U.S. Department
of Transportation
Federal Aviation Administration

Air Traffic Organization
Western Service Area
Engineering Services

222 W 7th Avenue, 3rd Floor
Anchorage, AK 99513

April 02, 2026

Agnes M. Sablan, Director
Division of Coastal Resources Management
3rd Floor, Gualo Rai Center
Chalan Pale Arnold
P.O. Box 501304
Saipan, MP 96950

RE: Coastal Zone Management Act (CZMA), Consistency Determination for the Proposed Federal Aviation Administration (FAA) Installation and Operation of a New Air Route Surveillance Radar (ARSR) atop Mount Petosukara, As Matuis, Saipan, Commonwealth of the Northern Mariana Islands

Dear Director Sablan:

The Federal Aviation Administration (FAA) submits this Consistency Determination under Section 307(c)(1) of the Coastal Zone Management Act (CZMA; 16 U.S.C. § 1456(c)(1)) and implementing regulations of the CZMA at 15 CFR Part 930, Subpart C, for the proposed installation and operation of a new Air Route Surveillance Radar (ARSR) facility atop Mount Petosukara, As Matuis, Saipan, Commonwealth of the Northern Mariana Islands (CNMI). This document provides the FAA's determination that the proposed federal action is consistent to the maximum extent practicable, with the enforceable policies of the CNMI Coastal Resources Management Program (CRM) pursuant to 15 CFR § 930.39.

Project Description

The FAA proposes to install and operate a new long-range ARSR facility at the site of the former Pacific Barrier III (PACBAR III) radar installation located atop Mount Petosukara in the Tangke area near the village of As Matuis. Implementation of the proposed action would include:

- Construction, installation, and operation of a new 55-foot-tall radar platform, ARSR array with radome, radar support equipment, and radar service building.
- Demolition and removal of the existing PACBAR III array and associated operations building.
- Upgrade the existing 1.6-mile electrical line distribution (ELD) that provides power to the radar site. The ELD would be upgraded from single-phase to three-phase service by replacing existing wooden utility poles with typhoon-resistant concrete poles.
- The ELD upgrade would occur along the existing radar access road and utility corridor and would not require establishment of a new cleared corridor.

- Limited vegetation clearing may occur in localized areas along the ELD corridor where necessary to install replacement utility poles and maintain required safety clearances. For analysis purposes, vegetation disturbance associated with the ELD upgrade is conservatively estimated to involve clearing of up to 10 feet in width along portions of the 1.6-mile corridor, resulting in approximately 1.9 acres of temporary disturbance.

Determination of Coastal Effects

The project occurs within CNMI's defined coastal zone and therefore qualifies for federal consistency review. Potential coastal effects are limited to temporary soil disturbance and stormwater runoff associated with construction activities, and visual changes associated with installation of the radar structure on an existing ridgeline facility.

No construction will occur within marine, shoreline, wetland, or lagoon Areas of Particular Concern (APCs). Implementation of best management practices (BMPs) will prevent erosion, sediment runoff, and waste discharge to coastal waters, allowing the project to remain consistent with Northern Mariana Islands Administrative Code (NMIAC) §15-10-305(f)-(h).

Because the Proposed Action occurs within previously disturbed areas associated with the former radar facility and along an existing roadside utility corridor, effects to coastal resources are expected to be minimal and temporary.

Consistency with the Enforceable Policies of the CNMI Coastal Management Program

The FAA has reviewed the enforceable policies of CNMI's CRM (Title 15 NMIAC) and determined that the proposed action is consistent to the maximum extent practicable with those policies. The table below summarizes the FAA's evaluation of the proposed project against the applicable enforceable policies.

Citation	Policy Topic	FAA Consistency Analysis	Consistency Finding
15-10-305(a)	Cumulative Impact	The Proposed Action involves installation and operation of a new ARSR facility at the site of the former PACBAR III radar installation on Mount Petosukara. The Action occurs within a previously developed site and existing access/utility corridors. No additional development is anticipated in the surrounding area; therefore cumulative impacts to coastal resources are expected to be negligible.	Consistent
15-10-305(b)	Compatibility with Existing Uses	The project remains within the existing developed facility site and use area. It does not introduce new land uses or incompatible development.	Consistent
15-10-305(d) & (f)	Conservation and Erosion Control	Construction activities associated with the Proposed Action would occur primarily within previously disturbed areas at the former PACBAR III radar facility and along the existing radar access road and utility corridor. The approximately 1.6 mile ELD upgrade	Consistent

Citation	Policy Topic	FAA Consistency Analysis	Consistency Finding
		would replace existing wooden utility poles with typhoon-resistant concrete poles and upgrade the existing single-phase electrical line to three-phase service. Temporary soil disturbance would be minimized and controlled using standard construction BMPs to prevent erosion and sediment transport.	
15-10-305(h)	Waste Management	All waste, including construction debris and hazardous materials, will be handled and disposed of in accordance with FAA and CNMI regulations.	Consistent
15-10-311	Areas of Particular Concern (APC)	No APCs occur within or adjacent to the project area. The site is located inland and outside of coastal hazard zones.	Consistent
15-10-345	Coastal Hazards	The radar site is elevated and outside the 100-year floodplain. Structures will be designed to meet typhoon and seismic safety standards. The 1.6-mile transmission line upgrade is outside of the 100-year floodplain. New typhoon resistant concrete poles with three-phase power will replace the existing wooden poles with single-phase power in the same (or very near) locations.	Consistent
15-10-350	Height, Density, Setback, and Coverage	The ARSR tower replaces an existing structure of comparable size and footprint. There will be no increase in density or new encroachment.	Consistent
15-10-610(e)	Mandatory Conditions	FAA will comply with any mandatory conditions or requirements identified by DCRM during its review and concurrence process.	Consistent

Supporting Federal Framework

In accordance with FAA Order 1050.1G, and consistent with the National Oceanic and Atmospheric Administration (NOAA) guidance regarding federal consistency determinations, federal agency activities that may affect coastal uses or resources must be consistent to the maximum extent practicable with approved state or territorial coastal management programs. The FAA is complying with applicable federal environmental and regulatory requirements for the proposed Saipan ARSR project. Key elements of the federal environmental review and interagency coordination are summarized below.

- **National Environmental Policy Act (NEPA):** The FAA is preparing an Environmental Assessment (EA) for the proposed action in accordance with FAA Order 1050.1G and the Council on Environmental Quality regulations implementing NEPA (40 CFR Parts 1500–1508). The EA evaluates potential environmental impacts associated with installation and

operation of the proposed ARSR facility, including demolition of the former PACBAR III radar installation and associated infrastructure improvements. The EA is currently undergoing internal agency review and no final NEPA decision has been issued. The EA evaluates potential effects to environmental resources, including those relevant to coastal uses and resources. This federal consistency determination relies on the best available information compiled to date (including the EA analysis and supporting technical studies) and will be updated if the EA identifies materially different impacts or if the project description changes.

- **Agency Roles and Coordination:** The FAA is the lead federal agency for the Proposed Action. The Department of the Air Force (PACAF) is participating as a cooperating agency in the NEPA process. The FAA will continue coordination with the CNMI DCRM, the CNMI Bureau of Environmental and Coastal Quality (BECQ), and other federal and territorial agencies, as appropriate.
- **Hazardous Materials and Contaminated Sites:** A Phase II Environmental Site Assessment conducted in 2025 for the former PACBAR III radar facility identified petroleum-related compounds, lead, and semi-volatile organic compound contamination in surface water within the existing underground storage tank and septic tank areas. Asbestos-containing materials and lead-based paint were also identified in building materials associated with existing structures. Soil samples did not exceed CNMI environmental screening levels (ESLs). As part of implementation of the proposed ARSR project, the FAA will remediate contaminated areas within the planned lease boundary to meet CNMI BECQ ESLs for industrial and commercial land use. Remediation activities will be coordinated with BECQ and conducted in accordance with applicable federal and CNMI requirements to ensure contaminants are not mobilized to nearby soils or surface waters. All demolition debris and hazardous or contaminated materials removed from the lease parcel will be properly characterized, handled, and disposed of at approved facilities. These measures will prevent adverse effects to coastal uses and resources.
- **Historic and Cultural Resources (NHPA Section 106):** The FAA is conducting consultation under Section 106 of the National Historic Preservation Act (NHPA) in accordance with 36 CFR Part 800. Identification efforts to date have included review of an Archaeological Inventory Survey within the Area of Potential Effect (APE). Consultation with the CNMI Historic Preservation Office (HPO) and other consulting parties is ongoing. Any avoidance, minimization, or mitigation measures identified through the Section 106 process will be incorporated into the project, as appropriate.
- **Endangered Species Act (ESA Section 7) and Other Resource Statutes:** The FAA evaluated potential effects of the Proposed Action on federally listed species and their habitats in coordination with the U.S. Fish and Wildlife Service (USFWS). Based on habitat conditions, site surveys, and project design, the FAA determined that the proposed action may affect and is likely to adversely affect the Nightingale reed warbler (*Acrocephalus luscinia*) and the Micronesian megapode (*Megapodius laperouse*). The adverse effect determination is primarily associated with temporary vegetation removal and minor habitat disturbance along portions of the ELD corridor, which may reduce or temporarily disturb potential habitat for these species. The FAA also coordinated with the CNMI Division of Fish and Wildlife (DFW) regarding wildlife resources within the

project area. Formal consultation under Section 7 of the Endangered Species Act (ESA) with the USFWS is currently ongoing. The FAA will complete ESA consultation prior to issuance of a final NEPA decision and will incorporate any resulting conservation measures or terms and conditions into project implementation as appropriate.

- **Coastal Zone Management Act (CZMA) Consistency:** This consistency determination is submitted pursuant to Section 307(c)(1) of the CZMA and implementing regulations at 15 CFR Part 930, Subpart C. Based on the analysis conducted to date and the implementation of BMPs, the FAA has determined that installation and operation of the proposed ARSR facility, including demolition of the former PACBAR III radar installation and upgrades to the existing ELD, is consistent to the maximum extent practicable with the enforceable policies of the CNMI Coastal Resources Management Program.
- **Commitment to Update:** Upon completion of the NEPA process, the FAA will provide DCRM with the EA decision document and any environmental commitments or mitigation measures relevant to coastal resources. If new information indicates different or greater coastal effects than evaluated herein, the FAA will coordinate with DCRM and provide supplemental information as appropriate.

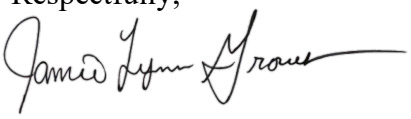
Determination

Based on the information presented above, the FAA has determined that the proposed installation and operation of a new ARSR facility on Mount Petosukara is consistent, to the maximum extent practicable, with the enforceable policies of the CNMI Coastal Management Program. Implementation of the project, including demolition of the former PACBAR III radar installation and associated infrastructure improvements, will not adversely affect coastal uses or resources when conducted in accordance with applicable regulatory requirements and standard construction BMPs.

Request for Concurrence

Pursuant to 15 CFR § 930.41, the FAA respectfully requests written concurrence from the CNMI DCRM within 60 days of receipt of this consistency determination. If you have any questions, please contact me by email at: jamie.l.groves@faa.gov.

Respectfully,



Jamie L. Groves
Environmental Engineer
ATO Tech Ops, WSA Engineering Services
Federal Aviation Administration

Attachments:

A. Project Location Maps
B. Project Drawings (relevant pages)
C. Site Photos

Attachment 1: Figures

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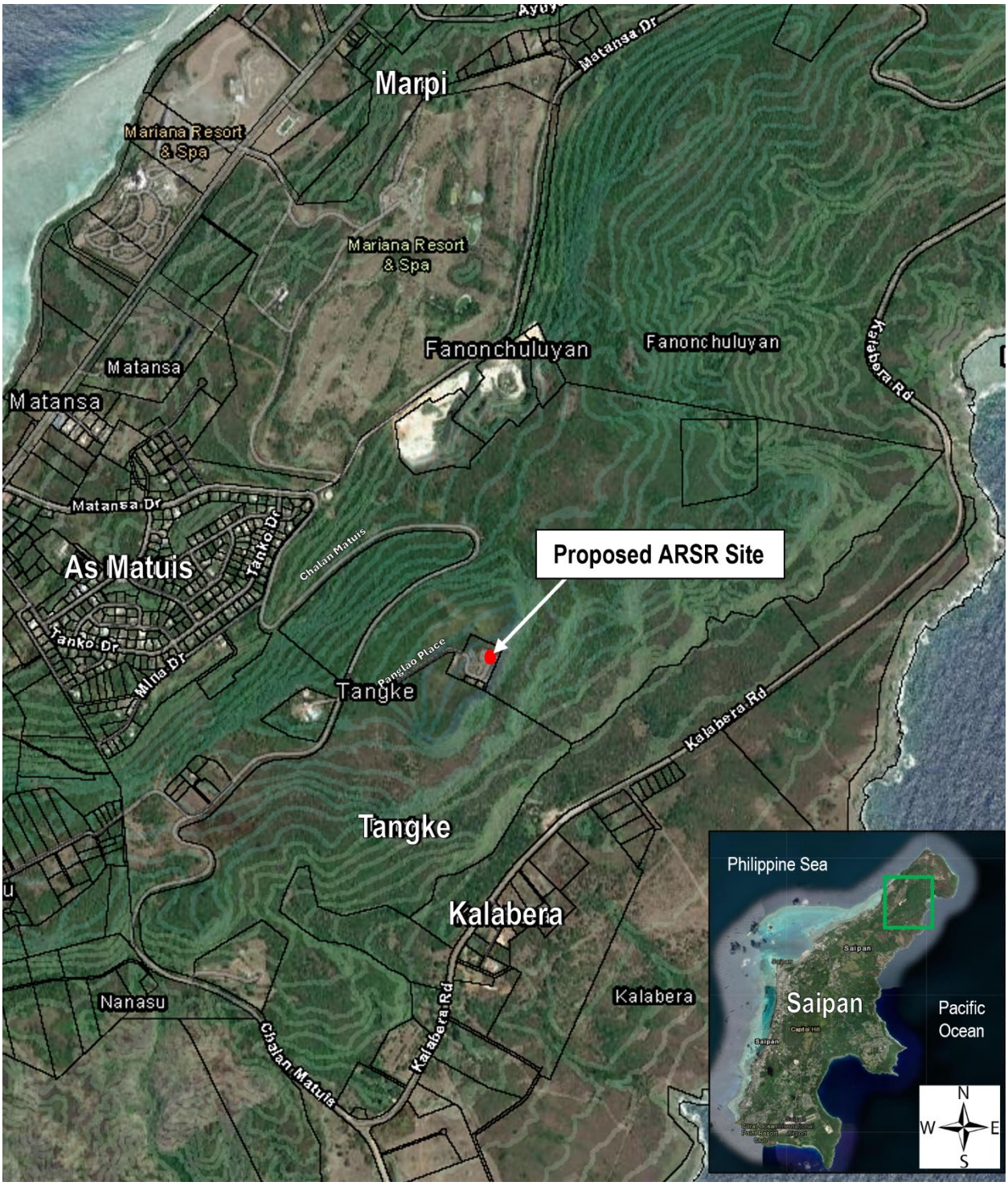

Figure 1 Location of Proposed ARSR Site on Mount Petosukara, Saipan, CNMI.
Source: Adapted from CNMI BECQ, CNMI DCRM Public Permitting App.

