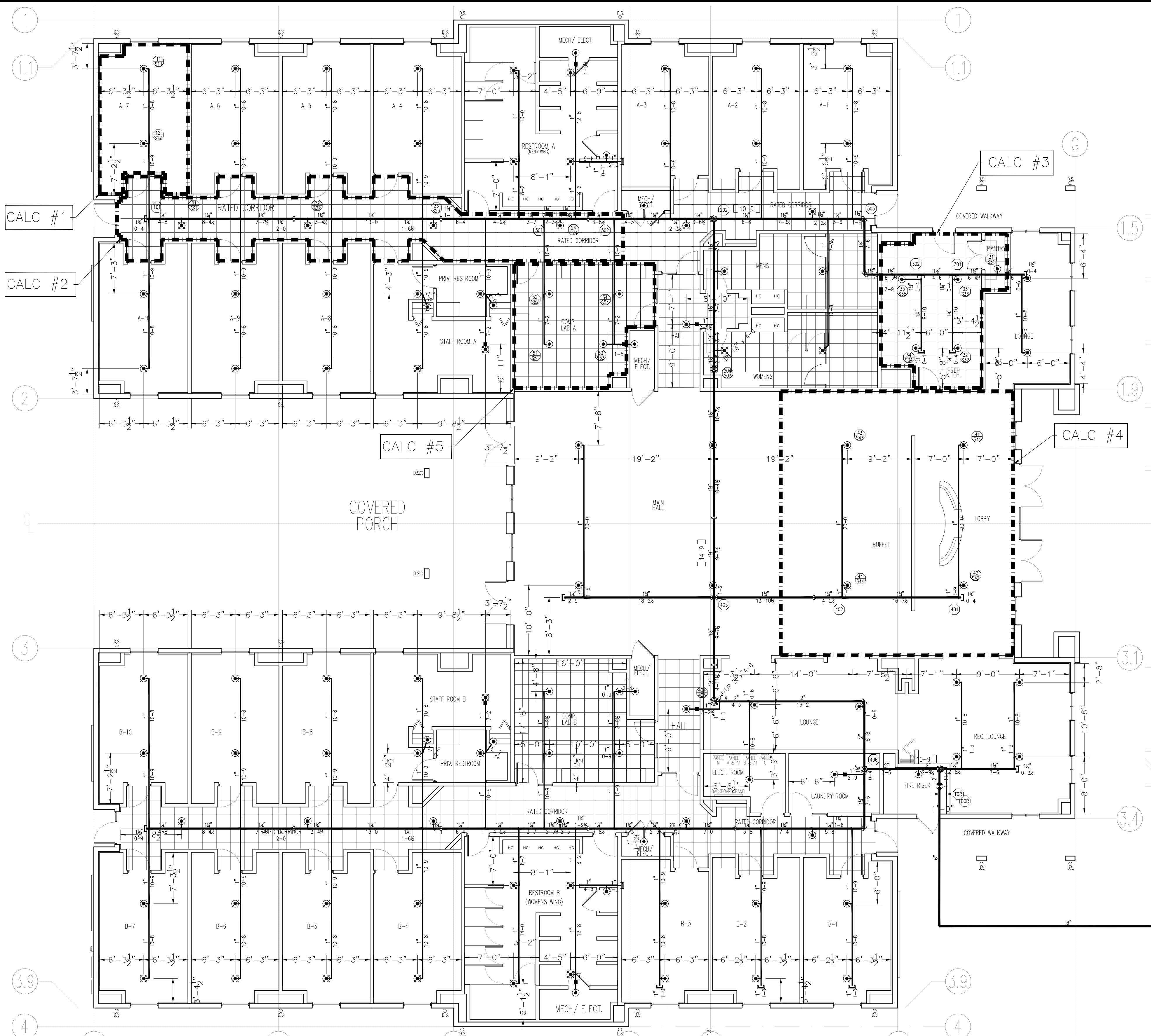


SECTION VIEW

1/8" = 1'-0"



PLAN VIEW

1/8" = 1'-0"

GENERAL NOTES

SYSTEM TYPE: WET DRY DELUGE PREACTION OTHER

SYSTEM IS DESIGNED AND TO BE INSTALLED PER: NFPA 13 ISO FM BOCA OTHER FIRE SUBCODE

PIPE SIZING: HYDRAULIC CALCULATIONS PIPE SCHEDULE

PIPE TYPE:
 BRANCH LINES: SCH-40, SCH-10, XL-PIPE, GALV., COPPER, PLASTIC, CPVC, WLS, THIRD, THINWALL, OTHER
 MAINS: SCH-40, SCH-10, XL-PIPE, GALV., COPPER, PLASTIC, CPVC, WLS, OTHER

