JUL 7 1987

4101
MAIN

Director, Utilities Branch, Marine Corps Base, Camp Lejeune

Director, Operations Branch, Marine Corps Base, Camp Lejeune

ENERGY CONSERVATION INITIATIVES FOR RENOVATION OR CONSTRUCTION PROJECTS

In order to ensure that all future facility renovation or construction projects are properly designed for maximum energy efficiency, it is requested that the following initiatives be included in the project specifications:

_____ All ceiling or attic spaces be insulated to an "R" factor of at least 25.

(Pad

_____ All exterior walls or interior walls between environmentally controlled and non-controlled areas be insulated to an "R" factor of at least 10.

_____ All floors for heated spaces over unheated spaces be insulated to an "R" factor of at least 15. Slab-on-grade insulation with an "R" factor of at least 5 should be installed around the perimeter of the floor.

_____ All interior lighting be fluorescent and that occupancy sensors be installed where applicable. Any recessed lighting should be a PL-type fluorescent.

_____ All exterior lighting be should PL-type fluorescences. However, if flood lighting is required, this should be High Pressure Sodium.

_____ Existing single pane windows should be replaced with thermopane windows with a one-piece vinyl extruded frame.

_____ All existing window air conditioning units should be replaced with a central air conditioning system. Electronic sensors and controls should be installed in each system of 5 tons or larger to allow interface with the UMACS computer system. Variable speed drives should be utilized on all mechanical equipment which is controlled by the computer. Smaller systems should be equipped with a Radio Control Switch during installation.

_____ Existing steam or electrical domestic hot water heaters should be replaced with instantaneous steam hot water heaters.

SUBJ: ENERGY CONSERVATION INITIATIVES FOR RENOVATION OR CONSTRUCTION PROJECTS

_____ All exterior doors are insulated and have adequate weather stripping.

Your assistance in ensuring that these energy conservation measures are included on projects will result in energy savings for Camp Lejeune. Should you have any questions concerning these suggestions, contact Ms. P. Engle, extensions 2985/5642.

C. H. BAKER

Copy to:
UMACS

11370
MAIN

29 Apr 87

Director, Utilities Branch

Director, Operations Branch (Attn: Greg Shoemaker)

M-2 CONSTRUCTION PROJECTS

(1) Removal of Asbestos Insulation, Bldg 1700
(2) Boiler and Steam Plant Repairs, BB-9

1. Provided as the enclosures are projects for the M-2 Construction Program. Enclosure (1) is submitted as a FY90 project and enclosure (2) is submitted as a supplemental FY88 project.

2. Point of contact for additional information is Carl Baker or David Southerland, extensions 5161/5024.

C. H. BAKER

Project: Removal of Asbestos Insulation, Building 1700

Description of Work: Remove asbestos insulation and reinsulate with calcium silicate insulation with smooth metal jacket covering the following steam, water and condensate lines:

1. Main header 160' x 14" steam line
2. Four nonreturn to header stop lines 256' x 12" steam line
3. Auxiliary steam loop line, 285' x 8" steam line
4. Area 1, 2, 3, 40' x 14" steam line
5. Areas 4 and 5, 40' x 14" steam line
6. Industrial Area, 25' x 8" steam line
7. Industrial Area Bypass 50' x 8" steam line
8. Condensate return from hot well, 150' x 8"
9. Condensate return from tunnel, 36' x 4"

Feedwater lines 225' x 4"

ated Cost: $350,000

Existing Conditions

ng asbestos insulation has deteriorated to the extent that it is friable the normal vibration of plant equipment along with the air movement of iler forced air fans.

If Not Provided: Asbestos insulation will continue to deteriorate and hazardous working conditions.

Encl (1)

Project: Removal of Asbestos Insulation, Building 1700

Description of Work: Remove asbestos insulation and reinsulate with calcium silicate insulation with smooth metal jacket covering the following steam, water and condensate lines:

1. Main header 160' x 14" steam line
2. Four nonreturn to header stop lines 256' x 12" steam line
3. Auxiliary steam loop line, 285' x 8" steam line
4. Area 1, 2, 3, 40' x 14" steam line
5. Areas 4 and 5, 40' x 14" steam line
6. Industrial Area, 25' x 8" steam line
7. Industrial Area Bypass 50' x 8" steam line
8. Condensate return from hot well, 150' x 8"
9. Condensate return from tunnel, 36' x 4"
10. Feedwater lines 225' x 4"

Estimated Cost: $350,000

Existing Conditions

Existing asbestos insulation has deteriorated to the extent that it is friable under the normal vibration of plant equipment along with the air movement of the boiler forced air fans.

