



## **San Jacinto River Authority**

GRP Review Committee

Regular Meeting  
Monday, June 25, 2012  
12:00 PM  
1577 Dam Site Road  
Conroe, TX 77304

**Regular Meeting  
GRP Review Committee  
G & A Building  
1577 Dam Site Road  
Conroe, Texas 77304  
Monday, June 25, 2012  
12:00 Noon**

## **Agenda**

### **Call to order**

1. Approval of Minutes of GRP Review Committee meeting on May 21, 2012.
2. GRP items for consideration by the SJRA Board on June 28, 2012.
  - a. Consider authorizing General Manager to execute agreement with the City of Willis relative to the Catahoula Well Project
  - b. Consider authorizing General Manager to execute Professional Services Agreement and Work Order No. 1 for Construction Administration and Inspection Services with CDM Smith, Inc. for the GRP Surface Water Facilities
3. Presentation regarding Early Work package No. 2 for GRP Surface Water Facilities
4. Presentation of GRP Organizational Study
5. Update on GRP Financing with TWDB
6. GRP Budget Planning Overview
7. GRP Division update
8. Future Items for Discussion
9. Future Meeting Schedule

**Minutes of a Regular Meeting  
of the GRP Review Committee  
May 21, 2012**

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A regular meeting of the San Jacinto River Authority GRP Review Committee was held at 12:00 P.M., May 21, 2012 at the San Jacinto River Authority G&A Building, 1577 Dam Site Road, Conroe, Texas 77304. Attendees were as follows:

Troy Morris	Chairman, Mid South
Al Newton	MUDs East
Dean Towery	City of Conroe
Mike Mooney	WJPA
Arthur Faiello	Cities
Jackie Chance	MUDs West
Ron Kelling	SJRA Deputy General Manager, Operations
Mark Smith	SJRA GRP Administrator
Don Sarich	SJRA GRP Development Coordinator
Matt Corley	SJRA GRP Compliance Technician
Connie Kelly	SJRA GRP Administrative Assistant
Steve Fenney	SJRA Technical Services
Dr. Bob Hill	SJRA SCADA Manager
Shane Porter	SJRA Project Manager
Hector Ortiz	SJRA SWTP
Ronda Trow	SJRA Public Relations
Jason Hasduk	Pate Engineers
Jan Bartholomew	RBC Capital Markets
Ryan Nesmith	RBC Capital Markets
Jennifer Ivey	Red Oak

Troy Morris called the meeting to order at 12:05 PM.

Troy introduced the minutes of the April 23, 2012 meeting and asked for a motion to approve those minutes. A motion was made by Al Newton, seconded by Mike Mooney and passed unanimously.

Troy announced that the City of Willis agreement would be tabled until next meeting.

Mark Smith introduced items that would be brought to the SJRA Board for approval.

- a. Construction contract with Preferred Technologies, Inc. for the Construction of a Fiber Optic Line from SJRA G&A Building to GRP Building 1
- b. Work Order Nos. 3 and 4 with Dannenbaum Engineering Corporation, Inc. for final design and survey services of the Surface Water Transmission System Segment C-1 for the GRP.
- c. City of Willis Agreement tabled
- d. Presentation of a GRP Pumpage Rate Study and the consideration and action upon an amendment to the SJRA Rate Order relative to fees, rates and charges related to the GRP

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Program and procedures for payment of same.

Jennifer Ivey of Red Oak presented the findings of the GRP Pumpage Rate Study

Mark Smith called for a motion to approve the recommendations to the Board. A motion was made by Dean Towery, seconded by Arthur Faiello and passed unanimously for approval of those items going before the Board and recommendation for the pumpage rate increase.

Mark discussed the proposed receiving facilities system improvements for the City of Conroe and The Woodlands. A motion was made by Arthur Faiello, seconded by Jackie Chance and passed to recommend these agreements for approval by the Board. Dean Towery abstained from the vote.

Mark presented an update on the budget for BY 2012-2013.

Mark presented the GRP Division Monthly Progress Report.

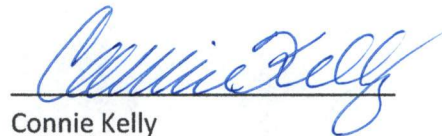
Mark mentioned items that would be discussed at the next meeting:

- a. City of Willis Agreement for implementation of a Catahoula well project
- b. Contract for Construction Administration and Inspection
- c. Contract for Construction Materials Testing

The next meeting was set for June 25, 2012.

Troy Morris called for adjournment at 1:40 pm.

Minutes recorded by:



Connie Kelly  
GRP Administrative Assistant



### GRP REVIEW COMMITTEE

#### AGENDA ITEM #2b

June 25, 2012

**SUBMITTED BY:** Mark Smith

**ITEM CAPTION:** Consider Authorizing General Manager to execute Professional Services Agreement and Work Order No. 1 with CDM Smith, Inc. for Professional Construction Administration and Inspection Services for the Surface Water Facilities for the GRP Program

**RECOMMENDATION:** Staff recommends that the Review Committee recommend approval of the contract.

#### **BACKGROUND INFORMATION:**

Work Order No. 1 provides for all of the labor and materials required to provide professional Construction Administration and Inspection (CA&I) Services during the construction of the GRP Division's Surface Water Facilities (Raw Water Intake and Pump Station, Water Treatment Plant, High Service Pump Station and Ground Storage Tanks). During construction, the CA&I Consultant will serve as the SJRA's representative providing resident: CMAR Contract and project controls administration; monthly CMAR Application for Payment reviews; meeting, document, communication and construction materials testing coordination; quality assurance/quality control (inspection) activities; and other associated activities.

#### **SUPPORTING DOCUMENTS:**

1. SJRA Board Communication memo
2. CA&I WO 1



# San Jacinto River Authority

## Board Communication

Item No.	Agenda Item	Date
	Consider Authorizing General Manager to execute Professional Services Agreement and Work Order No. 1 for Professional Construction Administration and Inspection Services for the Surface Water Facilities for the GRP Program	06/28/12

### BACKGROUND INFORMATION

**Firm Name:** CDM Smith, Inc.

**Project:** Surface Water Facility for the GRP Program

**Type of Services:** Professional Construction Administration and Inspection Services

**Type of Agreement:** Professional Services Agreement and Work Order No. 1

**Purpose and General Description of Services:**

Work Order No. 1 provides for all of the labor and materials required to provide professional Construction Administration and Inspection (CA&I) Services during the construction of the GRP Division's Surface Water Facilities (Raw Water Intake and Pump Station, Water Treatment Plant, High Service Pump Station and Ground Storage Tanks). During construction, the CA&I Consultant will serve as the SJRA's representative providing resident: CMAR Contract and project controls administration; monthly CMAR Application for Payment reviews; meeting, document, communication and construction materials testing coordination; quality assurance/quality control (inspection) activities; and other associated activities.

**Anticipated Notice to Proceed:** July 01, 2012

**Anticipated Completion Date of Services:** June 30, 2015

**Type of Compensation:** \$5,348,633.00-Cost Reimbursable w/ Not-to-Exceed

**Construction Cost:** \$191,000,000.00

### RECOMMENDED ACTION

Consider Authorizing General Manager to execute Professional Services Agreement and Work Order No. 1 for Professional Construction Administration and Inspection Services for the Surface Water Facilities for the GRP Program



**SJRA GROUNDWATER REDUCTION PLAN PROGRAM  
SURFACE WATER FACILITY  
CONSTRUCTION ADMINISTRATION AND INSPECTION CONSULTANT  
WORK ORDER NO. 1 SCOPE OF WORK**

In 2010, the Lone Star Groundwater Conservation District (LSGCD) developed and issued a District Regulatory Plan (DRP Phase IIB) to limit the total amount of groundwater withdrawn from the aquifers that serve Montgomery County by January 1, 2016. The San Jacinto River Authority (SJRA) is implementing the Groundwater Reduction Plan (GRP) Program to assist participants in meeting this regulatory requirement.

The SJRA is implementing a 30-million gallon per day (MGD) wholesale raw surface water treatment facility and a treated surface water supply system that will include a new Raw Water Intake and Pump Station (RWPS), Surface Water Treatment Plant (SWTP), High Service Pump Station (HSPS), and an extensive transmission system to deliver potable surface water within portions of Montgomery County.

The SJRA has entered into a Construction Manager-at-Risk (CMAR) contract with McCarthy Contractors for construction management services during the SWF Project design and pre-construction phase. The CMAR contract provides that, if retained, the CMAR will continue to provide construction management services during the SWF Project construction phase. Such services shall be in addition to the CMAR's construction of the SWF Project.

As such, the SJRA has identified the need for a Surface Water Facility (SWF) Construction Administration and Inspection (CA&I) Consultant to provide professional construction administration, and inspection services during construction of the proposed Surface Water Facilities (RWPS, SWTP, and HSPS). The proposed SWF Project includes but is not limited to the following:

**1. Raw Water Intake and Pump Station (RWPS):**

The Raw Water Intake and Pump Station (RWPS) will transfer raw water from Lake Conroe to the surface water treatment plant (SWTP). The RWPS includes a reinforced concrete platform set approximately 300 linear feet into Lake Conroe supported by concrete drilled shafts; one (1) 125HP (17.75 MGD) and two (2) 500HP (31.5 MGD) motor vertical turbine pumps with room for three (3) additional future phase pumps (ultimate capacity of 126 MGD); three (3) 72-inch pump barrels with screened intake openings at three (3) different elevations; concrete roadway access bridge from the dam structure; two (2) parallel 48-inch and one (1) 60-inch raw water discharge line; variable frequency drives; metering station; two (2) - 12.47kV to 480V electrical supply/transformers; switchgear; chemical feed system; SCADA; instrumentation and controls; air conditioned operator work room; CMU masonry exterior; and standing seam metal roof.

**2. Surface Water Treatment Plant (SWTP):**

The Surface Water Treatment Plant (SWTP) will generally consist of the following process and operational related facilities:

Pre-treatment: Permanganate storage and feed facility to be installed in the proposed Chemical Building.

Sedimentation: Four (4) separate trains will utilize three-stage flocculators; static mixers; high-rate plate settlers; sludge pumps; and piping to sludge holding tanks.



