

NAKAZAWA CORPORATION  
 ARCHITECTS & PLANNERS  
 212 SOUTH TRYON STREET  
 CHARLOTTE, NORTH CAROLINA 28281  
 (704) 335-1184

Starting 7/11 initials

|   |       |    |
|---|-------|----|
| 1 | Fred  | EE |
| 2 | Gene  | SP |
| 3 | Larry | WB |
| 4 |       |    |
| 5 |       |    |
|   |       |    |
|   |       |    |

C 840437

5 December 1984

Commander, Atlantic Division  
 Naval Facilities Engineering Command  
 Naval Station, Building N26  
 Norfolk, Va. 23511

Attention: Maxie L. Bryant

Subject: Contract N62480-84-C-6812;  
 Project P-808, Applied Instruction Bldg.,  
 Marine Corps Base, Camp Lejeune, N.C.

Gentlemen:

We are submitting herewith three (3) copies of the final Mini-Master  
 Plan drawings and Report in accordance with the contract requirements.

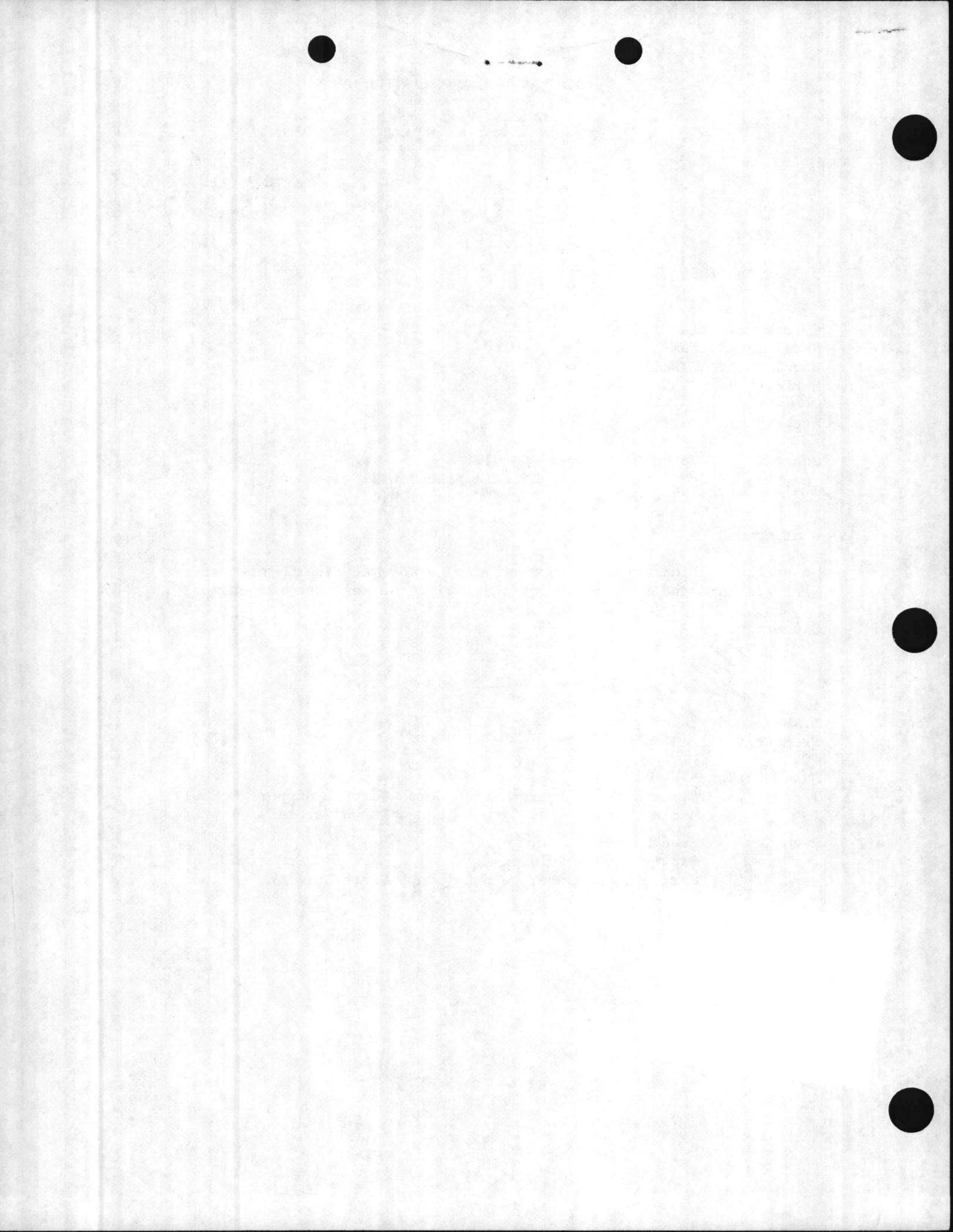
Sincerely,

*Y. Nakazawa*  
 Y. Nakazawa, FAIA  
 President

Distribution:

- 1 copy - Commanding Officer, Marine Corps Service Support School  
 Marine Corps Base, Camp Lejeune, North Carolina
- ✓ 2 copies - Fred W. Estes, Jr.  
 Public Works Division  
 Marine Corps Base, Camp Lejeune, North Carolina

*File on  
 in study  
 drawer  
 and one in  
 P-808 with the  
 in other hand (etc)*



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| Starting 7/11 Initials |           |
|------------------------|-----------|
| 1                      | Fred EE   |
| 2                      | Gene SP   |
| 3                      | Larry WKB |
| 4                      |           |
| 5                      |           |
| 6                      |           |
| 7                      |           |
| 8                      |           |

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Naval Facilities Engineering Command  
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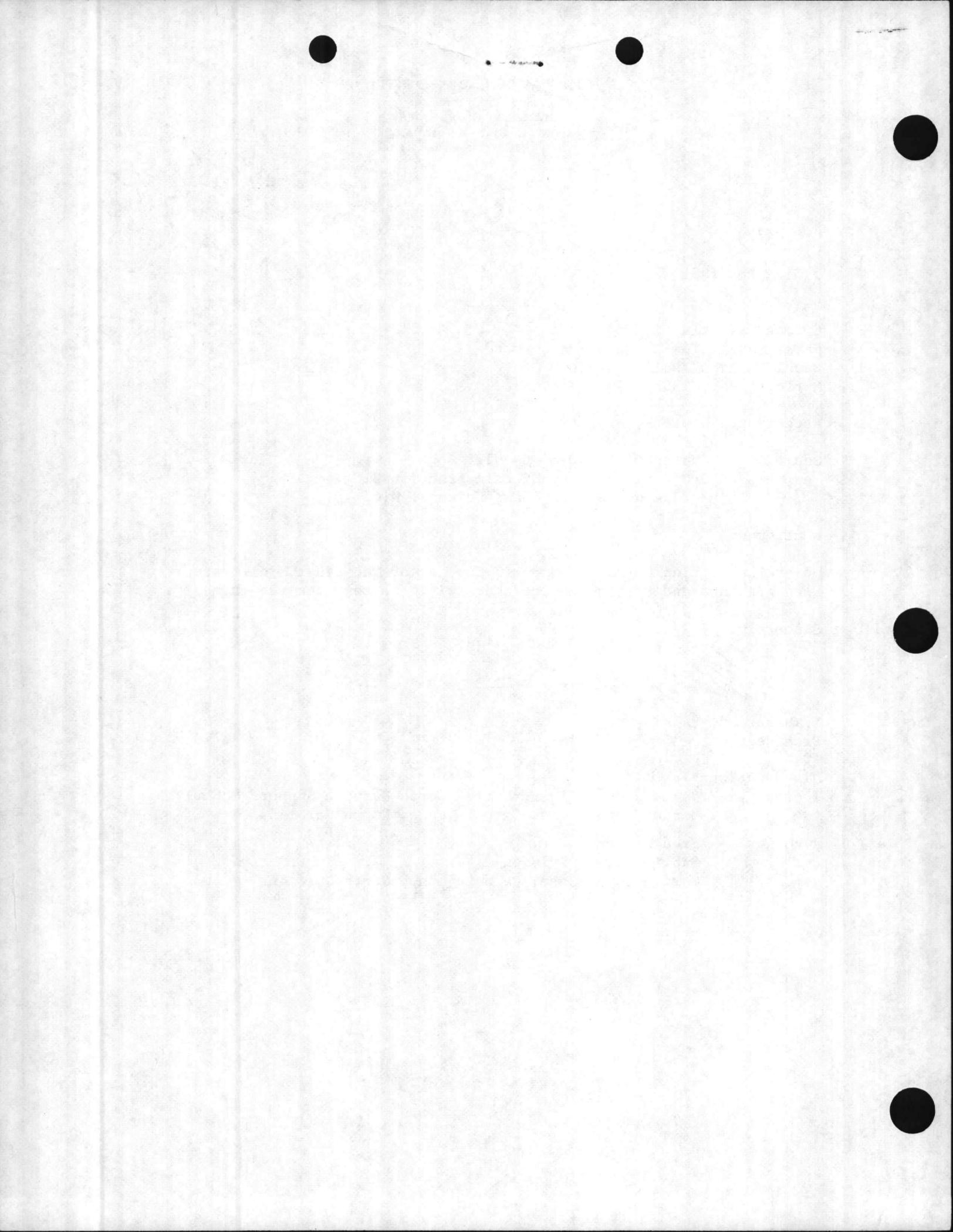
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Y. Nakazawa, FAIA  
President

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Marine Corps Base, Camp Lejeune, North Carolina
- ✓ 2 copies - Fred W. Estes, Jr.  
Public Works Division  
Marine Corps Base, Camp Lejeune, North Carolina



MINI-MASTER PLAN REPORT

for

PROJECTS P-808, P-809 & P-810  
APPLIED INSTRUCTION BUILDING  
MARINE CORPS BASE, CAMP LEJEUNE  
JACKSONVILLE, N.C.

