Project

HYDROGEN READY POWER PLANT

Customer

GREENFIELD SOUTH POWER INC.

Applique

GAS TURB. S/N: 299735 / IPS1615904

GEN S/N: GG10870 / 761x090

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Revision History			
Rev	Description	Date (YYYY-MM-DD)	Approved
B	LEGENDS: B1) REMOVED NOTE 17 AND UPDATED NOTE M18. B2) UPDATED INLET FILTER HOUSE (A040), INLET SUPPORT STRUCTURE (A880), TURBINE ENCLOSURE (1634) AND LOAD COMPARTMENT(1617). B3) ADDED/UPDATED/DELETED CALL-OUTS. B4) UPDATED/ADDED DIMENSIONS. B5) ADDED VIEWS IN SHEET 3. B6) UPDATED MLI 557T & 0585. B7) ADDED/UPDATED TABLE. B8) UPDATED VIEW LABLE.	2025-03-25	DRAWN SHIVUKUMAR BV ENGINEER MEENAGHAN KELLY

GENERAL NOTES:

1. THIS DRAWING PROVIDES DIMENSIONAL DATA OF THE GAS TURBINE-POWER TRAIN PACKAGE AND ALL OTHER GE VERNOVA LOCATED EQUIPMENT. SPACE REQUIREMENTS FOR STATION LAYOUT, DEPICTION OF GAS TURBINE/GENERATOR ROTOR REMOVAL DIMENSIONS, MAINTENANCE CLEARANCES, CUSTOMER INTERFACE DETAILS AND OUTLINE EQUIPMENT EXTENDING BEYOND THE PERIMETER OF THE GAS TURBINE-POWER TRAIN PACKAGE.

   THIS DRAWING ALSO PROVIDES DIMENSIONAL DATA FOR ELECTRICAL ITEMS LOCATIONS, SUCH AS JUNCTION BOXES, CABLE ENTRY POINTS, ACCESS WAYS, GROUND CONNECTIONS AND BUS DUCTS FOR EQUIPMENT SUPPLIED BY GE VERNOVA. EQUIPMENT SUPPLIED BUT NOT LOCATED BY GE VERNOVA IS NOT INCLUDED. ALL OTHER COMPONENTS SHOWN ARE INDICATIVE AND COULD VARY IN THE FINAL DESIGN.

   THIS DRAWING ALSO PROVIDES PIPING CONNECTION INTERFACE INFORMATION FOR ALL GAS TURBINE LOCATED PIPING CONNECTIONS. FOR PURCHASER-MOUNTED LOOSE-SHIPPED DEVICE CONNECTIONS, REFER TO MLI 0302 (OUTLINE, PURCHASER MOUNTED DEVICES). FOR CONNECTIONS ON GE VERNOVA PROVIDED MODULES THAT ARE LOCATED BY PLANT DESIGNER AND/OR PLANT INSTALLER, REFER TO MLI EG26 (OUTLINE, FOUNDATION INTERFACE, OFF-BASE, MECHANICAL).

2. DIMENSIONS SHOWN IN [BRACKETS] ARE IN MILLIMETERS, ALL OTHER DIMENSIONS ARE IN INCHES.
   "X" DIMENSIONS ARE FROM TURBINE BASE ANCHOR SUPPORT CENTERLINE (TBAS).
   "Y" DIMENSIONS ARE FROM UNIT CENTERLINE.
   "Z" DIMENSIONS ARE FROM UNIT CENTERLINE.
   REFER TO SHEET 3 & 4 FOR ORIGIN AND ORIENTATION OF THIS REFERENCE POINT.
   X-Y-Z LOCATION DEFINITION IS ALSO PROVIDED ON MODULES IN DRAWING VIEWS TO COMMUNICATE RELATIVE DISTANCES TO ABOVE REFERENCE POINT.
   THE REFERENCE POINT IDENTIFIED ON THIS DRAWING MAY DIFFER FROM THE MODELING COORDINATE SYSTEMS ORIGIN AND ORIENTATION.

3. LOOKING DOWNSTREAM REFERS TO LOOKING IN THE DIRECTION OF GAS TURBINE AIR FLOW.

4. WHEN POSITIONING THE GAS TURBINE WITH THE STATION AND SURROUNDINGS, CONSIDERATION SHOULD BE GIVEN TO THE PREVAILING WINDS SO THAT THE POSSIBILITY OF EXHAUST GAS INTO THE INLET WILL BE MINIMIZED.

5. PLANT DESIGNER AND/OR PLANT INSTALLER LOCATED EQUIPMENT SHOULD NOT BE WITHIN A MINIMUM OF 48.00 [1219.2] FROM GE VERNOVA LOCATED EQUIPMENT TO ENSURE ADEQUATE VENTILATION AND EQUIPMENT ACCESSIBILITY, UNLESS OTHERWISE INDICATED.

6. ONLY DIMENSIONED FEATURES SHOWN ON THIS DRAWING OR 3D MODELS ARE CONSIDERED VALIDATED. FEATURES SHOWN ON THIS DRAWING WITHOUT DIMENSIONS ARE REPRESENTATIVE AND SHOWN FOR INFORMATION ONLY. THESE ARE SUBJECT TO CHANGE WITH FINAL EQUIPMENT DESIGN AND ARE NOT TO BE USED FOR FINAL PLANT DESIGN.

MECHANICAL NOTES:

M1. ACCESSORY MODULE WALKWAY MOUNTING SUPPORTS ARE CAPABLE OF SUSTAINING A 2400 LBS [1088 KG] VERTICAL LOAD AND A 4800 FT-LBS [6507 N-m] MOMENT. THE SUPPORTS PADS FOR TURBINE ENCLOSURE ARE SIZED FOR 4 FT [1219,0] CANTILEVERED WALKWAY LOADED TO 100 PSF [488.20 KG/M2] ALONG THE ENTIRE LENGTH.

M2. SEE MLI-A111 (GENERATOR TERMINAL ENCLOSURE) OUTLINE FOR BUSDUCT INTERFACE DETAILS AND FOR THE LOCATION AND REQUIRED CLEARANCE FOR JUNCTION BOXES.

M3. SEE MLI-F015(OUTLINE ELECTRICAL EQUIPMENT) AND MLI-EG26 REFERENCE DRAWINGS FOR OFFBASE EQUIPMENT SUPPLIED BY GE VERNOVA AND LOCATED BY PLANT DESIGNER AND/OR PLANT INSTALLER.

M4. EXPANSION JOINT CYCLIC MOVEMENTS SEE NOTE 9A BELOW
   1.00 [25,4] COMPRESSION
   .50 [12,7] EXTENSION
   NOTE M4A:
   IN ADDITION TO THE ABOVE CYCLIC MOVEMENTS THE EXPANSION JOINT IS CAPABLE OF ACCOMMODATING THE FOLLOWING ADDITIONAL INSTALLATION MISALIGNMENTS BETWEEN THE AFT DIFFUSER AND BOILER DUCT FLANGES.
   AXIAL MISALIGNMENT: 1.00 [25,4] IN THE JOINT COMPRESSION DIRECTION
   .50 [12,7] IN THE JOINT EXTENSION DIRECTION
   LATERAL MISALIGNMENT: .50 [12,7] BETWEEN THE DIFFUSER AFT FLANGE AND THE BOILER DUCT FLANGE IN THE LATERAL DIRECTION (PERPENDICULAR TO FLOW DIRECTION)

M5. VENT PIPE CONFIGURATION SHOWN IS TYPICAL FOR AN UP & FORWARD INLET GAS TURBINE ONLY. PLANT DESIGNER AND/OR PLANT INSTALLER MUST ACCOUNT FOR A GAS TURBINE INLET AND POTENTIAL IGNITION SOURCES IN THE PLANT DESIGN WHEN TERMINATING THE VENTS. PLANT DESIGNER AND/OR PLANT INSTALLER MUST EXTEND VENT LINES CONTINUOUSLY UPWARD TO ABOVE ROOF FOR INDOOR UNIT. MAXIMUM ADDITIONAL LENGTH IS 75 FEET [22.86 METERS] WITH CONTINUATION OF DIAMETER PROVIDED.

M6. PERSONNEL AND ENVIRONMENTAL HAZARDS COULD BE CREATED IF OIL SPILLED FROM THE LUBE OIL RESERVOIR, THE PIPING OR THE LUBE OIL HANDLING EQUIPMENT IN THE A160 ACCESSORY MODULE. THE OPERATOR SHOULD IMPLEMENT SAFE WORKING AND HOUSEKEEPING PRACTICES, CONSISTENT WITH LOCAL AND NATIONAL WORKPLACE SAFETY REGULATIONS, IN ORDER TO MITIGATE ANY PERSONNEL SAFETY HAZARDS THAT ARISE. ALSO, IN ORDER TO MITIGATE ANY POTENTIAL ENVIRONMENTAL HAZARDS, GE VERNOVA RECOMMENDS THE PROVISION OF A SECONDARY CONTAINMENT SYSTEM WITHIN THE POWER PLANT AND AROUND THE ACCESSORY MODULE LUBE OIL RESERVOIR. A CONTAINMENT DIKE OR WALL OR OTHER MEANS CAN ACCOMPLISH THIS. THIS SYSTEM SHOULD BE SUCH THAT, IN THE EVENT OF A SPILL FROM THE LUBE OIL TANK, THE EFFLUENT IS CONTAINED IN ACCORDANCE WITH ANY APPLICABLE LOCAL AND NATIONAL ENVIRONMENTAL REGULATIONS. THE CONTAINMENT VOLUME SHOULD BE SIZED TO ACCOMMODATE 6800 US GALLONS (25740 LITERS), WHICH IS THE MAXIMUM CAPACITY OF THE LUBE OIL RESERVOIR, PLUS ADDITIONAL FREEBOARD SUFFICIENT TO HOLD RAINFALL FROM A 24-HOUR/100-YEAR STORM EVENT IF THIS IS KNOWN, OR A MINIMUM OF 6.00 [152.4] OF RAINFALL, WHICHEVER IS GREATER. THE DESIGN AND PROVISION OF THIS SECONDARY CONTAINMENT SYSTEM IS THE RESPONSIBILITY OF THE PLANT DESIGNER AND/OR PLANT INSTALLER.

M7. HANDRAIL SUPPORT PADS (6.00 [152,4] X 6.00 [152,4] X .50 [12,7]) ARE LOCATED AS SHOWN. TO BE USED TO SUPPORT PLANT DESIGNER AND/OR PLANT INSTALLER SUPPLIED RAILINGS, AS REQUIRED. THESE SUPPORT PADS ARE DESIGNED TO WITHSTAND LOADS AS DEFINED IN OSHA 1910.23(a). ALL PADS ARE PITCHED WITH THE ENCLOSURE ROOF.

M8. LADDER SUPPORT PADS (6.00 [152,4] X 24.00 [609,6] X .50 [12,7]) ARE LOCATED, AS SHOWN. TO BE USED TO SUPPORT A PLANT DESIGNER AND/OR PLANT INSTALLER SUPPLIED LADDER, AS REQUIRED. THESE SUPPORT PADS ARE DESIGNED TO WITHSTAND LOADS AS DEFINED IN OSHA 1910.27(a).

M9. THE HAZARDOUS AREA CLASSIFICATION SHALL BE AS FOLLOWS:
   A) COMBUSTIBLE MATERIAL - GROUP IIA, AUTO IGNITION GREATER THAN 644 F [340 C]
   B) NATURAL GAS COMPARTMENT - IEC- GROUP IIA, ZONE 2
   C) TURBINE COMPARTMENT - IEC- GROUP IIA, ZONE 2
   D) REFER MLI 0331 FOR HAZARDOUS AREA MAP (IF PROVIDED)

M10. EQUIPMENT BASELINE REPRESENTS THE TOP OF GROUT. GE VERNOVA RECOMMENDS A GROUT THICKNESS OF 1.50 [38.1] BETWEEN TOP OF CONCRETE AND EQUIPMENT BASELINE. UNIT CENTERLINE IS 156.00 [3962.4] ABOVE EQUIPMENT BASELINE. MACHINE BASELINE IS 85.00 [2159,0] BELOW THE UNIT CENTERLINE.

M11. EXHAUST DUCTWORK BY PLANT DESIGNER AND/OR PLANT INSTALLER SHALL BE DESIGNED TO SUPPORT THE DOWNSTREAM PORTION OF THE EXPANSION JOINT. A DESIGN WEIGHT OF 7500 LBS [3402 KGS] CAN BE ASSUMED.

M12. ADEQUATE DOOR SWING CLEARANCE MUST BE MAINTAINED FOR PERSONNEL AND MAINTENANCE ACCESS.

M13. LADDER LOCATION IS FOR REFERENCE ONLY, LADDER TO BE FIELD INSTALLED TO BEST FIT ADJACENT EQUIPMENT.

M14. S18 X 70 TROLLEY BEAM FOR REMOVAL OF THE GENERATOR ENDSHIELDS. 10 TON [9071,8 KG] TROLLEY BEAM CAPACITY. LIFTING DEVICE MUST BE SUPPLIED BY PLANT DESIGNER AND/OR PLANT INSTALLER.

