

## PLUMBING GENERAL NOTES:

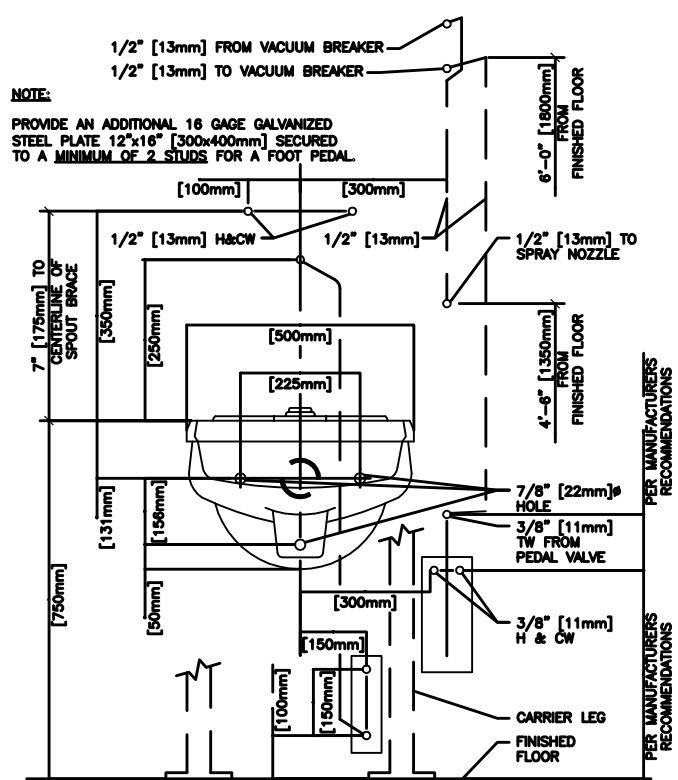
- LOCATIONS AND ROUTING OF EXISTING PIPING, DUCTWORK AND EQUIPMENT IS PRESUMED FROM EXISTING DRAWINGS. MECHANICAL CONTRACTOR SHALL FIELD VERIFY ALL PRIOR TO COMMENCEMENT OF CONSTRUCTION. NOTIFY ENGINEER OF ANY CONDITIONS WHICH WILL NOT PERMIT THE WORK TO BE PERFORMED AS INDICATED ON THESE DRAWINGS.
- COORDINATE ALL SHUT-DOWNS OF EXISTING MECHANICAL SYSTEMS WITH OWNER A MINIMUM OF TEN (10) WORKING DAYS IN ADVANCE.
- PRIOR TO INSTALLATION, VERIFY PRECISE LOCATION OF NEW WALL MOUNTED DEVICES WITH OWNER AND ARCHITECT.
- PROVIDE ADEQUATE SERVICE CLEARANCE FOR ALL MECHANICAL EQUIPMENT. REFER TO INSTRUCTIONS FROM THE EQUIPMENT MANUFACTURER.
- NEW PIPING SHALL NOT BE ROUTED ABOVE ELECTRICAL PANELS. REFER TO ELECTRICAL DRAWINGS FOR LOCATION OF PANELS.
- WHERE EXISTING FIXTURES ARE TO BE REMOVED, REMOVE ALL ASSOCIATED BRANCH PIPING WHICH IS NOT TO BE REUSED. REMOVE PIPING TO MAINS AND CAP REMAINING PIPES.

