

1. Component NAVY	FY 2005 MILITARY CONSTRUCTION PROGRAM	2. Date 13 JAN 2004
----------------------	--	------------------------

3. Installation and Location/UIC: N57043 COMMANDER NAVAL FORCES MARIANAS FINEGAYAN, GUAM	4. Project Title KILO WHARF IMPROVEMENTS
--	---

5. Program Element 0212276N	6. Category Code 15210	7. Project Number P451	8. Project Cost (\$000) 12,500
--------------------------------	---------------------------	---------------------------	-----------------------------------

9. COST ESTIMATES

Item	UM	Quantity	Unit Cost	Cost(\$000)
KILO WHARF IMPROVEMENTS	LS			7290
BILGE OILY WATER TREATMENT SYSTEM	LS			(1420)
FENDER SYSTEM	LS			(820)
FIRE PROTECTION SYSTEM	LS			(900)
INFRASTRUCTURE UPGRADE	LS			(530)
ORDNANCE CONTAINER HANDLING PAD	LS			(720)
STEAM BOILER SYSTEM	LS			(610)
UPGRADE SERVICE/SUPPORT BUILDING	LS			(320)
WHARF ELECTRICAL, LIGHTING & LIGHTNING	LS			(630)
PROTECTION				
WHARF SECURITY SYSTEM	LS			(220)
TECHNICAL OPERATING MANUALS	LS			(50)
INFORMATION SYSTEMS	LS			(1070)
SUPPORTING FACILITIES				3500
SPECIAL CONSTRUCTION FEATURES	LS			(90)
ELECTRICAL UTILITIES	LS			(1030)
MECHANICAL UTILITIES	LS			(50)
DEMOLITION	LS			(10)
PAVING & SITE IMPROVEMENTS	LS			(2320)
SUBTOTAL				10790
CONTINGENCY (5%)				540
TOTAL CONTRACT COST				11330
SIOH (6.5%)				740
SUBTOTAL				12070
DESIGN/BUILD - DESIGN COST				430
TOTAL REQUEST ROUNDED				12500
TOTAL REQUEST				12500

10. Description of Proposed Construction

At Kilo Wharf, the project will: 1) provide a new Bilge Oily Water Treatment System (BOWTS); 2) replace the existing deteriorated fender pile system; 3) renovate the existing Gate House and Service/Support Buildings to current criteria and operational requirements; 4) upgrade to current criteria and operational requirements the utilities infrastructure, including the sewer lift station, pumps, piping (steam, domestic water, and fire protection water), piping supports, data, communication, and cable television lines to the waterfront.

BOWTS: Construct new Bilge Oily Water Treatment System including piping and transfer system. The treatment system shall be designed to treat 113,550 L (30,000 gallons) of bilge oil water.

