

AD-A074 619

AMMANN AND WHITNEY NEW YORK

F/G 18/3

SCIENTIFIC DIRECTOR'S REPORT OF ATOMIC WEAPON TESTS AT ENIWETOK--ETC(U)  
NOV 51

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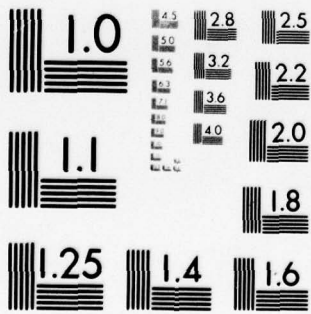
AEC-WT-60(REF)-PT-4

NL

1 OF 2  
AD  
A074619  
REF ID: A68484



074619



MICROCOPY RESOLUTION TEST CHART  
NATIONAL BUREAU OF STANDARDS-1963-A

WEAST

ADA074619



OPERATION

CONFIDENTIAL

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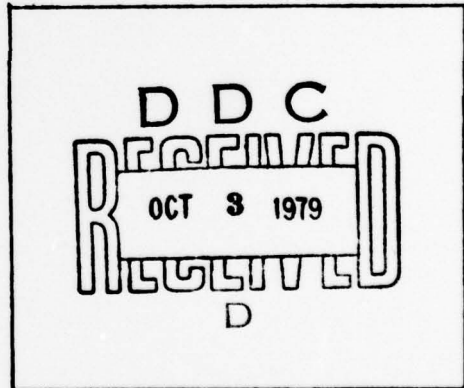
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WT-60(REF.) is divided into four parts as follows:

Part I - Pages 1 through 75

Part II - Pages 76 through 90

Part III - Pages 91 through 110

Part IV - Pages 111 through 130

## Scientific Director's Report of Atomic Weapon Tests at Eniwetok, 1951

Annex 3.1

U. S. Army Structures

Appendix 2 As-built Construction

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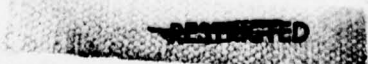
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# U. S. ARMY STRUCTURES

## Appendix 2

### As-built Construction

by

AMMANN & WHITNEY  
Consulting Engineers

Approved by: SHERWOOD B. SMITH  
Director, Program 3

Approved by: ALVIN C. GRAVES  
Scientific Director

New York, New York

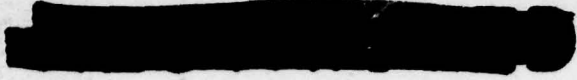
November 1951

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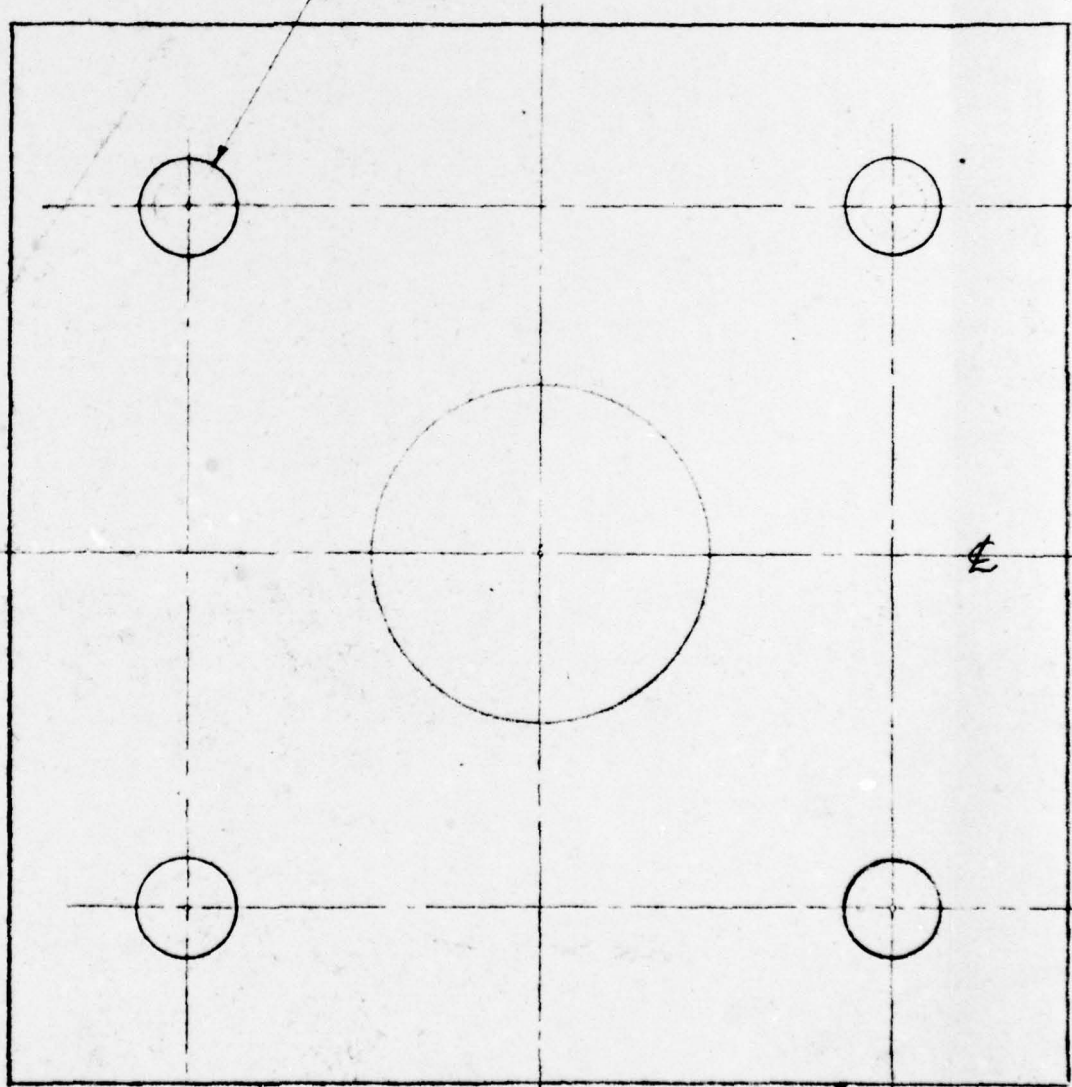
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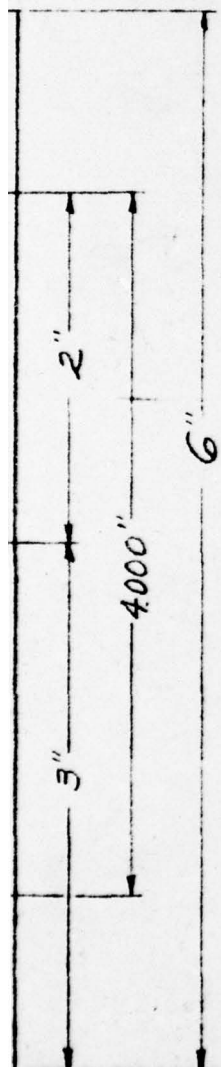


8 HOLES -  $\frac{7}{16}$ " DIA DRILL

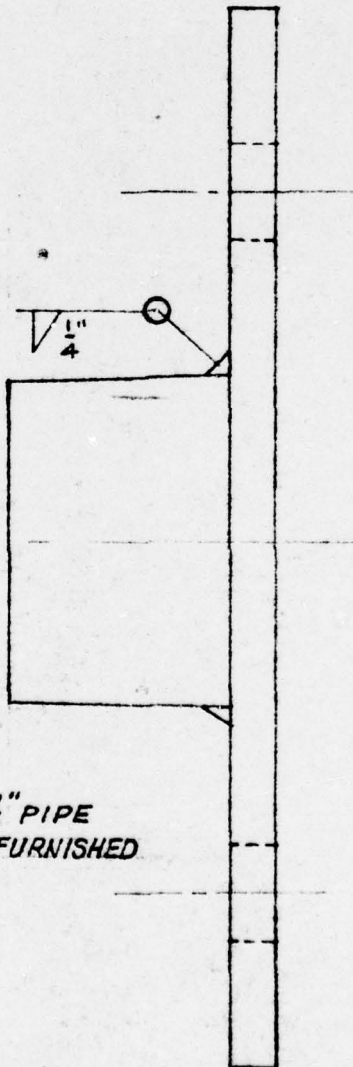


EXISTING 500I MOUNT





REMOVE EXISTING  $\frac{1}{2}$ " PIPE  
 & INSTALL ADAPTER FURNISHED  
 BY SANDIA



2  
 5001B

NOTE  
 DECIMAL T  
 FRACTION T  
 PLATES M

# PAGE III

## MODIFICATION OF 5001 MOUNT USED ON DWGS.

5104	5128
5113	5131
5115	5132
5118	5133
5122	5107
5126	

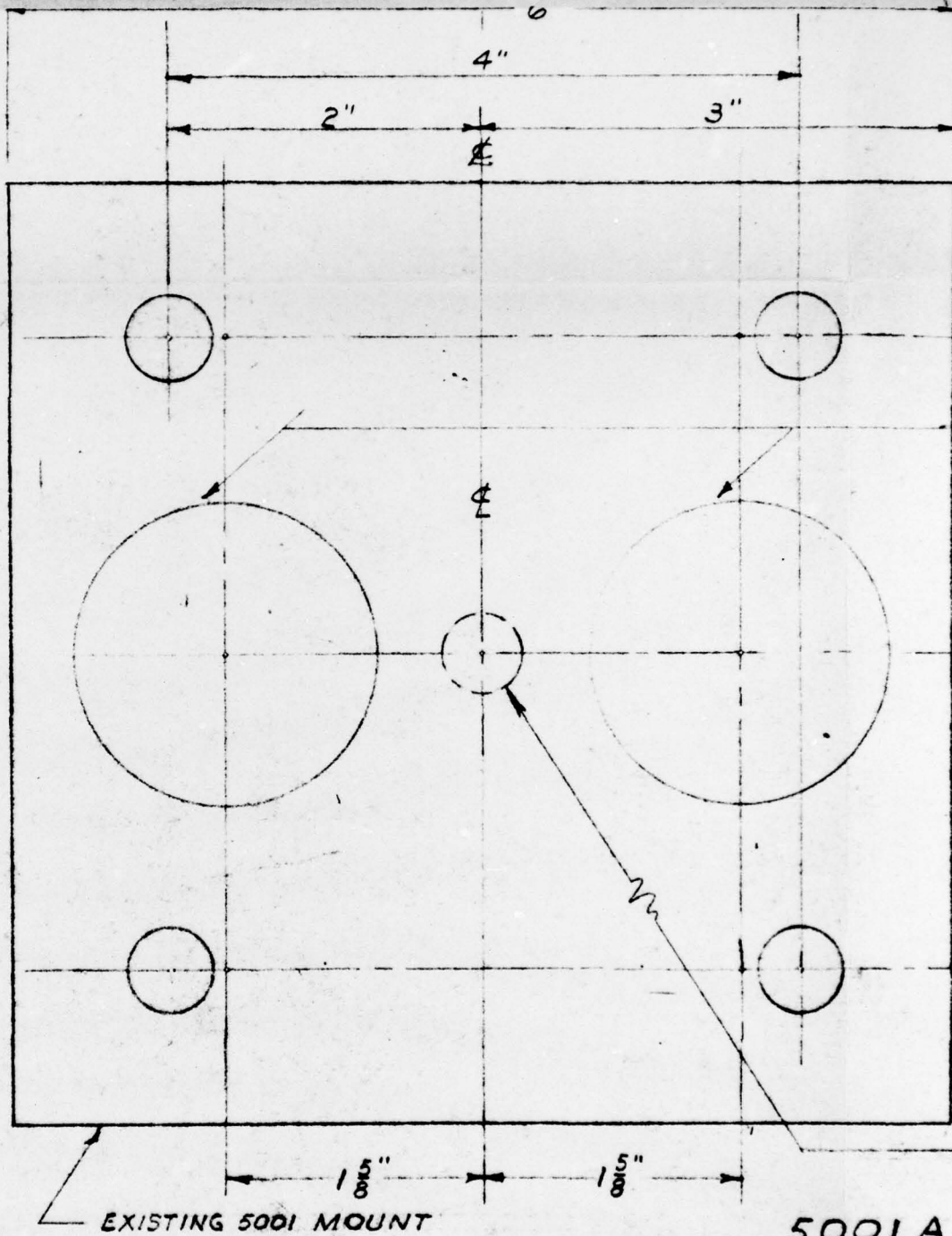
NOTE

3

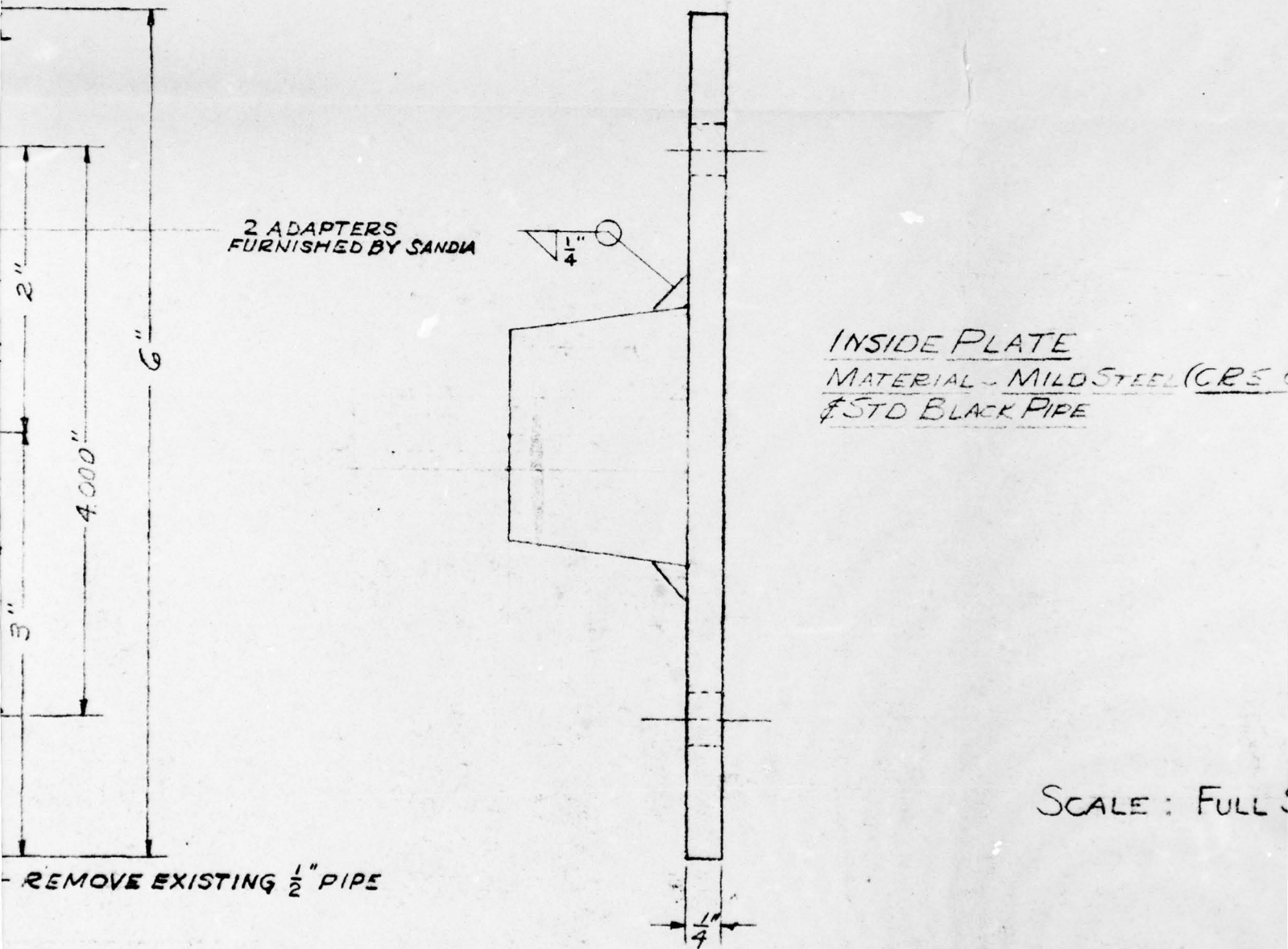
DECIMAL TOLERANCE  $\pm 0.005$

FRACTION TOLERANCE  $\pm \frac{1}{32}$ "

PLATES MAY BE TORCH CUT



4



5

FIG. A2.80

SIDE PLATE  
MATERIAL - MILD STEEL (CR5 OR HR5)  
TO BLACK PIPE

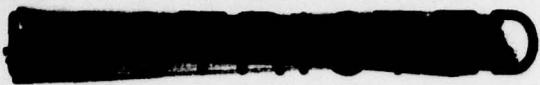
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SCALE : FULL SCALE

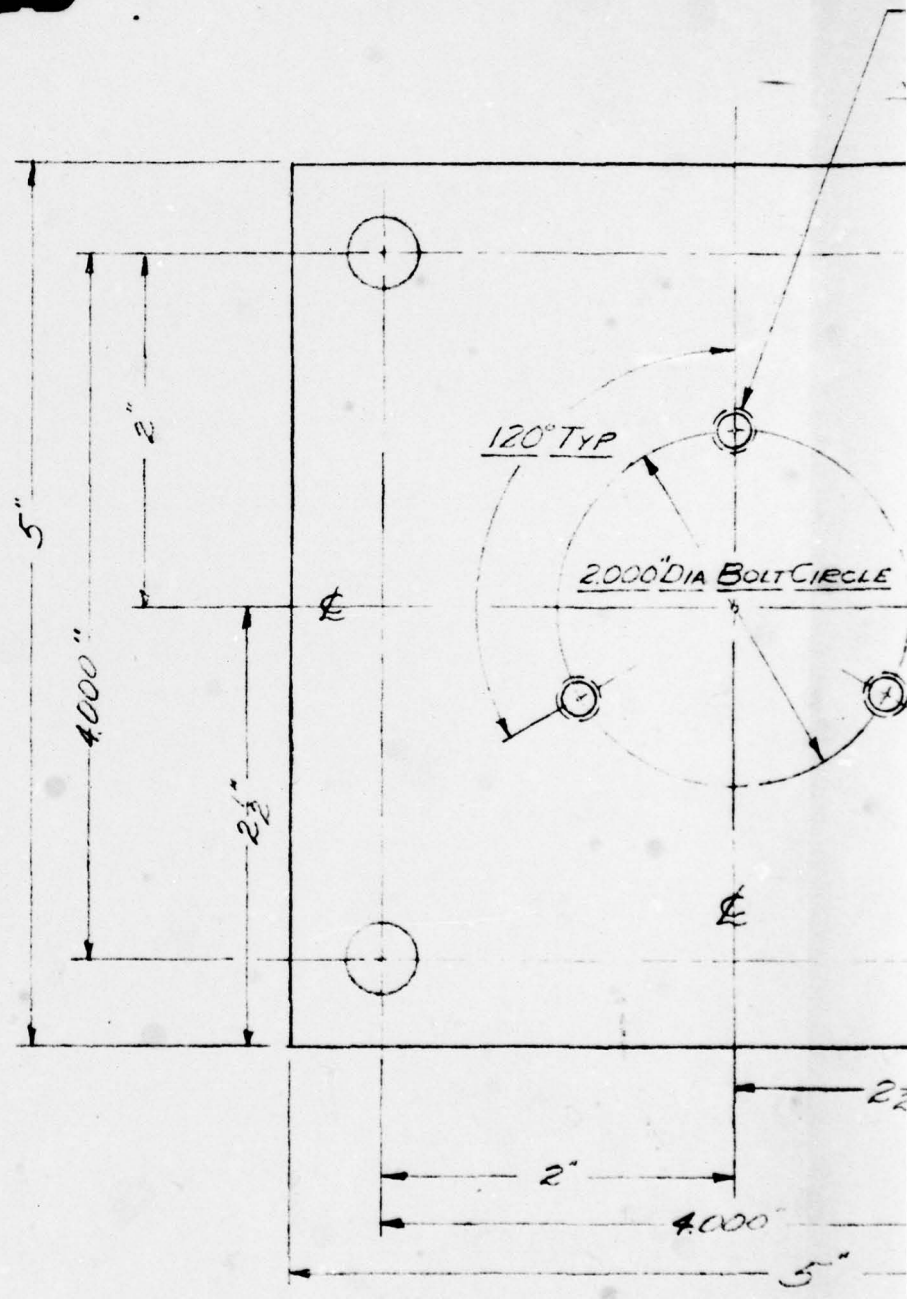
FOR THIN PANELS & SLABS

REVISIONS			HOLMES & HARVER INCORPORATED ENGINEERS	
NO.	DATE	DESCRIPTION	824 S. FIGUEROA ST. LOS ANGELES	
1	3/25/51	Corrected notations	<u>MOUNT</u> <u>FOR DISPLACEMENT</u> <u>GAUGE</u>	
2	5/4/51	GENERAL REVISION AS BUILT AS SHOWN		
			DR.	CH. L.V.
			DATE	SHEET NO.
			3-29-50	5001
			JOB NO.	APPROVED
			840F	W. J. [Signature]

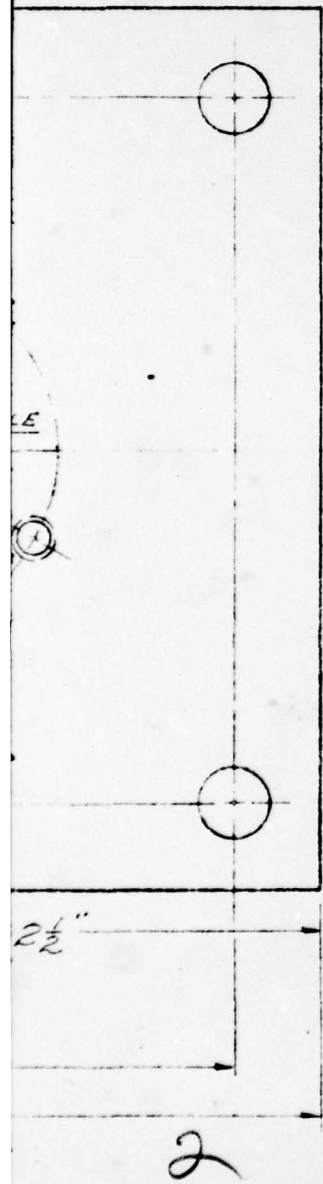
6



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3 PLACES - DRILL & TAP FOR  $\frac{1}{4}$ -28 N.F. 2 THD  
INSERT  $\frac{1}{4}$ -28 N.F.  $\times \frac{3}{8}$ " SOCKET HEAD OR HEADLESS FLAT POINT  
SET SCREW (BRASS)



INSIDE PLATE  
MATERIAL ~ MILD STEEL (CR5 OR H)

BLANCHARD GRIND OR EQUAL ONE FACE

NOTE

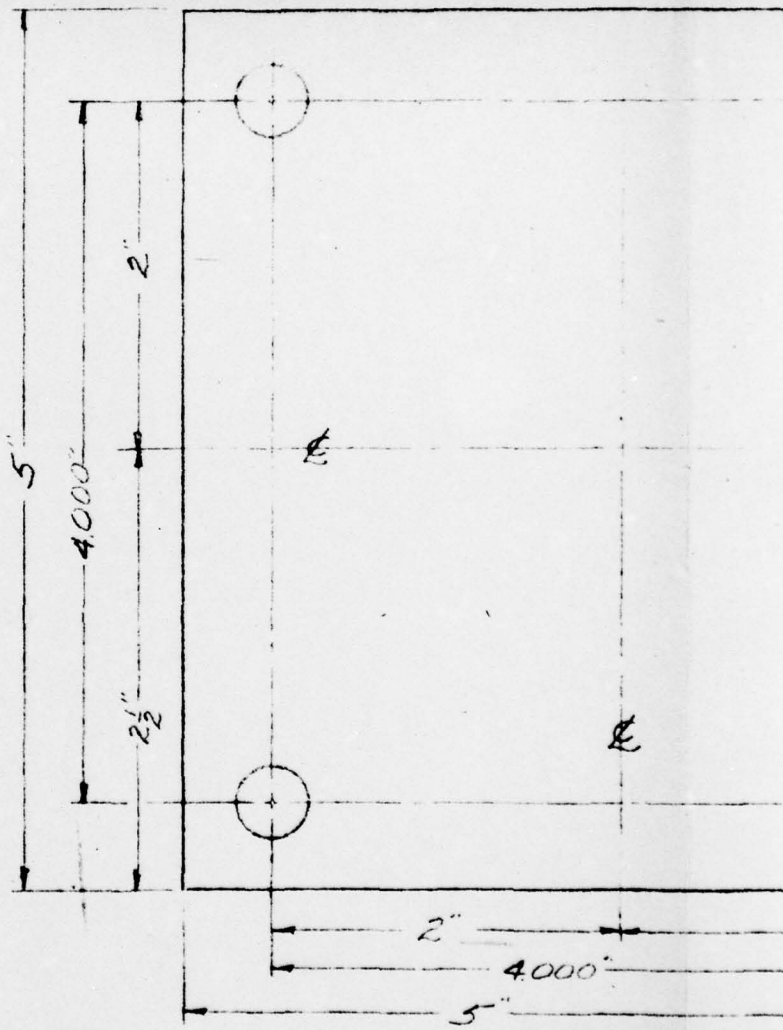
**PAGE 112**

FEEL (CRS OR HRS)

EQUAL ONE FACE ONLY

3

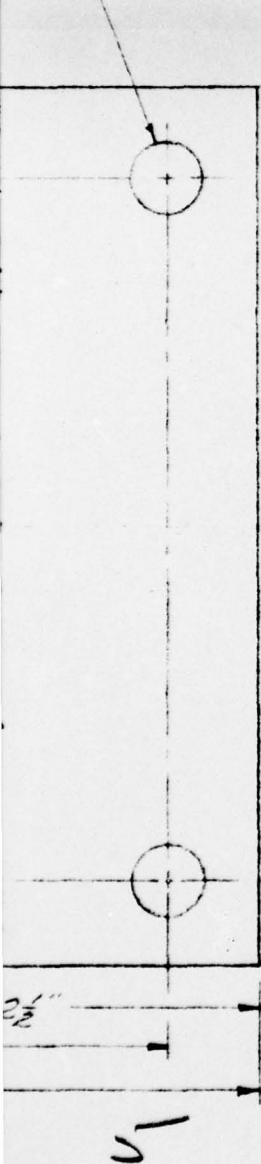
NOTE



4

DECIMAL TOOL  
FRACTION TOOL  
PLATE MADE

8 PLACES -  $\frac{7}{16}$ " DIA DRILL



OUTSIDE PLATE  
MATERIAL - MILD STEEL (CRS OR H.R.S)

SCALE : FULL SCALE

**FIG. A2.81**

MAXIMUM TOLERANCE ±0.005"  
POSITION TOLERANCE ±.005"  
ITEM MAY BE TORCH CUT

H.R.S.)