Impact If Not Provided: Asbestos insulation will continue to deteriorate and produce hazardous working conditions.

Project: Removal of Asbestos Insulation, Building 1290

Description of Work: Remove asbestos insulation and remediate with calcium silicate insulation with smooth metal jacket covering the following steam, water and condensate lines:

1. Main header 160' x 14" steam line
2. Four connection to header from lines 250' x 12" steam
3. Auxiliary steam loop lines, 250' x 8" steam line
4. Area 1, 2, 3, 30' x 14" steam line
5. Areas 4 and 5, 40' x 14" steam line
6. Industrial Area, 250' x 8" steam line
7. Industrial Area Sprinkler 50' x 8" steam line
8. Condensate return from boiler, 150' x 8"
9. Condensate return from tunnel, 30' x 8"
10. Feedwater lines, 285' x 4"

Estimated Cost: $50,000

Existing Conditions

Existing asbestos insulation was determined to be friable in the opinion of the Project Engineer. The material covering of plenum equipment along with the air ducts or the boiler forced air ducts.

The Facility Management Section will continue to monitor and produce maintenance working conditions.

Project: Boiler and Steam Plant Repairs, BB-9

Description of Work: Work at Steam Plant BB-9 shall include the following items and any other related work necessary to provide a complete and usuable facility:

1. Replace No. 55 boiler, complete with valves, automatic controls, regulators, gauges, oil meters, catwalks, fans, piping and other related equipment
to make boiler functional. Boiler should be the water tube type with capacity increased to 20,000 pounds per hour.

2. Replace boiler blowdown piping from all three boilers to include blowdown tank.

3. Replace oil heater pump set to include piping and regulators to all three boilers with capacity to accommodate the increased capacity of No. 55 boiler.

4. Replace outer casing, insulation, boiler gas seals, burner eye refractory, and paint No. 53 boiler.

5. Replace deteriorated removable window panels with roll up doors behind Nos. 53, 54, and 55 boilers.

6. Remove asbestos insulation off all steam, condensate and water lines. Reinsulate with calcium silicate and smooth metal covering.

7. Replace three 10,000-gallon No. 6 oil tanks with two above the ground type. The two new tanks should have a capacity of 75,000 gallons each. The tanks should include a berm type retaining wall with off loading pumps (duplex), steam coils, regulator valves, area lighting and security fence. The existing 10,000-gallon oil tanks shall be removed and disposed of by the contractor.

8. Replace the existing boiler water transfer pump and piping with a duplex pump set. Provide necessary valves, strainers, regulators, from deaerator to make up tanks.

9. Replace existing steam flow meters with type that has 10 to 1 turn down ratio, pressure and temperature compensators, 24-hour chart, digital readout, 4-20 M.A., and replace orifice plates on Nos. 53, 54, and 55 boilers.

Estimated Cost: $525,000

Existing Conditions

1. Boiler No. 55 is deteriorated beyond economical repairs. The burner and controls are obsolete and no longer have parts available.

2. Blow down tank is excessively pitted and blowdown pipe has been patched.

3. Oil heater and pump set is worn from normal use and does not have the capability of the increased capacity of No. 55 boiler.

4. Boiler gases have leaked past the seals deteriorating the insulation and outer boiler casing. Casing and seals have been patched and welded previously. Boiler was built in 1978.

5. Roll up doors will give the needed room for boiler cleaning during the hot summer months in lieu of replacing deteriorated panels.

6. Asbestos is old and friable and should be replaced due to personnel safety.

7. Oil tanks are old and have the potential of leaking oil into the ground.

8. The existing pump is worn from normal use and should be replaced with a duplex set to prevent plant downtime during pump failure. Also, pump need to be sized for the added capacity of No. 55 boiler.

9. Existing steam flow meters are old and do not have the turn down ratio for the varying summer/winter loads to give accurate readings.

Impact If Not Provided: Steam Plant BB-9 will be unable to provide adequate steam to meet the demand for building heating requirements, domestic hot water, and messhall equipment.

4. Boiler tubes have leaked past the seals between the inner and outer boiler casing. Casing and roof have been patched and welded previously. Boilers were built in 1970.

5. Roll up doors will give the maximum room for boiler cleaning, unless the hot blower moves in lieu of replacing motorized panels.

