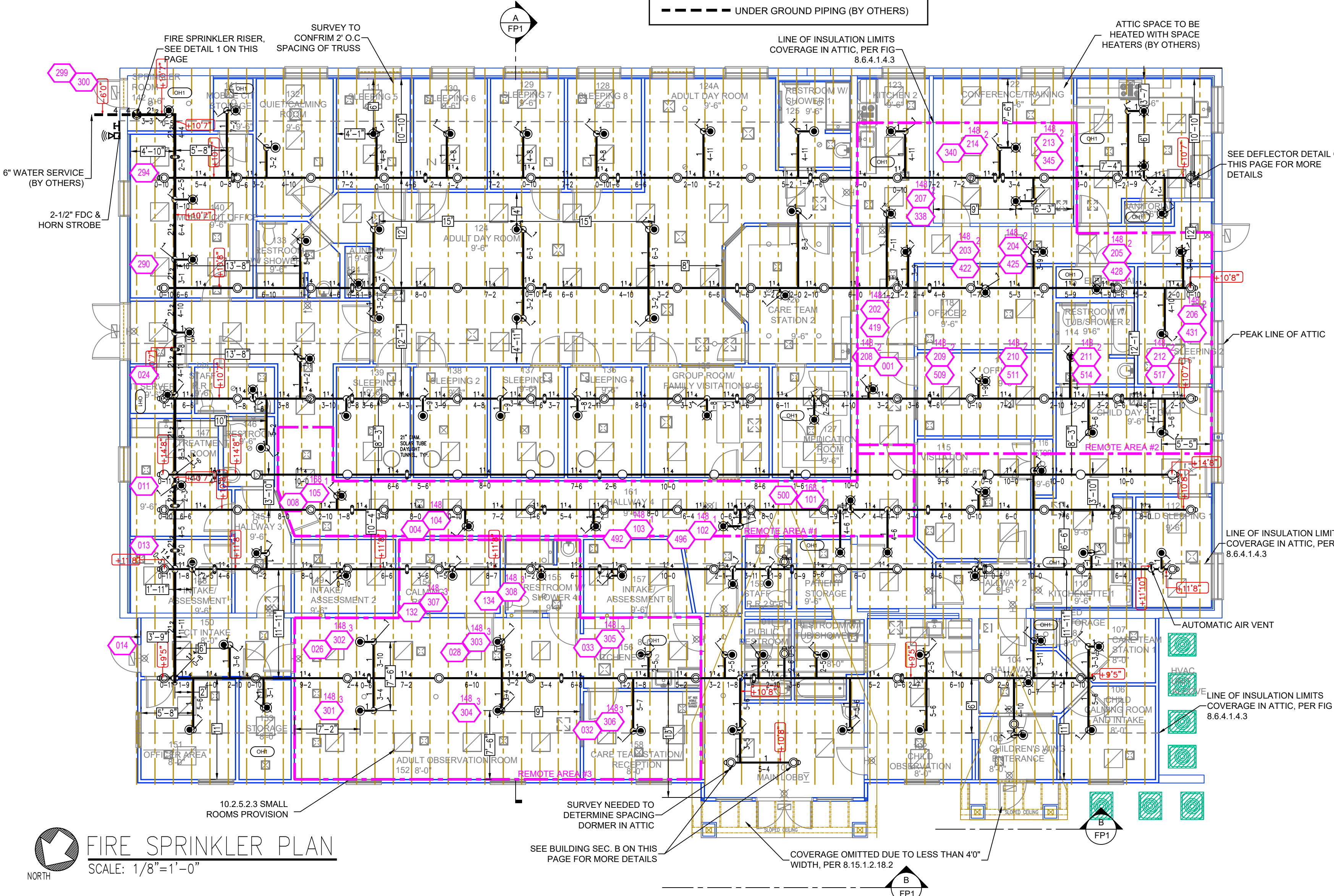


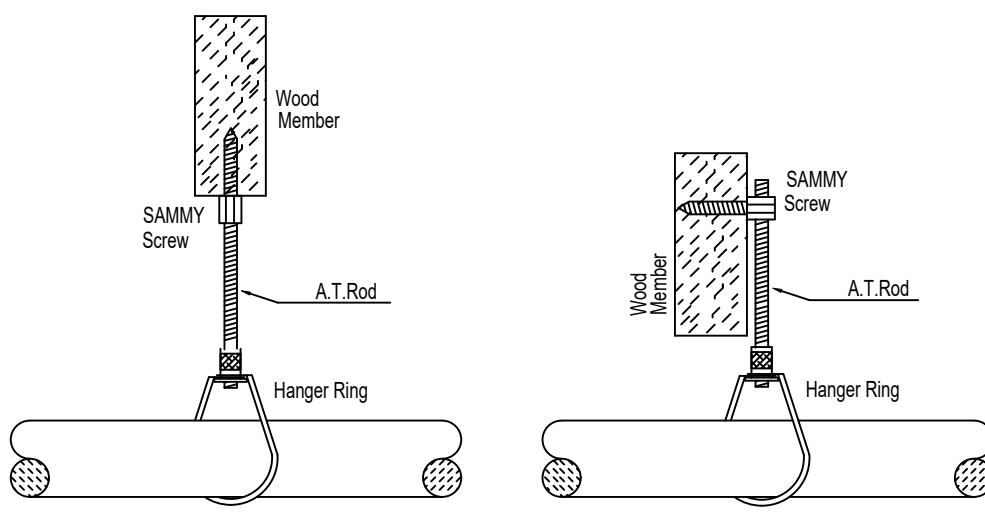
SUBMITTAL

PIPE LEGEND

