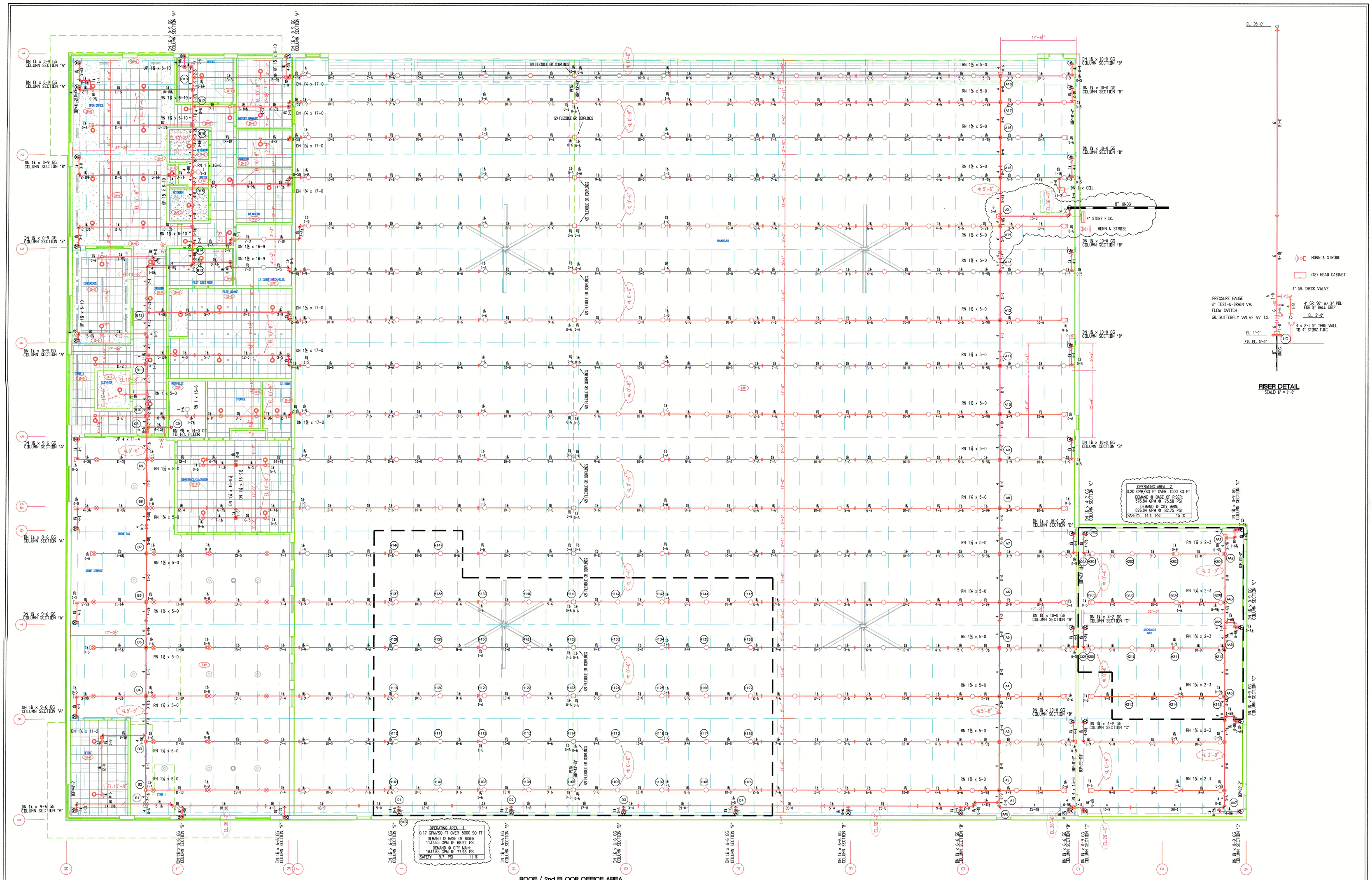


ROOF / 2nd FLOOR OFFICE AREA

T.F. OF 2nd FLOOR OFFICE AREA TO BE 14'-0"
ROOF SLOPE = 1/4" / 12"
HEADS NEAR HEAT SOURCES TO BE HIGH TEMP. PER NFPA-13
ALL HANGERS TO BE SPACED PER NFPA - 13 (SEE CHART)
ALL HANGERS TO BE CDJ.
PENDENT HEADS TO BE DN 48" LONG VIC. AH22C FLEX DROP