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FOR THIN PANELS & SLABS

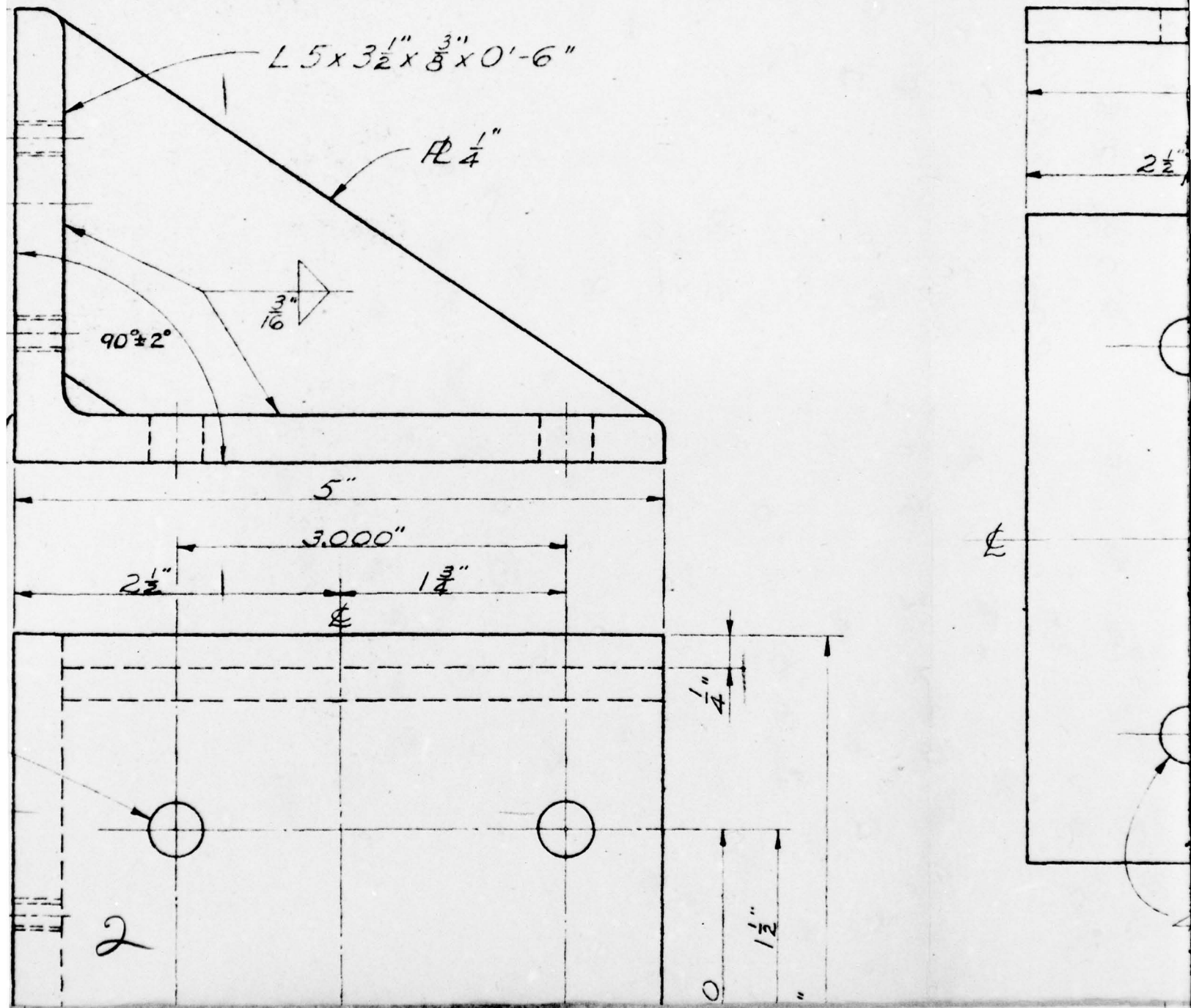
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	4/15	AS BUILT AS SHOWN		
			<u>MOUNT</u> FOR ELECTRONIC ACCELEROMETER	
DR.	CH. LV	DATE	SHEET NO.	
Trans		3-28-50	5002	
JOB NO.	APPROVED.			
840F	K. T. [Signature]			

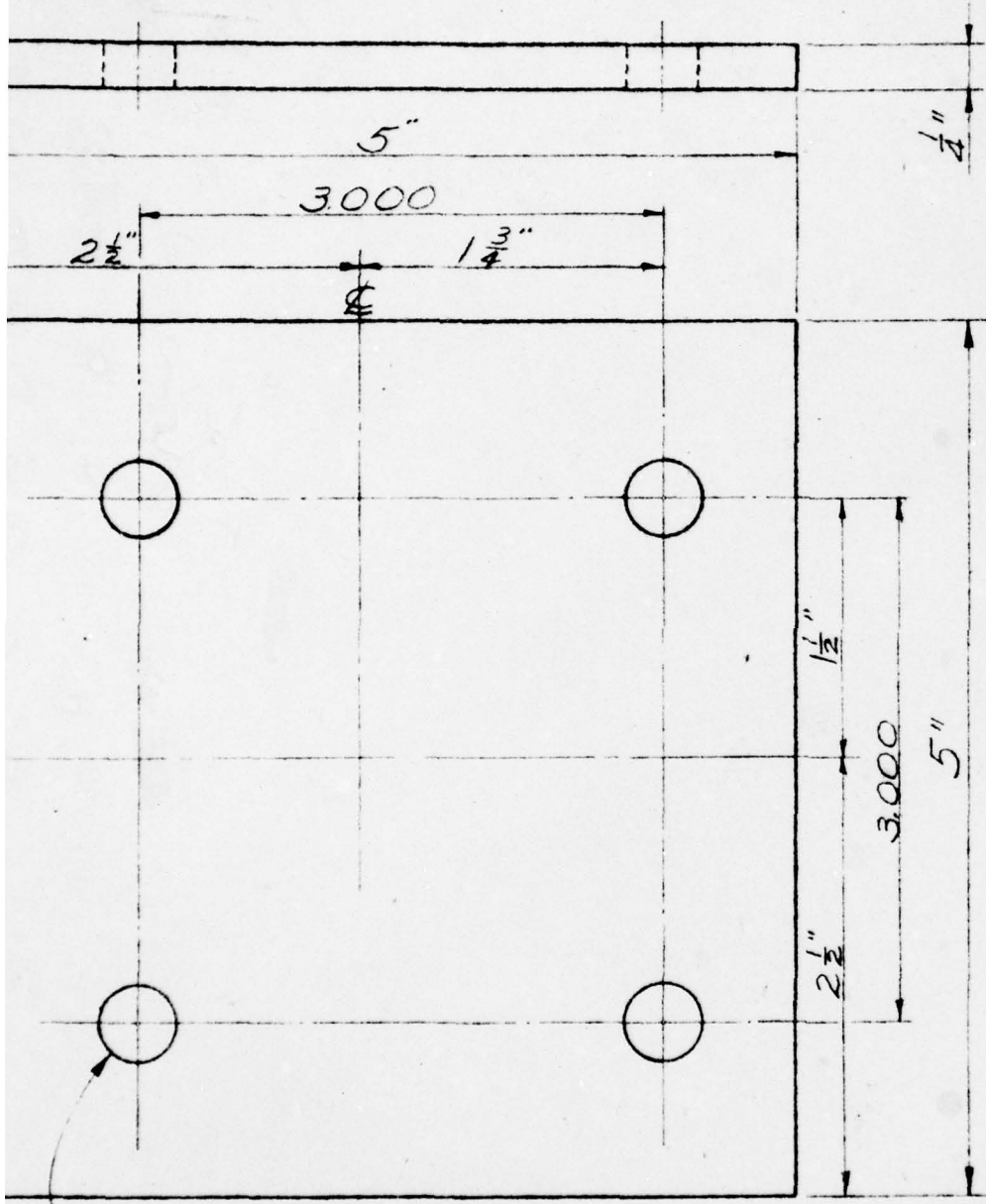
SCALE

6



THD  
OR HEADLESS SET SCREWS (BRASS)





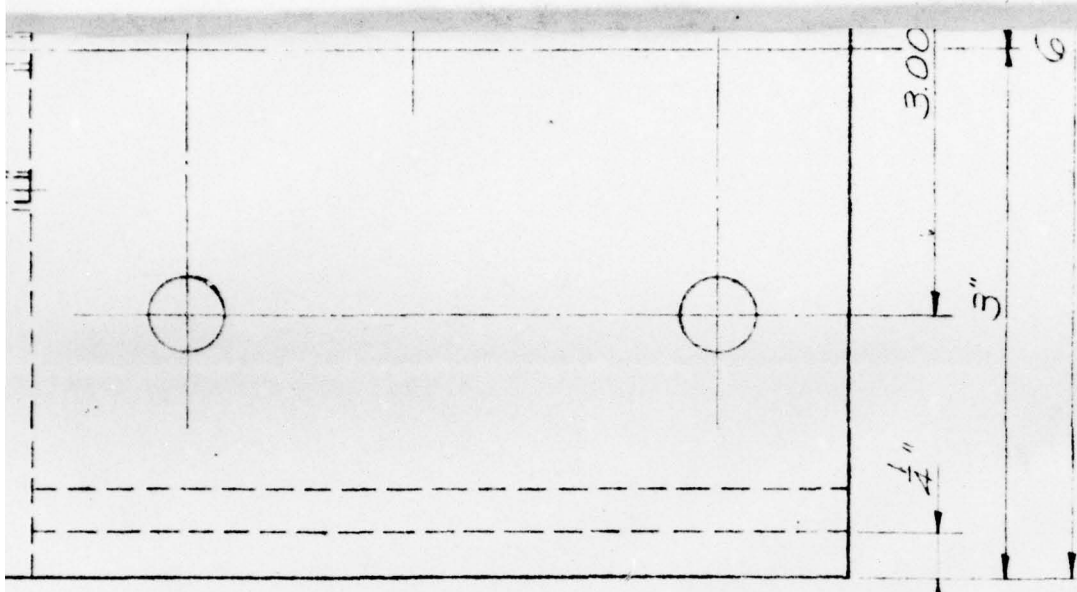
4 HOLES - DRILL  $\frac{7}{16}$ "  
3

2

E.

INSIDE CLIP ANGLE  
MATERIAL: MILD STEEL

4



(CRS OR HRS)

NOTE:  
DECIMAL TOLERANCE  $\pm 0.005$ "  
FRACTION TOLERANCE  $\pm \frac{1}{32}$ "  
PLATES MAY BE TORCH CUT

5

**FIG. A2.82**

SCALE: FULL SIZE

OUTSIDE PLATE

MATERIAL: MILD STEEL (CRS OR HRS)

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FOR RIGHT ANGLE MOUNTING -  
THIN PANELS & SLABS

REVISIONS			HOLMES & NARVER INCORPORATED ENGINEERS	
NO	DATE	DESCRIPTION	824 S. FIGUEROA ST. LOS ANGELES	
1	3/23/50	Corrected notation	<u>MOUNT</u> <u>FOR ELECTRONIC</u> <u>ACCELEROMETER</u>	
	3/24/50	AS BUILT AS SHOWN		
DR.	CH. LV	DATE	SHEET NO.	
L.W.K.		3-29-50	5003	
JOB NO.	APPROVED			
8405	K.T. Roberts			

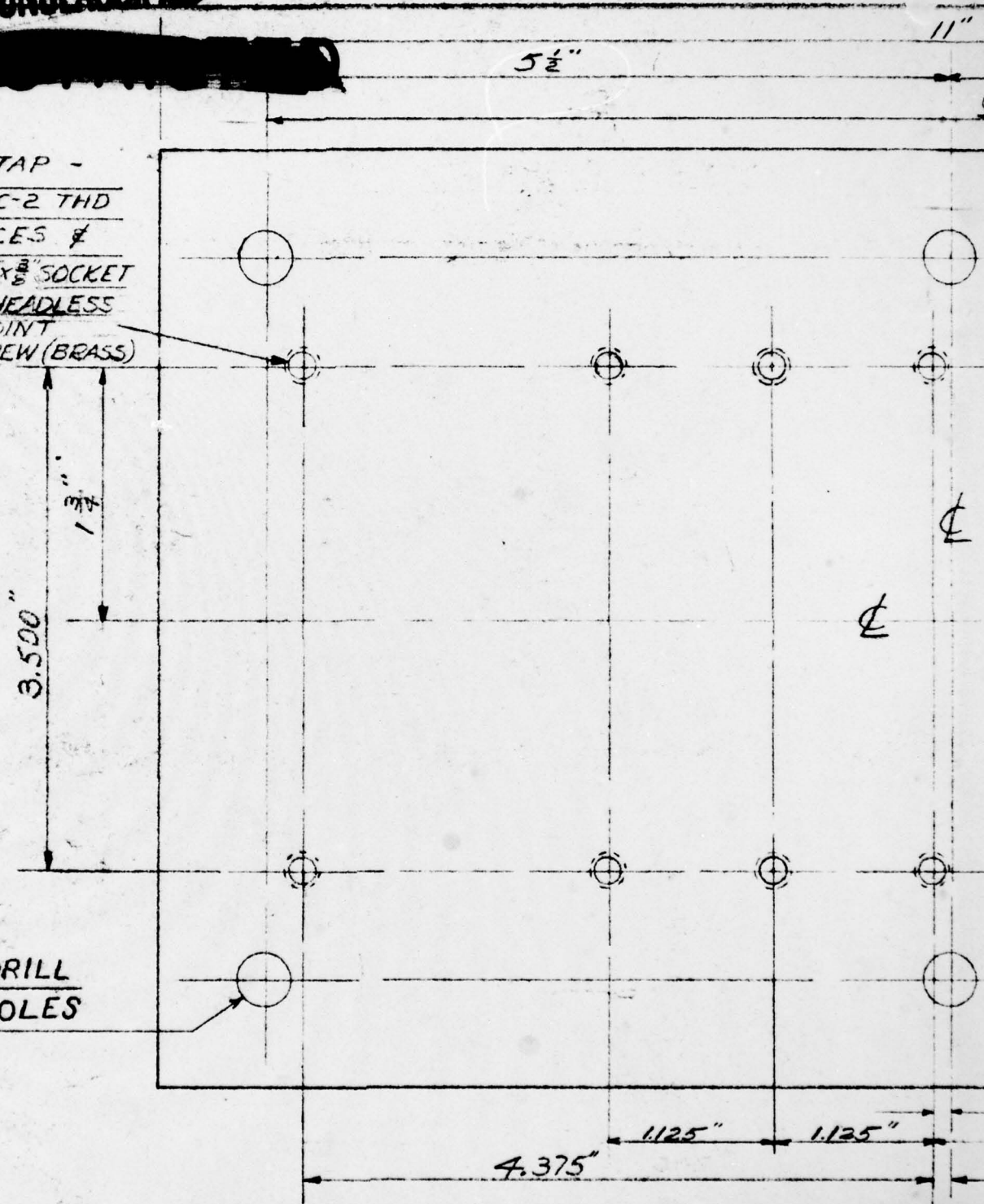
5"  
2"  
UT

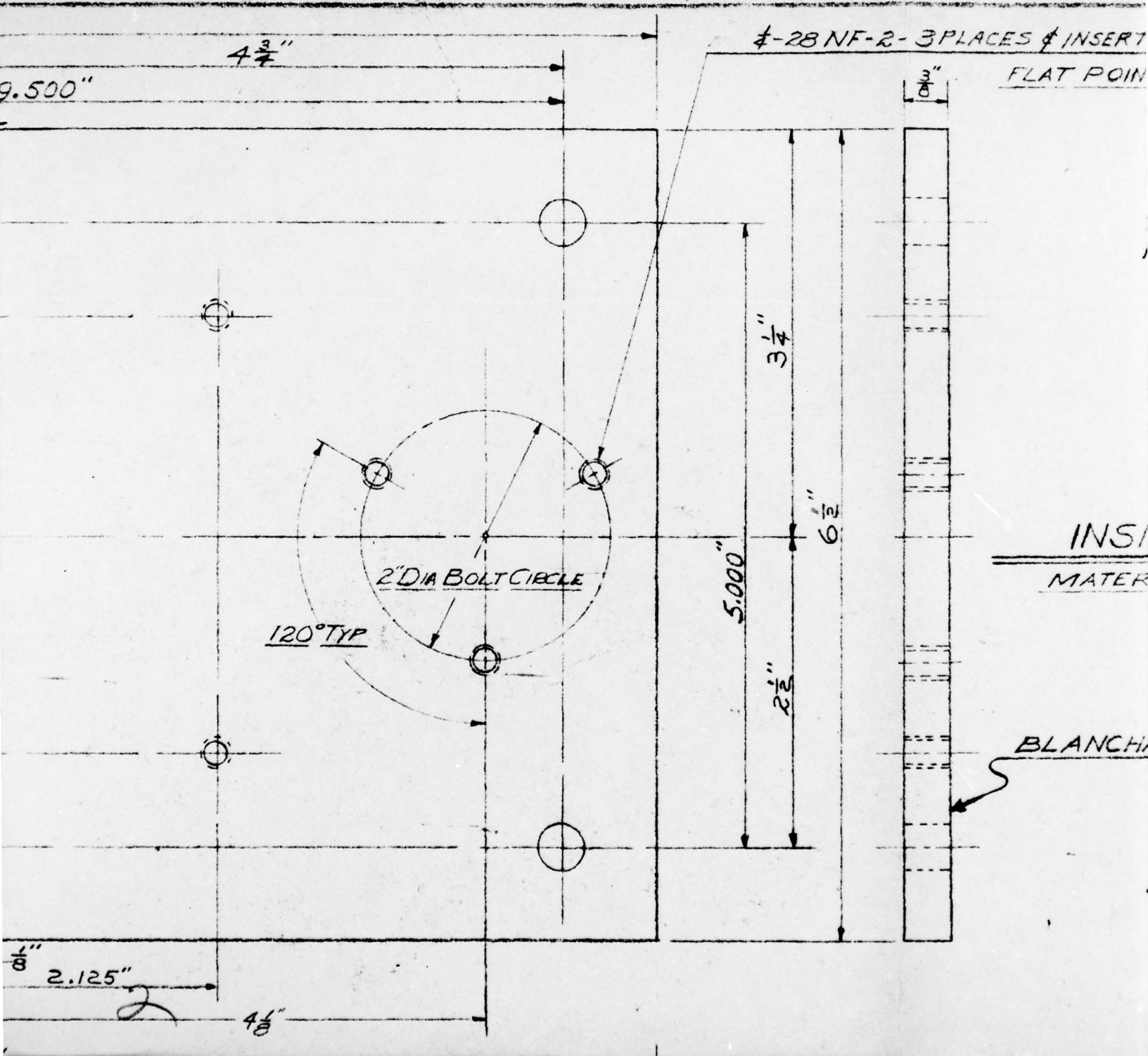
6

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DRILL & TAP -  
 $\frac{1}{4}$ "-20NC-2 THD  
10 PLACES  $\phi$   
INSERT  $\frac{1}{4}$ "x $\frac{3}{8}$ " SOCKET  
HEAD OR HEADLESS  
FLAT POINT  
SET SCREW (BRASS)

$\frac{7}{16}$ " DRILL  
6 HOLES





INSERT  $\frac{1}{4}$ -28 X  $\frac{3}{8}$ " SOCKET HEAD OR HEADLESS  
LAT POINT SET SCREW (BRASS)

# PAGE 114

## INSIDE PLATE

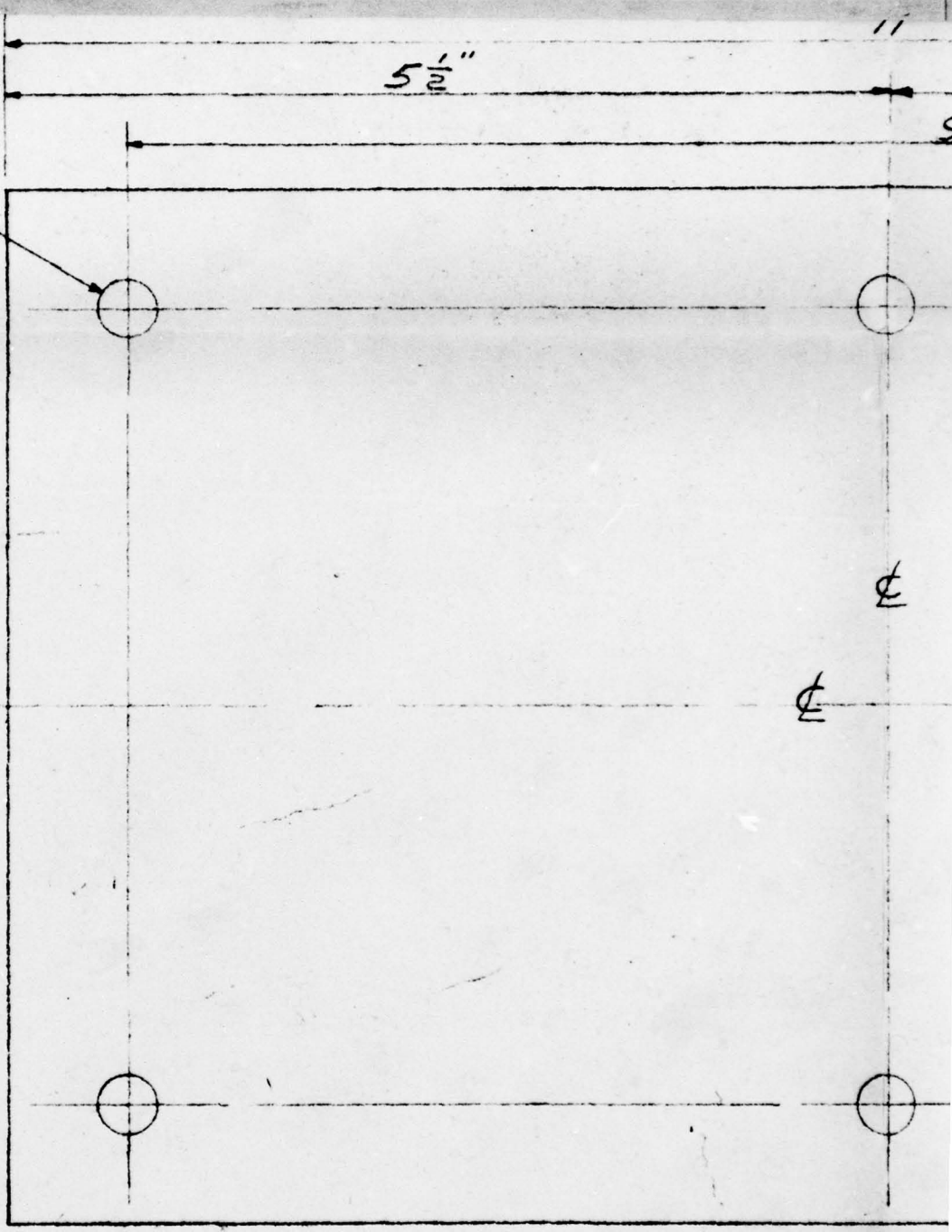
MATERIAL: MILD STEEL (CPS OR HRS)

BLANCHARD GRIND OR EQUAL - ONE FACE ONLY

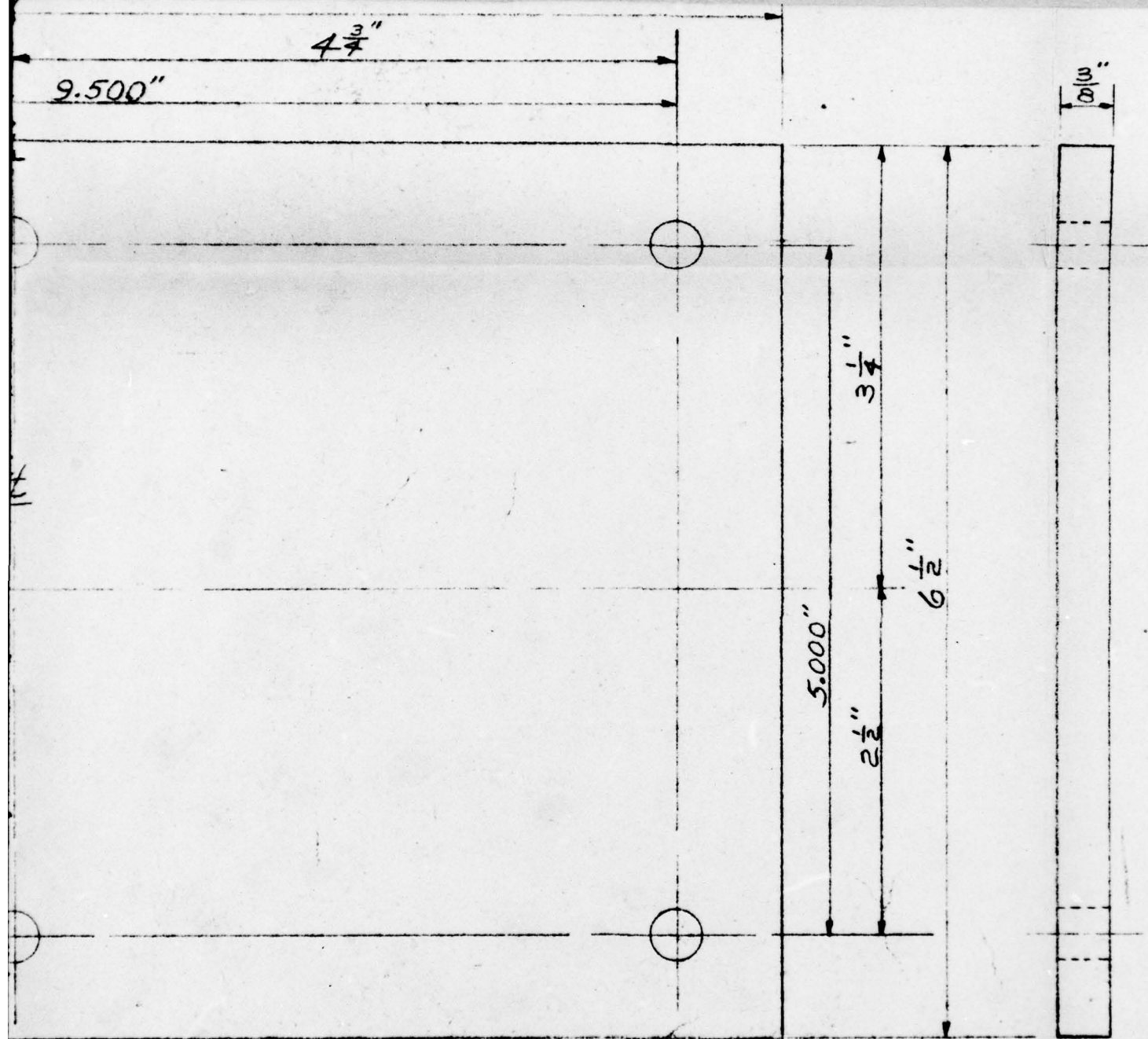
3 NOTE  
DECIMAL TOLERANCE  $\pm 0.005$ "  
FRACTION TOLERANCE  $\pm \frac{1}{52}$ "  
PLATES MAY BE TORCH CUT

7/16" DRILL  
6 HOLES

5 1/2"



H



S

FIG. A2.83

OUTSIDE PLATE

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MATERIAL: MILD STEEL (CES OR HES)

~~RESTRICTED~~

SCALE: FULL SCALE

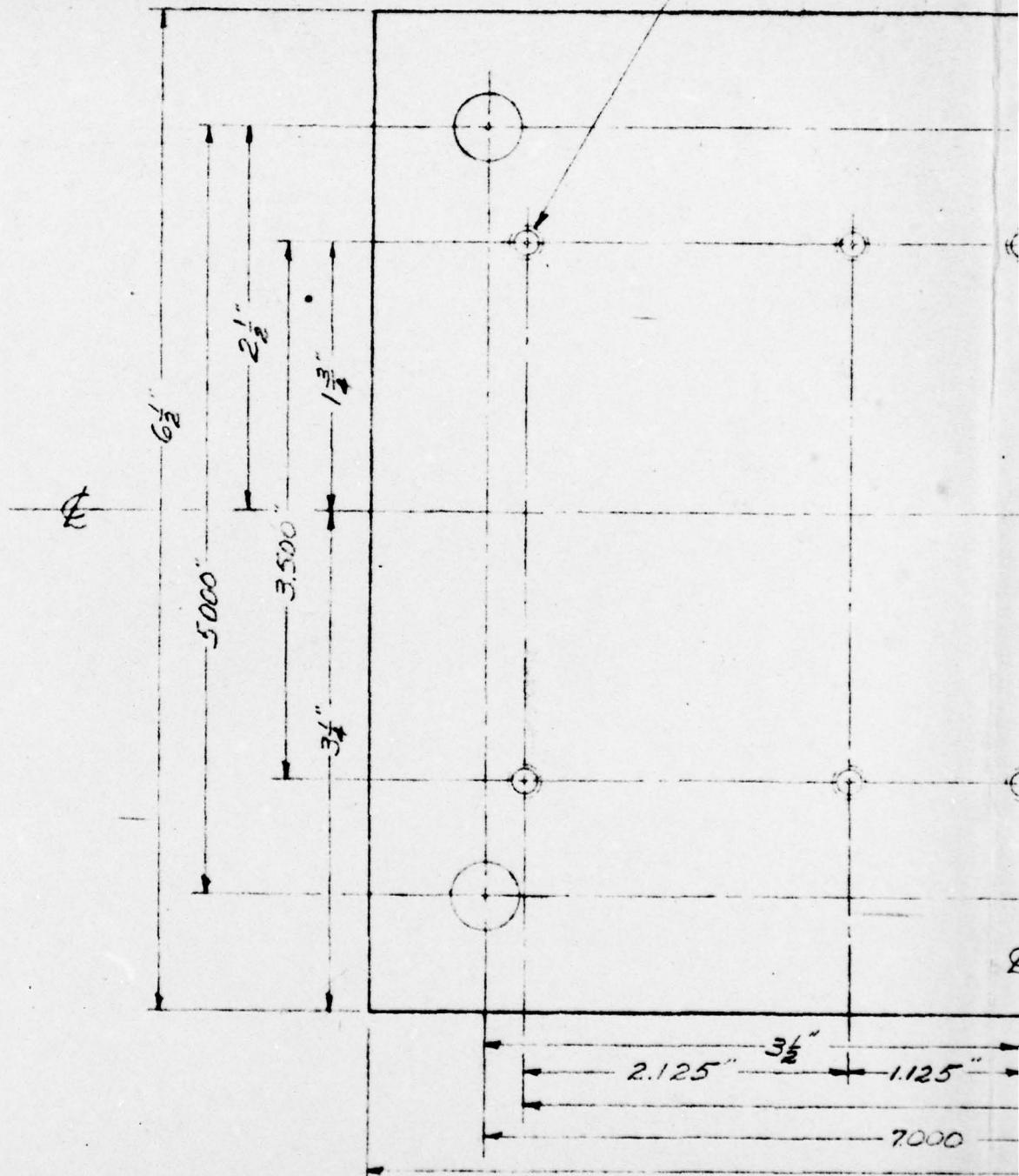
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	5/16/51	AS BUILT AS SHOWN		
DR	CH. LV	DATE	SHEET NO.	
ROSE		3-20-50	5004	
JOB NO.	APPROVED			
840F				

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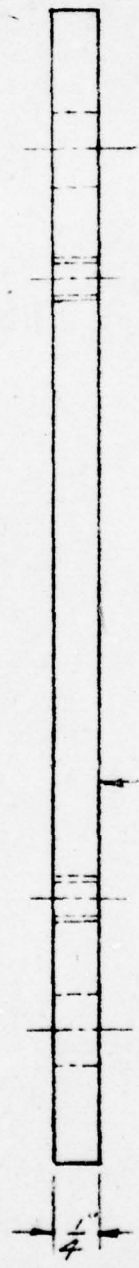
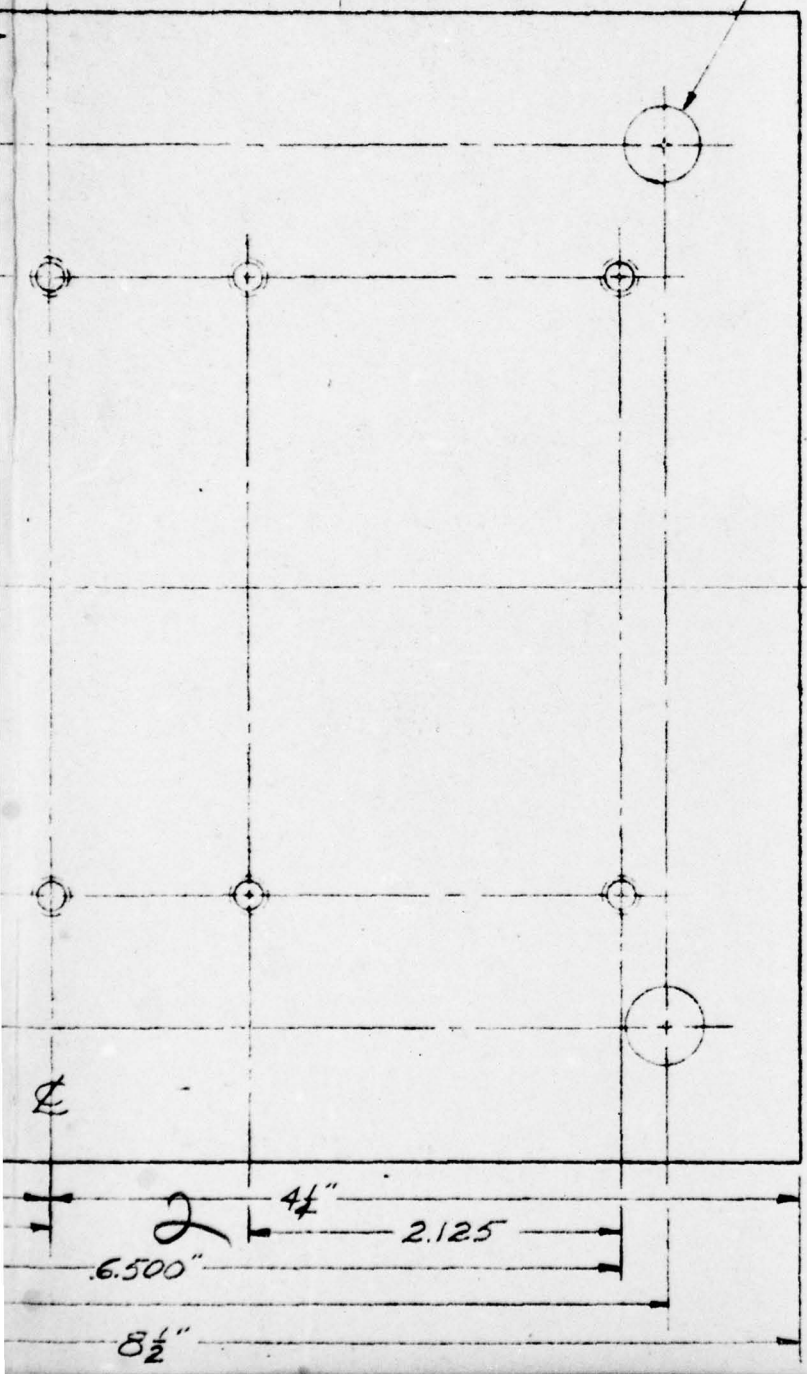
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~~TOP SECRET~~

