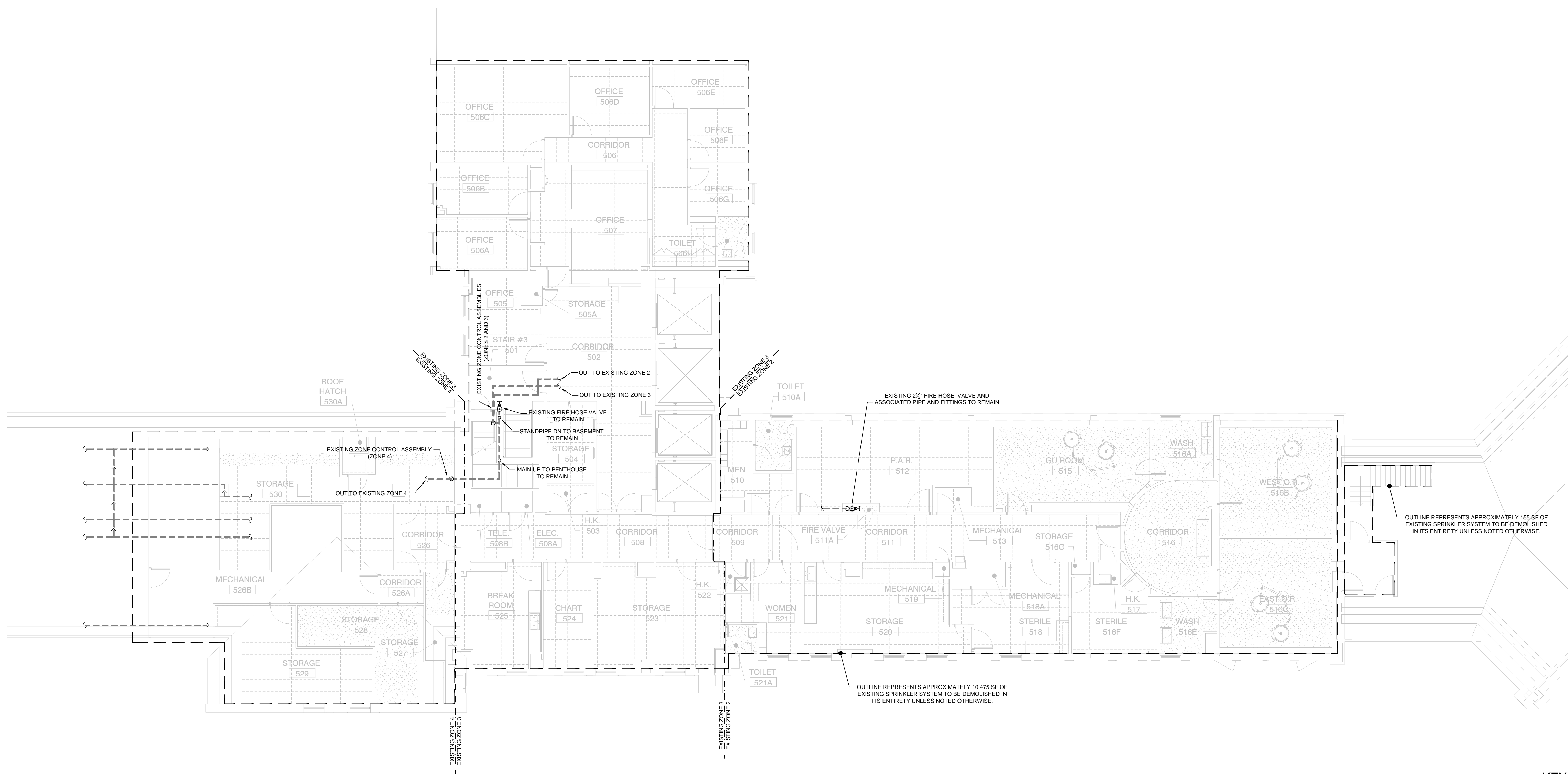
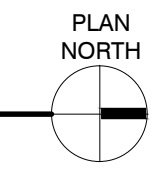


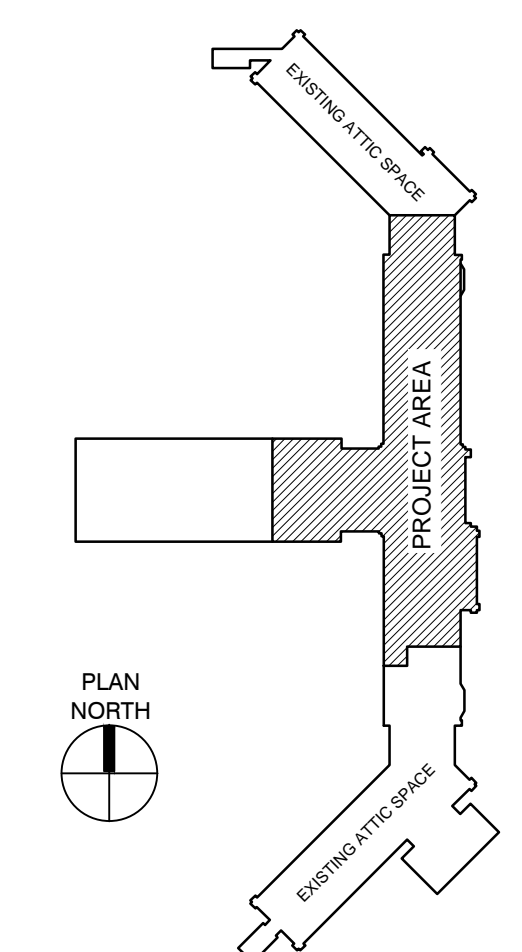
A
three inches = one foot
B
one and one half inches = one foot
C
one inch = one foot
D
three quarters inch = one foot
E
one half inch = one foot
F
three eighths inch = one foot
G
one quarter inch = one foot
H
one eighth inch = one foot



