

## REQUEST FOR ENVIRONMENTAL IMPACT REVIEW; FORMAT AND PROCEDURES FOR SUBMISSION OF

1. Action Sponsor: Commanding General, Marine Corps Base, Camp Lejeune
2. Name, Address, Phone Number of Point of Contact: AC/S, Facilities, MCB  
Attn: Mr. Gene Jones, Chief, Planning Branch, Public Works Div., Ext. 1833
3. Title and Brief Description of Proposed Action (state purpose, when proposed action is to occur, and any proposed environmental protection measure):

DIVISION HEADQUARTERS (P-057)

I. PROJECT DESCRIPTION

The Division Headquarters will provide an adequate Headquarters building for the 2d Force Service Support Group in the French Creek Area. The building will be a three story structured steel frame building with pile foundation, masonry walls, concrete floors, built-up roof and installation, air conditioning, heating, fire prevention, pavement, exterior lighting.

II. PROJECT PURPOSE

This project will provide 2d FSSG Headquarters with adequate facilities. One major goal in this project is to move the 2d Force Service Support Group Headquarters which is now located in an old WWII barracks in the Hadnot Point Area, some three miles away from their living/working area in the French Creek Area.

III. SITE SELECTION

The site is located on Enclosure (1). The site named is to be located in the French Creek, 2d FSSG area and is in compliance with the latest Camp Lejeune Master Plan.

IV. CONCLUSION

Based on information provided above and in the Base Master Plan, this project will not have any significant adverse environmental impact on the environment. The building of a new Division Headquarters would be a positive aspect. Preparation of an environmental assessment per MCO 6280.5 is not required.

ENCLOSURE (9)

4. Location: Attach a Camp Lejeune Special Map (or equivalent quality map) showing location of proposed action/project site(s).

5. Potential Environmental Impact/Considerations: (See Note 1)

a. Air Quality: Will there be any open burning associated with the project/action? No Will there be any new boilers, incinerators or fuel storage tanks (larger than 1,000 gallons) provided? Yes Will there be any paint booths, solvent vats, degreasers or other vapor-producing industrial processes involved? No Will the project involve the use or disposal of asbestos? No Will project cause dust problems? No

b. Land Quality: Will the action require use of significant amount of earthen fill material? No Will there be an increase in level of soil disturbance/damage to vegetation? No Will there be one acre or more of land cleared/disturbed? Yes

c. Groundwater Quality: Does the project involve use of herbicides, insecticides or other pesticides in significant amounts? No Does the project involve installation/use of septic tanks, or any other on-site disposal of sanitary waste? No Will there be any wells dug or any excavations deeper than twenty feet? No Will any toxic or hazardous material/waste requiring disposal be used or generated by the project? No Will there be a net increase of solid waste caused by implementing the project/action? Unknown Will the project or action be carried out within 200 feet of a drinking water supply well? No

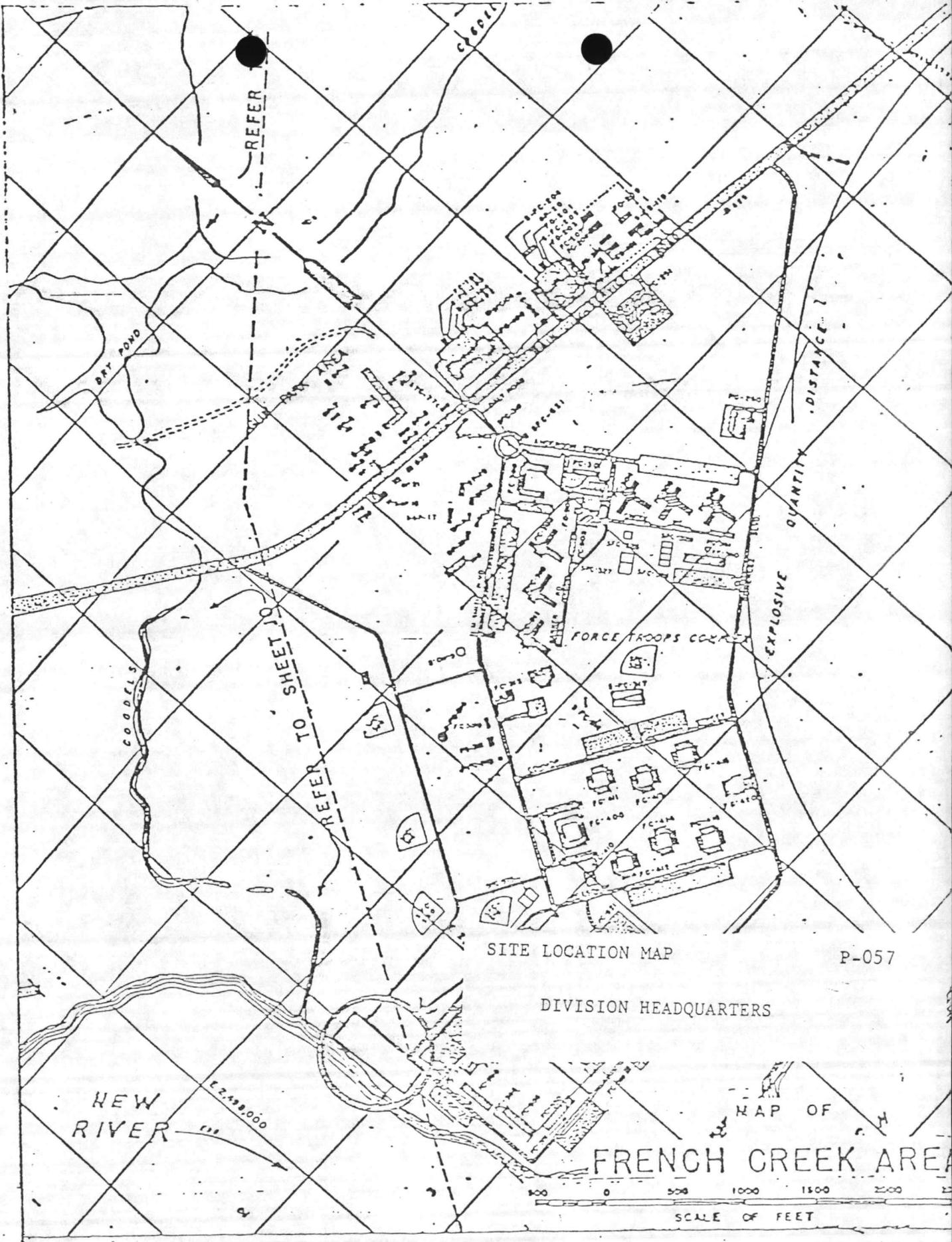
d. Surface Water Quality: Is the project located on or in a water body or adjacent 100-year flood plain? Unknown Will the project involve construction of drainage ditches/underground drains for purposes of lowering water table? No Will all wastewater be connected to sanitary sewer? Yes Will there be an increase in erosion/siltation from soil disturbing activity? No Will petroleum oil and lubricants be routinely stored or used at the site? Yes Will the project increase rates of surface/storm water run-off? Yes

e. Natural Resources: Will there be a loss of forest land? No Will public access for hunting, boating, fishing, etc., be restricted? Yes Is there a change in land use from what is presently shown in Base Master Plan? No Will removal of existing vegetation be required? Yes Are there any known effects on any endangered species? No Does the project involve the purchase or sale of any real estate? No

f. Socio-Economic Considerations: Will the project cause an increase/decrease in on or off-base military population? No Will there be any increased demand on a local or state government to provide services? No Will there be any changes to traffic flow and patterns on or off-base? No Will any noise, traffic, dust, etc., be generated which may affect off-base persons or property? No Is there any known controversy associated with the type of project or action proposed? No Are there any historical or archaeological sites affected by project/action? No

NOTE 1. Answer either "yes", "no" or "unknown". Answers should be based on information available to the action sponsor at time of submission to the Base Environmental Impact Review Board. Do not delay the submission of this request awaiting additional information. Many environmental considerations need to be addressed in early planning stages. If additional information becomes available after submission, it should be forwarded to the EIRB.

ENCLOSURE (1)



SITE LOCATION MAP

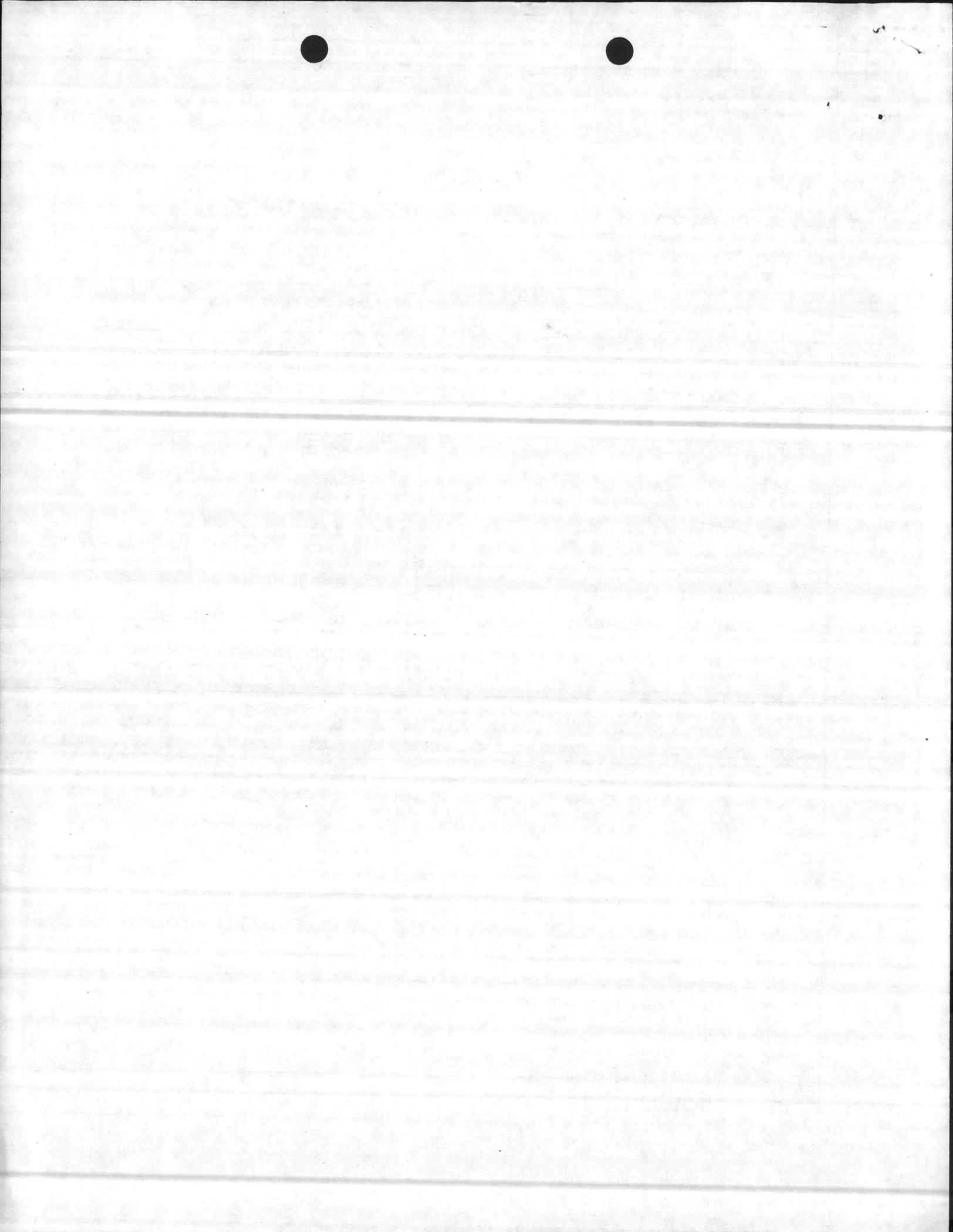
P-057

DIVISION HEADQUARTERS

MAP OF  
FRENCH CREEK AREA

SCALE OF FEET

ENCLOSURE (9)





UNITED STATES MARINE CORPS  
Marine Corps Base  
Camp Lejeune, North Carolina 28542-5001

IN REPLY REFER TO:

11000

PWO

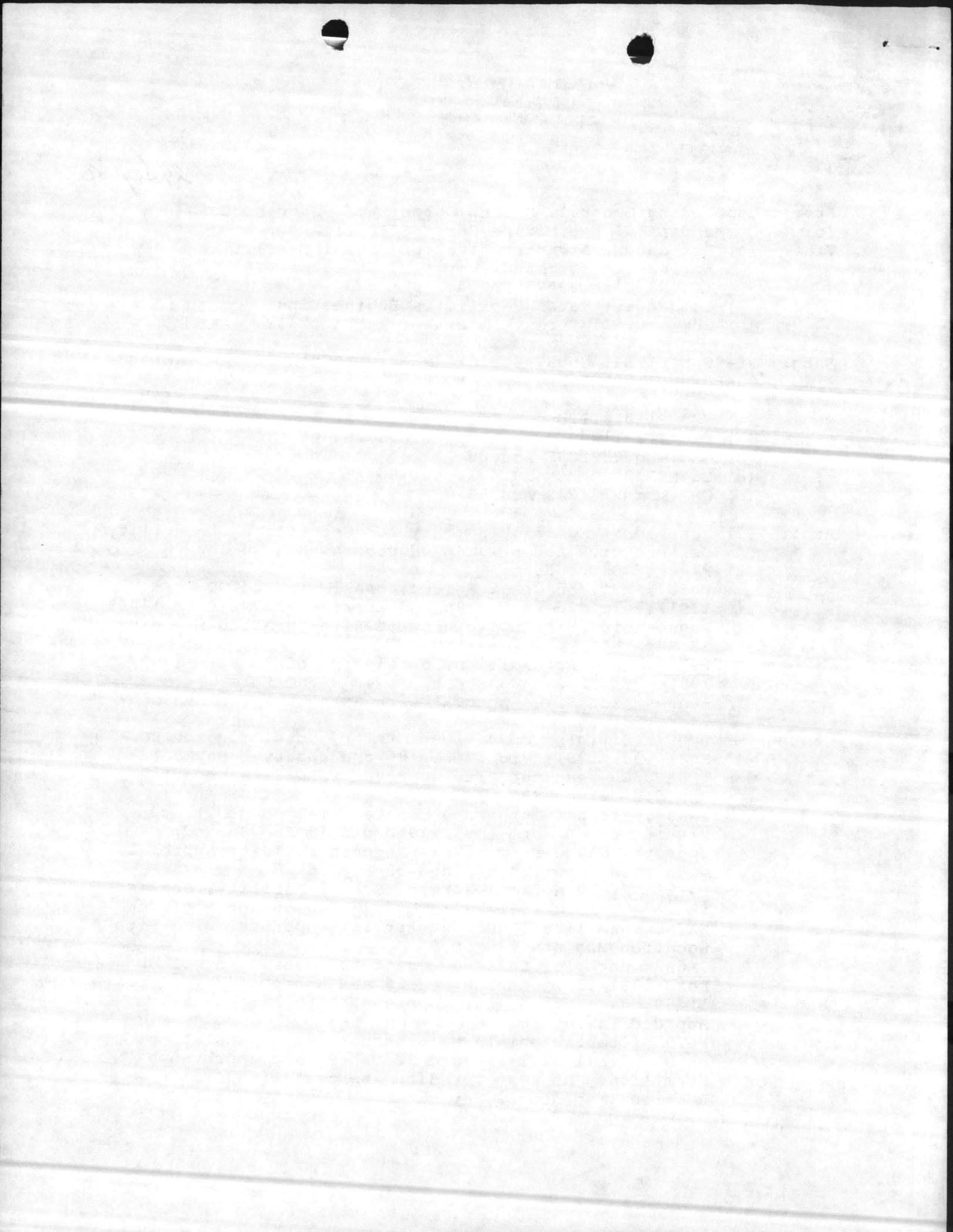
29 Sep 86

From: Commanding General, Marine Corps Base, Camp Lejeune  
To: Commandant of the Marine Corps (LFF-1)  
Via (1) Commander, Atlantic Division, Naval Facilities  
Engineering Command, Norfolk, VA 23511-6287  
(ATTN: Code 09A21B3/Code 407)  
(2) Commander, Naval Facilities Engineering Command  
200 Stovall Street, Alexandria, VA 22332

Subj: FY-90 MILITARY CONSTRUCTION (MCON) PROGRAM FOR MARINE  
CORPS BASE, CAMP LEJEUNE, NC

Ref: (a) MCO P11000.12B  
(b) CMC ltr 11000 over LFF-1 dtd 8 Jul 86  
(c) CMC msg 050129Z Aug 86  
(d) CG MCB CLNC msg 191422Z Aug 86  
(e) CMC msg 210124Z Aug 86

Encl: (1) Revised NAVMC 10956 Summary for Correction of Facility  
Deficiencies for FY-90 MCON program dtd 30 Sep 86  
(2) FY-90 MCON Program:  
P-887, Wallace Creek Bridge, consisting of DD Form  
1391/1391c dtd 30 Sep 86 and approved NAVMC Form 11069  
Request for Site Approval with Site Location Map dtd  
30 Sep 1986  
P-869, Land Acquisition, consisting of DD Form 1391/  
1391c dtd 30 Sep 86 and approved NAVMC Form 11069,  
Request for Site Approval with Site Location Map dtd  
24 Feb 86  
P-057, Division Operations Center, consisting of DD  
Form 1391/1391c dtd 30 Sep 86 and approved NAVMC Form  
11069, Request for Site Approval with Site Location  
Map dtd 22 Sep 81  
P-804, Field Maintenance Complex (Increment 3), con-  
sisting of DD Form 1391/1391c dtd 30 Sep 86 and  
approved NAVMC Form 11069, Request for Site Approval  
with Site Location Map dtd 30 Sep 86  
P-828, Field Medical Service School Facility, consist-  
ing of DD Form 1391/1391c dtd 30 Sep 86 and approved  
NAVMC Form 11069, Request for Site Approval with Site  
Location Map dtd 18 Sep 86  
P-630, Bachelor Enlisted Quarters, consisting of DD  
Form 1391/1391c dtd 30 Sep 86 and approved NAVMC Form  
11069, Request for Site Approval with Site Location  
Map dtd 18 Sep 86  
P-196, Combat Vehicle Maintenance Shop, consisting  
of DD Form 1391/1391c dtd 30 Sep 86 and approved NAVMC  
Form 11069, Request for Site Approval with Site  
Location Map dtd 22 Sep 81



Subj: FY-90 MILITARY CONSTRUCTION (MCON) PROGRAM FOR MARINE  
CORPS BASE, CAMP LEJEUNE, NC

P-644, Electronics/Communications Maintenance Shop, consisting of DD Form 1391/1391c dtd 30 Sep 86 and approved NAVMC Form 11069, Request for Site Approval with Site Location Map dtd 22 Sep 81

P-881, Anti-Tank Maintenance Facility, consisting of DD Form 1391/1391c dtd 30 Sep 86 and approved NAVMC Form 11069, Request for Site Approval with Site Location Map dtd 18 Sep 86

P-849, Bachelor Officers Quarters, consisting of DD Form 1391/1391c dtd 30 Sep 86 and approved NAVMC Form 11069, Request for Site Approval with Site Location Map dtd 24 Jul 85

P-842, Regional Automated Service Center (RASC), consisting of DD Form 1391/1391c dtd 30 Sep 86 and approved NAVMC Form 11069, Request for Site Approval with Site Location Map dtd 24 Jul 84

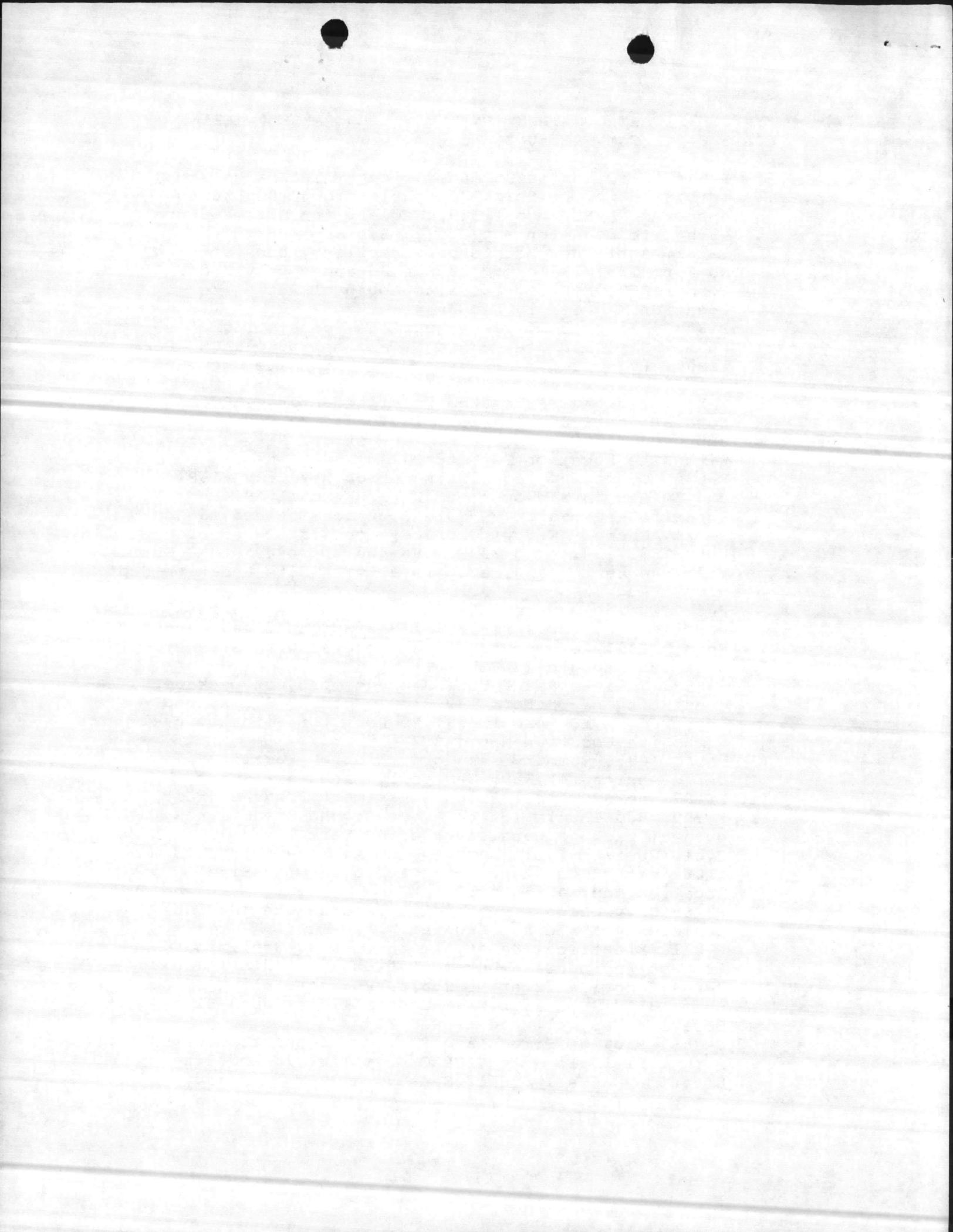
P-065, Gymnasium, consisting of DD Form 1391/1391c dtd 30 Sep 86 and approved NAVMC Form 11069, Request for Site Approval with Site Location Map dtd 16 Nov 81

P-824, Chapel (Tarawa Terrace), consisting of DD Form 1391/1391c dtd 30 Sep 86 and approved NAVMC Form 11069 Request for Site Approval with Site Location Map dtd 30 Aug 82

P-672, Road Improvements (Brewster Blvd. Overpass), consisting of DD Form 1391/1391c and approved NAVMC Form 11069, Request for Site Approval with Site Location Map dtd 24 Feb 86.

P-853, Vehicle Ready Fuel Storage, project package consisting of DD Form 1391/1391c dtd 30 Sep 86 and approved NAVMC Form 11069, Request for Site Approval with Site Location Map dtd 24 Jul 85

- (3) NAVMC 10956 Summary for Correction of Facility Deficiencies for Navy Centrally Managed Program
- (4) FY-87 Energy Conservation Investment Program (ECIP)  
P-799, Add Insulation to Above-Ground Steam Lines, project package consisting of DD Form 1391/1391c, Life Cycle Cost Analysis Summary and Approved NAVMC Form 11069 with Request for Site Approval with Site Location Map, all dtd 14 Apr 86
- (5) FY-89 Navy Occupational Safety and Health (NAVOSH) Deficiency Abatement Program  
P-811, Electrical Safety Improvements, Preliminary Project Engineering Documentation (PED) dtd 1 Jan 86  
P-864, Provide Exterior Stairways, consisting of DD Form 1391/1391c with NAVFAC Form 11013/7 and Site Location Map, all dtd 12 Sep 85  
P-788, Provide Fire Alarm Systems, consisting of DD Form 1391/1391c with NAVFAC Form 11013/7 and Site Location Map all dtd 12 Sep 85



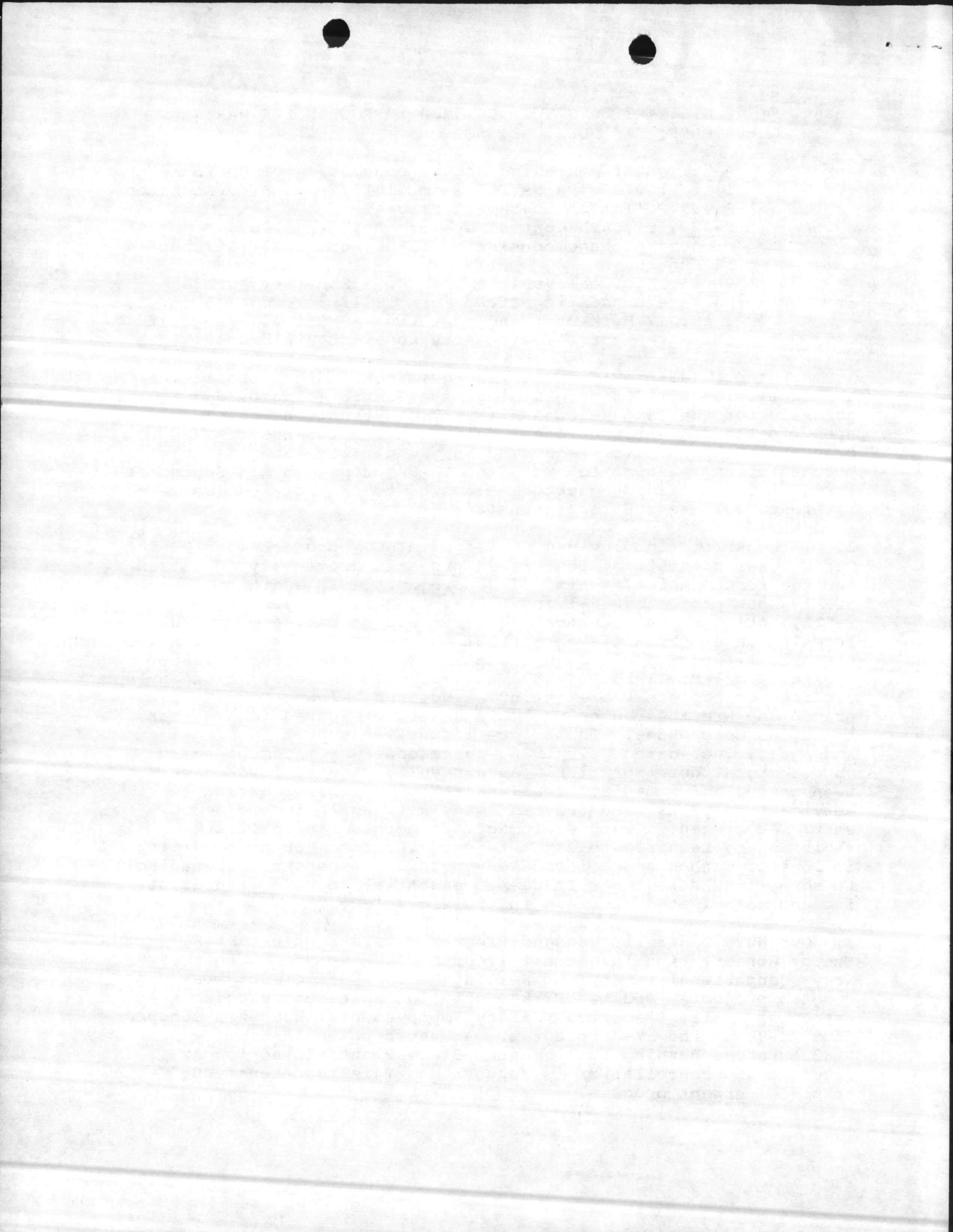
Subj: FY-90 MILITARY CONSTRUCTION (MCON) PROGRAM FOR MARINE  
CORPS BASE, CAMP LEJEUNE, NC

- P-867, Modify Loading Docks, consisting of DD Form  
1391/ 1391c with NAVFAC Form 11013/7 and Site Location  
(6) FY-89 Pollution Abatement Program  
P-829, Fly Ash Control System, Building 1700,  
project package consisting of DD Form 1391/1391c dtd  
14 Aug 85  
P-845, Tactical Vehicle Wash Down Facility, project  
package consisting of DD Form 1391/1391c dtd 15 Jul 86  
(LANTDIV Mark-up), and approved NAVMC 11069, Request  
for Site Approval with Site Location Map dtd 30 Aug 84

1. Reference (a) provided detailed guidance in the formulation and submission of MCON programming. Reference (b) provided guidance for the Camp Lejeune Military Construction Program specifically requesting project documentation for the FY-90 program. Reference (c) requested Navy Centrally Managed Project Documentation be submitted with the FY-90 program by 15 September 1986. Reference (d) requested extension to 30 September and reference (e) granted the extension.

2. This submission provides developed MILCON projects for FY-90. Our program consists of four FY-90 projects previously submitted and the resubmission of nine FY-89 projects. In addition, there are two new projects P-881 and P-887. Project submission for P-881, Anti-Tank Maintenance Facility, was necessitated by the formulation of the Anti-Tank Battalion and is consistent with the Base Facilities Support Requirements (FSR) dated January 1986, and revised 1 May 1986. P-887, Wallace Creek Bridge, is urgently required to replace the existing structures which have deteriorated and are located on the main artery of ingress and egress to Marine Corps Base. The bridge inspection report by Bigger and Agnew, Inc. dated July 1986, recommended replacement based on structural deterioration. As a result, reduced loads have been posted and immediate repairs are being made to extend service five years when reduced loads will again become necessary. At present, heavy equipment, commercial and military vehicles are required to use alternate indirect routes resulting in loss of manhours and increased operation expenses. Upgrading to three-lane structures is deemed essential to cope with existing and anticipated increase in traffic volumes.

3. Our Navy Centrally Managed Program consists of one FY-87 Energy Conservation Investment Program (ECIP) project, four FY-89 Navy Occupational Safety and Health (NAVOSH) Deficiency Abatement Program projects, and two FY-89 Pollution Abatement program projects; P-811, Electrical Safety Improvements, has been dropped from FY-88 to the FY-89 program. As shown on enclosure (3) P-822, Refuse Burning Supplemental Steam Plant, is no longer required and cancellation is requested. This represents our complete current program.



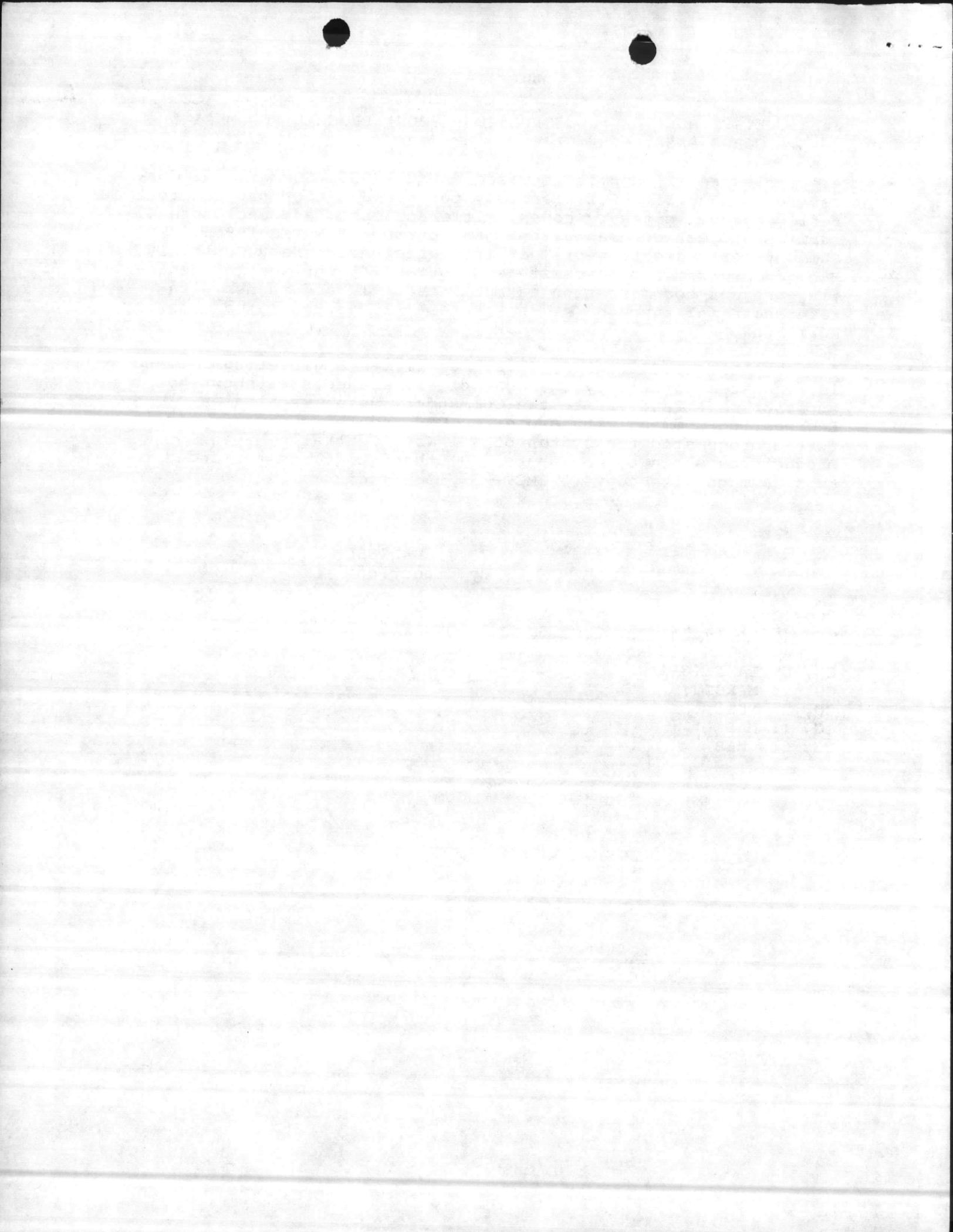
Subj: FY-90 MILITARY CONSTRUCTION (MCON) PROGRAM FOR MARINE  
CORPS BASE, CAMP LEJEUNE, NC

4. Enclosure (1) submits revised NAVMC 10956, Summary for Correction of Facility Deficiencies, for FY-90 MILCON program to reflect proper category codes, title and cost; and enclosure (2) submits project documentation. Enclosure (3) NAVMC 10956, Summary for Correction of Facility Deficiencies Navy Centrally Managed program projects with enclosures (4) through (6) depicting project documentation as submitted. In accordance with references (a) through (e) enclosures (1) through (6) are hereby submitted.

5. The Atlantic Division, Naval Facilities Engineering Command is requested to certify the cost of all projects as shown by enclosures (1) and (2) to the Commander, Naval Facilities Engineering Command with copies to CMC and this Command. It is further requested the status of all Navy Centrally Managed Projects as shown by enclosures (3) through (6) be forwarded to this Command with copy to CMC.

T. J. DALZELL  
By direction

Copy to:  
CMC (LFF) (advance)  
NAVFACENGCOM (advance)  
CG, FMFLANT (G-4)  
CG, 2d MARDIV  
CG, 2d FSSG  
CG, II MAF  
CG, 6th MAB



DESIGN DIVISION ROUTING SLIP

DATE: 27 Dec 86

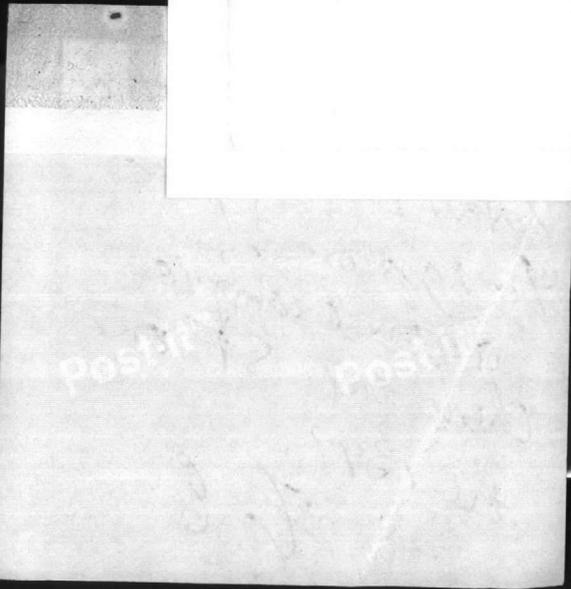
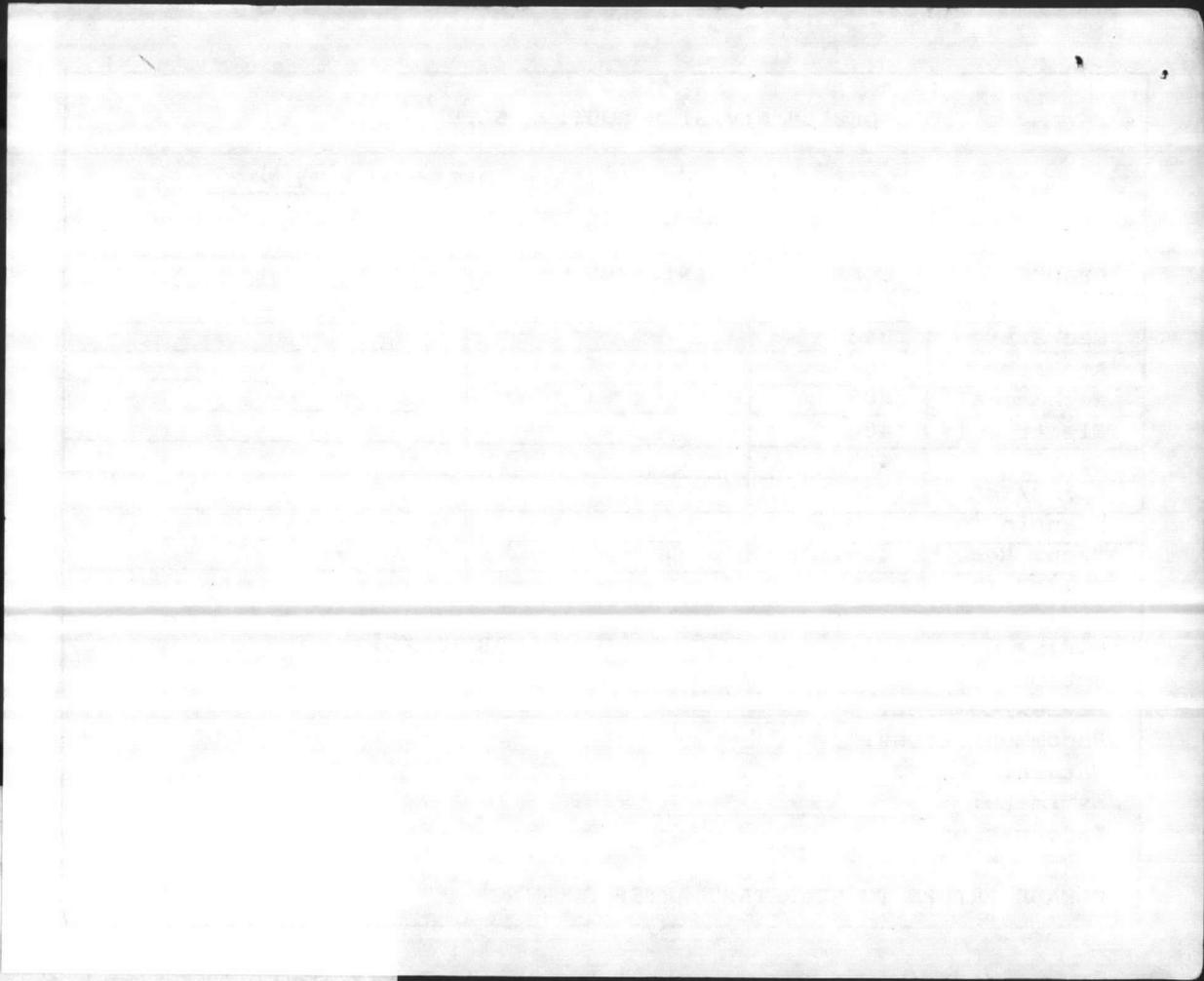
BRANCH	CODE	INITIALS	DATE
Design Dir	04	<i>vm</i>	6-25
Secretary	04S		
Architect	401		
Mechanical	403		
Electrical	404		
Civil	405		
Specs/Est.	406		
Planning	408 <i>2</i>		
Tech. Rec.	408.1		
Custodian			

FOR:  
 Action: \_\_\_\_\_  
 Review/Comment: \_\_\_\_\_  
 Recommendations: \_\_\_\_\_  
 Retain: \_\_\_\_\_  
 Estimate: \_\_\_\_\_  
 Information: \_\_\_\_\_

REMARKS:

PLEASE RETURN TO SECRETARY AFTER ROUTING

*Comments were submitted - which LANTDIV chose to ignore!! as an example, check the SF on the 1391 to E*



DESIGN DIVISION ROUTING SLIP

DATE: 27 Dec 86

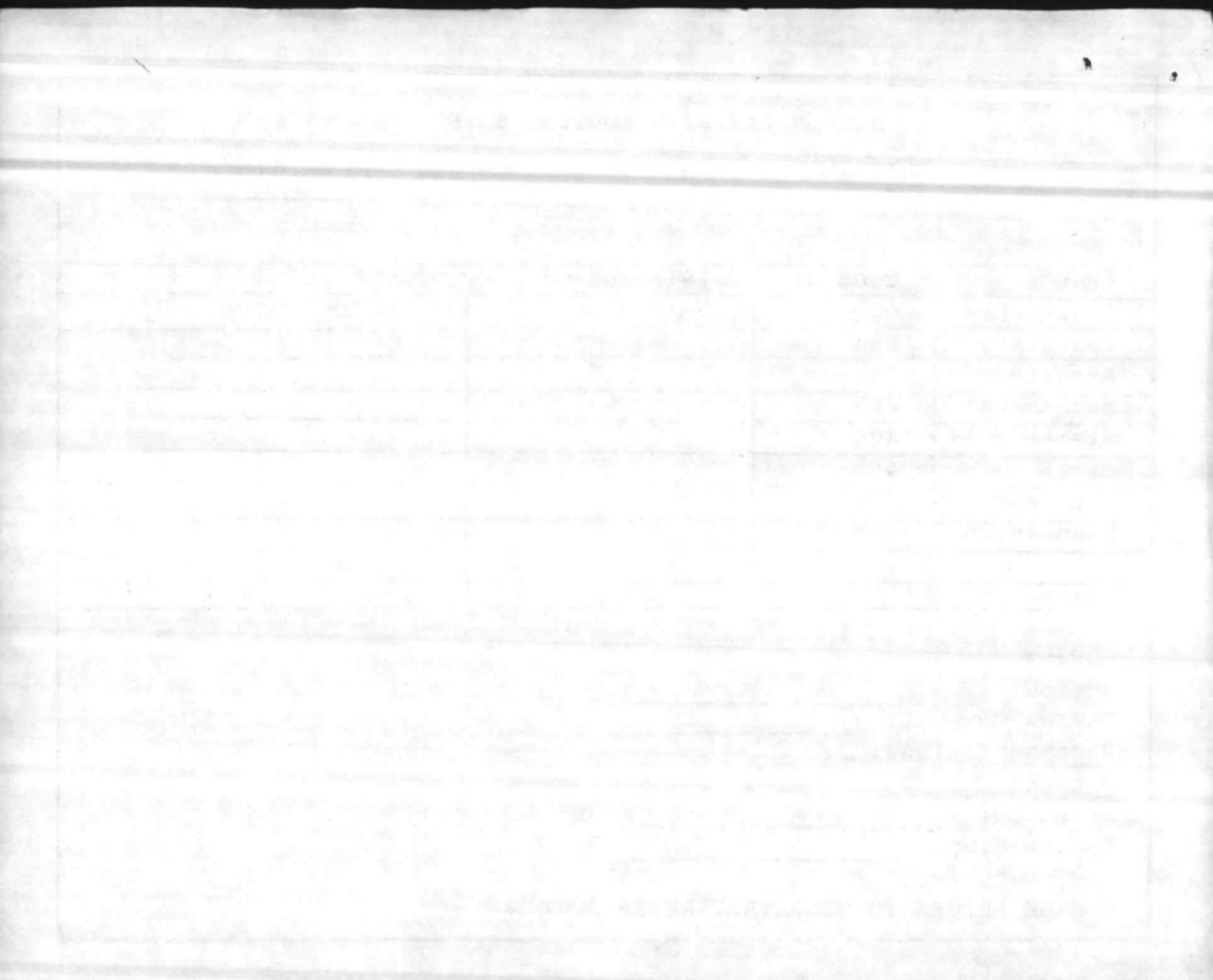
BRANCH	CODE	INITIALS	DATE
Design Dir	04	<i>VM</i>	6-25
Secretary	04S		
Architect	401		
Mechanical	403		
Electrical	404		
Civil	405		
Specs/Est.	406		
Planning	408	<i>2</i>	
Tech. Rec.	408.1		
Custodian			

FOR:

Action: \_\_\_\_\_  
 Review/Comment: \_\_\_\_\_  
 Recommendations: \_\_\_\_\_  
 Retain: \_\_\_\_\_  
 Estimate: \_\_\_\_\_  
 Information: \_\_\_\_\_

REMARKS:

PLEASE RETURN TO SECRETARY AFTER ROUTING





DEPARTMENT OF THE NAVY

ATLANTIC DIVISION  
NAVAL FACILITIES ENGINEERING COMMAND  
NORFOLK, VIRGINIA 23511-6287

TELEPHONE NO.

444-9670

IN REPLY REFER TO:

11010

09A21B3

16 JUN 1986

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

Subj: FY 1988 PROJECT ENGINEERING DOCUMENTATION (PED) FOR PROJECT P-057,  
DIVISION OPERATIONS CENTER, MARINE CORPS BASE, CAMP LEJEUNE, NORTH  
CAROLINA

Ref: (a) NAVFACENGCOM ltr 11013/0512C of 7 Jan 86  
(b) NAVFACENGCOMINST 11010.14P  
(c) NAVFACENGCOMINST 11010.44

Encl: (1) Subject PED with Witness Data Sketch (3 copies)  
(2) Project Design and Construction Data Sheet

1. As requested by reference (a), enclosures (1) and (2), prepared in accordance with reference (b), are submitted. Project is currently unprogrammed. Design will be held at the preliminary (35%) stage.