10 PLACES - DRILL & TAP  
INSERT  $\frac{1}{4}$ " X  $\frac{1}{4}$ " SOCKET



TAP  $\frac{1}{4}$ -20 NC 2 THD  
SET HEAD OR HEADLESS FLAT POINT SET SCREW (BRASS) 4 PLACES -  $\frac{7}{16}$ " DIA DRILL



INSIDE PLATE  
MATERIAL - MILD STEEL

BLANCHARD GRIND OR

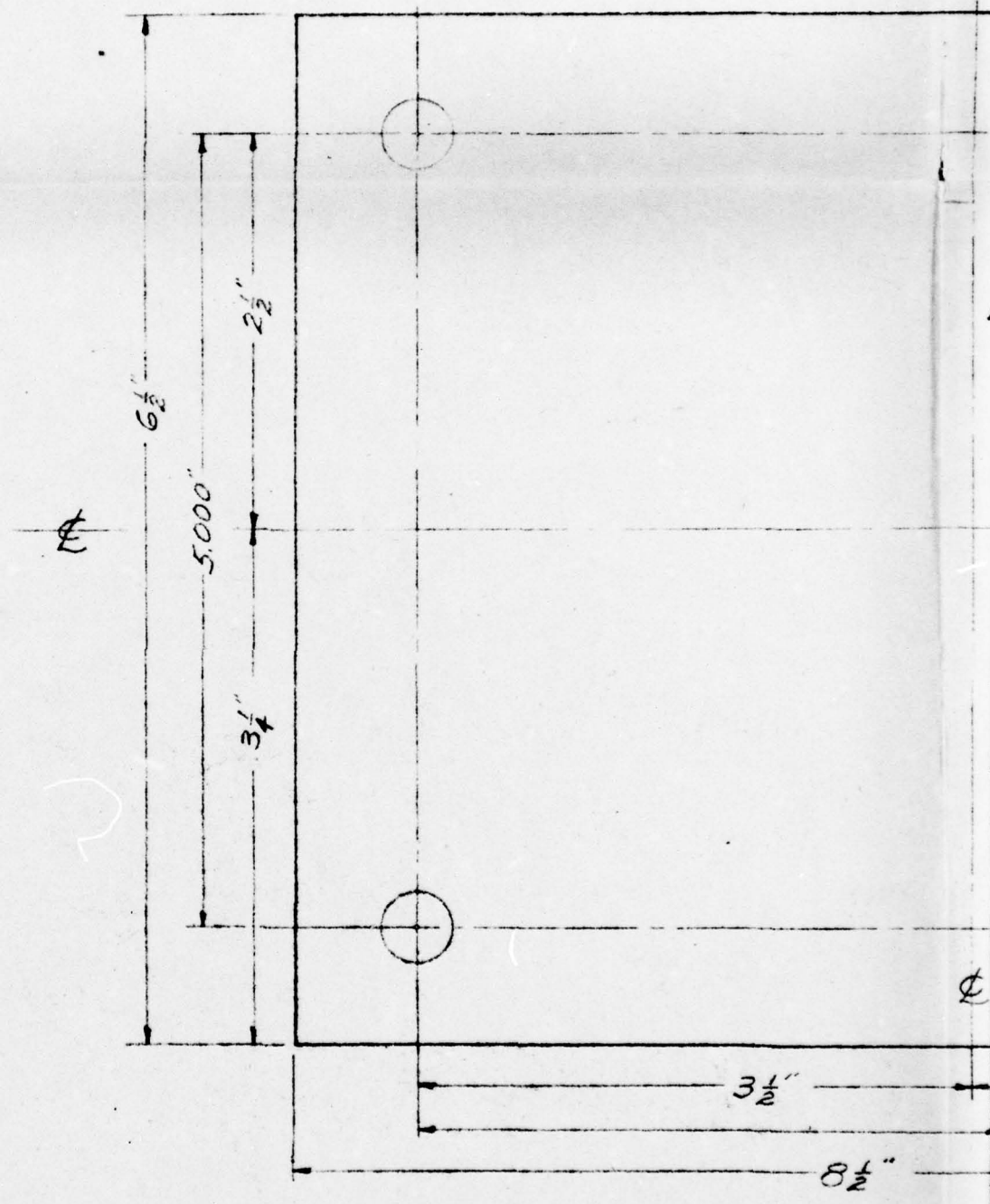
NO  
DR  
FE  
FL

PAGE 115

PLATE  
MILD STEEL (CR5 OR HR5)

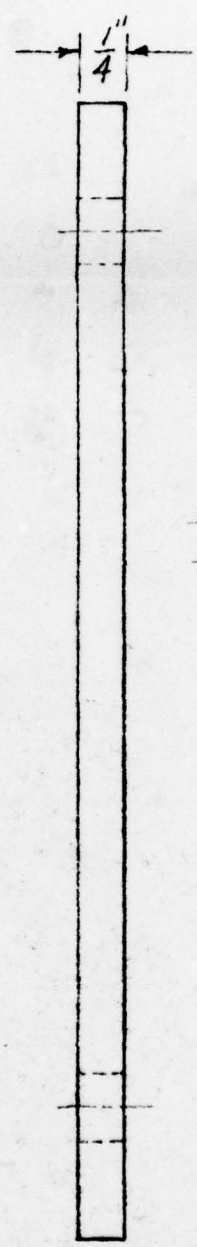
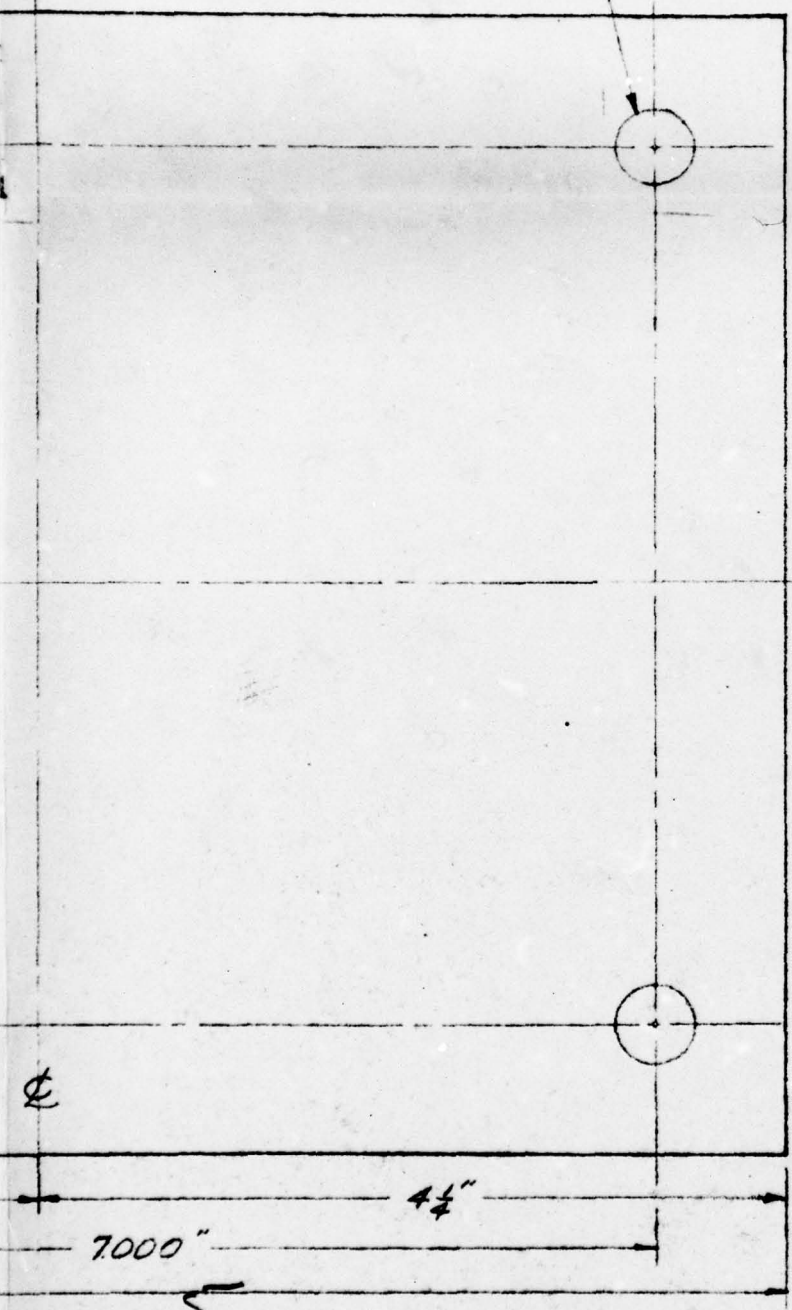
ED GRIND OR EQUAL ONE FACE ONLY

NOTE 3  
DECIMAL TOLERANCE = 0.005"  
FRACTION TOLERANCE = 1/32"  
PLATE STOCK MAY BE TORCH CUT



4

4 PLACES  $\frac{7}{16}$ " DIA. DRILL



OUTSIDE PLATE  
MATERIAL - MILD S

SCALE: FULL SC

**FIG. A2.84**

E PLATE  
IAL - MILD STEEL (CRS OR HRS)

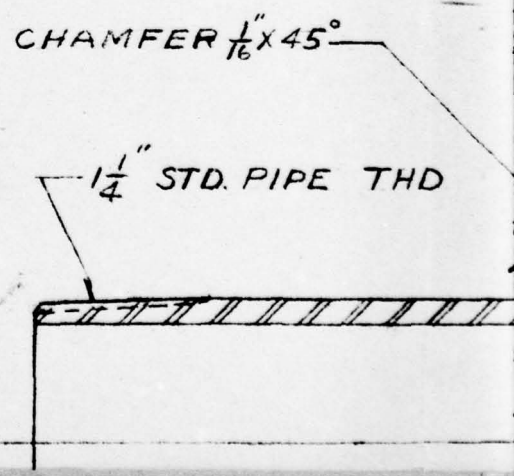
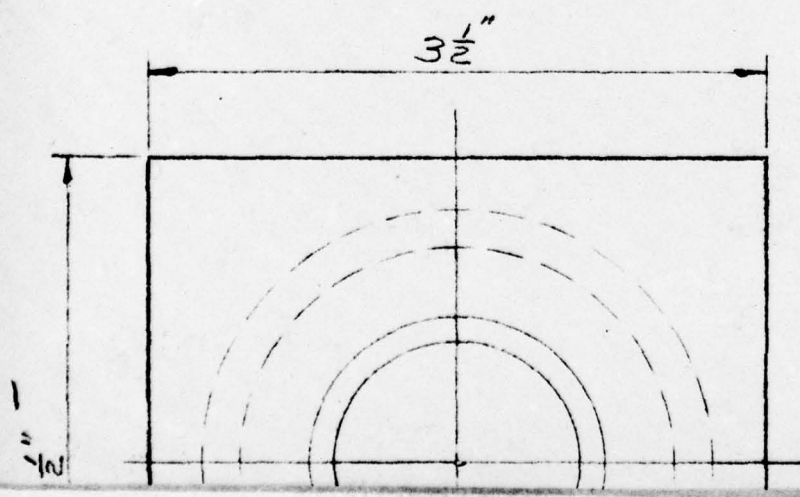
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LE: FULL SCALE

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DR.	CH. LV.	DATE	SHEET NO.	
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JOB NO.	APPROVED			
840F	A. T. Robinson			

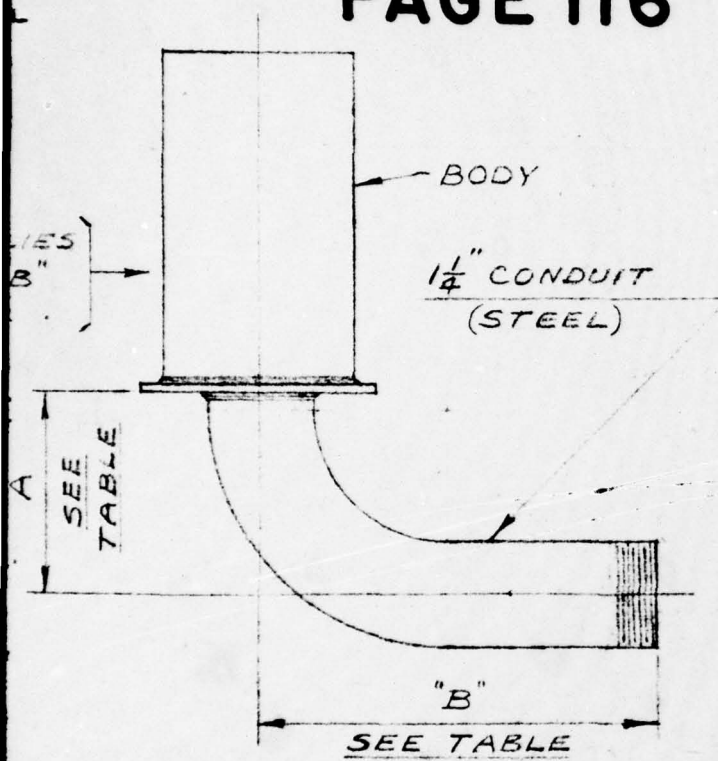
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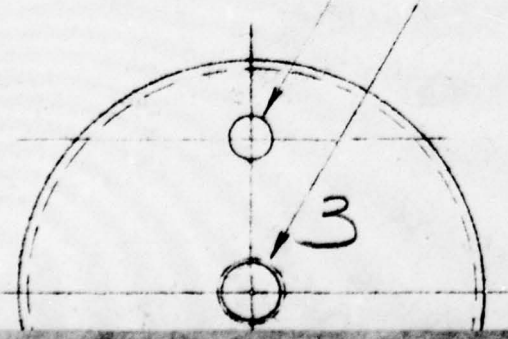




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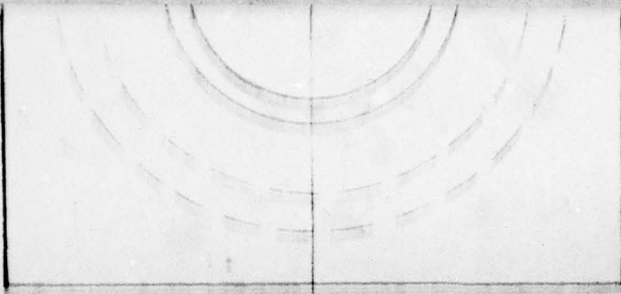


DRILL & TAP FOR  $\frac{3}{8}$ "-16 NC-2  
 $\frac{1}{4}$ " DEEP - 2 PLACES  
 NOT CHAMFER



LET.	DIM. "A"	DIM. "B"
a	8"	
b	4	
c	5	
d	6	
e	<del>7</del>	
f	8	
g	9	
h	10	
i	11	
j	12	
k	13	
l	14	
m	15	
n	16	
o	17	
p	18	
q	3	6"
r	3	12
s	6	6
t	6	12
u	9	6
v	9	12
w	12	6
x	12	12
y	15	6
z	15	12
A	96	CONDUIT

17

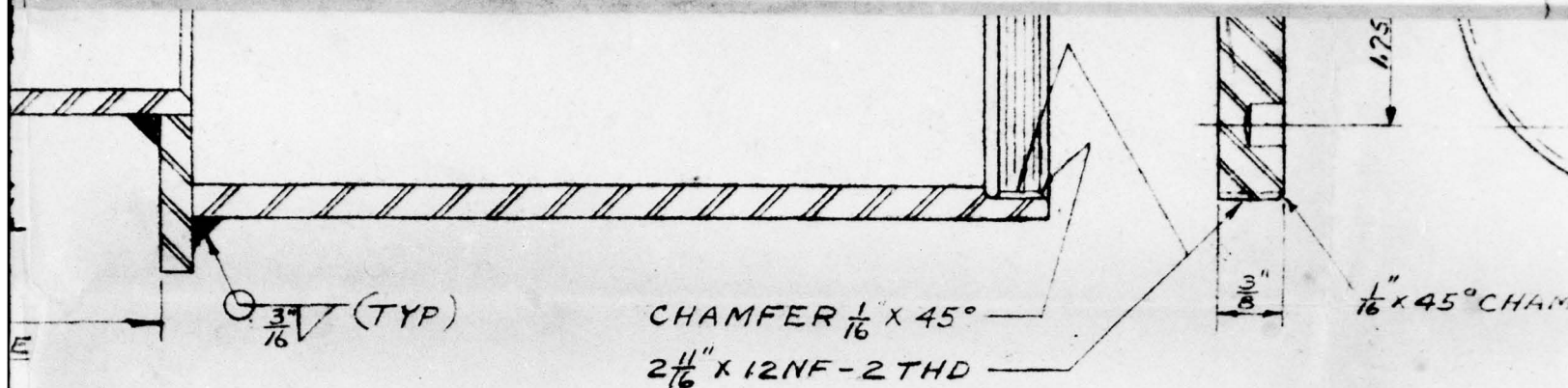


"A"

SEE TABLE

END VIEW

4



CROSS SECTION OF BODY

MATERIAL: SHELBY TUBING - 2 7/8" O.D. x 2.435" I.D.  
 MILD STEEL PLATE (CRS OR HRS)  
 1 7/8" STD. BLACK PIPE

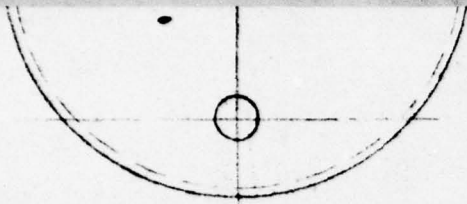
To  
 M

NOTE  
 BREAK SHARP EDGES  
 DECIMAL TOLERANCE ± 0.00  
 FRACTION TOLERANCE ± 1/32  
 PLATE STOCK MAY BE TORCH

S

FIG. A2.85

SCALE: FULL



$\frac{1}{8}$ " x 45° CHAMFER

7677 181

TOP VIEW-PLUG  
MATERIAL: BRASS

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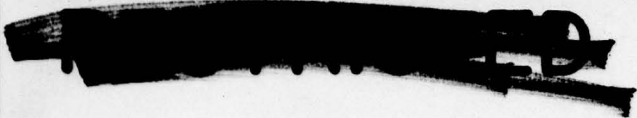
GES  
TOLERANCE  $\pm 0.005$ "  
RADIUS  $\pm \frac{1}{32}$ "  
TO BE TORCH CUT

FOR POURED-IN-PLACE CONCRETE			<b>HOLMES &amp; NARVER</b> INCORPORATED <b>ENGINEERS</b> 824 S. FIGUEROA ST. LOS ANGELES	
REVISIONS				
NO.	DATE	DESCRIPTION	<u>MOUNT</u>  <u>FOR PRESSURE GAGE</u>	
1	3/23/50	CORRECTED NOTATIONS		
	5/6/51	AS BUILT AS SHOWN		
DR HFK.	CH. LV	DATE 3-29-50	SHEET NO. 5006	
JOB NO. 8405	APPROVED <i>[Signature]</i>			

1/2" FULL SCALE

6

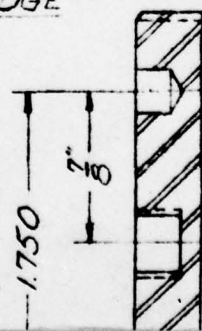
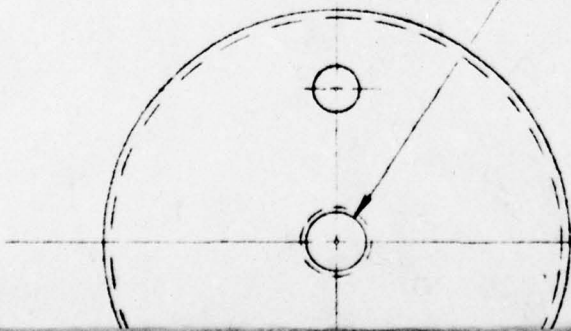
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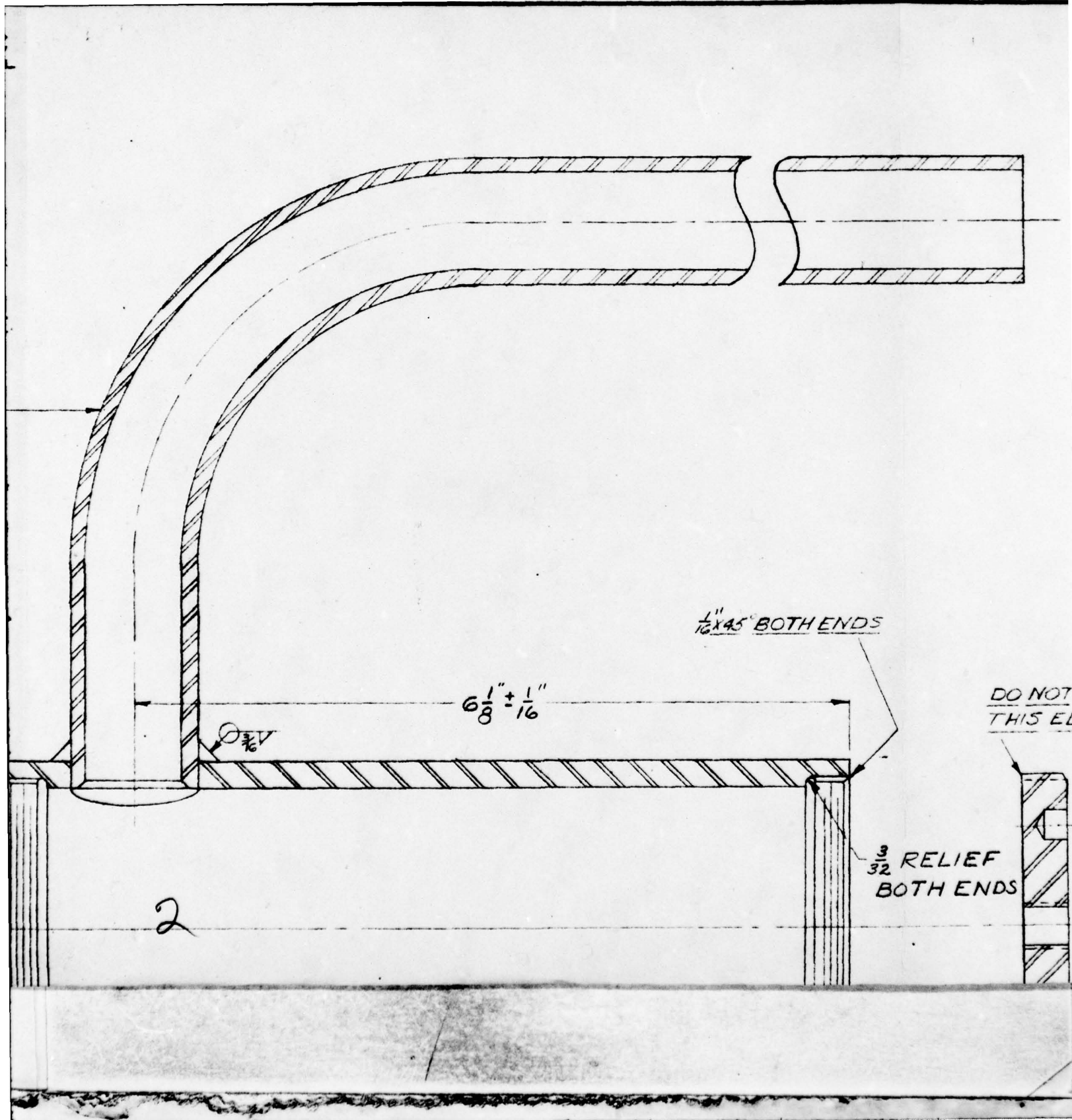


$\frac{3}{4}$ " ELECTRICAL CONDUIT 18" LONG  
TO BE FORMED IN FIELD

BOTTOM TAP  $\frac{3}{8}$ -16 NC-2 THD  
 $\frac{1}{4}$  DEEP

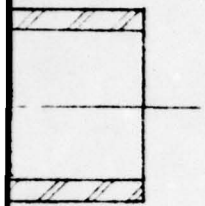
DO NOT CHAMFER THIS  
EDGE





PAGE 117

LET.	DIM.
	A
a	7 $\frac{1}{4}$
b	8
c	9
d	10
e	11
f	12



DO NOT CHAMFER  
THIS EDGE

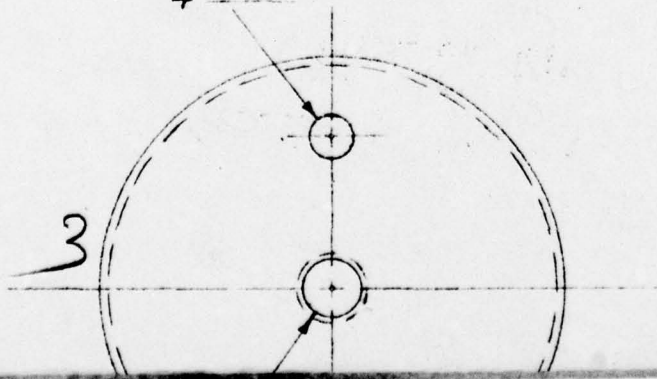
2 HOLES -  $\frac{1}{4}$ " DIA DRILL  
 $\frac{1}{4}$ " DEEP

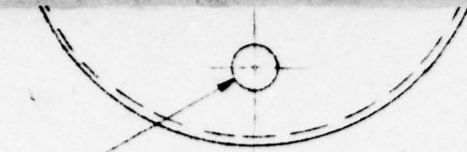
LIEF  
ENDS



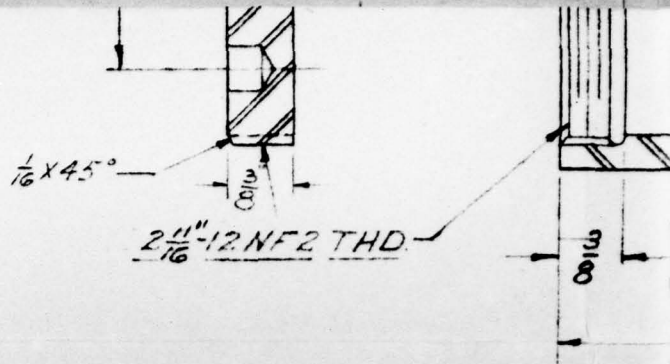
1.750

1.750



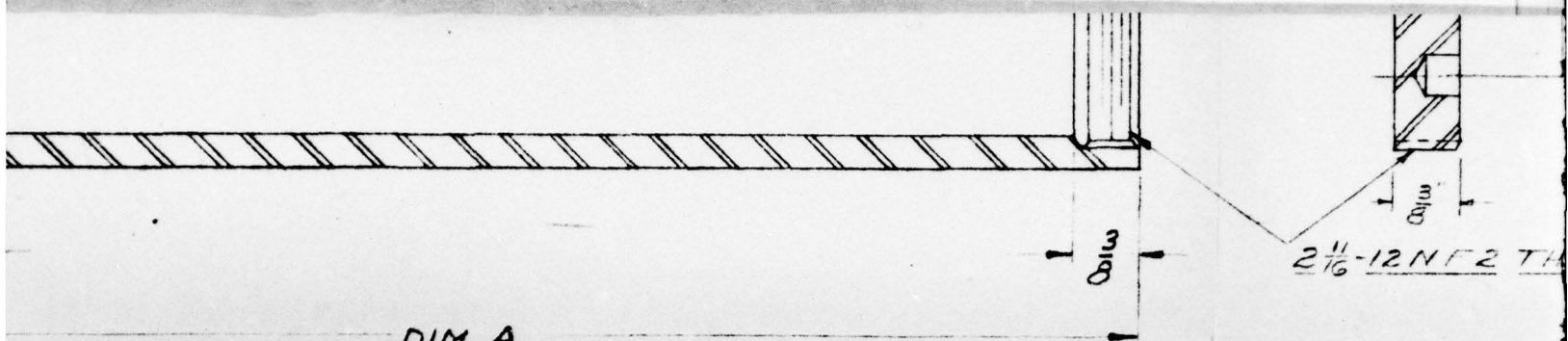


2 HOLES -  $\frac{1}{4}$ " DIA DRILL  
 $\frac{1}{4}$ " DEEP



TOP VIEW LH PLUG  
MATERIAL: BRASS

4



DIM A  
SEE TABLE

CROSS SECTION OF BODY

MATERIAL: SHELBY TUBING 2 7/8" O.D. 2.438" I.D.  
3/4" CONDUIT

NOTE

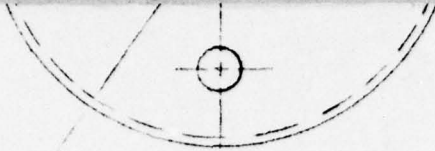
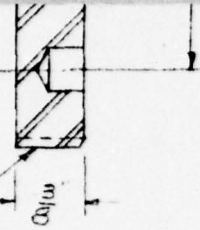
DECIMAL TOLERANCE ± 0.005"

FRACTION TOLERANCE ± 1/32"

SCALE: FULL SCALE

5

**FIG. A2.86**



— DRILL & TAP  $\frac{3}{8}$ " -16 NC-2 THD

1/2"-12 NF 2 THD

TOP VIEW RH PLUG  
MATERIAL: BRASS

~~RESTRICTED~~  
**UNCLASSIFIED**

FOR POURED IN PLACE CONCRETE

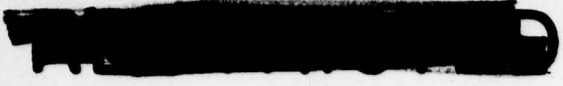
REVISIONS			HOLMES & NARVER INCORPORATED ENGINEERS 824 S. FIGUEROA ST. LOS ANGELES	
NO.	DATE	DESCRIPTION		
1	3/26/57	CORRECTED NOTATIONS	<u>MOUNT</u> <u>FOR PRESSURE GAGE</u>	
	5/6/57	AS BUILT AS SHOWN		
			BY <i>HEK</i>	CH. LV
			JOB NO. 840F	DATE 3-27-50
			APPROVED <i>W.T. Smith</i>	SHEET NO. 5007