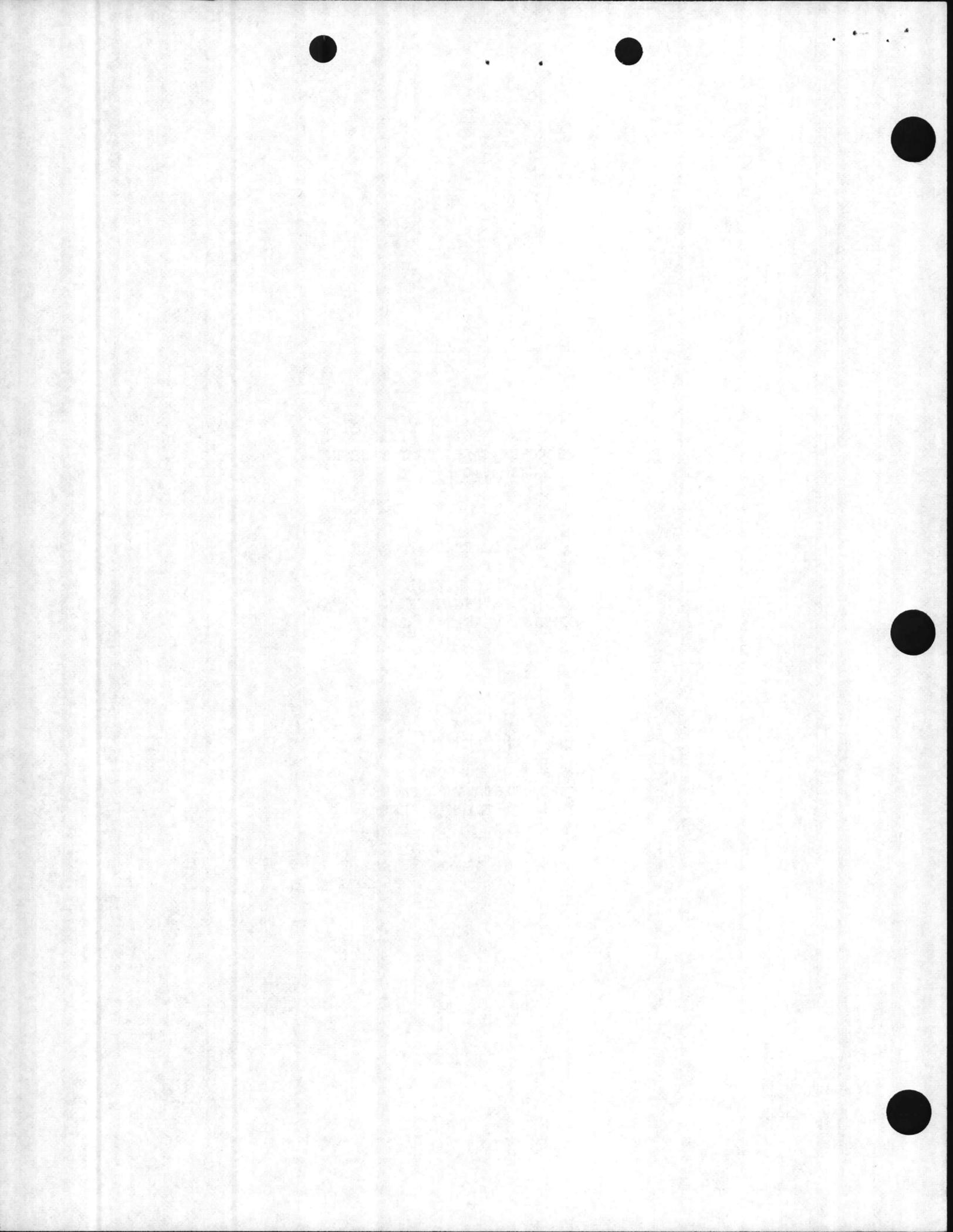
ADMINISTERED BY:

ATLANTIC DIVISION  
NAVAL FACILITIES ENGINEERING COMMAND  
NORFOLK, VIRGINIA 23511

PREPARED BY:

NAKAZAWA CORPORATION  
ARCHITECTS & PLANNERS  
212 S. TRYON STREET  
CHARLOTTE, N.C. 28281

DATE: 01 DECEMBER 1984



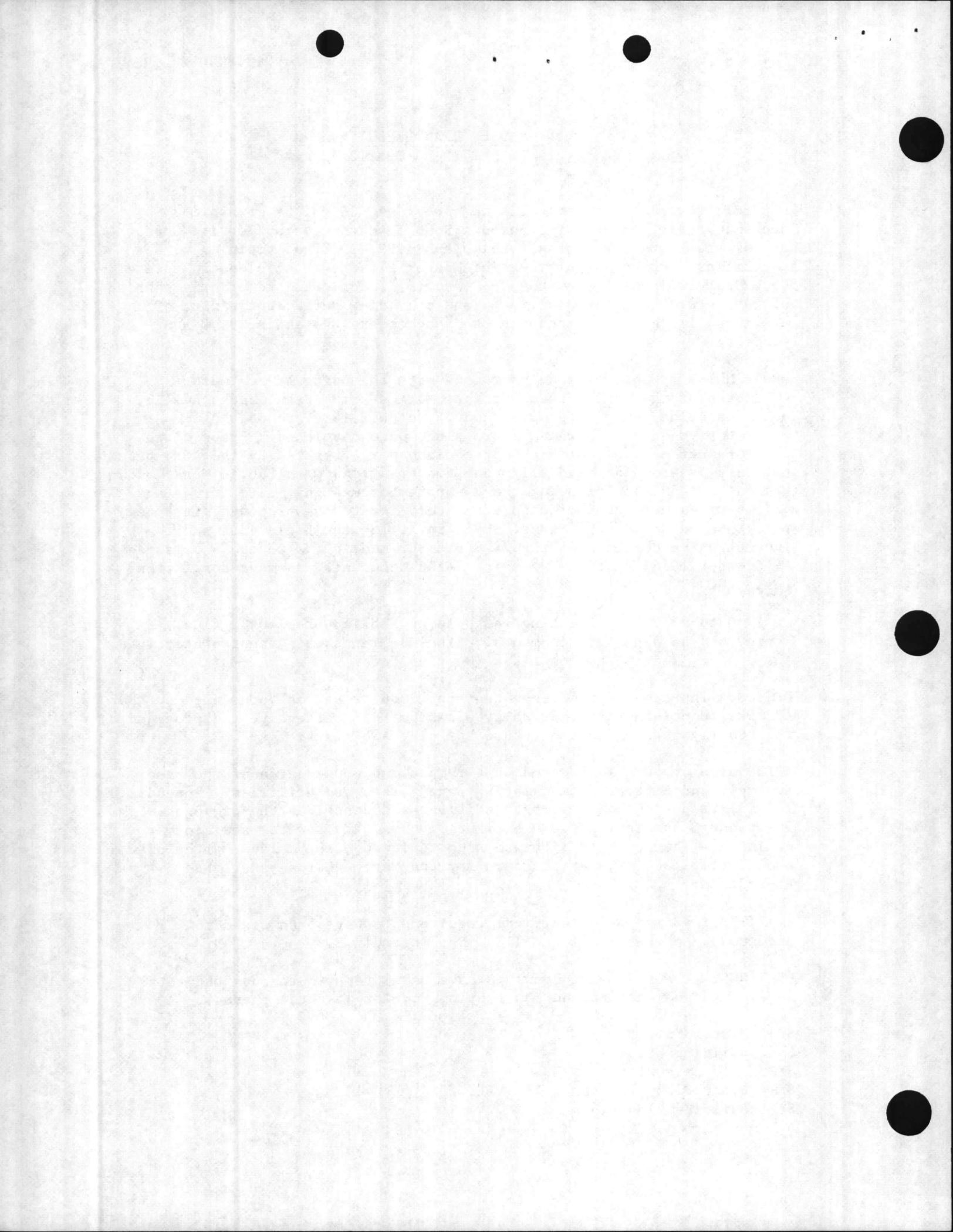
MINI-MASTER PLAN REPORT  
Contract N62470-84-C-6812