Membrane Building: Includes eight (8) trains utilizing Pall low pressure membranes; water feed pumps, backwash water pumps; chemical transfer pumps; electrical; SCADA; instrumentation and control; laboratory; operator office; membrane cleaning chemical storage; and all associated piping, including piping to granular activated carbon (GAC) contactors.

GAC Contactors: Includes eight (8) 17' x 34' concrete granular activated carbon (GAC) contactors; electrical; SCADA; instrumentation and control; water supply piping; backwash water pumps (4-pumps/motors); treated water pump station (3-pumps/motors); all associated piping, including piping to the finished water storage tanks and backwash water equalization basins.

Waste Stream Piping: Includes yard piping required to transmit membrane and GAC backwash water, sludge/dewater sludge and clarifier supernate and water recovery basin water to the head of the plant.

Backwash Equalization Basin: Includes a concrete backwash equalization basin sized to retain a volume equal to a complete membrane system and one (1) GAC contactor backwash water cycle. Three (3) 600 Gallons Per Minute (GPM)/40 HP pumps with Variable Frequency Drives (VFDs) and local SCADA switch

Filter Backwash Clarification: Includes two (2) 75,000 to 100,000 gallon concrete backwash water clarifiers; center well; rake; under slab piping; electrical; SCADA; instrumentation and control; Three (3) 150 GPM/20 HP pumps with VFDs and local SCADA switch.

Sludge Holding Tank: Includes one (1) 130,000 gallon concrete sludge tank; electrical; SCADA; instrumentation and control; sludge feed pumps and associated piping.

Thickeners: Includes two (2) 100,000 gallon concrete thickeners; three (3) thickened sludge pumps (two dedicated, one swing); electrical; SCADA; instrumentation and control; designed for gravity overflow and solids pumping.

Belt Press Building: A two-story cast-in-place concrete and CMU masonry building which will house two (2), 2-meter belt presses; sludge feed pumps; conveyors; polymer storage tanks; polymer feed pumps; polymer day tanks; truck loading area; electrical; SCADA; and instrumentation and control. Sludge dewatering is anticipated to occur 5-days per week for 7-hours per day.

Process Water Recovery Basin: Includes two (2) 200,000 gallon earthen-dam basins separated by a pipe and isolation gate; pump station housing four (4) submersible pumps, (two [2] large and two [2] small pumps); electrical; SCADA; instrumentation and control; and piping to the head of the plant (upstream of the point of coagulation addition).

Chemical Building: A single story building having precast concrete beams/columns and CMU masonry walls; metering pumps; chemical supply piping; electrical; SCADA; instrumentation and controls; and single wall and double wall Fiberglass Reinforced Plastic (FRP) chemical storage and use tanks. The chemical building will provide bulk storage, day tanks, and chemical feed systems for the majority of the chemical treatment systems implemented at the SWTP. Chemicals not stored at this building include the polymers at the belt press building and sodium hypochlorite immediately outside the blower building. All chemicals except sodium hypochlorite will be stored in single wall tanks. Chemicals located in the Chemical Building include the following:

Sodium Hypochlorite – Bulk storage of 12%; disinfection and membrane cleaning

Aluminum Chlorohydrate (ACH) – primary coagulant

Liquid Lime – Alkalinity adjustment and stabilization of the water

Carbon Dioxide – Combination with lime for pH adjustment and stabilization of the water

Sulfuric/Citric Acid – membrane cleaning

Sodium Hydroxide – membrane cleaning/waste neutralization

Sodium Bisulfite – membrane cleaning/waste neutralization

Permanganate – Pre-oxidation

Phosphoric Acid – Distribution system corrosion stability

Blower Building: An approximately 5000 sq. ft building having precast concrete beams/columns and CMU masonry wall will house six (6) 350HP blowers/motors; electrical; SCADA; instrumentation and controls; air piping for the Ground Storage Tanks; chemical metering pumps; and associated chemical piping. A large sodium hypochlorite day tank will be located immediately outside the blower building.

Operations Building: A proposed three (3) story, 20,000 sq. ft. building to house the GRP Division Staff as well as SCADA Central Control, and the Emergency Operations Center. The building

functions will include administrative offices, conference rooms, visitor center, SCADA Control Center, Information Technology Staff offices, lounge and kitchen areas, document storage, and a self-contained emergency operations center that can withstand minimum Category 3 Hurricane force winds.

**Electrical Substation and Generation:** Power supplies will terminate at the electrical transformer/substation. In the event of a power failure, automatic switchover capabilities will retain power to the entire plant. If external power sources fail, electrical generation capabilities are installed to allow all normal plant operations to function. A minimum of two (2) 2-MW diesel generators and fuel storage tanks are required.

### **3. High Service Pump Station (HSPS):**

The High Service Pump Station will pump treated surface water from the SWTP and ground storage tanks into the proposed surface water transmission system for distribution. The pump station will have a firm pumping capacity of 30 million gallons per day at pressures up to 120 psi. The major facilities include a CMU masonry pump station with six (6) horizontal split-case high service pumps (2 – 125HP and 4 – 700HP), four (4) of the pumps will be variable frequency drives (VFDs), two (2) 5 million gallon prestressed concrete ground storage tanks (GSTs) with baffling systems, two (2) 20,000 gallon hydro-pneumatic tanks (HPTs), and a pressure relief valve station outside of the pump building, along with infrastructure for chemical injection and sampling, associated yard piping including steel and/or concrete-cylinder pipe up to 66-inch diameter, electrical infrastructure, and other miscellaneous amenities. Other features include a control room, chlorine analyzers, a restroom, HVAC, SCADA, Instrumentation and Control Systems, transformers, etc., electrical service of two (2) 12.47KVA to 4160V transformers, electrical supply and switchgear.

**NOTE:** The above description provides only a general concept of the possible system features.

The SJRA has retained the services of a Program Management Consultant to support the SJRA's management of the GRP Program. The Program Management Consultant provides assistance to the SJRA for the management of GRP at the Program level. During construction, it is anticipated that the Program Management Consultant will provide and/or coordinate the various Engineers of Record's (EOR) construction phase services. In this way, GRP Program and GRP Project related institutional understanding may be integrated and utilized by the SWF CA&I Consultant to facilitate the execution of its scope of work.

The SJRA has also retained the services of a Program Management Surveyor Consultant, Program Management Geotechnical Consultant, Fiber Optics Consultant, Program Management Transient Consultant, and Program Management Corrosion Consultant to support the SJRA's development of a Design Standards and Criteria Manual, review appropriate design/technical documents, and design specialty items to be incorporated into the designer's documents. The SJRA is currently in the process of procuring the services of a Construction Materials and Testing Consultant. These Program Management Consultants will assist the SJRA and the SWF CA&I Consultant during the construction phase of the GRP Program.

### **GRP PROGRAM DOCUMENTS**

The GRP Program has developed a series of standard technical, contract and administration documents. Documents to be provided to CDM Smith by the GRP Program Staff and implemented by the CDM Smith are:

1. Program Management Plan (PMP);
2. Construction Manager-at-Risk (CMAR) Contract;
3. General Conditions of the Contract;
4. Standard forms and letter format; and
5. Other standard GRP Program documents, as necessary.

## **SCOPE OF SERVICES**

CDM Smith shall provide professional construction administration and inspection services for the SWF Project. It shall be CDM Smith's responsibility to assemble a team of qualified construction administration and inspection service professionals as needed to meet resource and discipline/area service requirements. This resource and discipline/area of experience includes but is not limited to:

1. Construction Administration;
2. Records Management;
  3. Reporting;
  4. Responsible inspection/Inspector oversight;
  5. Large diameter water pipeline inspection (60-inch through 30-inch);
  6. Small diameter pipeline inspection (24-inch through 10-inch);
  7. Civil inspection;
  8. Mechanical inspection (below and above grade);
  9. Electrical inspection;
  10. Fiber optic inspection;
  11. Structural inspection;
  12. Pavement inspection;
  13. Surface preparation and coating application inspection;
  14. Landscaping and tree protection inspection;
  15. Environmental inspection (SW3P, well pointing, hazardous materials identification, wetlands, etc.);
  16. Quality assurance;
  17. Application for Payment review and certification;
  18. Schedule Management;
  19. Claims Management;
  20. Risk Management;
  21. Safety Management; and
  22. Other as directed by SJRA.

The scope of the CDM Smith's services may generally include but, may not be limited to, the following areas of Work:

## **GENERAL**

1. The CA&I Consultant shall work as an extension of the SJRA's staff during the execution of its duties and responsibilities. Such staff will be subject to oversight, monitoring, and direction of the SJRA.
2. The CA&I Consultant shall provide the number and the type of qualified professional construction administration and inspection staff, as dictated by the Surface Water Facility Project being executed and/or as directed by the SJRA. The SJRA retains the right to review the qualifications of CA&I Consultant proposed staff and retains the right to reject or approve all CA&I Consultant proposed staff.

The CA&I Consultant shall work with the SJRA to effectively plan the CA&I Consultant's securing and deployment of its staff, including who, when, and where staff may be utilized. The CA&I Consultant, as part of the GRP Program Team, will work to continuously identify and engage its respective resources for the formation (and maintenance) of its staff, in support of the Surface Water Facility Project.

