

NOTES:

1. ENCLOSURE ASSEMBLY:
  - a.) FOR A CATERPILLAR 1750kW 3516C GEN-SET (ACS TO MOUNT ON SUB-BASE FUEL TANK).
  - b.) FULLY ASSEMBLED ACOUSTICAL ENCLOSURE TO BE MOUNTED TO BASE TANK AND THEN ANCHORED TO THE FOUNDATION.
  - c.) PANEL JOINTS ARE SKIP WELDED AND CAULKED.
2. ENCLOSURE CONSTRUCTION:
  - a.) SKIN – 14 GA. GALVANNEAL STEEL (WALLS).  
14 GA. GALVANNEAL STEEL (ROOF).
  - b.) FRAMING – A36 STRUCTURAL CHANNEL & A500-B TUBING.
  - c.) INNER LINER – GALVANIZED PERFORATED STEEL.
  - d.) INSULATION – MINERAL WOOL PROTECTED BY 2 MIL POLY COVERING WALLS AND ROOF.
  - e.) DOORS – FOUR (4) SINGLE ACCESS SERVICE DOORS WITH STAINLESS STEEL HINGES & CHROME PLATED REFRIGERATOR DOOR LATCH w/ INSIDE RELEASE.
  - f.) ONE (1) FIXED INLET WEATHER LOUVER (GALVANNEAL CONSTRUCTION).
  - g.) 60T" DEEP INLET BAFFLE PANELS (GALVANNEAL CONSTRUCTION).
  - h.) 36" DEEP DISCHARGE BAFFLE PANELS (GALVANNEAL CONSTRUCTION).
  - i.) ONE (1) GRAVITY BACKDRAFT DAMPER – (ALUMINUM CONSTRUCTION).
  - j.) ONE (1) INTERNAL DISCHARGE ELBOW – (GALVANIZED CONSTRUCTION).
3. DESIGN CONSTRUCTION:
  - a.) AIR FLOW RATES;  
RADIATOR – 87,580 CFM  
COMBUSTION – 6,175 CFM
  - b.) PRESSURE DROPS;  
INLET & DISCHARGE LOUVERS/BAFFLES 0.5" W.G. OR LESS (TOTAL).
  - c.) PERFORMANCE;  
DESIGNED TO REDUCE THE GEN-SET EQUIPMENT NOISE LEVEL TO 62 dBA WHEN MEASURED AT A DISTANCE OF 23 FEET FROM THE ENCLOSURE AND 5 1/2 FEET ABOVE GRADE.  
(PROVIDING THE EQUIPMENT NOISE DOES NOT EXCEED 120 dBA @ 3 FEET).
4. PAINTING:
  - a.) ALL EXTERIOR GALVANIZED SURFACES TO BE SOLVENT CLEANED PER SSPC-SP1 AND PAINTED AS FOLLOWS;  
\* PRIMER – INDUSTRIAL WASH PRIMER.  
\* INTERMEDIATE – ONE COAT AMERON AMERLOCK 2 (3-5 MILS DFT).  
\* FINISH – ONE COAT AMERON PSX 700 POLYURETHANE TEXTURE (2-3 MILS DFT).  
\* ENCLOSURE INTERIOR WALL AND ROOF SURFACES WILL NOT BE PAINTED.
  - b.) ALL CARBON STEEL SURFACES TO BE POWER TOOL CLEANED PER SSPC-SP3 AND PAINTED AS FOLLOWS;  
\* PRIMER – INDUSTRIAL WASH PRIMER.  
\* INTERMEDIATE – ONE COAT AMERON AMERLOCK 2 (3-5 MILS DFT).  
\* FINISH – ONE COAT AMERON PSX 700 POLYURETHANE TEXTURE (2-3 MILS DFT).  
\* INTERIOR SURFACES WILL NOT BE PAINTED.
  - c.) COLOR – PRECISION TAN.
5. BASE FUEL TANK: U.L. 142, SUB BASE, 3,590 GALLON CAPACITY FINISH PAINTED TO MATCH ENCLOSURE.
6. ELECTRICAL:
  - a.) SEE ELECTRICAL 11841-10E.
7. QUANTITY REQUIRED:
 

TWO (2) GEN-SET ENCLOSURE ASSEMBLIES  
TWO (2) U.L. 142 SUB BASE FUEL TANKS  
(ACS TO ASSIST WITH SETTING ENCLOSURE AND HOOK UP CONNECTIONS)
8. WEIGHTS:
 

ESTIMATED WEIGHTS ARE AS FOLLOWS:

1) ENCLOSURE ASSEMBLY	– 27,450 LBS
2) SUB BASE FUEL TANK	– 16,900 LBS
3) GENSET ASSEMBLY	– 40,000 LBS
TOTAL	– 84,350 LBS
9. SHIPPING SIZES:
 

1) ENCLOSURE ASSEMBLY	– 472" L x 162" W x 156" H
2) U.L. 142 SUB BASE FUEL TANK:	– 400" L X 156" W X 25" H
3) GENSET ASSEMBLY	– 246" L X 97" W X 117" H
10. ACS CONTACT INFORMATION
 

