

GENERAL NOTES

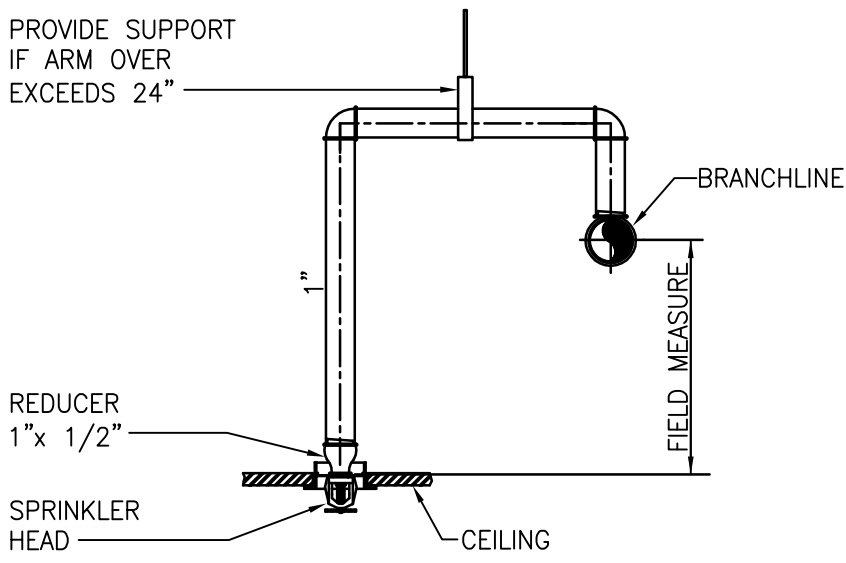
- FIRE PROTECTION SPRINKLER INSTALLATION SHALL MEET THE REQUIREMENTS OF THE FOLLOWING:  
A. NFPA 13 AND 14, 2013 ED.  
B. LOCAL AND STATE REGULATIONS AND IBC 2012 ED.  
C. DVA FIRE PROTECTION MANUAL, SIXTH ED.; REVISED SEPTEMBER 2011
- SPRINKLER HEADS SHALL BE FM APPROVED QUICK RESPONSE IN ALL AREAS EXCEPT WHERE SPECIFICALLY PROHIBITED, IN COMPLIANCE WITH VA GUIDELINES AND NFPA REQUIREMENTS.
- SPRINKLERS THROUGHOUT THE BUILDING TO BE ORDINARY TEMPERATURE RATED EXCEPT FOR ELECTRICAL ROOMS/CLOSETS, HEADS LOCATED WITH 15' OF AUTOGLAZES AND CAGENASHER SHALL BE INTERMEDIATE TEMPERATURE RATED AND MECHANICAL ROOMS TO BE PROVIDED WITH HIGH TEMPERATURE RATED HEADS.
- SPRINKLER PIPE SIZES AND SPRINKLER HEAD LOCATIONS SHALL CONFORM TO NFPA REQUIREMENTS.
- PIPE HANGERS INCLUDING SEISMIC PROTECTION TO BE INSTALLED AS REQUIRED BY N.F.P.A. FOR SUPPORTING SPRINKLER PIPING. NO OTHER PIPING AND/OR DEVICES ARE TO BE ATTACHED TO THE SPRINKLER PIPE.
- PIPING SHALL NOT BE LOCATED IN ANY ELECTRICAL ROOMS/CLOSETS OR TELECOMMUNICATION ROOMS/CLOSETS UNLESS THOSE PIPES SERVE ONLY THAT SPACE.
- ALL SPRINKLER PIPE TO MAINTAIN A 6"-0" MIN VERTICAL CLEARANCE FROM TOP OF ELECTRICAL CONTROL PANELS & SWITCHGEAR/TRANSFORMERS.
- PROVIDE SPRINKLER ZONE FLOOR CONTROL VALVE ASSEMBLY CONSISTING OF CONTROL VALVE, CHECK VALVE, FLOW SWITCH, SELF-CONTAINED TEST AND DRAIN ASSEMBLY AND PRESSURE GAGE, ON THE SPRINKLER MAIN BRANCH SERVING EACH FLOOR.
- INSTALL PIPING SO THAT VALVES ARE ACCESSIBLE AND STEMS EXTEND VERTICALLY UP. ALL CONTROL VALVES SHALL BE EQUIPPED WITH TAMPER SWITCHES.
- ALL WATER FLOW SWITCHES MUST BE ISOLATED BY MEANS OF A FITTING OR UNION ON BOTH SIDE TO FACILITATE REMOVAL AND SERVICE OF THE FLOW SWITCH.
- THE FIRE PROTECTION CONTRACTOR SHALL PROVIDE THE QUANTITY OF SPRINKLER HEADS AS REQUIRED TO MAINTAIN THE MINIMUM COVERAGE REQUIRED BY NFPA 13 IS ALL AREAS THE BUILDING.