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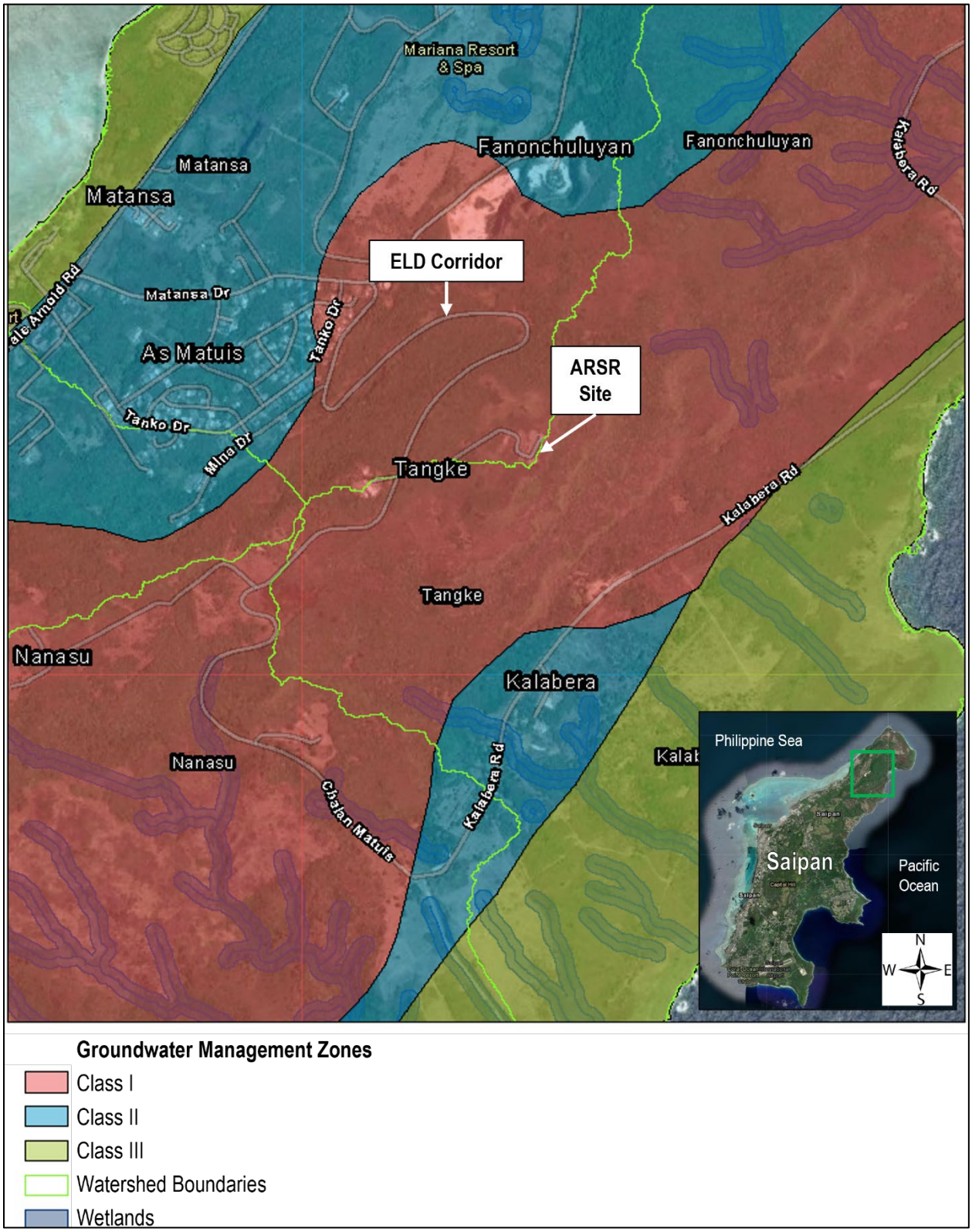

Figure 2 **Water Resources in the vicinity of the Proposed ARSR Facility and ELD Corridor. Source: Adapted from CNMI BECQ, CNMI DCRM Public Permitting App.**

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Attachment 2: Project Drawings (select pages)

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VICINITY MAP:
N.T.S.

SAIPAN (GSN) ARSR SITE
SAIPAN, CNMI
3-PHASE POWER SERVICE ESTABLISHMENT
ISSUED FOR CONSTRUCTION DRAWINGS

SITE ADDRESS:
PANGLAO PL, SAN ROQUE, SAIPAN, CNMI, 96950

FOR OFFICIAL USE ONLY:
PUBLIC AVAILABILITY TO BE DETERMINED UNDER 5 USC 552

FAA
DESIGNED BY:

CUSA CONSULTING LLC
6 MERRILL INDUSTRIAL DR, UNIT 6
HAMPTON, NH 03842
T. (603) 926-5895
WWW.CUSACONSULTING.COM

REV	APPROVED	DESCRIPTION	JCN	DATE	APVD

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
ATC - TECHNICAL OPERATIONS WESTERN SERVICE AREA

SAIPAN ARSR FACILITY
3-PHASE POWER SERVICE ESTABLISHMENT
ISSUED FOR CONSTRUCTION DRAWINGS, 4/4/2025
COVER SHEET

SAIPAN GSN CNMI

NO P.E. SEAL REQUIRED FOR THIS PROJECT

REVIEWED BY:	SUBMITTED BY:	APPROVED BY:
	PROJECT ENGINEER	MANAGER, INFRASTRUCTURE CENTER
ISSUED BY:	DESIGNED: A.J.G./C.U.C.	DATE: JCN:
	DRAWN: A.J.G.	DRAWING NUMBER: GSN-D-ARSR-ELD-G001 REV
	CHECKED: J.G.P.	

M:\Current Jobs - ELD Projects\GSN ARSR - ELD (Saipan ARSR, CNMI)\CUSA Drawings\Issued For Construction\GSN-D-ELD IFC.dwg
4/4/2025 6:45 AM ANDREW GRAY

INDEX OF SHEETS

SHEET DESIGNATION/NUMBERING KEY:

PER THE NATIONAL CAD STANDARD 1.3.3, THE FOLLOWING KEY IS PROVIDED FOR THE NUMBERING OF THESE PLANS:

- *XXX-D-XXX-**X**___* DISCIPLINE DESIGNATOR

  - ** ***G** - GENERAL*
  - ** ***D** - DEMOLITION*
  - ** ***C** - CIVIL*
  - ** ***E** - ELECTRICAL*
  - ** ***M** - MECHANICAL*
  - ** ***V** - SURVEY*

- *XXX-D-XXX-**X0**__* GENERAL NOTES, LEGENDS, REQUIREMENTS, SPECIFICATIONS
- *XXX-D-XXX-**X1**__* PLAN VIEWS
- *XXX-D-XXX-**X2**__* ELEVATION OR PROFILE VIEWS
- *XXX-D-XXX-**X3**__* SECTION VIEWS
- *XXX-D-XXX-**X5**__* DETAILS
- *XXX-D-XXX-**X6**__* SCHEDULES AND DIAGRAMS

SITE LEGEND:

EXISTING (TO REMAIN)	EXISTING (TO BE DEMOLISHED)	NEW OR TEMPORARY	
			GENERAL LINEWORK CONVENTION
	N/A	*N/A*	PROPERTY LINE
	N/A	*N/A*	ROADWAY OR RUNWAY CENTERLINE
ILS	*N/A*	*N/A*	INSTRUMENT LANDING SYSTEM CRITICAL AREA
ROFA	*N/A*	*N/A*	RUNWAY OBJECT-FREE AREA
RSA	*N/A*	*N/A*	RUNWAY SAFETY AREA
TOFA	*N/A*	*N/A*	TAXIWAY OBJECT-FREE AREA
TSA	*N/A*	*N/A*	TAXIWAY SAFETY AREA
GAS	*N/A*	*N/A*	GAS MAIN OR SERVICE LINE
W	*N/A*	*N/A*	WATER MAIN OR SERVICE LINE
UGE	UGE	*N/A*	UNDERGROUND ELECTRIC FEED, TYPE UNKNOWN
UTIL	UTIL	*N/A*	UNDERGROUND UTILITY, TYPE UNKNOWN
CBL	CBL	CBL	ABOVE GROUND CABLE
CDT	CDT	CDT	ABOVE GROUND ELECTRICAL CONDUIT
AGF	AGF	AGF	ABOVE GROUND FUEL LINE
DCT	DCT	DCT	BURIED CONDUIT OR DUCT BANK
BUS	BUS	BUS	BUS DUCT
X	X	X	CHAIN LINK FENCE
DEB	DEB	DEB	DIRECT EARTH BURIED CABLE
EES	EES	EES	EARTH ELECTRODE SYSTEM
1ØP	1ØP	1ØP	OVERHEAD SINGLE-PHASE PRIMARY
1ØS	1ØS	1ØS	OVERHEAD SINGLE PHASE SECONDARY
3ØP	3ØP	3ØP	OVERHEAD THREE-PHASE PRIMARY
3ØS	3ØS	3ØS	OVERHEAD THREE PHASE SECONDARY
UGF	UGF	UGF	UNDERGROUND FUEL LINE
N/A	*N/A*	BORE	DIRECTIONAL BORE

GENERAL OBJECT CONVENTION

BUILDING

CONCRETE

GRAVEL

SAND

ASPHALT PAVEMENT

EARTH

GRASS

ILS CRITICAL AREA (*N/A* / *N/A*)

SWAMP (*N/A* / *N/A*)

DETAIL CALLOUT: # / ##### — *VIEW NUMBER / SHEET NUMBER* OR *VIEW NUMBER / SHEET NUMBER* — # / #####

SECTION CALLOUT: # / ##### — *VIEW NUMBER / SHEET NUMBER* OR *VIEW NUMBER / SHEET NUMBER* — # / #####

EQUIPMENT ITEM DESIGNATION: ## OR ##

CABLE OR PIPE DESIGNATION: ## OR ##

SUB-COMPONENT DESIGNATION: ## OR ##

ELECTRICAL ONE-LINE DIAGRAM LEGEND:

FUSE

BREAKER

FUSED DISCONNECT SWITCH

STANDARD METER

STANDARD METER W/ INTEGRAL BREAKER

CT METER

PAD-MOUNTED STEP-DOWN TRANSFORMER

POLE

GROUND

ABBREVIATIONS

Ø	ELECTRICAL PHASE OR DIAMETER	KWH	KILOWATT-HOUR
A	AMPERE	LRA	LOCKED ROTOR AMPERE
AA	AIR COOLED	LTG	LIGHTING
AC	ALTERNATING CURRENT	LV	LOW-VOLTAGE
AF	AMPERE FRAME	M	METER
AFF	ABOVE FINISHED FLOOR	MBJ	MAIN BONDING JUMPER
AIC	AMPERE INTERRUPTING CAPACITY	MCB	MAIN CIRCUIT BREAKER
AMM	AMMETER	MCC	MOTOR CONTROL CENTER
AT	AMPERE TRIP	MCP	MOTOR CIRCUIT PROTECTOR
ATS	AUTOMATIC TRANSFER SWITCH	MDP	MAIN DISTRIBUTION PANEL
AWG	AMERICAN WIRE GAUGE	MDS	MAIN DISCONNECT SWITCH
BC	BARE COPPER	MH	MANHOLE
BAT CHGR	BATTERY CHARGER	MLO	MAIN LUGS ONLY
CB	CIRCUIT BREAKER	MV	MEDIUM-VOLTAGE
CDT	CONDUIT	N	NEUTRAL
CKT	CIRCUIT	OH	OVERHEAD
COMM	COMMUNICATIONS	P	POLE
CTRL	CONTROLS	PF	POWER FACTOR
COR	CONTRACTOR OFFICER REPRESENTATIVE	PH	PHASE
CPU	CENTRAL PROCESSING UNIT	PNL	PANEL
CR	CONTROL RELAY	PME,PMH	S&C PAD-MOUNTED SWITCHGEAR
CT	CURRENT TRANSFORMER	PMJ	PRE-MOLDED JOINT
DC	DIRECT CURRENT	REC	RCEPTACLE
DEB	DIRECT EARTH BURIAL	RFI	RADIO FREQUENCY INTERFACE
DISC	DISCONNECT	RGS	RIGID GALVANIZED STEEL
DIST PNL	DISTRIBUTION PANEL	ROFA	RUNWAY OBJECT-FREE AREA
DM	DEMAND METER	RMS	ROOT MEAN SQUARE
DPDT	DOUBLE POLE DOUBLE THROW	RSA	RUNWAY SAFETY AREA
DPST	DOUBLE POLE SINGLE THROW	SBJ	SYSTEM BONDING JUMPER
DS	DISCONNECT SWITCH	SCP	SYSTEM CONTROL PANEL
DT	DOUBLE THROW	SD	STEP-DOWN TRANSFORMER
ECP	ENGINE CONTROL PANEL	SP	SINGLE-POLE OR SWITCHPAD
EES	EARTH ELECTRODE SYSTEM	SPD	SURGE PROTECTIVE DEVICE
E/G	ENGINE GENERATOR	SRG	SIGNAL REFERENCE GRID
EH	ELECTRIC HEATER OR HUMIDIFIER	S/S	START-STOP
EHC	ELECTRIC HEATING COIL	SSC	SYSTEM SUPPORT CENTER
EMRG	EMERGENCY	SU	STEP-UP TRANSFORMER
EMT	ELECTRICAL METALLIC TUBING	SW	SWITCH
EQUIP	EQUIPMENT	SWBD	SWITCHBOARD
ERMS	ENVIRONMENTAL REMOTE MONITORING SYSTEM	SWGR	SWITCHGEAR
ET	ELECTRIC HEAT TRACE	T	TRANSFORMER
FC	FAN-COOLED	TB	TERMINAL BOX OR TERMINAL BOARD
FDR	FEEDER	TC	TRIP COIL
FHH	FOTS HAND HOLE	TD	TIME DELAY
FLA	FULL LOAD AMPERES	TERM	TERMINAL
FLUOR	FLUORESCENT	TOFA	TAXIWAY OBJECT-FREE AREA
FOTS	FIBER OPTIC TRANSMISSION SYSTEM	TSA	TAXIWAY SAFETY AREA
GEC	GROUNDING ELECTRODE CONDUCTOR	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSOR
GND	GROUND	UON	UNLESS OTHERWISE NOTED
HH	HANDHOLE	V	VOLT OR VOLTAGE
HID	HIGH INTENSITY DISCHARGE	VA	VOLT-AMPERE
HOA	HANDS-OFF AUTOMATIC	VAV	VARIABLE AIR VOLUME
HZ	HERTZ	VM	VOLTMETER
JB	JUNCTION BOX	W	WATT
KA	KILOAMPERES	WM	WATTMETER
KCMIL	THOUSAND CIRCULAR MILS	XFR	TRANSFER
KV	KILOVOLT	XFMR	TRANSFORMER
KVA	KILOVOLT AMPERES	Y	WYE
KVAR	KILOVOLT AMPERES-REACTIVE	Y-D	WYE-DELTA
KW	KILOWATT	Z	IMPEDANCE

FOR OFFICIAL USE ONLY:
PUBLIC AVAILABILITY TO BE DETERMINED UNDER 5 USC 552

FAA
DESIGNED BY:

CUSA CONSULTING LLC
6 MERRILL INDUSTRIAL DR, UNIT 6
HAMPTON, NH 03842
T. (603) 926-5895
WWW.CUSACONSULTING.COM

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DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
ATC - TECHNICAL OPERATIONS — WESTERN SERVICE AREA

SAIPAN ARSR FACILITY
3-PHASE POWER SERVICE ESTABLISHMENT
ISSUED FOR CONSTRUCTION DRAWINGS, 4/4/2025
INDEX OF SHEET, LEGEND AND ABBREVIATIONS

SAIPAN — GSN — CNMI

NO P.E. SEAL REQUIRED FOR THIS PROJECT

REVIEWED BY:	SUBMITTED BY:	APPROVED BY:
	PROJECT ENGINEER	MANAGER, INFRASTRUCTURE CENTER
ISSUED BY:	DESIGNED: A.J.G./C.U.C.	DATE: JCN:
	DRAWN: A.J.G.	DRAWING NUMBER: GSN-D-ARSR-ELD-G002 REV
	CHECKED: J.G.P.	

M:\Current Jobs - ELD Projects\GSN ARSR - ELD (Saipan ARSR, CNMI)\CUSA Drawings\Issued For Construction\GSN-D-ELD IFC.dwg
4/4/2025 6:45 AM ANDREW GRAY

00 71 00 CONTRACTING DEFINITIONS

OWNER: THE LEGAL OWNER OF THE SITE OR A REPRESENTATIVE OF THE OWNER, SPECIFICALLY AUTHORIZED TO REPRESENT THE OWNER IN MATTERS PERTAINING TO THIS PROJECT. FAA IS USED INTERCHANGEABLY OWNER.

