

BEFORE THE GUAM PUBLIC UTILITIES COMMISSION



IN RE:

GPA Docket 11-02

REQUEST BY GUAM WATERWORKS
AUTHORITY FOR APPROVAL OF A
\$1.2M INCREASE IN GWA'S
PROGRAM MANAGEMENT OFFICE
CONTRACT WITH BROWN &
CALDWELL

CERTIFICATION BY
LEGAL COUNSEL

1. In its Order dated December 11, 2012 in this Docket, the Guam Public Utilities Commission ["PUC"] conditionally approved GWA's request for a \$1.2M increase in GWA's Program Management Office Contract with Brown & Caldwell.
2. Approval was conditioned upon submission by GWA of certain documentation, including a final Work Order 2012-12, and Work Authorizations for projects including Southern SSES, Central 1/1 and SSES and Phase 1 Construction Management for Agana WWTP Primary Treatment Upgrade Improvements.
3. When GWA had submitted materials in accordance with paragraph 14 of the December 11, 2012, Order, PUC Legal Counsel was directed to certify compliance.
4. Legal Counsel hereby certifies that, on February 18, 2013, GWA submitted the following Work Authorizations for PMO Brown & Caldwell to the PUC:
 - (a) GWA Work Authorization No.: 2012-01-A2 re: General Program Management Support - Amendment 2
 - (b) GWA Work Authorization No.: 2012-10-A2 re: Chaot and Agana Heights Design Build Package - Archaeology Survey
 - (c) GWA Work Authorization No.: 2012-12 re: Phase I Facility Evaluations - Umatac-Merizo Wastewater System Evaluation Phase I
 - (d) GWA Work Authorization No.: 2013-01 re: Phase I Project Management for Agana WWTP Primary Treatment Upgrade Improvements

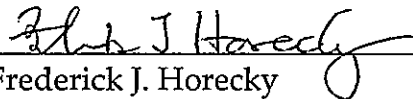
- (e) GWA Work Authorization No.: 2013-02 re: Phase I Construction Management for Agana WWTP Primary Upgrade Improvements
 - (f) GWA Work Authorization No.: 2013-03 re: Southern Sewer Basin Sanitary Sewer Evaluation Survey (SSES).
5. Said Work Authorizations are attached hereto collectively as Exhibit "1".
 6. On March 21, 2013, Counsel requested two additional documents from GWA. On April 1, GWA submitted an additional Work Authorization (Amendment 1 to Work Authorization No. 2012-01 re: General Program Management Support), and an updated Summary of the GWA PMO Budget Allocation.
 7. GWA has now supplied work authorizations for the projects for which it seeks an increase in the PMO compensation, with appropriate project descriptions, timeframes and deadlines, cost estimates, and explanations.
 8. To date, it appears that GWA has expended approximately \$2,282,245 of the \$3.2M initially allocated for the Brown & Caldwell Contract. See summary of the GWA PMO Budget Allocation, attached hereto as Exhibit "2".
 9. In the additional Work Authorizations submitted, GWA has now justified approval of an additional \$1.2M for its PMO contract with Brown & Caldwell.
 10. Notwithstanding Counsel's recommendation for approval, there are still significant concerns with the long range plans of GWA to fund the PMO at similar levels.
 11. In its initial Order in this Docket on March 21, 2011, PUC stated that "PUC desires to insure that the engineering and other competency skills possessed by the PMOs are institutionalized...and passed on to...employees." The proposed contract requires that PMOs execute a staff development and process improvement plan for GPA and GWA. There are additional requirements that the final contract awards for the PMOs specify in detail how the PMO will optimize the skills of GPA/GWA employees.
 12. So that PUC can fully evaluate the need for a PMO, GWA should supply more information to the PUC. There is little, if any, information on file as to how the PMO plans to institutionalize and pass on its skills to employees, what has been done to date, and what specific staff development and process improvement plans are in effect.

13. It is now appropriate that GWA submit a detailed report to PUC on the foregoing matters in Paragraph 11 above, as well as its long range plans for utilization of the PMO, including such items as estimated time frame for use of a PMO, estimated annual budgets for the next five years, scopes of work, etc. There should be an explanation as to why engineers on staff could not be hired to perform these functions, or on-island engineers.
14. Counsel recommends that PUC order GWA to provide a report to the PUC, within 60 days of its Order in this Docket, which addresses the following:
 - (a) A detailed explanation of GWA's proposed immediate and long range plans for use of the PMO, including the remainder of this fiscal year and over the next five years and beyond. Such explanation should include general tasks proposed and general scopes of work;
 - (b) A discussion of the need for a PMO; there was not a PMO utilized by GWA to handle Stipulated Order Projects from 2003 through 2011; what is the justification for the use of a PMO now? When the PMOs were approved by the PUC initially, the justification was the need created by the large number of military buildup projects. It now appears that the PMO is intended to perform the ongoing sewer and water projects of GWA;
 - (c) A discussion of how the PMO plans to institutionalize and pass on its skills to employees, what has been done to date, and what specific staff development and process improvement plan there are in effect;
 - (d) Provision by GWA to the PUC of copies of staff development and process improvement plan proposed and executed by PMO Brown & Caldwell, and portions of the GWA-Brown & Caldwell contract which specifies in detail precisely how the PMO will optimize the skills of GWA employees;
 - (e) A brief Outline of the major accomplishments of the PMO; and
 - (f) A description of the steps to-date that the PMO taken to develop the skills of GWA employees.

Certification by Legal Counsel
GWA Request for
Increase in PMO Contract
GPA Docket 11-02
April 24, 2013

15. Legal counsel has submitted a proposed Order to the PUC under separate cover.

SO CERTIFIED this 24th day of April, 2013.



Frederick J. Horecky
PUC Legal Counsel

Guam Waterworks Authority
Program Management Services Contract Work Authorization

TO: Brown and Caldwell
414 W. Soledad Ave.
Suite 500
Hagatna, Guam 96910

WORK AUTHORIZATION NO.: 2012-01-A2

SUBMITTAL DATE: February 1, 2013

FROM: Martin Roush
GENERAL MANAGER
GUAM WATERWORKS AUTHORITY

You are hereby authorized to perform the services described below in accordance with the Contract for Technical and Professional Services executed February 6, 2012 between Brown and Caldwell (BC) and Guam Waterworks Authority (GWA) for Program Management Services, GPA-RFP-11-005.

DESCRIPTION OF WORK AND FEE ESTIMATES

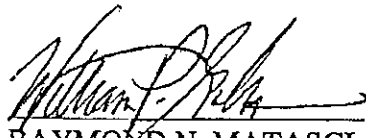
DESCRIPTION: General Program Management Support

Defined cost, scope and schedule on a time and materials basis are provided in the attached proposal letter and consist of providing general program management support for the GWA through June 30, 2013. This will be the second amendment to the program management work authorization 2012-01.

Notice to Proceed Date: _____

NOT TO EXCEED amount: \$ 289,770.00

Signed



RAYMOND N. MATASCI
VICE PRESIDENT/PROGRAM MANAGER
BROWN AND CALDWELL

Date 2/1/2013

GWA Reviewer:



Date 2/7/13

Signed



MARTIN ROUSH
GENERAL MANAGER
GUAM WATERWORKS AUTHORITY

Date 2-18-13

WORK AUTHORIZATION NO: 2012-01-A2

DESCRIPTION: General Program Management Support

GWA PROJECT MANAGER: Thomas Cruz

PROJECT BACKGROUND AND OBJECTIVE

The purpose of this task order is to provide general program management support for the GWA Program Management Office (PMO) through June 30, 2013. This is the second amendment to Work Authorization (WA) 2012-01.

SCOPE OF WORK

Task 1: Program Planning, Implementation and Management

The PMO will be responsible for implementing the program management plan.

The PMO will:

- use a progress monitoring system to track team expenditures and product completion, providing the basis for PMO actions;
- use a monthly review process that estimates level of effort to complete and determines value earned, providing the basis for work plan modifications to meet budget and schedule;
- manage staff resources and subconsultants to assure timely product generation and response; and
- conduct periodic quality control review of the work before final submittal to GWA.

The PMO will assist GWA with identifying project needs, planning the work, and coordinating with other Government of Guam agencies as required. The PMO will assist GWA in developing scopes of work and work plans for CIP projects, PUC Stipulated Order projects and Court Order projects as required including preparation of work authorizations. PMO staff will collect information via document review and GWA staff interviews to develop work authorizations including scopes, schedules, budgets, and staffing plans for tasks that GWA delegates to the PMO. The PMO will effectively manage the project team members and perform administrative tasks for the projects to produce a quality product within budget and schedule.

PMO Team Responsibilities: PMO staff will develop a draft and final program management plan along with periodic updates, as required. PMO staff will implement the plans and protocols listed in the program management plan. The PMO will develop work authorizations, scopes, schedules, budgets and staffing plans.

GWA Responsibilities: ~~GWA staff will review and provide comments on the plan. GWA staff~~ will be responsible for abiding by the protocols set forth in the plan.

Products: Program management plan periodic plan updates.

Task 2: Meeting and Reporting

Approach: PMO staff will be working closely with GWA staff to successfully deliver the program and will be required to meet with GWA regularly for specific task orders. It is expected that PMO staff will meet with GWA staff weekly and provide weekly action items reports along with monthly progress reports. Monthly reports will address earned values and percent resources (man-hours and expenses) expended to date, decision tracking reports (issues and their resolutions), schedule for design and construction activities, and program changes (initiated by GWA, design-related, and/or other forces). Templates will be developed for weekly and monthly reports and will be included in the program management plan described in Task 1.

PMO Team Responsibilities: BC staff will coordinate and attend weekly status meetings, develop weekly and monthly progress reports and invoices.

GWA Responsibilities: GWA staff will be required to attend meetings and review progress reports.

Products: Weekly and monthly progress reports and monthly invoices

Task 3: Program and Technical Support

Approach: The PMO will provide a highly qualified, specialized technical support team that covers architecture and engineering, management, business and organizational processes, technical and analytical presentations, inspection, claims management, and scientific disciplines necessary to respond to issues that may require specialized support during the contract period. This team shall be available for resolution of critical issues, claims, special design reviews and reports, inspections, and other specialized technical assistance during planning, design, construction and close-out phases of the program.

