SCOPE OF WORK

1. PROVIDE A FIRE SPRINKLER SYSTEM THROUGHOUT THE BUILDING IN ACCORDANCE WITH NFPA–13 (2016) AND AS INDICATED ON THE CONTRACT DRAWINGS AND THE CONTRACT SPECIFICATIONS. THE CONTRACT DOCUMENTS ESTABLISH ENGINEERING DESIGN PRECEDENCE, INCLUDING ACCEPTABLE SPRINKLER CHARACTERISTICS (I.E. MAXIMUM COVERAGE AREA AND SPACING, RESPONSE RATING, TEMPERATURE RATING, ETC.). DEVIATIONS FROM THIS DESIGN PRECEDENCE SHALL NOT BE PERMITTED WITHOUT APPROVAL OF THE ENGINEER PRIOR TO BID. THE USE OF EXTENDED COVERAGE SPRINKLERS, IN LIEU OF STANDARD SPRAY SPRINKLERS AS SHOWN ON THE CONTRACT DRAWINGS, IS A CHANGE IN ESTABLISHED ENGINEERING PRECEDENCE AND WILL NOT BE PERMITTEKD WITHOUT WRITTEN PERMISSION FROM THE ENGINEER PRIOR TO BID.
   - 1.1. CONTRACTOR SHALL PROVIDE SPRINKLER PROTECTION PER NFPA–13 THROUGHOUT ALL COMBUSTIBLE CONCEALED SPACES AS PART OF THE BASE–BID CONTRACT, EVEN IF NOT SHOWN ON THESE DRAWINGS. CONTRACTOR'S BASE–BID PRICING SHALL INCLUDE ALL REQUIRED MODIFICATIONS/ADJUSTMENTS AND INSTALLATION OF ADDITIONAL CONCEALED SPACE SPRINKLERS IN THE FIELD FOR COORDINATION WITH THE BUILDING CONSTRUCTION, DUCTWORK, EXTENSION OF THE WALL HEIGHTS, ETC. NO ADDITIONAL COSTS FOR SPRINKLER PROTECTION WITHIN COMBUSTIBLE CONCEALED SPACES WILL BE AWARDED BEYOND THE CONTRACTOR'S BASE–BID PRICING FOR COMPLETE PROTECTION OF ALL COMBUSTIBLE CONCEALED SPACES PER NFPA–13 THROUGHOUT THE BUILDING.
     - 1.1.1. SPRINKLERS INSTALLED WITHIN COMBUSTIBLE CONCEALED SPACES SHALL BE LISTED FOR THE SPECIFIC APPLICATION OF COMBUSTIBLE CONCEALED SPACE PROTECTION, UNLESS NOTED OTHERWISE AND PERMITTED BY NFPA–13.
     - 1.1.2. THE BASIS OF DESIGN CONCEALED SPACE SPRINKLER IS THE K5.6 IT VIKING VK950. THE LISTING REQUIREMENTS OF THE SPRINKLER REQUIRES FULL DEPTH BLOCKING IN EACH UPPER DECK AND CEILING JOIST CHANNEL AT A MAXIMUM OF 32–FT INTERVALS.
     - 1.1.3. FOR SOLID WOOD JOIST CONSTRUCTION, THE SPRINKLER SPACING SHALL NOT EXCEED 14–FT BY 14–FT, SUCH THAT THE INSTALLATION OF DRAFT CURTAINS ARE NOT REQUIRED PER THE LISTING OF THE VIKING VK950 SPRINKLER. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING DRAFT CURTAINS AS REQUIRED PER THE LISTING OF THE SELECTED SPRINKLER FOR INSTALLATION, IF THE SELECTED SPRINKLER LISTINGS ARE DIFFERENT FROM THAT OF THE BASIS OF DESIGN SPRINKLER.
     - 1.1.4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DESIGNING, FABRICATING, PROVIDING AND INSTALLING ALL REQUIRED BLOCKING AND DRAFT CURTAINS THROUGHOUT THE ENTIRE BUILDING TO ENSURE THE COMBUSTIBLE CONCEALED SPACE SPRINKLERS ARE INSTALLED IN ACCORDANCE WITH THEIR LISTING REQUIREMENTS AS PART OF THE BASE–BID CONTRACT BASED ON THE CONTRACTOR'S FINAL SPRINKLER SPRINKLER SELECTION. LOCATIONS OF BLOCKING, DRAFT CURTAINS, AND FULL HEIGHT WALLS SHALL BE IDENTIFIED ON THE CONTRACTOR'S SHOP DRAWINGS.
     - 1.1.5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADDITIONAL SPRINKLERS BEYOND THE QUANTITIES INDICATED ON THE CONTRACT DRAWINGS WITHIN ALL COMBUSTIBLE CONCEALED SPACES AS PART OF THE BASE–BID CONTRACT PER NFPA–13 BASED ON FINAL COORDINATION BETWEEN APPLICABLE TRADES AND FIELD COORDINATION DURING INSTALLATION. CONTRACTOR'S BASE BID SHALL ASSUME NFPA–13 COMPLIANT SPRINKLER PROTECTION OF ALL COMBUSTIBLE CONCEALED SPACES THROUGHOUT THE BUILDING REGARDLESS OF WHETHER THE COMBUSTIBLE CONCEALED SPACE IS INDICATED ON THESE DRAWINGS OR NOT.
     - 1.1.6. WHERE THE "CLEAR HEIGHT" WITHIN A COMBUSTIBLE CONCEALED SPACE OF WOOD JOIST CONSTRUCTION EXCEEDS 36" VERTICALLY, STANDARD SPRAY K5.6 QR IT SPRINKLERS SHALL BE PERMITTED IN LIEU OF SPECIFIC APPLICATION COMBUSTIBLE CONCEALED SPACE SPRINKLERS, AS PERMITTED BY SECTION 8.15.1.6 OF NFPA–13 (2016), PROVIDED THAT THE MAXIMUM SPRINKLER SPACING DOES NOT EXCEED 120 SF PER SPRINKLER, CONCEALED SPACE SPRINKLERS ARE SPACED NO GREATER THAN 12–FEET ON CENTER, CONCEALED SPACE SPRINKLERS ARE SPACED NO GREATER THAN 6–FEET FROM A "WALL" OF THE CONCEALED SPACE, SPRINKLERS ARE SPACED ON OPPOSITE SIDES OF ALL OBSTRUCTIONS OR PROVIDED ADEQUATE CLEARANCE PER TABLE 8.6.5.1.2, THE SPRINKLERS ARE INSTALLED PER ALL NFPA–13 REQUIREMENTS, AND A 1,000 SF HYDRAULIC AREA IS CALCULATED PER NFPA–13.
       - 1.1.6.1. THE BASIS OF DESIGN SPRINKLER LAYOUT, WHICH IS BASED ON VIKING VK950 CONCEALED SPACE SPRINKLERS, DOES NOT MEET THE MORE STRINGENT SPACING REQUIREMENTS FOR STANDARD SPRAY SPRINKLERS IN ALL AREAS OF THE BUILDING (BASIS OF DESIGN SPACING EXCEEDS SPACING LIMITATIONS FOR STANDARD SPRAY SPRINKLERS). IF THE CONTRACTOR ELECTS TO PROVIDE STANDARD SPRAY SPRINKLERS IN LIEU OF LISTED SPECIFIC APPLICATION CONCEALED SPACE SPRINKLERS, THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ANY ADDITIONAL PIPING, SPRINKLERS, FITTINGS, HYDRAULIC CALCULATIONS, INCREASE IN PIPE SIZES, ETC. AS REQUIRED TO ALLOW FOR THE COMPLETE INSTALLATION OF STANDARD SPRAY SPRINKLERS WITHIN COMBUSTIBLE CONCEALED SPACES PER THE REQUIREMENTS NFPA–13 AND THE CONTRACT DOCUMENTS.
       - 1.1.6.2. IF THE CONTRACTOR PROVIDES BOTH STANDARD SPRAY SPRINKLERS AND SPECIFIC APPLICATION COMBUSTIBLE CONCEALED SPACE SPRINKLERS TO PROTECT COMBUSTIBLE CONCEALED SPACES, THE AREAS PROTECTED BY EACH TYPE OF SPRINKLER SHALL BE PHYSICALLY SEPARATED BY FULL HEIGHT WALLS OR BARRIERS OF NON–COMBUSTIBLE CONSTRUCTION. SEPARATION BARRIERS SHALL BE PROVIDED BY THE CONTRACTOR, AS NEEDED.
     - 1.1.7. SPRINKLER PROTECTION SHALL BE PERMITTED TO BE OMITTED FROM NON–COMBUSTIBLE CONCEALED SPACES PER NFPA–13 REQUIREMENTS.
   - 1.2. THE BASIS OF DESIGN PIPING IS BLACK STEEL PIPING. CPVC PIPING SHALL NOT BE INSTALLED.
   - 1.3. THE FIRE PROTECTION SYSTEMS SHALL BE INSTALLED SO THAT THEY ARE COMPLIANT WITH THE CODES AND STANDARDS BELOW. THESE CODES AND STANDARDS SHALL APPLY TO THE CONTRACT AS THOUGH THEY WERE WRITTEN ON THIS DRAWING IN THEIR ENTIRETY.
     - 1.3.1. 2020 NEW YORK STATE BUILDING AND FIRE CODES.
     - 1.3.2. 2016 EDITION OF NFPA 13, STANDARD FOR THE INSTALLATION OF SPRINKLER SYSTEMS
2. REMOVE THE EXISTING SPRINKLER SYSTEM IN ITS ENTIRETY THROUGHOUT THE BUILDING SO THAT A COMPLETELY NEW SPRINKLER SYSTEM CAN BE INSTALLED. REFER TO EXISTING SPRINKLER SYSTEM PLANS FOR APPROXIMATE LAYOUT OF EXISTING SPRINKLER SYSTEM. EXISTING LAYOUT PROVIDED IS DIAGEAMATTIC ONLY AND DOES NOT CONVEY THE COMPLETE EXTEND OF THE EXISTING SPRINKLER SYSTEM. THE CONTRACTOR'S BASE–BID SHALL INCLUDE REMOVAL OF THE EXISTING SPRINKLER SYSTME IN ITS ENTIRETY, INCLUDING THE EXISTING RISERS AND WATER SERVICE ENTRANCE EQUIPMENT.
3. WHERE DISCREPANCIES ARISE IN THE REQUIREMENTS OF THE 2020 NEW YORK STATE BUILDING AND FIRE CODES, APPLICABLE NFPA STANDARDS, THE CONTRACT DRAWINGS AND THE CONTRACT SPECIFICATIONS, THE MOST STRINGENT REQUIREMENTS SHALL APPLY TO THE CONTRACT.
4. PROVIDE PRODUCT SUBMITTALS, SHOP DRAWINGS AND HYDRAULIC CALCULATIONS FOR REVIEW AND APPROVAL IN ACCORDANCE WITH NFPA–13. REFER TO THE HYDRAULIC CALCULATIONS NOTES FOR ADDITIONAL INFORMATION. SUBMITTALS AND SHOP DRAWINGS SUBMISSIONS REQUIRING MORE THAN TWO REVIEW CYCLES DUE TO CONTRACTOR'S OR SUB–CONTRACTOR'S OWN ERRORS, OMISSIONS OR INCOMPLETENESS CAUSES ADDITIONAL EFFORTS REQUIRED BY ENGINEER (RAN FIRE PROTECTION ENGINEERING P.C.) THESE ADDITIONAL EFFORTS ARE BACK CHARGEABLE TO AND AT THE SOLE COST OF THE CONTRACTOR AND/OR SUB CONTRACTOR WHO SHALL PAY RAN'S STANDARD HOURLY RATES AS ADDITIONAL SERVICES UNDER RAN'S CONTRACT WITH OWNER/CLIENT.
5. PROVIDE HANGING AND BRACING IN ACCORDANCE WITH NFPA–13.
6. PROVIDE AUTOMATIC AIR VENTS ON ALL WET PIPE SPRINKLER SYSTEMS IN ACCORDANCE WITH THE REQUIREMENTS OF NFPA–13 (2016 EDITION), AND WHERE INDICATED ON THESE DRAWINGS.
7. PROVIDE SPARE SPRINKLER CABINET, SPARE SPRINKLERS, SPRINKLER WRENCH(S) AND A LIST OF INSTALLED SPRINKLERS IN ACCORDANCE WITH NFPA–13.
8. PROVIDE ACCEPTANCE TESTING OF THE SPRINKLER SYSTEM IN ACCORDANCE WITH NFPA–13 REQUIREMENTS.
9. CONDUCT A THOROUGH EXAMINATION OF THE PREMISES PRIOR TO PREPARING A PROPOSAL. ANY CHANGES TO THE DESIGN MADE NECESSARY BY FIELD CONDITIONS SHALL BE CONVEYED TO THE ENGINEER PRIOR TO PREPARING A PROPOSAL. NO ADDITIONAL COSTS BEYOND THE PROPOSAL PRICE WILL BE ACCEPTED FOR FIELD CONDITIONS THAT COULD HAVE BEEN DETERMINED BY AN INSPECTION OF THE PREMISES.
10. PROVIDE AS–BUILT DRAWINGS AND HYDRAULIC CALCULATIONS. DRAWINGS SHALL BE AVAILABLE IN PDF AND AUTOCAD FORMATS. PROVIDE FINAL AS–BUILT DRAWINGS AND AS–BUILT HYDRAULIC CALCULATIONS IN THE O+M MANUAL. CONTRACTOR SHALL MAINTAIN RED–LINES OF INSTALLED CONDITIONS ON SITE THROUGH INSTALLATION AND SHALL UPDATE AS–BUILT DRAWINGS REGULARLY THROUGHOUT CONSTRUCTION.
11. UPON REQUEST OF LOCAL CODE ENFORCEMENT OFFICIALS OR PERMITTING AGENCY, PROVIDE SHOP DRAWINGS AND HYDRAULIC CALCULATIONS WHICH HAVE BEEN REVIEWED BY, AND SIGNED AND SEALED BY A THIRD PARTY LICENSED PROFESSIONAL ENGINEER. BEAR ALL COSTS ASSOCIATED WITH THE THIRD PARTY PROFESSIONAL ENGINEER REVIEW AND SIGNING/SEALING OF SHOP DRAWINGS/HYDRAULIC CALCULATIONS.

HYDRAULIC DESIGN CRITERIA

WATER FLOW TEST
STATIC: 48 PSI
RESIDUAL: 35 PSI
FLOW: 674 GPM
DATE: 12–03–2020
LOCATION: PORT JERVIS MIDDLE SCHOOL

NOTE: SPRINKLER CONTRACTOR SHALL PERFORM AND WITNESS A HYDRANT FLOW TEST WHICH SHALL BE USED FOR CONTRACTOR'S HYDRAULIC CALCULATIONS. PRESSURE AND FLOW READINGS SHALL BE TAKEN FROM WATER MAIN WHICH FEED THE BUILDING.

LEGEND

- – LIGHT HAZARD OCCUPANCY WITH CEILING HEIGHTS EXCEEDING 20–FEET. PROVIDE HYDRAULICALLY DESIGNED SPRINKLER SYSTEM TO PROVIDE A MINIMUM DENSITY OF 0.10 GPM/SF OVER A 1,500 SF DESIGN AREA, PLUS A 100 GPM HOSE STREAM ALLOWANCE. PROVIDE CONCEALED SPACE SPRINKLER PROTECTION IN PORTIONS OF BUILDING CONTAINING COMBUSTIBLE CONSTRUCTION.
- – LIGHT HAZARD OCCUPANCY WITH CEILING HEIGHTS UP TO 13–FEET. PROVIDE HYDRAULICALLY DESIGNED SPRINKLER SYSTEM TO PROVIDE A MINIMUM DENSITY OF 0.10 GPM/SF OVER A 1,000 SF DESIGN AREA (1,050 SF IF CEILING HEIGHT IS UP TO 16–FEET), PLUS A 100 GPM HOSE STREAM ALLOWANCE. PROVIDE CONCEALED SPACE SPRINKLER PROTECTION IN PORTIONS OF BUILDING CONTAINING COMBUSTIBLE CONSTRUCTION.
- – ORDINARY HAZARD GROUP 1 OCCUPANCY WITH CEILING HEIGHTS UP TO 13–FEET. PROVIDE HYDRAULICALLY DESIGNED SPRINKLER SYSTEM TO PROVIDE A MINIMUM DENSITY OF 0.10 GPM/SF OVER A 1,000 SF DESIGN AREA (1,050 SF IF CEILING HEIGHT IS UP TO 16–FEET), PLUS A 250 GPM HOSE STREAM ALLOWANCE. PROVIDE CONCEALED SPACE SPRINKLER PROTECTION IN PORTIONS OF BUILDING CONTAINING COMBUSTIBLE CONSTRUCTION.
- ⦿ – K5.6 QR OT UPRIGHT SPRINKLER, ON SPRIG WHERE REQUIRED. PROVIDE IT SPRINKLERS WITHIN MECHANICAL ROOMS AND GYMNASIUM. PROVIDE OTHER TEMPERATURE RATINGS AS REQUIRED BY NFPA–13. BASIS OF DESIGN SPRINKLER IS VIKING VK300 OR EQUAL.
- ⊗ – K5.6 QR OT CONCEALED PENDENT SPRINKLER. COVER PLATE SHALL BE ROUND AND FLAT TYPE. PROVIDE OTHER TEMPERATURE RATINGS AS REQUIRED BY NFPA–13. BASIS OF DESIGN SPRINKLER IS VIKING VK4621 OR EQUAL.
- ◐ – K5.6 QR IT LISTED SPECIFIC APPLICATION COMBUSTIBLE CONCEALED SPACE SPRINKLER, ON SPRIG WHERE REQUIRED. BASIS OF DESIGN SPRINKLER IS VIKING VK950 OR EQUAL. CONTRACTOR SHALL PROVIDE ALL REQUIRED BLOCKING AND DRAFT CURTAINS AS REQUIRED BY THE SPRINKLER'S LISTING REQUIREMENTS.
- – SYMBOL INDICATES TWO LEVELS OF SPRINKLERS.
  - –– BELOW THE DROP CEILING LEVEL, PROVIDE K5.6 QR OT CONCEALED PENDENT SPRINKLER. COVER PLATE SHALL BE ROUND AND FLAT TYPE. PROVIDE OTHER TEMPERATURE RATINGS AS REQUIRED BY NFPA–13. BASIS OF DESIGN SPRINKLER IS VIKING VK4621 OR EQUAL.
  - –– IN COMBUSTIBLE CONCEALED SPACE ABOVE THE CEILING, PROVIDE K5.6 QR IT LISTED SPECIFIC APPLICATION COMBUSTIBLE CONCEALED SPACE SPRINKLER, ON SPRIG WHERE REQUIRED. BASIS OF DESIGN SPRINKLER IS VIKING VK950 OR EQUAL. CONTRACTOR SHALL PROVIDE ALL REQUIRED BLOCKING AND DRAFT CURTAINS AS REQUIRED BY THE SPRINKLER'S LISTING REQUIREMENTS.
- ● – K5.6 QR IT CONCEALED PENDENT SPRINKLER FOR ORDINARY HAZARD AREAS (KITCHEN). COVER PLATE SHALL BE ROUND AND FLAT TYPE. PROVIDE OTHER TEMPERATURE RATINGS AS REQUIRED BY NFPA–13. BASIS OF DESIGN SPRINKLER IS VIKING VK4621 OR EQUAL.
- ●D – K5.6 QR IT DRY BARREL CONCEALED OR FLUSH MOUNTED PENDENT SPRINKLER. PROVIDE OTHER TEMPERATURE RATINGS AS REQUIRED BY NFPA–13. BASIS OF DESIGN SPRINKLER IS VIKING VK482 OR EQUAL. DRY PENDENT SPRINKLERS SHALL BE PROVIDED WITH SEALING/BOOT PER MANUFACTURER REQUIREMENTS.
- – SPRINKLER PIPING.
- – FDC. CONTRACTOR SHALL COORDINATE FINAL TYPE AND LOCATION WITH THE LOCAL FIRE DEPARTMENT.
- – ELECTRIC ALARM GONG. ALARM GONG SHALL BE MOUNTED ADJACENT TO THE SPRINKLER SYSTEM FDC AND AS DIRECTED BY THE LOCAL FIRE DEPARTMENT. ALARM GONG SHALL BE MONITORED BY THE BUILDING FIRE ALARM SYSTEM AND SHALL BE PROGRAMMED THROUGH THE FIRE ALARM CONTROL PANEL TO ANNUNCIATE UPON ACTIVATION OF ANY SPRINKLER SYSTEM WATER FLOW SWITCH.
- – TEST HEADER FOR FLOW TESTING OF THE BACKFLOW PREVENTER. TESTED HEADER SHALL CONSIST OF A MINIMUM OF TWO 2–1/2" HOSE VALVES WITH CAPS AND CHAINS.

GPM	–	GALLONS PER MINUTE.
SF	–	SQUARE FEET.
TYP	–	TYPICAL.
FDC	–	FIRE DEPARTMENT CONNECTION.
FT	–	FEET.
QR	–	QUICK RESPONSE.
OT	–	ORDINARY TEMPERATURE.
IT	–	INTERMEDIATE TEMPERATURE.

HYDRAULIC CALCULATIONS

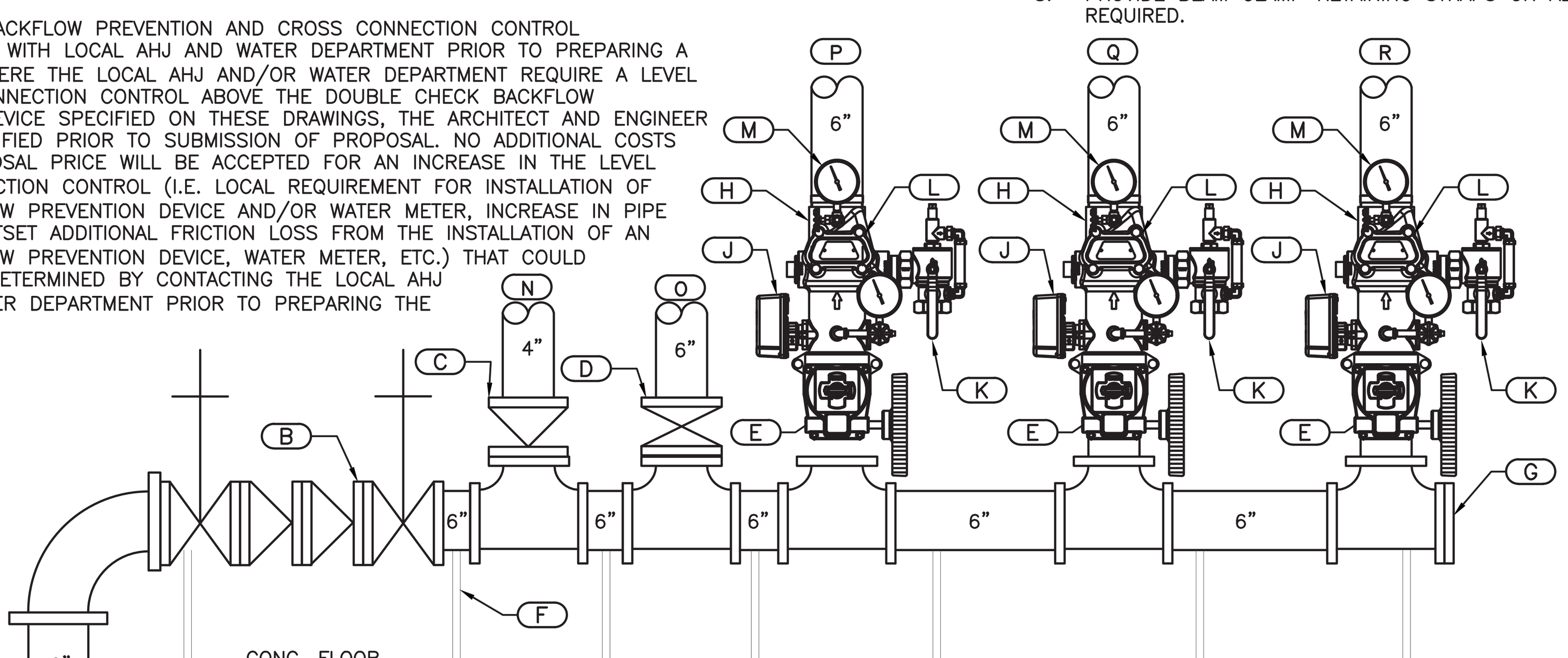
1. SUBMIT HYDRAULIC CALCULATIONS FOR REVIEW AND APPROVAL AS DESCRIBED IN THIS SECTION.
2. PERFORM AND WITNESS A HYDRANT FLOW TEST WHICH WILL BE USED FOR CONTRACTOR'S HYDRAULIC CALCULATIONS.
3. SPRINKLER CLASSIFICATION FOR WORK AREA SHALL BE "LIGHT HAZARD". SPRINKLER CLASSIFICATION FOR ALL STORAGE AND MECHANICAL ROOMS, AND KITCHENS SHALL BE "ORDINARY HAZARD GROUP 1". REFER TO DRAWINGS FP–003 AND FP–004 FOR HATCHED FLOOR PLANS INDICATING GENERAL HAZARD CLASSIFICATIONS.
4. PERFORM HYDRAULIC CALCULATIONS IN ACCORDANCE WITH NFPA–13 REQUIREMENTS FOR HYDRAULICALLY DESIGNED (DENSITY/AREA METHOD) SPRINKLER SYSTEMS.

	DESIGN DENSITY [GPM/SF]	DESIGN AREA [SF]	HOSE ALLOWANCE [GPM]
LIGHT HAZARD	0.10	1,500	100
ORDINARY HAZARD 1	0.15	1,500	250

5. THE HYDRAULIC REMOTE AREA SHALL BE INCREASED 30% FOR SLOPED CEILINGS PER NFPA–13 REQUIREMENTS.
6. THE SIZE OF THE HYDRAULIC REMOTE AREA IS PERMITTED TO BE REDUCED ON WET PIPE SPRINKLER SYSTEMS PER NFPA–13 REQUIREMENTS WHERE QUICK RESPONSE SPRINKLERS ARE INSTALLED AND THE MAXIMUM CEILING HEIGHT DOES NOT EXCEED 20'–0", AND AS INDICATED ELSEWHERE ON THE DRAWINGS.
7. SPRINKLER PROTECTION WITHIN COMBUSTIBLE CONCEALED SPACES SHALL BE HYDRAULICALLY DESIGNED TO PROVIDE A MINIMUM DESIGN DENSITY OF 0.10 GPM/SF OVER A MINIMUM 1,000 SF DESIGN AREA, PLUS A 100 GPM HOSE STREAM ALLOWANCE.
8. CONSTRUCTION OF THE SPRINKLER SYSTEM SHALL NOT COMMENCE UNTIL CONTRACTOR'S SHOP DRAWINGS AND HYDRAULIC CALCULATIONS HAVE BEEN APPROVED BY THE ENGINEER IN ACCORDANCE WITH NFPA–13.
9. CONTRACTOR IS RESPONSIBLE TO PROVIDE ADDITIONAL HYDRAULIC CALCULATIONS, AS REQUESTED, DURING THE SUBMITTAL REVIEW AND INSTALLATION PROCESS.
10. THE "SOURCE" NODE POINT IN CONTRACTOR'S HYDRAULIC CALCULATIONS SHALL BE LOCATED AT THE LOCATION OF THE PRESSURE GAUGE HYDRANT FROM THE CONTRACTOR'S HYDRANT FLOW TEST. ALL PIPING AND FITTINGS BETWEEN THE BUILDING AND THE PRESSURE GAUGE HYDRANT SHALL BE INCLUDED IN THE CONTRACTOR'S HYDRAULIC CALCULATIONS.
11. OUTDOOR HOSE ALLOWANCES SHALL BE INCLUDED IN HYDRAULIC CALCULATIONS AT THE POINT OF CONNECTION OF THE BUILDING SPRINKLER WATER SERVICE ENTRANCE MAIN TO THE CITY WATER SUPPLY, OR AT THE LOCATION OF THE NEAREST HYDRANT, WHICHEVER IS CLOSER TO THE SPRINKLER SYSTEM RISER.

SCHEMATIC WATER SERVICE ENTRANCE NOTES:

1. REMOVE THE EXISTING FIRE PROTECTION WATER SERVICE ENTRANCE IN ITS ENTIRETY. EXISTING EQUIPMENT NOT SHOWN ON PLANS.
2. INSTALLED AT THE NEW WATER SERVICE ENTRANCE, BACKFLOW PREVENTION DEVICE FOR FIRE PROTECTION SYSTEM ONLY.
3. OBTAIN ALL APPROVALS FOR THE COMPLETE INSTALLATION OF THE BACKFLOW PREVENTION DEVICE INCLUDING BUT NOT LIMITED TO NEW YORK STATE DEPARTMENT OF HEALTH APPROVAL.
4. PROVIDE ADDITIONAL TAMPER AND FLOW SWITCHES AS PART OF THIS CONTRACT BASED ON THE CONTRACTOR'S WORKING DRAWINGS.
5. COORDINATE BACKFLOW PREVENTION AND CROSS CONNECTION CONTROL REQUIREMENTS WITH LOCAL AHJ AND WATER DEPARTMENT PRIOR TO PREPARING A PROPOSAL. WHERE THE LOCAL AHJ AND/OR WATER DEPARTMENT REQUIRE A LEVEL OF CROSS CONNECTION CONTROL ABOVE THE DOUBLE CHECK BACKFLOW PREVENTION DEVICE SPECIFIED ON THESE DRAWINGS, THE ARCHITECT AND ENGINEER SHALL BE NOTIFIED PRIOR TO SUBMISSION OF PROPOSAL. NO ADDITIONAL COSTS TO THE PROPOSAL PRICE WILL BE ACCEPTED FOR AN INCREASE IN THE LEVEL CROSS CONNECTION CONTROL (I.E. LOCAL REQUIREMENT FOR INSTALLATION OF RPZ BACKFLOW PREVENTION DEVICE AND/OR WATER METER, INCREASE IN PIPE SIZES TO OFFSET ADDITIONAL FRICTION LOSS FROM THE INSTALLATION OF AN RPZ BACKFLOW PREVENTION DEVICE, WATER METER, ETC.) THAT COULD HAVE BEEN DETERMINED BY CONTACTING THE LOCAL AHJ AND/OR WATER DEPARTMENT PRIOR TO PREPARING THE PROPOSAL.



1 FP–001 SCHEMATIC FIRE PROTECTION WATER SERVICE ENTRANCE
SCALE: NOT TO SCALE

- (A) 6" WATER SERVICE ENTRANCE.
- (B) 6" DOUBLE CHECK BACKFLOW PREVENTER WITH TWO O.S.+Y. GATE VALVES (WITH TAMPER SWITCHES).
- (C) 4" CHECK VALVE WITH AUTOMATIC BALL DRIP TO FIRE DEPARTMENT CONNECTION. PIPE BALL DRIP TO NEAREST FLOOR DRAIN OR THE BUILDING EXTERIOR.
- (D) 6" NORMALLY CLOSED BUTTERFLY VALVE WITH TAMPER SWITCH. VALVE SHALL BE LISTED TO BE ELECTRICALLY SUPERVISED IN THE NORMALLY CLOSED POSITION.
- (E) BUTTERFLY VALVE WITH TAMPER SWITCH. SIZED TO MATCH SPRINKLER RISER.
- (F) PIPE STAND (TYPICAL).
- (G) 6" CAPPED PIPE.
- (H) VICTAULIC SERIES UMC UNIVERSAL MANIFOLD CHECK ASSEMBLY, INCLUDING BUTTERFLY VALVE WITH TAMPER SWITCH, WATER FLOW SWITCH, CHECK VALVE, PRESSURE GAUGES, AND SYSTEM TEST/DRAIN CONNECTION WITH A BUILT–IN PRESSURE RELIEF VALVE. SIZED TO MATCH SPRINKLER RISER.
- (J) WATER FLOW SWITCH.
- (K) SYSTEM TEST AND DRAIN CONNECTION WITH BUILT–IN PRESSURE RELIEF VALVE. TEST CONNECTION SHALL BE SIZED FOR K4.2 ORIFICE SPRINKLERS OR SMALLER. PIPE DRAIN CONNECTION TO NEAREST FLOOR DRAIN OF THE BUILDING EXTERIOR.
- (L) CHECK VALVE.
- (M) PRESSURE GAUGE.
- (N) 4" RISER TO FIRE DEPARTMENT CONNECTION. CONTRACTOR SHALL COORDINATE FINAL TYPE AND LOCATION OF THE FDC WITH THE LOCAL FIRE DEPARTMENT.
- (O) 6" RISER TO TEST HEADER. PROVIDE TEST HEADER ON THE EXTERIOR OF THE BUILDING TO ALLOW FOR FULL FLOW TESTING OF THE BACKFLOW PREVENTER. TEST HEADER SHALL CONSIST OF A MINIMUM OF TWO 2–1/2" HOSE VALVES WITH CAPS AND CHAINS.
- (P) 6" RISER TO FIRST FLOOR WET PIPE SPRINKLER SYSTEM.
- (Q) 6" RISER TO SECOND FLOOR WET PIPE SPRINKLER SYSTEM.
- (R) 6" RISER TO THIRD FLOOR AND CUPOLA SPRINKLER SYSTEM.