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QUOTE NO.: 1204020 REV. 6

PO NO.: 120043E001

WO NO.: TBD

JOB NAME: US AIR

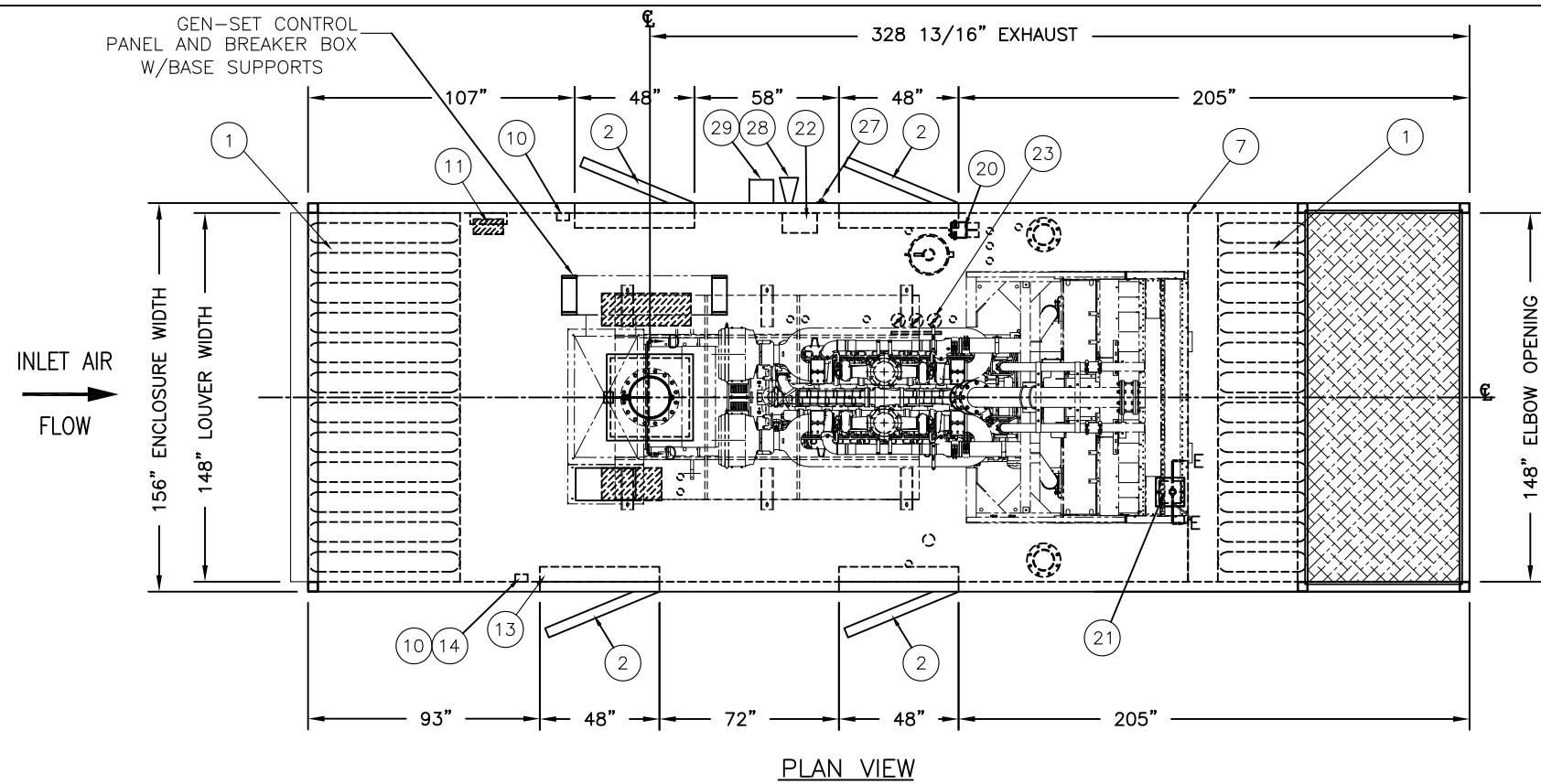


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DATE 05/18/12		1 OF 4 F	
DRAWING NUMBER 11841-10			
EMPIRE CAT			
ACOUSTICAL ENCLOSURE TEXT SHEET			

\*CUSTOMER TO VERIFY ALL NOTES AND DIMENSIONS

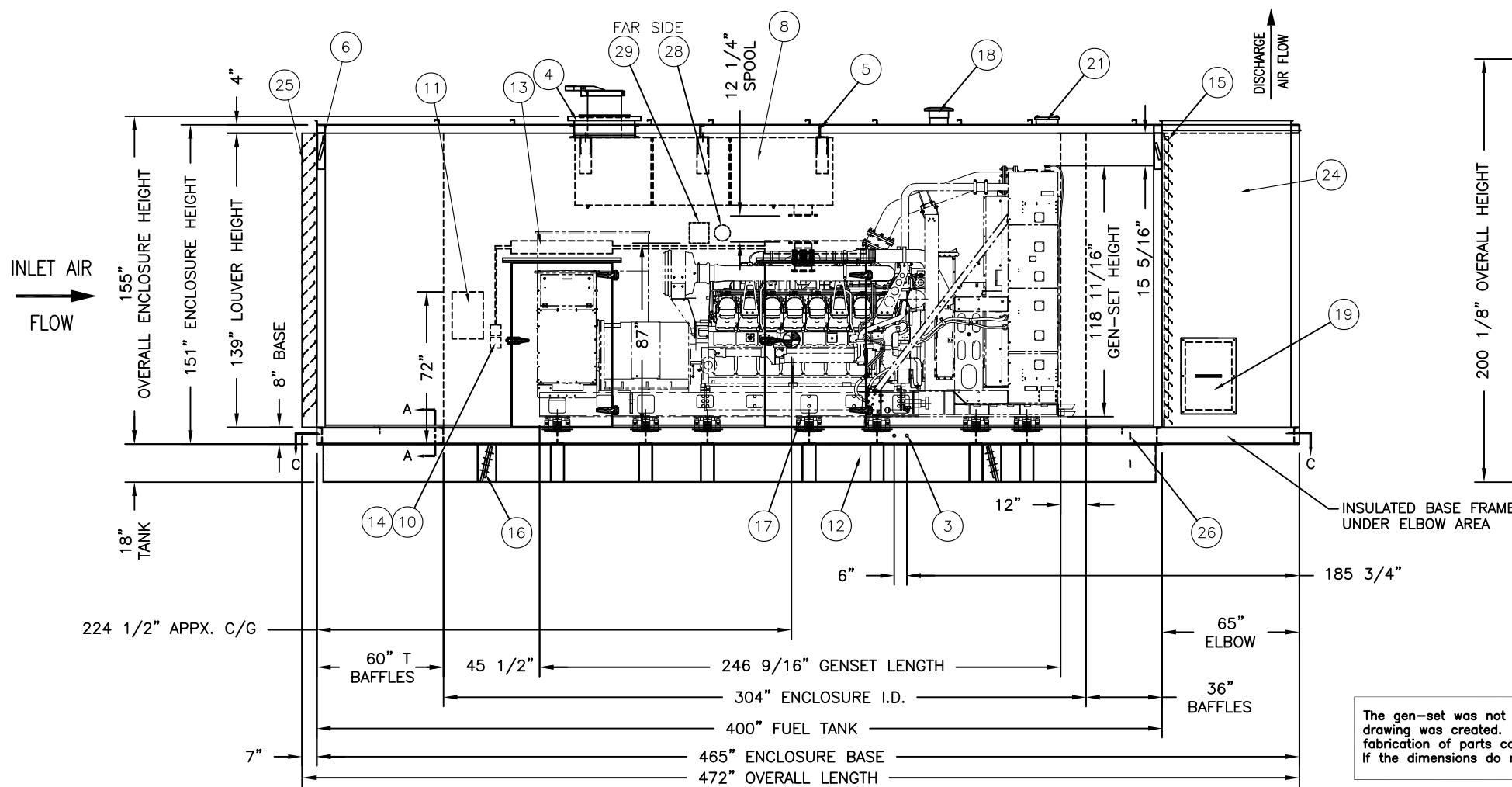
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E	SEE SHEETS 2 & 4	DK	SO	09/10/12
D	SEE SHEETS 2 & 4	DM	SO	07/30/12
C	SEE SHEET 2	MS	SO	06/18/12
B	UPDATED PERFORMANCE DATA	MS	SO	06/11/12
A	SEE SHEET 2	MS	SO	05/22/12
REV	ECO NUMBER	DESCRIPTION	BY APPD	DATE 05/18/12

