



GUAM FOOTBALL ASSOCIATION  
REQUEST FOR PROPOSAL

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LIGHTING SYSTEM WITH LED LIGHT SOURCE

ISSUED

**19 April 2025**

DEADLINE

**5pm on 1 May 2025**

Late responses will not be considered.

This Request for Proposal is posted on the Guam Football Association website  
<https://guamfa.com/contact-us/team-up-with-us/>

## A. INTRODUCTION

The Guam Football Association (“GFA”) is a 501(c)(3) Guam not-for-profit organization and governs Guam football (soccer) at both the domestic and international levels, including the men’s and women’s national teams for senior and youth age groups. GFA is a member of the governing bodies of FIFA, AFC, and EAFF. As a result of Typhoon Mawar that hit the island in May 2023, it has destroyed six (6) out of nine (9) floodlights at the facility. The importance of this floodlight system is imperative to the ever-growing programs within GFA and the sport.

## B. SCOPE OF TENDER

### Lighting System with LED Light Source

#### **PART 1 – GENERAL**

##### **1.1 SUMMARY**

- A. Work covered by this section of the specifications shall conform to the contract documents, engineering plans as well as state and local codes.
- B. The purpose of these specifications is to define the lighting system performance and design standards for Guam Football Association Soccer Field using an LED Lighting source. The manufacturer / contractor shall supply lighting equipment to meet or exceed the standards set forth in these specifications.
- C. The sports lighting will be for the following venues:
  - 1. Upper Pitch and Lower Pitch
  - 2. Mini Pitch
  - 3. Beach Soccer Court
  - 4. Grass Area
  - 5. Futsal Courts 1 and 2
- D. The primary goals of this sports lighting project are:
  - 1. **Guaranteed Light Levels:** Selection of appropriate light levels impacts the safety of players and the enjoyment of spectators. Therefore, light levels are guaranteed to not drop below specified target values for a period of 10 years.
  - 2. **Control and Monitoring** – To allow for optimized use of labor resources and avoid unneeded operation of the facility, customer requires a remote on/off control system for the lighting system. Fields should be proactively monitored to detect luminaire outages over a 10-year life cycle. All communication and monitoring costs for 10-year period shall be included in the bid.

##### **1.2 ONFIELD LIGHTING PERFORMANCE**

- A. **Illumination Levels and Design Factors:** Playing surfaces shall be lit to an average target illumination level and uniformity as specified in the chart below. Lighting manufacturers will provide a guarantee that light levels will be sustained over the life of the warranty period. Lighting calculations shall be developed, and field measurements taken on the grid spacing with the minimum number of grid points specified below.

Manufacturers will provide lumen maintenance data of the LED luminaires used per TM-21-11 and will incorporate the lumen maintenance projections into the lighting designs to ensure target light levels are achieved throughout the guaranteed period of the system. Per IES guidelines, lumen maintenance hours should be reported based on the 6x multiplier of testing hours.

<b>Upper Pitch and Lower Pitch</b>				
<b>Horizontal Average Guaranteed Illumination Levels</b>	<b>Min/Max</b>	<b>Min/Ave</b>	<b>Grid Height</b>	<b>Grid Spacing</b>
1500lux	0.5	0.7	1m	5mx5m
<b>Mini Pitch</b>				
<b>Horizontal Average Guaranteed Illumination Levels</b>	<b>Min/Max</b>	<b>Min/Ave</b>	<b>Grid Height</b>	<b>Grid Spacing</b>
150lux	Resulting	Resulting	1m	5mx5m
<b>Beach Soccer Court</b>				
<b>Horizontal Average Guaranteed Illumination Levels</b>	<b>Min/Max</b>	<b>Min/Ave</b>	<b>Grid Height</b>	<b>Grid Spacing</b>
200lux	Resulting	Resulting	1m	2mx2m
<b>Grass Area</b>				
<b>Horizontal Average Guaranteed Illumination Levels</b>	<b>Min/Max</b>	<b>Min/Ave</b>	<b>Grid Height</b>	<b>Grid Spacing</b>
50lux	Resulting	Resulting	1m	5mx5m
<b>Futsal Courts 1 and 2</b>				
<b>Horizontal Average Guaranteed Illumination Levels</b>	<b>Min/Max</b>	<b>Min/Ave</b>	<b>Grid Height</b>	<b>Grid Spacing</b>
750lux	0.3	0.5	1m	2mx2m

- B. Color Temperature: The lighting system shall have a color temperature of 5700K and a CRI of 75.
- C. Playability: Lighting design and luminaire selection should be optimized for playability by reducing glare onfield.
  - 1. Glare Control Technology – Luminaires selected should have glare control technology including, but not limited to: external visors, internal shields and louvers
- D. Mounting Heights:

<b># of Poles</b>	<b>Pole Designation</b>	<b>Pole Height</b>
3	Pole A to C	23.5m
6	Pole D to I	21.7m

- E. EPA and Weight of luminaires of Upper and Lower Pitches do not exceed:

Item	EPA	Weight
Per Luminaire	0.26sqm	30kg
All Luminaires on Pole A	4.6sqm	540kg
All Luminaires on Pole B	3.1sqm	360kg
All Luminaires on Pole C	5.6sqm	660kg
All Luminaires on Pole D	9.1sqm	1080kg
All Luminaires on Pole E	6.1sqm	720kg
All Luminaires on Pole F	10.1sqm	1200kg
All Luminaires on Pole G	5.6sqm	660kg
All Luminaires on Pole H	4.1sqm	480kg
All Luminaires on Pole I	4.6sqm	540kg

## **PART 2 – PRODUCT**

### **2.1 SPORTS LIGHTING SYSTEM CONSTRUCTION**

- A. Manufacturing Requirements: All components shall be designed and manufactured as a system. All luminaires, wire harnesses, drivers and other enclosures shall be factory assembled, aimed, wired and tested.
- B. Durability: All exposed components shall be constructed of corrosion resistant material and/or coated to help prevent corrosion. All exposed carbon steel shall be hot dip galvanized per ASTM A123. All exposed aluminum shall be powder coated with high performance polyester or anodized. All exterior reflective inserts shall be anodized, coated, and protected from direct environmental exposure to prevent reflective degradation or corrosion. All exposed hardware and fasteners shall be stainless steel, passivated and coated with aluminum-based thermosetting epoxy resin for protection against corrosion and stress corrosion cracking. Structural fasteners may be carbon steel and galvanized meeting ASTM A153 and ISO/EN 1461 (for hot dipped galvanizing), or ASTM B695 (for mechanical galvanizing). All wiring shall be enclosed within the cross-arms, pole, or electrical components enclosure.
- C. System Description: Lighting system shall consist of the following:
  1. Galvanized steel poles and cross-arm assembly.
  2. Lighting systems shall use anchor bolt foundations
  3. Manufacturer will supply all drivers and supporting electrical equipment.
    - a. Remote drivers and supporting electrical equipment shall be mounted approximately 10 feet above grade in aluminum enclosures. The enclosures shall be touch-safe and include drivers and fusing with indicator lights on fuses to notify when a fuse is to be replaced for each luminaire. Disconnect per circuit for each pole structure will be located in the enclosure. Integral drivers are not allowed.
    - b. The pole shall include steps, cables, and platforms for luminaire maintenance, if owner responsible for removal of faulty luminaires.
    - c. Manufacturer shall provide surge protection at the pole equal to or greater than 40 kA for

each line to ground (Common Mode) as recommended by IEEE C62.41.2\_2002.

5. Wire harness complete with an abrasion protection sleeve, strain relief and plug-in connections for fast, trouble-free installation.
  6. All luminaires, visors, and cross-arm assemblies shall withstand 150 mi/h winds and maintain luminaire aiming alignment.
  7. Luminaire uses tempered glass lens.
  8. Control cabinet to provide remote on-off control, monitoring, and entertainment features of the lighting system. See Section 2.3 for further details.
  9. Enhanced corrosion protection package: Due to the potentially corrosive environment for this project, manufacturers must provide documentation that their products meet the following enhanced requirements in addition to the standard durability protection specified above:
    - a) Exposed carbon steel horizontal surfaces on the crossarm assembly shall be galvanized to no less than a five (5) mil average thickness.
    - b) Exposed die cast aluminum components shall be Type II anodized per MIL-STD-8625 and coated with high performance polyester.
    - c) Exposed extruded aluminum components shall be Type II anodized per MIL-STD-8625 and coated with high performance polyester.
- D. Safety: All system components shall be UL listed for the appropriate application.

