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Guam Waterworks Authority
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BEFORE THE GUAM PUBLIC UTILITIES COMMISSION

IN THE MATTER OF:

**THE GUAM WATERWORKS
AUTHORITY'S CONTRACT WITH
HDR, INC.**

GWA DOCKET NO. 25-10

**PETITION TO APPROVE FUND
INCREASE TO HDR, INC. CONTRACT
FOR ASAN SPRINGS
REHABILITATION DESIGN PROJECT**

COMES NOW, the GUAM WATERWORKS AUTHORITY ("GWA"), by and through its counsel of record, THERESA G. ROJAS, ESQ., and hereby files its petition seeking PUC approval to increase funding for the Asan Springs Rehabilitation design project.

BACKGROUND

The rehabilitation of the Asan Springs facility is to treat and distribute water to customers in the surrounding areas by reducing, or potentially eliminating reliance on water purchased from the U.S. Navy.

On July 26, 2016, the CCU first approved Resolution 46-FY2016 authorizing GWA to enter into a contract with HDR, Inc. for the design services of Asan Springs Water Supply Facilities in the amount of Three Hundred Seventy-Four Thousand, Four Hundred Seventy dollars (\$374,470.00).

GWA Docket 25-10

PUC Review: Petition for GWA to Approve Fund Increase for the Asan Spring Rehabilitation Project with HDR, Inc.

1
2 GWA issued Change Order No. 1 in January 2019 in the amount of Thirty-Five
3 Thousand, Five Hundred Ninety-Nine dollars (\$35,599.00) for additional services required for
4 land acquisition and federal permitting needs, which brought the total value of the Contract to
5 Four Hundred Ten Thousand, Sixty-Nine dollars (\$410,069.00).

6
7 GWA subsequently received approval to issue Change Order No. 2 in the amount of
8 Three Hundred Eighty-Two Thousand, Five Hundred Ninety-Five dollars (\$382,595.00)¹ for
9 additional water distribution system improvements as well as additional environmental work
10 needed to address National Environmental Policy Act (NEPA) requirements due to federal
11 property ownership, thus expanding the designer's scope of work. The total value of the contract
12 after Change Order No. 2 was then increased to Seven Hundred Ninety-Four Thousand, Five
13 Hundred Twelve dollars (\$794,512.00). This additional design work was approved by the CCU
14 through Resolution No. 26-FY2019 on April 25, 2019.

15 16 **REQUEST FOR APPROVAL**

17
18 Through on-going design work with the engineering consultant, GWA has now
19 determined that additional compliance improvements are needed to address the treatment of Per-
20 and Polyfluoroalkyl Substances (PFAS) and the status of Ground Water Under the Direct
21 Influence (GWUDI) for the continued rehabilitation of the Asan Springs project.

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26 ¹ The CCU by Resolution No. 26-FY2019 approved an amount "not to exceed \$382,595" although actual change
order issued was for \$302,194.

1 GWA and the current contractor, HDR, Inc., have agreed on a price of Seven Hundred
2 Forty-One Thousand, Nine Hundred Six dollars (\$741,906.00) for these additional compliance
3 improvement services. Additionally, a 10% contingency of Seventy-Four Thousand One
4 Hundred Ninety-Six dollars (\$74,196.00) has been included. This brings the total additional
5 amount requested for the compliance improvements to Eight Hundred Sixteen Thousand, One
6 Hundred Two dollars (\$816,102.00). When combined with the \$794,512.00 from Change Order
7 No. 2, this amount increases the total needed funding with HDR, Inc. to One Million Six Hundred
8 Ten Thousand Six Hundred Fourteen dollars (\$1,610,614.00).

10 The Consolidated Commission on Utilities (CCU) approved this total funding for the
11 design contract with HDR, Inc. through CCU GWA Resolution 51-FY2025. GWA now
12 respectfully requests the PUC's approval under the Contract Review Protocol as this amount
13 exceeds \$1M dollars.

15 In support of this Petition, the CCU has approved GWA's request to increase funding for
16 the contract with HDR, Inc. by its adoption of GWA Resolution 51-FY2025. This Resolution and
17 its supporting exhibits are attached as **Exhibit A** and are incorporated by reference as if fully set
18 forth herein.

20 CONCLUSION

21 Based on the foregoing, GWA requests the PUC's approval to increase the total authorized
22 funding by Eight Hundred Sixteen Thousand One Hundred Two dollars (\$816,102.00) to bring
23 the total authorized contract amount for its Asan Springs Rehabilitation project to One Million
24

27

GWA Docket 25-10

28 PUC Review: Petition for GWA to Approve Fund Increase for the Asan Spring Rehabilitation Project with HDR, Inc.

1 Six Hundred Ten Thousand, Six Hundred Fourteen dollars (\$1,610,614.00) as it is
2 reasonable, prudent, and necessary.

3 **RESPECTFULLY SUBMITTED** this 5th day of September 2025.
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6 By: _____/s/_____
7 **THERESA G. ROJAS**
8 GWA Legal Counsel
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27 _____
28 GWA Docket 25-10
PUC Review: Petition for GWA to Approve Fund Increase for the Asan Spring Rehabilitation Project with HDR, Inc.