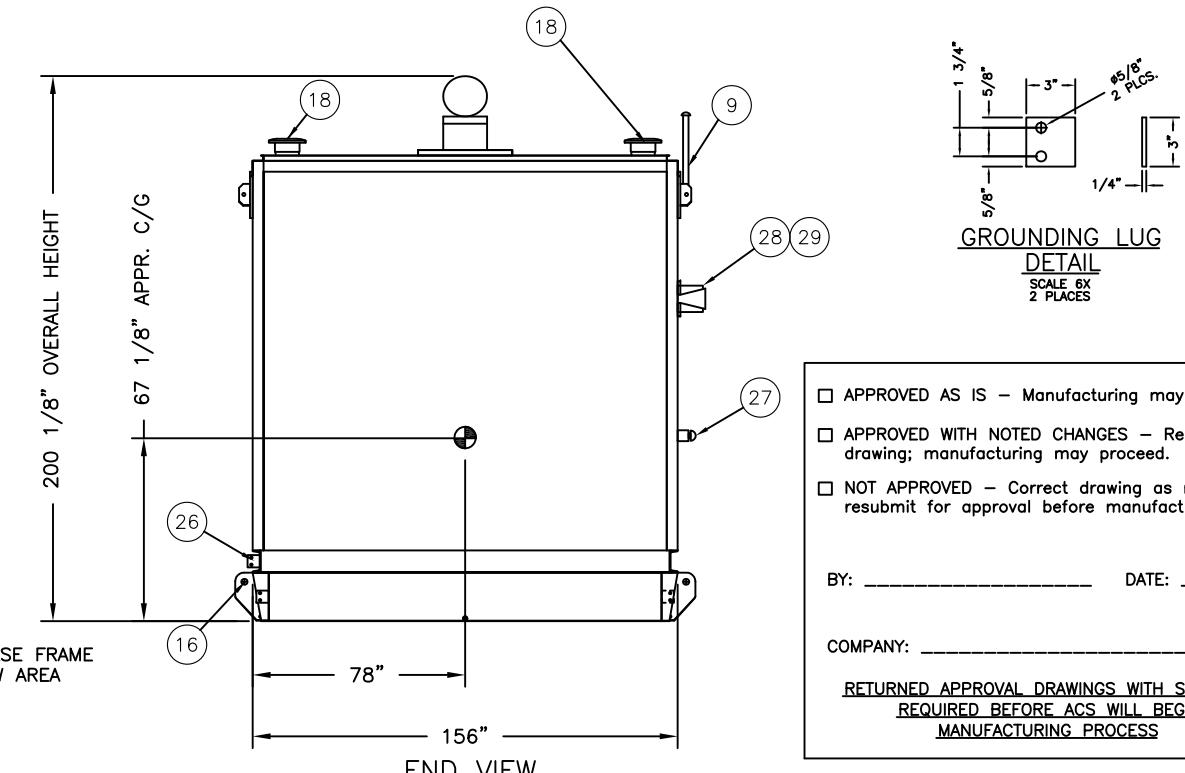


PLAN VIEW

Parts List		
ITEM	QTY	NAME
1	24	BAFFLE PANEL W/MINERAL WOOL
2	4	48" X 78" SINGLE DOOR - DOUBLE SEAL
3	2	1" SKID COUPLINGS - OIL & COOLANT DRAINS, EXTENDED TO ENCLOSURE BASE CHANNEL, BALL VALVE INSIDE AND PLUGGED OUTSIDE. (NEAR SIDE)
4	1	SSTL EXHAUST WEATHER COVER W/16" ANSI FLANGE
5	4	INTERNAL MUFFLER SUPPORT CHANNEL
6	4	ENCLOSURE LIFTING LUG (DESIGNED TO LIFT ENCLOSURE ONLY) WELD-ON
7	1	RADIATOR FLASHING
8	1	COMPLETE EXHAUST SYSTEM (INCLUDING MUFFLER, FLEXES w/BLANKETS, TAILPIPE, RAIN CAP, NBG KIT)
9	1	FUEL TANK NORMAL VENT(EXTENDED TO ROOF LINE AT LEAST 12' ABOVE GRADE)
10	2	DUPLEX RECEPTACLE, 20A
11	1	LOAD CENTER w/BREAKERS, 100A - 120/240V, 1PH
12	1	UL-142 BASE TANK, 3,590 GALLON CAPACITY
13	4	FLOURESCENT LIGHT FIXTURE
14	2	3-WAY LIGHT SWITCH
15	1	DISCHARGE GRAVITY BACKDRAFT DAMPER (ALUMINUM)
16	4	TANK LIFTING LUGS (DESIGNED TO LIFT TANK AND GENSET ONLY) BOLT-ON
17	14	SPRING ISOLATOR (BY OTHERS) ACS TO MOUNT AND INSTALL
18	2	FUEL TANK EMERGENCY VENT(EXTENDED TO ROOF LINE AT LEAST 12' ABOVE GRADE)
19	1	ELBOW ACCESS HATCH
20	1	FUEL TANK ANNUNCIATOR PANEL W/AUDIBLE & VISUAL ALARMS
21	1	RADIATOR ACCESS HATCH
22	1	BATTERY CHARGER (BY OTHERS) INSTALLED BY ACS
23	1	RACOR FILTER ASSEMBLY (ACS TO MOUNT AND PLUMB)
24	1	INTERNAL DISCHARGE ELBOW
25	1	INTAKE FIXED WEATHER LOUVER
26	2	GROUNDING LUG, 304SS (LOCATED ON OPPOSING CORNERS OF BASE FRAME)
27	1	EMERGENCY STOP STATION (PULL TO STOP FLIP-UP COVER)
28	1	SIGNAL HORN
29	1	SIGNAL LIGHT