## **2.2 ELECTRICAL**

- A. Electric Power Requirements for the Sports Lighting Equipment:
  1. Electric power: 274kw 480 Volt 3-Phase
  2. Maximum total voltage drop: Voltage drop to the disconnect switch located on the poles shall not exceed three (3) percent of the rated voltage.
- B. Energy Consumption: The kW consumption for the field lighting system shall be 310KW.
- C. See enclosed diagrams.

## **2.3 CONTROL**

- A. Instant On/Off Capabilities: System shall provide for instant on/off of luminaires.
  - B. Dimming: System shall provide for 3-stage dimming (high-medium-low). Dimming will be set via scheduling options (Website, app, phone, email).
  - C. Remote Lighting Control System: System shall allow owner and users with a security code to schedule on/off system operation via a web site, phone, or email up to ten years in advance. Manufacturer shall provide and maintain a two-way TCP/IP communication link. Trained staff shall be available 24/7 to provide scheduling support and assist with reporting needs.
- The owner may assign various security levels to schedulers by function and/or fields. This function must be flexible to allow a range of privileges such as full scheduling capabilities for all fields to only having permission to execute "early off" commands by phone. Scheduling tool shall be capable of setting curfew limits.

Controller shall accept and store 7-day schedules, be protected against memory loss during power outages, and shall reboot once power is regained and execute any commands that would have occurred during outage.

- D. Remote Monitoring System: System shall monitor lighting performance and notify manufacturer if individual luminaire outage is detected so that appropriate maintenance can be scheduled. The controller shall determine switch position (manual or auto) and contactor status (open or closed).
  - E. Management Tools: Manufacturer shall provide a web-based database and dashboard tool of actual field usage and provide reports by facility and user group. Dashboard shall also show current status of luminaire outages, control operation and service. Mobile application will be provided suitable for IOS and Android devices.
- Hours of Usage: Manufacturer shall provide a means of tracking actual hours of usage for the field lighting system that is readily accessible to the owner.
- 1. Cumulative hours: shall be tracked to show the total hours used by the facility.
  - 2. Report hours saved by using early off and push buttons by users.
- F. Communication Costs: Manufacturer shall include communication costs for operating the control and monitoring system for a period of 10 years.
  - G. Communication with luminaire drivers: Control system shall interface with drivers in electrical components enclosures by means of wireless communication.

## **2.4 STRUCTURAL PARAMETERS**

- A. Wind Loads: Wind loads shall be based on the 2018 International Building Code. An ultimate design wind speed of 210mph and exposure category C.
- B. Pole Structural Design: The stress analysis and safety factor of the poles shall conform to 2013 AASHTO Standard Specification for Structural Supports for Highway Signs, Luminaires, and Traffic Signals (LTS-6).

## **PART 3 – EXECUTION**

### **3.1 DELIVERY TIMING**

- A. Delivery Timing Equipment On-Site: The equipment must be on-site 8-10 weeks from receipt of approved submittals and receipt of complete order information.

### **3.2 Project Management Services**

- A. Project Management team from manufacturers visit fields to supervise the installation of lighting systems.

### **3.3 FIELD QUALITY CONTROL**

- A. Illumination Measurements: Upon substantial completion of the project and in the presence of the Contractor, Project Engineer, Owner's Representative, and Manufacturer's Representative, illumination measurements shall be taken and verified. The illumination measurements shall be conducted in accordance with IESNA RP-6-22.

B. Field Light Level Accountability

1. Light levels are guaranteed not to fall below the target maintained light levels for the entire warranty period of 10 years. These levels will be specifically stated as “guaranteed” on the illumination summary provided by the manufacturer.
2. The contractor/manufacturer shall be responsible for conducting initial light level testing and an additional inspection of the system, in the presence of the owner, one year from the date of commissioning of the lighting.
3. The manufacturer will be held responsible for any and all changes needed to bring these fields back to compliance for light levels and uniformities.

- C. Correcting Non-Conformance: If, in the opinion of the Owner or his appointed Representative, the actual performance levels including lux, uniformity ratios, are not in conformance with the requirements of the performance specifications and submitted information, the Manufacturer shall be required to make adjustments to meet specifications and satisfy Owner.

### 3.4 **WARRANTY AND GUARANTEE**

- A. 10-Year Warranty: Each manufacturer shall supply a signed warranty covering the entire system for 10 years from the date of shipment. Warranty shall guarantee specified light levels. Manufacturer shall maintain specifically funded financial reserves to assure fulfillment of the warranty for the full term. Warranty does not cover weather conditions events such as lightning or hail damage, improper installation, vandalism or abuse, unauthorized repairs or alterations, or product made by other manufacturers.
- B. Maintenance: Manufacturer shall monitor the performance of the lighting system, including on/off status, hours of usage and luminaire outage for 10 years from the date of equipment shipment. Parts and labor shall be covered such that individual luminaire outages will be repaired when the usage of any field is materially impacted. Manufacturer is responsible for removal and replacement of failed luminaires, including all parts, labor, shipping, and equipment rental associated with maintenance. Owner agrees to check fuses in the event of a luminaire outage.

## **PART 4 – DESIGN APPROVAL**

### 4.1 **PRE-BID SUBMITTAL REQUIREMENTS (Non-Musco)**

- A. Bidder entity should be the manufacturer of the proposed flood lights system.
- B. The manufacturers need to have over 30 years’ experience in Sports Lighting
- C. Design Approval: The owner / engineer will review pre-bid submittals per section 4.1.B from all the manufacturers to ensure compliance to the specification 10 days prior to bid. If the design meets the design requirements of the specifications, a letter and/or addendum will be issued to the manufacturer indicating approval for the specific design submitted.
- D. The manufacturers need to be classed as a preferred provider for Floodlights by FIFA.
- B. Approved Product: Musco’s Light-Structure System™ with TLC for LED® is the approved product. All substitutions must provide a complete submittal package for approval as outlined in Submittal Information at the end of this section at least 10 days prior to bid. Special manufacturing to meet the standards of this specification may be required. An addendum will be issued prior to bid listing any other approved lighting manufacturers and designs.

- C. All listed manufacturers not pre-approved shall submit the information at the end of this section at least 10 days prior to bid. An addendum will be issued prior to bid; listing approved lighting manufacturers and the design method to be used.
- D. Bidders are required to bid only products that have been approved by this specification or addendum by the owner or owner's representative. Bids received that do not utilize an approved system/design, will be rejected.



**PART 5 – BOQ Lists****5.1 Summary**

- A. The equipment quantity is indicative only and is a minimum requirement.
- B. Adding Lights is needed to meet on-field lighting performance criteria listed in 1.2-A

**5.2 BOQ list for Upper Pitch and Lower Pitch**

<b>BOQ List: Upper Pitch and Lower Pitch</b>		
ITEM	QTY	Equipment Description
1	192	TLC-LED-1500 Factory aimed and assembled luminaires
2	3	23.5m galvanized steel poles
3	6	21.7m galvanized steel poles
4	9	Anchor bolts and templates for galvanized steel poles
5	-	Electrical component enclosures (as required)
6	-	Pole length wire harnesses from Pole bottom to Pole top (as required)
7	-	LED Control & Monitoring System

**5.3 BOQ list for Mini Pitch**

<b>BOQ List: Mini Pitch</b>		
Notes: Please re-use 2 poles from Lower Pitch.		
ITEM	QTY	Equipment Description
1	8	TLC-LED-1500 Factory aimed and assembled luminaires
2	-	Electrical component enclosures (as required)
3	-	Pole length wire harnesses from Pole bottom to Pole top (as required)
4	-	LED Control & Monitoring System

**5.4 BOQ list for Beach Soccer Pitch**

<b>BOQ List: Beach Soccer Court</b>		
Notes: Please re-use 1 pole from Upper Pitch.		
ITEM	QTY	Equipment Description
1	4	TLC-LED-1200 Factory aimed and assembled luminaires

2	-	Electrical component enclosures (as required)
3	-	Pole length wire harnesses from Pole bottom to Pole top (as required)
4	-	LED Control & Monitoring System

### 5.5 **BOQ list for Grass Area**

BOQ List: Grass Area		
Notes: Please re-use 1 pole from Upper Pitch.		
ITEM	QTY	Equipment Description
1	4	TLC-LED-1500 Factory aimed and assembled luminaires
2	-	Electrical component enclosures (as required)
3	-	Pole length wire harnesses from Pole bottom to Pole top (as required)
4	-	LED Control & Monitoring System

### 5.6 **BOQ list for Futsal Courts 1 and 2**

BOQ List: Futsal Courts 1 and 2		
Notes: Please re-use the 14 existing poles		
ITEM	QTY	Equipment Description
1	32	TLC-LED-550 Factory aimed and assembled luminaires
2	-	Electrical component enclosures (as required)
3	-	Pole length wire harnesses from Pole bottom to Pole top (as required)
4	-	LED Control & Monitoring System

**REQUIRED SUBMITTAL INFORMATION FOR ALL MANUFACTURERS  
(NOT PRE-APPROVED) 10 DAYS PRIOR TO BID**

All items listed below are mandatory, shall comply with the specification and be submitted according to pre-bid submittal requirements. Complete the Yes/No column to indicate compliance (Y) or noncompliance (N) for each item. Submit checklist below with submittal.