## MEDICAL GAS GENERAL NOTES:

- PROVIDE MEDICAL GAS PIPING SYSTEMS AND PIPE LABELS COMPLYING WITH REQUIREMENTS OF NFPA 99 "STANDARD FOR HEALTH CARE FACILITIES".
- INSTALLATION AND CERTIFICATION SHALL COMPLY WITH ASSE/ANSI SERIES 6000, "PROFESSIONAL QUALIFICATIONS STANDARDS FOR MEDICAL GAS SYSTEMS INSTALLERS, INSPECTORS AND VERIFIERS".
- PROVIDE COMPATIBLE ACCESSORIES, TUBE, FITTING, AND VALVES FOR EACH SYSTEM.
  - OUTLET / INLET STYLE:
    - DISS
  - MEDICAL GAS TUBE, FITTINGS AND JOINTS: PRE-CLEANED AND SEALED COPPER TUBE: ASTM B 88, TYPE K OR TYPE L, WATER TUBE, SEAMLESS, DRAWN TEMPER, CLEANED FOR MEDICAL GAS USE, PURGED, AND WITH ENDS SEALED.
  - MEDICAL SYSTEM ACCESSORIES: PROVIDE THE MEDICAL GAS SYSTEM ACCESSORIES FROM MANUFACTURER OF EXISTING ACCESSORIES, COMPATIBLE WITH EXISTING SYSTEMS.
  - SERVICE OUTLETS: INCLUDE BRASS VALVE AND BODY BLOCK WITH SEALS IN ROUGH-IN AND FINISHING ASSEMBLIES. STEEL OUTLET BOX AND COVER PLATE; 3/8" INCH TYPE K OR L COPPER TUBE BRAZED TO VALVE; AND PRESSURE OUTLETS WITH AUTOMATIC SECONDARY SERVICE VALVE TO PREVENT GAS FLOW WHEN PRIMARY VALVE IS REMOVED. DISS COUPLING SHALL BE INDEXED TO PREVENT INTERCHANGE BETWEEN SERVICES. CONSTRUCTED TO PERMIT ONE HANDED CONNECTION AND REMOVAL OF EQUIPMENT WITH POSITIVE LOCKING RING WHICH RETAINS EQUIPMENT STEM IN VALVE DURING USE. OUTLET/INLET TYPE OF CONNECTION SHALL BE COORDINATED WITH THE OWNER PRIOR TO ORDERING EQUIPMENT.
- INSTALL LABELING ON VALVES, VALVE BOX COVERS, AND ALARM PANELS IN ACCORDANCE WITH REQUIREMENTS OF NFPA 99 AND VA STANDARDS. CAPTIONS AND COLOR CODING: PER THE REQUIREMENTS OF NFPA 99 AND VA STANDARDS.
- LOCATIONS AND ROUTING OF EXISTING PIPING, DUCTWORK AND EQUIPMENT IS PRESUMED FROM EXISTING DRAWINGS. MECHANICAL CONTRACTOR SHALL FIELD VERIFY ALL PRIOR TO COMMENCEMENT OF CONSTRUCTION. NOTIFY ENGINEER OF ANY CONDITIONS WHICH WILL NOT PERMIT THE WORK TO BE PERFORMED AS INDICATED ON THESE DRAWINGS.
- COORDINATE ALL SHUT-DOWNS IF EXISTING MEDICAL GAS AND VACUUM SYSTEMS WITH OWNER A MINIMUM OF TEN WORKING DAYS IN ADVANCE.
- PRIOR TO INSTALLATION, VERIFY PRECISE LOCATION OF NEW WALL MOUNTED DEVICES WITH OWNER AND ARCHITECT.
- PROVIDE ADEQUATE SERVICE CLEARANCE FOR ALL EQUIPMENT. REFER TO INSTRUCTIONS FROM THE EQUIPMENT MANUFACTURER.
- NEW PIPING SHALL NOT BE ROUTED ABOVE ELECTRICAL PANELS. REFER TO ELECTRICAL DRAWINGS FOR LOCATION OF PANELS.
- WHERE EXISTING FIXTURES ARE TO BE REMOVED, REMOVE ALL ASSOCIATED BRANCH PIPING WHICH IS NOT TO BE REUSED. REMOVE PIPING TO MAINS AND CAP REMAINING PIPES.
- MEDICAL GAS MATERIALS, EQUIPMENT AND INSTALLATION SHALL COMPLY WITH NFPA 99, HEALTH CARE FACILITIES. LATEST EDITION. INSTALLATION PERSONNEL SHALL BE QUALIFIED IN ACCORDANCE WITH ASSE SERIES 6000, "PROFESSIONAL QUALIFICATIONS FOR MEDICAL GAS SYSTEMS INSTALLERS, INSPECTORS AND VERIFIERS".

## LEAD SHIELDING NOTE

- REFER TO ARCHITECTURAL PLANS FOR DESIGNATED WALLS IN THE PROJECT AREA TO BE LINED WITH LEAD SHIELDING BY THE CONTRACTOR. FOR EXISTING MECHANICAL DEVICES THAT ARE INDICATED TO REMAIN, THE MECHANICAL CONTRACTOR SHALL REMOVE AND RE-INSTALL, OR RELOCATE THESE DEVICES. THE GC SHALL PROVIDE NEW LEAD SHIELDING FOR ALL SUCH DEVICES. FOR NEW MECHANICAL DEVICES, THE GC SHALL PROVIDE ALL LEAD SHIELDING FOR EACH DEVICE. THE MECHANICAL CONTRACTOR SHALL COORDINATE ALL SUCH WORK WITH THE GENERAL CONTRACTOR, AND SHALL ASSIST THE GENERAL CONTRACTOR IN THE PERFORMANCE OF THIS WORK. IN ANY CASE, ALL PLUMBING DEVICES, HVAC DEVICES, FIRE PROTECTION DEVICES, ETC. INSTALLED IN THESE WALLS SHALL BE SHIELDED WITH LEAD.