ELEVATION VIEW



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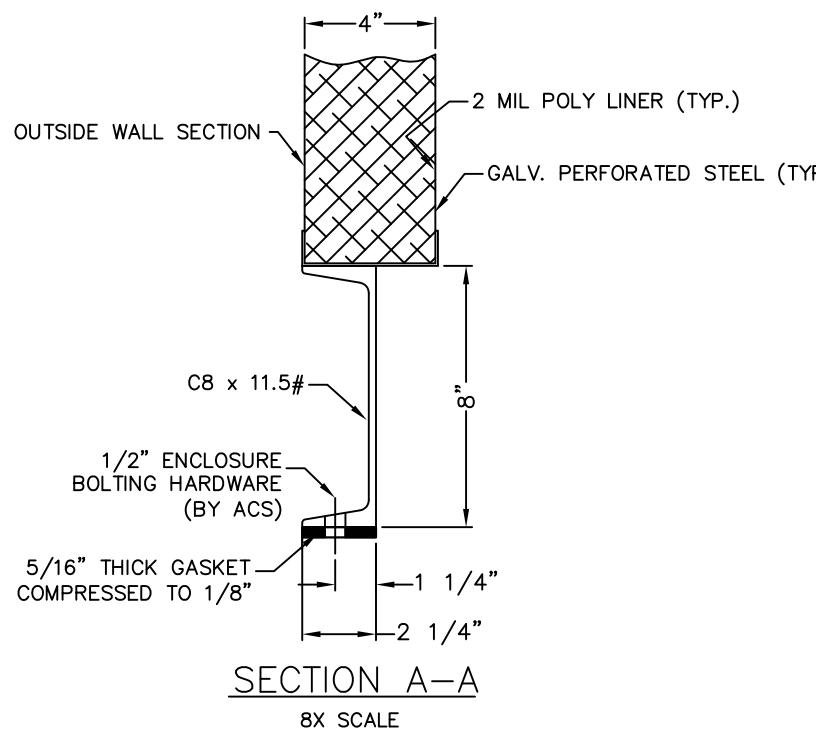
JOB NAME: US AIR



The gen-set was not available for physical review when this drawing was created. Please verify all dimensions prior to fabrication of parts connected to the location of the gen-set. If the dimensions do not match please contact Engineering.

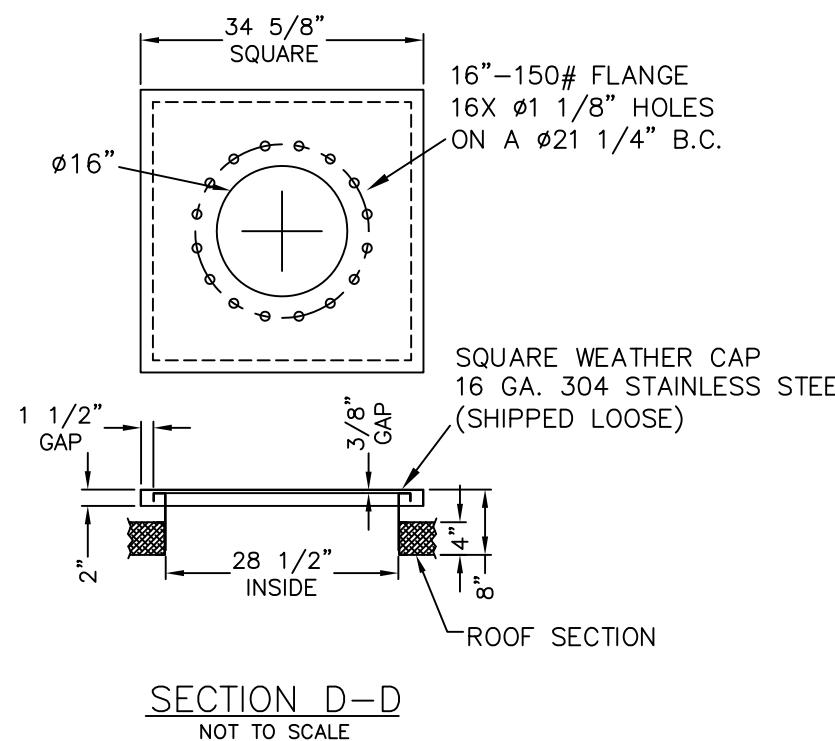
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SCALE 1 TO 1		CHECKED BY:
DATE 05/18/12		APPROVED BY: SO
DRAWING NUMBER 11841-10		SHEET 2 OF 4
REV. F		

