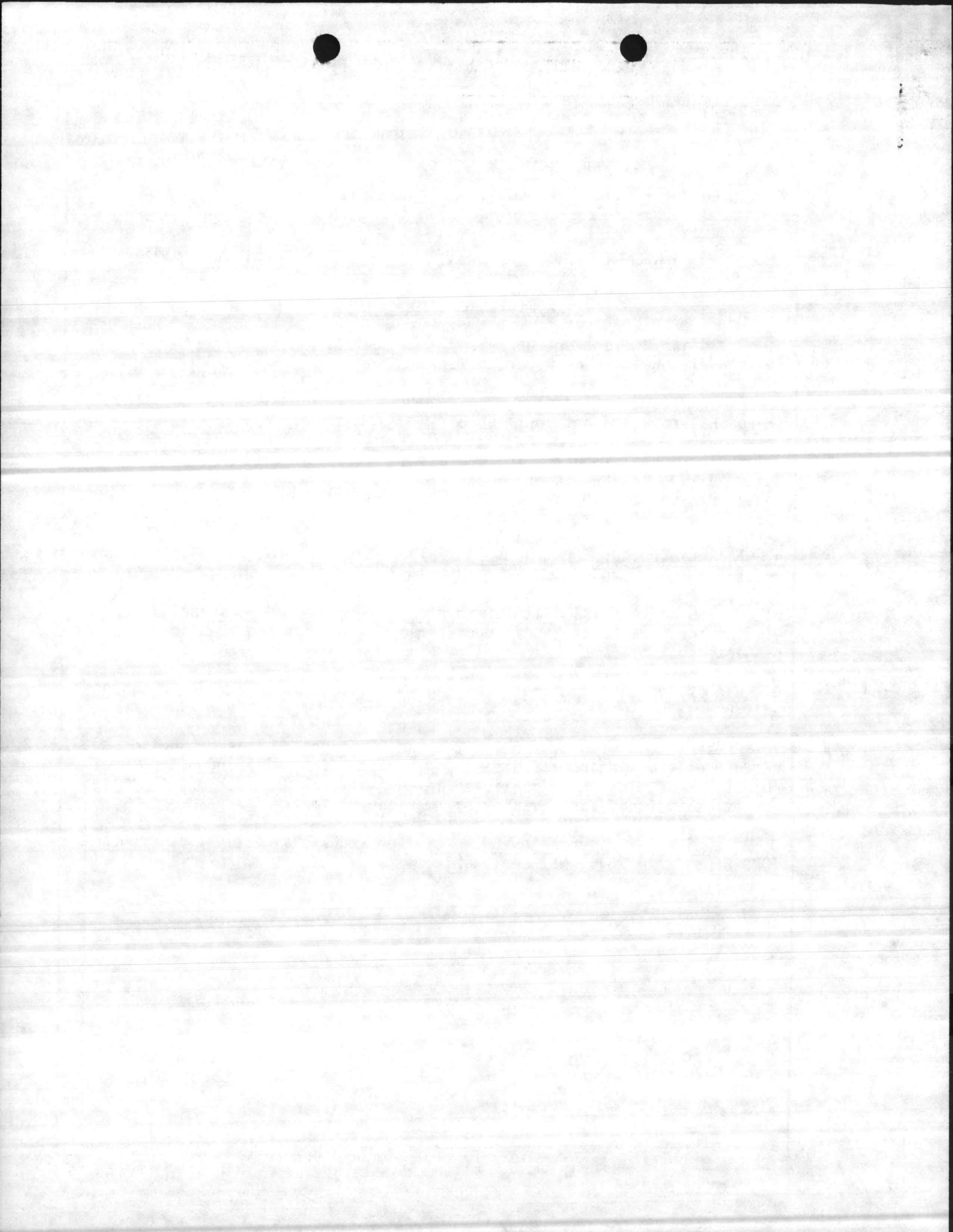


1. COMPONENT MARINE CORPS		FY 19 <sup>89</sup> MILITARY CONSTRUCTION PROJECT DATA		2. DATE 1 July 1985	
3. INSTALLATION AND LOCATION MARINE CORPS BASE, CAMP LEJEUNE, NC 28542			4. PROJECT TITLE ELEC/COMM MAINTENANCE SHOP		
5. PROGRAM ELEMENT		6. CATEGORY CODE 217-10	7. PROJECT NUMBER P-229	8. PROJECT COST (\$000) 6,000	
9. COST ESTIMATES					
ITEM		U/M	QUANTITY	UNIT COST	COST (\$000)
ELECTRONICS/COMMUNICATIONS MAINTENANCE SHOP		SF	44,524	104.91	4,671
Building		SF	44,524	84.22	(3,750)
Built-in Equipment		LS	-	-	(800)
Solar Hot Water System		LS	-	-	(121)
SUPPORTING FACILITIES					735
Special Construction Features		LS	-	-	(101)
Utilities		LS	-	-	(250)
Roads, Parking, Sidewalks		LS	-	-	(322)
Site Improvements		LS	-	-	(62)
SUBTOTAL					5,406
CONTINGENCY - 5%					270
TOTAL CONTRACT COST					5,676
SUPERVISION, INSPECTION & OVERHEAD - 515%					312
TOTAL REQUEST					5,988
TOTAL REQUEST (ROUNDED)					6,000
EQUIPMENT PROVIDED FROM OTHER APPROPRIATIONS		-		(NON ADD)	0
10. DESCRIPTION OF PROPOSED CONSTRUCTION					
<p>Permanent one story shop with piles, reinforced concrete foundation, floors and masonry walls. Built-up roof over insulation and interior support systems, i.e., air conditioning, steam, compressed air, sprinkler, fire alarm, plumbing, 60/400 cycle electrical; grounding, etc., exterior pavements, fencing, area lighting, site work, telephone and telephone switching equipment and utilities connected are included. Fallout shelter excluded - shelters for personnel have been programmed in other projects. (Air Conditioning: 145 tons)</p>					
<p>REQUIREMENTS: <u>188,563 SF</u>    ADEQUATE: <u>39,738 SF</u>    SUBSTANDARD: <u>122,051 SF</u></p>					
<p>PROJECT: Construct an electronics and communications maintenance shop for an Artillery Regiment of the 2d Marine Division.</p>					
<p>REQUIREMENT: A maintenance facility to effectively execute the prescribed electronics and communications maintenance program.</p>					
<p>CURRENT SITUATION: The maintenance program is being carried out in sub-standard masonry-type WWII buildings and Butler-type metal buildings constructed in 1952 during the Korean campaign. The facilities are inadequate as electronics/communications shops for use in the maintenance of the modern sophisticated equipment in use today and cannot be economically rehabilitated.</p>					
<p>IMPACT IF NOT PROVIDED: The deadline time on electronic equipment for personnel &amp; vehicles will remain adversely affected and maintenance capability and combat readiness will continue to be impaired.</p>					



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<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 not required 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 possesses 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>		



1. COMPONENT MARINE CORPS	FY 19 <sup>89</sup> MILITARY CONSTRUCTION PROJECT DATA	2. DATE 1 July 1985
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3. INSTALLATION AND LOCATION MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA 28542
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4. PROJECT TITLE ELEC/COMM MAINTENANCE SHOP	5. PROJECT NUMBER P-229
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FACILITY STUDY

1. Project: Provide 44,524 SF of electronics/communications maintenance shop for electronics and communications T/E equipment assigned to the Artillery Regiment/Battalion, 2d Marine Division.

