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E

three inches = one foot
one and one half inches = one foot
one inch = one foot
three quarters inch = one foot
one half inch = one foot
three eighths inch = one foot
one quarter inch = one foot
one eighth inch = one foot

PLUMBING SYMBOL LEGEND

(NOTE: NOT ALL SYMBOLS ARE USED IN THIS PROJECT)

SYMBOL	DESCRIPTION
	90° ELBOW
	45° ELBOW
	BRANCH CONNECTION OUT OF SIDE
	BRANCH CONNECTION OUT OF TWO SIDES
	RISER DOWN (ELBOW)
	BRANCH CONNECTION OUT OF BOTTOM
	BRANCH CONNECTION OUT OF BOTTOM TO 90° ELBOW
	BRANCH CONNECTION OUT OF TOP TO 90° ELBOW
	RISER DOWN TO 90° ELBOW
	BALL VALVE
	BUTTERFLY VALVE
	CHECK VALVE
	CIRCUIT SETTER
	GAS COCK
	GATE VALVE
	GLOBE VALVE
	PLUG VALVE
	PRESSURE REDUCING VALVE
	SOLENOID VALVE
	2-WAY MOTORIZED VALVE
	3-WAY MOTORIZED VALVE
	3-WAY VALVE
	ANGLE VALVE
	SWING CHECK VALVE
	UNION
	FLOW - IN DIRECTION OF ARROW
	CONCENTRIC REDUCER
	REDUCED PRESSURE ZONE BACKFLOW ASSEMBLY (RPZ)
	STRAINER-WYE
	STRAINER-WYE WITH BLOW OFF
	CAP ON END OF PIPE
	FLOOR CLEANOUT (SAME SIZE AS PIPE)
	CLEANOUT TO GRADE (SAME SIZE AS CARRIER PIPE)
	DOUBLE CLEANOUT TO GRADE (SAME SIZE AS CARRIER PIPE)
	WALL CLEANOUT
	CLEANOUT PLUG
	SHORT SWEEP BEND
	LONG SWEEP BEND
	VENT TEE
	SANITARY TEE
	WYE
	DOUBLE WYE
	DOUBLE SANITARY TEE
	WYE W/8TH BEND
	DBL. COMBINATION WYE W/8TH BEND
	1/8TH BEND

PLUMBING SYMBOL LEGEND

(NOTE: NOT ALL SYMBOLS ARE USED IN THIS PROJECT)

SYMBOL	DESCRIPTION
	PIPE ANCHOR
	FLEXIBLE CONNECTOR (FLEX. CONN.)
	WATER HAMMER ARRESTOR
	PRESSURE GAUGE
	THERMOMETER
	VALVE IN CAST IRON BOX
	NATURAL GAS CONNECTION
	COMPRESSED AIR CONNECTION
	AIR ADMITTANCE VALVE (MAXI STUDOR VENT)
	NEW PLUMBING FIXTURE
	EXISTING PLUMBING FIXTURE
	DEMOLISHED PLUMBING FIXTURE
	TANKLESS DOMESTIC WTR. HEATER
	DOMESTIC WATER HEATER
	WASHING MACHINE BOX
	WATER CONNECTION BOX
	WALL HYDRANT AND HOSE BIBB
	NATURAL GAS METER W/ REGULATOR
	NATURAL GAS REGULATOR
	WATER METER
	PRIMARY ROOF DRAIN (AS SHOWN ON ROOF PLAN)
	AUXILIARY ROOF DRAIN (AS SHOWN ON ROOF PLAN)
	PRIMARY ROOF DRAIN (AS SHOWN FROM BELOW)
	AUXILIARY ROOF DRAIN (AS SHOWN FROM BELOW)
	AUXILIARY OVERFLOW SCUPPER
	FLOOR DRAIN (ROUND AND SQUARE)
	HUB DRAIN
	FLOOR SINK (FULL GRATE, 1/2 GRATE AND 3/4 GRATE)
	TRENCH DRAIN
	SUMP PUMP
	FIXTURE TAG
	KEYED NOTE
	CONNECT TO EXISTING
	POINT OF DEMOLITION
	REVISION TAG
	PLUMBING RISER TAG
	EXISTING PIPE TO REMAIN
	DEMOLISHED PIPE
	NEW PIPE

PLUMBING SYSTEM LEGEND

(NOTE: NOT ALL SYSTEMS ARE USED IN THIS PROJECT)

SYMBOL	DESCRIPTION
	DOMESTIC COLD WATER
	DOMESTIC HOT WATER (110°F)
	DOMESTIC HOT WATER RETURN (110°F)
	DOMESTIC HOT WATER SUPPLY (140°F)
	DOMESTIC HOT WATER RETURN (140°F)
	DOMESTIC HOT WATER SUPPLY (160°F)
	DOMESTIC HOT WATER RETURN (160°F)
	SOFT WATER
	DE-IONIZED WATER
	DISTILLED WATER
	REVERSE OSMOSIS WATER
	NON-POTABLE WATER
	SANITARY SEWER
	VENT
	COMBINATION WASTE AND VENT
	GREASE WASTE
	ACID WASTE
	ACID VENT
	PUMP DISCHARGE
	STORM DRAIN
	AUXILIARY STORM DRAIN
	OIL WASTE
	CONDENSATE DRAIN
	FUEL GAS
	NATURAL GAS - 7"WC - 11"WC
	NATURAL GAS - 2 PSI
	NATURAL GAS - 5 PSI
	LIQUID PETROLEUM GAS - LOW PRESSURE
	LIQUID PETROLEUM GAS - HIGH PRESSURE
	MEDICAL AND LAB GAS
	CARBON DIOXIDE
	MEDICAL AIR
	LAB AIR
	NITROGEN
	NITROUS OXIDE
	OXYGEN
	LIQUID OXYGEN
	MEDICAL VACUUM
	LAB VACUUM
	WASTE ANESTHESIA GAS

PLUMBING DEMOLITION / RENOVATION NOTES

- IN THESE GENERAL NOTES, "PLUMBING" SHALL REFER TO, BUT NOT BE LIMITED TO SYSTEMS, COMPONENTS AND EQUIPMENT FOR HOT WATER, HOT WATER RETURN, COLD WATER, SEWER, SEWER VENTS, STORM SEWER, CONDENSATE WASTE, MEDICAL GAS, MEDICAL GAS OUTLETS, MEDICAL GAS EQUIPMENT, ISOLATION VALVES, BALANCING VALVE, REGULATORS, EQUIPMENT AND PIPING, ETC.
- CONTRACTOR SHALL VERIFY EXISTING SITE CONDITIONS INCLUDING, BUT NOT LIMITED TO:
 - * PIPE SYSTEMS, SIZES AND LOCATIONS.
 - * VALVE LOCATIONS.
 - * EQUIPMENT CONDITIONS, CONNECTIONS AND LOCATIONS.
 - * BALANCING VALVES.
 - * HAMMER ARRESTORS.
- ALL EXISTING PLUMBING EQUIPMENT AND PIPING ADJACENT TO AND/OR IN AREAS OF DEMOLITION SHALL BE PROPERLY IDENTIFIED FOR LOCATION, SIZE, CONDITION AND SYSTEM(S) OPERATION. ALL SYSTEMS SHALL BE COMPARED TO THE PLUMBING DRAWINGS AND EXISTING RECORD DRAWINGS (EXISTING RECORD DRAWINGS SHALL BE REQUESTED FROM VA) AND DOCUMENT ALL VARIATIONS. AFTER THE EXISTING SYSTEMS ARE INVESTIGATED AND DOCUMENTED, THE CONTRACTOR SHALL CAP AND/OR REMOVE ALL PLUMBING EQUIPMENT AND PIPING BACK TO POINT OF DEMOLITION BOUNDARY AS NOTED ON PLANS. DEMOLITION BOUNDARY AND PHASING SHALL BE COORDINATED WITH ARCHITECT AND COR PRIOR TO CONSTRUCTION. ALL BRANCHES AND DROPS NOT REMOVED SHALL BE CAPPED AND PREPARED FOR FUTURE RECONNECTION WHEN NEW EQUIPMENT AND/OR FIXTURES ARE INSTALLED, AS REQUIRED.
- COORDINATE AND SCHEDULE THE REMOVAL OF EXISTING PLUMBING AND SYSTEM SHUT-DOWNS WITH COR, ARCHITECT AND MAINTENANCE PERSONNEL PRIOR TO CONSTRUCTION.
- MAINTAIN EXISTING PLUMBING WITH PHASED DEMOLITION AND INSTALLATION OF NEW WORK, PROVIDING TEMPORARY SERVICES AS REQUIRED.
- EXISTING PLUMBING EQUIPMENT BEING REMOVED AND NOT RE-USED, SHALL REMAIN THE PROPERTY OF THE VA (AS APPROVED BY THE VA) AND SHALL BE DELIVERED UPON REMOVAL TO LOCATION DESIGNATED BY THE VA. ALL OTHER SYSTEM COMPONENTS REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR.
- UPON COMPLETION OF NEW ADDITION, NEW PLUMBING EQUIPMENT AND PIPING WILL BE INSTALLED AS SHOWN ON RENOVATED PLUMBING PLANS. RECONNECT ALL EXISTING BRANCHES AND EQUIPMENT TO NEW SYSTEM PIPING AS REQUIRED FOR OPERATION.
- REPLACE AND/OR PATCH TO MATCH EXISTING, ANY COMPONENTS OF THE EXISTING PLUMBING SYSTEMS TO FACILITATE ITS INSTALLATION WITHIN THE NEW RENOVATED AREAS. SUCH ITEMS MAY INCLUDE, BUT NOT BE LIMITED TO, FITTINGS, SUPPORTS, NEW MOUNTING SYSTEMS, NEW ACCESS DOORS, ETC.
- DAMAGED, OR INOPERABLE PLUMBING COMPONENTS INSPECTED PRIOR TO DEMOLITION AND DETERMINED NOT SUITABLE FOR REUSE, THAT WILL EFFECT THE INTEGRITY OF THE OPERATION OF THE PLUMBING SYSTEM, SHALL BE REPLACED WITH NEW OF LIKE, OR EQUAL QUALITY.
- PATCH ALL WALLS, FLOORS, ROOFS AND CEILINGS TO MATCH EXISTING OR NEW (IF APPLIED) FOR ALL OPENINGS CREATED BY DEMOLITION WORK OF EQUIPMENT AND PLUMBING SYSTEM PENETRATIONS.
- REFER TO HVAC PLANS FOR EXTENT OF WORK RELATING TO PLUMBING PIPING CONNECTING TO HVAC EQUIPMENT TO BE REMOVED OR RELOCATED.
- THE ADJACENT SPACES WILL CONTINUE TO OPERATE DURING CONSTRUCTION. THE CONTRACTOR SHALL COORDINATE WITH VA TO ENSURE THAT PLUMBING CONSTRUCTION DOES NOT IMPACT HOURS OF OPERATION. SEE ARCHITECTURAL SHEET FOR ADDITIONAL NOTES AND INSTRUCTIONS.

ACCESSIBILITY REQUIREMENTS

THIS SECTION APPLIES TO ACCESSIBLE FIXTURES ONLY.

WATER CLOSETS: THE HEIGHT OF WATER CLOSETS SHALL BE 17" MEASURED FROM THE TOP OF THE TOILET SEAT. SEATS SHALL NOT BE SPRUNG OR RETURN TO A LIFTED POSITION. THE WATER CLOSET SHALL BE LOCATED 16" MIN. 18" MAX. FROM THE SIDE WALL TO THE CENTER OF THE BOWL. HAND OPERATED FLUSH CONTROLS SHALL BE MOUNTED ON THE WIDE SIDE OF THE TOILET AREAS. SEE ARCHITECTURAL SHEETS FOR GRAB BAR LOCATIONS.

LAVATORIES: LAVATORIES SHALL BE MOUNTED WITH THE RIM OR COUNTER SURFACE NO MORE THAN 34" ABOVE FINISHED FLOOR. PROVIDE A CLEARANCE OF AT LEAST 29" ABOVE FINISHED FLOOR TO THE BOTTOM OF THE APRON. KNEE SPACE SHALL BE 8" FROM THE BOTTOM EDGE OF APRON TO THE LEADING EDGE OF THE BOTTOM OF BOWL. THE BOTTOM OF THE BOWL SHALL BE A MINIMUM OF 27" ABOVE FINISHED FLOOR. ALL WATER AND DRAIN PIPING UNDER LAVATORIES SHALL BE INSULATED WITH FOAM INSERT, COVERED WITH A 1/8" VINYL OUTER SHELL. ANGLE STOPS SHALL HAVE A FLIP TOP ACCESS.

PARTITION LEGEND

	EXISTING UNRATED PARTITION
	EXISTING PARTITION TO BE REMOVED
	NEW UNRATED PARTITION
	NEW LEAD SHIELDED PARTITION
	NEW / EXISTING SMOKE BARRIER
	NEW / EXISTING 1 HOUR BARRIER / SMOKE BARRIER SEE PLAN FOR LOCATIONS
	NEW / EXISTING 2 HOUR BARRIER / SMOKE BARRIER SEE PLAN FOR LOCATIONS

SEISMIC INFORMATION

- SEISMIC RESTRAINTS ARE REQUIRED FOR PLUMBING COMPONENTS AND SYSTEMS PER THE REQUIREMENTS OF THE 2012 EDITION OF THE INTERNATIONAL BUILDING CODE (IBC) AS DEFINED AS IN ASCE 7-10. (REFER TO STRUCTURAL DRAWING S1001 FOR ADDITIONAL INFORMATION).
- SEISMIC DESIGN DATA:
 - SEISMIC IMPORTANCE FACTOR
 - SPECTRAL RESPONSE COEFFICIENTS
 - SITE CLASS
 - ADJUSTED MCE SPECTRAL RESPONSE
 - DESIGN SPECTRAL RESPONSE ACCELERATION
 - SEISMIC DESIGN CATEGORY

Ie = 1.5
Ss = 0.488
S1 = 0.180
C
d. ADJUSTED MCE SPECTRAL RESPONSE
Sm1 = 0.292
SDS = 0.390
SD1 = 0.194
D
e. DESIGN SPECTRAL RESPONSE ACCELERATION
f. SEISMIC DESIGN CATEGORY




CONSTRUCTION DOCUMENT SUBMISSION FULLY SPRINKLERED

CONSULTANTS: STRUCTURAL: THARPE ENGINEERING GROUP 321 W. CONGRESS STREET SUITE 301-C SAVANNAH, GA 31401 912.349.7603 MECHANICAL, PLUMBING, ELECTRICAL, FIRE PROTECTION: CROMWELL 101 SOUTH SPRING STREET LITTLE ROCK, AR 72201 501.372.2900		ARCHITECT/ENGINEERS: BES DESIGN/BUILD, LLC 766 Middle St, Fairhope, AL 36532 Phone: 251.990.5778 Fax: 251.990.3716		Drawing Title: PLUMBING LEGEND AND NOTES		Project Title: RADIOLOGY / NUCLEAR MEDICINE IMPROVEMENTS		Project Number: CSI-111 Building Number 1		CENTRAL ARKANSAS VETERANS AFFAIRS HEALTHCARE SYSTEM	
Revisions:				Approved: Project Director		Location: JOHN L. McCLELLAN MEMORIAL VETERANS HOSPITAL; LITTLE ROCK, ARKANSAS		Drawing Number: PI001		Department of Veterans Affairs	
Date:		10/22/2014		Drawn: STEARNS		Checked: SEAY		Dwg. 60 of 99			

