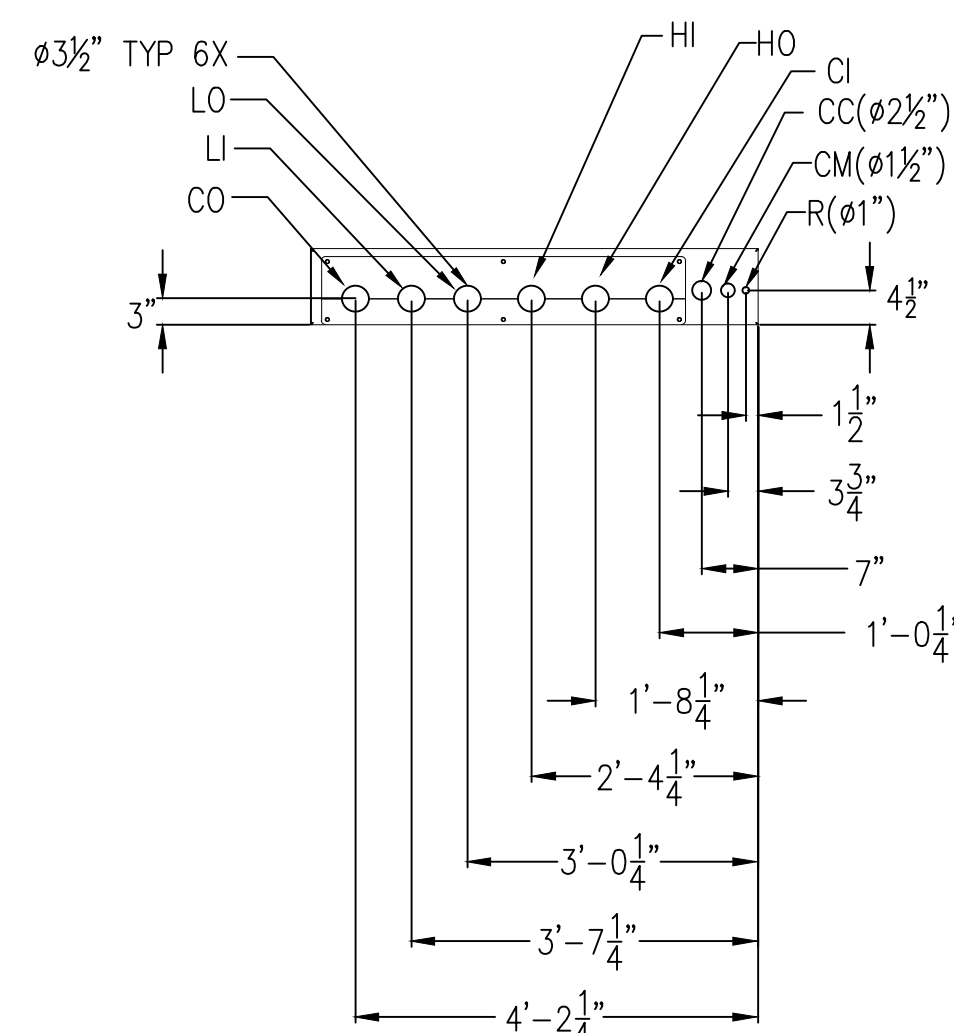