SPRINKLER NOTES

1. INSTALLATION WORK SHALL NOT PROCEED UNTIL SUBMITTALS HAVE BEEN RECEIVED, PROCESSED AND APPROVED IN ACCORDANCE WITH THE REQUIREMENTS OF THE CONTRACT DRAWINGS AND SPECIFICATIONS.
2. ALL NEW VALVES ON THE FIRE PROTECTION SYSTEM TO BE ELECTRICALLY SUPERVISED. TYPE AND EXACT LOCATION OF FLOW, PRESSURE AND SUPERVISORY SWITCHES SHALL BE ACCOMPLISHED BETWEEN THE DIFFERENT RESPONSIBLE TRADES.
3. COVER PLATES FOR CONCEALED PENDENT SPRINKLERS SHALL BE FACTORY PAINTED TO MATCH THE CEILING COLOR IN WHICH THEY ARE INSTALLED. CONTRACTOR SHALL REFER TO ARCHITECTURAL DRAWINGS FOR CEILING COLORS AND COORDINATE WITH THE ARCHITECT TO DETERMINE THE NUMBER OF COLORS REQUIRED PRIOR TO PREPARING A PROPOSAL.
4. LOCATION OF SPRINKLERS IN CEILING TILES:
   - 4.1. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS AND ROOM FINISH SCHEDULES FOR CEILING TILE TYPES.
   - 4.2. IN STANDARD 2 BY 4 CEILING TILES, LOCATE SPRINKLERS IN THE CENTER OF TILES.
   - 4.3. IN STANDARD 2 BY 4 CEILING TILES WHICH SIMULATE 2 BY 2 CEILING TILES, LOCATE SPRINKLERS IN THE CENTER OF THE 2 BY 2 AREA.
5. MATERIALS:
   - 5.1. ALL PIPING 1–1/4" OR SMALLER SHALL BE SCHEDULE 40 BLACK STEEL PIPING WITH THREADED CAST IRON FITTINGS OR GROOVED FITTINGS AND COUPLINGS. (SCHEDULE 10 PIPE WILL NOT BE ALLOWED).
   - 5.2. ALL PIPING 1–1/2" OR LARGER SHALL BE SCHEDULE 10 OR 40 BLACK STEEL PIPING WITH GROOVED TYPE FITTINGS AND MECHANICAL COUPLINGS.
6. ALL FIRE WATER LEAD–INS TO THE BUILDINGS SHALL BE CEMENT LINED DUCTILE IRON OR STAINLESS–STEEL PIPE FROM A POINT OF 5–FEET FROM THE BUILDING TO A POINT OF 12–INCHES ABOVE FINISHED FLOOR. ALL FIRE WATER LEAD–INS ARE TO BE PROVIDED WITH MECHANICAL RESTRAINTS AND THRUST BLOCKS.
7. ALL MECHANICAL FITTINGS SHALL BE HELD IN PLACE BY COUPLINGS OF THE SAME MANUFACTURER, NO EXCEPTIONS.
8. THE INSTALLATION OF TREADED OR GROOVED SPRINKLERS SHALL BE PERMITTED. GROOVED SPRINKLERS, IF PROVIDED, SHALL BE AS FOLLOWS:
   - 8.1. VICTAULIC FIRELOCK IGS INSTALLATION–READY STYLE V9 COUPLING.
     - 8.1.1. UL LISTED AND FM APPROVED RIGID COUPLING TO JOIN SPRINKLERS WITH IGS PROFILE GROOVED ENDS TO MATCHING 1" IGS OUTLETS. COUPLING CONSISTS OF TWO CAST COPPER–ALLOW HOUSING SEGMENTS FOR CONNECTION OF 1/2", 3/4" AND 1" SPRINKLERS. COUPLING INCLUDES AN EDPM TYPE A GASKET, WITH ZINC–PLATED CAP SCREWS CONFORMING TO ASTM F835, AND NYLON INSERT LOCKNUT. INSTALLATION–READY, FOR DIRECT PUSH WITHOUT FIELD DISASSEMBLY. RATED FOR A WORKING PRESSURE TO 175 PSI.
       - 8.1.1.1. GROOVE: IGS "INNOVATIVE GROOVE SYSTEM" GORRVE WITH SHORTENED "A" DIMENSION AND TAPERED GROOVE BACKSIDE FOR EASE OF INSTALLATION. GROOVING TOOL SHALL BE A VICTAULIC RG2100, WITH IGS CONFIRMATION GAUGE.
       - 8.1.1.2. FULLY INSTALLED AT VISUAL PAD–TO–PAD CONTACT WITH NO REQUIRED TORQUE RATING.
       - 8.1.1.3. ALL GROOVED SPRINKLERS SHALL BE UL LISTED FOR USE WITH THE GROOVED COUPLING.
9. ALL SPRINKLER WORK SHALL BE IN STRICT CONFORMANCE WITH NFPA–13 "STANDARD FOR INSTALLATION OF SPRINKLER SYSTEMS", STATE BUILDING CODE, AND THE OWNER'S INSURANCE COMPANY.
10. COORDINATE DRAINING OF EXISTING SYSTEM WITH BUILDING MANAGEMENT.
11. THE BASE BUILDING "CONTRACT DRAWINGS" AND "SPECIFICATIONS" INCLUDING ALL RESPECTIVE ADDENDA AND BULLETINS SHALL FORM A PART OF THIS WORK AND ALL WORK SHALL BE SUBJECT TO RESPECTIVE PROVISIONS THEREOF.
12. REFER TO ARCHITECTURAL DRAWINGS FOR HUNG CEILING HEIGHTS AND CONSTRUCTION. WHERE WORK BETWEEN THIS DRAWING AND ARCHITECTURAL PLANS ARE IN CONFLICT, ADVISE PRIOR TO INSTALLATION OF PIPING.
13. WORK SHALL BE COORDINATED WITH ALL OTHER TRADES, NOTIFY ENGINEER TO AVOID CONFLICTS.
14. ADJUST AND/OR ADD SPRINKLERS AS REQUIRED UTILIZING ARCHITECT'S REFLECTED CEILING PLAN FOR LOCATION OF LIGHTS, DIFFUSERS, CABLE TRAYS, ETC...
15. ALL EQUIPMENT SHALL BE APPROVED BY OWNER'S INSURANCE COMPANY.
16. LAYOUT OF SPRINKLERS AND HYDRAULICS CALCULATIONS ARE FOR AUTHORITY HAVING JURISDICTION USE ONLY. PREPARE FINAL SPRINKLER LAYOUT AND SHOP DRAWINGS INCLUDING HYDRAULIC CALCULATIONS AND OBTAIN ALL APPROVALS AS REQUIRED. PERFORM AND WITNESS A HYDRANT FLOW TEST WHICH WILL BE USED FOR CONTRACTOR'S HYDRAULIC CALCULATIONS.
17. WILL NOT INSTALL ANY SPRINKLER PIPING THAT WILL INTERFERE WITH THE MAINTENANCE/REMOVAL OF HVAC EQUIPMENT.
18. MUST FILE APPLICATION FOR AND SUBMIT EVIDENCE OF A VALID SPRINKLER SYSTEM IMPAIRMENT PERMIT TO BUILDING MANAGEMENT WHEN SCHEDULING ALL SPRINKLER SYSTEM MODIFICATIONS. ALL SHUTDOWNS WILL BE PERFORMED BY BUILDING ENGINEERING PERSONNEL EXCLUSIVELY, UNLESS OTHERWISE PERMITTED BY BUILDING MANAGEMENT.
19. DETERMINE BEST LOCATION FOR ROUTING/RE–ROUTING ALL ASSOCIATED SPRINKLER LINES. PIPE ROUTING SHOWN SHALL BE USED AND ANY ADDITIONAL OFFSETS OR FITTINGS REQUIRED FOR PROPER INSTALLATION, COORDINATION WITH OTHER TRADES, AND/OR TO MAINTAIN PROPER CLEARANCES SHALL BE PROVIDED. VERIFY EXISTING STRUCTURAL, MECHANICAL, ELECTRICAL INSTALLATIONS AND AVOID ANY/ALL OBSTRUCTIONS OR INTERFERENCES WITH FIRE PROTECTION PIPE ROUTING.
20. ALL SPRINKLERS MOUNTED IN CEILING SHALL BE LOCATED A MINIMUM OF 4" AWAY FROM ANY WALLS, CEILING HEIGHT CHANGES OR ANY OTHER VERTICAL INTERSECTING SURFACE.
21. PROVIDE SPRINKLERS ABOVE AND BELOW EXPOSED DUCTWORK 4 FEET OR WIDER. FOR DUCTWORK LOCATED AGAINST WALLS, PROVIDE ADDITIONAL SPRINKLERS AS NEEDED IN ACCORDANCE WITH NFPA–13 REQUIREMENTS FOR OBSTRUCTIONS AGAINST WALLS. PROVIDE HEAD GUARDS WITH WATER SHIELDS FOR ALL SPRINKLERS INSTALLED BELOW EXPOSED DUCTWORK.
22. PROVIDE HEAD GUARDS ON SPRINKLERS IN ELECTRIC, TELEPHONE AND ELEVATOR EQUIPMENT ROOMS.
23. CUTTING OF STRUCTURAL AND/OR ARCHITECTURAL MEMBERS TO BE DONE ONLY WITH THE WRITTEN APPROVAL OF THE ARCHITECT.
24. FIRE STOP ALL PENETRATIONS OF SMOKE/FIRE WALLS, CEILINGS, FLOORS, ROOFS, ETC. FLASH AND COUNTERFLASH ROOF PENETRATIONS.
25. PROVIDE ACCESS PANELS TO ALL VALVES ABOVE NON–ACCESSIBLE CEILINGS AND CHASES.

PIPE HANGERS AND SUPPORTS

1. ACCEPTABLE PRODUCTS: ALL SUPPORT SYSTEMS ARE TO BE UL LISTED AND FM APPROVED AND INSTALLED IN ACCORDANCE WITH NFPA–13.
2. PROVIDE COMBINATION CLEVIS TYPE HANGERS UNLESS NOTED OTHERWISE.
3. PIPE HANGERS: HEIGHT ADJUSTABLE STANDARD DUTY CLEVIS TYPE, WITH CROSS BOLT AND NUT.
4. SWIVEL RING TYPE HANGERS WILL BE ALLOWED FOR SPRINKLER PIPING UP TO A MAXIMUM OF 2 INCHES IN SIZE.
5. HANGER RODS: MILD, LOW CARBON STEEL, FULLY THREADED OR THREADED AT EACH END, WITH TWO NUTS AT EACH END FOR POSITIONING ROD AND HANGER, AND LOCKING EACH IN PLACE.
   - 5.1. PROVIDE 3/8" MINIMUM DIAMETER ROD FOR PIPES SIZED 4" AND SMALLER.
   - 5.2. PROVIDE 1/2" MINIMUM DIAMETER ROD FOR PIPES SIZED 6" OR 8".
6. RISER CLAMPS: MALLEABLE IRON OR STEEL.
7. PIPE HANGERS OR OTHER SUPPORTS SHALL NOT BE ATTACHED TO DUCTWORK, CONDUITS, PIPES OR OTHER CONSTRUCTURAL ELEMENTS OF THE BUILDING.
8. PROVIDE BEAM CLAMP RETAINING STRAPS ON ALL HANGERS IN BUILDINGS WHERE SEISMIC BRACING IS REQUIRED.

SPRINKLER NOTES CONTINUED

26. METHODS OF HANGING PIPES, HEADERS AND BRANCHES SHALL BE IN ACCORDANCE WITH NFPA–13.
27. ALL VALVES FOR FIRE SERVICE SHALL BE LISTED BY THE UNDERWRITER'S LABORATORIES, INC. AND THE FACTORY MUTUAL LABORATORIES. VALVES SHALL BE FACTORY MARKED "UL" AND "FM", 175 PSI WORKING PRESSURE.
28. EACH FIRE PROTECTION RISER SHALL BE PROVIDED WITH A COMPLETED AND ACCEPTED CONTRACTOR'S TEST CERTIFICATE, AND ALL HYDROSTATIC TESTING AND FLUSHING PROCEDURES SHALL COMPLY WITH NFPA–13 AND NFPA–24.
    - 28.1 ALL RISERS SHALL BE PROVIDED WITH PLACARDS WHICH HAVE BEEN MECHANICALLY EMBOSSED WITH THE SPRINKLER DEMAND AT THE BASE OF THE RISER INCLUDING PRESSURE AND FLOW, DESIGN AREA AND DISCHARGE DENSITY, K–FACTOR, AREA PROTECTED, COMMODITIES PROTECTED, MINIMUM AISLE WIDTH, MAXIMUM STORAGE HEIGHT, HOSE STREAM DEMAND, AND NAME OF INSTALLING CONTRACTOR.
    - 28.2 EACH SPRINKLER RISER SHALL BE CLEARLY NUMBERED FOR IDENTIFICATION PURPOSES.
    - 28.3 FIRE ALARM INSTALLATION CONTRACTOR TO ENSURE THE ADDRESSES OF FLOW AND TAMPER SWITCHES CORRESPOND TO THE CORRECT RISER NUMBER. COORDINATE WITH THE FIRE ALARM CONTRACTOR.
    - 28.4 AT COMPLETION OF INSTALLATION, PROVIDE STURDY CHAINS AND LOCKS THAT ARE KEYED ALIKE ON ALL FIRE PROTECTION SYSTEM CONTROL VALVES. THE LOCKS SHALL BE STURDY (3/16 INCH SHACKLE OR LARGER), RESISTANCE TO BREAKAGE EXCEPT BY BOLT CUTTERS (FRANGIBLE OR BREAK–AWAY LOCKS ARE ACCEPTABLE), AND WEATHERPROOF WHERE EXPOSED TO THE ELEMENTS. COMBINATION OR MULTIPLE KEYED LOCKS SHALL NOT BE USED.
29. ALL ABOVE GRADE SPRINKLER SYSTEMS SHALL BE PROVIDED WITH SPRINKLER DRAINS AND INSPECTOR'S TEST CONNECTIONS WITH DISCHARGE PIPING ON THE EXTERIOR OF THE BUILDING. EXTERIOR TEST/DRAIN CONNECTIONS SHALL BE EXTENDED DOWN TO 8–INCHES ABOVE GRADE AND SHALL BE PAINTED WITH A RUST PROHIBITIVE PRIMER AND FINISH COAT TO MATCH THE ADJACENT SURFACES. ALL EXTERIOR DRAINS SHALL BE PROVIDED WITH A CONCRETE SPLASH BLOCK TO PREVENT EROSION OF THE DISCHARGE LOCATION.
30. ALL POWER WIRING SHALL BE ACCOMPLISHED UNDER THE ELECTRICAL DIVISION. ALL CONTROL AND INTERLOCK WIRING SHALL BE ACCOMPLISHED UNDER THIS SECTION OF THE SPECIFICATIONS IN ACCORDANCE WITH THE REQUIREMENTS IN THE ELECTRICAL DIVISION. COORDINATE ALL ELECTRICAL ITEMS WITH ELECTRICAL CONTRACTOR.
31. SPRINKLERS SHALL COVER THE ENTIRE AREA OF THE ROOM INCLUDING ALCOVES. SPRAY SHALL NOT BE BLOCKED BY WALLS OR PARTITIONS.
32. MAINTAIN A MINIMUM OF 18 INCHES FROM THE BOTTOM OF THE SPRINKLER DEFLECTOR TO THE TOP OF STORAGE/FILE STORAGE.
33. ALL FIRE PROTECTION SYSTEMS ARE SHOWN SCHEMATICALLY. IT IS NOT THE INTENT OF THESE PLANS TO SHOW ALL LISTED COMPONENTS, SUCH AS PIPING, FITTINGS, VALVES, ETC. CONTRACTOR IS RESPONSIBLE FOR INSTALLING SYSTEM PER APPLICABLE CODES.
34. PROVIDE A PERMANENTLY ATTACHED HYDRAULIC DESIGN INFORMATION SIGN STATING THE REQUIRED DESIGN CRITERIA FOR EACH HYDRAULICALLY DESIGNED SYSTEM.
35. INSPECTOR'S TEST VALVE SHALL NOT EXCEED 7 FEET ABOVE THE FINISHED FLOOR.
36. PROVIDE SPRINKLER COVERAGE IN ALL COMBUSTIBLE CONCEALED SPACES.
37. PROVIDE ADEQUATE DRAINAGE FOR THE ENTIRE SPRINKLER SYSTEM AS REQUIRED BY NFPA–13 AND COORDINATED WITH ALL APPLICABLE BUILDING SYSTEMS. PROVIDE LOW POINT AND AUXILIARY DRAINS FOR ALL TRAPPED PIPE PER NFPA–13 REQUIREMENTS. ALL AUXILIARY DRAINS REQUIRED FOR THE COMPLETE INSTALLATION OF THE BUILDING FIRE SPRINKLER SYSTEMS SHALL BE PROVIDED AS PART OF THE BASE BID CONTRACT.
38. THE SPRINKLER PIPING LAYOUT AND PIPE SIZES SHOWN ON THE CONTRACT DOCUMENTS ARE TO DEFINE THE DESIGN INTENT FOR COMPETITIVE BIDDING AND FOR PRELIMINARY SUBMISSION TO THE AUTHORITIES HAVING JURISDICTION. THE WORK OF THE CONTRACT INCLUDES HYDRAULIC CALCULATIONS AND FABRICATION SHOP DRAWINGS FOR THE ACTUAL INSTALLATION CONDITIONS.
39. WHERE WET PIPE SPRINKLER SYSTEMS ARE INSTALLED, CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THE WET SYSTEM PIPING IS INSTALLED WITHIN THE HEATED/CONDITIONED BUILDING ENVELOPE. WHERE CONFLICTS ARISE AND/OR WET SYSTEM PIPING IS NOT/CANNOT BE INSTALLED WITHIN THE HEATED/CONDITIONED BUILDING ENVELOPE, THE CONTRACTOR SHALL NOTIFY THE ENGINEER AND OWNER IMMEDIATELY. THE CONTRACTOR IS SOLELY RESPONSIBLE TO PROVIDE A STATEMENT/AFFADAVIT WITH AS–BUILT AND O+M DOCUMENTS STATING THAT THE CONTRACTOR HAS VERIFIED AND CONFIRMED THAT ALL WET SYSTEM PIPING HAS BEEN INSTALLED WITHIN THE HEATED/CONDITIONED BUILDING ENVELOPE.

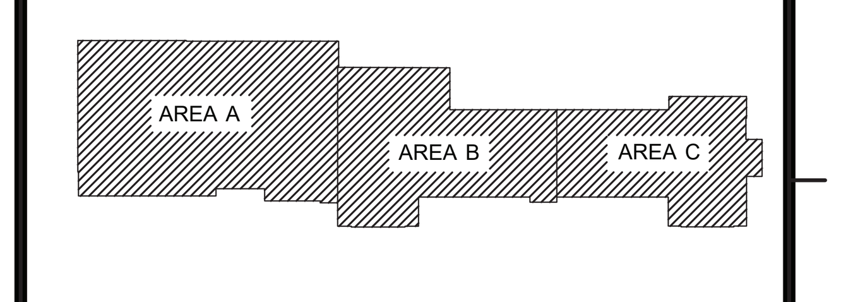
FIRE PROTECTION CONTRACTOR QUALIFICATIONS

1. THE CONTRACTOR'S PROJECT MANAGER AND COMPANY FIELD ADVISOR SHALL BE MINIMUM NICET LEVEL IV CERTIFIED IN WATER BASED FIRE PROTECTION SYSTEMS, AS REQUIRED BY THE CONTRACT SPECIFICATIONS, NO EXCEPTIONS.
2. THE NICET LEVEL IV CERTIFIED ENGINEERING TECHNICIAN SHALL DIRECTLY PRODUCE ALL PROJECT SUBMITTALS, SHOP DRAWINGS AND HYDRAULIC CALCULATIONS. DELEGATED DESIGN DUTIES TO OTHERS SHALL NOT BE PERMITTED. THE NICET LEVEL IV CERTIFIED TECHNICIAN SHALL PROVIDE A LETTER WITH EACH SUBMITTAL ATTESTING TO THAT FACT THAT THE NICET LEVEL IV CERTIFIED TECHNICIAN DIRECTLY PERFORMED ALL DUTIES ASSOCIATED WITH THE SUBMITTAL AND THAT ALL REQUIRED TASKS WERE NOT DELEGATED.
3. THE NICET LEVEL IV CERTIFIED ENGINEERING TECHNICIAN SHALL WITNESS ALL FLOW TESTING AND ACCEPTANCE TESTING.
4. THE NICET LEVEL IV CERTIFIED ENGINEERING TECHNICIAN SHALL VISIT THE SITE ON A BI–WEEKLY BASIS DURING ACTIVE INSTALLATION OF THE FIRE PROTECTION SYSTEMS. DURING EACH SITE OBSERVATION, THE NICET LEVEL IV CERTIFIED ENGINEERING TECHNICIAN SHALL DOCUMENT THE PROGRESS OF THE SPRINKLER SYSTEMS, AND SHALL DOCUMENT ALL ITEMS WHICH HAVE BEEN MODIFIED/ADJUSTED IN THE FIELD FOR NFPA–13 COMPLIANCE AT THE DIRECTION OF THE NICET LEVEL IV CERTIFIED ENGINEERING TECHNICIAN. ALL SITE OBSERVATIONS SHALL BE LOGGED/RECORDED IN A MEMO/REPORT FORMAT, AND ALL MEMO/REPORTS SHALL BE MADE READILY AVAILABLE UPON REQUEST AND SHALL BE INCLUDED IN THE O+M MANUAL.
5. SUBSTITUTION OF A NICET TECHNICIAN IS PERMITTED IN ACCORDANCE WITH THE CONTRACT SPECIFICATIONS, WHERE THE SUBSTITUTION IS A NEW YORK STATE LICENSED FIRE PROTECTION ENGINEER, WHO HAS PASSED THE FIRE PROTECTION PROFESSIONAL ENGINEERING EXAMINATION ADMINISTERED BY THE NATIONAL COUNCIL OF EXAMINERS FOR ENGINEERING AND SURVEYING (NCEES).
   - 5.1. IF THE CONTRACTOR CHOOSES TO SUBSTITUTE THE NICET LEVEL IV TECHNICIAN WITH A LICENSED FIRE PROTECTION PROFESSIONAL ENGINEER, THE LICENSED FIRE PROTECTION ENGINEER SHALL SERVE ALL THE DUTIES OF THE NICET LEVEL IV TECHNICIAN AS REQUIRED BY THE CONTRACT DOCUMENTS, NO EXCEPTION. THIS MEANS THAT THE SUBSTITUTED FIRE PROTECTION ENGINEER WILL BE REQUIRED TO DIRECTLY DEVELOP ALL SHOP DRAWINGS, HYDRAULIC CALCULATIONS AND SUBMITTALS (DELEGATED DESIGN IS NOT PERMITTED), AND THAT THE SUBSTITUTED FIRE PROTECTION ENGINEER SHALL ATTEND ALL PROJECT MEETINGS, SHALL OBSERVE THE SITE AND INSTALLATION ON A REGULAR BASIS, SHALL WITNESS ALL ACCEPTANCE TESTING, ETC.
6. UPON AWARD OF CONTRACT, PROVIDE A QUALIFICATIONS SUBMITTAL INDICATING THAT THE PROJECT NICET LEVEL IV QUALIFICATION REQUIREMENTS ARE BEING MET. NO OTHER SUBMITTALS AND/OR REQUESTS FOR INFORMATION (RFI's) FROM THE CONTRACTOR WILL BE ADDRESSED AFTER AWARD OF CONTRACT UNTIL THE QUALIFICATIONS SUBMITTAL HAS BEEN SUBMITTED, REVIEWED AND APPROVED.

TESTING

1. AFTER COMPLETING THE PIPING SYSTEM, A HYDROSTATIC TEST OF THE FIRE SPRINKLER PIPING FOR A PERIOD OF TWO HOURS AT NOT LESS THAN 200 PSI, OR AT 50 PSI IN EXCESS OF THE MAXIMUM OPERATING STATIC PRESSURE WHEN THE STATIC PRESSURE IS IN EXCESS OF 150 PSI. CHECK THE SYSTEM FOR LEAKS AND MEASURE THE HYDROSTATIC PRESSURE AT THE LOW POINT OF EACH SYSTEM OR ZONE BEING TESTED.
2. REPAIR OR REPLACE PIPING AND FITTINGS AS REQUIRED TO ELIMINATE LEAKS IN ACCORDANCE WITH ANSI/NFPA STANDARDS FOR "LITTLE OR NO LEAKS" AND RETEST AS SPECIFIED TO DEMONSTRATE COMPLIANCE.
3. UPON SATISFACTORY COMPLETION AND TESTING OF THE PIPING SYSTEM, PROVIDE THE OWNER WITH A LETTER CERTIFYING THAT THE PIPING SYSTEM HAS BEEN COMPLETED IN ACCORDANCE WITH ANSI/NFPA 13 STANDARDS AND IS OPERATIONAL, COMPLETE AND WITHOUT DEFECTS.

KEY PLAN:



KEY PLAN
SCALE:NOT TO SCALE

SED CONTROL NO. 27-01-00-01-0-024-009

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PORT JERVIS CITY SCHOOL DISTRICT
RENOVATIONS TO:
PORT JERVIS MIDDLE SCHOOL
Port Jervis - Orange County - New York

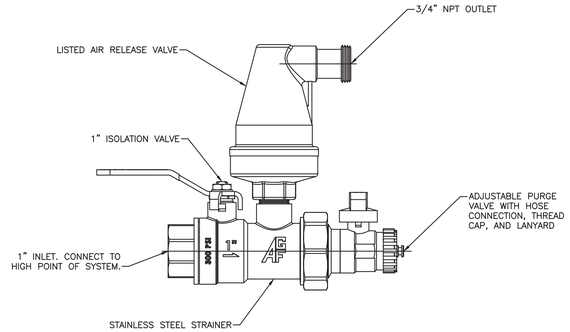
REV	DATE	DESCRIPTION

DRAWN BY CMC	PROJECT NUMBER 2019-011 PH1
CHECKED BY DRN	DATE 11/12/2021

FIRE PROTECTION NOTES, SYMBOLS, AND DETAILS

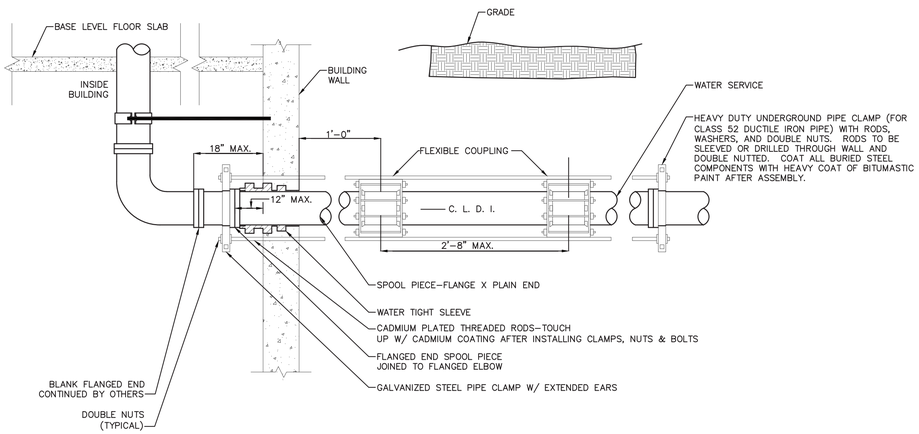
BUILDING	SHEET NUMBER
MS	FP-001

RE-BID

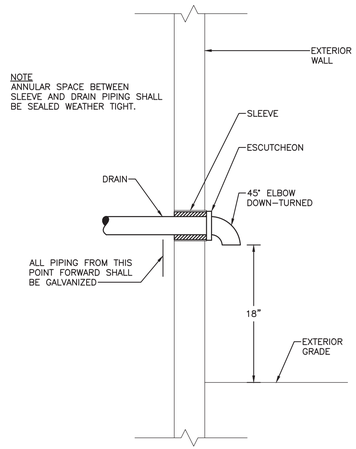


AIR VENT NOTES:
1. CONNECT TO SYSTEM IN THE FOLLOWING LOCATIONS:
   1.1. HIGH POINT OF EACH WET PIPE SPRINKLER SYSTEM AT THE END OF REMOTE MAIN OR BRANCH LINE.
   1.2. TOP OF ALL WET PIPE SUPPLY RISERS.
2. BASIS OF DESIGN AIR VENT: AGF MANUFACTURING M7900AAV

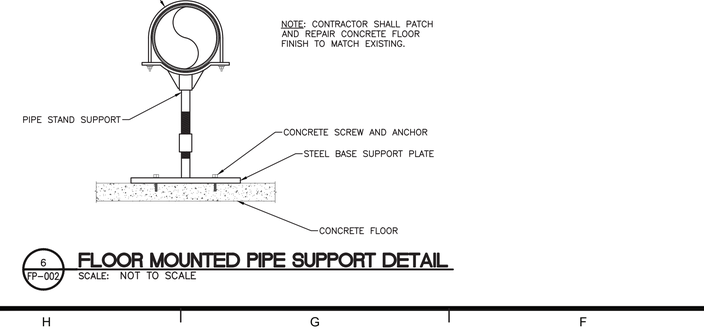
1 FP-002 AUTOMATIC AIR VENT VALVE FOR WET PIPE SPRINKLER SYSTEM
SCALE: NOT TO SCALE



2 FP-002 FIRE PROTECTION ENTRANCE THRU WALL BELOW GRADE
SCALE: NOT TO SCALE



3 FP-002 DRAIN THROUGH WALL DETAIL
SCALE: NOT TO SCALE

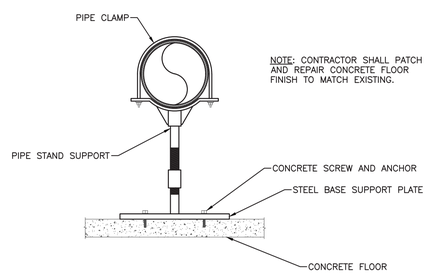


NOTES:
1. INSTALLATION OF ALL SPRINKLER PIPING AND SPRINKLERS SHALL PROVIDE REQUIRED CLEARANCES AROUND ELECTRICAL EQUIPMENT IN ACCORDANCE WITH NFPA-70.
2. A DEDICATED ELECTRICAL SPACE SHALL BE MAINTAINED FOR A MINIMUM OF 6'-0" ABOVE THE TOPS OF ELECTRICAL PANELS.
3. A DEDICATED WORKING SPACE SHALL BE MAINTAINED FOR A MINIMUM OF 3'-0" IN FRONT OF ELECTRICAL PANELS UP TO AN ELEVATION OF 6'-6" AFF.
4. SPRINKLERS AND SPRINKLER PIPING SHALL NOT BE INSTALLED IN EITHER THE DEDICATED ELECTRICAL SPACE OR THE DEDICATED WORKING SPACE.

4 FP-002 REQUIRED ELECTRICAL PANEL CLEARANCES SCHEMATIC
SCALE: NOT TO SCALE

THROUGH FOUNDATION WALL NOTES:
1. DETAIL APPLIES TO THROUGH FOUNDATION PENETRATIONS FROM THE CITY MAIN TO BUILDING.

5 FP-002 UNDERGROUND PIPE THROUGH FOUNDATION
SCALE: NOT TO SCALE

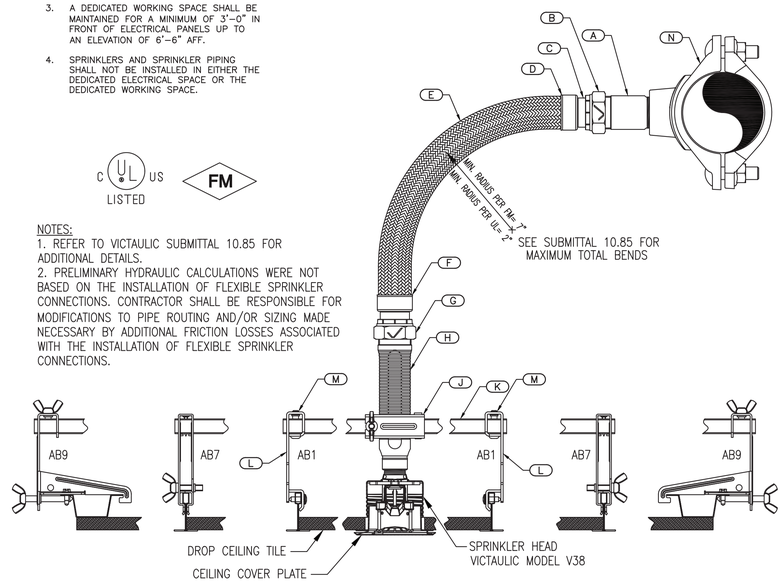


NOTE: CONTRACTOR SHALL PATCH AND REPAIR CONCRETE FLOOR FINISH TO MATCH EXISTING.

