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Spec Item	Title	Description
1	General Information	The Contractor shall provide all labor, management, supervision, tools, material, and equipment required to perform Facility Investment (FI) services for Joint Region Marianas (JRM) on the island of Guam.
1.1	Concept of Operations	The intent of 1502000 Facility Investment (FI) is to specify the requirements for Sustainment, Restoration, and Modernization (SRM) requirements for facilities, systems, ground structures and other assets. The Facility Investment requirements within this sub-annex primarily consist of infrastructure sustainment and minimal restoration and modernization work. Sustainment is the maintenance and repair necessary to keep an inventory of facilities, systems, ground structures and other assets in good working order. Restoration and modernization normally consists of major rehabilitation and capital improvements that is accomplished through other Navy programs. Some restoration, modernization, major repair, minor construction and stand-alone demolition may be accomplished as part of Facility Investment. This sub-annex addresses the Contractor's responsibility to maintain in good condition and to repair all facilities, systems, ground structures and other assets, and therefore allow that facilities, systems, ground structures and other assets to realize its intended useful life. Development of plans for the Planned Maintenance (PM) Program, Infrastructure Condition Assessment Program (ICAP) and Integrated Maintenance Program (IMP) are covered in 1501000, Facility Management. During the term of the contract, the Government may replace, renovate, or modify equipment, systems, facilities, components, and fixtures by means not associated with this contract. When completed, all replaced, modified, updated, modernized, or renovated equipment, systems, facilities, components, and fixtures shall be turned over to the BOS contract to be maintained, operated, and/or repaired by the Contractor within the existing requirements of the contract.

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2	Management and Administration	
2.1	Definitions and Acronyms	Definitions and Acronyms are listed in J-0200000-01.
2.2	Personnel	The Contractor shall provide personnel with the qualifications, technical knowledge, experience and skills required for efficient operations within the Facility Investment function.
2.2.1	Certification, Training and Licensing	If required by the original equipment manufacturer (OEM), maintenance and repair shall be performed by personnel trained and certified by the OEM. All maintenance trade personnel certifying or inspecting repair or maintenance work that does not require an inspector certified by a governing directive shall be qualified at the journeyman level. Personnel working on systems, equipment or components containing chlorofluorocarbons (CFCs) and/or hydro-chlorofluorocarbons (HCFCs) shall be certified under an Environmental Protection Agency (EPA) approved technical certification program per OPNAVINST 5090.2. Personnel working with or on electrical or electronic equipment shall be trained and certified per NAVFAC MO-200. Personnel working with electrical/electronic equipment must meet all the qualifications in 29 CFR Section 1910. These include, but are not limited, to CPR and successful completion of Electrical Safety training. Personnel conducting ordnance ground safety checks shall be certified per NAVSEA OP-5. Personnel performing inspections and tests on VTEs shall be qualified per NAVFAC MO-118, ANSI B153.1 and ASME A17.1. Personnel performing inspections and tests on VTEs shall not be employed by a contractor presently performing any type of work on the VTE to be inspected and certified. Personnel inspecting, witnessing tests, preparing reports, and issuing certificates for boilers and UPVs shall be qualified per UFC 3-430-07. A contract inspector shall not be an employee of a contractor utilized to operate or maintain the equipment to be certified. A contract inspector may not report directly to the boiler operations or maintenance supervisor in any capacity of their employment. Personnel inspecting, certifying, and making recommendations for corrective action for backflow preventers shall be certified per UG-2029-ENV. Personnel testing the backflow prevention assembly shall obtain certification from an institution recognized by the American Backflow Prevention Association. Personnel maintaining, repairing, inspecting, testing, operating, or rigging WHE shall be qualified per NAVFAC P-307, Management of Weight Handling Equipment. Personnel inspecting and testing crane trackage shall be qualified per