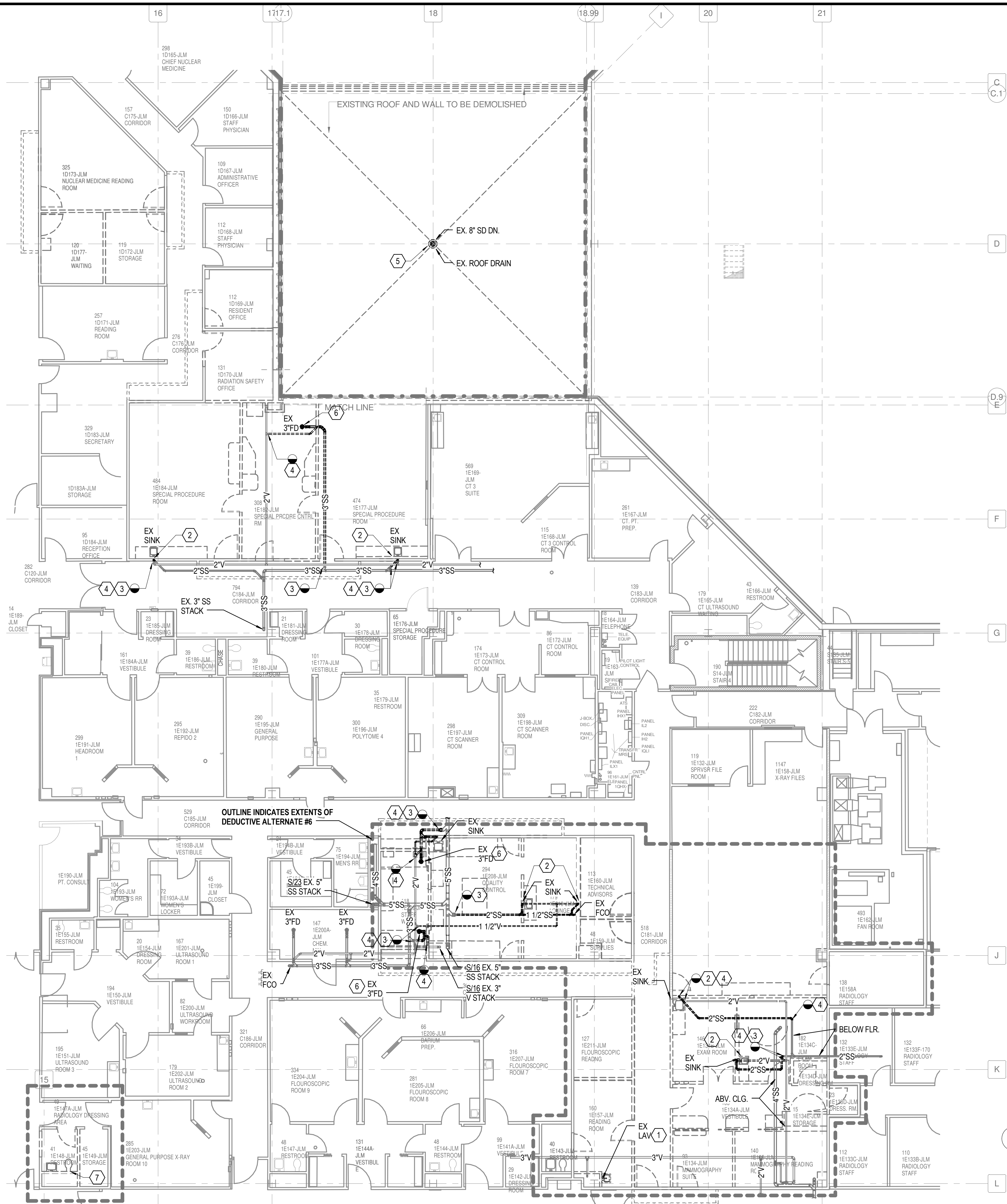
PLUMBING GENERAL NOTES

V	VENT
VAC	VACUUM
VB	VACUUM BREAKER
VCO	VACUUM CLEANER OUTLET
VP	VACUUM PUMP
VS	VENT STACK
VTR	VENT THROUGH ROOF
W	WASTE
WC	WATER CLOSET
WCO	WALL CLEANOUT
WG	WATER GAGE
WH	WALL HYDRANT
WH	WATER HEATER
WHA	WATER HAMMER ARRESTER
WL	WATER LINE
WM	WATER METER
WPD	WATER PRESSURE DROP
WS	WASTE STACK
YCO	YARD CLEANOUT
YH	YARD HYDRANT

1. ALL PLUMBING SYSTEMS SHALL BE INSTALLED AS PER SPECIFICATIONS AND GOVERNING CODES.
2. ALL DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENTS OR GEOMETRIC RELATIONSHIPS OF EQUIPMENT AND SERVICES. THEY ARE NOT INTENDED TO SPECIFY OR SHOW EVERY OFFSET, FITTING OR COMPONENT. CONTRACTOR SHALL NOT SCALE DRAWINGS. INFORMATION AND COMPONENTS SHOWN ON RISER DIAGRAMS OR DETAILS, BUT NOT SHOWN ON PLANS, AND VICE-VERSA, SHALL BE PROVIDED AS IF EXPRESSLY REQUIRED BY BOTH. THE CONTRACTOR SHALL SUBMIT A REQUEST FOR INFORMATION (RFI) IF INFORMATION CONFLICTS. DRAWINGS SPECIFIC TO THIS DISCIPLINE DO NOT LIMIT THE RESPONSIBILITY OF WORK REQUIRED BY CONTRACT DOCUMENTS. REFER TO ARCHITECTURAL, STRUCTURAL, ELECTRICAL AND OTHER DRAWINGS FOR COMPLETE INFORMATION.
3. BY NECESSITY, THESE DRAWINGS REFLECT A SYSTEM DESIGNED AROUND SPECIFIC REFERENCE PRODUCTS, THE SELECTION OF WHICH HAS IMPACTED THE DESIGNS OF OTHER TRADES (HVAC, ELECTRICAL, STRUCTURAL, ETC.). IF ALTERNATE MANUFACTURERS, FUEL SOURCES, SIZES, OR MODEL NUMBERS ARE SUBMITTED OR BID, IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS TO COORDINATE ALL DIFFERENCES PRIOR TO BID. NO EXTRAS WILL BE ALLOWED FOR CHANGES REQUIRED TO OTHER TRADES IF ALTERNATE EQUIPMENT IS BID OR INSTALLED AT THE CONTRACTORS OPTION.
4. EXCEPT WHERE MODIFIED BY SPECIFIC NOTATION TO THE CONTRARY, IT SHALL BE UNDERSTOOD THAT THE INDICATION AND/OR DESCRIPTION OF ANY ITEM, IN THE DRAWINGS OR SPECIFICATIONS OR BOTH, CARRIES WITH IT THE INSTRUCTION TO FURNISH AND INSTALL THE ITEM, REGARDLESS OF WHETHER OR NOT THIS INSTRUCTION IS EXPLICITLY STATED AS PART OF THE INDICATION OR DESCRIPTION.
5. CONTRACTOR SHALL PAY ALL UTILITY FEES & CHARGES AS PART OF BASE BID IN THE CONTRACT.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING ALL WORK WITH THAT OF OTHER TRADES; I.E., ARCHITECTURAL, HVAC, ELECTRICAL, STRUCTURAL, FIRE PROTECTION AND CIVIL PRIOR TO CONSTRUCTION.
7. THE CONTRACTOR SHALL COORDINATE UTILITY LOCATIONS, SIZES AND INVERT ELEVATIONS PRIOR TO CONSTRUCTION; I.E., SANITARY SEWER, STORM DRAIN, FIRE PROTECTION, DOMESTIC WATER AND NATURAL GAS. ALL SERVICES SHALL TERMINATE 5 FEET OUTSIDE THE BUILDING, EXCEPT WHERE SHOWN OTHERWISE. SEE SITE UTILITY DRAWINGS FOR CONTINUATION OF ALL SERVICE LINES.
8. PROVIDE ISOLATION VALVES AT EACH FIXTURE GROUP OR BATTERY OF FIXTURES IN THE DOMESTIC CW, HW, HWR AND GAS PIPING. VALVES SHALL BE EASILY ACCESSIBLE. WHERE HARD CEILINGS ARE LOCATED, VALVES SHALL BE ACCESSED THROUGH ACCESS PANELS. ACCESS PANELS SHALL BE COORDINATED WITH ARCHITECT PRIOR TO CONSTRUCTION.
9. PROVIDE STOP VALVES AT ALL PLUMBING FIXTURES ON BOTH HOT AND COLD WATER SUPPLY LINES. VALVES, ESCUTCHEONS, FITTINGS, ETC., SHALL BE CHROME PLATED AND INSTALLED TIGHT TO WALL. WHERE PIPING IS EXPOSED, CHROME PLATED PIPE SHALL BE USED.
10. ALL EXPOSED OR ACCESSIBLE P-TRAPS SHALL BE CHROME PLATED AND PROVIDED WITH BOTTOM CLEANOUT PLUGS.
11. SLOPE 2 1/2" AND SMALLER DRAIN WASTE AND VENT (DWV) LINES AT MIN. (2%) 1/4" FALL PER FT., 3" TO 6" DWV LINES AT MIN. (1%) 1/8" FALL PER FT. AND 8" AND LARGER DWV LINES AT MIN. (.5%) 1/16" FALL PER FT. SANITARY SEWER AND WATER SHALL BE A MINIMUM OF 10' APART OR THE DOMESTIC WATER SERVICE SHALL BE 12" ABOVE THE TOP OF THE SEWER LINE, AT ITS HIGHEST POINT, IF PLACED IN SAME TRENCH.
12. PROVIDE ALL FITTINGS, TRANSITIONS, COUPLINGS, ADAPTERS, UNIONS, AND OTHER ACCESSORIES NEEDED TO COMPLETE CONNECTIONS AND PROPER OPERATIONS OF PLUMBING FIXTURES AND PLUMBING EQUIPMENT.
13. REFER TO SPECIFICATIONS FOR ACCEPTABLE MANUFACTURERS OF PLUMBING FIXTURES AND EQUIPMENT, AND PROPER APPLICATIONS OF SAME.
14. PROVIDE CLEANOUTS IN ALL SEWERS, WHETHER SHOWN OR NOT, AT INTERVALS NOT TO EXCEED 50 FEET, AT EACH CHANGE OF DIRECTION GREATER THAN 45 DEGREES, AND ALL VERTICAL STACKS AT A HEIGHT OF 30' ABOVE FINISH FLOOR AT THE BASE OF EACH STACK.
15. WHERE WATER PRESSURES EXCEED 80 PSI, PROVIDE WATER PRESSURE REDUCING VALVES (PRV) WITH STRAINER IN WATER SUPPLY LINES, SETTING AT 80 PSI. SEE CODE AND MANUFACTURER INFORMATION FOR ACCEPTABLE PRESSURE REQUIREMENTS.
16. ALL PIPING PENETRATIONS OF THE RATED CEILING AND WALL MUST BE MADE WITH METAL PIPE OR UL LISTED APPROVED DEVICES. FIRE STOP ALL PIPE PENETRATIONS THRU RATED WALLS. SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS, RATINGS AND FIRE STOPPING DETAILS.
17. DO NOT ROUTE ANY PIPING OVER ELEC. ROOMS, COMPUTER ROOMS, OR ELEC. PANELS.
18. INSTALL AN AGA LISTED NATURAL GAS COCK, DIRT LEG AND UNION IMMEDIATELY UPSTREAM OF EQUIPMENT CONNECTIONS. AS NOTED ON DRAWINGS PROVIDE AN AGA LISTED VENT LIMITING GAS REGULATOR, GAS REGULATORS SHALL NOT BE INSTALLED IN AIR PLENUMS (SEE HVAC PLANS FOR AIR PLENUM LOCATIONS).
19. ALL DOMESTIC WATER PIPING ROUTED IN AREAS SUBJECT TO FREEZING TEMPERATURES SHALL BE ROUTED BELOW INSULATION AND WITHIN THE HEATED ENVELOPE OF THE BUILDING. WHERE PIPING CAN NOT BE ROUTED BELOW INSULATION, PIPING SHALL HAVE 5 WATT/FT HEAT TRACING ATTACHED. SEE ARCHITECTURAL DRAWINGS FOR INSULATION PLACEMENT AND DETAILS. COORDINATE ELECTRICAL REQUIREMENTS WITH ELECTRICAL CONTRACTOR AND ENGINEER.
20. UNLESS OTHERWISE INDICATED DO NOT ROUTE WATER PIPING IN EXTERIOR WALLS. WHEN ROUTED IN EXTERIOR WALLS, CAREFULLY POSITION WATER PIPING ON THE HEATED SIDE (INTERIOR SIDE) OF THE WALL INSULATION.
21. MAINTAIN 10'-0" MINIMUM CLEARANCE BETWEEN FRESH AIR INTAKES, OPERABLE WINDOWS AND FLUES, PLUMBING VENTS AND GAS REGULATORS.
22. ALL STORM DRAIN, CONDENSATE DRAIN, SEWER & VENT PIPING SHALL BE RODDED AND CLEANED AT END OF CONSTRUCTION. ALL TRAPS SHALL BE CLEANED AND PRIMED AT END OF CONSTRUCTION.
23. ALL PIPE DROPS FROM CEILING PLENUM TO FLOOR SHALL BE MADE IN FURROUTS AT COLUMNS, IN WEB OF BEAMS AT COLUMNS OR IN WALLS. PIPING SHALL BE CONCEALED UNLESS APPROVED BY ARCHITECT.
24. PROVIDE WATER HAMMER ARRESTORS IN FIXTURE BRANCHES WHERE QUICK CLOSING VALVES ARE INSTALLED; I.E., FLUSH VALVES, ICE MAKERS, DISHWASHERS, ETC.
25. BELOW SLAB WATER PIPE TO BE TYPE K SOFT DRAWN COPPER WITHOUT FITTINGS OR JOINTS. SLEEVE IN ENTIRETY WITH ARMAFLEX OR APPROPRIATE POLYETHYLENE SLEEVE MATERIAL.
26. PROVIDE APPROVED BACKFLOW PREVENTION OR ANTI-SIPHON DEVICES AT ALL FIXTURES THAT COULD CONTAMINATE THE POTABLE WATER SYSTEM.
27. INSULATE ALL WATER, CONDENSATE, STORM DRAIN PIPING (VERTICAL AND HORIZONTAL) AND ROOF DRAIN BODIES ABOVE FINISH FLOOR. SEE SPECIFICATIONS FOR THICKNESS SCHEDULE.
28. INSULATE ALL EXPOSED HOT WATER & DRAIN PIPING FOR ACCESSIBLE FIXTURES PER ANSI A117.1 AND ADA REQUIREMENTS.
29. ALL EXPOSED MATERIALS WITHIN RETURN AIR PLENUMS (EXISTING AND NEW) SHALL HAVE A FLAME SPREAD INDEX OF NOT MORE THAN 25 OR A SMOKE-DEVELOPED INDEX OF NOT MORE THAN 50, AS DETERMINED IN ACCORDANCE WITH ASTM E84 AND UL LISTINGS. IF ANY MATERIALS (EXISTING OR NEW) DO NOT MEET THESE STANDARDS, THE ITEMS SHALL BE ENCLOSED IN A GYPSUM-BOARD ENCLOSURE TO BE FINISHED WITH MINIMUM RATED MATERIALS (I.E. CAST IRON), OR BE WRAPPED WITH AN APPROVED FIRE RATING MATERIAL, SUCH AS 3M FYRE WRAP, PLASTIC PIPING (PVC, ABS, AND CPVC) IS NOT TO BE APPROVED TO BE INSTALLED WITHIN RETURN AIR PLENUMS. BY NECESSITY, WE HAVE NOTED AS MANY AREAS AS POSSIBLE ON THE PLANS WHERE THESE CONDITIONS OCCUR, BUT IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE EXISTING CONDITIONS (WHETHER SHOWN ON THE PLANS OR NOT) AND INCLUDE THE REPLACEMENT/WRAPPING OF THESE ITEMS IN THE BID PRICE (SEE NOTE 7 ABOVE). COORDINATE RETURN AIR PLENUM LOCATIONS AND ANY NOTED DISCREPANCIES FROM THE PLANS WITH MECHANICAL ENGINEER PRIOR TO BID.
30. FLOOR DRAINS IN MECHANICAL ROOMS ARE SHOWN FOR GENERAL LOCATION ONLY. FLOOR DRAINS SHALL BE ACCESSIBLE AND SHALL BE VERIFIED WITH EQUIPMENT LAYOUT FOR INTERFERENCES.
31. AN APPROVED TRAP GUARD PRODUCT CONFORMING TO NSF-14, CSA8602-99 AND CSA879-94 SHALL BE INSTALLED AT ALL FLOOR AND HUB DRAINS. ALL DRAINS SHALL HAVE DEEP SEAL TRAPS, 4" DEEP SEAL MINIMUM. INSTALL TRAP GUARD DEVICES PER MANUFACTURER'S INSTRUCTIONS.
32. DOMESTIC WATER SERVICE PIPING AND FITTINGS; E.G., CHECK VALVES, RPZA, SHUT-OFF VALVES, STRAINERS, PRESSURE REGULATORS, ETC. SHALL COMPLY WITH NSF61 CRITERIA. ALL CAST IRON EQUIPMENT IS TO BE INTERNALLY EPOXY COATED.