RISER DETAIL

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

FLOW TEST INFORMATION		
LOCATION: NE HAGAN RD.		
DATE/TIME: 8-10-2023		
BY: CITY OF LEE'S SUMMIT		
SIZE OF CITY MAIN: 12"		
STATIC PRESSURE:	101	PSI
RESIDUAL PRESSURE:	76	PSI
FLOW @ RESIDUAL:	2300	GPM

FIRE SPRINKLER HEADS/NOZZLES

MANUF.	MODEL	STYLE	INPT K	SIN#	TEMP.°F	RESPONSE	FINISH	ESCUTCHEON	NOTES	SYM	QTY.
RELIABLE	F1FR 56	UPRIGHT	5.6	RA1425	200°	QUICK	BRASS			○	335
RELIABLE	F1FR 56	UPRIGHT	5.6	RA1425	200°	QUICK	BRASS		W/ HEAD GUARD	⊗	26
RELIABLE	F1FR 56	PENDENT	5.6	RA1425	200°	QUICK	BRASS			⊗	46
RELIABLE	F1FR 42	PENDENT	4.2	RA1413	200°	QUICK	BRASS		W/ WATER SHIELD	◇	96
									TOTAL THIS SHEET:		503

APPROVALS

DWN:		CKD:	
DATE:		DATE:	

REVISIONS

NO.	DATE:	BY:	REVISION DESCRIPTION
1	11-6-2024	BAK	REVISED FOR NEW UNDG. LOCATION & ASI 01

AEGIS FIRE PROTECTION
"Building Lives and Property"
AEGIS FIRE PROTECTION, LLC
11936 W. 119th ST. #262
OVERLAND PARK, KS 65708
P: 913.825.0343 F: 913.322.4475
FIRE SPRINKLER SYSTEMS CONSULTING, SALES, DESIGN, INSTALLATION & SERVICE
FIRE ALARM & DETECTION CONSULTING, SALES, DESIGN, INSTALLATION, & SERVICE
FIRE EXTINGUISHERS, INTEGRATED SECURITY APPLICATIONS & NURSE CALL SYSTEMS

GENERAL NOTES:

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

ALL DESIGN, MATERIAL & INSTALLATION TO COMPLY WITH ALL LOCAL REQUIREMENTS AND NFPA STANDARDS.

ALL ELECTRICAL WIRING TO BE BY OTHERS

ALL UNDERGROUND WORK TO BE BY OTHERS

TJ = TOP OF STEEL JOIST

℄ DIM. – CENTER LINE OF PIPE FROM TJ

EL. DIM. – CENTER LINE OF PIPE ELEVATION ABOVE FIN. FLR.

⬭ DIM. – FINISHED CEILING HEIGHT ABOVE FIN. FLR.

◯ – HYDRAULIC REFERENCE POINT OR LINE NUMBER

DESIGN CRITERIA:

COLUMN PROTECTION = .25/SQ. FT. OF COLUMN WETTED AREA

HANGAR BAYS, ROOF LEVEL:
PER NFPA-409, 2016 EDITION / NFPA-13, 2016 EDITION:
(NFPA-409 – SECTION 12.5.6 FOR UNFUELED AIRCRAFT)
0.17 GPM/SQ. FT. FOR 5000 SQ. FT.
OUTSIDE HOSE ALLOWANCE = 500 GPM.

STORAGE BAYS:
PER NFPA-13, 2016 EDITION, ORDINARY HAZARD GR II:
0.20 GPM/SQ. FT. FOR 1500 SQ. FT.
OUTSIDE HOSE ALLOWANCE = 250 GPM.

STORAGE/MECH. AREAS:
PER NFPA-13, 2016 EDITION, ORDINARY HAZARD GR I:
0.15 GPM/SQ. FT. FOR 1050 SQ. FT.
OUTSIDE HOSE ALLOWANCE = 250 GPM.