Yes/ No	Tab	Item	Description
	<b>A</b>	Letter/ Checklist	Listing of all information being submitted must be included on the table of contents. List the name of the manufacturer's local representative and his/her phone number. Signed submittal checklist to be included.
	<b>B</b>	Equipment Layout	Drawing(s) showing field layouts with pole locations
	<b>C</b>	On Field Lighting Design	Lighting design drawing(s) showing: <ul style="list-style-type: none"> <li>a. Field Name, date, file number, prepared by</li> <li>b. Outline of field(s) being lighted, as well as pole locations referenced to the center of the field (x &amp; y), Illuminance levels at grid spacing specified</li> <li>c. Pole height, number of fixtures per pole, horizontal and vertical aiming angles, as well as luminaire information including wattage, lumens and optics</li> <li>d. Height of light test meter above field surface.</li> <li>e. Summary table showing the number and spacing of grid points; average, minimum and maximum illuminance levels in lux; uniformity including maximum to minimum ratio, maximum to average ratio number of luminaires, total kilowatts.</li> </ul>
	<b>D</b>	Photometric Report	Provide first page of photometric report for all luminaire types being proposed showing candela tabulations as defined by IESNA Publication LM-35-02. Photometric data shall be certified by laboratory with current National Voluntary Laboratory Accreditation Program or an independent testing facility with over 5 years experience.
	<b>E</b>	Performance Guarantee	Provide performance guarantee including a written commitment to undertake all corrections required to meet the performance requirements noted in these specifications at no expense to the owner. Light levels must be guaranteed to not fall below target levels for warranty period.
	<b>F</b>	Structural Calculations	Pole structural calculations and foundation design showing foundation shape, depth backfill requirements, rebar and anchor bolts (if required). Pole base reaction forces shall be shown on the foundation drawing along with soil bearing pressures. Design must be stamped by a structural engineer if required by owner. (Structural Calculations shall be supplied upon award).
	<b>G</b>	Control & Monitoring System	Manufacturer of the control and monitoring system shall provide written definition and schematics for automated control system They will also provide ten (10) references of customers currently using proposed system.
	<b>H</b>	Warranty	Provide written warranty information including all terms and conditions. Provide ten

			(10) references of customers currently under specified warranty.
	<b>I</b>	Project References	Manufacturer to provide a list of LED projects where the technology and specific fixture proposed for this project has been installed. Reference list will include project name, project city.
	<b>G</b>	Product Information	Complete bill of material and current brochures/cut sheets for all products being provided.
	<b>K</b>	Delivery	Manufacturer shall supply an expected delivery timeframe from receipt of approved submittals and complete order information.
	<b>L</b>	Non-Compliance	Manufacturer shall list all items that do not comply with the specifications. If in full compliance, tab may be omitted.

The information supplied herein shall be used for the purpose of complying with the specifications for Guam Football Association Soccer Field. By signing below, I agree that all requirements of the specifications have been met and that the manufacturer will be responsible for any future costs incurred to bring their equipment into compliance for all items not meeting specifications and not listed in the Non-Compliance section.

Proposals can be submitted electronically via email to [cheri.stewart@theguamfa.com](mailto:cheri.stewart@theguamfa.com), or by hand delivery of a sealed envelope to the address provided below. To arrange a hand delivery, please coordinate with Ms. Cheri Stewart at 671-688-1279 or via the email above. Proposals submitted by email should be in PDF format.

By Hand Delivery:

ATTN: Ms. Cheri Stewart  
Guam Football Association  
230 Harmon Loop Road  
Dededo, Guam 96929

#### REPORTING

Report directly to GFA

#### OPENING DATE FOR RFP

**19 April 2025**

#### POSTING OF RFP

<https://guamfa.com/contact-us/team-up-with-us/>

#### QUESTIONS/CLARIFICATIONS

Cheri Stewart: 671-688-1279

#### CLOSING DATE

**5pm on 01 May 2025**

Submittals after this deadline may not be accepted.

#### CRITERIA FOR AWARD

The contract will be awarded to the tenderer based on experience, qualifications, fees, past performance, and other considerations.

### D. CANCELLATION

GFA reserves the right to change the time plan or cancel the request for proposal without any obligation to cover any cost associated with the tender process.

## TENDER FORM

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### GUAM FOOTBALL ASSOCIATION Lighting System with LED Light Source

Name of Tenderer: \_\_\_\_\_

Principal Contact Person: \_\_\_\_\_

Address: \_\_\_\_\_

\_\_\_\_\_

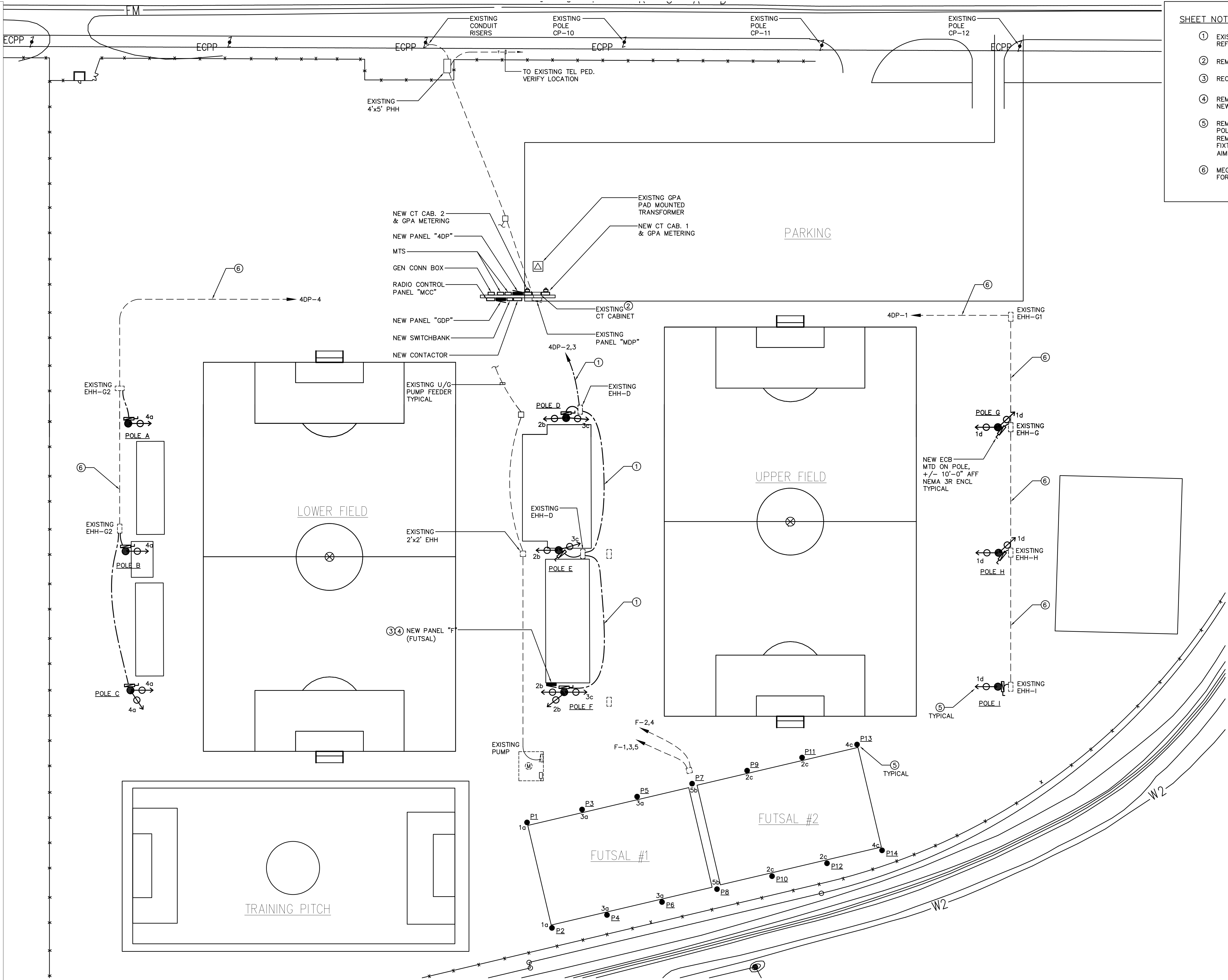
Email: \_\_\_\_\_

Contact Phone: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Name: \_\_\_\_\_

