

**WORK ASSIGNMENT NO. 14 PURSUANT TO
THE JULY 13, 2010 AGREEMENT BETWEEN THE
CITY OF VENICE, FLORIDA AND
ARCADIS-US, Inc.**

WHEREAS, on **July 13, 2010** the parties entered into an Agreement whereby the **CONSULTANT** would perform professional services for the OWNER pursuant to an executed Work Assignment; and

WHEREAS, the OWNER wishes to authorize the **CONSULTANT** to perform professional services concerning the **Reverse Osmosis Water Treatment Plant (RO WTP) Odor Control System Improvements** as more particularly described in the Scope of Services contained herein; and

WHEREAS, the **CONSULTANT** wishes to perform such professional services.

NOW THEREFORE, in consideration of the premises and mutual covenants contained in the **July 13, 2010** Agreement and in this Work Assignment, the parties agree as follows:

1. General description of the project: ARCADIS will develop preliminary and detailed design documents, provide bidding assistance and construction administration services for the complete replacement of the existing degasifier and odor control scrubber with a new properly sized and fully integrated odor control system consisting of two degasifiers and a two-stage odor control scrubber, associated chemical system(s) and a cleaning system.
2. Scope of services to be performed. CONSULTANT shall perform the services described in the scope of services attached as Attachment "A".
3. Compensation to be paid. City shall pay the CONSULTANT the sum of \$371,450 for performance of the professional services specified in this work assignment. A \$30,000 Owner's Allowance is included, which brings the total to \$401,450
4. Time for completion. CONSULTANT shall complete the professional services specified in Tasks 1-5 within 9 months. Remaining tasks shall be completed in accordance with the City's schedule.

IN WITNESS WHEREOF, the parties have executed this work assignment on the ____ day of ____, 2013.

ARCADIS-US, Inc.

CITY OF VENICE, FLORIDA

ATTEST:

By: _____

Mayor

City Clerk

ATTACHMENT A

RO Water Treatment Plant Odor Control System Improvements *Scope of Work - REVISED* 06/28/13

Project Overview

Over the years, the Venice RO WTP has received odor complaints from nearby businesses due to hydrogen sulfide release from the existing odor control scrubber. As a result, the City has tried several different solutions to address the problem, including the current practice of adding SulfaClear to the scrubber to further reduce off-gassing of hydrogen sulfide. The existing degasifier and odor control scrubber are nearing the end of their useful service lives and performance has generally been poor. Replacement of these systems has been recommended as part of the 2012 RO WTP Improvements Basis of Design Report and the ongoing Phase 2 Water Master Plan.

This project consists of the complete replacement of the existing degasifier and odor control scrubber with a new properly sized and fully integrated odor control system consisting of two new degasifiers and a two-stage odor control scrubber, associated chemical system(s) and cleaning system. The following scope of work presents ARCADIS' approach to complete this project. As part of this scope of work, ARCADIS will complete design investigations, develop preliminary and detailed design documents, provide bidding assistance, and construction administration services needed for implementation of the work.

Scope of Work

TASK 1 – PROJECT KICKOFF MEETING AND SITE VISIT

ARCADIS will prepare and lead one project kickoff meeting with appropriate City staff to review the scope of work, project schedule, data needs and key milestones. Prior to the kickoff meeting, ARCADIS will submit a proposed agenda that will include: (1) items to be discussed, (2) specific questions to be answered, and (3) additional data requests.

Immediately following the project kickoff meeting, ARCADIS process mechanical, structural, electrical and I&C engineers will conduct a detailed site walkthrough to visually inspect the existing degasifier, odor control equipment and ancillary equipment including chemical systems, retrofit requirements, etc.; and to conduct interviews with engineering, operations and maintenance staff to identify system deficiencies, needs, constraints and requirements.

ARCADIS will prepare and submit detailed minutes that document discussions and action items from the kickoff meeting and initial facility site visit.

