

CMB

BASE MAINTENANCE DIVISION  
MARINE CORPS BASE  
CAMP LEJEUNE, NORTH CAROLINA 28542

DATE: 20 NOV 1987

FROM: BASE MAINTENANCE OFFICER, MARINE CORPS BASE, CAMP LEJEUNE, N.C.  
TO: PUBLIC WORKS OFFICER, BUILDING 1005, MARINE CORPS BASE, CAMP  
LEJEUNE, N.C.

SUBJ: ENGINEERING SERVICE REQUEST FOR PROJECT NUMBER - 8M84CN

ENCL: (A) LISTING/LOCATION OF WASTE OIL TANKS (BASEWIDE)  
(B)

1. TYPE OF SERVICE REQUESTED:

PROCURE AN A & E FIRM TO INSPECT THE STRUCTURAL  
INTEGRITY OF WASTE OIL TANKS  
14 TANKS BASEWIDE

2. COMBINED WITH

3. REMARKS: EXPEDITE, PROVIDE SCOPE/EST FOR REPAIRS

4. DESIRED COMPLETION FISCAL YEAR: 88

5. FUNDS TO BE PROVIDED UNDER SUB-FUNCTIONAL-CATEGORY: M1  
BUILDING/FACILITY IDENTIFICATION FOLLOWS:

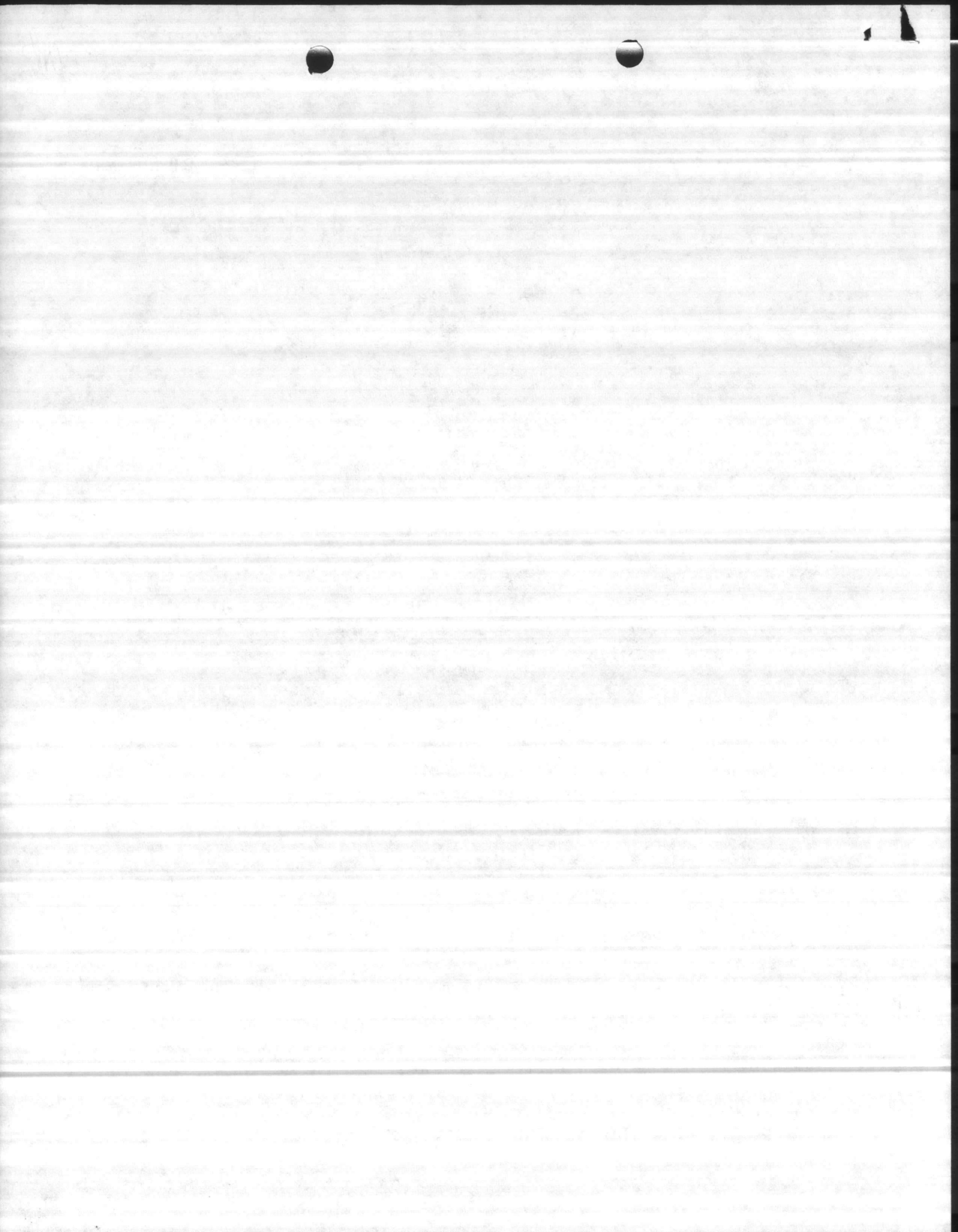
|        |        |        |        |        |        |        |
|--------|--------|--------|--------|--------|--------|--------|
| AS419, | AS420, | AS421, | STT61, | STT62, | STT63, | STT64, |
| STT65, | STT66, | S781,  | S888,  | S889,  | S890,  | S891,  |

ESTIMATE COST IS \$ 0.00

6. POINT OF CONTACT IS GREG SHOEMAKER, PHONE 5794

T.D. JEWELL  
BY DIRECTION

Dir., Util. Br.



| GENERAL LOCATION | TANK (FACIL #) | CAPACITY (000 GALS) | CURRENT STATUS | DATE ANALYSIS REQUESTED | DATE ANALYSIS RECEIVED | DATE DISPOSAL REQUESTED | CONTENTS CLASSIFICATION | REMARKS                 |
|------------------|----------------|---------------------|----------------|-------------------------|------------------------|-------------------------|-------------------------|-------------------------|
| MCAS             | AS-419         | 30K                 | IN USE         |                         |                        |                         | UNKNOWN                 | ONLY 5K GAL REMAINING   |
| MCAS             | AS-420         | 30K                 | FULL           |                         |                        | 10OCT87                 | HW                      |                         |
| MCAS             | AS-421         | 30K                 | FULL           | 20JAN87                 |                        | 10OCT87                 | HW                      |                         |
| HOLCOMB          | S-888          | 17.5K               | EMPTY          | 20JAN87                 | 14JUL87                | 24JUL87                 | UO                      | READY FOR USE           |
| HOLCOMB          | S-889          | 17.5K               | FULL           | 20JAN87                 | 14JUL87                | 2SEP87                  | HW                      |                         |
| HOLCOMB          | S-890          | 17.5K               | EMPTY          | 20JAN87                 | 14JUL87                | 7AUG87                  | UO                      | AUBURN PICKED UP        |
| HOLCOMB          | S-891          | 30K                 | FULL           |                         | 14JUL87                | 2SEP87                  | HW                      |                         |
| BLDG 45          | S-781          | 273K                | BEING EMPTIED  | 20JAN87                 | 4JUN87                 | 11JUN87                 | HW                      |                         |
| TT               | STT-61         | 12.5K               | FULL           |                         | 14JUL87                | 2SEP87                  | HW                      |                         |
| TT               | STT-62         | 12.5K               | FULL           |                         | 14JUL87                | 2SEP87                  | HW                      |                         |
| TT               | STT-63         | 12.5K               | FULL           |                         | 14JUL87                | 7AUG87                  | UO                      | WAITING PICKUP (AUBURN) |
| TT               | STT-64         | 12.5K               | FULL           |                         |                        |                         |                         |                         |
| TT               | STT-65         | 12.5K               | IN USE         |                         |                        |                         |                         |                         |
| TT               | STT-66         | 12.5K               | IN USE         |                         |                        |                         |                         |                         |