Title/Position: \_\_\_\_\_



- SHEET NOTE:
- EXISTING CONDUIT WITH NEW WIRE/CABLES REFER TO ONE-LINE DIAGRAM SHEET E-3.
  - REMOVE EXISTING CT'S AND USE AS PULLBOX
  - RECONNECT TO EXISTING POWER SOURCE.
  - REMOVE EXISTING EQUIPMENT AND PROVIDE NEW IN ITS PLACE AS SHOWN.
  - REMOVE EXISTING LIGHTING AND PROVIDE NEW POLE LIGHT ASSEMBLY WITH INTEGRAL REMOTE/RADIO CONTROL TRANSCEIVER AIM EACH FIXTURE AS PER MANUFACTURER PROVIDED AIMING DIAGRAM AND/OR COORDINATES
  - MEGGER TEST EXISTING CABLES TO BE REUSE FOR COMPLIANCE WITH APPROVE STANDARDS.

project title

GUAM FOOTBALL (SOCCER)  
ASSOCIATION  
LIGHTS INSTALLATION  
DEDEDO, GUAM

consultant

sheet content

ELECTRICAL SITE PLAN

stamp

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY  
ME OR UNDER MY DIRECT SUPERVISION.

revisions

job no. cadd no. date

XXX

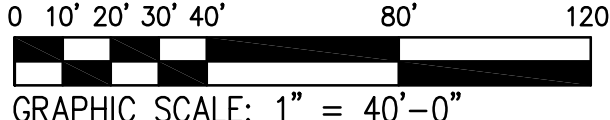
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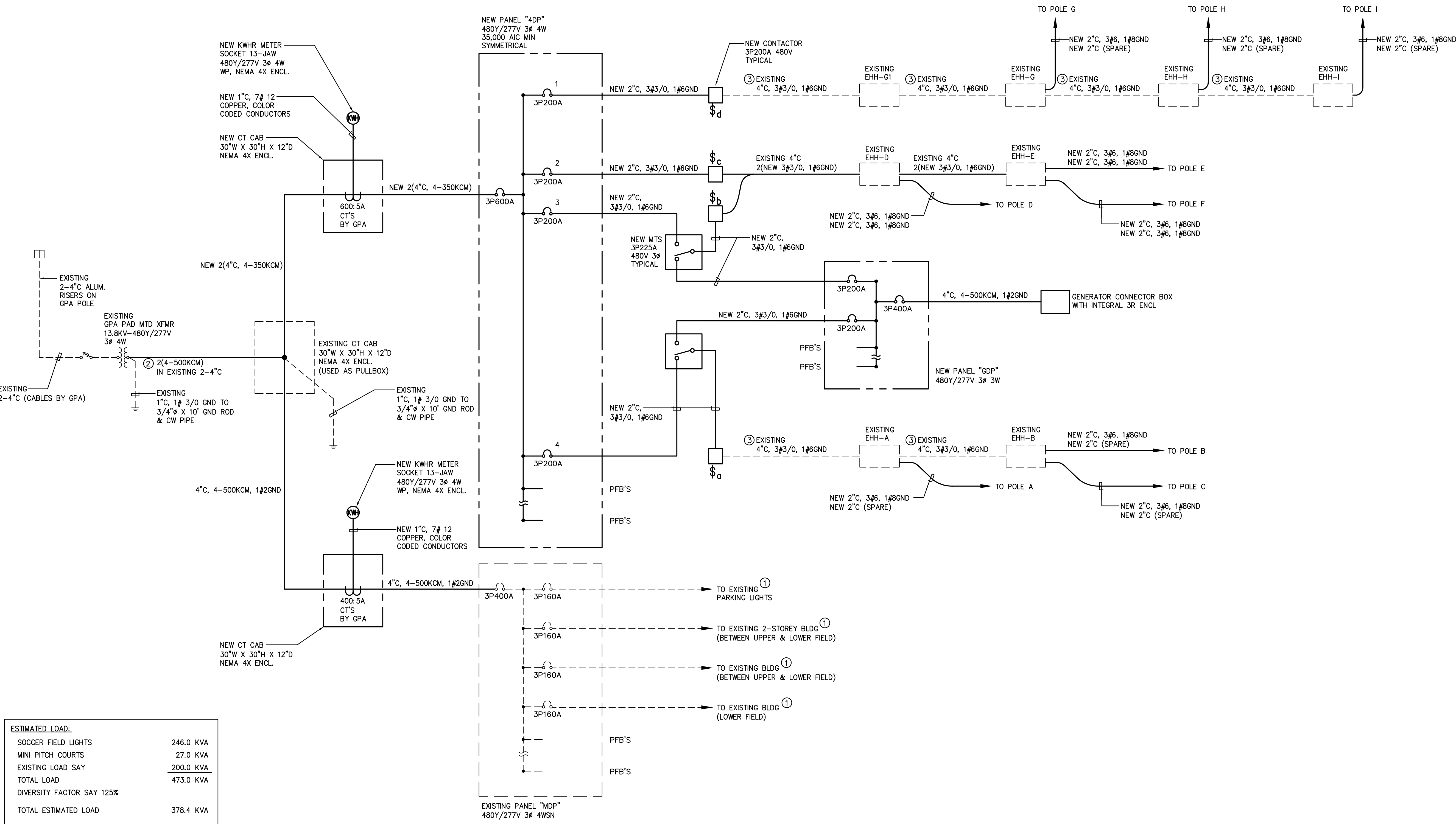
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E-2

1  
E-2  
ELECTRICAL SITE PLAN - NEW CONDITION  
SCALE: 1"=40'-0"





1 ONE-LINE DIAGRAM - NEW CONDITION  
E-3 SCALE: NTS

- NOTE:
- DISCONNECT AND RECONNECT TO NEW PANEL AS SHOWN.
  - REMOVE EXISTING CABLES AND PROVIDE NEW AS SHOWN.
  - MEGGER TEST EXISTING CABLES TO BE REUSE FOR COMPLIANCE WITH APPROVE STANDARDS.

project title

UPPER FIELD (LEFT)

UPPER FIELD (RIGHT)  
AND LOWER FIELD (LEFT)

GUAM FOOTBALL (SOCCER)  
ASSOCIATION  
LIGHTS INSTALLATION  
DEDEDO, GUAM

consultant

UPPER FIELD (RIGHT)

sheet content

ONE-LINE DIAGRAM

stamp

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY  
ME OR UNDER MY DIRECT SUPERVISION.

revisions

job no. cadd no. date

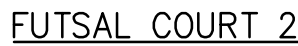
XXX

design drawn checked

EPI EPI ARV

sheet no. of

E-3



- ① DISCONNECT AND RECONNECT TO NEW PANEL AS SHOWN.
- ② REMOVE EXISTING EQUIPMENT AND PROVIDE NEW IN ITS PLACE.



## NTS



DEDEDO, GUAM

consultant

sheet content

### ONE-LINE DIAGRAM

stamp

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY  
ME OR UNDER MY DIRECT SUPERVISION. \_\_\_\_\_

revisions

job no.	cadd no.	date
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XXX

design	drawn	checked
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EPI                  EPI                  ARV

