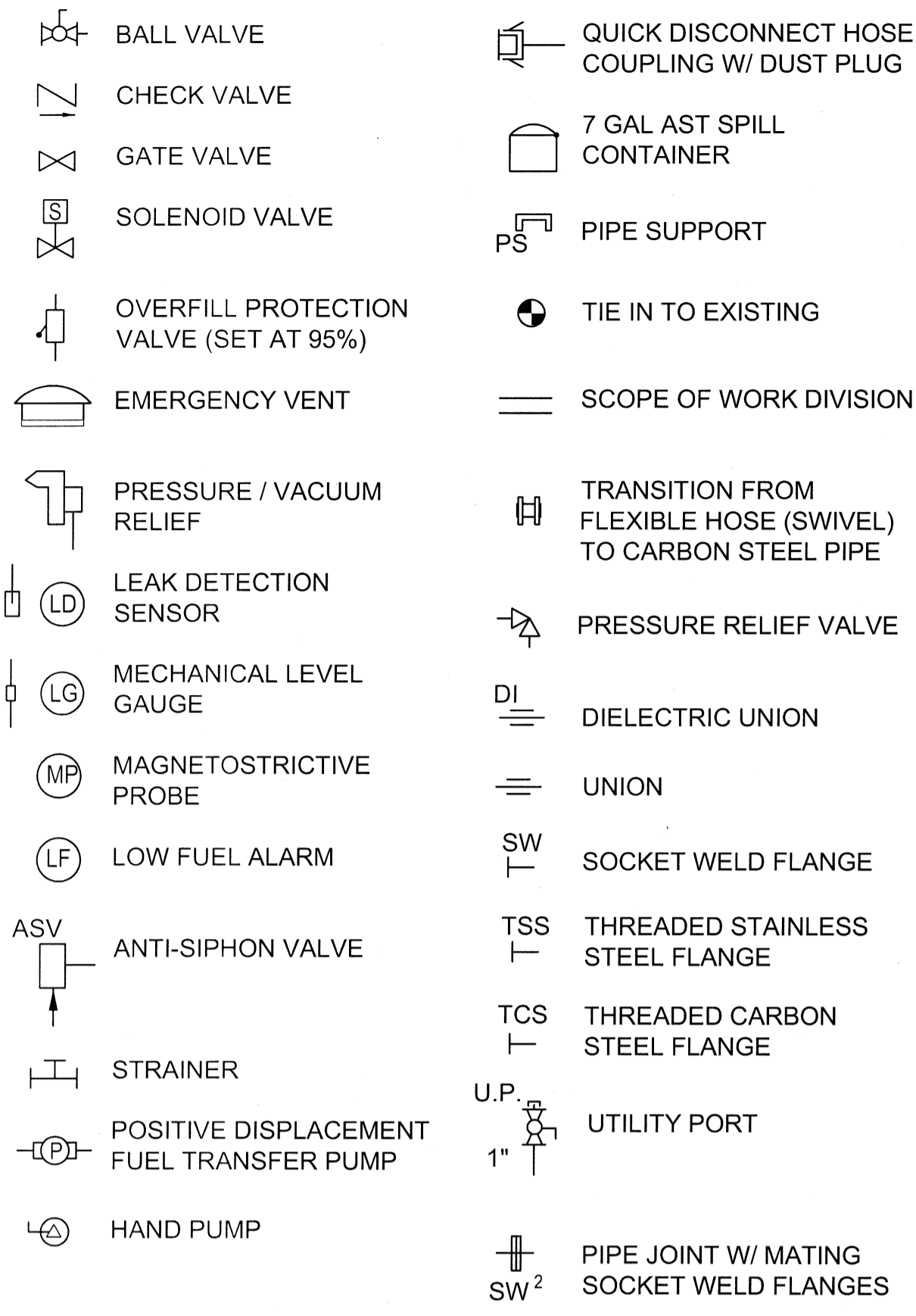


**LEGEND**



**CONTRACTOR SCOPE OF WORK NOTES**

- A. FURNISHED UNDER FUEL STORAGE SYSTEM PACKAGE BY OWNER. RECEIVED AND INSTALLED BY SITE CONTRACTOR.
- B. FURNISHED AND INSTALLED BY SITE CONTRACTOR.
- C. FURNISHED AND INSTALLED UNDER HEMP SHIELDED MODULE PACKAGE BY OWNER.
- D. FURNISHED BY OWNER. RECEIVED AND INSTALLED BY SITE CONTRACTOR.

