

EXHIBIT A
SCOPE OF SERVICES
FOR
ST. JOHN THE BAPTIST PARISH
WATER SYSTEM MAPPING, MODELING, AND PLANNING

Task 1 – Water System Mapping

St. John the Baptist Parish desires to prepare planning level maps of its water distribution system. These maps will provide a single source-planning tool to assist the Parish in addressing current and future needs. Maps will be developed through interviews with Parish personnel, utilizing information from as-built drawings, and field reconnaissance of the distribution system. Maps will be prepared in an electronic format and will be compatible with the Parish's GIS Base Maps. Full size drawings will appear at a 1" = 200' scale and show streets, street names, waterlines, sizes of waterlines, valves, and fire hydrants. It is estimated that 92 system maps will be prepared.

Activities required for the preparation of the system maps are as follows:

Activity 1 – Data Gathering

- Conduct kick-off meeting with utilities director and water system personnel
- Gather existing as-builts and data specific to the Parish's water distribution system; it is anticipated that this information will have to be retrieved from multiple sites.
- Sort and catalog all as-builts by area: LaPlace north of Airline, LaPlace south of Airline, Reserve, Garyville, West Bank, etc. Sorting of all maps will ensure what information is available after initially compiling the information.
- Specifically identify subdivisions, streets, and areas where as-builts are not available or do not exist.

Activity 2 – Base Maps

- Prepare one key map and 13 additional base maps. The Parish, in electronic format, will provide seventy-nine existing base maps. The 13 additional base maps and existing base maps will cover the Parish's water distribution system.
- Prepare examples of Base Map with water facilities shown (System Map) to agree on legend and symbols for valves, hydrants, pipelines, pump stations, etc. and general overall appearance.

Activity 3– Field Reconnaissance

- Valves and hydrants will be located in the field using GPS technology. This will be done parish-wide, in all areas, whether or not as-built information is available.

- A reasonable attempt will be made to find valves that are not apparent in the field but are shown on the as-built drawings. A list of suspected valve locations will be furnished to the Parish for further investigation (i.e. valves under pavement or deeply buried).

Activity 4 – Prepare System Maps

- Using as-built records and field information, prepare mark-ups of System Maps for use by graphics
- Prepare 92 draft System Maps in electronic format.
- Conduct Quality Control (QC) review both in-house and with the Parish staff at regular intervals.
- Conduct final review of draft Systems Maps, make corrections and incorporate comments, and prepare final System Maps.

Activity 5 – Project Management

- Coordination of Project and Team activities
- Preparation of work plan to define schedules and costs for all project tasks
- Prepare project instructions for all key Project Team members
- Prepare monthly project status reports
- Monitor work progress and expenditures
- Client contact

Task II – Water System Modeling

A calibrated computer model of both the East Bank and West Bank water system will be prepared utilizing the system mapping generated in Task 1. Input data that are required for the model are the physical characteristics of the distribution system (obtained during Task 1) and water demands.

A field data collection program will be conducted to aid in calibrating the model. Hydrant flow tests will be used to measure system pressures which will be compared to model predicted pressures.

The computer model will be installed on the Parish's computer facilities for continuing use by the Parish.

Task III – Water System Planning

As population increases, water demands, both residential and commercial, will continue to increase in the coming years and a plan to provide for additional water supplies, storage, and distribution should be developed now. This is especially true in the LaPlace area, which is the fastest growing area of the parish. The continued existence of any community requires a safe and reliable source of water to meet the public need.

Alternatives for expansion of the water supply system on the East Bank would include additional wells in the Ruddock area, the construction of a water treatment plant in the

LaPlace area along the Mississippi River, or a further expansion of the existing water treatment plant at Lions. Alternatives on the West Bank would probably be limited to a further expansion of the existing water treatment plant at Edgard. Wherever additional supplies are to be located, the impact on the existing transmission, distribution, and storage facilities must be examined. It may be necessary to upgrade or expand these facilities in conjunction with the most cost effective supply system alternative. A present worth analysis of each alternative which would look at capital costs and operation and maintenance costs, would need to be performed.

Activity 1 – Site Visits and Data Gathering

- Kick-off meeting with Utility Director and Utility Personnel
- Visits to existing water supply systems including Ruddock Supply, Storage, and Transmission System and the Lions and Edgard Water Treatment Plants.
- Gather and review existing information (to be provided by the Parish) including:
 - Other relevant preliminary studies
 - Copies of federal and state discharge permits
 - Laboratory reports and monitoring reports
 - Record drawings and design specifications
 - Operations and maintenance manuals
 - Previously prepared population studies and other planning studies
 - Water consumption records
 - Utility audit reports
- Meet with appropriate Parish representatives to discuss existing information

Activity 2 – Develop Future Water Demand Projections

Census data, utility audit reports, water production rates, and water consumption records will be analyzed to project population and water demands. This analysis will include a review and evaluation of previous planning efforts by local planning agencies and of former studies performed for the Parish.