6 FP-002 FLOOR MOUNTED PIPE SUPPORT DETAIL
SCALE: NOT TO SCALE

C UL US LISTED FM

NOTES:
1. REFER TO VICTAULIC SUBMITTAL 10.85 FOR ADDITIONAL DETAILS.
2. PRELIMINARY HYDRAULIC CALCULATIONS WERE NOT BASED ON THE INSTALLATION OF FLEXIBLE SPRINKLER CONNECTIONS. CONTRACTOR SHALL BE RESPONSIBLE FOR MODIFICATIONS TO PIPE ROUTING AND/OR SIZING MADE NECESSARY BY ADDITIONAL FRICTION LOSSES ASSOCIATED WITH THE INSTALLATION OF FLEXIBLE SPRINKLER CONNECTIONS.



7 FP-002 BRAIDED VICFLEX FLEXIBLE HOSE SPRINKLER ASSEMBLIES
SCALE: NOT TO SCALE

KEYED NOTES:

(A) INLET NIPPLE (1" MPT)
(B) NUT
(C) ISOLATION RING
(D) COLLAR / WELD FITTING
(E) STAINLESS STEEL FLEXIBLE BRAIDED HOSE (1" NOMINAL DIAMETER)
(LENGTHS AVAILABLE 31", 36". 48", 60", & 72")
(F) COLLAR / WELD FITTING
(G) NUT
(H) REDUCING OUTLET (AVAILABLE 1/2" OR 3 /4" FMPT)
(J) CENTER BRACKET ASSEMBLY
(K) SQUARE BAR (AVAILABLE 1/2" OR 3/4" FMPT)
(L) END BRACKET ASSEMBLY
(M) SHEET METAL SCREW
(N) VIC MECHANICAL-T OUTLET STYLE 922 FIRELOCK (1" FMPT)
SEE VICTAULIC SUBMITTAL NUMBER 10.85

KEY PLAN:

KEY PLAN
SCALE:NOT TO SCALE

SED CONTROL NO. 27-01-00-01-0-024-009

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PORT JERVIS CITY SCHOOL DISTRICT
RENOVATIONS TO:
PORT JERVIS MIDDLE SCHOOL
Port Jervis - Orange County - New York

REV	DATE	DESCRIPTION

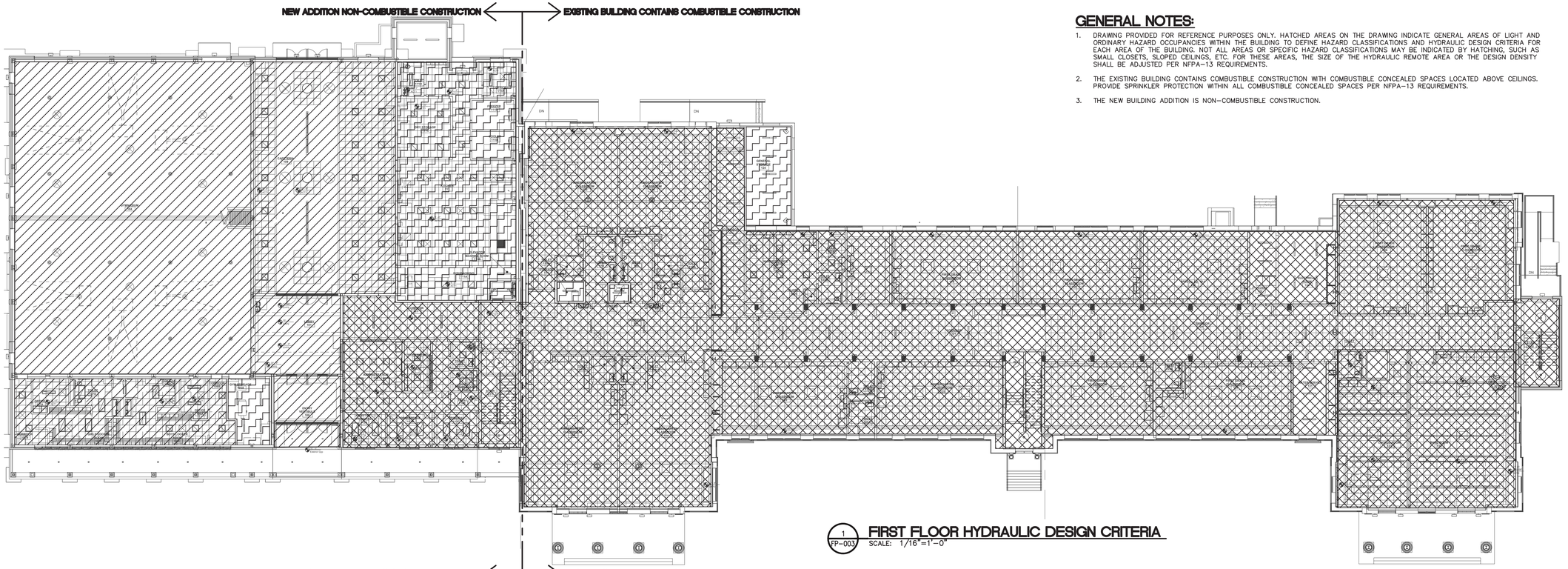
DRAWN BY	PROJECT NUMBER
CMC	2019-011 PH1
CHECKED BY	DATE
DRN	11/12/2021

FIRE PROTECTION DETAILS

BUILDING	SHEET NUMBER
MS	FP-002

RE-BID

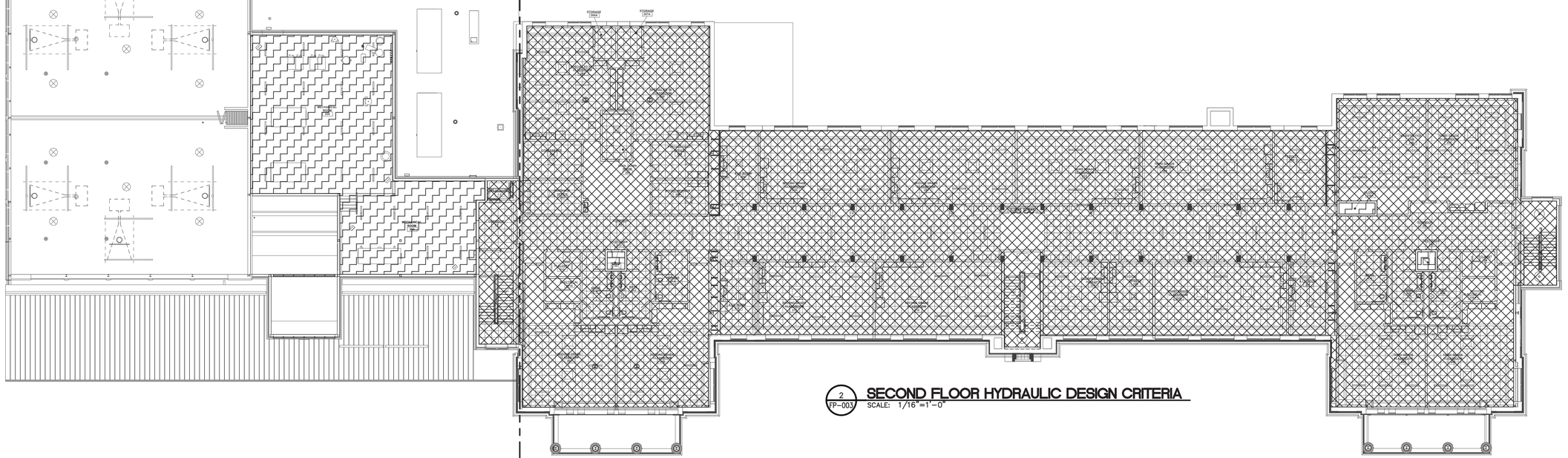
NEW ADDITION NON-COMBUSTIBLE CONSTRUCTION ⟷ EXISTING BUILDING CONTAINS COMBUSTIBLE CONSTRUCTION



1 FP-003 **FIRST FLOOR HYDRAULIC DESIGN CRITERIA**
SCALE: 1/16"=1'-0"

NEW ADDITION NON-COMBUSTIBLE CONSTRUCTION ⟷ EXISTING BUILDING CONTAINS COMBUSTIBLE CONSTRUCTION

NEW ADDITION NON-COMBUSTIBLE CONSTRUCTION ⟷ EXISTING BUILDING CONTAINS COMBUSTIBLE CONSTRUCTION



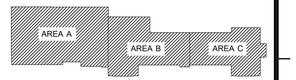
2 FP-003 **SECOND FLOOR HYDRAULIC DESIGN CRITERIA**
SCALE: 1/16"=1'-0"

NEW ADDITION NON-COMBUSTIBLE CONSTRUCTION ⟷ EXISTING BUILDING CONTAINS COMBUSTIBLE CONSTRUCTION

GENERAL NOTES:

1. DRAWING PROVIDED FOR REFERENCE PURPOSES ONLY. HATCHED AREAS ON THE DRAWING INDICATE GENERAL AREAS OF LIGHT AND ORDINARY HAZARD OCCUPANCIES WITHIN THE BUILDING TO DEFINE HAZARD CLASSIFICATIONS AND HYDRAULIC DESIGN CRITERIA FOR EACH AREA OF THE BUILDING. NOT ALL AREAS OR SPECIFIC HAZARD CLASSIFICATIONS MAY BE INDICATED BY HATCHING, SUCH AS SMALL CLOSETS, SLOPED CEILINGS, ETC. FOR THESE AREAS, THE SIZE OF THE HYDRAULIC REMOTE AREA OR THE DESIGN DENSITY SHALL BE ADJUSTED PER NFPA-13 REQUIREMENTS.
2. THE EXISTING BUILDING CONTAINS COMBUSTIBLE CONSTRUCTION WITH COMBUSTIBLE CONCEALED SPACES LOCATED ABOVE CEILINGS. PROVIDE SPRINKLER PROTECTION WITHIN ALL COMBUSTIBLE CONCEALED SPACES PER NFPA-13 REQUIREMENTS.
3. THE NEW BUILDING ADDITION IS NON-COMBUSTIBLE CONSTRUCTION.

KEY PLAN:



KEY PLAN
SCALE:NOT TO SCALE

SED CONTROL NO. 27-01-00-01-0-024-009

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PORT JERVIS CITY SCHOOL DISTRICT
RENOVATIONS TO:
PORT JERVIS MIDDLE SCHOOL
Port Jervis - Orange County - New York

REV	DATE	DESCRIPTION

DRAWN BY	PROJECT NUMBER
CMC	2019-011 PH1
CHECKED BY	DATE
DRN	11/12/2021

FIRE PROTECTION HYDRAULIC DESIGN CRITERIA

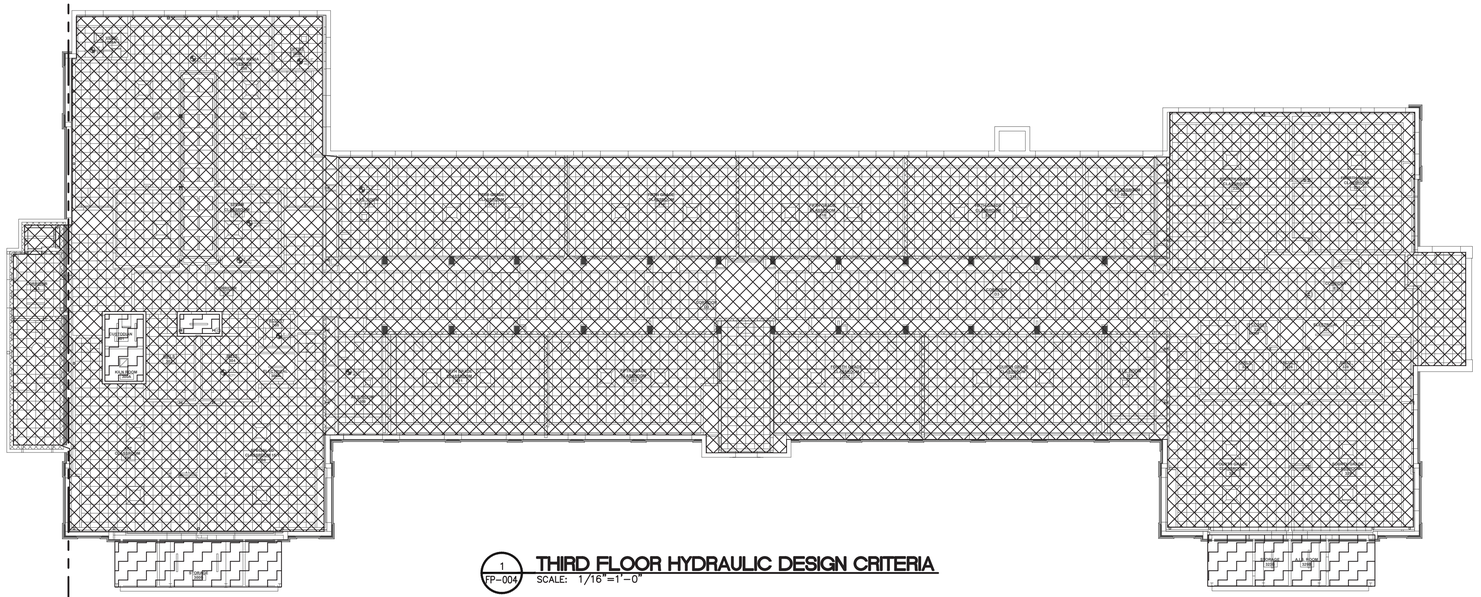
BUILDING	SHEET NUMBER
MS	FP-003
	RE-BID

NEW ADDITION NON-COMBUSTIBLE CONSTRUCTION

EXISTING BUILDING CONTAINS COMBUSTIBLE CONSTRUCTION

GENERAL NOTES:

1. DRAWING PROVIDED FOR REFERENCE PURPOSES ONLY. HATCHED AREAS ON THE DRAWING INDICATE GENERAL AREAS OF LIGHT AND ORDINARY HAZARD OCCUPANCIES WITHIN THE BUILDING TO DEFINE HAZARD CLASSIFICATIONS AND HYDRAULIC DESIGN CRITERIA FOR EACH AREA OF THE BUILDING. NOT ALL AREAS OR SPECIFIC HAZARD CLASSIFICATIONS MAY BE INDICATED BY HATCHING, SUCH AS SMALL CLOSETS, SLOPED CEILINGS, ETC. FOR THESE AREAS, THE SIZE OF THE HYDRAULIC REMOTE AREA OR THE DESIGN DENSITY SHALL BE ADJUSTED PER NFPA-13 REQUIREMENTS.
2. THE EXISTING BUILDING CONTAINS COMBUSTIBLE CONSTRUCTION WITH COMBUSTIBLE CONCEALED SPACES LOCATED ABOVE CEILINGS. PROVIDE SPRINKLER PROTECTION WITHIN ALL COMBUSTIBLE CONCEALED SPACES PER NFPA-13 REQUIREMENTS.
3. THE NEW BUILDING ADDITION IS NON-COMBUSTIBLE CONSTRUCTION.

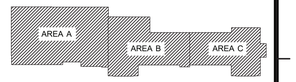


1 FP-004 THIRD FLOOR HYDRAULIC DESIGN CRITERIA
SCALE: 1/16"=1'-0"

NEW ADDITION NON-COMBUSTIBLE CONSTRUCTION

EXISTING BUILDING CONTAINS COMBUSTIBLE CONSTRUCTION

KEY PLAN:



KEY PLAN
SCALE:NOT TO SCALE

SED CONTROL NO. 27-01-00-01-0-024-009

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RAN FIRE PROTECTION ENGINEERING

PORT JERVIS CITY SCHOOL DISTRICT
RENOVATIONS TO:
PORT JERVIS MIDDLE SCHOOL
Port Jervis - Orange County - New York

REV	DATE	DESCRIPTION

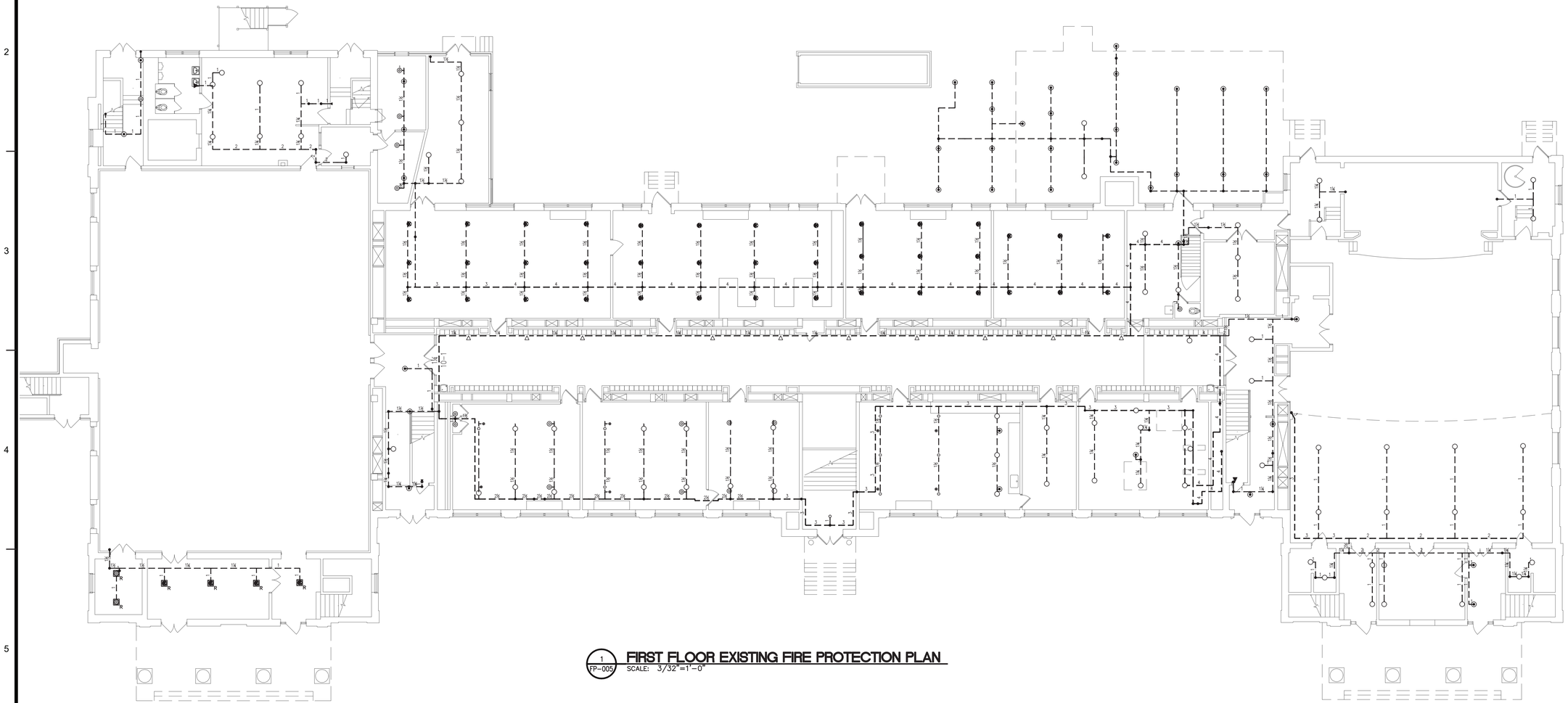
DRAWN BY: CMC	PROJECT NUMBER: 2019-011.PH1
CHECKED BY: DRN	DATE: 11/12/2021

FIRE PROTECTION HYDRAULIC DESIGN CRITERIA

BUILDING	SHEET NUMBER
MS	FP-004
	RE-BID

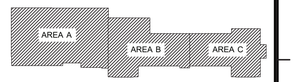
GENERAL NOTES:

1. DRAWING PROVIDED FOR REFERENCE PURPOSES ONLY.
2. DRAWING INDICATES GENERAL LAYOUT OF EXISTING BUILDING SPRINKLER SYSTEM. DRAWING NOT INTENDED TO SHOW ALL EXISTING PIPING, ACCURATE PIPE SIZING, SPRINKLERS, EQUIPMENT, ETC.
3. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING THE EXISTING SPRINKLER SYSTEM IN ITS ENTIRETY AS PART OF THE BASE-BID SCOPE OF WORK BASED ON ALL EXISTING CONDITIONS, WHETHER INDICATED ON THIS DRAWING OR NOT.



1 FP-005 **FIRST FLOOR EXISTING FIRE PROTECTION PLAN**
SCALE: 3/32"=1'-0"

KEY PLAN:



KEY PLAN
SCALE:NOT TO SCALE

SED CONTROL NO. 27-01-00-01-0-024-009

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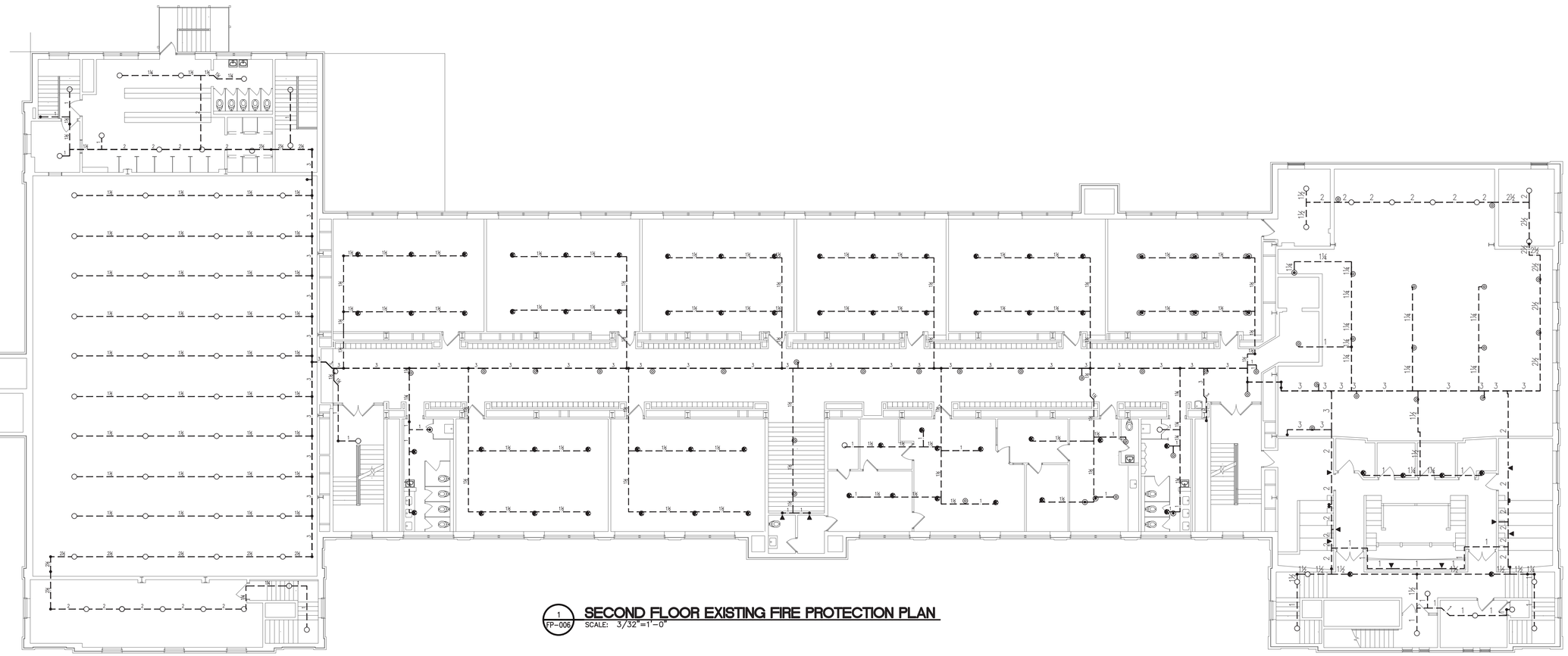
FIRST FLOOR EXISTING FIRE PROTECTION PLAN

BUILDING	SHEET NUMBER
MS	FP-005
	RE-BID

GENERAL NOTES:

1. DRAWING PROVIDED FOR REFERENCE PURPOSES ONLY.
2. DRAWING INDICATES GENERAL LAYOUT OF EXISTING BUILDING SPRINKLER SYSTEM. DRAWING NOT INTENDED TO SHOW ALL EXISTING PIPING, ACCURATE PIPE SIZING, SPRINKLERS, EQUIPMENT, ETC.
3. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING THE EXISTING SPRINKLER SYSTEM IN ITS ENTIRETY AS PART OF THE BASE-BID SCOPE OF WORK BASED ON ALL EXISTING CONDITIONS, WHETHER INDICATED ON THIS DRAWING OR NOT.



1 FP-006 **SECOND FLOOR EXISTING FIRE PROTECTION PLAN**
SCALE: 3/32"=1'-0"

KEY PLAN:

KEY PLAN
SCALE:NOT TO SCALE

SED CONTROL NO. 27-01-00-01-0-024-009

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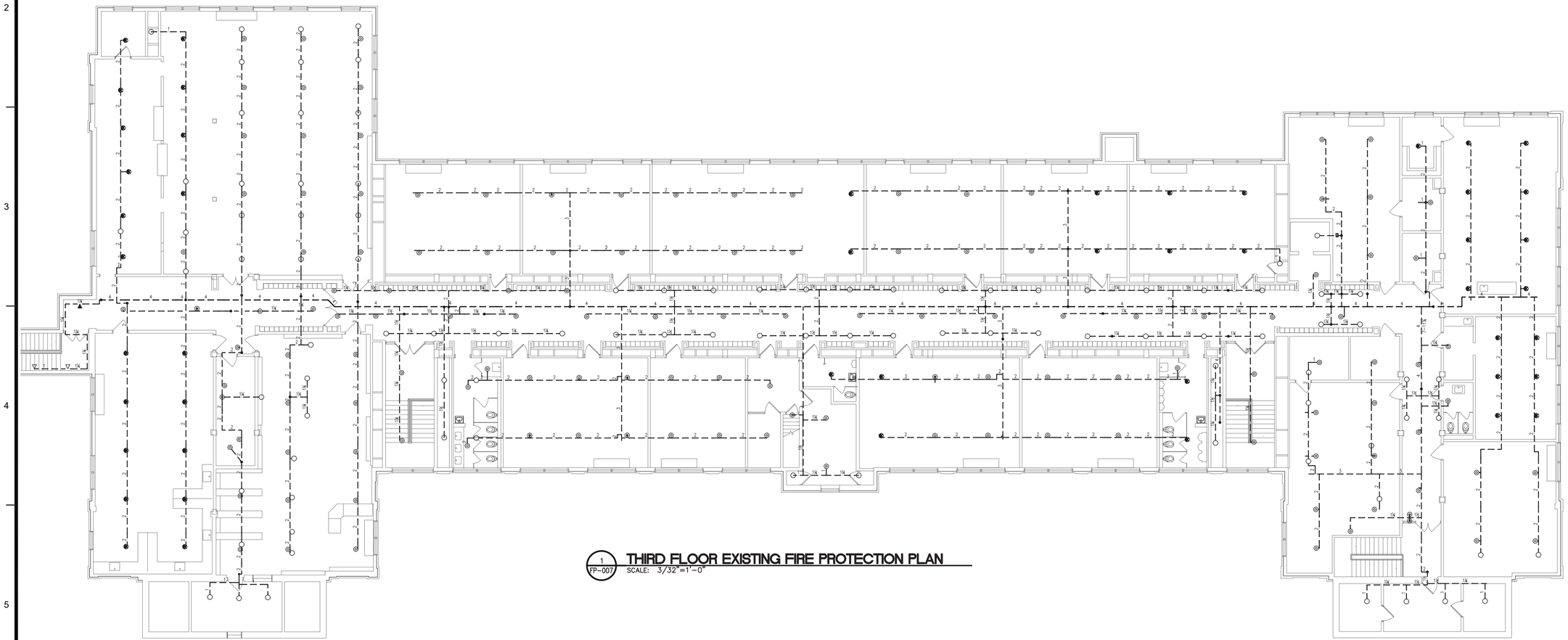
SECOND FLOOR EXISTING FIRE PROTECTION PLAN

BUILDING	SHEET NUMBER
MS	FP-006

RE-BID

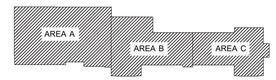
GENERAL NOTES:

1. DRAWING PROVIDED FOR REFERENCE PURPOSES ONLY.
2. DRAWING INDICATES GENERAL LAYOUT OF EXISTING BUILDING SPRINKLER SYSTEM. DRAWING NOT INTENDED TO SHOW ALL EXISTING PIPING, ACCURATE PIPE SIZING, SPRINKLERS, EQUIPMENT, ETC.
3. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING THE EXISTING SPRINKLER SYSTEM IN ITS ENTIRETY AS PART OF THE BASE-BID SCOPE OF WORK BASED ON ALL EXISTING CONDITIONS, WHETHER INDICATED ON THIS DRAWING OR NOT.



1 FP-007 THIRD FLOOR EXISTING FIRE PROTECTION PLAN
SCALE: 3/32"=1'-0"

KEY PLAN:



KEY PLAN
SCALE:NOT TO SCALE

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DRN	11/12/2021

THIRD FLOOR EXISTING FIRE PROTECTION PLAN

BUILDING	SHEET NUMBER
MS	FP-007

RE-BID

GENERAL NOTES:

1. REFER TO ARCHITECTURAL DRAWINGS FOR CEILING HEIGHTS AND CONSTRUCTION TYPE.
2. THE SPRINKLER SYSTEM SHALL BE DESIGNED TO PROTECT THE HAZARD CLASSIFICATIONS PER NFPA-13, AS NOTED IN THE HYDRAULIC CALCULATION NOTES ON DRAWINGS FP-003 AND FP-004.
3. THE BASIS OF DESIGN SPRINKLER LAYOUT IS BASED ON THE INSTALLATION OF BLACK STEEL PIPE. CPVC PIPING IS NOT PERMITTED.
4. ALL HANGERS SHALL BE INSTALLED PER NFPA-13. ALL PIPE HANGER AND SUPPORT EQUIPMENT SHALL BE LISTED IN ACCORDANCE WITH NFPA-13 REQUIREMENTS.
5. DRAWINGS DO NOT INDICATE ALL REQUIRED LOCATIONS OF SPRINKLERS BELOW OBSTRUCTIONS SUCH AS DUCTWORK, MECHANICAL EQUIPMENT, ETC. PROVIDE ADDITIONAL SPRINKLERS BELOW EXPOSED DUCTWORK PER NFPA-13 REQUIREMENTS WHICH CREATE AN OBSTRUCTION TO CEILING LEVEL SPRINKLER DISCHARGE. COORDINATION OF AND INSTALLATION OF ALL REQUIRED SPRINKLERS BELOW DUCTWORK SHALL INCLUDED AS PART OF THE BASE-BID CONTRACT.
6. PROVIDE FINAL COORDINATION WITH THE HVAC SYSTEMS AND ALL TRADES AS REQUIRED BY NFPA-13. PROVIDE FULLY COORDINATED LAYOUT SHOWN ON THE SHOP DRAWINGS INCLUDING, BUT NOT LIMITED TO, SHOWING DUCTWORK AND REFLECTIVE CEILING PLAN LOCATIONS ON THE SUBMITTED SHOP DRAWINGS. COORDINATE SPRINKLER LOCATIONS WITH CLEARANCES TO LIGHTS PER NFPA-13 REQUIREMENTS.
7. THE BUILDING WILL CONTAIN SUSPENDED LIGHTS. ALL LIGHTS SHALL BE SUSPENDED A MINIMUM OF 20" BELOW THE CEILING FROM THE DROP CEILING LEVEL TO THE TOPS OF LIGHTS, SUCH THAT ADEQUATE VERTICAL CLEARANCE IS PROVIDED BETWEEN THE SPRINKLER DEFLECTORS AND THE TOP OF THE LIGHTS SUCH THAT THE LIGHTING IS NOT CONSIDERED AN OBSTRUCTION TO NFPA-13. CONTRACT SHALL COORDINATE REQUIREMENTS FOR SUSPENDED LIGHTS WITH APPLICABLE TRADES TO ENSURE ALL SUSPENDED LIGHTING IS INSTALLED AT THE CORRECT ELEVATION.
8. THE CONTRACTOR SHALL PROVIDE SPRINKLER PROTECTION THROUGHOUT ALL COMBUSTIBLE CONCEALED SPACES AS PART OF THE BASE-BID CONTRACT, AS DESCRIBED ON DRAWING FP-001.
9. FIRESTOP ALL PENETRATION ITEMS THROUGH ALL FLOOR AND WALL PENETRATIONS MADE AS PART OF THIS CONTRACT. FIRESTOP ALL THROUGH-PENETRATIONS FOR A 2-HOUR FIRE RESISTANCE ASSEMBLY RATING.
10. THE BUILDING IS PROTECTED BY A WET PIPE SPRINKLER SYSTEM. ALL PORTIONS OF THE BUILDING SHALL BE HEATED TO MAINTAIN TEMPERATURES GREATER THAN 40 DEGREES FAHRENHEIT THROUGHOUT. ADEQUATE HEAT SHALL BE PROVIDED BY THE OWNER.
11. THE BUILDING IS PROTECTED WITH A WET PIPE SYSTEM THROUGHOUT. CONTRACTOR SHALL ENSURE ALL WET SPRINKLER PIPING IS INSTALLED WITHIN THE HEATED BUILDING ENVELOPE.

