

LEGGETTE, BRASHEARS & GRAHAM, INC

**WORK ORDER INITIATION FORM
for the CITY OF CLEARWATER**

Date: August 15, 2014

Project Number: _____

City Project Number: 09-0044-UT

1. PROJECT TITLE:

Injection well system monitoring and preparation of Operating Permit application.

2. SCOPE OF SERVICES:

Leggette, Brashears & Graham, Inc. (LBG) is nearing completion of Work Order No. 4 for City Project No. 09-0044-UT, Permitting and Construction of a Class I Concentrate Injection Well. Work Order No. 4 included construction of the Class I Test Injection well, and preparation of the reports and supporting documentation to begin operational testing of the well. This Work Order No. 5 includes hydrogeological services for: review, compilation, and evaluation of monthly monitoring data during the two-year operational test period; preparation of an Operational Test Summary Report; and preparation of an application for a Class I Injection Well Operating Permit.

I. PRE-DESIGN PHASE

Task 1 - Not Applicable

II. DESIGN PHASE

Task 1 - Not Applicable

III. FINAL DESIGN PHASE

Task 1 - Not Applicable

IV. BIDDING PHASE

Task 1 - Not Applicable

V. CONSTRUCTION PHASE (if applicable)

Task 1 – Review and Compile Monthly Data

LBG will obtain monthly monitoring data from the City and create a database for compilation of the data into summary tables and graphs. Data will include injection rate, injection pressure, water levels in the monitoring wells, and water-quality parameters listed in the Injection Well Construction and Testing Permit. Data will be entered monthly and reviewed to assess water-level and water-quality changes during the test injection period. The tables and graphs will be formatted for use in the monitoring summary report, and for continued use by City staff to maintain for future operational reports.

Task 2 – Prepare Operational Test Summary Report

The data compiled during the two-year operational test period will be used to prepare an Operational Test Summary Report, which will be submitted with an application for a Class I Injection Well Operating Permit. The report will include the summary data tables, graphs, and a discussion of the data including an interpretation of the data with respect to performance of the well and trends in water-level and water-quality data.

Task 3 – Prepare Application for a Class I Injection Well Operating Permit

LBG will complete an application and prepare the supporting documentation for a Class I Injection Well Operating Permit. The Operational Test Summary Report will be included in this package. The application package will be submitted to the City for review and comments. The final application package will be submitted to the FDEP electronically. Electronic and five hard copies will also be submitted to the City.

Task 4 – Project Administration

LBG performs a number of activities associated with managing this project. These activities

include project coordination of activities with the City staff, subcontractors, FDEP and LBG staff. The task also includes electronic, telephonic, and written communications on a regular basis. This task also includes any periodic agency meetings that may arise for discussing overall project issues.

3. PROJECT GOALS:

The following work products will be submitted during the project:

- 1) Monthly Data Tables and Graphs
- 2) Operational Test Summary Report
- 2) Application Package for Class I Injection Well Operating Permit

4. BUDGET:

Attachment "B" provides a breakdown of the total cost per task for the services included in this Work Order No. 3. This price includes all labor and expenses anticipated to be incurred by Leggette, Brashears & Graham, Inc. for the completion of these tasks in accordance with Professional Services Method "A" – Cost Times Multiplier Basis, for a fee not to exceed of one hundred fifty-five thousand, seven hundred thirty-six Dollars (\$155,736.00).

5. SCHEDULE:

The project is to be completed **760 days** from issuance of notice-to-proceed. The project deliverables are to be phased as follows:

Compile and Review Monthly Data	730 days
Prepare Summary Report and Operational Permit Application	30 days

6. STAFF ASSIGNMENT (Consultant):

David A. Wiley, P.G. – Project Manager

Jeffrey M. Trommer – Lead Project Hydrogeologist

Roy Silberstein – Lead Professional Engineer

Richard Cofer – Sr. Hydrogeologist (Lead Field Staff)

Ron Ewinski – Sr. Hydrogeologist

Tim Harrell – Drafting

Dayna Green – Word Processing

7. CORRESPONDENCE/REPORTING PROCEDURES:

ENGINEER's project correspondence shall be directed to:

David A. Wiley, P.G.

All City project correspondence shall be directed to:

Robert S. Fahey, P.E.

8. INVOICING/FUNDING PROCEDURES:

Invoices shall be submitted monthly to the City of Clearwater, Attn: Veronica Josef, Senior Staff Assistant, Engineering, P. O. Box 4748, Clearwater, Florida 33758-4748, for work performed.

City Invoicing Code: **0315-96767-561300-533-000-0000 jlc 7/31/14**

9. INVOICING PROCEDURES

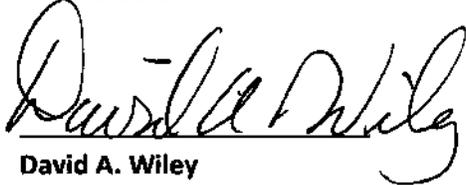
At a minimum, in addition to the invoice amount(s) the following information shall be provided on all invoices submitted on the Work Order:

- A. Purchase Order Number and Contract Amount.
- B. The time period (begin and end date) covered by the invoice.
- C. A short narrative summary of activities completed in the time period
- D. Contract billing method – Lump Sum or Cost Times Multiplier
- E. If Lump Sum, the percent completion, amount due, previous amount earned and total earned to date for all tasks (direct costs, if any, shall be included in lump sum amount).
- F. If Cost Times Multiplier, hours, hourly rates, names of individuals being billed, amount due, previous amount earned, total earned to date for each task and other direct costs (receipts will be required for any single item with a cost of \$50 or greater or cumulative monthly expenses greater than \$100).
- G. If the Work Order is funded by multiple funding codes, an itemization of tasks and invoice amounts by funding code.