DEMOLITION FIRE PROTECTION PLAN - FIFTH FLOOR
SCALE: 1/8" = 1'-0"



KEY PLAN:



100% CONSTRUCTION DRAWINGS	
Project Title V.A. HEALTH CARE SYSTEM RENOVATE 5TH FLOOR SURGERY	Project Number 438-15-201
Location SIoux FALLS, SOUTH DAKOTA	Building Number 5
Date OCTOBER 17, 2017	Checked CRT
Approved: Project Director	Drawn RAK
Drawing Number 5-FD101	
Dwg. 22 of 60	

CONSULTANTS:

WPE WEST PLAINS ENGINEERING, INC.
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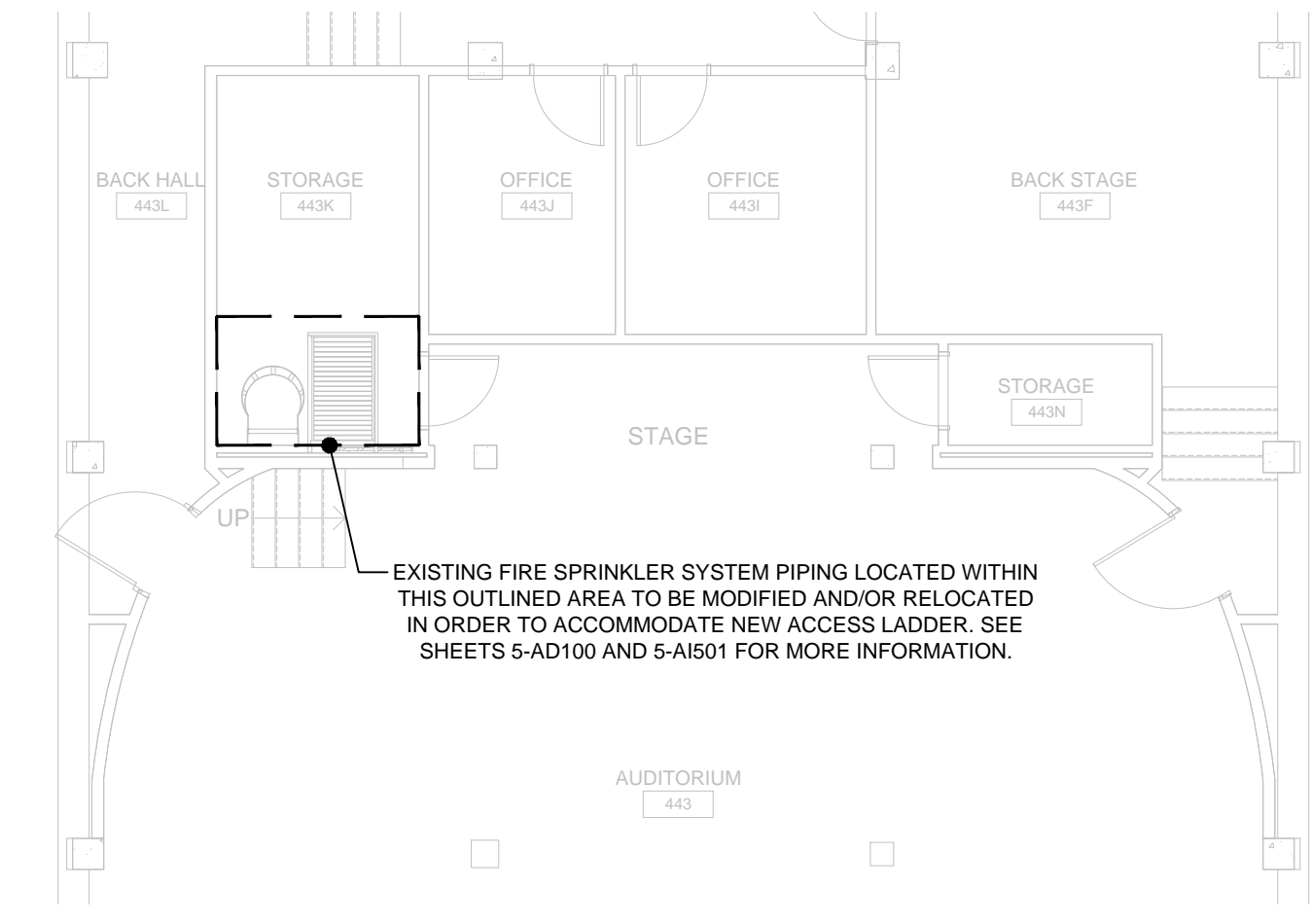
FIRE ENGINEERING
47165 WILD CLOVER CIRCLE, SUITE 200 • SIOUX FALLS, SD 57103
PHONE: (605) 543-5170 • FAX: (605) 543-5171
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SEAL:

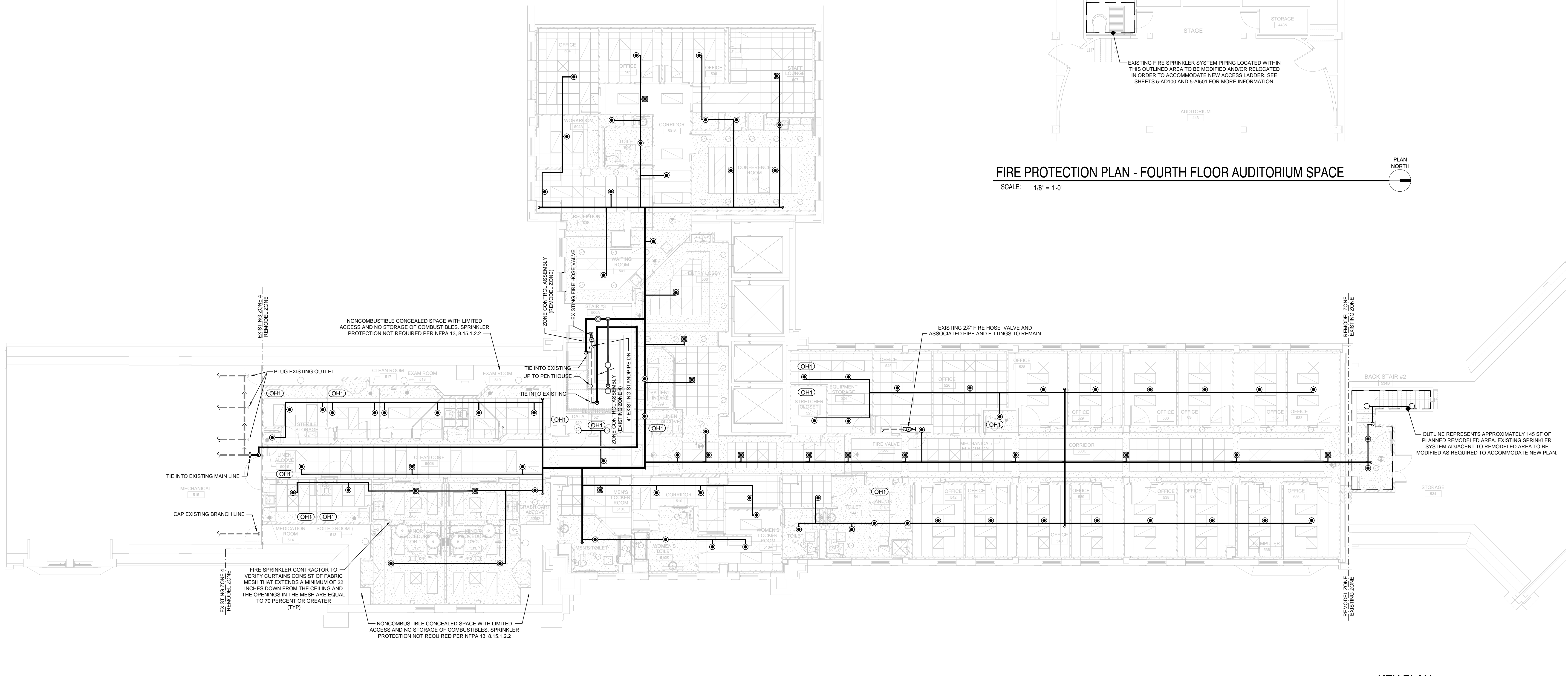
ARCHITECT:

MSH ARCHITECTS
625 S. MINNESOTA AVENUE, SUITE 204
SIOUX FALLS, SOUTH DAKOTA 57104-4873
TELE: (605) 332-7850 FAX: (605) 332-3539