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		NAVFACINST 11230.1. Personnel working on security systems and equipment shall be National Institute for Certification in Engineering Technologies (NICET) Level III certified in Video Security Systems Technician. Fire Protection services shall be managed by a qualified individual who is NICET level III certified in fire alarm or NICET level III certified in special hazards systems. The Fire Protection Services Manager shall provide daily supervision over all Fire Protection Services. The NICET level III certified Fire Protection Services Manager shall be on-site during the Government's regular working hours and shall be available on-site within one hour after the Government's regular working hours. Personnel working on fire protection systems shall be certified in accordance with the requirements below: Fire Alarm Systems: • Fire Alarm: NICET Level II certification in Fire Alarm Systems. • Detection and releasing systems for Special Hazard Systems such as those found in aircraft hangars and computer server rooms: NICET Level II certification in Special Hazard Systems Water Based Suppression Systems: • Wet Pipe and Dry Pipe Sprinklers: NICET Level II certification in Inspection and Testing of Water Based Systems. • Pre-Action, Deluge, Foam and Antifreeze Systems: NICET Level III certification in Inspection and Testing of Water Based Systems. Special Hazard Systems: • Clean Agent, CO2 and Combination Detection/Releasing Systems: NICET Level II certification in Special Hazard Systems. Pre-Engineered Kitchen Fire Extinguishing Systems: • NICET Level II certification in Special Hazards Suppression Systems or certified by ICC/NAFED in Pre-Engineered Kitchen Fire Extinguishing Systems. The service technician shall have the applicable manufacturer's design, installation, and maintenance manual and service bulletins. Less qualified personnel may assist NICET Levels II and III certified personnel in the execution of inspection, testing, maintenance and repair task. At no time shall less qualified personnel be allowed to execute inspection, testing, maintenance and repair task without a qualified NICET Level II or III certified person physically present within the same facility where the inspection, testing, maintenance and repair task are being executed. Personnel requiring access to Trane Tracer Summit or Trane Tracer ES building automation systems shall have completion certificates for Trane Summit 101, Trane Tracer Summit 102, Trane Tracer SC, and Tracer ES Operations Courses.

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		Personnel performing work on transformers shall be knowledgeable of proper procedures for handling and disposing of insulating fluid containing polychlorinated biphenyls (PCBs). Personnel performing work in HAZMAT/HAZWASTE shall complete the HAZMAT/HAZWASTE handling course or have a minimum of one year of experience working with HAZMAT/HAZWASTE and meet or exceed training requirements per 40 CFR 265.16. Personnel performing work and obtaining test data on the cathodic protection system must be trained per UFC 3-570-06. Personnel inspecting tanks and berms shall meet qualification requirements defined by 40 CFR 112. The Contractor shall submit proof of all certification, training and licensing requirements per Annex 2. All required licenses and certifications will be kept current.
2.3	Special Requirements	
2.3.1	Workmanship and Material Standards	The Contractor shall be responsible for maintaining all facilities, systems, ground structures and other assets, identified in this technical sub-annex, to a standard that prevents deterioration beyond that which results from normal wear and tear and corrects deficiencies in a timely manner to assure full life expectancy of the facilities, systems, ground structures and other assets. Best commercial practices shall be applied in the performance of work. All work shall be completed per approved and accepted industry and equipment manufacturers' standards and shall comply with building and safety codes, applicable activity, local, state, and federal regulations, and other technical requirements identified within this technical sub-annex. Workmanship for maintenance and repair shall include all work necessary to complete facility and system restoration, including touch-up painting and operational checks. Upon completion of work, the Contractor shall ensure all facilities, systems, ground structures and other assets are free of missing components or defects which would affect the safety, appearance, or habitability of the facilities, systems, ground structures and other assets or would prevent any electrical, mechanical, plumbing or structural system from functioning in accordance with design intent. Repairs shall be made in accordance with the manufacturers' specifications and guidelines, and standard building codes. The quality of repairs shall meet the applicable standards and shall prevent any malfunction reoccurrences caused by poor workmanship or other contractor inadequacies. The quality of the repaired areas shall be fully compatible with adjacent surfaces or equipment. Except where otherwise specified, replacements shall match existing in dimensions, finish, color, design, and functionality and shall have an appearance similar to the original finished appearance with only minor unobjectionable deterioration resulting from normal use. The Contractor shall not allow debris to spread unnecessarily into adjacent areas nor accumulate in the work area. All such debris, excess material, and parts shall be cleaned up and removed at the completion of the job and at the end of each day work is in progress. Upon completion of work, any stains and other unsightly marks shall be removed.

