

CONSTRUCTION CONTRACT 86-5573

RENOVATE EXTERIOR AND INTERIOR, STRUCTURAL REPAIRS BUILDING 66
SCOPE OF WORK

THE SCOPE OF THE WORK INVOLVES RENOVATION AND STRUCTURAL REPAIRS TO BLDG. 66.
THE WORK IS GENERALLY DESCRIBED IN THE ATTACHED COST ESTIMATE.

DEMOLITION:

1. REMOVE EXISTING WINDOWS
2. REMOVE EXISTING EXTERIOR DOORS AND INTERIOR DOORS COMPLETE
3. REMOVE EXISTING VINYL FLOOR TILE IN HALLWAYS AND PUBLIC AREAS
4. REMOVE EXISTING VAULT DOOR COMPLETE
5. REMOVE EXISTING ELECTRICAL WIRING, OUTLETS, SWITCHES, LIGHTING AND SERVICE
6. REMOVE EXISTING ASBESTOS PIPING INSULATION
7. REMOVE EXISTING HEATING SYSTEM COMPLETE

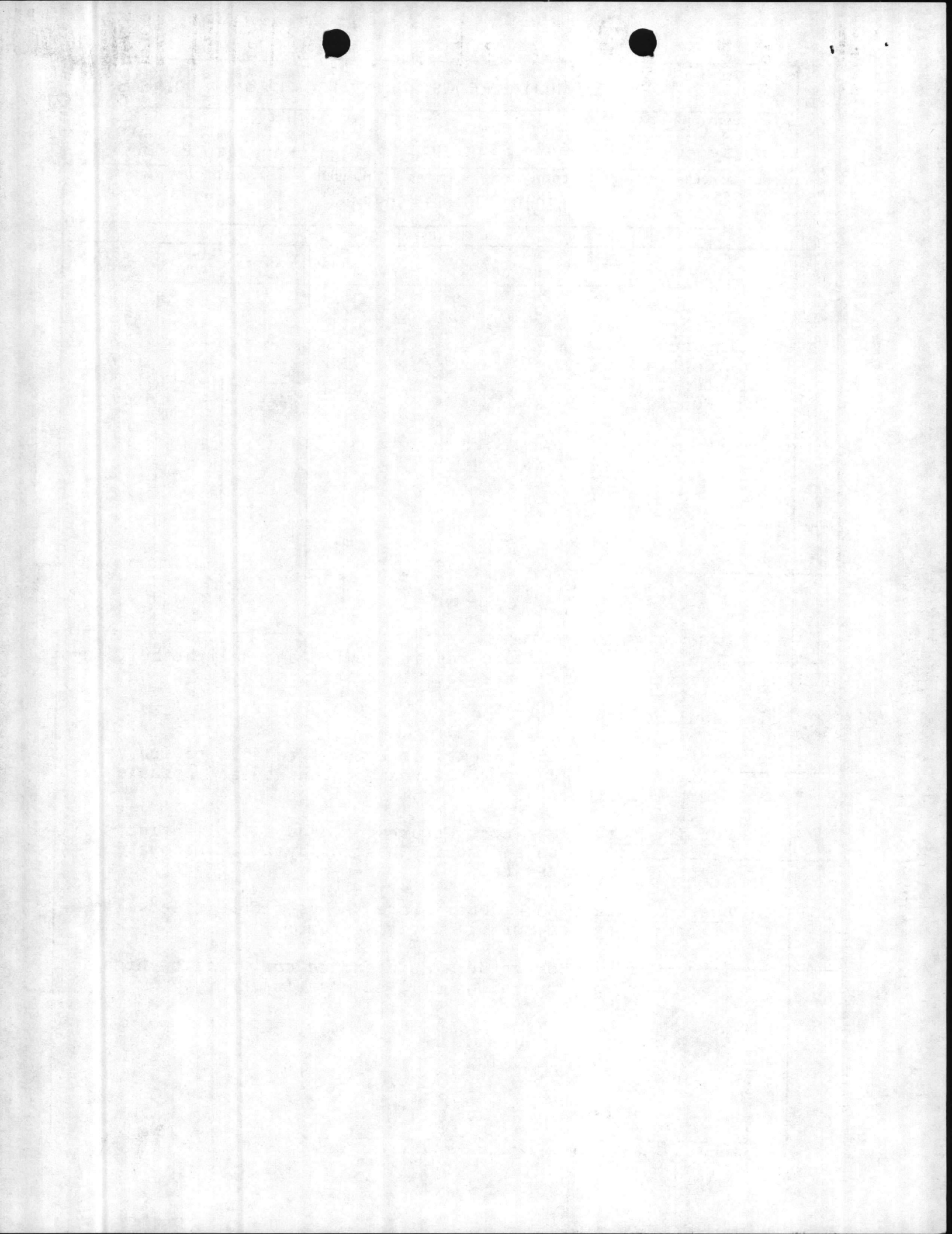
CONSTRUCTION:

1. PROVIDE NEW INSULATED WINDOWS
2. PROVIDE NEW EXTERIOR AND INTERIOR DOORS, FRAMES AND HARDWARE
3. PROVIDE NEW VINYL TILE IN HALLWAYS AND PUBLIC AREAS
4. PROVIDE NEW CARPET
5. PROVIDE NEW VINYL WALL COVERING
6. PROVIDE NEW CERAMIC FLOOR AND WALL TILE
7. PAINT EXTERIOR AND INTERIOR COMPLETE
8. PROVIDE NEW SUSPENDED ACOUSTICAL CEILING
9. ALTER EXISTING INTERIOR PARTITIONS
10. PROVIDE NEW ELECTRICAL WIRING, OUTLETS, SWITCHES, LIGHTING AND SERVICE
11. PROVIDE NEW CENTRAL HVAC SYSTEM WITH COOLING COIL, CONDENSER, STEAM COIL, DUCTWORK AND CONTROLS.

ALL RENOVATIONS AND REPAIRS SHALL CONFORM TO APPLICABLE NAVFAC DESIGN CRITERIA CODES AND GOOD ENGINEERING AND ARCHITECTURAL PRACTICE.

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1. COMPONENT		FY 19 ⁸⁷ MILITARY CONSTRUCTION PROJECT DATA		2. DATE		18 Sep 85	
3. INSTALLATION AND LOCATION Marine Corps Base Camp Lejeune, NC 28542 Bldg #66				4. PROJECT TITLE Make Int & Ext Structure Repairs, Rewire, Relight, Renovate Piping			
5. PROGRAM ELEMENT		6. CATEGORY CODE		7. PROJECT NUMBER		8. PROJECT COST (\$000)	
		61010		LE5032M		637	
9. COST ESTIMATES							
ITEM				U/M	QUANTITY	UNIT COST	COST (\$000)
Total Cost				LS	----	----	579
Contingency 10%				LS	----	----	58
Total Contract Cost				LS	----	----	637
Design Cost 6%					----	----	38
Total Funds					----	----	1312 637
10. DESCRIPTION OF PROPOSED CONSTRUCTION							
Make Int. & Ext. structure repairs, rewire and relight building, renovate steam, condensate, potable water system.							
11. Requirements:							
<u>Project:</u> Make int. & ext. structural repairs, rewire, relight building, renovate steam, condensate and potable water system.							
<u>Requirement:</u> Repair structure int. and ext., lighting, wiring, renovate and modify heating system. Renovate potable water system.							
<u>Current Situation:</u> Deteriorated doors, floors, tile, walls, heating system, potable water system.							
<u>Impact If Not Corrected:</u> Maintenance cost will be high and working conditions will be unsatisfactory.							