005"  
2"

FULL SCALE

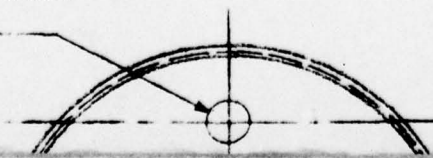
6

UNCLASSIFIED



$\frac{1}{4}$ " DRILL x  $\frac{1}{4}$ " DEEP  
2 PLACES

1



$2\frac{11}{16}$ " - 12 NF - 2 THD  
DO NOT CHAMFER  
CHAMFER  $\frac{1}{16}$  x 45°

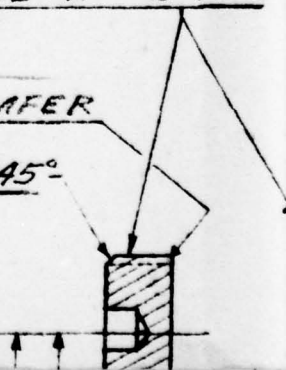
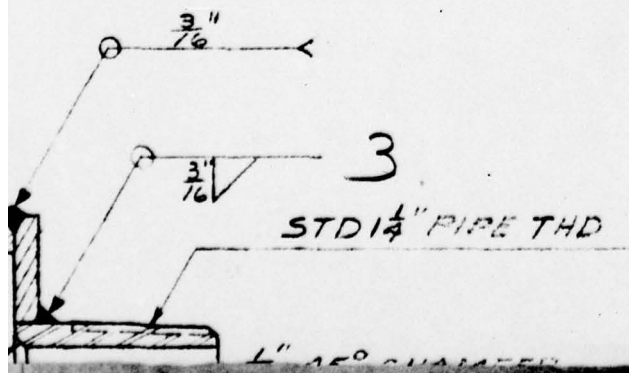
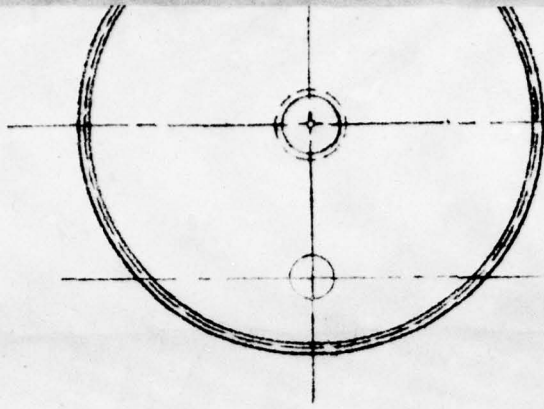




TABLE A

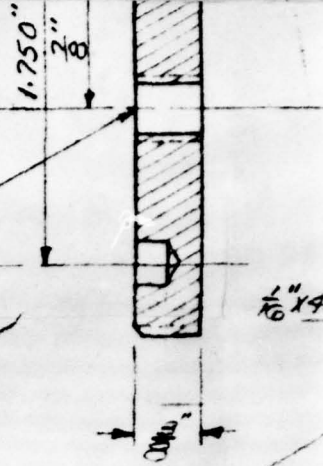
a	$1\frac{1}{4}"$
b	$1\frac{3}{8}"$
c	$1\frac{1}{2}"$
d	$1\frac{3}{4}"$
e	2"
f	
g	
h	





TOP VIEW OF PLUG  
MATERIAL - BRASS

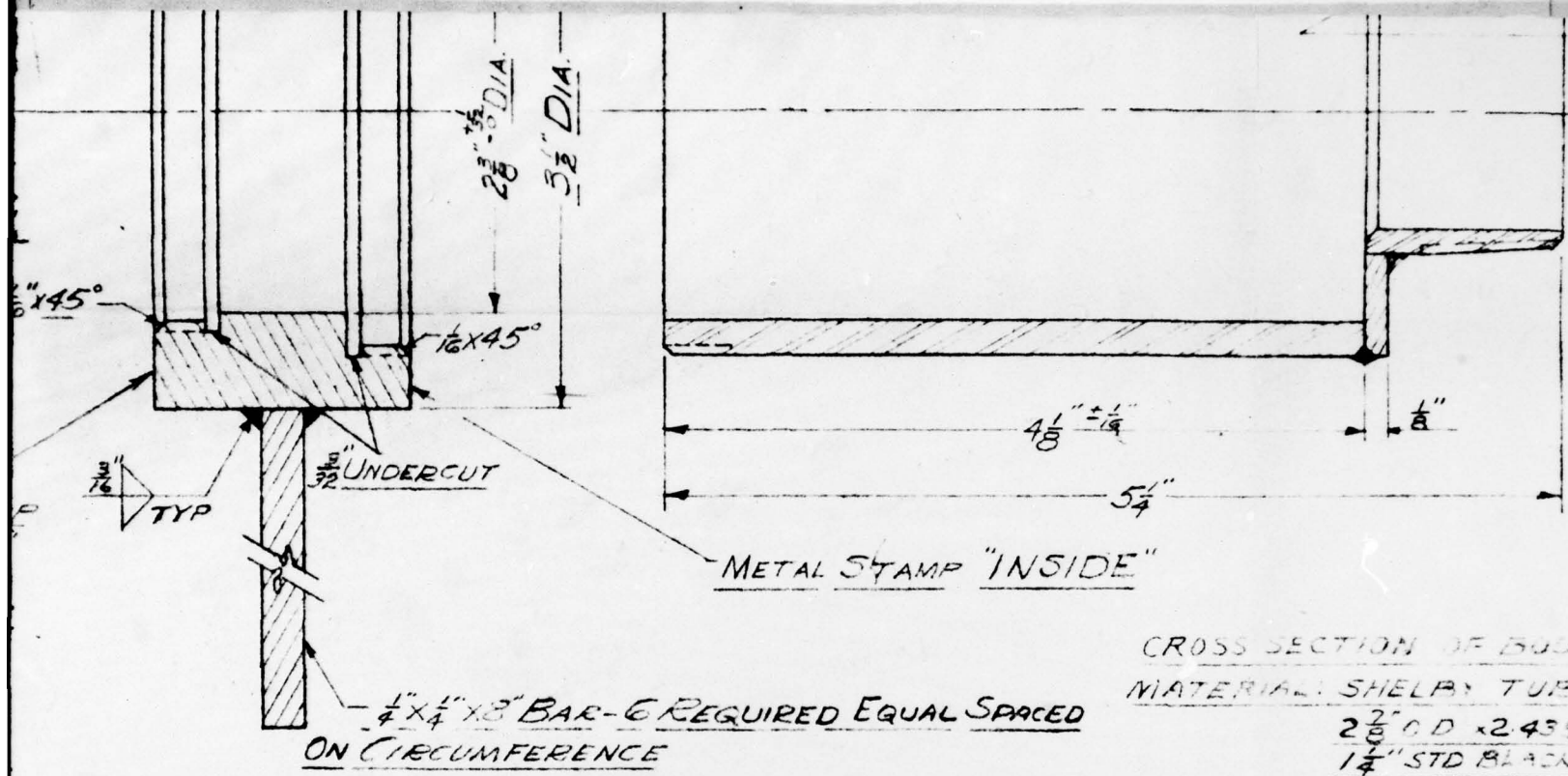
DRILL & TAP FOR  
STD.  $\frac{3}{8}$ " 16 N.C. T.H.D  
CLASS 2



METAL STAMP  
"OUTSIDE"

MATERIAL

I



CROSS SECTION OF BUSH  
 MATERIAL: SHELF: TYP  
 2 3/8" O.D. x 2.43"  
 1 1/4" STD BLACK  
 2 7/8" φ x 1/8" ANLD

1/4" x 1/4" x 8" BAR-6 REQUIRED EQUAL SPACED  
 ON CIRCUMFERENCE

RETAINER RING

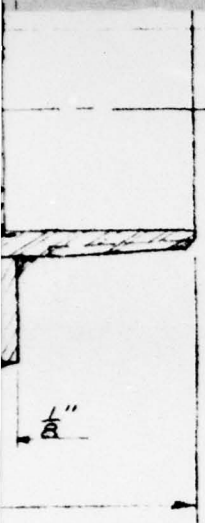
MATERIAL: 3 1/2" φ COLD ROLL BAR STOCK  
 1/4" x 1/4" MILD STEEL BAR STOCK (CBS OR H.P.S.)

NOTE  
 BREAK ALL SHARP EDGES  
 DECIMAL TOLERANCES ± 0.005"  
 FRACTION TOLERANCES ± 1/32"  
 PLATE MAY BE TORCH CUT

5

FIG. A2.87

10570



ON OF BOOT  
HELPER TUBING  
2" O.D. x 2.439" I.D.  
1/2" STD BLACK PIPE  
1/8" φ x 1/8" ANLD STEEL PL. (CRS OR H.P.S.)

~~RESTRICTED~~

SCALE: FULL SCALE

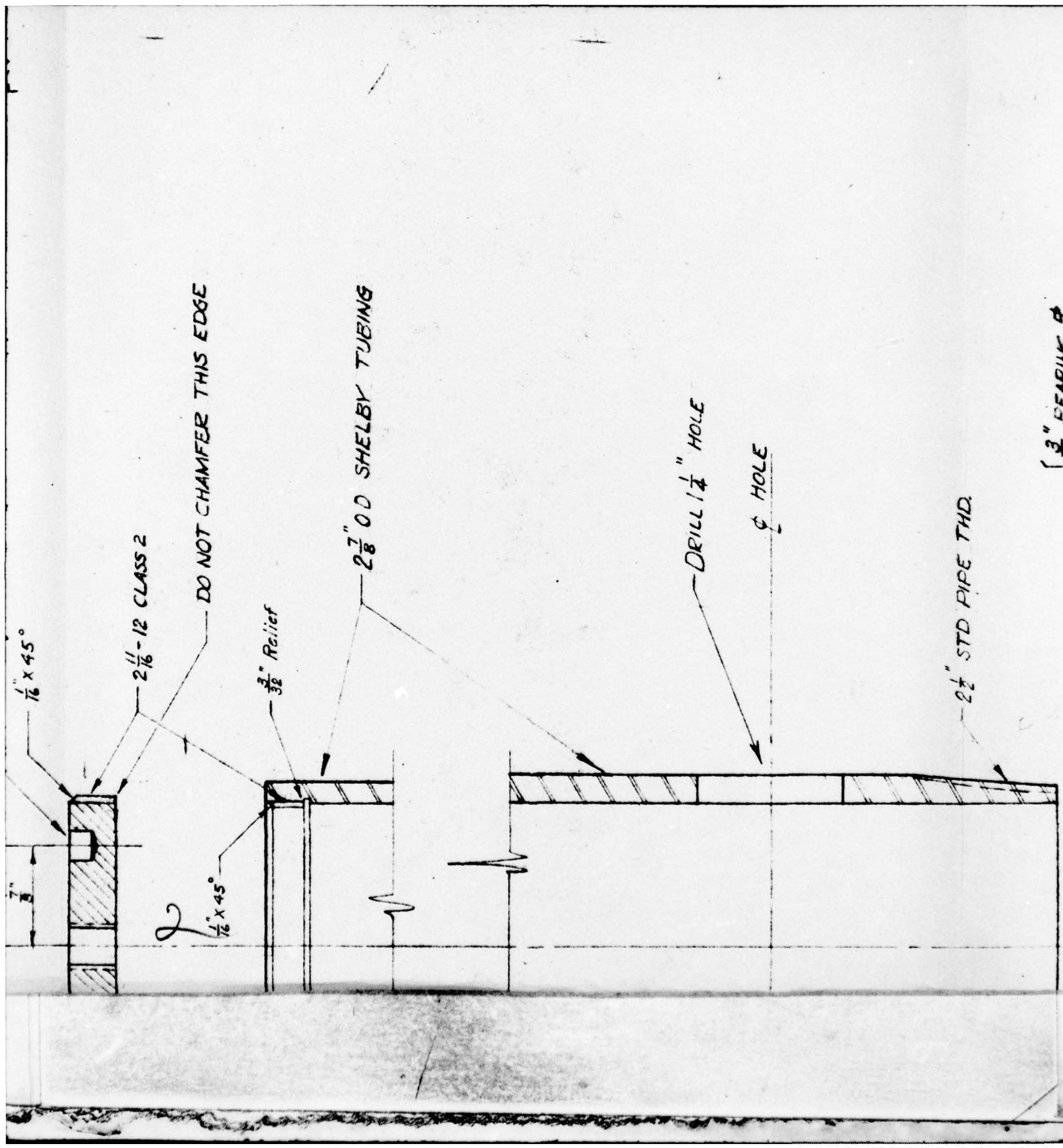
UNCLASSIFIED

EDGES  
± 0.005"  
± 1/32"  
H CUT

<p>FORTHIN PANELS &amp; SLABS</p>			<p>HOLMES &amp; HARVER INCORPORATED ENGINEERS 824 S. FIGUEROA ST. LOS ANGELES</p>	
<p>REVISIONS</p>			<p>MOUNT FOR PRESSURE GAUGE</p>	
NO.	DATE	DESCRIPTION	DR.	CH. LV.
1	3/21/50	CORRECTED NOTATIONS	LAGNER	DATE
	5/6/50	AS BUILT AS SHOWN		3-21-50
			JOB NO.	APPROVED:
			840F	[Signature]
				SHEET NO.
				5008

6

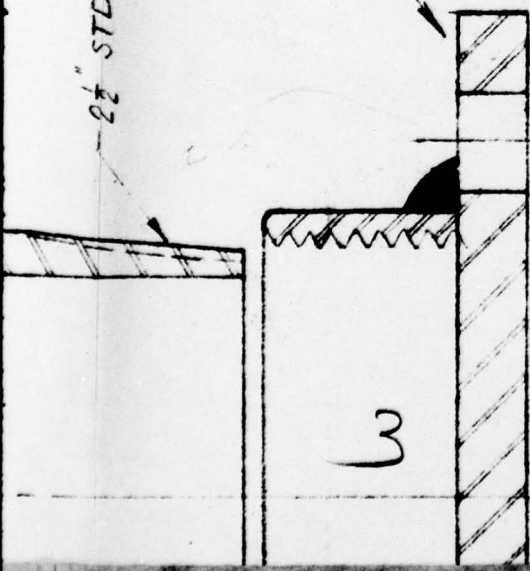


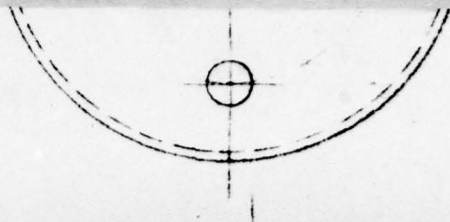


$\frac{3}{8}$ " BEARING PL  
SEE PART NO 5009 Sheet 2.

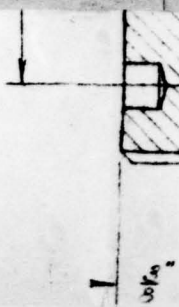
A	PART NO.
3'-6"	5009
6'-0"	5009 A

2 1/2" STD PIPE THD.



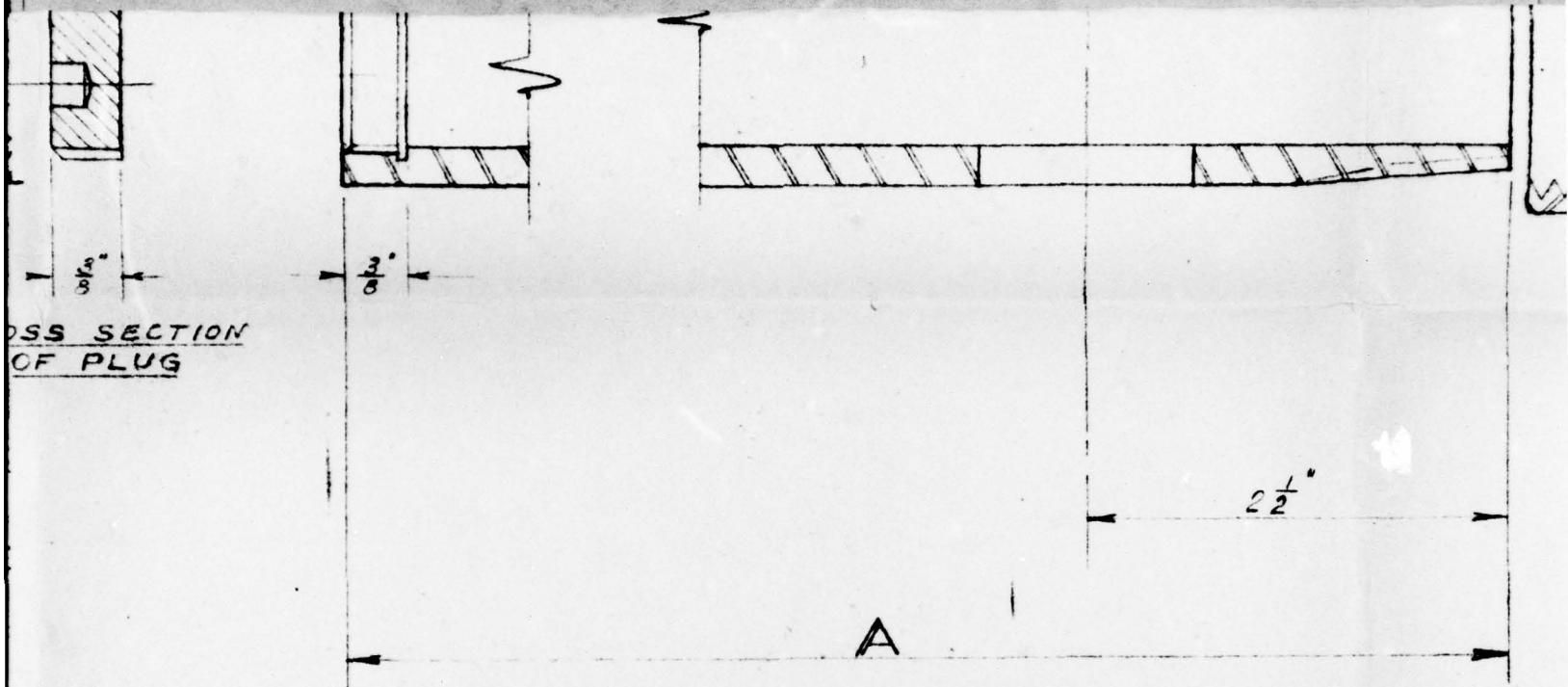


TOP VIEW OF PLUG  
MATERIAL: BRASS



CROSS S  
OF PL

4



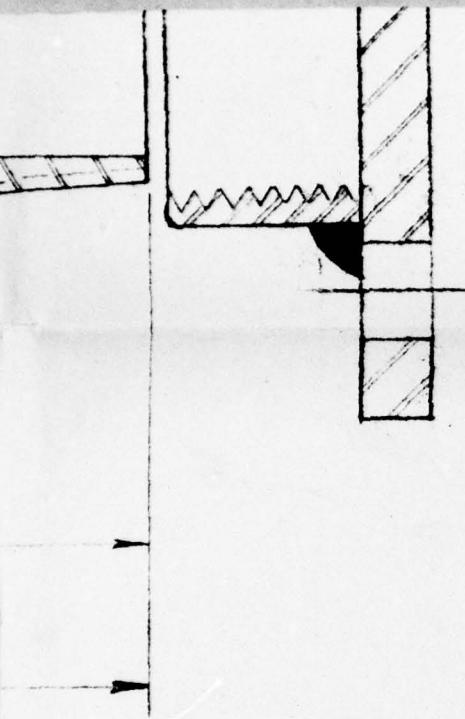
CROSS SECTION  
OF PLUG

CROSS SECTION OF BODY  
MATERIAL: SHELBY TUBING 2 7/8" O.D. - 2.438" I.D.

NOTES  
DECIMAL TOLERANCE ±0.00  
FRACTIONAL TOLERANCE

5

FIG. A2.88



UNCLASSIFIED

~~RESTRICTED~~

SCALE: FULL SCALE

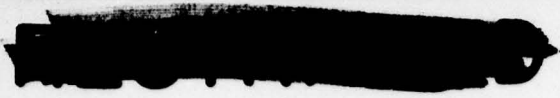
TOLERANCE  $\pm 0.005"$   
TOLERANCE  $\pm 1/32"$

FOR FREESTANDING INTERIOR PRESSURE

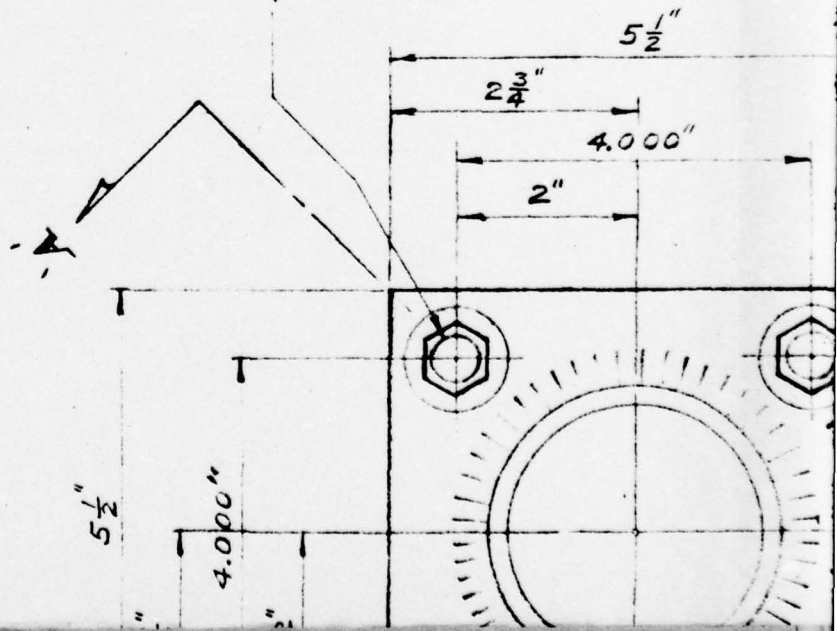
REVISIONS			HOLMES & NARVER INCORPORATED ENGINEERS 824 S. FIGUEROA ST. LOS ANGELES		
NO.	DATE	DESCRIPTION			
1	3/27/51	CORRECTED NOTATIONS	<u>MOUNT</u> FOR PRESSURE GAUGE		
	5/6/51	AS BUILT AS SHOWN			
DR.	CH.	DATE	SHEET NO.		
<i>[Signature]</i>	LV	3-28-50	5009		
JOB NO.	APPROVED			SHEET 1	
840F	<i>[Signature]</i>				

6

UNCLASSIFIED



4 HOLES:  $\frac{9}{16}$ " DIA DRILL THROUGH

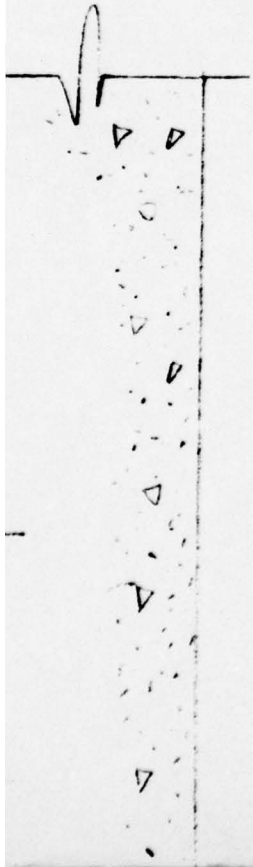




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SECTION A-A

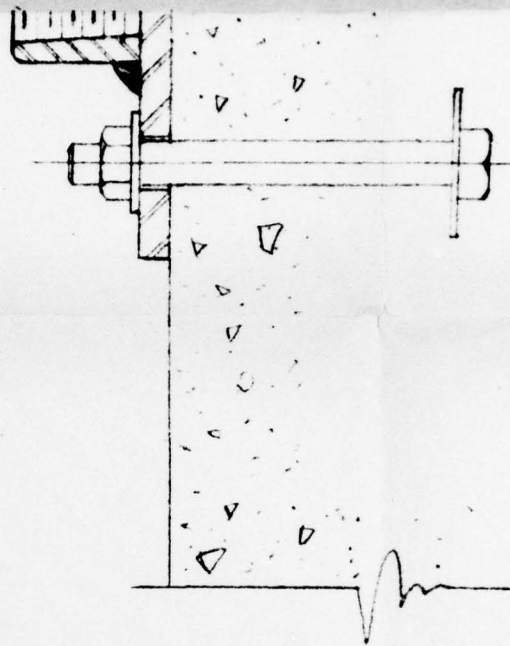
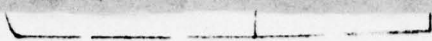
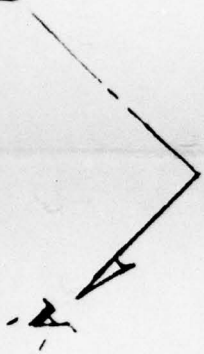
30



2



4



## BEARING PLATE

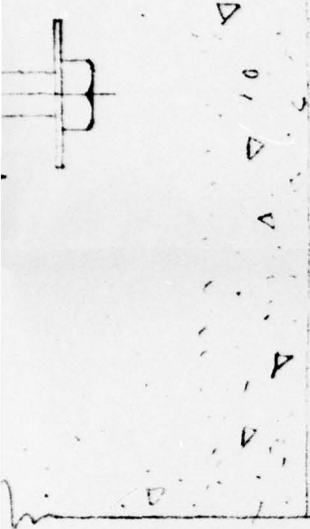
### MATERIAL:

BASE PLATE - MILD STEEL (CPS OR HCS)  
COUPLING - BLACK MALLEABLE

5

**FIG. A2.89**

SEC



Notes

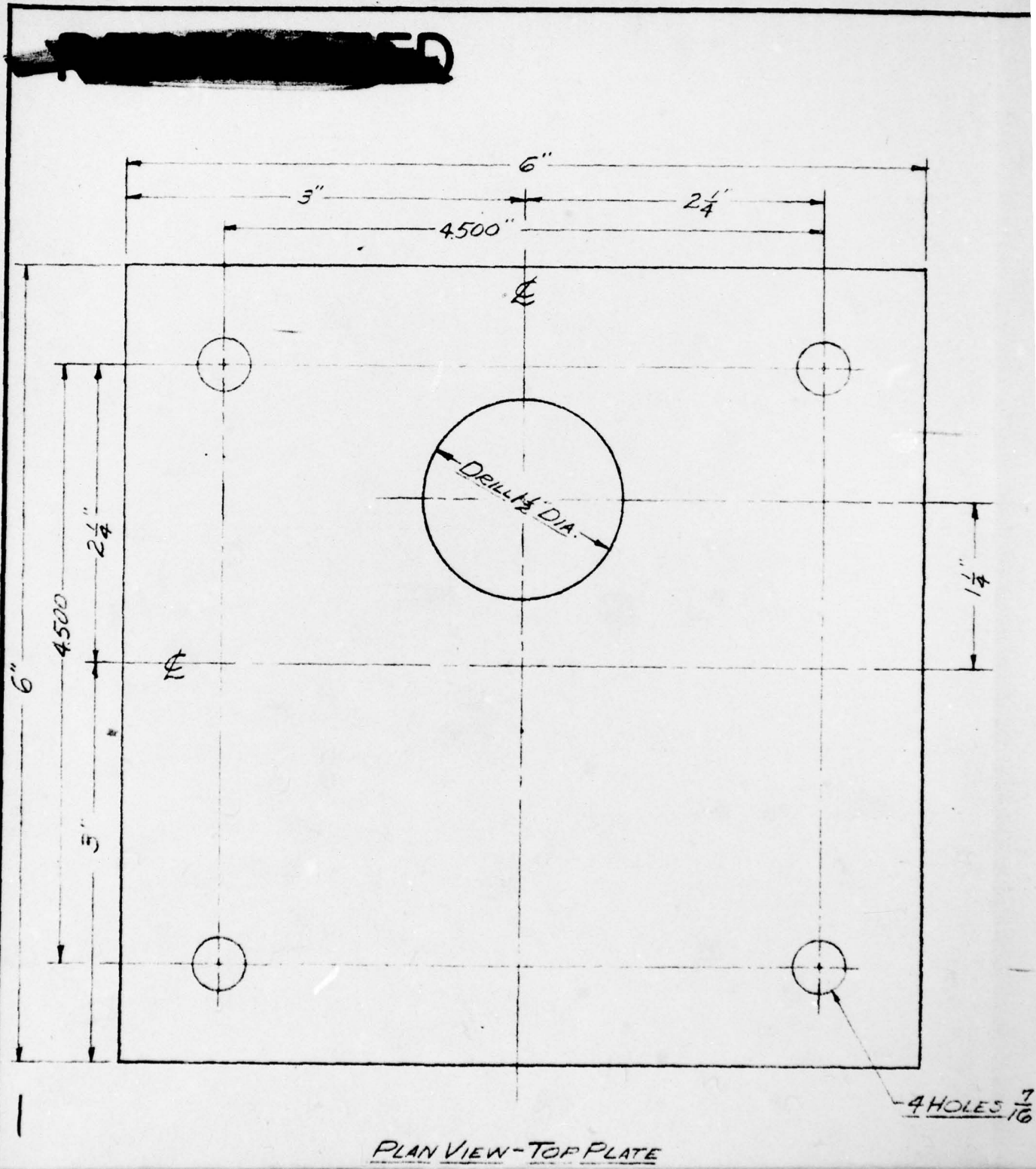
DECIMAL TOLERANCE  $\pm 0.005$ "  
FRACTIONAL TOLERANCE  $\pm 1/32$ "

~~RESTRICTED~~  
SCALE :  $1/2$ " = 1" UNCLASSIFIED

<u>FOR FREESTANDING INTERICE PRESSURE</u>			
<b>REVISIONS</b>			<b>HOLMES &amp; NARVER INCORPORATED ENGINEERS</b> 824 S. FIGUEROA ST. LOS ANGELES
NO.	DATE	DESCRIPTION	
1	3/22/50	CORRECTED NOTATIONS	<u>MOUNT</u> <u>FOR PRESSURE GAUGE</u>
	6/14/50	AS BUILT AS SHOWN	
DR.	CH.	DATE	SHEET NO.
30	V	3-28-50	5009
JOB NO.	APPROVED		SHEET 2
840 F	<i>[Signature]</i>		

