

GENERAL INFORMATION

- ENCLOSURE DIMENSIONS AND WEIGHTS
 - LENGTH: NOMINAL 33'-6" SHIPPING 43'-9"
 - WIDTH: NOMINAL 9'-9" SHIPPING 10'-4"
 - HEIGHT: NOMINAL 14'-4" SHIPPING 14'-10"
 - EMPTY ENCLOSURE WEIGHT: 20,773 LBS.
 - SKID WEIGHT: 5,995 LBS
 - *EQUIPMENT WEIGHT: 24,598 LBS. (PROVIDED BY CUSTOMER)
 - TOTAL WEIGHT: 51,366 LBS.
- SHIPPING LOCATION: FARIBAULT, MINNESOTA
- MODEL NUMBER: 70184-1
- NUMBER OF STORIES: 1
- OCCUPANCY LOAD: 0
- BUILDING AREA IN SQUARE FEET: 327 SQ. FT.
- BUILDING NOT HABITABLE

BASIC DESIGN CRITERIA

INTERNATIONAL BUILDING CODE: 2012 WITH STATE AMENDMENTS (2015 MINNESOTA BUILDING CODE)
 FIRE CODE: NFPA 30, NFPA 12
 NATIONAL ELECTRICAL CODE: 2014
 AREA CLASSIFICATION: GENERAL PURPOSE NON-HAZARDOUS
 BUILDING USE GROUP: U
 CONSTRUCTION TYPE: II-B
 OCCUPANCY CATEGORY: II
 WIND SPEED: 120 MPH, EXPOSURE C
 SEISMIC IMPORTANCE FACTOR: 1.0
 ROOF LIVE LOAD: 20 PSF - NO MORE THAN 700 LBS OF SILENCER PER ROOF BOV
 GROUND SNOW LOAD: 50 PSF IMPORTANCE FACTOR: 1.0
 FLOOR LOAD: 250 PSF-DL+LL
 FLOOR LIVE LOAD: 225 PSF FLOOR DEAD LOAD: 25 PSF
 BASE DEFLECTION (ON FOUNDATION): L/240

THE FOLLOWING INFORMATION IS THE RESPONSIBILITY OF OTHERS

GENERAL CIVIL REQUIREMENTS AND DESIGN CRITERIA ARE NOT THE RESPONSIBILITY OF HARVARD INTEGRATIONS. THIS INCLUDES AND IS NOT LIMITED TO: SITE LAYOUT, SURVEYING, FOUNDATION AND ANCHORING DESIGN, FIRE SEPARATION DISTANCE, ETC.

CONSTRUCTION

- EXTERIOR WALL ASSEMBLY 14GA. PRE-GALVANIZED G90 STEEL PANELS ASTM A653. CAULK ALL EXTERIOR WALL SEAMS.
- EXTERIOR WALL FLOOR CAPPING 14GA. PRE-GALVANIZED G90.
- EXTERIOR WALL CAPPING 14GA. PRE-GALVANIZED G90.
- ROOF ASSEMBLY
 6"-8" TAPERED W/ 12GA. ROOF BEAMS PRE-GALVANIZED G90 SHEET STEEL ASTM A653
 14GA. ROOF PANELS PRE-GALVANIZED G90 SHEET STEEL ASTM A653
 FIBERGLASS INSULATION 6" THICK; R= 25.00
- CEILING ASSEMBLY 22GA. PERFORATED, GALVANIZED LINER
- INTERIOR WALL LINER 22GA. PERFORATED, GALVANIZED.
- STEEL DESIGN, IDENTIFICATION, AND FABRICATION COMPLIES WITH AISC 360-2005, AISI S100-2007, AISI S200-2007

FINISH:

- EXTERIOR PAINT SYSTEM - HARVARD WHITE
 EXTERIOR SURFACES - BASE (EXTERIOR), WALLS, ROOF, & FASCIA
 - CLEAN ALL OTHER SURFACES TO SSPC-SP1 (SOLVENT CLEANING)
 - PRIMER / WALLS, ROOF & FASCIA - EPOXY PRIMER 2.0 MILS DFT
 - FINISH - HIGH SOLIDS POLYURETHANE ENAMEL 2.0 MILS DFT
- FLOOR - (TOP AREA) PAINT SYSTEM - BLACK
 - CLEAN ALL SURFACES TO SSPC-SP1 (SOLVENT CLEANING)
 - PRIMER - EPOXY PRIMER 2.0 MILS DFT
 - FINISH - HIGH SOLIDS POLYURETHANE ENAMEL 2.0 MILS DFT W / NON - SKID ADDITIVE
- TOUCH UP PAINT KIT

MATERIAL SPECIFICATION

FORMED C-CHANNEL: A1011
 L-ANGLE: A36
 HSS SQUARE AND RECTANGULAR TUBE: A500 GRB - Fy = 42 ksi
 PLATE 1/2" AND GREATER: A36
 WALL, CEILING, AND ROOF PANELS: A653 - Fy = 38 ksi

DRAWING NO.	REVISION	DRAWING NAME	REVISION DATE
70184-1-001	3	COVER	6/13/17
70184-1-100	1	FLOOR PLAN VIEW	6/12/17
70184-1-105	1	CEILING/ROOF PLAN VIEW	4/28/17
70184-1-106	1	SILENCER DETAILS	4/28/17
70184-1-110	1	ELECTRICAL PLAN VIEW	4/28/17
70184-1-200	2	ASSEMBLED BASE DETAIL	6/13/17
70184-1-250	0	CONCRETE LAYOUT	
70184-1-300	1	ELEVATION VIEW RIGHT	6/13/17
70184-1-301	0	ELEVATION VIEWS FRONT	
70184-1-310	1	ELEVATION VIEW LEFT	4/28/17
70184-1-311	1	ELEVATION VIEWS REAR	4/28/17
70184-1-360	2	DOOR DETAILS	6/13/17
70184-1-400	1	GENSET CONSTRUCTION DETAILS	4/28/17
70184-1-500	0	LIFTING/SHIPPING DETAILS	
70184-1-520	0	CENTER OF GRAVITY	
70184-1-002	1	ELECTRICAL COVER	4/28/17
70184-1-003	0	ELECTRICAL LEGEND	
70184-1-600	1	LP1 PANEL SCHEDULE	4/28/17
70184-1-601	1	LP1 CIRCUIT DETAILS	4/28/17
70184-1-640	0	LVB TERMINAL SCHEDULE	
70184-1-641	1	LVB CIRCUIT DETAILS	4/28/17
70184-1-660	0	POWER CIRCUIT DETAILS	
70184-1-690	1	ELECTRICAL LAYOUT VIEW	4/28/17

Seismic Code = ASCE 7-10 ← per Section 1613.1
 $S_s = 0.049$ g ← mapped spectral acceleration at short periods, Figure 22-1
 $S_1 = 0.031$ g ← mapped spectral acceleration at 1 second periods, Figure 22-2
 SCD = "D" ← site class definition, Section 20.3 and Table 20.3-1
 $F_a = 1.600$ ← site coefficient defined in Table 11.4-1
 $F_v = 2.400$ ← site coefficient defined in table 11.4-2
 $S_{M5} = F_a \times S_s = 0.078$ ← maximum considered earthquake spectral response accelerations for short period, Eq 11.4-1
 $S_{M1} = F_v \times S_1 = 0.074$ ← maximum considered earthquake spectral response accelerations for 1 second period, Eq 11.4-2
 $S_{D5} = 2/3 \times S_{M5} = 0.052$ ← design spectral response acceleration at short period, Section 11.4.4
 $S_{D1} = 2/3 \times S_{M1} = 0.050$ ← design spectral response acceleration at 1 second period, Section 11.4.4
 SDC_s = "A" ← seismic design category for short period, Table 11.6-1
 SDC₁ = "A" ← seismic design category for 1 second period, Table 11.6-2
 SDC = "A" ← most severe seismic design category, from Tables 11.6-1 and 11.6-2
 $I_e = 1.000$ ← seismic importance factor Table 11.5-1
 $I_p = 1.000$ ← component importance factor Section 13.1.3
 $a_p = 2.500$ ← component amplification factor Table 13.5-1 or 13.6-1
 $R_g = 6.000$ ← component response modification factor Table 13.5-1 or 13.6-1

DIMENSIONAL TOLERANCES
 • ENCLOSURE OVERALL LENGTH, OVERALL WIDTH, AND OVERALL HEIGHT SHALL BE +/- 1".
 MECHANICAL FASTENERS (SUCH AS SCREW HEADS) SHALL NOT BE CONSIDERED WHEN VERIFYING THESE PHYSICAL MEASUREMENTS TO THE DIMENSIONS FOUND ON THE DRAWINGS.
 • THE DIMENSIONED PLACEMENT OF WALL CUT-OUTS, FLOOR CUT-OUTS, AND DOOR INSTALLATIONS SHALL BE +/- 1/4".
 • ALL OTHER DIMENSIONS COMMUNICATED IN THIS DRAWING SET ARE FOR REFERENCE ONLY UNLESS OTHERWISE SPECIFIED.

2	UPDATED DESIGN TABLE	DJS	6/12/17				
1	UPDATED DESIGN TABLE	PLK	4/28/17				
0	ISSUED FOR DESIGN REVIEW	PLK	4/3/17				
B	REVISED INSULATION CALLOUTS AND DRAWING LIST	DJS	3/30/17				
A	ISSUED FOR APPROVAL	PLK	3/20/17				
REV.	DESCRIPTION	BY	DATE	REV.	DESCRIPTION	BY	DATE
				3	UPDATED DESIGN TABLE, ADDED PAINT SPEC, REVISED WALL PANEL CALLOUT	PLK	6/13/17

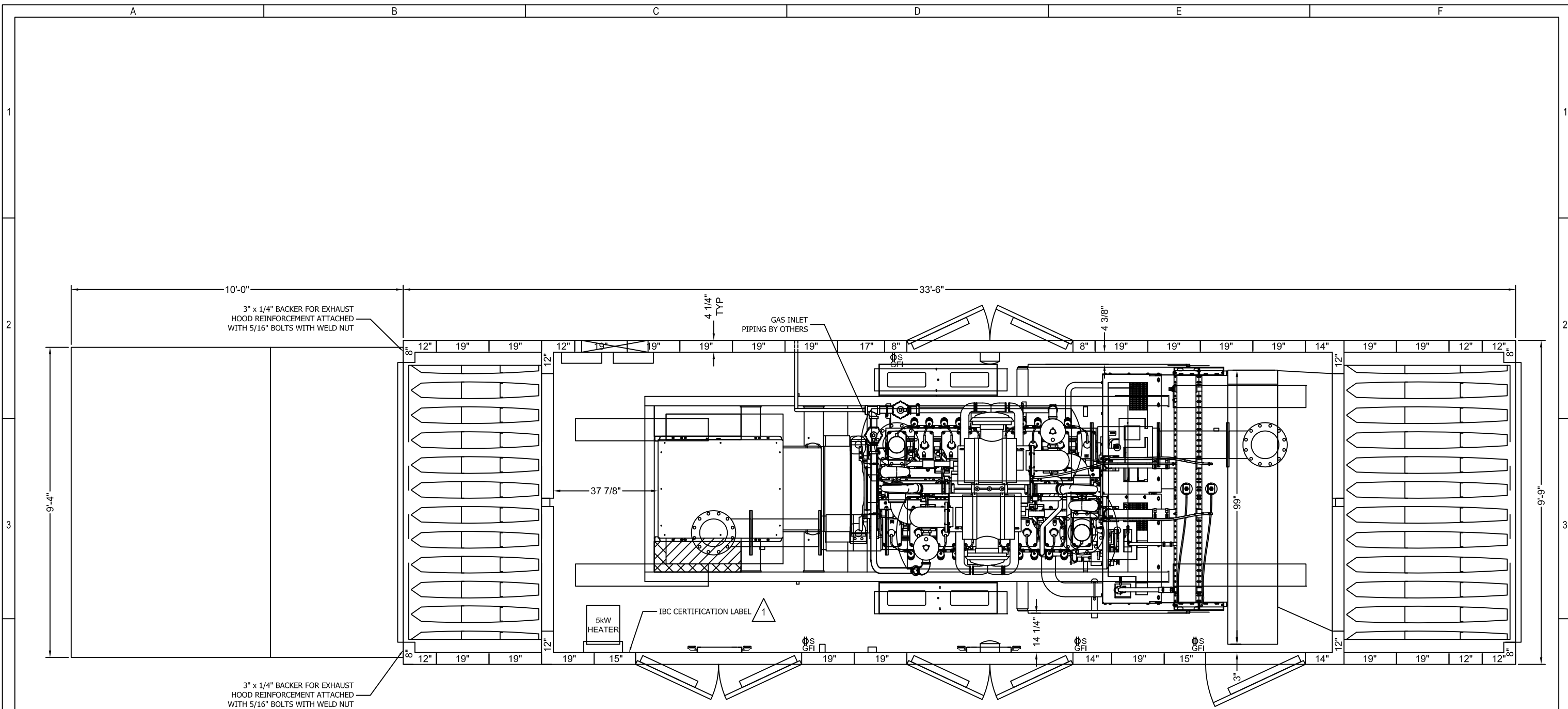
HARVARD INTEGRATIONS
 - A HILL COMPANY -
 27157 470TH AVE.
 TEA, SD 57064
 PH: 605 368 5306
 F: 605 368 2210

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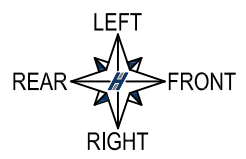
Drawn By: P.KOLDEN
 Checked By: D.SCHETTLER
 Scale: N.T.S.
 Date: 3/20/17

Customer: CUMMINS SALES & SERVICE
 Project Name: FARIBAULT GENERATOR
 Drawing Title: COVER
 Drawing No.: 70184-1-001
 P.O.#: 1770 S.O.#: 70184

Rev No. **3**



ENCLOSURE LAYOUT VIEW



REV.	DESCRIPTION	BY	DATE	REV.	DESCRIPTION	BY	DATE
1	ADDED IBC CERTIFICATION LABEL LOCATION	DJS	6/12/17				
0	ISSUED FOR DESIGN REVIEW	PLK	4/3/17				
B	REVISED LOADBANK SIZE, SHIFTED GENSET LOCATION AND REVISED DOORS	DJS	3/30/2017				
A	ISSUED FOR APPROVAL	PLK	3/20/17				

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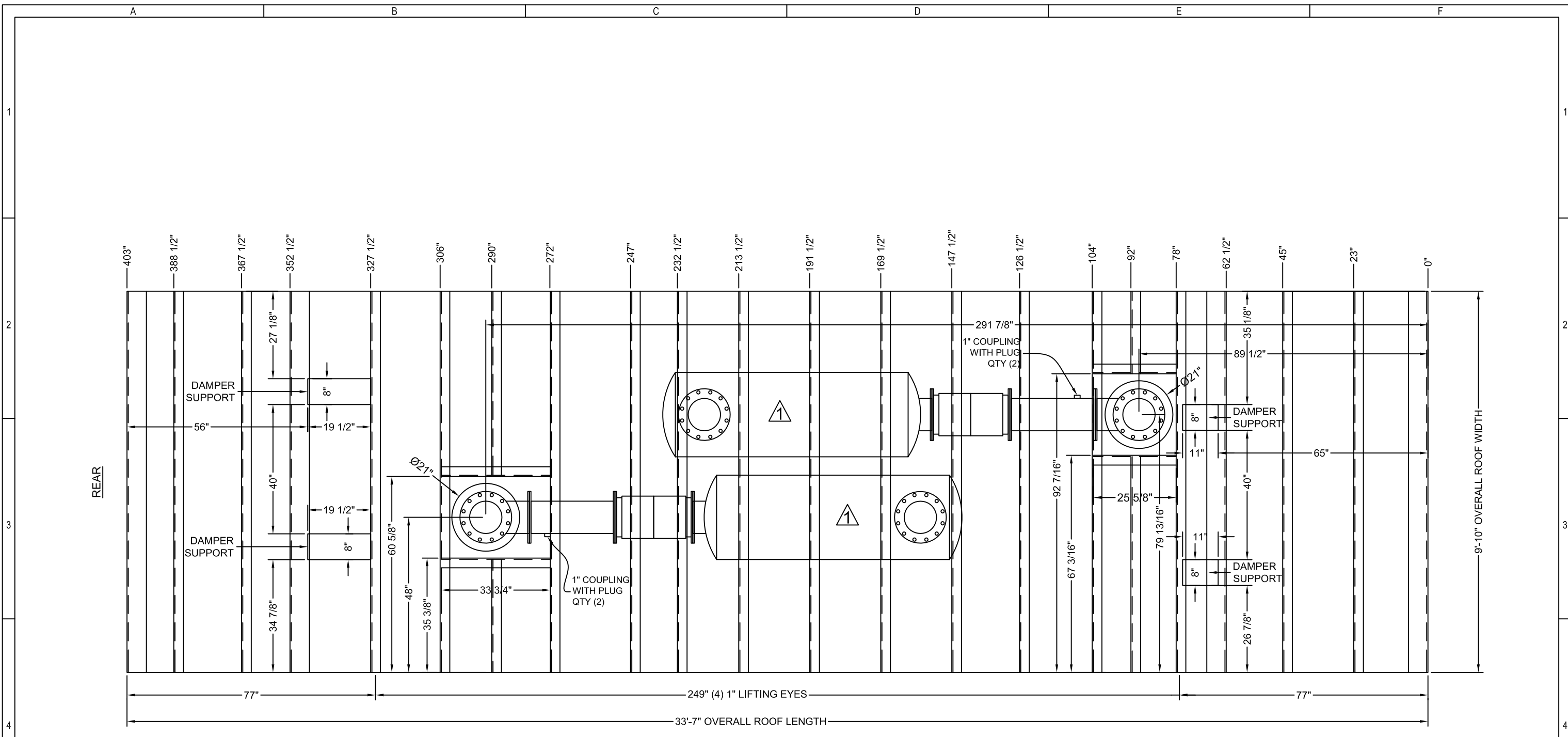
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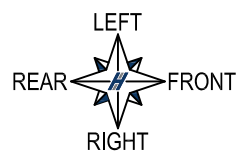
Drawn By: P.KOLDEN
Checked By: D.SCHETTLER
Scale: N.T.S.
Date: 3/20/17

