

NEW OFFICE BUILDING FOR HEALTHCARE SYSTEM  
REPUBLIC OF PALAU SOCIAL SECURITY ADMINISTRATION  
KOROR, REPUBLIC OF PALAU

OUTLINE SPECIFICATIONS  
**06 JULY 2018**

DIVISION 1: GENERAL

- 1.1. The intent of this project is to secure a complete, functioning office building for the Healthcare System operated by the Republic of Palau Social Security Administration (the Owner) at the location in **Ngerbeched Hamlet, Koror State** shown on the site plan.
- 1.2. The work shall be undertaken as a design/build project. The Contractor shall submit design drawings as a part of his proposal, to include architectural floor plans, exterior elevations, and one cross-section. The work is defined below in terms of local standard construction means, methods and materials, but alternate building systems may be considered. Proposals for alternate systems shall include sufficient information to permit the Owner to evaluate their suitability and acceptability. Those systems may be rejected by the Owner for technical or other reasons at their sole discretion.
- 1.3. When the Contractor is selected, he shall submit full drawings for the project which shall include demolition, civil, architectural, structural, electrical, plumbing and air conditioning drawings in sufficient detail to permit the Owner to evaluate them, for permits to be issued, and for construction of the project.
- 1.4. All work shall be done in accordance with all applicable laws, codes, rules and regulations of Koror State and the Republic of Palau. Apply for and obtain all necessary permits from all applicable agencies.
- 1.5. All work shall be done in compliance with an acceptable, current and generally recognized U.S. building code which shall be identified on the drawings.
- 1.6. Design requirements shall be as set forth in ASCE 7-05 Minimum Design Loads for Buildings and Other structures. The structure shall be designed for a wind speed of 120mph and for seismic loads  $S_s$  shall be .73g and  $s_1$  shall be .35g.
- 1.7. Assumed soil bearing capacity shall be 1500 psi.

DIVISION 2: DEMOLITION AND SITEWORK

- 2.1. Lay out the building on site and consult with Owner to confirm that the location is correct and acceptable.
- 2.2. Demolish and remove any on-grade concrete that would interfere with construction of the building.
- 2.3. Excavate and level the ground at the location of the building as required, and cut and remove any tree roots that would interfere with the building. Ensure that rainwater will drain around and away from building walls.
- 2.4. Provide trash containers adequate in size to hold the construction debris generated by the work, and remove those materials from the jobsite regularly and dispose of them in a legal manner. Do not allow rubbish to accumulate on the jobsite.
- 2.5. Connect water and waste lines to PPUC services on or adjacent to building, in accordance with agency guidelines. Consult with agency regarding points of connection before designing systems.
- 2.6. Provide for connection of electrical power service from PPUC and for connection of PNCC telephone, Internet and cable television services. Consult with agency regarding points of connection before designing systems.

- 2.7. Field treat soil under the concrete slab for termites prior to placing concrete, using services of licensed pest control company.

#### DIVISION 3: CONCRETE

- 3.1. Design of all concrete members shall be in accordance with ACI 318.08.
- 3.2. Concrete shall have a minimum compressive strength of 3,000 psi for all foundation elements and 4,000 psi for all other concrete elements. The use of dredged ocean sand as fine aggregate is strictly prohibited.
- 3.3. Reinforcement shall have a minimum yield strength of 60,000 psi for all bar sizes.

#### DIVISION 4: MASONRY

- 4.1. Design of all masonry elements shall be in accordance with ACI 530-08. All masonry units shall be laid in running bond.
- 4.2. All masonry units shall be reinforced and all cells fully grouted.
- 4.3. Net compressive strength of concrete masonry units shall be a minimum of 1,900 psi. Compressive strength of grout shall be a minimum of 2,000 psi.
- 4.4. Reinforcement shall be as per 3.3. above.

#### DIVISION 5: METALS

- 5.1. Provide and install white factory-coated metal roofing on the wood roof structure, with all required flashings and accessories. Fasten with rust-resistant screws with neoprene washers.
- 5.2. Provide and install metal rain gutters and downspouts sized to provide adequate drainage of rainwater from roof. Material shall be factory coated in corrosion-resistant white material. Install leaf filters or screens to minimize amount of debris flowing through piping into rainwater catchment system defined in paragraph 15.7 below.
- 5.3. Metal framing connectors shall be galvanized, with sufficient capacity to support all loads, including wind, specified herein.
- 5.4. All bolts, nuts, washers, nails and other fasteners used throughout project shall be galvanized.
- 5.5. Provide and install aluminum railings at stairs and second floor exit balcony. Railings shall comply with building code requirements and shall be factory made. Finish shall be anodized in Owner's choice of colors.

#### DIVISION 6: WOOD AND PLASTICS

- 6.1. The design of all wood elements shall be in accordance with the requirements of the National Design Specifications for Wood Construction 2005 edition.
- 6.2. Structural lumber elements shall have minimum characteristics equivalent to Douglas Fir Larch (DFL) No. 2.
- 6.3. All wood elements shall be factory treated against termite infestation.
- 6.4. All wood elements and connections shall have sufficient capacity to support all loads. Hold-down clips conforming to 5.3. above shall be provided and installed to withstand wind lift.
- 6.5. Provide and install continuous wood-framed ventilation in soffits at second floor using plastic insect screening.
- 6.6. Provide and install one prefabricated wood vanity cabinet in toilet room, and precast synthetic marble vanity with integrated bowl.

