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28 Jul 1980

From: Base Maintenance Officer
To: Public Works Officer

Subj: Proposed Military Construction Projects

- Encl: (1) Environmental Impact Assessment/Expansion of Holcomb Boulevard
Water Treatment Plant w/forms 1391 and 1391c
(2) Environmental Impact Assessment/Cold Storage Plant w/forms 1391
and 1391c
(3) Environmental Impact Assessment/Expansion/Upgrade of Courthouse
Bay Utilities w/forms 1391 and 1391c

1. It is requested that enclosures (1), (2), and (3) be fully developed as projects for the Military Construction Program.

T. HATCHER, P.E.
By direction



DEPARTMENT OF THE NAVY

UNITED STATES MARINE CORPS

ENVIRONMENTAL IMPACT ASSESSMENT

Expansion/Upgrade of Courthouse Bay Utilities
(Project Title)

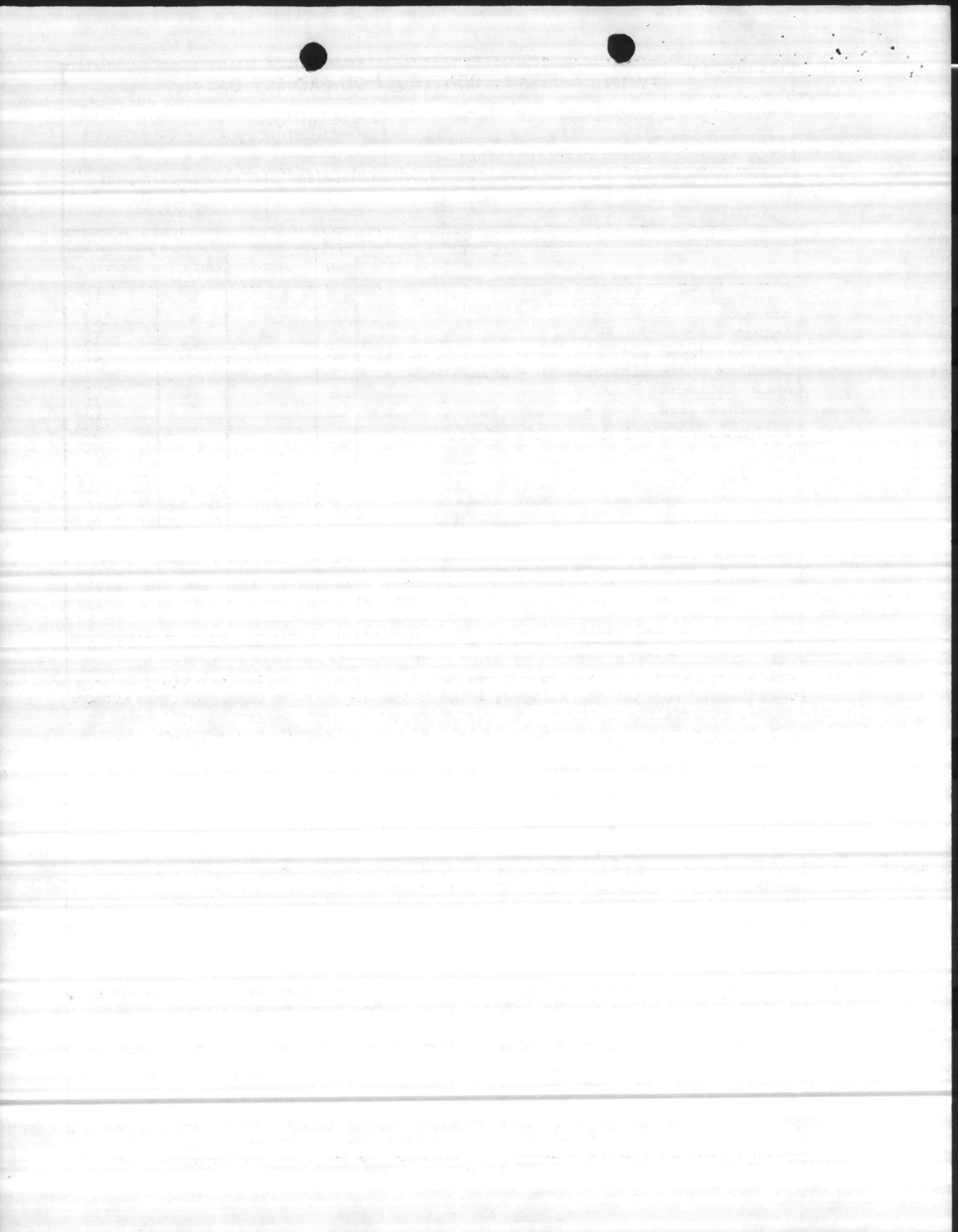
MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA 28542
(Military Installation)

