

FIRE PROTECTION ABBREVIATIONS

THIS LIST OF ABBREVIATIONS IS PROVIDED FOR CONVENIENCE ONLY. ITEMS LISTED HERE MAY OR MAY NOT BE USED ON THIS PROJECT.

A	AMPS	ID	INSIDE DIAMETER
ABV	ABOVE	INCL	INCLUDE
ACT	ACCESS DOOR	INSUL	INSULATION
A.D.	ADJUSTABLE	INV	INVERT
AD	AREA DRAIN	ITC	INSPECTOR'S TEST CONNECTION
ADJ	ADJUSTABLE	JAN	JANITOR
AF	ANTIFREEZE	JC	JANITOR CLOSET
AFF	ABOVE FINISHED FLOOR	JP	JOCKEY PUMP
AFG	ABOVE FINISHED GRADE	JPC	JOCKEY PUMP CONTROLLER
AHJ	AUTHORITY HAVING JURISDICTION	KW	KILLOWATT
AHU	AIR HANDLING UNIT	LAV	LAVATORY
ALT	ALTERNATE	LF	LINEAR FEET
ARCH	ARCHITECTURAL	LTG	LIGHTING
AS	AUTOMATIC SPRINKLERS	LTS	LIGHTS
ATS	AUTOMATIC TRANSFER SWITCH	MAX	MAXIMUM CONTRACTOR
AUTO	AUTOMATIC	MC	MECHANICAL
AV	ALARM VALVE	MECH	MECHANICAL
AVG	AVERAGE	MER	MECHANICAL EQUIPMENT ROOM
		MFR	MANUFACTURER
		MIN	MINIMUM
		MISC	MISCELLANEOUS
		MTD	MOUNTED
		MTG	MOUNTING
BD	BALL DRIP VALVE	NA	NOT APPLICABLE
BL	BRANCHLINE	NC	NORMALLY CLOSED
BLDG	BUILDING	NCI	NOT IN CONTRACT
BTM	BOTTOM	NO	NORMALLY OPEN
BTU	BRITISH THERMAL UNITS	NOM	NOMINAL
BTUH	BRITISH THERMAL UNITS/HOUR	NTS	NOT TO SCALE
		OC	ON CENTER
		OD	OUTSIDE DIAMETER
		OH	OVERHEAD
		OPNG	OPENING
		OS&Y	OUTSIDE SCREW AND YOKE
CAP	CAPACITY	PC	PLUMBING CONTRACTOR
CFH	CUBIC FEET/HOUR	PD	PRESSURE DROP
CFM	CUBIC FEET/MINUTE	PEND	PENDANT
C.I.	CAST IRON	PH	PENTHOUSE
CL	CENTERLINE	PLMB	PLUMBING
CLG	CEILING	PN	PANEL
CM	CROSS MAIN	PRESS	PRESSURE
COL	COLUMN	PRV	PRESSURE REDUCING VALVE
COMB	COMBINATION	PS	PULL STATION
CONC	CONCRETE	PSI	POUND PER SQUARE INCH
CONN	CONNECTION	PSIG	POUND PER SQUARE INCH ABSOLUTE
CONST	CONSTRUCTION		
CONT	CONTINUOUS	REC	RECESSED
CONTR	CONTRACTOR	REQD	REQUIRED
		REV	REVISION
		RH	ROOF HYDRANT
		RH	ROOF HYDRANT
		RPM	REVOLUTIONS PER MINUTE
dB	DECIBEL	S	SINK
DED	DEDICATED	SCHED	SCHEDULE
DET	DETAIL	SD	SEALED
DIA	DIAMETER	SECT	SECTION
DIM	DIMENSION	SF	SQUARE FOOT (FEET)
DISC	DISCONNECT	SH	SHOWER
DISCH	DISCHARGE	SHT	FLOOR DRAIN
DN	DOWN	FDC	FIRE DEPARTMENT CONNECTION
DP	DRY PIPE	FEC	FIRE EXTINGUISHER CABINET
DWG	DRAWING	FH	FIRE HYDRANT
		FHR	FIRE HOSE RACK
		FHV	FIRE HOSE VALVE
EA	EACH	FIN	FINISH
EC	ELECTRICAL CONTRACTOR	FKT	FIXTURE
ELC	ELECTRICAL	FLASH	FLASHING
ELEV	ELEVATOR	FLEX	FLEXIBLE
EM GEN	EMERGENCY GENERATOR	FLR	FLOOR
ENCL	ENCLOSURE	FSEC	FOOD SERVICE EQUIPMENT CONTRACTOR
EQUIP	EQUIPMENT	FND	FOUNDATION
ESFR	EARLY SUPPRESSION FAST RESPONSE	FP	FIRE PROTECTION
ESP	EXTERNAL STATIC PRESSURE	FPC	FIRE PROTECTION CONTRACTOR
EX	EXTENDED COVERAGE	FPM	FEET PER MINUTE
EXIST	EXISTING	FPS	FEET PER SECOND
EXP	EXPANSION	FT	FOOT (FEET)
EXTER	EXTERIOR	FTG	FOOTING
FAB	FABRICATE	GA	GAUGE
FACP	FIRE ALARM CONTROL PANEL	GALV	GALVANIZED
FBO	FURNISHED BY OTHERS	GC	GENERAL CONTRACTOR
FBP	FIRE PROTECTION BACKFLOW PREVENTER	GPH	GALLONS PER HOUR
FC	FLEXIBLE CONNECTION	GPM	GALLONS PER MINUTE
FD	FLOOR DRAIN	GRD	GROUND
FDC	FIRE DEPARTMENT CONNECTION		
FEC	FIRE EXTINGUISHER CABINET	HC	HVAC CONTRACTOR
FH	FIRE HYDRANT	HGT	HEIGHT
FHR	FIRE HOSE RACK	HORIZ	HORIZONTAL
FHV	FIRE HOSE VALVE	HP	HORSEPOWER
FIN	FINISH	HT	HIGH TEMPERATURE
FKT	FIXTURE	HVAC	HEATING VENTILATION AIR CONDITION
FLASH	FLASHING	HYD	HYDRAULIC
FLEX	FLEXIBLE	HZ	HERTZ
FLR	FLOOR		
FSEC	FOOD SERVICE EQUIPMENT CONTRACTOR		
FND	FOUNDATION		
FP	FIRE PROTECTION		
FPC	FIRE PROTECTION CONTRACTOR		
FPM	FEET PER MINUTE		
FPS	FEET PER SECOND		
FT	FOOT (FEET)		
FTG	FOOTING		
GA	GAUGE		
GALV	GALVANIZED		
GC	GENERAL CONTRACTOR		
GPH	GALLONS PER HOUR		
GPM	GALLONS PER MINUTE		
GRD	GROUND		
HC	HVAC CONTRACTOR		
HGT	HEIGHT		
HORIZ	HORIZONTAL		
HP	HORSEPOWER		
HT	HIGH TEMPERATURE		
HVAC	HEATING VENTILATION AIR CONDITION		
HYD	HYDRAULIC		
HZ	HERTZ		

