

GENERAL DIESEL NOTES

1. CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH TSSA REGARDING VARIANCE. CONTRACTOR SHALL ENSURE THAT ALL ULC LABELS ON ALL DIESEL ACCESSORIES AND FITTINGS (PIPING, VALVES, TANK ETC.) ARE CLEARLY VISIBLE FOR TSSA INSPECTIONS.
2. CONTRACTOR WILL TEST & COMMISSION THE DIESEL GENERATOR AND FUEL SYSTEM AT END OF CONSTRUCTION. FILL OUT AND COMPLETE COMMISSIONING REPORT AS PER TENDER SPECIFICATIONS.
3. CONTRACTOR SHALL REMOVE UNUSED TANKS, PIPES, FITTINGS AND OTHER RELATED ITEMS FROM THE SITE AT THE END OF CONSTRUCTION.
4. CONTRACTOR SHALL SIGN AND COMPLETE ALL TSSA COMPREHENSIVE CHECKLISTS AT THE END OF CONSTRUCTION.
5. UNLESS OTHERWISE NOTED. ALL EQUIPEMENT, ACCESSORIES SHALL BE ULC.

SCOPE OF WORK

1. REMOVE AND DISPOSE OF EXISTING DIESEL GENERATORS, FILL & VENT POINTS AND DIESEL PIPING AS PER CSA B-139
2. KEEP EXISTING MAIN DIESEL TANK.
3. PROVIDE NEW AND/OR EXTEND EXISTING PIPES TO FACILITATE THE NEW INSTALLATION.
4. SUPPLY AND INSTALL ALL DIESEL ACCESSORIES AS INDICATED ON THE DRAWINGS.
5. NEW REDUNDANT SYSTEM AS PER DRAWING.
6. ALL DIESEL PIPES (NEW AND EXISTING) SHALL BE PAINTED DARK BROWN AND LABELED C/W DIRECTION OF FLOW. PIPING OR TUBING PENETRATING WALL SHALL BE SLEEVED OR DOUBLE WRAPPED WITH PIPE TAPE.
7. SUPPLY AND INSTALL EXHAUST PROTECTION TO PREVENT HUMAN CONTACT AS WELL AS EXTEND DRAIN ON EXHAUST SYSTEM.