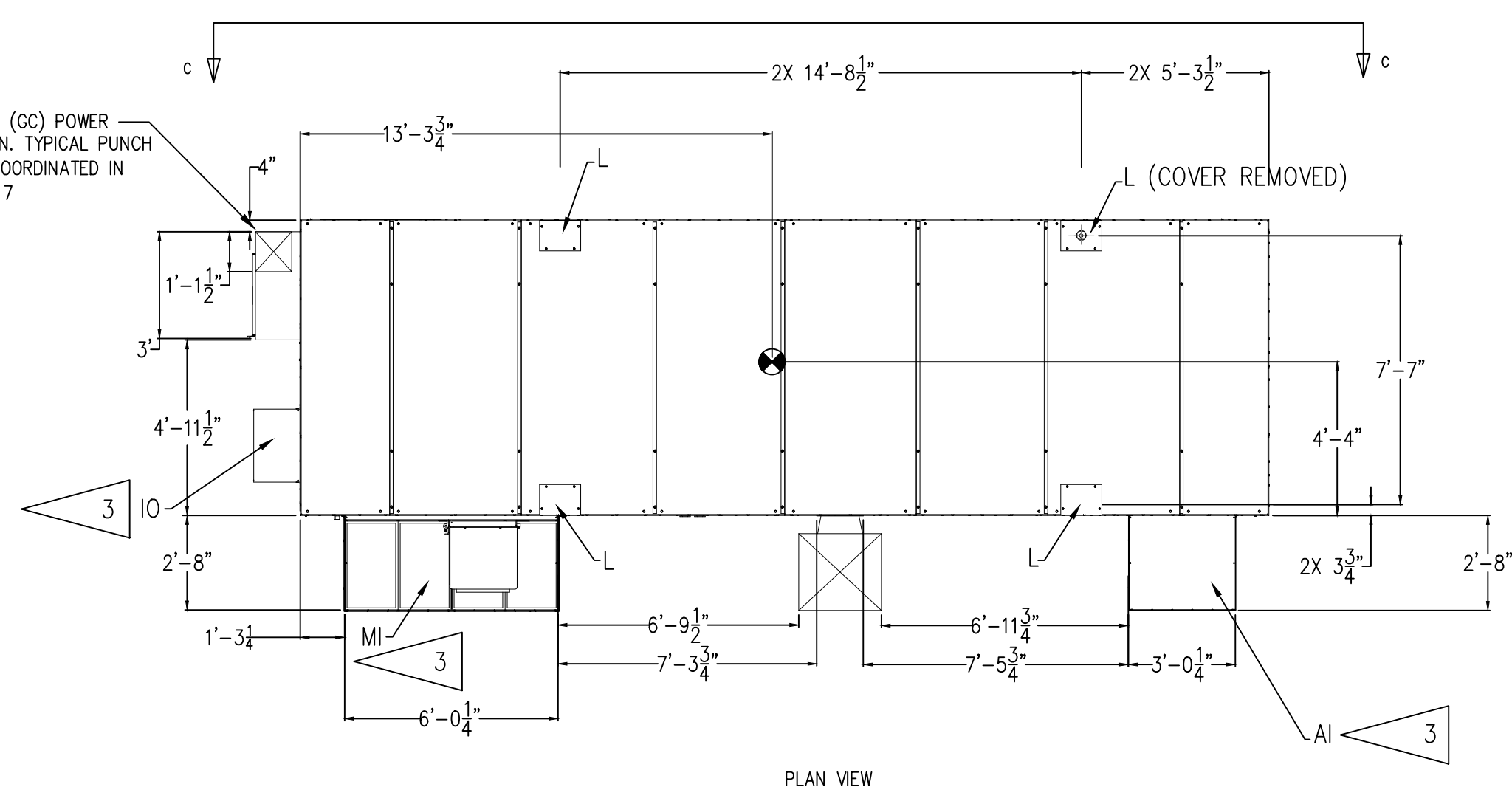# GENERAL SHEET NOTES:

1. NOT USED.

2. NOT USED.

3. INLET & EXHAUST HOODS, EXHAUST CHIMNEY AND LIFT POINT COVERS ARE SHIPPED SEPARATELY AND ATTACHED ON-SITE. POWER PLANT MUST REMAIN COVERED UNTIL THESE ITEMS ARE INSTALLED.

4. UNLESS OTHERWISE SPECIFIED, ALL DIMENSIONS ARE IN FEET AND INCHES.

5. POWER PLANT WEIGHT: 60,000 LBS

6. POWER PLANT SIZED FOR INTERSTATE SHIPPING ON SINGLE DROP FLATBED TRAILER. MAX SHIPPING DIMENSIONS ON BED: 10'-0" H X 8'6" W X 27'6" L

7. INTERFACE DEFINITIONS:
AI = AIR INLET, PROCESS AIR AND FUEL COMPARTMENT VENTILATION
CC = CUSTOMER COMMUNICATIONS: INTERFACE OPENING CONDUIT SIGNAL CABLES
   – GRID ENABLE
   – EXTERNAL POWER DISPATCH
   – ZERO POWER EXPORT
   – NORMAL SHUTDOWN
   – HIGH GRADE HEAT TEMPERATURE SENSOR
   – EXTERNAL FAN CONTROL
   – EXTERNAL FLOW SENSING
   – FAST (EMERGENCY) SHUTDOWN
   – ETHERNET TO RMS
   – NITROGEN PRESSURE SWITCH
CI = GLYCOL MIXTURE IN FROM COOLING MODULE: 2 INCH ASME B16.5 CLASS 150 LAP FLANGE, CS
CO = GLYCOL MIXTURE OUT TO COOLING MODULE: 2 INCH ASME B16.5 CLASS 150 LAP FLANGE, CS
CM = COOLING MODULE POWER
FI = FUEL INLET: 2 INCH 150# LAP FLANGE, CS
GC = GRID CONNECT POWER: REQUIRED ENCLOSURE OPENINGS PUNCHED IN FIELD. MAY BE LOCATED IN TOP OR BOTTOM OF DISCONNECT BOX
GI = GRID INDEPENDENT LOAD; DISCARD COVER PLATE AND PROVIDE NEMA RATED ENCLOSURE AT BUS BAR CONNECTIONS
GND= POWER MODULE GROUND
HI = HIGH GRADE WATER IN FROM CUSTOMER: 2 1/2 INCH ASME B16.5 CLASS 150 LAP FLANGE, CS
HO = HIGH GRADE WATER OUT TO CUSTOMER: 2 1/2 INCH ASME B16.5 CLASS 150 LAP FLANGE, CS
IO = INVERTER VENTILATION AIR EXIT
L = POWER PLANT LIFTING POINTS (4 PLCS) 1 1/2 INCH–6 UNC–2B THREAD, SEE NOTES 3 & 8
LI = LOW GRADE WATER IN FROM CUSTOMER: 2 INCH ASME B16.5 CLASS 150 LAP FLANGE, CS
LO = LOW GRADE WATER OUT TO CUSTOMER: 2 INCH ASME B16.5 CLASS 150 LAP FLANGE, CS
LOI = LOCAL OPERATOR INTERFACE: LOCATED BEHIND PANEL
MI = MOTOR COMPARTMENT AND INVERTER VENTILATION AIR INLET
MO = MOTOR COMPARTMENT VENTILATION AIR EXIT
NI = NITROGEN PURGE INLET: 3/4 INCH NPT FEMALE THREAD, CS
PO = PROCESS GAS EXHAUST
ESB = EXTERNAL SHUTDOWN BUTTON
R = REMOTE MONITORING 120 VAC POWER. ENCLOSURE OPENING
T = TIE DOWN LOCATIONS (4 PLCS): 3" HOLE.
WI = MAKEUP WATER INLET: 3/4 INCH FNPT, CS
WO = WATER TANK OVERFLOW: 3/4 INCH FNPT, CS

8. LIFT POWER PLANT ONLY AT LIFT LOCATIONS (L), USING FOUR 1 1/2 INCH–6 UNC–2B SWIVEL HOIST RINGS RATED AT 24,000 LBS. MINIMUM DISTANCE BETWEEN TOP OF POWER PLANT AND CRANE HOOK TO BE 25 FEET.