CAB

BASE MAINTENANCE DIVISION  
MARINE CORPS BASE  
CAMP LEJEUNE, NORTH CAROLINA 28542

DATE: 29 SEP 1987

FROM: BASE MAINTENANCE OFFICER, MARINE CORPS BASE, CAMP LEJEUNE, N.C.  
TO: PUBLIC WORKS OFFICER, BUILDING 1005, MARINE CORPS BASE, CAMP  
LEJEUNE, N.C.

SUBJ: ENGINEERING SERVICE REQUEST FOR PROJECT NUMBER - BR023

ENCL: (A) ESTIMATE WORK SHEET(S) FOR R1 FUNDS  
(B)

1. TYPE OF SERVICE REQUESTED:

INSTALL CHEMICAL STORAGE TANK  
BLDG 1700

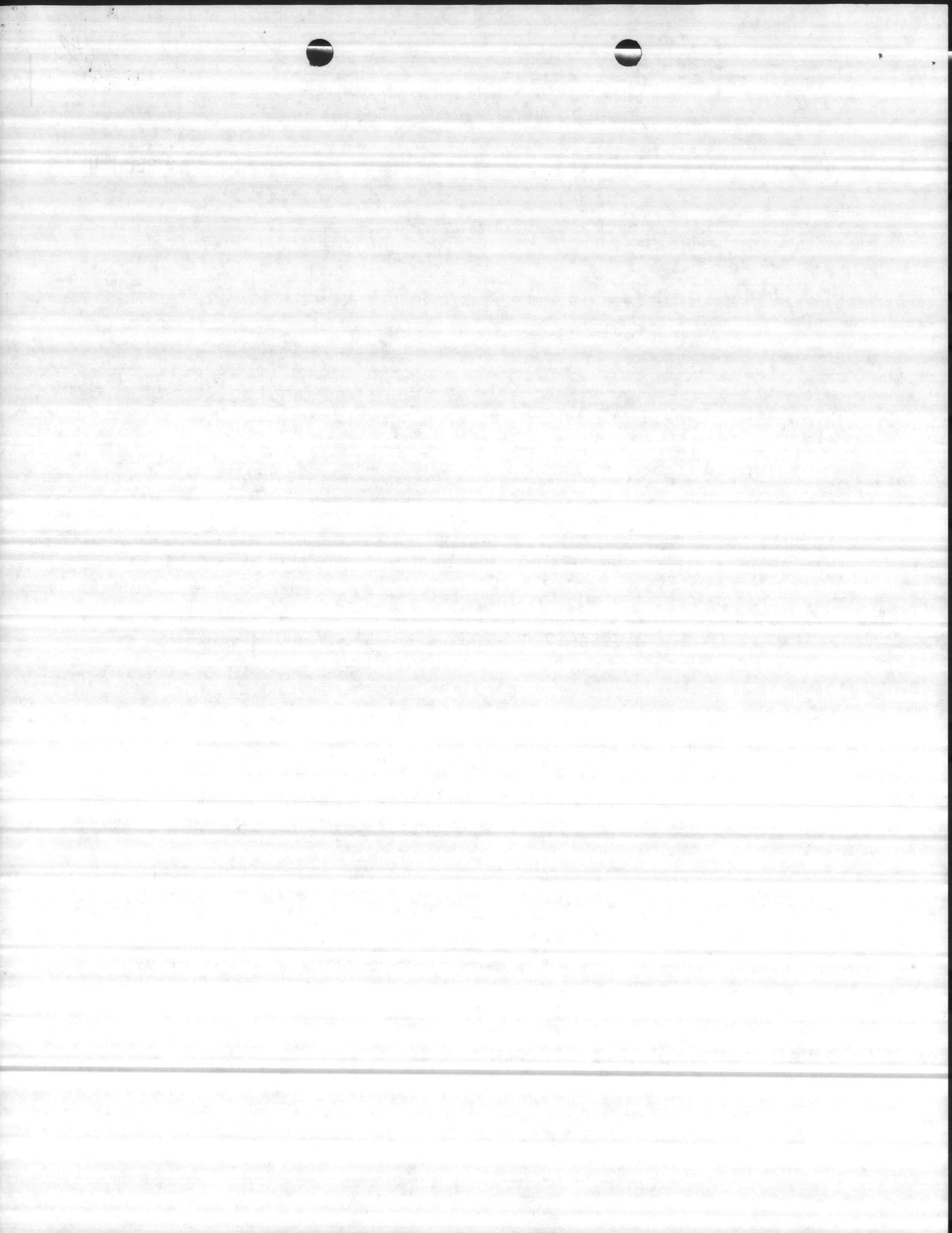
2. DESIRED COMPLETION FISCAL YEAR: 88

3. FUNDS TO BE PROVIDED UNDER SUB-FUNCTIONAL-CATEGORY: R1  
BUILDING/FACILITY IDENTIFICATION FOLLOWS: 1700,

ESTIMATE COST IS \$ 82,600.00

4. POINT OF CONTACT IS GREG SHOEMAKER , PHONE 5794

T.D. JEWELL  
BY DIRECTION



**COST ESTIMATE**

DATE PREPARED  
 9-15-87

SHEET OF

ACTIVITY AND LOCATION

CONSTRUCTION CONTRACT NO.