COST ESTIMATE

DATE PREPARED
 18 Sep 85

ACTIVITY AND LOCATION
 Marine Corps Base
 Camp Lejeune, NC 28542 Bldg. #66

CONSTRUCTION CONTRACT NO
 LE5032M

ESTIMATED BY
 Huffman

IDENTIFICATION NUMBER

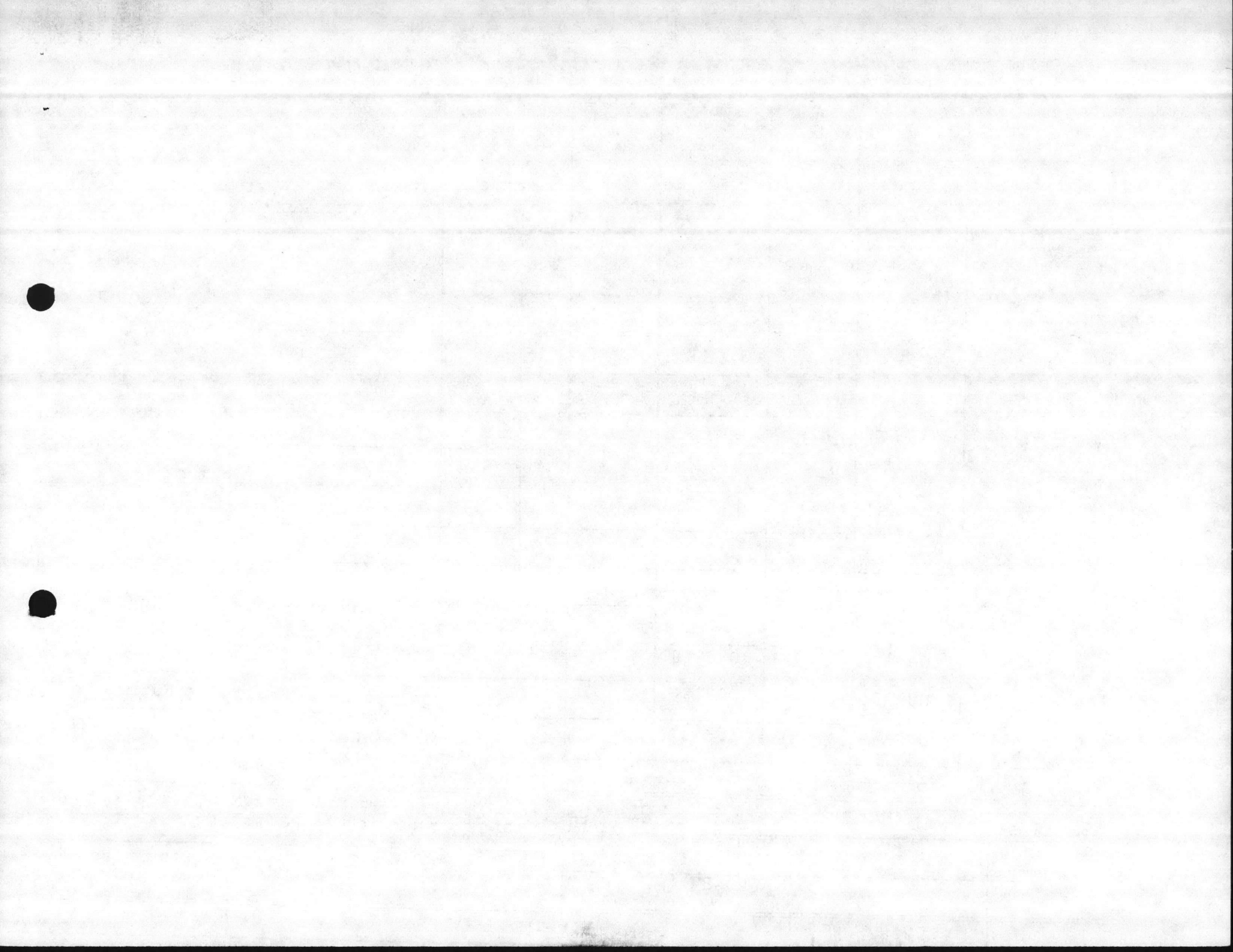
CATEGORY CODE NUMBER
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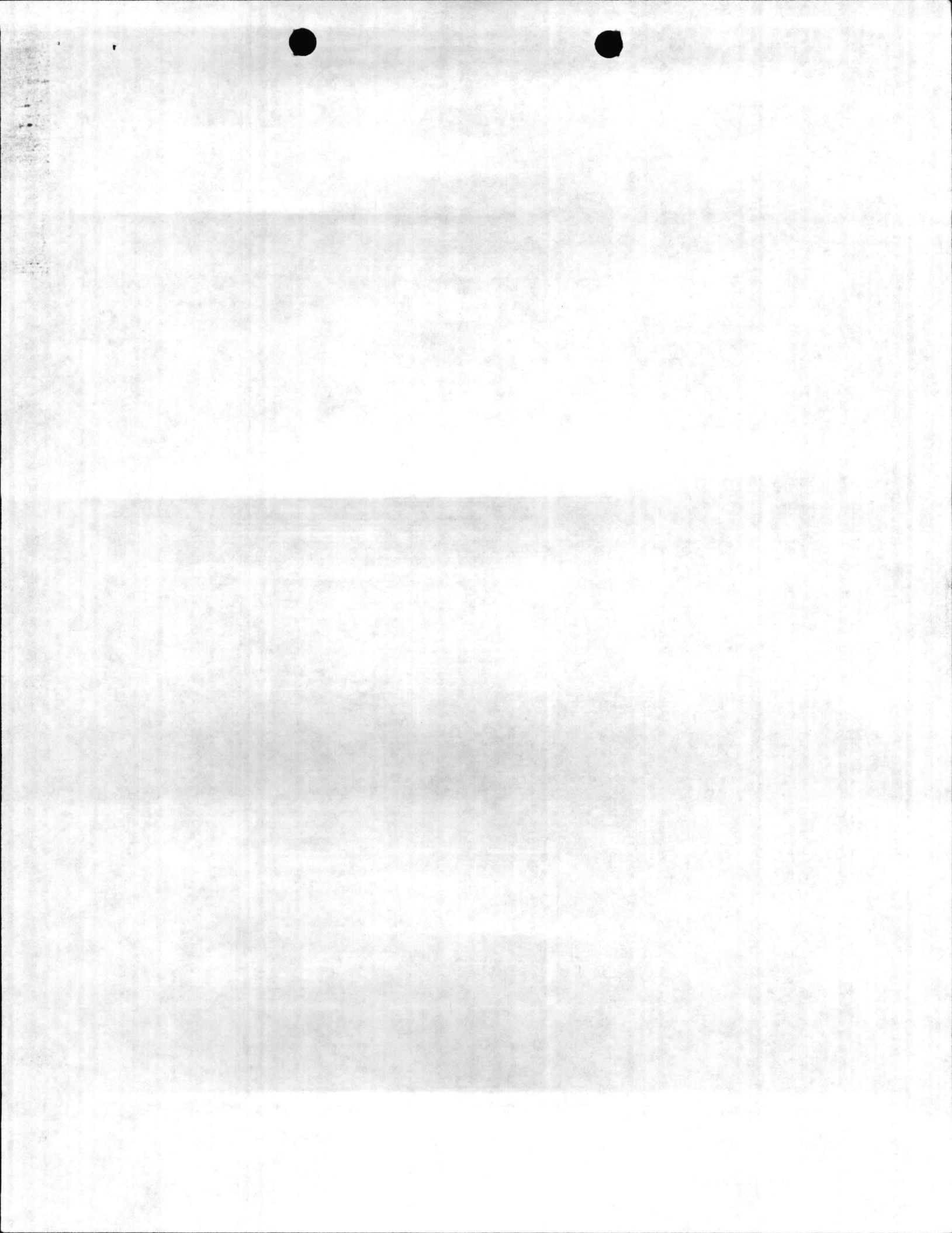
JOB ORDER NUMBER

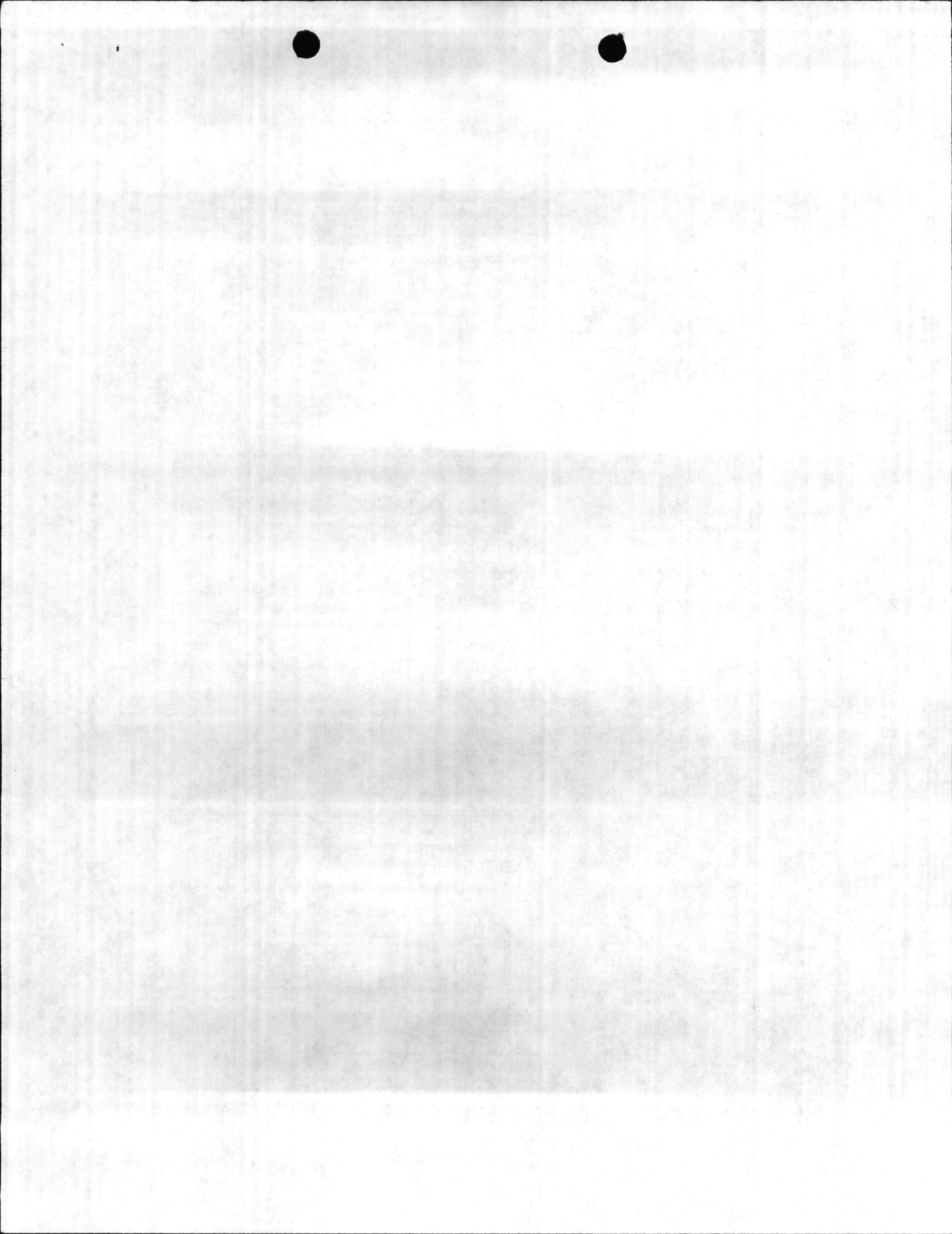
PROJECT TITLE
 Make int & ext repairs, rewire, renovate steam,
 condensate, potable water system