25 July 1980
(Date)

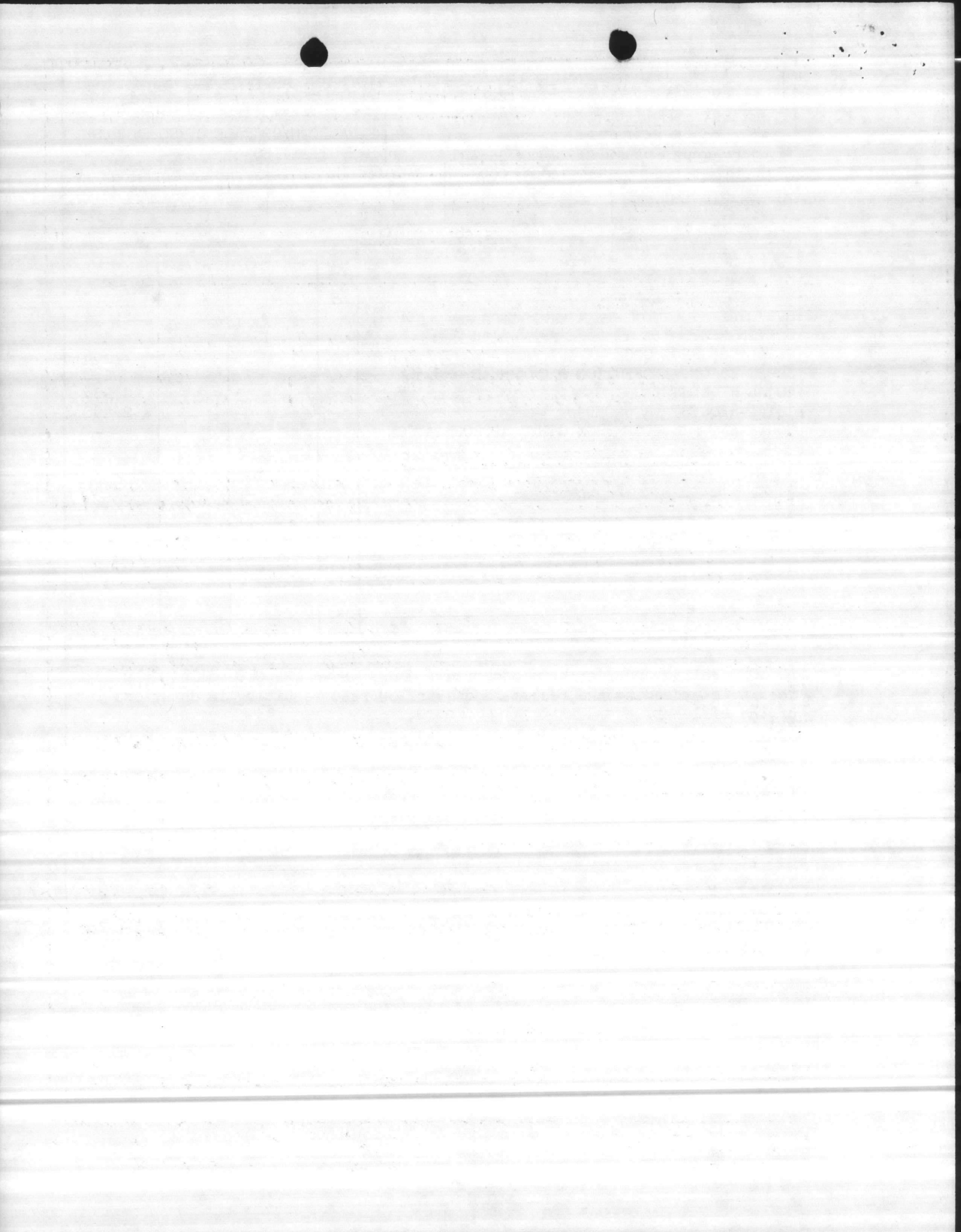
Prepared by:

T. HATCHER, Director
(Title)

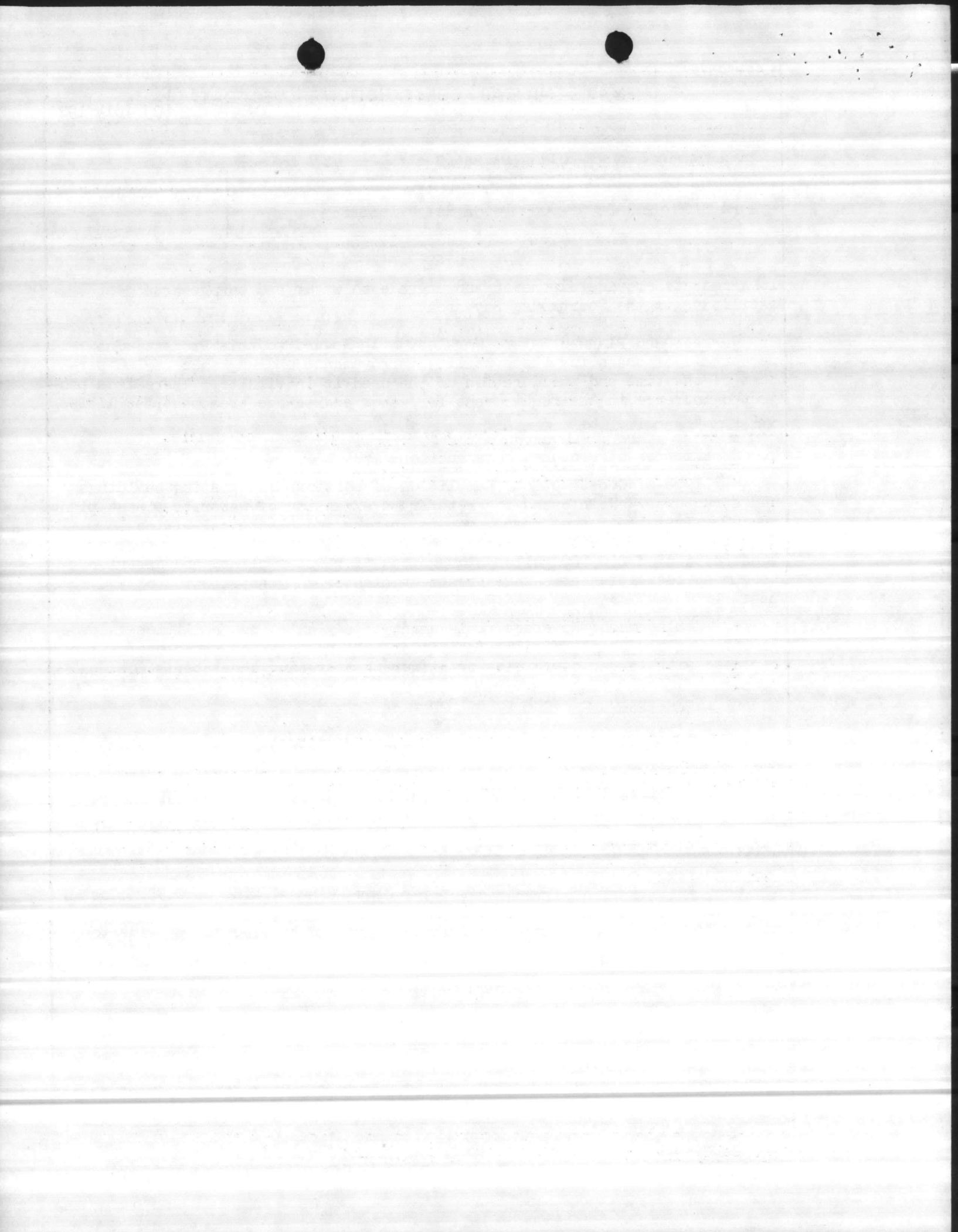
1. COMPONENT NAVY		FY 1984 MILITARY CONSTRUCTION PROJECT DATA			2. DATE 23 July 1980	
3. INSTALLATION AND LOCATION MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA 28542				4. PROJECT TITLE EXPANSION/UPGRADE OF COURTHOUSE BAY UTILITIES		
5. PROGRAM ELEMENT		5. CATEGORY CODE	7. PROJECT NUMBER P-784		8. PROJECT COST (\$000) \$2,490	
9. COST ESTIMATES						
ITEM		U/M	QUANTITY	UNIT COST	COST (\$000)	
IMPROVEMENTS - EXISTING WELLS		LS	-	-	10	
NEW WELL		LS	-	-	169	
SANITARY SEWER COLLECTION SYSTEM		LS	-	-	74	
SANITARY SEWER LIFT STATION - COURTHOUSE BAY		LS	-	-	24	
SANITARY SEWER LIFT STATION - AMTRAC AREA		LS	-	-	7	
WATER TREATMENT PLANT		LS	-	-	748	
DEMOLITION		LS	-	-	(3)	
SITE PREPARATION					(52)	
BUILDING		SF	1280	43.89	(56)	
STORAGE TANK		GAL	250,000		(95)	
EQUIPMENT		LS	-	-	(534)	
BUILDING PIPING		LF	155	38.92	(6)	
ELECTRICAL		LS	-	-	(2)	
WASTEWATER TREATMENT PLANT		LS	-	-	1,212	
DEMOLITION		LS	-	-	(90)	
SITE PREPARATION		LS	-	-	(135)	
STRUCTURES		LS	-	-	(287)	
EQUIPMENT		LS	-	-	(695)	
(continue on next page)						
10. DESCRIPTION OF PROPOSED CONSTRUCTION Expand the existing water treatment plant, BB-190 by 1280 square feet, utilizing same width and height, with reinforced concrete/steel frame construction. Install new filters, 250,000 gallon storage tank, softener system, diesel generator, filter pumps, controls for filters and softener. Rebuild pumps and replace motors in two deep wells, and install new well with building and associated pump and piping. Demolish inlet structure, Imhoff tanks, effluent structure and chlorine contact chamber at sewage treatment plant, BB-4. Construct dual barminutor system, flow splitter box, trickling filter, two primary clarifiers, a secondary clarifier, gravity thickener, aerobic digester, pump house and pumps, chlorine contact chamber, chlorine storage building and chlorinator system. Construct a concrete wet well adjacent to existing wet well, lift station SA-38, along with pump and motor. Replace pumps and motors at lift station BB-1. Install 656 feet of ten inch V.C.P. and 1110 feet of twelve inch V.C.P..						
11. REQUIREMENT: Project: Expand and upgrade sewage and water treatment facilities in the Courthouse Bay area. Requirement: A projected deficiency of 384,000 gallons per day of water production and a deficiency of 153,000 gallons per day of sewage treatment capacity will exist in 1986. Additionally, stringent new requirements in the NPDES permit for this plant will require major modification to the plant to handle increased sewage flows expected. A projected shortage of 240,000 gallons of storage of water for fire protection will exist. Current Situation: A current reserve capacity of approximately 50,000 gallons per day exists at the water treatment plant. Although a reserve of 97,000 gallons per day exists at the sewage treatment plant, flows in excess of						



