PLUMBING SPECIFICATIONS

GENERAL NOTES:

A. THE WORK INCLUDES PROVIDING THE INDICATED SYSTEMS AND PROVIDING NEW MATERIALS, FITTINGS AND ACCESSORIES NECESSARY FOR COMPLETE FUNCTIONING SYSTEMS. THE WORK ALSO INCLUDES FINAL CONNECTIONS TO ALL EQUIPMENT PROVIDED BY THIS CONTRACTOR AS WELL AS ALL EQUIPMENT PROVIDED BY OTHERS. ALL WORK SHALL BE IN ACCORDANCE WITH LOCAL CODES AND/OR ORDINANCES AND IS SUBJECT TO INSPECTION.

B. THE INTENT OF THE DRAWINGS IS TO INDICATE THE GENERAL EXTENT OF WORK REQUIRED FOR THE PROJECT. THE DRAWINGS ARE DIAGRAMMATIC SHOWING THE GENERAL LOCATION, TYPE, FIXTURES AND EQUIPMENT REQUIRED. THE DRAWINGS SHALL NOT BE SCALED FOR EXACT MEASUREMENTS. REFER TO MANUFACTURERS STANDARD ROUGH-IN DRAWINGS FOR EXACT CONNECTION LOCATIONS.

C. COORDINATE WITH THE WORK OF OTHER TRADES AND WITH EQUIPMENT FURNISHED BY OTHERS.

PIPING SYSTEMS - GENERAL:

A. ALL PIPING SHALL BE RUN PARALLEL TO BUILDING LINES, SUPPORTED AND ANCHORED AS REQUIRED TO FACILITATE EXPANSION AND CONTRACTION. ALL PIPING SHALL BE CONCEALED EXCEPT IN UNFINISHED SPACES. INSTALL AS REQUIRED TO MEET ALL CONSTRUCTION CONDITIONS AND TO ALLOW FOR INSTALLATION OF OTHER WORK INCLUDING DUCTS AND ELECTRICAL CONDUIT. AT ALL CONNECTIONS BETWEEN FERROUS PIPING AND NONFERROUS PIPING, PROVIDE AN ISOLATING DIELECTRIC UNION. ALL HANGERS SHALL BE COMPATIBLE WITH PIPING MATERIAL TO PREVENT CORROSION.

B. PROVIDE ALL FITTINGS, ACCESSORIES, OFFSETS, AND MATERIALS NECESSARY TO FACILITATE THE PLUMBING SYSTEM'S PROPER OPERATION AS IDICATED BY THE DESIGN AND THE EQUIPMENT INDICATED.

FIXTURE TRIM:

A. PROVIDE ALL FITTINGS, ACCESSORIES, OFFSETS, AND MATERIALS NECESSARY TO FACILITATE THE PLUMBING SYSTEM'S PROPER OPERATION AS IDICATED BY THE DESIGN AND THE EQUIPMENT INDICATED.

WASTE PIPING AND FITTINGS:

A. SANITARY DRAINAGE PIPING ABOVE FLOOR SHALL BE PVC SCHEDULE 40 WITH PRIMED AND SOLVENT JOINTS. ALL DRAINAGE PIPING UP TO 4" SHALL BE SLOPED UNIFORMLY AT 1/4" PER FOOT. ALL PIPING 4" AND LARGER SHALL BE SLOPED AT 1/8" PER FOOT.

VENT PIPING AND FITTINGS ABOVE GRADE:

A. PROVIDE COMPLETE SYSTEM OF PVC SCHEDULE 40.

CONDENSATE AND INDIRECT DRAIN PIPING:

A. TYPE "M" COPPER TUBING UP TO 1" ID, TYPE DWV TUBINGS AND FITTINGS FOR 1-1/4" & LARGER SIZES.

WATER DISTRIBUTION PIPING:

A. LAYOUT WATER PIPING SO THAT THE ENTIRE SYSTEM CAN BE DRAINED. HOT AND COLD WATER PIPING SHALL BE TYPE 'L' COPPER TUBING WITH WROUGHT COPPER FITTINGS AND SWEAT CONNECTIONS FOR ALL ABOVE FLOOR PIPING. INSTALL CHROME PLATED BRASS ESCUTCHEON PLATES AT ALL PENETRATIONS THROUGH FINISHED SURFACES (INCLUDING CABINET INTERIORS). USE AWS BCUP-5 FILLER MATERIAL FOR ALL SWEAT FITTINGS OF COPPER PIPING. SHUTOFF VALVES WITH UNIONS SHALL BE PROVIDED FOR SERVICE TO EACH PLUMBING FIXTURE OR OTHER EQUIPMENT ITEM TO FACILITATE ISOLATION FOR REPAIR OR REPLACEMENT.

