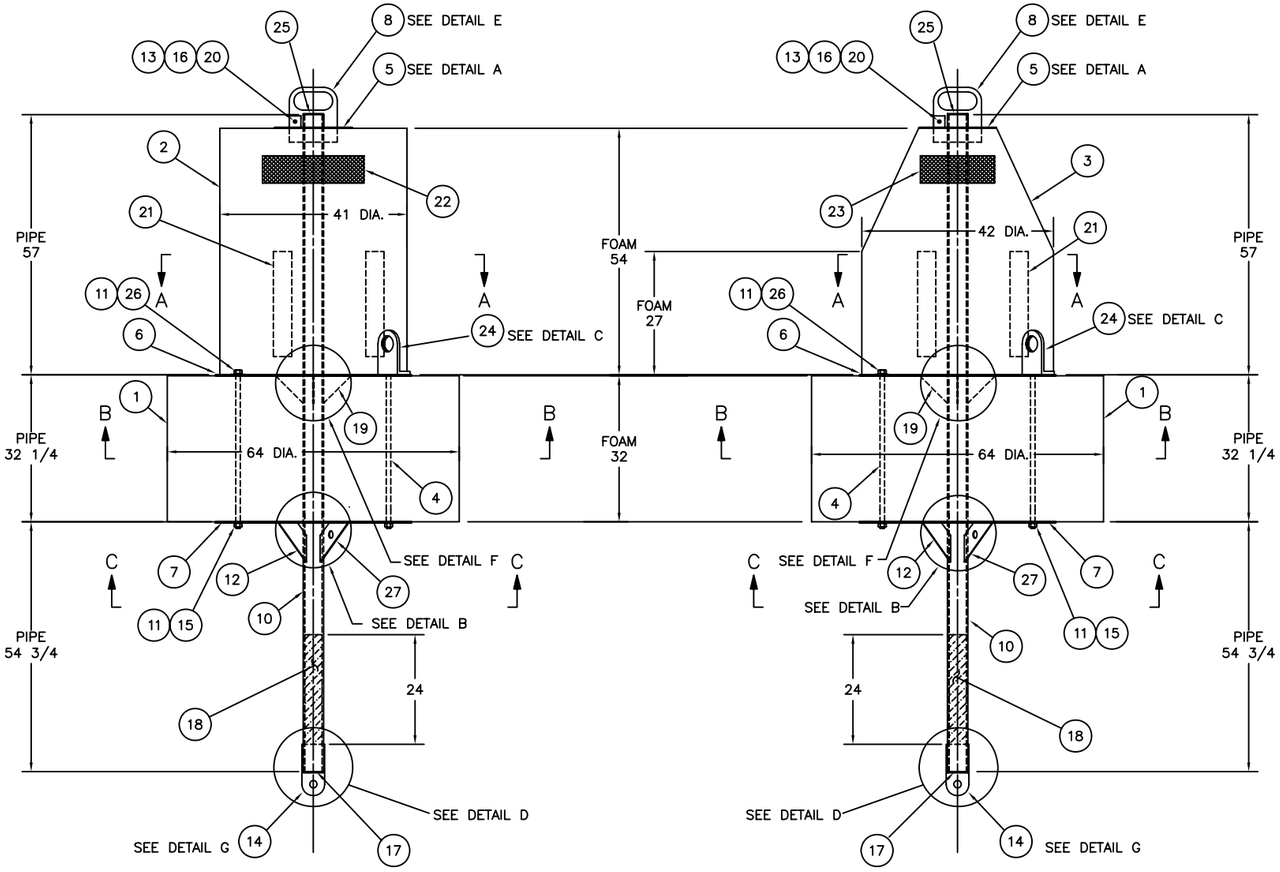


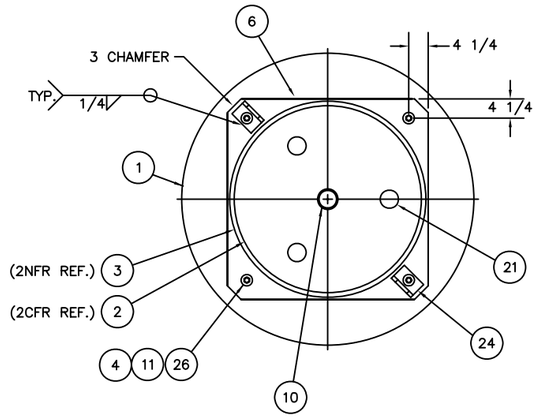

2CFR

SCALE: 3/4"=1'-0"