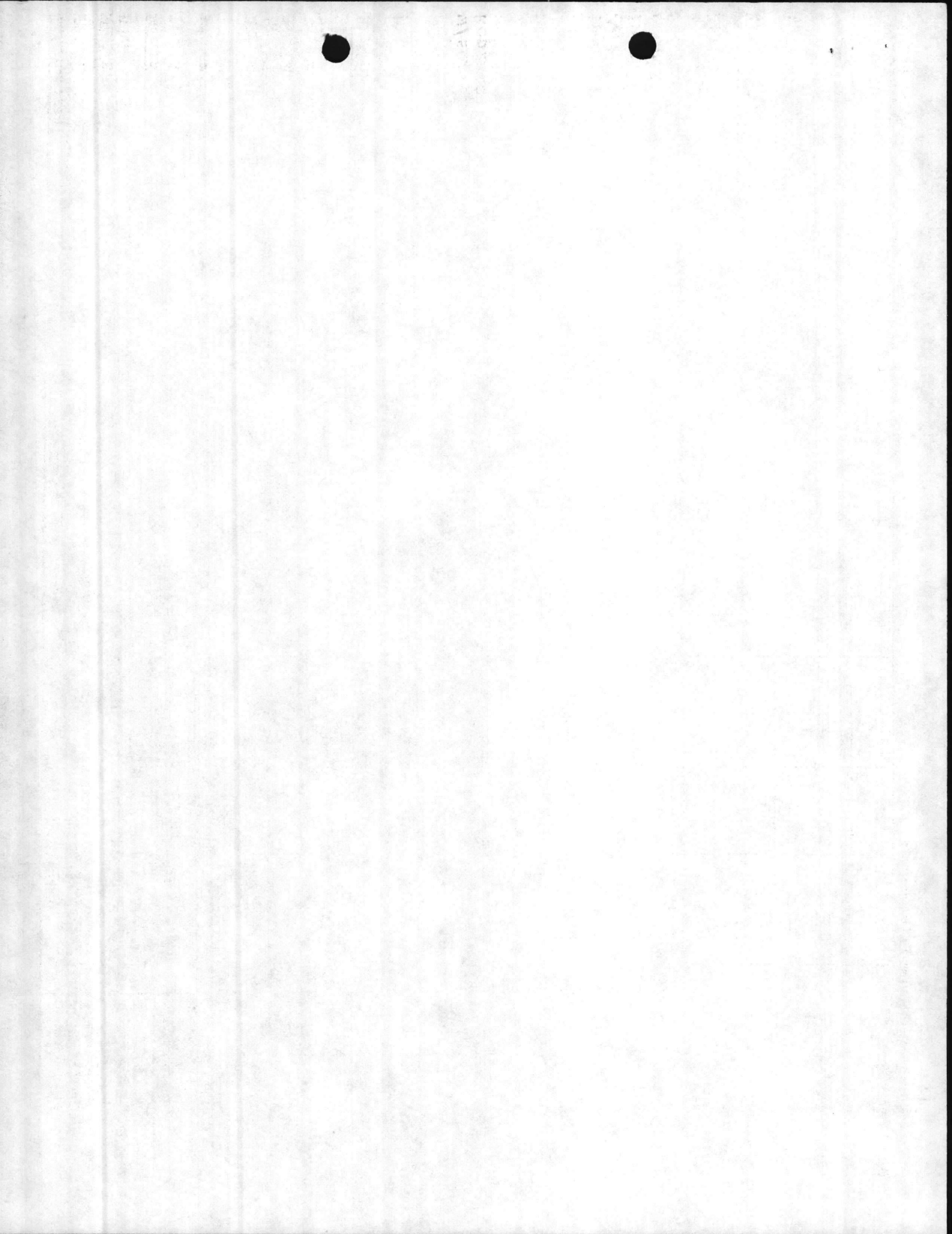
STATUS OF DESIGN
 PED 30% 100% FINAL Other (Specify)

ITEM DESCRIPTION	QUANTITY		MATERIAL COST		LABOR COST		ENGINEERING ESTIMATE	
	NUMBER	UNIT	UNIT COST	TOTAL	UNIT COST	TOTAL	UNIT COST	TOTAL
Make int. & ext. structure repairs				149,851		55,449		205,300
Replace wiring, lighting, power circuits				26,800		13,200		40,000
Renovate steam, condensate, hot water				87,000		87,000		174,000
Installing a potable water systems.								
Remove asbestos.								
Basic Cost				263,651		155,649		419,300
Overhead 15%								62,895
Labor 18%								28,016
Material 4%								10,546
Sub Total								520,757
Profit 10%								52,075
Sub Total								572,832
Bond 1%								5,728
Total Cost								578,560