LOCAL SSC: STAFF FROM THE FAA SYSTEM SUPPORT CENTER IN WHOSE JURISDICTION THE PROJECT IS LOCATED.

CONTRACTING OFFICER: THE FAA OFFICER ENGAGED TO ISSUE CONTRACTS, PAYMENTS AND CHANGE ORDERS FOR THE PROJECT.

PROJECT ENGINEER: THE FAA REPRESENTATIVE FROM ENGINEERING SERVICES, APPOINTED TO OVERSEE, REVIEW AND APPROVE TECHNICAL MATTERS ON THE PROJECT.

RESIDENT ENGINEER: THE FAA REPRESENTATIVE, SPECIFICALLY AUTHORIZED AND APPOINTED TO PHYSICALLY REPRESENT THE FAA ON-SITE DURING THE PROJECT.

CONTRACTOR: THE ENTITY, CORPORATION, OR PERSON AUTHORIZED TO PERFORM THE WORK SET FORTH IN THE DRAWINGS AND SCOPE OF WORK.

CONTRACTOR IS ALSO USED INTERCHANGEABLY WITH THE CONTRACTOR'S EMPLOYEE SPECIFICALLY AUTHORIZED AND APPOINTED TO REPRESENT THE CONTRACTOR ON SITE DURING PRODUCTION OF THE PROJECT.

CONTRACTOR IS ALSO USED INTERCHANGEABLY WITH SUBCONTRACTORS, WORKING UNDER THE DIRECT AUTHORIZATION AND SUPERVISION OF THE CONTRACTOR'S PROJECT MANAGER TO PERFORM WORK SPECIFIC TO THIS PROJECT. ALL REQUIREMENTS AND RESTRICTIONS APPLICABLE TO THE CONTRACTOR ARE ALSO APPLICABLE TO ALL SUBCONTRACTORS.

PROGRAM OFFICE: THE FAA POWER SERVICES SUBGROUP WHO IS AUTHORIZING, DIRECTING AND FUNDING THE PROJECT.

PROJECT: THE WORK LAID OUT IN THE DRAWINGS AND SCOPE OF WORK.

QUALIFIED FAA PERSONNEL: EITHER THE LOCAL FAA SSC PERSONNEL OR THE RESIDENT ENGINEER, IF THEY ARE SUITABLY TRAINED AND QUALIFIED TO PERFORM IDENTIFIED TASKS.

00 73 83 DISPUTE RESOLUTION

IN THE EVENT OF A DISCREPANCY, THE FOLLOWING SHALL BE THE ORDER OF PRECEDENCE, UNLESS MUTUALLY AGREED UPON:

1. ADDENDA OR CHANGE ORDERS SHALL TAKE PRECEDENCE OVER THE SPECIFICATIONS,
2. THE SPECIFICATIONS SHALL TAKE PRECEDENCE OVER THE DRAWINGS,
3. LISTED DIMENSIONS SHALL TAKE PRECEDENCE OVER SCALED DIMENSIONS,
4. DETAIL DRAWINGS SHALL TAKE PRECEDENCE OVER LAYOUT DRAWINGS,
5. SCHEDULES SHALL TAKE PRECEDENCE OVER OTHER DATA ON THE PLANS.

THE ENGINEER OF RECORD THAT PRODUCED THE PROJECT DRAWINGS HAS THE FIRST RIGHT OF INTERPRETATION OVER ANY DISCREPANCY, AMBIGUITY, OMISSION OR CONTRADICTION IN THE PROJECT DRAWINGS OR SPECIFICATIONS.

01 14 00 WORK RESTRICTIONS

GENERAL:

- CONTRACTOR SHALL NOT IMPEDE ACCESS TO THE SITE BY FAA TECHNICIANS, EVEN IF THE FACILITY IS TAKEN COMPLETELY OUT OF SERVICE DURING CONSTRUCTION. MEANS OF EGRESS FROM THE ALL LOCATIONS OF THE SITE SHALL NOT BE BLOCKED OR IMPEDED.
- CONSTRUCTION AREAS SHALL BE CLEANED AND SECURED DAILY. ALL DEBRIS AND TRASH SHALL BE BAGGED OR PLACED IN CONTAINERS AT THE END OF EACH DAY. GREAT CARE SHALL BE TAKEN NOT TO GENERATE ANY FOREIGN OBJECT DEBRIS (FOD).

OFF-AIRFIELD SITE:

THIS SITE IS CURRENTLY VACANT LAND, OPEN TO THE PUBLIC. THERE ARE NO GATES OR SECURITY FENCES OR ANY OTHER MEANS OF ACCESS RESTRICTIONS. THE SITE MAY BE USED FOR STAGING OF MATERIAL BUT OFFERS NO PROTECTION AGAINST THEFT AND VANDALISM. ONLY MATERIAL THAT IS NOT EASILY STOLEN (SUCH AS CONCRETE VAULTS) SHOULD BE STAGED ON-SITE. USE OF THE BUILDINGS FOR STORAGE IS NOT PERMITTED, DUE TO ONGOING ENVIRONMENTAL TESTING.

01 25 00 SUBSTITUTION PROCEDURES

THE CONTRACTOR MAY PROPOSE SUBSTITUTIONS OF MATERIAL DUE TO AVAILABILITY OF LOCAL SUPPLIERS OR ISSUES WITH LEAD TIME. PROPOSED MATERIAL SUBSTITUTIONS MUST BE EQUIVALENT IN PERFORMANCE AND VALUE OF THE ORIGINAL MATERIAL SPECIFIED IN THE DRAWINGS.

THE CONTRACTOR MAY ALSO PROPOSE ALTERNATIVE MATERIALS OR METHODS PRESCRIPTIVELY APPROVED BY FAA STANDARDS AND SPECIFICATIONS.

THE PROJECT ENGINEER AND CONTRACTING OFFICER ARE UNDER NO OBLIGATION TO APPROVE MATERIAL SUBSTITUTION REQUESTS.

ANY SUBSTITUTION REQUEST MUST INCLUDE DETAILED CUT-SHEETS FROM THE MANUFACTURER OF THE MATERIAL FOR REVIEW BY THE PROJECT ENGINEER.

01 26 00 CHANGE ORDERS

CHANGE ORDERS SHALL BE SUBMITTED WHEN;

- DIFFERING OR UNFORESEEN SITE CONDITIONS NOT DESCRIBED IN THE DRAWINGS ARE DISCOVERED,
- UPON MUTUAL AGREEMENT OF THE CONTRACTOR, RESIDENT ENGINEER AND FAA CONTRACTING OFFICER, ADDITIONAL ITEMS ARE ADDED, REMOVED OR MODIFIED FROM THE SCOPE OF WORK.

FOR ALL CHANGE ORDERS, THE CONTRACTOR SHALL NOTIFY THE RESIDENT ENGINEER AT THE FIRST PRACTICABLE OPPORTUNITY IF A CHANGE ORDER IS NEEDED. IF THE RESIDENT ENGINEER AGREES THAT A CHANGE ORDER IS NEEDED, THE RESIDENT ENGINEER SHALL NOTIFY THE PROJECT ENGINEER AND CONTRACTING OFFICER IN WRITING AT THE FIRST PRACTICABLE OPPORTUNITY.

THE CONTRACTOR SHALL PREPARE A CHANGE ORDER SUBMITTAL DESCRIBING THE MATERIALS, LABOR AND/OR SERVICES REQUIRED TO COMPLETE THE WORK. THE CHANGE ORDER SUBMITTAL SHALL CLEARLY IDENTIFY THE DIFFERENCE IN MATERIAL COST, LABOR COST AND THIRD-PARTY/SERVICE COST FOR THE CHANGE IN SCOPE.

THE CONTRACTOR SHALL ALSO REVISE AND RESUBMIT THE PROJECT SCHEDULE AND SUBMIT IT TO THE RESIDENT ENGINEER AND PROJECT ENGINEER AS SOON AS PRACTICABLE.

THE PROJECT ENGINEER SHALL AUTHORIZE THE CHANGE ORDER WORK IN WRITING AND PROVIDE NOTICE OF ACCEPTANCE OR REJECTION TO THE RESIDENT ENGINEER AND CONTRACTOR.

01 32 16 CONSTRUCTION PROGRESS SCHEDULE

PRIOR TO THE PRE-CONSTRUCTION MEETING, THE CONTRACTOR SHALL DEVELOP AND SUBMIT A CRITICAL PATH METHOD SCHEDULE FOR THE PROJECT, IDENTIFYING THE ANTICIPATED START DATE, ALL MAJOR CONSTRUCTION ACTIVITIES, MAJOR MILESTONES AND THE ANTICIPATED COMPLETION DATE. THE SCHEDULE SHALL BE ONLY UPDATED AND RESUBMITTED DUE TO MAJOR DELAYS, CHANGE ORDERS OR REVISIONS OF MAJOR MILESTONES SUCH AS CUTOVERS.

THROUGHOUT THE DURATION OF THE PROJECT, THE CONTRACTOR SHALL DEVELOP A TWO-WEEK LOOK AHEAD SCHEDULE AND DISTRIBUTE IT TO THE RESIDENT ENGINEER AND PROJECT ENGINEER. THE TWO-WEEK LOOK-AHEAD SCHEDULE SHALL BE UPDATED AND SUBMITTED WEEKLY, BEFORE THE START OF WORK EACH MONDAY.

01 41 00 REGULATORY REQUIREMENTS

THE FOLLOWING CODES SHALL GOVERN THE DESIGN AND EXECUTION OF THIS PROJECT:

- LATEST EDITION OF ASCE 7 MINIMUM DESIGN LOADS AND ASSOCIATED CRITERIA FOR BUILDINGS AND OTHER STRUCTURES (ASCE/SEI 7-22).
- LATEST EDITION OF ACI 318 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE AND COMMENTARY (ACI 318-19, REAPPROVED 2022).
- LATEST EDITION OF NFPA 70 NATIONAL ELECTRIC CODE (NEC 2023).
- LATEST EDITION OF IEEE NATIONAL ELECTRICAL SAFETY CODE (NESC 2023).
- LATEST EDITION OF NFPA 780 STANDARD FOR THE INSTALLATION OF LIGHTNING PROTECTION SYSTEMS (NFPA 780 2023).
- LATEST EDITION OF FAA SPECIFICATION 1217 ELECTRICAL WORK, PREMISES WIRING (FAA-C-1217H CHANGE #1).
- LATEST EDITION OF FAA SPECIFICATION 1391 INSTALLATION, TERMINATION, SPLICING, AND TRANSIENT/SURGE PROTECTION OF UNDERGROUND ELECTRICAL DISTRIBUTION SYSTEM POWER CABLES (FAA-C-1391F).
- LATEST EDITION OF FAA STANDARD 19 LIGHTNING AND SURGE PROTECTION, GROUNDING, BONDING, AND SHIELDING REQUIREMENTS FOR FACILITIES AND ELECTRONIC EQUIPMENT (FAA-STD-19G).

IN THE EVENT OF A DISCREPANCY OR CONTRADICTION BETWEEN ANY OF THE ABOVE-MENTIONED CODES, THE MORE STRINGENT REQUIREMENT SHALL BE FOLLOWED.

CONTRACTOR SHALL PROCURE ALL AIRPORT-SPECIFIC OR LOCALITY-SPECIFIC PERMITS REQUIRED FOR THIS PROJECT. SEE SECTION 01 35 43 ENVIRONMENTAL PROCEDURES FOR LIST OF REQUIRED ENVIRONMENTAL PERMITS TO BE SOUGHT FOR THIS PROJECT.

BUILD AMERICA, BUY AMERICA ACT:

- ALL IRON AND STEEL USED IN THE PROJECT - INCLUDING MANUFACTURING PROCESSES FROM THE INITIAL MELTING STATE THROUGH THE APPLICATION OF COATINGS - SHALL BE PRODUCED IN THE UNITED STATES.
- ALL MANUFACTURED PRODUCTS USED IN THE PROJECT SHALL BE PRODUCED IN THE UNITED STATES. THIS MEANS THE MANUFACTURED PRODUCT ITSELF WAS BUILT IN THE UNITED STATES, AND THE COST OF THE COMPONENTS OF THE MANUFACTURED PRODUCT MINED, PRODUCED, OR MANUFACTURED IN THE UNITED STATES IS GREATER THAN 55 PERCENT OF THE TOTAL COST OF ALL COMPONENTS OF THE MANUFACTURED PRODUCT. (NOTE: IN SOME INSTANCES, OTHER LAWS OR REGULATIONS THAT DETERMINE MINIMUM DOMESTIC CONTENT APPLY.)
- ALL CONSTRUCTION MATERIALS SHALL BE MANUFACTURED IN THE UNITED STATES. THIS MEANS THAT ALL MANUFACTURING PROCESSES FOR THE CONSTRUCTION MATERIAL OCCURRED IN THE UNITED STATES.
- WAIVERS MAY BE REQUESTED FOR NON-AVAILABILITY, UNREASONABLE COST OR INCONSISTENCY WITH PUBLIC INTEREST.

01 64 00 OWNER-FURNISHED PRODUCTS

THIS PROJECT DOES NOT INCLUDE ANY GOVERNMENT FURNISHED MATERIAL (GFM).

THIS PROJECT INCLUDES MATERIAL THAT SHALL BE PURCHASED, FURNISHED, INSTALLED AND OWNED BY THE UTILITY (COMMONWEALTH UTILITY CORPORATION, **C.U.C.**). THE UTILITY SHALL ORDER ADDITIONAL POLES FOR DESTRUCTIVE TESTING, AS REQUIRED BY THEIR SPECIFICATIONS.

CONTACT INFORMATION FOR C.U.C. ELECTRICAL ENGINEERS:

JONATHAN CAMACHO JONATHAN.CAMACHO@CUCGOV.ORG

REY DARAG REY.DARAG@CUCGOV.ORG

01 78 00 CLOSEOUT SUBMITTALS

THE CONTRACTOR SHALL GENERATE THREE (3) COPIES OF REDLINED DRAWINGS DURING CONSTRUCTION AND TURN THEM OVER AS FOLLOWS:

- ONE COPY FOR THE CONTRACTOR TO RETAIN,
- ONE COPY FOR THE RESIDENT ENGINEER TO TURNOVER TO FAA ENGINEERING SERVICES,
- ONE COPY THAT SHALL BE LEFT ON-SITE FOR REFERENCE BY THE LOCAL SSC TECHNICIANS.

  OR

- THE CONTRACTOR MAY ELECT TO CREATE DIGITAL REDLINES IN PDF FORMAT AND DISTRIBUTE THE REDLINED DRAWINGS IN THIS FORMAT, BUT STILL MUST LEAVE A PRINTED COPY OF THE DIGITAL PRINTS OR A REDLINED SET OF THE DESIGN PRINTS ON-SITE.

IF THE ENGINEER IS ALSO THE CONTRACTOR, THEN THE CONTRACTOR SHALL PRODUCE AS-BUILT DRAWINGS AND SUBMIT THEM TO THE PROJECT ENGINEER WITHIN 30 DAYS OF ALL PUNCHLIST ITEMS BEING COMPLETE. AS-BUILT DRAWINGS SHALL BE DELIVERED IN PDF FORMAT AND AUTOCAD DWG, 2010 FILE FORMAT.

THE RESIDENT ENGINEER SHALL PROVIDE THE CONTRACT ACCEPTANCE INSPECTION (CAI) FORM AND FILL IT OUT PRIOR TO THE DATE OF THE CAI WALKTHROUGH. ANY REMAINING PUNCHLIST ITEMS SHALL BE WRITTEN ON THE CAI FORM OR A CAI FORM EXTENSION AND PROVIDED TO THE CONTRACTOR IMMEDIATELY. THE RESIDENT ENGINEER SHALL SIGN THE CAI FORM, EVEN IF THERE ARE OUTSTANDING PUNCHLIST ITEMS.

