1. A&E Contract No.: N62470-86-B-9263 Construction Contract No.: N62470-

Project Title/Location: FY 89 MCON Project P-433, Corrosion Control Hangar, Marine Corps Air Station, New River, North Carolina (MCAS New River)

a. DD Form 1391 dated 3 November 1986 with Budget Estimate

- c. Collateral Equipment List dated 15 October 1980
- 2. Project Budget: \$ 2,350,000 Construction Cost: \$ 2,113,000

In accordance with design contract terms, you are responsible to ensure that estimated construction costs remain within programmed funds. Approval from the Project Manager (PM) is required to continue design in excess of programmed funds. You are responsible to design to scope. Approval from the PM is required

3. LANTNAVFACENGCOM PM/Telephone:

Mr. J. P. (Joe) Cuccu, Code 09A2132/804-444-9672

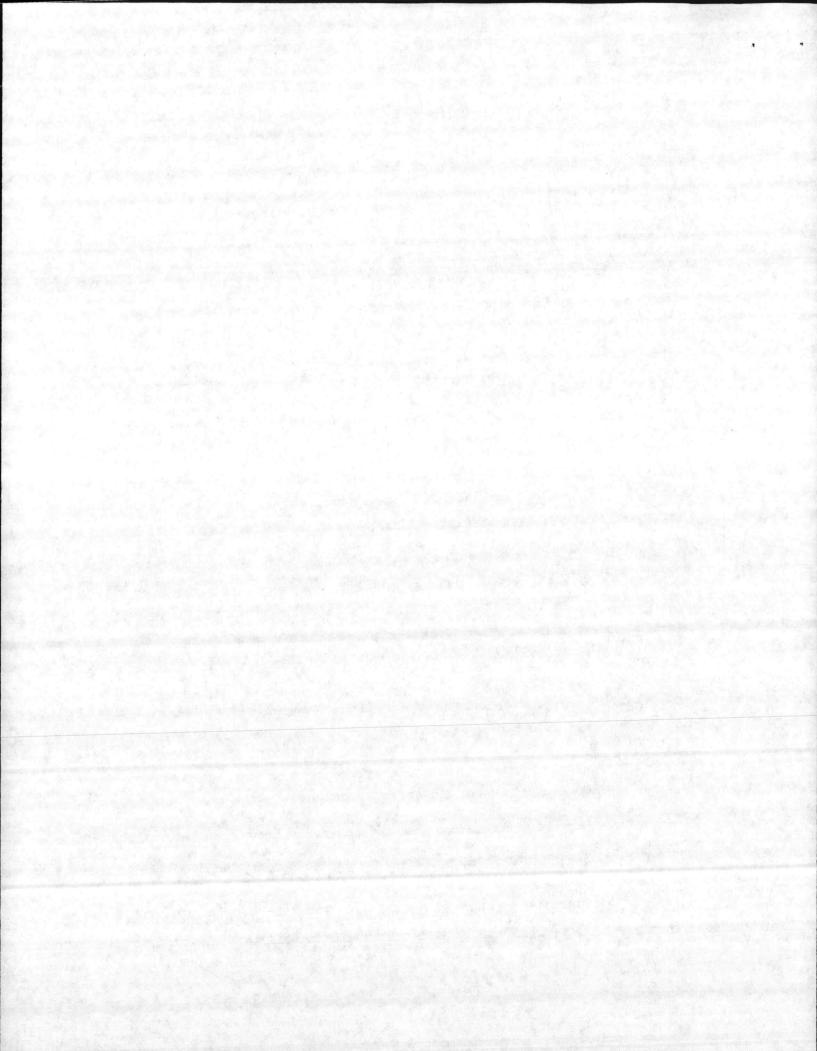
4. Activity Point of Contact/Telephone:

Mr. Flick Acosta/919-451-6686

- Services Required: 5.
 - a. The following listed services are required:

PED Plans Specifications Cost Estimate Shop Drawing Review As-Built Dwg Prep O&M Manual Prep Soil Borings and Report