2. Current and Planned Future Workload with Regard to this Project:  
The duration of need is indefinite and the facility will be utilized 100 percent of the time. An average of ten hours per day for a five-day work week is spent in the shop. After training exercises or deployments, the maintenance workload increases; consequently, many nights and weekends are required to perform the additional maintenance. The organization is responsible for performing first and second echelon maintenance on all items of electronics and communications equipment authorized by the T/E. The future workload is difficult to project; however, it is expected to increase as the present equipment becomes older and new items are introduced into the system.

3. Description of Proposed Construction:

a. Type of Construction:

(1) Permanent one-story maintenance shop on pilings; reinforced concrete foundations, floors, masonry walls, built-up roofs, insulation, interior utilities, air conditioning in training and administrative areas, 60/400 cycle-power with AC/DC power bus duct.

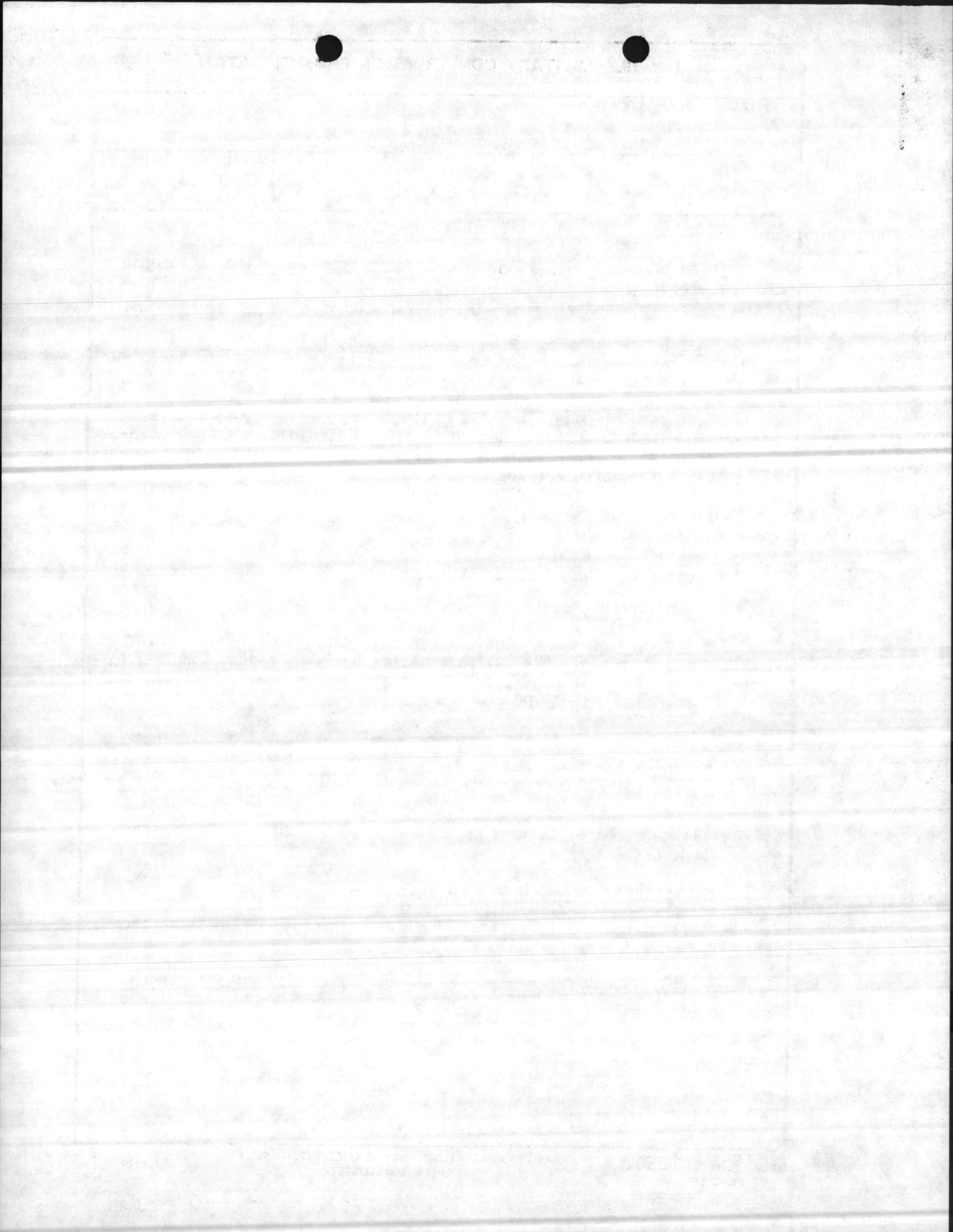
(2) Rigid and flexible concrete walks and parking pavements, security fencing and lighting, site improvements, exterior utilities, telephones and telephone switching equipment, etc.

b. Replacement: Not applicable. Existing facilities will be temporarily utilized to satisfy deficiencies until new facilities are constructed.

c. Description of Work to be Done:

(1) Primary Facilities: Modular reinforced concrete/masonry structures on pile foundation.

(2) Energy Conservation: Energy efficient equipment and building orientation for maximum energy conservation will be utilized.



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(3) Collateral Equipment:

(a) Built-in to be MCON funded:

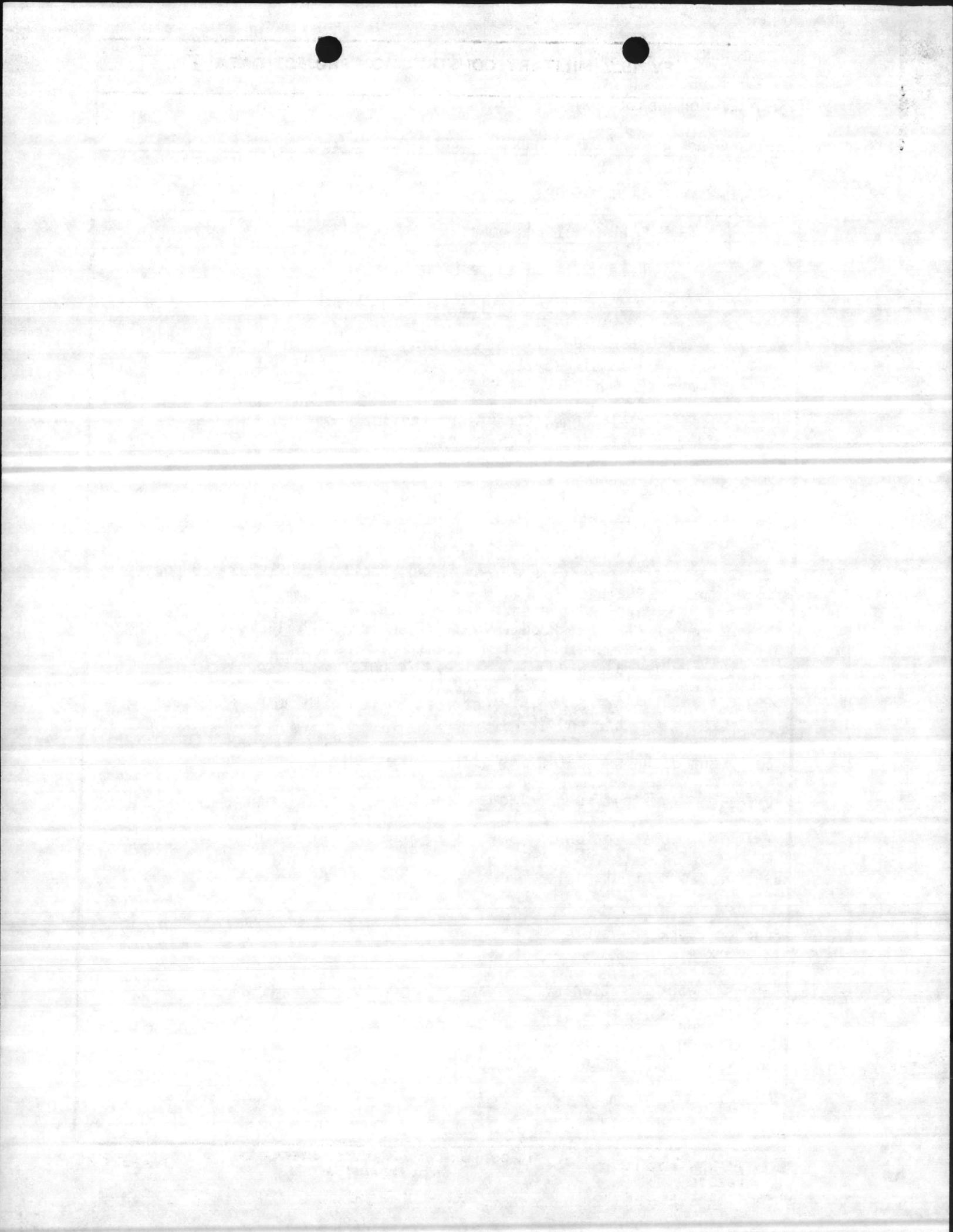
Description

- \*Air Conditioning, Heating and Ventilating System
- \*Plumbing System and Steam System (interior)
- \*Compressed Air System
- \*Sprinkler System
- \*Telephone, Fire Alarm and Intercom Systems
- \*Drinking Water Coolers
- \*Lockers, wall mounted
- \*Locker-room benches, 6' long
- \*Chalkboards, wall mounted
- \*Bulletin Board, wall mounted
- \*Blinds, venetian, light tight
- \*Counter, dispatchers
- \*Exhaust system, overhead fractional HP, 208V, 3 phase
- \*Deluge Shower, w/eye wash CW
- \*Acid Resistant Sink w/bench CW
- \*Exhaust Hood (over) w/fractional HP, 120V, 1 phase fan
- \*Grounding System, Electronic
- \*Pass window, 4' wide, w/counter & "B" label roll down shutter (w/fusible link)
- \*60/400 cycle Electrical System with AC/DC Power Bus bar and transformers

\*Equipment with associated installation cost.

(b) Expense Items:

<u>Description</u>	<u>Qty</u>	<u>U/I</u>	<u>Unit\$</u>	<u>Total\$</u>
Benches, work, portable, 48"x28"x34"H	22	EA	350	7,700
Benches, work, portable 72"x28"x34"H	15	EA	409	6,135
Benches, work, stationary, 28"Dx34"H stl top, std., lead covered in battery shop	20	EA	400	8,000
Parts Bins, adj shelving 14x24"D	8	EA	105	840
Grinder, bench, 7" w/buffer wheel	2	EA	400	800



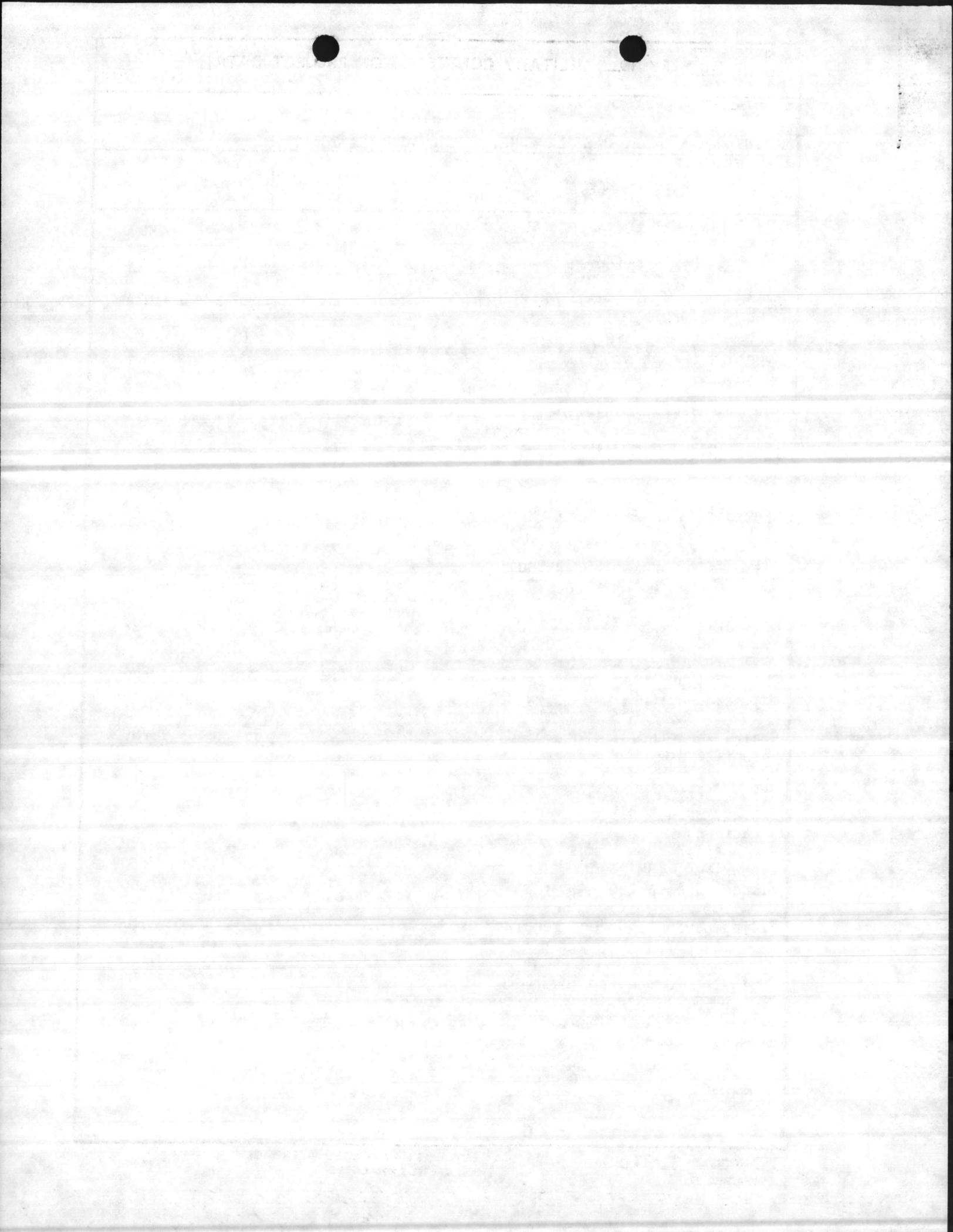
1. COMPONENT **FY 19<sup>89</sup> MARINE CORPS** **MILITARY CONSTRUCTION PROJECT DATA** 2. DATE **1 July 1985**

