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Bureau of International Narcotics and Law Enforcement Affairs (INL)

U.S. Embassy – Tegucigalpa, Honduras

Special Naval Forces (FEN) Operational Readiness Construction Projects

Dock, Workshop & Barracks

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SECTION C — DESCRIPTION / SPECIFICATIONS / SCOPE OF WORK

C.1 Purpose

The purpose of this contract is to provide all engineering design, labor, materials, equipment, quality control, safety oversight, and supervision necessary to design and construct the rehabilitation, improvement, and limited new construction of mission-critical infrastructure at the Fuerza Especial Naval (FEN) Base, Puerto Castilla, Colón, Honduras. The Contractor shall deliver safe, code-compliant, fully commissioned facilities with complete documentation and minimal operational disruption, under a single Design-Build contract.

The purpose of this integrated scope is to restore, improve, and expand mission-critical infrastructure required to support maritime operations, emergency response readiness, and marine equipment maintenance, while maximizing the use of existing facilities and minimizing unnecessary structural intervention.

C.2 Background

The Bureau of International Narcotics and Law Enforcement Affairs (INL) is an instrumental leader in the development of policies and programs to combat international narcotics and crime. INL programs support two of the Department of State's strategic goals: (1) to reduce the entry of illegal drugs and migrants into the United States; and (2) to minimize the impact of international crime on the United States and its citizens. One of the many ways to meet these goals is to partner with allied governments to promote the modernization of, and support the enforcement operations of, their foreign criminal justice systems and law enforcement agencies.

INL assists host nations with the construction and rehabilitation of facilities that enable those nations to enhance their capacity to manage security incidents within their own countries. In cooperation with the Government of Honduras, INL is providing technical assistance for the rehabilitation and improvement of the FEN Puerto Castilla facility — an active operational base supporting maritime security, interdiction, and emergency response activities. The existing infrastructure requires comprehensive rehabilitation to support safe, reliable operations and compliance with applicable building codes and mission requirements.

End-user transfer. The completed facilities and all equipment furnished under this contract are provided as assistance to the Government of Honduras and will be transferred to the Fuerza Especial Naval upon final acceptance. The Contractor shall deliver all warranty documentation, operations and maintenance manuals, and training in a form usable by the end user.

Existing infrastructure at the site comprises a timber dock supported by preserved timber piles; an open-sided steel-framed structure with concrete slab-on-grade and metal roof housing the

workshop and barracks areas; and existing electrical and utility services serving the facility. All works shall be integrated into the existing infrastructure with minimal disruption and without modification to primary structural systems unless expressly stated in this SOW.

This project consolidates three interrelated sub-projects into a single design-build procurement:

1. Rehabilitation of approximately 40 linear meters of the existing maritime dock (superstructure replacement, retaining existing piles) and construction of a new 15-linear-meter dock extension (new piles and full structure), with an optional concrete topping slab system over the full 55 m of dock surface;
2. Construction and improvement of an Outboard Engine Workshop (approximately 80 m²), including enclosures, access elements, cladding, electrical, plumbing, ventilation, and fire protection;
3. Construction and improvement of Emergency Response Barracks (approximately 40 m², dormitory for eight personnel), including enclosures, finishes, suspended ceiling, doors, windows, electrical, and life safety provisions.

C.2.1 Contractor Qualifications

The Contractor shall be licensed and certified to perform architectural, engineering, and construction services in Honduras, and shall have an established office in Honduras at the time of design and construction. The Contractor shall supply qualified in-house engineering and/or skilled labor personnel, project management oversight, quality assurance/quality control oversight, and site safety monitoring.

The Contractor shall demonstrate corporate capability in marine and waterfront construction, including timber pile installation over water.

The Contractor shall accomplish the assigned work by employing qualified personnel with appropriate combinations of education, training, and experience, matching personnel skills to the task.

C.2.2 Local Participation

The Contractor is encouraged to hire local labor and subcontractors and to use locally available materials consistent with the material standards in this SOW, and to work with local trades and suppliers to develop a design that fits the local context of the surrounding FEN base facilities and facilitates future maintenance and procurement of replacement parts by FEN personnel. Local participation is encouraged but is not an evaluation factor and receives no evaluation credit.

C.3 Performance Objective and Approach

This Statement of Work (SOW) is performance-based: the Government describes the required results and measurable minimum performance standards, and the Contractor selects the methods by which those standards will be achieved.

The Contractor shall provide all labor, materials, equipment, engineering, QA/QC, safety, and supervision necessary to complete the three sub-projects at FEN Puerto Castilla, delivering safe, code-compliant, fully commissioned facilities with complete documentation.

C.3.1 Design-Build Overview

Under this delivery method, the Contractor is solely responsible for:

- Conducting all necessary site investigations and geotechnical/marine assessments;
- Developing complete engineering designs, calculations, and construction drawings;
- Obtaining all required permits and regulatory approvals;
- Constructing all facilities in accordance with the approved design and this SOW; and
- Delivering fully commissioned, operational facilities.

The Government provides performance criteria — required outcomes, functional standards, and minimum quality thresholds — rather than prescriptive design specifications.

C.3.2 Design Responsibility

The Contractor assumes full professional and legal responsibility for the adequacy, accuracy, and code compliance of all engineering designs produced under this contract. Design errors, omissions, or non-compliant designs shall be corrected by the Contractor at no additional cost to the Government.

- **35% Design (Provide as Government-Furnished Information): The Contractor to validate and, where necessary, identifies required departures from the concept.** The 35% is at conceptual-level technical layout establishing major design elements, fundamental project geometry, major systems, preliminary criteria, and baseline design intent sufficient for initial coordination and guidance on minimum performance requirements.
- **65% Design:** Substantially developed set of technical documents with coordinated architectural, structural, civil, marine, and MEP systems, resolving most design conflicts.
- **95% Design:** Near-final construction document package; technically complete but still undergoing final QC, coordination, and resolution of minor conflicts.

- **100% Design (Construction Drawings):** Fully validated, coordinated, contract-ready package with all details finalized.
- **As-Built:** Finalized technical document recording the precise, field-verified geometry, dimensions, materials, and installed conditions of the constructed project.

C.3.2.1 Design Stage Schedule

Each stage comprises Contractor development time, Government review time, and Contractor resubmittal time.

Stage	Contractor develop and submit	Gov't review	Contractor resubmit	Gov't approve	Stage duration (business days)	Cumulative from LNTP
Site Investigation, Underwater Assessment, and 35% Validation Report	5	5	5	5	20	LNTP + 20
65% Design	20	5	5	5	35	LNTP + 55
95% Design	10	5	5	5	25	LNTP + 80
100% Construction Documents	5	5	5	5	20	LNTP + 100

Permitting submissions shall run concurrently with the 65%, 95%, and 100% stages.

Government review periods are included within the Design Period; the Contractor shall account for them in the Work Plan and Schedule.

C.3.2.2 Design Period

The Design Period shall be **[100] business days from LNTP**.

C.3.2.3 Oral Presentation

The Contractor shall deliver oral presentation to the COR and technical team at completion of the 65% and 95% Design.

C.3.2.4 Limited Notice to Proceed (LNTP)

Upon award, the Contracting Officer will issue a Limited Notice to Proceed authorizing the Contractor to mobilize and commence site investigation, underwater assessment, and design services. The Contracting Officer may additionally authorize hazardous-materials assessment and abatement, and demolition of deteriorated dock superstructure elements, during the Design

Period, provided the Contractor has first obtained COR approval of the HAZMAT plan and the Site-Specific Safety Plan (including Over-Water Work Plan), obtained any required Honduran maritime or environmental authority approval, and obtained base access authorization. **The Design Period begins on the date of LNTP issuance.**

C.3.2.5 Construction Notice to Proceed (CNTP)

The Contracting Officer will issue a Construction Notice to Proceed confirming:

1. COR approval of the 100% Design / Construction Documents;
2. COR approval of all required preconstruction submittals, including the Quality Control Plan, Site-Specific Safety Plan, Severe Weather Plan, Work Plan/Project Schedule, and HAZMAT plan;
3. Contractor has obtained all required Honduran construction, maritime, and environmental permits;
4. Contractor has provided evidence of all insurance required, including Defense Base Act coverage and any required bonds;
5. Contractor has obtained base access authorization for its personnel.

C.3.3 Single Point of Responsibility

The Design-Build Contractor is the single point of responsibility for the completeness, accuracy, and code compliance of all engineering designs and construction activities. The Contractor shall manage and coordinate all design disciplines, subcontractors, and construction activities to deliver a complete, integrated, and fully functional facility.

The Contractor shall be solely responsible for: conducting all site and underwater investigations necessary to develop a complete and accurate design; completing all final design, detailing, calculations, shop drawings, and construction methods required to deliver a fully functional and compliant facility; identifying and providing any additional materials, components, labor, equipment, connections, supports, accessories, or minor works necessary for proper execution, whether or not explicitly shown or quantified; and obtaining all required permits and regulatory approvals.

No additional compensation, change order, or time extension shall be granted for work, materials, or design details that are reasonably implied, technically required, or necessary for a complete and operable installation. By submitting a proposal, the Contractor acknowledges full design and construction responsibility for delivering a turnkey, fully operational scope consistent with the intent of this project.

C.3.4 Government Review Role

Government review of design submittals is for conformance with performance criteria and contract requirements only. Government review and approval of design documents does not transfer design responsibility to the Government; constitute acceptance of the design as structurally or technically adequate; or relieve the Contractor of responsibility for errors, omissions, or code non-compliance. Submittal review by INL does not relieve the Contractor of responsibility for correctness or compliance.

C.3.5 Reference Condition Assessments — Government-Furnished Information, No Warranty

Statements appearing in Government-Furnished Information to the effect that the existing timber piles remain structurally sound, vertically aligned, and capable of continued service reflect prior above-water visual observation only. Such statements are issued as reference GFI and are not a warranty, representation, or guarantee of the underwater, submerged, or subsurface condition of any pile or of the substructure generally.

The Contractor shall independently determine the condition, section loss, marine-borer attack, and residual capacity of every pile proposed for retention through the underwater investigation required and shall certify in the 35% Validation Report which piles may be retained, and which require repair or replacement. Piles determined deficient shall be addressed under different options in two different CLINs.

No claim for differing site conditions, additional compensation, or time extension will be considered on the basis of pile or substructure conditions that the underwater investigation required by this SOW would have revealed.

C.4 Performance Standards and Minimum Quality Requirements

This section establishes the minimum required performance outcomes, quality standards, and acceptance criteria. Contractors shall propose methods, materials, and approaches that meet these minimum standards. Approaches, materials, or qualifications exceeding the stated minimums are permitted but receive no evaluation credit, no preference, and no advantage in the award decision. Each requirement below is objectively verifiable and forms the basis for the technical acceptability determination.

C.4.1 Engineering Design Package

Performance Objective: Provide a complete, code-compliant engineering design package for all three sub-projects demonstrating that the proposed solution meets all performance requirements, can be constructed safely within the Construction Period, and is suitable for the high-salinity coastal marine environment at Puerto Castilla.

C.4.1.1 Design Criteria —Minimums

The Contractor's design shall meet or exceed the following. These are minimum criteria, not design solutions; the Contractor remains solely responsible for final member sizing, connection design, and structural adequacy.