- b. Energy Conservation: Not required.
- Bench mark datum shall be obtained from the Activity.
- d. Value Engineering (VE): VE of project will be conducted through a separate contract. Your involvement in the VE Study is described in the A&E Guide. Data required for distribution directly to the VE Team is specifically outlined and this effort will be reimbursed under the heading of Engineering



- Computer Estimating System (CES): A computer estimate utilizing our CES system will be required with the prefinal and final (100%) submittals. The A&E shall furnish 7 floppy disks (5 1/4" D, double-sided, double density) and the Government will return loaded with the CES. A users manual and a hard copy of the CES database will also be furnished. Minimum hardware/software requirements are IBM compatible PC w/5 megabyte hard disk storage, printer, DOS (version 2.0 or greater), DBase 3. A manually prepared cost estimate in the systems format or computer generated estimate may be submitted with the 35% submittal. Review the
- 6. Fees and Options: (To be filled in at conclusion of negotiations on A&E contracts)

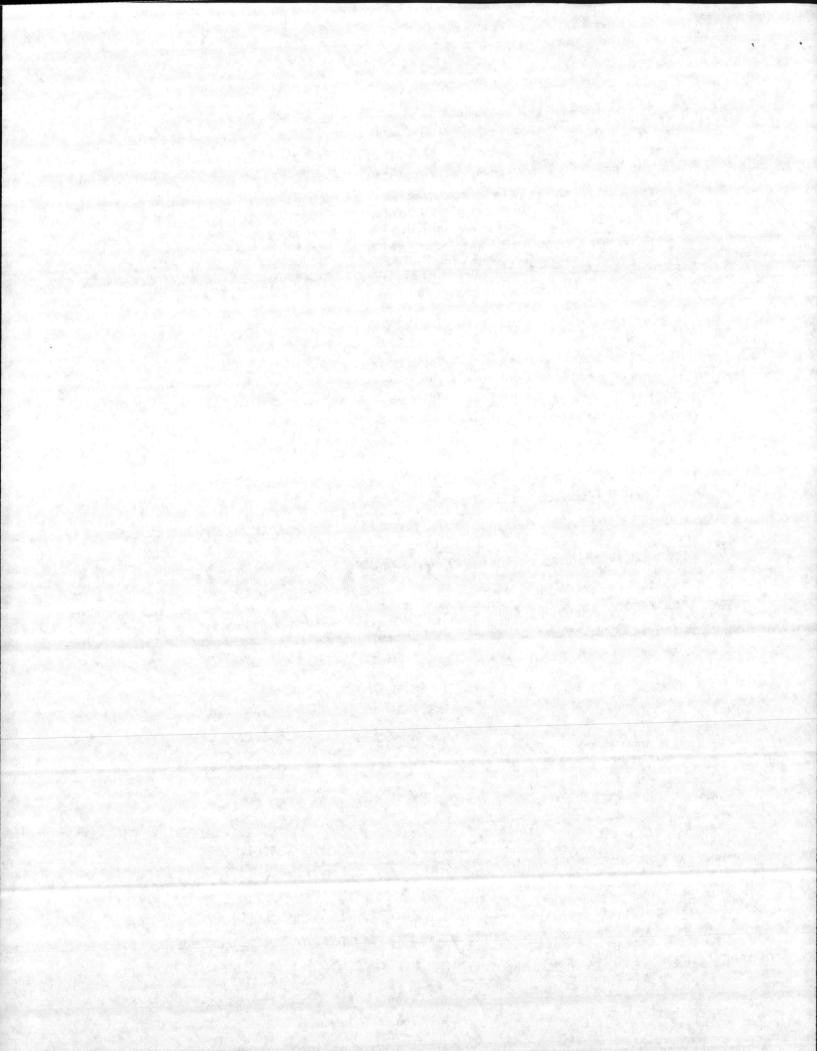
Direct Design Engineering Services Travel and Subsistence Check Shop Drawings As Built Drawings Unit Cost Additional Soil Borings	BASIC AWARD 0-35%	35-100%/ OPTION	OTHER OPTIONS	
BASIC CONTRACT/CHANGE ORDER AMOUNT:				
TOTAL CONTRACT/CHANGE ORDER VALUE:	Carlos or			
Proposed Design Miles	dan days)			