6. Asbestos is old and friable and should be replaced due to personnel safety.

7. Oil tanks are old and have the potential of leaking oil into the ground.

8. The existing pump is worn from normal use and should be replaced with a duplex set to prevent plant downtime during pump failure. Also, pump need to be sized for the added capacity of No. 55 boiler.

9. Existing steam flow meters are old and do not have the turn down ratio for the varying summer/winter loads to give accurate readings.

Summary If not provided [illegible] Plant [illegible] will be unable to provide adequate steam to meet the demand for building heating requirements, domestic hot water and laundry equipment.

11000
MAIN

16 Apr 87

Director, Utilities Branch

Director, Operations Branch

MINOR CONSTRUCTION PROJECTS

Ref: (a) Dir, OpnsBr memo 11000 MAIN of 31 Mar 87

Encl: (1) Utilities Minor Construction Projects

1. As requested by the reference, the enclosure is provided for submission into the Minor Construction Program.

C. H. BAKER

WORK REQUEST (MAINTENANCE MANAGEMEN
NAVFAC 9-11014/20 REV. 2-68) S/N 0105-LF-002-7510
Supersedes NAVDOCKS 2351

(PW Department see Instructions in NAVFAC MO-321)

Requestor see Instructions on Reverse Side

PART I—REQUEST (Filled out by Requestor)

B045

1. FROM Director, Utilities Branch	2. REQUEST NO. 121-87
3. TO Director, Operations Branch	4. DATE OF REQUEST 17 Apr 87
5. REQUEST FOR ☐ COST ESTIMATE ☐ PERFORMA' ICE OF WORK	5a. REQUEST WORK START
6. FOR FURTHER INFORMATION CALL C. H. Baker, 5161	7. SKETCH/PLAN ATTACHED ☐ YES ☐ NO

8. DESCRIPTION OF WORK AND JUSTIFICATION *(Including location, type, size, quantity, etc.)*

1. Provide a radio telemetry system at the Hadnot Point Water Plant, Bldg 20 to control 35 wells including on-off controls, indicators for well condition status, 100% expansion capability, continuous visual observation and monitoring, interfacing with computer system at Water Plant 670, and automatic well pump operation by analog input.
Justification: At present, Bldg 20 has no controls over the well field except by dispatching personnel to each site to turn the well on or off. Also, if a well pump fails or is operating on emergency power, the condition is not known until the site is visited. A new radio telemetry system would provide a central automatic control system for the well field and reduce man-hours required to provide raw water to Bldg 20.
Estimated Cost: $130,000

9. FUNDS CHARGEABLE	10. SIGNATURE *(Requesting Official)* C. H. BAKER

PART II—COST ESTIMATE
(Filled out by Maintenance Control Division if estimate requested)

11. TO:	12. ESTIMATE NO.

13. COST ESTIMATE		14. SKETCH/PLAN ATTACHED ☐ YES ☐ NO
a. Labor	$	15.
b. Material	$	☐ APPROVED. PROGRAMMING TO START IN _____
c. Overhead and/or Surcharge	$	☐ APPROVED. BASED ON PRESENT WORKLOAD, THIS JOB CAN BE PROGRAMMED TO START IN _____, IF
d. Equipment Rental/Usage	$	AUTHORIZED BY 25TH OF _____ AND FUNDS ARE MADE AVAILABLE.
e. Contingency	$	☐ DISAPPROVED. *(See Reverse Side)*
f. TOTAL	$	16. SIGNATURE / 17. DATE

PART III—ACTION (Filled out by Requestor)

18. TO:

19. AUTHORIZATION TO PROCEED IS ATTACHED *(Check one if other than PW funds are involved)* ☐ NAVCOMPT 140 ☐ OTHER	20. WORK REQUESTED ☐ HAS BEEN CANCELLED ☐ HAS BEEN DEFERRED ☐ WILL BE PERFORMED BY OTHERS
21. SIGNATURE	22. DATE

(See Part IV on Reverse Side)

INSTRUCTIONS

IF ESTIMATE IS DESIRED BEFORE WORK IS STARTED

Requestor fills in all items in Part I, checks "Cost Estimate" in item 5, attaches sketch or plan if necessary, and checks proper block in item 7. Requestor retains last copy and forwards balance to Public Works Department.

If the Work Request is approved, the original and first copy will be returned to the requestor with Part II completed. If the requestor desires the work to proceed in accordance with the estimate provided, he should fill in Part III, checking proper block in item 19 and attaching the document citing the funds to be used. If the requestor decides not to authorize the work, the appropriate box in item 20 should be checked. The original form, in either case, is returned to the Public Works Department.

