File 5-1 Review + Return

DEPARTMENT OF THE NAVY
ATLANTIC DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
NORFOLK, VIRGINIA 23511

TELEPHONE NO.
444-9670
IN REPLY REFER TO:

09A21B3:MLB:car
11010/MARCORB
CAMP LEJEUNE
29 October 1982

From: Commander, Atlantic Division, Naval Facilities Engineering Command
To: Commander, Naval Facilities Engineering Command (Code 05)

Subj: FY 1984 Project Engineering Documentation (PED) for Project P-780, Sewage System, Building 1700, Marine Corps Base, Camp Lejeune, North Carolina

Ref: (a) NAVFACENGCOM ltr 0512A1/AGT of 4 Jun 1981
(b) NAVFACINST 11010.14M
(c) NAVFACINST 11010.44D

Encl: (1) Subject PED (10 copies)
(2) Detailed Engineering Cost Estimate Sheets
(3) Witness Data Sketch (2 copies)

1. As requested by reference (a), enclosures (1), (2), and (3), prepared in accordance with reference (b), are submitted.

2. It is certified that: (a) the PED has been prepared in accordance with reference (b) and is based upon 35% design; (b) project scope and cost are the minimum required to satisfy the operational requirements and are supported by current SFPS documentation in accordance with reference (c); (c) utilities are adequate to support the additional load imposed by the project; (d) the facility design is generally acceptable to the Activity Commanding General, and satisfies the Activity's requirements; and (e) the DD Form 1391 has been reviewed by both the Activity and LANTNAVFACENGCOM.

3. The subject project cost has increased to comply with DOD policy to reduce the number of point source discharges in accordance with the National Pollutant Discharge Elimination System (NPDES) and State environmental requirements.

4. The discharge from the proposed coal pile run-off pretreatment plant has a flow limitation of 100 GPM (maximum), to be routed through the existing sanitary system. This hydraulic limitation is necessary to maintain a reasonable reserve capacity in the downstream sewer system and to prevent adverse effects at the receiving sewage treatment plant. Also the amount of coal being stored at the plant has increased and full containment of the run-off will require additional concrete pavement (storage pad surface).

5. By copy of this letter, the Commandant of the Marine Corps (LFF-1); and the Commanding General, Marine Corps Base, Camp Lejeune, North Carolina; are requested to provide any comments directly to NAVFACENGCOM (Attention Code 05) with a copy to LANTNAVFACENGCOM (attention Code 09A2). If no comments are submitted within 30 days, concurrence will be assumed.

E. W. ATKINSON, P. E.
By direction

Comment to Jon Marshburn via FONECON 11-23-82 - divert catch basin under ash silo to new collection system.

09A21B3:MLB:car
11010/MARCORB
CAMP LEJEUNE

Copy to: (w/2 copies encl (1))
CMC (LFF-1)
MARCORB CAMP LEJEUNE

FOR OFFICIAL USE ONLY 31 AUGUST 1982

DEPARTMENT OF THE NAVY

PROJECT ENGINEERING DOCUMENTATION

SEWERAGE SYSTEM

(P-780)

FY 1984 MCON

MARINE CORPS BASE
CAMP LEJEUNE, NORTH CAROLINA

ADMINISTERED BY

ATLANTIC DIVISION
NAVAL FACILITIES
ENGINEERING COMMAND
NORFOLK, VA. 23511

PREPARED BY

HENRY VON OESEN & ASSOCIATES
CONSULTING ENGINEERS & PLANNERS
P.O. BOX 2087
WILMINGTON, N.C. 28401

1. COMPONENT	FY 19__ MILITARY CONSTRUCTION PROJECT DATA	2. DATE
NAVY		31 AUGUST 1982

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA	SEWERAGE SYSTEM,

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
	821-09	P-780	$560

9. COST ESTIMATES

Escalation 13% ITEM Bid Opening Date 1 April 1984	U/M	QUANTITY	UNIT COST	COST ($000)
SEWERAGE SYSTEM	LS	-------	-----	$ 483.00
Catchment & Discharge System	LS	-------	-----	(499.00
T.V. Cameras & Monitoring System	LS	-------	-----	(34.00)
SUBTOTAL				$ 483.00
CONTINGENCY (10%)				48.00
TOTAL CONTRACT COST				$ 531.00
SUPERVISION, INSPECTION & OVERHEAD (5.5%)				29.00
TOTAL REQUEST				$ 560.00
TOTAL REQUEST ROUNDED				$ 560.00

10. DESCRIPTION OF PROPOSED CONSTRUCTION

Extend coal storage hard stand and provide a containment wall and 15' wide concrete pad to encompass the existing coal pile. Construct containment system settling basin, pH adjustment tanks and control building. Provide TV stack emission monitoring system, erosion control, and associated work.

11. Requirement: N/A SF Adequate N/A SF Substandard N/A SF
PROJECT: Provide pollution control facilities for coal pile storage area, stack emission TV monitors, and related work.

REQUIREMENT: The National Pollutant Discharge Elimination System (NPDES) for the Base requires compliance with the Clean Water Act (CWA) 33 USC 1251 ET SEQ. The coal pile at the Central Heating Plant is a source of suspended solids that is being dumped into surrounding storm sewers. With the recent addition of electrostatic precipitators to this plant, which will allow the burning of coal, a much larger volume of coal will be stored. This creates the potential for larger quantities of suspended solids to be dumped untreated into existing storm sewers. A TV monitoring system is required to insure compliance with air quality standards established by the Environmentl Protection Agency (EPA) and the State of North Carolina for generating plant facilities.

CURRENT SITUATION: Pollutants from the coal pile runoff are allowed to drain off untreated.

IMPACT IF NOT PROVIDED: Coal storage may not be allowed at the Central Heating Plant if the runoff facility is not provided, resulting in having to use oil, a scarce resource, at the Central Heating Plant instead of cheaper and more abundant coal.

1. COMPONENT	FY 19__ MILITARY CONSTRUCTION PROJECT DATA	2. DATE
NAVY		31 AUGUST 1982

3. INSTALLATION AND LOCATION

MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA

4. PROJECT TITLE	5. PROJECT NUMBER
SEWERAGE SYSTEM	P-780

ENVIRONMENTAL IMPACT: The project Preliminary Environmental Assessment has been reviewed, and where required, the design concepts give consideration to eliminating adverse environmental effects consistent with applicable directives.

PRESERVATION OF HISTORICAL SITES AND STRUCTURES: The project facilities do not directly or indirectly affect a district, site, building, structure, object or setting which is listed in the National Register or otherwise possesses a significant quality of American History.

FALLOUT SHELTER CONSTRUCTION: Fallout shelter excluded -- Project not susceptible for shelter incorporation.

FLOOD HAZARDS EVALUATION: Requirements of Executive Order No. 11988 (Floodplain Management) and Executive Order No. 11990 (Protection of Wetlands) are not applicable.

POLLUTION, PREVENTION, ABATEMENT AND CONTROL: This project will not cause additional air or water pollution.

DESIGN FOR ACCESSIBILITY OF PHYSICALLY HANDICAPPED PERSONNEL: Provisions for physically handicapped personnel not required in this facility.

BUDGET ESTIMATE SUMMARY SHEET FOR P-780

Title: Sewerage System — Costs Escalated to: 1 April 84

Location: Marine Corps Base, Camp Lejeune, NC — Escalation: 13%

Prepared by: Henry von Oesen & Associates, Inc. — Date: 31 August 82 — Contingency: 10%

	$/SF	$/SYS	SYS QUAN	TOTAL	BUILDING	BUILT-IN EQ
Catchment and Discharge System						
Demolition				14,900		
Site Work				246,000		
Concrete Detendion Basin				160,200		
Monitoring & Nuetrailizing Equipment				22,000		
Electrical				6,000		
Subtotal				449,100		
Stack Monitoring System				34,200		

Total Estimated Contract Cost:	$483,300.00
Contingency (10%)	48,000.00
SIOH (5.5%)	29,000.00
Total Budget Cost	$560,300.00
Rounded	$560,000.00

DESIGN CONCEPTS

Activity and Location: MARINE CORPS BASE, CAMP LEJEUNE, N. C.

Project Title: SEWERAGE SYSTEM (P-780)

Date: 31 AUGUST, 1982

USE OF DEFINITIVES AND PREVIOUS DESIGNS

There are no definitives applicable to this project. Collection, treatment and disposal of stormwater runoff from Coal Storage areas is a relatively new design and construction problem on military installations. In years past, this runoff has been allowed to drain to the stormwater system of the area and discharge in a similar manner as other stormwater. With the adoption of National Pollutant Discharge Elimination System (NPDES) requirements as outlined by the Environmental Protection Agency and the State of North Carolina, it has become necessary for the stormwater runoff to be segregated from the adjacent system and be monitored and treated if necessary, prior to discharge. This process will require a specific design for which very little design criteria is available.

A second part of this project is the installation of a television monitoring system for the air pollution control systems. This is also a relatively new requirement for which there is a limited amount of design criteria.

SPECIAL DESIGN CHARACTERISTICS

A. Stormwater Run-off from Coal Storage Area: There are many free and dissolved solids and separate metals in bituminous coal. The pollutant effect in coal pile runoff is primarily due to (1) acidity (2) suspended solids and (3) toxic trace metals and other dissolved chemicals.