GWA RESOLUTION NO. 51-FY2025

**RELATIVE TO INCREASE FUNDING FOR ASAN SPRINGS REHABILITATION
DESIGN PROJECT**

WHEREAS, under 12 G.C.A. § 14105, the Consolidated Commission on Utilities (“CCU”) has plenary authority over financial, contractual, and policy matters relative to the Guam Waterworks Authority (“GWA”); and

WHEREAS, the Guam Waterworks Authority (“GWA”) is a Guam Public Corporation established and existing under the laws of Guam; and

WHEREAS, GWA is currently working on the rehabilitation of the Asan Springs facility, with the objective of treating and distributing water to customers at surrounding areas and reducing, or potentially eliminating, reliance on water purchased from the U.S. Navy; and

WHEREAS, the CCU approved Resolution No. 46-FY2016 that authorized contract funding of Three Hundred Seventy-Four Thousand Four Hundred Seventy Dollars (\$374,470.00), plus a ten percent (10%) contingency of Thirty-Seven Thousand Four Hundred Forty-Seven Dollars (\$37,447.00), to bring the total authorized funding amount to Four Hundred Eleven Thousand Nine Hundred Seventeen Dollars (\$411,917.00); and

WHEREAS, following CCU approval in Resolution No. 46-FY2016, GWA contracted with HDR, Inc. in the amount of Three Hundred Seventy-Four Thousand Four Hundred Seventy Dollars (\$374,470.00) to provide design services for the Asan Spring Rehabilitation project; and

WHEREAS, GWA issued Change Orders No.1 in the amount of Thirty-Five Thousand Five Hundred Ninety-Nine Dollars (\$35,599.00) for additional design services in which the total value of the Contract was increased to Four Hundred Ten Thousand Sixty-Nine Dollars (\$410,069.00); and

1 **WHEREAS**, CCU approved Resolution No. 26-FY2019 which authorized Three
2 Hundred Eighty-Two Thousand Five Hundred Ninety-Five Dollars (\$382,595.00) for additional
3 design services to bring the total authorized funding to Seven Hundred Ninety-Four Thousand
4 Five Hundred Twelve Dollars (\$794,512.00); and

5
6 **WHEREAS**, following CCU approval in Resolution No. 26-FY2019, GWA issued
7 Change Order No. 2 in the amount of Three Hundred Two Thousand One Hundred Ninety-Four
8 Dollars (\$302,194.00) for additional design services in which the total value of the Contract was
9 increased to Seven Hundred Twelve Thousand Two Hundred Sixty-Three Dollars (\$712,263.00);
10 and

11
12 **WHEREAS**, GWA has further determined, through the course of design work with the
13 engineering consultant, that additional compliance improvements are needed to address Per- and
14 Polyfluoroalkyl Substances (PFAS) treatment and to determine Ground Water Under the Direct
15 Influence (GWUDI) status of the groundwater source; and

16
17 **WHEREAS**, GWA and HDR, Inc. negotiated the price for the services to be provided in
18 the amount of Seven Hundred Forty-One Thousand Nine Hundred Six Dollars (\$741,906.00)
19 (Exhibit A); and

20
21 **WHEREAS**, GWA Management is seeking CCU approval in the amount of Seven
22 Hundred Forty-One Thousand Nine Hundred Six Dollars (\$741,906.00), along with a ten percent
23 (10%) contingency of Seventy-Four Thousand One Hundred Ninety-Six Dollars (\$74,196.00), to
24 bring the total requested amount to Eight Hundred Sixteen Thousand One Hundred Two Dollars
25 (\$816,102.00); and

26
27 **WHEREAS**, GWA Management further seeks CCU approval of the total authorized
28 funding for the design contract with HDR, Inc. to One Million Six Hundred Ten Thousand Six
29 Hundred Fourteen Dollars (\$1,610,614.00); and

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1 **WHEREAS**, the funding for this request will be from Bond funds; and

2
3 **WHEREAS**, the CCU must approve all petitions that will be submitted to the PUC; and

4
5 **WHEREAS**, GWA Management seeks authorization to notify the Public Utilities
6 Commission as appropriate under the Contract Review Protocol to petition for approval if the use
7 of Bond funds exceeds the applicable threshold; and

8
9 **NOW BE IT THEREFORE RESOLVED**, the Consolidated Commission on Utilities
10 does hereby approve the following:

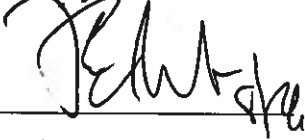
- 11
12 1. The recitals set forth above hereby constitute the findings of the CCU.
13 2. The CCU finds that the terms of the fee proposal submitted by HDR, Inc. is
14 fair and reasonable.
15 3. The CCU finds that the terms of the conditions set by GWA relative to the
16 commencement of subsequent work activities are fair and reasonable and
17 serve as a measure of Quality Assurance/Quality Control (QA/QC).
18 4. The CCU hereby authorizes the management of GWA to issue Change
19 Order(s) in the amount of Seven Hundred Forty-One Thousand Nine Hundred
20 Six Dollars (\$741,906.00) (Exhibit A).
21 5. The CCU hereby further approves the total authorized funding in the amount
22 of One Million Six Hundred Ten Thousand Six Hundred Fourteen Dollars
23 (\$1,610,614.00).
24 6. The CCU hereby authorizes the use of Bond funds.
25 7. The CCU further authorizes management to notify the Public Utilities
26 Commission as appropriate under the Contract Review Protocol to petition for
27 approval if the use of Bond funds exceeds the applicable threshold.

28
29 **RESOLVED**, that the Chairman certified, and the Board Secretary attests to the adoption
30 of this Resolution.