- A. The CA&I Consultant staff shall be located at the offices of the SJRA Lake Conroe Campus for the duration of this Work Order;
  - B. Number of staff shall correspond to the needs of the GRP Program as mutually determined by the SJRA and the CA&I Consultant;
  - C. The positions, qualifications, and duration of such staff shall be subject to SJRA review and approval and shall be coordinated with the CA&I Consultant to ensure compliance with GRP Program objectives and the successful execution of the GRP Program and GRP Program Projects.
3. The CA&I Consultant Field staff:
- A. Shall report directly to SJRA
  - B. SJRA staff will provide direction on execution of work tasks listed herein
4. CA&I Consultant Field staff provided office space by the SJRA shall abide by the following, occupancy terms:
- A. The assignment of CA&I Consultant personnel to each office space shall receive prior SJRA approval;
  - B. The duration of occupancy shall in no instance be longer than the effective term of this Work Order;
  - C. CA&I Consultant staff may be asked at anytime to relocate or move out of the CA&I Consultant occupied office. The CA&I Consultant shall comply with such a request within five (5) calendar days after receiving such written (email) notice by the SJRA;
  - D. The SJRA shall pay all building and utility related costs including those for the connection and utilization of electricity, natural gas, water, wastewater, internet, and telephone. A lunch room (microwave, refrigerator, table, and chairs) and parking area will be provided;
  - E. Office supplies, cables, printers, copiers, scanners, etc. will be provided to the CA&I Consultant by the SJRA to responsibly and effectively execute its duties under this contract. CA&I Consultant shall be responsible for providing and maintaining laptop or work station computers to its staff; and
  - F. CA&I Consultant shall provide wireless telephone communication systems to permit immediate and prompt communication. Field inspection vehicles, and small tools required to perform construction administration and inspection services will be provided as needed and approved by SJRA. Internet connections will be provided when available.
5. CA&I Consultant shall provide professional construction administration and inspection services for the GRP Program's proposed Surface Water Facility.
6. Generally, provided CA&I services shall include but are not limited to:
- A. Cooperation and coordination with Construction Manager at Risk (CMAR) concerning contract administration and inspection activities;
  - B. GRP Program and Surface Water Facility Project level CA&I activities;
  - C. CMAR contract administration services;
  - D. CMAR contract compliance assurance;
  - E. Internal and external stakeholder coordination per SJRA direction;
  - F. Reporting;

- G. Resident inspection;
  - H. Claims avoidance;
  - I. Application for payment/budget compliance;
  - J. Schedule evaluation;
  - K. Issues solving and mitigating;
  - L. Risk assessment and mitigation;
  - M. Quality assurance;
  - N. Safety evaluation;
  - O. Materials testing oversight;
  - P. Records management; and
  - Q. Other.
7. Together with the SJRA, the CA&I Consultant shall lead the execution and coordination of the GRP Program's standard policies, procedures, and protocols. These policies, procedures, and protocols are contained within the GRP Program's Program Management Plan (PMP).
  8. A Program Management Information System (PMIS) has been developed based upon the web-based electronic data management system SharePoint®. While still under development, the CA&I Consultant shall utilize SharePoint® to communicate with all internal and external GRP Program and GRP Project stakeholders. Other electronic document management tools may be implemented as brought online by the SJRA and/or CMAR.
  9. Provide CA&I services commensurate with the professional standards and quality consistent with those typically met by construction administration and inspection firms.
  10. The CA&I Consultant shall work towards assisting the SJRA and CMAR to complete the SWF timely and within prescribed budget and quality standards.
  11. The CA&I Consultant shall work with the SJRA and CMAR to monitor safety during construction of the Surface Water Facility Project.
  12. The CA&I Consultant shall not control or have charge of, and shall not be responsible for, construction means, methods, techniques, sequences, procedures of construction, health or safety programs or precautions connected with the work and shall not manage, supervise, control or have charge of construction.
  13. The CA&I Consultant staffing is limited to that shown in the attached staffing projection which was negotiated with SJRA based on the scope of services desired as an extension of SJRA staff. Should additional staffing be requested by SJRA, an Amendment to this Agreement shall be executed as mutually negotiated in consideration of the additional scope and or staff to be provided.

### **Construction Administration Services**

Upon request by the SJRA the CA&I Consultant shall perform the following construction administration services:

1. Become familiar with available studies, reports, preliminary engineering, etc., prepared in advance of or in concert with the CMAR contract as assigned to the GRP Program Project.

2. Coordinate, cooperate with, and provide information, data, documentation and other items as required of the CMAR and as requested by the SJRA and GRP Program Team members including Project Controls personnel.
3. Administer the CMAR contract of the Surface Water Facility Project. Work to achieve timely completion of the construction of the GRP Program Surface Water Facility Project and coordinate activities of the CMAR.
4. Provide Owner-supplied information and approvals in a timely manner to permit the CMAR to fulfill its obligations under the contract documents.
5. Lead and perform GRP Program Project level review and analysis efforts of the CMAR's schedule for compliance to the contract documents. Review, analyze, and comment on the CMAR's baseline, monthly update, recovery, and other required schedules. Coordinate schedule reviews with CMAR and GRP Program Construction Manager, as necessary. Provide written schedule review/analysis comments to the GRP Program Construction Manager including recommendations as to the acceptability of such schedules. Coordinate and perform construction schedule evaluation activities to assure compliance with the requirements of the GRP Program PMP.
6. Lead efforts of the GRP Program and CMAR in the development of a contract compliant and logical GRP Program Surface Water Facility Project baseline construction schedule. Such efforts shall be performed to ensure all schedules remain the responsibility of the CMAR.
7. Receive, track, coordinate, and record all CMAR Proposals and Claims for contract modification in accordance with the CMAR contract and GRP Program's PMP. Review and evaluate received CMAR Proposals and Claims, and perform good faith negotiations regarding the same. Prepare and submit to the GRP Program Construction Manager, the CA&I Consultant's recommendation for acceptance or rejection of the CMAR Proposal or Claim. The CA&I Consultant shall:
  - A. Review, analyze, and comment on CMAR Proposals, Change Orders and Claims for additional contract time, for compliance and/or conformance to contract requirements, accuracy, and appropriateness. Perform micro schedule (or other) analysis of such Claims.
  - B. Lead and perform cost analysis efforts for Proposals of the SJRA (GRP Program) and CMAR. Lead and perform cost analysis efforts for Claims of the CMAR. Provide written cost review/analysis comments to the GRP Program Construction Manager including recommendations as to the acceptability of such Cost Proposals and/or Claims.
  - C. Assist the GRP Program Construction Manager with the defense of Change Orders and/or Claims.
  - D. Maintain all records to support these efforts.
8. Review and provide recommendations to the GRP Program Construction Manager regarding the CMAR's use of CMAR's Contingency Funds thereof submitted by the CMAR, including contract compliance.
9. Prepare Requests for Proposals for design revisions and additions that may be required or as directed by the SJRA. Evaluate Proposals by the CMAR in response to such requests and make recommendation to the GRP Program Construction Manager for acceptance or rejection. Such

recommendation shall be made only after the CA&I Consultant has exhausted all efforts to negotiate resultant cost and time impacts. Prepare Change Order documents utilizing GRP Program standard forms.

10. Discuss design clarifications and recommendations with the GRP Program Construction Manager and Engineer of Record (EOR) to assist in resolving field problems relating to the construction.
11. Utilize established GRP Program document control system in accordance with SJRA direction, inclusive of paper and electronic document control systems. The web-based electronic document management system, SharePoint®, shall be implemented for the transmittal and retainage of all GRP Program Project correspondence. Utilize other electronic recordation and/or document tools/devices as brought online by the SJRA and/or CMAR.
12. Review and provide recommendations to the GRP Program Construction Manager regarding the CMAR's use of equipment, tools, manpower, implementation methods, and updates thereof submitted by the CMAR.
13. Attend the Pre-construction Conference and routine progress and coordination meetings. Lead such meetings when requested to do so by the GRP Program Construction Manager.
14. Receive, track, coordinate, record, respond (as appropriate), and transmit all shop drawing submittals required by the Construction Contract. Coordinate all requests that require review and response from the EOR and/or the SJRA. Address contractual implications of received shop drawing submittal comments/clarifications in the response to the CMAR's shop drawing submittal.
15. Receive, track, coordinate, record, respond (as appropriate), and transmit all Requests for Information (RFI) from the CMAR. Coordinate all RFI's that require technical review and response from the EOR and/or the SJRA. Address contractual implications of such technical clarification in the response to the CMAR.
16. Receive, track, coordinate, record, respond (as appropriate), and transmit all other CMAR contract correspondence including but not limited to letters, forms, notices, permits, change orders, field and laboratory test results, schedules of values, and CMAR applications for payment.
17. Assist the SJRA or the GRP Program Team by preparing notifications and exhibits for meetings and communications as requested.
18. Coordinate review of laboratory, shop, and mill tests of material and equipment, and all submittals requiring technical review. Report to the GRP Program Construction Manager in writing on such matters.
19. Monitor the CMAR's conduct of required testing to assure, in the CA&I Consultant's professional opinion, that required testing is performed in accordance with the Contract Documents. Secure and distribute (or cause to be distributed) information from the testing laboratories to the EOR, CMAR, and GRP Program Construction Manager regarding necessary field and laboratory tests. Review the results of the tests with the EOR for compliance with the Contract Documents.



20. Oversee the coordination of the activities of the SJRA's Construction Material Testing (CMT) Laboratory Consultant, as necessary. Review material testing firm invoices and comment in writing on its acceptability to the GRP Program Construction Manager.
21. Verify the quantities contained in the CMAR's application for payment and make recommendations to the GRP Program Construction Manager within seven (7) days after receipt of the application for payment regarding payment of periodic and final requests for payment.
22. Prepare and distribute as required, monthly status reports to include CA&I Consultant budget information, current estimates of construction cost and schedule, obligations and action items required, status of change orders, anticipated change orders, expenditures and estimated cost at completion, CMAR payment reports, cash flow projections, and other information necessary to define the current GRP Program Project status.
23. Assist the GRP Program Construction Manager and/or CMAR by coordinating as required with utility corporations and governmental agencies regarding easement and right-of-way access including work to be performed adjacent-to, within or across such easements and rights-of-way, including closings and relocations. Coordinate activities as indicated on the CMAR documents and when the CMAR contract work does not provide for actual field conditions and adjustments that are deemed necessary to proceed with the GRP Program construction project. Entities shall include but not be limited to public and private power companies, telephone companies, communication companies, railroads, transit lines, municipalities, water supply, sewerage, and drainage districts/companies, and other public entities.
24. Coordinate and monitor compliance of CMAR regarding required permits and relevant laws.
25. Provide advice, reviews, and assistance to the GRP Program Construction Manager in connection with all queries, actions, or communications that the CMAR Contract and the CMAR's performance would pose for construction of the GRP Program Surface Water Facility Project.
26. Collect all records, certificates, guarantees, warranties and releases required from the CMAR and transmit to the GRP Program Construction Manager as required. Maintain a record file for transmittal to the GRP Program Construction Manager at the completion of a Work Order.
27. Perform observations of the construction site to determine the dates of substantial and final completion of the work. CA&I Consultant shall make a recommendation to the SJRA as to the work meeting the criteria for substantial and final completion.
28. Observe the construction site, together with the SJRA no less than 30 days and no more than 45 days before the expiration of the correction period established by the Construction Documents. Further, the CA&I Consultant shall within 14 days after such observation, furnish the GRP Program Construction Manager with a written report enumerating items that require repair or replacement as provided under the correction period provisions of the Construction Documents.
29. Prepare and process the closeout documents within a time period as established during Work Order negotiations with the SJRA after approval of the final estimate by CMAR.