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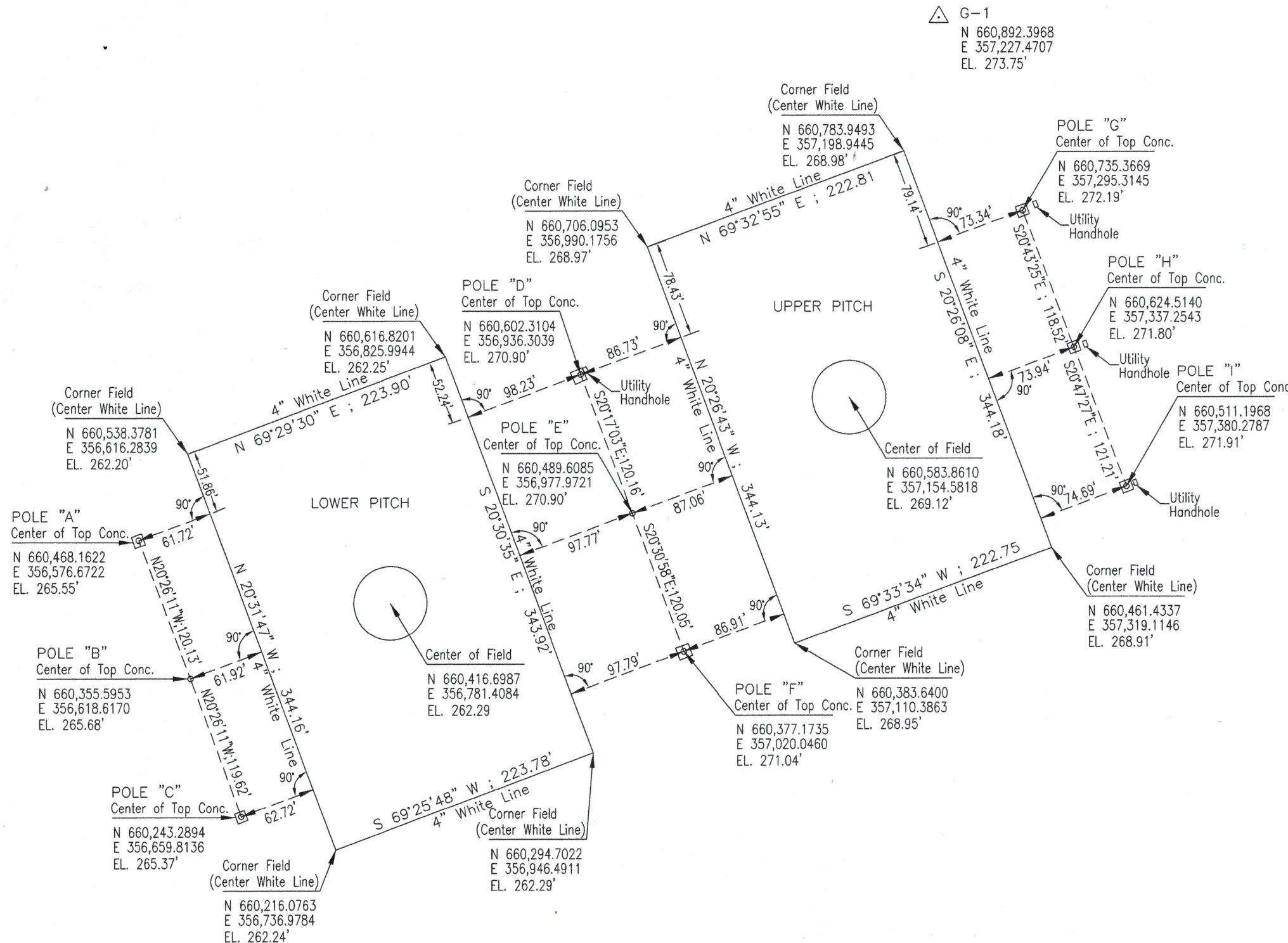
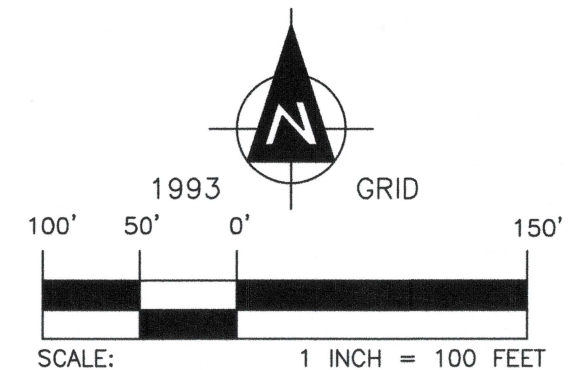
F-4



△ G-2  
N 661,078.7442  
E 357,292.7072  
EL. 278.81'

## LEGEND:

△ CONTROL STATION



## NOTES:

- HORIZONTAL AND VERTICAL CONTROL WAS BASED ON GGN 0916 WITH THE FOLLOWING 1993 GRID COORDINATES VALUES:  
N 660,782.4122  
E 356,121.5788  
EL. 258.53' (MSL)
- ALL COORDINATES ARE IN FEET AND DECIMALS THEREOF UNLESS OTHERWISE NOTED.
- AS BUILT SURVEY WITH ELEVATION WAS MADE IN MARCH 25, 2025 USING RTK GPS SYSTEM.

## CERTIFICATION:

I, VIRGILIO P. OLIVARES, HEREBY CERTIFY THAT THIS SURVEY SKETCH WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION, THAT IT WAS BASED ON A FIELD SURVEY MADE ON MARCH 2025.

*Virgilio P. Olivares*  
VIRGILIO P. OLIVARES, P. L. S. # 77

04-01-2025


DATE



EXP. DATE: 04/30/2026

## AS-BUILT SURVEY SKETCH EXISTING CONC. POLE FOUNDATION

GFA TRAINING CENTER, MUNICIPALITY OF DEDEDO

 **V. P. OLIVARES SURVEYING, LLC**  
CERTIFICATE OF AUTHORIZATION NO. 261  
PROFESSIONAL LAND SURVEYOR NO. 77  
CEL PH. (671) 727-7734  
TEL NO. (671) 734-5856  
E-MAIL ADDRESS: virgilio\_olivares@yahoo.com  
P.O. BOX 4740 HAGATNA, GUAM 96932

# CONTRACT FOR CONSTRUCTION OF A SMALL PROJECT

This Contract is by and between \_\_\_\_\_ (Owner) and  
\_\_\_\_\_ (Contractor).

Owner and Contractor hereby agree as follows:

## ARTICLE 1 - THE WORK

### 1.01 Work

- A. Work includes all labor, materials, equipment, services, and documentation necessary to construct the Project defined herein. The Work may include related services such as testing, start-up, and commissioning, all as required by the Contract Documents.
- B. The Contractor shall complete all Work as specified or indicated in the Contract Documents. The Project is generally described as follows:
  - 1. **[Project Name]** which includes **[short description of the Work]**.
  - 2. The Site of the Work includes property, easements, and designated work areas described in greater detail in the Contract Documents but generally located **[short description of the location of the Site]**.

## ARTICLE 2 - CONTRACT DOCUMENTS

### 2.01 Intent of Contract Documents

- A. It is the intent of the Contract Documents to describe a functionally complete project. The Contract Documents do not indicate or describe all of the Work required to complete the Project. Additional details required for the correct installation of selected products are to be provided by the Contractor and coordinated with the Owner and Engineer. This Contract supersedes prior negotiations, representations, and agreements, whether written or oral. The Contract Documents are complementary; what is required by one part of the Contract Documents is as binding as if required by other parts of the Contract Documents.
- B. During the performance of the Work and until final payment, Contractor and Owner shall submit all matters in question concerning the requirements of the Contract Documents, or relating to the acceptability of the Work under the Contract Documents to the Engineer. Engineer will be the initial interpreter of the requirements of the Contract Documents, and judge of the acceptability of the Work thereunder.
- C. Engineer will render a written clarification, interpretation, or decision on the issue submitted, or initiate a modification to the Contract Documents.
- D. Contractor, and its subcontractors and suppliers, shall not have or acquire any title to or ownership rights to any of the Drawings, Specifications, or other documents (including copies or electronic media editions) prepared by Engineer or its consultants.

## 2.02 Contract Documents Defined

**NOTES TO USER:** *If any of the items listed are not to be included as Contract Documents, remove such item from the list and renumber the remaining items as necessary.*

- A. The Contract Documents consist of the following documents:
  - 1. This Contract.
  - 2. Performance bond.
  - 3. Payment bond.
  - 4. Specifications listed in the Table of Contents.
  - 5. Drawings as listed on the Drawing Sheet Index.
  - 6. Addenda.
  - 7. Exhibits to this Contract (enumerated as follows):
    - a. **[Exhibit 1 – Name of Exhibit]**.
    - b. **[Exhibit 2 – Name of Exhibit]**.
  - 8. The following which may be delivered or issued on or after the Effective Date of the Contract:
    - a. Work Change Directives (EJCDC C-940).
    - b. Change Orders (EJCDC C-941).
    - c. Field Orders.

## ARTICLE 3 - ENGINEER

### 3.01 Engineer

- A. The Engineer for this Project is **[Name of engineering firm or entity serving in the role of Engineer]**.

## ARTICLE 4 - CONTRACT TIMES

### 4.01 Contract Times

**NOTES TO USER:** *Use Paragraph A for contracts with an Owner stipulated date for project completion. Write in the stipulated dates. Use Paragraph B for contracts for a number of calendar days for construction. Write in the stipulated number of days where these are stipulated by the Owner or use the days from the proposal where bidder is allowed to submit a proposed number of calendar days for completion of the Project. Delete the paragraph not used. Modify the language if working days are used.*

- A. The Work will be substantially completed on or before **[Date]** and completed and ready for final payment on or before **[Date]**.
- B. The Work will be substantially completed within **[Number of Days]** days after the Effective Date of the Contract and completed and ready for final payment within **[Number of Days]** days after the Effective Date of the Contract.

