Flow Signal Input: 4-20mA
- Safeties:
  - Suction Manifold Low inlet pressure shutdown
  - Individual pump suction strainer differential pressure
  - Low discharge pressure shutdown
  - High discharge pressure shutdown w/auto restart
  - VSD fault with auto restart
  - Solid State Overload shutdown per motor
  - Phase Failure, Imbalance and low voltage protection
- Operation Features
  - Lamp Test Function
  - Automatic alternation of pumps based on least run time
  - Intelligent Slow Ramp feature for automatic line fill
- APC Remote Cell Monitoring w/1 Year Activation 250 MB Data Plan Limit per month
- Remote pump station disable feature from any smart device or PC
- Factory support remote access to PLC/HMI and VFD for programming and troubleshooting

#### \$45,522.00 For Control Panel

#### **Post Production:**

- Freight to site is included.
- Installation is not included.
- Start-up, station calibration & operator training is included, 1 day allotted.
- Wiring and Conduit included and inside the package.
- Power wire and conduit, 6" suction/discharge piping and 4" filter piping to skid system are to be by contractor.
- 2 Year Warranty on Station

• Control Stations, Conduit/Wire from BPS to the MCC Control Panel, etc. are by others.

**Total Price:** 

\$ 182,514.00

INCLUDES \$3,000.000 FOR FREIGHT

Addendums Seen: 0

**Proposed Delivery Schedule:** 

**Drawings:** 6-8 weeks after receipt of order **Delivery:** 14-18 Weeks After Approved Submittals

- (1) The price quoted is F.O.B. Jobsite.
- (2) Federal taxes, state taxes, or local taxes are NOT included.
- (3) Terms are Net 30 Days, Standard Terms and Conditions Apply.
- (4) There is not piping, valves, rails, etc. that are not specifically mentioned.
- (5) This Quote is valid for 60 DAYS from the date on the quote.

Thank you for your consideration of the proposed equipment.

Sincerely, James Mansfield

James Mansfield

Pump Solutions Inc.

(512) 809-2302

#### **EXHIBIT B**

Firm Water Conservation Cost-share Program Project Status Report



## Firm Water Conservation Cost-share Program Project Status Report

2022

Please complete the following information for the completed cost-share project and return to LCRA by January 2023, or upon completion of the project if the timeframe for completion is less than one year. For equipment purchases, please attach associated purchasing receipts, as appropriate, or other documentation outlining the costs incurred. Please mail your completed status report and associated attachments to:

Stacy Pandey Lower Colorado River Authority P.O. Box 220 Austin, Texas 78767-0220

#### **GENERAL INFORMATION**

Participating Organization:				
Project Description:				
Contact Person/Title:				
	Contact Email Address:			
REPORTING REQUIREMENTS				
Is the project complete?	If yes, enter completion date:			
If no, has an extension been requested?□ Yes	No Enter extension date:			
Please describe the progress of the funded proj	ject as of [enter date]. Attach additional pages as needed.			

#### **PROJECT GOALS**

Please indicate the number of equipment items installed, incentives distributed, etc.

Attach additional pages as needed.

Item Description	Total Number of Items for Project

#### PROJECT EXPENDITURES

What is the total estimated cost for the project as described in your cost-share application? \$	
Please list the actual project cost upon completion? \$	

Please list your total project expenditures to date.

Attach additional pages as needed.

Major Budget Components	
(including in-kind contributions such as salaries, wages, equipment, etc.)	Cost
	\$
	\$
	\$
	\$
	\$
	\$
	\$
	\$
	\$
	\$

#### **WATER SAVINGS**

What is your total estimated annual water savings from the project (include assumptions/calculations if relevant)?		
For water loss reduction projects, do historical water reports support the estimated annual water savings		
How will the water savings continue to be monitore		
CERTIFICATION I hereby certify that the information given herewith and belief.		
Signature of Contact Representative:	Date:	