		CONSULTANTS: STRUCTURAL: THARPE ENGINEERING GROUP 321 W. CONGRESS STREET SUITE 301-C SAVANNAH, GA 31401 912.349.7603 MECHANICAL, PLUMBING, ELECTRICAL, FIRE PROTECTION: CROMWELL 101 SOUTH SPRING STREET LITTLE ROCK, AR 72201 501.372.2900				ARCHITECT/ENGINEERS:  BES DESIGN/BUILD, LLC 766 Middle St, Fairhope, AL 36532 Phone: 251.990.5778 Fax: 251.990.3716		Drawing Title PLUMBING NOTES AND ABBREVIATIONS Approved: Project Director		Project Title RADIOLOGY / NUCLEAR MEDICINE IMPROVEMENTS Location McCLELLAN MEMORIAL VETERANS HOSPITAL; LITTLE ROCK, ARKANSAS Date 10-22-2014		Project Number CSI-111 Building Number 1 Drawing Number PI002 Dwg. 61 of 99		CENTRAL ARKANSAS VETERANS AFFAIRS HEALTHCARE SYSTEM 	
Revisions:		Date						Checked SEAY		Department of Veterans Affairs					

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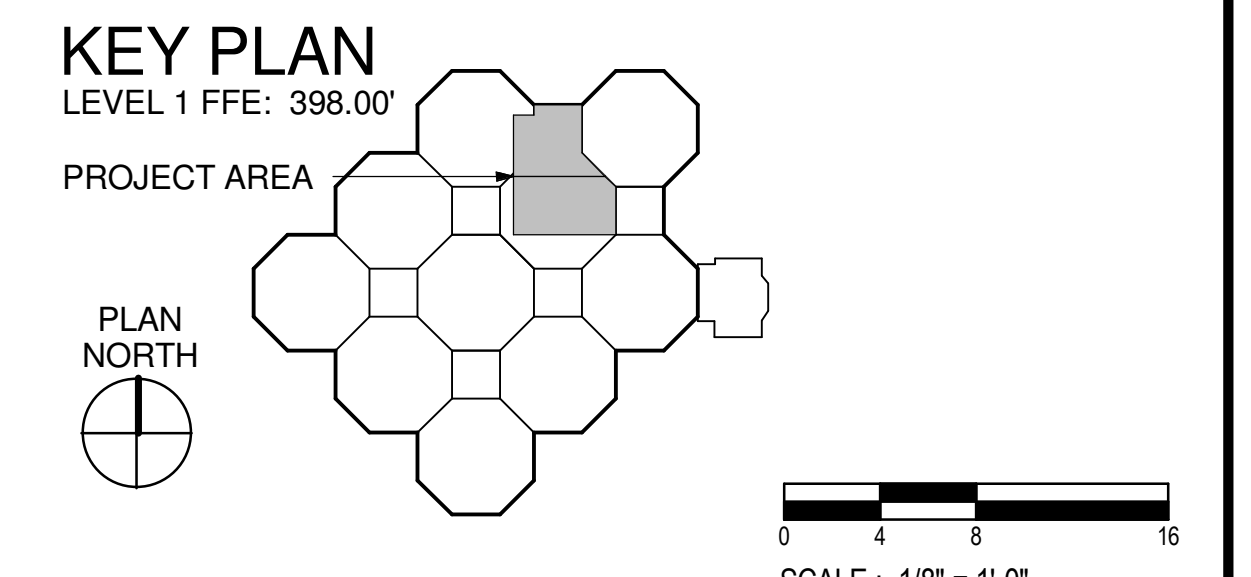
THE CONTRACTOR IS REQUIRED TO SEAL NEWLY CREATED PENETRATIONS WITH FIRE STOPPING MATERIAL OF THE PROPER HOURLY RATING. IN ADDITION, THE CONTRACTOR SHALL FIRE STOP EXISTING HOURLY RATED WALLS WHERE PLUMBING PIPING IS REMOVED. COORDINATE ALL DEMOLITION WITH ARCHITECT AND PLUMBING FOR LOCATIONS AND PHASING.

PLUMBING LEGEND AND NOTES

REFER TO SHEET PP001 & PP002 FOR LEGEND AND NOTES.

DEMOLITION PLUMBING KEYED NOTES

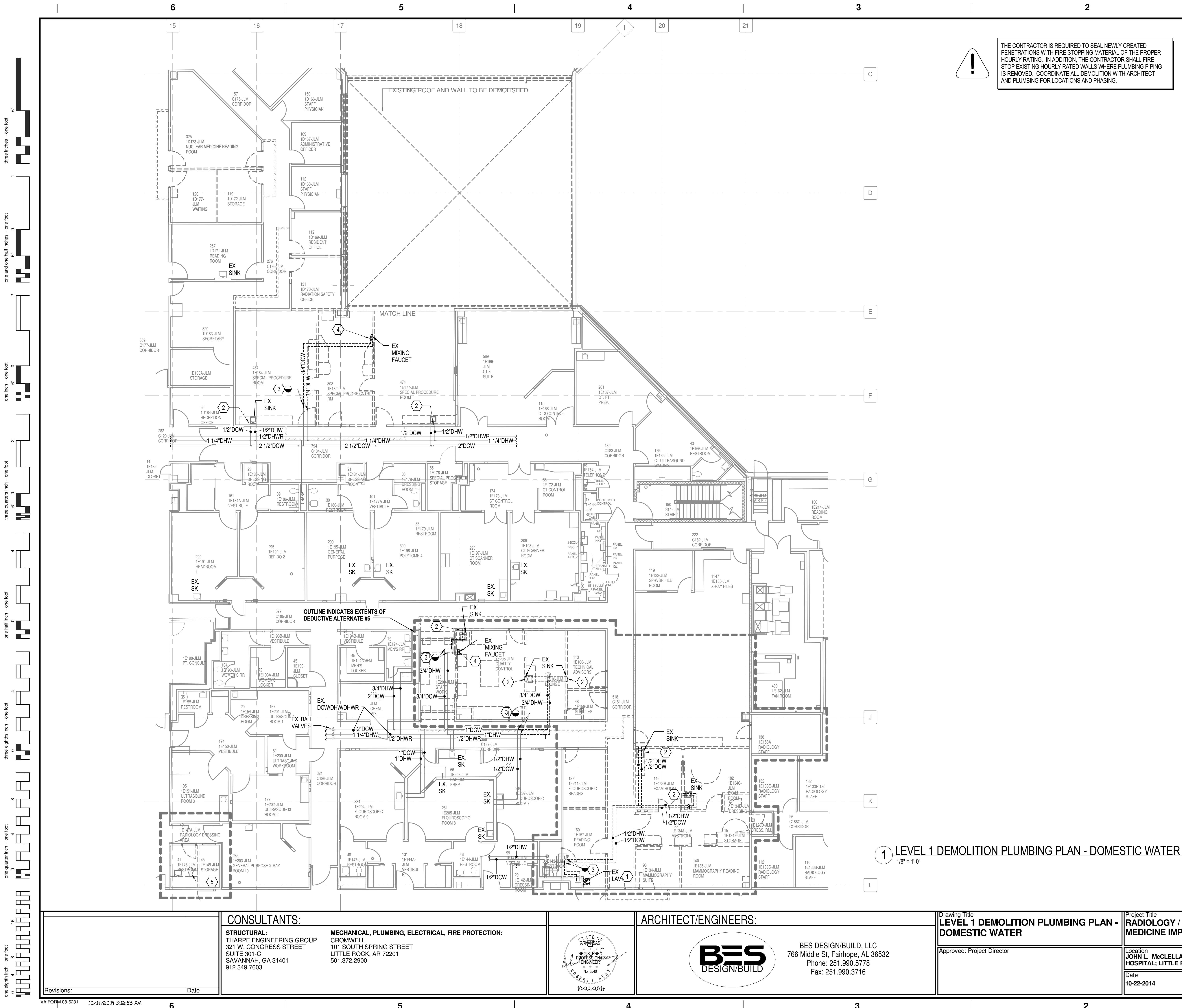
- 1 REMOVE EXISTING LAVATORY AND ASSOCIATED PLUMBING. CAP SEWER AND VENT TO CONCEAL.
- 2 REMOVE EXISTING SINK AND ASSOCIATED PLUMBING. CAP SEWER AND VENT TO CONCEAL.
- 3 REMOVE SANITARY SEWER BACK TO LOCATION INDICATED. PLUG AND CAP SANITARY SEWER.
- 4 REMOVE SEWER VENT BACK TO LOCATION INDICATED. PLUG AND CAP SEWER VENT.
- 5 REMOVE EXISTING ROOF DRAIN. EXISTING STORM DRAIN PIPE TO BE EXTENDED UP TO NEW ROOF.
- 6 REMOVE EXISTING FLOOR DRAIN GRATE AND PLUG DRAIN. INFILL FLOOR TO MATCH EXISTING.
- 7 REMOVE EXISTING LAVATORY, WATER CLOSET AND ASSOCIATED PLUMBING. CAP SEWER AND VENT TO CONCEAL.



1 LEVEL 1 DEMOLITION PLUMBING PLAN - WASTE AND VENT
1/8" = 1'-0"

CONSTRUCTION DOCUMENT SUBMISSION
FULLY SPRINKLERED

CONSULTANTS: STRUCTURAL: THARPE ENGINEERING GROUP 321 W. CONGRESS STREET SUITE 301-C SAVANNAH, GA 31401 912.349.7603 MECHANICAL, PLUMBING, ELECTRICAL, FIRE PROTECTION: CROMWELL 101 SOUTH SPRING STREET LITTLE ROCK, AR 72201 501.372.2900		ARCHITECT/ENGINEERS: BES DESIGN/BUILD, LLC 766 Middle St. Fairhope, AL 36532 Phone: 251.990.5778 Fax: 251.990.3716		Drawing Title LEVEL 1 DEMOLITION PLUMBING PLAN - WASTE AND VENT Approved: Project Director		Project Title RADIOLOGY / NUCLEAR MEDICINE IMPROVEMENTS Location JOHN L. McCLELLAN MEMORIAL VETERANS HOSPITAL, LITTLE ROCK, ARKANSAS Date 10-22-2014		Project Number CSI-111 Building Number 1 Drawing Number PD101 Dwg. 62 of 99		CENTRAL ARKANSAS VETERANS AFFAIRS HEALTHCARE SYSTEM 	
Revisions: Date				Drawn STEARNS		Checked SEAY					



PLUMBING LEGEND AND NOTES

REFER TO SHEET PP001 & PP002 FOR LEGEND AND NOTES.

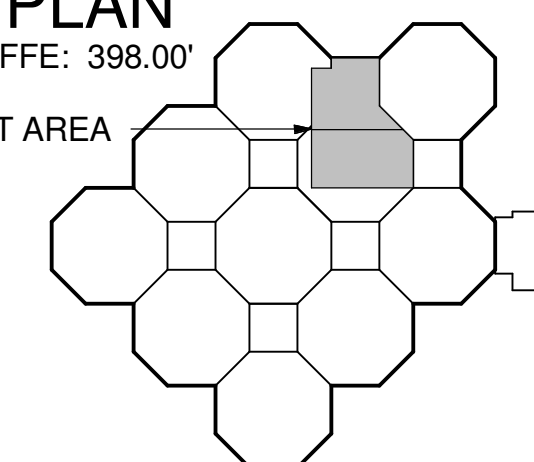
DEMOLITION PLUMBING KEYED NOTES

- 1 REMOVE EXISTING LAVATORY AND ASSOCIATED PLUMBING. CAP AND VALVE HOT/COLD WATER ABOVE CEILING.
- 2 REMOVE EXISTING SINK AND ASSOCIATED PLUMBING CAP AND VALVE DOMESTIC HOT/COLD ABOVE CEILING.
- 3 CAP AND VALVE DOMESTIC HOT/COLD WATER. REMOVE PIPING TO LOCATION INDICATED.
- 4 REMOVE EXISTING MIXING FAUCET, CAP AND VALVE DOMESTIC HOT/COLD ABOVE CEILING.
- 5 REMOVE EXISTING LAVATORY, WATER CLOSET AND ASSOCIATED PLUMBING. CAP AND VALVE COLD WATER ABOVE CEILING.