During the course of the program it is expected that GWA will require the PMO to conduct short duration and immediate tasks such as independent research, document review, technical opinions and evaluations. These tasks will often have critical and urgent deadlines, a brief scope and limited budget. It may be inefficient for such tasks to require the development of a stand alone work authorization. Program support will be used for the PMO to respond to GWA's instantaneous needs required to support the overall program.

The program will provide for housing subsistence, utilities, and a lease car for two full-time employees dedicated to the contract. In addition, airfare and per diem to bring technical experts to Guam limited to three personnel for one week duration each have been included.

PMO Team Responsibilities: The PMO will provide the technical support team as needed. The PMO will conduct short duration and immediate tasks as directed by GWA.

GWA Responsibilities: GWA staff will be required to attend meetings and provide available information to the PMO on upcoming tasks. GWA staff will be required to document the effort needed via e-mail or letter to the PMO.

Guam Waterworks Authority
Program Management Services Contract Work Authorization

Products: General services such as research and document review, reports, opinions, white papers, studies, meeting minutes, and memoranda.

Task 4: Program Contract Assistance and Document Sharing

Approach: At GWA's discretion, the PMO team will prepare and review requests for proposals and scopes of work. The program manager will also be available to participate in the negotiation of contracts with selected consultants and contractors for individual projects. Services are intended to include planning, design, design/build, construction, plant information (SCADA) and asset management systems, instrumentation contracts, and other tasks as may be requested by GWA.

The PMO will provide a process for collecting, organizing and disseminating data related to CIP projects, PUC Stipulated Order projects and Court Order projects. The PMO will capture documents generated both internally and externally to GWA and see that they are appropriately managed and maintained using a secure electronic document control system; e.g. SharePoint. This system will allow access to records, documents, decisions, publications, and dashboards that are critical to the success of GWA's program and that need to be shared in a secure manner with GWA staff, the PMO, consultants, contractors, and other appropriate entities. The basic functions of the document control system will assist in coordination, work collaboration and distribution of critical project and program information.

PMO Team Responsibilities: The PMO will provide contract assistance, as needed and host a SharePoint project site.

GWA Responsibilities: GWA staff will review contract documentation and utilize the SharePoint site in accordance with the protocols set forth in the program management plan.

Products: Contract documents and SharePoint site.

Guam Waterworks Authority
Program Management Services Contract Work Authorization

SCHEDULE

The effort described in this work authorization will be conducted from January 2013 through June 30, 2013.

BUDGET

This work order will be performed on a time and materials basis and will not exceed \$289,770 without written consent from GWA.

Labor				
Name	Labor Code	Labor Rate	Hours	Total
Gilman	M	239	312	\$ 74,568.00
Neff	K	218	100	\$ 21,800.00
Kloske	G	138	160	\$ 22,080.00
Enriquez	J	205	316	\$ 64,780.00
Matasci	M	239	80	\$ 19,120.00
Tamai	F	125	74	\$ 9,250.00
Accounting	E	108	32	\$ 3,456.00
Senior Support	L	239	94	\$ 22,466.00
Subtotal				\$ 237,520.00
Other Direct Costs				
Description				
Airfare \$2000 from HNL; \$3000 from Mainland				\$ 7,000.00
Rental Car \$70/day				\$ 1,050.00
Per Diem \$250/day				\$ 3,750.00
Overseas Housing Allowance \$2250/month				\$ 18,000.00
Utility/Recurring Maintenance \$600/month				\$ 4,800.00
Lease Car \$750/month				\$ 6,000.00
Subtotal				\$ 40,600.00
Total Work Order Estimate				
GRT 4.167%				\$ 11,591.76
Total				\$ 289,771.76

Guam Waterworks Authority
Program Management Services Contract Work Authorization

TO: Brown and Caldwell
414 W. Soledad Ave
Suite 500
Hagatna, Guam 96910

WORK AUTHORIZATION NO.: 2012-10-A2

SUBMITTAL DATE: February 7, 2013

FROM: Martin Roush
GENERAL MANAGER
GUAM WATERWORKS AUTHORITY

You are hereby authorized to perform the services described below in accordance with the Contract for Technical and Professional Services executed February 6, 2012 between Brown and Caldwell (BC) and Guam Waterworks Authority (GWA) for Program Management Services, GPA-RFP-11-005.

DESCRIPTION OF WORK AND FEE ESTIMATES

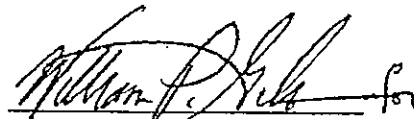
DESCRIPTION: Chaot and Agana Heights Design Build Package – Archeological Survey

Defined cost, scope and schedule on a time and materials basis are provided in the attached proposal letter and consist of providing an archeological survey to support the Chaot and Agana Heights tank replacement project as described in court order paragraph 28(c).

Notice to Proceed Date: _____

NOT TO EXCEED amount: \$ \$18,100.00

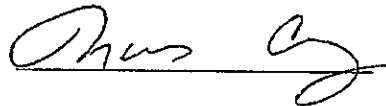
Signed



RAYMOND N. MATASCI
VICE PRESIDENT/PROGRAM MANAGER
BROWN AND CALDWELL

Date 2/5/2013

GWA Reviewer:



Date 2/7/13

Signed



MARTIN ROUSH
GENERAL MANAGER
GUAM WATERWORKS AUTHORITY

Date 2-18-13

WORK AUTHORIZATION NO: 2012-10-A2

DESCRIPTION: Chaot and Agana Heights Design Build Package – Archeological Survey

GWA PROJECT MANAGER: Thomas Cruz

PROJECT BACKGROUND AND OBJECTIVE

The purpose of this work authorization is provide an archeological survey to support the Chaot and Agana Heights tank replacement as described in court order paragraph 28(c).

SCOPE OF WORK

This work authorization will be performed by the team of Brown and Caldwell and SWCA listed herein as the PMO Team. This scope outlines the overall PMO Team scope, schedule, and budget. The specific SWCA scope, schedule, and budget are included in Attachment A.

Task 1: Task Management

Approach: GWA Program Management Office (PMO) staff will manage the scope, schedule, and budget associated with the work described in this Work Authorization to ensure that this work is managed in a manner that meets the intent of the GWA PMO Program Management Plan. This includes, but is not limited to, management of documents; change; risk; and quality assurance and control.

PMO Team Responsibilities: PMO staff will manage the scope, schedule and budget. The PMO lead will manage tasks in this Work Authorization in accordance with the protocols set forth in the GWA PMO Program Management Plan.

GWA Responsibilities: GWA staff will attend meetings, review progress reports, and adhere to the protocols set forth in the GWA PMO Program Management Plan.

Products: Task status reports; scope, schedule, and budget updates, as necessary.

Task 2: Archeological Survey

Approach: The PMO will conduct an archeological survey to support the replacement of the Chaot and Agana Heights tanks. SWCA will be primarily responsible for conducting the survey with review and oversight by the PMO team. The specific SWCA scope, schedule, and budget are attached as Attachment A.

PMO Team Responsibilities: Survey report as defined in Attachment A.

GWA Responsibilities: Attend meetings, provide information, and review deliverables as defined in Attachment A.

Products: Defined in Attachment A.

Guam Waterworks Authority
Program Management Services Contract Work Authorization

SCHEDULE

The schedule is provided in Attachment A.

BUDGET

This work order will be performed on a time and materials basis, and will not exceed \$18,100 without written consent from GWA. A detailed scope and budget supporting the subcontractor hours is located below and in Attachment A.

Labor				
Name	Labor Code	Labor Rate	Hours	Total
Gilman	L	239	8	\$ 1,912.00
Tamai	F	125	1	\$ 125.00
Subtotal				\$ 2,037.00
Subcontractor				
Description				
SWCA				\$ 13,960.00
		10% mark up		\$ 1,396.00
Subtotal				\$ 15,356.00
Total Work Order Estimate				
GRT 4.167%				\$ 724.77
Total				\$ 18,117.77

ATTACHMENT A
SUBCONTRACTOR SCOPE, SCHEDULE, AND BUDGET



ENVIRONMENTAL CONSULTANTS
Sound Science. Creative Solutions.

Guam Office
P.O. Box 23305, G.M.F.
Barrigada, Guam 96921
Tel 671.472.3117 Fax 671.472.3118
www.swca.com

2/36

January 20, 2013

Bill Gilman
Brown and Caldwell
414 W. Soledad Ave, Suite 500
Hagatna, Guam 96910

Re: Proposal for archaeological monitoring of GHD demolition and reconstruction activities at the Chaot and Agana Heights Reservoirs of the Guam Waterworks Authority

Dear Mr. Gilman:

SWCA is pleased to submit this cost proposal for the archaeological monitoring of the demolition of various structures of the Chaot and Agana Heights Reservoirs. These tasks are required by the Guam State Historic Preservation Office (Guam SHPO). SWCA understands we will be contracted to Brown and Caldwell the Prime Consultant of the Guam Waterworks Authority (GWA) Program Management Office (PMO) Team, but taking field direction from GHD, the specific task order manager.

As currently scoped the estimated total cost for monitoring labor (Time and Materials is \$4,560, and estimated total cost for preparation of the requisite archaeological monitoring plan as well as reporting (Fixed Fee/Lump Sum with Assumptions) is \$9,400 for a total of \$13,960. These costs are based on the expectation of GHD that there will be five (5) days of monitoring required, and no significant archaeological/historical discoveries. These cost estimates are subject to change if the monitoring goes beyond the GWA PMO, or if significant historic materials are encountered. Additionally, this proposal does not provide for recording, recovery, analysis and reporting on human burial remains, should human burials be discovered a change order will be required.

We sincerely appreciate this opportunity to provide the professional archaeological tasks required of GWA PMO. Should you have any questions, or if you need additional information, I can be reached at the office (671) 989-5896 or cell (671) 797-0885 at any time.

Sincerely,

Sandra Lee Yee

Principal Investigator and Senior Archaeologist
SWCA Environmental Consultants, Inc.