ALL OTHER AREAS:
PER NFPA-13, 2016 EDITION, LIGHT HAZARD:
0.10 GPM/SQ. FT. FOR 1050 SQ. FT.
OUTSIDE HOSE ALLOWANCE = 100 GPM.

CODE INFO:

AREA OF WORK = 49,000± SQ. FT.
CONSTRUCTION TYPE: II-B
OCCUPANCY TYPE: S-1 / B / E
CODE INFO: IBC, 2018 / IFC, 2018 / NFPA-13, 2016

CONSTRUCTION:

EXISTING: STEEL BEAMS & PURLINS

PIPE TYPE:

ALL GR. / WELDED PIPING TO BE SCHED 10
ALL THREADED PIPING TO BE SCHED 40

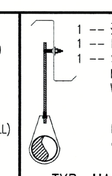
HANGER SPACING TABLE

HANGER SPACING FOR STEEL PIPE (SCH. 40)

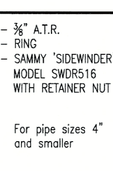
PIPE SIZE	HANGER SPACING
1", 1¼"	12'
1½" & LARGER	15'

HANGER SPACING FOR STEEL PIPE (THINWALL)

PIPE SIZE	HANGER SPACING
1" – 3"	12'
4" & LARGER	15'