Customer: CUMMINS SALES & SERVICE
Project Name: FARIBAULT GENERATOR
Drawing Title: FLOOR PLAN VIEW
Drawing No.: 70184-1-100
P.O.#: 1770 S.O.#: 70184

Rev No.	1
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ROOF TOP LAYOUT



REV.	DESCRIPTION	BY	DATE	REV.	DESCRIPTION	BY	DATE
1	SPECIFIED DIMENSIONS	PLK	4/28/17				
0	ISSUED FOR DESIGN REVIEW	PLK	4/3/17				
B	REVISED SILENCER LOCATION	DJS	3/31/17				
A	ISSUED FOR APPROVAL	PLK	3/20/17				

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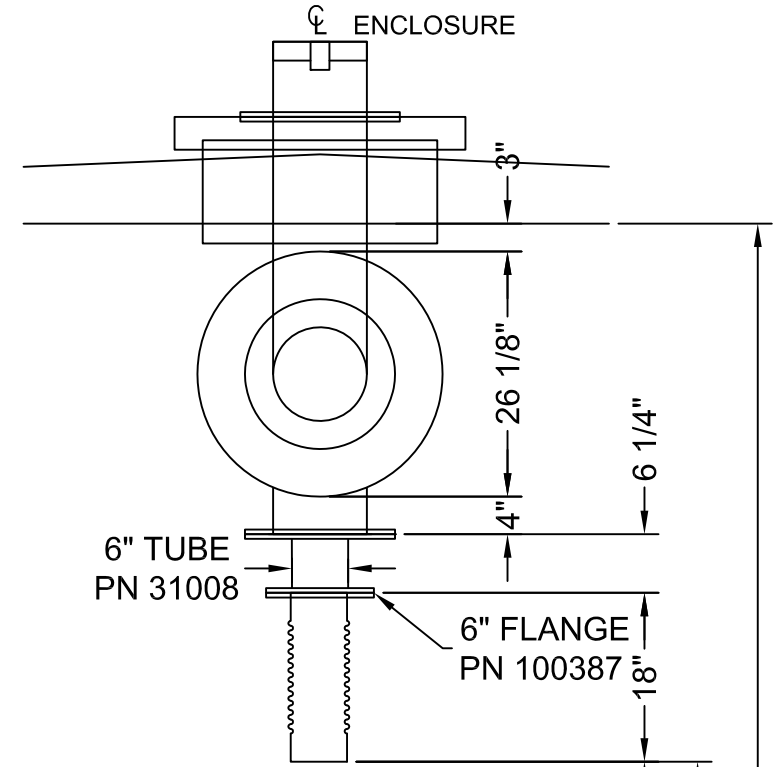
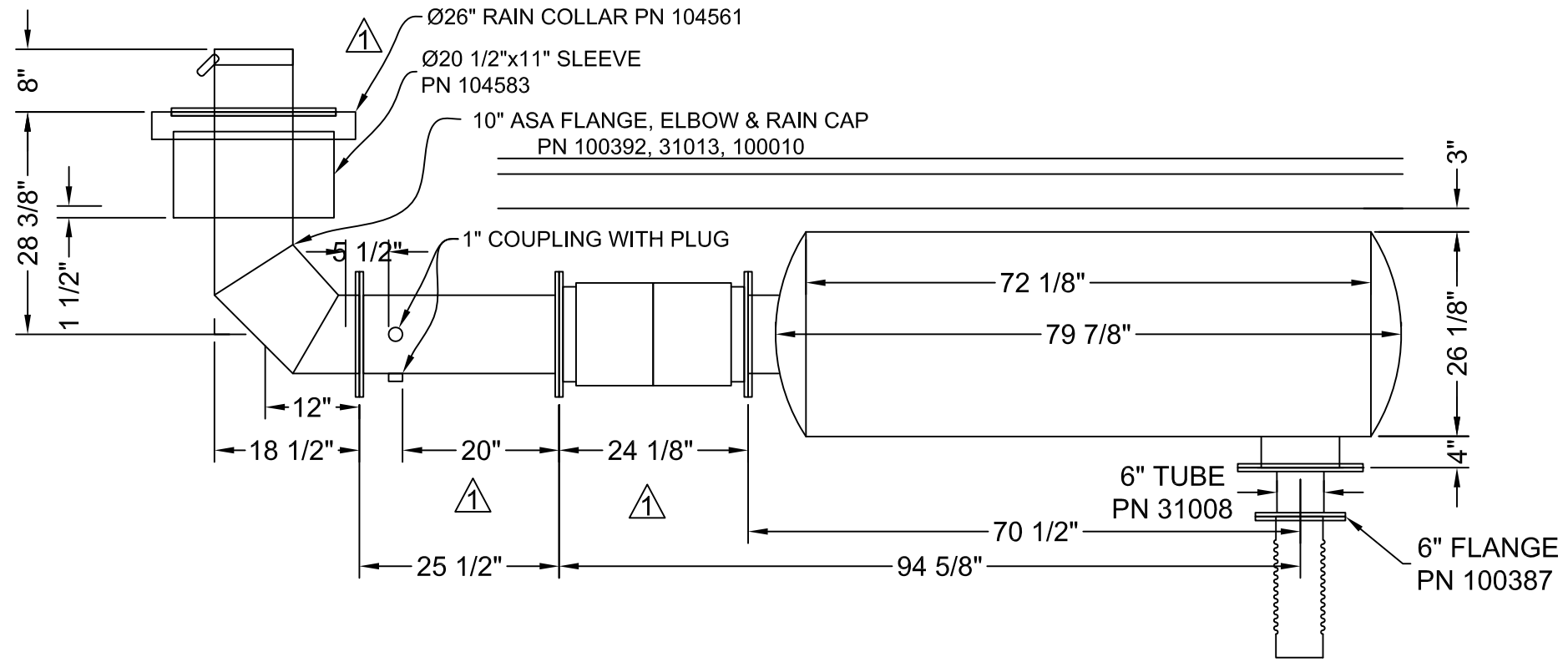
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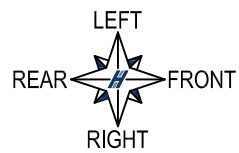
Drawn By:
P.KOLDEN
Checked By:
D.SCHETTLER
Scale: N.T.S.
Date: 3/20/17

Customer: CUMMINS SALES & SERVICE
Project Name: FARIBAULT GENERATOR
Drawing Title: CEILING/ROOF PLAN VIEW
Drawing No.: 70184-1-105
P.O.#: 1770 S.O.#: 70184

Rev No.	1
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SILENCER DETAIL
 VIEWS ARE RIGHT SIDE & FRONT
 QUANTITY: 2



148" INSIDE
 90 5/8" TOTAL
 84 1/8" TO TOP OF EXHAUST
 6 1/2" MTG PAD & ISO

REV.	DESCRIPTION	BY	DATE	REV.	DESCRIPTION	BY	DATE
1	SPECIFIED RAIN COLLAR & SLEEVE SIZE	PLK	4/28/17				
0	ISSUED FOR DESIGN REVIEW	PLK	4/3/17				
A	ISSUED FOR APPROVAL	PLK	3/20/17				

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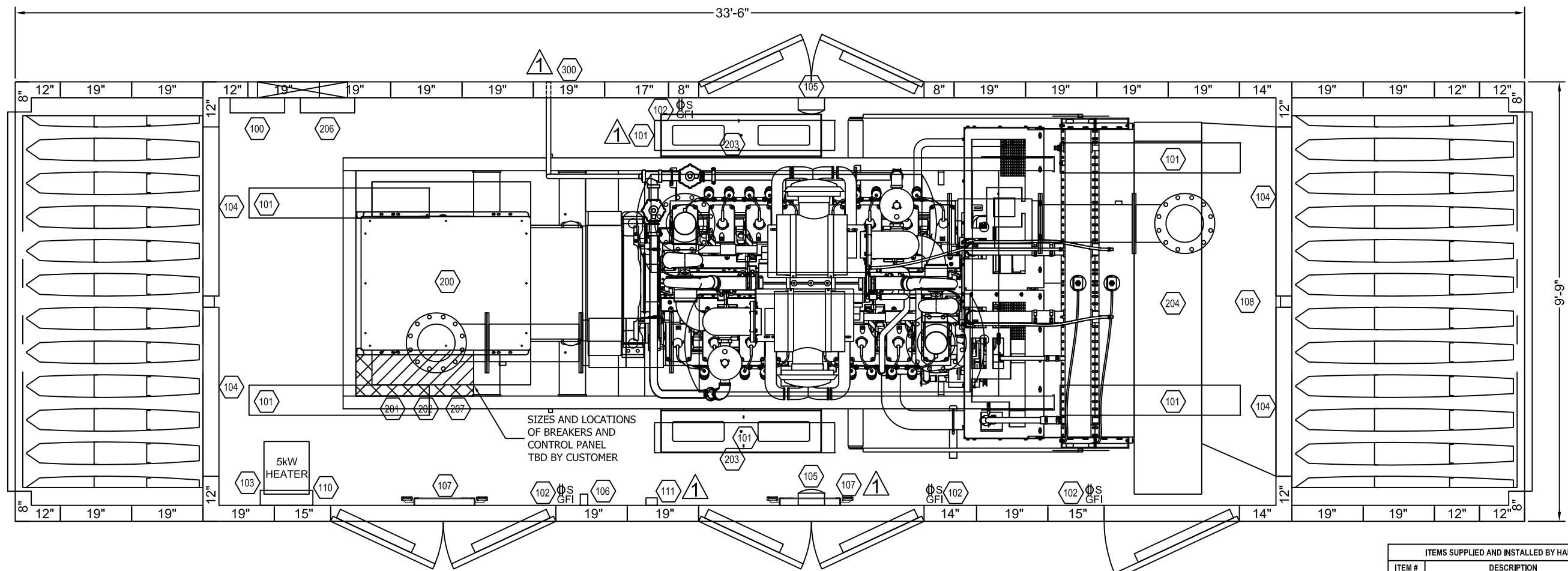
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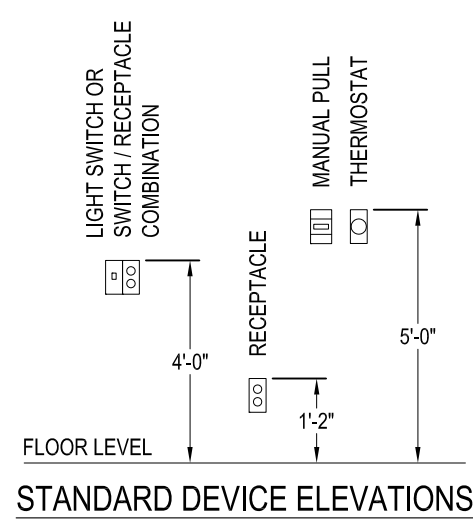
Drawn By: P.KOLDEN
 Checked By: D.SCHETTLER
 Scale: N.T.S.
 Date: 3/20/17

Customer: CUMMINS SALES & SERVICE
 Project Name: FARIBAULT GENERATOR
 Drawing Title: SILENCER DETAILS
 Drawing No.: 70184-1-106
 P.O.#: 1770 S.O.#: 70184

Rev No.
1



SIZES AND LOCATIONS OF BREAKERS AND CONTROL PANEL TBD BY CUSTOMER



ELECTRICAL PLAN VIEW LEGEND

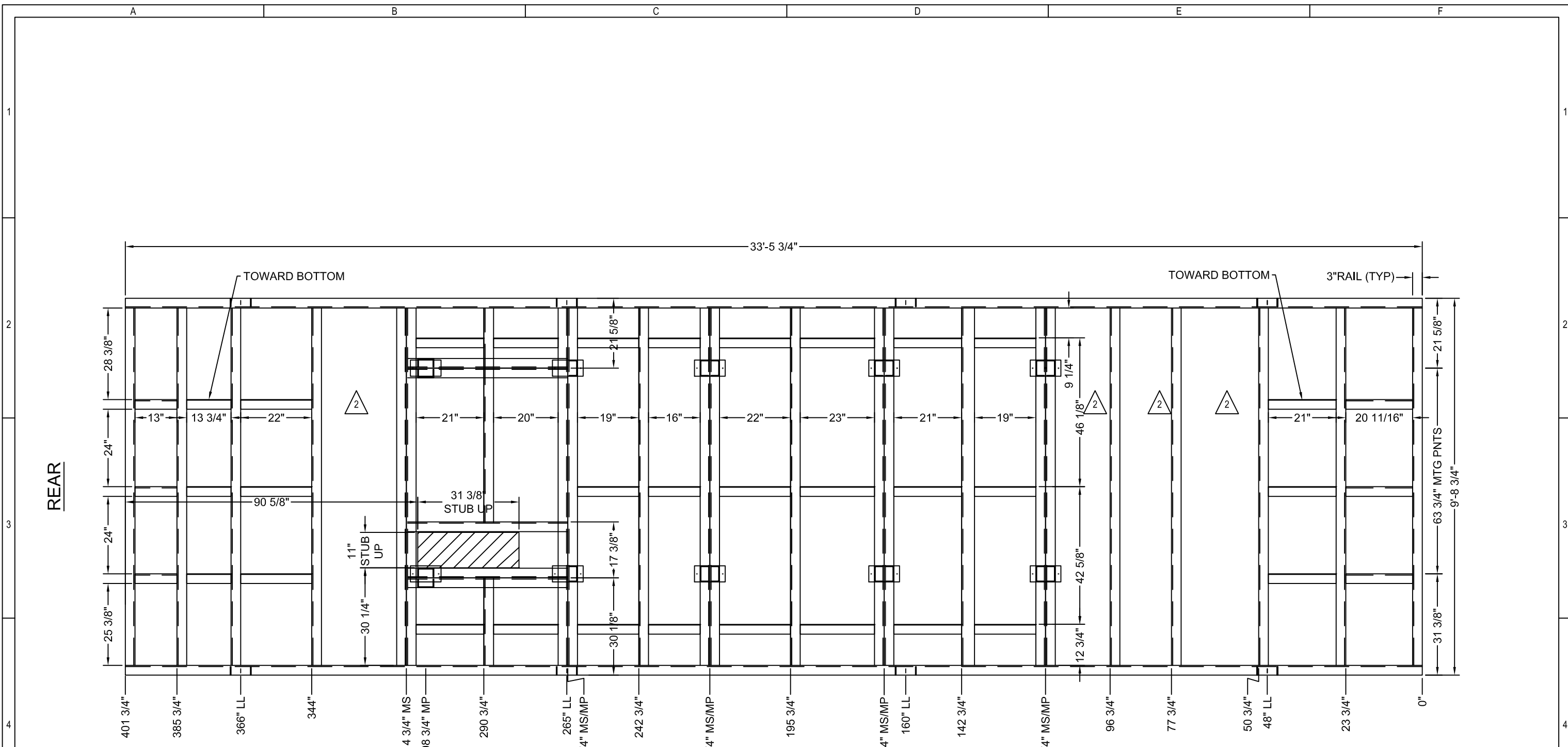
(THESE SYMBOLS ARE REFERENCED WHEN APPLICABLE)

- ★ = FIXTURE NEEDS TO BE MOUNTED BELOW CABLE TRAY.
- (1), (2), (3) OR (4) = CIRCUIT NUMBER THE FIXTURE IS ON.
- [Symbol] = FIXTURE WITH AN EMERGENCY BALLAST.
- A.F.F. IS DIMENSIONED FROM FINISHED FLOOR TO TOP OF EQUIPMENT.
- F.F. DENOTES EQUIPMENT MOUNTED ON FINISHED FLOOR.

