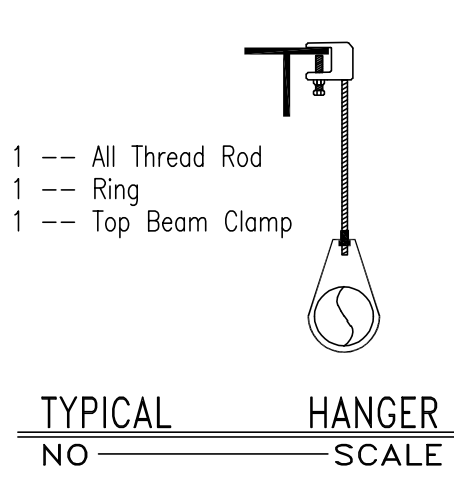
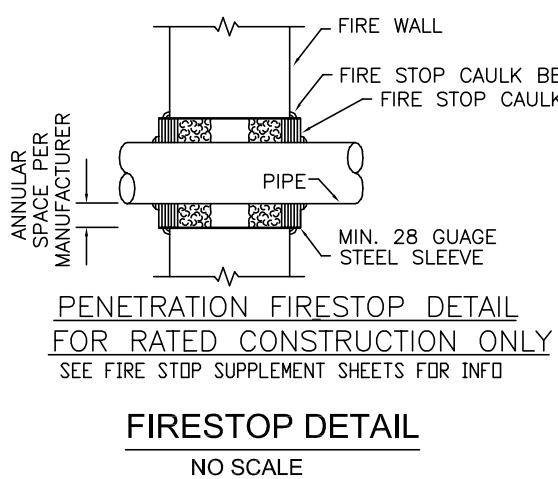
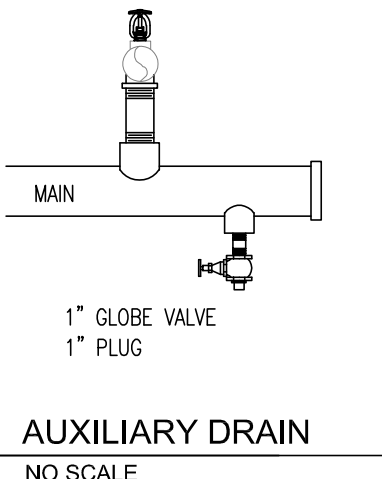


HANGER SPACING TABLE										
NOMINAL PIPE SIZE (IN.)	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	3 1/2"	4"	5"
STEEL PIPE EXCEPT THREADED LIGHTWALL	N/A	12'-0"	12'-0"	15'-0"	15'-0"	15'-0"	15'-0"	15'-0"	15'-0"	15'-0"
THREADED LIGHTWALL STEEL PIPE	N/A	12'-0"	12'-0"	12'-0"	12'-0"	12'-0"	N/A	N/A	N/A	N/A
CPVC	5'-6"	6'-0"	6'-6"	7'-0"	8'-0"	9'-0"	10'-0"	N/A	N/A	N/A



- LEGEND**
- DN - VERTICAL PIPE DOWN OR DROP NIPPLE
 - RN - VERTICAL PIPE UP OR RISER NIPPLE
 - UP - VERTICAL PIPE UP
 - T.O.S. - TOP OF STEEL ELEVATION ABOVE FIN. FLR.
 - P.C.L. - FIRE-CLUT
 - G.S.N. - GROOVED SHAPE NIPPLE
 - U.N.O. - UNLESS NOTED OTHERWISE
 - A.F.F. - ABOVE FINISHED FLOOR
 - N.T.S. - NOT TO SCALE
 - H.F. - HANGER TO BE DETERMINED DURING INSTALLATION
 - C.O.J. - PIPING TO BE CUT ON JOB DURING INSTALLATION
 - EL. X-X - ELEVATION OF PIPE CENTER-LINE ABOVE FIN. FLR.
 - - DISTANCE FROM PIPE CENTER-LINE TO STRUCTURE ATTACHMENT
 - - EXISTING PIPING
 - - NEW PIPING
 - - PIPE HANGER
 - - GROOVED COUPLING
 - - HYDRAULIC REFERENCE POINT
 - 8'-0" - FINISHED CEILING HEIGHT ABOVE THE FIN. FLR.