Cc: Tanya Johnson-Director Guam and Hawaii



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PROPOSAL

ARCHAEOLOGICAL MONITORING OF THE DEMOLITION AND RECONSTRUCTION OF THE CHAOT AND AGANA HEIGHTS RESERVOIRS

JANUARY 20, 2013

NOTICE

THE INFORMATION FURNISHED IN CONNECTION WITH THIS PROPOSAL WILL NOT BE DISCLOSED OUTSIDE OF THE GOVERNMENT AND WILL NOT BE DUPLICATED, USED, OR DISCLOSED IN WHOLE OR IN PART FOR ANY PURPOSE OTHER THAN TO EVALUATE THIS PROPOSAL; PROVIDED, THAT IF A CONTRACT IS AWARDED TO SWCA AS A RESULT OF OR IN CONNECTION WITH THE SUBMISSION OF THIS INFORMATION, THE GOVERNMENT WILL HAVE THE RIGHT TO DUPLICATE, USE, OR DISCLOSE THE INFORMATION TO THE EXTENT PROVIDED IN THE CONTRACT. THIS RESTRICTION DOES NOT LIMIT THE GOVERNMENT'S RIGHT TO USE INFORMATION CONTAINED IN THIS PROPOSAL IF IT IS OBTAINED FROM ANOTHER SOURCE WITHOUT RESTRICTION. THE INFORMATION CONTAINED IN THIS PROPOSAL IS SUBMITTED IN CONFIDENCE OR IS PRIVILEGED, AND IT IS EXEMPT FROM DISCLOSURE.

Prepared for:

GHD

865 South Marine Corps Drive, Ste.202
Tamuning, Guam 96913

Prepared by:

SWCA Environmental Consultants
705 South Marine Corps Drive
Tamuning, Guam 96913

ARCHAEOLOGICAL MONITORING OF THE DEMOLITION AND RECONSTRUCTION OF THE CHAOT AND AGANA HEIGHTS RESERVOIRS

1.0 BACKGROUND AND UNDERSTANDING OF THE PROJECT

SWCA Environmental Consultants (SWCA) proposes to undertake archaeological tasks to monitor the demolition and reconstruction of the Chaot and Agana Heights Reservoirs as directed by Mr. Bryan Ryley via email on January 17, 2013. The proposed archaeological work is in compliance with the current standard requirements of the Guam State Historic Preservation Office (SHPO).

For archaeological monitoring projects, the Guam SHPO requires preparation of an Archaeological Monitoring and Data Recovery Plan (AMDRP) prior to any ground disturbance. SWCA is providing here an estimate of the cost for that research and document preparation. Following research, preparation and approval of an AMDRP, monitoring of the demolition process may proceed under this current cost proposal. This will be followed by preparation of the brief end-of-fieldwork Management Summary report, and following all GIS/GPS and laboratory analysis, a technical archaeological report will be submitted to GHD for Guam SHPO archiving.

In our professional experience, additional work may be required by the Guam SHPO to mitigate damage to historic properties or burials encountered during monitoring. This potential additional work cannot be determined and budgeted until monitoring is underway. The cost estimate below does not include work associated with future requests by Guam SHPO for specific or extensive mitigation and data recovery tasks stemming from discoveries during monitoring. Costs associated with future SHPO requests will be estimated by SWCA upon request of GWA PMO.

2.0 WORK TO BE PERFORMED

If selected, SWCA will perform the specific tasks described below.

1. Preparation of an AMDRP
2. Monitoring of all ground disturbance during demolition and reconstruction
3. Data Recording
4. Data Recovery
5. Photography
6. Laboratory Analysis
7. Production of written reports (Management Summary and Technical)

3.0 SWCA COST PROPOSAL

The preparation of the AMDRP will be at a Fixed Fee/Lump Sum of \$5,600 that will include project management, consultations, archival research, and preparation of the document.

The field monitoring, that entails one archaeologist at one excavation/earth-moving machine for five (5) days of eight (8) hours each (40 hours total, as provided by GHD) will be on a Time and Materials basis for \$4,560. This will include all tasks needed to record the monitoring discoveries (GPS, photography, filling out of standard SWCA Field Monitoring Forms, travel to and from the work site, and minimal laboratory analysis).

The reporting will entail an end-of-field Management Summary Report, and a Final Technical Report. These will incorporate the GPS locations of any historic properties encountered/discovered into GIS maps, photographs of significant soil stratigraphy as well as natural strata for comparative purposes in the excavations resulting from the demolition or reconstruction activities and trenching. These reports will each have one review by GHD as well as one review by Guam SHPO before finalization. The estimated cost for these tasks is \$3,800.

Estimated Costs (with assumptions below)

TASK	Estimated hours	Estimated total cost
Prepare AMDRP	60	\$5,600
Monitoring (T&M)	40	\$4,560
Reporting	40	\$3,800
TOTAL		\$13,960

These quotes of hours and tasks are only estimates based upon the expected monitoring time (provided by GHD) and the related laboratory, management, and writing time (calculated by SWCA) assuming that no significant cultural/historic materials will be encountered. The final costs are fully dependent upon how much cultural material is encountered during ground disturbance, thus requiring recording, recovery, excavation, photography, analysis, and write-up.

Invoices will be submitted on a monthly basis. A final invoice will be submitted prior to submission of the final report.

4.0 ASSUMPTIONS AND LIMITATIONS

This estimate includes all labor and direct expenses that were requested and anticipated. It does not cover additional field work or efforts not outlined in this cost proposal or costs incurred by SWCA due to circumstances beyond its control (for example, field time lost to inclement weather, contractor excavation equipment breakdown, etc.).

No work outside the current proposal will be performed without the written permission of the client. This includes costs associated with preparing and presenting testimony before any administrative or judicial hearing, additional agency meetings, or additional field work. This proposal also does not cover any human burial recording, recovery, analysis, or write-up. Discovery of human remains will require a contract modification.

The client will provide SWCA with:

- Access to the Federal base and library archives for background research for original Navy files that may relate to the reservoir construction.
- Access to project plans and maps, including planning documents that have been prepared in computer format adaptable to or suitable for Auto-CAD or ESRI ArcGIS software.

- Rights-of-entry permission for SWCA field personnel to access the project sites at all times during the performance period.

Assumptions guiding this proposal:

A minimum four (4) hour half-day will be charged for any day that an archaeological monitor is requested even if work is cancelled by the contractor after departure of the archaeological monitor from the SWCA office.

Mileage to and from work sites (from SWCA office in Tamuning) will be charged at the standard rate of \$.56 per mile. Other direct costs for camera equipment use and Global Positioning System (GPS) use are accrued on a daily basis.

SWCA project management and safety tasks (for OSHA and other safety standards) are included in this SWCA proposal.

If more than five (5) days (40 hours) of monitoring become necessary, the monitoring will continue as needed on a T&M basis, with a monitoring fee of \$85/hour plus Other Direct Costs (ODCs).

If significant cultural materials or significant historic properties are encountered, thus requiring significant laboratory analysis, the additional T&M costs will be presented in a Change Contract Order (CCO) or addendum to GHD prior to the laboratory analysis proceeding. This will have effect on the amount of reporting time as well.

5.0 PLANNING AND PROGRAM SUPPORT

Field equipment may include digital cameras, laptop computers, and expendables (to be reimbursed as ODCs). SWCA will access the project area in the company owned Guam-based 4WD pickup and additional vehicles as necessary, all of which will be clearly marked with the SWCA logo.

6.0 DELIVERABLES

SWCA will provide the following deliverables (as part of the earlier cost proposal):

- An electronic (email) copy and one hard copy of the AMDRP to Brown and Caldwell and GHD, for their review, and reproduction for distribution as required by Guam SHPO.
- An electronic (email) copy of the Management Summary and Final Technical Reports to Brown & Caldwell and GHD, for their review, and reproduction for distribution as required by Guam SHPO.

7.0 PERFORMANCE PERIOD

The AMDRP research and writing will commence within two (2) weeks of SWCA receipt of Notice to Proceed (NTP). Monitoring can begin upon approval of the AMDRP by Guam SHPO. The Management Summary Report will be prepared for Brown and Caldwell and GHD within two (2)

weeks of the completion of all ground disturbance/fieldwork. The Final Technical Report will be delivered within three (3) months of the Guam SHPO approval of the Management Summary Report.

8.0 KNOWLEDGE, SKILLS, AND ABILITY TO PERFORM ARCHAEOLOGICAL INVESTIGATIONS

SWCA is a natural and cultural resource firm consisting of over 600 professionals in 24 offices throughout the western United States, Honolulu and Guam. The company has been in business since 1981, and has performed thousands of projects across the United States and its Territories involving natural and cultural resource management, planning, permitting, scientific investigation, survey, and other related services.

SWCA Guam staff has extensive experience with identifying and treating archaeological sites on Guam. Sandy Yee, M.A. will serve as Principal Investigator (PI) for the proposed investigations. Ms. Yee exceeds the qualifications for a professional archaeologist as outlined in Secretary of Interior's Standards and Guidelines (48 Federal Register 44716 ff, 29 Sept. 1983).

In addition to Ms. Yee, other members of the team will include Lynn Leon Guerrero, B.A. (Field Archaeologist), Russell Kanai, B.A. (Field Archaeologist) and Erbes Rumong (Field Assistant).

Sandra L. Yee, M.A. – Principal Investigator / Senior Archaeologist: Ms. Yee is SWCA's Guam Cultural Resources Office lead. She has more than 30 years experience working in the fields of archaeology, historic preservation, cultural resource management, cartography and anthropology. Her eight years experience on Guam has given her a sound understanding and knowledge of archaeology on the island. Ms. Yee holds a double B.A. in Anthropology and Geography, and an M.A. in Cultural Geography from the University of Hawaii. In addition to the full suite of cultural investigation skills from preparation of proposals, field surveys, excavation and data recovery, GPS data gathering, to final reports, Ms. Yee has supervised staff and managed both museum and consultancy offices.

Lynn R. Leon Guerrero, B.A. –Field Archaeologist: Ms. Leon Guerrero has worked as an archaeologist on Guam since 1998 after completing her B.A. at the University of Arizona. She has extensive experience as a field archaeologist, crew chief, and project supervisor. Ms. Leon Guerrero has worked on numerous archaeological projects on Guam and CNMI. These include inventory and assessment surveys, burial excavations, data recovery excavations, and archaeological monitoring. Duties include supervision of field crew, monitoring, survey and excavations, burial retrieval, and acquisition of GPS data using the Trimble GeoExplorer series. In addition, she supervises lab and data analysis of archaeological materials as well as the curation of project collections. Ms. Leon Guerrero has extensive experience with Guam and CNMI historic preservation laws, guidelines and procedures. This experience includes supervision and completion of field projects on federal, government, and private lands.