ITEMS SUPPLIED AND INSTALLED BY HARVARD INTEGRATIONS			
ITEM #	DESCRIPTION	PART #	QTY.
100	DISTRIBUTION PANEL (120/208VAC 3 PHASE)	SPECIAL	1
101	INTERIOR LIGHT (FLUORESCENT)	3647	6
102	LIGHT SWITCH & GFI RECEPTACLES	1863/1664/1647	4
103	5 kW HEATER (208V 1 PHASE)	101415	1
104	DAMPER MOTORS	103636	4
105	EMERGENCY DC LIGHTS	101539	2
106	30 MINUTE TIMER	150019	1
107	EMERGENCY / EXIT LIGHT	12975	2
108	DUCT ADAPTER	SPECIAL	1
109	EXHAUST HOOD (NOT SHOWN)	SPECIAL	1
110	LOW VOLTAGE BOX	SPECIAL	1
111	THERMOSTAT	6506	1
ITEMS SUPPLIED BY OTHERS AND INSTALLED BY HARVARD INTEGRATIONS			
ITEM #	DESCRIPTION	PART #	QTY.
200	GFLC 750 kW GENSET	CSE	1
201	600A BREAKER	CSE	1
202	1200A BREAKER	CSE	1
203	BATTERY RACK	CSE	2
204	LOAD BANK	CSE	1
205	ISOLATORS (NOT SHOWN)	CSE	10
206	BATTERY CHARGER	CSE	1
207	CONTROL PANEL	CSE	1
ITEMS SUPPLIED BY OTHERS AND INSTALLED BY HARVARD INTEGRATIONS			
ITEM #	DESCRIPTION	PART #	QTY.
300	N.G. PIPING SYSTEM	CSE	1

REV.	DESCRIPTION	BY	DATE	REV.	DESCRIPTION	BY	DATE
1	ADDED #111 & #112, MOVED LIGHT	PLK	4/28/17				
0	ISSUED FOR DESIGN REVIEW	PLK	4/3/17				
B	MOVED BREAKERS, ADDED CONTROL PANEL AND BATTERY CHARGER, REVISED DOORS	DJS	3/30/17				
A	ISSUED FOR APPROVAL	PLK	3/20/17				

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	<p>Drawn By: P.KOLDEN</p> <p>Checked By: D.SCHETTLER</p> <p>Scale: N.T.S.</p> <p>Date: 3/20/17</p>		



SKID TOP VIEW

LL = LIFT LOOP
 MS = MAIN SUPPORT
 MP = MOUNTING POINT

REV.	DESCRIPTION	BY	DATE	REV.	DESCRIPTION	BY	DATE
1	ADDED DIMENSIONS, MOVED CROSSMEMBERS	PLK	4/28/17				
	ADDED BAFFLES AND ANGLES	PLK	5/15/17				
0	ISSUED FOR DESIGN REVIEW	PLK	4/3/17				
B	RELOCATED AND REMOVED STUB-UP	DJS	3/30/17				
A	ISSUED FOR APPROVAL	PLK	3/20/17	2	REMOVED WALKWAY ANGLES	PLK	6/13/2017

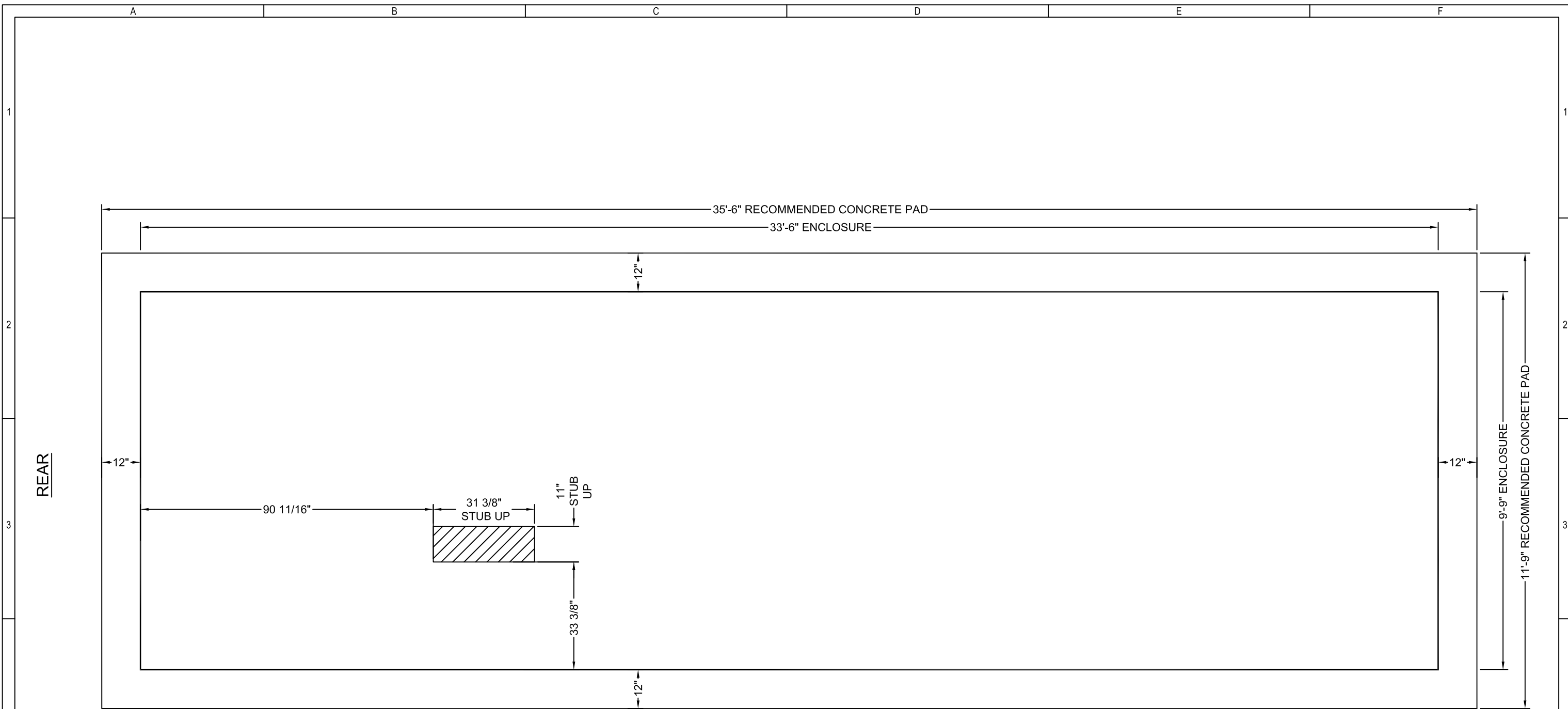
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Drawn By: P.KOLDEN
 Checked By: D.SCHETTLER
 Scale: N.T.S.
 Date: 3/20/17

Customer:	CUMMINS SALES & SERVICE
Project Name:	FARIBAULT GENERATOR
Drawing Title:	ASSEMBLED BASE DETAIL
Drawing No.:	70184-1-200
P.O.#:	1770
S.O.#:	70184
Rev No.	2



CONCRETE PAD LAYOUT

REV.	DESCRIPTION	BY	DATE	REV.	DESCRIPTION	BY	DATE
0	ISSUED FOR DESIGN REVIEW	PLK	4/3/17				
B	RELOCATED AND REMOVED STUB UP	DJS	3/30/2017				
A	ISSUED FOR APPROVAL	PLK	3/20/17				

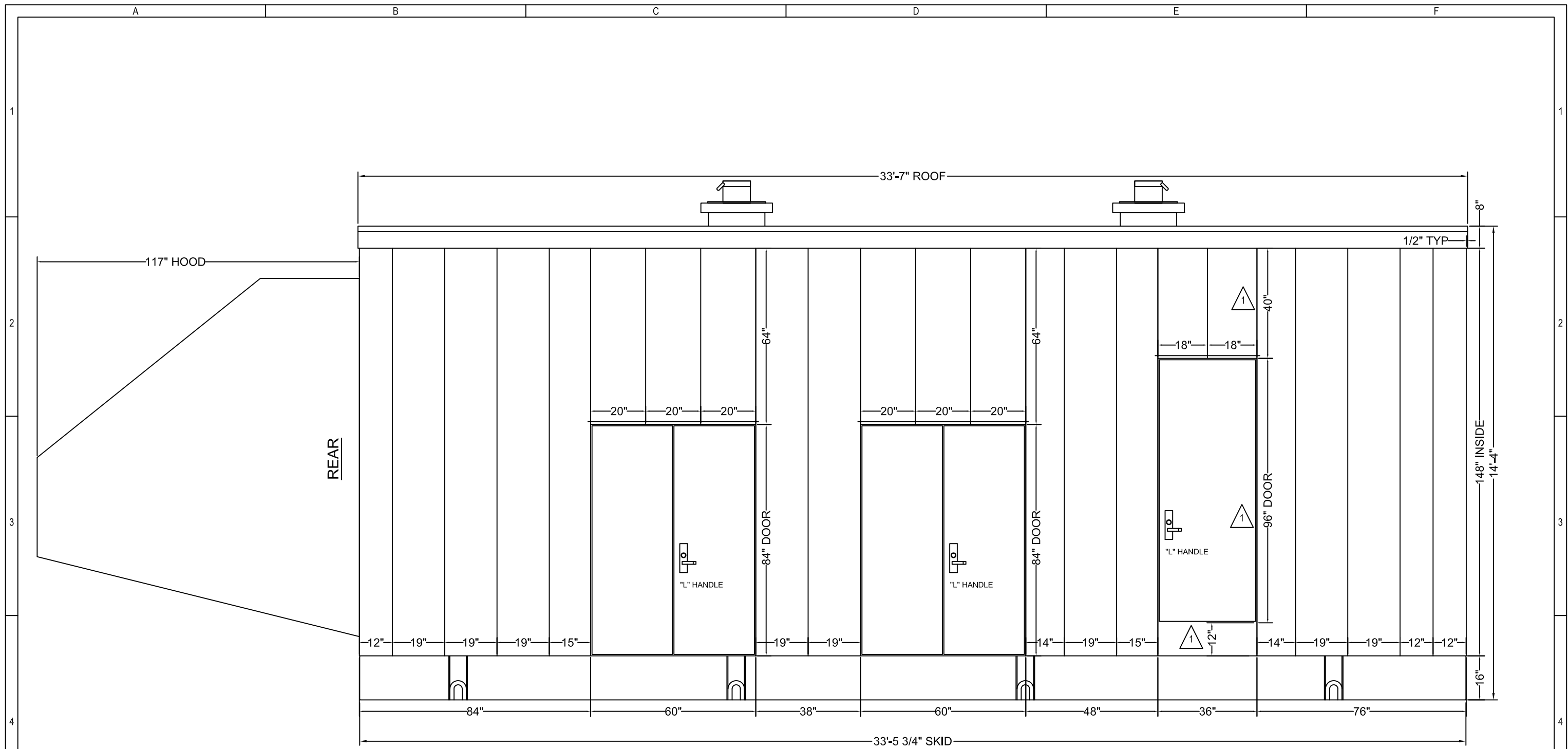

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Drawn By: P.KOLDEN
 Checked By: D.SCHETTLER
 Scale: N.T.S.
 Date: 3/20/17

Customer: CUMMINS SALES & SERVICE
 Project Name: FARIBAULT GENERATOR
 Drawing Title: CONCRETE LAYOUT
 Drawing No.: 70184-1-250
 P.O.#: 1770 S.O.#: 70184

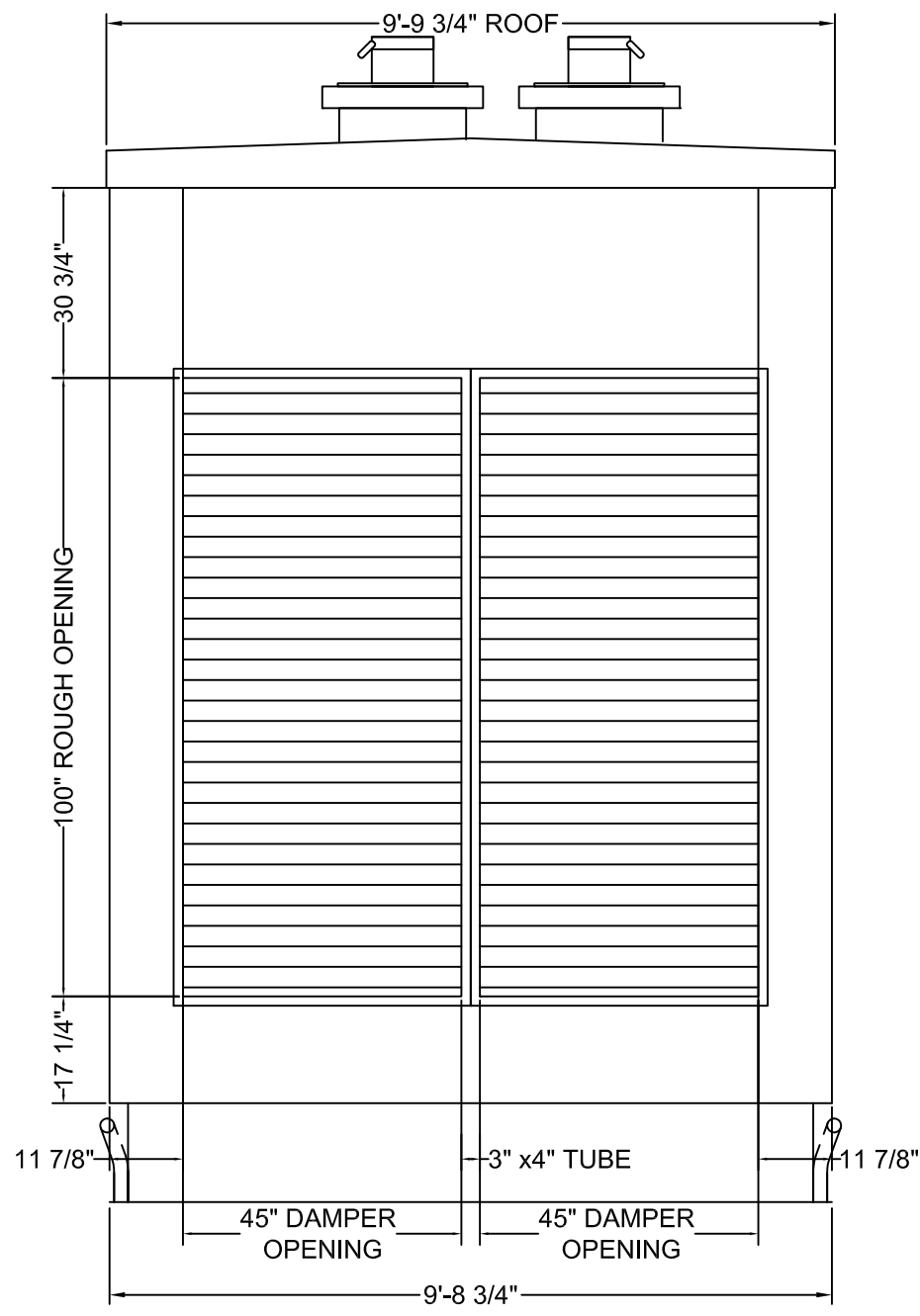
Rev No.	0
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RIGHT SIDE VIEW

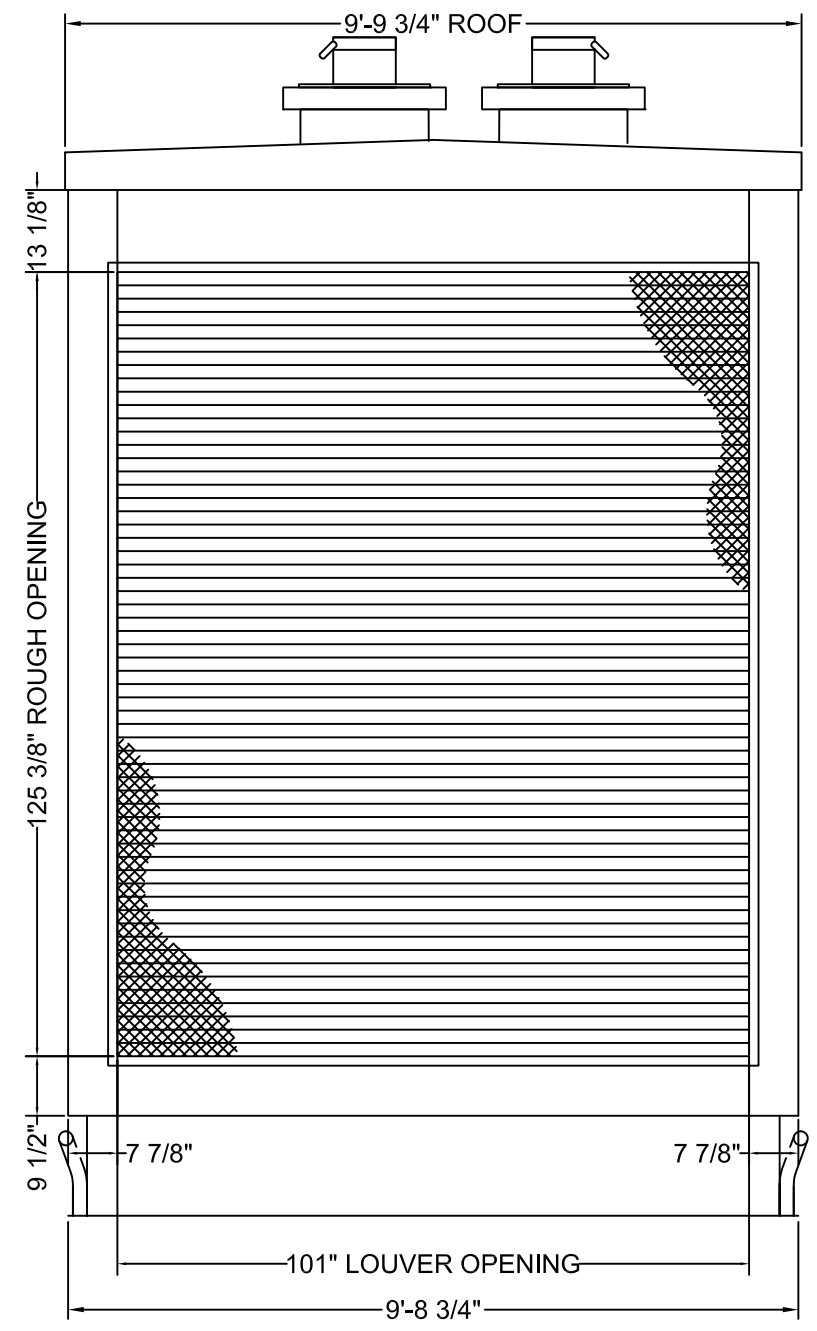
1	ADDED 12" DOOR SILL, DOOR HEIGHT TO 96", SHORTENED DOOR HEADERS 24"	PLK	6/13/17					 <p>HARVARD INTEGRATIONS — A HILL COMPANY —</p> <p>27157 470TH AVE. TEA, SD 57064 PH: 605 368 5306 F: 605 368 2210</p>	<p>THIS DOCUMENT CONTAINS INFORMATION CONSIDERED CONFIDENTIAL BY HARVARD INTEGRATIONS. ITS CUSTOMERS AND EMPLOYEES, RECIPIENT AGREES NOT TO SHARE WITH OTHERS WITHOUT EXPRESS WRITTEN CONSENT FROM HARVARD INTEGRATIONS OR ITS CUSTOMER.</p>	Drawn By:	P.KOLDEN	Customer:	CUMMINS SALES & SERVICE	
0	ISSUED FOR DESIGN REVIEW	PLK	4/3/17							Checked By:	D.SCHETTLER	Project Name:	FARIBAULT GENERATOR	
B	REVISED WALL CUTOUT AND ADDED DOOR	DJS	3/30/17							Scale:	N.T.S.	Drawing Title:	ELEVATION VIEW RIGHT	
A	ISSUED FOR APPROVAL	PLK	3/20/17							Date:	3/20/17	Drawing No.:	70184-1-300	
REV.	DESCRIPTION	BY	DATE	REV.	DESCRIPTION	BY	DATE					P.O.#:	1770	S.O.#:

Rev No.
1



FRONT VIEW (INTERIOR)

- EXHAUST HARDWARE**
 (2) MOTORIZED DAMPER
 45" W x 100" H
FIXED LOUVER
 101" W x 125 3/8" H
ATTENUATOR
 99" W x 120" H x 60" D
DUCT ADAPTER
 1/2" MTG. PAD
BIRD SCREEN
 .081 ALUMINUM



FRONT VIEW (LOUVER)

REV.	DESCRIPTION	BY	DATE	REV.	DESCRIPTION	BY	DATE
0	ISSUED FOR DESIGN REVIEW	PLK	4/3/17				
A	ISSUED FOR APPROVAL	PLK	3/20/17				

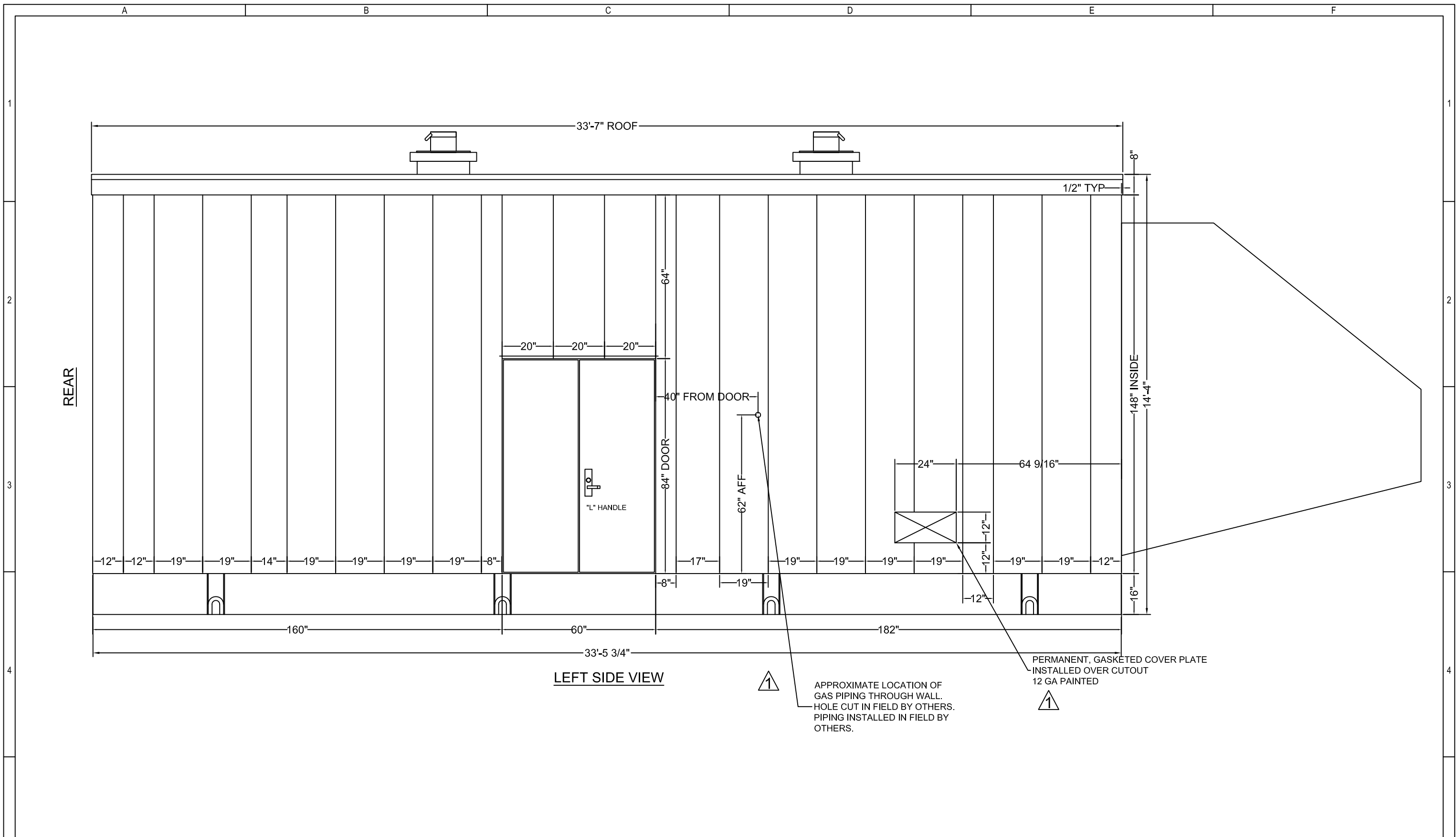
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 PH: 605 368 5306
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Drawn By: P.KOLDEN
 Checked By: D.SCHETTLER
 Scale: N.T.S.
 Date: 3/20/17

Customer: CUMMINS SALES & SERVICE
 Project Name: FARIBAULT GENERATOR
 Drawing Title: ELEVATION VIEWS FRONT
 Drawing No.: 70184-1-301
 P.O.#: 1770 S.O.#: 70184

Rev No. **0**



LEFT SIDE VIEW



APPROXIMATE LOCATION OF GAS PIPING THROUGH WALL. HOLE CUT IN FIELD BY OTHERS. PIPING INSTALLED IN FIELD BY OTHERS.

PERMANENT, GASKETED COVER PLATE INSTALLED OVER CUTOUT 12 GA PAINTED



REV.	DESCRIPTION	BY	DATE	REV.	DESCRIPTION	BY	DATE
1	REVISED NPT LOCATION, 12 GA COVER PLATE	PLK	4/28/17				
0	ISSUED FOR DESIGN REVIEW	PLK	4/3/17				
B	REVISED DOORS	DJS	3/30/17				
A	ISSUED FOR APPROVAL	PLK	3/20/17				

HARVARD INTEGRATIONS
— A HILL COMPANY —

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Drawn By: P.KOLDEN
Checked By: D.SCHETTLER
Scale: N.T.S.
Date: 3/20/17

Customer: CUMMINS SALES & SERVICE
Project Name: FARIBAULT GENERATOR
Drawing Title: ELEVATION VIEW LEFT
Drawing No.: 70184-1-310
P.O.#: 1770 S.O.#: 70184

Rev No.	1
---------	----------

A B C D E F

1

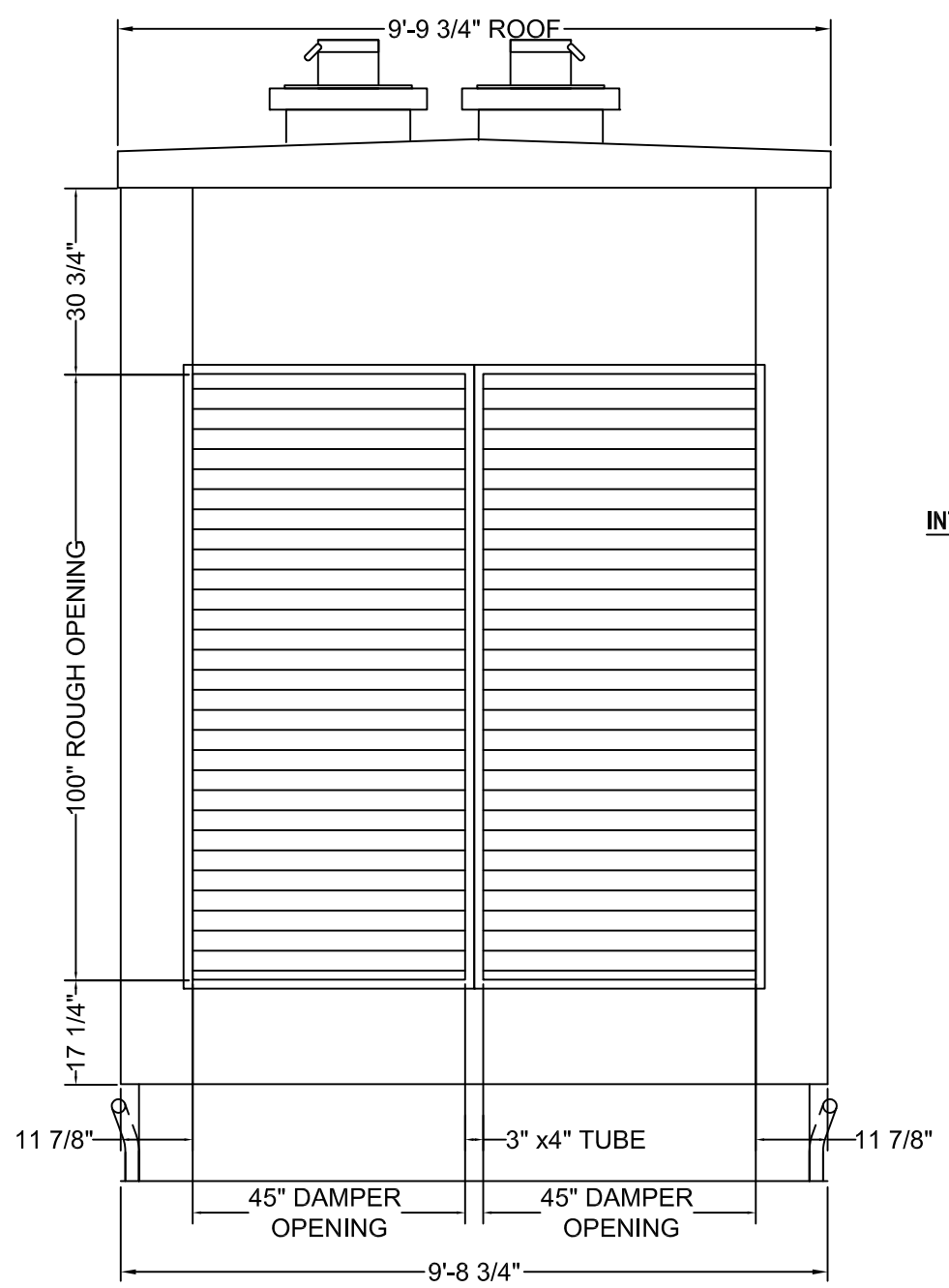
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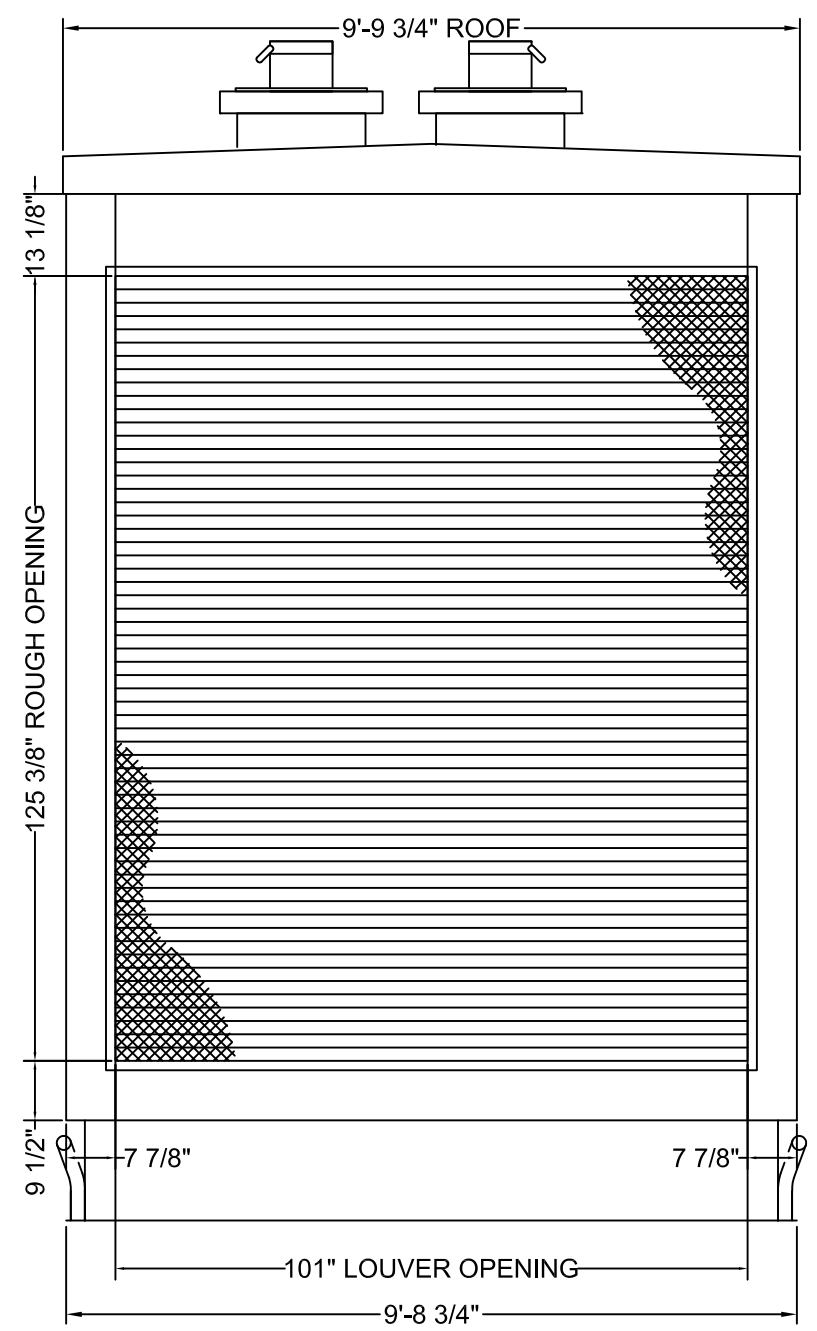
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A B C D E F



REAR VIEW (INTERIOR)

- INTAKE HARDWARE**
- (2) MOTORIZED DAMPER
45" W x 100" H
 - FIXED LOUVER
101" W x 125 3/8" H
 - ATTENUATOR
99" W x 120" H x 48" D
 - BIRD SCREEN
.081 ALUMINUM



REAR VIEW (EXTERIOR)

▲ *NOTE: 1/4" x 3" BACKING PLATE

REV.	DESCRIPTION	BY	DATE	REV.	DESCRIPTION	BY	DATE
1	ADDED BACKING PLATE NOTE	PLK	4/28/17				
0	ISSUED FOR DESIGN REVIEW	PLK	4/3/17				
A	ISSUED FOR APPROVAL	PLK	3/20/17				

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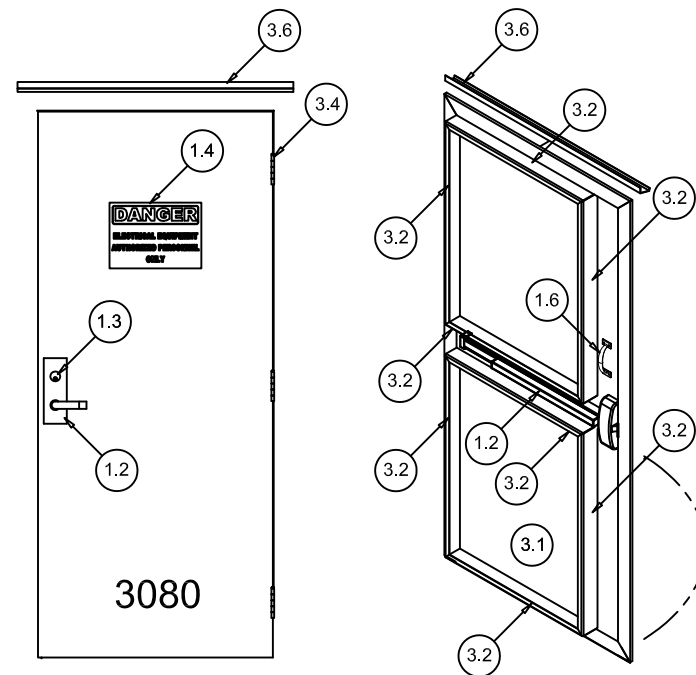
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Checked By: D.SCHETTLER
Scale: N.T.S.
Date: 3/20/17

