

# **GUAM POWER AUTHORITY**

ATURIDÅT ILEKTRESEDÅT GUÅHAN P.O.BOX 2977 • HAGÅTÑA, GUAM U.S.A. 96932-2977

To All Interested Parties:

The Guam Power Authority, Procurement Office will continue its efforts with improvement towards accountability, transparency, and efficiency to better serve GPA personnel, prospective bidders, and guests, please be advised of the following:

- 1. Virtual meetings and/or conferences will be coordinated through the GPA Procurement Division.
- 2. For In-Person meetings and/or conferences:
  - a. Please contact our office for scheduled hand delivery of Sealed Bid submission on or before scheduled Opening/Closing date and time with confirmation via:

Tel: (671) 648-3054/5 and/or (671) 648-3045 Email: GPA-Interested-Parties@gpagwa.com

b. Face masks and social distancing may be employed at the option of the individual.

COMPAN	IY NAME:	REPRESENTA	ΓIVE NAME:
		Print / Sign	Date
BID NO.:	RE-BID MULTI STEP GPA-042-22	2	
RFP NO.:			





# JOSEPH T. DUENAS Chairman



# JOHN M. BENAVENTE, P.E. General Manager

Bidder Representative's Signature

		Teleph	one Nos. (671) 648-3054/55	or Facsimile (671) 648	3165	
Accountabili	ty	· Impartiality	· Competence	· Openness	•	Value
NVITATION I		) NO.: <u>RE-BID MULTI-S</u> Fadian Public Par	TEP GPA-042-22 king Lot Solar Canopy			
Bidders are to ascertain submit one copies of the Technic SEPARATI	reminded to that all of the (1) original, e Qualitativ al Proposal E SEALED"	SPECIAL REMINDE read the Sealed Bid Solice following requirements of six (6) bound copies of e Scoring Workbook. Of and Qualitative Scoring envelope and consist of enda, if any, at the closing	RS TO PROSPECTIVE BIDE itation and Instructions, an checked below are submitted their Technical Proposal one (1) electronic PDF for Workbook. The BIDDER one printed copy and one date and time.	d General Terms and ed in the bid envelope. I including one (1) or mat copy in CD, DVI R's Price Proposal sh	Bidders are iginal and si ), and/or USI and/or USI	e required to x (6) printed 3 Flash Drive of itted in a
		I	SSUING OFFICE:			
		(	Guam Power Authority-Prod 1st. Floor, Room 101 Gloria B. Nelson Public Serv 688 Route 15 Mangilao, Guam 96913			
		- (15%) May be in the form one General Terms and Cond				
	b. c.	ONLY be made out to the Letter of Credit or Surety Bond – Valid only if a 1. Current Certificate of Au 2. Power of Attorney issue a. Current Sworn An b. Current Renewal	accompanied by: uthority issued by the Insuran ed by the Surety to the Residential Report (Limited Liability of Annual Limited Liability Par ed by two (2) major officers or	ce Commissioner; or ent General Agent or the Company (LLC) and/or tnership (LLP); or	e following: Corporation) or	
,		UALIFICATION;				
XX) OWNE XX) NON-( XX) NO GI XX) ETHIC XX) WAGE XX) REST	CHURES/DESERSHIP AND COLLUSION RATUITIES COLL STANDA E DETERMINARICTIONS AGRICULT		;			
Note: The ab	a. b. c.	Date of signature of the pers	ving requirements: I within 60 days of the date th son authorized to sign the bid an original – If copy, indicate	and the notary date mu		
A Conot cor 04, suc	required in htract with t 2007 and W ccessful bid reminder mu mean a disqu	ess License and/or Con- order to provide a prop- he Authority. Bidders Mage Determination under der must provide to GPA st be signed and returned in alification and rejection of the		t, but is a pre-condition of the bid. Failure to condition the bid. Failure to condition of the bid. Failure to condition of the bid.	on for enteri 002, PL 28-10 Additionally, on by the US mply with the a	ng into a 55 dated January upon award the Dept. of Labor. bove requirements
On this	s	day of	2024, I	,	<u>,</u> autho	orized representative
of above	referenced IF		2024, I acknowledge rec	eipt of this special remir	nder to prospec	tive bidders with the

# **INVITATION FOR BID**

# ISSUING OFFICE:

Guam Power Authority-Procurement Office 1st. Floor, Room 101 Gloria B. Nelson Public Service Building 688 Route 15 Mangilao, Guam 96913

Attn: JOHN M. BENAVENTE, P.E. General Manager c/o JAMIE LYNN C. PANGELINAN Supply Management Administrator

BEATRICE "TRICEE" P. LIMTIACO DATE

General Manager (A)

General Manager (A)		DATE			
DATE ISSUED:	06/13/20 06/20/20		BID INVITATION	RE-BID MULT NO.: <u>GPA-042-22</u>	I-STEP
BID FOR:	Fadian P	ublic Parking L	ot Solar Canopy		
SPECIFICATION:	See Attac	ched			
DESTINATION:	See Attac	ched			
REQUIRED DELIVE	RY TIME: Se	e Attached			
PRE-BID CONFERE (Meeting place will be Building, 688 Route 15	at our GPWA F	Procurement Off	: _10:00 A.M.; Tuesday, J ice, Room 101, 1st. Floor, Glor	une 25, 2024 ia B. Nelson Public S	 Service
CUT-OFF DATE FO	R RECEIPT (	OF QUESTION	S: 4:00 P.M.; Tuesday,	luly 02, 2024	
INSTRUCTIONS TO INDICATE WHETHE		INDIVIDUAL	PARTNERSHIP _	CORPORAT	ΓΙΟΝ
INCORPORATED IN:			_		
original and six (6) printe and/or USB Flash Drive submitted in a "SEPARA Flash Drive) copy includi (Guam CHamoru Stand	ed copies of the ( of the Technical TE SEALED" en ng all addenda, lard Time; ChS	Qualitative Scoring Proposal and Quavelope and considerand sealed to the Input of the properties of the Polysian Proposed Inc.	six (6) bound copies of their Tect g Workbook. One (1) electronic Falitative Scoring Workbook. The st of one printed copy and one el- issuing office above no later thar luly 30, 2024 Bid subm ferms and Conditions and Sealed	PDF format copy in CD BIDDER's Price Propo ectronic (CD, DVD and n (Time) 4:00 P.M. itted after the time and	o, DVD, osal shall be dor USB date
the respective items liste expense of the Government	ed on the schedu ent in opening, t	le provided, unles abulating, and ev	ne specified, the articles and serves otherwise specified by the bidd aluating this and other bids, and ale not less than six (6) months	er. In consideration to other considerations, the	the he
NAME AND ADDRESS OF	BIDDER:		SIGNATURE AND TITLE OF PERS AUTHORIZED TO SIGN THIS BID		
AWARD: CONTRACT NO	l.:	AMOUNT:	DATE:		
ITEM NO(S). AWARDED:					
			CONTRACTING OFF	ICFR·	<u> </u>
			CONTRACTING OFF	IOLIV.	
			BEATRICE "TRICEE" General Manager (A)	P. LIMTIACO DA	TE
NAME AND ADDRESS (	OF CONTRACT	OR:	SIGNATURE AND TI	TLE OF PERSON	===
			_ 		

# **INVITATION FOR RE-BID MULTI-STEP**

**BID NO.: GPA-042-22** 

FEDERAL GRANT NO.: D19AP00168

# FADIAN PUBLIC PARKING LOT SOLAR CANOPY DESIGN AND CONSTRUCTION



LORRAINE O. SHINOHARA, P.E.

STRATEGIC PLANNING AND OPERATIONS RESEARCH MANAGER (A)

JOHN J. CRUZ JR., P.E.

gu d Cof

ASSISTANT GENERAL MANAGER, ENGINEERING & TECHNICAL SERVICES

JOHN M. BENAVENTE, P.E.

**GENERAL MANAGER** 

GUAM POWER AUTHORITY P.O. BOX 2977 HAGATNA, GUAM 96932

# **INVITATION FOR RE-BID MULTI-STEP BID**

NO.: GPA-042-22

# Fadian Public Parking Lot Solar Canopy DESIGN AND CONSTRUCTION



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# 1. Introduction

The Guam Power Authority (GPA) is inviting qualified firms to participate in a Multi-Step Bid for the Fadian Public Access Parking Lot Solar Canopy Design and Construction funded through a grant from the U.S. Department of the Interior Office of Insular Affairs.

The Technical and Price Proposals shall be submitted on or before the Cut-Off Date for Receipt of Proposals specified in *Table 1: Bid Milestones*. The bid evaluation shall be a two-step process. Step One will involve evaluation of the Technical or Qualitative Proposals (Non-priced Technical Offers), and the establishment of a Qualified Bidders List (QBL) based on acceptable submitted Technical Proposals. Step Two will involve the evaluation of Price Proposals (Priced Offers) from the BIDDERs identified on the QBL. Price Proposals for unqualified BIDDERs shall be returned, unopened, after the Technical Proposal Evaluation. GPA will perform a comprehensive evaluation of each proposal and select the BIDDER with the best proposal based on the submitted Price Proposal Evaluation Workbook Sheet. If the selected vendor cannot proceed with the Contract, GPA may elect to go to the next best BIDDER or cancel the bid.

Table 1: Bid Milestones indicates the projected start and end dates for the milestones in the Bid Process. **GPA reserves the right to change the Bid Milestones at its sole discretion.** BIDDERs are encouraged to confirm with GPA any of the scheduled milestones via an official letter to GPA.

Table 1: Bid Milestones

	Bid Process Milestones	From Date	To Date	
Bid Announcement	06/13/2024	7/30/2024		
Vendors Submit Questio	06/13/2024	07/02/2024		
	06/25/2024	10:00 AM		
Non-Mandatory Site Vis	it #1	CHamoru Standard Time; (CHST)		
		07/02/202	4 4:00 PM	
Cut-Off Date for Receipt	CHamoru Standard Time; (CHST)			
GPA Review and Answer	Questions	06/13/2024 07/23/2024		
Vendors Prepare Bids		06/13/2022 07/30/2024		
		07/30/2024	4:00 PM	
Cut-Off Date for Receipt of Proposals (Technical and Price Proposals)  CHamoru Standard (CHST)		•		
	Opening of Technical Proposal	07/30/24		
EVALUATION Step One:	Office of Attorney General Review Phase II (Form 016)	07/31/2024	08/13/2024	
	Technical Proposal Evaluation	08/14/2024	08/22/2024	

	Notification of Qualified Bidders	08/23	Page 13 of 34 /2024
EVALUATION	Opening of Price Proposals (Public Opening)	08/26/2024 CHamoru Sta (CH	andard Time;
Step Two:	Office of Attorney General Review Phase III (Form 016)	8/27/2024	09/10/2024
	Evaluation of Price Proposals	09/11/2024	09/17/2024
	Notification of Successful Bidder	09/18	/2024
Contract Approval,	Award & Issuance of NTP	TBD	TBD
Office of Attorney G	ieneral Review Phase III (Form 016)	TBD	TBD
Contract Mobilization	on	TBD	TBD
Contract and Operational Commencement TBD			BD

# 1.1. Invitation for Bid (IFB) Document Organization

Invitation for Bid (IFB) documents are organized into six separate volumes, as follows:

Volume I — Commercial Terms and Conditions

Volume II — Technical and Functional Requirements

Volume III — Contract

Volume IV — Appendices

# 1.2. Project Overview and Scope

GPA is seeking the services of an Engineer/Procure/Construct (EPC) "CONTRACTOR" for the design and installation of a Photovoltaic (PV) System mounted on canopy structure(s) to be located at GPA's main office branch's public-access parking lot. The PV System shall have a minimum size of 68 KWdc and shall serve the load at the Gloria B. Nelson Public Service Building. GPA seeks a "turnkey" project that will be fully operational upon commissioning. The required services include compliance with all applicable local and federal laws as well as applicable local and national standards for the services rendered.

The CONTRACTOR shall design, procure equipment and materials, obtain required permitting, construct, install, interconnect, test, commission and provide five-year operation and maintenance of the PV system to be located on Guam Power Authority property in Fadian, Mangilao. The PV System shall include a five-year workmanship warranty and five-year cost-free maintenance service for checking PV Array condition, DC output, inverter efficiency, maintaining and tightening interconnections, costs for parts replacement, and replacement labor costs.

### 1.2.1. GPA Overview

Guam Power Authority (GPA) is a public corporation that provides electric power service throughout the entire island of Guam. It is and an enterprise fund of the Government of Guam. The Guam Power Authority Act of 1968 established GPA in May 1968. Guam Code 12 Chapter 8 sets the legal definitions, empowerments and limitations for GPA. GPA currently serves about 52,000 customers with 420 MW of oil-fired generation capacity and 25.3 MW of renewable generation capacity. In 2020, GPA had a peak demand of 247 MW. GPA follows the National Electrical Manufacturers Association (NEMA) ANSI C84 for power systems.

An overview of GPA's generation resources and transmission systems is provided in GPA's Integrated Resource Plan, which can be found on the following webpage: <a href="http://www.guampowerauthority.com/gpa\_authority/strategicplanning/2021IRP.php">http://www.guampowerauthority.com/gpa\_authority/strategicplanning/2021IRP.php</a>.

#### 1.2.2. Project Background

GPA has obtained, or will obtain prior to construction, the following requirements:

- A. Bureau of Statistics and Plans Guam Coastal Management Program (GCMP): determined the project is consistent with federal plan
- B. U.S. Fish & Wildlife Service (USFWS): completed Endangered Species Act (ESA) Section 7 consultation and Biological Opinion
- C. Guam State Historic Preservation Office: National Historic Preservation Act (NHPA) Section 106 consultation before construction start date

- D. US Army Corps of Engineers: review and approval of Record of Environmental Consideration and supporting documents
- E. U.S. Department of Interior, Office of Insular Affairs: Authorization to Proceed (ATP) GPA's Island Wide Power System diagrams can be found on the following webpage: <a href="http://guampowerauthority.com/gpa\_authority/engineering/gpa\_engineering\_system\_diagrams\_php">http://guampowerauthority.com/gpa\_authority/engineering/gpa\_engineering\_system\_diagrams\_php</a>.

# 1.2.3. Site Description

The Photovoltaic Canopy Structure(s) shall be constructed within the front parking lot of GPA's main office branch building. This parking lot is fully paved and is located at 688 Route 15, Fadian, designated as the Gloria B. Nelson Public Service Building, and is within the Municipality of Mangilao. There is an existing paved road along Route 15 that is used to access the site by public patrons and GPA and GWA employees.

# 2. Instructions to Bidders

#### 2.1. Introduction

This is a Multi-Step Bid procurement. The **Technical and Price Proposals should both be submitted on or before the Cut-Off Date for Receipt of Proposals specified in** *Table 1: Bid Milestones*. In Step One, only the submitted Technical Proposals will be evaluated and determined whether Acceptable or Unacceptable. BIDDERs whose Technical Proposals are determined to be Acceptable shall qualify for Step Two. BIDDERs whose Technical Proposals are Unacceptable shall be notified, and the unopened Price Proposal packages shall be returned. In Step Two, the Price Proposals of the BIDDERs whose Technical Proposals that are determined to be Acceptable, either initially or as a result of discussions, will be considered for award.

# 2.2. Language and Correspondence

The official language of Guam is English. The bid and all accompanying documents shall be in English. Any prospective BIDDER desiring an explanation or interpretation of the solicitation, commercial terms, Technical Specification, etc., must make a request in writing to GPA at the address listed below, **referencing the Invitation for Multi-Step Bid No**.

JOHN M. BENAVENTE, P.E.
GENERAL MANAGER
GUAM POWER AUTHORITY
POST OFFICE BOX 2977
HAGATNA, GUAM 96932-2977

ATTENTION: SUPPLY MANAGEMENT ADMINISTRATOR

PHONE: (671) 646-3054 / 55

FAX: (671) 648-3165

The written request may also be sent via-email by sending an electronic copy of the written request to the Procurement Officer handling the IFB. All inquiries must be received by Procurement no later than the close of business of the Cut-Off Date for Receipt of Questions specified in *Table 1: Bid Milestones*. Any information given to a prospective BIDDER concerning a solicitation will be furnished promptly to all parties recorded by Procurement as having received the Invitation for Bid as an amendment to the solicitation if that information is necessary in submitting bids or if the lack of it would be prejudicial to other prospective BIDDERs. Oral explanations or instructions given will not be binding.

#### 2.3. Pre-Bid Site Visit

If requested by a BIDDER, a Pre-Bid Site Visit will be scheduled before the cut-off date for receipt of proposals. All prospective BIDDERS are not required to be present at the Pre-Bid Site Visit. Attendance to the Pre-Bid Site Visit shall be at the BIDDER's own expense. BIDDERs wishing to attend may meet at the GPA Procurement Conference room at the time specified before proceeding to the project site.

Though a site visit is not a requirement, Bidders shall be responsible for having ascertained pertinent conditions such as location, accessibility, and general character of the site or building, the character and extent of existing work within or adjacent to the site, and any other work being performed thereon at the time of the submission of their bids. No extra compensation will be made by reason of any misunderstanding or error as regards to the site, the conditions thereof, accessibility or the amount or kind of work to be performed.

If, in the performance of the contract, subsurface or latent conditions at the site are found to be materially different from those indicated by the drawings and specifications, or unknown conditions of an unusual nature are disclosed differing materially from the conditions usually inherent in work of the character shown and specified, the attention of the Contracting Officer shall be called immediately to such conditions before they are disturbed. Upon such notice, or upon his own observation of such conditions, the Contracting Officer shall promptly make such changes in the drawings and specifications as he finds necessary to conform to the different conditions, and any increase or decrease in the cost of the work resulting from such changes shall be adjusted as provided under Changes in Work.

#### 2.4. Technical and Functional Requirements Examination

Before submitting their proposals, BIDDERs must familiarize themselves with the nature and extent of the work, duly noting any local conditions that may affect the work to be done and the labor, materials, and equipment required. BIDDERs are also required to carefully examine all tender documents inclusive of all technical and functional requirements and to inform themselves of all conditions and requirements for the execution of the proposed work in accordance with the laws and regulations of Guam. Ignorance on the part of BIDDERs of any part of the tender documents and Technical and Functional Requirements will in no way relieve them of the obligations and responsibilities assumed under the Contract.

#### 2.5. Solicitation Amendment

Any amendment, modification or addendum issued by GPA, prior to the opening of the proposals, for the purpose of changing the intent of the Technical and Functional Requirements, clarifying the meaning or changing any of the provisions of this Invitation for Bid, shall be binding to the same extent as if written in the tender documents. Any addendum issued will be made available to all BIDDERs via mail, fax, e-mail or posting to the ftp site.

Announcements regarding any amendment shall also be posted at the GPA Website at <a href="http://www.guampowerauthority.com/gpa\_authority/procurement/gpa\_current\_rfps.php">http://www.guampowerauthority.com/gpa\_authority/procurement/gpa\_current\_rfps.php</a>. The BIDDERS shall acknowledge receipt of the amendment by a signature on one copy, which is to be returned to the GPA Supply Management Administrator. Acknowledgement may also be made by fax or e-mail.

# 2.6. Familiarity With Laws

The BIDDER shall be familiar with all Federal (U.S.) and local laws, ordinances, rules and regulations of Guam that in any manner affect the work. Ignorance of law on the part of the BIDDER will not relieve the BIDDER from responsibility.

# 2.7. Cost of Bidding

BIDDERs shall bear all costs associated with the preparation and submission of their proposals. GPA will not be responsible or liable for those costs, regardless of the outcome of the IFB process.

#### 2.8. Documents Executed Outside of Guam

The Power of Attorney, Performance Bond Guarantee, and documents defining the constitution of the joint venture, consortium, company or firm, if executed outside Guam, whether required to be submitted with the proposals or after the award of the Contract, must be authenticated by a Notary Public or other official authorized to witness sworn statements.

# 2.9. Proposal Submittal

This section outlines the requirements for proposal submittals, including the proposal package format and content required by GPA. The BIDDERs are advised to keep a copy of all documents submitted, including the Workbooks, and test electronic copies on disk prior to submission to GPA if applicable.

# 2.9.1. Technical Proposal Requirements

Each BIDDER's Technical Proposal Package shall include, but is not limited to, the following:

- A. Complete printed copies of the Technical Proposal
- B. Complete PDF copy of the Technical Proposal in a CD
- C. Checklist forms defined in Appendix A
- D. All other required forms defined in Volume IV Appendices
- E. Supplementary information as described below

The Technical Proposal Package shall be submitted in the format and quantities described below.

# 2.9.2. Price Proposal Requirements

The BIDDER's Price Proposal shall consist of one copy of the bid form (*Bid Schedule* in Appendix N). BIDDERs shall provide prices/costs in U.S. Dollars. Technical and Price Proposals shall be submitted on or before the Cut-Off Date for Receipt of Proposals, with the Price Proposal on a separate sealed envelope marked "PRICE PROPOSAL" and indicating the date and time of bid package remittance. Any equipment and material prices shall be provided on the basis of CIF to the Guam job site unloaded.

The Price Proposal shall be submitted in a separate sealed package with the following information clearly marked on the outside of each side:

- (1) "PRICE PROPOSAL"
- (2) "FADIAN PUBLIC ACCESS PARKING LOT SOLAR CANOPY PROJECT DESIGN AND CONSTRUCTION"
- (3) BIDDER's Name
- (4) Invitation for Bid Number
- (5) Closing Date and Time (Guam Standard Time)
- (6) Addressed as follows:

ATTENTION: JOHN M. BENAVENTE, P.E.

GENERAL MANAGER

GUAM POWER AUTHORITY
POST OFFICE BOX 2977

HAGATNA, GUAM 96932-2977

# 2.9.3. Non-Repudiation Issues

GPA has structured both its Manual and Electronic IFB submittal procedures to ensure non-repudiation of the submitted proposals. In this IFB, non-repudiation is strong and substantial evidence of the identity of the sender and owner of the proposal and of proposal's integrity in so far as it being unaltered from its original sent state, sufficient to prevent a party from successfully denying the origin, submission or delivery of the proposal and the integrity of its contents. Non-repudiation applies to both parties to this IFB transaction. It binds the sender as well as precludes the recipient from denying the exchange of information and material upon the receipt of secure acknowledgment from the recipient.

GPA and the BIDDER shall manage the Manual IFB Submittal Process to address non-repudiation, security and confidentiality inclusive but not limited to the following:

- A. Manually executed signatures and printed media documents
- B. Chain of custody receipts
- C. Manual time-stamps for receipt of IFB materials
- D. Machine generated Fax confirmation reports

- E. Secure notification e-mail
- F. Physical delivery of printed material proposals
- G. Physically secured area storage of IFB materials

# 2.9.4. Signature of Bidder

A duly authorized person must sign the BIDDER's proposals. All names shall be typed or printed below the signature. A proposal submitted by a corporation must bear the seal of the corporation, be attested to by its Secretary, and be accompanied by necessary Power-of-Attorney documentation.

Associated companies or joint ventures shall jointly designate one Power-of-Attorney person authorized to obligate all the companies of the association or joint venture. A proposal submitted by a joint venture must be accompanied by the document of formation of the joint venture, duly registered and authenticated by a Notary Public, in which is defined precisely the conditions under which it will function, its period of duration, the persons authorized to represent and obligate it, the participation of the several firms forming the joint venture, the principal member of the joint venture, and address for correspondence for the joint venture. BIDDERs are advised that the joint venture agreement must include a clause stating that the members of the joint venture are severally and jointly bound.

Wherever a legal signature is required, receipt of an electronic signature will suffice to meet the submittal deadline for those electing to use the Electronic Proposal Submittal process. The original signed documents must be reproduced electronically and be placed in the submitted compressed archive file. However, the original documents must be sent to GPA via post or courier and postmarked no later than the bid-opening date. In addition, GPA will accept an electronic scanned copy of Notarized documents with the compressed archive submitted will suffice to meet the proposal deadline. However, the original documents must be sent to GPA via post or courier and post-marked no later than the bid-opening date.

#### 2.9.5. Cut-Off Date for Receipt of Proposals

The Technical and Price Proposals have to be submitted on or before the GPA Cut-Off Date for Receipt of Proposals specified in *Table 1: Bid Milestones*.

Price Proposals shall be returned, unopened, to the BIDDERs whose Technical Proposals are deemed Not Acceptable.

# 2.9.6. Receipt and Handling of Proposals

Upon receipt, each proposal submittal package will be time-stamped. The only acceptable evidence to establish the time of receipt at GPA is the date/time stamp of GPA's Procurement Office on the wrapper or other documentary evidence of receipt maintained by GPA. Proposals will be stored in a secure place until the date and time set for proposal opening.

GPA Procurement personnel and the BIDDERs must ensure that the outside of the sealed package is stamped received using the GPA Procurement Stamp. In addition, GPA Procurement personnel must officially log the time and date that the BIDDER's sealed proposal package has been received. GPA makes no warranties on these submittal processes, manual or electronic.

# 2.9.7. Proposal Changes During Bid Process

Changes may be made by the BIDDER to the Technical Proposal and Price Proposal prior to the Cut-Off Date. The proposals, including corrections or changes made, must be re-submitted on or before the Cut-Off Date.

# 2.10. Step One Procedures

# 2.10.1. Evaluation of Technical Proposals

After the close of the proposal submission date, the GPA Evaluation Committee shall evaluate the Technical Proposals. Each of the responses and supporting information shall be evaluated and scored, in accordance with the scoring methodology described in the *Qualitative Proposal Scoring Worksheet* in Appendix M.

#### 2.10.2. Evaluation Criteria and Scoring of Technical Proposals

In determining the most qualified BIDDER, GPA shall be guided by the following:

- A. The ability, capacity and skill of the BIDDER to perform the work specified.
- B. Whether the BIDDER can perform promptly or within the specified time.
- C. The BIDDERS approach or plan for the required work. A preliminary schedule must be provided with the plan.
- D. The quality of performance of the BIDDER with regard to awards of similar scope previously made to him.
- E. The previous and existing compliance by the BIDDERS with laws and regulations relative to procurement.

The *Qualitative Proposal Scoring Worksheet* in Appendix M lists the evaluation criteria and preliminary scoring. GPA will convene an Evaluation Committee of no less than three (3) people whom will elect a committee chairperson. Each committee member will score each BIDDER'S proposal using the *Qualitative Proposal Scoring Worksheet*. Proposals that score greater than or equal to 80 points are deemed acceptable. Proposals that score between 75 and 79 percent, inclusive, are deemed potentially acceptable. Proposals scoring below 75 percent are deemed unacceptable.

If the committee determines that a proposal is not acceptable, then that proposal cannot be evaluated in Step Two. If the committee determines that a proposal is potentially acceptable, then that proposal cannot be evaluated in step Two unless the committee finds less than two acceptable proposals. No unacceptable proposals will be scored beyond Step One.

At the conclusion of the Step One evaluation, GPA shall establish a Qualified Bidders List (QBL), and the Procurement Officer or his designee may initiate Step Two if there are sufficient acceptable Technical Proposals to assure effective price competition in the second phase without technical discussions. If the Procurement Officer or his designee finds that such is not the case, the Procurement Officer shall issue an amendment to this Invitation for Bid or engage in technical discussions with BIDDERs as set forth below.

# 2.10.3. Discussion of Proposals

The Procurement Officer or his designee may conduct discussions with any BIDDER who submits an acceptable or potentially acceptable Technical Proposal. During the course of such discussions, the Procurement Officer or his designee shall not disclose any information derived from one Technical Proposal to any other BIDDER.

GPA may conduct discussions with any BIDDER to determine such BIDDER's qualifications for further consideration and explore with the BIDDER the scope and nature of the required services, method of performance and the relative utility of alternative methods of approach. During the course of such discussions, the Procurement Officer shall not disclose any information derived from a technical proposal to any other BIDDER.

Each BIDDER is requested not to contact GPA on any matter relating to its proposal, from the time of submission of the proposals to the time the Contract is awarded, except to respond to inquiries by GPA.

#### 2.10.4. Notice of Unacceptable Proposal

A notice of unacceptability will be forwarded to the BIDDER upon completion of the Technical Proposal evaluation and final determination of unacceptability. When the Procurement Officer or his designee determines a BIDDER's Technical Proposal to be unacceptable, such BIDDER shall not be afforded an additional opportunity to supplement its technical proposal.

#### 2.11. Step Two Procedures

Upon completion of evaluation of the Technical Proposals, qualified BIDDERs will be notified and GPA will proceed with Step Two of the Multi-Step Bid. GPA shall return the Price Proposal Packages submitted by BIDDERs whose Technical Proposals did not qualify for Step Two.

#### 2.11.1. Opening of Price Proposals

Each selected BIDDER from the Qualified Bidders List will be notified of the Price Proposal Opening date, which is specified in *Table 1: Bid* Milestones. BIDDERs may be present during the Bid Opening.

#### 2.11.2. Proposal Changes During Bid Process

No changes may be made between Notification of Acceptable Proposal and Price Proposal Opening date.

Bids will be opened publicly at the time and place stated in the invitation for bids. The officer whose duty it is to open them will decide when the specified time has arrived and bids received thereafter will not be considered. No responsibility will be attached to any officer for the premature opening of a bid not properly addressed and identified.

Telegraphic bids will not be considered, but modifications by telegraph of bids already submitted will be considered if received prior to time set for opening.

#### 2.11.3. Proposal Validity

All price/cost data submitted with the BIDDER's proposal shall remain firm and open for acceptance for a period of not less than six (6) months after the Price Proposal Opening Date and thereafter shall be subject to renewal by mutual agreement between the BIDDER and GPA. BIDDER shall state the actual date of expiration in their proposal.

# 2.11.4. Preliminary Examination of Price Proposals

GPA will examine the Price Proposals on the opening date to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed, and whether the Price Proposals are generally in order.

Arithmetical errors will be rectified on the following basis:

- A. If there is a discrepancy between the unit price and the total price, including any discounts, that is obtained by multiplying the unit priced and quantity, the unit price shall prevail and the total price shall be corrected.
- B. If the BIDDER does not accept the correction of the error, its bid will be rejected. If there is a discrepancy between words and figures, the amount in words will prevail

#### 2.12. Award of Contract

The Contract will be awarded to the BIDDER evaluated as being qualified, with the lowest total Priced Proposal for the basic bid and additive bid (if applicable).

The successful BIDDER will be notified by GPA through official written correspondence of the intent to award the Contract (Notice of Intent to Award). The written correspondence may be sent by GPA via official letter, e-mail and fax.

The BIDDER will be required to send to Guam, within fourteen (14) days of the date of receipt of such notice, a representative or representatives with proper Power-of-Attorney for the purpose of executing a Contract with such alterations or additions thereto as may be required to adopt such Contract to the circumstances of the proposal. The successful BIDDER shall provide the required Performance Bond within fourteen (14) working days of receipt of the GPA Notice of Intent to Award.

Failure on the part of the successful BIDDER to provide a Performance Bond and/or to enter into a Contract with GPA shall be sufficient grounds for the annulment of the award. GPA may determine the BIDDER to be non-responsive to the bid, and may proceed with sending a Notice of Intent to Award to the next most qualified BIDDER.

# 2.13. Bid and Performance Bond Requirements

#### 2.13.1. Bid Bond Form and Amount

Bid guarantee may be bid bond (form enclosed), certified check or cashier's check. Bid bond shall be signed by the bidder, two major officers of the Surety and Resident General Agent, if the Surety is a foreign or alien surety and shall be accompanied with copies of current Certificate of Authority to do business on Guam issued by the Department of Revenue and Taxation, Power of Attorney issued by the Surety to the Resident General Agent and Power of Attorney issued by two major officers of the Surety to whoever is signing on their behalf. Certified check or cashier's check must be issued by a banking institution licensed to do business on Guam and shall be made payable to the Guam Power Authority. Such bid bond or check shall be submitted with the understanding that it shall guarantee that the bidder will not withdraw his bid for a period of sixty (60) calendar days after the scheduled closing time for the receipt of bids; that if his bid is accepted, he will enter into a formal contract with the Owner in accordance with the form of agreement included as a part of the contract documents, and that the required performance and payment bond will be given; and that in the event of the withdrawal of said bid within said period, or the failure to enter into said contract and give said bond within ten (10) working days after he has received notice of the acceptance of his bid, the bidder shall be liable to the Owner for the full amount of the bid guarantee as representing the damage to the Owner on account of the default of the bidder in any particular hereof. The bid guarantee shall be returned to all except the three lowest bidders within three days after the formal opening of bids. The bid guarantee of the second and/or third low bidder shall be returned thirty (30) calendar days after the bid opening date upon request, provided that he has not been notified by the Owner of the acceptance of his bid prior to the date of such request. The bid guarantee of the lowest qualified bidder shall be returned within fortyeight (48) hours after the Owner and the qualified bidder have executed the contract.

A Bid Bond for an amount of not less than fifteen percent (15%) of the total bid amount is required and may be in the following form:

- A. Cash, Bank Draft or Certified Check made payable to the Guam Power Authority
- B. By wire transfer to Guam Power Authority. Account information shall be sent to the BIDDERs upon request
- C. Letter of Credit
- D. Surety Bond valid if accompanied by:
  - a. Current Certificate of Authority to do business on Guam issued by the Department of Revenue and Taxation;
  - b. Power of Attorney issued by the Surety to the Resident General Agent; and
  - c. Power of Attorney issued by two (2) major officers of the Surety to whoever is signing on their behalf.

Bonds submitted as Bid Guarantee without signatures and supporting documents are invalid and bids will be rejected. If a BIDDER desires to submit a Bid Bond with an acceptable bonding company, the BIDDER must submit original copies of Appendix I.

# 2.13.2. Performance Bond Form, Amount and Duration

The required Performance Bond shall be in the form as prescribed in Appendix B. If the CONTRACTOR is declared by GPA to be in default under the CONTRACT, GPA may exercise any or all rights and remedies it possesses under the provisions of the Performance Bond.

The successful bidder must deliver to the Owner an executed performance and payment bond (forms enclosed) in an amount at least equal to one hundred percent (100%) of the accepted bid as security for the faithful performance of the contract and security for the payment of all persons performing labor and furnishing materials in connection with this contract. The sureties of all bonds shall be such surety company or companies as are approved by the Owner and as are authorized to transact business in Guam. The bonds must be approved by the Owner prior to execution of the formal contract.

# 2.13.3. Performance Bond Execution by a Guam Licensed Surety Company

The CONTRACTOR shall provide a Performance Bond executed by a surety company licensed to do business on Guam. A list of surety companies licensed to do business on Guam is provided in Appendix C.

# 2.14. General Proposal Guidelines and Requirements

#### 2.14.1. Amendments to the Bid Documents

GPA may elect to change the IFB documents in whole or part. GPA shall send all Amendments to the IFB documents via fax and/or e-mail. In addition, GPA will make all Amendments available on the Internet at <a href="http://www.guampowerauthority.com/procurement/index.html">http://www.guampowerauthority.com/procurement/index.html</a>.

#### 2.14.2. Withdrawal of Bids

Bids may be withdrawn on written or telegraphic request received from bidders prior to the time fixed for opening. Negligence on the part of the bidder in preparing the bid confers no right to the withdrawal of the bid after it has been opened.

# 2.14.3. Proprietary Data

For the purposes of this solicitation and submitted proposals, the laws, rules and regulations of Guam governing confidentiality shall govern. BIDDERs may designate those portions of the proposal that contain trade secrets or other proprietary data that are to remain confidential.

The Procurement Officer or his designee shall examine the proposals to determine the validity of any request for nondisclosure of trade secrets and other proprietary data identified in writing. If the BIDDER and GPA do not agree as to the disclosure of data, the Procurement Officer or his designee shall inform the BIDDER in writing and in e-mail within five working days of the closing date for proposal submittal what portions of the proposal will be disclosed and that, unless the BIDDER protests under the Conditions of Contract Disputes clause the information will be so disclosed. The proposal shall be opened to public inspection subject to any continuing prohibition of the disclosure of confidential data.

#### 2.14.4. Acceptance of Proposals

GPA reserves the right to reject any or all proposals and to waive minor informalities if it appears in GPA's best interest to do so. Any effort by a BIDDER to influence GPA in the proposal evaluation, proposal comparison or contract award decisions may result in the rejection of the proposal. Once GPA has arrived at a decision regarding the award of the Contract, it will notify promptly the successful BIDDER through official written correspondence, and shall include information advising the BIDDERs of the timing of the bid milestones such as Contract Finalization, Awarding and Mobilization. Potential Bid Awardees shall await this notification from GPA prior to commencement of any Contract Terms Finalization.

#### 2.14.5. Solicitation Cancellation or Delay

GPA reserves the right to delay award or to cancel the Invitation for Bid, or to reject all proposals or any individual proposal in whole or in part, at any time prior to the final award. When a bid is cancelled or rejected prior to final award, notice of cancellation or rejection shall be sent to all BIDDERs and all proposal materials will be promptly returned. The reasons for cancellation or rejection shall be made a part of the procurement file that is available for public inspection.

After opening, but prior to award, all proposals may be rejected in whole or in part when the Procurement Officer or his designee determines that such action is in GPA's best interest for reasons including but not limited to:

- A. The supplies and services being provided are no longer required
- B. The solicitation did not provide consideration of other factors of significance to GPA
- C. All otherwise acceptable proposals received have clearly unreasonable price/cost data
- D. There is reason to believe that the proposals may not have been independently arrived at in open competition, may have been collusive and may have been submitted in bad faith

Any individual proposal may be rejected in whole or in part when in the best interest of GPA.

# 2.14.6. Rejection of Bids

The owner reserves the right to reject any and all bids when such rejection is in the interest of the Owner and to reject the bid of a bidder who is not in a position to perform the contract.

# 2.14.7. Disqualification of Bidder

When, for any reason, collusion or other anticompetitive practices are suspected among BIDDERs, a notice of the relevant facts shall be transmitted to the Guam Attorney General. BIDDERs suspected of collusion or other anticompetitive practices may be suspended or debarred from participating in future procurement opportunities for a specified period.

# 2.14.8. False Statements In Proposal

BIDDERs must provide full, accurate, and complete information as required by this solicitation and its attachments. The penalty for making false statements in any proposal or bid is prescribed in 18 U.S.C. 1001 and Title 9, Guam Code Annotated. Note, by use of a digital signature to sign the proposal, the BIDDER agrees that this act legally binds the BIDDER to his proposal.

# 2.14.9. Prohibition Against Gratuities, Kickbacks, and Favors

Pursuant to GCA 5 Section 5630 (c), this clause is conspicuously set forth to alert all parties in this procurement that *Guam Public Law Title 5 § 5630. Gratuities and Kickbacks* prohibits against gratuities, kickbacks and favors.

# 2.14.10. Restriction against Contractors Employing Convicted Sex Offenders from Working at Government of Guam Venues

GCA 5 §5253(b) restricts the BIDDER against employing convicted sex offenders from working at Government of Guam venues. It states:

(b) All contracts for services to agencies listed herein shall include the following provisions: (1) warranties that no person providing services on behalf of the CONTRACTOR has been convicted of a sex offense under the provisions of Chapter 25 of Title 9 GCA or an offense as defined in Article 2 of Chapter 28, Title 9 GCA, or an offense in another jurisdiction with, at a minimum, the same elements as such offenses, or who is listed on the Sex Offender Registry; and (2) that if any person providing services on behalf of the CONTRACTOR is convicted of a sex offense under the provisions of Chapter 25 of Title 9 GCA or an offense as defined in Article 2 of Chapter 28, Title 9 GCA or an offense in another jurisdiction with, at a minimum, the same elements as such offenses, or who is listed on the Sex Offender Registry, that such person will be immediately removed from working at said agency and that the administrator of said agency be informed of such within twenty-four (24) hours of such conviction.

# 3. Required Forms and Supplemental Information

# GPA shall automatically disqualify any proposal submitted without the supplementary information and required forms listed below:

- A. A copy of the BIDDER's Articles of Incorporation or other applicable forms concerning business organization (i.e. partnership, sole proprietorship, etc.) and By-Laws
- B. Certificate of Good Standing to conduct business in jurisdiction of residence
- C. Information regarding outstanding claims against the BIDDER, if any
- D. Required affidavits (Major Shareholders Disclosure; Non Collusion; Declaration Regarding Compliance with DOL Wage Determination; No Gratuities or Kickbacks; Ethical Standards Affidavit; Restriction against Contractors Employing Convicted Sex Offenders from Working at Government of Guam Venues
- E. Proposal Checklist
- F. Bid Bond
- G. A current Guam Business License. Although it is not required in order to provide a Bid for this engagement, obtaining a Guam Business License is a pre-condition for entering into a Contract with the Authority

The following forms and workbooks will be available on the GPA Website's Procurement Page and in Volume IV Appendices. Appendices A, D, E, F, G, H, I, K, M, N and V must be completed:

- A. Appendix A: Proposal Checklist
- B. Appendix B: Performance Bond
- C. Appendix C: List of Surety Companies Licensed to Do Business in Guam
- D. Appendix D: Ownership and Interest Disclosure Affidavit
- E. Appendix E: Non-collusion Affidavit
- F. Appendix F: No Gratuities or Kickbacks Affidavit
- G. Appendix G: Ethical Standards Affidavit
- H. Appendix H: Declaration Re Compliance with U.S. DOL Wage Determination
- I. Appendix I: Bid Bond Form and Instructions
- J. Appendix J: Local Procurement Preference Application
- K. Appendix K: Restriction Against Sex Offenders
- L. Appendix L: Deferred Payment Agreement
- M. Appendix M: Qualitative Proposal Scoring Worksheet
- N. Appendix N: Bid Schedule
- O. Appendix O: Vicinity Map
- P. Appendix P: Gloria B. Nelson Public Service Building Existing Site Layout Plan
- Q. Appendix Q: Gloria B. Nelson Public Service Building Electrical Site Plan
- R. Appendix R: Site Subsurface Soil Investigation Report
- S. Appendix S: Electrical Panel Schedule and Power One-Line Diagram
- T. Appendix T: As-Built Drawings
- U. Appendix U: Record of Environmental Consideration Correspondence
- V. Appendix V: Contingent Fees Affidavit

# 3.1. Technical Proposal Forms

The following referenced forms shall be completed and submitted with the proposal.

# 3.1.1. Proposal Checklist

The BIDDER shall complete Form A-1 in Appendix A by acknowledging the receipt of the Invitation for Bid Documents received from GPA, including the latest IFB Amendments received. Acknowledgement of receipt shall be given by signing or putting an initial beside each line item received. This Form is an acknowledgement of receipt, review and understanding of the IFB documents.

During the submission of the proposals, the BIDDER shall complete Form A-2. This Form provides an inventory of documents submitted by the BIDDER in response to the proposal requirements.

#### 3.1.2. Ownership and Interest Disclosure Affidavit

The BIDDER shall fill out the Major Shareholders Disclosure Affidavit form in Appendix D and submit it with its proposal.

#### 3.1.3. Non-collusion Affidavit

The BIDDER shall fill out the Non-collusion Affidavit form in Appendix E and submit it with its proposal.

#### 3.1.4. No Gratuities or Kickbacks Affidavit

The BIDDER shall fill out the No Gratuities or Kickbacks Affidavit Form in Appendix F and submit it with its proposal.

# 3.1.5. Ethical Standards Affidavit

The BIDDER shall fill out the Ethical Standards Affidavit Form in Appendix G and submit it with its proposal.

# 3.1.6. Compliance with US DOL Wage Determination

The BIDDER shall fill out and sign Form E – Declaration of Compliance with US DOL Wage Determination in Appendix H and submit it with the Technical Proposal.

#### 3.1.7. Bid Bond Form

As stated in section 2.13, if a BIDDER desires to submit a Bid Bond with an acceptable bonding company, the BIDDER must submit original copies of Appendix I.

# 3.1.8. Local Procurement Preference Application

The BIDDER shall fill out and sign the Local Procurement Preference Application in Appendix J and submit it with the Technical Proposal.

# 3.1.9. Restriction Against Sex Offenders

The BIDDER shall complete the form *Restriction against Sex Offenders Employed by Service Providers to Government of Guam from Working on Government of Guam Property* in Appendix K and submit it as part of the Technical Proposal.

# 3.1.10. Contingent Fee

The BIDDER shall fill out the Contingent Fees Affidavit in Appendix V and submit it with the Technical Proposal.

#### 4. Conditions of Contract

#### 4.1. Definitions

Wherever used in these General Conditions or in the other Contract Documents, the following terms have the meanings indicated which are applicable to both the singular and plural thereof.

# **Approved**

The word "Approved," when applied by ENGINEER to CONTRACTOR's drawings or documents, shall mean that the drawings or documents are satisfactory from the standpoint of interfacing with GPA-furnished components, and/or that ENGINEER has not observed any statement or feature that appears to deviate from the Specification's requirements.

#### **Approved As Revised**

The words "Approved As Revised," when applied by ENGINEER to CONTRACTOR's drawings or documents shall mean that the drawings or documents are approved as defined above, except that the corrections shown are required for the proper interfacing with GPA-furnished components or are necessary to be in conformance with the Specification's requirements.

#### **Change Order**

A written instrument to CONTRACTOR signed by GPA authorizing an addition, deletion, or revision in the goods or Special Services, or an adjustment in the purchase order price or the delivery time, issued after the effective date of the Contract Agreement (Contract).

#### **Contract Agreement (Contract or Agreement)**

The written agreement between GPA and CONTRACTOR covering the furnishing of the Goods, Special Services, and other services in connection therewith evidencing what is contemplated and agreed to between the parties including any other Contract Documents either attached to the Contract or made a part thereof by reference therein.

#### **Contract Documents**

The Contract Agreement, Bonds (where required), these Conditions of Contract, any Supplementary Conditions, the Specifications, the Drawings and any other documents specifically identified in the Contract Agreement, together with all Modifications issued after execution of the Contract Agreement.

#### **CONTRACTOR**

The CONTRACTOR with whom GPA has entered into the Contract Agreement.

#### Day

A calendar day of twenty-four (24) hours measured from midnight to the next midnight

#### Defective

An adjective which when modifying the words Goods or Special Services refers to Goods or Special Services which are unsatisfactory, faulty, deficient, do not conform to the Contract Documents, or do not meet the requirements of any inspection, reference standard, test, or approval referred to in the Contract Documents.

#### **Delivery Time**

The total number of days or the dates stated in the Contract Agreement for furnishing the Goods and/or Special Services

#### **Drawings**

Drawings are all official drawings approved by the ENGINEER and showing the character and scope of the Goods to be furnished.

# **Effective Date of the Contract Agreement**

The date indicated in the Contract Agreement on which it becomes effective, or if no such date is indicated, the date by which the Contract Agreement is signed by both parties.

#### **ENGINEER**

Wherever the words "ENGINEER" or "ENGINEERS" appear in the CONTRACT Documents, it shall mean GPA's engineer duly appointed as "ENGINEER". GPA shall assign several ENGINEERS as required to cover specialized areas of expertise.

#### **ENGINEER's Instructions**

Written instructions issued by ENGINEER which clarify or interpret the CONTRACT Documents or order minor changes or alterations in the Goods or Special Services to be furnished but which do not involve a change in the Purchase Price or the Delivery Time.

#### **General Manager**

The General Manager is the Chief Executive Officer of GPA. The office and title of General Manager shall apply to any person acting in a regular or in an acting capacity as the Chief Executive Officer of GPA.

#### Goods

All property required to be furnished by CONTRACTOR under the procurement documents.

# Modification

A written amendment of the Contract Agreement signed by both parties, or Change Order, or ENGINEER's Instructions.

#### **OWNER**

The Guam Power Authority (an autonomous instrumentality of the Government of Guam).

#### **Point of Delivery**

The place at which property in the goods shall pass to GPA shall be CIF landed at job-site, Guam, unloaded.

#### **Procurement Officer**

The General Manager of GPA or the General Manager's designee.

# **Project**

The plant, facilities, or works the Goods and Services are to be used for or incorporated into.

#### **PURCHASER**

The Guam Power Authority with whom CONTRACTOR has entered into the Contract Agreement.

#### Seller

The CONTRACTOR.

#### Site

The Site is the area where the Project is to be constructed or executed.

# **Special Services**

Services to be furnished by the CONTRACTOR as required by the Contract Agreement.

#### Territory

The Territory of Guam

#### 4.2. Construction Contract

#### 4.2.1. Contract Documents

- a. The contract documents consist of the Formal Contract, and Technical Specifications, including all addenda and alterations made in the documents prior to their execution.
- b. The contract documents shall be signed by the Owner and Contractor.
- c. Anything required by one of the contract documents shall be of like effect as if required by all the contract documents whether the other contract documents have the same requirement or not. In case of conflict between the contract documents, the Formal Contract shall be controlling over the technical specifications. Any discrepancies between the contract documents shall be called to the attention of the Contracting Officer before proceeding with work affected thereby.
- d. It will be conclusively presumed that the Contractor has read, examined and agreed to each and every term, condition and provision, covenant or agreement in the technical specifications, bid forms, contract, related to the work to be carried out, said documents being on file in the Procurement Office, Guam Power Authority.

#### 4.2.2. Drawings

- a. The general character and scope of the work are illustrated by the drawings. Any additional detail drawings and other information deemed necessary by the Contracting Officer will be furnished by the Contractor when and as required.
- b. In case of differences between small scale and large scale drawings, the large scale drawings shall govern. Figured dimensions on the drawings shall be considered primary compared with measurements obtained through scaling of drawings. The Contractor shall verify all dimensions, and if any be lacking, he shall call the attention thereto and be governed by the decision of the Contracting Officer.
- c. Where on any of the drawings a portion of the work is drawn out and the remainder is indicated in outline, the parts drawn out shall apply also to all other like portions of the work.
- d. Where the word "similar" occurs on the drawings, it shall be interpreted in its general sense and not as meaning identical.
- e. The approval of shop and setting drawings will be general and shall not be construed (1) as permitting any departure from the contract requirements, (2) as relieving the Contractor of the responsibility for any error in details, dimensions and otherwise that may exist; (3) as approving departures from additional details or instructions previously furnished by the Contracting Officer.

#### 4.2.3. Detail Drawings and Instructions

- a. The Contractor shall furnish additional instructions and detail drawings as may be necessary to carry out the work included in the contract. The additional drawings and instructions thus supplied by the Contractor shall be consistent with the contract documents and true developments thereof, and shall be so prepared that they can be reasonably interpreted as a part thereof. The Contractor shall carry out the work in accordance with the additional detail drawings and instructions.
- b. The Contracting Officer at any time, by written order designated or indicated to be a change order, may make any change in the work within the general scope of the contract, including but not limited to changes:
  - (1) In the specifications (including drawings and designs);
  - (2) In the method or manner of performance of the work;
  - (3) In the Government-furnished facilities, equipment, materials, services for site; or
  - (4) Directing acceleration in the performance of the work.
- c. Any other written order or an oral order (which terms as used in paragraph (b) shall include direction, instructions, interpretations or determination from the Contracting Officer) which causes any such change, shall be treated as a change order under this clause,

provided that the Contractor gives the Contracting Officer written notice stating the date, circumstances and source of the order and that the Contractor regards the order as a change order.

- d. Except as herein provided, no order, statement, or conduct of the Contracting Officer shall be treated as a change order under this clause or entitle the Contractor to an equitable adjustment hereunder.
- e. If any change under this clause causes an increase or decrease in the Contractor's cost of, or the time required for the performance of any part of the work under this contract, whether or not changed by any order, an equitable adjustment shall be made and the contract modified in writing accordingly, provided, however, that except for claims based on defective specifications no claim for any change under (b) above shall be allowed for any costs incurred more than 20 calendar days before the Contractor gives written notice as therein required. And provided further, that in the case of defective specifications for which the Owner is responsible, the equitable adjustment shall include any increased cost reasonably incurred by the Contractor in attempting to comply with such defective specifications.
- f. If the Contractor intends to assert a claim for an equitable adjustment under this clause, he must, within 30 calendar days after receipt of a written change order under (a) above or the furnishing of a written notice under (b) above, submit to the Contracting Officer a written statement setting forth the general nature and monetary extent of such claim, unless this period is extended by the Owner. The statement of claim hereunder may be included in the notice under (b) above.
- g. No claim by the Contractor for an equitable adjustment hereunder shall be allowed if asserted after final payment under this contract.

# 4.2.4. Shop Drawings

- a. The Contractor shall submit for the approval of the Contracting Officer, shop and setting drawings and schedules required by the specifications or that may be requested by the Contracting Officer and no work shall be fabricated by the Contractor, save at his own risk, until such approval has been given.
- b. Drawings and schedules shall be submitted in quadruplicate (unless otherwise specified) accompanied by letter of transmittal which shall give a list of the numbers and dates of the drawings submitted. Drawings shall be complete in every respect and bound insets.
- c. The Contractor shall submit all drawings and schedules sufficiently in advance of construction requirements to allow ample time for checking, correcting, resubmitting and rechecking.

- d. The drawings submitted shall be marked with the name of the project, numbered consecutively and bear the stamp of approval of the Contractor as evidence that the drawings have been checked by the Contractor. Any drawings submitted without this stamp of approval will not be considered and will be returned to the Contractor for resubmission. If the shop drawings show variations from the requirements of the contract because of standard shop practice or other reasons, the Contractor shall make specific mention of such variation in his letter of transmittal so that if any variations are acceptable, suitable action may be taken for proper adjustment; otherwise, the Contractor will not be relieved of the responsibility for executing the work in accordance with the contract even though such shop drawings have been approved.
- e. If a drawing as submitted indicates a departure from the contract requirements which the Contracting Officer finds to be in the interest of the Owner and to be so minor as not to involve a change in the contract price or time for performance, he may approve the drawing.

# 4.2.5. Specifications and Drawings

- a. The Contractor shall keep on the work site a copy of the drawings and specifications including all authorized change orders, and shall at all times give the Owner, Contracting Officer and their representatives access thereto.
- b. All drawings and specifications and copies thereof furnished by the Contracting Officer are his property and shall not be used on other projects without his consent. Upon completion of this project all copies of the drawings and specifications except the signed contract sets are to be returned to the Contracting Officer upon his request.

# 4.2.6. Special Requirements

- a. Where special requirements, provisions or specifications or detailed specifications are attached hereto or are included in the proposal they shall be considered a part of these general conditions or specifications or detailed specifications as fully as if contained herein. Should any special provisions be in conflict with these general conditions or specifications or detailed specifications, said special requirements, provisions or detailed specifications shall govern.
- b. Person in charge of electrical wiring and installations shall be a licensed Master Electrician and/or Registered Electrical Engineer in Guam.

#### 4.2.7. Explanation to Bidders

Discrepancies, omissions, or doubts as to the meaning of bid submittal documents, contract provisions and technical specifications should be communicated in writing to the Contracting Officer for interpretation. Bidders should act promptly and allow sufficient time for a reply to each item. Every interpretation made to a bidder will be in the form of an addendum to the Invitation for Bids documents which, if issued, will be sent as promptly as practicable to all

persons to whom the bid documents have been issued. All such addenda shall become part of the contract documents.

# 4.3. Scope of the Contract Agreement

Each party to the Contract Agreement acknowledges that no representation, promises or agreement, orally or otherwise, has been made by any party or anyone acting on behalf of any party and that no other agreement not contained in the Contract Agreement shall be valid or binding. Any modification of the Contract Agreement will be effective only if in writing, and mutually agreed to and signed by both parties. For purposes of the Contract Agreement, both the signature of the General Manager and the Chairman of the Consolidated Commission on Utilities (CCU) are the only signatures that will effectively bind GPA to the Contract Agreement.

#### 4.4. Indemnity

CONTRACTOR shall indemnify, defend and hold GPA and ENGINEER harmless from any claim, liability or product liability, loss, damage, demand, cause of action or suit, expense, or fee of legal counsel (including reasonable attorney's fees incurred by Owner) arising out of or in connection with the performance of the work, or any Goods and Special Services provided by the CONTRACTOR, including injury or death to any person or persons resulting from the acts of omission of the Contractor or the Contractor's employees, servants, agents or subcontractors and from mechanics and materialmans liens.

# 4.5. Accounting

For accounting purposes and for use in establishing property records, GPA may require CONTRACTOR to provide a reasonable price breakdown of the total price into separate prices applying to the individual items supplied under the Contract Agreement.

Where the Contract Agreement covers the reimbursement of the traveling or living expenses of the CONTRACTOR's employees or agents, the CONTRACTOR agrees to furnish complete itemization and breakdowns of such expenses when requested by GPA.

In the event of any changes to or termination of the Contract Agreement, or the furnishing of goods or services on a labor hour or a cost reimbursable basis, CONTRACTOR shall supply information in such detail as may be reasonably required by GPA to support all applicable charges. GPA, or an independent auditor designated by GPA, shall have the right to audit, during normal working hours, CONTRACTOR's accounts and records relating to such charges. The expense of such audit will be borne by GPA.

#### 4.6. Waiver of Claims

The making and acceptance of final payment will constitute:

A. A waiver of all claims by GPA against CONTRACTOR, except claims arising from unsettled liens, claims relative to defective Goods or Special Services appearing after final payment, or from failure to comply with the Contract Documents or the terms of any special guarantees specified therein; nor will final payment constitute a waiver by GPA of any

- rights in respect of CONTRACTOR's continuing obligations under the Procurement Documents; and
- B. A waiver of all claims by CONTRACTOR against GPA other than those previously made in writing and still unsettled.

# 4.7. Supervision and Coordination by Contractor

CONTRACTOR shall competently and efficiently manage, supervise, and direct production of the Goods and furnishing of Special Services and coordinate all operations required to deliver the Goods and furnish any required Special Services.

CONTRACTOR shall designate, in writing to GPA, a person with authority to act on behalf of CONTRACTOR with respect to CONTRACTOR's obligations under the CONTRACT Documents, and all communications given to or received from that person will be binding on CONTRACTOR.

CONTRACTOR shall perform all such activities as an independent contractor and not as an agent of GPA. When others furnish materials and equipment for assembly by the CONTRACTOR, CONTRACTOR shall receive, unload, store, and handle it and become responsible therefore as though CONTRACTOR was furnishing such materials and/or equipment under the Contract Agreement.

# 4.8. Duties of Contracting Officer and Contractor Safety Measures

### 4.8.1. Authority of Contracting Officer

The Contracting Officer shall give all orders and directions contemplated under this contract and specifications relative to the execution of the work. The Contracting Officer shall determine the amount, quality, acceptability, and fitness of the several kinds of work and materials which are to be paid under this contract and shall decide all questions which may arise in relation to paid work and the construction thereof. The Contracting Officer's estimates and decisions shall be final and conclusive, except as herein otherwise expressly provided. In case any question shall arise between the parties hereto relative to said contract or specifications, the determination or decision of the Contracting Officer shall be a condition precedent to the right of the Contractor to receive any money or payment for work under this contract affected in any manner or to any extent by such question.

The Contracting Officer shall decide the meaning and intent of any portion of the specifications and of any plans or drawings where the same may be found obscure or be in dispute.

Any difference or conflicts in regard to their work which may arise between the Contractor under this contract and other Contractors performing work for the Owner shall be adjusted and determined by the Contracting Officer.

#### 4.8.2. Contractor's Obligations

The Contractor shall, in good workmanlike manner, do and perform all work and furnish all supplies and materials, machinery, equipment, facilities and means, except as herein otherwise expressly

specified, necessary or proper to perform and complete all the work required by this contract within the time herein specified in accordance with the plans and drawings of the work covered by this contract and any and all supplemental plans and drawings, and in accordance with the directions of the Contracting Officer as given from time to time during the progress of the work. He alone shall be responsible for the safety, efficiency and adequacy of his plant, appliances and methods, and for any damage which may result from their failure or their improper construction, maintenance or operations. The Contractor shall observe, comply with and be subject to all terms, conditions, requirements, and limitations of the contract and specifications and shall carry on and complete the entire work to the satisfaction of the Contracting Officer and the Owner.

# 4.8.3. Superintendence by Contractor

The Contractor shall give his personal superintendence to the work or have a competent foreman or superintendent, satisfactory to the Contracting Officer, on the work at all times during progress with authority to act for him.

#### 4.8.4. Subcontracts

- a. Nothing contained in the specifications or drawings shall be construed as creating any contractual relationship between any subcontractor and the Owner. The diffusion or sections of the specifications are not intended to control the Contractor in dividing the work among subcontractors or to limit the work performed by any trade.
- b. The Contractor shall be as fully responsible to the Owner for the acts and omissions of subcontractors and of persons employed by them, as he is for the acts and omissions of persons directly employed by him.
- c. The Contractor shall be responsible for the coordination of the trades, subcontractors, and material men engaged in his work.
- d. The Contractor shall, without additional expense to the Owner, utilize the services of specialty subcontractors on those parts of the work which are specified to be performed by specialty subcontractors.
- e. The Owner will not undertake to settle any differences between the Contractor and his subcontractors or between subcontractors.
- f. The Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the work including waiver of mechanics liens to bind subcontractors by the terms of the General Conditions and other contract documents insofar as applicable to the work of subcontractors and to give the Owner any exercise over the Contractor under any provisions of the contract documents.

g. Subcontracting can be done with Guam Power Authority approval. GPA shall review contractor submittals regarding request for subcontracting part of the project. Contractor shall provide the names of subcontracting contractor GPA shall approve after appropriate review.

## 4.8.5. Subletting

Subletting part of the work is permitted. However, bidder must note that subletting in excess of the following is not allowed:

- a. Where the subletting is for both labor and material, total cost of sublet work shall not exceed 49% of the contract amount.
- b. Where subletting is for labor only, sublet work cost shall not exceed 30% of the total labor contract amount. Information concerning subcontracts must form a part of the bid documents and shall be submitted on standard "Subcontract" information form.

## 4.8.6. Assignments

The Contractor shall not assign the whole or any part of this contract or any monies due or to become due hereunder without the written consent of the Owner and of all the sureties executing any bonds on behalf of the Contractor in connection with said contract. In case the Contractor assigns the whole or any part of said contract or assigns all or any part of any monies due or to become due under said contract, the instrument of assignment shall contain a clause substantially to the effect that it is agreed that the right of the assignee in and to any monies due or to become due the Contractor or otherwise shall be subject to all of the terms and conditions of said contract or supplemental thereto, the rights and remedies of the Owner there under or arising by operation of the law and to the liens of all persons, firms, and corporations for services rendered or materials supplied in connection with the performance of said contract.

# 4.8.7. Equal Opportunity

- a. The Contractor will not discriminate against any employee or applicant for employment because of race, religion, sex, color, age, economic status, or national origin. The Contractor will take affirmative action to insure that qualified applicants are employed and that employees are treated during employment without regard to their race, religion, sex, color, age, economic status, or national origin. Such action shall include, but not be limited to, the following: Employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoffs or termination, rates of pay or other forms of compensation, and selection for training including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Contracting Officer setting forth the provisions of this nondiscrimination clause.
- b. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor; state that all qualified applicants will receive consideration for

employment without regard to race, religion, sex, color, age, economic status, or national origin.

c. The Contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the Contracting Officer, advising the said labor union or workers' representative of the Contractor's commitments under Section 202 of Executive Order No. 11246 of September 24, 1965 and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

## 4.8.8. Hiring of Apprentices

The Contractor shall hire for performance of work under this contract apprentice(s) to be employed in the performance of work under this contract in accordance with Executive Order No. 2000-10 dated April11, 2000(See Attachment "A" to General Conditions).

#### 4.8.9. Minimum Wage Rate

All persons employed on this project shall be paid not less than minimum wage applicable to the corresponding skill or craft as determined by the Department of Labor, Government of Guam. Prevailing wage rates of Department of Labor, Government of Guam are attached herewith and shall be deemed a part of the contract documents.

## 4.8.10. Law, Permits and Regulations

- a. Building permit for the project shall be secured and paid for by the Contractor.
- b. The Contractor shall pay all fees and charges for connection to outside service and use of property other than the site of the work for storage of materials or other purposes.
- c. The Contractor shall comply with all laws, ordinances, regulations and building code requirements applicable to work hereunder unless in conflict with contract requirements. If the Contractor ascertains at any time that any requirement of this contract is a variance with applicable laws, ordinances, regulations, or building code requirements, he shall promptly notify the Contracting Officer and any necessary adjustment of the contract shall be made as specified under Changes in Work.

#### 4.8.11. Accident Prevention

a) Precaution shall be exercised at all times for the protection of persons (including employees) and property. The safety provisions of applicable laws, building and construction codes shall be observed. Machinery equipment and all hazards shall be observed. Machinery equipment and all hazards shall be guarded or eliminated in accordance with the safety provisions of the latest edition of the Manual of Accident Prevention in Construction published by the Associated General Contractors of America to the extent that such provisions are not in contravention of applicable laws.

b) Should typhoon warnings be issued, the Contractor shall take every practicable precaution to minimize damage and/or danger to persons, to the work, and to the adjacent property. These precautions shall include closing all openings, removing all loose materials, tools and/or equipment from exposed locations, and removing or securing scaffolding and all other temporary work.

# 4.8.12. Protection of Work and Property

The Contractor shall at all times safely guard the Owner's property from injury or loss in connection with this contract. He shall at all times safely guard and protect his own work and that of adjacent property (as provided by law and the contract documents) from damage. All passageways, guard fences, lights and other facilities required for protection by laws and regulations and local conditions must be provided and maintained.

# 4.8.13. Responsibility of Contractor to Act in Emergency

In case of an emergency which threatens loss or injury of property and/or safety or life, the Contractor shall act, without previous instructions from the Owner or Contracting Officer, as the situation may warrant. He shall notify the Contracting Officer thereof immediately thereafter of any compensation claimed by the Contractor. Substantiating documents regarding expenses shall be submitted to the Owner through the Contracting Officer and the amount of compensation shall be determined by agreement or by the Contracting Officer subject to review procedures provided under Guam's Procurement Law and Claims Act.

# 4.8.14. Mutual Responsibility of Contractors

If the Contractor or any of his subcontractors or employees cause loss or damage to any separate contractor on the work, the Contractor agrees to settle with such separate contractor by agreement, if he will so settle. If such separate contractor sues the Owner on account of any loss so sustained, the Owner shall notify the Contractor who shall indemnify and save harmless the Owner against any expenses or judgement arising therefrom.

#### 4.8.15. Use of Premises and Removal of Debris

The Contractor expressly agrees to undertake at his own expense

(a) To take every precaution against injuries to the persons or damages to property;

- (b) To comply with the regulations governing the operation of premises which are occupied and to perform his contract in such a manner as not to interrupt or interfere with the operation of other facilities;
- (c) To perform any work necessary to be performed after regular working hours or on Sundays or legal holidays without additional expense to the Owner;
- (d) To store his apparatus, materials, supplies, and equipment in such orderly fashion at the site of the work as will not unduly interfere with the progress of his work or the work of any other contractors;
- (e) To place upon the work or any part thereof only such loads as are consistent with the safety of that portion of the work;
- (f) To frequently clean up all refuse, rubbish, scrap materials and debris caused by his operation so that at all times the site of the work shall present a neat, orderly and workmanlike appearance;
- (g) To affect all cutting, fitting, or patching of his work required to make the same conform to the plans and specifications, and except with the consent of the Contracting Officer, not to cut or otherwise alter the work of any contractor;
- (h) Before final payment to remove all surplus materials, false work, temporary structures, including foundations thereof, plant of any description and debris of every nature resulting from his operations, to put the site in a neat, orderly condition and to thoroughly clean and leave reasonably dust free all furnished surfaces.

## 4.8.16. Obstructions

The Contractor shall at his own expense remove all obstructions, the removal of which shall be necessary for the proper reception, performance, construction, installation and completion of all work under this contract.

## 4.8.17. Site of Contractor's Operations

The Contractor shall confine all construction operations within the vicinity of the site and shall arrange his work so that all construction materials and equipment are placed in such manner and location that there may be a minimum of interference or inconvenience inflicted upon the public and employees of the Government.

#### 4.8.18. Barricades

The Contractor shall erect, install and maintain all temporary public walks, warning signs, barricades or other protective means in and around the site as deemed necessary or as may be ordered by the Contracting Officer for the effective protection of the public from injury and shall be held strictly liable for their safety.

## 4.8.19. Electrical Energy

The Contractor shall make all necessary applications, pay all fees and charges, obtain necessary permits and provide and maintain his own electrical power and light as required and necessary in the progress of any branch of the work. He shall provide all temporary wiring necessary.

#### 4.8.20. Water

The Contractor shall make all necessary applications, pay all fees and charges obtain necessary permits for construction of temporary water required for use on this project. The nearest available source of water tap shall be verified by the Contractor. The Contractor shall be responsible for all expenses required for conveying water to the site from the available nearest source.

## 4.8.21. Signs

The Contractor shall erect a sign at the project site at his own expense. The location of the sign shall be as directed by the Contracting Officer. Size of signs, lettering, and other pertinent data that should appear on the sign will be furnished by the Contracting Officer to the Contractor.

# 4.9. Quality of Work

## 4.9.1. Engineering and Layout

- (a) The Contractor shall provide competent engineering services to execute the work in accordance with the contract requirements. He shall verify the figures shown on the survey and approach drawings before undertaking any construction work and shall be responsible for the accuracy of the finished work.
- (b) The Owner has established or will establish such general reference points as will, in his judgment, enable the Contractor to proceed with the work. If the Contractor finds that any previously established reference points have been destroyed or displaced, he shall promptly notify the Owner.
- (c) The Contractor shall protect and preserve the established bench marks and monuments and shall make no changes in location without the written approval of the Owner. Any of them which may be lost or destroyed or which require shifting because of necessary changes in grades or locations shall be subject to prior approval by the Owner, be replaced and accurately located by the Contractor.

#### 4.9.2. Shop Drawings, Materials and Workmanship

Unless otherwise specified, all materials and equipment incorporated in the work under the contract shall be new. All workmanship shall be first class and by persons qualified in the respective trades.

**Shop Drawings** 

- (a) The Contractor shall submit, for the approval of the Contracting Officer, shop and setting drawings and schedules required by the specifications or that may be requested by the Contracting Officer and no work shall be fabricated by the Contractor, save at his own risk, until such approval has been given.
- (b) Drawings and schedules shall be submitted in quadruplicate (unless otherwise specified) accompanied by letter of transmittal which shall give a list of the numbers and dates of the drawings submitted. Drawings shall be complete in every respect and bound insets.
- (c) The Contractor shall submit all drawings and schedules sufficiently in advance of construction requirements to allow ample time for checking, correcting, resubmitting and rechecking.
- (d) The drawings submitted shall be marked with the name of the project, numbered consecutively and bear the stamp of approval of the Contractor as evidence that the drawings have been checked by the Contractor. Any drawings submitted without this stamp of approval will not be considered and will be returned to the Contractor for resubmission. If the shop drawings show variations from the requirements of the contract because of standard shop practice or other reasons, the Contractor shall make specific mention of such variation in his letter of transmittal in order that if applicable, suitable action may be taken for proper adjustment. Otherwise, the Contractor will not be relieved of the responsibility for executing the work in accordance with the contract even though such shop drawings have been approved.
- (e) If a drawing as submitted indicates a departure from the contract requirements which the Contracting Officer finds to be in the interest of the Owner and to be so minor as not to involve a change in the contract price or time for performance, he may approve the drawings.
- (f) The approval of shop and setting drawings will be general and, except as otherwise provided in paragraph 2 (e), shall not be construed (1) as permitting any departure from the contract requirements; (2) as relieving the Contractor of the responsibility for any error in details, dimensions or otherwise that may exist; (3) as approving departures from additional details or instructions previously furnished by the Contracting Officer.

#### 4.9.3. Standards

- (a) Any material specified by reference to the number, symbol or title of a specific standard, such as a commercial standard, a Federal specification, a trade association standard or other similar standard, shall comply with the requirements in the latest revision thereto in effect on the date of Invitation for Bids, except as limited to type, class or grade or modified in such reference.
- (b) The standard referred to, except as modified in the specifications, shall have full force and effect as though printed in the specifications. These standards are not furnished to bidders for the reason that the manufacturers and trades involved are assumed to be familiar with

- their requirements. The Contracting Officer will furnish, upon request, information as to how copies of such standards may be obtained.
- (c) Reference in the specifications to any article, device, product, material, fixture, form, or type of construction by name, make or catalog number shall be interpreted as establishing a standard of quality and shall not be construed as limiting competition; and the Contractor, in such cases, may at his option use any article, device, product, material, fixture, form of type of construction which in the judgment of the Contracting Officer expressed in writing is equal to that specified.
- (d) All construction work must comply with applicable GPA standards. The Contractor shall be responsible for obtaining all applicable GPA standards.

## **4.9.4.** Samples

- (a) The Contractor shall furnish for the approval of the Contracting Officer any samples required by the specifications or that may be required by the Contracting Officer of any and all materials or equipment he proposes to use and shall prepay all shipping charges on the samples.
- (b) No samples are to be submitted with bids.
- (c) No materials or equipment of which samples are required to be submitted for approval shall be used on the work until such approval has been given by the Contracting Officer, save only at the Contractor's risk and expense.
- (d) Each sample shall have a label indicating the material represented, its place of origin and the names of the producer, the Contractor and the building or work for which the material is intended. Samples of finished materials shall be so marked as to indicate where the materials represented are required by the drawings or specifications.
- (e) A letter in duplicate submitting each shipment of samples shall be mailed under separate cover by the Contractor and contain a list of the samples, the name of the building or work for which the materials are intended, and the brands of the materials and names of the manufacturers.
- (f) The approval of any sample shall be only for characteristics or for the named in such approval and no other. No approval of a sample shall be taken in itself to change or modify any contract requirement. When a material has been approved, no additional sample of that material will be considered and no change in brand or make will be permitted. Approval of samples of hardware in good condition may be suitably marked for identification and used in the work.
- (g) Failure of any material to pass the specified tests will be sufficient cause for refusal to consider under this contract any further samples of the same brand or make of that material.

(h) Test samples as the Contracting Officer may deem necessary will be procured from the various materials or equipment delivered by the Contractor for use in the work. If any of these test samples fail to meet the specifications requirement, any previous approvals will be withdrawn and such materials or equipment shall be subject to removal and replacement by the Contractor with materials or equipment meeting the specification requirements, or at the discretion of the Owner, the defective materials and equipment may be permitted to remain in place subject to a proper adjustment of the contract price. The cost of the tests will be borne by the Owner except where laboratory tests as hereinafter specified are required by the specifications.

## 4.9.5. Laboratory Tests

Any specified laboratory tests of materials and finished articles to be incorporated in the work shall be made by bureaus, laboratories or agencies approved by the Contracting Officer, and the reports of such tests shall be submitted to the Contracting Officer. The cost of the testing shall be paid for by the Contractor.

#### 4.9.6. Methods

The Contractor shall use proper and efficient methods and appliances for the performance of all the operations connected with work embraced under these specifications, drawings and contract to secure a rate of progress which will secure completion of the work within the time specified. If, at any time before commencement of work, or during the progress thereof, such methods, equipment or appliances are inefficient or inappropriate for securing said quality of work or said rate of progress, the Contracting Officer may order the Contractor to increase their efficiency or to improve their character, and the Contractor must conform to such order. The failure of the Contractor or his sureties from the obligations to secure such quality of work and said rate of progress and the completion of the work as required herein.

## 4.9.7. Labor and Materials

The Contractor shall furnish all labor, materials and equipment for the execution of the work according to the drawings, specifications and contract, and where no specifications are contained therein for whatever may be necessary, shall do all that may be termed ordinary, customary or essential to a job to be well and reliably completed. This includes concealment of all pipes and other rough items of installation if not clearly so shown on the drawings in a manner acceptable to the Contracting Officer. Structural safety shall not be impaired by such concealment. Work not particularly detailed, marked or specified shall be of equal quality as similar parts that are detailed, marked or specified. All material finished for and used in the job shall be of kind and grade specified and where not specifically called for at least of customary standard grade. All work shall be executed in accordance with their trades. Full structural safety is essential and the Contractor guarantees to accomplish same for the entire work.

## 4.9.8. Submittals

Specific items requiring submittals are specified in the Contract Documents or may be requested as needed by the Contracting Officer. Shop Drawings shall be submitted and approved before procurement, fabrication or delivery. Partial submittals are not acceptable.

#### 4.9.8.1. Submittal Procedures

- a) Transmit each submittal with a transmittal letter.
- b) Sequentially number the transmittal forms. Resubmittals shall have original number with an alphabetic suffix.
- c) Identify Project, Contractor, Subcontractor, or Supplier; pertinent drawing sheet and detail number, and GPA specification number as appropriate.
- d) Schedule submittals to expedite the Project and deliver to GPA. Coordinate submission of related items.
- e) Identify variations from Contract Documents and GPA specifications which may be detrimental to successful performance of the completed Work.
- f) Revise and resubmit submittals as required. Identify all changes made since previous submittal.
- g) Distribute copies of reviewed submittals to concerned parties. Instruct parties to promptly report any inability to comply with provisions.
- h) GPA shall be allowed two (2) weeks to review and approve submittals without affecting the Contract completion date. Delays in delivery due to submittals that are disapproved during this review period are the responsibility of the Contractor.
- Submittals returned to the Contractor as approved shall be considered authorization to proceed with the work. The approval of GPA shall in no way abrogate the requirements of GPA specifications. Review of drawings, methods of work, or information regarding materials or equipment the Contractor proposes to provide, shall not relieve the Contractor of its responsibility for errors therein and shall not be regarded as an assumption of risks or liability by GPA or by any officer, employee, or subcontractor thereof, and the Contractor shall have no claim under the contract on account of the failure, or partial failure, of the method of work, material, or equipment so reviewed. A mark of "NO EXCEPTIONS TAKEN" or "MAKE CORRECTIONS NOTED" shall mean that GPA has no objection to the Contractor, upon its own responsibility, using the plan or method of work proposed, or providing the materials or equipment proposed.
- j) If a submittal indicates a departure from the contract requirements which the GPA Project Engineer finds to be in the interest of GPA and to be so minor as not to involve a change in the contract price or time for performance, he may approve the submittal. Any such submittal shall be clearly indicated in the transmittal form as deviating from the contract requirements.

## 4.9.8.2. Manufacturer's Data

Submittals for each manufactured item shall include manufacturer's descriptive literature, equipment drawings, diagrams, performance and characteristic curves, and catalog cuts. Each submittal shall include the manufacturer's name, trade name, catalog model or number, nameplate data, size, layout dimensions, capacity, specification reference, applicable Federal, Military and Industry specification references, and all other information necessary to establish contract compliance.

#### 4.9.9. Guarantee of Work

- (a) Except as otherwise specified all work shall be guaranteed by the Contractor against defects resulting from the use of inferior materials, equipment, or workmanship for one year from the date of final completion of the contract or from full occupancy of the building by the Owner, whichever is earlier.
- (b) If within any guarantee period, repairs or changes are required in connection with guaranteed work which, in the opinion of the Contracting Officer, is rendered necessary as the result of the use of materials, equipment or workmanship which are inferior, defective or not in accordance with the terms of the contract, the Contractor shall promptly upon receipt of notice from the Owner and without expense to the Owner:
  - (1) Place in satisfactory condition in every particular all of such guaranteed work and correct all defects therein; and
  - (2) Make good all damages to the building or site or equipment or contents thereof which, in the opinion of the Contracting Officer, is the result of the use of materials, equipment or workmanship which are inferior, defective or not in accordance with the terms of the contract.
- (c) In any case wherein fulfilling the requirements of the contract or of any guarantee embraced in or required thereby the Contractor disturbs any work guaranteed under another contract, he shall restore such disturbed work to a condition satisfactory to the Contracting Officer and guarantee such restored work to the same extent as it was guaranteed under such other contract.
- (d) If the Contractor, after notice, fails to proceed promptly to comply with the terms of the guarantee, the Owner may have the defects corrected and the Contractor and his surety shall be liable for all expense incurred.
- (e) All special guarantees applicable to definite parts of the work shall be stipulated in the specifications or other papers forming a part of the contract and shall be subject to the terms of this paragraph during the first year of the life of such special guarantee.

# 4.9.10. Defective Work

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No work or material which may be defective in construction or quality or deficient in any of the requirements of the drawings and specifications will be considered accepted as a consequence of the failure of the Contracting Officer or the inspectors to discover or to point out said defects or deficiencies during the construction; nor will the presence of inspectors on the work relieve the Contractor from the responsibility of securing the quality and progress of work as required by these specifications.

Any defective work that may be discovered before the completion of the work or within such time as required by the bond shall be replaced by work and materials that shall conform to the spirit and intent of the drawings, specifications and contract.

The fact that the Contracting Officer or his representatives may have overlooked defective work shall not constitute the acceptance of work. NO PAYMENT WHETHER PARTIAL OR FINAL SHALL BE CONSTRUED TO BE AN ACCEPTANCE OF DEFECTIVE WORK OR IMPROPER MATERIALS.

The Contracting Officer may at any time by order given in writing stop any work not being done according to drawings and specifications and any order so given shall not in any way relieve the Contractor from completing his contract and shall not in any way terminate, cancel or abrogate the contract or any part thereof, and the Government of Guam shall not in any way be responsible for the delay due to stopping the work as aforesaid.

# 4.10. Inspection of Work

## 4.10.1. Inspection

- (a) All materials and workmanship (if not otherwise designated by the specifications) shall be subject to inspection, examination and testing by the Contracting Officer at any and all times during manufacture and/or construction and at any and all places where such manufacture and/or construction are carried on. The Contracting Officer shall have the right to reject defective material and workmanship or require its correction. Rejected workmanship shall be satisfactorily corrected, and rejected materials shall be satisfactorily replaced with proper materials and the Contractor shall promptly segregate and remove the rejected materials from the premises. If the Contractor fails to proceed at once with the replacement of rejected materials and/or the correction of defective workmanship, the Owner may, by contract or otherwise, replace such materials and/or correct such workmanship and charge the cost to the Contractor, or may terminate the right of the Contractor to proceed as provided in paragraph 5 of Section VII, Time for Performance, the Contractor and surety being liable for any damage to the same extent as provided in said paragraph 16 for termination thereunder.
- (b) The Contractor shall furnish promptly, without additional charge, all reasonable facilities, labor and materials necessary for the safe and convenient inspection and tests that may be required by the Contracting Officer. All inspections and tests shall be performed in such manner as not to unnecessarily delay the work. Special, full-size and performance tests shall be as described in the specifications. The Contractor shall be charged with any cost

- of inspection when material and workmanship are not ready at the time inspection is requested by the Contractor.
- (c) Should it be considered necessary or advisable by the Contracting Officer at any time before final acceptance of the entire work to make an examination of work already completed by removing or tearing out same, the Contractor shall on request promptly furnish all necessary facilities, labor and materials. If such work is found to be defective in any material respect due to the fault of the Contractor or his subcontractors, he shall defray all the expenses of such examination and of satisfactory reconstruction.
- (d) GPA or its designee shall have the right to inspect or observe the production, inspection, or testing of the Goods at any time and place including the Contractor's facilities and those of its subcontractors where the Goods are being produced or repaired. GPA shall send two (2) representatives to observe and witness production and testing.
- (e) The Contractor shall conduct, at its responsibility and expense, all tests and inspections called for by the Contract Documents. In the event that witness inspection by GPA is required under the Contract Documents, the costs and expense arising therefrom shall be borne by the Contractor, including inspector's fees, transportation, hotel, and general flying expenses. In the event that Contractor's inspection is required at the site, Contractor's transportation, hotel, and general living expenses shall be borne by the Contractor.
- (f) Any inspection made by the inspector of GPA and/or its designee will be final. Such inspections or the witnessing of CONTRACTOR's test and inspection by GPA and/or its designee shall not relieve the CONTRACTOR of any of its responsibilities or liabilities under the Contract Documents, nor be interpreted in any way as implying acceptance of the Goods.
- (g) The CONTRACTOR shall repair and replace, without cost or delay, anything found defective by tests and inspections, and also to bear all costs of re-inspection.
- (h) The CONTRACTOR must carry out at its authority and expense any inspection required by statutory Authority, governmental regulation, or other similar Authority on the codes or standards.
- (i) In the event of a dispute arising from an inspection, an independent inspector shall be appointed, mutually acceptable to both parties, whose decision as to the quality and/or necessity of the work shall be final and binding on both parties. The independent inspector(s)'s fees and charges shall be shared equally by both parties. Payments of any and all invoices of any major repairs or replacements shall be made based on mutually acceptable terms pre-approved by the Contractor and GPA.
- (j) All inspections shall be divided into two (2) categories as follows:

- 1. **Field inspection** is that inspection in the vicinity of the jobsite which when performed properly, will result in the complete compliance of all work-in-place with the contract drawings and specifications.
- 2. **Factory inspection** is that inspection of the point of manufacture of the various products which are shipped to the jobsite, including but not limited to, such items as electrical equipment.

## 4.10.2. Inspectors

Inspectors may be placed by the Contracting Officer to supervise each and every subdivision of the work or any parts or process thereof. The Contracting Officer and the inspectors shall have free access to all parts of the work at all time and shall be given every facility, information and means of thoroughly inspecting the work done and the materials used or to be used.

The inspectors shall at all times be free to perform their duties and any intimidation of any inspector by the Contractor or the employees thereof shall be sufficient reason, if the Owner shall so decide, to annul the contract.

## 4.10.3. Final Inspection and Final Inspection Date

When the work is substantially completed the Contractor shall notify the Owner, in writing, that the work will be ready for final inspection and test on a definite date which shall be stated in such notice. The notice shall be given at least ten (10) calendar days in advance of said date and shall be forwarded through the Contracting Officer who will attach his endorsement as to whether or not he concurs in the Contractor's statement that the work will be ready for final inspection or tests on the date given but such endorsement shall not relieve the Contractor of this responsibility in the matter.

- a) When the Contractor has completed work listed on the punch list or when the 10-day punch list period expires, whichever comes first, the Engineer will set a definite date for final inspection. The Engineer and Contractor will then make a final inspection of the project, again noting any deficiencies that remain. The Engineer will again notify the Contractor in writing of all particulars in which this inspection reveals that the work is incomplete or defective. The Contractor shall remedy such deficiencies within 5 days of written notice.
- b) If such deficiencies are not corrected within 5 days after receipt of the written notice listing deficiencies, the Owner may, without further notice to the Contractor, take whatever steps it deems necessary to correct those deficiencies. Such steps may include, but are not limited to, the correction of defects by Owner provided forces or by others. Thereafter, all direct and indirect costs of the Owner in exercising such rights will be charged against the Contractor and a unilateral change order issued incorporating the necessary revisions in the contract documents and ordering that such costs be deducted from monies due or becoming due the Contractor. Such indirect or direct costs shall include in particular, but without limitation to,

compensation for additional professional services required, and all cost of repair and replacement of the work of others destroyed or damaged by correction, removal, or replacement of the Contractor's deficient work.

