# EXHIBIT B

## **SCOPE OF WORK**

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The proposed project will be divided into tasks in an effort to effectively meet the project objectives.

Task 1	Project Management
Task 1.1	Correspondence
Task 1.2	Monitoring/Reporting
Task 2	Test Drilling/Aquifer Evaluation
Task 2.1	Fiberglass Research and Evaluation
Task 2.2	Design/Specification/Bidding
Task 2.3	Test Drilling
Task 2.4	Aquifer Evaluation and Recommendations
Task 2.5	TCEQ Coordination and Exception Process
Task 3	Design/Bid Phase-Production Well
Task 3.1	Design Phase (Plans and Specifications)
Task 3.2	Bidding Phase
Task 3.3	Bid Evaluation
Task 4	Implement/Construct Production Well (Dependent on Cost Benefit)
Task 4.2	Construction
Task 4.3	Testing/Monitoring
Task 4.4	Start-up/operation
Task 5	Reporting

### Task 1: Project Management

The study team will draw on its considerable experience with brackish groundwater issues in the region to execute this project in a timely and cost-conscious manner. The Project Manager will manage the research project and the larger water supply project in which this project is a vital step.

The consultant team will provide project management focused on collaboration, control of project costs, maintaining project schedule requirements, identifying key issues, and delivering quality documents.

Our project manager will provide overall project management, coordination, planning and monitoring of the work, budget, and schedule. The project manager will review and submit monthly invoices and progress reports and be the primary point of contact with the TWDB staff. A project file will be maintained including copies of correspondence, reports, minutes of meetings and memoranda.

Communications with TWDB will include frequent meetings, telephone calls and emails to discuss current activities and any needs for additional input or information.

#### Task 2: Test Drilling/Aquifer Evaluation

During Task 2, hydrologic study along with surface factors will assist the team in pinpointing optimum well field location and layout. Preliminary design work is currently underway as part of the larger Donna BWRO Project. The Team will prepare plans and specifications for the Test Drilling Phase. The Team will bid, evaluate bids, and select a contractor to perform the test drilling phase. It is anticipated that a total of 3 to 4 test wells will be implemented as part of the test drilling program.

The Team will provide an experienced field geologist or engineer to observe critical phases of the test drilling, including: sand sampling, geophysical logging, temporary well installation, aquifer testing, and water quality sampling.

The Team will analyze the data obtained during the testing program. This will include a determination of aquifer productivity characteristics, review of water quality data, and perform groundwater modeling to determine production well capacity. The data gathered from test wells, including water quality parameters and flow data, will form the basis for design of the full-scale well field. This includes the one well included in Task 4 and the additional wells necessary to feed the BWRO plant.

In addition, the Team will conduct extensive research and evaluation on fiberglass materials and the technical feasibility of these materials for use in full scale production wells.

The Team will also coordinate with the casing manufacturer to ensure the project is thoroughly monitored so as to yield sufficiently detailed data to effectively demonstrate the potential for utilizing fiberglass casing on full scale production wells. The Team will closely coordinate this fiberglass research information with TCEQ during the Exception Request Process to request and obtain approval for use of this material in full scale production wells.

#### Task 3: Design/Bid Phase of Production Well

Drawing on its experience designing, managing construction of and instituting brackish wells, the design team will formulate plans and specifications for the production well utilizing both stainless steel and fiberglass. This will allow a cost comparison of both materials.

The decision for the design of a production well utilizing fiberglass will move forward after the Team has determined the technical feasibility of this material in Tasks 1 and 2 as well as TCEQ approval for the exception to use fiberglass on a full scale production well.

The plans and specifications will delineate the construction differences and techniques for the implementation of a stainless steel production well and a fiberglass production well. Based on the most cost-effective and mutually agreeable implementation strategy, bids will be formulated and advertised in accordance with contractual and legal statutes. These bids will be evaluated to determine the most cost effective way to proceed in the implementation of the necessary production wells. It is anticipated that 2 to 3 wells will be necessary to provide enough feed water to the proposed 2 MGD Brackish Groundwater Desalination Project.

#### Task 4: Production Well (Dependent on Cost Benefit)

The plan during this task is to implement one stainless steel production well and one fiberglass production well (if only two wells are required for the project). The implementation of a fiberglass production well will move forward only if the Team determines the cost effectiveness of this material.

The Team will monitor and make the necessary refinement to the fiberglass production well construction technique, if it does take place. The Team will record and report in Task 5 any refinement experienced during construction, if any, as compared to the one delineated on the plans and specifications.

#### Task 5: Reporting

Long-term benefit will be measured by analyzing annual O&M costs of the well field compared to other similar wells operated by NAWSC that use other well casing materials. These results will be forwarded to team members and TWDB at a future date. Data monitored during the duration of this research project will be recorded by the team and will include flow rates, pressure, and water quality data. This primary data can indicate the integrity of the well casing or other well elements. The final report will be completed and forwarded to TWDB at the conclusion of the study and will include fiberglass research information, test drilling information, production wells plans and specifications, construction techniques (stainless steel and fiberglass), resultant data, cost evaluation, and recommendations. The construction technique for a production well utilizing fiberglass casing will be included in the report regardless of actual implementation of a fiberglass production wel

NORTH ALAMO WATER SUPPLY CORPORATION DEMONSTRATION OF FIBERGLASS CASINGS IN BRACKISH GROUNDWATER WELLS													
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