## **Project Background**

The City of Bryant Parks Department maintains a 14,650 Sq Ft Aquatic Center Natatorium at 6401 Boone Road that was constructed in 2009. Currently the Humidity and Air Temperature conditions within the area above the enclosed pools are maintained with a PoolPak Dehumidification System. The System has been relatively unchanged until 2019 when compressors were replaced and an Air-Cooled Condenser was added to improve dehumidification. The system has since experienced additional compressor, controls, and heat exchanger failure as the result of reaching an expected life of 15 years. The Natatorium consists of a main pool that has a surface area of 4930 sq ft and is typically maintained at 82 degrees Fahrenheit and a therapy pool that has a surface area of 1513 sq ft and is typically maintained at 95 degrees Fahrenheit. The remaining wet deck surface area is approximately 2000 sq ft and the total volumetric capacity of the facility is 296,000 cubic feet. During Summer months excessive diurnal radiant heat from the transparent roof and wall system is compensated by opening roof panels.

## **Project Scope**

The City of Bryant is seeking Requests For Proposals (RFP) for the purchase, removal, and replacement of the existing Natatorium Dehumidification Compressor/Heat Exchanger system along with the installation of a set (2) of High Volume, Low Speed Ceiling Fans. The following are the scope requirements that are requested to be submitted for selection:

- Replacement system must utilize the existing Supply and Return Duct/Plenums within the building of the Aquatic Center. Contractor shall be responsible for any and all duct transitions. All ducts shall be constructed, insulated, and sized in accordance with American Society of Heating, Refrigeration, and Air conditioning Engineering (ASHRAE) standards. Pool area shall be ventilated in accordance with ASHRAE 62.1 standards for fresh air.
- Approved manufacturers of natatorium dehumidification systems are PoolPak, Seresco, Desert Aire, Aaon, Innovent, and Xetex. Any other manufacturer must be preapproved by the City project manager before submittal.
- 3. Provide cleaning and inspection of existing Supply and Return Duct/Plenums within the building of the Aquatic Center. Any deficiencies or defects must be reported immediately to the City Project Manager.
- 4. Replacement system must reasonably fit within the envelope of the existing system and not interfere with the existing access to the building nor the surrounding drives or walkways.
- 5. The operating performance:
  - a. Maintain Pool head space temperature between 80 and 86 degrees F during Fall, Winter, and Spring months.
  - b. Maintain Pool head space Relative Humidity between 40 and 60%.
  - c. Maximum Supply Volumetric Rate between 22,000 and 24,000 cfm.
  - d. Minimum fresh air makeup in accordance with ASHRAE 62.1 of 0.48 cfm/sq ft (7400 cfm).
  - e. Total System Cooling and Heating Capacity between 744 and 960 MBH with approximately 1.2 MMBH of Auxiliary water heating.
  - f. Able to condense and collect approximately 350 lbs/hr
- 6. Replacement system must utilize the existing Electrical Switchgear available.
- 7. Integrated controls with direct system interface to be located outside the interior office of the Aquatic Center Director's office

- 8. Demolition and Removal of existing Compressor/Heat Exchanger and Air-Cooled Condenser System. Contractor shall be responsible for disposal of all removed materials.
- 9. Provide and Install Two (2) High Volume, Low Speed Ceiling Fans to be mounted and installed above the walk area between the Main and Therapy Pools and above the bleacher area by the Main Pool. Contractor must provide the fabricated mount to connect to the roof structure and the design must be reviewed and approved by a Structural Engineer licensed in the state of Arkansas. The fans must be a Greenheck Model DS-6-14-70HV or approved equivalent. Localized controller can be installed at the nearest outside wall in an accessible area.
- 10. Provide all trades (HVACR, Electrical, Civil, and MEP) to successfully complete installation and startup.
- 11. All Installation must be scheduled a month in advance and not interfere with any regularly schedule events that occur within the Aquatic Center and must coordinate with the City Project Manager.
- 12. Provide all accommodations for transportation, rigging and setting of equipment.
- 13. Provide operator training to Aquatic Personnel.
- 14. Provide 1- Year Warranty on parts, installation, and labor with an extended 5-year compressor warranty, and a prorated 10-year warranty on the heat exchanger with parts and labor.
- 15. Provide all permits required to work within the City of Bryant, Arkansas.
- 16. Provide As-Built drawings, manuals, schematics, recommended spare-parts list, and maintenance schedules.
- 17. Provide a current certificate of insurance for proof of general liability, automobile, and workers compensation that must be maintained for the duration of the project and throughout the warranty period.
- 18. Provision of a 5% bid bond. A 100% payment and performance bond will be required from the successful proposer prior to beginning any work on the project.

# Proposals shall include the following Items:

- 1. Basic equipment design with Manufacturer Model No. and sizing and performance data.
- 2. Total cost of project with itemization as outlined in attached Cost Submittal Form.
- 3. Time frame to complete work including lead times on equipment and major construction/installation milestones.
- 4. Physical configuration, location and impact on the facility.
- 5. List of company references and contact information.
- 6. Key company employees and representatives, including installation technicians and engineers.
- 7. List of all subcontractors.

#### **General Submittal Requirements and Conditions:**

- All contractors/vendors are responsible for verifying site conditions. Site visits can be arranged by contacting the City Project Manager: Ted Taylor (<a href="mailto:ttaylor@cityofbryant.com">ttaylor@cityofbryant.com</a> Phone: 501-943-0309).
- 2. All Proposals must be received no later than 2:00 p.m., Tuesday January 14th, 2025 at 210 SW 3<sup>rd</sup> Street Bryant, AR 72022.
- 3. Bids shall be sealed and labeled for City of Bryant Parks Department Aquatic Center Natatorium Dehumidifier Attn: Ted Taylor.

1	A public opening will be schooluled for Thursday Japuany 22rd, 2025 at 2,00 pm at Dryant Darks				
4.	A public opening will be scheduled for Thursday January 23rd, 2025 at 2:00 pm at Bryant Parks Department – Administration Building Conference Room 6401 Boone Road, Bryant, AR 72002. Contractors are invited to attend to witness the opening.				

# RFP Form for Aquatic Center Natatorium Dehumidifier Replacement

Date Su	bmitted:			
To: City	of Bryant, AR – Parks Department			
I,				
Represe	entative Name (Print)	Signat	ure	
Of				
Na	me of Company			
Addre	ess City	Zip	Phone	
ITEM DESCRIPTION			COST \$	
1.	Demolition of the Existing Dehumidifier Compressor/Heat Exchanger and Air- Cooled Condenser Systems			
2.	Purchase and Install replacement Dehumidifier System			
3.	Purchase and Install High Volume, Low Speed Ceiling Fans (2)			
4.	Commissioning and Training			
	TOTAL			