IDENTIFICATION NUMBER

*BLDG 1700*

ESTIMATED BY

CATEGORY CODE NUMBER

PROJECT TITLE

*McHammond & D.C. Bawn*

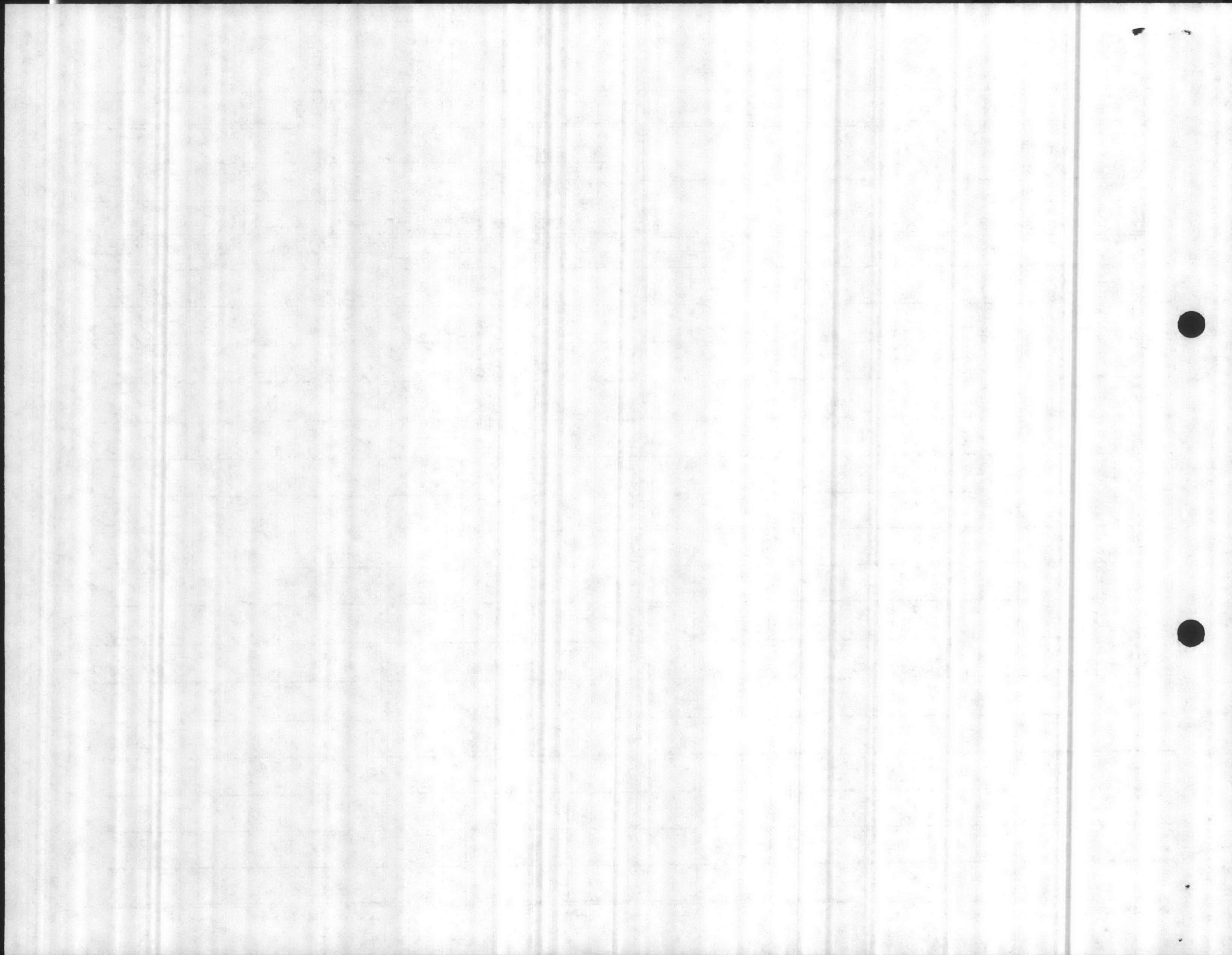
*Chemical Storage Tank*

STATUS OF DESIGN

JOB ORDER NUMBER

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         |
| <i>BASIC COST</i>                    |          |      |               | <i>41,019</i> |            | <i>18,669</i> |                      | <i>59,688</i> |
| <i>OVER HEAD + 15%</i>               |          |      |               | <i>6,153</i>  |            | <i>2,800</i>  |                      | <i>8,953</i>  |
|                                      |          |      |               | <i>47,172</i> |            | <i>21,469</i> |                      | <i>68,641</i> |
| <i>LABOR (TAXES, INS S.S.) + 18%</i> |          |      |               |               |            |               |                      | <i>3,864</i>  |
| <i>MATERIAL + 4%</i>                 |          |      |               |               |            |               |                      | <i>1,887</i>  |
| <i>Sub TOTAL</i>                     |          |      |               |               |            |               |                      | <i>74,392</i> |
| <i>PROFIT + 10%</i>                  |          |      |               |               |            |               |                      | <i>7,439</i>  |
| <i>Sub TOTAL</i>                     |          |      |               |               |            |               |                      | <i>81,831</i> |
| <i>BOND + 1%</i>                     |          |      |               |               |            |               |                      | <i>818</i>    |
| <i>Sub TOTAL</i>                     |          |      |               |               |            |               |                      | <i>82,649</i> |
| <i>GRAND TOTAL (Rounded off)</i>     |          |      |               |               |            |               |                      | <i>82,600</i> |
|                                      |          |      |               |               |            |               |                      |               |
|                                      |          |      |               |               |            |               |                      |               |
|                                      |          |      |               |               |            |               |                      |               |
|                                      |          |      |               |               |            |               |                      |               |
|                                      |          |      |               |               |            |               |                      |               |





**COST ESTIMATE**

DATE PREPARED

SHEET 1 OF 3

ACTIVITY AND LOCATION

Bldg 1700

CONSTRUCTION CONTRACT NO.