#### 4.02 Liquidated Damages

- A. Contractor and Owner recognize that time is of the essence in the performance of the Contract, and that Owner will incur damages if Contractor does not complete the Work according to the requirements of Paragraph 4.01. Because such damages for delay would be difficult and costly to determine, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty) Contractor shall pay Owner \$[amount calculated for liquidated damages] for each day that expires after the Contract Time for substantial completion.

#### 4.03 Delays in Contractor's Progress

- A. If Owner, Engineer, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in the Contract Times and Contract Price. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.
- B. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delay, disruption, or interference caused by or within the control of Contractor or their subcontractors or suppliers.
- C. If Contractor's performance or progress is delayed, disrupted, or interfered with by unanticipated causes not the fault of and beyond the control of Owner, Contractor, and those for which they are responsible, then Contractor shall be entitled to an equitable adjustment in Contract Times.
- D. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for any delay, disruption, or interference if such delay is concurrent with a delay, disruption, or interference caused by or within the control of Contractor or Contractor's subcontractors or suppliers.

#### 4.04 Progress Schedules

- A. Contractor shall develop a progress schedule and submit to the Engineer for review and comment before starting Work on the Site. The Contractor shall modify the schedule in accordance with the comments provided by the Engineer.
- B. The Contractor shall update and submit the progress schedule to the Engineer each month. The Owner may withhold payment if the Contractor fails to submit the schedule.

### ARTICLE 5 - CONTRACT PRICE

#### 5.01 Payment

**NOTES TO USER: Use Paragraph A for lump sum contracts with no unit price items. Use Paragraph B for unit price contracts. Include any lump sum work in unit price contracts as a single item number with a unit quantity of 1. Delete the paragraph not used. Verify that prices listed here match those submitted with the proposal.**

- A. Owner shall pay Contractor in accordance with the Contract Documents, the lump sum amount of \$[Contract Price] for all Work.

- B. Owner shall pay Contractor in accordance with the Contract Documents at the following unit prices for each unit of Work completed:

Item No.	Description	Unit	Estimated Quantity	Unit Price	Extended Price
<b>Total of all extended prices for Estimated Quantities of Work</b>					<b>\$</b>

Payment will be made in an amount equal to the total of all extended prices for actual Work completed. The extended price is determined by multiplying the unit price times the actual quantity of that Work item completed. Actual quantities installed will be determined by the Engineer.

## ARTICLE 6 - BONDS AND INSURANCE

**NOTES TO USER: Requirements for bonds vary significantly between private and public owners, and with Laws and Regulations of the Project jurisdiction. Modify Paragraph 6.01 to comply with applicable Laws and Regulations.**

### 6.01 Bonds

- A. Before starting Work, Contractor shall furnish a performance bond and a payment bond from surety companies that are duly licensed or authorized to issue bonds in the required amounts in the jurisdiction in which the Project is located. Each bond shall be in an amount equal to the Contract Price, as security for the faithful performance and payment of all of Contractor's obligations under the Contract. These bonds shall remain in effect until the completion of the correction period specified in Paragraph 7.12 but, in any case, not less than one year after the date when final payment becomes due.

### 6.02 Insurance

- A. Before starting Work, Contractor shall furnish evidence of insurance from companies that are duly licensed or authorized in the jurisdiction in which the Project is located with a minimum AM Best rating of A-VII or better. Contractor shall provide insurance in accordance with the following:
- Contractor shall provide coverage for not less than the following amounts, or greater where required by Laws and Regulations:
    - Workers' Compensation:

State:	Statutory
Employer's Liability:	
Bodily Injury, each Accident	\$ _____
Bodily Injury By Disease, each Employee	\$ _____

Bodily Injury/Disease Aggregate	\$	_____
b. Commercial General Liability:		
General Aggregate	\$	_____
Products - Completed Operations Aggregate	\$	_____
Personal and Advertising Injury	\$	_____
Each Occurrence (Bodily Injury and Property Damage)	\$	_____
c. Automobile Liability herein:		

**NOTES TO USER: Automobile Liability Insurance may be listed as Bodily Injury and Property Damage or a Combined Single Limit that covers both. Choose Bodily Injury and Property Damage or a Combined Single Limit and delete the lines not used.**

Bodily Injury:		
Each Person	\$	_____
Each Accident	\$	_____
Property Damage:		
Each Accident	\$	_____
Combined Single Limit of:	\$	_____
d. Excess or Umbrella Liability:		
Per Occurrence	\$	_____
General Aggregate	\$	_____
e. Contractor's Pollution Liability:		
Each Occurrence	\$	_____
General Aggregate	\$	_____

- B. All insurance policies required to be purchased and maintained will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 10 days prior written notice has been given to the insured and additional insured.
- C. Automobile liability insurance provided by Contractor shall provide coverage against claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance, or use of any motor vehicle. The automobile liability policy shall be written on an occurrence basis.
- D. Contractor's commercial general liability policy shall be written on a 1996 or later ISO commercial general liability occurrence form and include the following coverages and endorsements:
1. Products and completed operations coverage maintained for three years after final payment;

2. Blanket contractual liability coverage to the extent permitted by law;
  3. Broad form property damage coverage; and
  4. Severability of interest; underground, explosion, and collapse coverage; personal injury coverage.
- E. The Contractor's commercial general liability and automobile liability, umbrella or excess, and pollution liability policies shall include and list Owner and Engineer and the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each as additional insureds; and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby (including as applicable those arising from both ongoing and completed operations) on a non-contributory basis.
1. Additional insured endorsements will include both ongoing operations and products and completed operations coverage through ISO Endorsements CG 20 10 10 01 and CG 20 37 10 01 (together). If Contractor demonstrates to Owner that the specified ISO endorsements are not commercially available, then Contractor may satisfy this requirement by providing equivalent endorsements.
  2. Contractor shall provide ISO Endorsement CG 20 32 07 04, "Additional Insured—Engineers, Architects or Surveyors Not Engaged by the Named Insured" or its equivalent for design professional additional insureds.
- F. Umbrella or excess liability insurance shall be written over the underlying employer's liability, commercial general liability, and automobile liability insurance. Subject to industry-standard exclusions, the coverage afforded shall be procured on a "follow the form" basis as to each of the underlying policies. Contractor may demonstrate to Owner that Contractor has met the combined limits of insurance (underlying policy plus applicable umbrella) specified for employer's liability, commercial general liability, and automobile liability through the primary policies alone, or through combinations of the primary insurance policies and an umbrella or excess liability policy.
- G. The Contractor shall provide property insurance covering physical loss or damage during construction to structures, materials, fixtures, and equipment, including those materials, fixtures, or equipment in storage or transit.
- H. If Contractor has failed to obtain and maintain required insurance, Owner may exclude the Contractor from the Site, impose an appropriate set-off against payment, and exercise Owner's termination rights under Article 15.

## **ARTICLE 7 - CONTRACTOR'S RESPONSIBILITIES**

### **7.01 Supervision and Superintendence**

- A. Contractor shall supervise and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. Contractor shall be solely responsible for the means, methods, techniques, sequences, safety, and procedures of construction.
- B. Contractor shall assign a competent resident superintendent who is to be present at all times during the execution of the Work. This resident superintendent shall not be replaced without written notice to and approval by the Owner and Engineer except under extraordinary circumstances.

- C. Contractor shall at all times maintain good discipline and order at the Site.
  - D. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed during regular working hours, Monday through Friday.
- 7.02 Other Work at the Site
- A. In addition to and apart from the Work of the Contractor, other work may occur at or adjacent to the Site. Contractor shall take reasonable and customary measures to avoid damaging, delaying, disrupting, or interfering with the work of Owner, any other contractor, or any utility owner performing other work at or adjacent to the Site.
- 7.03 Services, Materials, and Equipment
- A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start up, and completion of the Work, whether or not such items are specifically called for in the Contract Documents.
  - B. All materials and equipment incorporated into the Work shall be new, of good quality and shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable supplier, except as otherwise may be provided in the Contract Documents.
- 7.04 Subcontractors and Suppliers
- A. Contractor may retain subcontractors and suppliers for the performance of parts of the Work. Such subcontractors and suppliers must be acceptable to Owner.
- 7.05 Quality Management
- A. Contractor is fully responsible for the managing quality to ensure Work is completed in accordance with the Contract Documents.
- 7.06 Licenses, Fees and Permits
- A. Contractor shall pay all license fees and royalties and assume all costs incident to performing the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others.
  - B. Contractor shall obtain and pay for all construction permits and licenses unless otherwise provided in the Contract Documents.
- 7.07 Laws and Regulations; Taxes
- A. Contractor shall give all notices required by and shall comply with all local, state, and federal Laws and Regulations applicable to the performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.
  - B. Contractor shall bear all resulting costs and losses, and shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs,



losses, and damages if Contractor performs any Work or takes any other action knowing or having reason to know that it is contrary to Laws or Regulations.