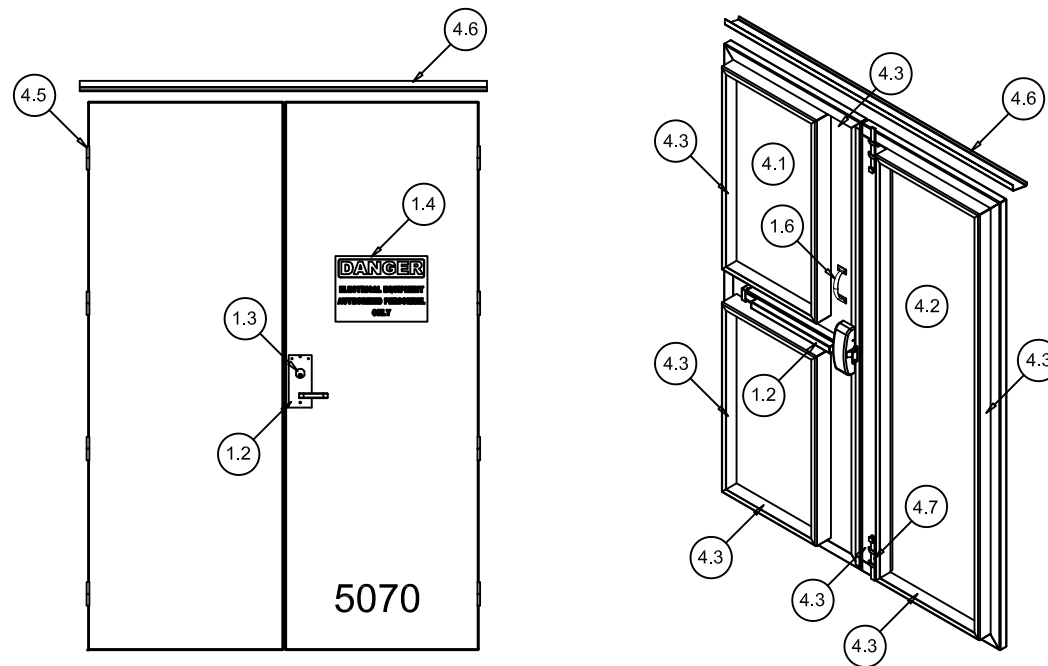
Customer:	CUMMINS SALES & SERVICE
Project Name:	FARIBAULT GENERATOR
Drawing Title:	ELEVATION VIEWS REAR
Drawing No.:	70184-1-311
P.O.#:	1770
S.O.#:	70184

Rev No.
1



3080 GENSET DOOR

	DESCRIPTION	QTY	PART NO.
3	ASSY. - EXTERIOR #3080 GALVANIZED GENSET PERSONNEL DOOR	1	-
3.1	FORMED 14 GA. GALVANIZED DOOR BLANK 36"	1	50034
3.2	FORMED 14 GA. GALVANIZED 4" DOOR EXTENSION (10 PIECE)	4	60032
3.3	FORMED 14 GA. GALVANIZED STIFFENER, NO HOLES	1	60031
3.4	STEEL WELD ON HINGE	4	9070
3.5	1x1x1/8x20' STEEL ANGLE	1	31067
3.6	RAIN RAIL (36" DOOR)	1	60012



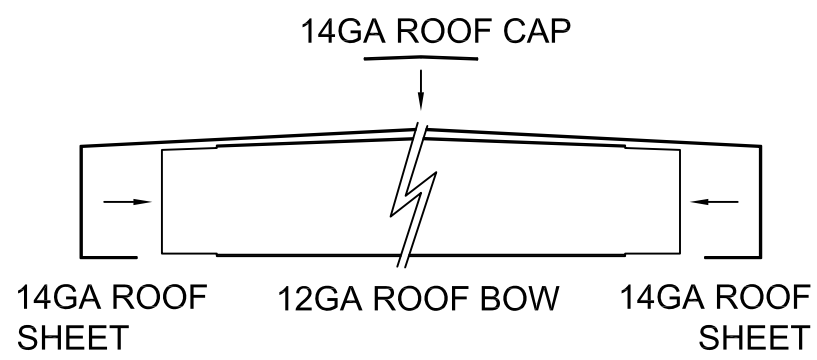
5070 GENSET DOOR

	DESCRIPTION	QTY	PART NO.
4	ASSY. - EXTERIOR #5070 GALVANIZED GENSET PERSONNEL DOOR	3	-
4.1	FORMED 14 GA. GALVANIZED DOOR LEAF (ACTIVE)	3	50033
4.2	FORMED 14 GA. GALVANIZED DOOR LEAF (NON-ACTIVE)	3	50030
4.3	FORMED 14 GA. GALVANIZED 4" DOOR EXTENSION (10 PIECE)	21	60032
4.4	1x1x1/8x20' STEEL ANGLE	1	31067
4.5	STEEL WELD ON HINGE	12	9070
4.6	RAIN RAIL (60" DOOR)	3	60012
4.7	SURFACE BOLT	6	3318

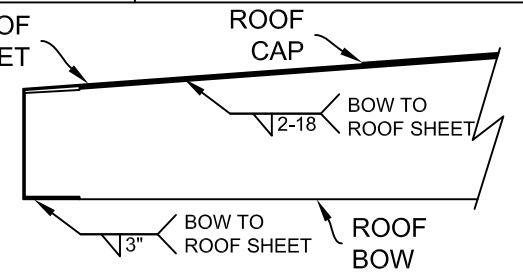
1.2	PANIC HARDWARE - L-HANDLE TOUCH BAR EXIT DEVICE (RHRB)	4	10626
1.3	26D BRASS RIM CYLINDER	4	3292
1.4	DANGER - ELECTRICAL EQUIPMENT - AUTHORIZED PERSONNEL ONLY SIGN	4	6666
1.5	DOOR HOLDER, ELECTRO PLATED (NOT SHOWN)	7	101047
1.6	DOOR PULL HANDLE	4	13072

REV.	DESCRIPTION	BY	DATE	REV.	DESCRIPTION	BY	DATE
2	REVISED 3070 DOOR TO BE 3080	PLK	6/13/17				
1	REMOVED LOCK, ADDED PULL HANDLE	PLK	4/28/17				
0	ISSUED FOR DESIGN REVIEW	PLK	4/3/17				

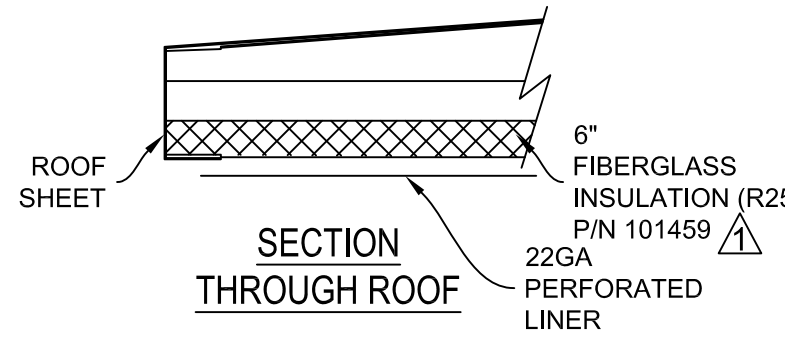
<p>HARVARD INTEGRATIONS — A HILL COMPANY —</p> <p>27157 470TH AVE. TEA, SD 57064 PH: 605 368 5306 F: 605 368 2210</p>	<p>THIS DOCUMENT CONTAINS INFORMATION CONSIDERED CONFIDENTIAL BY HARVARD INTEGRATIONS. ITS CUSTOMERS AND EMPLOYEES, RECIPIENT AGREES NOT TO SHARE WITH OTHERS WITHOUT EXPRESS WRITTEN CONSENT FROM HARVARD INTEGRATIONS OR ITS CUSTOMER.</p>	<p>Drawn By: P.KOLDEN</p> <p>Checked By: D.SCHETTLER</p> <p>Scale: N.T.S.</p> <p>Date: 3/20/17</p>	<p>Customer: CUMMINS SALES & SERVICE</p> <p>Project Name: FARIBAULT GENERATOR</p> <p>Drawing Title: DOOR DETAILS</p> <p>Drawing No.: 70184-1-360</p> <p>P.O.#: 1770 S.O.#: 70184</p>
			Rev No.
			2



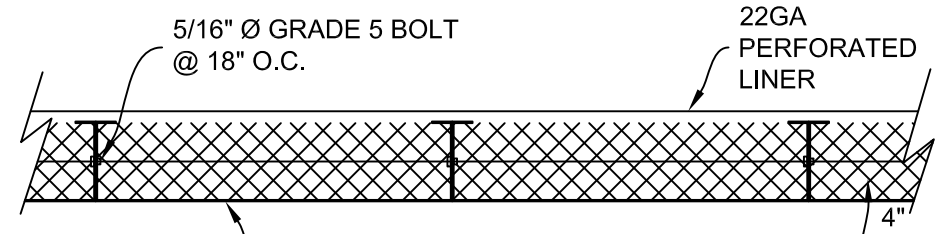
ROOF DETAILS



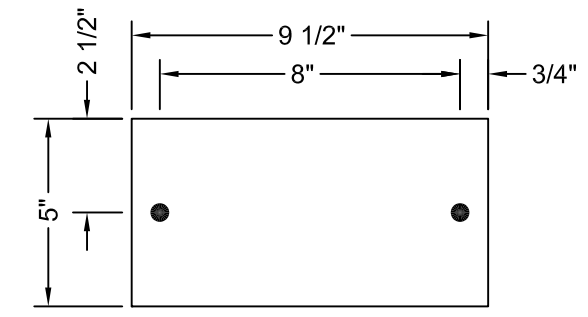
ROOF WELD DETAILS



SECTION THROUGH ROOF

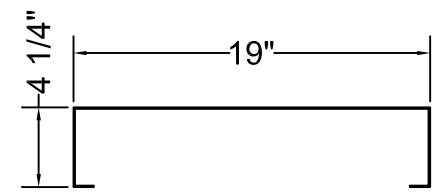


SECTION THROUGH WALL

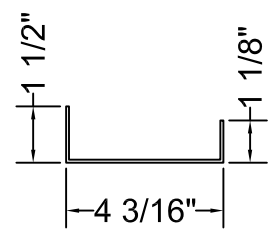


ISOLATOR MTG. PLATES

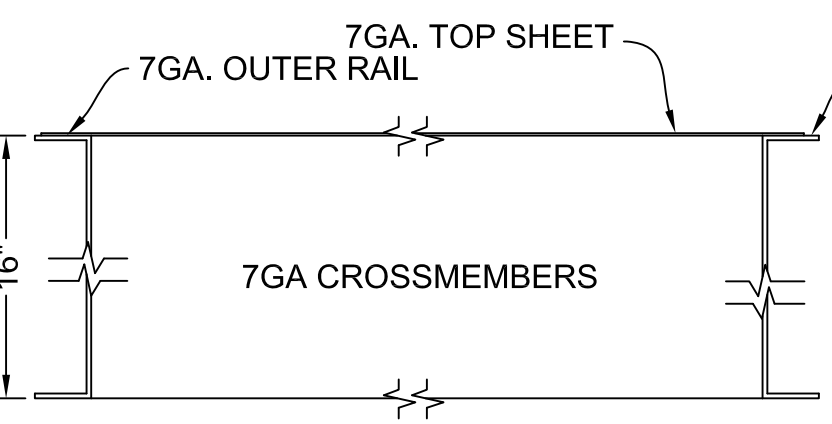
QUANTITY: 10
 1/2" STEEL PLATE w/ 2
 1/2"-9 1/2" x 1 1/2" WELD STUDS



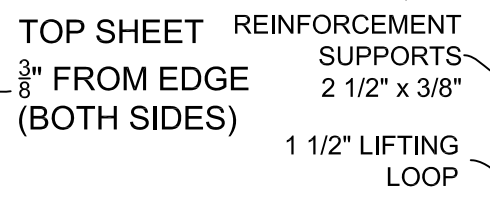
TYPICAL WALL PANEL



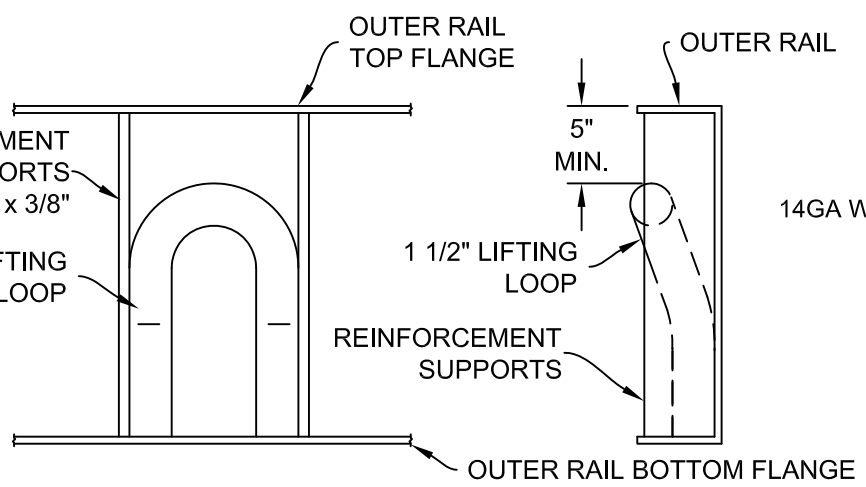
WALL CAPPING



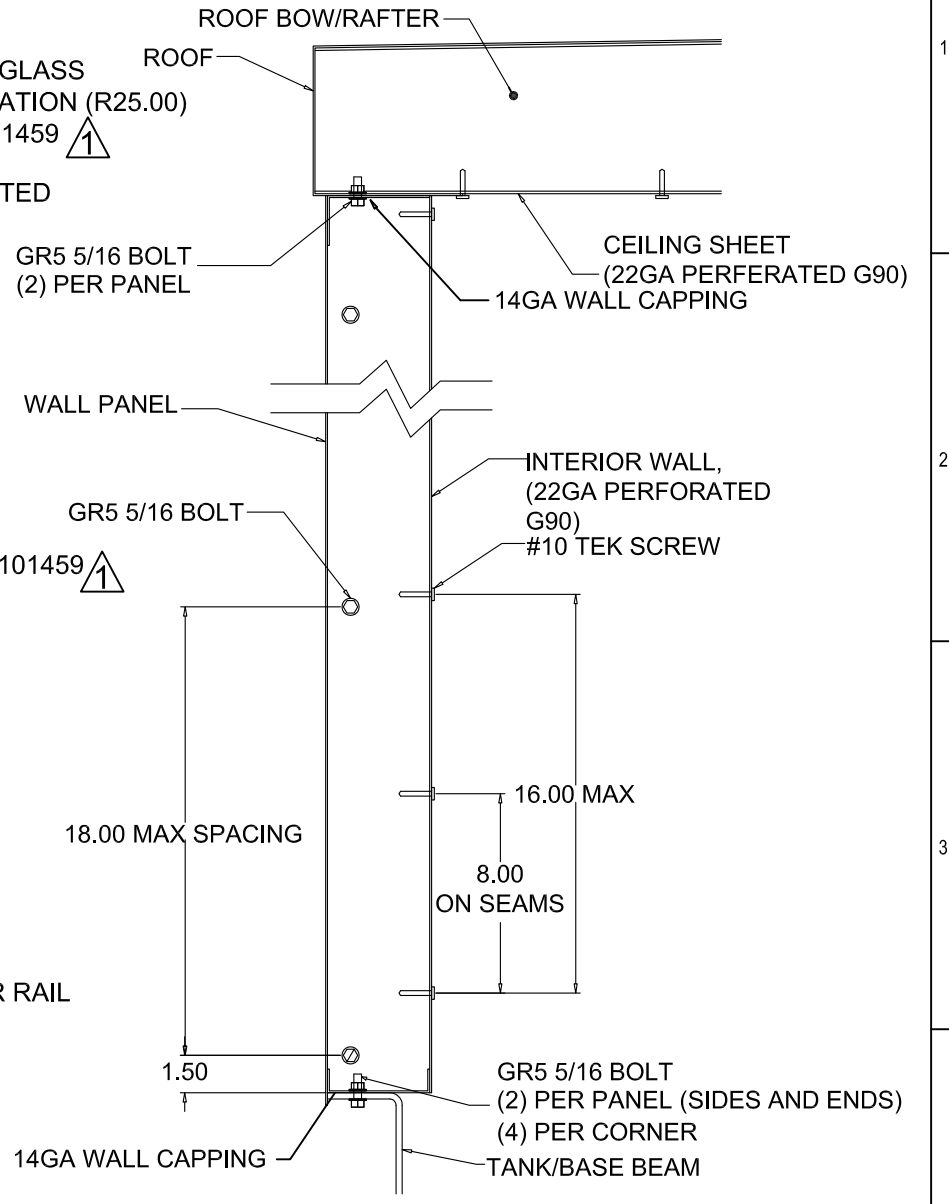
SKID DETAIL



TOP SHEET REINFORCEMENT SUPPORTS



1 1/2" STUB LIFTING LOOP DETAIL
 (RATED CAPACITY: 30,000 POUNDS)
 P/N: 101455



WALL PANEL CONNECTIONS

REV.	DESCRIPTION	BY	DATE	REV.	DESCRIPTION	BY	DATE
1	SPECIFIED PART NUMBERS FOR INSULATION	PLK	4/28/17				
0	ISSUED FOR DESIGN REVIEW	PLK	4/3/17				