DIESEL GENERATOR SCHEDULE

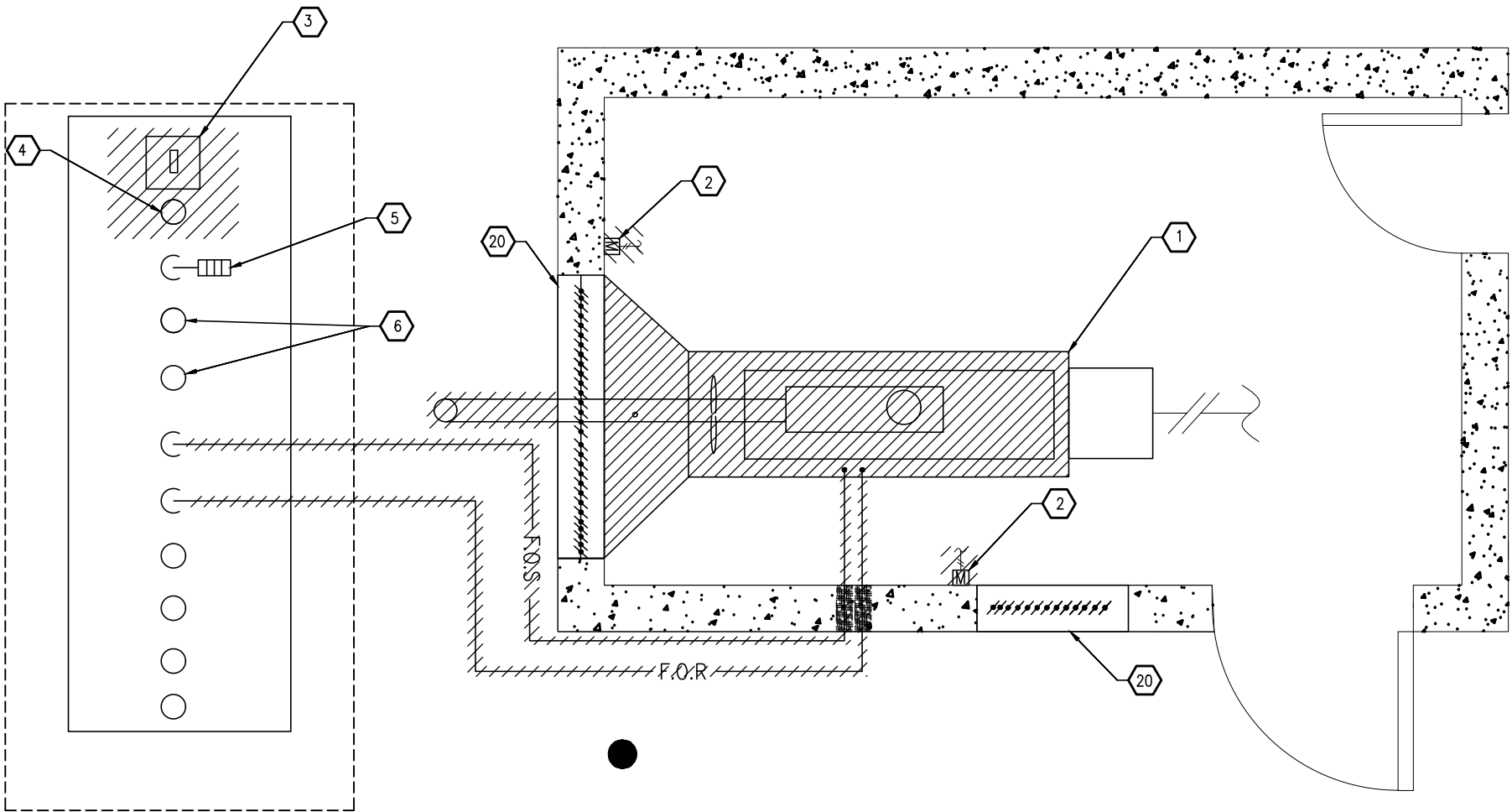
TAG	MAKE	MODEL	SIZE	WEIGHT	POWER	LOCATION	REMARKS
-	T&T POWER GROUP	1106D-E70TAG4, TIER 3	96.0" x 30.5" x 51.25" H	DRY: ~ 3500 LBS	175 KW 600 A	INDOOR	DISCONNECT: 3 POLE DISCONNECT MOUNTED INSIDE ENCLOSURE FOR 3-PHASE GENERATOR. LIQUID COOLED DIESEL, RADIATOR, PUSHER FAN, OIL FILTER AND WATER SEPARATOR, AIR CLEANER, 12 VDC, AUTO GLOW PLUG BASED ON ENGINE TEMP IF ENGINE FACTORY EQUIPPED. (NOTE: ENGINE MAKE/MODEL SUBJECT TO CHANGE BASED ON CONFIGURATION AND AVAILABILITY).