CLINIC SERVICE SINK ROUGH-IN DETAIL  
NTS

## PLUMBING SYMBOLS:

	REFERENCE TO CODED NOTE
	EQUIPMENT OR FIXTURE MARK
C.T.E.	CONNECT TO EXISTING
P.C.	PLUMBING CONTRACTOR
G.C.	GENERAL CONTRACTOR
	NATURAL GAS
	STORM WATER
	SANITARY WASTE
	PLUMBING VENT
	TEMPERED WATER
	DOMESTIC COLD WATER SUPPLY
	DOMESTIC HOT WATER SUPPLY
	DOMESTIC HOT WATER RETURN
	DOMESTIC HIGH TEMPERATURE HOT WATER
	ROOF DRAIN
	RAIN WATER CONDUCTOR
	FLOOR DRAIN
	X EXISTING TO REMAIN
	XR EXISTING TO BE REMOVED
	ISOLATION VALVE
	CHECK VALVE
	MOTORIZED CONTROL VALVE
	UNION
	REDUCER
	STRAINER
	BALANCING VALVE
	PIPE GUIDE
	PIPE EXPANSION ANCHOR
	FLEXIBLE METAL EXPANSION LOOP ASSEMBLY
	LIMIT OF DEMOLITION
	NEW WORK CONNECTION POINT

## MEDICAL GAS SYMBOLS:

	EXISTING TO BE RELOCATED
	EXISTING TO BE REMOVED
	EXISTING TO BE REMAINED
	MEDICAL OXYGEN
	MEDICAL AIR
	MEDICAL VACUUM
	PIPE DOWN
	PIPE RISE UP
	PIPE CAP
	BRANCH CONNECTION
	ISOLATION VALVE
	LOCKABLE VALVE (INLINE/SERVICE)
	MEDICAL GAS PRESSURE SENSOR
	MEDICAL GAS CONNECTION WITH OUTLET/INLET
	MEDICAL GAS VACUUM SLIDE
	MEDICAL GAS ALARM PANEL
	MEDICAL GAS VALVE BOX
	ACCESS SIDE OF VALVE BOX OR ALARM PANEL
	MEDICAL VALVE BOX
	MEDICAL ALARM PANEL

## PROJECT COORDINATION NOTES:

- THIS PROJECT CONSISTS OF MULTIPLE TRADES OF WORK PERFORMED WITHIN AN EXISTING BUILDING, ALL OF WHICH ALLOWS VERY LITTLE PERMISSIBLE RANGE OF VARIATION. THE CONTRACTOR SHALL TAKE CAREFUL CONSIDERATION WITH THE COORDINATION AND INSTALLATION OF THE MULTITUDE OF NEW SYSTEMS WHILE ALSO ACCOMMODATING ANY EXISTING SYSTEMS TO REMAIN.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL TRADES ASSOCIATED WITH THIS PROJECT AND ISSUING COORDINATION PLANS PRIOR TO COMMENCEMENT OF EACH PHASE OF CONSTRUCTION.
- THE COORDINATION DRAWINGS SHALL ILLUSTRATE ALL SYSTEMS IN PLACE. NO EXCEPTIONS! THE CONTRACTOR SHALL SHOW ALL NECESSARY OFFSETS, TRANSITIONS, ETC. AS REQUIRED IN ORDER TO ACCOMMODATE CONDITIONS IDENTIFIED IN THE FIELD.
- IF CONFLICTS ARE IDENTIFIED DURING THE DEVELOPMENT OF COORDINATION PLANS, THE CONTRACTOR SHALL NOTIFY THE VA COTR, ARCHITECT, AND/OR ENGINEER OF ANY CONDITIONS WHICH WILL NOT PERMIT THE WORK TO BE PERFORMED AS INDICATED ON THE PROJECT PLANS.
- A COMPLETED SET OF COORDINATION PLANS ISSUED FOR REVIEW SHALL CONFIRM THAT THE CONTRACTOR FULLY UNDERSTANDS THE PROJECT CONSTRAINTS AND ALL KNOWN CONFLICTS HAVE BEEN ADDRESSED.

## MEDICAL VALVE BOX SCHEDULE

VALVE BOX	OX	MV	MA	WALL WIDTH REQUIRED
MVB-1	1/2"	3/4"	1/2"	27.9"
MVB-2	1/2"	3/4"	1/2"	27.9"
MVB-3	1/2"	3/4"	1/2"	27.9"
MVB-4	1/2"	3/4"	1/2"	27.9"
MVB-5	1/2"	3/4"	1/2"	27.9"