- COORDINATE THE EXACT LOCATION OF ALL SPRINKLER HEADS, PIPING, EQUIPMENT, AND DEVICES WITH ARCHITECTURAL DRAWINGS AND THE RESPECTIVE DRAWINGS OF PIPING, DUCTWORK, DIFFUSERS, BEAMS, LIGHTS, ETC. THIS CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF THESE COMPONENTS IN THE FIELD.
- PROVIDE COMPLETE AND FUNCTIONAL FIRE PROTECTION SYSTEMS FOR THE PROJECT, THE SYSTEMS SHALL CONFORM TO THE SPECIFICATIONS AND AS SHOWN ON DRAWINGS. ITEMS OR WORK NOT SHOWN OR SPECIFIED, BUT REQUIRED FOR COMPLETE SYSTEMS, SHALL BE PROVIDED AND CONFORM TO ACCEPTED TRADE PRACTICES. THE DRAWINGS AND SPECIFICATIONS ARE PRESENTED TO DEFINE SPECIFIC SYSTEM REQUIREMENTS AND SERVE TO EXPAND ON THE PRIMARY CONTRACT REQUIREMENTS OF PROVIDING COMPLETE SYSTEMS. THE DRAWINGS ARE DIAGRAMMATIC AND INDICATE THE GENERAL ARRANGEMENT AND ROUTING OF THE SYSTEMS INCLUDED IN THIS CONTRACTORS WORK.
- THESE DRAWINGS WERE PREPARED FROM INFORMATION TAKEN FROM THE ORIGINAL BUILDING DRAWINGS AND FIELD SURVEY INFORMATION COMPILED BY THE ENGINEERING DESIGN TEAM FOR THE PURPOSE OF ENGINEERING DESIGN CONCEPT. EXISTING CONDITIONS ARE SHOWN AS ACCURATELY AS POSSIBLE. THERE IS THE POSSIBILITY THAT CONDITIONS SHOWN ARE NOT EXACTLY AS EXISTING. CONTRACTOR SHALL VERIFY ALL DIMENSIONS, ELEVATIONS, LOCATIONS, SIZES AND CONDITIONS AT THE SITE AND REPORT ANY DISCREPANCIES TO THE ARCHITECT PRIOR TO BEGINNING INSTALLATION OR FABRICATION WORK.
- THE CONTRACTOR WILL BE RESPONSIBLE FOR ENSURING THAT ALL RULES AND REGULATIONS, INCLUDING THOSE WHICH MAY BE ISSUED BY THE OWNER, ARE BEING OBSERVED, PARTICULARLY WORKPLACE SAFETY AND THE CONDUCT OF ALL THOSE EMPLOYED DIRECTLY AND INDIRECTLY BY HIM ON THE PREMISES, AND THE OWNER'S EMPLOYEES WHO MAY BE IMPACTED OR AFFECTED BY CONSTRUCTION ACTIVITIES. THE CONTRACTOR WILL INSTALL SIGNAGE, BARRIERS, AND OTHER MEANS TO PROVIDE WARNING AND PERSONNEL SAFETY. PLACEMENT OF THESE ITEMS WILL BE COORDINATED WITH THE OWNER AND HIS ONGOING OPERATIONS AND WILL PROMPTLY BE REVISED WHEN WORK IN A PARTICULAR AREA HAS BEEN COMPLETED.
- CONTRACTOR SHALL MAKE ALL NECESSARY SUBMISSIONS AND OBTAIN ALL NECESSARY PERMITS AND APPROVALS PRIOR TO STARTING FABRICATION AND CONSTRUCTION.