- c) The Contractor will not be allowed an extension of contract time because of any delay in performance of the work attributable to the exercise of the Owner's rights hereunder.
- d) Upon correction of all deficiencies, the Engineer will notify the Contractor and Owner in writing of the date upon which the work was considered complete.

Any inspection made by the inspector of GPA and/or its designee will be final. Such inspections or the witnessing of CONTRACTOR's test and inspection by GPA and/or its designee shall not relieve the CONTRACTOR of any of its responsibilities or liabilities under the Contract Documents, nor be interpreted in any way as implying acceptance of the Goods.

The CONTRACTOR shall repair and replace, without cost or delay, anything found defective by tests and inspections, and also to bear all costs of re-inspection.

The CONTRACTOR must carry out at its authority and expense any inspection required by statutory Authority, governmental regulation, or other similar Authority on the codes or standards.

## 4.10.4. As-Built Drawings

A contract set of drawings shall be maintained at the site with all changes or deviations from the original drawings neatly marked thereon in brightly contrasting color. This shall be a separate set of drawings not used for construction purposes which shall be kept up to date as the job progresses and shall be made available for inspection by the Contracting Officer at all times. Submit as-built drawings and electronic file of as-built drawings. As-built drawings shall be marked "As-Built Drawing" with Contractor's signature. As-built drawings shall be drawn in AutoCad Release 14.

#### 4.10.5. As-Built Record of Materials

Furnish within 10 calendar days of the beneficial occupancy date a record of materials used prior to completion of the contract. Submission of this data is a condition for final payment under the contract.

Where several manufacturers' brand, types, or classes of the item listed have been used in the project, designate specific areas where each item was used. Designations shall be keyed to the areas and spaces depicted on the contract drawing. Furnish the record of materials used in the following format:

MATERIALS SPECIFICATION MANUFACTURER MATERIAL USED WHERE DESIGNATION (MANUFACTURER'S USED DESIGNATION)

#### 4.11. Time for Performance

#### 4.11.1. Prosecution of the Work

The Contractor agrees that said work shall be prosecuted regularly, diligently and without interruption at such rate of progress as will insure full completion thereof within the time specified. It is expressly understood and agreed by and between the Contractor and the Owner that the time for completion of the same takes into consideration the average climatic range and usual industrial conditions prevailing in the locality.

#### 4.11.2. Suspension of Work

The Owner will furnish all land and rights-of-way necessary for the carrying out of this contract and the completion of the work herein contemplated. Should the Owner be prevented or enjoined from proceeding with the work or from authorizing its prosecution, either before or after the commencement by reason of any litigation, the Contractor shall not be entitled to make or assert any claim for damage by reason of said delay, or to withdraw from the contract except by consent of the Owner, but time for completion of the work will be extended to such time as the Contracting Officer determines will compensate for the time lost by such delay determination to be set forth in writing.

#### 4.11.3. Climatic Conditions

- (a) When so ordered by the Contracting Officer, the Contractor shall suspend any work that may be subject to damage by climatic conditions.
- (b) Contract Completion Time. The allowable work days for this contract were calculated after allowing for the following number of lost days in each month. Time extension on account of inclement weather will be allowed only if the daily report of the Contracting Officer's inspector indicates lost days beyond the limits shown below.

Month	Non-Working Days	
January	07	
February	05	
March	05	
April	04	
May	05	
June	06	
July	10	
August	11	
September	12	
October	10	
November	07	
December	07	

## 4.11.4. Progress Report

The Contractor shall submit monthly progress report in triplicate to the Contracting Officer briefly setting forth work accomplished.

## 4.12. Owner's Right to Stop Work or Terminate Contract, Delays, Damages

- (a) The Owner's shall have the Right to Stop Work or Terminate the Contract for delays if:
  - (1) The Contractor shall be adjudged bankrupt or make an assignment for the benefit of creditors;
  - (2) A receiver or liquidator shall be appointed for the Contractor or for any of his property and shall not be dismissed within 20 calendar days after such appointment, or the proceedings in connection therewith shall not be stayed on appeal within the said 20 calendar days;
  - (3) The Contractor shall refuse or fail, after Notice of Warning from the Contracting Officer, to supply enough properly skilled workmen or proper materials; or
  - (4) The Contractor shall refuse to prosecute the work or any part thereof with such diligence as will insure its completion within the period herein specified (or any duly authorized extension thereof) or shall fail to complete the work within said period, or;
  - (5) The Contractor shall fail to make payments as specified to persons supplying labor or materials for the work, or;
  - (6) The Contractor shall fail or refuse to regard laws, ordinances or the instructions of the Contracting Officer or otherwise be guilty of a substantial violation of any provision(s) of this contract, then, and in any such event, the Owner, upon the certificate of the Contracting Officer that sufficient cause exists to justify such action, and without prejudice to any other rights or remedy he may have may, within 10 calendar days notices to the Contractor, terminate the employment of the Contractor and his right to proceed, either as to the entire work or (at the option of the Owner) as to any portion thereof as to which delay shall have occurred, and may take possession of the work and complete the work by contract or otherwise as the Owner may deem expedient. In such case the Contractor shall not be entitled to receive any further payment on that work until the work is finished. If the unpaid balance of the compensation to be paid the Contractor hereunder shall exceed the expense of so completing the work (including compensation for additional managerial, administrative, and inspection services and any liquidated damages for delay), such excess shall be paid to the Contractor. If such expense shall exceed such unpaid balance, the Contractor and his sureties shall be liable to the Owner for such excess. If the right of the Contractor to proceed with the work is so terminated, the Owner may take possession of and utilize in completing the work such materials, supplies, plant, and equipment as may be on the site of the work and necessary therefore. The expenses incurred through the Contractor's default shall be certified by the Contracting Officer.

- (b) If the Owner does not terminate the right of the Contractor to proceed, the Contractor shall continue the work, in which event the Contractor shall pay to the Owner as fixed, agreed, and liquidated damages for each calendar day of the delay until work is completed or accepted the amount as set forth in the section of the specifications and the Contractor and his sureties shall be liable for the amount thereof.
- (c) Provided that the right of the Contractor to proceed shall not be terminated, or the Contractor charged with liquidated damages because of any delays in the completion of the work due to unforeseeable cause beyond the control and without the fault or negligence of the Contractor including, but not restricted to, acts of God or of the public enemy, acts of the Owner. acts of another Contractor in the performance of a contract with the Owner, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and unusually severe weather, or delays of subcontractors due to such cases, if the Contractor shall, within ten days from the beginning of any such delay (unless the Owner shall grant a further period of time prior to the date of final settlement of the contract) notify the Owner in writing of the causes of delay through the Contracting Officer, who shall ascertain the facts and the extent of the delay and extend the time for completing the work when in his judgment the findings of facts justify such an extension, and his findings of fact thereon shall be final and conclusive on the parties hereto subject only to review procedures provided under Guam's Procurement Law and Claims Act.

#### 4.13. Substitutions

If CONTRACTOR wishes to furnish or use a substitute item of material or equipment, CONTRACTOR shall make written application to ENGINEER for acceptance thereof certifying that the proposed substitute will perform adequately the function as called for by the general design, be similar and of equal substance to that specified, and be suited to the same use and capable of performing the same function as that specified. The application will state that the evaluation and acceptance of the proposed substitute will not prejudice the CONTRACTOR's warranty or timely delivery of the Goods, whether or not acceptance of the substitute will require a change in any of the Contract Documents to adapt the design to the substitute and whether or not incorporation or use of the substitute in connection with the production of the Goods is subject to payment of any license fee or royalty. All variations of the proposed substitute from that specified will be identified in the application and available maintenance, repair, and replacement service will be indicated. ENGINEER may require CONTRACTOR to furnish at CONTRACTOR's expense such additional data about the proposed substitute as is required by ENGINEER. GPA may require CONTRACTOR to furnish at CONTRACTOR's expense a special performance guarantee or other surety with respect to any substitute.

## 4.14. Documentation and Drawings

GPA shall have the right to reproduce any and all drawing, prints, or other data or documents received from CONTRACTOR.

The Contract Agreement will not be deemed satisfactorily completed until all requirements have been complied with including, but not limited to, proper material documentation, final drawings

and reproductions, and other requirements stated in the Contract Documents. GPA may withhold final payment hereunder, pending completion of all such requirements by the CONTRACTOR.

At the time of each submission, CONTRACTOR shall in writing call ENGINEER's attention to any deviations that the drawings or documents may have from the requirements of the Specification or Contract Documents. CONTRACTOR shall also direct specific attention in writing to revisions other than the corrections called for by ENGINEER on previous submittals. CONTRACTOR's submission of any drawing or document bearing CONTRACTOR's approval shall constitute a representation to GPA and ENGINEER that CONTRACTOR assumes full responsibility for having determined and verified the design criteria, quantities, dimensions, installation requirements, materials, catalog numbers, and similar data and that CONTRACTOR has reviewed or coordinated each drawing or document with the requirements of the Contract Documents.

ENGINEER's review and approval of CONTRACTOR's drawings or documents will be only for conformance with the design concept of the Goods and for compliance with the information given in the Contract Documents. Such review and approval will not extend to design data reflected in drawings or documents that is peculiarly within the special expertise of CONTRACTOR or any party dealing directly with CONTRACTOR. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions. CONTRACTOR shall make corrections required by ENGINEER when drawings or documents are marked "Approved As Revised" and shall return the required number of corrected copies.

GPA and/or ENGINEER shall have the right to reproduce any and all drawing, prints, or other data or documents received from CONTRACTOR that are considered necessary for engineering, construction, or other purposes, despite any notice to the contrary appearing on the item. When a drawing or document approval is required by the Specifications, CONTRACTOR shall not commence production of any part of the Goods affected thereby until such drawing or document has been reviewed and approved by ENGINEER.

ENGINEER's review and approval of CONTRACTOR's drawings or documents will not relieve CONTRACTOR from responsibility for any deviations from the Contract Documents unless CONTRACTOR has in writing called ENGINEER's attention to such deviation at the time of submission and ENGINEER has given written concurrence and approval to the specific deviation, nor will any concurrence or approval by ENGINEER relieve CONTRACTOR from responsibility for errors or omissions in the drawings or documents submitted.

The Contractor shall submit for the approval of the Contracting Officer, shop and setting drawings and schedules required by the specifications or that may be requested by the Contracting Officer and no work shall be fabricated by the Contractor, save at his own risk, until such approval has been given. The drawings submitted shall be marked with the name of the project, numbered consecutively and bear the stamp of approval of the Contractor as evidence that the drawings have been checked by the Contractor. Any drawings submitted without this stamp of approval will not be considered and will be returned to the Contractor for re-submission. If the shop drawings show variations from the requirements of the contract because of standard shop practice or other reasons, the Contractor shall make specific mention of such variation in his letter of transmittal so that if any variations are acceptable, suitable action may be taken for proper adjustment; otherwise, the Contractor will not be relieved of the responsibility for executing the work in

accordance with the contract even though such shop drawings have been approved. If a drawing as submitted indicates a departure from the contract requirements which the Contracting Officer finds to be in the interest of the Owner and to be so minor as not to involve a change in the contract price or time for performance, he may approve the drawing.

## 4.15. Continuing Performance

CONTRACTOR shall continue its performance under the Contract Agreement during all claims, disputes, or disagreements with GPA. Production of Goods will not be delayed or the timely delivery of Goods or furnishing of Special Services be prejudiced, delayed, or postponed pending resolution of any claims, disputes, or disagreements, except as CONTRACTOR and GPA may otherwise agree in writing.

## 4.16. Access to Facility

A paved access driveway is available for CONTRACTOR's use as a safe access to the Site as is necessary for the performance of their functions and in connection with the Contract Documents.

Because the site is within a parking lot that is currently and actively serving public customers, the access road shall be free of obstruction throughout the course of the project. In the event obstruction on the access road may not be avoided, a partial obstruction may be permitted so long as CONTRACTOR submits a traffic control plan subject to GPA's approval.

#### 4.17. Expediting

CONTRACTOR shall expedite delivery of the Goods and any related work of subcontractors. When requested or required by the Contract Documents, CONTRACTOR shall also provide GPA with an itemized schedule for engineering, outsourcing, fabrication, and shipping, which shall be followed by expediting reports including status of deliveries of materials and/or equipment purchased from subcontractors, if any, each month during its performance under the Contract Agreement. If CONTRACTOR encounters delay in obtaining materials, or foresees any delay in its own manufacturing works, CONTRACTOR shall immediately inform GPA of such situation.

GPA and/or its designee shall be allowed reasonable access to CONTRACTOR's and its subcontractor's works for the purpose of expediting project progress.

Any expediting done by GPA shall not relieve CONTRACTOR from its obligations as to the Delivery Time specified in the Contract Agreement.

# 4.18. Compliance with Law

CONTRACTOR shall comply, and secure compliance by its subcontractors, with all applicable laws or regulations in connection with the Goods and services furnished hereunder. This includes the securing of any business or other licensing, certifications, or permits required. If CONTRACTOR discovers any variance between the provisions of applicable laws and regulations and the drawings, Specifications, and other technical data furnished by GPA, CONTRACTOR shall promptly

notify GPA in writing thereof and obtain necessary changes from GPA before proceeding with the work affected thereby.

# 4.19. Price Adjustment

# 4.19.1. Price Adjustment Methods

Any adjustment in Contract Price within the parameters of the Contract Agreement shall be made in one or more of the following ways:

- A. By agreement on a fixed price adjustment before commencement of the pertinent performance or as soon thereafter as practicable
- B. By unit prices specified in the Contract Agreement or subsequently agreed upon
- C. By the costs attributable to the event or situation covered by the clause, plus appropriate profit or fee, all as specified in the Contract Agreement or subsequently agreed upon
- D. In such other manner as the parties may mutually agree
- E. In the absence of agreement between the parties, by a unilateral determination by the Procurement Officer of the costs attributable to the event or situation covered by the clause, plus appropriate profit or fee, all as computed by the Procurement

## 4.19.2. Submission of Cost or Pricing Data

The CONTRACTOR shall provide cost or pricing data for any price adjustments subject to the provisions of Section 3-403 (Cost or Pricing Data) of the Guam Procurement Regulations.

## 4.20. Changes

# 4.20.1. Change Order

By a written order, at any time, and without notice to surety, the Procurement Officer may, subject to all appropriate adjustments, make changes within the general scope of the Contract Agreement in any one or more of the following:

- A. Drawings, designs, or Specifications, if the supplies to be furnished are to be specially manufactured for GPA in accordance therewith
- B. Method of shipment or packing
- C. Place of delivery

## 4.20.2. Change Order Procedures

- a) Maintain detailed records of work done on a cost of work basis. Provide full information required for evaluation of proposed changes, and to substantiate costs of changes in the Work.
- b) Document each quotation for a change in cost or time with sufficient data to allow evaluation of the quotation. The Schedule of Values shall be used as a basis for the Change Order.

- c) On request, provide additional data to support computations:
  - i. Quantities of products, labor, and equipment
  - ii. Taxes, insurance and bonds
  - iii. Overhead and profit
  - iv. Justification for any change in Contract Time
  - v. Credit for deletions from Contract, similarly documented
- d) Support each claim for additional costs, and for work done on a cost of work basis, with additional information:
  - i. Origin and date of claim
  - ii. Dates and times work was performed, and by whom
  - iii. Time records and wage rates paid
  - iv. Invoices and receipts for products, equipment, and subcontracts, similarly documented
- e) The Project Engineer will advise of minor changes in the Work not involving an adjustment to Contract Sum/Price or Contract Time by issuing supplemental instructions, or by issuing a Field Change Order.
- f) The Project Engineer may issue a proposal request which includes a detailed description of a proposed change with supplemental or revised drawings and specifications, and change in Contract Time for executing the change. Contractor will prepare and submit an estimate within 10 days.
- f) The Contractor may propose a change by submitting a request for change to the Project Engineer, describing the proposed change and its full effect on the Work, with statement describing the reason for the change, and the effect on the Contract Sum/Price and Contract Time with full documentation and a statement describing the effect on Work by separate or other contractors.
- g) No change order is authorized unless an original, certified, signed purchase order amendment is received by the Contractor.
- h) The Contractor may not make a change order claim for work already completed.
- i) Promptly revise Application for Payment form to record each authorized Change Order as a separate line item and adjust the Contract Sum/Price.
- j) Promptly revise progress schedules to reflect any change in Contract Time, revise subschedules to adjust time for other items of work affected by the change, and resubmit.
- k) Promptly enter changes in Project Record Documents.

## 4.20.3. Time Period for Claim

Within 30 days after receipt of a written change order under Paragraph 4.20.1 Change Order, unless the Procurement Officer extends such period in writing or e-mail, the CONTRACTOR shall file notice of intent to assert a claim for an adjustment. Later notification shall not bar the CONTRACTOR's claim unless GPA is prejudiced by the delay in notification.

## 4.20.4. Claims Barred After Final Payment

No claim by the CONTRACTOR for an adjustment hereunder shall be allowed if notice is not given prior to final payment or completion of the work under the Contract Agreement.

#### 4.20.5. Other Claims Not Barred

In the absence of such a change order, nothing in this clause shall be deemed to restrict the CONTRACTOR's right to pursue a claim arising under the Contract Agreement if pursued in accordance with the clause entitled, "Claims Based on the General Officer's Actions or Omissions, - Notice of Claim", or for breach of contract.

#### 4.21. Contract Price

The Contract Price constitutes the total consideration to be paid by GPA to the CONTRACTOR for performing other services in connection therewith in accordance with the Contract Documents as amended by the parties pursuant to the Contract Agreement. Unless expressly provided otherwise in the Contract Documents, the Contract Price is not subject to escalation in respect of materials and/or labor cost or any other factor or variation in rates of exchange, and all duties, responsibilities, and obligations assigned to or undertaken by the CONTRACTOR shall be at its expense without change in the Contract Price. Charges, fees, CONTRACTOR's profit, and all other expense shall be deemed to be included in the Contract Price.

Only a formal Change Order, accepted by GPA, may change the Contract Price. The CONTRACTOR shall make any claim for an increase in the Contract Price in advance of performance of any such changes. However, GPA reserves the right to challenge or refute such claims.

#### 4.22. Claims, Payment

## 4.22.1. Contractor's Title to Materials

No materials or supplies for the work shall be purchased by the Contractor or by any subcontractor subject to any chattel mortgage or under a conditional sale or other agreement by which an interest is retained by the seller. The Contractor warrants that he has good title to all materials and supplies for which he accepts partial payments.

#### 4.22.2. Claims

The Contractor agrees whenever required to do so by the Owner to furnish satisfactory evidence that all persons, firms or corporations who have done work or supplied materials under these

specifications have been paid or have been duly notified of the completion of the work and have been secured to their satisfaction before the said Contractor shall be entitled to final payment.

In case such evidence is not furnished or in case any claim is filed with the Owner or any suit or action is instituted against the Owner as defendant or garnishee or against the Contractor in connection with the work performed or to be performed under the drawings, specifications or contract, the Owner may retain from the money due or to become due to the Contractor such sum or sums as in the judgment of the Contracting Officer will fully protect the Owner from loss, charge or expense by reason of such claim, suit or action. The Owner without prejudice to any other and further rights, may make any and all deductions for any loss, charge or expense sustained by it to which it would be entitled under the contract specifications or bond, or otherwise before paying over the balance of the sum or sums retained as aforesaid, if any, to the Contractor, his creditor, or any successful claimant against the Contractor.

No payment made or retained under this contract shall be held to relieve the Contractor and/or his sureties from his and/or their obligations under this bond to hold harmless and indemnify the Owner or its agents from any and all loss, charge or expense by reason of any unpaid claim whatsoever.

#### 4.22.3. Waiver of Mechanics Liens

Contractor waives any right that he now has or in the future may have to claim a mechanic's lien against the real property or improvements thereon which are the subject of this contract, to secure payment for labor and materials furnished or to be furnished by him under this contract.

## 4.22.4. Payment Schedule

- a) GPA will make partial payments to the CONTRACTOR after receipt and approval of the request for partial payment covering the work performed during the preceding calendar month. No payments for installed materials on the site will be made unless such request is accompanied by a receipt or certification showing that the CONTRACTOR has made payment in full for such work done. In preparing such estimates, preparatory work done shall not be considered for payment. Materials delivered to site shall be considered for payment subject to the following conditions:
  - i. The material shall be kept in a safe and enclosed warehouse or area located on site with restricted access.
  - ii. The receipt and issue of material must be controlled by a stock card kept in the warehouse.
  - iii. Insurance coverage required under Section 11, Chapter IV of the General Conditions shall include insurance of such material and shall include theft insurance.
  - iv. Request for payment must be accompanied with certification and receipts indicating the cost of material and showing that the CONTRACTOR has made full payment for such material.

- b) In making such partial payments there shall be retained ten percent (10%) of the estimated amount until final completion and acceptance of all work covered by the contract. However, if the Contracting Officer, at any time after 50 percent of the work has been completed, finds that satisfactory progress is being made, he may authorize payment in full of each progress payment for work performed beyond the 50 percent stage of completion. Also, whenever the work is substantially complete, the Contracting Officer, if he considers the amount retained to be in excess of the amount adequate for the protection of GPA, at his discretion, may release to the CONTRACTOR all or a portion of such excess amount.
- c) All materials and work covered by partial payments made shall thereupon become the sole property of GPA, but this provision shall not be construed as relieving the CONTRACTOR from the sole responsibility for all materials and work upon which payment have been made, or the restoration of any damaged work or as a waiver of the right of GPA to require the fulfillment of all of the terms of the contract.
- d) Release of Claims Neither the final payment or any part of the retained percentage shall become due until the CONTRACTOR shall deliver to GPA through the Contracting Officer a complete release of all claims against GPA arising under and by virtue of this contract, including claims of all subcontractors and suppliers of either materials or labor, other than such claims, if any, as may be specifically excepted by the CONTRACTOR.
- e) Certificate of Completion Upon completion and acceptance of all work whatsoever required and the release of all claims against GPA as specified, the Contracting Officer shall file a written certificate with GPA and with the CONTRACTOR as to the entire amount of work performed and compensation earned by the CONTRACTOR, including extra work and compensation thereof.
- f) Final Payment Within thirty (30) calendar days after the filing of such certificate of completion, GPA shall pay to the CONTRACTOR the amount therein stated less all prior payments and advances whatsoever to or for the amount of the contract. All prior estimates and payments including those relating to extra work shall be subject to correction by this payment which is throughout this contract called Final Payment.
- g) Acceptance of Final Payment Constitutes Release The acceptance by the CONTRACTOR of the final payment shall be and shall operate as a release to GPA of all claims and of all liability to the CONTRACTOR for all things done or furnished in connection with this work and for every act and neglect of GPA and others relating to or arising out of this work, excepting the CONTRACTOR's claims for interest upon the final payments if this payment be improperly delayed. No payments, however, final or otherwise shall operate to release the CONTRACTOR or his sureties from any obligations under this contract or the performance and payment bonds.

The CONTRACTOR shall submit for review by GPA monthly invoices accompanied by a progress report describing the work performed during the compensation period. The CONTRACTOR shall

also provide the updated project schedule. All payments to CONTRACTOR shall be free of any deductions, including but not limited to withholding taxes.

Should GPA enter into a Deferred Payment Agreement with the CONTRACTOR, GPA shall pay the CONTRACTOR for cost and services rendered upon complete delivery and acceptance of all goods and services as herein specified and performed under the Contract Agreement. A Deferred Payment Agreement as shown on Appendix L shall be executed between the CONTRACTOR and GUAM POWER AUHORITY. The first application for payment maybe submitted by the CONTRACTOR after the Deferred Payment Agreement has been executed. GPA will make payments within thirty (30) days from receipt and approval of the invoice.

#### 4.22.5. Application for Payment

#### 4.22.5.1. Schedule of Values

The CONTRACTOR shall submit typed schedule on attached Application for Payment form. Contractor's standard form or electronic media printout will be considered. The Bid Items shall be used as the basis for the Schedule of Values except a breakdown for those Bid Items which are lump sum items shall be provided. The schedule shall be revised to list approved Change Orders, with each Application for Payment.

## 4.22.5.2. Application for Payment Submittal Procedures

- a) Present required information in typewritten form.
- b) Execute certification by signature of authorized officer.
- List each authorized Change Order with Change Order number and dollar amount.
- d) Submit an updated progress schedule with each Application for Payment.
- e) When the Contracting Officer requires substantiating information, submit data justifying dollar amounts in question. Indicate Application number and date.

## 4.22.6. Taxes

The Contractor shall, without additional expense to the Owner, pay all applicable taxes. The successful bidder will be required to comply with the applicable sections of Titles 11 and 21 of the Guam Code Annotated, as regards to licenses and taxes. In addition to the general contractor's liability, subcontractors are also subject to these provisions. Subcontractors are also required to possess Guam Service Licenses. The Contractor will be required to submit a list of his subcontractors and the monetary amount of each subcontract.

#### 4.22.7. Materials, Services, and Facilities

It is understood that except as otherwise specifically stated in the contract documents, the Contractor shall provide and pay for all materials, labor, tools, equipment, water, light, power, transportation, superintendence, temporary construction of every nature whatsoever necessary to execute, complete and deliver the work within the specified time.

# 4.22.8. Patents

The Contractor shall hold and save the Owner and his officers, agents, servants, and employees harmless from liability of any nature or kind, including cost and expenses, for or on account of any patented or unpatented invention, process, article or appliance manufactured or used in the performance of the contract including its use by the Owner, unless otherwise specifically stipulated in the contract documents.

## 4.22.9. Payment by Contractor

Contractor shall pay -

- (a) For all transportation and utility services not later than the 20th day of the calendar month following that in which such services are rendered;
- (b) For all materials, tools, and other expendable equipment to the extent of 90 percent of the cost thereof, not later than the 20th day of the calendar month following that in which such materials, tools and equipment are delivered at the site of the project, and the balance of the cost thereof not later than the 30th day following the completion of that part of the work in or on which such materials, tools and equipment are incorporated or used;
- (c) To each of his subcontractors, not later than the 5th day following each payment to the Contractor, the respective amounts allowed the Contractor on account of the work performed by his subcontractors, to the extent of such subcontractor's interest therein.

#### 4.22.10. Extras

Except as otherwise herein provided, no charge for any extra work or materials will be allowed unless the same has been ordered in writing by the Owner and either the price is stated in such order or a definite acknowledgment is made that a change in price is involved subject to later determination.

## 4.22.11. Changes in Work

- (a) The Owner may at any time, by a written order, and without notice to the sureties, make changes in the drawings and specifications of this contract and within the general scope thereof. However, no change will be made which increases the total contract price without notice to sureties. In making any change, the charge or credit for the change shall be determined by the following method:
  - (1) The actual cost of:
    - I. Labor, including foreman
    - II. Materials entering permanently into the work
    - III. Equipment rental cost during time used on extra work

- IV. Power and consumable supplies
- V. Insurance
- VI. To the above cost there shall be added a fixed fee to be agreed upon, but not to exceed 15% of the net cost. This fee shall be compensation to cover the cost of supervision, overhead, bond, profit and other general expenses.
- (b) The Contractor shall, when required by the Owner, furnish to the Owner an itemized breakdown of the quantities and prices used in computing the value of any change that might be ordered.
- (c) In figuring changes, instructions for measurement of quantities set forth in the specifications shall be followed.
- (d) If any part of the work as installed is at variance with the contract requirements, the Owner may, if he finds it to be in his interest, allow all or any part of such work to remain in place subject to a proper adjustment in the contract price.

#### 4.22.12. Payment to Contractor

- (a) Unless otherwise provided in the specifications, the Owner will make partial payments to the Contractor after receipt and approval of the request for partial payment covering the work performed during the proceeding calendar month. No payments for installed materials on the site will be made unless such request is accompanied by a receipt or certification showing that the Contractor has made payment in full for such work done. In preparing such estimates, preparatory work done shall not be considered for payment. Materials delivered to site shall be considered for payment subject to the following conditions:
  - (1) The material shall be kept in a safe and enclosed warehouse or area located on site with restricted access.
  - (2) The receipt and issue of material must be controlled by a stock card kept in the warehouse.
  - (3) Insurance coverage required under 4.8.11 Comprehensive General Liability shall include insurance of such material and shall include theft insurance.
  - (4) Request for payment must be accompanied with certification and receipts indicating the cost of material and showing that Contractor has made full payment for such material.
- (b) In making such partial payments there shall be retained ten percent (10%) of the estimated amount until final completion and acceptance of all work covered by the contract. However, if the Contracting Officer, at any time after 50 percent of the work has been completed, finds that satisfactory progress is being made, he may authorize payment in full of each progress payment for work performed beyond the 50 percent stage of completion. Also, whenever the work is substantially complete, the Contracting Officer, if he considers the amount retained to be in excess of the amount adequate for the protection of the Government, at his discretion, may release to the Contractor all or a portion of such excess amount.

- (c) All materials and work covered by partial payments made shall thereupon become the sole property of the Owner, but this provision shall not be construed as relieving the Contractor from the sole responsibility for all materials and work upon which payment have been made, or the restoration of any damaged work or as a waiver of the right of the Owner to require the fulfillment of all of the terms of the contract.
- (d) Release of Claims Neither the final payment or any part of the retained percentage shall become due until the Contractor shall deliver to the Owner through the Contracting Officer a complete release of all claims against the Owner arising under and by virtue of this contract, including claims of all subcontractors and suppliers of either materials or labor, other than such claims, if any, as may be specifically excepted by the Contractor.
- (e) Certificate of Completion –Upon completion and acceptance of all work whatsoever required and the release of all claims against the Owner as specified, the Contracting Officer shall file a written certificate with the Owner and with the Contractor as to the entire amount of work performed and compensation earned by the Contractor, including extra work and compensation therefor.
- (f) Final Payment Within thirty (30) calendar days after the filing of such certificate of completion, the Owner shall pay to the Contractor the amount therein stated less all prior payments and advances whatsoever to or for the amount of the contract. All prior estimates and payments including those relating to extra work shall be subject to correction by this payment which is throughout this contract called Final Payment.
- (g) Acceptance of Final Payment Constitutes Release- The acceptance by the Contractor of the final payment shall be and shall operate as a release to the Owner of all claims and of all liability to the Contractor for all things done or furnished in connection with this work and for every act and neglect of the Owner and others relating to or arising out of this work, excepting the Contractor's claims for interest upon the final payments if this payment be improperly delayed. No payments, however, final or otherwise shall operate to release the Contractor or his sureties from any obligations under this contract or the performance and payment bonds.

#### 4.23. Force Majeure

Force Majeure referred to herein shall mean an occurrence beyond the control and without the fault or negligence of the party affected including, but not limited to, acts of God or the public enemy, expropriation or confiscation; changes in law procedures, war, rebellion, or riots; floods, unusually severe weather that could not reasonably have been anticipated; fires, explosions, epidemics, catastrophes, or other similar occurrences which are not within the control of the party affected. However, the following shall not be considered as Force Majeure:

- A. Delay caused by lack or inability to obtain raw materials, congestion at CONTRACTOR's or its subcontractor's facilities, or elsewhere; market shortages, or similar occurrences
- B. Delay, either on the part of the CONTRACTOR or its subcontractors, caused by shortages of supervisors or labor, inefficiency, or similar occurrences
- C. Sabotage, strikes, or any other concerted acts of workmen, which occur only in the facilities of the CONTRACTOR or its subcontractors

Should the circumstances of *Force Majeure* continue over a period of ninety (90) days, GPA has the right, if no other understanding is reached, to terminate the whole Contract Agreement or any part thereof in accordance with **Paragraph 4.22**. Any delay or failure in performing the obligations under the Contract Documents of the parties hereto shall not constitute default under the Contract Agreement or give rise to any claim for damages or loss or anticipated profits if, and to the extent, such delay or failure is caused by Force Majeure, and if a claim is made therefore.

## 4.23.1. Invocation of Force Majeure

The party invoking Force Majeure shall perform the following:

- A. Notify the other party as soon as reasonably possible by facsimile, e-mail, telex, cable or Messenger/courier of the nature of Force Majeure, anticipated exposure time under Force Majeure, and the extent to which the Force Majeure suspends the affected party's obligations under the CONTRACT.
- B. Consult with the other party and take all reasonable, prudent steps to minimize the losses of either party resulting from the Force Majeure.
- C. Resume the performance of its obligations as soon as possible after the Force Majeure condition ceases.

## 4.23.2. Delivery Time and Force Majeure

Only a Change Order may change contractual Delivery Times. The CONTRACTOR as provided in **Paragraph 4.14** and its sub-paragraphs shall file all claims for an extension in the Delivery Time.

The Delivery Time will be extended in an amount equal to time lost due to delays caused by Force Majeure if a claim is made therefore as provided in this Paragraph. No amendment to the Contract Price, however, shall be allowable because of Force Majeure occurrences.

Notwithstanding the foregoing, all time limits stated in the Purchase Order documents are of the essence in the agreement. The provisions of this Paragraph shall not exclude recovery for damages (including compensation for additional professional services) for delays not caused by Force Majeure.

#### 4.24. Warranty

The CONTRACTOR's obligation to furnish the Goods and Special Services and to perform other services in connection therewith in accordance with the Contract Agreement is absolute, and the CONTRACTOR warrants and guarantees to GPA that all Goods will be in accordance with the Contract Documents and will be new, fit for the purpose for which they are intended, and free from any defects, including faulty design, materials, or workmanship.

The CONTRACTOR shall provide GPA with all warranties and guarantees in writing. GPA and the BIDDER shall negotiate the manner in which claims against these warranties are addressed including any remedies for non-responsiveness. This may include retention of contract amounts, performance bonds, etc.

The CONTRACTOR shall be responsible for remedying all defects, without limitation, in design, materials, workmanship, operating characteristics, or performance of the Goods developing within twelve (12) months from the date on which GPA has placed the Goods in continuous service, or within twenty-four (24) months from the date of final payment, whichever date shall first occur, or within such longer period of time as may be prescribed by law or by the terms of any applicable special guarantee or by any specific provisions of the Contract Documents.

Any part(s) supplied in replacement of the defective part(s) of the Goods or any Goods repaired pursuant to the provisions of this Paragraph shall be supplied or repaired on the same terms and conditions as provided for herein for the supply of the Goods and in particular a new warranty period shall apply. Such new warranty period shall expire on the date twelve (12) months from the date of such replacement or repair or on the expiration date of the warranty for the original Goods that were replaced or repaired, whichever is later.

In the event the CONTRACTOR furnishes Special Services for installation and startup, such services shall be rendered in a competent and diligent manner and in accordance with the Contract Documents, accepted industry practice and any applicable professional standards.

## 4.25. Remedying Defects

## 4.25.1. Remedying Defective Parts

If at any time GPA determines that the replacement parts are defective, the CONTRACTOR shall, upon written notice from GPA, do all things necessary, at its expense, to make good the defects as soon as possible after being notified to do so by GPA. The CONTRACTOR warrants that the CONTRACTOR, unless otherwise agreed, shall remedy any defects. It is understood, that if so instructed by GPA, the CONTRACTOR shall make shipment by the fastest available method.

In the event that the CONTRACTOR does not take prompt action to fulfill its obligations hereunder as required by GPA and to the satisfaction of GPA, GPA may, after ten (10) days written notice to the CONTRACTOR, and without prejudice to any of its rights under the Contract Agreement, accept the defective Goods and carry out the remedial work itself instead of requiring correction or removal and replacement, and charge the CONTRACTOR for the costs of the work. In an emergency where delay would cause serious risk of loss or damage, GPA may take such action without prior notice to or waiting for action by the CONTRACTOR.

## 4.25.2. Remedying Defective Special Services

If at any time GPA notifies the CONTRACTOR in writing that any of the Special Services are defective, the CONTRACTOR shall promptly provide acceptable services. If the CONTRACTOR fails to do so, GPA may obtain the Special Services elsewhere.

## 4.25.3. Cost of Remedying Defects

All direct, indirect, and other costs of correcting, removing, and replacing defective Parts or of obtaining Special Services elsewhere and of exercising GPA's rights and remedies under **Paragraph 4.33**, and other sections as they apply, will be charged against the CONTRACTOR and, if incurred prior to final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents and a reduction in the Purchase Price, or if incurred after final payment, an appropriate amount will be paid by the CONTRACTOR to GPA. Such direct, indirect, and other costs will include, in particular but without limitation, compensation for additional professional services required and all costs of repair and replacement of property of GPA or others destroyed or damaged by correction, removal, or replacement of defective Goods. The CONTRACTOR shall not be allowed an extension of the Delivery Time because of any delay in performance attributable to the exercise by GPA of GPA's rights and remedies under this Paragraph.

# 4.26. Stop Work Order

## 4.26.1. Order to Stop Work

The Procurement Officer may, by written order to the CONTRACTOR, at any time, and without notice to any surety, require the CONTRACTOR to stop all or any part of the work called for by the Contract Agreement. This order shall be for a specified period not exceeding ninety-days (90-days) after the order is delivered to the CONTRACTOR, unless the parties agree to any further period. Any such order shall be identified specifically as a stop work order issued pursuant to this clause. Upon receipt of such an order, the CONTRACTOR shall forthwith comply with its terms and take all reasonable steps to minimize the occurrence of costs allocable to the work covered by the order during the period of work stoppage. Before the stop work order expires, or within any further period to which the parties shall have agreed, the Procurement Officer shall either:

- A. Cancel the stop work order
- B. Terminate the work covered by such order, as provided in the Termination for Default Clause or the Termination for Convenience Clause of the Contract

#### 4.26.2. Cancellation or Expiration of the Order

If a stop work order issued under this clause is canceled at any time during the period specified in the order, or if the period of the order or any extension thereof expires, the CONTRACTOR shall have the right to resume work. An appropriate adjustment shall be made in the delivery schedule or Contract Price shall be modified in writing accordingly, if:

- A. The stop work order results in an increase in the time required for, or in the CONTRACTOR's cost properly allocable to, the performance of any part of the Contract Agreement; and
- B. The CONTRACTOR asserts a claim for such an adjustment within thirty (30) days after the end of the period of work stoppage; provided that, if the Procurement Officer decides that the facts justify such action, any such claim asserted may be received and acted upon at any time prior to final payment under the Contract Agreement.

# 4.26.3. Termination of Stopped Work

If a stop work order is not canceled and the work covered by such order is terminated for default or Convenience, the reasonable costs resulting from the stop work order shall be allowed by adjustment or otherwise.

#### 4.27. Termination for Convenience

#### 4.27.1. Termination

The Procurement Officer may, when the interest of GPA so require, terminate the Contract Agreement in whole or in part, for the Convenience of GPA. The Procurement Officer shall give written notice of the termination to the CONTRACTOR specifying the part of the Contract Agreement terminated and when termination becomes effective. [GSA Procurement Regulations 6-101.10.]

## 4.27.2. Contractor's Obligations

The CONTRACTOR shall incur no further obligations in connection with the terminated work and on the date set in-the notice of termination the CONTRACTOR will stop work to the extent specified. The CONTRACTOR shall also terminate outstanding orders and subcontracts as they relate to the terminated work. The CONTRACTOR shall settle the liabilities and claims arising out of the termination of subcontracts and orders connected with the terminated work. The Procurement Officer may direct the CONTRACTOR to assign the CONTRACTOR's right, title, and interest under terminated orders or subcontracts to GPA. The CONTRACTOR must still complete the work not terminated by the notice of termination and may incur obligations as are necessary to do so.

#### 4.27.3. Right to Supplies

The Procurement Officer may require the CONTRACTOR to transfer title and deliver to GPA in the manner and to the extent directed by the Procurement Officer:

- A. Training material
- B. Any completed supplies
- C. Such partially completed supplies and materials, parts, tools, dies, jigs, fixtures, plans, drawings, information and contract rights (hereinafter called "manufacturing material") as the CONTRACTOR has specifically produced or specially acquired for the performance of the terminated part of the Contract Agreement

The CONTRACTOR shall, upon direction of the Procurement Officer, protect and preserve property in the possession of the CONTRACTOR in which GPA has an interest. If the Procurement Officer does not exercise this right, the CONTRACTOR shall use best efforts to sell such supplies and manufacturing materials in accordance with the standards of **Uniform Commercial Code of Guam (UCCG), Section 2706.** Utilization of this Section in no way implies that GPA has breached the Contract Agreement by exercise of the Termination for Convenience Clause.

#### 4.27.4. Compensation Under Termination for Convenience

The CONTRACTOR shall perform the following for compensation under termination for convenience.

- A. The CONTRACTOR shall submit a termination claim specifying the amounts due because of the termination for Convenience together with cost or pricing data to the extent required by Section 3-403 (Cost or Pricing Data) of the Guam Procurement Regulations bearing on such claim. If the CONTRACTOR fails to file a termination claim within one year from the effective date of termination, the Procurement Officer may pay the CONTRACTOR, if at all, an amount set in accordance with subparagraph (c) of this Paragraph.
- B. The Procurement Officer and the CONTRACTOR may agree to a settlement provided the CONTRACTOR has filed a termination claim supported by cost or pricing data to the extent required by Section 3-403 (Cost or Pricing Data) of the Guam Procurement Regulations and that the settlement does not exceed the total Contract Price plus settlement costs reduced by payments previously made by GPA, the proceeds of any sales of supplies and manufacturing materials, and the Contract Price of the work not terminated.
- C. Absent complete agreement under Subparagraph (b) of this Paragraph, the Procurement Officer shall pay the CONTRACTOR the following amounts, provided payments agreed to under Subparagraph (b) shall not duplicate payments under this subparagraph:
  - i. Contract prices for supplies or services accepted under the Contract Agreement;
  - ii. Costs incurred in preparing to perform and performing the terminated portion of the work plus a fair and reasonable profit on such portion of the work (such profit shall not include anticipatory profit or consequential damages) less amounts paid or to be paid for accepted supplies or services; provided, however, that if it appears that the CONTRACTOR would have sustained a loss if the entire Contract Agreement would have been completed, no profit shall be allowed or included and the amount of compensation shall be reduced to reflect the anticipated rate of loss;
  - iii. Costs of settling and paying claims arising out of the termination of subcontracts or orders pursuant to **Paragraph 4.22.2** of this clause. These costs must not include costs paid in accordance with other subparagraphs of this Paragraph;
  - iv. The reasonable settlement costs of the CONTRACTOR including accounting, legal, clerical, and other expenses reasonably necessary for the preparation of settlement claims and supporting data with respect to the terminated portion of the Contract Agreement for the termination and settlement of subcontracts there under, together with reasonable storage, transportation, and other costs incurred in connection with the protection or disposition of property allocable to the terminated portion of the Contract Agreement. The total sum to be paid to the CONTRACTOR under this Subparagraph shall not exceed the total Contract Price plus the reasonable settlement costs of the CONTRACTOR reduced by the amount of payments otherwise made, the proceeds of any sales of supplies and manufacturing materials under subparagraph (b) of this Paragraph, and the Contract Price of work not terminated.
- D. Cost claimed, agreed to, or established under subparagraph (b) and (c) of this Paragraph shall be in accordance with Chapter 7 (Cost Principles) of the Guam Procurement Regulations. 13 GCA 2796 (UCCG) states:

## 2706. SELLER's Resale Including Contract for Resale

- (1) Under the conditions stated in Section 2703 on CONTRACTOR's remedies, the CONTRACTOR may resell the goods concerned or the undelivered balance thereof. Where the resale is made in good faith and in a commercially reasonable manner the CONTRACTOR may recover the difference between the resale price and the Contract Price together with an incidental damages allowed under the provisions of this division (Section 2710), but less expenses saved in consequence of the buyer's breach.
- (2) Except as otherwise provided in Subsection (3) or unless otherwise agreed resale may be at public or private sale including sale by way of one or more contracts to sell or of identification to an existing contract of the CONTRACTOR. Sale may be as a unit or in parcels and at any time and place and on any terms, but every aspect of the sale including the method, manner, time, place and terms must be commercially reasonable. The resale must be reasonably identified as referring to the broken contract, but it is not necessary that the goods be in existence or that any or all of them have been identified to the Contract Agreement before the breach.
- (3) Where the resale is at private sale the CONTRACTOR must give the buyer [i.e., GPA] reasonable notification of his intention to resell.
- (4) Where the resale is at public sale:
  - (01) Only identified goods can be sold except where there is a recognized market for a public sale of futures in goods of the kind; and
  - (02) It must be made at a usual place or market for public sale if one is reasonably available and except in the case of goods which are perishable or threaten to decline in value speedily the CONTRACTOR must give the buyer [i.e., GPA] reasonable notice of the time and place of the resale; and,
  - (03) If the goods are not to be within the view of those attending the sale, the notification of sale must state the place where the goods are located and provide for their reasonable inspection by prospective BIDDER s; and
  - (04) The CONTRACTOR may buy.
- (5) A purchaser who buys in good faith at a resale takes the goods free of any rights of the original buyer [i.e., GPA] even though the CONTRACTOR fails to comply with one or more of this section's requirements.
- (6) The CONTRACTOR is not accountable to the buyer [i.e., GPA] for any profit made on any resale. A person in the position of a CONTRACTOR (Section 2707) or a buyer who has rightfully rejected or justifiably revoked acceptance must account for any excess over the amount of his security interest, as hereinafter defined (Subsection 3) of Section 2711."

#### 4.28. Termination for Defaults

#### 4.28.1. **Default**

If the CONTRACTOR refuses or fails to perform any of the provisions of the Contract Agreement with such diligence as will ensure its completion within the time specified in the Contract Agreement, or any extension thereof, otherwise fails to timely satisfy the Contract Agreement provisions, or commits any other substantial breach of the Contract Agreement, the Procurement

Officer may notify the CONTRACTOR in writing of the delay or non-performance and if not corrected in ten days or any longer time specified in writing by the Procurement Officer, such officer may terminate the CONTRACTOR's right to proceed with the Contract Agreement or such part of the Contract Agreement as to which there has been delay or a failure to properly perform.

In the event of termination in whole or in part, the Procurement Officer may procure similar supplies or services in a manner and upon terms deemed appropriate by the Procurement Officer. The CONTRACTOR shall continue performance of the Contract Agreement to the extent it is not terminated and shall be liable for excess cost incurred on procuring similar goods or services.

# 4.28.2. Contractor's Duties

Notwithstanding termination of the Contract Agreement and subject to any directions from the Procurement Officer, the CONTRACTOR shall take timely, reasonable, and necessary action to protect and preserve property in the possession of the CONTRACTOR in which GPA has an interest.

#### 4.28.3. Compensation

Payment for completed supplies delivered and accepted by GPA shall be at the Contract Price. Financing payment shall be made after all services are rendered and accepted by GPA. The first application for payment may be submitted by the CONTRACTOR after the Deferred Payment Agreement has been executed.

## 4.28.4. Excuse for Nonperformance or Delayed Performance

Except with respect to defaults of subcontractors, the CONTRACTOR shall not be in default by reason of any failure in performance of the Contract Agreement in accordance with its terms (including any failure by the CONTRACTOR to make progress in the prosecution of the work hereunder which endangers such performance) if the CONTRACTOR has notified the Procurement Officer within fifteen (15) days after the cause of the delay and the failure arises out of causes such as: acts of God; acts of the public enemy; act of GPA and any other governmental entity in its sovereign restrictions; strikes or other labor disputes; freight embargoes; or unusually severe weather. If the failure to perform is caused by the failure of a subcontractor to perform or to make progress, and if such failure arises out of causes similar to those set forth above, the CONTRACTOR shall not be deemed to be in default, unless the supplies or services to be furnished by the subcontractor were reasonably obtainable from other sources in sufficient time to permit the CONTRACTOR to meet the Contract Agreement requirements. Upon request of the CONTRACTOR, the Procurement Officer shall ascertain the facts and extent of such failure, and, if such officer determines that any failure to perform was occasioned by any one or more of the excusable causes, and that, but for the excusable cause, the CONTRACTOR's progress and performance would have met the terms of the Contract Agreement, the delivery schedule shall be revised accordingly, subject to the rights of GPA under the clause entitled "Termination For Convenience", Paragraph Error! Reference source not found.. (As used in the Paragraph of this clause the term "subcontractor" means subcontractor at any tier.)

## 4.28.5. Erroneous Termination for Default

If, after notice of termination of the CONTRACTOR's right to proceed under the provisions of this clause, it is determined for any reason that the CONTRACTOR was not in default under the provisions of this clause, or that the delay was excusable under the provisions of Section 4.29.4 Excuse for Nonperformance or Delayed Performance, the rights and obligations of the parties shall, if the Contract Agreement contains a clause providing for Termination for Convenience of GPA, be the same as if the notice of termination had been issued pursuant to such clause. If, in the foregoing circumstances, the Contract Agreement does not contain a clause providing for Termination for Convenience of GPA, the Contract Agreement shall be adjusted to compensate for such termination and the Contract Agreement modified accordingly subject to the CONTRACTOR's rights under Chapter 9 (Legal and Contractual Remedies) of the Guam Procurement Regulations.

## 4.28.6. Additional Rights and Remedies

The rights and remedies provided in this clause are in addition to any other rights and remedies provided by law or under the Contract Agreement.

# 4.29. Disputes

All controversies between GPA and the CONTRACTOR, which arise under, or are by virtue of, the Contract Agreement and which are not resolved by mutual agreement, shall be resolved under Guam Procurement Law and the Government Claims Act.

- (a) Except as otherwise provided in this contract, any disputes arising under this contract shall be decided by the Contracting Officer, who shall reduce his decision to writing and mail or otherwise furnish a copy thereof to the Contractor. The decision of the Contracting Officer shall be final and conclusive. The provision shall not be pleaded in any suit involving a question of facts arising under this contract as limiting judicial review of any such decision to cases where fraud by such official or his representative is alleged. Provided, however, that any such decision shall be final and conclusive unless the same is fraudulent or capricious or arbitrary or so grossly erroneous as necessarily to imply bad faith or is not supported by substantial evidence
- (b) This "Disputes" clause does not preclude consideration of questions of law in connection with decisions provided for in paragraph (2) above. Nothing in this contract, however, shall be construed as making final the decision of any administrative official representative or board on a question of law.

#### 4.30. Consequential Damages

Unless expressly provided for otherwise in the Contract Agreement, neither party, including their agents and employees, shall be liable to the other party for consequential damages, including, but not limited to, loss of use, loss of profit and interest due to breach of contract, breach of warranty, negligence, or any other cause whatsoever, provided nothing herein shall relieve CONTRACTOR

from its liability for injury to persons or property, including property of GPA, whether such liability arises in contract, including breach of warranty, or tort, including negligence.

## 4.31. Time of Completion and Liquidated Damages

The CONTRACTOR must agree to fully complete the basic work under the Contract Agreement within three hundred sixty-five (365) calendar days from the issuance of Notice to Proceed (NTP). The CONTRACTOR must also agree to pay to GPA the amount of two thousand dollars (\$2,000.00) per calendar day, not as a penalty, but as reasonable liquidated damages for failing, neglecting or refusing the work within the time specified.

Should GPA choose to award the additive bid, the CONTRACTOR must agree to fully complete the work under the Contract Agreement within ninety (90) calendar days from the issuance of the Notice to Proceed (NTP). The CONTRACTOR must also agree to pay to GPA the amount of two thousand dollars (\$2,000.00) per calendar day, not as a penalty, but as reasonable liquidated damages for failing, neglecting or refusing the work within the time specified.

#### 4.32. Notices

Whenever any provision of the Contract Documents requires the giving of written notice it shall be deemed to have been validly given if delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or if delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.

## 4.33. Computation of Time

When any period of time is referred to in the Contract Documents by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the time computation.

## 4.34. Language and Trade Terms

All communications, documents, and execution of services hereunder, unless otherwise designated, shall be in the English language. INCOTERMS (International Rules for the Interpretation of Trade Terms) published by the International Chamber of Commerce in 1980 and any subsequent revisions thereto shall govern interpretation of trade terms in the Contract Documents.

## 4.35. Governing Law

The laws of Guam shall govern the validity and interpretation of these conditions, the Contract Agreement and legal relations of the parties. CONTRACTOR shall not transfer or assign to any third parties any obligations or rights under the Contract Agreement, nor any claims against GPA arising directly or indirectly out of the Contract Agreement.

CONTRACTOR shall not sublet the Contract Agreement in whole or in part without the prior written consent of GPA. Written consent of GPA for subletting shall not relieve CONTRACTOR of any of his obligations under the Contract Agreement.

#### 4.36. Non-waiver

GPA shall not consider any provisions of the Contract Agreement waived unless GPA gives notice of such waiver in writing. Even if such notice has been given, such waiver shall not be construed as being a waiver of any other past or future right of GPA under the provisions of the Contract Agreement, unless otherwise expressly stipulated therein. Failure of GPA to insist upon strict performance of any of the terms and conditions hereof, or failure or delay of GPA to insist upon strict performance of any of the terms and conditions hereof, or failure or delay of GPA to exercise any acts, rights, or remedies provided herein or by law shall not relieve CONTRACTOR of liability under any guarantees or of obligations under the Contract Agreement and shall not be deemed a waiver of any right of GPA to insist upon strict fulfillment of the Contract Agreement or of any of GPA's rights or remedies as to the Goods or Special Services furnished.

#### 4.37. Severability

If any work, phrase, clause, article, or other provision of the Contract Agreement is or is deemed or adjudicated or otherwise found to be against public policy, void, or otherwise unenforceable, then said work, phrase, clause, article, or other provision shall be deleted or modified, in keeping with the express intent of the parties hereto as necessary to render all the remainder of the Contract Agreement valid and enforceable. All such deletions or modifications shall be the minimum necessary to effect the foregoing.

## 4.38. Rights and Remedies

The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto, will be in addition to, and shall not be construed in any way as a limitation of any rights and remedies available to any or all of them which are otherwise imposed or available by law or contract, by special warranty or guarantee, or by other provisions of the Contract Documents, and the provisions of this paragraph shall be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply. All representations, warranties, and guarantees made in the Contract Documents will survive final payment and termination or completion of the Contract Agreement.

#### 4.39. New Material

Unless the Contract Agreement specifies otherwise, the CONTRACTOR represents that the Goods and components are new. If the CONTRACTOR believes that furnishing used or reconditioned Goods or components will be in GPA's interest, the CONTRACTOR shall so notify GPA in writing. The CONTRACTOR's notice shall include the reasons for the request along with a proposal for any consideration to GPA if GPA authorizes the use of used or reconditioned Goods or components.

## 4.40. Claims Based on the General Manager's Actions or Omission

If any action or omission on the part of the General Manager, or his/her designee, requiring performance changes within the scope of the Contract Agreement constitutes the basis for a claim by the CONTRACTOR for additional compensation, damages, or an extension of time for completion, the CONTRACTOR shall continue with performance of the Contract Agreement in compliance with the directions or orders of such officials, but by so doing, the CONTRACTOR shall not be deemed to have prejudiced any claim for additional compensation, damages, or an extension of time for completion; provided:

- A. The CONTRACTOR shall have given written notice to the General Manager, or his/her designee:
  - i. Prior to the commencement of the work involved, if at that time the CONTRACTOR knows of the occurrence of such action or omission;
  - ii. Within thirty (30) days after the CONTRACTOR knows of the occurrence of such action or omission, if the CONTRACTOR did not have such knowledge prior to the commencement of the work; or
  - iii. Within such further time as may be allowed by the Procurement Officer in writing. This notice shall state that the CONTRACTOR regards the act or omission as a reason that may entitle the CONTRACTOR to additional compensation, damages, or an extension of time. The Procurement Officer or designee of such officer, upon receipt of such notice, may rescind such action, remedy such omission, or take such other steps as may be deemed advisable in the discretion of the Procurement Officer or designee of such officer.
- B. The notice required by subparagraph (1) of this Paragraph describes as clearly as practicable at the time the reasons why the CONTRACTOR believes that additional compensation, damages, or an extension of time may be remedies to which the CONTRACTOR is entitled; and
- C. The CONTRACTOR maintains and, upon request, makes available to the Procurement Officer within a reasonable time, detailed records to the extent practicable, of the claimed additional costs or basis for an extension of time in connection with such changes.

#### 4.41. Limitations of Clause

Nothing herein contained shall excuse the CONTRACTOR from compliance with any rules of law precluding GPA and its officers and any CONTRACTORS from acting in collusion or bad faith in issuing or performing change orders that are clearly not within the scope of the Contract Agreement.

## 4.42. Standards of Design and Workmanship

The finished Work shall be complete in all respects. The intent of the Specifications is to acquire or purchase management services, training, operations and maintenance materials and services, and supply and inventory management and control. All hardware shall be manufactured, fabricated, assembled, finished, and documented with quality workmanship throughout, and all of its components shall be new and suitable for the purposes specified. All firmware/software shall be designed, implemented, tested, and documented in accordance with the best and recognized

correct practices and shall be suitable for the purpose specified. All work shall conform to industry best practices.

#### 4.43. Standard Work Schedule

Work scheduled and performed by the CONTRACTOR on GPA's premises shall conform to published GPA working hours and shall account for GPA's observed holidays.

## 4.44. Interference with Operation

Interference with normal operation of GPA's facilities or equipment, or that of any CONTRACTORS or subcontractors on GPA's premises, shall be avoided. The GPA's representative will determine in advance whether such interference is unavoidable and will establish the necessary procedures under which the interferences will be allowed.

#### 4.45. Release of Information

The CONTRACTOR shall not release any information including the Contract Price concerning this project or any part thereof in any form, including advertising, news releases, or professional articles, without written permission of GPA.

#### 4.46. Liens

In the event that a lien of any nature shall at any time be filed against the hardware, firmware, or software or the CONTRACTOR's facility by any person, firm, or corporation which has supplied material or services at the request of the CONTRACTOR, and for the cost of which the CONTRACTOR is liable under the terms of the Contract Agreement, the CONTRACTOR agrees, promptly on demand of GPA and at the CONTRACTOR's expense, to take any and all action necessary to cause any such lien to be released or discharged therefrom. The CONTRACTOR agrees to hold GPA harmless from all liens, claims, or demands in connection with the Work.

#### 4.47. Title

Title to any of the hardware, firmware, and software, management practices, training and other documents and/or processes required by GPA to continue the improved management, operations and maintenance of the project will pass to GPA upon placement of the equipment within GPA's premises prior to commencement of its installation, subject to GPA's inspection thereof. The CONTRACTOR shall retain title and be responsible for movement of the equipment from the delivery carrier onto the premises and the subsequent unpacking of the equipment. If, for any reason, the Work is terminated prior to its completion, the title to all the Work performed to that time including all hardware, firmware, software, management practices, training and other documents and/or processes required by GPA to continue the improved management, operations and maintenance of the project, whether in the CONTRACTOR's facility, in transit, or on GPA's premises, shall immediately pass to GPA.

#### 4.48. Insurance

CONTRACTOR shall not commence work under the Contract Agreement until he has obtained all insurance required under this section and GPA has approved such insurance, nor shall the CONTRACTOR allow any subcontractor to commence work on this subcontract until all similar insurance required of the subcontractor has been so obtained and approved. CONTRACTOR and subcontractor shall maintain all insurance required during the course of the work.

#### 4.49. Certificate of Insurance

CONTRACTOR shall furnish certificates of insurance and waiver of subrogation endorsement to GPA prior to commencement of work showing evidence of such coverage, including the statement to the effect that cancellation or termination of the insurance shall not be effective until at least (10) days after receipt of written notice to GPA. At all times CONTRACTOR's insurance shall be primary to any other insurance that may be carried by GPA. The statement of limits of insurance coverage shall not be construed as in any way limiting the CONTRACTOR's liability under the Contract Agreement. GPA shall be an additional insured on all liability coverage and certificates of insurance shall clearly indicate such.

#### 4.50. Insurance Company and Agent

All insurance policies herein required of the CONTRACTOR shall be written by a company duly authorized and licensed to do business in Guam where work under the Contract Agreement is being performed and be executed by some agent thereof duly licensed as an agent in Guam.

#### 4.51. **GPA Insurance**

GPA agrees that it will keep the property and machinery and equipment insured, at a minimum, against loss or damage by fire with extended coverage endorsement for full replacement value as determined by GPA from time to time. Such insurance shall be issued by financially responsible insurers duly authorized to do business in Guam where the property is located and shall contain the standard form of waiver of subrogation. The insurance company shall be required to give GPA not less than thirty days (30) notice in the event of cancellation or material alteration of such coverage. Nothing contained herein shall be construed as creating any liability or responsibility on the part of the CONTRACTOR for the adequacy of insurance coverage on the property. As to any insurable risks of loss or damage to the property and machinery and equipment not required to be insured hereunder, GPA shall bear the cost of the same. GPA shall be deemed to be self-insured as to the deductible or co-insurance amount applicable to such insurance coverage and shall pay any deductible or co-insurance amount applicable in the event of such loss or damage.

#### 4.52. Contractor's and Subcontractor's Insurance

a. Prior to commencing the work, Contractor shall obtain and thereafter maintain during the course of the work Insurance with companies acceptable to Owner. The Contractor shall not allow any subcontractor to commence work on his subcontract until all similar insurance required of the subcontractor has been so obtained and approved. The limits of insurance shall be as follows unless a higher limit is required by statute:

- Comprehensive General Liability including products, completed operations and contractual coverage for this Agreement in the amount of \$1,000,000 per occurrence and \$1,000,000 aggregate.
  - 1. Policy must be primary and non-contributory with endorsements attached
  - 2. GPA shall be named as a NAMED INSURED
  - 3. Waiver of Subrogation endorsement shall be in favor of GPA
  - 4. Cancellation Clause a minimum 90 days prior written notice must be submitted to GPA for cancellations
- ii. Auto Liability Insurance covering bodily injury and property damage in the amount of \$1,000,000 combined single limit per occurrence.
  - 1. Policy must be primary and non-contributory with endorsements attached
  - 2. GPA shall be named as a NAMED INSURED
  - 3. Waiver of Subrogation endorsement shall be in favor of GPA
  - 4. Cancellation Clause a minimum 90 days prior written notice must be submitted to GPA for cancellations
- iii. Excess Liability Policy with limits of \$5,000,000 or higher.
  - 1. Policy must be primary and non-contributory with endorsements attached
  - 2. GPA shall be named as a NAMED INSURED
  - 3. Waiver of Subrogation endorsement shall be in favor of GPA
  - 4. Cancellation Clause a minimum 90 days prior written notice must be submitted to GPA for cancellations
- iv. Worker's Compensation and Employer's Liability- Statutory Limits
  - 1. Policy must be primary and non-contributory with endorsements attached
  - 2. GPA shall be named as a NAMED INSURED
  - 3. Waiver of Subrogation endorsement shall be in favor of GPA

- 4. Cancellation Clause a minimum 90 days prior written notice must be submitted to GPA for cancellations
- v. Professional Liability Insurance including in the amount of \$1,000,000 each claim
  - 1. Policy must be primary and non-contributory with endorsements attached
  - 2. GPA shall be named as a NAMED INSURED
  - 3. GPA shall be named as Loss Payee
  - 4. Cancellation Clause a minimum 90 days prior written notice must be submitted to GPA for cancellations
- vi. Contractors All Risk or Builder's Risk or Installation Floater, when applicable.
  - 1. Policy must be primary and non-contributory with endorsements attached
  - 2. GPA shall be named as a NAMED INSURED
  - 3. GPA shall be named as Loss Payee
  - 4. Cancellation Clause a minimum 90 days prior written notice must be submitted to GPA for cancellations
- b. Contractor shall furnish certificates of insurance and waiver of subrogation endorsement to Owner prior to commencement of work showing evidence of such coverage, including the statement to the effect that cancellation or termination of the insurance shall not be effective until at least ten (10) days after receipt of written notice to Owner. At all times Contractor's insurance shall be primary to any other insurance that may be carried by Owner. The statement of limits of insurance coverage shall not be construed as in any way limiting the Contractor's liability under this agreement. Owner shall be an additional insured on all liability coverage and certificates of insurance shall clearly indicate as such.

#### 4.53. Waiver of Subrogation

The parties hereby release each other and their respective officers, employees, and agents from all loss or damage to the Premise property, machinery and equipment and to the fixtures, personal property, equipment and improvements of either GPA or CONTRACTOR in or on the Property, notwithstanding that any such loss or damage may be due to or result from the negligence of either of the parties or their respective officers, employees or agents. This waiver does not apply to maintenance and repair assumed under the Contract Agreement by the CONTRACTOR.

#### 4.54. Contract Closeout

#### 4.54.1. Substantial Completion Date

- a) When the Contractor considers the entire work ready for its intended use, the Contractor shall, in writing to the Engineer, certify that the entire work is substantially complete and request that the Engineer concur and establish a date of substantial completion.
- b) Within 5 days the Contractor and the Engineer shall complete an inspection of the work to determine the status of the completion. If the Engineer does not consider the work substantially complete, the Engineer will notify the Contractor in writing giving the Engineer's reasons therefore. The Contractor may appeal this decision.
- c) If the Engineer considers the work substantially complete, the Engineer will concur in writing to the Contractor that the work is substantially complete and shall therein fix the date of substantial completion. In addition, a list of any deficiencies requiring completion or correction before final inspection will be attached to the Certificate of Substantial Completion. This list of deficiencies (punch list) shall be completed by the Contractor within 10 days after receipt of the Certificate of Substantial Completion and list of deficiencies. The Engineer will not make the final inspection until all work, including the correction of such deficiencies, final clean-up, and such extra work as may be ordered by the Engineer, has been completed by the Contractor and all sub- contractors.
- d) Definition of Substantial Completion: The date of substantial completion of a project or specified area of the project is the date when construction is sufficiently completed and in accordance with the contract documents, as modified by any change orders agreed to by the parties, to permit the Guam Power Authority to occupy the project or specified area of the project for the use for which intended.

#### 4.54.2. Final Acceptance

- a) A Certificate of Completion for the project, submitted by the Engineer and approved by the Owner, shall constitute final acceptance of the work.
- b) Final acceptance shall not constitute acceptance of any unauthorized or defective work or material, nor shall progress estimates be construed as acceptance of any work under this contract. The Owner shall not be barred from requiring the Contractor to remove, replace, repair, or dispose of any unauthorized or defective work or from recovering damages for any such work or material.
- c) Submit final Application for Payment identifying total adjusted Contract Sum, previous payments, and sum remaining due.

## 4.54.3. Final Cleaning

- a) Execute final cleaning prior to final inspection.
- b) Clean equipment and fixtures to a sanitary condition.

- c) Clean filters of operating equipment.
- d) Clean debris from roofs, downpours, and drainage systems.
- e) Clean site; sweep paved areas, rake clean landscaped surfaces.
- f) Remove waste and surplus materials, rubbish, and construction facilities from the site.

#### 4.54.4. Correction Period

- a) If within a year after the date of Final Completion or such longer period of time as may be prescribed by Laws or Regulations or by the terms of any applicable special guarantee required by the Contract Documents or by any specific provision of the Contract Documents, any work is found to be defective, the Contractor shall promptly, without cost to the Owner and in accordance with the Owner's written instructions: (i) correct such defective work, or, if it has been rejected by the Owner, remove it from the site and replace it with work that is not defective, and (ii) satisfactorily correct or remove and replace any damage to other worker the work of others resulting therefrom. If the Contractor does not promptly comply with the terms of such instructions, or in an emergency where delay would cause serious risk of loss or damage, the Owner may have the defective work corrected or the rejected work remove and replaced, and all claims, costs, losses and damages caused by resulting from such removal and replacement (including but not limited to all costs of repair or replacement of work of others) will be paid by the Contractor.
- b) Where defective work (and damage to other work resulting therefrom) has been corrected, removed or replaced under this paragraph 4.62.5, the correction period hereunder with respect to such work will be extended for an additional period of two years after such correction or removal and replacement has been satisfactorily completed
- c) Contractor shall furnish a warranty period performance bond. The bond shall be for an amount equal to 15% of the Contract Price and shall remain in effect for the entire warranty period. Receipt by the Owner of the warranty period bond shall be a prerequisite for release of the construction period performance bond.

## 4.54.5. Final Report

Two (2) hard copies and one (1) electronic copy of final reports shall be submitted to GPA after testing and commissioning are completed. The report shall include but not limited to:

- a) Summary of Work Performed
- e) Inspection and Test Criteria
- f) All test results
- g) List of materials used
- h) As-built drawings
- i) Commissioning Reports

j) Recommendations

## 4.55. Quality Control

## 4.55.1. Quality Control Requirements

All testing shall be divided into three (3) categories as follows:

- a) Field tests made at, or in the vicinity of, the jobsite in connection with the actual work, including but not limited to concrete batch plants, asphalt batch plants, and similar establishments directly involved in the work.
- b) Factory tests at the point of manufacture of various products which are shipped to the jobsite as a unit, including by not limited to, such items as electrical equipment, as required by the Engineer.
- c) Certified tests made by approved testing agencies on material and/or equipment, which is to be incorporated into structures under the contract. These tests are those as are performed by Factory Mutual, Underwriters' Laboratories, Inc., and others.
  - i. Field Tests by the Contractor: The Contractor shall perform all field testing specifically required by the "Applicable Publications" referenced in the contract specification. Cost of testing shall be borne by the Contractor. He shall furnish all equipment, instruments, qualified personnel and facilities necessary to perform all tests required by the contract documents. Testing services shall be performed by the Contractor or acquired by the Contractor through a qualified commercial testing laboratory. If a commercial testing laboratory is retained to perform tests under this contract, all test reports shall be performed by the Contractor or acquired by the Contractor through a qualified commercial testing laboratory. If a commercial testing laboratory is retained to perform tests under this contract, all tests reports shall be certified by a representative of the testing laboratory, who is authorized to sign certified test reports for the laboratory. Test reports shall include the acceptable value for each specification item, the actual test results obtained, the methods used, and a statement that the product conforms (or does not conform to the specification requirements).
  - ii. Factory Tests: The Engineer will arrange for factory tests when they are required.
  - iii. Manufacturer's Certified Tests: Certified tests on materials to be incorporated into the work will be acceptable, provided they are performed by the manufacturer or by Government approved agencies or laboratories, show that the material conform to the specification, and that the tests and certification meet the requirements of the paragraph entitled "Certificates and Certifications" below.
  - iv. Government Approval of Laboratories: All laboratory work performed under this contract shall be done by a laboratory approved by the Government, whether the

laboratory is employed by the Contractor or by others, or is owned and operated by the Contractor. The basis of approval includes the following:

- 1. Laboratories performing work in connection with concrete, steel and bituminous material must conform to American Society for Testing and Materials (ASTM) designation E632-77.
- Laboratories performing work not in connection with concrete, steel or bituminous material must conform to Sections 3 and 4 of ASTM designation E329-77.

## 4.55.2. Shop Drawings and Catalog Cuts

All shop drawings, and catalog cuts required by the technical sections of the contract specifications shall be approved by the Engineer.

#### 4.55.3. Identification

Each item which is to be incorporated into the contract shall be clearly marked and identified in the catalog cut submittals, and shall be cross-referenced to the contract drawings and specifications so as to identify clearly the use for which it is intended.

#### 4.55.4. Samples

Samples of materials shall be prepared and submitted as required. The Contractor shall check and approve all samples of materials and/or equipment proposed for incorporation into the project. The samples shall be identified as to their intended use, and shall be accompanied by a letter of certification from the Contractor stating that the samples comply with the contract drawings and specifications.

#### 4.55.5. Certificates and Certifications

Manufacturer's certification may be furnished by the Contractor, on items of materials and equipment incorporated into the work, only when this method will assure full compliance with the provisions of the contract, as determined by the Government. Pre-printed certifications will not be acceptable. All certifications shall be in the original. The original of all manufacturer's certifications shall name the appropriate item of equipment or material, specification, standard or other document specified as controlling the quality of that item and shall have attached thereto certified copies of the test reports upon which the certifications are based.

## 4.55.6. Record of Inspections

The Contractor shall maintain, on a day-to-day basis, a record of all inspections and field test performed with a certification that all work is in conformance with contract requirements.

## 4.55.7. Recalibration of Equipment

Equipment requiring recalibration shall be subject to recalibration at the request of the Engineer. Such recalibration shall be performed by the Contractor at his expense.

## 4.56. Safety Requirements

#### 4.56.1. References

The publications listed below form a part of this specification to the extent referenced. The publications are referred to in the text by the basic designation only.

a) AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI A10.14 (1991)	Construction and Demolition Operations – Requirements
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for Safety Belts, Harnesses, Lanyards and Lifelines for

Construction and Demolition Use

ANSI Z359.1 (1999) Safety Requirements for Personal Fall Arrest Systems

b) CODE OF FEDERAL REGULATIONS (CFR)

29 CFR 1910.120 Hazardous Waste Operations and Emergency Response

c) CORPS OF ENGINEERS (COE)

COE EM-385-1-1 (1996) Safety and Health Requirements Manual

c) NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)

NFPA 70 National Electric Code

NFPA 70E (2017) Standard for Electrical Safety in the Workplace

NFPA 241 (1996) Safeguarding Construction, Alteration, and Demolition

**Operations** 

## 4.56.2. Definitions

a) Certified Industrial Hygienist. An industrial hygienist is an individual who is certified by the American Board of Industrial Hygiene.

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- b) Certified Safety Professional. A safety manager, safety specialist, or safety engineer that has passed the CSP exam administered by the Board of Certified Safety Professionals.
- c) Confined Space. A space which by design has limited openings for entry and exit, unfavorable natural ventilation which could contain or produce dangerous air contaminants, and which is not intended for continuous employee occupancy, engulfment or any other recognized safety or health hazard. Confined spaces include, but are not limited to storage tanks, process vessels, pits, silos, vats, degreasers, reaction vessels, boilers, ventilation and exhaust ducts, sewers, tunnels, underground utility vaults, and pipelines.
- d) Multi-employer work site (MEWS). The prime contractor is the "controlling authority" for all work site safety and health of the subcontractors.
- e) Recordable Occupational Injuries or Illness. An occupational injury or illnesses which result in serious injuries, lost workday cases, non-fatal cases or significant mishaps.
- f) Serious Injuries & Fatalities. Regardless of the time between the injury and death or the length of the illness; hospitalization of three or more employees; or property damage in excess of \$200,000.
- g) Lost Workday Cases. Injuries, other than fatalities, that results in lost workdays.
- h) Non-Fatal Cases. Cases without lost workdays which result in transfer to another job or termination of employment, or require medical treatment (other than first aid) or involve property damage in excess of \$10,000 but less than \$200,000 or involve: loss of consciousness or restriction of work or motion. This category also includes any diagnosed occupational illnesses which are reported to the employer but are not classified as facilities or lost workday cases.
- i) Health and Safety Plan (HASP). The HASP is the Navy equivalent Army term of SHP or SSHP used in COE EM-385-1-1. "USACE" property and equipment specified in COE EM-385-1-1 should be interpreted as Government property and equipment.
- j) Safety Officer. The superintendent or other qualified or competent person who is responsible for the on-site safety required for the project. The contractor quality control person cannot be the safety officer, even though the QC has safety inspection responsibilities as part of the QC duties.
- k) Significant Contractor Mishap. A contractor mishap which involves falls of 4 feet or more, electrical mishaps, confined space mishaps, diving mishaps, equipment mishaps, and fire mishaps which result in a lost time injury, or property damage of \$10,000 or more, but less than \$200,000; or when fire department or emergency medical treatment (EMT) assistance is required.
- I) Medical Treatment. Treatment administered by a physician or by registered professional personnel under the standing orders of a physician. Medical treatment does not include first aid treatment provided by a physician or registered personnel.

- m) First Aid. A one-time treatment, and follow-up visit for the purpose of observation, of minor scratches, cuts, burns, splinters, and so forth, which do not ordinarily require medical care, even though provided by a physician or registered professional personnel.
- n) Lost Workdays. The number of days (consecutive or not) after, but not including, the day of injury or illness during which the employee would have worked but could not do so; that is, could not perform all or part of his normal assignment during all or any part of the workday or shift; because of the occupational injury or illness.

#### 4.56.3. Submittals.

Submit the following in accordance with the submittal procedures:

a) Accident Prevention Plan (APP)

Submit at least 15 calendar days prior to start of work at the job site, make APP site specific, Notice to Proceed will be given after Government finds the APP acceptable.

b) Activity Hazard Analysis (AHA)

Submit the AHA for the preparatory phase as a part of the APP. Submit subsequent AHA for each major phase of work at least 15 calendar days prior to the start of that phase. Format subsequent AHA as amendments to the APP.

c) Health and Safety Plan (HASP)

Allow 30 calendar days for review by GPA construction safety manager.

d) Records

Reports. Submit reports as their incidence occurs, in accordance with the requirements of the paragraph entitled, "Reports."

## 4.56.4. Quality Assurance

- a) Qualifications
  - i. Qualifications of Safety Officer:
    - 1. Ability to manage the on-site contractor safety program through appropriate management controls.
    - 2. Ability to identify hazards and have the capability to expend resources necessary to abate the hazards.
    - 3. Must have worked on similar types of projects that are equal to or exceed the scope of the project assigned with the same responsibilities.

## ii. Qualifications of Qualified Person, Confined Space Entry:

The qualified person shall be capable by education and specialized training of anticipating, recognizing, and evaluating employee exposure to hazardous substances or other unsafe conditions in a confined space. This person shall be capable of specifying necessary control and protective action to ensure worker safety.

## b) Meetings

## i. Preconstruction Conference

The safety officer shall attend the preconstruction conference.

#### ii. Meeting on Work Procedures

Meet with Contracting Officer to discuss work procedures and safety precautions required by the HASP. Ensure the participation of the Contractor's superintendent, the Quality Control, and the CSP or CIH.

## iii. Weekly Safety Meetings

Hold weekly. Attach minutes showing contract title, signatures of attendees and a list of topics discussed to the QC Contractor Quality Control daily report.

## c) Crane Safety Requirements

The contractor shall comply with specific activity regulations pertaining to crane safety and operation, and shall notify the contracting officer, in advance of any cranes entering the activity. The contractor shall comply with ASME B30.5 for mobile cranes and ASME B30.22 for articulating boom cranes.

## i. Crane Certificate of Compliance

Prior to cranes entering federal activities, a certificate of compliance form the contractor shall be completed and submitted to the contracting officer. The certificate of compliance shall certify that the crane and rigging gear meets applicable OSHA regulations. The specific OSHA regulation applying to the crane shall be cited on the certification. The contractor shall also certify that all of its crane operators working on federal activity have been trained not to bypass safety devices during lifting operations. A copy of the certification submitted to the contracting officer shall be posted in the crane. Attached at the end of this specification section is a certification form to be used for this purpose.

## ii. Crane Weight Handling Equipment Accident Report

The contractor shall provide the contracting officer within 30 days of any accident a Weight Handling Equipment Accident Report using the form provided at the end of this

specification section. The contractor shall notify the contracting officer as soon as practical, but not later than four hours, after an accident involving a fatality, in-patient hospitalization, overturned crane, collapsed boom, or any other major damage to the crane or adjacent property. The contractor shall secure the accident site and protect evidence unit released by the contracting officer. The contractor shall conduct an accident investigation to establish the root cause(s) of the accident. Crane operations shall not proceed until cause if determined and corrective actions have been implemented to the satisfaction of the contracting officer. These notifications and reporting requirements are in addition to those required under other parts of this project specification and the provisions of the "Accident Prevention" clause of the contract.

#### 4.56.5. Accident Prevention Plan (APP)

Prepare the APP in accordance with the required and advisory provisions of COE EM-385-1-1 including Appendix A, "Minimum Basic Outline for Preparation of Accident Prevention Plan," and as modified herein. Include the associated AHA and other specific plans, programs and procedures listed on Pages A-3 and A-4 of COE EM-385-1-1, some of which are called out below.

- a) Contents of the Accident Prevention Plan
  - i. Name and safety related qualifications of safety officer (including training and any certifications).
  - ii. Qualifications of competent and of qualified persons.
  - iii. Identify of the individual who will complete exposure data (hours worked); accident investigations, reports and logs; and immediate notification of accidents to include subcontractors.
  - iv. Emergency response plan. Conform to COE EM-385-1-1, paragraph 01.E and include a map denoting the route to the nearest emergency care facility with emergency phone numbers. Contractor may be required to demonstrate emergency response.
  - v. Confined Space Entry Plan. Identify the qualified person's name and qualifications, training, and experience. Delineate the qualified person's authority to direct work stoppage in the event of hazardous conditions. Include procedure for rescue by contractor personnel and the coordination with emergency responders. (If there is no confined space work, include a statement that no confined space work exists and none will be created.)
  - vi. Hazardous Material Use. Provisions to deal with hazardous materials, pursuant to the Contract Clause "FAR 52.223-3, Hazardous Material Identification and Material Safety Data." And the following:
    - 1. Inventory of hazardous materials to be introduced to the site with estimated quantities.

- 2. Plan for protecting personnel and property during the transport, storage and use of the materials
- Emergency procedures for spill response and disposal, including a site map with approximate quantities on site at any given time. The site map will be attached to the inventory, showing where the hazardous substances are stored
- 4. Material Safety Data Sheets for inventoried materials not required in other section of this specification.
- 5. Labeling system to identify contents on all containers on-site.
- 6. Plan for communicating high health hazards to employees and adjacent occupants.
- vii. Hazardous Energy Control Plan. For hazardous energy sources, comply with COE EM-385-1-1, paragraph 12.A.07.
- viii. Critical Lift Procedures. Weight handling critical lift plans will be prepared and signed in accordance with COE EM-385-1-1, paragraph 16.c.18.
- ix. Alcohol and Drug Abuse Plan
  - Describe plan for random checks and testing with pre-employment screening in accordance with the DFAR Clause subpart 252.223-7004, "Drug Free Work Force."
  - 2. Description of the on-site prevention program
- x. Fall Protection Plan. The plan shall be site specific and protect all workers at elevations above 6 feet.
- xi. Site Demolition Plan. The safety and health aspects prepared in accordance with Section 02220, "Site Demolition"

#### 4.56.6. Activity Hazard Analysis (AHA)

Prepare for each phase of the work. As a minimum, define activity being performed, sequence of work, specific hazards anticipated, control measures to eliminate or reduce each hazard to acceptable levels, training requirements for all involved, and the competent person in charge of that phase of work. For work with fall hazards, including fall hazards associated with scaffold erection and removal, identify the appropriate fall arrest systems. For work with materials handling equipment, address safeguarding measures related to materials handling equipment. For work requiring excavations, include excavation safe guarding requirements. The appropriate AHA shall be reviewed and attendance documented by Contractor at the preparatory, initial, and follow-up phases of Quality Control inspection.

#### 4.56.7. Health and Safety Plan (HASP)

Prepare as required by 29 CFR 1910.120 and COE EM-385-1-1.

## a) Qualified Personnel

Retain a Certified Industrial Hygienist (CIH) or a Certified Safety Professional (CSP) to prepare the HASP, conduct activity hazard analyses, and prepare detailed plan for demolition, removal, and disposal of materials. Retain the CIH or CSP for duration of contract.

## b) Contents

In addition to the requirements of COE EM-385-1-1, Table 28-1, the HASP must include:

- i. Interface of trades involved in the construction.
- ii. Sequencing of work.
- iii. Disposal plan.
- iv. Protective equipment.
- v. Pollution control.

## 4.56.8. Drug Prevention Program

Conduct a proactive drug and alcohol use prevention program for all workers, prime and subcontractor, on the site. Ensure that no employees either use illegal drugs or consume alcohol during work hours. Ensure no employees under the influence of drugs or alcohol during work hours. After accidents, collect blood, urine or saliva specimens and test injured employee influence. A copy of the test shall be made available to the Contracting Officer upon request.

## 4.56.9. Fall Hazard Prevention Program

#### a) Scaffolds

Delineate the fall protection requirements necessary during the erection and dismantling operation of scaffolds used on the project in the fall protection plan and activity hazard analysis for the phase of work.

## b) Training

Institute a fall protection program. As part of the Fall Protection Program, contractor shall provide training for each employee who might be exposed to fall hazards.

#### 4.56.10. Duties of the Safety Officer

- a) Ensure construction hazards are identified and corrected.
- b) Maintain applicable safety reference material on the job site.
- c) Maintain a log of safety inspections performed.

## 4.56.11. Display of Safety Information

Display the following information in clear view of the on-site construction personnel:

- a) Map denoting the route to the nearest emergency care facility with emergency phone numbers.
- d) AHA
- e) Sign with number of hours worked since last lost workday accident.

## 4.56.12. Site Safety Reference Materials

Maintain safety-related references applicable to the project, including those listed in the article "References." Maintain applicable equipment manufacturers' manuals.

#### 4.56.13. Emergency Medical Treatment

Contractors will arrange for their own emergency medical treatment. Government has no responsibility to provide.

## 4.56.14. Reports

#### a) Reporting Reports

For OSHA recordable accidents, the prime contractor will conduct a suitable investigation and provide to the Contracting Officer within 5 calendar days of the accident.

## b) Notification

Notify Contracting Officer, within 4 hours, of any accident meeting the definition of OSHA recordable occupational injury or illness. Information shall include Contractor name; contract title; type of contract; name of activity, installation or location where mishap occurred; date and time of mishap; names of personnel injured; extent of property damage, if any; and brief description of mishap (to include type of construction equipment used, PPE used, etc.). In addition to OSHA reporting requirements, initial notification shall be made of any accident involving significant mishaps.

## c) Monthly Exposure Report

Monthly exposure reporting, to the Contracting Officer is required to be attached to the monthly billing request. This report is a compilation of employee-hours worked each month for all site workers, both prime and subcontractor.

#### d) OSHA Citations and Violations

Provide the Contracting Officer with a copy of each OSHA citation, OSHA report and Contractor response. Correct violations and citations promptly and provide written corrective actions to the Contracting Officer.

## 4.56.15. Fall Protection Anchorage

Fall protection anchorages, used by contractors to protect their people, will be left in place and so identified for continued customer use.

#### 4.56.16. Construction

Comply with COE EM-385-1-1, NFPA 241, the accident prevention plan, the activity hazard analysis and other related submittals and activity fire and safety regulations.

#### a) Hazardous Material Exclusions

Notwithstanding any other hazardous material used in this contract, radioactive materials or instruments capable of producing ionizing/non-ionizing radiation as well as materials which contain asbestos, mercury or polychlorinated biphenyls, di-isocynates, lead-based paint are prohibited. Exceptions to the use of any of the above excluded materials may be considered by Contracting Officer upon written request by Contractor.