TASK 2 – DATA COMPILATION AND REVIEW

Task 2.1 – Obtain and review historical data

ARCADIS will assemble and review existing documentation and recent operating data that will be used to assess operating conditions and to develop system design criteria as part of the preliminary design investigations and detailed design. Data gaps and any additional data needs will be identified. The project team will review available City furnished information, including, but not limited to:

- Available degasifier, scrubber system and ancillary equipment as-built drawings
- Available operating, water quality, chemical usage and performance data for the last three years.
- Available odor control system pilot testing data, reports and evaluation.

Available operating, water quality and chemical usage data is requested in electronic format to facilitate compilation, trending and correlation of parameters. It is understood that as-built drawings are not available electronically.

Task 2.2 – Survey Services

ARCADIS will obtain the necessary site survey information required for the design and construction of the hydrogen sulfide removal system. The survey will include horizontal and vertical locations of necessary physical features affecting the project design and construction, including location of underground and aboveground utilities, and existing structures at the proposed construction area.

All land surveying services shall be performed under the direction and control of a Florida Registered Professional Land Surveyor and shall be in accordance with Chapter 21 HH-6, Florida Administrative Code: Minimum Technical Standards for Land Surveying.

ARCADIS will coordinate the services of a subconsultant to locate underground utilities around the locations where the new degasifier, scrubber and chemical storage and feed equipment will be located.

Task 2.3 – Geotechnical Services

ARCADIS will obtain existing subsurface geotechnical information required for the completion of the design of the degasifier, odor control scrubber and chemical storage and feed system. Geotechnical engineering services will include drilling and field testing services for soil analysis. It is assumed that two borings down to a depth of 15-ft will be collected at the locations for the new degasifier and odor control scrubber. The drilling and field testing services shall include laboratory services, sieve analysis, natural moisture content, organic content, Atterberg limits

and staff professional visual classification. The engineering analysis shall include a soils report and shall be signed and sealed by a licensed Florida Professional Engineer. ARCADIS will coordinate the services of a subconsultant to perform the geotechnical services.

TASK 3 – EVALUATION OF ALTERNATIVES

Task 3.1 – Evaluate Hydrogen Sulfide Removal Alternatives

ARCADIS will conduct a desktop evaluation of available degasifier and odor control scrubber alternatives. Odor control scrubber alternatives to be considered include: (1) two-stage chemical scrubber and (2) two-stage biological scrubber. The evaluation will include a description of each system and associated ancillary equipment, implementation considerations, operation and maintenance requirements, advantages and disadvantages, and costs. ARCADIS will prepare preliminary drawings and general concept layout drawings in sufficient detail to facilitate the comparison of degasifier/scrubber alternatives.

The chemical scrubber alternative will include an assessment of requirements for a permanent chemical storage and feed system(s) for the scrubber chemical(s). Chemicals to be evaluated include continued use of the proprietary chemical Sulfa Clear or converting back to the more “traditional” sodium hydroxide and sodium hypochlorite chemicals. The assessment will also include a review of options for handling and disposal of waste products from the chemical scrubbers.

Task 3.2 –Hydrogen Sulfide Removal Alternatives Technical Memorandum

ARCADIS will prepare a technical memorandum (TM) summarizing the data review completed in Task 2, and detailing the alternatives evaluated in Task 3.1. Five hard copies and one electronic copy of the draft technical memorandum will be submitted to the City for review and comment.

Upon receiving comments from the City, ARCADIS will finalize the TM and incorporate City’s comments and feedback from the review meeting described in Task 3.3. Five hard copies and one electronic copy of the final technical memorandum will be submitted to the City.

Task 3.3 – Meeting to Review Draft Hydrogen Sulfide Removal Alternatives TM

Within two weeks of submitting the draft TM, ARCADIS will lead a meeting with City staff to review the assessment presented in the technical memorandum and to select the hydrogen sulfide removal system that will be implemented at the City of Venice RO WTP.

