GAS REGULATOR STATION DETAIL

OUTLET PRESSURE | REGULATOR MAX. CAPACITY (SCFH) | ORIFICE SIZE | SPRING NUMBER
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1/2 TO 2.5 PSIG | 230 | 3/8 | GE30343X012 (BLACK)
2.5 TO 5 PSIG | 490 | 3/8 | GE30343X012 (WHITE)
1.5 TO 5 PSIG | 230 | 3/8 | GE30426X012 (ORANGE)

GENERAL NOTES:
1. IF THIS SHEET IS NOT 24"X36" USE GRAPHIC SCALE ACCORDINGLY.

KEYED NOTES:
1. LANL's MSS SUBMIT AND INSTALL ADDITIONAL PRESSURE OF GAS REGULATORS.
2. SUBCONTRACTOR SHALL TERMINATE PIPING WITH A THREADED CAP OR PLUG AND ALLOW SUFFICIENT VERTICAL CLEARANCE BETWEEN TERMINATION POINTS FOR INSTALLATION OF PRESSURE REGULATOR.
3. LOCATE REGULATORS NOT CLOSER THAN 10 FEET HORIZONTALLY FROM INTAKE AIR DEVICES, 5000, ETC.
4. BOND ABOVE GROUND PIPING TO ELECTRICAL GROUNDING SYSTEM BOND TO GAS PIPING AT LOW PRESSURE REGULATOR AND UPSTREAM OF GAS APPLIANCE SHUT-OFF VALVE, COMPARE WITH NEC.
5. BOND GAS PIPING LOCATED WITHIN 6 FEET OF A LIGHTNING PROTECTION CONDUCTOR TO THE CONDUCTOR PRIOR TO THE REGULATOR (SPACE BETWEEN UPSTREAM OF LOW PRESSURE REGULATOR.

NOTES FOR DESIGNER:
1. WHEN EDITING DETAIL TO SUIT PROJECT, AND JOB SPECIFIC REQUIREMENTS DELETE ONLY THOSE THAT DO NOT APPLY, TO AVOID VARIANCE FROM APPLICABLE REQUIREMENTS, CONTACT THE ESM CIVIL.
2. VERIFY NATURAL GAS INLET PRESSURE AND SIZE REGULATOR ACCORDINGLY.
3. REFER TO THE FOLLOWING LAM STANDARDS FOR ADDITIONAL REQUIREMENTS
   1. 4.06 ENGINEERING STANDARDS MANUAL, CIVIL, CHAPTER 3
   2. 4.06 CIVIL DRAWINGS ST-G056-1, BOLLARD DETAIL
   3. MASTER SPECIFICATION 33 1016, NATURAL GAS DISTRIBUTION SYSTEM.
   4. MASTER SPECIFICATION 23 1122, NATURAL GAS PIPING SYSTEM (BUILDING).
4. PROVIDE 4" DIAMETER PIPE BOLLARDS IF VEHICLES ARE LIKELY TO COME IN CONTACT WITH REGULATOR STATION. BOLLARDS FOR PROTECTING GAS SERVICES WILL BE 3'-6" ABOVE AND 2'-6" BELOW GRADE WITH BASE BEING 4" OF CONCRETE ALL AROUND.
5. CONTACT LANL UTILITIES AND INSTITUTIONAL FACILITIES FOR SPECIAL DESIGN, AND WHEN EXCEPTIONS TO THESE STANDARDS ARE NECESSARY I.E. LOCATION OF REGULATOR, FLOW CAPACITIES, ETC.
6. INSTALL AS APPROVED APPLIANCE REGULATIONS AT EACH APPLIANCE ON 1 PSIG OR 2 PSIG GAS PIPING SYSTEMS. SEPARATE VENTS TO THE OUTSIDE ARE NOT REQUIRED PROVIDING APPLIANCE REGULATORS HAVE MAXIMUM DISCHARGE RATE THROUGH VENT OF 0.5 CFM AT 2 PSIG. INSTALL REGULATORS IN classify-building well-ventilated interior location, READY ACCESSIBLE FOR SERVICING.
7. INSTALL BOLT PROTECTION ABOVE REGULATOR STATION IF STATION IS LOCATED ON SLOPE END OF ROOF.
8. INSTALL BOLT PROTECTION ABOVE REGULATOR STATION IF STATION IS LOCATED ON SLOPE END OF ROOF.
9. DESIGN DRAWINGS AND SUBMITTALS OF SITE NATURAL GAS PIPING SYSTEM SHALL BE REVIEWED AND APPOINTED FOR LANL UTILITIES AND INSTITUTIONAL FACILITIES REPRESENTATIVE.