## b) Unforeseen Hazardous Material

If additional material, not indicated, that may be hazardous to human health upon disturbance during construction operations is encountered, stop that portion of work and notify the Contracting Officer immediately. Within 14 calendar days the Government will determine if the material is hazardous. If material is not hazardous or poses no danger, the Government will direct the Contractor to proceed without change. If material is hazardous and handling of the material is necessary to accomplish the work, the Government will issue a modification pursuant to "FAR 52.243-4, Changes" and "FAR 52.236-2, Differing Site Conditions."

#### 4.56.17. Pre-Outage Coordination Meeting

Contractors are required to apply for utility outages a minimum of 15 days in advance. As a minimum, the request should include the location of the outage, utilities being affected, duration of outage and any necessary sketches.

#### 4.56.18. Personnel Protection

#### a) Hazardous Noise

Provide hazardous noise signs, and hearing protection, where ever equipment and work procedures produce sound-pressure levels greater than 85 dBA steady state or 140 dBA impulses, regardless of the duration of the exposure.

#### b) Fall Protection

Enforce use of the fall protection device named for each activity in the AHA all times when an employee is on a surface 6 feet or more above lower levels. Personal fall arrest systems are required when working from an articulating or extendible boom, scissor lifts, swing stages, or suspended platform. Fall protection must comply with ANSI A10.14.

#### c) Personal Fall Arrest Device

Equipment, subsystems, and components shall meet ANSI Z359.1, Personal Fall Arrest Systems. Only a full-body harness with a shock absorbing lanyard is an acceptable personal fall arrest device. Body belts may only be used as positioning devices only such as for steel reinforcing assembly. Body belts are not authorized as a personal fall arrest device. Harnesses must have upper middle back "D" rings for proper body suspension during a fall. Lanyard must be fitted with a double locking snap hook attachment. Webbing, straps, and ropes must be of synthetic fiber or wire rope.

#### d) Scaffolding

Employees shall be provided with a safe means of access to the work area on the scaffold. Climbing of any scaffold braces or supports not specifically designed for access is prohibited. Contractor shall ensure that scaffold erection is performed by employees that are qualified. Do not use scaffold without the capability of supporting at least four times the maximum intended load or without appropriate fall protection as delineated in the accepted fall protection plan. Minimum platform size shall be based on the platform not being greater in height than four times the dimension of the smallest width dimension for rolling scaffold. Some Baker type scaffolding has been found not to meet these requirements. Stationary scaffolds must be attached to structural building components to safeguard against tipping forward or backward. The first tie-in shall be at the height equal to 4 times the width of the scaffold base.

#### e) Use of Material Handling Equipment

i. Material handling equipment such as forklifts shall not be modified with work platform attachments for supporting employees unless specifically delineated in the manufactures printed operating instructions. Crane supported work platforms shall only be used in extreme conditions if the Contractor proves that using any other access to the work location would provide a greater hazard to the workers.

- ii. Cranes must be equipped with Load Indicating Devices, anti-two blocks devices, load, boom angle moment indicating indicators.
- iii. Christmas-tree lifting (multiple rigged materials) is not allowed.

#### f) Excavations

The competent person for excavation shall be on site when work is being performed in excavation, and shall inspect excavations prior to entry by workers. Individual must evaluate for all hazards, including atmospheric, that may be associated with the work, and shall have the resources necessary to correct hazards promptly.

## g) Conduct of Electrical Work

Underground electrical spaces must be certified safe for entry before entering to conduct work. Cable intended to be cut must be positively identified and de-energized prior to performing each cut. Perform all high voltage cutting remotely. When racking in or live switching of circuit breakers, no additional person other than the switch operator will be allowed in the space during the actual operation. Plan so that work near energized parts is minimized to the fullest extent possible. Use of electrical outages clear of any energized electrical sources is the preferred method. When working in energized substations, only qualified electrical workers shall be permitted to enter. When work requires Contractor to work near energized circuits as defined by the NFPA 70, high voltage personnel must use personnel protective equipment that includes, as a minimum, electrical hard hat, safety shoes, insulating gloves with leather protective sleeves, fire retarding shirts, coveralls, face shields, and safety glasses. Insulating blankets, hearing protection, and switching suits may be required, depending on the specific job and as delineated in the Contractor AHA.

#### 4.56.19. Accident Scene Prevention

For serious accidents, ensure the accident site is secured and evidence is protected remaining undisturbed until released by the Contracting Officer.

#### 4.56.20. Field Quality Control

#### a) Inspections

Include safety inspection as a part of the daily Quality Control inspections required in Section 01400, "Quality Control."

## 4.56.21. Traffic Work

All work around/involving roadways, to include roadway excavations and utility crossings, will be conducted in accordance with Manual of Uniform Traffic Control Devices. Contractors shall provide

and ensure appropriate road closure and detour signs are established as necessary for motor traffic management. All road closures shall be coordinated with the Contracting Officer in advance. Self- illuminated (lighted) barricades shall be provided during hours of darkness. Brightly-colored (orange) vests are required for all personnel working in roadways. Road closures shall require a road closure plan showing the location of signage.

## 4.56.22. Station Regulations

Contractor is responsible to adhere to all station regulations and obtain all necessary permits and outage approvals prior to commencement of that work activity.

#### 4.56.23. Station Permits

Permits are required for, but not necessarily limited to, welding, digging, and burning. Allow 7 calendar days for processing of the application.

#### 4.56.24. Temporary Barricades

Contractor shall provide for barricading around all work areas to prevent public access.

#### 4.56.25. Fencing

Fencing shall be provided along the construction site at all open excavations and tunnels to control access by unauthorized people. Fencing must be installed to be able to restrain a force of at least 200 pounds against it.

#### 4.56.26. Signs

Place warning signs at the construction area perimeter designating the presence of construction hazards requiring unauthorized persons to keep out. Signs must be placed on all sides of the project, with at least one sign every 300 feet. All points of entry shall have signs designating the construction site as a hard hat area.

## 4.57. Environmental Protection

## 4.57.1. Definitions of Contaminants

- a) Sediment: Soil and other debris that has been eroded and transported by runoff water.
- b) Solidwaste: Rubbish, debris, garbage, and other discarded materials resulting from industrial, commercial, and agricultural operations, and from community activities' such material having insufficient liquid content to be free flowing.

- c) Rubbish: A variety of combustible and noncombustible wastes such as ashes, waste materials that result from construction or maintenance and repair work, leaves and tree trimmings.
- d) Chemical Wastes: Includes salts, acids, alkalies, herbicides, pesticides, petroleum-derived products and organic chemicals.
- Sewage: Water-carried waste products from residences, public buildings, institutions or other buildings, including excrementitious or other discharge from the bodies of human beings or animals, together with such ground water infiltration and surface water as may be present.
- f) Garbage: Refuse and scraps resulting from preparation, cooling, dispensing, and consumption of food.
- g) Asbestos and Asbestos Materials: Asbestos means actinolite, amosite, anthophyllite, chrysotile, crocidolite, and tremolite. Asbestos Materials means asbestos or any material containing asbestos such as asbestos waste, scrap, debris, bags, containers, equipment, and asbestos-contaminated clothing consigned for disposal. Friable asbestos material requires a Waste Disposal Permit. Submit one (1) copy of Guam Environmental Protection Agency (GEPA) permit or license which reflects such agency's approval of the disposal plan as being in compliance with their waste disposal regulations.

#### 4.57.2. Environmental Protection Requirements

- a) Provide and maintain during the life of the contract, environmental protection as defined herein. Provide environmental protective measures as required to control pollution that develops during normal construction practice.
- b) Provide also environmental protective measures required to correct conditions that develop during the construction of permanent or temporary environmental features associated with the project. Comply with all federal and local statutes and regulations pertaining to environmental protection.

## 4.57.3. Submittals

a) Environmental protection Plan: Submit two (2) copies of the proposed Environmental Protection Plan (EPP) to the Guam Environmental Protection Agency (GEPA) and 2 copies to the Contracting Officer for review and approval no later than 10 calendar days after receipt of the Notice to Proceed (NTP) with work under this project. Review of the plan by the Contracting Officer and GEPA will be accomplished simultaneously.

The Contractor shall not undertake any clearing, grubbing, earthwork, and excavations until the EPP has been approved by the GEPA and the Contracting Officer.

- b) Solid waste Disposal Permit: Submit one (1) copy of local permit or license which reflects Guam Environmental Protection Agency's (GEPA) approval of the disposal plan as being in compliance with their solid waste disposal regulations.
- c) The Contractor must submit an approved Erosion Control Plan (ECP) to Guam EPA to be implemented and maintained throughout the duration of the project.

#### 4.57.4. Protection of Natural Resources

The natural resources within the project boundaries and outside the limits of permanent work performed under this contract shall be preserved in their existing condition or restored to an equivalent or improved condition upon completion of the work. Confine construction activities to areas defined by the work schedule, drawings, and specifications.

- a) Land Resources: Except in areas indicated to be cleared, do not remove, cut, deface, injure, or destroy trees or shrubs without special permission from the Contracting Officer.
  - Protection: Protect existing trees which are to remain and which may be injured, bruised, defaced, or otherwise damaged by construction operations. Remove displaced rocks from uncleared areas. Protect monuments, markers, and works of art.
- b) Repair or Restoration: Repair or restore to their original condition all trees or other landscape features scarred or damaged by the equipment or operations. Obtain approval of the repair or restoration from the Contracting Officer prior to its initiation.
- c) Temporary Construction: At the conclusion of the project, obliterate all signs of temporary construction facilities such as work areas, stockpiles of excess or waste materials, and all other vestiges of construction.
- d) Water Resources: Perform all work in such a manner that any adverse environmental impact on water resources is reduced to a level acceptable to the Contracting Officer.
- e) Oily and Other Hazardous Substances: Take special measures to prevent oily or other hazardous substances from entering the ground, drainage areas, or local bodies of water.

## 4.57.5. Control and Disposal of Solid, Chemical and Sanitary Wastes

Pick up solid waste and place in containers which are emptied on a regular schedule. The preparation, cooking, and disposing of food are strictly prohibited on the project site. Conduct handling and disposal of waste to prevent contamination of the site and other areas. On completion, leave areas clean and natural looking. Remove signs of temporary construction and activities incidental to construction of the permanent work in place.

a) Disposal of Rubbish and Debris: Dispose of rubbish and debris in accordance with the requirements specified herein.

Remove rubbish and debris from the project site and dispose of it in compliance with federal and local requirements.

- b) Garbage Disposal: Place garbage in appropriate containers and transport such refuse to an approved landfill for disposal at least once per week. As an alternative, the Contractor may arrange for weekly pickup and disposal service either with the Government of Guam or a privately-owned garbage collection service. The Contractor shall pay all fees associated with obtaining and maintaining garbage collection and disposal services.
- c) Sewage, Odor, and Pest Control: Dispose of sewage through connection to the public sewage system. Where such system is not available, use chemical toilets or comparably effective units and periodically empty waste into the public sanitary sewage system. Include provisions for pest control and elimination of odors.
- d) Chemical Waste: Store chemical waste in corrosion resistant containers labeled to identify type of waste and date filled. Remove containers from the project site, and dispose of chemical waste in accordance with federal, state, and local regulations. For oil and hazardous material spills which may be large enough to violate federal and local regulations, notify the Contracting Officer immediately and take measures as instructed by the Contracting Officer, at no additional costs.
- e) Petroleum Products: Conduct fueling and lubricating of equipment and motor vehicles in a manner that affords the maximum protection against spills and evaporation. Dispose of lubricants to be discarded and excess oil in accordance with approved procedures meeting federal and local regulations.

#### 4.57.6. Dust Control

Keep dust down at all times, including non-working hours, weekends, and holidays. Sprinkle or treat, with dust suppressors, the soil at the site, haul roads, and other areas disturbed by operations. No dry brooming is permitted. Instead use vacuuming, wet mopping, wet sweeping, or wet power brooming. Air blowing is permitted only for cleaning non-particulate debris, such as steel reinforcing bars. No sandblasting is permitted unless dust therefrom is confined. Only wet cutting of concrete blocks, concrete, and asphalt is permitted. No unnecessary shaking of bags is permitted where bagged cement, concrete mortar, and plaster is used.

#### 4.57.7. Noise

When available, make the maximum use of "low-noise emission products" as certified by Guam Environmental Protection Agency.

#### 4.58. Contractor Use of Site

The CONTRACTOR shall confine all operations to within the vicinity of the site limits and shall arrange his work so that all materials and equipment are placed in such manner and location that there may be a minimum of interference or inconvenience inflicted upon other contractors, employees, equipment of GPA and the public.

#### 4.59. Materials

All materials shall be new, free from defects, and shall be of the best commercial quality for the purpose specified. All materials shall conform to federal and local codes and standards applicable to this type of work i.e. NEMA, ANSI, IEEE, ASTM etc. All necessary items and accessories not specified herein, but which are required to fully carryout the specified intent of the work, shall be furnished by the CONTRACTOR at no cost to the owner.

#### 4.60. Defective Work

No work or material which may be defective in construction or quality or deficient in any of the requirements of the drawings and specifications will be considered accepted as a consequence of the failure of the Contracting Officer or the inspectors to discover or to point out said defects or deficiencies during the construction; nor will the presence of inspectors on the work relieve the CONTRACTOR from the responsibility of securing the quality and progress of work as required by these specifications.

Any defective work that may be discovered before the completion of the work or within such time as required by the bond shall be replaced by work and materials that shall conform to the spirit and intent of the drawings, specifications and contract.

The fact that the Contracting Officer or his representatives may have overlooked defective work shall not constitute the acceptance of work. NO PAYMENT WHETHER PARTIAL OR FINAL SHALL BE CONSTRUED TO BE AN ACCEPTANCE OF DEFECTIVE WORK OR IMPROPER MATERIALS.

The Contracting Officer may at any time by order given in writing stop any work not being done according to drawings and specifications and any order so given shall not in any way relieve the CONTRACTOR from completing his contract and shall not in any way terminate, cancel or abrogate the contract or any part thereof, and the Government of Guam shall not in any way be responsible for the delay due to stopping the work as aforesaid.

#### 4.61. Schedule of Values

Within ten (10) days after receipt of notice to proceed, the CONTRACTOR shall submit for approval a schedule of the estimated values of the main branches of the work totaling the amount of the contract. The format to be used will be furnished by the Contracting Officer. These values will be used for determining partial payments and as a basis for changes in work as outlined in the General Conditions.

## 4.62. Shop Drawings

The CONTRACTOR shall submit for the information of GPA, shop and setting drawings and schedules required by the specifications or that may be requested by GPA.

Drawings and schedules shall be submitted in duplicate (unless otherwise specified) accompanied by letter of transmittal which shall give a list of the numbers and dates of the drawings submitted. Drawings shall be complete in every respect and bound insets.

## 4.63. Protection of Porperty and Work

The CONTRACTOR shall at all times safely guard the Owner's property from injury or loss in connection with this contract. He shall at all times safely guard and protect his own work and that of adjacent property (as provided by law and the contract documents) from damage. All passageways, guard fences, lights and other facilities required for protection by laws and regulations and local conditions must be provided and maintained.

## 4.64. Restoration of Property

Any property damages to private and public properties, buildings, equipment, or utilities during the course of the work shall be restored to its original condition at no expense to GPA.

## 4.65. Guarantee

Upon completion of the construction work, furnish GPA a written guarantee that workmanship and materials used are as specified, and that the CONTRACTOR shall make good or repair at his own expense immediately, any defects in such workmanship and materials, other than ordinary wear that may develop, within one year from the date of final acceptance of work.

#### 4.66. Cleanup

Throughout the construction work, clean and remove from the work site all packed cartons, cans, rubbish and all debris resulting from the work and maintain the premises in a clean and orderly condition at all times. Upon completion, remove all rubbish, tools and equipment and turn over to GPA all used or unused excess materials. The CONTRACTOR shall dispose rubbish and debris as per approved GEPA disposal plan.

## 4.67. Use of Premises and Removal of Debris

The CONTRACTOR expressly agrees to undertake the following at his own expense:

- A. To take every precaution against injuries to persons or damages to property
- B. To comply with the regulations governing the operation of premises which are occupied and to perform his contract in such a manner as not to interrupt or interfere with the operation of other facilities
- C. To perform any work necessary to be performed after regular working hours or on Saturdays, Sundays or legal holidays without additional expense to GPA
- D. To store his apparatus, materials, supplies, and equipment in such orderly fashion at the site of the work as will not unduly interfere with the progress of his work or the work of any other contractors
- E. To place upon the work or any part thereof only such loads as are consistent with the safety of that portion of the work
- F. To frequently clean up all refuse, rubbish, scrap materials, and debris caused by his operation so that at all times the site of the work shall present a neat, orderly and workmanlike appearance
- G. To affect all cutting, fitting, or patching of his work required to make the same conform to the plans and specifications, and except with the consent of GPA, not to cut or otherwise alter the work of any contractor

H. Before final payment to remove all surplus materials, false work, temporary structures, including foundations thereof, plant of any description and debris of every nature resulting from his operations, to put the site in a neat, orderly condition and to thoroughly clean and leave reasonably dust free all finished surfaces

## 4.68. Acceptance

The work shall be deemed completed upon documented acceptance by GPA and shall constitute final acceptance of the work.

## 4.69. Final Report

Five (5) copies of final reports shall be submitted to GPA after testing and commissioning are completed. The report shall include but not limited to:

- A. Summary of Work Performed
- B. Inspection and Test Criteria
- C. All test results
- D. List of materials used
- E. As-built drawings
- F. Commissioning Reports
- G. Recommendations

#### 4.70. Working Hours

Working hours shall be between 7:00 a.m. and 4:00 p.m. Monday through Friday.

## 4.71. Time Restrictions for Performing Work

No work shall be carried out on site outside of the specified working hours or on Saturdays, Sundays, or legal holidays without the Engineer's written consent unless the work is unavoidable, absolutely necessary to save life or property, or necessary for the safety of the work, in which case the CONTRACTOR shall immediately advise the Engineer. Engineer shall not unreasonably withhold any such consent save in exceptional circumstances, nor do so if work outside of the specified working hours or on Saturdays, Sundays, or legal holidays in considered by CONTRACTOR to be necessary to meet the Contract Time. The services of the Inspector and Engineer will be charged to the CONTRACTOR.

## 4.72. Time of Completion and Liquidated Damages

The CONTRACTOR must agree to fully complete the basic work under the contract within three hundred sixty-five (365) calendar days from the issuance of the Notice to Proceed (NTP). The CONTRACTOR must also agree to pay to GPA the amount of two thousand dollars (\$2,000.00) per calendar day, not as a penalty, but as reasonable liquidated damages for failing, neglecting or refusing the work within the time specified.

Should GPA choose to award the additive bid, the CONTRACTOR must agree to fully complete the additive work under the contract within ninety (90) calendar days from the issuance of the Notice to Proceed (NTP) for the additive bid. The CONTRACTOR must also agree to pay to GPA the amount of two thousand dollars (\$2,000.00) per calendar day, not as a penalty, but as reasonable liquidated damages for failing, neglecting or refusing the work within the time specified.

## 4.73. Safety and Health Requirements

## 4.73.1. Compliance with Federal and Local Safety Regulations

The CONTRACTOR shall comply with Safety and Health Regulations for Construction, promulgated by the Secretary of Labor under Section 107 of the Contract Work Hours and Safety Standards Act, as set forth in Title 29, C.F.R. Copies of these regulations may be obtained from Labor Building, 14th and Constitution Avenue, NW, Washington, DC 20013. The CONTRACTOR shall comply with the provisions of the Federal Occupational Safety and Health Act, as amended.

#### 4.73.2. Responsibility of Contractor to Act in Emergency

In case of an emergency, which threatens loss or injury of property and/or safety or life, the CONTRACTOR shall act, without previous instructions from GPA, as the situation may warrant. He shall notify the GPA thereof immediately thereafter of any compensation claimed by the CONTRACTOR. Substantiating documents regarding expenses shall be submitted to GPA and the amount of compensation shall be determined by agreement or by GPA subject to review procedures provided under Guam's Procurement Law and Claims Act.

## **INVITATION FOR MULTI-STEP BID**

NO.: GPA-042-22

# FADIAN PUBLIC PARKING LOT SOLAR CANOPY DESIGN AND CONSTRUCTION



# VOLUME II TECHNICAL AND FUNCTIONAL REQUIREMENTS

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## 1. **Project Overview**

GPA is seeking the services of an Engineer/Procure/Construct (EPC)) "CONTRACTOR" for the design and installation of a Photovoltaic (PV) System mounted on canopy structure(s) to be located at GPA's main office branch's public-access parking lot. The PV System shall have a minimum size of 68 KWdc and shall serve the load at the Gloria B. Nelson Public Service Building. GPA seeks a "turn-key" project that will be fully operational upon commissioning. The required services include compliance with all applicable local and federal laws as well as applicable local and national standards for the services rendered.

The CONTRACTOR shall design, procure equipment and materials, obtain required permitting, construct, install, interconnect, test, commission and provide five-year operation and maintenance of the PV system to be located on Guam Power Authority property in Fadian, Mangilao. The PV System shall include a five-year workmanship warranty and five-year cost-free maintenance service for checking PV Array condition, DC output, inverter efficiency, maintaining and tightening interconnections, costs for parts replacement, and replacement labor costs.

#### 1.1. GPA Overview

Guam Power Authority (GPA) is a public corporation that provides electric power service throughout the entire island of Guam. It is and an enterprise fund of the Government of Guam. The Guam Power Authority Act of 1968 established GPA in May 1968.Guam Code 12 Chapter 8 sets the legal definitions, empowerments and limitations for GPA. GPA currently serves about 52,000 customers with 374 MW of oil-fired generation capacity and 25.6 MW of renewable generation capacity. In 2020, GPA had a peak demand of 247 MW. GPA follows the National Electrical Manufacturers Association (NEMA) ANSI C84 for power systems.

An overview of GPA's generation resources and transmission systems is provided in GPA's Integrated Resource Plan, which can be found on the following webpage: <a href="http://www.guampowerauthority.com/gpa\_authority/strategicplanning/2021IRP.php">http://www.guampowerauthority.com/gpa\_authority/strategicplanning/2021IRP.php</a>.

## 1.2. Project Background

GPA has obtained, or will obtain prior to construction, the following requirements:

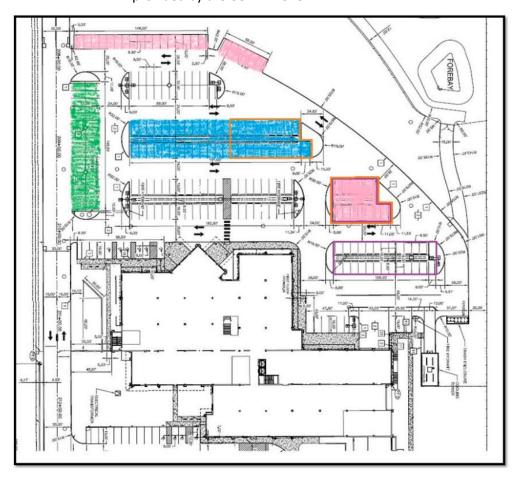
- A. Bureau of Statistics and Plans Guam Coastal Management Program (GCMP): determined the project is consistent with federal plan
- B. U.S. Fish & Wildlife Service (USFWS): completed Endangered Species Act (ESA) Section 7 consultation and Biological Opinion
- C. Guam State Historic Preservation Office: National Historic Preservation Act (NHPA) Section 106 consultation before construction start date
- D. US Army Corps of Engineers: review and approval of Record of Environmental Consideration and supporting documents
- E. U.S. Department of Interior, Office of Insular Affairs: Authorization to Proceed (ATP)

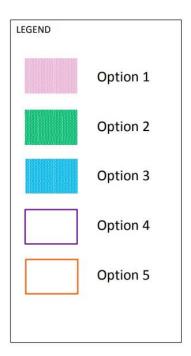
GPA's Island Wide Power System diagrams can be found on the following webpage: <a href="http://guampowerauthority.com/gpa\_authority/engineering/gpa\_engineering\_system\_diagrams.php">http://guampowerauthority.com/gpa\_authority/engineering/gpa\_engineering\_system\_diagrams.php</a>.

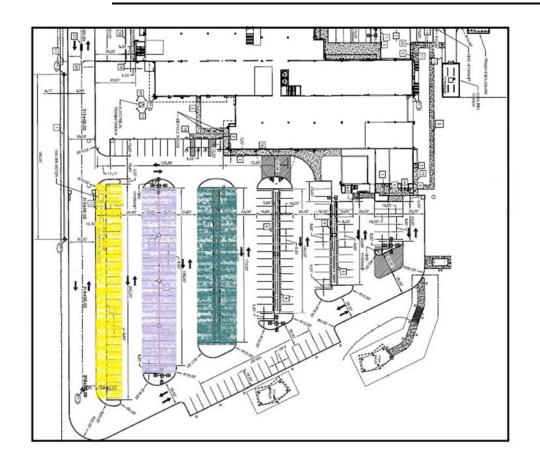
## 1.3. Site Description

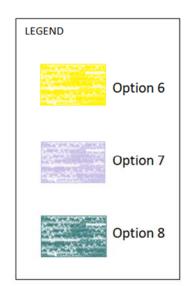
The Photovoltaic Canopy Structure(s) shall be constructed within the front parking lot of GPA's main office branch building. This parking lot is fully paved and is located at 688 Route 15, Fadian, designated as the Gloria B. Nelson Public Service Building, and is within the Municipality of Mangilao. There is an existing paved road along Route 15 that is used to access the site by public patrons and GPA and GWA employees.

There are currently eight possible options for PV Canopy locations, however the Basic Bid price will be based on Option 1 only. Options 2 through 8 will be Additive Bid items. These location options are outlined below, highlighted over the map of the Gloria B. Nelson Public Service Building Parking Lot. GPA reserves the right to change the location to one of the other options prior to the design phase. The adjusted price will be based on the Additive Bid price for the respective location provided by the CONTRACTOR.









## 2. **Proposal Requirements**

## 2.1. Technical / Qualitative Proposal

The BIDDER shall demonstrate sufficient qualifications for this solicitation by providing the following sections as part of the Technical or Qualitative Proposal:

## 2.1.1. Business Structure

The BIDDER shall provide all of the following:

- A. Company information such as name, local address, corporate headquarters (if any) and affiliate company in support for the performance of the required services.
- B. Business structure and nature of services provided.
- C. Copy of the Articles of Incorporation and By-Laws or other applicable forms concerning the business organization.
- D. Certificate of Good Standing to conduct business in jurisdiction of residence.
- E. Other supporting information, brochures, company profile publications that may assist in the evaluation and selection process
- F. Insurance policy

#### 2.1.2. Project Approach

The BIDDER shall provide all of the following:

- A. Detailed description of the work plan to perform, meet, and achieve the objectives of this solicitation.
- B. Detailed description of the planned scope of work for each Basic Bid and Additive Bid Item.
- C. Specification documents from the manufacturer of the materials and devices included in the proposed canopy and PV System.
- D. Brief description of information or coordination to be requested from GPA for the duration of the project.
- E. A table specifying compliance for each required item in Section 3.3.7.

A BIDDER's proposal shall be deemed unacceptable if the PV System requirements specified in Section 3.3.7 are not met.

## 2.1.3. Experience of the Proposed Project Team

The BIDDER shall provide all of the following:

- A. Supporting information describing the past and current successful experience of the Project Team members with similar projects within the past five years. Describe the Project Team members' roles in past projects.
- B. Supporting information demonstrating knowledge and experience in complying with U.S. federal and local standards pertaining to the requested scope of work.
- C. Organizational chart of the Project Team with descriptions of the respective roles and duties of each team member.
- D. Copies of Certifications of the Project Team.
- E. Copy of current Certificate of Authorization (COA) issued by the Guam Board of Registration for Professional Engineers, Architects and Land Surveyors. As required in 10.E(1) of the PEALS Rules and Regulations, "Any corporation, partnership, joint venture or any other association of two (2) or more firms, whether organized under the laws of Guam or any other jurisdiction, may not offer to engage in the practice of engineering, architecture, land surveying or construction management services involving the practices thereof in Guam until such corporation, partnership, joint venture or association has obtained a certificate of authorization issued by the Board."

#### A BIDDER's proposal shall be deemed unacceptable if the following are not met:

- A. The proposed Project Design Team must include a Licensed Professional Engineer with a minimum of five (5) years of experience in design of canopy-mounted or commercial PV systems and associated facilities required for proper grid interconnection.
- B. The proposed Project Team must include at least one member with a minimum of five (5) years of experience in construction of canopy-mounted PV systems or commercial PV systems and associated facilities required for proper grid interconnection.
- C. The Local Project Manager must have a minimum of three (3) years of construction management experience.

# 2.1.4. Time of Delivery

The BIDDER shall demonstrate adequate time of delivery of the project within the specified completion time. A draft project schedule illustrating all major tasks with their respective durations shall be provided.

#### 2.1.5. References

The BIDDER shall provide at least three (3) letters of reference or recommendation from clients that received similar services from the proposed Project Team within the past five (5) years indicating:

- A. Quality of work
- B. Compliance with performance schedules
- C. Cost-control ability
- D. Level of integrity and business ethics

# 2.1.6. Exceptions to the Bid Documents

The BIDDER shall indicate any exceptions to the bid requirements in this section. A BIDDER's proposal shall be disqualified if the GPA Evaluation Committee finds any exceptions to the bid requirements unacceptable.

# 2.2. Price Proposal

The Price Proposal is itemized into specific activities as indicated in the *Bid Schedule* in Appendix N. The BIDDER must indicate a bid price for each item and there shall be no double-charging.

The BIDDER's *Bid Schedule* shall contain bid prices for each of the specific activities and total bid package. GPA will evaluate the Price Proposal and will decide to award either the basic bid, both the basic bid and additive bid, or none of the bid options to the BIDDER.

# 3. **Scope of Work**

# 3.1. General Scope Requirements

The CONTRACTOR shall be responsible for all aspects of project implementation including:

- A. Necessary permits
- B. Adherence to all applicable codes and standards
- C. Foundation design: using manufacturer's standard design or modified design with expected impacts clearly delineated
- D. Interconnection equipment coordination with GPA
- E. Installation design: addressing all electrical, mechanical and civil systems
- F. PV system devices, auxiliary devices, wiring, and other necessary equipment procurement and delivery
- G. Delivery, storage, and handling of all materials and equipment

Deliver materials, products, or supplies to jobsite in original, undamaged, unopened packaging or crates. Include any special instructions for unloading or repair of damage coatings. Comply with manufacturers' storage instructions.

- H. All on-site construction including drilling works of existing parking lot area, excavation, form works, concrete pouring for foundation, anchoring and installation of canopy structure members, PV mounting, and PV installation & interconnection
- I. Commissioning and performance testing with coordination of third-party verification by other GPA contractor
- J. Removal of spoils due to foundation drilling
- K. Parts list of manufacturers, part numbers and costs of all parts that are expected to need replacement during the first 10 years of PV system operation either during normal O&M procedures or anticipated failure/repair events
- L. CONTRACTOR-provided training for GPA on all aspects of PV System operation and normal periodic O&M procedures (i.e., monthly, quarterly, semi-annual or annual O&M events, PV handle & care, and other expected troubleshooting and performance verification procedures normally performed for PV installations)
- M. Full documentation of all equipment, owners and operating manuals, warranties, etc.
- N. Monitoring Software:

  Provide software application to allow for active remote monitoring of the system via status update on performance.

The CONTRACTOR shall include the submission of a Master Project Schedule outlining anticipated start and end dates for each of the functional activities listed above.

The CONTRACTOR shall provide all labor and materials including taxes, equipment, means, and operations necessary to purchase and construct the designated PV system and related features.

The CONTRACTOR shall maximize, to the greatest extent practicable, the use of goods, products and materials produced in the United States, consistent with the grant funding requirements regarding Executive Order 13788 (Buy American and Hire American) and Executive order 13858 (Strengthening Buy-American Preferences for Infrastructure Project).

The CONTRACTOR shall meet the following equipment specifications:

- A. PV system inverters or micro-inverters shall have a minimum 90% efficiency rating, compliant with UL1741/IEEE1547, FCC Part 15 Class B, CAN/CSA-C22 NO. 0-M91, 0.404, and 107.1-01, with lifetime monitoring software.
- B. Rack mount products have to be compliant to UL 2703
- C. PV wire shall be compliant with UL 4703 and UV-rated
- D. PV Modules must have operating temperatures compatible to Guam's historical temperatures. Its wind load design should be rated at minimum 2.4 KPA and must be UL/ULC ORD C1703 listed with compliance to IEC 61215 for performance requirements.
- E. The solar cells within the modules must have performance degradation of less than 1% per vear
- F. Design and system components shall follow the applicable requirements identified in GPA's Net Metering Program Interconnection Policy (AP-072).
- G. Protective coatings such as epoxy, powder coats, acrylic, and anti-reflection coatings are lead and chromate free.

# 3.2. Special Conditions

It shall be the CONTRACTOR's responsibility to verify the existing conditions at the site during either the official pre-bid walkthrough or subsequent site visits to the property. During the pre-bid walkthrough, all areas for project construction will be available for observation.

Any physical disruption to the site that is necessary for the construction and interconnection shall be repaired as nearly as possible to its original state.

The CONTRACTOR must maintain a clean worksite and take all necessary measures to prevent any erosion or distribution of loose material away from the site.

The CONTRACTOR must identify any malfunctioning or defective equipment and report such incidences to GPA. The GPA project manager will decide on the corrective action.

The CONTRACTOR must ensure that all product warranties are active when the project becomes operational. Documentation of product warranties shall be provided to GPA upon commissioning.

The CONTRACTOR shall be required to maintain detailed records. For compliance with GPA's requirements, the CONTRACTOR shall submit monthly reports that track % completion for the major project tasks.

The CONTRACTOR must abide by the Bureau of Statistics and Plans requirements in Appendix U, which contains the Record of Environmental Consideration Correspondence, for the Coastal Zone Management Act concerning air quality, water quality, fragile areas, and visual quality.

Pursuant toward Resource Policy 2, Air Quality, the CONTRACTOR shall:

- A. Strictly implement appropriate dust control BMPs,
- B. Ensure that diesel engines employed in equipment or vehicles are regularly maintained and that particulate filters are used, where applicable.
- C. Comply with the Guam Air Pollution Control Standards and Regulations.

Pursuant toward Resource Policy 3, Water Quality, the CONTRACTOR shall:

- A. Apply for a Soil Erosion and Sediment Control Permit or waiver thereof, from the Guam Environmental Protection Agency for ground-disturbing activities as required under 22 GAR §10102(d).
- B. For ground-disturbing activities, implement appropriate BMPs throughout the project in strict compliance with the Guam Soil Erosion and Sediment Control Regulations (22 GAR Chapter 10), installed in accordance with the Guam Transportation Stormwater Drainage Manual.
- C. Comply with the Guam Soil Erosion and Sediment Control Regulations, as applicable.
- D. Monitor heavy equipment used on the project area for oil/petroleum fluid leaks during activities. Absorbent pads must be readily available. If leaks occur, all work must cease and leak area must be cleaned to avoid impact to water resources and other fragile areas.

Pursuant toward Resource Policy 4, Fragile Areas, the CONTRACTOR shall:

- A. Avoid migratory bird species If they are encountered on the project site, cease activities in the immediate area until species leave on their own volition.
- B. Consult with DoAg to avoid Micronesian Starlings opportunistically building nests in the project area and in the solar PV system. Maintenance of installed equipment should be subject to preliminary inspection or survey of birds and nests before any equipment maintenance activity occurs to determine if the Micronesia Starling has opportunistically nested in the PV system and related facilities.
- C. Be advised to use shielded light fixtures or lesser lumens to minimize light pollution which may harm the Marianas fruit bat, should any lights be installed as part of the subject project.

Pursuant to Resource Policy 6, Visual Quality, the CONTRACTOR shall:

- A. Dispose of any debris and waste generated during demolition and construction must be disposed of at a Guam EPA permitted site and must adhere to the requirements of the Guam Solid Waste Regulation.
- B. Remove and properly dispose of temporary protective measures which are intended for use only during the demolition and/or construction phase of the project.

The CONTRACTOR must incorporate the appropriate BMPs in accordance with the Department of Land Management to comply with the general provision of the island's Land Use Laws to promote the protection of the public's health, safety, and general welfare pursuant to the Executive Order 78-37, Guam Land Use Policies, whereas, the proposed project will be in line with the established policies and laws.

The CONTRACTOR shall, in accordance with the Guam Environmental Protection Agency, select PV panel systems and appurtenances that contain less hazardous components and materials, to reduce the potential for possible soil and groundwater contamination if systems are damaged or improperly stored or disposed of.

The CONTRACTOR must incorporate the appropriate BMPs in accordance with the U.S. Fish and Wildlife Services technical assistance located in Appendix U. BMPs pertinent to the CONTRACTOR as follows:

# A. Marianas Fruit Bat

- a. Minimize nighttime lighting near forested areas. Direct temporary lighting away from forest habitat. When installing new or replacing existing permanent lights, use downward-facing, full cut-off lens lights (with the lowest lumens necessary). Fully shield all outdoor lights so the bulb can only be seen from below bulb height and only use when necessary. We would also recommend the installation of automatic motion sensor switches and controls on all outdoor lights to turn off lights when human activity is not occurring in the lighted area.
- b. Avoid human activity within 150 meters (m) (492 feet (ft)) of a transiting or feeding Mariana fruit bat (these activities generally occur at night). During all project work,

monitor the project site and areas within 150 m (492 ft) of project activity for the Mariana fruit bat and if a bat moves into the area, delay work until the animal(s) have left the area of their own accord. Risks to transiting and foraging Mariana fruit bats will be project-specific; coordinate with our office for assistance assessing the project's disturbance duration and intensity in relation to risks to the bat.

# 3.3. Basic Bid Items

The following are general descriptions of the Basic Bid Items listed in the *Bid Schedule*. The BIDDER shall include, in the Technical Proposal, more detailed scope of work descriptions for each Basic Bid Item for evaluation.

#### 3.3.1. Mobilization

The CONTRACTOR shall be responsible for all preparatory operations performed by the CONTRACTOR, including but not limited to, those necessary for the movements of its personnel, equipment, supplies and incidentals to the project site; for premiums on bonds for the project, and for other operations which it must perform or costs it must incur before beginning construction on the various items on the project site.

The CONTRACTOR shall use BMPs (e.g., silt screen, hydro-ax hand clearing, etc.) to comply with the Erosion and Siltation policy of the Guam Coastal Management Program (GCMP).

The CONTRACTOR shall use BMPs to comply with the Water Quality policy of the Guam Coastal Management Program (GCMP).

The CONTRACTOR shall use BMPs (e.g., dust control with non-potable water spray) to comply with the Air Quality policy of the Guam Coastal Management Program (GCMP).

The CONTRACTOR shall submit to GPA for approval a proposed work schedule with milestones, deliverables and timelines no later than ten (10) days after GPA issues the Notice to Proceed. The schedule shall be prepared in a bar chart format and shall display scheduled and actual progress. The schedule shall show the work broken down into major phases and key items with the dates work is expected to begin and be completed. The schedule shall be updated and submitted to GPA every month. The schedule shall show actual progress and any proposed changes in the schedule of remaining work. The CONTRACTOR shall not change the accepted project schedule without prior concurrence of GPA.

#### 3.3.2. Permits, Bonds and Codes

The CONTRACTOR shall secure all permits and bonds required for the construction of this project, including but not limited to those required by the Department of Public Works, Guam Waterworks Authority, Guam Telephone Authority and Department of Parks and Recreation. The CONTRACTOR shall provide assistance with obtaining the Department of Land Management (DLM) Zone Variance for Height permit if needed.

The CONTRACTOR shall also be responsible for applying for and obtaining all other federal, local and other applicable permits, agreements, licenses, and certificates to complete this project, unless otherwise stated in this document. Copies of the permits and approvals shall be submitted to GPA before starting work.

The CONTRACTOR shall adhere to all applicable codes governing electrical, mechanical, civil, structural systems, etc.

GPA has obtained, or will obtain prior to construction, the following requirements:

- A. Bureau of Statistics and Plans Guam Coastal Management Program (GCMP): determined the project is consistent with federal plan
- B. US Fish & Wildlife Service (USFWS): completed Endangered Species Act (ESA) Section 7 consultation and Biological Opinion
- C. Guam State Historic Preservation Office: completion of National Historic Preservation Act (NHPA) Section 106 consultation and archaeological survey anticipated before construction start date

# 3.3.3. Construction Site Survey

The CONTRACTOR shall perform all survey work required for preparation of the design and as-built drawings and for construction completion. All costs required for furnishing instruments and miscellaneous survey materials shall be included.

# 3.3.4. Foundation Design

The CONTRACTOR shall develop a site-specific foundation design to be submitted to the manufacturer for review. Foundation designs must be accompanied with the stamp of a registered Professional Engineer (PE).

The CONTRACTOR is responsible for trenching, excavation, and removal of all bushes, trees or other necessary objects for carport canopy installation. At the completion of the construction phase, the CONTRACTOR shall return the site as nearly as possible to its original conditions.

# 3.3.5. Interconnection Equipment

The CONTRACTOR shall connect to the Gloria B. Nelson Public Service Building's main AC panel. The CONTRACTOR shall develop specifications for the following requirements and shall request information from GPA to ultimately determine:

- A. AC and DC Disconnect requirements including provisions for:
  - a. Fusible, service rated disconnects
  - b. Lockable disconnects
  - c. Externally operable and readily accessible disconnects
- B. Interconnection requirements
- C. Grounding requirements: when designing and installing the earth ground electrode system, the CONTRACTOR shall utilize the following references, or other updated versions of these references:

- a. Standards and Requirements for Solar Equipment Installation, and Licensing and Certification, A Guide for States and Municipalities,
- b. MIL-HDBK 419, Grounding, Bonding and Shielding for Electronic Equipment and Facilities
- c. IEEE 141-1993 (Red Book)
- d. IEEE 142-2007 (Green Book)
- e. NFPA 780 art 3 (Standard for Installation of Lightning Protection Systems) and IEC 62305 (Protection Against Lightning)
- f. NFPA 10 art 250 (Grounding and Bonding)
- D. Appropriate NEMA rating for Combiner Boxes, Electrical Boxes and other electrical enclosures
- E. Recommendations or required equipment to protect the PV system and minimizing voltage flicker during PV intermittency, irregular operating voltage levels and other power quality issues that may arise

# 3.3.6. Installation Design – Addressing All Electrical, Mechanical and Civil Systems

The CONTRACTOR shall provide to GPA an integrated design plan that describes all construction activities on the site in regards to:

- A. Electrical equipment: inverters, external disconnect devices, inverter pads, manholes, underground distribution lines, wiring, risers, trenches, etc.
- B. PV system: PV modules, PV strings, PV racking, tracking mechanism, anchors, meters, energy storage, wiring, inverters/micro-inverters, charge controller etc.
- C. Canopy/carport: posts, roof structure, drainage pipes, lighting fixtures, anchoring, beams, trusses, marine and anti-corrosion coating of exposed metallic parts etc.
- D. Civil engineering work: clearing and grading, drilling work, excavation, compaction work, foundation work, form works, concrete specifications & concrete pouring, asphalt paving, laydown areas for equipment, trench for underground wiring (if any), bollards, concrete wheel stops, etc.

# The design plan shall include:

# A. Site Plan:

Site plan shall identify all construction activities that will be undertaken on the site and locate these on civil engineering drawings. The CONTRACTOR shall perform site work as necessary to prepare site for construction activities. Security and access controls shall be implemented to prevent unauthorized entry to site during construction and to protect wildlife from site exposure. The CONTRACTOR shall obtain appropriate approvals and shall construct connections or new systems for electrical power, water, sewer, telephone, and other utilities.

B. Site Map:

The Site Map shall indicate the proposed solar canopy location and the layout of other project components (i.e., point of common coupling, AC main panel, etc.)

C. Foundation Design:

The Foundation Design shall identify locations and dimensions for the solar canopy and where foundation pads shall be constructed. The design shall also verify bearing capacity of soils and required degree of compaction and densification of soils over where

foundations are to be placed. The design should also outline foundation details such as spacing for rebar reinforcements, footing details, as well as anchoring details.

# D. Canopy Design:

The design of canopy structure shall include but is not limited to column framing plans, structure elevations, beam or truss framing details, column anchor points, and wind loading calculations. The overall canopy design shall be conducive with the canopy serving as a carport that is also utilized as a roof mounting mechanism for the PV system. The carport shall have outdoor lighting and outdoor receptacles for facility use. Canopy aggregate footprint shall be no larger than 8,900 square feet.

# E. Solar PV Design:

The design of the PV system shall include analysis of site's solar window, mounting and racking details, PV-wiring details, array tilt angle and PV orientation, system grounding, lightning protection, surge protection, overcurrent protection device details, conduit details and conduit fill, inverter/micro-inverter specifications, switch or circuit breaker details as means of disconnects, and system production.

#### F. Single-Line Diagram:

The Single-Line Diagram shall detail the on-site electrical configuration from the PV modules to the Gloria B. Nelson Public Service Building Main AC Panel

G. Interconnection Design:

The Interconnection Design shall specify:

- Recommendations or required equipment to minimizing voltage flicker during PV intermittency, irregular operating voltage levels and other power quality issues that may arise
- b. Recommendations for coordination with existing GPA protective devices.

The CONTRACTOR shall submit to GPA for review the pre-final design drawings in the following formats: hard copy of appropriate size, AutoCAD 2005 (or later) and PDF. Construction shall not commence until the design drawings are approved by GPA. The approval of GPA shall not relieve the CONTRACTOR from the responsibility of corrective actions if defective or inadequate work was overlooked.

The CONTRACTOR shall submit to GPA the approved final design drawings in the following formats: hard copy of appropriate size, AutoCAD and PDF before construction commences.

# 3.3.7. Procurement and Delivery of Parking Canopy, PV System, and Other Necessary Equipment

The CONTRACTOR shall be responsible for the procurement and delivery of all PV system, PV mounting equipment, parking canopy structure materials and other necessary equipment to construct and install this project in a turn-key manner.

The solar canopy shall comply with the following general specifications:

- A. System Size:
  - The rated capacity of the PV system shall be at minimum 68 KWdc.
- B. PV Module Tier 1:
  - PV Modules shall be Tier 1 PV modules
- C. High Availability

# Fadian Public Parking Lot Solar Canopy Project Design and Construction Volume II: Technical and Functional Requirements

The design shall consider systems with maintenance (routing preventative maintenance, inspections, tests, & adjustments) schedules that minimize interruption to normal system operations to allow for system high availability

# D. Guarantee of Minimum Generation:

PV modules shall have at least a 10-year limited warranty that modules will generate no less than 90% and 20-year limited warranty that modules will generate no less than 80% of rated output under Standard Testing Conditions (STC).

# E. Canopy Structure Height:

The PV canopies shall have the proper height clearances for parking lot traffic, including garbage trucks and freight trucks.

# F. PV Source Circuit OCPDs:

All Overcurrent Protection Devices in the PV system shall have a minimum overcurrent size that is no less than 125% of the maximum PV circuit current

#### G. Footprint:

The solar canopy structure shall be erected within the public-access parking lot of the Gloria B. Nelson Public Service Building, and all associated facilities and equipment shall be placed entirely within GPA's property.

H. Marine, Anti-Corrosion Coating on all Metal Parts on Canopy Structure:

Any metal parts, if any, on the canopy structure must have effective protection of anticorrosion coating suitable for wet, salty, sunny, corrosive, or abrasive environments or conditions.

I. Typhoons and Extreme Weather:

Due to the high potential for periodic extreme winds and the parking canopy being a structure exposed to those winds, the canopy and PV racking system must be designed to withstand 170 mph (76 m/s) sustained winds, and 195 mph (87 m/s) gusts.

J. Workmanship Warranty:

All construction and installation work under this project proposal shall include one (1) year workmanship warranty.

# K. Remote Output Monitoring:

The PV system shall include meters and other auxiliary devices to allow for the monitoring of PV system output. Metering provision shall be installed at three locations: PV output, battery output and interconnection point. Also included are the necessary licenses for any software application needed for monitoring. Historical System Output data shall be available for download and may be imported as a CSV file or PDF file.

L. Future PV Capacity Expansion Provision:

The configuration of the PV system should allow for possible future expansion of PV system capacity

M. Future Solar EV Charger and Energy Storage:

The PV system shall be configured to allow future provision of energy storage batteries to support Solar EV Charger(s).

# P. Other:

The design shall include other Features/Components that may be deemed necessary to allow for the operation of the integrated system equipment.

# 3.3.8. On-Site PV Canopy Construction, Installation and Interconnection

The CONTRACTOR's primary scheduled activities shall include, but are not limited to:

# Fadian Public Parking Lot Solar Canopy Project Design and Construction Volume II: Technical and Functional Requirements

- A. Construction equipment delivery
- B. Site work: clearing, leveling, trenching, drilling etc.; activities to prepare the site for construction
- C. Parking lot canopy foundation, anchor point, and any needed concrete pad excavation
- D. Foundation, anchor points and pad form and rebar installation
- E. Concrete pour and curing for foundation, anchor points and concrete pad
- F. Electrical cable installation
- G. Installation and construction of parking lot canopy as needed
- H. Crane and other installation equipment delivery as needed
- I. Materials and equipment delivery and unloading
- J. PV mounting, PV wiring and installation
- K. Load test of the foundation

All construction work must comply with applicable GPA standards.

The CONTRACTOR shall include the submission of a Master Project Schedule outlining anticipated start and end dates for each of the on-site construction, installation and interconnection activities.

# **Progress Meetings:**

Monthly progress meetings shall be held throughout the duration of the project. GPA may request additional meetings if deemed necessary. Such meetings shall be attended by the CONTRACTOR either via phone or in person, by all active subcontractors and by GPA. The purpose of the meetings will be to discuss current work progress, design or construction issues, interface issues, and potential changes to the schedule.

#### Work Progress Reports:

The CONTRACTOR shall submit to GPA monthly reports on actual work progress. Such reports shall be submitted to GPA prior to the scheduled work progress meetings. The narrative shall contain a description of current and anticipated delaying factors, if any, impact of possible delaying factors, and proposed corrective actions. The reports shall be submitted as supporting documents for progress payments.

# 3.3.9. Commissioning and Performance Testing

The CONTRACTOR shall conduct pre-commissioning through final inspection activities with the GPA Project Manager to demonstrate the successful installation and fully functional operation of the photo-voltaic system and its subsystems.

# The CONTRACTOR shall provide:

A. Pre-Commissioning Inspection:

The CONTRACTOR shall conduct a pre-commissioning walk-through inspection with the GPA Project Manager and document the pre-commissioning inspection findings in a brief report. The report shall include a list of equipment/products installed, commissioning activities and tests to take place during the Commissioning Process.

B. Commissioning and Testing:

The CONTRACTOR shall complete commissioning process and testing of all installed equipment and subsystems to establish operating and start-up condition and operational parameters. Commissioning activities shall include, but not be limited to:

- a. Verification of operation of PV system (i.e., array testing, whole-system performance test, system start, etc.)
- b. Verification of appropriate PV orientation, as per design
- c. Verification of meter operation and PV production monitoring
- d. Verification of grounding and lightning protection system
- e. Verification of all electrical testing OR Verification that PV system is free from abnormal thermal variations (hot spots, diode failures, module failure, fuse failure, inverter failure, reverse-polarity wiring, and other fire risks)
- f. Verification of mounting and racking system's proper installation (correct torque values, proper assembly, etc.)

#### C. Final Inspection:

The CONTRACTOR shall conduct a final inspection with the GPA Project Manager and document the findings in a final inspection report. The inspection shall concentrate on the items identified at the pre-final inspection and recorded in the pre-final inspection report. The final inspection report shall: (1) certify that all items of the design have been implemented and that the construction is complete, and (2) include a record of "signed and sealed" as-built drawings and specifications verifying that all development standards have been met. At the final inspection, the CONTRACTOR shall present a completed form for the statement of Transfer and Acceptance of Real Property to GPA for signature and acceptance.

All test and inspections shall be performed according to IEC 62446 Grid Connected Photovoltaic Systems - Minimum requirements for system documentation, commissioning tests and inspection. Unless otherwise specified, manufacturer recommendations shall be followed during all inspections and test procedures.

# 3.3.10. Demobilization

The CONTRACTOR shall demobilize facilities and construction equipment as necessary, and restore the site surrounding solar canopy to pre-construction conditions. The CONTRACTOR shall remove any temporary facilities and implement erosion control measures such as seeding, mulching, sodding, and erosion control fabrics; restore roads, structures, and utilities; and plant trees, shrubbery, grasses, and other vegetation. The CONTRACTOR shall document and report on these activities. All costs associated with withdrawing from the site after completion of work, including CONTRACTOR's personnel, facilities, equipment, cleaning and securing the site shall be included.

# 3.3.11. O&M and O&M Training

Upon completion of the project construction, the CONTRACTOR shall be responsible for all O&M activities needed to ensure that the PV Solar Canopy is in service for a period of five (5) years. The

CONTRACTOR shall also provide training for operation and maintenance of the PV system. All items below shall be included:

# A. PV System five-year cost-free O&M:

The PV system shall have a five-year full service and parts warranty and five-year cost-free operations and maintenance service for checking PV Array condition, DC output, inverter efficiency, and maintaining & tightening interconnections, etc. This shall include the following:

- All aspects of daily operations including operation of PV system, monitoring performance, manage inventory of spare parts, etc.
- Executing all periodic maintenance procedures (daily, monthly, quarterly, semiannually, annually) covering electrical systems (controls, generator, transient voltage surge suppression devices, torqueing electrical connections etc.), mechanical systems, grounding/lightning protection systems, monitoring devices (software upgrades) etc.
- Performing critical service procedures (checking PV Array condition, DC output, checking inverter efficiency, maintaining and tightening interconnections, parts replacement and labor, performing repairs, troubleshooting, etc.)
- PV equipment handle and care (cleaning of modules, vacuuming inverter air filters, tracker lubrication, if applicable, etc.)
- o Testing overvoltage surge suppressors in inverter
- Testing output of modules that exhibit cracked glass, bubble formation, oxidation of busbars, discoloration of busbars, or PV module hot spots (bypass diode failures)

#### B. PV Annual Performance Testing:

- Measuring incident sunlight and simultaneously observing temperature and energy output
- Calculating PV module efficiency as a function of temperature
- o Calculate balance-of-system efficiency
- o Compare Readings with diagnostic benchmark (original efficiency of system)
- Analyze readings to identify faults or system degradation.
- C. Provide GPA personnel hands-on training for all items under A and B
- D. Operation and Maintenance Plan
  - o CONTRACTOR shall submit an official O&M plan for the Canopy and equipment included in the PV System, including inverter(s), wiring, modules, etc.
  - All operations and maintenance procedures should follow manufacturer's recommendations.
  - The O&M Plan shall consider systems with maintenance (routing preventative maintenance, inspections, tests, & adjustments) schedules that minimize interruption to normal system operations to allow for system high availability.

# 3.3.12. Warranties

The CONTRACTOR shall provide the following warranties:

A. Minimum Five-Year warranty for parking lot canopy structures

- B. Solar module linear performance warranty of minimum 80% rated output for rating for minimum twenty (20) years
- C. Solar panel product warranty of minimum twenty (20) years
- D. Inverter or micro-inverters with product warranty of minimum twenty (20) years
- E. Racking and mounting equipment with minimum twenty (20) years warranty on workmanship and material defects
- F. Construction and installation work performed under this project shall be covered under workmanship warranty that shall be minimum of one (1) year
- G. All ownership rights and equipment warranties shall be transferred to Guam Power Authority's jurisdiction at the completion of construction.

# 3.3.13. Full Documentation of All Equipment and Construction Work

The CONTRACTOR shall provide the following documents either during construction or upon commissioning:

- A. As-built electrical, mechanical and civil drawings for all installed systems
- B. Owner's manual for all complete systems (i.e., PV modules, inverters/micro-inverters, PV monitoring software etc.)
- C. Spare Parts list with part number, supplier, cost and recommended number to have in inventory
- D. O&M manual for the PV system, to include service schedules for preventative maintenance as per manufacturer's recommendations and a complete parts & equipment listing

# 3.3.14. PV Canopy Location Option 1

There are currently eight possible options for PV Canopy locations, however the Basic Bid will be based on the price provided by the CONTRACTOR for Option 1 only. Options 2 through 8 will be Additive Bid items. These location options are outlined in Section 1.3, highlighted over the map of the Gloria B. Nelson Public Service Building Parking Lot. GPA reserves the right to change the location to one of the other options prior to the design phase. The adjusted price will be based on the Additive Bid price for the respective location provided by the CONTRACTOR.

# 3.4. Scope of Work - Additive Bid Items

The following are general descriptions of the Additive Bid Items listed in the *Bid Schedule*. The BIDDER shall include, in the Technical Proposal, more detailed scope of work descriptions for each Additive Bid Item for evaluation.

GPA shall have the option of instructing the CONTRACTOR to proceed with any Additive Bid Item throughout the duration of the contract.

# 3.4.1. Energy Storage

The CONTRACTOR shall design, install and interconnect an energy storage solution for the PV System under this bid. The Energy Storage System (ESS) will store power generated by the PV

system to accommodate power output for a quantity of two (2) Level 2 Electric Vehicle (EV) chargers and a quantity of one (1) Level 3 Electric Vehicle chargers to be installed at a total of three (3) parking stalls under the solar canopy. The ESS configuration and layout shall be able to accommodate up to 200% growth for future battery capacity expansion and any future additional EV chargers. The ESS should also include all necessary auxiliary devices to support optimal storage of excess energy generated by the PV array to the battery and the delivery of energy from battery to the load (this includes devices such as battery-based inverters, charge controllers, load controllers, or low voltage disconnects).

The CONTRACTOR shall provide a parts list of manufacturers, part numbers and costs of all parts that are expected to need replacement during the first 10 years of energy storage operation either during normal O&M procedures or anticipated failure/repair event.

GPA shall have the option of instructing the CONTRACTOR to procure one or more items from the Spare Parts List throughout the duration of the contract.

# 3.4.2. Solar Electric Vehicle Charging Station

The CONTRACTOR shall design, install and interconnect an outdoor electric vehicle charging station to accommodate a quantity of two (2) Level 2 Electric Vehicle (EV) chargers and a quantity of one (1) Level 3 Electric Vehicle chargers to serve a total of three (3) parking stalls underneath the solar canopy. The charging ports shall be programmable to bill according to utility-specified rates based on the KWH delivered at the charging station. The charger shall also be capable of complex utility rate schema with Time of Use structure. The design should make provisions to allow for future installations of additional charging stations.

CONTRACTOR shall provide a parts list of manufacturers, part numbers and costs of all parts that are expected to need replacement during the first 10 years of ESS operation either during normal O&M procedures or anticipated failure/repair event.

GPA shall have the option of instructing CONTRACTOR to procure one or more items from the Spare Parts List throughout the duration of the contract.

#### 3.4.3. Electrical Shelter

The CONTRACTOR shall design and construct an electrical shelter to accommodate electrical equipment such as electrical panel boxes, combiner boxers, inverters, etc. as needed and dictated by the PV system design. The shelter shall have appropriate working space for each equipment, as well as additional space for future facility growth. The electrical shelter shall be built according to Guam's current local building codes. The shelter shall also include HVAC equipment and electrical receptacles for facility use.

# 3.4.4. PV Canopy Location Options 2 Through 8

There are seven alternate PV canopy locations, within the Gloria B. Nelson Public Service Building Parking Lot, identified in the maps in Section 1.3 as Options 2 through 8. GPA reserves the right to

# Fadian Public Parking Lot Solar Canopy Project Design and Construction Volume II: Technical and Functional Requirements

change the location to one of the other options prior to the design phase. The adjusted price will be based on the Additive Bid price for the respective location provided by the CONTRACTOR.

# INVITATION FOR RE- BID MULTI-STEP BID NO.: GPA-042-22

# FADIAN PUBLIC PARKING LOT SOLAR CANOPY DESIGN AND CONSTRUCTION



VOLUME III
CONTRACT

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# **CONTRACT**

(Contractor)

**GUAM POWER AUTHORITY** 

2021

**MULTI-STEP BID No.: GPA-042-22** 

FADIAN PUBLIC PARKING LOT SOLAR CANOPY PROJECT

**DESIGN AND CONSTRUCTION** 

#### **FORMAL CONTRACT**

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licensed	, regist	tered	and	, h qualified	fter ref do busi				•	•	
					and						

Guam Power Authority, hereinafter referred to as the "Authority" or "GPA", a Public Corporation with its office located at 1911 Route 16, Harmon, Guam, 96911;

# **RECITALS**

WHEREAS, GPA desires to design and construct the Fadian Public Parking Lot Solar Canopy Project; and

WHEREAS, GPA has provided adequate public announcement of the need for such services through an Invitation for Multi-Step Bid, GPA-xxx-21, describing the type of services required and specifying the type of information and data required of each bidder; and

WHEREAS, CONTRACTOR submitted a bid proposal to design and construct the Fadian Public Parking Lot Solar Canopy Project; and

WHEREAS, GPA, upon evaluation of the submitted bid proposal, determined that CONTRACTOR is the most responsive bidder to provide the services set forth in the Multi-Step Bid; and

WHEREAS, CONTRACTOR is fully willing to provide, and is capable of performing the design and construction of the Fadian Public Parking Lot Solar Canopy Project, set forth in the Multi-Step Bid and Agreement in accordance with the terms and conditions thereof; and

WHEREAS, the Consolidated Commission on Utilities has determined that to hire CONTRACTOR to design and construct the Fadian Public Parking Lot Solar Canopy Project is in the best interest of GPA.

NOW, THEREFORE, in consideration of the above premises and the mutual promises set forth herein and the terms and conditions hereinafter set forth and for other good and valuable consideration, receipt of which is hereby acknowledged, CONTRACTOR and GPA hereby agree as follows:

# SECTION 1. DEFINITIONS

"\$"

The term "\$" refers to currency in U.S. dollars.

# "Approved"

The word "Approved," when applied by ENGINEER to CONTRACTOR's drawings or documents, shall mean that the drawings or documents are satisfactory from the standpoint of interfacing with GPA-furnished components, and/or that ENGINEER has not observed any statement or feature that appears to deviate from the Specification requirements.

# "Approved As Revised"

The words "Approved As Revised," when applied by ENGINEER to CONTRACTOR's drawings or documents shall mean that the drawings or documents are approved as defined above, except that the corrections shown are required for the proper interfacing with GPA-furnished components or are necessary to be in conformance with the Specification's requirements.

# "Change Order"

A written instrument to CONTRACTOR signed by GPA authorizing an addition, deletion, or revision in the goods or special services, or an adjustment in the purchase order price or the delivery time, issued after the effective date of the Contract Agreement (Agreement).

#### "Contract"

The term "Contract" means the Wind Turbine Pilot Project Design and Construction Contract executed as a result of this Multi-Step Bid.

# "Contract Agreement (Agreement)"

The written agreement between GPA and CONTRACTOR covering the furnishing of the Goods, Special Services, and other services in connection therewith evidencing what is contemplated and agreed to between the parties including any other Contract Documents either attached to the Agreement or made a part thereof by reference therein.

# "Contract Documents"

The Contract Agreement, Bonds (where required), these General Conditions, any Supplementary Conditions, the Specifications, the Drawings and any other documents specifically identified in the Contract Agreement, together with all Modifications issued after execution of the Contract Agreement.

# "Contracting Officer"

The term "Contracting Officer" as used herein means the General Manager of the Guam Power Authority and shall include his authorized representatives.

#### "CONTRACTOR"

The term "Contractor" as used herein means the party or parties who or which shall have duly entered into a contract with the Guam Power Authority to perform the work herein contemplated or his or their authorized assignee.

#### "Day"

A calendar day of twenty-four (24) hours measured from midnight to the next midnight.

# "Delivery Time"

The total number of days or the dates stated in the Agreement for furnishing the Goods and/or Special Services.

#### "Defective"

An adjective which when modifying the words Goods or Special Services refers to Goods or Special Services which are unsatisfactory, faulty, deficient, do not conform to the Contract Documents, or do not meet the requirements of any inspection, reference standard, test, or approval referred to in the Contract Documents.

# "Drawings"

Drawings are all official drawings approved by the ENGINEER and showing the character and scope of the Goods to be furnished.

# "Effective Date of the Contract Agreement"

The date indicated in the Contract Agreement on which it becomes effective, or if no such date is indicated, the date by which the Contract Agreement is signed by both parties.

#### "ENGINEER"

Wherever the words "ENGINEER" or "ENGINEERS" appear in the CONTRACT Documents, it shall mean the Guam Power Authority's Manager of Strategic Planning and Operations Research and shall include his authorized representatives duly appointed as "ENGINEER". GPA shall assign several ENGINEERS as required to cover specialized areas of expertise.

# "ENGINEER's Instructions"

Written instructions issued by ENGINEER which clarify or interpret the CONTRACT Documents or order minor changes or alterations in the Goods or Special Services to be furnished but which do not involve a change in the Purchase Price or the Delivery Time.

# "Forms Enclosed"

The copies of the Formal Contract and Bid Bond, enclosed herewith are incorporated in these General Conditions by reference and are made a part hereof to the same extent as though fully set forth herein.

# "General Manager"

The General Manager is the Chief Executive Officer of the Guam Power Authority. The office and title of General Manager shall apply to any person acting in a regular or in an acting capacity as the Chief Executive Officer of the Guam Power Authority.

#### "Goods"

All property required to be furnished by CONTRACTOR under the procurement documents.

#### "Modification"

A written amendment of the Contract Agreement signed by both parties, or Change Order, or ENGINEER's Instructions.

# "Notice"

The term "Notice" as used herein shall mean and include all written notice demands, instructions, claims, approvals and disapprovals required to obtain compliance with contract requirements. Any written notice by either party to the contract shall be sufficiently given if delivered to or at

the last known business address of the person, firm, or corporation constituting the other party to the contract, or to his, their, or its duly authorized agent, representative, or officers, or when enclosed in a postage prepaid envelope addressed to such last known business address and deposited in a United States mail box. CONTRACTOR must provide and maintain a post office address within Guam and file the same with the Contracting Officer.

#### "OWNER"

The term "Owner", "GPA" or "Authority" as used herein means the Guam Power Authority, and shall include the Governor of Guam, and/or his authorized representatives.

# "Photovoltaic System"

The power system designed to supply usable solar power by means of photovoltaics, consisting of an arrangement of several components including solar panels, inverter(s), mounting, cabling, and other electrical accessories.

# "Point of Delivery"

The place at which property in the goods shall pass to GPA shall be CIF landed at job-site, Guam, unloaded.

# "Project"

The facilities, or works, the Goods and Services are to be used for or incorporated into.

#### "Procurement Officer"

The General Manager of the Guam Power Authority or the General Manager's designee.

#### "PURCHASER"

The Guam Power Authority with whom CONTRACTOR has entered into the Contract Agreement.

#### "Seller"

CONTRACTOR.

#### "SITE or Site"

The SITE is the area where the Project is to be constructed or executed. In this case, the SITE is the Cotal Conservation Reserve.

# "Special Services"

Services to be furnished by CONTRACTOR at the Site as required by the Contract Agreement.

# SECTION 2. PURPOSE AND SCOPE OF SERVICES

# 2.1 Purpose

CONTRACTOR agrees to provide all the services as required under the Contract Documents herein and GPA agrees to pay for all the services rendered in the amount, as stipulated in Section 6, the services to design and install the Fadian Public Parking Lot Solar Canopy Project on or about 365 Calendar Days after NTP.

#### 2.2 Scope of Services

CONTRACTOR agrees to furnish all the necessary labor, supplies and materials, machinery, equipment, facilities, tools and services necessary or proper to perform and complete in a workmanlike manner all the work required for the design and construction of the Fadian Public Parking Lot Solar Canopy Project as required under the Contract Documents and herein. CONTRACTOR shall observe, comply with and be subject to all terms, conditions, requirements, and limitations of the Contract Documents and shall carry on the Contract to the satisfaction of GPA.

#### SECTION 3. CONDITIONS PRECEDENT

# 3.1 CONTRACTOR's Submittals

CONTRACTOR shall supply the following to GPA, each in form and substance satisfactory to GPA unless such condition precedent is waived by GPA:

- Copies of resolutions adopted by CONTRACTOR's Board of Directors authorizing the execution, delivery and performance by CONTRACTOR of this Agreement certified by the company secretary of CONTRACTOR in a manner satisfactory to GPA;
- B. Project Performance Bond as specified in Appendix B of the Multi-Step Bid Documents;
- C. Copy of the Articles of the Incorporation of CONTRACTOR certified by the company secretary in a manner satisfactory to GPA;
- D. Copy of CONTRACTOR's license to do business in Guam.

#### 3.2 GPA's Submittals

GPA shall supply the following, each in form and substance satisfactory to CONTRACTOR unless such condition precedent is waived by CONTRACTOR:

A. Copies of resolutions adopted by the Consolidated Commission on Utilities authorizing the execution, delivery and performance by GPA of this Agreement, each certified by the corporate secretary of the CCU in a manner satisfactory to CONTRACTOR;

# 3.3 Insurance

CONTRACTOR shall obtain all insurance specified in the Contract Documents.

#### SECTION 4. CONTRACT DOCUMENTS

# 4.1 Documents Included

It is mutually agreed that the following lists of documents which are attached hereto, bound herewith or incorporated herein by reference shall constitute the Contract Documents, all of which are made a part hereof, and collectively evidence and constitute the contract between the parties hereto, and they are as fully a part of this Agreement as if they were set out verbatim and in full herein, and are designated as follows in their order of precedence:

- A. This Contract
- B. Amendments to Multi-Step Bid No.: RE-BID GPA-042-22
- C. Multi-Step Bid No.: RE-BID GPA-042-22
  - a. Volume I Commercial Terms & Conditions
  - b. Volume II Technical and Functional Requirements

- c. Volume III Contract
- d. Volume IV Appendices
- D. CONTRACTOR's Proposal for RE-BID Multi-Step Bid No.: GPA-042-22
- E. The Project Performance Bond
- F. Affidavit of Disclosure of Ownership and Interest
- G. Audited financial information on CONTRACTOR's firm and all subcontractors that will be used in the project (if applicable)
- H. Certificate of Good Standing to conduct business in jurisdiction of residence
- I. Non-collusion Affidavit
- J. Declaration Regarding Compliance with DOL Wage Determination
- K. No Gratuities or Kickback
- L. Ethical Standards Affidavit
- M. Restriction against Contractors Employing Sex Offenders from Working at Government of Guam Venues
- N. Bid Bond
- O. A current Guam Business License. Although it is not required in order to provide a bid for this engagement, obtaining a Guam Business License is a pre–condition for entering into a contract with the Authority.
- P. Contingent Fees

# 4.2 Discrepancies

In the case of discrepancies or conflicts between the above-referenced contract documents, this Contract shall take precedence over RE-BID MS GPA-042-22, and CONTRACTOR's proposal submitted in response to the MULTI-STEP BID. In case of discrepancies or conflicts between the Amendments to RE-BID MS GPA-042-22, the Amendments shall take precedent. CONTRACTOR believe that there is any discrepancy or inconsistency between this Contract and the other contract documents, CONTRACTOR shall bring such discrepancy to the attention of the General Manager before proceeding with the work affected thereby.

# 4.3 Presumption of Familiarity

It will be conclusively presumed that CONTRACTOR has read, examined and agreed to each and every term, condition, provision, covenant or agreement contained within each and every Contract Document. CONTRACTOR is assumed to be familiar with all federal (U.S.) And local laws, ordinances, rules and regulations of Guam that in any manner affect the work. Ignorance of law on the part of CONTRACTOR will not relieve CONTRACTOR from responsibility.

# SECTION 5. CONTRACT TERM

5.1	Term
	Contract shall be for a three hundred sixty-five calendar (365) days after NTP on
	2022 and shall continue until the midnight of, 2023.

# SECTION 6. COMPENSATION FOR SERVICES

#### 6.1 Payment

GPA shall pay CONTRACTOR for costs and services rendered hereunder in accordance with this Agreement. Compensation for services performed and provided by CONTRACTOR shall be on a monthly basis at the rate stipulated in this section. CONTRACTOR shall invoice GPA once a month, and payment shall be made within 30 days of after receipt of an acceptable invoice. In the event of any dispute with regard to any portion of the invoice, the undisputed portion shall be paid pending settlement of the dispute. Should GPA fail to make any payment due to CONTRACTOR under this Agreement, GPA shall pay interest to CONTRACTOR in accordance with the provisions of the Prompt Payment Act, 5 GCA Sections 22502-22507.

#### 6.2 Contract Price

The Contract Price constitutes the total consideration to be paid by GPA to CONTRACTOR for the complete delivery of all Contract Items, and for performing other services in connection therewith in accordance with the Contract Documents as amended by the parties pursuant to the Agreement. The Price or Cost for each Contract Item under this Agreement shall remain fixed during the term of this Agreement. Unless expressly provided otherwise in the Contract Documents, the Contract Price is not subject to escalation in respect of materials and/or labor cost or any other factor or variation in rates of exchange, and all duties, responsibilities, and obligations assigned to or undertaken by CONTRACTOR shall be at its expense without change in the Contract Price. Charges, fees, CONTRACTOR's profit, and all other expense shall be deemed to be included in the Contract Price. Only a formal Change Order request, accepted by GPA, may change the Contract Price. CONTRACTOR shall make any claim for an increase in the Contract Price in advance of performance of any such changes. However, GPA reserves the right to challenge or refute such claims.

# 6.3 Payment Milestones and Schedule

Payment milestones have been selected to clearly identify the actual status of the portion of the Work completed rather than anticipated project progress schedules. Payments will be based on actual completion of each milestone event, where applicable, and not on the scheduled completion date. When a change in the Agreement is approved, the total contract price will be altered to the new total, and the remaining milestone payments will be adjusted. Milestones shall not be scheduled more frequently than once every month. GPA will not approve a milestone payment until all preceding milestones have been approved. GPA will make payments within thirty days from receipt and approval of the invoice for the completed milestone.

# 6.4 Invoicing

CONTRACTOR shall submit for review by GPA monthly invoices accompanied by a progress report describing the work performed during the compensation period. All payments to CONTRACTOR shall be free of any deductions, including but not limited to withholding taxes.

# 6.5 Total Amounts Paid to CONTRACTOR

The amounts paid or reimbursed to CONTRACTOR shall in no event exceed the dollar amount indicated above except upon prior written agreement by the parties. Prior to incurring any expense not contemplated in the total contract amount, CONTRACTOR shall request prior approval of any such additional cost from GPA. No such expense shall be reimbursable unless approved in advance by GPA.

# 6.6 Final Payment

Final payment shall be made upon delivery and acceptance of all Services as herein specified and performed under this Agreement. Prior to final payment, and as a condition precedent thereto, CONTRACTOR shall execute and deliver to the Authority a release of any claims arising under and by virtue of this Agreement against the Authority except any identified written claims in existence at the time of the final payment.

# 6.7 Guam Gross Receipts Tax

The prices and costs set forth in this Agreement are based on the assumption that the Services performed will be subject to the Guam Gross Receipts Tax. CONTRACTOR is responsible for payment of any applicable taxes.

# SECTION 7. AGREEMENT

Prior to entering into a formal agreement, GPA and CONTRACTOR shall resolve and document any differences between CONTRACTOR's proposal and the tender documents. The Agreement between GPA and CONTRACTOR shall consist of the tender documents, as resolved by CONTRACTOR's final negotiated Proposal and by GPA amendments, and the CONTRACTOR's proposal, as adjusted by a prioritized list of documents generated during the evaluation and negotiation processes and agreed to and acknowledged in writing by both parties. These documents may consist of, but are not limited to, written answers to questions, letters, and written clarifications to the proposal.

Any formal contract document shall reference GPA tender documents and CONTRACTOR's proposal. No oral understanding or statement shall modify the Agreement. Changes to the above documents can only be made in accordance with the procedure for modifications as defined in Section 27.

The resolved tender documents shall take priority over and shall govern in all cases of conflict with the adjusted proposal. CONTRACTOR's contractual obligation shall be to fulfill all requirements of the tender documents, as resolved, and to provide all features of the CONTRACTOR's proposal, as adjusted.

The tender documents are intended to be complementary, what is called for by one shall be as binding as if called for by all. If not otherwise specified in the tender documents, these General Conditions shall apply. If, during performance of the Agreement CONTRACTOR detects a discrepancy in the tender documents, CONTRACTOR shall so report to ENGINEER in writing at once and shall obtain a written interpretation or clarification from ENGINEER before proceeding further; however, CONTRACTOR shall not be liable to GPA for failure to report any conflict, error, or discrepancy in the Contract Documents unless CONTRACTOR had actual knowledge thereof or should reasonably have known thereof.

All materials, equipment, and services that may reasonably be inferred from the tender documents, as being required to produce the intended result will be supplied whether or not specifically called for. When words that have a well-known technical or trade meaning are used to describe materials, equipment, or services, such words will be interpreted in accordance with

such meaning. Reference to standard specifications, manuals, or codes of any technical society, organization or association, or to the code of any Governmental authority, whether such reference be specific or by implication, shall mean the latest standard specification, manual, or code in effect on the effective date of the Agreement except as may be otherwise specifically stated in the Specification or Agreement. ENGINEER shall issue clarifications and interpretations of the tender documents.

# SECTION 8. OPERATION OF THIS CONTRACT

The Guam Power Authority's responsibility for the day to day monitoring and enforcement of this Contract resides with the GPA Strategic Planning and Operations Research Manager or his designee. CONTRACTOR shall identify to GPA the person(s) responsible for the implementation of the Contract and who shall act as CONTRACTOR's point of contact.

# SECTION 9. CONTRACTOR'S OBLIGATIONS

# 9.1 Execution

CONTRACTOR shall, in good workmanlike manner, do and perform all work and furnish all supplies and materials, machinery, equipment, facilities and means, except as herein otherwise expressly specified, necessary or proper to perform and complete all the work required in this contract, and as specified in the Invitation for Bid Documents. CONTRACTOR shall observe, comply with and be subject to all terms, conditions, requirements, and limitations of the contract and specifications and shall do carry on the Contract to the satisfaction of the OWNER.

# 9.2 Right to Inspection

GPA shall have the right to conduct inspections of any repair and/or replacement conducted. In the event of a dispute, an independent inspector shall be appointed, mutually acceptable to both parties, whose decision as to the quality and/or necessity of the work shall be final and binding on both parties. The independent inspector(s)' fees and charges shall be shared equally by both parties. Payments of any and all invoices of any major repairs or replacements shall be made based on mutually acceptable terms pre-approved by CONTRACTOR and GPA.

# 9.3 Contractor's Financing Capability

If necessary, CONTRACTOR shall have the financial capability to support its cash flow requirement associated with the scope of work.

# SECTION 10. QUANTITY AND QUALITY ASSURANCE

CONTRACTOR shall be solely responsible for the cost resulting from any direct damages to the generator and any other equipment in the plant or failure in quality thereof, caused by the negligence of CONTRACTOR.

# SECTION 11. FEDERAL AND LOCAL REGULATORY COMPLIANCE

CONTRACTOR shall be responsible for complying with all Environmental, Homeland Security, and other Federal and Local compliance requirements.

# SECTION 12. PROTECTION OF WORK AND PROPERTY

CONTRACTOR shall at all times safely guard the OWNER's property from injury or loss in connection with this contract. He shall at all times safely guard and protect his own work and that of adjacent property (as provided by law and the contract documents) from damage. All passageways, guard fences, lights and other facilities required for protection by laws and regulations and local conditions must be provided and maintained.

# **SECTION 13. WARRANTY**

CONTRACTOR's obligation to deliver and perform services in connection therewith in accordance with the Agreement is absolute, and CONTRACTOR warrants and guarantees to OWNER that all services will be in accordance with the Contract Documents. CONTRACTOR shall provide OWNER with all warranties and guarantees in writing.

Except as otherwise specified all work shall be guaranteed by CONTRACTOR against defects resulting from the use of inferior materials, equipment, or workmanship for one year from the date of final completion of any repairs or replacements.

If within any guarantee period, repairs or changes are required in connection with guaranteed work which, in the opinion of the OWNER, is rendered necessary as the result of the use of materials, equipment or workmanship which are inferior, defective or not in accordance with the terms of the contract, CONTRACTOR shall promptly upon receipt of notice from OWNER and without expense to the OWNER:

- A. Place in satisfactory condition in every particular all of such guaranteed work and correct all defects therein; and
- B. Make good all damages to the building or site or equipment or contents thereof which, in the opinion of the OWNER, are the result of the use of materials, equipment or workmanship which are inferior, defective or not in accordance with the terms of the contract.

In any case wherein fulfilling the requirements of the contract or of any guarantee embraced in or required thereby CONTRACTOR disturbs any work guaranteed under another contract, he shall restore such disturbed work to a condition satisfactory to the OWNER and guarantee such restored work to the same extent as it was guaranteed under such other contract.

If CONTRACTOR, after notice, fails to proceed promptly to comply with the terms of the guarantee, the OWNER may have the defects corrected and CONTRACTOR and his surety shall be liable for all expense incurred.

All special guarantees applicable to definite parts of the work shall be stipulated in the specifications or other papers forming a part of the contract and shall be subject to the terms of this paragraph during the first year of the life of such special guarantee.

In the event CONTRACTOR furnishes special services for installation and startup, such services shall be rendered in a competent and diligent manner and in accordance with the Contract Documents, accepted industry practice and any applicable professional standards.

# **SECTION 14. DEFECTIVE WORK**

No work or material which may be defective in construction or quality or deficient in any of the requirements of the drawings and specifications will be considered accepted as a consequence of the failure of the OWNER to discover or to point out said defects or deficiencies during the construction; nor will the presence of inspectors on the work relieve CONTRACTOR from the responsibility of securing the quality and progress of work as required by these specifications.

Any defective work that may be discovered before the completion of the work or within such time as required by the bond shall be replaced by work and materials that shall conform to the spirit and intent of the drawings, specifications and contract.

The fact that the OWNER may have overlooked defective work shall not constitute the acceptance of work. NO PAYMENT WHETHER PARTIAL OR FINAL SHALL BE CONSTRUED TO BE AN ACCEPTANCE OF DEFECTIVE WORK OR IMPROPER MATERIALS.

The OWNER may at any time by order given in writing stop any work not being done according to drawings and specifications and any order so given shall not in any way relieve CONTRACTOR from completing his contract and shall not in any way terminate, cancel or abrogate the contract or any part thereof, and the Government of Guam shall not in any way be responsible for the delay due to stopping the work as aforesaid.

#### SECTION 15. INSPECTION OF WORK

#### 15.1 Access to the Work

Authorized GPA representatives shall have access at all times to the work for inspection whatever it is in preparation or progress and CONTRACTOR shall provide proper facilities for such access and inspection.

# 15.2 Inspectors

Inspectors may be placed by the OWNER to supervise each and every subdivision of the work or any parts or process thereof. The authorized inspectors shall have free access to all parts of the work at all times and shall be given every facility, information and means of thoroughly inspecting the work done and the materials used or to be used. The inspectors shall at all times be free to perform their duties and any intimidation of any inspector by CONTRACTOR or the employees thereof shall be sufficient reason, if the OWNER shall so decide, to annul the contract.

# SECTION 16. DEFAULT

In the event either party of this Contract fails to perform any of the provisions of this Contract, the other party must notify the party in default in writing of the deficiency or non-performance. The party in default has thirty (30) calendar days in which to remedy such default. If such default is not cured within thirty (30) calendar days, the other party may terminate all or part of the Contract. Events of default include but are not limited to the following:

- A. Failure of CONTRACTOR to provide evidence of an acceptable performance bond on specified time.
- B. Failure of the OWNER to pay invoices within 30-days of receipt.
- C. Failure of CONTRACTOR to adhere to the terms of the Contract.

# SECTION 17. LICENSES, PERMITS, TAXES, AND RESPONSIBILITIES

CONTRACTOR shall, without additional expense to the OWNER, be responsible for obtaining any necessary licenses and permits, and for complying with any applicable Federal and Territorial laws, codes, statutes, and regulations necessary for the performance of the Contract by CONTRACTOR.

# **SECTION 18. SUBCONTRACTS**

Nothing contained in the contract documents shall be construed as creating any contractual relationship between any subcontractor and the OWNER. The diffusion or sections of the specifications are not intended to control CONTRACTOR in dividing the work among subcontractors or to limit the work performed by any trade.

CONTRACTOR shall be as fully responsible to the OWNER for the acts and omissions of subcontractors and of persons employed by them, as he is for the acts and omissions of persons directly employed by him.

CONTRACTOR shall be responsible for the coordination of the subcontractors engaged in his work.

CONTRACTOR shall, without additional expense to the OWNER, utilize the services of specialty subcontractors on those parts of the work which are specified to be performed by specialty subcontractors.

The OWNER will not undertake to settle any differences between CONTRACTOR and his subcontractors or between subcontractors.

CONTRACTOR shall cause appropriate provisions to be inserted in all subcontracts relative to the work including waiver of mechanics liens to bind subcontractors by the terms of the contract documents insofar as applicable to the work of subcontractors and to give the OWNER any exercise over CONTRACTOR under any provisions of the contract documents.

# SECTION 19. ASSIGNMENT OF AGREEMENT

CONTRACTOR shall not assign the whole or any part of this contract or any monies due or to become due hereunder without the written consent of the OWNER and of all the sureties executing any bonds on behalf of CONTRACTOR in connection with said contract. In case CONTRACTOR assigns the whole or any part of said contract or assigns all or any part of any monies due or to become due under said contract, the instrument of assignment shall contain a clause substantially to the effect that it is agreed that the right of the assignee in and to any monies due or to become due CONTRACTOR or otherwise shall be subject to all of the terms and conditions of said contract or supplemental thereto, the rights and remedies of the OWNER thereunder or arising by operation of the law and to the liens of all persons, firms, and corporations for services rendered or materials supplied in connection with the performance of said contract.

# SECTION 20. EQUAL OPPORTUNITY

CONTRACTOR will not discriminate against any employee or applicant for employment because of race, religion, sex, color, age, economic status, or national origin. CONTRACTOR will take affirmative action to insure that qualified applicants are employed and that employees are treated

during employment without regard to their race, religion, sex, color, age, economic status, or national origin. Such action shall include, but not be limited to, the following: Employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoffs or termination, rates of pay or other forms of compensation, and selection for training including apprenticeship. CONTRACTOR agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the OWNER setting forth the provisions of this nondiscrimination clause.