Russell Kanai, B.A. –Field Archaeologist: Mr. Kanai completed his B.A. at the University of Guam in 2003. He is a proficient field archaeologist whose responsibilities include supervision of cultural resource management projects on Guam and the CNMI. Mr. Kanai has conducted a variety of archaeological projects on Guam and Saipan, including inventory and assessment surveys, data recovery excavations, and archaeological monitoring. He has also undertaken and supervised the excavation of numerous sets of human remains, including the approximately 200 sets associated with the Okura Hotel Project on Tumon, Guam. In his current position Mr. Kanai is also responsible for site

recording, GPS (Global Positioning System) data collection and mapping, archaeological monitoring, data recovery, and survey investigations, as well as artifact analysis.

Erbes Rumong –Field Technician: Mr. Rumong is a proficient field archaeologist whose responsibilities include work on cultural resource management projects on. Mr. Rumong has worked on a variety of archaeological projects on Guam, including inventory and assessment surveys, data recovery excavations, and archaeological monitoring. He has also undertaken the excavation of numerous sets of human remains, including the approximately 200 sets associated with the Okura Hotel Project on Tumon, Guam. In his current position Mr. Rumong is also responsible for site recording, GPS (Global Positioning System) data collection and mapping, field and laboratory photography, archaeological monitoring, data recovery, and survey investigations, as well as artifact analysis, database compilation, and graphics preparation.

Ken Cochrane, M.S. – CADD/GIS Operator: Mr. Cochrane is a GIS Analyst at SWCA's Guam office with extensive Geographic Information Systems (GIS) expertise. His job consists of creating custom maps and exhibits using (GIS) for inclusion into reports and/or presentations. He collects, processes, and rectifies GPS data from the field surveys for analysis against existing environmental data to arrive at conclusions and make recommendations. He is intimately familiar with FGDC metadata standards, ESRI ArcGIS 9.x software and GPS data logging and integration, and able to meet all relevant DoD requirements for SDSFIE and related data formatting. Mr. Cochrane will be responsible for the creation of illustrative map graphics.

9.0 POINTS OF CONTACT

SWCA Guam:

Sandra Lee Yee, Principal Investigator / Senior Archaeologist, Office Phone:(671) 989-5896;Cell:(671) 797-0885; E-mail: syee@swca.com

GHD:

Bryan J. Ryley, Office Phone:(671) 472-6792; Cell:(671) 797-3336; FAX:(671) 477-6229; Email: bryan.ryley@ghd.com

Brown and Caldwell:

Bill Gilman, Office Phone: (671) 488-0975; Cell (671) 488-1867

Guam Waterworks Authority
Program Management Services Contract Work Authorization

TO: Brown and Caldwell
414 W. Soledad Ave
Suite 500
Hagatna, Guam 96910

WORK AUTHORIZATION NO.: 2012-12

SUBMITTAL DATE: January 31, 2013

FROM: Martin Roush
GENERAL MANAGER
GUAM WATERWORKS AUTHORITY

You are hereby authorized to perform the services described below in accordance with the Contract for Technical and Professional Services executed February 6, 2012 between Brown and Caldwell (BC) and Guam Waterworks Authority (GWA) for Program Management Services, GPA-RFP-11-005.

DESCRIPTION OF WORK AND FEE ESTIMATES

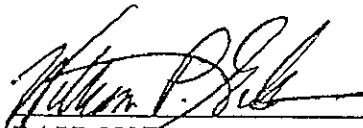
DESCRIPTION: Phase I Facility Evaluations - Umatac-Merizo Wastewater System Evaluation Phase I.

Defined cost, scope and schedule on a time and materials basis are provided in the attached proposal letter.

Notice to Proceed Date: _____.

NOT TO EXCEED amount: \$106,100.00.

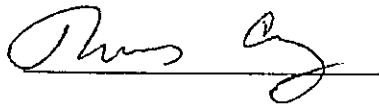
Signed



RAYMOND N. MATASCI
VICE PRESIDENT/PROGRAM MANAGER
BROWN AND CALDWELL

Date 2/1/2013

GWA Reviewer:



Date 2/7/13

Signed



MARTIN ROUSH
GENERAL MANAGER
GUAM WATERWORKS AUTHORITY

Date 2-18-13

WORK AUTHORIZATION NO: 2012-12

**DESCRIPTION: Phase I Facility Evaluations - Umatac-Merizo Wastewater System
Evaluation Phase I**

GWA PROJECT MANAGER: Thomas Cruz

PROJECT BACKGROUND AND OBJECTIVE

The purpose of this work authorization is to begin developing the Wastewater System Evaluations for the Southern Wastewater Treatment Plants. The evaluations will be conducted in a phased approach for three southern treatment plants. The first evaluation will be conducted for the Umatac-Merizo service area. The wastewater system evaluation process is designed to establish recommendations for capital improvements projects needed to meet the community's wastewater collection, transmission, treatment and effluent management needs and regulatory compliance through the year 2035. The evaluation shall include the collection system, the conveyance system, and the wastewater treatment plant for the service area as described in the November 10, 2011 Court Order for Preliminary Relief RE: Deadlines for Outstanding Projects Under the Amended Stipulated Order, Paragraph 15. This work authorization for Umatac-Merizo is for the first phase of a two-phase process, as outlined below:

Phase	Tasks
1	<ul style="list-style-type: none">• Task Management• Future Needs and Existing Facilities Evaluation• Development of Alternatives
2	<ul style="list-style-type: none">• Evaluation of Alternatives• Development of Recommended Approach• Preparation of the Wastewater System Evaluation Report for submittal to EPA

A separate work authorization for Phase 2 Umatac-Merizo facility evaluations and separate work authorizations for Agat-Santa Rita and Baza Gardens wastewater treatment facility evaluations will be prepared for GWA approval at a later date.

SCOPE OF WORK

This work authorization will be performed by Brown and Caldwell listed herein as the PMO Team. This scope outlines the overall PMO Team scope, schedule, and budget.

Task 1: Task Management

Approach: GWA Program Management Office (PMO) staff will manage the scope, schedule, and budget associated with the work described in this Work Authorization to ensure that this work is managed in a manner that meets the intent of the GWA PMO Program Management Plan. This includes, but is not limited to, management of documents; change; risk; and quality assurance and control.

PMO Team Responsibilities: PMO staff will manage the scope, schedule and budget. The

Guam Waterworks Authority
Program Management Services Contract Work Authorization

PMO lead will manage tasks in this Work Authorization in accordance with the protocols set forth in the GWA PMO Program Management Plan.

GWA Responsibilities: GWA staff will attend meetings, review progress reports, and adhere to the protocols set forth in the GWA PMO Program Management Plan.

Products: Task status reports; scope, schedule, and budget updates, as necessary.

Task 2: Future Needs and Existing Facilities Evaluation

Approach: The PMO Team will review available reports, permits, operating data, plans, specifications, and population projections. The PMO Team Leader will conduct a site visit of the wastewater facilities and surrounding community to review existing facilities, constraints, and potential opportunities. A visual assessment of the wastewater pump stations and treatment facilities will be conducted.

A kickoff meeting will be conducted with GWA management to review the planning process, discuss the organizational values as they pertain to future wastewater management in the Southern District, and to jointly develop goals for the facility planning process.

Flow and load projections will be developed for the planning period that will last through the year 2035. The projections will be separated into base flow and I/I. I/I will be expressed as ranges to reflect potential I/I reduction that will be quantified during a parallel I/I reduction analysis.

Collection and conveyance system needs will be assessed based on the flow projections and existing facility condition assessment. Applicable findings from the parallel SSES effort will be incorporated into the evaluations.

The existing wastewater treatment and disposal system at Umatac-Merizo will be evaluated to assess whether the existing facilities can be modified to achieve regulatory compliance under the future flow and load conditions, based on existing NPDES permit requirements. The evaluation will consist of:

- Assessment of the aerated lagoon treatment capabilities. Identification of potential lagoon modifications to meet future needs.
- Identification and evaluation of modifications to the existing overland flow system to enhance treatment and disposal capabilities to meet future dry weather flow needs without surface water discharge. If surface discharge during dry weather flow conditions is unavoidable, BC will identify additional treatment needs to achieve compliance with the existing NPDES permit conditions for discharge from the recirculation pond.
- Conduct a desktop evaluation of precipitation effects on the overland flow system and the potential for wet weather surface water discharge from the recirculation pond.

Guam Waterworks Authority
Program Management Services Contract Work Authorization

- Conduct a desktop evaluation of additional treatment and/or storage needs to achieve compliance with the existing NPDES permit conditions for wet weather discharge from the recirculation pond.

Planning level capital and operations and maintenance cost estimates for continuing with the existing aerated lagoon/overland flow system (modified as necessary) will be prepared.

Alternatives to continuing with the existing lagoon/overland flow system (modified as necessary) will be identified and screened at a conceptual level. The most-promising alternatives will be evaluated in more detail during the future Phase 2 work authorization.

A draft TM will be prepared that summarizes the evaluations for GWA review and comment. A final TM will not be prepared; the evaluation findings and GWA comments will be incorporated into the Wastewater System Evaluation Report that will be prepared during the future Phase 2 work authorization.

PMO Team Responsibilities: Prepare draft TM

GWA Responsibilities: Respond to questions from PMO Team. Review draft TM.

Products: Draft TM for internal GWA review and comment.

SCHEDULE

The Phase I Umatac-Merizo TM will be developed by June 30, 2013.

Guam Waterworks Authority
Program Management Services Contract Work Authorization

BUDGET

This work order will be performed on a time and materials basis and will not exceed \$106,100 without written consent from GWA.

Labor				
Name	Labor Code	Labor Rate	Hours	Amount
Gilman/Muirhead/Ono	L	\$239	16	\$3,824
Neff	K	\$218	20	\$4,360
Lekven	J	\$205	156	\$31,980
Constantinescu	H	\$162	296	\$47,952
Lead Drafter	F	\$125	32	\$4,000
Admin Supervisor	F	\$125	49	\$6,125
Labor Subtotal				\$98,241
Other Direct Costs				
Description				Amount
Project supplies				\$59
Travel				\$3,600
ODC Subtotal				\$3,659
Total Work Order Estimate				\$101,900
GRT 4.167%				\$4,246
Total				\$106,146

Guam Waterworks Authority
Program Management Services Contract Work Authorization

TO: Brown and Caldwell
414 W. Soledad Ave
Suite 500
Hagatna, Guam 96910

WORK AUTHORIZATION NO.: 2013-01

SUBMITTAL DATE: January 31, 2013

FROM: Martin Roush
GENERAL MANAGER
GUAM WATERWORKS AUTHORITY

You are hereby authorized to perform the services described below in accordance with the Contract for Technical and Professional Services executed February 6, 2012 between Brown and Caldwell (BC) and Guam Waterworks Authority (GWA) for Program Management Services, GPA-RFP-11-005.