KEYED NOTES:

(4) 2" RISER NIPPLE THROUGHOUT FIRST FLOOR, AS NEEDED BASED ON CONTRACTOR'S SHOP DRAWING LAYOUT. (TYPICAL)

(5) 4" RISER FOR SPRINKLER MAIN ELEVATION CHANGE.

(6) 2-1/2" RISER FOR ELEVATION CHANGE WITHIN LOBBY 101 DUE TO CEILING CONFIGURATION. (TYPICAL)

(7) 4" RISER UP TO SECOND FLOOR. REFER TO DRAWING FP-103 FOR CONTINUATION.

(8) 3" DROP FED FROM ROOF LEVEL SPRINKLER SYSTEM WITHIN GYMNASIUM. REFER TO DRAWING FP-106 FOR CONTINUATION OF PIPING.

(9) SPRINKLER PROTECTION NOT REQUIRED WITHIN ELEVATOR MACHINE ROOM PER NFPA-13. ELEVATOR IS ELECTRIC TRACTION TYPE PASSENGER ELEVATOR AND THE ELEVATOR MACHINE ROOM WILL BE FIRE RATED AND SEPARATED FROM THE REMAINDER OF THE BUILDING.

(10) SPRINKLER PROTECTION NOT REQUIRED WITHIN ELEVATOR SHAFT PER NFPA-13. ELEVATOR IS ELECTRIC TRACTION TYPE PASSENGER ELEVATOR AND THE ELEVATOR HOISTWAY WILL BE NON-COMBUSTIBLE.

(11) SPRINKLER PROTECTION NOT REQUIRED BELOW NON-COMBUSTIBLE OVERHANG ON BUILDING EXTERIOR PER NFPA-13. STORAGE BENEATH OVERHANG NOT PERMITTED.

(17) PROVIDE ADDITIONAL SPRINKLER PROTECTION BELOW BOTTOM LANDING OF STAIRWELLS PER NFPA-13 REQUIREMENTS.

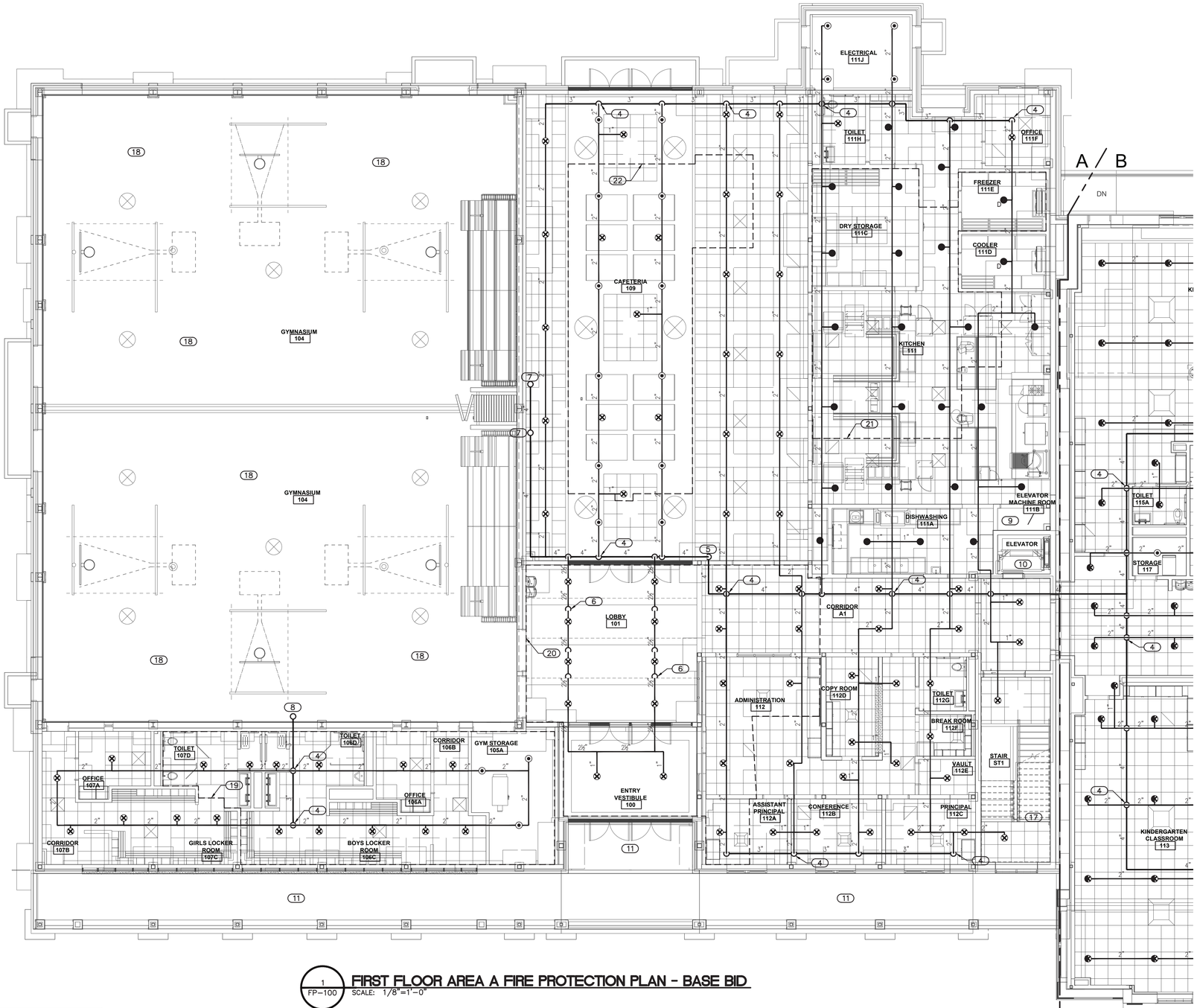
(18) REFER TO DRAWING FP-106 FOR SPRINKLER PROTECTION WITHIN GYMNASIUM.

(19) OUTLINE OF HYDRAULIC REMOTE AREA FOR FIRST FLOOR HYDRAULIC CALCULATION #1. THE CONTRACTOR SHALL PROVIDE A HYDRAULIC CALCULATION OF THIS REMOTE AREA FOR REVIEW WITH THE SHOP DRAWING AND HYDRAULIC CALCULATIONS SUBMISSION.

(20) OUTLINE OF HYDRAULIC REMOTE AREA FOR FIRST FLOOR HYDRAULIC CALCULATION #3. THE CONTRACTOR SHALL PROVIDE A HYDRAULIC CALCULATION OF THIS REMOTE AREA FOR REVIEW WITH THE SHOP DRAWING AND HYDRAULIC CALCULATIONS SUBMISSION.

(21) OUTLINE OF HYDRAULIC REMOTE AREA FOR FIRST FLOOR HYDRAULIC CALCULATION #4. THE CONTRACTOR SHALL PROVIDE A HYDRAULIC CALCULATION OF THIS REMOTE AREA FOR REVIEW WITH THE SHOP DRAWING AND HYDRAULIC CALCULATIONS SUBMISSION.

(22) OUTLINE OF HYDRAULIC REMOTE AREA FOR FIRST FLOOR HYDRAULIC CALCULATION #5. THE CONTRACTOR SHALL PROVIDE A HYDRAULIC CALCULATION OF THIS REMOTE AREA FOR REVIEW WITH THE SHOP DRAWING AND HYDRAULIC CALCULATIONS SUBMISSION.



1 / FP-100 **FIRST FLOOR AREA A FIRE PROTECTION PLAN - BASE BID**
SCALE: 1/8"=1'-0"

Hydraulic Calculation Data
Design Area Number: First Floor Hydraulic Calculation #1 Design Area Location: Gym Locker Room Hazard/Occupancy: Light Hazard and Ordinary Hazard 1 Design Density: 0.10 GPM/SF Design Area: 1,052 SF Number of Sprinklers in Design Area: 14
System Flow: 317.8 gpm System Pressure: 33.4 psi Hose Allowance: 100 gpm

SYSTEM HAS A SYSTEM SAFETY FACTOR OF 11.37 PSI.

Hydraulic Calculation Data
Design Area Number: First Floor Hydraulic Calculation #3 Design Area Location: Lobby 101 Hazard/Occupancy: Light Hazard Design Density: 0.10 GPM/SF Design Area: 1,526 SF Number of Sprinklers in Design Area: 18
System Flow: 407.3 gpm System Pressure: 35.4 psi Hose Allowance: 100 gpm

SYSTEM HAS A SYSTEM SAFETY FACTOR OF 7.5 PSI.

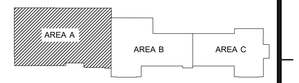
Hydraulic Calculation Data
Design Area Number: First Floor Hydraulic Calculation #4 Design Area Location: Kitchen 111 Hazard/Occupancy: Ordinary Hazard 1 Design Density: 0.15 GPM/SF Design Area: 1,050 SF Number of Sprinklers in Design Area: 12
System Flow: 436.1 gpm System Pressure: 30.7 psi Hose Allowance: 250 gpm

SYSTEM HAS A SYSTEM SAFETY FACTOR OF 10.66 PSI.

Hydraulic Calculation Data
Design Area Number: First Floor Hydraulic Calculation #5 Design Area Location: Cafeteria 109 Hazard/Occupancy: Light Hazard Design Density: 0.10 GPM/SF Design Area: 1,053 SF Number of Sprinklers in Design Area: 15
System Flow: 340.3 gpm System Pressure: 25.1 psi Hose Allowance: 100 gpm

SYSTEM HAS A SYSTEM SAFETY FACTOR OF 19.2 PSI.

KEY PLAN:



KEY PLAN
SCALE: NOT TO SCALE

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FIRST FLOOR AREA A FIRE PROTECTION PLAN - BASE BID

BUILDING	SHEET NUMBER
MS	FP-100
	RE-BID

GENERAL NOTES:

1. REFER TO DRAWING FP-100. ALL BASE-BID NOTES AND WORK FROM DRAWING FP-100 APPLIES TO ALTERNATE FP-1, WITH ADDITIONAL WORK AS INDICATED ON THIS DRAWING TO PROVIDE PROTECTION OF THE PLATFORM AREA.
2. PROVIDE SPRINKLER PROTECTION WITHIN THE PLATFORM AREA PER NFPA-13. PROVIDE TWO (2) LEVELS OF PROTECTION (ONLY ONE LEVEL OF PROTECTION AT THE ROOF LEVEL SHOWN ON PLANS FOR CLARITY. PROVIDE ONE LEVEL OF SPRINKLER PROTECTION AT THE ROOF LEVEL AND A SECOND LEVEL OF PROTECTION BELOW THE RAISED FLOOR.
3. THE ROOF LEVEL SPRINKLER SYSTEM PROTECTING THE PLATFORM IS DEFINED AS LIGHT HAZARD PER NFPA-13, HOWEVER AN ORDINARY HAZARD GROUP 1 SPRINKLER SYSTEM WILL BE PROVIDED. THE PLATFORM SPRINKLER SYSTEM SHALL BE HYDRAULICALLY CALCULATED TO PROVIDE A MINIMUM DESIGN DENSITY OF 0.15 GPM/SF OVER A DESIGN AREA OF THE ENTIRE PLATFORM OR 1,500 SF. THE DESIGN AREA IS PERMITTED TO BE REDUCED PER NFPA-13 ALLOWANCES IF THE PLATFORM CEILING HEIGHT DOES NOT EXCEED 20'-0".
4. THE SPACE BELOW THE PLATFORM WILL BE UTILIZED FOR GENERAL STORAGE (TABLES AND CHAIRS). THE SPRINKLER SYSTEM BELOW PLATFORM SHALL BE DESIGNED TO PROTECT AN ORDINARY HAZARD GROUP 1 OCCUPANCY. THE SPRINKLER LAYOUT BELOW THE PLATFORM SHALL MATCH THE SAME LAYOUT AS THE ROOF LEVEL OF SPRINKLER LOCATIONS, PIPE SIZING AND PIPE ROUTING. PROVIDE HEAD GUARDS ON ALL SPRINKLERS INSTALLED BELOW THE PLATFORM.

KEYED NOTES:

(4) 2" RISER NIPPLE THROUGHOUT FIRST FLOOR, AS NEEDED BASED ON CONTRACTOR'S SHOP DRAWING LAYOUT. (TYPICAL)

(5) 4" RISER FOR SPRINKLER MAIN ELEVATION CHANGE.

(6) 2-1/2" RISER FOR ELEVATION CHANGE WITHIN LOBBY 101 DUE TO CEILING CONFIGURATION. (TYPICAL)

(7) 4" RISER UP TO SECOND FLOOR. REFER TO DRAWING FP-103.1 FOR CONTINUATION.

(8) 3" DROP FED FROM ROOF LEVEL SPRINKLER SYSTEM WITHIN GYMNASIUM.

(9) SPRINKLER PROTECTION NOT REQUIRED WITHIN ELEVATOR MACHINE ROOM PER NFPA-13. ELEVATOR IS ELECTRIC TRACTION TYPE PASSENGER ELEVATOR AND THE ELEVATOR MACHINE ROOM WILL BE FIRE RATED AND SEPARATED FROM THE REMAINDER OF THE BUILDING.

(10) SPRINKLER PROTECTION NOT REQUIRED WITHIN ELEVATOR SHAFT PER NFPA-13. ELEVATOR IS ELECTRIC TRACTION TYPE PASSENGER ELEVATOR AND THE ELEVATOR HOISTWAY WILL BE NON-COMBUSTIBLE.

(11) SPRINKLER PROTECTION NOT REQUIRED BELOW NON-COMBUSTIBLE OVERHANG ON BUILDING EXTERIOR PER NFPA-13. STORAGE BENEATH OVERHANG NOT PERMITTED.

(17) PROVIDE ADDITIONAL SPRINKLER PROTECTION BELOW BOTTOM LANDING OF STAIRWELLS PER NFPA-13 REQUIREMENTS.

(18) GYMNASIUM ROOF LEVEL SPRINKLER PROTECTION. SHOWN ON DRAWING FP-100.2 FOR ALTERNATE FP-2. SHOWN ON DRAWING FP-106 FOR BASE-BID DRAWINGS.

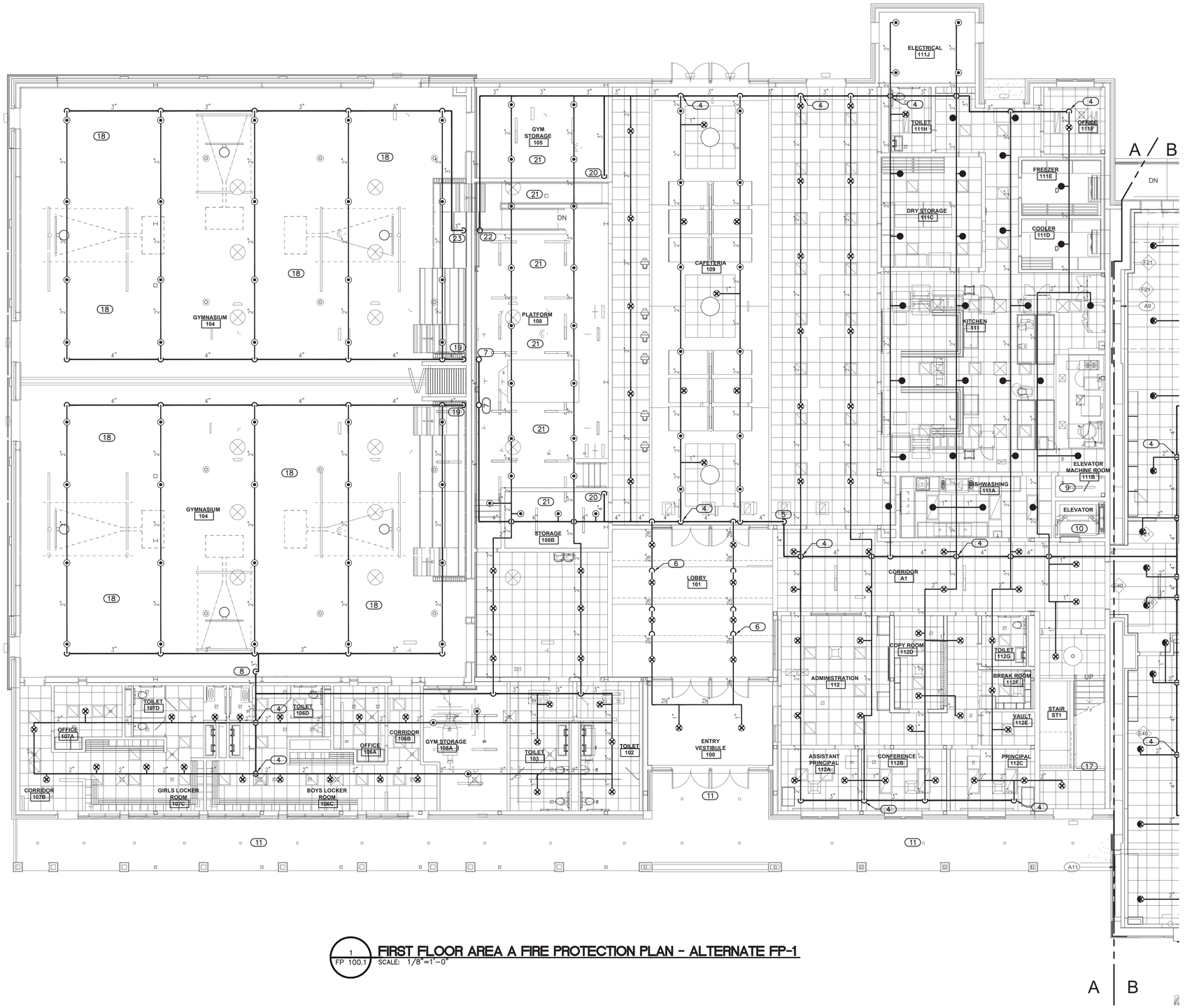
(19) 4" RISER DOWN TO SECOND FLOOR. REFER TO DRAWING FP-103.1 FOR CONTINUATION.

(20) 4" PIPING FROM PLATFORM ROOF LEVEL DOWN TO SPRINKLER PROTECTION IN SUB-FLOOR SPACE BENEATH PLATFORM.

(21) PROVIDE TWO (2) LEVELS OF SPRINKLER PROTECTION. PROVIDE ONE LEVEL OF PROTECTION AT THE PLATFORM ROOF LEVEL AND ONE LEVEL OF PROTECTION IN THE SUB-FLOOR SPACE BENEATH THE PLATFORM. PROVIDE ADDITIONAL SPRINKLER PROTECTION THROUGHOUT PLATFORM PER NFPA-13 REQUIREMENTS WHERE DUCTWORK OBSTRUCTS SPRINKLER DISCHARGE PER NFPA-13. PROVIDE HEAD GUARDS ON ALL SPRINKLERS LOCATED BENEATH DUCTWORK AND OTHER OBSTRUCTIONS.

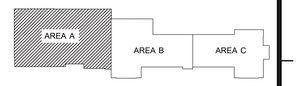
(22) 3" RISER UP TO SECOND FLOOR. REFER TO DRAWING FP-103.1 FOR CONTINUATION.

(23) 3" RISER DOWN TO SECOND FLOOR. REFER TO DRAWING FP-103.1 FOR CONTINUATION.



1 FP 100.1 **FIRST FLOOR AREA A FIRE PROTECTION PLAN - ALTERNATE FP-1**
SCALE: 1/8"=1'-0"

KEY PLAN:



KEY PLAN
SCALE: NOT TO SCALE

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FIRST FLOOR AREA A FIRE PROTECTION PLAN - ALTERNATE FP-1

BUILDING	SHEET NUMBER
MS	FP-100.1
	RE-BID

GENERAL NOTES:

1. REFER TO DRAWING FP-100. ALL BASE-BID NOTES AND WORK FROM DRAWING FP-100 APPLIES TO ALTERNATE FP-2, WITH ADDITIONAL WORK AS INDICATED ON THIS DRAWING TO PROVIDE PROTECTION OF THE PLATFORM AREA
2. PROVIDE SPRINKLER PROTECTION WITHIN THE PLATFORM AREA PER NFPA-13. PROVIDE TWO (2) LEVELS OF PROTECTION (ONLY ONE LEVEL OF PROTECTION AT THE ROOF LEVEL SHOWN ON PLANS FOR CLARITY. PROVIDE ONE LEVEL OF SPRINKLER PROTECTION AT THE ROOF LEVEL AND A SECOND LEVEL OF PROTECTION BELOW THE RAISED FLOOR.
3. THE ROOF LEVEL SPRINKLER SYSTEM PROTECTING THE PLATFORM IS DEFINED AS LIGHT HAZARD PER NFPA-13, HOWEVER AN ORDINARY HAZARD GROUP 1 SPRINKLER SYSTEM WILL BE PROVIDED. THE PLATFORM SPRINKLER SYSTEM SHALL BE HYDRAULICALLY CALCULATED TO PROVIDE A MINIMUM DESIGN DENSITY OF 0.15 GPM/SF OVER A DESIGN AREA OF THE ENTIRE PLATFORM.
4. THE SPACE BELOW THE PLATFORM WILL BE UTILIZED FOR GENERAL STORAGE (TABLES AND CHAIRS). THE SPRINKLER SYSTEM BELOW PLATFORM SHALL BE DESIGNED TO PROTECT AN ORDINARY HAZARD GROUP 1 OCCUPANCY. THE SPRINKLER LAYOUT BELOW THE PLATFORM SHALL MATCH THE SAME LAYOUT AS THE ROOF LEVEL OF SPRINKLER LOCATIONS, PIPE SIZING AND PIPE ROUTING. PROVIDE HEAD GUARDS ON ALL SPRINKLERS INSTALLED BELOW THE PLATFORM.

KEYED NOTES:

(4) 2" RISER NIPPLE THROUGHOUT FIRST FLOOR, AS NEEDED BASED ON CONTRACTOR'S SHOP DRAWING LAYOUT. (TYPICAL)

(5) 4" RISER FOR SPRINKLER MAIN ELEVATION CHANGE.

(6) 2-1/2" RISER FOR ELEVATION CHANGE WITHIN LOBBY 101 DUE TO CEILING CONFIGURATION. (TYPICAL)

(7) 4" RISER UP TO SECOND FLOOR. REFER TO DRAWING FP-103 FOR CONTINUATION.

(8) 3" DROP FED FROM ROOF LEVEL SPRINKLER SYSTEM WITHIN GYMNASIUM.

(9) SPRINKLER PROTECTION NOT REQUIRED WITHIN ELEVATOR MACHINE ROOM PER NFPA-13. ELEVATOR IS ELECTRIC TRACTION TYPE PASSENGER ELEVATOR AND THE ELEVATOR MACHINE ROOM WILL BE FIRE RATED AND SEPARATED FROM THE REMAINDER OF THE BUILDING.

(10) SPRINKLER PROTECTION NOT REQUIRED WITHIN ELEVATOR SHAFT PER NFPA-13. ELEVATOR IS ELECTRIC TRACTION TYPE PASSENGER ELEVATOR AND THE ELEVATOR HOISTWAY WILL BE NON-COMBUSTIBLE.

(11) SPRINKLER PROTECTION NOT REQUIRED BELOW NON-COMBUSTIBLE OVERHANG ON BUILDING EXTERIOR PER NFPA-13. STORAGE BENEATH OVERHANG NOT PERMITTED.

(17) PROVIDE ADDITIONAL SPRINKLER PROTECTION BELOW BOTTOM LANDING OF STAIRWELLS PER NFPA-13 REQUIREMENTS.

(18) GYMNASIUM ROOF LEVEL SPRINKLER PROTECTION. SHOWN ON DRAWING FP-100.2 FOR ALTERNATE FP-2. SHOWN ON DRAWING FP-106 FOR BASE-BID DRAWINGS.

(19) 4" RISER DOWN TO SECOND FLOOR. REFER TO DRAWING FP-103 FOR CONTINUATION.

(20) 4" PIPING FROM GYMNASIUM ROOF LEVEL DOWN TO ROOF LEVEL OF PLATFORM.

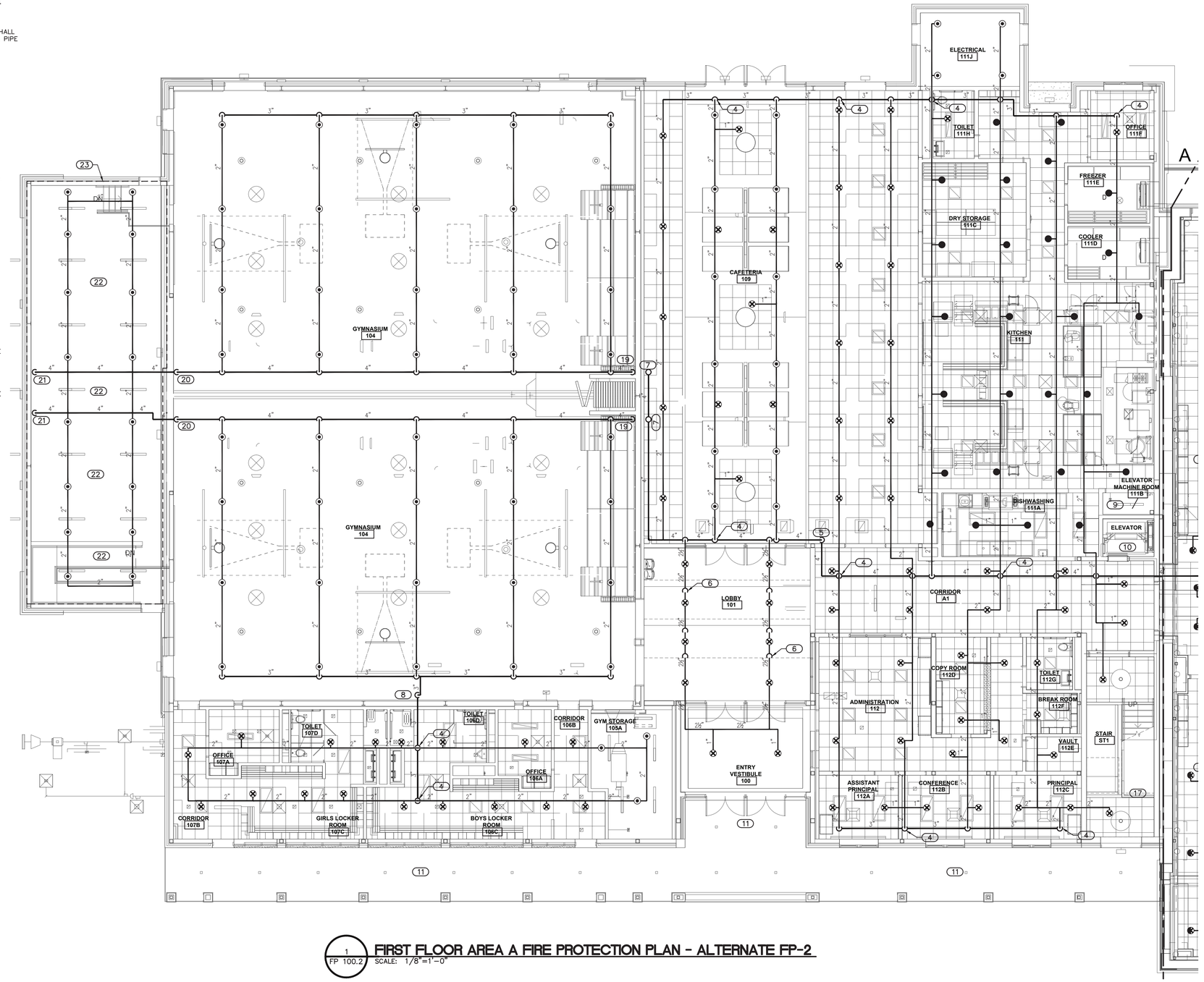
(21) 4" PIPING FROM PLATFORM ROOF LEVEL DOWN TO SPRINKLER PROTECTION IN SUB-FLOOR SPACE BENEATH PLATFORM.

(22) PROVIDE TWO (2) LEVELS OF SPRINKLER PROTECTION. PROVIDE ONE LEVEL OF PROTECTION AT THE PLATFORM ROOF LEVEL AND ONE LEVEL OF PROTECTION IN THE SUB-FLOOR SPACE BENEATH THE PLATFORM. PROVIDE ADDITIONAL SPRINKLER PROTECTION THROUGHOUT PLATFORM PER NFPA-13 REQUIREMENTS WHERE DUCTWORK OBSTRUCTS SPRINKLER DISCHARGE PER NFPA-13. PROVIDE HEAD GUARDS ON ALL SPRINKLERS LOCATED BENEATH DUCTWORK AND OTHER OBSTRUCTIONS.

(23) OUTLINE OF HYDRAULIC REMOTE AREA FOR ALTERNATE FP-2 HYDRAULIC CALCULATION. THE CONTRACTOR SHALL PROVIDE A HYDRAULIC CALCULATION OF THIS REMOTE AREA FOR REVIEW WITH THE SHOP DRAWING AND HYDRAULIC CALCULATIONS SUBMISSION.

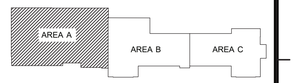
Hydraulic Calculation Data
Design Area Number: Alternate FP-2 Hydraulic Calculation Design Area Location: Platform Hazard/Occupancy: Ordinary Hazard Group 1 Design Density: 0.15 GPM/SF Design Area: 1,375 SF Number of Sprinklers in Design Area:16
System Flow: 491.8 gpm System Pressure:29.2 psi Hose Allowance: 250 gpm

SYSTEM HAS A SYSTEM SAFETY FACTOR OF 11.5 PSI.



1 FP 100.2 **FIRST FLOOR AREA A FIRE PROTECTION PLAN - ALTERNATE FP-2**
SCALE: 1/8"=1'-0"

KEY PLAN:



KEY PLAN
SCALE:NOT TO SCALE

SED CONTROL NO. 27-01-00-01-0-024-009

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Port PRIDE

RAN FIRE PROTECTION ENGINEERING

PORT JERVIS CITY SCHOOL DISTRICT
RENOVATIONS TO:
PORT JERVIS MIDDLE SCHOOL
Port Jervis - Orange County - New York

REV	DATE	DESCRIPTION

DRAWN BY	PROJECT NUMBER
CMC	2019-011 PH1
CHECKED BY	DATE
DRN	11/12/2021

FIRST FLOOR AREA A FIRE PROTECTION PLAN - ALTERNATE FP-2

BUILDING	SHEET NUMBER
MS	FP-100.2
	RE-BID

Hydraulic Calculation Data
Design Area Number: First Floor Hydraulic Calculation #6 Design Area Location: General Storage 124 Hazard/Occupancy: Light Hazard and Ordinary Hazard 1 Design Density: 0.15 GPM/SF Design Area: 1,046 SF Number of Sprinklers in Design Area:12
System Flow: 440.5 gpm System Pressure:27.3 psi Hose Allowance: 250 gpm

SYSTEM HAS A SYSTEM SAFETY FACTOR OF 14.8 PSI.

Hydraulic Calculation Data
Design Area Number: First Floor Hydraulic Calculation #7 Design Area Location: Nurse's Office 122 Hazard/Occupancy: Light Hazard Design Density: 0.10 GPM/SF Design Area: 1,037 SF Number of Sprinklers in Design Area:15
System Flow: 391.5 gpm System Pressure:31.8 psi Hose Allowance: 100 gpm

SYSTEM HAS A SYSTEM SAFETY FACTOR OF 11.43 PSI. CALCULATED FOR CONCEALED SPACE ABOVE CEILING.