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DULY AND REGULARLY ADOPTED, this 26th day of August 2025.

Certified by:



FRANCIS E. SANTOS

Chairperson

Attested by:



MELVIN F. DUENAS

Secretary

SECRETARY'S CERTIFICATE

I, **MELVIN F. DUENAS**, Board Secretary of the Consolidated Commission on Utilities as evidenced by my signature above do hereby certify as follows:

The foregoing is a full, true and accurate copy of the resolution duly adopted at a regular meeting by the members of the Guam Consolidated Commission on Utilities, duly and legally held at a place properly noticed and advertised at which meeting a quorum was present and the members who were present voted as follows:

AYES:

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NAYS:

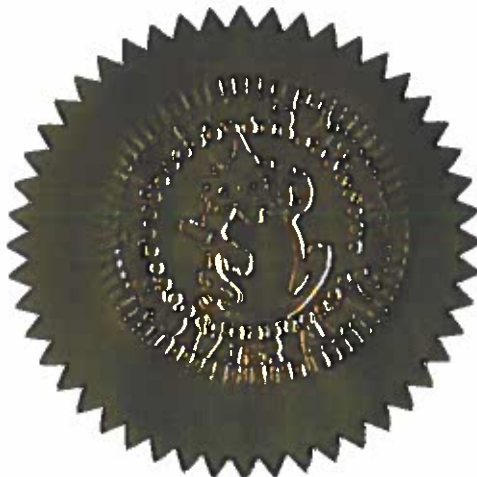
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ABSENT:

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ABSTAIN:

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July 25, 2025

Mr. Brett Railey, P.E.
Supervisor Engineer
The Guam Waterworks Authority
Engineering Division
Gloria B. Nelson Public Service Building
688 Rt. 15
Mangilao, Guam 96913

SUBJECT: Engineering Design Services, Asan Springs Rehabilitation Project – Revised Change Order #4; RFP-11-ENG-2015, GWA Project No. W11-003-BND

Dear Mr. Railey,

HDR appreciates the opportunity that we have to continue to provide design and environmental services in relation to this project. As requested, HDR is providing additional scope and fee to design a treatment system to address the detection of PFOS in the water coming out of the Asan Spring and for the testing of the groundwater source to assess if the site will be classified as a Ground Water Under Direct Influence (GWUDI). Within this scope and fee proposal, we are also updating scoped items from our original proposal dated, July 18, 2016, and any modifications through change orders to reflect both our subconsultants and HDR's current rates to complete these scoped items.

General Tasks and Approach

The existing and new general tasks for this project are listed below with the status change for this change order:

- | | |
|---------|---|
| Task 1 | Project Management (Updated to include extending time associated with Task 4-6 and new Task 9) |
| Task 2 | Initial Permitting (Completed; No additional scope and fee) |
| Task 3 | Site Investigation (Updated to include geotechnical investigation) |
| Task 4 | General Design (Updated to include revised boundary survey and biological monitoring services) |
| Task 5 | Detailed Design (Added scope and fee for PFAS design and updates to current design documents) |
| Task 6 | Bidding Process (Updated to current costs) |
| Task 7 | Engineering Services During Construction (Updated to current costs) |
| Task 8 | Environmental Services (Completed; No additional scope and fee) |
| Task 9 | Groundwater Under Direct Influence (GWUDI) Determination (New Task) |
| Task 10 | Operations and Maintenance Manual (New Task) |

We are requesting that a lump sum payment be used for the requested services to be conducted in Tasks 1 through 6. For the services in Task 7 and Task 9, HDR is proposing that they be provided on a T&M basis with a Not to Exceed (NTE) fee. Task 7 was based upon a preliminary construction schedule of eighteen (18) months.

Scope of Work and Detailed Task Descriptions

The following describes a detailed scope of work HDR proposes for this project:

Task 1 - Project Management

- a) General Project Management – This task will involve extending the general project management of the project from Notice to Proceed (NTP) through the end of Task 10 as presented below and is anticipated to last approximately fifteen (15) months. This will also include subconsultant coordination during this same time period.
- b) Project Management Plan – In accordance with GWA's Program Management Manual, an updated Project Management Plan will be developed and will include the revised scope activities and revisions to any of the following, as applicable: project description, project scope (from contract), project team including subconsultants, the anticipated project work plan with schedule, quality control plan, communication plan, documentation plan, and scope change tracking.

- c) The project schedule will be created in Microsoft Project and will outline the work plan with dates set for critical milestones for the project. The schedule will be updated throughout the project and will be provided monthly at the bi-weekly meetings.
- d) Progress reports will be generated on a monthly basis and will be included with the monthly payment invoices.
- e) Bi-weekly progress meetings will be held with GWA Engineering personnel at the GWA Engineering office, unless otherwise agreed upon, to provide updates on the status of the project.

Subtask 1.1 – QA/QC

- a) Conduct internal HDR quality assurance/quality control reviews of all deliverables prior to submittal to GWA.
- b) Prepare comment response logs showing received GWA responses to HDR deliverables and how HDR responded to them.
- c) Maintain a tracking log showing dates of internal QA/QC reviews, deliverable submittals, GWA comments, and HDR responses.

Task 2 - Initial Permitting

No additional scope.