2. It is certified that:

a. Project scope and cost are the minimum needed to satisfy the operational needs, meet applicable environmental and OSHA regulations, and are supported by current (SFPS) documentation following reference (c).

b. Utilities are adequate to support the additional load added by the project.

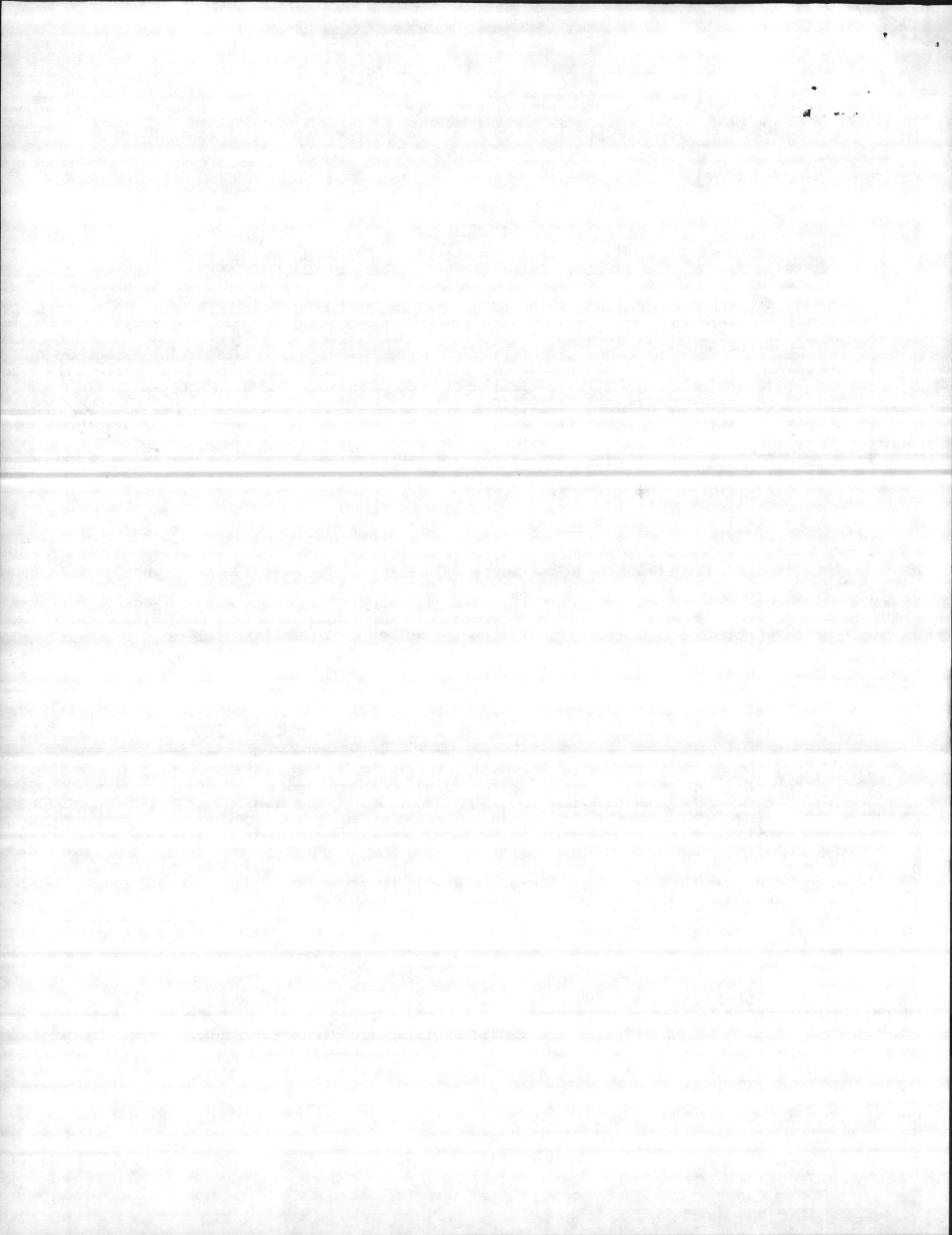
c. The facility design is generally acceptable to the Activity Commanding Officer, and satisfies the Activity's needs.

d. The DD Form 1391 has been reviewed by both the Activity and LANTNAVFACENGCOM.

3. By copy of this letter, CMC; MCB Camp Lejeune 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.

4. For Telecommunications Management Detachment: Telephone requirements for the subject project have been coordinated with the Activity to determine the facilities telephone support required. Interior conduit and pull wire will be provided. A 600 pair cable in a ductbank will be provided exterior to the facility. The telephone system at Camp Lejeune is Government owned. Request TELEMGT DET EAST coordinate with MCB Camp Lejeune to assess telephone requirements; assure facilities telephone support described is adequate; and assure that appropriate other resources are budgeted for telephone equipment and instruments.

*Gene J. Lavery*  
*Larry W. B.*  
*Fred B.*



16 JUN 1985

Subj: FY 1988 PROJECT ENGINEERING DOCUMENTATION (PED) FOR PROJECT P-057,  
DIVISION OPERATIONS CENTER, MARINE CORPS BASE, CAMP LEJEUNE, NORTH  
CAROLINA

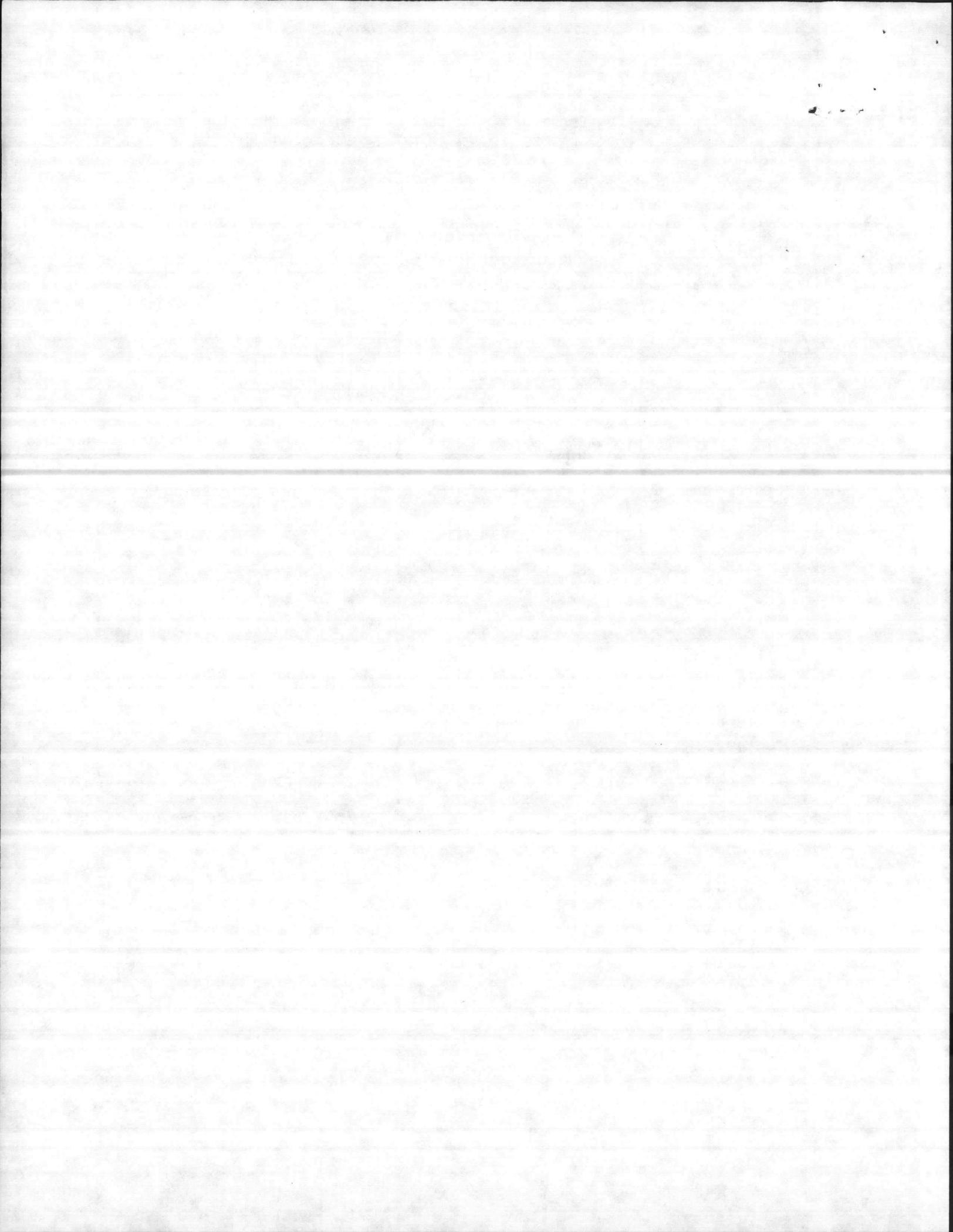
Request TELEMGT DET EAST provide comments directly to NAVFACENGCOM  
(Attention: Code 05) with a copy to LANTNAVFACENGCOM (Attention: Code  
09A2). If no comments are submitted within 30 days, it will be assumed that  
facilities telephone support described/budgeted in the project documentation  
is adequate.



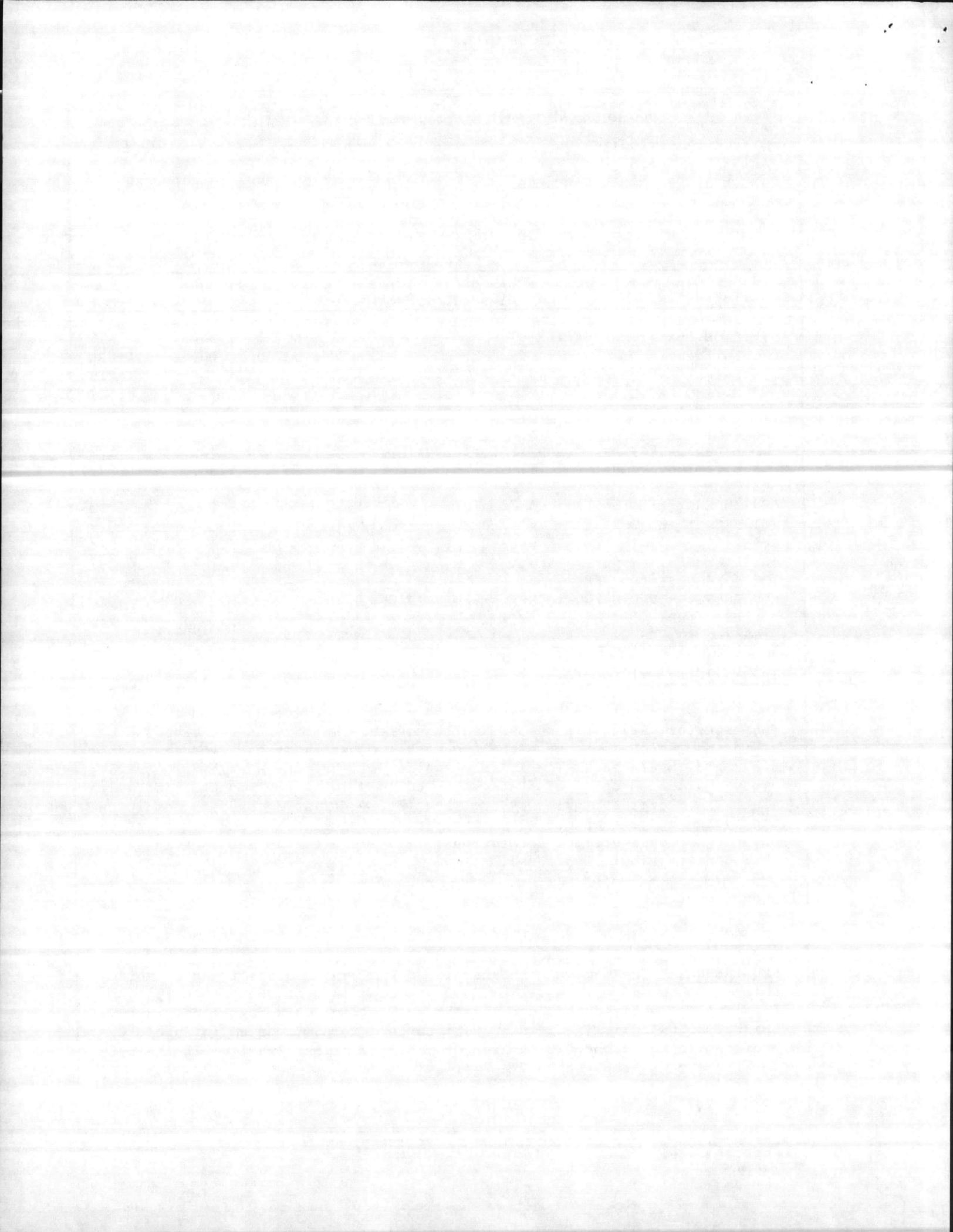
E. W. ATKINSON, P. E.  
By direction

Copy to: (w/1 copy encl (1))  
CMC  
MCB Camp Lejeune  
TELEMGT DET EAST Norfolk

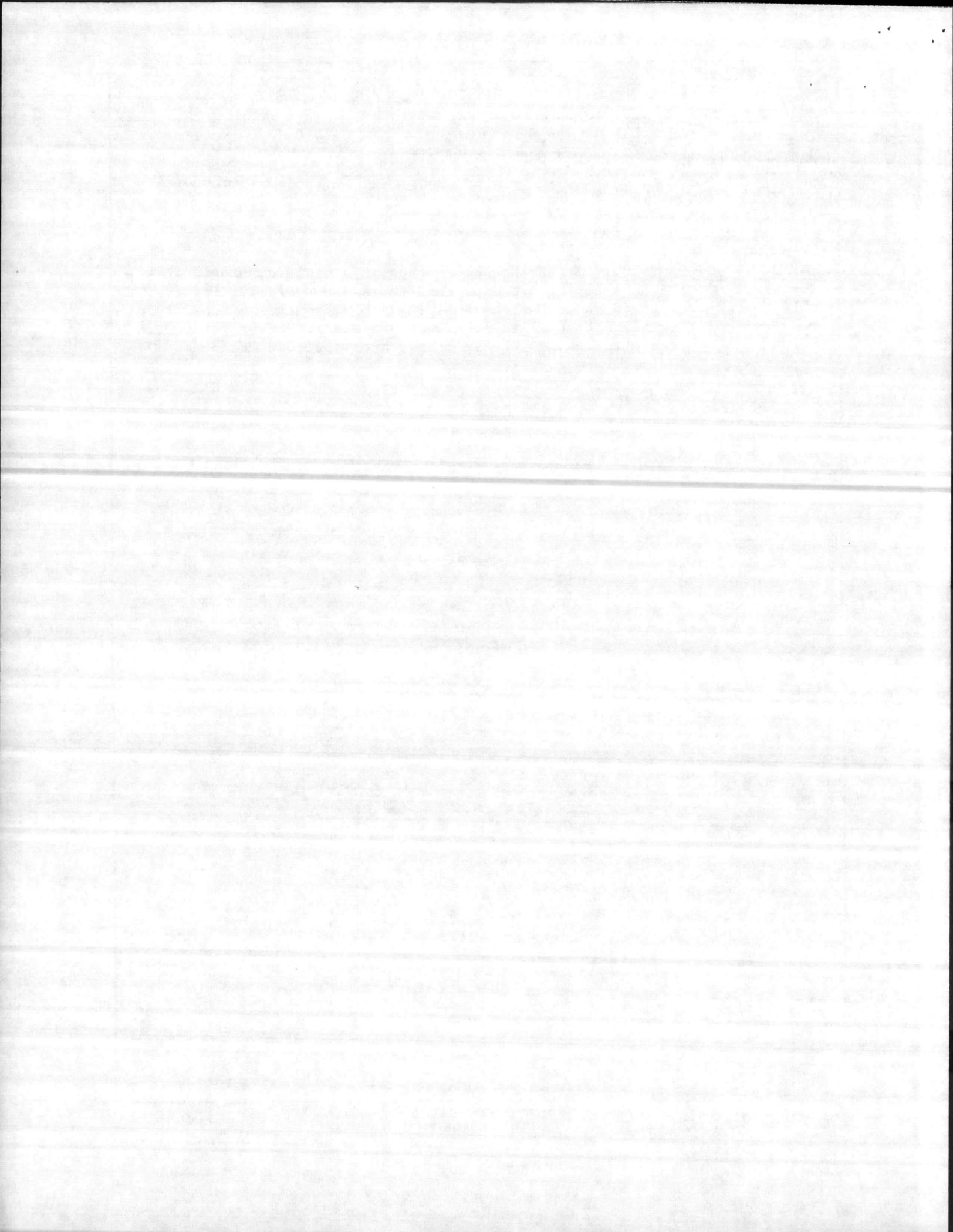
Gantt Huberman Architects  
112 West 5th Street  
Charlotte, North Carolina 28202



1. COMPONENT NAVY		FY 19 88 MILITARY CONSTRUCTION PROJECT DATA				2. DATE 1 MAY 1986	
3. INSTALLATION AND LOCATION MARINE CORPS BASE CAMP LEJEUNE, NORTH CAROLINA				4. PROJECT TITLE DIVISION OPERATIONS CENTER			
5. PROGRAM ELEMENT		6. CATEGORY CODE 610-70	7. PROJECT NUMBER P-057		8. PROJECT COST (\$000) 6,200		
<b>9. COST ESTIMATES</b>							
Escalation (7%)		ITEM	ESCALATED TO 1 APRIL 1988	U/M	QUANTITY	UNIT COST	COST (\$000)
DIVISION OPERATIONS CENTER		Building	SF	60,364	74.09	4,472	
		Built-In Equipment	SF	60,364	70.51	4,256	
SUPPORTING FACILITIES		Special Construction Features (Pilings)	LS	-	-	( 216)	
		Utilities	LS	-	-	1,127	
		Parking, Paving, Sidewalks, Heliport Sys.	LS	9,770	38.08	( 185)	
		Site Improvement	LS	-	-	( 273)	
SUBTOTAL			-	-	-	-	( 372)
CONTINGENCY (5%)			-	-	-	-	( 299)
TOTAL CONTRACT COST			-	-	-	-	5,599
SUPERVISION, INSPECTION & OVERHEAD (5.5%)			-	-	-	-	280
TOTAL REQUEST			-	-	-	-	5,879
TOTAL REQUEST (ROUNDED)			-	-	-	-	323
EQUIPMENT PROVIDED FROM OTHER APPROPRIATIONS (NON ADD)			-	-	-	-	6,202
			-	-	-	-	6,200
			-	-	-	-	810
<b>10. DESCRIPTION OF PROPOSED CONSTRUCTION</b>							
<p>The building will be three stories with steel framing, metal floor deck and concrete fill, metal roof deck with rigid board insulation and EPDM roofing. The foundation will be treated wood piles and concrete caps and floor slab. The exterior walls will be brick with concrete masonry unit backup and rigid insulation in between the two wythes or steel studs, gypsum sheathing and rigid insulation. The interior walls will be concrete masonry units or gypsum wallboard on metal studs. The building will contain plumbing, fire alarms, wet pipe sprinkler system, heating, ventilating and air conditioning system and a complete electrical system for lighting and equipment. The project includes utility connections, site improvements and a heliport. (Air Conditioning: <u>163 Tons</u>).</p> <p style="text-align: right;"><b>SEISMIC ZONE: 1</b></p>							
<b>11. Requirement: 60,444 SF Adequate: 0 SF Substandard 0 SF</b>							
<p><b>PROJECT:</b> Provide an adequate Operations Center for the 2d Force Service Support Group in the French Creek Area.</p> <p><b>REQUIREMENT:</b> The Commanding General, 2d FSSG and his Staff manage more than ten thousand marines. The Staff is comprised of 393 personnel. A facility if required to house these personnel for this management function.</p> <p><b>CURRENT SITUATION:</b> The 2d FSSG Headquarters is now located in an old WW II barracks in the Hadnot Point Area, some three miles away from their living/working area in the French Creek Area.</p>							



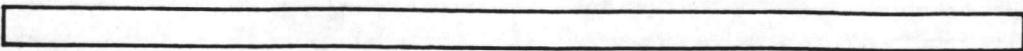
1. COMPONENT NAVY	FY 19 <u>88</u> MILITARY CONSTRUCTION PROJECT DATA	2. DATE 1 MAY 1986
3. INSTALLATION AND LOCATION MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA		
4. PROJECT TITLE DIVISION OPERATIONS CENTER	5. PROJECT NUMBER P-057	
<p><u>IMPACT IF NOT PROVIDED:</u> The French Creek Area is a newly developed area for the 2nd Force Service Support Group and there are no facilities available for conversion to an operations building. The Commanding General and his Staff will continue to utilize substandard space in Hadnot Point with a resulting decrease in management efficiency and impairment to combat readiness.</p>		

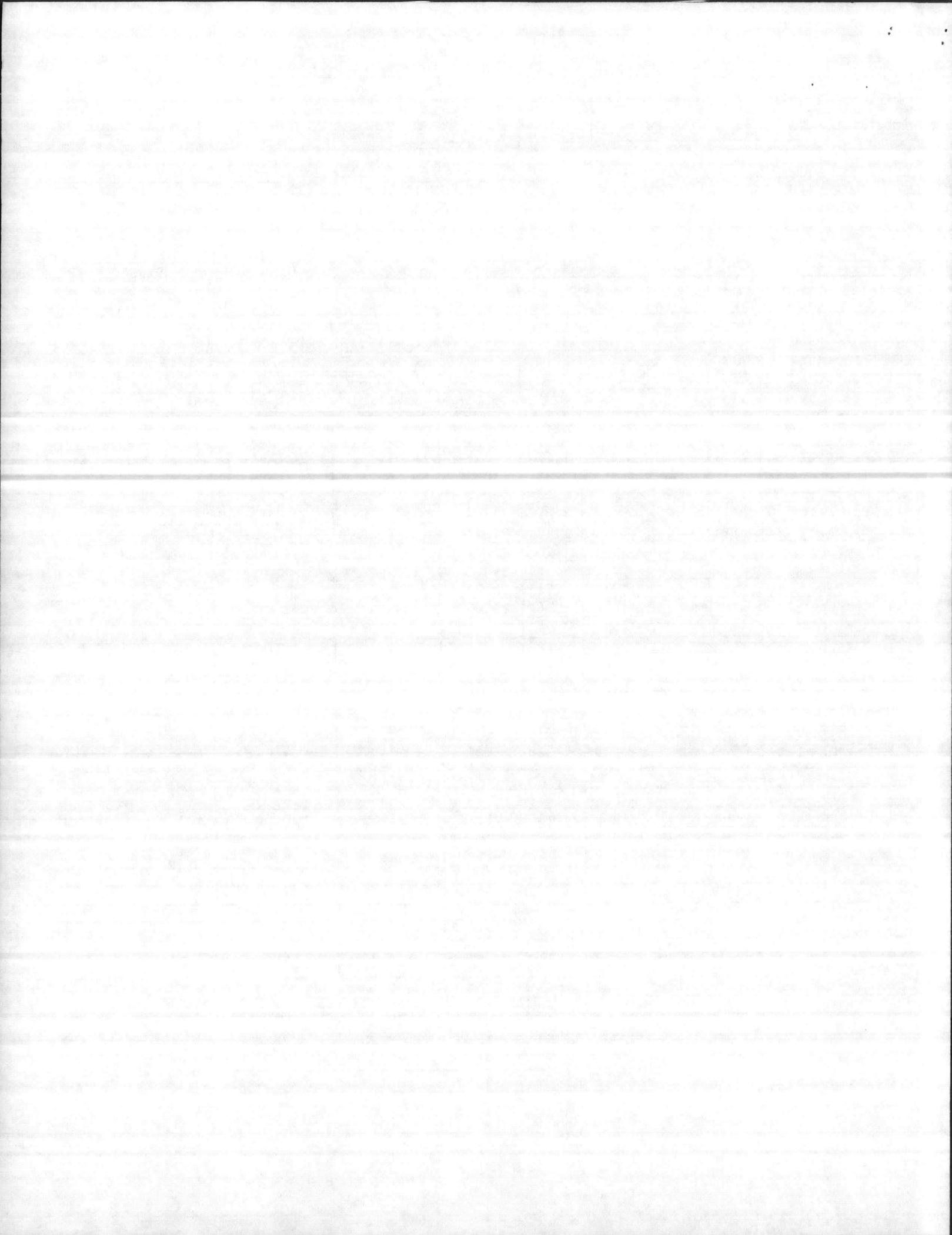


'BUILDING BUDGET ESTIMATE SUMMARY SHEET FOR P-057

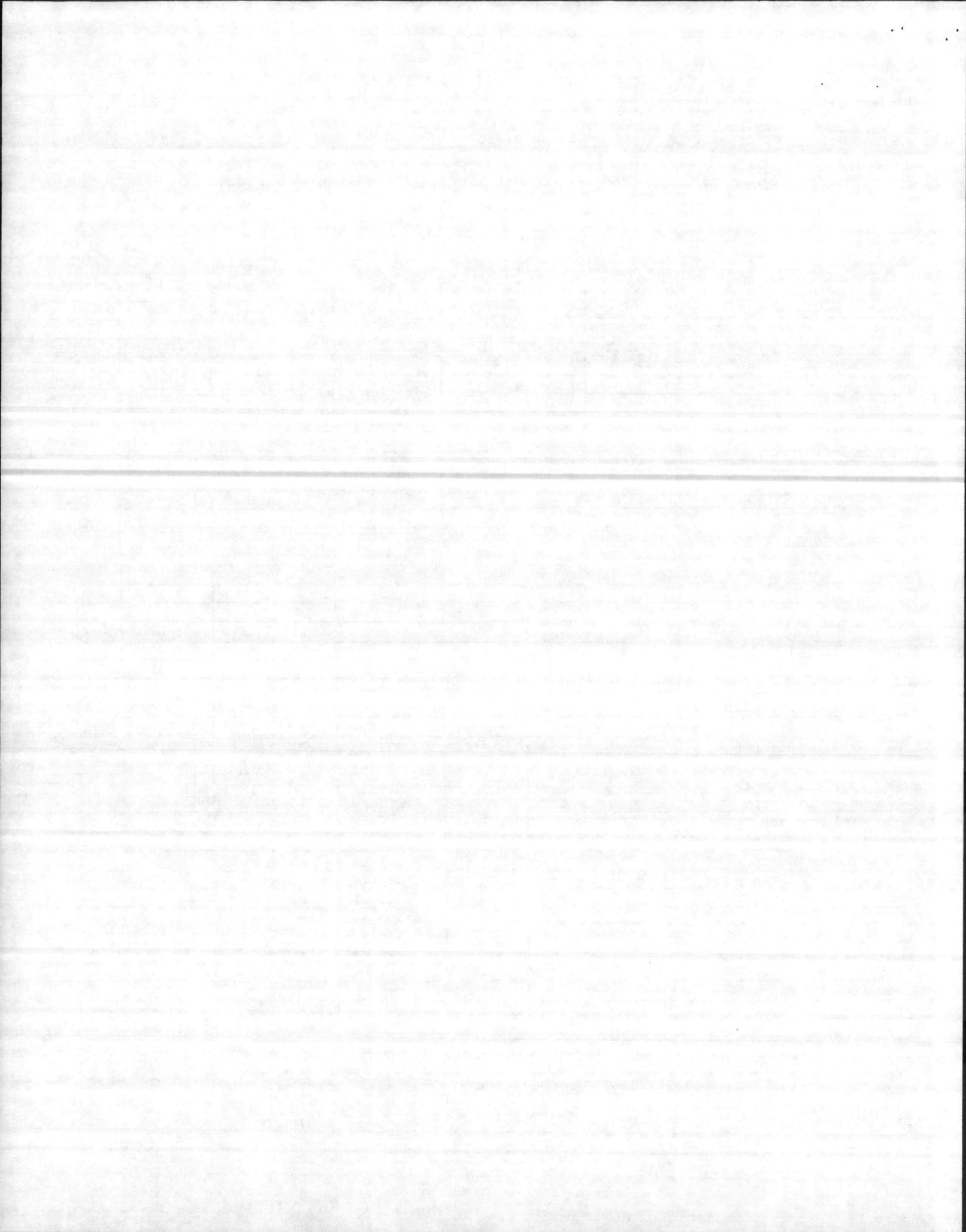
Title: Division Operations Center Cost Escalated To: 1 April 1988  
 Location: Marine Corps Base, Camp Lejeune, NC Escalation: 7%  
 Prepared By: Gantt Huberman Arch. Date: 1 May 1986 Contingency: 5%

Building/	60,364 Square Feet	\$/SF	\$/SYS	SYS QUAN.	TOTAL	BUILT-IN	
						BUILDING	EQUIP.
01	Foundation System	6.30	18.40	20,650 S.F.	380,000	380,000	
02	Slab on Grade	.13	.13	60,364 S.F.	8,000	8,000	
03	Structural System	9.26	9.26	60,364 S.F.	559,000	559,000	
04	Supported Floor System	7.87	7.87	60,364 S.F.	475,000	475,000	
05	Stair System	.58	365.58	96 R1	35,000	35,000	
06	Roof System	3.51	9.39	22,588 S.F.	212,000	212,000	
07	Exterior Wall System	4.24	11.65	21,972 S.F.	256,000	256,000	
08	Interior Wall System	1.71	1.38	74,699 S.F.	103,000	103,000	
09	Interior Finishes System	10.39	10.39	60,364 S.F.	627,000	627,000	
10	Doors and Windows System	9.18	44.22	12,527 S.F.	554,000	554,000	
11	Specialties	2.27	2.27	60,364 S.F.	137,000	137,000	
12	Plumbing - Domestic	1.13	800.00	85 EA	68,000	68,000	
13	Roof Drainage	.20	857.14	14 EA	12,000	12,000	
15	HVAC	5.28	163.08	1956 MBTU/Ton	319,000	319,000	
21	Elevators and Escalators	.91	18,333	3	55,000	--	55,000
24	Computer Room System	.76	153.33	300 MBTU/Ton	46,000	46,000	
26	Sprinkler System	.78	.75	60,364 S.F.	47,000	--	47,000
28	Fire Alarm System	.48	.48	60,364 S.F.	29,000	--	29,000
29	Halon System	.25	33.33	450 LB	15,000	--	15,000
31	Power System	5.35	242.86	1330 KW	323,000	323,000	
32	Lighting System	1.52	1.52	60,364 S.F.	92,000	92,000	
34	Security Detection System	.05	.05	60,364 S.F.	3,000	--	3,000
38	Electrical Generators	.83	333.33	159 KW	50,000	50,000	
41	Telephone System	.28	.28	60,364 S.F.	17,000	--	17,000
42	Intercom System	.10	.10	60,364 S.F.	6,000	--	6,000
44	Clock System	.25	.25	60,364 S.F.	15,000	--	15,000
48	Raised Floor	.48	21.23	1366 S.F.	29,000	--	29,000
SUBTOTAL BUILDING		74.09		60,364 S.F.	4,472,000	4,256,000	216,000









SPECIAL CONSIDERATIONS CHECKLIST

P-NO 057 PROJECT TITLE Division Operations Center  
LOCATION Marine Corps Base, Camp Lejeune, NC

Place a Check (✓) by each statement that is applicable.

POLLUTION PREVENTION, ABATEMENT, AND CONTROL

- Air/water pollution will be caused by this project and will be abated by:  
 Corrective measures included as part of this project  
 Related Project No. \_\_\_\_\_

ENVIRONMENTAL IMPACT

- An environment impact assessment indicates the proposed project will significantly impact the environment or is highly controversial and a candidate environmental impact statement has been/will be submitted.

PRESERVATION OF HISTORICAL SITES AND STRUCTURES

- The proposed project will have an effect on a district, site, building, structure, object or setting listed in the National Register of Historic places as indicated on the attached paper.

DESIGN FOR ACCESSIBILITY OF PHYSICALLY HANDICAPPED PERSONNEL

- Provisions for physically handicapped personnel will not be provided because: \_\_\_\_\_

FLOODPLAIN MANAGEMENT AND WETLANDS PROTECTION

- Executive Orders 11988 and 11990 apply and have been accommodated.

"NEW START" CRITERIA FOR COMMERCIAL OR INDUSTRIAL ACTIVITIES PROGRAM

- The project is a new start in accordance with OMB Circular A-76 and has been approved by the Assistant Secretary of the Navy.

INTERGOVERNMENTAL COORDINATION

- OMB Circular A-95 applies and coordination of the project with state and area-wide clearinghouses and agencies has been accomplished.

PLANNING IN THE NATIONAL CAPITAL REGION (IF APPLICABLE)

- The siting and configuration of the project have been submitted to the National Capital Planning Commission for approval.

- The project has been approved by the Commission of Fine Arts and Advisory Council on Historic Preservation. Approval by the National Capital Planning Commission is pending.

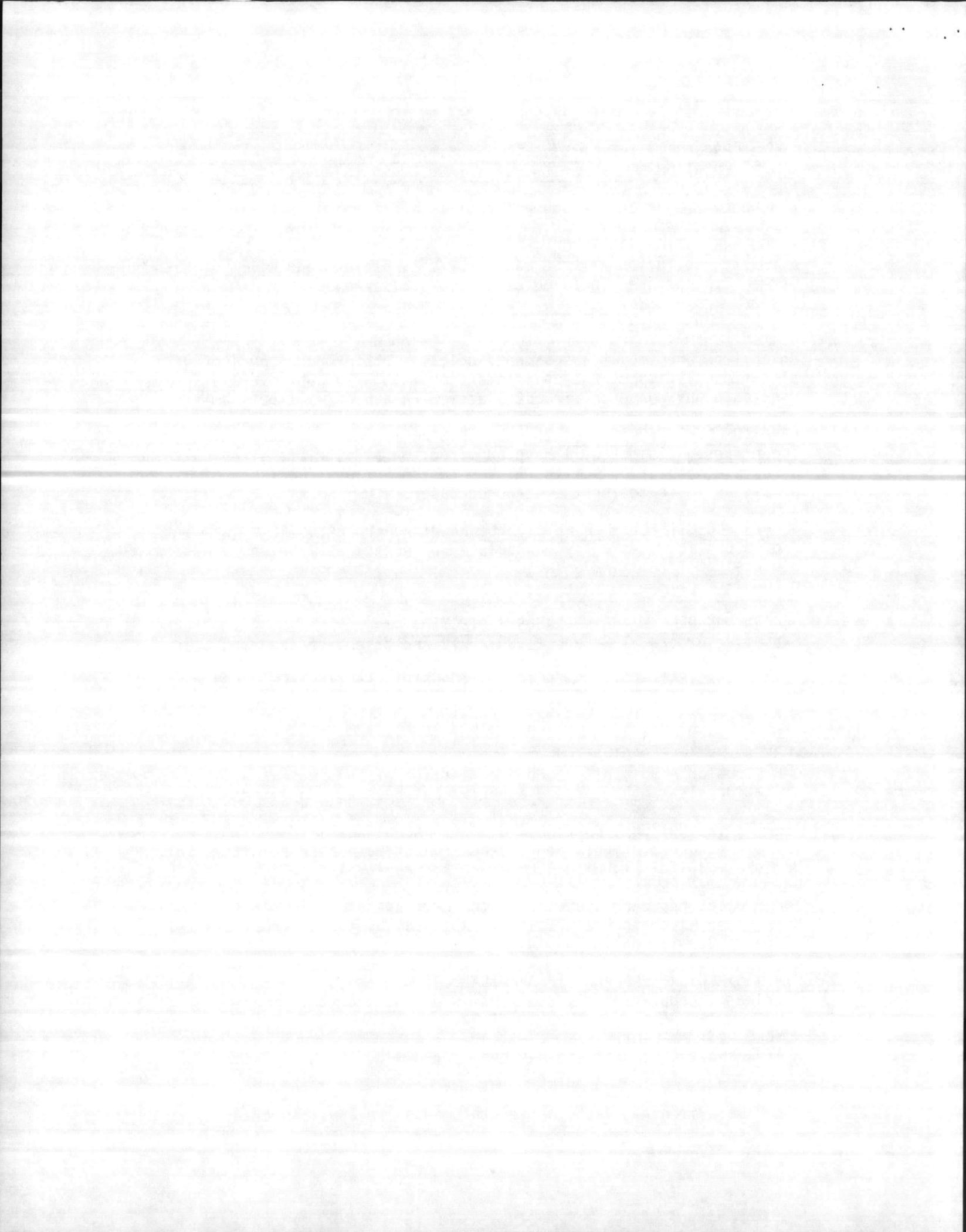
NATO INFRASTRUCTURE PROGRAM (IF APPLICABLE)

- Prefinancing under NATO procedures is planned for this project.

LIFE CYCLE COST ANALYSIS

- A life cycle cost analysis has been performed for this project.

- Check here if none of the above statements are applicable.



## DESIGN CONCEPTS

ACTIVITY AND LOCATION: MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA  
PROJECT TITLE: DIVISION OPERATIONS CENTER  
DATE: 1 MAY 1986

### Use of Definitives and Previous Designs

Definitive drawings are not available for this project. The proposed design is based on modifications to sketches attached to DD Form 1391 dated 11 September 1984 and DD Form 1391c dated 15 June 1984. The design modifications were required to accommodate functional criteria and site characteristics.

### Special Design Characteristics

Due to the existing soil conditions and the structural loading of this building a pile foundation will be provided.

Raised access flooring will be required in the Communication Center.

A diesel engine generator will be provided for emergency power for egress lighting, security, and fire alarm systems and to communications and computer equipment.

An uninterruptible power supply will be required for selected computer and communications equipment to provide continuous power during the transition from normal to emergency power.

A complete synchronous wired clock system will be provided. The system will provide continuous, automatic supervision of all secondary clocks. Clocks will be the 12 hour, 12 inch diameter, analog type.

### Pollution Abatement Aspects of Design

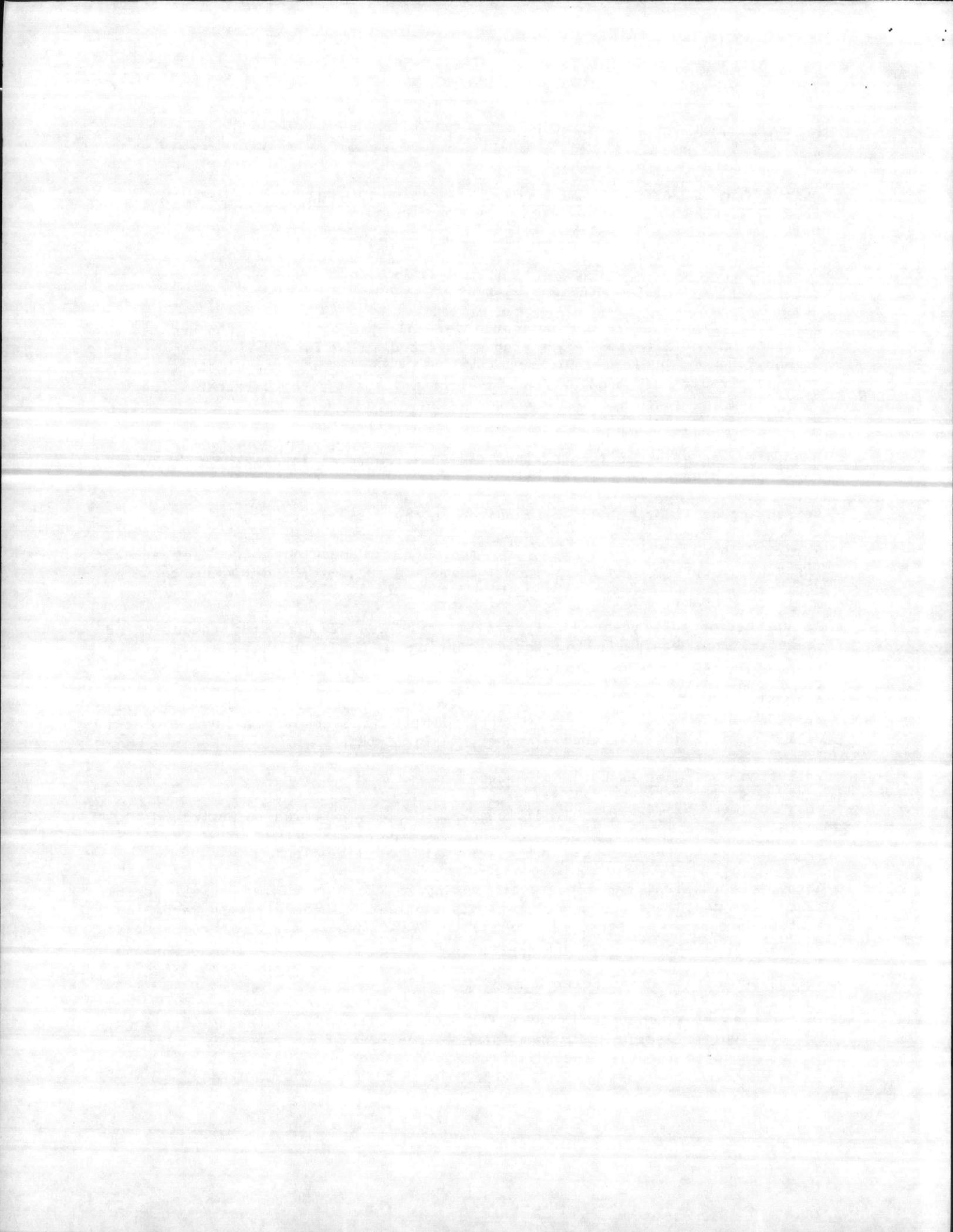
This project will not cause additional air, water, or noise pollution.

### Special Engineering Services

A complete physical and topographic survey has been completed. Soil boring tests have been made and a soil analysis prepared. A computerized mechanical systems program was performed to select HVAC systems based on comparative economic analysis of three different systems.

### Energy Conservation and Solar Energy

1. In view of recent past studies for active solar utilization at this location which clearly indicated solar energy not to be feasible, solar was not studied for this specific project.



2. Energy Conservation:

A heat pump HVAC system is being provided based on an LCC analysis. See Appendix "A".

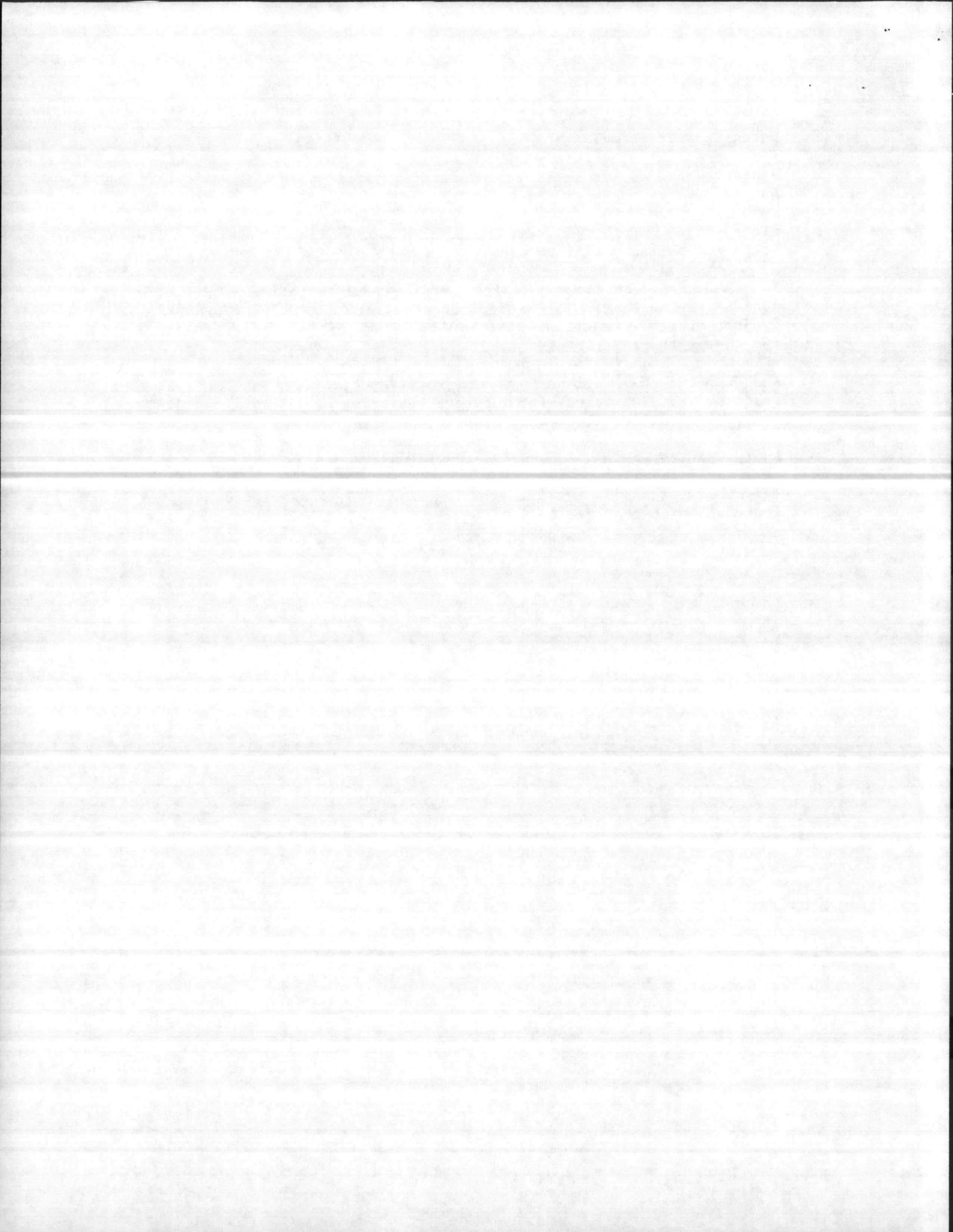
Fluorescent lighting fixture with high power factor energy efficient lamps and ballasts will be used.

The Building Code Number is 610, Office Administrative. The climatic zone is Region Four. The energy budget figure is 50,000 BTU/SF/YR. The project energy consumption will be 43,475 BTU/SF/YR. This project meets the energy budget criteria.

3. A KWH meter with demand register shall be provided at the pad-mount transformer. Provisions for future submetering of lighting and HVAC will be provided in the electrical distribution system.

4. Energy Monitoring and Control System (EMCS):

The HVAC system will provide sensors, DTC, FID, and related hardware for interface with the base EMCS.