GENERAL NOTES:

1. REFER TO ARCHITECTURAL DRAWINGS FOR CEILING HEIGHTS AND CONSTRUCTION TYPE.
2. THE SPRINKLER SYSTEM SHALL BE DESIGNED TO PROTECT THE HAZARD CLASSIFICATIONS PER NFPA-13, AS NOTED IN THE HYDRAULIC CALCULATION NOTES ON DRAWINGS FP-003 AND FP-004.
3. THE BASIS OF DESIGN SPRINKLER LAYOUT IS BASED ON THE INSTALLATION OF BLACK STEEL PIPE. CPVC PIPING IS NOT PERMITTED.
4. ALL HANGERS SHALL BE INSTALLED PER NFPA-13. ALL PIPE HANGER AND SUPPORT EQUIPMENT SHALL BE LISTED IN ACCORDANCE WITH NFPA-13 REQUIREMENTS.
5. DRAWINGS DO NOT INDICATE ALL REQUIRED LOCATIONS OF SPRINKLERS BELOW OBSTRUCTIONS SUCH AS DUCTWORK, MECHANICAL EQUIPMENT, ETC. PROVIDE ADDITIONAL SPRINKLERS BELOW EXPOSED DUCTWORK PER NFPA-13 REQUIREMENTS WHICH CREATE AN OBSTRUCTION TO CEILING LEVEL SPRINKLER DISCHARGE. COORDINATION OF AND INSTALLATION OF ALL REQUIRED SPRINKLERS BELOW DUCTWORK SHALL INCLUDED AS PART OF THE BASE-BID CONTRACT.
6. PROVIDE FINAL COORDINATION WITH THE HVAC SYSTEMS AND ALL TRADES AS REQUIRED BY NFPA-13. PROVIDE FULLY COORDINATED LAYOUT SHOWN ON THE SHOP DRAWINGS INCLUDING, BUT NOT LIMITED TO, SHOWING DUCTWORK AND REFLECTIVE CEILING PLAN LOCATIONS ON THE SUBMITTED SHOP DRAWINGS. COORDINATE SPRINKLER LOCATIONS WITH CLEARANCES TO LIGHTS PER NFPA-13 REQUIREMENTS.
7. THE BUILDING WILL CONTAIN SUSPENDED LIGHTS. ALL LIGHTS SHALL BE SUSPENDED A MINIMUM OF 20" BELOW THE CEILING FROM THE DROP CEILING LEVEL TO THE TOPS OF LIGHTS, SUCH THAT ADEQUATE VERTICAL CLEARANCE IS PROVIDED BETWEEN THE SPRINKLER DEFLECTORS AND THE TOP OF THE LIGHTS SUCH THAT THE LIGHTING IS NOT CONSIDERED AN OBSTRUCTION TO NFPA-13. CONTRACT SHALL COORDINATE REQUIREMENTS FOR SUSPENDED LIGHTS WITH APPLICABLE TRADES TO ENSURE ALL SUSPENDED LIGHTING IS INSTALLED AT THE CORRECT ELEVATION.
8. THE CONTRACTOR SHALL PROVIDE SPRINKLER PROTECTION THROUGHOUT ALL COMBUSTIBLE CONCEALED SPACES AS PART OF THE BASE-BID CONTRACT, AS DESCRIBED ON DRAWING FP-001.
9. FIRESTOP ALL PENETRATION ITEMS THROUGH ALL FLOOR AND WALL PENETRATIONS MADE AS PART OF THIS CONTRACT. FIRESTOP ALL THROUGH-PENETRATIONS FOR A 2-HOUR FIRE RESISTANCE ASSEMBLY RATING.
10. THE BUILDING IS PROTECTED BY A WET PIPE SPRINKLER SYSTEM. ALL PORTIONS OF THE BUILDING SHALL BE HEATED TO MAINTAIN TEMPERATURES GREATER THAN 40 DEGREES FAHRENHEIT THROUGHOUT. ADEQUATE HEAT SHALL BE PROVIDED BY THE OWNER.
11. THE BUILDING IS PROTECTED WITH A WET PIPE SYSTEM THROUGHOUT. CONTRACTOR SHALL ENSURE ALL WET SPRINKLER PIPING IS INSTALLED WITHIN THE HEATED BUILDING ENVELOPE.

KEYED NOTES:

(4) 2" RISER NIPPLE THROUGHOUT FIRST FLOOR, AS NEEDED BASED ON CONTRACTOR'S SHOP DRAWING LAYOUT. (TYPICAL)

(9) SPRINKLER PROTECTION NOT REQUIRED WITHIN ELEVATOR MACHINE ROOM PER NFPA-13. ELEVATOR IS ELECTRIC TRACTION TYPE PASSENGER ELEVATOR AND THE ELEVATOR MACHINE ROOM WILL BE FIRE RATED AND SEPARATED FROM THE REMAINDER OF THE BUILDING.

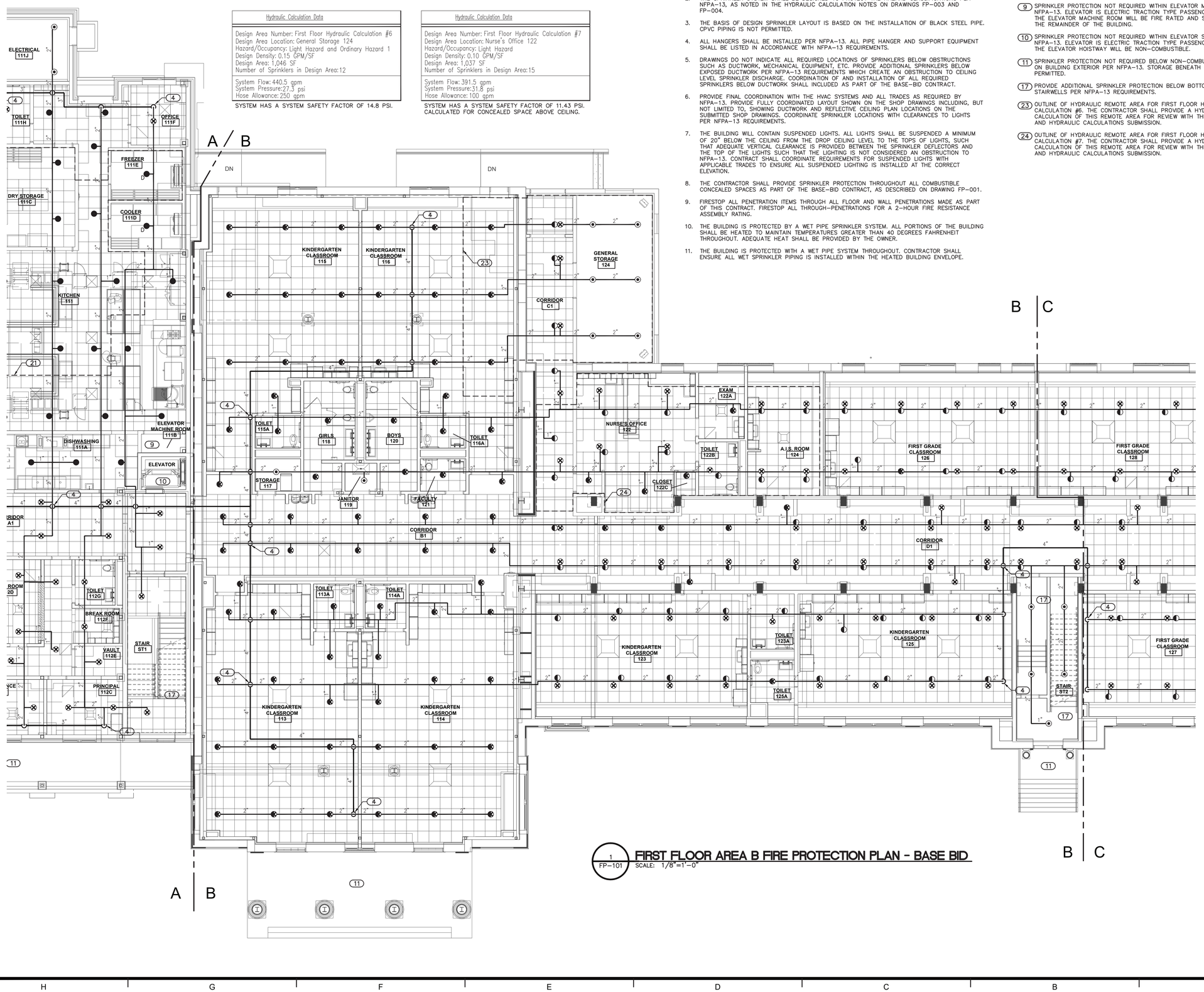
(10) SPRINKLER PROTECTION NOT REQUIRED WITHIN ELEVATOR SHAFT PER NFPA-13. ELEVATOR IS ELECTRIC TRACTION TYPE PASSENGER ELEVATOR AND THE ELEVATOR HOISTWAY WILL BE NON-COMBUSTIBLE.

(11) SPRINKLER PROTECTION NOT REQUIRED BELOW NON-COMBUSTIBLE OVERHANG ON BUILDING EXTERIOR PER NFPA-13. STORAGE BENEATH OVERHANG NOT PERMITTED.

(17) PROVIDE ADDITIONAL SPRINKLER PROTECTION BELOW BOTTOM LANDING OF STAIRWELLS PER NFPA-13 REQUIREMENTS.

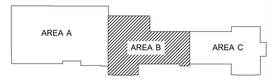
(23) OUTLINE OF HYDRAULIC REMOTE AREA FOR FIRST FLOOR HYDRAULIC CALCULATION #6. THE CONTRACTOR SHALL PROVIDE A HYDRAULIC CALCULATION OF THIS REMOTE AREA FOR REVIEW WITH THE SHOP DRAWING AND HYDRAULIC CALCULATIONS SUBMISSION.

(24) OUTLINE OF HYDRAULIC REMOTE AREA FOR FIRST FLOOR HYDRAULIC CALCULATION #7. THE CONTRACTOR SHALL PROVIDE A HYDRAULIC CALCULATION OF THIS REMOTE AREA FOR REVIEW WITH THE SHOP DRAWING AND HYDRAULIC CALCULATIONS SUBMISSION.



1 FP-101 **FIRST FLOOR AREA B FIRE PROTECTION PLAN - BASE BID**
SCALE: 1/8"=1'-0"

KEY PLAN:



KEY PLAN
SCALE:NOT TO SCALE

SED CONTROL NO. 27-01-00-01-0-024-009

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Port Jervis - Orange County - New York

REV	DATE	DESCRIPTION

DRAWN BY CMC	PROJECT NUMBER 2019-011 PH1
CHECKED BY DRN	DATE 11/12/2021

FIRST FLOOR AREA B FIRE PROTECTION PLAN - BASE BID

BUILDING	SHEET NUMBER
MS	FP-101 RE-BID

GENERAL NOTES:

1. REFER TO ARCHITECTURAL DRAWINGS FOR CEILING HEIGHTS AND CONSTRUCTION TYPE.
2. THE SPRINKLER SYSTEM SHALL BE DESIGNED TO PROTECT THE HAZARD CLASSIFICATIONS PER NFPA-13, AS NOTED IN THE HYDRAULIC CALCULATION NOTES ON DRAWINGS FP-003 AND FP-004.
3. THE BASIS OF DESIGN SPRINKLER LAYOUT IS BASED ON THE INSTALLATION OF BLACK STEEL PIPE. CPVC PIPING IS NOT PERMITTED.
4. ALL HANGERS SHALL BE INSTALLED PER NFPA-13. ALL PIPE HANGER AND SUPPORT EQUIPMENT SHALL BE LISTED IN ACCORDANCE WITH NFPA-13 REQUIREMENTS.
5. DRAWINGS DO NOT INDICATE ALL REQUIRED LOCATIONS OF SPRINKLERS BELOW OBSTRUCTIONS SUCH AS DUCTWORK, MECHANICAL EQUIPMENT, ETC. PROVIDE ADDITIONAL SPRINKLERS BELOW EXPOSED DUCTWORK PER NFPA-13 REQUIREMENTS WHICH CREATE AN OBSTRUCTION TO CEILING LEVEL SPRINKLER DISCHARGE. COORDINATION OF AND INSTALLATION OF ALL REQUIRED SPRINKLERS BELOW DUCTWORK SHALL INCLUDED AS PART OF THE BASE-BID CONTRACT.
6. PROVIDE FINAL COORDINATION WITH THE HVAC SYSTEMS AND ALL TRADES AS REQUIRED BY NFPA-13. PROVIDE FULLY COORDINATED LAYOUT SHOWN ON THE SHOP DRAWINGS INCLUDING, BUT NOT LIMITED TO, SHOWING DUCTWORK AND REFLECTIVE CEILING PLAN LOCATIONS ON THE SUBMITTED SHOP DRAWINGS. COORDINATE SPRINKLER LOCATIONS WITH CLEARANCES TO LIGHTS PER NFPA-13 REQUIREMENTS.
7. THE BUILDING WILL CONTAIN SUSPENDED LIGHTS. ALL LIGHTS SHALL BE SUSPENDED A MINIMUM OF 20" BELOW THE CEILING FROM THE DROP CEILING LEVEL TO THE TOPS OF LIGHTS, SUCH THAT ADEQUATE VERTICAL CLEARANCE IS PROVIDED BETWEEN THE SPRINKLER DEFLECTORS AND THE TOP OF THE LIGHTS SUCH THAT THE LIGHTING IS NOT CONSIDERED AN OBSTRUCTION TO NFPA-13. CONTRACT SHALL COORDINATE REQUIREMENTS FOR SUSPENDED LIGHTS WITH APPLICABLE TRADES TO ENSURE ALL SUSPENDED LIGHTING IS INSTALLED AT THE CORRECT ELEVATION.
8. THE CONTRACTOR SHALL PROVIDE SPRINKLER PROTECTION THROUGHOUT ALL COMBUSTIBLE CONCEALED SPACES AS PART OF THE BASE-BID CONTRACT, AS DESCRIBED ON DRAWING FP-001.
9. FIRESTOP ALL PENETRATION ITEMS THROUGH ALL FLOOR AND WALL PENETRATIONS MADE AS PART OF THIS CONTRACT. FIRESTOP ALL THROUGH-PENETRATIONS FOR A 2-HOUR FIRE RESISTANCE ASSEMBLY RATING.
10. THE BUILDING IS PROTECTED BY A WET PIPE SPRINKLER SYSTEM. ALL PORTIONS OF THE BUILDING SHALL BE HEATED TO MAINTAIN TEMPERATURES GREATER THAN 40 DEGREES FAHRENHEIT THROUGHOUT. ADEQUATE HEAT SHALL BE PROVIDED BY THE OWNER.
11. THE BUILDING IS PROTECTED WITH A WET PIPE SYSTEM THROUGHOUT. CONTRACTOR SHALL ENSURE ALL WET SPRINKLER PIPING IS INSTALLED WITHIN THE HEATED BUILDING ENVELOPE.

KEYED NOTES:

(1) REFER TO DETAIL 1 ON DRAWING FP-001 FOR SCHEMATIC FIRE PROTECTION WATER SERVICE ENTRANCE AND EQUIPMENT.

(2) 6" RISER UP TO SECOND FLOOR SPRINKLER SYSTEM. COORDINATE ROUTING WITHIN CHASE WITH MECHANICAL EQUIPMENT AND APPLICABLE TRADES. REFER TO DRAWING FP-105 FOR CONTINUATION.

(3) 6" RISER UP TO THIRD FLOOR SPRINKLER SYSTEM. COORDINATE ROUTING WITHIN CHASE WITH MECHANICAL EQUIPMENT AND APPLICABLE TRADES. REFER TO DRAWING FP-108 FOR CONTINUATION.

(4) 2" RISER NIPPLE THROUGHOUT FIRST FLOOR, AS NEEDED BASED ON CONTRACTOR'S SHOP DRAWING LAYOUT. (TYPICAL)

(11) SPRINKLER PROTECTION NOT REQUIRED BELOW NON-COMBUSTIBLE OVERHANG ON BUILDING EXTERIOR PER NFPA-13. STORAGE BENEATH OVERHANG NOT PERMITTED.

(12) DROP 6" PIPING DOWN TO TEST HEADER ALONG EXTERIOR WALL. PROVIDE SOFFIT/CHASE TO CONCEAL DROP PIPING BELOW THE MAIN CEILING LEVEL. COORDINATE WITH APPLICABLE TRADES.

(13) TEST HEADER FOR FLOW TESTING OF BACKFLOW PREVENTER PER NFPA-13. PROVIDE A MINIMUM OF TWO 2-1/2" HOSE VALVES WITH CAPS AND CHAINS.

(14) DROP 4" PIPING DOWN TO FDC ALONG EXTERIOR WALL. PROVIDE SOFFIT/CHASE TO CONCEAL DROP PIPING BELOW THE MAIN CEILING LEVEL. COORDINATE WITH APPLICABLE TRADES.

(15) FIRE DEPARTMENT CONNECTION (FDC). CONTRACTOR SHALL COORDINATE THE FINAL TYPE AND LOCATION OF THE FDC WITH THE LOCAL FIRE DEPARTMENT.

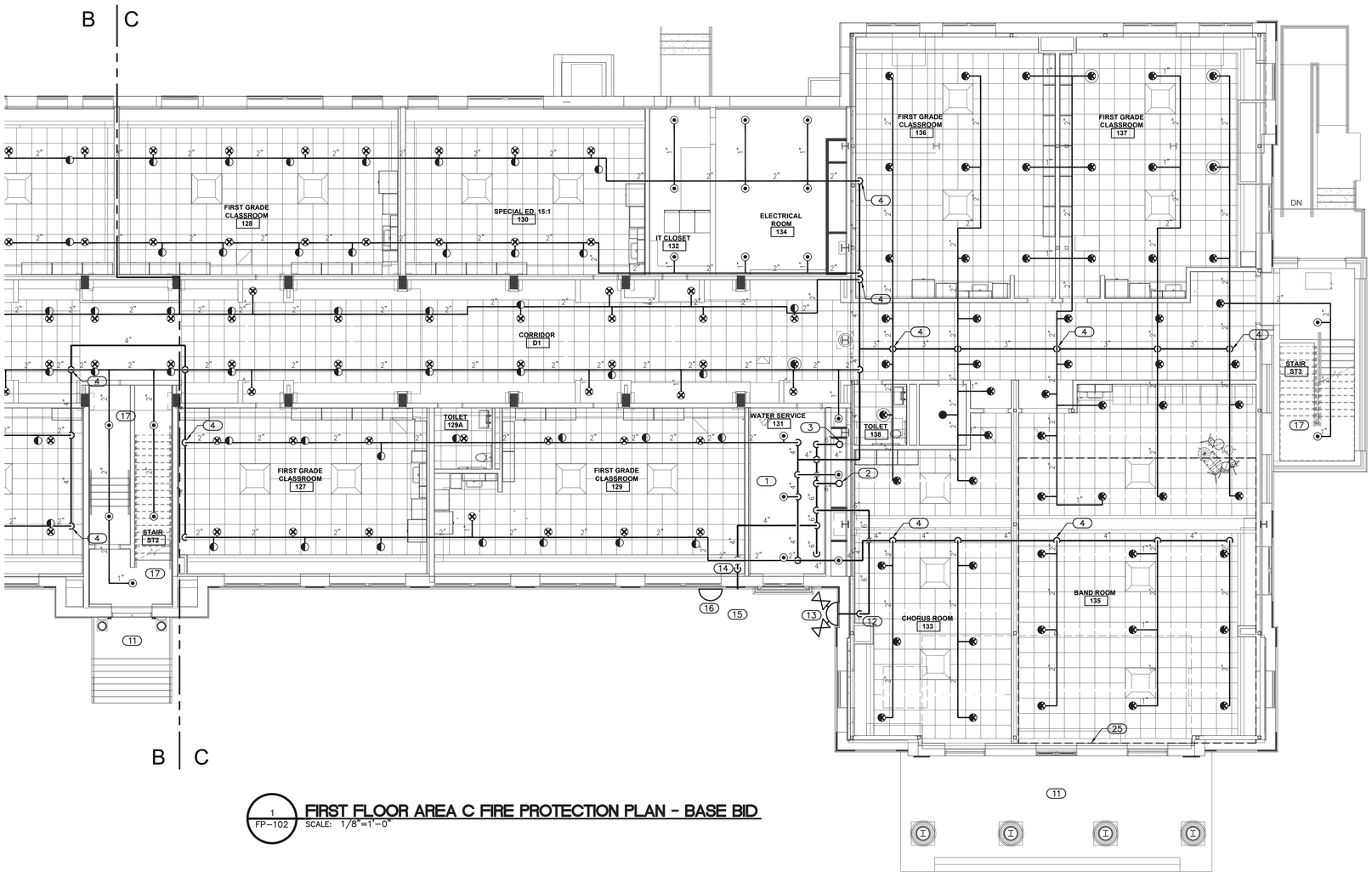
(16) WEATHERPROOF ELECTRIC ALARM GONG. MOUNT ON BUILDING EXTERIOR ADJACENT TO FDC. ALARM GONG SHALL BE PROGRAMMED THROUGH THE FIRE ALARM SYSTEM TO ANNUNCIATE UPON ACTIVATION OF ANY SPRINKLER SYSTEM WATER FLOW SWITCH.

(17) PROVIDE ADDITIONAL SPRINKLER PROTECTION BELOW BOTTOM LANDING OF STAIRWELLS PER NFPA-13 REQUIREMENTS.

(25) OUTLINE OF HYDRAULIC REMOTE AREA FOR FIRST FLOOR HYDRAULIC CALCULATION #8. THE CONTRACTOR SHALL PROVIDE A HYDRAULIC CALCULATION OF THIS REMOTE AREA FOR REVIEW WITH THE SHOP DRAWING AND HYDRAULIC CALCULATIONS SUBMISSION.

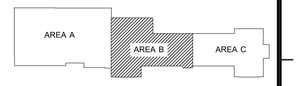
Hydraulic Calculation Data
Design Area Number: First Floor Hydraulic Calculation #8 Design Area Location: Band Room 135 Hazard/Occupancy: Light Hazard Design Density: 0.10 GPM/SF Design Area: 1,170 SF Number of Sprinklers in Design Area:13
System Flow: 298.8 gpm System Pressure:24.5 psi Hose Allowance: 100 gpm

SYSTEM HAS A SYSTEM SAFETY FACTOR OF 20.6 PSI.



1 / FP-102 FIRST FLOOR AREA C FIRE PROTECTION PLAN - BASE BID
SCALE: 1/8"=1'-0"

KEY PLAN:



KEY PLAN
SCALE:NOT TO SCALE

SED CONTROL NO. 27-01-00-01-0-024-009

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PORT JERVIS CITY SCHOOL DISTRICT
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Port Jervis - Orange County - New York

REV	DATE	DESCRIPTION

DRAWN BY CMC	PROJECT NUMBER 2019-011 PH1
CHECKED BY DRN	DATE 11/12/2021

FIRST FLOOR AREA C FIRE PROTECTION PLAN - BASE BID

BUILDING	SHEET NUMBER
MS	FP-102 RE-BID

GENERAL NOTES:

1. REFER TO ARCHITECTURAL DRAWINGS FOR CEILING HEIGHTS AND CONSTRUCTION TYPE.
2. THE SPRINKLER SYSTEM SHALL BE DESIGNED TO PROTECT THE HAZARD CLASSIFICATIONS PER NFPA-13, AS NOTED IN THE HYDRAULIC CALCULATION NOTES ON DRAWINGS FP-003 AND FP-004.
3. THE BASIS OF DESIGN SPRINKLER LAYOUT IS BASED ON THE INSTALLATION OF BLACK STEEL PIPE. CPVC PIPING IS NOT PERMITTED.
4. ALL HANGERS SHALL BE INSTALLED PER NFPA-13. ALL PIPE HANGER AND SUPPORT EQUIPMENT SHALL BE LISTED IN ACCORDANCE WITH NFPA-13 REQUIREMENTS.
5. DRAWINGS DO NOT INDICATE ALL REQUIRED LOCATIONS OF SPRINKLERS BELOW OBSTRUCTIONS SUCH AS DUCTWORK, MECHANICAL EQUIPMENT, ETC. PROVIDE ADDITIONAL SPRINKLERS BELOW EXPOSED DUCTWORK PER NFPA-13 REQUIREMENTS WHICH CREATE AN OBSTRUCTION TO CEILING LEVEL SPRINKLER DISCHARGE. COORDINATION OF AND INSTALLATION OF ALL REQUIRED SPRINKLERS BELOW DUCTWORK SHALL INCLUDED AS PART OF THE BASE-BID CONTRACT.
6. PROVIDE FINAL COORDINATION WITH THE HVAC SYSTEMS AND ALL TRADES AS REQUIRED BY NFPA-13. PROVIDE FULLY COORDINATED LAYOUT SHOWN ON THE SHOP DRAWINGS INCLUDING, BUT NOT LIMITED TO, SHOWING DUCTWORK AND REFLECTIVE CEILING PLAN LOCATIONS ON THE SUBMITTED SHOP DRAWINGS. COORDINATE SPRINKLER LOCATIONS WITH CLEARANCES TO LIGHTS PER NFPA-13 REQUIREMENTS.
7. THE BUILDING WILL CONTAIN SUSPENDED LIGHTS. ALL LIGHTS SHALL BE SUSPENDED A MINIMUM OF 20" BELOW THE CEILING FROM THE DROP CEILING LEVEL TO THE TOPS OF LIGHTS, SUCH THAT ADEQUATE VERTICAL CLEARANCE IS PROVIDED BETWEEN THE SPRINKLER DEFLECTORS AND THE TOP OF THE LIGHTS SUCH THAT THE LIGHTING IS NOT CONSIDERED AN OBSTRUCTION TO NFPA-13. CONTRACT SHALL COORDINATE REQUIREMENTS FOR SUSPENDED LIGHTS WITH APPLICABLE TRADES TO ENSURE ALL SUSPENDED LIGHTING IS INSTALLED AT THE CORRECT ELEVATION.
8. THE CONTRACTOR SHALL PROVIDE SPRINKLER PROTECTION THROUGHOUT ALL COMBUSTIBLE CONCEALED SPACES AS PART OF THE BASE-BID CONTRACT, AS DESCRIBED ON DRAWING FP-001.
9. FIRESTOP ALL PENETRATION ITEMS THROUGH ALL FLOOR AND WALL PENETRATIONS MADE AS PART OF THIS CONTRACT. FIRESTOP ALL THROUGH-PENETRATIONS FOR A 2-HOUR FIRE RESISTANCE ASSEMBLY RATING.
10. THE BUILDING IS PROTECTED BY A WET PIPE SPRINKLER SYSTEM. ALL PORTIONS OF THE BUILDING SHALL BE HEATED TO MAINTAIN TEMPERATURES GREATER THAN 40 DEGREES FAHRENHEIT THROUGHOUT. ADEQUATE HEAT SHALL BE PROVIDED BY THE OWNER.
11. THE BUILDING IS PROTECTED WITH A WET PIPE SYSTEM THROUGHOUT. CONTRACTOR SHALL ENSURE ALL WET SPRINKLER PIPING IS INSTALLED WITHIN THE HEATED BUILDING ENVELOPE.

KEYED NOTES:

(2) SPRINKLER PROTECTION NOT REQUIRED WITHIN ELEVATOR SHAFT PER NFPA-13. ELEVATOR IS ELECTRIC TRACTION TYPE PASSENGER ELEVATOR AND THE ELEVATOR HOISTWAY WILL BE NON-COMBUSTIBLE.

(3) 4" PIPING DOWN TO FIRST FLOOR. REFER TO DRAWING FP-100 FOR CONTINUATION.

(4) 4" PIPING UP TO GYMNASIUM ROOF LEVEL (THIRD FLOOR PLAN) REFER TO DRAWING FP-106 FOR CONTINUATION.

(5) 2" RISER NIPPLE THROUGHOUT SECOND FLOOR, AS NEEDED BASED ON CONTRACTOR'S SHOP DRAWING LAYOUT. (TYPICAL)

(6) 6" RISER FOR SPRINKLER MAIN ELEVATION CHANGE.

(7) 2-1/2" RISER NIPPLE.

(8) PROVIDE ADDITIONAL SPRINKLERS BELOW DUCTWORK AND MECHANICAL EQUIPMENT OBSTRUCTIONS THROUGHOUT MECHANICAL ROOM PER NFPA-13 REQUIREMENTS.

(9) PIPING INSTALLED EXPOSED AT UNDERSIDE OF STAIRS.

(10) OUTLINE OF HYDRAULIC REMOTE AREA FOR SECOND FLOOR HYDRAULIC CALCULATION #1. THE CONTRACTOR SHALL PROVIDE A HYDRAULIC CALCULATION OF THIS REMOTE AREA FOR REVIEW WITH THE SHOP DRAWING AND HYDRAULIC CALCULATIONS SUBMISSION.

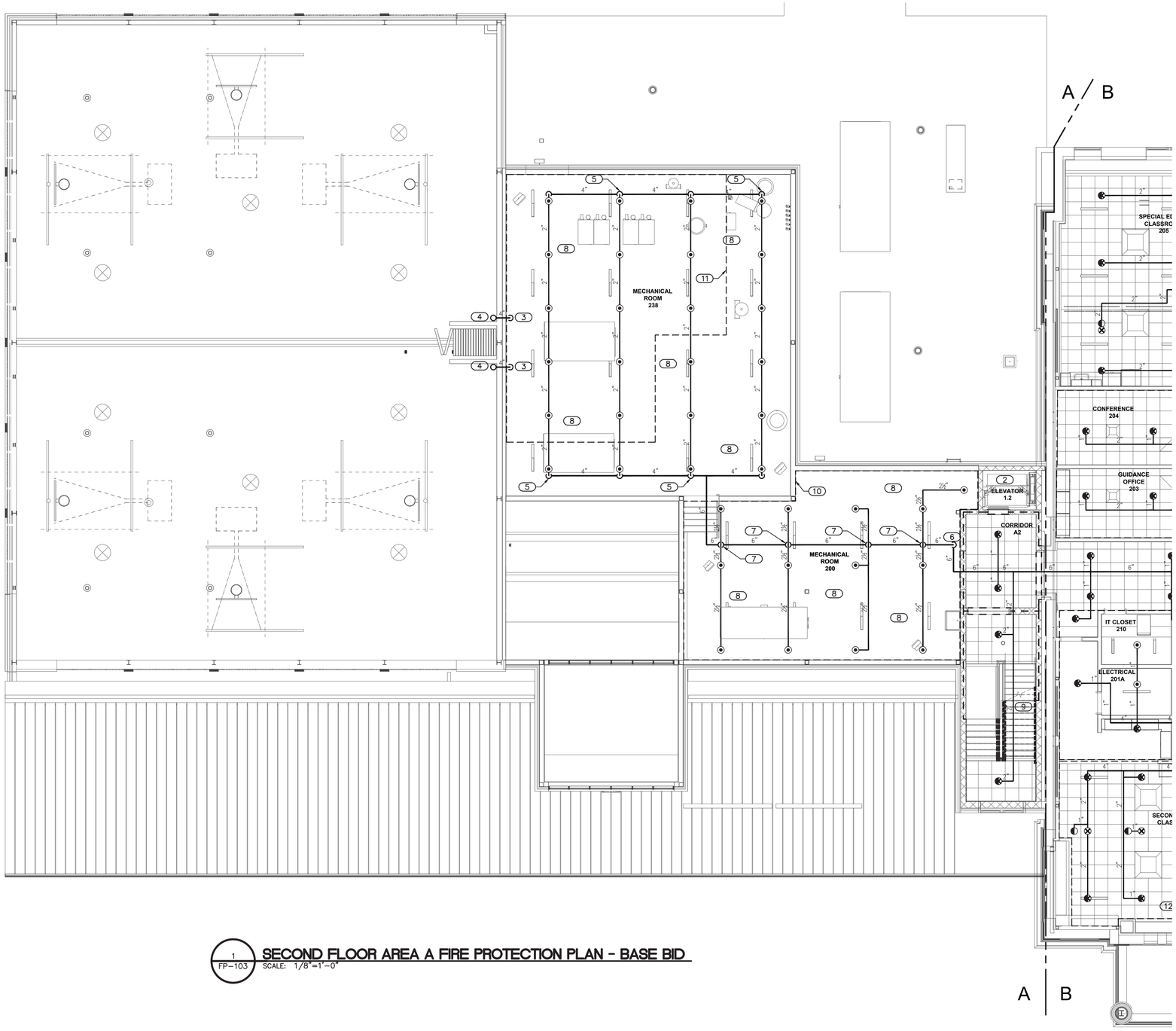
(11) OUTLINE OF HYDRAULIC REMOTE AREA FOR SECOND FLOOR HYDRAULIC CALCULATION #2. THE CONTRACTOR SHALL PROVIDE A HYDRAULIC CALCULATION OF THIS REMOTE AREA FOR REVIEW WITH THE SHOP DRAWING AND HYDRAULIC CALCULATIONS SUBMISSION.

Hydraulic Calculation Data
Design Area Number: Second Floor Hydraulic Calculation #1 Design Area Location: Mechanical Room 200 Hazard/Occupancy: Ordinary Hazard 1 Design Density: 0.15 GPM/SF Design Area: 1,091 SF Number of Sprinklers in Design Area: 13
System Flow: 507.0 gpm System Pressure: 34.0 psi Hose Allowance: 250 gpm

SYSTEM HAS A SYSTEM SAFETY FACTOR OF 6.37 PSI.

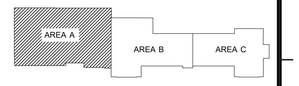
Hydraulic Calculation Data
Design Area Number: Second Floor Hydraulic Calculation #2 Design Area Location: Mechanical Room 238 Hazard/Occupancy: Ordinary Hazard 1 Design Density: 0.15 GPM/SF Design Area: 1,129 SF Number of Sprinklers in Design Area: 13
System Flow: 485.2 gpm System Pressure: 32.8 psi Hose Allowance: 250 gpm

SYSTEM HAS A SYSTEM SAFETY FACTOR OF 8.09 PSI.