If the Work Request is disapproved, the reasons for disapproval will be stated in Part IV, signed by the Public Works Officer, and the original and one copy returned to the requestor.

IF ESTIMATE IS NOT DESIRED BEFORE WORK IS STARTED AND FUNDS ARE NOT UNDER COGNIZANCE OF PWO

Requestor fills in all items in Parts I and III except item 20, checks "Performance of Work" in item 5, attaches sketch or plan if necessary, checks proper block in item 7, checks proper block in item 19, and attaches document citing the funds to be used. Requestor retains last copy and forwards balance to Public Works Department.

If the Work Request is approved, the first copy will be returned to the requestor with items 11, 12, 15, 16, and 17 of Part II completed.

If the Work Request is disapproved, the reasons for disapproval will be stated in Part IV, signed by the Public Works Officer, and the original and one copy returned to requestor.

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PART IV—REMARKS

WORK REQUEST (MAINTENANCE MANAGEMENT)
NAVFAC 9-11014/20 REV. 2-68) S/N 0105-LF-002-7510
Supersedes NAVDOCKS 2351

(PW Department see Instructions in NAVFAC MO-321)

Requestor see Instructions on Reverse Side

B045

PART I—REQUEST (Filled out by Requestor)

1. FROM Director, Utilities Branch	2. REQUEST NO. 122-87
3. TO Director, Operations Branch	4. DATE OF REQUEST 17 Apr 87
5. REQUEST FOR ☐ COST ESTIMATE ☐ PERFORMANCE OF WORK	5a. REQUEST WORK START
6. FOR FURTHER INFORMATION CALL C. H. Baker, 5161	7. SKETCH/PLAN ATTACHED ☐ YES ☐ NO

8. DESCRIPTION OF WORK AND JUSTIFICATION (*Including location, type, size, quantity, etc.*)

1. Install an exhaust fan and/or ventilation system in Supernatent Room No. 516, Building 22, to remove gases from digestor tunnel.

Justification: Safety requirement per Industrial Hygiene Assessment letter dated 23 July 1987.

Estimated Cost: $5,000

9. FUNDS CHARGEABLE	10. SIGNATURE (*Requesting Official*) C. H. BAKER

PART II—COST ESTIMATE
(Filled out by Maintenance Control Division if estimate requested)

11. TO:	12. ESTIMATE NO.

13. COST ESTIMATE	
a. Labor	$
b. Material	$
c. Overhead and/or Surcharge	$
d. Equipment Rental/Usage	$
e. Contingency	$
f. TOTAL	$

14. SKETCH/PLAN ATTACHED ☐ YES ☐ NO

15.
☐ APPROVED. PROGRAMMING TO START IN _____
☐ APPROVED. BASED ON PRESENT WORKLOAD, THIS JOB CAN BE PROGRAMMED TO START IN _____, IF AUTHORIZED BY 25TH OF _____ AND FUNDS ARE MADE AVAILABLE.
☐ DISAPPROVED. (*See Reverse Side*)

16. SIGNATURE	17. DATE

PART III—ACTION (Filled out by Requestor)

18. TO:

19. AUTHORIZATION TO PROCEED IS ATTACHED (*Check one if other than PW funds are involved*) ☐ NAVCOMPT 140 ☐ OTHER	20. WORK REQUESTED ☐ HAS BEEN CANCELLED ☐ HAS BEEN DEFERRED ☐ WILL BE PERFORMED BY OTHERS
21. SIGNATURE	22. DATE

(*See Part IV on Reverse Side*)

INSTRUCTIONS

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PART IV—REMARKS

WORK REQUEST (MAINTENANCE MANAGEMENT)
NAVFAC 9-11014/20 REV. 2-68) S/N 0105-LF-002-7510
Supersedes NAVDOCKS 2351

(PW Department see Instructions in NAVFAC MO-321)

Requestor see Instructions on Reverse Side

PART I—REQUEST (Filled out by Requestor)

B045

1. FROM Director, Utilities Branch	2. REQUEST NO. 123-87
3. TO Director, Operations Branch	4. DATE OF REQUEST 17 Apr 87
5. REQUEST FOR ☐ COST ESTIMATE ☐ PERFORMANCE OF WORK	5a. REQUEST WORK START
6. FOR FURTHER INFORMATION CALL C. H. Baker, 5161	7. SKETCH/PLAN ATTACHED ☐ YES ☐ NO

8. DESCRIPTION OF WORK AND JUSTIFICATION *(Including location, type, size, quantity, etc.)*

1. Extend the existing coal storage yard by adding a 290 foot by 70 foot reinforced concrete slab with retaining walls and coal pile run-off collection drains on the southeast side of the existing facility. Work shall include demolition of the existing retaining wall and run-off collection drain on the southeast side of the yard.