1. Acidity: Metal sulfides in coal oxidize and form sulfates which in turn combine with water forming weak acids. The collection system will direct all of the runoff to a monitoring pit which will allow ph adjustment to within allowable limits with a chemical neutralizer.

2. Suspended Solids: The collection system will direct all of the runoff to a settling basin which will allow the suspended solids to settle and permit only the allowable range to discharge.

3. Toxic Metals: Toxic metals and other pollutants in the runoff are treated separately by discharging the pretreated effluent to the sanitary sewer system.

4. Criteria:

Design Storm: 10 year design frequency
Time of Concentration = 2 hours
I @ 2 hours = 1.6 in/hr
C = 0.55 for pile area
Runoff Area = 3.2 acres
Particle Size = 40 to 80 microns (diameter)

5. Preliminary Sizes: From available information, a settling basin or pond is necessary to accommodate the water flow and the settling rate anticipated. A concrete retention area, 20' x 120' x 10' would accommodate these requirements as well as allow space for a monitoring pit which would also house two pumps to discharge the water to the nearest sanitary sewer. This pit would require cleaning of accumulated sediments (mostly coal dust) at four year intervals. Cleaning would be by mechanical bucket, or dragline.

6. The facility is presently storing coal about 45 feet beyond the limits of the existing slab. The extension of the coal storage hard stand is necessary to provide positive containment of acidic leachant that could pollute ground water.

B. Television Monitoring System: There is no special design considerations for this system.

ENERGY CONSERVATION AND SOLAR ENERGY

Solar energy is not applicable for use on this project. Energy-consuming equipment such as pumps and lighting will be selected for maximum efficiency. An automatic control system will monitor and record remote equipment and control of the equipment will minimize manual inspection and surveillance.

POLLUTION ABATEMENT ASPECTS OF DESIGN

This design is intended to monitor and treat the effluent as necessary to allow discharge to the sanitary sewer system. (See Section 1 and 2 above). It has been noted that effluent from the coal pile runoff treatment facility is to be discharged to the sanitary sewer system. No permit will be required with this type of discharge.

SITE APPROVAL

Site work approval has been granted per Commanding General letter PWO:408:BJD:bjd P-780 of 28 July 1981.

ECONOMIC ANALYSIS

Coal Pile Sewerage System: Several alternatives for collection of runoff have been considered.

(1) Collection within retaining walls.
(2) Collection outside retaining walls.
(3) Marginal aprons or swales within walls.
(4) Marginal aprons on swales outside walls.
(5) Underground collection and piping.
(6) Collection pit (underground structure)
(7) Collection basin (open with sloped sides).

Function and efficiency out-weigh economy in selecting the retaining and collecting system. Experience has shown that a low concrete retaining wall provides the best retainer for coal piles; collection swales within the pile area adversely effect equipment operation; underground piping sometimes has sedimentation clogging; collecting swales outside retaining walls pose less objection to function and are more efficient. Therefore, a standard concrete retaining wall with an outside paved apron or channel has been selected because of function and efficiency reasons although the cost of this with other considerations is about the same.

The following criteria was considered in selection of the collection facility type:

(1) Detention Time: 2 to 2-1/2 hours. This requirement clearly indicates that the cross-sectional area of a pit must be approximately the same as a basin.

(2) There is sufficient land available to obtain the required cross-section using more surface area and shallower depths.

(3) The shallow basin can be built with sloped sides (trapezoidal section) at less first cost than a pit with vertical sides.

(4) The sloped sides of the basin will allow easier cleaning of sediments with mechanical equipment (dragline) than the vertical sides of a pit.

(5) An open top basin shall allow easier monitoring of sedimentation rates. The shallow section will allow channelled flow even if the sedimentation rate varies substantially.

The basin system has been selected.

SPECIAL ENGINEERING SERVICES

Field surveys have been made to determine existing topographic features. Two subsurface investigations will be required.

CONTINGENCY

A contingency amount of 10% is applied to the estimated project cost to account for existing underground obstructions which can not be qualified until actual construction.

COLLATERAL EQUIPMENT REQUIREMENTS (Initial Outfitting)
NAVFAC LANTDIV 4-11010/6 (9/73)

DATE 31 AUGUST 82

1. ACTIVITY (Name and Location)

MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA

2. PROJECT TITLE

P. NO. P-780

SEWERAGE SYSTEM,

COG. SYMBOL AND FED. STOCK NO. OR OTHER SOURCE	ITEM/EQUIPMENT DESCRIPTION	QUANTITY	UNIT OF ISSUE	UNIT PRICE	TOTAL COST
1. BUILT-IN EQUIPMENT TO BE MCON FUNDED	N/A				
2. EXPENSE ITEMS	N/A				
3. INVESTMENT ITEMS	N/A				
4. APA EQUIPMENT	N/A				
5. TRAINING EQUIPMENT	N/A				
6. OTHER EXPENSES	N/A				
7. EQUIPMENT ON HAND	N/A				
8. SUMMARY	N/A				

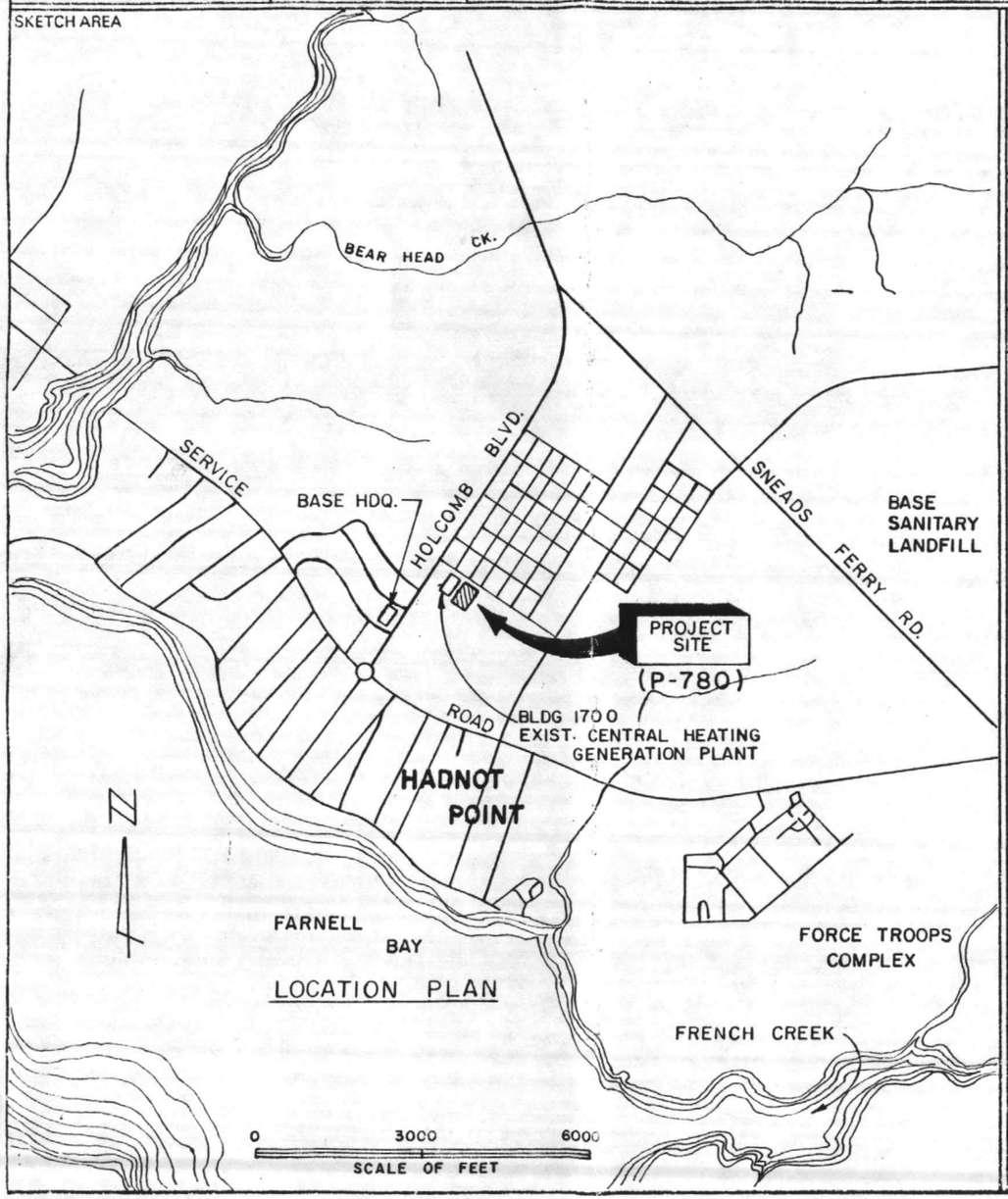
NAVFAC 11010/13 (Rev. 6-79)

MILITARY CONSTRUCTION PROJECT WITNESS DATA

FY PROGRAM: 84

INSTALLATION	PROJECT TITLE		DATE
MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA	SEWERAGE SYSTEM	P- 780	31 August 1982