TYP. HANGER #53
NO SCALE



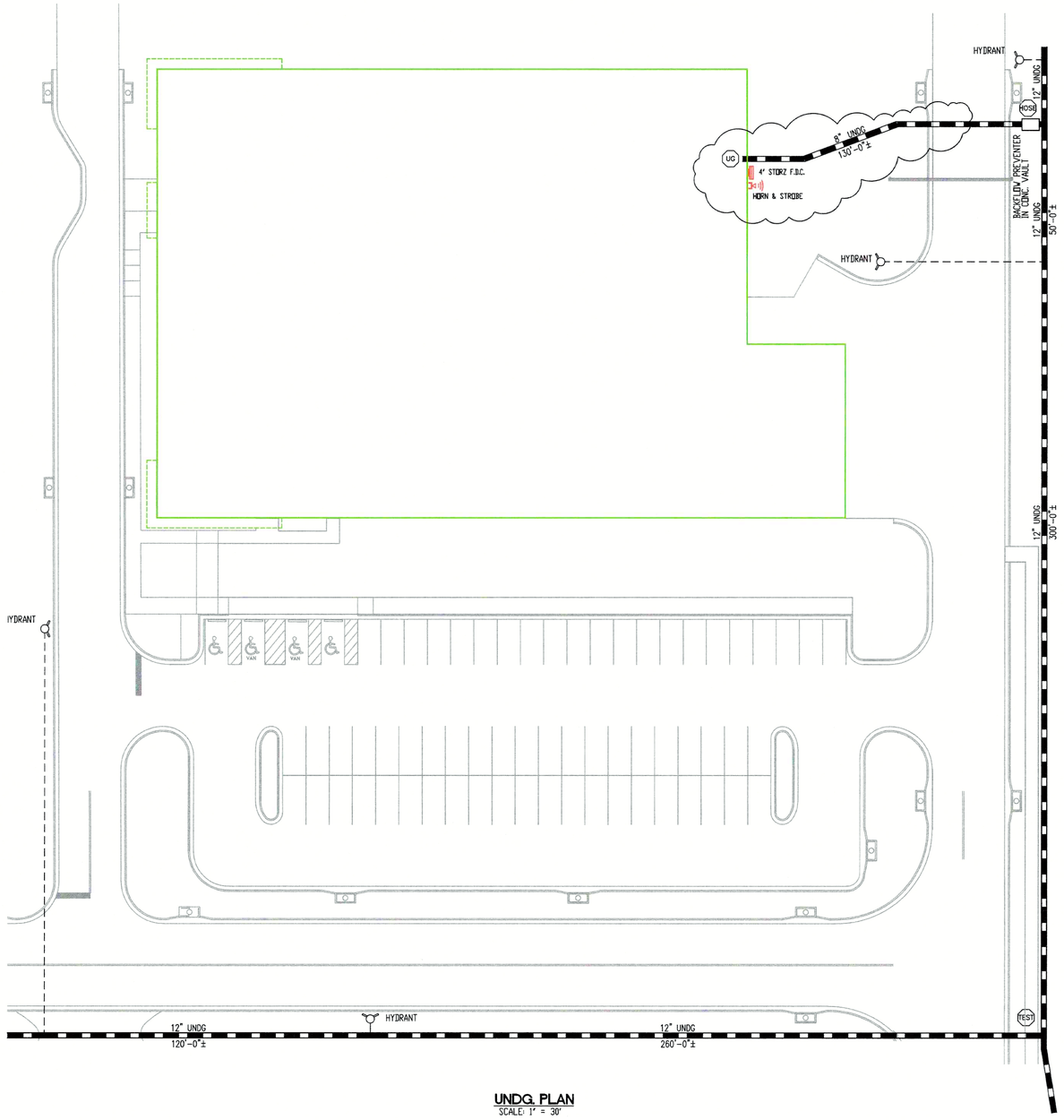
TYP. HANGER #01
NO SCALE

JOB NAME:

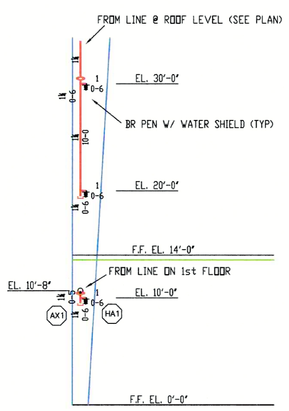
LEE'S SUMMIT MUNIC. AIRPORT
LTX HANGAR 2
2751 NE DOUGLAS ST.
LEE'S SUMMIT, MO 64064

CONTRACT NO:	19240
TOTAL HEADS:	590
HEADS THIS SHEET:	503
SCALE:	1/8"=1'-0"
DESIGNED BY:	B & K
CHECKED BY:	
DRAWING DATE:	8-23-2024
PLOT DATE:	
DRAWING NO:	FP1

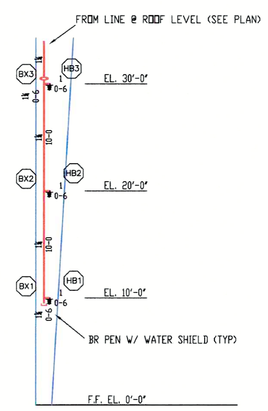
STATE OF MISSOURI
TOM R. HAMPTON
E-24599
PROFESSIONAL ENGINEER
11/8/24



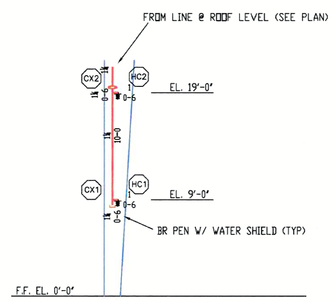
UNDG. PLAN
SCALE: 1" = 30'