FITTING TYPE:
 BRANCH LINES: GROOVED, PLAN-END, SCHEDULED, WELDED, CPVC, OTHER
 MAINS: GROOVED, PLAN-END, SCHEDULED, WELDED, CPVC, OTHER

FITTING MATERIAL: CAST IRON MALLEABLE IRON FORGED STEEL DUCTILE IRON COPPER PLASTIC OTHER

FITTING CLASS: 125 150 250 300 OTHER

PIPE SLEEVES: FIRE WALLS MASONRY WALLS ALL WALLS GALV SCH-40 THINWALL SHI METAL OTHER N/A

BUY AMERICAN ACT: YES NO

CENTER OF TILE: YES NO

ALL DIMENSIONS AND ELEVATIONS ARE TO CENTERLINE OF PIPE

HANGERS SHALL BE SPACED IN ACCORDANCE W/NFPA 13

ALL PIPE AND HANGER LENGTHS ARE CUT DIMENSIONS (EXCEPT COPPER AND PLASTIC SYSTEMS ARE CENTER/CENTER) UNLESS OTHERWISE NOTED

0'-0" = CENTERLINE OF PIPE BELOW DECKING

APPROXIMATE HANGER LOCATION PER NFPA 13

HYDRAULIC FLOW POINT

OWNER TO PROVIDE HEAT THROUGHOUT WET SPRINKLER AREAS AND IN ENCLOSURES FOR DRY PIPE, DELUGE AND OTHER TYPES OF VALVES CONTROLLING WATER SUPPLIES TO SPRINKLER SYSTEMS

OWNER TO MAINTAIN SPRINKLER SYSTEM AS PER NFPA #25

ALL ELECTRICAL WIRING BY OTHERS

ALL ELECTRICAL ALARM DEVICES BY OTHERS

ALL CUTTING AND/OR PATCHING BY OTHERS

ALL SLEEVES AND/OR FIRE PROOFING BY OTHERS

IF REQUIRED ALL PAINTING IS BY OTHERS

IF REQUIRED ALL CONCRETE WORK IS BY OTHERS

ALL PIPING TO BE TESTED AND INSTALLED PER NFPA #13

DRY SYSTEM BRANCH LINES SHALL BE PITCHED AT LEAST 1/2" PER 10'

AND DRY SYSTEM MAINS SHALL BE PITCHED AT LEAST 1/4" PER 10'

THIS SPRINKLER DRAWING IS FOR THE SOLE USE AND INSTALLATION OF AWC FIRE PROTECTION ONLY

AS THE ACTUAL LIFE SPAN OF THE SPRINKLER SYSTEM IS DEPENDENT ON MANY VARIABLES, INCLUDING BUT NOT LIMITED TO WATER QUALITY AND ATMOSPHERIC CONDITIONS, NEITHER MASTERCRAFT SPRINKLER, INC. NOR THEIR ENGINEER ASSUME ANY LIABILITY OR RESPONSIBILITY FOR THE EXPECTED LIFE SPAN OF THE SPRINKLER SYSTEM PRIOR TO WATER BEING INTRODUCED TO THE SYSTEM, THE GENERAL CONTRACTOR AND/OR THE OWNER SHOULD HAVE THE SPRINKLER SYSTEM TESTED AND TREATED (IF NECESSARY) FOR PROTECTION AGAINST MICRO-BIOLOGICALLY INFLUENCED CORROSION (MIC).

WATER DATA

STATIC PSI: 73.3 PSI, RESIDUAL PSI: 66.6 PSI @ 1.140 GPM FLOWING

MAIN SIZE & TYPE: 12" WATER MAIN, DEAD END, CIRCULATING

TEST TAKEN AT: PRESSURE HYDRANT 3343 IN FRONT OF PROPERTY

FLOW HYDRANT TEST OF PROPERTY

BY: MASTERCRAFT - DG & CO., DATE: 4/13/20 TIME: 10:30 AM

HAZARD CLASSIFICATION RESIDENTIAL 13R SYSTEM AREA #1 DWELLING

NO. SPRKS DISCHARGING: 2, DENSITY: 0.05 GPM/SQFT, 196 SQFT/SPRK

HEAD TYPE: RESIDENTIAL PENDENT, K-FACTOR: 4.9k

ORIFICE SIZE: 1/2" NPT, MIN. FLOW PER HEAD: 13 GPM

AREA OF APPLICATION: 245 SQFT, HOSE ALLOWANCES: NONE

TOTAL SYSTEM REQUIREMENTS: 26.4 GPM AT 32.2 PSI AT SUPPLY MAIN (NO HOSE)