Task 3 - Site Investigation

Subtask 3.1 – Geotechnical Investigation

- a) A geotechnical exploration will be provided by drilling up to two borings to a maximum depth of approximately 50 feet. Exact depth and location of borings will be determined in the field based upon site conditions encountered. The exploration will characterize the site conditions and provide design recommendations related to the proposed site facilities, grading and any potential retaining wall installation. Based upon preliminary analysis of existing geotechnical data at the site, there is potential evidence of a dormant landslide under the existing site. Geotechnical analysis will also include stability analyses and recommendations for the suitability of the site for planned improvements, site preparation and grading, retaining wall, foundations, slabs-on-grade, and underground utilities.
- b) Obtaining applicable Guam EPA clearing and grading and soil boring permits are included in this scope.
- c) Restoration will be in accordance with Guam EPA requirements and will include placement of up to 4 inches of cold patch asphalt in areas where borings are in asphalt.

Deliverables:

- One (1) Electronic copy of both the pre-final geotechnical report and the final geotechnical report submitted electronically.

Task 4 - General Design

- a) Perform a boundary retracement to establish the limits of the agreed upon right of way with the National Park Service. Right of Way will be established with concrete monumentation installed with a brass disc already supplied by the National Park Service. Additionally, in accordance with the NEPA FONSI, a biological monitor will be provided in advance of the survey to monitor for previously found tree snails.

Task 5 - Detailed Design

- a) Prepare up to two (2) conceptual layouts showing location options for installing PFAS treatment. Submission will be a revised site plan showing these locations and both will be presented to GWA for concurrence on the recommended layout prior to continuation with design. This task includes structural design for a retaining wall, in case one option requires additional land area to install PFAS equipment. No geotechnical investigation is included.
- b) Prepare a 60% revised design submittal consisting of updated drawings for PFAS treatment and updated major equipment specifications (include spare parts and maintenance items). Additional updates are to include revisions to documents to include requirements as outlined in the NEPA Findings of No Significant Impact (FONSI) document.
- c) Prepare a 90% revised design submittal consisting of updated drawings, updated major and minor equipment specifications, and revised draft construction schedule.
- d) Prepare a final design submittal consisting of bid ready drawings and specifications, final construction schedule, all engineering calculations, and a final updated Engineering Report.

Subtask 5.1 – Cost Estimating and Value Engineering

- a) Prepare an updated construction cost estimates using the following schedule.
 - Updated Class 2 estimate for 90% design submittal

Deliverables:

- Three (3) Hard copy sets of the design plans will be produced on half size 11"x17" sheets for 30%, 60% and 90% submittals.
- Five (5) Hard copy sets of the design plans will be produced on full size 22"x34" sheets for the final submittal.

- Three (3) Hard copy sets of specifications and cost estimates will be provided for 30%, 60% and 90% submittals.
- Five (5) Hard copy sets of specifications and cost estimates will be provided for the final submittal.
- One (1) Electronic copy set of design plans, specifications and cost estimates will be provided at all design submittals on a CD.

Subtask 5.2 – Design Review Workshops

- a) Conduct a design review workshop with GWA for the 60% and 90% updated submittals.
- b) For each workshop, prepare agenda, notes, and action item tracking lists.
- c) 60% and 90% submittal workshops to be performed utilizing MS Teams.
- d) Each workshop will be one-hour in duration.

Task 6 - Bidding Process

- A pre-bid meeting will be conducted with GWA and interested bidding contractors. A meeting agenda and sign-in sheets will be prepared and made available during the meeting. Meeting minutes will be prepared from this meeting and will be provided to GWA for review and incorporated into the bid documents.
- Requests for clarification will be compiled with appropriate responses in coordination with GWA and addenda will be prepared as needed.
- HDR will attend the bid evaluation conference.
- HDR will review, evaluate and certify the bid tabulations.
- HDR will prepare a letter recommendation for the construction contract award.

Task 7 - Engineering Services During Construction

An initial assumption for construction duration is 18 months. A Not to Exceed (NTE) fee has been prepared and includes the following services to be performed:

- A Conformed Construction Document set will be prepared compiling changes made during bidding.
- Construction progress meetings will be attended at the request of GWA and have been estimated at five (5) meetings only.
- Perform field observations as required and submit field reports documenting findings. Field observations are estimated at five (5) site visits only. No travel is included for disciplines not located on Guam.
- Archaeological monitoring services will be provided for any ground disturbance activities as required by GHPO and are estimated at 160 hours. Data collection will be based upon

recording and collecting small samples of artifacts, with no more than five (5) artifacts being collected, processed, analyzed and temporarily curated. Archaeological monitoring investigations will be conducted at the rates specified per hour and all sites and features will be recorded and evaluated to the extent that can be accomplished by a single archaeological monitor and in the case the work is too much for one monitor, an additional monitor can be added upon the written approval of GWA at the same hourly rate presented in the proposal. A minimum four (4) hours is required for each callout.

- HDR will review contractor submittals, RFI's, Change Orders and schedule and provide responses/comments as necessary. A total of ten (10) each Submittals, RFI's, Change Orders and Schedule have been estimated.
- HDR will perform a final inspection and submit a punch list of items to GWA.

Task 8 - Environmental Services

No additional scope.