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4. PROJECT TITLE **ELEC/COMM MAINTENANCE SHOP** 5. PROJECT NUMBER **P-229**

(3) Collateral Equipment (cont'd)

<u>Description</u>	<u>Qty</u>	<u>U/I</u>	<u>Unit\$</u>	<u>Total\$</u>
Parts, Rota Bins, 3'dia multi-bin	15	EA	375	5,625
Battery charger, 12/24/36V Selenium type; battery tester, 12/24/36, 2.2KW, 60/400 cyl. AC/DC	8	EA	600	4,800
14" w shelving w/adj stds	27	EA	93	2,511
12" w shelving w/adj stds, 6 shelves 36"W amd 84"H	27	EA	93	2,511
Desk, flat top, dbl ped, 60x30" walnut pattern top, no overhang	8	EA	235	1,880
Desk, flat top, 45x30" walnut pattern top, no overhang	12	EA	240	2,880
Desk, flat top, w/attach for sec'l and gen. clerical purposes	12	EA	200	2,400
Chair, rotary, tilting seat & back adj. seat height, w/arms, w/casters	20	EA	70	1,400
Chair, secretarial, rotary adj. seat height, w/arms, w/casters	12	EA	65	780
Stand, office machine, 2 drop leaves, walnut pattern top, w/casters	8	EA	85	680
Typewriter, IBM electric, carbon ribbon, dual pitch, Model 833	12	EA	800	9,600
Filing cabinet, 5 dwr, legal sz w/o lock	10	EA	147	1,470
Cabinet, storage, dbl door, 36"x18"x80-1/16"H	12	EA	200	2,400
Bookcase, base, 33"x13"x10"H	15	EA	25	375
Bookcase, section, w/o doors 31"x12"x14"H	45	EA	45	2,025



1. COMPONENT  
MARINE CORPS FY 19<sup>89</sup> MILITARY CONSTRUCTION PROJECT DATA

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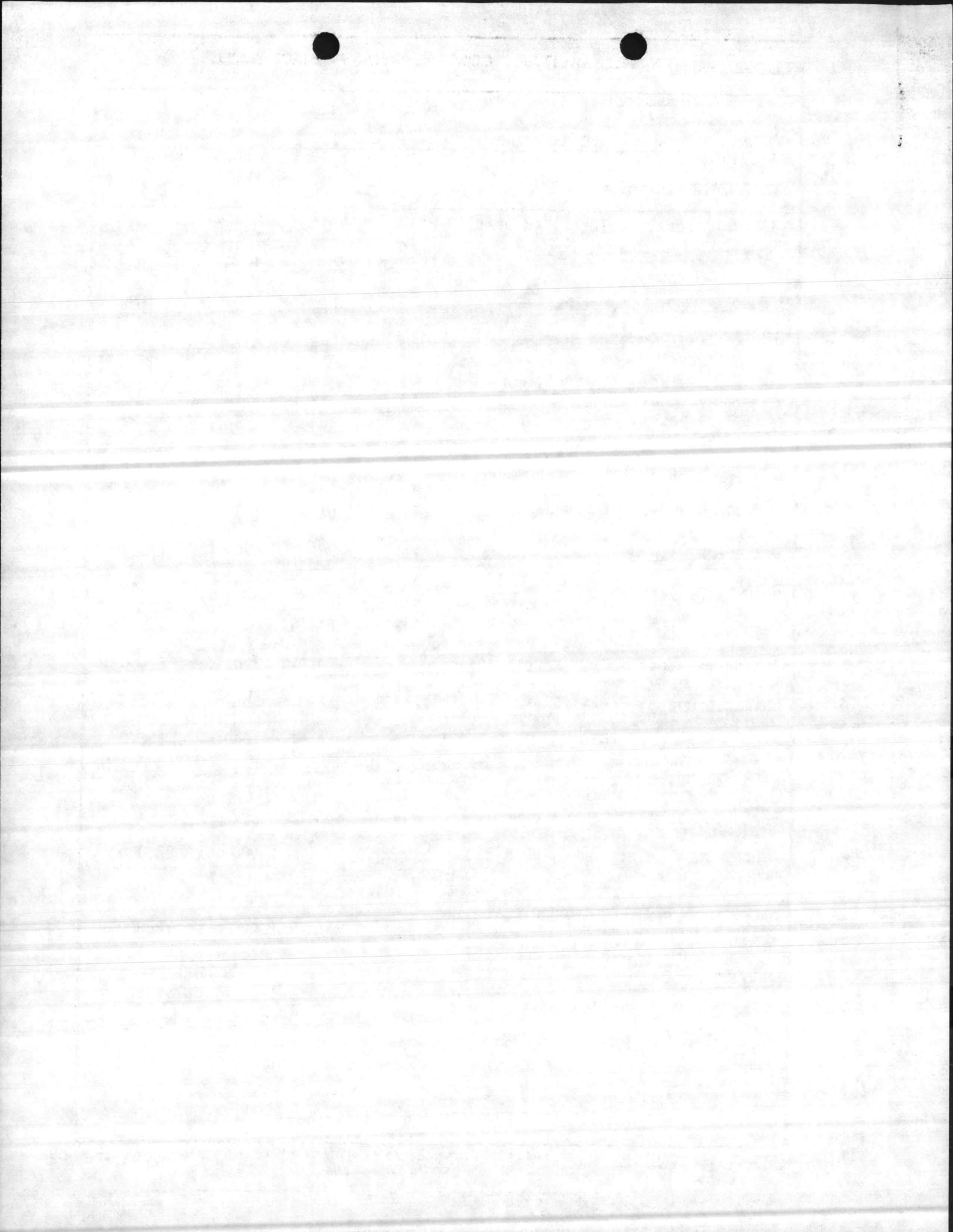
3. INSTALLATION AND LOCATION  
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ELEC/COMM MAINTENANCE SHOP