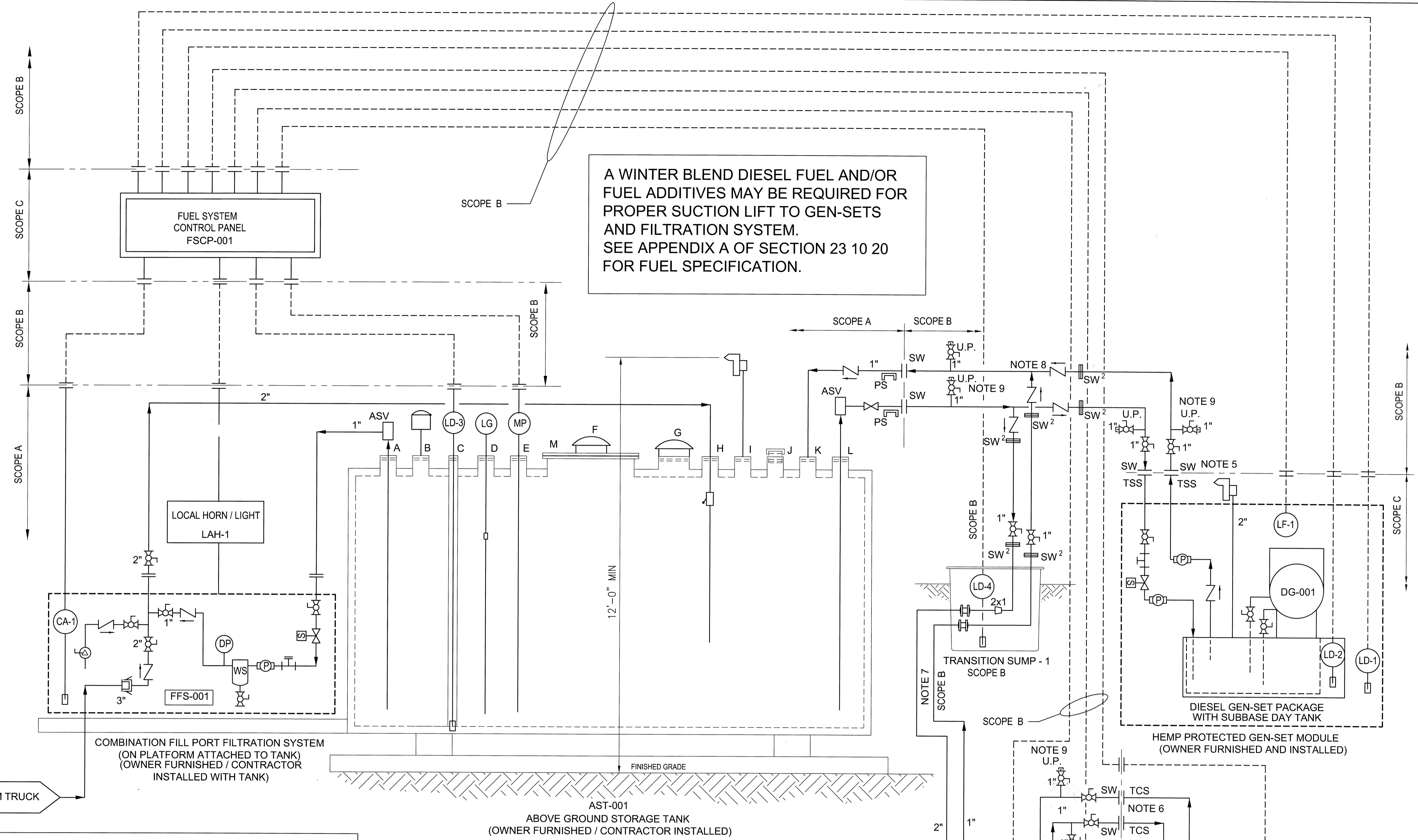
**FUEL MONITORING SYSTEM SCHEDULE**

INPUT	REMOTE MONITOR REPORTING
LD-1	LEAK DETECTION GENERATOR MODULE FLOOR
LD-2	LEAK DETECTION MODULE SUBBASE TANK
LD-3	LEAK DETECTION PRIMARY TANK
LD-4	LEAK DETECTION UG PIPING SUMP - 1
LD-5	LEAK DETECTION SUB-BASE TANK - SITE GENSET
LD-6	LEAK DETECTION UG PIPING SUMP - 2
LF-1	LOW FUEL ALARM SUBBASE TANK - MODULE GEN-SET
LF-2	LOW FUEL ALARM SUB-BASE TANK - SITE GENSET
LAH-1	LEVEL ALARM HIGH - LOCAL
MP	TANK LOW-LOW FUEL LEVEL (50%)
	TANK LOW FUEL LEVEL (60% - ORDER FUEL)
	TANK HIGH FUEL LEVEL (90% - TANK FULL / STOP FILL)
	TANK HIGH-HIGH LEVEL (92.5% - ALARM MESSAGE SENT)
	TANK FUEL VOLUME
	TANK WATER VOLUME
CA-1	COMMON ALARM FUEL FILTRATION SYS. CABINET

**AST NOZZLE SCHEDULE**

NOZZLE TAG	SIZE (INCH)	DESCRIPTION