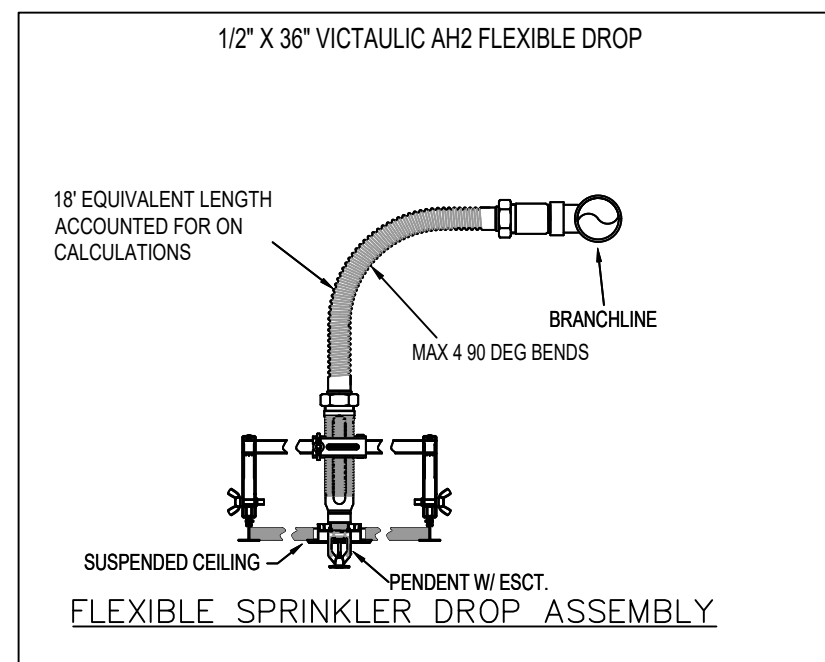
— BLACK STEEL FIRE SPRINKLER PIPING
--- UNDER GROUND PIPING (BY OTHERS)



