

GENERAL DIESEL NOTES

- CONTRACTOR SHALL PUMP OUT THE DIESEL FUEL STORED INSIDE THE STORAGE TANKS. CONTRACTOR SHALL STORE, HANDLE AND TRANSPORT THE DIESEL FUEL AS PER CSA-B139 LATEST EDITION. COORDINATE WITH PROPERTY MANAGEMENT TO DETERMINE WHETHER THE PUMPED FUEL CAN BE RE-USED FOR THE TEMPORARY TANK OR AT ANY OTHER FACILITY. ELSE THE CONTRACTOR SHALL DISPOSE OF THE PUMPED DIESEL AS PER CSA-B139.+
- CONTRACTOR SHALL BE 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.
- CONTRACTOR SHALL TEST & COMMISSION THE DIESEL GENERATOR AND FUEL SYSTEM AT END OF CONSTRUCTION. FILL OUT AND COMPLETE COMMISSIONING REPORT AS PER TENDER SPECIFICATIONS.
- CONTRACTOR SHALL REMOVE UNUSED TANKS, PIPES, FITTINGS AND OTHER RELATED ITEMS FROM THE SITE AT THE END OF CONSTRUCTION.
- CONTRACTOR SHALL SIGN AND COMPLETE ALL TSSA COMPREHENSIVE CHECKLISTS AT THE END OF CONSTRUCTION.

SCOPE OF WORK

- PROVIDE NEW AND/OR EXTEND EXISTING PIPES TO FACILITATE THE NEW INSTALLATION.
- SUPPLY AND INSTALL ALL DIESEL ACCESSORIES AS INDICATED ON THE DRAWINGS.
- NEW REDUNDANT SYSTEM AS PER DRAWING.
- RUN NEW POWER SUPPLY LINES OR USE EXISTING TO ALL NEW EQUIPMENT AS REQUIRED.
- ALL DIESEL PIPES (NEW AND EXISTING) SHALL BE PAINTED DARK BROWN AND LABELED C/W DIRECTION OF FLOW (INCLUDING D. RISERS).
- CONTRACTOR SHALL PROVIDE A TEMPORARY DIESEL TANK INSIDE GENERATOR ROOM DURING THE CONSTRUCTION PERIOD TO ENSURE GENERATOR OPERATION.

ACTUATORS SCHEDULE

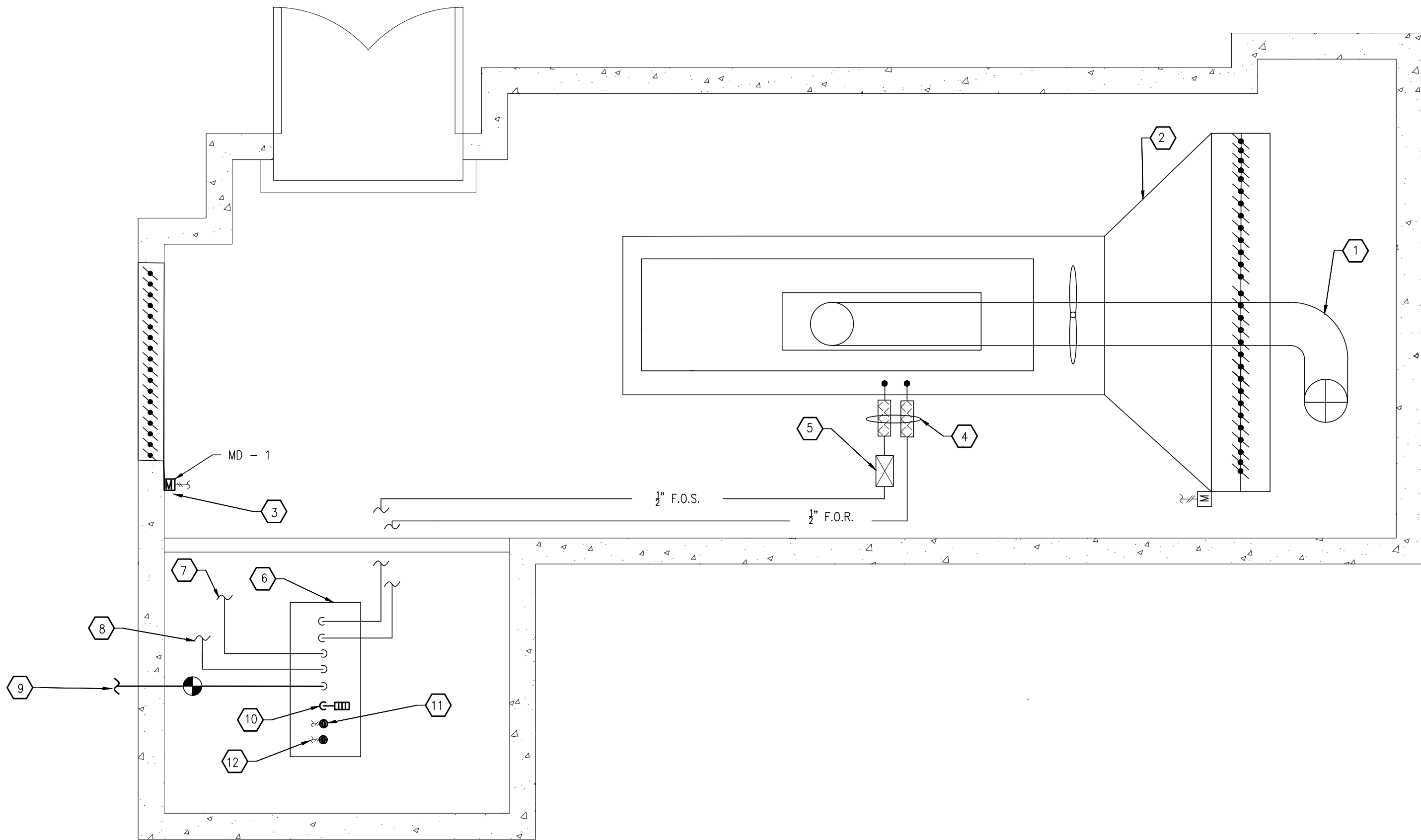
TAG	TYPE	MAKE	MODEL	SIZE	POWER
MD-1	SPRING LOADED	BELIMO (ACTUATOR)	FSNF120-S	-	120 VAC