Task 9 - Groundwater Under Direct Influence (GWUDI) Determination

Subtask 9.1 Water Quality Analysis Testing Plan

A water quality analysis testing plan program will be developed and will be based upon the following tests and frequency as provided by the Guam Environmental Protection Agency and adapted from the Hawaii Safe Drinking Water Branch GWUDI Protocol (See Figure 1)

Figure 1 – Hawaii Safe Drinking Water Branch GWUDI Protocol (GWUDIProtocol2020-06.pdf)		
Test	Frequency	Additional Notes
pH	Weekly for one (1) year after approval of Water Quality Testing Plan	Field Measurement in conjunction with Temperature, Conductivity and Turbidity
Temperature	Weekly for one (1) year after approval of the Water Quality Testing Plan	“
Conductivity	Weekly for one (1) year after approval of the Water Quality Testing Plan	“
Turbidity	Weekly for one (1) year after approval of the Water Quality Testing Plan	“
Tunnel Flow	Weekly (daily preferred)	Not Applicable (Not Scoped)

Figure 1 – Hawaii Safe Drinking Water Branch GWUDI Protocol (GWUDIProtocol2020-06.pdf)		
Test	Frequency	Additional Notes
Rain Gage Reading	Weekly (daily preferred)	“
Stream gage reading (if applicable)	N/A	Not Applicable (Not Scoped)
Heterotrophic Plate Count	Weekly	“
Total Coliforms	Weekly	“
E. coli	Weekly	“
Microscopic Particulate Analysis	Monthly or minimum four (4) Rainfall Events*	*Taken within 48 hrs of a 1” rainfall event (rain gage documentation required)
Giardia	Same sampling event as MPA	
Cryptosporidium	Same sampling event as MPA	

Subtask 9.2 Water Quality Analysis

- Water quality field samples will be collected and measured for pH, Temperature and Conductivity weekly for up to 12 months.
- Water quality samples will be collected on either a weekly or monthly basis, based upon the schedule shown in Figure 2 and will be either delivered to the WERI water quality lab for turbidity, Heterotrophic Plate Count, Total Coliforms and E. Coli and packaged and shipped to an off-island water quality lab for MPA, Giardia and Cryptosporidium testing for up to 12 months.

Subtask 9.3 Rain Gauge Monitoring

- An auto logging rain gauge logger will be setup at the Asan Springs Water Supply site for the same 12 months that water quality samples are collected. Data will be collected weekly and processed for use in conjunction with the flow monitoring as described below.

Subtask 9.4 Flow Monitoring

- Two (2) pressure transducers will be deployed within the Asan Springs collection tank(s) to measure flow levels. This data in conjunction with overflow outlet sizing will be used to determine potential production flow vs. overflow that occurs out of the tank system.

Task 10 - Operations and Maintenance (O&M) Manual

Subtask 10.1 O&M Kickoff Meeting

- A kickoff meeting will be held with GWA Engineering and Operations personnel to discuss the initial goals and objectives of the document and include an initial discussion and screening of alternatives for various aspects of the Facility. Facility information that is necessary to create the O&M Manual will be discussed and will include, but not limited to the following:
 - Current or planned operations and maintenance practices at the Facility related to normal operations, emergency operations, startup and shutdown.
 - Discussion of each unit process.
 - Discussion of sampling and monitoring requirements and practices.

Subtask 10.2 O&M Manual

- An O&M Manual will be created and will include the following sections:
 - **Water Treatment Facility Description**
 - This section will provide a brief description of the components at the facility site. This will include all mechanical, structural, electrical and instrumentation systems. It will also include a brief description of the water source.
 - **Staffing**
 - This section will include a brief description of the operator certification requirements for this facility. It will also include a brief description of how often the operator visits the facility, as well as where they report to.
 - **Operations**
 - This section will provide a description of how the facility operates. It will provide sufficient detail so that an experienced operator could walk in and understand how to operate the facility.
 - For each process area (raw water collection, pumping, disinfection, etc.), it will explain major components and how instrumentation and automation functions to allow unattended operations. It will also include an example of the operator Checksheets/Roundsheets that are used when the operator visits the site every day.
 - **Sampling and Monitoring**
 - This section will provide details on the parameters to be tested, the sampling locations and frequencies. It will also describe if the operator is to perform the analysis or if it is to be sent to a third party laboratory.

- **Maintenance**

- This section will provide details on the basic preventive maintenance to be performed on the facility. This will not be a detailed list pertaining to all assets.

Deliverables:

- One (1) Electronic copy of both the pre-final and the final operations and maintenance manual submitted electronically.

Compensation

HDR proposes to perform the services as outlined according to the following:

Tasks 1, 4-6, Project Management associated with Task 9 and Task 10	Lump Sum of \$507,673
Task 7 and Task 9	NTE Sum of \$234,232
Total HDR NTE Fee	\$741,906

A summary of the fee in the requested GWA format is attached for both the lump sum fee and the time and materials fee. Also included is the proposed schedule of rates.

Delivery Schedule

HDR proposes completing Tasks 1, Tasks 4-6 and Task 9, as presented in this proposal, within fifteen (15) months, after a signed contract and Notice to Proceed (NTP) are received by HDR. Task 6 is assumed to follow and be completed within 30 days from GWA's receipt of the 100% updated design plans and specs. Task 7 will be delivered over a period of 18 months from the time the construction contractor receives a contract and NTP.

Proposal Assumptions, Exclusions and Limitations

Only the services described in our proposal are included. The following assumptions, exclusions and limitations were made in preparation of this scope and fee proposal:

- It is our understanding from GWA that the Asan Springs supply is currently designated as a groundwater source and is not required to be designed as a Ground Water Under the Direct Influence of Surface Water (GWUDI) at this time. As part of this project's work, under Task

9, this data will be supplied to GWA to provide to GEPA to make any changes to that determination.