A	4"	SUPPLY TO FUEL PURIFIER WITH ANTI-SIPHON VALVE
B	4"	SERVICE POINT FOR MANUAL CLEANING AND FILTRATION WITH 7 GALLON SPILL CONTAINER WITH LOCKABLE HINGED COVER
C	2"	INTERSTITIAL LEAK DETECTION
D	4"	MECHANICAL LEVEL GAUGE
E	4"	ELECTRONIC LEVEL SENSOR
F	8"	PRIMARY - EMERGENCY RELIEF
G	8"	SECONDARY - EMERGENCY RELIEF (INTERSTITIAL)
H	4"	FUEL FILL / RETURN FROM FUEL PURIFIER DROP TUBE WITH ANTI-SYPHON BLEED HOLE AND OVERFILL PROTECTION VALVE
I	4"	PRIMARY - NORMAL VENT (PRESSURE / VACUUM RELIEF)
J	4"	SPARE WITH PIPE NIPPLE AND LOCKABLE INSPECTION CAP
K	4"	RETURN FROM DAY TANK
L	4"	SUPPLY TO DAY TANK
M	24"	MANWAY WITH COVER PLATE, BOLTS AND GASKET

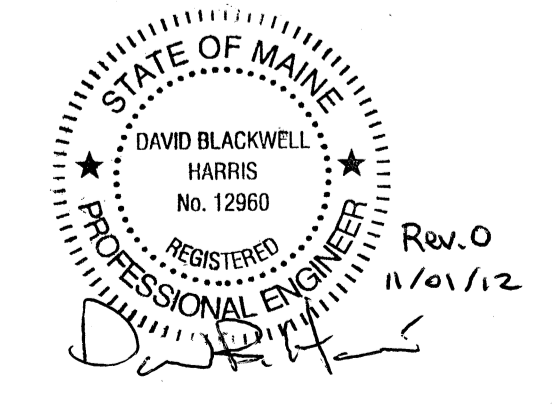
NOTES:  
1. ALL NOZZLES SHALL BE FPT COUPLINGS EXCEPT FOR THE FLANGED MANWAY.