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(3) Collateral Equipment (cont'd)

<u>Description</u>	<u>Qty</u>	<u>U/I</u>	<u>Unit\$</u>	<u>Total\$</u>
Bookcase, top 33"x13"x2 1/4"H	15	EA	25	375
Chair, straight, w/o arms	72	EA	80	5,760
Costumer, wearing apparel, contemporary, 4dbl hooks, w/round pole w/rd base	18	EA	35	630
Rack, wearing apparel contemporary 6 mtl hangers	20	EA	45	900
Wastepaper basket, dark brown	32	EA	3	96
Draperies, lined	12	PR	90	1,080
Draperies, blackout	6	PR	90	540
Desk Lamp	32	EA	42	1,344
Adding machine, Monroe Model 1405	8	EA	300	2,400
Bulletin Board, cork 4x6	10	EA	55	550
Table, gen. purpose	10	EA	164	1,640
Student chairs	52	EA	69	3,588
Portable easel	4	EA	90	360
Bench, work, electronic, 60 cycle 400 cyc., 28V	22	EA	1,500	33,000
Rack, security, for mechanics tool boxes, 24 openings	6	EA	2,000	12,000
Expense Items Total				129,075
(c) <u>Investment Items</u> : None				
(d) <u>APA Equipment</u> : None				



<b>1. COMPONENT</b> MARINE CORPS	<b>2. DATE</b> 1 July 1985
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**3. INSTALLATION AND LOCATION**  
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<b>4. PROJECT TITLE</b> ELEC/COMM MAINTENANCE SHOP	<b>5. PROJECT NUMBER</b> P-229
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Collateral Equipment (cont'd)

(e) Training Equipment:

Movie Projector	2	EA	650	1,300
Movie Screen	2	EA	235	470
Overhead Projector	2	EA	375	750
				2,520

(f) Equipment on Hand: None

(g) Summary:

Expense Items (O&MMC)		129,075	
Training Cost (O&MMC)		2,520	
Total		131,595	

(4) Supporting Facilities: Special piling, foundation, solar hot water system, collateral equipment, site improvement, pollution abatement, telephone and telephone switching equipment, etc. No demolition will be accomplished on this project.

4. Cost Estimate: Area cost factor for Camp Lejeune, NC is 0.95. cost data derived from the Military Construction Cost Review Guide, FY-84 (DOD 4270.1-CG), and escalated to FY-89 to provide for this proposed facility.

5. Justification for Project and for Scope of Project:

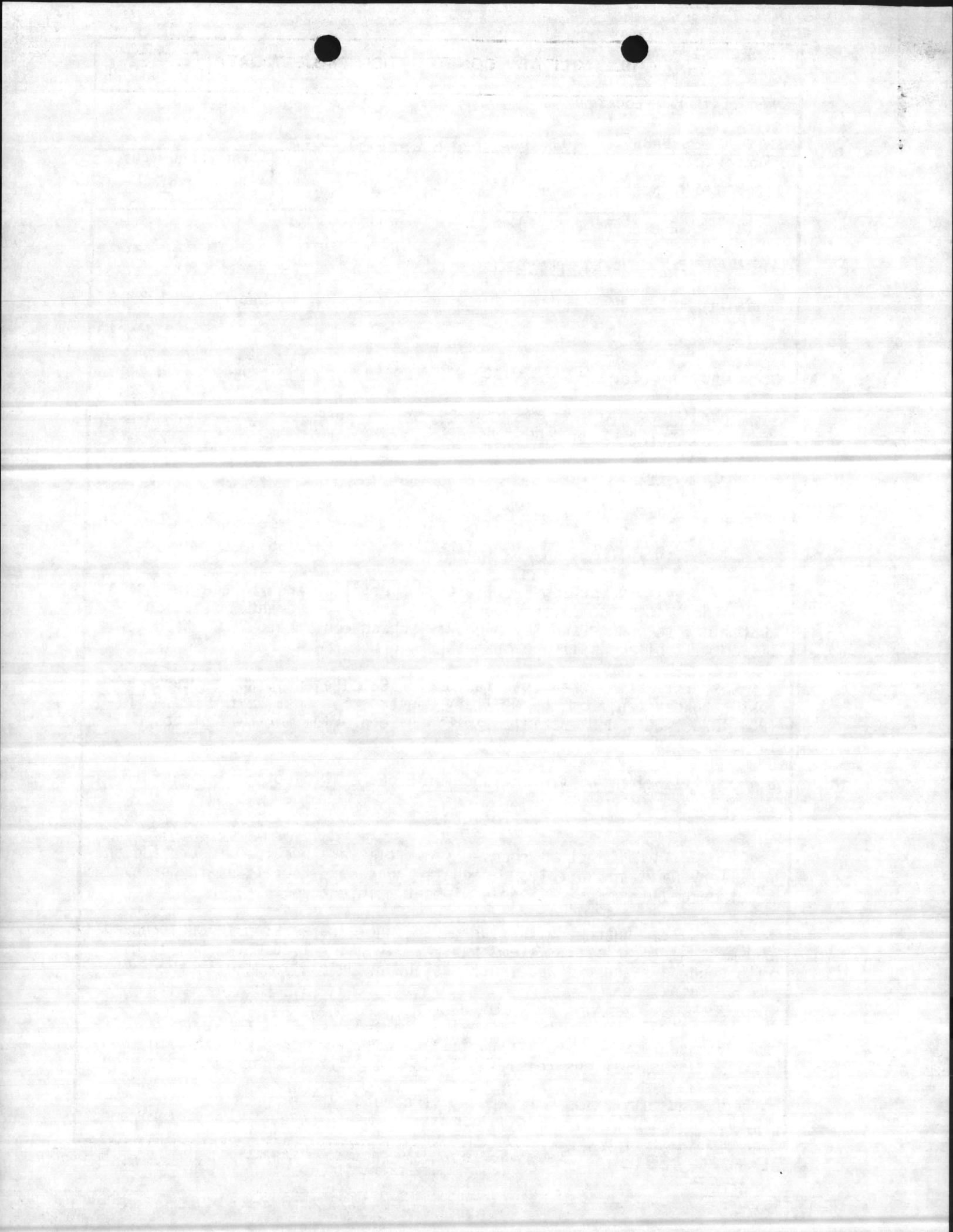
a. Justification for Project:

(1) Project: Proposed facilities are required to provide an Artillery Regiment/Battalion adequate and secure facilities to perform electronic and communications equipment maintenance.