1. Component NAVY	FY 2005 MILITARY CONSTRUCTION PROGRAM			2. Date 13 JAN 2004
3. Installation and Location/UIC: N57043 COMMANDER NAVAL FORCES MARIANAS FINEGAYAN, GUAM			4. Project Title KILO WHARF IMPROVEMENTS	
5. Program Element 0212276N	6. Category Code 15210	7. Project Number P451	8. Project Cost (\$000) 12,500	
<p>FENDER SYSTEM: Remove existing deteriorated and ineffective fender system and replace with new fender system. New fender system to be vertical type capable to roll as the ship surges up and down.</p> <p>KILO WHARF SECURITY SYSTEM: At Kilo Wharf upgrade the existing Gate House at the entrance to include security control station. Provide adequate communication system and signage. Install new security monitoring system throughout the facility complete with cameras. Install air conditioning system.</p> <p>FIRE PROTECTION SYSTEM: Upgrade existing salt water fire pump fire protection system from the existing 5680 liter/min (1500gpm) to 11,355 liter/min (3,000gpm). Replace deteriorated fire protection mains and fire hydrants with new pipes and hydrants to accommodate fire flow requirements. Provide fire sprinklers in salt water pump house. Upgrade power supply to support new electric and diesel fire pumps, and replace emergency generator and transfer switch to support auxiliary equipment.</p> <p>ELECTRICAL, LIGHTING & LIGHTNING PROTECTION: Repair existing electrical services including replacement of power outlets and feeder cables at the existing three power mounds. Upgrade area lighting and lightning protection system to protect entire wharf area.</p> <p>UPGRADE SERVICE/SUPPORT BUILDING: Renovate existing support building to include office space, men's & women's restrooms and tool storage to meet current requirements.</p> <p>UPGRADE STEAM BOILER SYSTEM: Replace/rehabilitate existing steam boiler system, water treatment and storage system, auxiliary systems, and ventilation system in Utility Building. Increase steam system capacity to provide cold-iron support for AE-35 class ships. Provide new fuel storage system for boiler.</p> <p>INFRASTRUCTURE UPGRADE: Rehabilitate existing sewer lift station, replace existing communitor (grinder pump), replace rusty pipes at utility pedestals, replace corroded steam, fresh water main and fire protection main in existing utility trench, minor repair of damaged pavement and crack at bollard foundation and relocate existing sewer lateral for Service/Support Building. Paint the exterior of all buildings.</p> <p>INFORMATION SYSTEM/FIBER OPTIC: Install communication conduit with pull wire in a concrete duct system for fiber optic service. Install one telephone/fiber optic outlet at each of the existing power mounds. Provide underground ducts and hand holes from</p>				

1. Component NAVY	FY 2005 MILITARY CONSTRUCTION PROGRAM			2. Date 13 JAN 2004
3. Installation and Location/UIC: N57043 COMMANDER NAVAL FORCES MARIANAS FINEGAYAN, GUAM			4. Project Title KILO WHARF IMPROVEMENTS	
5. Program Element 0212276N	6. Category Code 15210	7. Project Number P451	8. Project Cost (\$000) 12,500	
<p>existing communication manhole near cemetery to Kilo Wharf. Provide duct for cable television.</p> <p>At Orote Peninsula, in close proximity to Kilo Wharf, the project will provide: 1) New Ordnance Container Pad; 2) Single access point security fence, complete with intrusion detection system (IDS), and video motion detection; 3) Lighting; 4) Lightning protection; and 5) New access road from Kilo Wharf</p> <p>ORDNANCE CONTAINER HANDLING PAD: Construct concrete Ordnance Container Handling Pad 60.9m x 60.9m (200 ft. x 200 ft.) to accommodate the containerized and/or break bulk of munitions that will await pick up by ammunition ships, transits to Andersen Air Force Base, or loaded in containers for transit back to Kilo Wharf. Earthen berms will be constructed to provide line-of-sight protection between any two potential explosive sites. Pads will include a lightning protection system; a 1,524 m (5,000 linear feet) of asphalt access road to the open Ordnance Transit Pads and Ordnance Container Handling Pad to accommodate truck hauling to and from the Kilo Wharf; security measures comprised of a 680m (2,231 ft) chain link fence, with Intrusion Detection System (IDS) and Video Motion Detection, and a card or automated entry system; electrical utilities comprised of an electrical tap from overhead 13.8 kV line along Orote Road extending underground in reinforced concrete ducts to new pad-mounted transformer inside facility fence, electric service equipment, standby generator, electrical distribution equipment in new Generator Building, and site electrical distribution system; roadway lighting, operational lighting for the pads, perimeter fence security lighting, power and lighting for guardhouse, gate and turnstile, grounding for the perimeter fence; lightning protection for the ordnance pads, composed of concrete poles and overhead catenary lines.</p> <p>Ordnance handling pad construction also includes underground reinforced concrete ducts from the new information system underground ducts along Orote Road into the facility for communications and security systems cables that are provided by others; distributed cabinets for Government installed security equipment; conduit for four closed circuit TV (CCTV) cameras per pad; conduit and pull boxes for fence IDS cable-type sensors; telephone service conduit, telephone cabinet, and telephone outlet boxes for Guardhouse.</p> <p>Anti-terrorism/Force Protection criteria is not applicable to this uninhabited structure. Sustainable principles will be integrated into the design, development, and construction in accordance with Executive Order 13123 and other laws and Executive Orders. Special construction features include working restrictions and phasing. Demolition consists of</p>				