30. Oversee the performance, completion, and acceptance procedures and tests required for the GRP Program Project including, but not limited to, equipment, material, pipeline, electrical, fiber optic, component and system testing,
31. Coordinate and monitor compliance of CMAR regarding required commissioning of mechanical, electrical, instrumentation and control components and systems.
32. Review and approve training program developed by CMAR for compliance to contract document requirements. Oversee training of Owner staff in operation and maintenance of completed work.
33. Monitor CMAR compliance with contract requirements for Operation and Manual preparation and submittal. Monitor and report contract required spare parts are transmitted to the Owner.
34. Maintain detailed and accurate records that are compiled throughout the course of construction, so as to assure adequately detailed Record Drawing documentation of completed construction activities at the completion of the Project(s). Perform a monthly review and approve CMAR as-built (record) drawing preparation for completeness and accuracy. Coordinate required updates and/or corrections to record drawings. Coordinate transmittal of record drawings with the EOR and GRP Program Construction Manager.
35. Provide administration manpower for performance of the above defined tasks to accomplish the goal of coordinating and expediting the completion of the GRP Program Project.

### **Construction Inspection Services**

To the extent staffed in accordance with the approved staffing plan, Perform Professional Construction Inspection Services for the GRP Program Surface Water Facility. Such services shall consist of technical on-site inspection of the materials, structures, equipment, workmanship and methods used by the CMAR to verify that GRP Program Surface Water Facility is constructed in compliance with the Contract Documents and according to good construction practices. The construction inspection services shall include the following:

1. The Surface Water Facility CA&I Consultant shall observe and report to the GRP Program Construction Manager and the CMAR if in the CA&I Consultant Inspection Staff's professional opinion the CMAR is using or professing to use construction methods that may adversely affect the finished work. However, selection of the CMAR's means and methods, as well as the CMAR's implementation of its Safety Program shall remain the exclusive responsibility of the CMAR.
2. Provide on-site observation of the progress and quality of work for the CMAR Contract. Advise the CMAR of any observed deviations from the contract documents in a timely manner so as to minimize delay in the progress of the work.
3. Inspect and observe the CMAR's activities to verify that the work complies with the contract documents. Notify the CMAR if the CMAR's work is not in compliance with contract documents including all addenda, Change Directives, and Change Orders and notify the GRP Program Construction Manager of any failure of the CMAR to take measures to place such work in compliance.

4. Inspect and observe the materials and equipment being incorporated into the work to verify, that in the CA&I Consultant's professional opinion, they are handled, stored, and installed properly and adequately, and are in compliance with the Contract Documents. Report these activities to the GRP Program Construction Manager.
5. Review and evaluate received CMAR Proposals and Claims. Prepare and submit to the GRP Program Project Manager and/or GRP Program Construction Manager, the CA&I Consultant's recommendation for acceptance or rejection of the CMAR Proposal or Claim.
6. Observe and report on the performance, completion, and acceptance procedures and tests required for GRP SWF Project including, but not limited to, equipment, material, pipeline, electrical, fiber optic, component and system testing, etc.
7. Identify problems encountered in accomplishing the work and recommend the appropriate action for resolution of problems to minimize impact on timely completion of the work to the GRP Program Construction Manager.
8. Attend and participate with the CMAR in all routine meetings and inspections as set forth in the Contract Documents and special meetings when requested by GRP Program Project and/or Construction Manager. Assist the GRP Program's personnel in responding to impacts and concerns of construction on the local community.
9. Prepare a report of daily construction activities utilizing SJRA's electronic document control system SharePoint®. Such Daily Progress Reports shall be prepared and made available not later than 24 - hours following each day's activities. Utilize other electronic recordation and/or document tools/devices as brought online by the SJRA and/or CMAR.
10. Maintain a daily progress diary to factually record work performed and significant job events and conversations held on site and at Project meetings.
11. Assemble and maintain notes, comments, sketches, photographs, and supportive data relative to the Surface Water Facility Project in order to facilitate the revisions of the Contract Drawings to conform to the construction records.
12. Make readily available the Inspector's Daily Progress Reports within SharePoint® and provide a copy of the Inspector's Daily Progress Reports to the GRP Program Construction Manager.
13. Coordinate the development of and verify the quantities contained in the CMAR's monthly application for payment request and make recommendations to the GRP Program Construction Manager regarding payment of monthly application, Partial Substantial Completion, Substantial Completion, and Final Completion requests for payment. Work to ensure timely CMAR submittal and Owner payment.
14. Utilize and maintain the GRP Program and GRP Project document control system in accordance with GRP Program direction, inclusive of paper and electronic document control systems. Utilize and maintain all record documents on the GRP Program's prescribed SharePoint® electronic document

control system. Utilize the SharePoint® prescribed/GRP Program approved document control numbering/coding system. Attend and participate in all required SharePoint® training sessions.

15. Record names, addresses, and telephone numbers of all contractors, subcontractors, sub-consultants, and major suppliers of materials and equipment.
16. Consult with the CMAR's Project Manager, Resident Engineer, and Superintendents on the CMAR's work progress and advise the GRP Program Construction Manager of such activities.
17. Consult with the CMAR's Project Manager, Resident Engineer, and Superintendents in advance of scheduled major tests, inspections or the start of an important phase of the work and advise the GRP Program Construction Manager.
18. Immediately report to the GRP Program Construction Manager the occurrence of any accident. Prepare and submit to the Project and/or GRP Program Construction Manager a detailed incident report. Verbal notification is required within one (1) hour and written notification within twenty-four (24) hours of the CA&I Consultants awareness of accident. Prepare and transmit reports in accordance with Contract Documents and PMP.
19. Read, understand and implement the GRP Program's PMP Guidance Document and all GRP Program standard forms in the execution of all above items.
20. Coordinate with SJRA Inspectors for the purpose of ensuring compliance with GRP Program PMP and SJRA standards as well as progress of the work. Assist SJRA Inspector's with Quality Audits performed by the GRP Program Team.
21. Coordinate the activities of the Owner's Construction Material Testing Laboratory Consultant, as necessary. Review and comment on invoices of the Material Testing Laboratory Consultant and make recommendations for payment to the GRP Program Construction Manager.
22. Coordinate activities of the CMAR and SJRA Operation staff for training program developed by CMAR. Oversee compliance with approved training program.
23. Review and comment on monthly CMAR Record Drawing preparation for completeness and accuracy. Coordinate required updates and/or corrections to record drawings. Coordinate transmittal of record drawings with the EOR and GRP Program Construction Manager.
24. Perform observations of the construction site to determine the dates of Partial Substantial, Substantial and Final Completion of the work. CA&I Consultant shall make a recommendation to the SJRA as to the work meeting the criteria for all such completions.
25. Coordinate and assist with the activities of the EOR, as necessary.
26. Coordinate and work to ensure contract required spare parts are transmitted to the SJRA.
27. Provide inspection manpower for performance of the above defined tasks to accomplish the goal of coordinating and expediting the completion of the GRP Program Surface Water Facility Project in accordance with SJRA approved staffing plan.





### GRP REVIEW COMMITTEE

#### AGENDA ITEM #2a

June 25, 2012

**SUBMITTED BY:** Mark Smith

**ITEM CAPTION:** Agreement between the City of Willis and SJRA for implementation of a Catahoula well project

**RECOMMENDATION:** At the time of agenda preparation this item is still being reviewed by the City of Willis. The Review Committee should consider and discuss the agreement and possibly withhold action pending possible revisions.

#### **BACKGROUND INFORMATION:**

The City of Willis has submitted a proposal to the San Jacinto River Authority proposing that the GRP fund the development of two wells which will draw water from the Catahoula aquifer. The proposal describing the terms proposed by the City of Willis is attached.

This revised proposal is different from the one approved by the Board last June. The main difference is that Willis will fund the cost of the Catahoula wells instead of the GRP providing funding. Under the new terms, the GRP provides a financial safety net in case the Catahoula well(s) fail. If the wells are successful and will provide an alternative water supply for the City of Willis, the GRP will not be responsible for any of the costs of the wells. In addition, the GRP would get credit for the reduction of groundwater pumpage achieved by the development of this alternative water source. The wells would be owned, operated and maintained by the City of Willis.

#### **SUPPORTING DOCUMENTS:**

1. SJRA Board Communication memo
2. CONTRACT FOR IMPLEMENTATION OF ALTERNATIVE WATER SUPPLY STRATEGY



### GRP REVIEW COMMITTEE

#### AGENDA ITEM #2b

June 25, 2012

**SUBMITTED BY:** Mark Smith

**ITEM CAPTION:** Consider Authorizing General Manager to execute Professional Services Agreement and Work Order No. 1 with CDM Smith, Inc. for Professional Construction Administration and Inspection Services for the Surface Water Facilities for the GRP Program

**RECOMMENDATION:** Staff recommends that the Review Committee recommend approval of the contract.

#### **BACKGROUND INFORMATION:**

Work Order No. 1 provides for all of the labor and materials required to provide professional Construction Administration and Inspection (CA&I) Services during the construction of the GRP Division's Surface Water Facilities (Raw Water Intake and Pump Station, Water Treatment Plant, High Service Pump Station and Ground Storage Tanks). During construction, the CA&I Consultant will serve as the SJRA's representative providing resident: CMAR Contract and project controls administration; monthly CMAR Application for Payment reviews; meeting, document, communication and construction materials testing coordination; quality assurance/quality control (inspection) activities; and other associated activities.