1 / FP-103 **SECOND FLOOR AREA A FIRE PROTECTION PLAN - BASE BID**
SCALE: 1/8"=1'-0"

KEY PLAN:



KEY PLAN
SCALE: NOT TO SCALE

SED CONTROL NO. 27-01-00-01-0-024-009

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DRAWN BY	PROJECT NUMBER
CMC	2019-011 PH1
CHECKED BY	DATE
DRN	11/12/2021

SECOND FLOOR AREA A FIRE PROTECTION PLAN - BASE BID

BUILDING	SHEET NUMBER
MS	FP-103
	RE-BID

GENERAL NOTES:

1. REFER TO DRAWING FP-103. ALL BASE-BID NOTES AND WORK FROM DRAWING FP-103 APPLIES TO ALTERNATE FP-1, WITH ADDITIONAL WORK AS INDICATED ON THIS DRAWING TO PROVIDE PROTECTION OF THE EXTENDED MECHANICAL ROOM ABOVE THE PLATFORM AREA.

KEYED NOTES:

(2) SPRINKLER PROTECTION NOT REQUIRED WITHIN ELEVATOR SHAFT PER NFPA-13. ELEVATOR IS ELECTRIC TRACTION TYPE PASSENGER ELEVATOR AND THE ELEVATOR HOISTWAY WILL BE NON-COMBUSTIBLE.

(3) 4" PIPING DOWN TO FIRST FLOOR. REFER TO DRAWING FP-100.1 FOR CONTINUATION.

(4) 4" PIPING UP TO GYMNASIUM ROOF LEVEL. REFER TO DRAWING FP-100.1 FOR CONTINUATION.

(5) 2" RISER NIPPLE THROUGHOUT SECOND FLOOR, AS NEEDED BASED ON CONTRACTOR'S SHOP DRAWING LAYOUT. (TYPICAL)

(6) 6" RISER FOR SPRINKLER MAIN ELEVATION CHANGE.

(7) 2-1/2" RISER NIPPLE.

(8) PROVIDE ADDITIONAL SPRINKLERS BELOW DUCTWORK AND MECHANICAL EQUIPMENT OBSTRUCTIONS THROUGHOUT MECHANICAL ROOM PER NFPA-13 REQUIREMENTS.

(9) PIPING INSTALLED EXPOSED AT UNDERSIDE OF STAIRS.

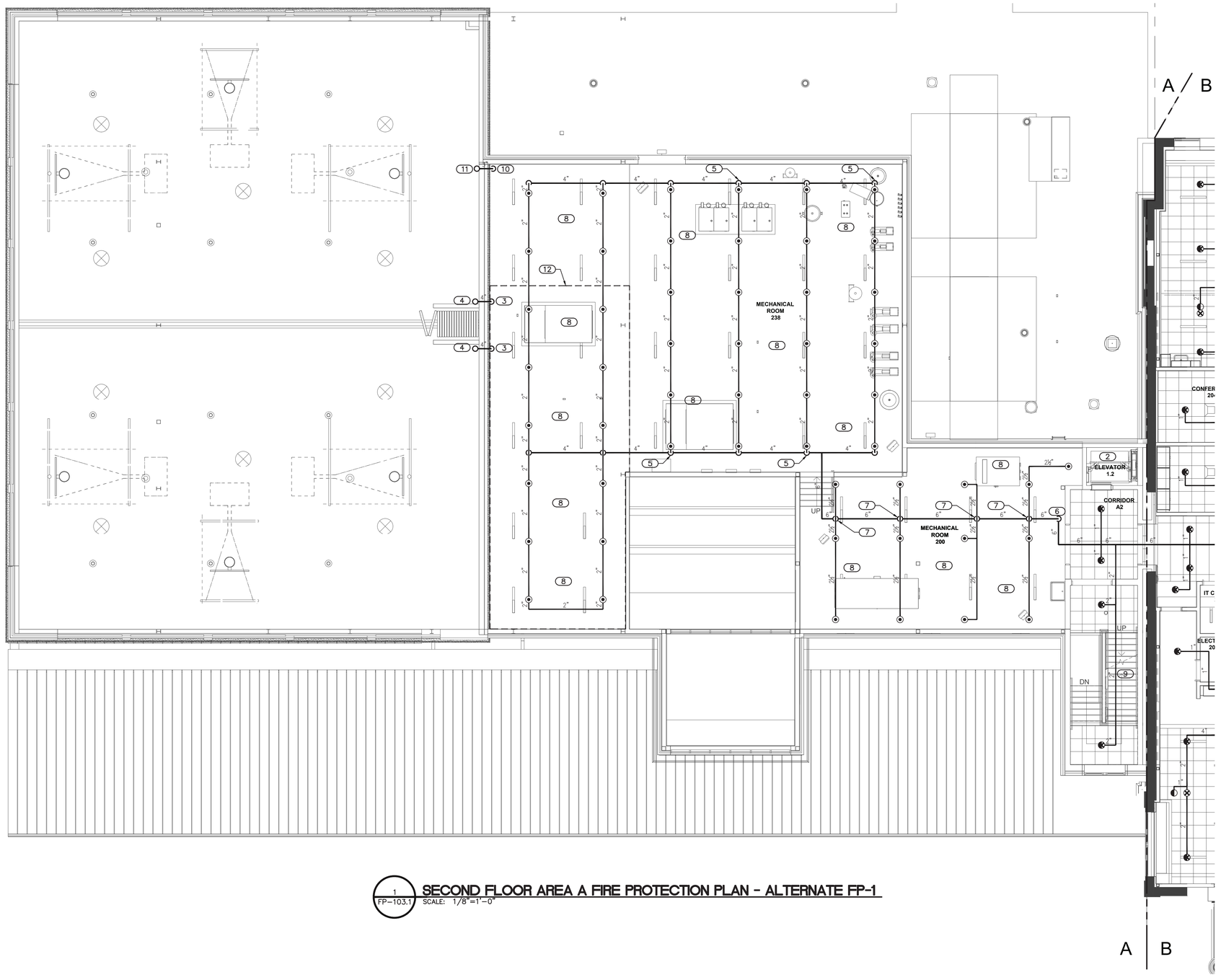
(10) 3" PIPING DOWN TO FIRST FLOOR. REFER TO DRAWING FP-100.1 FOR CONTINUATION.

(11) 3" PIPING UP TO GYMNASIUM ROOF LEVEL. REFER TO DRAWING FP-100.1 FOR CONTINUATION.

(12) OUTLINE OF HYDRAULIC REMOTE AREA FOR ALTERNATE FP-1 HYDRAULIC CALCULATION. THE CONTRACTOR SHALL PROVIDE A HYDRAULIC CALCULATION OF THIS REMOTE AREA FOR REVIEW WITH THE SHOP DRAWING AND HYDRAULIC CALCULATIONS SUBMISSION.

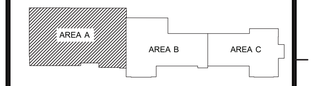
Hydraulic Calculation Data
Design Area Number: Alternate FP-1 Hydraulic Calculation Design Area Location: Mechanical Room 238 Hazard/Occupancy: Ordinary Hazard Group 1 Design Density: 0.15 GPM/SF Design Area: 1,135 SF Number of Sprinklers in Design Area: 12
System Flow: 467.5 gpm System Pressure: 32.5 psi Hose Allowance: 250 gpm

SYSTEM HAS A SYSTEM SAFETY FACTOR OF 8.9 PSI.



1 / FP-103.1 SECOND FLOOR AREA A FIRE PROTECTION PLAN - ALTERNATE FP-1
SCALE: 1/8"=1'-0"

KEY PLAN:



KEY PLAN
SCALE:NOT TO SCALE

SED CONTROL NO. 27-01-00-01-0-024-009

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CHECKED BY DRN	DATE 11/12/2021

SECOND FLOOR AREA A FIRE PROTECTION PLAN - ALTERNATE FP-1

BUILDING	SHEET NUMBER
MS	FP-103.1 RE-BID

Hydraulic Calculation Data
Design Area Number: Second Floor Hydraulic Calculation #3 Design Area Location: Second Grade Classrooms 201/202 Hazard/Occupancy: Light Hazard Design Density: 0.10 GPM/SF Design Area: 1,007 SF Number of Sprinklers in Design Area: 14
System Flow: 384.6 gpm System Pressure: 32.4 psi Hose Allowance: 100 gpm

SYSTEM HAS A SYSTEM SAFETY FACTOR OF 11.0 PSI.

Hydraulic Calculation Data
Design Area Number: Second Floor Hydraulic Calculation #4 Design Area Location: Second Floor Restrooms Hazard/Occupancy: Light Hazard Design Density: 0.10 GPM/SF Design Area: 1,057 SF Number of Sprinklers in Design Area: 12
System Flow: 368.6 gpm System Pressure: 35.9 psi Hose Allowance: 100 gpm

SYSTEM HAS A SYSTEM SAFETY FACTOR OF 7.8 PSI.

Hydraulic Calculation Data
Design Area Number: Second Floor Hydraulic Calculation #5 Design Area Location: Rooms 203,204,206,208,209 Hazard/Occupancy: Light Hazard Design Density: 0.10 GPM/SF Design Area: 1,078 SF Number of Sprinklers in Design Area: 12
System Flow: 479.5 gpm System Pressure: 33.3 psi Hose Allowance: 100 gpm

SYSTEM HAS A SYSTEM SAFETY FACTOR OF 7.8 PSI.

Hydraulic Calculation Data
Design Area Number: Second Floor Hydraulic Calculation #6 Design Area Location: Classroom 207 Hazard/Occupancy: Light Hazard Design Density: 0.10 GPM/SF Design Area: 1,012 SF Number of Sprinklers in Design Area: 12
System Flow: 340.3 gpm System Pressure: 31.4 psi Hose Allowance: 100 gpm

SYSTEM HAS A SYSTEM SAFETY FACTOR OF 12.9 PSI.

GENERAL NOTES:

1. REFER TO ARCHITECTURAL DRAWINGS FOR CEILING HEIGHTS AND CONSTRUCTION TYPE.
2. THE SPRINKLER SYSTEM SHALL BE DESIGNED TO PROTECT THE HAZARD CLASSIFICATIONS PER NFPA-13, AS NOTED IN THE HYDRAULIC CALCULATION NOTES ON DRAWINGS FP-003 AND FP-004.
3. THE BASIS OF DESIGN SPRINKLER LAYOUT IS BASED ON THE INSTALLATION OF BLACK STEEL PIPE. CPVC PIPING IS NOT PERMITTED.
4. ALL HANGERS SHALL BE INSTALLED PER NFPA-13. ALL PIPE HANGER AND SUPPORT EQUIPMENT SHALL BE LISTED IN ACCORDANCE WITH NFPA-13 REQUIREMENTS.
5. DRAWINGS DO NOT INDICATE ALL REQUIRED LOCATIONS OF SPRINKLERS BELOW OBSTRUCTIONS SUCH AS DUCTWORK, MECHANICAL EQUIPMENT, ETC. PROVIDE ADDITIONAL SPRINKLERS BELOW EXPOSED DUCTWORK PER NFPA-13 REQUIREMENTS WHICH CREATE AN OBSTRUCTION TO CEILING LEVEL SPRINKLER DISCHARGE. COORDINATION OF AND INSTALLATION OF ALL REQUIRED SPRINKLERS BELOW DUCTWORK SHALL INCLUDED AS PART OF THE BASE-BID CONTRACT.
6. PROVIDE FINAL COORDINATION WITH THE HVAC SYSTEMS AND ALL TRADES AS REQUIRED BY NFPA-13. PROVIDE FULLY COORDINATED LAYOUT SHOWN ON THE SHOP DRAWINGS INCLUDING, BUT NOT LIMITED TO, SHOWING DUCTWORK AND REFLECTIVE CEILING PLAN LOCATIONS ON THE SUBMITTED SHOP DRAWINGS. COORDINATE SPRINKLER LOCATIONS WITH CLEARANCES TO LIGHTS PER NFPA-13 REQUIREMENTS.
7. THE BUILDING WILL CONTAIN SUSPENDED LIGHTS. ALL LIGHTS SHALL BE SUSPENDED A MINIMUM OF 20" BELOW THE CEILING FROM THE DROP CEILING LEVEL TO THE TOPS OF LIGHTS, SUCH THAT ADEQUATE VERTICAL CLEARANCE IS PROVIDED BETWEEN THE SPRINKLER DEFLECTORS AND THE TOP OF THE LIGHTS SUCH THAT THE LIGHTING IS NOT CONSIDERED AN OBSTRUCTION TO NFPA-13. CONTRACT SHALL COORDINATE REQUIREMENTS FOR SUSPENDED LIGHTS WITH APPLICABLE TRADES TO ENSURE ALL SUSPENDED LIGHTING IS INSTALLED AT THE CORRECT ELEVATION.
8. THE CONTRACTOR SHALL PROVIDE SPRINKLER PROTECTION THROUGHOUT ALL COMBUSTIBLE CONCEALED SPACES AS PART OF THE BASE-BID CONTRACT, AS DESCRIBED ON DRAWING FP-001.
9. FIRESTOP ALL PENETRATION ITEMS THROUGH ALL FLOOR AND WALL PENETRATIONS MADE AS PART OF THIS CONTRACT. FIRESTOP ALL THROUGH-PENETRATIONS FOR A 2-HOUR FIRE RESISTANCE ASSEMBLY RATING.
10. THE BUILDING IS PROTECTED BY A WET PIPE SPRINKLER SYSTEM. ALL PORTIONS OF THE BUILDING SHALL BE HEATED TO MAINTAIN TEMPERATURES GREATER THAN 40 DEGREES FAHRENHEIT THROUGHOUT. ADEQUATE HEAT SHALL BE PROVIDED BY THE OWNER.
11. THE BUILDING IS PROTECTED WITH A WET PIPE SYSTEM THROUGHOUT. CONTRACTOR SHALL ENSURE ALL WET SPRINKLER PIPING IS INSTALLED WITHIN THE HEATED BUILDING ENVELOPE.

KEYED NOTES:

(2) SPRINKLER PROTECTION NOT REQUIRED WITHIN ELEVATOR SHAFT PER NFPA-13. ELEVATOR IS ELECTRIC TRACTION TYPE PASSENGER ELEVATOR AND THE ELEVATOR HOISTWAY WILL BE NON-COMBUSTIBLE.

(5) 2" RISER NIPPLE THROUGHOUT SECOND FLOOR, AS NEEDED BASED ON CONTRACTOR'S SHOP DRAWING LAYOUT. (TYPICAL)

(6) 6" RISER FOR SPRINKLER MAIN ELEVATION CHANGE.

(7) 2-1/2" RISER NIPPLE.

(8) PROVIDE ADDITIONAL SPRINKLERS BELOW DUCTWORK AND MECHANICAL EQUIPMENT OBSTRUCTIONS THROUGHOUT MECHANICAL ROOM PER NFPA-13 REQUIREMENTS.

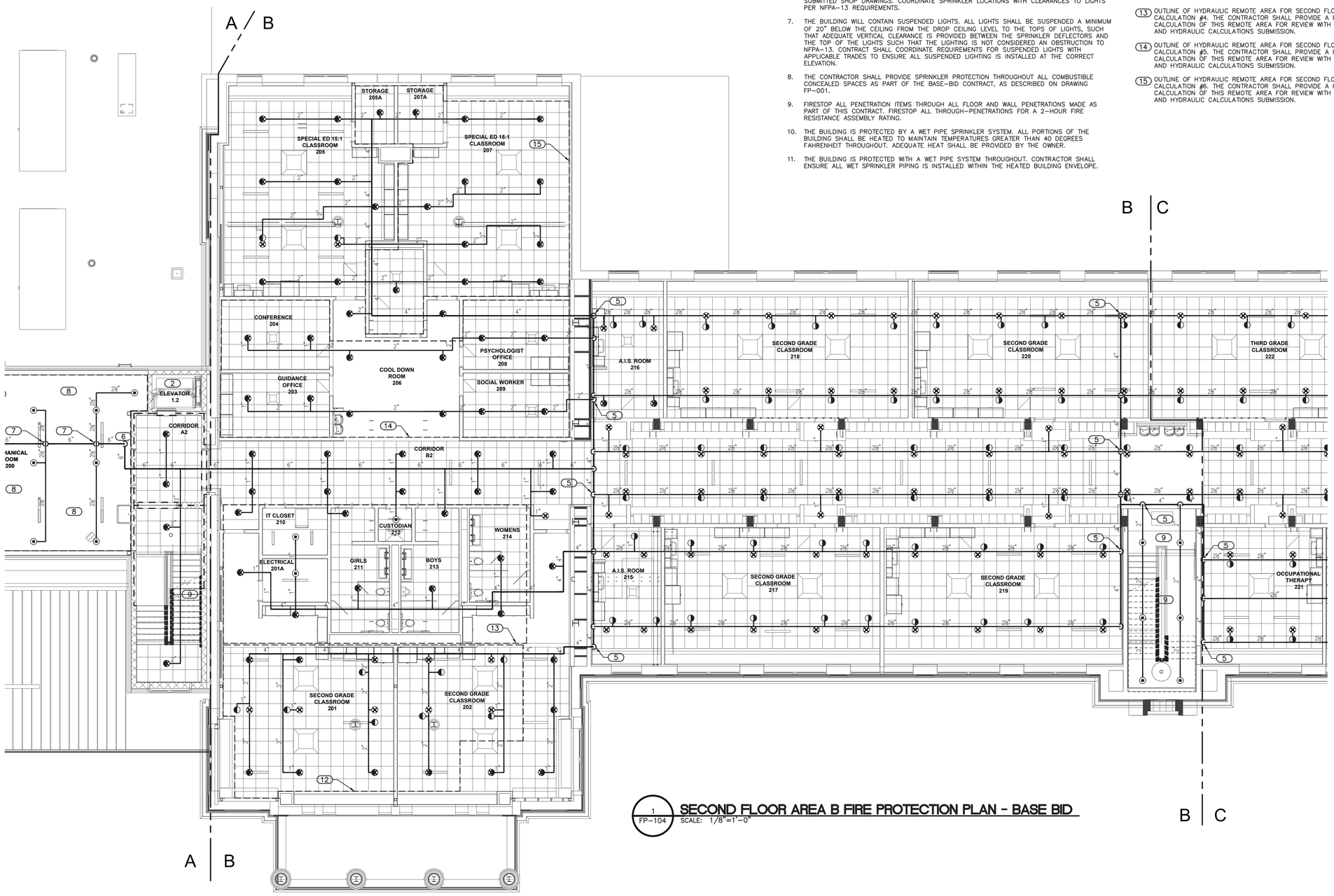
(9) PIPING INSTALLED EXPOSED AT UNDERSIDE OF STAIRS.

(12) OUTLINE OF HYDRAULIC REMOTE AREA FOR SECOND FLOOR HYDRAULIC CALCULATION #3. THE CONTRACTOR SHALL PROVIDE A HYDRAULIC CALCULATION OF THIS REMOTE AREA FOR REVIEW WITH THE SHOP DRAWING AND HYDRAULIC CALCULATIONS SUBMISSION.

(13) OUTLINE OF HYDRAULIC REMOTE AREA FOR SECOND FLOOR HYDRAULIC CALCULATION #4. THE CONTRACTOR SHALL PROVIDE A HYDRAULIC CALCULATION OF THIS REMOTE AREA FOR REVIEW WITH THE SHOP DRAWING AND HYDRAULIC CALCULATIONS SUBMISSION.

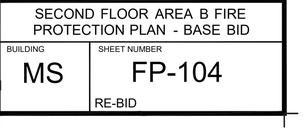
(14) OUTLINE OF HYDRAULIC REMOTE AREA FOR SECOND FLOOR HYDRAULIC CALCULATION #5. THE CONTRACTOR SHALL PROVIDE A HYDRAULIC CALCULATION OF THIS REMOTE AREA FOR REVIEW WITH THE SHOP DRAWING AND HYDRAULIC CALCULATIONS SUBMISSION.

(15) OUTLINE OF HYDRAULIC REMOTE AREA FOR SECOND FLOOR HYDRAULIC CALCULATION #6. THE CONTRACTOR SHALL PROVIDE A HYDRAULIC CALCULATION OF THIS REMOTE AREA FOR REVIEW WITH THE SHOP DRAWING AND HYDRAULIC CALCULATIONS SUBMISSION.



1 / FP-104 SECOND FLOOR AREA B FIRE PROTECTION PLAN - BASE BID
SCALE: 1/8"=1'-0"

KEY PLAN:



KEY PLAN
SCALE: NOT TO SCALE

SED CONTROL NO. 27-01-00-01-0-024-009

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Port PRIDE

RAN FIRE PROTECTION ENGINEERING

PORT JERVIS CITY SCHOOL DISTRICT
RENOVATIONS TO:
PORT JERVIS MIDDLE SCHOOL
Port Jervis - Orange County - New York

REV	DATE	DESCRIPTION

DRAWN BY CMC	PROJECT NUMBER 2019-011 PH1
CHECKED BY DRN	DATE 11/12/2021

SECOND FLOOR AREA B FIRE PROTECTION PLAN - BASE BID

BUILDING	SHEET NUMBER
MS	FP-104 RE-BID

GENERAL NOTES:

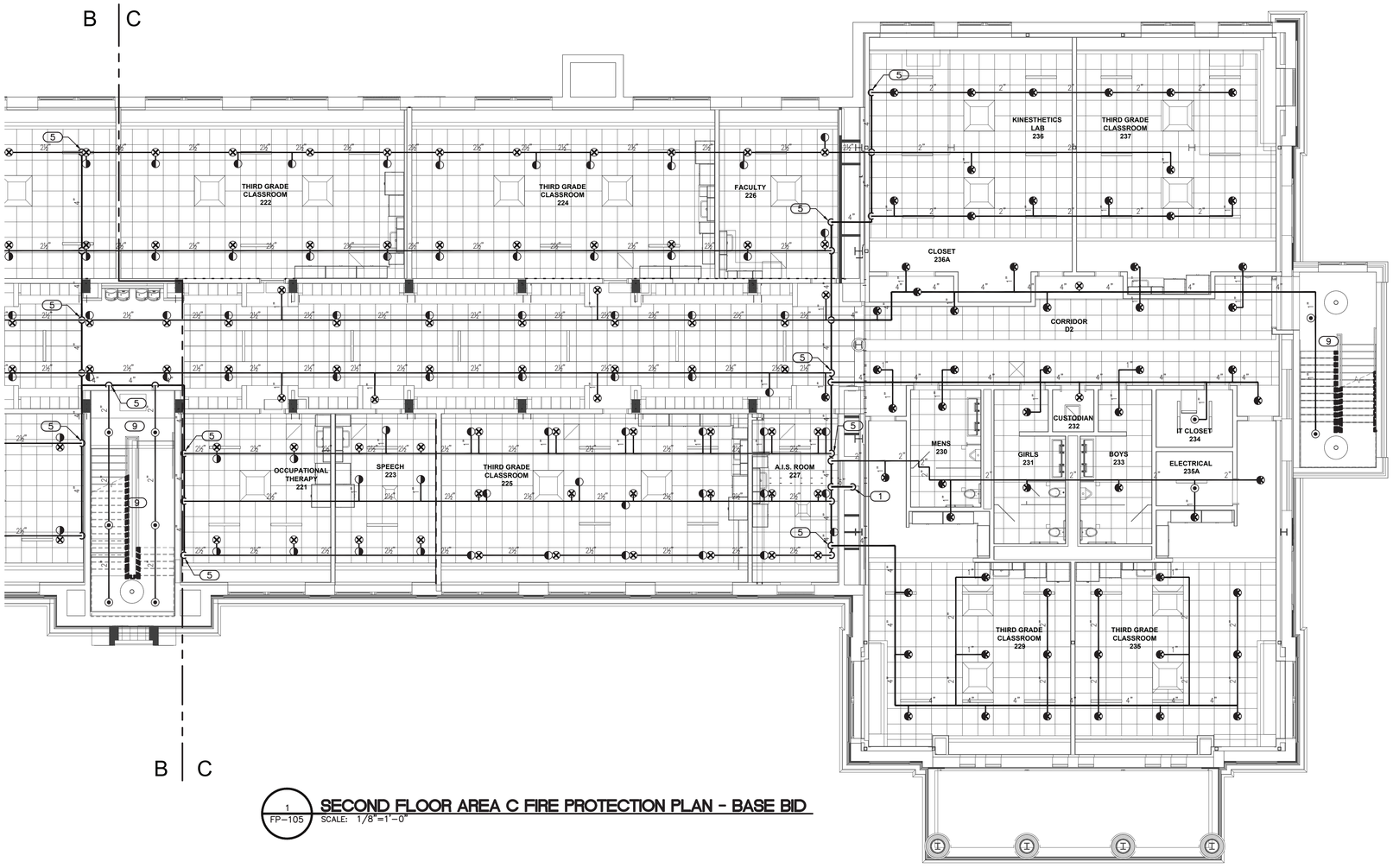
1. REFER TO ARCHITECTURAL DRAWINGS FOR CEILING HEIGHTS AND CONSTRUCTION TYPE.
2. THE SPRINKLER SYSTEM SHALL BE DESIGNED TO PROTECT THE HAZARD CLASSIFICATIONS PER NFPA-13, AS NOTED IN THE HYDRAULIC CALCULATION NOTES ON DRAWINGS FP-003 AND FP-004.
3. THE BASIS OF DESIGN SPRINKLER LAYOUT IS BASED ON THE INSTALLATION OF BLACK STEEL PIPE. CPVC PIPING IS NOT PERMITTED.
4. ALL HANGERS SHALL BE INSTALLED PER NFPA-13. ALL PIPE HANGER AND SUPPORT EQUIPMENT SHALL BE LISTED IN ACCORDANCE WITH NFPA-13 REQUIREMENTS.
5. DRAWINGS DO NOT INDICATE ALL REQUIRED LOCATIONS OF SPRINKLERS BELOW OBSTRUCTIONS SUCH AS DUCTWORK, MECHANICAL EQUIPMENT, ETC. PROVIDE ADDITIONAL SPRINKLERS BELOW EXPOSED DUCTWORK PER NFPA-13 REQUIREMENTS WHICH CREATE AN OBSTRUCTION TO CEILING LEVEL SPRINKLER DISCHARGE. COORDINATION OF AND INSTALLATION OF ALL REQUIRED SPRINKLERS BELOW DUCTWORK SHALL INCLUDED AS PART OF THE BASE-BID CONTRACT.
6. PROVIDE FINAL COORDINATION WITH THE HVAC SYSTEMS AND ALL TRADES AS REQUIRED BY NFPA-13. PROVIDE FULLY COORDINATED LAYOUT SHOWN ON THE SHOP DRAWINGS INCLUDING, BUT NOT LIMITED TO, SHOWING DUCTWORK AND REFLECTIVE CEILING PLAN LOCATIONS ON THE SUBMITTED SHOP DRAWINGS. COORDINATE SPRINKLER LOCATIONS WITH CLEARANCES TO LIGHTS PER NFPA-13 REQUIREMENTS.
7. THE BUILDING WILL CONTAIN SUSPENDED LIGHTS. ALL LIGHTS SHALL BE SUSPENDED A MINIMUM OF 20" BELOW THE CEILING FROM THE DROP CEILING LEVEL TO THE TOPS OF LIGHTS, SUCH THAT ADEQUATE VERTICAL CLEARANCE IS PROVIDED BETWEEN THE SPRINKLER DEFLECTORS AND THE TOP OF THE LIGHTS SUCH THAT THE LIGHTING IS NOT CONSIDERED AN OBSTRUCTION TO NFPA-13. CONTRACT SHALL COORDINATE REQUIREMENTS FOR SUSPENDED LIGHTS WITH APPLICABLE TRADES TO ENSURE ALL SUSPENDED LIGHTING IS INSTALLED AT THE CORRECT ELEVATION.
8. THE CONTRACTOR SHALL PROVIDE SPRINKLER PROTECTION THROUGHOUT ALL COMBUSTIBLE CONCEALED SPACES AS PART OF THE BASE-BID CONTRACT, AS DESCRIBED ON DRAWING FP-001.
9. FIRESTOP ALL PENETRATION ITEMS THROUGH ALL FLOOR AND WALL PENETRATIONS MADE AS PART OF THIS CONTRACT. FIRESTOP ALL THROUGH-PENETRATIONS FOR A 2-HOUR FIRE RESISTANCE ASSEMBLY RATING.
10. THE BUILDING IS PROTECTED BY A WET PIPE SPRINKLER SYSTEM. ALL PORTIONS OF THE BUILDING SHALL BE HEATED TO MAINTAIN TEMPERATURES GREATER THAN 40 DEGREES FAHRENHEIT THROUGHOUT. ADEQUATE HEAT SHALL BE PROVIDED BY THE OWNER.
11. THE BUILDING IS PROTECTED WITH A WET PIPE SYSTEM THROUGHOUT. CONTRACTOR SHALL ENSURE ALL WET SPRINKLER PIPING IS INSTALLED WITHIN THE HEATED BUILDING ENVELOPE.

KEYED NOTES:

(1) 6" RISER DOWN TO FIRST FLOOR AND WATER SERVICE ENTRANCE. COORDINATE ROUTING WITHIN CHASE WITH MECHANICAL EQUIPMENT AND APPLICABLE TRADES. REFER TO DRAWING FP-102 FOR CONTINUATION ON FIRST FLOOR.

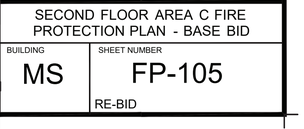
(5) 2" RISER NIPPLE THROUGHOUT SECOND FLOOR, AS NEEDED BASED ON CONTRACTOR'S SHOP DRAWING LAYOUT. (TYPICAL)

(9) PIPING INSTALLED EXPOSED AT UNDERSIDE OF STAIRS.



1 / FP-105 SECOND FLOOR AREA C FIRE PROTECTION PLAN - BASE BID
SCALE: 1/8"=1'-0"

KEY PLAN:



KEY PLAN
SCALE:NOT TO SCALE

SED CONTROL NO. 27-01-00-01-0-024-009

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PORT JERVIS CITY SCHOOL DISTRICT
RENOVATIONS TO:
PORT JERVIS MIDDLE SCHOOL
Port Jervis - Orange County - New York

REV	DATE	DESCRIPTION

DRAWN BY: CMC	PROJECT NUMBER: 2019-011 PH1
CHECKED BY: DRN	DATE: 11/12/2021

SECOND FLOOR AREA C FIRE PROTECTION PLAN - BASE BID

BUILDING	SHEET NUMBER
MS	FP-105
	RE-BID

GENERAL NOTES:

1. REFER TO ARCHITECTURAL DRAWINGS FOR CEILING HEIGHTS AND CONSTRUCTION TYPE.
2. THE SPRINKLER SYSTEM SHALL BE DESIGNED TO PROTECT THE HAZARD CLASSIFICATIONS PER NFPA-13, AS NOTED IN THE HYDRAULIC CALCULATION NOTES ON DRAWINGS FP-003 AND FP-004.
3. THE BASIS OF DESIGN SPRINKLER LAYOUT IS BASED ON THE INSTALLATION OF BLACK STEEL PIPE. CPVC PIPING IS NOT PERMITTED.
4. ALL HANGERS SHALL BE INSTALLED PER NFPA-13. ALL PIPE HANGER AND SUPPORT EQUIPMENT SHALL BE LISTED IN ACCORDANCE WITH NFPA-13 REQUIREMENTS.
5. DRAWINGS DO NOT INDICATE ALL REQUIRED LOCATIONS OF SPRINKLERS BELOW OBSTRUCTIONS SUCH AS DUCTWORK, MECHANICAL EQUIPMENT, ETC. PROVIDE ADDITIONAL SPRINKLERS BELOW EXPOSED DUCTWORK PER NFPA-13 REQUIREMENTS WHICH CREATE AN OBSTRUCTION TO CEILING LEVEL SPRINKLER DISCHARGE. COORDINATION OF AND INSTALLATION OF ALL REQUIRED SPRINKLERS BELOW DUCTWORK SHALL INCLUDED AS PART OF THE BASE-BID CONTRACT.
6. PROVIDE FINAL COORDINATION WITH THE HVAC SYSTEMS AND ALL TRADES AS REQUIRED BY NFPA-13. PROVIDE FULLY COORDINATED LAYOUT SHOWN ON THE SHOP DRAWINGS INCLUDING, BUT NOT LIMITED TO, SHOWING DUCTWORK AND REFLECTIVE CEILING PLAN LOCATIONS ON THE SUBMITTED SHOP DRAWINGS. COORDINATE SPRINKLER LOCATIONS WITH CLEARANCES TO LIGHTS PER NFPA-13 REQUIREMENTS.
7. THE BUILDING WILL CONTAIN SUSPENDED LIGHTS. ALL LIGHTS SHALL BE SUSPENDED A MINIMUM OF 20" BELOW THE CEILING FROM THE DROP CEILING LEVEL TO THE TOPS OF LIGHTS, SUCH THAT ADEQUATE VERTICAL CLEARANCE IS PROVIDED BETWEEN THE SPRINKLER DEFLECTORS AND THE TOP OF THE LIGHTS SUCH THAT THE LIGHTING IS NOT CONSIDERED AN OBSTRUCTION TO NFPA-13. CONTRACT SHALL COORDINATE REQUIREMENTS FOR SUSPENDED LIGHTS WITH APPLICABLE TRADES TO ENSURE ALL SUSPENDED LIGHTING IS INSTALLED AT THE CORRECT ELEVATION.
8. THE CONTRACTOR SHALL PROVIDE SPRINKLER PROTECTION THROUGHOUT ALL COMBUSTIBLE CONCEALED SPACES AS PART OF THE BASE-BID CONTRACT, AS DESCRIBED ON DRAWING FP-001.
9. FIRESTOP ALL PENETRATION ITEMS THROUGH ALL FLOOR AND WALL PENETRATIONS MADE AS PART OF THIS CONTRACT. FIRESTOP ALL THROUGH-PENETRATIONS FOR A 2-HOUR FIRE RESISTANCE ASSEMBLY RATING.
10. THE BUILDING IS PROTECTED BY A WET PIPE SPRINKLER SYSTEM. ALL PORTIONS OF THE BUILDING SHALL BE HEATED TO MAINTAIN TEMPERATURES GREATER THAN 40 DEGREES FAHRENHEIT THROUGHOUT. ADEQUATE HEAT SHALL BE PROVIDED BY THE OWNER.
11. THE BUILDING IS PROTECTED WITH A WET PIPE SYSTEM THROUGHOUT. CONTRACTOR SHALL ENSURE ALL WET SPRINKLER PIPING IS INSTALLED WITHIN THE HEATED BUILDING ENVELOPE.