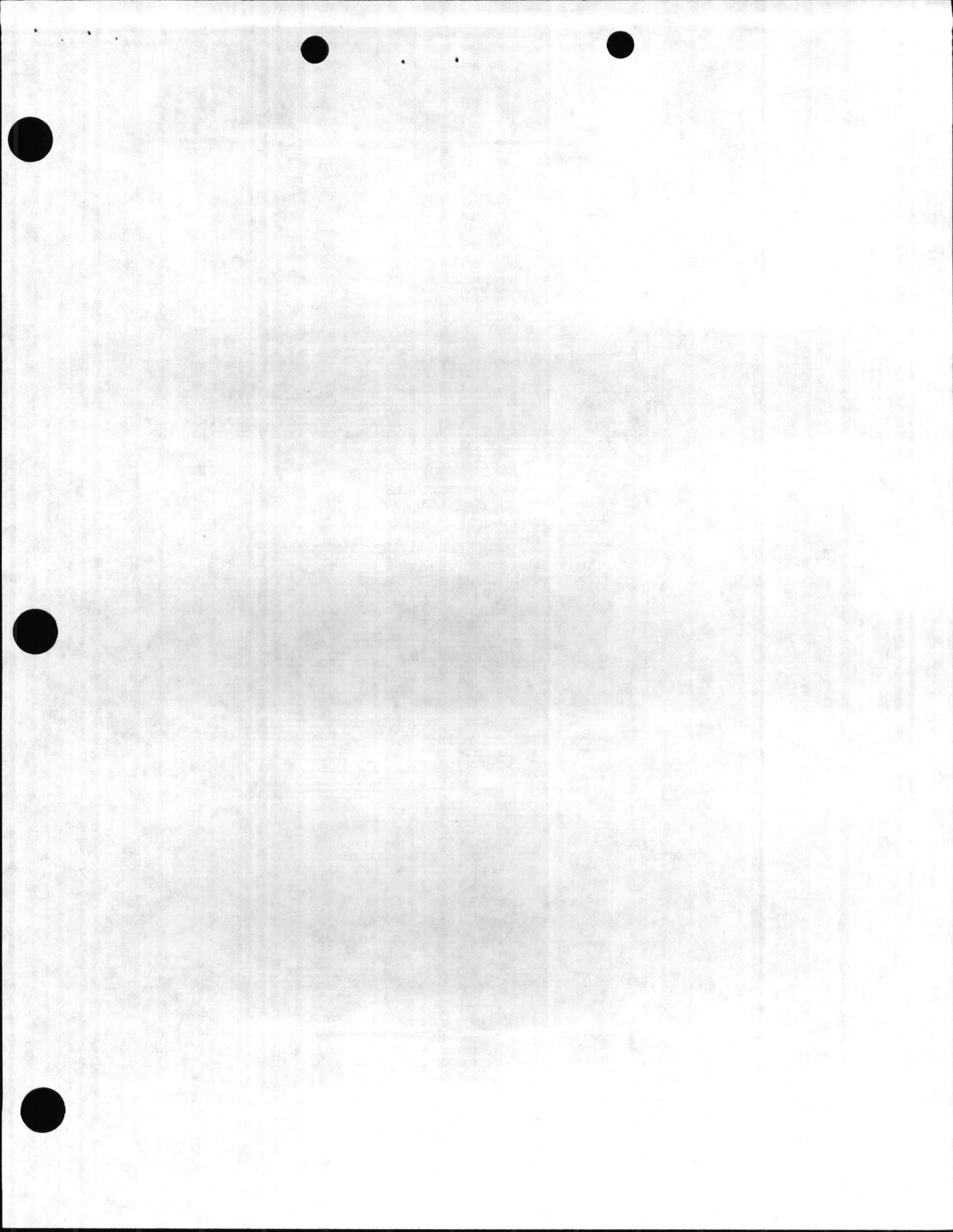
1. PROJECT: Current program calls for providing 26,961 SF of applied/academic school for Motor Transport School, Marine Corps Service Support School, as Increment I of a total planned 99,079 SF of training facilities. Objective of the Mini-Master Plan is to develop the entire 99,079 SF project (three phases), insuring functional and orderly phasing of the future building additions, and providing sufficient sizing of utilities in the first increment to accommodate the entire 99,079 SF project.
2. PROGRAMMING: Meetings and interviews with the Using Agency were conducted at the Public Works Office, Marine Corps Base, Jacksonville, North Carolina, on 24 September and 24 October 1984, to obtain quantitative data from which macro plans were developed. Prior to the 24 September meeting, pre-schematic plans were prepared by the A/E, based on early program data and telephone conversations with Public Works and the Using Agency. Following the 24 September meeting, site survey and soil borings were conducted to accurately locate the proposed site, new road work and soil conditions. Upon reviewing the field data and incorporating comments of the 24 September meeting, a second submission (9 October 1984) of the mini-master plan documents was made for further review.

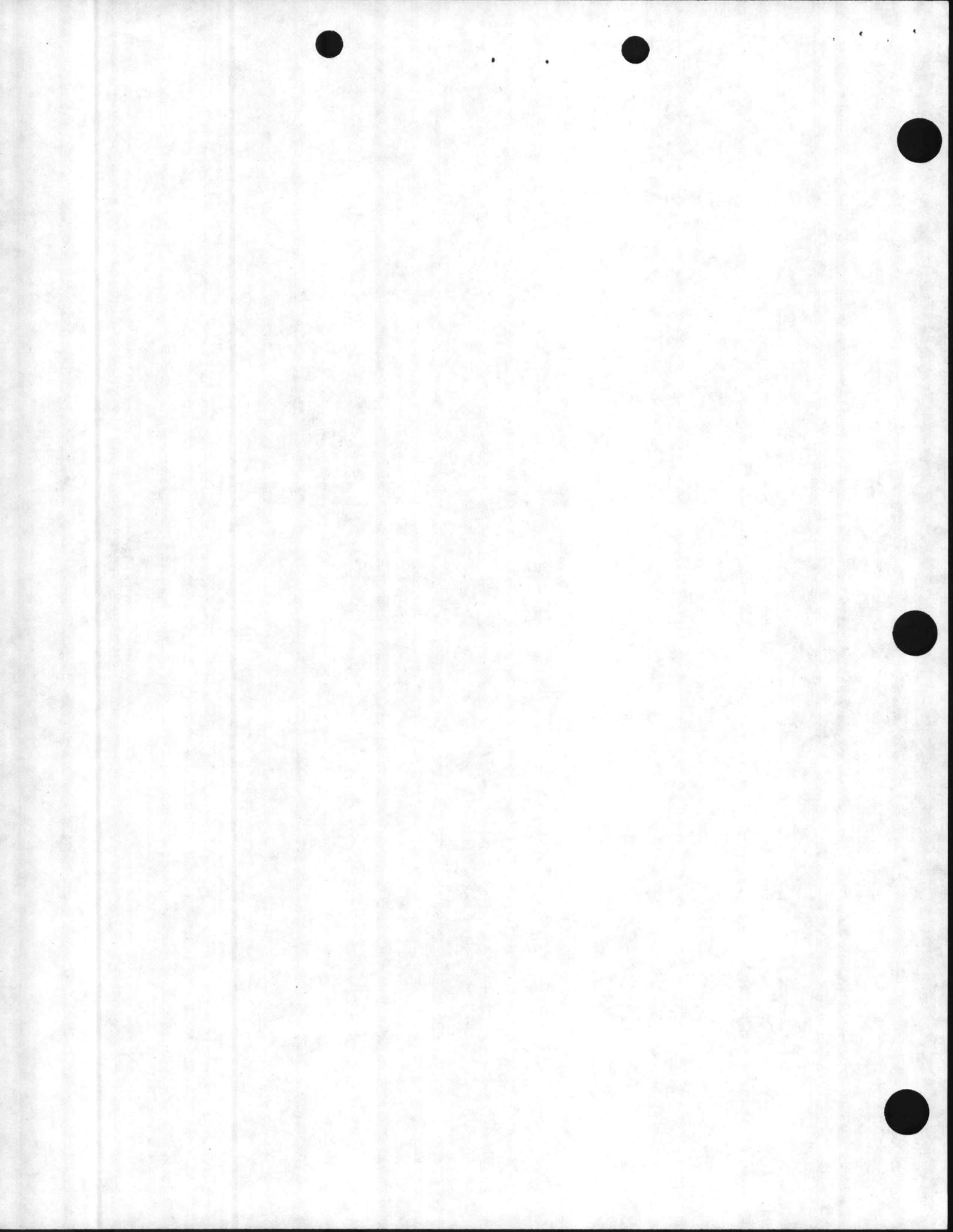
On 24 October 1984, a meeting was held at Public Works for a final review of the planning documents. Final comments were incorporated into the plans. See Appendices A & B (Meeting Notes).

3. DESIGN: There was concurrence that the modular concept presented by the A/E was functional, aesthetically pleasing, cost effective and provided for orderly phasing of the future building additions.
4. SITE: The project is located in a remote and wooded area of the base, several hundred feet from existing paved areas and utilities. Appendix D (Civil), reports the existing conditions and describes the proposed work for roads & parking, Water Distribution, sanitary sewers, and storm drainage. The proposed site was also reviewed with Harland Bartholomew & Associates, Inc., master planners for the Marine Corps Base. See Appendix C.
5. UTILITIES: Steam and electrical requirements have been sized to accommodate phases I, II and III. See Appendix E.
6. DRAWINGS: The following drawings have been prepared to show the total development of the Applied Instruction Complex in three phases.