CONTRACTOR will, in all solicitations or advertisements for employees placed by or on behalf of CONTRACTOR, state that all qualified applicants will receive consideration for employment without regard to race, religion, sex, color, age, economic status, or national origin.

CONTRACTOR will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the OWNER, advising the said labor union or workers' representative of CONTRACTOR's commitments under Section 202 of Executive Order No. 11246 of September 24, 1965 and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

# SECTION 21. PROHIBITION AGAINST GRATUITIES, KICKBACKS, AND FAVORS

GCA 5 §5630(c) prohibits the CONSULTANT against gratuities, kickbacks, and favors.

# SECTION 22. RESTRICTION AGAINST CONTRACTORS EMPLOYING CONVICTED SEX OFFENDERS FROM WORKING AT GOVERNMENT OF GUAM VENUES

GCA 5 §5253(b) restricts the CONSULTANT against employing convicted sex offenders from working at Government of Guam venues. It states:

(b) All contracts for services to agencies listed herein shall include the following provisions: (1) warranties that no person providing services on behalf of the contractor has been convicted of a sex offense under the provisions of Chapter 25 of Title 9 GCA or an offense as defined in Article 2 of Chapter 28, Title 9 GCA, or an offense in another jurisdiction with, at a minimum, the same elements as such offenses, or who is listed on the Sex Offender Registry; and (2) that if any person providing services on behalf of the contractor is convicted of a sex offense under the provisions of Chapter 25 of Title 9 GCA or an offense as defined in Article 2 of Chapter 28, Title 9 GCA or an offense in another jurisdiction with, at a minimum, the same elements as such offenses, or who is listed on the Sex Offender Registry, that such person will be immediately removed from working at said agency and that the administrator of said agency be informed of such within twenty-four (24) hours of such conviction.

# SECTION 23. CLAIMS AND DISPUTES

All controversies between the OWNER and CONTRACTOR which arise under, or are by virtue of, this Contract and which are not resolved by mutual agreement of the parties shall be decided as set forth in 5 G.C.A \$5427 of the Guam Procurement Law.

# SECTION 24. TERMINATION FOR CONVENIENCE

OWNER may terminate the performance of the services under this Contract in accordance with this clause in whole, or in part, whenever OWNER determines that such termination of Contract is in the best interest of the Guam Power Authority and its ratepayers.

Any such termination is effected by delivery to CONTRACTOR a written Notice of Termination specifying the extent to which services in the Contract is terminated in whole or in part. In the event the OWNER elected to terminate the Contract it shall be effective sixty (60) days after the receipt of such Notice of Termination.

# **SECTION 25.** SURRENDER OF PREMISES

Upon voluntary or other termination of this Contract or any early termination of the term from whatever cause, CONTRACTOR shall voluntarily surrender and deliver to GPA all materials purchased and paid for by GPA, documents pertinent to the work, and all equipment and materials related to the work at CONTRACTORs possession.

#### SECTION 26. FAILURE TO COMPLY WITH LAWS

In the event CONTRACTOR or any person or entity identified as principals in the offer submitted in connection with the bid shall be found by any court or administrative agency having jurisdiction over the subject matter of the violation, to have violated any law, rule or regulation in connection with CONTRACTOR's performance of the obligations under the Contract in any manner whatsoever directly or indirectly which violation shall constitute a breach of the peace, or an act involving moral turpitude or otherwise constitute endangerment of the health, safety and welfare of the citizens of the Guam, OWNER may in its sole discretion terminate this Contract upon 30 days written notice.

# SECTION 27. AMENDMENT AND WAIVER

Neither the Contract nor any provision hereof may be changed, waived, altered, amended, discharged or terminated orally, but only by an instrument in writing signed by the party against whom enforcement of the change, waiver, alteration, amendment, discharge or termination is sought.

Failure by either party to object to any failure of performance by the other party of any provision of the Contract shall not constitute a waiver of, or estoppels against, the right of such party to require such performance by the other. Nor shall any such failure to object constitute a waiver or estoppels with respect to any succeeding failure of performance.

# **SECTION 28. GOVERNING LAW**

This Contract is made under, and shall be governed and construed in accordance with, the laws, statutes and regulations of Guam, to the exclusion of all other legal systems. Wherever a term defined by the Uniform Commercial Code is used in the Contract the definition contained in the Uniform Commercial Code of Guam will control, unless otherwise specified.

The parties expressly submit to the jurisdiction of the Superior Court of Guam, for the resolution of any dispute or difference or claims between the parties in connection with the Contract, and to service of process by registered mail. Judgment upon any award rendered by the Superior

Court of Guam may be entered in any court of any country having jurisdiction, and such award shall be binding upon the parties. CONTRACTOR waives all rights against OWNER to claim consequential, special or punitive damages.

#### **SECTION 29. RELATIONSHIP OF PARTIES**

Nothing contained in the Contract as awarded to the successful bidder shall be deemed or construed by the parties or by any third person to create the relationship of principal and agent or of partnership or of joint venture or of any association between CONTRACTOR and OWNER, and no provisions contained in the Contract nor any acts of the parties shall be deemed to create any relationship between OWNER and CONTRACTOR, other than the relationship of supplier of services and beneficiary.

## SECTION 30. NOTICE TO OTHER PARTY

Either party whose obligations may be affected by any of the forces or causes set out in the preceding section, supra, shall promptly notify the other party in writing, giving full particulars thereof as soon as possible after such occurrence of such force or cause. Such party shall exercise due diligence to remove such cause with all reasonable dispatch and shall exert every efforts to resume performance at the earliest practicable time.

# **SECTION 31. NOTICES**

Any notice, demand or any document required or permitted to be delivered hereunder shall be in writing and may be delivered personally or shall be deemed to be delivered when deposited in the mail, postage prepaid, registered or certified mail, addressed to the parties at their respective address indicated below:

To:		
	(CONTRACTOR)	
FAX Numbei	:	
Address:		

TO: GUAM POWER AUTHORITY

Attention: General Manager FAX Number: (671) 648-8163 P.O. Box 2977, Hagatna Guam 96932-2977

# SECTION 32. CONTRACTOR'S AND SUBCONTRACTOR'S INSURANCE

CONTRACTOR upon receipt of the Contract Award and prior to commencing work, shall obtain and thereafter maintain during the course of the Contract at a minimum, the following types of insurance at no cost to the OWNER:

A. General Liability including products, completed operations and contractual coverage for this Agreement in the amount of \$1,000,000 combined limit. Coverage for "on an occurrence basis" commercial general liability which includes owner's and contractor's protective and contractual liabilities, and have a general aggregate limit of One Million U.S. Dollars (US\$1,000,000), a products and completed operations aggregate limit of One

Million U.S. Dollars (US\$1,000,000), and a single occurrence limit of One Million U.S. Dollars (US\$1,000,000), and One Million U.S. Dollars (US\$1,000,000) for any of the above. GPA shall be an additional insured. Waiver of subrogation shall be granted in favor of GPA.

- B. Automotive Liability Insurance.: It shall carry coverage for owned, hired, and non-owned vehicles, which includes endorsement for loss, property damage or destruction, and personal bodily injury in single aggregate minimum amount of One Million U.S. Dollars (US\$1,000,000) for each occurrence. GPA shall be an additional insured. Waiver of subrogation shall be granted in favor of GPA.
- C. Professional Liability or Architects and Engineers Liability in the amount of \$1,000,000.
- D. Excess Liability with limits of \$5,000,000 or higher. GPA shall be an additional insured. Waiver of subrogation shall be granted in favor of GPA.
- E. Worker's Compensation and Employer's Liability The coverage shall include all employees and all statutory limits and requirements for workers' compensation for Guam, and including but not limited to employers' (CONTRACTOR) liability for employee bodily injury. Statutory limits and \$1,000,000/\$1,000,000/\$1,000,000 respectively. Add Waiver of Subrogation endorsement in favor of GPA.
- F. Builder's Risk or Installation Floater, when applicable, is to be furnished by Contractor, which shall include GPA as named insured.

CONTRACTOR **must furnish to the OWNER** "Certificates of Insurance" evidencing all such coverage of the above items including the statement to the effect that cancellation or termination of said policy shall not be effective until thirty (30) working days after receipt of written notice by OWNER, prior to the commencement of this Contract. OWNER shall have the rights, which shall be exercised in OWNER's sole discretion, to terminate this contract if CONTRACTOR fails to maintain or have the insurance policy described above.

All insurance policies herein required of CONTRACTOR shall be written by a company duly authorized and licensed to do business in Guam where work under this contract is being performed and be executed by some agent thereof duly licensed as an agent in Guam.

# **SECTION 33. INDEMNITY**

CONTRACTOR shall indemnify, defend and hold OWNER free and harmless from and against all claims of whatever nature arising from any acts, omissions, or negligence of CONTRACTOR, its employee, agents, or assigns arising from any accident, injury or damages whatsoever caused to any person, or the property of any person, occurring during the term of the Contract in or about the Premises, and to include the cost of enforcement of this indemnity. CONTRACTOR agrees that the insurance herein shall be issued by an established and reputable company with **Best's Key Rating of B+ or better.** 

# SECTION 34. WAIVER OF SUBROGATION

The parties hereby release each other and their respective officers, employees, and agents from all loss or damage to the Premise property, machinery and equipment and to the fixtures, personal property, equipment and improvements of either GPA or CONTRACTOR in or on the Property, notwithstanding that any such loss or damage may be due to or result from the negligence of either of the parties or their respective officers, employees or agents. This waiver does not apply to maintenance and repair assumed under this contract by CONTRACTOR.

# SECTION 35. ACCIDENT PREVENTION

Precaution shall be exercised at all times for the protection of persons (including employees) and property. Equipment and all hazards shall be guarded or eliminated in accordance with the safety provisions of the latest edition of the Manual of Accident Prevention in Construction published by the Associated General Contractors of America to the extent that such provisions are not in contravention of applicable laws.

Should typhoon warnings be issued, CONTRACTOR shall take every practicable precaution to minimize damage and/or danger to persons, to the work, and to the adjacent property. These precautions shall include closing all openings, removing all loose materials, tools and/or equipment from exposed locations, and removing or securing scaffolding and all other temporary work.

# SECTION 36. RESPONSIBILITY OF CONTRACTOR TO ACT IN EMERGENCY

In case of an emergency which threatens loss or injury of property and/or safety or life, CONTRACTOR shall act, without previous instructions from the OWNER, as the situation may warrant.

# **SECTION 37. FORCE MAJEURE**

No failure or omission to carry out or to observe any of the terms, provisions or conditions of the Contract shall give rise to any claim by one party against the other, or be deemed to be a breach of the Contract if the same shall be cause by or arise out of:

- (a) War, etc. War, hostilities, acts of public enemy or belligerents, sabotage, blockade, revolution, insurrection, riot or disorder;
- (b) Restraints. Arrest or restraint of princes, rulers or peoples;
- (c) Confiscation. Expropriation, requisition, confiscation of nationalization;
- (d) Rationing. Embargoes, export or import restrictions or rationing or allocation, whether imposed by law, decree or regulation or by voluntary cooperation of industry at the insistence or request of any governmental authority or person purporting to act therefore;
- (e) Regulations. Interference by restriction or onerous regulations imposed by civil or military authorities, whether legal or de factor and whether purporting to act under some constitution, decree, law or otherwise;
- (f) Acts of God. Acts of God, fire, frost or ice, earthquake, storm, lightning, tide, tidal wave, or peril of the sea, accident of navigation or breakdown or injury of vessels;
- (g) Loss of Tankers. Loss of tanker tonnage due to sinking or capture by belligerents, to include acts of piracy or to governmental taking whether or not by formal requisition;
- (h) Accidents. Accidents to or adjuncts of shipping navigation;
- (i) Strikes and Quarantine. Epidemics, quarantine, strikes or combination of workmen, lockouts, or other labor disturbances;
- (j) Explosions. Explosion, accidents by fire or otherwise to wells, pipes, storage facilities, refineries, installations, machinery;
- (k) Taking by Government. Unavailability of fuel because of the election of the government of the country of its origin to confiscate, retain, ban export, or otherwise prevent shipment of fuel;
- (I) Mechanical Breakdown. Unavailability of GPA's electric generating plant and any, or all, appurtenances thereto, including transmission and distribution facilities, due to any

- mechanical operate as designed, emergency outages of equipment or facilities for the purpose of making repairs to avoid breakdown thereof or damage thereto other than regularly scheduled repairs or regular maintenance; or
- (m) Other Events. Any event, matter or thing wherever occurring and whether or not of the same class or kind as those set forth, which shall not be reasonably within the control and without the fault or negligence of the party affected thereby.

No failure or omissions to carry out or to observe any of the terms, provisions or conditions of the Contract shall give rise to any claim by one party against the other, or be deemed to be a breach of the Contract from the time of and to the extent occasioned by the Force Majeure, not from the date of notice of the Force Majeure is received.

#### **SECTION 38. ATTORNEY'S FEES AND COSTS**

Contractor agrees that should a default by either party result in litigation, the successful party shall be entitled to recover its costs and reasonable attorney's fees from the defaulting party.

#### SECTION 39. CONTRACT BINDING EFFECT

All EXHIBITS attached hereto are incorporated herein by reference in its entirety.

#### SECTION 40. O&M SCOPE OF WORK

1. Owner	Guam Power Authority ("GPA")	
2. Contractor	("Contractor")	
3. Project	Fadian Public Parking Lot Solar Canopy Project ("Project")	
4. Work	Contractor shall perform the following work (collectively, the "Work"):	
	The work related to operation, maintenance and management of the Project (which includes, without limitation, the works listed below; the "O&M Work"):	
	<ul> <li>The scheduled maintenance work, monitoring work and warranty management work;</li> </ul>	
	- Emergency service work (collectively with the above, the "Scheduled Maintenance Work");	
	<ul> <li>Repairs, improvements, replacements and other works other than the Scheduled Maintenance Work and other than as otherwise expressly contemplated hereunder (the "<u>Unscheduled</u> <u>Maintenance Work</u>");</li> </ul>	
	<ul> <li>Maintaining the O&amp;M manual and obtaining Owner's approval (to the extent not otherwise provided under the Contract);</li> </ul>	
	- Submission of monthly reports and annual "inspection result"	

reports;

- Creation and storage of operation and maintenance records (including electronic records) and Project performance monitoring;
- Storage and management of all spare parts, replacement parts, consumable parts;
- Preparing of annual maintenance plan and obtaining Owner's prior approval;
- Supervision and acceptance inspection of all deliveries, replacements, repairs, warranties, and tests and verification by equipment suppliers etc. (the "Service Providers");
- Responses or reports to related agencies, electric utility, and local related parties that are necessary for performing the Work and operating the Project;
- Obtain and maintain permits, authorizations and licenses that must be obtained in the name of Contractor for the performance of the Work;
- Compliance with the provisions of the Project agreements specified in the Contract and otherwise affecting the operation, repair and maintenance of the Project, as well as the requirements under the applicable permits;
- Promptly notifying or reporting to Owner regarding events and accidents at or affecting the Project;
- Handling of complaints filed against Owner regarding the operation and maintenance of the Project;
- Periodic testing and reporting of the results of the performance to Owner under the Contract and remedial actions required by Contractor;
- All work that is related to or is necessary under applicable laws and regulations and applicable permits in association with each of the above.
- All work related to the O&M services as required in the contract documents.

# 5. Maintenance Support System

Contractor shall secure the necessary and appropriate personnel and organization for performing the Work and shall maintain a system that enables Contractor to commence any repairs in case an event requiring the repairs occurs within the response times set forth in the Contract.

6. Environmental, Health and Safety Manual	Contractor shall prepare an environment, health, and safety manual indicating the protocols for performing the Work safely and in accordance with the applicable laws and regulations and applicable permits, submit it to Owner no later than [30] days prior to the Commencement Date and obtain approval of Owner.
7. Hazardous Substances	Contractor shall not use or bring into the site of the Project (the "Site") any "Hazardous Materials" (as defined in the Contract) except as set forth in the Contract consistent with "Good Industry Practice" and applicable laws and permits. Contractor shall comply with applicable laws and regulations and permits when disposing "Hazardous Materials" or using "Hazardous Materials" in furtherance of performing its obligations under the Contract.
8. Inspection by Owner	Owner may conduct inspections on or off the Site with respect to the performance of the Work as necessary, including any testing of the Work following any warranty work. In case Owner reasonably determines that the performance of the Work by Contractor does not meet the applicable performance standards, Contractor shall implement necessary measures to bring such Work in compliance with the Contract.
9. Subcontracts	In case Contractor subcontracts a part of the work to subcontractors, it shall notify Owner and obtain its prior written approval.  All Work to be performed by subcontractors shall be subject to, and performed in compliance with, the requirements of the Contract to the same extent as if Contractor were performing such Work.  Contractor shall be responsible for, and supervise, all aspects of the Work, including any part performed by such subcontractors.  Contractor shall expedite Work of subcontractors.
10. Performance Report	From the date when the "Performance Guarantee" (as defined in the Contract) under the Contract, Contractor shall report the results of the ESS performance test defined in the Contract.

IN WITNESS WHEREOF the parties hereto have executed this contract as of the day and year first written.

CONTRACTOR:	OWNER:	
	GUAM POWER AUTHORITY	
	JOHN M. BENAVENTE, P.E.  General Manager	
Date:	Date:	
	CERTIFIED AS TO FUNDS AVAILABLE:	
	Ву:	
	PAMELA AGUIGUI	
	GPA'S Certifying Officer	
	APPROVED AS TO FORM:	
	By:	
	MARIANNE WOLOSCHUCK, Esq. GPA Staff Attorney	

# APPENDIX A PROPOSAL CHECKLIST

# **A1: DOCUMENT RECEIPT CHECKLIST**

Document Title	Proponent Initial
Volume I Commercial Terms and Conditions	
Volume II Technical and Functional Requirements	
Volume III Contract	
Volume IV Appendices	
APPENDIX A – Proposal Checklist	
APPENDIX B – Performance Bond	
APPENDIX C – List of Surety Companies Licensed to Do Business in Guam	
APPENDIX D – Major Shareholders Disclosure Affidavit	
APPENDIX E – Non-collusion Affidavit	
APPENDIX F – No Gratuities of Kickbacks Affidavit	
APPENDIX G – Ethical Standards Affidavit	
APPENDIX H – Declaration Re Compliance with U.S. DOL Wage Determination	
APPENDIX I – Bid Bond Form and Instructions	
APPENDIX J – Local Procurement Preference Application	
APPENDIX K – Restrictions Against Sex Offenders	
APPENDIX L – Deferred Payment Agreement	
APPENDIX M – Qualitative Proposal Scoring Worksheet	
APPENDIX N – Bid Schedule	
APPENDIX O – Vicinity Map	
APPENDIX P – Site Map – Topographical	
APPENDIX Q – Gloria B. Nelson Public Service Building Electrical Site Plan	
APPENDIX R - Site Subsurface Soil Investigation Report	
APPENDIX S - Electrical Panel Schedule and Power One-Line Diagram	
APPENDIX T - As-Built Drawings	
APPENDIX U - Record of Environmental Consideration Correspondence	
APPENDIX V - Contingent Fees	
Others:	

#### A2: TECHNICAL PROPOSAL SUBMITTAL CHECKLIST

#### RECEIPT CHECKLIST

#### **Document Title**

**Project Schedule** Overall Workplan/Project Approach **Project Team Organizational Chart** Team Member Experience/Resume/Curriculum Vitae **Exceptions to the Bid Documents** Adequate Insurance Policy References/ Recommendations from Previous Clients PV System Equipment Manufacturer Specifications Canopy Materials Manufacturer Specifications Performance Bond Ownership and Interest Disclosure Affidavit Non-collusion Affidavit No Gratuities of Kickbacks Affidavit **Ethical Standards Affidavit** Declaration Re Compliance with US DOL Wage Determination Bid Bond Form and Instructions Local Procurement and Preference Application **Restrictions Against Sex Offenders** 

**Deferred Payment Agreement** 

# APPENDIX B PERFORMANCE BOND

# PERFORMANCE BOND NUMBER:\_\_\_\_\_ KNOW ALL MEN BY THESE PRESENTS that as Principal, and (Bonding Company)\_\_\_\_\_ A duly admitted insurer under the laws of the Territory of Guam, as SURETY, hereinafter called the Surety are Held firmly bound unto the Territory of Guam for the **sum of** (\$\_\_\_\_\_\_), for the Payment whereof CONTRACTOR and SURETY bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents. WHEREAS, the Principal has submitted a bid for (identify project by number and brief description) NOW, THEREFORE, if the Territory of Guam shall accept the bid of the Principal and the Principal shall enter into a Contract with the Territory of Guam in accordance with the terms of such bid, and give such bond or bonds as my be specified in bidding or Contract documents with good and sufficient surety for the faithful performance of such Contract Documents with good and sufficient surety for the faithful performance of such Contract and for the prompt payment of labor and material furnished in the prosecution thereof, or in the event of the failure of the Principal to enter such Contract and give such bond or bonds, if the Principal shall pay to the Territory of Guam the difference not to exceed the penalty hereof between the amounts specified in said bid and such larger amount for which the Territory of Guam may in good faith contract with another party to perform work covered by said bid or an appropriate liquidated amount as specified in the Invitation for Bids then this obligation shall be null and void, otherwise to remain full force and effect. Signed and sealed this day of , 20 . (Principal) (Seal) (Bonding Company) (Witness) (Title)

(Title)

(Witness)

# APPENDIX C LIST OF SURETY COMPANIES LICENSED TO DO BUSINESS IN GUAM

# NAMES AND ADDRESSES OF ALL INSURANCE COMPANIES AND THEIR GENERAL AGENTS LICENSED TO TRANSACT INSURANCE BUSINESS IN GUAM AS OF DECEMBER 31,1999

# NAME AND HOME ADDRESS OF INSURANCE COMPANY

Academy Life Insurance Co 20 Moores Road Frazer PA 19355

Admiral Life Insurance Co of America 206 Eight Street Des Moines IA 50309

Alexander Hamilton Life Insurance Co 100 North Greene Street Greensboro NC 27401

All American Life Insurance Co 707 North Eleventh Street PO Box 2074 Milwaukee WI 53201

Ambac Assurance Corporation One State Street Plaza New York NY 10004

American Family Life Assurance Co 1932 Wynnton Road Columbus GA 31999

American Fidelity Life Insurance Co 4060 Barrancas Avenue Pensacola FL 32507 NAME AND ADDRESS OF GENERAL AGENT

Prescott R. Hoeck 1036S Route 1 Yigo GU 96929

Francisco B. Salas 145 Aspinall Avenue Hagatna GU 96910

Money Resources Inc 415 Chalan San Antonio #210 Tamuning GU 96911

Independent Research Agency for Life Insurance Hong's Building Suite 5 Route 10 & 32 Mangilao GU 96923

Joseph M. Casey Holiday Tower Condo, Apt. 615 Route 4 Sinajana GU 96926

Moylan's Insurance Underwriters Inc 101 Agana Shopping Center Hagatna GU 96910

Pioneer Pacific Financial Services Inc of Guam 231 Hesler Place Hagatna GU 96910

Dale M. Donovan 790 N Marine Drive # 496 Tumon GU 96911

American Home Assurance Co 70 Pine Street

New York NY 10270

American International Assurance

Company (Bermuda) LTD 29 Richmond Road

Pembroke HKO8 Bermuda

American International Life

Assurance Company

P 0 Box 727 Wall Street Station New York NY 10268

American National Insurance Co

One Moody Plaza Galveston TX 77550

American National Life Insurance

Company of Texas One Moody Plaza Galveston TX 77550

American-Amicable Life Insurance

Company of Texas 425 Austin Avenue Waco TX 76702

Amwest Surety Insurance Co 5230 Las Virgenes Road

Calabasas CA 91302

Argonaut Insurance Co 250 Middlefield Road Menlo Park CA 94025 NAME AND ADDRESS OF GENERAL AGENT

Calvo's Insurance Underwriters Inc

115 Chalan Santo Papa Hagatna GU 96910

Calvo's Insurance Underwriters Inc

115 Chalan Santo Papa Hagatna GU 96910

Calvo's Insurance Underwriters Inc

115 Chalan Santo Papa Hagatna GU 96910

Randolph C. Biscoe

130 Aspinall Avenue Suite 1 E

Hagatna GU 96910

Randolph C. Biscoe

130 Aspinall Avenue Suite 1 E

Hagatna GU 96910

Winfred T. Profitt 106 Lily Court Mangilao GU 96923

Takagi & Associates Inc

414 W Soledad Avenue Suite 100

Hagatna GU 96910

Cassidy's Associated Insurers Inc

376 West O'Brien Drive Hagatna GU 96910

Cassidy's Associated Insurers Inc

376 West O'Brien Drive Hagatna GU 96910

Balboa Insurance Co 18581 Teller Avenue Irvine CA 92612

Balboa Life Insurance Co 18581 Teller Avenue Irvine CA 92612

Best Life Assurance Co of California P 0 Box 19721 Irvine CA 96612

Canada Life Assurance Co The 330 University Avenue Ontario Toronto Canada M5G1 R

Capital Markets Assurance Corporation 113 King Street Armonk NY 10504

Central States Health & Life Co of Omaha P O Box 34350 Omaha NE 68134-0350

Central States Indemnity Co. of Omaha P O Box 34350 Omaha NE 68134

Centurion Life Insurance Co 206 Eighth Street Des Moines IA 50309

## NAME AND ADDRESS OF GENERAL AGENT

Cassidy's Associated Insurers Inc 376 West O'Brien Drive Hagatna GU 96910

Cassidy's Associated Insurers Inc 376 West O'Brien Drive Hagatna GU 96910

D B Davis& Associates Staywell Building 430 West Soledad Avenue Hagatna GU 96910

Joaquin C. Arriola 259 Martyr Street Suite 201 Hagatna GU 96910

Moylan's Insurance Underwriters Inc 101 Agana Shopping Center Hagatna GU 96910

The Brass Group Inc 479 West O'Brien Drive Suite 102 Hagatna GU 96910

Moylan's Insurance Underwriters Inc 101 Agana Shopping Center Hagatna GU 96910

Moylan's Insurance Underwriters Inc 101 Agana Shopping Center Hagatna GU 96910

Francisco B. Salas 267 S Marine Drive Suite 2F Tamuning GU 96911

CGU International Insurance PLC Multinational Bancorporation Ctr 10th FIr 6805 Ayala Avenue Makati City Philippines

Chung Kuo Insurance Co Ltd 10th Floor ICBC Bldg No 100 Chilin Road Taipei Taiwan

Conseco Life Insurance Co 11815 N Pennsylvania Street Carmel IN 46032

## NAME AND ADDRESS OF GENERAL AGENT

AON Insurance Micronesia (Guam) I Hengi Plaza #203 278 South Marine Drive Tamuning GU 96911

Great National Ins Underwriters Inc Great National Insurance Building Chalan San Antonio Tamuning GU 96911

Alpha Insurers 123 Archbishop Flores Street Hagatna GU 96910

Rodolfo B. Batimana Suite 202 Julale Center Hagatna GU 96910

Carmencita C. Estrada 114 Abas Court Liguan Terrace Dededo GU 96912

Pacific Financial Corporation 973 S Marine Drive Suite 101 Tamuning GU 96911

Edward B. Senato P 0 Box 11945 Tamuning GU 96931

Farley A. Young 132 Kayen Mapagahes Dededo GU 96912

Continental Insurance Co
CNA Plaza
CNA Plaza
Chicago IL 60685

Cassidy's Associated Insurers Inc
376 West O'Brien Drive
Hagatna GU 96910

Cumberland Casualty & Surety Co 4311 W Waters Avenue #401 Tampa FL 33614 Cassidy's Associated Insurers Inc 376 West O'Brien Drive Hagatna GU 96910

Dai-Tokyo Fire & Marine Insurance Company Ltd The 25-3, Yoyogi 3-Chome Shlbuya-ku Tokyo Japan

Delaware American Life Insurance Co P O Box 667 Wilmington DE 19899

Dongbu Insurance Co 21-9 Cho-Dong, Chung-Gu CPO Box 658 Seoul Korea 100

Eagle Pacific Insurance Co 2101 4th Avenue Suite 1700 Seattle WA 98121

Federal Insurance Co P O Box 1615 Warren NJ 07061

Fireman's Fund Insurance Company 777 San Marin Drive Novato CA 94998

First American Title Insurance Co 114 East Fifth Street Santa Ana CA 92702

First Fire & Casualty Insurance Hawaii Inc P O Box 2866 Honolulu HI 96803

First Indemnity Insurance of Hawaii Inc P O Box 2866 Honolulu HI 96803

#### NAME AND ADDRESS OF GENERAL AGENT

Takagi & Associates Inc 414 W Soledad Avenue GCIC Building Suite 100 Hagatna GU 96910

Calvo's Insurance Underwriters Inc 115 Chalan Santo Papa Hagatna GU 96910

Moylan's Insurance Underwriters Inc 101 Agana Shopping Center Hagatna GU 96910

Moylan's Insurance Underwriters Inc 101 Agana Shopping Center Hagatna GU 96910

Cassidy's Associated Insurers Inc 376 West O'Brien Drive Hagatna GU 96910

Calvo's Insurance Underwriters Inc 115 Chalan Santo Papa Hagatna GU 96910

Pacific American Title Insurance & Escrow Company 715 Chalan Machaute Suite 101 Maite GU 96927

Cassidy's Associated Insurers Inc 376 West O'Brien Drive Hagatna GU 96910

Cassidy's Associated Insurers Inc 376 West O'Brien Drive Hagatna GU 96910

First Insurance Company of Hawaii Ltd P O Box 2866 Honolulu Hi 96803

First Liberty Insurance Corporation 175 Berkeley Street Boston MA 02117

First Net Insurance Company 101 Agana Shopping Center Hagatna GU 96910

Fortis Benefits Insurance Company P O Box 62471 St Paul MN 55164

General Security Insurance Company Two World Trade Center New York NY 10048

Globe Life & Accident Ins Company 204 North Robinson Avenue Oklahoma City OK 73102

GMHP Health Insurance LTD 177 Chalan Pasaheru Suite A Tamuning GU 96911

# NAME AND ADDRESS OF GENERAL AGENT

Cassidy's Associated Insurers Inc 376 West O'Brien Drive Hagatna GU 96910

Takagi & Associates Inc 414 W Soledad Avenue GCIC Building Hagatna GU 96910

Anne Palacios 414 West Soledad Avenue GCIC Building Hagatna GU 96910

Moylan's Insurance Underwriters Inc 101 Agana Shopping Center Hagatna GU 96910

World Marketing Alliance Inc Guam Calvo's Insurance Bldg Suite 200 115 Chalan Santo Papa Hagatna GU 96910

Cassidy's Associated Insurers Inc 376 West O'Brien Drive Hagatna GU 96910

Joseph M. Casey Holiday Tower Condo Apt 615 788 Route 4 Sinajana GU 96926

Calvo's Insurance Underwriters Inc 115 Chalan Santo Papa Hagatna GU 96910

TS Inc 845 N Marine Drive Suite 11 Tumon GU 96911

Grand Pacific Life Insurance Co Ltd 1164 Bishop Street Suite 500 Honolulu HI 96813

Grand Pacific Life Insurance Co Ltd 1164 Bishop Street Suite 500 Honolulu HI 96813

Great American Life Insurance Co P O Box 5420 Mail Drop 250-23-5 C Cincinnati OH 45201

Great-West Life & Annuity Insurance Co 8515 East Orchard Road Englewood CO 80111

Gulf Insurance Company 4600 Fuller Drive Irving Texas 75038

Hartford Life & Accident Insurance Co P O Box 2999 Hartford CT 06104

Individual Assurance Company Life Health & Accident 1600 OAK Street Kansas City MO 64108

Insurance Company of North America 1601 Chestnut Street P O Box 7716 Philadelphia PA 19192

### NAME AND ADDRESS OF GENERAL AGENT

Great National Insurance Underwriter Great National Insurance Bldg Chalan San Antonio Tamuning GU 96911

Pacific Financial Corporation 973 S Marine Drive Suite 101 Tamuning GU 96911

Takagi & Associates Inc 414 W Soledad Avenue GCIC Building Hagatna GU 96910

Guam Imperial International Inc 231 Hesler Place Hagatna GU 96910

Benefits Communication Corp 424B Route 8 Mongmong GU 96927

Cassidy's Associated Insurers Inc 376 West O'Brien Drive Hagatna GU 96910

Primo Mabesa 1296 North Marine Drive Suite 2 Tamuning GU 96911

Joaquin C. Arriola 259 Martyr Street Suite 201 Hagatna GU 96910

Anne M. Palacios 414 W Soledad Avenue GCIC Building Suite 9 Hagatna GU 96910

Insurance Company of North America 1601 Chestnut Street P O Box 7716 Philadelphia PA 19192

Intercargo Insurance Company 1450 E American Lane 20th Floor Schaumburg IL 60173

Jefferson Pilot Financial Insurance One Granite Place Concord NH 03301

Jefferson-Pilot Life Insurance Company 100 North Greene Street Greensboro NC 27401

John Alden Life Insurance Company 5100 Gamble Drive St Louis Park MN 55416

John Hancock Life Insurance Company PO Box 111 Boston MA 02117

Knights of Columbus One Columbus Plaza New Haven CT 06510

Liberty National Life Insurance Company P O Box 2612 Birmingham AL 35202

#### NAME AND ADDRESS OF GENERAL AGENT

Takagi & Associates Inc 414 W Soledad Avenue GCIC Building Suite 100 Hagatna GU 96910

Takagi & Associates Inc 414 W Soledad Avenue GCIC Building Suite 100 Hagatna GU 96910

Money Resources Inc 415 Chalan San Antonio #210 Tamuning GU 96911

Money Resources Inc 415 Chalan San Antonio # 210 Tamuning GU 96911

William A. Dippel Terrace Condominium #D 50 Tumon GU 96911

Money Resources Inc 415 Chalan San Antonio #210 Tamuning GU 96911

Jesus A. Baza 125 Granada Lane Sinajana GU 96910

Joseph M. Casey Holiday Tower Condo Apt 615 Route 4 Sinajana GU 96926

Independent Research Agency for Life Insurance Hong's Building Suite 5 Route 10 & 32 Mangilao GU 96923

Lincoln Benefit Life Company 3075 Sanders Road H2C Northbrook IL 60062

Lincoln National Life Insurance Co

1300 South Clinton Street

Fort Wayne IN 46802

#### NAME AND ADDRESS OF GENERAL AGENT

Jesus Dela Cruz 231 Hesler Street Hagatna GU 96910

Patrocel N. Duque 231 Hesler Street Hagatna GU 96910

Jacqueline T. Flores 231 Hesler Street Hagatna GU 96910

Roger Surban 615 Harmon Loop Road Suite 201 (C) Tonko Reyes Comm Complex Dededo GU 96912

Takagi & Associates Inc 414 W Soledad Avenue GCIC Building Suite 100 Hagatna GU 96910

The Money Tree Inc 231 Hesler Street Hagatna GU 96910

Dale M. Donovan 790 N Marine Drive #496 Tumon GU 96911

David W. Cassidy 376 West O'Brien Drive Hagatna GU 96910

LM Insurance Corporation Anne M. Palacios
175 Berkeley Street 414 W Soledad Avenue
Boston MA 02117 GCIC Building Suite 9
Hagatna GU 96910

LM Insurance Corporation 175 Berkeley Street Boston MA 02117

Lumbermens Mutual Casualty Co One Kemper Drive Long Grove IL 60049

Lyndon Life Insurance Company 520 Maryville Center Drive Suite 500 St Louis MO 63141

Manufacturers Life Insurance Co (USA) P O Box 6400 Buffalo NY 14201-0604

MBIA Insurance Corporation 113 King Street Armonk NY 10504

Merrill Lynch Life Insurance Co. 4804 Deer Lane Drive East 4th Floor Jacksonville FL 33246

Midland Life Insurance Company The 250 East Broad Street Columbus OH 43215

Midland National Life Insurance Co One Midland Plaza Sioux Falls SD 57193

Mitsui Marine & Fire Insurance Company LTD 9 Kanda Surugadai, 3-Chome Chiyoda-Ku, Tokyo, Japan

## NAME AND ADDRESS OF GENERAL AGENT

Takagi & Associates Inc 414 W Soledad Avenue GCIC Building Suite 100 Hagatna GU 96910

Cassidy's Associated Insurers Inc 376 West O'Brien Drive Hagatna GU 96910

Joaquin C. Arriola 259 Martyr Street Suite 201 Hagatna GU 96910

Moylan's Insurance Underwriters Inc 101 Hagatna Shopping Center Hagatna GU 96910

Moylan's Insurance Underwriters Inc 101 Hagatna Shopping Center Hagatna GU 96910

Merrill Lynch Life Agency Inc 134 Soledad Avenue Suite 406 Hagatna GU 96910

Billy C. Acebron 119 South Marine Drive Suite B1 Tamuning GU 96911

Earl F. Foley Julale Shopping Center Suite 216 424 W O'Brien Drive Hagatna GU 96910

AON Insurance Micronesia (Guam) I Hengi Plaza Suite 203 278 South Marine Drive Tamuning GU 96911

MMI General Insurance Limited 135 C Kayen Chando Sateena Mail Suite 207/208 Dededo GU 96912

Monumental Life Insurance Company 2 East Chase Street Baltimore MD 21202

MONY Life Insurance Company 1740 Broadway New York NY 10019

National Travelers Life Company 5700 Westown Parkway West Des Moines IA 50266

National Union Fire Insurance Company of Pittsburgh PA 70 Pine Street New York NY 10270

National Western Life Insurance Co 850 East Anderson Lane Austin TX 78752

Nationwide Life Insurance Company One Nationwide Plaza 1-27-08 Columbus OH 43215

Nauru Insurance Corporation P O Box 82 AIWO District Republic of Nauru Central Pacific Nauru

# NAME AND ADDRESS OF GENERAL AGENT

Moylan's Insurance Underwriters Inc 101 Agana Shopping Center Hagatna GU 96910

Joseph M. Casey Holiday Tower Condo Apt 615 788 Route 4 Sinajana GU 96926

Independent Research Agency for Life Insurance Hong's Building Suite 5 Route 10 & 32 Mangilao GU 96923

Gayle & Teker 300 Hernan Cortez Avenue #200 Hagatna GU 96910

Joaquin C. Arriola 259 Martyr Street Suite 201 Hagatna GU 96910

Calvo's Insurance Underwriters Inc 115 Chalan Santo Papa Hagatna GU 96910

Moylan's Insurance Underwriters Inc 101 Agana Shopping Center Hagatna GU 96910

BWC Investment Services, Inc. 1855 Gateway Blvd Suite 500 Concord CA 94590

Calvo's Insurance Underwriters Inc 115 Chalan Santo Papa Hagatna GU 96910

Netcare Life & Health Insurance 101 Agana Shopping Center Hagatna GU 96910

New Hampshire Insurance Company 70 Pine Street New York NY 10270

Nichido Fire & Marine Insurance Co N0 3-16 Ginza 5-Chome Chuo-Ku Tokyo 104 Japan

Nippon Fire & Marine Insurance Company, Ltd. 2-10 Nihonbashi 2-Chome Tokyo 103 Japan

North Coast Life Insurance Company 1116 West Riverside Avenue Spokane WA 99201

Occidental Life Insurance Company of America 425 Austin Avenue P O Box 2595 Waco TX 76702

Old Line Life Insurance Company of America The 707 North Eleventh Street P O Box 401 Milwaukee WI 53201

Old Republic Insurance Company 414 West Pittsburgh Street Greensboro PA 15601

## NAME AND ADDRESS OF GENERAL AGENT

Moylan's Insurance Underwriters Inc 101 Agana Shopping Center Hagatna GU 96910

Calvo's Insurance Underwriters Inc 115 Chalan Santo Papa Hagatna GU 96910

Calvo's Insurance Underwriters Inc 115 Chalan Santo Papa Hagatna GU 96910

Nanbo Guam Ltd DBA: Nanbo Insurance Underwriters 434 West O'Brien Drive Hagatna GU 96910

Moylan's Insurance Underwriters Inc 101 Agana Shopping Center Hagatna GU 96910

Moylan's Insurance Underwriters Inc 101 Agana Shopping Center Hagatna GU 96910

Joseph M. Casey Holiday Tower Condo Apt 615 788 Route 4 Sinajana GU 96926

Independent Research Agency for Life Insurance Hong's Building Suite 5 Route 10 & 32 Mangilao GU 96923

David W. Cassidy 376 W O'Brien Drive Hagatna GU 96910

Old Republic National Title Ins Co 400 Second Avenue S Minneapolis MN 55401

Pacific Guardian Life Insurance Company Ltd 1440 Kapiolani Boulevard Suites 1600 & 1700 Honolulu HI 96814

Pacific Indemnity Insurance Company P O Box 3580 Hagatna GU 96932

Pacific Indemnity Insurance Company P O Box 3580 Hagatna GU 96932

Pacificare Life Assurance Company 3515 Harbor Boulevard Costa Mesa CA 92626

## NAME AND ADDRESS OF GENERAL AGENT

Takagi Title Security Inc 414 W Soledad Avenue GCIC Building Hagatna GU 96910

Dwayne K. Brown 866 Chalan Palasyo (Rt.7) Ste.205 Maina, Guam 96927

Calvo's Insurance Underwriters, Inc. 115 Chalan Santo Papa Hagatna, Guam 96910

Citadel Trading Corporation DBA: Citadel Insurance Underwriters 615 Harmon Loop Road Suite 201 C Tonko Reyes Comm Complex Dededo GU 96912

Nanbo Guam Ltd DBA Nanbo Insurance Underwriters 434 West O'Brien Drive Hagatna GU 96910

Anacleto Q. Nicholas 145 Chichirica Street Kaiser Dededo GU 96912

Cassidy's Associated Insurers Inc 376 W O'Brien Drive Hagatna GU 96910

Prescott Hoeck dba: Guam Ventures 121 Taison Way Barrigada GU 96913

The Baldwin Corporation 790 S Marine Drive #1 Tamuning GU 96911

PFL Life Insurance Company 4333 Edgewood Road NE Cedar Rapids IA 52499

Primerica Life Insurance Company 3120 Breckinridge Boulevard Duluth GA 30199

Progressive Casualty Insurance Co 6300 Wilson Mills Road Mayfield Village OH 44143

Protective Life Insurance Company 2801 Highway 280 South Birmingham Birmingham AL 35223

Pruco Life Insurance Company 213 Washington Street Newark NJ 07102

#### NAME AND ADDRESS OF GENERAL AGENT

William A. Dippel Terrace Condominium #D 50 Tumon GU 96911

Carmelita S. Concepcion Ada's Comm & Proff Center #202 B 130 Marine Drive Hagatna GU 96910

Primerica Financial Services Insurance Marketing Inc Ada's Comm & Proff Center #202 B 130 Marine Drive Hagatna GU 96910

Bernadita S. Quitugua 136 Sampaguita Lane Latte Heights Mangilao GU 96923

The Baldwin Corporation 790 South Marine Drive #1 Tamuning GU 96911

Nanbo Guam Ltd., dba: Nanbo Insurance Underwriters 434 West O'Brien Drive Hagatna GU 96910

Pacific Financial Corporation 973 S Marine Drive Suite 101 Tamuning GU 96911

John S. Pillsbury 267 South Marine Drive 2F Tamuning GU 96911

Francisco B. Salas 267 South Marine Drive Suite 2F Tamuning GU 96911

Prudential Insurance Company of America 751 Broad Street Newark NJ 07102

QBE Insurance (International) Limited 82 Pitt Street Sydney NSW 2000 Australia

Reliance Insurance Company Three Parkway 5th Floor Compliance Department Philadelphia PA 19102

Reliance National Indemnity Company Three Parkway 5th Floor Compliance Department Philadelphia PA 19102

Royal State National Insurance Company LTD 819 South Beretania Street Honolulu HI 96813

Safeco Insurance Co of America Safeco Plaza Seattle WA 98185

Seaboard Surety Company of NY 6225 Centennial Way Baltimore MD 21209

Security Benefit Life Insurance Co 700 Harrison Street Topeka KS 66636

Security-Connecticut Life Insurance Co 20 Security Drive Avon CT 06001

# NAME AND ADDRESS OF GENERAL AGENT

John S. Pillsbury 267 South Marine Drive Suite 2F Tamuning GU 96911

Sally E. Mondia 674 Harmon Loop Dededo GU 96912

Takagi & Associates Inc 414 West Soledad Avenue GCIC Building Suite 100 Hagatna GU 96910

Takagi & Associates Inc 414 West Soledad Avenue GCIC Building Suite 100 Hagatna GU 96910

Gayle & Teker 330 Hernan Cortez Avenue Hagatna GU 96910

Calvo's Insurance Underwriters Inc 115 Chalan Santo Papa Hagatna GU 96910

Calvo's Insurance Underwriters Inc 115 Chalan Santo Papa Hagatna GU 96910

Independent Research Agency for Life Insurance Hong's Building Suite 5 Route 10 & 32 Mangilao GU 96923

Life Investment Consultants Inc 121 Basa Street Tamuning GU 96911

Security-Connecticut Life Insurance Co 20 Security Drive Avon CT 06001

St Paul Fire & Marine Insurance Co 385 Washington Street St Paul MN 55102

Standard Insurance Company 1100 SW Sixth Avenue Portland OR 97204

Stewart Title Guaranty Company PO Box 2029 Houston TX 77252

Surety Life Insurance Company 3075 Sanders Road H2C Northbrook IL 60062

Surety Life Insurance Company 3075 Sanders Road H2C Northbrook IL 60062

#### NAME AND ADDRESS OF GENERAL AGENT

Pacific Financial Corporation 973 South Marine Drive Suite 101 Tamuning GU 96911

Primo Mabesa dba: PM Ins & Financial Planning Svcs 790 North Marine Drive Suite 880 Tamuning GU 96911

Regis Insurance Inc 118 East Marine Drive Suite B2 Dededo GU 96912

Calvo's Insurance Underwriters Inc 115 Chalan Santo Papa Hagatna GU 96910

Moylan's Insurance Underwriters Inc 101 Agana Shopping Center Hagatna GU 96910

Joaquin C. Arriola 259 Martyr Street Suite 201 Hagatna GU 96910

Manu P. Melwani 715 Chalan Machaute Suite 101 Maite GU 96927

Jesus M. Dela Cruz 166 Carlos Lane Mangilao GU 96923

Jacqueline T. Flores 231 Hesler Place Hagatna GU 96910

Moylan's Insurance Underwriters Inc 101 Agana Shopping Center Hagatna GU 96910

Surety Life Insurance Company 3075 Sanders Road H2C Northbrook IL 60062

#### NAME AND ADDRESS OF GENERAL AGENT

Roger S. Surban 46 Anaco Lane Nimitz Hill Estate Piti GU 96910

The Money Tree Inc 231 Hesler Place Hagatna GU 96910

Terrace Guam Ltd 134 West Soledad Avenue Bank of Hawaii Building Suite 401 Hagatna GU 96910

Ticor Title Insurance Company 171 North Clark Street 6th Floor Chicago IL 60601

Tokio Marine & Fire Insurance Company Limited 2-1 Marunouchi 1-Chome Chiyoda-Ku Tokyo Japan

Trans World Assurance Company 885 South El Camino Real San Mateo CA 94402

Transamerica Assurance Company PO Box 2101 Los Angeles CA 90051

Transamerica Life Insurance & Annuity Company PO Box 54178 Los Angeles CA 90054

Transamerica Occidental Life Ins Co 1150 South Olive Street Los Angeles CA 90054 Title Guaranty of Guam Hernan Cortez Avenue Hagatna GU 96910

Nanbo Guam Ltd dba: Nanbo Insurance Underwriters 434 West O'Brien Drive Hagatna GU 96910

Dale M. Donovan 790 North Marine Drive Suite 496 Tumon GU 96911

Ralph G. Taitano 130 Aspinall Street Suite 2BE Hagatna GU 96910

Ralph G. Taitano 130 Aspinall Street Suite 2BE Hagatna GU 96910

Ralph G. Taitano 130 Aspinall Street Suite 2BE Hagatna GU 96910

Travelers Casualty and Surety Co One Tower Square Hartford CT 06183

Travelers Indemnity Company One Tower Square Hartford CT 06183

Travelers Insurance Company One Tower Square Hartford CT 06183

United of Omaha Life Insurance Co Mutual of Omaha Plaza Omaha NE 68175

United Pacific Insurance Company Three Parkway Compliance Department 5th Floor Philadelphia PA 19102

United Services Automobile Assn 9800 Fredericksburg Road San Antonio TX 78288

United States Fire Insurance Company 305 Madison Avenue Morrison NJ 07960

UNUM Life Insurance Company of America 2211 Congress Street Portland ME 04122

USAA Casualty Insurance Company 9800 Fredericksburg Road San Antonio TX 78288

#### NAME AND ADDRESS OF GENERAL AGENT

Moylan's Insurance Underwriters Inc 101 Agana Shopping Center Hagatna GU 96910

Moylan's Insurance Underwriters Inc 101 Agana Shopping Center Hagatna GU 96910

Moylan's Insurance Underwriters Inc 101 Agana Shopping Center Hagatna GU 96910

Earl L. Foley P O Box BO Hagatna GU 96910

Takagi & Associates Inc 414 West Soledad Avenue GCIC Building Suite 100 Hagatna GU 96910

Calvo's Insurance Underwriters Inc 115 Chalan Santo Papa Hagatna GU 96910

Cassidy's Associated Insurers Inc 376 West O'Brien Drive Hagatna GU 96910

Moylan's Insurance Underwriters 101 Agana Shopping Center Hagatna GU 96910

Calvo's Insurance Underwriters Inc 115 Chalan Santo Papa Hagatna GU 96910

Cassidy's Associated Insurers Inc 376 West O'Brien Drive Hagatna GU 96910

USAA General Indemnity Company 9800 Fredericksburg Road San Antonio TX 78288

Western Reserve Life Assurance Company of Ohio P O Box 5068 Clearwater FL 33758

Western-Southern Life Assurance Co P O Box 1119 Cincinnati OH 45202

Westport Insurance Corporation P O Box 2979 Overland KA 66201

Zurich Insurance (Guam) Inc GCIC Building Suite 900 414 West Soledad Avenue Hagatna GU 96910

## NAME AND ADDRESS OF GENERAL AGENT

Nanbo Insurance Underwriters 434 West O'Brien Drive Hagatna GU 96910

Calvo's Insurance Underwriters Inc 115 Chalan Santo Papa Hagatna GU 96910

Billy C. Acebron 119 South Marine Drive Suite B1 Tamuning GU 96911

Glenn Meno 400 Route 8 Maite GU 96927

AON Insurance Micronesia (Guam) I Hengi Plaza #203 278 South Marine Drive Tamuning GU 96911

D B Davis& Associates 430 West Soledad Avenue Staywell Building Hagatna GU 96910

# APPENDIX D OWNERSHIP AND INTEREST DISCLOSURE AFFIDAVIT

# SPECIAL PROVISON FOR OWNERSHIP DISCLOSURE AFFIDAVIT

All Bidders/Offerors are required to submit a current affidavit as required below. Failure to do so will mean disgualification and rejection of the Bid/RFP.

5 GCA §5233 (Title 5, Section 5233) states: Disclosure of Ownership, Financial, and Conflicts of Interest

- (a) Purpose. The disclosure required by this Section are intended to reveal information bearing on the responsibility of a bidder, and can be obtained by an inquiry regarding responsibility prior to award.
- (b) Definitions.

As used herein, the term "person" shall be interpreted liberally to include the definition found in 1 GCA § 715, and in § 5030(n) of this Chapter, and includes a natural person as well as every entity of whatever form or composition (an "artificial person") recognized under the laws of Guam other than a natural person, who is a prospective contractor under a bid, offer, proposal, or other response to a solicitation, or is a contractor under a contract with the government of Guam, and subject to the provisions of this Chapter.

- (c) Public Disclosure of Ownership.
  - (1) The ownership interests to be disclosed under this Section include the interests of a natural or artificial person who owns all or any part of a prospective contractor, bidder, or offeror, whether as proprietor, a partner, limited or otherwise, a shareholder of any class, in which case the percentage ownership interest test shall be based on each class, a member of an association or company, limited or otherwise, and any person owning a beneficial legal interest in any trust, and any other person having the power to control the performance of the contract or the prospective contractor.
  - (2) Prior to award, every person who is a prospective contractor, bidder, or offeror of a contract to be acquired under any method of source selection authorized by this Chapter shall submit a Disclosure Statement, executed as an affidavit under oath, disclosing the name of each person who currently or has owned an ownership interest in the prospective contractor, bidder, or offeror greater than ten percent (10%) at any time during the twelve (12) month period immediately preceding the date of the solicitation (the "relevant disclosure period"). If a prospective contractor, bidder, or offeror is an artificial person, the Disclosure Statement shall disclose the name of each person who has owned an ownership interest in such artificial person (a "second tier owner") greater than twenty-five percent (25%) at any time during the relevant disclosure period. If any such second tier owner is also an artificial person, the Disclosure Statement shall disclose the name of each person who has owned an ownership interest in such second tier owner (a "third tier owner") of forty-nine percent (49%) or more during the relevant disclosure period. If the name of no natural person has been identified as an owner, or a second or third tier owner of the prospective contractor, bidder, or offeror, the Disclosure Statement shall identify the name, position, address, and contact information of the natural person having the authority and responsibility for the performance of the prospective contract, and the name of any natural person who has the authority and power to remove and replace the designated responsible person or otherwise control the performance of the prospective contract.
- (d) Disclosure of Financial Interest. A prospective contractor shall execute an affidavit disclosing the name of any person who has received or is entitled to receive a commission, gratuity, contingent fee or other compensation to solicit, secure, or assist in obtaining business related to the solicitation by means of a Disclosure Statement, executed as an affidavit under oath, disclosing such interest and shall also contain the amounts of any such commission, gratuity, contingent fee or other compensation.
- (e) Disclosure of Conflict of Interest. A prospective contractor shall disclose the name of any person who directly or indirectly participates in any solicitation if such person is also an employee of the government of Guam, or of the government of the United States if federal funds are used in payment of the contract.

- (f) Every disclosure of an ownership or financial interest of any person required to be identified by this Section shall name the person required to be disclosed and the street address of their principal place of business. All information disclosed or meant to be disclosed under this Section is public procurement data and shall be kept as part of the public record of each procurement.
- (g) Continuing Duty of Disclosure. Notwithstanding any other provision of this Chapter, the duty to disclose the information required under this Section shall be, upon award a continuing duty of a contractor of every contract subject to this Chapter, and all such information shall become part of the procurement record required by § 5249 of this Chapter. Throughout the term of a contract subject to the terms of this Chapter, the contractor shall promptly make any disclosures not made previously and update changes in the identities or other required information, interests, or conflicts of the persons required to be disclosed herein. Failure to comply with this Section shall constitute a material breach of contract."

Section 2. Severability. If any provision of this Act or its application to any person or circumstance is found to be invalid or contrary to law, such invalidity shall not affect other provisions or applications of this Act that can be given effect without the invalid provision or application, and to this end the provisions of this Act are severable.

- 1. If the affidavit is a copy, indicate the BID/RFP number and where it is filed.
- 2. Affidavits must be signed within 60 days of the date the bids or proposals are due.

# OWNERSHIP & INTEREST DISCLOSURE AFFIDAVIT

	(ITORY OF GUAM )					
HAGA	ATNA, GUAM )					
l, unde	rsigned,(partner or off	, being first duly icer of the company, etc.)	sworn, deposes and says:			
1.	That the name of each person bidder, or offeror greater than	That the name of each person who owns or has owned an ownership interest in the prospective contractor, bidder, or offeror greater than ten (10%) at any time during the twelve (12) month period immediately preceding the date of this solicitation are as follows:				
	Name	Street Address (Principal Place of Business)	Percentage of Shares Held			
		Total percentage of shares:				
2.	That for any owners listed So owned an interest in such art time during the relevant discl	ection 1 who are artificial persons, the name of each partificial person (a "second-tier owner") greater than twee osure period are as follows:	nty-five percent (25%) at any			
	<u>Name</u>	Street Address (Principal Place of Business)	Percentage of Shares Held			
		Total percentage of shares:				
3.	ownership interest in such se	That for any owners listed Section 2 who are artificial persons, the name of each person who has owned an ownership interest in such second-tier owner (a "third-tier owner") of forty-nine percent (49%) or more during the relevant disclosure period are as follows:				
	<u>Name</u>	Street Address (Principal Place of Business)	Percentage of Shares Held			
		Total percentage of shares:				
4.		been identified as an owner in Section 1-3 above, the or the performance of the prospective contract:	natural person having the			
	Name & Position	Street Address (Principal Place of Business)	Contact Information			
		e authority and power to remove and replace the des nance of the prospective contract:	ignated responsible person c			
	Name & Position	Street Address (Principal Place of Business)	Contact Information			
5.		or are entitled a commission, gratuity or other comperss related to the Bid/RFP for which this Affidavit is sub				
	<u>Name</u>	<u>Address</u>	Amount of Commission, Gratuity, or other Compensation			

government of the United States employees, if federal funds are used in payment of the contract):			
	reet Address (Principal Place of Business)  Contact Information		
Date:	Signature of individual if bidder/offeror is a sole Proprietorship; Partner, if the bidder/offeror is a Partnership Officer, if the bidder/offeror is a corporation.		
Subscribe and sworn to before me this	sday of,		
20	Notary Public		
	In and for the Territory of Guam		
	My Commission expires .		

# APPENDIX E NON-COLLUSION AFFIDAVIT

# NON-COLLUSION AFFIDAVIT

Guam	) )ss:		
Hagatna	)		
	I,first bein (Name of Declarant)	ng duly sworn, depose and say:	
,	(Name of Declarant)		
1.	That I am theof	(Name of Ridding/RED Company)	
2.	That in making the foregoing proposal or bid, that such proposal or bid is genuine and not collusive or shame, that said bidder/offeror has not colluded, conspired, connived or agreed, directly or indirectly, with any bidder or person, to put in a sham or to refrain from bidding or submitting a proposal and has not in any manner, directly or indirectly, sought by agreement or collusion, or communication or conference, with any person, to fix the bid of affiant or any other bidder, or to secure any overhead, project or cost element of said bid price, or of that of any bidder, or to secure any advantage against the GUAM POWER AUTHORITY or any person interested in the proposed contract; and		
3.	That all statements in said proposal or bid		
4.	This affidavit is made in compliance with §§3126(b).	Guam Administrative Rules and Regulations	
		(Declarant)	
SUBSCRIBED	AND SWORN to me before this	day of, 2024.	
		Notary Public	

# APPENDIX F NO GRATUITIES OR KICKBACKS AFFIDAVIT

## NO GRATUITIES OR KICKBACKS AFFIDAVIT

<u>AFFIDAVIT</u> (Offeror)		
TERRITORY OF GUAM	) ) SS:	
Hagatna, Guam	)	
	, being first duly sworn, deposes and says:	
agents, subcontractors, or employee employee, any	ve of the Offeror, that neither I nor of the Offeror' es has or have offered, given or agreed to give a payment, gift, kickback, gratuity or offer of emplo	any government of Guam
Offeror's proposal.		
	Cignature of Individual if Prancacria a Cala Pra	
	Signature of Individual if Proposer is a Sole Pro Partner, if the Proposer is a Partnership;	prietorsnip,
	Officer, if the Proposer is a Corporation	
SUBCRIBED AND SWORN to be	ore me thisday of, 2024.	
	Notary Public In and for the Territory of Gua My Commission Expires:	

# APPENDIX G ETHICAL STANDARDS AFFIDAVIT

## ETHICAL STANDARDS AFFIDAVIT

AFFIDAVIT (Proposer)	
TERRITORY OF GUAM	) SS:
HAGATNA, GUAM	)
	, being first duly sworn, deposes and says:
That I am ( the Sole Prop	rietor, a Partner or Officer of the Offeror)
That Offeror making the f	foregoing Proposal, that neither he or nor of the Offeror's officers, representatives, agents,
subcontractors, or employ	yees of the Offeror have knowingly influenced any government of Guam employee to
breach any of the ethical	standards set forth in 5 GCA Chapter 5 Article 11, and promises that neither he nor any
officer, representative, ag	gent, subcontractor, or employee of Offeror will knowingly influence any government of
Guam employee to bread	ch any ethical standard set for in 5 GCA Chapter 5 Article 11.
	Signature of Individual if Proposer is a Sole Proprietorship;
	Partner, if the Proposer is a Partnership;
	Officer, if the Proposer is a Corporation
SUBCRIBED AND SWO	RN to before me thisday of, 2024.
	Notary Dublia
	Notary Public In and for the Territory of Guam
	My Commission Expires:

# APPENDIX H DECLARATION RE-COMPLIANCE WITH U.S. DOL WAGE DETERMINATION

### DECLARATION RE-COMPLIANCE WITH U.S. DOL WAGE DETERMINATION

Procurement No.:		
Nar	me of Offeror Company:	
	hereby certifies under penalty of perjury:	
	That I am(the offeror, a partner of the offeror, an officer of the offeror) making the bid proposal in the foregoing identified procurement;	
(2)	That I have read and understand the provisions of 5 GCA § 5801 and § 5802 which read:	
	§ 5801. Wage Determination Established.	
	In such cases where the government of Guam enters into contractual arrangements with a sole proprietorship, a partnership or a corporation ('contractor') for the provision of a service to the government of Guam, and in such cases where the contractor employs a person(s) whose purpose, in whole or in part, is the direct delivery of service contracted by the government of Guam, then the contractor shall pay such employee(s) in accordance with the Wage Determination for Guam and the Northern Mariana Islands issued and promulgated by the U.S. Department of Labor for such labor as is employed in the direct delivery of contract deliverables to the government of Guam.	
	The Wage Determination most recently issued by the U.S. Department of Labor at the time a contract is awarded to a contractor by the government of Guam shall be used to determine wages, which shall be paid to employees pursuant to this Article. Should any contract contain a renewal clause, then at the time of renewal adjustments, there shall be made stipulations contained in that contract for applying the Wage Determination, as required by this Article, so that the Wage Determination promulgated by the U.S. Department of Labor on a date most recent to the renewal date shall apply.	
	§ 5802. Benefits.	
	In addition to the Wage Determination detailed in this Article, any contract to which this Article applies shall also contain provisions mandating health and similar benefits for employees covered by this Article, such benefits having a minimum value as detailed in the Wage Determination issued and promulgated by the U.S. Department of Labor, and shall contain provisions guaranteeing a minimum of ten (10) paid holidays per annum per employee.	
(3)	That the offeror is in full compliance with 5 GCA § 5801 and § 5802, as may be applicable to the procurement referenced herein;	
	Signature of Individual if Proposer is a Sole Proprietorship;	
	Partner, if the Proposer is a Partnership;	
	Officer, if the Proposer is a Corporation	
SU	BCRIBED AND SWORN to before me thisday of, 2024.	
	Notary Public In and for the Territory of Guam My Commission Expires:	

Unitized, 10.12 AM

"REGISTER OF WAGE DETERMINATIONS UNDER | U.S. DEPARTMENT OF LABOR
THE SERVICE CONTRACT ACT | EMPLOYMENT STANDARDS ADMINISTRATION
By direction of the Secretary of Labor | WAGE AND HOUR DIVISION | WASHINGTON D.C. 20210

Wage Determination No.: 2015-5693

Daniel W. Simms Division of | Director Wage Determinations |

Revision No.: 20
Date Of Last Revision: 12/26/2023

Note: Contracts subject to the Service Contract Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026.

| If the contract is entered into on or | Executive Order | after January 30, 2022, or the | the contract. | Contract is renewed or extended (e.g., | The contractor | an option is exercised) on or after | at least \$17.20 | January 30, 2022: | wage rate liste | if it is higher

|Executive Order 14026 generally applies to |the contract.

|The contractor must pay all covered workers |at least \$17.20 per hour (or the applicable |wage rate listed on this wage determination, |if it is higher) for all hours spent |performing on the contract in 2024.

The applicable Executive Order minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the Executive Orders is available at www.dol.gov/whd/govcontracts.

Chatage Come Northean Manisons Unite Taland

States: Guam, Northern Marianas, Wake Island

Area: Guam Statewide

Northern Marianas Statewide

Wake Island Statewide

\*\*Fringe Benefits Required Follow the Occupational Listing\*\*

OCCUPATION CODE - TITLE	FOOTNOTE	RATE
01000 - Administrative Support And Clerical Occupations		
01011 - Accounting Clerk I		14.27***
01012 - Accounting Clerk II		16.02***
01013 - Accounting Clerk III		17.93
01020 - Administrative Assistant		21.43
01035 - Court Reporter		17.40
01041 - Customer Service Representative I		12.75***
01042 - Customer Service Representative II		14.23***
01043 - Customer Service Representative III		15.62***
01051 - Data Entry Operator I		12.16***
01052 - Data Entry Operator II		13.27***
01060 - Dispatcher, Motor Vehicle		17.39
01070 - Document Preparation Clerk		13.85***
01090 - Duplicating Machine Operator		13.85***
01111 - General Clerk I		11.33***
01112 - General Clerk II		12.36***
01113 - General Clerk III		13.88***
01120 - Housing Referral Assistant		19.39
01141 - Messenger Courier		11.37***
01191 - Order Clerk I		12.57***
01192 - Order Clerk II		13.71***
01261 - Personnel Assistant (Employment) I		15.95***
01262 - Personnel Assistant (Employment) II		17.85

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01263	- Personnel Assistant (Employment) III	19.89
	- Production Control Clerk	22.97
	- Rental Clerk	11.10***
01300	- Scheduler, Maintenance	15.55***
01311	- Secretary I	15.55***
01312	- Secretary II	17.40
	- Secretary III	19.39
	- Service Order Dispatcher	15.40***
	- Supply Technician	21.43
	- Survey Worker	16.96***
	- Switchboard Operator/Receptionist	10.78***
	- Travel Clerk I	13.01***
	- Travel Clerk II	14.12***
	- Travel Clerk III	15.09***
	- Word Processor I	14.53***
	- Word Processor II	16.31*** 18.26
	- Word Processor III Automotive Service Occupations	18.20
	- Automobile Body Repairer, Fiberglass	17.20
	- Automobile Body Repairer, Fiberglass - Automotive Electrician	16.16***
	- Automotive Glass Installer	15.11***
	- Automotive Worker	15.11***
	- Mobile Equipment Servicer	12.96***
	- Motor Equipment Metal Mechanic	17.20
	- Motor Equipment Metal Worker	15.11***
	- Motor Vehicle Mechanic	17.20
	- Motor Vehicle Mechanic Helper	11.87***
	- Motor Vehicle Upholstery Worker	14.06***
05280	- Motor Vehicle Wrecker	15.11***
05310	- Painter, Automotive	16.16***
05340	- Radiator Repair Specialist	15.11***
	- Tire Repairer	12.67***
	- Transmission Repair Specialist	17.20
	Food Preparation And Service Occupations	
	- Baker	11.10***
	- Cook I	14.44***
	- Cook II	16.84***
	- Dishwasher	9.69***
	- Food Service Worker	10.11*** 13.34***
	- Meat Cutter	9.73***
	- Waiter/Waitress Furniture Maintenance And Repair Occupations	9.73
	- Electrostatic Spray Painter	18.75
	- Furniture Handler	11.37***
	- Furniture Refinisher	18.75
	- Furniture Refinisher Helper	13.77***
	- Furniture Repairer, Minor	16.32***
	- Upholsterer	18.75
	General Services And Support Occupations	
	- Cleaner, Vehicles	9.69***
11060	- Elevator Operator	9.69***
11090	- Gardener	14.28***
	- Housekeeping Aide	10.13***
	- Janitor	10.13***
	- Laborer, Grounds Maintenance	10.79***
	- Maid or Houseman	9.67***
	- Pruner	9.66***
	- Tractor Operator	13.07***
	- Trail Maintenance Worker	10.79***
	- Window Cleaner	11.32***
	Health Occupations - Ambulance Driver	18.96
	- AMDUIANCE Driver - Breath Alcohol Technician	18.96
	- Certified Occupational Therapist Assistant	26.02
	- Certified Physical Therapist Assistant	26.02
		20.02

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12020 - Dental Assistant		18.79
12025 - Dental Hygienist		39.73
12030 - EKG Technician		28.73
12035 - Electroneurodiagnostic Technologist		28.73
12040 - Emergency Medical Technician		18.96
12071 - Licensed Practical Nurse I		16.95***
12072 - Licensed Practical Nurse II		18.96
12073 - Licensed Practical Nurse III		21.14
12100 - Medical Assistant		13.42***
12130 - Medical Laboratory Technician		18.82
12160 - Medical Record Clerk		14.97***
12190 - Medical Record Technician 12195 - Medical Transcriptionist		17.77 16.95***
12210 - Nuclear Medicine Technologist		41.68
12221 - Nursing Assistant I		12.43***
12222 - Nursing Assistant II		13.97***
12223 - Nursing Assistant III		15.24***
12224 - Nursing Assistant IV		17.12***
12235 - Optical Dispenser		18.96
12236 - Optical Technician		16.95***
12250 - Pharmacy Technician		15.49***
12280 - Phlebotomist		16.95***
12305 - Radiologic Technologist		28.73
12311 - Registered Nurse I		23.50
12312 - Registered Nurse II		28.73
12313 - Registered Nurse II, Specialist		28.73
12314 - Registered Nurse III		34.76
12315 - Registered Nurse III, Anesthetist		34.76
12316 - Registered Nurse IV		41.68
12317 - Scheduler (Drug and Alcohol Testing)		23.50
12320 - Substance Abuse Treatment Counselor		23.50
13000 - Information And Arts Occupations 13011 - Exhibits Specialist I		21.42
13012 - Exhibits Specialist II		26.53
13013 - Exhibits Specialist III		32.45
13041 - Illustrator I		21.42
13042 - Illustrator II		26.53
13043 - Illustrator III		32.45
13047 - Librarian		29.38
13050 - Library Aide/Clerk		17.05***
13054 - Library Information Technology Systems		26.53
Administrator		
13058 - Library Technician		18.11
13061 - Media Specialist I		19.15
13062 - Media Specialist II		21.42
13063 - Media Specialist III		23.87
13071 - Photographer I		19.15
13072 - Photographer II 13073 - Photographer III		21.42
13073 - Photographer III 13074 - Photographer IV		26.53 32.45
13074 - Photographer IV 13075 - Photographer V		39.27
13090 - Technical Order Library Clerk		21.42
13110 - Video Teleconference Technician		19.15
14000 - Information Technology Occupations		13.13
14041 - Computer Operator I		15.71***
14042 - Computer Operator II		17.22
14043 - Computer Operator III		19.19
14044 - Computer Operator IV		21.33
14045 - Computer Operator V		23.62
14071 - Computer Programmer I	(see 1)	15.73***
14072 - Computer Programmer II	(see 1)	19.50
14073 - Computer Programmer III	(see 1)	23.84
14074 - Computer Programmer IV	(see 1)	
14101 - Computer Systems Analyst I	(see 1)	24.23
14102 - Computer Systems Analyst II	(see 1)	

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14103 - Computer Systems Analyst III	(see 1)	
14150 - Peripheral Equipment Operator	,	15.71***
14160 - Personal Computer Support Technician		21.33
14170 - System Support Specialist		21.24
15000 - Instructional Occupations		
15010 - Aircrew Training Devices Instructor (M	lon-Rated)	24.23
15020 - Aircrew Training Devices Instructor (F		29.32
15030 - Air Crew Training Devices Instructor (	(Pilot)	34.91
15050 - Computer Based Training Specialist / I	Instructor	24.23
15060 - Educational Technologist		29.40
15070 - Flight Instructor (Pilot)		34.91
15080 - Graphic Artist		20.47
15085 - Maintenance Test Pilot, Fixed, Jet/Pro	р	34.91
15086 - Maintenance Test Pilot, Rotary Wing		34.91
15088 - Non-Maintenance Test/Co-Pilot		34.91
15090 - Technical Instructor		17.67
15095 - Technical Instructor/Course Developer		23.78
15110 - Test Proctor		15.70***
15120 - Tutor		15.70***
16000 - Laundry, Dry-Cleaning, Pressing And Rela	nted Occupations	
16010 - Assembler		10.83***
16030 - Counter Attendant		10.83***
16040 - Dry Cleaner		12.36***
16070 - Finisher, Flatwork, Machine		10.83***
16090 - Presser, Hand		10.83***
16110 - Presser, Machine, Drycleaning		10.83***
16130 - Presser, Machine, Shirts		10.83***
16160 - Presser, Machine, Wearing Apparel, Lau	ındry	10.83***
16190 - Sewing Machine Operator		12.88***
16220 - Tailor		13.40***
16250 - Washer, Machine		11.34***
19000 - Machine Tool Operation And Repair Occupa	ations	
19010 - Machine-Tool Operator (Tool Room)		19.46
19040 - Tool And Die Maker		24.46
21000 - Materials Handling And Packing Occupation	ons	
21020 - Forklift Operator		15.36***
21030 - Material Coordinator		22.97
21040 - Material Expediter		22.97
21050 - Material Handling Laborer		12.57***
21071 - Order Filler	`	10.62***
21080 - Production Line Worker (Food Processin	ng)	15.36***
21110 - Shipping Packer		17.12***
21130 - Shipping/Receiving Clerk		17.12***
21140 - Store Worker I		15.83***
21150 - Stock Clerk		22.26
21210 - Tools And Parts Attendant		15.36***
21410 - Warehouse Specialist		15.36***
23000 - Mechanics And Maintenance And Repair Occ	cupations	25.04
23010 - Aerospace Structural Welder		25.04 19.47
23019 - Aircraft Logs and Records Technician 23021 - Aircraft Mechanic I		23.84
23022 - Aircraft Mechanic II		25.04
23023 - Aircraft Mechanic III		26.30
23040 - Aircraft Mechanic Helper		16.58***
23050 - Aircraft, Painter		22.39
23060 - Aircraft Servicer		19.47
23070 - Aircraft Servicer  23070 - Aircraft Survival Flight Equipment Tec	chnician	22.39
23080 - Aircraft Survival Flight Equipment lec	IIIIICIAII	21.03
23091 - Aircraft worker 23091 - Aircrew Life Support Equipment (ALSE)	Mechanic	21.03
I	MECHANIC	21.03
23092 - Aircrew Life Support Equipment (ALSE)	Mechanic	23.84
II	ricellanic	23.04
23110 - Appliance Mechanic		19.46
23120 - Appliance Mechanic		15.61***
23125 - Cable Splicer		22.47
		22.4/

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23130 - Carpenter, Maintenance	17.58
23140 - Carpet Layer	18.20
23160 - Electrician, Maintenance	19.37
23181 - Electronics Technician Maintenance I	18.20
23182 - Electronics Technician Maintenance II	19.46
23183 - Electronics Technician Maintenance III	20.72
23260 - Fabric Worker	16.94***
23290 - Fire Alarm System Mechanic	16.77***
23310 - Fire Extinguisher Repairer	15.61***
23311 - Fuel Distribution System Mechanic	20.72
23312 - Fuel Distribution System Operator 23370 - General Maintenance Worker	15.61*** 13.24***
23380 - Ground Support Equipment Mechanic	23.84
23381 - Ground Support Equipment Servicer	19.47
23382 - Ground Support Equipment Worker	21.03
23391 - Gunsmith I	15.61***
23392 - Gunsmith II	18.20
23393 - Gunsmith III	20.72
23410 - Heating, Ventilation And Air-Conditioning	19.27
Mechanic	
23411 - Heating, Ventilation And Air Contidioning	20.50
Mechanic (Research Facility)	
23430 - Heavy Equipment Mechanic	19.50
23440 - Heavy Equipment Operator	18.10
23460 - Instrument Mechanic	20.72
23465 - Laboratory/Shelter Mechanic	19.46
23470 - Laborer	12.57***
23510 - Locksmith	19.46
23530 - Machinery Maintenance Mechanic	23.13
23550 - Machinist, Maintenance	20.72
23580 - Maintenance Trades Helper	11.77***
23591 - Metrology Technician I	20.72
23592 - Metrology Technician II	22.03
23593 - Metrology Technician III	23.33
23640 - Millwright 23710 - Office Appliance Repairer	20.72 19.46
23760 - Painter, Maintenance	17.04***
23790 - Pipefitter, Maintenance	19.96
23810 - Plumber, Maintenance	18.75
23820 - Pneudraulic Systems Mechanic	20.72
23850 - Rigger	20.72
23870 - Scale Mechanic	18.20
23890 - Sheet-Metal Worker, Maintenance	19.55
23910 - Small Engine Mechanic	18.20
23931 - Telecommunications Mechanic I	19.96
23932 - Telecommunications Mechanic II	21.24
23950 - Telephone Lineman	20.62
23960 - Welder, Combination, Maintenance	19.96
23965 - Well Driller	21.13
23970 - Woodcraft Worker	20.71
23980 - Woodworker	15.61***
24000 - Personal Needs Occupations	
24550 - Case Manager	15.01***
24570 - Child Care Attendant	10.09***
24580 - Child Care Center Clerk	13.25***
24610 - Chore Aide	14.06***
24620 - Family Readiness And Support Services	15.01***
Coordinator	4.5. 4.2444
24630 - Homemaker	16.12***
25000 - Plant And System Operations Occupations	22.70
25010 - Boiler Tender	22.79
25040 - Sewage Plant Operator	22.89
25070 - Stationary Engineer 25190 - Ventilation Equipment Tender	22.79 15.72***
25210 - Water Treatment Plant Operator	22.89
23210 - Marci il carilletti Fitatir Obellarot.	22.09