ARCADIS will prepare meeting minutes summarizing the discussions and City comments from the draft TM review meeting.

TASK 4 – PRELIMINARY DESIGN REPORT

Task 4.1 –Preliminary Design Report

ARCADIS will prepare a draft Preliminary Design Report that incorporates the evaluation from the Hydrogen Sulfide Removal Alternatives TM (Task 3.2); and presents the following basis-of-design elements for the recommended hydrogen sulfide removal system:

- Facility sizing criteria and number of units
- Equipment type and/or configuration
- General equipment and facility layout alternatives
- Preliminary structural and electrical requirements
- Preliminary control and instrumentation philosophy
- Proposed project schedule
- Phasing and implementation plan
- Engineers opinion of probable construction costs

Five hard copies and one electronic copy (.pdf) of the draft Preliminary Design Report will be submitted to the City for review and comment. Upon receiving comments from the City, ARCADIS will prepare a final Preliminary Design Report that incorporates City's comments and feedback from the review meeting described in Task 4.2. ARCADIS will submit five paper copies plus one electronic copy of the final Preliminary Design Report to the City.

Task 4.2 – Meeting to Review the Draft Preliminary Design Report

Within two weeks of submittal of the draft Preliminary Design Report, ARCADIS will lead a meeting with City staff to review the design elements of the recommended odor control system. The meeting will serve as an open forum to discuss preliminary design issues, including equipment preferences, degree of instrumentation, operational/maintenance requirements, and permitting issues.

ARCADIS will prepare meeting minutes summarizing the discussions and City comments from the draft Preliminary Design Report review meeting.

TASK 5 – DETAILED DESIGN

ARCADIS will prepare contract documents that clearly define the scope of work for the construction contract. The design drawings will be prepared in accordance with the standard CSI format and notation using AutoCAD format. Project specifications will consist of the City of Venice Standard Front End (Division 0 and 1) and ARCADIS-prepared Bid Form and Technical Specifications. ARCADIS will review the City of Venice front end documents and provide any comments as part of this task. ARCADIS will provide comments and suggested revisions to be considered by the City to the General and Supplemental Conditions with respect to consistency and management of risk associated with this project. Specific detailed design tasks include:

Task 5.1 - 75% Design Submittal – Based on the approved Preliminary Design Report, ARCADIS will prepare a 75% design submittal composed of contract drawings (11"x 17" and 22"x 34") and draft technical specifications, front end documents and general requirements. The design submittal will include mechanical, structural, electrical, and instrumentation and controls design documents. Five copies of the 75% design package (five hard copies and one electronic copy) will be submitted to the City for review. Staff comments will be acknowledged and relevant comments will be incorporated into the subsequent design package.

Task 5.2 - 75% Design Submittal Review Meeting – ARCADIS will prepare and lead one meeting to review the 75% design submittal and discuss City comments within two weeks of submittal of the 75% contract documents. ARCADIS will prepare and distribute a meeting agenda and minutes documenting comments and action items from the design review meeting.

Task 5.3 - 100% Design Submittal - Based on the comments received from the City on the 75% design submittal, ARCADIS will prepare a 100% design submittal composed of contract drawings (22" x 34") and final technical specifications, bid form, front end documents and general requirements. Five copies of the 100% design package (five complete hard copies and one electronic copy) will be submitted to the City for review. Staff comments will be acknowledged and relevant comments will be incorporated in the final bid set.

Task 5.4 - 100% Design Submittal Review Meeting - ARCADIS will prepare and lead one meeting to review the 100% design submittal and discuss City comments within two weeks of submittal of the 100% contract documents. ARCADIS will prepare and distribute a meeting agenda and minutes documenting comments and action items from the design review meeting. Staff comments will be acknowledged and relevant comments will be incorporated into the final design package. ARCADIS will provide final specifications and plans in .pdf format.