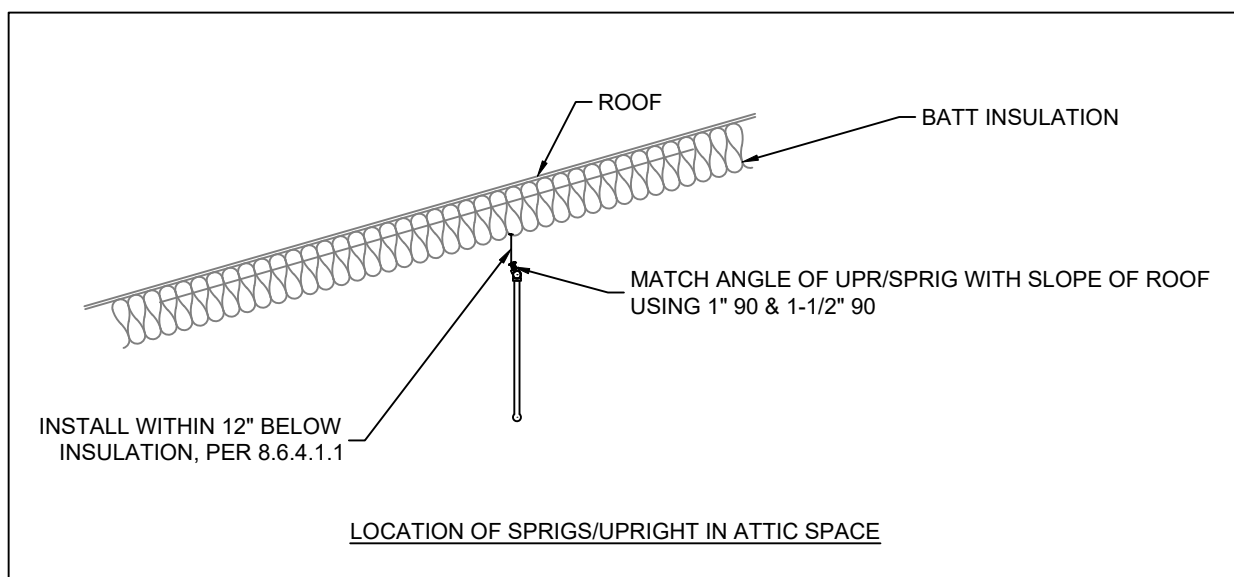
FIRE SPRINKLER PLAN
SCALE: 1/8"=1'-0"



HANGER DETAILS

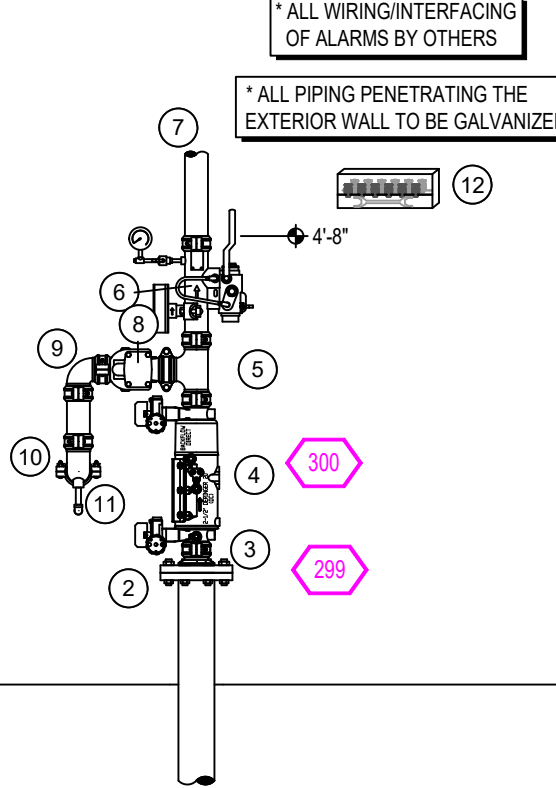


INSTALLATION DETAILS



DEFLECTOR DETAIL

SCALE: 1/4"=1'-0"



RISER DETAIL
SCALE: 1/2"=1'-0"

Design Area # 1	HAZARD: LH
Zone: 1	System Type: 1
Location: CORRIDOR	
Flowing Outlets: 5	
Density: 0.10	Remote Area: 472
Flow: 191.6 gpm @ 78.7 psi	
Calculation Safety: 36.5psi	
Includes 100 gpm Hose allowance	