THE CAI CAN BE PERFORMED CONCURRENTLY WITH THE JOB ACCEPTANCE INSPECTION (JAI). IF THE JAI CANNOT BE SCHEDULED FOR THE SAME DAY AS THE CAI, IT SHALL NOT DELAY THE PERFORMANCE OF THE CAI WITH THE RESIDENT ENGINEER AND THE CONTRACTOR.

01 33 16 DESIGN DATA

FOR SUBCONTRACTORS PREPARING BIDS FOR THIS PROJECT OR FAA PERSONNEL PERFORMING INDEPENDENT GOVERNMENT COST ESTIMATES FOR THIS PROJECT;

THE QUANTITIES LISTED IN THESE PLANS ARE CAREFULLY CALCULATED ESTIMATES BUT MUST NOT BE RELIED UPON AS AUTHORITATIVE OR 100% ACCURATE. THE PREVIOUSLY MENTIONED ENTITIES MUST INDEPENDENTLY ESTIMATE QUANTITIES OF MATERIAL BASED UPON THESE DRAWINGS, DATED 4/4/2025.

NO PRICE ADJUSTMENT WILL BE GRANTED TO SUBCONTRACTORS IF THEY CREATE ESTIMATES USING THESE PLANS WITHOUT AN INDEPENDENT ESTIMATE AND CALCULATION.

ADDITIONAL FASTENERS, FITTINGS, ASSOCIATED PARTS, PAINT, CAULKING, AND OTHER INCIDENTAL PARTS/MATERIAL WILL BE REQUIRED WHICH ARE NOT LISTED IN ANY ESTIMATE OF QUANTITIES IN THIS PLAN SET.

01 35 43 ENVIRONMENTAL PROCEDURES AND PERMITTING

THIS PLAN SET IS INTENDED TO PRIMARILY DEPICT THE WORK TO PROVIDE A NEW 3-PHASE POWER SERVICE TO A PROPOSED FAA ARSR FACILITY. THE ARSR FACILITY IS NOT YET DESIGNED. TO ALLOW FOR COMPREHENSIVE EVALUATION OF THE REQUIRED ENVIRONMENTAL PERMITS NEEDED TO INITIATE CONSTRUCTION OF THE POWER FEED, SUFFICIENT DETAIL HAS BEEN GATHERED AS TO THE IMPACTS OF THE ARSR SITE CONSTRUCTION AS WELL.

THE FOLLOWING FEDERAL FILINGS WILL BE INITIATED DURING THE CONTINUING DESIGN/PLANNING PROCESS OF THE POWER PORTION:

- SECTION 7 WILDLIFE CONSULTATION FOR ALL PHASES OF THE PROJECT.
- SECTION 106 HISTORICAL CONSULTATION FOR ALL PHASES OF THE PROJECT.
- CNMI DCRM FEDERAL CONSISTENCY REVIEW FOR ALL PHASES OF THE PROJECT.

AFTER REVIEW AND APPROVAL OF THESE CONSULTATIONS, A TASK ORDER WILL BE ISSUED TO BEGIN CONSTRUCTION OF THE POWER FEED. PRIOR TO INITIATING ANY GROUND-DISTURBING ACTIVITIES, THE ELD INSTALLATION CONTRACTOR SHALL FILE:

- BECQ ONESTART EARTHMOVING PERMIT, LIMITED TO THE POWER INSTALLATION PORTION ONLY.

THERE ARE ISSUES OF KNOWN AND SUSPECTED CONTAMINANTS FOR THE ARSR FACILITY SITE. DURING THE DESIGN AND ANALYSIS PHASE OF THE ARSR FACILITY, THE FAA SHALL PERFORM THE FOLLOWING:

- UPDATE THE ENVIRONMENTAL PHASE I SITE ASSESSMENT OF THE PROPERTY
- ENVIRONMENTAL PHASE II SITE INVESTIGATION OF SOIL, WATER AND STRUCTURES SLATED FOR DEMOLITION TO CONSTRUCT THE ARSR FACILITY.
- HISTORICAL STUDY OF THE PACIFIC BARRIER RADAR ANTENNA.
- NEPA ENVIRONMENTAL ASSESSMENT REPORT.

THESE STUDIES WILL PROVIDE THE NECESSARY DATA TO PLAN FOR MITIGATION AND REMEDIATION OF ANY CONTAMINANTS RELATING TO THE ARSR CONSTRUCTION. THIS DATA WILL BE USED TO PREPARE AND FILE A BECQ ONESTART EARTHMOVING PERMIT SPECIFICALLY FOR THE ARSR CONSTRUCTION.

02 00 00 EXISTING CONDITIONS

THE CONTRACTOR AND RESIDENT ENGINEER SHALL DOCUMENT ALL RELEVANT EXISTING CONDITIONS PRIOR TO BEGINNING ANY WORK ON THE PROJECT. CONTRACTOR AND RESIDENT ENGINEER SHALL IMMEDIATELY RECORD ANY DISCREPANCY FOUND IN THE DRAWINGS, OR ANY DIFFERING SITE CONDITIONS THAT WILL AFFECT THE PERFORMANCE OF THE WORK, OR THE FINAL AS-BUILT RECORDS.

THE CONTRACTOR SHALL RESTORE ALL STRUCTURES, SURFACES AND FINISHES TO THEIR ORIGINAL CONDITIONS.

FOR OFFICIAL USE ONLY:
PUBLIC AVAILABILITY TO BE DETERMINED UNDER 5 USC 552

FAA
DESIGNED BY:

CUSA CONSULTING LLC
6 MERRILL INDUSTRIAL DR. UNIT 6
HAMPTON, NH 03842
T. (603) 926-5895
WWW.CUSACONSULTING.COM

REV	APPROVED	DESCRIPTION	JCN	DATE	APVD

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
ATC - TECHNICAL OPERATIONS WESTERN SERVICE AREA

SAIPAN ARSR FACILITY
3-PHASE POWER SERVICE ESTABLISHMENT
ISSUED FOR CONSTRUCTION DRAWINGS, 4/4/2025
GENERAL PROJECT SPECIFICATIONS

SAIPAN GSN CNMI

NO P.E. SEAL REQUIRED FOR THIS PROJECT

REVIEWED BY:	SUBMITTED BY:	APPROVED BY:
	PROJECT ENGINEER	MANAGER, INFRASTRUCTURE CENTER
ISSUED BY:	DESIGNED: A.J.G./C.U.C.	DATE: JCN:
	DRAWN: A.J.G.	DRAWING NUMBER: GSN-D-ARSR-ELD-G003 REV
	CHECKED: J.G.P.	

M:\Current Jobs - ELD Projects\GSN ARSR - ELD (Saipan ARSR, CNMI)\CUSA Drawings\Issued For Construction\GSN-D-ELD IFC.dwg
4/4/2025 6:45 AM ANDREW GRAY

01 89 00 SITE CONSTRUCTION PERFORMANCE REQUIREMENTS

FACILITY RISK CATEGORY:	IV
DESIGN WIND SPEED:	220 MPH
WIND-BORNE DEBRIS REGION:	YES
FEMA FLOOD ZONE:	NONE, ABOVE THE 500-YEAR FLOOD ELEVATION
0.2S SEISMIC DESIGN VALUE (S_{DS}):	1.38
1.0S SEISMIC DESIGN VALUE (S_{D1}):	0.41
SEISMIC DESIGN CATEGORY:	D
BUILDING CODE FROST DEPTH:	N/A
COLD REGION:	NO
ARID OR SEMI-ARID REGION:	NO
TROPICAL/COSTAL REGION:	YES

03 30 00 CAST-IN-PLACE CONCRETE

SUMMARY: THIS SECTION COVERS ALL CAST-IN-PLACE CONCRETE PRODUCTS TO BE FURNISHED AND INSTALLED FOR THIS PROJECT.

1. MEASUREMENT AND PAYMENT:

1.1. MEASUREMENT AND PAYMENT FOR CAST-IN-PLACE CONCRETE SHALL BE PER CUBIC YARD.

1.2. FORMBOARDS, TIE WIRE, WATER, PREP WORK, CONCRETE DELIVERY, CURING AND FINISHING SHALL BE INCIDENTAL TO THIS PAY ITEM.

2. MATERIALS:

2.1. ALL NORMAL STRENGTH (2500-5000PSI) CONCRETE MIXES SHALL HAVE THE FOLLOWING MIX CHARACTERISTICS:

2.1.1.	WATER/CEMENT RATIO:	0.40-0.45
2.1.2.	AIR CONTENT, WITHOUT AIR ENTRAINMENT:	2.0% - 5.0%
2.1.3.	SLUMP:	4" +/- 1"

2.2. "SIDEWALK CONCRETE" SHALL HAVE A 28-DAY COMPRESSIVE STRENGTH OF 3000 PSI.

2.3. "DUCT BANK CONCRETE" SHALL MEET THE FOLLOWING SPECIFICATIONS:

2.3.1. THE COMPRESSIVE STRENGTH OF MAY BE AS LOW AS 2000PSI.

2.3.2. SLUMP MAY BE AS HIGH AS 9".

2.3.3. THE MAXIMUM AGGREGATE SIZE SHALL BE 3/4".

2.4. CONCRETE BACKFILL:

2.4.1. CONCRETE BACKFILL MAY BE USED TO FILL VOIDS OR ROAD CROSSINGS WHERE COMPACTION WOULD OTHERWISE BE IMPRACTICABLE. A MIX CERTIFIED BY THE STATE DOT IN THE PROJECT LOCALITY SHALL BE SELECTED. CONCRETE BACKFILL MAY BE CALLED "CONTROLLED LOW STRENGTH MATERIAL," "FLOWABLE FILL," "CEMENT SLURRY" OR OTHER TRADE NAMES.

2.4.2. THE MAXIMUM COMPRESSIVE STRENGTH OF CONCRETE BACKFILL SHALL BE 150 PSI. THIS IS THE TOP LIMIT WHERE IT IS CONSIDERED AN "EXCAVATABLE" PRODUCT.

3. EXECUTION:

3.1. CONCRETE:

3.1.1. THE CHUTE SHALL BE POSITIONED AS LOW AS PRACTICABLE TO PREVENT MOVEMENT OR FLOTATION OF FORMWORK, REINFORCEMENT OR DUCTS.

4. NOTIFICATIONS, SUBMITTALS AND DOCUMENTATION:

4.1. CONTRACTOR SHALL PROVIDE THE PLANT DOCUMENTATION FOR EACH CONCRETE MIX TO BE USED, PRIOR TO ORDERING ANY FOR THE PROJECT. COPIES SHALL BE FURNISHED TO THE RESIDENT ENGINEER OR PROJECT ENGINEER IF REQUESTED.

4.2. CONTRACTOR SHALL RETAIN A COPY OF EACH BATCH TICKET FROM EACH LOAD OF CONCRETE DELIVERED TO THE SITE. COPIES SHALL BE FURNISHED TO THE RESIDENT ENGINEER IF REQUESTED.

4.3. NO TESTS FOR BREAKING STRENGTH, TEMPERATURE, ENTRAINED AIR, SLUMP OR OTHER FIELD CHECKED ITEMS ARE REQUIRED FOR THIS PROJECT.

26 05 43 UNDERGROUND DUCTS AND RACEWAYS FOR ELECTRICAL SYSTEMS

SUMMARY: THIS SECTION COVERS BURIED ELECTRICAL CONDUITS AND DUCT BANKS TO BE INSTALLED FOR THIS PROJECT.

1. MEASUREMENT AND PAYMENT:

1.1. MEASUREMENT AND PAYMENT FOR BURIED ELECTRICAL DUCTS SHALL BE PER LINEAR FOOT.

1.2. EXCAVATION, CONCRETE FOR DUCT BANKS, GUARD WIRE INSTALLATION, SPOILS HAUL-OFF AND RESTORATION IS COVERED UNDER OTHER PAY ITEM SECTIONS.

1.3. INSTALLATION OF DETECTABLE WARNING TAPE SHALL BE INCIDENTAL TO THIS SECTION AND INCLUDED IN THE PER LINEAR FOOT PRICE OF BURIED CONDUIT. THE MATERIAL SHALL BE QUANTIFIED SEPARATELY SINCE ONE SECTION OF TAPE MAY PROVIDE COVERAGE FOR MULTIPLE CONDUITS.

2. MATERIALS:

2.1. CONDUIT SIZES, TYPES AND RATINGS ARE CALLED OUT IN THE DRAWINGS. NOMINAL PIPE SIZES AND COMMON TRADE NAMES ARE USED IN THE DRAWINGS.

2.2. ALL BURIED CONDUIT MUST BE EITHER SCH-80 PVC OR PVC-COATED RIGID GALVANIZED STEEL (RGS) OR CONCRETE ENCASED SCH-40 PVC.

2.3. CONCRETE ENCASED DUCTS SHALL BE PROVIDED WITH INTERLOCK SPACERS EVERY FIVE (5) FEET, MAXIMUM. IF FLOTATION OF DUCTS IS AN ISSUE, REBAR HOLD-DOWNS SHALL BE INSTALLED PRIOR TO CONCRETE POURING.

2.4. ALL CONDUITS MUST HAVE A MINIMUM SOIL COVER OF 24 INCHES.

2.5. CONDUITS TERMINATED IN VAULTS MUST HAVE PROTECTIVE "END-BELL" FITTINGS INSTALLED TO PROTECT THE CABLE DURING PULLING.

2.6. MAGNETICALLY DETECTABLE WARNING TAPE SHALL BE INSTALLED A MINIMUM OF 12" ABOVE THE CONDUIT OR DUCT BANK CONCRETE.

3. EXECUTION:

3.1. PVC CONDUITS SHALL BE GLUED TOGETHER PRIOR TO BACKFILLING.

3.2. PVC-COATED RGS CONDUITS SHALL UTILIZE THREADED COUPLINGS, TIGHTENED WITH A STRAP WRENCH UNTIL REFUSAL. PVC-COATED RGS CONDUIT SWEEPS OF 30 DEGREES OR MORE SHALL UTILIZE FACTORY COATED ELBOWS. FIELD BENDING OF PVC-COATED RGS IS ONLY PERMITTED FOR SMALL FIELD ROUTING BENDS. FIELD BENDING IS NOT PERMITTED FOR CONDUITS TWO (2) INCHES IN DIAMETER OR LARGER.

3.3. TRENCHES SHALL BE EXCAVATED, BACKFILLED, COMPACTED AND RESTORED IN ACCORDANCE WITH SECTION 31 23 00 EXCAVATION AND FILL.

4. NOTIFICATIONS, SUBMITTALS AND DOCUMENTATION:

4.1. NO SUBMITTALS ARE REQUIRED UNLESS A SUBSTITUTION OR CHANGE ORDER IS REQUESTED.

31 05 16 AGGREGATES FOR EARTHWORK

SUMMARY: THIS SECTION COVERS ALL IMPORTED AGGREGATES FOR EARTHWORK TO BE PLACED UNDERNEATH STRUCTURES AND ROADWAYS.

1. MEASUREMENT AND PAYMENT:

1.1. THE PAY UNIT OF AGGREGATES SHALL BE PER CUBIC YARDS. CONTRACTOR MUST INDEPENDENTLY ESTIMATE THE AMOUNT AGGREGATES NEEDED. DELIVERY, STOCKPILING, COMPACTION AND HAUL-OFF SHALL BE INCLUDED IN THE PER CUBIC YARD PRICE OF ALL AGGREGATES.

2. MATERIALS:

2.1. "BASE COURSE" SHALL CONSIST OF CRUSHED GRAVEL AGGREGATES THAT MEET THE FAA GRADATION OF FAA P-209. OTHER PRODUCTS APPROVED BY THE STATE DOT AS "TOP COURSE," "STRUCTURAL FILL," "DENSE GRADED AGGREGATE," "CRUSH AND RUN" OR OTHER TERMS FOR CRUSHED STONE MIXTURES MAY BE USED SUBJECT TO APPROVAL. THE PREFERRED GRADATION IS LISTED BELOW.