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2.3.2	Historical Preservation	Buildings and facilities designated as historical sites shall be maintained in accordance with Federal, state, and local historical policies and regulations.
2.3.3	Management Information System (MIS)	The Contractor shall manage asset inventory, Planned Maintenance (PM) and job plans, and induct all work performed under this contract directly into the Government's Computerized Maintenance Management System (CMMS) MAXIMO by direct entry per Annex 2. In addition to MAXIMO, the Contractor shall provide all required data for work for Naval Hospital Guam and all outlying clinics in the Defense Medical Logistics Standard Support (DMLSS) system by direct entry. Computer for DMLSS will be provided and maintained by the Government at the Naval Hospital Guam Facilities Maintenance Management Department. The Contractor shall comply with all Naval Hospital regulations regarding computer account usage. The Contractor shall input all required management/operational plans, data and reports into the Guam Network (G-Net) per Annex 2.
2.4	References and Technical Documents	References and Technical Documents are listed in J-0200000-04.

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3	Recurring Work	The Contractor shall provide Facility Investment services to ensure facilities, systems, ground structures and other assets are fully functional, in normal working condition, and function properly in accordance with specified standards.	The Contractor shall perform work orders, planned maintenance (PM), projects, inspection, testing, and certification and other recurring services to sustain, restore and modernize facilities, systems, ground structures, and other assets. Estimated quantities for work requirements are provided in J-1502000-18. The Contractor shall ensure all systems or components being serviced, inspected or tested are properly tagged with a machine readable optical label in accordance with Annex 1501000. Navy Facilities Asset Data (from iNFADS) is provided in J-0200000-02. MAXIMO Facilities Assets are provided in J-1502000-01, J-1502000-02, J-1502000-03, J-1502000-04, J-1502000-05, J-1502000-06, J-1502000-07, J-1502000-08, J-1502000-09, J-1502000-10, J-1502000-11, J-1502000-12, J-1502000-13, J-1502000-14, J-1502000-15, J-1502000-16, J-1502000-19, and J-1502000-20.	Facilities, systems, ground structures and other assets are fully functional, in normal working condition and function properly in accordance with specified standards.
3.1	Work Orders	The Contractor shall perform work orders in a timely manner to accomplish any work identified within the entire boundary of the installation to ensure facilities, systems, ground structures and other assets are fully functional, in normal working condition and function properly	The Contractor shall receive work orders from the Government's MAXIMO in accordance with the work reception requirements in Annex 2. The Contractor shall document each work order to the asset being serviced in MAXIMO. The Contractor shall schedule and perform work orders in a way that minimizes work order backlogs and disruptions to customers and Government operations.	Work orders are responded to and completed within the specified time and standards. Facilities, systems, ground structures and other assets are fully functional, in normal working condition and functional properly in accordance with OEM specifications, including

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		in accordance with specified standards.	The Contractor shall maintain sufficient materials and equipment on hand to perform work order requirements. Lack of availability of material or equipment will not relieve the Contractor from the requirement to complete work order within the time limits specified. The Government may combine multiple repair requirements received for the facility, system, ground structure or other asset at the same time into one work order. Work orders will include a wide variety of work. Sample of historical work order data is provided in J-1502000-17. Historical work order data associated with contracts prior to this solicitation may not be representative of requirement specified. The Government makes no warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of the historical work data. The Contractor shall establish an electronic Customer Satisfaction Survey. The Contractor shall perform all facility WHE, cranes, and trackage maintenance and repairs in accordance with NAVFAC P-307, Management of Weight Handling Equipment. The Contractor shall comply with NAVFAC P-502, Asbestos Program Management as well as Federal, state, and local regulations for all work involving asbestos.	recertification if applicable. When work order is complete, the facilities, systems, ground structures and other assets do not present danger to personnel or equipment. Work is documented at the asset level in MAXIMO. Interruption of services shall not exceed 15 working days. Achieve Satisfactory rating on the Customer Satisfaction Survey. Generators with automatic switchgear activated to restore electrical power within five minutes following loss of power. No open work orders past 30 days. No changes to network or controller devices on networked HVAC systems without following NAVFAC Marianas change management plan and SOP. The Monthly Work