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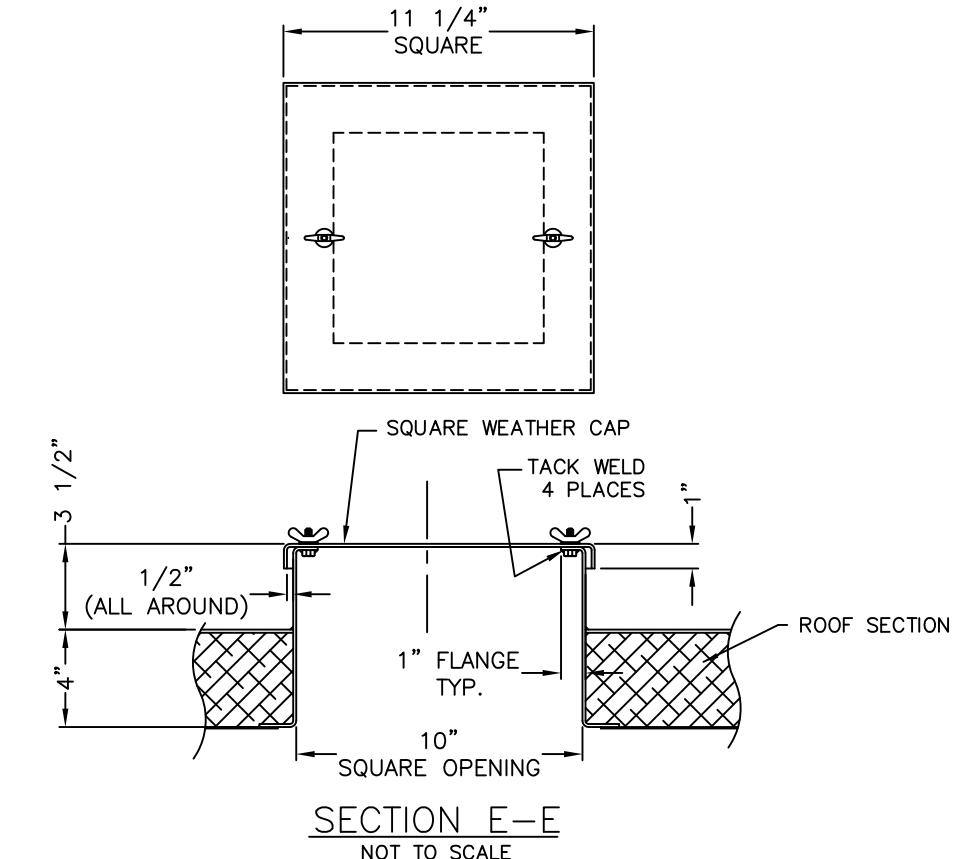