FIRE PROTECTION SYMBOLS SCHEDULE

THIS LIST OF SYMBOLS IS PROVIDED FOR CONVENIENCE ONLY. ITEMS LISTED HERE MAY OR MAY NOT BE USED ON THIS PROJECT.

	KEYNOTE INDICATOR (refer to notes on same sheet)
	EQUIPMENT MARK (PUMP FP, NUMBER 1)
	RISER IDENTIFICATION MARK (TYPE F, ON DRAWING F601)
	REVISION INDICATOR
	DETAIL CALLOUT MARK (DETAIL 1 ON DRAWING F601)
	SECTION INDICATOR (SECTION 1 ON DRAWING F601)
	NORTH ARROW
	REVISION BUBBLE
	DENOTES CONNECT TO EXISTING
	DENOTES DEMOLITION TO POINT INDICATED
	COLD WATER PIPE
	FIRE PROTECTION PIPE
	WET SPRINKLER PIPE
	DRY PIPE FIRE PROTECTION PIPE
	PRACTION FIRE PROTECTION PIPE
	FIRE PROTECTION DRAIN PIPE
	FLOW SWITCH
	PRESSURE SWITCH
	TAMPER SWITCH
	PRESSURE GAUGE WITH GAUGE COCK
	CAP
	PIPE TURNED DOWN
	PIPE TURNED UP
	TEE DOWN
	TEE UP
	TEE TURNED DOWN
	TEE TURNED UP
	FIRE DEPARTMENT CONNECTION
	HOSE VALVE
	WATER MOTOR GONG
	SWING CHECK VALVE
	DRY PIPE VALVE
	GATE VALVE
	OS&Y VALVE
	BACKFLOW PREVENTER
	FLUSHING CONNECTION
	PENDENT
	UPRIGHT
	CONCEALED PENDENT
	UPRIGHT WITH GUARD
	SIDEWALL
	DRY PENDENT
	EXTENDED COVERAGE PENDENT
	EXTENDED COVERAGE CONCEALED PENDENT
	EXTENDED COVERAGE UPRIGHT WITH GUARD
	FREE STANDING FIRE DEPARTMENT CONNECTION