KEY PLAN

LEVEL 1 FFE: 398.00'

PROJECT AREA



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

CONSTRUCTION DOCUMENT SUBMISSION
FULLY SPRINKLERED

CONSULTANTS:

STRUCTURAL:
THARPE ENGINEERING GROUP
321 W. CONGRESS STREET
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SAVANNAH, GA 31401
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MECHANICAL, PLUMBING, ELECTRICAL, FIRE PROTECTION:
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501.372.2900

ARCHITECT/ENGINEERS:



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766 Middle St. Fairhope, AL 36532
Phone: 251.990.5778
Fax: 251.990.3716

Drawing Title
LEVEL 1 DEMOLITION PLUMBING PLAN - DOMESTIC WATER

Approved: Project Director

Project Title
RADIOLOGY / NUCLEAR MEDICINE IMPROVEMENTS

Location
JOHN L. MCCLELLAN MEMORIAL VETERANS HOSPITAL, LITTLE ROCK, ARKANSAS

Date
10-22-2014

Drawn
STEARNS

Checked
SEAY

Project Number
CSI-111

Building Number
1

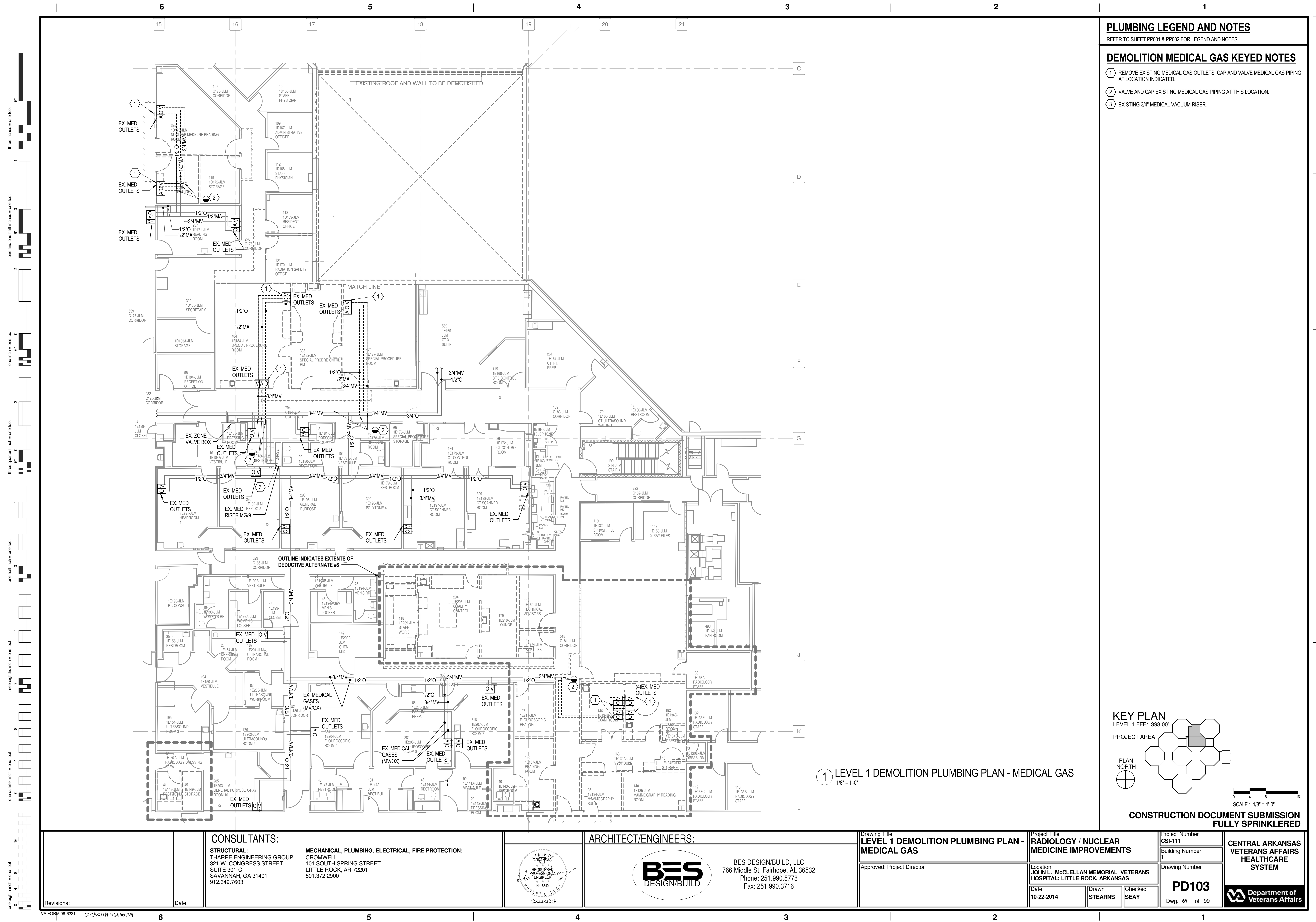
Drawing Number

PD102

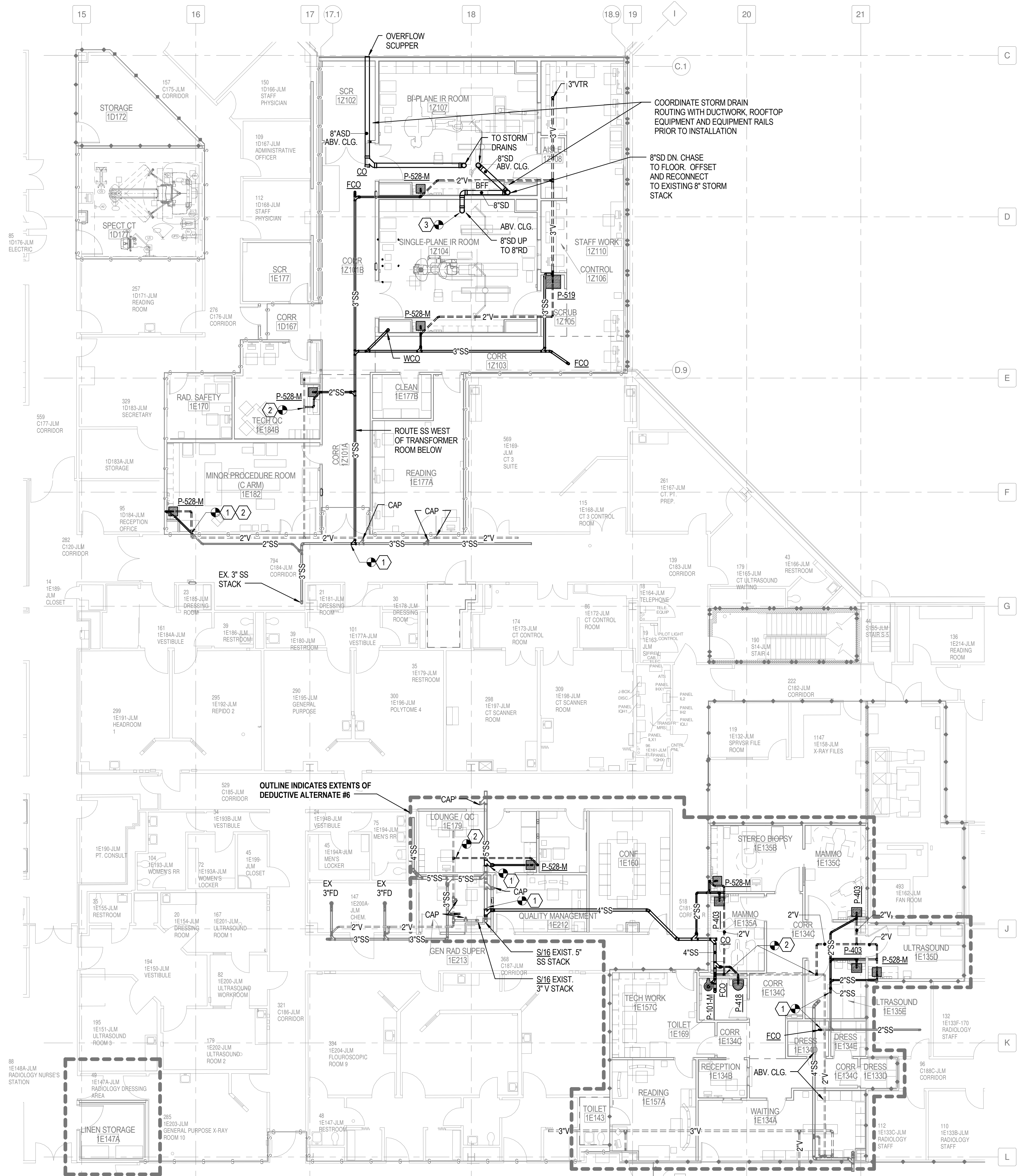
Dwg. 63 of 99

CENTRAL ARKANSAS VETERANS AFFAIRS HEALTHCARE SYSTEM





three inches = one foot
one and one half inches = one foot
one inch = one foot
three quarters inch = one foot
one half inch = one foot
three eighths inch = one foot
one quarter inch = one foot
one eighth inch = one foot



THE CONTRACTOR IS REQUIRED TO SEAL NEWLY CREATED PENETRATIONS WITH FIRE STOPPING MATERIAL OF THE PROPER HOURLY RATING. IN ADDITION, THE CONTRACTOR SHALL FIRE STOP EXISTING HOURLY RATED WALLS WHERE PLUMBING PIPING IS REMOVED. COORDINATE ALL DEMOLITION WITH ARCHITECT AND PLUMBING FOR LOCATIONS AND PHASING.

PLUMBING LEGEND AND NOTES

REFER TO SHEET PP001 & PP002 FOR LEGEND AND NOTES.

PLUMBING KEYED NOTES

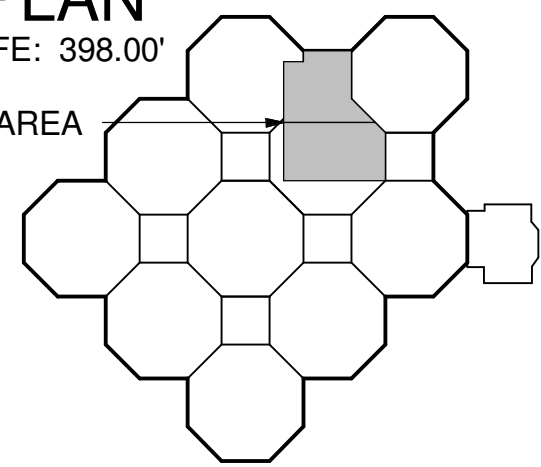
- 1 CONNECT NEW SANITARY SEWER TO EXISTING SANITARY SEWER SYSTEM. CONTRACTOR TO VERIFY LOCATION, ELEVATION AND CONDITION PRIOR TO CONSTRUCTION. INSTALL PLUMBING HIGH AS POSSIBLE. ROUTE TO NEAREST WASTE TO STACK AND CONNECT.
- 2 CONNECT NEW SEWER VENT TO EXISTING SANITARY SEWER SYSTEM. CONTRACTOR TO VERIFY LOCATION, ELEVATION AND CONDITION PRIOR TO CONSTRUCTION.
- 3 CONNECT NEW STORM SEWER TO EXISTING STORM SEWER SYSTEM. CONTRACTOR TO VERIFY LOCATION, ELEVATION AND CONDITION PRIOR TO CONSTRUCTION. INSTALL PLUMBING HIGH AS POSSIBLE.

1 LEVEL 1 PLUMBING PLAN - WASTE AND VENT
1/8" = 1'-0"

KEY PLAN

LEVEL 1 FFE: 398.00'

PROJECT AREA



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

CONSTRUCTION DOCUMENT SUBMISSION
FULLY SPRINKLERED

CONSULTANTS:

STRUCTURAL:
THARPE ENGINEERING GROUP
321 W. CONGRESS STREET
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SAVANNAH, GA 31401
912.349.7603

MECHANICAL, PLUMBING, ELECTRICAL, FIRE PROTECTION:
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101 SOUTH SPRING STREET
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ARCHITECT/ENGINEERS:



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766 Middle St. Fairhope, AL 36532
Phone: 251.990.5778
Fax: 251.990.3716

Drawing Title
LEVEL 1 PLUMBING PLAN - WASTE AND VENT

Approved: Project Director

Project Title
RADIOLOGY / NUCLEAR
MEDICINE IMPROVEMENTS

Location
JOHN L. McCLELLAN MEMORIAL VETERANS
HOSPITAL, LITTLE ROCK, ARKANSAS

Date
10-22-2014

Drawn
STEARNS

Checked
SEAY

Project Number
CSI-111

Building Number
1

Drawing Number

PL101

Dwg. 65 of 99

CENTRAL ARKANSAS
VETERANS AFFAIRS
HEALTHCARE
SYSTEM



three eighths inch = one foot
one eighth inch = one foot
one quarter inch = one foot
three eighths inch = one foot
one half inch = one foot
one inch = one foot
one and one half inches = one foot
two inches = one foot
three inches = one foot
four inches = one foot
five inches = one foot
six inches = one foot
seven inches = one foot
eight inches = one foot
nine inches = one foot
ten inches = one foot
eleven inches = one foot
twelve inches = one foot
thirteen inches = one foot
fourteen inches = one foot
fifteen inches = one foot
sixteen inches = one foot
seventeen inches = one foot
eighteen inches = one foot
nineteen inches = one foot
twenty inches = one foot
twenty one inches = one foot
twenty two inches = one foot
twenty three inches = one foot
twenty four inches = one foot
twenty five inches = one foot
twenty six inches = one foot
twenty seven inches = one foot
twenty eight inches = one foot
twenty nine inches = one foot
thirty inches = one foot
thirty one inches = one foot
thirty two inches = one foot
thirty three inches = one foot
thirty four inches = one foot
thirty five inches = one foot
thirty six inches = one foot
thirty seven inches = one foot
thirty eight inches = one foot
thirty nine inches = one foot
forty inches = one foot
forty one inches = one foot
forty two inches = one foot
forty three inches = one foot
forty four inches = one foot
forty five inches = one foot
forty six inches = one foot
forty seven inches = one foot
forty eight inches = one foot
forty nine inches = one foot
fifty inches = one foot
fifty one inches = one foot
fifty two inches = one foot
fifty three inches = one foot
fifty four inches = one foot
fifty five inches = one foot
fifty six inches = one foot
fifty seven inches = one foot
fifty eight inches = one foot
fifty nine inches = one foot
sixty inches = one foot
sixty one inches = one foot
sixty two inches = one foot
sixty three inches = one foot
sixty four inches = one foot
sixty five inches = one foot
sixty six inches = one foot
sixty seven inches = one foot
sixty eight inches = one foot
sixty nine inches = one foot
seventy inches = one foot
seventy one inches = one foot
seventy two inches = one foot
seventy three inches = one foot
seventy four inches = one foot
seventy five inches = one foot
seventy six inches = one foot
seventy seven inches = one foot
seventy eight inches = one foot
seventy nine inches = one foot
eighty inches = one foot
eighty one inches = one foot
eighty two inches = one foot
eighty three inches = one foot
eighty four inches = one foot
eighty five inches = one foot
eighty six inches = one foot
eighty seven inches = one foot
eighty eight inches = one foot
eighty nine inches = one foot
ninety inches = one foot
ninety one inches = one foot
ninety two inches = one foot
ninety three inches = one foot
ninety four inches = one foot
ninety five inches = one foot
ninety six inches = one foot
ninety seven inches = one foot
ninety eight inches = one foot
ninety nine inches = one foot
one hundred inches = one foot