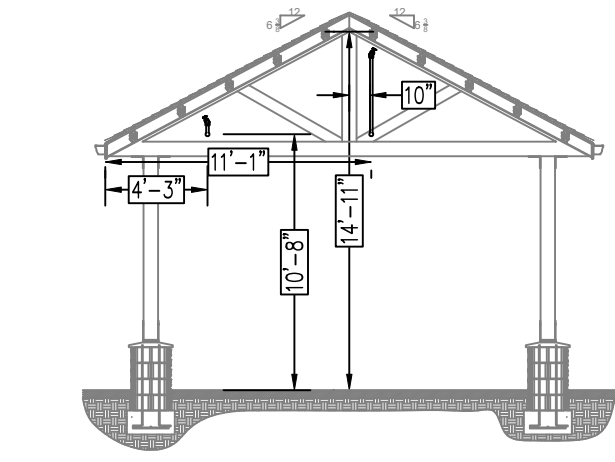
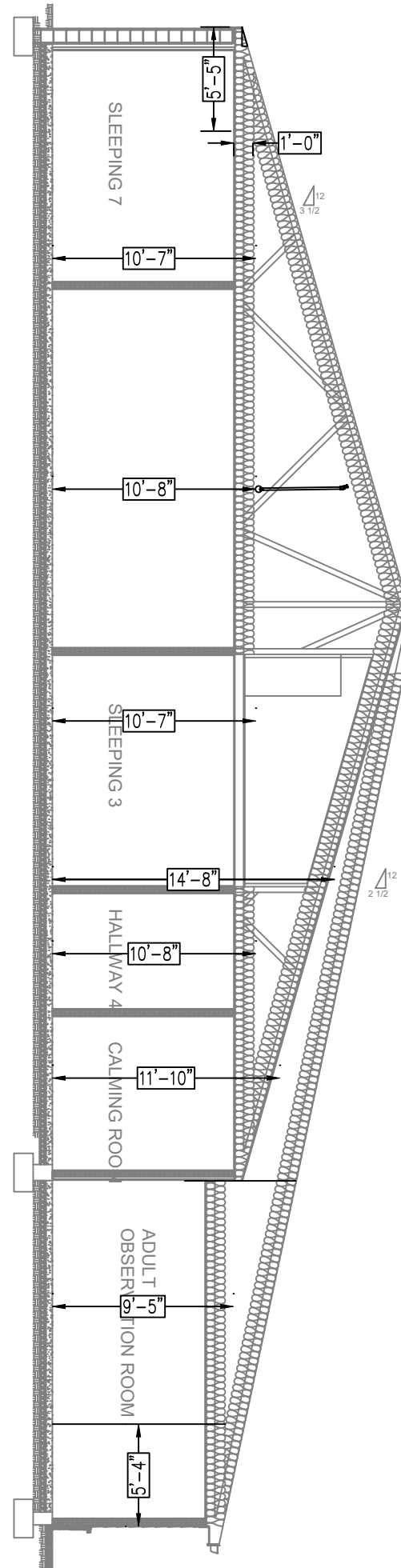
Design Area # 3	HAZARD: LH
Zone: 1	System Type: 1
Location: ADULT OBSERVATION ROOM	
Flowing Outlets: 8	
Density: 0.10	Remote Area: 900
Flow: 247 gpm @ 78 psi	
Calculation Safety: 28 psi	
Includes 100 gpm Hose allowance	

- RISER LEGEND**
- 4" UNDERGROUND WATER SERVICE (BY OTHERS) (FLUSHING & TESTING OF THE UNDERGROUND SHALL BE COMPLETED PRIOR TO THE SPRINKLER SYSTEM HOOKUP. UNDERGROUND PAPERS ARE TO BE SUPPLIED TO THE "FP" CONTRACTOR BY THE G.C.)
 - 4" GROOVED FLANGED ADAPTER
 - 4" x 2-1/2" GROOVED CONC. REDUCER
 - 2-1/2" GROOVED DERINGER 20 BACKFLOW
 - 2-1/2" GROOVED TEE
 - 2-1/2" RELIABLE CR2 COMM. RISER MANIFOLD W/ TEST & DRAIN VALVE AND PRESSURE RELIEF VALVE
 - 2-1/2" TO WET SYSTEM
 - 2-1/2" CHECK VALVE
 - 2-1/2" SHORT 90
 - 2-1/2" DRAIN 90 AUTOMATIC BALL DRIP TO FDC
 - AUTOMATIC BALL DRIP
 - HEAD BOX WITH SPARE HEAD WRENCH