DESCRIPTION OF WORK AND FEE ESTIMATES

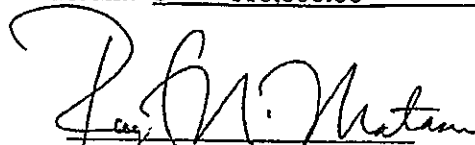
DESCRIPTION: Phase I Project Management for Agana WWTP Primary Treatment Upgrade Improvements

Defined cost, scope and schedule on a time and materials basis are provided in the attached proposal letter and consist of providing project management services for the Phase I oversight of the Agana Wastewater Treatment Plant (WWTP) Primary Treatment Upgrade for GWA.

Notice to Proceed Date: _____

NOT TO EXCEED amount: \$ 110,800.00

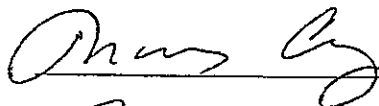
Signed



RAYMOND N. MATASCI
VICE PRESIDENT/PROGRAM MANAGER
BROWN AND CALDWELL

Date 29 JANUARY 2013

GWA Reviewer:



Date 2/7/13

Signed



MARTIN ROUSH
GENERAL MANAGER
GUAM WATERWORKS AUTHORITY

Date 2-18-13

WORK AUTHORIZATION NO: 2013-03

DESCRIPTION: Phase I Project Management for Agana WWTP Interim Improvements

GWA PROJECT MANAGER: Thomas Cruz

PROJECT BACKGROUND AND OBJECTIVE

The purpose of this task order is to provide project management and technical advice for the oversight of the Agana Wastewater Treatment Plant (WWTP) Primary Treatment Upgrade Project. This work will be performed in phases. This work authorization is for the Phase I services, which will run through June 30, 2013. GWA contracted with the design/builder GCIFI to complete the primary treatment upgrade improvements to the Agana WWTP. GHD will be providing construction management services under a separate work authorization.

SCOPE OF WORK

This work authorization will be performed by the team of Brown and Caldwell referred to herein as the Program Management Office (PMO) Team. This scope outlines the overall PMO Team scope, schedule, and budget.

Task 1: Task Management

Approach: GWA PMO staff will manage the scope, schedule, and budget associated with the work described in this Work Authorization to ensure that this work is managed in a manner that meets the intent of the GWA PMO Program Management Plan. This includes, but is not limited to, management of documents; change; risk; and quality assurance and control.

PMO Team Responsibilities: PMO staff will manage the scope, schedule and budget. The PMO lead will manage tasks in this Work Authorization in accordance with the protocols set forth in the GWA PMO Program Management Plan.

GWA Responsibilities: GWA staff will attend meetings, review progress reports, and adhere to the protocols set forth in the GWA PMO Program Management Plan.

Products: Task status reports; scope, schedule, and budget updates, as necessary.

Task 2: Project Management Oversight of Agana WWTP Interim Improvements

Approach: PMO staff will act as GWA's project manager for the Agana WWTP Interim Improvements contract. The main purpose is to monitor for performance and contract compliance of GWA's design/build contractor. Main duties will consist of:

- reviewing contractor and consultant deliverables for completeness, accuracy, and technical and financial feasibility
- assisting GWA in evaluation of technical approaches presented by the contractor and consultants

Guam Waterworks Authority
Program Management Services Contract Work Authorization

- providing oversight of construction management contract
- reviewing invoices, tracking schedule and budget, and general project scope oversight
- managing administrative and legal notices that affect the work
- coordinating communications between contractors and GWA
- determining the impact of changes or unforeseen site conditions that might require a change to the original design or contract agreements
- providing technical engineering advice to GWA on issues arising during the contract
- evaluating changes in the work and claims management involving GWA
- assisting GWA in making decisions to stop work and possible termination of the contracts
- attending periodic meetings
- observing construction activities for general conformance with the contract documents
- providing engineering advice to GWA operations on operational decisions that arise during the contract
- assisting in the coordination with other GovGuam departments and divisions
- assisting in the coordination with other contractors, surveyors, engineers, and regulators
- assisting GWA in conducting final project close out

PMO Team Responsibilities: PMO staff will perform duties outlined in the approach. The PMO anticipates the use of senior, experienced engineers and operators for technical advice as required, and staff engineers for field observation and construction related activities at regular intervals over the duration of the project. The PMO will also track project status with regards to scope, schedule, and budget. Two site visit trips have been budgeted for off-island senior technical experts during the course of the project.

GWA Responsibilities: GWA staff will provide oversight and attend meetings, review progress reports, and adhere to the protocols set forth in the GWA PMO Program Management Plan.

Products: Meeting minutes, memos, and reports as necessary.

Task 3: Meetings and Progress Reports

Approach: PMO staff will attend bi-weekly meetings with GWA and the design/build contractors and provide monthly progress reports to GWA on our evaluation of the status of the projects. PMO staff will arrange for additional meetings, as required, based on design progress and issue resolution.

PMO Team Responsibilities: The PMO staff will attend meetings and develop monthly progress reports.

GWA Responsibilities: GWA staff review reports.

Products: Monthly progress reports.

Guam Waterworks Authority
Program Management Services Contract Work Authorization

SCHEDULE

The project management scope of services described in this work authorization are expected to be required over the entire duration of the existing GCIFI contract for primary treatment upgrade at the Agana WWTP. The estimated completion of the GCIFI contract is December 2013. However, the estimated completion for this phase 1 work authorization is June 30, 2013. A subsequent phase 2 work authorization, similar to this work authorization in scope and fee, will be required to continue providing project management services from July 01, 2013 to project completion in December 2013.

BUDGET

This work order will be performed on a time and materials basis and will not exceed \$110,800.00 without written consent from GWA.

Labor				
Name	Labor Code	Labor Rate	Hours	Total
Gilman	M	239	160	\$ 38,240.00
Kloske	G	138	200	\$ 27,600.00
Tamai	F	125	30	\$ 3,750.00
Muirhead/Ono/Melcer	L	239	82	\$ 19,598.00
Neff	K	218	28	\$ 6,104.00
Matasci	M	239	12	\$ 2,868.00
Subtotal				\$ 98,160.00
Other Direct Costs				
Description				
Airfare \$2000 from HNL; \$3000 from Mainland				\$ 5,000.00
Rental Car \$70/day; \$1000 monthly				\$ 700.00
Per diem \$250/day				\$ 2,500.00
Subtotal				\$ 8,200.00
Total Work Order Estimate				
GRT 4.167%				\$ 4,432.02
Total				\$110,792.02

Guam Waterworks Authority
Program Management Services Contract Work Authorization

TO: Brown and Caldwell
414 W. Soledad Ave
Suite 500
Hagatna, Guam 96910

WORK AUTHORIZATION NO.: 2013-02

SUBMITTAL DATE: January 31, 2013

FROM: Martin Roush
GENERAL MANAGER
GUAM WATERWORKS AUTHORITY

You are hereby authorized to perform the services described below in accordance with the Contract for Technical and Professional Services executed February 6, 2012 between Brown and Caldwell (BC) and Guam Waterworks Authority (GWA) for Program Management Services, GPA-RFP-11-005.

DESCRIPTION OF WORK AND FEE ESTIMATES

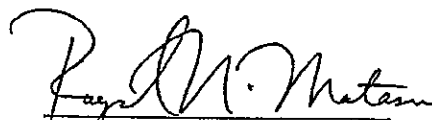
DESCRIPTION: Phase I Construction Management for Agana WWTP Primary Treatment Upgrade Improvements

Defined cost, scope and schedule on a time and materials basis are provided in the attached proposal letter and consist of providing construction management services for Phase I of the Agana Wastewater Treatment Plant (WWTP) Primary Treatment Upgrade for GWA.

Notice to Proceed Date: _____

NOT TO EXCEED amount: \$ 241,000.00

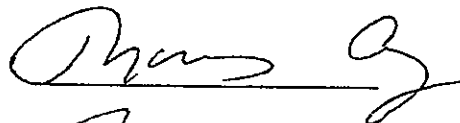
Signed



RAYMOND N. MATASCI
VICE PRESIDENT/PROGRAM MANAGER
BROWN AND CALDWELL

Date 29 JANUARY 2013

GWA Reviewer:



Date 2/7/13

Signed



MARTIN ROUSH
GENERAL MANAGER
GUAM WATERWORKS AUTHORITY

Date 2-18-13

WORK AUTHORIZATION NO: 2013-02

DESCRIPTION: Phase I Construction Management for Agana WWTP Primary Treatment Upgrade Improvements

GWA PROJECT MANAGER: Thomas Cruz

PROJECT BACKGROUND AND OBJECTIVE

The purpose of this task order is to provide construction management and technical advice of the Agana Wastewater Treatment Plant (WWTP) Primary Treatment Upgrade Project. This work will be performed in phases. This work authorization is for the Phase I services which will run through June 30, 2013.

SCOPE OF WORK

This work authorization will be performed by the team of Brown and Caldwell and GHD listed herein as the PMO Team. Task management for this scope is covered under WA 2013-01 Phase I Project Management for the Agana WWTP Primary Treatment Upgrade Improvements. The specific GHD scope, schedule, and budget are included in Attachment A.

Task 1: Construction Management

Approach: The PMO will provide construction management services for GWA on the Agana Wastewater Treatment Plant (WWTP) Primary Treatment Upgrade Project. The specific GHD scope, schedule, and budget are attached as Attachment A.

PMO Team Responsibilities: Construction management services as defined in Attachment A.

GWA Responsibilities: Attend meetings, provide information, and review deliverables as defined in Attachment A.

Products: Defined in Attachment A.

SCHEDULE

The construction management scope of services described in this work authorization are expected to be required over the entire duration of the existing GCIFI contract for primary treatment upgrade at the Agana WWTP. The estimated completion of the GCIFI contract is December 2013. However, the estimated completion for this phase 1 work authorization is June 30, 2013. A subsequent phase 2 work authorization, similar to this work authorization in scope and fee, will be required to continue providing project management services from July 01, 2013 to project completion in December 2013.

Guam Waterworks Authority
Program Management Services Contract Work Authorization

BUDGET

A detailed scope and budget supporting the subcontractor hours is included in Attachment A.