NOTES:  
(1) LABEL PER VA STANDARDS

## MEDICAL GAS AREA ALARM PANEL SCHEDULE

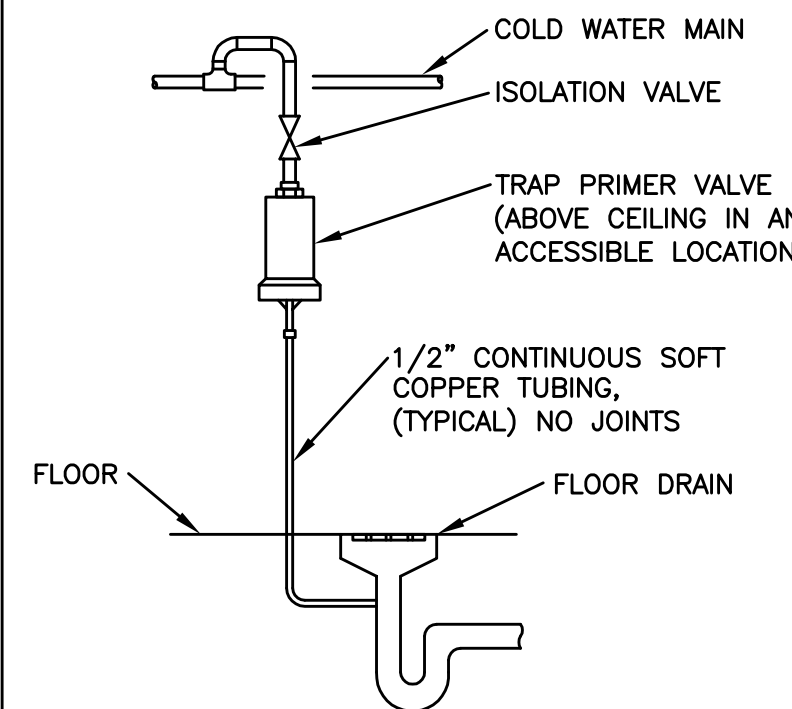
ALARM PANEL	VALVE BOX SERVED	WALL WIDTH REQUIRED	NOTES
MAP-1	MVB-1 THRU MVB-5	16"	1,2,3,4

- NOTES:  
(1) PROVIDE REMOTE SENSORS AND WIRING FROM SENSORS TO ALARM PANEL.  
(2) LABEL PER VA STANDARDS.  
(3) TIE ALARM PANEL ALARMS INTO BMS. BMS TO DISPLAY EACH ALARM.  
(4) PROVIDE A SIX MODULE ALARM PANEL WITH ALARM MODULES FOR OXYGEN, MEDICAL AIR, AND MEDICAL VACUUM. THE REMAINING MODULES SHALL BE BLANK.