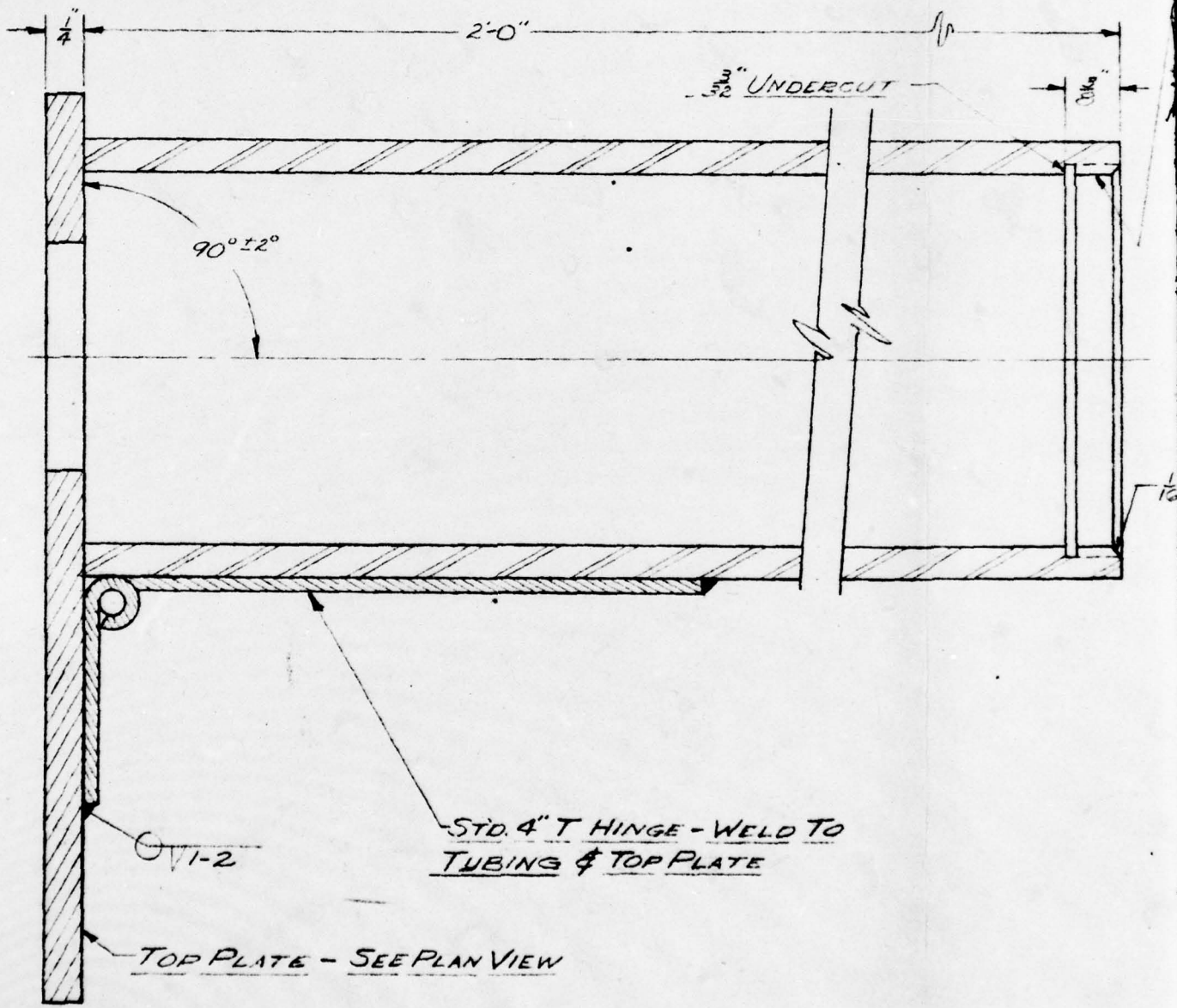
6

UNCLASSIFIED



PLAN VIEW-TOP PLATE

$2\frac{1}{8}$ "-12 NF2 THD



$90^\circ \pm 2^\circ$

$\frac{3}{32}$ " UNDERCUT

STD. 4" T HINGE - WELD TO TUBING & TOP PLATE

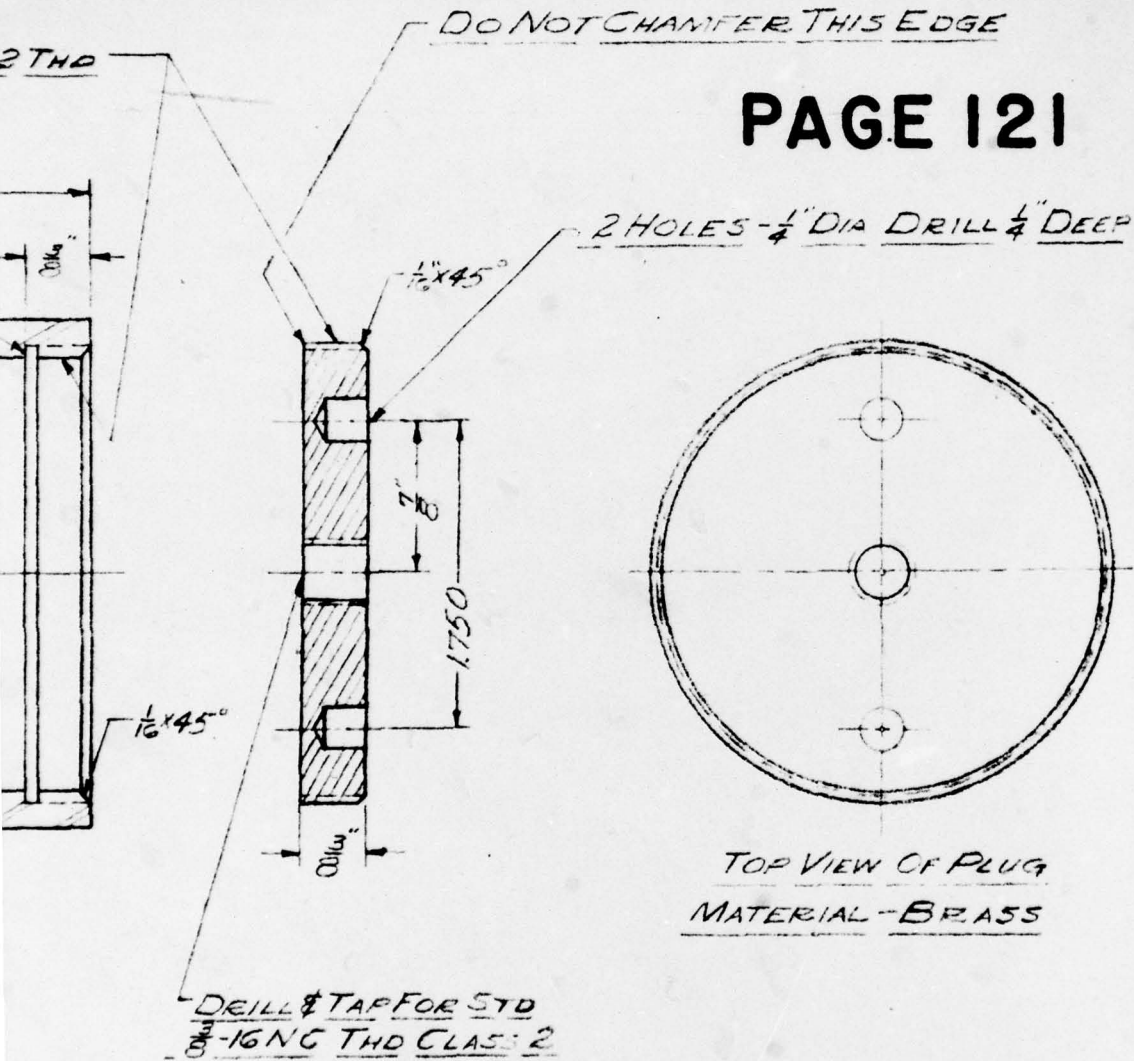
TOP PLATE - SEE PLAN VIEW

2  
" DIA DRILL

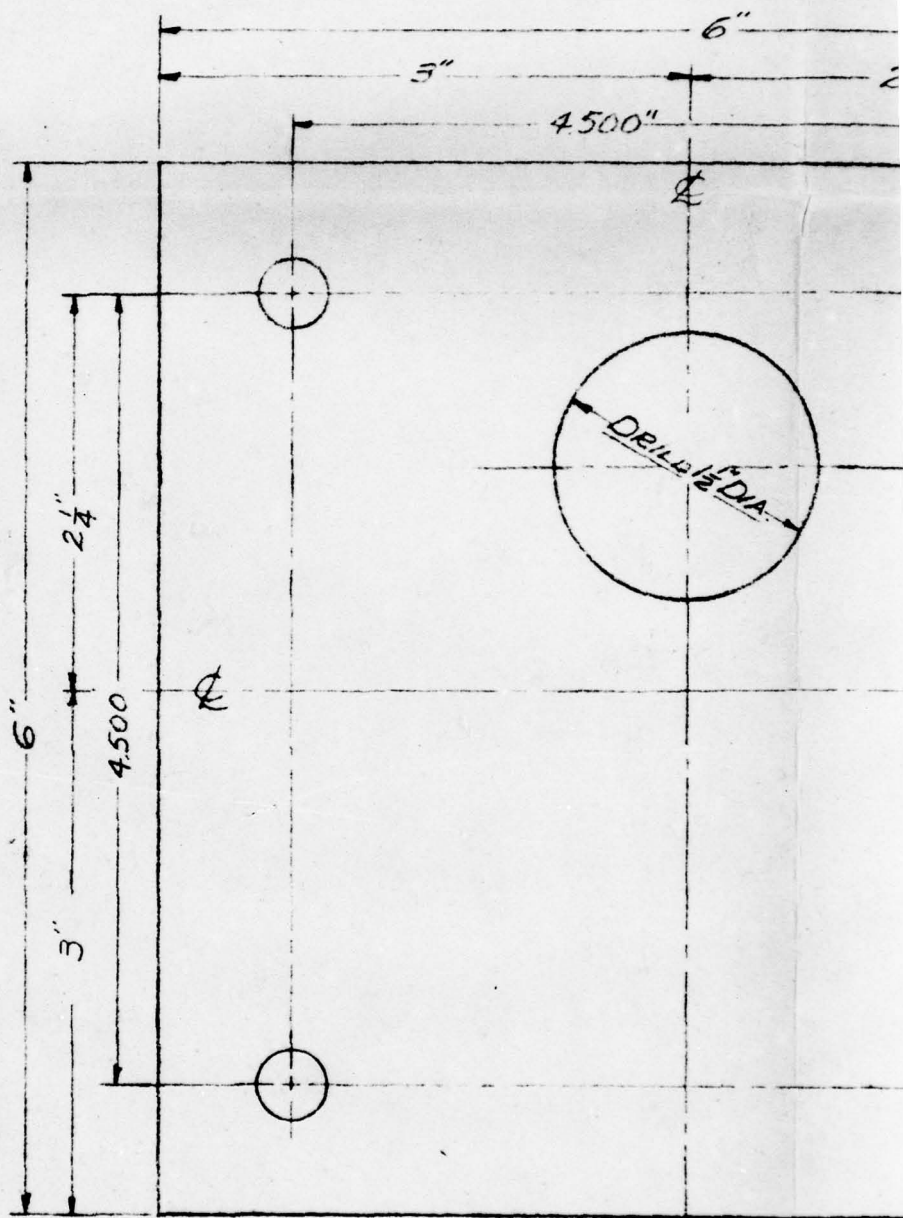
CROSS SECTION OF BODY

MATERIAL: SAE 1018 STEEL

PAGE 121



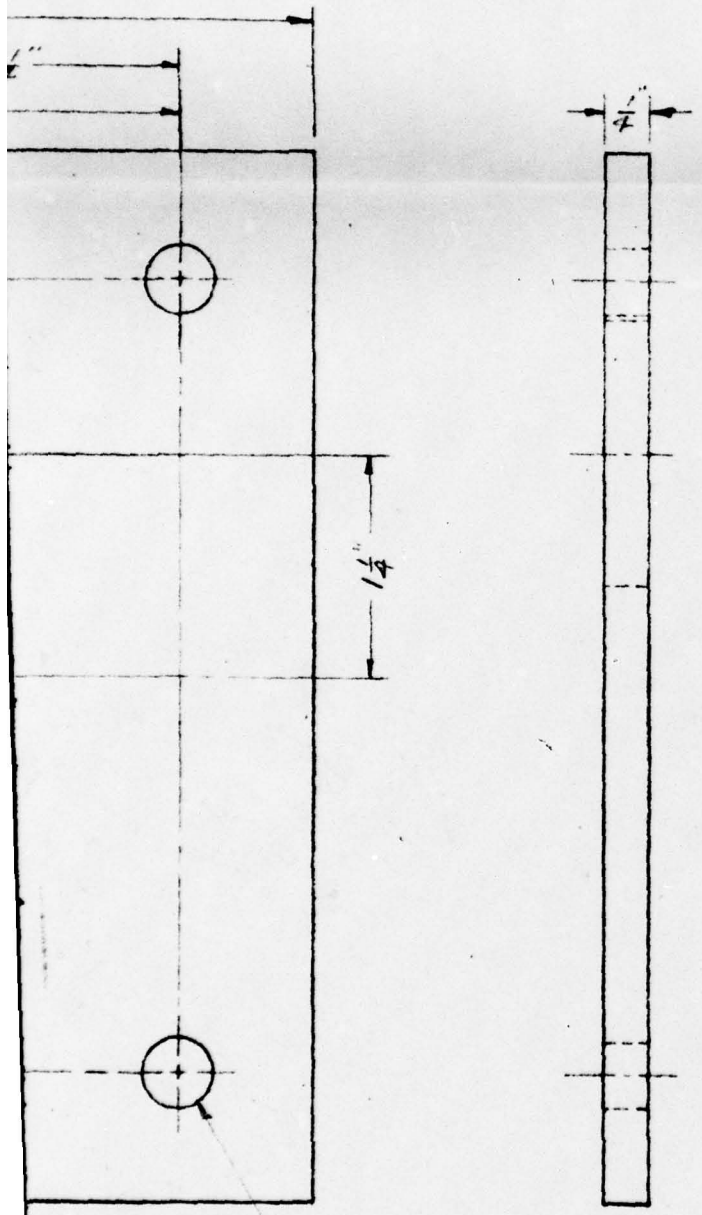
3



4

INSIDE PLATE  
 MATERIAL - MILD STEEL

STEEL HINGE  
MILD STEEL PLATE (CRS OR HRS)



NOTE:  
DECIMAL TOLERANCE ± 0.005"  
FRACTION TOLERANCE ± 1/32"  
PLATE STOCK MAY BE TOUGH CUT

5 HOLES  $\frac{7}{16}$  DIA DRILL  
(CRS OR HRS)

**FIG. A2.90**

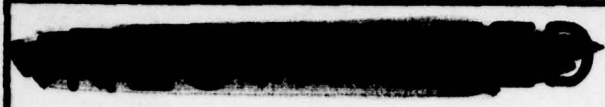
UNCLASSIFIED  
~~RESTRICTED~~

SCALE: FULL SCALE

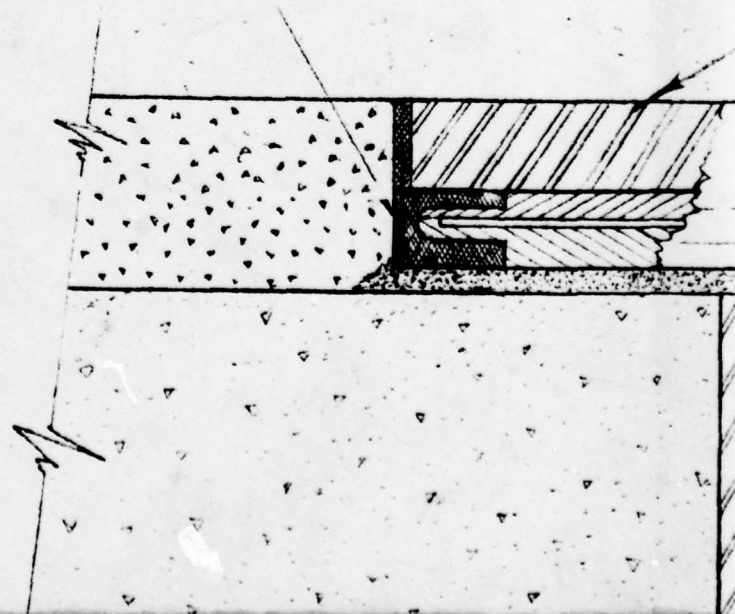
FOR AIR PRESSURE ABOVE EARTH  
COVERED STRUCTURES

REVISIONS			HOLMES & NARVER INCORPORATED ENGINEERS			
NO.	DATE	DESCRIPTION	824 S. FIGUEROA ST. LOS ANGELES			
1	3/22/50	CORRECTED NOTATIONS	<u>MOUNT</u> FOR PRESSURE GAUGE			
	5/16/51	AS BUILT AS SHOWN				
		6	DR. TIGNER	CH. & V.	DATE 3-22-50	SHEET NO.
			JOB NO. 840F	APPROVED W. J. Ball		5010

UNCLASSIFIED

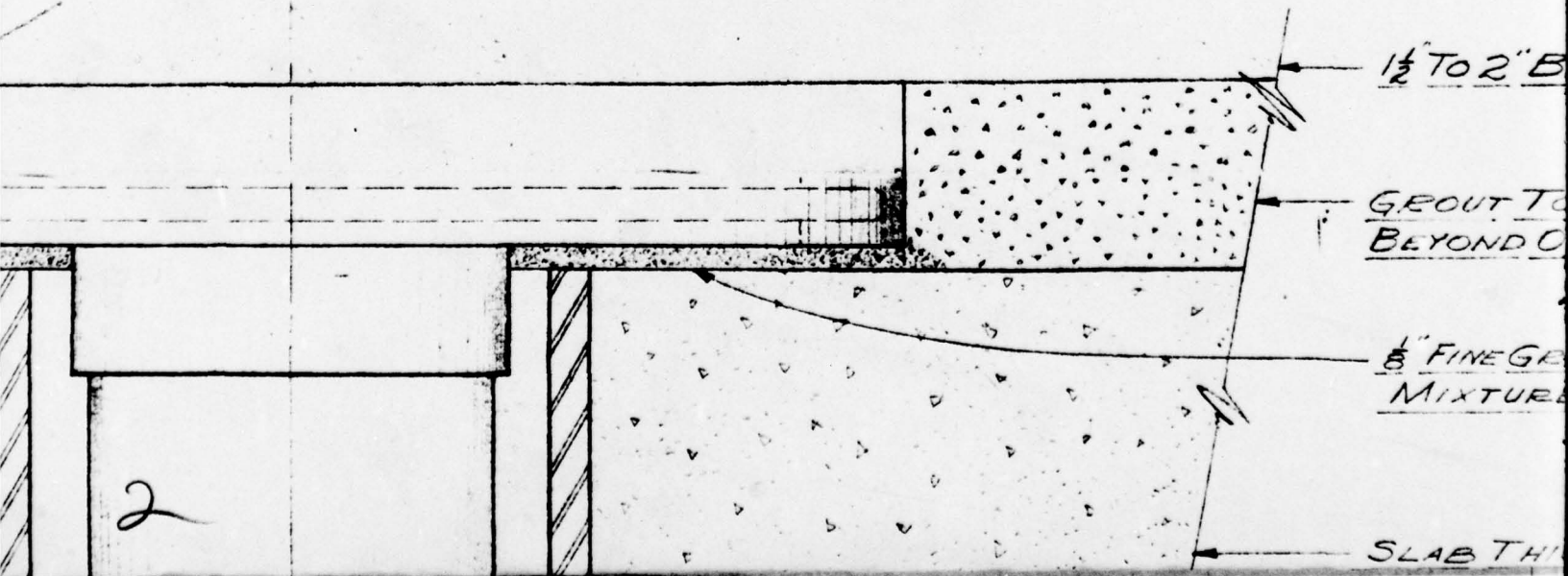


FLANNEL PACKING WITH  
ON EDGE OF DIAPHRAGM



TAPE COVERING  
AS SHOWN

STEEL PLATE - 8 INCH DIA \* 1/2 INCH THICK



PAGE 122

1½" TO 2" BED OF SAND

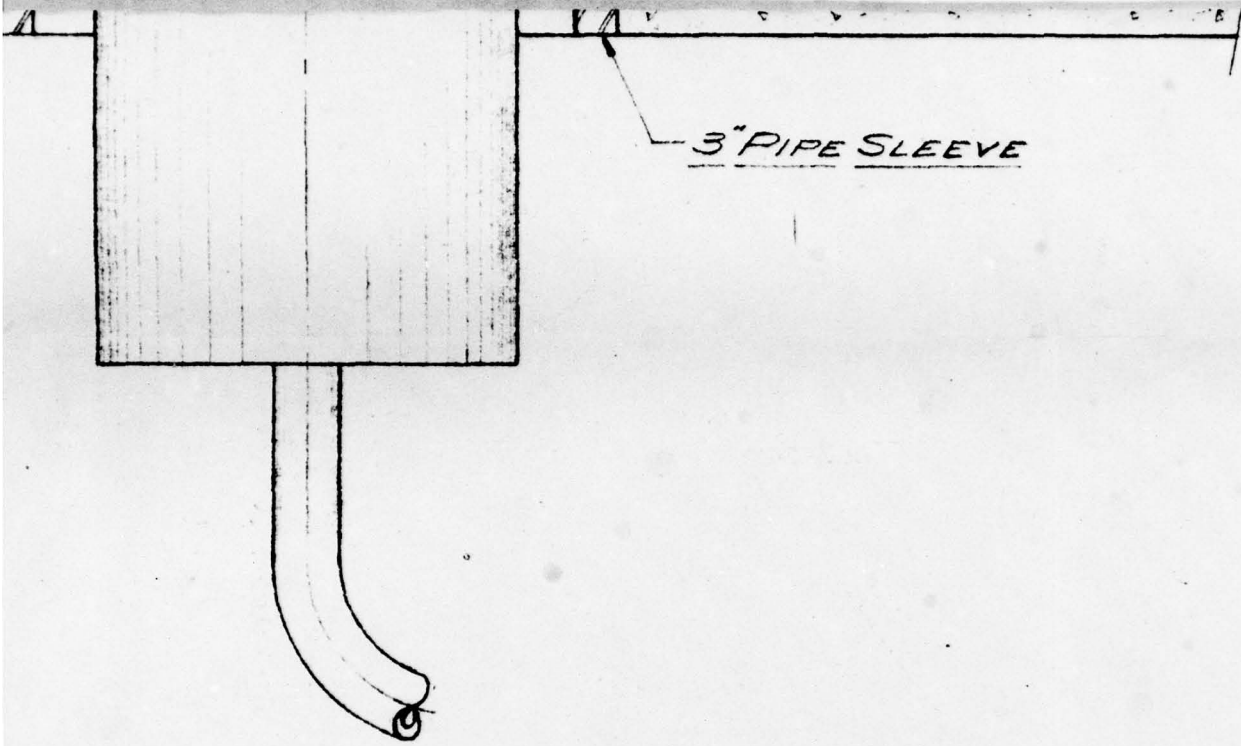
GROUT TO EXTEND NOT LESS THAN 1'-0"  
BEYOND OUTSIDE EDGE OF DIAPHRAGM

½" FINE GROUT - AGGREGATE TO PASS 30 MESH  
MIXTURE OF 1 TO 1½ BY VOLUME

3

SLAB THICKNESS VARIES

4



5

**FIG. A2.91**

~~RESTRICTED~~

UNCLASSIFIED

SCALE : FULL SCALE

FOR THIN PANELS & SLABS

REVISIONS			HOLMES & NARVER INCORPORATED ENGINEERS 824 S. FIGUEROA ST. LOS ANGELES	
NO.	DATE	DESCRIPTION	<u>MOUNT</u> <u>FOR</u> <u>EARTH PRESSURE</u> <u>GAUGE</u>	
1	3/23/51	CORRECTED NOTATIONS		
2	5/9/51	GENERAL REVISION AC BUILT AS SHOWN		
DR.	CH. LV	DATE	SHEET NO.	
T. B. W. H.		7-4-50	5011	
JOB NO.	APPROVED			
890F				

6.

UNCLASSIFIED

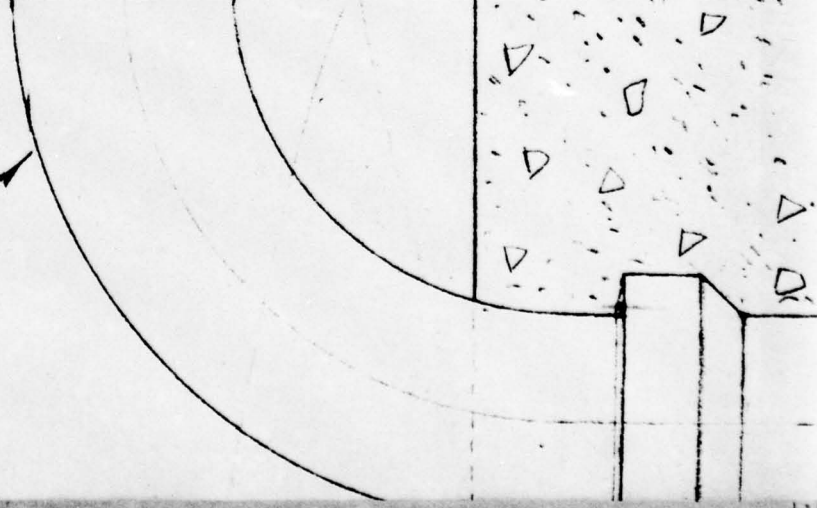
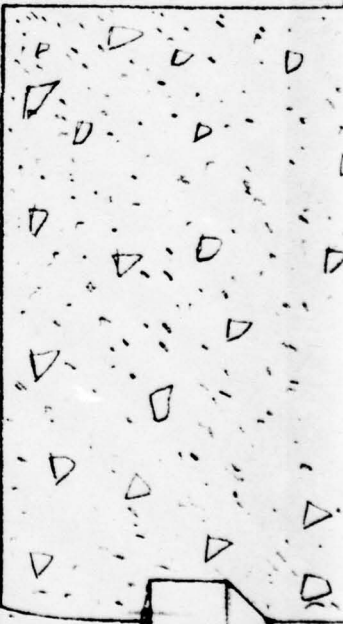
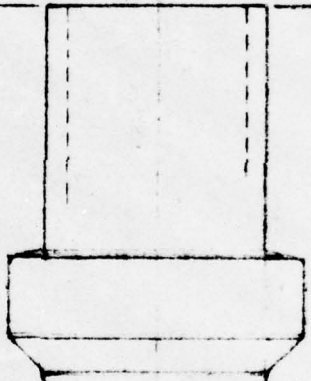


TOP SET FLUSH WITH TOP OF  
EARTH, SLAB, OR PANEL FLOOR

8"

VAN

INSIDE



OF INSIDE  
LOOR

VARIES

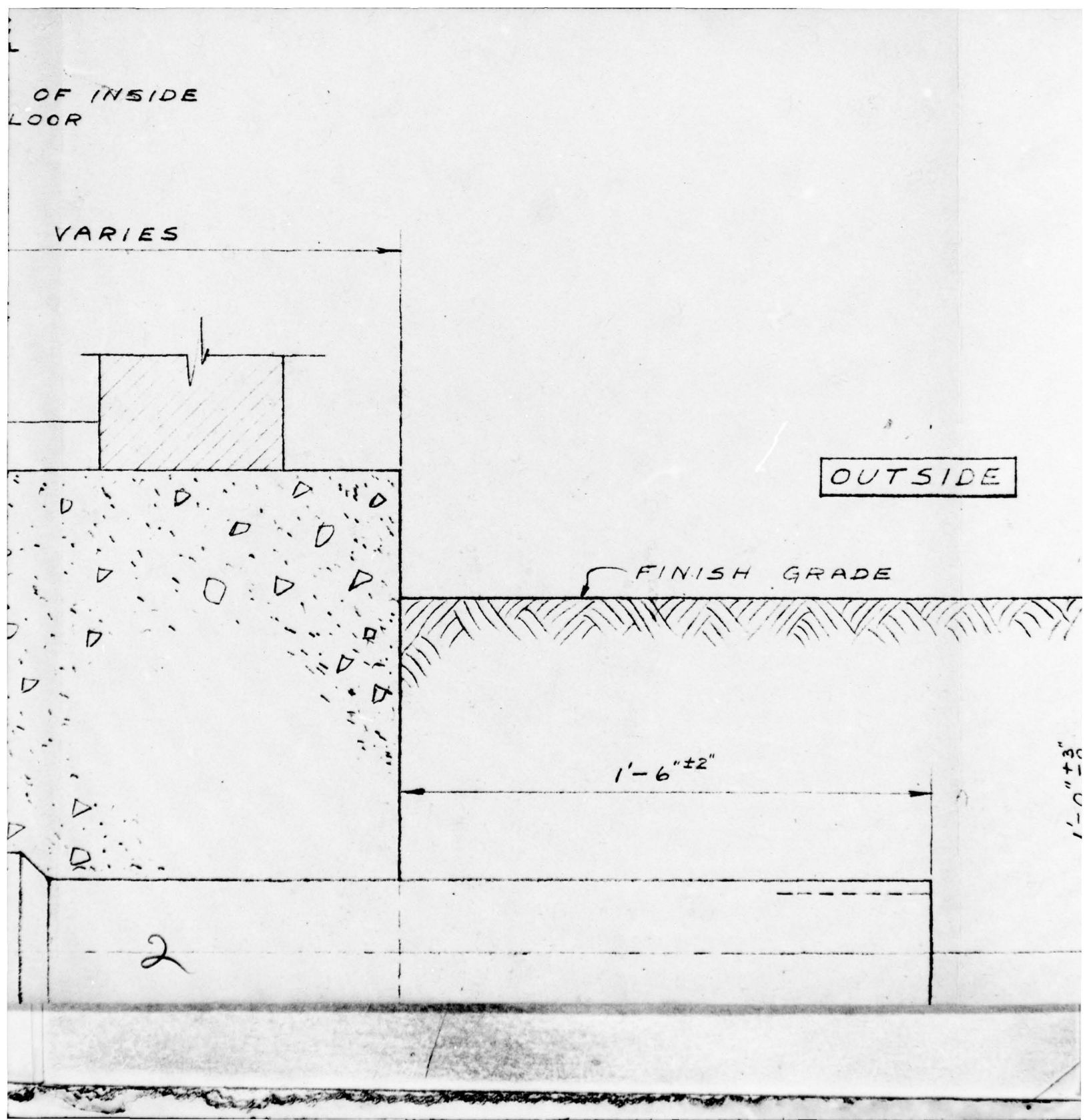
OUTSIDE

FINISH GRADE

1'-6" ± 2"