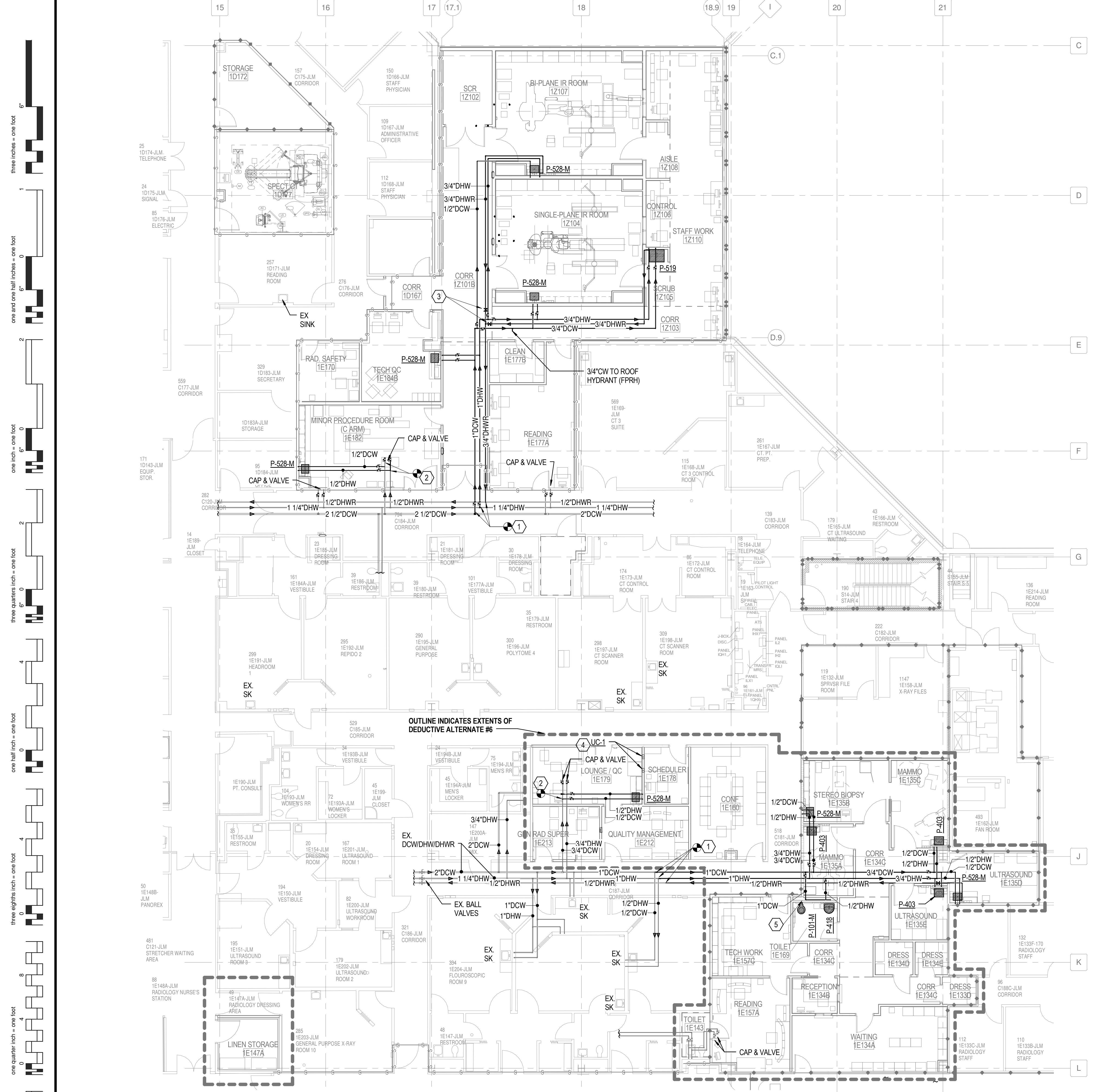
THE CONTRACTOR IS REQUIRED TO SEAL NEWLY CREATED PENETRATIONS WITH FIRE STOPPING MATERIAL OF THE PROPER HOURLY RATING. IN ADDITION, THE CONTRACTOR SHALL FIRE STOP EXISTING HOURLY RATED WALLS WHERE PLUMBING PIPING IS REMOVED. COORDINATE ALL DEMOLITION WITH ARCHITECT AND PLUMBING FOR LOCATIONS AND PHASING.

PLUMBING LEGEND AND NOTES

REFER TO SHEET PP001 & PP002 FOR LEGEND AND NOTES.

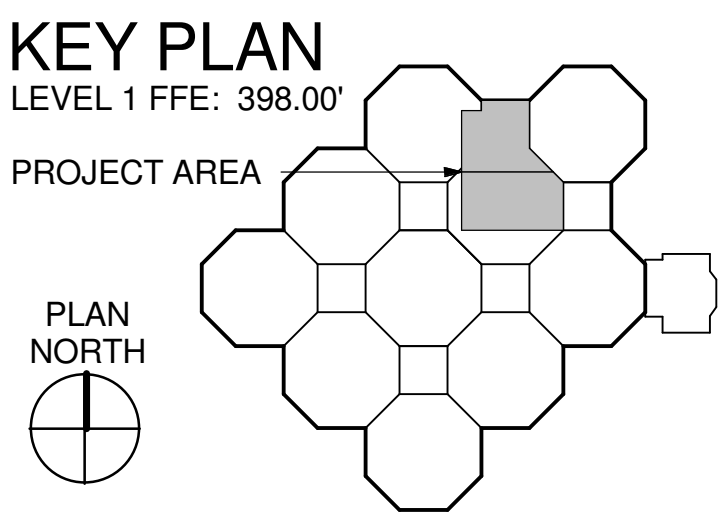
PLUMBING KEYED NOTES

- 1 CONNECT NEW DOMESTIC COLD/HOT RETURN TO EXISTING PIPING IN THIS AREA. VERIFY EXISTING LOCATIONS PRIOR TO CONSTRUCTION.
- 2 CONNECT NEW DOMESTIC COLD/HOT TO EXISTING PIPING IN THIS AREA. VERIFY EXISTING LOCATIONS PRIOR TO CONSTRUCTION.
- 3 PROVIDE BELL & GOSSETT #CB-3/4S (FOR 3/4" HWR) AND #CB-1/2S (FOR 1/2" HWR) CIRCUIT SETTER BALANCING VALVE, SET AT 1 GPM FLOW RATE. PROVIDE FULL PORT BALL VALVE IMMEDIATELY UPSTREAM OF THE BALANCING VALVE.
- 4 ROUTE 1/2" CW IN WALL AND EXTEND TO UTILITY CONNECTION BOXES AND PROVIDE ISOLATION VALVE. ROUTE 1/4" CW LINE TO EACH REFRIG. ICE MAKER. VERIFY CONNECTION REQUIREMENTS WITH EQUIPMENT MFR.
- 5 ROUTE 1" CW AND 1/2" HW DN. WALL TO HEADER. TAP AS NECESSARY. SEE PLUMBING FIXTURE SCHEDULE FOR INDIVIDUAL SIZES.



OUTLINE INDICATES EXTENTS OF DEDUCTIVE ALTERNATE #6

1 LEVEL 1 PLUMBING PLAN - DOMESTIC WATER
1/8" = 1'-0"



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

CONSTRUCTION DOCUMENT SUBMISSION
FULLY SPRINKLERED

CONSULTANTS:

STRUCTURAL:
THARPE ENGINEERING GROUP
321 W. CONGRESS STREET
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SAVANNAH, GA 31401
912.349.7603

MECHANICAL, PLUMBING, ELECTRICAL, FIRE PROTECTION:
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ARCHITECT/ENGINEERS:



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Fax: 251.990.3716

Drawing Title
LEVEL 1 PLUMBING PLAN - DOMESTIC WATER

Approved: Project Director

Project Title
RADIOLOGY / NUCLEAR MEDICINE IMPROVEMENTS

Location
JOHN L. MCCLELLAN MEMORIAL VETERANS HOSPITAL, LITTLE ROCK, ARKANSAS

Date
10-22-2014

Drawn
STEARNS

Checked
SEAY

Project Number
CSI-111

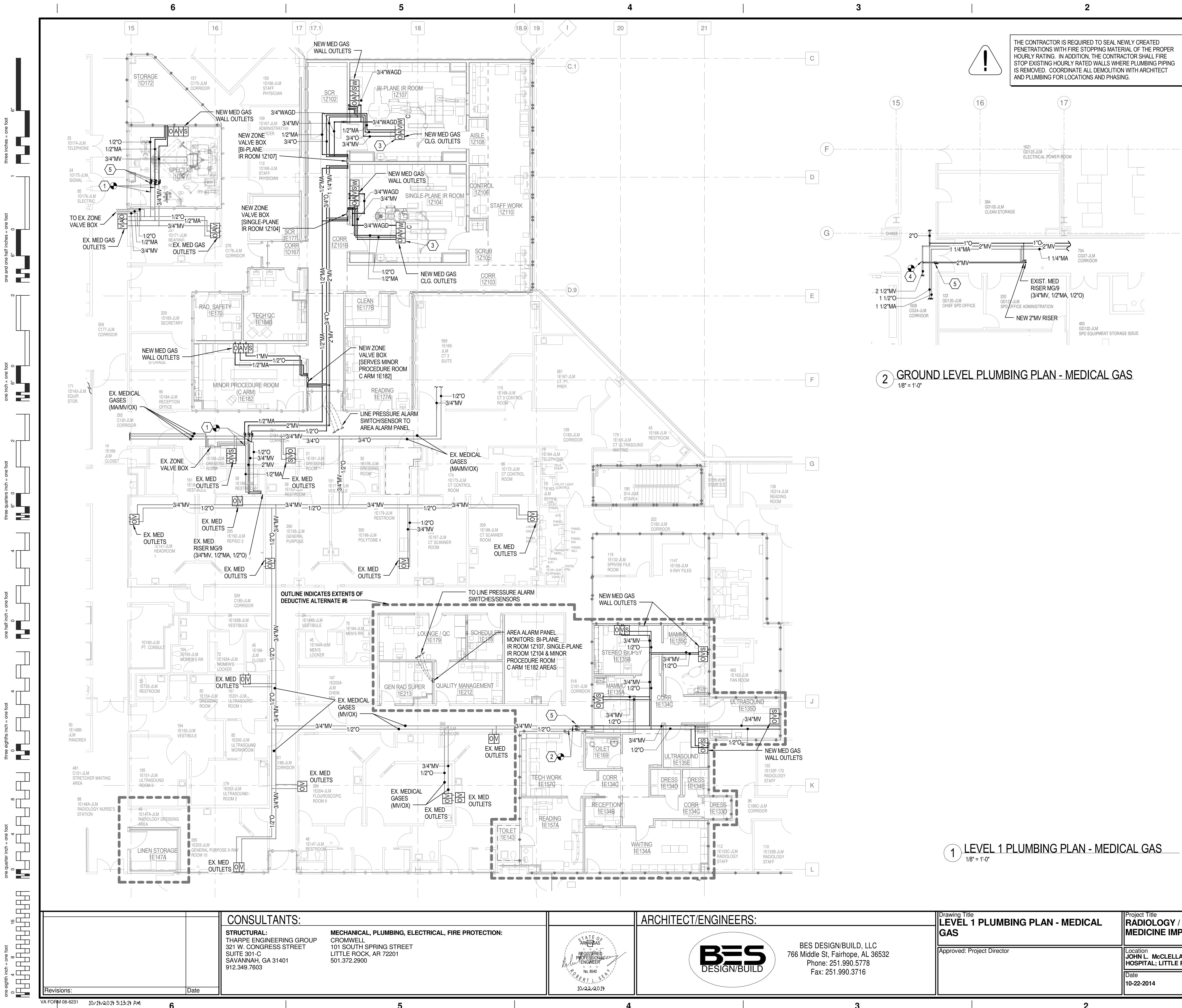
Building Number
1

Drawing Number
PL102

Dwg. 66 of 99

CENTRAL ARKANSAS VETERANS AFFAIRS HEALTHCARE SYSTEM





2 GROUND LEVEL PLUMBING PLAN - MEDICAL GAS
1/8" = 1'-0"

1 LEVEL 1 PLUMBING PLAN - MEDICAL GAS
1/8" = 1'-0"

PLUMBING LEGEND AND NOTES

REFER TO SHEET PP001 & PP002 FOR LEGEND AND NOTES.

MEDICAL GAS KEYED NOTES

1. CONNECT NEW MEDICAL GAS, MEDICAL AIR, OXYGEN, MEDICAL VACUUM TO EXISTING MEDICAL GAS SYSTEMS. PROVIDE LOCKING SERVICE VALVE AT CONNECTION ON EACH SYSTEM.
2. CONNECT NEW MEDICAL GAS, OXYGEN, MEDICAL VACUUM TO EXISTING MEDICAL GAS SYSTEMS. PROVIDE LOCKING SERVICE VALVE AT CONNECTION ON EACH SYSTEM.
3. MEDICAL GAS CEILING OUTLETS AND RETRACKERS, MEDICAL AIR, OXYGEN, MEDICAL VACUUM AND WASTE ANESTHESIA DISPOSAL (WAGD). COORDINATE INSTALLATION WITH EQUIPMENT RAILS, HVAC, ELECTRICAL AND VA RADIOLOGIST USER TEAM PRIOR TO CONSTRUCTION. SEE EQUIPMENT DRAWINGS INCLUDED IN FINAL CONSTRUCTION SET FOR RAIL AND EQUIPMENT LOCATION.
4. ROUTE AND CONNECT NEW 2" MEDICAL VACUUM TO EXISTING 2-1/2" MEDICAL VACUUM IN COORDINATOR (APPROXIMATELY 30FT WEST OF EXISTING MEDICAL GAS RISER MG/9).
5. SERVICE VALVE WITH LOCKABLE HANDLE.

