

GENERAL NOTES:

ALL ASSEMBLIES SHALL BE INSTALLED WITH A CENTERLINE HEIGHT MIN 18" OR AS PER LOCAL OR STATE CODES.

ANY INSTALLATION AT A GREATER HEIGHT THAN RECOMMENDED LOCAL OR STATE CODES SHALL BE PROVIDED WITH A FIXED PLATFORM.

LIFT SYSTEM SHALL BE PROVIDED AND INSTALLED AS PER OSHA STANDARDS.

ALL RPZ DEVICES MUST HAVE AN 18" MINIMUM CLEARANCE BETWEEN THE BOTTOM OF THE RELIEF VALVE AND FLOOR TO PREVENT SUBMERSION AND PROVIDED ACCESS FOR SERVICING AND RELIEF VALVE.

MIN 12" OF CLEAR SPACE SHALL BE MAINTAIN ABOVE THE ASSEMBLY TO ALLOW FOR SERVICING CHECK VALVES AND FOR OPERATION OF SHUT-OFF VALVES.

MIN 30" OF CLEAR SPACE SHALL BE MAINTAINED BETWEEN THE FRONT SIDE OF THE DEVICE AND THE NEAREST WALL OR OBSTRUCTION.

ALL SIDED MOUNTED TEST COCKS OR RELIEF VALVES WILL FACE THE BACK WALL.

THE ASSEMBLIES SHALL BE ADEQUATELY SUPPORTED TO PREVENT LATERAL MOVEMENT. PIPE HANGERS, BRACES, SADDLES, STANCHIONS, PIERS, ETC, SHOULD BE USED TO SUPPORT THE DEVICE AND SHOULD BE PLACE IN A MANNER THAT WILL NOT OBSTRUCT THE FUNCTION OF OR ACCESS TO THE RELIEF VALVES.

STRAINERS ARE TO BE INSTALLED PRIOR TO EACH BACKFLOW PREVENTION ASSEMBLY.

CONTRACTOR TO SUBMIT SHOP DRAWINGS SHOWING THAT THE ASSEMBLY IS SIZED HYDRAULICALLY, TAKING INTO ACCOUNT BOTH THE VOLUME REQUIREMENTS OF THE SERVICE AND THE HEAD LOSS OF THE ASSEMBLY AND STAMP BY REGISTER MECHANICAL ENGINEER.

BEFORE INSTALLATION THE CONTRACTOR SHALL REFER TO MANUFACTURERS LITERATURE FOR TEMPERATURE RANGES. ALL ASSEMBLIES MUST BE PROTECTED FROM FREEZING TEMPERATURES.

ALL ASSEMBLIES SHOULD BE SPECIFIED AND INSTALLED WITH THE MANUFACTURER SUPPLIED RESILIENT SEATED 'SHUT-OFF VALVES INTEGRAL TO THE ASSEMBLY.

WATER LINES SHALL BE THOROUGHLY FLUSHED BEFORE INSTALLING THE ASSEMBLY.

WHERE THE DISTANCE BETWEEN THE METER AND THE DEVICE IS GREATER THAN 10 FEET, ALL EXPOSED PIPING SHOULD BE STENCILED "FEED LINE TO BACKFLOW PREVENTER" DO NOT TAP AT 5 FOOT INTERVALS.

FOR RPZ DEVICES, DRAINAGE CAPACITY SHALL BE SIZED TO ACCOMMODATE BOTH INTERMITTENT DISCHARGES AND A CATASTROPHIC FAILURE OF THE RELIEF VALVE. REFER TO MANUFACTURERS FLOW CURVES TO DETERMINE MAXIMUM DISCHARGE RATE BASED ON SUPPLY PRESSURE OR ON SITE PRESSURE.

ALL DRAINAGE FROM RPZ's MUST BE BY GRAVITY DRAINS. SUMP PUMPS ARE NOT ALLOWED.

AN AIR GAP MUST BE MAINTAINED BETWEEN THE RPZ RELIEF VALVE OPENING AND ANY DISCHARGE PIPING. THE AIR GAP MUST BE AT LEAST TWICE THE DIMENIONS OF THE EFFECT OPENING OF THE RELIEF VALVE.

AFTER AN APPROVAL OF PLANS AND THE INSTALLATION OF THE ASSEMBLY, IT MUST BE TESTED BY A CERTIFIED TESTER.