M15. ALL CABLES/CONDUITS ON THE ROOF SHOULD BE EITHER AVOIDED OR EASILY REMOVABLE.

M16. PEECC SHALL BE INSTALLED NO MORE THAN 250 FEET [76.2 METERS] FROM UNIT CENTER LINE (AT TURBINE BASE ANCHOR SUPPORT CENTER LINE) DUE TO BLADE HEALTH MONITORING SYSTEM REQUIREMENTS. FOR CLARITY PEECC IS NOT SHOWN.

B1 M17. REMOVED.

M18. SEE A1B0 GENERATOR MECHANCIAL OUTLINE DRAWING FOR GENERATOR INTERFACE & ENVELOPE DETAILS AND CUSTOMER CONNECTIONS.

ELECTRICAL NOTES :

E1. ALL CONNECTIONS TO GE VERNOVA FURNISHED DEVICES MUST CONFORM TO ALL APPLICABLE LOCAL AND NATIONAL ELECTRICAL CODES.

E2. TABULATED DEVICE OPENINGS ARE ACTUAL OPENINGS. REDUCERS AND ENLARGERS MAY BE USED BY PURCHASER AS REQUIRED.

E3. FIELD DRILL FOR CONDUIT ENTRANCE AS REQUIRED.

E4. ALL BLOWOUT PANELS REQUIRE A 12.00 [304.8] CLEARANCE IN FRONT OF PANELS.

E5. ALL JUNCTION BOXES AND CONDUIT COUPLINGS SHALL HAVE 6.00 [152,4] TOLERANCE APPLIED TO BOTH HORIZONTAL AND VERTICAL DIMENSIONS.

E6. JUNCTION BOX RACK MAY BE POSITIONED AND ALIGNED ANYWHERE WITHIN A 15 FT [4572,0] BY 15 FT [4572,0] AREA, PROVIDING THE 36.00 [914,4] X 36.00 [914,4] AREA REQUIRED FOR SAFE ACCESS TO JUNCTION BOXES IS MAINTAINED. CONFIRM LOCATION OF FEEDS AND LOCATION OF PEECC BEFORE LOCATING JUNCTION BOX RACK TO AVOID INTERFERENCE. LOCATION IS BY PLANT DESIGNER AND/OR PLANT INSTALLER.

E7. REFER MLI-0463 FOR CABLE SUMMARY

PIPING NOTES:

P1. EQUIPMENT AND PIPING SHOWN MAY DEPICT OTHER PIPING INTERFACES THAT ARE NOT PURCHASER CONNECTIONS, BUT INTERNAL GE VERNOVA-GE VERNOVA PIPING INTERFACES CONNECTED TO GE VERNOVA-PROVIDED PIPING. REFER TO MLI 0043 FOR GT PIPING PACKAGE DETAILS.

P2. FOR PIPING ROUTING PURPOSES, PLANT DESIGNER AND/OR PLANT INSTALLER SHOULD TAKE INTO ACCOUNT POSSIBLE INTERFERENCES WITH GE VERNOVA-SUPPLIED, FIELD INSTALLED PIPING.

P3. PURCHASER CONNECTS AT THESE POINTS AND IS RESPONSIBLE FOR THE DESIGN, ANALYSIS, CERTIFICATION, AND CLEANING OF ALL ASSOCIATED PIPING. REFER TO SCHEMATICS FOR SYSTEM REQUIREMENTS. SPRING HANGERS, COMPANION FLANGES, BOLTS, STUDS, NUTS AND GASKETS FOR PURCHASER CONNECTIONS ARE NOT SUPPLIED BY GE VERNOVA UNLESS SPECIFICALLY REQUIRED IN THE PURCHASER CONTRACT.

P4. THERMAL MOVEMENTS OF PURCHASER CONNECTIONS TERMINATING AT A WELDED PENETRATION THROUGH THE TURBINE BASE MUST ALLOW FOR THE EXPANSION OF THE BASE I-BEAMS. THERMAL MOVEMENTS OF THESE CONNECTIONS WILL BE PROPORTIONATE TO THE MOVEMENT OF THE BASE AND CAN BE CALCULATED BY APPROPRIATELY SCALING FROM THE TURBINE BASE ANCHOR SUPPORTS. THE MAXIMUM TURBINE BASE MOVEMENTS (FROM THE ANCHOR SUPPORTS) ARE .50 INCHES [12.7] AFT AND .17 INCHES [4.3] LATERALLY.

P5. UNLESS OTHERWISE NOTED UNDER INDIVIDUAL CONNECTIONS, THE TOTAL RESULTANT FORCE AND TOTAL MOMENT EXERTED ON THE EQUIPMENT AT ANY CONNECTION MUST NOT EXCEED:
   F = 100 x D
   M = 200 x D
   WHERE:
   F = RESULTANT FORCE IN POUNDS
   M = RESULTANT MOMENT IN FT-LBS
   D = NOMINAL PIPE SIZE (NPS) OF THE CONNECTION IN INCHES UP TO 8 INCHES IN DIAMETER. FOR SIZES GREATER THAN 8 INCHES IN DIAMETER USE A VALUE OF "D" EQUAL TO (16 + NPS)/3 INCHES. SEE MLI 4063 CONNECTION LIST FOR PIPE SIZE.
   EXAMPLE:
   FOR PIPE SIZE EQUAL TO 6", THE MAXIMUM APPLIED RESULTANT FORCE MUST NOT EXCEED 600 LBS AND THE MAXIMUM APPLIED RESULTANT MOMENT MUST NOT EXCEED 1200 FT-LBS. CONVERSIONS TO METRIC VALUES MUST ONLY BE COMPLETED AFTER THE RESULTS FROM ABOVE FORMULAS HAVE BEEN DETERMINED IN ENGLISH UNITS.

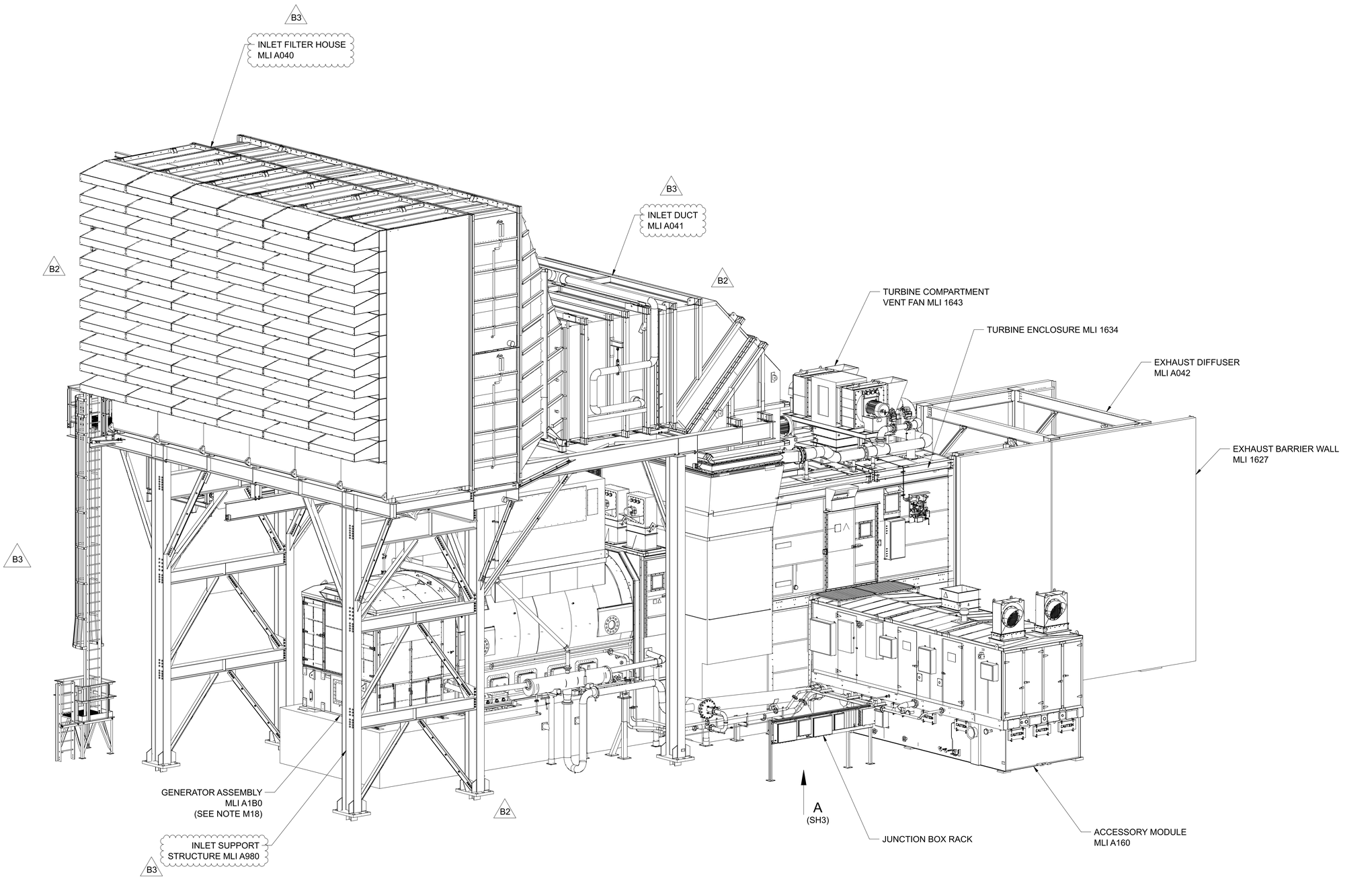
P6. THIS DRAWING PROVIDES PURCHASER CONNECTION COORDINATE DIMENSIONS FOR GE VERNOVA-LOCATED PIPING CONNECTIONS. CONNECTION SIZE, MATERIAL, AND TYPE INFORMATION IS PROVIDED ON MLI 4063 CONNECTION LIST FOR ALL PURCHASER PIPING CONNECTIONS.

NLR

THIRD ANGLE PROJECTION

GE VERNOVA

Similar To: 307T4438	Created By: SEYAKUMARAN M		MLI 0333
First Made For: 1615904	Approved By: KELLY MEENAGHAN		IEC61355 NO. MTL
	Document Type: ARRANGEMENT		Sheet Size E
	Document Title: OUTLINE, MECHANICAL GAS TURBINE AND GENERATOR		
Creation Date (YYYY-MM-DD) 2023-07-17	Drawing Number: 308T7304	Revision B	Sheet 1 OF 11



OUTDOOR 7F.04 MULTISHAFT GAS TURBINE/H35 GENERATOR

NLR

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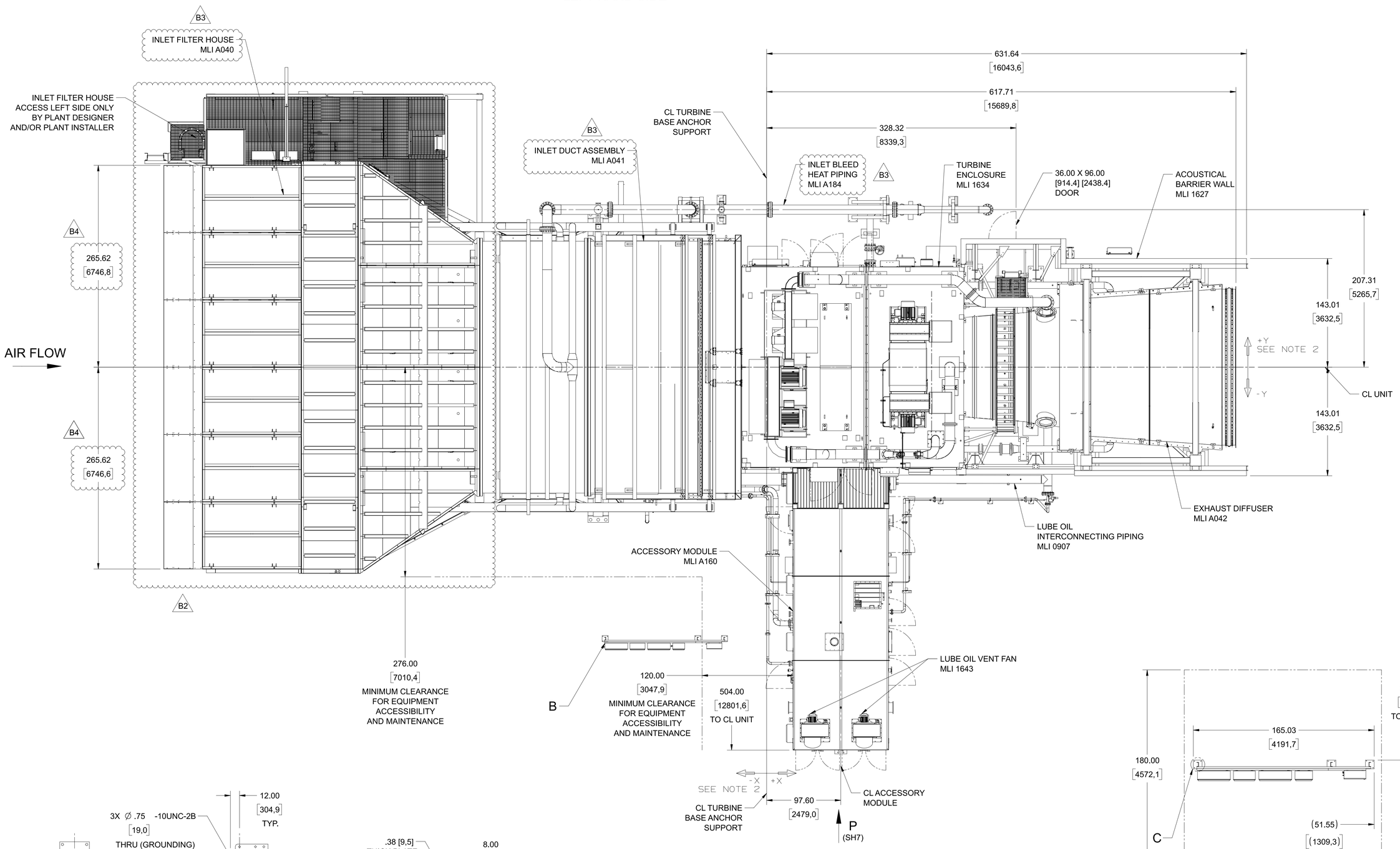