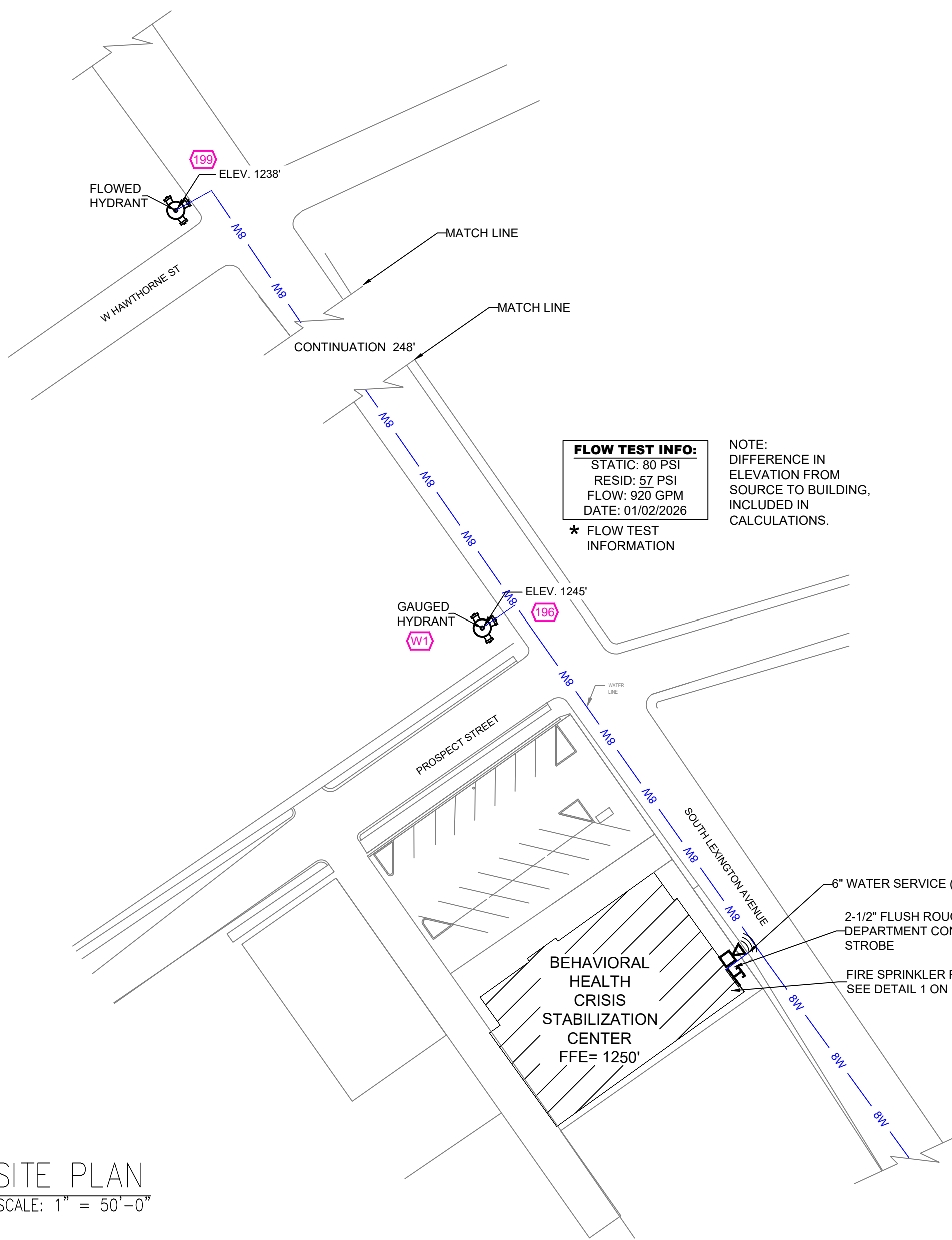
Design Area # 2	HAZARD: LH
Zone: 1	System Type: 1
Location: C.C. SPACE	
Flowing Outlets: 9	
Density: 0.10	Remote Area: 1170
Flow: 331 gpm @ 76.5 psi	
Calculation Safety: 11.9psi	
Includes 100 gpm Hose allowance	