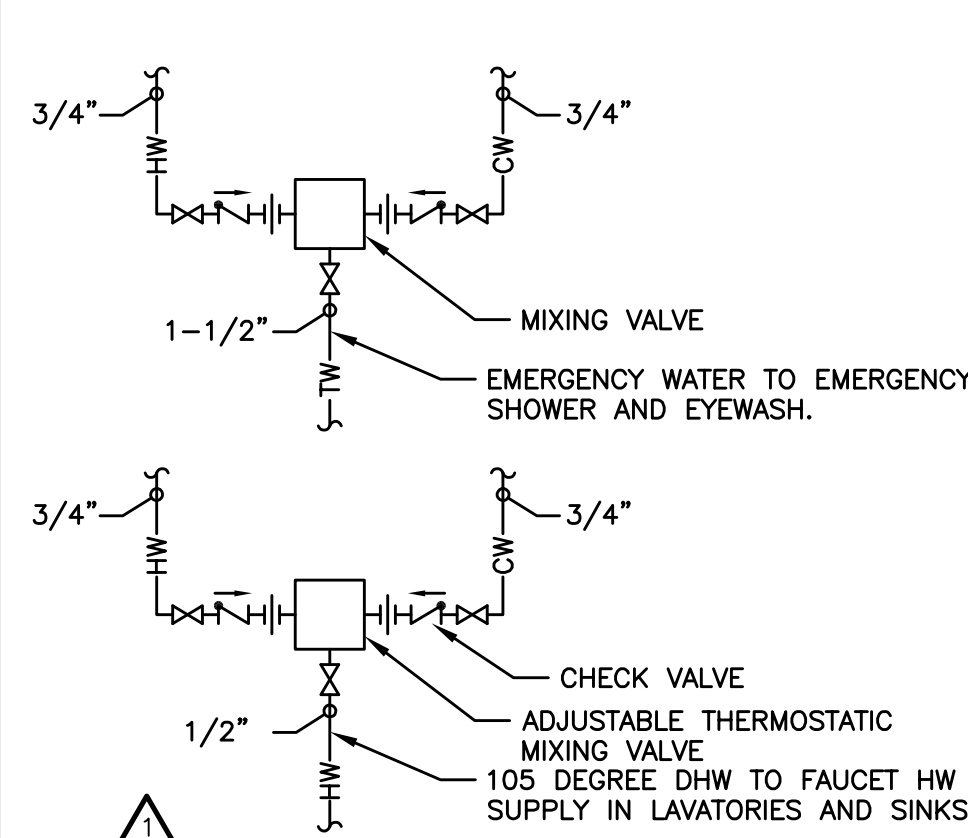
## PLUMBING FIXTURE CONNECTION SCHEDULE

MARK	FIXTURE	BRANCH PIPE SIZE			
		CW	HW	WASTE	VENT
P-103	WATER CLOSET WALL HUNG	1-1/2"	-	4"	2"
P-414	LAVATORY WALL HUNG	3/4"	3/4"	1-1/2"	1-1/2"
P-418	LAVATORY WALL HUNG	3/4"	3/4"	1-1/2"	1-1/2"
P-505	CLINIC SINK WALL HUNG	1-1/2"	3/4"	4"	2
P-528	STAINLESS STEEL DROP IN SINK	3/4"	3/4"	1-1/2"	1-1/2"
P-530	STAINLESS STEEL UNDERMOUNT SINK	3/4"	3/4"	1-1/2"	1-1/2"
P-531	STAINLESS STEEL UNDERMOUNT SINK	3/4"	3/4"	1-1/2"	1-1/2"
P-532	INTEGRAL STAINLESS STEEL SINK	3/4"	3/4"	1-1/2"	1-1/2"
P-609	ELECTRIC WATER COOLER	3/4"	-	1-1/2"	1-1/2"
P-707	EMERGENCY SHOWER/EYE WASH	3/4"	3/4"	-	-
P-810	MIXING VALVE	3/4"	3/4"	-	-
FD-A	FLOOR DRAIN	-	-	4"	2"
FD-C	FLOOR DRAIN	-	-	4"	2"

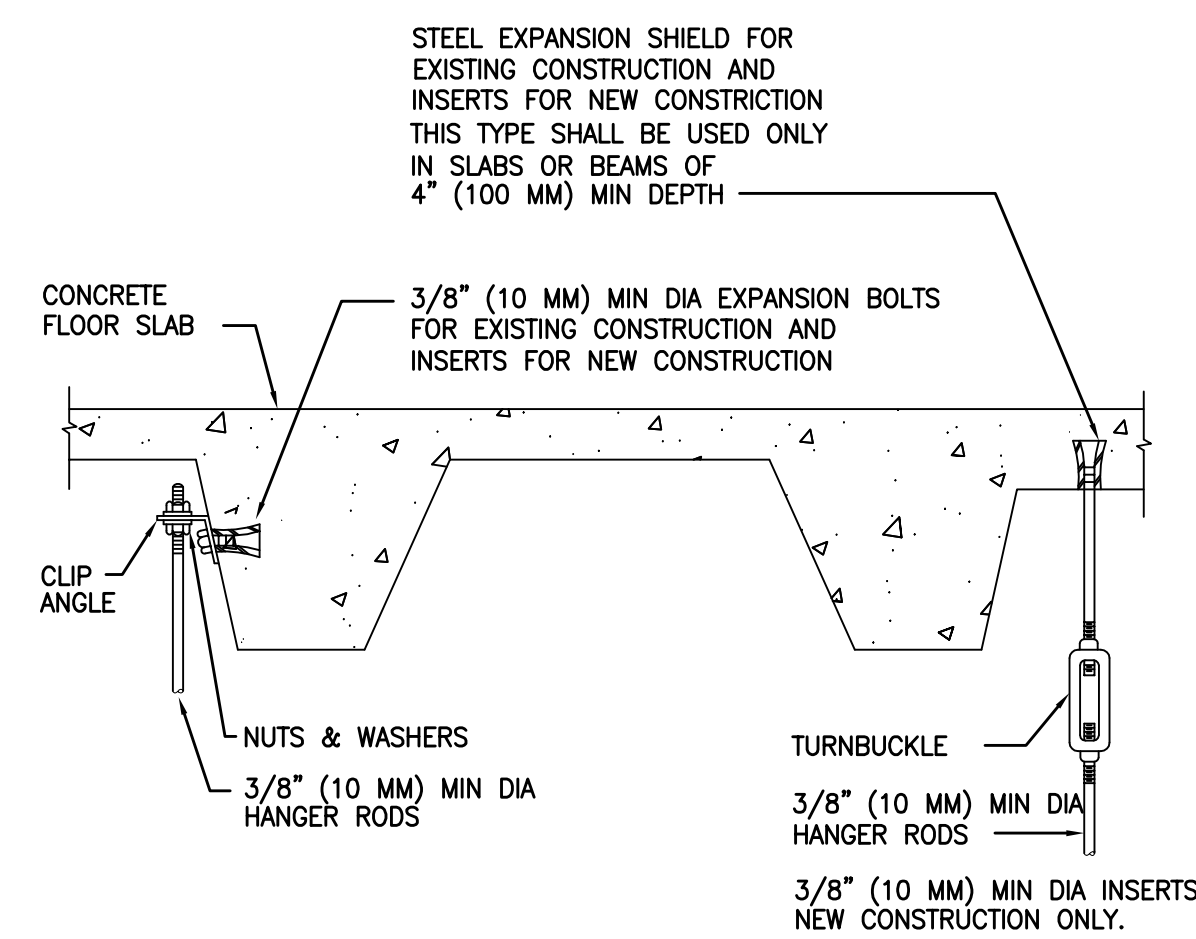
- NOTES:  
1. PROVIDE INSULATION PROTECTION FOR ALL ADA LAVATORIES.  
2. P-532 IS INTEGRAL TO COUNTERTOP. REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION. REFER TO SPECIFICATIONS FOR FAUCET AND PLUMBING REQUIREMENTS.  
3. PROVIDE A MIXING VALVE FOR EACH LAVATORY AND SINK FAUCET, PIPED TO THE HOT WATER SUPPLY.