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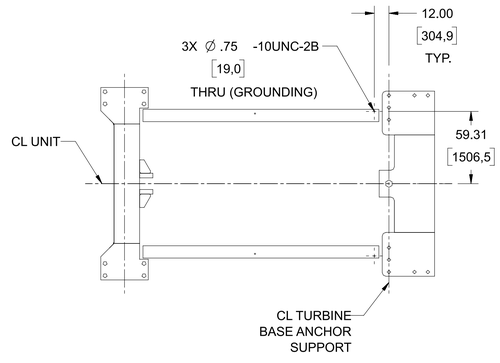
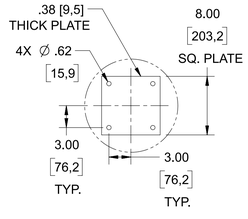


DETAIL A (SH2, M15) TURBINE BASE



DETAIL C (N18)
FOUNDATION PLATE
TYP 2 PLACES

DETAIL B (L10) JUNCTION BOX RACK

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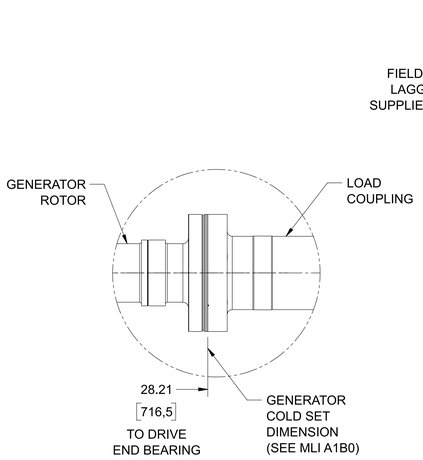
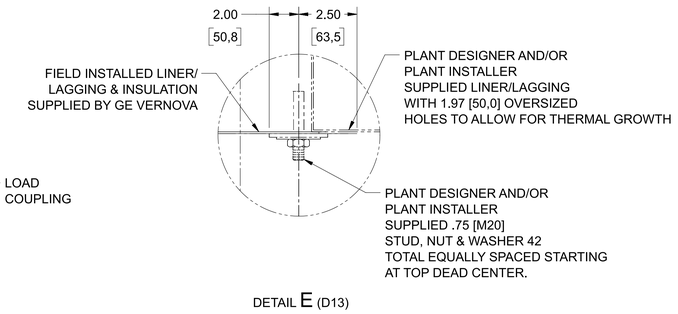
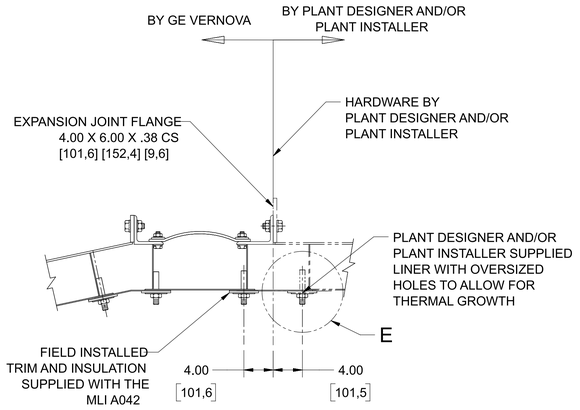


COLD SET POSITION
GENERATOR ROTOR

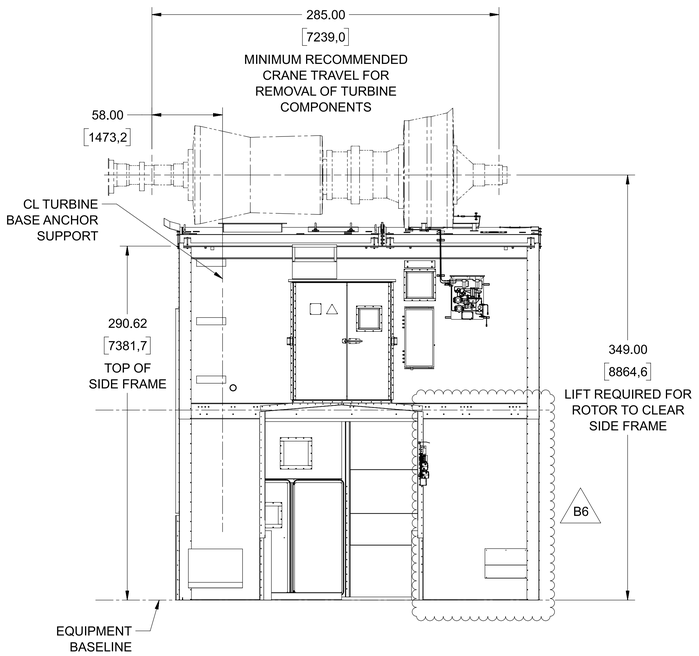


DETAIL E (D13)

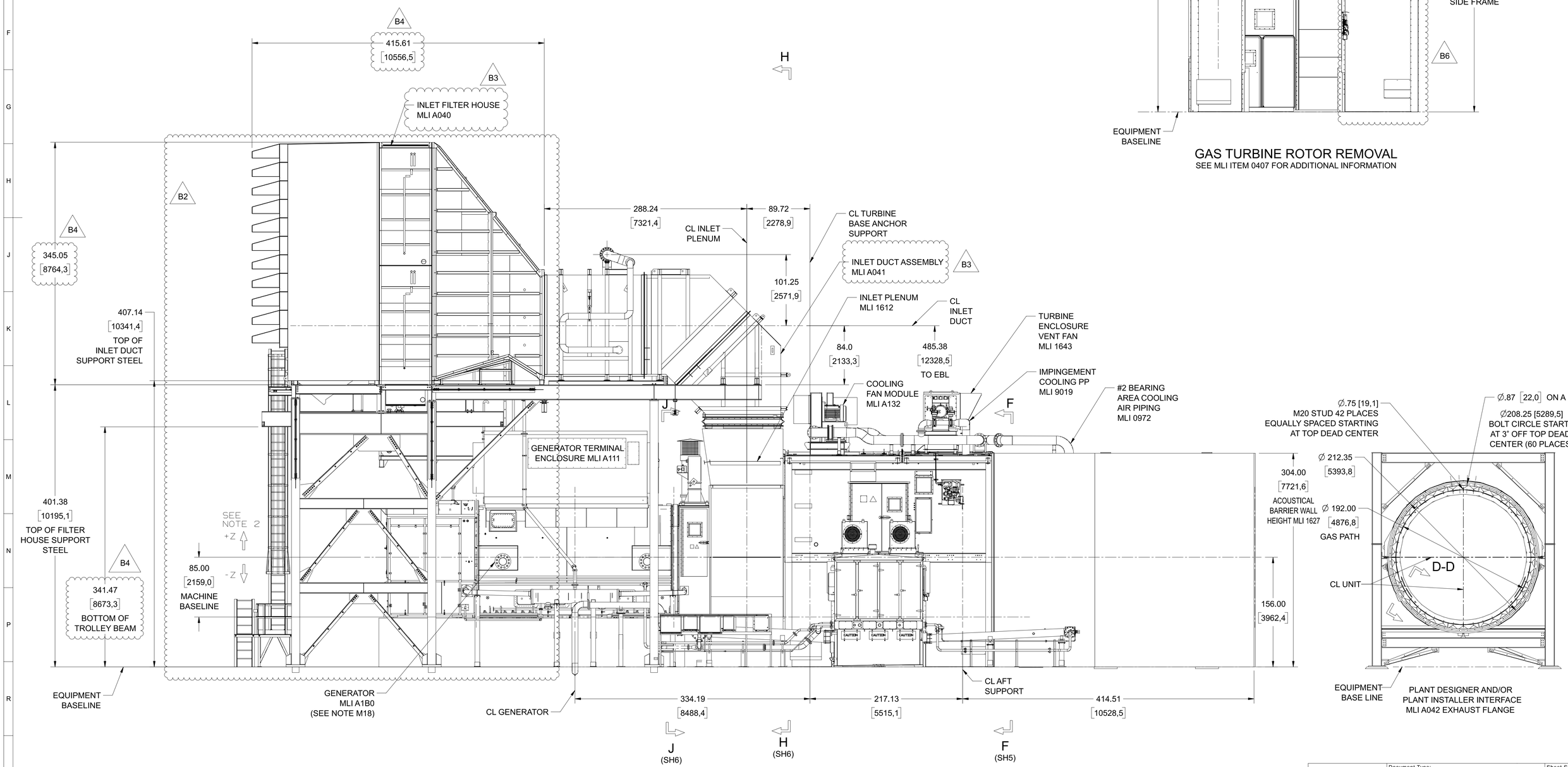


D-D (N20)
COLD TO COLD EXPANSION JOINT
(SEE NOTES M4 AND M11)

H



GAS TURBINE ROTOR REMOVAL
SEE MLI ITEM 0407 FOR ADDITIONAL INFORMATION



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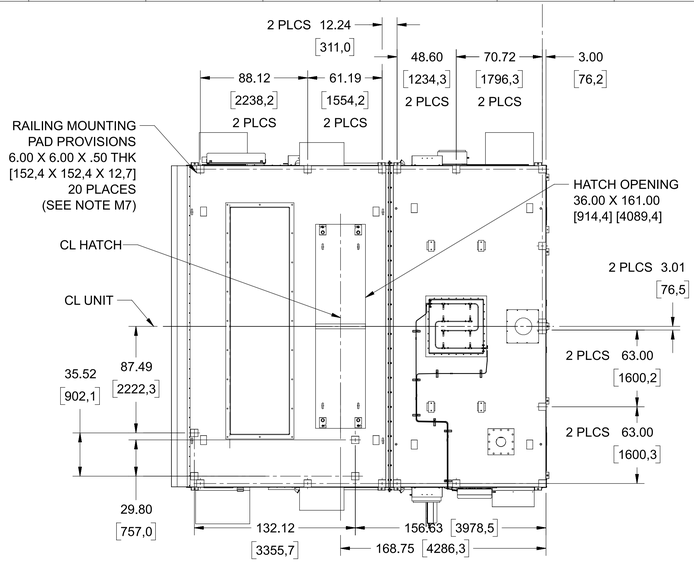
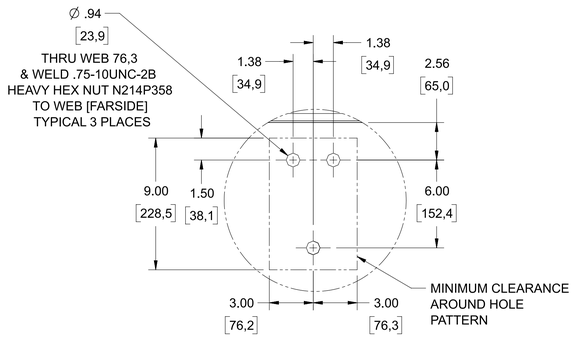
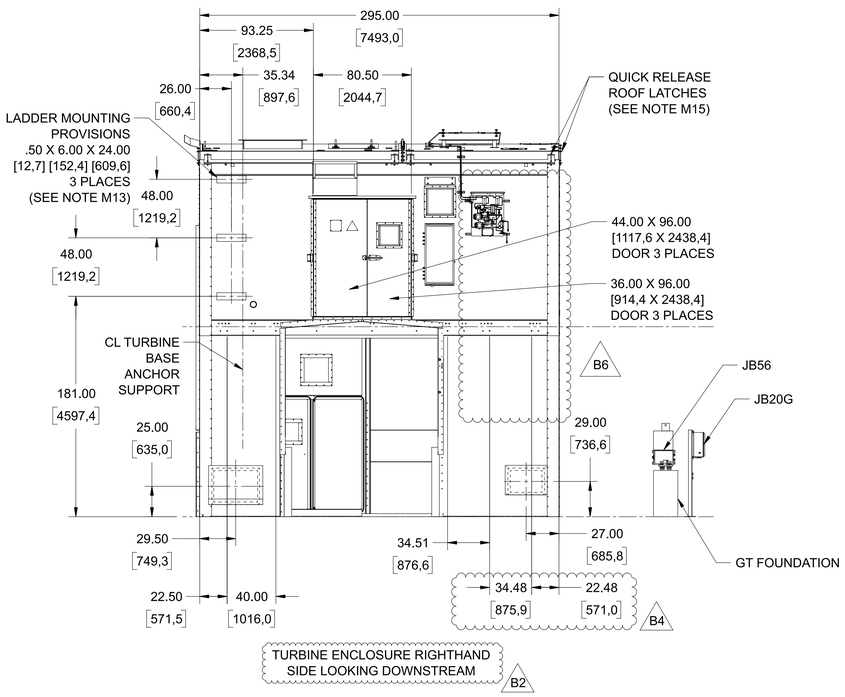