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27000 -	Protective Service Occupations	
	- Alarm Monitor	10.90***
27007	- Baggage Inspector	9.63***
	- Corrections Officer	14.59***
	- Court Security Officer	14.59***
	- Detection Dog Handler	10.90***
	- Detention Officer	14.59***
	- Firefighter	14.59***
	- Guard I	9.63***
_	- Guard II	10.90***
	- Police Officer I	14.59***
_	- Police Officer II	16.21***
	Recreation Occupations	10.21
	•	13.24***
	- Carnival Equipment Operator	14.46***
	- Carnival Equipment Repairer	9.78***
	- Carnival Worker	
	- Gate Attendant/Gate Tender	13.18***
	- Lifeguard	11.01***
	- Park Attendant (Aide)	14.74***
	- Recreation Aide/Health Facility Attendant	11.84***
	- Recreation Specialist	18.26
28630	- Sports Official	11.74***
	- Swimming Pool Operator	17.71
29000 -	Stevedoring/Longshoremen Occupational Services	
29010	- Blocker And Bracer	26.02
29020	- Hatch Tender	26.02
29030	- Line Handler	26.02
29041	- Stevedore I	24.21
	- Stevedore II	27.82
	Technical Occupations	
	- Air Traffic Control Specialist, Center (HFO)	(see 2) 43.06
	- Air Traffic Control Specialist, Station (HFO)	
30012	- Air Traffic Control Specialist, Terminal (HFO)	(see 2) 32.70
30012 30021	<ul><li>- Air Traffic Control Specialist, Terminal (HFO)</li><li>- Archeological Technician I</li></ul>	(see 2) 32.70 18.17
30012 30021 30022	<ul><li>Air Traffic Control Specialist, Terminal (HFO)</li><li>Archeological Technician I</li><li>Archeological Technician II</li></ul>	(see 2) 32.70 18.17 20.33
30012 30021 30022 30023	<ul> <li>Air Traffic Control Specialist, Terminal (HFO)</li> <li>Archeological Technician I</li> <li>Archeological Technician II</li> <li>Archeological Technician III</li> </ul>	(see 2) 32.70 18.17 20.33 25.19
30012 30021 30022 30023 30030	<ul> <li>Air Traffic Control Specialist, Terminal (HFO)</li> <li>Archeological Technician I</li> <li>Archeological Technician II</li> <li>Archeological Technician III</li> <li>Cartographic Technician</li> </ul>	(see 2) 32.70 18.17 20.33 25.19 25.19
30012 30021 30022 30023 30030 30040	<ul> <li>Air Traffic Control Specialist, Terminal (HFO)</li> <li>Archeological Technician I</li> <li>Archeological Technician II</li> <li>Archeological Technician III</li> <li>Cartographic Technician</li> <li>Civil Engineering Technician</li> </ul>	(see 2) 32.70 18.17 20.33 25.19 25.19 25.19
30012 30021 30022 30023 30030 30040 30051	<ul> <li>Air Traffic Control Specialist, Terminal (HFO)</li> <li>Archeological Technician I</li> <li>Archeological Technician III</li> <li>Archeological Technician IIII</li> <li>Cartographic Technician</li> <li>Civil Engineering Technician</li> <li>Cryogenic Technician I</li> </ul>	(see 2) 32.70 18.17 20.33 25.19 25.19 25.19 27.89
30012 30021 30022 30023 30030 30040 30051 30052	<ul> <li>Air Traffic Control Specialist, Terminal (HFO)</li> <li>Archeological Technician I</li> <li>Archeological Technician III</li> <li>Cartographic Technician</li> <li>Civil Engineering Technician</li> <li>Cryogenic Technician I</li> <li>Cryogenic Technician II</li> </ul>	(see 2) 32.70 18.17 20.33 25.19 25.19 25.19 27.89 30.80
30012 30021 30022 30023 30030 30040 30051 30052 30061	<ul> <li>Air Traffic Control Specialist, Terminal (HFO)</li> <li>Archeological Technician I</li> <li>Archeological Technician III</li> <li>Cartographic Technician</li> <li>Civil Engineering Technician</li> <li>Cryogenic Technician I</li> <li>Cryogenic Technician II</li> <li>Drafter/CAD Operator I</li> </ul>	(see 2) 32.70 18.17 20.33 25.19 25.19 25.19 27.89 30.80 18.17
30012 30021 30022 30023 30030 30040 30051 30052 30061 30062	<ul> <li>Air Traffic Control Specialist, Terminal (HFO)</li> <li>Archeological Technician I</li> <li>Archeological Technician III</li> <li>Archeological Technician III</li> <li>Cartographic Technician</li> <li>Civil Engineering Technician</li> <li>Cryogenic Technician I</li> <li>Cryogenic Technician II</li> <li>Drafter/CAD Operator I</li> <li>Drafter/CAD Operator II</li> </ul>	(see 2) 32.70 18.17 20.33 25.19 25.19 25.19 27.89 30.80 18.17 20.33
30012 30021 30022 30023 30030 30040 30051 30052 30061 30062 30063	<ul> <li>Air Traffic Control Specialist, Terminal (HFO)</li> <li>Archeological Technician I</li> <li>Archeological Technician III</li> <li>Archeological Technician III</li> <li>Cartographic Technician</li> <li>Civil Engineering Technician</li> <li>Cryogenic Technician I</li> <li>Cryogenic Technician II</li> <li>Drafter/CAD Operator I</li> <li>Drafter/CAD Operator III</li> </ul>	(see 2) 32.70 18.17 20.33 25.19 25.19 25.19 27.89 30.80 18.17 20.33 22.66
30012 30021 30022 30023 30030 30040 30051 30062 30061 30062 30063	<ul> <li>Air Traffic Control Specialist, Terminal (HFO)</li> <li>Archeological Technician I</li> <li>Archeological Technician III</li> <li>Archeological Technician IIII</li> <li>Cartographic Technician</li> <li>Civil Engineering Technician</li> <li>Cryogenic Technician I</li> <li>Cryogenic Technician II</li> <li>Drafter/CAD Operator I</li> <li>Drafter/CAD Operator III</li> <li>Drafter/CAD Operator IV</li> </ul>	(see 2) 32.70 18.17 20.33 25.19 25.19 25.19 27.89 30.80 18.17 20.33 22.66 27.89
30012 30021 30022 30023 30030 30040 30051 30062 30061 30062 30063 30064 30081	<ul> <li>Air Traffic Control Specialist, Terminal (HFO)</li> <li>Archeological Technician I</li> <li>Archeological Technician III</li> <li>Archeological Technician IIII</li> <li>Cartographic Technician</li> <li>Civil Engineering Technician</li> <li>Cryogenic Technician I</li> <li>Cryogenic Technician II</li> <li>Drafter/CAD Operator I</li> <li>Drafter/CAD Operator III</li> <li>Drafter/CAD Operator IV</li> <li>Engineering Technician I</li> </ul>	(see 2) 32.70 18.17 20.33 25.19 25.19 25.19 27.89 30.80 18.17 20.33 22.66
30012 30021 30022 30023 30030 30040 30051 30062 30061 30062 30063 30064 30081	<ul> <li>Air Traffic Control Specialist, Terminal (HFO)</li> <li>Archeological Technician I</li> <li>Archeological Technician III</li> <li>Archeological Technician IIII</li> <li>Cartographic Technician</li> <li>Civil Engineering Technician</li> <li>Cryogenic Technician I</li> <li>Cryogenic Technician II</li> <li>Drafter/CAD Operator I</li> <li>Drafter/CAD Operator III</li> <li>Drafter/CAD Operator IVI</li> <li>Engineering Technician I</li> <li>Engineering Technician I</li> <li>Engineering Technician II</li> </ul>	(see 2) 32.70 18.17 20.33 25.19 25.19 25.19 27.89 30.80 18.17 20.33 22.66 27.89
30012 30021 30022 30023 30030 30040 30051 30052 30061 30062 30063 30064 30081 30082 30083	<ul> <li>Air Traffic Control Specialist, Terminal (HFO)</li> <li>Archeological Technician I</li> <li>Archeological Technician III</li> <li>Archeological Technician IIII</li> <li>Cartographic Technician</li> <li>Civil Engineering Technician</li> <li>Cryogenic Technician I</li> <li>Cryogenic Technician II</li> <li>Drafter/CAD Operator I</li> <li>Drafter/CAD Operator III</li> <li>Drafter/CAD Operator IV</li> <li>Engineering Technician I</li> <li>Engineering Technician II</li> <li>Engineering Technician III</li> </ul>	(see 2) 32.70 18.17 20.33 25.19 25.19 25.19 27.89 30.80 18.17 20.33 22.66 27.89 16.19***
30012 30021 30022 30023 30030 30040 30051 30052 30061 30062 30063 30064 30081 30082 30083	<ul> <li>Air Traffic Control Specialist, Terminal (HFO)</li> <li>Archeological Technician I</li> <li>Archeological Technician III</li> <li>Archeological Technician IIII</li> <li>Cartographic Technician</li> <li>Civil Engineering Technician</li> <li>Cryogenic Technician I</li> <li>Cryogenic Technician II</li> <li>Drafter/CAD Operator I</li> <li>Drafter/CAD Operator III</li> <li>Drafter/CAD Operator IVI</li> <li>Engineering Technician I</li> <li>Engineering Technician I</li> <li>Engineering Technician II</li> </ul>	(see 2) 32.70 18.17 20.33 25.19 25.19 25.19 27.89 30.80 18.17 20.33 22.66 27.89 16.19*** 18.17
30012 30021 30022 30023 30030 30040 30051 30052 30061 30062 30063 30064 30081 30082 30083 30084	<ul> <li>Air Traffic Control Specialist, Terminal (HFO)</li> <li>Archeological Technician I</li> <li>Archeological Technician III</li> <li>Archeological Technician IIII</li> <li>Cartographic Technician</li> <li>Civil Engineering Technician</li> <li>Cryogenic Technician I</li> <li>Cryogenic Technician II</li> <li>Drafter/CAD Operator I</li> <li>Drafter/CAD Operator III</li> <li>Drafter/CAD Operator IV</li> <li>Engineering Technician I</li> <li>Engineering Technician II</li> <li>Engineering Technician III</li> </ul>	(see 2) 32.70 18.17 20.33 25.19 25.19 25.19 27.89 30.80 18.17 20.33 22.66 27.89 16.19*** 18.17 20.33
30012 30021 30022 30023 30030 30040 30051 30052 30061 30062 30063 30084 30081 30082 30083	<ul> <li>Air Traffic Control Specialist, Terminal (HFO)</li> <li>Archeological Technician I</li> <li>Archeological Technician III</li> <li>Cartographic Technician</li> <li>Civil Engineering Technician</li> <li>Cryogenic Technician I</li> <li>Cryogenic Technician II</li> <li>Drafter/CAD Operator I</li> <li>Drafter/CAD Operator III</li> <li>Drafter/CAD Operator IV</li> <li>Engineering Technician I</li> <li>Engineering Technician II</li> <li>Engineering Technician II</li> <li>Engineering Technician III</li> <li>Engineering Technician IV</li> <li>Engineering Technician IV</li> <li>Engineering Technician V</li> </ul>	(see 2) 32.70 18.17 20.33 25.19 25.19 25.19 27.89 30.80 18.17 20.33 22.66 27.89 16.19*** 18.17 20.33 25.19
30012 30021 30022 30023 30030 30040 30051 30052 30061 30062 30063 30084 30081 30082 30083 30084 30085 30086	<ul> <li>Air Traffic Control Specialist, Terminal (HFO)</li> <li>Archeological Technician I</li> <li>Archeological Technician III</li> <li>Cartographic Technician</li> <li>Civil Engineering Technician</li> <li>Cryogenic Technician I</li> <li>Cryogenic Technician II</li> <li>Drafter/CAD Operator I</li> <li>Drafter/CAD Operator III</li> <li>Drafter/CAD Operator IV</li> <li>Engineering Technician I</li> <li>Engineering Technician II</li> <li>Engineering Technician II</li> <li>Engineering Technician III</li> <li>Engineering Technician IV</li> </ul>	(see 2) 32.70 18.17 20.33 25.19 25.19 25.19 27.89 30.80 18.17 20.33 22.66 27.89 16.19*** 18.17 20.33 25.19 30.80 37.27
30012 30021 30022 30023 30030 30040 30051 30052 30061 30062 30063 30084 30082 30083 30084 30085 30086 30090	- Air Traffic Control Specialist, Terminal (HFO) - Archeological Technician I - Archeological Technician III - Archeological Technician III - Cartographic Technician - Civil Engineering Technician - Cryogenic Technician I - Cryogenic Technician II - Drafter/CAD Operator I - Drafter/CAD Operator II - Drafter/CAD Operator III - Drafter/CAD Operator IV - Engineering Technician I - Engineering Technician II - Engineering Technician III - Engineering Technician IV - Engineering Technician V - Engineering Technician VI - Environmental Technician	(see 2) 32.70 18.17 20.33 25.19 25.19 25.19 27.89 30.80 18.17 20.33 22.66 27.89 16.19*** 18.17 20.33 25.19 30.80 37.27 25.19
30012 30021 30022 30023 30030 30040 30051 30062 30063 30064 30081 30082 30083 30084 30085 30086 30090 30095	<ul> <li>Air Traffic Control Specialist, Terminal (HFO)</li> <li>Archeological Technician I</li> <li>Archeological Technician III</li> <li>Cartographic Technician III</li> <li>Civil Engineering Technician</li> <li>Cryogenic Technician I</li> <li>Cryogenic Technician II</li> <li>Drafter/CAD Operator I</li> <li>Drafter/CAD Operator III</li> <li>Drafter/CAD Operator IV</li> <li>Engineering Technician II</li> <li>Engineering Technician II</li> <li>Engineering Technician II</li> <li>Engineering Technician III</li> <li>Engineering Technician IV</li> <li>Engineering Technician V</li> <li>Engineering Technician VI</li> <li>Environmental Technician</li> <li>Evidence Control Specialist</li> </ul>	(see 2) 32.70 18.17 20.33 25.19 25.19 25.19 27.89 30.80 18.17 20.33 22.66 27.89 16.19*** 18.17 20.33 25.19 30.80 37.27 25.19 25.19
30012 30021 30022 30023 30030 30040 30051 30062 30063 30064 30081 30082 30083 30084 30085 30086 30090 30095 30210	<ul> <li>Air Traffic Control Specialist, Terminal (HFO)</li> <li>Archeological Technician I</li> <li>Archeological Technician III</li> <li>Cartographic Technician III</li> <li>Civil Engineering Technician</li> <li>Cryogenic Technician I</li> <li>Cryogenic Technician II</li> <li>Drafter/CAD Operator I</li> <li>Drafter/CAD Operator III</li> <li>Drafter/CAD Operator IV</li> <li>Engineering Technician II</li> <li>Engineering Technician II</li> <li>Engineering Technician II</li> <li>Engineering Technician IV</li> <li>Engineering Technician V</li> <li>Engineering Technician VI</li> <li>Engineering Technician VI</li> <li>Environmental Technician</li> <li>Evidence Control Specialist</li> <li>Laboratory Technician</li> </ul>	(see 2) 32.70 18.17 20.33 25.19 25.19 25.19 27.89 30.80 18.17 20.33 22.66 27.89 16.19*** 18.17 20.33 25.19 30.80 37.27 25.19
30012 30021 30022 30023 30030 30040 30051 30062 30063 30064 30081 30082 30083 30085 30086 30090 30095 30210	<ul> <li>Air Traffic Control Specialist, Terminal (HFO)</li> <li>Archeological Technician I</li> <li>Archeological Technician III</li> <li>Cartographic Technician III</li> <li>Cartographic Technician</li> <li>Civil Engineering Technician</li> <li>Cryogenic Technician I</li> <li>Cryogenic Technician II</li> <li>Drafter/CAD Operator I</li> <li>Drafter/CAD Operator III</li> <li>Drafter/CAD Operator IV</li> <li>Engineering Technician I</li> <li>Engineering Technician II</li> <li>Engineering Technician II</li> <li>Engineering Technician IV</li> <li>Engineering Technician V</li> <li>Engineering Technician VI</li> <li>Engineering Technician VI</li> <li>Environmental Technician</li> <li>Evidence Control Specialist</li> <li>Laboratory Technician</li> <li>Latent Fingerprint Technician I</li> </ul>	(see 2) 32.70 18.17 20.33 25.19 25.19 25.19 27.89 30.80 18.17 20.33 22.66 27.89 16.19*** 18.17 20.33 25.19 30.80 37.27 25.19 25.19 25.66 27.89
30012 30021 30022 30023 30030 30040 30051 30062 30061 30062 30063 30084 30085 30086 30086 30090 30095 30210 30221 30222	<ul> <li>Air Traffic Control Specialist, Terminal (HFO)</li> <li>Archeological Technician I</li> <li>Archeological Technician III</li> <li>Cartographic Technician III</li> <li>Cartographic Technician</li> <li>Civil Engineering Technician</li> <li>Cryogenic Technician I</li> <li>Cryogenic Technician II</li> <li>Drafter/CAD Operator I</li> <li>Drafter/CAD Operator III</li> <li>Drafter/CAD Operator IV</li> <li>Engineering Technician I</li> <li>Engineering Technician II</li> <li>Engineering Technician III</li> <li>Engineering Technician IV</li> <li>Engineering Technician V</li> <li>Engineering Technician VI</li> <li>Engineering Technician VI</li> <li>Environmental Technician</li> <li>Evidence Control Specialist</li> <li>Laboratory Technician</li> <li>Latent Fingerprint Technician II</li> </ul>	(see 2) 32.70 18.17 20.33 25.19 25.19 25.19 27.89 30.80 18.17 20.33 22.66 27.89 16.19*** 18.17 20.33 25.19 30.80 37.27 25.19 25.19 22.66 27.89 30.80
30012 30021 30022 30023 30030 30040 30051 30062 30061 30062 30063 30084 30085 30086 30090 30095 30210 30221 30222 30240	<ul> <li>Air Traffic Control Specialist, Terminal (HFO)</li> <li>Archeological Technician I</li> <li>Archeological Technician III</li> <li>Cartographic Technician III</li> <li>Cartographic Technician</li> <li>Civil Engineering Technician</li> <li>Cryogenic Technician I</li> <li>Cryogenic Technician II</li> <li>Drafter/CAD Operator I</li> <li>Drafter/CAD Operator III</li> <li>Drafter/CAD Operator IV</li> <li>Engineering Technician I</li> <li>Engineering Technician II</li> <li>Engineering Technician III</li> <li>Engineering Technician IV</li> <li>Engineering Technician V</li> <li>Engineering Technician VI</li> <li>Environmental Technician</li> <li>Evidence Control Specialist</li> <li>Laboratory Technician</li> <li>Latent Fingerprint Technician II</li> <li>Mathematical Technician</li> </ul>	(see 2) 32.70 18.17 20.33 25.19 25.19 25.19 27.89 30.80 18.17 20.33 22.66 27.89 16.19*** 18.17 20.33 25.19 30.80 37.27 25.19 25.19 22.66 27.89 30.80 25.19
30012 30021 30022 30023 30030 30040 30051 30062 30063 30064 30081 30082 30083 30084 30085 30086 30090 30095 30210 30221 30222 30240 30361	- Air Traffic Control Specialist, Terminal (HFO) - Archeological Technician I - Archeological Technician III - Archeological Technician III - Cartographic Technician - Civil Engineering Technician - Cryogenic Technician I - Cryogenic Technician II - Drafter/CAD Operator I - Drafter/CAD Operator II - Drafter/CAD Operator IV - Engineering Technician I - Engineering Technician II - Engineering Technician III - Engineering Technician IV - Engineering Technician V - Engineering Technician V - Engineering Technician - Evidence Control Specialist - Laboratory Technician - Latent Fingerprint Technician II - Mathematical Technician - Paralegal/Legal Assistant I	(see 2) 32.70 18.17 20.33 25.19 25.19 25.19 27.89 30.80 18.17 20.33 22.66 27.89 16.19*** 18.17 20.33 25.19 30.80 37.27 25.19 25.19 25.19 25.19 25.19 25.19 25.19 25.19 25.19 25.19
30012 30021 30022 30023 30030 30040 30051 30062 30061 30062 30063 30084 30081 30085 30085 30086 30090 30095 30210 30221 30222 30240 30361 30362	- Air Traffic Control Specialist, Terminal (HFO) - Archeological Technician I - Archeological Technician III - Archeological Technician III - Cartographic Technician - Civil Engineering Technician - Civil Engineering Technician - Cryogenic Technician I - Cryogenic Technician II - Drafter/CAD Operator I - Drafter/CAD Operator III - Drafter/CAD Operator IV - Engineering Technician I - Engineering Technician II - Engineering Technician III - Engineering Technician IV - Engineering Technician V - Engineering Technician V - Engineering Technician - Evidence Control Specialist - Laboratory Technician - Latent Fingerprint Technician II - Mathematical Technician - Paralegal/Legal Assistant I - Paralegal/Legal Assistant II	(see 2) 32.70 18.17 20.33 25.19 25.19 25.19 27.89 30.80 18.17 20.33 22.66 27.89 16.19*** 18.17 20.33 25.19 30.80 37.27 25.19 25.19 266 27.89 30.80 25.19 22.66 27.89 30.80 25.19 24.21
30012 30021 30022 30023 30030 30040 30051 30062 30063 30064 30081 30082 30083 30084 30085 30086 30090 30095 30210 30221 30222 30240 30361 30362 30363	- Air Traffic Control Specialist, Terminal (HFO) - Archeological Technician I - Archeological Technician II - Archeological Technician III - Cartographic Technician - Civil Engineering Technician - Cryogenic Technician I - Cryogenic Technician II - Drafter/CAD Operator I - Drafter/CAD Operator III - Drafter/CAD Operator IV - Engineering Technician I - Engineering Technician II - Engineering Technician III - Engineering Technician IV - Engineering Technician V - Engineering Technician V - Engineering Technician V - Engineering Technician II - Latent Fingerprint Technician I - Latent Fingerprint Technician II - Mathematical Technician - Paralegal/Legal Assistant II - Paralegal/Legal Assistant III	(see 2) 32.70 18.17 20.33 25.19 25.19 25.19 27.89 30.80 18.17 20.33 22.66 27.89 16.19*** 18.17 20.33 25.19 30.80 37.27 25.19 25.19 25.19 25.19 25.19 25.19 25.19 25.19 25.19 25.19 25.19 22.66 27.89 30.80 25.19 19.54 24.21 29.61
30012 30021 30022 30023 30030 30040 30051 30062 30061 30062 30063 30081 30082 30083 30084 30085 30086 30090 30095 30210 30221 30222 30240 30361 30362 30363 30364	- Air Traffic Control Specialist, Terminal (HFO) - Archeological Technician I - Archeological Technician II - Archeological Technician III - Cartographic Technician - Civil Engineering Technician - Cryogenic Technician I - Cryogenic Technician II - Drafter/CAD Operator I - Drafter/CAD Operator II - Drafter/CAD Operator IV - Engineering Technician I - Engineering Technician II - Engineering Technician III - Engineering Technician IV - Engineering Technician V - Engineering Technician V - Engineering Technician - Evidence Control Specialist - Laboratory Technician - Latent Fingerprint Technician II - Mathematical Technician - Paralegal/Legal Assistant II - Paralegal/Legal Assistant III - Paralegal/Legal Assistant IV	(see 2) 32.70 18.17 20.33 25.19 25.19 25.19 27.89 30.80 18.17 20.33 22.66 27.89 16.19*** 18.17 20.33 25.19 30.80 37.27 25.19
30012 30021 30022 30030 30040 30051 30052 30061 30062 30063 30084 30085 30085 30086 30085 30086 30090 30095 30210 30221 30222 30240 30361 30362 30363 30364 30375	- Air Traffic Control Specialist, Terminal (HFO) - Archeological Technician I - Archeological Technician III - Archeological Technician III - Cartographic Technician - Civil Engineering Technician - Cryogenic Technician I - Cryogenic Technician II - Drafter/CAD Operator I - Drafter/CAD Operator II - Drafter/CAD Operator IV - Engineering Technician I - Engineering Technician II - Engineering Technician III - Engineering Technician IV - Engineering Technician IV - Engineering Technician V - Engineering Technician V - Engineering Technician V - Engineering Technician II - Latent Fingerprint Technician I - Latent Fingerprint Technician II - Mathematical Technician - Paralegal/Legal Assistant II - Paralegal/Legal Assistant III - Paralegal/Legal Assistant IV - Petroleum Supply Specialist	(see 2) 32.70 18.17 20.33 25.19 25.19 25.19 27.89 30.80 18.17 20.33 22.66 27.89 16.19*** 18.17 20.33 25.19 30.80 37.27 25.19 25.19 25.19 25.19 25.19 25.19 25.19 25.19 25.19 25.19 25.19 25.19 25.19 25.19 266 27.89 30.80 25.19 19.54 24.21 29.61 35.83 30.80
30012 30021 30022 30023 30030 30040 30051 30062 30061 30062 30063 30082 30083 30084 30085 30085 30086 30090 30095 30210 30221 30222 30240 30361 30362 30363 30364 30375 30390	- Air Traffic Control Specialist, Terminal (HFO) - Archeological Technician I - Archeological Technician III - Archeological Technician III - Cartographic Technician - Civil Engineering Technician - Cryogenic Technician I - Cryogenic Technician II - Drafter/CAD Operator I - Drafter/CAD Operator II - Drafter/CAD Operator IV - Engineering Technician I - Engineering Technician II - Engineering Technician II - Engineering Technician IV - Engineering Technician V - Engineering Technician V - Engineering Technician V - Engineering Technician - Evidence Control Specialist - Laboratory Technician - Latent Fingerprint Technician II - Mathematical Technician - Paralegal/Legal Assistant II - Paralegal/Legal Assistant III - Paralegal/Legal Assistant IV - Petroleum Supply Specialist - Photo-Optics Technician	(see 2) 32.70 18.17 20.33 25.19 25.19 25.19 27.89 30.80 18.17 20.33 22.66 27.89 16.19*** 18.17 20.33 25.19 30.80 37.27 25.19
30012 30021 30022 30023 30030 30040 30051 30062 30063 30064 30081 30082 30083 30084 30085 30086 30090 30095 30210 30221 30222 30240 30361 30362 30363 30364 30375 30390 30395	- Air Traffic Control Specialist, Terminal (HFO) - Archeological Technician I - Archeological Technician III - Archeological Technician III - Cartographic Technician - Civil Engineering Technician - Cryogenic Technician I - Cryogenic Technician II - Drafter/CAD Operator I - Drafter/CAD Operator II - Drafter/CAD Operator IV - Engineering Technician I - Engineering Technician II - Engineering Technician III - Engineering Technician IV - Engineering Technician V - Engineering Technician V - Engineering Technician V - Engineering Technician - Evidence Control Specialist - Laboratory Technician - Latent Fingerprint Technician I - Latent Fingerprint Technician II - Mathematical Technician - Paralegal/Legal Assistant II - Paralegal/Legal Assistant III - Paralegal/Legal Assistant IV - Petroleum Supply Specialist - Photo-Optics Technician - Radiation Control Technician	(see 2) 32.70 18.17 20.33 25.19 25.19 25.19 27.89 30.80 18.17 20.33 22.66 27.89 16.19*** 18.17 20.33 25.19 30.80 37.27 25.19 25.10 2
30012 30021 30022 30023 30030 30040 30051 30062 30063 30064 30082 30083 30084 30085 30085 30086 30090 30095 30210 30221 30222 30240 30361 30362 30363 30364 30375 30390 30395 30461	- Air Traffic Control Specialist, Terminal (HFO) - Archeological Technician I - Archeological Technician III - Archeological Technician III - Cartographic Technician - Civil Engineering Technician - Cryogenic Technician I - Cryogenic Technician II - Drafter/CAD Operator I - Drafter/CAD Operator II - Drafter/CAD Operator IV - Engineering Technician I - Engineering Technician II - Engineering Technician II - Engineering Technician IV - Engineering Technician V - Engineering Technician V - Engineering Technician V - Engineering Technician - Evidence Control Specialist - Laboratory Technician - Latent Fingerprint Technician II - Mathematical Technician - Paralegal/Legal Assistant II - Paralegal/Legal Assistant III - Paralegal/Legal Assistant IV - Petroleum Supply Specialist - Photo-Optics Technician	(see 2) 32.70 18.17 20.33 25.19 25.19 25.19 27.89 30.80 18.17 20.33 22.66 27.89 16.19*** 18.17 20.33 25.19 30.80 37.27 25.19

I/17/24, 10:12 AM	SAM.gov	
30463 - Technical Writer III	3	37.27
30491 - Unexploded Ordnance (UXO) Technician I		27.37
30492 - Unexploded Ordnance (UXO) Technician II		33.11
30493 - Unexploded Ordnance (UXO) Technician III		39.69
30494 - Unexploded (UXO) Safety Escort		27.37
30495 - Unexploded (UXO) Sweep Personnel		27.37
30501 - Weather Forecaster I		27.89
30502 - Weather Forecaster II		33.93
30620 - Weather Observer, Combined Upper Air Or		22.66
Surface Programs	` ,	
30621 - Weather Observer, Senior	(see 2)	25.19
31000 - Transportation/Mobile Equipment Operation Occupa	tions	
31010 - Airplane Pilot	3	33.11
31020 - Bus Aide	8.9	97***
31030 - Bus Driver	11.7	73***
31043 - Driver Courier	10.2	26***
31260 - Parking and Lot Attendant	9.9	91***
31290 - Shuttle Bus Driver	11.6	55***
31310 - Taxi Driver		11***
31361 - Truckdriver, Light	11.2	21***
31362 - Truckdriver, Medium	12.3	L6***
31363 - Truckdriver, Heavy		L1***
31364 - Truckdriver, Tractor-Trailer	16.3	L1***
99000 - Miscellaneous Occupations		
99020 - Cabin Safety Specialist		L4***
99030 - Cashier		91***
99050 - Desk Clerk	9.7	71***
99095 - Embalmer		27.37
99130 - Flight Follower		27.37
99251 - Laboratory Animal Caretaker I		24.31
99252 - Laboratory Animal Caretaker II		26.56
99260 - Marketing Analyst		21.54
99310 - Mortician		27.37
99410 - Pest Controller		7***
99510 - Photofinishing Worker		38***
99710 - Recycling Laborer		L7.32
99711 - Recycling Specialist		23.38
99730 - Refuse Collector		10***
99810 - Sales Clerk		53***
99820 - School Crossing Guard		L7.96
99830 - Survey Party Chief		23.99
99831 - Surveying Aide		55***
99832 - Surveying Technician		L7.73
99840 - Vending Machine Attendant		24.31
99841 - Vending Machine Repairer		30.96
99842 - Vending Machine Repairer Helper	•	24.31

\*\*\*Workers in this classification may be entitled to a higher minimum wage under Executive Order 14026 (\$17.20 per hour). Please see the Note at the top of the wage determination for more information. Please also note that the minimum wage requirements of Executive Order 14026 are not currently being enforced as to contracts or contract-like instruments entered into with the federal government in connection with seasonal recreational services or seasonal recreational equipment rental for the general public on federal lands. The minimum wage requirements of Executive Order 14026 also are not currently being enforced as to any contract or subcontract to which the states of Texas, Louisiana, or Mississippi, including their agencies, are a party.

\_\_\_\_\_\_

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HEALTH & WELFARE: \$4.98 per hour, up to 40 hours per week, or \$199.20 per week or \$863.20 per month

HEALTH & WELFARE EO 13706: \$4.57 per hour, up to 40 hours per week, or \$182.80 per week, or \$792.13 per month\*

\*This rate is to be used only when compensating employees for performance on an SCA-covered contract also covered by EO 13706, Establishing Paid Sick Leave for Federal Contractors. A contractor may not receive credit toward its SCA obligations for any paid sick leave provided pursuant to EO 13706.

VACATION: 2 weeks paid vacation after 1 year of service with a contractor or successor; and 4 weeks after 3 years. Length of service includes the whole span of continuous service with the present contractor or successor, wherever employed, and with the predecessor contractors in the performance of similar work at the same Federal facility. (Reg. 29 CFR 4.173)

HOLIDAYS: A minimum of eleven paid holidays per year: New Year's Day, Martin Luther King Jr.'s Birthday, Washington's Birthday, Memorial Day, Juneteenth National Independence Day, Independence Day, Labor Day, Columbus Day, Veterans' Day, Thanksgiving Day, and Christmas Day. (A contractor may substitute for any of the named holidays another day off with pay in accordance with a plan communicated to the employees involved.) (See 29 CFR 4.174)

THE OCCUPATIONS WHICH HAVE NUMBERED FOOTNOTES IN PARENTHESES RECEIVE THE FOLLOWING:

1) COMPUTER EMPLOYEES: This wage determination does not apply to any individual employed in a bona fide executive, administrative, or professional capacity, as defined in 29 C.F.R. Part 541. (See 41 C.F.R. 6701(3)). Because most Computer Systems Analysts and Computer Programmers who are paid at least \$27.63 per hour (or at least \$684 per week if paid on a salary or fee basis) likely qualify as exempt computer professionals under 29 U.S.C. 213(a)(1) and 29 U.S.C. 213(a)(17), this wage determination may not include wage rates for all occupations within those job families. In such instances, a conformance will be necessary if there are nonexempt employees in these job families working on the contract.

Job titles vary widely and change quickly in the computer industry, and are not determinative of whether an employee is an exempt computer professional. To be exempt, computer employees who satisfy the compensation requirements must also have a primary duty that consists of:

- (1) The application of systems analysis techniques and procedures, including consulting with users, to determine hardware, software or system functional specifications;
- (2) The design, development, documentation, analysis, creation, testing or modification of computer systems or programs, including prototypes, based on and related to user or system design specifications;
- (3) The design, documentation, testing, creation or modification of computer programs related to machine operating systems; or
- (4) A combination of the aforementioned duties, the performance of which requires the same level of skills. (29 C.F.R. 541.400).

Any computer employee who meets the applicable compensation requirements and the above duties test qualifies as an exempt computer professional under both section 13(a)(1) and section 13(a)(17) of the Fair Labor Standards Act. (Field Assistance Bulletin No. 2006-3 (Dec. 14, 2006)). Accordingly, this wage determination will not apply to any exempt computer employee regardless of which of these two exemptions is utilized.

2) AIR TRAFFIC CONTROLLERS AND WEATHER OBSERVERS - NIGHT PAY & SUNDAY PAY: If you

work at night as part of a regular tour of duty, you will earn a night differential and receive an additional 10% of basic pay for any hours worked between 6pm and 6am. If you are a full-time employed (40 hours a week) and Sunday is part of your regularly scheduled workweek, you are paid at your rate of basic pay plus a Sunday premium of 25% of your basic rate for each hour of Sunday work which is not overtime (i.e. occasional work on Sunday outside the normal tour of duty is considered overtime work).

### \*\* HAZARDOUS PAY DIFFERENTIAL \*\*

An 8 percent differential is applicable to employees employed in a position that represents a high degree of hazard when working with or in close proximity to ordnance, explosives, and incendiary materials. This includes work such as screening, blending, dying, mixing, and pressing of sensitive ordnance, explosives, and pyrotechnic compositions such as lead azide, black powder and photoflash powder. All dry-house activities involving propellants or explosives. Demilitarization, modification, renovation, demolition, and maintenance operations on sensitive ordnance, explosives and incendiary materials. All operations involving re-grading and cleaning of artillery ranges.

A 4 percent differential is applicable to employees employed in a position that represents a low degree of hazard when working with, or in close proximity to ordnance, (or employees possibly adjacent to) explosives and incendiary materials which involves potential injury such as laceration of hands, face, or arms of the employee engaged in the operation, irritation of the skin, minor burns and the like; minimal damage to immediate or adjacent work area or equipment being used. All operations involving, unloading, storage, and hauling of ordnance, explosive, and incendiary ordnance material other than small arms ammunition. These differentials are only applicable to work that has been specifically designated by the agency for ordnance, explosives, and incendiary material differential pay.

### \*\* UNIFORM ALLOWANCE \*\*

If employees are required to wear uniforms in the performance of this contract (either by the terms of the Government contract, by the employer, by the state or local law, etc.), the cost of furnishing such uniforms and maintaining (by laundering or dry cleaning) such uniforms is an expense that may not be borne by an employee where such cost reduces the hourly rate below that required by the wage determination. The Department of Labor will accept payment in accordance with the following standards as compliance:

The contractor or subcontractor is required to furnish all employees with an adequate number of uniforms without cost or to reimburse employees for the actual cost of the uniforms. In addition, where uniform cleaning and maintenance is made the responsibility of the employee, all contractors and subcontractors subject to this wage determination shall (in the absence of a bona fide collective bargaining agreement providing for a different amount, or the furnishing of contrary affirmative proof as to the actual cost), reimburse all employees for such cleaning and maintenance at a rate of \$3.35 per week (or \$.67 cents per day). However, in those instances where the uniforms furnished are made of ""wash and wear"" materials, may be routinely washed and dried with other personal garments, and do not require any special treatment such as dry cleaning, daily washing, or commercial laundering in order to meet the cleanliness or appearance standards set by the terms of the Government contract, by the contractor, by law, or by the nature of the work, there is no requirement that employees be reimbursed for uniform maintenance costs.

### \*\* SERVICE CONTRACT ACT DIRECTORY OF OCCUPATIONS \*\*

The duties of employees under job titles listed are those described in the ""Service Contract Act Directory of Occupations"", Fifth Edition (Revision 1), dated September 2015, unless otherwise indicated.

\*\* REQUEST FOR AUTHORIZATION OF ADDITIONAL CLASSIFICATION AND WAGE RATE, Standard Form 1444 (SF-1444) \*\*

### Conformance Process:

The contracting officer shall require that any class of service employee which is not listed herein and which is to be employed under the contract (i.e., the work to be performed is not performed by any classification listed in the wage determination), be classified by the contractor so as to provide a reasonable relationship (i.e., appropriate level of skill comparison) between such unlisted classifications and the classifications listed in the wage determination (See 29 CFR 4.6(b)(2)(i)). Such conforming procedures shall be initiated by the contractor prior to the performance of contract work by such unlisted class(es) of employees (See 29 CFR 4.6(b)(2)(ii)). The Wage and Hour Division shall make a final determination of conformed classification, wage rate, and/or fringe benefits which shall be paid to all employees performing in the classification from the first day of work on which contract work is performed by them in the classification. Failure to pay such unlisted employees the compensation agreed upon by the interested parties and/or fully determined by the Wage and Hour Division retroactive to the date such class of employees commenced contract work shall be a violation of the Act and this contract. (See 29 CFR 4.6(b)(2)(v)). When multiple wage determinations are included in a contract, a separate SF-1444 should be prepared for each wage determination to which a class(es) is to be conformed.

The process for preparing a conformance request is as follows:

- 1) When preparing the bid, the contractor identifies the need for a conformed occupation(s) and computes a proposed rate(s).
- 2) After contract award, the contractor prepares a written report listing in order the proposed classification title(s), a Federal grade equivalency (FGE) for each proposed classification(s), job description(s), and rationale for proposed wage rate(s), including information regarding the agreement or disagreement of the authorized representative of the employees involved, or where there is no authorized representative, the employees themselves. This report should be submitted to the contracting officer no later than 30 days after such unlisted class(es) of employees performs any contract work.
- 3) The contracting officer reviews the proposed action and promptly submits a report of the action, together with the agency's recommendations and pertinent information including the position of the contractor and the employees, to the U.S. Department of Labor, Wage and Hour Division, for review (See 29 CFR 4.6(b)(2)(ii)).
- 4) Within 30 days of receipt, the Wage and Hour Division approves, modifies, or disapproves the action via transmittal to the agency contracting officer, or notifies the contracting officer that additional time will be required to process the request.
- 5) The contracting officer transmits the Wage and Hour Division's decision to the contractor.
- 6) Each affected employee shall be furnished by the contractor with a written copy of such determination or it shall be posted as a part of the wage determination (See 29 CFR 4.6(b)(2)(iii)).

Information required by the Regulations must be submitted on SF-1444 or bond paper.

When preparing a conformance request, the ""Service Contract Act Directory of Occupations"" should be used to compare job definitions to ensure that duties requested are not performed by a classification already listed in the wage determination. Remember, it is not the job title, but the required tasks that determine whether a class is included in an established wage determination. Conformances may not be used to artificially split, combine, or subdivide classifications listed in the wage determination (See 29 CFR 4.152(c)(1))."

# APPENDIX I BID BOND FORM AND INSTRUCTIONS



# **GUAM POWER AUTHORITY**

ATURIDÅT ILEKTRESEDÅT GUÅHAN P.O.BOX 2977 • HAGÅTÑA, GUAM U.S.A. 96932-2977

Telephone Nos. (671) 648-3054/55 Fax: 648-3165

Lourdes A. Leon Guerrero I Maga 'håga Joshua F. Tenorio I Sigundo Maga 'låhi

1	BID BOND		
NO.:	_		
KNOW ALL MEN BY THESE PRESENTS that			<u>,</u> as
Principal Hereinafter called the Principal, and (Bonding A duly admitted insurer under the laws of the Territory Held firmly bound unto the Territory of Guam for the s (\$), for Payment of which sum will Surety bind ourselves, our heirs, executors, administrately these presents.	y of Guam, as Surety, hereing um of and truly to be made, the sai	after called the Sure	Dollars aid
WHEREAS, the Principal has submitted a bid for	r (identify project by number a	and brief description	)
NOW, THEREFORE, if the Territory of Guam shenter into a Contract with the Territory of Guam in accounts as my be specified in bidding or Contract docuperformance of such Contract Documents with good a Contract and for the prompt payment of labor and man of the failure of the Principal to enter such Contract and Territory of Guam the difference not to exceed the pean double larger amount for which the Territory of Guawork covered by said bid or an appropriate liquidated obligation shall be null and void, otherwise to remain for the principal state of the principal stat	cordance with the terms of su ments with good and sufficier and sufficient surety for the fa- terial furnished in the prosect and give such bond or bonds, nalty hereof between the amount amount as specified in the In- full force and effect.	ch bid, and give such t surety for the faith ithful performance of ution thereof, or in the f the Principal shall bunts specified in sa with another party to vitation for Bids the	th bond or iful of such ne event pay to the iid bid o perform
Signed and sealed this	day of	2024.	
	(PRINCIPAL)	(SEAL)	_
(WITNESS)			
(TITLE)			
(MAJOR OFFICER OF SURETY)			
(TITLE)	(ТІ	TLE)	_
	(RESIDENT GE	NERAL AGENT)	_

### INSTRUCTION TO PROVIDERS:

NOTICE to all Insurance and Bonding Institutions:

The Bond requires the signatures of the Vendor, two (2) major Officers of the Surety and Resident General Agent, if the Surety is a foreign or alien surety.

When the form is submitted to the Guam Power Authority, it should be accompanied with copies of the following:

- Current Certificate of Authority to do business on Guam issued by the Department of Revenue and Taxation.
- 2. Power of Attorney issued by the Surety to the Resident General Agent or the following:
  - a. Current Sworn Annual Report (Limited Liability Company (LLC) and/or Corporation) or;
  - b. Current Renewal of Annual Limited Liability Partnership (LLP)

The following reference links below are for reference:

https://www.govguamdocs.com/revtax/docs/SwornAnnualReport LLC 0609.pdf https://www.govguamdocs.com/revtax/docs/SwornAnnualReport Corporations.pdf https://www.govguamdocs.com/revtax/docs/Renewal LLP Registration r1106.pdf

Power of Attorney issued by two (2) major officers of the Surety to whoever is signing on their behalf.

Bonds, submitted as Bid Guarantee, without signatures and supporting documents are invalid and Bids will be rejected.

# APPENDIX J LOCAL PROCUREMENT PREFERENCE APPLICATION

# **GUAM POWER AUTHORITY**

ATURIDÅT ILEKTRESEDÅT GUÅHAN P.O.BOX 2977 • HAGÅTÑA, GUAM U.S.A. 96932-2977

Lourdes A. Leon Guerrero I Maga 'håga

Telephone Nos. (671) 648-3054/55 Fax: 648-3165

Joshua F. Tenorio I Sigundo Maga 'låhi

Impartiality Accountability Value Competence Openness

## LOCAL PROCUREMENT PREFERENCE APPLICATION

Based on the law stipulated below, please place a checkmark or an "X" on the block indicating the item that applies to your business:

5GCA, Chapter 5, Section 5008, "Policy in Favor of Local Procurement" of the Guam Procurement Law states:

All procurement of supplies and services shall be made from among businesses licensed to do

			ness on Guam and that maintains an office or other facility on Guam, whenever a business is willing to be a contractor is:
(	)	(a)	A licensed bona fide manufacturing business that adds at least twenty-five percent (25%) of the value of an item, not to include administrative overhead, suing workers who are U.S. Citizens or lawfully admitted permanent residents or nationals of the United States, or persons who are lawfully admitted to the United States to work, based on their former citizenship in the Trust Territory for the Pacific Islands; or
(	)	(b)	A business that regularly carries an inventory for regular immediate sale of at least fifty percent (50%) of the items of supplies to be procured; or
(	)	(c)	A business that has a bona fide retail or wholesale business location that regularly carries an inventory on Guam of a value of at least one half of the value of the bid or One Hundred Fifty Thousand Dollars (\$150,000.0) whichever is less, of supplies and items of a similar nature to those being sought; or
(	)	*(d)	A service actually in business, doing a substantial business on Guam, and hiring at least 95% U.S. Citizens, lawfully admitted permanent residents or national of the United States, or persons who lawfully admitted to the United States to work, based on their citizenship in any of the nations previously comprising the Trust Territory of the Pacific Islands.
		•	Bidders indicating qualification under (d) may be considered QUALIFIED for the Local Procurement Preference only if the Government's requirement is for service. Service is defined Pursuant to 5 GCA Government Operations Subparagraph 5030 entitled DEFINITIONS under Chapter 5 of the Guam Procurement Law.
		1.	I
		2.	I, representative for, have read the requirements of the law cited above, and do not wish to apply for the Local Procurement Preference for Bid No.: GPA
			Bidder Representative Signature
			 Date

# APPENDIX K RESTRICTION AGAINST CONVICTED SEX OFFENDERS

### SPECIAL PROVISIONS

Restriction Against Sex Offenders Employed by Service Providers to Government of Guam from Working on Government of Guam Property

GCA 5 §5253 Restriction Against Contractors Employing Convicted Sex Offenders from Working at Government of Guam Venues:

- (a) No person convicted of a sex offense under the provisions of Chapter 25 of Title 9 Guam Code Annotated, or an offense as defined in Article 2 of Chapter 28, Title 9 GCA in Guam, or an offense in any jurisdiction which includes, at a minimum, all of the elements of said offenses, or who is listed on the Sex Offender Registry, and who is employed by a business contracted to perform services for an agency or instrumentality of the government of Guam, shall work for his employer on the property of the Government of Guam other than public highway.
- (b) All contracts for services to agencies listed herein shall include the following provisions: (1) warranties that no person providing services on behalf of the contractor has been convicted of a sex offense under the provisions of Chapter 25 of Title 9 GCA or an offense as defined in Article 2 of Chapter 28, Title 9 GCA, or an offense in another jurisdiction with, at a minimum, the same elements as such offenses, or who is listed on the Sex Offender Registry; and (2) that if any person providing services on behalf of the contractor is convicted of a sex offense under the provisions of Chapter 25 of Title 9 GCA or an offense as defined in Article 2 of Chapter 28, Title 9 GCA or an offense in another jurisdiction with, at a minimum, the same elements as such offenses, or who is listed on the Sex Offender Registry, that such person will be immediately removed from working at said agency and that the administrator of said agency be informed of such within twenty-four (24) hours of such conviction.
- (c) Duties of the General Services Agency or Procurement Administrators. All contracts, bids, or Requests for Proposals shall state all the conditions in §5253(b).
- (d) Any contractor found in violation of § 5253(b), after notice from the contracting authority of such violation, shall, within twenty-four (24) hours, take corrective action and shall report such action to the contracting authority. Failure to take corrective action within the stipulated period may result in the temporary suspension of the contract at the discretion of the contracting authority.

SOURCE: Added by P.L. 28-024:2 ((Apr. 21, 2005). Amended by P.L. 28-098:2 (Feb. 7, 2006).

Proposer, if an individual; Partner, if a partnership; Officer, if a corporation.  Subscribed and sworn before me this		Signature of Bidder	Date
ubscribed and sworn before me thisday of, 2024		Partner, if a partnersh	ip;
	ubscribed and sworn before me this	day of	, 2024
	ubscribed and sworn before the this	uay oi	, 2024

# APPENDIX L DEFERRED PAYMENT AGREEMENT (SAMPLE)

## **DEFERRED PAYMENT AGREEMENT**

This Ag	greement is made and entered into	on the	day of		, by and	between:
	ACTOR,			, and	d GUAM	POWER
AUTHO	ORITY (hereinafter "GPA").					
		RECITA	<b>L</b>			
WHERE	EAS, GPA and		(Contractor)	entered int	o a contract	to Design
and Co	nstruct the Fadian Public Access Sola ; and	ır Canopy v	which commen	iced on	and com	pleted on
	EAS, GPA and instruction of the Fadian Public Acces					ne Design
WHERE	EAS, the maximum principal amount	is U.S. \$			·	
debt ov	EAS, FOR VALUE RECEIVED, the und wed to	(Co	ntractor) [the "	'Lender"] a	nd promises	to pay to
amoun by	or other defends on the unpaid balance.	herwise ad ntractor) a	ljusted by the p nd invoiced to	arties, base GPA and ir	ed on work p	erformed
1)	GPA will pay thirty \$ea cumulative, exceed the amount of a	ach. GPA's i	monthly payme	ents shall no	ot, in any r	
2)	GPA will pay the first installment on	1				
3)	Interest will accrue based on total each month after until the principal	_(Contracto	or), and a simil	ar installme		
4)	Payments will be applied first on in	terest and	then on princip	oal.		
5)	GPA will pay the entire amount of t ending in		al and interest	within thirt	y six (36) mc	onths
6)	GPA may prepay all or any part of the	he principa	al without pena	lty.		
7)	Payment on interest for GPA's failumade in accordance with the provis		•	•	•	

WHEREAS,	(Contractor) agrees that the principal and interest
payment shall start after upon completion	n and acceptance of the project.
This agreement shall be governed by, and Guam.	construed and enforced in accordance with the laws of
<b>IN WITNESS WHEREOF</b> the parties hereto executed on this date.	have caused this Deferred Payment Agreement to be
DATE:	
Contractor's Authorized Representative	
JOHN M. BENAVENTE, P.E. Guam Power Authority (GPA) General Manager	

# APPENDIX M QUALITATIVE PROPOSAL SCORING WORKSHEET

Qualitative Proposal Scoring Worksheet										
ltem	Description	Item Weigh t	Max Raw Rating Score (B)	Max Weighted Score (C)	Score (Lowest: 0, Highest: 5) (D)	Weighted Score (A x D)				
	Project :	Approach	l							
1	Adequate overall work plan to perform, meet and achieve the objectives	5	5	25						
2	Adequate work plan for each bid item	5	5	25						
3	Adequate PV System and Canopy manufacturer's specs	15	5	75						
4	Ability to provide "turn-key" project	5	5	25						
5	Adequate plan for O&M and O&M training	3	5	15						
Experience of Proposed Project Team										
6	Experience of project team members in commercial, canopy-mounted PV System interconnection design	15	5	75						
7	Experience of project team members in commercial, canopy-mounted PV System construction	15	5	75						
8	Experience of project team members in commercial, canopy-mounted PV System commissioning	3	5	15						
9	Experience of assigned project manager	15	5	75						
10	Knowledge and experience in complying with U.S. federal and local standards pertaining to the scope of work	3	5	15						
11	Adequate organizational chart with respective roles	5	5	25						
Time of Delivery										
12	Adequate project schedule	3	5	15						
13	Ability to complete project within the specified completion time	2	5	10						
References										
14	Adequate letters of reference or recommendation from previous clients of similar projects		5	10						
Other Documents										
15	Adequate insurance policy	2	5	10						
16	Certificate of Good Standing to conduct business in jurisdiction of residence	2	5	10						
		100		500						
Final Score = (Total Weighted Score / 500) = %										

### **Conditions for Proposal Disqualification:**

- 1. Solar Canopy requirements specified in Section 3.3.8 must be met
- 2. Product and workmanship warranties under Section 3.1 must be met
- 3. The proposed Project Design Team must include a Licensed Professional Engineer with a minimum of five (5) years of experience in design of commercial, canopy-mounted PV systems and associated facilities required for proper grid interconnection
- 4. The Local Project Manager must have a minimum of three (3) years of construction management experience

Proposal Disqualified?	YES	NO 🗆
If Yes, indicate reason: _		

# APPENDIX N BID SCHEDULE

Bid Schedule/ Price Proposal – Fadian Public Access Public Parking Lot Solar Canopy

	bid Scriedule/ Price i	1	1							
ltem	Description	Unit	Qty		Unit Co	ost		Total Co	ost	Total
B		≓	₹	Material	Labor	Equipment	Material	Labor	Equipment	Cost
	l	1			1	I				
Basi	ic Bid									
1	Mobilization	LS	1							
2	Permits, Bonds and	LS	1							
	Codes									
3	Construction Site	LS	1							
	Survey									
4	Foundation Design	LS	1							
5	Interconnection	LS	1							
	Equipment									
6	Installation Design	LS	1							
7	Procurement and Delivery	LS	1							
8	On-Site PV Canopy Construction, Installation and Interconnection	LS	1							
9	Commissioning & Performance Testing	LS	1							
10	Demobilization	LS	1							
11	O&M and O&M Training	LS	1							
12	Warranties	LS	1							
13	Documentation	LS	1							
14	PV Canopy Location	LS	1							
	Option 1									
	1 - 1 - 1 - 1	1			ı	<u> </u>	Basic	Bid Tot	al Cost:	\$
Basi	ic Bid Total Cost in Wo	rds:								
Add	litive Bid									
1		LS	1							
	Energy Storage Solar Electric	LS	1							
1	Energy Storage Solar Electric Vehicle Charging									
2	Energy Storage Solar Electric Vehicle Charging Station	LS	1							
2 3	Energy Storage Solar Electric Vehicle Charging Station Electrical Shelter									
1 2 3 4	Energy Storage Solar Electric Vehicle Charging Station Electrical Shelter PV Canopy Location	LS	1							
1 2 3 4 A	Energy Storage  Solar Electric Vehicle Charging Station Electrical Shelter PV Canopy Location Option 2	LS LS LS	1 1 1							
1 2 3 4 A B	Energy Storage Solar Electric Vehicle Charging Station Electrical Shelter PV Canopy Location Option 2 Option 3	LS LS LS	1 1 1 1							
1 2 3 4 A B C	Energy Storage  Solar Electric Vehicle Charging Station  Electrical Shelter PV Canopy Location Option 2 Option 3 Option 4	LS LS LS LS	1 1 1 1 1							
1 2 3 4 A B C	Energy Storage Solar Electric Vehicle Charging Station Electrical Shelter PV Canopy Location Option 2 Option 3 Option 4 Option 5	LS LS LS LS LS LS	1 1 1 1 1							
1 2 3 4 A B C D	Energy Storage Solar Electric Vehicle Charging Station Electrical Shelter PV Canopy Location Option 2 Option 3 Option 4 Option 5 Option 6	LS LS LS LS LS LS LS	1 1 1 1 1 1							
1 2 3 4 A B C	Energy Storage Solar Electric Vehicle Charging Station Electrical Shelter PV Canopy Location Option 2 Option 3 Option 4 Option 5	LS LS LS LS LS LS	1 1 1 1 1							

Additive Bid Total Cost in Words:	
*All prices shall include overhead, administration cost, profit and applicable taxes.	
A. Total Construction Cost (Bid Items 1-10 and 12-13): \$	
B. Total O&M Cost (Bid Item 11): \$	
C. Total Basic Bid Cost (Construction and O&M): \$	
D. PV System Size OfferedKWdc	
E. Bid Cost per KW (Total Bid Cost /PV System Size): \$/KWdc	
Bid Cost per KWdc in Words:	
Name of Bidder:	

# APPENDIX O VICINITY MAP

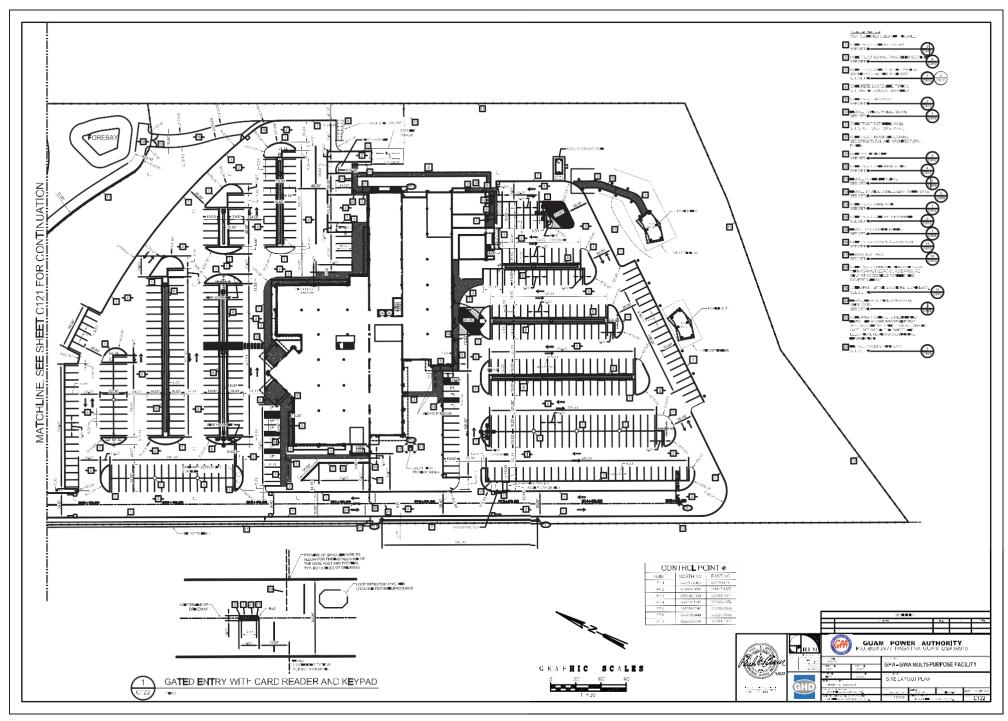


GUAM POWER AUTHORITY
GLORIA B. NELSON PUBLIC SERVICE BUILDING

PROPOSED SOLAR CANOPY LOCATION FADIAN, MANGILAO, GUAM

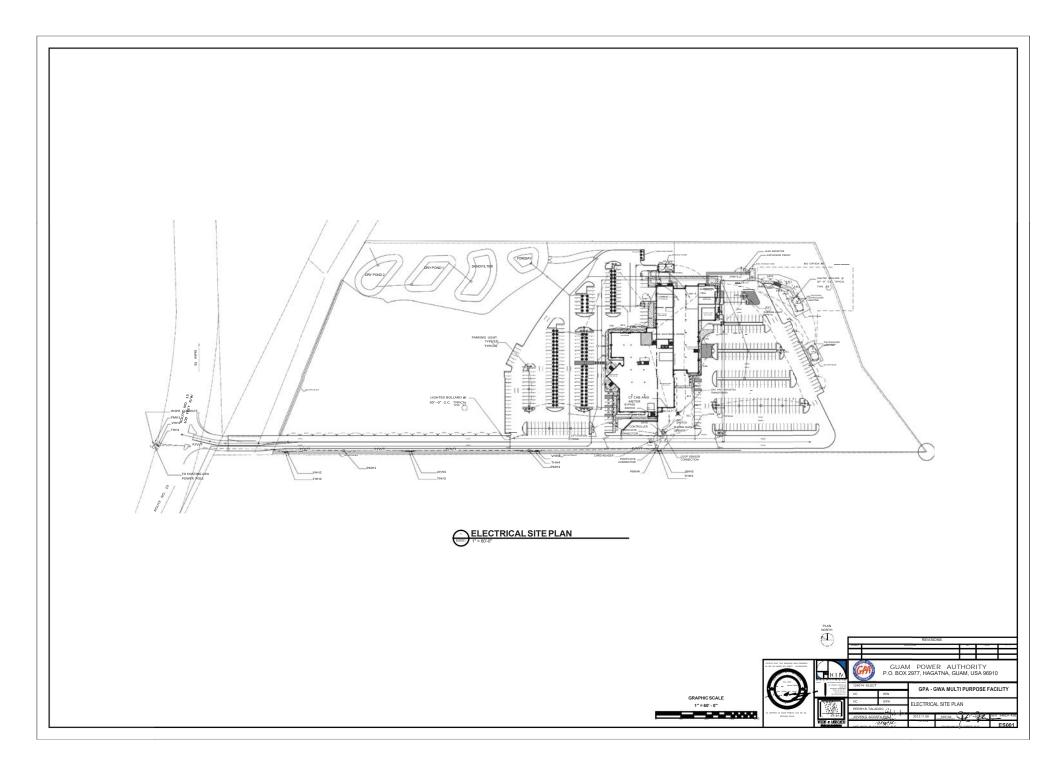


# APPENDIX P Gloria B. Nelson Public Service Building Existing Site Layout Plan



9

APPENDIX Q Gloria B. Nelson Public Service Building Electrical Site Plan



# APPENDIX R SITE SUBSURFACE SOIL INVESTIGATION REPORT

# **REPORT**

# SUBSURFACE SOIL INVESTIGATION GPA-GWA MULTI-PURPOSE FACILITY FADIAN, MANGILAO, GUAM

Prepared for

RIM Architects 316 Hernan Cortez Ave., Suite 300 Hagatna, Guam 96910

Prepared by

Geo-Engineering & Testing, Inc. 136 Tun Felix Camacho Street Tamuning, Guam 96913-3826

20 August 2012

436.14

#### INTRODUCTION

This report presents the results of the subsurface soil investigation we performed for the GPA-GWA Multi-Purpose Facility, planned for construction on Route 15, Fadian, Mangilao, Guam.

We understand that the planned development will consist of a 3-story, large reinforced concrete building having 116,551 square feet of floor area, with split finished floor elevations of 265 feet (Mean Lower Low Water Datum) at approximately the west side and 279 feet at approximately the east side of the planned building. Site improvements will require up to approximately 12 feet thick of cuts and approximately 5 feet thick of fills at the main building location. Support facilities will include extensive paved parking lots, a small sewage pump station, and approximately 2,800 linear feet of force main sewer pipeline along Route 15. Route 15 will be widened in front of the project site. A storm-water disposal system will be constructed at the eastern edge of the property where the existing surface elevations are much lower at approximately 200 feet to 250 feet.

The project site is presently heavily vegetated and terrains are very rugged, with large coralline limestone rock outcrops.

The purpose of our investigation was to explore the subsurface conditions at the project site, perform appropriate laboratory testing and engineering analyses and evaluation to provide discussion, conclusions, and recommendations concerning the site grading earthwork, supports for structural

foundations, trenching and backfilling for the sewer and water pipelines, and asphalt concrete pavements generally as follows:

- 1. General geological and subsurface conditions at the project site (based on the geological reconnaissance and field investigation at the project site).
- 2. Site preparation and grading earthwork, including cuts and fills, slopes, soil material requirements, placement and compaction procedure, and subgrade improvements, as appropriate.
- 3. Foundation support methods for the new building, and the pump station.
- 4. Settlement estimates for the structural foundations.
- 5. Subgrade preparations for concrete on-grade floor slabs and asphalt pavements.
- 6. Lateral earth pressures for retaining wall design.
- 7. Flexible asphalt pavement section thicknesses, including pavement design for the Route 15 widening based on Federal Highways Administration standards.
- 8. Percolation rates for storm-water disposal design.
- 9. Pipeline trenching and backfilling procedure and backfill soil requirements.
- Any unusual subsurface conditions that might be found during our field exploration, including hard rock, possible underground cavities, soft soil pockets.

#### REGIONAL GEOLOGY

Guam is the southernmost and largest island of the Mariana Islands chain, which form an arcuate belt in the Western Pacific. The islands occur along a ridge, which rises well above the deep ocean floor and generally divides the

Philippine Sea from the Pacific Ocean. About 70 miles southeast of Guam is the deep Mariana Trench. The trench has been formed approximately along the submerged surface trace of a westward dipping discontinuity in the oceanic crust, referred to as a subduction zone. The rocks constituting the crust of the Pacific Basin are being thrust under the Mariana Ridge and in the process; the ridge is being thrust upwards. Ridge formation has also been contributed to by submarine volcanism starting in Eocene geologic time (about 50 million years ago). Volcanism continued only through the Miocene geologic epoch on Guam but continues to the present in the Northern Mariana Islands.

Geological formations of Guam are both of volcanic and organic origins consisting predominantly of volcanic sediments and coralline limestone. Coralline limestone formations range in age from Miocene up through the present and are principally Pliocene and Pleistocene in age represented by the Mariana limestone. Essentially, the limestone has been deposited upon the crest and upper flanks of the underlying volcanic ridge. Compared to the several thousand feet of underlying volcanic rocks, the upper coralline limestone represents a relatively thin capping layer over the volcanic basement rocks.

Faulting and tilting of the rocks comprising the island system has occurred concurrently with volcanism and limestone deposition. All of the faults mapped on Guam are relatively high angle normal faults and most have produced relatively small displacements of the rocks over short distances. Somewhat greater displacements on the order of few hundred feet have occurred on the northwest striking Pago Bay - Adelup Point or simply Adelup Fault, which

approximately divides the northeast limestone plateau from the principally volcanic southwest portion of the island. In general, most faults occur in the volcanic and do not penetrate upwards and displace the overlying limestone. Some faults do, however, occur in the limestone plateau and displace the Pleistocene Mariana limestone. The Adelup Fault has displaced the Mariana limestone formation against Alutom volcanic formation, thus indicating that the fault has been active at least up until mid-Pleistocene time. The Adelup Fault lies in the Ordot - Asan village area, which is at the central part of the island of Guam.

Late Pleistocene displacements are inferred on the basis of apparent small uplifts of the island as indicated by raised reefs in the range of a few feet above present sea level. Tracy and others (1964) indicate that "In some places on jointed headlands the six-foot dip is slightly displaced and in a few places minor faults with displacement of 5 to 10 feet cut the reef margin; however, no significant movements of the island of Guam appear to have taken place since the late Pleistocene". Thus, from a seismic or earthquake risk standpoint, the island of Guam is in an active seismic belt but significant earthquakes are from movements in the deep under-thrust. One or more of the faults, such as the Adelup, visible on the island may have been active within Holocene time (last 11,000 years) but the amount of displacement would appear to have been small. So far as is known, none of the relatively shallow faults of the island of Guam has produced a significant magnitude earthquake and the probability of surface displacement due to these faults in the near future would appear to be small.

However, significant earthquakes have been generated from epicenters deep in the Pacific Ocean.

Only one distinct major geologic rock unit of Guam is exposed within or directly underlying the project site. It is the Mariana limestone formation (Tracey et al). The Mariana limestone formation includes about 80 percent of the exposed reef-associated limestone of Guam. It forms most of the north plateau of the island.

Specifically, the coralline limestone underlying the project site is the detrital facies of the Mariana limestone formation. The detrital limestone is generally friable to well cemented, coarse to fine-grained, porous at times, and occasionally with small voids and/or small cavities.

#### SITE GEOLOGY

In accordance with geological published information, the site is underlain by the reef facies member of the Mariana limestone formation.

The reef facies limestone is characterized by generally compact, porous, and cavernous white limestone of reef origin, especially along cliff faces, made up mostly of corals in position of growth in matrix of encrusting calcareous algae.

The reef facies is characterized by its highly nonconforming, irregular shape, highly porous with numerous fissures, voids, and cavities. However, the reef limestone is generally hard to very hard, with irregular, jagged and sharp edges. The thickness of the reef limestone could be limited to the upper crust,

approximately in the upper 15 to 30 feet, where exposures to severe coastal environment eroded any weak elements, leaving the reef limestone in its highly irregular and hard features.

#### SEISMICITY

Tracy and others (1964) have compiled a list of significant earthquakes on Guam extending back to April 1825. Between 1825 and 1936, there were 19 strongly felt or damaging earthquakes on Guam with Modified Mercalli intensities estimated in the range of VI to IX. The largest in the more immediate vicinity occurred on September 22, 1902 with an intensity IX on Guam. Richter (1958) reports the magnitude as 8.1 and the epicenter at latitude 18 North, longitude 146 East or about in the vicinity of Pagan Island north of Guam. It is reported to have caused many landslides in the mountainous areas of Guam. Another significant earthquake occurred on January 25, 1849 and also produced intensities up to IX. Gutenberg and Richter (1954) report magnitudes for earthquakes between 1904 and 1950. Four of these are significant, occurring in 1912, 1932 and October and November 1936. Magnitudes were in the range of 6 to 7 and focal depths were in the range of 106 miles. In October of 1936, a severe earthquake with Richter Magnitude of 7.75 occurred at about 78 miles southwest of Guam with no severe damage reported.

The more recent earthquakes of large magnitudes are in the range of 6 to 7 Richter scale and the depths are reported as approximately 71 miles. They

were centered from several to tens of miles from the island of Guam. All of the significant earthquakes for which focal depth estimates are available indicate that the active zone is the under-thrust, which is believed to dip eastward at about 45 degrees beneath the island.

In the more recent time from 1975 to 1983, three significant earthquakes of Richter Magnitude of 5.2 to 7.1 were recorded with epicenters located at about 12.5 to 25 miles north of Guam. There were several buildings which suffered damages but all of which were repairable.

In August 8, 1993, a major earthquake of 8.1 Richter Magnitude with epicenter located at about 37.5 miles south of the island of Guam caused nearpanic on Guam during day time but no reported direct loss of lives. There were two 8- to 9-story buildings that suffered severe damages but primarily due to poor construction and insufficient reinforcement. During this earthquake, Sierra Wharf at the main Naval Base at southern tip of the island of Guam suffered deck collapse that was believed to be caused by underlying soil liquefaction. The wharf is believed to be underlain with man-made fill placed over mostly relatively poor or loose to medium dense silty sandy soils with coral fragments to significant depths. A few other naval wharves in the same general vicinity suffered only minor damages. Minor liquefaction also occurred on a small, unpaved road in the city of Hagatna not far from the sea, with high ground water and silty fine sand subsurface soils that are susceptible to liquefaction.

The nearest known fault was the Tamuning Fault that would have passed approximately 0.65 miles south of the site which is considered inactive. It is

believed that the last active fault in Guam was the Asan-Adelup fault near the Asan and Piti villages, and the last activity of this fault was hundreds of years ago. In general, seismic hazards in Guam are pretty much the same for the entire island.

It is generally believed that earthquake hazards on Guam are pretty much the same just about everywhere for the fact that active earthquake epicenters had been deep in the Pacific Ocean which is very far from Guam (such as the 1993 earthquake was 37.5 miles away from Guam). Thus, comparatively, Guam is relatively very small in relation to the seismic travel distance and is subjected to just about the same earthquake effects throughout the island. However, localized conditions are different such as the northern half of Guam is underlain with coralline limestone formations and the southern half of Guam being underlain with volcanic formations.

# SURFACE AND SUBSURFACE EXPLORATIONS

We performed a general geologic reconnaissance of the project site to evaluate the existing surface conditions including rock outcrops, existing cut slopes, and general geologic features.

The subsurface exploration program consisted of performing the following tasks:

1) A total of 8 test borings were drilled down to approximately 22 to 27 feet below the existing ground surface. Six of the test borings were located within the foot-print of the main building. The

remaining two test borings were drilled at the planned access road along Route 15.

- Twenty test pits were excavated at the project site: One test pit each at the main building, the fuel tank location, and the cooling tower, 13 test pits were for the parking areas, and 4 test pits were for the access road. The depth of the test pits ranged from approximately 2 feet to 8 feet below the existing ground surface. The shallower test pits were terminated at shallower depths due to hard rock excavations. We also obtained 4 bulk samples.
- Four percolation tests were performed at the planned stormwater runoff disposal locations.

The test borings were drilled utilizing rotary wash drilling rig equipped with 4-inch diameter drill bit that is capable of obtaining both undisturbed subsurface soil samples and rock coring utilizing a 3-inch diameter Nx rock core barrel. The test pits including percolation test pits were excavated utilizing a tractor backhoe. The approximate locations of the test borings, test pits, and percolation tests are shown on Plate 1 of this report.

The table below summarizes the boreholes (BH) drilled, test pits (TP) and percolation test pits (PT) excavated their locations, depths, and coordinates:

Test	Depth	Structure	Coor	dinates
No (feet)		Otractare	North	East
BH-1	27	Admin Building	194153.3289	107769.6214
BH-2	22	Admin Building	194100.58	107766.4558
BH-3	27	Admin Building	194165.5236	107724.8952
BH-4	27	Admin Building	194131.9116	107711.6995
BH-5	27	Admin Building	194098.4645	107726.2647
BH-6	27	Admin Building	194120.197	107684.7375
R-1	27	Access Road	194247.342	107591.2683

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R-2	27	Access Road	194011.6339	107714.7179
TP-1	2.5	Admin Building	194126.7041	107758.6898
TP-2	3.0	Cooling Tower	194145.1503	107777.9736
TP-3	8.0	Fuel Tank	194093.6600	107807.5686
TP-4	1.5	Parking Area	194182.7602	107739.6042
TP-5	4.5	Parking Area	194215.6653	107702.0542
TP-6	6.0	Parking Area	194182.9520	107695.6188
TP-7	2.0	Parking Area	194190.8729	107660.0890
TP-8	7.0	Parking Area		-
TP-9	6.0	Parking Area	194154.1434	107655.8393
TP-10	4.0	Parking Area	194075.3077	107766.4369
TP-11	2.5	Parking Area	194036.2354	107766.5882
TP-12	4.5	Parking Area	194064.9585	107749.4692
TP-13	4.0	Parking Area	194081.8811	107713.9032
TP-14	3.5	Parking Area	194038.0030	107740.8892
TP-15	4.0	Parking Area	194048.2633	107716.0236
TP-16	3.0	Parking Area	194007.3237	107737.9788
TP-17	4.0	Access Road	193947.2276	107743.3388
TP-18	4.0	Access Road	194080.3049	107679.5147
TP-19	6.0	Access Road	194173.6030	107632.9127
TP-20	4.5	Access Road	194329.1265	107553.3854
PT-1	4.0	Dry Pond-1	194343.9091	107703.4519
PT-2	3.0	Dry ond-2	194310.2238	107711.4186
PT-3	5.0	Dry Pnd-3	194266.9589	107724.1862
PT-4	4.5	Dry Pond-4	194257.2638	107744.5839

During the subsurface exploration, our technical staff was at the site full-time, directing the exploration, and logging the subsurface materials that were encountered in the test bored holes and test pits, and obtained subsurface soil and rock samples for visual examination, field classification, and laboratory testing. The logs of the test borings and test pits are presented on Plates 2

through 29. Plate 30 is the Unified Soil Classification System that has been used for describing and classifying soils.

While obtaining the subsurface soil and rock samples, we also obtained the standard penetration test values or N-values. The N-value is defined as the number of blows per each foot of penetration into the underlying, undisturbed soil or weak rock of a 2.0-inch outside diameter, split spoon soil sampler, driven by a 140-pound drop weight free falling 30 inches per each blow. The N-values obtained from the test bored holes are shown on the logs of the test borings at the depths where they were taken.

However, in order to obtain better and larger, undisturbed subsurface soil samples, a larger, 3.0-inch outside diameter split spoon soil sampler was used, and the blow counts or N-values of the larger samples were corrected to the standard N-values by multiplying the 3.0 diameter blow counts with a correction factor of 0.68 to account for the larger soil sampler.

Because the relatively shallow coralline limestone formation is generally hard, we used a 3-inch diameter, Nx series rock core barrel for rock coring. During the rock coring, we recorded the drilling rates in minutes per each foot of rock coring, and the rock quality designation (RQD) of the cored limestone rock were recorded. The N-values, drill rates and RQDs are shown on the logs of the test borings at their respective depths.

Percolation Tests - We also conducted percolation tests to determine the infiltration characteristics of the upper soils. All four percolation tests exposed shallow overburden soils consisting of approximately 1 foot to 3 feet thick of

medium stiff, reddish brown sandy silt, and loose to medium dense, silty limestone gravel with sand, overlying coralline limestone to the 3.0 to 4.5 foot depths of the percolation test pits. The percolation test pits were saturated with water prior to performing the percolation tests. The following results were obtained from the tests, including our recommended percolation rates for the storm-water disposal design:

Percolation Test No.	Overall Rate (Inches/ minute)	Last Rate (Inches/ Minute)	Recommended Design Rate (Inches/minute)
PT-1	0.178	0.133	0.089
PT-2	1.211	0.204	0.204
PT-3	1.083	1.266	0.541
PT-4	8.667	37.5	2.000

The wide variations of the tested percolation rates were due to the complex structures of the coralline limestone ranging from very porous (such as PT-4) to dense or very dense to hard (PT-1).

# LABORATORY TESTING

In our laboratory, we re-examined the subsurface soil and rock samples obtained from the project site and selected appropriate samples for testing to determine their in-situ moisture content, unit weight (dry density), particle size

distribution, percent passing No. 200 mesh sieve (silt and clay sizes), liquid limit and plasticity index, moisture-density relations (laboratory compaction), and California Bearing Ratio. The results of the tests are shown on the boring and test logs where the tested samples were taken, and are also shown graphically on Plates 31 through 40. The Key to Test Data on Plate 30 explains the abbreviations of the test designations shown on the logs of the test borings and the test pits.

The laboratory test results were also used to confirm and/or modify the field classification of the soils.

#### SITE CONDITIONS

# **Surface Conditions**

The project site is fronting Route 15, and is high above sea level with surface elevations ranging from low of approximately 220 feet (Mean Lower Low Water Datum) at the northeast corner at the front near Route 15 where ponding basins are planned, and generally rise towards the back or south-southeast property lines to as much as 290 feet.

There are existing tenants occupying near the planned ponding basin, and near the planned building locations at the time of our field explorations. There is an existing old asphalt pavement that traversed the middle of the property.

The site is heavily vegetated mostly of thick shrubs, tangan-tangan, palm, and bread fruit trees.

The cut slopes at the back of the property were vertical or near vertical with a height of approximately 75 feet. It exposes moderately hard to hard, light brown-white, reef facies of the Mariana limestone formation. The slopes appear to be stable and does not show any signs of distress when we inspected the slopes during our site geologic reconnaissance. (Note: Reef limestone is generally more massive, well cemented, and hard, though generally is more porous, and often with fissures, voids, and cavities).

# Subsurface Conditions

Administration Building (Borings 1 to 6 and Test Pit 1) - As encountered from the test borings drilled at the building site and the test pit, the building site is generally underlain with approximately 0.3 to 2 feet thick of light brown-white, loose to medium dense, silty sandy limestone gravel. Underlying the silty sandy limestone gravel soil is the native coralline limestone formation. The limestone is the reef facies of the Mariana limestone formation which is generally hard.

Cooling Tower and Fuel Tank (Test Pits 2 and 3) – Test Pit 2 at the cooling tower location exposed moderately hard to hard coralline limestone from the surface without overburden soil.

However, in Test Pit 3 at the fuel tank location, we encountered at least 8 feet thick of silty sandy limestone gravel with only the upper one foot being dense and the rest are all loose down to the 8-foot bottom of this test pit (maximum reach of the excavator due to constant caving in of the soils inside this test pit), which could extend deeper than 8 feet below Test Pit 3. It is possible that Test Pit

3 could have been a deep depression or pocket that had collected surface silt from surface run-offs over time or it could have been a man-made deposit.

Parking Areas and Access Road (Test Pits 4 to 16) - All the test pits generally encountered from none to as much as 4 feet thick of overburden soils consisting of reddish brown, soft sandy silt, and light brown-white, loose to dense silty sandy limestone gravel.

In fact, most of the overburden silty soils in the test pits are just about all soft; indicating that they could have been also resulted from surface run-off deposits, or possibly man-made deposit, and the original limestone surface could have been irregular which is possible for reef facies of the coralline limestone formation.

Underlying the sandy silt and the silty sandy limestone gravel is the native coralline limestone with some silt pockets in the upper 2 to 4 feet of the limestone formation. The native coralline limestone is generally moderately hard to hard, though mostly be hard rock.

The table below is a summary of the depths of soft or loose soils found in most of the test pits:

Test Pit No	Depth of Soft or Loose Soils (feet)	Location
TP-1	none	Building
TP-2	none	Cooling Tower
TP-3	8+' all loose sandy limestone gravel	Fuel Tank
TP-4	1.5' soft silt	Parking Area
TP-5	1.5' soft silt	Parking Area
TP-6	1.2' soft silt	Parking Area
TP-7	1.5' soft silt	Parking Area
TP-8	3' loose silty sandy limestone	Parking Area

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	gravel, and 2' soft silt	
TP-9	4' soft silt	Parking Area
TP-10	2.5' medium dense silty sandy limestone gravel	Parking Area
TP-11	2' dense silty sandy limestone gravel	Parking Area
TP-12	3.5' medium dense to dense silty sandy limestone gravel	Parking Area
TP-13	1.5' dense silty sandy limestone gravel, and 1' soft silt	Parking Area
TP-14	2.5' dense silty sandy limestone gravel	Parking Area
TP-15	1.7' medium dense silty sandy limestone gravel, and 4' soft silt	Parking Area
TP-16	1.7' medium dense silty sandy limestone gravel	Parking Area
TP-17	2' loose silty sandy limestone gravel	Access Road
TP-18	3' medium dense silty sandy limestone gravel	Access Road
TP-19	1.5' medium dense silty sandy limestone gravel, and 2' soft silt	Access Road
TP-20	3' loose silty sandy limestone gravel	Access Road

Front Access Road (Borings R-1 and R-2, and Test Pits 17 to 20) — Borings R-1 and R-2 encountered approximately 6 inches to 1 foot thick of loose to medium dense, silty sandy limestone gravel, overlying hard coralline limestone formation throughout the remaining 26 feet thick of the boreholes.

Test Pits 17 to 20 found approximately 1.5 to 3 feet thick of loose to medium dense of silty sandy limestone gravel soils, similar to the gravelly soils found in other test pits.

Ground Water - No groundwater or seepage was encountered in all the

test borings and test pits conducted at the project site, which also suggest that the on-site soils and rocks are generally permeable. Ground water at the site should be at approximately the sea level and should have no significance on this planned development.

# Seismic Site Class

Based on the published geologic reports and the results of our field investigation, the site is underlain with shallow limestone rock formation, which should extend much deeper than the 100-foot depth defining the seismic site class of the site.

Based on the above and in accordance with the 2009 International Building Code, the project site may be classified as Site Class C for seismic design of the planned building and the pump house. It is assumed that any soft silt or loose gravelly soils found within the building foot-print and the pump house will be replaced with densely compacted, suitable limestone sand/gravel soil fill which can be part of Site Class C.

Based on the mapped maximum considered earthquake ground motion for Guam, the 0.2 second spectral response acceleration (Ss) and the 1.0 second spectral response acceleration (S1) for the project site can be taken as 1.5 g and 0.6 g, respectively.

#### DISCUSSION AND CONCLUSIONS

The 3-story concrete main building, the cooling tower, and the pump house locations are underlain with shallow coralline limestone formation which can be supported on conventional, shallow spread footings and/or continuous wall footings with moderate bearing capacities. The spread footings and/or continuous wall footings would have to bottom in either the undisturbed, native coralline limestone rock formation or on densely compacted, limestone sand/gravel fill with at least 95 percent of its maximum dry density (as determined by ASTM D1557 laboratory compaction test method), replacing any existing soft silt or loose sand/gravel soils.

The fuel tank can also be supported on shallow spread foundation such as thickened on-grade concrete slabs or continuous footings, but will require replacing the existing soft silty soil with engineered, compacted limestone sand/gravel soils having at least 95 percent of its maximum dry density.

The existence of very irregular depths of generally soft silt and loose gravelly soils would present challenging site grading earthwork for their removals and replacements with engineered, densely compacted, suitable limestone sand/gravel soil fill which can be obtained from a good portion of the on-site excavated, silty sandy limestone gravel soils if they meet the fill soil requirements.

Similar site improvements will have to be performed within the planned parking lots and access roads, which will also replace the potentially expansive,

silty soil that can be harmful to the on-grade concrete slabs, side walks, and asphaltic concrete pavements.

The relatively massive cuts will encounter hard limestone rock, which will require rock breaker or other tools to remove hard rock. Blasting is not permitted by Guam Environmental Protection Agency.

Details of our recommendations are presented in the remainder of this report.

#### RECOMMENDATIONS

# Site Preparation and Grading

Clearing and Stripping – Initially, after demolition and removal of the existing structures and other unsuitable matters are made, the areas to be filled and the exposed areas after cuts should be cleared of any remaining vegetation, trees to be removed, and debris. Any remaining silty topsoil should be stripped and removed away or saved for landscaping use. The depth of stripping will likely range from several inches to a foot or so, except deeper for localized removal of large tree roots and thick silty soil.

Additional Excavation – After site clearing, stripping, and any required excavations are completed, any exposed, remaining, fine-grained, reddish brown to dark brown, soft to medium stiff silty soils should be excavated within all load-bearing areas including building and other structural footprints, parking lots, access roads, walkways, storage and loading areas, including at least 5 feet horizontally beyond their boundaries, should all be excavated and removed

away, or some may be saved for later landscaping use. Similarly, any exposed or remaining loose to medium dense, silty sandy limestone gravel soils within the above areas should also be excavated and removed away or some meeting the fill and backfill soils requirements can be stockpiled at the site for re-use as compacted backfill soils.

The above excavation and removal of the soft and loose soils should also be performed under the load bearing areas where new fill will be placed, so that there will be no new fill settlements due to the underlying, compressible, soft and loose soils.

Recompaction - After the site stripping and any required excavations are completed, in the areas to be filled and in exposed surface areas after cuts, any remaining, uncompacted surfaces should be scarified to about 6 to 8 inches deep, moisture conditioned as necessary and compacted to at least 95 percent of the maximum dry density of the compacted, noncohesive, sand and gravel soils or 90 percent if it is cohesive silt or clay soils. In non-load-bearing areas, the compacted densities may be lowered by 5 percent for both noncohesive and cohesive soils.

Fill and Backfill Soils – All fill and backfill soils should be free of organic matter, debris, and rock fragments or lumps larger than 4 inches or one-half the compacted layer thickness, whichever is less, in greatest dimension. In addition, within the top 2 feet of the finished subgrade elevations, the fill soils should be non-expansive with plasticity index 12 maximum, liquid limit no more than 35 and

not more than 25 percent finer than no. 200 mesh sieve (silt and clay sizes). All the fill and backfill soils should have adequate sand for dense compaction.

The on-site excavated limestone sand and gravel soils meeting the above criteria will be suitable for use as fill and backfill. The on-site excavated silty soil should only be used for backfill in non-load-bearing areas such as landscaping, utility trenches outside of building and pavement areas. The silty soil may also be used as backfill below the top 2 feet of the finished subgrade elevations under load-bearing areas — on the condition that the contractor can achieve the required compacted density or at least 90 percent of its maximum dry density.

<u>Fill and Backfill Soil Placement</u> - Approved fill and backfill soils should be placed in 10-inch maximum loose layers, moisture conditioned as necessary and compacted to at least 95 percent of their respective maximum dry densities, but can be reduced to 90 percent maximum dry density in non-load-bearing areas outside the building, pavement, and concrete slabs, plus 3 more feet wider all around.

<u>Cut Slopes</u> – The proposed cut slopes into the existing coralline limestone can be 1 to 3 (horizontal to vertical) slope ratio. Where it is applicable, cut slopes in soils at the top of the slopes should be trimmed back to not steeper than 2 to 1 slope ratio.

The cut slopes can extend to a maximum height of 20 feet without an intermediate bench. If a cut slope is higher than 20 feet, an intermediate bench would be needed. The bench, if it is needed, should be constructed at the midheight of the slope or slightly lower. The bench should be at least 8 feet wide and

sloped slightly inward to direct surface flow away from the slopes for gravity drain to appropriate outlets.

The cut slopes should be performed in a cautious and neat manner to avoid any possible over-cut which can undermine the slopes. The final slope surfaces should be uniform and firm. Any loose rocks exposed should be removed and the voids filled with lean concrete as necessary.

Temporary cuts during construction in moderately hard to hard, massive limestone may be vertical but OSHA safety regulations should be followed, and should be inspected by the geotechnical engineer or a geologist if it is necessary or required by OSHA.

<u>Fill Slopes</u> – should not be steeper than 2 to 1 (horizontal to vertical) slope ratio. Fill to be placed over the existing surface steeper than 5 to 1 slope ratio should be keyed at the toe of the slope and benched into firm soil or rock as the fill is being raised. Typical fill over slope section is shown on Plate A. The final fill slopes should be compacted to dense and non-yielding, preferably by over-filling and trimming back to expose compacted, firm slope surface. (Note: the proposed fill can be 15 feet maximum as planned.)

However, the fill slope fronting Route 15 which will be some 8 feet high can be at 1.5:1 horizontal to vertical slope ratio provided the fill material will be the non-expansive limestone fill as recommended on page 21 of this report and with adequate sand for dense compaction to achieve at least 95 percent of its maximum dry density. The fill slope should be over-filled and cut back to provide a uniform and dense surface. Loose soil or rocks peeled off from cutting back

should be removed and voids filled with lean concrete or sand/cement mix at 50/50 ratio if it is necessary. The voids should be cleaned of loose particles before patching with the lean concrete or sand/cement mix.

Fill to be placed over exposed surface steeper than 5:1 (horizontal to vertical) slope ratio should be keyed at the toe of the fill and benched into firm soil or rock as the fill is being raised. Typical fill over slope section is shown on Plate A.

Wherever it is feasible, surface flows should be diverted away from the tops of the slopes via lined ditches or other appropriate measures for gravity flows to appropriate outlets.

Fill slopes should be planted with rapid growth ground cover to minimize surface erosion. Hydro seeding on fill slopes would be preferred.

# **Foundation Support**

The planned administration building can be supported on conventional shallow spread footings resting directly on either the undisturbed, native coralline limestone or on densely compacted limestone sand/gravel soil fill having at least 95 percent of its maximum dry density. The footings can be designed with the following criteria:

# 1. Allowable bearing pressures

Dead plus live loads 4000 psf (psf = pounds per square foot)

Total design loads, including 5400 psf wind or seismic forces

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2 feet

Minimum footing bottom, below lowest adjacent final depth

3. Minimum footing width 2 feet

4. Resistance to lateral loads.

Friction across footing bottoms (Percent of total dead loads at the footing bottoms)

35

Passive soil resistance (with 95 percent maximum dry density backfill on one footing face. Ignore top one foot if it is not directly covered with concrete slab or asphalt pavement), equivalent fluid pressure (pcf = pounds per cubic foot)

800 pcf

During the footing excavation, any silty soil or uncertified old fill that are exposed beneath the footing bottoms should be entirely excavated and replaced with non-expansive limestone sand/gravel soil fill, including at least 12 inches wider all around the footings. Thereafter, the exposed surface should be lightly scarified and leveled to approximately 6 inches deep, moisture conditioned as necessary and compacted to at least 95 percent of its maximum dry density. Then approved limestone sand/gravel backfill should be placed in 8-inch maximum loose layers, moisture conditioned as necessary and compacted to at least 95 percent of its maximum dry density with a uniform, dense and unyielding surface.

The footings strictly constructed as recommended herein should be designed to tolerate 1/2 inch differential settlement across building width.

<u>Foundation Probes</u> – To determine possible existence of underground cavities/caverns in the underlying coralline limestone formation below foundation

footings, it is recommended to drill one probe hole at the center of each square footing of not wider than 8 feet. For continuous wall footings, drill one probe hole per every 15 feet along bearing wall or continuous footings. The probe holes should be at least 3 inches in diameter and should be at least 15 feet for both column or individual footings and 10 feet under continuous bearing wall footings, but not less than twice the width of the footing directly above.

Drilling of the probe holes should be performed under full-time observation of the geotechnical engineer or his authorized representative, who has at least two years of such experience. The engineer or his representative should record the probe hole drilling rates (minute-seconds per each one foot drilled, drilling behavior if it deviates from normal drilling conditions, and describe the soil/rock cuttings coming out of the drilled holes.

If significant size, more than a few inches, cavity/cavern is found, it should be thoroughly backfilled with lean concrete or sand-cement mix with at least 1000 psi 28-day old compressive strength. If cavity is bigger than 1 foot in diameter or depth, the grout backfilling should be performed under at least 30 psi or twice the overburden grouting pressure. The lean concrete or sand-cement mix should have high slump such as 8 to 10 inches, can be mixed with super-plasticizer admixture for ease of thorough backfilling. The engineer or his representative should keep record of grout volume used for backfilling in each probe hole.

The grout backfilling under pressure should be tremie method by lowering the grouting hose to the bottom of the probe hole and slowly raise the hose up as

the grout is being discharged into the probe hole. The bottom of the hose should be at least 12 inches below the surface of the grout as the grout is being raised.

Probe holes that do not encounter significant size cavity/cavern should be completely backfilled with the above lean concrete or sand-cement mix by thoroughly rodding into each hole. The engineer should keep record of the volume of grout backfill used to completely backfill each hole to verify that all the probe holes are thoroughly backfilled.

#### Retaining Walls

Where retaining wall is required, it can be supported on continuous wall footing resting on the native limestone or densely compacted, limestone sand/gravel fill with at least 95 percent of its maximum dry density. The wall footings can be designed with the same designed values recommended for the building foundation support.

The top-unrestrained retaining walls can be designed to resist active lateral earth pressure of 35 psf per foot of depth (or pounds per cubic foot, pcf) equivalent fluid pressure (with maximum 35H at the base of the wall, H = wall height).

For seismic design, assumed an additional earth pressure equals to 20 percent of the maximum static earth pressure (or  $35H \times .20 = 7H$ ) but acting at the top of the wall and then decreasing linearly to zero at the base of the wall footing.

For top-restrained walls, the design lateral earth pressure should be as shown on Plate B, which will increase from zero at the top of the wall to a

maximum of 50H at wall height of 1/4H from the top down, and then constant down to the base of the wall. For seismic design, add 20 percent of 50H or 10H from the top of the wall down to zero at the base of the wall footing.

To prevent hydrostatic pressure building up behind the walls, one foot wide of the backfill immediately behind the walls, except the top one-foot thick, should be 3/4-inch or 1-inch maximum size concrete coarse aggregate. The aggregate should be placed in 8-inch loose layers with the surface lightly compacted to dense and unyielding without over-stressing the walls The remaining wall backfill should be limestone sand/gravel soils, to be placed in 8-inch loose layers, moisture conditioned as necessary and compacted to at least 95 percent of its maximum dry density without overstressing the walls.

The top one foot thick of the wall backfill should be impervious, fine-grained silty soil compacted in two equal layers to at least 90 percent of its maximum dry density. Limestone fines or silty fine sand that will be impervious after compacted to at least 90 percent of its maximum dry density may be used to replace fine-grained, silty soil.

The contractor should not damage the wall during wall backfilling and compaction.