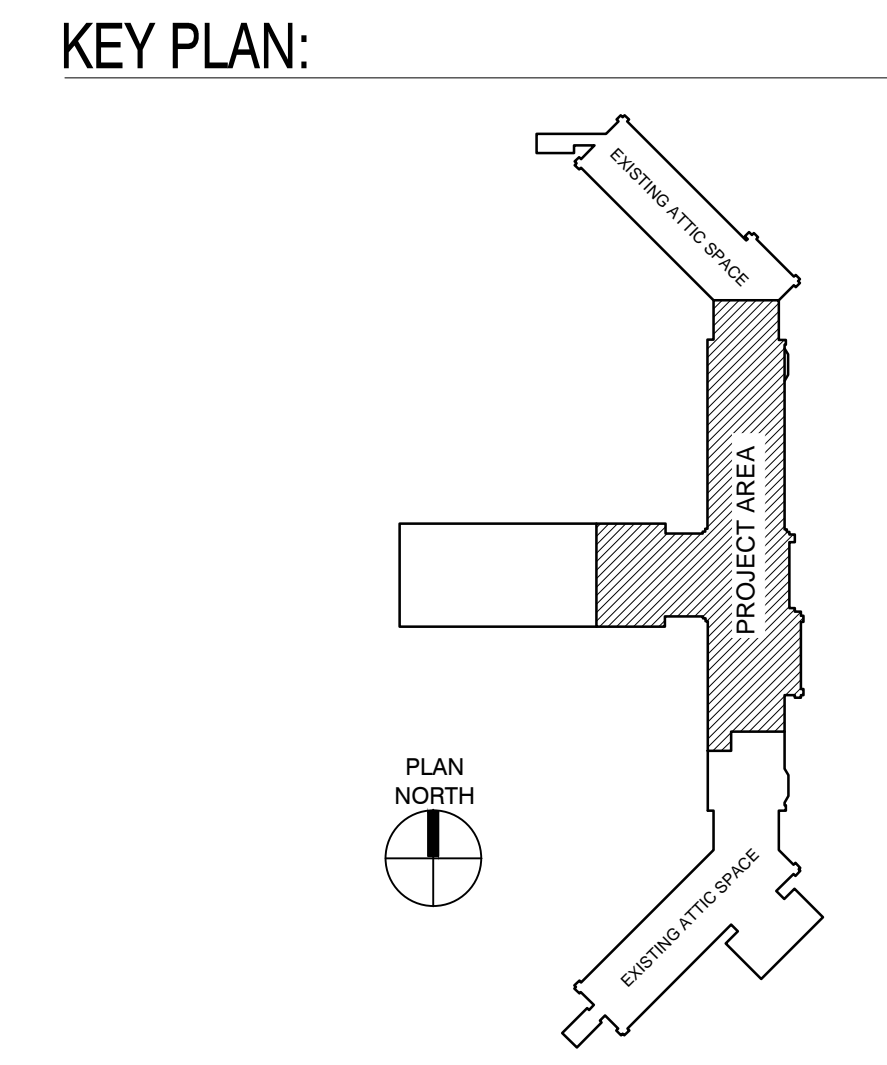
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 F
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 one quarter inch = one foot
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 one eighth inch = one foot



FIRE PROTECTION PLAN - FOURTH FLOOR AUDITORIUM SPACE
SCALE: 1/8" = 1'-0"



FIRE PROTECTION PLAN - FIFTH FLOOR
SCALE: 1/8" = 1'-0"



100% CONSTRUCTION DRAWINGS

Project Title V.A. HEALTH CARE SYSTEM RENOVATE 5TH FLOOR SURGERY		Project Number 438-15-201		Office of Construction and Facilities Management
Location SIoux FALLS, SOUTH DAKOTA		Building Number 5		
Date OCTOBER 17, 2017	Checked CRT	Drawn RAK	Drawing Number 5-FA102	Department of Veterans Affairs
Approved: Project Director		Dwg. 24 of 60		

Revisions:	Date

CONSULTANTS:

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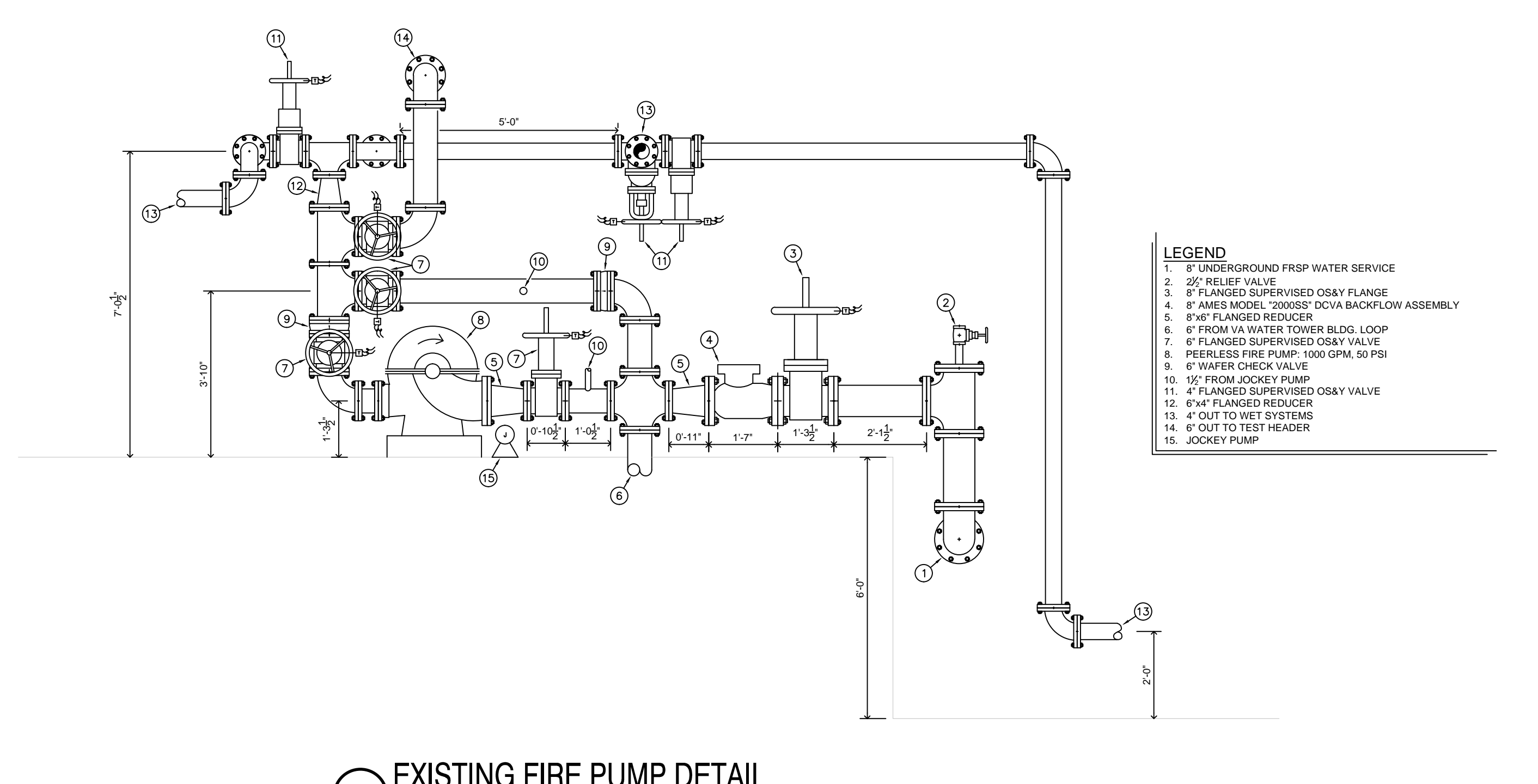
SEAL:

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Drawing Title
FIRE PROTECTION PLAN - FIFTH FLOOR

Approved: Project Director

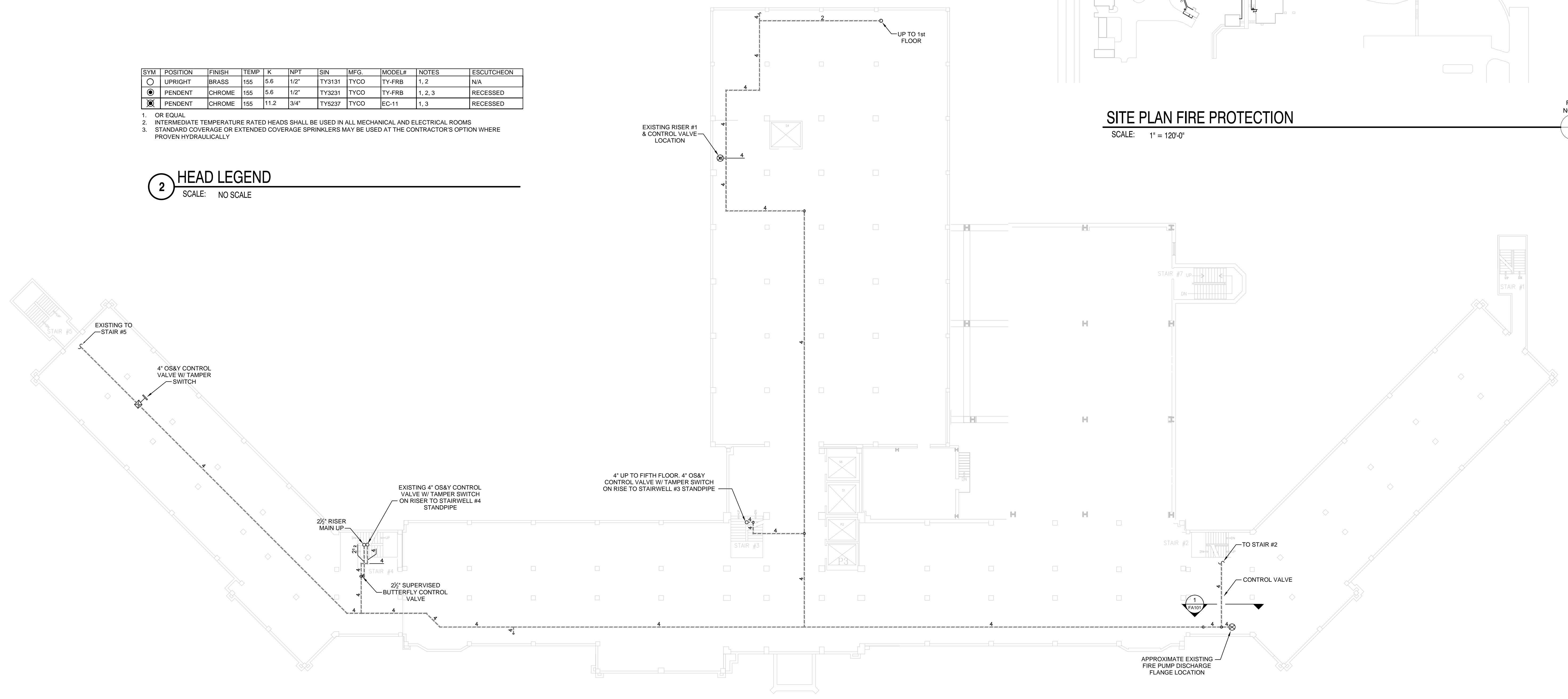


1 EXISTING FIRE PUMP DETAIL
SCALE: 1/2" = 1'-0"

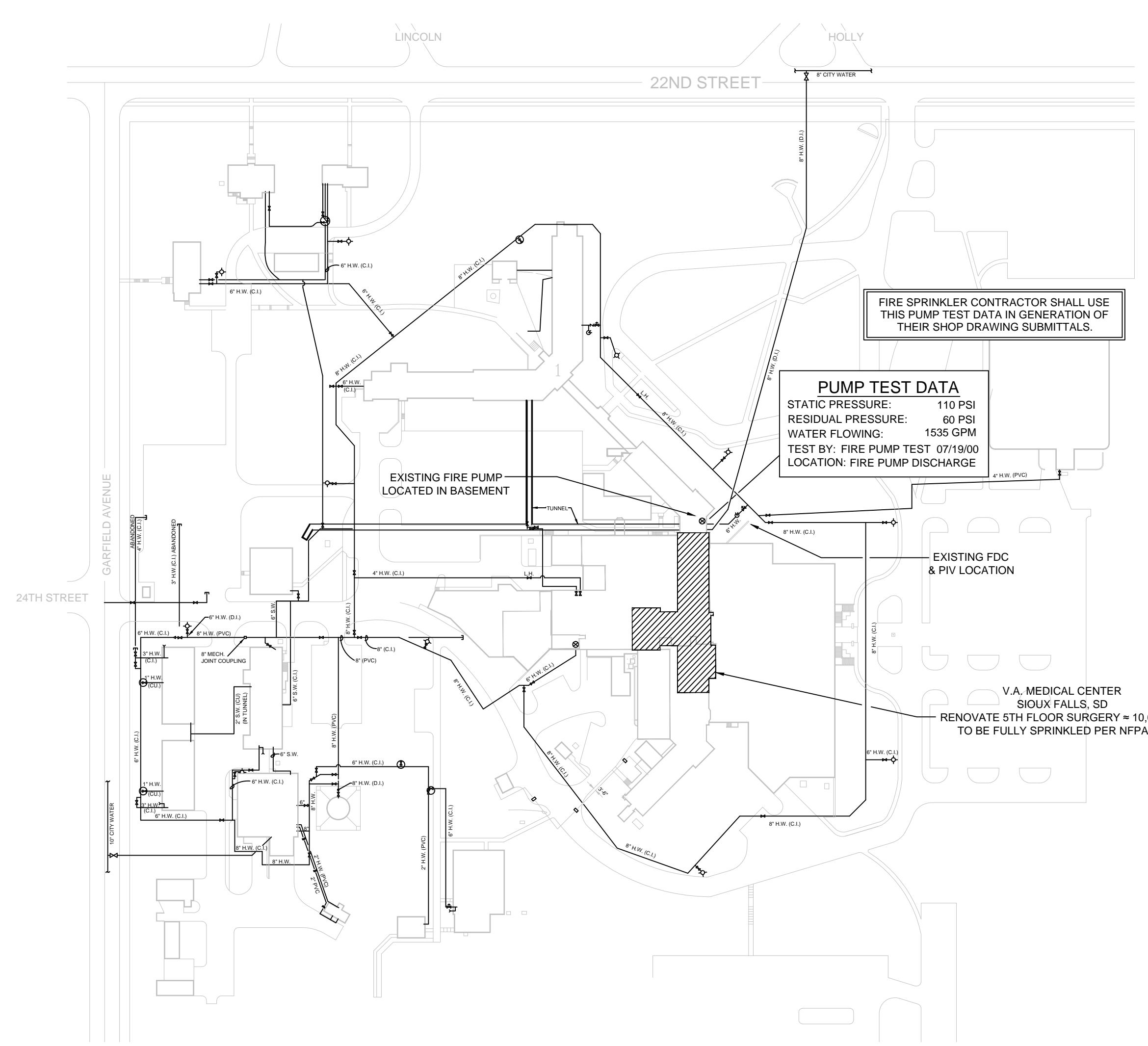
SYM	POSITION	FINISH	TEMP	K	NPT	SIN	MFG.	MODEL#	NOTES	ESCUTCHEON
○	UPRIGHT	BRASS	155	5.6	1/2"	TY3131	TYCO	TY-FRB	1, 2	N/A
●	PENDENT	CHROME	155	5.6	1/2"	TY3231	TYCO	TY-FRB	1, 2, 3	RECESSED
⊗	PENDENT	CHROME	155	11.2	3/4"	TY3237	TYCO	EC-11	1, 3	RECESSED

1. OR EQUAL
2. INTERMEDIATE TEMPERATURE RATED HEADS SHALL BE USED IN ALL MECHANICAL AND ELECTRICAL ROOMS
3. STANDARD COVERAGE OR EXTENDED COVERAGE SPRINKLERS MAY BE USED AT THE CONTRACTOR'S OPTION WHERE PROVEN HYDRAULICALLY