(2) Current Situation: Personnel are working in substandard and makeshift facilities, temporary WW-II Butler type metal buildings with open bays and oil space heaters and no heads, located in the Hadnot Point area.

(3) Impact if Not Provided: Personnel will continue to work in substandard and makeshift facilities resulting in time consuming and inefficient operations resulting in loss of work time and wasted energy.

b. Justification for Scope of Project: The project scope, 44,524 SF, is the minimum size facility that can meet the deficiency requirement



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3. INSTALLATION AND LOCATION MARINE CORPS BASE, CAMP LEJEUNE, NORTH CAROLINA 28542
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4. PROJECT TITLE ELEC/COMM MAINTENANCE SHOP	5. PROJECT NUMBER P-229
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b. Justification for Scope of Project: (cont'd)  
for the electronic/communications maintenance needs of the Artillery Regiment/Battalion, 2d Marine Division, See Item 13 Quantitative Data.

6. Equipment Provided from Other Appropriations: Not applicable.

7. Common Support Facilities: Not applicable. There are no common support facilities available in the Hadnot Point area.

8. Effect on Other Resources: The project will require approximately \$12,615 per year in increased O&MMC funds for increased utility services and operations. No additional personnel will be required to operate this facility. The project will enhance and improve the morale of personnel presently working in widely dispersed facilities. Proposed construction should be responsive to the challenges presented by the energy situation and comply with the requirements of Executive Order 12003 of 20 July 1977, and implemented by NAVFACINST 4100.5A.

Utility Requirements

a. Electricity: Consumption....124,440 KWHR/Yr.  
Peak Demand.....77 KW  
Avg Demand.....71 KW

b. Steam: Consumption..5,581,776 lbs/yr  
Demand.....1,998 lbs/hr

c. Coal: 218 tons/yr

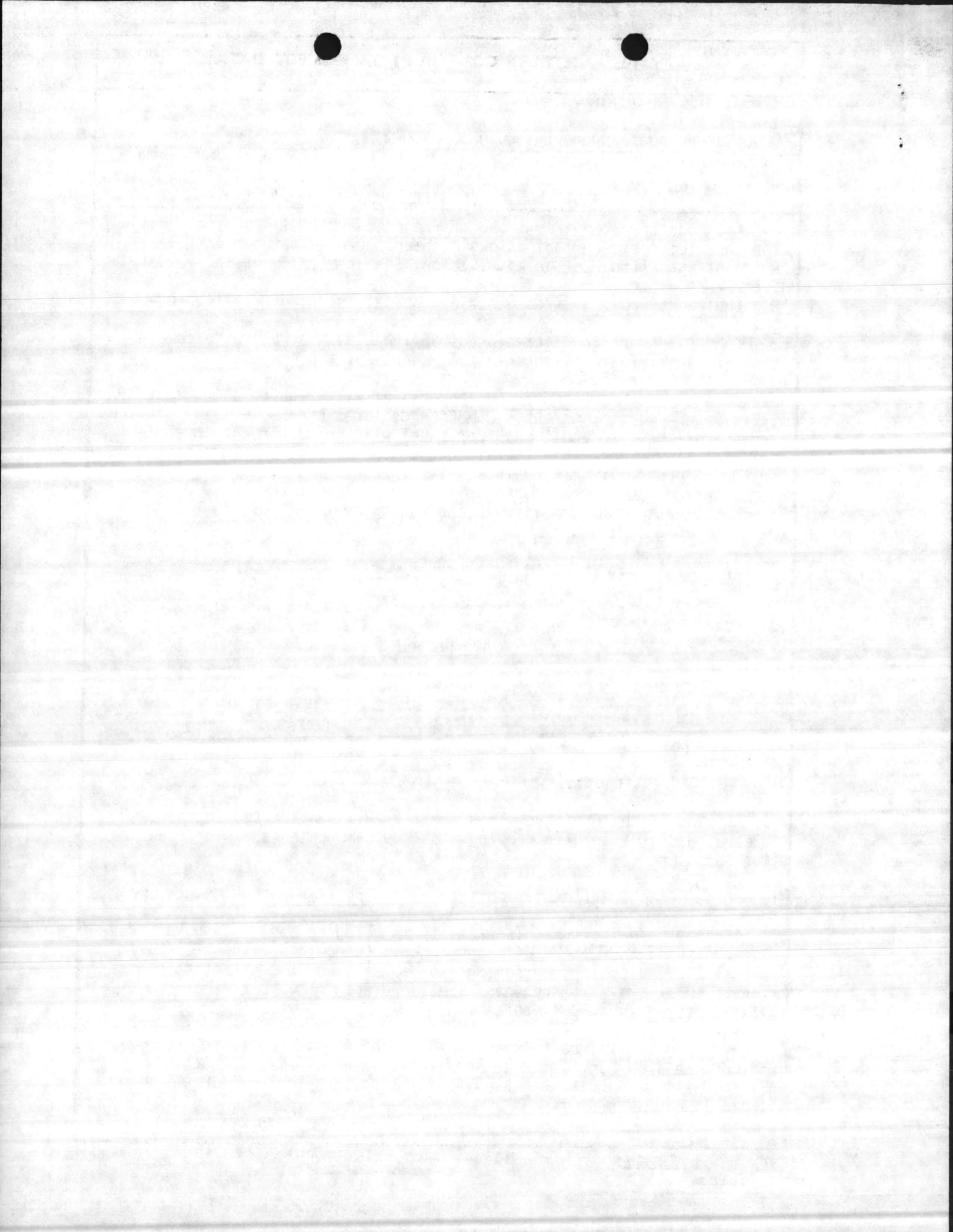
d. Adequate utility requirements are available.

9. Siting of the Project: This facility will be located in the 1700 area of Hadnot Point, in keeping with the Camp Lejeune Master Plan. See enclosure (1).

10. Other Graphic Presentations, including photographs: None.

11. Economic Analysis: This facility is being constructed on an undeveloped site adjacent to a developed area. Economic savings will be in nominal energy consumption savings to be realized from efficient operations. This is a military operational project in support of an operational mission located in this area.