Weep holes should be provided at the lower portion of the topunrestrained walls at approximately 8 inches above the final ground surface outside the wall. For top-restrained walls, no weep holes but provide a 4-inch diameter pvc drain pipes at the bottom of the wall backdrain layer to appropriate outlet. The lower half of the pvc drain pipes should be perforated with the perforations facing down. The pipe should be surrounded by 4 inches of the backdrain aggregate.

The wall footing strictly constructed as recommended above should be designed to tolerate 1/4-inch total settlement and 1/4-inch differential settlement measured every 40-foot length of the retaining wall.

# Subgrade Preparation for Concrete On-Grade Floor Slabs

The new concrete on-grade floor slabs should be underlain with 6 inches thick aggregate base course, uniformly spread without segregation, moisture conditioned as necessary and compacted to at least 98 percent of its maximum dry density with a uniform, dense and unyielding surface.

The compacted base course aggregate should be covered with an impervious membrane to prevent moisture vapor migration into the concrete slabs.

#### Flexible Pavements

We recommend the following flexible pavement design thicknesses for the Route 15 merging lane, access roads, and parking areas.

New Pavement Areas	Asphalt Surface (inches)	Aggregate Base (inches)
Route 15 merging lane Main access road and	3*	8
heavy truck trafficking	3	8
Passenger cars, light trucks	2	6

<sup>\*</sup>A 1-inch thick layer of non-skid, surface friction course should be added.

The subgrade below the base course should be either the moderately hard to hard, native coralline limestone or at least 2 feet thick of the nonexpansive limestone sand-gravel fill having at least 95 percent of its maximum dry density, to be placed and compacted in four equal layers of 6-inch compacted thickness.

The aggregate base course should conform to the following requirements:

<u>Sieve Size</u>	Percent Finer by Weight
2 inches	100
1.5 inches	90 – 100
0.75 inch	50 — 85
No. 4	25 – 45
No. 30	10 – 25
No. 200	3 – 13
California Bearing Ratio (C	
San Equivalent Abrasion Wear	= 35 minimum
Liquid Limit	= 40 maximum = 12 maximum
Plasticity Index	= 6 maximum
I lasticity frack	- omaximum

The aggregate base course should be uniformly spread without segregation, moisture conditioned as necessary, and compacted with a vibratory roller at least 10 tons in weight to 100 percent of its maximum dry density with a uniform, dense and unyielding surface.

# Pipeline Trenching and Excavation

It is expected that the trenching excavation for the pipelines will encounter hard limestone. The contractor should be responsible in determining the type of equipment that would be appropriate in the excavation and/or trenching.

Prior to trenching operation, the areas should be cleared of all vegetation and surface debris. Topsoil should be stripped and removed away or temporarily stockpiled at the site for later landscaping uses. In general, temporary excavation deeper than 6 feet will have to be braced in accordance with the OSHA. During the excavation, the contractor should not stockpile materials or place relatively heavy equipment within a 6-foot distance of the trenches. The contractor should be responsible for the safety of men and equipment working or trafficking near the excavation.

## Pipe Line Trenching and Backfilling

<u>Pipe Bedding</u> - Prior to placing the new sewer pipe lines, a layer of bedding sand at least 6 inches thick should be uniformly spread below the pipe bottom. The bedding sand should consist of non-plastic, relatively clean sandy soil meeting the following requirements:

Sieve Size	<u>Perce</u>	ent Passing by Weight
¾ inch	•	100
No. 4		60 - 100
No. 40		20 - 60
No. 200		0 - 5
Liquid Limit		25 maximum
Plasticity index		6 maximum

Alternatively, 3/8-inch concrete fine aggregate may be used as bedding sand.

The bedding sand should be moisture conditioned as necessary and compacted to 90 percent of its maximum dry density. If clean, coarse grained

sand and/or fine gravel are used, the compaction may be limited to achieving a dense and unyielding condition.

Backfill from pipe bottom to 12 inches above the pipe — The backfill should be bedding sand or relatively clean, granular sandy soil such as 3/8- or 3/4-inch fine aggregate or sand (per ASTM C-33). The bedding sand should first be placed under and around the pipe and lightly compacted before placing above the pipe to approximately 6 to 8 inches above the pipe, moisture conditioned as necessary and carefully compacted until dense (without damaging the pipe) to achieve 90 percent of its maximum dry density.

<u>surface</u> – On-site excavated soils free of fragments larger than 4 inches in greatest dimension, debris, and organic matter may be used as backfill. However, only silt is available on site, imported backfill soil from quarry pit-run or equivalent limestone sand-gravel soil should obtained prior approval from the contracting officer before bringing onto the site. The approved fill soil should be placed in 10-inch maximum loose layers; moisture conditioned as necessary and compacted to at least 90 percent of its maximum dry density.

The above backfill may be extended to the final grades for areas outside of the roadways, road shoulders, or in non-load bearing areas; however, the top 12 inches should be compacted to 95 percent of its maximum dry density in two equal layers.

<u>Upper 2 feet of roadway subgrades and road shoulders</u> – The backfill soil should be subbase or select fill meeting the following requirements:

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Sieve Size	Perc	ent Passing by Wei
4 inches		100
No. 4		50 - 100
No. 40		15 - 60
No. 200		5 - 25
Liquid Limit	=	35 maximum
Plasticity index	=	12 maximum
California Bearing Ratio (CBR)	=	30 minimum

Approved backfill soil should be placed in 10-inch maximum loose layers, moisture conditioned as necessary and compacted to at least 95 percent of its maximum dry density.

## Construction Inspection and Testing

During construction, the earthwork and foundation preparation and installation, foundation probe hole drilling and grout backfilling, and pavement construction, should be inspected and tested to ascertain that the works are performed in accordance with the project plans and specifications and our recommendations, and to modify our recommendations should unanticipated subsurface conditions are encountered.

#### **INVESTIGATION LIMITATIONS**

The findings, discussions and recommendations presented herein are based on the information obtained from the test borings and test pits performed for this project. Unanticipated subsurface conditions may be encountered during construction and cannot be fully determined by test borings and test pits.

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Therefore, some contingency fund is thus recommended for the project to accommodate these possible costs.

This report has been prepared for the exclusive use of our client and its respective design consultants. It shall not be used by or transferred to any other party or to another project without the prior expressed written consent and/or thorough review by this facility.

Should this project be delayed beyond the period of one year from the date of this report, the report shall be reviewed relative to possible changed conditions. Breach of any recommendations provided herein will void the professional responsibility of this facility.

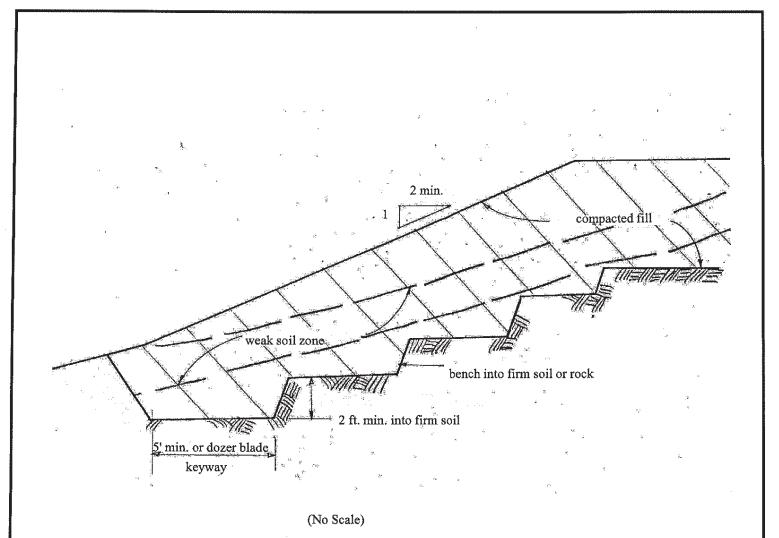
## GEO-ENGINEERING & TESTING, INC.

The following plates are included to complete this geotechnical investigation report for GPA-GWA Administration Building, Fadian, Mangilao, Guam.

Plate A	en.	Typical Fill over Slope
Plate B	-	Lateral Earth Pressure Diagram for Top-Restrained Wall
Plates 1A and 1B	-	Boring, test pit and Percolation test Location Plan
Plates 2 through 7	-	Logs of Borings 1 through 6
Plates 8 and 9	-	Logs of Borings R-1 and R-2
Plates 10 through 29	-	Logs of Test Pits 1 through 20
Plate 30	-	Soil Classification Chart and Key to Test Data
Plates 31 through 34	-	Particle Size Distribution Report
Plates 35 through 38	ine	Liquid and Plastic Limits Test Report
Plate 39	-	Laboratory Compaction Test Report
Plate 40	-	(California) Bearing Ratio Test Report
		Respectfully submitted,
		GEO-ENGINEERING & TESTING, INC

Michael C. Rayo Project Engineer

Ukrit Siriprusanan Civil Engineer - 360



Notes:

- 1) Keyway and benches should be provided for fill placed over existing slopes steeper than 5 horizontal to 1 vertical slope ratio.
- 2) Subdrains should be provided beneath fill placed over drainage courses.
- 3) Actual dimensions may be modified by the geotechnical engineer during construction, depending on height, soil conditions.

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Geotechnical & Material Testing Engineers

TYPICAL FILL OVER SLOPE
GPA-GWA MULTI-PURPOSE FACILITY

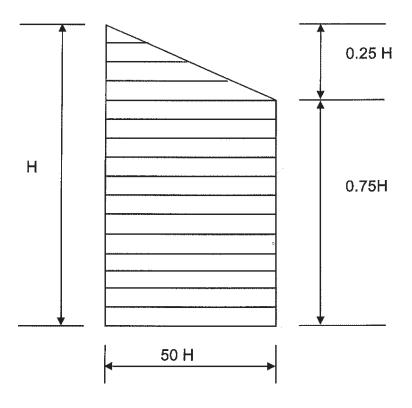
PLATE

Α

Job No. 436.14 Appr. US/ Date 03/29/12

FADIAN, MANGILAO

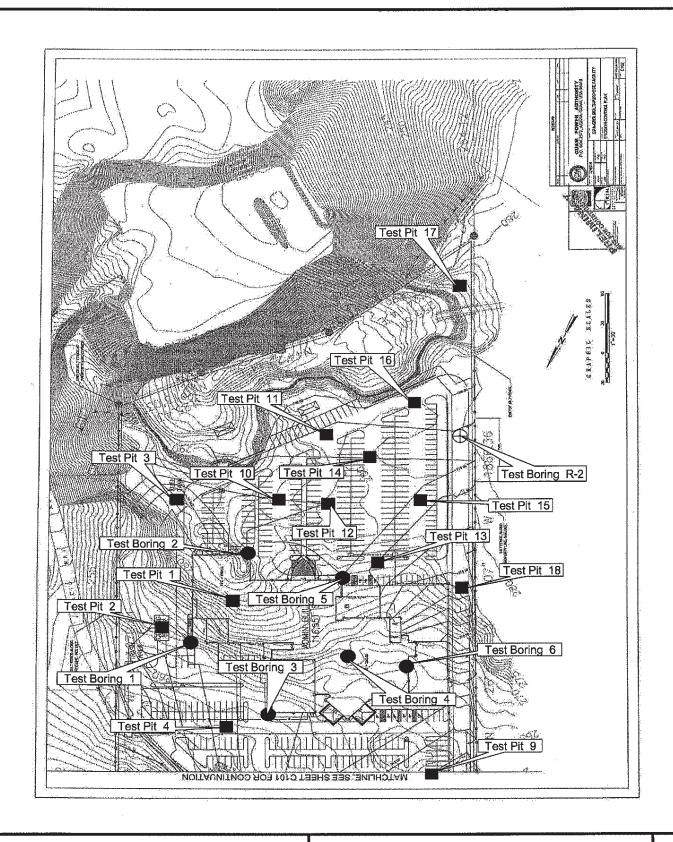
GUAM



Note: 1. H = Height of wall in feet

- 2. Pressures are in pounds per square foot distributed as shown above.
- 3. Assumed no hydrostatic pressure with wall backdrain.
- 4. Surcharge loads are additional.

GEO-ENGINEERING & TESTING, INC. Geotechnical & Material Testing Engineers	LATERAL EARTH PRESSURE DIAGRAM FOR TOP-RESTRAINED WALLS	PLATE
Job No. <u>436.14</u> Appr Date: <u>03/29/</u>	GPA-GWA MULTI-PURPOSE FACILITY FADIAN, MANGILAO GÙAM	В



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Geotechnical & Material Testing Engineers

Job No. 436.14 Appr. US/ Date 07/16/12

TEST BORING, PIT & PERCOLATION LOCATION PLAN

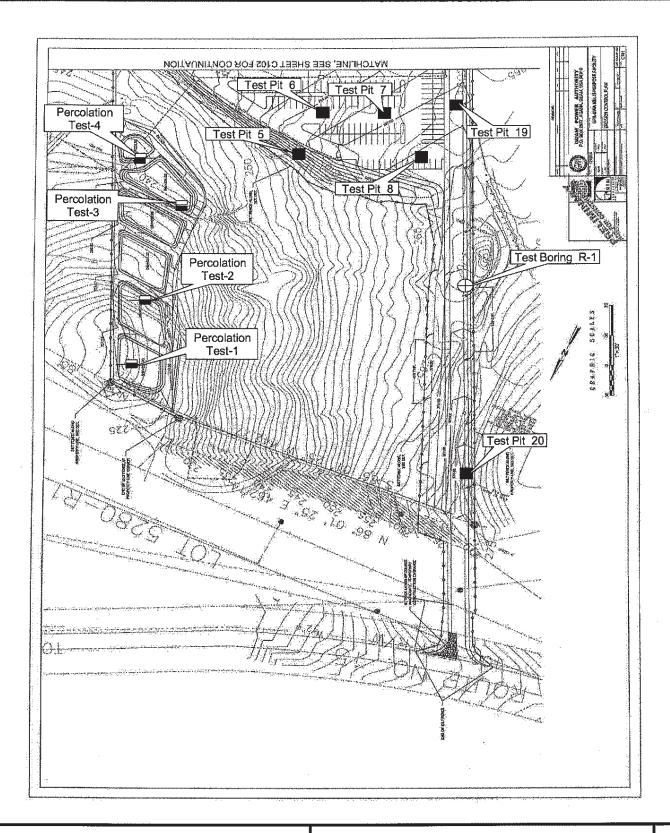
GPA-GWA MULTI-PURPOSE FACILITY

FADIAN, MANGILAO

PLATE

1A

**GUAM** 



GEO-ENGINEERING & TESTING, INC.

Geotechnical & Material Testing Engineers

Job No. <u>436.14</u> Appr. <u>US/</u> Date <u>07/16/12</u>

TEST BORING, PIT & PERCOLATION LOCATION PLAN

GPA-GWA MULTI-PURPOSE FACILITY

FADIAN, MANGILAO

GUAM

PLATE

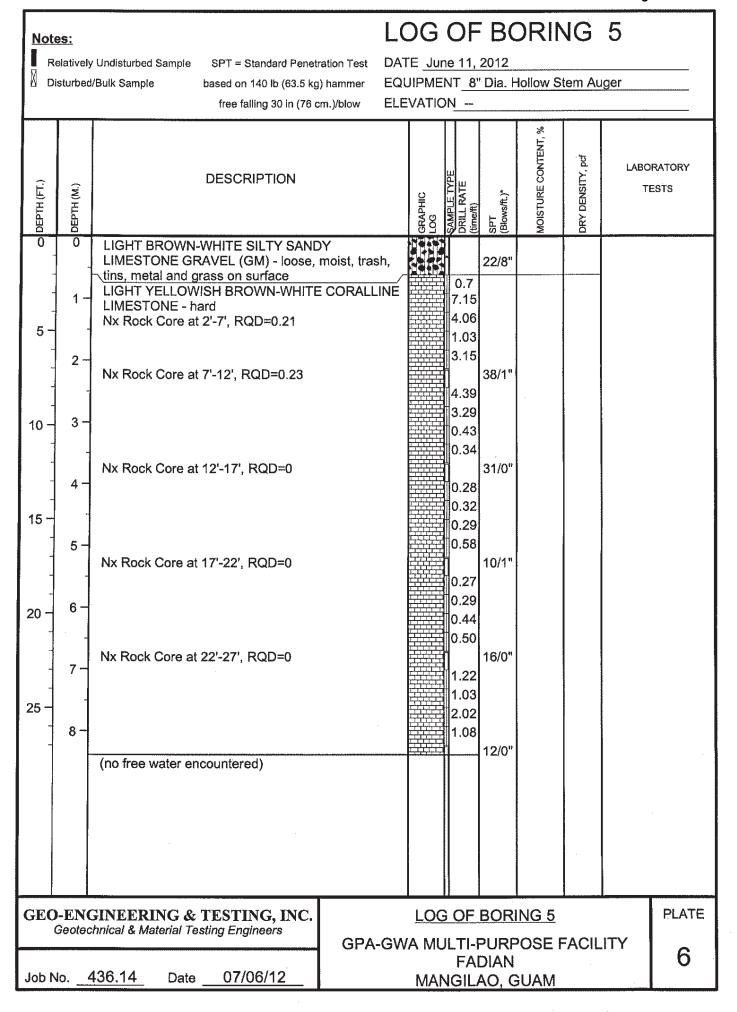
**1B** 

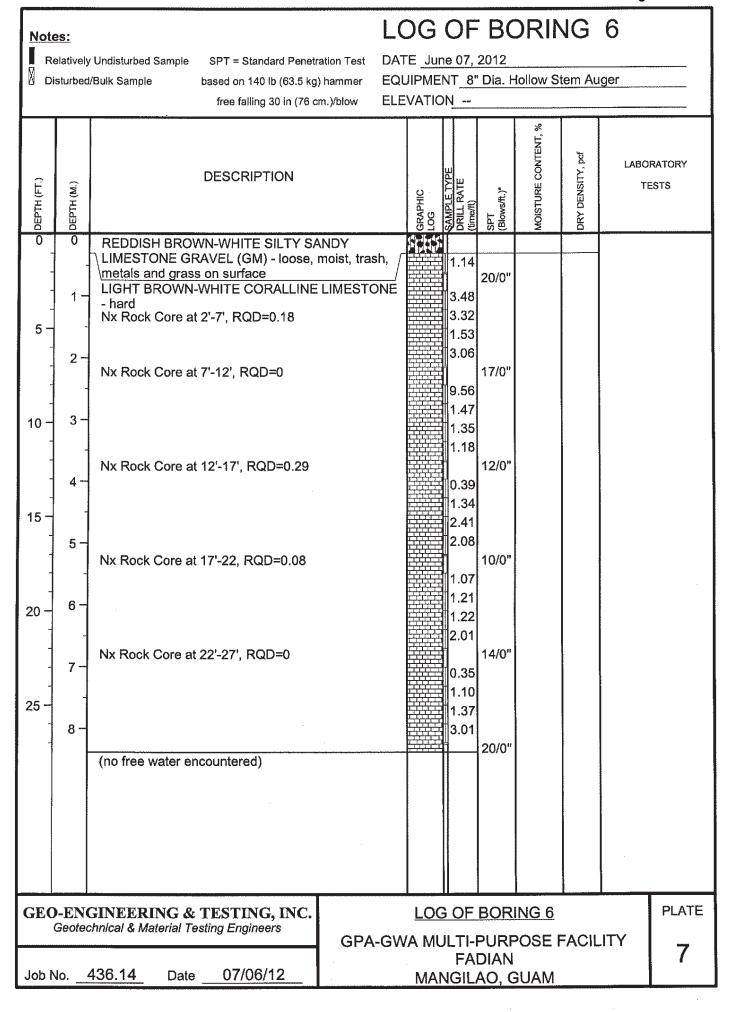
No	ote	<u>s:</u>		LOG OF BORING 1							
	Rel	atively	Undisturbed Sample SPT = Standard Penetration Test	DATE June 08, 2012							
	Dis	turbed	/Bulk Sample based on 140 lb (63.5 kg) hammer	EQUIPMENT 8" Dia. Hollow Stem Auger							
			free falling 30 in (76 cm.)/blow	ELEVATION							
	П			8							
				GRAPHIC LOG SAMPLE TYPE BRILL RATE (Imerit) SPT (Blows/fL)* MOISTURE CONTENT, % ALSSA ALSS							
			DESCRIPTION	LABORATORY							
H.		H.		GRAPHIC LOG SAMPLE TYPE SAMPLE TYPE (Ime/ft) SPT (Blows/ft.)* MOISTURE CONTI MOISTURE CONTI ALSASA A							
<b>DEPTH (FT.)</b>		DEPTH (M.)		GRAPHIC LOG SAMPLE I DRIL RAT (timeft) SPT (Blows/ft.)*  MOISTURE  DRY DENS							
0		0	TREDDISH BROWN-WHITE SILTY SANDY	76(3)							
		-	LIMESTONE GRAVEL (GM) - loose, slightly moboulders and grass on surface	/ [pi   pi   pi   pi   pi   pi   pi   pi							
	-	1-	LIGHT BROWN-WHITE CORALLINE LIMESTO	ONE 1.09							
	-	۱ ۱	- hard Nx Rock Core at 2'-7', RQD=0	1.00							
5	$\dashv$	1	TATION OF ALL PITTED	0.39							
	1	2-		1.37							
			Nx Rock Core at 7'-12', RQD=0	17/0"							
				0.23							
10	4	3 -		0.35							
	1			0.34							
	1		Nx Rock Core at 12'-17', RQD=0	0.43							
	1	4 -		90							
15	]	4		0.27							
10	-	_		0.42							
	+	5 –	Nx Rock Core at 17'-22', RQD=0	20/1"							
	+		Total Colo at 11 22,11ab c	0.52							
	1	6 -		0.44							
20	]			1.06							
		1	No Book Come of OOL OF DODGO	1.08							
	-	7	Nx Rock Core at 22'-27', RQD=0	0.48							
	1		·	1.82							
25	$\dashv$	1		1.05							
		8 -		0.51							
		ŀ	(no free water encountered)	24/2"							
			(,,,,,,, .								
			•								
GE			CINEERING & TESTING, INC.	LOG OF BORING 1 PLATE							
	G	eotec	chnical & Material Testing Engineers GPA	-GWA MULTI-PURPOSE FACILITY							
				FADIAN 2							
Job	No	o. <u> </u>	436.14 Date <u>07/06/12</u>	MANGILAO, GUAM							

Note	es:			LOG OF BORING 2							
Ω.		Undisturbed Sample /Bulk Sample	SPT = Standard Penetro based on 140 lb (63.5 kg)		DATE <u>Jur</u> EQUIPME			Iollow S	tem Au	aer	<u> </u>
			free failing 30 in (76 cr		ELEVATIO						
рертн (гт.)	DЕРТН (M.)		DESCRIPTION		GRAPHIC LOG	SAMPLE TYPE DRILL RATE (time/ft)	SPT (Blows/ft.)*	MOISTURE CONTENT, %	DRY DENSITY, pcf		RATORY SSTS
5	2-	LIMESTONE GR moist, grass on s	/N-WHITE SILTY SA AVEL (GM) - mediun urface WHITE CORALLINE	n dense,	NE NE	0.24 3.13 2.54 2.33 6.15 3.49 1.20 2.35 5.49	15/0"				
15 -	5 -					5.07 0.13 0.43 2.20 4.35 2.12 0.52	40/2"				
		(no free water end	countered)			0.22 0.28					
	O-ENGINEERING & TESTING, INC. Geotechnical & Material Testing Engineers				LOG	OF	BORI	NG 2			PLATE
		436.14 Date	07/06/12	GPA-	GWA ML MAN	FA	PURP DIAN AO, G		FACIL	ITY	3

Note				LOG OF BORING 3							
$\Lambda$		Undisturbed Sample SPT = Standard Penetration   Bulk Sample based on 140 lb (63.5 kg) hamr		DATE June 08, 2012  EQUIPMENT 8" Dia. Hollow Stem Auger							
[ ]	otal boar	free falling 30 in (76 cm.)/blo		VATIO		Dia. i	IONOW O	tom rtu	901		
							%				
DЕРТН (FT.)	DEPTH (M.)	DESCRIPTION		GRAPHIC LOG	SAMPLE TYPE DRILL RATE (time/ft)	SPT (Blows/ft.)*	MOISTURE CONTENT, 9	DRY DENSITY, pcf		RATORY ESTS	
10	1 - 2 - 3 - 4 -	REDDISH BROWN-WHITE SILTY SANDY LIMESTONE GRAVEL (GM) - medium der moist, boulders, grass on surface LIGHT BROWN-WHITE CORALLINE LIME - hard Nx Rock Core at 2'-7', RQD=0  Nx Rock Core at 7'-12', RQD=0  Nx Rock Core at 12'-17', RQD=0	nse,		0.24 0.26 2.54 2.33 6.15 3.49 1.20 1.43 0.48 0.54 1.12 0.59 0.51	88 10/1"					
20 -	6-	Nx Rock Core at 17'-22', RQD=0			0.43 0.40 0.49 1.48						
25 -	7 - 8 -	Nx Rock Core at 22'-27', RQD=0  (no free water encountered)			0.41 1.27 1.32 1.10	17/1" 14/0"					
		GINEERING & TESTING, INC. hnical & Material Testing Engineers	3PA-GW	LOG OF BORING 3 PA-GWA MULTI-PURPOSE FACILITY						PLATE	
Job N	lo4	136.14 Date <u>07/06/12</u>	21.71.011		FA	DIAN				4	

<u>Nc</u>	otes:			LOG	OF	BC	DRIN	١G	4	
	Relati	vely	Undisturbed Sample SPT = Standard Penetration Test	DATE Jun	e 08,	2012				
M	Disturi	bed/	/Bulk Sample based on 140 lb (63.5 kg) hammer	EQUIPME	NT_8'	' Dia. F	lollow S	tem Au	ger	
			free falling 30 in (76 cm.)/blow	ELEVATIO	N					······································
ОЕРТН (FT.)	DEDTH (M.)		DESCRIPTION	GRAPHIC LOG	SAMPLE TYPE DRILL RATE (time/ft)	SPT (Blows/ft.)*	MOISTURE CONTENT, %	DRY DENSITY, pcf		RATORY ESTS
0	] (	7	REDDISH BROWN-WHITE SILTY SANDY	31(C(3))	1.01					
		-	LIMESTONE GRAVEL (GM) - loose, moist, boul thrash, grass on surface LIGHT BROWN-WHITE CORALLINE LIMESTO - hard		1.04 1.24	10/0"				
5	_	-	Nx Rock Core at 2'-7', RQD=0		1.14 1.57					
	2	<u>-                                    </u>	Nx Rock Core at 7'-12', RQD=0		0.31	12/0"				
10	3	3-	Nx Rock Core at 12'-17', RQD=0.08		0.35 1.08 1.12	15/0"				
15	-	<del>-</del>      -	TAX NOOK GOTO AL 12-17, NGB-0.00		1.15	10/0				
	5	; -	Nx Rock Core at 17'-22', RQD=0.17 (hole caved in 5' from 17'-22', possible cavities)		0.46 0.38 0.20	12/0"	÷			
20	_ 6	;			0.31 0.26 1.42					
0.5	7	-	Nx Rock Core at 22'-27', RQD=0		0.33 0.29	10/0"				
25	8				0.24 0.42	11/0"				
			(no free water encountered)							
GE			GINEERING & TESTING, INC. hnical & Material Testing Engineers	LOG OF BORING 4						PLATE
Job	No.	_4	GPA- 136.14 Date <u>07/06/12</u>	GWA MU MAN	FA	PURP DIAN 40, G		-ACIL	ПΥ	5





Notes: LOG OF BORING R-1													
Π	Rela	atively	Undisturbed Sample	SPT = Standard Penetr	ation Test D								
	Dist	urbed	/Bulk Sample	based on 140 lb (63.5 kg)		QUIPME		Dia. H	Iollow S	tem Au	ger		
				free falling 30 in (76 c	m.)/blow E	LEVATIO	)N						
DEPTH (FT.)		DEPTH (M.)		DESCRIPTION		GRAPHIC LOG	SAMPLE TYPE DRILL RATE (time/ft)	SPT (Blows/ft.)*	MOISTURE CONTENT, %	DRY DENSITY, pcf		RATORY	
0	-	0		WN-WHITE SILTY SA		1(2):						SA	
	-	-	grass on surface	RAVEL (GM) - loose, :	slightly moist	t,/	1.20	10/0"				plastic paction	
	_	1-	LIGHT BROWN-	WHITE CORALLINE	LIMESTONI	E	0.56	!!		:		BR	
	-		<ul> <li>hard</li> <li>Nx Rock Core at</li> </ul>	2'-7', RQD=0			0.32	I !					
5		1					0.35						
	]	2 -	No Deals Occ.	7 40 505			0.40						
	-		Nx Rock Core at	7'-12', RQD=0			0.57	14/0"		:			
	+						0.37						
10	10 - 3 -						0.55						
	1 1						0.46	1 1					
	Nx Rock Core at 12'-17', RQD=0							12/0"					
	1	7					0.30 0.31						
15	+	-					0.37						
	1	5 -					0.35	1 1					
			Nx Rock Core at	17'-22', RQD=0				11/0"					
							0.25	İ					
20	4	6					0.21						
	1	-					0.46						
	1	_	Nx Rock Core at	22'-27', RQD=0				30/0"					
	1	7.					0.33						
25		-					0.40						
	1	8 -					0.34 0.38						
	1		· · · · · · · · · · · · · · · · · · ·				0.00	18/0"					
			(no free water en	countered)									
				•									
GE				TESTING, INC.		LOG	OF E	BORIN	IG R-1			PLATE	
	Ge	eotec	hnical & Material Te	sting Engineers	GPA-G	WA ML	JLTI-	PURP	OSE F	FACIL	ITY	_	
					3.7.0			DIAN				8	
Job	No	4	136.14 Date	07/06/12		MAI	NGIL.	AO, G	UAM				

No	tes:		LOG OF BORING R-2							
M		/ Undisturbed Sample SPT = Standard Penetration Test //Bulk Sample based on 140 lb (63.5 kg) hammer free falling 30 in (76 cm.)/blow	DATE June 06, 2012  EQUIPMENT 8" Dia. Hollow Stem Auger  ELEVATION							
ОЕРТН (FT.)	DЕРТН (М.)	DESCRIPTION	GRAPHIC LOG SAMPLE TYPE DRILL RATE (time/ft) SPT (Blows/ft.)* MOISTURE CONTENT, % DRY DENSITY, pdf ACCOUNTENT, pdf ACCOUNTENT, % ACCOUNTENT, MACCOUNTENT, % ACCOUNTENT, MACCOUNTENT, % ACCOUNTENT, MACCOUNTENT, MACCOUNTE, MACCOUNTENT, MACCOUNTENT, MACCOUNTENT, MACCOUNTENT, MACCOUNTE, MACCOUNTENT, MACCOUNTE, MACCOUNTE, MACCOUNTE, MACCOUNTE, MACC							
10 10 20	1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 -	REDDISH BROWN-WHITE SILTY SANDY LIMESTONE GRAVEL (GM) - medium dense, moist, grass on surface LIGHT BROWN-WHITE CORALLINE LIMEST - hard Nx Rock Core at 2'-7', RQD=0  Nx Rock Core at 7'-12', RQD=0  Nx Rock Core at 12'-17', RQD=0  Nx Rock Core at 17'-22', RQD=0  Nx Rock Core at 22'-27', RQD=0  (no free water encountered)	Compaction							
GEO	)-ENC	GINEERING & TESTING, INC.	LOG OF BORING R-2 PLATE							
	Geotec	hnical & Material Testing Engineers	A-GWA MULTI-PURPOSE FACILITY							
Job I	No. 4	36.14 Date 07/06/12	FADIAN 9							

<u>N</u>	otes:				LO	G (	DF	TE:	ST	PIT	1	
	Undisturbed Sample SPT = Standard Penetration  Disturbed/Bulk Sample based on 63.5 kg (140 lb) ha  free falling 76 cm (30 in.)				EQUI	May PMEN ATION	T Exc	12 avator			Marine 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
DEPTH (FT.)			DESCRIPTION			GRAPHIC LOG	SAMPLE TYPE DRILL RATE (time/ft)	SPT (Błows/ft.)	MOISTURE CONTENT, %	DRY DENSITY, pcf		RATORY STS
2	0.4	hard from 2.5' (Refusal to dig (no free water	ging at 2.5')	LIMESTO	NE -			3	V			
GI	EO-EN	GINEERING o	& TESTING, INC. Testing Engineers					EST				PLATE
Joi	o No		Date07/06/12	GPA-			FAD		ė	ACIL	ITY	10

Not	es:				LO	G (	<b>DF</b>	TE:	ST	PIT	2	
Μ		oed Sample	tion Test									
	Disturbed/Bulk Sample based on 63.5 kg (140 lb) hamm free falling 76 cm (30 in.)/blo					ATION		avalur				
<b>ДЕРТН (FT.)</b>	DEPTH (M.)		DESCRIPTION			GRAPHIC LOG	SAMPLE TYPE DRILL RATE (time/ft)	SPT (Blows/ft.)	MOISTURE CONTENT, %	DRY DENSITY, pcf		RATORY ESTS
2 -	0.4	moderately hat hard from 3' (Refusal to dig		LIMESTO	DNE -					1		
GEC	O-ENGINEERING & TESTING, INC.					LOG OF TEST PIT 2						PLATE
'	Geoted	hnical & Material	Testing Engineers	GPA	-GWA				SE F	ACIL	ITY	11
Job N	No4	136.14	Date <u>07/06/12</u>		!	MANO	FADI GILA		JAM			1 1

No	tes:				LO	G (	<b>DF</b>	TE	ST	PIT	3	
87		bed Sample d/Bulk Sample	SPT = Standard Penetra based on 63.5 kg (140 lb) free falling 76 cm (30 in	hammer	DATE EQUIF	PMEN	T Exc	112 cavator	•			
<b>DEPTH</b> (FT.)	DEPTH (M.)		DESCRIPTION			GRAPHIC LOG	SAMPLE TYPE DRILL RATE (time/ft)	SPT (Blows/ft.)	MOISTURE CONTENT, %	DRY DENSITY, pof		DRATORY ESTS
0	0	LIGHT BRO GRAVEL (G	WN-WHITE SILTY SAND M) - dense, moist, trees of	OY LIMESTO on surface	ONE		X		7.0			SA
2 · 4 · 6 · 8	0.4 - 0.8 - 1.2 - 2 - 2.4 -	LIMESTONE (hole kept co	ROWN-WHITE-YELLOW E GRAVEL (GP-GM) - loc ollapsing)						4.4			SA
GEO	)-EN(	GINEERING	& TESTING, INC.		LO	G O	FTE	ST	PIT :	3		PLATE
Job I		136.14	Date 07/06/12	GPA-0			FADI			ACIL	ITY	12

Not	Notes: LOG OF TEST PIT 4									
M		bed Sample SPT = Standard Penetration Test d/Bulk Sample based on 63.5 kg (140 lb) hammer		E May IPMEN						<del> </del>
	isturbec	d/Bulk Sample based on 63.5 kg (140 lb) hammer free falling 76 cm (30 in.)/blow		/ATION		avalui				
DEPTH (FT.)	DEPTH (M.)	DESCRIPTION		GRAPHIC LOG	SAMPLE TYPE DRILL RATE (time/ft)	SPT (Blows/ft.)	MOISTURE CONTENT, %	DRY DENSITY, pcf		PRATORY ESTS
0	0	REDDISH BROWN SANDY SILT (ML) - soft, tall trees and grass on surface	moist,				43.8			SA
	0.4 -	YELLOWISH BROWN-WHITE CORALLINE					43.0		PI=5	; LL=30
2 -		LIMESTONE - hard					:			
-	0.8 –	(Refusal to digging at 3')								
		(no free water encountered)								
	Ē									
							:			
							ı			
GEC	-EN(	GINEERING & TESTING, INC.	L(	OG C	FT	EST	PIT 4	4		PLATE
	960(60	GP	A-GWA		TI-PU FADI		OSE F	ACIL	ITY	13
Job N	lo4	436.14 Date <u>07/06/12</u>		MANO			JAM			'

Not	otes: LOG OF TEST PIT 5								
M		ed Sample SPT = Standard Penetration Te	_	May 28,					
M D	isturbed	/Bulk Sample based on 63.5 kg (140 lb) hamme free falling 76 cm (30 in.)/blow		PMEN <u>T (</u> ATION	Excavator -	•			
		nee talling /e an (ee in.), see		П	1	%			
ОЕРТН (FT.)	DEPTH (M.)	DESCRIPTION		GRAPHIC LOG SAMPLE TYPE	(time/ft) SPT (Blows/ft.)	MOISTURE CONTENT, %	DRY DENSITY, pcf		RATORY
0 - -	0	REDDISH BROWN-WHITE SANDY SILT ( moist, grass and boulders on surface	(ML) - soft,			37.6		-#20	0=66%
2-	0.4 -	LIGHT BROWN-WHITE CORALLINE LIME moderately hard	ESTONE -				:		
	0.8 -								
4	1.2 -	hard from 4' _(Refusal to digging at 4.5')				9.2			SA
		(no free water encountered)							į
		GINEERING & TESTING, INC. hnical & Material Testing Engineers			TEST				PLATE
		136.14 Date 07/06/12	PA-GWA	FA	-PURPO ADIAN -AO, GL		FACIL	ITY	14

<u>Not</u>	Notes: LOG OF TEST PIT 6										
M		ed Sample /Bulk Sample	SPT = Standard Penetrati based on 63.5 kg (140 lb) h free falling 76 cm (30 in.	nammer	DATE May EQUIPMEN ELEVATION	T Exc					
ОЕРТН (FT.)	DEPTH (M.)		DESCRIPTION		GRAPHIC LOG	SAMPLE TYPE DRILL RATE (time/ft)	SPT (Blows/ft.)	MOISTURE CONTENT, %	DRY DENSITY, pcf		RATORY SSTS
2-	0.4	trees on surfa YELLOWISH LIMESTONE	ROWN SANDY SILT (ML ice BROWN-WHITE CORA - moderately hard					6.9			
GEO	)-EN( Geotec	GINEERING	& TESTING, INC. Testing Engineers		LOG (	OF T	EST	PIT	6		PLATE
Job I		436.14_	Date07/06/12	GPA-	GWA MUI MAN	FAD			ACIL	ITY	15

Not	Notes: LOG OF TEST PIT 7								
Undisturbed Sample SPT = Standard Penetration Test DATE May 30, 2012									
M D	isturbed	#/Bulk Sample based on 63.5 kg (140 lb) free falling 76 cm (30 in		JIPMEN <u>T E</u> VATION	xcavator				
						%			
DEPTH (FT.)	DEPTH (M.)	DESCRIPTION		GRAPHIC LOG SAMPLE TYPE DRILL RATE	(time/ft) SPT (Blows/ft.)	MOISTURE CONTENT, %	DRY DENSITY, pof		RATORY STS
0	0 -	REDDISH BROWN SANDY SILT (ML trees on surface, and exposed coral h	.) - soft, moist, nead	)			Papel		
2 -	0.4 -	LIGHT BROWN-WHITE CORALLINE hard \ (Refusal to digging at 2') (no free water encountered)	LIMESTONE -						
		(no nos water enesanteres)							
						:			
									:
						·			
							:		
		GINEERING & TESTING, INC. chnical & Material Testing Engineers	L	OG OF	TEST	PIT	7		PLATE
Job I		436.14 Date 07/06/12	GPA-GW	'A MULTI- FA MANGIL	DIAN		ACIL	ITY	16

Not	LOG OF TEST PIT 8									
	ndisturt	sed Sample SPT = Standard Penetration	Test DATE	≣ May :	30, 20	12				
N D	isturbed	/Bulk Sample based on 63.5 kg (140 lb) ham free falling 76 cm (30 in.)/bi		IPMEN] /ATION		avator		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
		nee raining 76 GH (30 HL)/Di	iow LLLV	I I			%			
DEРТН (FT.)	DEPTH (M.)	DESCRIPTION		GRAPHIC LOG	SAMPLE TYPE DRILL RATE (time/ft)	SPT (Blows/ft.)	MOISTURE CONTENT, %	DRY DENSITY, pcf		RATORY ESTS
0	0.4 -	REDDISH BROWN-WHITE SILTY SANE LIMESTONE GRAVEL (GM) - loose, mo surface								
2-	0.8 -						13.5			SA ; LL=35
-	4.0	REDDISH BROWN SANDY SILT (ML) -	soft, moist							
4 -	1.2 -			V			29.1			; LL=35 0=84%
6-	1.6 -	LIGHT BROWN-WHITE CORALLINE LII moderately hard	MESTONE -							
	2									
		hard at 7' (no free water encountered)								
7.000										
GEC	-EN	GINEERING & TESTING, INC.	L(	OG O	F TE	ST	PIT 8	 <u>3</u>		PLATE
	Geoted	hnical & Material Testing Engineers	GPA-GWA	MUL	TI-Pl	JRPC			ITY	47
Job N	۱o. <u></u>	136.14 Date <u>07/06/12</u>		MANG	FADI SILA(		JAM			17.

Page 274 of 345 LOG OF TEST PIT 9 Notes: Undisturbed Sample SPT = Standard Penetration Test DATE May 30, 2012 Disturbed/Bulk Sample based on 63.5 kg (140 lb) hammer **EQUIPMENT** Excavator **ELEVATION** -free falling 76 cm (30 in.)/blow AOISTURE CONTENT, % DENSITY, pcf LABORATORY **DESCRIPTION** O DEPTH (FT.) SAMPLE TYP DRILL RATE (time/ft) DEPTH (M.) **TESTS** REDDISH BROWN SANDY CLAYEY SILT (MH) soft, moist, short grass on surface 0.4 -2 -8.0 1.2 YELLOWISH BROWN-WHITE CORALLINE LIMESTONE - moderately hard 1.6 6 hard at 6' (Refusal to digging at 6') (no free water encountered) **LOG OF TEST PIT 9 PLATE** GEO-ENGINEERING & TESTING, INC. Geotechnical & Material Testing Engineers **GPA-GWA MULTI-PURPOSE FACILITY** 18 **FADIAN** 436.14 07/06/12 Job No. Date MANGILAO, GUAM

No	Notes: LOG OF TEST PIT 10								
M M		bed Sample SPT = Standard Penetration Test d/Bulk Sample based on 63.5 kg (140 lb) hammer							
	oisturbe	d/Bulk Sample based on 63.5 kg (140 lb) hammer free falling 76 cm (30 in.)/blow	EQUIPMENT Excavator ELEVATION						
БЕРТН (FT.)	DEPTH (M.)	DESCRIPTION	GRAPHIC LOG SAMPLE TYPE SAMPLE TYPE (time/ft) SPT (Blows/ft.) MOISTURE CONTENT, % DRY DENSITY, pcf	LABORATORY TESTS					
2-	0.4 -	LIGHT BROWN-WHITE SILTY SANDY LIMEST GRAVEL (GM) - medium dense, moist, trees or surface	NE 10.8	·					
	0.8 -	REDDISH BROWN-WHITE CORALLINE LIMESTONE - moderately hard	2.0						
4 -	1.2 -	hard from 4' (Refusal to digging at 4') (no free water encountered)							
GEC	-EN Geoted	GINEERING & TESTING, INC. chrical & Material Testing Engineers	LOG OF TEST PIT 10	PLATE					
Job N	No	GPA- 436.14 Date <u>07/06/12</u>	WA MULTI-PURPOSE FACILIT FADIAN MANGILAO, GUAM	<sup>Y</sup> 19					

Notes: LOG OF TEST PIT 11											
₩.		oed Sample I/Bulk Sample	SPT = Standard Penetro based on 63.5 kg (140 lb)		DATE Ma EQUIPME			•			
		Dan Sample	free falling 76 cm (30 l		ELEVATIO		cavalu				-
О БЕРТН (FT.)	DЕРТН (М.)		DESCRIPTION		GRAPHIC	SAMPLE TYPE DRILL RATE (time(ft))	SPT (Blows/ft.)	MOISTURE CONTENT, %	DRY DENSITY, pcf	1	DRATORY ESTS
2-	0.4 -	LIMESTONE surface  LIGHT BROV hard, with silt (Refusal to di	BROWN-WHITE SILTY GRAVEL (GM) - dense  /N-WHITE CORALLINE pockets gging at 2.5') encountered)	, moist, trees	on						
						-					<b></b>
GEO	-ENG Geoteci	SINEERING hnical & Material	& TESTING, INC. Testing Engineers		LOG C		·				PLATE
GPA-GWA MULTI-PU FADI Job No. <u>436.14</u> Date <u>07/06/12</u> MANGILAC					IAN		ACIL	ITY	20		

Notes: LOG						TE	ST	PIT	T 12	
	Jndisturt	ed Sample SPT = Standard Penetration Test	est DATE May 29, 2012							
	Disturbed	/Bulk Sample based on 63.5 kg (140 lb) hammer	EQUIPM	_		avato	•			
	1	free falling 76 cm (30 in.)/blow	ELEVAT	ION						
БЕРТН (FT.)	DEPTH (M.)	DESCRIPTION	GRAPHIC	LOG SAMDI E TVDE	AMITE ITPE DRILL RATE (time/ft)	SPT (Blows/ft.)	MOISTURE CONTENT, %	DRY DENSITY, pcf	1	ORATORY FESTS
0	0.4	LIGHT BROWN-WHITE SILTY SANDY LIMES GRAVEL (GM) - medium dense, moist, trees o surface	TONE in	A. C. C. C.						
2-	0.8	reddish brown-white, dense from 2.5'					6.9		-#2	00=9%
-	-	2.0					5.7		-#20	00=14%
4 -	1.2 -	LIGHT BROWN-WHITE CORALLINE LIMESTO moderately hard, with silt pockets	ONE -							
-	-	hard at 5' (Refusal to digging at 5')								
		(no free water encountered)								
			:							
										:
GEO	-ENG	INEERING & TESTING, INC. inical & Material Testing Engineers	LOG	OF	TE	ST F	IT 1:	2		PLATE
	-501001	GPA	-GWA MI				SE F	ACIL	ITY	21
ob N	o. <u>4</u>	36.14 Date <u>07/06/12</u>	MAI		ADI. ILAC	AN ), GU	AM			41

Notes: LOG OF TEST PIT 13										
1 1/2		bed Sample SPT = Standard Penet		st DATE May 29, 2012						
W c	Disturbe	d/Bulk Sample based on 63.5 kg (140 lk		EQUIPMEN	***************************************	avator	7			<u>.</u>
	1	free falling 76 cm (30	in.)/blow t	ELEVATION	<u> </u>		I			
O DEPTH (FT.)	DEPTH (M.)	DESCRIPTION		GRAPHIC LOG	SAMPLE TYPE DRILL RATE (time/ft)	SPT (Blows/ft.)	MOISTURE CONTENT, %	DRY DENSITY, pdf	l	PRATORY ESTS
	0.4 -	REDDISH BROWN SILTY SANDY I GRAVEL (GM) - dense, moist, trees			M M		5.7			SA
2-		REDDISH BROWN CLAYEY SILT (			\ \ \		44.9			3; LL=55 0=99%
,	0.8~	LIGHT BROWN-WHITE CORALLIN moderately hard, with silt pockets	E LIMESTON	IE -					7/20	3 30 70
4 -	1.2 -	hard from 4' (Refusal to digging at 4') (no free water encountered)								
							-			
								:		
	:									
					,					:
			<b>-</b>							
GEC	)-ENG Geoted	GINEERING & TESTING, INC. chrical & Material Testing Engineers		LOG O	FTE	ST F	<u>PIT 1</u>	3		PLATE
Job N		436.14 Date <u>07/06/12</u>	GPA-G	WA MUL MANO	FADI	AN		ACIL	ITY	22

No	Notes: LOG OF TEST PIT 14									
1.67		bed Sample SPT = Standard Penetration T d/Bulk Sample based on 63.5 kg (140 lb) hamm free falling 76 cm (30 in.)/bloo	er EQUI	May 2 PMEN <u>T</u> ATION_	Exc					
БЕРТН (ЕТ.)	DEPTH (M.)	DESCRIPTION		GRAPHIC LOG SAMPI ETVPE	ORILL RATE (time/ft)	SPT (Blows/ft.)	MOISTURE CONTENT, %	DRY DENSITY, pd	l	DRATORY ESTS
2	0.4	LIGHT BROWN-WHITE-YELLOW SILTY S LIMESTONE GRAVEL (GM) - dense, mo surface	st, trees on				4.6			SA
	0.8~	LIGHT BROWN-WHITE CORALLINE LIMI hard, with silt pockets (Refusal to digging at 3.5') (no free water encountered)	ESTONE -							
GEO	)-EN( Geotec	GINEERING & TESTING, INC. hnical & Material Testing Engineers	LO	G OF	TE	STF	PIT 1	4		PLATE
Job I		136.14 Date 07/06/12	PA-GWA		ADI	AN		ACIL	ITY	23

Notes: LOG OF TEST PIT 15						
M		bed Sample SPT = Standard Penetration Test d/Bulk Sample based on 63.5 kg (140 lb) hammer	DATE May 29, 2012 EQUIPMENT Excavator			
	1010100	free falling 76 cm (30 in.)/blow	ELEVATION			
DEPTH (FT.)	DEPTH (M.)	DESCRIPTION	GRAPHIC LOG SAMPLE TYPE DRILL RATE (time/ft) SPT (Blows/ft.) MOISTURE CONTENT, % ACISTURE CONTENT, % ACISTURE CONTENT, % ACISTURE CONTENT, % ACISTURE CONTENT, % ACISTURE CONTENT, % ACISTURE CONTENT, ACI			
0	0	YELLOWISH BROWN-WHITE SILTY SANDY LIMESTONE GRAVEL (GM) - medium dense, n trees on surface	11(1)(1)(1)			
2-	0.4 -	REDDISH BROWN-WHITE GRAVELLY SANDY	(SULT)			
-	0.8 -	\(ML) - soft, moist LIGHT BROWN-WHITE CORALLINE LIMESTO moderately hard, with silt pockets				
4	1.2 -	hard from 4' (Refusal to digging at 4') (no free water encountered)				
	į					
GEO	-ENC Geotec	GINEERING & TESTING, INC.	LOG OF TEST PIT 15 PLATE			
			GWA MULTI-PURPOSE FACILITY FADIAN MANGILAO, GUAM			

No	Notes: LOG OF TEST PIT 16									
Ωŧ		bed Sample SPT = Standard Penetration T d/Bulk Sample based on 63.5 kg (140 lb) hamn free falling 76 cm (30 in.)/blo	ner EQUI	May PMEN ATION	T Exc		-			
DЕРТН (FT.)	DEPTH (M.)	DESCRIPTION	·	GRAPHIC LOG	SAMPLE TYPE DRILL RATE (time/ft)	SPT (Blows/ft.)	MOISTURE CONTENT, %	DRY DENSITY, pof		RATORY ESTS
2 -	0.4 -	REDDISH BROWN-WHITE SILTY SAND LIMETONE GRAVEL (GM) - medium den trees on surface  LIGHT BROWN-WHITE CORALLINE LIM moderately hard  hard from 3' (Refusal to digging at 3') (No free water encountered)	se, moist,				14.3			; LL=37 0=19%
GEC	)_EN(	GINEERING & TESTING, INC.	1.0	G OF	 = TE	ST E	DIT 1	6		PLATE
- Jul	Geotec	hnical & Material Testing Engineers	<u>LO</u> GPA-GWA						ITY	
Job 1	اoـــــــــــــــــــــــــــــــــــ	136.14 Date <u>07/06/12</u>			FADI	AN				25

Not	es:		LOG OF TEST PIT 17					
l M		ped Sample SPT = Standard Penetration Test	DATE May 29, 2012					
	isturbed	d/Bulk Sample based on 63.5 kg (140 lb) hammer free falling 76 cm (30 in.)/blow	EQUIPMENT Excavator  ELEVATION					
	Π							
DEPTH (FT.)	DEPTH (M.)	DESCRIPTION	GRAPHIC LOG SAMPLE TYPE DRILL RATE (timeff) SPT (Blows/ft.) MOISTURE CONTENT, % MOISTURE CONTENT, % ACCONTENT, pcf ACCONTENT, pcf ACCONTENT, ACCONTENT, % ACCONTENT, ACCONTENT, % ACCONTENT, ACCONTENT, ACCOUTE, ACCONTENT, ACCONTENT, ACCONTENT, ACCONTENT, ACCONTENT, ACCOUTE, ACCONTENT, ACCONTENT, ACCOUTE,					
-	0.4 -	REDDISH BROWN-WHITE SILTY SANDY LIMESTONE GRAVEL (GM) - loose, moist, tre surface	es on 15.8 SA PI=7; LL=52					
2 -	0.8 -	LIGHT BROWN-WHITE CORALLINE LIMEST moderately hard	ONE -					
4 -	1.2	hard from 4' (Refusal to digging at 4') (no free water encountered)						
To produce the second								
ļ								
GEO	-ENG	GINEERING & TESTING, INC.	LOG OF TEST PIT 17 PLATE					
Job N		GPA  436.14 Date 07/06/12	-GWA MULTI-PURPOSE FACILITY FADIAN MANGILAO, GUAM					

Notes: LOG OF TEST PIT 18										
17/		sped Sample SPT = Standard Penetration Test based on 63.5 kg (140 lb) hammer free falling 76 cm (30 in.)/blow	EQUI	May PMEN ATION	T Exc		•			
рертн (гт.)	DEPTH (M.)	DESCRIPTION		GRAPHIC LOG	SAMPLE TYPE DRILL RATE (time/ft)	SPT (Blows/ft.)	MOISTURE CONTENT, %	DRY DENSITY, pcf		DRATORY ESTS
2-	0.4 -	YELLOWISH BROWN-WHITE SILTY SANDY LIMESTONE GRAVEL (GM) - medium dense, trees on surface	moist,				18.1			00=31%
4 —		YELLOWISH BROWN-WHITE CORALLINE LIMESTONE - hard (Refusal to digging at 4') (no free water encountered)			V V				PI=5	; LL=34
9,044,04										
						:				
GEO	-ENC Geotec	GINEERING & TESTING, INC.  hnical & Material Testing Engineers		G O						PLATE
Job N	lo4	GPA -36.14 Date <u>07/06/12</u>	-GWA- 1		FADI	AN	÷	ACIL	ITY	27

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Notes: LOG OF TEST PIT 19											
M		d/Bulk Sample based on 6	andard Penetration Test 3.5 kg (140 lb) hammer ing 76 cm (30 in.)/blow	DATE May 30, 2012  EQUIPMENT Excavator  ELEVATION							
DEPTH (FT.)	DEPTH (M.)	DESC	RIPTION		GRAPHIC LOG	SAMPLE TYPE DRILL RATE (time/ft)	SPT (Blows/ft.)	MOISTURE CONTENT, %	DRY DENSITY, pcf		DRATORY ESTS
0	0.4 -		GM) - medium dense			Ž		18.3		P!=#	SA 5; LL=30
2 -	0.8 -	REDDISH BROWN SAN	DY SILT (ML) - soft,	moist		V		44.4		PI=5	i; LL=34 00=96%
4 -	1.2 -	YELLOWISH BROWN-W LIMESTONE - moderate	HITE CORALLINE y hard				-				
6 -	1.6 -	hard from 6' (Refusal to digging at 6')		ı		X					
		(no free water encountered	ed)								
William											
GEC	)-EN( Geotec	GINEERING & TESTI hnical & Material Testing Eng	ineers	LOG OF TEST PIT 19							PLATE
Job N	Geotechnical & Material Testing Engineers  GPA-GWA MULTI-PURPOSE FACILITY  FADIAN  ob No. 436.14 Date 07/06/12 MANGILAO, GUAM									28	

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Not	es:		LOG OF TEST PIT 20							
N/A		ed Sample SPT = Standard Penetration /Bulk Sample based on 63.5 kg (140 lb) hami								
		free falling 76 cm (30 in.)/blo								
<b>DEPTH (FT.)</b>	DEPTH (M.)	DESCRIPTION	GRAPHIC LOG SAMPLE TYPE SAMPLE TYPE (time/ft) SPT (Blows/ft.) MOISTURE CONTENT, % ADEY DENSITY, pcf SLESSED SAMPLE TYPE (time/ft) SPT (Blows/ft.) MOISTURE CONTENT, % ADEX DENSITY, pcf ADEX DENSITY, pcf							
2-	0.4 -	LIGHT BROWN TO RED-BROWN-WHIT SANDY LIMESTONE GRAVEL (GM) - lotrash, such as tires, metal, GI pipes on su	se, moist,							
4	1.2 -	YELLOWISH LIGHT BROWN-WHITE CO LIMESTONE - moderately hard hard from 4' (Refusal to digging at 4.2') (no free water encountered)	RALLINE							
THE PROPERTY OF THE PROPERTY O										
GEO	-ENC	GINEERING & TESTING, INC. Inchain & Material Testing Engineers	LOG OF TEST PIT 20 PLATE							
Job N			SPA-GWA MULTI-PURPOSE FACILITY FADIAN MANGILAO, GUAM							

	MAJOR DIVIS	SIONS	SYN	/BOL	TYPICAL NAMES
40	GRAVELS	CLEAN GRAVELS WITH LITTLE OR NO	GW		WELL. GRADED GRAVEL, WELL-GRADED GRAVEL WITH SAND
SOILS 200 SIEVE	GRAVELS	FINES	GP	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	POORLY GRADED GRAVEL, POORLY GRADED GRAVEL WITH SAND
ED SO	MORE THAN HALF COARSE FRACTION IS LARGER THAN No. 4 SIEVE SIZE	GRAVELS WITH	GM	111	SILTY GRAVEL, SILTY GRAVEL WITH SAND
GRAINED		OVER 12 % FINES	GC		CLAYEY GRAVEL, CLAYEY GRAVEL WITH SAND
R 2 시 2 시 2 시 2 시 2 시 2 시 2 시 2 시 2 시 2			SW	*****	WELL-GRADED SAND, WELL-GRADED SAND WITH GRAVEL
COARSE GRAINED SOILS MORE THAN # 200 SIEVE	SANDS	CLEAN SANDS WITH LITTLE OR NO FINES	SP		POORLY GRADED SAND, POORLY GRADED SAND WITH GRAVEL
COA	MORE THAN HALF COARSE FRACTION IS SMALLER THA No. 4 SIEVE SIZE	SANDS WITH OVER	SM		SILTY SAND, SILTY SAND WITH GRAVEL
		12 % FINES	sc		CLAYEY SAND, CLAYEY SAND WITH GRAVEL
LS 300 SIEVE			ML		SILT, SILT WITH SAND OR GRAVEL, SANDY OR GRAVELLY SILT
SOIL HAN# 200	SILTS AN		CL		LEAN CLAY, LEAN CLAY WITH SAND OR GRAVEL, SANDY OR GRAVELLY LEAN CLAY
FINE GRAINED SOILS MORE THAN # 200 SIEVE	LIQUID LIMIT LI	LIQUID LIMIT LESS THAN 50			ORGANIC SILT OR CLAY, ORGANIC SILT OR CLAY WITH SAND OR GRAVEL, SANDY OR GRAVELLY ORGANIC SILT OR CLAY
RAI			МН		ELASTIC SILT, ELASTIC SILT WITH SAND OR GRAVEL, SANDY OR GRAVELLY ELASTIC SILT
FINE G	SILTS ANI		СН		FAT CLAY, FAT CLAY WITH SAND OR GRAVEL, SANDY OR GRAVELLY FAT CLAY
FI	LIQUID LIMIT GRE	ОН		ORGANIC SILT OR CLAY, ORGANIC SILT OR CLAY WITH SAND OR GRAVEL, SANDY OR GRAVELLY ORGANIC SILT OR CLAY	
н	GHLY ORGANI	C SOILS	Pt	2222	PEAT AND OTHER HIGHLY ORGANIC SOILS

## **UNIFIED SOIL CLASSIFICATION SYSTEM**

SA = Sieve Analysis with Hydrometer
(ASTM C117/C136)

LL = Liquid Limit (ASTM D4318)

Pl = Plasticity Index (ASTM D4318)

-#200 = Minus No. 200 Mesh Sieve (ASTM C117)

MDD = Laboratory Compaction (ASTM D698)

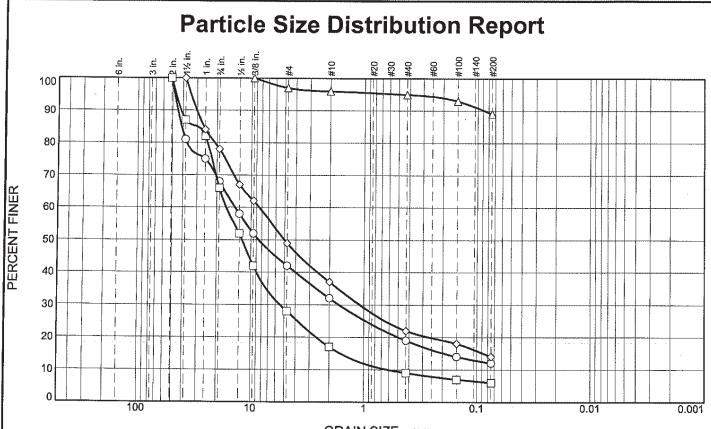
CBR = California Bearing Ratio (ASTM D1883)

BLOW COUNTS REPORTED FOR UNDISTURBED SAMPLES ARE CORRECTED TO REPRESENT EQUIVALENT STANDARD PENETRATION TEST BLOW COUNTS

□ DISTURBED SAMPLE

RELATIVELY UNDISTURBED SAMPLE

GEO-ENGINEERING & TESTING, INC. Geotechnical & Material Testing Engineers	SOIL CLASSIFICATION CHART  AND KEY TO TEST DATA	PLATE	
	GPA-GWA MULTI-PURPOSE FACILITY	30	
Job No. <u>436.14</u> Appr. <u>U.S.</u> Date: <u>07/16/12</u>	FADIAN, MANGILAO GUAM		



	% +3"	% Gr	avel		RAIN SIZE - % Sand		% Fines		
	70 . 3	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay	
	0	32	26	10	13	7	12		
	0	34	38	11	8	3	6		
۷.	0	0	3	1	1	6	89		
>	0	22	29	12	15	8	14		

X	LL	PL	D <sub>85</sub>	D <sub>60</sub>	D <sub>50</sub>	D <sub>30</sub>	D <sub>15</sub>	D <sub>10</sub>	Cc	Cu
0			41.2332	13.8713	8.5108	1.6488	0.1953			
			30.1334	16.5870	11.9542	5.4690	1.6079	0.6212	2.90	26.70
Δ	30	25								
<b>♦</b>			26.3121	8.4658	5.0202	1.0865	0.0877			

L	Material Description	USCS	AASHTO
k	D LIGHT BROWN-WHITE SILTY SANDY LIMESTONE GRAVEL	GM	wui.
I	□ ORANGE-BROWN-WHITE-YELLOW SANDY LIMESTONE GRAVEL	GM	
1	△ REDDISH BROWN SANDY SILT	ML	
k	> LIGHT BROWN-WHITE CORALLINE LIMESTONE	ROCK	

Project No. 436.14 **Client: RIM ARCHITECTS** Project: GPA-GWA MULTI-PURPOSE FACILITY

O Source of Sample: TP-3

Depth: 0.5

□ Source of Sample: TP-3

Depth: 4

△ Source of Sample: TP-4 ♦ Source of Sample: TP-5

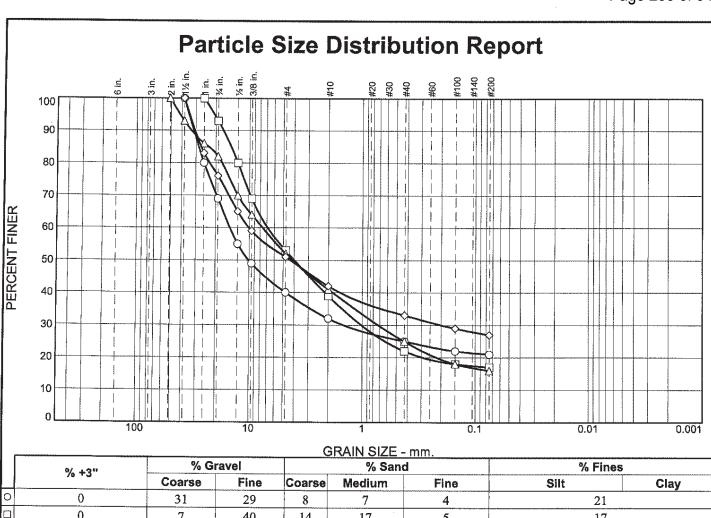
Depth: I Depth: 4

GEO-ENGINEERING & TESTING, INC. Geotechnical & Materials Testing Engineers

**Plate** 

Remarks:

31



0,	% +3"	% Gr	avel		% Sand		% Fines		
	, 13	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay	
	0	31	29	8	7	4	21		
	0	7	40	14	17	5	17		
	0	18	30	11	16	9	16		
	0	24	25	9	9	6	27		

$\mathbb{Z}$	LL	PL	D <sub>85</sub>	D <sub>60</sub>	D <sub>50</sub>	D <sub>30</sub>	D <sub>15</sub>	D <sub>10</sub>	Cc	Cıı
0	35	29	28.3814	14.9008	10.0982	1.4719				
			14.6076	6.8981	3.9774	1.0173				
Δ			23.2684	7.6227	4.1492	0.7226				
$\Diamond$	52	45	26.9889	10.0836	4.2999	0.1998				

Material Description	USCS	AASHTO
O REDDISH BROWN-WHITE SILTY SANDY LIMESTONE GRAVEL	GM	
□ REDDISH BROWN SILTY SANDY LIMESTONE GRAVEL	GM	
△ LIGHT BROWN-WHITE-YELLOW SILTY SANDY LIMESTONE GRAVEL	GM	
◇ REDDISH BROWN-WHITE SILTY SANDY LIMESTONE GRAVEL	GM	

Project No. 436.14 **Client: RIM ARCHITECTS** Project: GPA-GWA MULTI-PURPOSE FACILITY

O Source of Sample: TP-8

Depth: 2

☐ Source of Sample: TP-13

Depth: 0.5

△ Source of Sample: TP-14

Depth: 1.5

♦ Source of Sample: TP-17

Depth: 1

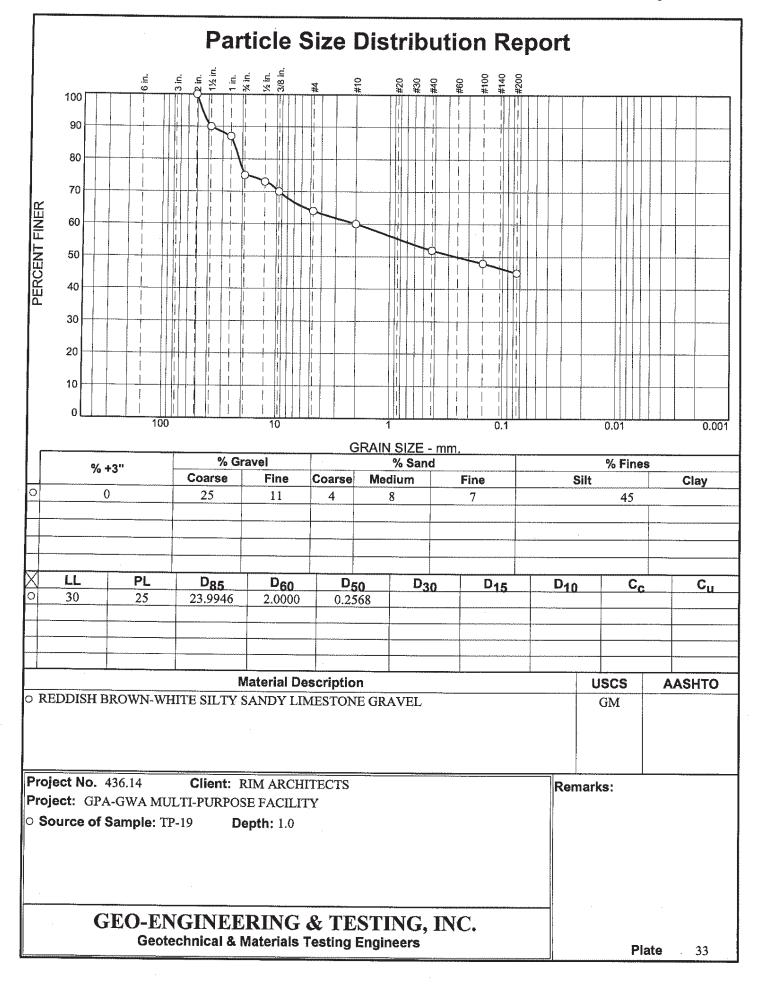
## GEO-ENGINEERING & TESTING, INC.

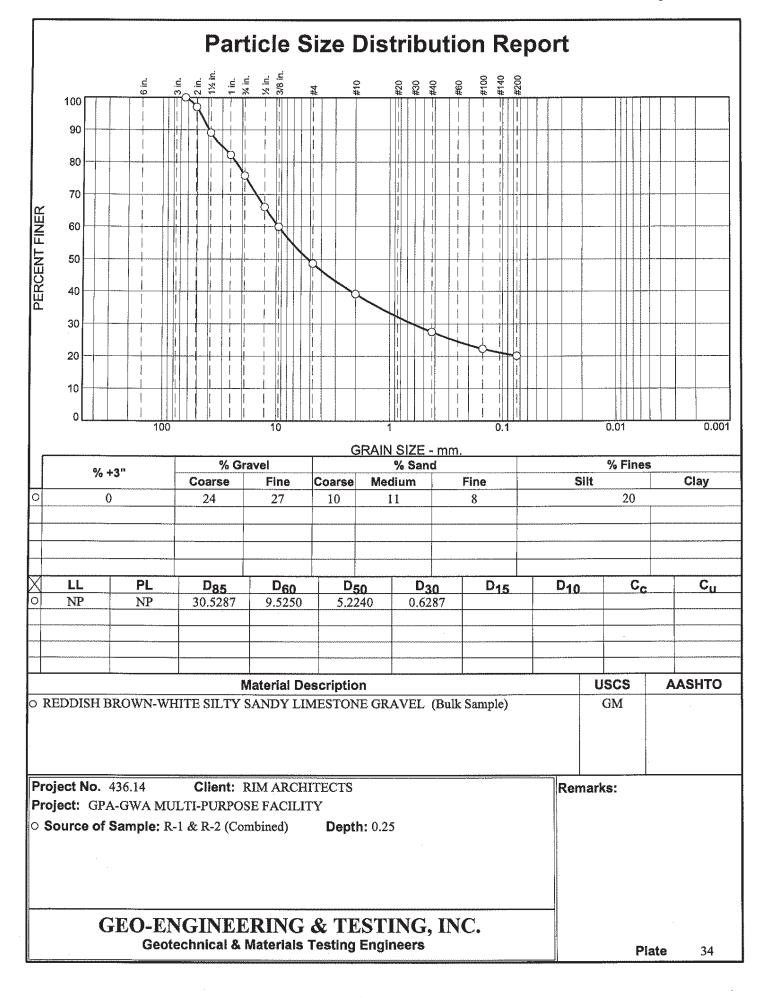
**Geotechnical & Materials Testing Engineers** 

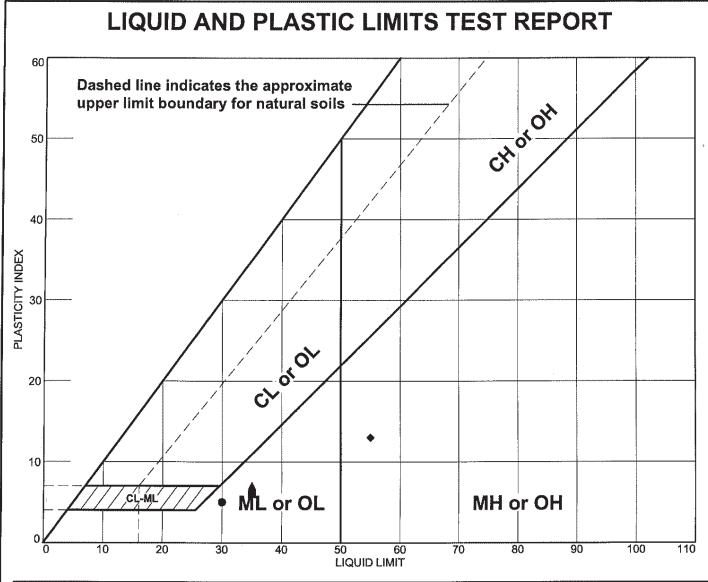
**Plate** 

Remarks:

32







	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
•	REDDISH BROWN SANDY SILT	30	25	5	95	89	ML
	REDDISH BROWN-WHITE SILTY SANDY LIMESTONE GRAVEL	35	29	6	25	21	GM
<b>A</b>	REDDISH BROWN SANDY SILT	35	28	7		, sao qua	ML
•	REDDISH BROWN CLAYEY SILT	55	42	13			MH

Project No. 436.14

**Client: RIM ARCHITECTS** 

Project: GPA-GWA MULTI-PURPOSE FACILITY

**FADIAN** 

Source of Sample: TP-4

Depth: 1

■ Source of Sample: TP-8

▲ Source of Sample: TP-8

Depth: 2

Depth: 4

◆ Source of Sample: TP-13

Depth: 2

# GEO-ENGINEERING & TESTING, INC.

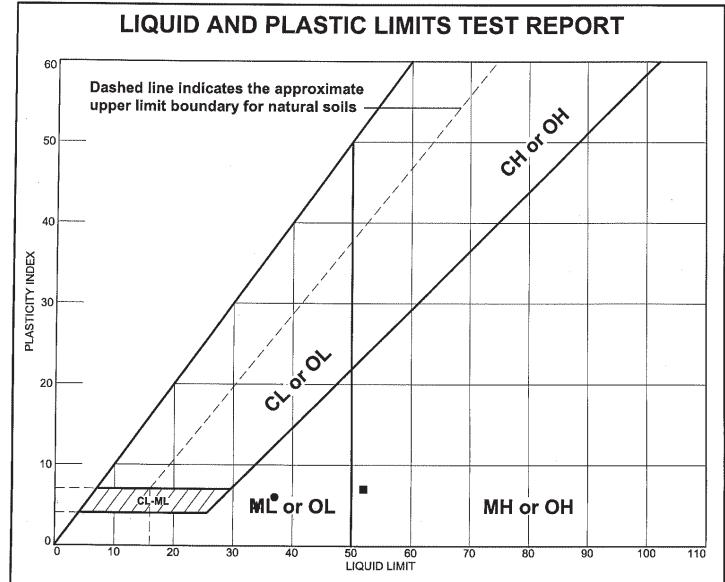
**Geotechnical & Materials Testing Engineers** 

# Remarks:

• This test was performed on sample portion passing No. 40 sieve only.

**Plate** 

35



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
•	REDDISH BROWN-WHITE SILTY SANDY LIMESTONE GRAVEL	37	31	6			GM
	REDDISH BROWN-WHITE SILTY SANDY LIMESTONE GRAVEL	52	45	.7	33	27	GM
<b>A</b>	YELLOWISH BROWN-WHITE SILTY SANDY LIMESTONE GRAVEL	34	29	5			GM

Project No. 436.14

**Client: RIM ARCHITECTS** 

Project: GPA-GWA MULTI-PURPOSE FACILITY

**FADIAN** 

● Source of Sample: TP-16

Depth: 1

■ Source of Sample: TP-17

Depth: 1

▲ Source of Sample: TP-18

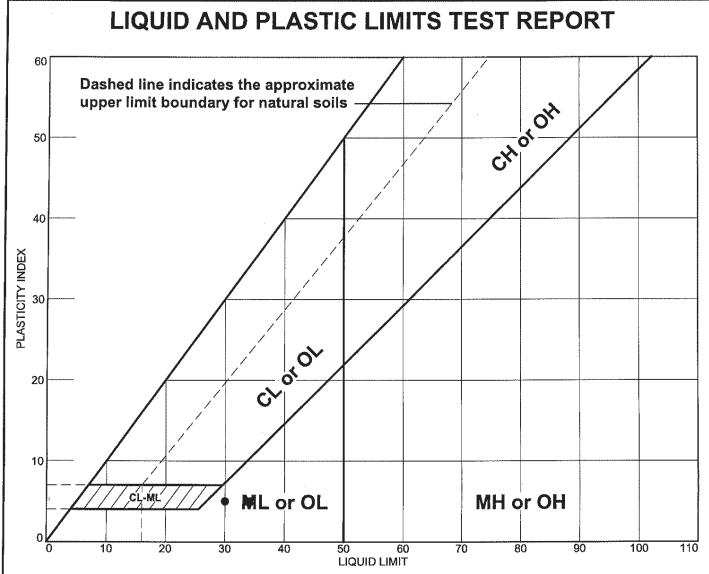
Depth: 2.5

GEO-ENGINEERING & TESTING, INC. Geotechnical & Materials Testing Engineers

### Remarks:

 This test was performed on sample portion passing No. 40 sieve only.

**Plate** 



	MATERIAL DESCRIPTION	LL	PL.	PI	%<#40	%<#200	USCS
•	REDDISH BROWN-WHITE SILTY SANDY LIMESTONE GRAVEL	30	25	5	52	45	GM
	REDDISH BROWN SANDY SILT	34	29	5		<b></b>	ML
		-					

**Project No.** 436.14

**Client: RIM ARCHITECTS** 

Project: GPA-GWA MULTI-PURPOSE FACILITY

FADIAN

● Source of Sample: TP-19

Depth: 1.0

■ Source of Sample: TP-19

Depth: 2.5

# GEO-ENGINEERING & TESTING, INC.

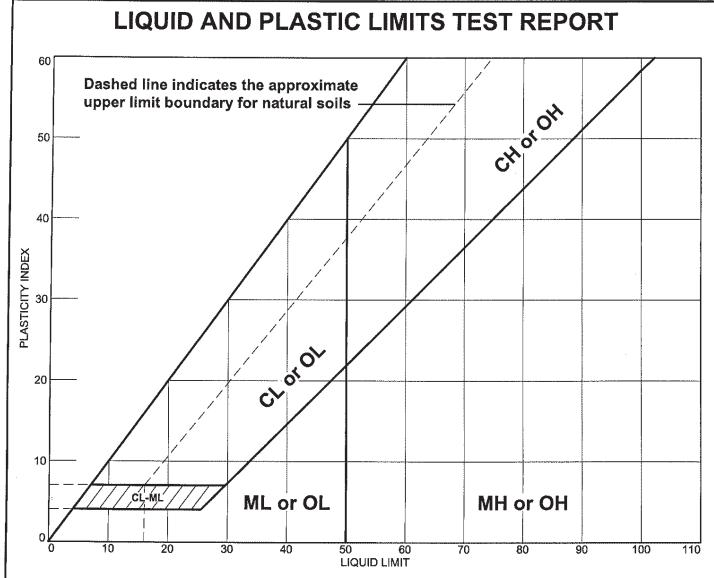
Geotechnical & Materials Testing Engineers

# Remarks:

 This test was performed on sample portion passing No. 40 sieve only.