2

1'-0" ± 1"

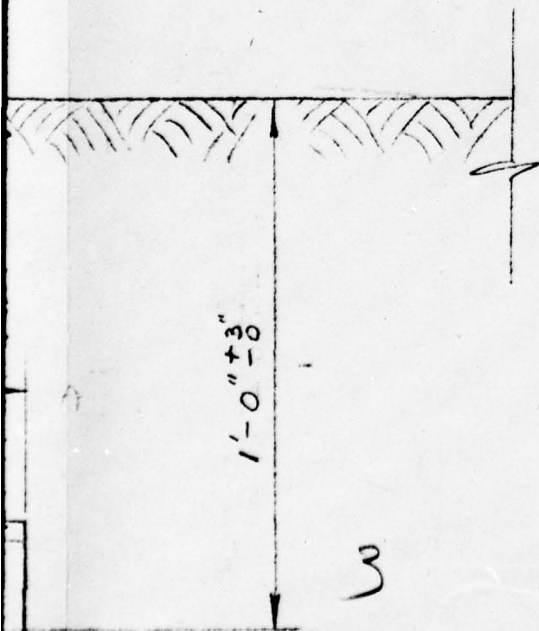


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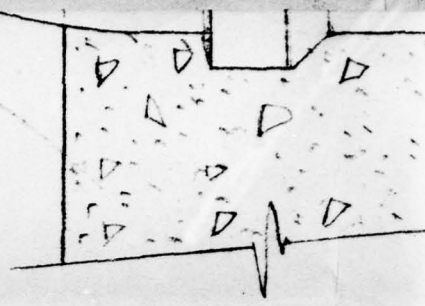
SIDE

1'-0" ± 3"

3

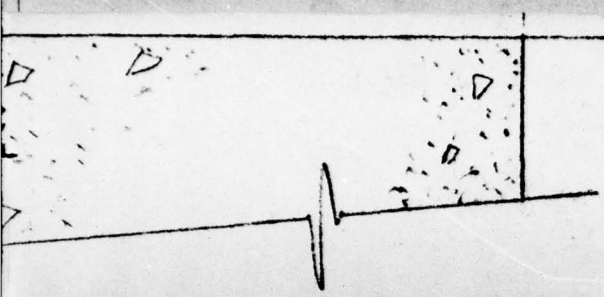


4" PIPE. (STEEL PIPE, CAST  
IRON, CONDUIT, CLAY TILE,  
OR TRANSITE MAY BE USED)  
TO BE FABRICATED IN THE FIELD



TYPICAL

4



NOTE  
ADAPT PIPE TO SUIT  
EACH FOOTING

CAL FOOTING

S-

**FIG. A2.92**

UNCLASSIFIED

~~RESTRICTED~~

SCALE: 3"=1'-0"

FOR ALL BLDGS 3.2: SERIES

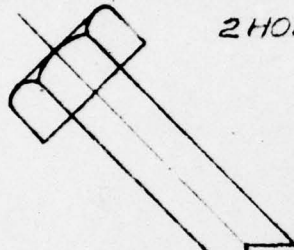
REVISIONS			HOLMES & NARVER INCORPORATED ENGINEERS 824 S. FIGUEROA ST. LOS ANGELES	
NO.	DATE	DESCRIPTION		
1	3/23/50	CORRECTED NOTATIONS	CABLE ENTRANCE SLEEVE	
	5/6/51	AS BUILT AS SHOWN		
DR.	CH. LV	DATE	SHEET NO.	
J.F.E.		3-27-50	5012	
JOB NO.	APPROVED			
B40F				

6

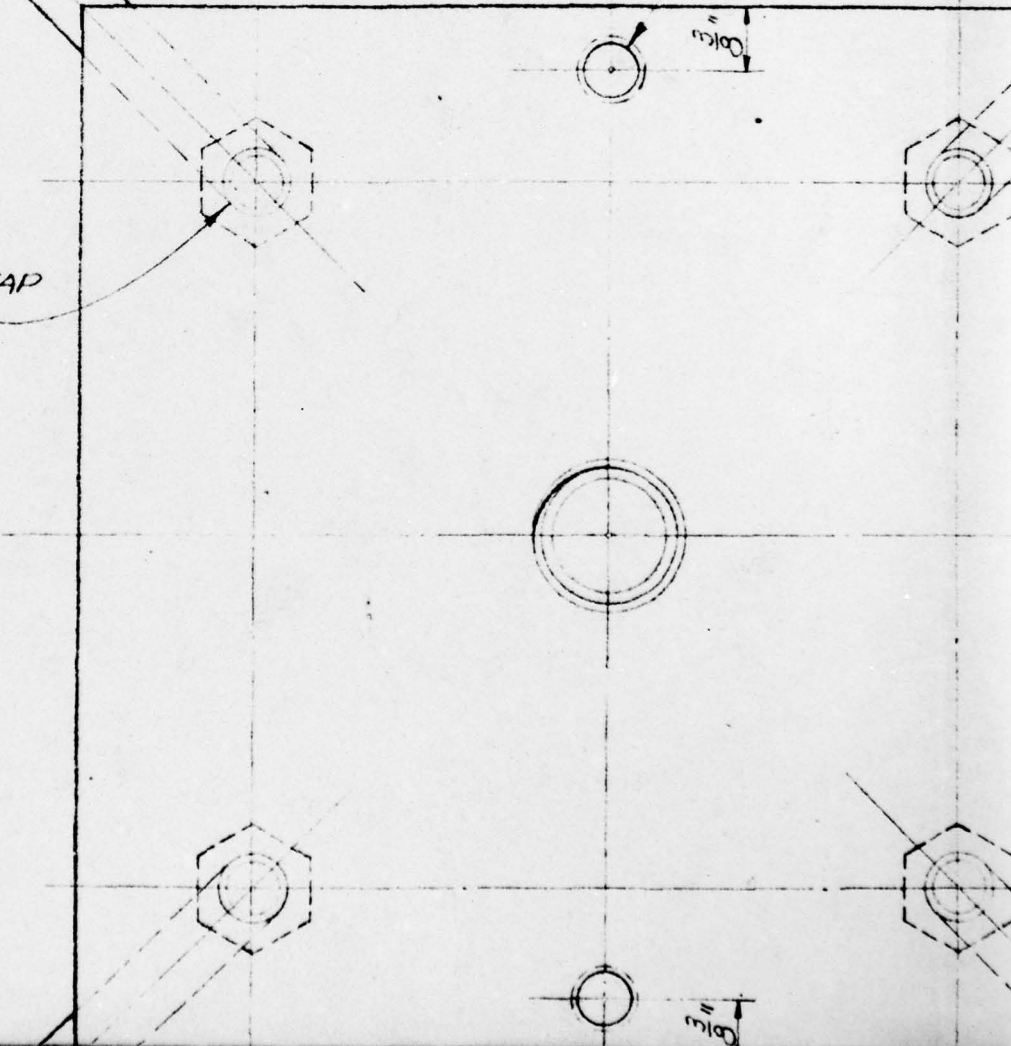
UNCLASSIFIED



2 HOLES - DRILL  $\frac{1}{8}$ " TAP  $\frac{3}{8}$ "-16 NC-2



4 HOLES - DRILL  $\frac{1}{8}$ " TAP  
 $\frac{3}{8}$ "-16-NC-2



NOTE: ALL MOUNTS THIS TYPE  
MODIFIED IN THE FIELD  
TO PROVIDE 1 1/2" PIPE NIPPLE

45° WHERE PRACTICAL

1/2" STD PIPE THD  
PROVIDE 1/2" STD PIPE  
CAP

3/16"

4.000"

6"

2"

3"

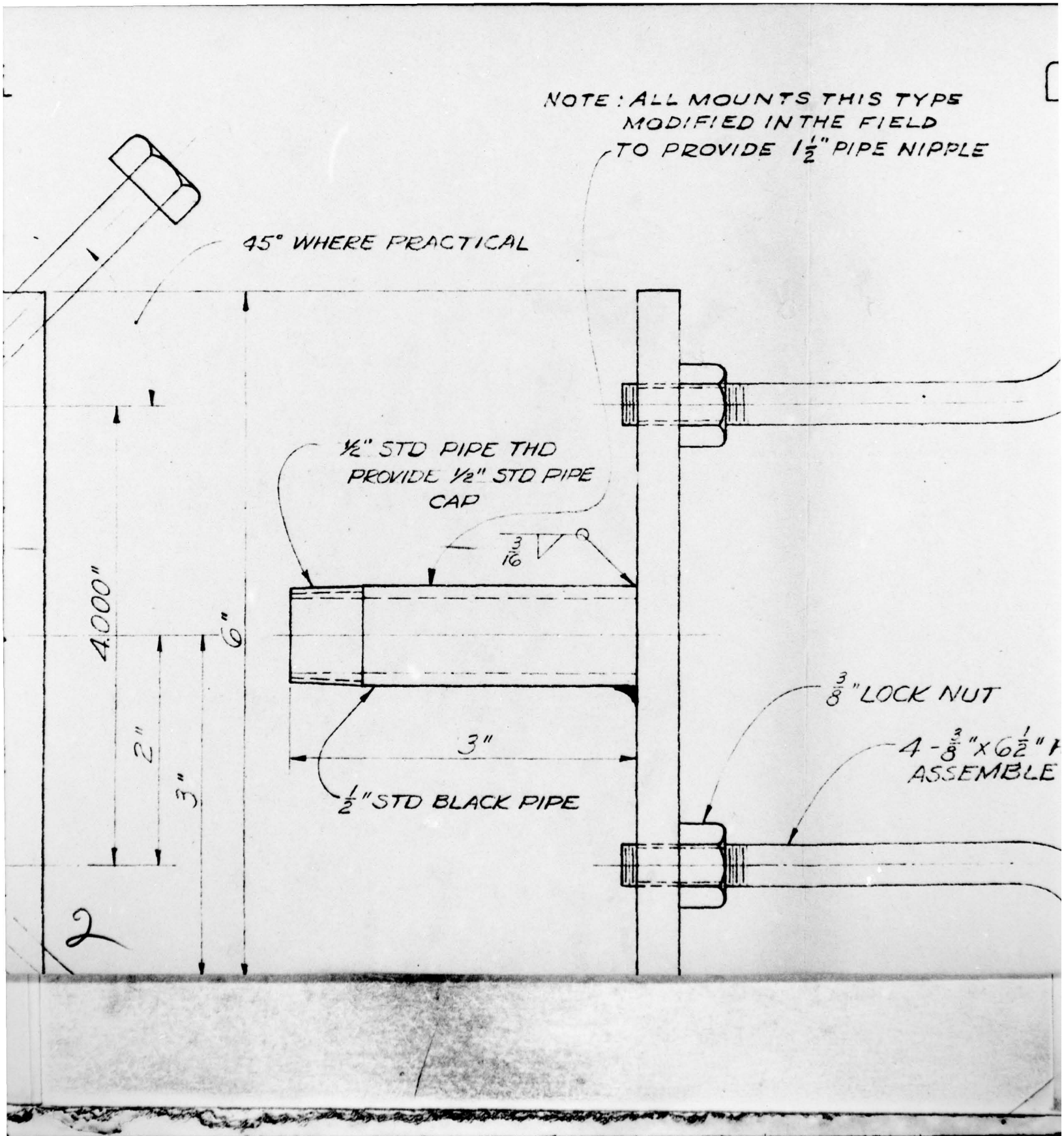
3"

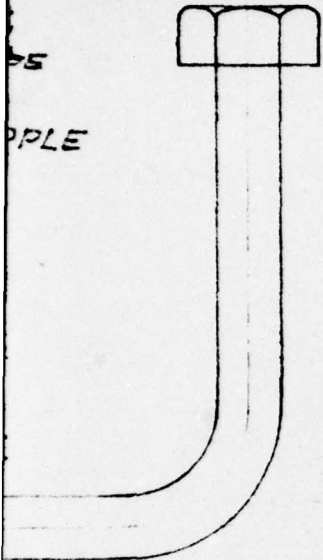
1/2" STD BLACK PIPE

3/8" LOCK NUT

4 - 3/8" X 6 1/2" F  
ASSEMBLY

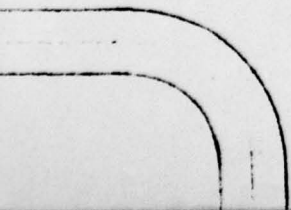
2



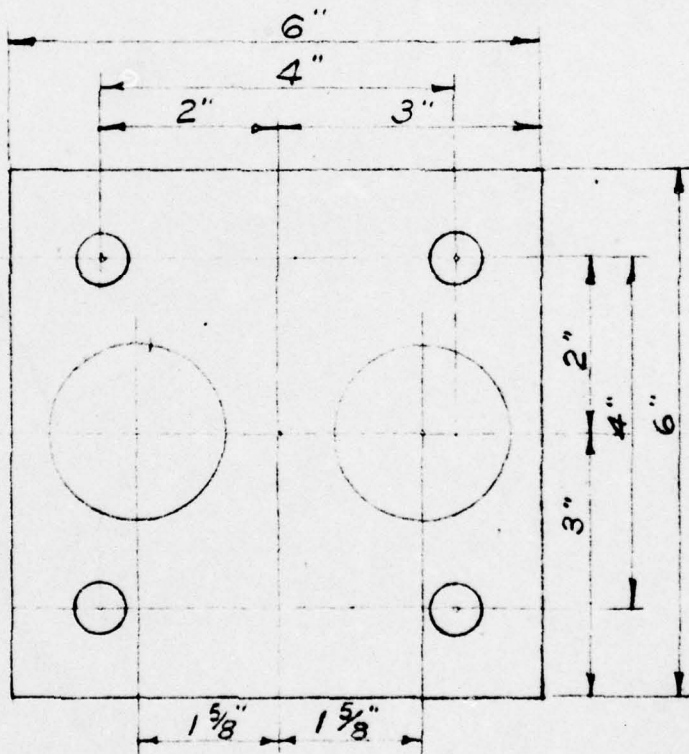
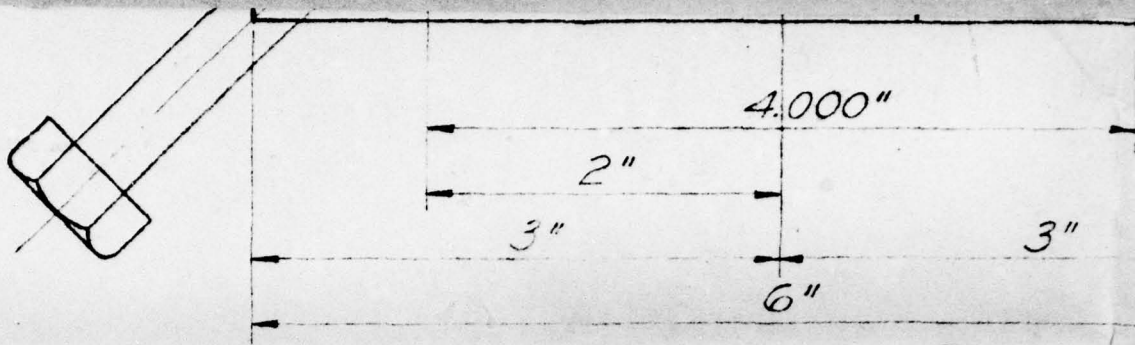


NUT

$\frac{3}{8}$ " x  $6\frac{1}{2}$ " HEX. HEAD BOLTS  
ASSEMBLE IN FIELD



3

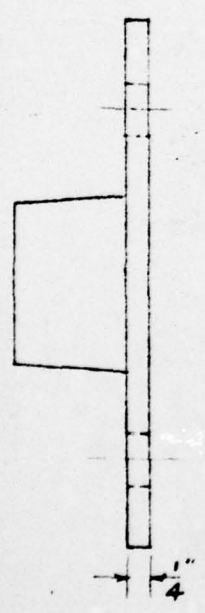


SCALE: HALF SIZE  
 DETAIL FOR 2 NIPPLES 5013A

4



INSIDE PLATE  
MATERIAL-MILD STEEL (CRS OR HRS)



NOTES  
 DECIMAL TOLERANCE  $\pm 0.005$   
 FRACTIONAL TOLERANCE  $\pm 1/16$   
 PLATE STOCK MAY BE TORQUE

013 A

S

**FIG. A2.93**

4 1/16"



UNCLASSIFIED

~~RESTRICTED~~

SCALE : FULL SCALE

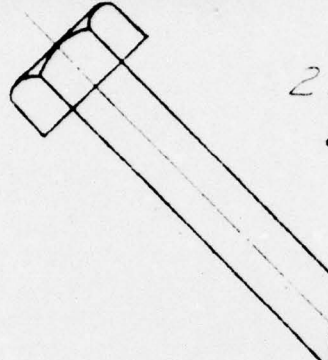
FOR POURED IN PLACE CONCRETE

±0.005"  
TOLERANCE ± 1/32"  
TO BE TORCH CUT

6

REVISIONS			HOLMES & NARVER INCORPORATED ENGINEERS 824 S. FIGUEROA ST. LOS ANGELES	
NO.	DATE	DESCRIPTION		
1	3/27/50	CORRECTED NOTATIONS	<u>MOUNT FOR DISPLACEMENT GAUGE</u>	
2	5/3/50	GENERAL REVISION AS BUILT AS SHOWN		
DR.	CH. LV	DATE	SHEET NO.	
L.W.K.		3-29-50	5013	
JOB NO.	APPROVED			
840F	<i>[Signature]</i>			

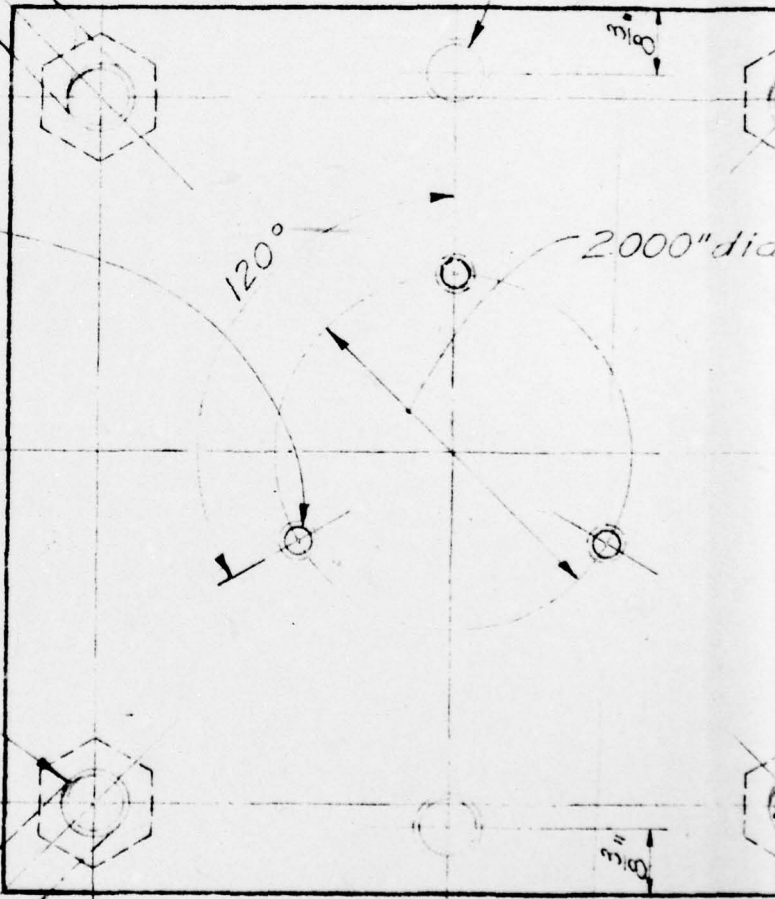
UNCLASSIFIED

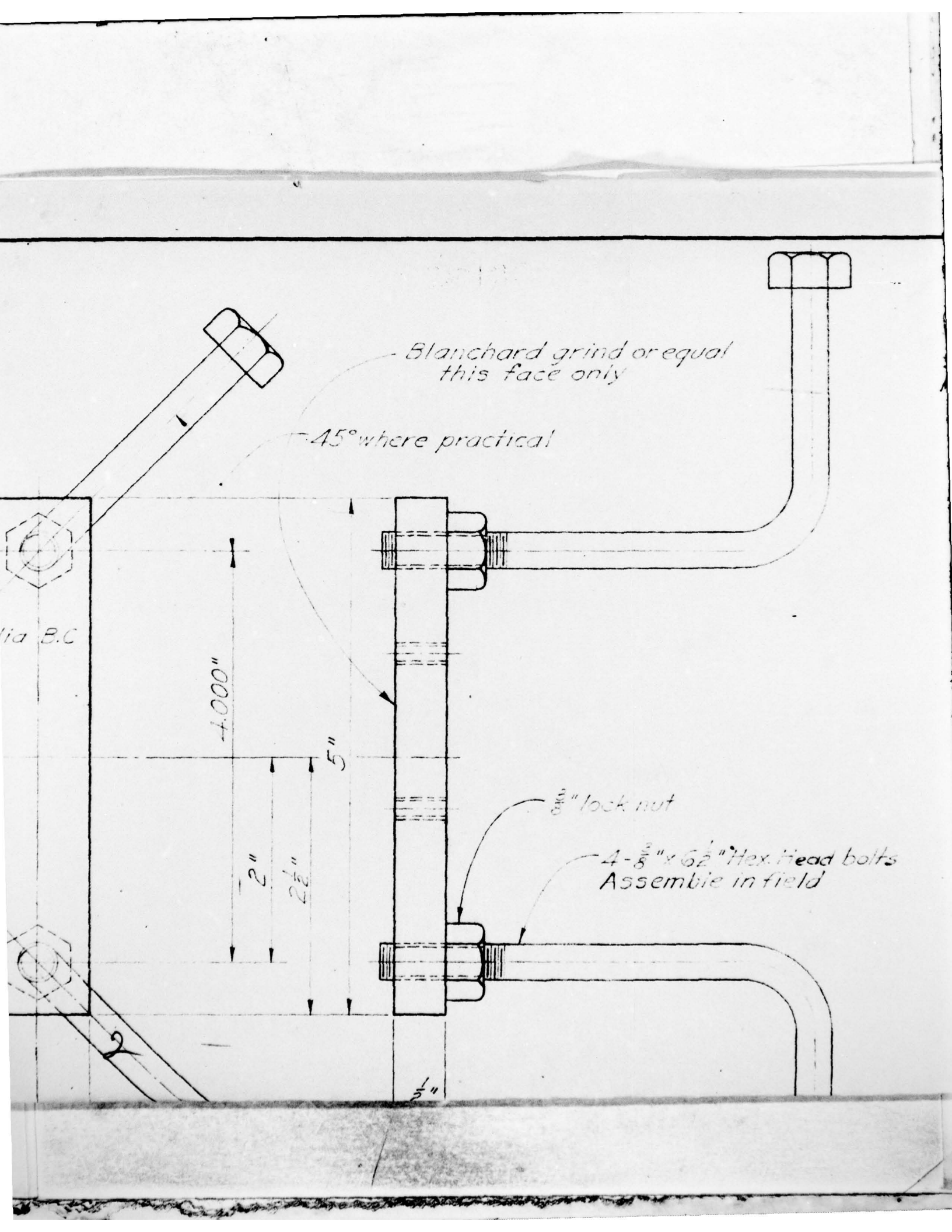


2 holes - Drill & tap  
 $\frac{3}{8}$ "-16-NC-2

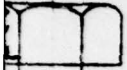
3 holes equally spaced  
Drill & tap  $\frac{1}{4}$ "-28-NF-2  
Insert  $\frac{1}{4}$ "-28 x  $\frac{1}{2}$ " socket  
head flat point set screws  
Headless - (Brass)

4 holes - Drill & tap  
 $\frac{3}{8}$ "-16-NC-2



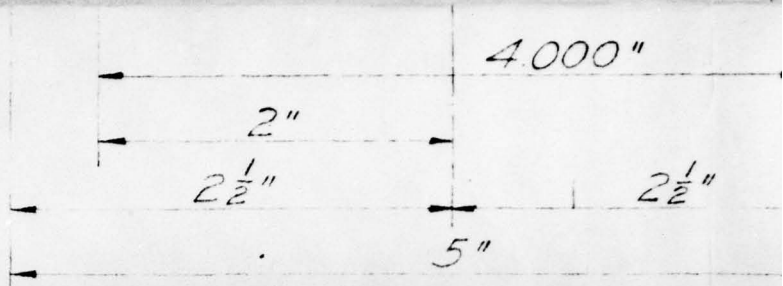
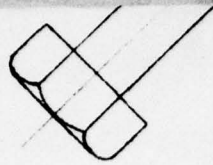


**PAGE 125**



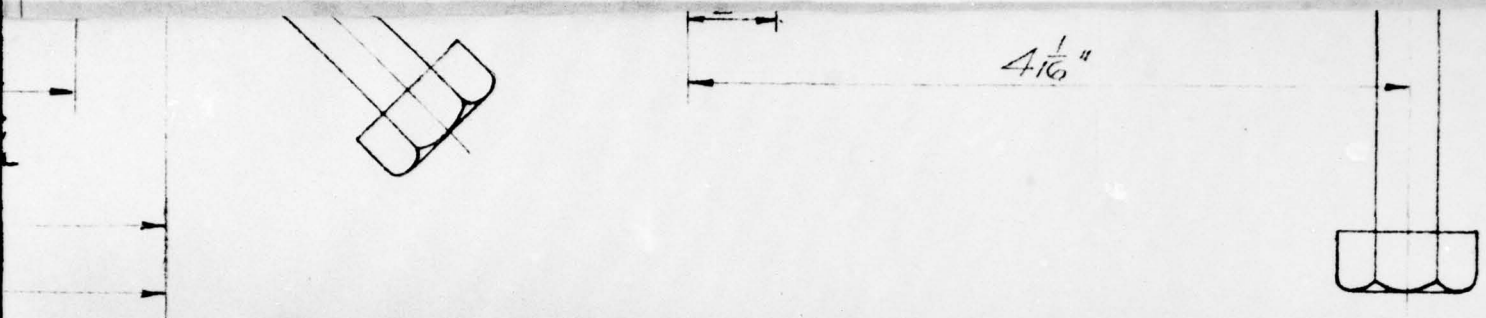
*lead bolts  
1d*

*3*



4

M



INSIDE PLATE  
MATERIAL - MILD STEEL (CRS OR HRS)

NOTE  
Decimal tolerance  $\pm 0.005$   
Fraction tolerance  $\pm \frac{1}{32}$ "  
Plate stock may be torch

5

**FIG. A2.94**

AD-A074 619

AMMANN AND WHITNEY NEW YORK  
SCIENTIFIC DIRECTOR'S REPORT OF ATOMIC WEAPON TESTS AT ENIWETOK--ETC(U)  
NOV 51

F/G 18/3

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AEC-WT-60(REF)-PT-4

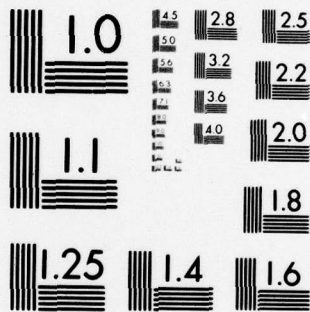
NL

2 OF 2

AD  
A074619



END  
DATE  
FILMEQ  
11 -79  
DDC



MICROCOPY RESOLUTION TEST CHART  
NATIONAL BUREAU OF STANDARDS-1963-A

UNCLASSIFIED

~~RESTRICTED~~

SCALE : FULL SCALE

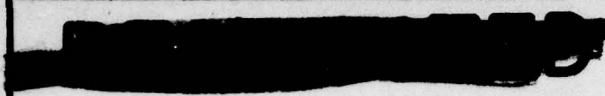
FOR POURED IN PLACE CONCRETE

REVISIONS			HOLMES & NARVER INCORPORATED ENGINEERS 824 S. FIGUEROA ST. LOS ANGELES	
NO.	DATE	DESCRIPTION	<u>MOUNT</u> <u>FOR</u> <u>ELECTRONIC</u> <u>ACCELEROMETER</u>	
1	3/23/50	CORRECTED NOTATIONS		
	5/6/50	AS BUILT AS SHOWN	DR. CH. LY DATE SHEET NO. LWK 3-28-50 5014 JOB NO. APPROVED 840F	

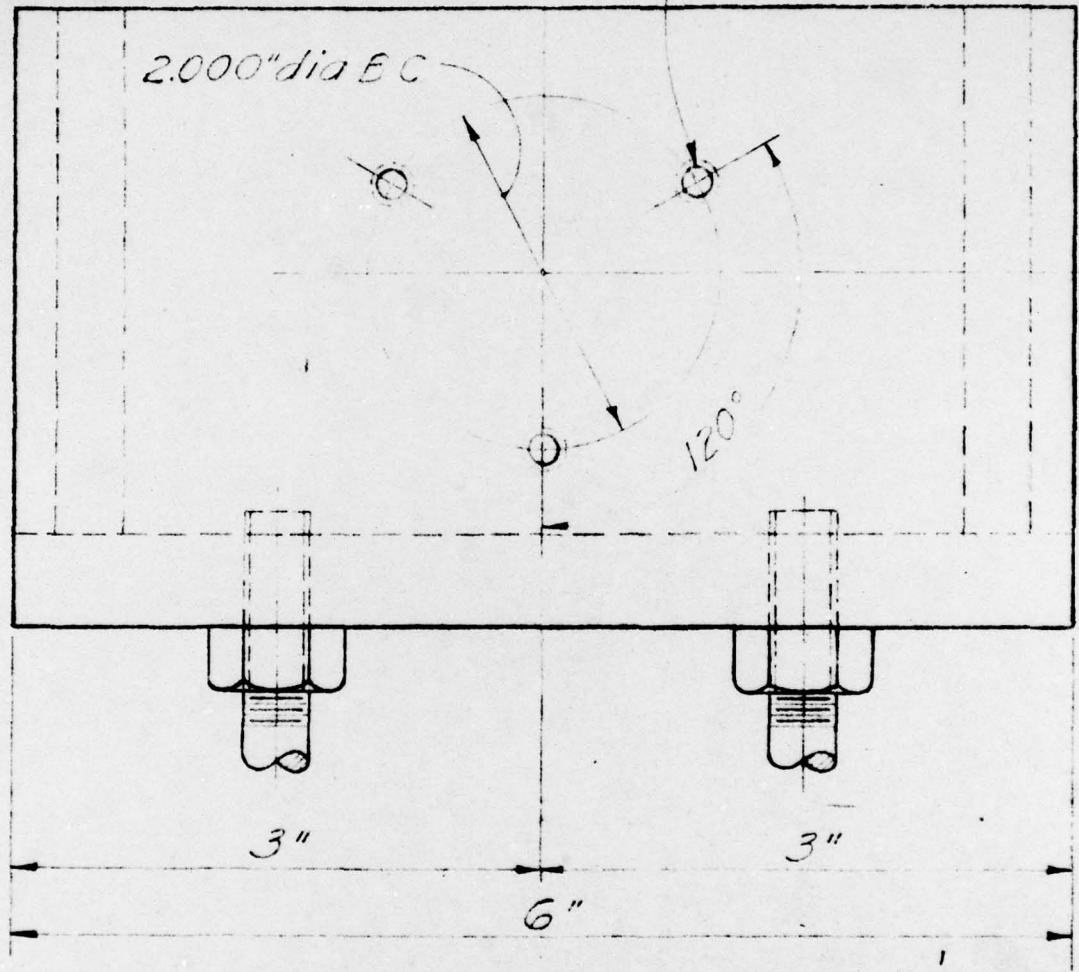
$\pm 0.005$   
 $\pm \frac{1}{32}$ "  
torch cut