10. SPECIAL CONSIDERATIONS:

Not Applicable

PREPARED BY:



David A. Wiley
Senior Vice President
Leggette, Brashears & Graham, Inc.

March 13, 2013

Date

APPROVED BY:



Michael D. Quillen, PE
City Engineer
City of Clearwater

8-29-14
Date



CITY OF CLEARWATER ENGINEERING DEPARTMENT

WORK ORDER INITIATION FORM CITY DELIVERABLES

1. **FORMAT**

The design plans shall be compiled utilizing the following methods:

1. City of Clearwater CAD standards.
2. Datum: Horizontal and Vertical datum shall be referenced to North American Vertical Datum of 1988 (vertical) and North American Datum of 1983/90 (horizontal). The unit of measurement shall be the United States Foot. Any deviation from this datum will not be accepted unless reviewed by City of Clearwater Engineering/Geographic Technology Division.

2. **DELIVERABLES**

The design plans shall be produced on bond material, 24" x 36" at a scale of 1" = 20' unless approved otherwise. Upon completion the consultant shall deliver all drawing files in digital format with all project data in Autodesk Civil 3D file format. If not available Land Desktop files are still acceptable, however the City or Clearwater is currently phasing out Land Desktop.

NOTE: If approved deviation from Clearwater CAD standards are used the Consultant shall include all necessary information to aid in manipulating the drawings including either PCP, CTB file or pen schedule for plotting. The drawing file shall include only authorized fonts, shapes, line types or other attributes contained in the standard AutoDesk, Inc. release. All block references and references contained within the drawing file shall be included. Please address any questions regarding format to Mr. Tom Mahony, at (727) 562 4762 or email address Tom.Mahony@myClearwater.com.

All electronic files (CAD and Specification files) must be delivered upon completion of project or with 100% plan submittal to City of Clearwater.

Construction of a Class I Test Injection Well and Associated Monitoring Wells

Leggette, Brashears and Graham, Inc.

**WORK ORDER INITIATION FORM
PROJECT BUDGET**

Task	Description	Subconsultant Services	Labor	Total
1.0	Pre- Design			
1.1	Project Management Plan		\$0	
1.2	Progress Reports		\$0	
1.3	Coordination		\$0	
1.4	Meetings		\$0	
1.5	Task Allowance (10%)		\$0	
				\$0
2.0	Design			
2.1	Ground Surveys (xyz, Inc.)	\$0	\$0	
2.2	Geotechnical Services	\$0	\$0	
2.3	Utility Locations by Vacuum Excavation (10)	\$0	\$0	
2.4	Task Allowance (10%)		\$0	
				\$0
3.0	Final Design Plans and Specifications			
3.1	Site Visits		\$0	\$0
3.3	Final Construction Specifications		\$0	\$0
3.4	Task Allowance (10%)		\$0	
				\$0
4.0	Permitting Services			
4.1			\$0	
4.2	Task Allowance (10%)		\$0	
				\$0
5.0	Construction Phase Services			
5.1	Review and Compile Monthly Data		\$71,740	\$71,470
5.2	Prepare Operational Test Summary Report		\$22,652	\$22,652
5.3	Prepare Application for Class I Operating Permit		\$20,352	\$20,352
5.4	Project Administration		\$38,208	\$38,208
				\$152,682
Subtotal, Labor and Subcontractors				\$152,682
Permit Review Fees				\$0
Other Direct Costs (prints, photocopies, postage, etc.) (Not applicable to lump sum Work Orders)				\$3,054
Grand Total				\$155,736

Attachment "B"

2012 DIRECT HOURLY RATES

LEGGETTE, BRASHEARS AND GRAHAM, INC.

Job Classification	Minimum	Rate	Maximum
		(\$ / hour) Typical	
Senior Vice President	\$70	\$72	\$74
Vice President/Officer-in-Charge	\$70	\$72	\$74
Project Manager/Associate Principal	\$55	\$57	\$60
Construction Manager	\$28	\$30	\$35
Construction Engineer	\$28	\$30	\$35
Senior Engineer/Scientist	\$28	\$30	\$35
Engineer/Scientist (III-IV)	\$26	\$28	\$30
Engineer/Scientist (I-III)	\$24	\$26	\$28
Planner			
Landscape Architect			
Field Technician	\$26	\$28	\$35
Senior Designer			
Drafter/CADD Operator	\$26	\$28	\$35
Operations Specialist			
Fiscal/Accounting	\$20	\$22	\$30
Administrative/Clerical	\$20	\$22	\$30

MULTIPLIER: 3.4