- This proposal does not include paying for or obtaining any Federal or Local permits required for this project. It is assumed any other required permits that need to be obtained will be done by the selected construction contractor as part of the building permit process.
- The design of ASWSF improvements will provide an overall facility design life of 25 years.
- Unless noted otherwise, submittals to GWA will be by email as PDF files.
- This scope does not account for designing any water or sewer improvements outside of the Asan Springs site's existing fenced boundary.
- This proposal excludes performing any geotechnical borings or analysis. If a retaining wall is required, then additional scope and fee will be required to perform at least one boring at the toe slope of where a retaining wall will be installed.
- Translocation of endangered snails are not included in this proposal. If snails are found within the survey boundary marker locations, additional consultation with USFWS and NPS may be required and are not included within this proposal.
- This proposal excludes performing any commissioning services.
- Microscopic Particulate Analysis (MPA) testing allows only a 48 hour hold time per the US EPA consensus method and this proposal was prepared utilizing EMSL lab in New Jersey to perform the test. This location exceeds the hold time allowed and this proposal does not guarantee samples will be shipped and arrive to the lab within the hold times.
- This proposal was prepared with MPA testing being performed at the EMSL lab in New Jersey and all costs for shipping are based upon that location.
- Costs for shipping water samples are estimated, and actual costs will not be known until after the final shipment container and weights are known.

We are again thankful for the opportunity to serve GWA on this very important project. If there are any questions, please feel free to call Nick Manley in our Guam office at 671-989-5558.

Sincerely,

HDR Engineering, Inc.



Dawn B. Szewczyk, P.E.

Area Operations Manager, Vice President



Design Services for Asan Springs Water Treatment Facility
GWA Project No. W11-003-BND
Change Order #4, Revision 01
Lump Sum Fee Worksheet