COST ESTIMATE

DATE PREPARED
18 Sep 85

SHEET **2** OF **8**

ACTIVITY AND LOCATION
**Marine Corps Base, Camp Lejeune, NC 28542
 Bldg #66**

CONSTRUCTION CONTRACT NO

IDENTIFICATION NUMBER
LE5032M

ESTIMATED BY
R. Marshall

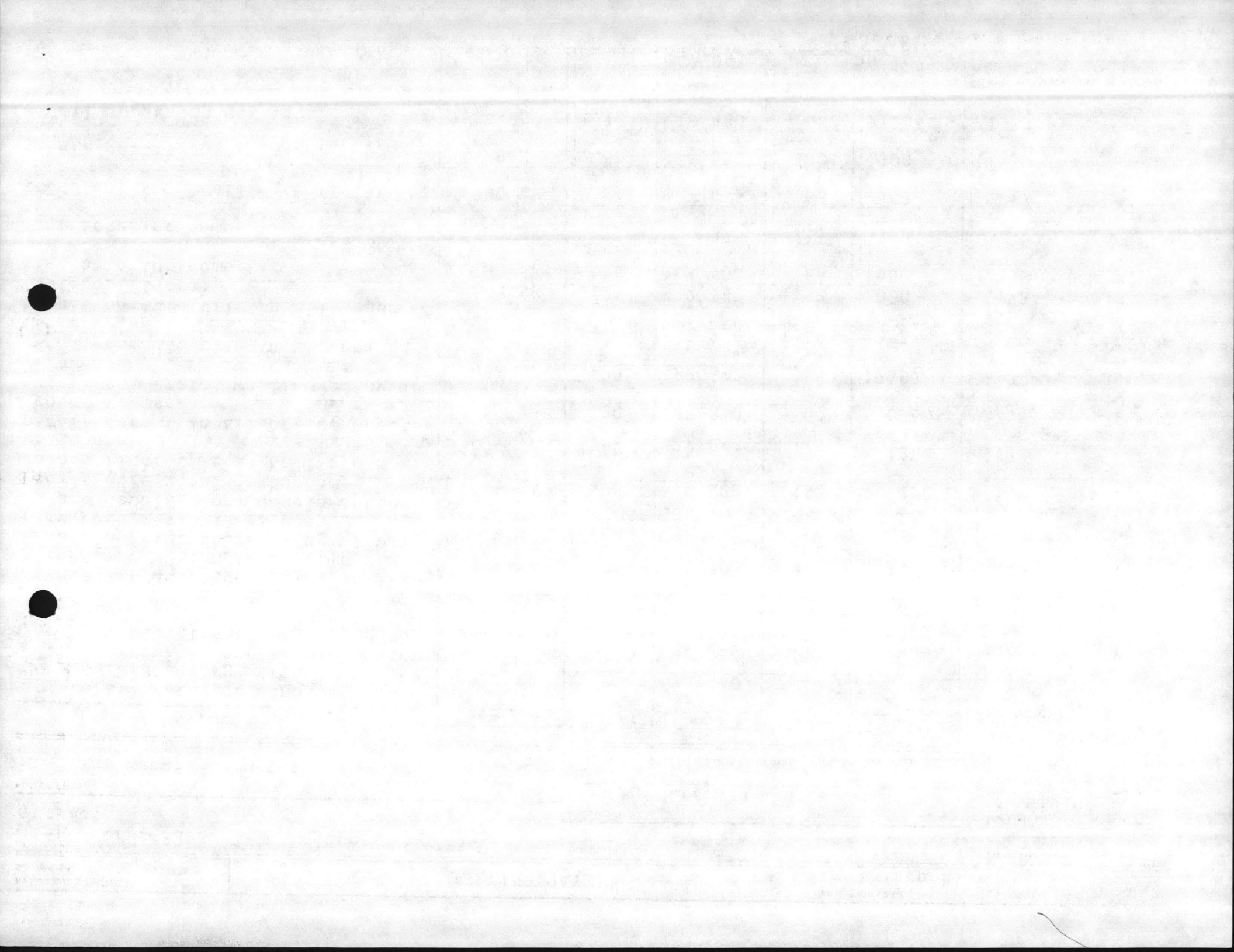
CATEGORY CODE NUMBER
61010

PROJECT TITLE
Int & Ext Repair Structure

STATUS OF DESIGN
 PFD 30% 100% FINAL Other (Specify) _____

JOB ORDER NUMBER

ITEM DESCRIPTION	QUANTITY		MATERIAL COST		LABOR COST		TOTAL COST	
	NUMBER	UNIT	UNIT COST	TOTAL	UNIT COST	TOTAL	UNIT COST	TOTAL
Replace all exterior windows with anodized alum energy efficient type	124	EA	310	38,440	40	4960	350	43,400
Replace exterior door single action type H.D. alum frame tempered glass	3	EA	525	1,575	129	387	654	1,962
Replace ext door (double)(2 3x7) single action type HDalum frame temp glass	4	EA	975	3,900	276	1104	1251	5,004
Replace all int doors (single) w/ solid core metal jambs comp	91	EA	180	16,380	46	4186	226	20,566
Replace double doors, double action w/solid core metal jambs comp	5	EA	400	2,000	150	750	550	2,750
Replace floor tile in hallways & public area	3885	SF	1.40	5,439	.32	1243	1.72	6,682
Install carpet in all office spaces & court rooms	1392	Sq Yd	20	27,840	5.00	6960	25.00	34,800
Install commercial wall covering in all areas	31,086	SF	.73	22,692	.55	17097	1.28	39,789
Install ceramic tile in all heads complete (walls)	1,544	SF	1.45	2,238	1.45	2238	2.90	4,476
Install ceramic tile in all heads complete (floors)	673	SF	3.25	2,187	1.53	1030	4.78	3,217
Paint exterior comp	2,500	SF	.16	400	.64	1600	.80	2,000
Paint interior comp	1,500	SF	.25	375	.11	165	.36	540
Extend walls to ceiling & finish	100	LF	2.54	645	3.63	363	6.17	1,008
Install partitions in heads	9	EA	450	4,050	100	900	550	4,950
Install suspended ceilings	16,417	SF	1.15	18,880	.68	11164	1.83	30,044
				147,041		54,147		201,188



COST ESTIMATE

DATE PREPARED
18 Sep 85

SHEET 3 OF 8

ACTIVITY AND LOCATION
Marine Corps Base, Camp Lejeune, NC 28542
Bldg #66

CONSTRUCTION CONTRACT NO.

IDENTIFICATION NUMBER
LE5032M

ESTIMATED BY

R. Marshall

CATEGORY CODE NUMBER

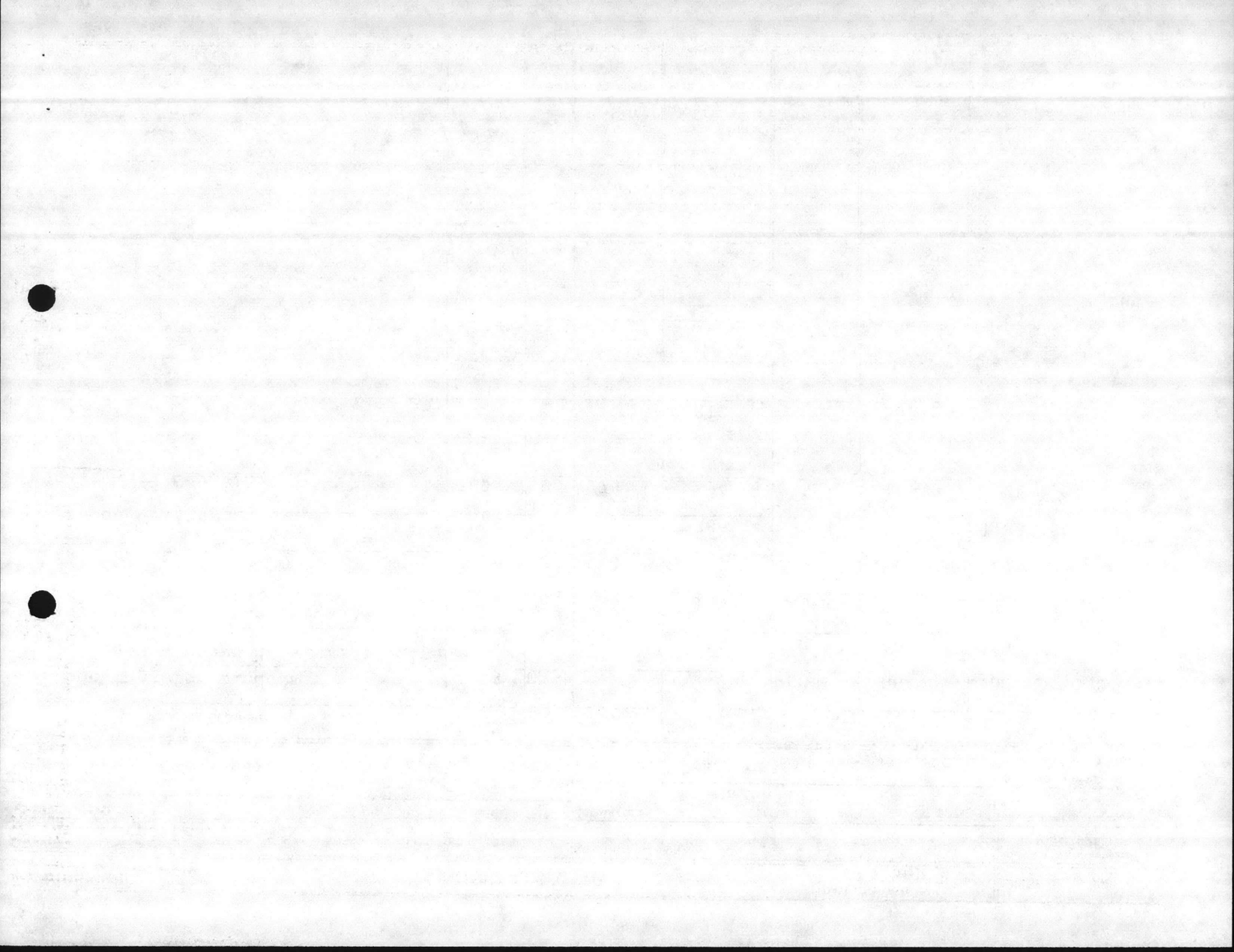
PROJECT TITLE
Int Repair, Ext Repair

STATUS OF DESIGN

PED 30% 100% FINAL Other (Specify) _____

JOB ORDER NUMBER

ITEM DESCRIPTION	QUANTITY		MATERIAL COST		LABOR COST		TOTAL COST	
	NUMBER	UNIT	UNIT COST	TOTAL	UNIT COST	TOTAL	UNIT COST	TOTAL
Cut openings for windows	3	EA			100	300	100	300
Install new windows HD Alum, anodized with temp glass	3	EA	310	930	40	120	350	1,050
Place vault type door with 3x7 solid wood door metal jambs	1	EA	180	180	46	46	226	226
Install carpet	38	Sq Yd	20	760	5	190	25	950
Suspended Ceiling	336	SF	1.15	386	.68	228	1.83	614
Install Wall Coverings	760	SF	.73	554	.55	418	1.28	972
								\$4,112
				2,810		1,302		4,112