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			The Contractor shall perform all facility compressed air systems maintenance, repairs, tests, and certification in accordance with NAVFAC MO-206. The Contractor shall perform all facility generators, auxiliary generators, and standby power systems maintenance, repairs, tests, and certification in accordance with NAVFAC MO-912 and UFC 3-540-07. Maintenance shall include periodic startup, run and load test of all generators to ensure operability. The Contractor shall activate generators with automatic switchgear to restore electrical power within five minutes following loss of power. The Contractor shall re-lamp and make necessary repairs to interior and exterior lighting systems per UFC 3-530-01. The Contractor shall perform testing and balancing activities for all repairs to HVAC systems. Reference UFC 3-410-01 for design, maintenance and alteration of HVAC systems. The Contractor shall comply with NAVFAC Marianas FRCS cyber security requirements and perform functional administration requirements per Annex 2, UFC 4-010-06 and SECNAVINST 5239.22. The Contractor shall comply with NAVFAC Marianas change management plan and SOP when changes occur on network or controller devices on a networked HVAC system. The Contractor shall submit the Monthly Work Schedule per	Schedule and Recurring Work Summary Report are complete, accurate and submitted on time.

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			Section F. The Contractor shall submit a Recurring Work Summary Report per Section F.	
3.1.1	Emergency Work Orders	The Contractor shall perform emergency work orders in a timely manner to accomplish any work identified within the entire boundary of the installation to ensure facilities, systems, ground structures and other assets are fully functional, in normal working condition and function properly in accordance with specified standards.	The Contractor shall perform emergency work orders 24 hours a day, seven days a week throughout the contract period. The Contractor shall respond to emergency work orders with the appropriate service personnel and equipment to commence work immediately. The emergency work order is complete once the emergency has been arrested. The Contractor shall notify the KO or KO designated representative of any additional work required to complete the repair and restore the facility, systems, ground structures and other assets to its normal operating condition. The Contractor shall submit an Equipment Discrepancy Report per Section F with documentation of his follow-on work. The KO or KO designated representative may issue an urgent, routine, or project work order for the follow-on work required to repair/restore the facility, systems, ground structures and other assets. The Contractor shall remain at the work site until the emergency has been arrested.	Emergency work orders responded to within one hour of receipt. Emergency work orders are arrested within 24 hours of receipt. Work is continued without interruption until emergent condition is arrested and damage to facilities, systems, ground structures, other assets and personnel is mitigated.
3.1.2	Urgent Work Orders	The Contractor shall perform urgent work orders in a timely manner to accomplish any work identified within the entire boundary of the installation to ensure facilities,	The Contractor shall perform urgent work orders to repair deficiencies without extended delay, therefore preventing further damage to facility, systems, ground structures and other assets.	Urgent work orders are completed within five working days.

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		systems, ground structures and other assets are fully functional, in normal working condition and function properly in accordance with specified standards.		
3.1.3	Routine Work Orders	The Contractor shall perform routine work order in a timely manner to accomplish any work identified within the entire boundary of the installation to ensure facilities, systems, ground structures and other assets are fully functional, in normal working condition and function properly in accordance with specified standards.	The Contractor shall perform routine work orders to repair deficiencies to facilities, systems, ground structures and other assets to normal working condition. The Contractor shall not use routine work orders for visual inspections or as part of project work order support. Performance of routine work orders is not required outside of Government regular working hours.	Routine work orders are completed within 30 calendar days.
3.1.4	Project Work Orders	The Contractor shall perform project work order in a timely manner to accomplish any work identified within the entire boundary of the installation to ensure facilities, systems, ground structures and other assets are fully functional, in normal working condition and function properly in accordance with specified standards.	The Contractor shall develop a Plan of Action and Milestones (POAM) for each project and submit per Section F for KO or KO designated representative concurrence. The Contractor shall prepare all required documentation required to perform project work orders. The Contractor shall provide Monthly Project Work Order Updates per Section F and notify the KO or KO designated representative of potential delays to project milestones.	Project orders are completed within specified time as agreed to in the POAM. Project status updates and notifications are timely and accurate.
3.2	Planned Maintenance (PM) Program	The Contractor shall perform Planned Maintenance (PM) work orders in a timely manner to	The Contractor shall perform PM in accordance with NAVFAC P-503, Planned Maintenance Guide and NAVFAC P-307, Management of Weight Handling Equipment.	Planned Maintenance is completed in accordance with the approved job plans and schedule.