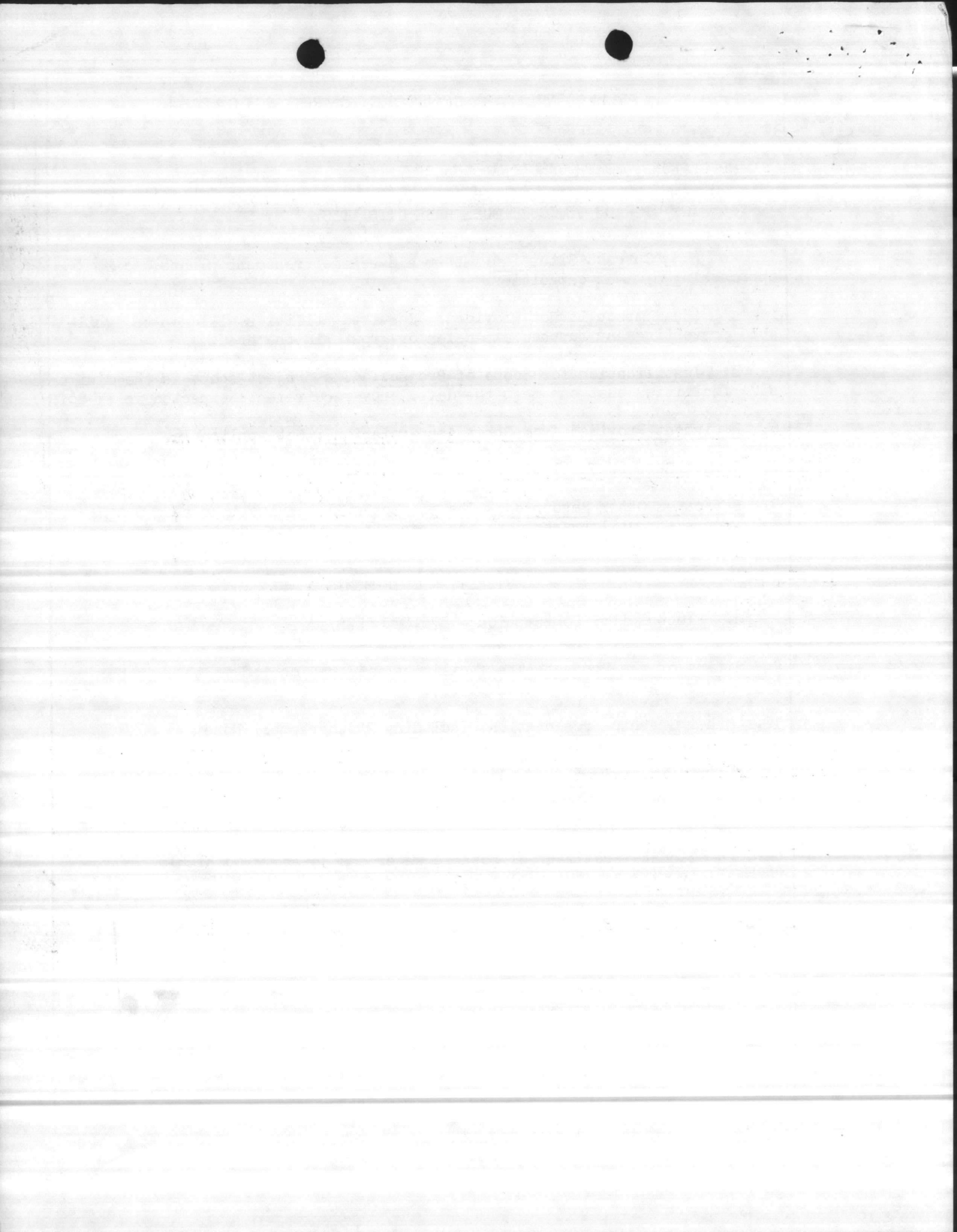
1. COMPONENT NAVY		FY 1984 MILITARY CONSTRUCTION PROJECT DATA		2. DATE 24 July 1980	
3. INSTALLATION AND LOCATION MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA 28542			4. PROJECT TITLE EXPANSION/UPGRADE OF COURTHOUSE BAY UTILITIES		
5. PROGRAM ELEMENT		6. CATEGORY CODE	7. PROJECT NUMBER	8. PROJECT COST (\$000) \$2,490	
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT COST	COST (\$000)
ELECTRICAL		LS	-	-	(5)
SUBTOTAL					2,244
CONTINGENCY - 5%					112
TOTAL CONTRACT COST					2,356
SUPERVISION, INSPECTION & OVERHEAD - 5.5%					130
TOTAL REQUEST					2,486
TOTAL REQUEST (ROUNDED)					2,490
EQUIPMENT PROVIDED FROM OTHER APPROPRIATION					-
10. DESCRIPTION OF PROPOSED CONSTRUCTION					
<p>424,000 gallons per day have occurred. Flows above 424,000 gallons per day result in exceeding the recommended overflow rate resulting in deterioration of the effluent.</p> <p><u>Impact If Not Provided:</u> Future growth in the Courthouse Bay area will be restricted due to the lack of adequate utilities in the area.</p>					



1. COMPONENT	FY 19 <u>84</u> MILITARY CONSTRUCTION PROJECT DATA	2. DATE 23 July 1980
3. INSTALLATION AND LOCATION MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA 28542		
4. PROJECT TITLE EXPANSION/UPGRADE OF COURTHOUSE BAY UTILITIES	5. PROJECT NUMBER	
<p><u>FACILITY STUDY</u></p> <p>1. <u>Project</u>: Provide expansion and upgrade to water and sewage treatment facilities in the Courthouse Bay area.</p> <p>2. <u>Current and Planned Future Workload with Regard to this Project</u>: The percentage of usage for these utility improvements and upgrades is 100 percent of the time and the duration of the need is indefinite. There is a projected increase in the requirement for water and sewage treatment facilities for the area.</p> <p>3. <u>Description of Proposed Construction</u>:</p> <p style="padding-left: 40px;">a. <u>Type of Construction</u>: Demolition of portions of existing buildings and structures. Reinforced concrete/frame expansion of water treatment plant BB-190. Installation of pumps, motors, piping and electrical wiring in sewage and water treatment plants, wells, and lift stations. Reinforced construction of 250,000 gallon storage tank for water plant, and exterior treatment facilities at sewage treatment plants, and installation of V.C.P. pipe.</p> <p style="padding-left: 40px;">b. <u>Replacement</u>: No exact replacement of any existing facilities is proposed. However, some existing facilities will be modified, and some will be replaced with larger capacities or different operating characteristics.</p> <p style="padding-left: 40px;">c. <u>Description of Work to be Done</u>:</p> <p style="padding-left: 80px;">(1) <u>Primary Facility</u>: Reinforced concrete/steel masonry structures.</p> <p style="padding-left: 80px;">(a) <u>Support Facilities</u>: Installation of pumps, motors, piping, electrical wiring, controls.</p> <p style="padding-left: 80px;">(2) <u>Energy Conservation</u>: Energy efficient equipment will be utilized.</p> <p>4. <u>Cost Estimate</u>: Area cost factor for Camp Lejeune, N.C. is 0.95. Cost data derived from study prepared by J. E. Serrine Company, A & E Contract N62470-78-C-3678, on 8 January 1979, and escalated to FY-84 to provide for this project.</p> <p>5. <u>Justification for Project and for Scope of Project</u>:</p> <p style="padding-left: 40px;">a. <u>Justification for Project</u>:</p> <p style="padding-left: 80px;">(1) <u>Project</u>: Proposed utilities expansion and upgrade is required to provide requirements for near term expansion of facilities in the Courthouse Bay area.</p>		