ACTUATORS SCHEDULE

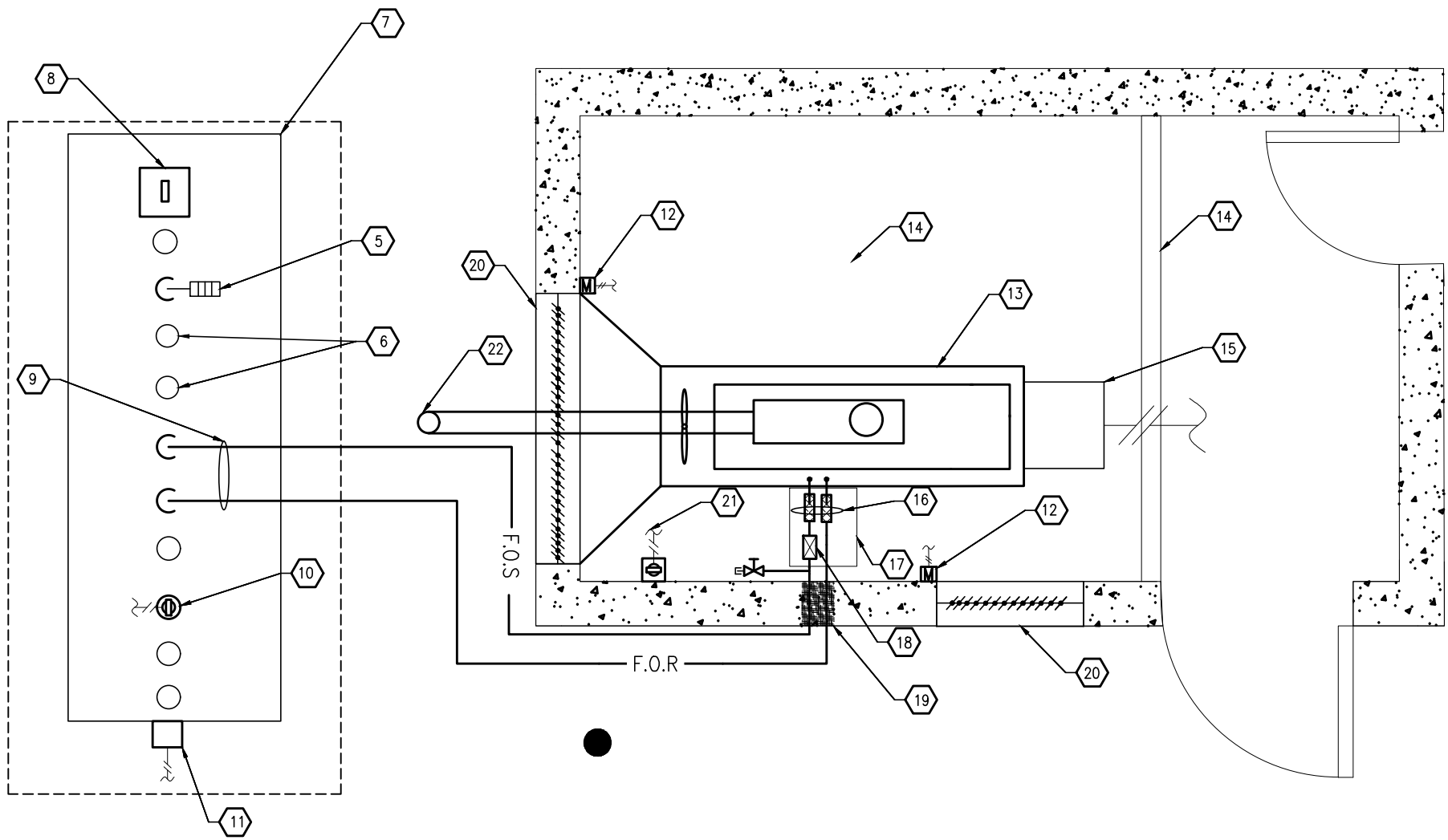
TAG	TYPE	MAKE	MODEL	SIZE	POWER	REMARKS
MD-1&2	SPRING LOADED	BELIMO (ACTUATOR)	FSNF120-S	-	120 VAC	SPRING RETURN DAMPER ACTUATOR. ACTUATOR SHALL BE DIRECT COUPLED TYPE WHICH REQUIRE NO CRANKCAM OR LINKAGE AND CAPABLE OF DIRECT MOUNTING. ACTUATOR SHALL BE DESIGNED TO OPERATE FOR CLOCKWISE AND COUNTERCLOCKWISE OPERATION WITHOUT FAILURE. ACTUATOR SHALL BE ULC LISTED AND CSA CERTIFIED.