FIRE PROTECTION GENERAL NOTES

- PROVIDE DESIGN AND INSTALLATION OF SPRINKLER SYSTEM IN ACCORDANCE WITH APPLICABLE EDITION OF NFPA-13 AND VA DESIGN MANUAL, CHAPTER 6 FIRE PROTECTION SYSTEMS.
- SPRINKLER HEADS SHALL BE FM APPROVED QUICK RESPONSE IN ALL AREAS EXCEPT WHERE SPECIFICALLY PROHIBITED, IN COMPLIANCE WITH VA GUIDELINES AND NFPA 45.
- SPRINKLER PIPE SIZES AND SPRINKLER HEADS LOCATIONS SHALL CONFORM TO AND NFPA REQUIREMENTS.
- CONDUCT A NEW WATER SUPPLY FLOW-PRESSURE TEST. PROVIDE A FLOW TEST REPORT CERTIFIED BY A REGISTERED PROFESSIONAL ENGINEER.
- SPRINKLER PIPE SIZES SHALL BE DETERMINED BY HYDRAULIC CALCULATIONS BASED ON THE RESULTS OF THE NEW WATER SUPPLY FLOW-PRESSURE TEST, AND PERFORMANCE CHARACTERISTICS OF THE FIRE PUMP PROVIDED UNDER ROB BASE BUILDING DESIGN PROJECT (CURRENTLY UNDER CONSTRUCTION).
- EXISTING SERVICES ARE INDICATED AT THEIR APPROXIMATE LOCATIONS.
- RUN ALL FIRE PROTECTION PIPING WITH POSITIVE GRADE TO DRAIN UNLESS OTHERWISE NOTED. PIPING SHALL BE GRADED TO DRAIN BACK TO THE SUPPLY RISER PIPING BY GRAVITY. PROVIDE AUXILIARY DRAINS FOR TRAPPED SECTIONS OF PIPING.
- PROVIDE FLOOR CONTROL VALVE ASSEMBLY ON THE SPRINKLER MAIN BRANCH SERVING LABORATORY AREA ON EACH FLOOR.
- INSTALL PIPING SO THAT VALVES ARE ACCESSIBLE AND STEMS ARE EXTENDED VERTICALLY UP.
- ALL VALVES AND EQUIPMENT IDENTIFICATION SHALL BE IN ACCORDANCE WITH OWNER'S IDENTIFICATION SYSTEM. CONTRACTORS ARE RESPONSIBLE FOR ANY REQUIRED CROSS REFERENCE BETWEEN THESE DRAWINGS AND SPECIFICATIONS AND OTHER DISCIPLINES.
- THE FIRE PROTECTION CONTRACTOR SHALL PROVIDE THE QUANTITY OF SPRINKLER HEADS IN EACH ROOM/AREA TO MAINTAIN THE MINIMUM COVERAGE, AS REQUIRED BY NFPA-13.
- COORDINATE THE EXACT LOCATION OF ALL SPRINKLERS, PIPING, EQUIPMENT, AND DEVICES WITH ARCHITECTURAL DRAWINGS AND THE RESPECTIVE DRAWINGS OF PIPING, DUCTWORK, DIFFUSERS, BEAMS/JOISTS, LIGHTS, ETC. THIS CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF THESE COMPONENTS IN THE FIELD.
- THIS CONTRACTOR SHALL COORDINATE WITH ALL LIGHTS, DIFFUSERS, CEILING HEIGHTS, OBSTRUCTIONS, ETC. TO DETERMINE THE PROPER PLACEMENT OF THE SPRINKLER HEADS. ANY WORK DONE BY THIS CONTRACTOR, WHICH IS NOT FIRST COORDINATED, SHALL BE REMOVED AND RELOCATED AT THE FIRE PROTECTION CONTRACTOR'S EXPENSE.
- WHERE SPRINKLER HEADS ARE TO BE INSTALLED IN A SUSPENDED CEILING, LOCATE SPRINKLER HEADS IN THE MIDDLE AND CENTER OF A CEILING TILE. IF A 2' x 4' OR 2' x 2' CEILING TILE IS SCORED INTO A "SECOND LOOK" EFFECT (I.E. 12" x 12" TILES), THE SPRINKLER HEAD SHALL BE POSITIONED IN THE MIDDLE OF THE "SECOND LOOK" EFFECT.
- PROVIDE COMPLETE AND FUNCTIONAL SYSTEM FOR THE PROJECT. THE SYSTEM SHALL CONFORM TO THE SPECIFICATIONS AND AS SHOWN ON THE 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.
- DO NOT SCALE THE DRAWINGS. BECAUSE OF THE SCALE OF THE DRAWINGS, IT IS NOT POSSIBLE TO INDICATE OFFSETS, FITTINGS, VALVES, OR SIMILAR ITEMS WHICH MAY BE REQUIRED TO PROVIDE COMPLETE OPERATING SYSTEM. CAREFULLY INVESTIGATE CONDITIONS AFFECTING THE WORK ASSOCIATED WITH THIS PROJECT. INSTALL SYSTEM IN SUCH A MANNER THAT INTERFERENCES BETWEEN PIPES, CONDUIT, DUCTS, EQUIPMENT, ARCHITECTURAL AND STRUCTURAL FEATURES ARE AVOIDED. PROVIDE ITEMS REQUIRED TO MEET THE PROJECT CONDITIONS WITHOUT ADDITIONAL COST TO THE OWNER.
- PROTECT BUILDING FROM DAMAGE DURING CONSTRUCTION. PROVIDE PLYWOOD OR SIMILAR BUILDING MATERIAL UNDER EQUIPMENT OR MATERIALS STORED ON FLOORS AND IN AREAS WHERE CONSTRUCTION MAY DAMAGE THE FLOOR SURFACES. BUILDING SURFACES AND/OR FINISHES DAMAGED DURING THE CONSTRUCTION SHALL BE REPLACED AT THE COST OF THE CONTRACTOR AT FAULT.
- PIPING SHALL NOT BE LOCATED IN ANY ELECTRICAL ROOMS, CLOSETS, OR TELECOMMUNICATION ROOMS UNLESS THOSE PIPES SERVE ONLY THAT SPACE.
- INDICATE THE LOCATIONS OF ACCESS DOORS FOR EACH CONCEALED VALVE, PIECE OF EQUIPMENT, COMPONENTS, OR OTHER DEVICE CONCEALED BEHIND FINISHED CONSTRUCTION AND REQUIRING SERVICE, ON THE COORDINATION DRAWINGS.
- CONTRACTORS SHALL HAVE SUFFICIENT EXPERTISE (MINIMUM OF 5 YEARS) IN THIS TYPE OF CONSTRUCTION TO REALIZE THE EXTENT OF THE WORK REQUIRED. THEREFORE, IT SHOULD BE OBVIOUS TO ANY PRUDENT FIRM WITH EXPERIENCE IN THIS FIELD THAT THESE DOCUMENTS MAY NOT EXPLICITLY DISCLOSE FINAL DETAILS; HOWEVER, CONTRACTORS SHALL HAVE THE EXPERTISE NECESSARY TO INCLUDE NECESSARY APPOINTMENTS.
- FIRE PROTECTION SHOP DRAWINGS AND HYDRAULIC CALCULATIONS SHALL BE APPROVED AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER.
- PROVIDE APPROVED FIRESTOPPING AT ALL RATED FLOOR AND WALL PENETRATIONS.
- ALL SPRINKLER PIPING SHALL BE SUPPORTED IN ACCORDANCE WITH NFPA-13.
- PROVIDE CEILING MOUNTED 18" DEEP CLEAR PLEXIGLASS SHIELDS BETWEEN SPRINKLERS SPACED AT LESS THAN 6 FT APART.