2NFR

SCALE: 3/4"=1'-0"



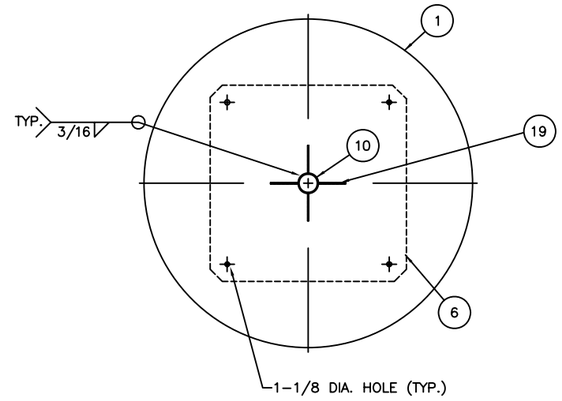

SECTION A-A

SCALE: 3/4"=1'-0"




SECTION C-C

SCALE: 3/4"=1'-0"




SECTION B-B

SCALE: 3/4"=1'-0"

| REV. | DATE | APPR. | DESCRIPTION | BY |
|---|---|---|---|---|
| E | 5-15-07 | S.W. | CHANGED ITEMS 1, 2 & 3 FROM 3 PCF TO 4 PCF. | S.M. |
| D | 1-5-99 | S.W. | MODIFIED QTY OF ITEMS 12 AND 21. ADDED ITEM 27. REORGANIZED NOTES. | S.M. |
| C | 4-21-98 | S.W. | MOD QTY OF ITEM 15. ADDED ITEM 26. DEL ITEM 9 AND NOTES 3, 5, 6, 8, & 9. REORGANIZED THE DWG. | S.M. |
| B | 11-24-97 | S.W. | MODIFIED SLOT DIMENSION FOR ITEM 5. | S.M. |
| A | 1-22-97 | S.W. | REORGANIZED DRAWING. MODIFIED ITEMS 5, 7, 8, 10, 13, 14, 15, 16, 19, 22, 23, 24. ADDED NOTE 9. ADDED ITEM 25. | C.B. |

DESIGNED: D.B.
DRAWN: D.B.
TRACED:
CHECKED: S.M.
REVIEWED BY: D. A. Braganza, PROJECT ENGINEER
REVIEWED BY: S. D. Walker, G-ECV-3B
REVIEWED BY:

U.S. COAST GUARD HEADQUARTERS

CIVIL ENGINEERING

# 2CFR AND 2NFR UNLIGHTED FOAM BUOYS

APPROVED: L. E. Jaeger, CHIEF OF OCEAN ENGINEERING BRANCH

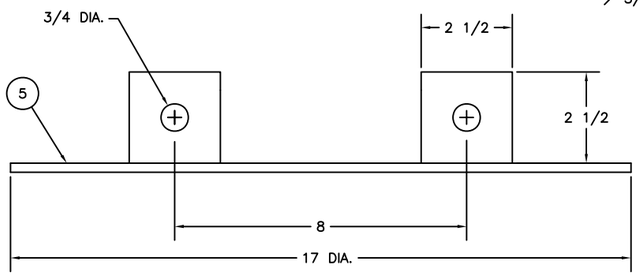
DATE: 09-06-95

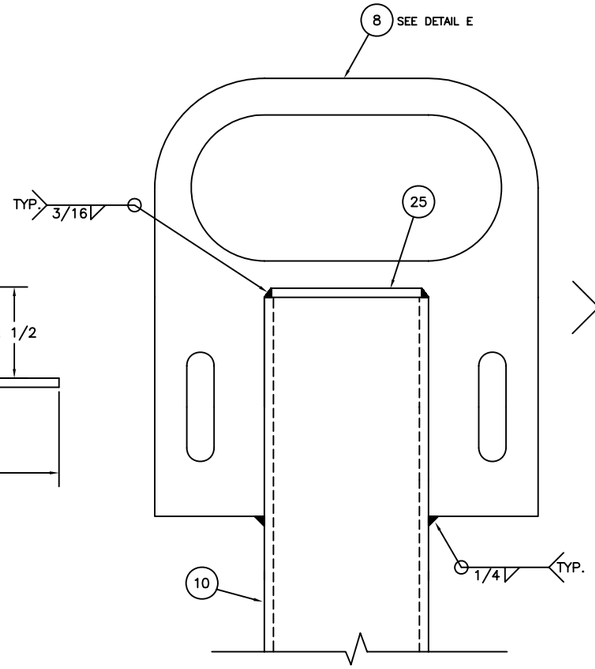
UNLESS OTHERWISE SPECIFIED:
ALL DIMENSIONS ARE IN INCHES.
TOLERANCES: DIM. ±1/8
ANG. ±1°

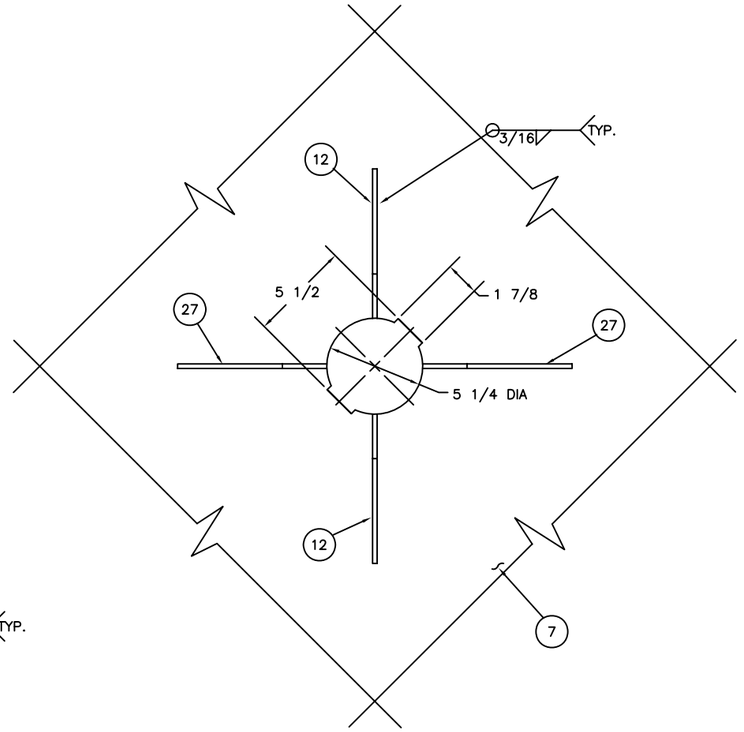
DRAWING NUMBER: 121166 REV. E

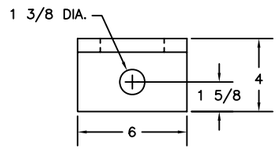
SCALE: AS NOTED SHEET 1 OF 3

PLOTTING SCALE: 3/4"=1'-0"