Criterion	Minimum
Dock uniform live load (pedestrian)	2.5 kN/m ²
Topping slab additional dead load, if exercised	not to exceed 1.0 kN/m ²
Existing deck elevation at termination point	Approximately 1.20 m above water level; the extension shall continue from this elevation with adjustments necessary for continuity and proper alignment
New pile spacing	Approximately 2.50 m on center, subject to Contractor verification and structural analysis
Pile embedment	Greater than 2.50 m below seabed level, driven to refusal or firm bearing layer

Criterion	Minimum
Berthing energy, mooring, and vessel impact loads	Per the Contractor's analysis for the design vessel; design vessel particulars to be confirmed with FEN through the COR during site investigation
Wind, seismic, wave, and tidal loads	Per applicable Honduran code and ASCE 7 or equivalent, whichever is more stringent
Barracks occupant load	8 personnel minimum, for egress and life-safety design
Approximate floor areas (to be field verified)	Outboard Engine Workshop Approximately 80 m ² ; Barracks Approximately 40 m ²
Wall heights	Workshop 2.93 m; Barracks 3.25 m

C.4.1.2 Site Assessment—Minimums

The Contractor shall conduct a preliminary site assessment addressing at minimum:

- Physical conditions (GPS coordinates, photographic record);
- Site and waterside access (roads, wharf approach, security, emergency access);
- Utilities — electricity, potable water, sanitary sewer, and storm drainage, including capacity, condition, and point-of-connection verification;
- Site clearing and vegetation removal;
- Site demolition, including existing plans and demolition plans for the dock superstructure, workshop, and barracks;
- Removal and lawful disposal of debris and construction material, including treated timber;
- Seasonal weather and sea-state conditions affecting access and scheduling, including tropical storm season;
- Local authority and project team contact information, including the Honduran maritime authority and port operator;

- Structural assessment of existing timber piles, dock superstructure, workshop steel frame, barracks steel frame, and slabs-on-grade to remain;
- Identification of hazardous materials and a remediation plan, specifically addressing CCA/creosote-treated timber, lead-based and antifouling coatings, and any asbestos-containing materials in the workshop and barracks.

C.4.1.3 Site Investigation—Minimums

The Contractor shall conduct:

- **Boundary** — verify project boundary lines and the location of all underground, above-ground, overhead, and submarine utilities with designated FEN representatives;
- **Topographical** — define slope and gradient for cut/fill and storm water overland relief; minimum two benchmarks; spot elevations and contour lines within the project site and 30 m outside the site boundary;
- **Hydrographic / bathymetric** — bathymetric survey of the dock footprint and extension alignment plus 20 m beyond; establishment of a tidal datum with recorded tidal range; verification of the existing deck elevation of approximately 1.20 m above water level; berth depth verification at the design vessel draft;;
- **Underwater structural investigation** — underwater inspection of 100% of existing timber piles, addressing marine borer attack, section loss, splitting, and connection condition and pile-by-pile condition rating; a written determination of which piles are structurally sound and may be retained;
- **Geotechnical / marine** — define subsurface characteristics adequate to support pile design for the dock extension, including embedment, capacity, and driving criteria, and to support masonry wall anchorage and any new footings;
- **Environmental** — identify construction impacts and mitigation measures aligned with Honduran regulation, addressing local environmental oversight agency inquiries, hydrogeological and nearshore conditions, government environmental database review, inspection of the subject property and adjacent waters, digital photographs with descriptions, and a statement of qualifications of the assessors.

The Contractor shall furnish the Government a copy of all reports and test results accompanied by the Contractor's interpretation of those results.

C.4.1.4 Minimum Required Outcomes:

- Demonstrated compliance with all applicable Honduran codes and with the international codes and standards;
- Drawings sufficiently detailed to support construction, inspection, permitting, and future maintenance;
- Material specifications demonstrating that proposed products meet or exceed the standards in this SOW;
- Structural calculations for all primary structural elements, including dock superstructure, pile system, dock extension, and masonry wall anchorage;
- Marine engineering analysis addressing wave action, tidal variation, salinity exposure, vessel berthing and impact loads, mooring loads, and corrosion protection strategy;
- Design signed (if applicable sealed) by a licensed professional engineer with demonstrated experience in marine construction.

C.4.1.5 Minimum Design Package Contents

- Site investigation, underwater inspection, and site assessment reports, including the 35% Validation Report;
- Structural drawings and calculations for the 40 m dock rehabilitation (superstructure framing, connections, load analysis, retained pile capacity);
- Structural drawings for the 15 m dock extension (pile layout, embedment, driving criteria, superstructure, connections);
- Structural drawings and load-compatibility analysis for the optional concrete topping slab;
- Structural drawings for masonry wall enclosures and anchorage at the workshop and barracks;
- Structural analysis of existing foundations, slabs-on-grade, and steel frames to remain;
- Architectural drawings for workshop and barracks improvements (floor plans, elevations, sections, door/window schedules);
- Electrical single-line diagrams, load calculations confirmation, and installation drawings for workshop and barracks and dock/waterfront lighting;
- Plumbing layout drawings and calculations for the workshop, including tank base, piping, and drainage;

- Life safety drawings for the workshop and barracks —means of egress, exit signage and emergency egress lighting layout, and portable fire extinguisher locations;
- Corrosion protection plan and material specifications for all marine-exposed elements;
- Concrete mix design for the optional topping slab;
- Construction specifications referencing applicable ASTM, ACI, AWS, NEC, IPC, NFPA, and UL standards;
- Finishes schedule; door, window, and hardware schedules;
- Submittal register; installation details and installation notes;
- Marine work plan — pile driving method statement, barge/work platform plan, debris containment plan, and vessel traffic coordination plan;
- Operations and Maintenance Plan for the completed facilities;
- Permitting documentation and submissions to applicable Honduran authorities, including maritime and environmental authorities.

C.4.1.6 Minimum Quality Standards

- All drawings signed and sealed by a licensed professional engineer, bearing evidence of licensure;
- Calculations demonstrate code compliance with appropriate safety factors;
- Material specifications include manufacturer data sheets and certifications;
- Design demonstrates constructability within the **140-business-day Construction Period**;
- Design and schedule account for the active operational nature of the FEN base and for tidal and sea-state working windows.

C.4.1.7 Acceptance Criteria

Contractor certification letter documenting verification of a complete, code-compliant engineering design package. COR approval of the 100% Design package prior to issuance of the CNTP; all required professional signatures (if applicable seals) present and valid; no unresolved code compliance issues; COR and INL Engineering review completed with no outstanding comments.

C.4.2 Dock Rehabilitation (40 m)

Performance Objective: Fully design and replace the deteriorated dock superstructure over 40 linear meters while retaining the existing structurally sound timber piles, restoring the dock to full operational capacity for maritime operations.

Minimum Required Outcomes:

- Carefully dismantle and remove all deteriorated timber decking, beams, braces, and associated hardware without damaging the piles to be retained;
- Inspect all existing piles for vertical alignment, mechanical integrity, and deterioration; report deficiencies to INL Engineering through the COR before proceeding;
- Install new transverse timber load beams, pressure-treated pine, nominal 2"×12", perpendicular to the dock axis;
- Install new longitudinal timber load beams, pressure-treated pine, nominal 2"×12", parallel to the dock axis, forming the main dock girders; joined with overlapping stainless-steel angles and double through-bolts;
- Install central longitudinal beams where required to distribute loads evenly to the supporting piles;
- Install new timber cross braces (crucetas), nominal 2"×8", to improve lateral stability and resistance to horizontal forces;
- Install new timber decking planks, pressure-treated pine, nominal 2"×6", with uniform spacing to allow drainage;
- Apply marine-grade epoxy coating and non-slip surface treatment to all decking surfaces;
- Replace all connection hardware with new galvanized or stainless-steel components, including bolts, nuts, washers, angles, clamps, and fasteners;
- Seal all joints, interfaces, and bolt penetrations with marine-grade polyurethane sealant to prevent water ingress;
- Pile substructure stability enhancement. Install additional X-bracing between existing pile pairs using 2"×8" CCA-treated timber or galvanized round bar Ø25 mm, bolted with galvanized hardware. Where the Contractor's underwater investigation identifies lateral movement, install mid-level struts. Extent and configuration shall be established by the Contractor's structural analysis and shown on the 65% Design.
- Piles identified as deficient in the underwater investigation shall be repaired, jacketed, or replaced; the Contractor shall not retain any pile that its own analysis does not certify as adequate for the design loads;
- Removed CCA/creosote-treated timber shall be handled and disposed of in accordance to applicable codes; burning is prohibited; no removed material shall enter the water.

Minimum Quality Standards:

Parameter	Minimum
Timber, superstructure	Southern Yellow Pine or equivalent species approved for marine application; CCA Type C pressure-treated; retention $\geq 0.60 \text{ kg/m}^3$; moisture content $\leq 20\%$ at installation
Timber finish	Two coats clear epoxy sealer on all exposed surfaces, followed by one polyurethane top coat; all cut ends and drilled holes field-treated with preservative and epoxy sealer
Metal components	ASTM A36 or A307; hot-dip galvanized per ASTM A123/A153, ≥ 85 microns ; AISI 316 stainless fasteners in marine air exposure
Bolts and fasteners	Ø19 mm minimum , ASTM A307 galvanized or AISI 316; all kits to include washers and locknuts
Structural angles and plates	$2\frac{1}{2}" \times \frac{1}{4}"$, 6 mm thickness , ASTM A36 or AISI 316; all drilling and cut edges protected with zinc-rich primer and epoxy topcoat
Welding	AWS D1.1, electrodes suitable for galvanized steel
Coating system, steel	Zinc-rich epoxy primer 75 μm + aliphatic polyurethane topcoat 75 μm ; total Dry Film Thickness (DFT) $\geq 150 \mu\text{m}$; exposed angles, bolts and brackets 150–200 μm
Epoxy systems	Marine-grade, solvent-free, tensile adhesion $\geq 300 \text{ psi}$
Sealants	Polyurethane-based, UV-resistant, Shore hardness 40–50A
Decking installation	5–8 mm expansion gaps ; stainless-steel screws or galvanized bolts; all cut edges sealed
Cross bracing fit	Tight fit and full contact at all joints; no gap exceeding 3 mm
Alignment tolerance	$\pm 10 \text{ mm}$ in plan, $\pm 5 \text{ mm}$ in elevation

Hold Point: Notify the COR not less than **3 business days** before covering or decking over any structural connection, and before application of coating systems. Work shall not proceed until the COR has verified connections and surface preparation, or has waived the hold point in writing.

Acceptance Criteria: COR visual inspection confirming complete removal of deteriorated elements and proper installation of the new superstructure; material certificates for timber treatment, galvanizing, and coatings; torque testing on bolted connections as required completed; photographic documentation of each construction phase; as-built drawings submitted and approved; Contractor certification letter documenting all of the above.

C.4.3 New Dock Extension (15 m)

Performance Objective: Design and construct a new 15-linear-meter dock extension continuing from the existing dock elevation, using the same structural typology as the rehabilitated dock with improved corrosion protection.

Minimum Required Outcomes:

- Supply and install new pressure-treated timber piles, nominal diameter 30 cm, at approximately 2.50 m spacing, driven to refusal or firm bearing layer with minimum embedment 2.50 m below seabed level;
- Verify pile alignment and verticality during installation; cut piles to final elevation;
- Record pile-driving data for every pile — penetration depth, hammer blows, and final set;
- Cap each pile with a 6 mm galvanized steel plate (ASTM A36, hot-dip galvanized ≥ 85 microns) with through-bolts Ø19 mm minimum and washers; protect pile heads immediately after driving with galvanized caps and bituminous or epoxy sealant;
- Construct the full timber superstructure — transverse beams, longitudinal beams, central beams, and cross bracing — using pressure-treated pine;
- Install all structural connections using galvanized or epoxy-coated steel connectors, angles (2½"×¼"), bolts, and clamps;
- Install timber decking planks to the same specifications and finishes as the rehabilitated section;
- Apply marine epoxy and polyurethane coating systems to all exposed metal components;
- Perform alignment checks, level verification, and mechanical inspection prior to acceptance;
- Berthing and mooring provisions: fenders, cleats or bollards, and pile-mounted rub strips sized by the Contractor's berthing energy analysis for the design vessel;

Minimum Quality Standards:

Parameter	Minimum
Piles	Southern Yellow Pine or equivalent species approved for marine application; CCA Type C pressure-treated to AWPA Use Category UC5C (marine use) ; retention $\geq 0.96 \text{ kg/m}^3$
Pile installation records	Penetration depth, hammer blow count, and final set recorded for 100% of piles
Pile head connectors	Galvanized or stainless-steel brackets and cap plates, ASTM A36, 6 mm , through-bolts Ø19 mm min. with washers; all exposed steel hot-dip galvanized or marine epoxy/polyurethane coated

Parameter	Minimum
Structural connections	Galvanized or epoxy-coated steel connectors, angles 2½"×¼", bolts, and clamps
Concrete (pile heads, if required)	$f_c \geq 3,000$ psi; ASTM A615 Grade 60; epoxy-coated reinforcement for marine exposure

Hold Point: Notify the COR not less than **three (3) business days** before commencing pile driving. Driving shall not proceed until the COR has verified the pile layout, driving criteria, **dynamic pile load testing (PDA)** plan or has waived the hold point in writing. This hold point is not waivable by the Contractor and cannot be satisfied retroactively.