COLLATERAL EQUIPMENT REQUIREMENTS (Initial Outfitting)  
 LANTDIV NORVA 4-11010/6 (Rev.11/81)

DATE  
 1 May 1986

1 ACTIVITY (Name and Location)

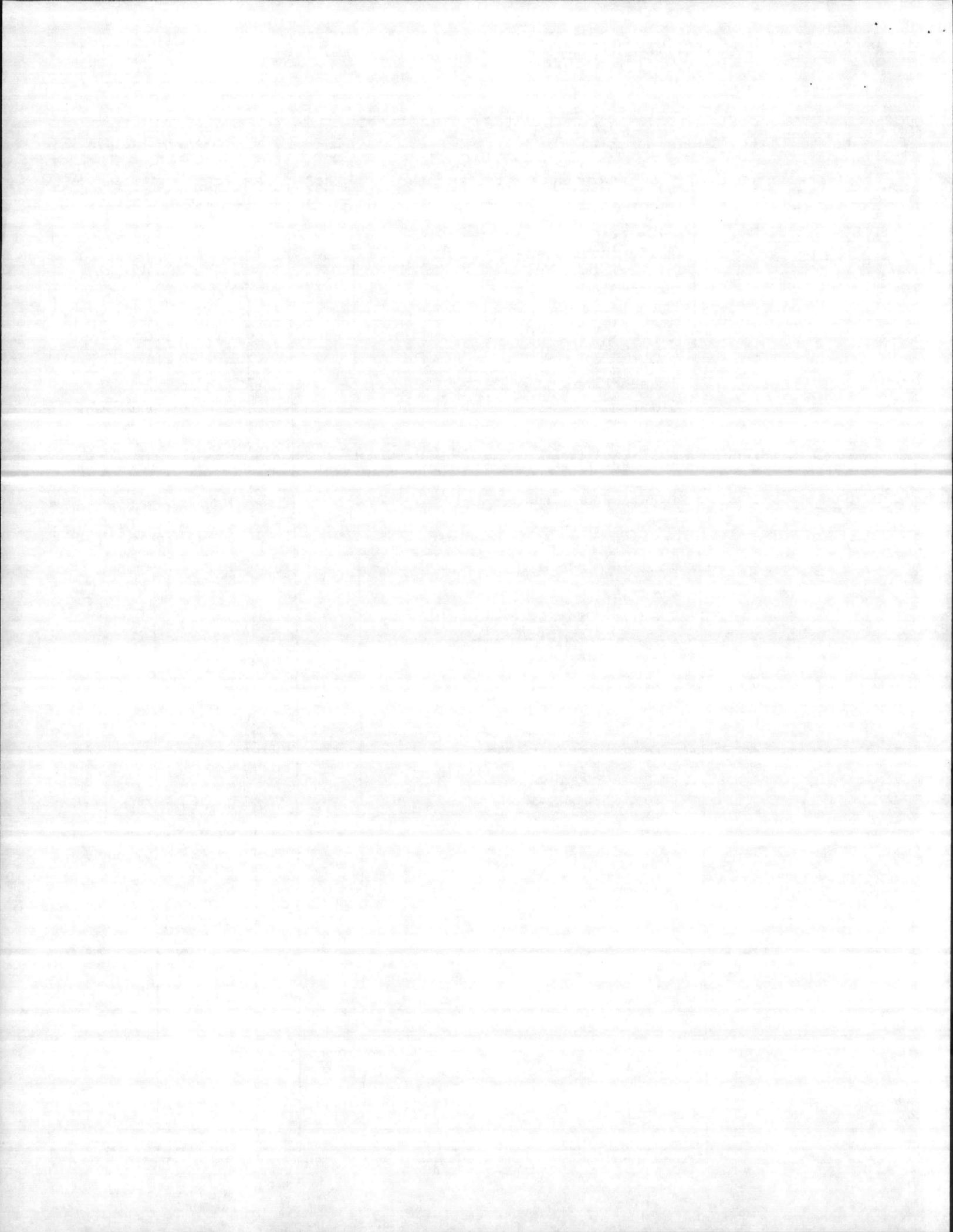
Marine Corps Base, Camp Lejeune, North Carolina

2. PROJECT TITLE

Division Operations Center

P. NO.  
 P-057

COG. SYMBOL AND FED. STOCK NO. OR OTHER SOURCE	ITEM/EQUIPMENT DESCRIPTION	QUAN- TITY	UNIT OF ISSUE	UNIT PRICE	TOTAL COST
1. <u>BUILT-IN EQUIPMENT TO BE MCON FUNDED:</u>	Elevator Sprinkler System Fire Alarm System Halon System Security Detection System Telephone System Intercommunications System Clock System Raised Floor TOTAL				55,000.00 47,000.00 30,000.00 15,000.00 3,000.00 17,000.00 6,000.00 15,000.00 29,000.00 <u>\$217,000.00</u>
2. <u>EQUIPMENT PROVIDED FROM OTHER APPROPRIATIONS:</u>	Uninterrupted Power System Telephone System Exterior Communications TOTAL				52,000.00 24,000.00 457,000.00 <u>\$533,000.00</u>



**COLLATERAL EQUIPMENT REQUIREMENTS (Initial Outfitting)**  
**LANTDIV NORVA 4-11010/6 (Rev.11/81)**

DATE  
1 May 1986

1. ACTIVITY (Name and Location)

Marine Corps Base, Camp Lejeune, North Carolina

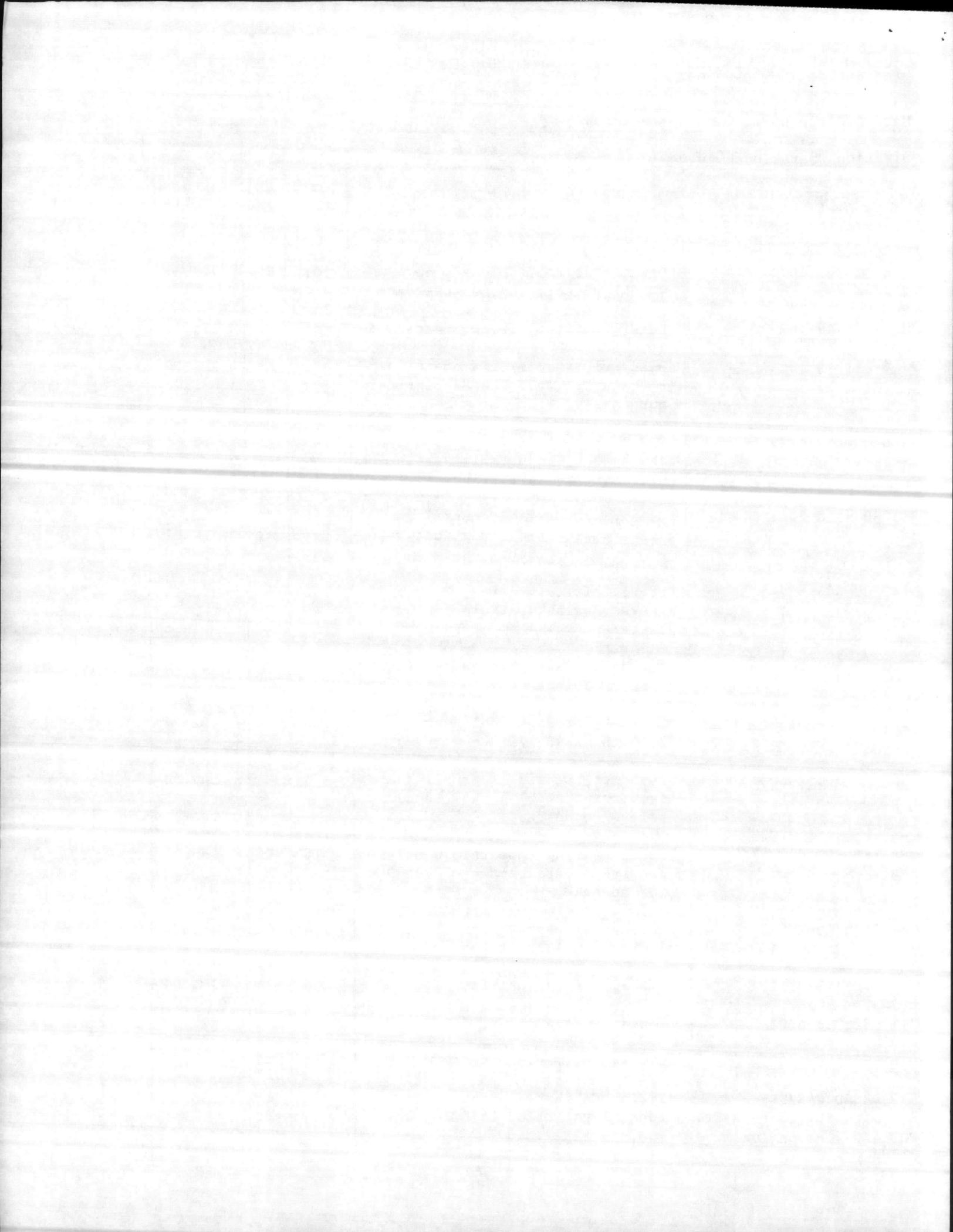
2. PROJECT TITLE

Division Operations Center

P. NO.

P-057

COG. SYMBOL AND FED. STOCK NO. OR OTHER SOURCE	ITEM/EQUIPMENT DESCRIPTION	QUAN- TITY	UNIT OF ISSUE	UNIT PRICE	TOTAL COST
<b>3. EXPENSE ITEMS:</b>					
7110-00-149-1630	Desk, flat top, dbl ped, 60"x30" walnut pattern top, no overhang	101	EA	227.51	22,979.00
7110-00-149-1629	Desk, flat top, walnut pattern top	55	EA	171.40	9,427.00
7110-01-015-1361	Desk, flat top w/attachment for secretarial and general clerical purposes	71	EA	192.00	13,632.00
7110-00-082-6229	Chair, rotary, tilting seat and chair back, adjustable seat height w/arms, w/casters, navy	145	EA	63.46	9,202.00
7110-00-958-8044	Chair, secretarial, nontilting seat, spring back, adj. backrest w/o arms, w/casters, navy	64	EA	48.00	3,072.00
7110-00-685-5534	Stand, office machine, 2 drop leaves, walnut pattern top, w/ casters	36	EA	122.00	4,392.00
7110-00-497-2012	Filing cabinet, 5 drawers, legal size, w/o lock	69	EA	146.20	10,088.00
7125-00-764-6129	Cabinet, storage, dbl door 36"x 18" x 90-1/16" H	30	EA	132.27	3,968.00
GSA 7198-00-242-3503	Customer, wearing apparel, con- temporary, 4 dbl hooks, round pole w/round base	25	EA	40.00	1,000.00
GSA 7195-00-004-6716	Rack, wearing apparel, 6 mtl hangers, contemporary, 78"x 30"x 20" at base	18	EA	55.63	1,001.00
GSA 7520-00-285-5416	Wastepaper basket, dark brown, 14-1/2 H x 13"D at top	184	EA	2.75	506.00
7110-00-143-0821	Table, office, utility	36	EA	164.00	5,904.00
7110-00-926-6702	Table, coffee	15	EA	122.00	1,830.00
6645-00-530-3342	Clock, wall, electric 12"	54	EA	6.30	340.00
BROADHEAD GARRETT 2448 Industrial Park Dr. POB 4707, Macon, GA 31208	Filing Cabinet, 4 drawer, w/comb. lock, legal size, #576225, color #44, pg 131	18	EA	186.00	3,348.00



**COLLATERAL EQUIPMENT REQUIREMENTS (Initial Outfitting)**  
 LANTDIV NORVA 4-11010/6 (Rev.11/81)

DATE  
 1 May 1986

1. ACTIVITY (Name and Location)

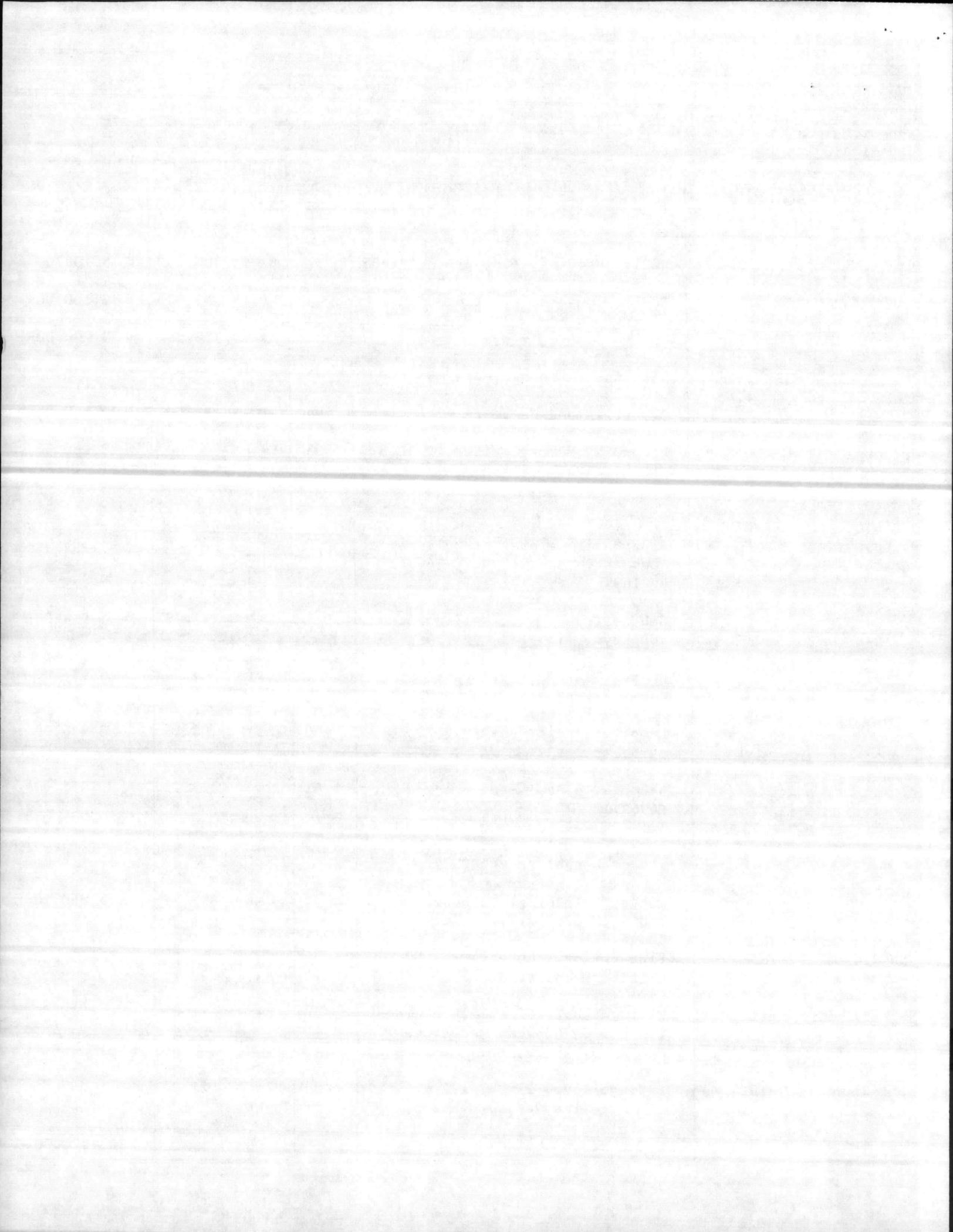
Marine Corps Base, Camp Lejeune, North Carolina

2. PROJECT TITLE

Division Operations Center

P. NO.  
 P-057

COG. SYMBOL AND FED. STOCK NO. OR OTHER SOURCE	ITEM/EQUIPMENT DESCRIPTION	QUAN- TITY	UNIT OF ISSUE	UNIT PRICE	TOTAL COST
<b>3. EXPENSE ITEMS: (cont'd)</b>					
OP MONROE	Adding Machine, Monroe Model 1405	17	EA	300.00	5,100.00
FEDERAL SCHEDULE	Table, conference, 12x4x3'	6	EA	350.00	2,100.00
OP	Chair, lounge, w/arms	34	EA	150.00	5,100.00
OP	Sofa/Chaise Lounge, w/arms	22	EA	350.00	7,700.00
OP	Draperies and Hardware	294	PR	90.00	26,460.00
OP Xerox Co.	Xerox 625 Memory Writer, Duel pitch, carbon ribbon	35	EA	800.00	28,000.00
MCMaster CARR POB 440, New Brunswick NJ 08903 Catalog #90	Side chair, w/arms, tubular steel legs satin chrome, navy #4676T24 pg 163	70	EA	50.00	3,500.00
	Cabinet, key, mt1, wall mounted 100 keys, #1347A31, pg 754	7	EA	137.78	964.00
	Stamp, Time/Date recorder #8442T14, pg 519	8	EA	384.58	3,077.00
	Lamp, electric, desk #168K26 pg 88	40	EA	68.14	2,726.00
	Receptacle Ash (sand urn) pg. 173 #4962T12	41	EA	23.29	955.00
	Book King welded steel bookcases 12" deep shelves #4609T19	75	EA	103.67	7,775.00
	Locker, clothing, 12 hanger #4864T12 12x15x12, pg 166	32	EA	498.45	15,950.00
NSN4210-00-202-7858	Fire Extinguisher, 15 lbs CO <sub>2</sub> cartridge-operated, class B/C	20	EA	100.74	2,015.00
NSN 4210-00-965-1111	Extinguisher, Fire, dry chemical Class B/C, CO <sub>2</sub> gas cartridge operated, 20 lb cap., Ansul Brand	10	EA	91.81	918.00
NSN 4210-00-720-1815	Extinguisher, Fire 1-1/2 gal. air expelled water, Class A, stainless steel	11	EA	27.00	297.00
	<b>TOTAL EXPENSE ITEMS</b>				<u>203,326.00</u>



COLLATERAL EQUIPMENT REQUIREMENTS (Initial Outfitting)  
 LANTDIV NORVA 4-11010/6 (Rev.11/81)

DATE 1 MAY 1986

1 ACTIVITY (Name and Location)

Marine Corps Base, Camp Lejeune, North Carolina

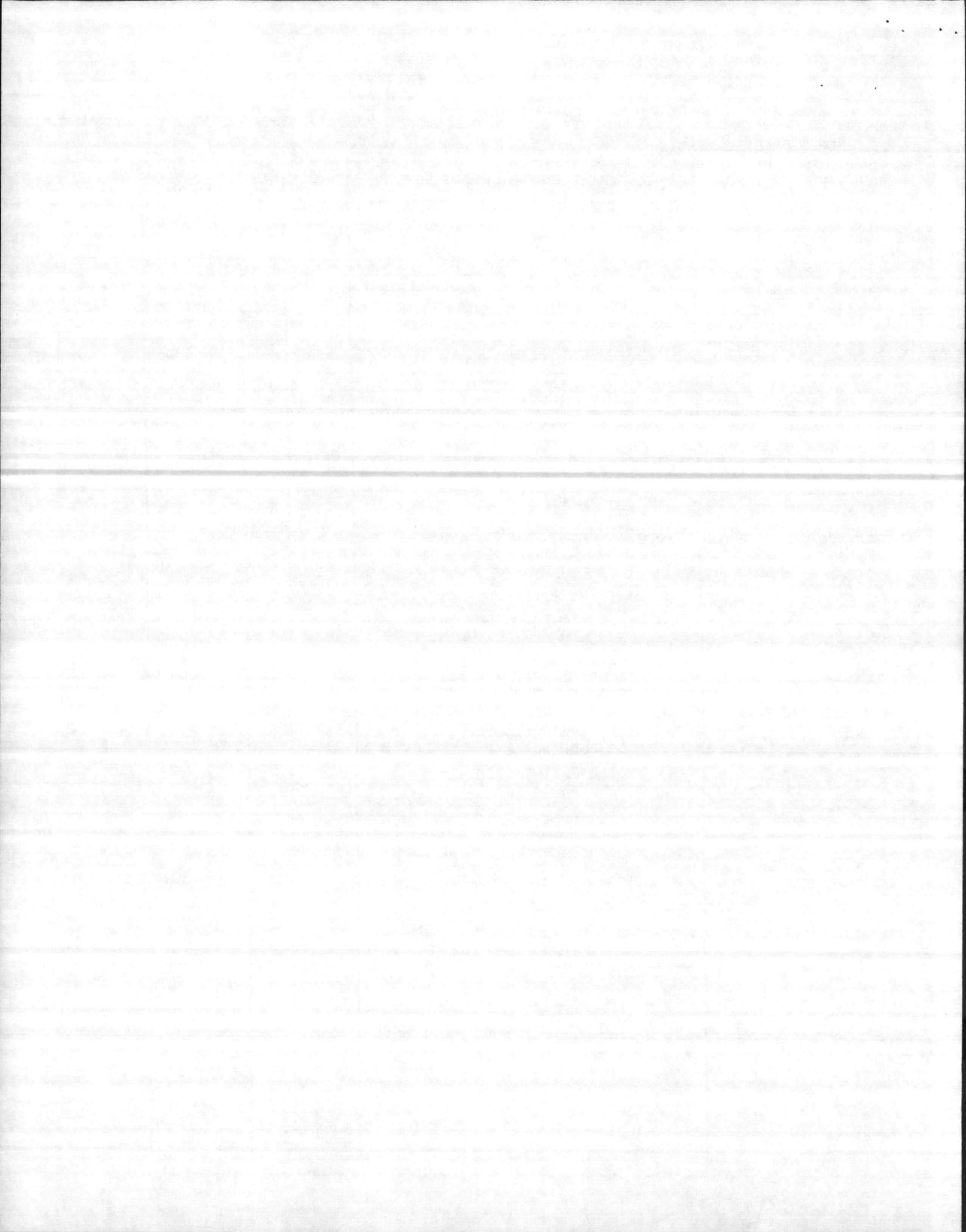
2 PROJECT TITLE

Division Operations Center

P. NO.

P-057

COG. SYMBOL AND FED. STOCK NO. OR OTHER SOURCE	ITEM/EQUIPMENT DESCRIPTION	QUAN- TITY	UNIT OF ISSUE	UNIT PRICE	TOTAL COST
4. <u>INVESTMENT ITEMS:</u>	None				
5. <u>APA EQUIPMENT:</u>	None				
6. <u>TRAINING EQUIPMENT:</u>	Projector, Movie	2	EA	650.00	1,300.00
	Screen, Movie	2	EA	235.00	470.00
	Projector, Overhead	2	EA	375.00	750.00
	TOTAL TRAINING EQUIPMENT				\$2,520.00
7. <u>EQUIPMENT ON HAND:</u>	None				
8. <u>SUMMARY:</u>	A. Equipment Provided From Other Appropriations (Item 2)				533,000.00
	10% Contingency				53,000.00
	TOTAL (E.P.F.O.A.) ITEMS				\$586,300.00
	B. Expense Items (Item 3)				203,326.00
	10% Contingency				20,333.00
	TOTAL EXPENSE ITEMS				\$223,659.00
	C. Training Equipment (Item 6)				2,520.00
	10% Contingency				252.00
	TOTAL TRAINING EQUIPMENT				\$ 2,772.00
	TOTAL (ROUNDED)				



Date 16 JUN 1986

FY 1988 MCON Project Design and Construction Data; submission of

<u>057</u>	<u>Division Operations Center</u>	<u>MCB Camp Lejeune</u>
P-No.	Title	Activity

DESIGN DATES: (Express dates as month-year, i.e. 1-86)

Start Date 10-84 (actual A/E award date or in-house work start date)

35% Complete 5-86 (actual or scheduled date)

100% Complete \_\_\_\_\_ (p&s complete and ready to advertise; actual or scheduled date)

% as of 30 Sep \_\_\_\_\_ (estimated % complete)

% as of 30 Nov \_\_\_\_\_ (estimated % complete as OSD submission; if less than 35%, provide explanation below)

% as of 1 Jan \_\_\_\_\_ (estimated % complete at Congressional submission)

% as of 1 Oct \_\_\_\_\_ (estimated % complete at start of FY of execution)

Comments: NAVFACENCOM ltr 11013/0512C of 29 May 86 placed in unprogrammed status

DESIGN TYPE

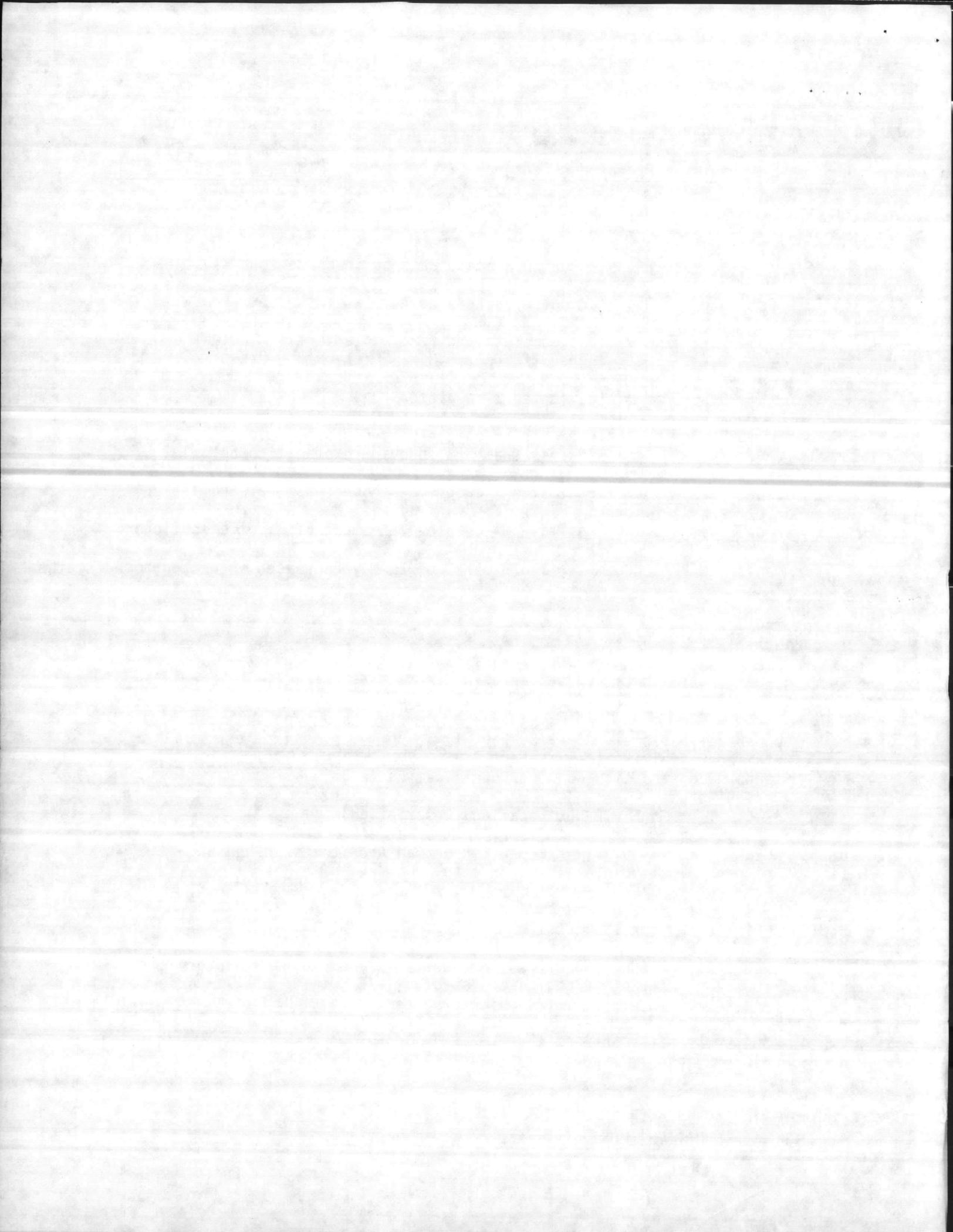
- Unique design - one of a kind facility
- Generic design - similar to private sector facilities (i.e. chapels)
- Standard layout - (i.e. BEQ, medical); \_\_\_\_\_ (Indicate type and identify)
- Conceptual Definitive (P-272, Part I) \_\_\_\_\_
- Detailed Definitive (P-272, Part II) \_\_\_\_\_
- Standard Construction Drawing/Specification (P-34) \_\_\_\_\_
- Design Re-use \_\_\_\_\_ (FY, P-No, Location, Description)

DESIGN AGENT A/E Gantt Huberman Architects In-house  
(if A/E give name, city, state) Charlotte, NC

DESIGN COST (\$000) for 100% Design

- |       |                |  |
|-------|----------------|--|
| 1.    | <u>242,266</u> | Production of p&s (A/E costs subject to 6% statutory cost limit) |
| 2.    | <u>103,676</u> | All other design costs (other A/E costs & all In-house costs)    |
| 3.    | <u>345,942</u> | Total (1) + (2) which also equals (4) + (5) (If over 8% explain) |
| <hr/> |                |  |
| 4.    | <u>304,990</u> | All Contract costs   |
| 5.    | <u>40,952</u>  | All In-house costs (estimated)                                   |

CONSTRUCTION AWARD DATE \_\_\_\_\_  
CONSTRUCTION DURATION (MOS) \_\_\_\_\_



# MILITARY CONSTRUCTION PROJECT WITNESS DATA

INSTALLATION

Marine Corps Base, Camp Lejeune, NC

PROJECT TITLE

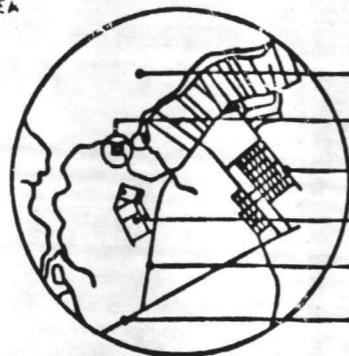
Division Operations Center

P-057

DATE

1 May 1986

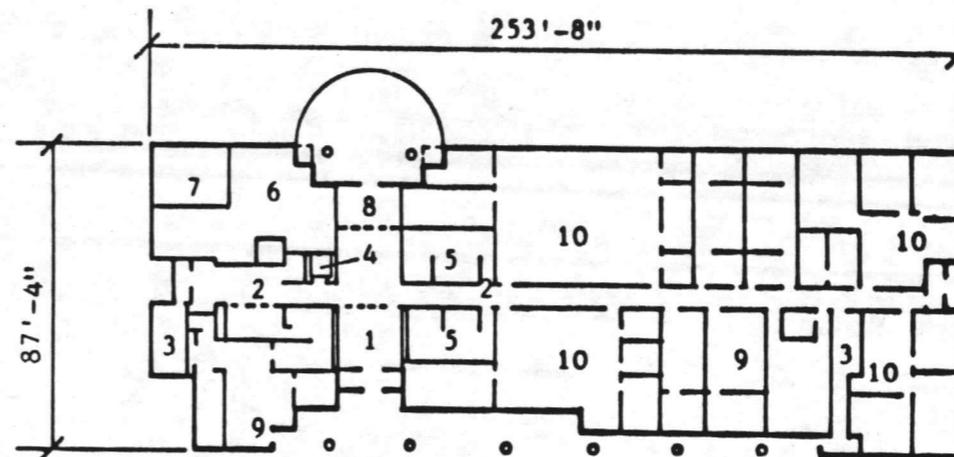
SKETCH AREA



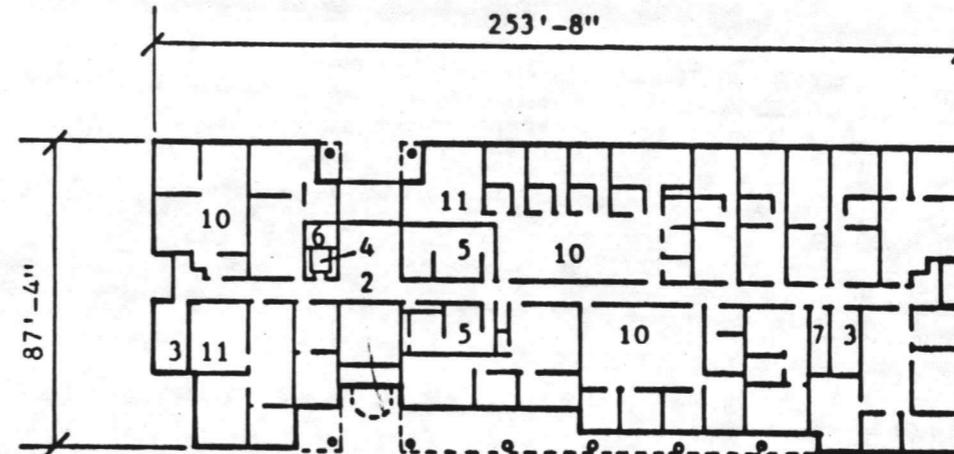
NEW RIVER  
PROJECT LOCATION  
HOLCOLM BOULEVARD  
FRENCH CREEK AREA  
MAIN SERVICE ROAD  
SNEADS FERRY ROAD

LOCATION MAP

SKETCH AREA

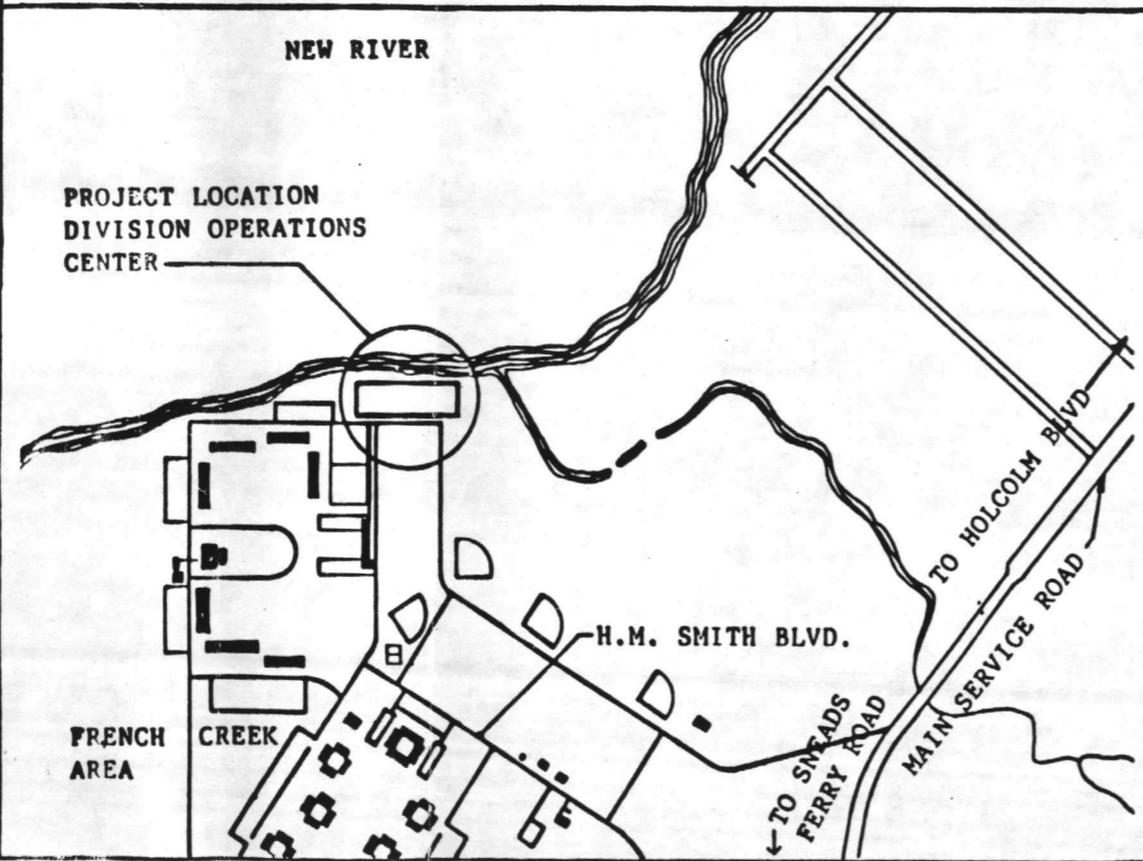


FIRST FLOOR PLAN

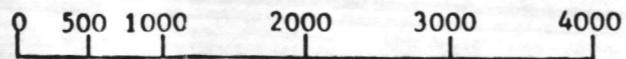


SECOND FLOOR PLAN

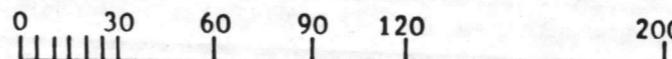
SEE LEGEND NEXT PAGE

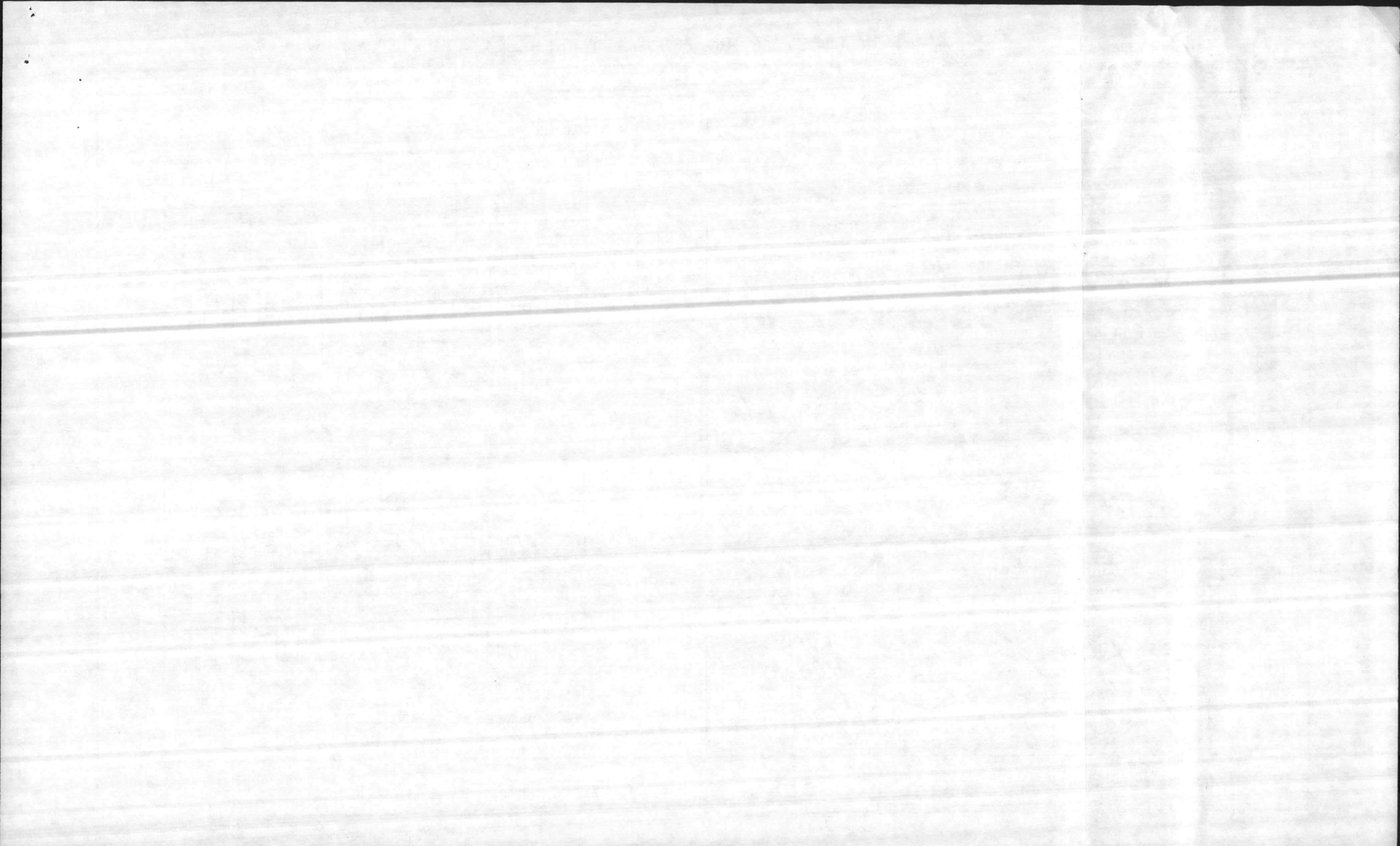


VICINITY MAP



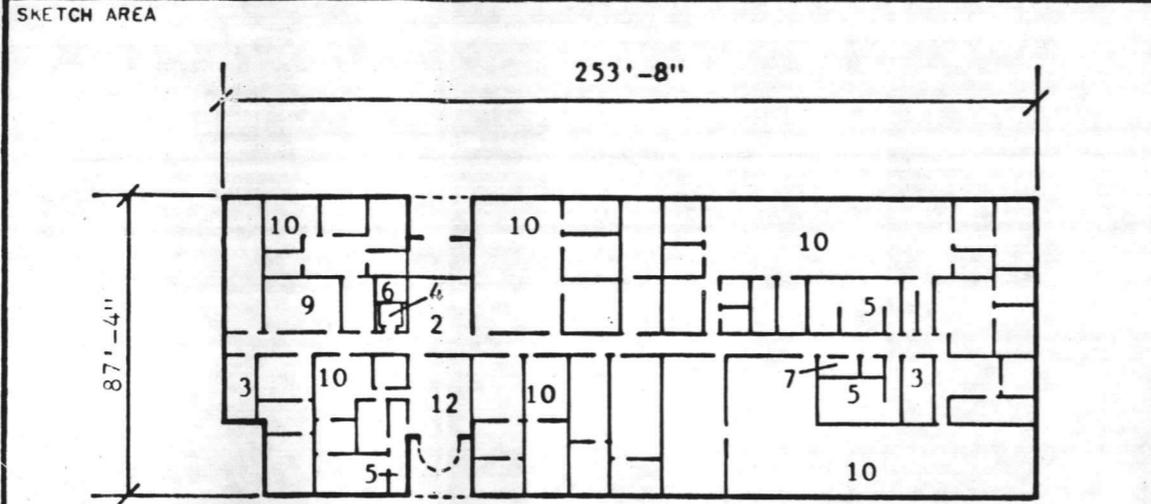
FLOOR PLANS





# MILITARY CONSTRUCTION PROJECT WITNESS DATA

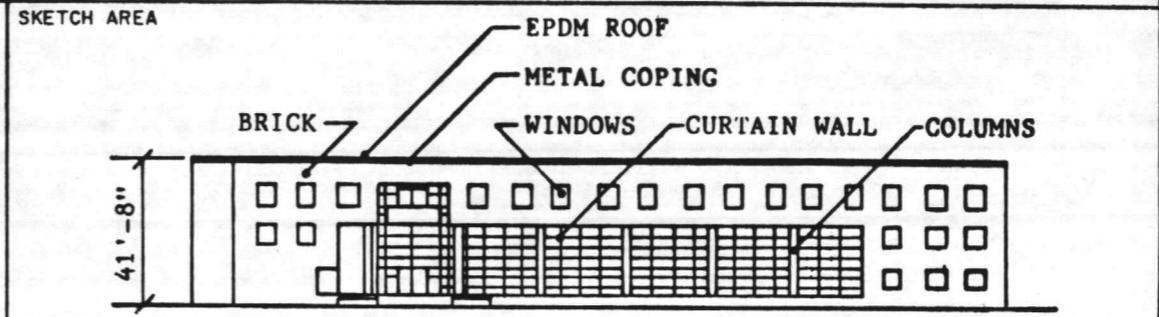
INSTALLATION Marine Corps Base, Camp Lejeune, NC	PROJECT TITLE Division Operations Center	P-057	DATE 1 May 1986
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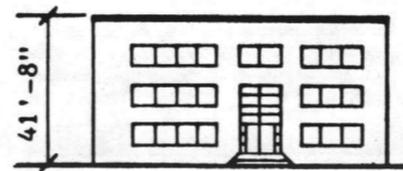
THIRD FLOOR PLAN

**LEGEND**

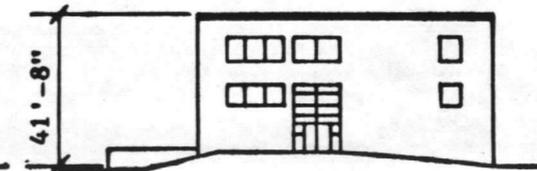
- 1. Lobby
- 2. Corridor
- 3. Stairs
- 4. Elevator
- 5. Toilets
- 6. Mechanical
- 7. Electrical/Telephone
- 8. Break Area
- 9. Conference
- 10. Offices
- 11. Library
- 12. Group Commander