COST ESTIMATE

DATE PREPARED
 18 Sep 85

SHEET 5 OF 8

ACTIVITY AND LOCATION
 Marine Corps Base, Camp Lejeune, NC 28542
 Bldg #66

CONSTRUCTION CONTRACT NO

IDENTIFICATION NUMBER
 LE5032M

ESTIMATED BY
 R. McGowen

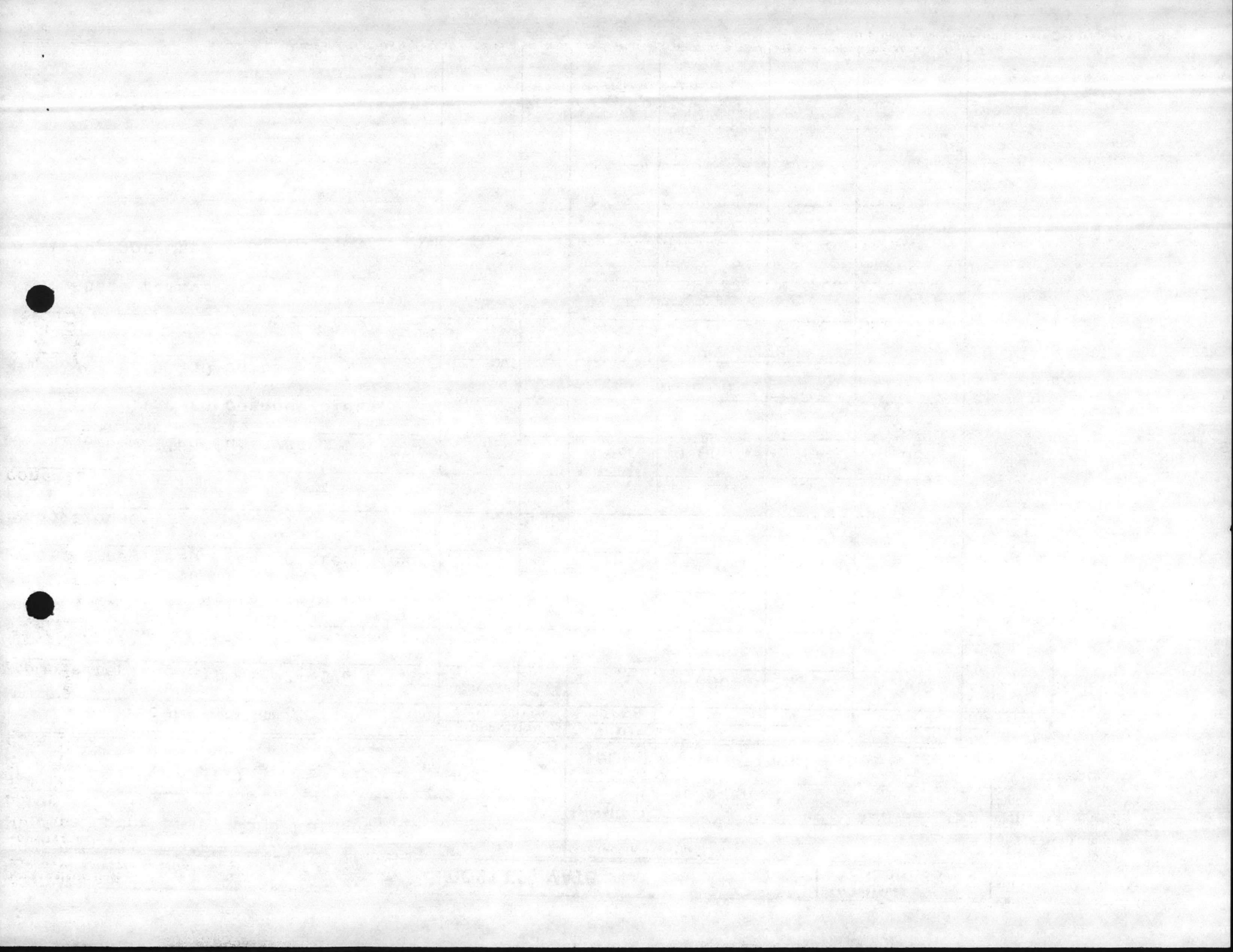
CATEGORY CODE NUMBER

PROJECT TITLE
 Replace all old wiring, lighting & power
 circuits

STATUS OF DESIGN
 PER 30% 100% FINAL Other (Specify)

JOB ORDER NUMBER

ITEM DESCRIPTION	QUANTITY		MATERIAL COST		LABOR COST		ENGINEERING ESTIMATE	
	NUMBER	UNIT	UNIT COST	TOTAL	UNIT COST	TOTAL	UNIT COST	TOTAL
Remove, replace all old 2-wire circuit for lighting power, outlets steam pits This includes all old wiring provide new reep & equip grounding conditions.				3,000		4,500		7,500
Provide new lighting system for dropped ceiling throughout bldg approximately 250 units.				10,000		4,000		14,000
connect remove old signal lights & wiring not used				---		1,000		1,000