Task 5.5 - Construction Cost Estimates and Schedule – An opinion of probable construction costs and schedule will be prepared for each of the 75% and 100% (final opinion of construction cost) submittals. The opinion of construction costs will be prepared using the CSI division format and will utilize appropriate contingency factors for the level of completion at the various design stages.

TASK 6 – BIDDING ASSISTANCE

ARCADIS will provide the following services in connection with bidding and award of the construction contract:

- a) Attend a pre-bid meeting and site tour to explain the design and answer questions pertaining to the contract documents.
- b) Respond to questions on the design. Prepare responses for addenda to interpret, clarify or expand the contract documents

- c) Provide bid evaluation review, bid tabulation and recommendation.
- d) Prepare a conformed set of drawings and specifications incorporating revisions from addenda during the bidding phase.

TASK 7 – PERMITTING ASSISTANCE

ARCADIS will provide the following services in connection to the anticipated permitting for this project:

- Arrange and conduct one meeting with the Florida Department of Environmental Protection (FDEP) to discuss permitting requirements and the permit application package.
- Submit the Preliminary Design Report and 75% design submittal package to FDEP
- Respond to Requests for Additional Information (RAI's) from FDEP
- Prepare the construction permit application
- Review the plant's existing FDEP operating permit and environmental resource permit (ERP). It is assumed that only an update to the plant's operating protocol within the FDEP permit is necessary and included in this task. The submission of a minor or substantial permit modification application to the FDEP operation permit and ERP permit is not included.
- Pay permit application fees.

TASK 8– CONSTRUCTION ADMINISTRATION SERVICES

ARCADIS and the City will share construction administration services outlined in the construction contract documents. Overall, the services will focus on confirming that the completed work complies with the requirements of the contract documents and the integrity of the design concepts are reflected in the finished work. It is assumed that the City will provide day to day inspection of construction activities. The construction administration services to be provided by ARCADIS for the construction period are as follows:

Task 8.1 - Preconstruction Meeting: ARCADIS will conduct a pre-construction meeting with the City of Venice and the contractor as required by the contract documents. The purpose of the meeting will be to define responsibilities, review project administrative requirements, and receive the contractor's plan to complete the work. It is typical that issues of safety requirements, permitting, schedule, work hours, staffing, requirements for shutdown, staging areas, payment schedules, and startup considerations will be discussed. The contractor will also present its proposed invoicing method and format. ARCADIS will prepare and distribute meeting minutes to all attendees.

Task 8.2 - Construction Progress Meetings: ARCADIS will maintain regular communication with the City and contractor by participating in monthly construction progress meetings upon contractor mobilization to monitor project progress and identify issues in a timely manner.

ARCADIS will attend up to nine (9) monthly construction progress meetings (6 hrs each – including travel) at the plant during construction. These will be attended by the project manager and one design engineer as appropriate. ARCADIS will prepare and distribute an agenda and meeting minutes for each meeting.

Task 8.3 - Shop Drawing Review: The contractor will prepare shop drawings for the selected equipment and other components of the work as specified in the contract documents. These shop-drawing submittals will be reviewed by ARCADIS for compliance with the design concept and contract requirements. ARCADIS will maintain a log of submittals to include submittal number, subject, date received, reviewer, action taken and date returned. If during the shop drawing review process, the contractor requests substitute materials and/or equipment, ARCADIS will provide a recommendation on the submittal to the City. It is assumed that the number of re-submittals for a submitted item will be limited to one re-submittal. It is also assumed that 40 individually numbered submittals will be received throughout the project.

Task 8.4 - Requests for Information: ARCADIS will receive and respond to contractor Requests for Information (RFI) or request for clarification of the contract documents or design intent. ARCADIS will interpret the meaning of the contract documents and will provide required clarifications or explanations of the design intent and requirements. ARCADIS will also prepare and maintain a log of all such received requests, noting the date received, subject, resolution and date response was returned to the contractor. All such reviews and replies will be in writing and will be done expeditiously. It is estimated that 20 RFIs will be received throughout the project, and the average review and response time will be four (4) hours per RFI.