CONSTRUCTION

METAL DECK ON STEEL BEAMS

PIPE TYPE

ALL GROOVED PIPING TO BE SCHEDULE 10
ALL THREADED PIPING TO BE SCHEDULE 40

FLOW TEST

STATIC: 87 PSI
RESIDUAL: 66 PSI
FLOW: 710 GPM
DATE: 05/19/21
LOCATION: HYDRANT 034-017FH
SOURCE: QUALITY PLUMBING INSPECTION
ELEVATION SAME AS FIN. FLR.

GENERAL NOTES

THIS SPRINKLER INSTALLATION SHALL COMPLY WITH ALL APPLICABLE NFPA STANDARDS, LOCAL JURISDICTION STANDARDS AND/OR INSURANCE REQUIREMENTS.

THE DESIGNER SHALL NOT BE LIABLE FOR THE USE OF ANY UNLISTED MATERIALS AND/OR ANY ALTERATIONS MADE TO THIS DESIGN PRIOR TO OR DURING INSTALLATION.

ALL HANGERS ARE TO BE SPACED IN ACCORDANCE TO NFPA 13 AND COMPRISED OF APPROVED MATERIALS SPECIFICALLY LISTED FOR FIRE SPRINKLER USE.

THESE SHOP DRAWINGS ARE BASED ON THE OWNER'S ACCEPTANCE OF NFPA 25 AS THE OWNER'S STANDARD FOR THE INSPECTION, TESTING AND MAINTENANCE OF WATER-BASED FIRE PROTECTION SYSTEMS

OWNER TO PROVIDE ADEQUATE HEAT THROUGHOUT THE ENTIRE BUILDING TO PREVENT ALL SPRINKLER PIPING FROM FREEZING

ENTIRE BLIND SPACE TO BE COMPLETELY FREE OF ANY COMBUSTIBLES TO AVOID THE NECESSITY OF SPRINKLER PROTECTION

REMOTE MONITORING OF SPRINKLER SYSTEM TO BE BY OTHERS

ALL ELECTRICAL WIRING TO BE BY OTHERS

PER NFPA 13 - 2016 ED - 7.1.5 A SINGLE AIR VENT WITH A CONNECTION SHALL BE PROVIDED ON EACH WET PIPE SYSTEM. THE AIR VENT SHALL BE LOCATED NEAR A HIGH POINT IN THE SYSTEM TO ALLOW TO BE REMOVED FROM THAT PORTION OF THE SYSTEM BY ONE OF THE FOLLOWING METHODS: MANUAL VALVE MINIMUM 1/2" SIZE; OR AUTOMATIC AIR VENT.

DESIGN CRITERIA

SHOP AREAS:
DESIGN IS IN ACCORDANCE WITH THE DENSITY/AREA HYDRAULIC CALCULATION METHOD OF NFPA 13 (2016 ED.) SECTION 11.2.3.2 FOR ORDINARY HAZARD OCCUPANCY. THE DESIGN DENSITY IS 0.20 gpm/sqft. AND THE AREA OF SPRINKLER OPERATION IS 1500 sqft. TOTAL ALLOWANCE FOR HOSES IS 250 gpm IN ACCORDANCE WITH TABLE 11.2.3.1.2.

PAINT BOOTHS
PER NFPA 13, EXTRA HAZARD GROUP II THE DESIGN DENSITY IS 0.40 gpm/sqft. AND THE ENTIRE AREA OF SPRINKLER OPERATION IS 2500 sqft. OR AREA OF THE PAINT BOOTH, PROVIDE SEPARATE CONTROL VALVE FOR FIRE SPRINKLERS THAT IS OPERABLE FROM THE FLOOR LEVEL.