COST ESTIMATE

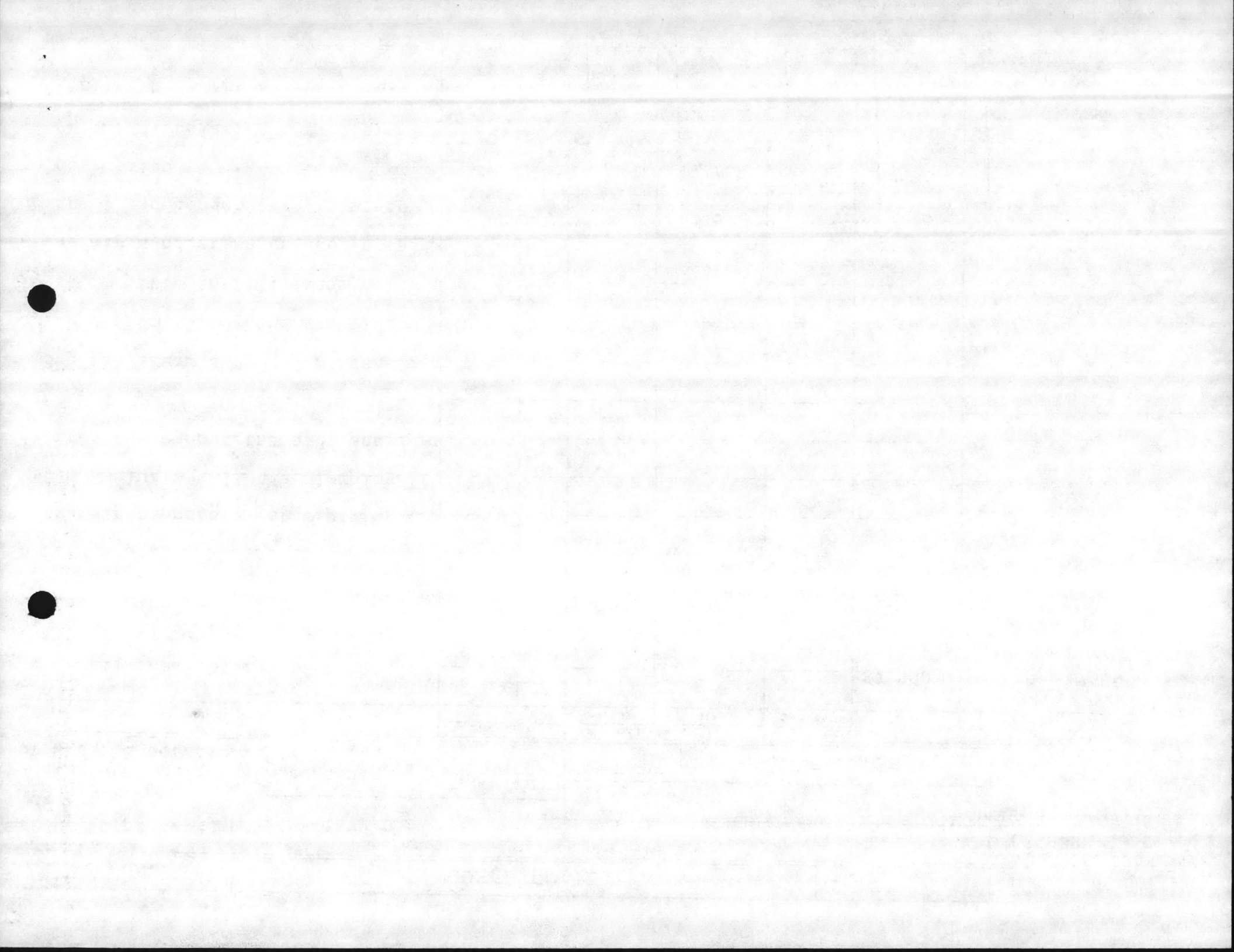
DATE PREPARED
 18 Sep 85

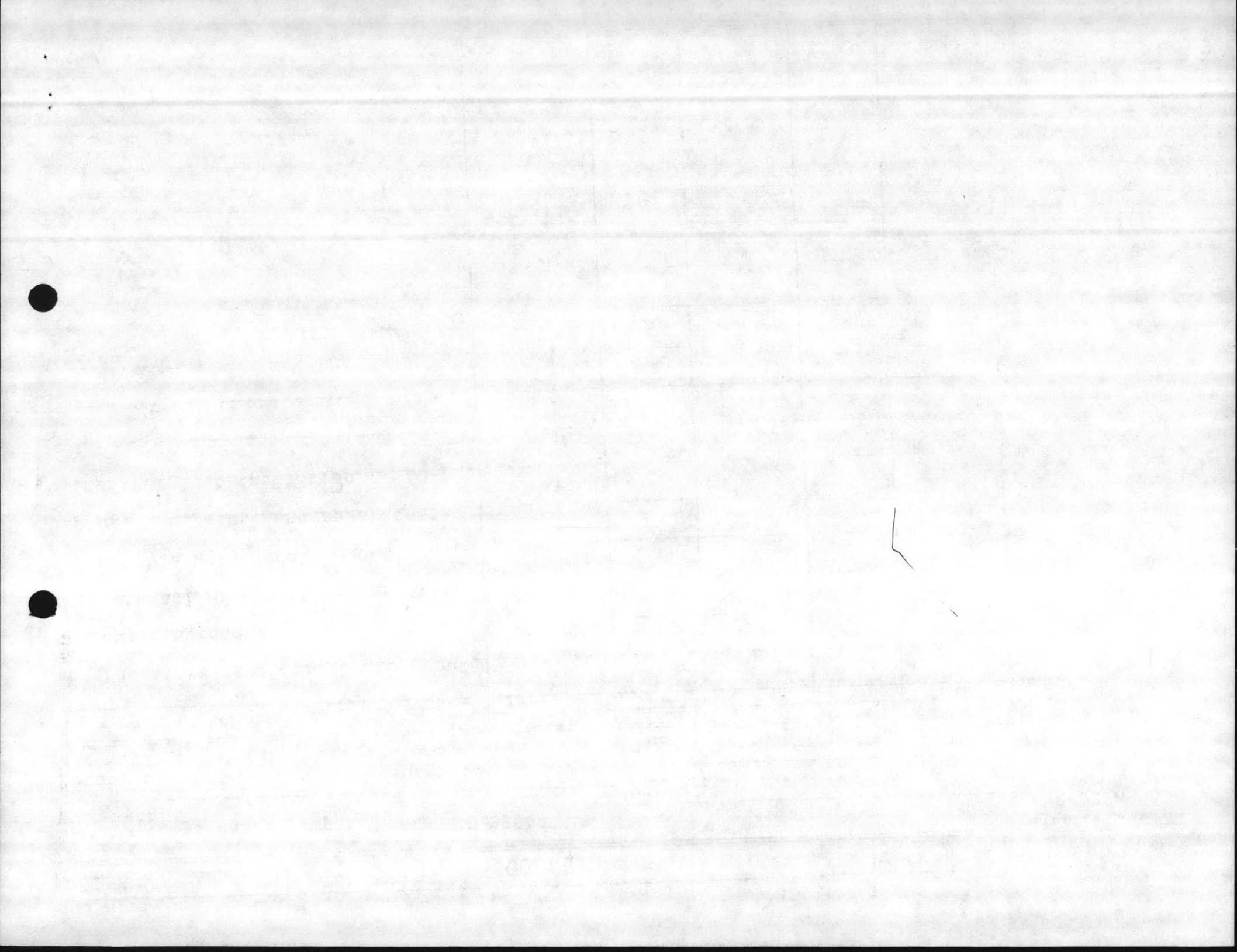
ACTIVITY AND LOCATION
 Marine Corps Base, Camp Lejeune, NC
 Bldg #66
 PROJECT TITLE
 Remove & renovate steam, condensate, circulating hot water & potable water systems

CONSTRUCTION CONTRACT NO.
 ESTIMATED BY
 Beasley
 STATUS OF DESIGN
 PED 30% 100% FINAL Other (Specify)

IDENTIFICATION NUMBER
 LE5032M
 CATEGORY CODE NUMBER
 JOB ORDER NUMBER

ITEM DESCRIPTION	QUANTITY		MATERIAL COST		LABOR COST		ENGINEERING ESTIMATE	
	NUMBER	UNIT	UNIT COST	TOTAL	UNIT COST	TOTAL	UNIT COST	TOTAL
Remove all the asbestos pipe insulation on all of the piping, equip, and apparatus throughout the bldg and the steam pit.				87,500		87,500		175,000
Renovate the potable water piping system including all the plumbing fixtures throughout the bldg and steam pit.								
Remove the steam and condensate piping system throughout the bldg and steam pit. Install steam coils in the air handler units and install the steam and condensate piping to the new coils.								
Remove the circulating hot water heating system, piping, apparatus,								





A/E FIRM NAME WM. F. FREEMAN ASSOCIATES		CONSULTANT'S NAME(S) None		A/E CONTRACT NO. N62470-86-B-0533	
PROJECT TITLE Renovate Exterior and Interior, Structural Repairs Building 66		STRU - MECH - ELEC - CIVIL -		JOB ORDER NO. 86-5573	
LOCATION Marine Corps Base Camp Lejeune, NC				ESTIMATED STATESIDE CONST. COST \$637,000	

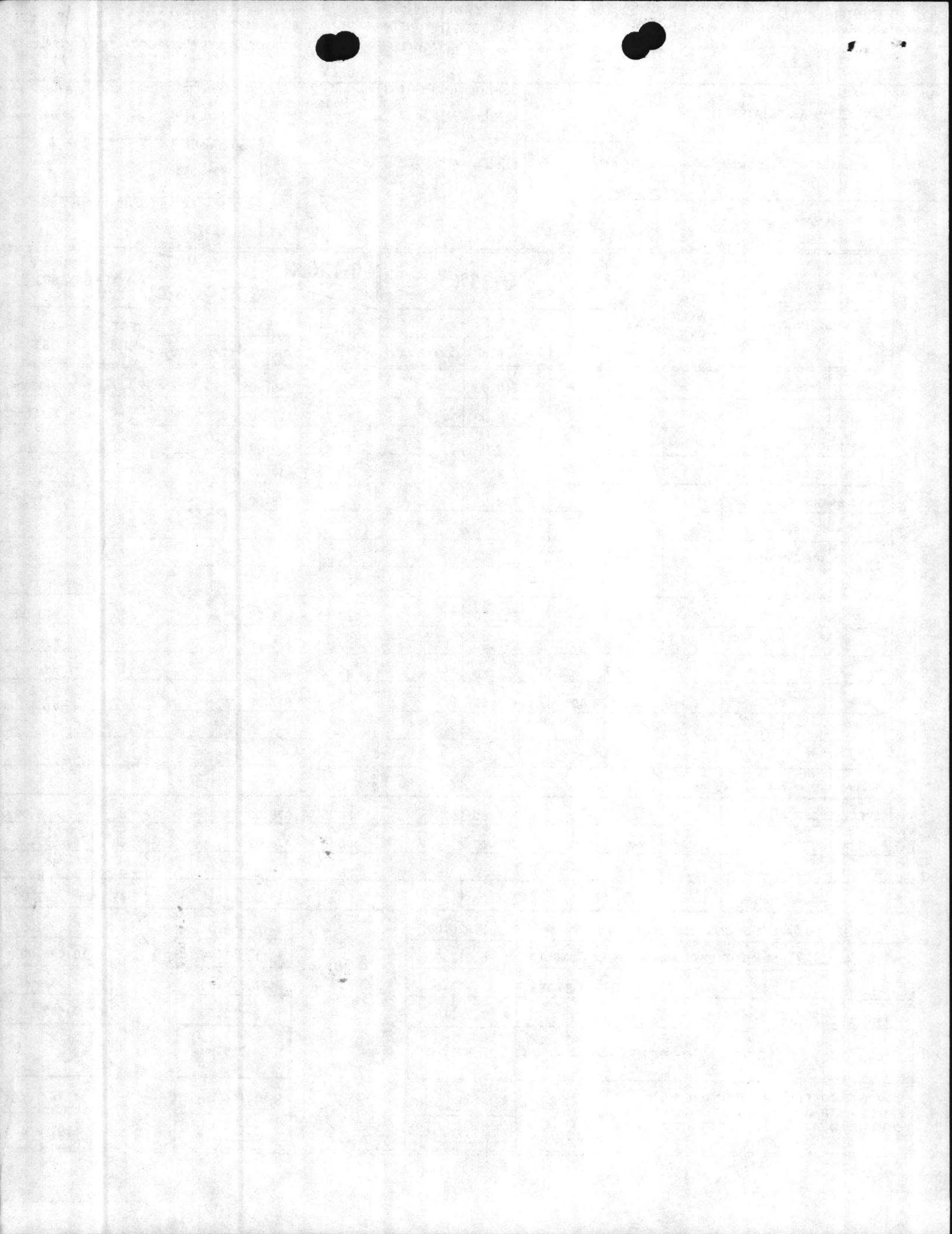
ENGINEERING DISCIPLINE	EST. NO. DWGS.	HRLY. RATE	0-35%			0-100%			TOTAL DESIGN	
			EST. HRS.	EST. COST		EST. HRS.	EST. COST		EST. HRS.	EST. COST
				A/E	CONSULTANT		A/E	CONSULTANT		
PROJECT ENGINEER		22.00	20	440.00		20	440.00		40	880.00
ARCHITECT	9	17.97	60	1,078.00		120	2,157.00		180	3,235.00
STRU ENGINEER	2	17.97	20	359.00		20	360.00		40	719.00
MECH ENGINEER	6	17.97	40	719.00		80	1,437.00		120	2,156.00
ELEC ENGINEER	5	19.97	40	719.00		60	1,078.00		100	1,797.00
CIVIL ENGINEER										
LANDSCAPE ARCHITECT										
DRAFTSMEN: ARCH	9	10.78	60	647.00		120	1,293.00		180	1,940.00
STRU	2	10.78	20	216.00		20	215.00		40	431.00
MECH	6	10.78	40	432.00		80	862.00		120	1,294.00
ELEC	5	10.78	40	431.00		60	647.00		100	1,078.00
CIVIL										
TOTAL - Drawings	22									
2. SPECS										
SPEC/REPORT WRITER		17.97	20	360.00		60	1,078.00		80	1,438.00
TYPIST		7.97	20	151.00		60	478.00		80	637.00
TOTAL - Specifications										
3. TOTAL - Cost Engineer										
		17.97	20	360.00		27	485.00		47	845.00
TOTAL EST. COST A/E PLUS CONSULTANT (ITEMS 1, 2 & 3)				5,920.00				10,530.00		
OVERHEAD: <u>110</u> % X TOT. EST. COST A/E PLUS CONSULT.				+ 6,512.00				+ 11,583.00	+ 18,095.00	
SUBTOTAL				12,432.00				22,113.00	34,545.00	
PROFIT: <u>10</u> % X SUBTOTAL				+ 1,243.00				+ 2,212.00	+ 3,455.00	
TOTAL COST OF SECTION A (DESIGN)				\$ 13,675.00				\$ 24,325.00	\$ 38,000.00	
COMPUTE COST PER SHEET AND DESIGN PERCENTAGE WHICH CANNOT EXCEED 6% OF ESTIMATED STATESIDE CONSTRUCTION COST				\$ <u>621</u> /SHT				\$ <u>1,106</u> /SHT	\$ <u>1,727</u> /SHT	
				<u>2.15</u> %				<u>3.82</u> %	<u>5.97</u> %	