Pile Capacity Verification. The Contractor shall perform **dynamic pile load testing (PDA)** on **not fewer than two (2) piles**, selected by the COR. Driving logs shall be submitted for **every** pile. PDA results demonstrating capacity below the design requirement shall obligate the Contractor to redesign and reinstall at no additional cost to the Government. PDA reports and driving logs are a precondition to erection of superstructure over the extension.

Acceptance Criteria: Pile installation records and PDA reports reviewed and approved by INL Engineering and/or the third-party engineering firm; alignment and level verification completed and documented; material certificates provided; coating verified; as-built drawings indicating pile locations, dimensions, and materials submitted.

C.4.4 Optional Concrete Topping Slab System

Performance Objective: Design and construct an optional structural concrete topping slab installed over the dock surface — across both the rehabilitated 40 m section and the new 15 m extension — to improve durability, safety, and service life. The system shall be compatible with both the rehabilitated and new dock structures.

Option exercise. The Contracting Officer will exercise or decline the Option in writing, following COR review of the pile installation records, PDA results, and the Contractor's load-compatibility analysis. If not exercised, the option lapses without cost to the Government.

Minimum Required Outcomes:

- Contractor's design shall verify structural compatibility with the timber superstructure and confirm that the additional dead load does not exceed the allowable capacity of the retained and new timber pile systems;
- Reinforced concrete slab, 7.5 cm thick, cast over form decking supported by the dock beams;
- Total area approximately 93.5 m² (55 linear meters × 1.7 m width) — covering the full length of the rehabilitated and new dock;
- Additional dead load ≤ 1.0 kN/m²;
- 2% cross slope for water drainage;
- Broom-textured finish with anti-slip epoxy sealer or equivalent marine coating;
- Expansion joints every 3.0 m, filled with polyurethane marine sealant;
- Marine plywood form decking, temporary or permanent, as the base for the topping;
- Perimeter edges protected with 2"×2"×3/16" galvanized angle securely anchored to beams.

Minimum Quality Standards:

Parameter	Minimum
Concrete	$f'_c = 21$ MPa (3,000 psi); ASTM C150 Type I Portland Cement; w/c ≤ 0.50 ; slump 7–9 cm; air content $5 \pm 1\%$
Aggregates	Clean, well-graded river sand and crushed gravel ≤ 19 mm
Corrosion inhibitor	Calcium nitrite at 1.5–2% of cement weight
Reinforcement	Welded wire mesh 6×6 W2.9/W2.9 (Ø4.8 mm) galvanized, placed mid-depth; overlap ≥ 150 mm; tie-wire connections to ensure stability before pouring

Parameter	Minimum
Bonding agent	Existing decking or form panel surface cleaned, roughened, and coated with epoxy bonding agent (Sikadur 32 or approved equivalent) prior to concrete placement
Curing	7 days minimum, wet burlap or curing compound
Sealer	Marine-grade silane/siloxane applied after curing to reduce chloride penetration

Hold Point: Notify the COR not less than **3 business days** before concrete placement. Placement shall not proceed until the COR has verified reinforcement placement, form decking, and containment measures preventing any discharge of concrete, wash water, or slurry to the marine environment, or has waived the hold point in writing.

Acceptance Criteria: Contractor verifies structural compatibility and submits shop drawings for approval before casting; compressive strength testing (1 set per 15 m³) completed and documented; verification of reinforcement and bonding prior to casting; final inspection for cracking, delamination, or uneven surface.

C.4.5 Outboard Engine Workshop Improvements

Performance Objective: Design and deliver a fully enclosed, functional Outboard Engine Workshop of approximately 80 m² capable of supporting the inspection, maintenance, and servicing of marine engines and related equipment used in FEN maritime operations.

No demolition or replacement of the primary structural frame, foundations, roof system, or slab-on-grade is included, except for localized surface repairs, cleaning, or anchorage required to integrate new construction elements.

Minimum Required Outcomes:

- Architectural and structural drawings for all new masonry wall enclosures, confining frame, access elements, and cladding within the existing steel-framed structure;
- Design confirms new masonry walls are non-load-bearing and that anchorage to the existing slab is adequate;
- Only the wall enclosures highlighted on the reference layouts shall be built or intervened.

Masonry reinforcement and confinement (mandatory minimum):

- Walls of 6-inch CMU, non-load-bearing;
- Vertical reinforcement: one Ø12 mm (½") bar at 0.60 m spacing, fully grouted in 2,500 psi concrete;
- Horizontal reinforcement: two Ø10 mm (⅜") bars every two courses;
- Tie columns 15 × 20 cm, 4#4 bars with #4 stirrups @ 20 cm, at all corners and at any mid-span exceeding 2.50 m;
- Intermediate columns 10 × 15 cm, 2#3 with #3 @ 20 cm, at all door and window jambs;
- Three horizontal bond beams 15 × 20 cm, 4#4 with #4 stirrups @ 20 cm, at floor level, at 2.10 m, and at wall top;
- Floor-level bond beam epoxy-anchored to the existing slab with ½" dowels @ 40 cm;
- All perimeters reinforced and properly tied. Wall height 2.93 m.
- Masonry walls mechanically anchored to the existing slab using epoxy-anchored dowels designed for the applicable loads;

Access, cladding, and protection:

- **One (1) double-leaf steel access gate**, approximately 5.00 m × 5.00 m, for engine and equipment access, combining perforated mesh and solid metal panels per the Contractor's

design, with all frames, subframes, hinges, columns, and anchoring systems, including anchoring plates to floor and roof beams and vertical load-bearing supports;

- **Metal personnel access doors**, nominal 1.00 m × 2.10 m, with metal frames, hinges, handles, locks and all accessories; single-lever latch sets for exterior entries; marine-resistant epoxy coating;
- **Aluzinc corrugated sheet metal cladding, minimum gauge 24**, on designated exterior wall sections, screw-fastened to existing framing with additional framing provided by the Contractor as required; panels shall extend between the new wall and roof structure ensuring full closure; anti-salinity protective coating applied to all finishes;
- **Galvanized cyclone mesh panels, gauge 24, with steel support framing**, installed in upper wall areas between new masonry walls and the existing roof structure, to allow ventilation while maintaining security;
- **Localized cleaning and corrosion protection of existing steel** — remove loose rust, scale, and deteriorated coatings by mechanical means; prepare surfaces per coating manufacturer recommendations; apply marine-grade epoxy primer and polyurethane topcoat to total Dry Film Thickness (DFT) $\geq 150 \mu\text{m}$; the entire existing metal structure of the building shall be cleaned of rust, repaired, and coated;

Minimum Quality Standards: Concrete grout $\geq 2,500$ psi; all masonry plumb, level, and aligned with existing structural elements; gate and doors protected by hot-dip galvanizing or marine-grade epoxy; cladding and mesh securely fastened without compromising structural integrity; all materials commercially available in Honduras unless otherwise approved; metal components hot-dip galvanized or epoxy/polyurethane coated for marine exposure; the design shall not modify the primary structural frame, foundations, roof system, or slab-on-grade except for localized surface repairs or anchorage points.

Hold Point: Notify the COR not less than **three (3) business days** before grouting CMU walls. Grouting shall not proceed until the COR has verified reinforcement placement, tie column and bond beam reinforcement, dowel installation, and wall dimensions, or has waived the hold point in writing.

Acceptance Criteria: Verification of masonry wall alignment, dimensions, and reinforcement placement prior to grouting; inspection of epoxy anchors installed into the existing slab; visual inspection of steel surface preparation and coating application with Dry Film Thickness (DFT) verification; functional testing of the access gate and personnel doors; as-built drawings reflecting field adjustments; Contractor certification letter; COR acceptance.

C.4.6 Workshop Electrical Installations

Performance Objective: Design and provide a functional electrical system suitable for workshop operations, connected to the existing facility electrical service.

Minimum Required Outcomes: Electrical single-line diagram, load calculations, and installation drawings; confirmed compatibility with the existing electrical service; LED lighting fixtures suitable for industrial/workshop use; surface-mounted conduits and wiring systems; duplex electrical outlets for hand tools and equipment at appropriate locations. Ground-fault circuit interrupter protection at all outlets in wet, washdown, or outdoor locations; all circuits protected, grounded, and labeled at the panel; conduit, boxes, fittings, and fasteners rated for marine/corrosive exposure.

Minimum Quality Standards: Compliance with NEC and applicable Honduran electrical codes and safety standards; cost-effective, locally available materials; conduit properly supported and following building lines.

Acceptance Criteria: Contractor certification letter documenting code-compliant design by an electrical engineer; functional testing of 100% of lighting, outlet, and grounding circuits with the COR; all deficiencies corrected prior to acceptance.

C.4.7 Workshop Plumbing Installations

Performance Objective: Design and provide basic plumbing facilities required for workshop functionality, including parts cleaning and hand washing capability.

Minimum Required Outcomes:

- Plumbing layout drawings, pipe sizing, and connection details;
- One (1) prefabricated industrial washing sink suitable for parts cleaning and hand washing;
- One (1) polyethylene water storage tank (nominal 2,000 liters, Rotoplas-type or approved equivalent) installed on a designed reinforced concrete base;
- Complete piping system (inlet, outlet, overflow, valves, and connections between tank and washing sink);
- The tank system functions as an auxiliary reserve and shall not be considered a potable distribution system.

Minimum Quality Standards: All plumbing installed neatly and securely; reinforced concrete base designed to support the full tank load; IPC or locally applicable Honduran plumbing code.

Hold Point: Notify the COR not less than 3 business days before backfilling any underground piping or placing concrete over any under-slab piping. This hold point is not waivable by the Contractor and cannot be satisfied retroactively.

Acceptance Criteria: Leak and pressure testing of 100% of connections witnessed by the COR or evidenced by certified test report; all deficiencies corrected prior to acceptance.

C.4.8 Emergency Response Barracks Improvements

Performance Objective: Design and deliver fully enclosed, functional Emergency Response Barracks providing resting, staging, and readiness space for on-call personnel assigned to emergency and critical response operations.

Minimum Required Outcomes:

- Architectural and structural drawings for all new masonry wall enclosures, ceiling system, access elements, and finishes within the existing steel-framed structure;
- Design confirms new masonry walls are non-load-bearing and that anchorage to the existing slab is adequate;
- New masonry wall enclosures (6-inch CMU minimum) consistent with the functional requirements herein and the reference layouts provided as GFI;
- Vertical reinforcement Ø12 mm (½") at 60 cm spacing minimum, fully grouted; horizontal reinforcement Ø10 mm (⅜") every two courses minimum;
- Masonry walls anchored to the existing slab using epoxy-anchored dowels designed for the applicable loads;
- Masonry walls remain exposed and unpainted unless otherwise directed; concrete elements affected by new construction patched, smoothed, and polished;
- Suspended PVC ceiling system in the designated barracks area, including all framing members, hangers, suspension wires, trims, and accessories, coordinated with the existing roof structure and lighting layout;
- Metal access doors (nominal 1.00 m × 2.10 m) with frames, hinges, hardware, and corrosion-resistant finishes;
- Sliding aluminum or PVC windows with integrated mosquito mesh;
- All doors and windows securely anchored to masonry walls and sealed to prevent water intrusion.