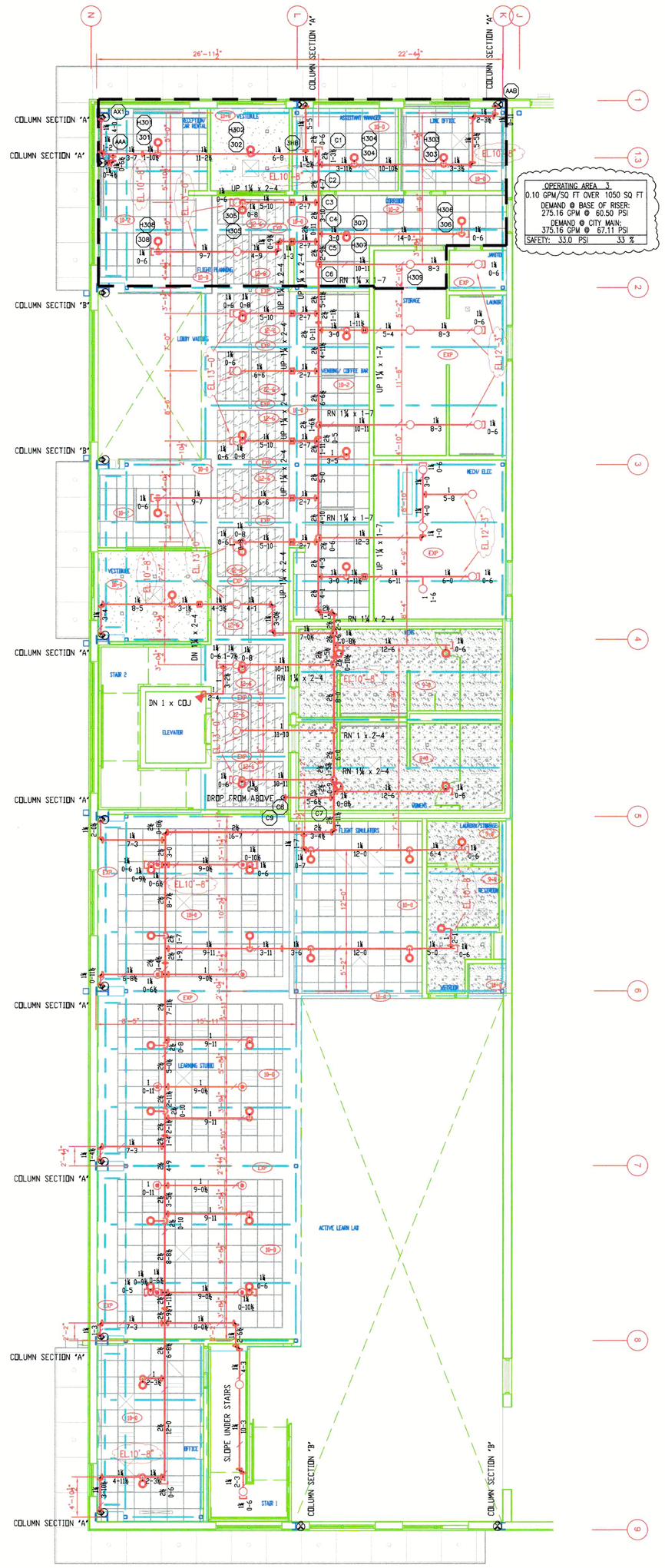
COLUMN SPRINKLERS SECTION "A"
(10) REQUIRED
MAX. COVERAGE PER HEAD @ COLUMN = 50 SQ. FT.
(.25 GPM FOR 60 SQ. FT. = 15 GPM / SPRINKLER)



COLUMN SPRINKLERS SECTION "B"
(20) REQUIRED
MAX. COVERAGE PER HEAD @ COLUMN = 50 SQ. FT.
(.25 GPM FOR 60 SQ. FT. = 15 GPM / SPRINKLER)



COLUMN SPRINKLERS SECTION "C"
(8) REQUIRED
MAX. COVERAGE PER HEAD @ COLUMN = 50 SQ. FT.
(.25 GPM FOR 60 SQ. FT. = 15 GPM / SPRINKLER)



1st FLOOR OFFICE
TB/RS = 17'-08"
CEILING HEIGHTS 9'-0" UNO.
ALL HANGERS TO BE SPACED PER NFPA - 13 (SEE CHART)
ALL HANGERS TO BE CEJ.
PENDENT HEADS TO BE ON 48" LONG VIC. AHECC FLEX DROP

GENERAL NOTES:

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

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ALL UNDERGROUND WORK TO BE BY OTHERS

TJ = TOP OF STEEL JOIST

℄ DIM. – CENTER LINE OF PIPE FROM TJ

EL. DIM. – CENTER LINE OF PIPE ELEVATION ABOVE FIN. FLR.

◯ DIM. – FINISHED CEILING HEIGHT ABOVE FIN. FLR.

◯ – HYDRAULIC REFERENCE POINT OR LINE NUMBER

DESIGN CRITERIA:
COLUMN PROTECTION = .25/SQ. FT. OF COLUMN WETTED AREA

STORAGE/MECH. AREAS:
PER NFPA-13, 2016 EDITION, ORDINARY HAZARD GR I:
0.15 GPM/SQ. FT. FOR 1050 SQ. FT.
OUTSIDE HOSE ALLOWANCE = 250 GPM.