DESIGN CRITERIA

PROVIDE SPRINKLER SYSTEM DESIGN HYDRAULIC CALCULATIONS USING A/R DENSITY METHOD IN ACCORDANCE WITH NFPA-13. SPRINKLER HEADS SPACING AND PIPE SIZING SHALL BE BASED ON THE ORDINARY HAZARD GROUP 1 COVERAGE CLASSIFICATION. ADD WATER ALLOWANCE OF 250 GPM FOR INSIDE AND OUTSIDE HOSE STREAMS, TO THE SPRINKLER REQUIREMENTS. THE CALCULATED DEMAND INCLUDING HOSE STREAMS REQUIREMENTS SHALL FALL NO LESS THAN 10% BELOW THE AVAILABLE WATER SUPPLY CURVE.

WATER SUPPLY HYDRAULIC INFORMATION

THE FOLLOWING DATA IS COPIED FROM ROB BASE BUILDING FIRE PROTECTION SHOP DRAWINGS. IT IS PROVIDED FOR INFORMATION ONLY. THE CONTRACTOR SHALL CONDUCT A NEW FLOW - PRESSURE TEST AND USE IT AS THE BASIS FOR SPRINKLER SYSTEM DESIGN AND HYDRAULIC CALCULATIONS.

FLOW-PRESSURE TEST DATE - 05-13-2009
 STATIC PRESSURE - 35 PSI
 RESIDUAL PRESSURE - 30 PSI
 TEST FLOW RATE - 710 GPM

FIRE PUMP INFORMATION

THE FOLLOWING DATA IS COPIED FROM ROB BASE BUILDING FIRE PUMP SUBMITTAL APPROVED BY DEPT. OF VA.

FIRE PUMP CAPACITY - 750 GPM
 TOTAL DEVELOPED HEAD - 140 PSI / 323 FT

DRAWING LIST

- FX-001 FIRE PROTECTION ABBREVIATIONS, SYMBOLS AND GENERAL NOTES
- FX-10G FIRE PROTECTION PLAN - GROUND FLOOR
- FX-101 FIRE PROTECTION PLAN - FIRST FLOOR
- FX-102 FIRE PROTECTION PLAN - SECOND FLOOR

CONSULTANTS:

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Approved V.P. Facility Manager

Approved Manager Project Section

Approved Project Engineer

Drawing Title
FIRE PROTECTION ABBREVIATIONS, SYMBOLS AND GENERAL NOTES

Scale: NTS
 Building Number: 30

Drawn By:
 Checked By:

Project Title
UNIVERSITY DRIVE RESEARCH OFFICE BUILDING WET LABS

Location
 University Drive, Pittsburgh, PA 15240

Date: 4/30/2013
 AutoCAD File Number:

Project Number
 646-10-100

Contract Number
 VA244-P-1827

Drawing Number
 FX-001

BID DOCUMENTS FULLY SPRINKLERED

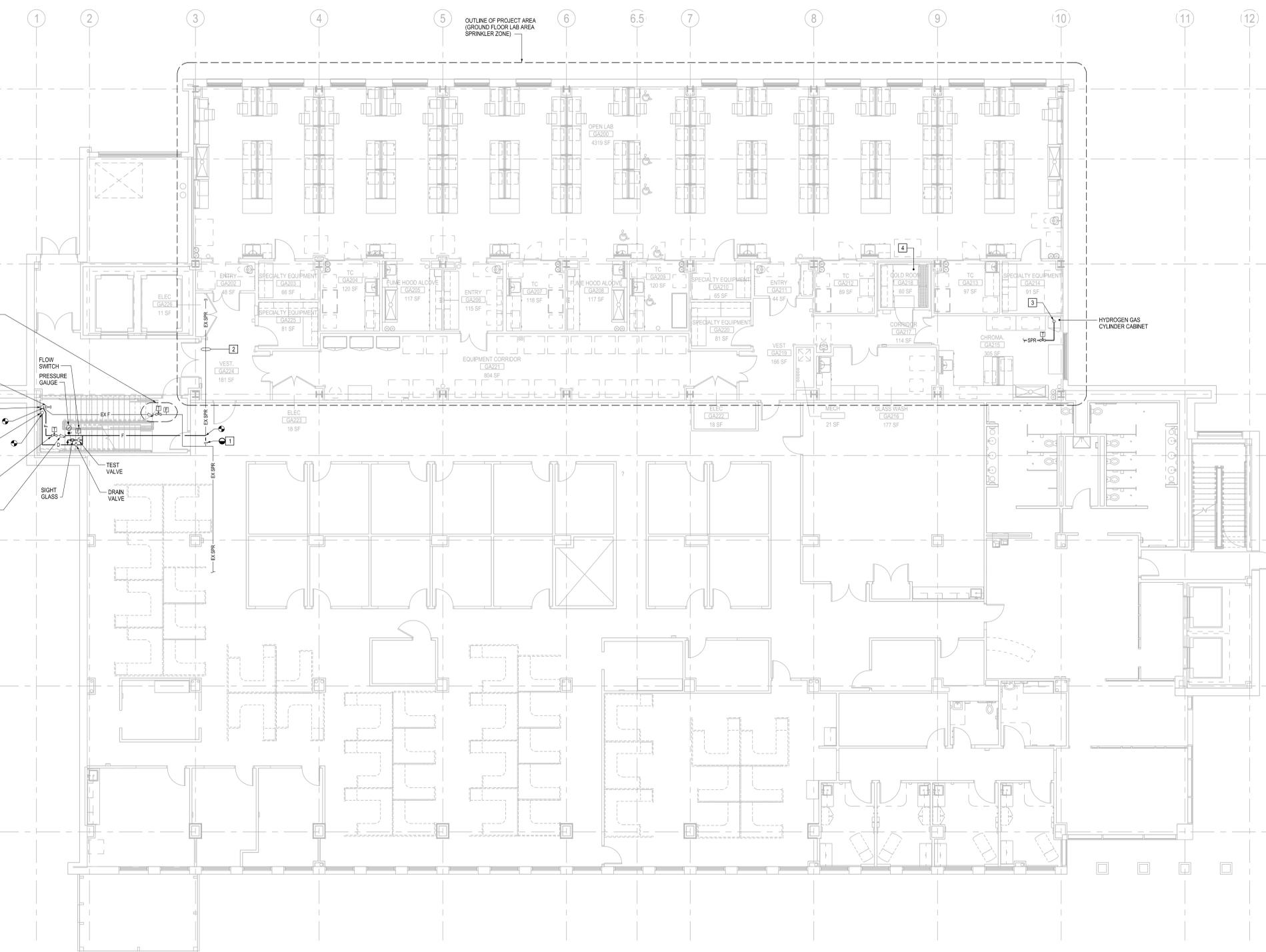
Office of Construction and Facilities Management

GENERAL NOTES

1. CONTRACTOR SHALL PROVIDE THE COMPLETE DESIGN OF THE SPRINKLER SYSTEM FOR THE ENTIRE PROJECT AREA INCLUDING SPRINKLER HEAD AND PIPING LAYOUT, ENGINEERING ANALYSIS, HYDRAULIC CALCULATIONS BY A REGISTERED PROFESSIONAL ENGINEER OR NICET CERTIFIED DESIGNER, BASED ON THE SPECIFIED DESIGN CRITERIA AND AS INDICATED ON THE DRAWINGS.
2. CONTRACTOR SHALL PROVIDE ALL MATERIALS, EQUIPMENT AND INSTALLATION OF THE COMPLETE OPERABLE WET SPRINKLER SYSTEM IN COMPLIANCE WITH NFPA 13, REQUIREMENTS OF VA DESIGN MANUAL, CHAPTER 6 - FIRE PROTECTION SYSTEMS, THE OWNER'S INSURANCE COMPANY AND ALL STATE AND LOCAL REGULATIONS.