REMARKS 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.

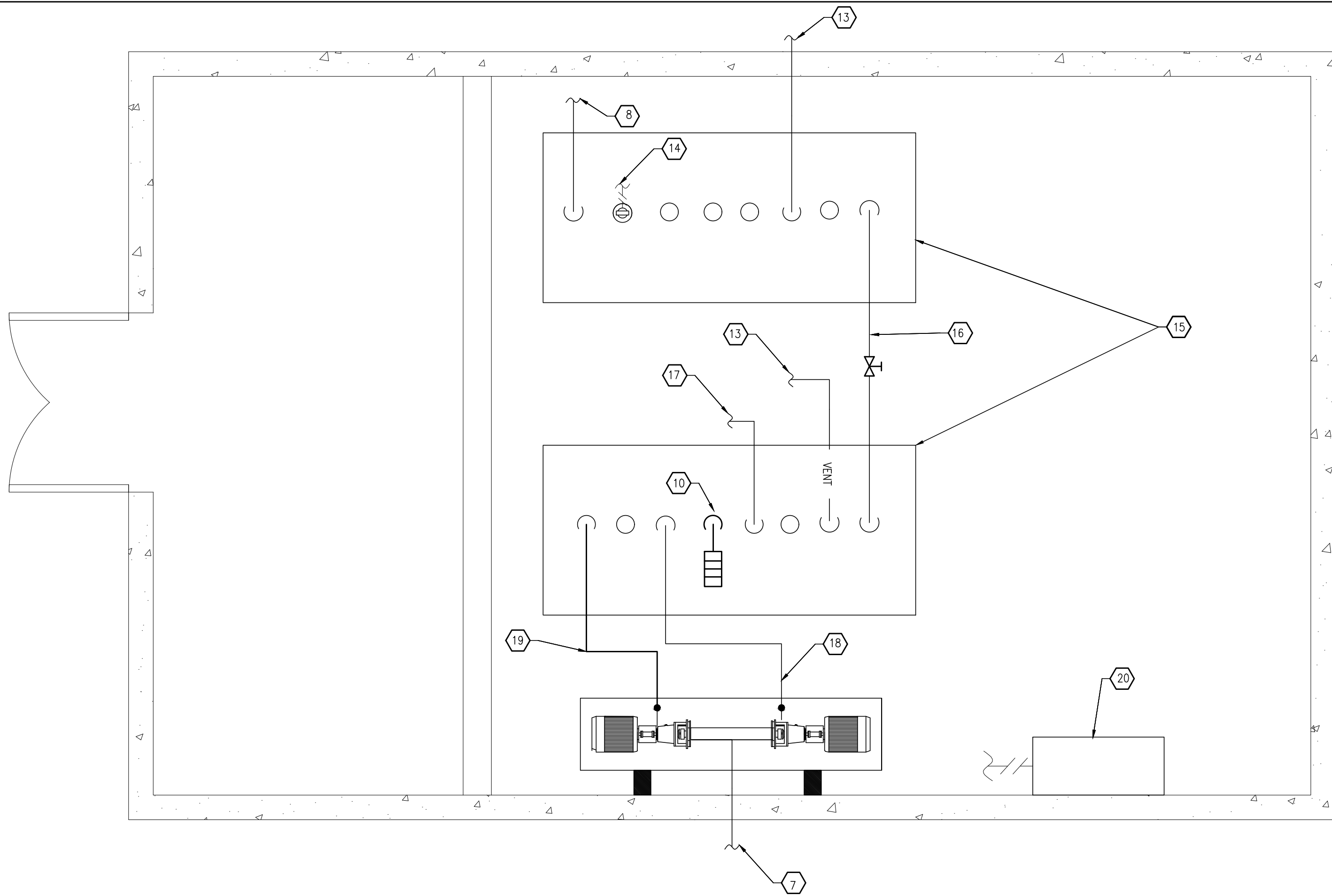
INSTALL ACTUATORS AS PER MANUFACTURER'S RECOMMENDATIONS. CONTRACTOR SHALL VERIFY ONSITE THE NUMBER OF ACTUATORS NEEDED AND THE POWER SUPPLY AVAILABLE FOR THE DAMPER ACTUATORS. PROVIDE AN ALARM AT INTAKE COMBUSTION DAMPER TO BE TIED DIRECTLY TO F.A PANEL OR GENERATOR TROUBLE. INTAKE DAMPERS TO FAILSAFE OPEN WITHIN 30 SEC.