IDENTIFICATION NUMBER

ESTIMATED BY

Muhammad

CATEGORY CODE NUMBER

PROJECT TITLE

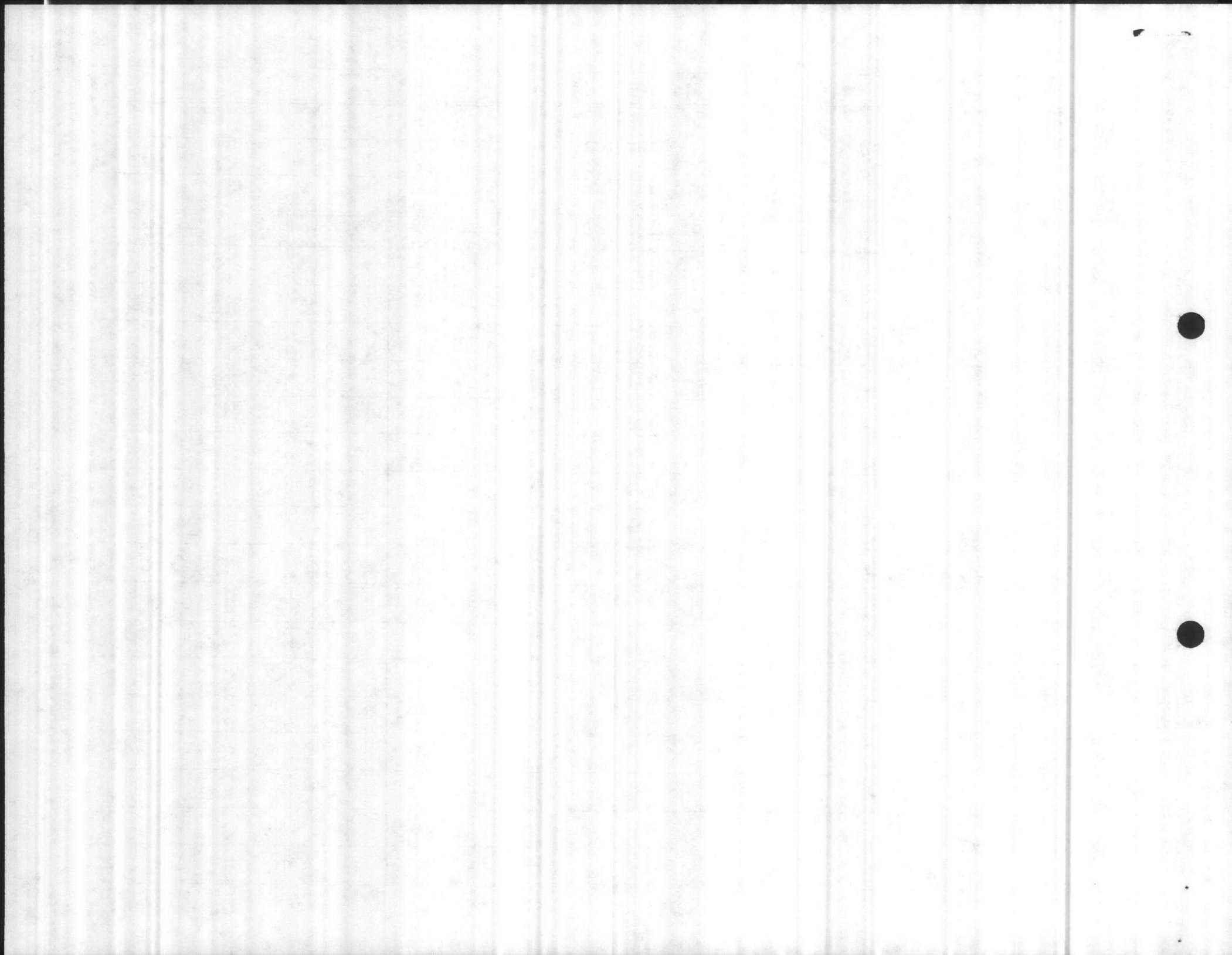
Chemical Storage Tanks

STATUS OF DESIGN

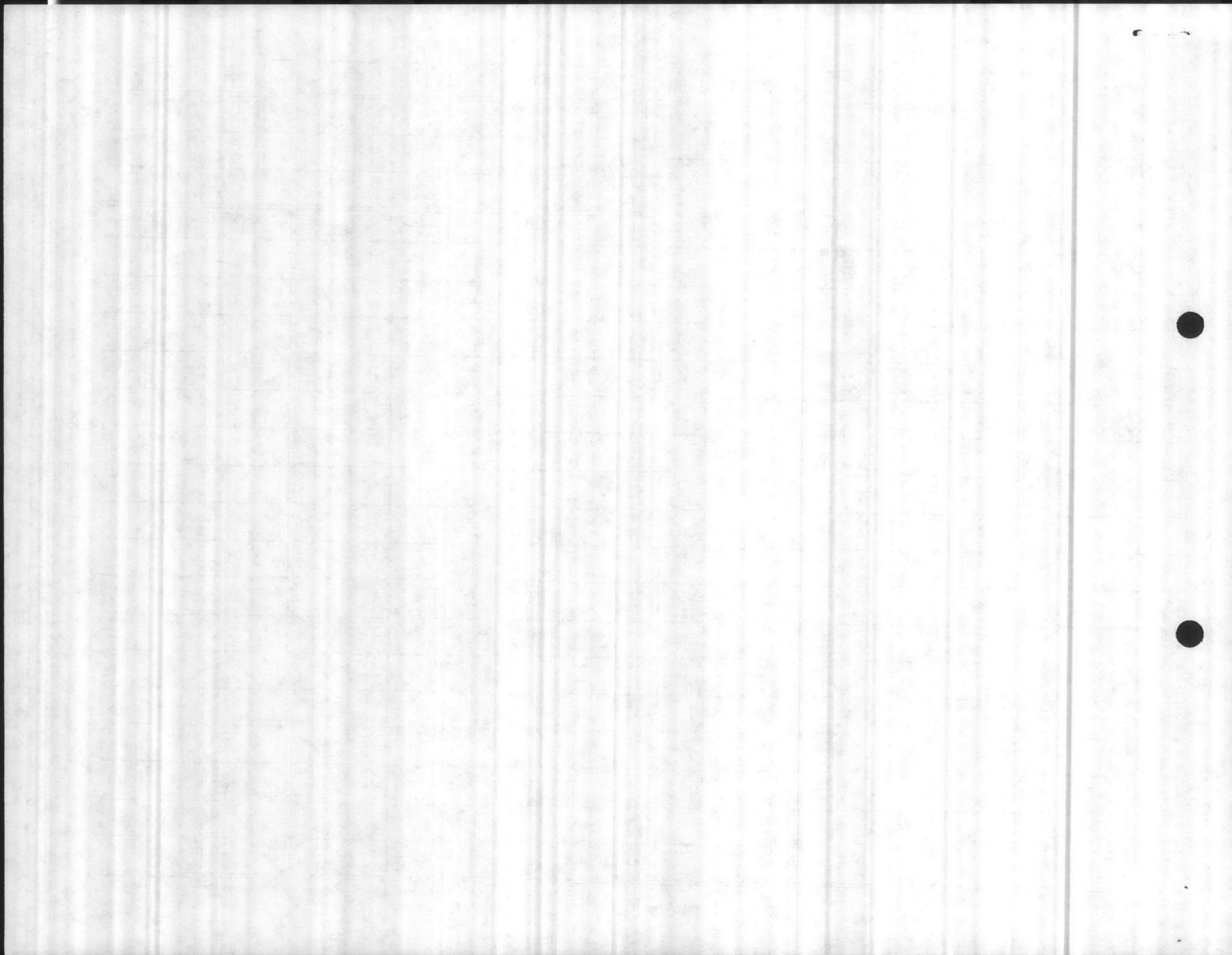
PED  30%  100%  FINAL  Other (Specify)