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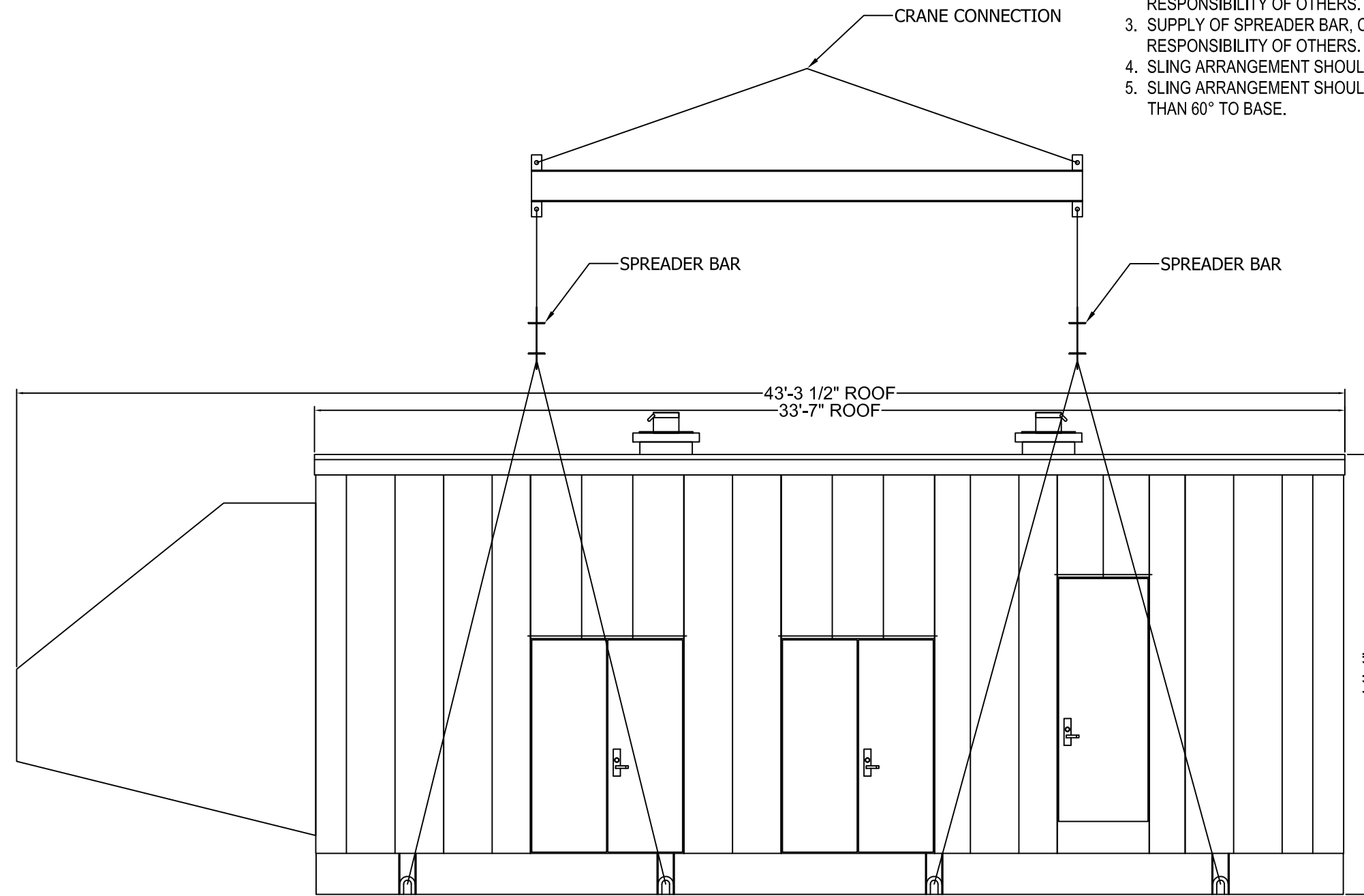
Drawn By: P.KOLDEN
 Checked By: D.SCHETTLER
 Scale: N.T.S.
 Date: 3/20/17

Customer: CUMMINS SALES & SERVICE
 Project Name: FARIBAULT GENERATOR
 Drawing Title: GENSET CONSTRUCTION DETAILS
 Drawing No.: 70184-1-400
 P.O.#: 1770 S.O.#: 70184

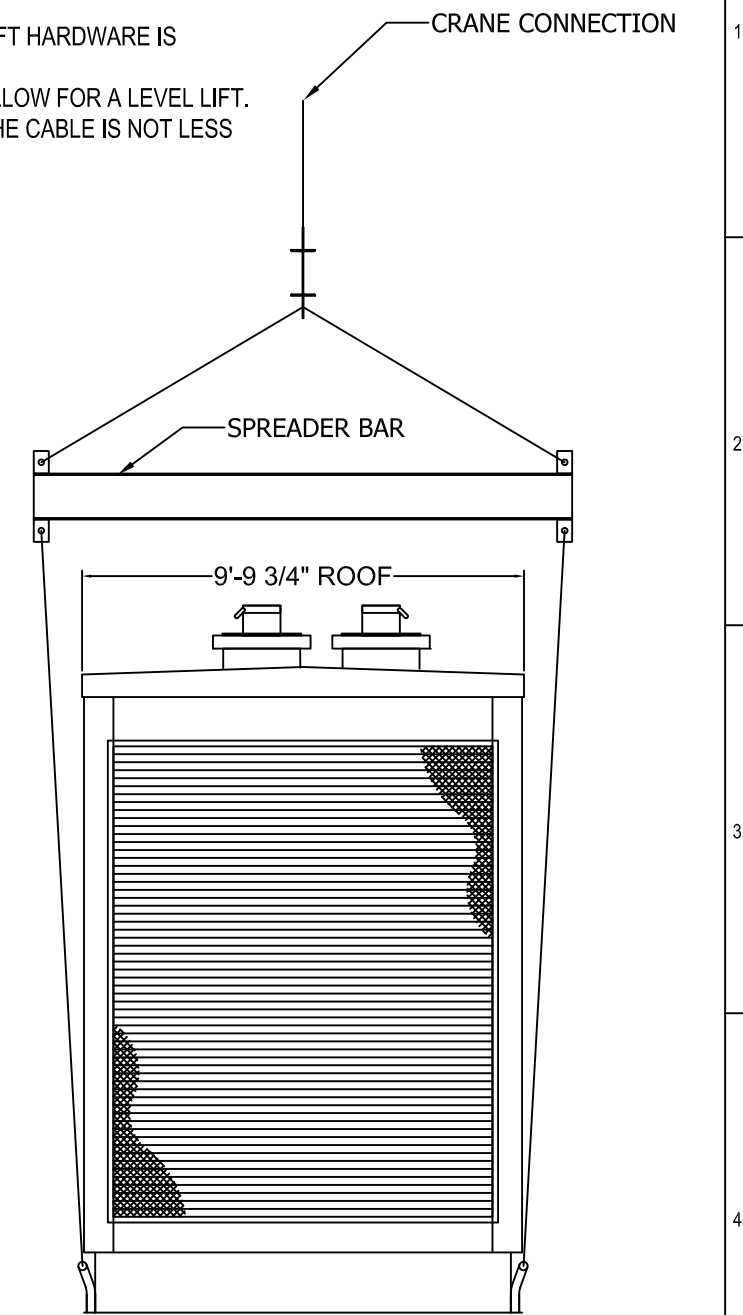
Rev No. **1**

LIFTING NOTES:

1. THIS DRAWING IS FOR ILLUSTRATION PURPOSES ONLY.
2. SIZING OF SPREADER BAR, CABLES AND OTHER LIFT HARDWARE IS RESPONSIBILITY OF OTHERS.
3. SUPPLY OF SPREADER BAR, CABLES AND OTHER LIFT HARDWARE IS RESPONSIBILITY OF OTHERS.
4. SLING ARRANGEMENT SHOULD BE ADJUSTED TO ALLOW FOR A LEVEL LIFT.
5. SLING ARRANGEMENT SHOULD BE ADJUSTED SO THE CABLE IS NOT LESS THAN 60° TO BASE.



RIGHT SIDE VIEW



FRONT VIEW (LOUVER)

REV.	DESCRIPTION	BY	DATE	REV.	DESCRIPTION	BY	DATE
0	ISSUED FOR DESIGN REVIEW	PLK	4/3/17				

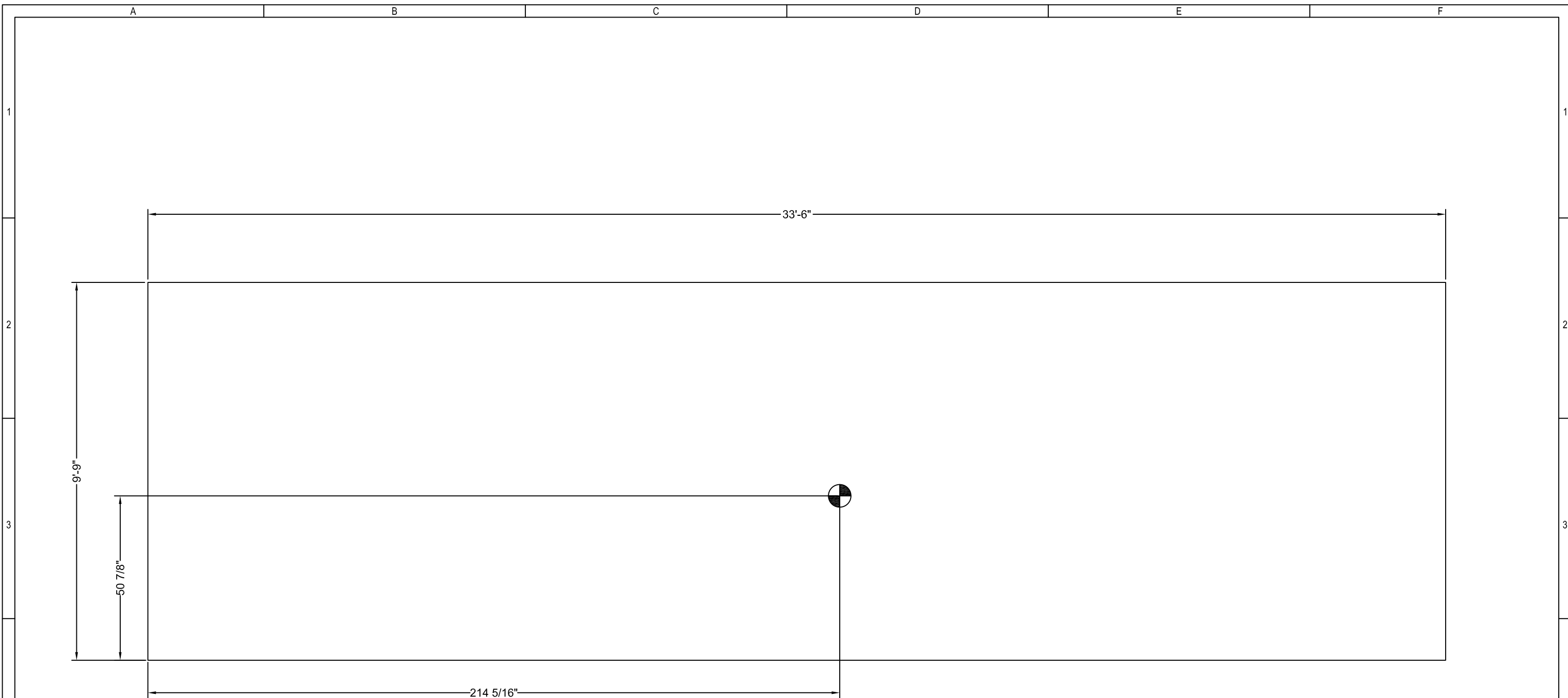

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Drawn By: P.KOLDEN
 Checked By: D.SCHETTLER
 Scale: N.T.S.
 Date: 3/20/17

Customer: CUMMINS SALES & SERVICE
 Project Name: FARIBAULT GENERATOR
 Drawing Title: LIFTING/SHIPPING DETAILS
 Drawing No.: 70184-1-500
 P.O.#: 1770 S.O.#: 70184

Rev No.
0



WEIGHT: 51,366 LBS

*INCLUDES GENSET, BUILDING, & HOOD

REV.	DESCRIPTION	BY	DATE	REV.	DESCRIPTION	BY	DATE
0	ISSUED FOR DESIGN REVIEW	PLK	4/3/17				


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Drawn By: P.KOLDEN
 Checked By: D.SCHETTLER
 Scale: N.T.S.
 Date: 3/20/17

Customer: CUMMINS SALES & SERVICE
 Project Name: FARIBAULT GENERATOR
 Drawing Title: CENTER OF GRAVITY
 Drawing No.: 70184-1-520
 P.O.#: 1770 S.O.#: 70184

Rev No. 0

ELECTRICAL CONDUIT

INTERIOR

- EXPOSED RIGID GALVANIZED CONDUIT AS REQUIRED BY NEC.
- 1/2" DIAMETER MINIMUM ANSI C80.1

NOTE #1: FOR LARGE VOLUMES OF WIRING WE RESERVE THE RIGHT TO USE ALUMINUM LADDER TYPE CABLE TRAY AND/OR WIREWAY AT OUR DISCRETION.

NOTE #2: FOR ELECTRICAL DEVICES HAVING ONLY 1/2" KNOCK-OUTS, 1/2" REDUCERS/NIPPLES MAY BE USED.

EXTERIOR

- EXPOSED RIGID GALVANIZED CONDUIT AS REQUIRED BY NEC.
- SEALTITE USED WHERE FLEXIBILITY IS REQUIRED
- 3/4" DIAMETER MINIMUM ANSI C80.1
- SURFACE MOUNT BOXES

NOTE #1: FOR ELECTRICAL DEVICES HAVING ONLY 1/2" KNOCK-OUTS, 1/2" REDUCERS/NIPPLES MAY BE USED.

ELECTRICAL WIRING

CONTROL WIRING

- TYPE MTW (#16 AWG MINIMUM)
- TINNED COPPER
- SOLID COLOR WITH IDENTIFYING STRIPE

POWER WIRING

- TYPE THHN (#14 AWG MINIMUM)

STANDARD COLOR CODING

208Y/120 & 240

- A-BLACK
- B-RED
- C-BLUE
- N-WHITE
- G-GREEN

480Y/277 & 480

- A-BROWN
- B-ORANGE
- C-YELLOW
- N-GREY
- G-GREEN

DC CIRCUITS

- POS(+) -RED
- NEG(-) -BLACK
- G -GREEN

NOTE #1: WHERE COLOR AVAILABILITY IS LIMITED DUE TO WIRE SIZE OR TYPE, ENDS OF CABLES MAY BE COLOR CODED WITH TAPE AT THE CONNECTION POINTS.

GENERAL NOTES:

1. CONDUITS SHALL BE GROUPED IN NEAT PARALLEL LINES, AND SHALL BE INSTALLED PARALLEL TO THE BUILDING WALLS, FLOOR AND CEILING EXCEPT WHERE PITCH IS REQUIRED FOR PROPER DRAINAGE AND WHERE INTERFERENCES PREVENT THIS.
2. WHERE AN OUTDOOR CONDUIT RUN IS INSTALLED SUCH THAT A SECTION OF THE RUN MAY FORM A TRAP WHERE WATER MAY COLLECT, THIS SECTION SHALL HAVE DRAINS OR DRAIN SEALS INSTALLED.
3. OPEN-ENDED CONDUITS SHALL BE CAPPED DURING CONSTRUCTION UNTIL INSTALLATION IS COMPLETE TO PREVENT INGRESS OF FOREIGN MATERIALS AND TO PROTECT THE EXPOSED CONDUIT THREADS.
4. WHERE CONDUITS ARE CONNECTED TO DISSIMILAR METAL FITTINGS, THE THREADS SHALL BE CLEANED AND COATED WITH GREASE AND METALLIC TYPE CONDUCTIVE COMPOUND.
5. CONDUITS SHALL BE INSTALLED IN ACCORDANCE WITH THE NEC, NINETY DEGREE BENDS FOR CONDUITS 2" AND SMALLER MAY BE EITHER STANDARD ELBOWS OR FIELD BENDS OF EQUIVALENT RADIUS OR LARGER.
6. STRAIGHT RUNS OF OUTDOOR CONDUIT OVER 98 FEET (30 METERS) IN LENGTH SHALL HAVE EXPANSION FITTINGS IF THERE ARE NO PULL BOXES INSTALLED.
7. ALL BOXES AND CABINETS LOCATED OUTDOORS, IN WET AREAS, OR AT THE LOW POINTS OF ANY INTERIOR CONDUIT RUN SHALL HAVE 1/8" WEEP HOLES FOR DRAINAGE.
8. LIQUID-TIGHT FLEXIBLE METAL CONDUITS 3/4", 1", OR 1-1/2" TRADE SIZES, LESS THAN 6' LONG CONTAINING CONDUCTORS PROTECTED BY OVERCURRENT DEVICES NOT MORE THAN 60A AND INSTALLED USING FITTINGS LISTED FOR GROUNDING ARE ACCEPTABLE FOR USE AS SUPPLEMENTAL GROUNDS WITHOUT ADDITIONAL JUMPERS.