Proposed Design Milestones: (Calendar days)

The designer of record shall begin work upon receipt of contract and pursue the work diligently in accordance with the date schedule established therein. Your assessment of the schedule shall be provided monthly to the Project

A&E Award:	CUMULATIVE NO. DAYS	GOVT REV
35%: Prefinal: Final (100%): Advertise: Award Construction Contract:	0 75 225 315 Oct 88 Dec 88	(30) (60) (30)
Caana D .		

8. Scope Description: The building will be a Corrosion Control Hangar to maintain 200 plus Fleet Marine Force (FMF) aircraft (i.e. AH-1, UH-1, CH-46, CH-53D&E helicopters; OV-10 fixed wing aircraft; and V-22 "OSPREY" tilt-rotor aircraft) attached to two Marine Aircraft Groups. The high bay area of the building will be a one story, pre-engineered steel frame building. The low bay areas will consist of steel roof framing supported on load bearing masonry and steel columns. Walls, columns, and frame will be supported on reinforced concrete foundations supported on precast concrete piles. Exterior walls in high bay area shall be prefinished metal siding with insulation over steel girts with prefinished metal liner panels above 12' from the finished floor.



From finished floor to 12' high, walls shall consist of prefinished metal siding over rigid insulation with an impact and solvent resistant interior application. Low bay exterior walls shall be prefinished metal siding over rigid insulation on the concrete masonry. The facility shall also consist of integral ground system in floor slab, insulated standing seam roof, steam heat, air conditioning, hangar area, explosion-proof lighting, utilities, fire protection, and paved parking removal, protective coating, and spot painting of aircraft. An X-ray Room and a paint spray room will also be a part of the facility. Additionally, there will remote from the hangar. Hazardous Materials Storage Building constructed grade with load bearing masonry walls, insulated standing seam metal roof, heating ventilation and lighting (explosion proof).

Functional Requirements:

a. General:

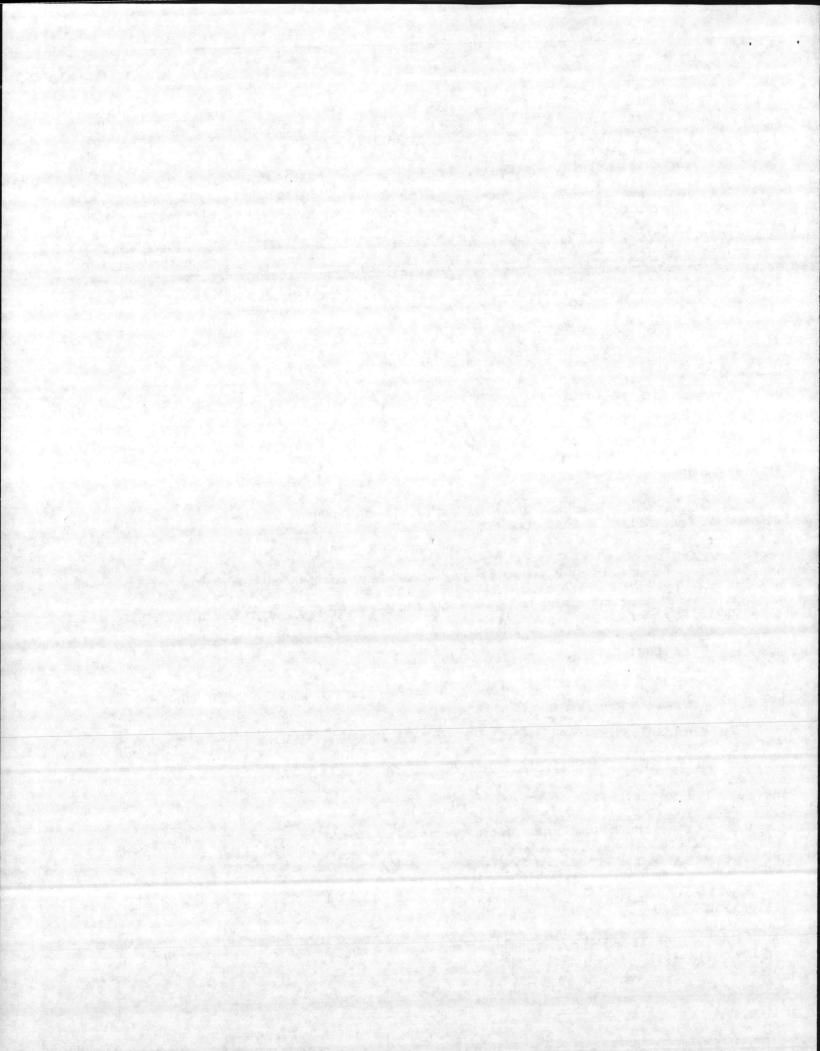
- (1) Provide sliding doors for aircraft entry.
- (2) Provide a one (1) ton hoist over the stripping vat.
- (3) No more than two (2) aircraft per day (two hours to wash with a 1-1/2 inch hose) will be washed inside the hangar.
 - (4) Provide lead shielding for walls and ceiling in the NDI (X-Ray) Lab.
 - (5) Building occupancy will be 20 people/shift with three (3) shifts/day.
 - (6) The X-Ray machine will be Government furnished equipment.
- (7) Provide a predesign meeting at the Activity and on-board reviews at LANTNAVFACENGCOM at the 35% and prefinal submittals.