WORKING NOTES:

- EXISTING GENERATOR EXHAUST TO REMAIN, BUT ADJUST COMBUSTIBLES AROUND IT TO ENSURE 18" OF CLEARANCE.
- EXISTING GENERATOR TO REMAIN.
- EXISTING INTAKES ACTUATORS TO BE REMOVED AND REPLACED WITH NEW ACTUATORS SPRING LOADED TO FAIL SAFE OPEN WITHIN 30 SEC, CHECK SCHEDULE FOR MORE DETAILS.
- NEW OPW ULC STAINLESS STEEL FLEXIBLE CONNECTION ON FUEL OIL SUPPLY AND RETURN.
- NEW ULC MORRISON FIRE VALVE.
- EXISTING 235L ULC-S602 DAY TANK TO REMAIN.
- EXISTING SUPPLY-LINE FROM THE PUMP TO REMAIN.
- EXISTING RETURN-LINE TO THE MAIN TANK TO REMAIN.
- RUN NEW 2" VENT LINE TO THE OUTSIDE.
- NEW ULC LEVEL GAUGE.
- NEW ULC ALBANY LEVCON 1; CRITICAL HIGH TO BE SET AT 90%.
- NEW ULC ALBANY LEVCON; 4 LEVELS TO BE SET AT 20%, 30%, 50% AND 80%.
- EXISTING MAIN TANK VENT TO REMAIN.
- EXISTING LEVCON 1 HIGH LEVEL TO REMAIN.
- 2 EXISTING 1250L ULC-S601 MAIN TANKS TO REMAIN.
- EXISTING EQUALIZING LINE TO REMAIN.
- EXISTING SPILL-BOX AND FILL-LINE TO REMAIN.
- EXISTING SUPPLY-LINE FROM THE MAIN TANK TO THE PUMP TO REMAIN.
- EXISTING COPPER PIPING FOR PRESSURE RELIEF TO BE REPLACED WITH NEW BLACK MALLEABLE PIPING.
- EXISTING PUMP-CONTROL PANEL TO REMAIN.



1 EXISTING DIESEL FUEL SYSTEM PIPING  
SCALE: N.T.S



2 NEW DIESEL FUEL SYSTEM PIPING  
SCALE: N.T.S

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	N.T.S	MF23040
DRAWN	H.W	MECHANICAL
DESIGNED	A.S.	DRAWING NO.
CHECKED	A.S.	M-1