KEY NOTES

1. DISCONNECT AND REMOVE PORTION OF EXISTING SPRINKLER MAIN DESIGNED FOR WET LABS AREA UNDER ROB BASE BUILDING PROJECT (CURRENTLY UNDER CONSTRUCTION), CAP REMAINING PIPING AS SHOWN.
2. VERIFY ADEQUACY OF THE EXISTING SPRINKLER MAIN DESIGNED FOR WET LABS AREA UNDER ROB BASE BUILDING PROJECT, REPLACE IT WITH LARGER SIZE PIPING IF NECESSARY ACCORDING TO HYDRAULIC CALCULATIONS.
3. PROVIDE SPRINKLER PIPING CONNECTION TO PRE-PIPED HYDROGEN GAS CYLINDER CABINET.
4. COORDINATE INSTALLATION OF DRY SPRINKLER AND SEALING OF SUPPLY PIPING PENETRATION OF COLD ROOM ENCLOSURE WITH THE SUPPLIER OF COLD ROOM ENCLOSURE.



1 FIRE PROTECTION PLAN - GROUND FLOOR
1/8"=1'-0"

Scale indicators on the left side of the drawing, showing increments from 1/8 inch to 15 inches, with corresponding graphical representations.

Revisions	Date

CONSULTANTS:



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Approved Associate Director	Approved Manager Project Section
Approved ACOS/R&D	Approved Project Engineer

Drawing Title FIRE PROTECTION PLAN - GROUND FLOOR	
Scale: 1/8" = 1'	Building Number: 30
Drawn By:	Checked By:

Project Title UNIVERSITY DRIVE RESEARCH OFFICE BUILDING WET LABS	
Location University Drive, Pittsburgh, PA 15240	
Date 4/30/2013	AutoCAD File Number

Project Number 646-10-100
Contract Number VA244-P-1827
Drawing Number FX-10G
Dwg. of