#### **SUPPORTING DOCUMENTS:**

1. SJRA Board Communication memo
2. CA&I WO 1



# San Jacinto River Authority

## Board Communication

Item No.	Agenda Item	Date
12	Consider authorizing General Manager to Execute Agreement with City of Willis for Water Well	06/28/12

**BACKGROUND INFORMATION**

The City of Willis has submitted a proposal to the San Jacinto River Authority proposing that the GRP fund the development of two wells which will draw water from the Catahoula aquifer. The proposal describing the terms proposed by the City of Willis is attached.

This revised proposal is different from the one approved by the Board last June. The main difference is that Willis will fund the cost of the Catahoula wells instead of the GRP providing funding. Under the new terms, the GRP provides a financial safety net in case the Catahoula well(s) fail. If the wells are successful and will provide an alternative water supply for the City of Willis, the GRP will not be responsible for any of the costs of the wells. In addition, the GRP would get credit for the reduction of groundwater pumpage achieved by the development of this alternative water source. The wells would be owned, operated and maintained by the City of Willis.

The proposal was presented to the GRP Review Committee on June 25, 2012. The Review Committee voted unanimously to approve the proposal.

**RECOMMENDED ACTION**

Motion to authorize the General Manager to execute the Agreement with the City of Willis, on behalf of the Authority.



**CONTRACT  
FOR IMPLEMENTATION OF ALTERNATIVE WATER SUPPLY STRATEGY  
AND RELATED GOODS AND SERVICES  
BY AND BETWEEN  
THE SAN JACINTO RIVER AUTHORITY AND  
THE CITY OF WILLIS, TEXAS**

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**CONTRACT  
FOR IMPLEMENTATION OF ALTERNATIVE WATER SUPPLY STRATEGY  
AND RELATED GOODS AND SERVICES  
BY AND BETWEEN  
THE SAN JACINTO RIVER AUTHORITY AND  
THE CITY OF WILLIS, TEXAS**

This **CONTRACT FOR IMPLEMENTATION OF ALTERNATIVE WATER SUPPLY STRATEGY AND RELATED GOODS AND SERVICES** ("Contract") is made and entered into as of the \_\_\_\_ day of \_\_\_\_\_, 2012, by and between the **SAN JACINTO RIVER AUTHORITY** ("Authority"), a conservation and reclamation district, body politic and corporate and a governmental agency of the State of Texas created and operating under the provisions of Chapter 426, Acts of the 45th Texas Legislature, Regular Session, 1937, as now or hereafter amended (the "Act"), enacted pursuant to the provisions of Section 59 of Article XVI of the Texas Constitution, and the **CITY OF WILLIS, TEXAS**, a municipal corporation and home-rule municipality, principally located in Montgomery County, Texas ("Participant").

**W I T N E S S E T H:**

**RECITALS**

**WHEREAS**, the Lone Star Groundwater Conservation District (the "Conservation District") was created by the Texas Legislature to conserve and protect the groundwater aquifers beneath Montgomery County and, in that regard, the Conservation District has established a District Regulatory Plan (the "Plan") to reduce groundwater production from the Upper Gulf Coast Aquifer (hereinafter defined) located within Montgomery County by its establishment of regulatory deadlines subject to enforcement; and

**WHEREAS**, the Authority and Participant are each a non-exempt large volume groundwater user subject to the Conservation District's groundwater reduction requirements under the Plan ("Regulated User"); and

**WHEREAS**, the Plan allows two or more Regulated Users to (a) enter into contractual agreements to share costs or cooperate in ways that achieve orderly reductions in total groundwater usage and conversions to alternative water supplies, and/or (b) join with other Regulated Users for the purpose of reducing groundwater withdrawals and achieving orderly compliance with the Conservation District's groundwater reduction requirements; and

**WHEREAS**, the Authority has entered into a "Contract for Groundwater Reduction Planning, Alternative Water Supply, and Related Goods and Services" (the "GRP Contract") with Participant, effective as of June 1, 2010, and has entered into substantially similar contracts with a number of Regulated Users, which contract provides that the Authority and such Regulated Users (collectively, the "Participants"), will form a group to achieve overall compliance with the Plan; and

**WHEREAS**, the GRP Contracts permit the Authority to contract with certain Participants for the development and implementation of Alternative Strategies (defined hereinafter) in addition to Project, and to include such strategies in the GRP in an effort to achieve compliance with the Plan; and

**WHEREAS**, the Catahoula Aquifer (defined hereinafter) is not currently subject to the groundwater reduction requirements of the Plan and, therefore, the production and beneficial use of groundwater from the Catahoula Aquifer represents a possible Alternative Strategy that may reduce dependence on groundwater from the Upper Gulf Coast Aquifer that are subject to reduction requirement under the Plan; and

**WHEREAS**, Participant has proposed to proceed with the development and implementation of an such an Alternative Strategy (the "Catahoula Project") whereby the Participant will finance, design, permit, construct, operate and maintain, at no cost to the Authority, one or more wells (the "Catahoula Wells") and related pilot drillings, pumps, machinery, meters, controls, gathering lines, and necessary facilities, appurtenances and infrastructure (collectively, the "Catahoula Facilities") that will withdraw water from the Catahoula Aquifer to supplement its use of groundwater from the Upper Gulf Coast Aquifer; and

**WHEREAS**, the reliability of the Catahoula Aquifer as a long-term source of supply for municipal purposes is uncertain at this time and, therefore, a failure of the Catahoula Project would put Participant at risk of paying the outstanding debt service on its bonds issued to finance the Catahoula Facilities, plus Pumpage Fees (hereinafter defined) due the Authority under the GRP Contract for water withdrawn from the Upper Gulf Coast Aquifer by one or more other wells to offset the loss in production from the failure of the Catahoula Project; and

**WHEREAS**, Participant has proposed that in the event of a failure of the Catahoula Project, Participant will resume payment of the Pumpage Fees and the Authority will be responsible for repayment and redemption of the outstanding bonds issued by Participant to finance the Catahoula Project, subject to the further terms, conditions, and specifications set forth herein; and

**WHEREAS**, the Authority and the Participant believe that the Catahoula Project will provide valuable information about the viability of the Catahoula Aquifer, achieve a reduction in Participant's withdrawals from the Upper Gulf Coast Aquifer and benefit the Participants as a result, and extend the Authority's surface water resources by achieving such reduction without relying upon the Project; and

**WHEREAS**, the Authority and the Participant deem it necessary and appropriate at this time to enter into a contract setting forth the terms under which Participant shall finance, design, permit, construct, operate and maintain the Catahoula Facilities at no cost to the Authority and, in consideration thereof, the Authority shall waive Pumpage Fees due from Participant for so long as any of Participant's bonds issued to finance the Catahoula Facilities remain outstanding, subject to the further terms, conditions, and specifications set forth herein; and

**WHEREAS**, the Review Committee representing the Participants approved of this Contract at its meeting of June 25, 2012; and

**WHEREAS**, the Authority is authorized to enter into this Contract pursuant to the Constitution and the laws of the State of Texas, including the Act and Sections 49.068(b) and 49.213 of the Texas Water Code; and

**WHEREAS**, Participant is authorized to enter into this Contract pursuant to the Constitution and the laws of the State of Texas, including Section 49.213 of the Texas Water Code, as well as its City Charter.

## **AGREEMENT**

**NOW, THEREFORE**, for and in consideration of the premises and of the mutual covenants and agreements herein contained, and the goods and services to be provided and rendered by the Authority and Participant hereunder, the Authority and Participant do mutually agree as follows:

### **ARTICLE I**

#### *Definitions; Construction and Interpretation of Contract*

**Section 1.01: Definitions.** In addition to terms defined elsewhere in this Contract, and unless the context requires otherwise, the following terms used in this Contract have the meanings set forth below and, to the extent applicable, supplement terms defined elsewhere in this Contract:

- (a) "Alternative Strategies" is defined in the GRP Contract, which definition is incorporated herein by reference.
- (b) "Authority" is defined in the Recitals hereto and means and includes the legal successors or assigns of the Authority.
- (c) "Catahoula Aquifer" means the Catahoula Restricted aquifer located within the various segments of the Catahoula Formation, which for purposes of this Contract, shall be considered to be exclusive of and situated beneath the Upper Gulf Coast Aquifer, as defined hereinafter.
- (d) "Catahoula Facilities" means the Catahoula Wells and related pilot drillings, test wells, pumps, machinery, meters, controls, gathering lines, and necessary facilities, appurtenances and infrastructure acquired, constructed and otherwise installed by Participant as part of the Catahoula Project for the purpose of withdrawing groundwater from the Catahoula Aquifer for use as a source of supply in Participant's System.

(e) "Catahoula Project" means the financing, design, permitting, construction, operation and maintenance of the Catahoula Facilities by Participant to withdraw groundwater from the Catahoula Aquifer for use as a source of supply in Participant's System.

(f) "Catahoula Wells" means the production wells constructed by Participant as part of the Catahoula Facilities.

(g) "Conservation District" is defined in the Recitals hereto and means and includes the legal successors or assigns of the Conservation District.

(h) "Contract" is defined in the Recitals hereto and means and includes any supplements or amendments to this Contract.

(i) "Contract Term" is defined in Section 7.01 hereof.

(j) "Days" means calendar days and not business days, unless otherwise expressly provided in this Contract.

(k) "Effective Date" means the date first written above.

(l) "Failure" means, in the reference to the Catahoula Project, a condition where groundwater produced by the Catahoula Wells exceeds a maximum contaminant level for any regulated constituent of the National Primary Drinking Water Regulations (40 C.F.R. § 141.1 *et seq.*, as amended) promulgated by the United States Environmental Protection Agency under the SDWA.

(m) "gpm" means, in reference to the Catahoula Wells, gallons per minute.

(n) "GRP" is defined in the GRP Contract, which definition is incorporated herein by reference.

(o) "GRP Administrator" is defined in the GRP Contract, which definition is incorporated herein by reference.

(p) "GRP Contract" is defined in the Recitals hereto and means and includes any supplements or amendments to the GRP Contract between the Authority and Participant.

(q) "Participant" is defined in the Recitals hereto and means and includes the legal successors or assigns of Participant.

(r) "Participant's System" is defined in the GRP Contract, which definition is incorporated herein by reference.