6

UNCLASSIFIED



3 holes equally spaced.  
Insert  $\frac{1}{4}$ "-28 x  $\frac{1}{2}$ " socket head



2.000" dia BC

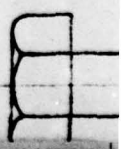
120°

3"

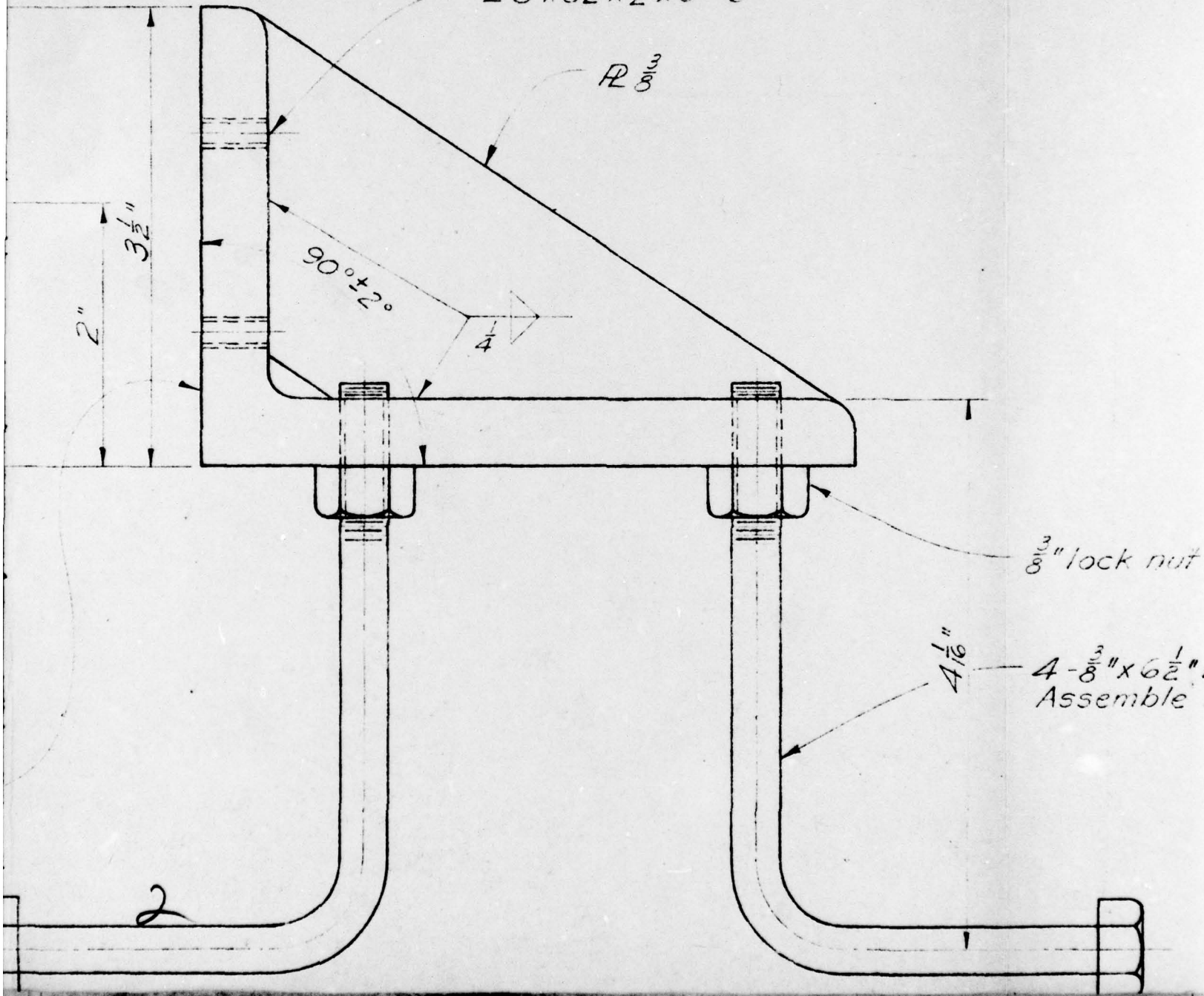
6"

3"

Blanchard grind or equal  
this face only



Drill & tap  $\frac{1}{4}$ "-28-NF-2  
head flat point set screws  
Headless -- (Brass)  
 $L 5" \times 3\frac{1}{2}" \times \frac{1}{2}" \times 0'-6"$



$R \frac{3}{8}$

$90^\circ \pm 2^\circ$

$\frac{1}{4}$

$\frac{3}{8}$ " lock nut

$\frac{4}{16}$ "

4- $\frac{3}{8}$ " x 6 $\frac{1}{2}$ "  
Assemble

2

**PAGE 126**

*"lock nut*

*4- $\frac{3}{8}$ " x  $6\frac{1}{2}$ " Hex. Head bolts  
Assemble in field*

*3*



45° where practical

2 holes - Drill # top  $\frac{3}{8}$ "-16-NC-2

INSIDE CLIP ANGLE  
MATERIAL - MILD STEEL (CRS OR HRS)

NOTE

Decimal tolerance  $\pm 0.005$ "

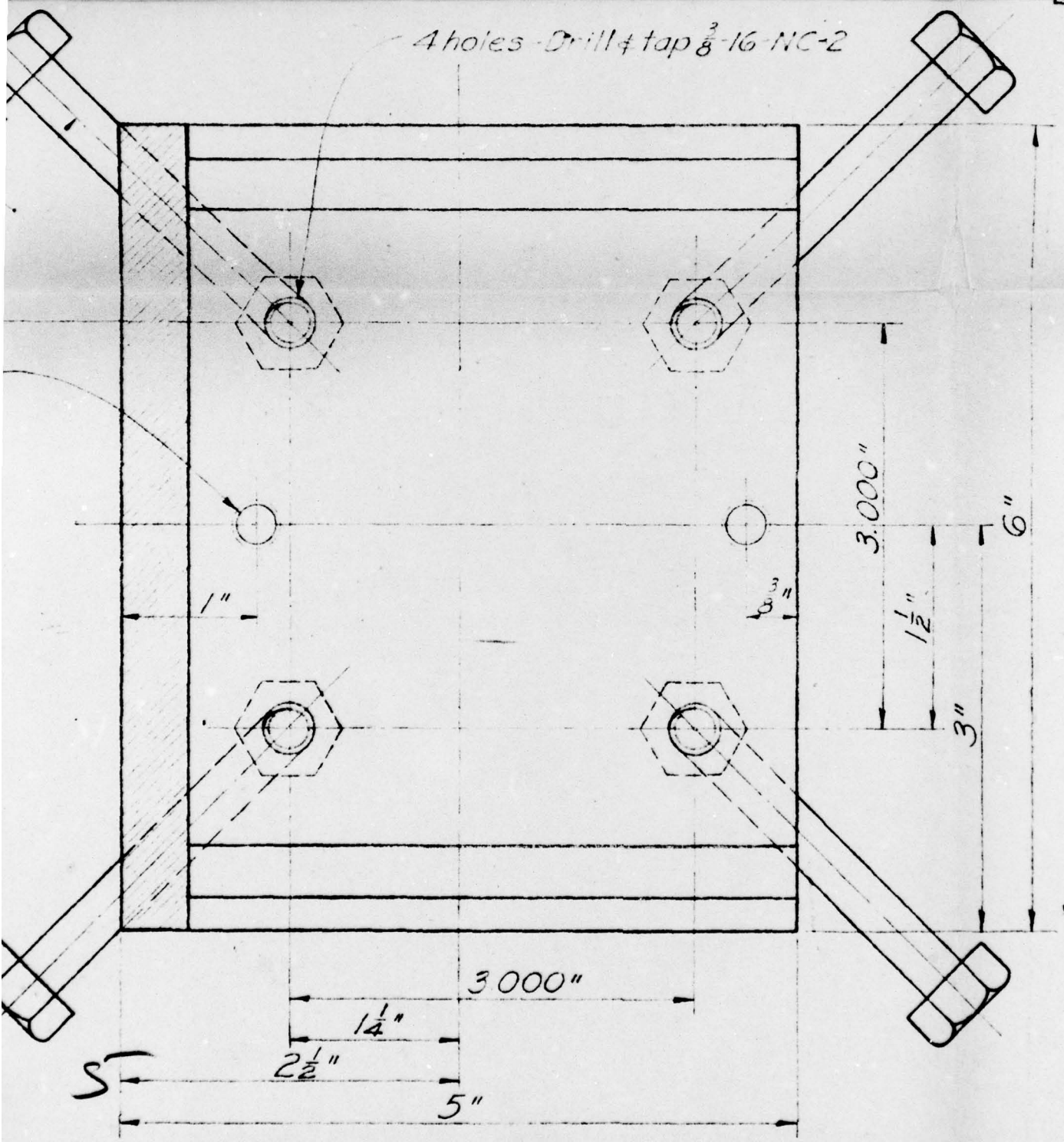
Fraction tolerance  $\pm \frac{1}{32}$ "

Plate stock may be torch cut

4

**FIG. A2.95**

4 holes - Drill & tap  $\frac{3}{8}$ -16-NC-2



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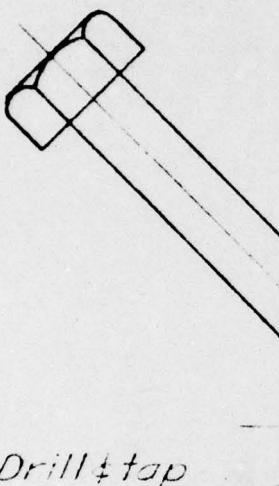
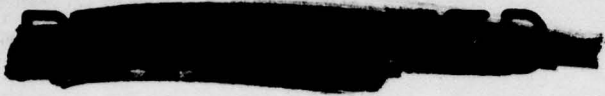
SCALE : FULL SCALE

FOR POURED IN PLACE CONCRETE

REVISIONS			HOLMES & NARVER INCORPORATED ENGINEERS 824 S. FIGUEROA ST. LOS ANGELES	
NO.	DATE	DESCRIPTION		
1	2/23/51	CORRECTED NOTATIONS	<u>MOUNT</u> FOR <u>ELECTRONIC</u> <u>ACCELEROMETER</u>	
	5/1/51	AS BUILT AS SHOWN		
DR.	CH. LV.	DATE	SHEET NO.	
L.W.K.		3-30-50	5015	
JOB NO.	APPROVED			
840F	<i>[Signature]</i>			

6

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2 holes - Drill & tap  $\frac{3}{8}$ "-16-NC-2

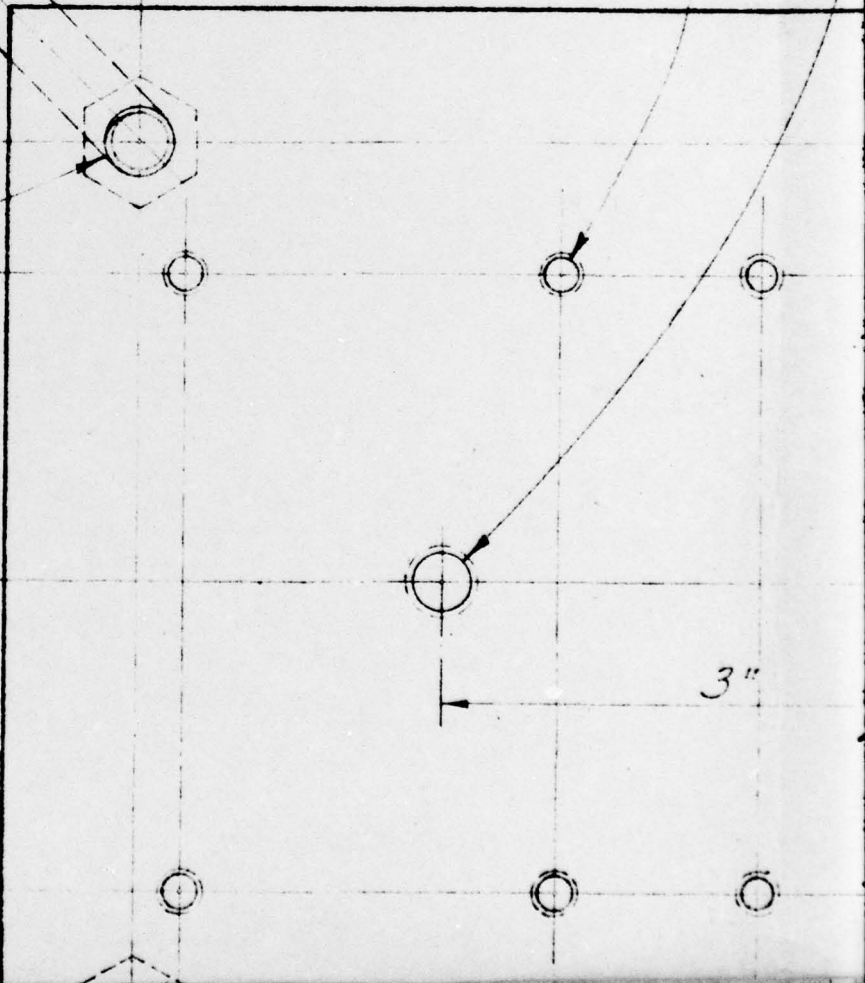
10 holes - Drill & tap  $\frac{1}{4}$ "-20-NC-2  
Insert  $\frac{1}{4}$ "-20 x  $\frac{1}{2}$ " socket head  
flat point set screws  
Headless - (brass)

6 holes - Drill & tap  
 $\frac{3}{8}$ "-16-NC-2

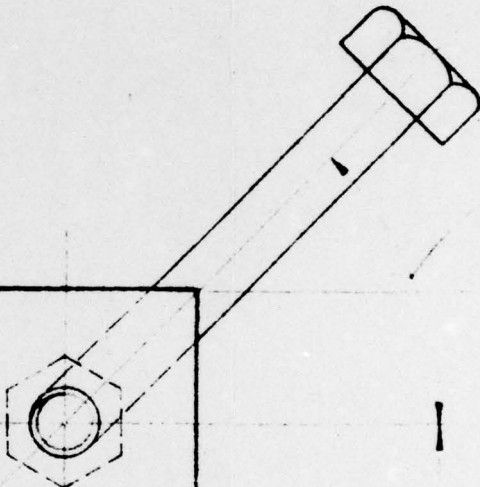
3.500"

$\frac{1}{4}$ "

3"



3 holes equally spaced  
Drill & tap  $\frac{1}{4}$ "-28-NF-2  
Insert  $\frac{1}{4}$ "-28 x  $\frac{1}{2}$ " socket  
head flat point set screws  
Headless - (Brass)



45° wh

5.000"

6  $\frac{1}{2}$ "

3"

2000" dia B C

120°

2  $\frac{1}{2}$ "

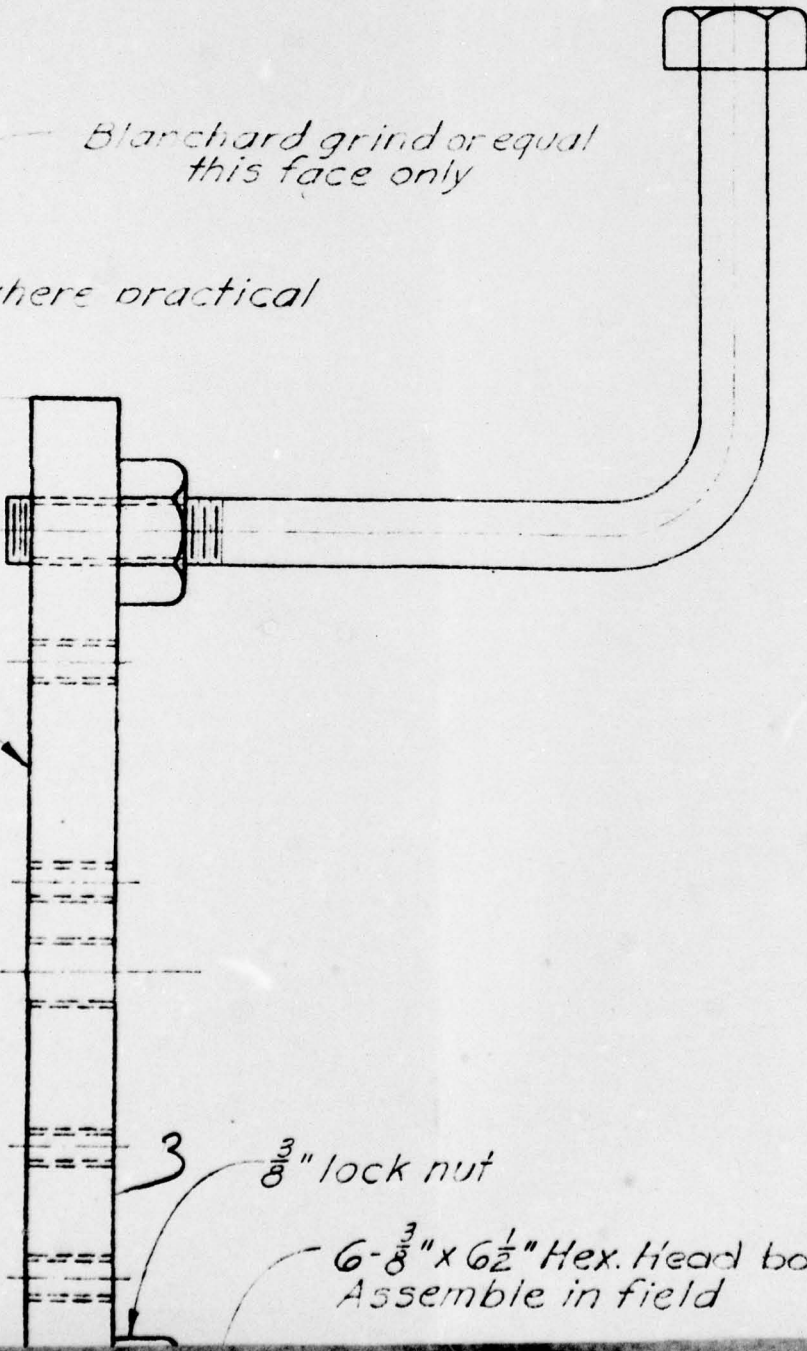
3  $\frac{1}{4}$ "

2

4.125"

*Blanchard grind or equal  
this face only*

*45° where practical*

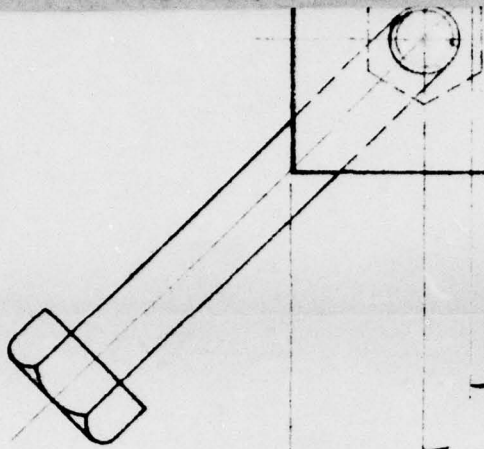


$6\frac{1}{2}$ "

3  $\frac{3}{8}$ " lock nut

$6-\frac{3}{8}$ " x  $6\frac{1}{2}$ " Hex. Head bolts  
Assemble in field

54



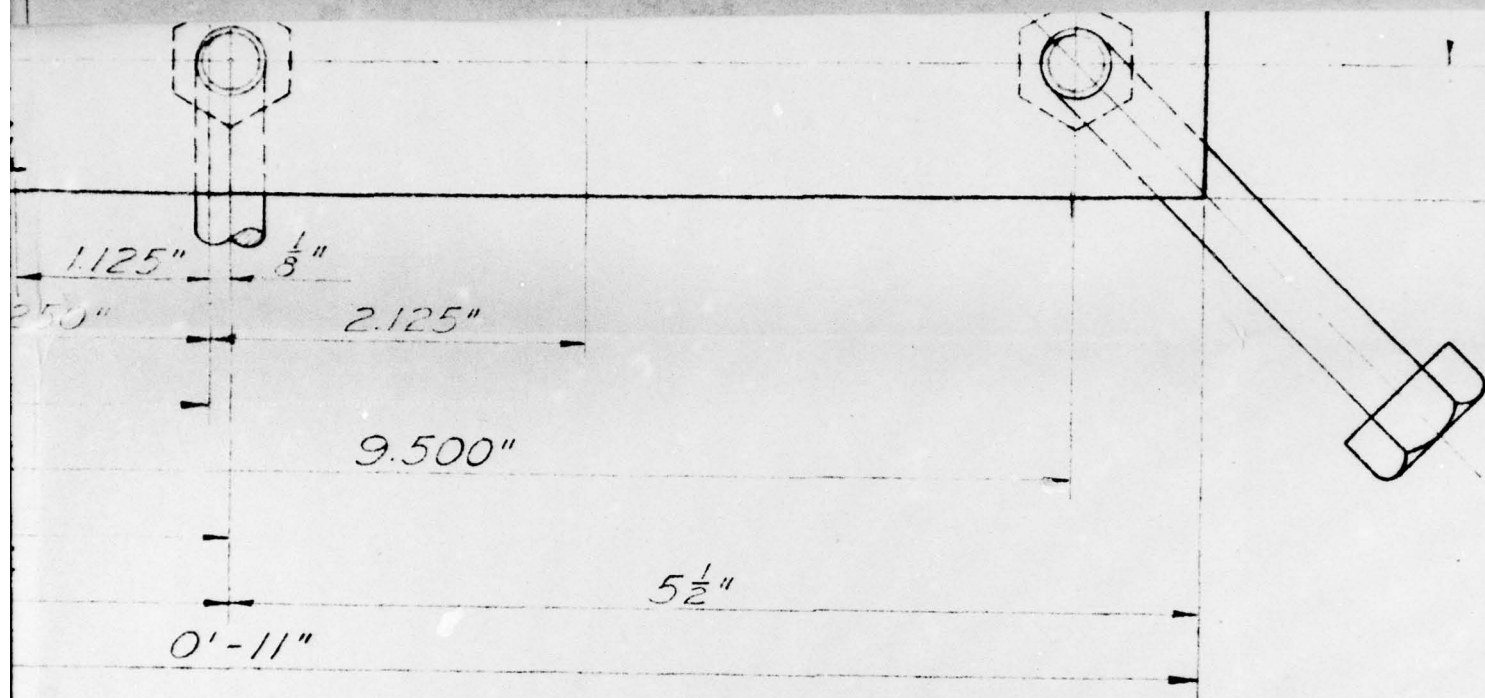
1.12  
2.250"

4.375"

4  $\frac{3}{4}$ "

5  $\frac{1}{2}$ "

4

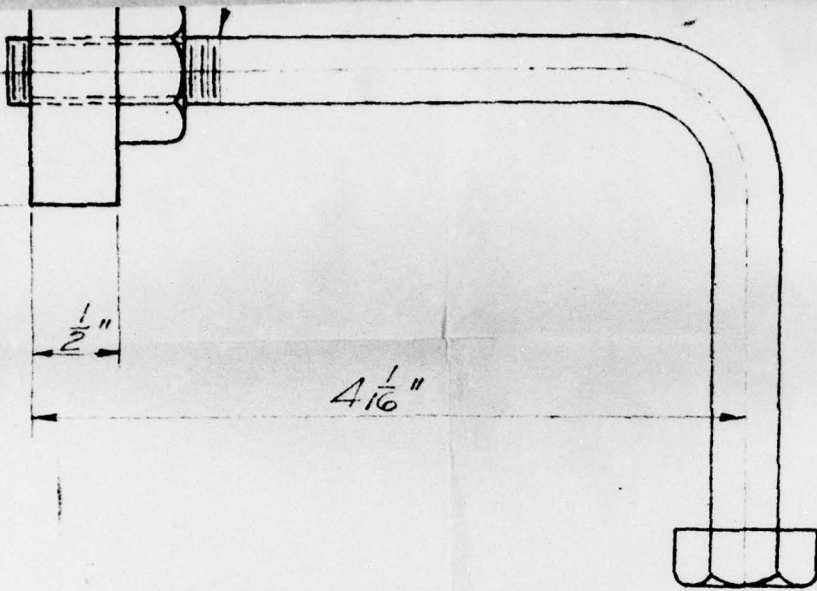


INSIDE PLATE  
MATERIAL - MILD STEEL (CRS OR HRS)

NOTE  
 Decimal tolerance  $\pm 0.00$   
 Fraction tolerance  $\pm \frac{1}{32}$   
 Plate stock may be forced

5

**FIG. A2.96**



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SCALE: FULL SCALE

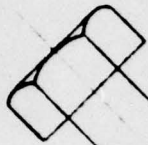
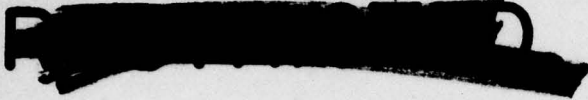
FOR POURED IN PLACE CONCRETE

REVISIONS		DESCRIPTION	HOLMES & NARVER INCORPORATED ENGINEERS 824 S. FIGUEROA ST. LOS ANGELES	
NO.	DATE		MOUNT FOR SELF RECORDING AND ELECTRONIC ACCELEROMETER	
1	3/23/50	CORRECTED NOTATIONS	DR. L.W.K.	CH. LV
	5/6/50	AS BUILT AS SHOWN	JOB NO. 840F	DATE 3-27-50
			APPROVED <i>[Signature]</i>	SHEET NO. 5016

ce ± 0.005"  
nce ± 1/32"  
be torch cut

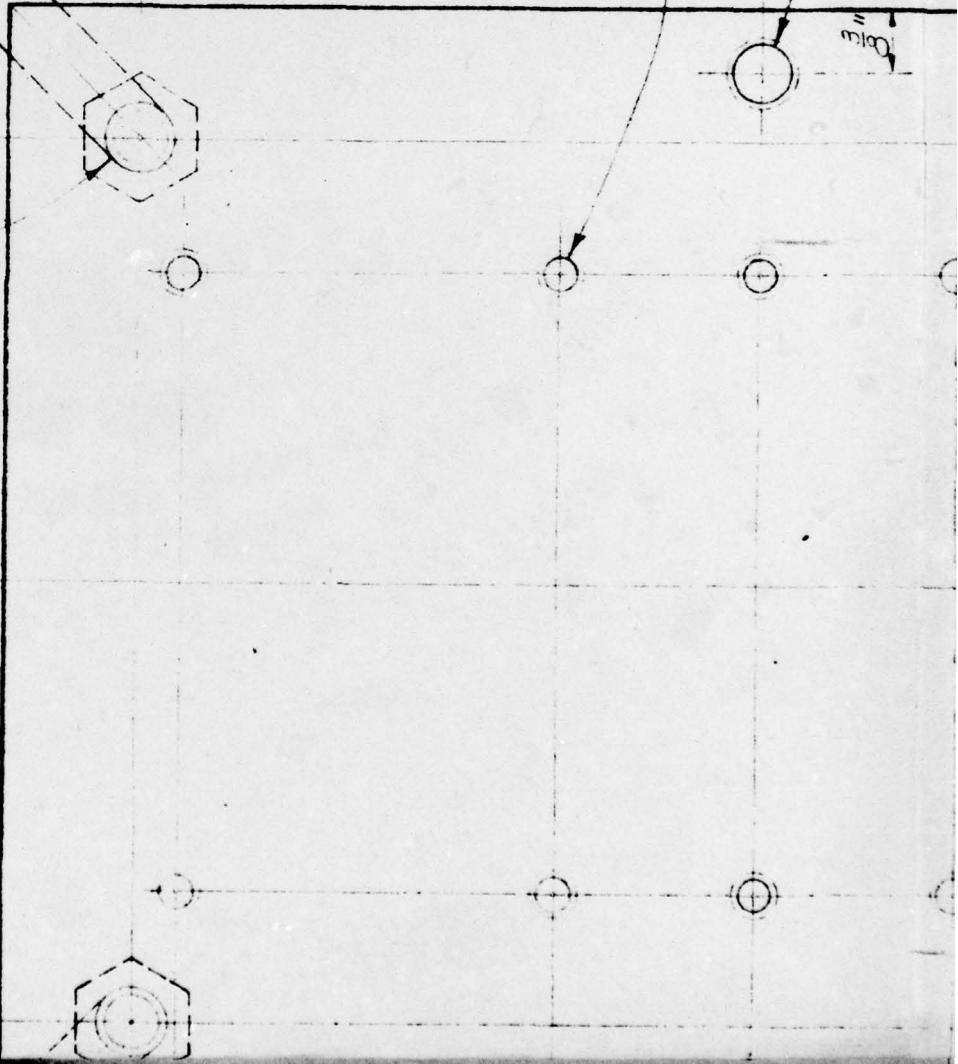
6

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10 holes - Drill & tap  $\frac{1}{4}$ "-20-NC-2  
Insert  $\frac{1}{4}$ "-20 x  $\frac{3}{8}$ " socket head  
flat point set screws  
Headless - (Brass)