SK-1 Master Site Plan  
SK-2 Building Site Plan  
SK-3 Road Extensions  
SK-4 Floor Plan, Phases I, II & III  
SK-5 Building Elevations







NAKAZAWA CORPORATION

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(704) 335-1184

CONFERENCE NOTES

Date: October 24, 1984 @ 13:30 Hours  
Place: Public Works Division, Building 1005 - Conference Room  
Marine Corps Base, Camp Lejeune, NC 28542  
Project: Applied Instruction Building, P-808, FY 1986 MCON,  
MCB, Montford Point Area, Camp Lejeune, NC  
A/E Contract Number: N62470-84-C-6812  
Subject: Presentation of Mini Master Plan  
Attendees: Lt. Col. Browning, Commander, MTSC, MCSSS (919) 451-0985  
Capt. T.L. Kassab, AO MTSC, MCSSS (919) 451-0946  
E.G. Jones, Manager, Planning Section (919) 451-1833  
F.W. Estes, Jr., Proj. Mgr., Planning Sec. (919) 451-1833  
P.W. Nakazawa, A/E (704) 335-1184

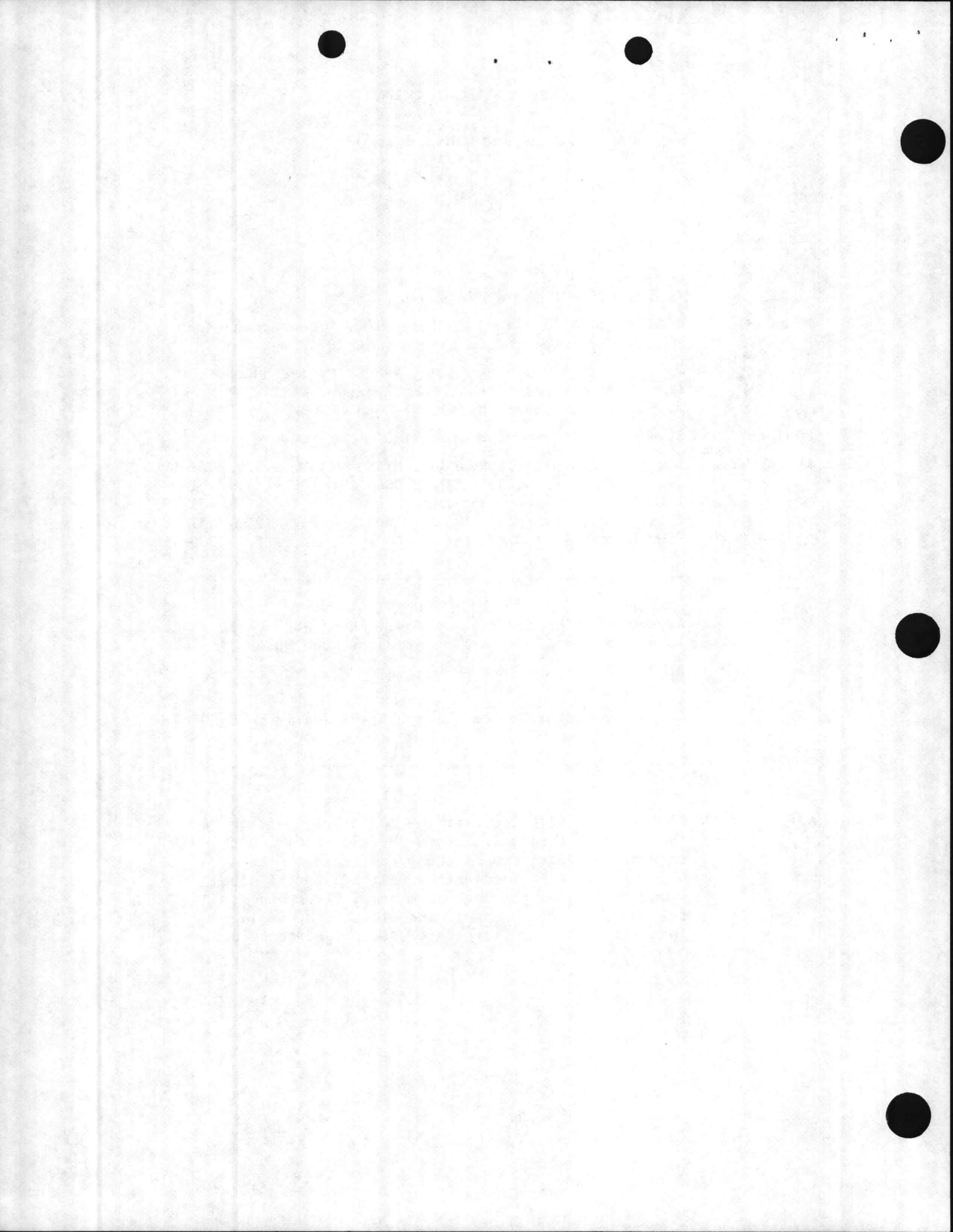
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AGENDA:

- A. Review of Master Plan Siting (P-808/P-809/P-810) and Internal Plan Organization of Each Phase
- B. Discussion of Plans Submitted to the User for Comments
- C. Discussion of Topics Related Specifically to P-808

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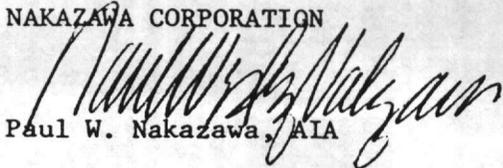
A.1.0 A/E reviewed with the user the master plan siting of the combined facilities (P-808/P-809/P-810) and the internal organization of the plans. Prior to the meeting, the user was sent by mail an overall site plan, indicating phasing; an overall floor plan of the three phases; and building elevations/massing indicating salient features of design and construction.



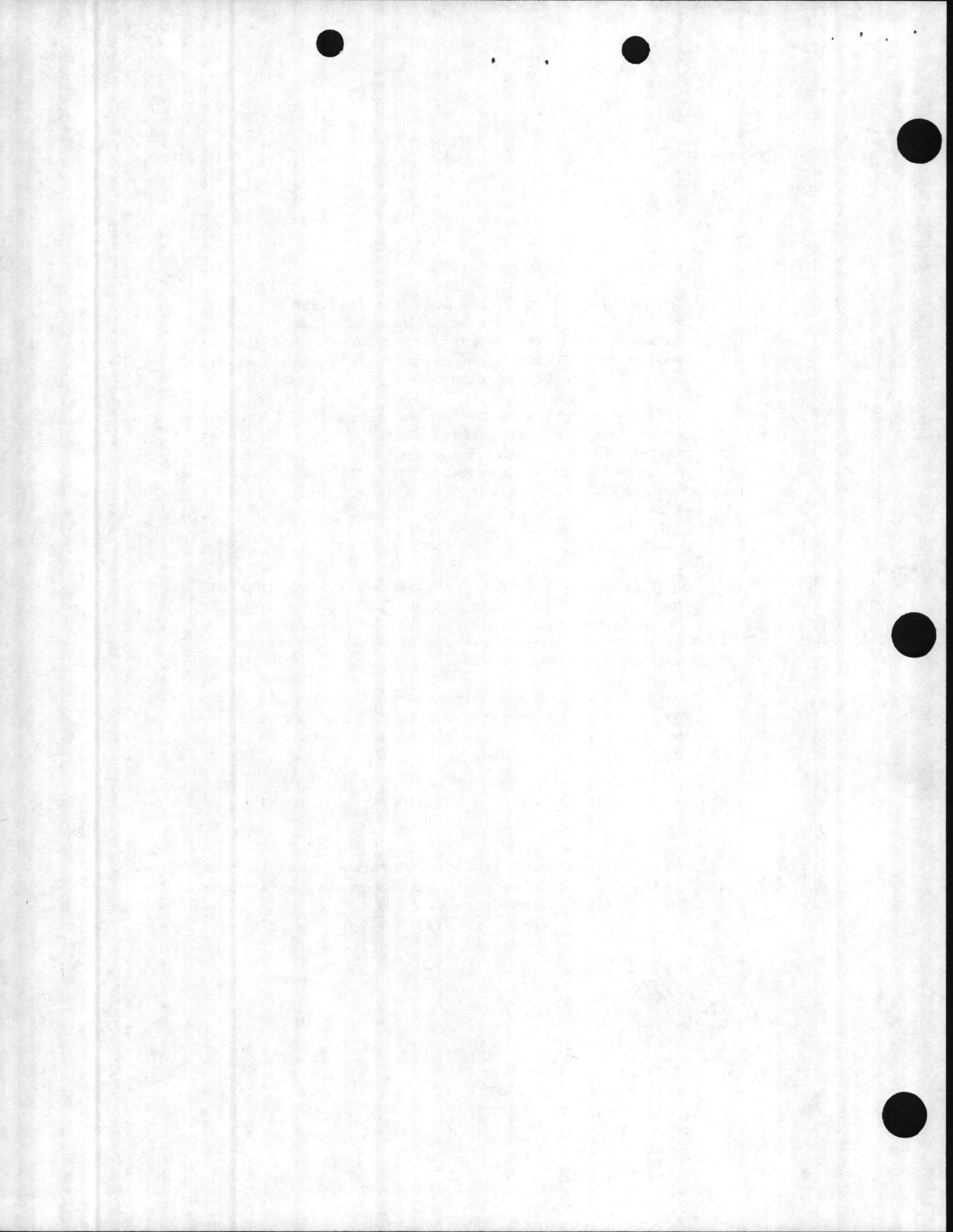
- C.1.0 P-808 Comments (Continued)
- 1.4 The A/E indicated to the User the location of a mechanical equipment room to be used primarily for domestic hot water supply, steam converter, telephone equipment and electrical distribution. The User concurs with the location.
- 1.5 Additional office space for the commander of the motor school and his administrative staff is not within the current scope for the P-808 project. The User is advised to pursue this matter through Public Works and LANTDIV for inclusion in a subsequent phase.
- D.1.0 ACTION ITEMS
- 1.1 User: Pursue request for additional administrative space with Public Works and LANTDIV so that it will be included in a future phase. The A/E has no authority to alter the scope of work. Direction must be given from LANTDIV.
- 1.2 User: Verify critical dimensions of simulators to be placed in Laboratory No.1 and No.2. A/E will provide sufficient clear openings to these spaces based on data provided.
- 1.3 A/E: Will provide to User revised plans based upon this meeting, including revision to site parking.

The foregoing represents the undersigned's understanding of the proceedings of the meeting. Please forward any additional comments, exceptions or corrections to the undersigned immediately.