Minimum Quality Standards: Concrete grout $\geq 2,500$ psi; all masonry plumb, level, and aligned with existing structure; ceiling materials resistant to humidity and suitable for coastal environments; all metal components hot-dip galvanized or coated with marine-grade epoxy; fasteners corrosion-resistant and suitable for high-salinity conditions; the design shall not modify the primary structural frame, foundations, roof system, or slab-on-grade except for localized surface repairs or anchorage points.

Hold Point: Notify the COR not less than **3 business days** before grouting CMU walls and before closing the suspended ceiling over any concealed electrical work.

Acceptance Criteria: Verification of masonry wall dimensions, alignment, and reinforcement; inspection of anchorage to the existing slab and structure; visual inspection of finishes and access elements; verification that all doors and windows operate freely and latch/lock as designed; as-built drawings reflecting field changes; Contractor certification letter; COR acceptance.

C.4.9 Barracks Electrical Installations

Performance Objective: Design and provide a basic electrical system sufficient to support emergency response readiness, including lighting and general-purpose outlets.

Minimum Required Outcomes: Electrical single-line diagram and installation drawings; LED lighting fixtures suitable for dormitory use; general-purpose outlets at appropriate locations; surface-mounted conduits and wiring systems. All circuits protected, grounded, and labeled at the panel; GFCI protection in any wet area.

Minimum Quality Standards: All designs and installations functional, safe, cost-effective, and compliant with NEC and/or applicable Honduran electrical codes.

Acceptance Criteria: Contractor certification letter documenting code-compliant design by an electrical engineer; functional testing of 100% of lighting, outlets, and switches with the COR; all deficiencies corrected prior to acceptance.

C.4.10 Exterior / Waterfront Lighting System

Performance Objective: Provide and install exterior lighting.

Minimum Required Outcomes: LED fixtures rated for outdoor/wet-location and marine service; corrosion-resistant housings and fasteners (AISI 316 or equivalent); weatherproof conduit, boxes, and connections; fixtures positioned to illuminate the building entrances and all exit discharge locations; lighting arranged to avoid glare toward the water that would impair vessel operations.

Acceptance Criteria: Contractor certification letter documenting code-compliant design by an electrical engineer; functional testing of 100% of exterior circuits; safe nighttime visibility along all pedestrian routes confirmed by the COR during a nighttime walkthrough; COR acceptance.

C.4.11 Fire Protection and Life Safety

Performance Objective: Deliver facilities providing code-compliant means of egress, emergency illumination and exit identification, and portable fire protection as per code.

Minimum Required Outcomes:

1. Means of egress meeting code requirements.
2. Egress doors openable from the egress side without key, tool, special knowledge, or effort, and swinging in the direction of egress travel where required by code.
3. Portable fire extinguishers selected, sized, mounted, signed.
 - **ABC-rated** extinguishers in the Barracks and throughout the Workshop;
 - **Class B-rated** capacity at the flammable-liquids storage.
4. **Smoke alarms** in the barracks sleeping area, with battery backup.
5. The Contractor shall obtain any review, inspection, or approval of the fire and life safety design required by the Honduran authority having jurisdiction, and provide evidence to the COR.

Minimum Quality Standards: IBC; IFC; NFPA 101; NFPA 10; NFPA 30 (flammable and combustible liquids); or locally applicable Honduran code.

Acceptance Criteria: Egress door swing out, hardware and lighting verified by walkthrough with the COR against the approved design; extinguisher type, rating, mounting, signage, by inspection with the COR; smoke alarm functional test; evidence of any required Honduran fire authority approval; Contractor certification letter documenting all of the above; COR acceptance.

C.5 Materials

Performance Objective: All materials and equipment shall be new, code-compliant, and capable of meeting the minimum performance standards for the intended service life in a **high-salinity coastal marine environment**.

General Material Requirements: All materials new and free of defects; materials carry the manufacturer's commercial warranty; materials comply with applicable codes and standards; materials suitable for marine and coastal environments; Contractor provides material data sheets demonstrating compliance.

Minimum Material Standards by System:

System	Minimum Performance Requirement
Dock timber components	CCA Type C pressure-treated; retention ≥ 0.60 kg/m ³ (superstructure), ≥ 0.96 kg/m ³ (piles); moisture content $\leq 20\%$; two coats clear epoxy sealer plus one polyurethane top coat
Dock metal components	ASTM A36 or A307; hot-dip galvanized per ASTM A123/A153, ≥ 85 microns; AISI 316 stainless fasteners in marine air exposure; welding per AWS D1.1
Masonry and concrete	6-inch CMU; grout $\geq 2,500$ psi; concrete $\geq f_c 3,000$ psi; ASTM A615 Grade 60 reinforcing steel; epoxy-coated reinforcement for marine exposure
Workshop and barracks enclosures	Aluzinc sheet metal cladding ≥ 24 gauge; cyclone mesh panels; metal doors and gates hot-dip galvanized or marine-grade epoxy coated; PVC ceiling system resistant to humidity
Electrical systems	LED fixtures suitable for industrial/workshop and dormitory use; surface-mounted conduit systems; all components meeting NEC and Honduran electrical codes; corrosion-resistant enclosures, fittings, and fasteners
Plumbing	Potable-rated materials for potable service; corrosion-resistant; IPC- or locally-compliant
Fenders, mooring, and safety hardware	Marine-grade; hot-dip galvanized or AISI 316; sized by the Contractor's berthing analysis

The Contractor may propose any specific product that meets or exceeds the applicable minimum. Products exceeding the minimum receive no evaluation credit.

Material Approval Process: Contractor submits material data sheets demonstrating compliance; substitutions must demonstrate equal or superior performance; COR approval required before procurement; the Contractor bears the risk of non-compliant material selection.

C.5.1 Substitutions. Substitution of any material, product, equipment, or method from that shown in the approved design requires prior written approval of the Contracting Officer. Requests shall identify the specified item, the proposed substitute, a point-by-point comparison demonstrating equal or superior performance against the applicable minimum, manufacturer data sheets, cost impact, and schedule impact. The Contractor bears the risk of proceeding without approval.

C.5.2 Quantities and Field Measurements. All quantities and dimensions stated in this SOW are estimates provided for reference and general scope definition only. The Contractor is responsible for verifying all measurements by taking field measurements during the site investigation phase. Any substantial discrepancy that could alter the contract price or period of performance must be reported in writing to the Contracting Officer immediately, and in any event prior to continuing with the affected work. Failure to report a discrepancy that a reasonable field investigation would have revealed precludes a claim for additional compensation or time extension based on that discrepancy.

C.5.3 Source/Nationality, and Domestic Preference

All materials shall be new, free of defects, and compliant with applicable codes and manufacturer requirements. Buy American and Trade Agreements requirements apply only to the extent the Contracting Officer determines them applicable. The Contractor shall provide certificates of origin, compliance, and warranties upon request.

C.5.4 Telecommunications restrictions. FAR 52.204-24, 52.204-25, and 52.204-26 (Section 889) apply. No covered telecommunications or video surveillance equipment or services shall be incorporated into the work.

C.6 Contractor Submittals and Approvals

C.6.1 Submittal Register. Within **5 business days of LNTP**, submit a Submittal Register covering: site investigation and underwater inspection plan; engineering design package (all disciplines); construction schedule and sequencing plan; shop drawings and installation details for dock components, structural connections, and special assemblies; material data sheets and certificates (timber treatment, coatings, galvanization, concrete mix designs); method statements for pile installation, timber assembly, and concrete works; HSE plan; and as-built/close-out templates.

C.6.2 Design Approval. **No construction, fabrication, or material procurement shall begin until the Government approves the relevant engineering design package.** The Contractor proceeds at its own risk if it commences prior to design approval.

C.6.3 Submittal Procedures. Submittals shall follow the approved Submittal Register and be submitted electronically in PDF unless otherwise directed. The Government has 5 business days to review submittals unless additional time is justified. "Approved" or "Approved with comments" submittals do not waive compliance requirements.

C.7 Minimum Performance Outcomes & Deliverables

#	Outcome	Deliverable
C.7.1 Site Assessment, Investigation, and Design	Verified site and underwater conditions, dimensions, elevations, tidal datum, utilities, and interfaces; approved engineering design package demonstrating code compliance, structural adequacy, and constructability	Site assessment, underwater inspection, bathymetric, geotechnical, and environmental reports; 35% Validation Report; 65%, 95%, and 100% design packages; structural, marine, electrical, plumbing, and life safety calculations; permitting documentation; written report of discrepancies between contract documents and actual site conditions
C.7.2 Dock Rehabilitation and Extension	Fully designed, rehabilitated 40 m dock superstructure and new 15 m dock extension, operational and compliant with this SOW	Commissioned dock with as-built drawings, material certificates, pile installation records, proof load test report, and photographic documentation
C.7.3 Optional Concrete Topping Slab (if exercised)	Durable, drained, anti-slip dock surface within the allowable structural capacity	Shop drawings, concrete test reports, as-builts
C.7.4 Outboard Engine Workshop	Fully enclosed, functional workshop with electrical, plumbing, ventilation, and fire protection operational	Completed workshop with as-built drawings, manufacturer data sheets, and O&M instructions
C.7.5 Emergency Response Barracks	Fully enclosed, functional barracks ready for emergency response use, with life safety provisions	Completed barracks with as-built drawings and manufacturer data sheets
C.7.6 Building Systems	Electrical, plumbing, exterior lighting, and fire/life safety systems complete, tested, and operational	Commissioned systems with as-builts, test reports, host-nation fire authority approval evidence

#	Outcome	Deliverable
C.7.7 Quality Control and Testing	All systems tested, certified, and operating within specified parameters	Complete testing documentation and commissioning reports
C.7.8 Documentation and Training	Facility personnel equipped to operate and maintain all installed systems	As-built drawings, O&M manuals (English and Spanish), training certificates, spare parts
C.7.9 Project Completion	Fully functional FEN Puerto Castilla dock, workshop, and barracks meeting all performance requirements	Final acceptance by the Contracting Officer with all punch-list items resolved

The Contractor shall furnish all labor, materials, equipment, engineering, supervision, testing, and incidentals necessary to deliver fully functional, operational facilities.