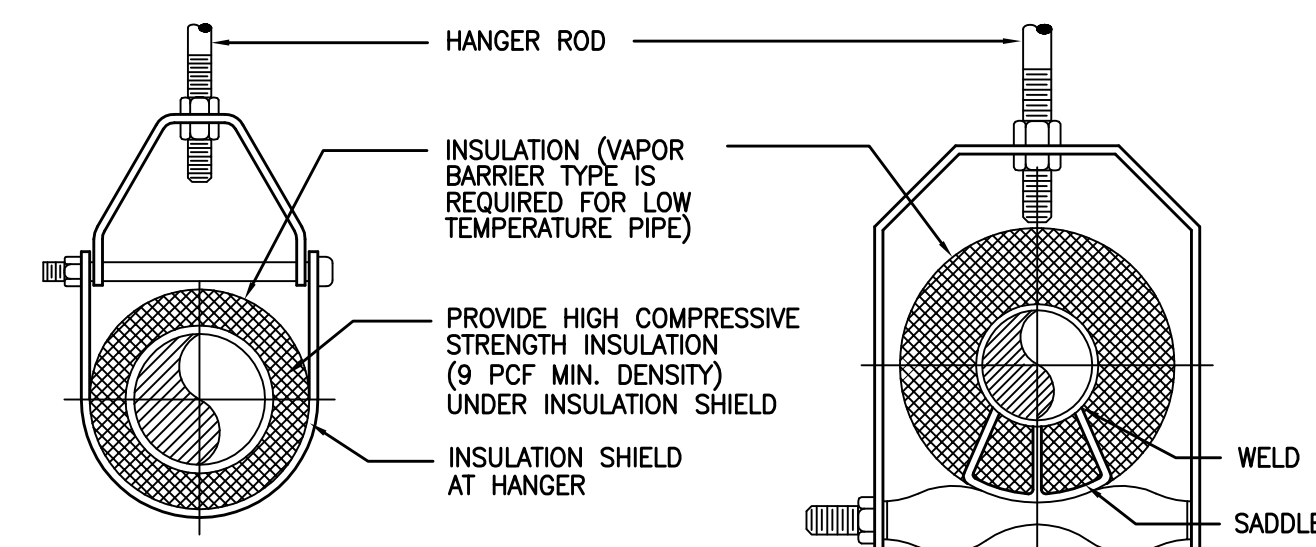
TRAP PRIMER DETAIL  
NOT TO SCALE



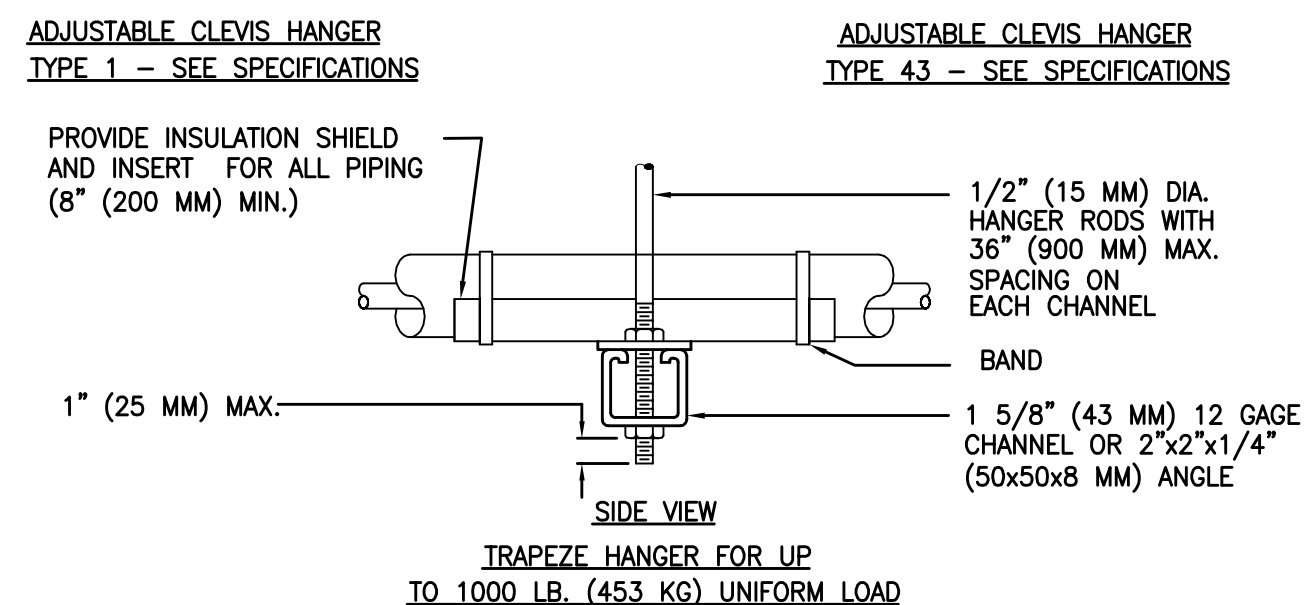
MIXING VALVE DETAIL  
NOT TO SCALE



TYPICAL METHOD OF SECURING HANGER RODS IN CONCRETE SLABS AND BEAMS  
NOT TO SCALE



KEY PLAN - BASEMENT  
Scale = None

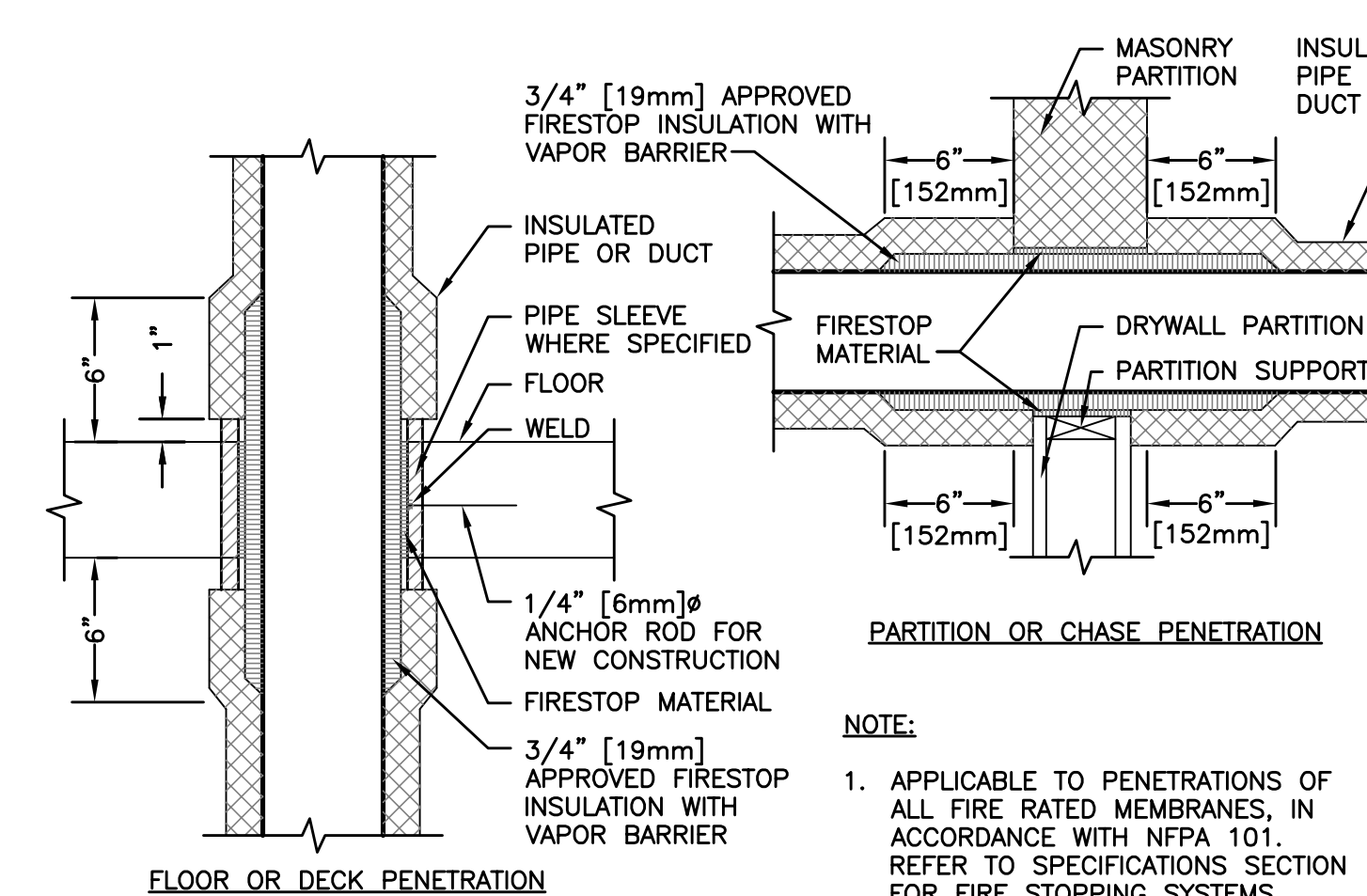


TYPICAL PIPE HANGERS  
NOT TO SCALE

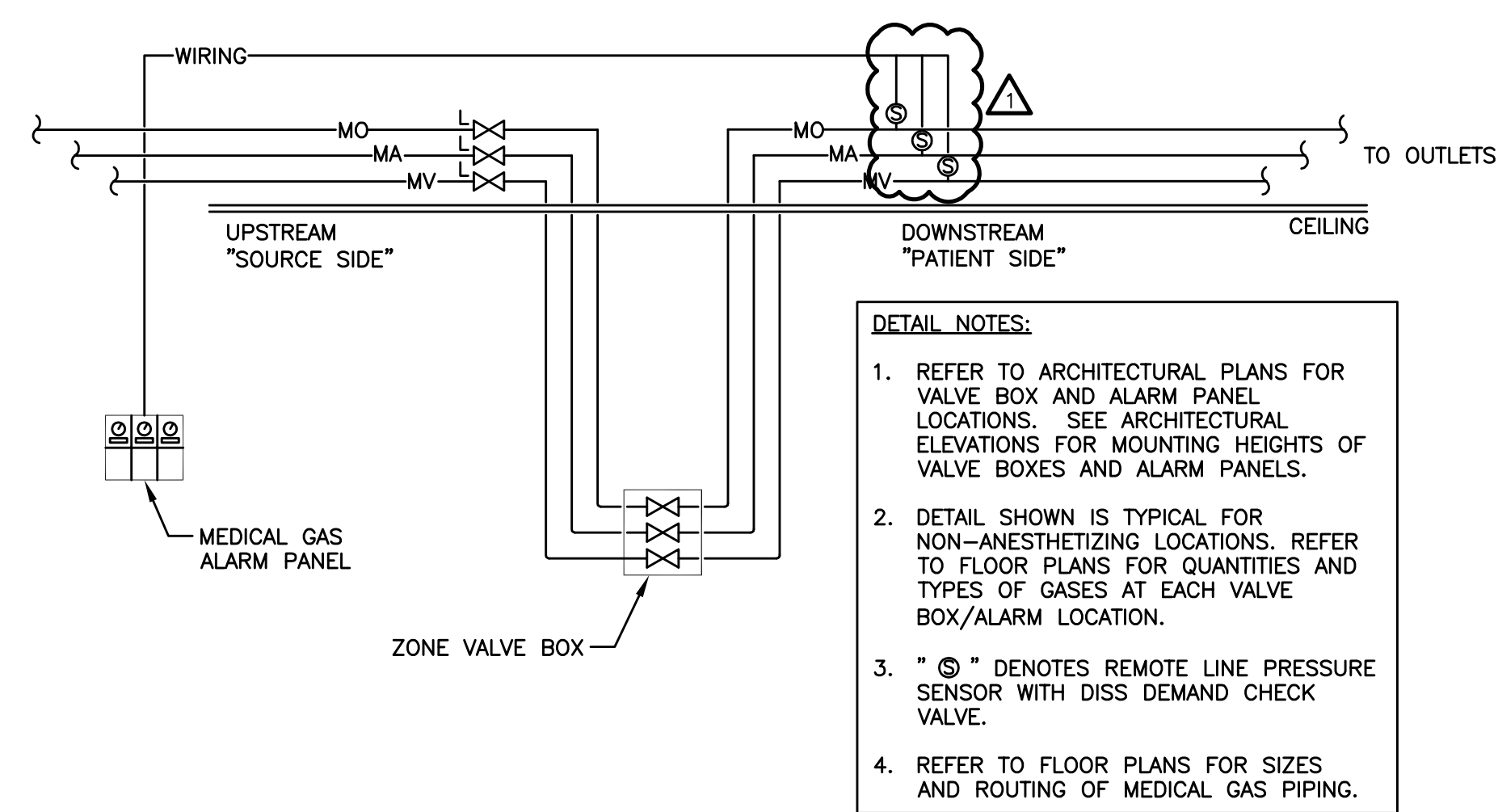
MAXIMUM PIPE/TUBING SUPPORT SPACING															