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		accomplish any work identified within the entire boundary of the installation to ensure facilities, systems, ground structures, and other assets are safe and fully functional.	The Contractor shall update and field verify the PM asset inventory data and Condition Based Maintenance (CBM) Condition Index (CI)/Direct Condition Rating (DCR) in MAXIMO for accuracy and completeness as part of the PM Program. The Contractor shall identify any system discrepancies and follow-on required repairs noted while performing PM and document cause of failure/failure modes in MAXIMO. Informational note: Development of the PM Program Plan is in 1501000, Facility Management.	PM is performed in accordance with manufacturers' recommended procedures and OEM standards. PM asset and CI are updated and field verified for accuracy and completeness annually. All required and recommended PM MAXIMO fields are accurate and complete in MAXIMO.
3.3	Integrated Maintenance Program	The Contractor shall perform maintenance for critical functional areas to ensure proper operation, uninterrupted services and maximize useful life.	The Contractor shall perform maintenance of critical functional areas in accordance with approved Integrated Maintenance Program (IMP) Plan. The Contractor shall maintain uninterrupted services to critical functional areas, systems and services shown on J-1502000-07, except as approved by the KO or KO designated representative for scheduled maintenance. The Contractor shall obtain KO or KO designated representative approval at least 15 working days prior to commencement of scheduled maintenance of any planned interruption of services to critical functional areas. The Contractor shall induct and document all IMP work for emergency, urgent, routine, planned maintenance, project and other recurring work in MAXIMO, G-Net and DMLSS (for Naval Hospital work only).	Work is completed in a timely manner per the IMP Plan. Zero unscheduled interrupted services during maintenance work. Generators and standby power activated to restore electrical power to maintain continuous uninterrupted services. All work is properly inducted, tracked and updated in MAXIMO and DMLSS and G-Net.

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			The Contractor shall provide Heating, Ventilation and Air Conditioning (HVAC) and Direct Digital Control (DDC) personnel support at the Naval Hospital 24 hours per day, 7 days a week. Naval Hospital standby power plant shall conform to The Joint Commission (TJC) standard. The Contractor shall provide the Monthly IMP Maintenance Schedule and Repair Status per Section F. The Contractor shall provide the generator logs and test results per Section F. Informational note: Development of the IMP Plan and response to IMP alarms is in 1501000, Facility Management.	
3.4	Condition Assessment	The Contractor shall assess and document asset condition for equipment to ensure accurate condition information is available for Infrastructure Condition Assessment Program (ICAP) and Condition Based Maintenance (CBM).	The Contractor shall perform condition assessments on all facilities, systems, ground structures and other assets are maintained in specified buildings in accordance with the ICAP Assessment Plans specified in 1501000, Facility Management. The Contractor shall assess equipment condition annually and document the characteristic meter readings within MAXIMO. Condition assessments shall also be updated after equipment/assets have been repaired or replaced and any time a significant change in condition is noted. The UNIFORMAT List and general direct condition rating guidance is in NAVFAC P-501, Condition Based Maintenance (CBM) Manual.	Characteristic Meter Reading updates and Condition Index for all equipment do not exceed 365 days. Characteristic Meter Reading data fields required in MAXIMO are complete and accurate. Direct Condition Rating (DCR) and Condition Index (CI) in MAXIMO are reflective of current asset condition and status.

