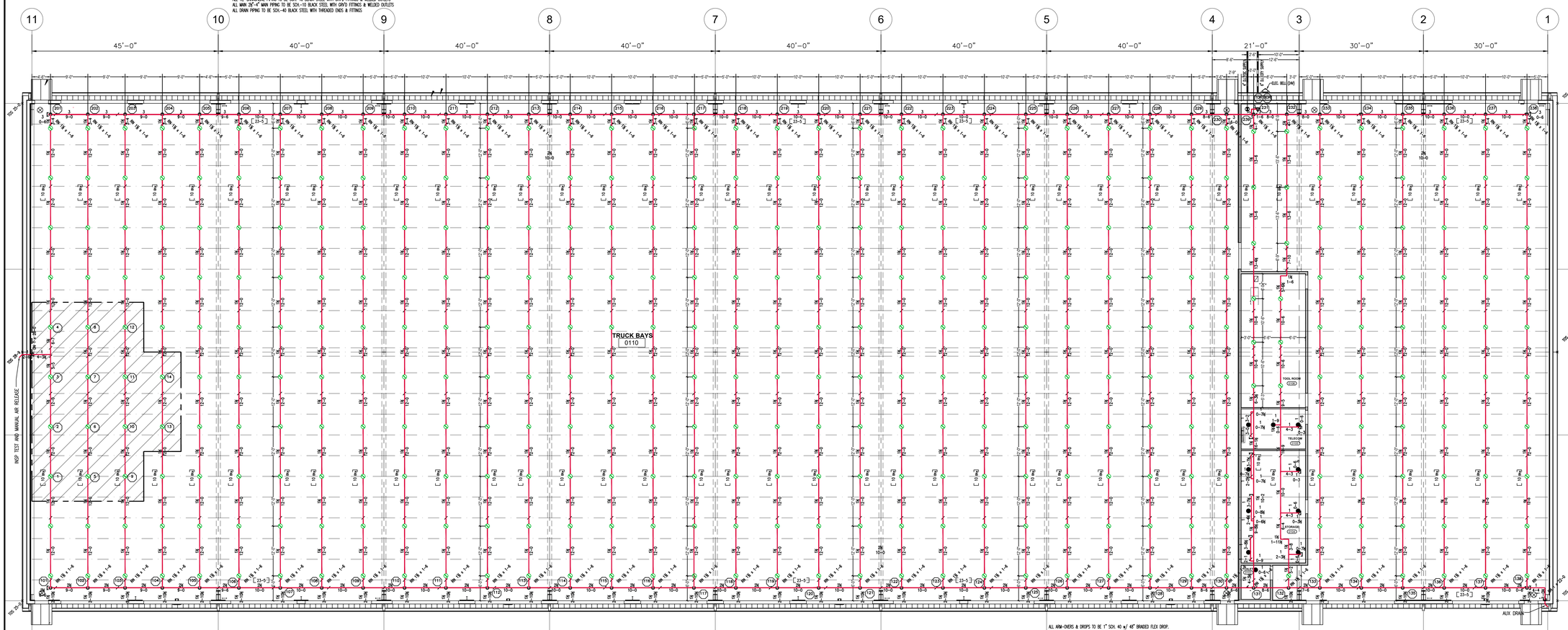
ALL ARM-OVERS & DROPS TO BE 1" SCH. 40 w/ 48" BRAIDED FLEX DROP.
UNSUPPORTED BREAKOVERS NOT TO EXCEED 12".
ALL 1½" BRANCHLINE PIPING TO BE SCH.-40 BLACK STEEL WITH GRVD FITTINGS & WELDED OUTLETS
ALL MAIN 2½"-4" MAIN PIPING TO BE SCH.-10 BLACK STEEL WITH GRVD FITTINGS & WELDED OUTLETS
ALL DRAIN PIPING TO BE SCH.-40 BLACK STEEL WITH THREADED ENDS & FITTINGS