PER BFI #0025
PAINT BOOTH CALCULATIONS TO PROVIDE PROTECTION FOR ONLY ONE PAINT BOOTH AT A TIME. SAFETY FACTOR IS NOT REQUIRED FOR THESE SYSTEM CALCULATIONS, BASED ON ADEQUATE SUPPLY PROVIDED.

CODE INFORMATION

DESIGN CODES
BUILDING CODE: INTERNATIONAL BUILDING CODE (2018 ED.)
FIRE CODE: INTERNATIONAL FIRE CODE (2018 ED.)
SPRINKLERS: NFPA-13 (2016 ED.)
OCCUPANCY CLASSIFICATIONS
B.S.
CONSTRUCTION TYPES
TYPE V-B (SPRINKLERED)

THREAD	MAKE	S.I.N.	MODEL	KF	TEMP.	SYMBOL	QUANT.
1/2"	VKING	VK300	"MICROFAST" QUICK RESPONSE BRASS UPRIGHT	5.6	200'	⊗	32
1/2"	VKING	VK302	"MICROFAST" QUICK RESPONSE CHROME PENDENT	5.6	155'	⊗	14
1/2"	VKING	VK305	"MICROFAST" QUICK RESPONSE BRASS HSW	5.6	200'	<	03
1"	VKING	VK275	"MICROFAST" QUICK RESPONSE DRY BRASS HSW	8.0	286'	<	02
3/4"	VKING	VK531	QUICK RESPONSE ELO BRASS UPRIGHT	11.2	286'	⊗	03
3/4"	VKING	VK536	QUICK RESPONSE ELO CHROME PENDENT	11.2	286'	⊗	15
				TOTAL			69

B SIDE VIEW LOOKING NORTH
1/8" = 1'-0"

A FRONT VIEW LOOKING EAST
1/8" = 1'-0"

3 SECOND FLOOR
1/8" = 1'-0"

AREA #1			
AREA CALCULATED	DENSITY	AREA	
COLLISION BAY	0.20 gpm/sqft	1608 sqft	
BASE OF DESIGN	0.20 gpm/sqft	1608 sqft	
NUMBER OF SPRINKLERS IN CALCULATED AREA		14	
SYSTEM DEMAND	SPRINKLER FLOW	PRESSURE	
	630.72 gpm	56.53 psi	
	DEMAND LOCATION	HOSE ALLOW.	
	CITY CONNECTION	250 gpm	

1 SHOP AREA - PLAN VIEW
1/8" = 1'-0"

AREA #2			
AREA CALCULATED	DENSITY	AREA	
ONE PAINT BOOTH	0.40 gpm/sqft	ENTIRE BOOTH	
BASE OF DESIGN	0.40 gpm/sqft	ENTIRE BOOTH	
NUMBER OF SPRINKLERS IN CALCULATED AREA		11	
SYSTEM DEMAND	SPRINKLER FLOW	PRESSURE	
	592.57 gpm	49.619 psi	
	DEMAND LOCATION	HOSE ALLOW.	
	CITY CONNECTION	500 gpm	

2 FIRST FLOOR PAINT BOOTH
1/8" = 1'-0"

REV.	DATE	DESCRIPTION



Century
FIRE SPRINKLERS, INC.
1901 Bedford Road - North Kansas City, MO 64116 - (816) 556-0808
27 Cassens Court Suite 37 - Fenton, MO 63026 - (314) 692-0011

CONTRACT NUMBER

MCC LONGVIEW HT
ADDITION/RENOVATION

ADDRESS 500 SW LONGVIEW ROAD
LEE'S SUMMIT, MO. 64061

CONTRACT WITH

DRAWN BY
R.V.

SCALE
1/8" = 1'-0"

DATE
03-16-2022

SHEET NUMBER

FP1 OF 1