9. PROVIDE LEVEL FLOOR. FLATNESS OF 1/4" IN 10 FT TO BE MAINTAINED. HOUSEKEEPING PAD NOT REQUIRED.

10. ANY VIOLATIONS OF MAINTENANCE CLEARANCES (REFERENCE INSTALLATION MANUAL (FCMAN70865) NEED PRIOR APPROVAL FROM UTC POWER AFTERMARKET AND INSTALLATION SERVICES.

11. TO BE INSTALLED PER NFPA 853.

12. NOT USED.

13. RECOMMENDED TIE DOWN BRACKETS FC69802–01

14. FOR GRID INDEPENDANT CONNECTIONS, ADEQUATE DIELECTRIC SPACE MUST BE MAINTAINED AT BUS BARS. PER ANSI FC1, 3/8" MINIMUM AIR GAP OR 1/2" MINIMUM SURFACE TRACKING (CREEPAGE) GAP MUST BE MAINTAINED.

15. FOR I/O DETAILS REFERENCE FCMAN70865

16. BRACKET HOLES FOR FLOOR BRACKETS MAY BE UTILIZED FOR ADDITIONAL SEISMIC SUPPORT AND/OR TIE DOWNS WHEN FLOOR IS NOT INSTALLED. DESIGN AND MATERIAL BY OTHERS. SHIM AS REQUIRED.

17. NOTE THE CLEARANCE REQUIRED FOR PIPING IN CUSTOMER INTERFACE AREA. MAINTENANCE WORK PLATFORM BUILT OVER PIPING MUST NOT EXCEED 1'-5" FROM BOTTOM OF FRAME. DO NOT EXTEND PLATFORM BEYOND WIDTH OF DOOR ABOVE PIPING TO AVOID OBSTRUCTING ADJACENT DOORS.
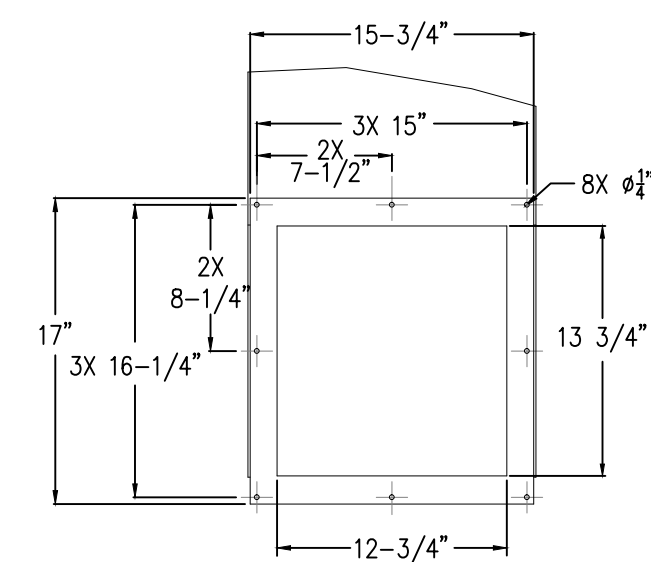