Justification: Construction of new coal conveying equipment has reduced capacity of existing storage yard to approximately 15,000 tons. Existing storage yard needs to be expanded to provide 25,000 tons storage capacity to handle increasing demand and sufficient operating pile in case of miners' strike, mobilization, and disaster preparedness.

Estimated Cost: $90,000

9. FUNDS CHARGEABLE	10. SIGNATURE *(Requesting Official)* C. H. BAKER

PART II—COST ESTIMATE
(Filled out by Maintenance Control Division if estimate requested)

11. TO:	12. ESTIMATE NO.

13. COST ESTIMATE		14. SKETCH/PLAN ATTACHED ☐ YES ☐ NO
a. Labor	$	15.
b. Material	$	☐ APPROVED. PROGRAMMING TO START IN _____
c. Overhead and/or Surcharge	$	☐ APPROVED. BASED ON PRESENT WORKLOAD, THIS JOB CAN BE PROGRAMMED TO START IN _____, IF
d. Equipment Rental/Usage	$	AUTHORIZED BY 25TH OF _____ AND FUNDS ARE MADE AVAILABLE.
e. Contingency	$	☐ DISAPPROVED. *(See Reverse Side)*
f. TOTAL	$	16. SIGNATURE / 17. DATE

PART III—ACTION (Filled out by Requestor)

18. TO:

19. AUTHORIZATION TO PROCEED IS ATTACHED *(Check one if other than PW funds are involved)* ☐ NAVCOMPT 140 ☐ OTHER	20. WORK REQUESTED ☐ HAS BEEN CANCELLED ☐ HAS BEEN DEFERRED ☐ WILL BE PERFORMED BY OTHERS
21. SIGNATURE	22. DATE

(See Part IV on Reverse Side)

INSTRUCTIONS

IF ESTIMATE IS DESIRED BEFORE WORK IS STARTED

Requestor fills in all items in Part I, checks "Cost Estimate" in item 5, attaches sketch or plan if necessary, and checks proper block in item 7. Requestor retains last copy and forwards balance to Public Works Department.

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PART IV—REMARKS

WORK REQUEST (MAINTENANCE MANAGEMENT)
NAVFAC 9-11014/20 REV. 2-68) S/N 0105-LF-002-7510
Supersedes NAVDOCKS 2351

(PW Department see Instructions in NAVFAC MO-321)

Requestor see Instructions on Reverse Side

PART I—REQUEST (Filled out by Requestor)

B045

1. FROM Director, Utilities Branch	2. REQUEST NO. 124-87
3. TO Director, Operations Branch	4. DATE OF REQUEST 17 Apr 87
5. REQUEST FOR ☐ COST ESTIMATE ☐ PERFORMANCE OF WORK	5a. REQUEST WORK START
6. FOR FURTHER INFORMATION CALL C. H. Baker, 5161	7. SKETCH/PLAN ATTACHED ☐ YES ☐ NO

8. DESCRIPTION OF WORK AND JUSTIFICATION *(Including location, type, size, quantity, etc.)*

1. Replace the existing Motorola sewage lift station alarm equipment at Building 22 including the central processor with state-of-the-art remote radio signal controls and alarms. Work must include placement of a computer control colorgraphic CRT with printer at Bldg 22 and interface with the existing computer system at Bldg 670. The current system controls/monitors 23 lift stations. The system needs to be expanded to include 59 additional sewage lift stations with additional expansion capability to control/monitor 100 remote lift stations. Acquisition of 10 additional complete spare control equipment units for future expansion.

Justification: Existing Motorola system is obsolete and replacement parts are no longer available.