Activity 3 – Prepare Overview of Existing Water Supplies

This includes an overview of the existing water supply, storage, and major transmission/distribution facilities. Also included is an assessment of the existing system to meet current demands. This information will be used in the planning of new or expanded facilities and will consist of the following:

- Prepare Overview of Existing Water Supplies
 - Locations
 - Capacities
 - Raw Water Quality
 - Treatment Requirements
 - Treatment Processes
 - On-going or upcoming improvement projects

- Current or potential problems
- Prepare Overview of Existing Storage and Major Transmission/Distribution Facilities
 - Location
 - Capacities
 - On-going or upcoming improvement projects
 - Current or potential problems

Activity 4 – Develop Water Supply Expansion Alternatives

This includes examining alternatives for meeting the water system needs over a 20-year planning period. Population and water demand projections developed under previous activities will be used. Options to expand or improve existing water supply facilities (i.e., Ruddock Well System) or to construct new facilities located elsewhere (i.e., along the Mississippi River) will be examined. The hydraulic model developed in Task II will be utilized for evaluating potential water supply sites and their impacts on local distribution systems. This effort will consist of the following:

- Develop design criteria for each Water Supply Alternative
- Evaluate Ruddock Well System Alternative
 - Develop number, size, & location of additional wells
 - Determine treatment requirements
 - Analyze effects on existing supply wells
 - Determine impact on Ruddock transmission and storage facilities
 - Determine permitting requirements
- Evaluate the Mississippi River Water Treatment Plant Alternatives
 - Determine best location
 - Develop type and size of plant
 - Develop treatment requirements and footprint of plant
 - Determine river intake requirements
 - Develop impact on local distribution system
 - Determine permitting requirements
- Meet with U.S.G.S. and DEQ representatives to discuss recommendations, to gather input, and to receive and discuss regulatory agency comments.
- Develop capital and O&M estimated costs
- Review other considerations such as reliability, energy use, process complexity, operation and maintenance, environmental impacts, and public acceptance.

Activity 5 – Develop Distribution System Needs

This includes identifying distribution system needs and developing options to meet these needs. The hydraulic model developed in Task II will be utilized. Options may include larger lines, replacement lines, line extensions, pumping stations, or a combination of options to ensure the water distribution system will meet the needs of the Parish for the planning period.

Activity 6 – Recommended Water System Plan

This task includes recommending a 20-year Water System Plan based upon the results and conclusions of previous activities. An implementation schedule of the recommended plan will be developed. Immediate, short term, and long term needs will be identified.

Activity 7 – Client Review

This includes preparing a draft document for review by the Parish. Meetings to discuss findings and to receive and discuss comments are included.

A workshop would also be conducted to present the draft document. Comments from the workshop would be adjudicated and incorporated into the final document. Twelve copies of the final document will be provided to the Parish

Activity 8 – Project Management

- Coordination of Project Team and activities
- Preparation of work plan to define schedules and costs for all project activities
- Prepare project instructions for all key Project Team members
- Prepare monthly project status reports
- Monitor work progress and expenditures
- Client contact

Activity 9 – Quality Control Review and Fix-ups

- Conduct internal quality control reviews
- Address comments from reviewers
- Address comments from client and regulatory agencies

EXHIBIT B
FEE SUMMARY
FOR
ST. JOHN THE BAPTIST PARISH
WATER SYSTEM MAPPING, MODELING, AND PLANNING

Task 1	Water System Mapping	\$	230,000
Task 2	Water System Modeling (Recommended Budget)	\$	85,000
Task 3	Water System Planning (Recommended Budget)	\$	<u>100,000</u>
	Total Project	\$	<u><u>415,000</u></u>

Letter of Agreement
Enron Communications
And
St. John the Baptist Parish

Work on laying fiber optic cable will resume at 12:00 noon, February 23, 2000.

St. John the Baptist Parish Agrees:

1. Furnish, at Enron Communications' expense, utility personnel at all times when work is being performed on U.S. Hwy. 51 and U.S. Hwy. 61.

2. Coordinate with Enron Communications to identify all lines at the following locations:
 - Junction of U.S. 51 and U.S. 61
 - Cardinal Street
 - Walnut Street
 - McReine Road (LA 636-1)
 - Bayou Steel Road (LA 3217)

Enron Communications Agrees:

1. To a minimum bore depth of Eight (8) feet.
2. To dig In and Up in virgin territory.
3. To re-visit the entire route with Parish utilities personnel.
4. Not to resume work west of McReine Road (LA 3217) until Monday, February 28, 2000.



Nickie Monica, Parish President
St. John the Baptist Parish



Jerry J. Humphrey
Enron Communications