For: NAKAZAWA CORPORATION

  
Paul W. Nakazawa, AIA

Distribution: All Attendees  
Maxie Bryant, PE, LANTDIV  
Y. Nakazawa, FAIA  
Project File

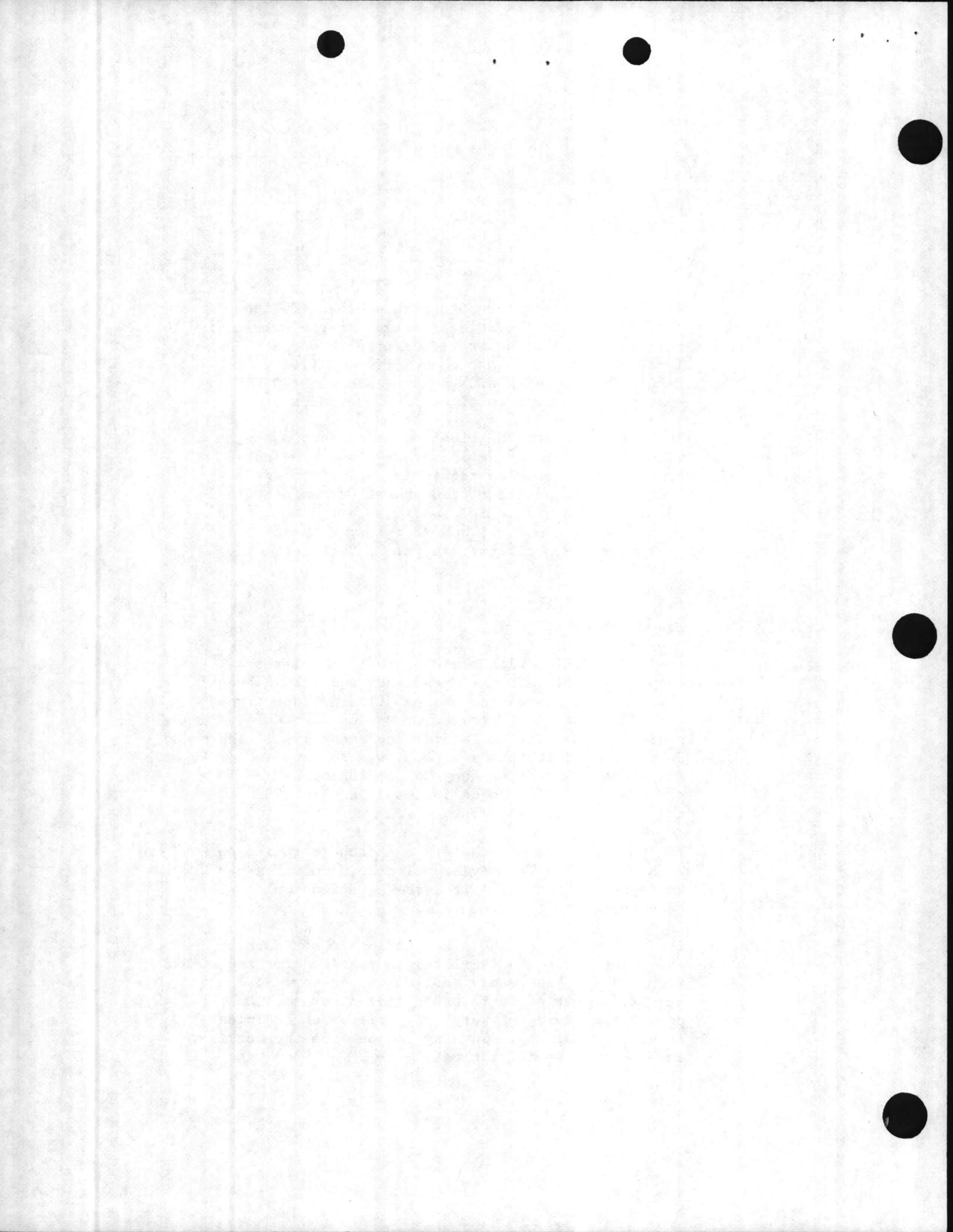


B.1.0 User Comments:

- 1.1 The User approved the site plan of the combined facilities with the sole exception of the number of parking spaces to be provided for each phase. The User requested that each increment (i.e., P-808, P-809, and P-810) be provided with 40 POV spaces each, for a total of 120 POV spaces.
- 1.2 The User approved the floor plans of each phase, with specific modifications to P-808 as indicated below. The User also requested the A/E to explore a way to incorporate office space for the school commander and his administrative staff into P-808 and/or P-809. [The A/E informed the user that no scope modifications were authorized for P-808 from LANTDIV].

C.1.0 P-808 Comments:

- 1.1 The A/E verified with the User that no built-in monorails, hoists or bridge cranes would be necessary for P-808 or subsequent phases. The A/E questioned the fact that no "A" frames or similar portable hoists were on the collateral equipment list. The User stated that this equipment was on hand in sufficient quantities and that no additional portable hoists would be included in the P-808 collateral equipment list.
- 1.2 The User provided to the A/E a sketch to revise one area of P-808. The revised allocation of area has no impact on scope. A revised P-808 floor plan will be provided to the User reflecting these changes.
- 1.3 The User informed the A/E that a pair of doors to the exterior of the facility was required for the AGARTS room. Also, Laboratory No.1 and Laboratory No.2 require a pair of doors of sufficient breadth to permit the moving of very large pieces of equipment (e.g., simulators). Turning radius from the corridor into these labs is critical.



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(704) 335-1184

## MEETING NOTES

**Date:** Monday, September 24, 1984, 0830 Hours  
**Place:** Public Works Office, Marine Corps Base  
Camp Lejeune, North Carolina  
**Project:** Applied Instruction Building, P-808, FY 86 MCON,  
Montford Point Area, Marine Corps Base,  
Camp Lejeune, North Carolina  
**Attendees:**

|                                      |              |
|--------------------------------------|--------------|
| E.G. Jones, Manager, Planning Branch | 919-451-1833 |
| F.W. Estes, Jr., Public Works        | 919-451-1833 |
| Lt. Col. Browning, MCSSS             | 919-451-0985 |
| Capt. P.D. Greene, S-4, MCSSS        | 919-451-0973 |
| Capt. T.L. Kassab, AO MTSCOL, MCSSS  | 919-451-0946 |
| G. Ash, TRNG SPEC, MCSSS             | 919-451-0923 |
| P.W. Nakazawa, AIA, A/E              | 704-335-1184 |
| M.B. Nikich, AIA, A/E                | 704-335-1184 |
| C. Niedziela, PE, A/E                | 704-335-1183 |

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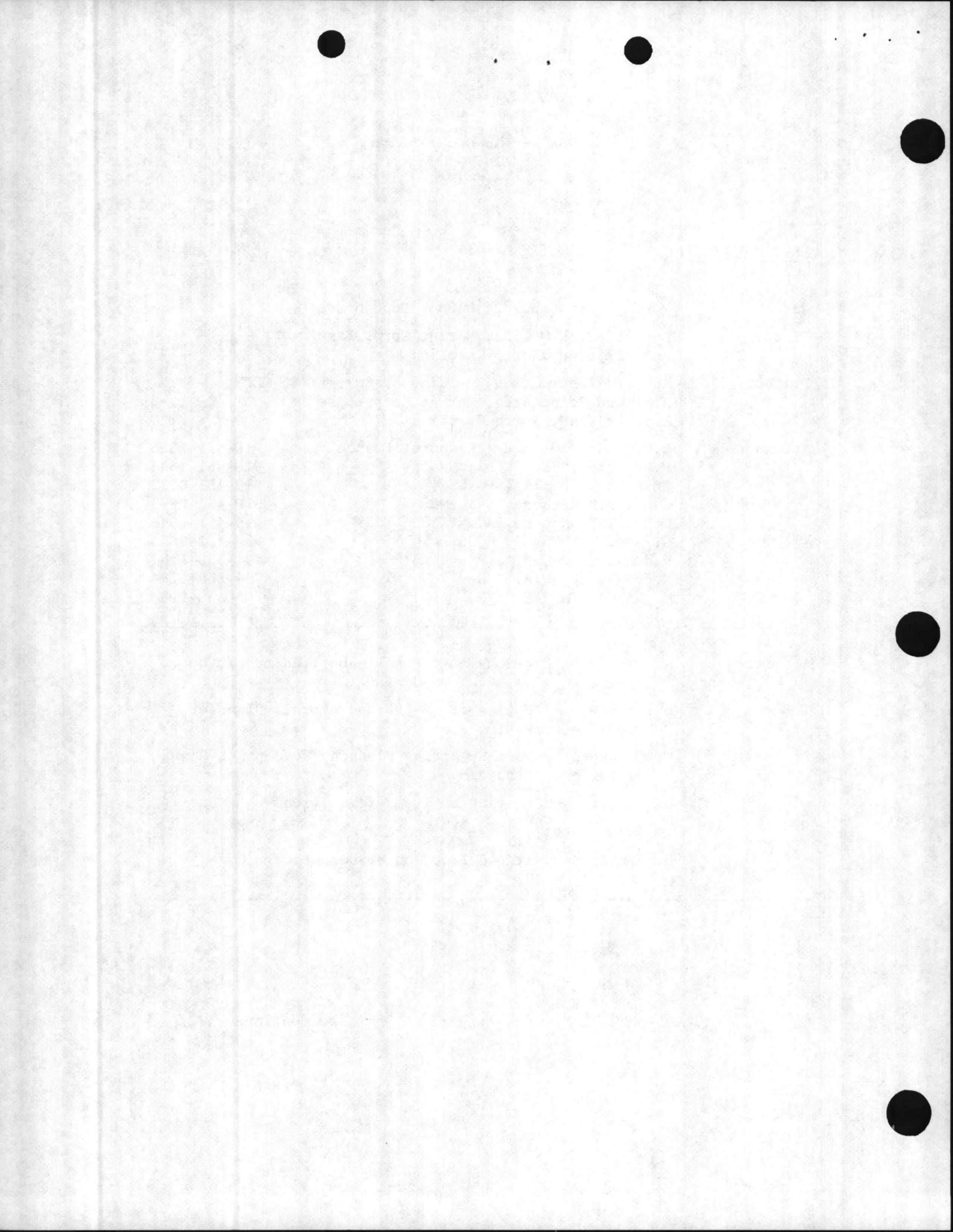
**Agenda:**