Estimated Cost: $100,000 ($97,000 M-1, $83,000 new construction)

9. FUNDS CHARGEABLE	10. SIGNATURE *(Requesting Official)* C. H. BAKER

PART II—COST ESTIMATE
(Filled out by Maintenance Control Division if estimate requested)

11. TO:	12. ESTIMATE NO.

13. COST ESTIMATE	
a. Labor	$
b. Material	$
c. Overhead and/or Surcharge	$
d. Equipment Rental/Usage	$
e. Contingency	$
f. TOTAL	$

14. SKETCH/PLAN ATTACHED ☐ YES ☐ NO

15.
☐ APPROVED. PROGRAMMING TO START IN _____
☐ APPROVED. BASED ON PRESENT WORKLOAD, THIS JOB CAN BE PROGRAMMED TO START IN _____, IF AUTHORIZED BY 25TH OF _____ AND FUNDS ARE MADE AVAILABLE.
☐ DISAPPROVED. *(See Reverse Side)*

16. SIGNATURE	17. DATE

PART III—ACTION (Filled out by Requestor)

18. TO:

19. AUTHORIZATION TO PROCEED IS ATTACHED *(Check one if other than PW funds are involved)* ☐ NAVCOMPT 140 ☐ OTHER	20. WORK REQUESTED ☐ HAS BEEN CANCELLED ☐ HAS BEEN DEFERRED ☐ WILL BE PERFORMED BY OTHERS
21. SIGNATURE	22. DATE

(See Part IV on Reverse Side)

INSTRUCTIONS

IF ESTIMATE IS DESIRED BEFORE WORK IS STARTED

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If the Work Request is disapproved, the reasons for disapproval will be stated in Part IV, signed by the Public Works Officer, and the original and one copy returned to requestor.

PART IV—REMARKS

WORK REQUEST (MAINTENANCE MANAGEMENT)
NAVFAC 9-11014/20 REV. 2-68) S/N 0105-LF-002-7510
Supersedes NAVDOCKS 2351

(PW Department see Instructions in NAVFAC MO-321)

Requestor see Instructions on Reverse Side

PART I—REQUEST (Filled out by Requestor) B045

1. FROM Director, Utilities Branch	2. REQUEST NO. 125-87
3. TO Director, Operations Branch	4. DATE OF REQUEST 17 Apr 87
5. REQUEST FOR ☐ COST ESTIMATE ☐ PERFORMANCE OF WORK	5a. REQUEST WORK START
6. FOR FURTHER INFORMATION CALL C. H. Baker, 5161	7. SKETCH/PLAN ATTACHED ☐ YES ☐ NO

8. DESCRIPTION OF WORK AND JUSTIFICATION *(Including location, type, size, quantity, etc.)*

1. Install approximately 1400' of 8' water line including valves, tapping sleeves and tee's between Bldg 210 and Bldg 50 to construct a loop feed for the system. An additional tee and valve should be installed at the road to the Demo Range for future expansion.

Justification: The existing water distribution system at Courthouse Bay does not have a loop feed from one side of Courhouse Bay to the other. When a line or valve ruptures adjacent to the elevated tank, an entire area has to be secured to repair the system. The installation of a loop feed will eliminate the problem and also eliminate dead end lines in the system.

Estimated Cost: $15,000

9. FUNDS CHARGEABLE	10. SIGNATURE *(Requesting Official)* C. H. BAKER

PART II—COST ESTIMATE
(Filled out by Maintenance Control Division if estimate requested)

11. TO:	12. ESTIMATE NO.

13. COST ESTIMATE	
a. Labor	$
b. Material	$
c. Overhead and/or Surcharge	$
d. Equipment Rental/Usage	$
e. Contingency	$
f. TOTAL	$

14. SKETCH/PLAN ATTACHED ☐ YES ☐ NO

15.
☐ APPROVED. PROGRAMMING TO START IN _____
☐ APPROVED. BASED ON PRESENT WORKLOAD, THIS JOB CAN BE PROGRAMMED TO START IN _____, IF AUTHORIZED BY 25TH OF _____ AND FUNDS ARE MADE AVAILABLE.
☐ DISAPPROVED. *(See Reverse Side)*

16. SIGNATURE	17. DATE

PART III—ACTION (Filled out by Requestor)

18. TO:

19. AUTHORIZATION TO PROCEED IS ATTACHED *(Check one if other than PW funds are involved)* ☐ NAVCOMPT 140 ☐ OTHER	20. WORK REQUESTED ☐ HAS BEEN CANCELLED ☐ HAS BEEN DEFERRED ☐ WILL BE PERFORMED BY OTHERS
21. SIGNATURE	22. DATE

(See Part IV on Reverse Side)

INSTRUCTIONS

IF ESTIMATE IS DESIRED BEFORE WORK IS STARTED

Requestor fills in all items in Part I, checks "Cost Estimate" in item 5, attaches sketch or plan if necessary, and checks proper block in item 7. Requestor retains last copy and forwards balance to Public Works Department.