JOB ORDER NUMBER

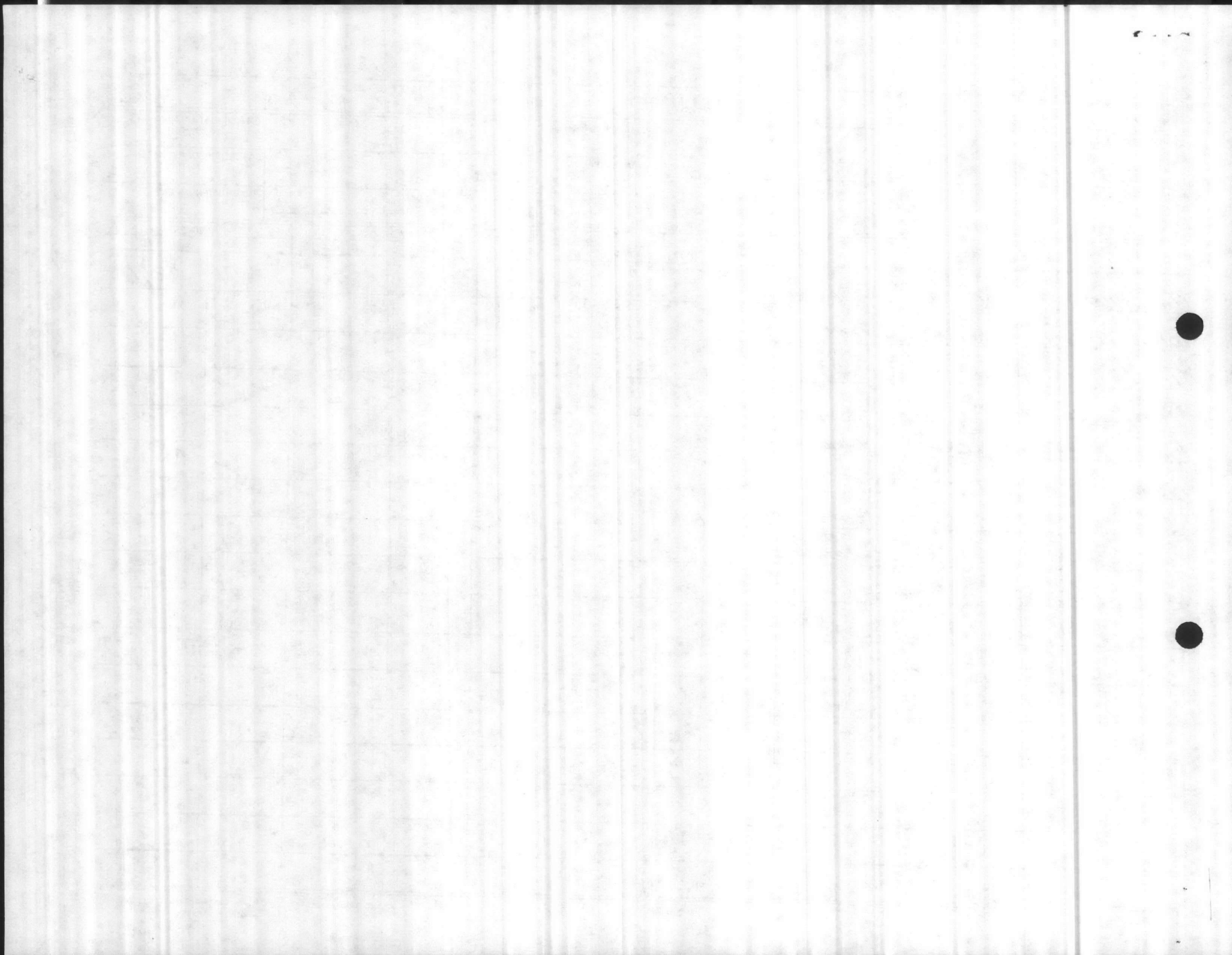
| ITEM DESCRIPTION  | QUANTITY |      | MATERIAL COST |       | LABOR COST |       | ENGINEERING ESTIMATE |                     |
|---|----------|------|---------------|-------|------------|-------|----------------------|---------------------|
|   | NUMBER   | UNIT | UNIT COST     | TOTAL | UNIT COST  | TOTAL | UNIT COST            | TOTAL               |
| <u>Demolition:</u>  |          |      |               |       |            |       |                      |                     |
| Remove 8" block wall surrounding (2) two 5400 gal boiler chemical storage tanks near the central heating plant.   | 208      | SF   |               |       |            | 1.40  |                      | 292 <sup>00</sup>   |
| <u>New Work:</u>  |          |      |               |       |            |       |                      |                     |
| Fabricate, deliver, and install (2) two stainless steel boiler chemical holding tanks. Tanks are to be constructed of 5/16" thick # 304 stainless steel. A level indication system, external ladder, inspection plate at tops of tanks, (continue on sheet 2 of 2.) | 2        | ea   |               | 20000 |            | 8000  |                      | 56000 <sup>00</sup> |











MINOR CONSTRUCTION PROJECT VALIDATION FORM

Requestor/Unit UTILITIES B045

Work Request # 127-87

Description CONSTRUCT CHEMICAL STORAGE TANK AREA BLDG 1700

1. Command Importance:

|        |            |
|--------|------------|
| High   | <u>4.0</u> |
| Medium | 2.0        |
| Low    | 1.0        |

2. Impact on Mission:

|        |            |
|--------|------------|
| High   | <u>4.0</u> |
| Medium | 3.0        |
| Low    | 2.0        |
| None   | 1.0        |

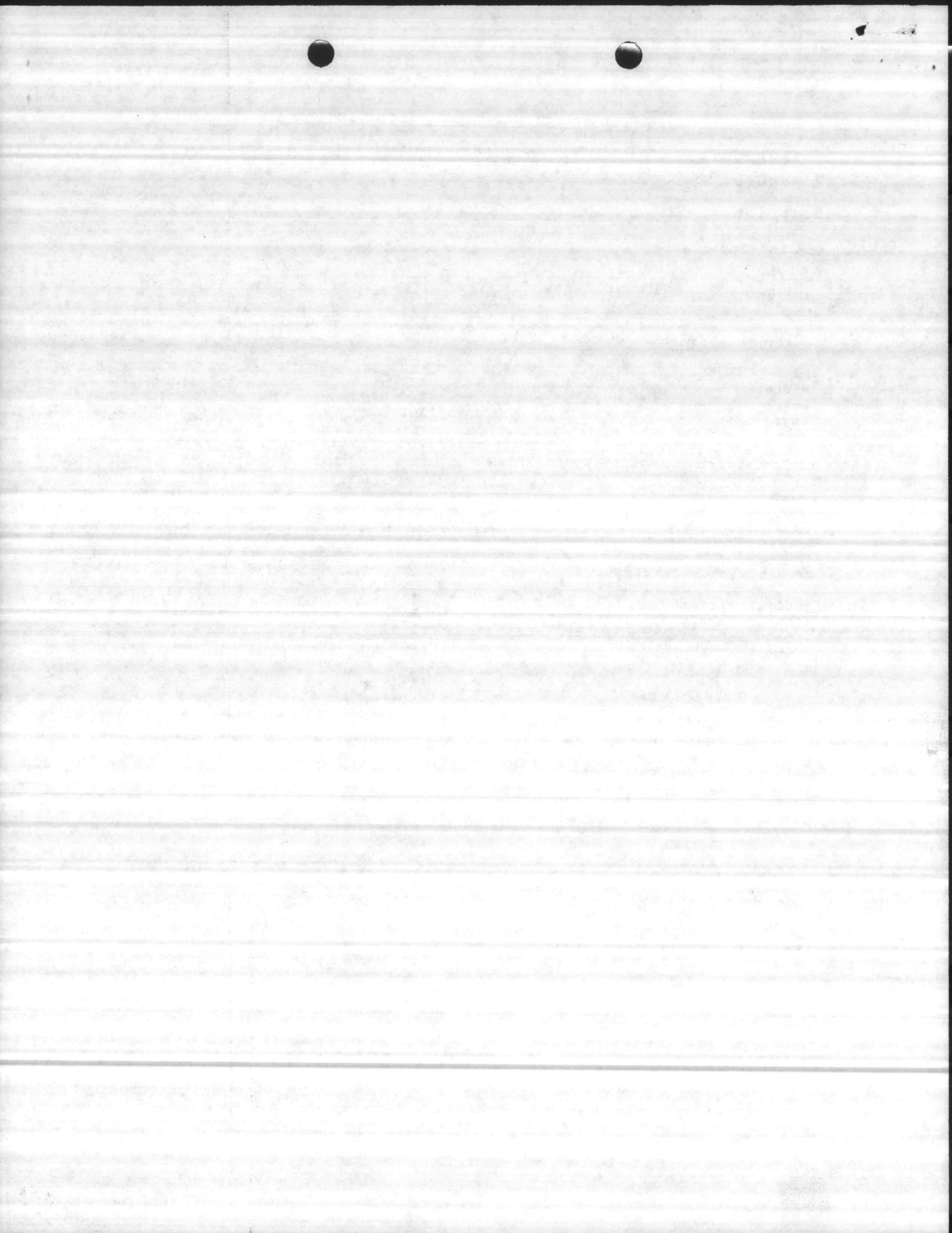
3. Impact on security, habitability, morale/welfare/training, safety, environmental protection or energy conservation.