C.8 Milestones & Deliverables

#	Milestones & Deliverable	Minimum Standard
1	Work Plan, Construction Schedule and Sequencing Plan	Submitted within 5 business days of LNTP; maintained and updated weekly in Microsoft Project (GANTT or CPM); ≥ 90% milestone on-time achievement
2	Site Investigation Report	Complete field investigation covering boundary, topographical, bathymetric/tidal, geotechnical/marine, and environmental investigation; underwater pile inspection with pile-by-pile condition rating and video; structural assessment of existing conditions; HAZMAT identification and remediation plan; utility verification; written report of any discrepancies from reference documents
3	Engineering Design Package – signed (if applicable sealed)	Contents per C.4.1
4	Permitting Documentation	All required Honduran construction, maritime, environmental, and fire authority permits obtained
5	35% Design Validation Report (signed/sealed)	Confirms the Contractor's interpretation of the Government 35% concept GFI or identifies required departures with supporting rationale; incorporates site and underwater investigation findings; COR acceptance required before commencement of 65% Design
6	65% Design Documents (signed/sealed)	Architectural, structural, marine, civil, electrical, plumbing, and life safety systems coordinated into an integrated package; most design conflicts resolved; constructability confirmed
7	95% Design Documents (signed/sealed)	Near-final construction document package, technically complete; includes all calculations required by the standards and codes; oral presentation delivered to COR
8	100% Construction Documents (signed/sealed)	Fully validated, coordinated, contract-ready; zero unresolved code compliance issues; COR review completed with no outstanding comments. COR approval is a CNTF precondition

#	Milestones & Deliverable	Minimum Standard
9	Shop Drawings and Installation Details	Submitted for review and approval prior to fabrication or procurement, whichever is first; COR approval required before procurement
10	Material Data Sheets and Certificates	Timber treatment, coatings, galvanization, and concrete mix design certificates submitted prior to use; 100% of materials covered; COR approval before procurement
11	Safety and HSE Plan	COR reviewed and approved before mobilization; CNTP precondition; zero safety violations during execution
12	Quality Control Plan	Addresses all required testing; identifies QC personnel by name and qualification; states inspection procedures, test methods, acceptance thresholds, and hold point notification procedures; approved before mobilization; CNTP precondition
13	Submittal Register	Submitted within 5 business days of LNTP; covers site investigation plan, all design stages, construction schedule, shop drawings for dock components and structural connections, material data sheets, method statements for pile installation, timber assembly, and concrete works, HSE plan, and as-built/close-out templates
14	Weekly Progress Reports	Submitted in English within 2 business days of week end;
15	Monthly Status Reports (if applicable)	Submitted in English within 5 working days of month end; includes quality management activities and updated Work Plan/schedule
16	Testing and Commissioning Reports	100% of required tests completed; certified reports; all results within specified parameters
17	O&M Plan	Bilingual (English/Spanish); covers all installed systems including dock inspection and maintenance intervals, coating renewal, fastener inspection; training completed with certificates issued
18	As-Built Drawings	Accurate representation of installed conditions ($\leq 2\%$ variance) in PDF and editable CAD (DWG), on CD,

#	Milestones & Deliverable	Minimum Standard
		English and Spanish; signed/sealed by the responsible design engineer
19	Warranty Documentation	Complete warranty certificates for all materials, equipment, and systems; minimum 12-month coverage or the period required by local law, whichever is longer
20	Spare Parts, and Training Records	Manufacturer-recommended spare parts for one year of normal operation; hands-on operator and maintenance training delivered in Spanish, with attendance rosters and certificates

Deliverable Acceptance Criteria: All deliverables submitted on schedule; content complete and accurate; COR approval obtained; electronic and hard copy formats provided as specified.

C.9 Schedule Performance Requirements

Performance Objective: Complete the Design Period within **[100] business days from LNTP** and the Construction Period within **140 business days from CNTP**, with **≥ 90% on-time milestone achievement** in each.

Minimum Required Outcomes: Work Plan / Construction Schedule submitted within 5 business days of LNTP; schedule maintained and updated weekly using Microsoft Project (GANTT or CPM); major milestones achieved within ± 5 days of planned dates; final completion within 240 business days from LNTP.

C.9.1 Design Period Milestones — measured from LNTP

Milestone	Not later than (business days)
Kickoff Meeting held	LNTP + 5
Submittal Register submitted	LNTP + 5
Work Plan / Construction Schedule submitted	LNTP + 5
Construction Schedule and Sequencing Plan submitted	LNTP + 5
Mobilization for design services complete	LNTP + 5
Site Investigation, Underwater Assessment, and 35% Validation Report submitted	LNTP + 5
Government review and comment returned	LNTP + 10
Corrected Site Investigation and 35% Validation Report resubmitted	LNTP + 15
Site Investigation, Assessment, and 35% Validation Report accepted	LNTP + 20
HAZMAT assessment and abatement plan approved (abatement runs concurrently with design stages)	LNTP + 30
Honduran permit applications submitted, including maritime and environmental (runs concurrently with 65%, 95%, and 100% stages)	LNTP + 30
Authorized demolition of deteriorated dock superstructure complete; debris lawfully disposed (if authorized under LNTP)	LNTP + 30
65% Design Documents submitted	LNTP + 40

Milestone	Not later than (business days)
Government review and comment returned	LNTP + 45
Corrected 65% Design resubmitted	LNTP + 50
65% Design accepted	LNTP + 55
95% Design Documents submitted; oral presentation delivered	LNTP + 65
Government review and comment returned	LNTP + 70
Corrected 95% Design resubmitted	LNTP + 75
95% Design accepted	LNTP + 80
100% Construction Documents submitted (signed and sealed)	LNTP + 85
Government review returned	LNTP + 90
100% Construction Documents approved	LNTP + 95
Honduran permits obtained, including any fire and maritime authority approval	LNTP + 100
Preconstruction submittals approved (QCP, Site-Specific Safety Plan, Severe Weather Plan, HAZMAT plan)	LNTP + 100
Insurance evidenced, including Defense Base Act; bonds provided if required	LNTP + 100
Base access authorization obtained for Contractor personnel	LNTP + 100
CNTP issued (End of Design Period)	LNTP + 100

C.9.2 Construction Period Milestones — measured from CNTP

Milestone	Not later than (business days)
Pre-Construction Orientation held	CNTP + 5
Construction mobilization and site setup complete; marine work platform mooring approved	CNTP + 5
Dock superstructure demolition complete; treated timber lawfully disposed	CNTP + 20
Dock extension piles driven; installation records submitted (pile driving hold point cleared)	CNTP + 45
Dock rehabilitation (40 m) superstructure complete	CNTP + 60
New dock extension (15 m) superstructure complete	CNTP + 70
Dock coating systems, fenders, mooring hardware and life-safety equipment installed	CNTP + 80
Optional concrete topping slab complete, if exercised (concrete hold point cleared, strength testing passed)	CNTP + 85
Outboard Engine Workshop masonry, cladding, gate, and doors complete (grouting hold point cleared)	CNTP + 100
Workshop electrical and plumbing complete; piping hold point cleared and tested	CNTP + 110
Emergency Response Barracks masonry, ceiling, doors, and windows complete	CNTP + 115
Barracks electrical complete	CNTP + 115
Exterior / waterfront lighting complete	CNTP + 120
Fire protection and life safety complete — egress, exit signage, emergency illumination, extinguishers, smoke alarms installed	CNTP + 120
Substantial completion; COR inspection and punch list generated	CNTP + 125

Milestone	Not later than (business days)
Testing, commissioning, training, and punch list resolution complete	CNTP + 130
Final inspection	CNTP + 135
Final acceptance	CNTP + 140

Acceptance Criteria: Work Plan and construction schedule submitted and approved within the stated periods; weekly updates provided with progress reports; $\geq 90\%$ of milestones achieved on time in each period; final completion within 140 business days of CNTP; COR approval of schedule performance.

C.9.3 Normal workdays are Monday through Friday. Workers typically work eight (8) hours per day, 40 hours per week. Flextime workers start not earlier than 0600 and not later than 0900. Core hours are 0800 to 1600 daily.

C.9.4 Holidays and Non-Work Days. Non-workdays include Honduran National Holidays, FEN base closure days, and may include U.S. Federal Holidays and INL-directed access restrictions. Work on non-workdays requires 48-hour prior approval from the COR.

C.9.5 Operational Continuity

Performance Objective: Execute all work with minimal disruption to existing FEN base operations, coordinating all outages and providing necessary temporary services.

Minimum Required Outcomes: Phasing plan that minimizes operational downtime; all outages coordinated and approved a minimum of 48 hours in advance; temporary power/services provided as needed to maintain critical operations; zero unauthorized disruptions; work activities affecting operations limited to approved windows.

Acceptance Criteria: COR approval of the phasing plan; all outages executed within approved windows; zero operational disruptions outside approved windows; temporary services functional and safe.

C.10 Quality Assurance (QA) / Quality Control (QC)

Performance Objective: Deliver work meeting or exceeding all specified quality standards with zero defects at final acceptance.

Minimum Required Outcomes: QA/QC plan implemented throughout the project lifecycle; all inspection checkpoints and hold points completed and documented; all testing performed with calibrated equipment and certified results; deficiencies identified and corrected before final acceptance.

Quality Performance Metrics: First-time acceptance rate $\geq 95\%$; deficiency correction time ≤ 5 calendar days; testing pass rate 100% (after any necessary corrections); documentation completeness 100%.

Minimum Required Testing:

System	Required testing
A. Dock works	Timber treatment certificates for 100% of timber; galvanization and coating certificates for 100% of metal components; coating dry-film thickness verification; alignment ± 10 mm plan / ± 5 mm elevation; torque testing on bolted connections as required; pile installation records reviewed and approved;
B. Concrete works	Compressive strength testing 1 set per 15 m ³ ; verification of reinforcement and bonding prior to casting; final inspection for cracking, delamination, or uneven surface
C. Masonry works	Verification of wall alignment, dimensions, and reinforcement placement prior to grouting; inspection of epoxy anchors into the existing slab; grout strength verification
D. Electrical systems	Functional testing of 100% of circuits; grounding verification; GFCI trip testing; 100% pass rate
E. Plumbing systems	Leak and pressure testing of 100% of connections;
F. Fire and life safety	Emergency egress illumination test; exit signage verification; extinguisher placement verification; smoke alarm functional test

Cost of Inspections and Testing. All inspections and tests required by this contract, by the approved design, or by Honduran authorities shall be initiated and paid for by the Contractor. The Contractor shall maintain quality control over suppliers, manufacturers, products, services, site conditions, and workmanship. Where a manufacturer's warranty requires installer approval, the Contractor shall be approved by the manufacturer to perform the work for the specified guarantee period.

Government Quality Assurance Inspections. The Government has the right to inspect and test all work, to the extent practicable, at all times and places during performance, and may perform full-time quality assurance inspections during construction. QA inspections do not relieve the Contractor of responsibility for QC or for meeting contract requirements.

Quality Documentation Requirements: Test plans submitted and approved before testing; calibration certificates for all test equipment; certified test reports with actual measured values; photographic documentation of installations; deficiency logs with corrective actions.

Acceptance Criteria: QA/QC plan approved and implemented; Contractor certification letter documenting all required tests completed with passing results including deficiencies corrected and re-tested; complete documentation package provided; COR verification of quality standards met.

The Contractor shall submit a **Quality Control Plan (QCP)** describing internal staffing and procedures used to meet the quality, quantity, timeliness, responsiveness, and other service delivery requirements in this SOW, including names and qualifications of site superintendents and other key oversight personnel.

Contractor certification letter — A signed statement submitted to the COR by the Contractor's responsible professional, certifying that a specified requirement of this SOW has been met. Each letter shall identify the SOW section certified, state the verification, testing, or inspection performed with dates and results, attach supporting records, and be signed by the Design-Build Project Manager or the discipline engineer of record. Letters certifying design adequacy or structural, electrical, plumbing, or life-safety compliance shall be signed (if applicable sealed) by the licensed professional engineer responsible for that discipline.

C.11 Work Execution Performance Standards

Performance Objective: Execute all design and construction work in a professional, safe, and coordinated manner that minimizes disruption to existing FEN base operations.