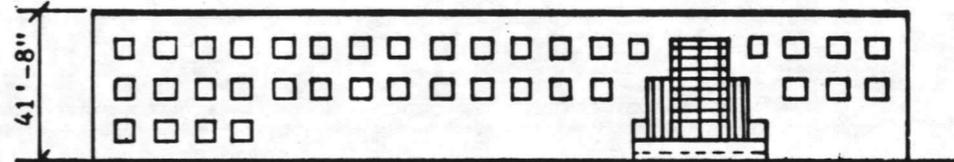
EAST ELEVATION



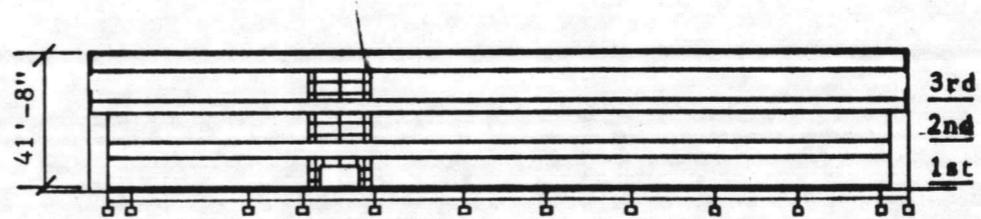
NORTH ELEVATION



SOUTH ELEVATION



WEST ELEVATION

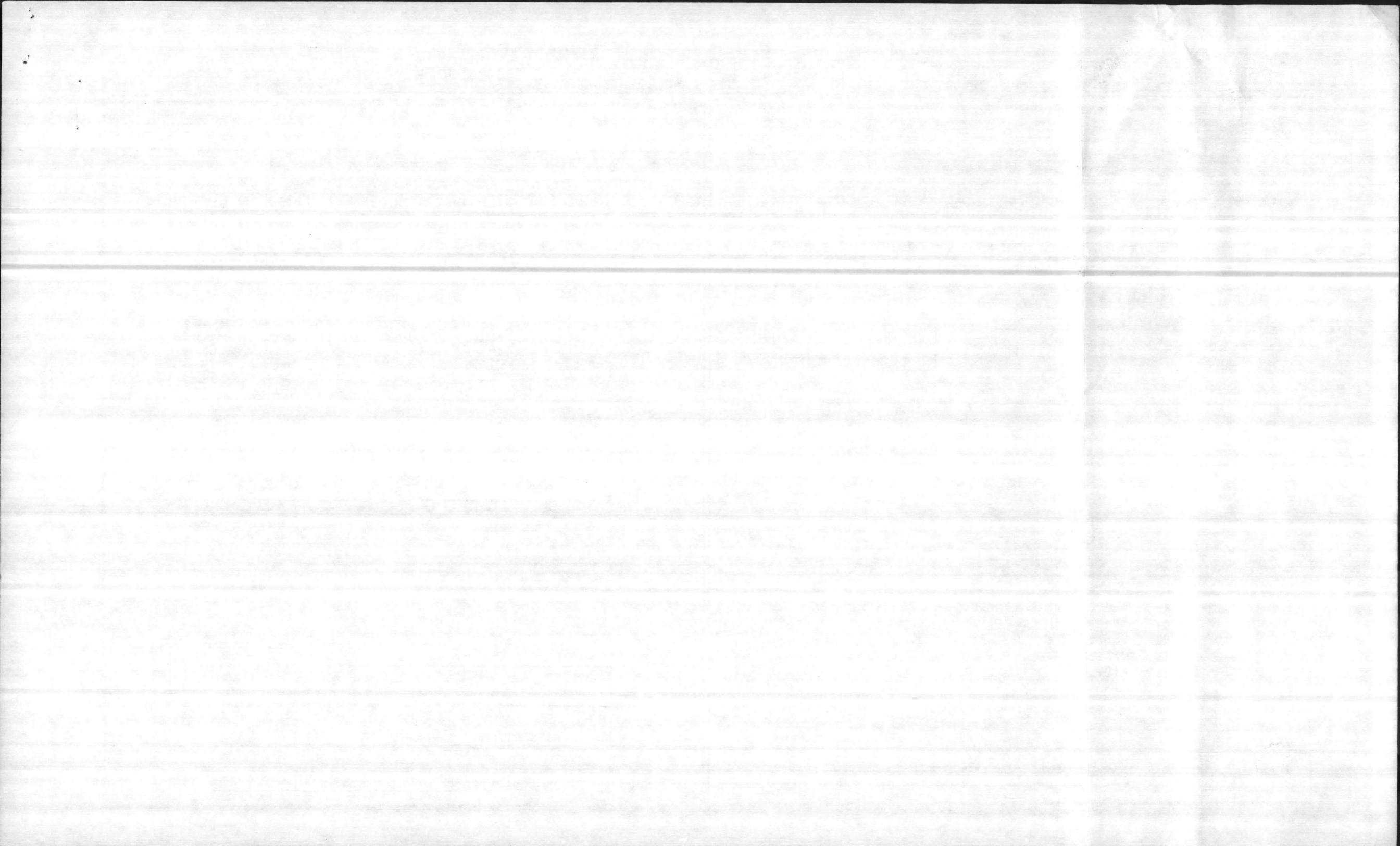


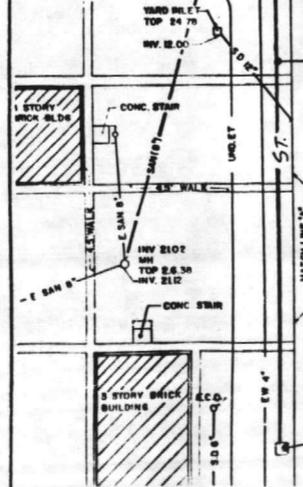
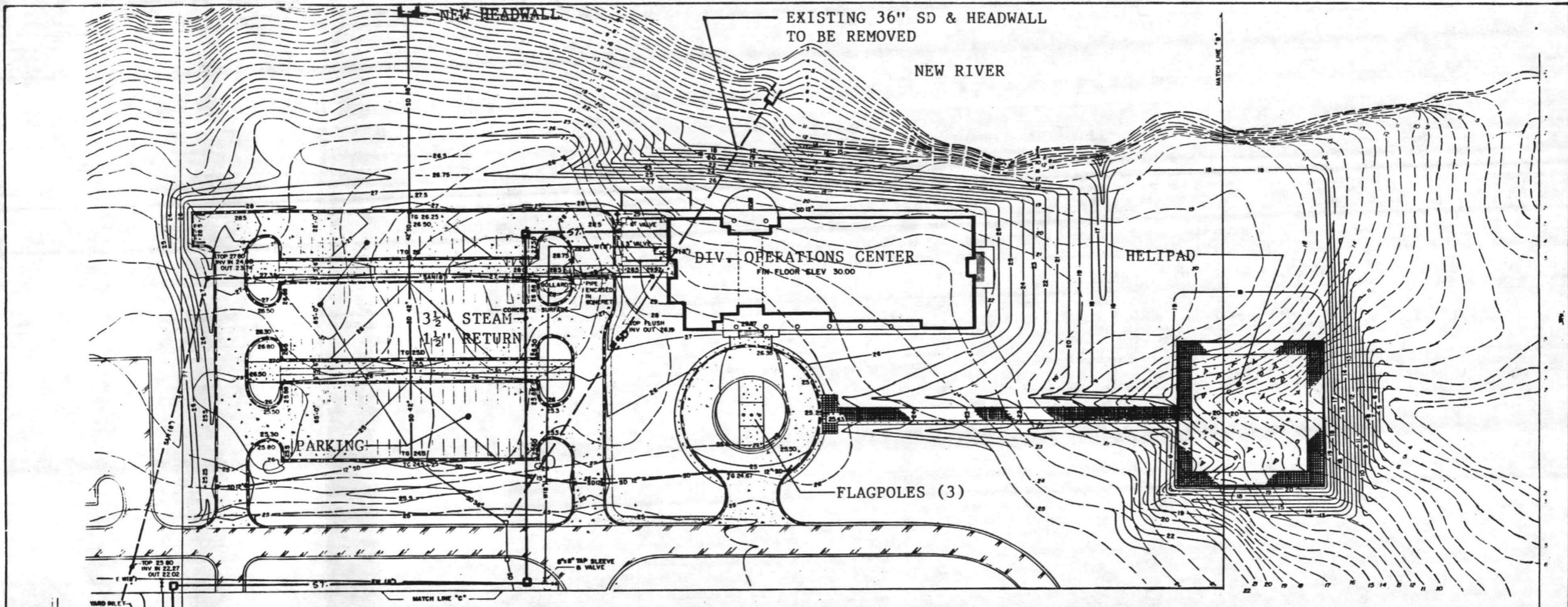
BUILDING SECTION

FLOOR PLANS



ELEVATION/SECTION





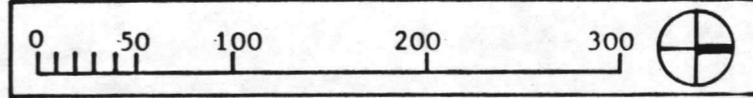
3 1/2" STEAM  
1 1/2" RETURN

LEGEND

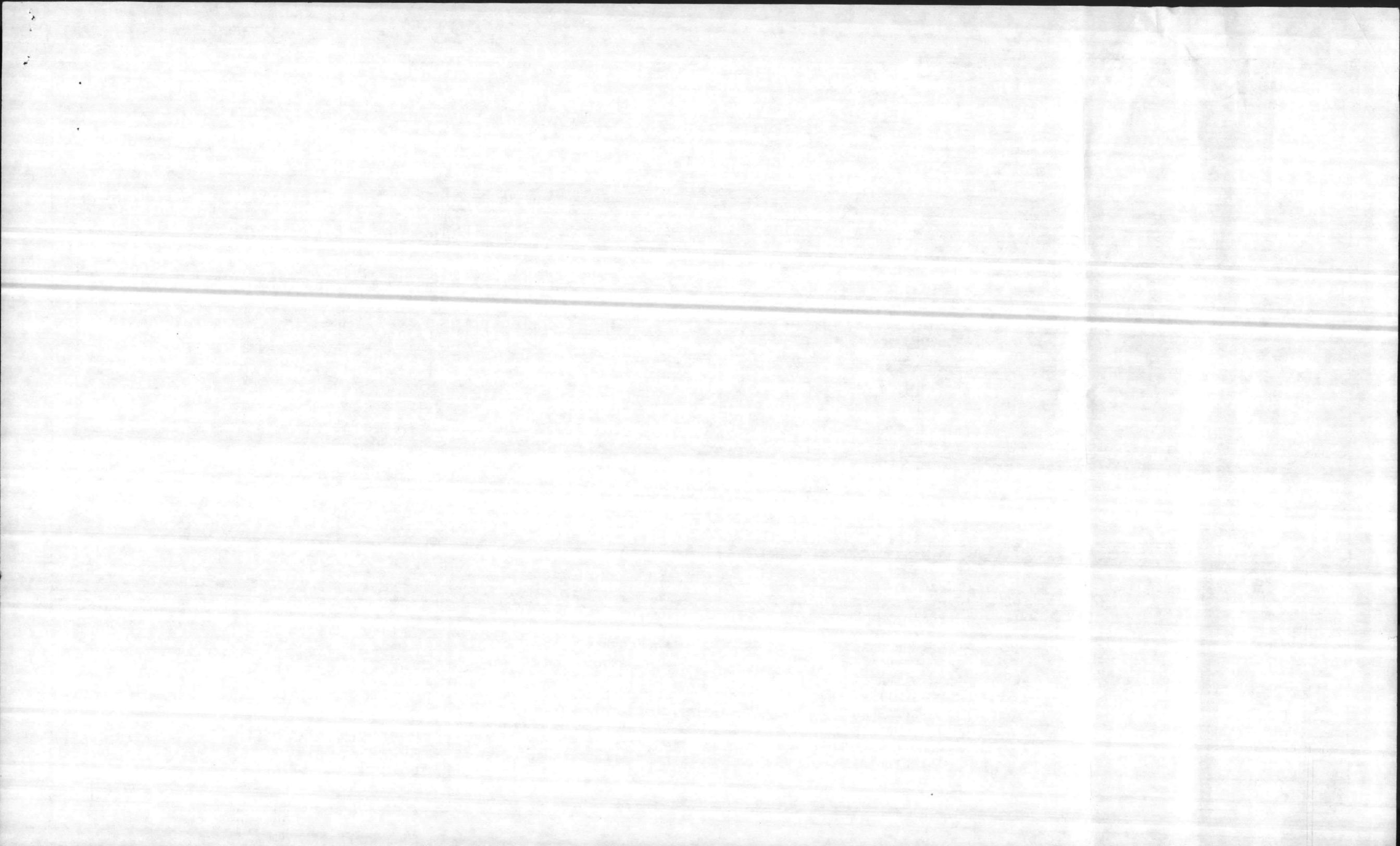
EXIST.	PROPOSED	
--27--	<b>27</b>	CONTOUR
-27-	(270)	ELEVATION
-EW-	<b>W</b>	WATER LINE
-E.SAN-	<b>SAN</b>	SANITARY SEWER
E.C.O.○	<b>C.O.○</b>	CLEAN OUT
▨	▨	CONCRETE SIDEWALK
▨	▭	BUILDINGS

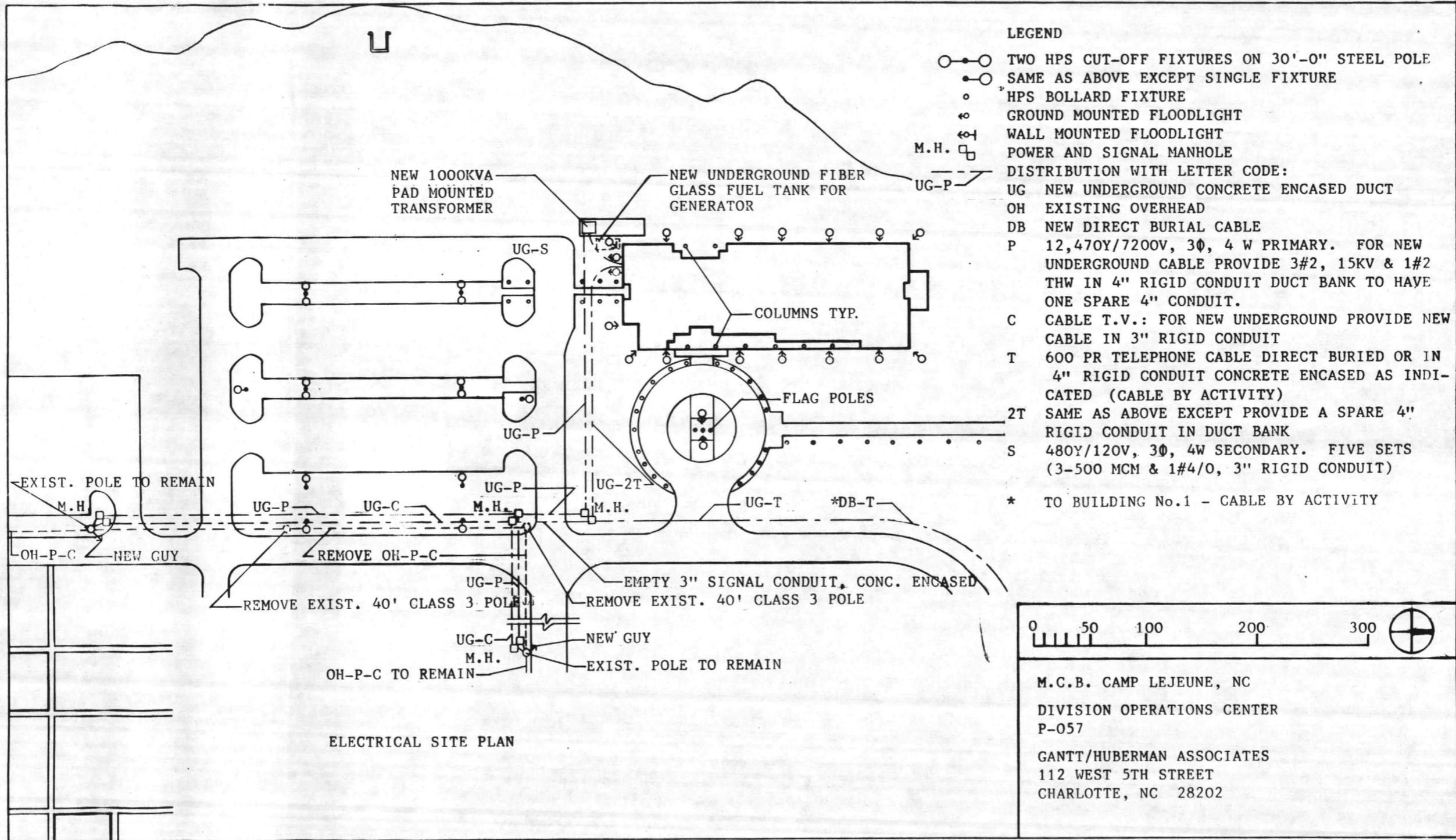
EXIST. PROPOSED

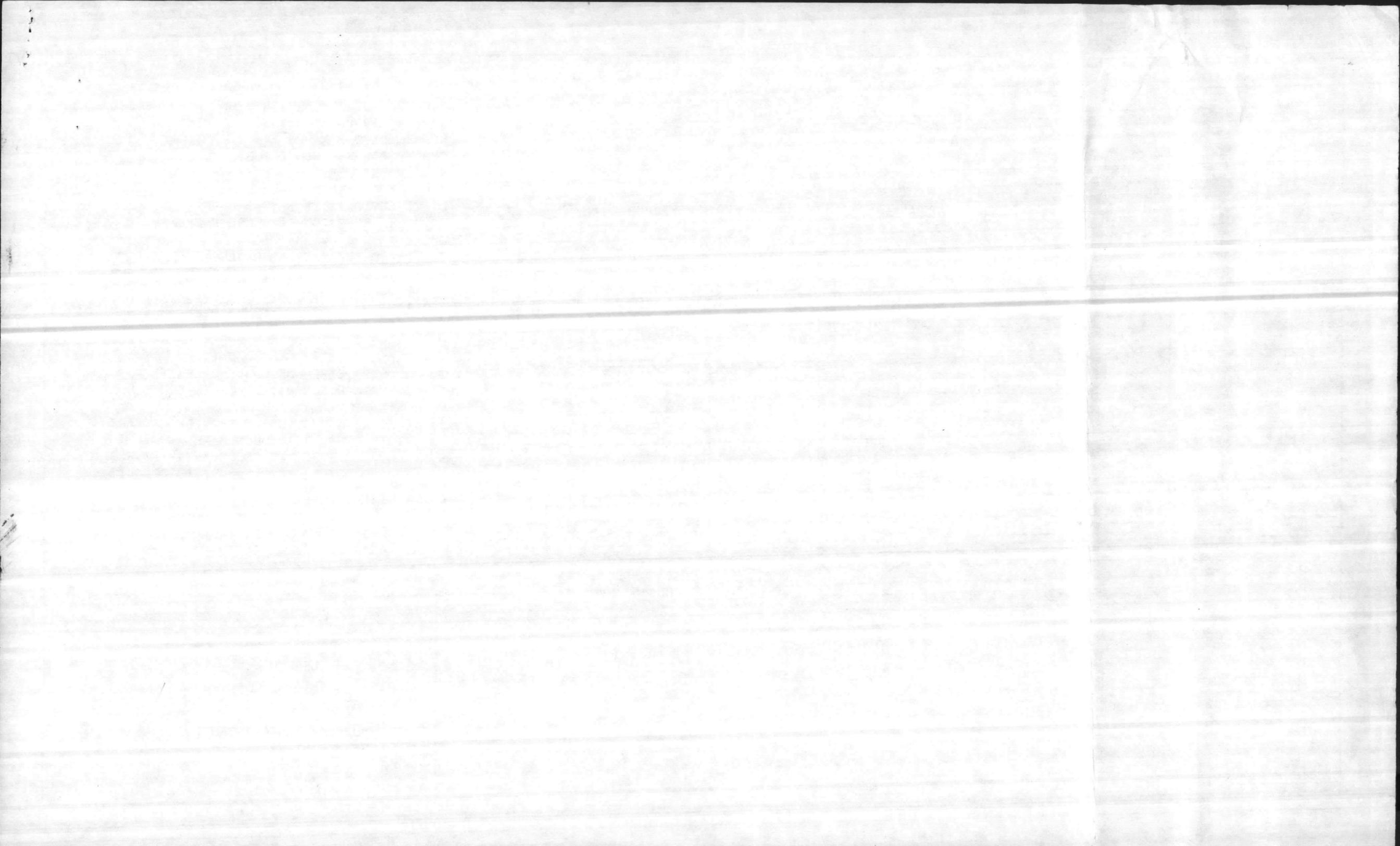
○	●	CURB & GUTTER
SD	SD	MANHOLE
ST	ST	STORM DRAIN
□	■	UNDERGROUND STEAM
▨	▨	CATCH BASIN
▨	▨	BITUMINOUS CONCRETE
▨	▨	POROUS PAVING
□	□	STEAM VALVE PIT



M.C.B. CAMP LEJEUNE, NC  
 DIVISION OPERATIONS CENTER  
 P-057  
 GANTT/HUBERMAN ASSOCIATES  
 112 WEST 5TH STREET  
 CHARLOTTE, NC 28202









DEPARTMENT OF THE NAVY

NAVAL ELECTRONIC SYSTEMS ENGINEERING CENTER  
PORTSMOUTH  
P.O. BOX 55  
PORTSMOUTH, VIRGINIA 23705-0055

*Gene [unclear]  
Larry [unclear]  
Fred [unclear]*

*File*

2804  
220HR:em  
SER: 220-244

28 JUL 1986

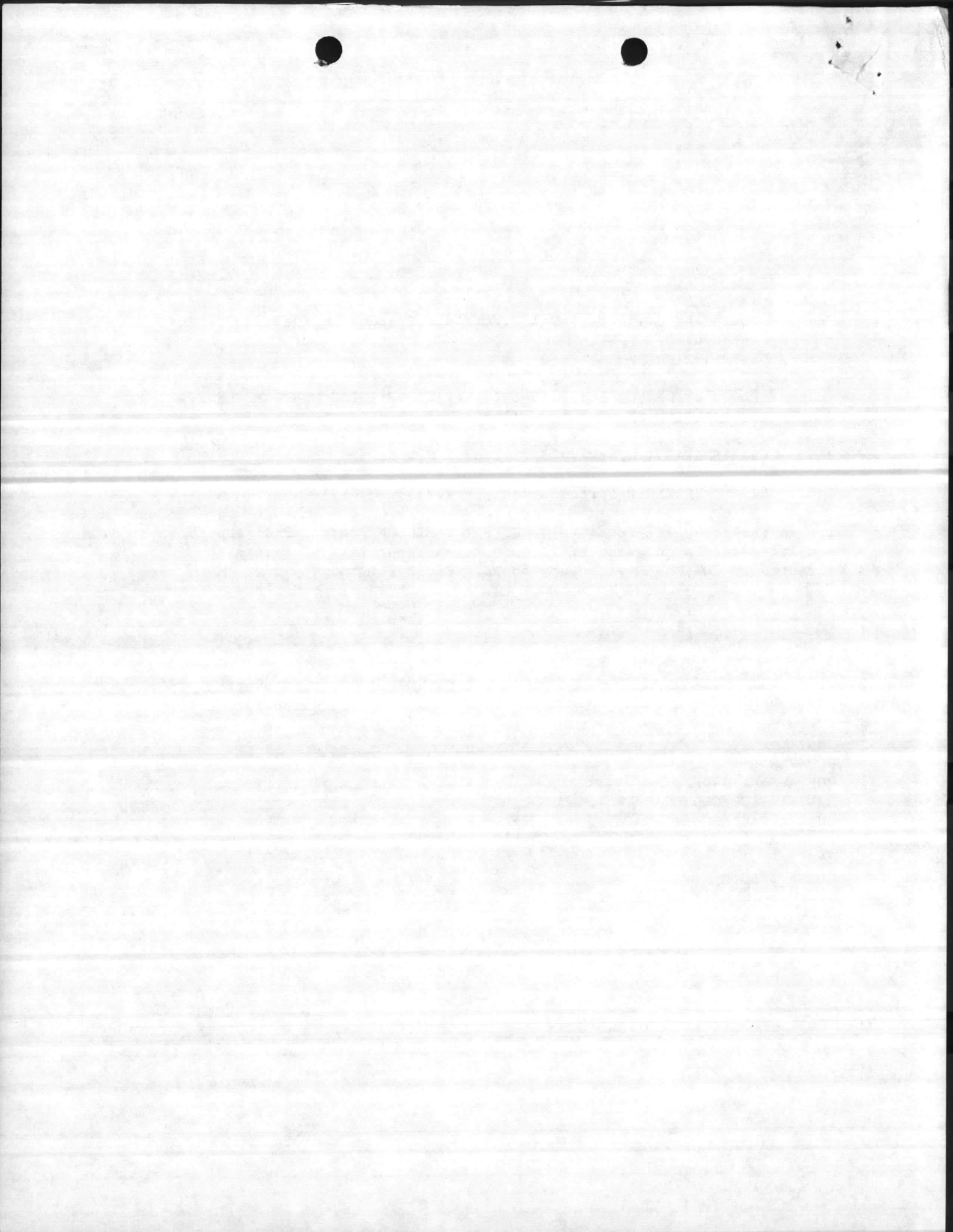
From: Commanding Officer, Naval Electronic Systems Engineering Center,  
Portsmouth  
To: Distribution  
Subj: MILCON BESEP FOR P-057 ADMINISTRATIVE BUILDING MCB CAMP LEJEUNE, NC;  
DISTRIBUTION OF  
Ref: (a) SPAWAR ltr Ser 7033/7551 of 7 Feb 86  
Encl: (1) NAVELEXCEN Portsmouth BESEP #72133

1. As tasked by reference (a), BESEP for MILCON Project P-057 has been completed and is forwarded for comments and approval. Comments should be directed to COMSPAWAR with copy to NAVELEXCEN Portsmouth.

*R. A. Gravatt*  
R. A. Gravatt  
By direction

Copy to:  
COMSPAWAR  
COMNAVFACENGCOM  
LANTNAVFACENGCOM  
CHESNAVFACENGCOM  
MCB Camp Lejeune  
CMC  
COMNAVTELCOM





NAVAL ELECTRONIC SYSTEMS ENGINEERING CENTER  
PORTSMOUTH  
PORTSMOUTH, VIRGINIA 23705

BASE ELECTRONIC SYSTEM ENGINEERING PLAN

BESEP NO: 72133

STATION: 2ND FSSG, CAMP LEJEUNE, NORTH CAROLINA

PROJECT: DIVISION OPERATIONS MESSAGE CENTER (MILCON PROJECT P-057)

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DEPARTMENT HEAD DATE

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SATISFACTORY TO:

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ACTIVITY/OPERATING COMMAND APPROVAL

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SPAWAR APPROVAL

\_\_\_\_\_  
DATE

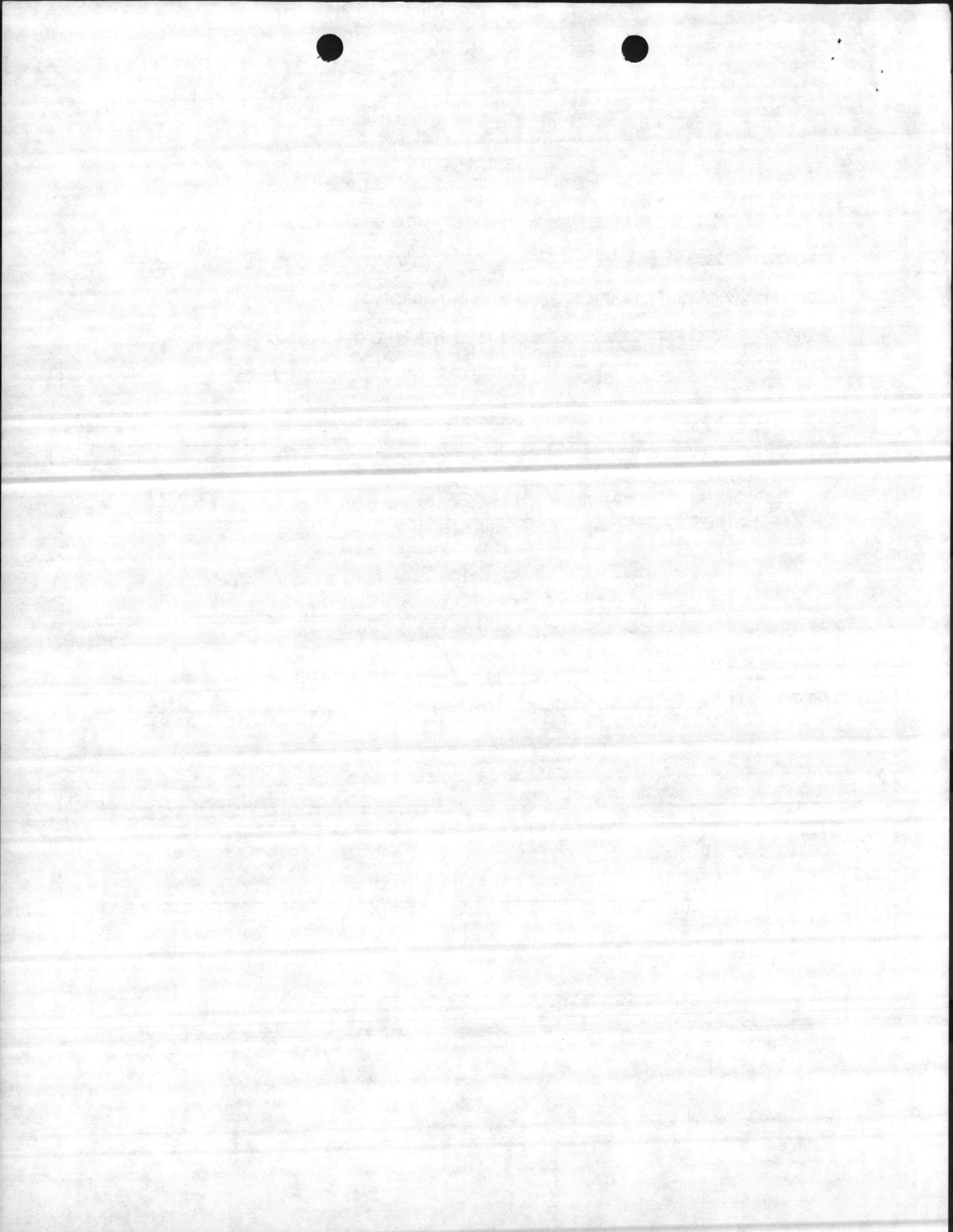


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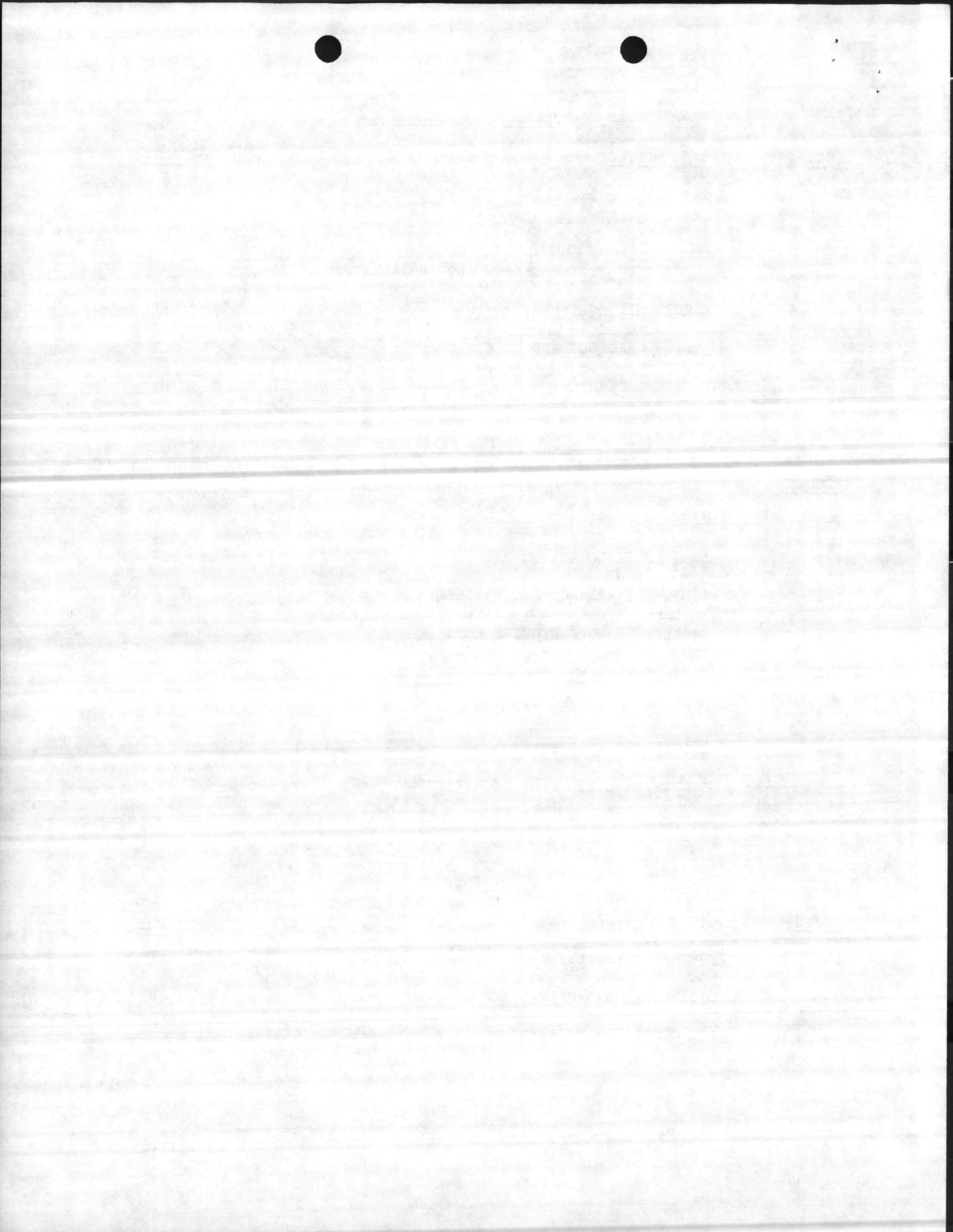
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## SECTION 1

### GENERAL REQUIREMENTS

#### 1.1 HISTORICAL DATA

- 1.1.1 The Commanding General of 2nd FSSG, FMF Atlantic, and part of his staff are crowded into a single building in the central base area. The remainder of his staff is located in various other buildings throughout the Hadnot Point area. FY-88 MILCON Project P-057 was initiated to build a new administration facility. This BESEP is being written to relocate the existing communication center from Building #59 to the new administration building.

#### 1.2 REFERENCES

- 1.2.1 DD Form 1391 of 15 June 1984 (Initiated MILCON Project P-057)
- 1.2.2 COMSPAWARSYSCOM ltr ser 7033/7551 of 7 February 1986 (Tasked NAVELEXSYSENGCEN Portsmouth to prepare preliminary BESEP for project)

#### 1.3 OBJECTIVE

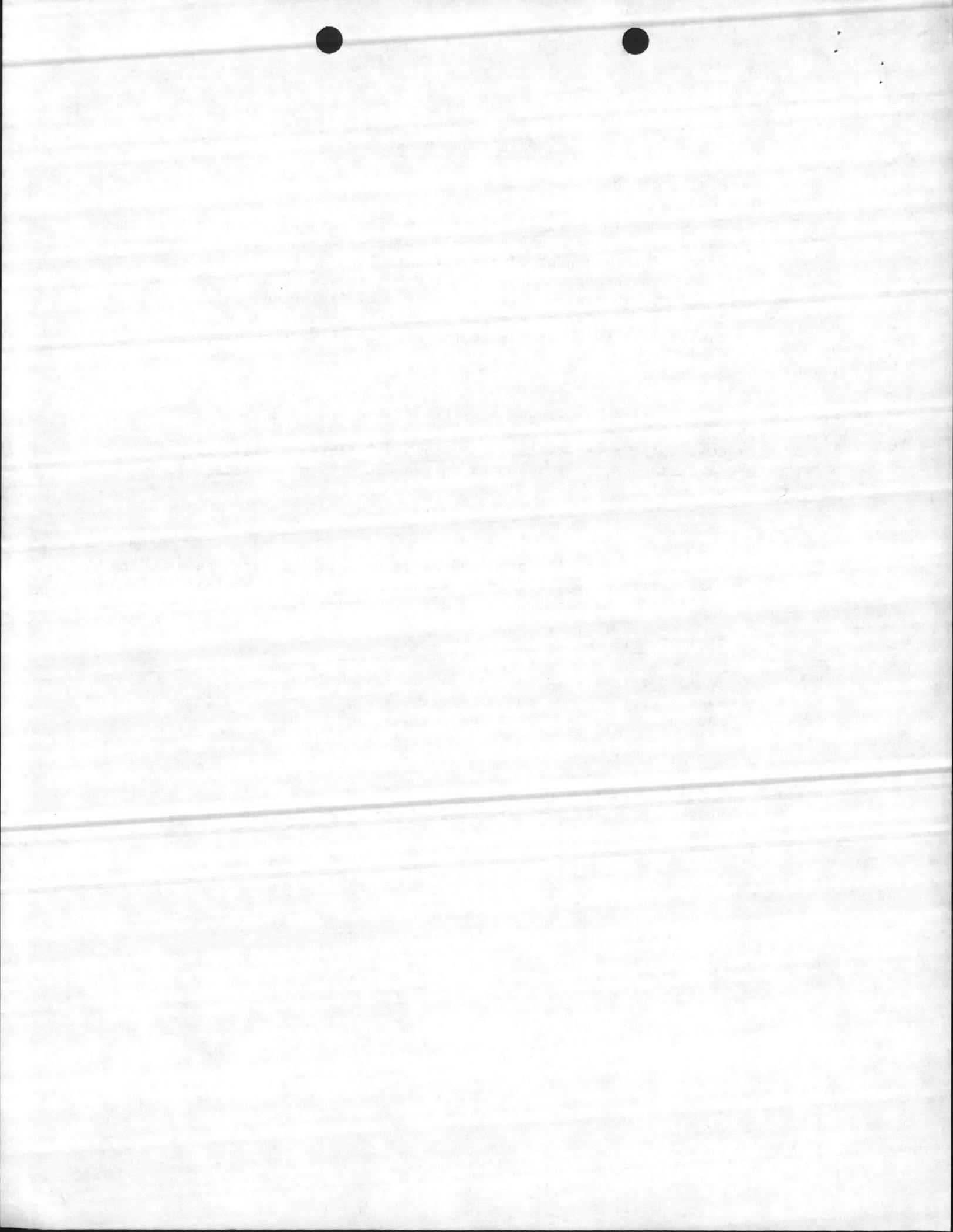
The objective of the proposed project is to relocate the existing Communication Center from Building #59 to the new administration building being constructed under MILCON P-057.

#### 1.4 PROJECT SITE

The project site is located in the French Creek Area, Marine Corps Base, Camp Lejeune, North Carolina. Figure 1-0 shows the vicinity map and Figure 1-1 shows the building location.

#### 1.5 RADIATION HAZARDS CONSIDERATIONS

Radiation hazards, as defined in Naval Shore Electronics Criteria, NAVELEX 0101,106, to personnel, ordnance or fuel do not exist.



## SECTION 2

### SCOPE

#### 2.1 ELECTRONICS

The scope of the electronics portion of this project includes the relocation of the Communications Center including the RIXT "C", existing teletype, and the Crypto Patch & Test.

#### 2.2 FACILITIES

The detailed scope of the facilities work is described in Section 6 which was prepared by CHESNAVFACENCOM, Code FPO-2B.

#### 2.3 RESPONSIBILITIES

2.3.1 COMSPAWARSYSCOM will be responsible for providing BESEP approval, funding, and engineering guidance as required.

2.3.2 NAVELEXSYSENGCEN Portsmouth will be responsible for the preparation of the BESEP and installation design, all aspects of electronics installation and checkout (except as noted in paragraphs 2.3.5, 2.3.6 and 2.3.7), maintenance of local program management functions, including maintaining liaison with the EFD, and for providing the material and equipment specified in Section 4.

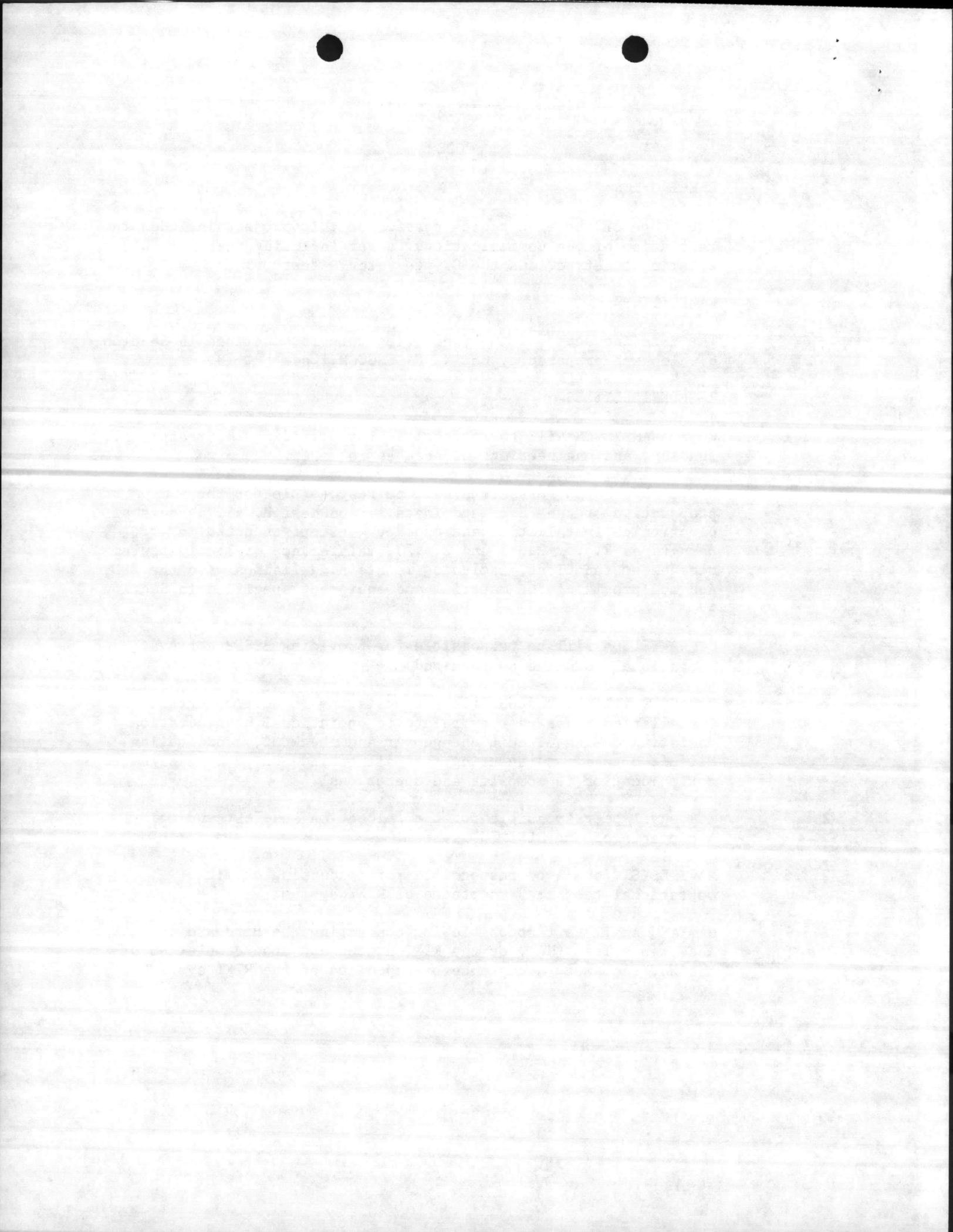
2.3.3 COMNAVTELCOM will be responsible for providing BESEP approval, and operational guidance as required.

2.3.4 2nd FSSG will be responsible for assisting in developing the installation plans as they relate to operational considerations, assisting during circuit changeover and checkout, coordinating circuit outage, and ensuring that all onhand equipment designated for relocation is complete and operational.

2.3.5 ACA shall be responsible for the relocation and Test and Acceptance of the RIXT "C" system.

2.3.6 NAVTELSYSIC shall be responsible for conducting on site operational test and acceptance of RIXT system.

2.3.7 NAVTASC shall be responsible for conducting the Hardware Acceptance Test (HAT) of the RIXT system and upon completion of the HAT recommend acceptance or rejection of the RIXT system.



## SECTION 3

### ELECTRONIC SYSTEM DESIGN AND INSTALLATION

#### 3.1 GENERAL

The major effort of the project is to relocate the existing Communications Center from Building #59 to the new administration building. All equipment will be relocated except for certain technical control components which will be new.

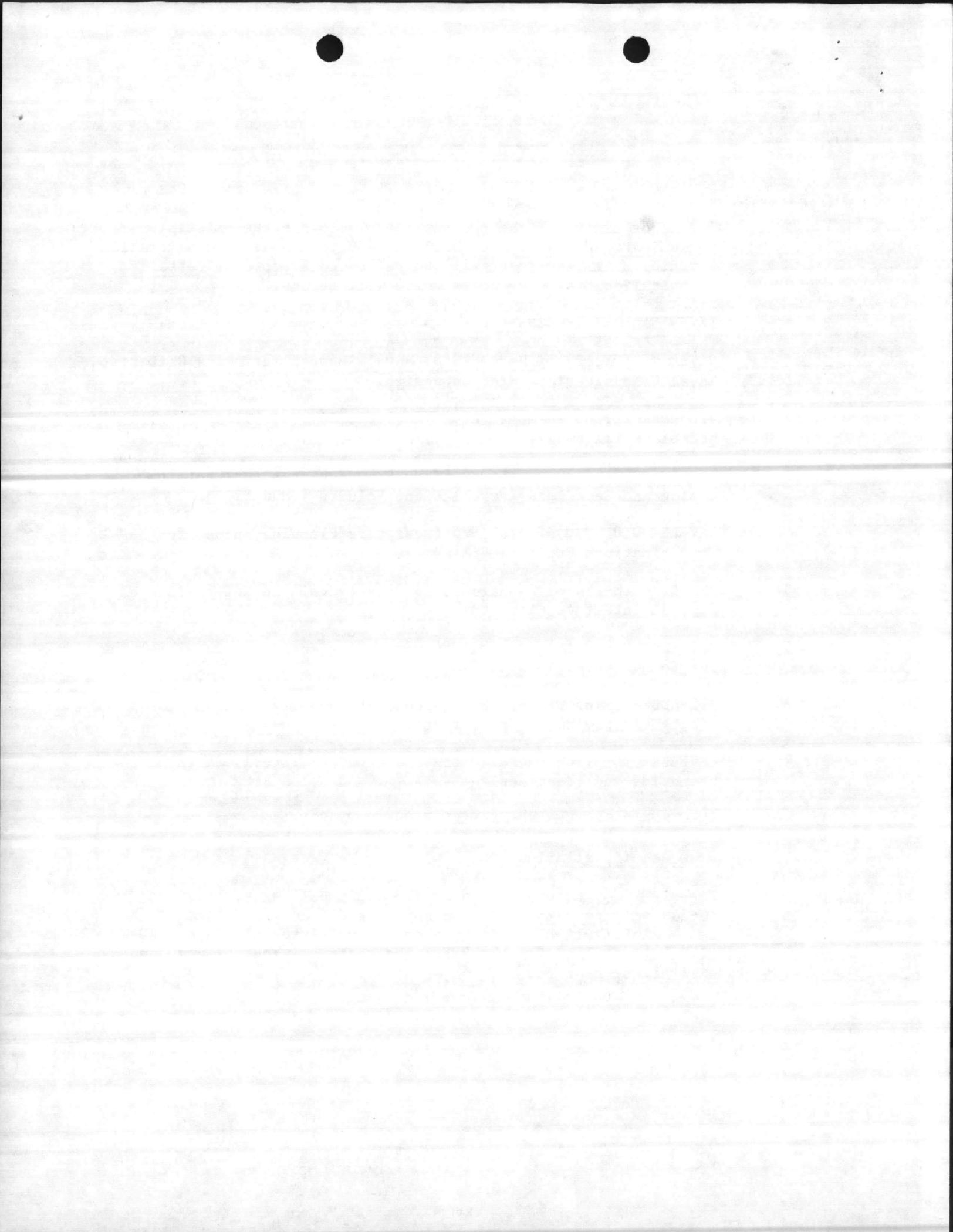
#### 3.2 TECHNICAL REFERENCES

- 3.2.1 NAVEXLEX 0101,102 of March 1973 (Naval Shore Electronics Criteria, Naval Communications Station Design)
- 3.2.2 MIL-HDBK-232 of 14 November 1972 (Shore Communications Station Red/Black Criteria)
- 3.2.3 NACSIM 5203 of 30 June 1982 (TEMPEST Guidelines for Facility Design and Red/Black Installation, Volumes I and II)
- 3.2.4 NAVEXLEX 0101,000 of Jan 1975 (Designers Planning Manual for Naval Communications Facilities Ashore)
- 3.2.5 MIL-STD-188-114 of 24 March 1976 (Electrical Characteristics of Digital Interface Circuits)
- 3.2.6 MIL-STD-188-124A of 2 Feb 1984 (Grounding, Bonding, and Shielding for Communication Systems)
- 3.2.7 MIL-HDBK-419 of 21 Jan 1982 (Grounding, Bonding, and Shielding for Electronic Equipment Facilities)
- 3.2.8 NAVEXLEX 0101,110A (Naval Shore Electronics Criteria Installation Standards and Practices)

#### 3.3 ELECTRONIC SYSTEM AND INSTALLATION

##### 3.3.1 Proposed Installation

The RIXT "C", teletype, and crypto equipment (except for the KG-34) will be relocated from Building #59 and installed in the new administration building as shown in Figure 3-1. A new KG-84 will be installed for the RIXT. The technical control components will all be new.