BID DOCUMENTS FULLY SPRINKLERED

Office of Construction and Facilities Management

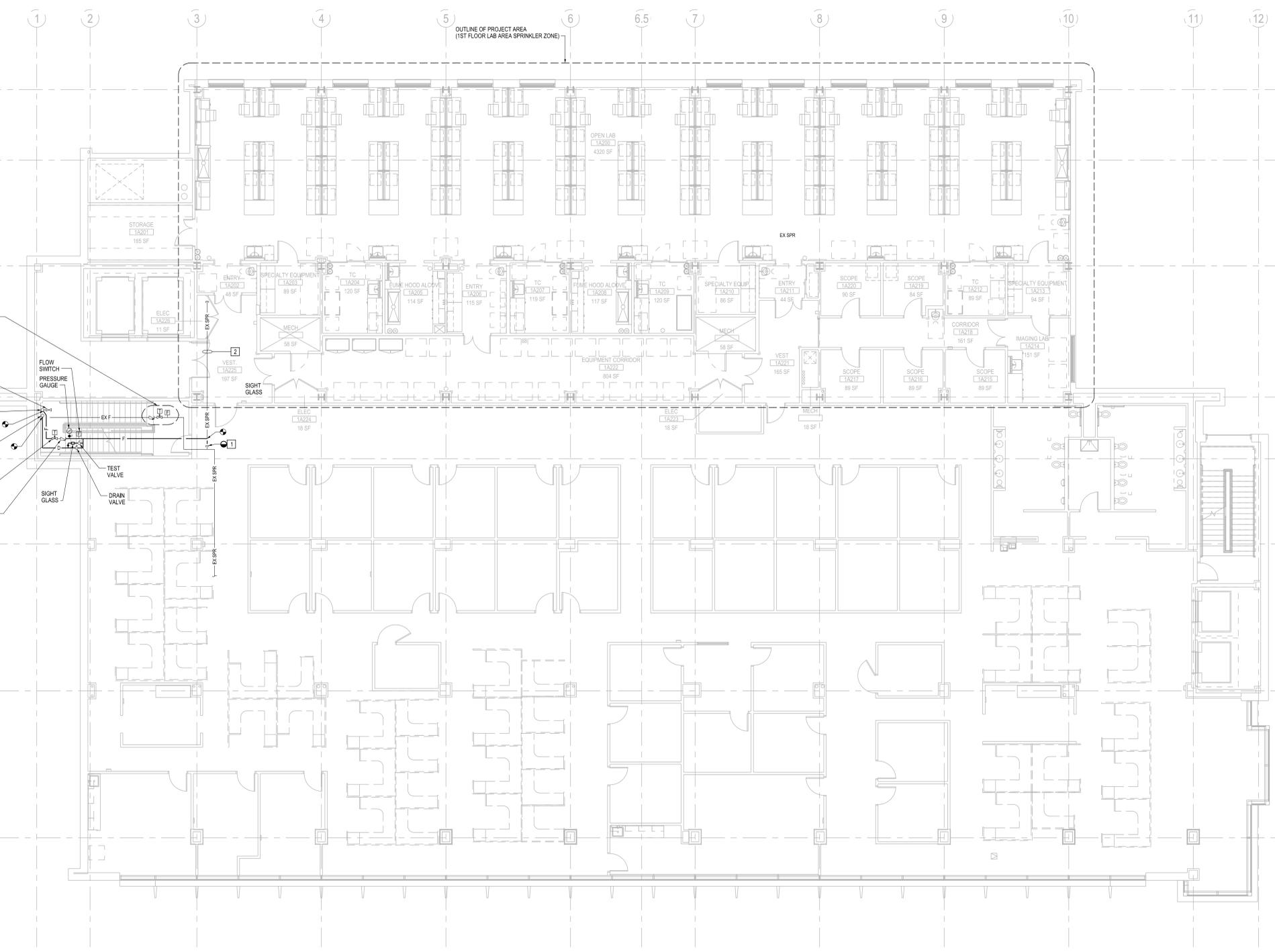


GENERAL NOTES

1. CONTRACTOR SHALL PROVIDE THE COMPLETE DESIGN OF THE SPRINKLER SYSTEM FOR THE ENTIRE PROJECT AREA INCLUDING SPRINKLER HEAD AND PIPING LAYOUT, ENGINEERING ANALYSIS BY A REGISTERED PROFESSIONAL ENGINEER OR NICET CERTIFIED DESIGNER, BASED ON THE SPECIFIED DESIGN CRITERIA AND AS INDICATED ON THE DRAWINGS.
2. CONTRACTOR SHALL PROVIDE ALL MATERIALS, EQUIPMENT AND INSTALLATION OF THE COMPLETE OPERABLE WET SPRINKLER SYSTEM IN COMPLIANCE WITH NFPA 13, REQUIREMENTS OF VA DESIGN MANUAL, CHAPTER 6 - FIRE PROTECTION SYSTEMS, THE OWNER'S INSURANCE COMPANY AND ALL STATE AND LOCAL REGULATIONS.

KEY NOTES

1. DISCONNECT AND REMOVE PORTION OF EXISTING SPRINKLER MAIN DESIGNED FOR WET LABS AREA UNDER ROB BASE BUILDING PROJECT (CURRENTLY UNDER CONSTRUCTION), CAP REMAINING PIPING AS SHOWN.
2. VERIFY ADEQUACY OF THE EXISTING SPRINKLER MAIN DESIGNED FOR WET LABS AREA UNDER ROB BASE BUILDING PROJECT, REPLACE IT WITH LARGER SIZE PIPING IF NECESSARY ACCORDING TO HYDRAULIC CALCULATIONS.



1 FIRE PROTECTION PLAN - FIRST FLOOR
1/8"=1'-0"

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

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Drawing Title FIRE PROTECTION PLAN - FIRST FLOOR	
Scale: 1/8" = 1'	Building Number: 30
Drawn By:	Checked By:

Project Title UNIVERSITY DRIVE RESEARCH OFFICE BUILDING WET LABS	
Location University Drive, Pittsburgh, PA 15240	
Date 4/30/2013	AutoCAD File Number

Project Number 646-10-100
Contract Number VA244-P-1827
Drawing Number FX-101
Dwg. of

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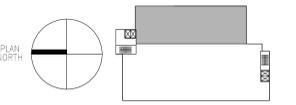
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GENERAL NOTES