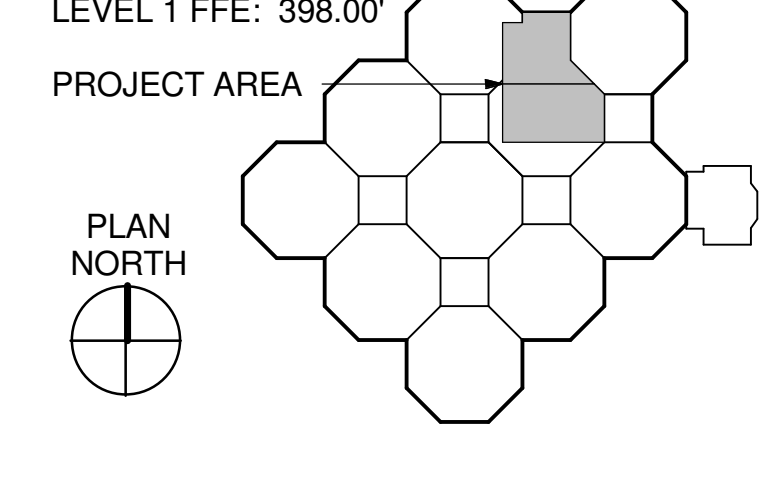
MEDICAL GAS GENERAL NOTES

1. MEDICAL GAS SYSTEM SHALL BE PROVIDED, INSTALLED AND TESTED IN COMPLIANCE WITH NFPA 99.
2. ALL EXISTING EQUIPMENT, PIPING, ETC. ARE BASED ON AS-BUILT DRAWINGS AND LIMITED SITE SURVEY. CONTRACTOR TO VERIFY LOCATIONS AND MAKE PROVISIONS SHOULD THERE BE ANY CONFLICTS OR VARIATIONS.
3. PIPING LAYOUT IS DIAGRAMMATIC ONLY. CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD VERIFICATION AND COORDINATING ACTUAL LOCATION WITH ALL OTHER TRADES.
4. DUE TO PHASING, IT WILL BE NECESSARY TO RE-CERTIFY PARTS OF NEWLY INSTALLED MEDICAL GAS PIPING & COMPONENTS. CONTRACTOR TO BEAR THE COST OF RECERTIFICATION AT NO ADDITIONAL COST TO THE OWNER. CONTRACTOR SHALL ALSO PROVIDE CERTIFICATION FOR ALL MEDICAL GAS PIPING (VACUUM, MEDICAL AIR AND OXYGEN) DOWN STREAM OF WHERE CONNECTIONS TO EXISTING PIPING ARE SHOWN.
5. THE CONTRACTOR SHALL CONNECT NEW MEDICAL GAS SERVICES TO EXISTING. THE CONTRACTOR SHALL PATCH TO MATCH EXISTING WALLS AND CEILING PENETRATIONS.
6. ALL SERVICE VALVES TEE OFF OF MAIN BRANCH LINE SHALL BE EQUIPPED WITH LOCKABLE HANDLES.
7. SIZES SHOWN ARE NOMINAL DIAMETERS. ALL PIPING SHALL BE: HARD DRAWN COPPER TUBE, ASTM B819, TYPE K, FACTORY CLEANED, PURGED AND SEALED FOR MEDICAL GAS SERVICE. INCLUDE MARKING OR LABELING, "CLEANED FOR MEDICAL GAS SERVICE." "CLEANED FOR OXYGEN SERVICE". COPPER WROUGHT FITTINGS ARE TO BE SIMILAR. ALL JOINTS TO BE BRAZED PER NFPA 99.
8. ALL MEDICAL GAS PIPING (VAC, AIR, OXY) TO DROP DOWN IN WALL TO 4'-6" ABOVE FINISHED FLOOR AND ROUGH-IN AND CONNECTED TO NEW GAS OUTLETS. VERIFY WITH VA HOSPITAL STANDARDS AND ARCHITECT FOR FINAL MOUNTING HEIGHT.
9. ALL FLOOR AND WALL PENETRATIONS SHALL BE FIRE STOPPED AS REQUIRED TO PRESERVE THE FIRE RESISTANCE RATING OF THE PENETRATED ASSEMBLY.
10. MEDICAL GAS CONTRACTOR SHALL INCLUDE MATERIALS AND INSTALLATION COST OF ALL MEDICAL WIRING IN BASE BID.
11. INTERVALS OF PIPE SUPPORTS: (EXAMPLE PIPE SIZE-SUPPORT SPACING IN FEET)
1/2" - 6FT, 3/4" - 7FT, 1" - 8FT, 1-1/4" - 9FT, 1-1/2" & 2" - 10FT
12. MEDICAL GAS SYSTEM PIPING AND COMPONENTS SHALL HAVE SEISMIC PROTECTION AS REQUIRED BY NFPA. REFER TO SEISMIC REQUIREMENTS AND DETAILS ON MECHANICAL SHEETS.
13. PROVIDE OHMEDA STYLE QUICK CONNECTORS AT OUTLETS. COORDINATE STYLE WITH VA HOSPITAL REQUIREMENTS PRIOR TO ORDERING.

MEDICAL GAS OUTLET LEGEND

- OA/VS** MEDICAL AIR, OXYGEN, MEDICAL VACUUM, SLIDE - WALL MOUNTED.
(1) 1/2" MA, (1) 1/2" O, (1) 3/4" MV, (1) SLIDE
- AO/MW** MEDICAL AIR, OXYGEN, VACUUM, WAGD - CONCEALED CEILING REELS.
(1) 1/2" MA, (1) 1/2" O, (1) 3/4" MV, (1) 3/4" WAGD
- OV/S** VACUUM, OXYGEN, SLIDE - WALL MOUNTED.
(1) 1/2" O, (1) 3/4" MV, (1) SLIDE

KEY PLAN



CONSTRUCTION DOCUMENT SUBMISSION
FULLY SPRINKLERED

CONSULTANTS:

STRUCTURAL:
THARPE ENGINEERING GROUP
321 W. CONGRESS STREET
SUITE 301-C
SAVANNAH, GA 31401
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ARCHITECT/ENGINEERS:



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Drawing Title
LEVEL 1 PLUMBING PLAN - MEDICAL GAS

Approved: Project Director

Project Title
RADIOLOGY / NUCLEAR MEDICINE IMPROVEMENTS

Location
JOHN L. MCCLELLAN MEMORIAL VETERANS HOSPITAL, LITTLE ROCK, ARKANSAS

Date
10-22-2014

Drawn
STEARNS

Checked
SEAY

Project Number
CSI-111

Building Number
1

Drawing Number
PL103

Dwg. 67 of 99

CENTRAL ARKANSAS VETERANS AFFAIRS HEALTHCARE SYSTEM



three inches = one foot
one and one half inches = one foot
one inch = one foot
three quarters inch = one foot
one half inch = one foot
three eighths inch = one foot
one quarter inch = one foot
one eighth inch = one foot

6

5

4

3

2

1

PLUMBING LEGEND AND NOTES

REFER TO SHEET PP001 & PP002 FOR LEGEND AND NOTES.

PLUMBING KEYED NOTES

1 MAINTAIN 25 FT. CLEARANCE BETWEEN VENT THRU. ROOF AND AIR INTAKE.

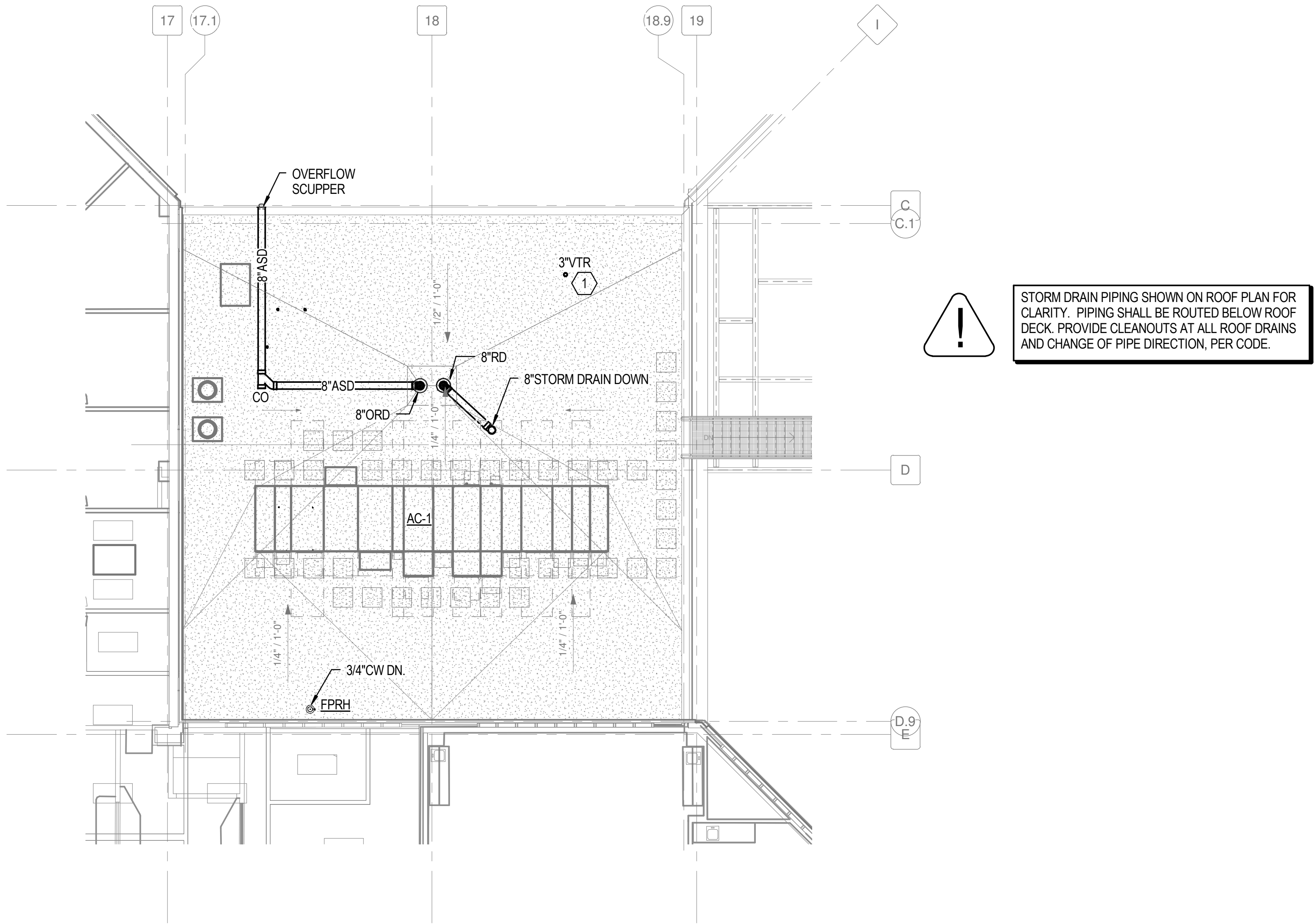
A

B

C

D

E

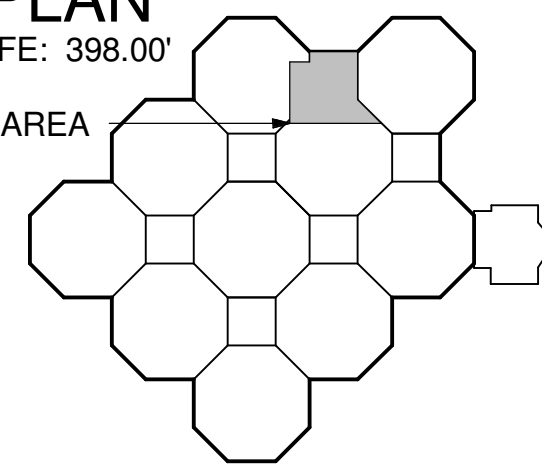


1 LEVEL 2 PLUMBING ROOF PLAN - AREA A
1/8" = 1'-0"

KEY PLAN

LEVEL 1 FFE: 398.00'

PROJECT AREA



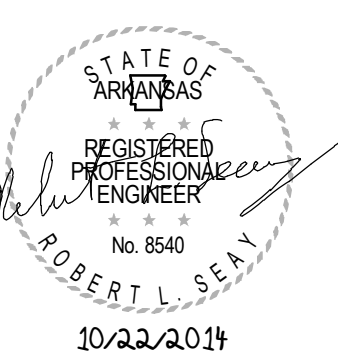
SCALE: 1/8" = 1'-0"

CONSTRUCTION DOCUMENT SUBMISSION
FULLY SPRINKLERED

CONSULTANTS:

STRUCTURAL:
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SAVANNAH, GA 31401
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Drawing Title
LEVEL 2 PLUMBING ROOF PLAN - AREA A

Approved: Project Director

Project Title
RADIOLOGY / NUCLEAR
MEDICINE IMPROVEMENTS

Location
JOHN L. McCLELLAN MEMORIAL VETERANS
HOSPITAL; LITTLE ROCK, ARKANSAS

Date
10-22-2014

Drawn
STEARNS

Checked
SEAY

Project Number
CSI-111

Building Number
1

Drawing Number

PL104

Dwg. 66 of 99

CENTRAL ARKANSAS
VETERANS AFFAIRS
HEALTHCARE
SYSTEM



6

5

4

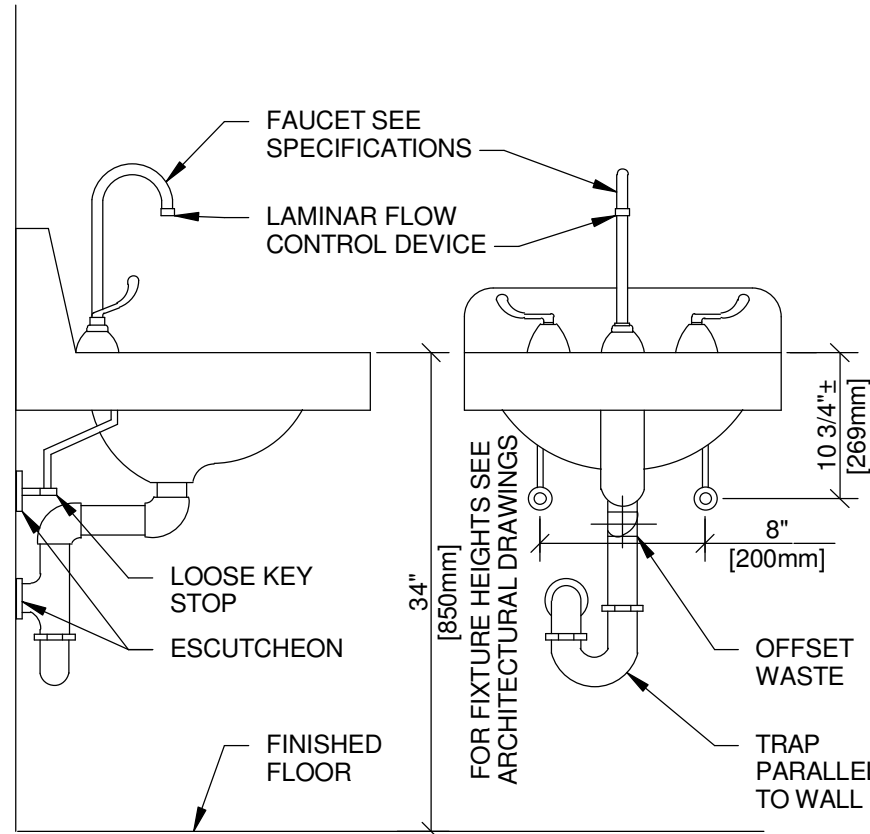
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2