|        |            |
|--------|------------|
| High   | <u>2.5</u> |
| Medium | 2.0        |
| Low    | 1.5        |
| None   | 1.0        |

4. Requirement generated by:

|                                |            |
|--------------------------------|------------|
| CMC direction                  | 2.5        |
| Support equipment installation | 2.0        |
| Concurrent with repair project | <u>1.5</u> |
| Other                          | 1.0        |

(1) 4.0 x (2) 4.0 x (3) 2.5 x (4) 1.5 = 60 (Total)





**WORK REQUEST (MAINTENANCE MANAGEMENT)**  
 NAVFAC 9-11014/20 REV. 2-68) S/N 0105-LF-002-7510  
 Supersedes NAVDOCKS 2351

(PW Department see Instructions in NAVFAC MO-321)

**FY-88 MINOR CONSTRUCTION**  
 Requestor see Instructions on Reverse Side

**UTILITIES**

**PART I—REQUEST (Filled out by Requestor)**

B045

|   |  |   |
|---|--|---|
| 1. FROM<br>Director, Utilities Branch   |  | 2. REQUEST NO.<br>127-87 <i>Pr: 2</i>   |
| 3. TO<br>Director, Operations Branch  |  | 4. DATE OF REQUEST<br>17 Apr 87   |
| 5. REQUEST FOR<br><input type="checkbox"/> COST ESTIMATE <input type="checkbox"/> PERFORMANCE OF WORK |  | 5a. REQUEST WORK START  |
| 6. FOR FURTHER INFORMATION CALL<br>C. H. Baker, 5161  |  | 7. SKETCH/PLAN ATTACHED<br><input type="checkbox"/> YES <input type="checkbox"/> NO |

*BLDG 1700*

**8. DESCRIPTION OF WORK AND JUSTIFICATION (Including location, type, size, quantity, etc.)**

1. Procure and erect two 5,000-gallon chemical storage tanks constructed of stainless steel or a rigid type material that will resist the corrosiveness of boiler chemicals. This will include all necessary piping, ladders, sight glasses, valves, meters, duplex pumps, drains, vents, lights (necessary for loading and off loading chemicals on a 24-hour basis). The existing site has two rental tanks in place that will be removed at time of construction. The retaining wall around these tanks is constructed of blocks. This should be torn down and replaced with a concrete wall, reinforced with steel. Justification: Existing bulk storage tanks are presently leased by the contractor supplying chemicals. This is a problem during the transition period from one contractor to the next. Chemicals have to be put into 55-gallon barrels until existing tanks are removed and the new contractor installs his tanks. This opens the door for potential chemical spills and back injuries when maneuvering the 55-gallon drums. Also, the existing retaining wall is constructed of blocks and has cracks along the mortar joints. This is not adequate for retaining the chemical if one of the tanks leak.  
 Estimated Cost: \$70,000

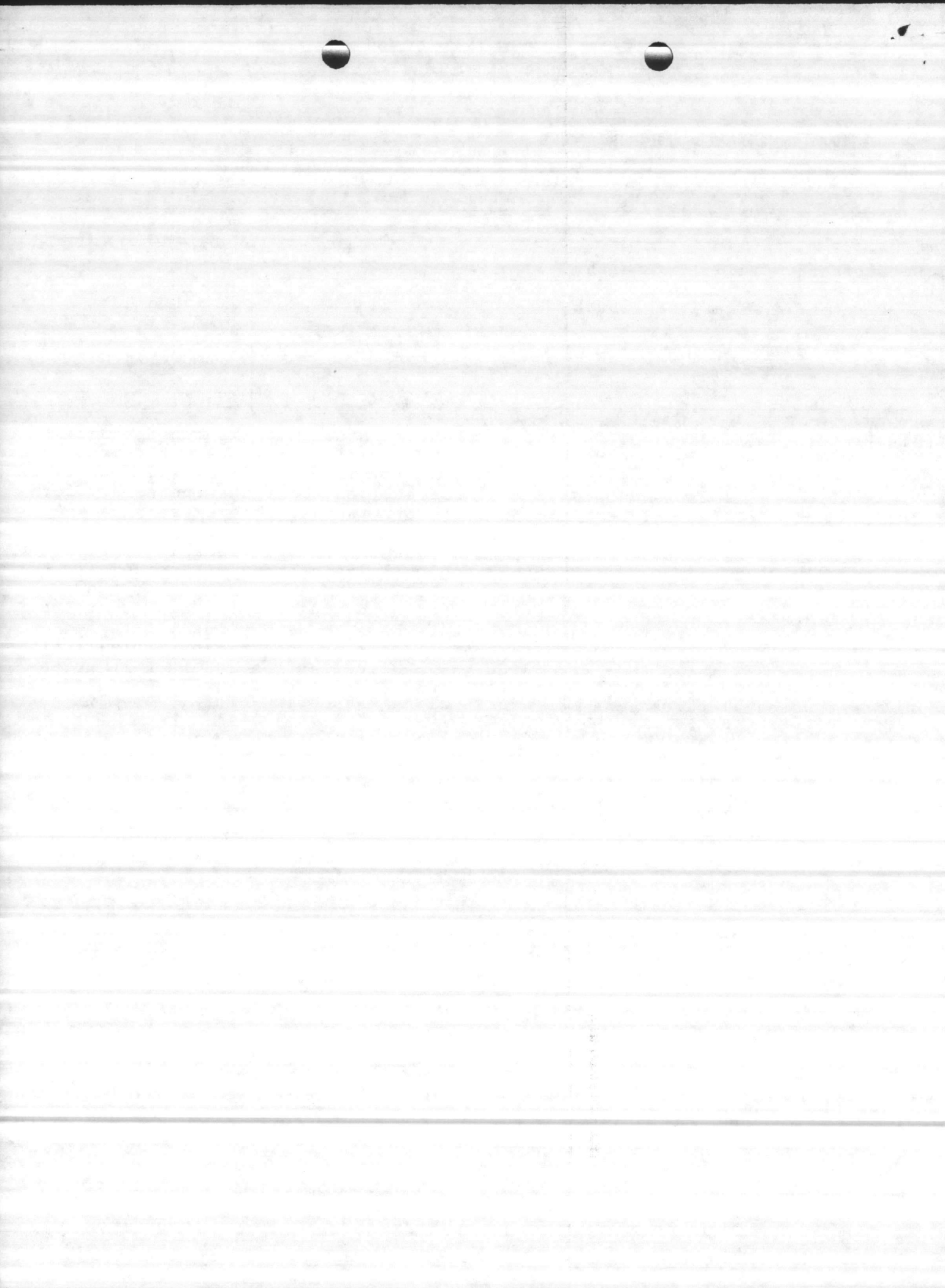
|                     |                                     |
|---------------------|-------------------------------------|
| 9. FUNDS CHARGEABLE | 10. SIGNATURE (Requesting Official) |
|---------------------|-------------------------------------|