1. Component NAVY	FY 2005 MILITARY CONSTRUCTION PROGRAM			2. Date 13 JAN 2004
3. Installation and Location/UIC: N57043 COMMANDER NAVAL FORCES MARIANAS FINEGAYAN, GUAM		4. Project Title KILO WHARF IMPROVEMENTS		
5. Program Element 0212276N	6. Category Code 15210	7. Project Number P451	8. Project Cost (\$000) 12,500	
utility lines removal.				
11. Requirement: <u>LS</u> Adequate: <u>LS</u> Substandard: <u>LS</u> PROJECT: The project upgrades deficient Kilo Wharf infrastructure systems and constructs an Ordnance Container Handling Pad on Orote Peninsula, complete with paved access roads and physical security improvements. (Current Mission) REQUIREMENT: An adequate and properly configured infrastructure system is required on Guam to accommodate the handling of up to 300 containers of ammunition. Construction of the container handling pad on Orote Peninsula supports a portion of this requirement. Guam is the primary and most strategically important ordnance activity within the Commander, Pacific Fleet (COMPACFLT) area of responsibility. The handling and storage of ordnance on Guam is essential to the Navy's mission in the western Pacific (WESTPAC) region. The Commander, U.S. Naval Forces Marianas (COMNAVMARIANAS) Ordnance Department is required to conduct handling, storage, and maintenance of ordnance to support operations of the 5th and 7th Fleet. The Department also supports Air Force operations at Andersen Air Force Base (AAFB) by providing for the loading and offloading of ordnance materials at Kilo Wharf and required hauling of these materials between the wharf and AAFB. All ordnance cargo on Guam for Navy and Air Force missions is off-loaded and uploaded at Kilo Wharf. The wharf is the only military ammunition port facility on Guam. In recent years, Mobility Enhancement Funds (MEF) were used to construct container crane facilities at Indian Island in Puget Sound, and at Concord in California. The Navy has determined that Guam is the primary location to receive containerized ordnance in WESTPAC. Existing facilities do not meet this mission. Historically, approximately 55 ships/year are unloaded/offloaded with ordnance at Kilo Wharf. Most of the ships are Military Sealift Command Ammunition Ships (MSC TAE). Further, established metrics allow for up to 56,000 individual lifts/year at Kilo Wharf. A lift is considered moving one item (pallet) to/from ship/wharf. The 56,000 lifts equate to as much as 50,000 - 60,000 short tons of ordnance/year moving to and from Kilo Wharf. PACFLT ordnance operations tempo requires ordnance ships to remain berthed at Kilo Wharf for only a short period of time (less than 4/5 days/visit). Ships must be off/on loaded quickly (but safely); to do otherwise would jeopardize overall Fleet ordnance readiness. The wharf is approved to handle 3.0 million pounds Net Explosive Weight (NEW), thus generating an explosive safety arc of 7,210 feet. This arc impacts				

1. Component NAVY	FY 2005 MILITARY CONSTRUCTION PROGRAM		2. Date 13 JAN 2004
3. Installation and Location/UIC: N57043 COMMANDER NAVAL FORCES MARIANAS FINEGAYAN, GUAM		4. Project Title KILO WHARF IMPROVEMENTS	
5. Program Element 0212276N	6. Category Code 15210	7. Project Number P451	8. Project Cost (\$000) 12,500

all of the Orote Peninsula area.