If the Work Request is approved, the original and first copy will be returned to the requestor with Part II completed. If the requestor desires the work to proceed in accordance with the estimate provided, he should fill in Part III, checking proper block in item 19 and attaching the document citing the funds to be used. If the requestor decides not to authorize the work, the appropriate box in item 20 should be checked. The original form, in either case, is returned to the Public Works Department.

If the Work Request is disapproved, the reasons for disapproval will be stated in Part IV, signed by the Public Works Officer, and the original and one copy returned to the requestor.

IF ESTIMATE IS NOT DESIRED BEFORE WORK IS STARTED AND FUNDS ARE NOT UNDER COGNIZANCE OF PWO

Requestor fills in all items in Parts I and III except item 20, checks "Performance of Work" in item 5, attaches sketch or plan if necessary, checks proper block in item 7, checks proper block in item 19, and attaches document citing the funds to be used. Requestor retains last copy and forwards balance to Public Works Department.

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PART IV—REMARKS

WORK REQUEST (MAINTENANCE MANAGEMENT)
NAVFAC 9-11014/20 REV. 2-68) S/N 0105-LF-002-7510
Supersedes NAVDOCKS 2351

(PW Department see Instructions in NAVFAC MO-321)

Requestor see Instructions on Reverse Side

PART I—REQUEST (Filled out by Requestor)

B045

1. FROM Director, Utilities Branch	2. REQUEST NO. 126-87
3. TO Director, Operations Branch	4. DATE OF REQUEST 17 Apr 87
5. REQUEST FOR ☐ COST ESTIMATE ☐ PERFORMANCE OF WORK	5a. REQUEST WORK START
6. FOR FURTHER INFORMATION CALL C. H. Baker, 5161	7. SKETCH/PLAN ATTACHED ☐ YES ☐ NO

8. DESCRIPTION OF WORK AND JUSTIFICATION *(Including location, type, size, quantity, etc.)*

1. Construct a new steam pit at FC-202 and provide necessary valves, pumps, and piping to tie in Bldgs FC100, FC200, FC241, and FC251 to the 8" steam main along Main Service Road.

Justification: The boilers and auxiliary equipment at FC202 Steam Plant require extensive repairs due to age and operate on No. 2 oil. Providing a tie in to the main steam line along Main Service Road will eliminate the need for FC202 Steam Plant and reduce operating cost due to steam requirement being met by coal burning in lieu of No. 2 oil which is more expensive.

Estimated Cost: $20,000

9. FUNDS CHARGEABLE	10. SIGNATURE *(Requesting Official)* C. H. BAKER

PART II—COST ESTIMATE
(Filled out by Maintenance Control Division if estimate requested)

11. TO:	12. ESTIMATE NO.

13. COST ESTIMATE	
a. Labor	$
b. Material	$
c. Overhead and/or Surcharge	$
d. Equipment Rental/Usage	$
e. Contingency	$
f. TOTAL	$

14. SKETCH/PLAN ATTACHED ☐ YES ☐ NO

15.
☐ APPROVED. PROGRAMMING TO START IN _____
☐ APPROVED. BASED ON PRESENT WORKLOAD, THIS JOB CAN BE PROGRAMMED TO START IN _____, IF AUTHORIZED BY 25TH OF _____ AND FUNDS ARE MADE AVAILABLE.
☐ DISAPPROVED. *(See Reverse Side)*

16. SIGNATURE	17. DATE

PART III—ACTION (Filled out by Requestor)

18. TO:

19. AUTHORIZATION TO PROCEED IS ATTACHED *(Check one if other than PW funds are involved)* ☐ NAVCOMPT 140 ☐ OTHER	20. WORK REQUESTED ☐ HAS BEEN CANCELLED ☐ HAS BEEN DEFERRED ☐ WILL BE PERFORMED BY OTHERS
21. SIGNATURE	22. DATE

(See Part IV on Reverse Side)

INSTRUCTIONS

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IF ESTIMATE IS NOT DESIRED BEFORE WORK IS STARTED AND FUNDS ARE NOT UNDER COGNIZANCE OF PWO

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PART IV—REMARKS

WORK REQUEST (MAINTENANCE MANAGEMENT)
NAVFAC 9-11014/20 REV. 2-68) S/N 0105-LF-002-7510
Supersedes NAVDOCKS 2351

(PW Department see Instructions in NAVFAC MO-321)