1. COMPONENT	FY 19 <u>84</u> MILITARY CONSTRUCTION PROJECT DATA	2. DATE 23 July 1980
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4. PROJECT TITLE EXPANSION/UPGRADE OF COURTHOUSE BASE UTILITIES	5. PROJECT NUMBER	
<p>(2) <u>Current Situation</u>: Water and sewage treatment plants are approaching maximum capacities.</p> <p>(3) <u>Impact If Not Provided</u>: Required utilities will not be available preventing any further expansion or growth in the area.</p> <p>b. <u>Justification for Scope of Project</u>: The project scope is the minimum size facilities that can meet the deficiency requirements expected in FY-86.</p> <p>6. <u>Equipment Provided from Other Appropriations</u>: Not applicable.</p> <p>7. <u>Common Support Facilities</u>: Not applicable.</p> <p>8. <u>Effect on Other Resources</u>: The project will require increased O & M, M.C. funds for utility services and operations. Three additional personnel will be required to operate the facilities.</p> <p style="text-align: center;"><u>UTILITY REQUIREMENTS</u></p> <p>a. <u>Electricity</u>: Consumption - 876,000 KWH/yr Peak Demand - 160 KW</p> <p>9. <u>Siting of the Project</u>: The facilities will be located in the Courthouse Bay - Amtrac area. See enclosure (1).</p> <p>10. <u>Other Graphic Presentation, Including Photographs</u>: None</p> <p>11. <u>Economic Analysis</u>: No analysis has been made. This project is in support of an operational mission located in this area.</p> <p>12. <u>Environmental Impact</u>: An environmental assessment of the project and project area indicate that the project will generally enhance the environment through adequate treatment of potable water and sewage. No highly controversial elements exist.</p>		