Subcontractor			
Description			
GHD			\$ 210,312.00
		10% mark up	\$ 21,031.20
Subtotal			\$ 231,343.20
Total Work Order Estimate			
GRT 4.167%			\$ 9,640.07
Total			\$ 240,983.27

ATTACHMENT A
SUBCONTRACTOR SCOPE, SCHEDULE, AND BUDGET



Agana Wastewater Treatment Plant Primary Treatment Upgrades

Construction Management Services

Phase I Scope of Work and Fees (01/25/13)

I. GENERAL

GHD, as the Construction Manager (CM), will provide services relating to the field observation, testing, supervision, management, coordination, and compliance monitoring for the construction of the Agana Wastewater Treatment Plant (AWWTP) primary Treatment Upgrades. The project is a design-build project for the primary treatment and the sludge handling system for the AWWTP located at Hagatna Bay.

The primary treatment system design and construction includes: chemical enhanced primary treatment (CEPT), clarifier repair, improvements and modifications for flocculation tanks, clarifiers' inlet and outlet channels, and fine screening process. Associated equipment and instruments for the primary treatment process such as variable frequency drive sludge pumps, clarifiers' baffles, CEPT chemical dosing system, electromagnetic flow meters and sludge blanket meters are also included.

The sludge handling system design and construction includes modification of the centrate piping to the new screening structure. Associated equipment and instruments for the sludge handling system includes, but not limited to, variable frequency drive centrifuge feed pumps, electromagnetic flow meters and piping improvements to/from the existing aerobic digesters. Improvements to the scum collection system, the sludge dewatering system, and the effluent pumping and discharge systems are included.

II. PROJECT OVERVIEW

The construction management, testing, and field observation services for the project will require general construction management and observation as well as specialized inspection and testing. In addition to general construction management duties, specialized inspection and/or testing identified for the Section 01400 Technical Specifications will be provided.

III. PHASE-I CONSTRUCTION PHASE SERVICES

The CM will review, record, and comment on submittal of Quality Control Plan submitted by the Construction Contractor. Upon receipt of the final construction documents, GHD will: develop, implement and maintain a Quality Assurance Plan for civil, structural,

electrical and mechanical elements including specialized work related to the construction of the new facilities.

GHD will file contractor certifications; review, file and submit inspection test results; and assess substantial completion.

Contents of the Quality Assurance Plan should include the following:

- Documentation of site conditions prior to beginning construction
- Review of approved submittals from the Contractor prior to fabrication or installation of materials and equipment
- Inspection, observation, and documentation of daily field work
- Monitoring of the Contractor's Quality Control Plan
- Reports and record keeping
- Non-conforming and deficient work resolution process
- Monitoring the Construction Contractor's implementation of their Quality Control Plan

It is important to note, the CM is responsible for monitoring the Contractor's compliance with the Contract Documents, but is not responsible for the means and methods, techniques, sequences, or procedures the Contractor may use to perform the work.

Task A1.0: Construction Management Plan. GHD will develop and implement the Construction Management Plan including guidelines for project organization and coordination in the field, standard daily operations, change order procedures, safety, quality, and cost control. This Construction Management Plan (CM Plan) sets forth the procedures and approach for the construction of the project. The CM Plan will serve GHD, the Owner's Representatives, and Contractors by defining the project, project team members and their roles, coordination among team members, procedures, and key milestones and schedule constraints. By establishing these parameters early in the project, the CM Plan will help control resources and costs, and establish communication and coordination between GHD, the Owner's Representative, Designers, and the Contractor.

Task A2.0: Quality Assurance Plan. GHD will prepare a Quality Assurance Plan (QA Plan) for use during the entire duration of work as it progresses, and shall have responsibility for reviewing the accuracy and completeness of the Contractors Quality Control Plan. All meeting notes, contract change orders, progress payments, labor compliance documentation, reports, etc. and other work performed under this Contract will be coordinated and monitored. The CM shall meet that responsibility through the implementation of the QA Plan well in advance of the start of field work.

Task A3.0: Implement & Maintain Project Controls (PC). These services shall be provided to insure that the project is efficiently managed and constructed according to the terms of the Contract and the Request for Proposal. The PC function is concerned

with gathering data regarding project progresses, producing progress reports; and monitoring time, cost, and quality.

The Project Controls system will include the following:

- A Cost Management Process that monitors, predicts, and reports project cost.
- A Planning and Scheduling Management Process that plans project activities, monitors completion of those activities, predicts timing of future activities, and reports schedule status.
- A Change Management Process that estimates the impact of change, enables and documents the change decision, and integrates the change into the project scope of work.

GHD will use New Forma for Document Management, and BST for CM cost management.

Task A4.0: Project Correspondence (Review & Maintenance). The CM shall prepare correspondence, reports, and inspection documentation as required to communicate project activities and issues with GWA and the Contractor. The CM shall develop a format for daily or weekly reports for the approval of Brown and Caldwell. At a minimum, the following reports and inspection documents shall be provided.

Task A4.1: Daily Construction Logs. The onsite inspector(s) shall maintain a log of material deliveries, daily production, site conditions, field orders, punch lists, progress photos, material testing, documentation of delays, and other material facts and issues regarding prosecution of the work. The Daily Construction Log shall be available to GWA Project Engineer for review at any time.

Task A4.2: Weekly Status Report. The CM shall prepare and submit a weekly construction progress report to the Brown and Caldwell project manager or designated project manager. The status report shall summarize the daily constructions, weekly progress meetings with the Contractor.

Task A4.3: Material Testing Forms. The CM shall prepare material testing forms for the approval of Brown and Caldwell. The forms shall capture all material testing requirements set forth by the Design Documents.

Task A4.4: Progress Photo Log. The CM shall prepare and retain a construction progress photo log in an organized album with phases of the project clearly labelled. The photo log shall capture all phases of the project pre-construction, during construction, and post-construction.

Task A5.0: Submittals & Shop Drawings. The CM shall process a limited number of submittals requiring review on behalf of GWA as may be required by the Contract documents. At this time it is estimated that approximately 125 submittals and 50 shop drawings will require review by the CM. In the event of a Contractor request for a time

extension or material or equipment substitution, the CM shall make a recommendation to Brown and Caldwell regarding the substitution. The Brown and Caldwell project manager will approve all substitutions.

Task A5.1: Contractor Project Schedules. The CM shall review the Contractor's work schedule for accuracy and for efficient sequencing of the work. GHD will direct the Contractor to make any changes deemed necessary and coordinate approval of the revised schedule with Brown and Caldwell. Any delays shall be documented and notified to Brown and Caldwell and the Contractor when actual progress is behind schedule.

Task A6.0: Payment Requests. The CM shall receive and process all payment requests from the Contractor. Payment requests shall be reviewed for compliance with Bid and Contract requirements and with the actual work completed. Upon completion of the review, the CM shall make any necessary adjustments, certify, and forward the request to Brown and Caldwell for processing of the payment. The CM shall submit their review and recommendations within 7 working days of receipt from the Contractor.

Task A6.1: Payroll Reports. The CM shall also review any payroll submittals required by the Contract including prevailing wage submissions. At a minimum, the Contractor and its subcontractors should be providing bi-weekly pay records for each of its employees on the project. GHD will also conduct random employee interviews to verify the pay request information. Upon completion of the review, the CM shall require the Contractor to make any necessary adjustments, certify, and forward the Payroll report along with the pay request to Brown and Caldwell for processing.

Task A7.0: Project Meetings. The CM shall schedule, arrange, and conduct conferences and meetings as required for clear communication of contract requirements and adherence to schedules.

Task A7.1: Pre-construction Conference. The CM shall prepare for, chair, and provide meeting minutes for the pre-construction conference. The preconstruction conference shall be arranged to discuss mobilization, prosecution of work, safety, environmental protection, historic preservation, processing payments, material submittals, testing procedure, project schedules, inspections, and all other contract issues as necessary.

Task A7.2: Progress Meetings. The CM shall arrange for a weekly progress meeting with the Contractor and Brown and Caldwell to discuss progress of work, contract requirements, and other issues related to the administration and prosecution of the work. The CM shall prepare meeting minutes for all progress meetings with contractors, sub-contractors, and Brown and Caldwell. The meeting minutes shall include action items from week to week until it has been completed. Meeting minutes will be provided to Brown and Caldwell, the Contractor and subcontractors within 48 hours following the meeting.

Task A7.3: As-built Drawing reviews. After each weekly meeting, the CM shall review the Contractor's record drawings to ensure that they are current and capture any deviations from the original plan set.

Task A7.4: Other Meetings. Arrange meeting between the Contractor and Brown and Caldwell, GWA, and other parties such as GEPA and DPW as necessary to address project issues that require decisions that cannot be made by the CM or to resolve regulatory concerns.

Task A8.0: Request for Information. Track all Requests for Information (RFI) and maintain an RFI log. Coordinate receipt of answers from GWA. Assist Brown and Caldwell with the development of RFI responses.

Task A9.0: Change Order. The CM shall promptly notify the Brown and Caldwell project manager regarding any issues that arise during construction of the project that could result in claims and/or disputes. The CM shall provide the following services to assist Brown and Caldwell with the resolution of claims and disputes.

Task A9.1: Change Order Review. Track all Change Orders (original to be provided to Brown and Caldwell) and maintain a Change Order Log. Provide change order evaluations, negotiations, and recommendations for approval by GWA. Change orders shall not be made when the Contractor has assumed such risk in the bid. Change Orders may include requests for additional payments for differing site conditions and the CM shall utilize the bid documents to determine if a Change Order is warranted. CM shall submit change order requests and supporting documentation to Brown and Caldwell for approval within 7 working days of receipt from the Contractor wherever practical.

Task A9.2: Change Order Negotiation with Contractor. Prepare independent cost estimates and negotiate with Contractor subject to Brown and Caldwell approval (final approval of negotiated change orders can only be made by the GWA General Manager).

Task A9.3: Change Order Documents. The CM shall maintain copies for all approved change orders (originals to be provided to Brown and Caldwell) and insure that subsequent pay requests accurately represent these change orders. Approved change orders shall be administrated by the CM along with other work elements according to the provisions of this scope of work.

Task A10.0: Project Records & Document Management/Communication. The CM shall maintain a project record in a clearly labelled/ tabbed set of 3-ring binders and electronic copies. The project records shall include all project correspondences, photos, daily logs, weekly reports, and other items required to document the construction process. Communicate and coordinate with all stakeholders during the construction phase. Notify Brown and Caldwell of any problems with the work or the Contractors.