Plate

37



	MATERIAL DESCRIPTION	LL	PL	PI	%<#40	%<#200	USCS
•	REDDISH BROWN-WHITE SILTY SANDY LIMESTONE GRAVEL (Bulk Sample)	NP	NP	NP	28	20	GM
						·	

Project No. 436.14 **Client: RIM ARCHITECTS** Remarks: Project: GPA-GWA MULTI-PURPOSE FACILITY

**FADIAN** 

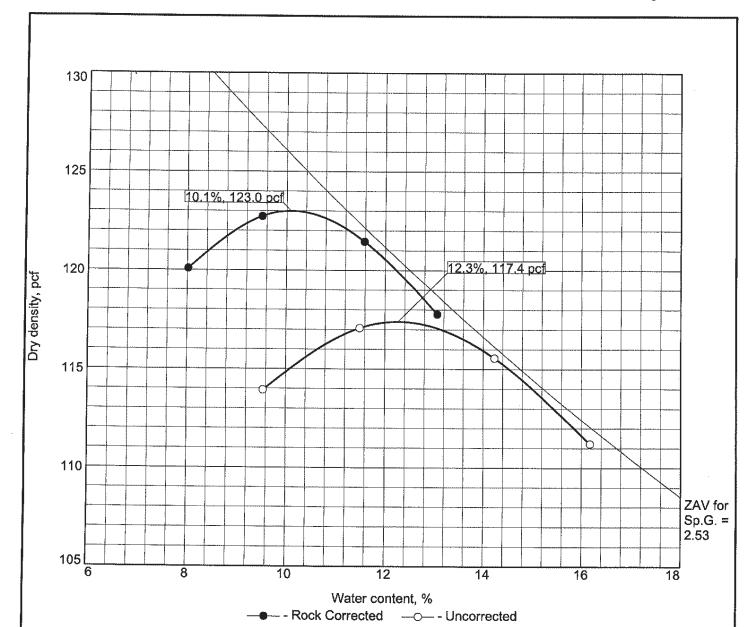
• Source of Sample: R-1 & R-2 (Combined)

**Depth: 0.25** 

GEO-ENGINEERING & TESTING, INC. Geotechnical & Materials Testing Engineers

**Plate** 

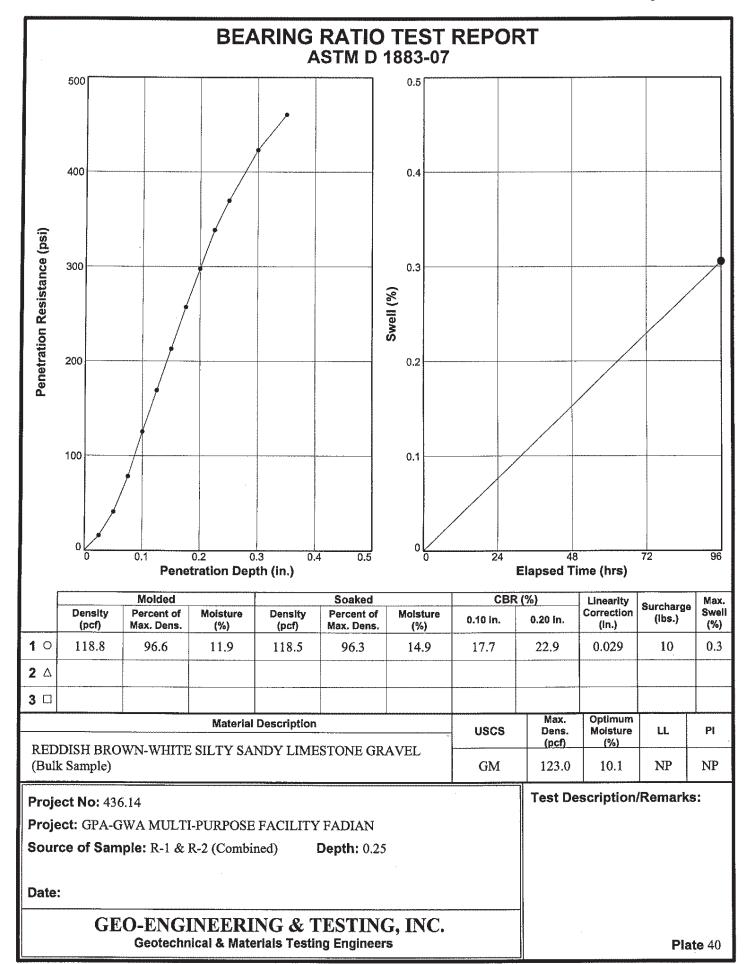
38



Test specification: ASTM D 1557-07 Method C Modified ASTM D 4718-87 Oversize Corr. Applied to Each Test Point

Elev/ Classification Nat. % > % < Sp.G. LL ΡI Depth USCS **AASHTO** Moist. 3/4 in. No.200 0.25 GM A-1-b 2.53 NP NP 24 20

ROCK CORRECTED TEST RESULTS	UNCORRECTED	MATERIAL DESCRIPTION
Maximum dry density = 123.0 pcf	117.4 pcf	REDDISH BROWN-WHITE SILTY SANDY LIMESTONE GRAVEL (Bulk
Optimum moisture = 10.1 %	12.3 %	Sample)
Project No. 436.14 Client: RIM ARCH	ITECTS	Remarks:
Project: GPA-GWA MULTI-PURPOSE FACILITY	•	
FADIAN	Date:	
○ Source of Sample: R-1 & R-2 (Combined)	<b>Depth:</b> 0.25	
GEO-ENGINEERING & T Geotechnical & Materials Testin		Plate 39



# APPENDIX S ELECTRICAL PANEL SCHEDULE and POWER ONE-LINE DIAGRAM

										EDULE						
		150A M	CB, 208	/120V, 3 F	PHASE, 4	WIRE, 10	KAIC	MINI	MUM,	SURFAC	ED MOUN	T (ISOLA	TED GF	ROUND)		
LOAD SERVED	L	OAD (V	4)	BKR	WIRE	CKT	- 1	PHAS	Ε	CKT	WIRE	BKR	L	OAD (V	A)	LOAD SERVED
LOAD OLIVED	A	В	С	TRIP	SIZE	NO.		ΑВ	С	NO.	SIZE	TRIP	A	В	С	EOAD OLIVED
LOAD	720			20	12	1	^		$\vdash \smallfrown$	2	12	20	720			LOAD
LOAD		720		20	12	3	~	+	$\vdash$	4	12	20		720		LOAD
LOAD			540	20	12	5	^	+	+	6	12	20			540	LOAD
LOAD	540			20	12	7	~	+	$\vdash \sim$	8	12	20	540			LOAD
LOAD		720		20	12	9	~	+	-	10	12	20		720		LOAD
LOAD			540	20		11	7	+	<b>├</b> ~	12	12	20			1,080	LOAD
LOAD	360			20	12	13	~	Н	_	14	12	20	1,080			LOAD
LOAD		540		20	12	15	~	+	_	16	12	20		1,500		LOAD
LOAD			520	20	12	17	~	Н	~	18	12	20			1,500	LOAD
LOAD	720			20	12	19	~	Н	-	20	12	20	500			LOAD
LOAD		1,080		20	12	21	~	+	_	22	12	20		720		LOAD
LOAD			1,250	20	12	23	~	H	~	24	12	20			720	LOAD
LOAD	900			20	12	25	~		_	26	12	20	720			LOAD
LOAD		720		20	12	27	~	+	_	28	12	20		1,080		LOAD
LOAD			720	20	12	29	~	H	_	30	12	20			1,080	LOAD
LOAD	1,080			20	12	31	~	H	_	32	12	20	540			LOAD
LOAD		1,000		20	12	33	~	-	_	34	10	30		1,600		LOAD
LOAD			1,000	20		35	~	H	~	36	12	20			500	LOAD
SPARE				20		37	~		_	38		20				SPARE A
SPARE				20		39	~	H	_	40		20				SPARE
SPARE				20		41	~	H	-	42		20				SPARE
TOTAL	4,320	4,780	4,570										4,100	6,340	5,420	TOTAL
				TOTAL	CONNEC	TED LOA	D (VA	): A	A = 842	20 B=	11120 C	= 9990				

LOAD SERVED	ı	OAD (VA	)	BKR TRIP	WIRE	CKT NO.		PHA	ASE		CKT NO.	WIRE	BKR TRIP	ı	OAD (VA	)	LOAD SERVED
	Α	В	С	IRIP	SIZE	NU.			3 C		NU.	SIZE	IRIP	A	В	С	
LOAD	1,080			20	12	1	~				2	12	20	1,080			LOAD
LOAD		720		20	12	3	~			~	4	12	20		720		LOAD
LOAD			900	20	12	5	~			7	6	12	20			720	LOAD
LOAD	720			20	12	7	7			7	8	12	20	360			LOAD
LOAD		720		20	12	9	7	Н		>	10	12	20		1,080		LOAD
LOAD			1,080	20	12	-11	~			~	12	12	20			720	LOAD
LOAD	360			20	12	13	7			^	14	12	20	1,080			LOAD
LOAD		540		20	12	15	~			~	16	12	20		720		LOAD
LOAD			720	20	12	17	~			~	18	12	20			720	LOAD
LOAD	720			20	12	19	~			~	20	12	20	1,080			LOAD
LOAD		900		20	12	21	~	-		~	22	12	20		720		LOAD
LOAD			1,080	20	12	23	~			^	24	12	20			1,080	LOAD
LOAD	360			20	12	25	~			~	26	12	20	1,080			LOAD
LOAD		1,250		20	12	27	~			~	28	12	20		540		LOAD
LOAD			900	20	12	29	~		-	~	30	12	20			720	LOAD
LOAD	1,320			20	12	31	~			~	32	12	20	500			LOAD
~~~@~~~	~~	V1,620V	$\overline{\sim}$	20	712	1-35 <sub>h</sub>	~	F		~	34	12			500		LOAD
LOAD			800	20	12	35	~		$\overline{}$	~	36						SPACE
musper un		~	~	~	~~	مړۍ	~		H	~	38						SPACE
SPARE				20		39	~			~	40						SPACE
SPARE				20		41	~			^	42						SPACE
TOTAL	4,560	5,450	5,480											5,180	4,280	3,960	TOTAL

						F	ANELBO.	ARD 1	L1C" S	CHEDUL	E						
			1	50A MCB,	208/120V, 3	PHASE, 4	WIRE, 10 H	(AIC MI	NIMUM	, SURFAC	ED MOUN	(ISOLATE	D GROUNE	)			
LOAD SERVED	ı	OAD (VA	A)	BKR	WRE	CKT		PHA	ASE		CKT	WIRE	BKR	L	OAD (VA	()	LOAD SERVED
LUAD SERVED	A	В	С	TRIP	SIZE	NO.		A E	3 C		NO.	SIZE	TRIP	A	В	С	LOAD SERVED
LOAD	500			20	12	1	~			}	2	12	20	1,200			LOAD
LOAD		1,200		20	12	3	~	_		~	4	12	20		1,200		LOAD
LOAD			1,200	20	12	5	~			~	6	12	20			1,500	LOAD
LOAD	1,500			20	12	7	~			_~	8	12	20	1,500			LOAD
LOAD		1,000		20	12	9	~	$\overline{}$		_	10	12	20		1,000		LOAD
LOAD			1,000	20	12	11	~		H	~	12	12	20			1,000	LOAD
LOAD	900			20	12	13	~			_	14	12	20	360			LOAD
LOAD		720		20	12	15	~	_		~	16	12	20		500		LOAD
LOAD			500	20	12	17	~		$\vdash$	~	18	12	20			1,000	LOAD
LOAD	1,000			20	12	19	~			~	20	12	20	900			LOAD
SPARE				20		21	~	_		~	22						SPACE
SPARE				20		23	~			~	24						SPACE
SPARE				20		25	~			_~	26						SPACE
SPARE				20		27	~	$\overline{}$		_	28						SPACE
SPARE				20		29	~		H	~	30						SPACE
TOTAL	3,900	2,920	2,700											3,960	2,700	3,500	TOTAL
					TOTA	L CONNEC	TED LOAD	(VA):	A = 7	860 B=	5620 C=	6200					

L							P	ANELBO	ARD "	L2A" S	CHEDUL	E						
				1	50A MCB,	208/120V, 3	PHASE, 4	WIRE, 10	KAIC MI	INIMUN	I, SURFAC	ED MOUN	T (ISOLATE	GROUND	1)			
Γ	LOAD SERVED	L	OAD (VA	)	BKR	WIRE	CKT		PHA	ASE		CKT	WIRE	BKR	l	.OAD (VA	A)	LOAD SERVED
L	EUAD SERVED	Α	В	С	TRIP	SIZE	NO.		ΑE	3 C		NO.	SIZE	TRIP	А	В	С	EOAD GERVED
	LOAD	540			20		1	~			_~	2	12	20	540			LOAD
Γ	LOAD		720		20	12	3	~	H		_	4	12	20		360		LOAD
	LOAD			900	20	12	5	~			_	6	12	20			360	LOAD
Γ	LOAD	1,080			20	12	7	~	Н		_	8	12	20	720			LOAD
	LOAD		900		20	12	9	~	_		_	10	12	20		720		LOAD
Γ	LOAD			360	20	12	11	~			~	12	12	20			540	LOAD
Γ	LOAD	540			20	12	13	~			_	14	12	20	1,000			LOAD
Γ	LOAD		720		20	12	15	~			_	16	12	20		1,000		LOAD
Γ	LOAD			720	20	12	17	~			~	18	12	20			720	LOAD
Γ	LOAD	500			20	12	19	~			_	20	12	20	360			LOAD
ľ	LOAD		720		20	12	21	~	F		_	22	12	20		1,500		LOAD
Γ	LOAD			1,500	20	12	23	~			~	24	12	20			1,500	LOAD
ľ	LOAD	900			20	12	25	~			_	26	12	20	1,500			LOAD
ľ	LOAD		900		20	12	27	~	_		_	28				900		LOAD
ľ	LOAD			1,320	20	12	29	~		-	_	30						SPACE
ľ	LOAD	1,320			20	12	31	~				32						SPACE
↟	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	$\sim$	7,320	$\sim$	~89~	722	_ 33	~	-		_	34						SPACE
ľ	LOAD			800	20	12	335	~		_		36						SPACE
Ť	William Willia	بىر	,u	u	ngen	متر	37	~			_	38						SPACE
ľ	SPARE				20		39	~			_	40						SPACE
	SPARE				20		41	~		-	~	42						SPACE
r	TOTAL	4,880	5,280	5,600											4,120	4,480	3,120	TOTAL
Γ						TOTA	L CONNEC	TED LOAI	) (VA):	A = 9	000 B=	9760 C=	8720					



							PANELI	BOAR	) "L2	B" SCI	HEDULE						
			150A N	1CB, 208	3/120V, 3	PHASE, 4	WIRE, 10	KAIC	MINI	IMUM,	SURFAC	ED MOUN	IT (ISOLA	TED GR	OUND)		
LOAD SERV	ED	L	OAD (V	A)	BKR	WIRE	CKT	F	HAS	Έ	CKT	WIRE	BKR	L	OAD (V	A)	LOAD SERVED
EOAD OLIVI	LD	Α	В	С	TRIP	SIZE	NO.	1	В	C	NO.	SIZE	TRIP	A	В	С	EOAD GERVED
LOAD		720			20	12	1	~	$\pm$	$\vdash$	2	12	20	900			LOAD
LOAD			720		20	12	3	7	$\pm$	$\vdash \smallfrown$	4	12	20		360		LOAD
LOAD				720	20	12	5	~	$\pm$	1	6	12	20			720	LOAD
LOAD		540			20	12	7	~	$\pm$	┢	8	12	20	1,000			LOAD
LOAD			540		20	12	9	~	+	<u></u>	10	12	20		1,000		LOAD
LOAD				720	20	12	11	~	$\pm$	$\vdash$	12	12	20			1,500	LOAD
LOAD		540			20	12	13	7	$\pm$	_	14	12	20	1,500			LOAD
LOAD			720		20	12	15	~	+	$\vdash$	16	12	20		500		LOAD
LOAD				720	20	12	17	7	$\pm$	-	18	12	20			1,000	LOAD
LOAD		720			20	12	19	~	$\pm$	$\vdash$	20	12	20	1,000			LOAD
LOAD			900		20	12	21	7	+	-	22	12	20		1,000		LOAD
LOAD				900	20	12	23	γ	+	<b>├</b> ~	24	12	20			1,000	LOAD
LOAD		540			20	12	25	7	Ŧ	_	26	12	20	1,250			LOAD
LOAD				1,080	20	12	27	γ	+	-	28	12	20		1,080		LOAD
~~~tQAB	$\sim$	1,08%	$\overline{}$	~	20	712	29	7	Ŧ	~	30	12	20			540	LOAD
LOAD			800		20	12	31	Σ	$\mp$	_	32						SPACE
SPARÆ	~~	$\sim$	$\mathcal{M}$	$\sim$	120		33	γ	+	Ι~	34						SPACE
SPARE	$\overline{}$				20		35	7	Ŧ	1	36						SPACE
SPARE					20		37	7	+	_	38						SPACE
SPARE					20		39	7	+	1	40						SPACE
SPARE					20		41	7	+	1	42						SPACE
TOTAL		4,140	3,680	4,140										5,650	3,940	4,760	TOTAL
		4,140	3,680	4,140		CONNEC		AD (VA	): '	A = 97		7620 C	= 8900	5,650	3,940	4,760	

			- 1	00A MCB,	208/120V, 3	PHASE, 4	WIRE, 10	KAIC MII	NIMUM, S	URFAC	ED MOUNT	(ISOLATE	GROUND	)			
LOAD SERVED		LOAD (VA	)	BKR	WIRE	CKT		PHA	SE		CKT	WIRE	BKR	l	OAD (VA	)	LOAD SERVED
	А	В	С	TRIP	SIZE	NO.		ΑĘ	3 C		NO.	SIZE	TRIP	Α	В	С	
LOAD	720			20	12	1	_~		_	~	2	12	20	1,250			LOAD
LOAD		720		20	12	3	~	$\vdash$	$\vdash$	~	4	12	20		720		LOAD
LOAD			720	20	12	5	7		-	7	6	12	20			720	LOAD
LOAD	1,080			20	12	7	~	$\Box$		~	8	12	20	720			LOAD
LOAD		1,080		20	12	9	~	$\Box$	$\dashv$	~	10	12	20		720		LOAD
LOAD			1,080	20	12	11	~	$\Box$	-	~	12	12	20			1,080	LOAD
LOAD	1,080			20	12	13	~		-	~	14	12	20	720			LOAD
LOAD		1,080		20	12	15	~	-	=	~	16	12	20		1,250		LOAD
LOAD			1,250	20	12	17	~		$\rightarrow$	~	18	12	20			900	LOAD
LOAD	540			20	12	19	~		=	~	20	12	20	1,080			LOAD
LOAD		900		20	12	21	~		$\dashv$	~	22	12	20		1,080		LOAD
LOAD			1,200	20		23	~		-	^	24	12	20			1,080	LOAD
LOAD	900			20	12	25	~			~	26	12	20	1,080			LOAD
LOAD		900		20	12	27	~		$\neg$	~	28	12	20		1,200		LOAD
LOAD			720	20	12	29	~	$\blacksquare$	-	~	30	12	20			1,200	LOAD
LOAD	540			20	12	31	~		$\equiv$	~	32	12	20	1,200			LOAD
LOAD		540		20	12	33	~		$\vdash$	~	34	12	20		540		LOAD
LOAD			720	20	12	35	~		_	^	36	~12~	~26~	$\sim$	~	~®\	
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	720	~	$\overline{}$	20~	12	~-87	~	$\blacksquare$		~	36	12	20	800			LOAD
LOAD		800		20	12	39	~		-	~	6	12	20		800		LOAD
LOAD			800	20	12	41	~		_	~	42 7	~	29.1	سر	·		W seek W
~ TOTAL ~ .	5,580	6,020	6,000		سسر	,	•							6,850	6,310	5,480	TOTAL

						-	PANEL BO	ΔRD "	134" S	CHEDIII	F							
			1	I50A MCB,	208/120V, 3							T (ISOLATE)	D GROUND	1)				
LOAD SERVED		LOAD (VA	A)	BKR	WIRE	СКТ			ASE		CKT	WIRE	BKR	ı	OAD (VA	)	LOAD SERVED	
EUND SERVED	A	В	С	TRIP	SIZE	NO.		A E	3 C		NO.	SIZE	TRIP	Α	В	С	EOAD SERVED	
LOAD	720			20	12	1	~			_	2	12	20	720			LOAD	
LOAD		900		20	12	3	_~			_	4	12	20		720		LOAD	
LOAD			900	20	12	5	~		H	_	6	12	20			720	LOAD	
LOAD	1,080			20	12	7	~	_		_	8	12	20	360			LOAD	
LOAD		1,080		20	12	9	~	_		_	10	12	20		900		LOAD	
LOAD			900	20	12	11	~		H	~	12	12	20			1,080	LOAD	
LOAD	720			20	12	13	~			_	14	12	20	900			LOAD	
LOAD		900		20	12	15	~	_		_	16	12	20		900		LOAD	
LOAD			900	20	12	17	~		Ε.		18	12	20			1,080	LOAD	
LOAD	1,080			20	12	19	~			_	20	12	20	900			LOAD	
LOAD		1,080		20	12	21	~	-		_	22	12	20		900		LOAD	
LOAD			900	20	12	23	~		_	~	24	12	20			720	LOAD	
LOAD	1,080			20	12	25	~			~	26	12	20	1,080			LOAD	
LOAD		360		20	12	27	~	_			28	12	20		1,080		LOAD	
LOAD			720	20	12	29	~		-	~	30	12	20			720	LOAD	
LOAD	540			20	12	31	~				32	12	20	1,200			LOAD	
LOAD		540		20	12	33	~	_		~	34	12	20		720		LOAD	
LOAD			1,200	20	12	35	~		F		36	12	20			720	LOAD	
LOAD	1,200			20	12	37	~			_	38	12	20	1,200			LOAD	
SPARE				20		39	~	_		_	40	12	20		300		LOAD	Δ
SPARE				20		41	~		i i	~	42		20				SPARE	
TOTAL	6,420	4,860	5,520											6,360	5,520	5,040	TOTAL	
		•			TOTAL	CONNECT	ED LOAD	(VA):	A = 12	780 B=	10380 C	= 10560		•	•			

LOAD SERVED			1	50A MCB,	208/120V, 3		ANELBO											
LOAD SERVED								VAIC INI	NIMUM	SURFAC	ED MOUN	T (ISOLATE)	GROUND	)				
	L	OAD (VA	4)	BKR TRIP	WIRE	CKT		PHA	ASE		CKT	WIRE	BKR TRIP	ı	OAD (VA	)	LOAD SERVED	
	А	В	С	TRIP	SIZE	NO.		ΑE	3 C		NO.	SIZE	TRIP	А	В	С		
LOAD	1,500			20	12	1	~			_~	2	12	20	720			LOAD	
LOAD		1,000		20	12	3	~	Ĭ		>	4	12	20		360		LOAD	
LOAD			1,000	20	12	5	~		_	}	6	12	20			540	LOAD	
LOAD	1,500			20	12	7	~			>	8	12	20	360			LOAD	
LOAD		900		20	12	9	~	$\Box$		>	10	12	20		1,500		LOAD	
LOAD			720	20	12	11	~			7	12	12	20			1,500	LOAD	
LOAD	500			20	12	13	7				14	12	20	1,080			LOAD	
LOAD		900		20	12	15	7			}	16	12	20		540		LOAD	
LOAD			720	20	12	17	~		$\equiv$	7	18	12	20			900	LOAD	
LOAD	540			20	12	19	7			>	20	12	20	900			LOAD	
LOAD		720		20	12	21	~	$\blacksquare$		>	22	12	20		720		LOAD	
LOAD			540	20	12	23	~			7	24	12	20			540	LOAD	
LOAD	720			20	12	25	~			>	26	12	20	720			LOAD	
LOAD		540		20	12	27	~	$\Box$		~	28	12	20		540		LOAD	
LOAD			1,500	20	12	29	~			2	30	12	20			360	LOAD	
LOAD	1,500			20	12	31	~			>	32	12	20	1,500			LOAD	
LOAD		1,200		20	12	33	~			_	34	12	20		1,200		LOAD	
LOAD			1,200	20	12	35	~		$\equiv$	>	36	12	20			1,200	LOAD	
LOAD	360			20	12	37	~			_	38	12	20	720			LOAD	
LOAD		720		20	12	39	~	_		_	40	12	20		500		LOAD	$\blacksquare$
			1,400	20	12	41	~			_	42	12	20			360	LOAD	~
LOAD								_										1
LOAD	6,620	5,980	TOTAL 6,620 5,980 7,080													TOTAL		
	LOAD LOAD LOAD LOAD LOAD LOAD LOAD LOAD	LOAD 720 LOAD 720 LOAD 1.00AD 1.500 LOAD 1.500 LOAD 1.00AD 1.500 LOAD 1.00AD 380 LOAD 380	LOAD 720 LOAD 540 LOAD 1,500 LOAD 1,500 LOAD LOAD 1,500 LOAD LOAD 1,500 LOAD LOAD 720 LOAD 720 LOAD 1,720 LOAD 1,720 LOAD 1,720 LOAD 1,720 LOAD 1,720 LOAD 7,720 LOAD 1,720 LOAD	LOAD 540  LOAD 720  LOAD 1500  LOAD 1,500  LOAD 1,500  LOAD 1,200   LOAD 540 20  LOAD 720 20  LOAD 540 20  LOAD 1,500 20  LOAD 20  LOAD 360 20  LOAD 360 20	LOAD 540 20 12  LOAD 720 20 12  LOAD 540 20 12  LOAD 540 20 12  LOAD 1500 20 12  LOAD 1,500 20 12  LOAD 720 20 12	LOAD	S40   20   12   23   \( \sigma \)	S40   20   12   23	10AD	LOAD   540   20   12   23   \( \cdots \) \(	1,000   540   20   12   23	10AD   150   12   23   12   24   12   12   12   12   12   12	LOAD   540   20   12   23	LOAD   540   20   12   23	LOAD	1.000	10AD   540   20   12   23	

	REVISION REVISION	ON 9			11.07.2	013
RIM	GAA		. , .		HORITY M, USA 969	910
Described and residence of the control of the contr	124014 - ELECT		PROJECT TITLE			OII 1707
Page Stuffers	VC	WW	GPA-G	WA MULIII	PURPOSE FA	CILITY
750005 Y	VC	GPA .	SHEET CONTENTS			
\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	PERRY B. TALAI	000	PANEL SCH	HEDULES		
√ <u>∧₩</u> Й	JOVEN G. ACOS		2012.11.06	100134	1/8" = 1"-0"	SHT 4180F 428
AMOUNT & VISICIALIS	MELINDAR CAL		DATE	JOAOLIN C. F.	LORES P.E.	E-812