(s) "Participants" is defined in the Recitals hereto and means and includes the Authority, Participant, and any other Regulated User that enters into and remains subject to a written agreement with the Authority in a form substantially similar to the GRP Contracts.

- (t) "Party" means either the Authority or Participant.
- (u) "Parties" means both the Authority and Participant.
- (v) "Plan" is defined in the Recitals hereto and means and includes any amendments, revisions or supplements thereto as may be adopted by the Conservation District on or after the Effective Date.
- (w) "Project" is defined in the Recitals hereto and is further defined in the GRP Contract, which definition is incorporated herein by reference.
- (x) "Pumpage Fee" is defined in the GRP Contract, which definition is incorporated herein by reference.
- (y) "Rate Order" is defined in the GRP Contract, which definition is incorporated herein by reference.
- (z) "Regulated User" is defined in the Recitals hereto and means and includes any public or private entity or person that is or becomes subject to the Plan on or after the Effective Date.
- (aa) "Rules" means and includes any rules, regulations, policies, or procedures deemed necessary and proper and duly adopted by the Board of Directors of the Authority for or relating to the development, implementation, operation, maintenance, or enforcement of the Project and/or the GRP, to the extent not contrary to, inconsistent with, or prohibited by the terms and provisions of the GRP Contract or this Contract, and all related amendments, revisions or supplements thereto.
- (bb) "SDWA" shall mean the Safe Drinking Water Act, codified at 42 U.S.C. § 300f *et seq.*, as amended.
- (cc) "substantial completion" means the completion of the Catahoula Facilities such that same are available to Participant for use.
- (dd) "TCEQ" means the Texas Commission on Environmental Quality and includes any board, agency, commission, or department of the State of Texas succeeding to the principal duties and responsibilities of the TCEQ.
- (ee) "Upper Gulf Coast Aquifer" means the major aquifer in Texas that parallels the Gulf of Mexico and includes the Chicot, Evangeline, and Jasper Aquifers and any perched aquifers that may serve as sources of recharge to the Chicot, Evangeline, or Jasper Aquifers. For purposes of foregoing, the base of the Jasper aquifer shall be as described in USGS Open File Report 03-299: *Selected Hydrogeologic Data Sets for the Jasper Aquifer, Texas*.



(ff) "Upper Aquifer Wells" means the current groundwater wells, and any future groundwater wells, operated by Participant that withdraw groundwater from the Upper Gulf Coast Aquifer and are subject to the GRP Contract and the Conservation District's groundwater reduction requirements under the Plan.

Section 1.02: Titles, Headings, and Exhibit. (a) The titles, heading, and captions appearing in the articles of this Contract and following each numbered section of this Contract are inserted and included solely for convenience and shall never be considered or given any effect in construing this Contract, or any provision hereof, or in connection with the duties, obligations, or liabilities of the respective Parties hereto or in ascertaining intent, if any questions of intent should arise.

(b) The exhibit attached hereto is incorporated as part of this Contract for all purposes.

Section 1.03: Interpretation of Contract. (a) This Contract and all the terms and provisions hereof shall be liberally construed to effectuate the purposes set forth herein and to sustain the validity of this Contract.

(b) Unless the context requires otherwise, words of the masculine gender shall be construed to include correlative words of the feminine and neuter genders and *vice versa*, and words of the singular number shall be construed to include correlative words of the plural number and *vice versa*. The word "include", and any of its derivatives, shall be interpreted as language of example and not of limitation, and shall be deemed to be followed by the words "without limitation", unless otherwise expressly provided herein.

(c) The Parties agree that this Contract shall not be construed in favor of or against a Party on the basis that the Party did or did not author this Contract.

(d) The Parties agree that this Contract is entered into to address the specific implementation of an Alternative Strategy, and is not intended to be construed by the Parties to amend, rescind, or otherwise modify any rights, obligations, terms or provisions specified in the GRP Contract by and between the Authority and Participant unless expressly provided for herein.

## ARTICLE II

### *Development and Implementation of Catahoula Project*

Section 2.01: General Description. The Parties agree that Participant shall be responsible for developing and implementing the Catahoula Project as an Alternative Strategy for the benefit of the GRP and the Participants as a whole. The Catahoula Project encompasses the financing, design, permitting, construction, operations and maintenance by Participant of the Catahoula Facilities, including the Catahoula Wells, and the subsequent operations and maintenance of the Catahoula Facilities by Participant, such that groundwater withdrawn from the Catahoula Wells is incorporated as a source of water supply in Participant's System.

Section 2.02: Design, Permitting, and Construction of Catahoula Facilities. (a) As between the Parties, Participant shall be responsible for the design, permitting, and construction of the Catahoula Facilities. A preliminary schedule of the Catahoula Facilities, and the related costs for the design, permitting and construction of same, is attached hereto as **Exhibit A**. Participant agrees to provide the Authority with initial design drawings and specifications for the Catahoula Facilities as and if requested by the Authority. Participant shall submit final design drawings and specifications for the Catahoula Facilities, or any component thereof, not less than ten (10) days prior to advertisement for bids for same. The Parties agree that the Authority shall bear no obligation or responsibility for such design drawings and specifications, as same are to be submitted to the Authority so that the Authority may confirm that same are related to the implementation of the Catahoula Project and within the scope of this Contract and for no other purpose. Within ten (10) days following substantial completion of construction of the Catahoula Facilities, Participant's engineer shall provide the Authority with a written certification as to the date of such completion. Within ninety (90) days following completion of construction of the Catahoula Facilities, Participant agrees to provide the Authority with a copy of record drawings for same.

(b) The Parties agree that the Catahoula Wells shall be comprised of at least one production well with a design capacity of not less than 1,000 gpm, but not more than two production wells with a combined design capacity of more than 5,000 gpm, that will withdraw groundwater from the Catahoula Aquifer. Within such parameters, Participant shall have the right to determine the size and the size and production capacity of the Catahoula Wells.

(c) Prior to drilling the Catahoula Wells, Participant agrees to conduct a pilot drilling and measure and document resistivity at the proposed screening depths for the Catahoula Wells. Not less than thirty (30) days prior to conducting such drilling, Participant agrees to provide the Authority with its proposed procedures for the measurement and documentation of resistivity, and Participant agrees to incorporate the reasonable requests of the Authority into such procedures. Within ten (10) days after completion of such drilling, the resistivity documentation shall be provided to the Authority. Within ten (10) days after receipt of such documentation, the Authority shall have the right to terminate this Contract if it reasonably believes that, based on such documentation, the Catahoula Wells will not produce groundwater that will comply with the SDWA. In such event, the Authority shall reimburse Participant for the costs of the pilot drilling and related engineering and testing fees and expenses out of GRP funds.

(d) The Parties agree that time is of the essence due to the fact that the Plan currently provides certain incentives (i.e., early conversion credits) for the reduction of groundwater withdrawals from the Upper Gulf Coast Aquifer prior to January 1, 2016. Therefore, Participant shall proceed with reasonable dispatch and due diligence to complete the design, permitting, financing, and construction of the Catahoula Facilities such that same will be placed into service on or before January 1, 2015. Any resulting early conversion credits will be transferred by Participant to the Authority for the benefit of the GRP and all Participants pursuant to Section 2.05 hereof.

Section 2.03: Title; Operations and Maintenance. (a) As between the Parties, Participant shall have sole and exclusive title to the Catahoula Facilities. Participant shall be solely responsible for operating and maintaining same at its sole cost and expense. Participant acknowledges that such operations, maintenance, and repair are subject, in part, to the provisions of Article V of this Contract.

Section 2.04: Financing; No Reimbursement. (a) As between the Parties, Participant shall be responsible for the financing of the Catahoula Project. Participant will finance the Catahoula Facilities by and through the issuance of its bonds to the Texas Water Development Board ("TWDB"), in the estimated original principal amount of \$3,150,000 ("Participant Bonds"), pursuant to that certain loan commitment approved by the TWDB Resolution No. 12-13. The Parties agree and acknowledge that a material consideration for the Authority to enter into this Contract is the terms of such loan commitment from the TWDB.

(b) The Parties agree that the Authority shall not be obligated to reimburse Participant for any costs related to such financing, or any other costs related to the implementation of the Catahoula Project under this Contract, including but not limited to legal, permitting, engineering, construction, operations, maintenance and/or repair costs of the Catahoula Facilities; provided, however, that it is recognized that the Authority has the option (but not an obligation) to provide funds for the redemption of the Participant Bonds and terminate this Contract under Section 7.02 (d) hereof.

(c) Participant agrees that, unless otherwise approved in writing by the Authority, the proceeds from the sale of the Participant Bonds to the TWDB shall be used solely for the Catahoula Project. Participant agrees that an accounting of all costs for the Catahoula Facilities paid out of proceeds from the sale of the Participant Bonds shall be provided to the Authority within one hundred eighty (180) days following completion of the Catahoula Facilities. Such accounting shall identify any unspent proceeds from the sale of the Participant Bonds, which proceeds shall be used by Participant to redeem the Participant Bonds unless otherwise approved by the Authority in writing.

Section 2.05: Integration of Catahoula Project into GRP; Conversion Credits. (a) The Parties agree and acknowledge that the GRP has heretofore been filed with the Conservation District and certified by the Conservation District on or about June 14, 2011. Participant agrees to provide the Authority such information as may be reasonably requested by the GRP Administrator to update, amend, or otherwise integrate Participant's implementation of the Catahoula Project into the GRP for the benefit of the GRP and the Participants as a whole.

(b) Participant agrees that to the extent it earns any early conversion credits, groundwater reduction credits, or similar credits, as and if offered and issued by the Conservation District, that directly result from the implementation of the Catahoula Project by Participant, any such credits, as and if offered and issued by the Conservation District, shall belong solely to the Authority for the benefit of the GRP and the Participants as a whole, and to the extent necessary, shall be transferred by Participant to the Authority at no cost. To that end, it is specifically agreed and acknowledged that Participant shall be responsible for securing any permits and approvals from the Conservation District that may be required to document or

otherwise accrue such groundwater reduction credits, and any related early-conversion credits, that may be offered by the Conservation District and applicable to the Catahoula Project. Notwithstanding the foregoing provisions related to credits, in no event shall the Authority be obligated to make payment to Participant to revise, amend, or otherwise include in the GRP the reduction in pumpage from Participant's Upper Aquifer Wells that is anticipated to result from the implementation of the Catahoula Project.