DETAIL VIEW A
SCALE: NONE
DIAMETER SIZES ARE ENCLOSURE PANEL OPENINGS ONLY, CONNECTION SIZES WITHIN MAY VARY.
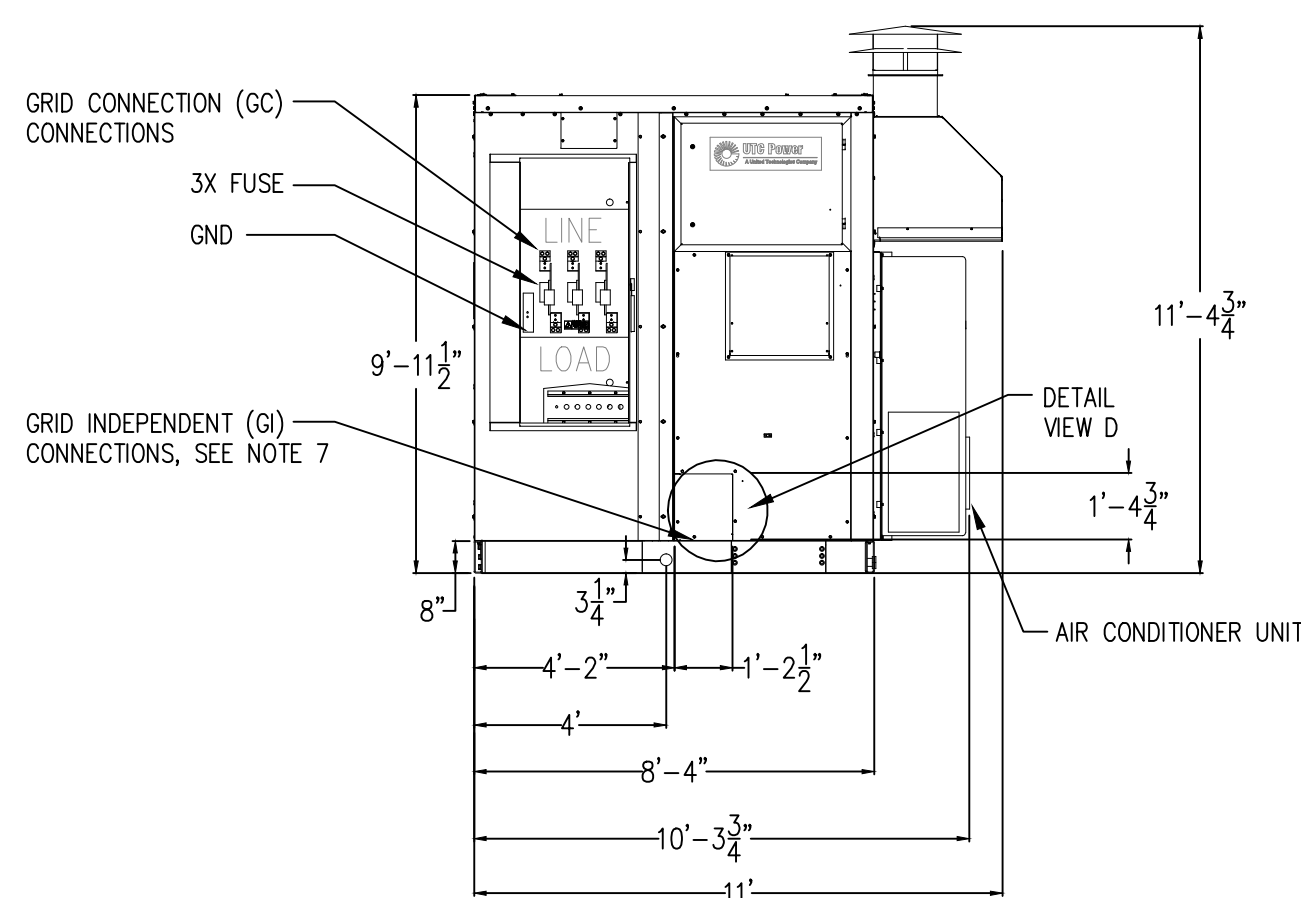