ENCLOSURE VOLTAGE(S):

208Y/120 VAC

480 VAC



24 VDC



NO FLEX LONGER THAN 6'

REV	DESCRIPTION	BY	DATE	REV	DESCRIPTION	BY	DATE
1	SPECIFIED VDC VOLTAGE	PLK	4/28/17				
0	ISSUED FOR DESIGN REVIEW	PLK	4/6/17				
A	ISSUED FOR APPROVAL	JTD	3/15/17				



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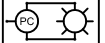


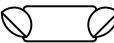
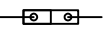
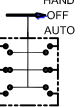
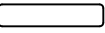

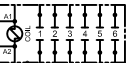







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Drawn By:	J. DONNELLY
Checked By:	JTD
Scale:	NTS
Date:	3/15/17

























Customer:	CUMMINS SALES & SERVICE	
Project Name:	FARIBAULT GENERATOR	
Drawing Title:	ELECTRICAL COVER	
Drawing No.:	70184-1-002	Rev No. 1
P.O.#:	1770	S.O.#: 70184

LEGEND - FIXTURES

-  EMERGENCY/EXIT LIGHT
-  EMERGENCY LIGHT
-  EXHAUST FAN
-  EXIT LIGHT
-  EXTERIOR LIGHT FIXTURE - INTEGRAL PHOTOCELL
-  EXTERIOR LIGHT FIXTURE
-  EXTERIOR PHOTOCELL
-  FLOOD LIGHTS
-  GROUNDING BLOCK
-  HAND-OFF-AUTO SWITCH
-  INTERIOR LIGHT FIXTURE - FLUORESCENT / LED
-  INTERIOR LIGHT FIXTURE - INCANDESCENT
-  LIGHTING CONTACTOR
-  MOTOR / PUMP MOTOR
-  RECEPTACLE, DUPLEX, GFCI, 5-20R
-  STROBE LIGHT
-  SWITCH SINGLE POLE
-  SWITCH 3-WAY
-  SWITCH 4-WAY
-  TIMER

NOTE: REFER TO DRAWINGS FOR CIRCUITRY, RATINGS, TYPE AND QUANTITY AS THEY OCCUR.

LEGEND - SYMBOLS

-  BREAKER
-  CENTER OF GRAVITY / ELEVATION
-  COIL
-  CONTACTOR (NORMALLY CLOSED)
-  CONTACTOR (NORMALLY OPEN)
-  FLOAT SWITCH (NORMALLY OPEN)
-  FUSED SWITCH
-  GROUND
-  HEATER FILAMENT
-  IN-LINE BREAKER / FUSE
-  MOMENTARY (PUSH BUTTON) SWITCH
-  OVERLOAD RELAY
-  PUSH TEST SWITCH
-  RELAY / CONTACTOR
-  RESISTOR
-  REVISION DELTA
-  SHUT OFF VALVE
-  SOLENOID
-  SWITCH (NORMALLY CLOSED)
-  SWITCH (NORMALLY OPEN)
-  TEST LIGHT
-  THERMAL SWITCH (NORMALLY CLOSED)
-  WIRE INSTALLED BY HARVARD INTEGRATIONS
-  WIRE INSTALLED BY OTHERS / FUTURE EQUIPMENT

NOTE: REFER TO DRAWINGS FOR CIRCUITRY, RATINGS, TYPE AND QUANTITY AS THEY OCCUR.

WIRING CALLOUT DESCRIPTIONS

- #C #x w/ GND "#" - NUMBER OF WIRES IN A SINGLE INSULATED JACKET. "C" - CONDUCTOR. "#x" - WIRE SIZE AND TYPE. "w/ GND" - ONE NON-INSULATED GROUND WIRE. ex: 4C #2 AWG w/ GND
- (#) #x "(#)" - NUMBER OF WIRES. "#x" - WIRE SIZE AND TYPE. ex: (3) #10 AWG
- (#) #x GND "(#)" - NUMBER OF WIRES. "#x" - WIRE SIZE AND TYPE. "GND" - NON INSULATED GROUND

WIRING COLOR CODE ABBREVIATIONS

- BLK BLACK
- BLU BLUE
- BRN BROWN
- GRN GREEN
- GRY GRAY
- ORG ORANGE
- PNK PINK
- PUR PURPLE
- RED RED
- VIO VIOLET
- WHT WHITE
- YEL YELLOW

ELECTRICAL ABBREVIATIONS

- BKR BREAKER
- CKT CIRCUIT
- GFCI GROUND FAULT CIRCUIT INTERRUPTER
- GND / G GROUND
- H HOT
- MB MAIN BREAKER
- MCB MAIN CIRCUIT BREAKER
- ML MAIN LUG
- MLO MAIN LUG ONLY
- N NEUTRAL
- NA NOT APPLICABLE
- PG PAGE / SHEET
- Φ PHASE
- REV REVISION
- RFI REQUEST FOR INFORMATION
- TBD TO BE DETERMINED (CUSTOMER TO PROVIDE)

ELECTRICAL EQUIPMENT ABBREVIATIONS


- ANN ANNUNCIATOR
- ATS AUTOMATIC TRANSFER SWITCH
- BC BATTERY CHARGER
- BS BATTERY SYSTEM
- BDISC BREAKER DISCONNECT
- BTC BREAKER TEST CABINET
- BSW BYPASS SWITCH

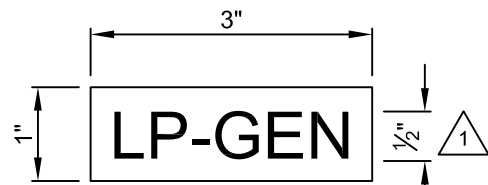
ELECTRICAL EQUIPMENT ABBREVIATIONS

- DCR DC DUPLEX RECEPTACLE
- DCP DC PANELBOARD
- DISC DISCONNECT
- DSW DOOR SWITCH
- EMEX EMERGENCY / EXIT LIGHT
- EM EMERGENCY LIGHT
- EPB EMERGENCY PUSHBUTTON
- EXFAN EXHAUST FAN
- EX EXIT LIGHT
- EL EXTERIOR LIGHT
- ER EXTERIOR GFCI RECEPTACLE
- FCP FIRE ALARM CONTROL PANEL
- FDISC FUSIBLE DISCONNECT
- HOA HAND-OFF-AUTO SWITCH
- HTP HEAT TRACE PANELBOARD
- HHTT HEAT TRACE TRANSFORMER
- HTS HIGH TEMPERATURE THERMOSTAT
- HRN HORN
- HS HUMIDISTAT
- HCP HVAC CONTROL PANEL
- HVAC HVAC UNIT
- IL INCANDESCENT LIGHT
- R INTERIOR GFCI RECEPTACLE
- FL INTERIOR LIGHT
- INTP INTRUSION SECURITY PANEL
- LC LIGHTING CONTACTOR
- LP LIGHTING PANEL
- LTS LOW TEMPERATURE THERMOSTAT
- LVB LOW VOLTAGE BOX
- MBS MAINTENANCE BYPASS SWITCH
- MP MANUAL PULL STATION
- MTS MANUAL TRANSFER SWITCH
- JB MISCELLANEOUS JUNCTION BOX
- MCC MOTOR CONTROL
- OSW OCCUPANCY SWITCH
- PC PHOTOCELL
- PP POWER PANEL
- PJB PULL JUNCTION BOX
- QR QUADPLEX RECEPTACLE
- S/HD SMOKE AND HEAT DETECTOR
- SD SMOKE DETECTOR
- SH SPACE HEATER
- SJB SPLIT JUNCTION BOX
- ST STROBE LIGHT
- SW SWITCH
- SWGR SWITCHGEAR
- TD THERMAL DETECTOR
- TS THERMOSTAT
- TM TIMER
- XFMR TRANSFORMER
- UP UPS PANELBOARD
- UPS UPS SYSTEM
- VFD VARIABLE FREQUENCY DRIVE

NOTE: THE ABOVE LISTED ELECTRICAL EQUIPMENT ABBREVIATIONS WILL BE USED UNLESS OTHERWISE SPECIFIED BY THE CUSTOMER.

REV	DESCRIPTION	BY	DATE	REV	DESCRIPTION	BY	DATE
0	ISSUED FOR DESIGN REVIEW	PLK	4/6/17				
A	ISSUED FOR APPROVAL	JTD	3/15/17				

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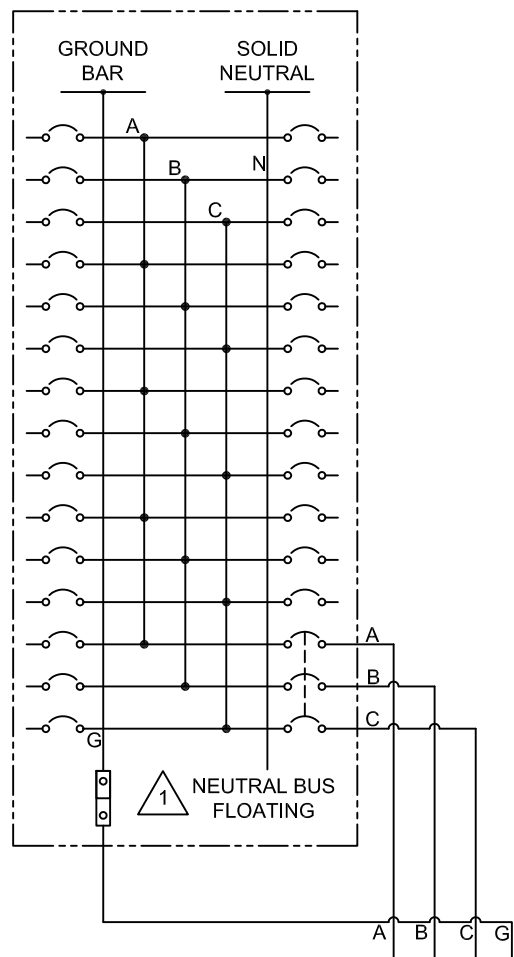


EQUIPMENT TAG

NOTE:
PHENOLIC TAG - WHITE
w/ BLACK LETTERS

LP1 PANEL INFORMATION	
PANEL MAKE	SQUARE D
PANEL VOLTAGE	208Y/120 VAC
PHASE / WIRING	3Φ, 4 WIRE
PANEL RATING	FULL
BUS TYPE	COPPER
BUS RATING - AMPERAGE	100A
BUS RATING - kAIC	10kAIC
NUMBER OF CIRCUITS	30
PANEL FEED ENTRY	BOTTOM
MAIN BREAKER	100A
BRANCH BREAKERS	SNAP-IN
BRANCH BREAKER RATING	10kAIC
GROUNDING REQUIREMENTS	GROUND BAR
NEUTRAL REQUIREMENTS	SOLID NEUTRAL
CABINET TYPE	INDOOR
NEMA RATING	1
MOUNTING	SURFACE

DESCRIPTION	LOAD AMPS	CB AMPS	CKT NO
SPACE	---		1
SPACE	---		3
SPACE	---		5
ROOM HEATER	20.9	30A	7 9
INTERIOR LIGHTING	3.2	20A	11
SPARE	---	20A	13
SPARE	---	20A	15
SPARE	---	20A	17
SPARE	---	20A	19
SPACE	---		21
SPACE	---		23
SPACE	---		25
SPACE	---		27
SPACE	---		29



CKT NO	CB AMPS	LOAD AMPS	DESCRIPTION
2	15A	2.5	ANTI-CONDENSATE HEATER
4	30A	20.9	JACKET WATER HEATER
6			
8	20A	3.0	INTERIOR RECEPTACLES
10	15A	8.0	BATTERY CHARGER
12	15A	1.5	DAMPER MOTOR POWER
14	20A	---	SPARE
16	20A	---	SPARE
18	20A	---	SPARE
20	20A	---	SPARE
22		---	SPACE
24		---	SPACE
26	100A	---	MAIN BREAKER
28			
30			

WIRED BY OTHERS IN FIELD

PHASE	A	B	C
TOTAL LOAD PER PHASE	26.4	49.8	25.6
TOTAL LOAD PER PANEL	33.9A		

REV	DESCRIPTION	BY	DATE	REV	DESCRIPTION	BY	DATE
1	SWITCHED PANEL TO BOT FED	ZDS	5/26/2017				
0	ISSUED FOR DESIGN REVIEW	PLK	4/6/17				
A	ISSUED FOR APPROVAL	JTD	3/15/17				



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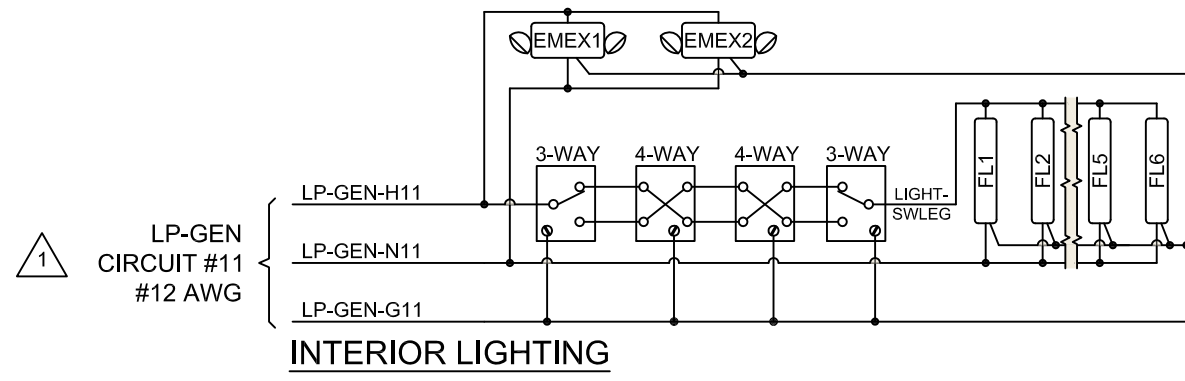
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J. DONNELLY
Checked By:
JTD
Scale: NTS
Date: 3/15/17

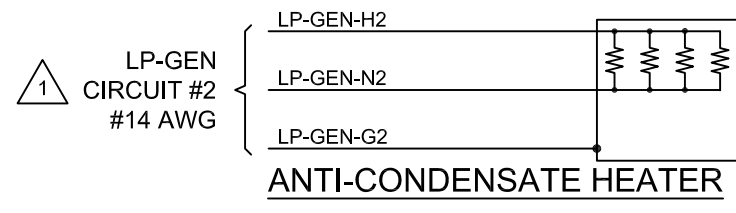
Customer: CUMMINS SALES & SERVICE
Project Name: FARIBAULT GENERATOR
Drawing Title: LP1 PANEL SCHEDULE
Drawing No.: 70184-1-600
P.O.#: 1770 S.O.#: 70184

Rev No.