- A. Design Phase:** Site investigation completed and design package submitted; design package approved by the COR prior to commencement of any construction; all design disciplines coordinated into an integrated, constructable design; permitting submissions made timely to avoid construction delays.
- B. Coordination and Scheduling:** All work coordinated with INL Honduras and FEN base authorities with **zero unauthorized disruptions**; work schedule maintained with **≥ 90% on-time milestone achievement**; minimum 5 business days advance notice for all access requirements.
- C. Construction Quality:** All construction executed in strict conformance with the approved design documents; all installations meet or exceed manufacturer specifications and code requirements; all disturbed surfaces restored to original condition or better.
- D. Site Management:** Work area maintained clean and safe at all times; existing facilities, vessels, and equipment protected from damage (zero damage incidents); debris removed daily; final cleanup within 24 hours of completion; **no discharge of pollutants, debris, oils, fuels, or chemicals into the marine environment.**
- E. Environmental Management:** Dust, noise, and waste managed per best practices; all waste disposed legally with documentation; zero environmental violations or citations.
- F. Protection of Existing Facilities.** The Contractor shall protect all INL and host-nation property, equipment, vessels, finishes, and infrastructure from damage. Any damage caused by the Contractor shall be repaired at the Contractor's expense to match existing conditions within 5 calendar days.
- G. Storage of Materials.** The Contractor shall maintain a materials inventory and receiving log recording item, quantity, date received, and storage location. The log shall be included in the Weekly Progress Report and available for COR inspection at any time. The Contractor shall secure all stored materials against loss, theft, and unauthorized removal and shall immediately report any loss to the COR. Materials furnished under this contract shall be used solely for the work at the location specified.
 - Protect all moisture-susceptible materials in dry, above-ground, watertight storage; keep labels intact and legible;
 - Store materials in Government-approved locations; cover and protect materials subject to weather damage, including in transit; stored materials shall be available for inspection;
 - Store flammable and volatile liquids in sealed containers a minimum of 20 feet from existing buildings
 - Deliver liquid products sealed in original containers;

- Distribute material, debris, and equipment placed on any deck or roof over structural members to avoid damage, and secure against movement by wind.

H. Debris and Dust Control. The Contractor shall prevent and control blowing dust and debris and shall maintain the site so that dust and wind-borne debris transported to adjacent FEN base areas are kept to minimal levels during demolition and earthwork. All demolition debris shall be removed to a COR-approved location and lawfully disposed. Over-water demolition –any material entering the water shall be recovered the same working day.

I. Operations and Storage Areas. The Contractor shall confine operations to authorized areas; maintain safe and orderly storage of materials; protect pavements, structures, vessels, and existing facilities; and restore any damaged areas at no additional cost to the Government. Temporary storage areas and marine plant mooring within the FEN base must be coordinated with the COR.

Acceptance Criteria: COR verification of coordination and schedule compliance; visual and functional inspection of all installations; testing verification of all systems; site cleanliness and restoration verified.

C.12 Contractor Equipment and Tools

Performance Objective: Provide all equipment and tools necessary to execute the design investigation and construction work safely, efficiently, and in compliance with manufacturer specifications and code requirements.

Minimum Equipment Capabilities:

- **Site investigation:** survey equipment, pile integrity testing equipment, marine depth measurement equipment;
- **Marine construction:** pile driving equipment (mechanical hammer or vibratory driver), marine work platforms or barges as required;
- **Timber work:** appropriate cutting, drilling, and fastening equipment; torque wrenches for bolted connections;
- **Masonry and concrete:** mixing, placing, and finishing equipment; epoxy injection equipment for anchors;
- **Electrical installation and testing:** continuity testers, voltage testers, conduit bending tools;
- **Plumbing:** pressure testing equipment and pipe joining equipment appropriate to the materials used;
- **Finishing work:** tools for professional-quality coating application, ceiling installation, and cladding installation;
- **Fabrication:** welding and metal fabrication equipment meeting AWS standards.

Minimum Quality Standards: All testing equipment calibrated within the past 12 months with certificates provided; equipment maintained in good working condition; equipment operated by trained, qualified personnel only. All lifting equipment, rigging, and barge/platform mooring certified and inspected per manufacturer and applicable standards.

Acceptance Criteria: Contractor certification letter documenting calibration certificates for all testing equipment; equipment demonstrated appropriate and functional; no damage to existing facilities from equipment use.

C.13 Health, Safety, Environmental and Security Performance Requirements

C.13.1 Safety Performance Objective: Zero lost-time accidents, zero safety violations, and 100% compliance with all safety regulations throughout the project.

Safety Performance Metrics: Lost-time accident rate: 0. OSHA recordable incidents: 0. Safety violations or citations: 0. PPE compliance: 100%. Daily safety briefing completion: 100%.

C.13.2 Site-Specific Safety Plan — the Contractor shall submit a plan addressing, at minimum:

1. Hazard analysis for each task, including coating removal hazards;
2. PPE requirements for all personnel; The Contractor shall provide all necessary PPE, including safety goggles, electrical safety gloves, safety footwear, dust masks, coveralls or equivalent clothing, hard hats, life vests and personal flotation devices for all over-water work, and any other PPE required to perform tasks effectively and safely.
3. Emergency response procedures;
4. Electrical safety procedures;
5. Marine and waterfront safety procedures;
6. Fall protection for elevated and over-water work;
7. Confined space procedures (if applicable);
8. Hot work procedures;
9. Material handling and storage;
10. Severe Weather / Tropical Cyclone Plan — trigger thresholds, securing of the site, barge, materials and equipment, personnel evacuation, and post-event damage assessment and reporting to the COR within 24 hours of site re-entry.

C.13.3 Safety Incident Reports. Any accident, injury, property damage, environmental release, or security incident shall be reported verbally to the COR within **1 hour** and in writing within **24 hours** of occurrence.

C.13.4 Environmental Performance Requirements

Performance Objective: Zero environmental violations and 100% compliant waste disposal. Protect the marine and terrestrial environment at all times.

Minimum Required Outcomes: All waste properly segregated, documented, and disposed of per Honduran regulations, including regulated handling of CCA/creosote-treated timber and coating debris; zero environmental spills or releases; no discharge of pollutants, debris, oils,

fuels, or chemicals into the marine environment; work site maintained clean with proper debris management.

Minimum Quality Standards: Waste disposal documentation for waste generated; immediate containment and reporting of any fuel or oil spill;

Acceptance Criteria: Contractor certification letter documenting waste disposal per local regulations; zero environmental violations or citations; COR verification of site cleanliness; all disturbed surfaces restored.

Environmental Note: The weather in Puerto Castilla is very humid and hot, with constant rains, power outages, and sand fleas and mosquitos. The Contractor shall account for these conditions in its planning, scheduling, and material selection. The site lies within the Atlantic tropical cyclone basin; the Contractor shall account for the June–November season in its schedule and shall maintain the Severe Weather Plan.

C.13.5 Site Access and Security: All Contractor personnel shall comply with FEN base access, badging, and escort requirements. The Contractor shall provide the first name, last name, date of birth, and nationality of all personnel requiring site access at least five (5) days prior to access. No personnel may access the site without prior vetting and authorization. All Contractor personnel shall comply with access restrictions, badging procedures, escort requirements, and identification rules established by INL, the U.S. Embassy, and FEN base authorities. Unauthorized photography, recording, geolocation mapping, and unmanned aircraft operation within or near the FEN base or INL facilities is strictly prohibited. All tools, equipment, and materials taken onto or removed from the premises are subject to inspection.

C.14 Key Personnel and Minimum Qualifications

The following are designated Key Personnel. The qualifications below are minimum requirements for technical acceptability.

Design-Build Project Manager:

- Bachelor's degree or higher from an accredited institution in civil or structural engineering, or licensed professional engineer holding a valid engineering license recognized by the Government of Honduras or the U.S.;
- Minimum 5 years verifiable experience in design and/or construction of comparable facilities, including at least one marine or waterfront project;
- Documented experience managing at least one (1) design-build project of comparable size and complexity;
- **Based in Honduras during the entire design and construction period;**
- Conducts site visits at least once every seven (7) calendar days during construction;
- Current CICH registration or equivalent recognized Honduran or U.S. license.

Lead Structural / Marine Engineer (Design):

- Valid professional engineering license recognized by the Government of Honduras or the U.S.;
- Minimum 5 years verifiable experience in marine structural design, including dock and pile systems in coastal environments;
- Responsible for all structural and marine engineering calculations and sealed drawings.

Lead Electrical Engineer (Design):

- Valid professional engineering license or equivalent certification;
- Minimum 5 years verifiable experience designing electrical systems for industrial and residential/institutional applications.

Lead Mechanical / Plumbing Engineer (Design):

- Valid professional engineering license or equivalent certification;
- Minimum 5 years verifiable experience designing plumbing and drainage systems.

Site Construction Supervisor:

- Verifiable experience on comparable marine construction and renovation projects;
- Documented experience with multi-discipline coordination.

Safety Officer / QC Manager:

- Quality Control / Quality management certificates from an appropriate agency;
- Verifiable experience in marine construction safety management and construction materials testing.

The Contractor shall submit a CV package for each required position containing: most recent professional experience; education, including all relevant degrees, institutions, and dates; copies of all current certifications and licenses; and relevant work/construction experience for the past five (5) years.

Key Personnel may not be removed, substituted, or reassigned without prior written approval from the Contracting Officer.

C.15 General Personnel

C.15.1 Work Hours. Contractor personnel shall perform their duties on business days (Monday–Friday) during hours coordinated with and approved by the COR and FEN base authorities. Core hours are 0800 to 1600.

C.15.2 Training. The Contractor shall ensure personnel receive adequate training to properly perform their duties, in accordance with international and local regulations, prior to the start of service.

C.15.3 PPE. The Contractor shall provide all necessary PPE.

C.15.4 Qualifications. The Contractor shall make available qualified engineers and workers who meet the criteria set by local authorities and possess experience in the relevant field, including marine construction, pile driving, masonry, electrical, and plumbing works.

C.15.5 Site Access. The Contractor shall coordinate access badges/clearances, base entry for personnel/tools/materials, escort requirements, and restricted area coordination with the COR, providing personnel data at least five (5) days prior to access.

C.16 Final Acceptance Criteria

The Government will conduct inspections before acceptance. Government quality assurance does not relieve the Contractor of its quality control responsibilities. Corrections are required at no additional cost to the Government.

Performance Objective: Deliver fully functional, rehabilitated and improved FEN Puerto Castilla facilities meeting 100% of specified performance requirements.

- A. Installation Quality:** 100% of installations meet applicable codes and contract requirements; zero deficiencies remaining on the punch list; all systems operate reliably under operational conditions.
- B. Testing and Commissioning:** 100% of required tests completed with passing results — dock alignment tolerances verified, torque testing complete, coating thickness verified, material certificates provided, pile records approved, proof load test passed; concrete compressive strength (if applicable); masonry alignment, reinforcement, and anchor inspections; electrical functional testing of all circuits, lighting, and outlets; plumbing leak and pressure testing; fire and life safety verification.
- C. Code Compliance:** Verified compliance with Honduran codes and applicable international standards; all required inspections passed; any required Honduran maritime, environmental, and fire authority approvals obtained.
- D. Documentation:** As-built drawings complete and accurate ($\leq 2\%$ variance); testing reports complete with certified results; O&M Plan complete, bilingual, with training certificates; warranty documentation complete; all deliverables approved by COR.
- E. Functional Performance:** All systems demonstrated to operate reliably under operational conditions; the dock demonstrated capable of receiving and mooring the design vessel; FEN base personnel trained and capable of operating and maintaining all systems.
- F. Site Restoration:** All disturbed surfaces restored to original condition or better; work area clean and free of debris; zero damage to adjacent facilities; marine environment protected; no contamination.

Final Acceptance Process:

1. Contractor notifies COR of substantial completion;
2. COR conducts inspection using the acceptance criteria checklist;
3. Punch list generated, if needed, with correction deadline;
4. Contractor corrects all punch list items;
5. COR conducts final inspection;
6. Final acceptance issued in writing by the Contracting Officer.

Performance Standard for Final Acceptance: 100% of acceptance criteria met; zero outstanding deficiencies; all deliverables complete and approved. The Contractor will be evaluated in accordance with the Government's Quality Assurance Surveillance Plan.