2 HEAD LEGEND
SCALE: NO SCALE

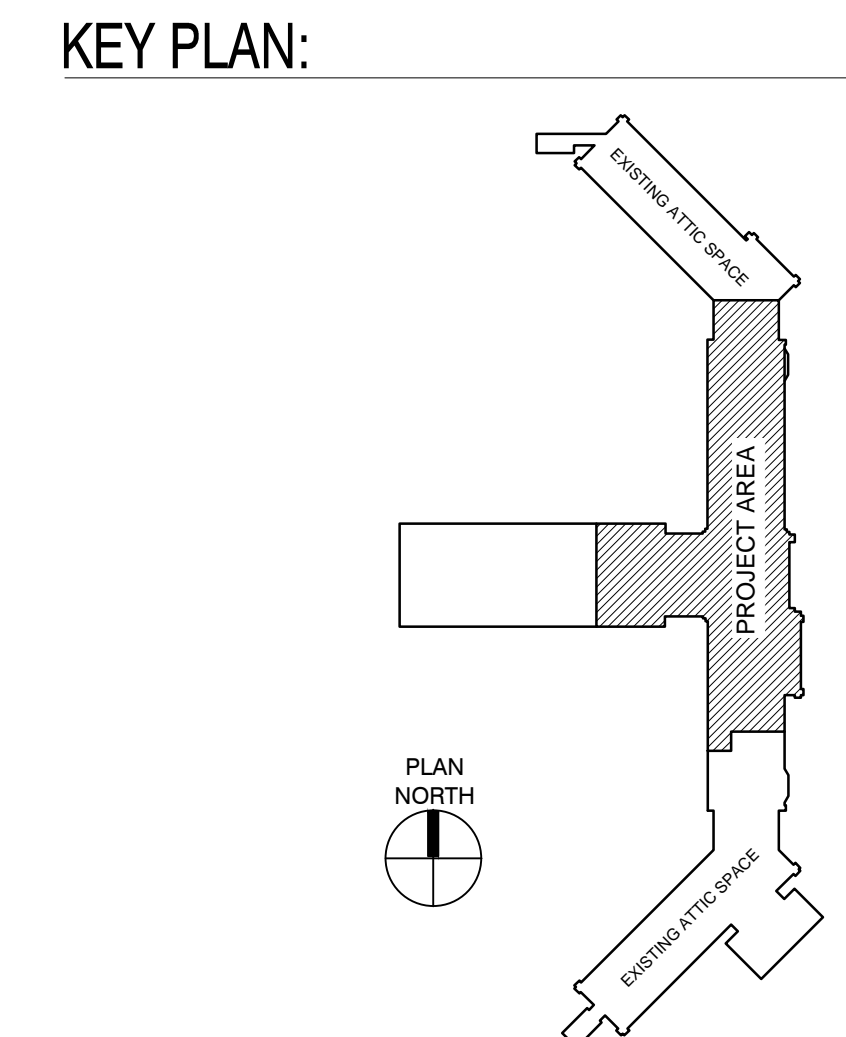


BASEMENT FIRE PROTECTION PLAN - SUPPLY
SCALE: 1/16" = 1'-0"



SITE PLAN FIRE PROTECTION
SCALE: 1" = 120'-0"