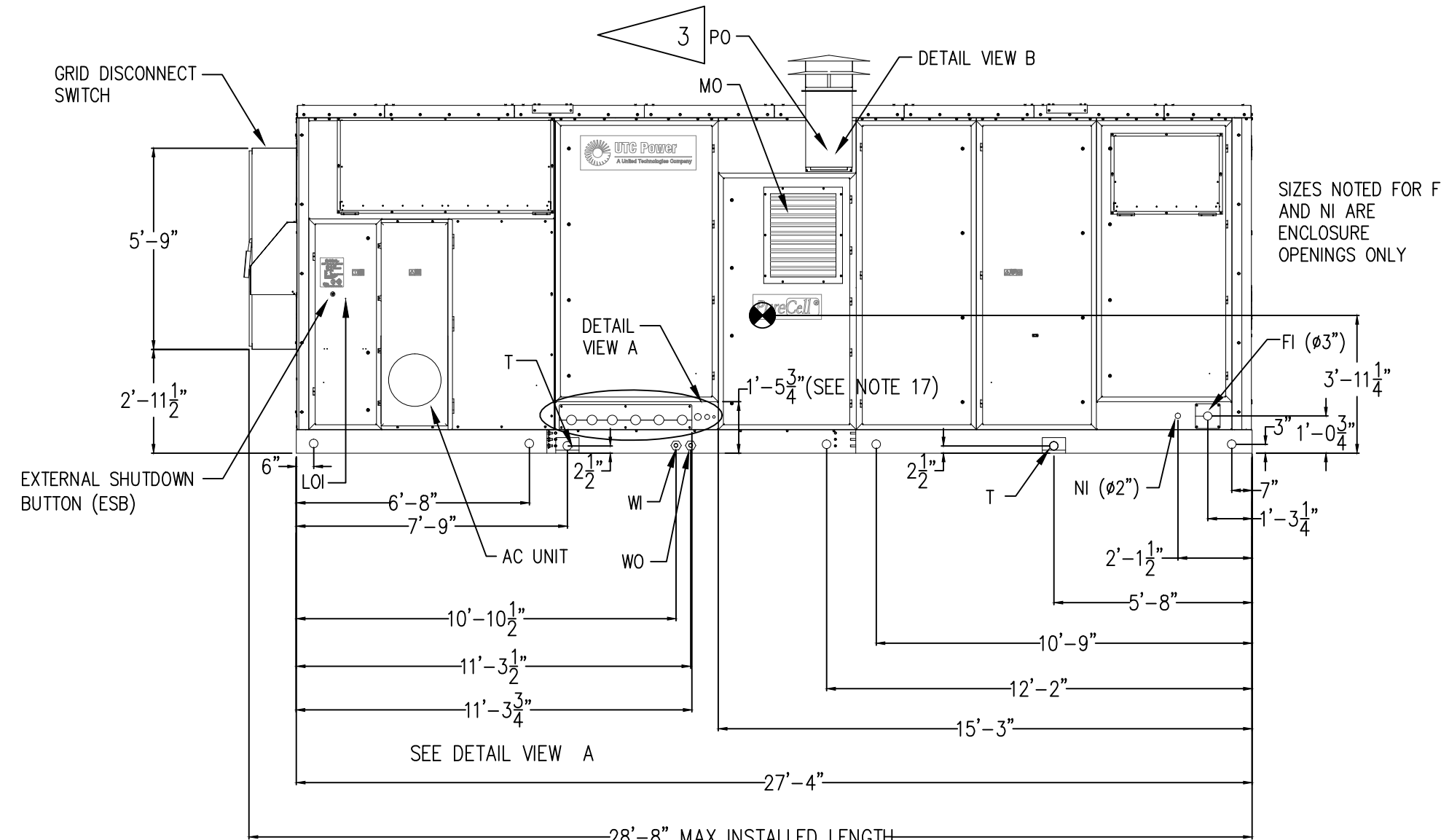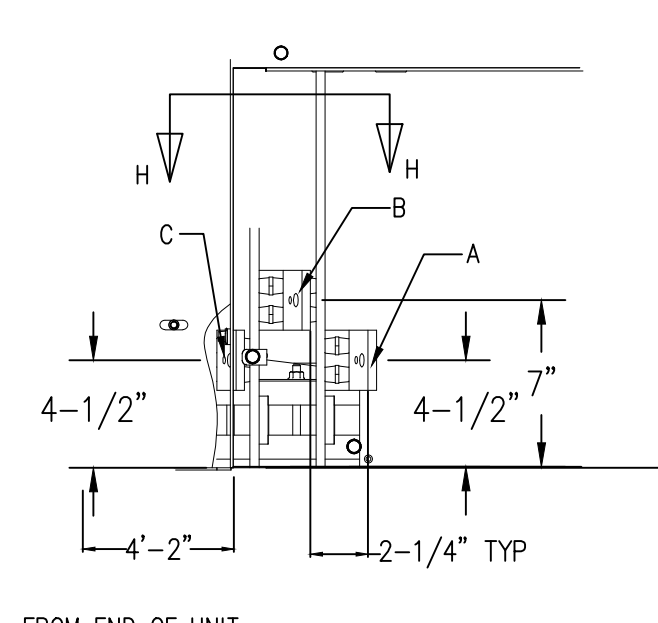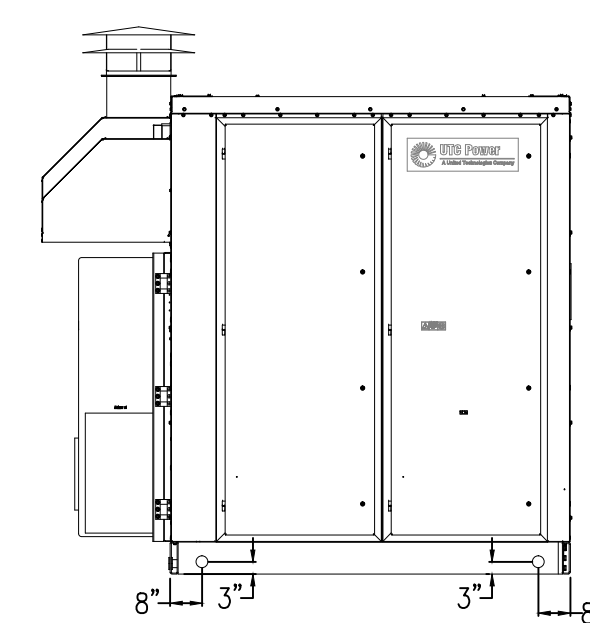
PLAN VIEW