SKETCH AREA



LOCATION PLAN

A&E/GF	PLANS AND SPECIFICATIONS			CONSTR	DESIGN PROGRESS INFO PROVIDED CONGRESS
NAME AND LOCATION	HENRY VON OESEN AND ASSOC., INC. WILMINGTON, NORTH CAROLINA			AWARD DATE (Est.) APR 1984	START DATE:
				MONTHS 15	COMPLETION DATE:
DATES	AWARD FEB 82	35% COMPLETION SEPT 82	100% COMPLETION MARCH 1983	BOD JULY 1985	COMPLETE 1 JAN: %
					COMPLETE 1 OCT: %

COMPARATIVE COST DATA			ENGINEERING DATA	
H OK L	AREA FACTOR:	UNIT COST ($)	DD 1391 COST PROJECTION DATA	
UNIT COST FOR THIS PROJECT ON DD 1391			INCREASE – TOTAL %	PROJECTION DATES (From – To)
DOD COST REVIEW GUIDE (ADJUSTED)			INCREASE/MONTH %	INDEX SOURCE
OTHER PROJECTS IN THIS PROGRAM (ADJUSTED)			SITE CONDITION, SPECIAL DESIGN CONSIDERATIONS, TECHNICAL PROBLEMS, ETC. OTHER THAN SHOWN ON DD 1391	

BUILT-IN EQUIPMENT; FEC DATA; SPECIAL OVERSEAS OVERHEAD COSTS; EXPLANATION OF DEMOLITION

W-1

PREPARED BY: Name _____ Extension _____ APPROVED BY ASSISTANT DIVISION DIRECTOR: CODE _____ INITIALS _____

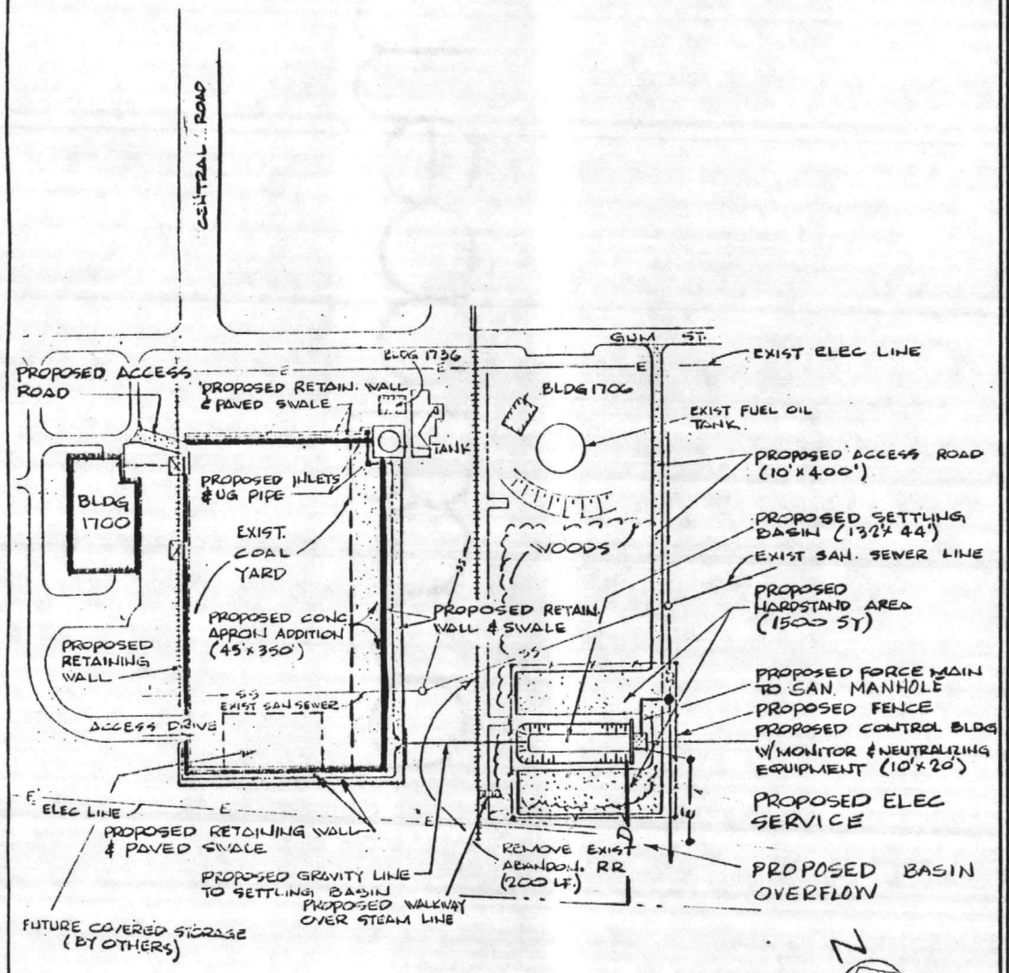
NAVFAC 11010/13 (Rev. 6-79)

MILITARY CONSTRUCTION PROJECT WITNESS DATA

FY PROGRAM: 84

INSTALLATION	PROJECT TITLE	P-	DATE
MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA	SEWERAGE SYSTEM	780	31 August 1982

SKETCH AREA



SITE PLAN

1"=200'

0 100 200 400

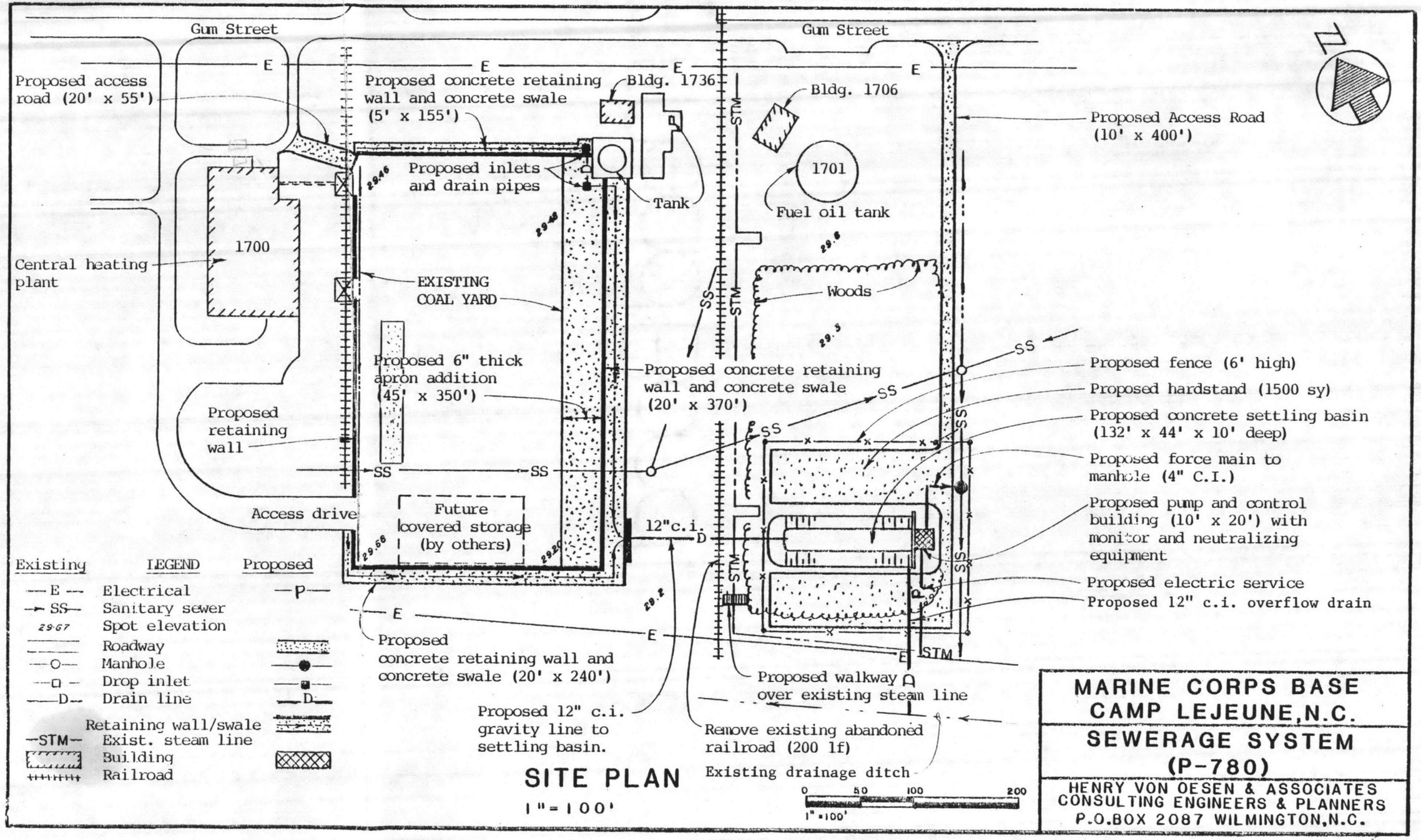
A&E/GF	PLANS AND SPECIFICATIONS			CONSTR	DESIGN PROGRESS INFO PROVIDED CONGRESS
NAME AND LOCATION	HENRY VON OESEN & ASSOC., INC. WILMINGTON, NORTH CAROLINA			AWARD DATE (Est.) APR 84 MONTHS 15	START DATE: COMPLETION DATE:
DATES	AWARD FEB 82	35% COMPLETION 15 SEPT 82	100% COMPLETION 5 JAN 83	BOD JUL 85	COMPLETE 1 JAN: % COMPLETE 1 OCT: %

COMPARATIVE COST DATA			ENGINEERING DATA
H OK L	AREA FACTOR:	UNIT COST ($)	DD 1391 COST PROJECTION DATA
UNIT COST FOR THIS PROJECT ON DD 1391			INCREASE – TOTAL % / PROJECTION DATES (From – To)
DOD COST REVIEW GUIDE (ADJUSTED)			INCREASE/MONTH % / INDEX SOURCE
OTHER PROJECTS IN THIS PROGRAM (ADJUSTED)			SITE CONDITION: SPECIAL DESIGN CONSIDERATIONS, TECHNICAL PROBLEMS, ETC. OTHER THAN SHOWN ON DD 1391

BUILT-IN EQUIPMENT; FEC DATA; SPECIAL OVERSEAS OVERHEAD COSTS; EXPLANATION OF DEMOLITION

W-1

PREPARED BY Name _____ Extension _____ APPROVED BY ASSISTANT DIVISION DIRECTOR: CODE _____ INITIALS _____



SITE PLAN

1" = 100'

MARINE CORPS BASE
CAMP LEJEUNE, N.C.