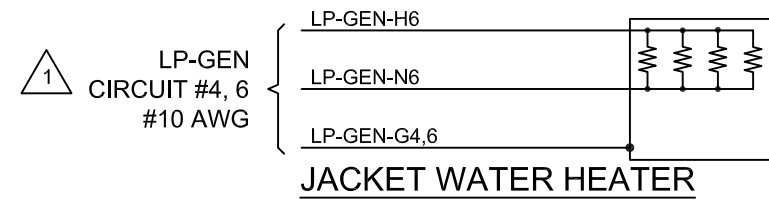
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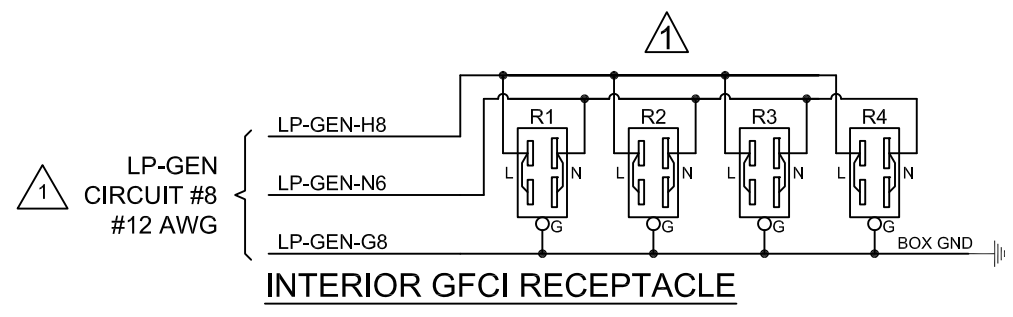
INTERIOR LIGHTING



ANTI-CONDENSATE HEATER



JACKET WATER HEATER



INTERIOR GFCI RECEPTACLE

REV	DESCRIPTION	BY	DATE	REV	DESCRIPTION	BY	DATE
1	UPDATED PANEL REFRENCES	ZDS	5/26/2017				
0	ISSUED FOR DESIGN REVIEW	PLK	4/6/17				
A	ISSUED FOR APPROVAL	JTD	3/15/17				

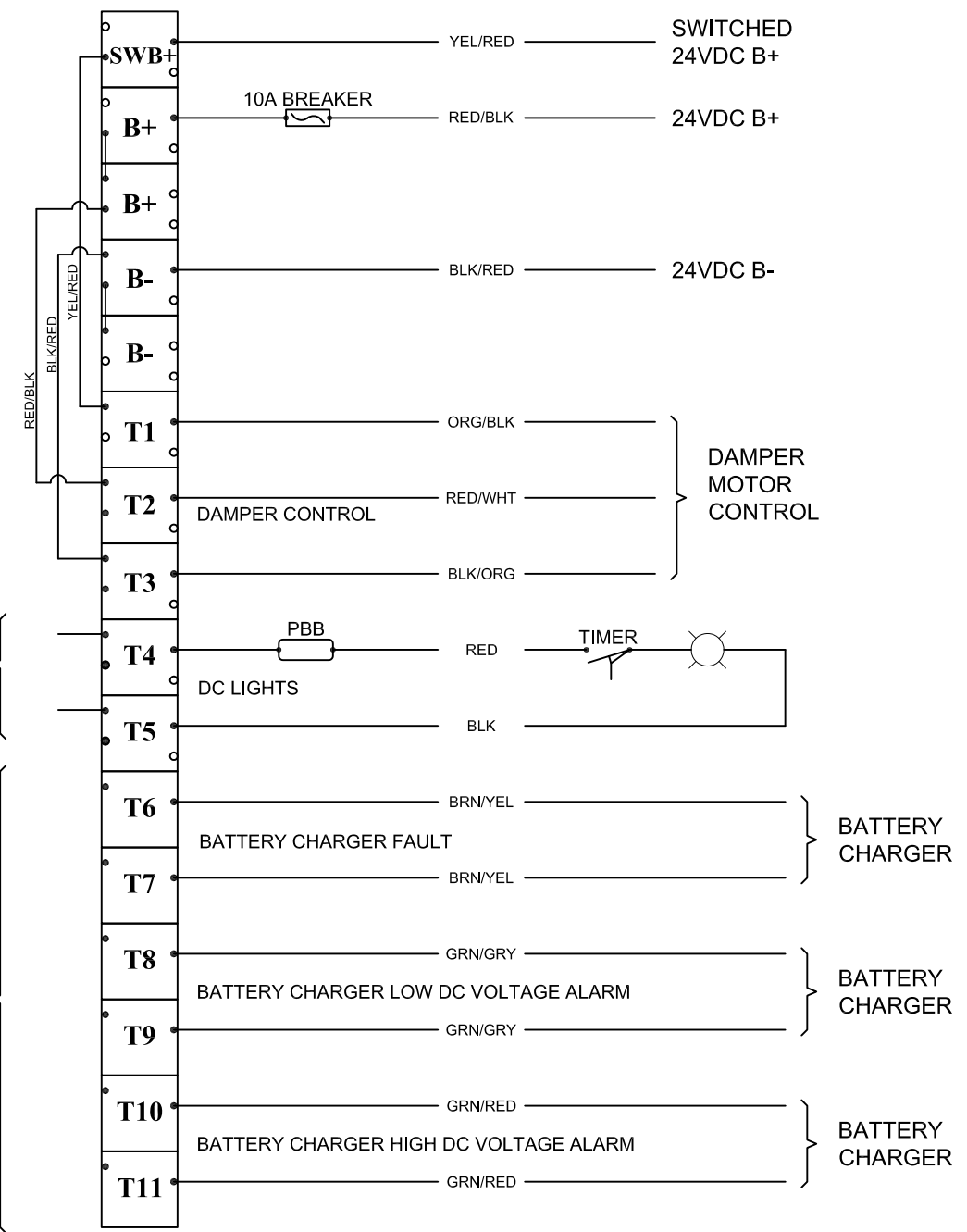
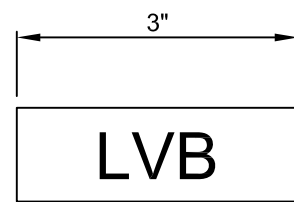


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Drawn By:
J. DONNELLY
Checked By:
JTD
Scale: NTS
Date: 3/15/17

Customer: CUMMINS SALES & SERVICE
Project Name: FARIBAULT GENERATOR
Drawing Title: LP1 CIRCUIT DETAILS
Drawing No.: 70184-1-601
P.O.#: 1770
S.O.#: 70184

Rev No.
1



TO STARTER

RUN TO GENERATOR LABEL & LEAVE LOOSE

REV	DESCRIPTION	BY	DATE	REV	DESCRIPTION	BY	DATE
0	ISSUED FOR DESIGN REVIEW	PLK	4/6/17				
A	ISSUED FOR APPROVAL	JTD	3/15/17				

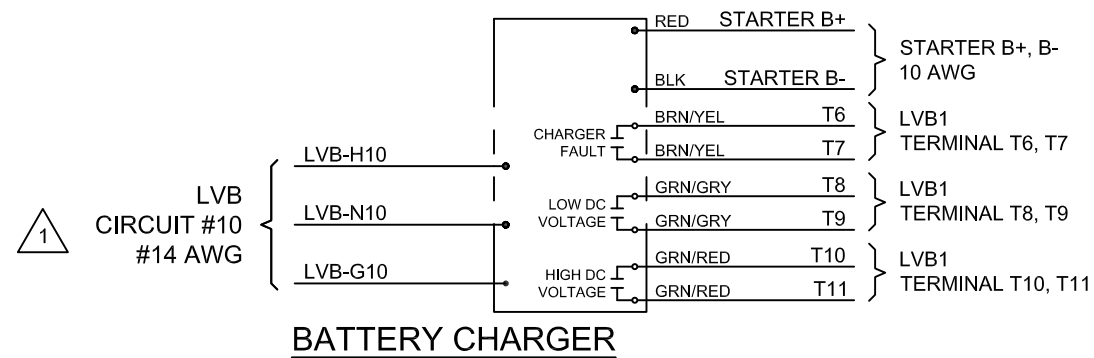
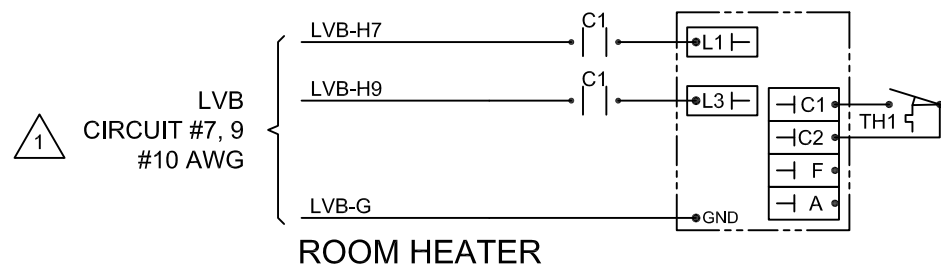
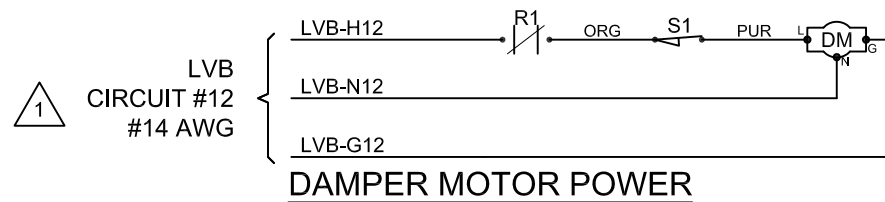
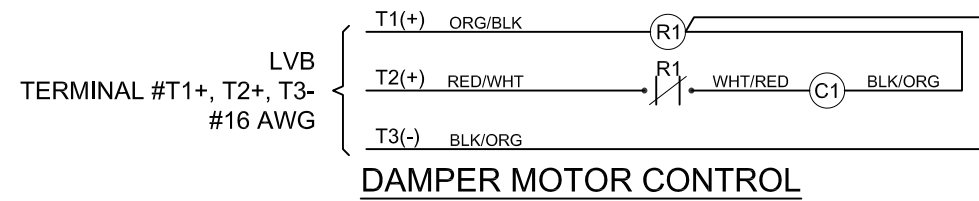


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Drawn By:
J. DONNELLY
Checked By:
JTD
Scale: NTS
Date: 3/15/17

Customer: CUMMINS SALES & SERVICE
Project Name: FARIBAULT GENERATOR
Drawing Title: LVB TERMINAL SCHEDULE
Drawing No.: 70184-1-640
P.O.#: 1770 S.O.#: 70184

Rev No.
0



GENERAL NOTES:
 1. ALL WIRES TO BE 16GA. STRANDED TINNED MTW, UNLESS NOTED OTHERWISE.

LEGEND

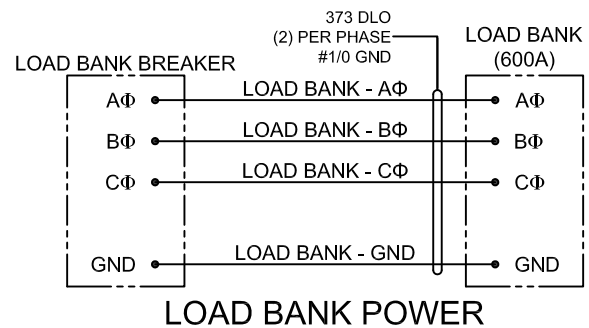
R1	24VDC 14-PIN RELAY - RUN RELAY
C1	24VDC 10-PIN CONTACTOR - HEATER
PT	PUSH TO TEST SWITCH (MOMENTARY, MULTIPLE CONTACTS)
S1	DAMPER BYPASS SWITCH
DM	DAMPER MOTOR (1-12)
TH1	HEATER THERMOSTAT
F1	PUSH BUTTON BREAKER
SL1	DOOR ACTIVATED SWITCH
SL	DOOR ACTIVATED LIGHT(GREEN)
FS8-T	FLOAT SWITCH (75% FULL)
FS10	FLOAT SWITCH (90% FULL)
L1	AMBER LIGHT (75% FULL)
L2	RED LIGHT (90% FULL)

REV	DESCRIPTION	BY	DATE	REV	DESCRIPTION	BY	DATE
1	UPDATED PANEL REFRENCES	ZDS	5/26/2017				
0	ISSUED FOR DESIGN REVIEW	PLK	4/6/17				
A	ISSUED FOR APPROVAL	JTD	3/15/17				



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Drawn By:	J. DONNELLY	Customer:	CUMMINS SALES & SERVICE
Checked By:	JTD	Project Name:	FARIBAULT GENERATOR
Scale:	NTS	Drawing Title:	LVB CIRCUIT DETAILS
Date:	3/15/17	Drawing No.:	70184-1-641
		P.O.#:	1770
		S.O.#:	70184
		Rev No.	1



REV	DESCRIPTION	BY	DATE	REV	DESCRIPTION	BY	DATE
0	ISSUED FOR DESIGN REVIEW	PLK	4/6/17				
A	ISSUED FOR APPROVAL	JTD	3/15/17				

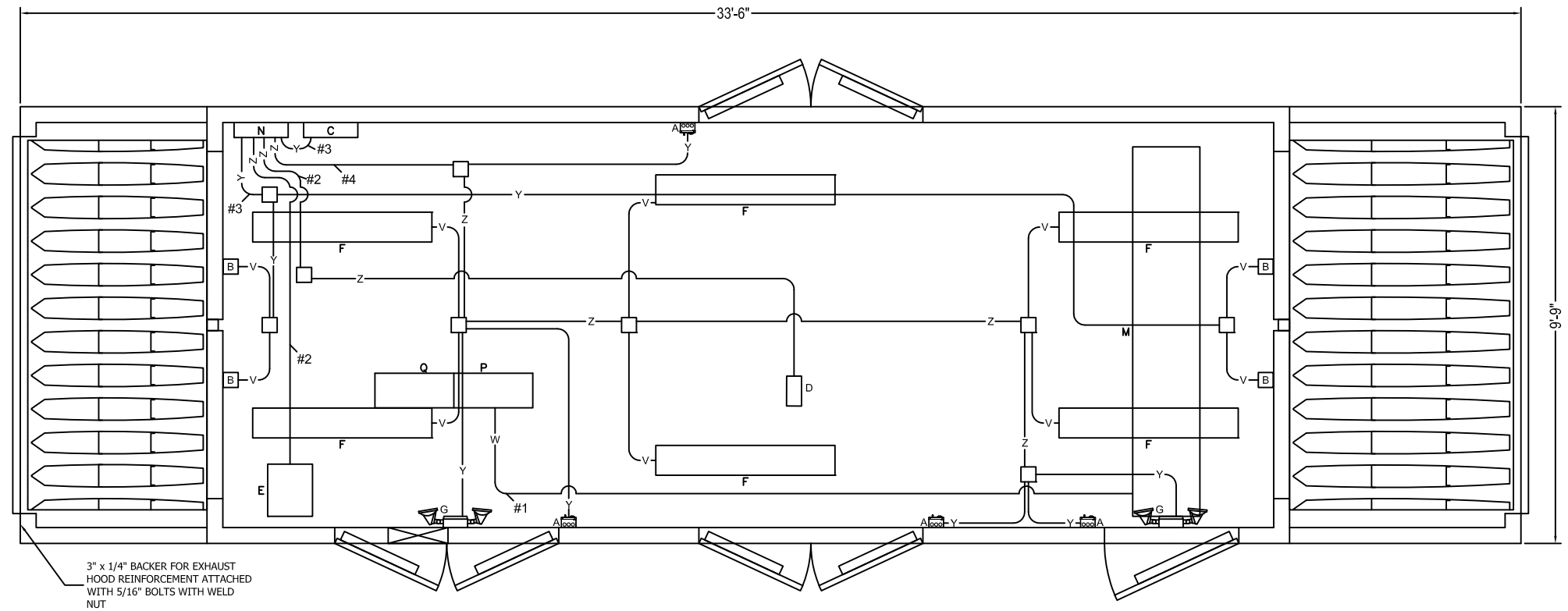
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Drawn By:	J. DONNELLY
Checked By:	JTD
Scale:	NTS
Date:	3/15/17

Customer:	CUMMINS SALES & SERVICE	
Project Name:	FARIBAULT GENERATOR	
Drawing Title:	POWER CIRCUIT DETAILS	
Drawing No.:	70184-1-660	Rev No.
P.O.#: 1770		0
	S.O.#: 70184	



ELECTRICAL NOTES:

DEVICES:

- A - 20 AMP SWITCH AND 20 AMP GFCI OUTLET MOUNTED 48" TO TOP FROM FINISH FLOOR IN 4 SQ. BOX W/ RAISED COVER
- B - 120 VOLT DAMPER MOTOR MOUNTED TO CEILING
- C - 120 VOLT BATTERY CHARGER MOUNTED 5' TO THE TOP OFF THE FINISH FLOOR
- D - WATER JACKET HEATERS MOUNTED ON GENERATOR
- E - ROOM HEATER MOUNTED TO CEILING
- F - 120V 2 BULB VAPORTIGHT FLUORESCENT LIGHT MOUNTED TO CEILING
- G - 120 VOLT EMERGENCY LIGHT WITH BATTERY BACKUP
- L - WALL MOUNTED THERMOSTAT FOR ROOM HEATER
- M - LOAD BANK
- N - DISTRIBUTION PANEL
- P - 480V, 600A LOAD BANK BREAKER
- Q - 480V, 1200A GENSET OUTPUT BREAKER
- R - MAIN DISTRIBUTION PANEL

CONDUCTORS:

- UNLESS NOTED: ALL WIRE ARE THHN STRANDED, SIZED PER OVER CURRENT DEVICE. INSTALLATIONS REQUIRING HIGHER TEMPERATURE WIRE RECEIVE 200°C SILICONE WIRE, SIZED PER OVER CURRENT DEVICE.
- #1 - (6) #373 DLO CONDUCTOR, (2) #1/0 DLO GROUND
 - #2 - (2) #10 CONDUCTOR (1) #10 GROUND
 - #3 - (1) #14 CONDUCTOR (1) #14 NEUTRAL #14 GROUND
 - #4 - (1) #12 CONDUCTOR (1) #12 NEUTRAL (1) #12 GROUND



PIPE:

- V - 1/2" LFMC (MAX. LENGTH NOT TO EXCEED 6')
- W - (2) 3 1/2" RIGID CONDUIT
- Y - 1/2" RIGID CONDUIT
- Z - 3/4" RIGID CONDUIT

REV	DESCRIPTION	BY	DATE
0	REVISED PIPE CALLOUTS	PLK	4/28/17
0	ISSUED FOR CONSTRUCTION	JTD	4/3/17


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Drawn By:	J. DONNELLY
Checked By:	JTD
Scale:	NTS
Date:	4/3/17

Customer:	CUMMINS SALES & SERVICE	
Project Name:	FARIBAULT GENERATOR	
Drawing Title:	ELECTRICAL LAYOUT VIEW	
Drawing No.:	70184-1-690	Rev No. 1
P.O.#:	1770	S.O.#: 70184