### **ARTICLE III**

#### *Routine Operations and Maintenance*

Section 3.01: Operations and Maintenance. (a) The Parties agree and acknowledge that the Catahoula Facilities will be integrated into Participant's System and that the Catahoula Project shall provide the sole source of groundwater to be utilized in Participant's System, except to the limited extent that (1) an emergency or routine repairs, maintenance, or rehabilitation of the Catahoula Facilities require Participant to utilize groundwater from another source, including water from Participant's Upper Aquifer Wells, (2) groundwater from the Upper Gulf Coast Aquifer is blended with groundwater produced by the Catahoula Wells as provided in Section 3.02 hereof, or (3) the Catahoula Project experiences a Failure as provided in Article IV hereof.

Section 3.02: Blending Water from Catahoula Wells. (a) In order for Participant to acclimate its customers to water supplied by the Catahoula Project, Participant may, at its option, blend groundwater produced by the Catahoula Wells with groundwater water from its Upper Aquifer Wells during the first four years of production, subject to the following limits.

- (1) *Year One:* Beginning on the date the Catahoula Facilities are substantially complete and continuing for a one-year period thereafter, the Catahoula Wells shall have accounted for at least 40% of the total volume of groundwater production from the Catahoula Wells and the Upper Aquifer Wells, combined, during such one-year period.
- (2) *Year Two:* Following the expiration of the one-year period above, for a successive one-year term the Catahoula Wells shall account for at least 50% of the total volume of groundwater production from the Catahoula Wells and the Upper Aquifer Wells, combined, during such one-year period.
- (3) *Year Three:* Following the expiration of the one-year period above, for a successive one-year term the Catahoula Wells shall account for at least 60% of the total volume of groundwater production from the Catahoula Wells and the Upper Aquifer Wells, combined, during such one-year period.

- (4) *Year Four:* Following the expiration of the one-year period above, for a successive one-year term the Catahoula Wells shall account for at least 70% of the total volume of groundwater production from the Catahoula Wells and the Upper Aquifer, combined, during such one-year period.

(b) Beginning on the date that is five (5) years following substantial completion of the Catahoula Facilities, and for the remainder of the Contract Term, the Catahoula Wells shall account for at least 80% of the volume of groundwater production from the Catahoula Wells and the Upper Aquifer, combined, on an annual basis.

(c) This Section 3.02 does not apply in the event that groundwater produced by Participant's Upper Aquifer Wells is blended with groundwater produced by the Catahoula Wells due to a Failure of the Catahoula Project.

Section 3.03: Waiver of Pumpage Fees On Blending Water. The Authority hereby agrees to waive Pumpage Fees on groundwater produced by Participant's Upper Aquifer Wells and blended with groundwater produced by the Catahoula Wells pursuant to Section 3.02, but only if the minimum production requirements for the Catahoula Wells are satisfied under subsections (a) and (b) of Section 3.02.

Section 3.04: Metering and Reporting. (a) Participant shall be responsible for installing and maintaining, at no expense to the Authority and at all times during the Contract Term, metering facilities on the Catahoula Wells of a kind and character that will reasonably satisfy the accuracy tolerances for Participant Meters in Section 5.03 of the GRP Contract.

(b) To the extent not inconsistent with this Contract, Sections 5.03 through 5.05 and 5.07 of the GRP Contract, and all Rate Order provisions and Rules adopted in furtherance thereof, that pertain to the maintenance, testing, and adjustment of Participant Meters shall apply to the meters installed on the Catahoula Wells as if such provisions were set for the herein.

(c) Beginning as of the date of substantial completion of construction of the Catahoula Facilities, Participant shall be responsible for reporting the pumpage from the Catahoula Wells to the Authority in the same manner as pumpage from is Upper Aquifer Wells is reported pursuant to Section 6.05 of the GRP Contract. To the extent not inconsistent with this Contract, Section 6.05 of the GRP Contract and all Rate Order provisions and Rules adopted in furtherance thereof, that pertain to the reporting of pumpage from Participant's Upper Aquifer Wells shall apply to the reporting of pumpage from the Catahoula Wells as if such provisions were set for the herein.

Section 3.05: Service Outside of City. It is agreed and acknowledged that Participant may provide water derived from the Catahoula Project outside of its corporate boundaries; provided, however, Participant shall not export water from the Catahoula Project outside of Montgomery County. No fees shall be applied to the export of water from the Catahoula Project by Participant to another GRP Participant, nor shall a GRP Participant be charged an import fee for receiving water supplied by Participant from the Catahoula Project.

## ARTICLE IV

### *Failure of Catahoula Project*

Section 4.01: Failure Events and Responses. (a) If the Catahoula Project experiences a Failure, Participant shall be responsible for blending water from other sources (including, but not limited to, its Upper Aquifer Wells) with groundwater produced by the Catahoula Wells to the extent necessary to meet minimum requirements under the SDWA.

(b) If the Catahoula Project experiences a Failure that cannot be adequately addressed by blending water from the Catahoula Wells with water from another source, then Participant may discontinue the use of the Catahoula Wells. Participant shall provide written notice of such Failure and the discontinuation of use of the Catahoula Wells to the Authority as soon as reasonably practicable. In such event, Participant agrees that, at no cost or expense to the Authority and at the option of the Authority, it shall either (i) close the Catahoula Wells in accordance with applicable federal, state and local laws and regulations of entities with jurisdiction, or (ii) convey title to the Catahoula Facilities to the Authority for ownership, operations and maintenance, together with such real property rights on, over, under or across real property owned by Participant as reasonably necessary for the Authority to conduct such operations and maintenance and/or to pump, convey, or otherwise transport groundwater from the Catahoula Wells for use by the Authority.

(c) Participant shall be responsible for all costs associated with a Failure of the Catahoula Project.

Section 4.02: Waiver of Pumpage Fees or Termination Due To Failure. (a) Participant shall not be obligated to pay Pumpage Fees for groundwater produced by its Upper Aquifer Wells to the extent that such groundwater is (1) blended with water produced from the Catahoula Wells, if and to the extent necessary to address a Failure under Section 4.01(a) hereof, or (2) necessary to offset a loss in production capacity due to a Failure under Section 4.01(b) hereof unless and until this Contract is terminated.

(b) This subsection shall apply in the event that that the Catahoula Project experiences a Failure as described in Section 4.01(b) hereof. Subject to the Authority's receipt, review and approval of the notice of a Failure of the Catahoula Project to be provided by Participant under Section 4.01(b), which review and approval shall not be unreasonably withheld, conditioned, or delayed, the Authority shall be obligated to terminate this Contract in the manner provided in Section 7.02(d) hereof and, unless otherwise mutually acceptable to the Parties, such termination shall be completed no later than twelve (12) months following the receipt of said notice.

## ARTICLE V

### *Force Majeure*

Section 5.01: Force Majeure. (a) In the event either Party is rendered unable, wholly or in part, by *force majeure*, to carry out any of its obligations under this Contract, other than the payment of money, it is agreed that on such Party's giving written notice and full particulars of such *force majeure* to the other Party as soon as practicable after occurrence of the cause relied upon, then the obligations of the Party giving such notice, to the extent they are affected by *force majeure* and to the extent that due diligence is being used to resume performance at the earliest practicable time, shall be suspended during the continuance of any inability so caused, but for no longer period. Such cause shall as far as possible be remedied with all reasonable dispatch.

(b) The term "*force majeure*", as used herein, shall include, but not be limited to, acts of God, strikes, lockouts, or other industrial disturbances, acts of the public enemy, war, blockades, insurrections, riots, epidemics, landslides, lightning, earthquakes, fires, storms, floods, washouts, droughts, tornadoes, hurricanes, arrests and restraints of government and people, governmental, regulatory, judicial, or administrative restraint or order, explosions, breakage or damage to machinery, a well, equipment, pipelines or canals, sudden shortage, sudden insufficiency, failure, interruptions, or curtailment of water or energy supply, and any other incapacities of either Party, whether similar to those enumerated or otherwise, and not within the control of the Party claiming such inability, and which by the exercise of due diligence and care such Party could not have avoided. It is understood and agreed that the settlement of strikes or lockouts shall be entirely within the discretion of the Party having the difficulty, and the above requirement that any *force majeure* be remedied with all reasonable dispatch shall not require the settlement of strikes or lockouts by acceding to the demands of the opposing party when such course is inadvisable in the discretion of the Party having the difficulty.

## ARTICLE VI

### *Default and Remedies*

Section 6.01: Default and Remedies; Mediation. (a) Default shall occur in the event either Party fails to perform or is in breach or violation of any of its other obligations hereunder ("Performance Default"). In the event of a Performance Default, the non-defaulting Party shall give the defaulting Party written notice describing such default and demanding cure of such default.

(b) Should a Performance Default not be fully cured within a reasonable time, but not more than sixty (60) days after notice of default has been given to the defaulting Party, or should the defaulting Party deny or dispute such default, the Parties agree to submit such dispute to non-binding mediation in accordance with the provisions of Section 11.03 of the GRP Contract, which provisions are incorporated herein by reference; provided, however, that either Party may seek injunctive relief, and only injunctive relief, prior to such mediation in order to preserve the *status quo* or to prevent irreparable harm; provided, however, a Party may commence litigation if same could be barred within sixty (60) days by an applicable law or statute of limitations.

(c) Upon conclusion of mediation proceedings or in the event of failure by a defaulting party to mediate timely and in good faith, then except as provided in Section 11.04 of the GRP Contract, which provisions are incorporated herein by reference, the non-defaulting Party may pursue any and all remedies existing at law and in equity from any court, agency, or other entity with jurisdiction over the subject matter at such time.

Section 6.02: Costs. If either Party prevails in any judicial, administrative, or other legal proceedings against the other Party brought under or arising out of this Contract, such prevailing Party shall additionally be entitled to recover court and administrative agency costs and reasonable and necessary attorney fees from the non-prevailing Party to such proceedings.