3.3.2 System Cutover Objectives

This project will be accomplished in such a manner as to ensure minimum circuit downtime. When circuit outages are required they will be documented to the station in a timely manner to allow coordination with the cognizant commands.

3.4 ELECTROMAGNETIC ENVIRONMENT

3.4.1 Electromagnetic Compatibility

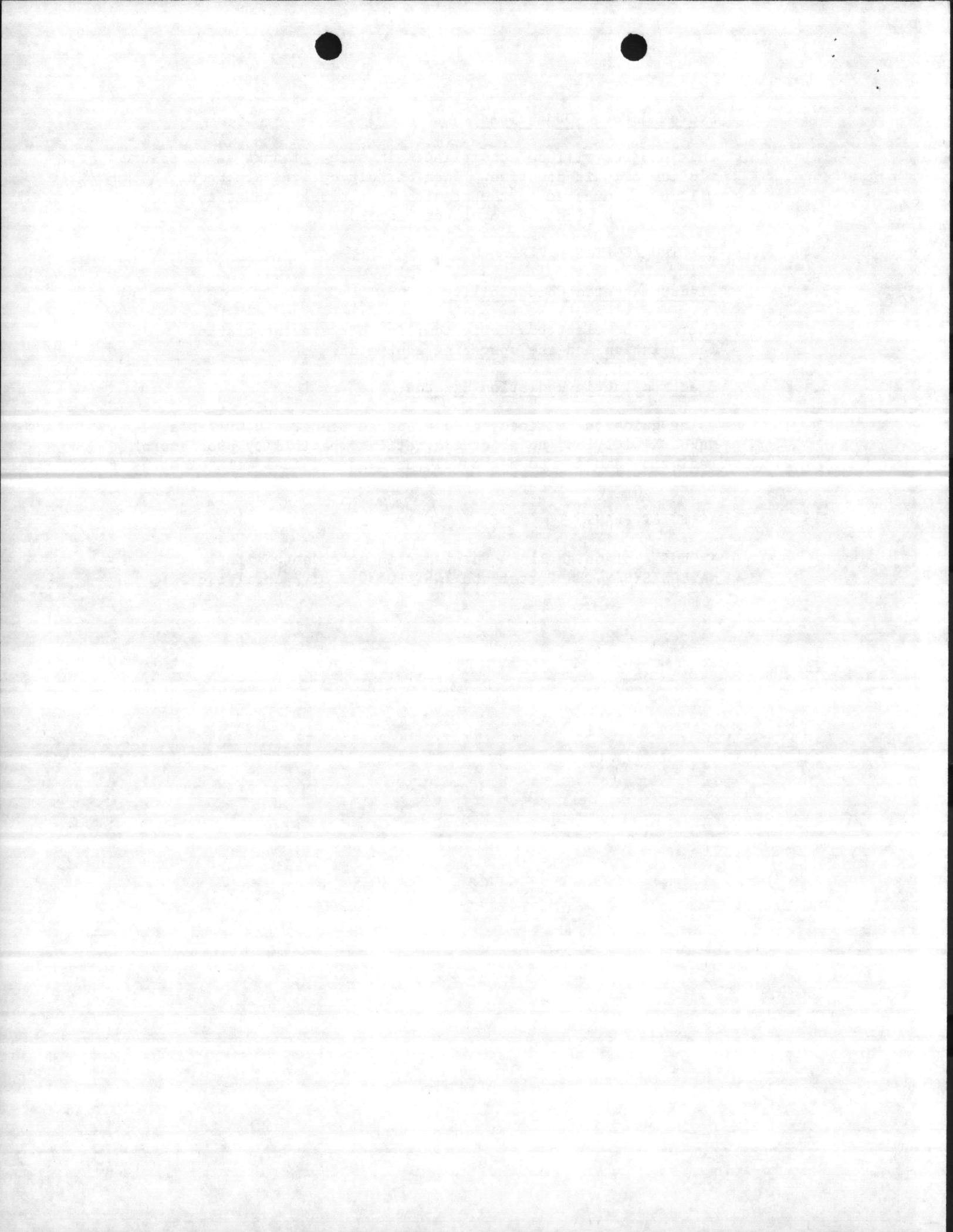
There is no electromagnetic conflict between the planned installation and the operating equipment.

3.4.2 Electromagnetic Radiation Hazards

Using guidance outlined in Naval Shore Electronic Criteria, NAVEXLEX 0101,106, no electromagnetic compatibility problems or radiation hazards to personnel, ordnance or fuel will exist as a result of this installation.

3.5 AS-BUILT PLANS

As-built plans shall be furnished in accordance with NAVEXLEXSYSENGCEN Portsmouth INST 10550.2 of 2 April 1981.



## SECTION 4

ELECTRONIC EQUIPMENT

## 4.1 MAJOR EQUIPMENT

The major items of electronic equipment and materials required for this installation are listed in Table 4-1.

TABLE 4-1: ELECTRONIC EQUIPMENT PROCUREMENT

## MESSAGE CENTER

ITEM NO.	NOMENCLATURE AND NOUN NAME	TOTAL REQ'D	ON HAND	PROCUREMENT RESPONSIBILITY			REMARKS
				STA	SPAWAR SYSCOM	NESEC PORTS	
1	AN/UGC-51 TELETYPE	1	1				
2	AN/UGC-6 TELETYPE	4	4				
3	RIXT LINE CONTROL UNIT	1	1				
4	RIXT MEDIUM SPEED LINE PRINTER	1	1				
5	RIXT HIGH SPEED LINE PRINTER	1	1				
6	RIXT PAPER TAPE READER PUNCH	1	1				
7	RIXT OPTICAL SCAN UNIT	1	1				

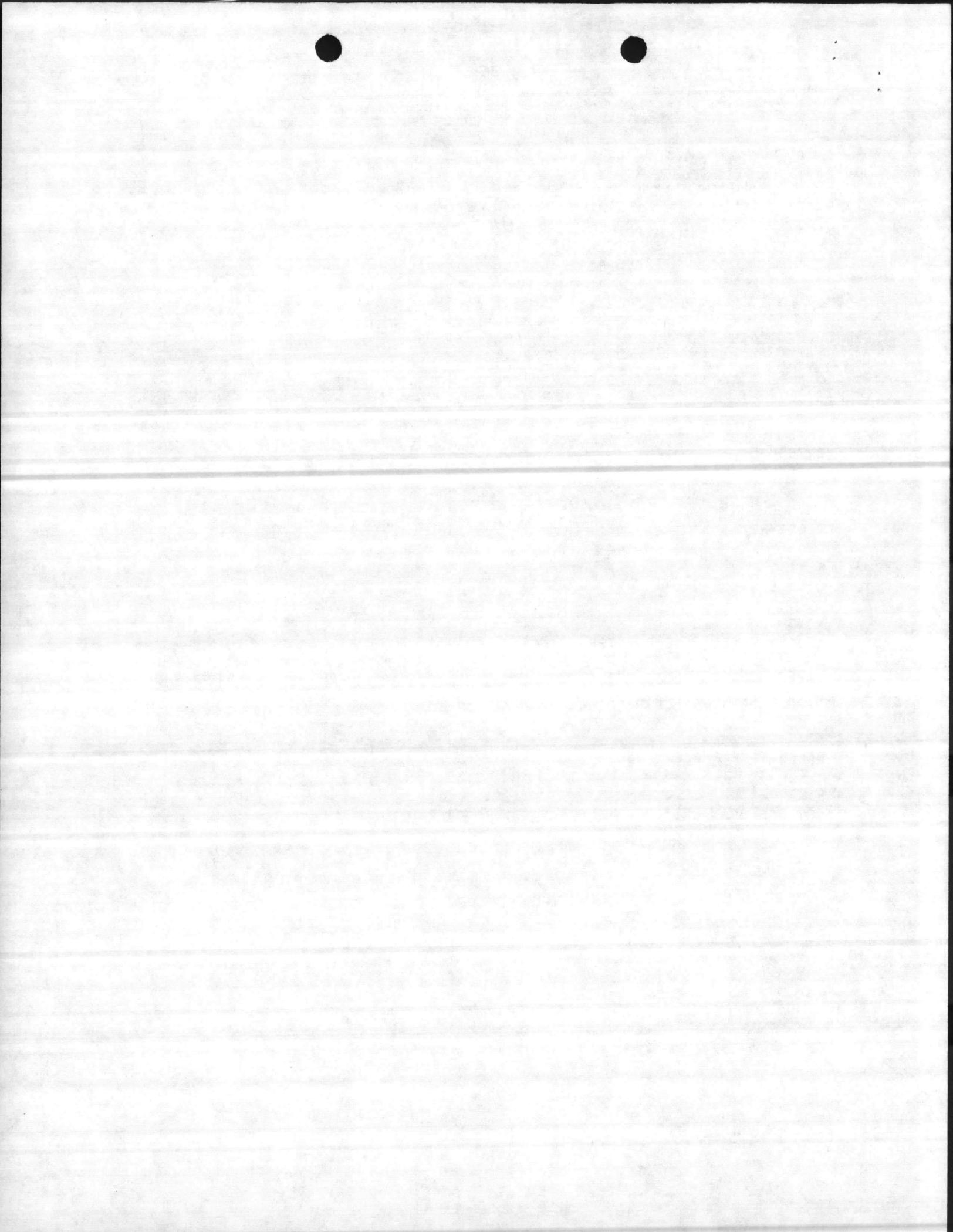


TABLE 4-1: ELECTRONIC EQUIPMENT PROCUREMENT

CRYPTO PATCH & TEST

ITEM NO.	NOMENCLATURE AND NOUN NAME	TOTAL REQ'D	ON HAND	PROCUREMENT RESPONSIBILITY			REMARKS
				STA	SPAWAR SYSCOM	NESEC PORTS	
8	ADC MULTI-CIRCUIT PATCH PANEL	2	0			X	
9	C-8657(P)/UG AUTOPHASE UNIT	1	0			X	
10	ICC 2200/24 DATA MODEM	1	1				
11	ME-400/FG METER PANEL	2	0			X	
12	PP-6521/FG POWER SUPPLY +-6VDC CONTROL	2	0			X	
13	PP-6521/FG (1) POWER SUPPLY +-6VDC MODULE	2	0			X	
14	SB-3189(B)/FG DC PATCH PANEL	2	0			X	
15	SB-3503/FG FUSE PANEL	2	0			X	
16	SB-3684 BALLAST LAMP PANEL	2	0			X	
17	TSEC/KG-84 CRYPTO	1	0	X			
18	TSEC/KW-7 CRYPTO	4	4				
19	TSEC/KWX-11 FIXED PLANT ADAPTER	4	4				
20	TSEC/KY-3 CRYPTO	1	1				

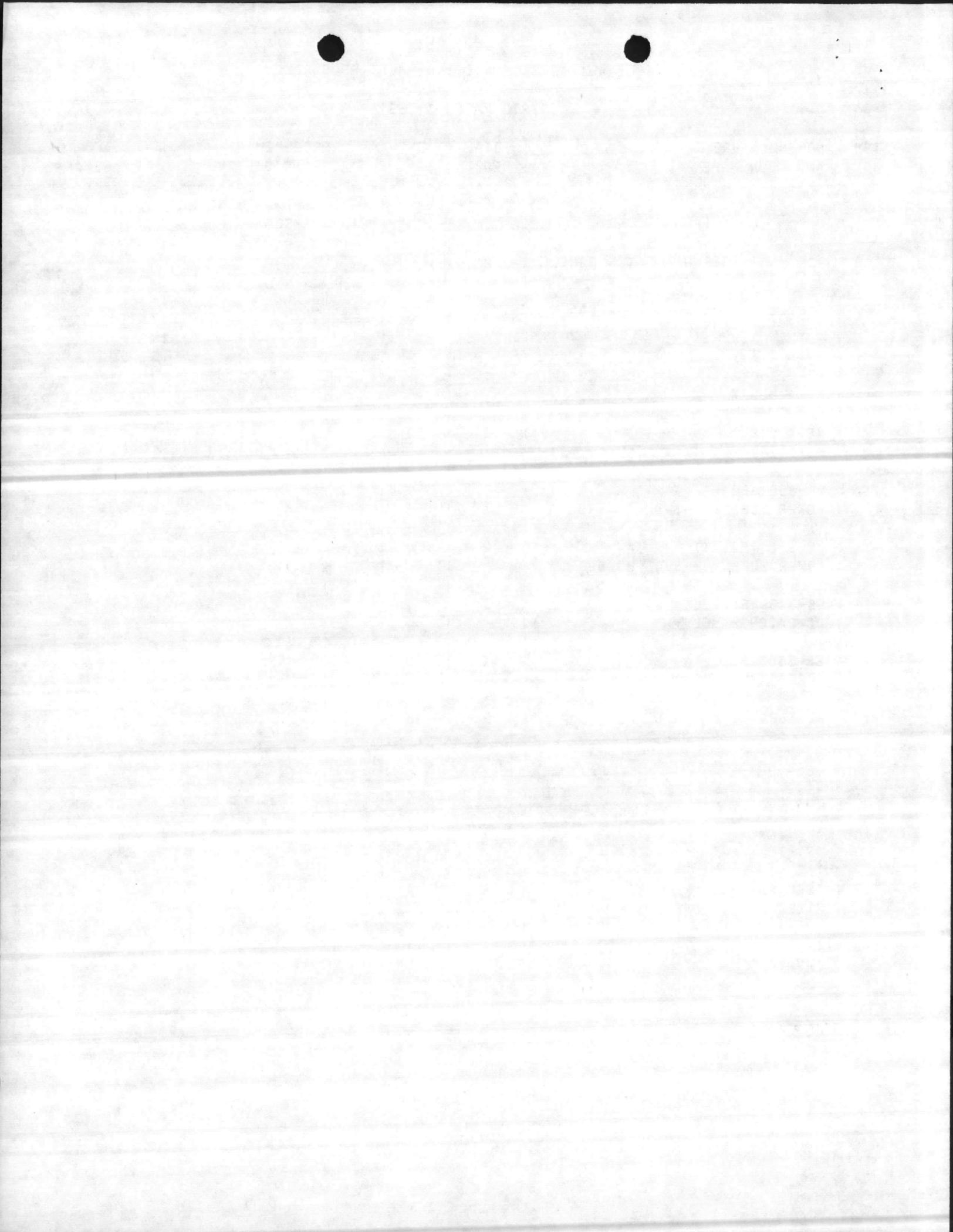
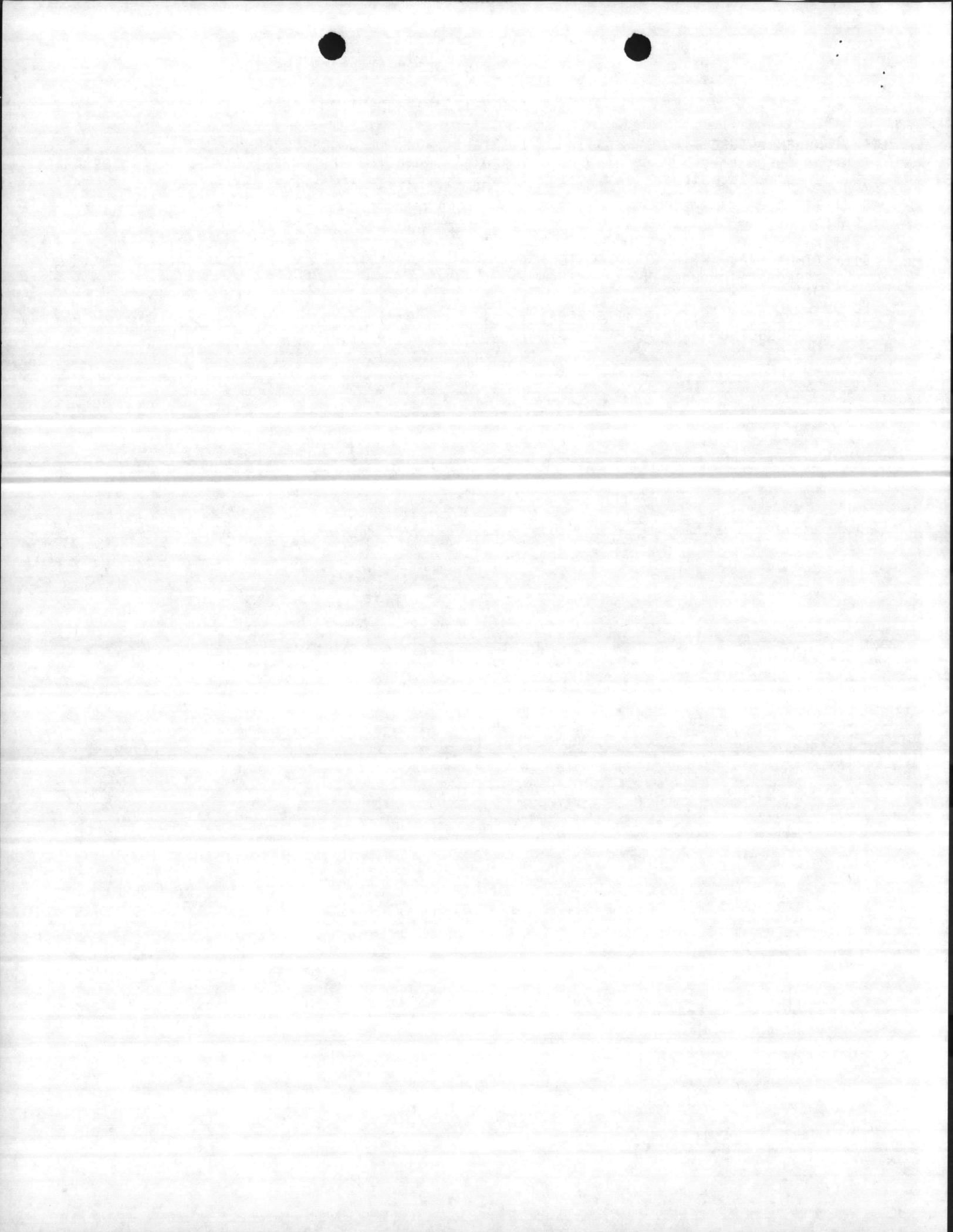


TABLE 4-1: ELECTRONIC EQUIPMENT PROCUREMENT

DISTRIBUTION/REPRODUCTION AREA

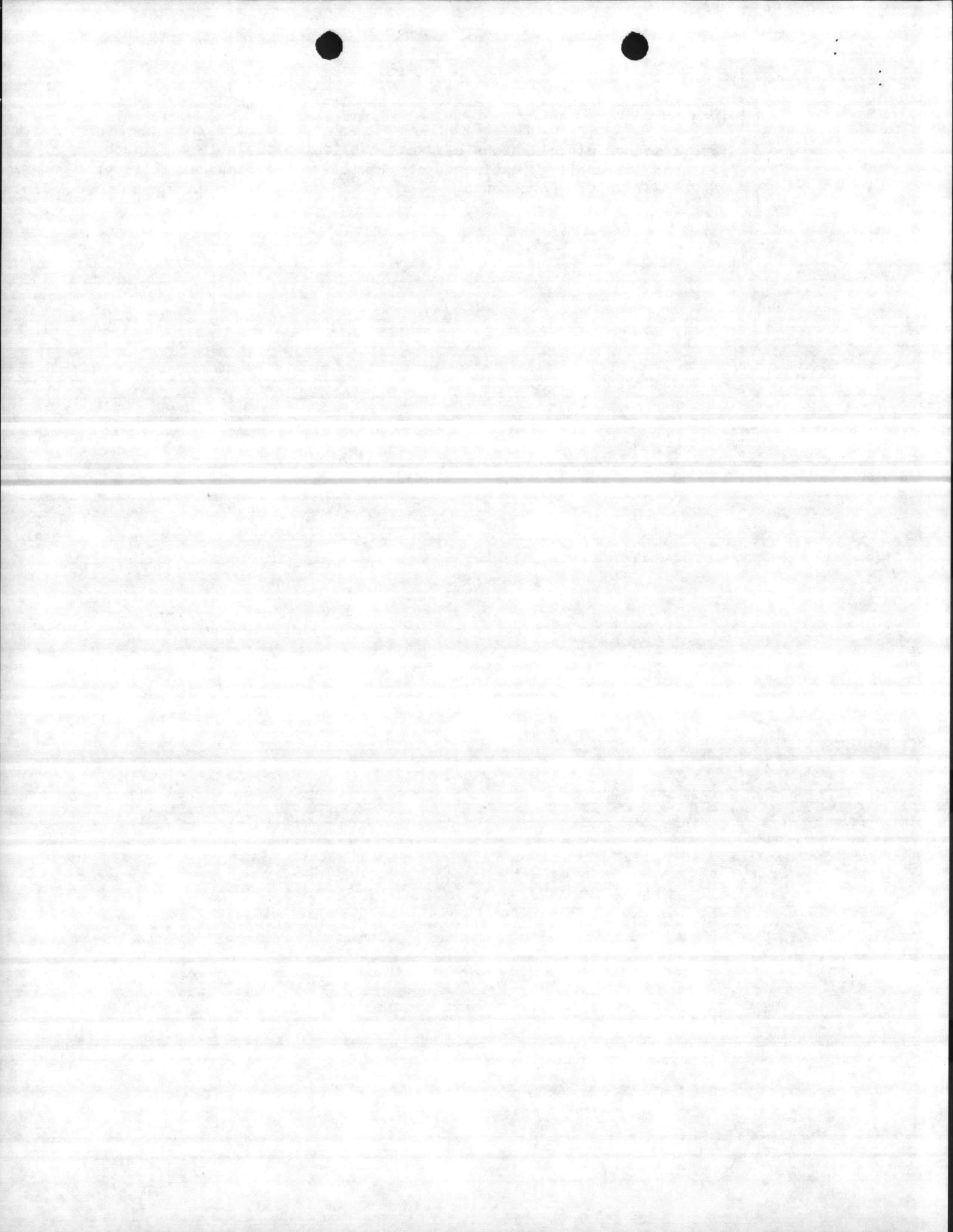
ITEM NO.	NOMENCLATURE AND NOUN NAME	TOTAL REQ'D	ON HAND	PROCUREMENT RESPONSIBILITY			REMARKS
				STA	SPAWAR	NESEC SYSCOM PORTS	
21	XEROX 9200 (WITH 12/12 SORTER) REPRODUCTION MACHINE (RUNNING)	1	0	X			
22	XEROX 9200 (WITH 12/12 SORTER) REPRODUCTION MACHINE (STANDBY)	1	0	X			



4.2

MISCELLANEOUS EQUIPMENT

Provision of miscellaneous hardware not listed in Table 4-1, such as conduit, cabling, cabinets, etc., will be the responsibility of NAVELEXSYSENGCEN Portsmouth.



## SECTION 5

### SYSTEM CHECKOUT AND ACCEPTANCE

#### 5.1 GENERAL REQUIREMENTS

The newly installed and relocated equipments and systems comprising this project require checkout and pre-acceptance performance testing to ensure that they have been properly installed, meet the specifications of the system design, and perform the intended function.

#### 5.2 TESTING

The relocated Astronautics equipment (RIXT) in the Message Center will require testing by ACA and upon completion of the contractor checkout, NAVTELSYSIC will conduct Hardware Acceptance Test (HAT) on the system.

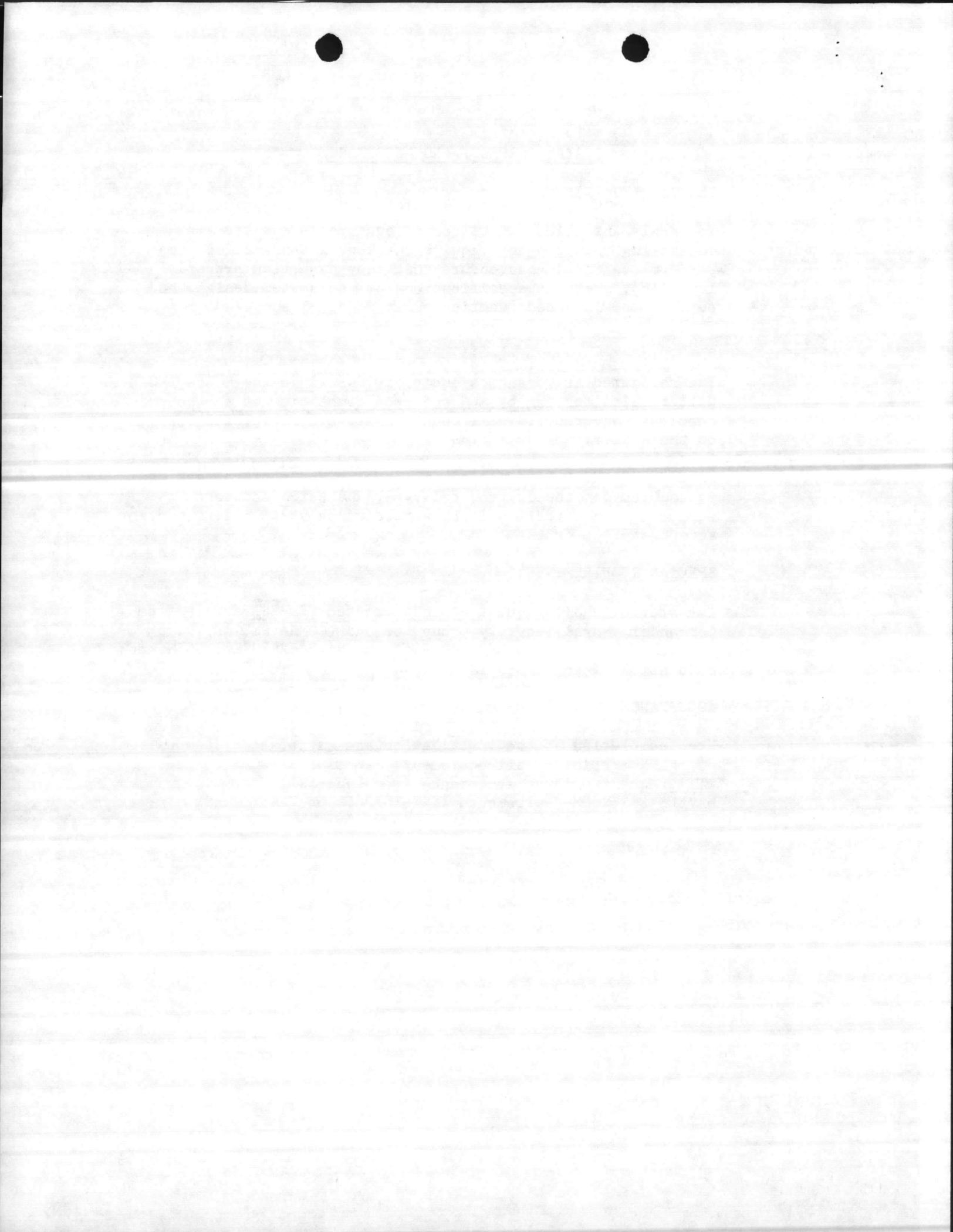
- 5.2.1 NAVELEXSYSENGCEN Portsmouth will develop and perform testing procedures for the crypto, teletype, and patch and test equipment. All tests will be witnessed by station forces prior to acceptance.

#### 5.3 SPECIAL REQUIREMENTS

The station shall request an instrumented TEMPEST survey from Commander, Naval Security Group Command (COMNAVSECGRU) with information copies to CNO (OP-944) and NAVELEXSYSSECENGCEN upon completion of the installation.

#### 5.4 ACCEPTANCE

Upon completion of the installation and satisfactory demonstration of the operation of all equipment, NAVELEXSYSENGCEN Portsmouth will request written acceptance from 2nd FSSG, per NAVELEXSYSENGCEN Portsmouth INST 10550.2 of 2 April 1981.



## SECTION 6

### PHYSICAL PLANT

#### 6.1 SCOPE

This section of the BESEP provides the known site preparation requirements for the installation of an Astronautics Corporation (ACA) Remote Information Exchange Terminal (RIXT) at the Second Force Service Support Group, Camp Lejeune, Jacksonville, North Carolina.

6.1.1 The physical plant for the project is on the first floor of a new three story building to be constructed by FY-88 MILCON Project P-057. Figure 1-0 and 1-1 shows the site locations of the project and location of the new building.

6.1.2 The RIXT equipment installation will require approximately 1500 square feet of area. Figure 6-1 shows the floor areas and new work requirements. Figure 3-1 shows the equipment layout. The electronic equipment characteristics are tabulated in Table 6-1.

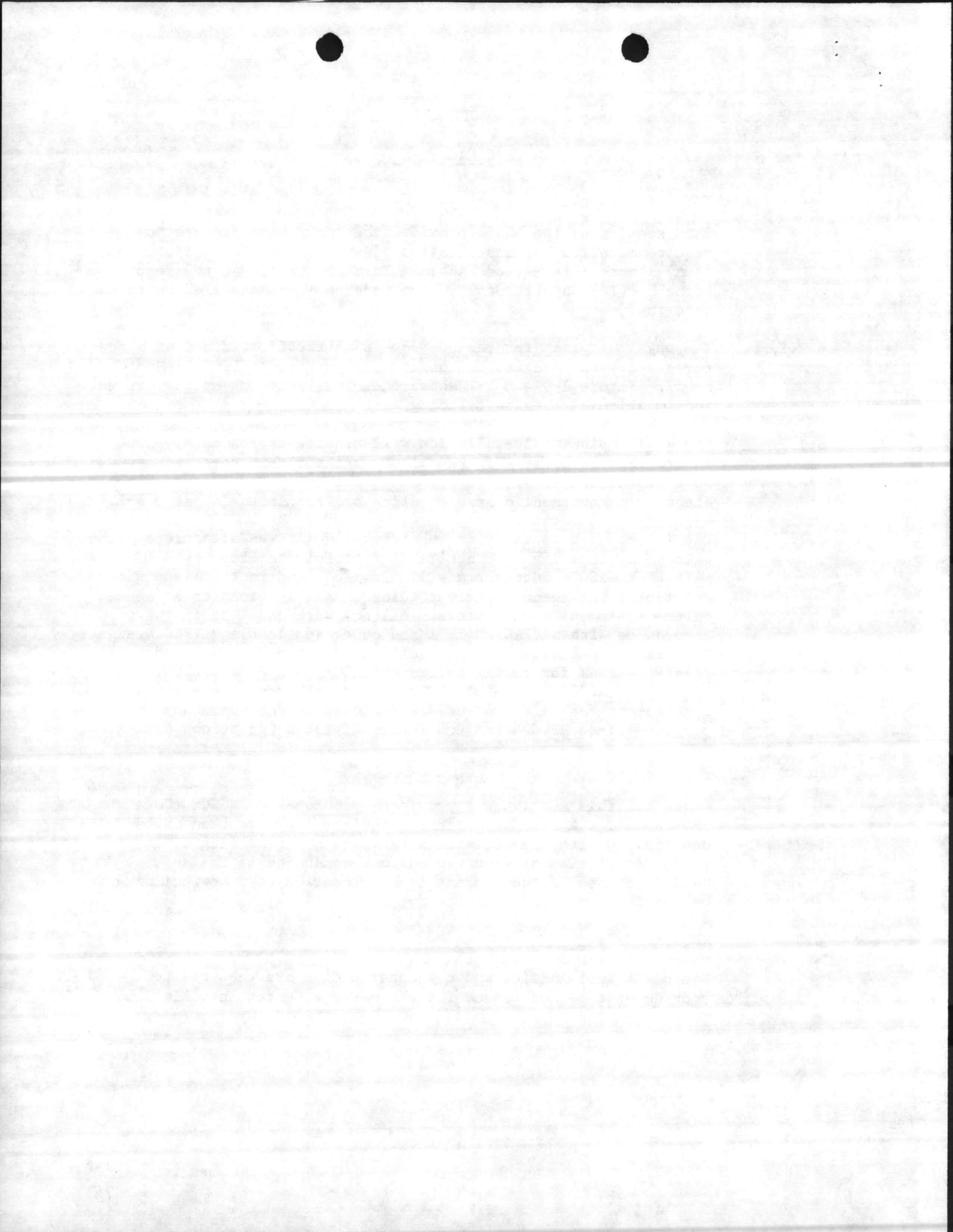
6.1.3 The intent of this BESEP is to aid the facilities site preparation agency in preparing an adequate operational facility. NAVELXSYSENGCEN Portsmouth will provide, by direct liaison with the facilities agency, further guidance and information as needed on the equipment requirements. All new work shall be in accordance with NAVFAC DM 12.1 and other applicable NAVFAC Design Manuals. A submittal of the facilities design drawings and specifications for review by COMNAVTELCOM, COMSPAWARSYSCOM, and NAVELXSYSENGCEN Portsmouth is required. The facilities requirement for this project are included in and funded by proposed FY-88 MILCON Project P-057, Division Operations Center.

#### 6.2 BACKGROUND

Input for this section was provided by CHESNAVFACEGCOM (Code FPO-2B) and the site preparation requirements have been coordinated with the activity's Facilities Engineering Office. A formal facilities site survey was not conducted as the Message Center portion of the project is a relocation to a new building to be constructed.

#### 6.3 REQUIREMENTS

Equipment installation and new construction are required to provide usable floor space for the Message Center installation.



6.3.1 Removal

Removal of existing items for the equipment installation is not anticipated.

6.3.2 New Work

Figure 6-1 shows the new facilities work requirements. All new work shall be of non-combustible or fire retardant material.

6.3.2.1 The details provided were determined by available known conditions and are not intended to preclude the facilities design agent from using good engineering practices based on detailed engineering investigation accomplished as part of the development of final construction plans and specifications.

6.3.2.2 Acoustic Treatment

a. Communication Area

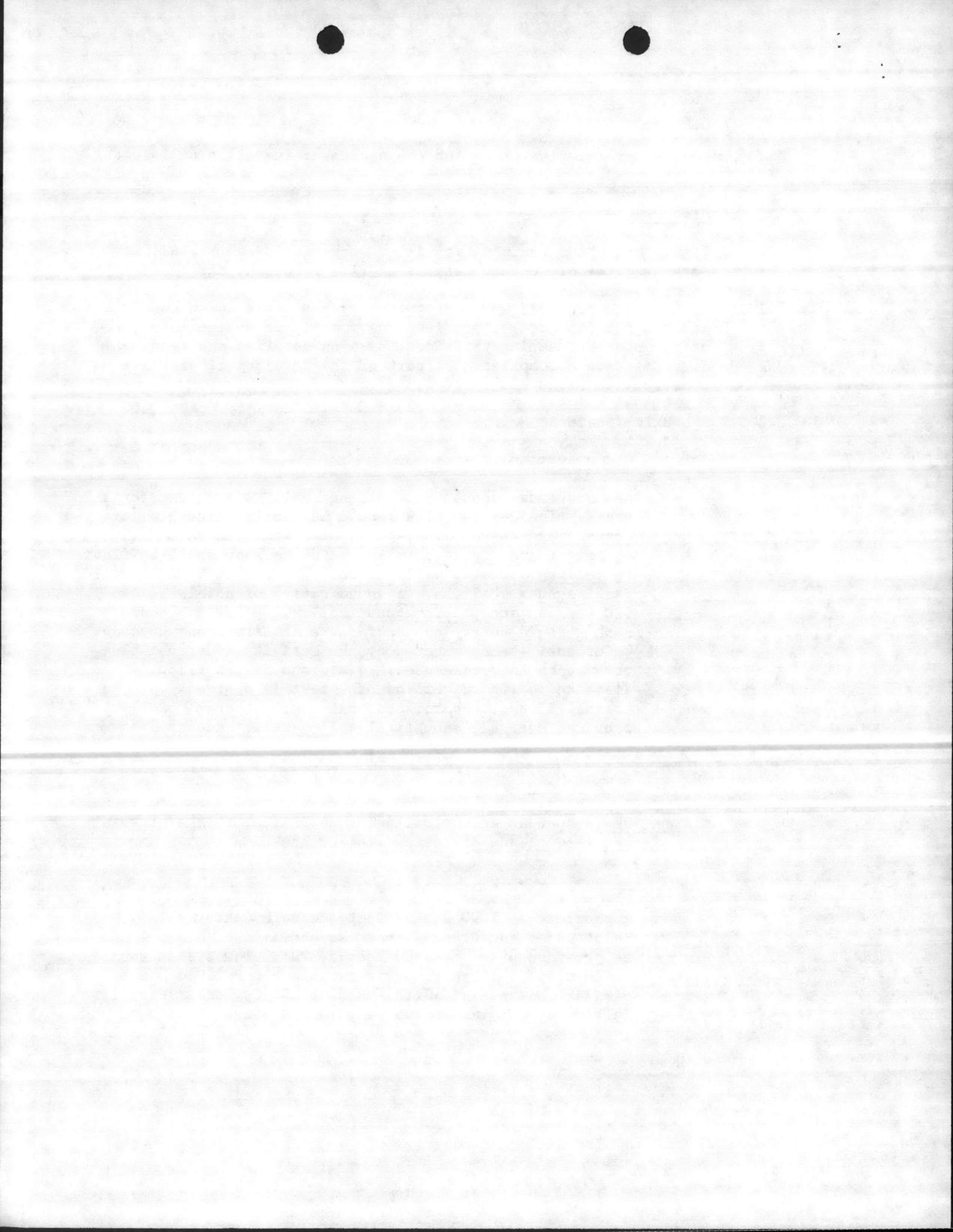
New suspended acoustical ceiling shall be provided for all areas. The ceiling tile should be easily removable for access into the ceiling space. The wall finish in all equipment areas and where shown in the shop shall be floor to ceiling acoustic wall panels. The new acoustical wall panel system shall have a sound rating of not less than STC-45. An acceptable acoustical wall panel is "sound soak" (rigid board) as manufactured by Armstrong Company. Color shall be as elected by the activity and frost blue or paprika is recommended. A minimum finish floor distance to finish ceiling of 9 feet is desired. A nominal 1" by 12" hard wood chair railing shall be provided over all acoustical wall panels, and shall have a gloss urethane finish.

b. Other Areas

New suspended acoustical ceilings similar to the above are required in the office and toilet area.

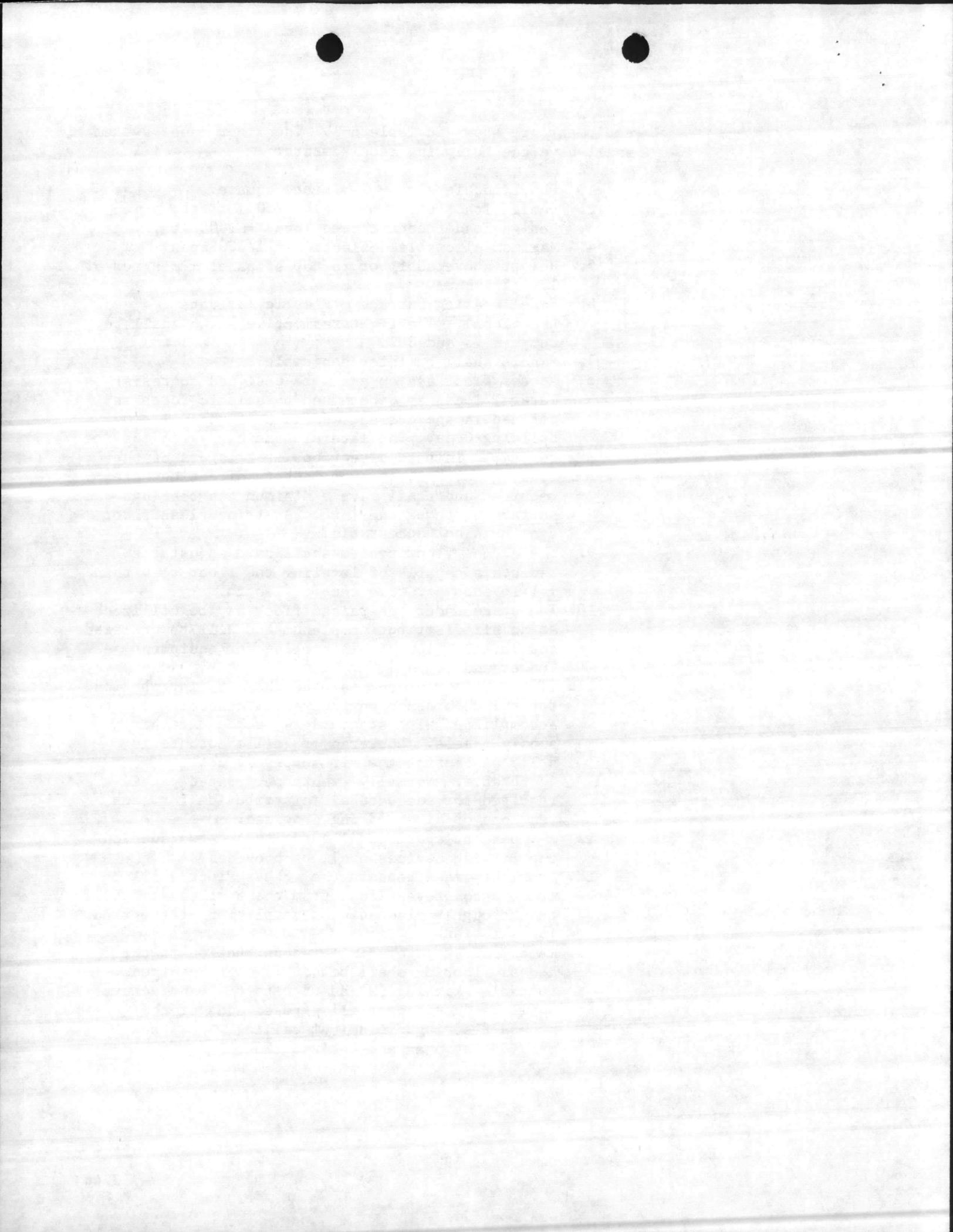
6.3.2.2 Floor Finish

a. Approximately 1000 square feet (Message Center (RIXT), Maintenance and Crypto) areas as shown in Figure 6-1 shall be provided a new access floor system. The system shall conform with Military Specifications MIL-F-29046 and be similar to the Rigid-Grid, MK-20 or 30 by Liskey Products, Baltimore, Maryland. The weights and sizes of each of the



equipment are shown in Table 6-1. The floor panel system shall have the following requirements:

1. Panel module size - 24 inches square.
2. Design load (uniform load) - 250 lbs/ft<sup>2</sup>.
3. Design load (concentrated load) - 1000 lbs.
4. Maximum allowable deflection - 1/300 span.
5. Height above subfloor to top of panel - minimum of 13-1/2 inches.
6. Panel wearing surface - Plastic laminate (seamless). The light reflective value shall be between 75 and 80%.
7. Panels shall be interchangeable.
8. Access floor system shall be designed to resist lateral loads as determined by seismic force as defined in the current addition of the Uniform Building Code. The lateral bracing system must be removable in both directions. Stringers of the rigid grid, bolt on type in both directions are required and shall have a minimum top bearing surface width of one inch. A stringerless floor system is not acceptable.
9. The access floor system shall have adjustable pedestals capable of leveling the floor to within  $\pm 1/16$  inch per five feet of length.
10. The space under the raised floor may be utilized as an air distribution plenum and will be utilized for installation of all cabling for equipment (power and signal).
11. If underfloor plenum is used the air distribution for the room space environmental control shall be accomplished with standard 24 inch square air supply panels. Louvered or grille cutouts in solid panels for the air supply is not acceptable. Normally twenty perforated panels are required for adequate air distribution for each ten tons of air handling provided.
12. A 5 percent spare panel quantity and two suction cup lifting devices shall be provided.
13. Subfloor areas beneath the access floor shall be treated to prevent dust from the surface and shall be thoroughly cleaned upon completion of the floor installation.
14. Ramps and steps of similar construction to the access flooring shall be provided if required. Suitable skirting (standard with the manufacturer) shall be provided at all exposed ends of the access flooring. Aluminum railings shall be provided at open ends of the flooring.



15. The space under the access floor will accommodate all power and signal cabling. Cutouts for cables will be provided for each equipment and closely coordinated with the equipment contractor to ascertain the exact final location of equipment before any cutouts are started. The location and size of the cutouts will be made from templates provided by the equipment manufacturer. The sawing of the cutouts, will be part of the equipment installation by NAVELEXSYSENGCEN Portsmouth.
16. Moisture sensors capable of detecting 1/64-inch of water should be affixed to new and existing subfloors in areas using chilled water or fluid for cooling (Dorlen Projects, Model SS, Greenfield, Wisconsin or equivalent).
17. The subfloor of the raised floor area shall be recessed so that all finish floor elevations are at the same level.

b. Other Areas

A new floor finish shall be provided in other areas. The office area and vestibule shall have a commercial grade (extra heavy) carpet 100% nylon, with a static propensity of less than 2.0 KV. Ceramic tile floors and walls (full height) shall be provided in the toilet area. The reproduction/distribution area shall have a seamless type vinyl flooring of the no-wax type.