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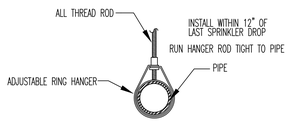
ALL DRAIN PIPING TO BE SCH.-40 BLACK STEEL WITH THREADED ENDS & FITTINGS

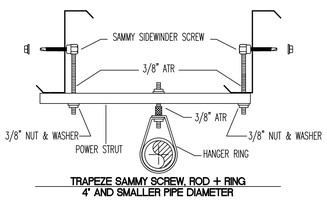
HYDRAULIC DESIGN CRITERIA

AREA NUMBER: 1	CODE REF.: NFPA 13(2013)	HAZARD: ORDINARY HAZARD GROUP II
REMOTE AREA: 1,500 SQ FT	DENSITY: .20 GPM	AREA PER SPRINKLER: 130 S.F.
SYSTEM TYPE: WET	INSIDE HOSE: 100	OUTSIDE HOSE: 150 GPM
TOTAL SYSTEM DEMAND: 477.82 GPM @ 37.56 PSI AT BOR		SAFETY MARGIN: 16.54 PSI

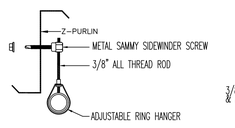
1 PIPING PLAN
FP 2 — 3/32" = 1'-0"



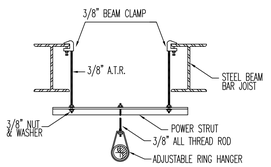
LAST BRANCHLINE SPRINKLER DROP SUPPORT HANGER RING DETAIL
USE WHEN PRESSURE EXCEEDS 100 PSI



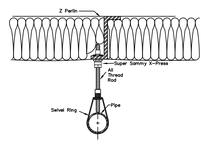
TRAPEZE SAMMY SCREW, ROD + RING
4" AND SMALLER PIPE DIAMETER



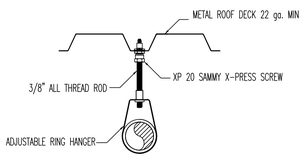
METAL SAMMY SIDEWINDER SCREW
4" AND SMALLER PIPE DIAMETER



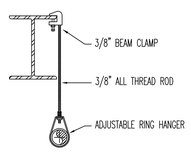
TRAPEZE TOP BEAM CLAMP, ROD + RING
4" AND SMALLER PIPE DIAMETER



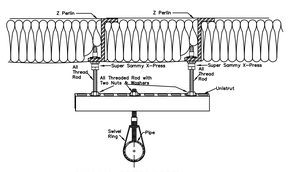
SAMMY X-PRESS SCREW
+ RING FOR BOTTOM OF PURLIN