ENVIRONMENTAL IMPACT ASSESSMENT

Submitting DoD Component: Department of the Navy

Installation: Marine Corps Base, Camp Lejeune, N. C. 28542

Project Title: Expansion/Upgrade of Courthouse Bay Utilities

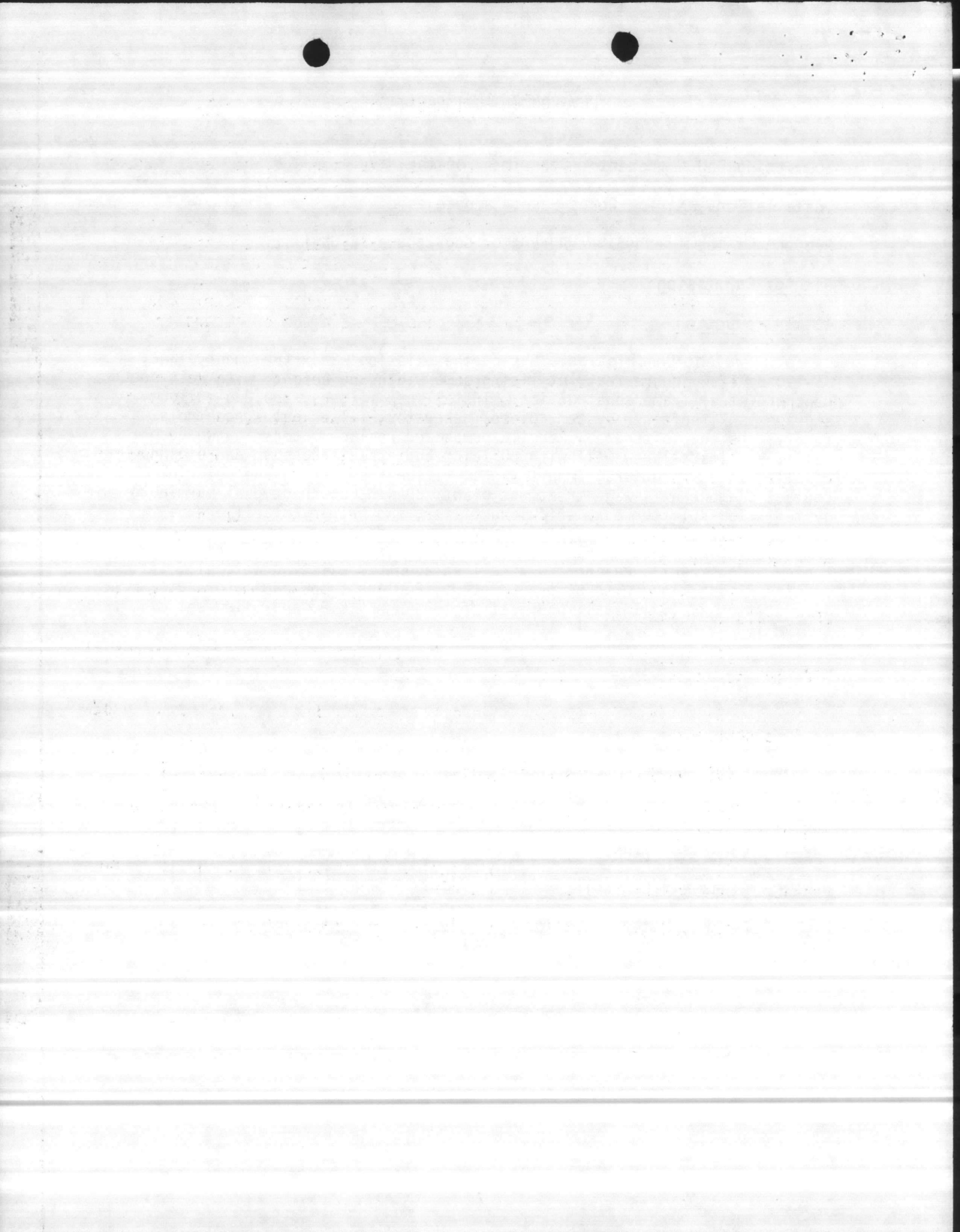
Date of Submission: 23 July 1980

1. Introduction

a. Project Description: Expand the existing water treatment plant, BB-190 by 1280 square feet, utilizing same width and height, with reinforced concrete/steel frame construction. Install new filters, 250,000 gallon storage tank, softener system, diesel generator, filter pumps, controls for filters and softeners. Rebuild pumps and replace motors in two deep wells, and install new well with building and associated pump and piping. Demolish inlet structure, Imhoff tanks, effluent structure and chlorine contact chamber at sewage treatment plant, BB-4. Construct dual barminutor system, flow splitter box, trickling filter, two primary clarifiers, a secondary clarifier, gravity thickner, aerobic digester, pump house and pumps, chlorine contact chamber, chlorine storage building and chlorinator system. Construct a concrete wet well adjacent to existing wet well, lift station SA-38, along with pump and motor. Replace pumps and motors at lift station BB-1. Install 656 feet of ten inch V.C.P. and 1110 feet of twelve inch V.C.P.

2. Relationship of Proposed Action to Land Use Plans, Policies and Controls for the Affected Area:

	Conforms With	No Plans For Area	Conflicts With
a. Land Use Plans	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Clear Air Control	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Federal Water Pollution Control Act	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



3. The probable Impact of the Proposed Action on the Environment:

a. Assessment of the positive and negative effects of the proposed action as it affects both the national and/or the international environment. The potentially significant effect of this action is that it:

(1) ~~XXXX~~/will not cause emissions into the atmosphere of toxic or hazardous substances or significant amounts of other pollutants. It will/will not significantly reduce the amount of pollution in the atmosphere?

(2) ~~XXXX~~/will not cause the creation of excessive noise, when considering the proximity and likely effects of the noise on humans or wildlife?

(3) ~~XXXX~~/will not introduce toxic or hazardous substances or significant amounts of chemicals, organic substances or solid wastes into bodies of water, on land or otherwise effect water or soil quality?

(4) ~~XXXX~~/will not significantly alter the rate of sediment deposit or temperature of a body of water?

(5) ~~XXXX~~/will not require the use of non-renewable energy sources, e.g., fossil fuels, etc., in apparently excessive or disproportionate amounts?

(6) ~~XXXX~~/will not result in a significant destruction of vegetation, wild or marine life?

(7) ~~XXXX~~/will not affect, beneficially or adversely, other forms of life or the ecosystems of which they are a part?

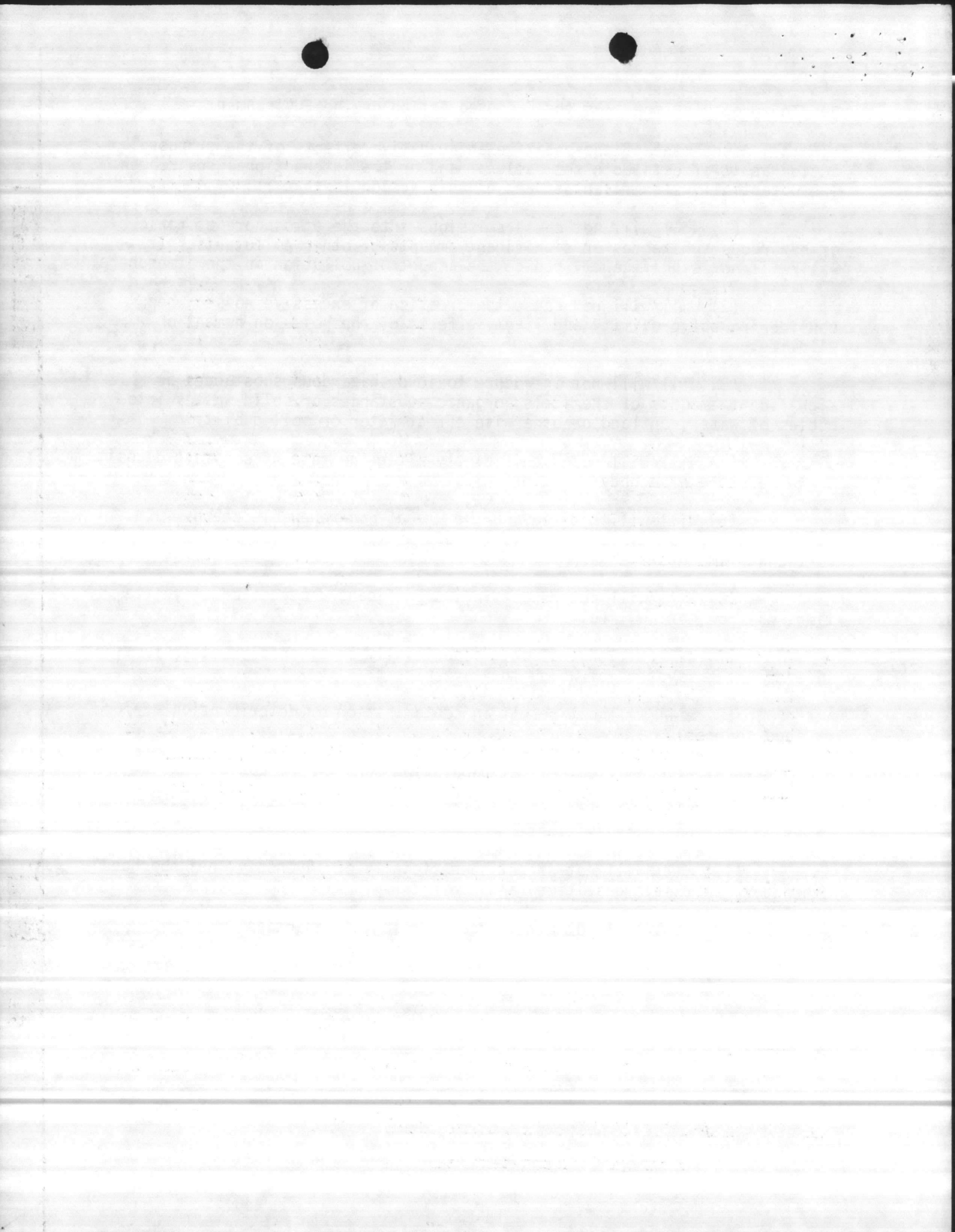
(8) ~~XXXX~~/will not result in contamination or deterioration of food or food sources?