- C. Contractor shall pay all applicable sales, consumer, use, and other similar taxes Contractor is required to pay in accordance with Laws and Regulations.

#### 7.08 Record Documents

- A. Contractor shall maintain one printed record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, written interpretations and clarifications, and approved shop drawings in a safe place at the Site. Contractor shall annotate them to show changes made during construction. Contractor shall deliver these record documents to Engineer upon completion of the Work.

#### 7.09 Safety and Protection

- A. Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work.
- B. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury, or loss to:
  - 1. All persons on the Site or who may be affected by the Work;
  - 2. All the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
  - 3. Other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, other work in progress, utilities, and underground facilities not designated for removal, relocation, or replacement in the course of construction.
- C. All damage, injury, or loss to any property caused, directly or indirectly, in whole or in part, by Contractor, or anyone for whose acts the Contractor may be liable, shall be remedied by Contractor at its expense (except damage or loss attributable to the fault of Contract Documents or to the acts or omissions of Owner or Engineer and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor).
- D. Contractor shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.
- E. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor shall act to prevent threatened damage, injury, or loss. Contractor shall give Engineer prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby or are required as a result thereof. If Engineer determines that a change in the Contract Documents is required because of the action taken by Contractor in response to such an emergency, a Work Change Directive or Change Order will be issued.

#### 7.10 Shop Drawings, Samples, and Other Submittals

- A. Contractor shall review and coordinate the shop drawing and samples with the requirements of the Work and the Contract Documents and shall verify all related field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information.

- B. Each submittal shall bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents with respect to Contractor's review of that submittal, and that Contractor approves the submittal.
- C. With each submittal, Contractor shall give Engineer specific written notice, in a communication separate from the submittal, of any variations that the shop drawing or sample may have from the requirements of the Contract Documents.
- D. Engineer will provide timely review of shop drawings and samples.
- E. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction or to safety precautions or programs.
- F. Engineer's review and approval of a separate item does not indicate approval of the assembly in which the item functions.
- G. Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of shop drawings and submit, as required, new samples for review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous submittals.
- H. Shop drawings are not Contract Documents.

#### 7.11 Warranties and Guarantees

- A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer and its officers, directors, members, partners, employees, agents, consultants, and subcontractors shall be entitled to rely on Contractor's warranty and guarantee.

#### 7.12 Correction Period

- A. If within one year after the date of substantial completion, any Work is found to be defective, or if the repair of any damages to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas used by Contractor as permitted by Laws and Regulations, is found to be defective, then Contractor shall promptly and without cost to Owner, correct such defective Work.

#### 7.13 Indemnification

- A. To the fullest extent permitted by Laws and Regulations, and in addition to any other obligations of Contractor under the Contract or otherwise, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the performance of the Work, provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom but only to the extent caused by any negligent act or omission of Contractor, any subcontractor, any supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work or anyone for whose acts they may be liable.

## **ARTICLE 8 - OWNER'S RESPONSIBILITIES**

### **8.01 Owner's Responsibilities**

- A. Except as otherwise provided in the Contract Documents, Owner shall issue all communications to Contractor through Engineer.
- B. Owner shall make payments to Contractor as provided in this Contract.
- C. Owner shall provide Site and easements required to construct the Project.
- D. If Owner intends to contract with others for the performance of other work at or adjacent to the Site, unless stated elsewhere in the Contract Documents, Owner shall have sole authority and responsibility for such coordination.
- E. The Owner shall be responsible for performing inspections and tests required by applicable codes.
- F. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.
- G. While at the Site, Owner's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Owner has been informed.
- H. Owner shall furnish copies of any applicable Owner safety programs to Contractor.

## **ARTICLE 9 - ENGINEER'S STATUS DURING CONSTRUCTION**

### **9.01 Engineer's Status**

- A. Engineer will be Owner's representative during construction. The duties and responsibilities and the limitations of authority of Engineer as Owner's representative during construction are set forth in this Contract.
- B. Neither Engineer's authority or responsibility under this Article 9 or under any other provision of the Contract, nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer, shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any subcontractor, any supplier, any other individual or entity, or to any surety for or employee or agent of any of them.
- C. Engineer will make visits to the Site at intervals appropriate to the various stages of construction. Engineer will not be required to make exhaustive or continuous inspections on the Site to check the quality or quantity of the Work.
- D. Engineer has the authority to reject Work if Contractor fails to perform Work in accordance with the Contract Documents.
- E. Engineer will render decisions regarding the requirements of the Contract Documents, and judge the acceptability of the Work.
- F. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the

safety precautions and programs, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

## **ARTICLE 10 - CHANGES IN THE WORK**

### **10.01 Authority to Change the Work**

- A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work.

### **10.02 Change Orders**

- A. Owner and Contractor shall execute appropriate Change Orders covering:
  - 1. Changes in the Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive;
  - 2. Changes in the Work which are: (a) ordered by Owner or (b) agreed to by the parties or (c) resulting from the Engineer's decision, subject to the need for Engineer's recommendation if the change in the Work involves the design (as set forth in the Drawings, Specifications, or otherwise), or other engineering or technical matters; and
  - 3. Changes in the Contract Price or Contract Times or other changes which embody the substance of any final binding results under Article 12.
- B. If the provisions of any bond require notice to be given to a surety of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times), the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

## **ARTICLE 11 - DIFFERING SUBSURFACE OR PHYSICAL CONDITIONS**

### **11.01 Differing Conditions Process**

- A. If Contractor believes that any subsurface or physical condition including but not limited to utilities or other underground facilities that are uncovered or revealed at the Site either differs materially from that shown or indicated in the Contract Documents or is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in Work of the character provided for in the Contract Documents then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except with respect to an emergency) until receipt of a written statement permitting Contractor to do so.
- B. After receipt of written notice, Engineer will promptly:
  - 1. Review the subsurface or physical condition in question;

2. Determine necessity for Owner obtaining additional exploration or tests with respect to the condition;
  3. Determine whether the condition falls within the differing site condition as stated herein;
  4. Obtain any pertinent cost or schedule information from Contractor;
  5. Prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the subsurface or physical condition in question and the need for any change in the Drawings or Specifications; and
  6. Advise Owner in writing of Engineer's findings, conclusions, and recommendations.
- C. After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor regarding the subsurface or physical condition in question, addressing the resumption of Work in connection with such condition, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations, in whole or in part.

## **ARTICLE 12 - CLAIMS AND DISPUTE RESOLUTION**

### **12.01 Claims Process**

- A. The party submitting a claim shall deliver it directly to the other party to the Contract and the Engineer promptly (but in no event later than 10 days) after the start of the event giving rise thereto.
- B. The party receiving a claim shall review it thoroughly, giving full consideration to its merits. The two parties shall seek to resolve the claim through the exchange of information and direct negotiations. All actions taken on a claim shall be stated in writing and submitted to the other party.
- C. If efforts to resolve a claim are not successful, the party receiving the claim may deny it by giving written notice of denial to the other party. If the receiving party does not take action on the claim within 45 days, the claim is deemed denied.
- D. If the dispute is not resolved to the satisfaction of the parties, Owner or Contractor shall give written notice to the other party of the intent to submit the dispute to a court of competent jurisdiction unless the Owner and Contractor both agree to an alternative dispute resolution process.

## **ARTICLE 13 - TESTS AND INSPECTIONS; CORRECTION OF DEFECTIVE WORK**

### **13.01 Tests and Inspections**

- A. Owner and Engineer will have access to the Site and the Work at reasonable times for their observation, inspection, and testing. Contractor shall provide them proper and safe conditions for such access.
- B. Contractor shall give Engineer timely notice of readiness of the Work for all required inspections and tests, and shall cooperate with inspection and testing personnel to facilitate required inspections and tests.

- C. If any Work that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, Contractor shall, if requested by Engineer, uncover such Work for observation. Such uncovering shall be at Contractor's expense.

#### 13.02 Defective Work

- A. Contractor shall ensure that the Work is not defective.
- B. Engineer has the authority to determine whether Work is defective, and to reject defective Work.
- C. Prompt notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor.
- D. The Contractor shall promptly correct all such defective Work.
- E. When correcting defective Work, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.
- F. If the Work is defective or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, then Owner may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated.

### ARTICLE 14 - PAYMENTS TO CONTRACTOR

#### 14.01 Progress Payments

- A. The Contractor shall prepare a schedule of values that will serve as the basis for progress payments. The schedule of values will be in a form of application for payment acceptable to Engineer. The unit price breakdown submitted with the bid will be used for unit price work. Break lump sum items into units that will allow for measurement of Work in progress.