FIRE PROTECTION DESIGN CRITERIA

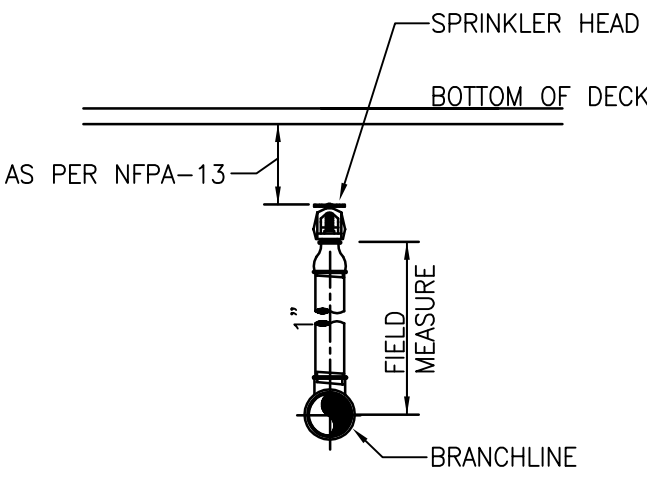
- SYSTEM TYPE: WET PIPE
- SPRINKLER HEAD SPACING AND PIPE SIZING SHALL BE:  
a. TOILET ROOMS AND PATIENT AREAS, LIGHT HAZARD (0.10 GPM/SQ.FT. OVER 1500 SQ.FT., 225 SQ.FT. PER SPRINKLER HEAD)  
b. MECHANICAL ROOMS AND ELECTRIC CLOSETS; ORDINARY GROUP 1 HAZARD (0.15 GPM/SQ.FT. OVER 1500 SQ.FT., 130 SQ.FT. PER SPRINKLER HEAD)  
c. STORAGE ROOMS; ORDINARY GROUP II HAZARD (0.20 GPM/SQ.FT. OVER 1500 SQ.FT., 130 SQ.FT. PER SPRINKLER HEAD)
- PROVIDE FOR AN ADDITIONAL WATER ALLOWANCE TOTAL OF 250 GPM FOR INSIDE AND OUTSIDE HOSE STREAMS TO THE SPRINKLER HYDRAULIC REQUIREMENTS.
- THE CALCULATED DEMAND INCLUDING HOSE STREAM REQUIREMENTS SHALL FALL NO LESS THAN 10 PERCENT BELOW THE AVAILABLE WATER SUPPLY.
- SYSTEM SHALL BE DESIGNED ON A HYDRAULICALLY CALCULATED BASIS UTILIZING THE AREA DENSITY METHOD PER THE NFPA 13 BY THE SPRINKLER CONTRACTOR. CALCULATIONS AND SHOP DRAWINGS SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF PENNSYLVANIA.
- SPRINKLERS THROUGHOUT THE BUILDING TO BE ORDINARY TEMPERATURE RATED EXCEPT FOR ELECTRICAL ROOMS/CLOSETS, MECHANICAL ROOMS AND CANOPY TO BE HIGH TEMPERATURE RATED HEADS.
- SPRINKLER PIPE SIZES SHALL BE DETERMINED BY HYDRAULIC CALCULATIONS BASED ON EXISTING SPRINKLER SYSTEM HYDRAULIC DATA AT BASE OF THE RISER; X GPM AT X PSI RESIDUAL PRESSURE AND X PSI STATIC.

LEGEND

---	EXISTING	ABV CLG	ABOVE THIS CEILING
----	EXISTING TO BE REMOVED	BLW FLR	BELOW THIS FLOOR
---	FIRE PIPING	(E)	EXISTING
---	SPRINKLER PIPING	EC	ELECTRICAL CONTRACTOR
---	SPRINKLER DRAIN PIPING	FC	FIRE PROTECTION CONTRACTOR
---	CHECK VALVE	PC	PLUMBING CONTRACTOR
---	CONTROL VALVE	FHV	FIRE HOSE VALVE
---	INSPECTORS TEST FITTING	FDC	FIRE DEPARTMENT CONNECTION
---	PRESSURE GAUGE	SPR	SPRINKLER
---	GROUND FACE UNION OR FLANGES		
---	WATERFLOW SWITCH		
---	TAMPER SWITCH		
---	CONCEALED PENDENT SPRINKLER HEAD		
---	UPRIGHT SPRINKLER HEAD		
---	RECESSED PENDENT SPRINKLER HEAD		
---	SIDEWALL SPRINKLER HEAD		