C.17 Warranty

C.17.1 Warranty Period and Coverage. The Contractor shall provide warranties for all work performed, materials supplied, and equipment installed. These warranties are in addition to, and not in lieu of, any other warranties implied by law or required by the contract. Unless otherwise specified or required by local law, the general warranty period is twelve (12) months from the date of final acceptance by the Contracting Officer. Coverage includes: engineering design adequacy and code compliance; structural integrity of the dock rehabilitation and extension; corrosion protection systems applied to timber and metal components; masonry wall enclosures and anchorage systems; electrical and plumbing installations; ceiling and cladding systems; fenders, mooring, and life-safety hardware; and manufacturer warranties for all equipment and materials.

C.17.2 Warranty Documentation. The Contractor shall obtain, compile, and submit all required warranty documents to the COR and to the end user. A warranty table shall be submitted identifying: Item/System/Work Description; Warranty Period; Warrantor (Contractor, Manufacturer, Supplier); and Notes/Specific Conditions.

C.17.3 Warranty Performance Requirement. The Contractor shall respond to warranty claims within 48 hours and complete warranty repairs within 10 calendar days of notification. Design deficiencies identified during the warranty period shall be corrected at no additional cost to the Government.

C.18 Close-Out

Provide a complete close-out package including:

- As-built drawings (PDF and editable CAD/DWG, on CD, in English and Spanish), signed and sealed by the responsible design engineer;
- Final engineering design package, if updated during construction;
- Updated plans and schedules;
- Test and commissioning reports, including pile installation records, coating verification, and the proof load test report;
- O&M Plan (English and Spanish);
- Training documentation and certificates;
- Manufacturer documentation;
- Warranty certificates (design, construction, materials, equipment);
- Punch list showing all items resolved;
- Waste disposal documentation and HAZMAT clearance records;
- Final completion report signed and sealed by the Contractor's site engineer
- Final invoice and Release of Claims.

Schedule a final inspection and commissioning demonstration for acceptance. **As-built drawings must be delivered in DWG and PDF formats, stored on CD, as a condition of release of 100% payment.**

C.18.1 Spare Parts and Training. As part of close-out the Contractor shall deliver:

- **Spare parts** — manufacturer-recommended spare parts for all installed equipment for one (1) year of normal operation;
- **Training** — hands-on operator and maintenance training for FEN personnel on all installed systems, delivered in Spanish, with attendance rosters and certificates, covering at minimum: dock inspection and maintenance intervals; coating and fastener inspection and renewal; fender and mooring hardware inspection; electrical panel operation and safe isolation; portable fire extinguisher use; and emergency egress and lighting test procedures.

C.19 Government-Furnished Information (GFI)

The Government may provide available site data, reference drawings, and access documents as GFI. **The Government does not guarantee the accuracy or completeness of GFI.** Under this Design-Build contract, the Contractor is fully responsible for verifying all dimensions, conditions, and interfaces through its own site investigation prior to finalizing the design.

GFI is provided to inform offerors of known existing conditions so that proposals are realistic and complete; to reduce the risk of scope misunderstanding and unbalanced pricing; and to enable performance-based design solutions grounded in actual site realities. GFI does not relieve the Contractor of the obligation to independently verify all site conditions, nor does it constitute a warranty regarding existing conditions. **No claim for additional compensation or time extension will be considered based on conditions that a reasonable site investigation would have revealed.**

Anticipated GFI:

- **J-1** Drawings and Technical Specifications (35% concept GFI): PLANS AND SPECS — FEN Operational Readiness; FEN Operational Readiness INTERVENTIONS
- **J-2** Photos — FEN Operational Readiness Project
- **J-3** Quality Assurance Surveillance Plan (QASP)
- **J-4** Cost Estimate Template
- **J-5** Liquidated Damages Analysis for the FEN Project
- **J-6** Construction Plan Review Checklist

C.17.1 Ownership and Use of Design Documents. All designs, drawings, specifications, models, calculations, notes, and other works developed in performance of this contract shall become the **sole property of the United States Government** and may be used on any other design or construction without additional compensation. The Contractor agrees not to assert, and not to authorize others to assert, any rights or claim under the design patent or copyright laws with respect to such works. For a period of **three (3) years** after project completion, the Contractor agrees to furnish all retained works at the Government's request.

Use and Return. Except as otherwise provided by contract modification, documents provided as GFI are not to be used by anyone other than the Contractor, nor by the Contractor on other work. With the exception of the Contractor's signed record set, additional copies shall be returned or suitably accounted for upon final completion.

Photographic Rights. The Government shall have the permanent right to reproduce any images produced under this contract for any non-profit, non-commercial use. Any additional fee charged by a photographer for granting these rights is the responsibility of the Contractor.

C.20 Place and Period of Performance

C.20.1 Place of Performance. FEN Base, Puerto Castilla, Colón Department, Honduras.

C.20.2 Period of Performance. 240 business days from Limited Notice to Proceed, inclusive of mobilization, material procurement, construction, testing, commissioning, training, and close-out. No on-site work may begin prior to LNTP unless specifically authorized in writing by the Contracting Officer.

- a) **Design Period.** [100] business days from LNTP, inclusive of mobilization for design services, site investigation and underwater assessment, validation of the Government 35% concept design, development and Government review of the 65%, 95%, and 100% design packages, permitting, and satisfaction of all CNTP preconditions.
- b) **Construction Period.** 140 business days from CNTP, inclusive of construction mobilization, demolition and abatement, construction, installation, testing, commissioning, training, and close-out.
- c) **Total.** 240 business days from LNTP.
- d) Government review periods are included within the Design Period. The Contractor shall account for them in the Work Plan/Schedule.

C.21 Applicable Regulations and Standards

The Contractor shall comply with all applicable Honduran laws, building codes, health and safety regulations, permitting requirements, environmental regulations, maritime regulations, and professional engineering requirements.

C.21.1 Honduran Codes: All applicable Honduran construction and labor regulations; all applicable local and national codes and standards specific to Honduras; all applicable maritime, port, and coastal-zone regulations; all applicable permitting and professional engineering requirements.

C.21.2 International Codes (where applicable):

Standard	Application
IBC — International Building Code	General construction, occupancy classification, egress
IEBC — International Existing Building Code	Work on existing structures
IPC — International Plumbing Code	Plumbing systems
IFC — International Fire Code	Fire protection and life safety
NFPA 101 — Life Safety Code	Means of egress, emergency illumination, exit marking
NFPA 10	Portable fire extinguishers
NFPA 30	Flammable and combustible liquids storage and handling
NEC — National Electrical Code	Electrical systems
ASTM	Materials and testing
ACI 318 / ACI 301	Concrete works
AWS D1.1	Welding
AWPA (or equivalent)	Timber preservative treatment and retention
ASCE 7 / applicable wind and wave criteria	Environmental loads on marine structures

Standard	Application
ADCI Consensus Standards (or equivalent)	Commercial diving operations
UL — Underwriters Laboratories	Listing and labeling of components
IESNA Lighting Handbook	Illumination levels
Manufacturer installation recommendations	All installed products

Contractor to notify the COR and CO of any deviations.

C.21.3 Occupational Safety: Honduran labor and safety regulations; INL and U.S. Embassy safety policies; environmental protection requirements applicable to marine and terrestrial works.

C.21.4 Code Compliance Responsibility: Where standards conflict, the more stringent requirement governs, subject to COR review. If the Contractor identifies irregularities in the drawings or non-compliance with applicable regulations, it shall promptly notify the COR and/or CO. Failure to do so precludes the Contractor from later claiming that work was constructed in accordance with the design despite known non-compliance. All structural designs shall incorporate appropriate safety factors per applicable codes. Marine structural design shall account for wave action, tidal variation, vessel impact loads, and high-salinity corrosion exposure.

C.21.5 Codes and Standards Compliance Performance Requirement: The Contractor shall demonstrate compliance with all applicable codes through required permits and inspections, testing and certification documentation, and material certificates.

C.21.6 Transportation, Logistics, and Customs. The Contractor is responsible for importation, customs clearance, local transportation, loading and unloading, site logistics, and protection of materials from weather and damage.

- a) Export and shipping documentation. The Contractor shall provide and file all required shipping and export declaration documentation together with all local handling fees, prior to shipment. Although the completed facilities will be donated to the Government of Honduras, these filings shall be submitted in advance declaring the value of goods entering the country.
- b) Advance submission. All shipping documents, export declaration forms, export licenses, and other delivery information shall be submitted in advance of shipment to the COR and the designated INL point of contact.
- c) Transportation compliance. The Contractor shall be licensed by, and in compliance with, applicable Honduran transportation and safety requirements.

- d) Delivery terms. Delivery is FOB Destination — FEN Base, Puerto Castilla, Colón, Honduras.
- e) Securing of shipments. Shipments shall include securing of loose gear to prevent shifting during transit, and securing of all equipment to prevent movement and damage. The Contractor shall remove flammable liquids in accordance with ocean and overland transportation regulations.
- f) Government assistance. The U.S. Government may assist the Contractor in obtaining customs clearance and tax exemption certificates from the Government of Honduras when required, provided the Contractor submits the documentation at (a) and (b) in advance. The Contractor shall include and arrange all local, port handling, and other fees associated with delivery to the destination.

C.22 Project Administration Data

C.22.1 Contracting Officer. The Contracting Officer is the only individual authorized to modify contract terms and conditions, obligate or de-obligate funds, approve changes to scope/schedule/price, and issue formal Notices to Proceed. All communication requiring legal or contractual interpretation shall be directed only to the CO.

C.22.2 Contracting Officer's Representative. A COR will be appointed in writing after award, authorized to monitor technical performance, review and approve submittals, verify quantities and quality, attend inspections and acceptance activities, review contractor invoices, and provide technical direction within the scope of the contract. The COR cannot modify contract terms, direct out-of-scope work, or authorize additional costs. The Contracting Officer will establish and grant the COR access to the COR eFile.

C.22.3 Communication Protocols. All formal communication shall be in writing, delivered to the CO with a copy to the COR, and clearly labeled with contract number, CLIN, and subject line. No verbal instruction constitutes authorization to change scope, cost, schedule, or performance requirements.

C.22.4 Unauthorized Disclosure. The Contractor and its employees shall exercise the utmost discretion concerning all matters relating to their duties under this contract and shall not communicate to any person any non-public information known to them by reason of their performance, except in the necessary performance of their duties or upon written authorization of the Contracting Officer. All documents and records, including photographs, generated during performance shall be for the sole use of, and become the exclusive property of, the U.S. Government. No article, book, pamphlet, email, recording, broadcast, speech, television appearance, film, or photograph concerning any aspect of the work shall be published or disseminated without the prior written authorization of the Contracting Officer. These obligations do not cease upon expiration or termination. The Contractor shall include the substance of this provision in all contracts of employment and in all subcontracts.

C.22.5 Non-Personal Services

This contract is for non-personal services. Contractor personnel shall not be considered Government employees for any purpose. The Contractor is fully responsible for the management, supervision, direction, and control of its employees and subcontractors. Nothing in this contract creates an employer-employee relationship. The Contractor is solely responsible for compliance with Honduran labor laws, wage requirements, social security contributions, insurance, and any other statutory obligations applicable to its workforce.

C.22.6 Government Surveillance Is Not Supervision. COR, INL engineering personnel, and other Government representatives will conduct inspections, surveillance, hold-point verification, and technical observation of the work. Such activities are quality assurance functions and do not constitute supervision, direction, or control of Contractor personnel. No Government

representative other than the Contracting Officer may direct the Contractor to perform work, alter the approved design, change methods or materials, or take any action affecting cost, schedule, or scope. The Contractor shall not accept or act upon any such direction and shall immediately notify the Contracting Officer if such direction is given.