#### 14.02 Applications for Payments:

- A. Contractor shall submit an application for payment in a form acceptable to the Engineer, no more frequently than monthly, to Engineer. Applications for payment will be prepared and signed by Contractor. Contractor shall provide supporting documentation required by the Contract Documents. Payment will be paid for Work completed as of the date of the application for payment.
- B. Beginning with the second application for payment, each application shall include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied on account to discharge Contractor's legitimate obligations associated with prior applications for payment.

#### 14.03 Retainage

- A. The Owner shall retain **[Percentage of Contract Price to be Held as Retainage]** % of each progress payment until the Work is substantially complete.

#### 14.04 Review of Applications

- A. Within 10 days after receipt of each application for payment, the Engineer will either indicate in writing a recommendation for payment and present the application for payment to Owner or return the application for payment to Contractor indicating in writing Engineer's reasons

for refusing to recommend payment. The Contractor will make the necessary corrections and resubmit the application for payment.

- B. Engineer will recommend reductions in payment (set-offs) which, in the opinion of the Engineer, are necessary to protect Owner from loss because the Work is defective and requires correction or replacement.
- C. The Owner is entitled to impose set-offs against payment based on any claims that have been made against Owner on account of Contractor's conduct in the performance of the Work, incurred costs, losses, or damages on account of Contractor's conduct in the performance of the Work, or liquidated damages that have accrued as a result of Contractor's failure to complete the Work.

#### 14.05 Contractor's Warranty of Title

- A. Contractor warrants and guarantees that title to all Work, materials, and equipment furnished under the Contract will pass to Owner free and clear of (1) all liens and other title defects, and (2) all patent, licensing, copyright, or royalty obligations, no later than seven days after the time of payment by Owner.

#### 14.06 Substantial Completion

- A. The Contractor shall notify Owner and Engineer in writing that the Work is substantially complete and request the Engineer issue a certificate of substantial completion when Contractor considers the Work ready for its intended use. Contractor shall at the same time submit to Owner and Engineer an initial draft of punch list items to be completed or corrected before final payment.
- B. Engineer will make an inspection of the Work with the Owner and Contractor to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor and Owner in writing giving the reasons therefor.
- C. If Engineer considers the Work substantially complete or upon resolution of all reasons for non-issuance of a certificate identified in 14.06.B, Engineer will deliver to Owner a certificate of substantial completion which shall fix the date of substantial completion and include a punch list of items to be completed or corrected before final payment.

#### 14.07 Final Inspection

- A. Upon written notice from Contractor that the entire Work is complete, Engineer will promptly make a final inspection with Owner and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals that the Work, or agreed portion thereof, is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

#### 14.08 Final Payment

- A. Contractor may make application for final payment after Contractor has satisfactorily completed all Work defined in the Contract, including providing all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of inspection, annotated record documents and other documents.
- B. The final application for payment shall be accompanied (except as previously delivered) by:
  - 1. All documentation called for in the Contract Documents;

2. Consent of the surety to final payment;
  3. Satisfactory evidence that all title issues have been resolved such that title to all Work, materials, and equipment has passed to Owner free and clear of any liens or other title defects, or will so pass upon final payment;
  4. A list of all disputes that Contractor believes are unsettled; and
  5. Complete and legally effective releases or waivers (satisfactory to Owner) of all lien rights arising out of the Work, and of liens filed in connection with the Work.
- C. The Work is complete (subject to surviving obligations) when it is ready for final payment as established by the Engineer's written recommendation of final payment.
- 14.09 Waiver of Claims
- A. The making of final payment will not constitute a waiver by Owner of claims or rights against Contractor.
  - B. The acceptance of final payment by Contractor will constitute a waiver by Contractor of all claims and rights against Owner other than those pending matters that have been duly submitted.

## **ARTICLE 15 - SUSPENSION OF WORK AND TERMINATION**

### **15.01 Owner May Suspend Work**

- A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 60 consecutive days by written notice to Contractor and Engineer. Such notice will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be entitled to an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension.

### **15.02 Owner May Terminate for Cause**

- A. Contractor's failure to perform the Work in accordance with the Contract Documents or other failure to comply with a material term of the Contract Documents will constitute a default by Contractor and justify termination for cause.
- B. If Contractor defaults in its obligations, then after giving Contractor and any surety ten days written notice that Owner is considering a declaration that Contractor is in default and termination of the Contract, Owner may proceed to:
  1. Declare Contractor to be in default, and give Contractor and any surety notice that the Contract is terminated; and
  2. Enforce the rights available to Owner under any applicable performance bond.
- C. Owner may not proceed with termination of the Contract under Paragraph 15.02.B if Contractor within seven days of receipt of notice of intent to terminate begins to correct its failure to perform and proceeds diligently to cure such failure.
- D. Subject to the terms and operation of any applicable performance bond, if Owner has terminated the Contract for cause, Owner may exclude Contractor from the Site, take possession of the Work, incorporate in the Work all materials and equipment stored at the



Site or for which Owner has paid Contractor but which are stored elsewhere, and complete the Work as Owner may deem expedient.

- E. In the case of a termination for cause, if the cost to complete the Work, including related claims, costs, losses, and damages, exceeds the unpaid contract balance, Contractor shall pay the difference to Owner.

#### 15.03 Owner May Terminate for Convenience

- A. Upon seven days written notice to Contractor, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for, without duplication of any items:
  - 1. Completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;
  - 2. Expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses; and
  - 3. Other reasonable expenses directly attributable to termination, including costs incurred to prepare a termination for convenience cost proposal.
- B. Contractor shall not be paid on account of loss of anticipated overhead, profits, or revenue, or other economic loss arising out of or resulting from such termination.

#### 15.04 Contractor May Stop Work or Terminate

- A. If, through no act or fault of Contractor, (1) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (2) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon seven days written notice to Owner, and provided Owner does not remedy such suspension or failure within that time, either stop the Work until payment is received, or terminate the Contract and recover payment from the Owner.

### ARTICLE 16 - CONTRACTOR'S REPRESENTATIONS

#### 16.01 Contractor Representations

- A. Contractor makes the following representations when entering into this Contract:
  - 1. Contractor has examined and carefully studied the Contract Documents, and any data and reference items identified in the Contract Documents.
  - 2. Contractor has visited the Site, conducted a thorough visual examination of the Site and adjacent areas, and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
  - 3. Contractor is familiar with and is satisfied as to all Laws and Regulations that may affect cost, progress, and performance of the Work.
  - 4. Contractor has considered the information known to Contractor itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Contract Documents; and the Site-

related reports and drawings identified in the Contract Documents, with respect to the effect of such information, observations, and documents on:

- a. The cost, progress, and performance of the Work;
  - b. The means, methods, techniques, sequences, and procedures of construction to be employed by Contractor; and
  - c. Contractor's safety precautions and programs.
5. Based on the information and observations referred to in the preceding paragraph, Contractor agrees that no further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract.
  6. Contractor is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.
  7. Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
  8. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
  9. Contractor's entry into this Contract constitutes an incontrovertible representation by Contractor that, without exception, all prices in the Contract are premised upon performing and furnishing the Work required by the Contract Documents.

## **ARTICLE 17 - MISCELLANEOUS**

### **17.01 Cumulative Remedies**

- A. The duties and obligations imposed by this Contract and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to 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 Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract. The provisions of this paragraph will 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.

### **17.02 Limitation of Damages**

- A. Neither Owner, Engineer, nor any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, shall be liable to Contractor for any claims, costs, losses, or damages sustained by Contractor on or in connection with any other project or anticipated project.

### **17.03 No Waiver**

- A. A party's non-enforcement of any provision shall not constitute a waiver of that provision, nor shall it affect the enforceability of that provision or of the remainder of this Contract.

17.04 Survival of Obligations

- A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract, as well as all continuing obligations indicated in the Contract, will survive final payment, completion, and acceptance of the Work or termination or completion of the Contract or termination of the services of Contractor.

17.05 Contractor's Certifications

- A. Contractor certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the Contract.

17.06 Controlling Law

- A. This Contract is to be governed by the law of the state in which the Project is located.

DRAFT

IN WITNESS WHEREOF, Owner and Contractor have signed this Contract.

This Contract will be effective on \_\_\_\_\_ (which is the Effective Date of the Contract).

OWNER:

CONTRACTOR:

By: \_\_\_\_\_

By: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

*(If Contractor is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.)*

Attest: \_\_\_\_\_

Attest: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Address for giving notices:

Address for giving notices:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

License No.: \_\_\_\_\_  
(where applicable)

*(If Owner is a corporation, attach evidence of authority to sign. If Owner is a public body, attach evidence of authority to sign and resolution or other documents authorizing execution of this Contract.)*

**NOTE TO USER: Use in those states or other jurisdictions where applicable or required.**