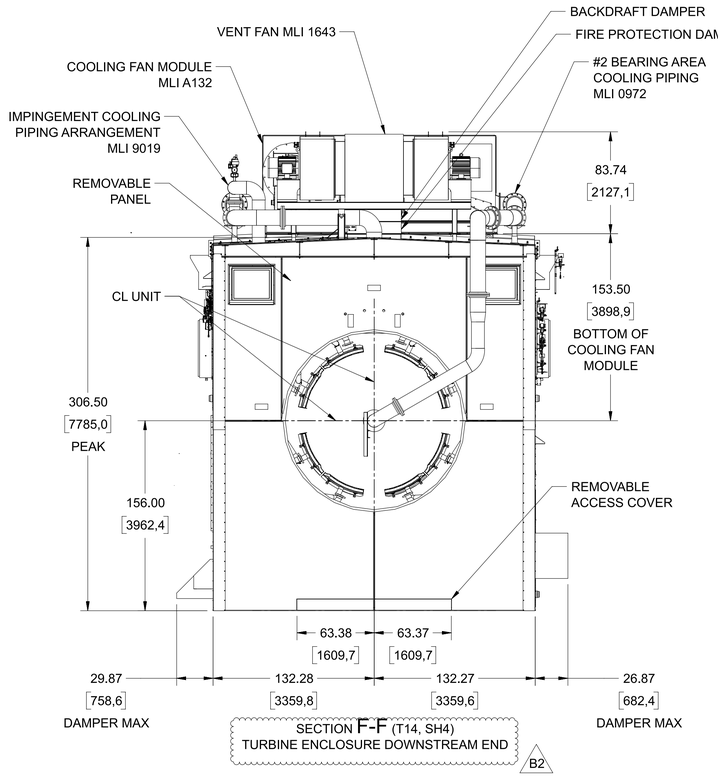
TOP VIEW OF TURBINE ENCLOSURE
SHOWING RAILING MOUNTING PAD
LOCATIONS



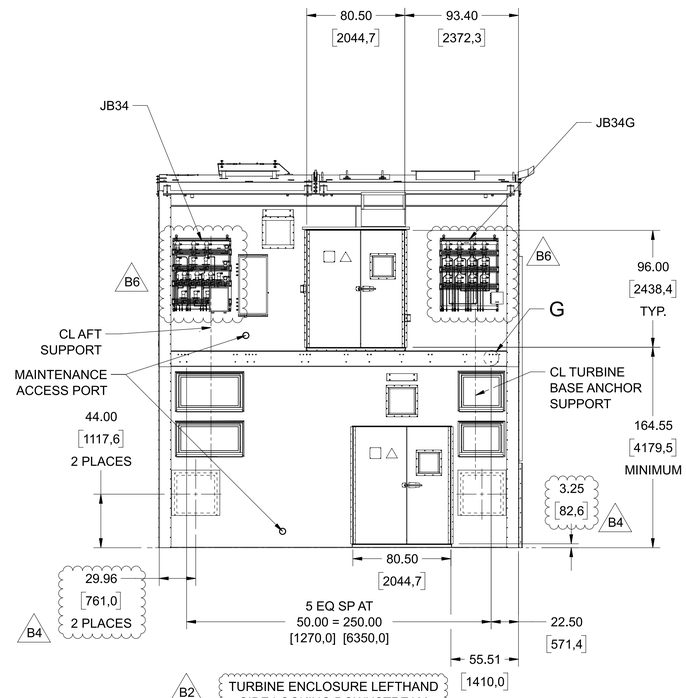
DETAIL G (H20)
TURBINE ENCLOSURE HOLE PATTERN
FOR MOUNTING WALKWAY SUPPORTS
11 PLACES (SEE NOTE M1)
EXTERNAL WALKWAYS BY PLANT DESIGNER AND/OR
PLANT INSTALLER



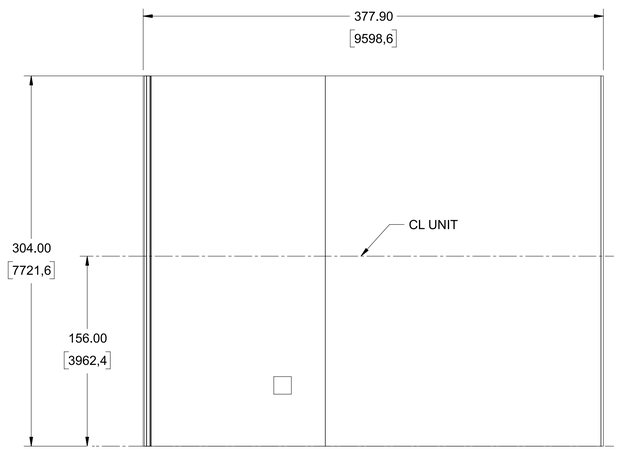
TURBINE ENCLOSURE RIGHTHAND
SIDE LOOKING DOWNSTREAM
B2



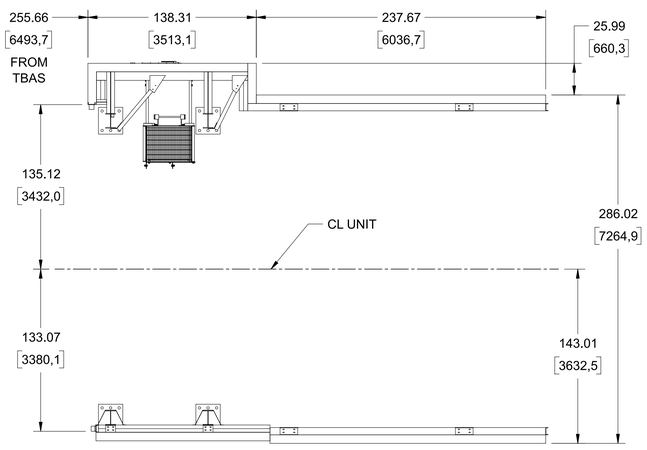
SECTION F-F (T14, SH4)
TURBINE ENCLOSURE DOWNSTREAM END
B2



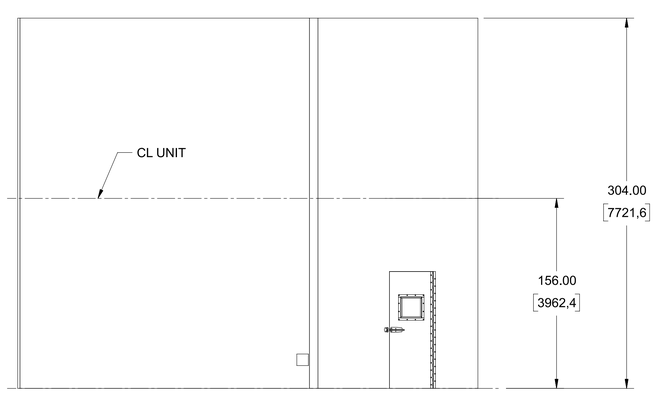
B2
TURBINE ENCLOSURE LEFTHAND
SIDE LOOKING DOWNSTREAM



VIEW LOOKING AT RIGHT SIDE
OF EXHAUST BARRIER WALL
B5



B5
TOP VIEW
EXHAUST BARRIER WALL



B5
VIEW LOOKING AT LEFT SIDE
OF EXHAUST BARRIER WALL

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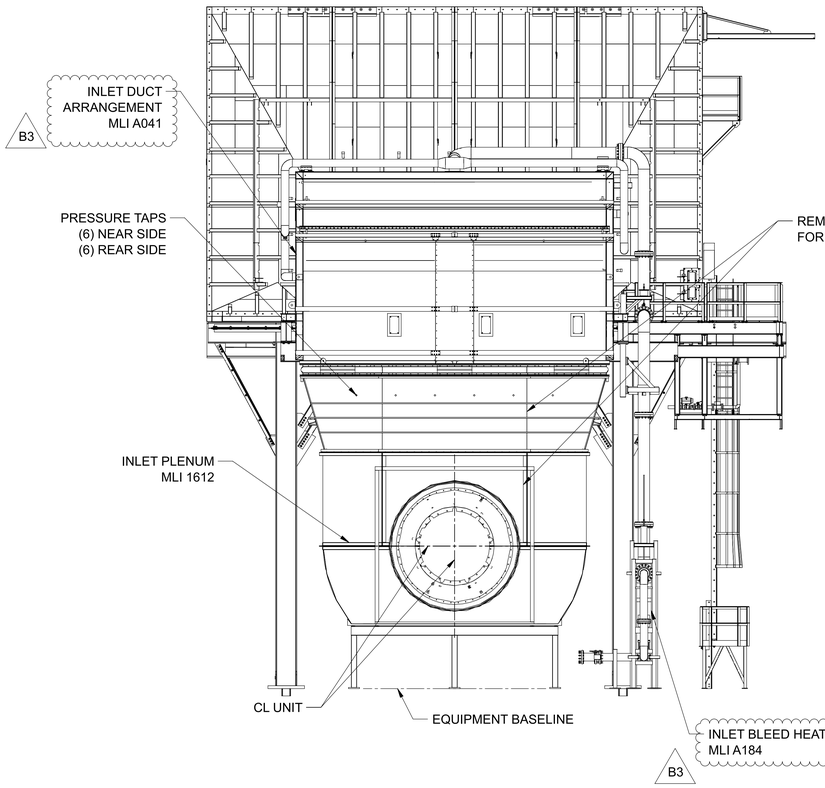
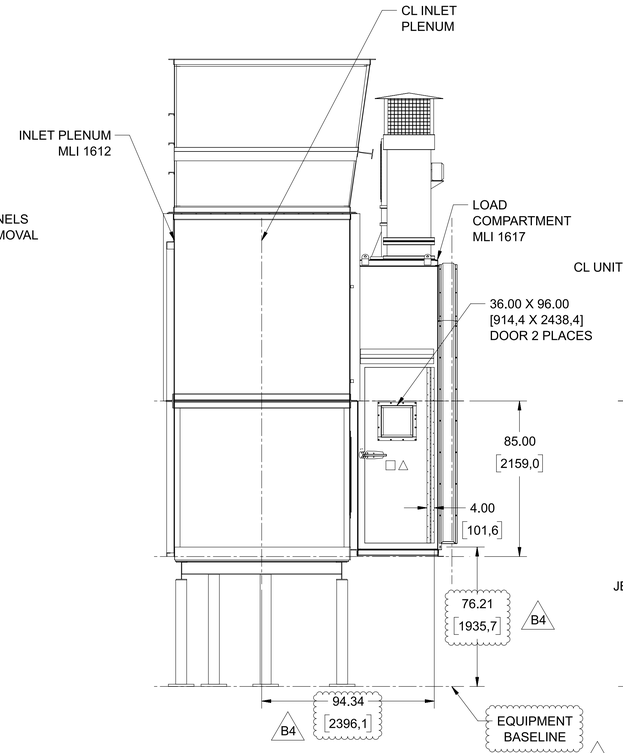
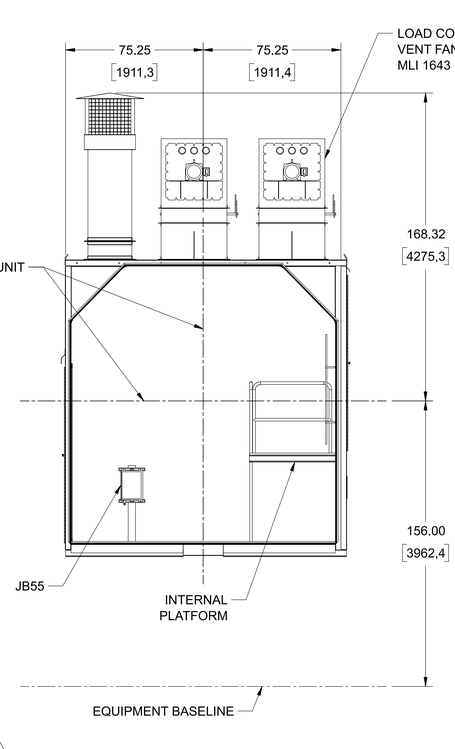