- GENERAL NOTES:**
- THIS PROJECT INCLUDES THE DESIGN AND INSTALLATION OF WET FIRE SPRINKLER SYSTEMS FOR REMODELED AREAS OF THE EXISTING BUILDING PER NFPA 13 (2013 ed.), LOCAL BUILDING CODES, AND THE VA FIRE PROTECTION DESIGN MANUAL (SIXTH ed.). THE FIRE SPRINKLER SYSTEMS ARE SUPPLIED BY AN EXISTING 8" UNDERGROUND WATER SERVICE SUPPLIED BY THE CITY WATER SYSTEM THAT IS SUPPLEMENTED BY AN EXISTING FIRE PUMP.
 - FINAL PIPE SIZING AND LOCATION IS TO BE DETERMINED BY THE FIRE SPRINKLER CONTRACTOR AND IS SUBJECT TO APPROVAL BY THE ENGINEER. NOT ALL REQUIRED PIPING IS SHOWN.
 - REFER TO SPECIFICATION SECTIONS 210800, 211200, AND 211313 FOR ADDITIONAL FIRE SPRINKLER SYSTEM INFORMATION.
 - ALL SPRINKLERS IN LIGHT HAZARD OCCUPANCIES ARE TO BE OF THE QUICK RESPONSE TYPE.
 - ALL SPRINKLER SHALL BE UL LISTED AND FM APPROVED PER THE VA FIRE PROTECTION DESIGN MANUAL.
 - SPRINKLERS ARE REQUIRED TO BE PROTECTED DURING PAINTING.
 - SPRINKLERS SHALL BE LOCATED IN THE CENTER POINT OF SQUARE CEILING TILES AND ALLOWED TO BE IN THE QUARTERS AND/OR CENTER POINTS OF RECTANGULAR CEILING TILES.
 - HEAD GUARDS ARE TO BE INSTALLED ON ALL EXPOSED SPRINKLERS ELEVATED BELOW 7'-0". SIDEWALL SPRINKLERS LOCATED BELOW OVERHEAD DOORS, AND THROUGHOUT AREAS WHERE SPRINKLERS ARE EXPOSED TO INTERFERENCE DAMAGE.
 - ALL SYSTEMS PIPING AND FITTINGS SHALL MEET THE REQUIREMENTS OF NFPA 13.
 - REQUIRED SYSTEM TESTING IS THE RESPONSIBILITY OF THE FIRE SPRINKLER CONTRACTOR PER NFPA 25.
 - NOT ALL REQUIRED SPRINKLERS AND PIPING ARE SHOWN. CONSIDERATION OF ADDITIONAL SPRINKLERS, PIPING, AND FITTINGS DUE TO INTERFERENCE WITH OTHER TRADES, OBSTRUCTIONS, IMPROVED AESTHETICS, OR OWNER/HAU REQUESTS SHALL BE MADE PRIOR TO BID BY THE FIRE SPRINKLER CONTRACTOR.
 - FIRE SPRINKLER CONTRACTOR TO PROVIDE ALL NECESSARY MATERIAL, INCLUDING BUT NOT LIMITED TO, SPRINKLERS, PIPING, VALVES, AND LABOR TO PROVIDE COMPLETE SYSTEMS TO COMPLY WITH NFPA 13, LOCAL BUILDING CODES, AND THE VA FIRE PROTECTION DESIGN MANUAL. ALL HYDRAULIC CALCULATIONS AND PIPE SIZING ARE THE RESPONSIBILITY OF THE FIRE SPRINKLER CONTRACTOR. ANY AND ALL CLARIFICATIONS TO BID DOCUMENTS SHALL BE MADE PRIOR TO BID.
 - UPRIGHT SPRINKLERS TO HAVE A BRASS FINISH THROUGHOUT.
 - ALL GROOVED STEEL PIPING SHALL BE SCHEDULE 10 MINIMUM.
 - ALL THREADED STEEL PIPING SHALL BE SCHEDULE 40.
 - ALL THREADED FITTINGS SHALL BE SCHEDULE 40.
 - ALL LISTED FLEX PIPING TO PENDENT HEADS IN CEILING IS ALLOWED FOR THIS PROJECT WHERE PROVEN HYDRAULICALLY.
 - CPVC IS NOT ALLOWED FOR THIS PROJECT.
 - ALL MATERIAL BEING INSTALLED MUST BE NEW AND LISTED FOR USE.
 - THE FIRE SPRINKLER CONTRACTOR SHALL VERIFY LOCATIONS AND ROUTING OF PIPE PRIOR TO BID. NO ALLOWANCES FOR EXTRA FITTINGS, PIPING, SPRINKLERS, ETC. WILL BE ALLOWED AFTER AWARD OF CONTRACT.
 - PIPING SHOWN ON THESE PLANS IS CONCEPTUAL, BUT IS TO BE CLOSELY FOLLOWED BY THE FIRE SPRINKLER CONTRACTOR. ANY MAJOR CHANGES TO WHAT IS BEING INDICATED ON THESE PLANS SHALL FIRST BE APPROVED BY THE ARCHITECT AND ENGINEER.
 - ALL ARCHITECTURAL, STRUCTURAL, MECHANICAL, & ELECTRICAL FEATURES INDICATED ON THE FP SHEETS SHALL BE VERIFIED BY CONSULTING THE ASBME SHEETS.
 - ALL SPRINKLERS LOCATED NEAR HEAT PRODUCING DEVICES SHALL BE PROVIDED WITH THE APPROPRIATE TEMPERATURE RATING PER THE REQUIREMENTS OF NFPA 13.
 - THE FIRE SPRINKLER CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL EXISTING SPRINKLER SYSTEM COMPONENTS SHOWN ON THESE PLANS PRIOR TO BID.
 - SHOULD ANY EXISTING SYSTEM DEFICIENCIES NOT INDICATED ON THESE PLANS BE DISCOVERED AS PART OF CONDUCTING THE WORK INCLUDED IN THIS SCOPE, THEY SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY.
 - THESE PLANS SHALL BE USED AS A GENERAL GUIDE IN THE GENERATION OF THE FIRE SPRINKLER CONTRACTOR'S BID AND ARE NOT INTENDED TO INDICATE THE ENTIRE EXTENT OF SPRINKLER PROTECTION REQUIRED. ANY AREAS REQUIRED TO BE PROTECTED PER NFPA 13 THAT MAY OR MAY NOT BE SHOWN WITH PROTECTION ON THESE PLANS SHALL BE INCLUDED IN THE CONTRACTOR'S BID. NO ALLOWANCES FOR EXTRAS WILL BE ALLOWED AFTER AWARD OF CONTRACT.
- OCCUPANCY HAZARD CLASSIFICATIONS:**
- SEE PLAN FOR HAZARD NOTATIONS. ALL AREAS TO BE DESIGNED AS LIGHT HAZARD UNLESS NOTED OTHERWISE.
 - LIGHT HAZARD OCCUPANCIES
 - 0.10 GPM/SQ.FT PER MOST DEMANDING 1500 SQ.FT.
 - (OHT) - ORDINARY HAZARD GROUP 1 OCCUPANCIES
 - 0.15 GPM/SQ.FT PER MOST DEMANDING 1500 SQ.FT.
 - REMOTE AREA REDUCTIONS WILL BE ALLOWED PER NFPA 13
 - REMOTE AREA INCREASES SHALL BE APPLIED WHERE REQUIRED BY NFPA 13
 - HOSE ALLOWANCES SHALL BE APPLIED AS PER NFPA 13
 - MINIMUM 10 PSI OR 10% SAFETY FACTOR, WHICHEVER IS GREATER, SHALL BE PROVIDED



100% CONSTRUCTION DRAWINGS

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