2.1.1. SIEVE DESIGNATION:	% PASSING
2 INCH (50 MM)	100
1-1/2 INCH (37.5MM)	95-100
1 INCH (25 MM)	70-95
3/4 INCH (19 MM)	55-85
NO. 4 (4.75MM)	30-60
NO. 40 (425 MM)	10-30
NO 200. (75 MM)	0-10

2.2. IN COLD REGIONS (AIR FREEZING INDEX ABOVE 1500 FOR THE 100-YEAR RETURN PERIOD), ALL AGGREGATES SHALL CONTAIN NO MORE THAN 6% PASSING THE NO. 200 SIEVE. LISTED "NON-FROST SUSCEPTIBLE" PRODUCTS MUST BE USED.

3. EXECUTION:

3.1. ALL IMPORTED AGGREGATES MUST BE SPREAD IN VERTICAL LIFTS AND COMPACTED THOROUGHLY. EACH LIFT OF SUB-BASE OR BASE COURSE MUST BE SUBJECT TO AT LEAST 4 PASSES OF THE COMPACTION EQUIPMENT.

3.2. FOR AGGREGATES UNDER LOAD-BEARING STRUCTURES:

3.2.1. IF USING HAND-HELD COMPACTION EQUIPMENT SUCH AS A PLATE COMPACTOR OR "JUMPING JACK," LIFT HEIGHT SHALL NOT EXCEED 4 INCHES.

3.2.2. IF USING SELF-PROPELLED COMPACTION EQUIPMENT WITH A GROSS WEIGHT EXCEEDING OF 3000 LBS, LIFT HEIGHT SHALL NOT EXCEED 8 INCHES.

3.2.3. IF WATER IS USED TO AID IN COMPACTION, IT SHALL BE CONSTRAINED SO THAT WATER DOES NOT PUDDLE ON THE SURFACE OR PUMP OUT OF THE AGGREGATE LIFT DURING COMPACTION.

4. NOTIFICATIONS, SUBMITTALS AND DOCUMENTATION:

4.1. NO DENSITY TESTING OF IN-SITU SOILS OR IMPORTED AGGREGATES SHALL BE REQUIRED OR PERFORMED.

4.2. CONTRACTOR SHALL RETAIN A BATCH TICKET COPY FROM EVERY LOAD OF AGGREGATES DELIVERED TO THE SITE. COPIES SHALL BE FURNISHED TO THE RESIDENT ENGINEER IF REQUESTED.

4.3. IF A DIFFERING MIX OTHER THAN THE LISTED FAA GRADATIONS SHALL BE USED, THE PRODUCT GRADATIONS SHALL BE SUBMITTED TO THE RESIDENT ENGINEER AND PROJECT ENGINEER FOR REFERENCE.

31 05 19.13 GEOTEXTILES FOR EARTHWORK

SUMMARY: THIS SECTION COVERS ALL GEOTEXTILES TO BE INSTALLED FOR THIS PROJECT.

1. MEASUREMENT AND PAYMENT:

1.1. MEASUREMENT AND PAYMENT FOR THIS PAY ITEM SHALL BE PER SQUARE FOOT.

2. MATERIALS:

2.1. ALL FABRIC SHALL BE INERT TO COMMONLY ENCOUNTERED CHEMICALS, HYDROCARBONS, MILDEW AND ROT RESISTANT, RESISTANT TO ULTRAVIOLET LIGHT EXPOSURE, INSECT AND RODENT RESISTANT AND FUEL RESISTANT,

2.2. "SEPARATION GRADE GEOTECHNICAL FABRIC" SHALL BE NON-WOVEN MATERIAL, INSTALLED AS SHOWN IN THE DRAWINGS. THE PREFERRED PRODUCT IS MIRAFI 140N.

3. EXECUTION:

3.1. PREPARE SUBGRADE AS SPECIFIED IN SECTION 31 23 00 EXCAVATION AND FILL.

3.2. GRADE TO A SMOOTH SURFACE, LEAVING NO SURFACE UNDULATIONS OR IRREGULARITIES THAT THE FABRIC CAN STRETCH AND "BRIDGE" OVER.

3.3. REMOVE ANY LOOSE AND ANGULAR MATERIALS, ROCKS AND STICKS THAT MAY DAMAGE THE FABRIC.

4. NOTIFICATIONS, SUBMITTALS AND DOCUMENTATION:

4.1. NO SUBMITTALS ARE REQUIRED UNLESS A SUBSTITUTION OR CHANGE ORDER IS REQUESTED.

31 23 00 EXCAVATION AND FILL

SUMMARY: THIS SECTION COVERS ALL EXCAVATION AND EARTHWORK REQUIRED FOR THIS PROJECT.

1. MEASUREMENT AND PAYMENT:

1.1. MEASUREMENT AND PAYMENT FOR THIS SECTION SHALL BE:

1.1.1. INCIDENTAL TO DEMOLITION WORK REQUIRING EXCAVATION,

1.1.2. INCIDENTAL TO INSTALLATION PAY ITEMS SUCH AS VAULTS, GROUNDING ITEMS AND OTHER STRUCTURES,

1.1.3. PER LINEAR FOOT FOR TRENCHING,

1.1.4. IF REQUIRED BY THE DRAWINGS, TOPSOIL, HAND-SEEDING AND/OR HYDROSEEDING SHALL BE MEASURED AND PAID AS ALL REQUIRED.

1.2. DELIVERY, STOCKPILING, COMPACTION AND HAUL-OFF SHALL BE INCLUDED IN THE PRICING OF EXCAVATION AND FILL.

2. MATERIALS:

2.1. FILL OR BACKFILL:

2.1.1. "FILL" REFERS TO MATERIAL USED TO FILL LOW-LYING AREAS OR ESTABLISH FINAL GRADES SURROUNDING STRUCTURES OR IMPACTED AREAS.

2.1.2. "BACKFILL" REFERS TO MATERIAL USED TO BACKFILL EXCAVATED TRENCHES OR OTHER AREAS NOT UNDER ANY LOAD BEARING STRUCTURE.

2.1.3. SUITABLE FILL OR BACKFILL MATERIAL SHALL CONSIST OF SOILS AND/OR AGGREGATES FREE OF ORGANIC MATERIAL AND FREE OF STONES LARGER THAN 1/2 OF THE PROPOSED LIFT DEPTH. NATIVE SOIL (OVERBURDEN AND SIDECAST MATERIAL FROM EXCAVATION) MAY BE USED IF IT MEETS THESE REQUIREMENTS.

2.1.4. SUB-BASE OR BASE COURSE MAY BE USED FOR FILL OR BACKFILL IF ELECTED BY THE CONTRACTOR.

2.1.5. FILL OR BACKFILL DOES NOT NEED TO BE NON-FROST SUSCEPTIBLE MATERIAL, EVEN IN COLD REGIONS.

3. EXECUTION:

3.1. UTILITY LOCATING AND PROTECTION:

3.1.1. THE CONTRACTOR OR SUBCONTRACTOR PERFORMING EXCAVATION SHALL CALL IN PUBLIC LOCATES ("DIAL 811" OR EQUIVALENT) IN THE LOCALITY OF THE PROJECT.

3.1.2. THE CONTRACTOR OR SUBCONTRACTOR PERFORMING EXCAVATION SHALL ALSO RETAIN A THIRD-PARTY UTILITY LOCATOR TO SWEEP THE TRENCHLINES AND EXCAVATION AREAS WITH GROUND PENETRATING RADAR PRIOR TO EXCAVATION.

3.1.3. ALL EXCAVATION WITHIN TWO (2) FEET OF IDENTIFIED OR SUSPECTED UTILITIES SHALL BE PERFORMED BY VACUUM EXCAVATION OR BY HAND TOOLS UNTIL THE UTILITY HAS BEEN LOCATED, EXPOSED AND PROTECTED.

3.2. EXCAVATION SAFETY:

3.2.1. NO PERSONNEL SHALL ENTER AN EXCAVATION DEEPER THAN 5 FEET WITHOUT AN EXCAVATION SAFETY PLAN BEING DEVELOPED AND IMPLEMENTED. THE PLAN SHALL BE COMPLIANT WITH CFR PART 1926, PART P. MEASURES MAY INCLUDE SLOPED EXCAVATION, BENCHED EXCAVATION, TRENCH BOXES, SHORING AND/OR OTHER MEANS AS DETERMINED BY A QUALIFIED PERSON.

3.2.2. ALL EXCAVATIONS 4 FEET OR DEEPER SHALL HAVE A MEANS OF EGRESS SPACED NO MORE THAN 50 FEET APART.

3.2.3. ALL TRENCHES AND OPEN EXCAVATIONS SHALL BE CLOSED AT THE END OF EACH WORK DAY, UNLESS APPROVED BY THE RESIDENT ENGINEER.

3.3. COMPACTION:

3.3.1. ALL FILL AND/OR BACKFILL SHALL BE SPREAD AND COMPACTED IN VERTICAL LIFTS:

3.3.1.1. IF USING HAND-HELD COMPACTION EQUIPMENT SUCH AS A PLATE COMPACTOR OR "JUMPING JACK," LIFT HEIGHT SHALL NOT EXCEED 6 INCHES.

3.3.1.2. IF USING SELF-PROPELLED COMPACTION EQUIPMENT WITH A GROSS WEIGHT EXCEEDING OF 3000 LBS, LIFT HEIGHT SHALL NOT EXCEED 12 INCHES.

3.3.2. COMPACTION OF AGGREGATES IS COVERED BY SECTION 31 05 16 AGGREGATES FOR EARTHWORK.

3.4. STOCKPILES OF ALL EARTHWORK MATERIALS SHALL BE KEPT SO THAT DUST DOES NOT BLOW ANYWHERE NEAR ACTIVE RUNWAYS, TAXIWAYS, APRONS OR ROADS. EROSIBLE MATERIALS TO BE LEFT FOR MORE THAN 3 DAYS UNATTENDED SHALL BE COVERED.

3.5. FINAL GRADING OF TRENCHES AND EXCAVATED AREAS SHALL MATCH EXISTING GRADES AND BE SMOOTHED, RAKED AND COMPACTED TO CREATE A SEAMLESS TOP SURFACE.

3.6. FINAL GRADING AROUND ALL STRUCTURES INSTALLED FOR THIS PROJECT SHALL BE GRADED TO PROVIDE 1% POSITIVE DRAINAGE AWAY FROM STRUCTURES FOR 10 FEET. GRADING MAY BE FIELD ADJUSTED DUE TO EXISTING SLOPES AND UNIQUE SITE CONDITIONS.

4. NOTIFICATIONS, SUBMITTALS AND DOCUMENTATION:

4.1. CONTRACTOR SHALL SUBMIT SOURCE MATERIAL DOCUMENTATION IF FILL OR BACKFILL IS TO BE BROUGHT IN FOR THIS PROJECT.

4.2. IF EXCAVATION DEPTH BEYOND 5 FEET IS ANTICIPATED, THE CONTRACTOR MUST SUBMIT AN EXCAVATION SAFETY PLAN, PREPARED BY A QUALIFIED PERSON.

33 05 63 CONCRETE VAULTS AND CHAMBERS

SUMMARY: THIS SECTION COVERS CONCRETE VAULTS FOR MEDIUM-VOLTAGE ELECTRICAL EQUIPMENT, TO BE FURNISHED AND INSTALLED FOR THIS PROJECT.

1. MEASUREMENT AND PAYMENT:

1.1. MEASUREMENT AND PAYMENT FOR CONCRETE VAULTS AND CHAMBERS SHALL BE PER EACH.

1.2. EXCAVATION AND INSTALLATION OF GEOTEXTILES, AGGREGATES, GROUNDING AND SITE RESTORATION SHALL BE INCIDENTAL TO THIS PAY ITEM. MATERIAL COSTS FOR THE OTHER ITEMS SHALL BE QUANTIFIED UNDER THEIR RESPECTIVE PAY ITEMS.

2. MATERIALS:

2.1. VAULTS ARE ITEMIZED ON THE DRAWINGS (E-SHEETS, 500 SERIES). THE PREFERRED MANUFACTURER IS CONCAST.

2.2. VAULTS SHALL BE FIBERGLASS-REINFORCED CONCRETE SPECIFICALLY MADE FOR THE MEDIUM VOLTAGE EQUIPMENT TO BE SUPPORTED.

2.3. STRENGTH REQUIREMENTS:

2.3.1. VAULTS FOR TRANSFORMERS SHALL HAVE A LISTED LOAD CAPACITY OF AT LEAST 10,000 LBS, OR 1.5X THE WEIGHT OF THE PROPOSED EQUIPMENT.

3. EXECUTION:

3.1. CONTRACTOR SHALL OVER-EXCAVATE SUFFICIENTLY TO INSTALL GEOTEXTILES AND A SIX (6) INCH BED OF BASE COURSE BENEATH THE STRUCTURE. THE SUBGRADE SHALL BE RAKED SMOOTH AND COMPACTED AND THE IMPORTED AGGREGATES SHALL BE COMPACTED PER SECTION 31 05 16 AGGREGATES FOR EARTHWORK. BEDDING AROUND THE MANHOLE SHALL BE PERMITTED TO BE BACKFILL.

3.2. THE VAULT SIDEWALL SHALL BE CORE-DRILLED TO ALLOW FOR CONDUIT ENTRY. CONCRETE FROM CONCRETE-ENCASED DUCT BANK SHALL BE USED TO FILL THE HOLE AND SEAL IT. FOR OTHER CONDUIT SETUPS, NON-SHRINK GROUT SHALL BE USED TO SEAL THE HOLE.

3.3. CONTRACTOR SHALL PROVIDE "END-BELL" FITTINGS ON THE CONDUITS TERMINATING INSIDE THE VAULT TO PROTECT THE CABLES DURING PULLING.

3.4. THE MEDIUM-VOLTAGE EQUIPMENT AND ANY METALLIC CONDUITS SHALL BE GROUNDED PER THE DRAWINGS AND SECTION 33 79 00 SITE GROUNDING.

4. NOTIFICATIONS, SUBMITTALS AND DOCUMENTATION:

4.1. MANUFACTURER'S CUT SHEETS FOR FIBERGLASS-REINFORCED CONCRETE VAULTS ARE INCLUDED IN THE DRAWINGS (E-SHEETS, 500 SERIES). NO FURTHER SUBMITTALS ARE REQUIRED UNLESS A SUBSTITUTION OR CHANGE ORDER IS REQUESTED.

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FAA
DESIGNED BY:

CUSA CONSULTING LLC
6 MERRILL INDUSTRIAL DR, UNIT 6
HAMPTON, NH 03842
T. (603) 926-5895
WWW.CUSACONSULTING.COM

NO P.E. SEAL REQUIRED FOR THIS PROJECT

REV	APPROVED	DESCRIPTION	JCN	DATE	APVD

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
ATC - TECHNICAL OPERATIONS — WESTERN SERVICE AREA

SAIPAN ARSR FACILITY
3-PHASE POWER SERVICE ESTABLISHMENT
ISSUED FOR CONSTRUCTION DRAWINGS, 4/4/2025
CIVIL/STRUCTURAL SPECIFICATIONS

SAIPAN — GSN — CNMI

REVIEWED BY:	SUBMITTED BY:	APPROVED BY:
	PROJECT ENGINEER	MANAGER, INFRASTRUCTURE CENTER
ISSUED BY:	DESIGNED: A.J.G./C.U.C.	DATE: JCN:
	DRAWN: A.J.G.	DRAWING NUMBER: GSN-D-ARSR-ELD-G004 REV
	CHECKED: J.G.P.	

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26 05 00 COMMON WORK RESULTS FOR ELECTRICAL

ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE ADOPTED STANDARDS REFERENCED IN 01 41 00 REGULATORY REQUIREMENTS.

ALL ELECTRICAL WORK SHALL BE PERFORMED BY LICENSED JOURNEYMAN ELECTRICIANS OR BY LICENSED APPRENTICE ELECTRICIANS UNDER THE DIRECT SUPERVISION OF A LICENSED JOURNEYMAN ELECTRICIAN. STATE-SPECIFIC JOURNEYMAN LICENSURE IS NOT REQUIRED FOR THIS PROJECT DUE TO THE FEDERAL SUPREMACY CLAUSE.