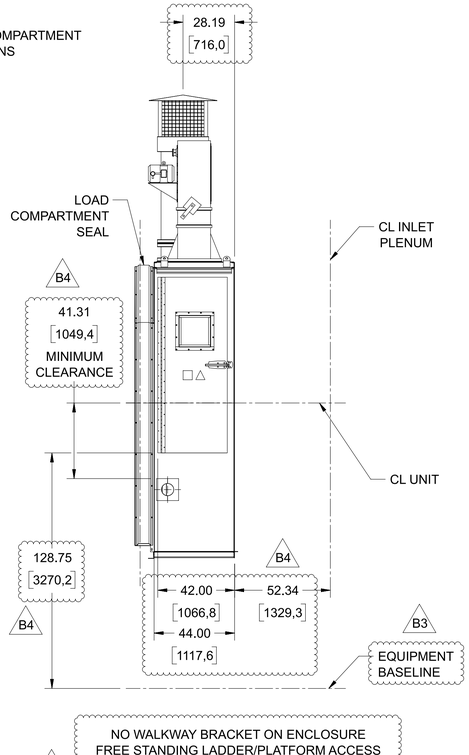
SECTION H-H (T11, SH4)



B2 NO WALKWAY BRACKET ON ENCLOSURE FREE STANDING LADDER/PLATFORM ACCESS BY PLANT DESIGNER AND OR PLANT INSTALLER



B2 SECTION J-J (T10, SH4) LOAD COMPARTMENT MLI 1617



B2 NO WALKWAY BRACKET ON ENCLOSURE FREE STANDING LADDER/PLATFORM ACCESS BY PLANT DESIGNER AND OR PLANT INSTALLER

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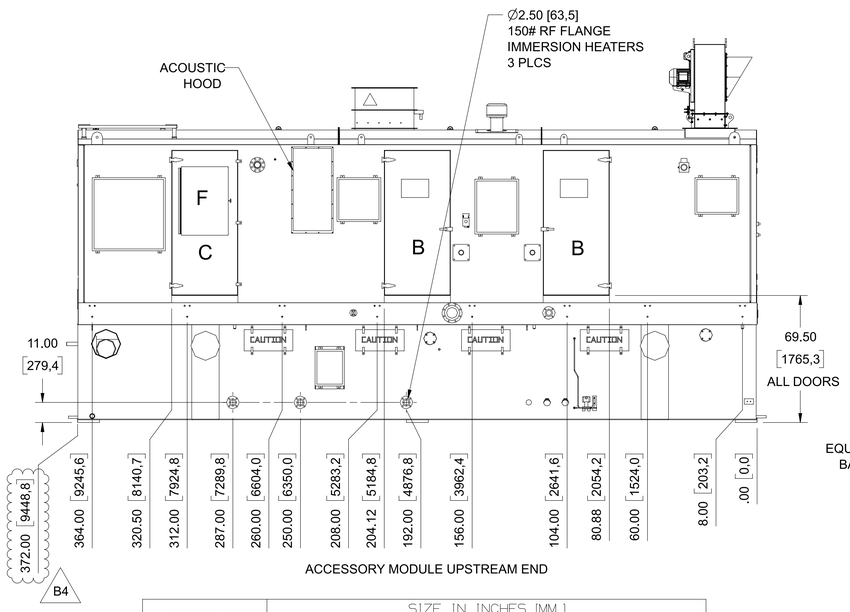
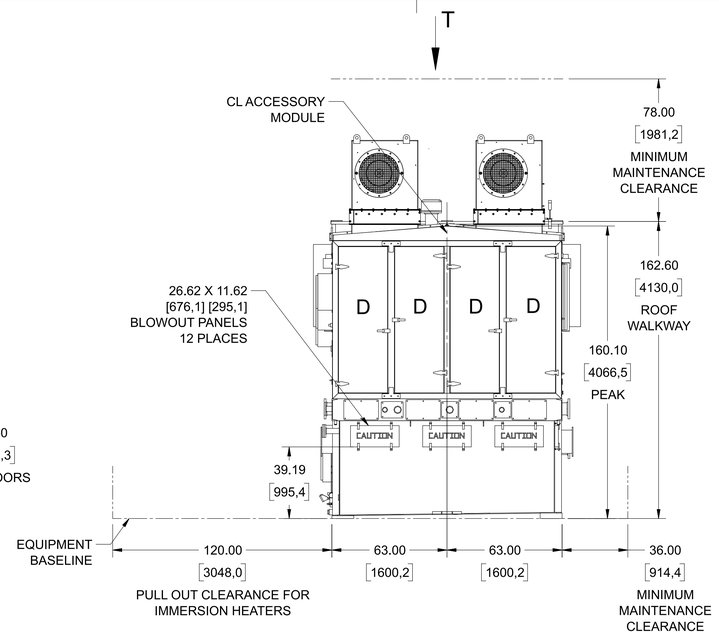
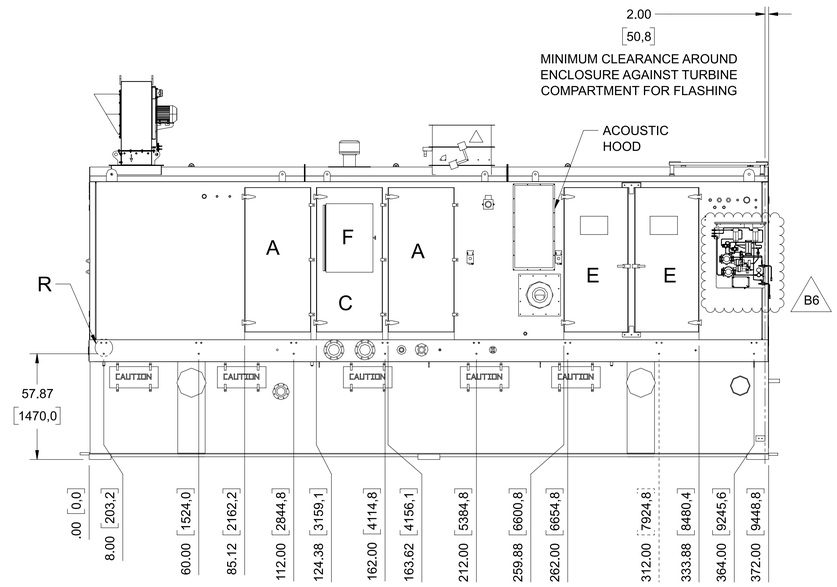
NLR



ACCESSORY MODULE UPSTREAM END



VIEW P (N14, SH3)
ACCESSORY MODULE OUTBOARD END



ACCESSORY MODULE DOWNSTREAM END

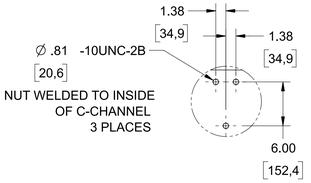
JUNCTION BOX	SIZE IN INCHES (MM)		
	WIDTH	HEIGHT	DEPTH
JB130	40.00 (1016,0)	40.00 (1016,0)	8.00 (203,2)
JB132A	24.00 (609,6)	20.00 (508,0)	8.00 (203,2)
JB132B	16.00 (406,4)	20.00 (508,0)	8.00 (203,2)
JB133	24.00 (609,6)	30.00 (914,4)	8.00 (203,2)
JB77L	24.00 (609,6)	24.00 (609,6)	8.00 (203,2)

B7

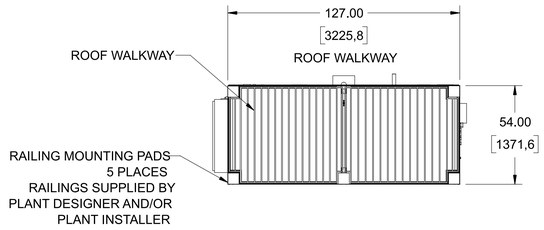
A160 LUBE OIL (LO) PIPING CONNECTIONS					
SCHEM	CONNECTION NAME	DESCRIPTION	X (SEE NOTE 2)	Y (SEE NOTE 2)	Z (SEE NOTE 2)
A160	LO123	LIFT OIL SUPPLY TO GT BRG #2	165.4 [4201.16]	-283 [-7188.2]	-95.99 [-2438.15]
A160	LO118	LUBE OIL FEED TO GT BRG #2	165.03 [4191.76]	-322 [-8178.8]	-95.99 [-2438.15]
A160	LO119	MAIN LUBE OIL RETURN	30.34 [770.64]	-147.56 [-3748.02]	-113 [-2870.2]
A160	LO120	LUBE OIL DRAIN FROM GT BRG #2	164.84 [4186.94]	-147.56 [-3748.02]	-115.62 [-2936.75]
A160	LO122	LIFT OIL SUPPLY TO GEN & GT BRG #1	30.34 [770.64]	-283 [-7188.2]	-96 [-2438.4]
A160	LO117	MAIN LUBE OIL SUPPLY	30.34 [770.64]	-337 [-8559.8]	-96 [-2438.4]
A160	LO36	SEAL OIL SUPPLY	30.34 [770.64]	-390 [-9906]	-96 [-2438.4]

ACCESSORY MODULE APPROXIMATE DOOR SIZE	
DOOR	SIZE
A MAINTENANCE ACCESS PANEL	36.00 X 80.00 [914,4] [2032,0]
B COMPARTMENT ACCESS DOOR	36.00 X 80.00 [914,4] [2032,0]
C GAUGE PANEL DOOR	36.00 X 80.00 [914,4] [2032,0]
D HINGED ACCESS PANEL	27.00 X 80.00 [685,8] [2032,0]
E ACCESS DOOR	36.0x80.0 (914.4x2032.0)
F ACOUSTIC WINDOW	25.75x37.5 (654.05x952,5

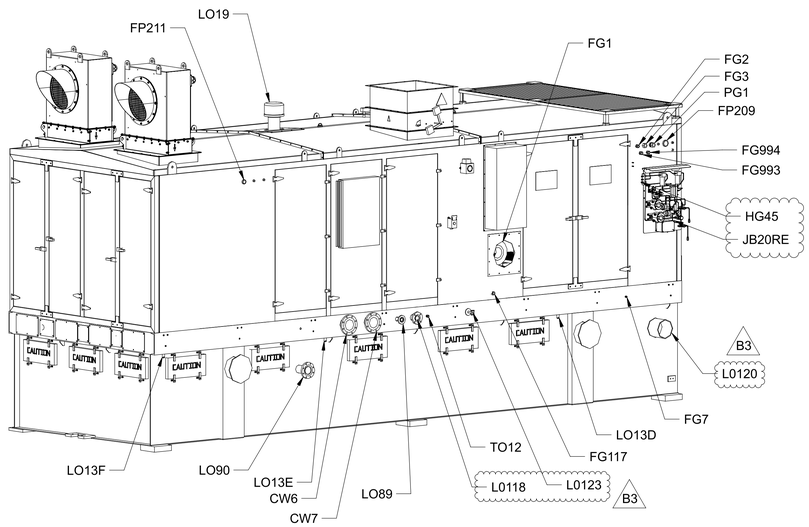
B4



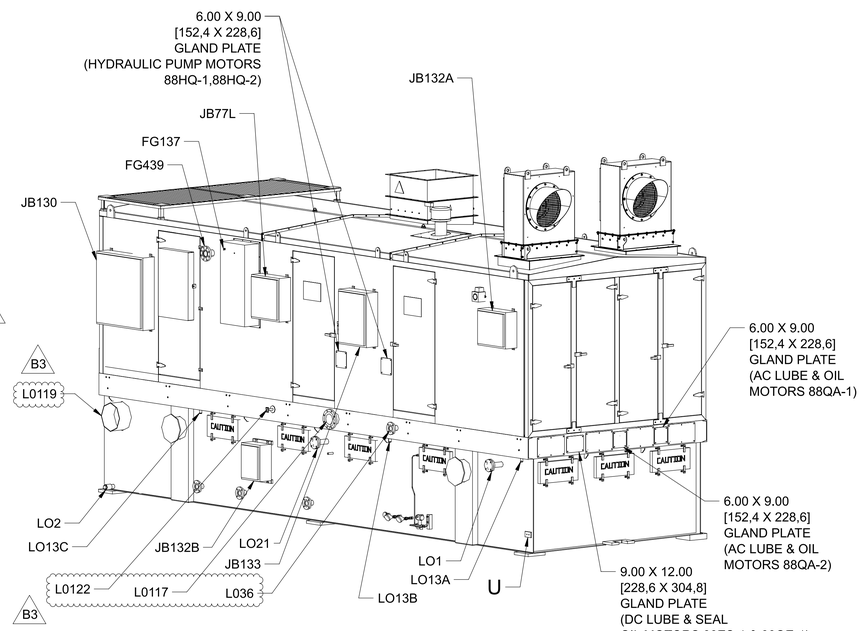
DETAIL R (C15)
WALKWAY MOUNTING PAD
ACCESSORY MODULE
16 PLACES, (SEE NOTE M1)