Requestor see Instructions on Reverse Side

PART I—REQUEST (Filled out by Requestor) B045

1. FROM Director, Utilities Branch	2. REQUEST NO. 127-87
3. TO Director, Operations Branch	4. DATE OF REQUEST 17 Apr 87
5. REQUEST FOR ☐ COST ESTIMATE ☐ PERFORMANCE OF WORK	5a. REQUEST WORK START
6. FOR FURTHER INFORMATION CALL C. H. Baker, 5161	7. SKETCH/PLAN ATTACHED ☐ YES ☐ NO

8. DESCRIPTION OF WORK AND JUSTIFICATION *(Including location, type, size, quantity, etc.)*

1. Procure and erect wo 5,000-gallon chemical storage tanks constructed of stainless steel or a rigid type material that will resist the corrosiveness of boiler chemicals. This will include all necessary piping, ladders, sight glasses, valves, meters, duplex pumps, drains, vents, lights (necessary for loading and off loading chemicals on a 24-hour basis). The existing site has two rental tanks in place that will be removed at time of construction. The retaining wall around these trucks is constructed of blocks. This should be torn down and replaced with a concrete wall, reinforced with steel.

Justification: Existing bulk storage tanks are presently leased by the contractor suppling chemicals. This is a problem during the transition period from one contractor to the next. Chemicals have to be put into 55-gallon barrels until existing tanks are removed and the new contractor installs his tanks. This opens the door for potential chemical spills and back injuries when maneuvering the 55-gallon drums. Also, the existing retaining wall is constructed of blocks and has cracks along the motar joints. This is not adequate for retaining the chemical if one of the tanks leak.

Estimated Cost: $70,000

9. FUNDS CHARGEABLE	10. SIGNATURE *(Requesting Official)*

PART II—COST ESTIMATE
(Filled out by Maintenance Control Division if estimate requested)

11. TO:	12. ESTIMATE NO.

13. COST ESTIMATE	
a. Labor	$
b. Material	$
c. Overhead and/or Surcharge	$
d. Equipment Rental/Usage	$
e. Contingency	$
f. TOTAL	$

14. SKETCH/PLAN ATTACHED ☐ YES ☐ NO

15.
☐ APPROVED. PROGRAMMING TO START IN _____
☐ APPROVED. BASED ON PRESENT WORKLOAD, THIS JOB CAN BE PROGRAMMED TO START IN _____, IF AUTHORIZED BY 25TH OF _____ AND FUNDS ARE MADE AVAILABLE.
☐ DISAPPROVED. *(See Reverse Side)*

16. SIGNATURE	17. DATE

PART III—ACTION (Filled out by Requestor)

18. TO:

19. AUTHORIZATION TO PROCEED IS ATTACHED *(Check one if other than PW funds are involved)* ☐ NAVCOMPT 140 ☐ OTHER	20. WORK REQUESTED ☐ HAS BEEN CANCELLED ☐ HAS BEEN DEFERRED ☐ WILL BE PERFORMED BY OTHERS
21. SIGNATURE	22. DATE

(See Part IV on Reverse Side)

INSTRUCTIONS

IF ESTIMATE IS DESIRED BEFORE WORK IS STARTED

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PART IV—REMARKS

WORK REQUEST (MAINTENANCE MANAGEMENT)
NAVFAC 9-11014/20 REV. 2-68) S/N 0105-LF-002-7510
Supersedes NAVDOCKS 2351

(PW Department see Instructions in NAVFAC MO-321)

Requestor see Instructions on Reverse Side

PART I—REQUEST (Filled out by Requestor)

B045

1. FROM Director, Utilities Branch	2. REQUEST NO. 128-87
3. TO Director, Operations Branch	4. DATE OF REQUEST 17 Apr 87
5. REQUEST FOR ☐ COST ESTIMATE ☐ PERFORMANCE OF WORK	5a. REQUEST WORK START
6. FOR FURTHER INFORMATION CALL C. H. Baker, 5161	7. SKETCH/PLAN ATTACHED ☐ YES ☐ NO

8. DESCRIPTION OF WORK AND JUSTIFICATION *(Including location, type, size, quantity, etc.)*

1. Install approximately 603 feet of security fence with two 4' personnel gates and one 20' equipment gate.

Justification: To prevent tampering or vandalism of two 60,000-gallon oil tanks.

Estimated Cost: $10,000

9. FUNDS CHARGEABLE	10. SIGNATURE *(Requesting Official)* C. H. BAKER

PART II—COST ESTIMATE
(Filled out by Maintenance Control Division if estimate requested)

11. TO:	12. ESTIMATE NO.

13. COST ESTIMATE	
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