**PART II—COST ESTIMATE**  
 (Filled out by Maintenance Control Division if estimate requested)

|                              |    |   |
|------------------------------|----|---|
| 11. TO:                      |    | 12. ESTIMATE NO.  |
| 13. COST ESTIMATE            |    | 14. SKETCH/PLAN ATTACHED<br><input type="checkbox"/> YES <input type="checkbox"/> NO  |
| a. Labor                     | \$ | 15.<br><input type="checkbox"/> APPROVED. PROGRAMMING TO START IN _____<br><input type="checkbox"/> APPROVED. BASED ON PRESENT WORKLOAD, THIS JOB CAN BE PROGRAMMED TO START IN _____, IF AUTHORIZED BY 25TH OF _____ AND FUNDS ARE MADE AVAILABLE.<br><input type="checkbox"/> DISAPPROVED. (See Reverse Side) |
| b. Material                  | \$ |   |
| c. Overhead and/or Surcharge | \$ |   |
| d. Equipment Rental/Usage    | \$ |   |
| e. Contingency               | \$ |   |
| f. TOTAL                     | \$ | 16. SIGNATURE   |
|                              |    | 17. DATE  |

**PART III—ACTION (Filled out by Requestor)**

|  |  |   |  |
|--|--|---|--|
| 18. TO:  |  | 20. WORK REQUESTED<br><input type="checkbox"/> HAS BEEN CANCELLED <input type="checkbox"/> HAS BEEN DEFERRED <input type="checkbox"/> WILL BE PERFORMED BY OTHERS |  |
| 19. AUTHORIZATION TO PROCEED IS ATTACHED (Check one if other than PW funds are involved)<br><input type="checkbox"/> NAVCOMPT 140 <input type="checkbox"/> OTHER |  | 22. DATE  |  |
| 21. SIGNATURE  |  |   |  |



OPERATIONS DIVISION  
 ESTIMATING WORK SHEET  
 MCBCL 11014/1 (REV. 04/87)

1. PRI

2. JOB ORDER NO

3. AMEND NO

4. REQUEST NO

127-87

5. CUSTOMER

UTILITIES BOYS

6. BRIEF TITLE

INSTALL (2) 5,000 GAL CHEMICAL TANKS

7. SOURCE

8.

STRUCTURAL  MECHANICAL  ELECTRICAL

WORK DESCRIPTION

9. HOURS

10. UNIT

11. QTY

12. MATERIAL COSTS

13. LABOR COSTS

14. TOTAL COSTS

PROCURE + INSTALL (2) 5,000 GAL

S.S. CHEMICAL STORAGE TANKS

FOR STORING BOILER CHEMICALS

TO INCLUDE RETAINING WALLS

70,000

15. RECOMMENDED ACCOMPLISHMENT OF WORK

- A.  IN HOUSE
- B.  CONTRACT
- C.  COMBINATION A&B

16. TOTAL THIS PAGE

TOTAL FOLLOWING PAGES(S)