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



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13. Quantitative Data:

- a. Unit of measure: "Square Feet"
- b. Total Requirement: 188,563 Square Feet
- c. Existing substandard: 122,051 Square Feet
- d. Existing Inadequate: 0 Square Feet
- e. Existing Adequate: 39,738 Square Feet
- f. Other Assets not in Inventory: 0 Square Feet
- g. Funded, Not in Inventory: 100,146 Square Feet

<u>Project #</u>	<u>SF</u>	<u>FY</u>
P-527	29,775	FY-86
P-565	4,505	FY-86
P-643	29,775	FY-87
P-644	29,775	FY-90
P-569	<u>6,316</u>	FY-90

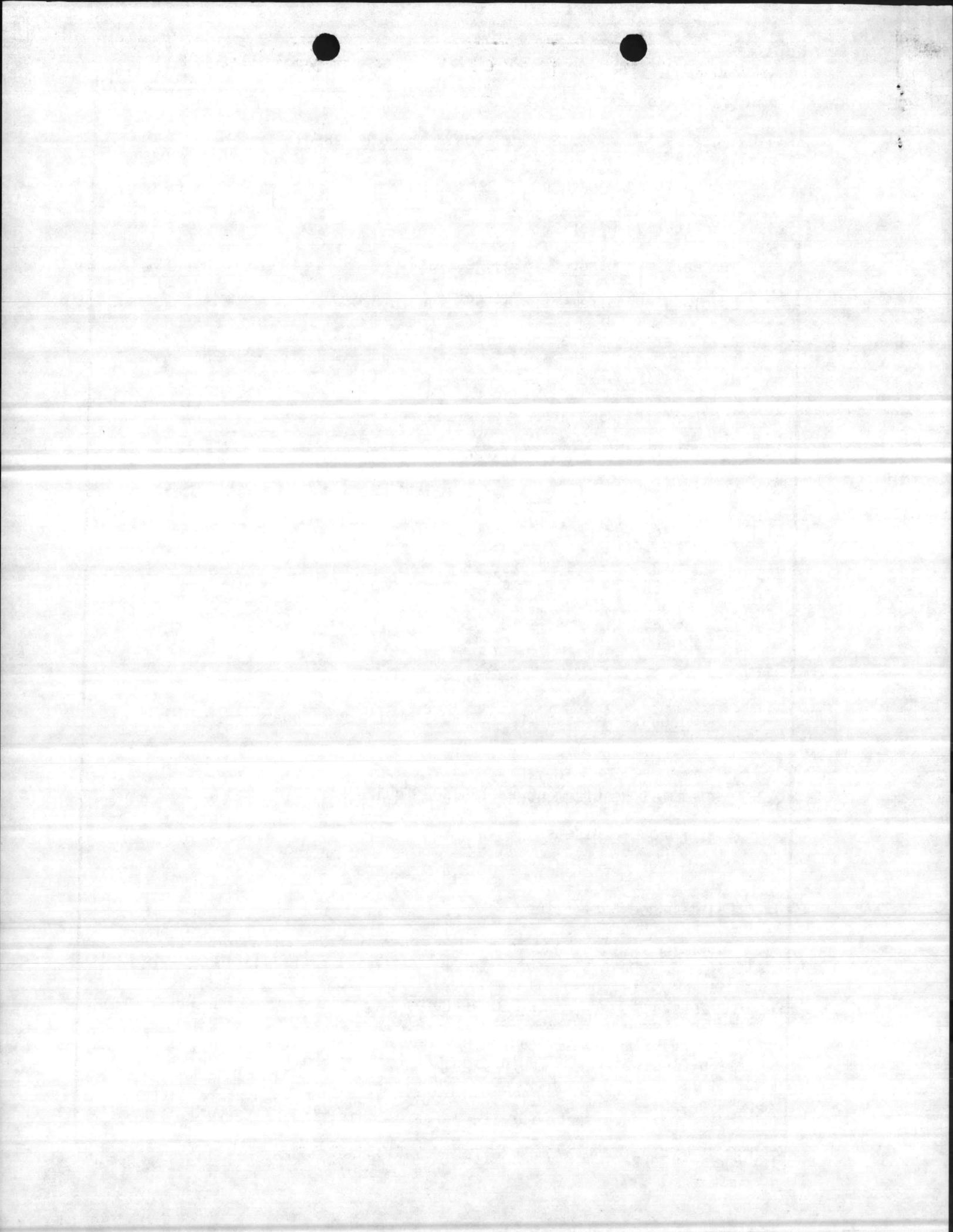
Total 100,146 SF

- h. Adequate Assets: (e + f + g) 139,884 Square Feet
- i. Deficiency: (b - h)

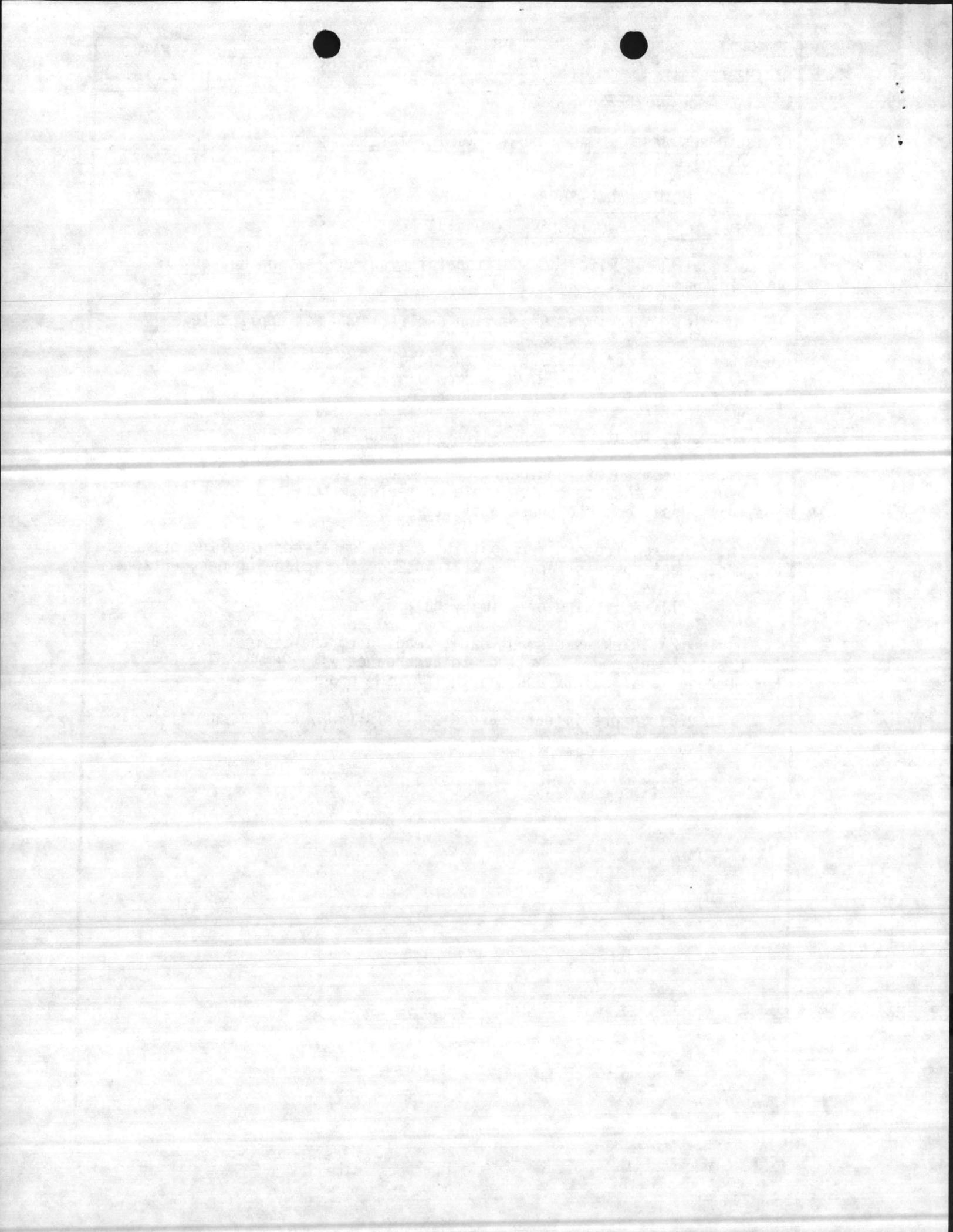
Total Requirement = 188,563 Square Feet  
 Adequate Assets = 139,884 Square Feet  
 Total Deficiency = 48,679 Square Feet