- A. Review of Pre-Schematic Plans Submitted to A/E by User.
- B. Review of A/E Plan for P-808 and Overall Plan for P-808/P-809/P-810.
- C. Comments by User Regarding Planning Concepts & Plans Presented by the A/E
- D. Summary and Listing of Items for Action  
Adjournment
- E. A/E Site Visit & Collection of Documents

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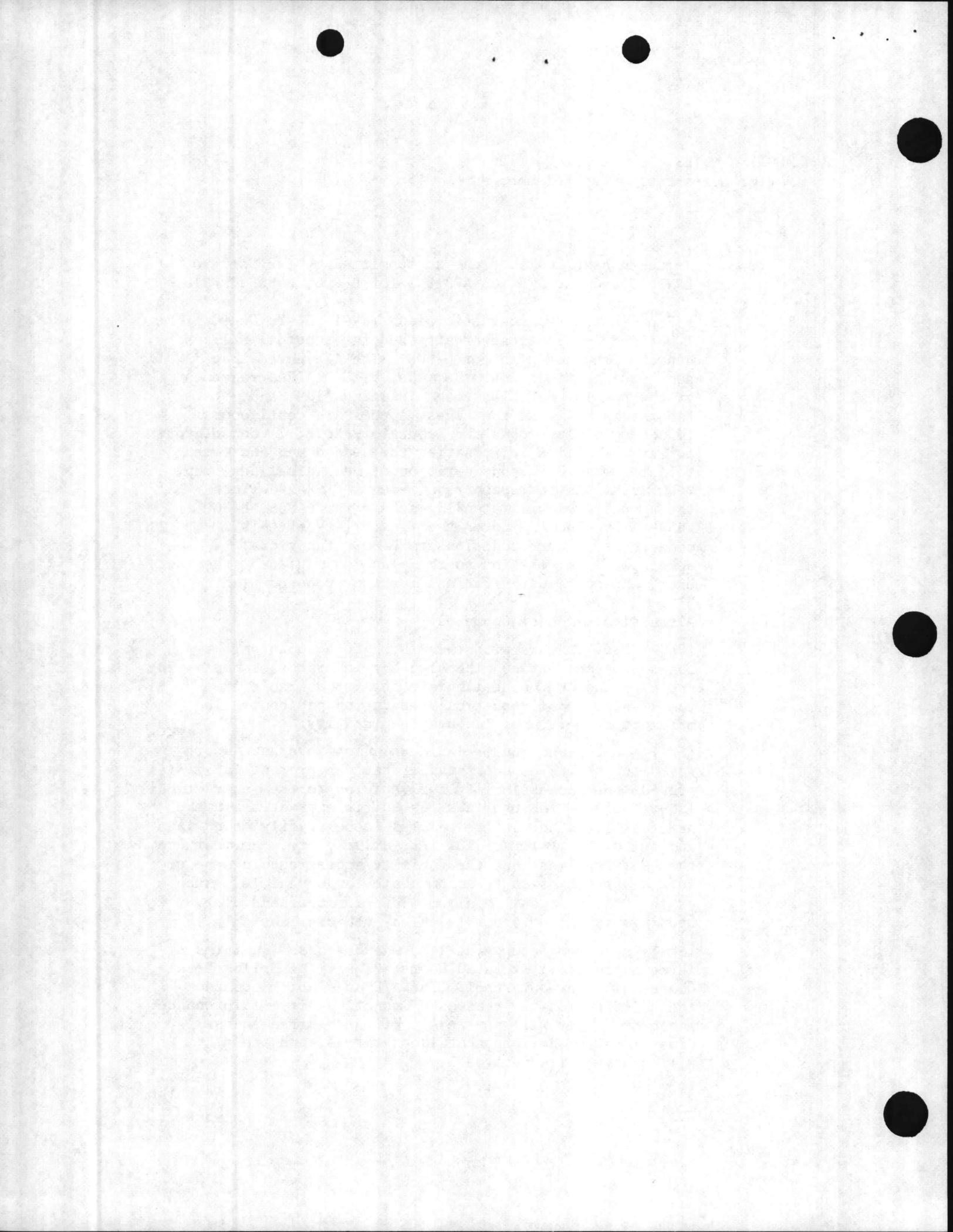
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APPENDIX B



- A.1.0 Reviewed diagramatic plans as submitted by the User to LANTDIV and the A/E (23 APR 84) for P-808, P-809, P-810.
- B.1.0 A/E presented two schematic plans (SK-1, SK-2, Dated 1 October 1984) hereafter attached for record. SK-1 depicts proposed plan for P-808. The A/E noted that some modifications would be made, viz.: 1) Rearrangement of the AGARTS, F&E Classroom, Training Aids, and Laboratory No.1, so that these spaces are contiguous to academic classrooms and Laboratory No.2; 2) Consolidate toilet facilities, eliminating the second men and women's toilet rooms; 3) Reconsideration of mechanical equipment room locations and space requirements. SK-2 depicts the proposed overall planning scheme for P-808, P-809 and P-810. The A/E noted the flexibility of this concept for future additions to P-808, functional development in relation to the plans submitted by the User, and cost justifications for the proposed plan.
- C.1.0 Discussion and User Comments
- C.1.1 [SK-2] User concurs with the A/E that the open buffer zones provided between the high bay laboratories containing vehicles and component laboratories is desirable from the standpoint of acoustical separation and controlled movement of personnel through the facility.
- C.1.2 [SK-1] Number and required dimensions of overhead doors was discussed. The user stated that the present facilities provide poor accessibility for vehicles to the instructional laboratories. The user desires sufficient access in the new facilities to enable vehicles to be readily moved into and out of laboratories for test drives, etc. Furthermore, the user requires that the facility access openings be of sufficient dimension to accommodate large vehicles, such as the Dragon Wagon. Minimum width for overhead door openings is 12'-0" clear (High bay vehicle labs only.)
- C.1.3. [SK-1] Access to component labs was discussed in terms of three options: 1) Overhead Doors; 2) Pair of Hollow Metal Doors; 3) Knock-out Panel. The A/E does not recommend the third option for reasons of functionality, maintenance and cost. User will advise A/E of the desired access dimensions to the component laboratories, and the A/E will analyse alternatives.

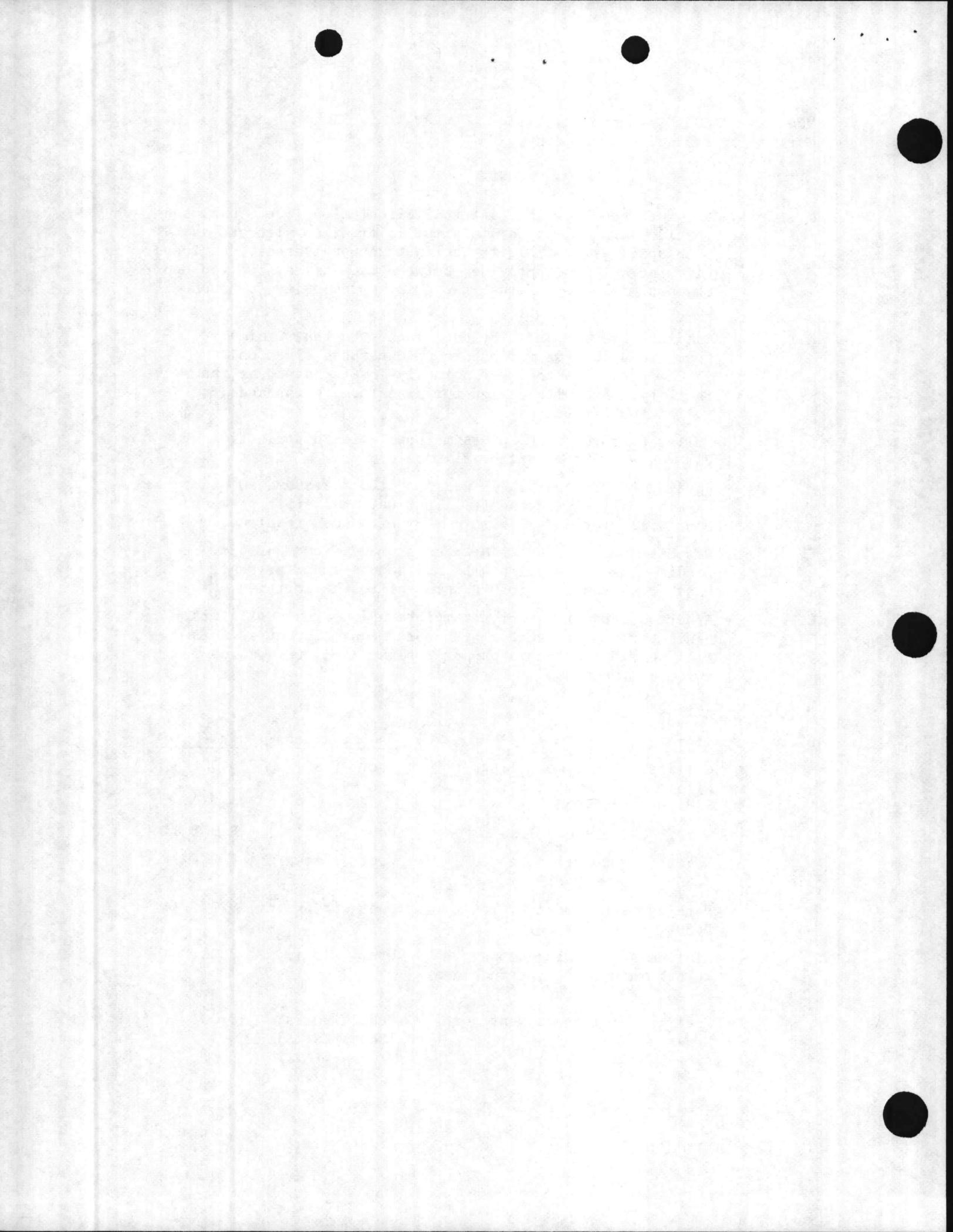
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- C.1.4. A/E informed User that internal circulation (i.e., enclosed corridors) was kept to a minimum in order to allocate as much space as possible to the instructional areas. Enclosed circulation is not provided between many areas, but the User concurs with the A/E that there is no necessity for such connections.
- C.1.5. Handicap Provisions: The User requested that minimal provisions be made for handicapped persons since only able bodied personnel are normally in attendance at the facility. A/E will design for classroom access and toilet facilities only.
- C.1.6. Toilet Fixtures: A/E to assume population distribution of 75% Men and 25% Women for fixture count.
- C.1.7. Parking Requirements: A/E was directed to assume no student parking on the site and full instructional staff parking. User will provide A/E with number of spaces required.
- C.1.8. New Site Access Roads: New access road from Montford Landing Road will align with new access road (presently under construction) to UEPH project to the North.
- C.1.9. A/E requested from user a complete and current Collateral Equipment List, together with work module layouts. This will permit the A/E to properly plan and dimension rooms for each function.