SUPPLIES AND TRAPS:

A. PROVIDE WATER SEALED TRAPS AND/OR SUPPLIES INSTALLED AS CLOSE AS POSSIBLE TO ALL PLUMBING FIXTURES .DRAINS AND EQUIPMENT FURNISHED BY OTHERS, HAVING A WASTE CONNECTION, OR REQUIRING WATER SERVICE. EXPOSED TRAPS AND SUPPLIES IN EXPOSED AREAS (INCLUDING CABINET INTERIORS) SHALL BE CHROMIUM PLATED BRASS, WITH ONE-PIECE CHROME PLATED ESCUTCHEON PLATES.

INSTALLATION:

A. THOROUGHLY CLEAN ITEMS BEFORE INSTALLATION. CAP PIPE OPENINGS TO EXCLUDE DIRT UNTIL FIXTURES ARE INSTALLED AND FINAL CONNECTIONS HAVE BEEN MADE. PROCEED AS RAPIDLY AS CONSTRUCTION WILL PERMIT. SET FIXTURES LEVEL AND IN PROPER ALIGNMENT. INSTALL SUPPLIES IN PROPER ALIGNMENT WITH FIXTURES. INSTALL SILICONE SELANT BETWEEN FIXTURES AND ADJACENT MATERIAL.

B. TEST WATER SYSTEM UNDER 125 PSIG HYDROSTATIC PRESSURE. FOR FOUR(4) HOURS MINIMUM WITH MAXIMUM ALLOWABLE PRESSURE VARIANCE OF 1/2 PSIG. WHEN TESTING INDICATES MATERIALS OR WORKMANSHIP IS DEFICIENT, REPLACE OR REPAIR AS REQUIRED, AND REPEAT TEST UNTIL STANDARDS ARE ACHIEVED. SANITARY SEWER TO BE TESTED AT 5 PSIG HYDROSTATIC PRESSURE FOR ONE(1) HOUR WITH MAXIMUM ALLOWABLE PRESSURE VARIANCE OF 1/2 PSIG.

C. DISINFECT, CLEAN AND FLUSH DOMESTIC COLD WATER PIPING. DISINFECT DOMESTIC WATER PIPING BY ADDING HYPOCHLORITE (50 PPM MIN) TO SYSTEM AND LET STAND FOR 24 HOURS. FLUSH SYSTEM UNTIL WATER RUNS CLEAR WHILE OPENING AND CLOSING ALL VALVES SEVERAL TIMES. SUBMIT WATER SAMPLE TO TESTING LABORATORY. REPEAT DISINFECTION OF WATER SYSTEM UNTIL LAB RESULTS ARE ACCEPTABLE.

CLEANOUTS:

A. PROVIDE CLEANOUTS AT THE END OF EACH HORIZONTAL RUN, AND AT THE BASE OF ALL VERTICAL WASTE AND DRAIN PIPES OR AT POINTS AS REQUIRED BY LOCAL CODES. CLEANOUTS SHALL BE OF THE SAME SIZE AS THE PIPES THEY SERVE. PROVIDE WALL AND FLOOR CLEANOUTS WITH ACCESSORIES TO OBSCURE FROM VIEW.

PLUMBING MATERIALS

WATER DISTRIBUTION SYSTEM

PIPING:	TUBE - TYPE 'L' COPPER (ASTM B88). FITTINGS - WROUGHT COPPER (ASME B16.22) JOINTS - 95-5 TIN ANTIMONY (ASTM B32).
VALVES:	BALL VALVE - BRONZE, STANDARD PORT, 2 PIECE, SOLDER ENDS, 400 WOG. STOP AND DRAIN VALVE - BRONZE, STANDARD PORT, BALL VALVE WITH DRAIN CAP, SOLDER END, 400 WOG.
HANGERS:	INSULATION - INSULATION HANGER WITH SUPPORT SHIELD. BARE TUBING - COPPER-ELECTROPLATED CARBON STEEL (ASTM LS).