SYSTEM SAFETY FACTOR: 40.84 PSI

HAZARD CLASSIFICATION RESIDENTIAL 13R SYSTEM AREA #2 CORRIDOR

NO. SPRKS DISCHARGING: 4, DENSITY: 0.05 GPM/SQFT, 324 SQFT/SPRK

HEAD TYPE: RESIDENTIAL PENDENT, K-FACTOR: 4.9k

ORIFICE SIZE: 1/2" NPT, MIN. FLOW PER HEAD: 17 GPM

AREA OF APPLICATION: 577 SQFT, HOSE ALLOWANCES: NONE

TOTAL SYSTEM REQUIREMENTS: 71.57 GPM AT 58.3 PSI AT SUPPLY MAIN (NO HOSE)

SYSTEM SAFETY FACTOR: 14.64 PSI

HAZARD CLASSIFICATION 13R ORD GROUP 1 SYSTEM AREA #3 KITCHEN

NO. SPRKS DISCHARGING: 5, DENSITY: 0.15 GPM/SQFT, 50-115 SQFT/SPRK

HEAD TYPE: OR PENDENT, K-FACTOR: 5.6k

ORIFICE SIZE: 1/2" NPT, MIN. FLOW PER HEAD: 14.82 GPM

AREA OF APPLICATION: 323 SQFT, HOSE ALLOWANCES: NONE

TOTAL SYSTEM REQUIREMENTS: 86.23 GPM AT 61.94 PSI AT SUPPLY MAIN (NO HOSE)

SYSTEM SAFETY FACTOR: 11.01 PSI

HAZARD CLASSIFICATION RESIDENTIAL 13R SYSTEM AREA #4 MAIN HALL

NO. SPRKS DISCHARGING: 4, DENSITY: 0.05 GPM/SQFT, 400 SQFT/SPRK

HEAD TYPE: RESIDENTIAL PENDENT, K-FACTOR: 4.9k

ORIFICE SIZE: 1/2" NPT, MIN. FLOW PER HEAD: 20 GPM

AREA OF APPLICATION: 1249 SQFT, HOSE ALLOWANCES: NONE

TOTAL SYSTEM REQUIREMENTS: 83.97 GPM AT 62.37 PSI AT SUPPLY MAIN (NO HOSE)