SUBTOTAL

CONTINGENCY

TOTAL ESTIMATE

70,000

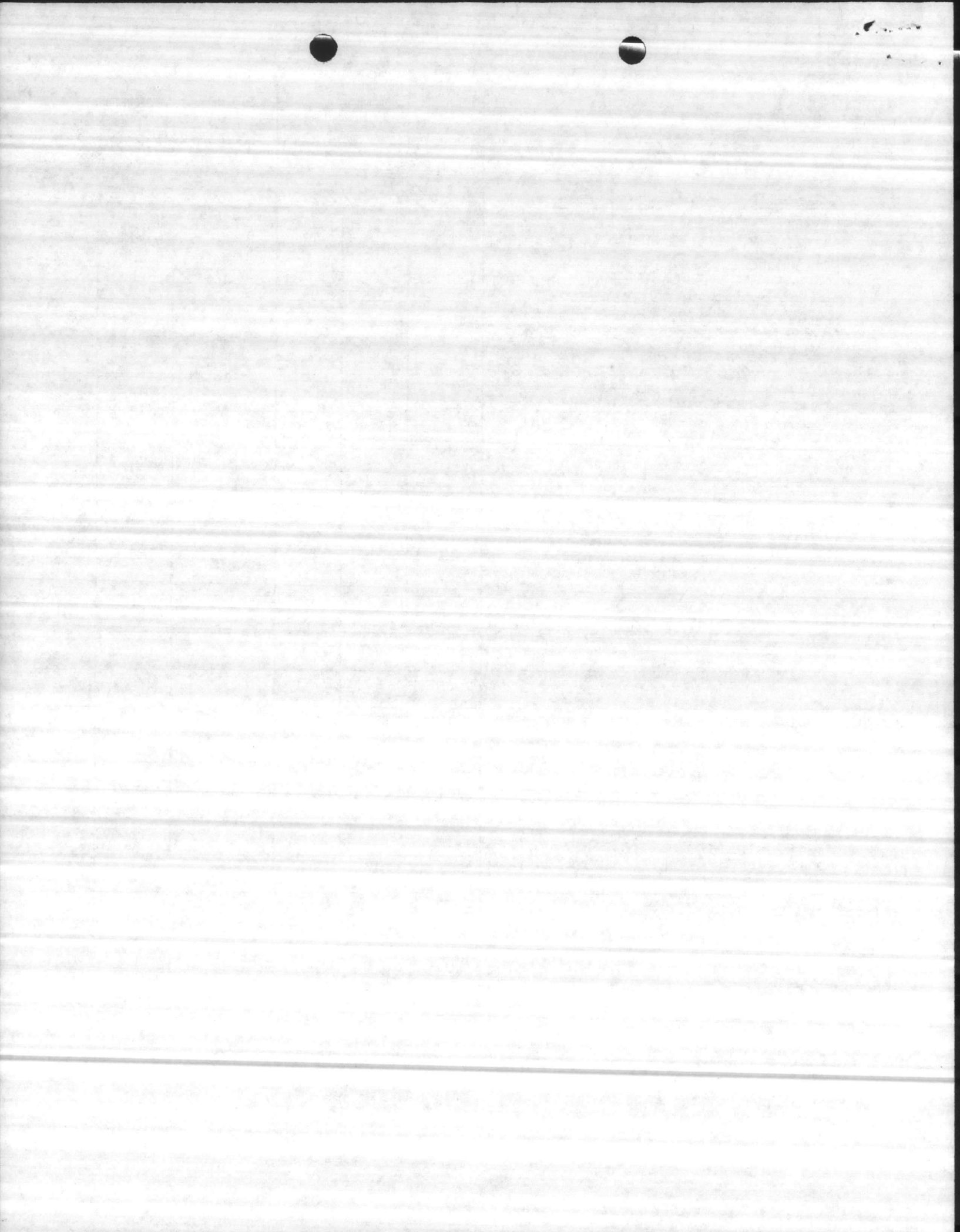
PREPARED BY

*L. Lanier*

RECEIVED BY

DATE

8-24-87



CLB

BASE MAINTENANCE DIVISION  
MARINE CORPS BASE  
CAMP LEJEUNE, NORTH CAROLINA 28542

DATE: 4 SEP 1987

FROM: BASE MAINTENANCE OFFICER, MARINE CORPS BASE, CAMP LEJEUNE, N.C.  
TO: PUBLIC WORKS OFFICER, BUILDING 1005, MARINE CORPS BASE, CAMP  
LEJEUNE, N.C.

SUBJ: ENGINEERING STUDY REQUEST FOR PROJECT NUMBER - 8P015

ENCL: (A) ESTIMATE WORK SHEET(S) FOR P1 FUNDS  
(B)

1. TYPE OF STUDY REQUESTED:

STUDY ON WATER TREATMENT PROCESS AT MCAS  
WATER PLANT AS-110

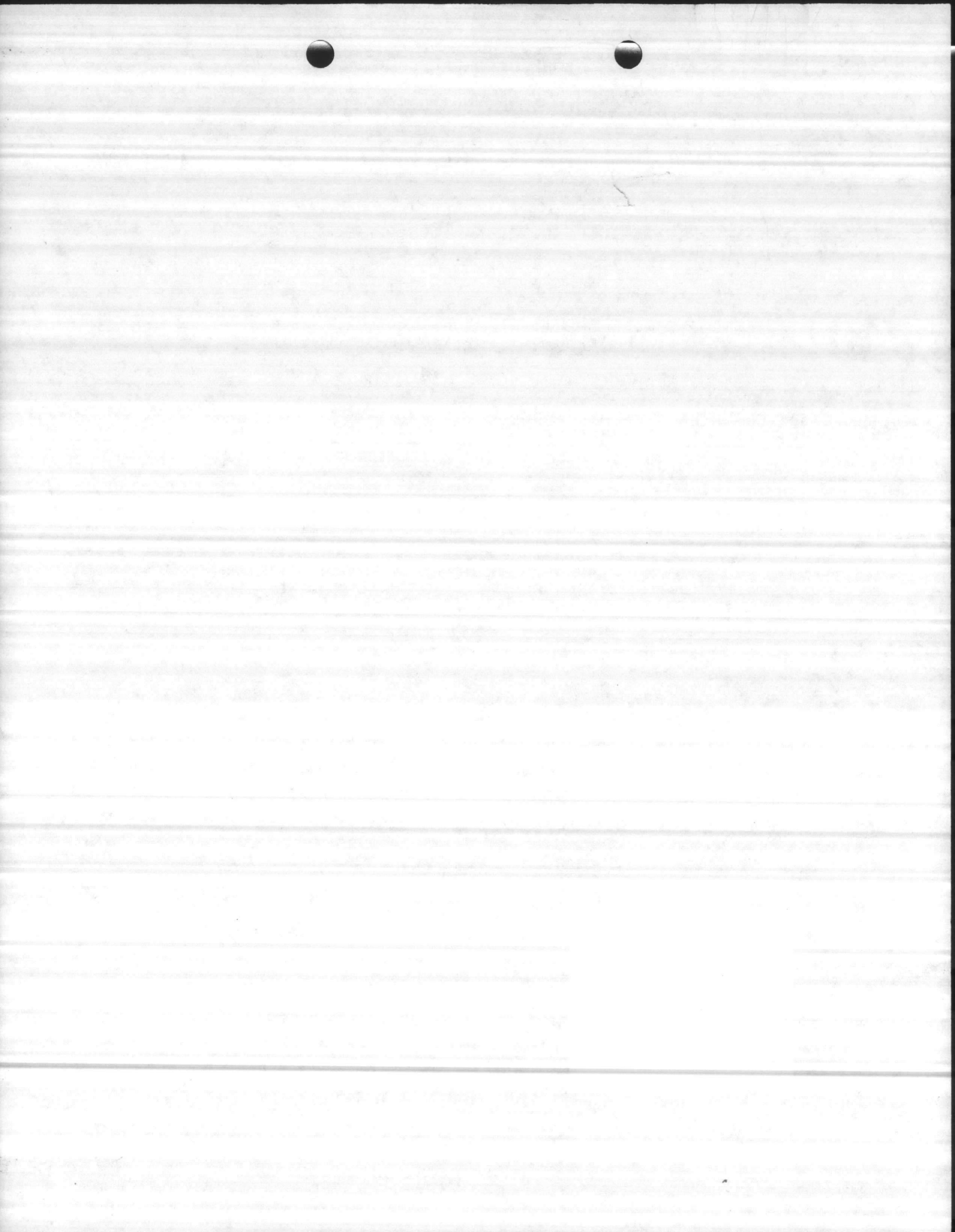
2. DESIRED COMPLETION FISCAL YEAR: 88

3. FUNDS TO BE PROVIDED UNDER SUB-FUNCTIONAL-CATEGORY: P1  
BUILDING/FACILITY IDENTIFICATION FOLLOWS: AS110,

4. POINT OF CONTACT IS CARL BAKER , PHONE 5161

T. D. JEWELL  
BY DIRECTION

*Utilities*



CHB

BASE MAINTENANCE DIVISION  
MARINE CORPS BASE  
CAMP LEJEUNE, NORTH CAROLINA 28542

DATE: 4 SEP 1987

FROM: BASE MAINTENANCE OFFICER, MARINE CORPS BASE, CAMP LEJEUNE, N.C.  
TO: PUBLIC WORKS OFFICER, BUILDING 1005, MARINE CORPS BASE, CAMP  
LEJEUNE, N.C.

SUBJ: ENGINEERING STUDY REQUEST FOR PROJECT NUMBER - 8P01S

ENCL: (A) ESTIMATE WORK SHEET(S) FOR P1 FUNDS  
(B)

1. TYPE OF STUDY REQUESTED:

STUDY ON WATER TREATMENT PROCESS AT MCAS  
WATER PLANT AS-110

2. DESIRED COMPLETION FISCAL YEAR: 88

3. FUNDS TO BE PROVIDED UNDER SUB-FUNCTIONAL-CATEGORY: P1  
BUILDING/FACILITY IDENTIFICATION FOLLOWS: AS110,

4. POINT OF CONTACT IS CARL BAKER , PHONE 5161

T. D. JEWELL  
BY DIRECTION