Design Area # 2	HAZARD: LH
Zone: 1	System Type: 1
Location: C.C. SPACE	
Flowing Outlets: 9	
Density: 0.10	Remote Area: 1170
Flow: 331 gpm @ 76.5 psi	
Calculation Safety: 11.9psi	
Includes 100 gpm Hose allowance	

BUILDING SECTION A
SCALE: 1/8"=1'-0"



BUILDING SECTION B
SCALE: 1/8"=1'-0"



SITE PLAN
SCALE: 1"=50'-0"

GENERAL NOTES

- INTERNATIONAL BUILDING CODE (2021) & VIRGINIA CONSTRUCTION CODE (2021)
- OCCUPANCY: INSTITUTIONAL TYPE I-2; BEHAVIOR HEALTH CRISIS CARE FACILITY
- TYPE OF CONSTRUCTION: V-B (UNPROTECTED COMBUSTIBLE CONSTRUCTION)
- SPRINKLERED AREAS (APPROXIMATE - SEE ARCHITECTURAL PLANS FOR ACTUAL)
- 1ST FLOOR = 6,943 S.F.
- ATTIC = 9,262 S.F.
- TOTAL = 16,205 S.F.
- INSTALLATION STANDARDS: SPRINKLER SYSTEM DESIGNED AND INSTALLED PER NFPA-13 (2019)
- SPRINKLER PIPE TYPES:
 - WET:
 - 1" BRANCH LINES TO BE BLK SCHEDULE 40 PIPING WITH THREADED FITTINGS
 - 1/2" THROUGH 3" MAIN & BRANCH LINES TO BE BLK SCHEDULE 10 PIPING WITH GROOVED FITTINGS
 - MAINS & BRANCH LINES TO BE ROLL-GROOVED BLK SCHEDULE 10 PIPING
- DESIGN CRITERIA
 - LIGHT HAZARD AREAS: BEDROOMS, RESTROOMS, COMMON AREAS, OFFICES, CONFERENCE ROOMS
 - DESIGNED TO DELIVER 0.10 GPM/S.F. OVER THE MOST DEMANDING 1500 S.F.
 - ORDINARY HAZARD GROUP 1 AREAS: STORAGE, FIRE RISER ROOM, ELECTRICAL ROOMS, IT ROOM, KITCHENS
 - REMOTE AREA REDUCTIONS HAVE BEEN TAKEN WHERE APPLICABLE PER NFPA 13 SEC. 19.3.3.2.3
- NOTES:
 - ALL MATERIAL TO BE NEW AND MEET U.L. STANDARDS
 - HANGERS TO BE INSTALLED IN ACCORDANCE WITH NFPA 13 (2019) - SEE PLAN FOR HANGING REQ.
- SYMBOLS USED ON DRAWINGS:
 - PIPE ELEVATION A.F.F.
 - PIPE ELEVATION BELOW B.O.D.
 - ROOM HAZARD CLASSIFICATION (ALL ROOMS ARE CONSIDERED LIGHT HAZARD UNLESS NOTED)
 - HYDRAULIC CALCULATION JUNCTION POINT
 - CEILING HEIGHT
- SCOPE OF WORK:
 - TO INSTALL A COMPLETE WET SYSTEM TO COVER ALL CONDITIONED AREAS. ALL AREAS OF THE BUILDING TO BE INSTALLED AND COVERED IN ACCORDANCE WITH THE LOCAL AUTHORITY HAVING JURISDICTION AND PER NFPA 13 (2019)