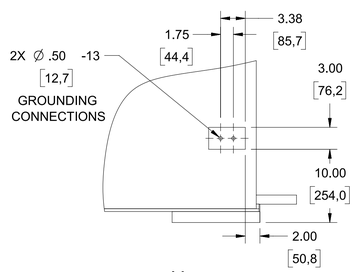
VIEW T (A12)
TOP VIEW OF ACCESSORY MODULE



ACCESSORY MODULE DOWNSTREAM END
ISOMETRIC VIEW



ACCESSORY MODULE UPSTREAM END
ISOMETRIC VIEW



VIEW U (F14)
GROUND PAD
TYP 2X
DIAGONALLY OPPOSITE CORNERS

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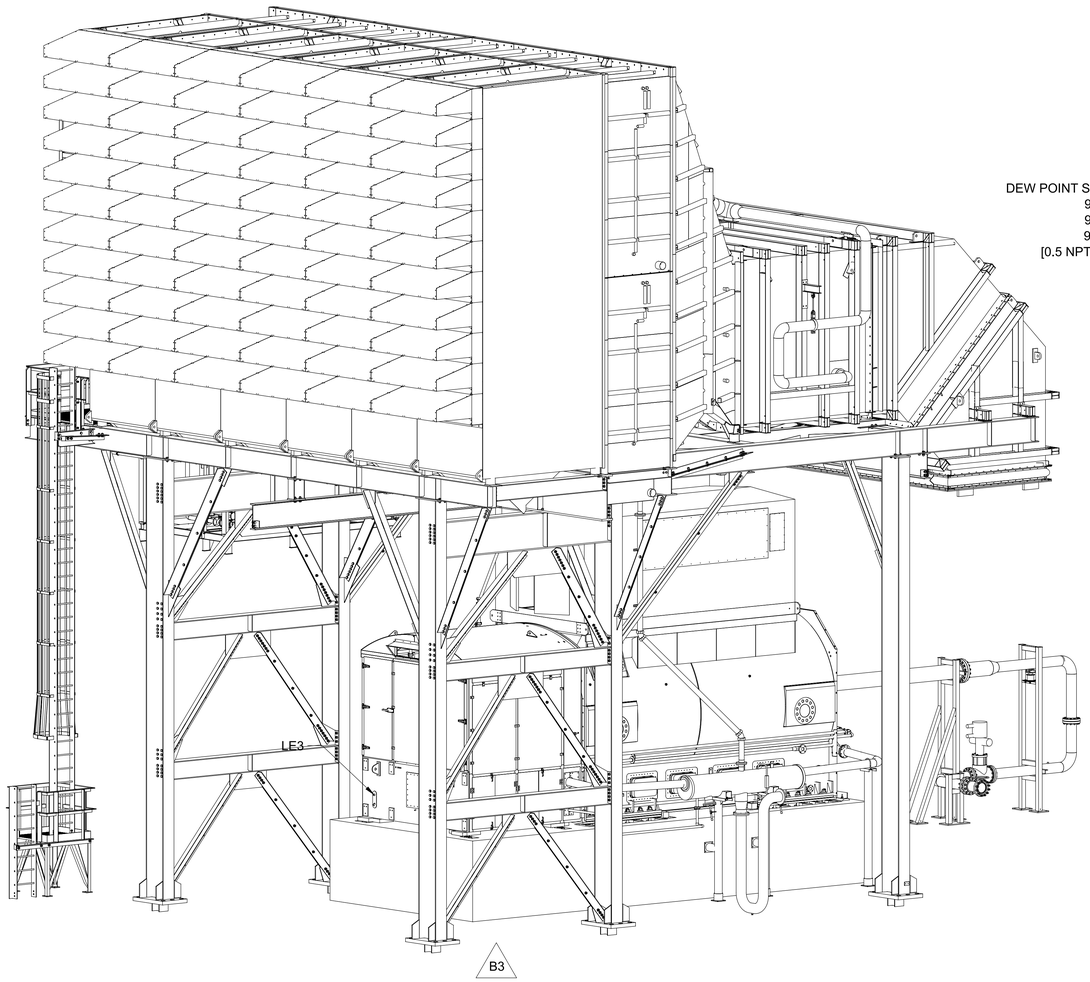
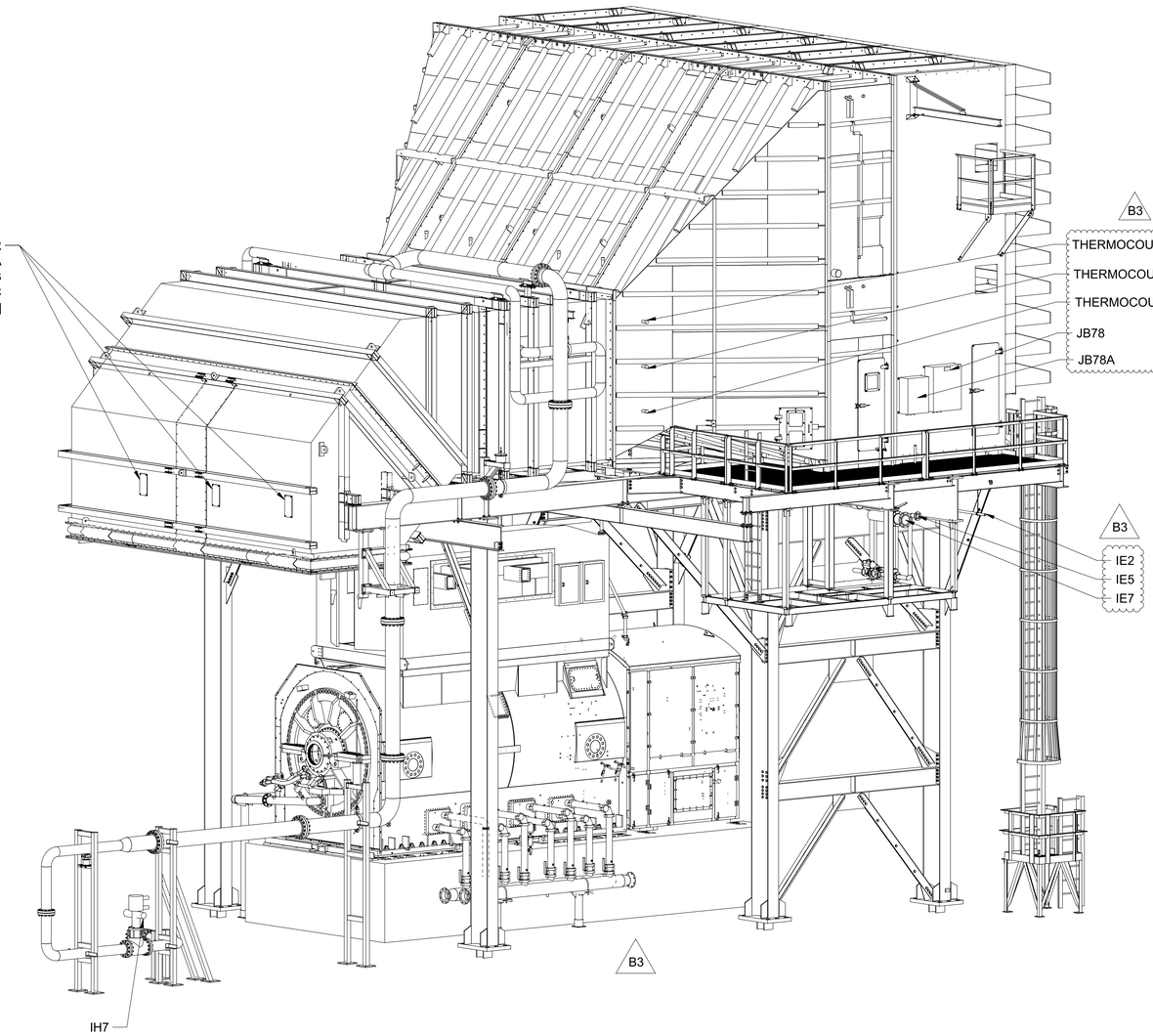


INLET SYSTEM, GENERATOR AND
AND INLET BLEED HEAT PIPING
ISOMETRIC VIEW
(SEE NOTE M18)

B8



INLET SYSTEM, GENERATOR AND
INLET BLEED HEAT PIPING
ISOMETRIC VIEW
(ROTATED 180°)
(SEE NOTE M18)

B8

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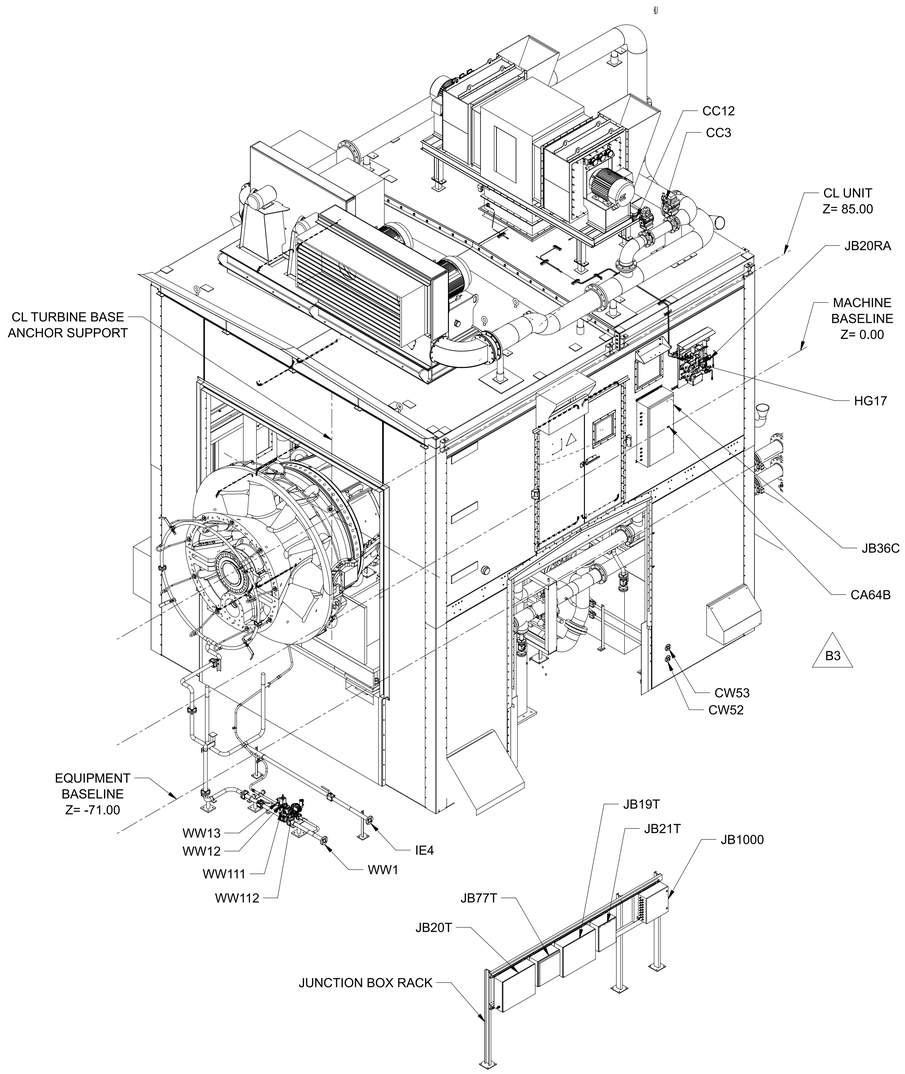
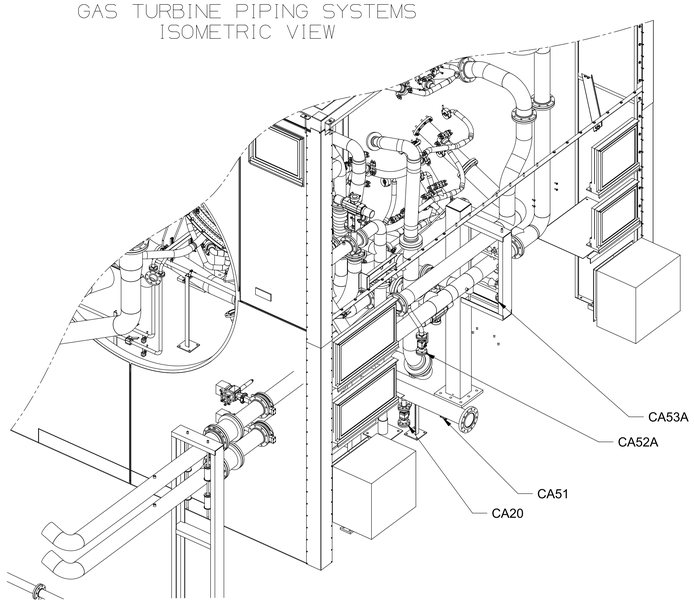
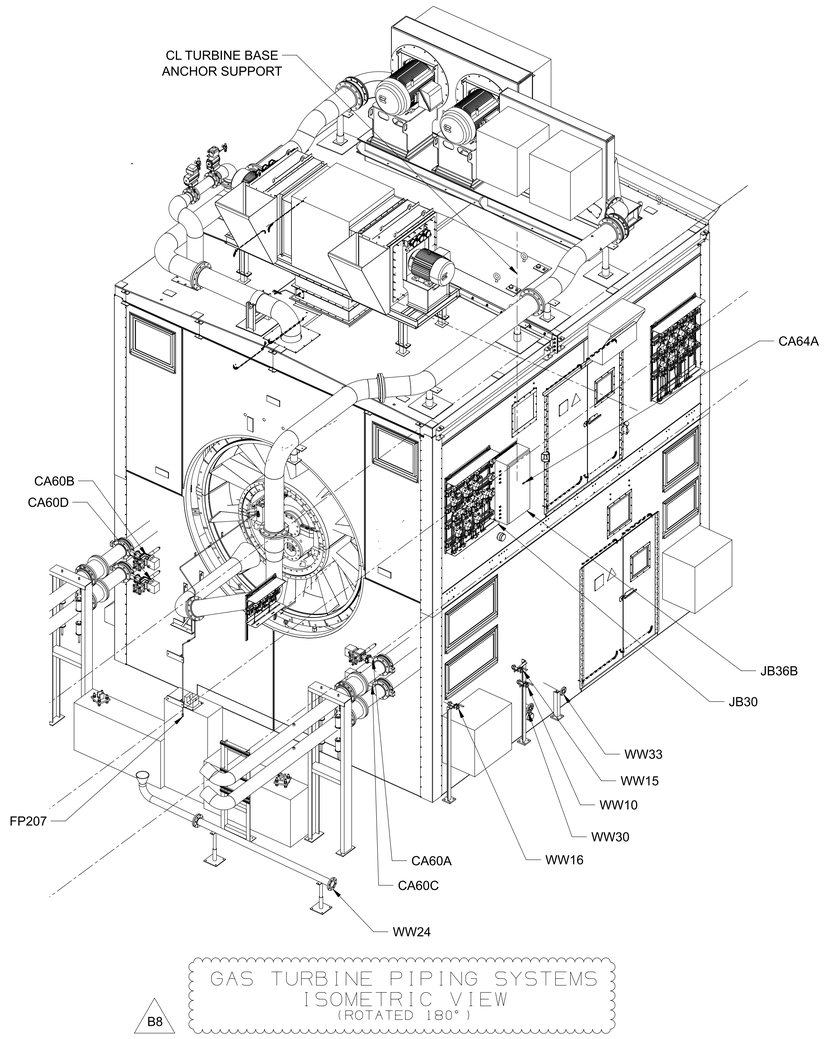