C.22.7 Performance Management. Performance will be evaluated on quality of work, timeliness, safety compliance, accuracy of submittals, responsiveness, documentation quality, and cooperation with INL and FEN base authorities.

C.22.8 Meetings – General. The Contractor shall attend the Kickoff Meeting (within 5 business days after LNTP); Design Review Meetings at each design stage; the oral presentation at 95% Design; the Pre-Construction Orientation (after CNTP issuance, before construction starts); Weekly Progress Meetings (in person or virtual); the Commissioning Meeting (prior to testing); and the Final Inspection Meeting (upon completion of punch list items). Meeting minutes shall be prepared by the Contractor and submitted within 48 hours for COR approval.

C.22.9 Weekly Progress Reports. Submitted to the COR in English within two (2) business days following the end of each work week, including: executive summary; on-site personnel and roles; activities completed, in progress, and planned; schedule tracking (planned vs. actual); photographic record with technical notes explaining any deviations, adjustments, or site conditions encountered; materials receiving log; safety statistics and any near-miss events; issues encountered and corrective actions; identified risks; and recommendations and decision requests.

C.22.10 Monthly Status Reports (if applicable). Submitted in English within five (5) working days following each month, including an executive summary, team personnel and skill levels, schedule tracking, issues and recommendations, and a chart showing actual versus planned work completed.

C.22.11 Liquidated Damages. Liquidated damages shall apply in accordance with the approved Liquidated Damages Analysis for the FEN Project and shall be assessed for failure to complete the work within the contractual execution period.

C.22.12 Change Management. The Contractor shall submit Requests for Information (RFIs) when clarification is needed during design or construction. **No changes to the SOW, approved design, materials, or methods are allowed without written approval from the Contracting Officer.** Design changes identified during construction that are necessary for constructability or code compliance shall be submitted to the COR and INL Engineering for review before implementation; no design change shall be implemented in the field without written COR approval. Modifications to contract pricing or duration shall be authorized only by the Contracting Officer.

C.22.13 Delays. The Contractor must notify the CO in writing within **5 days** of any event that may delay performance. **The CO alone determines whether an excusable delay exists.**

C.22.14 Restrictions on Communication. Offerors are warned against contacting any INL personnel other than the Contracting Officer and Contract Specialist prior to award. If such contact occurs and is found prejudicial to competing vendors, the vendor making the contact may be excluded from award consideration. **No information concerning this solicitation will be provided in response to telephone calls;** all requests shall be submitted in writing to the CO and Contract Specialist, citing the reference section, title, and page number.

C.22.15 Freedom of Information Act. Information furnished under this solicitation may be subject to disclosure under FOIA. All items confidential to business, or containing trade secrets or proprietary or personnel information, shall be clearly marked. Marking does not necessarily preclude disclosure; however, if such items are not marked, all information contained within the submitted documents shall be deemed releasable.

C.23 Completion-Based Payment Approach

The Contractor shall submit a fixed-price proposal covering all design, testing, and construction services. The Contractor's failure to understand the full scope of this work, or any omission in its proposal, shall not constitute grounds for additional payment or change to the contract. No additional sums are payable due to escalation in the cost of materials, equipment, or labor, and the contract price will not be adjusted for currency exchange rate fluctuations. The price includes all surveys, studies, design work, permitting, testing, inspection, technical coordination, and design support services. The pricing schedule shall be inclusive of all direct and indirect costs to place the required staff on the project, including travel to the project site, accommodations, per diem, security, and communications.

Each payment is consideration for a completed, delivered, inspected, and accepted deliverable or discrete work product, and is not an advance payment.

- Payments are tied to verified completion of performance outcomes in both design and construction phases;
- Design phase payment is released upon COR approval of the complete engineering design package;
- Construction phase payments are tied to verified completion of measurable work items per the approved design;
- Final 10% payment is withheld until final acceptance and approval of all deliverables.
- Payment is withheld for work not meeting quality standards until corrected; The Government may withhold payment when work is deficient or incomplete; required deliverables are not submitted; studies do not meet technical requirements; design submittals are rejected; the Contractor fails to comply with contract requirements; or required field inspection reports, progress summaries, or construction support documentation are not submitted.

Invoice Submission. Invoices shall be submitted no later than the **15th calendar day of the following month**, aligned with the progress of work, electronically to the CO and COR, in English and in U.S. dollars, with sufficient backup documentation (approved deliverables, progress photos, test reports, schedule of values). Advance payment is not authorized.

C.24 Special Conditions

C.24.1 Mandatory Site Visit. Offerors must conduct a site visit prior to submitting a proposal. Site visits shall be coordinated with and approved by INL. The offeror shall provide first name, last name, date of birth, and nationality of all persons requiring access at least five (5) business days prior to the visit. A proposal from an offeror that did not attend the site visit will be rejected as ineligible for award.

C.24.2 Coordination with Base Operations

The FEN Puerto Castilla facility is an active operational base supporting maritime security, interdiction, and emergency response. The Contractor shall coordinate all construction activities with designated base authorities and INL representatives. Work sequencing, access routes, material storage areas, marine work platform mooring locations, and temporary facilities shall be approved prior to mobilization. Construction activities shall be planned to minimize interference with daily operations, emergency response readiness, vessel movements, and security protocols.

Vessel Traffic and Berth Availability. The Contractor shall coordinate all over-water work with FEN vessel operations through the COR and shall vacate or suspend work in any berth required for an operational or emergency launch. Suspensions for operational necessity of less than four (4) cumulative hours per week are not compensable and shall be accounted for in the Contractor's schedule.

C.24.3 Host Nation Technical Participation. Engineering personnel of the Fuerza Especial Naval may observe construction activities, attend progress meetings, and participate in inspections and commissioning, coordinated through the COR. The Contractor shall reasonably accommodate such observation and shall provide access consistent with the Site-Specific Safety Plan.

Host nation personnel have no authority to direct the Contractor, approve work, accept deliverables, authorize changes, or waive any requirement. Any request or instruction from host nation personnel shall be referred to the COR. Only the Contracting Officer may direct changes to scope, cost, schedule, or performance requirements. The Contractor shall coordinate with the COR to ensure that operations and maintenance training is delivered to FEN personnel designated by the end user.

C.24.4 Proposal Format.

Volume I — Technical. Organize in the following order and address each acceptability standard directly:

1. **Technical Approach** — Method for each construction element (40 m dock rehabilitation; 15 m dock extension; optional topping slab; Outboard Engine Workshop; Emergency Response Barracks); **marine construction methodology and pile installation approach**; underwater investigation methodology; demonstration of understanding of the full scope; statement of compliance with the codes and standards; corrosion protection

strategy for the high-salinity Puerto Castilla environment; preliminary design concept and coordination drawings.

2. **Schedule and Phasing** — Detailed 240-business-day design and construction schedule addressing every critical milestone, highlighting the critical path, tidal and weather working windows, and risks in the phasing plan to minimize disruption to active FEN base operations.
3. **QA/QC** — Quality Control Plan addressing the minimum testing and hold-point notification procedures.
4. **Safety** — Site-Specific Safety Plan addressing marine/over-water hazard analysis, PPE including life vests, severe weather, and emergency response.
5. **Key Personnel** — CV package for each position, with licenses and certifications attached.
6. **Past Performance** — Recent (within 5 years) relevant projects, **including at least one marine or waterfront project**, with the three (3) required references (full name, position, company, phone, email).
7. **Resources** — Financial capacity, equipment inventory, and staffing capacity sufficient to execute the design-build scope within 240 business days.

Volume II — Price.

1. In U.S. dollars;
2. Basis of Estimate for each CLIN with stated assumptions: material quantities, specifications, and unit costs; labor hours by trade/skill level and rates; equipment costs; subcontractor identification and pricing; overhead and profit percentages;
3. Cost estimate using the INL-provided master template;
4. Material Compliance Statement confirming that pricing is based on materials meeting the minimum specifications, standards, and codes.

C.24.4.1 Exceptions and Deviations. Any exception or deviation must be clearly identified in Volume I. The Government reserves the right to reject exceptions contradictory to essential requirements.

C.25 Definitions

Term	Definition
ACI	American Concrete Institute
ADCI	Association of Diving Contractors International
As-Built	The finalized technical document recording the precise, field-verified geometry, dimensions, materials, and installed conditions of the constructed project, reflecting all deviations from the original design
ASTM	American Society for Testing and Materials
AWS	American Welding Society
Business day	Monday through Friday, excluding U.S. Federal Holidays, Honduran National Holidays, and FEN base closure days
Calendar day	Every day of the week, including weekends and holidays
CCA	Chromated Copper Arsenate (timber preservative treatment)
CLIN	Contract Line Item Number
CMU	Concrete Masonry Unit
CNTP	Construction Notice to Proceed — written notice authorizing commencement of construction, issued only after all preconditions are satisfied. The Construction Period begins on the date of CNTP issuance
CO	Contracting Officer — the U.S. Government official with legal authority to enter into, administer, modify, and/or terminate contracts
Construction Period	The period beginning on CNTP issuance, inclusive of mobilization, demolition and abatement, construction, installation, testing, commissioning, training, and close-out
COR	Contracting Officer's Representative — an individual designated and authorized in writing by the CO to perform specific technical or administrative functions
CPM	Critical Path Method

Term	Definition
DBA	Defense Base Act
Design-Build	A delivery method under which a single contractor is responsible for both design and construction, serving as the single point of responsibility
Design Period	The period beginning on LNTP issuance, inclusive of site investigation and assessment, validation of the Government 35% concept design, development and Government review of the 65%, 95%, and 100% packages, permitting, and satisfaction of all CNTF preconditions
DoS	Department of State
FEN	Fuerza Especial Naval (Special Naval Forces), Honduras
FFP	Firm-Fixed-Price
Final acceptance	Written acceptance of the completed work issued by the Contracting Officer upon satisfaction of all criteria in this SOW. Final acceptance commences the warranty period
FOB Destination	Free on Board Destination — the Contractor bears all costs and risk of loss until goods are delivered to the project site
GFI	Government-Furnished Information
HAZMAT	Hazardous materials, including CCA/creosote-treated timber, lead-based or antifouling coatings, and any asbestos-containing materials
Hold Point	A point in construction beyond which work may not proceed until the COR has verified the preceding work or waived verification in writing
HSE	Health, Safety, and Environmental
IBC / IEBC / IFC / IPC	International Building / Existing Building / Fire / Plumbing Codes
IGCE	Independent Government Cost Estimate
INL	Bureau of International Narcotics and Law Enforcement Affairs

Term	Definition
LNTF	Limited Notice to Proceed — written notice issued upon award authorizing mobilization, investigation, assessment, and design services, and such abatement or demolition as the CO expressly authorizes
LPTA	Lowest Price Technically Acceptable
MEP	Mechanical, Electrical, and Plumbing
NEC	National Electrical Code
NFPA	National Fire Protection Association (NFPA 10, 30, 101)
NTP	Notice to Proceed — see LNTF and CNTF
O&M	Operations and Maintenance
PE	Professional Engineer holding a valid license recognized by the Government
POC	Point of Contact
PoP	Period of Performance
PPE	Personal Protective Equipment
Punch list	The written list of deficiencies identified by the COR at the substantial completion inspection, all of which must be corrected before final acceptance
QA/QC	Quality Assurance / Quality Control
QAI	Quality Assurance Inspection — Government inspection at its discretion; does not relieve the Contractor of QC responsibility
QASP	Quality Assurance Surveillance Plan
QCP	Quality Control Plan — approval is a CNTF precondition
RFI	Request for Information
SOW	Statement of Work

Term	Definition
Substantial completion	The point at which the Contractor notifies the COR to conduct an inspection confirming the work is sufficiently complete and ready for utilization
UL	Underwriters Laboratories
USG	United States Government
VAT	Value Added Tax

END OF STATEMENT OF WORK