4 holes - Drill & tap  
 $\frac{5}{16}$ "-16-NC-2



2 holes - Drill & tap  $\frac{3}{8}$ "-16-NC-2

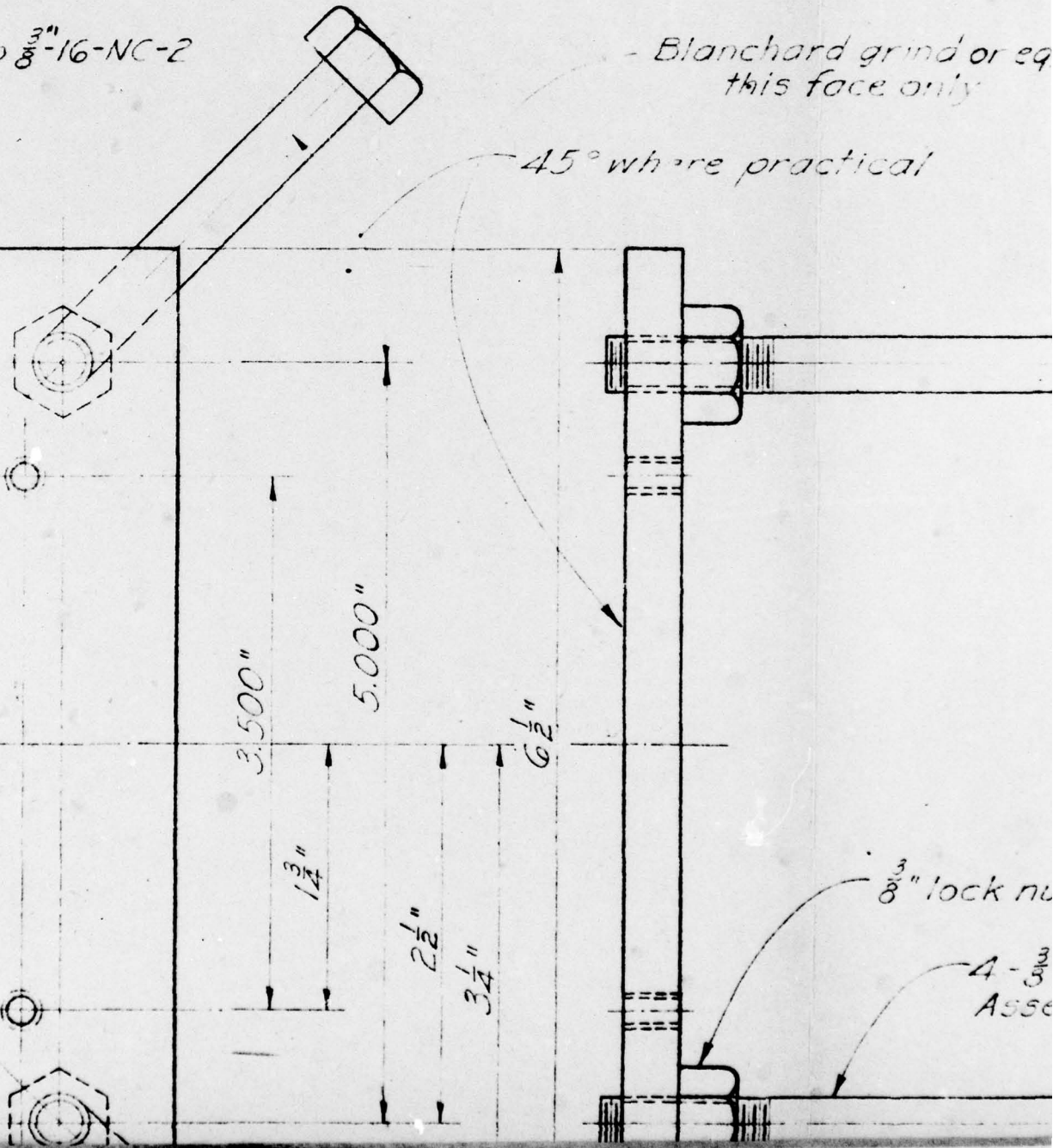
- Blanchard grind or eq  
this face only

45° where practical

2

$\frac{3}{16}$ " lock nu

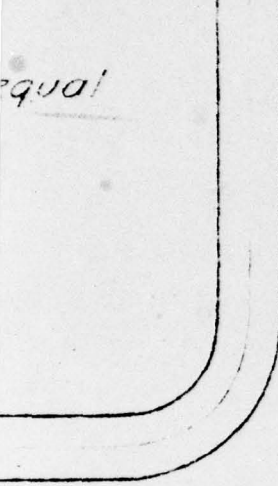
4 - 5/16"  
Asse



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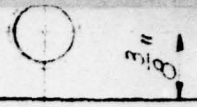
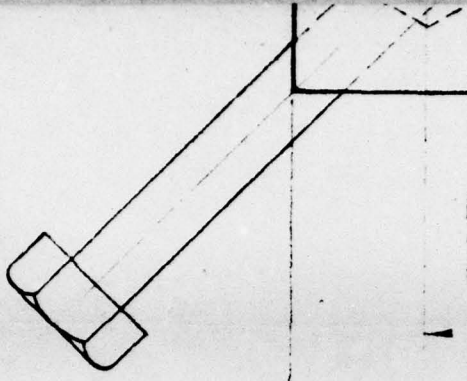
equal



nut

$\frac{3}{8}$ " x  $6\frac{1}{2}$ " Hex. Head bolts  
assemble in field

3



2.125"

1.125"

1.125"

$3\frac{1}{4}"$

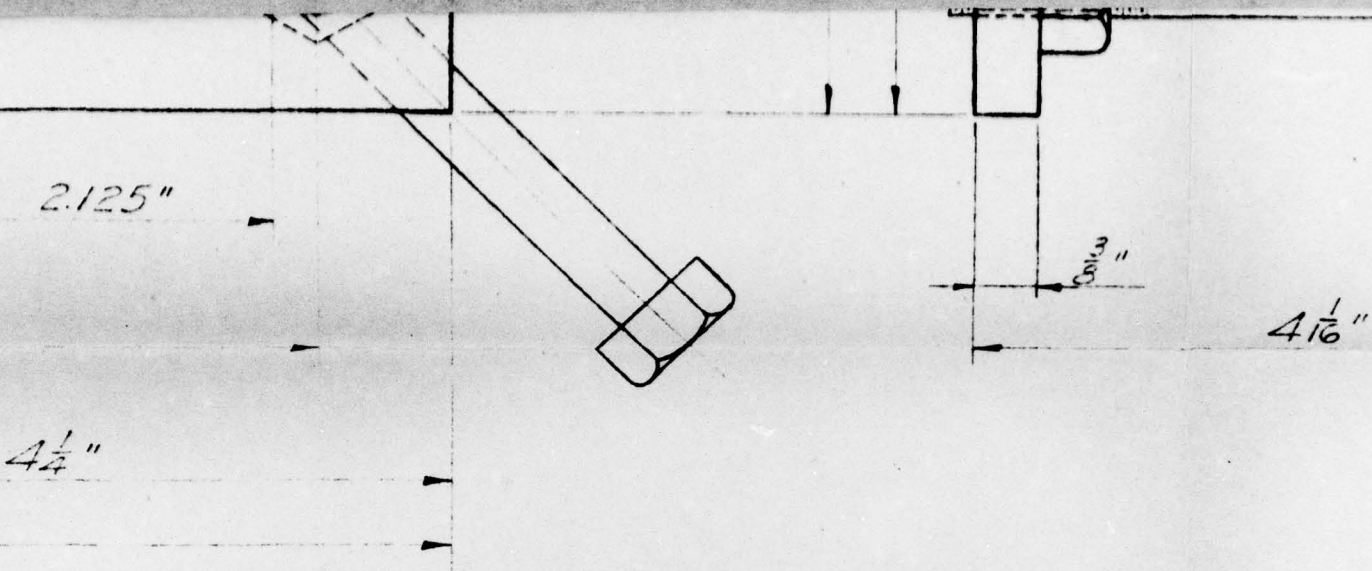
7.000"

$3\frac{1}{2}"$

$4\frac{1}{4}"$

$8\frac{1}{2}"$

4



INSIDE PLATE  
MATERIAL - MILD STEEL (CRS OR HRS)

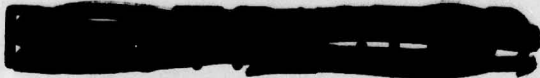
NOTE  
 Decimal tolerance  $\pm 0.005"$   
 Fraction tolerance  $\pm \frac{1}{32}"$   
 Plate stock may be torch cut

5

**FIG. A2.97**



UNCLASSIFIED



SCALE : FULL SCALE

FOR POURED-IN-PLACE CONCRETE

0.005"  
"   
ch cut

6

REVISIONS		
NO.	DATE	DESCRIPTION
1	3/23/51	CORRECTED NOTATIONS
	5/4/51	AS BUILT AS SHOWN

**HOLMES & NARVER**  
INCORPORATED  
**ENGINEERS**  
824 S. FIGUEROA ST. LOS ANGELES

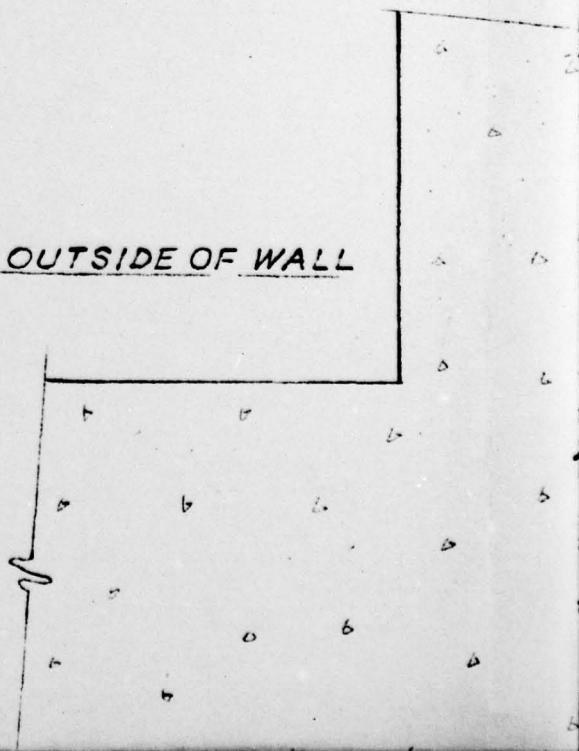
MOUNT  
FOR  
SELF-RECORDING  
ACCELEROMETER

DR. L.W.K.	CH. BY	DATE 3-28-50	SHEET NO. 5017
JOB NO. 840F	APPROVED		

UNCLASSIFIED

~~RESTRICTED~~

OUTSIDE OF WALL

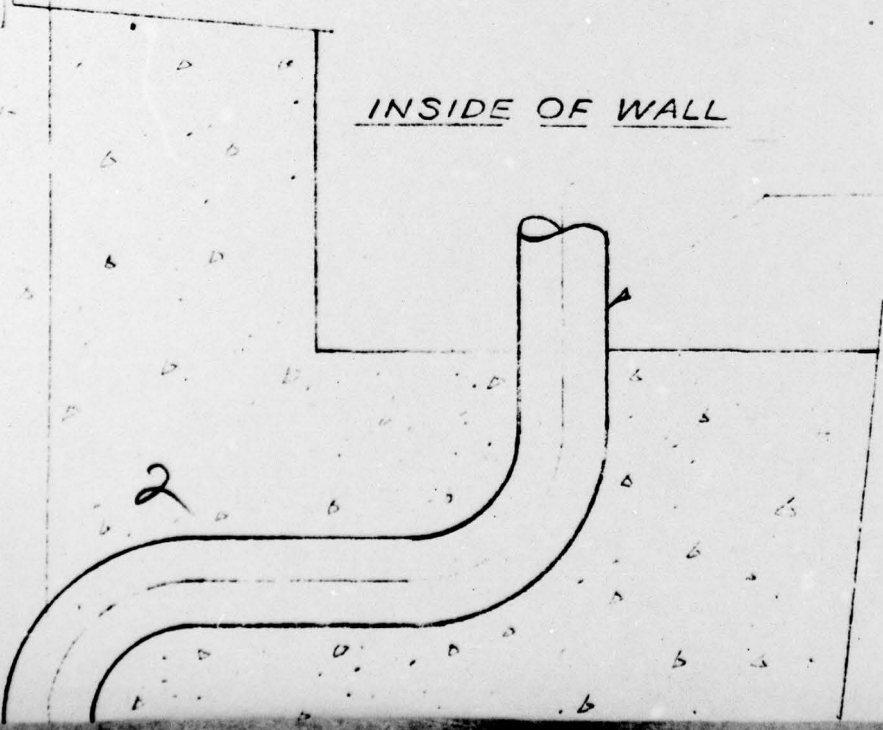


$\phi$  OF WALL OR COLUMN

INSIDE OF WALL

BEND CONDUIT TO EXTEND 6"  $\phi$   
FOOTING ON INSIDE OF WALL - L  
OF CONDUIT DEPENDENT UPON  
FOOTING

2

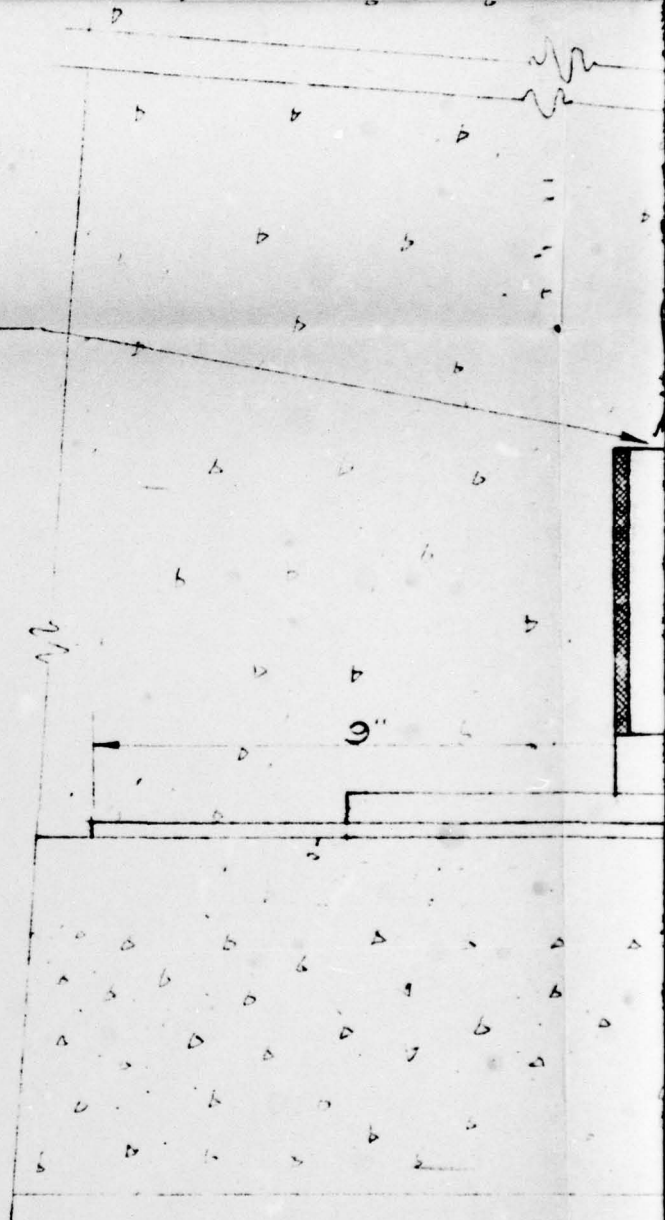


**PAGE 129**

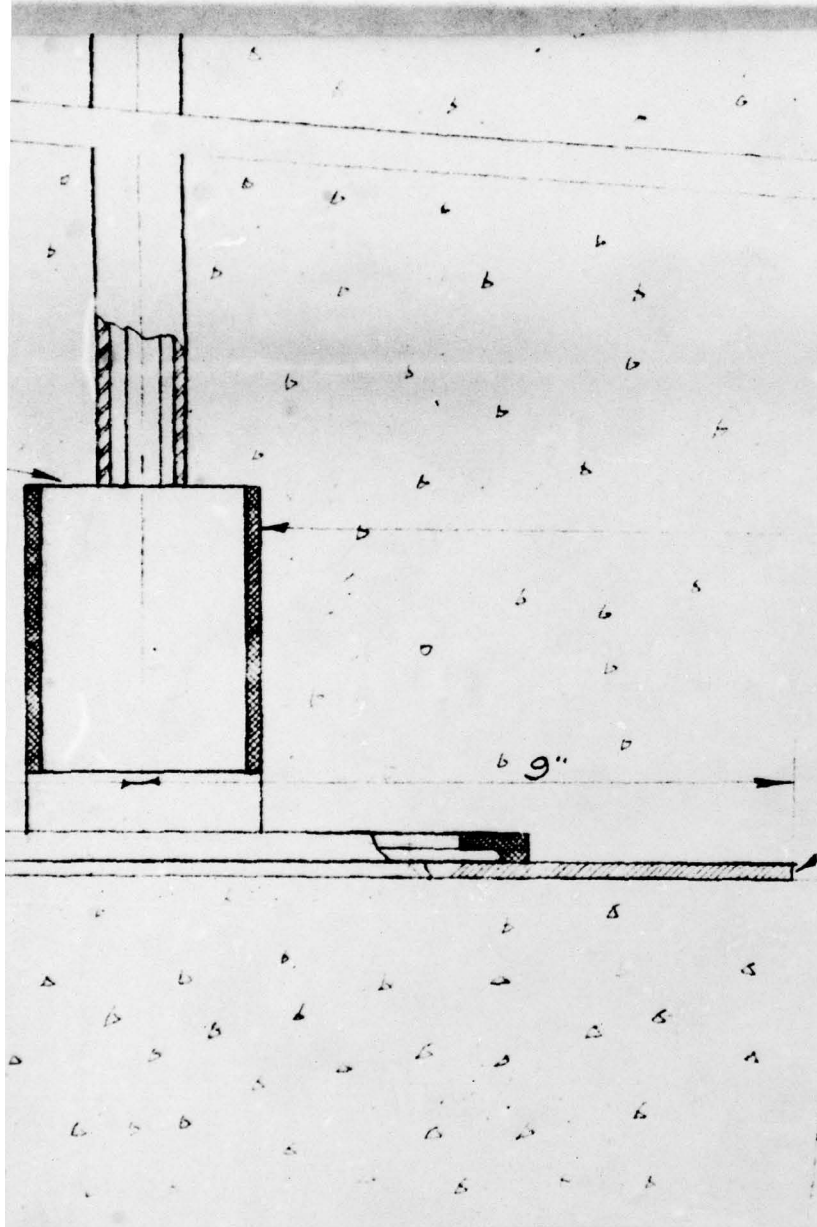
EXTEND 6" ABOVE  
OF WALL-LENGTH  
ENT UPON DEPTH OF

3

APPLY PRESSURE ON TOP OF GAGE  
WHILE CONCRETE IS BEING POURED



4



CONCRETE FOR LOWER 2'-0"  
HAND PLACED - DO NOT DRO

THIN FLANNEL PACKING - TAPE IN

WASHER MADE OF  
POROUS MATERIAL

3" OF CONCRETE NO AGGREGATE OVER  
3,000,000 P.S.I. MODULUS OF ELAS

5

FIG. A2.98

2'-0" TO BE  
NOT DROP

TAPE IN PLACE

ATE OVER  $\frac{3}{8}$ "  
OF ELASTICITY

~~RESTRICTED~~  
UNCLASSIFIED

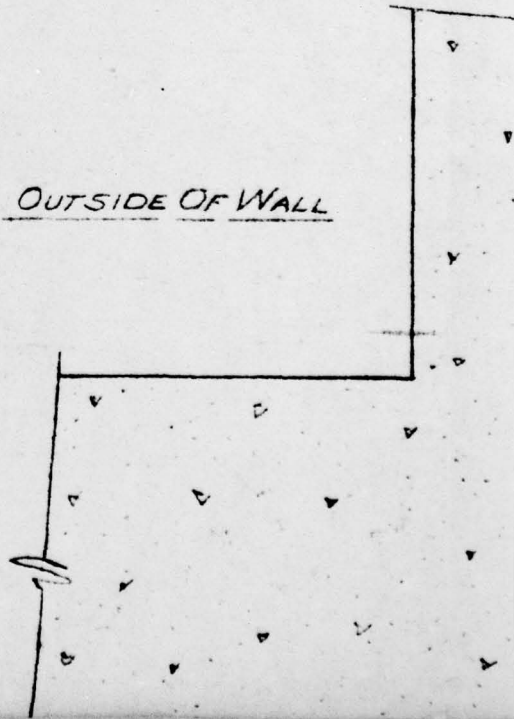
REVISIONS			HOLMES & NARVER INCORPORATED ENGINEERS	
NO.	DATE	DESCRIPTION	824 S. FIGUEROA ST. LOS ANGELES	
1		AS BUILT AS SHOWN	<u>MOUNT</u> <u>FOR</u> <u>FOOTING PRESSURE</u> <u>GAUGE</u>	
DR.	CH.	DATE	SHEET NO.	
G.P.	D.N.	5/12/51	5018	
JOB NO.	APPROVED			
840F				

6

~~RESTRICTED~~  
~~CANCELED~~

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OUTSIDE OF WALL

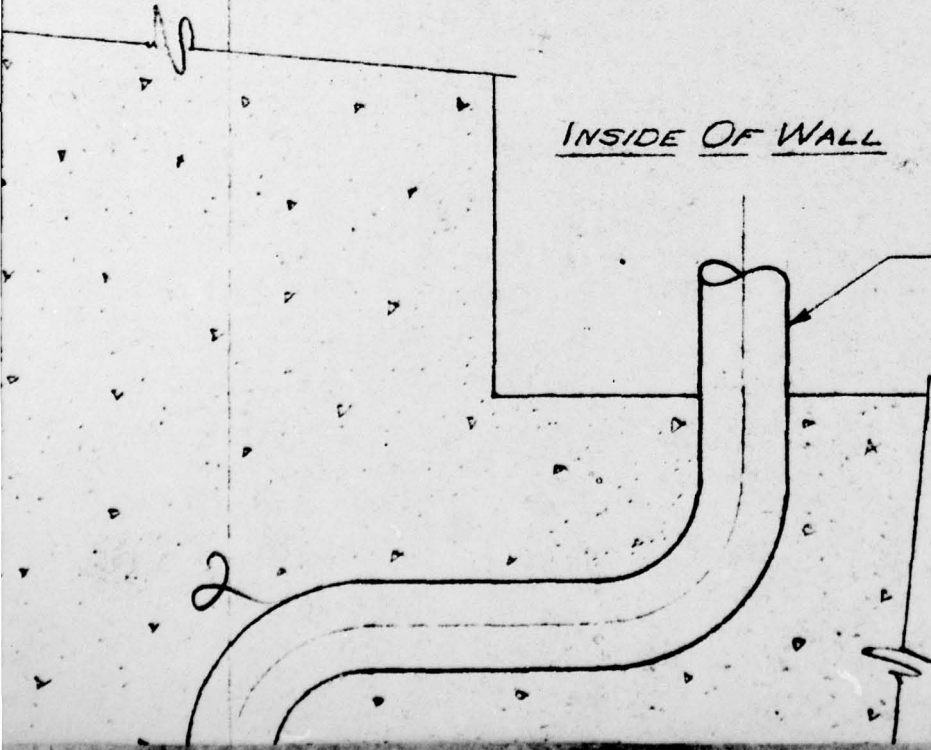


☉ OF WALL OR COLUMN

INSIDE OF WALL

BEND CONDUIT TO EXTEND 6" ABOVE  
FOOTING ON INSIDE OF WALL - LENGTH  
CONDUIT DEPENDENT UPON DEPTH  
FOOTING

2

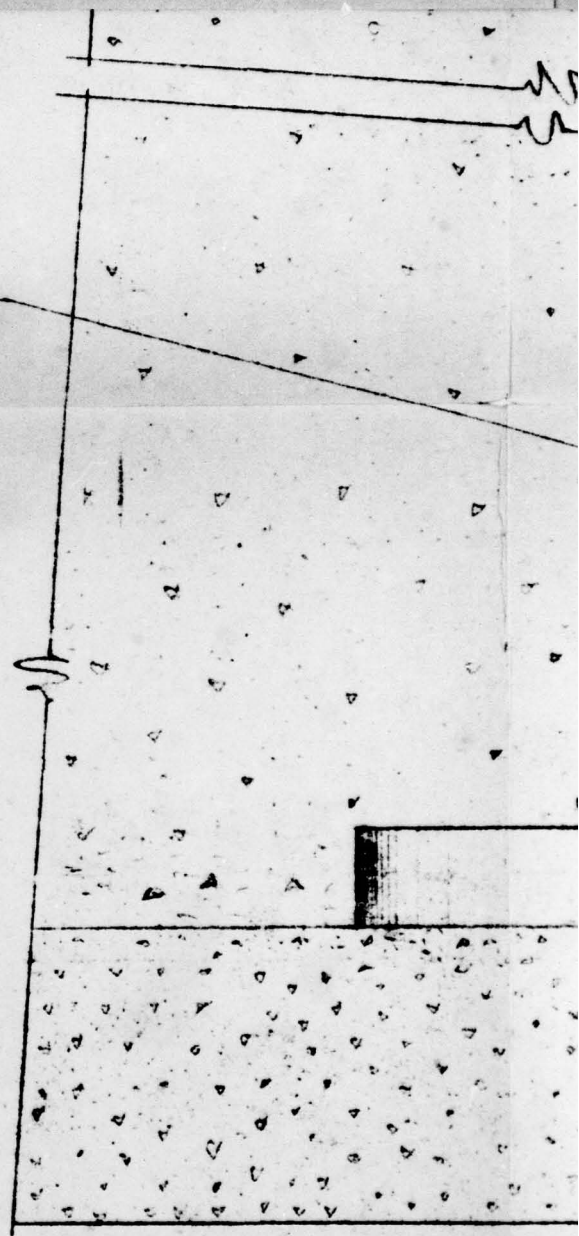


**PAGE 130**

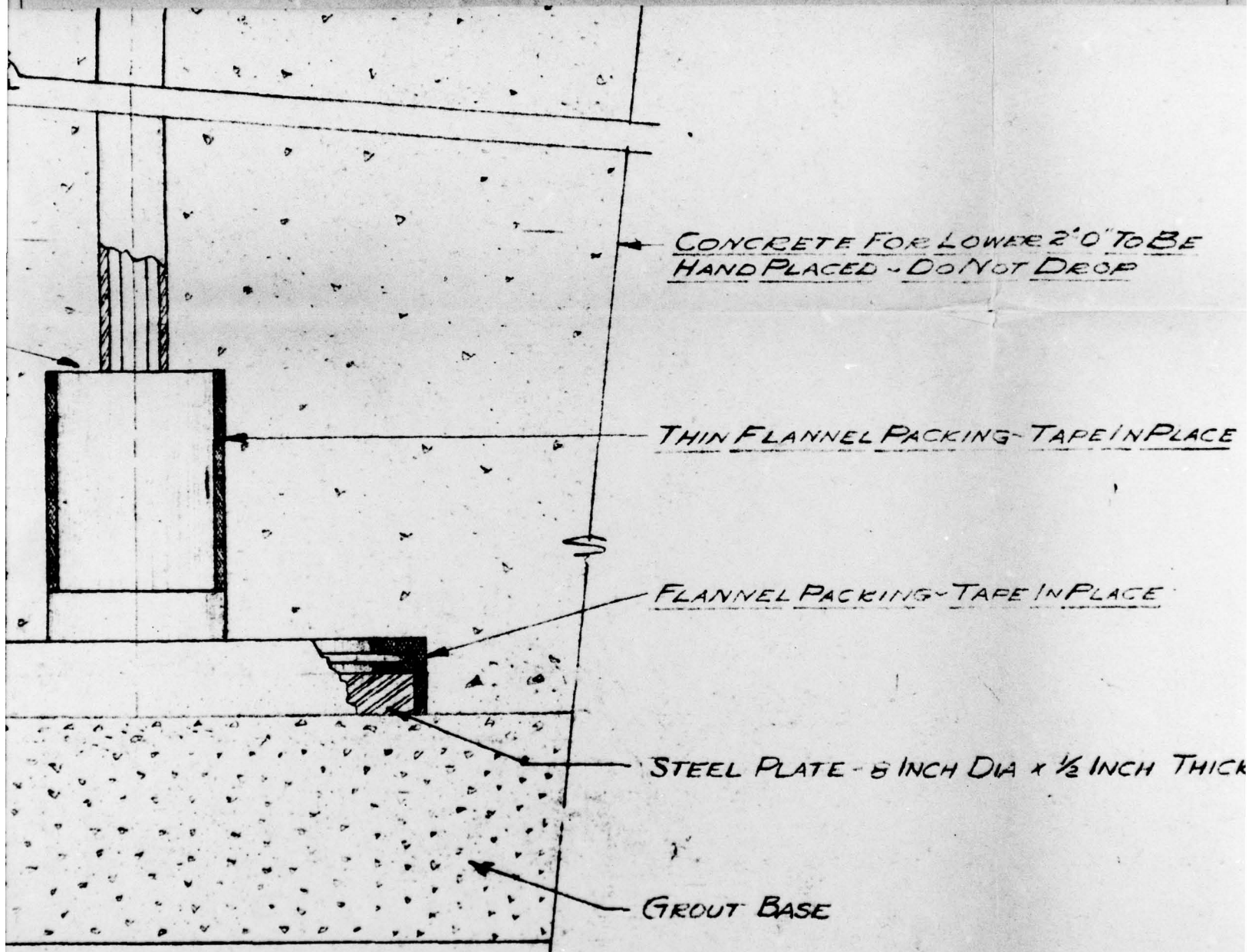
EXTEND 6" ABOVE  
WALL - LENGTH OF  
UPON DEPTH OF

3

APPLY PRESSURE ON TOP OF GAUGE  
WHILE CONCRETE IS BEING POURED



4



5

FIG. A2.99

TO BE

IN PLACE

CE

CH THICK

UNCLASSIFIED

~~RESTRICTED~~  
~~CANCELED~~  
~~CANCELED~~

FOR POURED IN PLACE FOOTINGS

REVISIONS			HOLMES & HARVER INCORPORATED ENGINEERS 824 S. FIGUEROA ST. LOS ANGELES	
NO.	DATE	DESCRIPTION		
1	3/23/51	CORRECTED NOTATIONS	<u>MOUNT</u> FOR FOOTING PRESSURE GAUGE	
	5/6/51	AS BUILT AS SHOWN		
DR.	CH. LV.	DATE	SHEET NO.	
TISHNER		4-5-50	5019	
JOB NO.	APPROVED			
390F				

6