SEWERAGE SYSTEM
(P-780)

HENRY VON OESEN & ASSOCIATES
CONSULTING ENGINEERS & PLANNERS
P.O.BOX 2087 WILMINGTON, N.C.

T-1130.01

BASE MAINTENANCE DIVISION
Marine Corps Base
Camp Lejeune, North Carolina 28542

MAIN/TH/rn
5420/3

JUL 2 7 1981

From: Base Maintenance Officer
To: Assistant Chief of Staff, Facilities

Subj: Preliminary Environmental Assessment, MCON Project P-780, Sewerage System

Ref: (a) AC/S, Fac ltr FAC:RCP:mkc 5420/3 of 8 Jul 1981

Encl: (1) Preliminary Environmental Assessment MCON Project P-780, Sewerage System

1. As requested in reference (a), enclosure (1) is submitted for review.

F. H. MOUNT

PRELIMINARY ENVIRONMENTAL IMPACT ASSESSMENT
MCON PROJECT P-780, SEWERAGE SYSTEM

Enclosure (1)

1. Action/Project Description

a. Project Description. This project will provide means to control the runoff of water and associated suspended solids from the coal pile storage area at the Central Steam Plant, as well as provide a stack monitoring system for the electrostatic precipitators at the plant to ensure compliance with air quality permit regulations.

2. Consideration of Alternatives and Site Selection. The coal pile storage area at the plant is an existing facility located by necessity adjacent to the plant utilizing the stored coal. The plant is located in the industrial area of Hadnot Point, and conforms well to the environment of this area. Relocation is not considered to be practical, and, accordingly, no alternatives were evaluated.

3. Compliance with Federal, State and Local Environmental Regulations and Guidelines.

a. Endangered Species. Not applicable.

b. Clean Water Act. This project will have a significant beneficial impact on water quality since suspended solids in runoff water will be removed, and will no longer be allowed to flow into storm sewers and drainage ditches. The treated runoff water will be pumped into the sanitary sewer system for further treatment at the Hadnot Point Sewage Treatment Plant.

c. Clean Air Act. This project will allow for monitoring of particulate emissions at plant stacks to ensure that plant emissions do not exceed allowable permit limits.

d. Coastal Zone Management Act. There is no direct or indirect impact on tidal marshes, beaches, or other protected areas.

e. Archaeological and Historic Preservation Act. The project site is in an existing industrial area that has previously been subjected to excavation. No archaeological or historic impact is expected.

f. North Carolina Erosion and Sedimentation Regulations. As discussed in 3(b) above, this project will decrease the potential for sediment leaving the site.

g. Hazardous Materials and Hazardous Waste Disposal. No hazardous materials are expected to be generated by this project. The requirements of B.O. 11090.1B will be followed in all cases.

h. Protection of Wetlands, Executive Order 11990. Not applicable.

i. Sanitary Waste and Refuse Disposal. Refuse generated during construction will be collected by using personnel and disposed of at an approved refuse container or the sanitary landfill.

j. Discuss Other Regulations Applicable. The proposed action does not involve any environmental regulations other than those discussed above.

k. Permit Requirements. None.

l. Site Map. See Appendix A.

4. How Does the Proposed Action Impact on Other Base Functions and Missions?

a. The project will not impact other base functions and missions. The project is consistent with the existing Master Plan and projected use of the surrounding area.

ASSISTANT CHIEF OF STAFF, FACILITIES
HEADQUARTERS, MARINE CORPS BASE

DATE June 12, 81

TO:

BASE MAINT O
PUBLIC WORKS O
COMM-ELECT O
MOTOR TRANSPORT O
DIR, FAMILY HOUSING
DIR, UNACCOMPANIED PERS HSG
BASE FIRE CHIEF

ATTN: Utilities

1. Attached is forwarded for info/action.

Comments?

2. Please initial, or comment, and return all papers to this office.

3. Your file copy

VR
Al Austin

"LET'S THINK OF A FEW REASONS
WHY IT CAN BE DONE"

Verbal discussion with Al. Austin, and Julian Wooten. Project schedule is acceptable as presented.

T. Hill

MCBCL 5216/21 (REV. 2-81)


RECEIVED
12 JUN 1981
PUBLIC WORKS DEPT.
CAMP LEJEUNE, N.C.

F.6-74. Ccw

P&S/PED/MPD AUTHORIZATION
NAVFAC 11010/3 (Rev. 11-80)
From: **Commander, Naval Facilities Engineering Command**

512A1/AGT
DATE 4 JUN 1981

To:
Commander, Atlantic Division, Naval Facilities Engineering Command

Subject:

PLANNING FOR: [X] FY 19 84 MCON [ ] FY 19 ____ MCNR [ ] FY 19 ____ SPECIFIED LOCATION MINOR MCON
[ ] 10 USC 2674 EXIGENT MCON [ ] FY 19 ____ MCNR MINOR [ ] OTHER: ____

PROJECT NO.	PROJECT DESCRIPTION	ACTIVITY AND LOCATION
P-780	Sewerage System	MCB Camp Lejeune, NC

Ref: (a)

Encl: (1) DD Form 1391 for subject project dated 11 June 1980

1. AUTHORITY IS GRANTED TO ACCOMPLISH THE ACTION CHECKED BELOW:
   - [X] Initiate preparation of final plans and specifications.
   - [X] Prepare Project Engineering Documentation (PED) in accordance with the current edition of NAVFACINST 11010.14.
   - [ ] Prepare Minimum Programming Documentation (MPD) in accordance with the current edition of NAVFACINST 11010.14.

2. SPECIFIC DESIGN DIRECTION:
   The design shall be developed in accordance with the scope of enclosure (1). Under no circumstances shall significant scope changes be implemented without the written approval of this Headquarters. Activity initiated requests for significant scope changes must be submitted via the chain of command to this Headquarters for resolution.
   - [ ] UTILIZE DEFINITIVE DRAWING NUMBER(S): ____
   - [ ] UTILIZE STANDARD DRAWING NUMBER(S): ____
   - [ ] SITE ADAPT ____
   - [ ] OTHER: ____

   If the design is to be accomplished by an A&E firm, the contract shall be negotiated with the option to hold in abeyance or cancel at the 35% stage. The initial obligation shall be limited to the 35% stage.
   - [ ] Proceed from the 35% to the 100% stage when ready unless otherwise advised by this Headquarters.
   - [X] Do not proceed beyond the 35% stage unless specifically authorized by this Headquarters.

   Ensure a thorough 35% design review including an on-board session with representatives of the user and other cognizant parties. The review should solidify user requirements and resolve significant conflicts so that the design may proceed to 100% completion with minimum changes.

3. PROJECT SITING MUST BE APPROVED AND/OR VALIDATED PRIOR TO THE START OF DESIGN IN ACCORDANCE WITH NAVFACINSTS 11010.14 AND 11010.57.

4. IMMEDIATE PLANNING OBLIGATION IS AUTHORIZED FOR THE SUBJECT PROJECT:

   a. Under Appropriation 17 1 1205 (MCON) 17 ____ 1235 (MCNR)

b. SUBHEAD	UIC NUMBER	PROJECT	PHASE
2513	M67001	P-780	F-84

5. OTHER GUIDANCE *(Including Required Submission Dates)*:
   a. The submission date for the PED is 1 May 1982.
   b. Provide best estimated cost, based on efforts to date or 2/1/82.