VALVES:

METER INLET AND OUTLET SHUT-OFF VALVES, AND BY-PASS VALVES SHALL BE FLANGED, HAND-WHEEL OPERATED, NON-RISING STEM GATE VALVES. ALL GATE VALVES SHALL BE RESILIENT-SEATED GATE VALVES BODY, BONNET, AND SEAL PLATE SHALL BE FUSION-BONDED EPOXY COATED ON ALL EXTERIOR AND INTERIOR SURFACES IN ACCORDANCE WITH ANSI/AWWA C550. ALL VALVES WILL OPEN BY TURNING THE HAND-WHEEL COUNTERCLOCKWISE. THE WORD OPEN AND AN ARROW TO INDICATED THE DIRECTION OF OPENING THE VALVES SHALL BE CAST ON THE RIM OF THE HAND-WHEEL.

PIPING:

ALL 3" THROUGH 10" PIPING SHALL BE DUCTILE IRON. PIPING INSIDE VAULTS SHALL BE FLANGED. PIPING OUTSIDE VAULTS SHALL BE MECHANICAL JOINT WITH MEGA-LUGS, OR RESTRAINED JOINT AS SHOWN ON THE DETAIL DRAWING.

FITTINGS:

ALL FITTINGS, INCLUDING SPOOLS AND FLANGED BY PLAIN END PIPE, SHALL BE DUCTILE IRON WITH A MINIMUM WATER, OIL, AND GAS (WOG) WORKING PRESSURE OF 250 psi. ALL FLANGES AND GLANDS SHALL BE DUCTILE IRON. INTERIORS SHALL BE CEMENT LINED WITH ASPHALTIC SEAL COAT AND EXTERIORS SHALL BE COATED WITH A BITUMINOUS COATING.

CONTRACTOR SHALL PROVIDED AND INSTALL AS DIRECTOR BY COR CL INJECTION AND CL READER SO, THE VAMC SALISBURY CAN MONITOR THE CL AMOUNT FROM THE CITY SUPPLY.

SYMBOLS

- GATE VALVE
- CHECK VALVE
- RPZ CHECK VALVE UNIT
- M METER
- ROSS PRESSURE REDUCING VALVE
- S STRAINER

AS-BUILTS

ARE PROVIDED IN THE CONTRACT DOCUMENTS FOR CONTRACTOR TO REVIEW. CONTRACTOR SHALL PROVIDE TWO NEW WATER VAULT STRUCTURES, BACKFLOWS, METERS, ELECTRICAL, AND MECHANICAL ITEMS AS REQUIRED. NEW SYSTEM SHALL MAINTAIN THE CAPABILITIES OF THE EXISTING SYSTEM EXCEPT NEW SYSTEM TO BE UPGRADED TO MEET CITY OF SALISBURY REQUIREMENTS AND CONTRACT DOCUMENTS.

KEY REQUIREMENTS:

CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF PLUMBING SYSTEM THAT HAS BEEN STAMPED AND APPROVED BY REGISTER PROFESSIONAL ENGINEER.

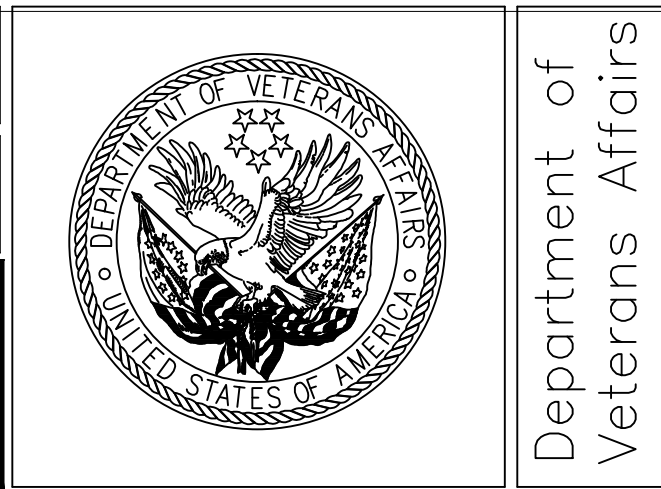
Revision	Date

RECOMMEND APPROVAL			
REQUESTER	Date		
CHIEF OF SERVICE	Date	CHIEF OF STAFF	Date
ASSOC. DIR. PATIENT CARE SVC.	Date	ASSOC. DIR. for OPERATIONS	Date
APPROVAL BY:			Date
MEDICAL CENTER DIRECTOR			

Drawing Title
BACKFLOW PREVENTER(S) & WATER METER [NORTH]
Approved: Safety Manager/M&O Supervisor
Approved:Chief of Facilities Management Srv.

Project Title
REBUILD BACKFLOW PREVENTERS & SHELTERS
Building Number CAMPUS
Checked
Drawn BLF
Location
W.G.(Bill) Hefner Medical Center 1601 Brenner Ave. Salisbury NC 28144

Date
01 OCT 2013
Project No.
659-14-005
DRAWING NO.
P-101
DWG. 6 OF 14



Department of
Veterans Affairs