6.3.2.3 Message Pass Window, Counters, and Shelving

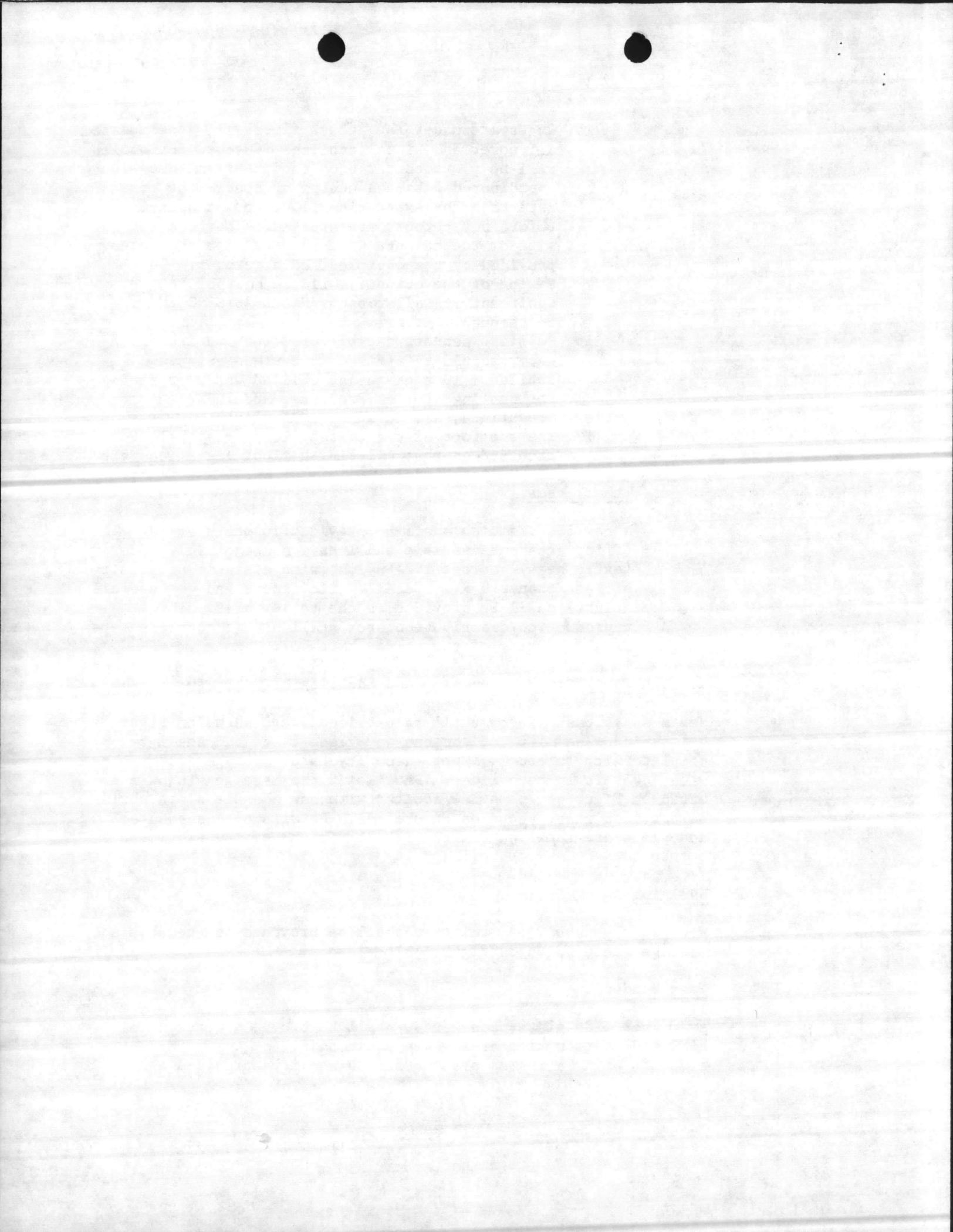
New message pass window shall be provided where shown on Figure 6-1. Window shall be of the one way glass type, and shall be complete with intercom, light, security bars, message drawer, and with counters on both sides. Details of the message window are shown on Figure 6-2. A new counter with new message slots shall be provided where shown on Figure 6-1. Details of the counters and slots are shown on Figure 6-3. A minimum of 120 slots shall be provided.

6.3.2.3.1 Shelving

Wood storage shelving, built-in shall be provided in the shop and storage where shown on Figure 6-1.

6.3.2.3.2 Pass Window

A 30 inch wide glass pass window shall be provided between the RIXT and reproduction area where shown on Figure 6-1. Wood counters with laminated plastic finish shall be provided each



side. A 3 inch high by 12 inch wide glass cutout shall be provided in the bottom of the window for paper pass-thru.

#### 6.3.2.4 Lighting (All Areas)

New fixtures shall be installed to accommodate the equipment locations shown in Figure 3-1.

6.3.2.4.1 The recommended light intensity to be maintained in the areas shall not be less than 50 foot-candle measured at 30 inches above the floor. Standard fluorescent type fixtures are acceptable and shall be recess mounted. Lights may be controlled from the lighting panel. All rooms shall have a uniform appearance (fixtures, bulbs, and lens).

6.3.2.4.2 Emergency lighting sets are required. Battery type (rechargeable on-line) emergency light fixtures are recommended. New fixtures shall conform to FED W-L-305.

#### 6.3.2.5 Electronic Work Bench

Electronic work benches shall be provided in the shop as shown on Figure 6-1. Suggested details for the bench is shown on Figure 6-4.

#### 6.3.3 Fire Protection

Adequate fire protection facilities are required in accordance with MIL-HDBK-1008. The following additional data is provided to assist in determining the degree of protection required. The NAVFAC design agent shall be responsible for ensuring that fire exits meet the requirements of NEPA Article 101.

6.3.3.1 Underfloor power cable will be run in metal conduit.

6.3.3.2 Underfloor signal cable is to be low voltage and metal sheathed.

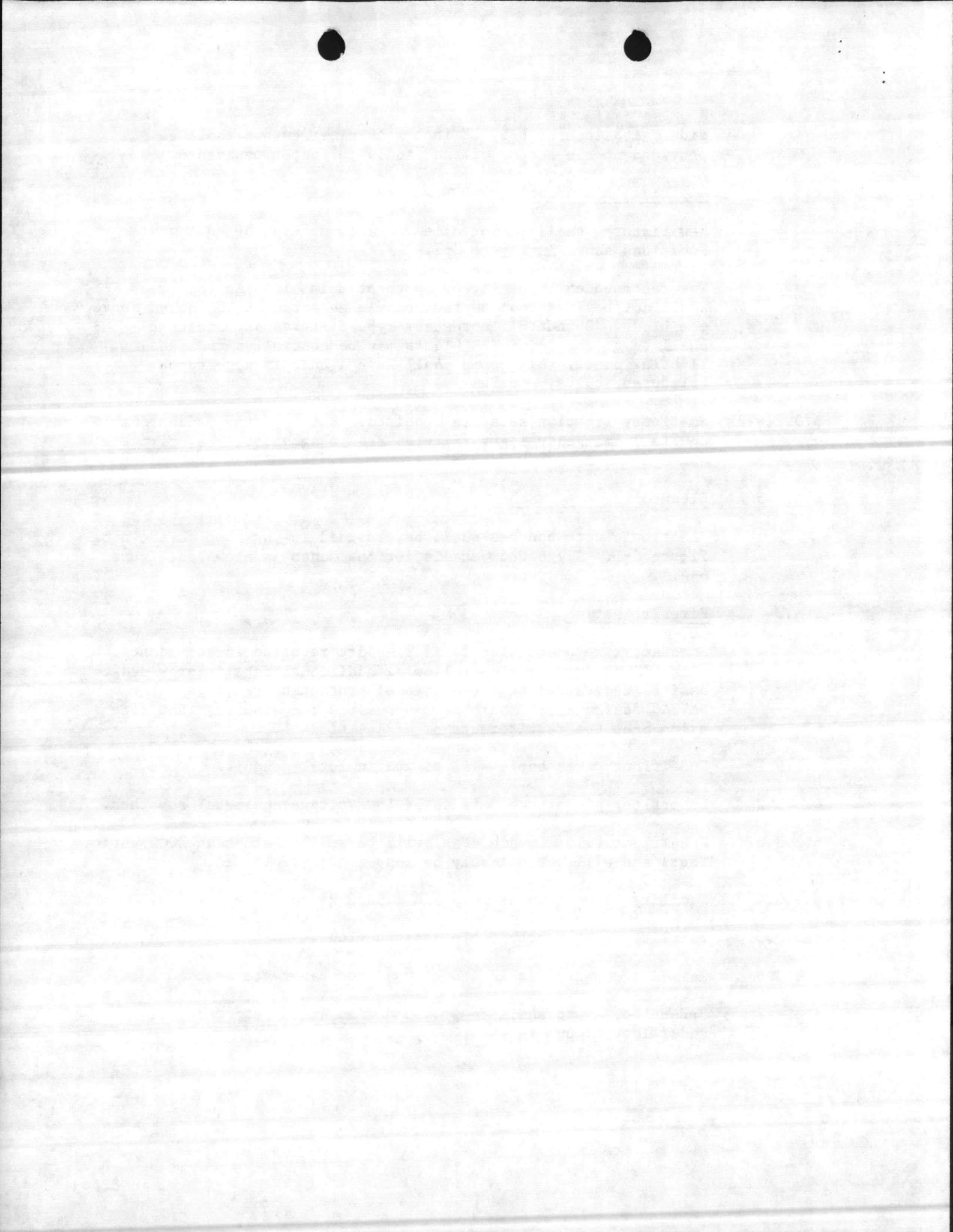
6.3.3.3 Underfloor volume (each area) will be small (less than 2000 cubic feet) and will periodically be inspected and cleared.

6.3.3.4 Facility is continuous duty and manned 24 hours/day.

6.3.3.5 Facility is non-combustible construction.

6.3.3.6 Raised floor area is not to be used for paper storage.

6.3.3.7 Underfloor areas shall be provided with smoke detectors, if underfloor plenum is used.



6.3.3.8 Hand held portable fire extinguishers of adequate capacity for the electronic equipment size will be provided in all equipment spaces.

6.3.3.9 All interior wall finishes used shall have the appropriate flame spread and smoke development ratings required (as tested by a nationally recognized testing laboratory) in order to be allowed for installation. Proof of compliance to criteria is a requirement and shall be in a form of manufacturer's literature or other documentation.

6.3.4 Grounding

The entire electrical power system including conduit system, panels, motors, frames and equipment shall be permanently and effectively grounded in accordance with NAVFAC DM-4. Each branch circuit shall contain a green wire ground conductor in accordance with the National Electric Code. Bonding, grounding or shielding for hemp protection is not a requirement.

6.3.4.1 Message Center Area

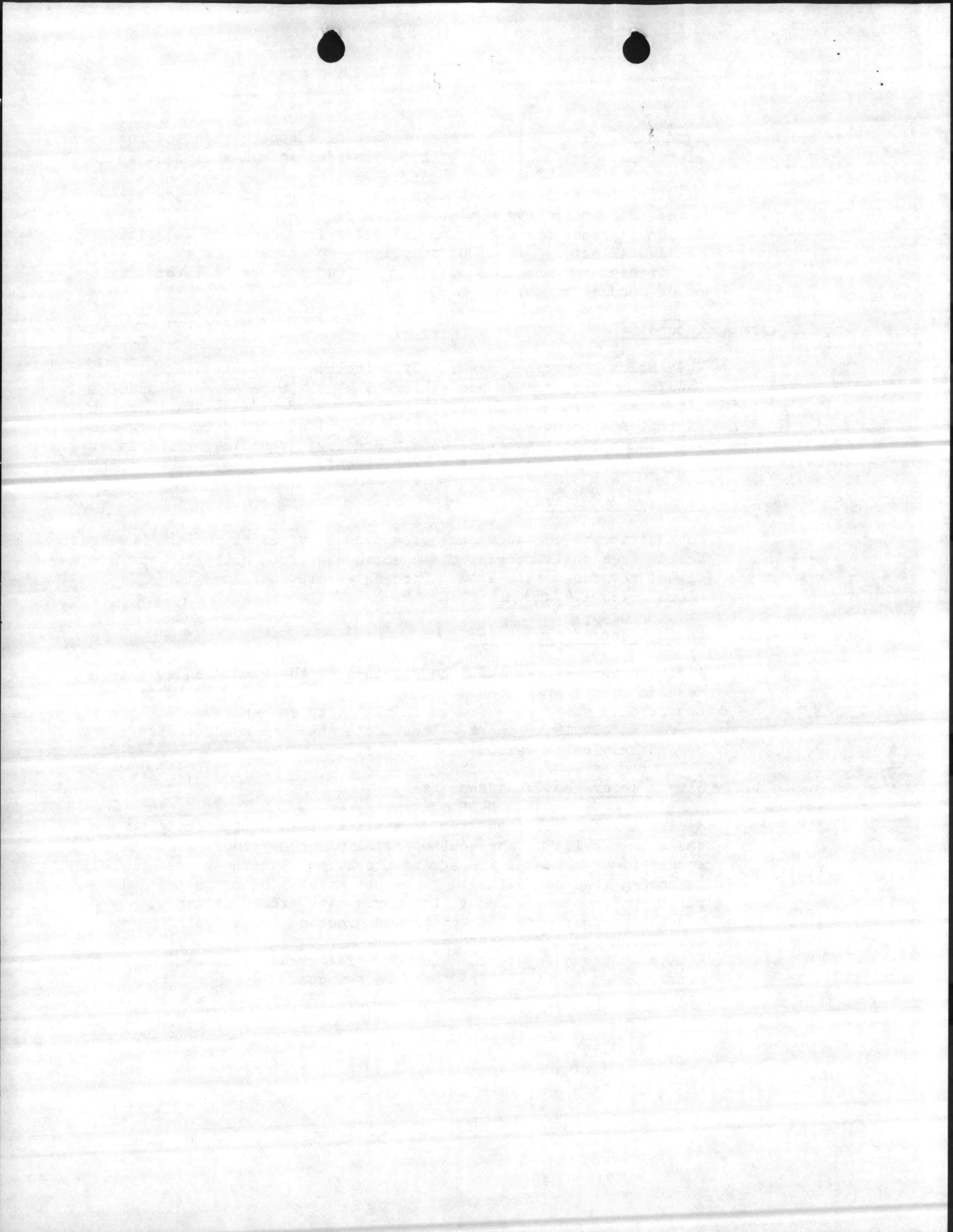
In addition to the above the grounding requirement for the Message Center Area shall consist of an earth electrode subsystem and a signal reference subsystem. Procedures are contained in MIL-STD-188-124 and MIL-HDBK-419.

6.3.4.1.1 Earth Electrode Subsystem

A ring ground system shall be provided in the ground under the Message Center Area consisting of 3/4 inch diameter by 10 ft long copper clad steel rods driven in the earth and spaced approximately 10 ft apart. These rods shall be connected together by exothermically welded #1/0 bare copper wire.

6.3.4.1.2 Signal Reference Subsystem

A signal reference subsystem consisting of an equipotential plane shall be provided. The equipotential plane may consist of the access floor pedestal and stringer system. The floor system shall be bonded together with AWG #8 copper wire. The equipotential plane shall be connected to the earth ring ground system with #1/0 bare copper wire through ground junction boxes installed in the raised access concrete subfloor (approximately every 10 ft). Equipment grounding to the equipotential ground will be accomplished by NAVELEXSYSENGCEN Portsmouth.



#### 6.3.4.2 Electrically Bonding Methods

- 6.3.4.2.1 The following bond method should be used for bonding AWG #8 and smaller:

"Copper to copper joints shall be made by brazing, utilizing an alloy conforming to FED SPEC QQ-B-654, Grade III without use of flux. Brazed joint quality shall conform to SPEC MIL-B-7883A".

- 6.3.4.2.2 The following bond method should be used at all locations where a copper mesh or radial is to be fused to light structure other than copper such as steel:

"Copper to steel, brass or other brazable alloy except copper shall be made by thoroughly cleaning the surfaces to be jointed to base metal and brazing utilizing an alloy conforming to FED SPEC QQ-B-654, Grade IV and flux conforming to FED SPEC O-F-499. Excess flux remaining after the joint is brazed shall be removed by flushing with water, preferably hot, to preclude later corrosion". Joint quality shall conform to SPEC MIL-B-7883A.

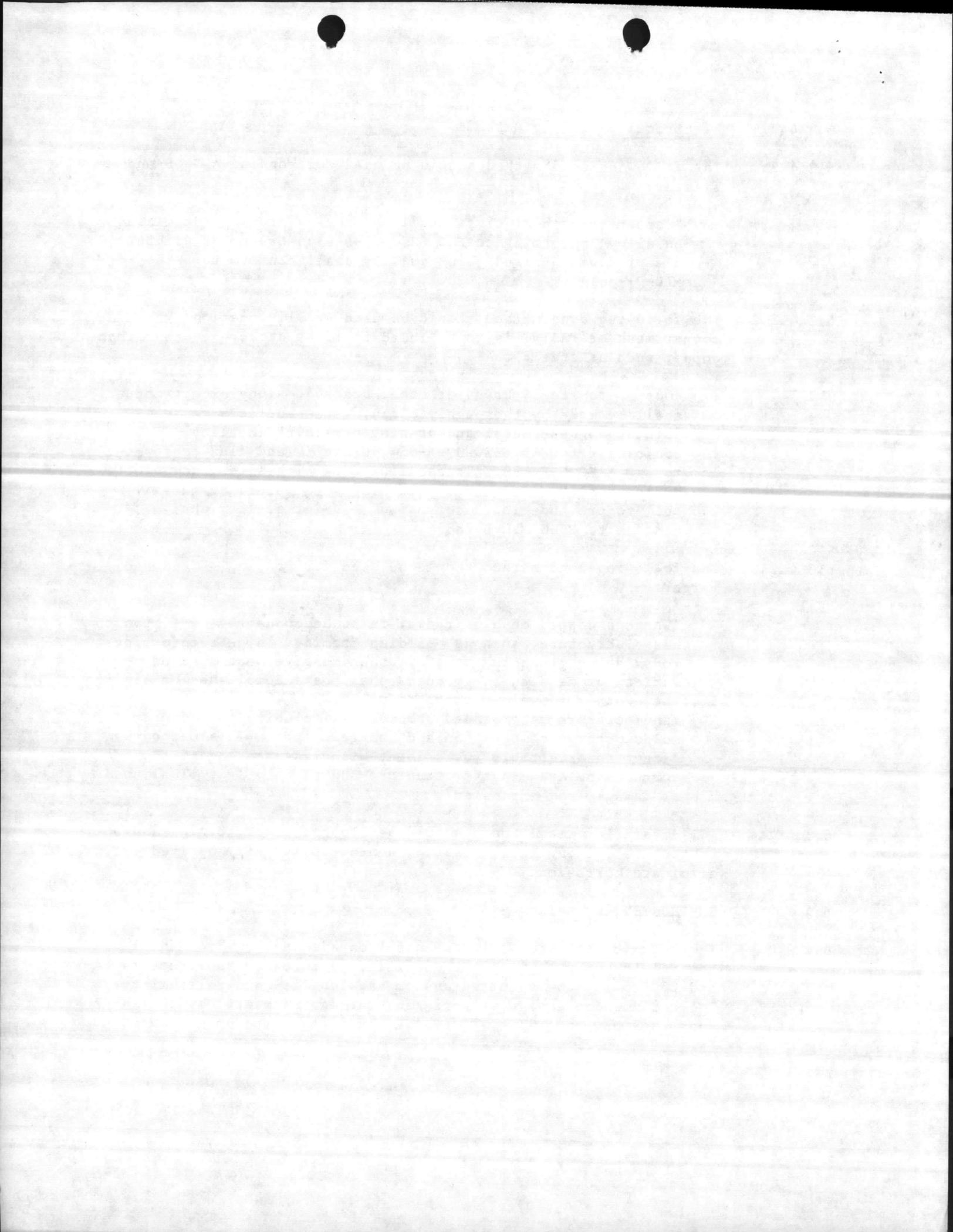
- 6.3.4.2.3 The following bond method should be used for bonding AWG #6 and larger:

"Where a copper mesh or radial is to be connected by fusion to heavy structure, such as building framing, large reinforcing rods, heavy grounding rods or other massive heat sink of a variety of metals, the process shall be accomplished utilizing the exothermic weld process in accordance with the manufacturers recommended procedures including use of proper molds, charge composition and charge weight. This method will effect an acceptable fused joint with less heating of the surrounding area in the structure and thereby less likelihood of damage from expansion".

- 6.3.4.2.4 All dissimilar metal bonds should be cleaned after joining and a protective coating (e.g., mastic, non-corrosive RTV) applied to eliminate corrosion.

#### 6.4 ENVIRONMENTAL CONTROL SYSTEM

- 6.4.1 The technical equipment is dependent on adequate environmental control in order to meet the specified performance requirements and to provide the required system availability and reliability. The recommended design criteria for the environmental system is 72 degrees F DB, and 45%  $\pm$  5% relative humidity. The operation of



the technical equipment is restricted to temperature of 65 degrees to 80 degrees F with a relative humidity range of 20% to 70%.

6.4.2 The required environmental control system shall be provided by MILCON Project P-057. All electronic equipment air intakes are from above the raised floor space. All distribution may be overhead or underfloor; however the underfloor plenum is recommended.

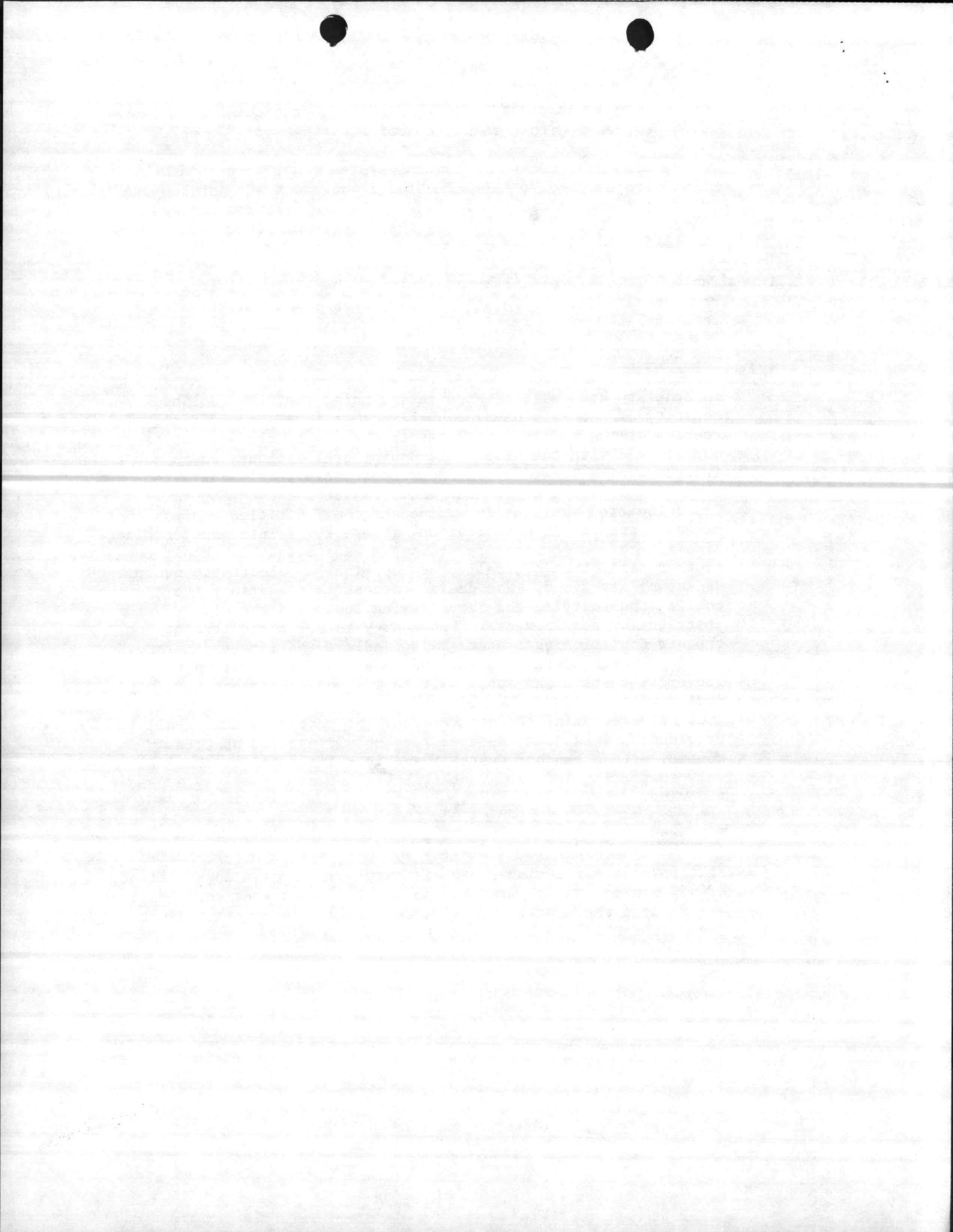
6.4.2.1 Table 6-2 is a preliminary analysis of the air conditioning requirements for the Message Center areas. The number of personnel for each area is also indicated.

6.4.3 Air Handlers

In order to keep size reasonable and noise low, the cooling capacity of each air handler shall not be more than 10 tons. The routing of the refrigerant lines to the air handlers shall be coordinated with the electronic equipment locations, so as not to interfere with locations of underfloor cable runs. Suggested areas for location of new air handlers are shown on Figure 3-1. Exact location shall be determined by the facilities design agent based on proper air distribution, access for maintenance, cabinet size and ease of the future equipment expansion. It should be kept in mind, that generally the locations of electronic equipment as shown, are fixed. The design purpose is to satisfy the cooling, humidifying and dehumidifying loads and the air distribution requirements. Redundancy is not a requirement for the air conditioning system. Air handlers shall be free standing single package, down flow room units which take air from the above-floor space and supply air to the underfloor space. This design will preclude the necessity for either supply or return ducting penetrating the secure area. No reheat as such shall be provided, and facility as specified should exhibit no cross control with attendant waste of energy. Air handlers shall be self-supporting and shall not be installed on top of the access flooring.

6.4.4 Filters

Filters on the incoming fresh air supply shall have an efficiency of 45% minimum as measured by the "ASHRAE" dust spot test. Return air filters shall have an efficiency of 20% minimum as measured by the same test.



6.4.5 Recorder

A temperatures/humidity recorder shall be provided by the site preparation contractor in the RIXT space in a location where it will sense fully diffused average conditions to monitor environmental control system performance.

6.4.6 Fresh Air Intake

The air conditioning system shall be designed for a continuous intake of outdoor air of not less than 20 CFM per occupant.

6.5 Electrical Power Requirements

6.5.1 The primary electric service to Camp Lejeune is delivered from Carolina Power and Light Company. Primary distribution is overhead at 12.4 KV. Adequate primary and secondary power for support of the Message Center shall be provided by MILCON Project P-057.

6.5.2 The power for the new equipment distribution shall be from a three phase, four-wire system, plus ground, at 120/208V volts; plus or minus 10% and 60 Hz plus or minus 5 Hz. The new equipment including reproduction being installed will require approximately 16 KW of technical power.

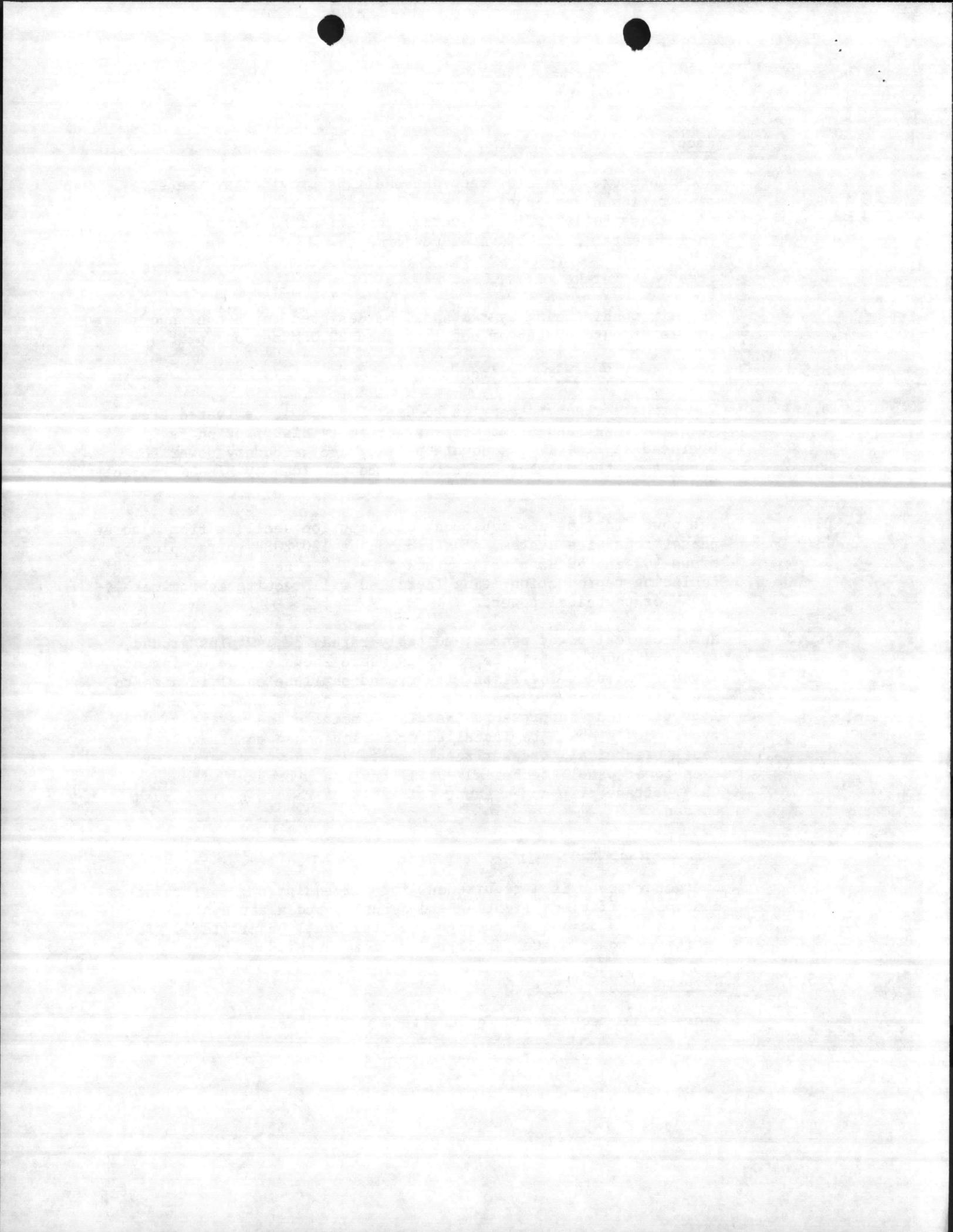
6.5.3 New technical power panels, suitably rated, 3Ø, 4W plus ground, 120/208V, 60 Hz, shall be provided where shown on the equipment layout drawing. The fifth wire ground shall be equal in size to the wire feeding the power panel. Power panels shall have power line transient suppressors installed, metal oxide varistor (MOV) type. MOV's shall be installed from each phase to ground. Power panel (technical) breaker requirements are shown on Table 6-1. Each power panel (technical) shall have main breaker with an undervoltage trip and a shunt trip using a remote control push button.

6.5.4 Emergency Power

Emergency power is a requirement for all equipment, environmental control, sufficient lighting and security and alarm systems. A minimum of 3 days fuel storage capacity shall be provided. The emergency power system shall be provided by MILCON Project P-057.

6.5.5 No-Break (UPS) Power

There is no requirement for no-break (UPS) power.



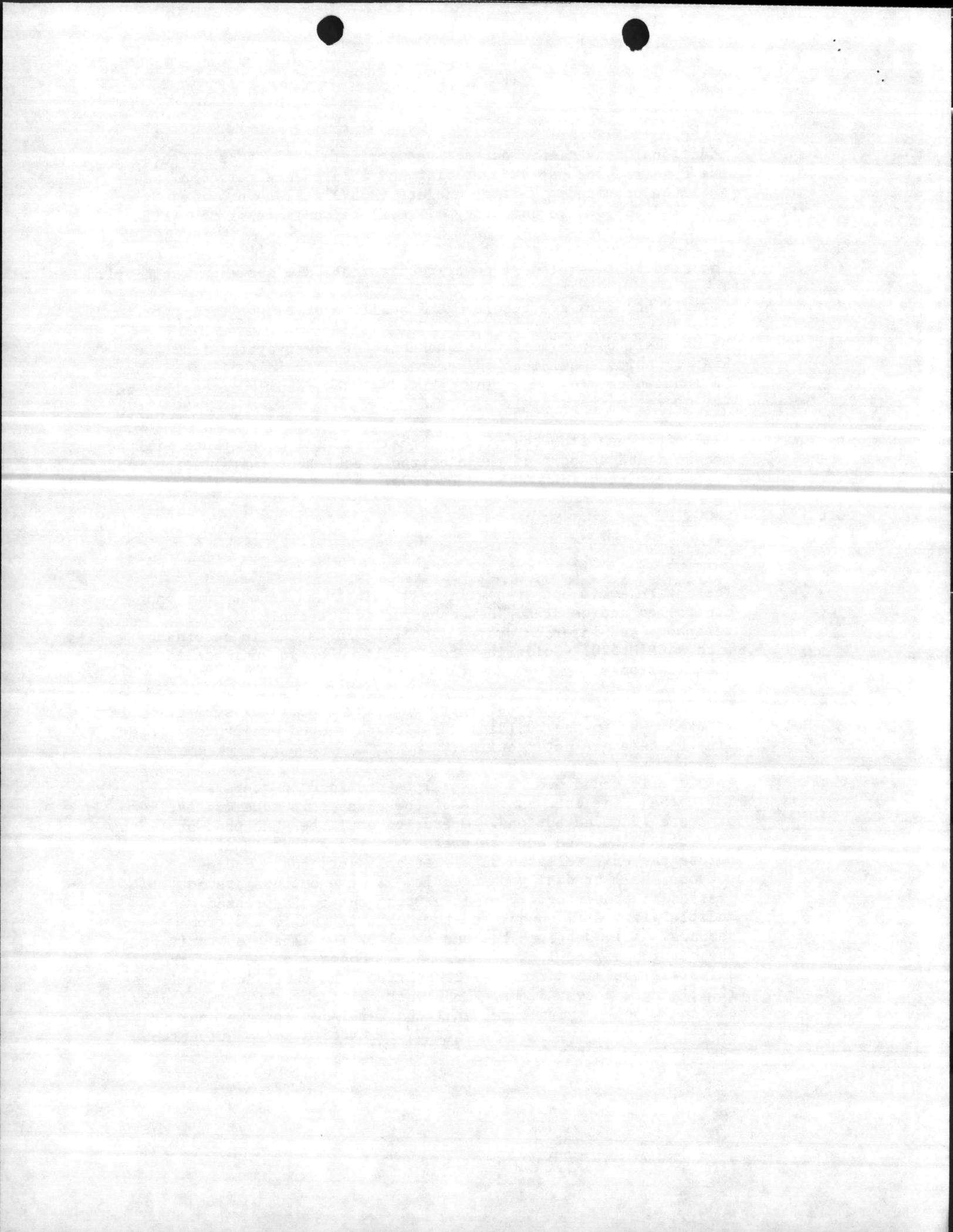
- 6.5.6 Additional convenience outlets (approximately 12 ft on centers) are required for use by operating and maintenance personnel and shall be provided. Special outlets (208V) will be provided by NAVELEXSYSENGCEN Portsmouth. All outlets shall be of the self grounding type.
- 6.5.7 The electronic equipment power requirements are shown on Table 6-1.
- 6.5.8 Circuit breakers are required and shall be of the bolt-on type.
- 6.5.9 Means shall be provided to disconnect the power system from the RIXT technical equipment in accordance with Article 645-3 of the National Electric Code. The means shall be readily accessible to the operating personnel.
- 6.5.10 All power runs from the circuit breaker in the power panel will be accomplished as part of the electronic equipment installation, and is not a part of MILCON Project P-057.

## 6.6 SECURITY

### 6.6.1 General

The entire equipment area will be within a continuous duty and controlled access area. New construction, technical power, telephone and intercom systems shall be installed in accordance with NACSIM 5203 (Guidelines for Facility Design and Red/Black Installation)

- 6.6.1.1 The RIXT system is tempest approved. The electrical substation is located next to the building in a locked fenced enclosure. Power line filters are not required.
- 6.6.2 An electric coded door lock shall be provided on doors so indicated. The lock shall be of the electronic type consisting of at least 10 coded buttons. Operation shall be such that at least four of the buttons must be pressed in a predetermined order before the unit releases an electrical door lock. Coding of the buttons shall be easily changeable. If the buttons are not pressed in proper order, or if a wrong button is pressed, an audible alarm will sound, and the door will be locked from 0 to 60 seconds. The door lock buttons shall be installed as a unit on the outside of the locked door space. Connection between the units will be via a flexible connection, and power input will be 120V, single phase, 60 Hz. An electrical lock as recommended by the coded lock manufacture, shall be furnished for the door. A preferred coded lock is the Hirsch Electronics Corporation, Los Angeles, CA, Micro-55, digital scrambler system.



6.6.3 Doors

Secure door (main entry and emergency exit) shall be of 1-3/4 inch solid core wood, 1 hour fire rated. Frames shall be metal. The main entry door shall be a minimum of 42 inches wide. Other doors shall be 1-3/4 inch solid core wood and 36 inches wide. Door hinges on entry and emergency exit doors shall be tamper-proof type. Additionally, emergency exit door shall contain an alarm to sound when ever the door is not latched. In addition to the electric lock, the main entry door shall contain a built-in, Group I, combination tumbler lock dead-bolt extension, also the doors shall be fitted with a one-way, wide angle viewer, to permit a person on the inside to determine the identity of the person on the outside.

6.6.4 Ducts and Openings

All ductwork and openings of greater than 90 square inches which penetrate the controlled area shall at the point of penetration, be equipped with security bars to prevent entry through the opening.

6.6.5 Walls

All walls defining the boundary of the controlled areas (COMM Center) shall be full height and extend from floor to underside of permanent floor above. The wall shall have a sound rating of greater than STC-45.

6.6.6 Responsibility

Physical security requirements for the protection of government property and classified material are specified in OPNAVINST 5510.10 and OPNAVINST 5510.45B. Special measures are the responsibilities of and will be provided by 2nd FSSG Camp Lejeune which includes surveillance of the areas and escorting of contractor personnel during construction hours. The activity has advised that for the facilities work, contractor security clearance for workmen, is not required.

6.6.7 Locations for secure walls and doors is shown on Figure 6-5.

6.7 Telephone and Intercom System

6.7.1 Telephone

Administrative telephone will be required, and are the responsibility of the activity. This project shall provide for empty conduit to each location. Locations of required telephones will be provided by 2nd FSSG, Camp Lejeune during the 35% Facilities Design Review.

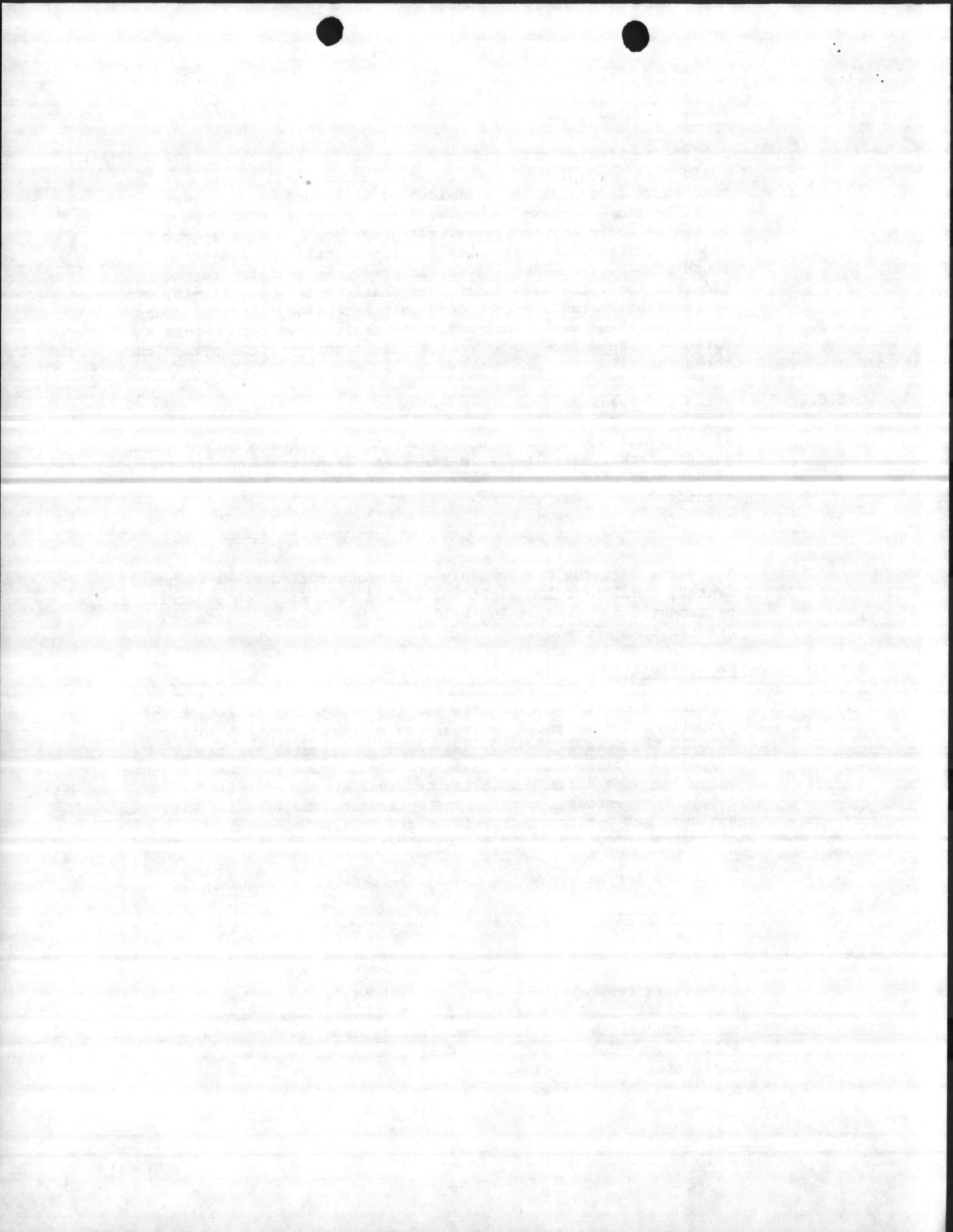


TABLE 6-1: EQUIPMENT CHARACTERISTIC TABULATION

## MESSAGE CENTER

QTY	NOMENCLATURE AND NOUN NAME	VOLTAGE	HERTZ	PH.	WATTS	TOTAL WATTS	N/B REQ	HEAT LOSS (BTU/HR)	TOTAL HEAT LOSS (BTU/HR)	WEIGHT (lbs.)	HEIGHT (in.)	WIDTH (in.)	DEPTH (in.)	REMARKS
1	AN/UGC-51 TELETYPE	115	60	1	200	200	N	683	683	90	19.00	17.00	28.00	20 AMP BREAKER
4	AN/UGC-6 TELETYPE	115	60	1	250	1000	N	850	3400	290	39.00	36.00	18.50	20 AMP BREAKER
1	RIXT LINE CONTROL UNIT	115	60	1	1035	1035	N	3530	3530	650	45.00	51.00	38.00	15 AMP BREAKER
1	RIXT MEDIUM SPEED LINE PRINTER	115	60	1	800	800	N	2730	2730	285	42.00	30.00	28.00	15 AMP BREAKER
1	RIXT HIGH SPEED LINE PRINTER	115	60	1	1950	1950	N	6655	6655	395	47.00	36.00	32.00	30 AMP BREAKER
1	RIXT PAPER TAPE READER PUNCH	115	60	1	345	345	N	1180	1180	655	61.00	28.00	28.00	10 AMP BREAKER
1	RIXT OPTICAL SCAN UNIT	115	60	1	440	440	N	1500	1500	300	34.00	26.00	30.00	10 AMP BREAKER

TOTALS FOR MESSAGE CENTER

5770 WATTS

19678 BTU/HR

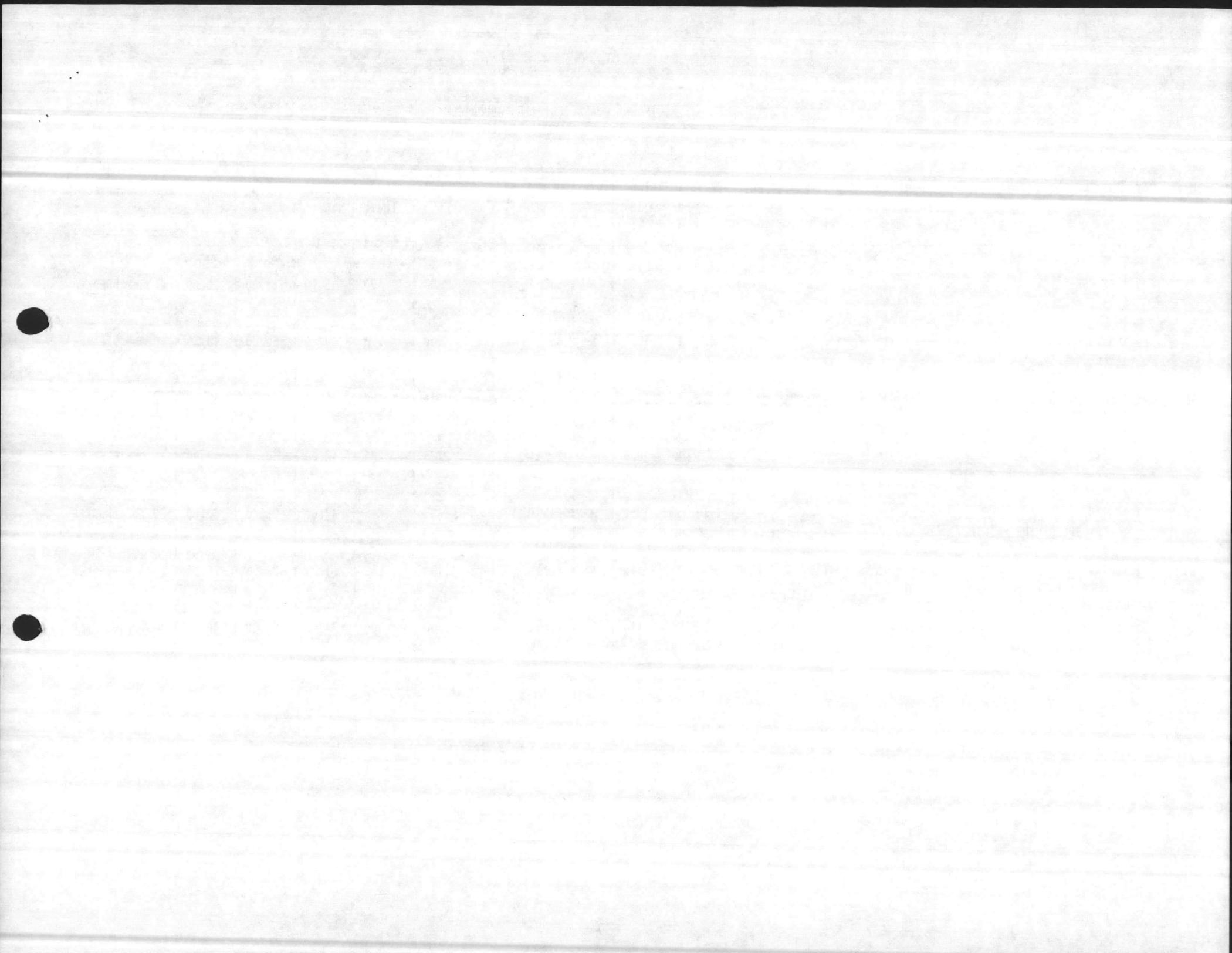


TABLE 6-1: EQUIPMENT CHARACTERISTIC TABULATION

CRYPTO PATCH & TEST

QTY	NOMENCLATURE AND NOUN NAME	VOLTAGE	HERTZ	PH.	WATTS	TOTAL WATTS	N/B REQ	HEAT LOSS (BTU/HR)	TOTAL HEAT LOSS (BTU/HR)	WEIGHT (lbs.)	HEIGHT (in.)	WIDTH (in.)	DEPTH (in.)	REMARKS
2	ADC MULTI-CIRCUIT PATCH PANEL	115	60	1	100	200	N	340	680	19	5.25	19.00	18.00	
1	C-8657(P)/UG AUTOPHASE UNIT	115	60	1	80	80	N	274	274	30	5.25	19.00	14.00	
1	ICC 2200/24 DATA MODEM	115	60	1	30	30	N	102	102	9	3.56	16.75	15.63	
2	ME-400/FG METER PANEL	N/A	N/A	N/A	N/A	0		N/A	0	5	5.25	19.00	2.00	
2	PP-6521/FG POWER SUPPLY +-6VDC CONTROL	115	60	1	5	10	N	17	34	5	5.22	19.00	5.13	
2	PP-6521/FG (1) POWER SUPPLY +-6VDC MODULE	115	60	1	60	120	N	204	408	40	8.72	9.50	20.00	
2	SB-3189(B)/FG DC PATCH PANEL	N/A	N/A	N/A	N/A	0		N/A	0	20	7.00	19.00	15.00	
2	SB-3503/FG FUSE PANEL	+6 VDC	N/A	N/A	NONE	0		N/A	0	0	7.00	19.00	14.50	
2	SB-3684 BALLAST LAMP PANEL	N/A	N/A	N/A	N/A	0		N/A	0	5	3.50	19.00	15.00	
1	TSEC/KG-B4 CRYPTO	115	60	1	15	15	N	51	51	20	7.67	7.50	12.68	