SECTION A. DESIGN (Preparation of plans and specifications)

1. DRAWINGS

2. SPECS

3.



SECTIONS B, C & D LISTED AS TOTAL (0-100%) COST ONLY.
THERE IS NO BREAKDOWN OF 0-35% AND 35%-100% REQUIRED.

SECTIONS B, C & D
SHOP DRAWINGS, RECORD DRAWING
AND INTERIOR DESIGN

	REVIEW SHOP DRAWINGS	RECORD DRAWING PREPARATION	INTERIOR DESIGN
SECTION B REVIEW SHOP DRAWINGS	80 HRS @ \$ 17.97 /HR		
SECTION C RECORD DRAWING PREPARATION	40 HRS @ \$ 10.78 /HR	431.00	
SECTION D INTERIOR DESIGN	_____ HRS @ \$ _____ /HR		
PLUS OVERHEAD 110 %	+ 1,582.00	+ 474.00	+
SUBTOTAL	3,020.00	905.00	
PLUS PROFIT 10 % X SUBTOTAL	+ 302.00	+ 91.00	+
TOTAL COST OF SECTIONS B, C & D	\$ 3,322.00	\$ 996.00	\$ 4,318.00

SECTION E
ENGINEERING SERVICES


SECTIONS E & F EVALUATED BETWEEN 0-35% AND 35%-100% SIMILAR TO BREAKDOWN IN SECTION A (DESIGN) WHEN REQUIRED.	0-35%	0-100% 35%-100%	TOTAL
1. SITE INVESTIGATION			
A. SUB-SOIL STUDIES: (1) BORINGS _____ @ _____ LF			
(2) MOBILIZATION _____ REPORT _____			
B. SURVEYS: PARTY DAYS 3 DAYS @ 362.00	1,089.00		1,089.00
Measuring Including travel time			
C. FIELD INVESTIGATION: MAN DAYS 15 DAYS @ 302.00	4,530.00		4,530.00
3 Engineers @ 5 days Including travel			
D. OTHER (SPECIFY)			
2. SERVICES - SUBCONTRACTORS OR OTHER SPECIAL COSTS (PROVIDE BACK-UP ON SEPARATE SHEETS)			
A. COMPUTER STUDY			
22 Sheets x 3 Submittals x 10 sets=660	220.00	440.00	660.00
B. PRINTING/DUPLICATION 200 Sheets x 3 Submittals x 10 sets=6000	200.00	400.00	600.00
C. OPER/MAINT MANUAL PREPARATION			
D. OTHER (SPECIFY)			
SUBTOTAL (ITEMS 1 & 2)	6,039.00	840.00	6,879.00
PLUS PROFIT 10 % X SUBTOTAL	+ 604.00	+ 84.00	+ 688.00
TOTAL COST OF SECTION E	\$ 6,643.00	\$ 924.00	\$ 7,567.00

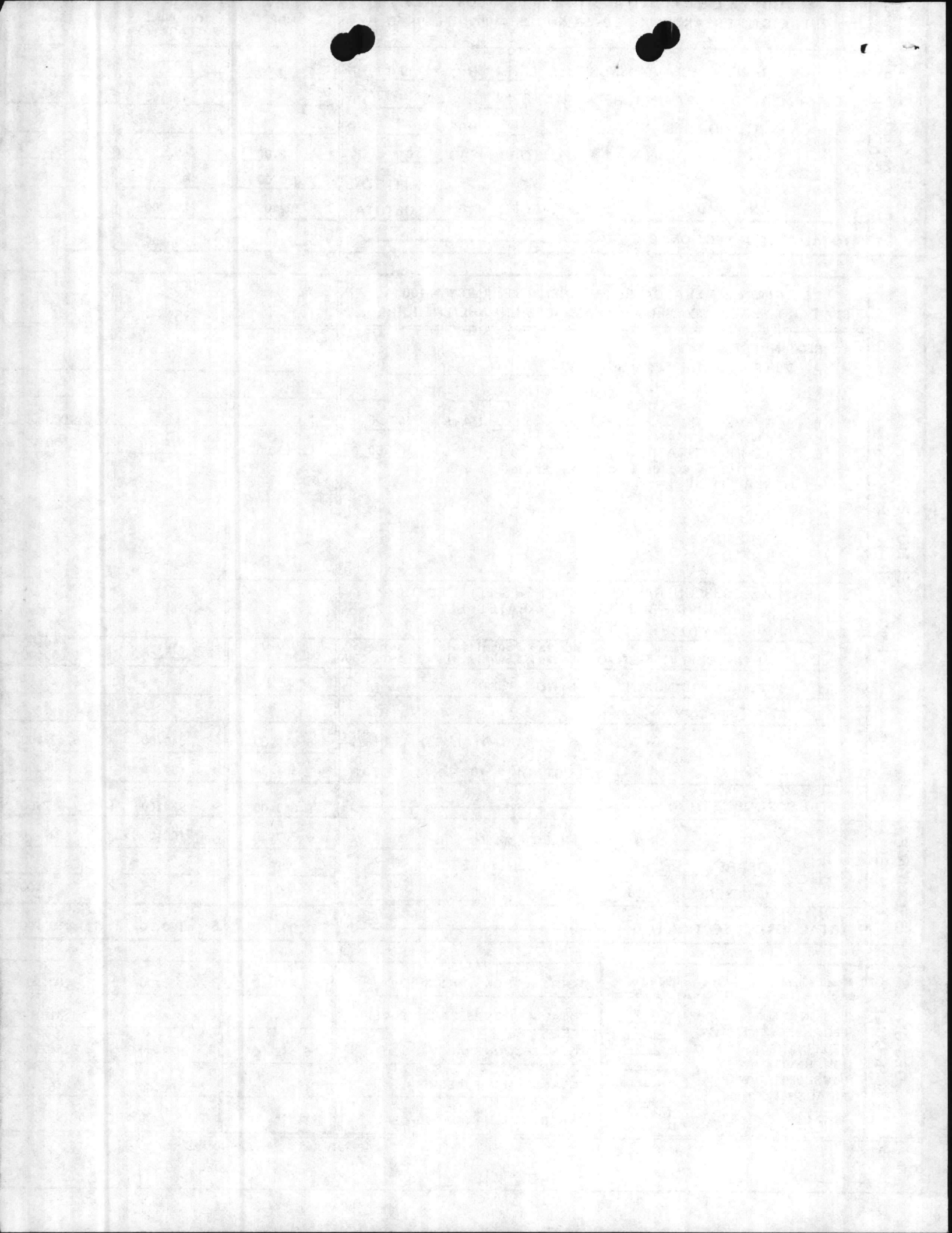
SECTION F
TRAVEL

AUTO 3 trips = 1500 MILES @ \$0.205	207.00	100.00	307.00
AIRFARE _____ PLUS RENTAL, ETC. _____			
SUBSISTENCE 16 DAYS @ \$50.00	800.00		800.00
TOTAL COST OF SECTION F	\$ 1,007.00	\$ 100.00	\$ 1,107.00