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3.5	Building Control Systems (BCS)	The Contractor shall operate, maintain, and monitor BCS and associated facilities Direct Digital Control (DDC) and connections to ensure proper system operations and facility environments are maintained.	The Contractor shall control, monitor, and configure settings for BCS/DDC systems in accordance with OEM and American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE) requirements to maintain proper system operations and environment. The Contractor shall monitor and respond to alarms/alerts generated by BCS/DDC systems and troubleshoot as necessary. The Contractor shall identify system deficiencies and submit a deficiency report per Section F. The Contractor shall immediately begin work to arrest emergency systems deficiencies. The Contractor shall ensure temperature settings and humidity controls are in accordance with OEM design standards. The Contractor shall perform inspections and operational maintenance tasks for BCS/DDC including point-to-point check out, sensor calibration and software updates/back up.	All equipment, including controls, sensors and detection devices are calibrated to ensure accurate readings. BCS/DDC system alarms/alerts responded to within 15 minutes for Critical Functional Areas and systems and 2 hours for other systems. Facilities systems are operating in accordance with OEM. Proper facility environments are maintained in accordance with ASHRAE.
3.6	Inspection, Testing, and Certification	The Contractor shall provide inspection, testing, and certification services in a timely manner to accomplish any work identified within the entire boundary of the installation to ensure facilities, systems, ground structures and other assets are fully functional, in normal working condition and function properly	The Contractor shall perform inspection, testing and certification as required to ensure continuous systems operation and no interruption of service. The Contractor performing certification services shall not be the same organization or personnel performing maintenance, operation, or testing of certified systems. The Contractor shall provide 5 days advanced notification to the KO or KO designated representative when systems are ready for testing and	All certifications are current. Testing, inspection, and certification services performed and completed in accordance with the inspection, testing, and certification program and schedule. Testing, inspection, and certification services performed in accordance with applicable

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		in accordance with specified standards.	certification for coordination with the Government provided inspector. The Contractor shall provide an Inspection, Testing, and Certification Schedule per Section F. The Contractor shall provide an Inspection, Testing and Certification Summary Report per Section F. The Contractor shall provide system certification certificate per Section F.	references.
3.6.1	Boilers and Unfired Pressure Vessels (UPVs)	The Contractor shall prepare, test, inspect, and certify Boiler and UPVs to ensure they are safe, fully functional, and operational.	The Contractor shall prepare boilers and UPVs for testing, inspection, and certification in accordance with UFC 3-430-07. The Contractor shall immediately void any boiler inspection safety certificates upon the discovery of a safety deficiency regardless of the expiration date on the certificate. The certificate will again be valid only after the deficiency has been corrected by the Contractor and the boiler has been re-certified. The Contractor shall thoroughly clean and prepare the system boilers and UPVs for testing and certification and assist the 3rd Party Certified Boiler Inspector in performing the testing for certification. Support includes but not limited to boiler shutdown, lockout/tagout, draining/filling boiler, opening/closing steam and mud drums, and providing confined space attendant when necessary. The Contractor shall refrain from cleaning or altering the boiler watersides prior to the 3rd Party Certified Boiler Inspector's borescope	Testing, inspection, and certification of boilers and UPVs performed and completed in accordance with the Inspection, Testing, and Certification Program and Schedule. Boilers and UPVs promptly returned to service upon issuance of certification. Boilers and UPVs are inspected, tested, and certified in accordance with UFC 3-430-07.

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			inspection. The Contractor shall prepare Inspection Reports and Inspection Certificates for boilers and UPVs per Section F.	
3.6.2	Backflow Prevention Devices	The Contractor shall prepare, inspect, test, and certify backflow prevention devices to ensure they are safe, fully functional, and operational.	The Contractor shall comply with inspection, testing, and certification requirements of the applicable regulatory agency and UFC-3-230-02, UG-2029-ENV, and OPNAVINST 5090.1. The Contractor shall prepare Inspection Reports and Inspection Certificates for backflows and cross connections per Section F.	Testing, inspection, and certification of backflow prevention devices performed and completed in accordance with the Inspection, Testing, and Certification Program and Schedule. Backflow prevention devices are certified in accordance with UFC-3-230-02, UG-2029-ENV, and OPNAVINST 5090.1.
3.6.3	Vertical Transportation Equipment (VTE)	The Contractor shall prepare, inspect, test, and certify all VTE systems to ensure they are safe, fully functional, and operational.	The Contractor shall prepare, inspect, test and certify VTE in accordance with NAVFAC MO-118, ANSI B153.1 and ASME A17.1. The Contractor shall submit the Inspection and Test Report for Vertical Transportation Equipment (VTE) per Section F.	VTE inspection, testing, and certification is completed when due. Inspection, testing, and certification of VTE performed and completed in accordance with the inspection, testing, and certification program and schedule. VTE inspected, tested, and certified in accordance with NAVFAC MO-118, ANSI B153.1 and ASME A17.1.
3.6.4	Water Testing	The Contractor shall provide water testing services for	The Contractor shall test, analyze and treat chilled water to retain required chemistry and	Water met quality standards and demand