SOIL WASTE AND VENTING SYSTEMS

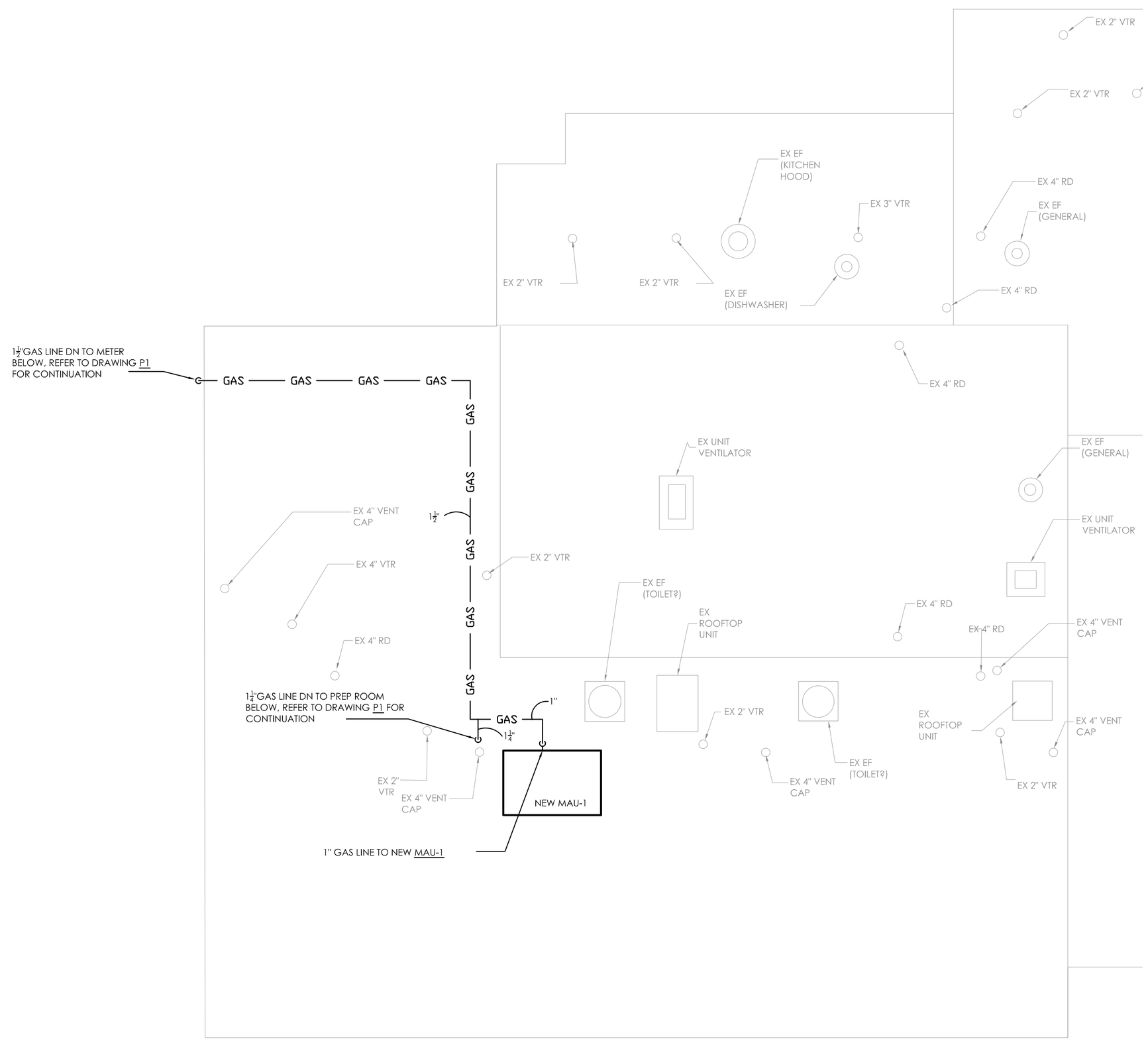
ABOVE GRADE:	PIPE AND FITTINGS - PVC SCHEDULE 40 PRIMED AND SOLVENT WELDED JOINTS - STAINLESS CLAMP WITH NEOPRENE GASKET. HANGERS - STANDARD CLEVIS, HEAVY DUTY.

INSULATION - WATER DISTRIBUTION SYSTEM

TYPE:	FIBERGLASS PIPE COVERING WITH FRK ALL SERVICE JACKET AND SELF-SEAL LAP WITH NON-COMBUSTIBLE MATERIALS MEETING ALL LOCAL JURISDICTION CODES AND ORDINANCES. FIRE AND SMOKE HAZARD RATINGS SHALL BE AS TESTED IN CONFORMANCE WITH ASTM E-84. NATIONAL FIRE PROTECTION AGENCY 255 AND UL 723, NOT EXCEEDING FLAME SPREAD RATINGS OF 25 AND A SMOKE DEVELOPED RATING OF 50. NO STAPLES ARE ALLOWED TO BE THROUGH VAPOR BARRIER.
VALVES:	OVERSIZED PIPE COVERING OF SAME MATERIAL AND THICKNESS AS ADJACENT PIPE COVERING. FINISH WITH PVC JACKET.
COLD WATER:	ALL HORIZONTAL AND VERTICAL MAINS AND BRANCH PIPING EXCEPT SUPPLY STUB-OUTS. 1/2" THRU 4" = 1/2" THICK INSULATION.
HOT WATER:	ALL HORIZONTAL AND VERTICAL MAINS AND BRANCH PIPING EXCEPT SUPPLY STUB-OUTS. 1/2" THRU 1" = 1" THICK INSULATION.

ACCEPTABLE MANUFACTURERS

DRAINS, CLEANOUTS: JOSAM, J.R. SMITH, WADE, ZURN.



1 P2 GAS PIPING ROOF PLAN

SCALE: 1/8" = 1'-0"

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2-25-13

PROGRESS DATES

DESIGN REVIEW SET	02/18/13
CODE & BIDDING SET	02/25/13

ST. JOSEPH'S CATHOLIC ACADEMY

901 Boalsburg Pike
Boalsburg, PA 16827

SCIENCE LAB RENOVATIONS

GAS PIPING ROOF PLAN & SPECIFICATIONS

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