SECTION A-A

8X SCA

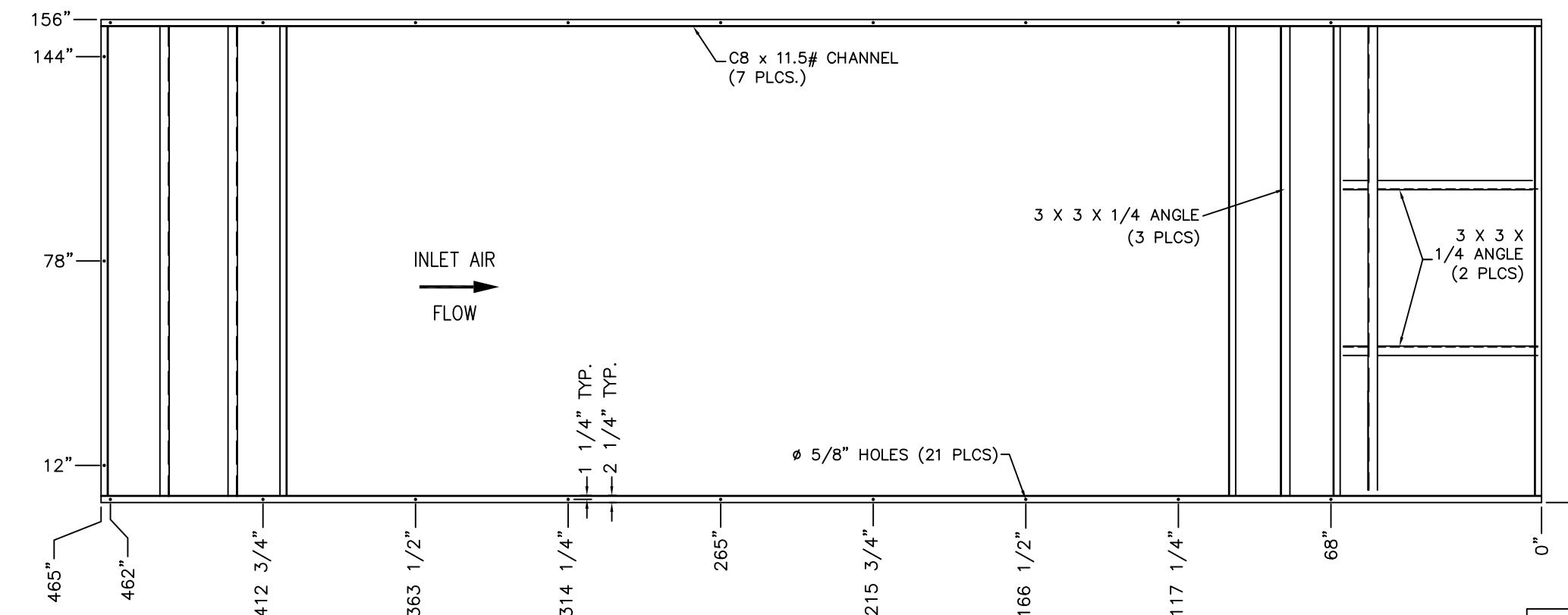


SECTION D-D  
NOT TO SCALE



SECTION E-E  
NOT TO SCALE

NOT TO SCALE



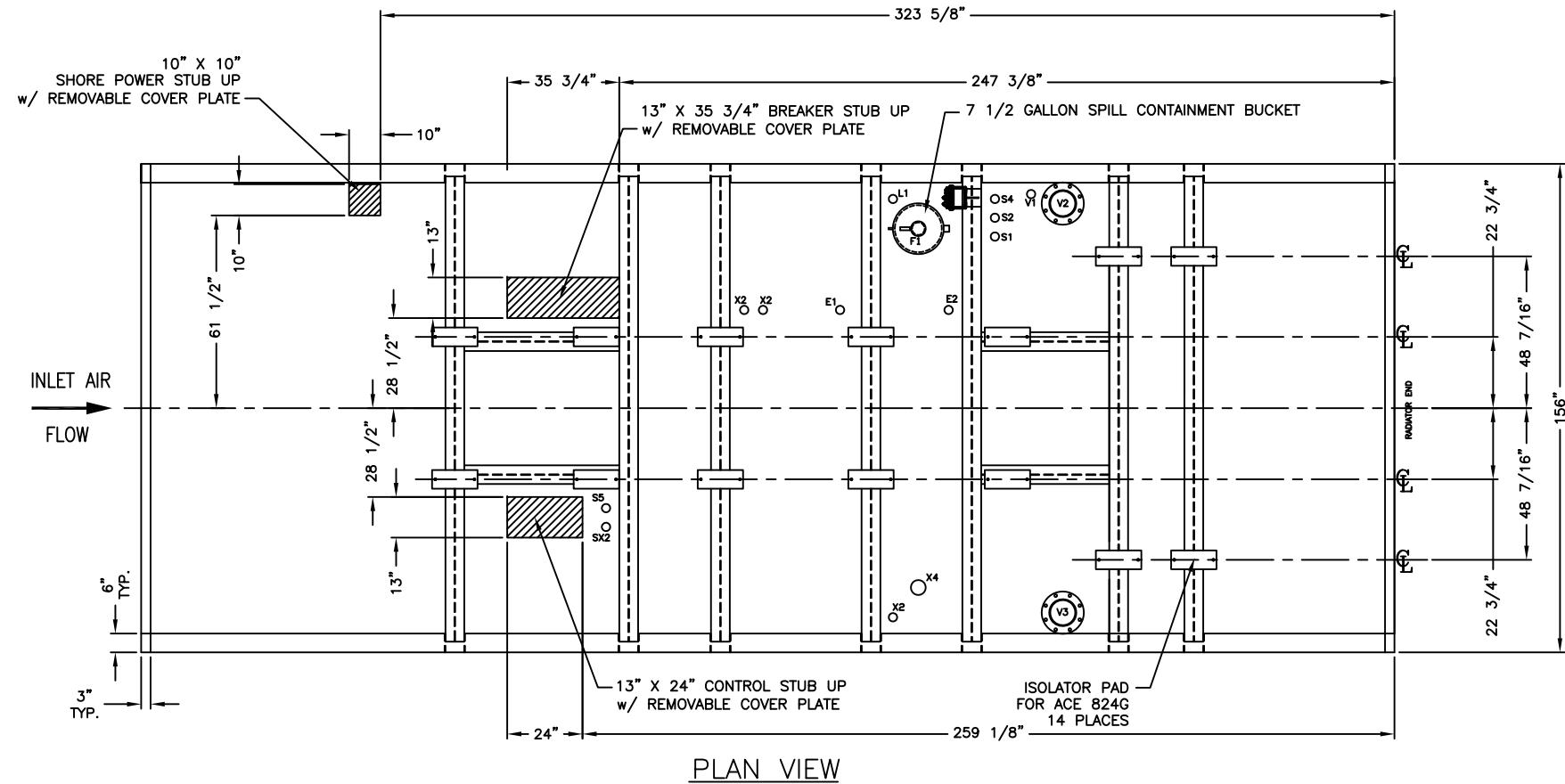
SECTION C-C



EMPIRE CAT

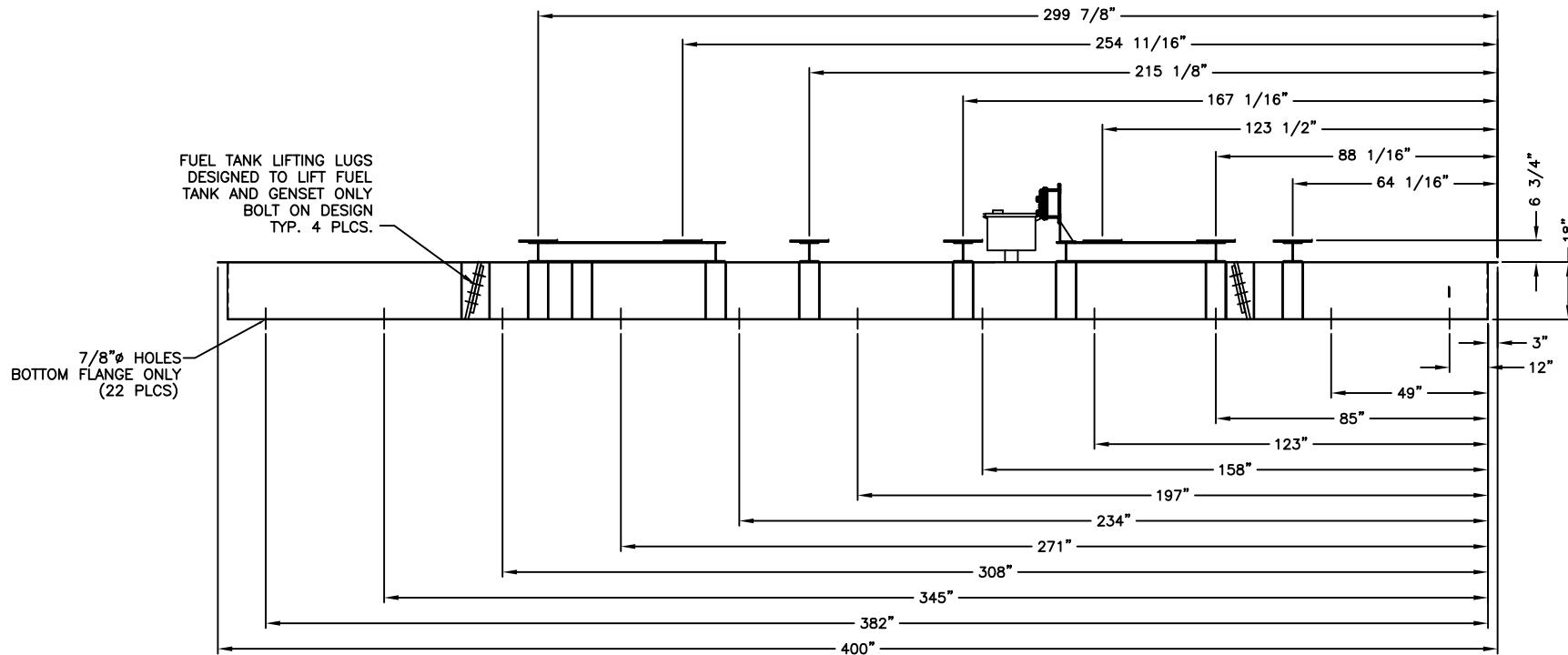
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D	SEE SHEETS 2 & 4	DM	SO	07/30/12	FRACTIONAL $\pm 1/8$			CHECKED BY:
C	SEE SHEET 2	MS	SO	06/18/12	ANGULAR $\pm 3^\circ$	TITLE	ACOUSTICAL ENCLOSURE ASSEMBLY	APPROVED BY: SO
B	SEE OTHER SHEETS	MS	SO	06/11/12	SCALE 1 TO 1		DETAIL SHEET	
A	SEE SHEET 2	MS	SO	05/22/12	DATE 05/18/12	DRAWING NUMBER	11841-10	3 OF 4 F
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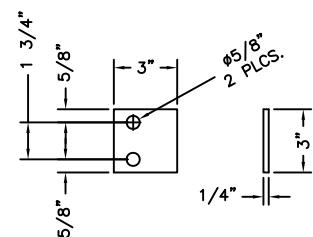
ELEVATION VIEW