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		boilers, UPV, and HVAC systems to ensure they are safe, fully functional, and operational.	standards. The Contractor shall maintain chilled water chemistry to pH 7.0 – 9.0, nitrite 500-1000 ppm as NO₂. The Contractor shall maintain cooling tower water to corrosion rate no greater than 2.5 mil per year for mild steel and .3 mil per year for copper and copper nickel. The Contractor shall not use chromium and acid for cooling tower water treatment. The Contractor shall test and treat boiled water in accordance with UFC 3-240-13. The Contractor shall maintain boiled water within limits specified in Section 3120 of NAVFACINST 11300.37. The Contractor shall provide water testing reports per Section F.	requirements in accordance with UFC 3-240-13 and NAVFACINST 11300.37. Water contained no biological threats, corrosion, scaling, erosion or algae. Water chemistry is maintained within required parameters. No calcium carbonate or calcium sulfate scale. No suspended solid deposit within exchange. Test results confirm water met the chemical residual limits.
3.6.5	Cathodic and Lightning Protection	The Contractor shall prepare, inspect, test, and certify cathodic and lightning protection devices and facilities to ensure they are safe, fully functional, and operational.	The Contractor shall prepare, maintain, inspect, and test cathodic protection systems and facilities in accordance with UFC 3-570-06 and PACNAVFACENGCOMINST 9633.1. Grounding points shall be tested in accordance with CNATRAINST 11130.2, MIL-HDBK-274 and NAVSEA OP-5. The Contractor shall repaint the identification and marking of grounding points semi-annually. The Contractor shall submit the Lightning Protection and Grounding System Report per Section F.	Cathodic and lightning protection systems are clearly identified and tests are performed in accordance with UFC 3-570-06, CNATRAINST 11130.2, MIL HDBK-274, PACNAVFACENGCOMINST 9633.1, and NAVSEA OP-5.
3.6.6	Fire Alarm and Suppression	The Contractor shall prepare,	The Contractor shall prepare, maintain, inspect, and test fire	Inspections, testing, and

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	Systems	inspect, test, and certify fire alarm and suppression systems, devices and facilities to ensure they are safe, fully functional, and operational.	alarm systems and facilities in accordance with UFC 3-600-02, NFPA 2001, and NFPA 25. The Contractor shall notify the Fire Department, Security Department, and facility inhabitants prior to performing work on the fire alarm systems. The Contractor shall provide fire alarm and suppression systems testing reports per Section F.	maintenance of fire alarm and suppression systems performed in accordance with UFC 3-600-02, NFPA 2001, and NFPA 25.
3.6.7	Radon Mitigation Systems	The Contractor shall prepare, inspect, test, monitor and certify radon mitigation systems, devices and facilities to ensure they are safe, fully functional, and operational.	The Contractor shall prepare, maintain, inspect, test and monitor radon mitigation systems and facilities in accordance with OPNAVINST 5090.1 The Contractor shall test and document radon levels for newly constructed, renovated, and repaired facilities. The Contractor shall mitigate buildings that have elevated radon levels to reduce radon levels to below EPA and NAVRAMP action level (less than 4pCi/L) The Contractor shall provide Radon Testing, Monitoring, and Mitigation Reports per Section F.	Inspections, testing, and maintenance of radon mitigation systems performed in accordance with OPNAVINST 5090.1.
3.6.8	Lead Testing	The Contractor shall provide lead testing services for drinking water coolers, fountains, and outlets to ensure they are safe, fully functional, and operational.	The Contractor shall test all drinking water coolers, fountains and outlets for lead when a water cooler, fountains, and outlets are repaired, maintained, or replaced per EM-385. The Contractor shall provide lead testing report per Section F.	Lead testing is in accordance with EM-385. Water met quality standards and demand requirements in accordance with standards.
3.6.9	Weight Handling Equipment (WHE) and trackage	The Contractor shall inspect, test, and certify facility WHE and trackage to ensure they are safe, fully	The Contractor shall comply with all Federal requirements and NAVFAC P-307, Management of Weight Handling Equipment, to properly test and maintain the facility WHE and trackage.	Testing, inspection, and certification of WHE performed and completed in accordance with NAVFAC P-307.