KEYED NOTES:

(2) SPRINKLER PROTECTION NOT REQUIRED WITHIN ELEVATOR SHAFT PER NFPA-13. ELEVATOR IS ELECTRIC TRACTION TYPE PASSENGER ELEVATOR AND THE ELEVATOR HOISTWAY WILL BE NON-COMBUSTIBLE.

(3) 2" RISER NIPPLE THROUGHOUT THIRD FLOOR, AS NEEDED BASED ON CONTRACTOR'S SHOP DRAWING LAYOUT. (TYPICAL)

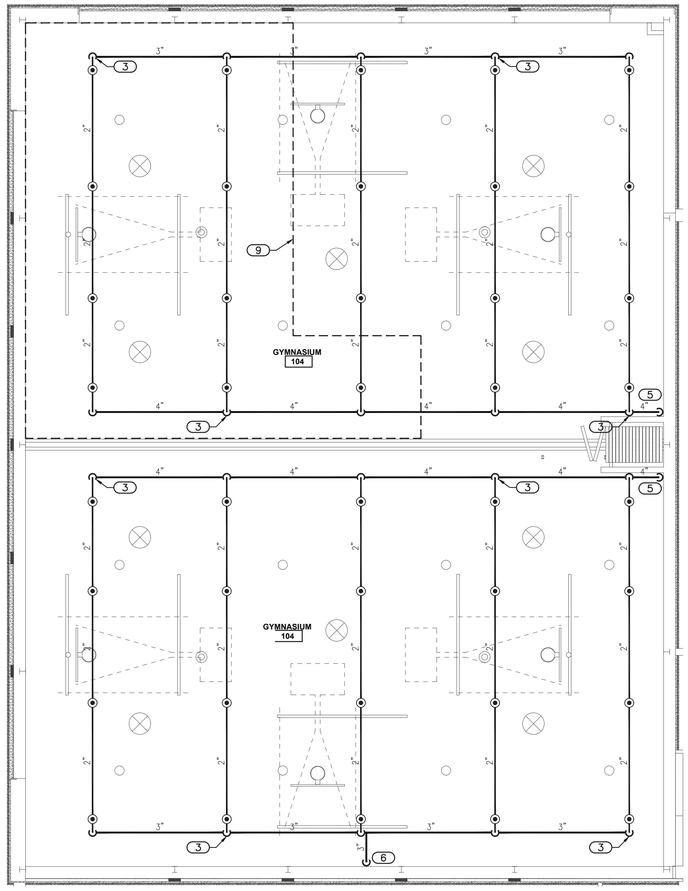
(5) 4" PIPING DOWN TO MECHANICAL ROOM ON SECOND FLOOR. REFER TO DRAWING FP-103 FOR CONTINUATION.

(6) 3" PIPING DOWN TO LOCKER ROOM SPRINKLER PROTECTION ON FIRST FLOOR. REFER TO DRAWING FP-100 FOR CONTINUATION.

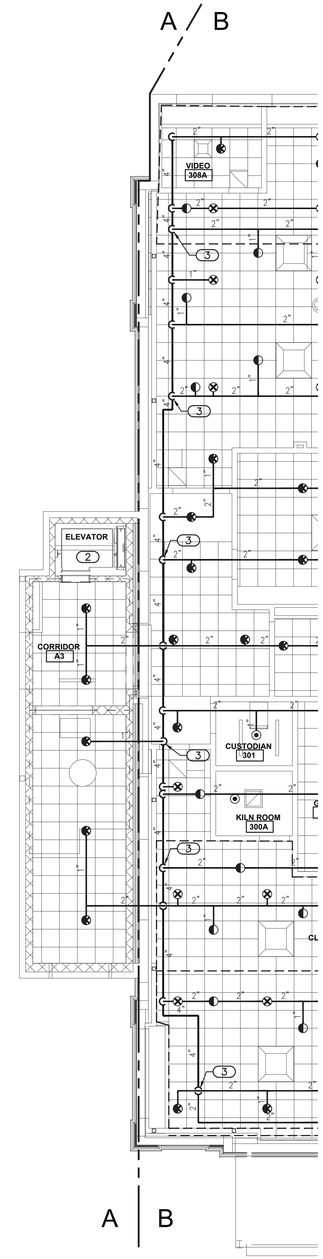
(9) OUTLINE OF HYDRAULIC REMOTE AREA FOR FIRST FLOOR HYDRAULIC CALCULATION #2. THE CONTRACTOR SHALL PROVIDE A HYDRAULIC CALCULATION OF THIS REMOTE AREA FOR REVIEW WITH THE SHOP DRAWING AND HYDRAULIC CALCULATIONS SUBMISSION.

Hydraulic Calculation Data
Design Area Number: First Floor Hydraulic Calculation #2 Design Area Location: Gymnasium Hazard/Occupancy: Light Hazard Design Density: 0.10 GPM/SF Design Area: 1,551 SF Number of Sprinklers in Design Area:9
System Flow: 277.0 gpm System Pressure:36.7 psi Hose Allowance: 100 gpm

SYSTEM HAS A SYSTEM SAFETY FACTOR OF 8.75 PSI.



1 FP-106 THIRD FLOOR AREA A FIRE PROTECTION PLAN - BASE BID
SCALE: 1/8"=1'-0"



KEY PLAN:

KEY PLAN
SCALE:NOT TO SCALE

SED CONTROL NO. 27-01-00-01-0-024-009

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PORT JERVIS CITY SCHOOL DISTRICT
RENOVATIONS TO:
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Port Jervis - Orange County - New York

REV	DATE	DESCRIPTION

DRAWN BY CMC	PROJECT NUMBER 2019-011 PH1
CHECKED BY DRN	DATE 11/12/2021

THIRD FLOOR AREA A FIRE PROTECTION PLAN - BASE BID

BUILDING	SHEET NUMBER
MS	FP-106 RE-BID

Hydraulic Calculation Data
Design Area Number: Third Floor Hydraulic Calculation #1 Design Area Location: Library Hazard/Occupancy: Light Hazard Design Density: 0.10 GPM/SF Design Area: 1,257 SF Number of Sprinklers in Design Area:16
System Flow: 343.6 gpm System Pressure:36.1 psi Hose Allowance: 100 gpm

SYSTEM HAS A SYSTEM SAFETY FACTOR OF 8.1 PSI.

Hydraulic Calculation Data
Design Area Number: Third Floor Hydraulic Calculation #2 Design Area Location: Art Classroom Hazard/Occupancy: Light Hazard Design Density: 0.10 GPM/SF Design Area: 1,058 SF Number of Sprinklers in Design Area:12
System Flow: 281.4 gpm System Pressure:37.4 psi Hose Allowance: 100 gpm

SYSTEM HAS A SYSTEM SAFETY FACTOR OF 8.3 PSI.

Hydraulic Calculation Data
Design Area Number: Third Floor Hydraulic Calculation #3 Design Area Location: Art Classroom – Concealed Space Hazard/Occupancy: Light Hazard Design Density: 0.10 GPM/SF Design Area: 1,058 SF Number of Sprinklers in Design Area:13
System Flow: 322.8 gpm System Pressure:39.2 psi Hose Allowance: 100 gpm

SYSTEM HAS A SYSTEM SAFETY FACTOR OF 5.5 PSI.

Hydraulic Calculation Data
Design Area Number: Third Floor Hydraulic Calculation #4 Design Area Location: Spec Ed Classroom Hazard/Occupancy: Light Hazard Design Density: 0.10 GPM/SF Design Area: 1,058 SF Number of Sprinklers in Design Area:14
System Flow: 318.0 gpm System Pressure:35.1 psi Hose Allowance: 100 gpm

SYSTEM HAS A SYSTEM SAFETY FACTOR OF 9.7 PSI.

Hydraulic Calculation Data
Design Area Number: Third Floor Hydraulic Calculation #5 Design Area Location: Spec Ed Classroom–Concealed Space Hazard/Occupancy: Light Hazard Design Density: 0.10 GPM/SF Design Area: 1,058 SF Number of Sprinklers in Design Area:14
System Flow: 323.6 gpm System Pressure:38.1 psi Hose Allowance: 100 gpm

SYSTEM HAS A SYSTEM SAFETY FACTOR OF 6.6 PSI.

Hydraulic Calculation Data
Design Area Number: Third Floor Hydraulic Calculation #6 Design Area Location: Class Rm 312 Hazard/Occupancy: Light Hazard Design Density: 0.10 GPM/SF Design Area: 1,057 SF Number of Sprinklers in Design Area:9
System Flow: 265.0 gpm System Pressure:30.8 psi Hose Allowance: 100 gpm

SYSTEM HAS A SYSTEM SAFETY FACTOR OF 14.9 PSI.

Hydraulic Calculation Data
Design Area Number: Third Floor Hydraulic Calculation #7 Design Area Location: Class Rm 312 – Concealed Space Hazard/Occupancy: Light Hazard Design Density: 0.10 GPM/SF Design Area: 1,057 SF Number of Sprinklers in Design Area:9
System Flow: 277.9 gpm System Pressure:38.7 psi Hose Allowance: 100 gpm

SYSTEM HAS A SYSTEM SAFETY FACTOR OF 6.7 PSI.

GENERAL NOTES:

1. REFER TO ARCHITECTURAL DRAWINGS FOR CEILING HEIGHTS AND CONSTRUCTION TYPE.
2. THE SPRINKLER SYSTEM SHALL BE DESIGNED TO PROTECT THE HAZARD CLASSIFICATIONS PER NFPA–13, AS NOTED IN THE HYDRAULIC CALCULATION NOTES ON DRAWINGS FP–003 AND FP–004.
3. THE BASIS OF DESIGN SPRINKLER LAYOUT IS BASED ON THE INSTALLATION OF BLACK STEEL PIPE. CPVC PIPING IS NOT PERMITTED.
4. ALL HANGERS SHALL BE INSTALLED PER NFPA–13. ALL PIPE HANGER AND SUPPORT EQUIPMENT SHALL BE LISTED IN ACCORDANCE WITH NFPA–13 REQUIREMENTS.
5. DRAWINGS DO NOT INDICATE ALL REQUIRED LOCATIONS OF SPRINKLERS BELOW OBSTRUCTIONS SUCH AS DUCTWORK, MECHANICAL EQUIPMENT, ETC. PROVIDE ADDITIONAL SPRINKLERS BELOW EXPOSED DUCTWORK PER NFPA–13 REQUIREMENTS WHICH CREATE AN OBSTRUCTION TO CEILING LEVEL SPRINKLER DISCHARGE. COORDINATION OF AND INSTALLATION OF ALL REQUIRED SPRINKLERS BELOW DUCTWORK SHALL INCLUDED AS PART OF THE BASE–BID CONTRACT.
6. PROVIDE FINAL COORDINATION WITH THE HVAC SYSTEMS AND ALL TRADES AS REQUIRED BY NFPA–13. PROVIDE FULLY COORDINATED LAYOUT SHOWN ON THE SHOP DRAWINGS INCLUDING, BUT NOT LIMITED TO, SHOWING DUCTWORK AND REFLECTIVE CEILING PLAN LOCATIONS ON THE SUBMITTED SHOP DRAWINGS. COORDINATE SPRINKLER LOCATIONS WITH CLEARANCES TO LIGHTS PER NFPA–13 REQUIREMENTS.
7. THE BUILDING WILL CONTAIN SUSPENDED LIGHTS. ALL LIGHTS SHALL BE SUSPENDED A MINIMUM OF 20" BELOW THE CEILING FROM THE DROP CEILING LEVEL TO THE TOPS OF LIGHTS, SUCH THAT ADEQUATE VERTICAL CLEARANCE IS PROVIDED BETWEEN THE SPRINKLER DEFLECTORS AND THE TOP OF THE LIGHTS SUCH THAT THE LIGHTING IS NOT CONSIDERED AN OBSTRUCTION TO NFPA–13. CONTRACT SHALL COORDINATE REQUIREMENTS FOR SUSPENDED LIGHTS WITH APPLICABLE TRADES TO ENSURE ALL SUSPENDED LIGHTING IS INSTALLED AT THE CORRECT ELEVATION.
8. THE CONTRACTOR SHALL PROVIDE SPRINKLER PROTECTION THROUGHOUT ALL COMBUSTIBLE CONCEALED SPACES AS PART OF THE BASE–BID CONTRACT, AS DESCRIBED ON DRAWING FP–001.
9. FIRESTOP ALL PENETRATION ITEMS THROUGH ALL FLOOR AND WALL PENETRATIONS MADE AS PART OF THIS CONTRACT. FIRESTOP ALL THROUGH–PENETRATIONS FOR A 2–HOUR FIRE RESISTANCE ASSEMBLY RATING.
10. THE BUILDING IS PROTECTED BY A WET PIPE SPRINKLER SYSTEM. ALL PORTIONS OF THE BUILDING SHALL BE HEATED TO MAINTAIN TEMPERATURES GREATER THAN 40 DEGREES FAHRENHEIT THROUGHOUT. ADEQUATE HEAT SHALL BE PROVIDED BY THE OWNER.
11. THE BUILDING IS PROTECTED WITH A WET PIPE SYSTEM THROUGHOUT. CONTRACTOR SHALL ENSURE ALL WET SPRINKLER PIPING IS INSTALLED WITHIN THE HEATED BUILDING ENVELOPE.

KEYED NOTES:

(2) SPRINKLER PROTECTION NOT REQUIRED WITHIN ELEVATOR SHAFT PER NFPA–13. ELEVATOR IS ELECTRIC TRACTION TYPE PASSENGER ELEVATOR AND THE ELEVATOR HOISTWAY WILL BE NON–COMBUSTIBLE.

(3) 2" RISER NIPPLE THROUGHOUT THIRD FLOOR, AS NEEDED BASED ON CONTRACTOR'S SHOP DRAWING LAYOUT. (TYPICAL)

(4) 2" RISER TO SUPPLY PIPING NEAR PEAK OF SLOPED CEILING.

(7) REFER TO DRAWING FP–109 FOR SPRINKLER PROTECTION WITHIN STAIRS LEADING TO CUPOLA.

(8) 4" UP TO CUPOLA SPRINKLER PROTECTION. REFER TO DRAWING FP–109 FOR CONTINUATION.

(10) OUTLINE OF HYDRAULIC REMOTE AREA FOR THIRD FLOOR HYDRAULIC CALCULATION #1. THE CONTRACTOR SHALL PROVIDE A HYDRAULIC CALCULATION OF THIS REMOTE AREA FOR REVIEW WITH THE SHOP DRAWING AND HYDRAULIC CALCULATIONS SUBMISSION.

(11) OUTLINE OF HYDRAULIC REMOTE AREA FOR THIRD FLOOR HYDRAULIC CALCULATION #2. THE CONTRACTOR SHALL PROVIDE A HYDRAULIC CALCULATION OF THIS REMOTE AREA FOR REVIEW WITH THE SHOP DRAWING AND HYDRAULIC CALCULATIONS SUBMISSION.

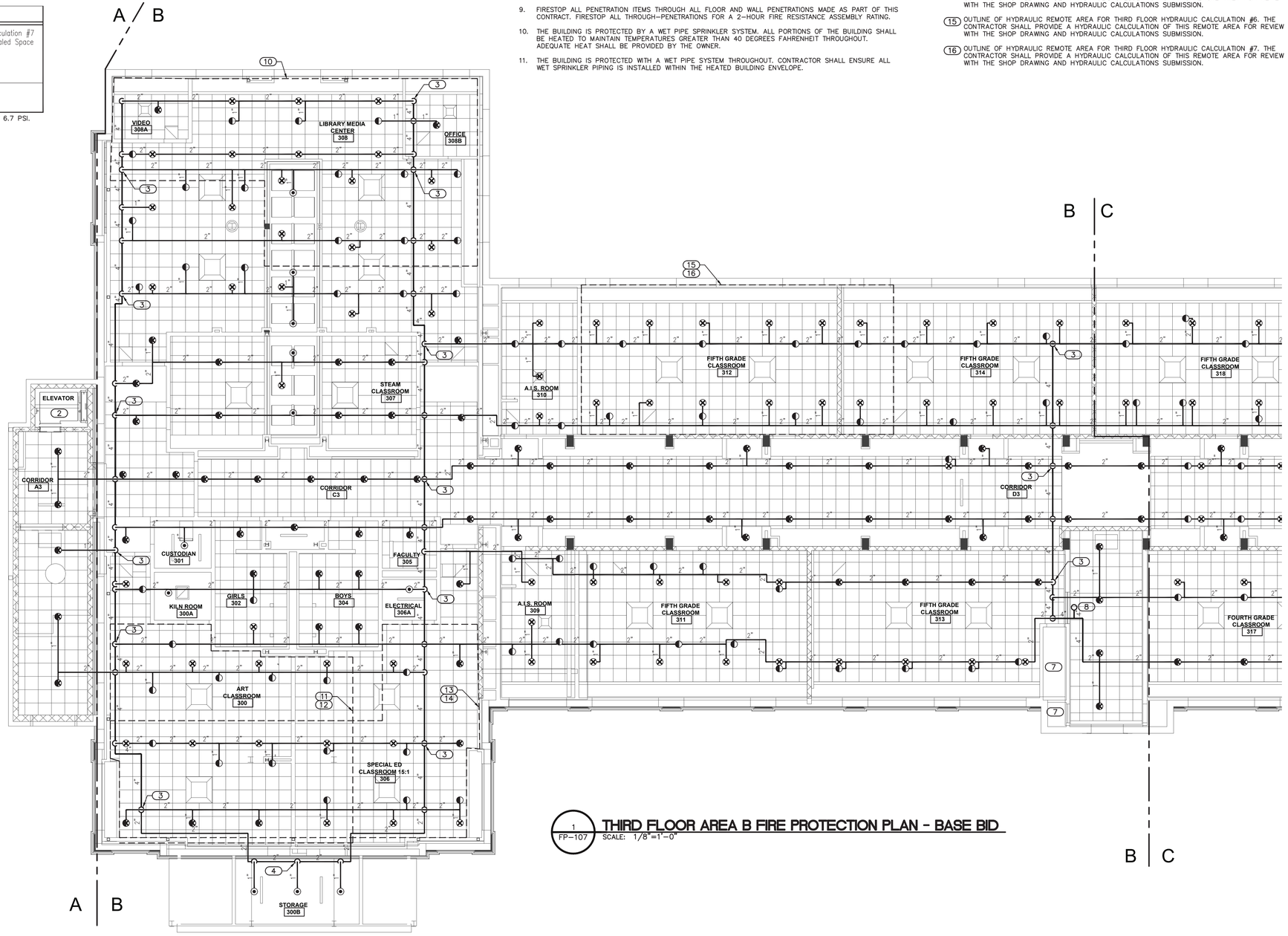
(12) OUTLINE OF HYDRAULIC REMOTE AREA FOR THIRD FLOOR HYDRAULIC CALCULATION #3. THE CONTRACTOR SHALL PROVIDE A HYDRAULIC CALCULATION OF THIS REMOTE AREA FOR REVIEW WITH THE SHOP DRAWING AND HYDRAULIC CALCULATIONS SUBMISSION.

(13) OUTLINE OF HYDRAULIC REMOTE AREA FOR THIRD FLOOR HYDRAULIC CALCULATION #4. THE CONTRACTOR SHALL PROVIDE A HYDRAULIC CALCULATION OF THIS REMOTE AREA FOR REVIEW WITH THE SHOP DRAWING AND HYDRAULIC CALCULATIONS SUBMISSION.

(14) OUTLINE OF HYDRAULIC REMOTE AREA FOR THIRD FLOOR HYDRAULIC CALCULATION #5. THE CONTRACTOR SHALL PROVIDE A HYDRAULIC CALCULATION OF THIS REMOTE AREA FOR REVIEW WITH THE SHOP DRAWING AND HYDRAULIC CALCULATIONS SUBMISSION.

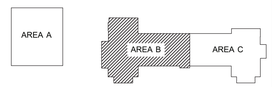
(15) OUTLINE OF HYDRAULIC REMOTE AREA FOR THIRD FLOOR HYDRAULIC CALCULATION #6. THE CONTRACTOR SHALL PROVIDE A HYDRAULIC CALCULATION OF THIS REMOTE AREA FOR REVIEW WITH THE SHOP DRAWING AND HYDRAULIC CALCULATIONS SUBMISSION.

(16) OUTLINE OF HYDRAULIC REMOTE AREA FOR THIRD FLOOR HYDRAULIC CALCULATION #7. THE CONTRACTOR SHALL PROVIDE A HYDRAULIC CALCULATION OF THIS REMOTE AREA FOR REVIEW WITH THE SHOP DRAWING AND HYDRAULIC CALCULATIONS SUBMISSION.



1 FP–107 THIRD FLOOR AREA B FIRE PROTECTION PLAN – BASE BID
SCALE: 1/8"=1'–0"

KEY PLAN:



KEY PLAN
SCALE:NOT TO SCALE

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RAN FIRE PROTECTION ENGINEERING

PORT JERVIS CITY SCHOOL DISTRICT
RENOVATIONS TO:
PORT JERVIS MIDDLE SCHOOL
Port Jervis - Orange County - New York

REV	DATE	DESCRIPTION

DRAWN BY CMC	PROJECT NUMBER 2019-011 PH1
CHECKED BY DRN	DATE 11/12/2021

THIRD FLOOR AREA B FIRE PROTECTION PLAN - BASE BID

BUILDING	SHEET NUMBER
MS	FP-107 RE-BID

GENERAL NOTES:

1. REFER TO ARCHITECTURAL DRAWINGS FOR CEILING HEIGHTS AND CONSTRUCTION TYPE.
2. THE SPRINKLER SYSTEM SHALL BE DESIGNED TO PROTECT THE HAZARD CLASSIFICATIONS PER NFPA-13, AS NOTED IN THE HYDRAULIC CALCULATION NOTES ON DRAWINGS FP-003 AND FP-004.
3. THE BASIS OF DESIGN SPRINKLER LAYOUT IS BASED ON THE INSTALLATION OF BLACK STEEL PIPE. CPVC PIPING IS NOT PERMITTED.
4. ALL HANGERS SHALL BE INSTALLED PER NFPA-13. ALL PIPE HANGER AND SUPPORT EQUIPMENT SHALL BE LISTED IN ACCORDANCE WITH NFPA-13 REQUIREMENTS.
5. DRAWINGS DO NOT INDICATE ALL REQUIRED LOCATIONS OF SPRINKLERS BELOW OBSTRUCTIONS SUCH AS DUCTWORK, MECHANICAL EQUIPMENT, ETC. PROVIDE ADDITIONAL SPRINKLERS BELOW EXPOSED DUCTWORK PER NFPA-13 REQUIREMENTS WHICH CREATE AN OBSTRUCTION TO CEILING LEVEL SPRINKLER DISCHARGE. COORDINATION OF AND INSTALLATION OF ALL REQUIRED SPRINKLERS BELOW DUCTWORK SHALL INCLUDED AS PART OF THE BASE-BID CONTRACT.
6. PROVIDE FINAL COORDINATION WITH THE HVAC SYSTEMS AND ALL TRADES AS REQUIRED BY NFPA-13. PROVIDE FULLY COORDINATED LAYOUT SHOWN ON THE SHOP DRAWINGS INCLUDING, BUT NOT LIMITED TO, SHOWING DUCTWORK AND REFLECTIVE CEILING PLAN LOCATIONS ON THE SUBMITTED SHOP DRAWINGS. COORDINATE SPRINKLER LOCATIONS WITH CLEARANCES TO LIGHTS PER NFPA-13 REQUIREMENTS.
7. THE BUILDING WILL CONTAIN SUSPENDED LIGHTS. ALL LIGHTS SHALL BE SUSPENDED A MINIMUM OF 20" BELOW THE CEILING FROM THE DROP CEILING LEVEL TO THE TOPS OF LIGHTS, SUCH THAT ADEQUATE VERTICAL CLEARANCE IS PROVIDED BETWEEN THE SPRINKLER DEFLECTORS AND THE TOP OF THE LIGHTS SUCH THAT THE LIGHTING IS NOT CONSIDERED AN OBSTRUCTION TO NFPA-13. CONTRACT SHALL COORDINATE REQUIREMENTS FOR SUSPENDED LIGHTS WITH APPLICABLE TRADES TO ENSURE ALL SUSPENDED LIGHTING IS INSTALLED AT THE CORRECT ELEVATION.
8. THE CONTRACTOR SHALL PROVIDE SPRINKLER PROTECTION THROUGHOUT ALL COMBUSTIBLE CONCEALED SPACES AS PART OF THE BASE-BID CONTRACT, AS DESCRIBED ON DRAWING FP-001.
9. FIRESTOP ALL PENETRATION ITEMS THROUGH ALL FLOOR AND WALL PENETRATIONS MADE AS PART OF THIS CONTRACT. FIRESTOP ALL THROUGH-PENETRATIONS FOR A 2-HOUR FIRE RESISTANCE ASSEMBLY RATING.
10. THE BUILDING IS PROTECTED BY A WET PIPE SPRINKLER SYSTEM. ALL PORTIONS OF THE BUILDING SHALL BE HEATED TO MAINTAIN TEMPERATURES GREATER THAN 40 DEGREES FAHRENHEIT THROUGHOUT. ADEQUATE HEAT SHALL BE PROVIDED BY THE OWNER.
11. THE BUILDING IS PROTECTED WITH A WET PIPE SYSTEM THROUGHOUT. CONTRACTOR SHALL ENSURE ALL WET SPRINKLER PIPING IS INSTALLED WITHIN THE HEATED BUILDING ENVELOPE.

KEYED NOTES:

(1) 6" DOWN TO FIRST FLOOR AND WATER SERVICE ENTRANCE. COORDINATE ROUTING WITHIN CHASE WITH MECHANICAL EQUIPMENT AND APPLICABLE TRADES. REFER TO DRAWING FP-102 FOR CONTINUATION.

(3) 2" RISER NIPPLE THROUGHOUT THIRD FLOOR, AS NEEDED BASED ON CONTRACTOR'S SHOP DRAWING LAYOUT. (TYPICAL)

(4) 2" RISER TO SUPPLY PIPING NEAR PEAK OF SLOPED CEILING.

(7) REFER TO DRAWING FP-109 FOR SPRINKLER PROTECTION WITHIN STAIRS LEADING TO CUPOLA.

(8) 4" UP TO CUPOLA SPRINKLER PROTECTION. REFER TO DRAWING FP-109 FOR CONTINUATION.

(17) OUTLINE OF HYDRAULIC REMOTE AREA FOR THIRD FLOOR HYDRAULIC CALCULATION #8. THE CONTRACTOR SHALL PROVIDE A HYDRAULIC CALCULATION OF THIS REMOTE AREA FOR REVIEW WITH THE SHOP DRAWING AND HYDRAULIC CALCULATIONS SUBMISSION.

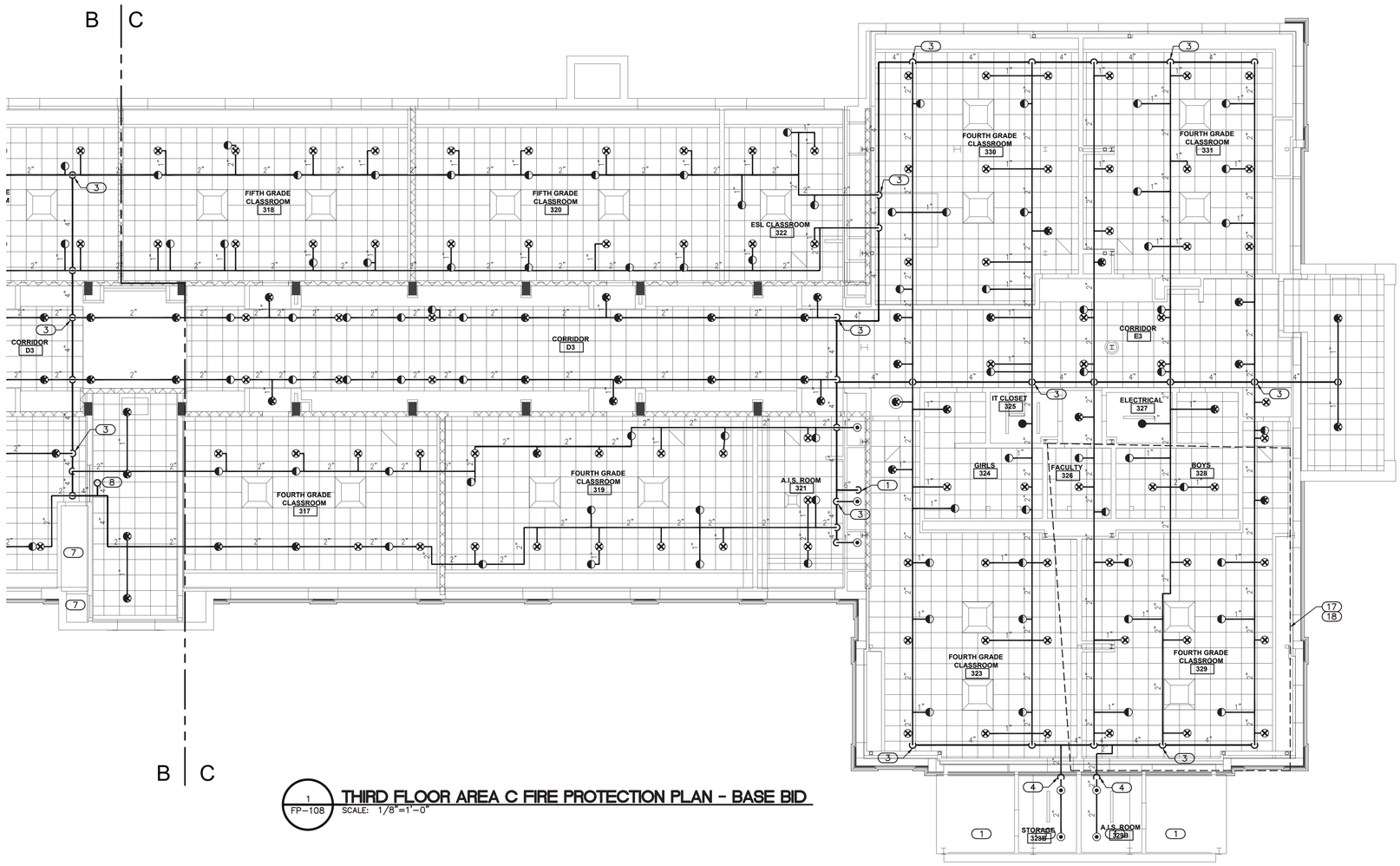
(18) OUTLINE OF HYDRAULIC REMOTE AREA FOR THIRD FLOOR HYDRAULIC CALCULATION #9. THE CONTRACTOR SHALL PROVIDE A HYDRAULIC CALCULATION OF THIS REMOTE AREA FOR REVIEW WITH THE SHOP DRAWING AND HYDRAULIC CALCULATIONS SUBMISSION.

Hydraulic Calculation Data
Design Area Number: Third Floor Hydraulic Calculation #8 Design Area Location: Class Rm 329 Hazard/Occupancy: Light Hazard Design Density: 0.10 GPM/SF Design Area: 1,117 SF Number of Sprinklers in Design Area: 13
System Flow: 295.8 gpm System Pressure: 29.4 psi Hose Allowance: 100 gpm

SYSTEM HAS A SYSTEM SAFETY FACTOR OF 15.8 PSI.

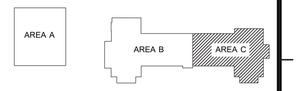
Hydraulic Calculation Data
Design Area Number: Third Floor Hydraulic Calculation #9 Design Area Location: Class Rm 329 – Concealed Space Hazard/Occupancy: Light Hazard Design Density: 0.10 GPM/SF Design Area: 1,117 SF Number of Sprinklers in Design Area: 10
System Flow: 289.1 gpm System Pressure: 36.8 psi Hose Allowance: 100 gpm

SYSTEM HAS A SYSTEM SAFETY FACTOR OF 8.2 PSI.