ALL OTHER AREAS:
PER NFPA-13, 2016 EDITION, LIGHT HAZARD:
0.10 GPM/SQ. FT. FOR 1050 SQ. FT.
OUTSIDE HOSE ALLOWANCE = 100 GPM.

CODE INFO:
AREA OF WORK = 49,000± SQ. FT.
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OCCUPANCY TYPE: S-1 / B / E
CODE INFO: IBC, 2018 / IFC, 2018 / NFPA-13, 2016

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PIPE SIZE	HANGER SPACING
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PIPE SIZE	HANGER SPACING
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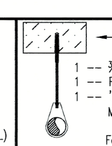
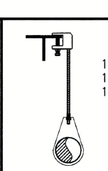
4" & LARGER	15'



1 -- ⅜" A.T.R.
1 -- RING
1 -- "SAMMY" SCREW MODEL CST 20

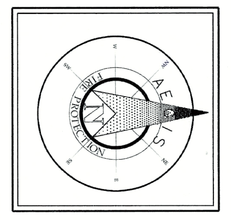
For pipe sizes 4" and smaller

TYP. HANGER #56
NO SCALE



1 -- A.T.R.
1 -- RING
1 -- T.B.C.

TYP. HANGER #01
NO SCALE



FLOW TEST INFORMATION

LOCATION:	NE HAGAN RD.
DATE/TIME:	8-10-2023
BY:	CITY OF LEE'S SUMMIT
SIZE OF CITY MAIN:	12"
STATIC PRESSURE:	101 PSI
RESIDUAL PRESSURE:	76 PSI
FLOW @ RESIDUAL:	2300 GPM

FIRE SPRINKLER HEADS/NOZZLES

MANUF.	MODEL	STYLE	INPT	K	SIN#	TEMP(°F)	RESPONSE	FINISH	NOTES	SYM.	QTY.
RELIABLE	F1FR 56	UPRIGHT	¾"	5.6	RA1425	200°	QUICK	BRASS	ESCUTCHEON		24
RELIABLE	F1FR 56	UPRIGHT	¾"	5.6	RA1425	200°	QUICK	BRASS			10
RELIABLE	F1FR 56	CONCEALER	¾"	5.6	RA1435	200°	QUICK	BRASS	ON 1" SPRIG		42
RELIABLE	F1FR 56	HOR. SIDEWALL	¾"	5.6	RA1435	200°	QUICK	BRASS			1
RELIABLE	F1FR 42	PENDENT	¾"	4.2	RA1413	200°	QUICK	BRASS	W/ WATER SHIELD		10

TOTAL THIS SHEET: 87

APPROVALS

	IN:	OUT:

REVISIONS

NO.	DATE:	BY:	REVISION DESCRIPTION:
1	11-8-2024	BKK	REVISED FOR NEW UNDG. LOCATION & ASI 08

AEGIS FIRE PROTECTION
Shielding Lives and Property

AEGIS FIRE PROTECTION, LLC
11936 W. 119th ST. #262
OVERLAND PARK, KS 66708
P: 913.825.0343 F: 913.322.4475

FIRE SPRINKLER SYSTEMS CONSULTING, SALES, DESIGN, INSTALLATION & SERVICE

FIRE ALARM & DETECTION CONSULTING, SALES, DESIGN, INSTALLATION, & SERVICE

FIRE EXTINGUISHERS, INTEGRATED SECURITY APPLICATIONS & NURSE CALL SYSTEMS

JOB NAME:
LEE'S SUMMIT MUNIC. AIRPORT
LTX HANGAR 2
2751 NE DOUGLAS ST.
LEE'S SUMMIT, MO 64064

CONTRACT NO:	19240
TOTAL HEADS:	590
HEADS THIS SHEET:	87
SCALE:	1/8"=1'-0"
DESIGNED BY:	B & K
CHECKED BY:	
DRAWING DATE:	8-24-2024
PLOT DATE:	
DRAWING NO:	FP2

STATE OF MISSOURI
TOAN R. HAMPTON
NO. PE-2001014861
REGISTERED PROFESSIONAL ENGINEER

11/8/24