CONDUIT ROUTES AND EQUIPMENT LOCATIONS ARE DIAGRAMMATIC AND SUBJECT TO FIELD ADJUSTMENT BASED ON SITE CONDITIONS AND OBSTRUCTIONS. CONTRACTOR SHALL ABIDE BY ALL NEC AND NESC REQUIREMENTS WHEN ADJUSTING THE LOCATIONS OF CONDUITS AND ELECTRICAL EQUIPMENT.

ALL ELECTRICAL WORK SHALL BE PERFORMED IN A NEAT AND PROFESSIONAL MANNER. CONDUITS AND EQUIPMENT SHALL BE INSTALLED LEVEL, PLUMB AND PARALLEL TO WALLS AND ADJACENT SURFACES. CONDUITS AND EQUIPMENT SHALL BE PROTECTED FROM DAMAGE AND MARRING DURING INSTALLATION.

ALL EQUIPMENT SHALL BE MOUNTED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS FOR SEISMIC INSTALLATION, UNLESS THE PROJECT LOCATION IS SEISMIC DESIGN CATEGORY A.

THE CONTRACTOR SHALL PROVIDE LOCKOUT/TAGOUT PROCEDURES TO THE RESIDENT ENGINEER AND THE LOCAL SSC TECHNICIANS AT THE END OF THIS PROJECT.

CONTRACTOR SHALL USE SURVEYOR'S GRADE GPS TO RECORD THE LOCATION OF ALL NEW EXTERIOR ITEMS OF ELECTRICAL EQUIPMENT, NOT AFFIXED TO A BUILDING. THIS INCLUDES;

- MANHOLES, HANDHOLES AND SPLICE CANS,
- ELECTRICAL EQUIPMENT RACKS AND JUNCTION BOXES,
- TRANSFORMERS, SWITCHGEAR, PRIMARY TERMINATION ENCLOSURES AND PRIMARY METERS,
- UTILITY POLES.

THE CONTRACTOR SHALL PURCHASE AND PROVIDE STANLEY BEST LOCK BODIES WITH FAA LOGO, PART NUMBER 21B772LPS1175 FOR ALL NEW ELECTRICAL EQUIPMENT WITH LOCKING MEANS. THE CONTRACTOR SHALL PURCHASE LOCK BODIES WITHOUT CORES. THE LOCAL SSC SHALL PURCHASE AND INSTALL THE CORES.

CUTOVER PLANS: ALL CUTOVERS TO CUSTOMERS SHALL BE COORDINATED AND PERFORMED BY THE UTILITY (C.U.C.). THE FAA CONTRACTOR SHALL COORDINATE WITH C.U.C. TO ENERGIZE THE FAA PORTION OF WORK AFTER INSPECTION AND COMPLETION.

26 05 13 MEDIUM-VOLTAGE CABLES

SUMMARY: THIS SECTION COVERS ALL CABLES, RATED AT 601V - 25KV, TO BE FURNISHED AND INSTALLED FOR THIS PROJECT.

1. MEASUREMENT AND PAYMENT:

1.1. MEASUREMENT AND PAYMENT FOR THIS PAY ITEM SHALL BE PER LINEAR FOOT.

1.2. TESTING AND INSTALLATION OF GROUNDING ITEMS SHALL BE INCIDENTAL TO THIS PAY ITEM. CABLES THAT FAIL TESTING SHALL BE REPLACED AT NO COST TO THE FAA.

2. MATERIALS:

2.1. MEDIUM-VOLTAGE CABLES ARE ITEMIZED IN THE DRAWINGS (E-SHEETS, 600 SERIES).

2.2. ALL NEW CABLE RUNS ARE TO BE INSTALLED AS A SINGLE, CONTINUOUS SECTION OF CABLE WITHOUT SPLICING, UNLESS ABSOLUTELY NECESSARY.

3. EXECUTION:

3.1. CABLE PULLING LUBRICANT SHALL BE USED FOR ALL CABLE PULLING THROUGH UNDERGROUND DUCTS.

4. NOTIFICATIONS, SUBMITTALS AND DOCUMENTATION:

4.1. TESTING:

4.1.1. VERY LOW-FREQUENCY (VLF) TESTING MAY BE PERFORMED AFTER INSULATION RESISTANCE TESTING OF A CABLE INDICATES THE CABLE IS IN RELATIVELY GOOD CONDITION AND CAN BE FURTHER TESTED BY VLF METHODS TO PROVIDE ADDITIONAL CABLE RELIABILITY INFORMATION.

4.1.2. INSULATION TESTING AND VLF TESTING MUST COMPLY WITH APPLICABLE SAFETY REGULATIONS. SEE SECTION 01 41 00 REGULATORY REQUIREMENTS.

4.1.3. ALL MEDIUM VOLTAGE TESTING MUST BE PERFORMED BY TWO INDIVIDUALS. ALL TESTING SHALL BE WITNESSED BY THE RESIDENT ENGINEER.

4.1.4. BEFORE, DURING, AND AFTER TESTING, CONTRACTOR SHALL ENSURE ALL APPLICABLE SAFETY RULES ARE FOLLOWED, INCLUDING USE OF PROPER PERSONAL PROTECTIVE EQUIPMENT (PPE), LOCK-OUT TAG-OUT OF ALL ASSOCIATED ELECTRICAL ENERGY SOURCES, TESTING OF CABLES FOR POSSIBLE "BACK-FEED" FROM UNKNOWN ELECTRICAL SOURCES AND DISCHARGE OF RESIDUAL CAPACITIVE CHARGES ON CABLES TO BE TESTED.

4.1.5. USE ONLY THE APPROVED HIGH VOLTAGE POWER TEST INSTRUMENTS TO CHECK FOR AC AND DC VOLTAGES ON ALL CABLES. DO NOT USE HAND HELD TEST INSTRUMENTS WHICH ARE ONLY RATED FOR USE IN ELECTRICAL/ELECTRONIC APPLICATIONS RATED 1000 VOLTS OR LESS.

4.1.6. BEFORE TESTING IS PERFORMED, CONTRACTOR SHALL ENSURE THAT CABLES AND ASSOCIATED TERMINATIONS ARE ISOLATED FROM ELECTRICAL APPARATUS SUCH AS POWER TRANSFORMERS, POTENTIAL TRANSFORMERS, SURGE ARRESTERS, CAPACITORS, ETC. CABLES ARE ALLOWED TO BE CONNECTED TO SWITCHES AND FUSED CUTOUTS SO LONG AS THE SWITCH ISOLATES THE CABLE AND TERMINATIONS FROM ELECTRICAL APPARATUS MENTIONED ABOVE. MAINTAIN AT LEAST SIX (6) INCHES CLEARANCE BETWEEN CABLE ENDS AND ANY GROUNDED SURFACE. IF MODULAR LOAD-BREAK ELBOW TERMINATIONS ARE USED ON THE CABLES, ENSURE THE LOAD BREAK ELBOWS ARE INSERTED IN THE ISOLATED PARKING BUSHINGS.

4.1.7. ENSURE THAT ALL CABLE SHIELDS, EQUIPMENT GROUNDING CONDUCTORS, ARMOR AND METALLIC CONDUITS ARE PROPERLY GROUNDED TO THE EARTH ELECTRODE SYSTEM AT BOTH ENDS OF THE CABLE TO BE TESTED. IF PRESENT, CHECK TO ENSURE THAT THE CABLE SHIELD, ARMOR, AND EQUIPMENT GROUNDING CONDUCTORS ARE ELECTRICALLY CONTINUOUS FROM ONE END OF THE CABLE TO THE OTHER.

4.1.8. NEW 15KV CABLES AND ASSOCIATED TERMINATIONS SHALL BE TESTED WITH A 5KV INSULATION RESISTANCE TEST (AEMC TYPE 5070 OR APPROVED EQUAL) AND A VLF TEST SET (HIGH VOLTAGE INC. TYPE VLF-34E OR APPROVED EQUAL). THIS APPLIES TO CABLES WITH BOTH 100% AND 133% INSULATION RATINGS.

4.1.9. INSULATION RESISTANCE MEASUREMENTS ON NEW 15KV CABLES, TERMINATIONS, AND JOINTS SHALL BE MADE WITH DC VOLTAGE APPLIED INCREMENTALLY UP TO 5KV FOR A DURATION NOT TO EXCEED 5 MINUTES. RECORD THE RESISTANCE AT EACH VOLTAGE LEVEL AS WELL AS THE AMBIENT TEMPERATURES AND RELATIVE HUMIDITY. PERFORM INSULATION RESISTANCE TESTING FROM EACH INSULATED CONDUCTOR TO GROUND AND BETWEEN EACH INSULATED CONDUCTOR. ANY INSULATION RESISTANCE VALUES LESS THAN 50 MEGAOHMS SHALL BE INVESTIGATED XXX. INSULATION TEST REPORT IS TO BE SUBMITTED TO THE RESIDENT ENGINEER.

4.1.10. THE VLF TEST FOR NEW 15KV CABLE SHALL BE APPLIED AT NOT TO EXCEED 28KV PEAK VOLTAGE AT 0.1 HZ FOR A DURATION OF FIFTEEN MINUTES. CONTRACTOR SHALL RECORD THE PASS OR FAIL CONDITION AT THE END OF THE TEST ALONG WITH THE AMBIENT TEMPERATURE AND RELATIVE HUMIDITY.

26 05 29 HANGERS AND SUPPORTS FOR ELECTRICAL SYSTEMS

SUMMARY: THIS SECTION COVERS HANGERS AND SUPPORT SYSTEMS FOR ELECTRICAL CONDUITS.

1. MEASUREMENT AND PAYMENT:

1.1. PROVISION OF ALL REQUIRED SUPPORTS SHALL BE INCIDENTAL TO CONDUIT FOR ELECTRICAL SYSTEMS.

2. MATERIALS:

2.1. SUPPORT ALL CONDUITS ON STRUT, BRACKETS, TRAPEZE HANGERS, OR AS SHOWN IN THE DRAWINGS. USE ANVIL, B-LINE, GRINNELL, UNISTRUT, OR APPROVED EQUAL.

2.2. ALL EXTERIOR STRUT, BRACKETS, FITTINGS, NUTS, BOLTS AND HARDWARE FOR CONDUIT SUPPORT SHALL BE STAINLESS STEEL, UNLESS OTHERWISE SPECIFIED IN THE DRAWINGS.

3. EXECUTION:

3.1. CONTRACTOR SHALL SECURE CONDUITS IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRIC CODE.

4. NOTIFICATIONS, SUBMITTALS AND DOCUMENTATION:

4.1. NO SUBMITTALS ARE REQUIRED UNLESS A SUBSTITUTION OR CHANGE ORDER IS REQUESTED.

26 05 33.13 CONDUIT FOR ELECTRICAL SYSTEMS

SUMMARY: THIS SECTION COVERS ALL ABOVE-GRADE ELECTRICAL CONDUITS TO BE FURNISHED AND INSTALLED FOR THIS PROJECT.

1. MEASUREMENT AND PAYMENT:

1.1. MEASUREMENT AND PAYMENT FOR THIS ITEM SHALL BE PER LINEAR FOOT.

1.2. ALL THREADED COUPLINGS, FITTINGS, ELBOWS, BUSHINGS, INSERTS AND GROUND CONNECTIONS SHALL BE INCIDENTAL TO THIS PAY ITEM.

2. MATERIALS:

2.1. BURIED CONDUITS AND DUCTS ARE COVERED UNDER SECTION 26 05 43 UNDERGROUND DUCTS AND RACEWAYS FOR ELECTRICAL SYSTEMS.

2.2. ALL EXTERIOR, ABOVE-GROUND CONDUITS SHALL BE SCH-80 PVC.

2.3. CONDUIT SIZES AND TYPES AND ITEMIZED IN THE DRAWINGS.

3. EXECUTION:

3.1. CONDUIT FIELD JOINTS SHALL BE CUT SQUARE AND REAMED SMOOTH. THREADS SHALL BE CLEANLY CUT AND JOINTS DRAWN UP TIGHT. CUTTING OF CONDUITS SHALL NOT BE PERFORMED WITH RECIPROCATING SAWS.

3.2. ALL ELBOWS SHALL BE FACTORY EXTRUDED ELBOWS, NO FIELD BENDED ELBOWS SHALL BE PERMITTED.

3.3. ALL CONDUIT RUNS SHALL BE COMPLETED AND CLEANED FREE FROM FOREIGN MATTER INSIDE BEFORE CONDUCTORS ARE DRAWN IN. AFTER INSTALLATION, SPARE CONDUIT ENDS SHALL BE PLUGGED OR CAPPED TO PREVENT THE ENTRANCE OF FOREIGN MATERIALS.

3.4. PVC CONDUITS FOR GROUNDING ELECTRODES SHALL PENETRATE A MINIMUM OF 12" BELOW GRADE. PVC CONDUITS SHALL EXTEND TO 6 FEET ABOVE GRADE, OR TO WITHIN 18 INCHES OF THE ITEM TO BE GROUNDED.

4. NOTIFICATIONS, SUBMITTALS AND DOCUMENTATION:

4.1. NO SUBMITTALS ARE REQUIRED UNLESS A SUBSTITUTION OR CHANGE ORDER IS REQUESTED.

26 05 53 IDENTIFICATION FOR ELECTRICAL SYSTEMS

IN EVERY ACCESSIBLE LOCATION ABOVE GROUND (INTERIOR AND EXTERIOR), CABLES SHALL BE TAGGED WITH VINYL SELF-LAMINATING LABELS OR SHRINK-EMBOSSED LABELS IDENTIFYING THE SOURCE, VOLTAGE AND PHASE, IF THREE-PHASE. IF THE CABLES ARE FED FROM A PANELBOARD, THE LABEL SHALL IDENTIFY WHICH BREAKER THE CABLES ARE FED FROM.

IN EVERY ACCESSIBLE LOCATION BELOW GROUND, CABLES SHALL BE TAGGED WITH RIGID PLASTIC LABEL PLATES IDENTIFYING THE SOURCE, VOLTAGE AND PHASE, IF THREE-PHASE.

ARC-FLASH LABELS SHALL BE PRINTED AND AFFIXED TO ANY PIECE OF ELECTRICAL EQUIPMENT THAT MAY NEED EXAMINATION, ADJUSTMENT, SERVICE OR MAINTENANCE WHILE ENERGIZED. REFER TO THE PROJECT ARC-FLASH, SHORT CIRCUIT, AND COORDINATION STUDY FOR ARC-FLASH LABEL DETAILS.

ALL PIECES OF MEDIUM-VOLTAGE EQUIPMENT (>600V) SHALL HAVE WARNING LABELS INDICATING "DANGER, HIGH VOLTAGE" AFFIXED TO THEM.

FURTHER DETAILS FOR ALL REQUIRED LABELS ARE IN THE DRAWINGS (E-SHEETS, 500 SERIES).

33 79 00 SITE GROUNDING

SUMMARY: THIS SECTION COVERS GROUNDING AND LIGHTNING PROTECTION FOR ALL EXTERIOR EQUIPMENT, DUCTS, CONDUITS AND STRUCTURES TO BE INSTALLED FOR THIS PROJECT.

1. MEASUREMENT AND PAYMENT:

1.1. MATERIALS FOR GROUNDING AND LIGHTNING PROTECTION SHALL BE PER EACH OR PER LINEAR FOOT, DEPENDING ON THE MATERIAL. LABOR TO INSTALL GROUNDING COMPONENTS SHALL BE INCIDENTAL TO OTHER PAY ITEMS OR SHALL BE ALL REQUIRED.

2. MATERIALS:

2.1. CABLE FOR CREATING EARTH ELECTRODE SYSTEMS (EES'S) AND CABLES EXTENDING CONNECTIONS TO THE EES SHALL BE 4/0, SOFT-DRAWN, 19-STRAND BARE COPPER WIRE, UNLESS OTHERWISE NOTED IN THE DRAWINGS.