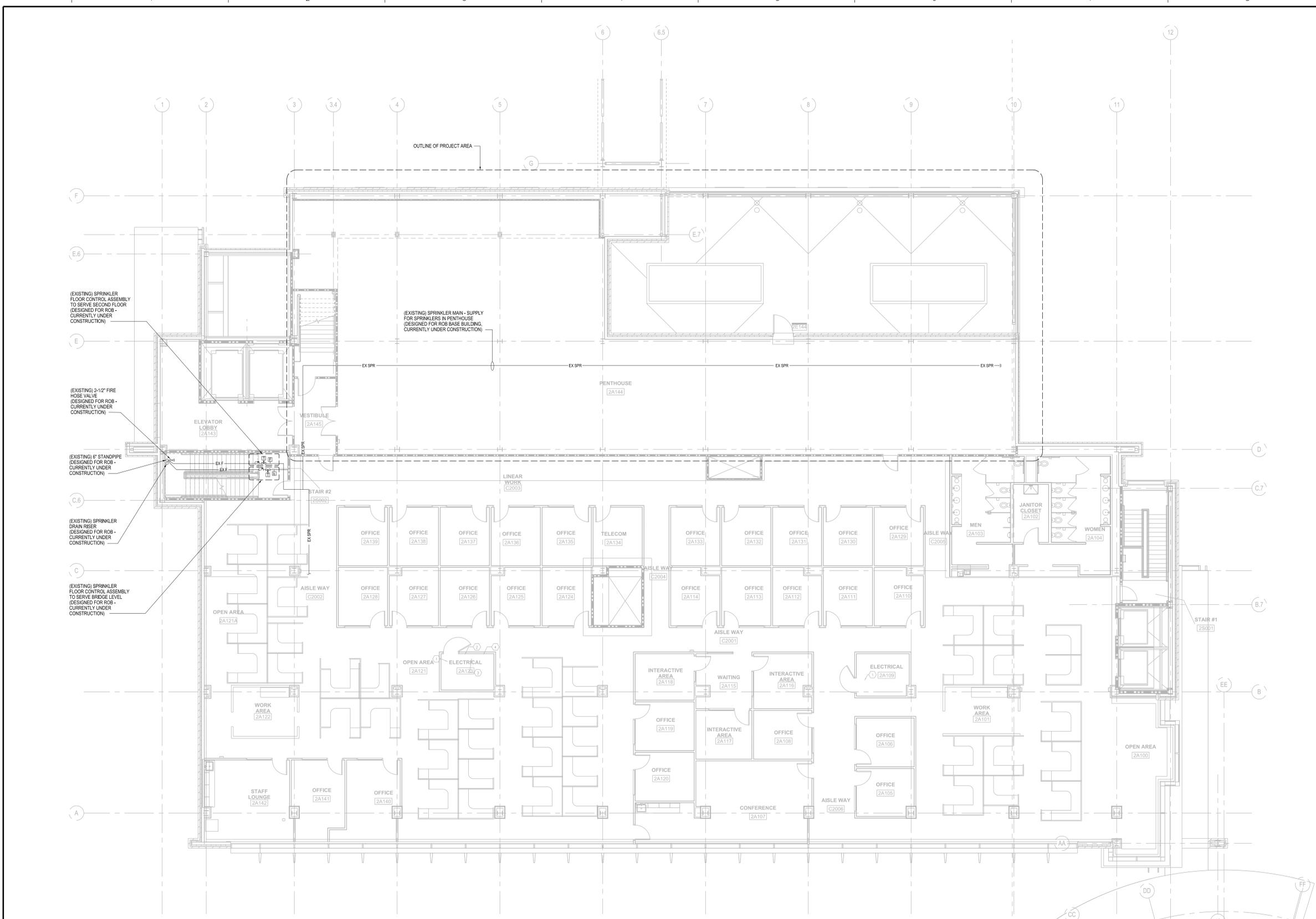
1. CONTRACTOR SHALL PROVIDE MODIFICATIONS OF THE EXISTING PENTHOUSE SPRINKLER SYSTEM AS REQUIRED TO REFLECT OBSTRUCTIONS BY MEP EQUIPMENT, PIPING AND DUCTWORK ADDED UNDER THIS (WET LABS) PROJECT. DENSITY OF THE PENTHOUSE SPRINKLER COVERAGE SHALL BE BASED ON ORDINARY HAZARD, GROUP I CLASSIFICATION.
2. CONTRACTOR SHALL PROVIDE ALL NEW MATERIALS, EQUIPMENT AND INSTALLATION OF THE EXISTING WET SPRINKLER SYSTEM MODIFICATIONS, IN COMPLIANCE WITH NFPA 13, REQUIREMENTS OF VA DESIGN MANUAL, CHAPTER 8 - FIRE PROTECTION SYSTEMS, THE OWNER'S INSURANCE COMPANY AND ALL STATE AND LOCAL REGULATIONS.
3. PROVIDE SPRINKLERS UNDER DUCTS AND OBSTRUCTIONS OF 48" AND WIDER.

1 FIRE PROTECTION PLAN - SECOND FLOOR
1/8"=1'-0"



KEY PLAN
BID DOCUMENTS
FULLY SPRINKLERED
Office of
Construction
and Facilities
Management
Department of
Veterans Affairs

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



Revisions	Date

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Approved ACOS/R&D	Approved Project Engineer

Drawing Title FIRE PROTECTION PLAN - SECOND FLOOR	
Scale: 1/8" = 1'	Building Number: 30
Drawn By:	Checked By:

Project Title UNIVERSITY DRIVE RESEARCH OFFICE BUILDING WET LABS	
Location University Drive, Pittsburgh, PA 15240	
Date 4/30/2013	AutoCAD File Number

Project Number 646-10-100
Contract Number VA244-P-1827
Drawing Number FX-102
Dwg. of