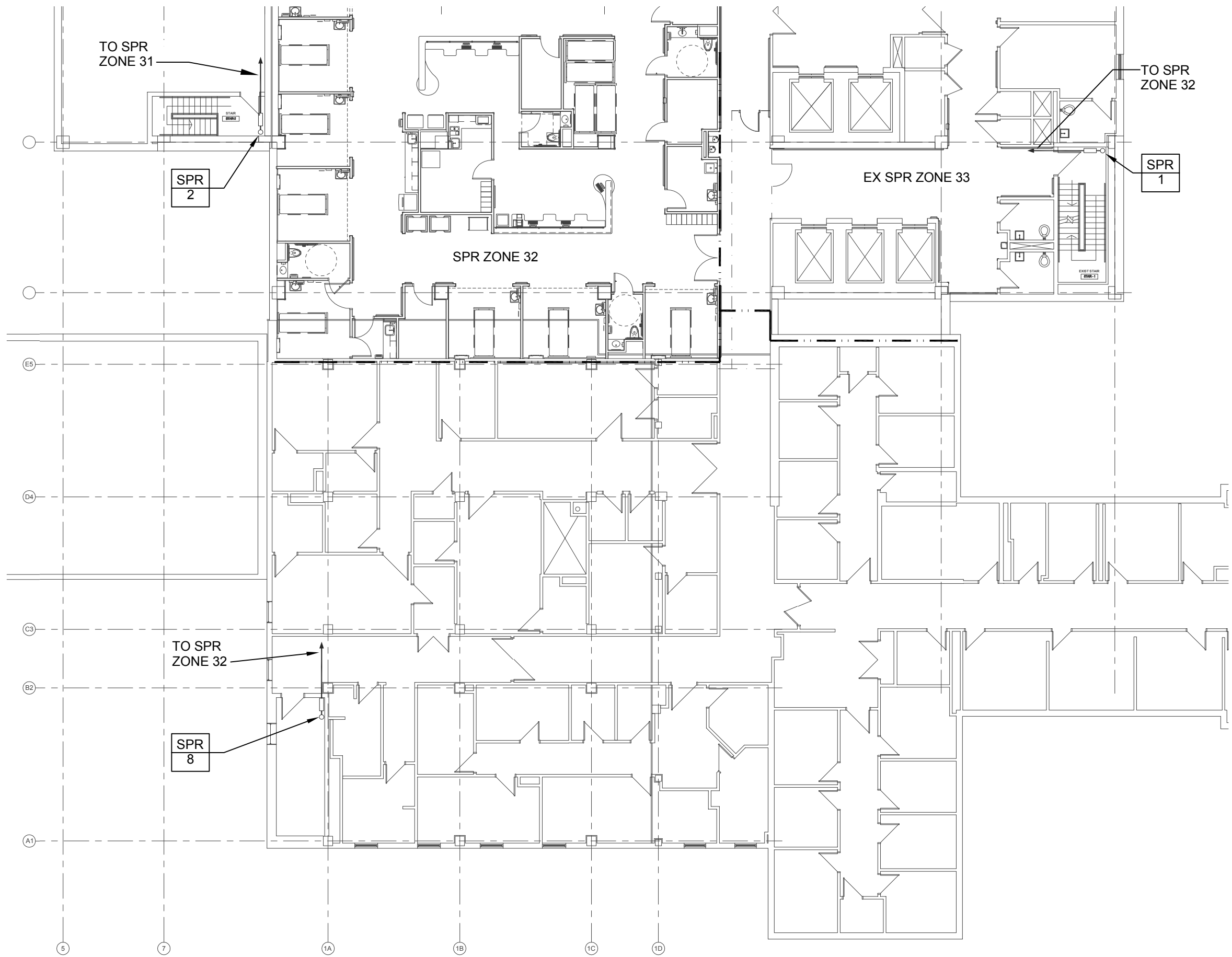
2 TYPICAL DROP PENDENT DETAIL  
NOT TO SCALE