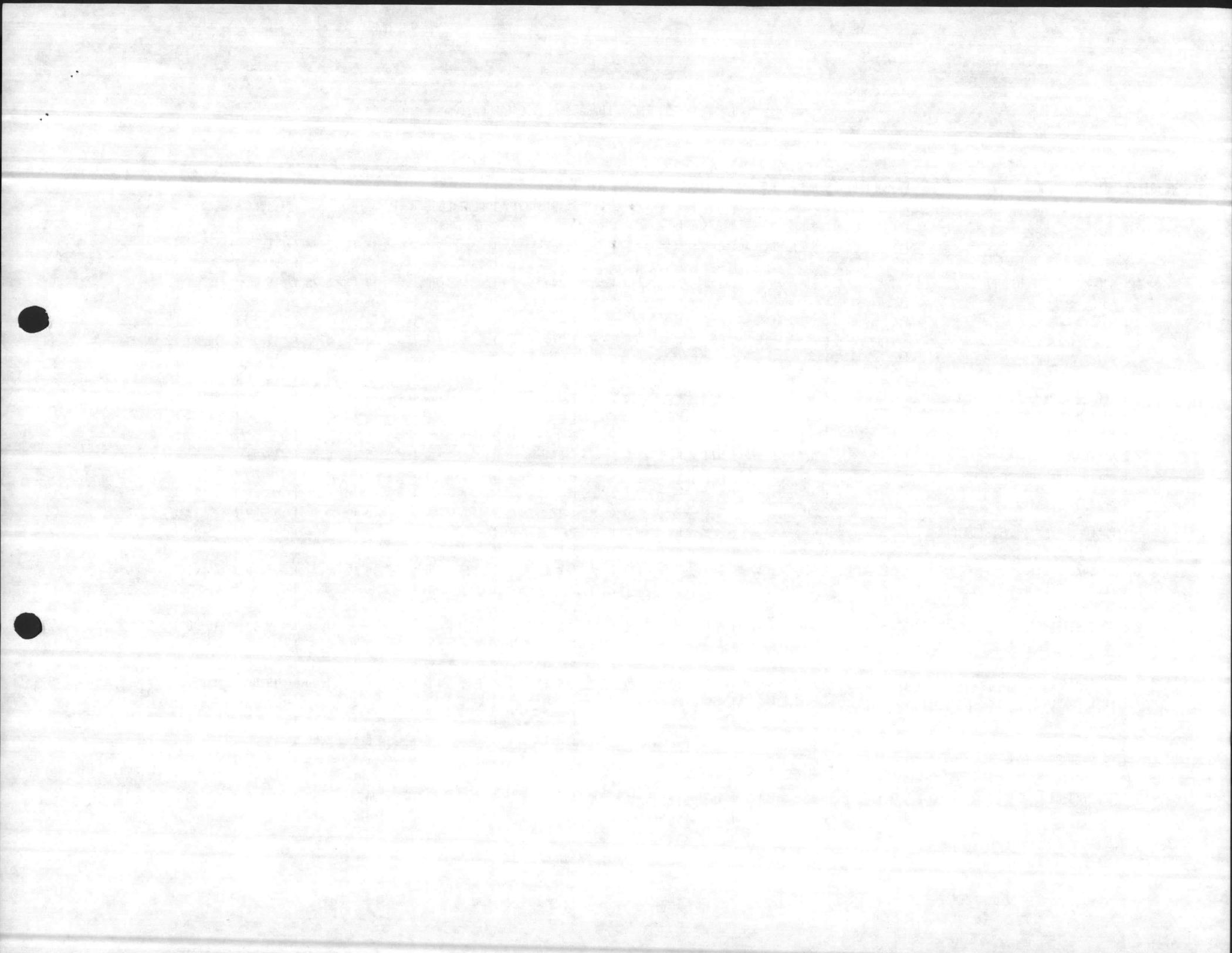


TABLE 6-1: EQUIPMENT CHARACTERISTIC TABULATION

CRYPTO PATCH & TEST

QTY	NOMENCLATURE AND NDUN NAME	VOLTAGE	HERTZ	PH.	WATTS	TOTAL WATTS	N/B REQ	HEAT LOSS (BTU/HR)	TOTAL HEAT LOSS (BTU/HR)	WEIGHT (lbs.)	HEIGHT (in.)	WIDTH (in.)	DEPTH (in.)	REMARKS
4	TSEC/KW-7 CRYPTO	115	60	1	85	340	N	274	1096	60	11.00	16.00	14.00	
4	TSEC/KWX-11 FIXED PLANT ADAPTER	+/- 6V DC	DC	N/A	1.2	4		4	16	14	10.00	15.00	7.00	
1	TSEC/KY-3 CRYPTO	120	60	1	125	125	N	427.5	427	270	29.50	23.00	27.50	
TOTALS FOR CRYPTO PATCH & TEST						924 WATTS			3088 BTU/HR					

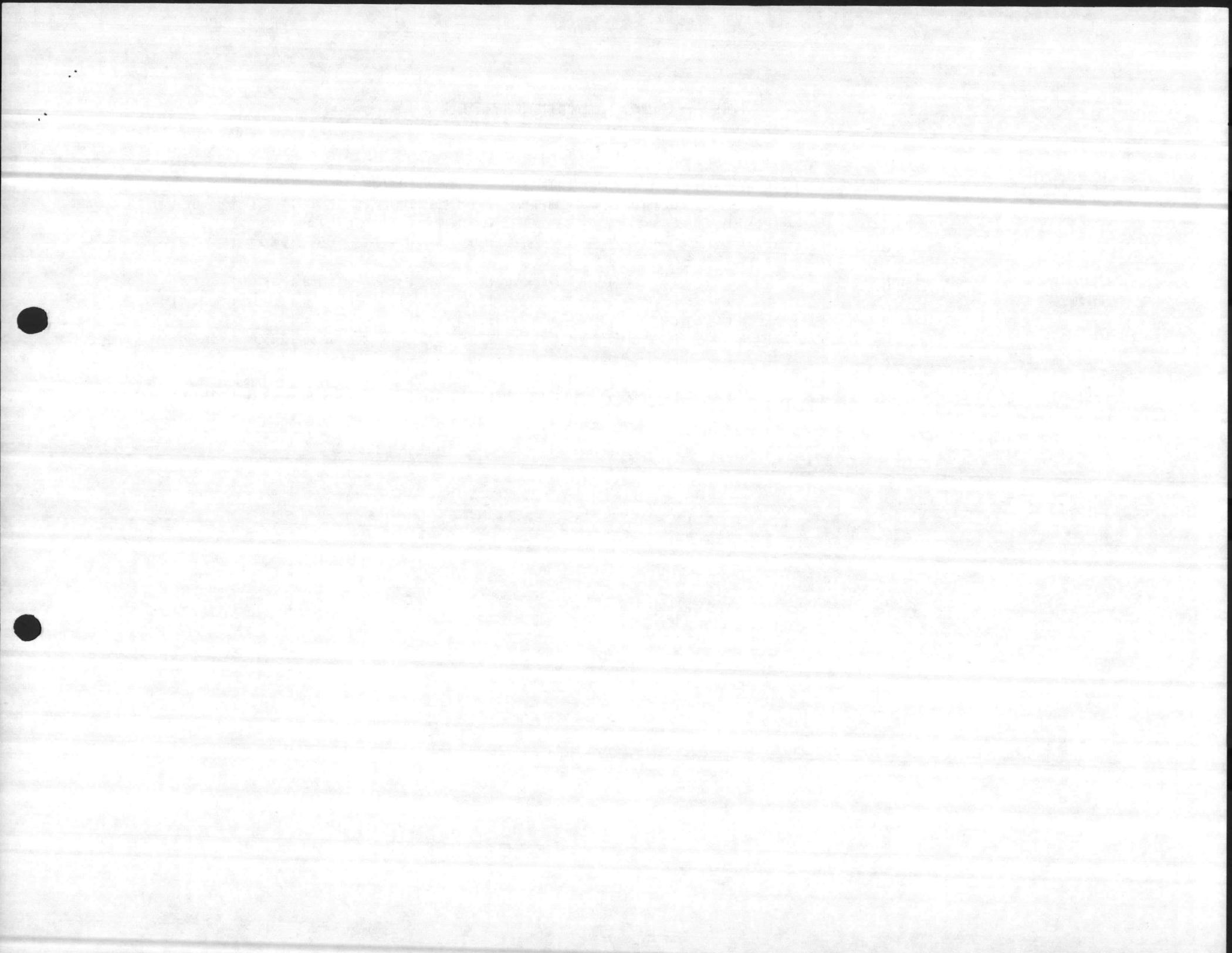


TABLE 6-1: EQUIPMENT CHARACTERISTIC TABULATION

DISTRIBUTION/REPRODUCTION AREA

QTY	NOMENCLATURE AND NOUN NAME	VOLTAGE	HERTZ	PH.	WATTS	TOTAL WATTS	N/B REQ	HEAT LOSS (BTU/HR)	TOTAL HEAT LOSS (BTU/HR)	WEIGHT (lbs.)	HEIGHT (in.)	WIDTH (in.)	DEPTH (in.)	REMARKS
1	XEROX 9200 (WITH 12/12 SORTER) REPRODUCTION MACHINE (RUNNING)	208	60	1	6224	6224	N	23940	23940	2586	57.00	116.00	66.00	ALSO REQUIRES 120V SINGLE PHASE SOURCE
1	XEROX 9200 (WITH 12/12 SORTER) REPRODUCTION MACHINE (STANDBY)	208	60	1	3553	3553	N	6060	6060	2586	57.00	116.00	66.00	ALSO REQUIRES 120V SINGLE PHASE SOURCE
TOTALS FOR DISTRIBUTION/REPRODUCTION AREA						9777 WATTS		30000 BTU/HR						



TABLE 6-2

AIR CONDITIONING PRELIMINARY ANALYSIS

MAINTENANCE, RIXT AND CRYPTO AREA

SHEET 1

		<u>BTU/HR</u>
1.	<u>TECHNICAL LOAD</u>	
	Equipment	34,120
2.	<u>LIGHTS/POWER</u>	
	1000 SF x 4W x 3.412	13,648
3.	<u>PEOPLE/VENTILATION</u>	
	7 x 2000 BTU	14,000
4.	<u>SOLAR/THERMAL</u>	
	Walls:	
	90 LF x 13 ft x 0.3 x 40	14,040
	Roof:	
	(Floor above)	NIL
5.	<u>OTHER</u>	
	Motors	680
	Growth	<u>12,000</u>
		88,488
	REQUIRED: $\frac{88,488}{12,000} = 7.4$ TONS	

Recommend one nominal 7.5 ton new unit be provided. Unit shall be floor mount, down blow type. Location is shown on the equipment layout drawing, redundancy is desired but is not a requirement.

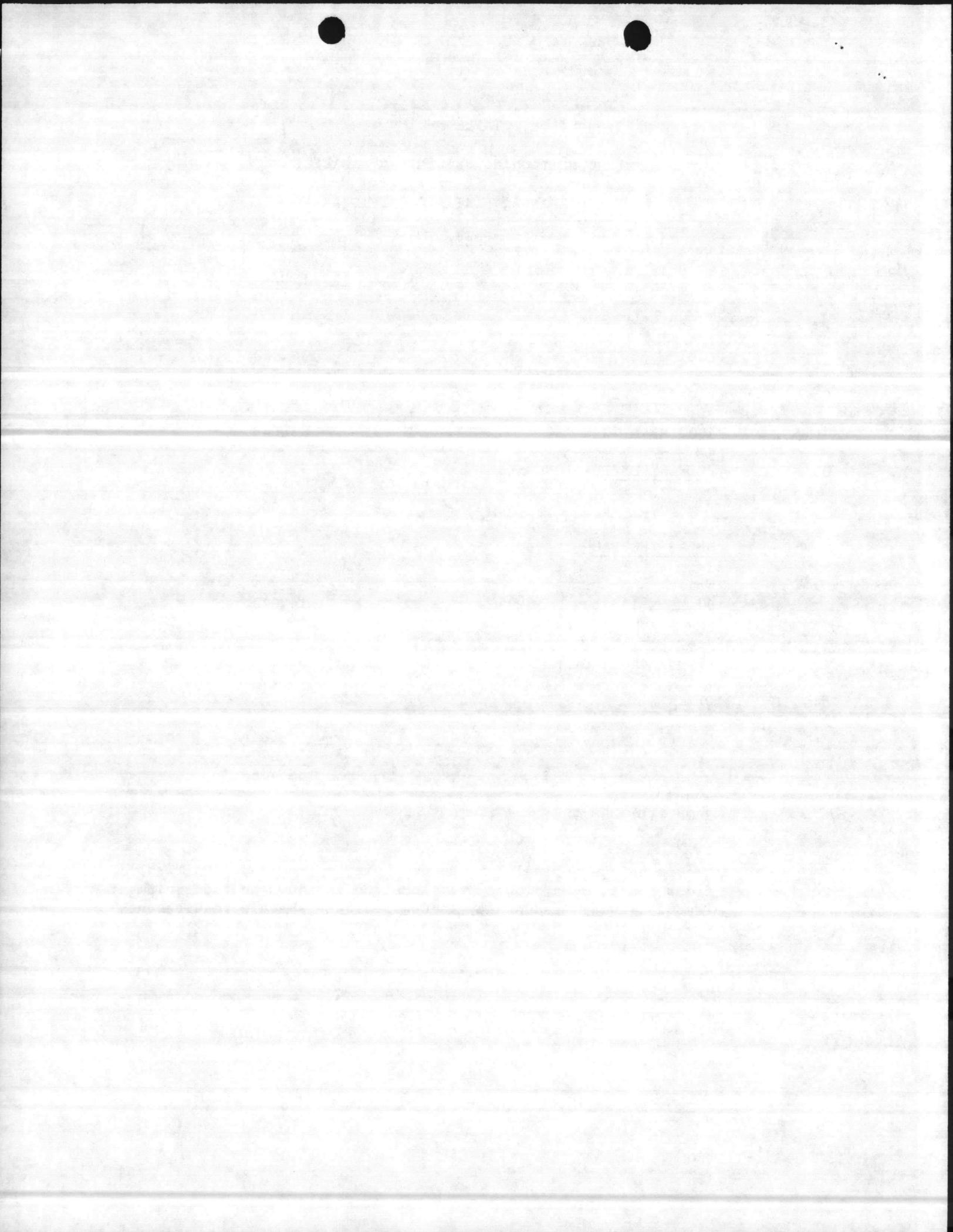


TABLE 6-2

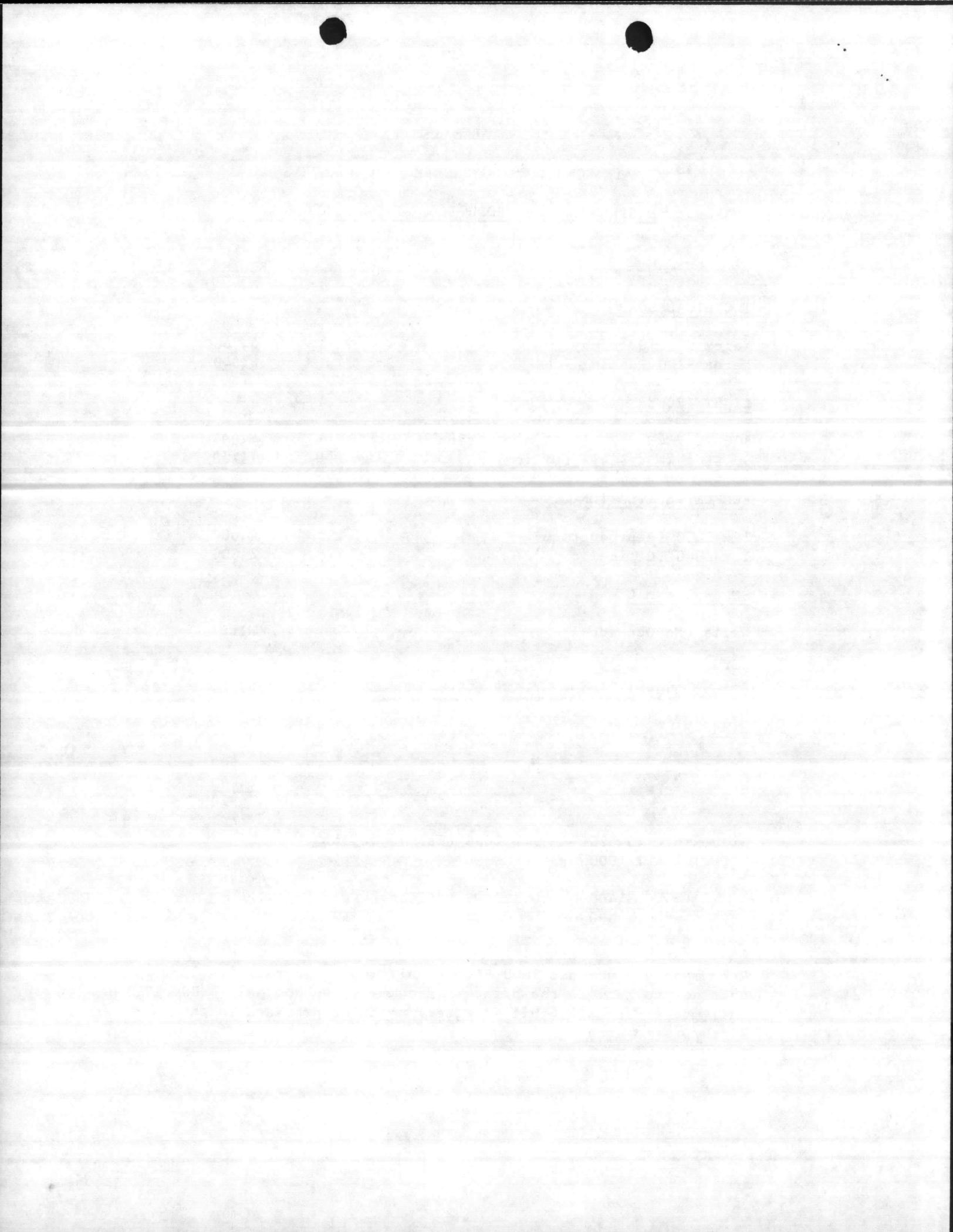
AIR CONDITIONING PRELIMINARY ANALYSIS  
DISTRIBUTION/REPRODUCTION AND OFFICE AREAS  
 SHEET 2

		<u>BTU/HR</u>
1	<u>TECHNICAL LOAD</u>	
	Xerox 9200 Stand-by	6,060
	Xerox 9200 Running	23,940
2	<u>LIGHTS/POWER</u>	
	300 SF x 4W x 3.412 (Reproduction)	4,094
	90 SF x 4W x 3.412 (Office)	1,228
3	<u>PEOPLE/VENTILATION</u>	
	2 x 2000 (Reproduction)	4,000
	1 x 2000 (Office)	2,000
4	<u>SOLAR/THERMAL</u>	
	Walls (No Outside):	NIL
	Roof: (Floor above)	NIL
5	<u>OTHER</u>	
	Motors	600
	Growth	<u>6,000</u>
		47,920

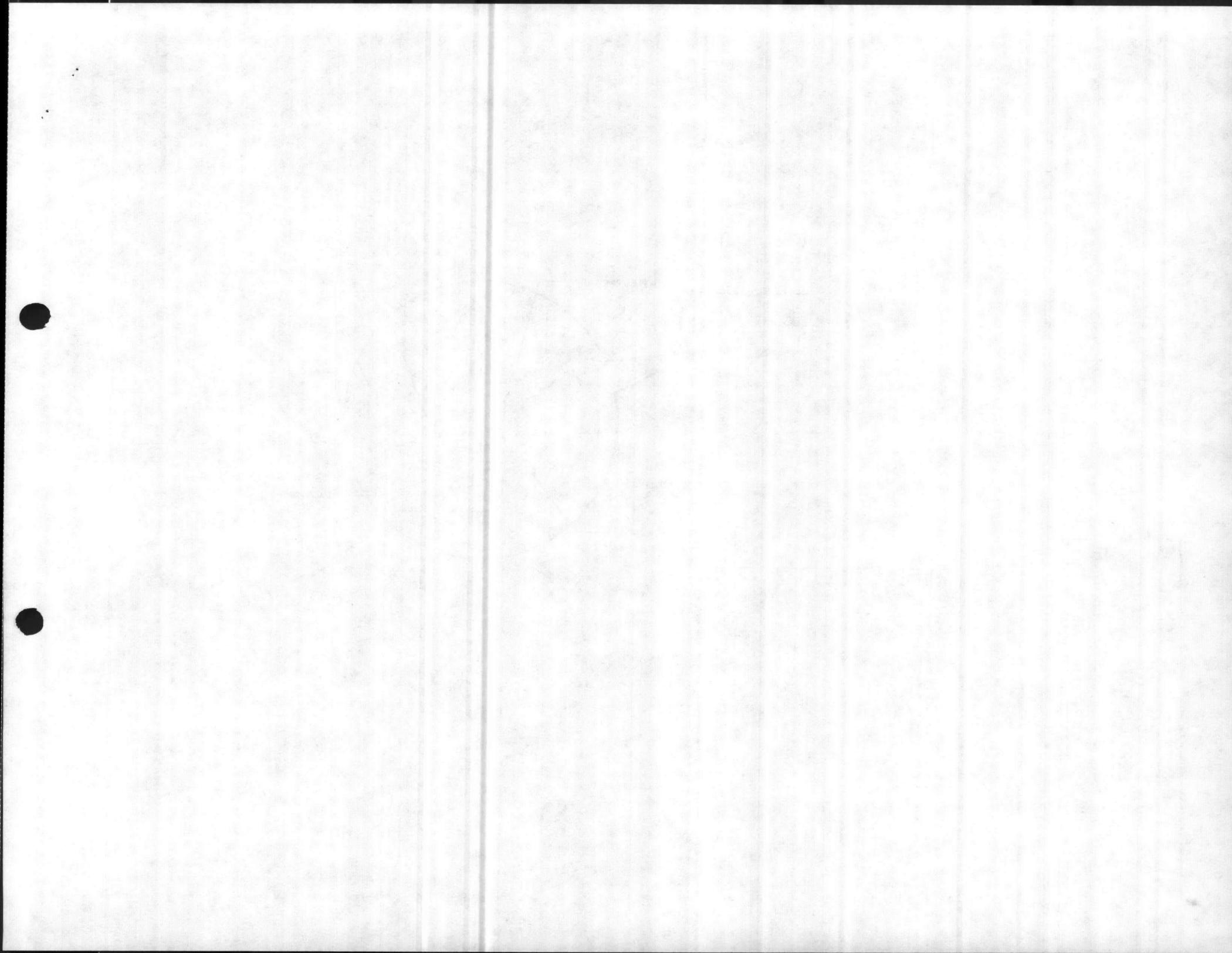
REQUIRED:  $\frac{45,520}{12,000}$  = 3.7 TONS (Reproduction)

$\frac{3,400}{12,000}$  = 0.3 TONS (Office)

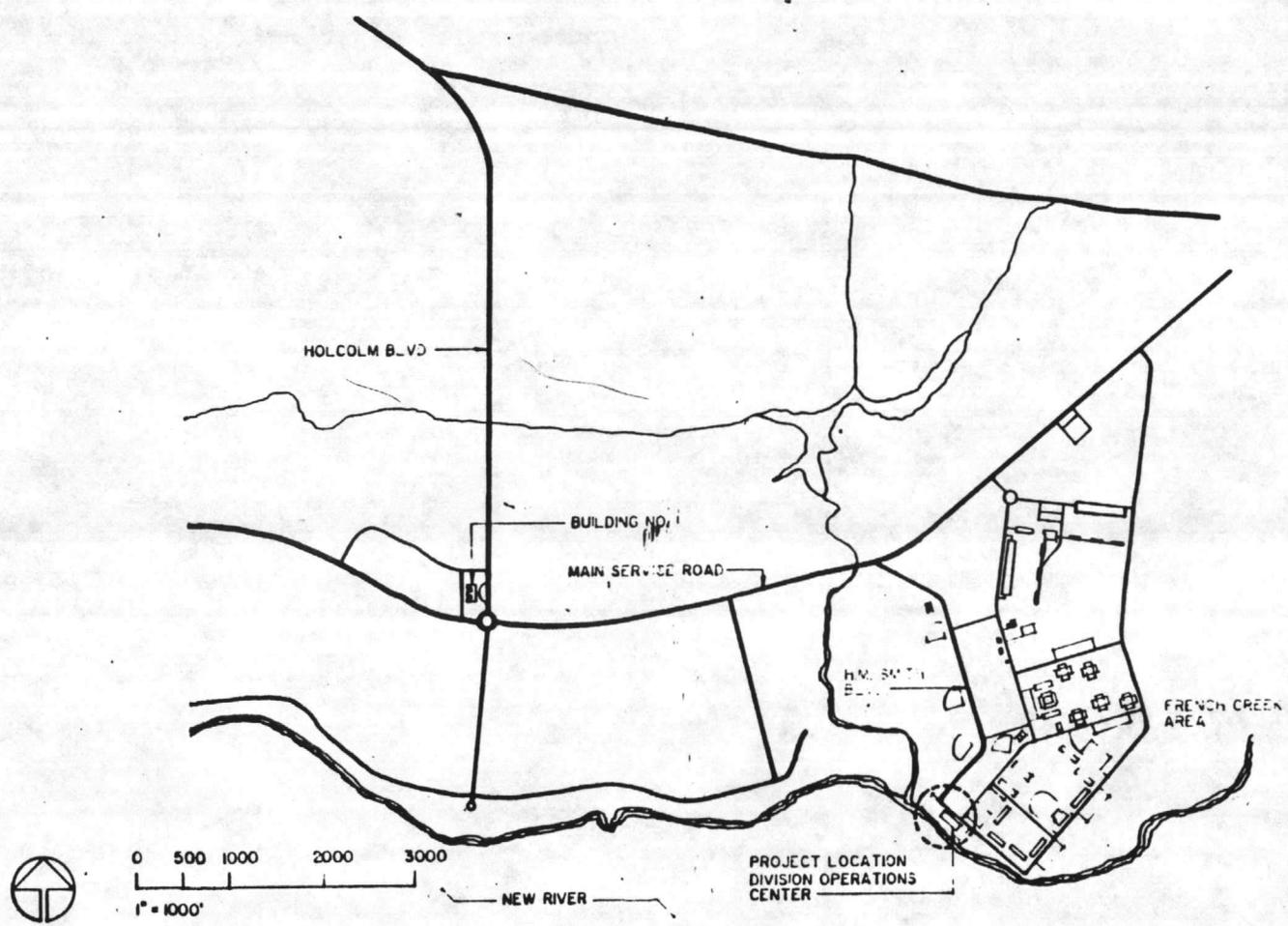
Recommend one nominal 3600 BTU/HR wall mount fan coil (chilled water) unit be provided in the office. Recommend two nominal 24,000 BTU/HR wall mount fan coil (chilled water) units be provided in the Repro/Distro area.

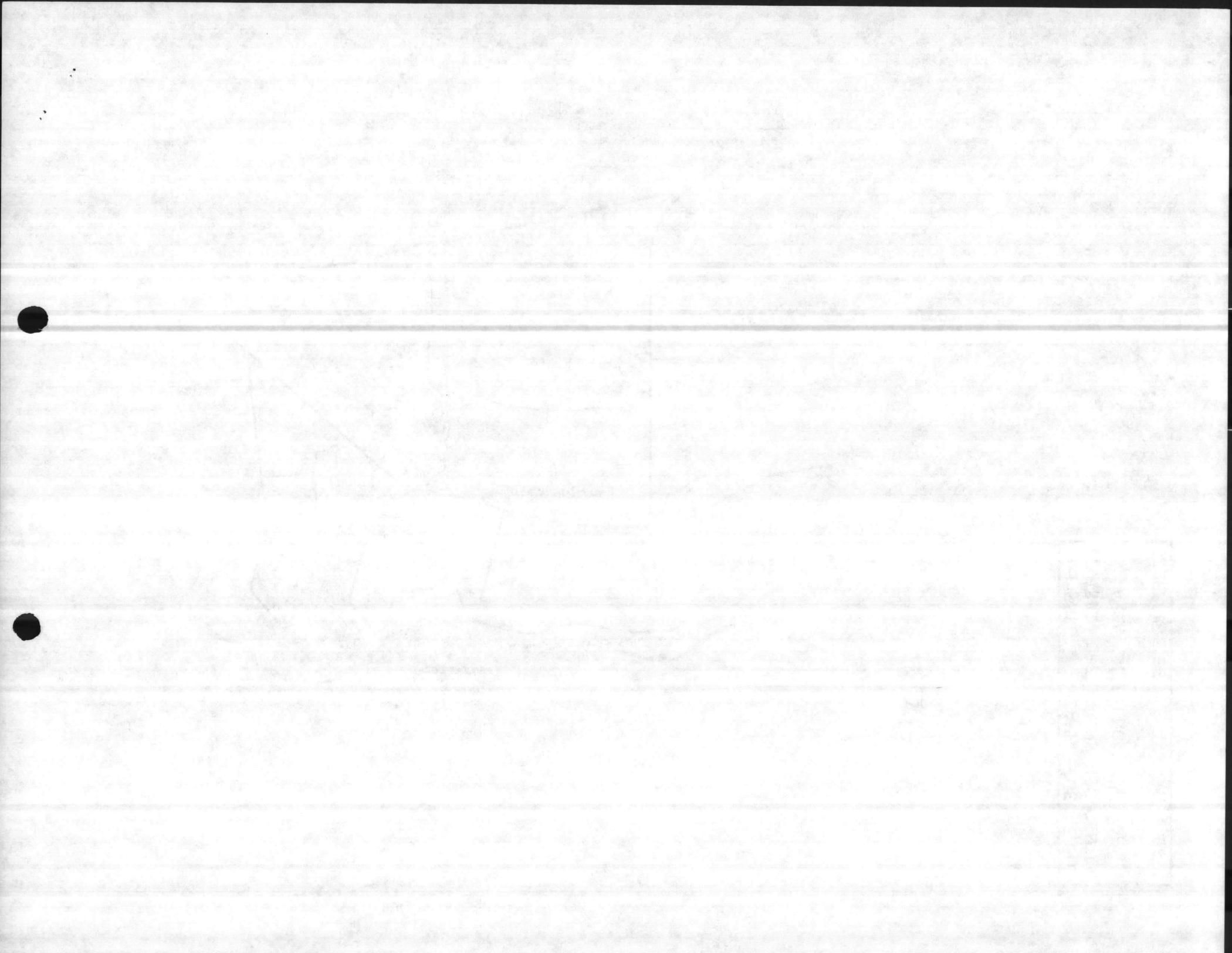


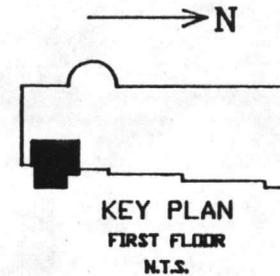
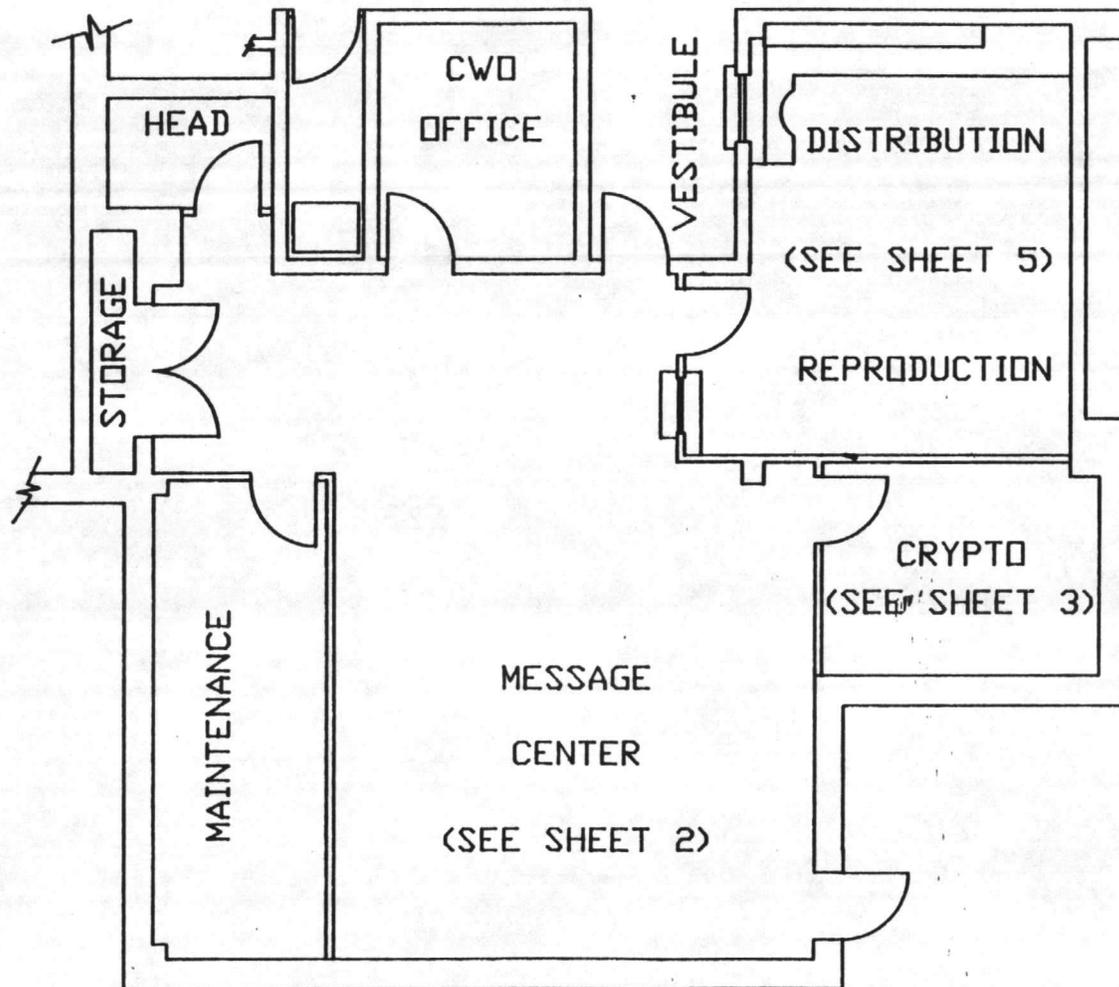




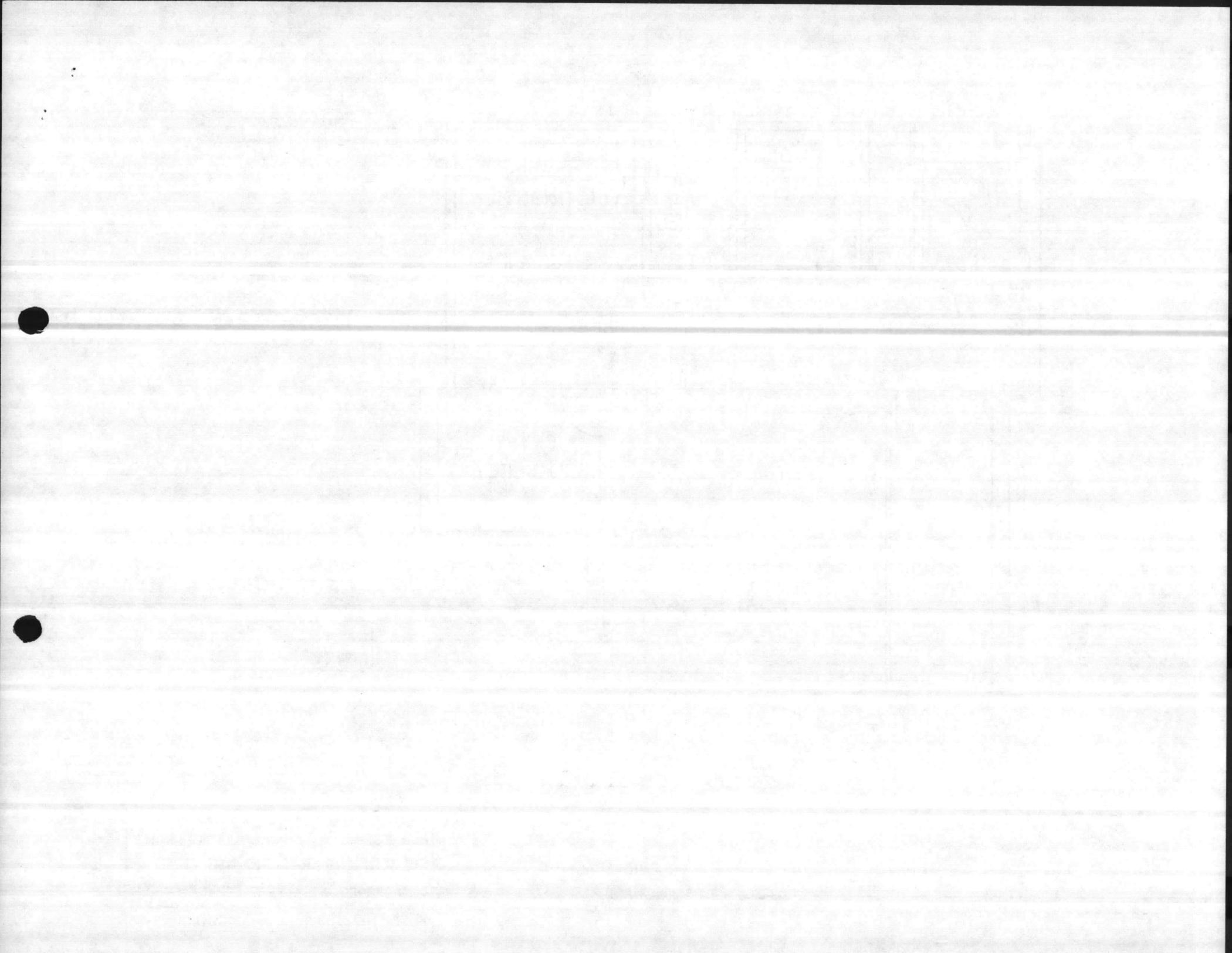
2nd FSSG CAMP LEJEUNE N.C.  
DIVISION OPERATIONS MSG CENTER  
AREA (SITE LOCATION) MAP  
FIG 1-1  
BESEP #72133 SHT 1 OF 1

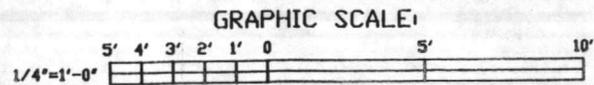
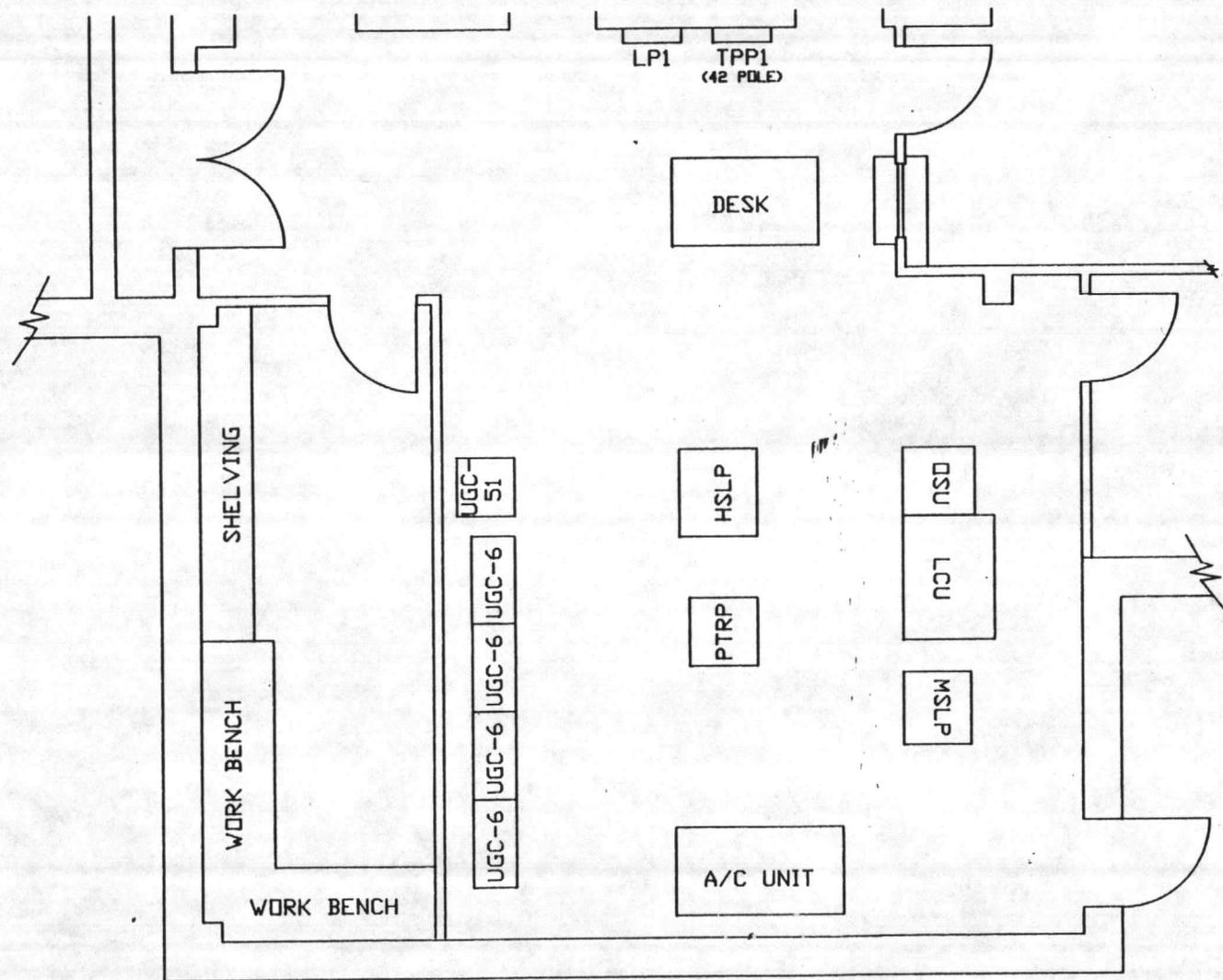