DESIGN
SCHEDULE

Measure in calendar days - Assume 10 days government review PED, 45 days plans/specs	TOTAL SECTION A (DESIGN FROM FRT)	13,675.00	24,325.00	38,000.00
DESIGN START = 0	TOTAL SECTIONS B, C & D (ABOVE)	-	4,318.00	4,318.00
PED PREL SUBMIT/RVW = _____	TOTAL SECTION E (ABOVE)	6,643.00	924.00	7,567.00
PED FINAL SUBMIT/RVW = _____	TOTAL SECTION F (ABOVE)	1,007.00	100.00	1,107.00
35% SUBMIT/RVW = _____	GRAND TOTAL - FEE PROPOSAL	\$21,325.00	\$29,667.00	\$ 50,992.00
90% SUBMIT/RVW = _____				
FINAL SUBMIT/RVW = _____				
TOTAL CALENDAR DAYS = _____				

SIGNATURE  BR. MGR. APPROVAL _____ 04 APPROVAL _____ DATE _____



ANTICIPATED PLAN SHEETS

5573 Building 66, Renovation of Exterior and Interior with Structural Repairs
Judge Advocate Building (courtroom and offices)

1. Title Sheet and Index of Drawings, Symbols, Abbreviations
2. Location and Vicinity Plan, Site Plan
3. Demolition Existing Interior Floor Plan
4. Demolition Existing Exterior Floor Elevations
5. Altered Floor Plan
6. Door and Window Schedules and Details
7. Room Finishes, Floor Covering Schedules, Painting Schedules (Interior and Exterior)
8. Room Elevations, Wall Sections and Details
9. Reflected Ceiling Plan
10. Structural Modifications at Demolitioned Vault
11. Structural Details, Framing and Miscellaneous Court Room Details
12. Mechanical Demolition (removal of existing HVAC and potable water piping, and plumbing fixtures)
13. Plumbing Plan and Fixture Schedules
14. HVAC Plans and Details, Mechanical Equipment Details
15. Mechanical Details, steam coil and condensate piping in air handling limits
16. Duct System of Details
17. Asbestos Removal
18. Lighting Fixtures Demolition Plan
19. Power Demolition and Existing Riser Diagram
20. Lighting Fixture Wiring Plan
21. Power Plan, Load Schedules, Panel Loads, Circuit Schedules
22. Lighting Fixtures Schedules and Details

COST ESTIMATE

DATE PREPARED
18 Sep 85

ACTIVITY AND LOCATION
Marine Corps Base
Camp Lejeune, NC 28542 Bldg, #66

CONSTRUCTION CONTRACT NO.
LE5032M

IDENTIFICATION NUMBER

ESTIMATED BY
Huffman

CATEGORY CODE NUMBER

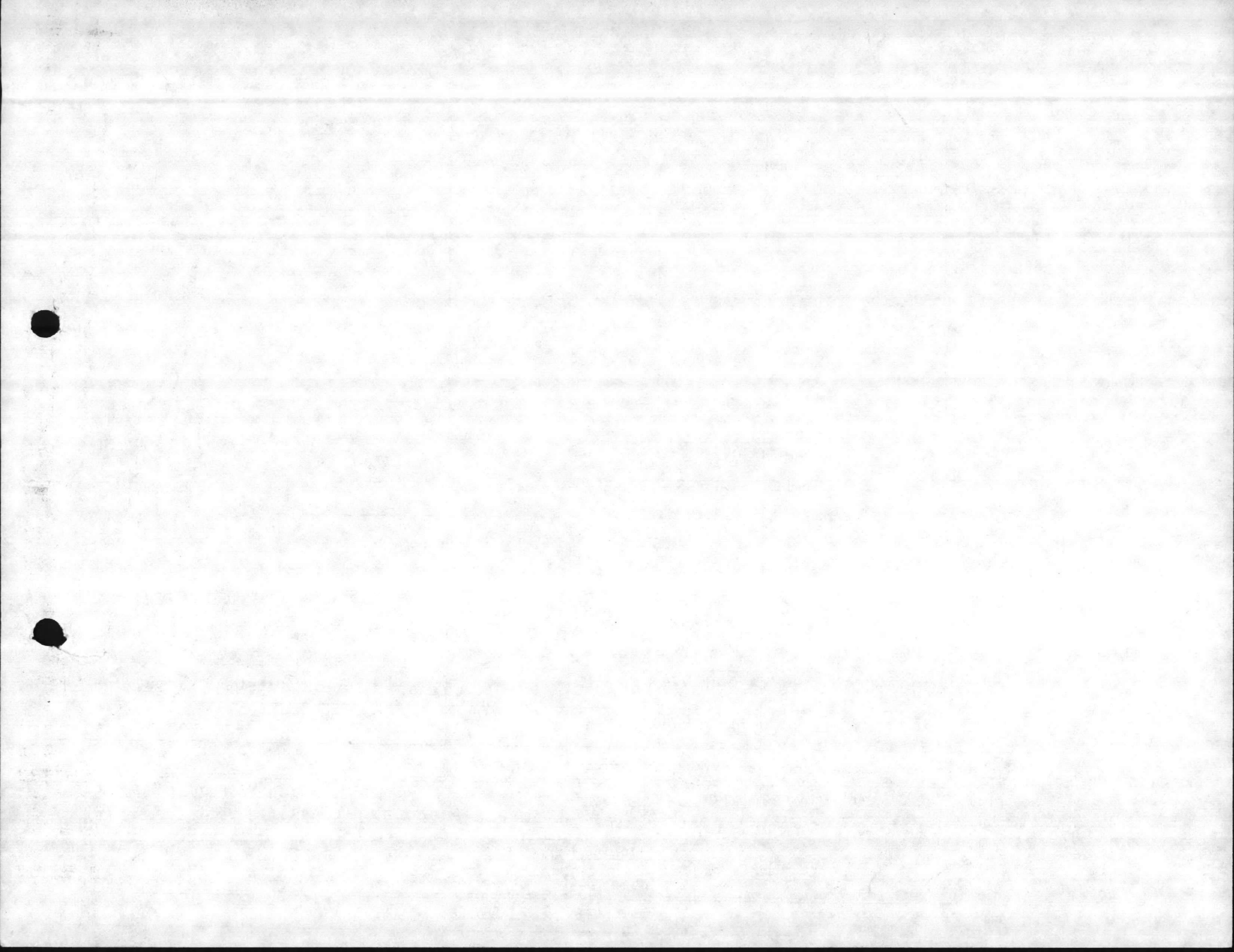
61010

PROJECT TITLE
Make int & ext repairs,rewire,renovate steam,
condensate,potable water system

STATUS OF DESIGN
 PED 30% 100% FINAL Other (Specify) _____

JOB ORDER NUMBER

ITEM DESCRIPTION	QUANTITY		MATERIAL COST		LABOR COST		ENGINEERING ESTIMATE	
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Renovate steam,condensate,hot water				87,000		87,000		174,000
Installing a potable water systems.								
Remove asbestos.								
Basic Cost				263,651		155,649		419,300
Overhead 15%								62,895
Labor 18%								28,016
Material 4%								10,546
Sub Total								520,757
Profit 10%								52,075
Sub Total								572,832
Bond 1%								5,728
Total Cost								578,560



COST ESTIMATE

DATE PREPARED
18 Sep 85

SHEET **7** OF **8**

ACTIVITY AND LOCATION
Marine Corps Base, Camp Lejeune, NC
Bldg #66
PROJECT TITLE
Remove & renovate steam, condensate, circulating hot water & potable water systems

CONSTRUCTION CONTRACT NO.

IDENTIFICATION NUMBER
LE5032M

ESTIMATED BY
Beasley

CATEGORY CODE NUMBER

STATUS OF DESIGN
 PED 30% 100% FINAL Other (Specify) _____

JOB ORDER NUMBER

ITEM DESCRIPTION	QUANTITY		MATERIAL COST		LABOR COST		ENGINEERING ESTIMATE	
	NUMBER	UNIT	UNIT COST	TOTAL	UNIT COST	TOTAL	UNIT COST	TOTAL
Remove all the asbestos pipe insulation on all of the piping, equip, and apparatus throughout the bldg and the steam pit.				87,500		87,500		175,000
Renovate the potable water piping system including all the plumbing fixtures throughout the bldg and steam pit.								
Remove the steam and condensate piping system throughout the bldg and steam pit. Install steam coils in the air handler units and install the steam and condensate piping to the new coils.								
Remove the circulating hot water heating system, piping, apparatus,								