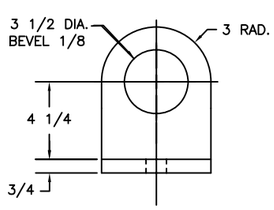


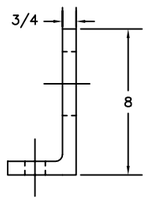




TOP VIEW



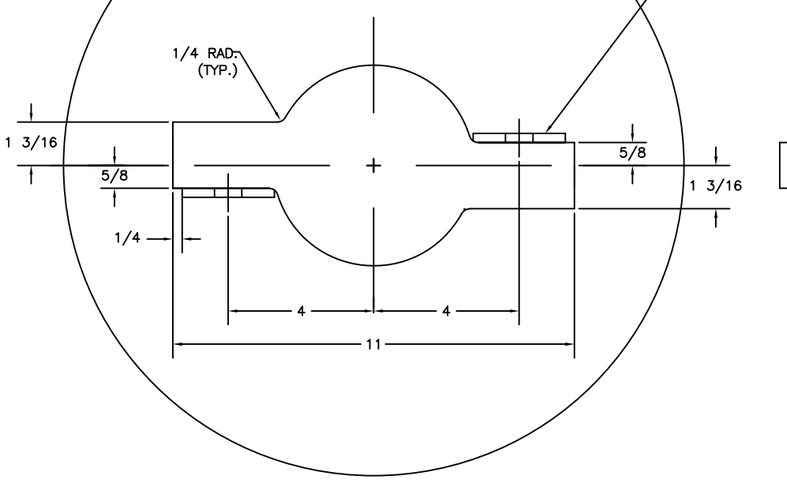

FRONT VIEW

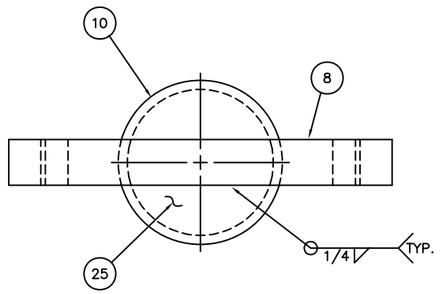



SIDE VIEW

## DETAIL C

SCALE: 3"=1'-0"

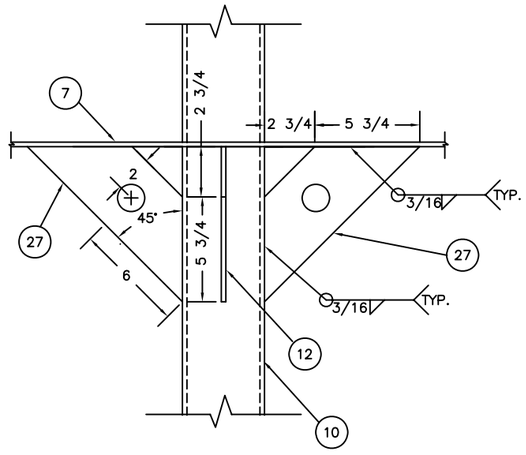



## DETAIL A

SCALE: HALF

NOTE: ITEM 5 BOLTS INTO ITEM 8 USING ITEMS 13, 16, AND 20




## DETAIL B

SCALE: 3"=1'-0"

(FOR CLARITY, THIS DETAIL HAS BEEN ROTATED 45° FROM THE VIEW ON PAGE 1)

| REV. | DATE | APPR. | DESCRIPTION | BY |
|---|---|---|---|---|
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| B | 11-24-97 | S.W. | MODIFIED SLOT DIMENSION FOR ITEM 5. | S.M. |
| A | 1-22-97 | S.W. | REORGANIZED DRAWING. MODIFIED ITEMS 5, 7, 8, 10, 13, 14, 15, 16, 19, 22, 23, 24. ADDED NOTE 9. ADDED ITEM 25. | C.B. |

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DRAWN: D.B.
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REVIEWED BY: D. A. Braganza, PROJECT ENGINEER
REVIEWED BY: S. D. Walker, G-ECV-3B
REVIEWED BY:

U.S. COAST GUARD HEADQUARTERS
CIVIL ENGINEERING

# 2CFR AND 2NFR UNLIGHTED FOAM BUOYS

APPROVED: L. E. Jaeger, CHIEF OF OCEAN ENGINEERING BRANCH
DATE: 09-06-95

UNLESS OTHERWISE SPECIFIED:
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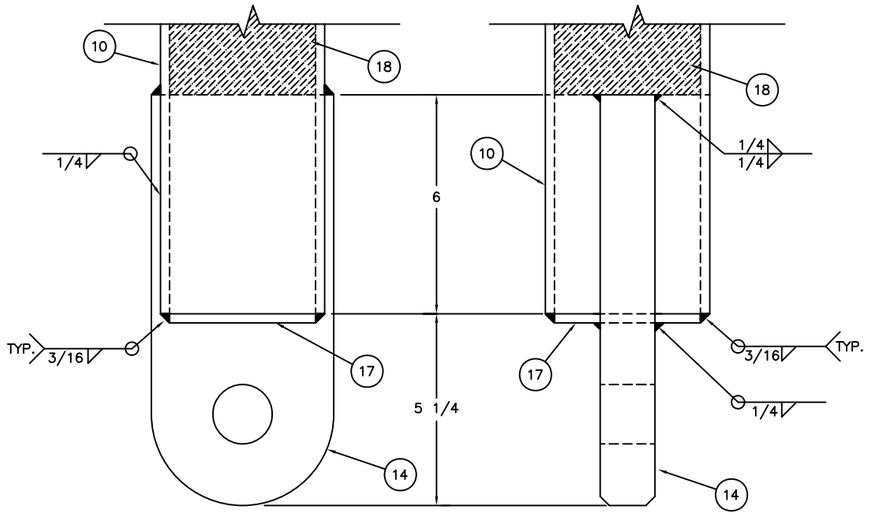
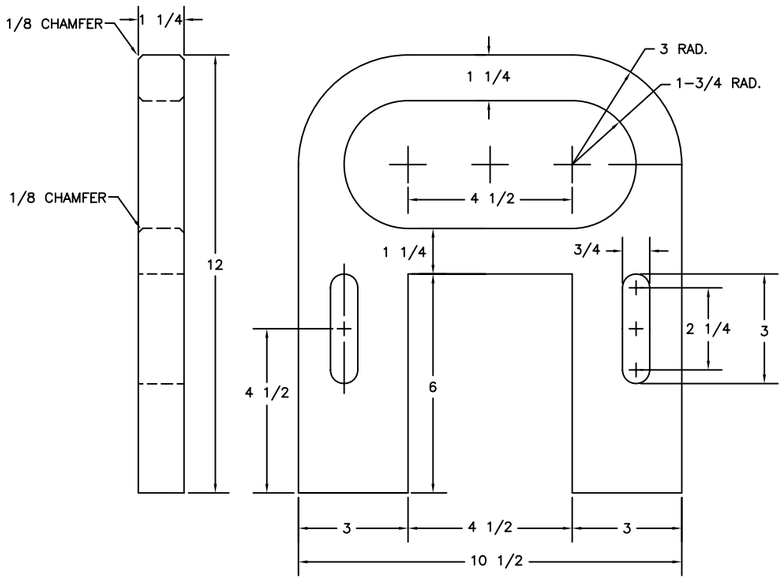
TOLERANCES: DIM. ±1/8
ANG. ±1°

DRAWING NUMBER: 121166 REV. E
SCALE: AS NOTED SHEET 2 OF 3

PLOTTING SCALE: 6"=1'-0"

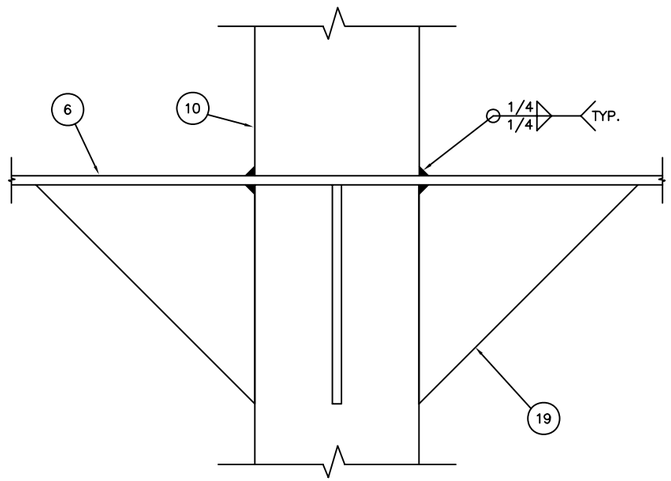



DETAIL D
SCALE: HALF

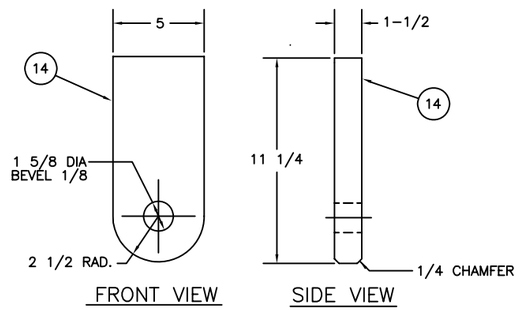



SIDE VIEW FRONT VIEW

DETAIL E
SCALE: 3"=1'-0"




DETAIL F
SCALE: HALF
(CROSS SECTIONAL VIEW)




FRONT VIEW SIDE VIEW

DETAIL G
SCALE: 3"=1'-0"