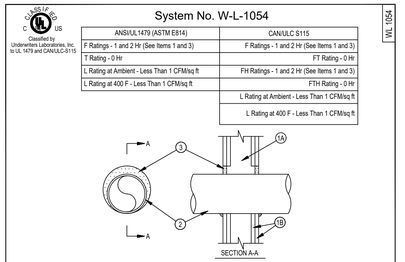
SAMMY X-PRESS SCREW
+ RING FOR METAL ROOF DECKING
2" AND SMALLER PIPE

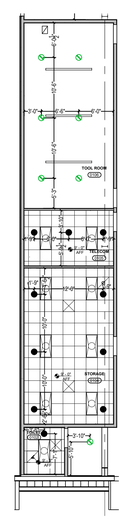


TOP BEAM CLAMP, ROD + RING
4" AND SMALLER PIPE DIAMETER

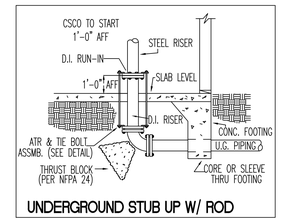


SAMMY X-PRESS SCREW
+ RING FOR BOTTOM OF PURLIN

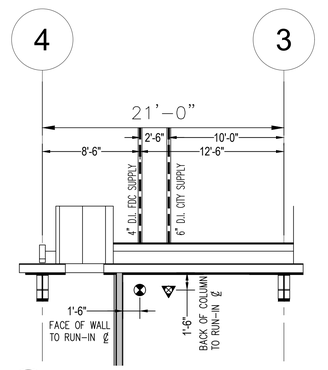




2 REFLECTED CEILING PLAN
FP 3 — 3/32" = 1'-0"



UNDERGROUND STUB UP W/ ROD



3 RISER & FDC RUN-IN LOCATION
FP 3 — 3/16" = 1'-0"

HANGER INSTALLATION REQUIREMENTS

MAXIMUM DISTANCE BETWEEN HANGERS												
NOMINAL PIPE SIZE	¾"	1"	1¼"	1½"	2"	2½"	3"	3½"	4"	5"	6"	8"
BLAZEMASTER CPVC	5' 6"	6' 0"	6' 6"	7' 0"	8' 0"	9' 0"	10' 0"	N/A	N/A	N/A	N/A	N/A
THREADABLE LIGHTWALL	N/A	12' 0"	12' 0"	12' 0"	12' 0"	12' 0"	12' 0"	N/A	N/A	N/A	N/A	N/A
STEEL PIPE (10/ 40)	N/A	12' 0"	12' 0"	15' 0"	15' 0"	15' 0"	15' 0"	15' 0"	15' 0"	15' 0"	15' 0"	15' 0"

100 PSI STATIC PRESSURE ON SYSTEM REQUIRES UP-LIFT RESTRAINT WITHIN 12 INCHES HORIZONTALLY OF HEAD FOR ARM-OVERS AND END OF BRANCH LINE
THE UNSUPPORTED LENGTH BETWEEN THE END SPRINKLER AND THE LAST HANGER ON THE LINE SHALL NOT EXCEED 36" FOR 1" PIPE, 48" FOR 1¼" PIPE AND 60" FOR 1½" PIPE OR LARGER
THE CUMULATIVE HORIZONTAL LENGTH OF AN UNSUPPORTED ARMOVER TO A SPRINKLER, SPRINKLER DROP, OR SPRIG-UP SHALL NOT EXCEED 24"

HEAD LEGEND

SYM	CNT	NAME	FINISH	TEMP	K	NPT	MFG.	MODEL#	MIN. SPACING	MAX. SPACING	ESCUT	RESPONSE
●	10	CONCEALED PENDENT	BRASS	155	5.6	1/2"	VIKING	VK-4621	6'-0"	15'-0"	WHITE PLATE	QUICK
⃠	373	UPRIGHT	BRASS	200	8.0	3/4	VIKING	VK-2001	6'-0"	15'-0"	N/A	STANDARD
TOTAL	383											

IMPORTANT: IN LOCATIONS SUBJECT TO FREEZING CONDITIONS IT IS THE OWNERS RESPONSIBILITY TO PROVIDE ADEQUATE HEAT THROUGHOUT WET PIPE SPRINKLER SYSTEM AREAS AND ENCLOSURES FOR DRY-PIPE, DELUGE AND OTHER TYPES OF VALVES CONTROLLING WATER SUPPLIES TO SPRINKLER SYSTEMS.

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NICET CERTIFIED
BRIAN THOMAS CRAWFORD
NICET LEVEL III WBSL #107492

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DUKE ENERGY - DUNN MOBILE SUBSTATION STORAGE
PIPING PLAN
1269 JONESBORO ROAD
DUNN, NORTH CAROLINA

UNDERWRITERS:
INDEX NO.
REVISIONS:

DESIGN CRITERIA

SYSTEM TYPE	WET
SYSTEM DESIGN	CALCULATED
DESIGN DENSITY	0.20 gpm/1500 sf
MAX HEAD CVRG	130 s.f.
HOSE ALLOWANCE	250 gpm

DRAWN BY: DFJ — DATE: 8/23/24
CHECK BY: BTC — DATE:
SCALE: 3/32" = 1'-0"

CONTRACT NO: J24-6014
FILE NO:

DWG. NO: FP 2 OF 2

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