R. E. NIEMI
By direction

COPY TO: CMC (LFF-1)
MCB Camp Lejeune

1. COMPONENT	POLLUTION ABATEMENT PROGRAM	2. DATE
NAVY	FY 19~~83~~ 84 MILITARY CONSTRUCTION PROJECT DATA	11 JUN 1980

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
MARINE CORPS BASE CAMP LEJEUNE, N.C. 28542	~~COAL PILE RUNOFF TREATMENT & MONITORING, BLDG. 1700~~ SEWERAGE SYSTEM

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
	821-09	P-780	~~142~~ 150

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT COST	COST ($000)
COAL YARD CATCHMENT AND DISCHARGE SYSTEM	LS	-	-	107
T.V. CAMERAS & MONITORING SYSTEM	LS	-	-	16
TOTAL COST	LS	-	-	123
CONTINGENCY - 10%	LS	-	-	12
ESTIMATED CONTRACT COST	LS	-	-	135
SUPERVISION, INSPECTION & OVERHEAD - 5.5%	LS	-	-	7
TOTAL FUNDS REQUESTED	LS	-	-	142
~~PLANNING & DESIGN COST~~	LS	-	-	~~9~~
TOTAL PROJECT COST, ESCALATED TO FY84 @ 6.2% & ROUNDED	LS	-	-	~~151~~ 150

10. DESCRIPTION OF PROPOSED CONSTRUCTION

Provide pollution abatement facilities for coal yard storage area adjacent to Bldg. 1700. Project includes catchment and discharge system, t.v. monitoring system, erosion control, and associated work.

REQUIREMENTS:

PROJECT: Provide pollution control facilities for coal pile storage area, stack emission t.v. monitors, and related work.

REQUIREMENT: The National Pollutant Discharge Elimination System (NPDES) for the Base requires compliance with the Clean Water Act (CWA) 33 USC 1251 ET SEQ.). The coal pile at the Central Heating Plant is a source of suspended solids that are dumped into surrounding storm sewers. With the recent addition of electrostatic precipitators to this plant, which will allow the burning of coal, a much larger volume of coal will be stored. This creates the potential for larger quantities of suspended solids to be dumped untreated into existing storm sewers. A t.v. monitoring system is required to insure compliance with standards established by the Environmental Protection Agency (EPA) and the State of North Carolina for generating plant facilities.

CURRENT SITUATION: Pollutants from the coal pile runoff are allowed to drain off untreated.

IMPACT IF NOT PROVIDED: Coal storage may not be allowed at the Central Heating Plant if the runoff facility is not provided, resulting in having to use oil, a scarce resource, at the Central Heating Plant instead of cheaper and more abundant coal. The monitoring system is to insure that all pollution control systems are working properly.

EGJ

1. COMPONENT	FY 19 84 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
NAVY		11 JUN 19

3. INSTALLATION AND LOCATION

MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA 28542

4. PROJECT TITLE	5. PROJECT NUMBER
~~COAL PILE RUNOFF TREATMENT AND MONITORING SYSTEM, BLDG. 1700~~ SEWERAGE SYSTEM	P-780

SPECIAL CONSIDERATIONS

1. Pollution Prevention, Abatement, and Control: This project will not cause additional air or water pollution.

2. Flood Hazard Evaluation: Requirements of Executive Order No. 11296 (Flood Hazards) are not applicable.

3. Environmental Impact: The project Environmental Impact Assessment has been made, reviewed, and where required, the design concepts give consideration to eliminating adverse environmental effects consistent with applicable directives.

4. Fallout Shelter Construction: Not applicable.

5. Design for Accessibility of Physically Handicapped Personnel. Provisions for physically handicapped personnel are not required in this facility.

6. Preservation of Historical Sites and Structures: The project facilities do not directly or indirectly affect a district, site, building, structure, object, or setting which is listed in the National Register or otherwise possess a significant quality of American history.

1. COMPONENT	FY 19 ~~83~~ 84 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
NAVY		11 JUN 1980

3. INSTALLATION AND LOCATION

MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA 28542

4. PROJECT TITLE	5. PROJECT NUMBER
~~COAL PILE RUNOFF TREATMENT & MONITORING SYSTEM, BLDG. 1700~~ SEWERAGE SYSTEM	P-780

FACILITY STUDY

1. Project: The project provides the means to control the runoff of water from the coal pile and monitor stack emissions at the Central Heating Plant, Building 1700, MCB, Camp Lejeune, to insure NPDES wastewater EPA standards. The basin, pumps, and associating piping will provide the means for treatment of the runoff before it is pumped into the sanitary sewer system. The monitoring system will insure both systems are operating properly.

2. Current and Planned Future Workload with Regard to This Project: Over one billion pounds of steam is produced each year at the Central Steam Plant. Ninety percent of this steam is produced from coal stored at this facility. The requirement for coal to be stored at this facility is expected to continue through the life of the proposed project.

3. Description of Proposed Construction:

a. Type of Construction: Permanent.

b. Replacement: Not applicable.

c. Description of Work to be Done:

(1) Primary Facility: This project will consist of the construction of a concrete settling basin, curbing, piping between the basin and sanitary sewer lines, and pumping facilities, t.v. monitoring system, and related work.

(2) Energy Conservation: Although the proposed project will not directly contribute to any savings in energy, it will indirectly contribute to the conserving of millions of gallons of oil yearly by allowing coal to be stored and burned at the Central Steam Plant, instead of oil.

(3) Collateral Equipment: Not applicable.

4. Cost Estimate: Area Construction Index is .95. Contingency factor to be utilized is 10 percent. The data is applicable to FY 1980. Cost data derived from cost estimate for MCAS Cherry Point Coal Yard Project, 78-B-8386 and escalated to reflect product cost on estimate.

5. Justification for Project and Scope of Project:

a. Justification for Project:

1. COMPONENT	FY 19~~83~~ 84 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
NAVY		11 JUN 1980

3. INSTALLATION AND LOCATION

MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA 28542

4. PROJECT TITLE	5. PROJECT NUMBER
~~COAL PILE RUNOFF TREATMENT & MONITORING SYSTEM, BLDG. 1700~~ SEWERAGE SYSTEM	P-780

(1) Project: The proposed project will provide for a coal pile runoff collection system with associated pumps and piping, and t.v. monitoring system.

(2) Requirement: A runoff collection facility is required to insure that no contravention of EPA wastewater regulations occurs. The t.v. monitoring system visually monitors pollution abatement systems.

(3) Current Situation: No means of collecting, treating and monitoring the coal pile runoff and stack emissions are presently available.

(4) Impact if Not Provided: The coal pile runoff will continue to be emptied untreated into drainage ditches and proper functioning of stack emission abatement equipment cannot be assured. Oil, a scarce energy resource, will have to be burned at the plant, assuming coal cannot be stored at the plant without the construction of a runoff treatment facility.

b. Justification for Scope of Project: The scope of the project is the minimum that should satisfy the requirements of the Clean Water Act (CWA) 33 USC 1251 ET SEQ. and EPA emission standards.

6. Equipment Provided from Other Appropriations: None.

7. Common Support Facilities: There are no common support facilities available that can satisfy the requirements for the proposed project.

8. Effect on Other Resources:

a. The facility will require approximately $2,000 per year in increased funding for utilities services and operations.

b. No additional personnel will be required to operate this facility.

UTILITY REQUIREMENTS

c. Electricity will be the only energy requirement for the facility.

Consumption	70,000 KWHR/yr
Peak Demand	8 KW
Average Demand	8 KW

9. Siting of the Project: See Site Location Map.

10. Other Graphic Presentations, including Photographs: None.

1. COMPONENT	FY 19 84 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
NAVY		11 JUN 1980

3. INSTALLATION AND LOCATION

MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA 28542

4. PROJECT TITLE	5. PROJECT NUMBER
~~COAL PILE RUNOFF TREATMENT & MONITORING SYSTEM,~~ ~~BLDG. 1700~~ SEWERAGE SYSTEM	P-780

11. Economic Analysis: The proposed project produces no direct economic benefits, but rather it insures compliance with environmental regulations. However, the construction of the project will provide indirect benefit, since complying with the environmental regulations will allow burning of coal, a cheaper, more readily available fuel instead of scarce, expensive oil.

12. Environmental Impact: An environmental impact assessment of the area has been made and it has been determined that this project will have neither a significant impact on the environment nor is it highly controversial.

13. Quantitative Data: Not applicable. This project is to correct potential environmental hazards to the local ecology and ecosystems.

SITE LOCATION FOR
P-780,
APPENDIX A

ROUTING SLIP JUL 3 1 1980

	ACTION	INFO	INITIAL
BMO			
ABMO		✓	BNE
ADMIN			
ENVIRON AFF		✓	
F&A BRANCH			
MAINT NCO			
M&R			
OPNS		✓	RMD
PROP			
TELE			
UMACS			
UTIL		✓	
SECRETARY			

COMMENTS:

UNITED STATES MARINE CORPS
MARINE CORPS BASE
CAMP LEJEUNE, NORTH CAROLINA 28542

IN REPLY REFER TO
PWO:408:EGJ:sh
P-780/783
28 JUL 1980

From: Commanding General
To: Commandant of the Marine Corps (LFF)

Subj: Pollution Abatement Program for FY-83, MCB, Camp Lejeune, N.C.

Ref: (a) MCO P11000.12A
(b) NAVFACINST 11010.32E
(c) CMC ltr LFF-L-LAW-tjw 11000/CLNC of 29 Feb 1980

Encl: (1) Project Package for P-780, Coal Pile Runoff Treatment and Monitoring, Building 1700, consisting of DD Forms 1391 and 1391c dtd 11 Jun 1980, and Site Location Map
(2) Project Package for P-783, Stream Crossings for Tracked Vehicles, consisting of DD Forms 1391 and 1391c dtd 22 Jul 1980, and Site Location Map

1. Reference (a) provided detailed guidance for submission of military construction projects. Reference (b) provided detailed instructions for preparation of the Navy Military Construction Pollution Abatement Program. Reference (c) requested submission of projects to be considered in the FY 1983 program. Accordingly, two projects are hereby submitted as enclosures (1) and (2).