HDR																			Subconsultants								
Task Number	Task Description	Principal Engineer - Troy Ching	Project Manager - Nick Manley	Technical Advisor/QA/QC	Senior Engineer - Process - Arthur Xu	Senior Engineer - Structural - Patrick Lindblom	Senior Engineer - Civil - TBD	Senior Engineer - Mechanical - Lock Kwan	Senior Engineer - Electrical - Lance Kirmeyer	O&M Specialist - Chris Malinowski	Process/Mechanical Engineer - Eric Yao	Structural Engineer	Civil Engineer	Electrical Engineer	Process/Mechanical CAD	Civil/Structural CAD	Accounting	Administration - Michelle Salzman	Coffman	SEARCH	RLB	DCA	ENGEO	Sum Total	Unexpended Funds from Original Proposal and all Change Orders	Difference and Cost Basis for this Change Order	
	Hourly Labor Rates/Unit Prices*	\$295	\$265	\$295	\$295	\$265	\$265	\$295	\$305	\$360	\$155	\$170	\$150	\$170	\$155	\$135	\$155	\$105	-	-	-	-	-				
1.0	Project Management																										
1.1	General Project Management	15	80	0	0	0	0	0	0	0	0	0	0	0	0	0	45	30						\$35,750	\$0	\$35,750	
1.2	Develop Project Management Plan	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	4	2						\$2,950	\$0	\$2,950	
1.3	Develop Project Schedule and Updates	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						\$3,975	\$0	\$3,975	
1.4	Develop Monthly Progress Reports	0	15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8						\$4,815	\$0	\$4,815	
1.5	Bi-weekly Meetings with GWA	0	60	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						\$15,900	\$0	\$15,900	
1.6	Project Kick-off Meeting	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						\$530	\$0	\$530	
	SUBTOTAL	15	180	0	0	0	0	0	0	0	0	0	0	0	0	0	49	40	\$0	\$0	\$0	\$0	\$0	\$63,920	\$0	\$63,920	
3.0	Site Investigation																										
3.1	Geotechnical Investigation	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					\$97,000	\$97,530	\$0	\$97,530	
	SUBTOTAL	0	2	0	0	0	0	0	0	0	0	0	0	0				0	\$0	\$0	\$0	\$0	\$97,000	\$97,530	\$0	\$97,530	
4.0	General Design																										
4.3	Topographical Survey w/Biological Monitor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0					\$16,808	\$16,808	\$2,136	\$14,672	
	SUBTOTAL	0	0	0	0	0	0	0	0	0	0	0	0	0				0	\$0	\$0	\$0	\$16,808	\$0	\$16,808	\$2,136	\$14,672	
5.0	Detailed Design																										
5.1	60% Drawing Update (Added PFAS)	0	8	12	16	28	16	40	20	0	40	60	20	40	40	0	0	0	\$5,700					\$78,040	\$0	\$78,040	
5.2	60% Specifications Update (Added PFAS)	0	8	8	4	8	8	14	8	0	12	4	8	4	0	0	0	0						\$20,890	\$0	\$20,890	
5.3	60% Basis of Design Update (Added PFAS)	0	8	2	2	8	8	8	8	0	8	2	8	0	0	0	0	0						\$15,120	\$0	\$15,120	
5.4	60% Design Review Workshop	0	2	0	1	1	1	2	1	0	0	0	0	0	0	0	0	0						\$2,250	\$0	\$2,250	
5.5	90% Drawing Update (Added PFAS)	0	4	6	4	16	8	24	20	0	20	0	10	20	20	0	0	0	\$2,800					\$37,450	\$0	\$37,450	
5.6	90% Specifications Update (Added PFAS)	0	2	4	2	2	4	10	4	0	8	40	8	4	0	0	0	0						\$17,980	\$0	\$17,980	
5.7	90% Basis of Design Update (Added PFAS)	0	2	2	2	4	4	4	1	0	10	2	8	0	0	0	0	0						\$8,405	\$0	\$8,405	
5.8	90% Cost Estimate Update	0	2	1	1	1	1	2	1	0	0	2	0	0	0	0	0	0			\$9,860			\$12,745	\$0	\$12,745	
5.9	90% Design Review Workshop	0	2	0	1	1	1	2	1	0	0	0	0	0	0	0	0	0						\$2,250	\$0	\$2,250	
5.10	100% Drawing Update (Added PFAS)	0	4	4	1	12	4	14	8	0	12	32	10	20	20	0	0	0	\$1,100					\$29,745	\$0	\$29,745	
5.11	100% Specifications Update (Added PFAS)	0	2	2	1	2	2	1	1	0	2	2	4	2	0	0	0	0						\$4,665	\$0	\$4,665	
5.12	100% Basis of Design Update	0	2	1	1	4	2	1	1	0	1	2	8	0	0	0	0	0						\$5,005	\$0	\$5,005	
5.13	100% Cost Estimate	0	2	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0						\$1,650	\$0	\$1,650	
5.14	Archaeological Draft and Final Technical Report	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		\$21,973				\$21,973	\$7,805	\$14,168	
	SUBTOTAL	0	48	43	36	88	60	123	74	0	113	146	84	90	80	0	0	0	\$9,600	\$21,973	\$9,860	\$0	\$0	\$258,168	\$7,805	\$250,363	
6.0	Bidding Process																										
6.1	Pre-Bid Meeting	0	4	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0						\$1,650	\$585	\$1,065	
6.2	Response to requests for clarification	0	16	0	0	8	0	16	8	0	8	0	0	0	0	0	0	0	\$3,000					\$17,760	\$2,110	\$15,650	
6.3	Prepare addenda	0	8	0	0	0	0	8	0	0	0	0	0	0	0	0	0	0						\$4,480	\$3,390	\$1,090	
6.4	Bid evaluation conference	0	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0						\$1,120	\$390	\$730	
6.5	Review, evaluate, and certify bid tabulations	0	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						\$2,120	\$780	\$1,340	
6.6	Letter of recommendation	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0						\$530	\$390	\$140	
	SUBTOTAL	0	40	0	0	8	0	28	8	0	8	0	0	0	0	0	0	0	\$3,000	\$0	\$0	\$0	\$0	\$27,660	\$7,645	\$20,015	
10.0	Operations & Maintenance																										
10.1	O&M Manual	0	12	0	0	0	0	0	0	50	0	0	0	0	0	0	0	0						\$21,180	\$0	\$21,180	
	SUBTOTAL	0	12	0	0	0	0	0	0	50	0	0	0	0	0	0	0	0	\$0	\$0	\$0	\$0	\$0	\$21,180	\$0	\$21,180	
																			Airfare				\$0	\$0	\$0		
																			Hotel/Rental Car				\$0	\$0	\$0		
																			Per Diem				\$0	\$0	\$0		
																			Mileage Reimbursement				\$0	\$0	\$0		
																			Printing, Scanning and Binding				\$0	\$0	\$0		
																			Field Supplies, Misc.				\$0	\$0	\$0		
HDR SUBTOTAL (Tasks 1,3-6,10)																								\$327,025	\$5,445	\$321,580	
Total Subcontractor Subtotal																									\$158,241	\$12,141	\$146,100
Subconsultant Markup (10%)																									\$15,824	\$1,214	\$14,610
Total Subtotal Fee (Task 1,3-6,10)																									\$501,090	\$18,800	\$482,290
GUAM GRT TAX (5.263%)																									\$26,372	\$989	\$25,383
TOTAL LUMP SUM FEE (Task 1,3-6,10)																									\$527,462	\$19,790	\$507,673