(9) ~~XXXX~~/will not affect population density and congestion?

(10) ~~XXXX~~/will not cause a major change in landscape, extensive clearing, paving or excavation?

(11) ~~XXXX~~/will not affect, beneficially or adversely, neighborhood character (aesthetic qualities) and zoning?

(12) ~~XXXX~~/will not alter area hydrologic properties?



b. The proposed action will have a potentially significant effect on the following:

<u>ITEM</u>	<u>Favorable</u>	<u>Adverse</u>	<u>No Effect</u>
Traffic	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Community Facilities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Schools	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Waste Treatment Facilities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Utilities	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Land Management	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Solid Waste Disposal	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Area Appearance	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other (See Attachment _____)			

4. Alternatives to the Proposed Action

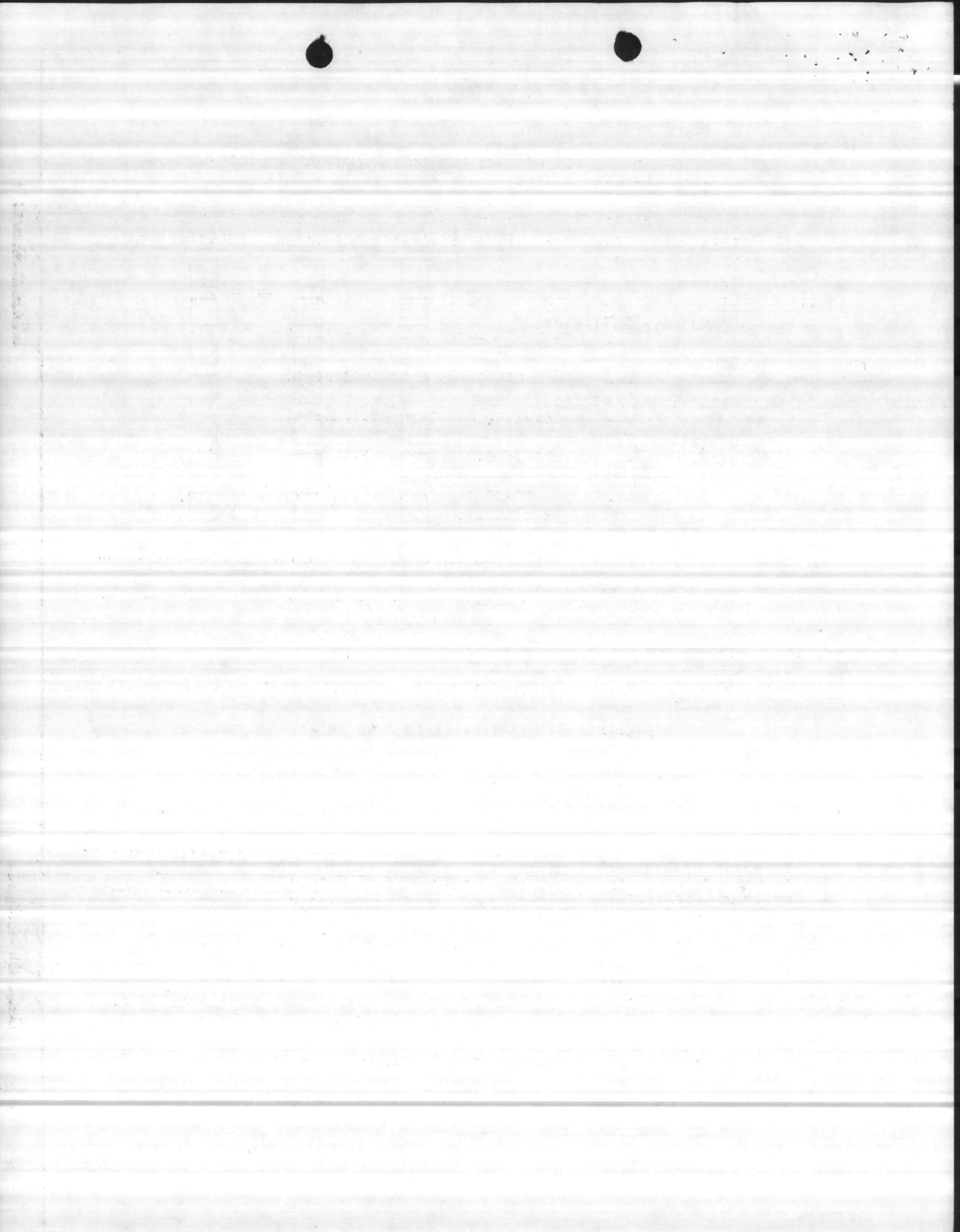
- There is no feasible alternative.
- Only feasible alternative is to take no action. The effects of this alternative are discussed in Attachment _____.
- Various alternatives and their effects are discussed in Attachment _____.