U.L. 142 SUB BASE FUEL TANK  
3,590 GALLON CAPACITY/3,000 GALLON USABLE

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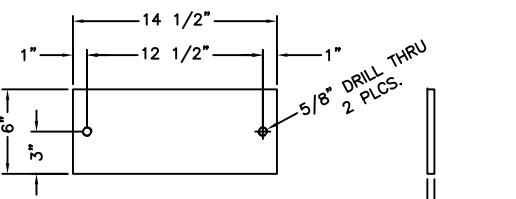
REF.	FITTING SIZE	DESCRIPTION
D1	1" NPT	TANK DRAIN - SECONDARY
E1	2" NPT	ENGINE FUEL SUPPLY - 1 1/2" NPT DIP TUBE
E2	2" NPT	ENGINE FUEL RETURN - 1 1/2" NPT DIP TUBE
F1	4" NPT	FUEL FILL W/ OPV (95%) & 2" CAMLOCK
L1	2" NPT	LEVEL GAUGE - DIRECT SITE READING
S1	2" NPT	LOW LEVEL SWITCH - N.C. - 35%
S2	2" NPT	HIGH LEVEL SWITCH - N.O. - 90%
S4	2" NPT	CRITICAL HIGH LEVEL SWITCH - N.O. - 95%
S5	2" NPT	LEAK DETECTOR SWITCH - N.O.
SX2	2" NPT	SPARE FITTING - SECONDARY - (1)
V1	2" NPT	NORMAL VENT - PRIMARY - EXTENDED OUTSIDE OF ENCLOSURE TO ROOF LINE (AT LEAST 12' ABOVE GRADE) SHIPPED LOOSE
V2	8" NPT	EMERGENCY VENT-PRIMARY - EXTENDED OUTSIDE OF ENCLOSURE TO ROOF LINE (AT LEAST 12' ABOVE GRADE) SHIPPED LOOSE
V3	8" NPT	EMERGENCY VENT-SECONDARY-EXTENDED OUTSIDE OF ENCLOSURE TO ROOF LINE (AT LEAST 12' ABOVE GRADE) SHIPPED LOOSE
X2	2" NPT	SPARE FITTING - (3)
X4	4" NPT	SPARE FITTING - (1)

\*FLOAT SWITCHES WIRED TO GEN-SET CONTROL PANEL VIA FLEX.  
\*FUEL SUPPLY & RETURN LINES CONNECTED TO TANK FITTINGS.