2.2. GROUND RODS SHALL BE 10' LONG, 3/4" DIAMETER COPPER-CLAD STEEL, UNLESS OTHERWISE NOTED IN THE DRAWINGS.

3. EXECUTION:

3.1. ALL UNDERGROUND GROUNDING CONNECTIONS SHALL BE EXOTHERMICALLY WELDED.

3.2. ALL ABOVE GROUND CONNECTIONS TO EXTEND OR CONNECT ADDITIONAL GROUNDING ELECTRODES SHALL BE PERFORMED WITH A 12-TON CRIMPER AND UL-LISTED, IRREVERSIBLE COMPRESSION CONNECTORS.

3.3. GROUNDING CONNECTIONS BETWEEN DISSIMILAR METALS SHALL BE PROTECTED FROM CORROSION IN ACCORDANCE WITH FAA STANDARD 19G, SECTION 4.2.2 DISSIMILAR METALS.

3.4. MEDIUM-VOLTAGE EQUIPMENT:

3.4.1. ALL MEDIUM VOLTAGE EQUIPMENT VAULTS SHALL HAVE A GROUND ROD INSTALLED FOR GROUNDING CONNECTIONS. CONNECTIONS TO THE GROUND ROD SHALL BE EXOTHERMICALLY WELDED. FRAME AND PHASE GROUNDING CONNECTIONS SHALL BE MADE IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS.

3.4.2. FOR LOW-VOLTAGE METALLIC CONDUITS LEAVING STEP-DOWN TRANSFORMER VAULTS, THE CONTRACTOR SHALL INSTALL AN INSULATED BUSHING ON THE LOW-VOLTAGE CONDUIT TERMINATING IN THE TRANSFORMER VAULT. A GROUND BUSHING IS NOT TO BE INSTALLED ON THE LOW-VOLTAGE CONDUIT IN THE TRANSFORMER VAULT.

4. NOTIFICATIONS, SUBMITTALS AND DOCUMENTATION:

4.1. TERMINATION TORQUE:

4.1.1. THE TORQUE VALUES OF ALL GROUNDING LUG TERMINATIONS SHALL BE RECORDED AND PROVIDED AS PART OF THE CLOSEOUT DOCUMENTATION. TORQUE VALUES FOR GROUNDING LUGS ARE LISTED IN FAA STANDARD 19, 4.2.3.4.2 BOLTED CONNECTIONS.

4.1.2. THE TORQUE RECORD SHALL INCLUDE THE SERIAL NUMBER OF THE TORQUING TOOL AND THE LATEST CALIBRATION DATE OF THE TORQUING TOOL. THE TORQUING TOOL SHALL BE FACTORY NEW-IN-BOX OR CALIBRATED WITHIN 12 MONTHS OF USE.

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FAA
DESIGNED BY:

CUSA CONSULTING LLC
6 MERRILL INDUSTRIAL DR, UNIT 6
HAMPTON, NH 03842
T. (603) 926-5895
WWW.CUSACONSULTING.COM

REV	APPROVED	DESCRIPTION	JCN	DATE	APVD

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
ATC - TECHNICAL OPERATIONS — WESTERN SERVICE AREA

SAIPAN ARSR FACILITY
3-PHASE POWER SERVICE ESTABLISHMENT
ISSUED FOR CONSTRUCTION DRAWINGS, 4/4/2025
ELECTRICAL SPECIFICATIONS

SAIPAN — GSN — CNMI

NO P.E. SEAL REQUIRED FOR THIS PROJECT

REVIEWED BY:	SUBMITTED BY:	APPROVED BY:
	PROJECT ENGINEER	MANAGER, INFRASTRUCTURE CENTER
ISSUED BY:	DESIGNED: A.J.G./C.U.C.	DATE: JCN:
	DRAWN: A.J.G.	DRAWING NUMBER: GSN-D-ARSR-ELD-G005 REV
	CHECKED: J.G.P.	

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PLAN VIEW
1" = 40m

EXISTING POLES TO BE DEMOLISHED		
POLE #	LATITUDE	LONGITUDE
EX-1	N015°15'12.71"	E145°47'27.05"
EX-2	N015°15'11.25"	E145°47'25.88"
EX-3	N015°15'10.01"	E145°47'24.71"
EX-4	N015°15'08.57"	E145°47'23.49"
EX-5	N015°15'07.01"	E145°47'22.81"
EX-6	N015°15'05.38"	E145°47'22.31"
EX-7	N015°15'03.23"	E145°47'21.67"
EX-8	N015°15'01.25"	E145°47'21.23"
EX-9	N015°15'00.09"	E145°47'22.42"
EX-10	N015°15'01.90"	E145°47'24.46"
EX-11	N015°15'03.80"	E145°47'26.48"
EX-12	N015°15'05.73"	E145°47'28.62"
EX-13	N015°15'05.94"	E145°47'28.39"
EX-14	N015°15'07.45"	E145°47'30.72"
EX-15	N015°15'09.01"	E145°47'32.96"
EX-16	N015°15'09.21"	E145°47'32.75"
EX-17	N015°15'10.23"	E145°47'35.48"
EX-18	N015°15'10.48"	E145°47'35.32"
EX-19	N015°15'11.01"	E145°47'38.17"
EX-20	N015°15'11.03"	E145°47'41.04"
EX-21	N015°15'10.86"	E145°47'43.62"
EX-22	N015°15'09.63"	E145°47'45.11"
EX-23	N015°15'07.78"	E145°47'44.76"
EX-24	N015°15'07.01"	E145°47'42.99"
EX-25	N015°15'06.20"	E145°47'40.97"
EX-26	N015°15'05.37"	E145°47'39.07"
EX-27	N015°15'04.03"	E145°47'37.06"
EX-28	N015°15'01.21"	E145°47'34.00"
EX-29	N015°14'59.33"	E145°47'32.71"
EX-30	N015°14'56.89"	E145°47'31.48"
EX-31	N015°14'54.40"	E145°47'30.46"
EX-32	N015°14'53.63"	E145°47'32.35"
EX-33	N015°14'53.27"	E145°47'33.91"
EX-34	N015°14'54.02"	E145°47'35.50"
EX-35	N015°14'55.31"	E145°47'37.62"
EX-36	N015°14'56.47"	E145°47'39.54"
EX-37	N015°14'57.97"	E145°47'42.13"
EX-38	N015°14'57.31"	E145°47'43.73"
EX-39	N015°14'55.53"	E145°47'43.62"
EX-40	N015°14'54.80"	E145°47'44.93"

NOTES:

1. ALL POLES DEPICTED AS 'EX' SHALL BE DEMOLISHED AND REMOVED BY UTILITY (C.U.C.). ALL EXISTING POLES ARE SINGLE PHASE WOOD POLES.
2. ALL SINGLE PHASE OVERHEAD WIRE SHALL BE DEMOLISHED AND RECLAIMED BY C.U.C..
3. COORDINATES FOR ALL EXISTING AND PROPOSED POLES ARE PROVIDED BY C.U.C. ENGINEERING STAFF.

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FAA
DESIGNED BY:

CUSA CONSULTING LLC
6 MERRILL INDUSTRIAL DR, UNIT 6
HAMPTON, NH 03842
T. (603) 926-5895
WWW.CUSACONSULTING.COM

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FEDERAL AVIATION ADMINISTRATION
ATC - TECHNICAL OPERATIONS WESTERN SERVICE AREA

SAIPAN ARSR FACILITY
3-PHASE POWER SERVICE ESTABLISHMENT
ISSUED FOR CONSTRUCTION DRAWINGS, 4/4/2025
OVERHEAD DEMOLITION PLAN

SAIPAN GSN CNMI

NO P.E. SEAL REQUIRED FOR THIS PROJECT

REVIEWED BY:
SUBMITTED BY:
APPROVED BY:
PROJECT ENGINEER
MANAGER, INFRASTRUCTURE CENTER
DESIGNED: A.J.G./C.U.C.
DRAWN: A.J.G.
CHECKED: J.G.P.
ISSUED BY:
DATE: JCN:
DRAWING NUMBER: GSN-D-ARSR-ELD-D100 REV

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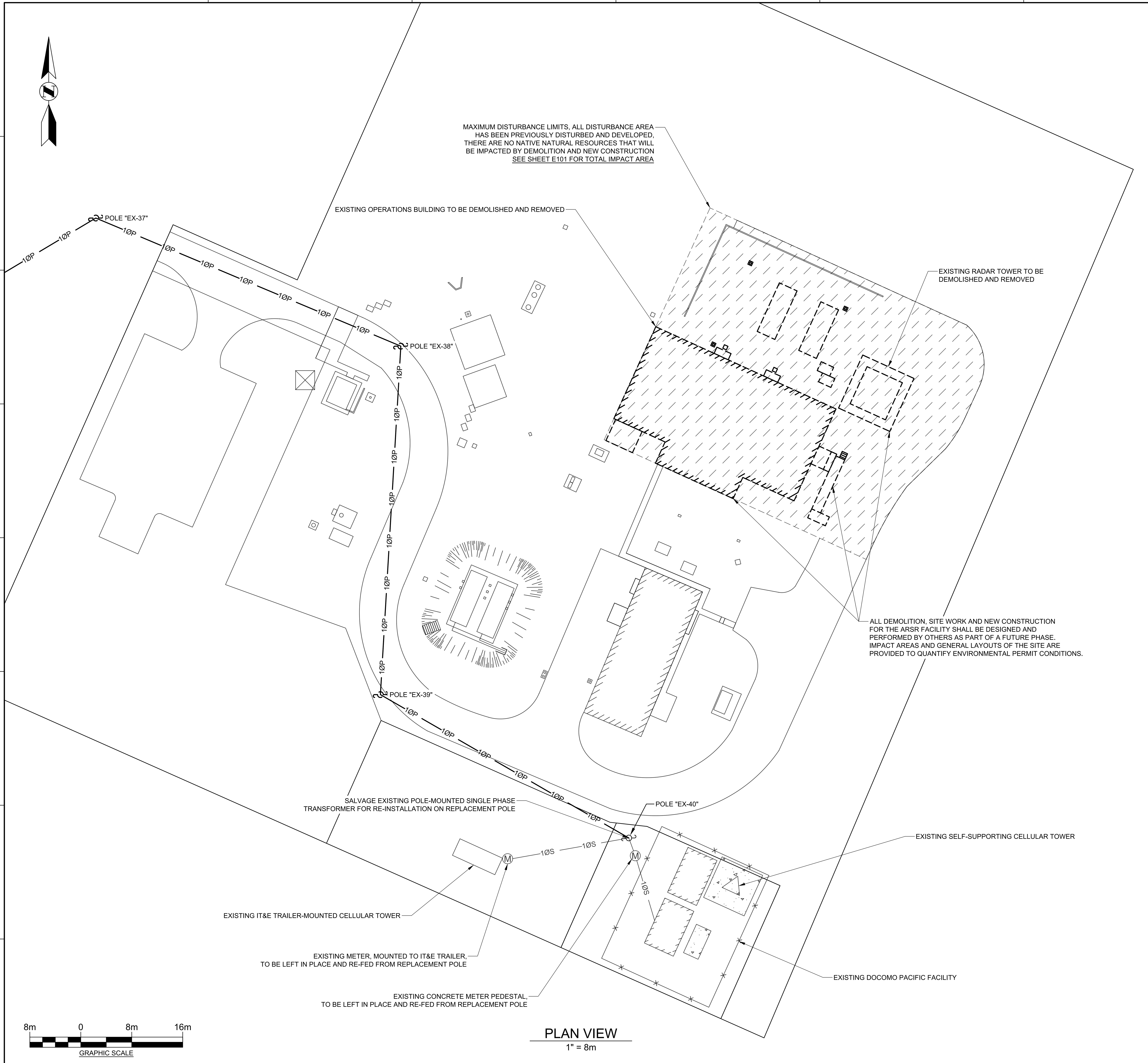

PLAN VIEW
1" = 8m

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CUSA CONSULTING LLC
6 MERRILL INDUSTRIAL DR, UNIT 6
HAMPTON, NH 03842
T. (603) 926-5895
WWW.CUSACONSULTING.COM

DEPARTMENT OF TRANSPORTATION
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ATC - TECHNICAL OPERATIONS WESTERN SERVICE AREA

SAIPAN ARSR FACILITY
3-PHASE POWER SERVICE ESTABLISHMENT
ISSUED FOR CONSTRUCTION DRAWINGS, 4/4/2025
SITE DEMOLITION PLAN

NO P.E. SEAL REQUIRED FOR THIS PROJECT

SAIPAN GSN CNMI

REVIEWED BY:
SUBMITTED BY: PROJECT ENGINEER
APPROVED BY: MANAGER, INFRASTRUCTURE CENTER
DESIGNED: A.J.G./C.U.C.
DRAWN: A.J.G.
CHECKED: J.G.P.
ISSUED BY:
DATE:
JCN:
DRAWING NUMBER: GSN-D-ARSR-ELD-D101
REV

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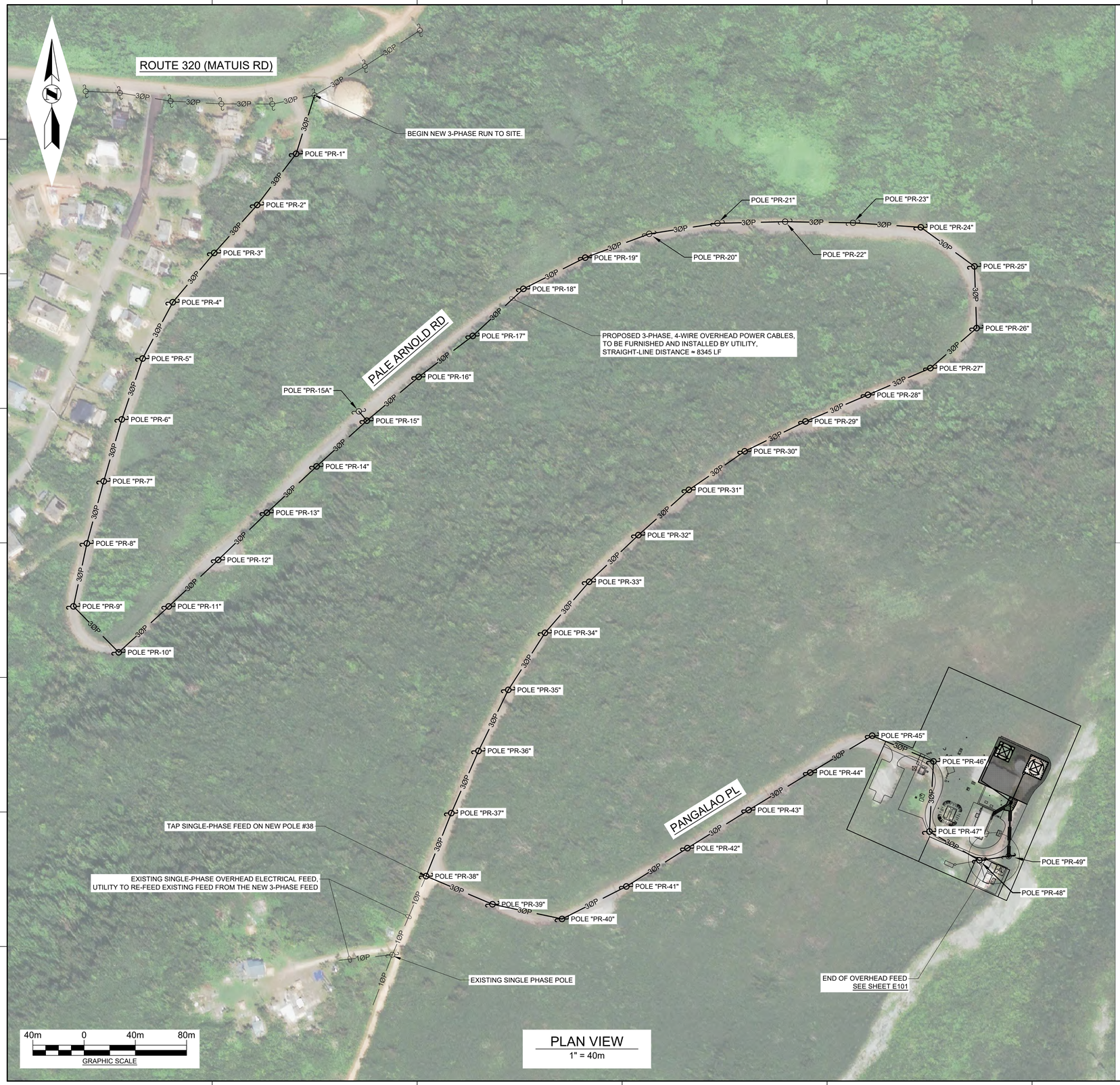