WORKING NOTES:

- 1 EXISTING GENERATOR, MUFFLER AND ALL ACCESSORIES TO BE DISCONNECTED AND REMOVED.
- 2 EXISTING INTAKE AND EXHAUST ACTUATORS TO BE REMOVED.
- 3 REMOVE EXISTING SPILL BOX.
- 4 REMOVE AND DISPOSE EXISTING 1-1/2 " VENT.
- 5 EXISTING LEVEL GAUGE TO REMAIN.
- 6 EXISTING 2" VENTS TO REMAIN.
- 7 EXISTING 4000 L TANK TO REMAIN.
- 8 NEW 2" ULC MORRISON SPILL BOX TO BE INSTALLED DIRECTLY ABOVE THE TANK BUNG, CONTINUE WITH OVERFILL PROTECTION VALVE.
- 9 NEW 1/2"ø SCHEDULE 40 F.O.S. AND F.O.R. LINES TO THE GENERATOR.
- 10 NEW ULC ALBANY LEVCON 2; LOW LEVEL TO BE SET AT 25%.
- 11 NEW KTECH 120V ULC VACUUM SWITCH MODEL VS9255 CONTINUE WITH END SWITCH.
- 12 NEW INTAKE AND EXHAUST ACTUATORS SPRING LOADED TO FAIL SAFE OPEN WITHIN 30 SEC, CHECK SCHEDULE FOR MORE DETAILS.
- 13 NEW DIESEL GENERATOR MODEL AS PER SCHEDULE. TO BE SUPPLIED BY OTHERS.
- 14 NEW EPOXY COATING FOR THE FLOOR TO BE CONTAINED WITHIN A 6" TALL CONTAINMENT BORDER ACROSS THE GENERATOR ROOM.
- 15 EXISTING TRANSFORMER TO REMAIN.
- 16 NEW OPW ULC STAINLESS STEEL FLEXIBLE CONNECTION ON FUEL OIL SUPPLY AND RETURN.
- 17 NEW PROTECTIVE CHECKERED PLATE TO BE INSTALLED.
- 18 NEW ULC MORRISON FIRE VALVE.
- 19 PIPE PENETRATION THROUGH THE WALL & SLAB MUST BE SLEEVED & SEALED C/W WEATHER PROOF SEALANT (TYPICAL).
- 20 EXISTING DAMPERS TO REMAIN.
- 21 NEW ALBANY LEAK DETECTOR MODEL LD-FPI-BB15.
- 22 NEW 4" INNER DIAMETER EXHAUST STACK. SUPPORT STACK AS REQUIRED C/W PPE SUPPORTS AND GUIDES.



1 EXISTING DIESEL FUEL SYSTEM PIPING
SCALE: 1/4" = 1'-0"



2 NEW DIESEL FUEL SYSTEM PIPING
SCALE: 1/4" = 1'-0"

MECHANICAL LEGEND

SYMBOL	DESCRIPTION
	EXISTING EQUIPMENT/DUCTWORK / PIPING
	NEW EQUIPMENT / DUCTWORK / PIPING
	EXISTING DUCTWORK/PIPING/EQUIPMENT TO BE REMOVED
	PIPE CONTINUATION
	CONNECT TO EXISTING
	EXISTING EQUIPMENT TO BE RELOCATED
	RELOCATED EQUIPMENT AT NEW LOCATION
	END CAP
	FUEL OIL RETURN
	FUEL OIL SUPPLY
	FILL LINE
	VENT LINE
	GAUGE
	ANTI SIPHON VALVE
	PRESSURE RELIEF VALVE
	CONTROL WIRING
	FIRE VALVE
	ISOLATION VALVE
	CHECK VALVE
	FLEXIBLE CONNECTION
	STEEL PIPE SLEEVE WITH FIRE RATED AND/OR WEATHERPROOF MATERIAL

1.	ISSUED FOR CLIENT REVIEW	JUNE 2023

No.	Description	Date
ISSUES/REVISIONS		



PROJECT		
DRAWING TITLE		
DIESEL FUEL SYSTEM UPGRADE		
DATE	JUNE 2023	PROJECT NO.
SCALE	1/4" = 1'-0"	MF23061
DRAWN	H.W	MECHANICAL
DESIGNED	A.S.	DRAWING NO.
CHECKED	A.S.	M-1