## DIVISION 7: THERMAL AND MOISTURE PROTECTION

- 7.1. Provide and install radiant barrier insulation under the metal roofing over all interior areas over the building. Insulation does not have to be provided over exterior roof overhangs.
- 7.2. Provide and install flexible, paintable sealants at all joints between dissimilar materials and at all joints where water infiltration could occur.
- 7.3. Where large gaps exist between dissimilar materials, fill them with expandable foam sealant.

## DIVISION 8: DOORS AND WINDOWS

- 8.1. Provide and install solid core wood doors in 2x wood frames in the exterior walls of the building, and provide and install hollow core wood doors in 2x wood frames in the interior walls, where shown on plans. Plane and sand frame members smooth before installation.
- 8.2. Provide and install the following door hardware:
  - 8.2.1. At exterior doors, four stainless steel ball-bearing hinges, one stainless steel keyed entry lockset, one stainless steel deadbolt, one commercial-grade closer, one stainless steel wall bumper and one aluminum threshold with a vinyl weatherseal.
  - 8.2.2. At interior doors, two stainless steel hinges, one stainless steel lockset, and one stainless steel wall bumper.
- 8.3. All door hardware items shall match in design and finish.
- 8.4. Provide and install sliding windows at locations shown on plans. Windows shall have aluminum frames with white powder-coated finish, and locking hardware. Glass shall be clear. Apply window tint film to inside surfaces of glass, selected for greatest reduction in infrared radiation with least reduction in visible light.

## DIVISION 9: FINISHES

- 9.1. Apply one coat of acrylic latex primer and two coats of acrylic latex house paint to the exterior surfaces of the building in the Owner's choice of color.
- 9.2. Apply one coat of acrylic latex primer and two coats of acrylic latex eggshell enamel to the interior surfaces of the building in the Owner's choice of color.
- 9.3. Apply one coat of acrylic latex primer and two coats of acrylic latex trim paint to the wood door frames and wood doors, in the Owner's choice of color.
- 9.4. Provide and install ceramic floor tile throughout interiors, and ceramic wall tile in toilet room, in Owner's choice of design and color. Install tiles on walls to act as base. Grout tile joints with grout in Owner's choice of color.

## DIVISION 10: SPECIALTIES

- 10.1. Provide and install one mirror with stainless steel frame, one toilet tissue holder, one paper towel holder and one stainless steel grab bar in each toilet room.
- 10.2. Provide and install one portable 5A/10B:C fire extinguisher in first floor space, with wall mounting.

DIVISIONS 11, 12, 13 and 14: Not Used

## DIVISION 15: MECHANICAL

- 15.1 Provide and install split-type air conditioning units in the building. Size units to provide adequate cooling to the interior spaces in which they are installed when fully occupied. Select units with the highest SEER rating available for each size.

- 15.2. Install air cooled condensing units in locations so as not to interfere with foot traffic around building. Install condensate drains to allow water to flow directly to ground around building.
- 15.3. Provide and install complete plumbing system consisting of PVC water lines and ABS waste lines. System shall be sized to meet requirements of intended occupancy of building. Extend piping to location of utility service connections, which shall be done by utility service company.
- 15.4. Provide and install flush-tank toilets with seat and shutoff valve.
- 15.5. Provide and install chrome-plated lavatory faucets and pop-up drains.
- 15.6. Provide and install outside-venting combination light fixture and exhaust fan in interior toilet rooms.
- 15.7. Provide and install 500 gallon water storage tank on concrete foundation with piping connected from raingutter system. Provide and install pressure pump, pressure tank and filter system sized to provide adequate water pressure in second floor toilets. Provide piping and valves to permit water service to building to be provided either from public utility system or from pump and filter system.

#### DIVISION 16: ELECTRICAL

- 16.1. Perform all work in accordance with the National Electric Code, 2014 edition.
- 16.2. Provide and install new overhead service drop to properly sized weatherhead, complete with PPUC-approved power meter base.
- 16.3. Provide and install new properly sized panelboard, complete with main breaker and appropriately sized branch circuit breakers as required.
- 16.4. Provide grounding in accordance with NFPA 70 (National Electric Code). The grounding system shall consist of an equipment bus bar in the main electrical panel connected to a driven ground rod with minimum 8' embedment.
- 16.5. Provide and install PVC conduit and branch wiring to all devices complete with phase conductors and neutral and ground wire in each conduit.
- 16.6. Provide and install general receptacles in each room and interior space. Use ground fault circuit interrupting (GFCI) receptacle at any location within six feet of a source of water. Use weatherproof GFCI outlets at building exterior.
- 16.7. Provide and install two utility boxes at each workstation location with conduits extending into ceiling space above, one wired for 110VAC power and one empty for Owner-installed data cabling.
- 16.8. Provide power to all mechanical equipment and all other devices requiring electrical connections.
- 16.9. Provide and install electrical light fixtures to supply adequate illumination in all spaces. For linear fixtures use T8 fluorescent lamps. Compact fluorescent lamps shall be minimum 13 watts. Provide damp area fixtures at exterior of building. Provide local switching for all lighting fixtures. Provide and install battery powered emergency lighting and exit lighting at each building exit.
- 16.10. Provide and install battery-powered smoke detectors in interior spaces, located to alert occupants in case of fire.
- 16.11. For unassigned lease space in second floor, provide and install general lighting and power as above, and provide additional circuits in distribution panel for future construction of interior partitions for multiple tenants.
- 16.12. Provide and install rooftop photovoltaic (PV) solar power system with inverter and all other necessary components for connection to PPUC utility grid. Peak power from system shall be 5 kw. Coordinate installation with PPUC.

NOTHING FOLLOWS