Task A11.0: Construction Observation, Inspection and Quality Control Monitoring. The CM shall provide full time observation and special inspection services as needed for construction to ensure that the work is accomplished in accordance with the Contract documents. A full time Resident Engineer shall be at the site during normal working hours unless attending project related meetings or during holidays, vacation or sick days

Task A11.1: On-site Inspector. The CM shall provide a full time competent on-site field staff person to observe all phases of the construction. The onsite field staff shall have demonstrable experience (satisfactory to Brown and Caldwell) relative to the discipline and type of work being performed. Project field staff shall review project documents, conduct daily observations, special inspections (where applicable), prepare and submit Daily Observation and Special Inspection Reports; communicate deficiency issues and resolve with Contractor; and update Non-Compliance Log. It is anticipated that one field staff will be present at the site during normal working hours. The Resident Engineer will determine which field staff will be onsite but it may be comprised of civil, structural or electrical field staff with the intent that there will be at least one of them on site during normal working hours and will be supported by additional Special Inspectors as described in Task 9.2.

Task A11.2: Review of Salvaged Items. The CM shall identify all items to be salvaged prior to start of work. The CM will assure salvaged items are properly disconnected to retain their full salvaged value and cleaned before being turned over to the owner.

Task A11.3: Special Inspections. In addition to general compliance inspections, the CM shall provide Special Inspection services in accordance with IBC 2009, Chapter 17 by a person with demonstrable experience (satisfactory to Brown & Caldwell) related to concrete placement, structural welding, reinforcing steel placement, and other operations that require special inspections to include the following:

1. Structural fill.
2. Deep foundations including piling.
3. Structural concrete and reinforcing.
4. Anchor bolts and post-installed anchor systems.
5. Masonry Systems, complete.
6. Structural steel and aluminum including connections.
7. Cold formed structural steel including connections.
8. Steel deck and wood sheathing.
9. Structural lumber including sawn and manufactured including connections.
10. All components of the lateral force resisting system not included in the above.

Task A11.4.0: Testing.

Task A11.4.1: Contractor Testing: Review Testing Laboratory Qualifications. Review Contractor's tracking of QCS activities at weekly progress meetings. Review Test and Inspection Reports for fill materials, paving materials, concrete reinforcing and

cast-in-place concrete to verify materials proposed for use conform to specification requirements. Reports shall be distributed as product data submittals. Assist Contractor to ensure that Special Inspections & Testing occurs when and where specified. Schedule, observe, approve or reject, and document all testing required to be performed by the Contractor.

Task A11.4.2: CM/CQA Testing. The CM shall provide CQA testing as necessary to monitor the Contractor's or Owner's independent testing firm.

Task A11.4.3: Witness Equipment and System Performance and Operational Testing. The CM shall review the test documentation and calibration plans and the specified system or equipment test plans as prepared by the contractor. The CM shall review documentation forms for all systems and items of equipment to be tested as prepared by contractor. The CM shall witness in coordination with the contractors quality assurance manager, operational testing, commissioning, performance acceptance tests, calibration work, etc. to certify that all equipment and systems comply with the requirements of the plans and specifications.

CLARIFICATIONS:

1. Stop Work Orders: It is understood that the CM may issue written stop work orders to the Contractor in accordance with the RFP and GWA policies for a portion of or the entire project for Contract non-compliance issues as follows:
 - (a) If condition of work or Contractor actions threaten the health and safety of Contractor's personnel, GWA representatives, or the public in such cases, stop work orders may be oral depending on the circumstances (with written stop work order to follow).
 - (b) With prior notification and approval of the GWA Chief Engineer or Project Manager in all other cases.
2. No formal Partnering Program will be provided but GHD will incorporate partnering to the extent required in the RFP to ensure a safe jobsite; ensure that environmental commitments are met; complete the project on time by resolving disputes quickly; finish within budget by proactively monitoring costs and facilitating creative solutions when faced with potential cost increases; ensure that quality is met by adequate oversight by the Contractor and CM.
3. No project specific permitting services are included but GHD will assist Brown and Caldwell, designer, and the Contractor as needed to help facilitate procurement of permits as expeditiously as possible.
4. No Archeological Survey, Section 106 Historic Preservation, biological resource monitoring, Section 7 Endangered Species Act or related work is included.

5. Any and all permit fees are excluded.
6. It is understood that the intent is for GHD to provide an equivalent single full-time staff as a combined role of both Resident Engineer and Assistant Project Manager for the duration of ten (10) months (approximately 217 work days or 301 calendar days); 10 months of one (1) half-time inspector and additional support staff as needed for a 10 month construction period. This is based upon a standard 40-hour work week.
7. It is our understanding that CM Services will be provided in two (2) phases. Phase I will be for approximately 4 months and Phase II for 6 months. A separate proposal shall be prepared for the additional Phase II CM Services to include construction phase tasks as outlined in this proposal above and additional project closeout services such as punch list development, project closeout inspections, startup & training, warranty compilation, preparation of final report, record drawings, warranty follow-up, etc. and other services tasks as may requested by Brown and Caldwell. Proposed phasing is anticipated as follows:
 - Phase I shall be for the period of March 01, 2013 through June 30, 2013 (4 months).
 - Phase II shall be for the period of July 01, 2013 through December 31, 2013 (6 months).
8. Until the complete construction drawings are available to assess a more precise level of effort for Special Inspections, a conservative estimate was determined based on preliminary specifications documents.
9. It is agreed that GHD will provide construction phase services through the time indicated in Exhibit A, exclusive of the Adverse Weather Delays and will extend the construction phase services for a maximum of 20 additional days (30 calendar days) due to adverse weather delays under the following conditions:
 - (a) GHD will not be required to staff the project during adverse weather delays and can adjust staffing during the course of the project to properly manage its budget but maintaining the intent of providing the equivalent of a total of 4 months for the Phase I services as described above.
 - (b) The Construction contract will include requirements that the Construction Contractor pay for overtime inspection outside of the normal 40 hour work week and this requirement will be strictly enforced and supported by GWA with payment coming out of the Contractor's Pay Request and then distributed to GHD by GWA or by other acceptable terms to GHD and GWA.
 - (c) Brown and Caldwell agrees to negotiate with GHD for change orders for additional construction phase services due to construction delays, additional work,

adverse weather delays in addition to those described above, or any other reason not due to the negligent acts of GHD until final acceptance of the project is achieved.

10. It is understood that the DB contractor shall provide a space in the temporary construction facilities for use by the Construction Manager.

11. Structural Observation shall be provided by the DB Engineer and not the Construction Manager. The Contractors QCS shall include a preliminary set of Structural Observations and what items are expected to be observed.

12. Proposal excludes GRT (Gross Receipts Tax)

IV. FEE SCHEDULE

ITEM	TASK DESCRIPTION	AMOUNT
	PHASE I CONSTRUCTION MANAGEMENT SERVICES	
A1.0	Construction Management Plan	\$10,540
A2.0	Quality Assurance Plan	\$10,540
A3.0	Implement & Maintain Project Controls	\$600
A4.0	Project Correspondence	\$29,910
A5.0	Submittals & Shop Drawings	\$21,700
A6.0	Payment Requests	\$3,880
A7.0	Project Meetings	\$21,020
A8.0	Request for Information	\$25,085
A9.0	Change Orders	\$14,850
A10.0	Project Records & Document Management/Communication	\$5,400
A11.0	Construction Observation, Inspection, and Quality Control Monitoring	\$51,552
	SUBTOTAL EXPENSES FOR PHASE I CONSTRUCTION SERVICES	\$15,235
	SUBTOTAL PHASE I CONSTRUCTION PHASE SERVICES	\$210,312
	GRT (4.167 %)	\$0
	GRAND TOTAL	\$210,312

Guam Waterworks Authority
Program Management Services Contract Work Authorization

TO: Brown and Caldwell
414 W. Soledad Ave
Suite 500
Hagatna, Guam 96910

WORK AUTHORIZATION NO.: WA 2013-03

SUBMITTAL DATE: February 1, 2013

FROM: Martin Roush
GENERAL MANAGER
GUAM WATERWORKS AUTHORITY

You are hereby authorized to perform the services described below in accordance with the Contract for Technical and Professional Services executed February 6, 2012 between Brown and Caldwell (BC) and Guam Waterworks Authority (GWA) for Program Management Services, GPA-RFP-11-005.

DESCRIPTION OF WORK AND FEE ESTIMATES


DESCRIPTION: Southern Sewer Basin Sanitary Sewer Evaluation Survey (SSES)

Defined cost, scope and schedule on a time and materials basis are provided in the attached proposal letter and consist of conducting a SSES for the three southern Guam sanitary sewer basins in accordance with the I/I Analyses and SSES Work Plan and Schedule for Southern and Central Guam, dated August 13, 2012.

Notice to Proceed Date: _____

NOT TO EXCEED amount: \$ 452,330.00

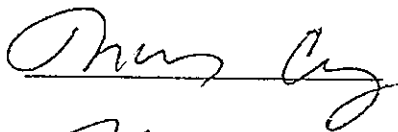
Signed



RAYMOND N. MATASCI
VICE PRESIDENT/PROGRAM MANAGER
BROWN AND CALDWELL

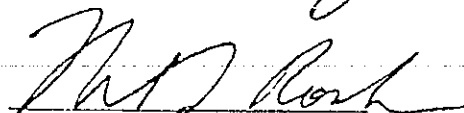
Date 2/1/2013

GWA Reviewer:



Date 2/7/13

Signed



MARTIN ROUSH
GENERAL MANAGER
GUAM WATERWORKS AUTHORITY

Date 2-18-13

WORK AUTHORIZATION NO: WA 2013-03

DESCRIPTION: Southern Sewer Basin Sanitary Sewer Evaluation Survey (SSES)

GWA PROJECT MANAGER: John McArthur Davis

PROJECT BACKGROUND AND OBJECTIVE

Guam Waterworks Authority (GWA) currently operates sanitary sewer collection systems in three sewer basins identified in the villages of Agat-Santa Rita, Baza Gardens, and Umatac-Merizo. As stated in the 2011 Court Order, Paragraph 8(d), GWA shall perform a SSES for the sanitary sewer systems tributary to the Southern WWTPs found to likely have Excessive Infiltration and Inflow (I/I), per the definition of Excessive I/I in the Court Order.