A WINTER BLEND DIESEL FUEL AND/OR FUEL ADDITIVES MAY BE REQUIRED FOR PROPER SUCTION LIFT TO GEN-SETS AND FILTRATION SYSTEM. SEE APPENDIX A OF SECTION 23 10 20 FOR FUEL SPECIFICATION.

**NOTES:**

- REFERENCE SUPPLIER SUBMITTAL DATA FOR INFORMATION REGARDING THE FUEL STORAGE SYSTEM, THE HEMP PROTECTED GEN-SET MODULE, AND THE SITE GEN-SET. THESE ITEMS WILL BE OWNER FURNISHED AS INDICATED.
- THE FUEL STORAGE SYSTEM SHALL BE FACTORY ASSEMBLED BY SUPPLIER AND THEN SHIPPED TO SITE. SITE INSTALLATION CONTRACTOR SHALL INSTALL THE SYSTEM AT THE SITE IN ACCORDANCE WITH SYSTEM SUPPLIER'S INSTRUCTIONS.
- PROVIDE INTERCONNECTING FUEL OIL PIPING AND SIGNAL CABLES AS INDICATED. (SEE ELECTRICAL DRAWINGS)
- SEE DRAWING M-101 AND SPECIFICATION SECTION 23 10 20, FOR FULL SCOPE OF WORK FOR THE FUEL OIL SYSTEM.
- CONNECT FUEL PIPING TO HEMP PROTECTED GEN-SET USING FLANGES. FURNISH AND INSTALL THREADED STAINLESS STEEL FLANGES ON EQUIPMENT FUEL LINE STUB-OUTS.
- CONNECT FUEL PIPING TO SITE GEN-SET USING FLANGES. FURNISH AND INSTALL THREADED CARBON STEEL FLANGES ON EQUIPMENT FUEL LINE STUB-OUTS. USE FLANGE INSULATING GASKET KIT.
- ONE (1) 1" C10A DOUBLE WALL FLEXIBLE PIPING INSIDE ONE (1) AXP-40 FLEXIBLE CONDUIT ACCESS PIPE AND ONE (1) 2" C20A DOUBLE WALL FLEXIBLE PIPING INSIDE ONE (1) AXP-40 FLEXIBLE CONDUIT ACCESS PIPE (UNDERGROUND)
- LOCATE ALL FOUR OF THESE CHECK VALVES AS NEAR AS POSSIBLE TO TEES. CHECK VALVES TO BE OPW 175B WITH INTERNAL PRESSURE RELIEF, OR APPROVED EQUAL.
- UTILITY PORT (U.P.) SHALL CONSIST OF A SOCKET WELD TEE, POE/TOE PIPE NIPPLE, THREADED BALL VALVE (LOCKABLE) AND PLUG. ALL 1" 304L STAINLESS STEEL. UTILITY PORT TO BE USED AS A UTILITY CONNECTION FOR TESTING, PRIMING, DRAINING, AND VENTING. THE HIGH POINT PORTS SHALL BE INSTALLED IN THE VERTICAL POSITION, AND THE LOW POINT PORTS SHALL BE INSTALLED IN THE HORIZONTAL POSITION.



Project Manager	OC	Reviewer	Architectural	Structural	Plumbing	Electrical	Civil
11/7/12							

Designed by	DBH
Checked by	DBH
Drawn by	RAM
Reviewed by	CHB
Date	2012

33 SOUTH FERRY STREET, SUITE 200  
PORTLAND, ME 04102  
PHONE: (207) 452-7900  
FAX: (207) 452-7988

**KBR**  
Engineering Services by  
KBR Engineering Co., LLC

FEMA EMERGENCY RADIO NETWORK  
ON WIGAN PORTLAND, MAINE

**FUEL SYSTEM P&ID**

Drawing Number:  
**M-601**