b. Structural:

- (1) The facility is located in seismic zone 1. Use 115 MPH wind load for calculations.
 - (2) The building floor will be a sloped concrete floor slab-on-grade.
 - (3) No safety lifeline is required for this facility.

c. Mechanical:

- (1) The hangar floor drain system will be routed through an oil/water separator to the sanitary sewer.
- (2) The sanitary sewer will be routed to a proposed sewage lift station adjacent to the building. The lift station will be constructed with an adjacent project (P-404).
- (3) Steam will be supplied from a year-round central steam loop adjacent to the facility.



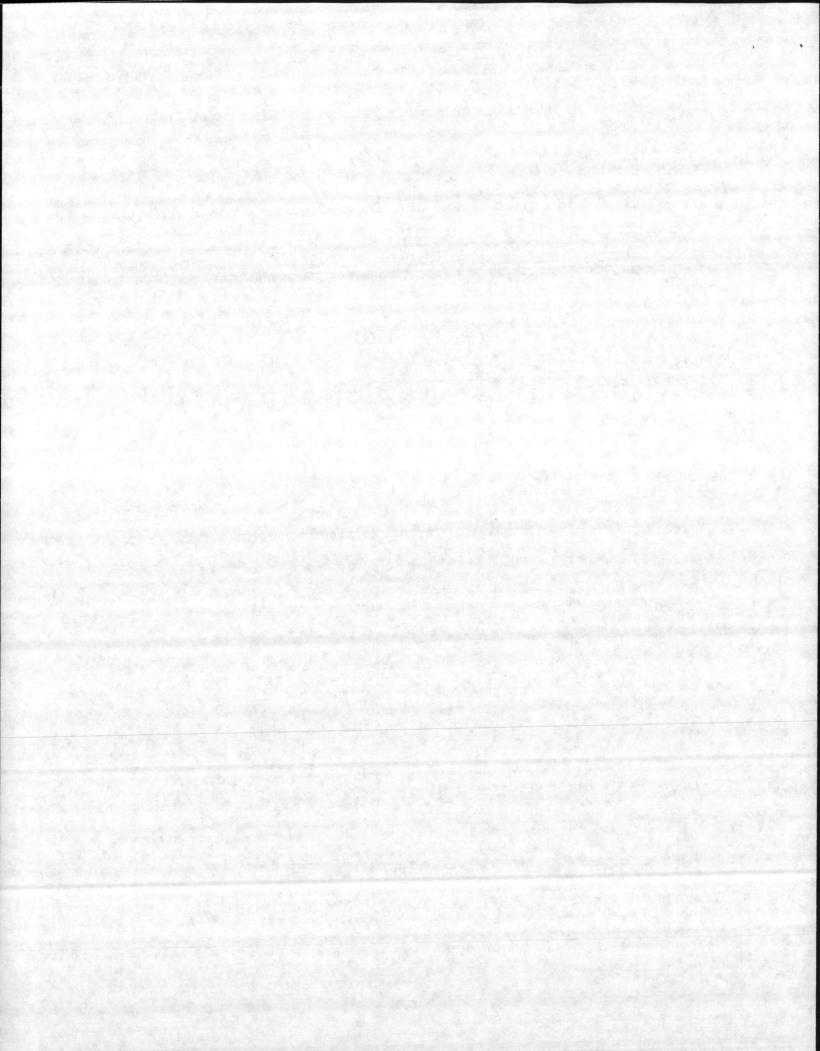
- (4) Hot water will be generated by a heat exchanger to be located in the Mechanical Room.
- (5) A breathing air compressor is required for the building with two (2) stations in the hangar and one (1) station in the paint booth.
- (6) Investigate the use of solvent recycling stills to treat wastewater from washing operations.
- (7) The fire protection for the building will be an overhead AFFF System in the hangar area and wet pipe sprinklers throughout the remainder of the building.
 - (8) Provide overhead hose reels for two (2) different greases.
- (9) The office area, X-Ray Room, and NDI Lab will have air conditioning and heat. The Paint Spray Room will have air conditioning, heat, ventilation, and humidification. The remainder of the building, including the Hazardous Materials Storage Building, will be heated and ventilated only.

d. Electrical:

- (1) Use metal halide light fixtures for good color rendering in hangar bay, explosion proof light fixtures in paint storage, stripping, mixing and Spray Rooms.
 - (2) Two-way intercoms are required between each room of the facility.
 - (3) The building is to be prepared for connection to the EMCS system.
 - (4) No stand-by generator is required for the facility.
- (5) Follow Naval Facility Engineering Command Headquarters (NAVFACENGCOM) criteria for aircraft grounding within the hangar.
- (6) The building fire alarm system will be connected to a radio type transmitter to send a signal to the Fire Department.
- (7) Provide automatic controls to shut-off the x-ray equipment if the doors to the area are opened.
- (8) Communications Requirements: Extend two (2) 4" ducts from the new building to the nearest communication system manhole. Run two (2) 25 pair cable. The Government will splice the lines inside the building.

See attachment (a).

- 9. Site Approval Status: Site approved on 26 June 1985.
- 10. Project Environmental Assessment (PEA): It has been determined that the project will have no significant impact on the environment.
- ll. Tentative Floor Plan Concept attached and Tentative Space Plan summarized below:

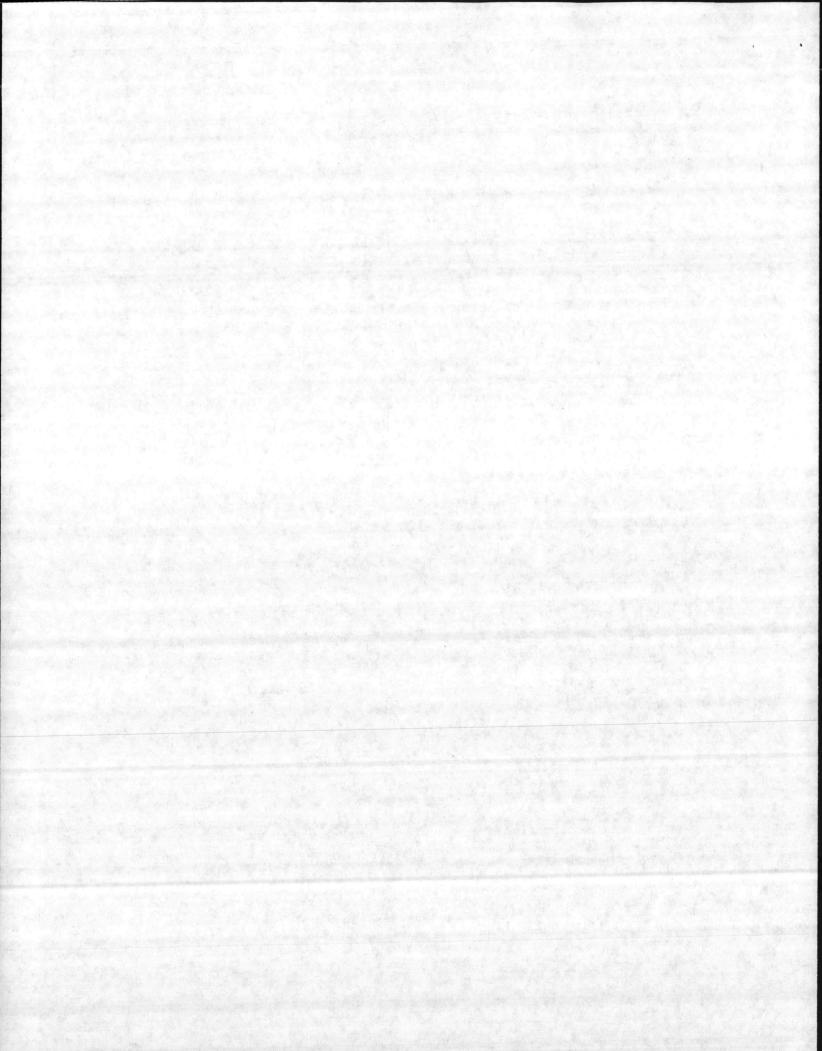


FUNCTION	
Office	AREA (+/-)
Women Men	228 SF 324 SF
X-Ray NDI Lab	540 SF
Aircraft Ray	180 SF 756 SF
Paint Storage Mixing	10,527 SF 180 SF
Spray Booth Stripping	162 SF 252 SF
Mechanical	180 SF
See attachment (b)	1,170 SF

See attachment (b).

12. Special Building Systems:

- a. Power Distribution System(s): 277/480V Provide from local overhead.
- c. UPS: N/A
- d. R.F. Shielding: N/A
- e. MCON Funded Built-in Equipment (see collateral equipment list, attachment (c))
- f. Raised Flooring: N/A
- Compressed Air: 125 PSI compressed air system ambient air breathing system.
 - Cranes and Hoists: One ton hoist in stripping area.
- i. Telephone/Telecommunication Systems: (Activity provide description of system function and type) - (2) 25 pair cable in (2) 4" conduit.
 - j. Other: X-Ray Room, Paint Spray Booth
- 13. System Safety and Hazard Analysis
 - a. Activity has prepared preliminary hazard analysis: No.
- b. Hazardous substances requiring consideration in design: Solvents requires combination emergency eye wash/shower and a remote hazardous materials
- c. Identify personnel safety measures required as part of facility design: X-Ray Room - walls and ceiling require lead lining.