1

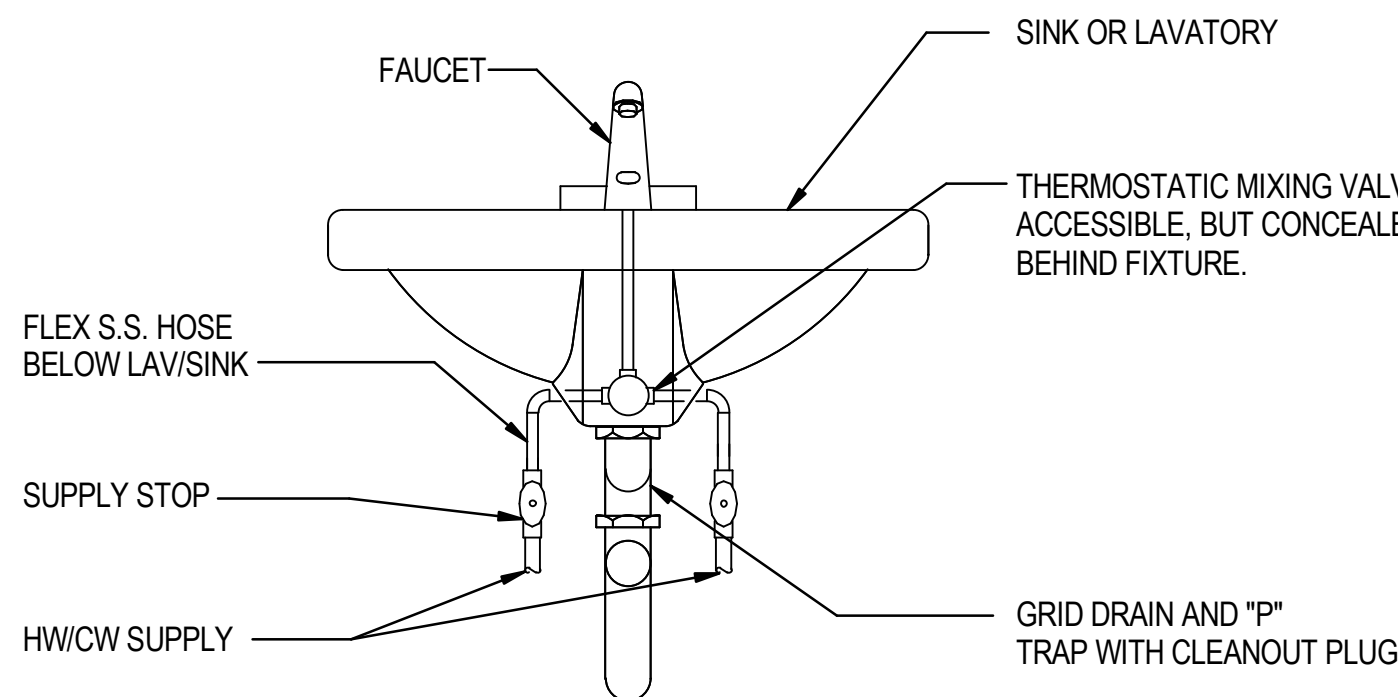
6
5
4
3
2
1
A
B
C
D
E

three inches = one foot
one and one half inches = one foot
one inch = one foot
three quarters inch = one foot
one half inch = one foot
one quarter inch = one foot
one eighth inch = one foot
one quarter inch = one foot
one eighth inch = one foot



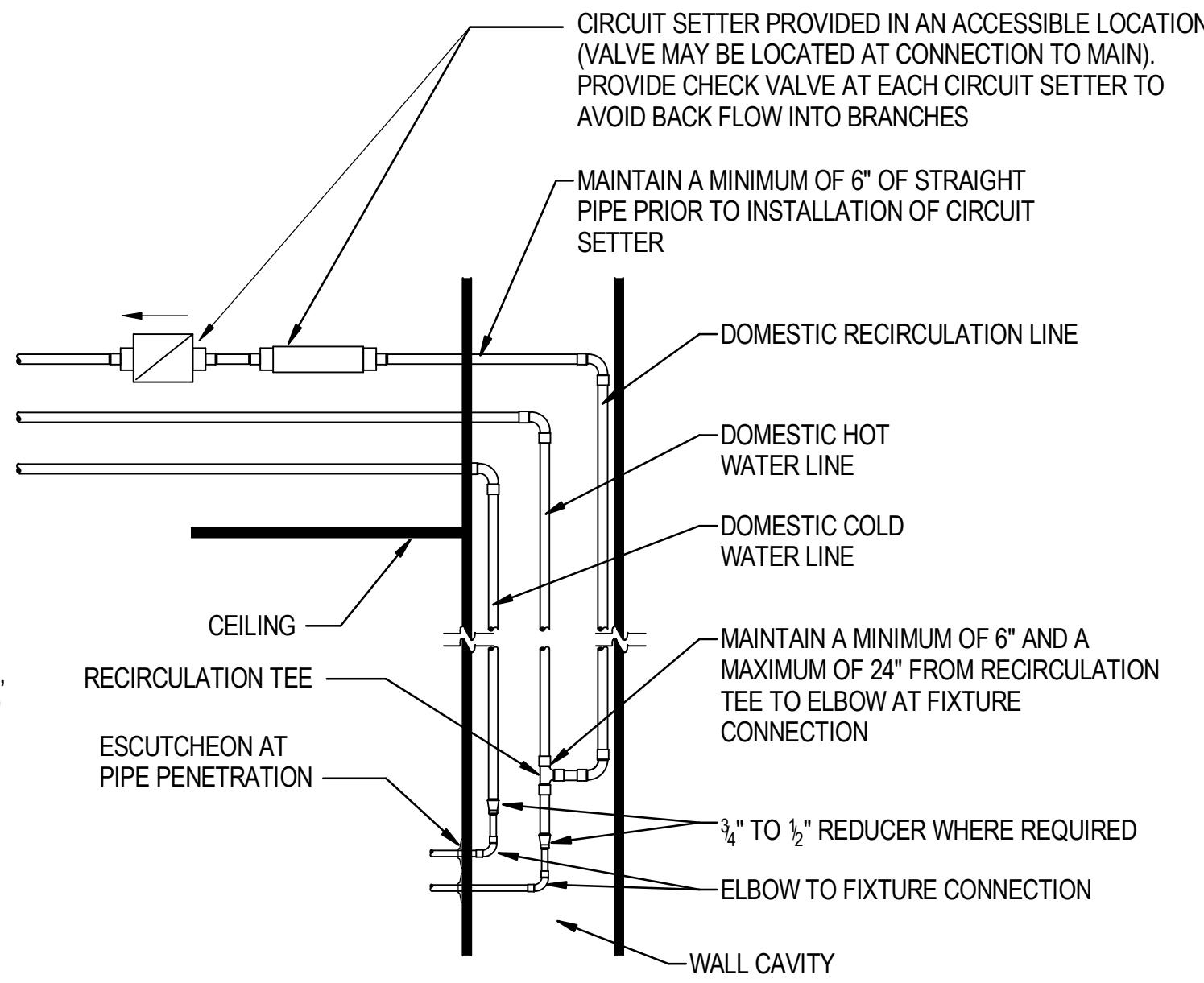
NOTE: PROVIDE TRAP, STOP AND SUPPLY WRAP

1 TYPICAL WHEELCHAIR LAVATORY DETAIL
NO SCALE



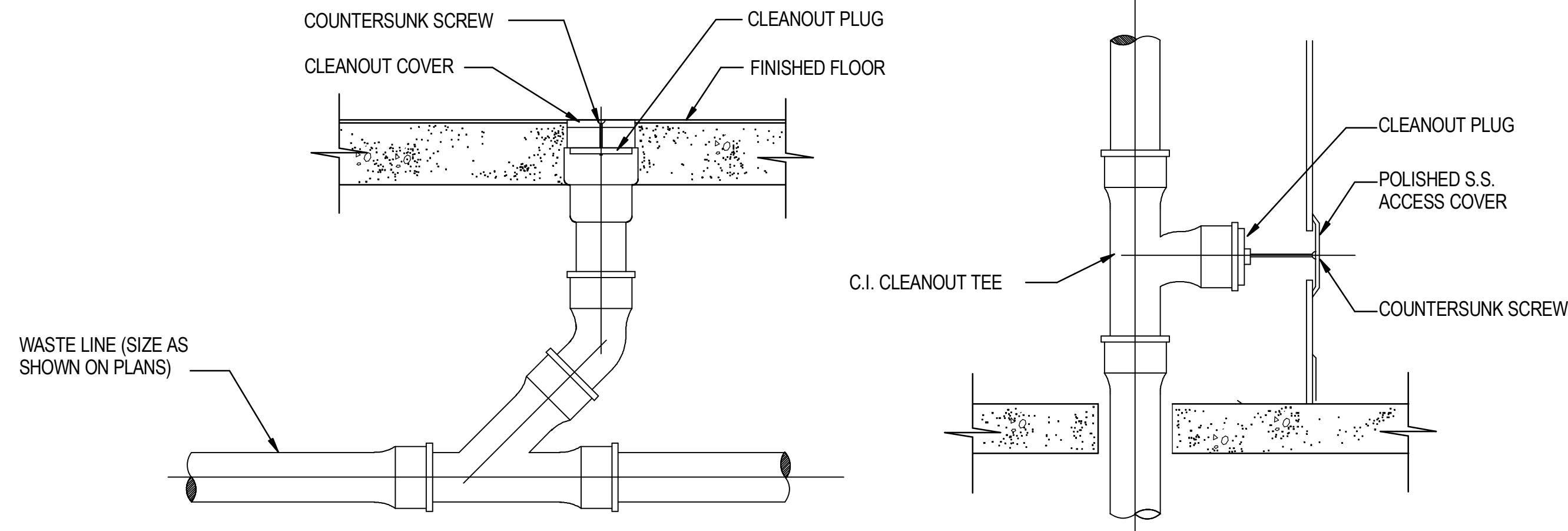
NOTE: PROVIDE TRAP, STOP AND SUPPLY WRAP

2 LAVATORY/SINK INSTALLATION
NO SCALE



NOTE:
WHEN ATTACHING HOT WATER RETURN PIPING IN CHASE HEADER, ATTACH AT FARTHEST FIXTURE LOCATION.

3 CIRCUIT SETTER CONNECTION
NO SCALE



4 TYPICAL CLEANOUTS
NO SCALE

CONSTRUCTION DOCUMENT SUBMISSION
FULLY SPRINKLERED

Revisions:	Date	CONSULTANTS: STRUCTURAL: THARPE ENGINEERING GROUP 321 W. CONGRESS STREET SUITE 301-C SAVANNAH, GA 31401 912.349.7603 MECHANICAL, PLUMBING, ELECTRICAL, FIRE PROTECTION: CROMWELL 101 SOUTH SPRING STREET LITTLE ROCK, AR 72201 501.372.2900		ARCHITECT/ENGINEERS: BES DESIGN/BUILD, LLC 766 Middle St, Fairhope, AL 36532 Phone: 251.990.5778 Fax: 251.990.3716	Drawing Title PLUMBING DETAILS	Approved: Project Director	Project Title RADIOLOGY / NUCLEAR MEDICINE IMPROVEMENTS	Location JOHN L. McCLELLAN MEMORIAL VETERANS HOSPITAL, LITTLE ROCK, ARKANSAS	Date 10-22-2014	Drawn STEARNS	Checked SEAY	Project Number CSI-111 Building Number 1	Drawing Number PL501 Dwg. 69 of 99	CENTRAL ARKANSAS VETERANS AFFAIRS HEALTHCARE SYSTEM

three inches = one foot
one and one half inches = one foot
one inch = one foot
three quarters inch = one foot
one half inch = one foot
three eighths inch = one foot
one quarter inch = one foot
one eighth inch = one foot

WATER HAMMER ARRESTOR						
WADE SHOKTROL SIZE	#5	#10	#20	#50	#75	#100
P.D.I. UNITS	A	B	C	D	E	F
FIXTURE UNITS	1-11	12-32	33-60	61-113	114-154	155-330

PLUMBING FIXTURE SCHEDULE

(NOTE: FIXTURES SCHEDULED ARE BASIS OF DESIGN. PROVIDE "EQUAL TO" FIXTURES SCHEDULED. FIXTURE SHALL COMPLY WITH "BUY AMERICAN ACT")

P-101-M (MODIFIED) WATER CLOSET, FLOOR-MOUNTED, SENSOR OPERATED FLUSH VALVE, HARD WIRED, ADA ACCESSIBLE
FIXTURE - AMERICAN STANDARD "MADERA 17-1/4"H" #3443.001, VITREOUS CHINA WITH EVERCLEAN, WHITE, FLOOR MOUNTED, 1.1 TO 1.6 GPF, 2 1/8" PASSAGEWAY, 1 1/2" TOP SPUD, SIPHON JET FLUSHING, INTEGRAL STOPS, AND INTEGRAL TRAPS.
FLUSH VALVE - SLOAN ROYAL #111-1.6 ES-S EXPOSED, SENSOR ACTIVATED ROYAL FLUSHOMETER, CHROME PLATED, ADA ACCESSIBLE, COURTESY FLUSH OVERRIDE BUTTON, VANDAL RESISTANT STOP CAP, SLOAN #EL-154 TRANSFORMER 120 VAC/24 VAC50 VA, SLOAN #EL-485-A FLUSHOMETER ELECTRICAL BOX POSITIONING AND SUPPORT KIT.
SEAT - AMERICAN STANDARD #5901.110, HEAVY ELONGATED SEAT OPEN FRONT WITH LESS COVER, EVERCLEAN SURFACE, CONCEALED CHECK HINGE.
PLUMBING ROUGH-INS - 3" SS, 2" V, 1" CW
MOUNTING - RIM AT 17-19" A.F.F (SEE ADA ACCESSIBLE NOTES FOR ADDITIONAL REQUIREMENTS).

P-403 LAVATORY, WALL HUNG, GOOSENECK SPOUT WITH FOOT PEDAL CONTROL
FIXTURE - AMERICAN STANDARD "LUCERNE" #0355.421, 20-1/2" X 18-1/4" x 8-1/8", WHITE, VITREOUS CHINA, SINGLE CENTERED FAUCET HOLE, CONCEALED ARM.
SPOUT/FOOT PEDAL VALVE - SPOUT - CHICAGO #626-E29VPABCP, 5-1/4" RIGID GOOSENECK SPOUT, 2.2 GPM VANDAL PROOF NON-AERATING LAMINAR FLOW OUT, LEAD FREE, CHROME. FOOT PEDAL VALVE - CHICAGO #834-EPSLOABCP, HOT/COLD FOOT PEDAL CONTROL VALVE, LEAD FREE, ADJUSTABLE METERING, EXTEND PEDALS, CHROME.
GRID STRAINER - MCGUIRE #155WC OFFSET TYPE, 1-1/4", ADJUST SANITARY SEWER ROUGH-IN LOCATION TO ACCOMMODATE OFFSET GRID STRAINER.
STOPS - MCGUIRE #LF2165CCLK, LEAD FREE, LOOSE KEY, COMPRESSION CONNECTION, 1/2"x3/8" O.D.
P-TRAP - MCGUIRE #8872, 1-1/4" INLET/OUTLET, 17 GA. CHROME PLATED CAST BRASS WITH CLEANOUT.
CARRIER - ZURN #1231 CONCEALED ARM WALL CARRIER.
PLUMBING ROUGH-INS - 2" SS, 2" V, 1/2" CW, 1/2" HW
MOUNTING HEIGHT - SEE ARCHITECTURAL DETAILS.