D.1.0. ACTION ITEMS:

| D.1.1. | <u>Item</u>   | <u>Who Provides</u>        | <u>By (Date)</u> |
|--------|---|----------------------------|------------------|
|        | Collateral Equipment List with phase identification and room locations. | User [Ash]                 | 8 OCT 84         |
|        | Work/Equipment Modules.   | User [Ash]                 | 8 OCT 84         |
|        | Facility Populations for P-808, P-809, P-810.                           | User [Browning]            | 8 OCT 84         |
|        | Parking Requirements for P-808, P-809, P-810.                           | User [Browning]            | 8 OCT 84         |
|        | Minimum Access Dimensions to Laboratories & Instructional Areas.        | User [Ash]                 | 8 OCT 84         |
|        | Environmental Assessment for Revised PED.                               | Public Works [Jones/Estes] | 8 OCT 84         |

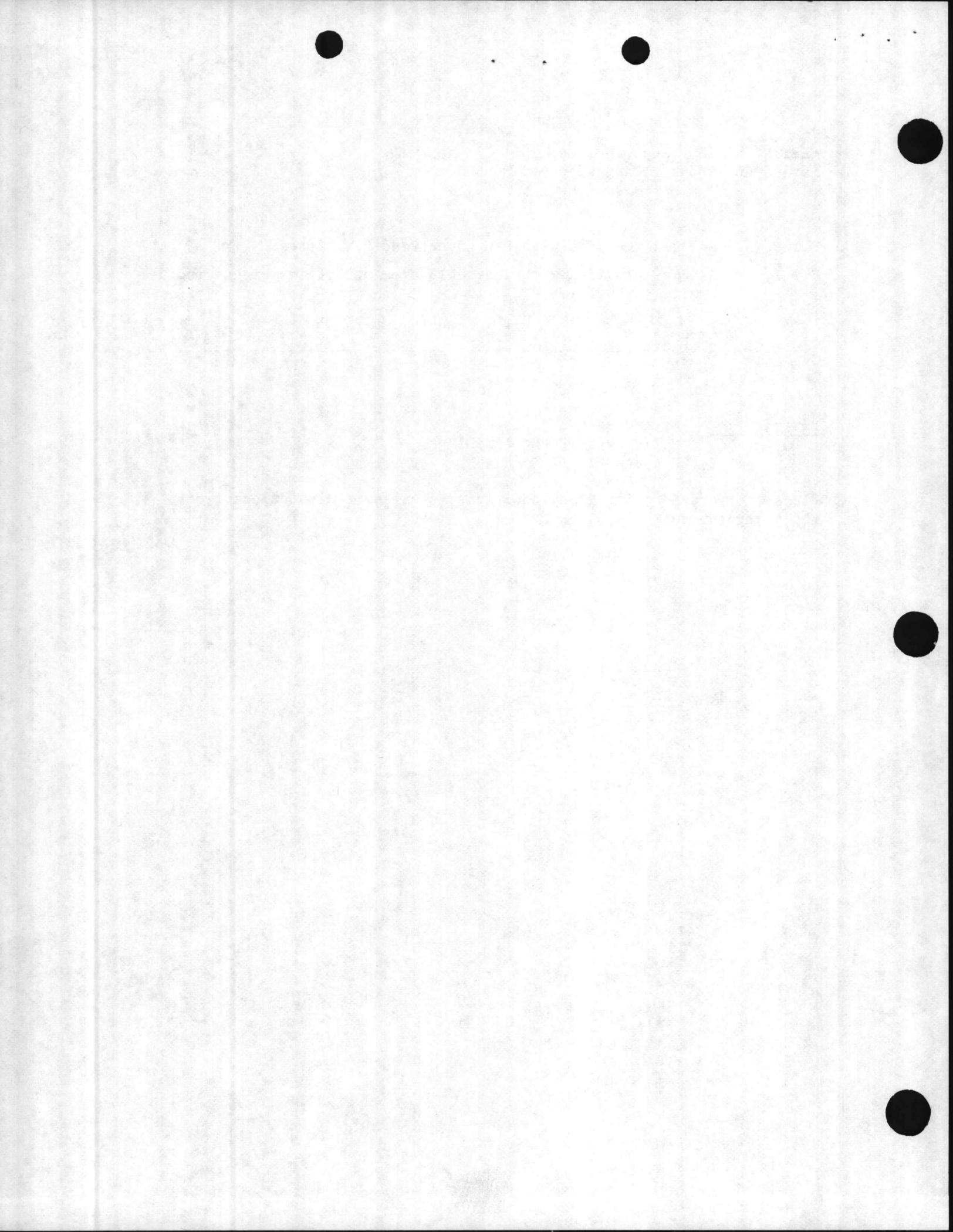


- E.1.0. A/E visited site with E.G. Jones and F.W. Estes.
- E.1.2. A/E was provided with available area utility drawings from Public Works files.

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Distribution: Attendees  
Maxie Bryant, PE, LANTDIV  
Project File

Please forward in writing any additions, changes or dissensions from the foregoing to the A/E.





HARLAND BARTHOLOMEW & ASSOCIATES, INC.

PLANNING • ENGINEERING • LANDSCAPE ARCHITECTURE

October 17, 1984

**RECEIVED**

**OCT 19 1984**

**NAKAZAWA CORPORATION**

Mr. Y. Nakazawa  
President  
Nakazawa Corporation  
212 South Tryon Street  
Charlotte, NC 28281

RE: Master Plan Update, Marine Corps Base, North Carolina

Dear Mr. Nakazawa:

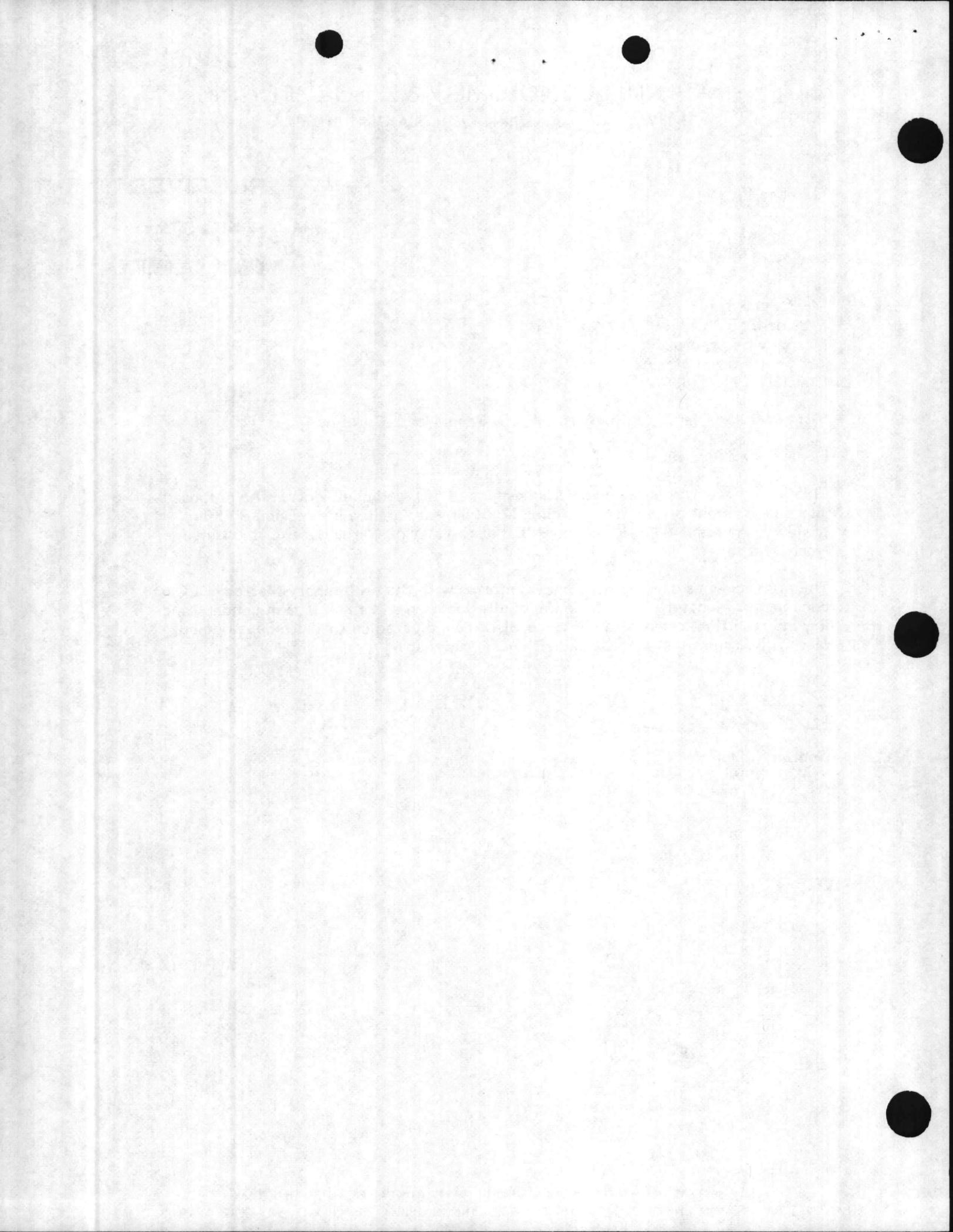
This letter is in response to your request for review and comment on the proposed site development plan, dated October 12, 1984, for Applied Instruction Building, project numbers P-808, P-809 and P-810 at the Marine Corps Base, Camp Lejeune, North Carolina.