1 TYPICAL UPRIGHT/SPRIG DETAIL  
NOT TO SCALE

3 BASEMENT PLAN

1/16" = 1'-0"  
FINISH FL EL. - 87'2" - 0"



4 3RD FLOOR BLDG 1A

1/16" = 1'-0"

CONSULTANTS:

MILLER-REMICK LLC  
PROFESSIONAL ENGINEER

ARCHITECT / ENGINEERS:

Miller-Remick LLC  
M.E.P. & Structural Engineering  
A Service Disabled Veteran Owned  
Small Business  
1010 KINGS HIGHWAY SOUTH  
CHERRY HILL, NEW JERSEY 08034  
PHONE: (856) 420-4000  
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Fax: 757-471-6506  
www.pfa-architect.com

Drawing Title  
FIRE PROTECTION  
GENERAL NOTES, LEGEND AND  
DETAILS

Approved: Medical Center Director

Project Title  
RENOVATE SURGICAL  
SERVICE & UPGRADE  
OPERATING ROOMS

Location HUNTINGTON, WV

Date  
01-15-2016

Checked  
MPP

Drawn  
PD

Project Number  
581-13-101

Building Number  
1S

Drawing Number  
FX0.01

Office of  
Construction  
and Facilities  
Management

Department of  
Veterans Affairs



GENERAL SHEET NOTES:

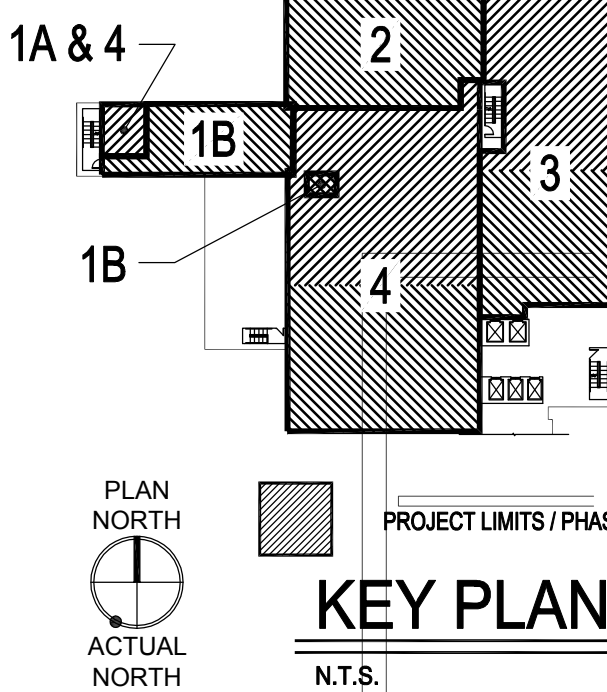
1. REFER TO DRAWING FX0.01 FOR FIRE PROTECTION LEGEND, GENERAL NOTES AND DETAILS.  
2. REFER TO DRAWING 3/FX0.01 FOR EXISTING STANDPIPE / SPRINKLER RISER SUPPLY PIPING.

SHEET KEYNOTES:

1. PROVIDE UPRIGHT SPRINKLER HEADS IN SHELLED ROOM 3B-167 TO BE FIT OUT IN FUTURE AS INDICATED.  
2. PROVIDE UPRIGHT SPRINKLER HEADS IN TEMPORARY GAS CYLINDER ROOM IN PHASE 4. ONCE NEW GAS CYLINDER ROOM IS IN OPERATION PROVIDE PENDENT SPRINKLER HEADS IN ANESTHESIA ROOM.