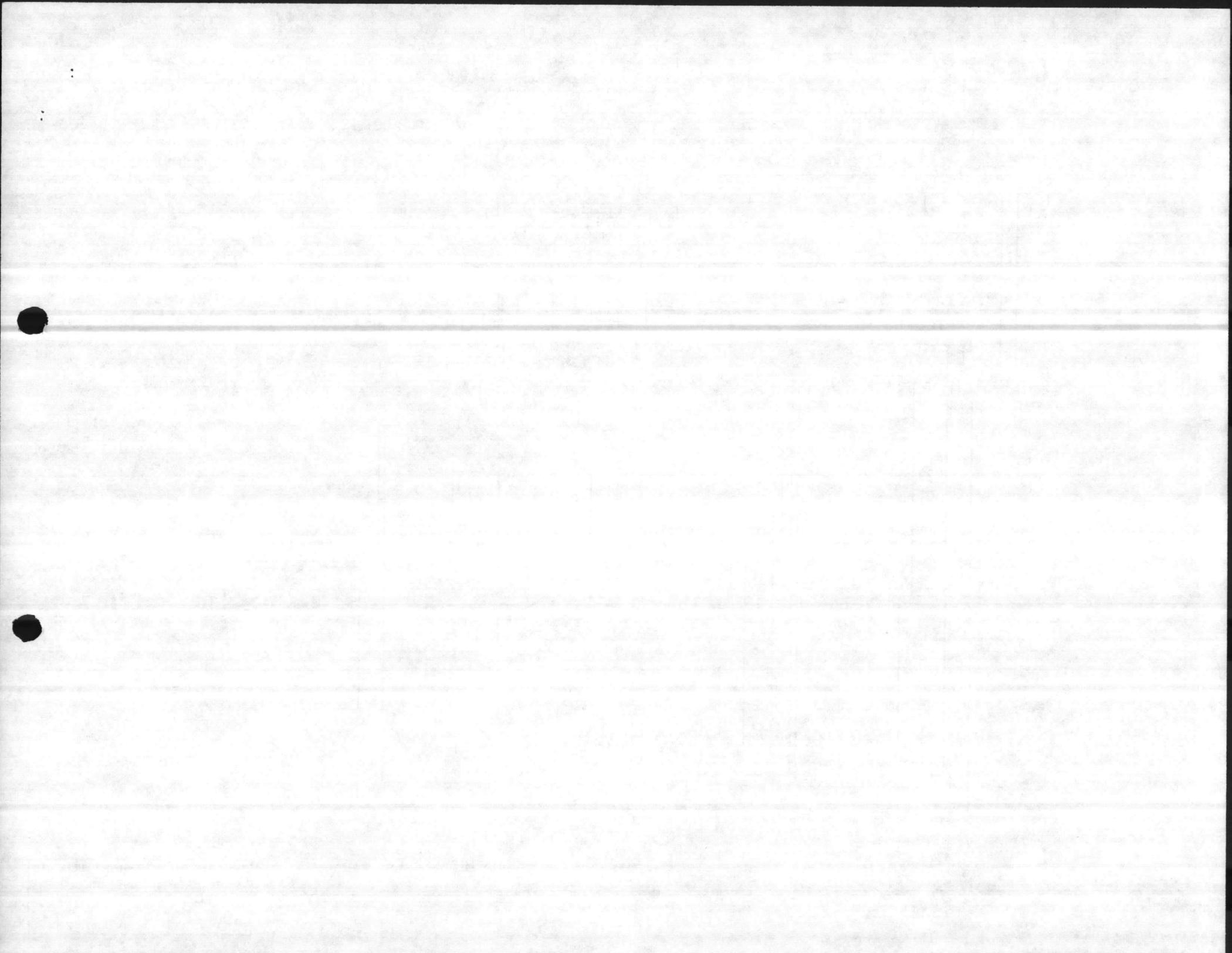


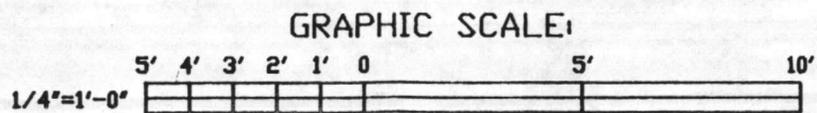
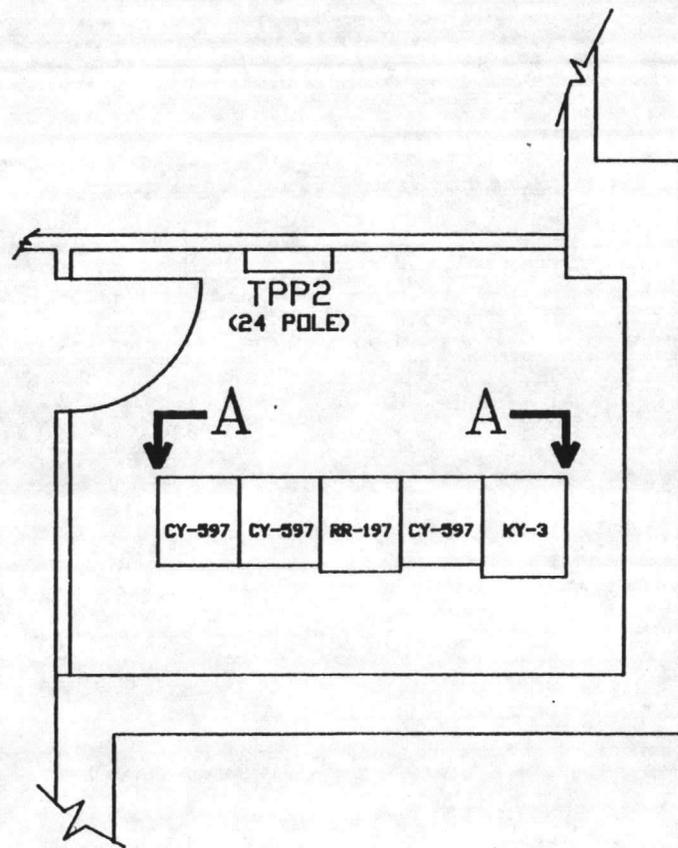
2nd FSSG CAMP LEJUENE N.C.  
DIVISION OPERATIONS MSG CENTER  
EQUIPMENT ARRANGEMENT  
BESEP #72133  
FIG 3-1  
SHT 1 OF 5



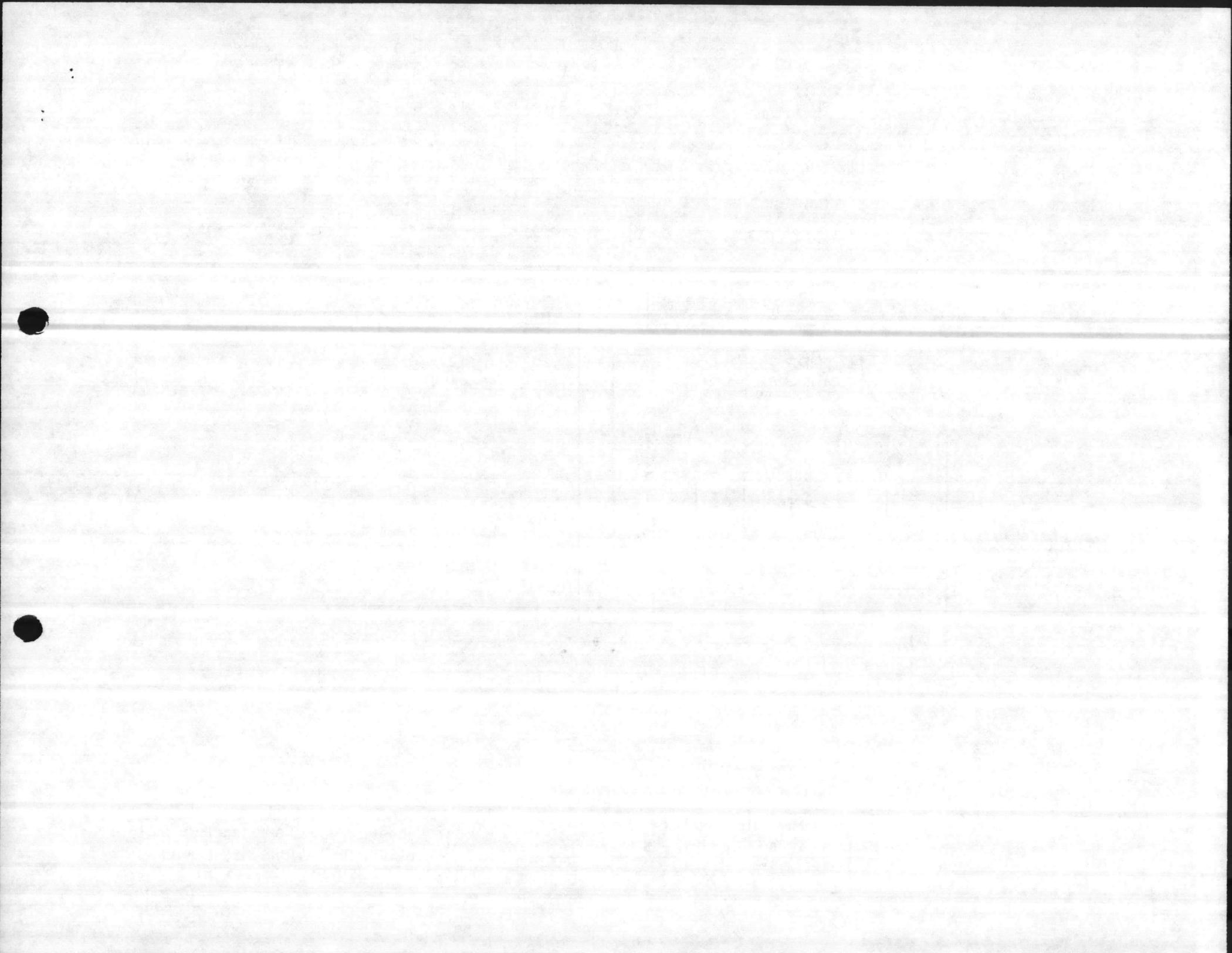


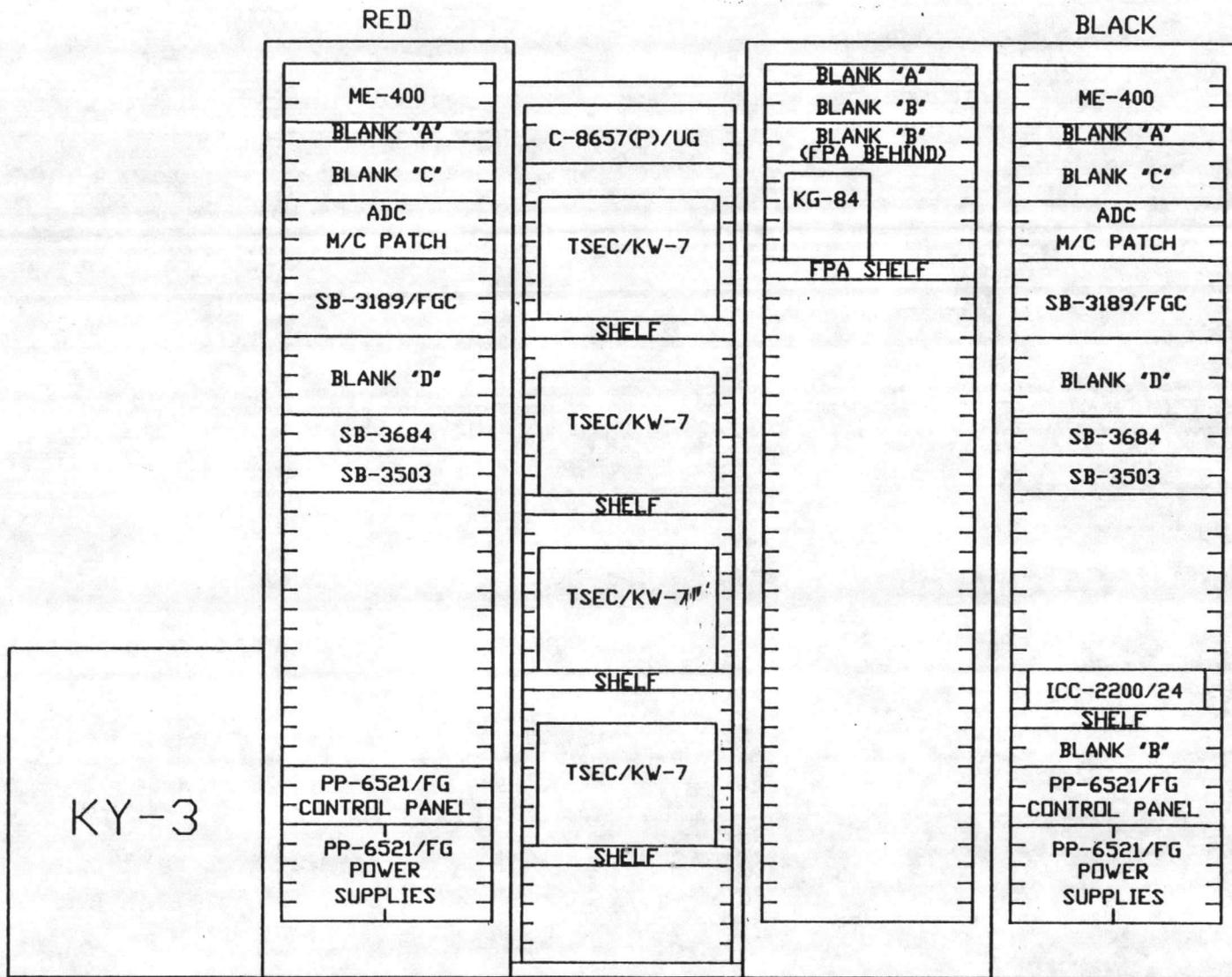
2nd FSSG CAMP LEJUENE N.C.  
 DIVISION OPERATIONS MSG CENTER  
 EQUIPMENT ARRANGEMENT  
 FIG 3-1  
 BESEP #72133 SHT 2 OF 5



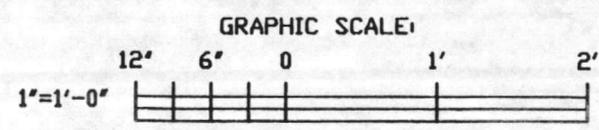


2nd FSSG                      CAMP LEJUENE N.C.  
 DIVISION OPERATIONS MSG CENTER  
 EQUIPMENT ARRANGEMENT  
 FIG 3-1  
 BESEP #72133                      SHT 3 OF 5

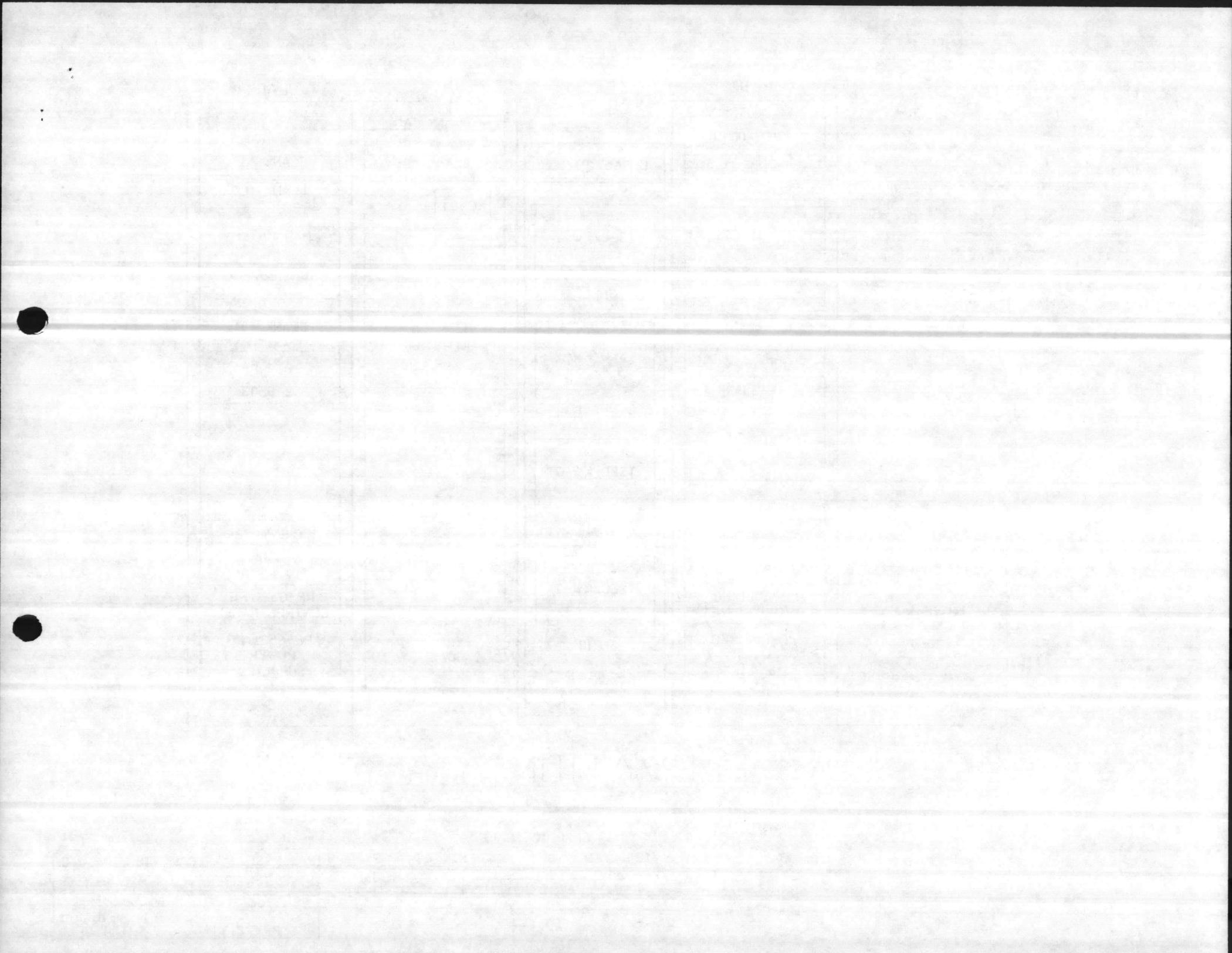


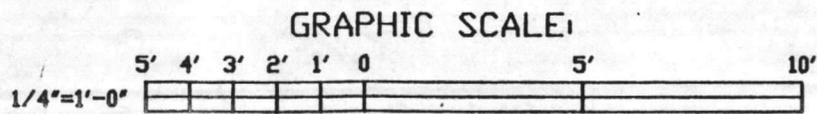
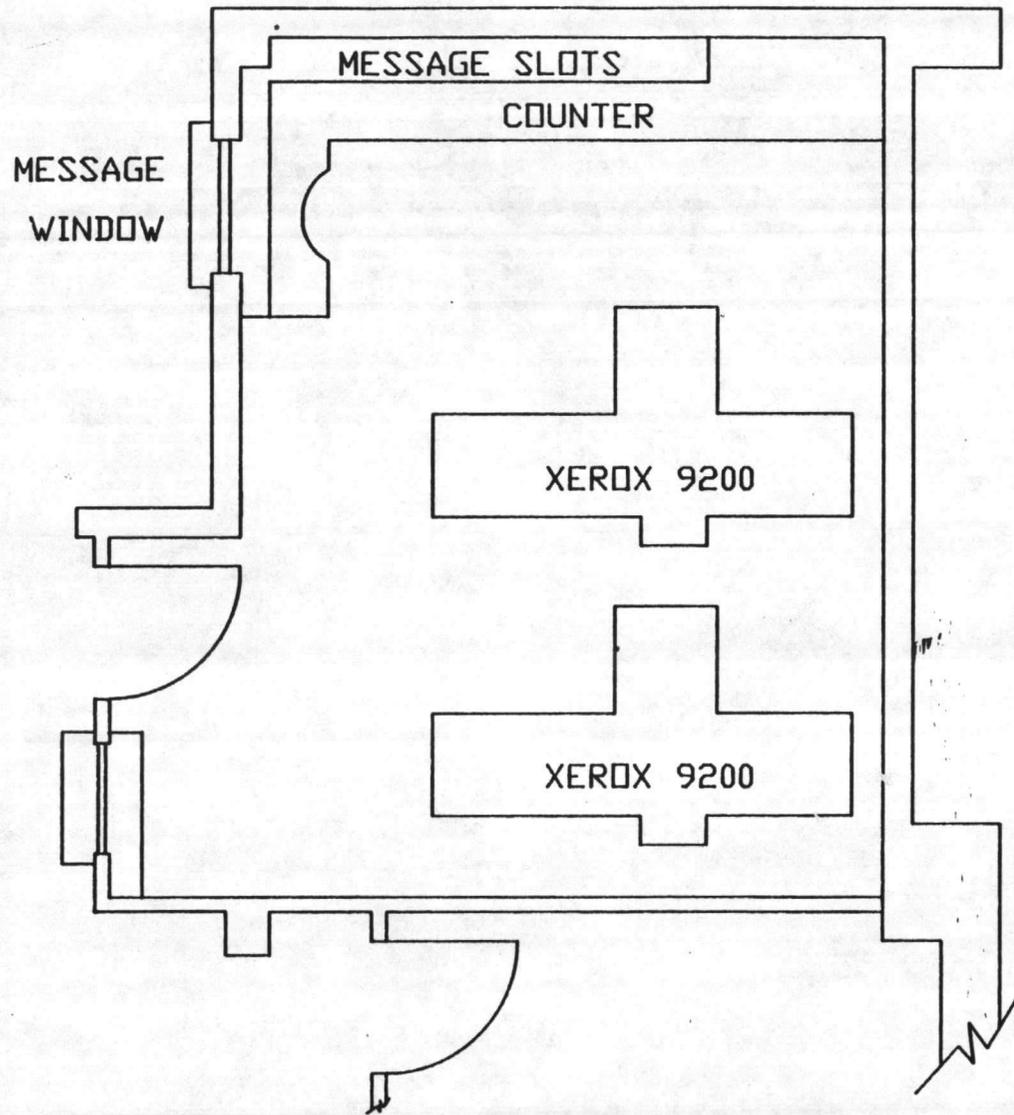


ELEVATION A-A

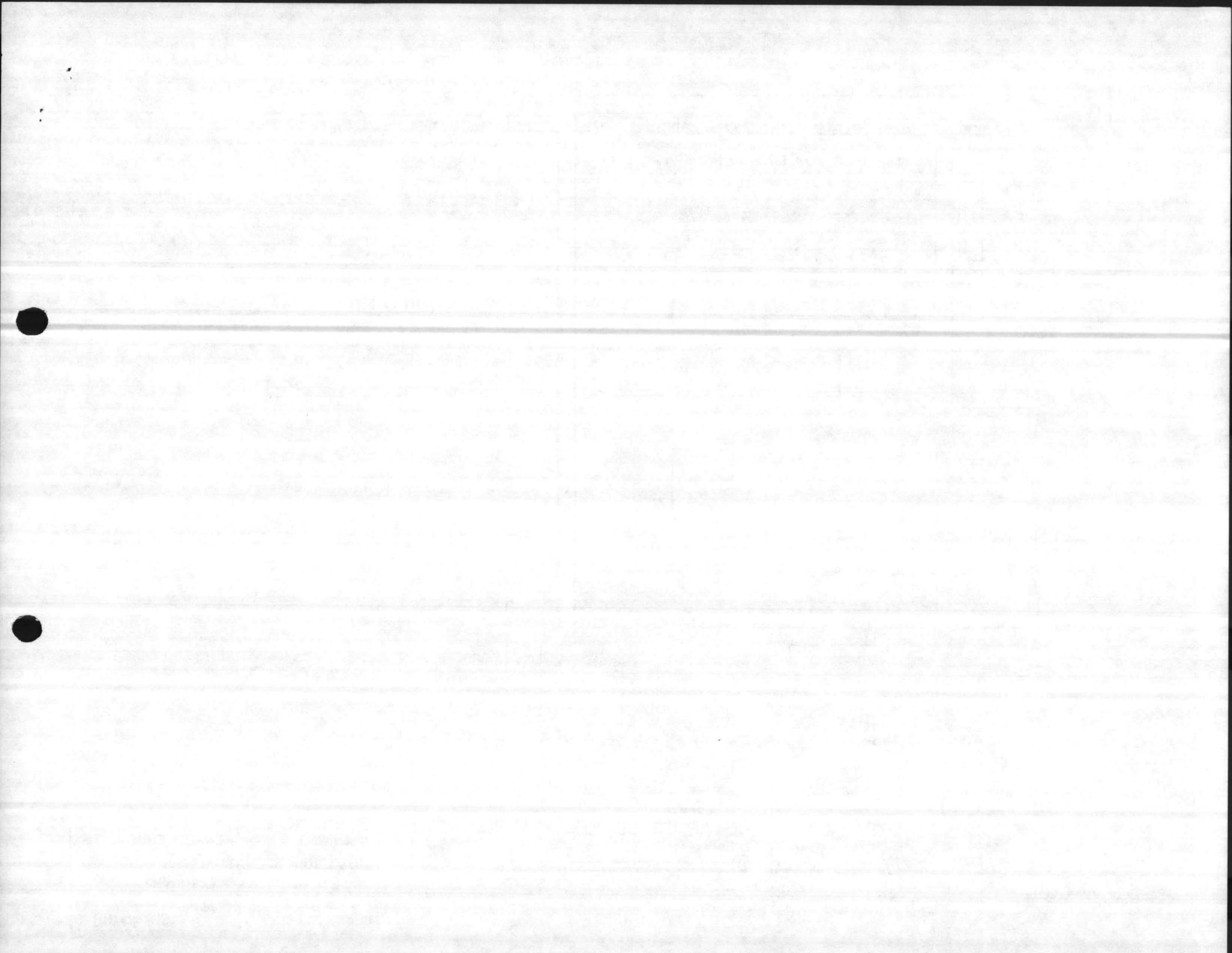


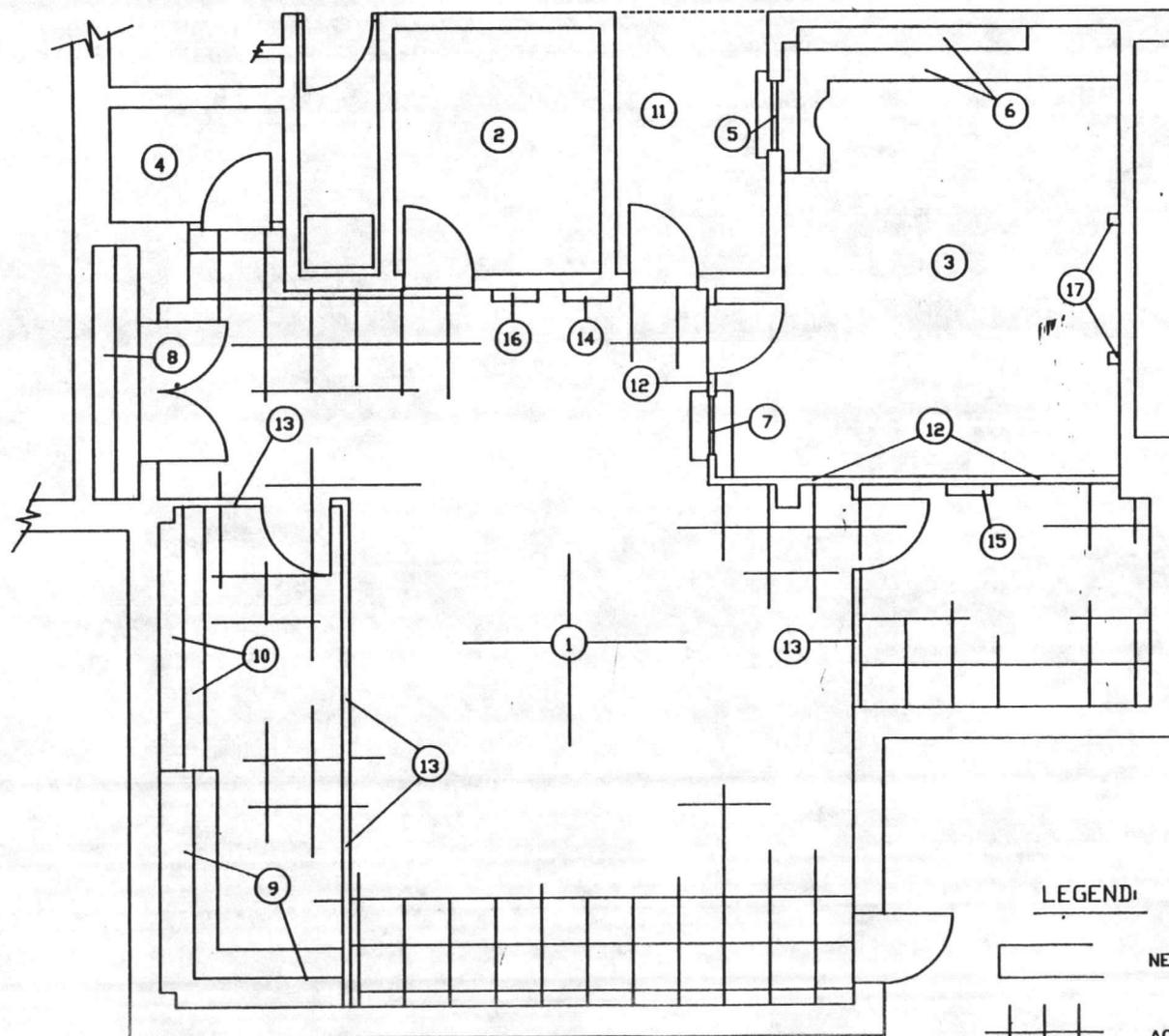
2nd FSSG CAMP LEJEUNE N.C.  
 DIVISION OPERATIONS MSG CENTER  
 EQUIPMENT ARRANGEMENT  
 FIG 3-1  
 BESEP #72133 SHT 4 OF 5





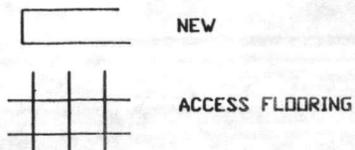
2nd FSSG                      CAMP LEJUENE N.C.  
 DIVISION OPERATIONS MSG CENTER  
 EQUIPMENT ARRANGEMENT  
 FIG 3-1  
 BESEP #72133                      SHT 5 OF 5





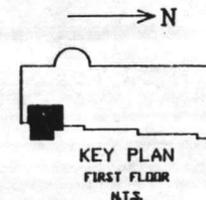
SCALE: 3/16"=1'-0"

LEGEND:

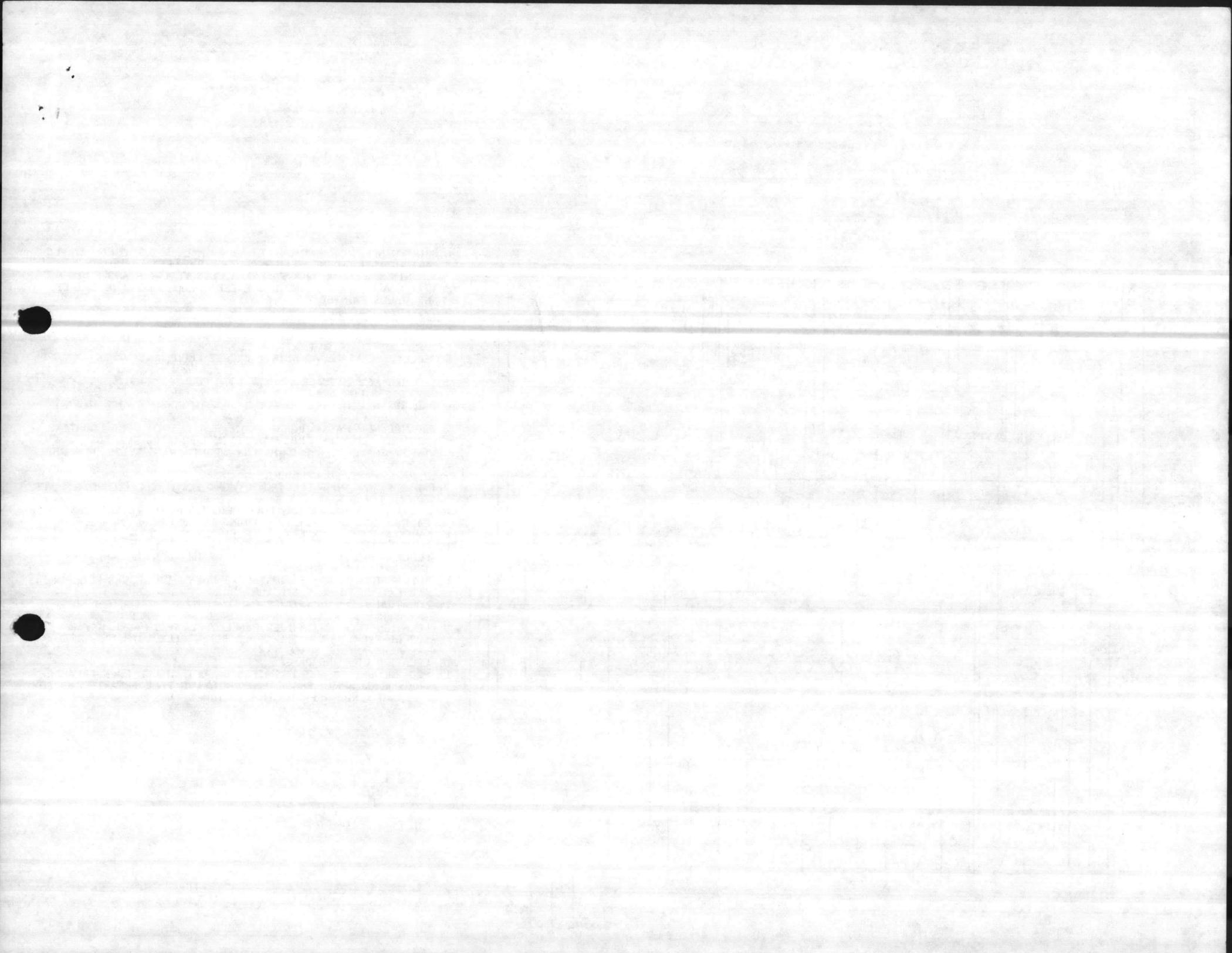


NOTES:

1. MAINTENANCE, RIXT AND CRYPTO AREA SHALL RECEIVE NEW WALLS, PARTITIONS, LIGHTING, ELECTRICAL, ENVIRONMENTAL CONTROL, ACOUSTICS (CEILING AND WALLS), ACCESS FLOORING AND FINISHES.
2. OFFICE AREA SAME AS NOTE 1, EXCEPT FLOOR FINISH IS CARPET AND WALLS PAINTED.
3. DISTRQ/REPRO AREA SAME AS NOTE 1, EXCEPT FLOOR FINISH IS SEAMLESS VINYL TILE AND WALLS (UPPER) ACOUSTICAL WALL PANELS WITH VINYL CLOTH LOWER WAINSCOT. PROVIDE 1' BY 12' HARDWOOD CHAIR RAIL AT JUNCTURE.
4. TOILET AREA SAME AS NOTE 1, EXCEPT FLOOR AND WALLS (FULL HEIGHT) ARE CERAMIC TILE.
5. PROVIDE NEW MESSAGE WINDOW WITH COUNTER EACH SIDE. SEE FIGURE 6-2 FOR DETAILS.
6. PROVIDE NEW MESSAGE SLOTS (120) WITH COUNTER AND STORAGE UNDER. SEE FIGURE 6-3 FOR TYPICAL DETAILS.
7. PROVIDE NEW PASS-WINDOW, PLATE GLASS, WITH WOOD COUNTERS EACH SIDE. COUNTER FINISH SHALL BE LAMINATED PLASTIC. WINDOW SHALL BE APPROXIMATELY 30 INCH WIDE BY 36 INCH HIGH.
8. PROVIDE WOOD SHELVING. SHELVES SHALL BE 12 INCH DEEP AND 12 INCH APART, FULL HEIGHT.
9. PROVIDE NEW WOOD ELECTRONIC WORK BENCH. SEE FIGURE 6-4 FOR TYPICAL DETAILS.
10. PROVIDE WOOD SHELVING, FULL HEIGHT. FIRST TWO SHELVES 24 INCH HIGH AND DEEP, REMAINING 12 INCH HIGH AND DEEP.
11. SAME AS NOTE 3, EXCEPT FLOOR FINISH IS CARPET.
12. THIS PARTITION SHALL EXTEND FULL HEIGHT TO UNDERSIDE OF FLOOR ABOVE. PARTITIONS MAY BE OF METAL STUDS AND TYPE 'X' GYPSUM BOARDS.
13. THIS PARTITION MAY BE INSTALLED DIRECT ON ACCESS FLOORING AND EXTEND TO UNDERSIDE OF FINISH CEILING.
14. LOCATION TECHNICAL POWER PANEL TPP1. SEE TABLE 6-1 FOR BREAKER REQUIREMENTS. PANEL SHALL BE 42 POLE.
15. LOCATION TECHNICAL POWER PANEL TPP2, THIS PANEL MAY BE SUBFED FROM TPP1. PANEL SHALL BE 24 POLE WITH 12 - 20 AMP BREAKERS AND 12 SPACES.
16. LOCATION LIGHTING PANEL.
17. PROVIDE ONE 20 AMP, 1 PHASE, 120 VOLT, SINGLE POLE BREAKER AND ONE 30 AMP, 1 PHASE, 208 VOLT, TWO POLE BREAKER AND BOX FOR TWO XEROX REPRODUCTION MACHINES.



2nd FSSG      CAMP LEJEUNE N.C.  
DIVISION OPERATIONS MSG CENTER  
FACILITIES WORK REQUIREMENTS  
FIG 6-1  
BESEP # 72133      SHT 1 OF 1



3. INSTALLATION AND LOCATION  
**MARINE CORPS BASE  
 CAMP LEJEUNE, NC 28542**

4. PROJECT TITLE  
**DIVISION HEADQUARTERS, FRENCH CREEK**

5. PROGRAM ELEMENT  
 6. CATEGORY CODE **610-70**  
 7. PROJECT NUMBER **P-057**  
 8. PROJECT COST (\$000) **6,920**

**9. COST ESTIMATES**

ITEM	U/M	QUANTITY	UNIT COST	COST (\$000)
DIVISION HEADQUARTERS (MARCOR)	SF	60,444	57.25	3,460
Building	SF	60,444	57.25	(3,460)
SUPPORTING FACILITIES	-	-	-	2,031
Special Construction Features	LS	-	-	(158)
Utilities	LS	-	-	(666)
Telephone Lines	LS	-	-	(315)
Roads, Parking, Sidewalks	LS	-	-	(698)
Site Improvements & Demolition	LS	-	-	(194)
SUBTOTAL				<u>5,491</u>
CONTINGENCY - 5%				275
TOTAL CONTRACT COST				<u>5,766</u>
SUPERVISION, INSPECTION AND OVERHEAD 5.5%				288
TOTAL REQUEST				<u>6,054</u>
TOTAL REQUEST (ROUNDED)				6,100
EQUIPMENT PROVIDED FROM OTHER APPROPRIATIONS	-	- (NON-ADD)		0
*Cost escalated to 4% for FY-90.				6,920

10. DESCRIPTION OF PROPOSED CONSTRUCTION

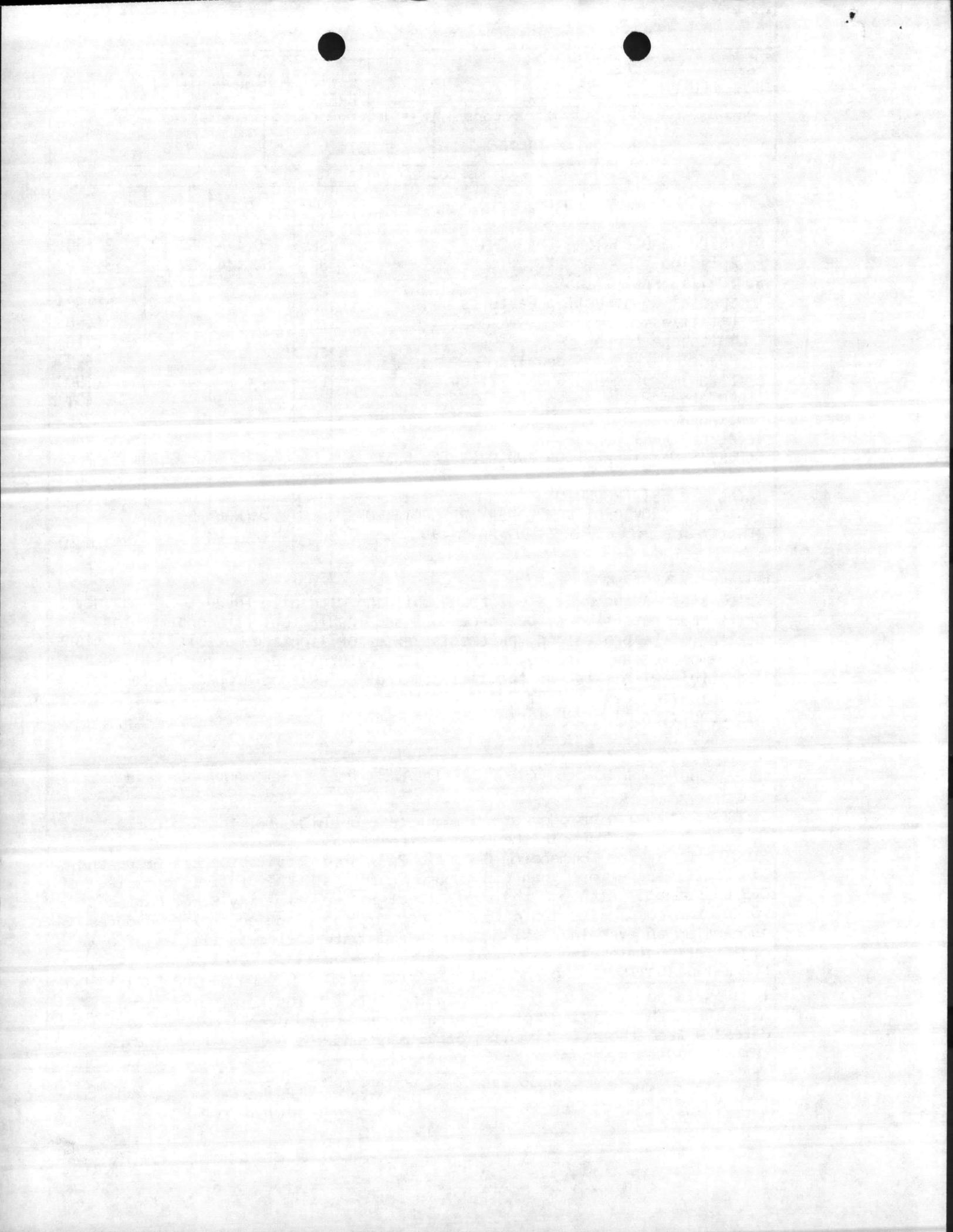
Three-story structural steel frame building with pile foundation, masonry walls, concrete floors, built-up roof and insulation, air conditioning, heating, fire protection, pavements, exterior lighting, utility connections, site improvements. Energy conservation features and exterior architecture compatible with existing facilities. Provide helicopter pad. Relocate Communication Center from Building #59.  
 Air Conditioning: 230 Tons

II. REQUIREMENTS: 60,444 SF ADEAUATE: 0 SF SUBSTANDARD: 0 SF

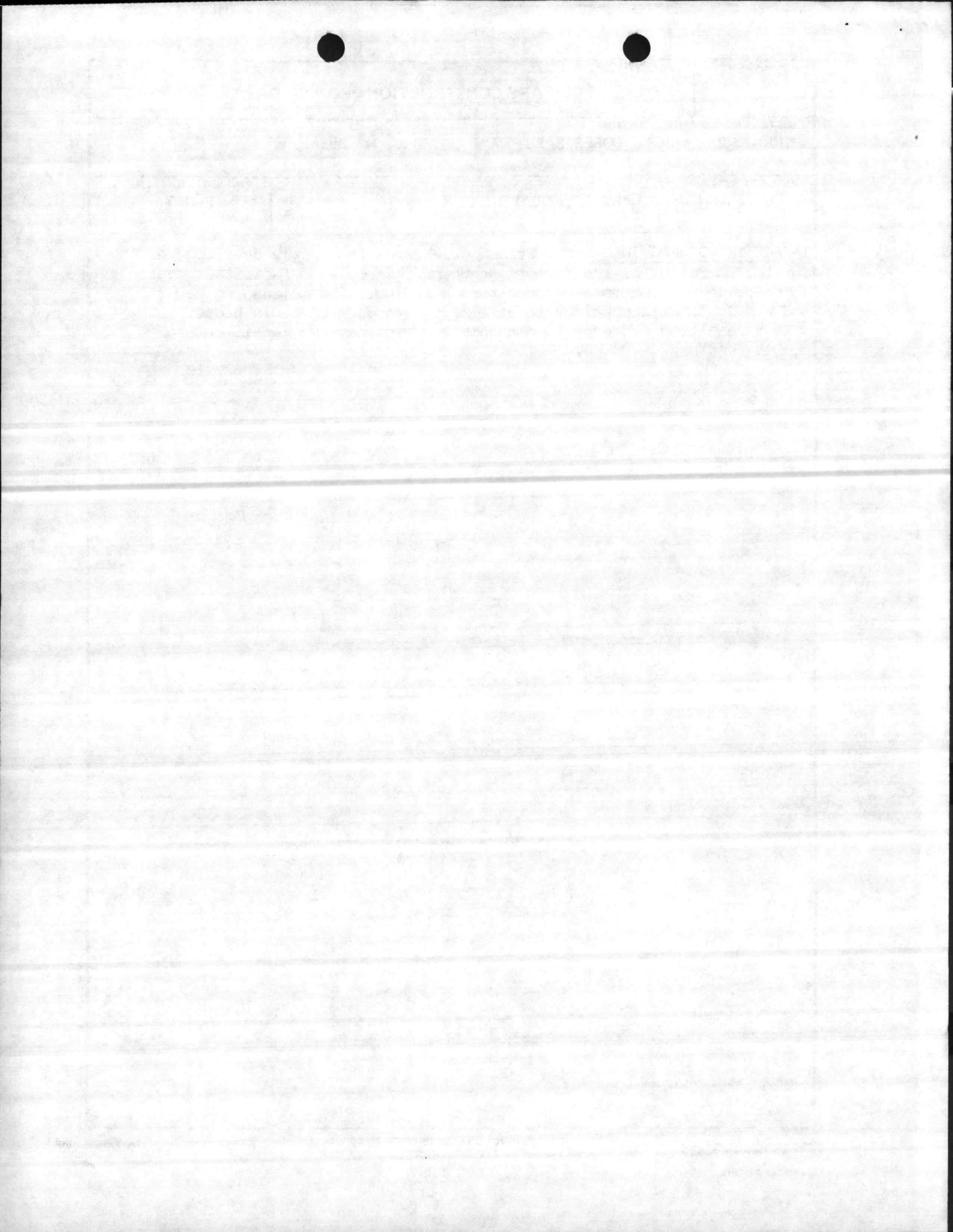
**PROJECT:** Provide an adequate Headquarters building for the 2nd Force Service Support Group in the French Creek Area.

**REQUIREMENT:** The Commanding General, 2nd Force Service Support Group and his staff manage more than ten thousand marines. The staff is comprised of 369 personnel. Although the units involved are primarily Fleet Marine Force, the complexity and extent of modern management control procedures is causing an ever-increasing need for adequate office facilities at all organizational levels, especially at the headquarters level.

**CURRENT SITUATION:** The 2nd Force Service Support Group Headquarters is now located in an old WW-II barracks in the Hadnot Point Area, some three miles from their living/working area in the French Creek area. This detracts from the effectiveness of Command and the ability to maintain combat readiness.



1. COMPONENT NAVY	FY 19 <sup>90</sup> MILITARY CONSTRUCTION PROJECT DATA	2. DATE MAY 01 1987
3. INSTALLATION AND LOCATION MARINE CORPS MARINE CORPS BASE, CAMP LEJEUNE, NC 28542		
4. PROJECT TITLE DIVISION HEADQUARTERS, FRENCH CREEK		5. PROJECT NUMBER P-057
<p><u>IMPACT IF NOT PROVIDED:</u> The French Creek Area is a newly developed area for the 2d Force Service Support Group and there are no facilities available for conversion to a headquarters building. The Commanding General and his Staff will continue to utilize substandard space in Hadnot Point with a resulting decrease in management efficiency and impairment to combat readiness.</p>		



1 COMPONENT NAVY	FEB 1990 MILITARY CONSTRUCTION PROJECT DATA	2 DATE MAY 01 1987
3. INSTALLATION AND LOCATION MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA 28542		
4. PROJECT TITLE DIVISION HEADQUARTERS	5. PROJECT NUMBER P-057	
<p style="text-align: center;"><u>SPECIAL CONSIDERATIONS</u></p> <ol style="list-style-type: none"> <li>1. <u>Pollution Prevention, Abatement, and Control</u>: This project will not cause additional air or water pollution.</li> <li>2. <u>Flood Hazard Evaluation</u>: Requirements of Executive Order No. 11296 (Flood hazards) are not applicable.</li> <li>3. <u>Environmental Impact</u>: 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.</li> <li>4. <u>Fallout Shelter Construction</u>: Fallout shelter protection is not incorporated in this project.</li> <li>5. <u>Design for Accessibility of Physically Handicapped Personnel</u>: Provisions for physically handicapped personnel are incorporated in this project.</li> <li>6. <u>Use of Air Conditioning</u>: Ceiling "U" factors will be made to conform with DOD 4270.1-M.</li> <li>7. <u>Preservation of Historical Sites and Structures</u>: This project does 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.</li> <li>8. <u>"New Start" Criteria for Commercial or Industrial Activities Program (OMB Circular A-76)</u>: Not applicable.</li> </ol>		