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		functional, and operational.	The Contractor shall perform load tests and associated operations for certification in the presence of the certifying official. The contractor shall utilize a third party certification for cranes specified in Appendix M of NAVFAC P-307. The Contractor shall comply with NAVFACINST 11230.1 for the inspection, certification, and audit of trackage. The Contractor shall submit the WHE and trackage certification of load test and condition inspection report per Section F. (Include file in equipment history jacket.)	Trackage are inspected, tested, and certified in accordance with NAVFACINST 11230.1.
3.7	Other Recurring Services Program	The Contractor shall perform recurring services for facilities, ground structures, personal property equipment and installed equipment and systems to ensure proper operation, to minimize breakdowns, and to maximize useful life.	The Contractor shall submit an Other Recurring Services Program Summary Report per Section F.	Other recurring services are accomplished in a timely manner and in accordance with standards. Services are performed in accordance with manufacturers' recommended procedures and OEM standards.
3.7.1	Grease Traps	The Contractor shall clean designated grease traps and remove and dispose of grease to ensure grease traps function properly.	The Contractor shall inspect, clean and maintain grease traps monthly. The Contractor shall provide chemical treatment to grease traps and sanitary lines connections to keep lines clear of buildup and prevent clogging after cleaning. Product used in the treatment of grease trap and piping shall be organic, non-toxic, non-flammable and biodegradable. The Contractor shall dispose of grease in accordance with	Grease traps are cleaned and maintained as scheduled. Grease traps and piping are clean and free of grease on baffles, perforated surfaces, and all other removable parts and function to meet the intended purpose.

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Spec Item	Title	Performance Objective	Related Information	Performance Standard
			environmentally approved procedures.	
3.7.2	HVAC/Chilled Water Systems	The Contractor shall maintain HVAC/Chilled Water Systems to ensure systems are fully functional, in normal working condition and function properly in accordance with specified standards.	The Contractor shall make all recorded data and measurements required by the maintenance plans available at all times. The Contractor shall maintain an adequate inventory of chemicals and materials required to treat cooling towers and chilled water systems and to sustain plant operations. The Contractor shall maintain and operate chilled water systems in accordance with Recurring work requirements (E/U/R/PM, Project), UFC 3-240-13, NAVFAC P-458 Vol II-7, NAVFACINST 11300.37A, NFPA, NETA, NEC, ASHRAE, ARI and OEM standards. The Contractor shall retain and maintain system safety redundancy. Except in an emergency, the Contractor shall not by-pass or disable safety devices. The Contractor shall not remove or alter a system safety or redundancy without prior KO or KO designated representative approval. The Contractor shall perform equipment and instrumentation calibration with test equipment calibrated to National Institute for Standards and Technology (NIST) Standards in accordance to National Conference of Standards Laboratories ANSI-NCSL Z540-11994.	HVAC/chilled water plants, equipment and distribution lines are maintained in accordance with required UFC 3-240-13, NAVFAC P-458 Vol II-7, NAVFACINS 11300.37A, NFPA, NETA, NEC, ASHRAE, ARI and OEM standards. HVAC/Chilled Water provided without interruption to meet required demand. No downtime on the HVAC/Chilled Water Systems. Test equipment and instrument calibration are maintained to National Institute for Standards and Technology (NIST) Standards in accordance to National Conference of Standards Laboratories ANSI-NCSL Z540-11994 standards.