Task 8.5 - Change Order Reviews: ARCADIS will prepare, issue, and coordinate work directives and change orders in coordination with the City. ARCADIS will maintain a log of change order issues and pending change orders. All Change Orders must be submitted to the City for review and approval before any work covered by such Change Orders can begin.

Task 8.6 - Pay Application Review and Approval: ARCADIS will review monthly payment applications from the contractor and provide a written recommendation for payment to the City based on construction progress. Based on a nine month construction duration, it is estimated that ten pay applications will be received for review and approval.

Task 8.7 - Periodic Site Visits/Inspection: ARCADIS will provide periodic site visits at intervals appropriate to the various construction stages of the work in progress. Such site visits shall review materials and equipment being used to determine if work is proceeding, in general, in accordance with the contract documents. Whenever possible, site visits by key personnel will be conducted on the same day as progress meetings to consolidate the number of site visits required. Time for site visits during progress meetings is included in Task 8.2. Special visits in addition to those conducted during progress monthly meetings are included in this task and have been budgeted to include the following (8 hours per visit):

- Two trips by a senior process engineer
- Two trips by a senior structural engineer

- Two trips by the senior electrical/I&C engineer
- Two trips by the project manager

Shorter, more frequent site visits may be conducted as required during construction. ARCADIS will prepare a written summary of each site visit to document the visit purpose, activities completed and follow up requirements. ARCADIS will maintain a site visit log with the site visit reports.

Task 8.8 - Training Coordination - ARCADIS will review the training packages from the vendors, coordinate the scheduling of training and attend equipment training sessions at the City's request to determine if the training performed by the vendors is adequate.

Task 8.9 - O&M Manual Review: ARCADIS will review and approve preliminary and final equipment manufacturer O&M manuals submitted by the contractor in accordance with the contract documents.

Task 8.10 - Startup and Testing: ARCADIS will assist the City and the contractor during systems startup and commissioning. It is anticipated that this will include the review of the contractor's proposed method and schedule for start-up of the equipment and facilities; presence at startup testing; providing technical guidance during operational confirmation and acceptance testing; reviewing test data; and troubleshooting. It is assumed that up to 60 hours will be provided by the ARCADIS team as appropriate during startup and testing.

Task 8.11 - Project Completion and Closeout: ARCADIS will conduct one pre-final site inspection to determine if the project is substantially complete. The inspection will result in the preparation of a punch list to be delivered to the contractor for final completion. ARCADIS will conduct one final inspection to determine if the work has been completed in accordance with the contract documents and the punch list. Subsequent to and upon acceptable final inspection, ARCADIS will recommend, in writing, final payment to the contractor and give written notice to the City and the contractor that the work is acceptable subject to any expressed conditions. ARCADIS will also prepare and send a letter of completion to FDEP confirming the project was constructed in accordance to the Contract Documents.

Task 8.12 - Record Drawings: ARCADIS will prepare final record drawings from the original electronic files based on contractor supplied as-built drawings only (redline markups). The City will be responsible for coordinating with the contractor to ensure that information from approved shop drawings, on-site inspections and other knowledge regarding field changes, modifications, etc., made during construction are incorporated into the as-built drawings. ARCADIS will submit record drawings to the appropriate regulatory agencies and provide the City with the CD electronic file (AutoCAD and PDF files) and five hard copies (22"x34") of the record drawings. ARCADIS will not be responsible for any errors or omissions in the information from others that are incorporated into the record drawings. Record drawings will be submitted prior to ARCADIS' contract completion in order to support project certification.