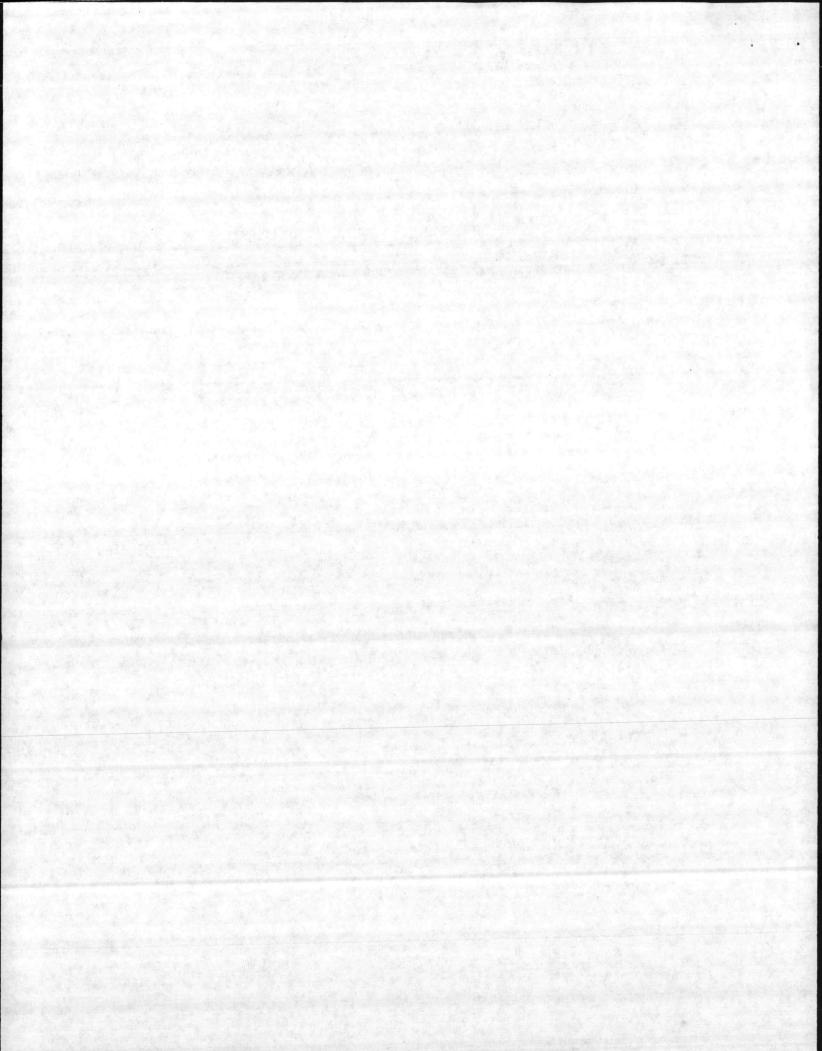
- d. Safety plan and hazardous analysis required by designer: No, per Mr. Bolton, Code 408, on 28 October 1986.
- 14. Demolition Proposed: None
- 15. Easements, Air and Water Discharge Permits Required: Erosion Control Plan required to be submitted to State of North Carolina.
- 16. List Significant Equipment from Other than MCON Appropriations: X-Ray Equipment (See attachment (c). 17. Utilities:

a. Points of Connection Proposed: (Subject to designer verification)

Water - 18" main approximately 85 LF away Sewer - Proposed lift station approximately 60 LF away Power - Overhead approximately 120 LF away Steam - Overhead 4" approximately 20 LF away Telephone - Connect to existing manhole approximately 260 LF away Fire Alarm - Radio transmitted

See attachment (d).

- b. Restrictions on Utility Interruptions: Outages shall be coordinated with MCAS New River.
- 18. Construction Procurement Strategy:
 - a. Number of Construction Contracts: One
 - b. Proposed Construction Perioa: 16 months.
- c. Applicability of Standard Liquidated Damages: Standard liquidated damages apply.
 - d. Methods of Procurement Proposed: Competitive Bid (Firm-Fixed-Price)
- e. Security Requirements of A&E Contract: A/E will have to coordinate site investigation with the Activity.
- f. Security Requirements of Construction Contracts: A/E to verify with Activity.
- g. Contractor Laydown Area: A/E to verify with Activity and reflect on project drawings.
- Project Submittal Distribution:



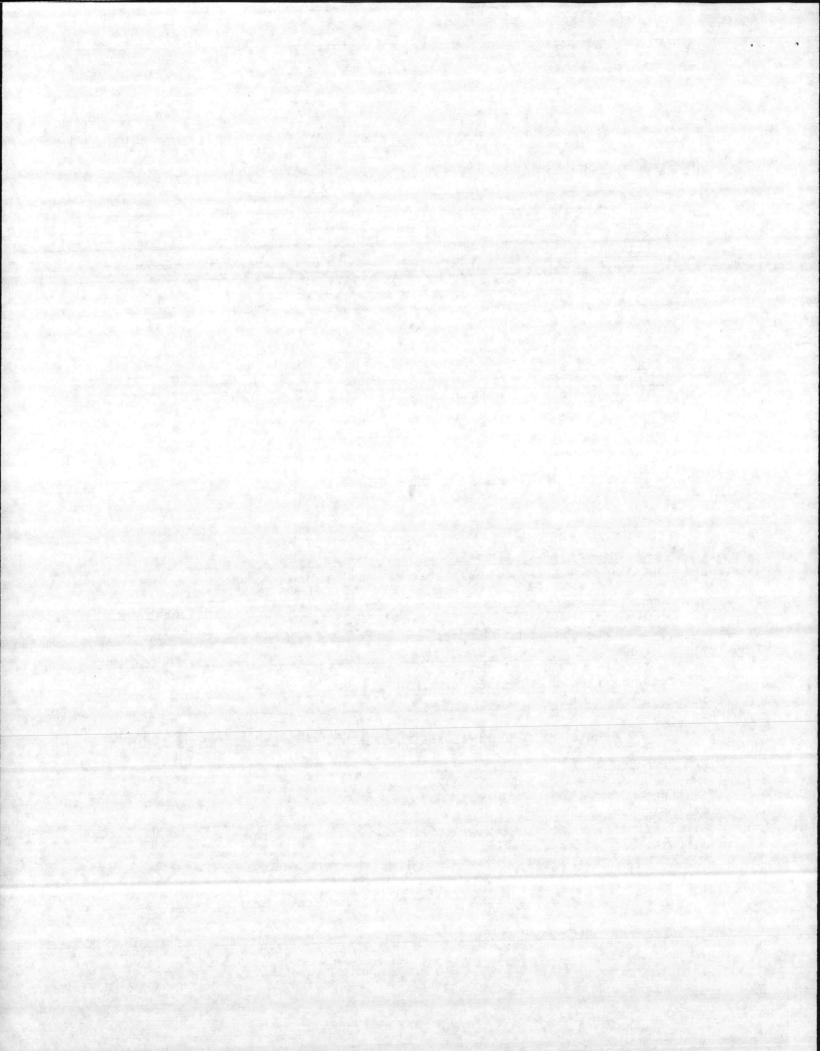
	LANTNAVFACENGCOM	ACTIVITY	ROICC	TMD
reliminary (35%)				
Plans	4	2		
Outline Specification	4			
Cost Estimate	3	2	A STATE OF THE STA	
Basis of Design	3	2		
Geotechnical Data				1
VE Package TO	VE TEAM ONLY			The state of
refinal				
Plans, Specifications	4	2		
Cost Estimate	3	2		
Interior Color/Finish Material				100
Calculations, Environmental				fled?
Permits	2			
All Marked Preliminary				
Submittal Data	X			
nal				
Plans - Tracings	Original			
Prints	2 sets			
Specifications	Bond			
	2 copies			
Cost Estimate	2 copies			
Calculations	1 copy			
Field Notes, Reports, Studies, Permits	1 copy each			
Interior Color/Finish Materials All DMs furnished by LANTNAVFAC	set			

MAILING ADDRESSES: DIRECT DISTRIBUTION TO EACH ADDRESSEE BY A&E IS REQUIRED

LANTNAVFACENGCOM

Commander Atlantic Division Naval Facilities Engineering Command Norfolk, Virginia 23511-6287

Attn: Code 09A2132, Mr. J. P. Cuccu, P. E.



ACTIVITY (MCAS CHERRY POINT)

Commanding General Marine Corps Air Station Cherry Point, North Carolina 28533

Attn: S-4

ROICC

Resident Officer in Charge of Construction Jacksonville, North Carolina Area Marine Corps Base Camp Lejeune, North Carolina 28542-5001

TMD

Telecommunications Management Detachment East 138 East Little Creek Road, Suite 222 Norfolk, Virginia 23505-2551