5. Any Probable Adverse Environmental Effects Which Cannot Be Avoided Should The Proposal Be Implemented

- No adverse effects on the environment are anticipated.
- Probable adverse effects are discussed in Attachment _____.

6. Relationship Between Local Short-Term Uses of the Environment and the Maintenance and Enhancement of Long-Term Productivity

No change in short-term use.



No change in the maintenance and/or enhancement of long-term productivity.

Adverse effects on the environment will occur only during the construction period and these will/will not create permanent or long-lasting adverse effects.

The proposed action will enhance the short-term use of resources by:

Abating existing or potential pollution.

Enhancing the area appearance.

Reducing utility requirements

Improvements in operational efficiency.

Improvements in habitability of existing facilities.

Other: _____

Long-term productivity will be enhanced by:

Abating existing or potential pollution. (Dust)

Reducing utility requirements.

Improvement in operational efficiency.

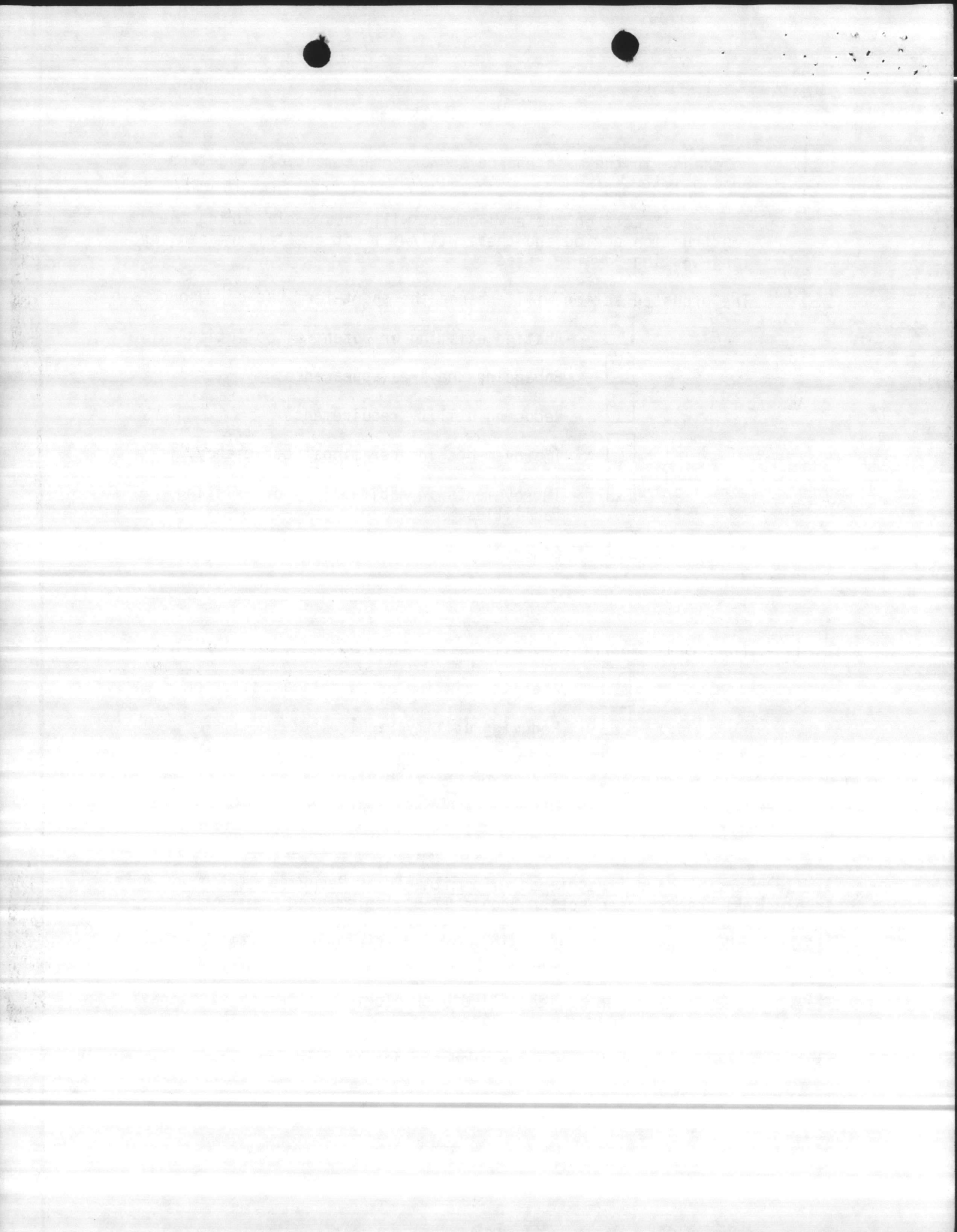
Other: _____

7. Irreversible and Irretrievable Commitments of Resources Which Would Be Involved in the Proposed Action Should It Be Implemented

No significant irreversible or irretrievable commitment of resources.

No destruction of identified archeological sites or sites having possible historic or architectural interests.

No effect on known endangered species of wildlife.



- No significant change in land use.
- Potentially significant irreversible or irretrievable commitments or resources are discussed in Attachment _____.
- Other: _____

8. Considerations That Offset the Adverse Environmental Effects

- a. This course of action as compared to adverse environmental effects of alternatives (Section 4) are discussed in Attachment _____.
- b. Cost benefit analysis of proposed action is Attachment _____.

9. Summary

- It is concluded that the proposed action will have no significant adverse effects on the environment.
- There has not been, nor is there currently, any known controversy concerning the proposed action.
- Based on this assessment, it is concluded that an Environmental Impact Statement must be prepared prior to implementation of the proposed action.