CONSTRUCTION ADMINISTRATION SERVICES ASSUMPTIONS. The following are the assumptions for the construction phase services:

- The construction duration is nine months (through final completion).
- Resident Inspection will be performed by the City or another designated representative.
- Verification of construction activities will be performed by the City or other designated representative.
- Testing log documentation will be performed by the City or other designated representative.
- Construction and field reports will be developed by the City or other designated representative.
- Pre-final and final inspections of the project to determine substantial and final completions will be performed by ARCADIS and the City Inspector.
- Preparation of System O&M manuals to incorporate the essential features of the odor control system is not included in this scope of work.
- Preparation of Record Drawings will be performed by ARCADIS. The contractor will provide red-lines to ARCADIS, including all City Inspector comments
- Coordination of vendor O&M training will be performed by ARCADIS / Contractor.

TASK 9– PROJECT MANAGEMENT AND ADMINISTRATION

ARCADIS will track the project schedule and budget and complete monthly invoicing to the City in accordance with the agreement. Invoices will include a listing of the hours expended and the hourly rate by staff category, as well as itemized expenses. Each invoice will include a cover letter, signed by the Project Manager, and a description of the project status and the services completed during the invoice period.

Deliverables and Preliminary Drawing List

The following deliverables are included for the project:

Task 1 – Project Kickoff Meeting and Site Visit

- Kickoff Meeting agenda
- Kickoff meeting and site visit minutes

Task 3 – Evaluation of Alternatives

- Odor Control System Alternatives Technical Memorandum (draft and final)
- Draft Technical Memorandum review meeting minutes

Task 4 – Preliminary Design Report

- Preliminary Design Report (draft and final)
- Draft Preliminary Design Report review meeting minutes

Task 5 – Detailed Design

- 75% Design Submittal (contract drawings and documents, cost estimate and schedule)
- 100% Design Submittal (final contract drawings and documents, bid form, cost estimate and schedule)
- Final Bid Package

Task 6 – Bidding Assistance

- Bid assistance addenda, bid tabulation, and bid evaluation review and recommendation

Task 7 – Permitting Assistance

- Permit Submittal
- Responses to RAls
- Construction permit application

Task 8 – Construction Administration Services

- Pre-construction meeting minutes, agenda and handouts
- Log of shop drawings received, subject, status and date response
- Log of RFIs received, subject, status and date response
- Punch list
- Notice of substantial completion
- Notice of final completion
- Record drawings
- FDEP letter of completion

Task 9 – Project Management and Administration

- Monthly progress reports and invoices

The preliminary list of design drawings is outlined below:

	Title Sheet
General	
G-1	Drawing Index, Legend and Abbreviations
G-2	Notes
G-3	Overall Site Plan
G-4	Process Flow Diagram
G-5	Hydraulic Profile
Demolition	
D-1	Notes and Abbreviations
D-2	Degasifier and Scrubber Demolition Plan
D-3	Degasifier and Scrubber Demolition Details

Civil	
C-1	Erosion/Sediment Control Plan, Details and Notes
C-2	Site Grading and Drainage
C-3	Yard Piping
C-4	Yard Piping – Enlarged Plan and Details
C-5	Miscellaneous Civil Details
Mechanical	
M-1	Symbols, Abbreviations and Notes
M-2	Hydrogen Sulfide Removal System Plan
M-3	Hydrogen Sulfide Removal System Section and Details
M-4	Recirculation Pump and Cleaning Systems Plans, Sections and Details
M-5	Chemical Storage and Feed System Plan Section and Details
M-6	Miscellaneous Details I
M-7	Miscellaneous Details II
Structural	
S-1	General Notes and Abbreviations
S-2	Foundation Plan
S-3	Top Plan
S-4	Sections
S-5	Sections and Details
S-6	Equipment Site Pad Plans and Sections
S-7	Typical Details Sheet I
I&C	
I-1	Symbols, Abbreviations and Notes
I-2	Degasifier and Odor Control Systems P&ID
I-3	Chemical Storage and Feed System P&ID
I-4	Miscellaneous Details
Electrical	
E-1	Symbols, Abbreviations and Notes
E-2	One Line Diagram
E-3	Degasifier Scrubber, Chemical System Power Plan
E-4	Degasifier, Scrubber, Chemical System Control Diagram
E-5	Interconnect Diagram
E-6	Miscellaneous Details
TOTAL NUMBER OF DRAWINGS = 37	