2. Project P-780 will provide facilities for the collection and treatment of runoff from the coal storage area at the central heating plant and includes a television monitoring system for boiler stack emissions. Both systems are required to insure compliance with standards established by the Environmental Protection Agency and the State of North Carolina.

3. Project P-783 will provide permanent stream crossings for tracked vehicles throughout the Base and is required to ensure compliance with the Federal Clean Water Act.

J. A. MARAPOTI
By direction

Copy to: (w/encl)
NAVFACENGCOM (Code 114)
LANTNAVFACENGCOM (Code 09A21E)

Blind copy to: (w/encl)
AC/S, Fac
BMO

1. COMPONENT	POLLUTION ABATEMENT PROGRAM FY 1983 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
NAVY		11 JUN 1980

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
MARINE CORPS BASE CAMP LEJEUNE, N.C. 28542	COAL PILE RUNOFF TREATMENT & MONITORING, BLDG. 1700

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
	821-09	P-780	142

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT COST	COST ($000)
COAL YARD CATCHMENT AND DISCHARGE SYSTEM	LS	-	-	107
T.V. CAMERAS & MONITORING SYSTEM	LS	-	-	16
TOTAL COST	LS	-	-	123
CONTINGENCY - 10%	LS	-	-	12
ESTIMATED CONTRACT COST	LS	-	-	135
SUPERVISION, INSPECTION & OVERHEAD - 5.5%	LS	-	-	7
TOTAL FUNDS REQUESTED	LS	-	-	142
PLANNING & DESIGN COST	LS	-	-	9
TOTAL PROJECT COST	LS	-	-	151

10. DESCRIPTION OF PROPOSED CONSTRUCTION

Provide pollution abatement facilities for coal yard storage area adjacent to Bldg. 1700. Project includes catchment and discharge system, t.v. monitoring system, erosion control, and associated work. See PW Dwg 14167.

REQUIREMENTS:

PROJECT: Provide pollution control facilities for coal pile storage area, stack emission t.v. monitors, and related work.

REQUIREMENT: The National Pollutant Discharge Elimination System (NPDES) for the Base requires compliance with the Clean Water Act (CWA) 33 USC 1251 ET SEQ.). The coal pile at the Central Heating Plant is a source of suspended solids that are dumped into surrounding storm sewers. With the recent addition of electrostatic precipitators to this plant, which will allow the burning of coal, a much larger volume of coal will be stored. This creates the potential for larger quantities of suspended solids to be dumped untreated into existing storm sewers. A t.v. monitoring system is required to insure compliance with standards established by the Environmental Protection Agency (EPA) and the State of North Carolina for generating plant facilities.

CURRENT SITUATION: Pollutants from the coal pile runoff are allowed to drain off untreated.

IMPACT IF NOT PROVIDED: Coal storage may not be allowed at the Central Heating Plant if the runoff facility is not provided, resulting in having to use oil, a scarce resource, at the Central Heating Plant instead of cheaper and more abundant coal. The monitoring system is to insure that all pollution control systems are working properly.

EGJ

1. COMPONENT	FY 19 83 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
NAVY		11 JUN 1980

3. INSTALLATION AND LOCATION	
MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA 28542	
4. PROJECT TITLE	**5. PROJECT NUMBER**
COAL PILE RUNOFF TREATMENT AND MONITORING SYSTEM, BLDG. 1700	P-780

SPECIAL CONSIDERATIONS

1. Pollution Prevention, Abatement, and Control: This project will not cause additional air or water pollution.

2. Flood Hazard Evaluation: Requirements of Executive Order No. 11296 (Flood Hazards) are not applicable.

3. Environmental Impact: The project Environmental Impact Assessment has been made, reviewed, and where required, the design concepts give consideration to eliminating adverse environmental effects consistent with applicable directives.

4. Fallout Shelter Construction: Not applicable.

5. Design for Accessibility of Physically Handicapped Personnel. Provisions for physically handicapped personnel are not required in this facility.

6. Preservation of Historical Sites and Structures: The project facilities do not directly or indirectly affect a district, site, building, structure, object, or setting which is listed in the National Register or otherwise possess a significant quality of American history.

1. COMPONENT	FY 19 83 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
NAVY		11 JUN 1980

3. INSTALLATION AND LOCATION

MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA 28542

4. PROJECT TITLE	5. PROJECT NUMBER
COAL PILE RUNOFF TREATMENT & MONITORING SYSTEM, BLDG. 1700	P-780

FACILITY STUDY

1. Project: The project provides the means to control the runoff of water from the coal pile and monitor stack emissions at the Central Heating Plant, Building 1700, MCB, Camp Lejeune, to insure NPDES wastewater EPA standards. The basin, pumps, and associating piping will provide the means for treatment of the runoff before it is pumped into the sanitary sewer system. The monitoring system will insure both systems are operating properly.

2. Current and Planned Future Workload with Regard to This Project: Over one billion pounds of steam is produced each year at the Central Steam Plant. Ninety percent of this steam is produced from coal stored at this facility. The requirement for coal to be stored at this facility is expected to continue through the life of the proposed project.

3. Description of Proposed Construction:

a. Type of Construction: Permanent.

b. Replacement: Not applicable.

c. Description of Work to be Done:

(1) Primary Facility: This project will consist of the construction of a concrete settling basin, curbing, piping between the basin and sanitary sewer lines, and pumping facilities, t.v. monitoring system, and related work.

(2) Energy Conservation: Although the proposed project will not directly contribute to any savings in energy, it will indirectly contribute to the conserving of millions of gallons of oil yearly by allowing coal to be stored and burned at the Central Steam Plant, instead of oil.

(3) Collateral Equipment: Not applicable.

4. Cost Estimate: Area Construction Index is .95. Contingency factor to be utilized is 10 percent. The data is applicable to FY 1980. Cost data derived from cost estimate for MCAS Cherry Point Coal Yard Project, 78-B-8386 and escalated to reflect product cost on estimate.

5. Justification for Project and Scope of Project:

a. Justification for Project:

1. COMPONENT	FY 19 83 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
NAVY		11 JUN 1980

3. INSTALLATION AND LOCATION

MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA 28542

4. PROJECT TITLE	5. PROJECT NUMBER
COAL PILE RUNOFF TREATMENT & MONITORING SYSTEM, BLDG. 1700	P-780

(1) Project: The proposed project will provide for a coal pile runoff collection system with associated pumps and piping, and t.v. monitoring system.

(2) Requirement: A runoff collection facility is required to insure that no contravention of EPA wastewater regulations occurs. The t.v. monitoring system visually monitors pollution abatement systems.

(3) Current Situation: No means of collecting, treating and monitoring the coal pile runoff and stack emissions are presently available.

(4) Impact if Not Provided: The coal pile runoff will continue to be emptied untreated into drainage ditches and proper functioning of stack emission abatement equipment cannot be assured. Oil, a scarce energy resource, will have to be burned at the plant, assuming coal cannot be stored at the plant without the construction of a runoff treatment facility.

b. Justification for Scope of Project: The scope of the project is the minimum that should satisfy the requirements of the Clean Water Act (CWA) 33 USC 1251 ET SEQ. and EPA emission standards.

6. Equipment Provided from Other Appropriations: None.

7. Common Support Facilities: There are no common support facilities available that can satisfy the requirements for the proposed project.

8. Effect on Other Resources:

a. The facility will require approximately $2,000 per year in increased funding for utilities services and operations.

b. No additional personnel will be required to operate this facility.

UTILITY REQUIREMENTS

c. Electricity will be the only energy requirement for the facility.

Consumption	70,000 KWHR/yr
Peak Demand	8 KW
Average Demand	8 KW

9. Siting of the Project: See Site Location Map.

10. Other Graphic Presentations, including Photographs: None.

1. COMPONENT	FY 1983 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
NAVY		11 JUN 1980

3. INSTALLATION AND LOCATION

MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA 28542

4. PROJECT TITLE	5. PROJECT NUMBER
COAL PILE RUNOFF TREATMENT & MONITORING SYSTEM, BLDG. 1700	P-780

11. Economic Analysis: The proposed project produces no direct economic benefits, but rather it insures compliance with environmental regulations. However, the construction of the project will provide indirect benefit, since complying with the environmental regulations will allow burning of coal, a cheaper, more readily available fuel instead of scarce, expensive oil.

12. Environmental Impact: An environmental impact assessment of the area has been made and it has been determined that this project will have neither a significant impact on the environment nor is it highly controversial.

13. Quantitative Data: Not applicable. This project is to correct potential environmental hazards to the local ecology and ecosystems.