SYSTEM SAFETY FACTOR: 10.58 PSI

HAZARD CLASSIFICATION 13R - LIGHT SYSTEM AREA #5 COMPUTER LAB

NO. SPRKS DISCHARGING: 4, DENSITY: 0.10 GPM/SQFT, 105 SQFT/SPRK

HEAD TYPE: OR PENDENT, K-FACTOR: 4.9k

ORIFICE SIZE: 1/2" NPT, MIN. FLOW PER HEAD: 17 GPM

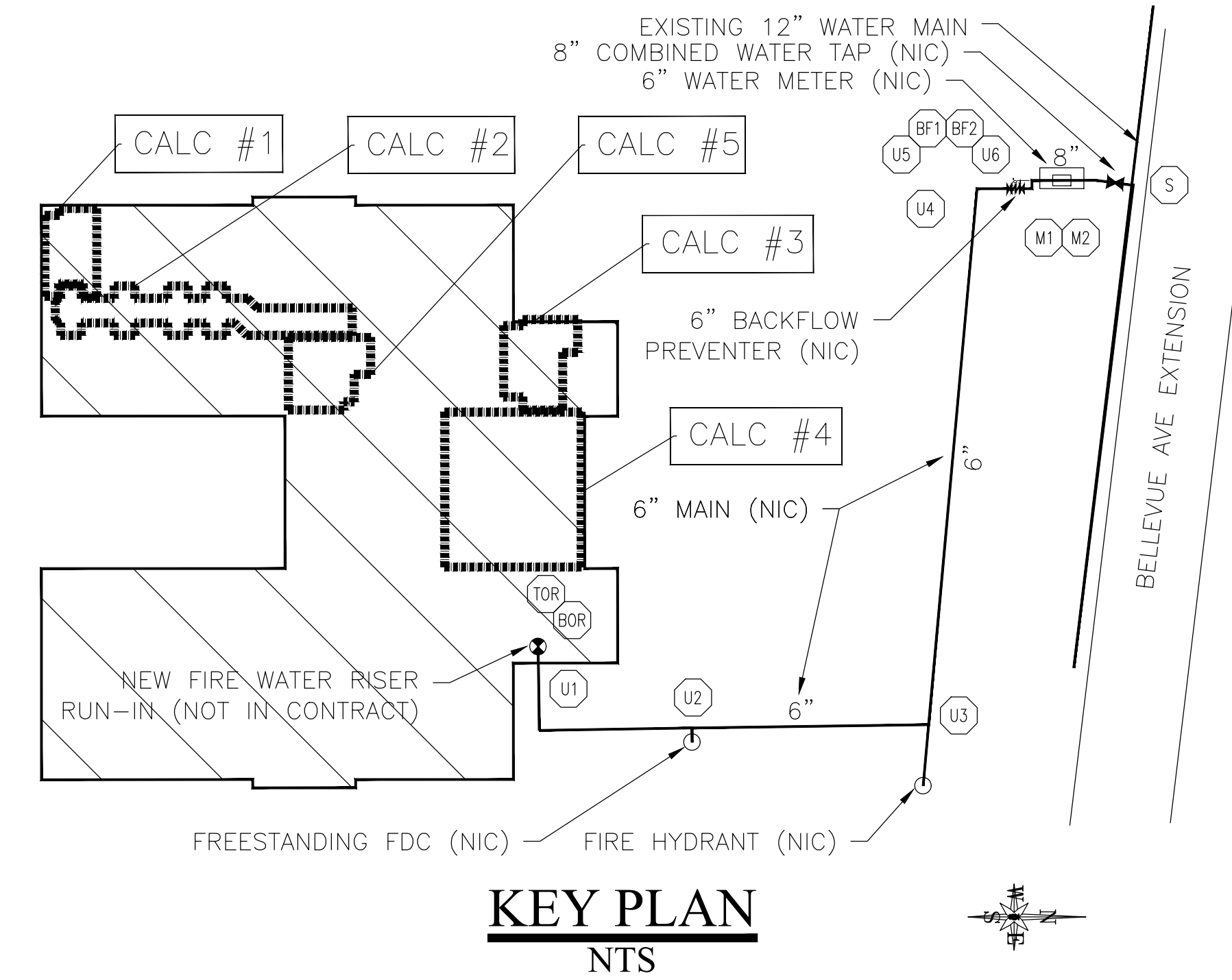
AREA OF APPLICATION: 314 SQFT, HOSE ALLOWANCES: NONE

TOTAL SYSTEM REQUIREMENTS: 60.39 GPM AT 44.82 PSI AT SUPPLY MAIN (NO HOSE)