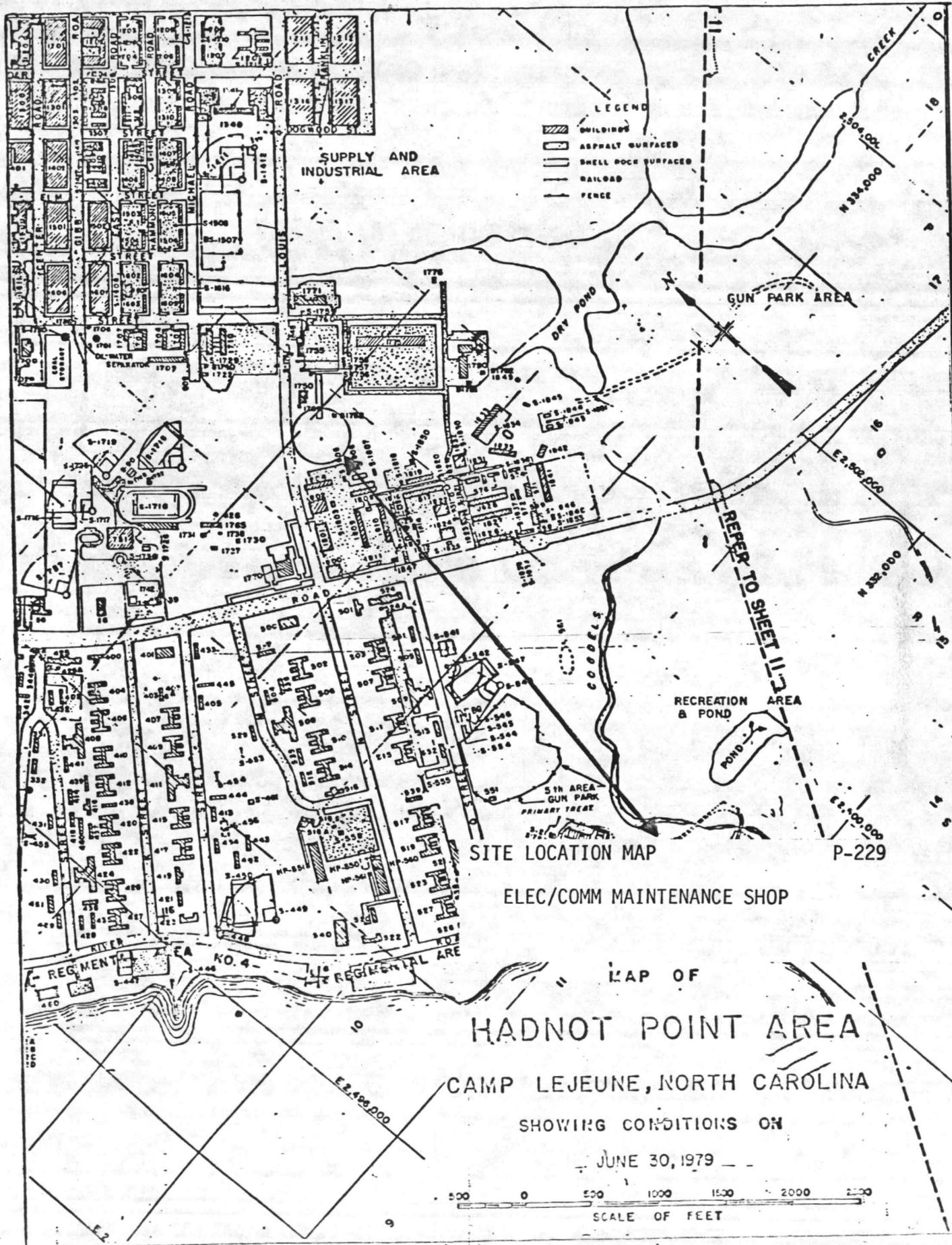
14. Maintenance Facilities:

Planning factors have been identified in terms of quantitative workloads that have been supported by the level of utilization. This facility has certain specifications in order to satisfy the space requirements and functional capabilities to effectively store and maintain the equipment involved. The NAVFAC definitive drawing given in P-272, part IV is NAVFAC Drawing number 1293355M, Artillery Regiment/Battalion Electronics-Communication Maintenance Shop is 36,280 square feet. This drawing has been modified to account for a second General Support Battalion with six firing batteries and a Headquarters Battery and additional shop space for the Target Acquisition Battery. The total



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<p>14. <u>Maintenance Facilities:</u> (cont'd)</p> <p>space requirement with the additional Target Acquisition Battery is 44,524 Square Feet.</p> <p>15. <u>Morale, Welfare and Recreation Facilities:</u> Not applicable.</p> <p>16. <u>Relocation Facilities:</u> Not applicable.</p> <p>17. <u>Storage Facilities:</u> Not applicable.</p> <p>18. <u>Hazards, Identification, Assessment and Analysis:</u></p> <p>a. System safety engineering and management programs will be used to ensure that the highest possible degree of safety and occupational health is designed into these facilities.</p> <p>b. The requirement for applying system safety engineering principles and management to this facility will include the following documentation:</p> <p>(1) A listing of primary hazards identified.</p> <p>(2) Risk assessment data, leading to the assignment of a "risk assessment code", shall be in accordance with OPNAVINST 5100.23, Navy Occupational Safety and Health (NAVOSH) program.</p> <p>(3) A preliminary hazard analysis (PHA) will be submitted as required.</p>			





LEGEND

- BUILDINGS
- ASPHALT SURFACES
- SHELL ROCK SURFACES
- RAILROAD
- FENCE

SUPPLY AND INDUSTRIAL AREA

GUN PARK AREA

RECREATION AREA & POND

SITE LOCATION MAP

P-229

ELEC/COMM MAINTENANCE SHOP

MAP OF  
HADNOT POINT AREA  
CAMP LEJEUNE, NORTH CAROLINA

SHOWING CONDITIONS ON

JUNE 30, 1979