NOM. SIZE	$\frac{1}{4}$ "	$\frac{1}{2}$ "	$\frac{3}{4}$ "	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	4"	5"	6"	8"	10"	12"
PIPE	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
TUBING	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)

NOTE: FOR TRAPEZE HANGER CASE SPACING OF SMALLEST SIZE ON TRAPEZE.

NOTE: FOR TRAPEZE HANGER TAKE SPACING OF SMALLEST SIZE ON TRAPEZE.



PIPE/DUCT PENETRATION OF FIRE/SMOKE BARRIERS  
NOT TO SCALE



TYPICAL MEDICAL GAS VALVE BOX DETAIL  
NOT TO SCALE

FULLY SPRINKLERED

AMENDMENT 02	09/12/14
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Drawing Title  
**PLUMBING LEGEND, SCHEDULES, DETAILS, AND NOTES**

Approved: Project Director

Project Title  
**EXPAND AND RENOVATE NUCLEAR MEDICINE AND RADIOLOGY**

Location  
**VAMC - WADE PARK**

Date  
1-17-2014

Checked  
BMW

Drawn  
DAD

Project Number  
541-14-101

Building Number  
1

Drawing Number  
**1-P0**

Dwg. of

Office of  
Facilities  
Management

Department of  
Veterans Affairs