SITE LOCATION FOR
P-780,
COAL PILE RUNOFF TREATMENT & MONITORING SYSTEM, BLDG. 1700

ENCLOSURE (1)

1. COMPONENT	FY 1983 MILITARY CONSTRUCTION PROJECT DATA POLLUTION ABATEMENT PROGRAM	2. DATE
NAVY		22 Jul 1980

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA 28542	STREAM CROSSINGS FOR TRACKED VEHICLES

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
	871-00	P-783	630

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT COST	COST ($000)
STREAM CROSSING STRUCTURE	EA	25	21,600	540
Excavation, fill, culverts, reinforced conc. pavement, erosion control & site work	LS	-	-	(540)
SUBTOTAL				540
CONTINGENCY (10%)	LS	-	-	54
TOTAL CONTRACT COST	LS	-	-	594
SUPERVISION, INSPECTION & OVERHEAD (5.5%)				33
TOTAL REQUEST	LS	-	-	627
TOTAL REQUEST (ROUNDED)	LS	-	-	630
EQUIPMENT PROVIDED FROM OTHER APPROPRIATIONS	-	-	-	-

10. DESCRIPTION OF PROPOSED CONSTRUCTION

Provide permanent stream crossing structures, complete with culverts, rip-rap, fill, reinforced concrete approach pads, ramps, shoulder stabilization, erosion control and site improvements.

11. REQUIREMENTS:

PROJECT: Construct all weather stream crossings for tracked armored vehicles, i.e. tanks, self-propelled artillery, amphibious personnel carriers, etc.

REQUIREMENT: To prevent water pollution of perennial streams from sedimentation and petroleum products from vehicles and prevent further violations of the Federal Clean Water Act.

CURRENT SITUATION: Infractions are generated during military tactical vehicle operations and training using the dirt trail system located on the Base.

IMPACT IF NOT PROVIDED: Continued practice will result in further pollution and additional citations for violations of Section 404 of the Federal Clean Water Act by the Department of Army, Corps of Engineers, District Office, Wilmington, NC and/or State Regulatory agencies.

S/N 0102-LF-001-3910 ☆U. S. Government Printing Office: 1979—603-076/6547 2-1

1. COMPONENT	FY 1983 MILITARY CONSTRUCTION PROJECT DATA POLLUTION ABATEMENT PROGRAM	2. DATE
NAVY		22 Jul 1980

3. INSTALLATION AND LOCATION

MARINE CORPS BASE
CAMP LEJEUNE, NORTH CAROLINA 28542

4. PROJECT TITLE	5. PROJECT NUMBER
STREAM CROSSINGS FOR TRACKED VEHICLES	P-783

SPECIAL CONSIDERATIONS

1. Pollution Prevention, Abatement, and Control: This project will not cause additional air or water pollution.

2. Flood Hazard Evaluation: Requirements of Executive Order No. 11296 (Flood Hazards) are not applicable.

3. Environmental Impact: The project Environmental Impact Assessment has been made, reviewed, and where required, the design concepts give consideration to eliminating adverse environmental effects consistent with applicable directives.

4. Fallout Shelter Construction: Not applicable.

5. Design for Accessibility of Physically Handicapped Personnel: Provisions for physically handicapped personnel are not required for this project.

6. Use of Air Conditioning: Not applicable.

7. Preservation of Historical Sites and Structures: The project facility does not directly or indirectly affect a district, site, building, structure, object, or setting which is listed in the National Register or otherwise possesses a significant quality of American history.

U.S. GOVERNMENT PRINTING OFFICE: 1978—703-173/34312-1

1. COMPONENT	FY 19 83 MILITARY CONSTRUCTION PROJECT DATA POLLUTION ABATEMENT PROGRAM	2. DATE
NAVY		22 JUL 1980

3. INSTALLATION AND LOCATION

MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA

4. PROJECT TITLE	5. PROJECT NUMBER
STREAM CROSSINGS FOR TRACKED VEHICLES	P-783

FACILITY STUDY

1. Project. Provide 25 environmentally approved all weather perennial stream crossings designed to support all tracked vehicles using the dirt trail system on the Base.

2. Current and Planned Future Workload with Regard to this Project. These structures will be utilized 100% of the time and the duration of need is indefinite. Decreased potential for environmental impact should reduce environmental planning input by Base training and using organizations and a net reduction of the Base Maintenance Department manhours spent on upkeep of the structures.

3. Description of Proposed Construction.

a. Type of Construction.

(1) Permanent stream crossing with reinforced concrete approach pads and ramps, earthfill, asphalt coated metal culvert with channel flume, rip rap, perennial grasses, erosion control and site stabilization.

(2) Construction sufficient to support tracked vehicles including 60 ton tanks, traveling at 5-15 mph including abrupt stops, starts, and twisting.

b. Replacement. Approximately 80% of the existing culverts will be replaced due to undersizing and requirement that construction be within existing trail right of way to avoid unnecessary environmental assessment and permit requirements. Soil in existing fills will be utilized. Usable culverts will be stored for reuse by the Base Maintenance Department.

c. Description of Work to be Done.

(1) Primary Facility. Mastic coated culvert with inlet-outlet flume, compacted fill, reinforced concrete approach pad and ramp, rip-rap shoulder stabilization.

(a) Support Facilities. Erosion control, site and vegetation restoration.

(2) Energy Conservation. The reduction of the closing of individual sections of the trail roads will result in a marked reduction of distances traveled during essential operational training. Significant reductions in fuel use due to reduced maintenance will impact favorably on the Base Maintenance Department.

1. COMPONENT	FY 1983 MILITARY CONSTRUCTION PROJECT DATA POLLUTION ABATEMENT PROGRAM	2. DATE
NAVY		22 JUL 1980

3. INSTALLATION AND LOCATION

MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA

4. PROJECT TITLE	5. PROJECT NUMBER
STREAM CROSSINGS FOR TRACKED VEHICLES	P-783

(3) Collateral Equipment. Not applicable.

(4) Supporting facilities. Not applicable.

4. Cost Estimate. Area cost factor for Camp Lejeune is 0.95. From the Military Construction Cost Review Guide,FY-82 (DOD 4270.1G).

5. Justification for Project and for Scope of Project.

a. Justification for Project.

(1) Project. Proposed facilities are required for compliance with Section 404, Clean Water Act; to reduce damage to protected wetlands; and prevent interference with tactical vehicle training missions.

(2) Current Situation. Two violations of the Clean Water Act by Base activities has been cited by the Department of Army, Corps of Engineers, District Office, Wilmington, NC. Twenty-three other sites have equivalent conditions and impact on the environment.

(3) Impact if not Provided. Additional violations of Federal laws, loss of environmental values, and potential interruptions of training with related public criticism and embarrassment to the Marine Corps as a result of litigation.

b. Justification for Scope of Project. Each of the proposed sites has been visited by trained environmental specialists and a determination made that the environmental impact was equivalent to the sites where violations have been cited; additionally, it was determined that routine maintenance would not correct the problem.

6. Equipment Provided from Other Appropriations. Not applicable.

7. Common Support Facilities. Not applicable.

8. Effect on Other Resources. A slight decrease in user manpower and a projected significant reduction in O and M funds, Base Maintenance Department is expected. Similar reductions in fuel use (energy) is to be expected at the same level of use. Since the facilities will enable training during more days/year, use may tend to increase, offsetting savings.

9. Siting of the Project. Existing stream crossings will be replaced utilizing same site to avoid environmental impact and related permit and assessment requirements at various locations throughout the dirt trail system. See enclosure (1).

1. COMPONENT	FY 19 83 MILITARY CONSTRUCTION PROJECT DATA POLLUTION ABATEMENT PROGRAM	2. DATE
NAVY		22 JUL 1980

3. INSTALLATION AND LOCATION

MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA

4. PROJECT TITLE	5. PROJECT NUMBER
STREAM CROSSINGS FOR TRACKED VEHICLES	P-783

10. Other Graphic Presentations, including Photographs. None.

11. Economic Analysis. Economic savings will be in normal savings from efficient operations. This is a project in support of operational missions required in these areas.

12. Environmental Impact. Due to the nature of the project, its siting of structures within areas disturbed by existing structures, the reduction of erosion, sedimentation, and damage to wetlands, and discussions with regulatory agency personnel, no significant controversy or adverse impact is expected during the replacement of the existing structures.

13. Quantitative Data.

a. BFRL Requirement. None required. Structures constructed where needed.

SITE LOCATION MAP FOR

P-783, STREAM CROSSINGS FOR TRACKED VEHICLES

SOUNDINGS IN METERS

● DENOTES STREAM CROSSING LOCATIONS

ENCLOSURE (1)

BASE MAINTENANCE DEPARTMENT
Marine Corps Base
Camp Lejeune, North Carolina 28542

MAIN/TH/rn
11000
MAR 1 3 1980

From: Base Maintenance Officer
To: Public Works Officer

Subj: Development of Project for Coal Pile Runoff Treatment, Central Heating Plant, Building 1700

Ref: (a) PWO memo PWO:408:BB:bb 11000 of 21 Feb 1980

Encl: (1) DD Form 1391
(2) DD Form 1391c

1. As requested in reference (a), information on the subject project has been developed and is contained in enclosures (1) and (2).