In July 2000, the Department of Defense Explosives Safety Board (DDESB) rescinded the site approval for Kilo Wharf ordnance operations because of explosives safety risks to civilian shipping while ordnance is stored on Kilo Wharf. Chief of Naval Operations (CNO) Exemption E1-00 was approved in September 2000 permitting continued use of Kilo Wharf since there were no immediate corrective actions that would eliminate the encumbrance on the shipping channel. CNO exemption (E1-00) covers a long standing issue regarding the ability to clear Kilo Wharf after a TAE download, and the need to advance stage the wharf for a major upload.

CURRENT SITUATION:

Kilo Wharf is currently without the capability to efficiently transport and treat bilge oily waste from ships berthed at the wharf. This condition requires additional time in port to complete servicing, and negatively impacts PACFLT ordnance operations, which only allow ships to be berthed for a short period of time.

The face fender system is inefficient and deteriorated. It presents hazards to ships berthed alongside. Other wharf deficiencies include insufficient lightning protection system, insufficient security monitoring system, insufficient fire protection system, corroding utility/power mounds, unavailability of steam, and no fiber optic communications capability.

On average, ammunition-handling operations are conducted approximately 260-270 days each year. Many of the operations require only short-term storage, but materials must be transported to the Ordnance Annex in accordance with dunnage requirements for transport over public roads. This is the only route available for transportation of explosives, and passes close to Department of Defense Education Activity (DODEA) schools, populated housing areas and base operating facilities.

As a result of the distance between the magazine area and Kilo Wharf, and the permitted short duration of MSC TAE ships berthed at Kilo, ordnance must be staged in advance to meet operational requirements. The process to move materials the eight miles from the Ordnance Annex to Kilo Wharf for a major upload or download takes approximately 22 days to complete. Ordnance may sit in the wharf for as long as 15 to 30 days, creating major explosive safety issues. This situation prolongs ammunition-handling operations at Kilo Wharf, delays timely delivery of ammunition to the fleet, increases the cost of ammunition logistical support, and endangers civilians and personal property. This project will assist in the rapid movement of ordnance off of Kilo Wharf, thereby reducing

1. Component NAVY	FY 2005 MILITARY CONSTRUCTION PROGRAM			2. Date 13 JAN 2004
3. Installation and Location/UIC: N57043 COMMANDER NAVAL FORCES MARIANAS FINEGAYAN, GUAM		4. Project Title KILO WHARF IMPROVEMENTS		
5. Program Element 0212276N	6. Category Code 15210	7. Project Number P451	8. Project Cost (\$000) 12,500	
<p>explosives safety exposure to civilian ship traffic in the Outer Apra Harbor and on public roads.</p> <p>IMPACT IF NOT PROVIDED: The Navy will not have adequate space to handle and store containerized ordnance, and storage of ammunition on Kilo Wharf will continue for extended periods of time in order to meet the operational tempo on Guam. Civilian ship traffic in Apra Harbor will remain exposed to explosives hazards for prolonged time periods while munitions remain on Kilo Wharf. DoD facilities, schools and public highways will remain exposed while munitions are transported on trucks between Kilo Wharf and the Ordnance Annex.</p>				
12. Supplemental Data:				
A. Estimated Design Data:				
1. Status:				
(A) Date Design Start				082002
(B) Date Design 35% Complete				092004
(C) Date Design Completed				042005
(D) Percent Completed as of SEPTEMBER 2003				3%
(E) Percent Completed as of JANUARY 2004				3%
(F) Type of Design Contract				Design Build
(G) Parametric Estimate used to develop cost				Yes
(H) Energy study/Life cycle analysis performed				Yes
2. Basis:				
(A) Standard or Definitive Design:				Yes
(B) Where Design Was Most Recently Used:				N/A
3. Total Cost (C) = (A) + (B) = (D) + (E) :				\$580
(A) Production of Plans and Specifications				\$500
(B) All other Design Costs				\$80
(C) Total				\$580
(D) Contract				\$80
(E) In-House				\$500
4. Contract Award				012005
5. Construction Start				042005
6. Construction Complete				042007
B. Equipment associated with this project which will be provided from other appropriations: NONE				
JOINT USE CERTIFICATION:				