GWA conducted I/I analyses on the three sewer basins in 2012. Sewer Basins likely subject to high levels of I/I have been identified. The purpose of this Work Authorization is to conduct the SSES in the areas identified and identify what is causing or contributing to recurring wet weather SSOs, overloading of WWTPs and /or bypasses at the WWTPs. Additionally, this work shall quantify the amount of I/I and recommend remedial efforts required to minimize I/I.

GWA requested that the PMO provide support in conducting the SSES and compiling the remedial measures required to minimize I/I, prepare planning level cost estimates to implement remedial measures, and recommend remedial work to be included in GWA's CIP subject to meeting the definition of Excessive I/I in the 2011 Court Order.

SCOPE OF WORK

This work authorization will be performed by the team of Brown and Caldwell (BC) and Underground Services, Inc (USi) listed herein as the PMO Team. This scope outlines the overall PMO Team scope, schedule, and budget. The specific USi scope, schedule, and budget are included in Attachment A.

Task 1: Task Management

Approach: GWA Program Management Office (PMO) staff will manage the scope, schedule, and budget associated with the work described in this Work Authorization to ensure that this work is managed in a manner that meets the intent of the GWA PMO Program Management Plan. This includes, but is not limited to, management of documents; change; risk; and quality assurance and control.

PMO Team Responsibilities: PMO staff will manage the scope, schedule and budget. The PMO lead will manage tasks in this Work Authorization in accordance with the protocols set forth in the GWA PMO Program Management Plan.

GWA Responsibilities: GWA staff will attend meetings, review progress reports, and adhere to the protocols set forth in the GWA PMO Program Management Plan.

Products: Task status reports; scope, schedule, and budget updates, as necessary.

Task 2: SSES Work for Agat-Santa Rita and Umatac-Merizo

- A) **Approach:** BC will work with its subcontractor USi to perform SSES fieldwork in the sewer basins of Agat-Santa Rita and Umatac-Merizo. A SSES Fieldwork Plan will be developed based on the areas identified during the I/I Analysis and shown on the attached maps. The Fieldwork Plan will be submitted to GWA for review prior to commencement of fieldwork.
- B) The SSES fieldwork will primarily employ smoke testing and visual inspection of pipes and manholes, but may also include other methods as described below. Inspections will be performed in accordance with the most current versions of the NASSCO Pipeline Assessment Certification Program (PACP) guidelines. Inspections will employ:
- a. Smoke testing. Smoke testing is typically used to identify inflow sources by direct visual inspection (observation) during rain. Smoke testing will also be used to identify which buildings are connected to the sewer system.
 - b. Visual inspection of pipes and manholes. Visual inspection of manholes will occur where manholes are located in drainage ways along the sides of roads, in or near streams, and at intersections or other low points. Manhole inspections will include opening the manhole covers and looking for infiltration through the manhole frame, barrel or pipe penetrations. Where necessary, BC will use GWA's existing CCTV documentation for visual inspection of pipes as a result of smoke testing.
 - c. Dyed water testing and area flooding. Dyed water may be used to confirm cross connections between sanitary sewers and storm drains, confirm downspouts or area drains are connected to sanitary sewers, or to determine if infiltration into a sewer main exists.
- C) **Manhole Inspections.** BC proposes to provide the following for the manhole inspections:
- a. Mobilization to the project location
 - b. Field vehicle and equipment
 - c. Limited traffic control, including cones, as needed
 - d. Digital photographs including area, upstream, downstream, the top and bottom of the manhole cover, looking down, the ring, the rungs, and any visible defects from the surface
 - e. Documentation of all inspections on field forms in an abbreviated MACP format approved by the GWA
- D) **Smoke Testing.** BC proposes to provide the following scope for smoke testing:
- a. Walking field reconnaissance of sewer line alignments to be smoke tested
 - b. Daily telephone, fax or email notification to the police and fire department for the area to be tested the same day
 - c. Notification to area residents and businesses approximately two (2) days in advance of the smoke testing
 - d. Smoke testing equipment that uses a liquid, non-toxic smoke source
 - e. Smoke testing of the sewer lines
 - f. Limited traffic control, including cones, as needed
 - g. Documentation of all identified defects on hard copy field logs in standard format
 - h. Digital photographs of identified defects detailing the location of the defects
- E) **Data Analysis.** Data collected from the SSES fieldwork will be evaluated and used to:

Guam Waterworks Authority
Program Management Services Contract Work Authorization

- a. Quantify the amount of I/I entering a sub basin
 - b. Determine the locations of recurring wet weather SSOs
 - c. Determine the sources of I/I
 - d. Identify locations of stormwater cross connections and unauthorized connections
 - e. Identify degraded pipes, manholes, and structures that allow I/I into the system
- F) Develop List of Rehab Projects for CIP
- a. Based on information from the data analysis, BC will develop a list of rehabilitation projects for inclusion in GWA's 5-year CIP.

SSES work within the sewer basin at Baza Gardens is not included in this Work Authorization. GWA is required under the 2011 Court Order to perform work within this basin as required to address Excessive I/I. SSES work identified for Baza Gardens will be included in a separate Work Authorization.

Products:

Output from the SSES fieldwork will be documented and submitted to GWA. This includes a plan to address problems identified from this study. BC proposes to provide a final report consisting of the following:

- A) One (1) computer generated PDF form of each manhole inspected
- B) One (1) set of digital photographs, of each manhole inspection, labeled and indexed in standard format
- C) One (1) summary spreadsheet, in Microsoft® Excel format, of the manhole inspections
- D) One (1) set of maps hand marked with field notes on results of smoke testing
- E) One (1) set of the completed hard copy field logs of smoke testing
- F) One (1) DVD containing pictures of the identified defects from smoke testing
- G) A Microsoft® Excel summary spreadsheet of the inspections in electronic and hard copy format of smoke testing results.
- H) Report on source and quantity of I/I, locations of recurring SSOs, and list of potential rehabilitation projects for the CIP.

Specific Exclusions:

BC specifically excludes the following work tasks:

- A) Uncovering buried manholes or paved-over manholes
- B) Accessing manholes on private property without prior permission
- C) Line cleaning
- D) CCTV
- E) Repaving uncovered/buried manholes, if required
- F) Repairs or replacement of landscaping, curbing, surface material and collapsed pipe unless solely due to the negligence of BC or its subcontractor

GWA Responsibilities: Attend meetings, provide information, review deliverables, provide escorts as necessary to enter GWA property, interface with the public as necessary, provide CCTV video taped information, and provide collection system staff time to help in locating manholes as necessary.

Guam Waterworks Authority
Program Management Services Contract Work Authorization

SCHEDULE

The SSES project fieldwork is expected to be conducted over the next 4 months. The final report is expected to be completed in 6 months from Notice to Proceed.

BUDGET

This work order will be performed on a time and materials basis and will not exceed \$452,330 without written consent from GWA.

Labor				
Name	Labor Code	Labor Rate	Hours	Total
Gilman	M	239	80	19,120
Enriquez	J	205	80	16,400
Myers	J	205	100	20,500
Bellows	M	239	24	5,736
			0	
Foucht	F	138	200	27,600
Admin/WP	F	125	40	5,000
Subtotal				\$ 94,356
Other Direct Costs				
Description				
Airfare \$2000 from HNL; \$3000 from Mainland				
Rental Car \$70/day				
Per diem \$250/day				
USi Labor	585 MHs and 107,000 LF			308,980
10% Markup				30,898
Subtotal				434,234
Total Work Order Estimate				
		GRT 4.167%		\$18,094.53
Total				\$452,328.53

ATTACHMENT A
SUBCONTRACTOR SCOPE, SCHEDULE, AND BUDGET

Summary of the GWA PMO Budget Allocation

Work Order Number	Work Authorization Title	Work Authorization Description	Original \$3.2M Allocation	Spent as of January 24, 2013
	Current Work Authorizations			
2012-01	Program Management	Provide general program management and engineering services and provide support in managing 2011 EPA Stipulated Order (SO) deadlines	\$ 956,700	\$ 933,411
2012-02	Programmatic Overview	Develop programmatic project management plan to submit to EPA for utilizing State Revolving Fund grants	\$ 45,600	\$ 18,476
2012-03	Northern District Interim Improvements	Act as GWA Project Manager for Northern District Interim Improvements under SO paragraph 2	\$ 240,000	\$ 220,098
2012-04	Agat/Santa Rita Interim Measures	Develop an interim measures evaluation per SO paragraph 9	\$ 45,300	\$ 42,920
2012-05	Baza Gardens Interim Measures	Develop an interim measures evaluation per SO paragraph 12	\$ 46,200	\$ 46,200
2012-06	Agana Interim Improvements	Act as GWA Project Manager for Agana Interim Improvements under SO paragraph 5	\$ 174,100	\$ 89,885
2012-07	Hydraulic Model	Develop a water system hydraulic model per SO paragraph 29	\$ 364,200	\$ 248,912
2012-08	Lifeline Program	Provide financial services for GWA Finance Division	\$ 102,000	\$ 5,269
2012-09	SSES Implementation	Act as GWA Project Manager for Southern I/I analysis under SO paragraph 8	\$ 83,160	\$ 68,018
2012-10	Chaot/Agana Heights Tanks DB package only	Develop a design/bid package for constructing the Chaot and Agana Heights storage tanks under SO paragraph 28	\$ 224,550	\$ 217,905
2012-11	PUC Stipulated Order	Develop water audit loss report, pipe prioritization model, and energy assessment per the PUC stipulated order	\$ 161,000	\$ 115,107
2012-13	Phase I Ugum Inspection and Training	Provide construction inspection and operations assessment at Ugum under SO 24 and 25	\$ 136,000	\$ 104,785
2012-14	NPDES Negotiation Support	Provide services to GWA in negotiating the upcoming secondary treatment NPDES permit	\$ 246,000	\$ 42,941
2012-15	Well Corrosion Specialist	Provide a specialist to inspect GWA wells to determine root cause of corrosion issues	\$ 50,200	\$ 44,028
2012-16	Umatac-Merizo Overflow	Provide a analysis and recommendation for eliminating the overflow at the Umatac-Merizo wastewater treatment plant	\$ 25,300	\$ 25,170
2012-17	NEIC Water Inspection Response Support	Provide technical support in responding to the NEIC water inspection report	\$ 298,000	\$ 59,119
Total			\$ 3,198,310	\$ 2,282,245