2. If you have further questions, please contact Mr. Terry Hatcher, Utilities Division, telephone 5161.

T. R. BAISLEY

1. COMPONENT	FY 1980 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
NAVY		10 Mar 1980

3. INSTALLATION AND LOCATION	4. PROJECT TITLE
MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA 28542	COAL YARD COLLECTOR BASIN

5. PROGRAM ELEMENT	6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST ($000)
			161

9. COST ESTIMATES

ITEM	U/M	QUANTITY	UNIT COST	COST ($000)
COAL YARD SETTLING BASIN	LS	-	-	66
SANITARY SEWER PIPING, CONNECTIONS	LS	-	-	37
COLLECTOR PUMPS, ELECTRICAL	LS	-	-	11
AIR WASHER, PIPING	LS	-	-	10
PAVING & CURBING	LS	-	-	22
TOTAL COST	LS	-	-	146
CONTINGENCY - 5%	LS	-	-	7
ESTIMATED CONTRACT COST	LS	-	-	153
SUPERVISION, INSPECTION & OVERHEAD - 5.5%	LS	-	-	8
TOTAL FUNDS REQUESTED	LS	-	-	161

10. DESCRIPTION OF PROPOSED CONSTRUCTION

Provide and tie into existing sewer system piping, a coal pile runoff collection basin, along with associated pumps and piping.

---

11. REQUIREMENTS

PROJECT: Provide a coal pile runoff collection and treatment facility.
REQUIREMENT: In order to comply with the requirements of National Pollutant Discharge Elimination System (NPDES) wastewater discharge permit, the coal pile runoff facility must be completed and in operation by 1 July 1982.
CURRENT SITUATION: Runoff from the coal pile currently flows into drainage ditches and surrounding areas, untreated.
IMPACT IF NOT PROVIDED: Coal cannot be stored at the Central Heating Plant after 1 July 1982 if the runoff facility is not provided. This will result in having to use oil, a scarce resource, at the Central Heating Plant instead of cheaper and more abundant coal.

1. COMPONENT	FY 1980 MILITARY CONSTRUCTION PROJECT DATA	2. DATE 10 Mar 1980
3. INSTALLATION AND LOCATION MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA 28542		
4. PROJECT TITLE COAL YARD COLLECTOR BASIN		5. PROJECT NUMBER

FACILITY STUDY

1. Project: The project provides the means to control the runoff of water from the coal pile at the Central Heating Plant, Building 1700, MCB, Camp Lejeune, as required by NPDES wastewater permit. The basin, pumps, and associated piping will provide the means for treatment of the runoff before it is pumped into the sanitary sewer system.

2. Current and Planned Future Workload with Regard to This Project: Over one billion pounds of steam is produced each year at the Central Steam Plant. Ninety percent of this steam is produced from coal stored at this facility. The requirement for coal to be stored at this facility is expected to continue through the life of the proposed project.

3. Description of Proposed Construction:

a. Type of Construction: Permanent.

b. Replacement: Not applicable.

c. Description of Work to be Done:

(1) Primary Facility: This project will consist of the construction of a concrete settling basin, curbing, piping between the basin and sanitary sewer lines, and pumping facilities.

(2) Energy Conservation: Although the proposed project will not directly contribute to any savings in energy, it will indirectly contribute to the conserving of millions of gallons of oil yearly by allowing coal to be stored and burned at the Central Steam Plant, instead of oil.

(3) Collateral Equipment: Not applicable.

4. Cost Estimate: Area Construction Index is 0.84; contingency factor to be utilized is 5 percent. The data is applicable to FY 1980. Cost data derived from cost estimate for MCAS Cherry Point Coal Yard Project, 78-B-8386.

5. Justification for Project and Scope of Project:

a. Justification for Project:

(1) Project: The proposed project will provide for a coal pile runoff collection basin along with associated pumps and piping.

1. COMPONENT	FY 1980 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
		10 Mar 1980

3. INSTALLATION AND LOCATION	
MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA 28542	
4. PROJECT TITLE	5. PROJECT NUMBER
COAL YARD COLLECTOR BASIN	

(2) Requirement: National Pollutant Discharge Elimination System (NPDES) wastewater discharge permit NC0003239 requires that a runoff collection facility be constructed and in operation by 1 July 1982, in order for coal to be stored at the Central Heating Plant.

(3) Current Situation: No means of collecting and treating the coal pile runoff is presently available.

(4) Impact if Not Provided: The coal pile runoff will continue to empty untreated into drainage ditches and the surrounding environment. Oil, a scarce energy resource will have to be burned at the plant, since coal cannot be stored at the plant without the construction of a runoff treatment facility.

b. Justification for Scope of Project: The scope of the project is the minimum that will satisfy the requirements of the NPDES permit.

6. Equipment Provided from Other Appropriations: None

7. Common Support Facilities: There are no common support facilities available that can satisfy the requirements for the proposed project.

8. Effect on Other Resources:

a. The facility will require approximately $2000 per year in increased funding for utilities services and operations.

b. No additional personnel will be required to operate this facility.

UTILITY REQUIREMENTS

a. Electricity will be the only energy requirement for the facility.

Consumption	70,000 KWHR/yr
Peak Demand	8 KW
Average Demand	8 KW

9. Siting of the Project: See enclosure ____.

10. Other Graphic Presentations, including Photographs: None.

11. Economic Analysis: The proposed project produces no direct economic benefits, but rather, is required to comply with environmental regulations. However, the construction of the project will provide indirect benefit, since complying with the environmental regulations will allow burning of coal, a

1. COMPONENT	FY 1980 MILITARY CONSTRUCTION PROJECT DATA	2. DATE
		10 Mar 1980

3. INSTALLATION AND LOCATION	
MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA 28542	
4. PROJECT TITLE	5. PROJECT NUMBER
COAL YARD COLLECTOR BASIN	

cheaper, more readily available fuel instead of scarce, expensive oil.

12. Environment Impact:

a. Existing Evnironment of Proposed Site: The proposed site is in an industrial environment adjacent to the Central Heating Plant.

b. Relationship of Proposed Action to Land Use Plans, Policies, and Controls for the Affected Area: The proposed action will help bring the base into compliance with NPDES wastewater regulations.

c. Probable Impact of the Proposed Action on the Environment: The proposed action will have a positive impact since runoff that is presently untreated will be collected, suspended solids will be reduced to below 50 mg/l in the runoff, and then emptied into the sanitary sewer system.

d. Alternatives: None

e. Any Probable Adverse Environmental Effects Which Cannot be Avoided Should the Proposal be Implemented: No adverse environmental effects.

f. Relationship Between Local Short Term Use of Man's Environment and the Maintenance and Enhancement of Long-Term Productivity: The construction of the proposed facility will help to immediately reduce pollution from coal pile runoff, and, in the long term provide for gradual improvement of the environment from effects of past pollution from untreated runoff from the coal pile.

g. Any Irreversible and Irretrievable Commitments of Resources that Would Be Involved in the Proposed Action Should It Be Implemented: Not applicable.

h. Considerations that Offset Adverse Environmental Effects: No adverse effects are attributable to the proposed project.

13. Quantitative Data: Not applicable.

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PRELIMINARY ENVIRONMENTAL IMPACT ASSESSMENT
MCON PROJECT P-780, SEWERAGE SYSTEM

Prepared by:

Mr. T. Hatcher
Utilities Division
Base Maintenance Department
24 July 1981

1. Action/Project Description

a. Project Description. This project will provide means to control the runoff of water and associated suspended solids from the coal pile storage area at the Central Steam Plant, as well as provide a stack monitoring system for the electrostatic precipitators at the plant to ensure compliance with air quality permit regulations.

2. Consideration of Alternatives and Site Selection. The coal pile storage area at the plant is an existing facility located by necessity adjacent to the plant utilizing the stored coal. The plant is located in the industrial area of Hadnot Point, and conforms well to the environment of this area. Relocation is not considered to be practical, and, accordingly, no alternatives were evaluated.

3. Compliance with Federal, State and Local Environmental Regulations and Guidelines.

a. Endangered Species. Not applicable.

b. Clean Water Act. This project will have a significant beneficial impact on water quality since suspended solids in runoff water will be removed, and will no longer be allowed to flow into storm sewers and drainage ditches. The treated runoff water will be pumped into the sanitary sewer system for further treatment at the Hadnot Point Sewage Treatment Plant.

c. Clean Air Act. This project will allow for monitoring of particulate emissions at plant stacks to ensure that plant emissions do not exceed allowable permit limits.

d. Coastal Zone Management Act. There is no direct or indirect impact on tidal marshes, beaches, or other protected areas.

e. Archaeological and Historic Preservation Act. The project site is in an existing industrial area that has previously been subjected to excavation. No archaeological or historic impact is expected.

f. North Carolina Erosion and Sedimentation Regulations. As discussed in 3(b) above, this project will decrease the potential for sediment leaving the site.

g. Hazardous Materials and Hazardous Waste Disposal. No hazardous materials are expected to be generated by this project. The requirements of B.O. 11090.1B will be followed in all cases.

h. Protection of Wetlands, Executive Order 11990. Not applicable.

i. Sanitary Waste and Refuse Disposal. Refuse generated during construction will be collected by using personnel and disposed of at an approved refuse container or the sanitary landfill.

j. Discuss Other Regulations Applicable. The proposed action does not involve any environmental regulations other than those discussed above.

k. Permit Requirements. None.

l. Site Map. See Appendix A.

4. How Does the Proposed Action Impact on Other Base Functions and Missions?

a. The project will not impact other base functions and missions. The project is consistent with the existing Master Plan and projected use of the surrounding area.

SITE LOCATION FOR
P-780,
APPENDIX A