BILL OF MATERIALS

| ITEM NO. | CFR NO. REQ. | NFR NO. REQ. | DESCRIPTION | MATL. | REMARKS |
|---|---|---|---|---|---|
| 1 | 1 | 1 | BUOY BODY | FOAM | 4 PCF SEE NOTE 1 |
| 2 | 1 | – | BUOY DAYMARK (CFR) | FOAM | 4 PCF SEE NOTES 1 & 2 |
| 3 | – | 1 | BUOY DAYMARK (NFR) | FOAM | 4 PCF SEE NOTES 1 & 2 |
| 4 | 4 | 4 | THROUGH ROD | STAIN. STEEL | 1 X 36 LG. |
| 5 | 1 | 1 | TOP PLATE | STEEL | 17 O.D. x 5-1/2 I.D. x 1/4 THK |
| 6 | 1 | 1 | MIDDLE PLATE | STEEL | 44 SQ. x 1/4 THK. |
| 7 | 1 | 1 | BOTTOM PLATE | STEEL | 44 SQ. x 1/4 THK. |
| 8 | 1 | 1 | TOP LIFT EYE | STEEL | 1-1/4 THK. |
| 9 | | | | | |
| 10 | 1 | 1 | CENTER PIPE | STEEL | 4 SCH. 80 PIPE x 144 LG. |
| 11 | 8 | 8 | WASHER | STAIN. STEEL | 1 NOMINAL |
| 12 | 2 | 2 | BOTTOM SUPPORT GUSSETS | STEEL | 1/4 THK. |
| 13 | 2 | 2 | NYLOCK NUT | STAIN. STEEL | 5/8-11 UNC-2B |
| 14 | 1 | 1 | MOORING EYE | STEEL | 1-1/2 THK. |
| 15 | 4 | 4 | HEX HEAD NUT | STAIN. STEEL | 1-8 UNC-2B |
| 16 | 2 | 2 | ATTACHMENT BOLTS | STAIN. STEEL | 5/8-11 UNC-2A x 3 LG. |
| 17 | 2 | 2 | BOTTOM TUBE SEAL PLATES | STEEL | 1/4 THK |
| 18 | 1 | 1 | BALLAST | STEEL | 4 O.D. x 24 LG. SOLID STEEL |
| 19 | 4 | 4 | CENTER PIPE GUSSET | STEEL | 6 x 6 x 1/4 THK. |
| 20 | 4 | 4 | HEAVY WASHERS | STAINLESS STEEL | 5/8 NOMINAL |
| 21 | 3 | 3 | RADAR REFLECTOR | | MOBRI M4 SEE NOTE 3 |
| 22 | 3 | – | RETROREFLECTIVE MATERIAL | --- | 6 x 27-1/2 SEE NOTE 4 |
| 23 | – | 3 | RETROREFLECTIVE MATERIAL | --- | 6 x 22-1/2 SEE NOTE 4 |
| 24 | 2 | 2 | MIDDLE LIFT EYE | STEEL | 8 x 4 x 3/4 L |
| 25 | 1 | 1 | TOP TUBE SEAL PLATE | STEEL | 1/4 THK |
| 26 | 4 | 4 | NYLOCK NUT | STAINLESS STEEL | 1-8 UNC-2B |
| 27 | 2 | 2 | UPPER MOORING EYE | STEEL | 3/4 THK |

## NOTES:

1. SEE LATEST REVISION OF U.S.C.G. CIVIL ENGINEERING SPECIFICATION No. 450 FOR FABRICATION REQUIREMENTS.
2. CUT HOLES IN ITEMS 2 & 3 TO PERMIT A TIGHT FIT WITH ITEM 21. FILL VOID WITH IONOMER FOAM PLUGS
3. INSTALL ITEM 21, 120° APART.
4. INSTALL ITEMS 22 AND 23, 120° APART AND SIX INCHES FROM THE TOP OF THE BUOY.
5. COMPRESS FOAM WITH PART 6 UNTIL IT IS COMPRESSED INTO PART 1 APPROXIMATELY 1/4".

| REV. | DATE | APPR. | DESCRIPTION | BY |
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DRAWING NUMBER: 121166 REV. E
SCALE: AS NOTED SHEET 3 OF 3

PLOTTING SCALE: 6"=1'-0"