PLAN VIEW
1" = 40m

PROPOSED POLES			
POLE #	LATITUDE	LONGITUDE	FORMERLY:
PR-1	N015°15'12.75"	E145°47'27.06"	EX-1
PR-2	N015°15'11.45"	E145°47'26.04"	-
PR-3	N015°15'10.23"	E145°47'24.92"	-
PR-4	N015°15'08.98"	E145°47'23.83"	-
PR-5	N015°15'07.55"	E145°47'23.04"	-
PR-6	N015°15'06.00"	E145°47'22.50"	-
PR-7	N015°15'04.43"	E145°47'22.03"	-
PR-8	N015°15'02.85"	E145°47'21.59"	-
PR-9	N015°15'01.25"	E145°47'21.23"	EX-8
PR-10	N015°15'00.09"	E145°47'22.42"	EX-9
PR-11	N015°15'01.25"	E145°47'23.73"	-
PR-12	N015°15'02.43"	E145°47'25.02"	-
PR-13	N015°15'03.63"	E145°47'26.30"	-
PR-14	N015°15'04.81"	E145°47'27.59"	-
PR-15	N015°15'05.97"	E145°47'28.91"	-
PR-15A	N015°15'06.20"	E145°47'28.70"	-
PR-16	N015°15'07.08"	E145°47'30.27"	-
PR-17	N015°15'08.12"	E145°47'31.68"	-
PR-18	N015°15'09.31"	E145°47'33.01"	-
PR-19	N015°15'10.11"	E145°47'34.62"	-
PR-20	N015°15'10.71"	E145°47'36.30"	-
PR-21	N015°15'10.98"	E145°47'38.08"	EX-19
PR-22	N015°15'11.02"	E145°47'39.85"	-
PR-23	N015°15'10.99"	E145°47'41.63"	-
PR-24	N015°15'10.88"	E145°47'43.40"	-

PROPOSED POLES			
POLE #	LATITUDE	LONGITUDE	FORMERLY:
PR-25	N015°15'09.88"	E145°47'44.81"	-
PR-26	N015°15'08.31"	E145°47'44.86"	-
PR-27	N015°15'07.30"	E145°47'43.65"	-
PR-28	N015°15'06.62"	E145°47'42.02"	-
PR-29	N015°15'05.94"	E145°47'40.39"	-
PR-30	N015°15'05.19"	E145°47'38.79"	-
PR-31	N015°15'04.21"	E145°47'37.33"	-
PR-32	N015°15'03.06"	E145°47'36.01"	-
PR-33	N015°15'01.87"	E145°47'34.72"	-
PR-34	N015°15'00.58"	E145°47'33.57"	-
PR-35	N015°14'59.13"	E145°47'32.61"	EX-29
PR-36	N015°14'57.58"	E145°47'31.83"	-
PR-37	N015°14'56.00"	E145°47'31.12"	-
PR-38	N015°14'54.40"	E145°47'30.46"	EX-31
PR-39	N015°14'53.69"	E145°47'32.19"	EX-32
PR-40	N015°14'53.31"	E145°47'34.01"	EX-33
PR-41	N015°14'54.14"	E145°47'35.70"	-
PR-42	N015°14'55.11"	E145°47'37.29"	-
PR-43	N015°14'56.08"	E145°47'38.89"	-
PR-44	N015°14'57.03"	E145°47'40.51"	-
PR-45	N015°14'57.97"	E145°47'42.13"	EX-37
PR-46	N015°14'57.31"	E145°47'43.73"	EX-38
PR-47	N015°14'55.53"	E145°47'43.62"	EX-39
PR-48	N015°14'54.80"	E145°47'44.93"	EX-40
PR-49	N015°14'54.91"	E145°47'45.69"	-

NOTES:

1. POLES WITH A 'FORMERLY' DESIGNATION SHALL BE INSTALLED IN THE SAME LOCATION AS THE PREVIOUS SINGLE-PHASE POLE AFTER REMOVAL.
2. THE AVERAGE STRAIGHT-LINE DISTANCE BETWEEN POLES IS 170 LF (49 INDIVIDUAL SPANS). UTILITY TO CALCULATE THE ACTUAL LENGTH OF CABLE BASED ON THEIR STANDARD SAG FACTORS.
3. COORDINATES FOR ALL EXISTING AND PROPOSED POLES ARE PROVIDED BY C.U.C. ENGINEERING STAFF.

FOR OFFICIAL USE ONLY:
PUBLIC AVAILABILITY TO BE DETERMINED UNDER 5 USC 552

FAA
DESIGNED BY:

CUSA CONSULTING LLC
6 MERRILL INDUSTRIAL DR. UNIT 6
HAMPTON, NH 03842
T. (603) 926-5895
WWW.CUSACONSULTING.COM

REV	APPROVED	DESCRIPTION	JCN	DATE	APVD

DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
ATC - TECHNICAL OPERATIONS WESTERN SERVICE AREA

SAIPAN ARSR FACILITY
3-PHASE POWER SERVICE ESTABLISHMENT
ISSUED FOR CONSTRUCTION DRAWINGS, 4/4/2025
OVERHEAD INSTALLATION PLAN

SAIPAN GSN CNMI

NO P.E. SEAL REQUIRED FOR THIS PROJECT

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APPROVED BY:
PROJECT ENGINEER
MANAGER, INFRASTRUCTURE CENTER
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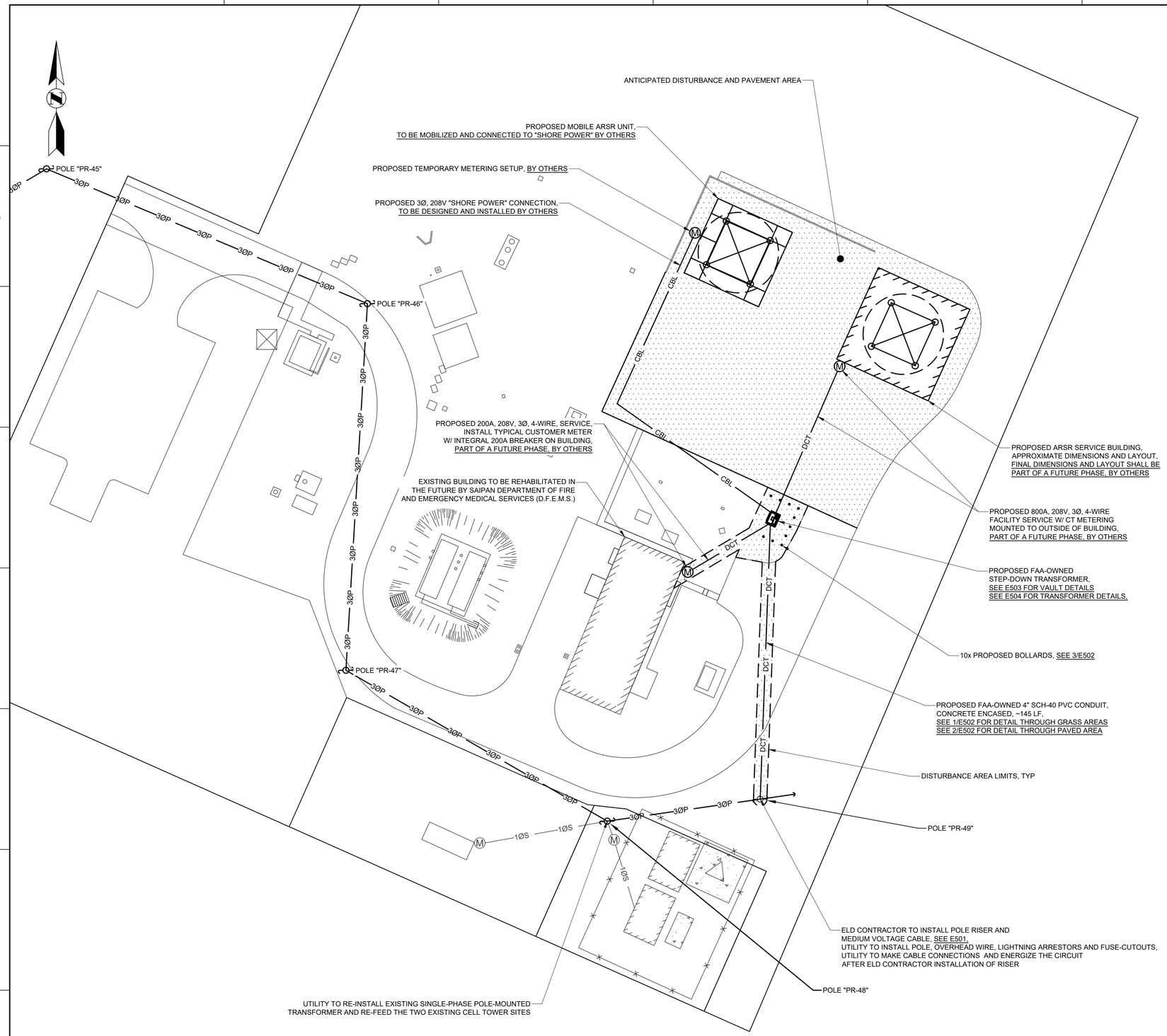

PLAN VIEW
1" = 8m

ENVIRONMENTAL IMPACTS SUMMARY		
	M^2	FT^2
DISTURBED AREA FROM POLE INSTALLATION	37	400
SITE WORK, TOTAL DISTURBED AREA	2076	22346
NET INCREASE IN IMPERVIOUS AREA	0	0

NOTES:

1. IMPACT AREA FOR NEW POLES IS ESTIMATED TO BE ONE SQUARE METER, UNLESS INSTALLED IN THE SAME LOCATION AS A PREVIOUS POLE.
2. ALL AREA TO BE DISTURBED IS CURRENTLY IMPERVIOUS SURFACES SUCH AS BUILDING ROOF OR ASPHALT PAVEMENT. FUTURE ARSR FACILITY CONSTRUCTION WILL RESULT IN EITHER NO CHANGE TO IMPERVIOUS SURFACE AREA OR A REDUCTION IN IMPERVIOUS SURFACE AREA.

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DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
ATC - TECHNICAL OPERATIONS WESTERN SERVICE AREA

SAIPAN ARSR FACILITY
3-PHASE POWER SERVICE ESTABLISHMENT
ISSUED FOR CONSTRUCTION DRAWINGS, 4/4/2025
SITE INSTALLATION PLAN

SAIPAN GSN CNMI

NO P.E. SEAL REQUIRED FOR THIS PROJECT

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Attachment 3: Site Photos

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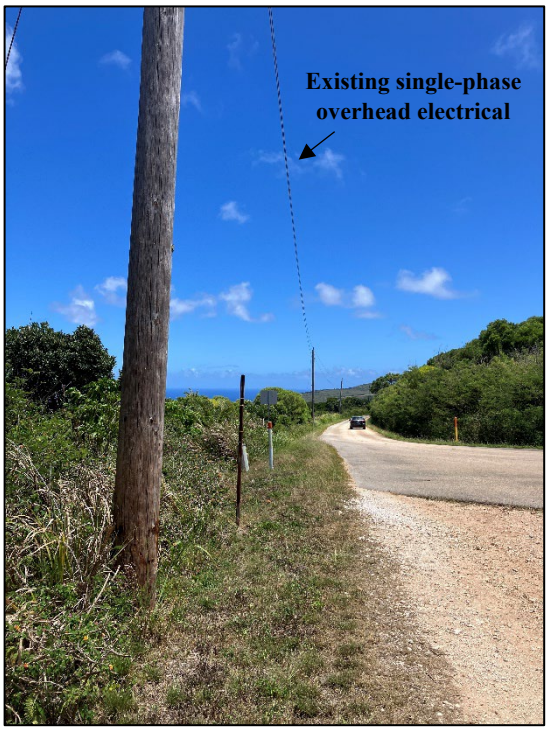


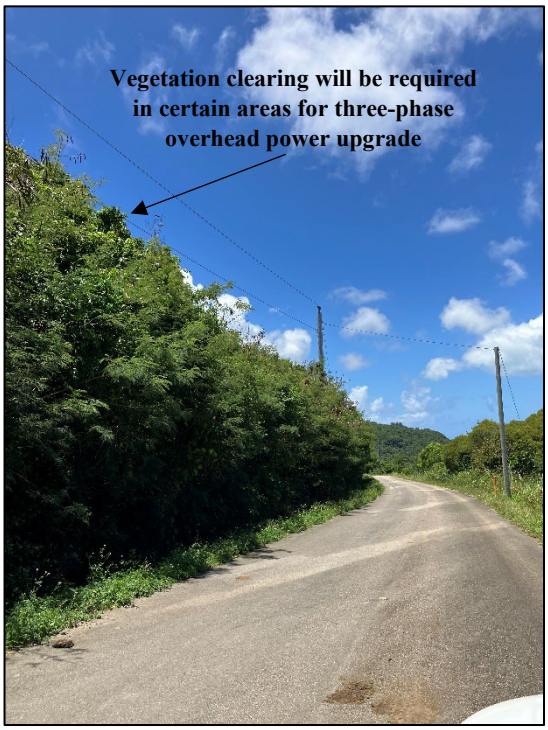
Picture 1: Existing single-phase electrical line distribution (ELD) wooden poles along Pale Arnold Road.

Picture 2: Existing single-phase electrical line distribution (ELD) wooden poles along Pale Arnold Road.

Picture 3: Existing single-phase electrical line distribution (ELD) wooden poles along Pale Arnold Road.

Picture 4: Existing single-phase electrical line distribution (ELD) wooden poles along Pale Arnold Road d.

Picture 5: Existing single-phase electrical line distribution (ELD) wooden poles along Pale Arnold Road.



Picture 6: Existing single-phase electrical line distribution (ELD) wooden poles along Pale Arnold Road.

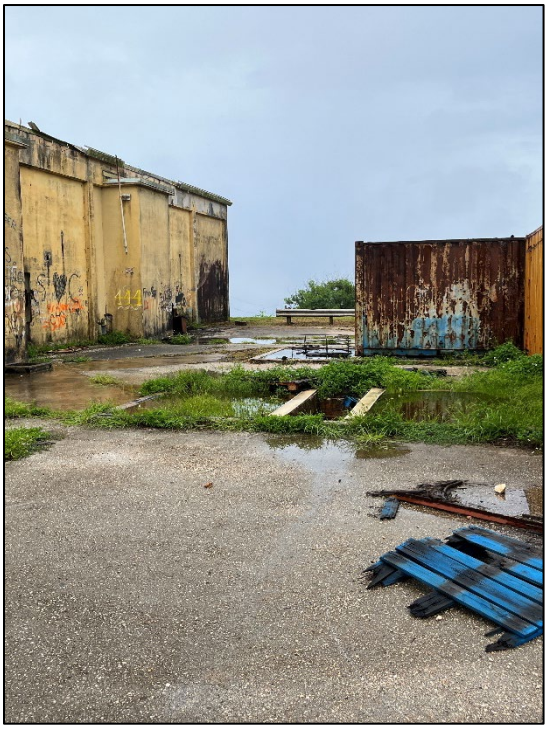
Picture 7: PACBAR III Facility Site. Existing operational telecommunications towers shown in background.

Picture 8: Abandoned PACBAR III Radar Array and associated operations building.

Picture 9: Concrete/earthen ponding basin near southwest quadrant of PACBAR III site

Picture 30: PACBAR III Radar Array

Picture 11: Likely septic tank manholes at PACBAR III site



Picture 12: Operations building and empty shipping containers at PACBAR III site

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