HDR											Subconsultants						
Task Number		Principal Engineer - Troy Ching	Project Manager - Nick Manley	Technical Advisor/QA/QC	Senior Engineer - Structural - Patrick Lindblom	Civil Engineer	Senior Engineer - Mechanical - Lock Kwan	Senior Engineer - Electrical - Lance Kirmeyer	Process/Mechanical Engineer - Eric Yao	Accounting	Coffman	SEARCH	EMSL, Inc.	WERI	Sum Total	Unexpended Funds from Original Proposal and all Change Orders	Difference and Cost Basis for this Change Order
	Task Description																
	Hourly Labor Rates/Unit Prices*	\$295	\$265	\$295	\$265	\$150	\$295	\$305	\$155	\$155	-	-					
7.0	Construction Services																
7.1	General Project Management	8	40	0	0	0	0	0	0	50					\$20,710	\$3,120	\$17,590
7.2	Conformed Construction Documents	0	2	2	2	2	2	2	0	0					\$3,150	\$0	\$3,150
7.3	Progress meetings	0	10	0	0	0	0	0	0	0					\$2,650	\$12,480	-\$9,830
7.4	Field observations	0	15	0	0	0	0	0	0	0					\$3,975	\$12,480	-\$8,505
7.5	Archaeological monitoring	0	0	0	0	0	0	0	0	0		\$24,000			\$24,000	\$2,000	\$22,000
7.6	Review submittals	0	10	0	5	5	5	5	5	0	\$13,200				\$21,700	\$11,050	\$10,650
7.7	Review RFIs	0	10	0	5	5	5	5	5	0					\$8,500	\$6,105	\$2,395
7.8	Review change orders	0	4	0	2	2	4	2	0	0					\$3,680	\$1,600	\$2,080
7.9	Review construction schedule	0	4	0	4	1	4	1	0	0					\$3,755	\$780	\$2,975
7.10	Conduct final inspection and punchlist	0	8	0	0	0	0	0	0	0					\$2,120	\$1,560	\$560
7.11	Others (Included in previous proposals)	0	0	0	0	0	0	0	0	0					\$0	\$8,370	-\$8,370
SUBTOTAL		8	103	2	18	15	20	15	10	50	\$13,200	\$24,000	\$0	\$0	\$94,240	\$59,545	\$34,695
9.0	Groundwater Under Direct Influence (GWUDI) Determination																
9.1	Water Quality Analysis Test Plan	0	40	4	0	8	0	0	0	0					\$12,980	\$0	\$12,980
9.2	Water Quality Analysis Sampling - MPA/Giardia & Crypto. (Monthly)	0	156	0	0	192	0	0	0	0			\$16,690	\$7,748	\$94,578	\$0	\$94,578
9.3	Water Quality Analysis/Rain Guage Field Testing/Download (Weekly)	0	40	0	0	268	0	0	0	0					\$50,800	\$0	\$50,800
9.4	Flow Monitoring	0	8	0	0	52	0	0	0	0					\$9,920	\$0	\$9,920
SUBTOTAL		0	244	4	0	520	0	0	0	0	\$0	\$0	\$16,690	\$7,748	\$168,278	\$0	\$168,278
					Mileage Reimbursement										\$1,050	\$0	\$0
					Printing, Scanning and Binding										\$150	\$0	\$0
					Shipping of Water Samples (Shipping Service + Packaging Materials)										\$8,500	\$0	\$0
					Pressure Transducers, Rain Guage Logger and Other Data Collection Items										\$4,000	\$0	\$0
					Misc. Field Supplies										\$500	\$0	\$0
HDR SUBTOTAL															\$215,078	\$51,395	\$163,683
Total Subcontractor Subtotal															\$61,640	\$8,150	\$53,490
Subconsultant Markup (10%)															\$6,164	\$815	\$5,349
Total Subtotal Fee															\$282,882	\$60,360	\$222,522
GUAM GRT TAX (5.263%)															\$14,887	\$3,177	\$11,710
TOTAL TIME AND MATERIALS FEE															\$297,769	\$63,537	\$234,232
TOTAL LUMP SUM FEE (FROM PAGE 2)															\$527,462	\$19,790	\$507,673
GRAND TOTAL FEE															\$825,232	\$83,326	\$741,906



Rate Schedule for Professional Services

Category	Assigned Hourly Rate
Principal Engineer	\$295
Technical Advisor/QAQC	\$295
Project Manager	\$265
Senior Process Engineer	\$295
Senior Structural Engineer	\$265
Senior Civil Engineer	\$265
Senior Mechanical Engineer	\$295
Senior Electrical Engineer	\$305
Operation & Maintenance Specialist	\$360
Senior Architect	\$225
Process Engineer	\$155
Mechanical Engineer	\$150
Structural Engineer	\$170
Civil Engineer	\$150
Electrical Engineer	\$170
Process CAD	\$135
Mechanical CAD	\$135
Civil CAD	\$135
Structural CAD	\$135
Project Engineer	\$145
Technical Editor	\$185
Archaeological Monitor (SEARCH)	4 hours or less = \$600/day; 4-8 hours = \$1,200/day
Accounting	\$155
Administration	\$105
Senior Mechanical Manager (Coffman)	\$223
Mechanical Engineer I (Coffman)	\$142

WERI Testing Lab Fees (As per adopted fee schedule dated 9/29/2023)

Test	Cost per Test
Turbidity	\$17
Heterotrophic Plate Count	\$66
Total Coliforms & E. coli	\$66

EMSL Testing Lab Fees

Test	Cost per Test
MPA Testing (2 week Turn Around)	\$700
Crypto + Giardia (2 week turn around)	\$525

Equipment/Shipping	Cost
Crypto + Giardia Sampling Apparatus	\$1,050 (Cost covered under Santa Rita Springs Proposal)
Crypto + Giardia Sampling Shipping	Est. at \$600



Design Services for Asan Springs Water Treatment Facility
GWA Project No. W11-003-BND
Change Order #4
Rate Schedule for Professional Services

Page: 4 of 4

EMSL Testing Lab Fees Cont'd
Equipment/Shipping

MPA Filter Media Shipping

Cost
Est. at \$100

HDR Reimbursable Expenses:

Printing

22"x34" Large Format Print

\$2/sheet

Scanning

22"x34" Large Format Scan

\$2/sheet

Report Binding

8.5"x11" Report Size

Actual rate of binding for each report deliverable

Mileage

Reimbursed at the effective IRS allowable rate (Currently \$0.70/mile)

MPA Sampling Apparatus

Actual Cost; Est. at \$2,000

Shipping Supplies and Rates

Actual cost of shipping containers, packing material and shipping service.

Compensation for services shall be at the hourly billing rates identified in the schedule above. If additional labor

Notes:

1. Subconsultants are charged at cost plus ten percent (10%).
1. The Guam Revenue Tax (GRT) in effect at the time of billing will be applied to each monthly invoice total for work.