Owner's Allowance

This Work Assignment includes an Owner's Allowance of \$30,000 for unforeseen tasks required to complete the project, which will be used only with the written approval of the City. A scope description and fee breakdown will be provided to the City for any proposed use of the Owner's Allowance.

Proposed Implementation Schedule

The proposed implementation schedule for the replacement of the odor control system at the City of Venice RO WTP is outlined below. The Notice to Proceed shall be the date of approval of this work assignment by the City. The following schedule assumes that City reviews will be completed in two weeks. Additional review time by the City or FDEP is beyond the control of ARCADIS and may require adjustment of the schedule.

Proposed Implementation Schedule	
Deliverable or Activity	Target Completion After Notice to Proceed
Project Kickoff Meeting and Site Walkthrough	One Week
Obtain and review background information	Three Weeks
Evaluation of Alternatives	
Draft Evaluation of Alternatives TM	1.5 Months
Meeting to Review draft TM	2.0 Months
Final Evaluation of Alternative TM	2.25 Months
Preliminary Design Report	
Draft Preliminary Design Report	3.25 Months
Draft PDR Review Meeting	3.75 Months
Final Preliminary Design Report	4.0 Months
75% Design Submittal	6.0 Months
75% Design Submittal Review Meeting	6.5 Months
100% Design Submittal	8.5 Months
100% Design Submittal Review Meeting	9.0 Months
Bidding and Project Award	13 Months
Substantial Completion	20 Months
Project Completion and Closeout	22 Months

Proposed Fee

The above scope of services will be completed for a not to exceed fee of \$371,450 including labor and expenses based on an hourly rate not to exceed basis, as detailed in the attached fee schedule and in accordance with the As-Needed Professional Services Agreement. In addition,

an Owner's Allowance of \$30,000 is included as part of this Work Assignment, which brings to the total to \$401,450.

Invoicing will be prepared in accordance with the requirements of this agreement. Any additional scope items outside of the proposed scope will not be completed without prior authorization from the City of Venice.

Table 2: Project Fee Breakdown

Task No.	Task Name	TOTAL HOURS	TOTAL LABOR	EXPENSES	SUB-CONSUL.	GRAND TOTAL
1.0	Project Kickoff Meeting and Site Visit	40	\$ 6,480	\$ 75	\$ -	\$ 6,555
2.0	Data Compilation and Review	82	\$ 9,500	\$ 300	\$ 3,700	\$ 13,500
3.0	Evaluation of Alternatives	134	\$ 16,530	\$ 50	\$ -	\$ 16,580
4.0	Preliminary Design Report	258	\$ 32,850	\$ 50	\$ -	\$ 32,900
5.0	Detailed Design	1,349	\$ 164,215	\$ 150	\$ -	\$ 164,365
6.0	Bidding Assistance	108	\$ 13,270	\$ 50	\$ -	\$ 13,320
7.0	Permitting Assistance	62	\$ 8,420	\$ 1,075	\$ -	\$ 9,495
8.0	Construction Administration Services	772	\$ 102,420	\$ 1,250	\$ -	\$ 103,670
9.0	Project Management and Administration	71	\$ 11,065	\$ -	\$ -	\$ 11,065
	SUBTOTAL	2,876	\$ 364,750	\$ 3,000	\$ 3,700	\$ 371,450
	Owner's Allowance		\$ 30,000			\$ 30,000
	TOTAL WITH OWNERS ALLOWANCE		\$ 394,750	\$ 3,000	\$ 3,700	\$ 401,450