GAS TURBINE PIPING SYSTEMS
ISOMETRIC VIEW

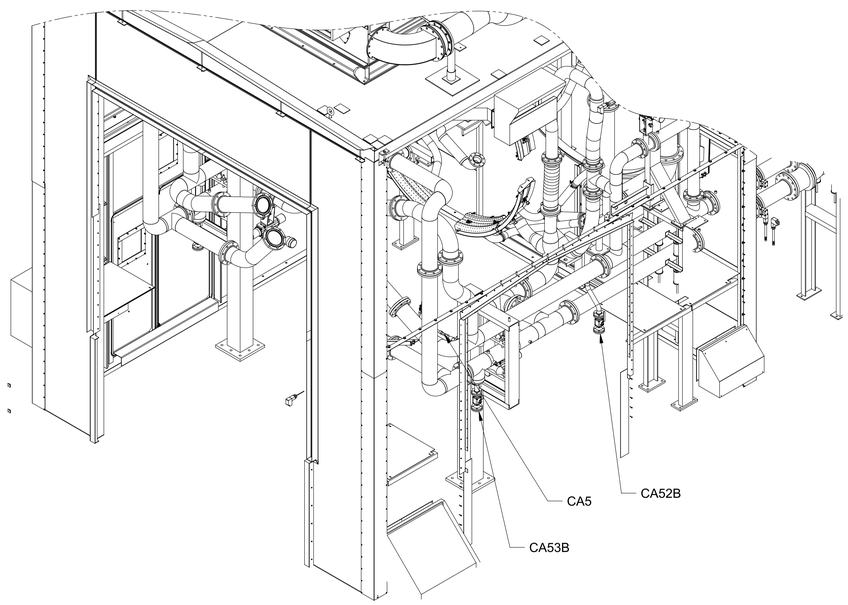


GAS TURBINE PIPING SYSTEMS,
GAS TURBINE ENCLOSURE WALL AND
SELECT PIPING WERE REMOVED FOR CLARITY
ISOMETRIC VIEW



B8

GAS TURBINE PIPING SYSTEMS
ISOMETRIC VIEW
(ROTATED 180°)



B8

GAS TURBINE PIPING SYSTEMS,
GAS TURBINE ENCLOSURE WALL AND
SELECT PIPING WERE REMOVED FOR CLARITY
ISOMETRIC VIEW
(ROTATED 180°)

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TURBINE JB CONN (SEE NOTE E2) OPENING SIZES (NPT)				
A	B	C	E	F
1.50 (38,1)	2.00 (50,8)	1.00 (25,4)	2.50 (63,5)	0.5 (12,7)

ALL OPENINGS ARE FACTORY PLUGGED, D= CONDENSATE DRAIN
REMOVE PLUG TO INSTALL CONDUIT/CABLE (NOT FOR PLANT DESIGNER AND/OR PLANT INSTALLER USE)

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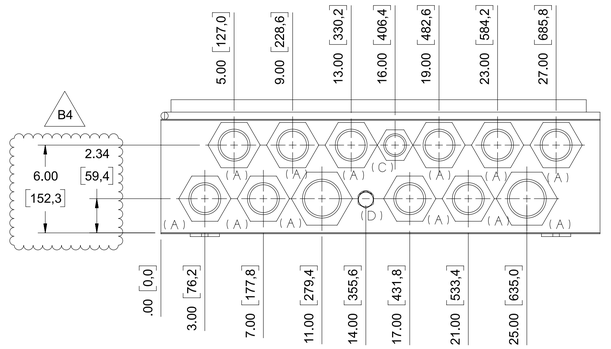
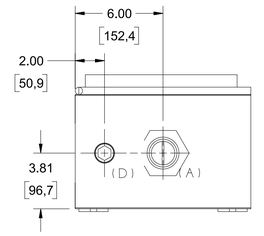
EQUIPMENT	JUNCTION BOX	X (SEE NOTE 2)	Y (SEE NOTE 2)	Z (SEE NOTE 2)	REV
ACCESSORY MODULE	JB130	30.84 [783.3]	-160.00 [-4064.0]	-62.00 [-1574.8]	
	JB132A	30.84 [783.3]	-482.00 [-12242.8]	-42.00 [-1066.8]	
	JB132B	33.60 [853.4]	-270.00 [-6858.0]	-136.00 [-3454.4]	
	JB133	30.84 [783.3]	-361.50 [-9182.1]	-52.84 [-1342.1]	
	JB77L	30.84 [783.3]	-286.00 [-7264.4]	-46.00 [-1168.4]	
	LUBE OIL VENT FAN #1	131.60 [3342.6]	-478.19 [-12146.0]	5.00 [127]	
	LUBE OIL VENT FAN #2	63.60 [1615.4]	-478.19 [-12146.0]	5.00 [127]	
INLET SYSTEM	DEW POINT SENSOR #1	-41.56 [-1055.5]	-65.99 [-1676.2]	245.11 [6225.9]	
	DEW POINT SENSOR #2	-41.56 [-1055.5]	34.39 [873.5]	245.11 [6225.9]	
	DEW POINT SENSOR #3	-41.56 [-1055.5]	134.77 [3423.1]	245.11 [6225.9]	
	JB78	-662 [-16814.8]	284.51 [7226.55]	292.32 [7424.93]	B
	JB78B	-629.32 [-15984.73]	284.51 [7226.55]	292.32 [7424.93]	B
	THERMOCOUPLE ID-1	-405.96 [-10311.38]	183.46 [4659.88]	301.81 [7665.97]	B
	THERMOCOUPLE ID-2	-405.96 [-10311.38]	183.46 [4659.88]	341.18 [8665.97]	B
	THERMOCOUPLE ID-3	-405.96 [-10311.38]	183.46 [4659.88]	380.55 [9665.97]	B
TURBINE & LOAD COMPARTMENT	COOLING FAN MODULE	24.66 [626.4]	4.50 [114.3]	198.50 [5041.9]	
	HOLE FOR GROUND LUG #1	12.01 [304.9]	-59.31 [-1506.5]	-84.07 [-2135.4]	
	HOLE FOR GROUND LUG #2	183.75 [4667.3]	-59.31 [-1506.5]	-84.00 [-2133.6]	
	HOLE FOR GROUND LUG #3	12.01 [304.9]	59.31 [1506.5]	-84.07 [-2135.4]	
	JB1000	-69.11 [-1755.4]	-366.46 [-9308.1]	-103.14 [-2619.7]	
	JB169	449.43 [11415.6]	145.19 [3687.9]	107.81 [2738.4]	
	JB19T	-141.82 [-3602.3]	-367.06 [-9323.3]	-107.29 [-2725.3]	
	JB20G	374.17 [9504.0]	53.70 [1364.0]	-106.77 [-2712.1]	
	JB20RA	201 [5105.4]	-138.55 [-3519.17]	74.92 [1902.97]	B
	JB20RE	167.4 [4251.96]	-147.34 [-3742.44]	-61.68 [-1566.67]	B
	JB20T	-197.79 [-5023.9]	-367.07 [-9323.7]	-107.16 [-2721.9]	
	JB21T	-115.80 [-2941.4]	-367.07 [-9323.7]	-103.17 [-2620.4]	
	JB30	210.66 [5350.8]	137.27 [3486.8]	37.85 [961.3]	
	JB34	205.57 [5221.48]	139.1 [3533.14]	48.42 [1229.87]	B
	JB34G	-17.87 [-453.9]	139.07 [3532.38]	44.04 [1118.62]	B
	JB36B	182.66 [4639.6]	138.34 [3513.8]	35.35 [897.9]	
	JB36C	161.51 [4102.5]	-138.34 [-3513.8]	35.35 [897.9]	
	JB55	-155.52 [-3950.2]	39.00 [990.6]	-54.00 [-1371.5]	
	JB56	345.67 [8779.9]	-23.63 [-600.1]	-113.18 [-2874.8]	
	JB77T	-169.99 [-4317.7]	-367.10 [-9324.3]	-103.17 [-2620.4]	
	LOAD COMPT VENT FAN #1	-163.67 [-4157.1]	4.50 [114.3]	77.50 [1968.5]	
	LOAD COMPT VENT FAN #2	-163.67 [-4157.1]	-48.50 [-1231.9]	77.50 [1968.5]	

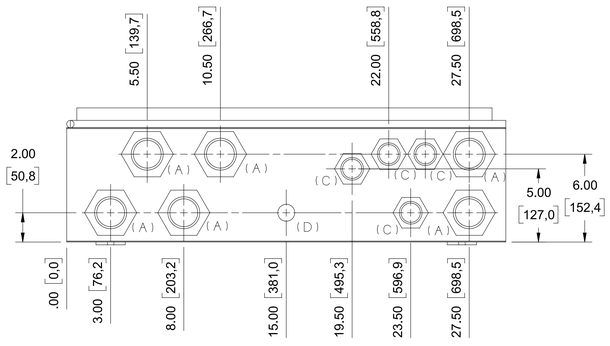
JUNCTION BOX DIMENSIONS LISTED ABOVE ARE TO BOTTOM CENTER.