P-418 LAVATORY, SEMI-RECESSED COUNTERTOP, SENSOR OPERATED, ADA ACCESSIBLE
FIXTURE - AMERICAN STANDARD "MEZZO" #9960.001, 20-1/2" X 21-1/4" x 8", SEMI-RECESSED COUNTERTOP, WHITE, VITREOUS CHINA, CENTER SINGLE FAUCET HOLE.
FAUCET - CHICAGO FAUCET #116.112AB.1, LEAD FREE, SENSOR OPERATED, SINGLE HOLE, HARD WIRED, 0.5 GPM LOW FLOW, VANDAL RESISTANT AERATOR, POWER SUPPLY TRANSFORMER CHICAGO #240.631.00.1 ABOVE CEILING CONCEALED 120 VAC/12 VAC TRANSFORMER (WILL OPERATE UP TO 8 FAUCETS).
GRID STRAINER - MCGUIRE #WC155 OFFSET TYPE, 1-1/4", ADJUST SANITARY SEWER ROUGH-IN LOCATION TO ACCOMMODATE COUNTERTOP BY ARCHITECT.
STOPS - MCGUIRE #LF2165CCLK, LEAD FREE, LOOSE KEY, COMPRESSION CONNECTION, 1/2"x3/8" O.D.
P-TRAP - MCGUIRE #8872, 1-1/4" INLET/OUTLET, 17 GA. CHROME PLATED CAST BRASS WITH CLEANOUT.
MIXING VALVE - LAWLER #TMM-1070LF, LEAD FREE, BELOW DECK MECHANICAL THERMOSTATIC MIXING VALVE (SET @ 110°F).
CARRIER - MANUFACTURER SUPPLIED MOUNTING BRACKET.
PLUMBING ROUGH-INS - 2" SS, 2" V, 1/2" CW, 1/2" HW
MOUNTING HEIGHT - 34" AFF. (SEE ADA ACCESSIBLE NOTES FOR ADDITIONAL REQUIREMENTS).

P-519 SURGEONS SCRUB SINK, (1) ONE STATION, WALL-MOUNTED, SENSOR OPERATED FAUCET
FIXTURE - WILLOUGHBY #CWSSS-1(R-MC)LS-D-LFN, SCRUB SINK, 32"(L) X 27"(W), (-1) ONE STATION, WALL MOUNTED, 14 GAUGE 304 STAINLESS STEEL, #4 SATIN FINISH, (-MC) MOUNTING CARRIER, (1) ONE (-IR) SENSOR ACTIVATED (-LFN) LAMINAR FLOW FAUCETS, PLUG-IN TRANSFORMER, (-LSD) LIQUID SOAP DISPENSERS, KNEE ACTIVATED, (1) ONE 1-1/2" CENTERED DRAIN OUTLET.
MIXING VALVE - LAWLER #TMM-1070LF, LEAD FREE, BELOW DECK MECHANICAL THERMOSTATIC MIXING VALVE (SET @ 110°F).
STOPS - MCGUIRE #LF2165CCLK, LEAD FREE, LOOSE KEY, COMPRESSION CONNECTION, 1/2"x3/8" O.D.
P-TRAP - MCGUIRE #8912, 1-1/2" INLET/OUTLET, 17 GA. CHROME PLATED CAST BRASS WITH CLEANOUT.
MOUNTING HEIGHT - 36" ABOVE FINISH FLOOR.

P-528-M (MODIFIED) SINGLE COMPARTMENT SINK, UNDERMOUNT, GOOSENECK SPOUT WITH FOOT PEDAL CONTROL
FIXTURE - JUST #US-1821-A-GR TYPE 304 STAINLESS STEEL, 18"(W) X 21"(L) X 7-1/2"(D), SINGLE BOWL, 16" (W) X 19"(L) INSIDE DIM., 18 GAUGE, UNDER MOUNT, CENTER DRAIN.
SPOUT/FOOT PEDAL VALVE - SPOUT - CHICAGO #626-CN8AE29VPABCP, 8" RIGID GOOSENECK SPOUT, 2.2 GPM VANDAL PROOF NON-AERATING LAMINAR FLOW OUT, LEAD FREE, CHROME.
FOOT PEDAL VALVE - CHICAGO #625-SLOABCP, HOT/COLD FOOT PEDAL CONTROL VALVE, LEAD FREE, ADJUSTABLE METERING, SHORT PEDALS, CHROME.
GRID STRAINER - JUST #J-35-FS FLAT STRAINER GRID DRAIN, 1-1/2"
STOPS - MCGUIRE #LF2165CCLK, LEAD FREE, LOOSE KEY, COMPRESSION CONNECTION, 1/2"x3/8" O.D.
P-TRAP - MCGUIRE #8912, 1-1/2" INLET/OUTLET, 17 GA. CHROME PLATED CAST BRASS WITH CLEANOUT.
PLUMBING ROUGH-INS - 2" SS, 2" V, 1/2" CW, 1/2" HW

UC-1 REFRIGERATOR ICE MAKER UTILITY CONNECTION BOX
FIXTURE - GUY GRAY #BIM875AB, UTILITY CONNECTION BOX, 1/2" LEAD FREE BRASS SWEAT CONNECTION VALVE, 20 GAUGE BOX WITH 20 GAUGE FACEPLATE. PROVIDE STAINLESS STEEL FLEXIBLE HOSE.
PLUMBING ROUGH-INS - 1/2" CW

RD-1 ROOF DRAIN
FIXTURE - ZURN #ZC100-C-EA, CAST IRON ROOF DRAIN WITH FLANGE, CAST IRON MUSHROOM DOME, (-C) UNDERDECK CLAMPING, (-EA) ADJUSTABLE EXTENSION ASSEMBLY, SEE PLAN FOR SIZE.
PLUMBING ROUGH-INS - SEE PLAN

ORD-1 AUXILIARY ROOF DRAIN
SAME AS RD-1, EXCEPT WITH 2" WATER DAM AND (-WS OPTION) STAINLESS STEEL RAIN COVER.
PLUMBING ROUGH-INS - SEE PLAN.

FPRH FREEZEPROOF ROOF HYDRANT
FIXTURE - MAPA #MPH-24FP, AUTO DRAINING, BLACK POWDER COATED CAST ALUMINUM WEATHER - GUARD DOME HANDLE, 304 STAINLESS STEEL SHROUD WITH FLANGE, 125 LB. 1" BRONZE GLOBE VALVE WITH QUICK DISCONNECT AND BUILT-IN VACUUM BREAKER, STAINLESS STEEL RESERVOIR, R-8/THERMO-CELL INSULATION AND UNDER DECK SUPPORT FLANGE.
PLUMBING ROUGH-INS - 3/4" CW

WCO WALL CLEANOUT
FIXTURE - ZURN #Z-1441-BP SERIES CLEANOUT CAST IRON FERRULE WITH BRASS PLUG, AND ROUND STAINLESS STEEL SECURE ACCESS COVER. USE CORRECT SIZE FOR PIPING INDICATED ON PLANS.

FCO FLOOR CLEANOUT
FIXTURE - ZURN #ZN1400-HD SERIES ADJUSTABLE, HEAVY DUTY CAST IRON FLOOR OUTLET, BRONZE PLUG, POLISHED NICKEL BRONZE TOP AND THREADED INSERTS.

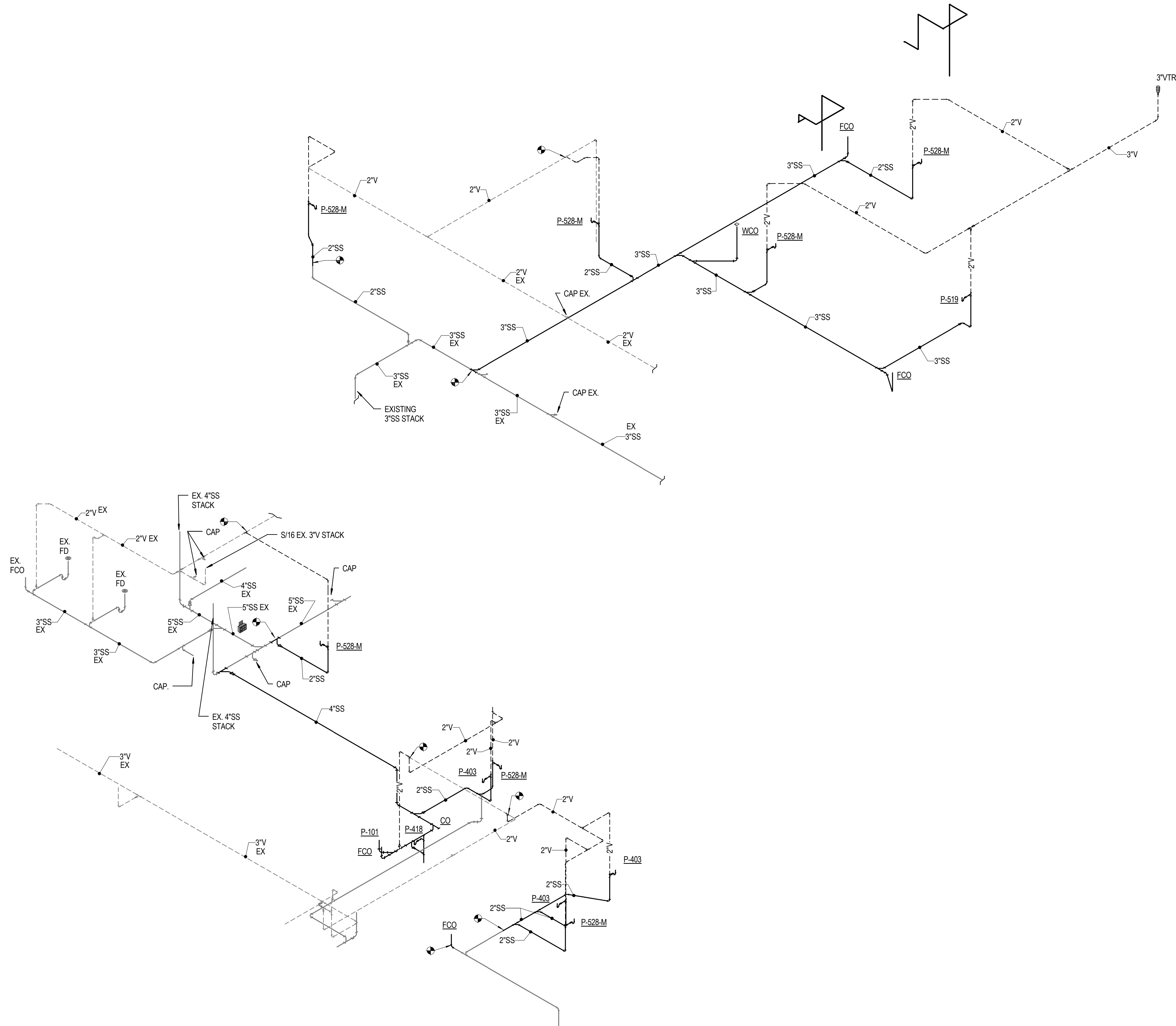
WATER HAMMER ARRESTORS
WADE "SHOKTROL" WHERE REQUIRED IN PIPING SYSTEMS, PROPERLY SIZED WATER HAMMER ARRESTERS SHALL BE PROVIDED. WATER HAMMER ARRESTERS SHALL BE LOCATED ON ALL QUICK CLOSING VALVE (FLUSH VALVES, DISHWASHERS, ICE MAKERS, SOLENOID VALVES, ETC.)

CONSTRUCTION DOCUMENT SUBMISSION
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<div>Revisions:</div> <div>Date</div>	<div>CONSULTANTS:</div> <div>STRUCTURAL: THARPE ENGINEERING GROUP 321 W. CONGRESS STREET SUITE 301-C SAVANNAH, GA 31401 912.349.7603</div> <div>MECHANICAL, PLUMBING, ELECTRICAL, FIRE PROTECTION: CROMWELL 101 SOUTH SPRING STREET LITTLE ROCK, AR 72201 501.372.2900</div>	<div><div>STATE OF ARKANSAS REGISTERED PROFESSIONAL ENGINEER No. 5540 ROBERT L. SEAY 10/22/2019</div></div>	ARCHITECT/ENGINEERS:		Drawing Title PLUMBING SCHEDULES		Project Title RADIOLOGY / NUCLEAR MEDICINE IMPROVEMENTS		Project Number CSI-111 Building Number 1		CENTRAL ARKANSAS VETERANS AFFAIRS HEALTHCARE SYSTEM
			<div><div>BES DESIGN/BUILD</div><div>BES DESIGN/BUILD, LLC 766 Middle St, Fairhope, AL 36532 Phone: 251.990.5778 Fax: 251.990.3716</div></div>		Approved: Project Director		Location JOHN L. MCLELLAN MEMORIAL VETERANS HOSPITAL, LITTLE ROCK, ARKANSAS		Drawing Number		
							Date 10-22-2014		Drawn STEARNS Checked SEAY		
						PL601		Dwg. 70 of 99		<div><div></div>Department of Veterans Affairs</div>	




three inches = one foot
one and one half inches = one foot
one inch = one foot
three quarters inch = one foot
one half inch = one foot
three eighths inch = one foot
one quarter inch = one foot
one eighth inch = one foot

A
B
C
D
E



1 WASTE AND VENT RISER
NO SCALE

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		CONSULTANTS: STRUCTURAL: THARPE ENGINEERING GROUP 321 W. CONGRESS STREET SUITE 301-C SAVANNAH, GA 31401 912.349.7603 MECHANICAL, PLUMBING, ELECTRICAL, FIRE PROTECTION: CROMWELL 101 SOUTH SPRING STREET LITTLE ROCK, AR 72201 501.372.2900				ARCHITECT/ENGINEERS:  BES DESIGN/BUILD, LLC 766 Middle St, Fairhope, AL 36532 Phone: 251.990.5778 Fax: 251.990.3716		Drawing Title PLUMBING RISERS - SANITARY SEWER		Project Title RADIOLOGY / NUCLEAR MEDICINE IMPROVEMENTS		Project Number CSI-111		CENTRAL ARKANSAS VETERANS AFFAIRS HEALTHCARE SYSTEM 			
								Approved: Project Director		Location JOHN L. McCLELLAN MEMORIAL VETERANS HOSPITAL; LITTLE ROCK, ARKANSAS		Drawing Number PL901					
Revisions:		Date								Date 10-22-2014		Drawn STEARNS			Checked SEAY		Dwg. 71 of 99