Section 6.03: Enforcement. The General Manager of the Authority, or any Deputy General Manager of the Authority designated by the General Manager, shall have the right to declare the existence of an event of default and/or enforce all legal rights and obligations under this Contract without further authorization by the Board of Directors of the Authority.

Section 6.04: Choice of Law; Venue. This Contract shall be governed by the laws of the State of Texas, and venue shall be in a court of competent jurisdiction located in Montgomery County, Texas.

Section 6.05: No Additional Waiver Implied. (a) The failure of either Party hereto to insist, in any one or more instances, upon performance of any of the terms, covenants, or conditions of this Contract shall not be construed as a waiver or relinquishment of the future performance of any such term, covenant, or condition by the other Party hereto, but the obligation of such other Party with respect to such future performance shall continue in full force and effect. To the extent applicable and permitted by law, each Party shall have available at all times the rights of mandamus and specific performance against the other Party.

(b) Nothing in this Contract shall be deemed, construed, or considered as (i) a waiver of governmental immunity by the Authority with respect to any third party, (ii) establishing a particular standard of care with respect to any third party, (iii) waiving any other rights, privileges, remedies, or defenses available to the Authority, at law or in equity, with respect to any third party, or (iv) waiving any rights, privileges, remedies, or defenses for the acts or omissions of any independent contractor of the Authority. All such rights, privileges, remedies, and defenses are hereby reserved by the Authority in all respects.

(c) Nothing in this Contract shall be deemed, construed, or considered as (i) establishing a particular standard of care with respect to any third party, or (ii) waiving any other rights, privileges, remedies, or defenses available to the Participant, at law or in equity, with respect to any third party. All such rights, privileges, remedies, and defenses are hereby reserved by the Participant in all respects.



## ARTICLE VII

### *Term*

Section 7.01: Contract Term. (a) This Contract shall be in force and effect from and after the Effective Date and shall expire on the earlier of (i) the date of retirement of all of the Participant Bonds, whether at final maturity, upon prior redemption, or due to an advanced refunding of same, or (ii) December 31, 2045 (the "Contract Term").

(b) Any and all obligations of Participant to make payments to the Authority under this Contract, to the extent such obligations were incurred prior to termination of this Contract, shall survive any expiration or termination of this Contract.

Section 7.02: Termination. (a) This Contract may be terminated prior to the expiration of the Contract Term by mutual, written agreement of the Parties.

(b) This Contract shall automatically terminate if the GRP Contract between the Parties is terminated.

(c) This Contract may be terminated by the Authority, at its option, (i) if the Catahoula Facilities are not substantially complete on or before January 1, 2016; or (ii) if groundwater produced by the Catahoula Wells becomes subject to groundwater reduction requirements imposed by the Conservation District.

(d) Upon written request submitted by the Authority, Participant agrees that it will make provisions for and redeem any then-outstanding Participant Bonds. In such case, the Authority shall provide Participant with funds necessary to redeem the Participant Bonds at the earliest practicable redemption date acceptable to the Authority. In the event that the outstanding Participant Bonds are not then callable for redemption, Participant agrees that it will enter into such arrangements as reasonably requested by the Authority to provide for the advanced refunding of the Participant Bonds, and the Authority shall provide Participant with funds necessary to make firm banking and financial arrangements for the discharge and redemption by deposit of the Participant Bonds at the earliest practicable redemption date acceptable to the Authority. Upon the provision of such funds by the Authority to Participant, this Contract shall automatically terminate.

(e) The above termination rights are in addition to the right of termination provided under Section 2.02(c) hereof, and the obligations of the Authority to terminate this Contract under limited the circumstances set forth under Sections 4.02(b) and 8.01(b) hereof.

## ARTICLE VIII

### *Miscellaneous Provisions*

Section 8.01: Contract Subject to Laws and Regulations, Bond Covenants. (a) This Contract shall be subject to all present and future valid and applicable laws, orders, rules, and regulations of the United States of America, the State of Texas, or any regulatory body having jurisdiction. The Authority shall not adopt, implement, or enforce any provision of its Rate Order, Rules, regulations, or any written order of the Authority that is contrary to, inconsistent with, or prohibited by the terms and provisions of this Contract.

(b) This Contract shall be subject to any covenants of the Authority's resolutions authorizing the issuance of its Bonds (as defined in the GRP), or orders providing for the refunding of such Bonds, if and to the extent that a waiver of Pumpage Fees shall be required hereunder. If the Authority determines that such covenants will not permit the waiver of any Pumpage Fees hereunder, the Authority will immediately provide written notice of same to Participant and shall be obligated to terminate this Contract in the manner provided in Section 7.02(d) hereof as soon as reasonable practicable and acceptable to the Parties.

(c) Neither this Contract nor the GRP Contract are intended to provide or assume Participant's compliance with the Plan relative to pumpage from the Catahoula Wells in the event that the Conservation District imposes groundwater reduction requirements on withdrawals from the Catahoula Aquifer.

Section 8.02: Severability and Reformation. (a) If any provision of this Contract or any like provision of a substantially similar contract with any other Participant(s) is held by a final and non-appealable decision of a court of competent jurisdiction to be unenforceable or violative of laws, orders, rules, or regulations of the United States of America, the State of Texas, or any regulatory body having jurisdiction, all other parts hereof remain enforceable unless the result materially prejudices either Party.

(b) Where any procedure hereunder may be held by a court of competent jurisdiction to be unenforceable or violative of any State or Federal statutory or constitutional provision, the Parties shall have the power by resolution, and the obligation, to adopt and promulgate reasonable and necessary alternative procedures which will conform thereto, and the Parties agree that they would have entered into this Contract without regard to such unenforceability or violative procedure.

Section 8.03: Notices. (a) Until the Authority is otherwise notified in writing by Participant, the address of Participant is and shall remain as follows:

Brenda Burns, City Secretary City of Willis  
200 N. Bell St.  
Willis, Texas 77378  
Telefax: (936) 856-4611  
E-mail: [bburns@ci.willis.tx.us](mailto:bburns@ci.willis.tx.us)

Until Participant is otherwise notified in writing by the Authority, the addresses of the GRP Administrator and the Authority are and shall remain as follows:

General Manager/GRP Administrator  
San Jacinto River Authority  
1577 Dam Site Road  
Conroe, Texas 77304  
Telefax: (936) 588-3043  
E-mail: legalnotices@sjra.net

(b) All written notices required or permitted to be given under this Contract from one Party to the other shall be given (i) by telefax or e-mail to the other Party at the telefax number or e-mail address set forth above, with a hard copy of same mailed within forty-eight (48) hours by certified mail (return receipt requested), with proper postage affixed thereto and addressed to the other Party at the address set forth above, or at such other address as the other Party may designate by written notice, or (ii) by the mailing of same by certified mail (return receipt requested), with proper postage affixed thereto and addressed to the other Party at the address set forth above or at such other address as the other Party may designate by written notice. Notice by telefax or e-mail shall be effective upon actual receipt. Notice by certified mail shall be effective when actually received, as reflected on the corresponding return receipt.

Section 8.04: Approvals; Execution by General Manager. (a) Unless otherwise expressly provided for herein, any consent or approval of the Parties shall be evidenced by an order or resolution duly adopted by the governing body of the Party, or an appropriate certificate executed by a person, firm, or entity previously authorized to determine and give such approval or consent on behalf of the Party pursuant to an ordinance, resolution, or other appropriate instrument adopted by the governing body or managing authority of such Party.

(b) Notwithstanding the above, the Board of Directors of the Authority has duly authorized the execution of this Contract by the General Manager of the Authority, and any approvals or consents required under this Contract may be given by the General Manager or the GRP Administrator, unless otherwise expressly provided herein.

Section 8.05: Parties in Interest. This Contract shall be for the sole and exclusive benefit of Participant and the Authority, and shall not be construed to confer any rights upon any other person.

Section 8.06: Assignments. This Contract shall bind and benefit the respective Parties and their legal successors, but shall not otherwise be generally assignable, in whole or in part, by either Party without first obtaining the written consent of the other.

Section 8.07: Reservation of Rights. All rights, powers, privileges, and authority of the Parties not governed, restricted, or affected by the express terms and provisions of this Contract shall be and are hereby reserved by the Parties and may be exercised and enforced from time to time and as often as may be deemed necessary and proper by the Parties.

Section 8.08: Merger; GRP Contract. This Contract contains all the agreements made between the Parties relative to the subject matters addressed hereinabove. This Contract shall not be deemed to amend, modify, terminate, or otherwise modify the GRP Contract between the Authority and Participant.

Section 8.09: Authority to Enter Into Contract. Each Party represents and warrants to the other Party that it is authorized to enter into this Contract by the Constitution and laws of the State of Texas.

[SIGNATURES COMMENCE ON THE FOLLOWING PAGE]

**IN WITNESS WHEREOF**, the parties hereto to have signed this Contract in multiple copies, each of which shall be deemed to be an original, but all of which shall constitute but one and the same contract, as of the Effective Date.

**SAN JACINTO RIVER AUTHORITY**

**By:** \_\_\_\_\_

**Reed Eichelberger, P.E.**  
**General Manager**

**Date:** \_\_\_\_\_

[SEAL]

**CITY OF WILLIS, TEXAS**

**By:** \_\_\_\_\_

**Name:** \_\_\_\_\_

**Title:** \_\_\_\_\_

**Date:** \_\_\_\_\_

[SEAL]

Exhibit A

**ESTIMATE OF CONSTRUCTION COSTS FOR CATAHOULA FACILITIES**

<b>Construction</b>	
Construction	\$2,116,000
<b>Subtotal Construction</b>	<b>\$2,116,000</b>
<b>Basic Engineering Fees</b>	
Design	\$190,000
Construction Engineering	\$50,000
<b>Subtotal Basic Engineering Fees</b>	<b>\$240,000</b>
<b>Special Services</b>	
Environmental	\$5,000
Surveying	\$3,500
Inspection	\$92,000
Hydro Geologist	\$150,000
<b>Subtotal Special Services</b>	<b>\$250,500</b>
<b>Contingency</b>	
Contingency	\$315,500
<b>Subtotal Contingency</b>	<b>\$315,500</b>
 <b>TOTAL ESTIMATED CONSTRUCTION COSTS</b>	 <b>\$2,922,000</b>