The proposed site development plan conforms with the preliminary Master Plan concept for Montford Point in terms of site location and size. It is my understanding that the final orientation of the project as indicated on this site development plan will be shown in accordance with base grid maps.

Sincerely,

George E. Hull  
Project Manager

APPENDIX C



BASIS OF DESIGN - CIVIL  
APPLIED INSTRUCTION BUILDING  
CAMP LEJEUNE, NORTH CAROLINA

1. GENERAL

This project is located in a generally remote and wooded area of the base several hundred feet from existing paved roads. This will require long access roads to be constructed into the site for ingress and egress and will also necessitate long runs of associated utilities.

2. ROADS AND PARKING

Preliminary soil investigation reports indicate poor conditions and some extra preparation will be necessary for subgrades. All roads and parking lots will be constructed on a suitably prepared subgrade with a stone base and asphalt paving. Curb and gutters will be used within the parking lots but no curbs or sidewalks will be used on the ingress and egress roads.

3. WATER DISTRIBUTION

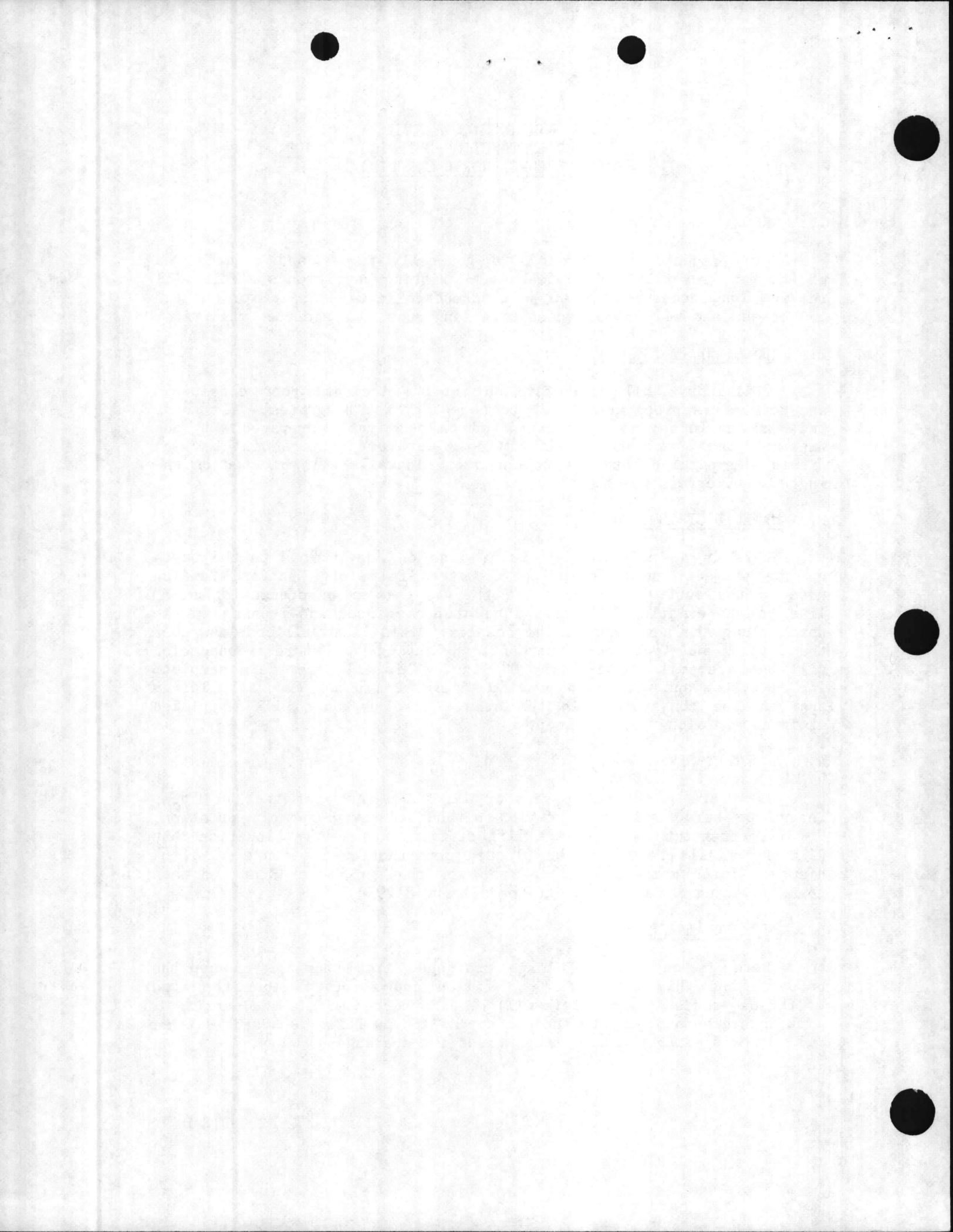
There is an existing 10" water line on Hoover Road to the south of the project and an existing 8" water line along Montford Landing Road to the east. We will serve the new complex by connecting an 8" line to the existing 10" water line at Hoover Road and running to the north along the new road to the complex. This line will continue pass the complex and loop back into Montford Landing Road where a connection will be made with the existing 8" line. This will provide a complete looped system and will also provide water service for future buildings that may be constructed in the area. Fire hydrants will be placed at intervals along the new loop.

4. SANITARY SEWERS

There are no existing gravity lines in the area that are deep enough to serve this new complex without a sewage pumping station. We will construct a new sewage lift station in a central location that will serve all phases of the planned construction and run a 4" or 6" diameter force main south along the new road to Hoover Road and then to an existing manhole adjacent to Building M129.

5. STORM DRAINAGE

There is an existing large drainage ditch running through the property and this ditch will be filled and rerouted along the edge of the new roads. Drop inlets will be constructed within the parking lot with underground piping to the existing ditch outfall. Roadside ditches will be used along the new access roads for drainage.



BASIS OF DESIGN - MECHANICAL/ELECTRICAL  
 APPLIED INSTRUCTION BUILDING  
CAMP LEJEUNE, NORTH CAROLINA

STEAM: Sizing of steam requirements for phases I, II and III. (includes heat loss and ventilation).

|                |                      |
|----------------|----------------------|
| Phase II       | 400#/Hr              |
| Phase II & III | <u>1,100#/Hr</u>     |
| TOTAL REQ'D    | 1,500#/Hr (5# Steam) |

Pipe Sizes - 3" diameter supply  
 2" diameter condensate return

ELECTRICAL: Electrical power requirements for phases I, II and III.

|          |                               |              |
|----------|-------------------------------|--------------|
| Phase I: | HVAC - 43T. x 2.1KW =         | 90KW         |
|          | Lighting 27,000SF x 2.0W/SF = | 54KW         |
|          | Power 27,000SF x 1.0W/SF =    | 27KW         |
|          | Equipment (Pumps, Etc.) =     | <u>10KW</u>  |
|          | TOTAL PHASE I                 | <u>181KW</u> |

|                  |                             |                     |
|------------------|-----------------------------|---------------------|
| Phases II & III: | HVAC - 130T. x 2.1KW =      | 271KW               |
|                  | Lighting 72,000 x 2.0W/SF = | 144KW               |
|                  | Power 72,000 x 1.0W/SF =    | <u>72KW</u>         |
|                  | TOTAL PHASES II & III       | <u><u>487KW</u></u> |

Assume Diversity of 75%

|                   |              |
|-------------------|--------------|
| Phase I =         | 181KW        |
| Phases II & III = | <u>487KW</u> |
| TOTAL             | <u>668KW</u> |

6.8 x 75% = USE 500KVA