LEGEND:

- EXISTING SPRINKLER ZONE LINE  
NEW SPRINKLER ZONE LINE  
CONSTRUCTION PHASE LINE
- UPRIGHT SPRINKLER HEADS  
ORDINARY HAZARD
- RECESSED PENDENT SPRINKLER HEADS  
LIGHT HAZARD
- RECESSED PENDENT SPRINKLER HEADS  
ORDINARY HAZARD



100% CONSTRUCTION DOCUMENTS  
FULLY SPRINKLERED

CONSULTANTS:			MILLER-REMICK LLC PROFESSIONAL ENGINEER		ARCHITECT / ENGINEERS:		Drawing Title FIRE PROTECTION PLAN		Project Title RENOVATE SURGICAL SERVICE & UPGRADE OPERATING ROOMS		Project Number 581-13-101		Office of Construction and Facilities Management	
							Approved: Medical Center Director		Location HUNTINGTON, WV		Building Number 1S		Department of Veterans Affairs	
									Date 01-15-2016		Checked MPP		Drawn PD	
											Drawing Number FX1.01			



GENERAL SHEET NOTES:

1. REFER TO DRAWING FX0.01 FOR FIRE PROTECTION LEGEND, GENERAL NOTES AND DETAILS.  
2. REFER TO DRAWING 3/FX0.01 FOR EXISTING STANDPIPE / SPRINKLER RISER SUPPLY PIPING.

SHEET KEYNOTES:

1. PROVIDE UPRIGHT SPRINKLER HEADS IN SHELLD AREAS TO BE FIT OUT IN FUTURE AS INDICATED.  
2. PROVIDE UPRIGHT SPRINKLER HEADS IN TEMPORARY GAS CYLINDER ROOM IN PHASE 1A UNTILL COMPLETION OF NEW GAS CYLINDER ROOM IN PHASE 4. ONCE NEW GAS CYLINDER ROOM IS IN OPERATION PROVIDE PENDENT SPRINKLER HEADS IN ANESTHESIA ROOM.

ALTERNATE NOTE

1. THIS SHEET HAS BEEN IDENTIFIED AS WORK TO BE INCLUDED AS A BID ALTERNATE. SEE SPECIFICATIONS AND INSTRUCTIONS TO BIDDERS FOR A DETAILED LISTING OF THE ASSOCIATED SCOPE OF WORK.

LEGEND:

- EXISTING SPRINKLER ZONE LINE  
NEW SPRINKLER ZONE LINE  
CONSTRUCTION PHASE LINE

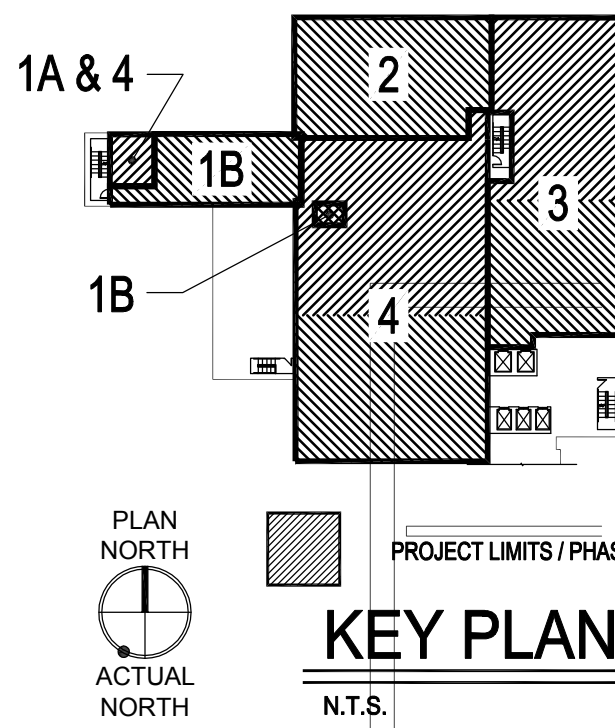
- UPRIGHT SPRINKLER HEADS  
ORDINARY HAZARD  
RECESSED PENDENT SPRINKLER HEADS  
LIGHT HAZARD  
RECESSED PENDENT SPRINKLER HEADS  
ORDINARY HAZARD

EXISTING SPRINKLER HEADS  
AND PIPING IN THIS AREA TO  
REMAIN

EXISTING SPRINKLER HEADS  
AND PIPING IN THIS AREA TO BE  
REMOVED AND/OR MODIFIED AS  
REQUIRED TO SUIT NEW LAYOUT

EXISTING SPRINKLER HEADS  
AND PIPING IN THIS AREA TO  
REMAIN

TO SPR  
ZONE 32



100% CONSTRUCTION DOCUMENTS  
FULLY SPRINKLERED

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