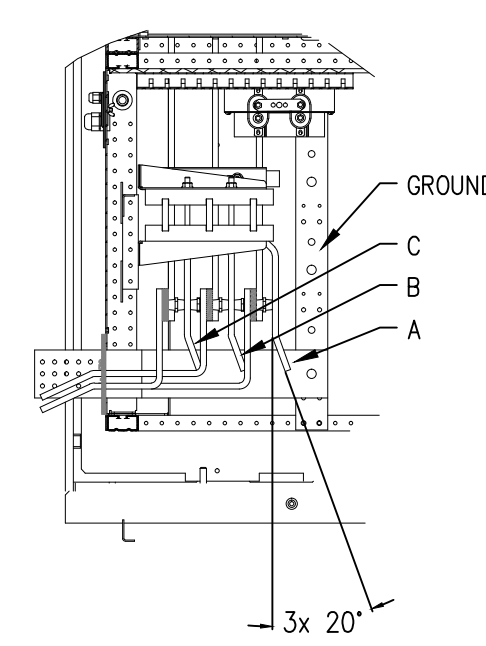DETAIL VIEW B
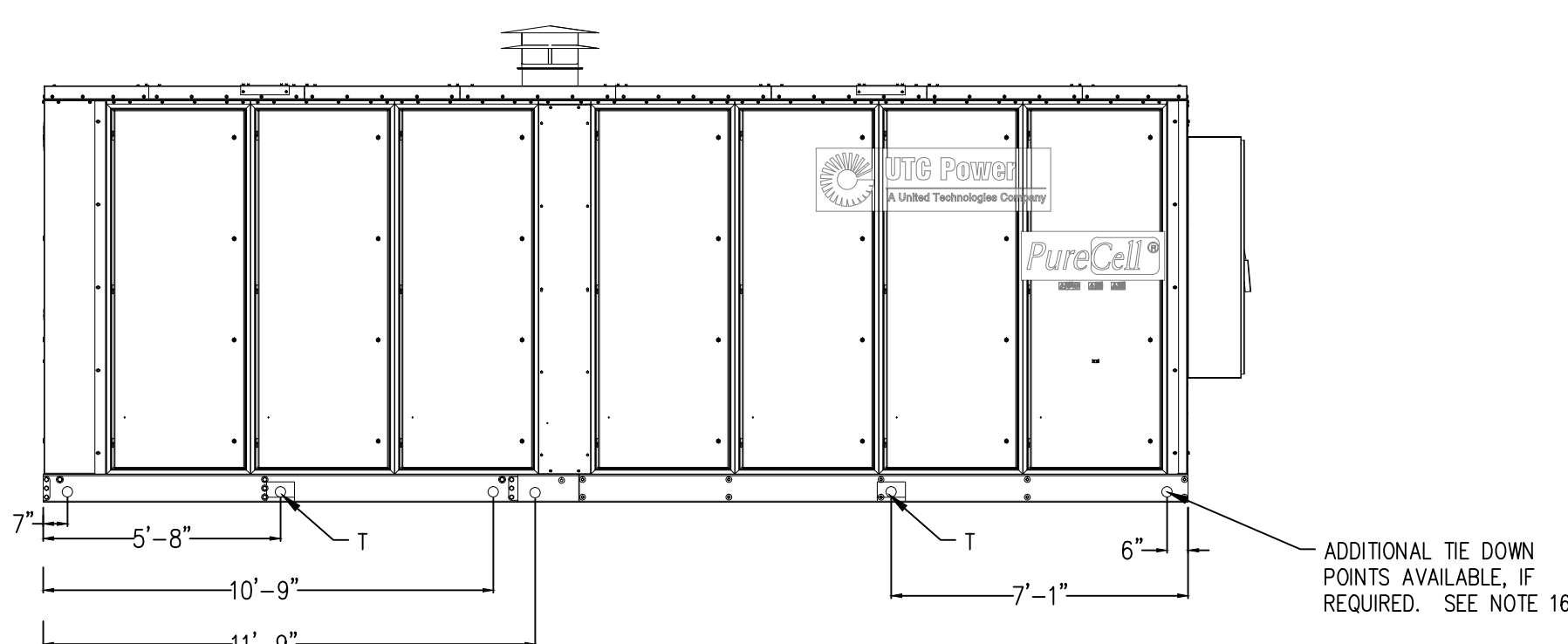SCALE: NONE
EXHAUST TO BE INSTALLED IN FIELD