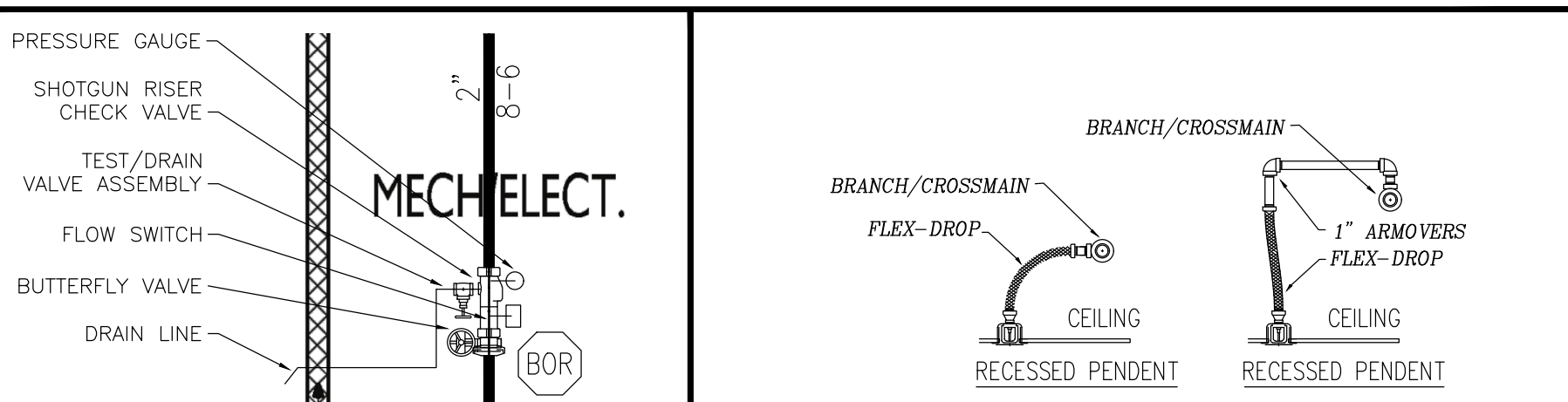
SYSTEM SAFETY FACTOR: 28.15

SPRINKLER SCHEDULE & LEGEND

SYM	SPRINKLER DESCRIPTION	K	TEMP	FIN	Spacing	Totals
○	F1FR56 RA1414 OR RECESSED PENDENT 1/2"npt	5.6k	155F	WHT	15'	24
⊗	F1Res R3516 RESIDENTIAL PENDENT 1/2"npt	4.9k	155F	WHT	14'-20'	94
Total New Heads =						118



KEY PLAN NTS



RISER

1/4" = 1'-0"

FLEX DROPS

NTS

- DESIGN CRITERIA / 61G15 ENGINEERING REQUIREMENTS: 61G15 32.003
- 1) AUTOMATIC-WET FIRE SPRINKLER SYSTEM THROUGHOUT SINGLE STORY 15,300sqft STRUCTURE. RESIDENTIAL NFPA 13R SPRINKLER SYSTEM UTILIZES RESIDENTIAL SPRINKLERS AND STEEL PIPING. NEW 8" TAP AND METER, 6" FIRE MAIN WITH BACKFLOW PREVENTOR BY OTHER CONTRACTOR. 6" DR11 PE 4710 DIPS UNDERGROUND.
 - 2) FIRE PROTECTION SYSTEM AND COMPONENTS ACCEPTANCE TEST SHALL CONFORM WITH THE STANDARDS OF NFPA-13R, 2013, CHAPTER 25 SYSTEM ACCEPTANCE PER FIGURE 25.1 CONTRACTORS MATERIAL & TEST CERTIFICATE FOR ABOVEGROUND PIPING, AND FIGURE 10.10.1 CONTRACTORS MATERIAL AND TEST CERT FOR UNDERGROUND PIPE
 - 3) #1 RESIDENTIAL DWELLING CALC - (2) 4.9K RESIDENTIAL SPRINKLERS 0.05 DENSITY - 16" SPACING MAXIMUM - NO HOSE ALLOWANCE
 #2 RESIDENTIAL CORRIDOR CALC - (4) 4.9K RESIDENTIAL SPRINKLERS 0.05 DENSITY - 18" SPACING MAXIMUM - NO HOSE ALLOWANCE
 #3 ORD GRP 1 HAZ KITCHEN AREA/DENSITY CALC - (4) 5.6K OR SPRINKLERS 343 sqft TOTAL AREA - NO HOSE ALLOWANCE
 #4 RESIDENTIAL MAIN HALL CALC - (4) 4.9K RESIDENTIAL SPRINKLERS 0.05 DENSITY - 20" SPACING MAXIMUM - NO HOSE ALLOWANCE
 #5 LIGHT HAZARD COMP LAB AREA/DENSITY CALC - (4) 5.6K OR SPRINKLERS 314 sqft TOTAL AREA - NO HOSE ALLOWANCE
- OCCUPANCY 'R-2' RESIDENTIAL
 BUILDING TYPE II B CONSTRUCTION CONCRETE BLOCK / STEEL BEAM ROOF
 MISC. CLASS I-IV STORAGE HEIGHT TO BE LIMITED TO 10' HIGH AND 5' FOR PLASTIC.
- 4) STANDARDS NFPA13R FIRE SPRINKLER 2013 EDITION/FPCC, 6th EDITION (2017)

CURTIS ENGINEERING SERVICE, LLC - CA#31561
 JAMES M. CURTIS, P.E.#37912
 29775 BAYHEAD ROAD
 DADE CITY, FLORIDA 33523
 ENGINEER OF RECORD

DME SPORTS HOUSING COMPLEX
 2501 BELLEVUE AVE.
 DAYTONA BEACH, FL 32114
 NFPA 13R FIRE SPRINKLER LAYOUT

MasterCraft
 PLUMBING, HEATING, MECHANICAL
 AIR CONDITIONING & FIRE PROTECTION
 881 Brentwood Dr., Daytona Beach, FL 32117 - Ph (386)592-7047 Fax (386) 898-0322