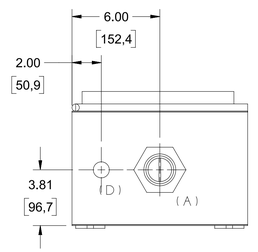
JB20T
BOTTOM VIEW
30.00W X 24.00H
[762,0 X 609,6]



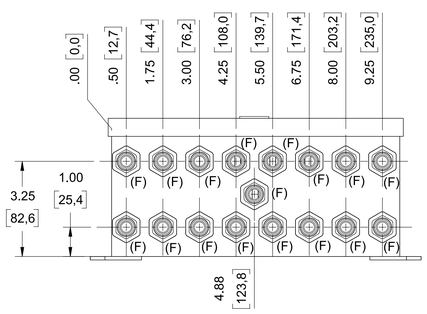
JB55
BOTTOM VIEW
12.00W X 16.00H
[304,8 X 406,4]



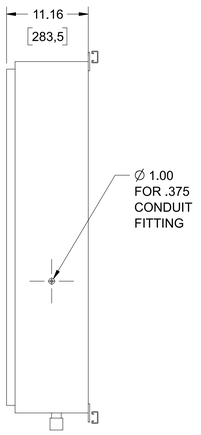
JB19T
BOTTOM VIEW
30.00W X 24.00H
[762,0 X 609,6]



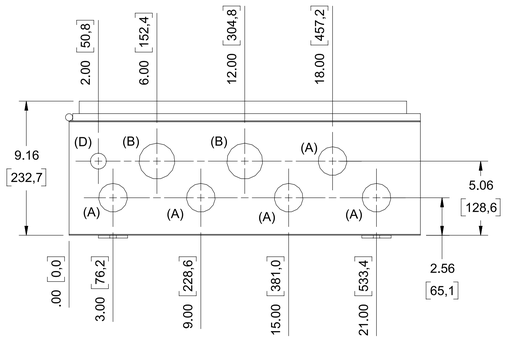
JB56
BOTTOM VIEW
12.00W X 16.00H
[304,8 X 406,4]



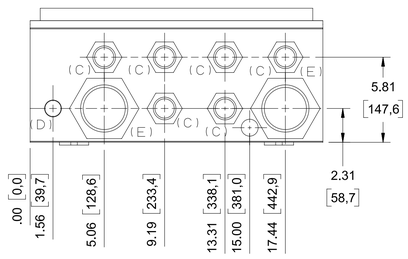
JB34
DOWNSTREAM END
9.84W X 9.84H
(250,0 X 250,0)
B6



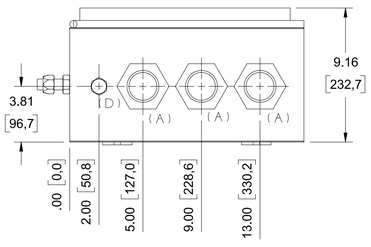
JB36B & JB36C
DOWNSTREAM END VIEW
24.00W X 48.00H
[609,6 X 1219,2]



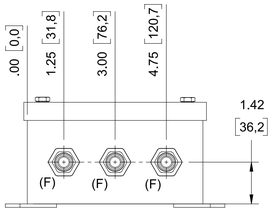
JB20G
BOTTOM VIEW
24W.00 X 20.00H
[609,6 X 508,0]



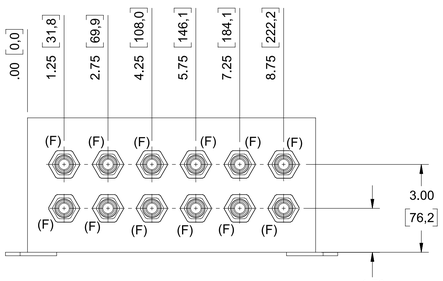
JB77T
BOTTOM VIEW
20.00W X 20.00H
[508,0 X 508,0]



JB21T
BOTTOM VIEW
16.00W X 20.00H
(406,4 X 508,0)



JB169
DOWNSTREAM END VIEW
6.00W X 6.00H
(152,4 X 152,4)
B6



B6
JB34G
DOWNSTREAM END VIEW
9.84W X 9.84H
(250,0 X 250,0)

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NLR

B7

CUSTOMER CONNECTION TABLE - PIPING

SCHEM	CONNECTION NAME	DESCRIPTION	X (SEE NOTE 2)	Y (SEE NOTE 2)	Z (SEE NOTE 2)	REV
0416	LO1	LUBE OIL TANK FILL (BLANK FLANGED)	30.35 [770,9]	-476.00 [-12090,4]	-108.12 [-2746,4]	
0416	LO13A	ACCESSORY COMPARTMENT DECK DRAINS	36.60 [929,6]	-496.00 [-12598,4]	-104.50 [-2654,3]	
0416	LO13B	ACCESSORY COMPARTMENT DECK DRAINS	36.60 [929,6]	-382.00 [-9702,8]	-104.50 [-2654,3]	
0416	LO13C	ACCESSORY COMPARTMENT DECK DRAINS	36.60 [929,6]	-218.00 [-5537,2]	-104.50 [-2654,3]	
0416	LO13D	ACCESSORY COMPARTMENT DECK DRAINS	158.60 [4028,4]	-218.00 [-5537,2]	-104.50 [-2654,3]	
0416	LO13E	ACCESSORY COMPARTMENT DECK DRAINS	158.60 [4028,4]	-382.00 [-9702,8]	-104.50 [-2654,3]	
0416	LO13F	ACCESSORY COMPARTMENT DECK DRAINS	158.60 [4028,4]	-496.00 [-12598,4]	-104.50 [-2654,3]	
0416	LO19	MIST ELIMINATOR DISCHARGE (BLANK FLANGED)	89.10 [2263,1]	-361.50 [-9182,1]	12.22 [310,5]	
0416	LO2	LUBE OIL TANK DRAIN W/PLUG	33.10 [840,7]	-140.00 [-3556,0]	-152.50 [-3873,5]	
0416	LO21	LUBE OIL TO CONDITIONER (BLANK FLANGED)	30.35 [770,9]	-325.00 [-8255,0]	-110.00 [-2794,0]	
0416	LO89	LUBE OIL FEED TO AA COMPRESSOR	164.85 [4187,2]	-333.00 [-8458,2]	-96.00 [-2438,4]	
0416	LO90	LUBE OIL DRAIN TO AA COMPRESSOR	164.85 [4187,2]	-399.00 [-10134,6]	-118.75 [-3016,3]	
0417	CA20	LOW POINT DRAIN, INLET AIR HEATING PIPING	136.32 [3462,5]	93.48 [2374,4]	-142.95 [-3630,8]	
0417	CA5	LOW POINT DRAIN AIR EXTRACTION	94.55 [2401,7]	-55.50 [-1409,7]	-81.00 [-2057,4]	
0417	CA51	LOW POINT DRAIN AIR EXTRACTION	131.82 [3348,2]	114.68 [2912,9]	-134.64 [-3419,9]	
0417	CA52A	LOW POINT DRAIN (FOR WATER WASH) FROM 9TH STAGE AIR EXTRACTION MANIFOLD	150.61 [3825,4]	116.81 [2966,9]	-76.99 [-1955,5]	
0417	CA52B	LOW POINT DRAIN (FOR WATER WASH) FROM 9TH STAGE AIR EXTRACTION MANIFOLD	153.62 [3902,1]	-116.80 [-2966,6]	-76.99 [-1955,5]	
0417	CA53A	LOW POINT DRAIN (FOR WATER WASH) FROM 13TH STAGE AIR EXTRACTION MANIFOLD	68.23 [1732,9]	107.79 [2737,9]	-90.91 [-2309,1]	
0417	CA53B	LOW POINT DRAIN (FOR WATER WASH) FROM 13TH STAGE AIR EXTRACTION MANIFOLD	68.23 [1732,9]	-107.79 [-2737,9]	-90.91 [-2309,1]	
0417	CA60A	VA2 VALVE ACTUATION AIR	280.14 [7115,6]	86.36 [2193,5]	-40.17 [-1020,3]	
0417	CA60B	VA2 VALVE ACTUATION AIR	283.46 [7200,0]	-86.30 [-2191,9]	-40.17 [-1020,3]	
0417	CA60C	VA2 VALVE ACTUATION AIR	280.14 [7115,6]	86.11 [2187,2]	-59.12 [-1501,7]	
0417	CA60D	VA2 VALVE ACTUATION AIR	283.09 [7190,5]	-85.67 [-2176,0]	-59.12 [-1501,7]	
0417	CA64A	AIR SUPPLY FOR PNEUMATIC VALVE	169.88 [4314,8]	138.34 [3513,8]	53.35 [1355,1]	
0417	CA64B	AIR SUPPLY FOR PNEUMATIC VALVE	174.30 [4427,2]	-138.34 [-3513,8]	53.35 [1355,1]	
4098	CC12	INSTRUMENT AIR TO CTM STOP VALVE	166.24 [4222,5]	-112.40 [-2854,8]	211.97 [5384,0]	B
4098	CC3	INSTRUMENT AIR TO CTM FLOW CONTROL VALVE	193.31 [4910,1]	-113.29 [-2877,5]	213.26 [5416,7]	B
0418	TO12	TRIP OIL SUPPLY TO LIQUID FUEL VALVE	161.85 [4111,0]	-312.00 [-7924,8]	-96.00 [-2438,4]	
0420	CW52	GAS TURBINE BASE WATER FEED	176.03 [4471,2]	-136.00 [-3454,3]	-135.34 [-3437,8]	
0420	CW53	GAS TURBINE BASE WATER RETURN	176.03 [4471,2]	-136.00 [-3454,4]	-126.34 [-3209,0]	
0420	CW6	COOLING WATER INLET TO LUBE OIL HEAT EXCHANGERS	164.85 [4187,2]	-370.00 [-9398,0]	-96.00 [-2438,4]	
0420	CW7	COOLING WATER OUTLET FROM LUBE OIL HEAT EXCHANGERS	164.85 [4187,2]	-353.00 [-8966,2]	-96.00 [-2438,4]	
0422	FG1	FUEL GAS INLET	154.60 [3926,8]	-257.25 [-6534,2]	-66.00 [-1676,4]	
0422	FG117	N2 SUPPLY	161.10 [4091,9]	-265.25 [-6737,4]	-87.11 [-2212,6]	
0422	FG137	VALVE PACKING LEAKOFF VENT	34.59 [878,6]	-240.14 [-6099,5]	-12.00 [-304,8]	
0422	FG2	FUEL GAS STRAINER VENT	161.85 [4111,0]	-164.00 [-4165,6]	-14.00 [-355,6]	
0422	FG3	GAS COMPARTMENT VALVE VENT	161.85 [4111,0]	-159.00 [-4038,6]	-14.00 [-355,6]	
0422	FG439	GAS VENT, P1 CAVITY	29.59 [751,6]	-230.44 [-5853,1]	-15.00 [-381,0]	
0422	FG7	INSTRUMENT AIR GAS PURGE VALVE	161.60 [4104,6]	-172.00 [-4368,8]	-96.25 [-2444,8]	
0432	IH7	INSTRUMENT AIR SUPPLY TO VA20 FOR CONTROL VALVE	176.12 [4473,4]	207.69 [5275,2]	-86.80 [-2204,7]	
0442	IE4	DRAIN FROM INLET PLENUM	-89.72 [-2278,9]	-125.00 [-3175,0]	-137.78 [-3499,6]	
0442	WW1	OFF-LINE / ON-LINE COMPRESSOR WATER WASH INLET	-118.87 [-3019,3]	-112.00 [-2844,8]	-146.00 [-3708,4]	
0442	WW10	DRAIN FROM TURBINE SHELL	172.54 [4382,6]	143.46 [3644,0]	-106.28 [-2699,4]	
0442	WW111	INSTRUMENT AIR SUPPLY TO VA16-1	-123.22 [-3129,8]	-76.52 [-1943,7]	-137.16 [-3483,9]	
0442	WW112	INSTRUMENT AIR SUPPLY TO VA16-3	-114.82 [-2916,5]	-77.25 [-1962,1]	-138.74 [-3524,0]	
0442	WW12	OFF-LINE FEED WATER DRAIN	-104.28 [-2648,8]	-58.77 [-1492,8]	-151.20 [-3840,5]	
0442	WW13	ON-LINE FEED WATER DRAIN	-104.29 [-2648,9]	-55.37 [-1406,5]	-151.20 [-3840,4]	
0442	WW15	DRAIN FROM EXHAUST FRAME	178.55 [4535,1]	143.47 [3644,3]	-90.90 [-2308,9]	
0442	WW16	DRAIN FROM EXHAUST DIFFUSER	246.63 [6264,5]	143.60 [3647,4]	-82.29 [-2090,2]	
0442	WW24	WASH WATER DRAIN FROM EXHAUST DUCT	399.60 [10149,8]	158.00 [4013,2]	-132.50 [-3365,5]	
0442	WW30	WASH WATER DRAIN FROM TURBINE SHELL MANWAY	166.36 [4225,6]	141.01 [3581,7]	-128.64 [-3267,4]	
0442	WW33	WASH WATER DRAIN FROM COMBUSTION SYSTEM	131.05 [3328,7]	140.82 [3576,8]	-134.81 [-3424,1]	
0474	HG17	AIR SUPPLY FOR COMB GAS ASPIRATOR- GT COMPARTMENT	185.72 [4717.29]	-134.63 [-3419.6]	102.85 [2612.39]	B
0474	HG45	AIR SUPPLY FOR COMB GAS ASPIRATOR	163.47 [4152.14]	-163.08 [-4142.23]	-33.7 [-855.98]	B
4067	FP207	NO. 2 BEARING TUNNEL DISCHARGE SUPPLY	360.36 [9153,3]	2.84 [72,1]	-87.00 [-2209,8]	
4067	FP209	WATER MIST FIRE PROTECTION DISCHARGE	161.10 [4091,9]	-144.00 [-3657,6]	-14.00 [-355,6]	
4067	FP211	LUBE/HYDRAULIC COMPARTMENT DISCHARGE SUPPLY	161.10 [4091,9]	-441.00 [-11201,4]	-12.00 [-304,8]	
0471	IE2	COMPRESSED AIR INLET FOR SELF CLEANING INLET FILTER COMPT	-649.75 [-16503.65]	352.00 [8940.8]	207.98 [5282.69]	B
0471	IE5	WATER INLET TO EVAPORATIVE COOLERS	-598.38 [-15198.85]	321.82 [8174.23]	207.99 [5282.95]	B
0471	IE7	OVERFLOW AND BLOWDOWN FROM EVAPORATIVE COOLERS	-584.37 [-14843]	322.00 [8178.8]	205.64 [5223.26]	B

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