SIDE VIEW

ELEVATION VIEW

DETAIL VIEW D
SCALE: NONE
GRID INDEPENDENT CONNECTIONS BY:

FROM END OF UNIT

SECTION VIEW H–H
SCALE: NONE
GRID INDEPENDENT BUS BARS AND GROUND

VIEW C–C

CBS TELEVISION CITY
FUEL CELL INSTALLATION PROJECT
7800 BEVERLY BLVD.
LOS ANGELES, CALIFORNIA 90036

FUEL CELL ELEVATIONS

ID	DATE	REMARKS
1	7/20/12	PRELIMINARY DESIGN REVIEW
2	8/23/12	PLAN CHECK
3	9/4/12	BID CLARIFICATIONS
4	9/19/12	UTC RECOMMENDED CORRECTIONS
5	9/25/12	UTC COMMENTS/REVISIONS
6	11/15/12	PLAN CHECK CORRECTIONS
7	12/10/12	FIELD CLARIFICATIONS

ENGR:	WTB
DRWN BY:	WTB
CHCK'D BY:	WTB
DATE:	9/19/12
JOB NO.:	12–010
SCALE:	AS NOTED

SHEET
M4.4

REGISTERED PROFESSIONAL ENGINEER
WILLIAM T. BISSEL JR.
No.028188
MECHANICAL
STATE OF CALIFORNIA