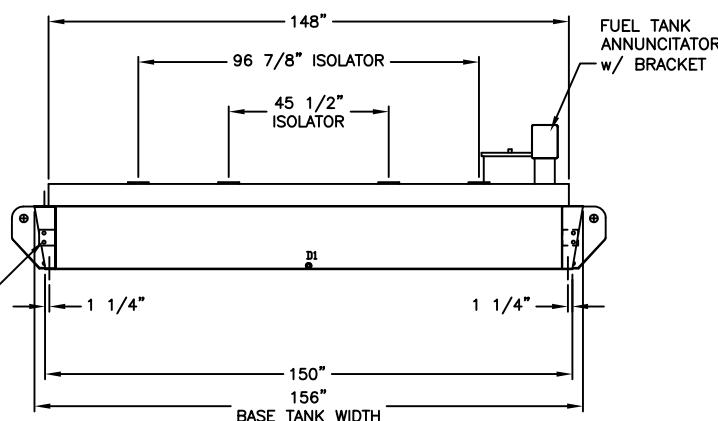
GROUNDING LUG  
DETAIL

SCALE 6X  
2 PLACES



ISOLATOR PAD  
FOR ACE 824G

SCALE 4X  
14 PLACES



END VIEW

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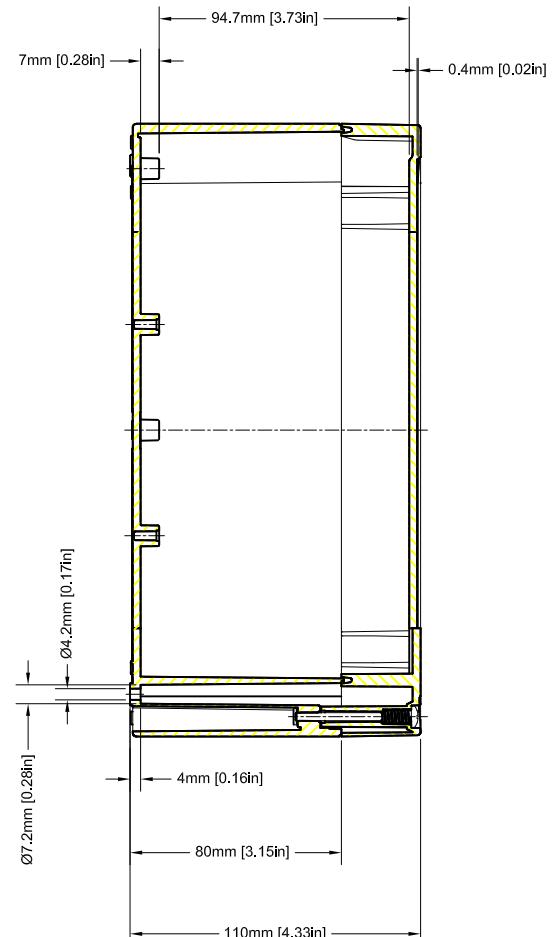
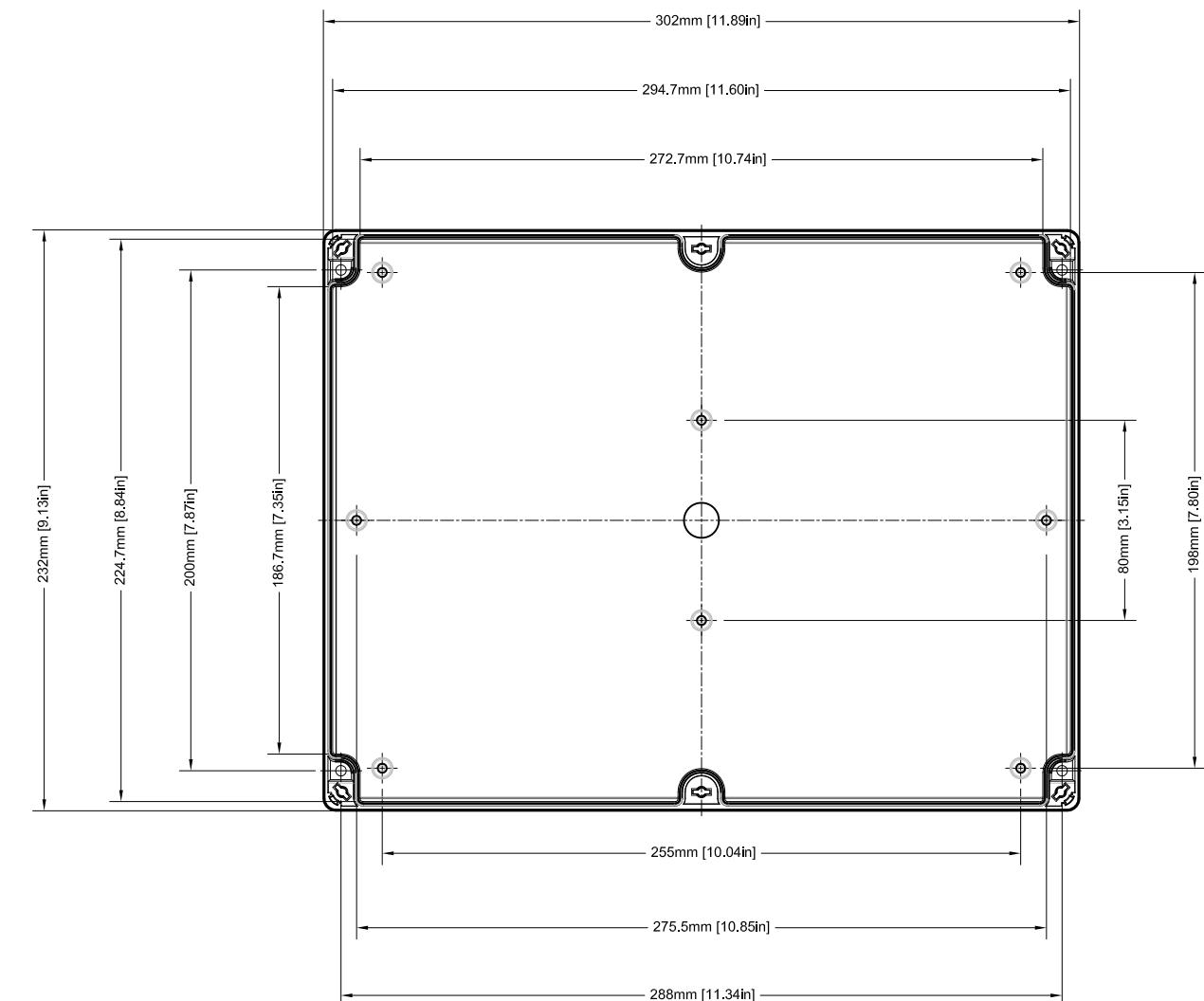
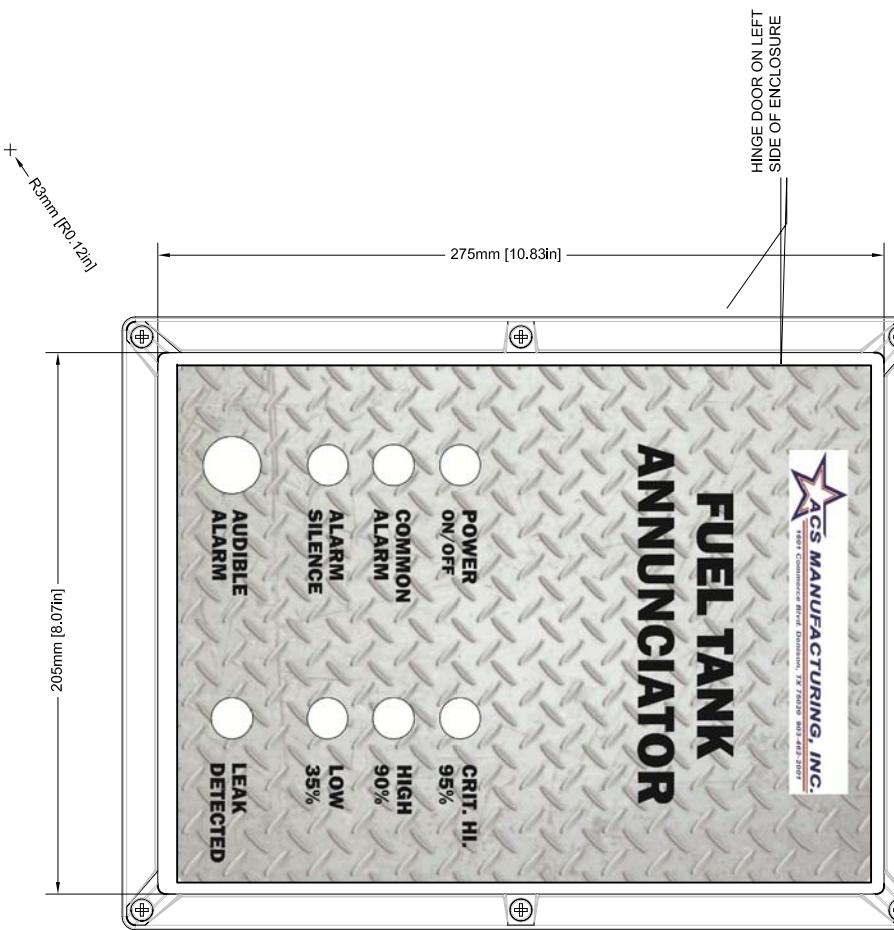
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JOB NAME: US AIR



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FRACTIONAL + 1/8"		CHECKED BY:	
ANGULAR $\pm 3^\circ$		APPROVED BY:	SO
SCALE 3/16" = 1"		APPROVED BY:	SO
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REV. 4 of 4		REVISION:	F





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SCALE	N/A	FUEL TANK ANNUNCIATOR ELECTRICAL SCHEMATIC	
DRAWING NUMBER		11841-10E	
SHEET		2 of 3	
REV.		B	

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