		150A M	CR 208	/120V 3	PHASE, 4	PANELI WIRE 10					ED MOUN	IT (ISOLA	TED GR	(OLIND)		
LOAD SERVED	-	OAD (V	- ,	BKR TRIP	WIRE SIZE	CKT NO.	F	PHAS	SE .	CKT NO.	WIRE	BKR	L	OAD (V	A)	LOAD SERVED
LOAD	1.100	В	C	20	12	1	~	4 8	<u> </u>	2	12	20	720	В	С	LOAD
LOAD	1,100	360		20	12	3	~	$\downarrow$	$\perp$	4	12	20	120	500		LOAD
LOAD			540	20	12	5	~	$^{\dagger}$	_	6	12	20			180	LOAD
LOAD	900			20	12	7	~	$\dagger$	_	8			2,500			
LOAD		720		20	12	9	~	+	_	10	10	30		2,500		LOAD
LOAD			900	20	12	11	~	H	_	12	12	20			1,080	LOAD
LOAD	720			20	12	13	~	Ŧ	~	14	12	20	540			LOAD
LOAD		900		20	12	15	~	+	-	16	12	20		720		LOAD
LOAD			540	20	12	17	~	H	~	18	12	20			1,500	LOAD
LOAD	540			20	12	19	7	+	~	20	12	20	1,500			LOAD
LOAD		540		20	12	21	~	+	$\sim$	22	12	20		360		LOAD
LOAD			540	20	12	23	7	$\pm$	-	24	12	20			720	LOAD
LOAD	540			20	12	25	7	$\pm$	$\vdash$	26	12	20	1,200			LOAD
LOAD		540		20	12	27	~		-	28	12	20		540		LOAD
LOAD			540	20	12	29	~	$\blacksquare$	$\overline{}$	30	12	20			540	LOAD
LOAD	360			20	12	31	~	$\pm$	1	32	12	20	1,200			LOAD
LOAD		900		20	12	33	7	+	_	34	12	20		1,320		LOAD
LOAD			700	20	12	35	~	+	1	36	12	20			1,320	LOAD
~~~~LOAD~~~	700	~	2	~20	V-12\	37	~	$\perp$	+	38	12	20	1,000			LOAD
LOAD		800		20	12	39	_~	+	$+\overline{}$	40	~12~	~20~	$\sim$	500~	$\sim$	70/b
LOAD			800	20	12	41)	~	$\pm$	-	42{	12	20			800	LOAD
W JOHA W	4.860	4,760	4,560		ححر	ED LOAD				7	~	$\overline{}$	8,660	6,440	6,140	JOTAL J

					Α	P/	NELBC	ARD *	'H3" S	CHEDU	LE						
			Δ	100A	MCB, 480	/277V, 3 F	HASE, 4	WIRE,	14 KA	IC MININ	UM, SUR	FACED M	DUNT				
LOAD SERVED		LOAD (VA)		BKR	WIRE	CKT		PHA	ASE		CKT	WIRE	BKR		LOAD (VA)		LOAD SERVED
LOAD SERVED	A	В	С	TRIP	SIZE	NO.		ΑE	3 C		NO.	SIZE	TRIP	A	В	С	LUAD SERVED
LOAD	3,304			20	12	1	_~			_	2	12	20	3,444			LOAD
LOAD		2,940		20	12	3	_~	-		~	4	12	20		3,192		LOAD
LOAD			2,856	20	12	5	_~		F.	~	6	12	20			2,352	LOAD
LOAD	2,772			20	12	7	~			~	8	12	20	3,024			LOAD
LOAD	LOAD 3,692 20 12 9 10 12 20 5,040																LOAD
LOAD			4,032	20	12	11	~		_	~	12	12	20			2,800	LOAD
SPARE				20		13	7			7	14						SPACE
SPARE				20		15	~	_		~	16						SPACE
SPARE				20		17	~			>	18						SPACE
SPARE				20		19	_~			_	20						SPACE
SPARE				20		21	_~	_		_	22						SPACE
SPARE				20		23	~			_	24						SPACE
SPARE				20		25	_~	-		_	26						SPACE
SPARE				20		27	~	H		$\vdash^{}$	28						SPACE
SPARE				20		29	~			_~	30						SPACE
TOTAL	6,076	6,632	6,888											6,468	8,232	5,152	TOTAL
				1	TOTAL CO	NNECTE	LOAD (	VA):	A = 12	544 B	14864	C = 1204	0				

		A	100A M	CB. 480/2	77V. 3 PH		NELBC		_			UNT (ISOL	ATED GR	OUND)			
		LOAD (VA)		BKR	WIRE	CKT	Ė	PHA	_		CKT	WIRE	BKR		LOAD (VA)		
LOAD SERVED	A	В	С	TRIP	SIZE	NO.		A E	3 C		NO.	SIZE	TRIP	A	В	С	LOAD SERVED
LOAD	3,528			20	12	1	~	$\vdash$	$\exists$	~	2	12	20	2,352			LOAD
LOAD		2,100		20	12	3	~	-	-	~	4	12	20		4,282		LOAD
LOAD			4,032	20	12	5	~			~	6	12	20			2,716	LOAD
	0					7	~			}	8	12	20				SPARE
SPARE		0		20		9	~	Н	-	7	10	12	20				SPARE
			0			11				~	12	12	20				SPARE
SPARE				20	12	13	_~			_~	14	12	20				SPARE
SPARE				20	12	15	~	$\vdash$	$\vdash$	_	16	12	20				SPARE
SPARE				20	12	17				_~	18	12	20				SPARE
SPARE				20	12	19	~			_	20	12	20				SPARE
SPARE				20	12	21	~_			_~	22	12	20				SPARE
SPARE				20	12	23	~			_~	24	12	20				SPARE
SPARE				20	12	25				_~	26	12	20				SPARE
SPARE				20	12	27				_~	28	12	20				SPARE
SPARE				20	12	29				_	30	12	20				SPARE
TOTAL	3,528	2,100	4,032											2,352	4,282	2,716	TOTAL

					A	. P/	ANELBO	ARD *	H2" S	CHEDU	LE						
			Δ	100A	MCB, 480	277V, 3 F	PHASE, 4	WIRE,	14 KAI	IC MININ	UM, SUR	FACED M	DUNT				
LOAD SERVED		LOAD (VA)		BKR	WIRE	CKT		PHA	ASE		CKT	WIRE	BKR		LOAD (VA)		LOAD SERVED
LUAD SERVED	A	В	С	TRIP	SIZE	NO.		ΑE	3 C		NO.	SIZE	TRIP	A	В	С	LUAD SERVED
LOAD	3,304			20	12	1	~			~	2	12	20	3,444			LOAD
LOAD		2,940		20	12	3	~	$\overline{}$	Ī	}	4	12	20		3,192		LOAD
LOAD			2,856	20	12	5	~		$\blacksquare$	}	6	12	20			2,352	LOAD
LOAD																LOAD	
LOAD	LOAD 3,692 20 12 9 10 12 20 5,040															LOAD	
LOAD	LOAD 4,032 20 12 11 1 12 20 28															2,800	LOAD
SPARE				20		13	~			~	14						SPACE
SPARE				20		15	~	_		^	16						SPACE
SPARE				20		17	~			}	18						SPACE
SPARE				20		19	~			}	20						SPACE
SPARE				20		21	7	Ĭ	Ī	}	22						SPACE
SPARE				20		23			$\vdash$	}	24						SPACE
SPARE				20		25	~			}	26						SPACE
SPARE				20		27	~			_~	28						SPACE
SPARE				20		29	~			~	30						SPACE
TOTAL	6,076	6,632	6,888											6,468	8,232	5,152	TOTAL
				1	OTAL CO	NNECTE	LOAD (	VA):	A = 12	544 B	14864	C = 1204	10				



		Δ	٠, ٢	₩		PANE	LBOAR	"M" S	CHE	DULE						
			C 600	A MCB, 4	186/277V, :	3 PHASE	, 4 WIRI	E, 35 K	AIC M	IINIMUI	И, SURFA	CED MOI	JNT			
LOAD SERVED		LOAD (VA)		√BKR/~	WIRE	CKT	Pi	HASE		CKT	WIRE	BKR		LOAD (VA)		LOAD SERVED
LOAD SERVED	A	В	С	TRIP	SIZE	NO.	A	вс		NO.	SIZE	TRIP	A	В	С	LUAD SERVEL
	45,672					1	1-1	+	γ-	2			45,672			
LOAD		45,672		250	250	3	1-1	+	-	4	250	250		45,672		LOAD
			45,672	1		5	1-4	-	~	6					45,672	
	4,706					7	-1		γ-	8			4,706			
LOAD		4,706		30	10	9	14	+	1	10	10	30		4,706		LOAD
			4,706	1		11	1-4		~	12	1				4,706	
	2,491					13	7	+	γ-	14			2,491			
LOAD		2,491		15	12	15	1-/-1	+	-	16	12	15		2,491		LOAD
			2,491	1		17	14	-	<del>ا</del> ـ	18	ĺ				2,491	
	2,491					19	-1	+	γ-	20			2,491			
LOAD		2,491		15	12	21	1-/-1	+	-	22	12	15		2,491		LOAD
			2,491	1		23	1-4	-	~	24					2,491	
	2,491					25	-1	+	γ-	26			6,920			
LOAD		2,491		15	12	27	1-1-1	+	1-1	28	8	50		6,920		LOAD
			2,491	1		29	1-4		~	30	-	~			6,920	
	6,920					31	1-1	#	η-	32			28,990			
LOAD		6,920		50	8	33	1-/-1	+	-	34	1/0	150	)	28,990		PANEL M1
			6,920	1		35	14	-	۲.	36-,	ĺ		₹Δ		28,990	
	63,759					37	-1	+	γ-	38	L.u.	~~	19,752			
LOAD		63,759		300	350	39	1-14-	++	-	40	2	100		19,752		PANEL M3
			63,759	1		41	14	-	τ.	42	1				19,752	
TOTAL	128,530	128,530	128,530										111,022	111,022	111,022	TOTAL

							PANELBO	DARD *	M3" SC	HEDULE							
					100A MCE	3, 480/277V,	3 PHASE,	4 WIRE,	35 KAIC	MINIMUN	I, SURFACE	D MOUNT					
LOAD SERVED		LOAD (VA)		BKR	WIRE	CKT NO.		PHA			CKT NO.	WIRE	BKR		LOAD (VA)		LOAD SERVED
EGYE GEWEE	A	В	С	TRIP	SIZE	OILI NO.		ΑE	3 C		OKT NO.	SIZE	TRIP	A	В	С	EUI D CETVED
	9,576					1	~	_		_~	2			9,576			
LOAD		9,576		50	6	3	~	Ī	-	>	4	6	50		9,576		LOAD
			9,576			5	~		_	~	6					9,576	
	300					7	~	$\equiv$		_	8			300			
LOAD		300		15	12	9	~	Ī	$\overline{}$	~	10	12	15		300		LOAD
			300			11	~		=	~	12					300	
						13	7			~	14						
SPACE						15	~	$\equiv$		~	16						SPACE
						17	~		=	~	18						
						19	~			~	20						
SPACE						21	~	Π	$\overline{}$	_	22						SPACE
						23	~		=	~	24						
						25	~			~	26						
SPACE						27	~	Ī	$\overline{}$	~	28						SPACE
						29	~		F	~	30						
TOTAL	9,876	9,876	9,876											9,876	9,876	9,876	TOTAL
					TOTA	T CONNEC.	TED LOAD	(VA):	A = 197	52 B= 1	19752 C=	19752					

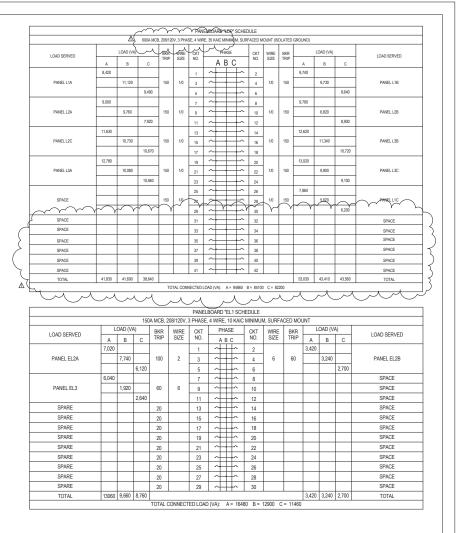
				A	· ~~	7	PANELBO										
		LOAD (VA)		(	K .	s, 480JZ/1V,	3 PHASE,			MINIMUN	I, SURFACE				LOAD (VA)		
LOAD SERVED				BKR TRIP	SIZE	CKT NO.		A B			CKT NO.	WIRE	BKR TRIP				LOAD SERVED
	A 500	В	С				-	A D						A 300	В	С	
LOAD	300	500		175	3/0	1					2	12	15	300	300		LOAD
LOAD		300	500	1/5	30	3					4	12	15		300	300	LOAD
			500			5					6					300	
	10,690 7 ~ 8 LOAD 10,690 175 30 9 ~ 10																
LOAD		10,690		175	3/0	9					10						SPACE
			10,690			11	4			~	12						
	7,500					13	~				14						
LOAD		7,500		60	8	15	ζ	_		_	16						SPACE
			7,500			17	~		$\exists$	~	18						
						19	ζ	-	-	_	20						
SPACE						21	7	-	=	_	22						SPACE
						23	~		=		24						
						25	7	-		_	26			10,000			
SPACE						27	~	_			28	#2	100/3		10,000		LOAD
						29	7		=	~	30					10,000	
TOTAL	18,690	18,690	18,690											10,300	10,300	10,300	TOTAL
					TOTA	L CONNEC.	TED LOAD	(VA): A	A = 289	90 B = 2	18990 C= 1	28990					

							PANELBO	DARD "	M2" SC	HEDULE							
					300A MCE	3, 480/277V,	3 PHASE,	4 WIRE,	35 KAIC	MINIMUN	I, SURFACE	D MOUNT					
LOAD SERVED		LOAD (VA)		BKR TRIP	WIRE	CKT NO.		РНА			CKT NO.	WIRE	BKR TRIP	_	LOAD (VA)		LOAD
	18.407	В	С				_				2			A 2.100	В	С	
SPARE	10,101	18.407		175	3/0	1	_					12	15	2,100	2.100		LOAD
SPANE		10,407	18.407	173	30	3 5	_			_	4	12	15		2,100	2.100	LOND
	13,494		10,407			7	~			_	8			2,100		2,100	
SPARE	10,404	13,494		175	3/0	9				$\overline{}$	10	12	15	2,100	2.100		LOAD
Ol File		10,454	13,494	- "	40					_	12				2,100	2,100	2072
	700 13 14 500															2,100	
LOAD		700		15	12.000000	15	~			_	16	12	15		500		LOAD
			700	1		17	~				18	-				500	
	13.768					19	~			_	20			10.690			
LOAD		13.768		50	6	21	~			_~	22	6	50		10.690		LOAD
		,	13.768	-	_	23	~			_	24				,	10.690	
			.,			25	~			_~	26			2.000			
LOAD						27	~	$\equiv$			28	12	20		2.000		LOAD
				1		29	~			~	30					2,000	
						31	~			$\overline{}$	32						
SPACE				1		33	~	=		_~	34						SPACE
				1		35	~			~	36						
						37	~	=		_~	38						
SPACE						39	~			_~	40						SPACE
				1		41	~			~	42						1
TOTAL	46,369	46,369	46,369											17,390	17,390	17,390	TOTAL
					TOTA	L CONNEC	TED LOAD	(VA): /	A = 637	59 B = 6	3759 C=	3759					

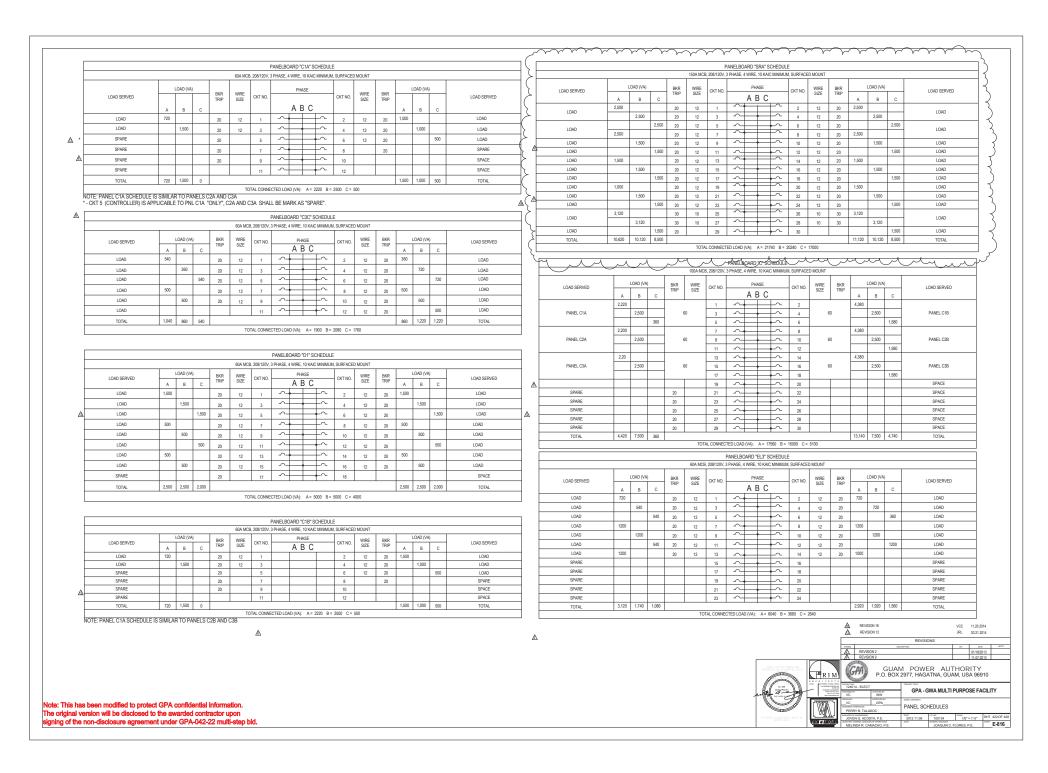


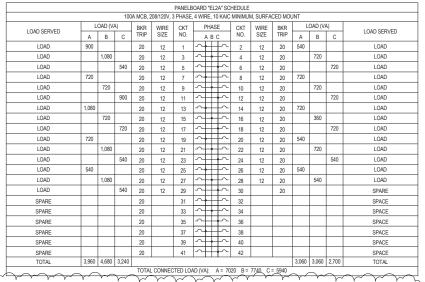
						P	ANEI BO	ΔRD	"M" S	CHEDU	F						
				40	0A MCB. 48							ACED MOU	INT				
		LOAD (VA	)	BKR	WIRE	СКТ		PH	IASE		СКТ	WRF	BKR		LOAD (VA	)	
LOAD SERVED	А	В	С	TRIP	SIZE	NO.		Α	ВС		NO.	SIZE	TRIP	А	В	С	LOAD SERVED
	18,407				3/0	1	~			_~	2	10		13,494			
LOAD		18,407		175/3	3/0	3	~			_^	4	10	30/3		13,494		LOAD
			18,407	1	3/0	5	~			_~	6	10	1			13,494	
	18,407				3/0	7	~	$\vdash$		_~	8	10		13,494			
LOAD		18,407		175/3	3/0	9	~			_^	10	10	30/3		13,494		LOAD
			18,407	1	3/0	11	^_			_^	12	10	1			13,494	
	18,407					13	~			_~	14	10		13,494			
SPACE		18,407		175/3		15	~			_^	16	10	30/3		13,494		SPACE
			18,407	1		17	~			_^	18	10	1			13,494	
						19	~			_~	20						
SPACE				1		21	~			_^	22		1				SPACE
				1		23	^				24		1				
						25	~			_~	26						
SPACE				1		27	~			_~	28		1				SPACE
				1		29	~				30		1				
TOTAL	55,221	55,221	55,221											40,482	40,482	40,482	TOTAL
					TOTAL C	ONNECTE	D LOAD	(VA):	A = 95	703 B=	95703 (	C = 95703					

						F	ANELBO	OARD *	2M" S0	CHEDUL	E						
					150A MCB,	208/120V, 3	PHASE,	4 WRE,	10 KAI	C MINIMU	IM, SURFA	CED MOUNT	Г				
LOAD SERVED	l.	LOAD (VA	4)	BKR	WIRE	CKT		PH	ASE		CKT	WIRE	BKR	ı	OAD (VA	)	LOAD SERVED
LUND SERVED	Α	В	С	TRIP	SIZE	NO.		A E	3 C		NO.	SIZE	TRIP	А	В	С	LOND SERVED
LOAD	720			20	12	1	^			~	2	8	40	2,300			LOAD
LOAD		720		20	12	3	^		_	>	4	12	20		540		LOAD
LOAD			720	20	12	5	~		_	~	6	12	20			720	LOAD
LOAD	720			20	12	7	^			^	8	12	20	540			LOAD
LOAD		540		20	12	9	^			^	10	12	20		540		LOAD
LOAD			540	20	12	11	~		_	~	12	12	20			540	LOAD
LOAD	LOAD 500 20 12 15 ^ 16 12 20 700																LOAD
LOAD	LOAD 500 20 12 15 14 12 20 700															LOAD	
LOAD			500		12	17	^		_	~	18	10	30				SPARE
LOAD	500			20	12	19	^			}	20	12	20				SPARE
LOAD		540		20	12	21	^			^	22						SPACE
LOAD			720	20	12	23	^		_	~	24						SPACE
LOAD	500			20	12	25	^			~	26	10		2,400			LOAD
SPARE				20		27	^			^	28	10	30		2,400		LUND
SPARE				20		29	^		_	{	30					2,400	LOAD
SPARE				20		31	^			^	32		30	2,400			LUAD
SPARE				20		33	^	_		~	34				2,400		LOAD
SPARE				20		35	^		_	{	36		30			2,400	LUND
SPARE				20		37	^			<b>~</b>	38						SPACE
SPARE				20		39	~	F	=	~	40						SPACE
SPARE				20		41	^		_	~	42						SPACE
TOTAL	2,980	2,300	2,480											8,360	6,580	6,060	TOTAL
					TOTAL	CONNECT	TED LOAD	(VA):	A= 1	1340 B =	8880 C	8540					









						F	ANELBO.	ARD "E	L2B" S	CHEDUL	E						
					60A MCB	, 208/120V,	3 PHASE, 4	WIRE,	10 KAIC	MINIMUM	, SURFACED	MOUNT					
1010.050150		LOAD (VA	)	BKR	WIRE	007.00		PHA	ASE		CKT NO.	WIRE	BKR		LOAD (VA)	)	1010000000
LOAD SERVED	A	В	С	TRIP	SIZE	CKT NO.		A E	3 C		CKI NO.	SIZE	TRIP	А	В	С	LOAD SERVED
LOAD	720			20	12	1	ζ			_	2	12	20	720			LOAD
LOAD		720		20	12	3	ζ			~	4	12	20		540		LOAD
LOAD			360	20	12	5	ζ		$\overline{}$	~	6	12	20			720	LOAD
LOAD	540			20	12	7	ζ	Ĭ		_	8	12	20	360			LOAD
LOAD		720		20	12	9	}	Į		~	10	12	20		540		LOAD
LOAD			900	20	12	11	7		=	~	12	12	20			720	LOAD
LOAD	720			20	12	13	ζ	Ī		~	14	12	20	360			LOAD
LOAD		720		20	12	15	ζ			_	16						SPACE
SPARE				20		17	ζ		Ĭ	~	18						SPACE
SPARE				20		19	ξ			~	20						SPACE
SPARE				20		21	ζ	Τ	I	_	22						SPACE
SPARE				20		23	ζ		Ī	~	24						SPACE
SPARE				20		25	ζ	Ĭ		_	26						SPACE
SPARE				20		27	}			~	28						SPACE
SPARE				20		29	ζ			~	30						SPACE
TOTAL	1,980	2,160	1,260											1,440	1,080	1,440	TOTAL
					TO	TAL CONNE	CTED LOAI	) (VA):	A = 3	420 B= 3	3240 C = 2	700					

$\sim\sim\sim$	$\sim$	<del></del>	$\sim$		$\sim$	$\sim$	$\sim$	~~~	$\overline{}$	~	~	~	Y-	~	~	~~~~
						Р	ANELBO	ARD "SRB" S	CHEDUL	.E						
					150A MCB, 2	208/120V, 3	PHASE, 4	WIRE, 10 KAK	C MINIMU	M, SURFAC	ED MOUNT					
		LOAD (VA	l)	BKR	WIRE	CKT		PHASE		CKT	WIRE	BKR	-	LOAD (VA	)	
LOAD SERVED	A	В	С	TRIP	SIZE	NO.		АВС		NO.	SIZE	TRIP	А	В	С	LOAD SERVED
LOAD	2,500			20	12	1				2	12	20	2,500			LOAD
LOAD		2,500		20	12	3				4	12	20		2,500		LUND
LOAD			2,500	20	12	5				6	12	20			2,500	LOAD
LOND	2,500			20	12	7				8	12	20	2,500			LUAD
LOAD		1,500		20	12	9				10	12	20		1,500		LOAD
LOAD			1,500	20	12	11				12	12	20			1,500	LOAD
LOAD	1,500			20	12	13				14	12	20	1,500			LOAD
LOAD		1,500		20	12	15				16	12	20		1,500		LOAD
LOAD			1,500	20	12	17				18	12	20			1,500	LOAD
LOAD	1,000			20	12	19				20	12	20	2,500			LOAD
LOAD		1,500		20	12	21				22	12	20		2,500		LUMD
LOAD			1,500	20	12	23				24	12	20			1,500	LOAD
LOAD				20	12	25				26	12	20	1,500			LOAD
LOAD	3,120			30	10	27				28	10	30		3,120		LOAD
LUMD		3,120		30	10	29				30	10	30			3,120	LOAD
TOTAL	10,620	10,120	7,000										10,500	11,120	10,120	TOTAL

							PANELBO	ARD '	SA" SC	CHEDULE							
					100A MC	3, 208/120V,	3 PHASE, 4	WIRE,	10 KAI	MINIMUN	, SURFACE	D MOUNT					
I OAD SERVED	- 1	LOAD (VA)	)	BKR	WIRE	CKT NO.		PH	ASE		CKT NO.	WIRE	BKR		LOAD (VA	)	LOAD SERVED
LUAD SERVED	Α	В	С	TRIP	SIZE	CKT NO.		ΑE	3 C		CKI NO.	SIZE	TRIP	A	В	О	LUAD SERVED
LOAD	540			20	12	1	7	_		~	2	12	20	540			LOAD
LOAD		1,000		20	12	3	~	_	_	_~	4	12	20		900		LOAD
LOAD			900	20	12	5	~		Η.	~	6	12	20			900	LOAD
LOAD	600			20	12	7	~			~	8	12	20	540			LOAD
LOAD		1,000		20	12	9	~		$\overline{}$	_~	10	12	20		900		LOAD
LOAD			1,000	20	12	- 11	~		_	~	12	12	20			1,000	LOAD
LOAD	1,000			20	12	13	~			~	14	12	20	1,000			LOAD
LOAD		900		20	12	15	~	_	-	_~	16		20				SPARE
LOAD			900	20	12	17	~		_	~	18		20				SPARE
SPARE				20		19	~			_~	20						SPACE
SPARE				20		21	7	_	$\overline{}$	~	22						SPACE
SPARE				20		23	~			~	24						SPACE
SPARE				20		25	~			~	26						SPACE
SPARE				20		27	~	_		~	28						SPACE
SPARE				20		29	~			~	30						SPACE
TOTAL	2,140	2,900	2,800											2,080	1,800	1,900	TOTAL
					TO	FAL CONNE	CTED LOAD	(VA):	A = 4	220 B = 4	1700 C = 4	700					



		Δ				PAI	NELBO/	ARD "I	EDP* S	SCHEDI	JLE						
			600A N	CB, 480/2	77V, 3 PH	ASE, 4 WI	RE, 35 K	AIC MI	NIMUN	I, SURFA	CED MO	UNT (ISOL	ATED GF	ROUND)			
		LOAD (VA)		BKR	WIRE	СКТ		PH	ASE		CKT	WIRE	BKR		LOAD (VA)		
LOAD SERVED	Α	В	С	TRIP	SIZE	NO.		A E	3 C		NO.	SIZE	TRIP	А	В	С	LOAD SERVED
	79,860				350	1	~	$\overline{}$		~	2	2		12,544			
PANEL EH1		69,552		300/3	350	3	~	Ε,		_	4	2	100/3		14,864		PANEL EH2
			69,618		350	5	~		_	~	6	2				12,040	
	12,544				2	7	7			~	8	2		95,703			
PANEL EH3		14,864		100/3	2	9	~	$\Box$		~	10	2	400/3		95,703		PANEL M4
			12,040		2	11	~		_	$\sim$	12	2				95,703	
SPARE						13	~			~	14						SPARE
SPARE						15	~	$\equiv$		~	16						SPARE
SPARE						17	7		_	7	18						SPARE
SPARE						19	~			~	20						SPARE
SPARE						21	7	_	_	~	22						SPARE
SPARE						23	~		_	~	24						SPARE
SPARE						25	~			~	26						SPARE
SPARE						27	~			~	28						SPARE
SPARE						29	~		Щ,	~	30						SPARE
TOTAL	92,404	84,416	81,658											108,247	110,567	107,743	TOTAL

				_~	~~	A PAL	HELBOA	RD-E	LDP"	SCHED	ULE						
			400A N		20V, 3 Phy	ASE, 4 WI	RE, 10 K	AIC M	NIMUN			UNT (ISOL	LATED GF	ROUND)			
LOAD SERVED		LOAD (VA)		BKR	WIRE	CKT	~	~#H	ASE		СКТ	WIRE	BKR		LOAD (VA)		LOAD SERVED
LUAD SERVED	Α	В	С	TRIP	SIZE	NO.			3 C		NO.	SIZE	TRIP	Α	В	С	LUAD SERVED
	40,000				350	1	7			~	2	350					
LOAD		40,000		300/3	350	3	~	H	ļ	~	4	350	300/3				LOAD
			40,000		350	5	~		Ī	~	6	350					
	16,480 10 7 - 8 2 9,440 NRELELI 12,900 150/3 10 9 - 10 2 100/3 9,440																
PANEL ELI		12,900		150/3	1/0	9	~	$\vdash$	ļ	~	10	2	100/3		9,440		PANEL C
			11,460		1/0	11	~			~	12	2				9,440	
	1,900				6	13	~	-		_	14						
PANEL C3C		2,080		60/3	6	15	~			_	16		60/3				SPARE
			1,760		6	17	~		Ī	~	18						
SPARE						19	~-	$\vdash$		-	20						SPARE
SPARE						21	~	$\vdash$		_	22						SPARE
SPARE						23	~		Ī	~	24						SPARE
SPARE						25	7	$\vdash$		~	26						SPARE
SPARE						27	~	$\vdash$	Į	~	28						SPARE
SPARE						29	7		Щ.	~	30						SPARE
TOTAL	58,380	54,980	53,220											9,440	9,440	9,440	TOTAL
				1	OTAL CO	NECTE	LOAD (	VA):	A = 67	'820 B	= 64420	C = 6266	10				

			$\sim$	$\sim$		PAI	NELBOA	ARD "I	JDP" S	SCHEDI	JLE						
		Δ	300A N	ICB, 400/2	77V, 3 PH	ASE, 4 WI	RE, 14 K	AIC MI	NIMUN	I, SURFA	CED MO	JNT (ISOL	ATED GF	ROUND)			
		LOAD (VA)	٠.,	BKR	WIRE	CKT		PH	ASE		CKT	WIRE	BKR		LOAD (VA)		
LOAD SERVED	A	В	С	TRIP	SIZE	NO.		A E	3 C		NO.	SIZE	TRIP	Α	В	С	LOAD SERVED
	13,000				2	1	~			~	2	2		13,000			
PANEL SRA		12,500		100/3	2	3	7			~	4	2	100/3		12,500		PANEL SRB
	14,000 2 5															14,000	
	13,000 2 7 - 8 2 4,220																
PANEL SRB		12,500		100/3	2	9	7	_	ļ	~	10	2	100 / 3		4,700		PANEL SA
			14,000		2	11	~		Ĭ	$\sim$	12	2				4,700	
	5,000				2	13	ζ			~	14						
PANEL D1		5,000		100/3	2	15	7	$\vdash$	ļ	^	16		100/3				SPARE
			4,000		2	17	~		_	_	18						
SPARE						19	7			^	20						SPARE
SPARE						21	~	_		_	22						SPARE
SPARE						23	~		Ĭ	^	24						SPARE
SPARE						25	~			_	26						SPARE
SPARE						27	7	H		~	28						SPARE
SPARE						29	~		$\Box$	~	30						SPARE
TOTAL	31,000	30,000	32,000											17,220	17,200	18,700	TOTAL

	_	_	_			_		' '		_		_		_	_		^
$\sim\sim\sim\sim\sim\sim$	$\sim$	$\sim$	$\sim$	$\sim$	$\sim$	$\overline{}$	$\sim$	~	$\searrow$	<u> </u>	$ \sim$	$\sim$	$\sim$	$\rightarrow$		$\sim$	$\gamma \gamma \gamma \gamma \gamma \gamma$
				-		F	PANELBO	DARD'	SA" S	CHEDUL	E						
					100A MCB,	208/120V, 3	PHASE,	4 WIRE	, 10 KAI	C MINIMU	M, SURFA	CED MOUN	Г				
		OAD (VA	A)	BKR	WIRE	CKT		PH	ASE		CKT	WIRE	BKR	-	OAD (VA	4)	
LOAD SERVED	A	В	С	TRIP	SIZE	NO.		A E	3 C		NO.	SIZE	TRIP	A	В	С	LOAD SERVED
LOAD	540			20	12	1	~			_	2	12	20	540			LOAD
LOAD		1,000		20	12	3	~	_	-	~	4	12	20		900		LOAD
LOAD			900	20	12	5	~			~	6	12	20			900	LOAD
LOAD																LOAD	
LOAD	LOAD 1,000 20 12 9 - 10 12 20 900															LOAD	
LOAD			1,000	20	12	11	^		-	~	12	12	20			1,000	LOAD
LOAD	1,000			20	12	13	~	•		~	14	12	20	1,000			LOAD
LOAD		900		20	12	15	>			~	16		20				SPARE
LOAD			900	20	12	17	~		-	~	18		20				SPARE
SPARE				20		19	7			~	20						SPACE
SPARE				20		21	~	_	-	~	22						SPACE
SPARE				20		23	~			~	24						SPACE
SPARE				20		25	~	•		~	26						SPACE
SPARE				20		27	~	_	-	~	28						SPACE
SPARE				20		29	^			~	30						SPACE
TOTAL	2,140	2,900	2,800											2,080	1,800	1,900	TOTAL
					TOTA	L CONNEC	TED LOA	O (VA):	A = 4	220 B=	4700 C=	= 4700					



				200A	MCB, 480	/277V, 3 P	PHASE, 4	WIRE,	, 35 KAI	C MININ	IUM, SUF	FACED M	DUNT				
		LOAD (VA)		BKR	WIRE	CKT		PH	ASE		СКТ	WIRE	A <sub>BKR</sub>		LOAD (VA)		
LOAD SERVED	A	В	С	TRIP	SIZE	NO.		ΑE	3 C		NO.	SIZE	TRIP	А	В	С	LOAD SERVED
LOAD	2,628			20	12	1	7	-		ζ	2	6	20	2,628			LOAD
LOAD		500		20	12	3	~	<u> </u>	-	~	4	4	20		980		LOAD
LOAD			500	20	12	5	7		_	ζ	6	10	20			900	LOAD
	2,900				10	7	~	-		7	8	10		5,000			
LOAD		2,900		30/3	10	9	7	_		ζ	10	10	30/3		5,000		LOAD
			2,900		10	11	~		_	~	12	10				5,000	
	11,098				3/0	13	7	$\vdash$		ζ	14	12	20	1,000			LOAD
PANEL "TM"		11,098		150/3	3/0	15	~	_		7	16		20				SPARE
			11,098		3/0	17	7			ζ	18		20				SPARE
SPARE						19	~	-		ζ	20						SPARE
SPARE						21	~	_		7	22						SPARE
SPARE						23	7		_	5	24						SPARE
SPARE						25	~			7	26						SPARE
SPARE						27	~	_		~	28						SPARE
SPARE						29	~			~	30						SPARE
TOTAL	16,626	14,498	14,498											8,628	5,980	5,900	TOTAL

						PA	NELBOA	RD "TM	"SCHEDL	JLE						
				150A	MCB, 480	/277V, 3 P	PHASE, 4	NIRE, 35	KAIC MININ	IUM, SUR	FACED MO	DUNT				
		LOAD (VA)		BKR	WIRE	СКТ		PHASE		СКТ	WIRE	BKR		LOAD (VA)		
LOAD SERVED	A	В	С	TRIP	SIZE	NO.		ΑВ	С	NO.	SIZE	TRIP	Α	В	С	LOAD SERVED
SPARE	1,000			20		1	~		1	2	4		25,760			
SPARE		1,000		20		3	-~	-	_~	4	4	75/3		20,760		SPARE
SPARE			1,000	20		5	7		<b>→</b> ~	6	4				20,760	
SPARE	1,000			20		7	~	_	_~	8		20	1,000			SPARE
SPARE		1,000		20		9	7	+	1	10		20		1,000		SPARE
SPARE			1,000	20		11	~	_	~	12		20			1,000	SPARE
SPARE	1,000			20		13	~	_	_~	14		20	1,000			SPARE
SPARE		1,000		20		15	~	-	1	16		20		1,000		SPARE
SPARE			1,000	20		17	~	_		18		20			1,000	SPARE
SPARE	1,000			20		19	~	_	1	20		20	1,000			SPARE
SPARE		1,000		20		21	-~	-	_~	22		20		1,000		SPARE
SPARE			1,000	20		23	~		<b>→</b>	24		20			1,000	SPARE
						25	~	_	_~	26						
						27	~	-		28						
						29	~		~	30						
TOTAL	4,000	4,000	4,000										28,760	23,760	23,760	TOTAL
				1	OTAL CO	NNECTED	LOAD (V	A): A =	32760 B	= 27760	C = 2776	0				

		LOAD (VA)					TINOL,	4 WIRE, 10 K	40 milkim					OAD (VA)		
LOAD SERVED	-	I (VA)	_	BKR	WIRE	CKT	_	PHASE		CKT	WIRE	BKR TRIP	<u> </u>	I (VA)		LOAD SERVED
	A	В	С	TRIP	SIZE	NO.		A B C		NO.	SIZE	TRIP	A	В	С	
LOAD	2,500			20	12	1	^	•	1	2	12	20	2,500			LOAD
LUND		2,500		20	12	3	~	-	~	4	12	20		2,500		LOND
LOAD			2,500	20	12	5	7		~	6	12	20			2,500	LOAD
LOAD	2,500			20	12	7	~	•	~	8	12	20	2,500			LOAD
LOAD		1,500		20	12	9	~		~	10	12	20		1,500		LOAD
LOAD			1,500	20	12	11	~		~	12	12	20			1,500	LOAD
LOAD	1,500			20	12	13	7		~	14	12	20	1,500			LOAD
LOAD		1,500		20	12	15	~	-	~	16	12	20		1,500		LOAD
LOAD			1,500	20	12	17	~		~	18	12	20			1,500	LOAD
LOAD	1,500			20	12	19	~		~	20	12	20	2,500			LOAD
LOAD		1,500		20	12	21	~		~	22	12	20		2,500		LUAD
LOAD			1,500	20	12	23	~		~	24	12	20			1,500	LOAD
	3,120			30	10	25	~		~	26	10	30	3,120			
LOAD		3,120		30	10	27	~		~	28	10	30		3,120		LOAD
LOAD			1,500	20	12	29	~		~	30	12	20			1,500	LOAD
LOAD	1,500			20	12	31	~		~	32	12	20	1,500			LOAD
LOAD		1,500		20	12	33	~		_	34	12	20		1,500		LOAD
						35				36						
						37				38						

						P.A	NELBC	ARD	"LM" S	CHEDL	ILE						
				75A	MCB, 480/	277V, 3 P	HASE, 4	WIRE,	35 KAI	C MINIM	UM, SURI	ACED MO	DUNT				
		LOAD (VA)		BKR	WIRE	CKT		PH	ASE		CKT	WIRE	BKR		LOAD (VA)		
LOAD SERVED	А	В	С	TRIP	SIZE	NO.		ΑΙ	ВС		NO.	SIZE	TRIP	А	В	С	LOAD SERVED
SPARE	1,000			20		1	~			_	2		20	1,000			SPARE
SPARE																	SPARE
SPARE	SPARE 1,000 20 5 6 20 1,000															1,000	SPARE
SPARE																	SPARE
SPARE		1,000		20		9	7		-	~	10		20		1,000		SPARE
SPARE			1,000	20		11	~		μ.	~	12		20			1,000	SPARE
PFB						13	7	$\vdash$		~	14						PFB
PFB						15	~		-	~	16						PFB
PFB						17	7		Щ.	~	18						PFB
TOTAL	2,000	2,000	2,000											2,000	2,000	2,000	TOTAL
					TOTAL C	ONNECT	ED LOAD	(VA):	A = -	4000 B	= 4000	C = 4000					

						PA	NELBO/	ARD "	2HM*	SCHED	ULE						
				50A	MCB, 208/	120V, 3 P	HASE, 4	WIRE,	10 KAI	IC MINIM	UM, SUR	FACED MO	UNT				
LOADOFFIED		LOAD (VA)		BKR	WIRE	CKT		PH	ASE		CKT	WIRE	BKR		LOAD (VA)		1040 050150
LOAD SERVED	A B C IRIP SIZE NO. ABC NO. SIZE IRIP A B C															LOAD SERVED	
LOAD	900	00 20 12 1 - 2 12 20 900 LOAD															LOAD
LOAD		500		20	12	3	~	Ε.	_	_	4	12	20		900		LOAD
LOAD				20	12	5	~			~	6	12	20			900	LOAD
	700			20	10	7	~			~	8	12	20	1,000			LOAD
LOAD		700		20	10	9	~			^	10	1 12	20		1,000		LUAD
			700	20	10	11	~			~	12		20				SPARE
TOTAL	1,600	1,200	700		Δ	7								1,900	1,900	900	TOTAL
					TOTAL C	ONNECT	ED LOAD	(VA):	A =	3500 B	= 3100	C = 1600					

							ANELBO										
				15	50A MCB, 2	08/120V, 3	PHASE, 4	_		IC MINIM	JM, SURF	ACED MOU	NT				
LOAD SERVED		LOAD (VA	)	BKR	WIRE	CKT		PHA	ASE		CKT	WIRE	BKR		LOAD (VA)	)	LOAD SERVED
LOAD SERVED	A	В	С	TRIP	SIZE	NO.		ΑE	3 C		NO.	SIZE	TRIP	А	В	С	LOAD SERVED
LOAD	1,500			20	12	1	~	•		~	2	12	20	1,500			LOAD
LOAD		1,500		20	12	3	~	_		~	4	12	20		1,500		LOAD
LOAD			1,500	20	12	5	~		_	~	6	12	20			1,500	LOAD
LOAD	1,500			20	12	7	~	•		~	8	12	20	1,500			LOAD
LOAD		1,500		20	12	9	~	_		~	10	12	20		1,500		LOAD
LOAD			1,500	20	12	11	7		_	~	12	12	20			1,500	LOAD
LOAD	2,500			20	12	13	~	•		~	14	12	20	2,500			LOAD
LUAD		2,500		20	12	15	~	$\Box$		~	16	12	20		2,500		LUAD
LOAD			2,500	20	12	17	~		_	~	18	12	20			2,500	LOAD
LUAD	2,500				12	19	~	•		~	20	12	20	2,500			LOND
LOAD		2,500		20	12	21	~	_		~	22	12	20		2,500		LOAD
LUAD			2,500	20	12	23	~		_	~	24	12	20			2,500	LOND
LOAD	2,500			20	12	25	~	•		~	26	12	20	2,500			LOAD
LUAD		2,500		20	12	27	~	$\overline{}$		~	28	12	20		2,500		LOND
LOAD			1,500	20	12	29	~		-	~	30	12	20			1,500	LOAD
LOAD	1,500			20	12	31	~	•		~	32	12	20	1,500			LOAD
LOAD		1,500		20	12	33	~	_		~	34	12	20		1,500		LOAD
LOAD			1,500	20	12	35	~		_	~	36	12	20			1,500	LOAD
LOAD	1,500			20	12	37	~			$\sim$	38	12	20	1,500			LOAD
LOAD		1,500		20	12	39	~	_		~	40	12	20		1,500		LOAD
SPARE				20		41	~		_	~	42		20				SPARE
TOTAL	TOTAL 13,500 13,500 11,000													13,500	13,500	11,000	TOTAL
					TOTAL C	ONNECTE	D LOAD	(VA):	A = 27	000 B=	27000 (	C = 22000					



					B A A IN I	DICTO	DUTIO	DAL DA	ALEI	COLIE	DUILE	"MADD"					
			400007771	0.00114		DISTR							ATED	2001110			
			480/277V	, 3 PHA:	SE, 4 WII	KE, 65 K	AIC MI		_	IRFACE	ED MOU	INT (ISOL	LATED				
LOAD SERVED		LOAD (VA	_	BKR TRIP	WIRE	CKT NO.	_	PHA			CKT NO.	WIRE	BKR TRIP	_	LOAD (VA	í	LOAD SERVED
	A	В	С	TRIP	SIZE	NO.	ABC				NO.	SIZE	TRIP	A	В	С	
	79,860			300 /3	350	1	~	-		_	2	3-350		224,965			
PANEL H1		69,552			350	3	~	$\vdash$	_	_	4	3-350	1000 /3		224,965		PANEL M
			69,618		350	5	~		$\overline{}$	$\sim$	6	3-350	350			224,965	
	12,544				2	7	ζ			7	8	2-300		169,923			
PANEL H2		14,864		100 /	2	9	~	-	-	~	10	2-300	500 /3		169,443		PANEL EDP
			12,040		2	11	7		$\overline{}$	~	12	2-300				167,223	
	15,700				2	13	7	-		~	14	3/0		24,254			
PANEL H3		16,250		100 /	2	15	7	$\Box$	$\overline{}$	~	16	3/0	200		19,998		PANEL HM
			14,800	1	2	17	~			~	18	3/0				20,389	
LOAD	7,200				6	19	7			~	20	10		3,600			
LOVE		7,200		*60/	6	21	~			~	22	10	30 /3	3	3,600		LOAD
			7,200	1	6	23	~		$\overline{}$	$\sim$	24	10	1			3,600	
						25	~			~	26						
						27	~			~	28						
						29	~		$\neg$	~	30						
						31	~			~	32						
						33	~			~	34						
						35	~			~	36						
						37	~			~	38						
						39	~	$\Box$		~	40						
						41	~		=	$\overline{}$	42						
TOTAL	115,304	107,866	103,658				_			_				422,742	418,006	416,177	TOTAL
	_		Т	OTAL C	ONNEC	TED LOA	AD (VA)	: A	= 538	8046	B = 525	872 C	= 51983	15			

						PANE	LBOA	RD "E	H1" SCH	IEDULE						
		20	0A, 480/2	77V, 3 P	HASE, 4	WIRE, 1	4 KAIC	MININ	MUM, SUF	FACED I	MOUNT (I	SOLATE	D GROU	ND)		
1040 050/50	LOAD (VA)			BKR	WIRE	СКТ		PHA	SE	СКТ	WIRE	BKR		LOAD (VA	.)	LOAD OFFINED
LOAD SERVED	Α	В	С	TRIP	SIZE	NO.	-	A E	3 C	NO.	SIZE	TRIP	Α	В	С	LOAD SERVED
LOAD	28,700				350	1	7	$\vdash$	$\rightarrow$	2						PFB
		28,700			350	3	7	-	_	4						PFB
			28,700		350	5	7		$\rightarrow$	6						PFB
PFB						7	ζ	$\vdash$	_	8						PFB
PFB						9	~	-	-	10						PFB
PFB						11	7		_	12						PFB
PFB						13	~	-	-	14						PFB
PFB						15	7	$\Box$	$\rightarrow$	16						PFB
PFB						17	~		$\rightarrow$	18						PFB
PFB						19	7	$\blacksquare$	$\rightarrow$	20						PFB
PFB						21	7	-	_	22						PFB
PFB						23	~		$\rightarrow$	24						PFB
PFB						25	ζ	$\vdash$	_	26						PFB
PFB						27	~	-	-	28						PFB
PFB						29	7		^	30						PFB
PFB						31	~		-	32						PFB
PFB						33	7	$\Box$	-	34						PFB
PFB						35	7		$\rightarrow$	36						PFB
PFB						37	7	-	$\rightarrow$	38						PFB
PFB						39	~		-	40						PFB
PFB						41	7		$\rightarrow$	42						PFB
TOTAL 28,700 28,700 28,700 0 0 TOTAL													TOTAL			
				TOTAL	CONNE	CTED LO	DAD (V	A): /	A = 28700	B = 2	8700 C	= 28700				

						PANE	LBOA	RD "I	H2"	SCHE	DULF						
		10	0A, 480/27	77V, 3 PI	HASE, 4	WIRE, 1	4 KAIC	MINII	MUM,	SURFA	ACED M	OUNT (IS	SOLATE	D GROUN	ND)		
		LOAD (VA)		BKR	WIRE	СКТ		PHASE			СКТ	WIRE	BKR	LOAD (VA)			
LOAD SERVED	Α	В	С	TRIP			-	A B (			NO.	SIZE	TRIP	Α	В	С	LOAD SERVED
LOAD	1,000			20	12	-1	~	_		~	2		20	1,000			SPARE
SPARE		1,000		20		3	~	$\equiv$		~	4		20		1,000		SPARE
SPARE			1,000	20		5	~			~	6		20			1,000	SPARE
SPARE	1,000			20		7	~			~	8		20	1,000			SPARE
SPARE		1,000		20		9	~	$\equiv$		~	10		20		1,000		SPARE
SPARE			1,000	20		11	~			~	12		20			1,000	SPARE
PFB						13	~	$\overline{}$		~	14						PFB
PFB						15	~	_	$\overline{}$	~	16						PFB
PFB						17	~			~	18						PFB
PFB						19	~			~	20						PFB
PFB						21	~	$\equiv$		~	22						PFB
PFB						23	~		Ξ	~	24						PFB
PFB						25	~			~	26						PFB
PFB						27	~	$\equiv$		~	28						PFB
PFB						29	~		Ε,	~	30						PFB
TOTAL	2,000	2,000	2,000				•							2,000	2,000	2,000	TOTAL
				TOTA	L CONN	ECTED	LOAD (	VA):	A =	4000	B = 40	00 C=	4000				

						PANE	LBOA	RD "	FH3"	SCHE	DULE						
		10	DA, 480/2	77V, 3 P	HASE, 4							OUNT (IS	SOLATE	D GROUN	ND)		
	LOAD (VA)			BKR	WIRE	СКТ		PH	ASE	SE		WIRE	BKR		LOAD (VA	)	
LOAD SERVED	A	В	С	TRIP	SIZE	NO.		A E	3 C	;	CKT NO.	SIZE	TRIP	А	В	С	LOAD SERVED
LOAD	1,000			20	12	1	~	-		~	2		20	1,000			SPARE
LOAD		1,000		20	12	3	~	Ε.		~	4		20		1,000		SPARE
SPARE			1,000	20		5	7		_	~	6		20			1,000	SPARE
SPARE	1,000			20		7	~	-		~	8		20	1,000			SPARE
SPARE		1,000		20		9	7	μ.		7	10		20		1,000		SPARE
SPARE			1,000	20		11	~		_	~	12		20			1,000	SPARE
LOAD	1,000			20	12	13	7	-		7	14						PFB
SPARE		1,000		20		15	~	-	-	~	16						PFB
SPARE			1,000	20		17	7		_	~	18						PFB
PFB						19	~	-		~	20						PFB
PFB						21	~	Ε.		~	22						PFB
PFB						23	7		_	~	24						PFB
PFB						25	~	-		~	26						PFB
PFB						27	~	μ.		~	28						PFB
PFB						29	~		Щ.	~	30						PFB
TOTAL	3,000	3,000	3,000											2,000	2,000	2,000	TOTAL
				TOTA	L CONN	ECTED	LOAD	(VA):	A =	5000	B = 50	00 C=	5000				

	PANELBOARD "EH4" SCHEDULE																
		10	0A, 480/27	77V, 3 PI	HASE, 4	WIRE, 1	4 KAIC	MINII	MUM,	SURF	ACED M	OUNT (IS	SOLATE	D GROUN	ND)		
		LOAD (VA)			WIRE	СКТ		PHA	ASE		СКТ	WIRE	BKR	- 1	LOAD (VA	)	LOAD SERVED
LOAD SERVED	Α	В	С	TRIP	SIZE	NO.	1	4 E	3 C		NO.	SIZE	TRIP	Α	В	С	LOAD SERVED
SPARE	1,000			20		1	~			~	2	12	20	1,000			LOAD
LOAD		1,000		20	12	3	7	$\Box$		~	4		20		1,000		SPARE
LOAD			1,000	20	12	5	~		Ξ	~	6		20			1,000	SPARE
SPARE	1,000			20		7	7			~	8		20	1,000			SPARE
SPARE		1,000		20		9	~	$\equiv$		~	10		20		1,000		SPARE
SPARE			1,000	20		11	7			~	12		20			1,000	SPARE
PFB						13	~	$\overline{}$		~	14						PFB
PFB						15	~	_		~	16						PFB
PFB						17	~			~	18						PFB
PFB						19	~			~	20						PFB
PFB						21	7	$\Box$		~	22						PFB
PFB						23	~		Ξ	~	24						PFB
PFB						25	7			~	26						PFB
PFB						27	~	$\equiv$		~	28						PFB
PFB						29	~		Ε,	~	30						PFB
TOTAL	2,000	2,000	2,000	2,000 2,000 2,000 TOTAL													
				TOTA	L CONN	ECTED	LOAD (	VA):	A =	4000	B = 40	00 C=	4000				

GUAM POWER AUTHORITY
P.O. BOX 2977, HAGATINA, GUAM, USA 98910

SERVICE STREET S

# APPENDIX T AS-BUILT DRAWINGS

#### GENERAL NOTES

- BLISTICAL LAVOI FORMANDA ME PARTIALI PLAGAMBATIA. SESTE TO ADMINISTRATE PROTECTAR. REVORAL ADMINISTRATIO GENERAL OR DISSINIONA CILLIAN HERATIA COOR INMOS, BOOK PROMES STRUCTURAL ADMINISTRATICA GENERAL ADMINISTRATION OF PRESA DESIGNATION PRES. STRUCTURAL STEEL OR GENERAL PROTECTION. PRES. STRUCTURAL STEEL OR GENERAL PROSESSA DESIGNATION PRESENTATION OF THE PROSESSA DESIGNATION OF SECONDA COMMISSION OF THE PROSESSA DESIGNATION OF SECONDA COMMISSION OF CONTROL OF SECONDA CONTRIBUTE DESIGNATION OF CONTROL SECONDA CONTRIBUTE DESIGNATION OF CONTROL SECONDA CONTRIBUTE DESIGNATION OF CONTROL SECONDA CONTRIBUTE DESIGNATION OF CONTRIBUTE DESIGNATION OF SECONDA CONTRIBUTE DESIGNATION OF CONTRI
- FURNISH ALL LABOR, EQUIPMENT, APPLIANCES, MATERIALS AND PERFORM OPERATIONS REQUIRED FOR COMPLETE INSTALLATION OF SYSTEMS SPECIFIED IN ACCORDANCE WITH DRAWINGE, CODES, OPENANCES AND TEMPS AND CONCENDES OF CONTRACT.
- COMPLY WITH THE LATEST EDITION OF ALL APPLICABLE CODES. ORDINANCES AND REGULATIONS.
- 4 SYMBOLS IN THE LEGEND ARE APPLICABLE GENERALLY. FOR EXACT REQUIREMENTS, REFER TO THE SCHEDULES, LAYOUTS, AND DETAILS. THE APPLICABLES OF A PARTICULAR SYMBOL, DOES NOT RECEISARILY MIPLY THAT THE FIEM IS INCLIDED IN THE CONTRACT.
- PROVIDE ADDITIONAL SUPPORTS FOR SWITCHES, STARTERS, RACEWAYS AND OTHER ELECTRICAL EQUIPMENT WHEREVER THE BUILDING STRUCTURE IS NOT SUITABLE FOR DISECT MODIFIED.
- THE WAS ARREST OF DIRECT MONTHING.

  WERRY CELLING SUPPRISONED SYSTEMS IN THE WARDOUS AREAS AND PROVIDE THE PROPERTIES WAS THE WARDOUS AREAS AND PROVIDE THE PROPERTIES WAS ARREST OF THE WARDOUS THE PROPERTIES OF THE WARDOUS AREAS AND PROVIDED WAS ARREST OF THE WARDOUS AREAS AND AREAS WAS ARREST WARDER OF THE WARDOUS AREAS WAS ARREST WARDER OF THE PROPERTIES WAS ARREST OF THE STORY OF CREAM FOR THE WARD FOR THE PROPERTIES WAS ARREST TO WARD AREAS AND ARREST WAS ARREST WAS ARREST WAS ARREST WAR ARREST WAR ARREST WAS ARREST WAR ARREST WAR ARREST WAS ARREST WAR ARREST WAR ARREST WAS ARREST WAS ARREST WAR ARREST WAS ARREST WAS ARREST WAS ARREST WAR ARREST WAR ARREST WAS ARREST WAS ARREST WAS ARREST WAR ARREST WAS ARREST WA
- PROVIDE SEAL FITTINGS IN CONDUITS THAT ENTER CONDITIONED AREAS.
- E. PROPERLY ROUND CONDUCT SYSTEM OUTLETS, ENTURES, ETC. IN ACCORDANCE WITH THE NUTCHING EXTENDED CODE. SECTION 25. PROVINCE ALL RECORDS, AMERICAN AND UNITED CONDUCTION 25. TO RECURRED FOR COMPLETE GROUNDING, PHOVIDE GREEN GROUND WHIELD STATEMENT AND UNITED CONDUCTION WHILE IN EACH RECORD AND UNITED COMPLETE CONDUCTION.
- CONNECT BRANCH CRICUIT NEUTRAL TO RECEPTACLE TERMINAL BY MEANS OF A SHORT PROTAL PERMANENTLY SPLICED TO THE NEUTRAL.
- PROVIDE SH' CONDUST FROM EACH THERMOSTAT TO THE EQUIPMENT THAT IT CONTROLS. SEE MECHANICAL PLANS FOR THERMOSTAT LOCATIONS.
- CONTRUCTOR MUST COORDINATE ALL SERVICE WORK WITH GPA. GPA MUST INSPECT AND APPROVE TRENCHING MID CONDUIT INSTALLATION PRIOR TO CONCRETE POUR. PRIOR APPROVIAL FROM GPA MUST BE OSTAINED FOR ROUTING OF MIDDIFFIGURED POWER LINE AND TRANSFORMER (LOCATION.
- APPLICATION OF POWER MUST BE SUBMITTED IT MONTHS IN ADVANCE BEFORE ACTUAL SERVICE CONNECTION TO ALLOW FOR DELIVERY OF GRA MATERIALS AND EQUIPMENT.
- THE OWNER MUST GRANT EASEMENT FOR THE ROUTING AND LOCATION OF UNDERGROUND POWER LINES AND EQUIPMENT.
- COORDINATE WITH GPA FOR THE INSPECTION OF TRENCH, CONDUIT LAYOUT, HAMCHOLE, RISER, PAD ETC. 48 HOURS ADVANCE NOTICE IS REQUIRED.
- ALL CONDUST MUST BE CLEANED AND MANDRELLED IN THE PRESENCE OF GPA INSPECTOR AND PROVIDED WITH NYLON PULL ROPE OF 200 LB MIN. PULL STRENGTH.
- ALL UNDERGROUND DUCTS, BENDS AND ELBOWS SHALL BE CONCRETE ENCASED THROUGHOUT THE WHOLE ROUTE.
- GPA HANDHOLE. TRANSFORMER AND METER SHALL BE ACCESSIBLE 24HRS A DAY FOR MAINTENANCE AND METER READING.
- ALL ABOVE GROUND GPA CONDUITS SHALL BE RIGID ALUMINUM CONDUIT. ALL BELOW GRADE GPA CONDUIT SHALL BE CONCRETE ENCASED PVC SCHEDULE 40.
- ALL ELECTRICAL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE NATIONAL ELECTRICAL CODE (NEC) AND NATIONAL ELECTRICAL SAFETY CODE (NESC).
- CONTRACTOR/OWNER SHALL IDENTIFY THE REGISTERED LAND SURVEYOR (RLS). PROPERTY MANKERS/POINTS TO THE GRAINS/PECTOR AT THE JOB SITE.
- 21. PROVIDE 3 FEET MIN. CLEARANCE ALL AROUND HANDHOLES, TRANSFORMERS, AND METERING EQUIPMENT FROM FENCES, WALLS, AND STRUCTURES, ETC.
- CONTRACTOR OYMER SHALL OBTAIN A REGISTERED LIND SURVEYOR TO PROVIDE NEW YOLK STARROUT AND DOWN-GUY LOCATIONS, IF APPLICABLE COORDINATE WITH GPA BENINEERING FOR SPECIFIC REDURBENETS.
- CONTRACTORIOWNER SHALL OBTAIN A REGISTERED LAND SURVEYOR TO PREPARE FAIRBRINE EXHBERT FOR DEPART HAND SIZES TRANSPORMERS OF CHEMICAL AND LANDRAGHOURD POWER LINES AND FINES ASSOCIATED WHILE FAILURES.
- 24. ALL SURVEY STAKEOUTS, MAPS, AND EASEMENT DOCUMENTS SHALL BE FIELD VERBY BY THE GRA.
- 25 CONTRACTOR TO PROVIDE SHOP DRAWINGS FOR ALL FLOOR DUTLETS FOR DATA AND POMER.
- 26. ALL WHING SHALL BE COPPER ALL POWER WIRING FO AND SMALLER SHALL BE COLD. IN AND LANGER MAY BE STRANGED. COLOR COCE ALL WHING BY SYSTEM. FOR 1200MV SYSTEMS, PHASE IN SHALL BE BLACK, PHASE IS SHALL BE FIED AND PHASE C SHALL BE BLIE. FOR 277ADV SYSTEMS, PHASE A SHALL BE SHOWN, PHASE IS SHALL DRAWGE AND PHASE C SHALL BE YELLOW.

#### LEGEND

2X4 RECESS FLUORESCENT LIGHT FIXTURE
2X2 RECESS FLUORESCENT LIGHT FIXTURE
1X4 RECESS FLUORESCENT LIGHT FIXTURE

UGHT FIXTURE WITH EMERGENCY SATTERY MADE,P
TX4 SURFACE WTD. FLUORESCENT LIGHT FIXTURE

CELING WITE BUT LIGHT, DOUBLE FACE, CONNECT TO LINIMITCHED ONT
WALL WITE BUT LIGHT, DOUBLE FACE, CONNECT TO LINIMITCHED ONT
GENING WITE BUT LIGHT, BRIGE FACE, CONNECT TO LINIMITCHED ONT
WALL WITE DUT LIGHT, BRIGE FACE, CONNECT TO LINIMITCHED ONT
STRP LIGHT SURFACE WITE

STRP LIGHT SURFACE WITE

WALL WITE DUT LIGHT, BRIGE FACE, CONNECT TO LINIMITCHED ONT

STRP LIGHT SURFACE WITE

WALL WITE DUT LIGHT, BRIGE FACE, CONNECT TO LINIMITCHED ONT

STRP LIGHT SURFACE WITE

WALL WITE DUT LIGHT, BRIGE FACE, CONNECT TO LINIMITCHED ONT

WALL WITE DUT LIGHT, BRIGE FACE, CONNECT TO LINIMITCHED ONT

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\$1 THREE-WAY SWITCH \$4 FOUR-WAY SWITCH

\$46 COMBINATION LIGHT SWITCH/MOTION BENSOR ORCUST BREAKER

BRANCH CROUT PANEL
CATY CAB

FIRE ALARM CAB TELEPHONE CAB INTERCOMPULISON

MITERCOM PULLBOX
SECURITY PULLBOX
COTY PULLBOX
LC UIGHTING CONTRACTOR

REFER TO NOTE INDICATED

EQUIPMENT CONNECTION

JUNCTION BOX

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POWER POLE

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WANGECO RECEPTACLE (W WEATHER PROOF 6 GFC))

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#### ABBREVIATIONS

A LIGHTING FIXTURE KEY-INE SCHEDULE
AC ABOVE COUNTER
AF AMP FRAME
AT AMP TRY
AMP TRANSPER SWATCH

CL CURPEWLIGHT
CT CURRENT TRANSFORMER
EF EXHAUST FAN

Em EMERGENCY LIGHT, CROUT OR PANEL. GFCI GROUND FAULT CROUT INTERRUPTER

FA FRE ALARN
MCS MAN CIRCUIT BREAKER
MCF MAN CIRCUIT BREAKER

MTS MANUAL TRANSFER SWITCH

NL NGHT LIGHT
NC NOT IN CONTRACT
PC PHOTO CELL

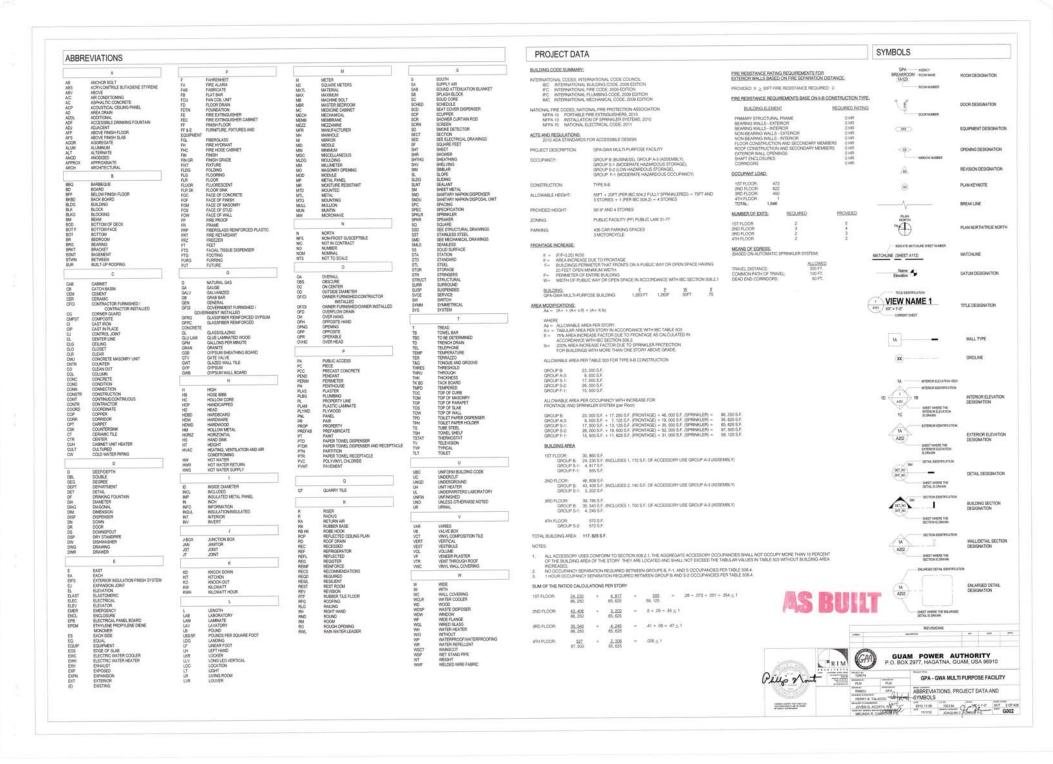
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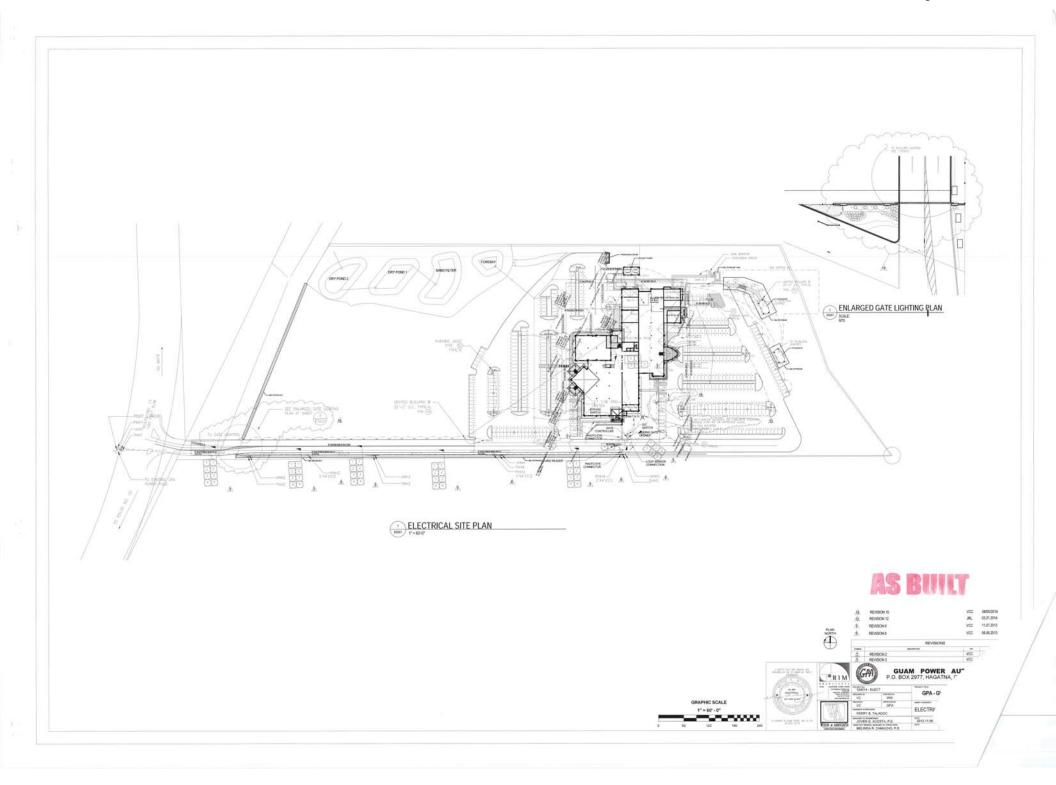
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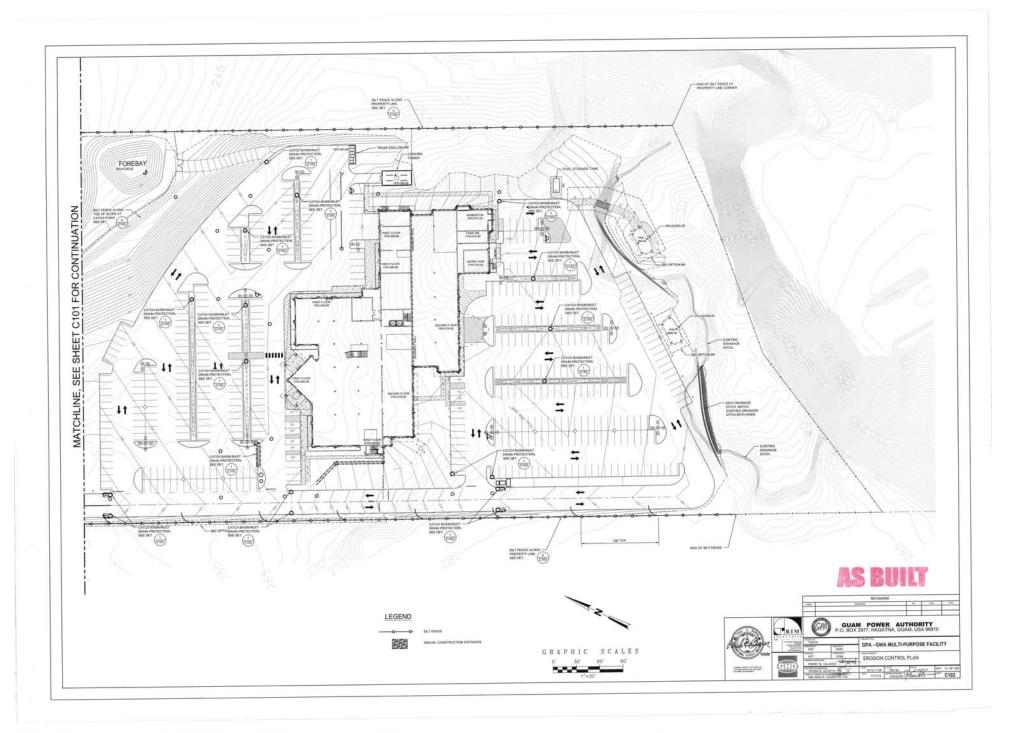


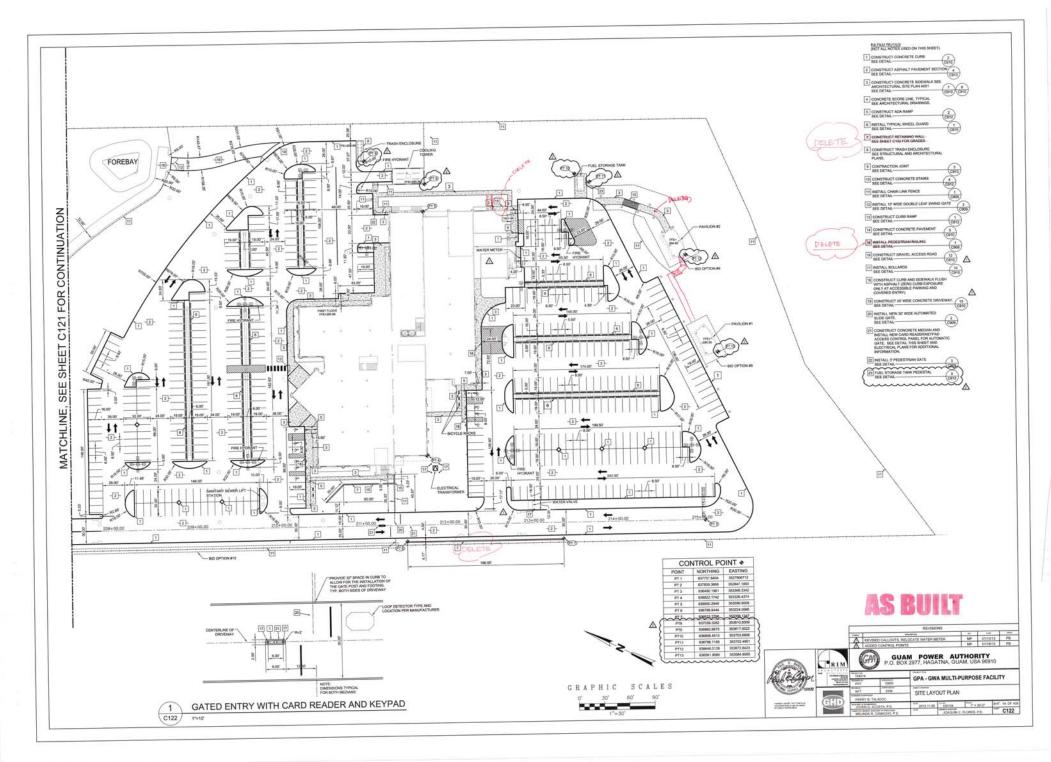


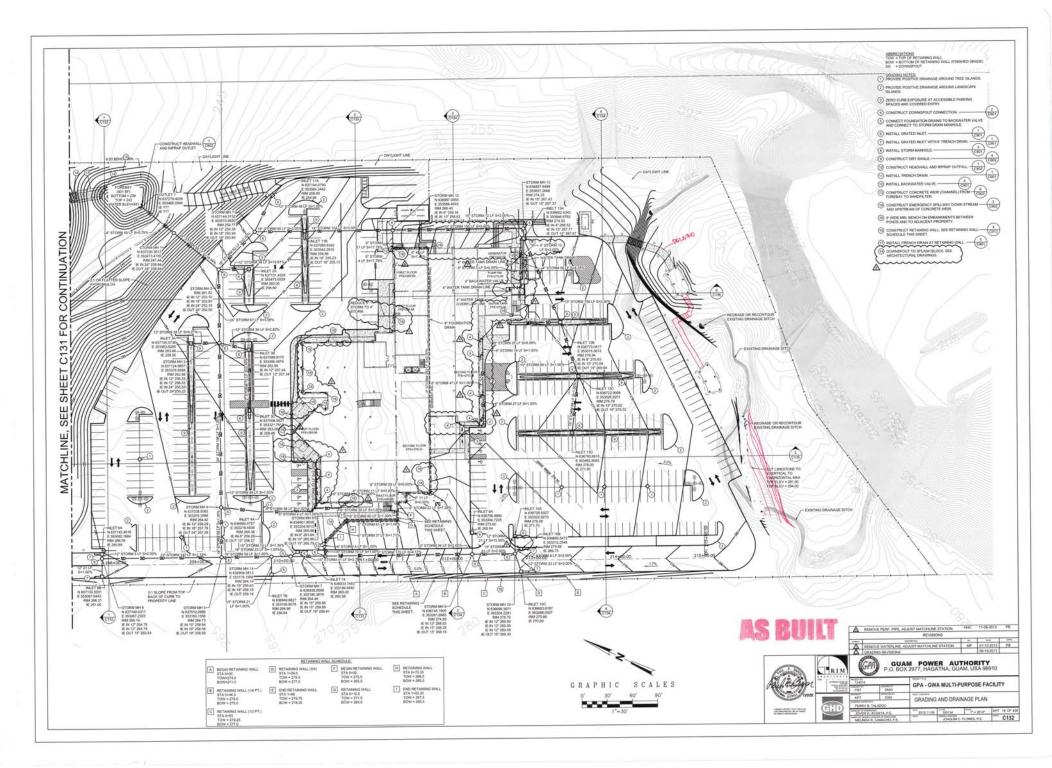
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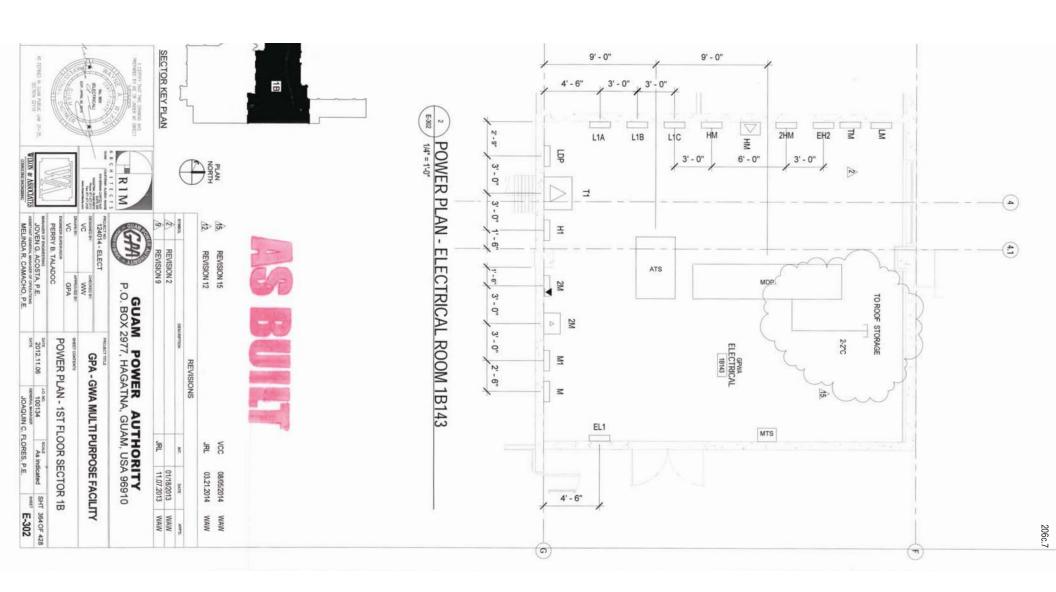


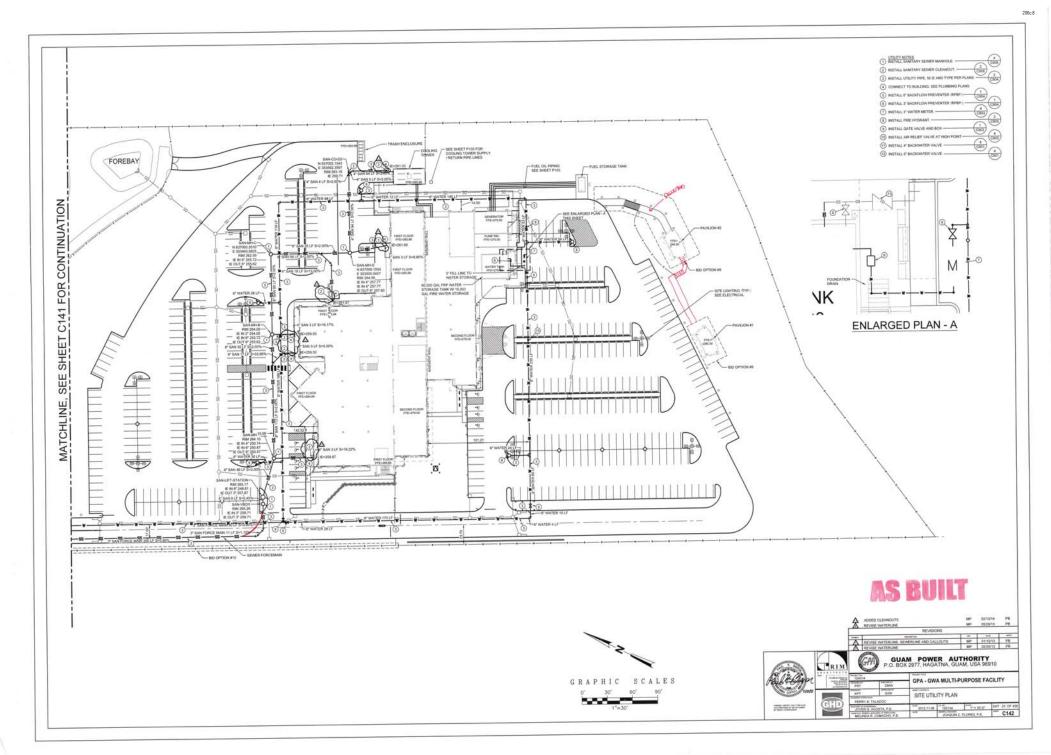


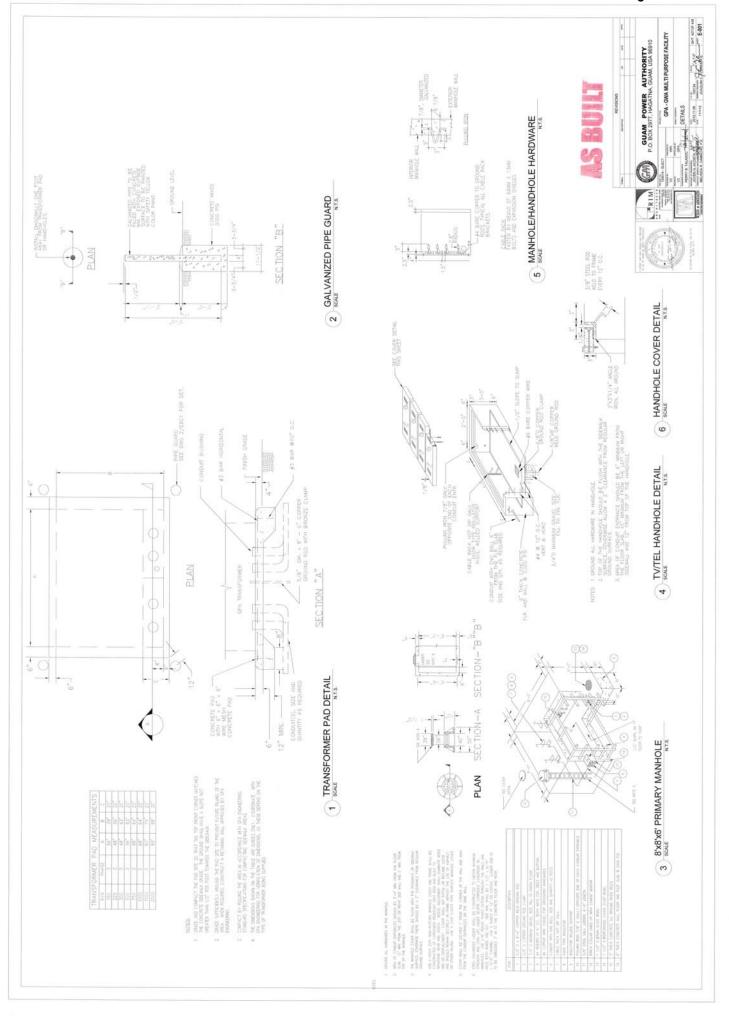


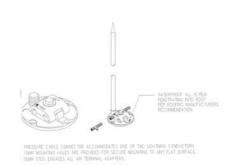








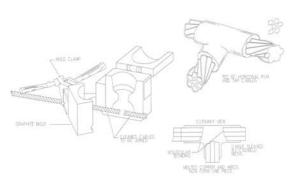




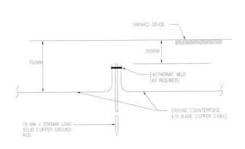




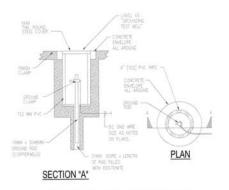
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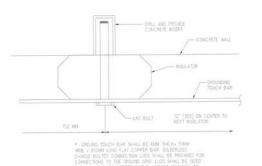
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5 GROUNDING ROD DETAIL
NTS.



3 GROUND ROD TEST WELD DETAIL N.T.S.









# APPENDIX U RECORD OF ENVIRONMENTAL CONSIDERATION CORRESPONDENCE



# BUREAU OF STATISTICS AND PLANS Guam Coastal Management Program



DEC 13 2022

John M. Benavente, PE General Manager Guam Power Authority P.O. Box 2977 Hagåtña, Guam 96932

RE: Coastal Zone Management Act (CZMA) Federal Consistency Review for Guam Power Authority's Application for Federal Assistance for its proposed Parking Lot Solar Canopy Project under DOI's Energizing Insular Communities 2019 Funding Opportunity (GCMP FC No. 2022-0024)

Hafa adai! The Guam Coastal Management Program of the Bureau of Statistics and Plans (Bureau) has completed its review of the Application for Federal Assistance by Guam Power Authority received on October 14, 2022. Guam Power Authority ("the applicant agency") has submitted its application pursuant to federal assistance from the Department of the Interior relative to the proposed Parking Lot Solar Canopy Project under DOI's Energizing Insular Communities 2019 Funding Opportunity in Mangilao, Guam.

The Bureau coordinated this review with partnering agencies, provided Public Notice, and received comments from the Department of Land Management (DLM), the Guam Waterworks Authority (GWA), and the Department of Agriculture (DOAG). Furthermore, the Bureau hereby concurs with the applicant agency's certification that the proposal is consistent with the enforceable policies of the Bureau's Guam Coastal Management Program (GCMP) based upon the following comments and conditions:

**Development Policy 2. Urban Development.** Commercial, multi-family, industrial and resort-hotel zone uses and uses requiring high levels of support facilities shall be concentrated within urban districts as outlined on the Land Use Districting Map.

The applicant agency represents: "Not applicable. The project is located on the parking lot of the GBNPSB and will not require further zoning or extensive support facilities."

The proposed project includes development of new facilities on the property. The North and Central Guam Land Use Plan (NCGLUP), which was deemed approved in accordance with the provisions of Guam Pub. Law 20-147, designates the geographic area in which the property is located as General Residential on its Future Land Use Map. The General Residential category encompasses uses and patterns of development that are most consistent with the Urban District

RE: CZMA Review of Guam Power Authority's Application for Federal Assistance for its proposed Parking Lot Solar Canopy Project under DOI's Energizing Insular Communities 2019 Funding Opportunity

Mangilao, Guam

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designation found in Section II(a) of the Land-Use District Guidelines promulgated by Exec. Order 78-23, which reads: "Urban districts shall include those areas characterized by and designated for higher concentrations of people, structures and streets, proximity to basic services such as sewers, water, sanitation, police and fire protection power and other major facilities and areas of high intensity use.

The General Residential category is described in NCGLUP Policy LU-1(b) which reads, in part: "Nonresidential uses are generally discouraged except for public facilities, schools, and institutions, provided their nature and location are not detrimental to the residential environment." The existing land use as a public facility is explicitly supported within the General Residential land use category to which the property is subject. In addition, the proposed development of a solar PV system on the subject property advances NCGLUP Policy LU-5, which is to "Promote environmental sustainability through a variety of measures," including "site design to promote renewable energy use."

**Resource Policy 2. Air Quality.** All activities and uses shall comply with all local air pollution regulations and all appropriate Federal air quality standards in order to ensure the maintenance of Guam's relatively high air quality.

Demolition of portions of the existing structures and accompanying ground-disturbing and earth-moving activities will result in the generation of fugitive dust which will have a temporary effect on ambient air quality, which must be addressed by appropriate dust control BMPs. In addition, the use of diesel equipment and vehicles may have temporary effects on ambient air quality, which should be addressed by regular maintenance of vehicles and equipment and the use of particulate filters where applicable. Dust control measures will also minimize potential impacts to surrounding habitats and species.

DOAG states: "Project must incorporate dust control measures for all earth moving and demolition activities to minimize potential impacts to surrounding habitats and species."

Pursuant to Resource Policy 2, Air Quality, the applicant agency shall:

- (1) strictly implement appropriate dust control BMPs.
- (2) ensure that diesel engines employed in equipment or vehicles are regularly maintained and that particulate filters are used, where applicable.
- (3) comply with the Guam Air Pollution Control Standards and Regulations.

**Resource Policy 3. Water Quality.** Safe drinking water shall be assured and aquatic recreation sites shall be protected through the regulation of uses and discharges that pose a pollution threat to Guam's waters, particularly in estuarine, reef and aquifer areas.

The applicant agency represents: "Project will not produce discharge that interferes with Guam's waters, especially estuaries, reef and aquifer areas. The project will also use BMP's to comply with

RE: CZMA Review of Guam Power Authority's Application for Federal Assistance for its proposed Parking Lot Solar Canopy Project under DOI's Energizing Insular Communities 2019 Funding Opportunity

Mangilao, Guam

## Page 3 of 6

water quality policy during mobilization." In addition, the applicant agency represents that the project site is confined to the existing pavement and that best management practices (BMPs) (e.g. silt screen, hydro-ax hand clearing, etc.) will be used to comply with erosion and siltation policies of GCMP.

If the propose project involves ground disturbance, the project will be subject to the Guam Soil Erosion and Sediment Control Regulations, as provided in 22 GAR §10102(c), which states, in part, "Regulations apply to all clearing, grubbing, grading, embankment or filling, excavating, stockpiling or other earth-moving operations on Guam which require a permit as provided for in 21 Guam Code Annotated, Chapter 66 (as amended)."

Where ground disturbance will occur within the project, appropriate BMPs must be installed in strict compliance with the Guam Soil Erosion and Sediment Control Regulations (22 GAR Chapter 10). E.O. 2012-02 requires that, "The CNMI and Guam Stormwater Management Criteria is adopted for use in all non-transportation construction projects and construction projects on private property." Since the proposed activity is solely a transportation construction project, the applicant agency is required to comply with the Guam Transportation Stormwater Drainage Manual for its installation of stormwater Best Management Practices (BMPs).

DOAG states: "Heavy equipment used on the project area must be monitored for oil/petroleum fluid leaks during activities. Absorbent pads must be readily available. If leaks occur, all work must cease and leak area must be cleaned to avoid impact to water resources and other fragile areas."

Pursuant to Resource Policy 3, Water Quality, the applicant agency shall:

- (1) apply for a Soil Erosion and Sediment Control Permit or waiver thereof, from the Guam Environmental Protection Agency for ground-disturbing activities as required under 22 GAR §10102(d).
- (2) for ground-disturbing activities, implement appropriate BMPs throughout the project in strict compliance with the Guam Soil Erosion and Sediment Control Regulations (22 GAR Chapter 10), installed in accordance with the Guam Transportation Stormwater Drainage Manual.
- (3) comply with the Guam Soil Erosion and Sediment Control Regulations, as applicable.
- (4) monitor heavy equipment used on the project area for oil/petroleum fluid leaks during activities. Absorbent pads must be readily available. If leaks occur, all work must cease and leak area must be cleaned to avoid impact to water resources and other fragile areas.

**Resource Policy 4. Fragile Areas.** Development in the following types of fragile areas shall be regulated to protect their unique character: historic and archaeological sites, wildlife habitats, pristine marine and terrestrial communities, Limestone forests, and mangrove stands and other wetlands.

DOAG comments as follows:

RE: CZMA Review of Guam Power Authority's Application for Federal Assistance for its proposed Parking Lot Solar Canopy Project under DOI's Energizing Insular Communities 2019 Funding Opportunity

Mangilao, Guam

### Page 4 of 6

Habitat types identified on the subject lot, and abutted properties, include open fields and urban forestry. Although this habitat types are not identified as Fragile Areas, these areas are potentially used by migratory bird species. Between August and May, migratory birds occur throughout Guam's coastal areas, wetlands, open fields (mowed grasslands), and forests. Biologists from DOAG have observed migratory birds in open grass field areas along Route 15. DOAG rules out any direct impacts towards the species if they occur since the solar canopy project will be occurring on existing parking lot areas. DOAG do ask that if migratory birds do in fact occur, that the species are to not be disturbed, harassed, chased, or captured. These species must be avoided and allowed to leave the area on their volition.

The locally protected, Micronesian starling may occur on the project area. Surveys of the species have starling individuals between Ladera Tower and Guam Community College, and Fadian Point. Starling are opportunistic, and often found in urban areas. Although the species have not been documented at the project area (GBNPSB), we believe that the species will make its way to the compound based on the distribution path to central areas.

Starling use urban materials (overhangs, aircon ducts, hollow blocks, pipes, etc) as nest platforms. Like in most urban settings, GBSNPSB is no different and provides adequate nesting opportunities for the species. With the addition of the solar fixtures, DOAG is concerned about the maintenance phase of the project, especially if and when the starling occurs. Maintenance of the equipment must include a preliminary inspection or survey of birds and nests before any equipment maintenance activity occurs. To avoid impacts to the operations and maintenance of equipment, DOAG is available to be consulted upon to determine better ways to avoid starling building nests in the project area, solar PV system.

Of recent, there have been numerous sightings of the endangered Mariana fruit bat along Route 15. Of concern is the light fixtures on the parking lot areas that emits bright light during the evening hours having an impact to the movements of fruit bats in the area. To minimize impacts to the species, installation of shielded lights fixtures or lesser lumens should be used to minimize light pollution.

Pursuant to Resource Policy 4, Fragile Areas, the applicant agency shall:

- (1) avoid migratory bird species. If they are encountered on the project site, cease activities in the immediate area until species leave on their own volution.
- (2) consult with DOAG to avoid Micronesian Starlings opportunistically building nests in the project area and in the solar PV system. Maintenance of installed equipment should be subject to preliminary inspection or survey of birds and nests before any equipment maintenance activity occurs to determine if the Micronesia Starling has opportunistically nested in the PV system and related facilities.

RE: CZMA Review of Guam Power Authority's Application for Federal Assistance for its proposed Parking Lot Solar Canopy Project under DOI's Energizing Insular Communities 2019 Funding Opportunity

Mangilao, Guam

# Page 5 of 6

(3) be advised to use shielded light fixtures or lesser lumens to minimize light pollution which may harm the Marianas fruit bat, should any lights be installed as part of the subject project.

**Resource Policy 6. Visual Quality.** Preservation and enhancement of, and respect for the island's scenic resources shall be encouraged through increased enforcement of and compliance with sign, litter, zoning, subdivision, building and related land-use laws. Visually objectionable uses shall be located to the maximum extent practicable so as not to degrade significant views from scenic overlooks, highways and trails.

Some of the protective measures mentioned in relation to other policies, to include but not necessarily limited to the installation of demolition/construction phase silt fences, as may be required as an erosion control measure, or dust barriers, would no longer be necessary following the construction phase of the project and would be visually objectionable if left in place.

Planting of native plants, where deemed feasible and appropriate, would help to stabilize the soil and increase infiltration of surface water, and enhance the visual experience of users of the Hagåtña Pool.

Pursuant to Resource Policy 6, Visual Quality, the applicant agency shall:

- (1) dispose of any debris and waste generated during demolition and construction must be disposed of at a Guam EPA permitted site and must adhere to the requirements of the Guam Solid Waste Regulation.
- (2) remove and properly dispose of temporary protective measures which are intended for use only during the demolition and/or construction phase of the project.

Therefore, based on the conditional concurrence stated above and the Bureau's review of all other information submitted, we find the application to be consistent with the approved development and resource policies of the Guam Coastal Management Program (GCMP), in accordance with the Coastal Zone Management Act of 1972, (P.L. 92-583) as amended, (P.L. 94-370). The Federal Consistency concurrence, however, does not preclude the need for securing other federal and Government of Guam permits, clearances and approvals prior to the start of this project.

Per 15 CFR §930.4(b), if the requirements for conditional concurrences specified in 15 CFR §930.4(a), (1) through (3), are not met, then all parties shall treat this conditional concurrence letter as an objection pursuant to 15 CFR Part 930 subpart F. Furthermore, if an objection is determined, you are hereby notified that, pursuant to 15 CFR §930.63(e) and 15 CFR Part 930, subpart H, you have the opportunity to appeal an objection resulting from not meeting the requirements of 15 CFR §930.4(a), (1) through (3), to the Secretary of Commerce within 30 days after receiving this conditional concurrence letter, or 30 days after receiving notice from the Federal agency that your application will not be approved as amended by the conditions required by this concurrence.

GCMP FC No. 2022-0024

RE:

CZMA Review of Guam Power Authority's Application for Federal Assistance for its proposed Parking Lot Solar Canopy Project under DOI's Energizing Insular Communities 2019 Funding Opportunity

Mangilao, Guam

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The proposed action shall be operated and completed as represented in the Coastal Zone Management (CZM) federal consistency certification. Significant changes to the subject proposal shall be submitted to the Bureau for review and approval and may require a full CZM federal consistency review, including publication of a public notice and provision for public review and comment. This condition is necessary to ensure that the proposed actions are implemented as reviewed for consistency with the enforceable policies of GCMP. Guam Land Use policies (Exec. Order 78-37), are the federally approved enforceable policies of GCMP that applies to this condition.

Please do not hesitate to contact Mr. Julian Janssen, Federal Activities Planner at 671-475-9664 or email <u>julian.janssen@bsp.guam.gov</u> or Mr. Edwin Reyes, Coastal Program Administrator at 671-475-9672 or email <u>edwin.reyes@bsp.guam.gov</u>. Si Yu'os Ma'åse'.

Sincerely,

**LOLA E. LEON GUERRERO** 

Director

Cc:

USDOI-OIA

NOAA-OCM

DOAG-DAWR

DLM

**DPR-SHPO** 

DPW

**GEPA** 

**GWA** 

Street Address: 590 S. Marine Corps Drive Suite 733 ITC Building Tamuning, GU 96913

> Mailing Address: P.O. Box 2950 Hagátňa, GU 96932

Website: http://dlm.guam.gov

E-mail Address: dtmdir@land.guam.gov

Telephone: 671-649-LAND (5263)

> Facsimile: 671-649-5383





# DIPĂTTAMENTON MINANEHAN TĂNO' (Department of Land Management) GUBETNAMENTON GUĂHAN

(Government of Guam)

LOURDES A. LEON GUERRERO MAGA HÁGA · GOVERNOR

JOSHUA F. TENORIO SIGUNDO MAGA'LÁHI • LIEUTENANT GOVERNOR

October 4, 2022

Memorandum

To:

Director, Bureau of Statistics and Plans

From:

Director, Department of Land Management

Subject:

Pre-Federal Consistency Review for GPA's Parking Lot Solar Canopy

Project Under DOI's Energizing Insular Communities 2019 Funding

Opportunity.

The Department of Land Management has reviewed the pre-Federal consistency for GPA'S proposed project to design and installation of Photovoltaic (PV) system mounted on canopy structures to provide the Gloria B. Nelson Facility with clean renewable energy. GPA's Solar Canopy parking lot is federally funded by the Department of Interiors office of Insular Affairs under its 2019 Energizing Insular Communities Program. The PV system shall have a minimum of 68 KWdc and will be interconnected supporting the Gloria B Nelson Public Service Building

Based on our review, the proposed project is not within the Seashore Reserve Area, therefore, there are no foreseeable effects to the Seashore Reserve Area. We are confident that GPA's proposed project impact will not have significant adverse environmental effects and that Best Management Practices (MPS'S) will be incorporated.

We are confident that the Guam Power Authority will meet all height and setbacks for structures; furthermore ensure that the appropriate BMPs are incorporated in the restoration project and the post restoration use and maintenance of the power poles to comply with the general provision of the island's Land Use Laws to promote the protection of the public's health, safety and general welfare pursuant to Executive Order 78-37, Guam Land Use Policies, whereas, the proposed project will be in line with the established policies and laws.





JOSEPH M. BORJA Director



GUAM ENVIRONMENTAL PROTECTION AGENCY • AHENSIAN PRUTEKSIÓN LINA'LA' GUÁHAN LOURDES A. LEON GUERRERO • GOVERNOR OF GUAM | JOSHUA F. TENORIO • LIEUTENANT GOVERNOR OF GUAM WALTER S. LEON GUERRERO • ADMINISTRATOR | MICHELLE C. R. LASTIMOZA • DEPUTY ADMINISTRATOR

NOV 1 4 2022

### **MEMORANDUM**

TO:

Director, Bureau of Statistics and Plans

FROM:

Administrator

SUBJECT:

GEPA-23-0081: FC2022-0024 GPA Parking Lot Solar Canopy Project

Hafa Adai,

Buenas yan Saluda. The Guam Environmental Protection Agency (GEPA) has reviewed the above referenced project and provides comments as part of the Federal Consistency application submitted to the Bureau of Statistics and Plans (BSP) by the Guam Power Authority (DPR). The proposed project as described includes the photovoltaic (PV) solar canopy design and construction for Fadian public parking lot.

The GEPA staff has reviewed the submitted documents and determined that the proposed project when properly executed, is not likely to have any significant impact to the environment. GEPA stresses the importance of protecting our environment and offers the following comments and recommendations:

### SPECIFIC COMMENT

GEPA recommends that GPA select PV panel systems and appurtenances that
contain less hazardous components and materials, to reduce the potential for
possible soil and groundwater contamination if systems are damaged or improperly
stored or disposed of. An additional recommendation is to develop Standard
Operating Procedures (SOPs) for the maintenance, storage and disposal of the PV
systems, as PV systems could be classified as hazardous waste.

### **GENERAL COMMENTS**

### A. Stormwater and Erosion Control

1. Any work that disturbs the ground surface must meet all requirements of the Guam Soil Erosion and Sediment Control Regulations (22 GAR Chapter 10), and must provide both pre- and post-construction stormwater controls compliant with the

GUAM EPA | 17-3304 Mariner Avenue Tiyan Barrigada, Guam 96913-1617 | Tel: (671) 300.4751/2 | Fax: (671) 300.4531 | epa.guam.gov ALL LIVING THINGS OF THE EARTH ARE ONE • MANUNU TODU I MANUALA'LA'



- requirements of the 2006 CNMI and Guam Stormwater Management Manual, as implemented by Executive Order No. 2012-02.
- Applicable BMP's shall be strictly implemented during the span of the construction period. Necessary measures must be taken by the contractor to prevent, control and mitigate the release of sediments, oils, trash/debris, and other pollutants to air, water and environment.
- 3. An Erosion and Sediment Control Plan (ECP) and Environmental Protection Plan (EPP) must be submitted for GEPA approval prior to the start of construction. Turbidity and siltation from project related work shall be minimized and contained to within the vicinity of the site through the appropriate use of effective silt containment devices and curtailment of work during adverse heavy rainfall events. Inspection and maintenance of containment devices shall be performed after adverse conditions.

### **B. Solid Waste**

- 1. The developer is responsible for compliance with all relevant Guam EPA regulations related to the disposal of demolition and construction debris.
- In the event that demolition materials and/or construction debris are determined to be hazardous, the contractor must notify or coordinate with Guam EPA's Hazardous Waste Program for guidance and proper disposal.

### C. Air Quality

- 1. Dust control measures shall be implemented and maintained throughout the duration of any activities, in accordance with the Guam Air Pollution Control Standards and Regulations (10 GCA 49).
- 2. The contractor must minimize construction related noise impact by limiting construction related activities during night time.

### D. Water Quality

 To avoid water quality impacts caused by construction activity, the contractor must ensure that equipment used at the project site will not cause oil leaks, and spill prevention kit(s) must be readily available onsite. Proper housekeeping must also be strictly implemented to circumvent the transport of contaminants by stormwater runoff such as pollutant spills into the ground and/or pollutant impacts to water quality in the area.

GEPA fully supports this project as its implementation will greatly reduce the overall power demand and provide additional safety and security for the facility.

GEPA-23-0081: GPA Parking Lot Solar Canopy Project: FC2022-0024 Page 3 of 2

Should you have any question and/or need additional information, please do not hesitate to contact the staff at Water Pollution Control Program, or the Non-point Source Program at tel. 671-300-4781 and 671-300-4787 respectively.

Dångkolu na si Yu'us ma'åse'

Senseramente

GUAM EPA | 17-3304 Mariner Avenue Tiyan Barrigada, Guam 96913-1617 | Tel: (671) 300.4751/2 | Fax: (671) 300.4531 | epa.guam.gov ALL LIVING THINGS OF THE EARTH ARE ONE . MANUNU TODU I MANLALA LA



# United States Department of the Interior



FISH AND WILDLIFE SERVICE Pacific Islands Fish and Wildlife Office 300 Ala Moana Boulevard, Room 3-122 Honolulu, Hawai'i 96850

In Reply Refer to:

2023-0010817

Michael N. Murphy Guam Power Authority PO Box 2977 Hagatna Guam 96932-2977 March 16, 2023

Subject: Technical Assistance for the GPA Parking Lot Solar Canopy Project, Mangilao,

Guam

Dear Michael N. Murphy:

The U.S. Fish and Wildlife Service (Service) received your correspondence on October 11, 2022, requesting for assistance in reviewing potential impacts to federally listed species for the Federal Registry Review.

We reviewed the request pursuant to the Endangered Species Act (ESA) of 1973, as amended (16 U.S.C. 1531 *et seq.*). We have determined no critical habitat exists within or near the proposed project sites. Based on information you provided and pertinent information in our files, the following species may occur within the vicinity of the project sites:

Scientific Name	Common Name	Listing Status	
Pteropus mariannus mariannus	Mariana fruit bat/ fanihi	Threatened	
Hypolimnas octocula mariannensis	Mariana eight spot butterfly/ ababang	Endangered	

If chosen, the results of a current biological survey of the project area would override this species list. Adjustments to the project, to include best management practices (BMP), will ensure that no additional or lasting impacts to the previously mentioned species will occur. Recommended avoidance and minimization measures are as follows:

## Mariana Fruit Bat

1. Minimize nighttime lighting near forested areas. Direct temporary lighting away from forest habitat. When installing new or replacing existing permanent lights, use downward-facing, full cut-off lens lights (with the lowest lumens necessary). Fully shield all outdoor lights so the bulb can only be seen from below bulb height and only use when

### PACIFIC REGION 1

- necessary. We would also recommend the installation of automatic motion sensor switches and controls on all outdoor lights or turn off lights when human activity is not occurring in the lighted area.
- 2. Avoid human activity within 150 meters (m) (492 feet (ft)) of a transiting or feeding Mariana fruit bat (these activities generally occur at night). During all project work, monitor the project site and areas within 150 m (492 ft) of project activity for the Mariana fruit bat and if a bat moves into the area, delay work until the animal(s) have left the area of their own accord. Risks to transiting and foraging Mariana fruit bats will be project-specific; coordinate with our office for assistance assessing the project's disturbance duration and intensity in relation to risks to the bat.
  - a. To facilitate project design, a qualified biologist will complete surveys of all forest habitat within 150 m (492 ft) of the project site (or the sound-related action area, whichever is larger) for the presence of any Mariana fruit bat day roosts and for transiting or feeding Mariana fruit bats. Methods used to identify roost locations include watching above the tree canopy to see where bats are flying from when they take flight at dusk, pre-dawn surveys using infrared equipment to detect roosting bats in tree canopies, and on-the-ground daytime surveys.
  - b. No earlier than one week prior to project initiation, a qualified biologist will complete surveys of all forest habitat within 150 m (492 ft) of the project site (or the sound-related action area, whichever is larger) for the presence of any Mariana fruit bat day roosts and for transiting or feeding Mariana fruit bats.

### Mariana Eight Spot Butterfly

- 1. A qualified biologist with experience surveying for and identifying the butterfly individuals, chrysalis, caterpillars, eggs, and host plants (*Elatostema calcareum, Procris pedunculata*) should survey the project action area and visibly mark the area occupied by the butterfly or host plant.
- 2. Implement the buffer distances in Table 1 to avoid affecting the plant. Where project actions will occur within these buffer distances, additional consultation coordination with the Service is required.
- 3. Pesticide or herbicide application should be applied in accordance with Table 1 if butterfly or host plants have to potential to occur within 150 feet of the project area. Insecticide use should be avoided.

Table 1. Buffer Distances for listed plants and butterfly host plants.

Proposed Action	Buffer Distances	
	Herbs/Shrubs	Trees
Vegetation removal (hand tools)	1 m (3 ft)	1 m (3 ft)
Vegetation removal (mechanical)	Variable	Variable
Vegetation removal (heavy equipment)	Variable	250 m (820 ft)
Hand application of herbicide	3 m (10 ft)	Crown Diameter
Ground spray of herbicide (e.g., backpack sprayer)	15 m (50 ft)	76 m (250 ft)
Aerial spray of herbicide (ball applicator)	76 m (250 ft)	76 m (250 ft)
Aerial spray of herbicide (paintball or individual	30 m (100 ft)	30 m (100 ft)
treatment)		

Aerial spray of herbicide (boom)	Prohibited	Prohibited
Ground/soil disturbance (hand tools)	6 m (20 ft)	2 times Crown
		Diameter
Ground/soil disturbance (heavy equipment)	100 m (328 ft)	250 m (820 ft)
Surface hardening/soil compaction (trails)	6 m (20 ft)	2 times Crown
		Diameter
Surface hardening/soil compaction	100 m (328 ft)	250 m (820 ft)
(roads/utilities/buildings)		
Prescribed burns	Prohibited	Prohibited
Farming, ranching, and silviculture	250 m (820 ft)	250 m (820 ft)

#### Notes

If it is determined that the proposed project may affect federally listed species, we recommend that you contact our office early in the planning process so that we may assist you with the ESA compliance. We appreciate your efforts to conserve listed species and native ecosystems pursuant to the ESA. If you have additional questions, please contact Laura Gombar, Fish and Wildlife Biologist, at (671) 787-3819 or by e-mail at lauraalexandria\_gombar@fws.gov. In future communications with us regarding this project, please refer to reference number: 2023-0010817.

Sincerely,

Jacqueline Flores Island Team Manager Mariana Islands

<sup>&</sup>lt;sup>a</sup> 3 feet, or the height of the vegetation to be removed, whichever is greater.

<sup>&</sup>lt;sup>b</sup> 2 times the width of the equipment, plus the height of the vegetation to be removed.

# APPENDIX V CONTINGEENT FEES AFFIDAVIT

# **CONTINGENT FEES AFFIDAVIT**

CITY OF)
) ss.   SLAND OF GUAM
sworn, deposes and says that:
The name of the offering company or individual is [state name of company]
2. As a part of the offering company's bid or proposal, to the best of my knowledge, the offering company has not retained any person or agency on a percentage, commission, or other contingent arrangement to secure this contract. This statement is made pursuant to 2 GAR Division 4 11108(f).
3. As a part of the offering company's bid or proposal, to the best of my knowledge, the offering company has not retained a person to solicit or secure a contract with the government of Guam upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, except for retention of bona fide employees or bona fide established commercial selling agencies for the purpose of securing business. This statement is made pursuant to 2 GAR Division 4 11108(h).
4. I make these statements on behalf of myself as a representative of the offeror, and on behalf of
the offeror's officers, representatives, agents, subcontractors, and employees.
Signature of one of the following:  Offeror, if the offeror is an individual;  Partner, if the offeror is a partnership;  Officer, if the offeror is a corporation.
Subscribed and sworn to before me
this day of, 2024.
NOTARY PUBLIC My commission expires
·

# **INSTRUCTION TO PROVIDERS:**

NOTICE to all Insurance and Bonding Institutions:

The Bond requires the signatures of the Vendor, two (2) major Officers of the Surety and Resident General Agent, if the Surety is a foreign or alien surety.

When the form is submitted to the Guam Power Authority, it should be accompanied with copies of the following:

- 1. Current Certificate of Authority to do business on Guam issued by the Department of Revenue and Taxation.
- 2. Power of Attorney issued by the Surety to the Resident General Agent or the following:
  - a. Current Sworn Annual Report (Limited Liability Company (LLC) and/or Corporation) or;
  - b. Current Renewal of Annual Limited Liability Partnership (LLP)

The following reference links below are for reference:

https://www.govguamdocs.com/revtax/docs/SwornAnnualReport\_LLC\_0609.pdf https://www.govguamdocs.com/revtax/docs/SwornAnnualReport\_Corporations.pdf https://www.govguamdocs.com/revtax/docs/Renewal\_LLP\_Registration\_r1106.pdf

3. Power of Attorney issued by two (2) major officers of the Surety to whoever is signing on their behalf.

Bonds, submitted as Bid Guarantee, without signatures and supporting documents are invalid and Bids will be rejected.



# **GUAM POWER AUTHORITY**

ATURIDÅT ILEKTRESEDÅT GUÅHAN P.O.BOX 2977 • HAGÅTÑA, GUAM U.S.A. 96932-2977

# SPECIAL PROVISION FOR OWNERSHIP & INTEREST DISCLOSURE AFFIDAVIT

All Bidders/Offerors are required to submit a current affidavit as required below. Failure to do so will mean disqualification and rejection of the Bid/RFP.

5 GCA §5233 (Title 5, Section 5233) states: Disclosure of Ownership, Financial, and Conflicts of Interest

- (a) Purpose. The disclosure required by this Section are intended to reveal information bearing on the responsibility of a bidder, and can be obtained by an inquiry regarding responsibility prior to award.
- (b) Definitions.

As used herein, the term "person" shall be interpreted liberally to include the definition found in 1 GCA § 715, and in § 5030(n) of this Chapter, and includes a natural person as well as every entity of whatever form or composition (an "artificial person") recognized under the laws of Guam other than a natural person, who is a prospective contractor under a bid, offer, proposal, or other response to a solicitation, or is a contractor under a contract with the government of Guam, and subject to the provisions of this Chapter.

- (c) Public Disclosure of Ownership.
  - (1) The ownership interests to be disclosed under this Section include the interests of a natural or artificial person who owns all or any part of a prospective contractor, bidder, or offeror, whether as proprietor, a partner, limited or otherwise, a shareholder of any class, in which case the percentage ownership interest test shall be based on each class, a member of an association or company, limited or otherwise, and any person owning a beneficial legal interest in any trust, and any other person having the power to control the performance of the contract or the prospective contractor.
  - (2) Prior to award, every person who is a prospective contractor, bidder, or offeror of a contract to be acquired under any method of source selection authorized by this Chapter shall submit a Disclosure Statement, executed as an affidavit under oath, disclosing the name of each person who currently or has owned an ownership interest in the prospective contractor, bidder, or offeror greater than ten percent (10%) at any time during the twelve (12) month period immediately preceding the date of the solicitation (the "relevant disclosure period"). If a prospective contractor, bidder, or offeror is an artificial person, the Disclosure Statement shall disclose the name of each person who has owned an ownership interest in such artificial person (a "second tier owner") greater than twenty-five percent (25%) at any time during the relevant disclosure period. If any such second tier owner is also an artificial person, the Disclosure Statement shall disclose the name of each person who has owned an ownership interest in such second tier owner (a "third tier owner") of forty-nine percent (49%) or more during the relevant disclosure period. If the name of no natural person has been identified as an owner, or a second or third tier owner of the prospective contractor, bidder, or offeror, the Disclosure Statement shall identify the name, position, address, and contact information of the natural person having the authority and responsibility for the performance of the prospective contract, and the name of any natural person who has the authority and power to remove and replace the designated responsible person or otherwise control the performance of the prospective contract.
- (d) Disclosure of Financial Interest. A prospective contractor shall execute an affidavit disclosing the name of any person who has received or is entitled to receive a commission, gratuity, contingent fee or other compensation to solicit, secure, or assist in obtaining business related to the solicitation by means of a Disclosure Statement, executed as an affidavit under oath, disclosing such interest and shall also contain the amounts of any such commission, gratuity, contingent fee or other compensation.

(e) Disclosure of Conflict of Interest. A prospective contractor shall disclose the name of any person who directly or indirectly participates in any solicitation if such person is also an employee of the government of Guam, or of the government of the United States if federal funds are used in payment of the contract.

- (f) Every disclosure of an ownership or financial interest of any person required to be identified by this Section shall name the person required to be disclosed and the street address of their principal place of business. All information disclosed or meant to be disclosed under this Section is public procurement data and shall be kept as part of the public record of each procurement.
- (g) Continuing Duty of Disclosure. Notwithstanding any other provision of this Chapter, the duty to disclose the information required under this Section shall be, upon award a continuing duty of a contractor of every contract subject to this Chapter, and all such information shall become part of the procurement record required by § 5249 of this Chapter. Throughout the term of a contract subject to the terms of this Chapter, the contractor shall promptly make any disclosures not made previously and update changes in the identities or other required information, interests, or conflicts of the persons required to be disclosed herein. Failure to comply with this Section shall constitute a material breach of contract."

Section 2. Severability. If any provision of this Act or its application to any person or circumstance is found to be invalid or contrary to law, such invalidity shall not affect other provisions or applications of this Act that can be given effect without the invalid provision or application, and to this end the provisions of this Act are severable.

- 1. If the affidavit is a copy, indicate the BID/RFP number and where it is filed.
- 2. Affidavits must be signed within 60 days of the date the bids or proposals are due.



# **GUAM POWER AUTHORITY**

ATURIDÅT ILEKTRESEDÅT GUÅHAN P.O.BOX 2977 • HAGÅTÑA, GUAM U.S.A. 96932-2977

Lourdes A. Leon Guerrero I Maga 'håga

Telephone Nos. (671) 648-3054/55 Fax: 648-3165

Joshua F. Tenorio I Sigundo Maga 'låhi

Accountability Impartiality Competence Value **Openness** 

# LOCAL PROCUREMENT PREFERENCE APPLICATION

Based on the law stipulated below, please place a checkmark or an "X" on the block indicating the item that applies to your business:

5GCA, Chapter 5, Section 5008, "Policy in Favor of Local Procurement" of the Guam Procurement Law states:

All procurement of supplies and services shall be made from among businesses licensed to do

			iness on Guam and that maintains an office or other facility on Guam, whenever a business is willing to be a contractor is:
(	)	(a)	A licensed bonafide manufacturing business that adds at least twenty-five percent (25%) of the value of an item, not to include administrative overhead, suing workers who are U.S. Citizens or lawfully admitted permanent residents or nationals of the United States, or persons who are lawfully admitted to the United States to work, based on their former citizenship in the Trust Territory for the Pacific Islands; or
(	)	(b)	A business that regularly carries an inventory for regular immediate sale of at least fifty percent (50%) of the items of supplies to be procured; or
(	)	(c)	A business that has a bonafide retail or wholesale business location that regularly carries an inventory on Guam of a value of at least one half of the value of the bid or One Hundred Fifty Thousand Dollars (\$150,000.0) whichever is less, of supplies and items of a similar nature to those being sought; or
(	)	*(d)	A service actually in business, doing a substantial business on Guam, and hiring at least 95% U.S. Citizens, lawfully admitted permanent residents or national of the United States, or persons who lawfully admitted to the United States to work, based on their citizenship in any of the nations previously comprising the Trust Territory of the Pacific Islands.
		•	Bidders indicating qualification under (d) may be considered QUALIFIED for the Local Procurement Preference <u>only if</u> the Government's requirement is for service. Service is defined Pursuant to 5 GCA Government Operations Subparagraph 5030 entitled DEFINITIONS under Chapter 5 of the Guam Procurement Law.
		1.	I, representative for, have read the requirements of the law cited above and do hereby qualify and elect to be given the LOCAL PROCUREMENT PREFERENCE for Bid No.: GPA  By filling in this information and placing my signature below, I understand that the Guam Power Authority will review this application and provide me with a determination whether or not the 15% preference will be applied to this bid.
		2.	I, representative for, have read the requirements of the law cited above, and do not wish to apply for the Local Procurement Preference for Bid No.: GPA
			Bidder Representative Signature

Prospective Bidders not completing this form will automatically be not considered for Local Procurement Preference. Non-completion of this form is not a basis for rejection of the bid or proposal.

Date

### **GOVERNMENT OF GUAM**

### **GENERAL TERMS AND CONDITIONS**

### SEALED BID SOLICITATION AND AWARD

### Only those Boxes checked below are applicable to this bid.

- [X] 1. **AUTHORITY:** This solicitation is issued subject to all the provision of the Guam Procurement Act (5GCA, Chapter 5) And the Guam Procurement Regulations (copies of both are available at the Office of the Complier of laws, Department of Law, copies available for inspection at the Guam Power Authority). It requires all parties involved in the Preparation, negotiation, performance, or administration of contracts to act in good faith.
- [X] 2. **GENERAL INTENTION**: Unless otherwise specified, it is the declared and acknowledged intention and meaning of these General Terms and conditions for the bidder to provide the Government of Guam (Government) with specified services or with materials, supplies or equipment completely assembled and ready for use.
- [X] 3. **TAXES**: Bidders are cautioned that they are subject to Guam Income Taxes as well as all other taxes on Guam Transactions. Specific information on taxes may be obtained from the Director of Revenue and Taxation.
- [X] 4. **LICENSING**: Bidders are cautioned that the Government will not consider for award any offer submitted by a bidder who has not complied with the Guam Licensing Law. Specific information on licenses may be obtained from the Director of Revenue and Taxation.
- [X] 5. **LOCAL PROCUREMENT PREFERENCE**: All procurement of supplies and services where possible, will be made from among businesses licensed to do business on Guam in accordance with section 5008 of the Guam Procurement Act (5GCA, Chapter 5) and Section 1-104 of the Guam Procurement Regulations.
- [X] 6. **COMPLIANCE WITH SPECIFICATIONS AND OTHER SOLICITATION REQUIREMENTS**: Bidders shall comply with all specifications and other requirements of the Solicitation.
- [ ] 7. "ALL OR NONE" BIDS: Unless otherwise allowed under this Solicitation. "all or none" bids may be deemed to be non-responsive. If the bid is so limited, the Government may reject part of such proposal and award on the remainder.
  - **NOTE**: By checking this item, the Government is requesting all of the bid items to be bided or none at all. **The Government will not award on an itemized basis**. Reference: Section 3-101.06 of the Guam Procurement Regulations.
- [X] 8. **INDEPENDENT PRICE DETERMINATION**: The bidder, upon signing the Invitation for Bid, certifies that the prices in his bid were derived at without collusion, and acknowledge that collusion and anti-competitive practices are prohibited by law. Violations will be subject to the provision of Section 5651 of that of the Guam Procurement Act. Other existing civil, criminal or administrative remedies are not impaired and may be in addition to the remedies in Section 5651 of the Government code.
- [X] 9. **BIDDER'S PRICE**: The Government will consider not more than two (2) (Basic and Alternate) item prices and the bidder shall explain fully each price if supplies, materials, equipment, and/or specified services offered comply with specifications and the products origin. Where basic or alternate bid meets the minimum required specification, cost and other factors will be considered. Failure to explain this requirement will result in rejection of the bid.
- [X] 10. **BID ENVELOPE**: Envelope shall be sealed and marked with the bidder's name, Bid number, time, date and place of Bid Opening.
- [X] 11. BID GUARANTEE REQUIREMENT: Bidder is required to submit a Bid Guarantee Bond or standby irrevocable Letter of Credit or Certified Check or Cashier's Check in the same bid envelope to be held by the Government pending award. The Bid Guarantee Bond, Letter of Credit, Certified Check or Cashier's Check must be issued by any local surety or banking institution licensed to do business on Guam and made payable to the Guam Power Authority in the amount of fifteen percent (15%) of his highest total bid offer. The Bid Bond must be submitted on Government Standard Form BB-1 (copy enclosed). Personal Checks will not be accepted as Bid Guarantee. If a successful Bidder (contractor) withdraws from the bid or fails to enter into contract within the prescribed time, such Bid guarantee will be forfeited to the Government of Guam. Bids will be disqualified if not accompanied by Bid Bond, Letter of Credit, Certified Check or Cashier's check. Bidder must include in his/her bid, valid copies of a Power of Attorney from the Surety and a Certificate of Authority from the Government of Guam to show proof that the surety company named on the bond instrument is authorized by the Government of Guam and qualified to do business on Guam. For detailed information on bonding matters, contact the Department of Revenue and Taxation. Failure to submit a valid Power of Attorney and Certificate of Authority on the surety is cause for rejection of bid. (GPR Section 3-202.03.3) Pursuant to Public Law 27-127, all competitive sealed bidding for the procurement of supplies or services exceeding \$25,000.00 a 15% Bid Security of the total bid price must accompany the bid package.
- [X] 12. PERFORMANCE BOND REQUIREMENT: The Bidder may be required to furnish a Performance Bond on Government Standard Form BB-1 or standby irrevocable Letter of Credit or Certified Check or Cashier's Check payable to the Guam Power Authority issued by any of the local Banks or Bonding Institution in the amount equal to ONE HUNDRED PERCENT (100) % of the contract prices as security for the faithful performance and proper fulfillment of the contract. In the event that any of the provisions of this contract are violated by the contractor, the Chief Procurement Officer shall serve written notice upon both the contractor and the Surety of its intention to terminate the contract. Unless satisfactory arrangement or correction is made within ten (10) days of such notice the contract shall cease and terminate upon the expiration of the ten (10) days. In the event of any such termination, the Chief Procurement Officer shall immediately serve notice thereof upon the Surety. The Surety shall have the right to take over and perform the contract, provided, however, that if the Surety does not commence performance thereof within

- 10 days from the date of the mailing of notice of termination, the Government may take over and prosecute the same to complete the contract or force account for the account and at the expense of the contractor, and the contractor and his Surety shall be liable to the Government for any excess cost occasioned the Government thereby (GPR Section 3-202.03.4).
- [X] 13. **PERFORMANCE GUARANTEE**: Bidders who are awarded a contract under this solicitation, guarantee that goods will be delivered or required services performed within the time specified. Failure to perform the contract in a satisfactory manner may be cause for suspension or debarment from doing business with the Government and to enforce Section 23 of these General Terms and Conditions. In addition, the Government will hold the Vendor liable and will enforce the requirements as set forth in Section 41 of these General Terms and Conditions.
- [X] 14. **SURETY BONDS**: Bid and Performance Bonds coverage must be signed or countersigned in Guam by a foreign or alien surety's resident general agent. The surety must be an Insurance Company, authorized by the government of Guam and qualified to do business in Guam. Bids will be disqualified if the Surety Company does not have a valid Certificate of Authority from the Government of Guam to conduct business in Guam.
- [X] 15. **COMPETENCY OF BIDDERS**: Bids will be considered only from the such bidders who, in the opinion of the Government, can show evidence of their ability, experience, equipment, and facilities to render satisfactory service.
- [X] 16. **DETERMINATION OF RESPONSIBILITY OF BIDDERS**: The Chief Procurement Officer reserves the right for securing from bidders information to determine whether or not they are responsible and to inspect plant site, place of business; and supplies and services as necessary to determine their responsibility in accordance with Section 15 of these General Terms and Conditions (GPR Section 3-401).
- [X] 17. **STANDARD FOR DETERMINATION OF LOWEST RESPONSIBLE BIDDER**: In determining the lowest responsible offer, the Chief Procurement Officer shall be guided by the following:
  - a) Price of items offered.
  - b) The ability, capacity, and skill of the Bidder to perform.
  - c) Whether the Bidder can perform promptly or within the specified time.
  - d) The quality of performance of the Bidder with regards to awards previously made to him.
  - e) The previous and existing compliance by the Bidder with laws and regulations relative to procurement.
  - f) The sufficiency of the financial resources and ability of the Bidder to perform.
  - g) The ability of the bidder to provide future maintenance and services for the subject of the award.
  - h) The compliance with all of the conditions to the Solicitation.
- [X] 18. **TIE BIDS**: If the bids are for the same unit price or total amount in the whole or in part, the Chief Procurement Officer will determine award based on Section 3.202.15.2, or to reject all such bids (GPR Section 3-202.15.2).
- [ ] 19. **BRAND NAMES**: Any reference in the Solicitation to manufacturer's Brand Names and number is due to lack of a satisfactory specification of commodity description. Such preference is intended to be descriptive, but nor restrictive and for the sole purpose of indicating prospective bidders a description of the article or services that will be satisfactory. Bids on comparable items will be considered provided the bidder clearly states in his bid the exact articles he is offering and how it differs from the original specification.
- [X] 20. **DESCRIPTIVE LITERATURE**: Descriptive literature(s) as specified in this solicitation must be furnished as a part of the bid and must be received at the date and time set for opening Bids. The literature furnished must clearly identify the item(s) in the Bid. The descriptive literature is required to establish, for the purpose of evaluation and award, details of the product(s) the bidder proposes to furnish including design, materials, components, performance characteristics, methods of manufacture, construction, assembly or other characteristics which are considered appropriate. Rejection of the Bid will be required if the descriptive literature(s) do not show that the product(s) offered conform(s) to the specifications and other requirements of this solicitation. Failure to furnish the descriptive literature(s) by the time specified in the Solicitation will require rejection of the bid.
- [ ] 21. **SAMPLES**: Sample(s) of item(s) as specified in this solicitation must be furnished as a part of the bid and must be received at the date and time set for opening Bids. The sample(s) should represent exactly what the bidder proposes to furnish and will be used to determine if the item(s) offered complies with the specifications. Rejection of the Bid will be required if the sample(s) do not show that the product(s) offered conform(s) to the specifications and other requirements of this solicitation. Failure to furnish the sample(s) by the time specified in the Solicitation will require rejection of the Bid.
- [ ] 22. **LABORATORY TEST**: Successful bidder is required to accompany delivery of his goods with a Laboratory Test Report indicating that the product he is furnishing the Government meets with the specifications. This report is on the bidder's account and must be from a certified Testing Association.
- [X] 23. AWARD, CANCELLATION, & REJECTION: Award shall be made to the lowest responsible and responsive bidder, whose bid is determined to be the most advantageous to the Government, taking into consideration the evaluation factors set forth in this solicitation. No other factors or criteria shall be used in the evaluation. The right is reserved as the interest of the Government may require to waive any minor irregularity in bid received. The Chief Procurement Officer shall have the authority to award, cancel, or reject bids, in whole or in part for any one or more items if he determines it is in the public interest. Award issued to the lowest responsible bidder within the specified time for acceptance as indicated in the solicitation, results in a bidding contract without further action by either party. In case of an error in the extension of prices, unit price will govern. It is the policy of the Government to award contracts to qualified local bidders. The government reserves the right to increase or decrease the quantity of the items for award and make additional awards for the same type items and the vendor agrees to such modifications and additional awards based on the bid prices for a period of thirty (30) days after original award. No. award shall be made under this solicitation which shall require advance payment or irrevocable letter of credit from the government (GPR Section 3-202.14.1).

- [ ] 24. MARKING: Each outside container shall be marked with the Purchase Order number, item number, brief tem description and quantity. Letter marking shall not be less than 3/4" in height.
- [ ] 25. **SCHEDULE FOR DELVERY**: Successful bidder shall notify the Guam Power Authority, Dededo Warehouse at (671) 653-2073, Information Technology Division at (671) 648-3060, GPA Transportation Supply at (671) 300-8318 and/or Guam Power Authority Cabras Warehouse at (671) 475-3319 at least twenty-four (24) hours before delivery of any item under this solicitation.
- [ ] 26. **BILL OF SALE**: Successful supplier shall render Bills of Sale for each item delivered under this contract. Failure to comply with this requirement will result in rejection of delivery. The Bill of Sale must accompany the items delivered but will not be considered as an invoice for payment. Supplier shall bill the Government in accordance with billing instructions as indicated on the Purchase Order.
- [ ] 27. MANUFACTURER'S CERTIFICATE: Successful bidder is required, upon delivery of any item under this contract, to furnish a certificate from the manufacturer indication that the goods meet the specifications. Failure to comply with this request will result in rejection of delivery payment. Supplier shall bill the Government in accordance with billing instructions as indicated on the Purchase Order.
- [X] 28. **INSPECTION**: All supplies, materials, equipment, or services delivered under this contract shall be subject to the inspection and/or test conducted by the Government at destination. If in any case the supplies, materials, equipment, or services are found to be defective in material, workmanship, performance, or otherwise do not conform with the specifications, the Government shall have the right to reject the items or require that they be corrected. The number of days required for correction will be determined by the Government.
- [ ] 29. MOTOR VEHICLE SAFETY REQUIREMENTS: The Government will only consider Bids on motor vehicles which comply with the requirements of the National Traffic and Motor Vehicle safety Act of 1966 (Public Law 89-563) and Clean Air Act as amended (Public Law 88-206), that are applicable to Guam. Bidders shall state if the equipment offered comply with these aforementioned Federal Laws.
- [ ] 30. **SAFETY INSPECTION**: All motor vehicles delivered under this contract must pass the Government of Guam Vehicle Inspection before delivery at destination.
- [X] 31. GUARANTEE:

### a) Guarantee of Vehicle Type of Equipment:

The successful bidder shall guarantee vehicular type of equipment offered against defective parts, workmanship, and performance, for a period of not less than one (1) year after date of receipt of equipment. Bidder shall also provide service to the equipment for at least one (1) year. Service to be provided shall include, but will not be limited to tune ups (change of spark plugs, contact points and condensers) and lubrication (change of engine and transmission oil). All parts and labor shall be at the expense of the bidder. All parts found defective and not caused by misuse, negligence or accident within the guarantee period shall be repaired, replaced, or adjusted within six (6) working days after notice from the Government and without cost to the Government. Vehicular type of equipment as used in this context shall include equipment used for transportation as differentiated from tractors, backhoes, etc.

### b) Guarantee of Other Type of Equipment:

The successful bidder shall guarantee all other types of equipment offered, except those mentioned in 31a, above, against defective parts, workmanship, and performance for a period of not less than three (3) months after date of receipt of equipment. Bidder shall also provide service to the equipment for at least three (3) months. All parts found defective within that period shall be repaired or replaced by the Contractor without cost to the Government. Repairs, adjustments or replacements of defective parts shall be completed by the contractor within six (6) working days after notice from the Government.

- c) Compliance with this Section is a condition of this Bid.
- [X] 32. REPRESENTATION REGARDING ETHICS IN PUBLIC PROCUREMENT: The bidder or contractor represents that it has not knowingly influenced and promises that it will not knowingly influence a Government employee to breach any of the ethical standards and represents that it has not violated, is not violating, and promises that it will not violate the prohibition against gratuities and kickbacks set forth on Chapter 11 (Ethics in Public Contracting) of the Guam Procurement Act and in Chapter 11 of the Guam Procurement Regulations.
- [X] 33. **REPRESENTATION REGARDING CONTINGENT FEES**: The contractor represents that it has not retained a person to solicit or secure a Government contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, except for retention of bona fide employees or bona fide established commercial selling agencies for the purpose of securing business (GPR Section 11-207).
- [X] 34. **EQUAL EMPLOYMENT OPPORTUNITY**: Contractors shall not discriminate against any employee or applicant of employment because of race, color, religion, se, or national origin. The contractor will take affirmative action to ensure that employees are treated equally during employment without regards to their race, color, religion, sex, or national origin.
- [X] 35. **COMPLIANCE WITH LAWS**: Bidders awarded a contract under this Solicitation shall comply with the applicable standard, provisions, and stipulations of all pertinent Federal and/or local laws, rules, and regulations relative to the performance of this contract and the furnishing of goods.
- [X] 36. **CHANGE ORDER**: Any order issued relative to awards made under this solicitation will be subject to and in accordance with the provisions of Section 6-101-03.1 of the Guam Procurement Regulations.
- [X] 37. **STOP WORK ORDER**: Any stop work order issued relative to awards made under this solicitation will be subject to and in accordance with the provisions of Section 6-101-04.1 of the Guam Procurement Regulations.

- [X] 38. **TERMINATION FOR CONVENIENCE**: Any termination order for the convenience of the Government issued relative towards made under this solicitation will be subject to and in accordance with the provisions of Section 6-101.10 of the Government Procurement Regulations.
- [X] 39. **TIME FOR COMPLETION**: It is hereby understood and mutually agreed by and between the contractor and the Government that the time for delivery to final destination or the timely performance of certain services is an essential condition of this contract. If the contractor refuses or fails to perform any of the provisions of this contract within the time specified in the Purchase Order (from the date Purchase Order is acknowledged by vendor), then the contractor is in default. Defaults will be treated subject to and in accordance with the provisions of Section 6-101-08 of the Guam Procurement Regulations.
- [X] 40. **JUSTIFICATION OF DELAY:** Bidders who are awarded contracts under this Solicitation, guarantee that the goods will be delivered to their destination or required services rendered within the time specified. If the bidder is not able to meet the specified delivery date, he is required to notify the Chief Procurement Officer of such delay. Notification shall be in writing and shall be receive by the Chief Procurement Officer at least twenty-four (24) hours before the specified delivery date. Notification of delay shall include an explanation of the causes and reasons for the delay including statement(s) from supplier or shipping company causing the delay. The Government reserves the right to reject delay justification if, in the opinion of the Chief Procurement Officer, such justification is not adequate.
- [X] 41. **PAYMENT TERMS**: NET THIRTY (30) DAYS after receipt of ORIGINAL invoice for goods and/or services rendered.
- [X] 42. **LIQUIDATED DAMAGES**: When the contractor is given notice of delay or nonperformance as specified in Paragraph 1 (Default) of the Termination for Default Clause of this contract and fails to cure in the time specified, the contractor shall be liable for damages for delay in the amount of one-fourth of one percent (1%) of outstanding order per calendar day from date set for cure until either the territory reasonable obtains similar supplies or services if the contractor is terminated for default, or until the contractor provides the supplies or services if the contractor is not terminated for default. To the extent that the contractor's delay or nonperformance is excused under Paragraph (4) (Excuse for Nonperformance or Delayed Performance) of the Termination for Default Clause of this contract, liquidated damages shall not be due the territory. The contractor remains liable for damages caused other than by delay (GPR Section 6-101-09.1).
- [X] 43. PHYSICAL LIABILITY: If it becomes necessary for the Vendor, either as principal, agent or employee, to enter upon the premises or property of the Government of Guam in order to construct, erect, inspect, make delivery or remove property hereunder, the Vendor hereby covenants and agrees to take, use, provide and make all proper, necessary and sufficient precautions, safeguards and protections against the occurrence of any accidents, injuries or damages to any person or property during the progress of the work herein covered, and to be responsible for, and to indemnify and save harmless the Government of Guam from the payment of all sums of money by reason of all or any such accidents, injuries or damages that may occur upon or about such work, and fines, penalties and loss incurred for or by reasons of the violations of any territorial ordinance, regulations, or the laws of Guam or the United States, while the work is in progress. Contractor will carry insurance to indemnify the Government of Guam against any claim for loss, damage or injury to property or persons arising out of the performance of the Contractor or his employees and agents of the services covered by the contract and the use, misuse or failure of any equipment used by the contractor or his employees or agents, and shall provide certificates of such insurance to the Government of Guam when required.
- [X] 44. **CONTACT FOR CONTRACT ADMINISTRATION**: If your firm receives a contract as a result of this Solicitation, please designate a person whom we may contact for prompt administration.

Name:	1itle:	
Address:	Telephone:	

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## **GOVERNMENT OF GUAM**

## **SEALED BID SOLICITATION INSTRUCTIONS**

1. **BID FORMS:** Each bidder shall be provided with two (2) sets of Solicitation forms. Additional copies may be provided upon request. Bidders requesting additional copies of said forms will be charged per page in accordance with Section 6114 of the Government Code of Guam. All payments for this purpose shall be by cash, certified check or money order and shall be made payable to the Guam Power Authority.

### 2. PREPARATIONS OF BIDS:

- a) Bidders are required to examine the drawings, specifications, schedule, and all instructions. Failure to do so will be at bidder's risk.
- b) Each bidder shall furnish the information required by the Solicitation. The bidder shall sign the solicitation and print or type his name on the Schedule. Erasures or other changes must be initialed by the person signing the bid. Bids signed by an agent are to be accompanied by evidence of this authority unless such evidence has been previously furnished to the issuing office.
- c) Unit price for each unit offered shall be shown and such price shall include packing unless otherwise specified. A total shall be entered in the amount column of the Schedule for each item offered. In case
  - of discrepancies between a unit price and extended price, the unit price will be presumed to be correct.
- d) Bids for supplies or services other than those specified will not be considered. Time, if stated as a number of days, means calendar days and will include Saturdays, Sundays, and holidays beginning the day after the issuance of a Notice to Proceed. Time stated ending on a Saturday, Sunday or Government of Guam legal holiday will end at the close of the next business day.
- 3. EXPLANATION TO BIDDERS: Any explanation desired by a bidder regarding the meaning or interpretation of the Solicitation, drawings, specifications, etc., must be submitted in writing and with sufficient time allowed for a written reply to reach all bidders before the submission of their bids. Oral explanations or instructions given before the award of the contract will not be binding. Any information given to a prospective bidder concerning a Solicitation will be furnished to all prospective bidders in writing as an amendment to the Solicitation if such information would be prejudicial to uninformed bidders.
- 4. ACKNOWLEDGEMENT OF AMENDMENTS TO SOLICITATIONS: Receipt of an amendment to a Solicitation by a bidder must be acknowledged by signing an acknowledgement of receipt of the amendment.
  - Such acknowledgement must be received prior to the hour and date specified for receipt of bids.

## 5. **SUBMISSION OF BIDS:**

- a) Bids and modifications thereof shall be enclosed in sealed envelopes and addressed to the office specified in the Solicitation. The bidder shall show the hour and date specified in the Solicitation for receipt, the Solicitation number, and the name and address of the bidder on the face of the envelope.
- b) Telegraphic bids will not be considered unless authorized by the Solicitation. However, bids may be modified or withdrawn by written or telegraphic notice, provided such notice is received prior to the hour and date specified for receipt (see paragraph 6 of these instructions).
- c) Samples of items, when required, must be submitted within the time specified, unless otherwise specified by the Government, at no expense to the Government. If not destroyed by testing, samples will be returned at bidder's request and expense, unless otherwise specified by the Solicitation.
- d) Samples or descriptive literature should not be submitted unless it is required on this solicitation. Regardless of any attempt by a bidder to condition the bid, unsolicited samples or descriptive literature will not be examined or tested at the bidder's risk, and will not be deemed to vary any of the provisions of this Solicitation.
- 6. **FAILURE TO SUBMIT BID:** If no bid is to be submitted, do not return the solicitation unless otherwise specified. A letter or postcard shall be sent to the issuing office advising whether future Solicitations for the type of supplies or services covered by this Solicitation are desired.

## 7. LATE BID, LATE WITHDRAWALS, AND LATE MODIFICATIONS:

- a) Definition: Any bid received after the time and date set for receipt of bids is late. Any withdrawal or modification of a bid received after the time and date set for opening of bids at the place designated for opening is late (Guam Procurement Regulations Section 3-202)
- b) Treatment: No late bid, late modification, or late withdrawal will be considered unless received before contract award, and the bid, modification, or withdrawal would have been timely but for the action or inaction of territorial personnel directly serving the procurement activity.

### 8. **DISCOUNTS:**

- a) Notwithstanding the fact that prompt payment discounts may be offered, such offer will not be considered in evaluating bids for award unless otherwise specified in the Solicitation. However, offered discounts will be taken if payment is made within the discount period, even though not considered in the evaluation of bids.
- b) In connection with any discount offered, time will be computed from date of delivery and acceptance of the supplies to the destination as indicated in the purchase order or contract.
   Payment is deemed to be made for the purpose of earning the discount on the date of mailing of the Government check.

- 9. **GOVERNMENT FURNISHED PROPERTY:** No material, labor or facilities will be furnished by the Government unless otherwise provided for in the Solicitation.
- 10. **SELLERS' INVOICES:** Invoices shall be prepared and submitted in quadruplicate (one copy shall be marked "original") unless otherwise specified. Invoices shall be "certified true and correct" and shall contain the following information: Contract and order number (if any), item numbers, description of supplies or services, sizes, quantities, unit prices, and extended total. Bill of lading number and weight of shipment will be shown for shipments made on Government bills of lading.
- 11. **RECEIPT, OPENING AND RECORDING OF BIDS:** Bids and modifications shall be publicly opened in the presence of one or more witnesses, at the time, date, and place designated in the Invitation for Bids. The name of each bidder, the bid price, and such other information as is deemed appropriate by the Procurement Officer, shall be read aloud and recorded, or otherwise made available. The names and addresses of required witnesses shall be recorded at the opening. The opened bids shall be available for public inspection except to the extent the bidder designates trade secrets or other proprietary data to be confidential as set forth in accordance with Section 12 below. Material so designated shall accompany the bid and shall be readily separable from the bid in order to facilitate public inspection of the non-confidential portion of the bid. Prices, makes and models or catalogue numbers of the items offered, deliveries, and terms of payment shall be publicly available at the time of bid opening regardless of any designation to the contrary (Guam Procurement Regulations Section 3-202.12.2).

### 12. RESTRICTION AGAINST SEX OFFENDERS:

5 GCA Section 5253, enacted by P.L 28-24 and amended by P.L. 28-98:

The service provider warrants that no person in its employment who has been convicted of a sex offense under the provisions of Chapter 25 of Title 9 of the Guam Code Annotated, or of an offense defined in Article 2 of Chapter 28 of Title 9 of the Guam Code Annotated, or who has been convicted of an offense with the same elements as heretofore defined in any other jurisdiction, or who is listed on the Sex Offender Registry shall provide services on behalf of the service provider while on government of Guam property, with the exception of public highways. If any employee of the service provider is providing services on government property and is convicted subsequent to an award of a contract, then the service provider warrants that it will notify the Government of the conviction within twenty-four (24) hours of the conviction, and will remove immediately such convicted person from providing services on government property. If the service provider is found to be in violation of any of the provisions of this paragraph, then the Government will give notice to the service provider to take corrective action. The service provider shall take corrective action within twenty-four (24) hours of notice from the Government, and the service provider shall notify the Government when action has been taken. If the service provider fails to take corrective steps within twenty-four (24) hours of notice from the Government in its sole discretion may suspend temporarily any contract for services until corrective action has been taken.

- **13. DISABLED VETERAN OWNED:** P.L. 34-115. 5 Guam Code Annotated §5011 & §5012 **§5011. Policy In Favor of Service-Disabled Veteran Owned Businesses.** Notwithstanding any provision of law, and *except* for the procurement of professional services, if any entity of the government of Guam or any entity expending governmental funds intends to procure any supply or service, which is offered by a business concern that is at least fifty-one percent (51%) owned by a service-disabled veteran(s), that entity *shall* procure such supply or service from that business concern, if the supply or service is available within the period required by procuring entity and the price for the supply or service *does not* exceed one hundred five percent (105%) of the lowest bidder, and *shall* be in addition to any other procurement benefit the service-disabled veteran owned business may qualify for under Guam Law. **§5012. Qualifications of a Service-Disabled Veteran Owned Business.** A business concern is qualified under §5011 of this Chapter if:
  - (a.) the business concern is licensed to do business on Guam;
  - (b.) the business concern maintains its headquarters on Guam;
  - (c.) the business concern is at least fifty-one percent (51%) owned by a service-disabled veteran(s) who served in the active U.S. military service, was discharged or released under honorable conditions and whose disability is service-connected as demonstrated by a DD214, and certified by and award letter from the U.S Department of Veterans Affairs;
  - (d.) the DD214 and Disability award letter from the U.S Department of Veterans Affairs are submitted to the procuring entity for every service offered; and
  - (e.) the service-disabled veteran(s) owner of the business concern has filed individual tax returns on Guam for a period of *at least* three (3) consecutive years."

# 14. **WOMEN-OWNED BUSINESSES**: P.L. 36.26. 5 Guam Code Annotated §5013. **§5013.** Policy In Favor of Women-Owned Businesses.

- (a.) Notwithstanding any other provision of law, if any entity of the government of Guam or any entity expending governmental funds intends to procure any supply or service which is offered by a business concern that is at least fifty-one percent (51%) owned by women, that entity *shall* procure such supply or service from that business concern, if the supply or service is available within the period required by procuring entity and the price for the supply or service *does not* exceed one hundred five percent (105%) of the lowest bidder, and *shall* be in addition to any other procurement benefit the women-owned business may qualify for under Guam Law. The procuring entity shall determine the lowest price to the entity in the case of more than one (1) women-owned business, or a women-owned business and a service-disabled veteran owned business, who are competing for the same government contract
- (b.) Qualifications of a Women-Owned Business. A business concern is qualified under Subsection (a) of the Section if:
  - (1) the business concern is licensed to business on Guam;
  - (2) the business concern maintains its headquarters on Guam;

- (3) the business concern is at least fifty-one percent (51%) owned by women, who manage day-to-day operations and make long-term decisions;
- (4) the business concern is certified as a Women-Owned Small Business (WOSB) or an Economically Disadvantaged Women-Owned Small Business (EDWOSB) by the U.S. Small Business Administration; and
- (5) the owner(s) of the business concern has (have) filed individual tax returns on Guam for a period of at least three (3) consecutive years
- 15. **CONFIDENTIAL DATA:** The Procurement Officer shall examine the bids to determine the validity of any requests for nondisclosure of trade secrets and other proprietary date identified in writing. If the parties do not agree as to the disclosure of data, the Procurement Officer shall inform the bidders in writing what portions of the bid will be disclosed and that, unless the bidders protest under Chapter 9 of the Guam Procurement Act (P.L. 16-124), the bids will be so disclosed. The bids shall be opened to public inspection subject to any continuing prohibition on the disclosure of confidential data (Guam Procurement Regulations Section 3-202.12.3).

### 16. MULTI-STEP SEALED BIDDING:

- a. It is defined as two-phase process consisting of a technical first-phase composed of one or more steps in which bidders submit unpriced technical offers to be evaluated by the territory, and a second-phase in which those bidders whose technical offers are determined to be acceptable during the first-step have their priced bids considered. It is designed to obtain the benefits of competitive sealed bidding by award of a contract to t h lowest responsive, responsible bidder, and at the same time obtained the benefits of the competitive sealed proposals procedure through the solicitation of technical offers and the conduct of discussions to evaluate and determine the acceptability of technical offers.
- b. In addition to the requirements set forth in the General Terms and Conditions and the Special provisions, the following applies:
  - 1). only unpriced technical offers are requested in the first phase;
  - 2). priced bids will be considered only in the second phase and only from bidders whose unpriced technical offers are found acceptable in the first phase;
  - 3). the criteria to be used in the evaluation at those specified in the Special Provisions and the General Terms and Conditions;
  - 4). the territory, to the extent the Procurement Officer finds necessary, may conduct oral or written discussion of the unpriced technical offers;
  - 5). the bidders, may designate those portions of the unpriced technical offers which contain trade secrets or other proprietary data which are to remain confidential; and,
  - 6). the service being procured shall be furnished generally in accordance with bidder's technical offer as found to be finally acceptable and shall meet the requirements of the Invitation for Bids.

# c. RECEIPT AND HANDLING OF UNPRICED TECHNICAL OFFERS.

Unpriced technical offers shall not be opened publicly, but shall be opened in front of two or more procurement officials. Such offers shall not be disclosed to unauthorized persons. Bidders may request nondisclosure of trade secrets and other proprietary data identified in writing.

## d. EVALUATION OF UNPRICED TECHNICAL OFFERS.

The unpriced technical offers submitted by bidders shall be evaluated solely in accordance with the criteria set forth in the Invitation for Bids. The unpriced technical offers shall be categorized as:

- 1). acceptable;
- 2). potentially acceptable, that is, reasonably susceptible of being made acceptable; or
- 3). unacceptable. The Procurement Officer shall record in writing the basis for finding an offer unacceptable and make it part of the procurement file.

The Procurement Officer may initiate Phase Two of the procedure if, in the Procurement Officer's opinion, there are sufficient acceptable unpriced technical offers to assure effective price competition in the second phase without technical discussions. If the Procurement Officer finds such is not the case, the Procurement Officer shall issue an amendment to the Invitation for Bids or engage in technical discussions as set forth in Subsection 3-202.20.5of this Section.

e. Upon the completion of Phase One, the Procurement Officer shall invite each acceptable bidder to submit a price bid. Upon submission of prices, the Procurement Officer shall prepare the final evaluation and reconsideration for the Chief Procurement Officer's approval.

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