1 FP-108 THIRD FLOOR AREA C FIRE PROTECTION PLAN - BASE BID
SCALE: 1/8"=1'-0"

KEY PLAN:



KEY PLAN
SCALE: NOT TO SCALE

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Port Jervis - Orange County - New York

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CHECKED BY: DRN	DATE: 11/12/2021

THIRD FLOOR AREA C FIRE PROTECTION PLAN - BASE BID

BUILDING	SHEET NUMBER
MS	FP-108
	RE-BID

GENERAL NOTES:

1. PROVIDE SPRINKLER PROTECTION THROUGHOUT THE CUPOLA PER NFPA–13 REQUIREMENTS. THE CUPOLA SPRINKLER SYSTEM SHALL BE HYDRAULICALLY DESIGNED FOR A LIGHT HAZARD OCCUPANCY. THE HYDRAULIC CALCULATION SHALL PROVIDE A MINIMUM DESIGN DENSITY OF 0.10 GPM/SF OVER A REMOTE AREA WHICH INCLUDES ALL SPRINKLERS ON THE LOWER AND UPPER LEVELS OF THE CUPOLA (ALL SPRINKLERS SHOWN FOR DETAIL 2 AND 3 ON THIS DRAWING). A 100 GPM HOSE STREAM ALLOWANCE SHALL BE INCLUDED.
2. REFER TO ARCHITECTURAL DRAWINGS FOR CEILING HEIGHTS AND CONSTRUCTION TYPE.
3. THE BASIS OF DESIGN SPRINKLER LAYOUT IS BASED ON THE INSTALLATION OF BLACK STEEL PIPE. CPVC PIPING IS NOT PERMITTED.
4. ALL HANGERS SHALL BE INSTALLED PER NFPA–13. ALL PIPE HANGER AND SUPPORT EQUIPMENT SHALL BE LISTED IN ACCORDANCE WITH NFPA–13 REQUIREMENTS.
5. DRAWINGS DO NOT INDICATE ALL REQUIRED LOCATIONS OF SPRINKLERS BELOW OBSTRUCTIONS SUCH AS DUCTWORK, MECHANICAL EQUIPMENT, ETC. PROVIDE ADDITIONAL SPRINKLERS BELOW EXPOSED DUCTWORK PER NFPA–13 REQUIREMENTS WHICH CREATE AN OBSTRUCTION TO CEILING LEVEL SPRINKLER DISCHARGE. COORDINATION OF AND INSTALLATION OF ALL REQUIRED SPRINKLERS BELOW DUCTWORK SHALL INCLUDED AS PART OF THE BASE–BID CONTRACT.
6. PROVIDE FINAL COORDINATION WITH THE HVAC SYSTEMS AND ALL TRADES AS REQUIRED BY NFPA–13. PROVIDE FULLY COORDINATED LAYOUT SHOWN ON THE SHOP DRAWINGS INCLUDING, BUT NOT LIMITED TO, SHOWING DUCTWORK AND REFLECTIVE CEILING PLAN LOCATIONS ON THE SUBMITTED SHOP DRAWINGS. COORDINATE SPRINKLER LOCATIONS WITH CLEARANCES TO LIGHTS PER NFPA–13 REQUIREMENTS.
7. THE BUILDING WILL CONTAIN SUSPENDED LIGHTS. ALL LIGHTS SHALL BE SUSPENDED A MINIMUM OF 20" BELOW THE CEILING FROM THE DROP CEILING LEVEL TO THE TOPS OF LIGHTS, SUCH THAT ADEQUATE VERTICAL CLEARANCE IS PROVIDED BETWEEN THE SPRINKLER DEFLECTORS AND THE TOP OF THE LIGHTS SUCH THAT THE LIGHTING IS NOT CONSIDERED AN OBSTRUCTION TO NFPA–13. CONTRACT SHALL COORDINATE REQUIREMENTS FOR SUSPENDED LIGHTS WITH APPLICABLE TRADES TO ENSURE ALL SUSPENDED LIGHTING IS INSTALLED AT THE CORRECT ELEVATION.
8. THE CONTRACTOR SHALL PROVIDE SPRINKLER PROTECTION THROUGHOUT ALL COMBUSTIBLE CONCEALED SPACES AS PART OF THE BASE–BID CONTRACT, AS DESCRIBED ON DRAWING FP–001.
9. FIRESTOP ALL PENETRATION ITEMS THROUGH ALL FLOOR AND WALL PENETRATIONS MADE AS PART OF THIS CONTRACT. FIRESTOP ALL THROUGH–PENETRATIONS FOR A 2–HOUR FIRE RESISTANCE ASSEMBLY RATING.
10. THE BUILDING IS PROTECTED BY A WET PIPE SPRINKLER SYSTEM. ALL PORTIONS OF THE BUILDING SHALL BE HEATED TO MAINTAIN TEMPERATURES GREATER THAN 40 DEGREES FAHRENHEIT THROUGHOUT. ADEQUATE HEAT SHALL BE PROVIDED BY THE OWNER.
11. THE BUILDING IS PROTECTED WITH A WET PIPE SYSTEM THROUGHOUT. CONTRACTOR SHALL ENSURE ALL WET SPRINKLER PIPING IS INSTALLED WITHIN THE HEATED BUILDING ENVELOPE.

KEYED NOTES:

(1) AREA PROTECTED BY THIRD FLOOR SPRINKLER SYSTEM. REFER TO DRAWINGS FP–106, FP–107 AND FP–108 FOR SPRINKLER PROTECTION.

(2) REFER TO DETAIL 1 ON THIS DRAWING FOR SPRINKLER PROTECTION IN INTERSTITIAL SPACE BETWEEN THIRD FLOOR AND CUPOLA. SPACE IS A COMBUSTIBLE CONCEALED SPACE.

(3) REFER TO DETAIL 2 ON THIS DRAWING FOR SPRINKLER PROTECTION OF LOWER CUPOLA LEVEL.

(4) REFER TO DETAIL 3 ON THIS DRAWING FOR SPRINKLER PROTECTION OF UPPER CUPOLA LEVEL.

(5) 4" RISER FED FROM THIRD FLOOR. REFER TO DRAWINGS FP–107 AND FP–108 FOR CONTINUATION DOWN TO THIRD FLOOR. 4" RISER ALSO EXTENDS TO UPPER LEVELS OF CUPOLA.

(6) PROVIDE SPRINKLER PROTECTION AT UNDERSIDE OF STAIRS.

(7) 4" RISER DOWN. REFER TO DETAIL 1 ON THIS DRAWING FOR CONTINUATION.

(8) 2" PIPING UP TO CUPOLA UPPER LEVEL. REFER TO DETAIL 3 ON THIS DRAWING FOR CONTINUATION.

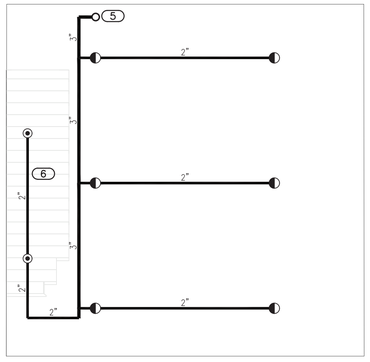
(9) 2" PIPING DOWN. REFER TO DETAIL 2 ON THIS DRAWING FOR CONTINUATION.

(10) EXTERIOR PORTION OF CUPOLA ABOVE ROOF IS NON–COMBUSTIBLE CONSTRUCTION. SPRINKLER PROTECTION IS NOT REQUIRED.

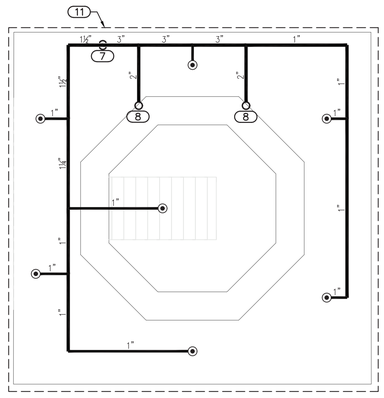
(11) OUTLINE OF HYDRAULIC REMOTE AREA FOR CUPOLA HYDRAULIC CALCULATION. THE CONTRACTOR SHALL PROVIDE A HYDRAULIC CALCULATION OF THIS REMOTE AREA FOR REVIEW WITH THE SHOP DRAWING AND HYDRAULIC CALCULATIONS SUBMISSION.

Hydraulic Calculation Data
Design Area Number: Cupola Hydraulic Calculation Design Area Location: Cupola Hazard/Occupancy: Light Hazard Design Density: 0.10 GPM/SF Design Area: Entire Cupola Number of Sprinklers in Design Area: 11
System Flow: 274.3 gpm System Pressure: 38.5 psi Hose Allowance: 100 gpm

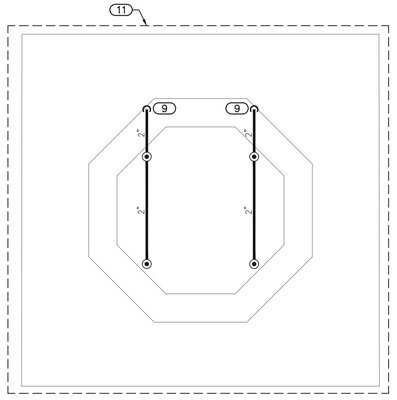
SYSTEM HAS A SYSTEM SAFETY FACTOR OF 7.0 PSI.



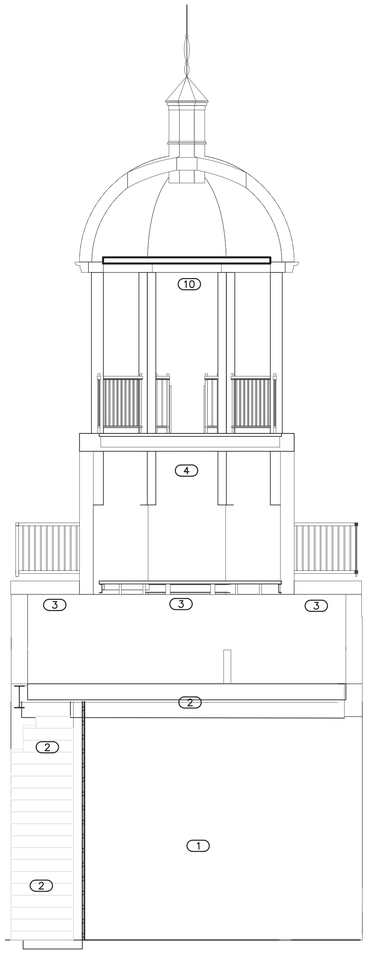
1 FP–109 **CUPOLA SUB-FLOOR FIRE PROTECTION PLAN - BASE BID**
SCALE: 1/4"=1'–0"



2 FP–109 **CUPOLA LOWER LEVEL FIRE PROTECTION PLAN - BASE BID**
SCALE: 1/4"=1'–0"

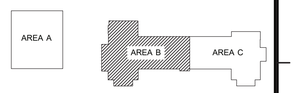


3 FP–109 **CUPOLA UPPER LEVEL FIRE PROTECTION PLAN - BASE BID**
SCALE: 1/4"=1'–0"



4 FP–109 **CUPOLA REFERENCE SECTION**
SCALE: 1/4"=1'–0"

KEY PLAN:



KEY PLAN
SCALE:NOT TO SCALE

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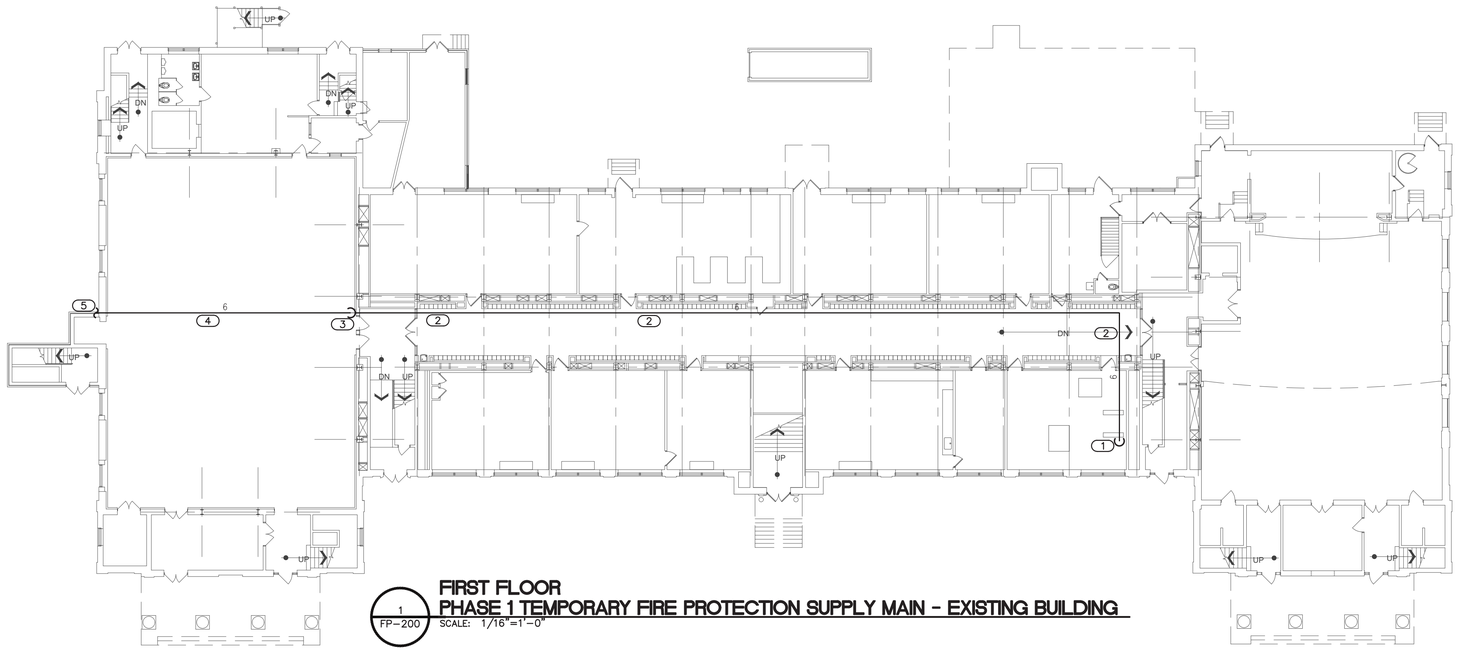
CUPOLA FIRE PROTECTION PLAN - BASE BID

BUILDING	SHEET NUMBER
MS	FP-109 RE-BID



1 FP-200

FIRST FLOOR
PHASE 1 TEMPORARY FIRE PROTECTION SUPPLY MAIN - EXISTING BUILDING

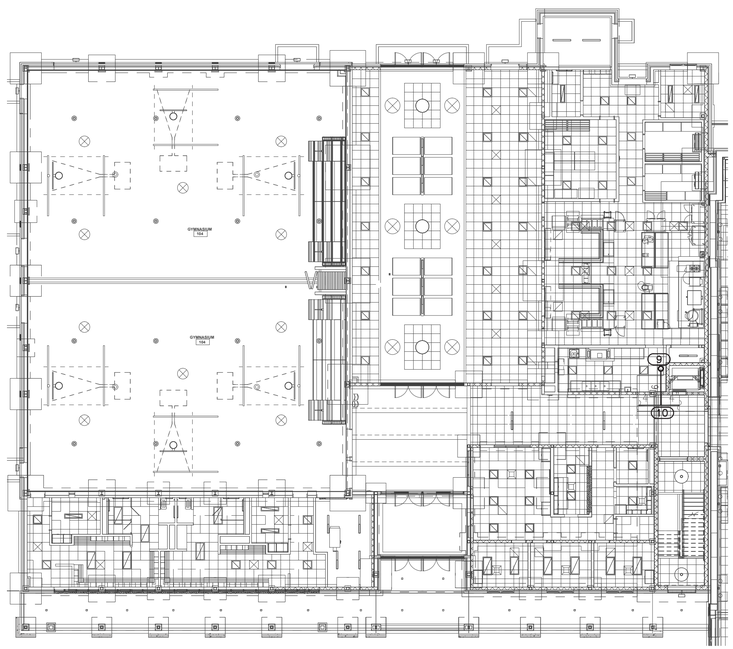
SCALE: 1/16"=1'-0"

GENERAL NOTES:

1. DRAWING INDICATES INSTALLATION OF TEMPORARY PIPING ONLY TO FACILITATE THE INSTALLATION OF THE PHASE 1 SPRINKLER SYSTEM. CONNECT TO THE EXISTING SPRINKLER SYSTEM WATER SERVICE ENTRANCE TO SUPPLY TEMPORARY FEED MAINS.
2. PROVIDE 6" FEED MAIN SUPPLIED BY THE EXISTING SPRINKLER SYSTEM AS INDICATED ON THESE DRAWINGS. DURING FUTURE PHASES, THE 6" MAIN SHALL BE REMOVED TO PROVIDE THE FINAL INSTALLATION AND SPRINKLER SYSTEM ZONING SHOWN ON THE FIRE PROTECTION FLOOR PLANS. THE CONTRACTOR MAY ELECT TO MAINTAIN OR RE-USE OR RE-LOCATE THE 6" PIPING PER THE CONTRACTOR'S MEANS AND METHODS, AS LONG AS THE FINAL ZONING OF THE SPRINKLER SYSTEMS UPON COMPLETION OF PHASE 3 MATCHES THE INTENT SHOWN ON THE FIRE PROTECTION FLOOR PLANS.
3. THE FIRE ALARM CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY TAMPER AND WATER FLOW SWITCHES AS INDICATED ON THESE DRAWINGS, REGARDLESS IF THE DEVICES ARE INDICATED ON FIRE ALARM DRAWINGS.

KEYED NOTES:

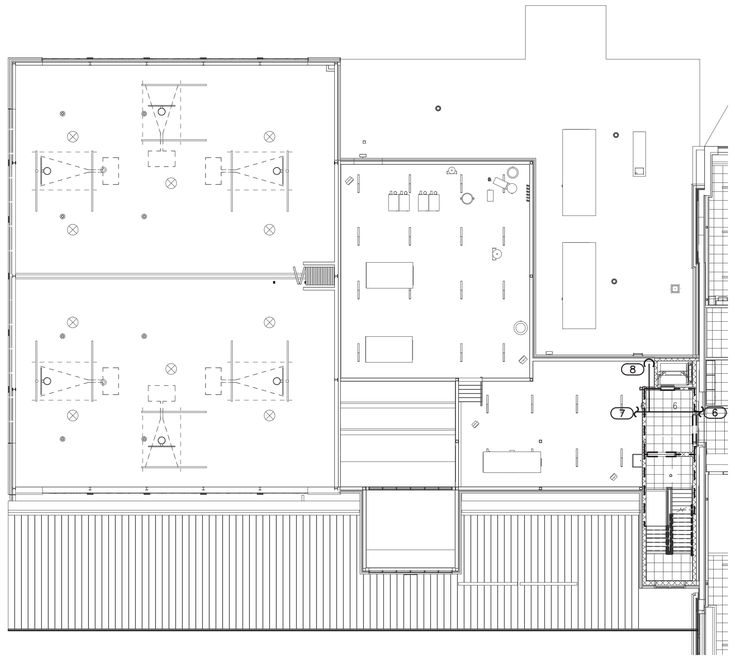
1. 6" PIPING DOWN TO EXISTING WATER SERVICE ENTRANCE. CONNECT TO EXISTING WATER SERVICE ENTRANCE.
2. ROUTE 6" TEMPORARY FEED MAIN THROUGH THE CORRIDOR.
3. WHERE 6" MAIN ENTERS THE GYMNASIUM, RAISE PIPING UP TO THE ROOF LEVEL.
4. ROUTE 6" TEMPORARY FEED MAIN ACROSS THE GYMNASIUM CEILING LEVEL.
5. REFER TO KEYED NOTE 6 ON THIS DRAWING FOR CONTINUATION OF PIPING INTO THE NEW ADDITION.
6. REFER TO KEYED NOTE 5 ON THIS DRAWING FOR CONTINUATION.
7. CONTINUE 6" PIPING TO TIE INTO SECOND FLOOR MAIN INDICATED ON FIRE PROTECTION FLOOR PLANS.
8. TEMPORARY 6" MAIN DOWN TO FIRST FLOOR ADDITION. REFER TO KEYED NOTE 9 ON THIS DRAWING FOR CONTINUATION. DROP PIPING SHALL BE REMOVED AND CAPPED DURING PHASE 2 OR 3, AS APPROPRIATE.
9. TEMPORARY 6" RISER UP TO SECOND FLOOR. REFER TO KEYED NOTE 8 ON THIS DRAWING FOR CONTINUATION.
10. CONNECT TEMPORARY 6" FEED MAIN INTO FIRST FLOOR ADDITION SPRINKLER SYSTEM AS INDICATED ON FIRE PROTECTION FLOOR PLANS.



2 FP-200

FIRST FLOOR
PHASE 1 TEMPORARY FIRE PROTECTION SUPPLY MAIN - ADDITION

SCALE: 1/16"=1'-0"



3 FP-200

SECOND FLOOR
PHASE 1 TEMPORARY FIRE PROTECTION SUPPLY MAIN - ADDITION

SCALE: 1/16"=1'-0"

KEY PLAN:

KEY PLAN
SCALE:NOT TO SCALE

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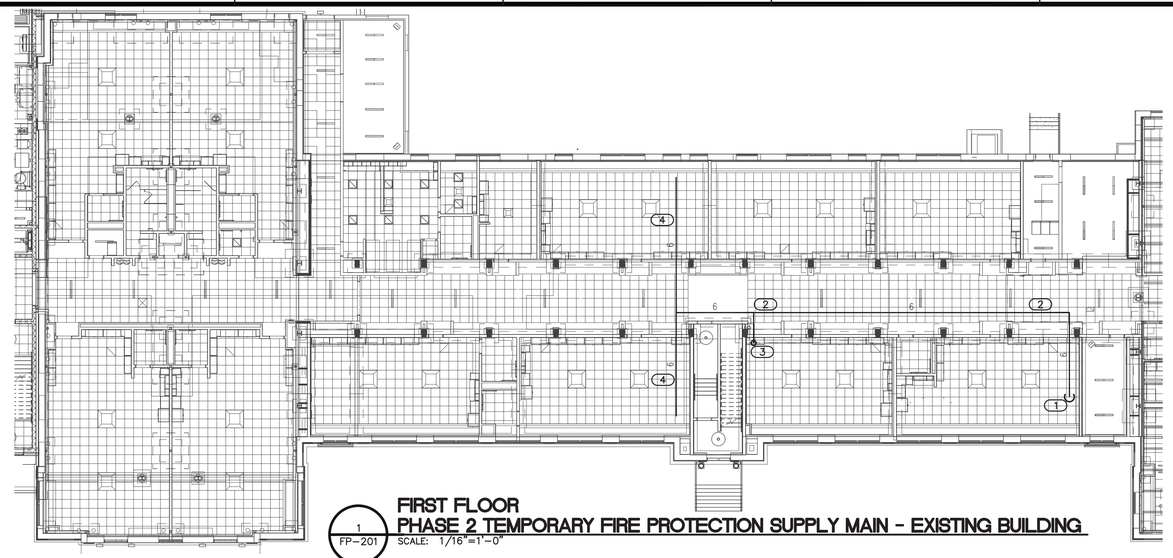
CHECKED BY: DRN	DATE: 11/12/2021

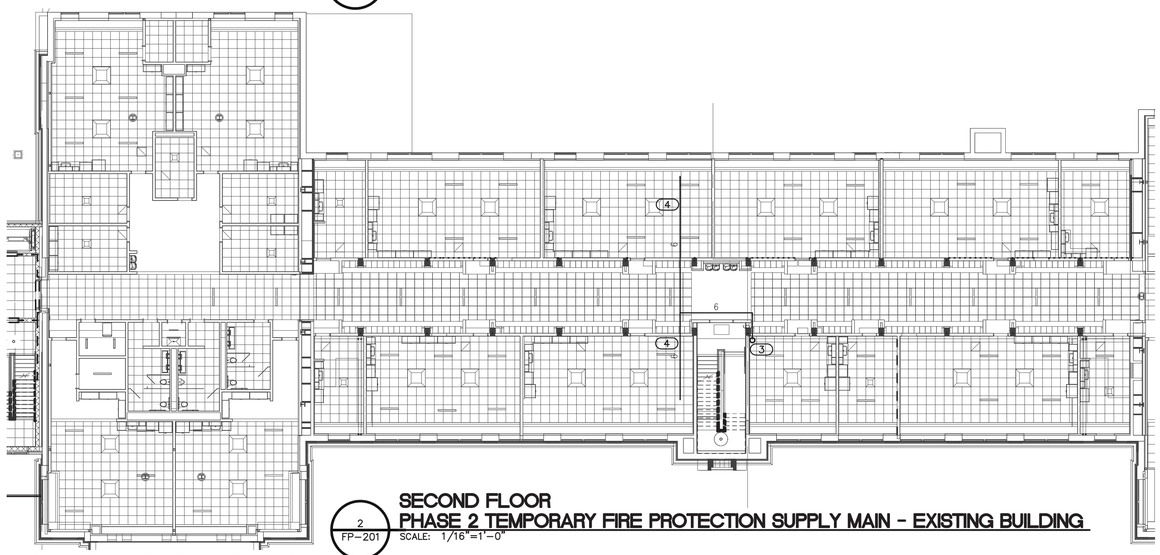
PHASE ONE TEMPORARY FIRE PROTECTION PLAN

BUILDING	SHEET NUMBER
MS	FP-200

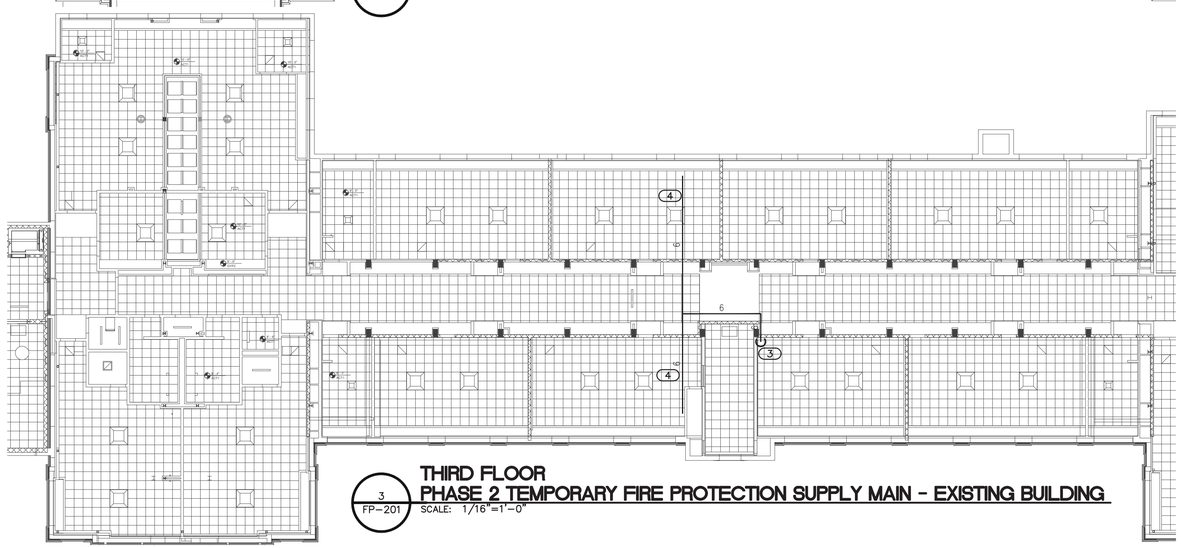
RE-BID



1 FP-201 — FIRST FLOOR
PHASE 2 TEMPORARY FIRE PROTECTION SUPPLY MAIN - EXISTING BUILDING
SCALE: 1/16"=1'-0"



2 FP-201 — SECOND FLOOR
PHASE 2 TEMPORARY FIRE PROTECTION SUPPLY MAIN - EXISTING BUILDING
SCALE: 1/16"=1'-0"



3 FP-201 — THIRD FLOOR
PHASE 2 TEMPORARY FIRE PROTECTION SUPPLY MAIN - EXISTING BUILDING
SCALE: 1/16"=1'-0"

GENERAL NOTES:

1. DRAWING INDICATES INSTALLATION OF TEMPORARY PIPING ONLY TO FACILITATE THE INSTALLATION OF THE PHASE 2 SPRINKLER SYSTEM. CONNECT TO THE EXISTING SPRINKLER SYSTEM WATER SERVICE ENTRANCE TO SUPPLY TEMPORARY FEED MAINS.
2. PROVIDE 6" FEED MAIN SUPPLIED BY THE EXISTING SPRINKLER SYSTEM AS INDICATED ON THESE DRAWINGS. DURING FUTURE PHASES, THE 6" MAIN SHALL BE REMOVED TO PROVIDE THE FINAL INSTALLATION AND SPRINKLER SYSTEM ZONING SHOWN ON THE FIRE PROTECTION FLOOR PLANS. THE CONTRACTOR MAY ELECT TO MAINTAIN OR RE-USE OR RE-LOCATE THE 6" PIPING PER THE CONTRACTOR'S MEANS AND METHODS, AS LONG AS THE FINAL ZONING OF THE SPRINKLER SYSTEMS UPON COMPLETION OF PHASE 3 MATCHES THE INTENT SHOWN ON THE FIRE PROTECTION FLOOR PLANS.
3. THE FIRE ALARM CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING TEMPORARY TAMPER AND WATER FLOW SWITCHES AS INDICATED ON THESE DRAWINGS, REGARDLESS IF THE DEVICES ARE INDICATED ON FIRE ALARM DRAWINGS.
4. MAKE MODIFICATIONS TO PHASE 1 TEMPORARY PIPING DURING PHASE 2 AS NEEDED TO FACILITATE INTENT OF FINAL SPRINKLER SYSTEM INSTALLATION UPON COMPLETION OF PHASE 3 (THESE MODIFICATIONS ARE NOT INDICTED ON THIS PLAN).

KEYED NOTES:

(1) 6" PIPING DOWN TO EXISTING WATER SERVICE ENTRANCE. CONNECT TO EXISTING WATER SERVICE ENTRANCE.

(2) ROUTE 6" TEMPORARY FEED MAIN THROUGH THE CORRIDOR.

(3) 6" TEMPORARY RISER/MAIN TO TEMPORARILY SUPPLY PHASE 2 SPRINKLER SYSTEM. REMOVE TEMPORARY RISER DURING PHASE 3 AND CAP AS NEEDED.

(4) CONNECT 6" MAIN ON EACH FLOOR TO THE GRIDDED SPRINKLER SYSTEM INDICATED ON THE FIRE PROTECTION FLOOR PLANS.

DETAIL NOTES:

(A) EXISTING 6" SPRINKLER WATER SERVICE ENTRANCE DURING PHASES 1 AND 2. REMOVED DURING PHASE 3.

(B) EXISTING TO REMAIN BACKFLOW PREVENTER. REMOVED DURING PHASE 3.

(C) EXISTING WET PIPE SPRINKLER RISER. REMOVED ENTIRELY DURING PHASE 3.

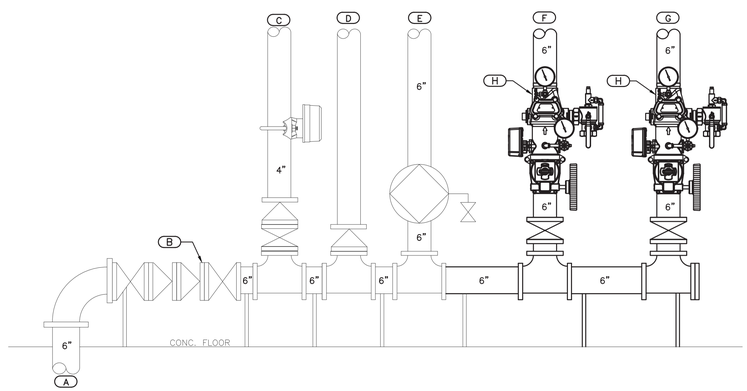
(D) EXISTING FIRE DEPARTMENT CONNECTION AND SUPPLY LINE. REMOVED ENTIRELY DURING PHASE 3.

(E) EXISTING DRY PIPE SPRINKLER SYSTEM. REMOVED ENTIRELY DURING PHASE 3.

(F) TEMPORARY 6" RISER TO PHASE 1 WET PIPE SPRINKLER SYSTEM.

(G) TEMPORARY 6" RISER TO PHASE 2 WET PIPE SPRINKLER SYSTEM.

(H) 6" RISER CONTROL ASSEMBLY CONSISTING OR BUTTERFLY VALVE WITH TAMPER SWITCH, WATER FLOW SWITCH, CHECK VALVE, PRESSURE GAUGE, AND SYSTEM TEST/DRAIN CONNECTION WITH A BUILT-IN PRESSURE RELIEF KIT. RISER MAY BE RELOCATED AND RE-USED DURING PHASE THREE. FIRE ALARM CONTRACTOR SHALL MONITOR TEMPORARY TAMPER AND WATER FLOW SWITCHES DURING PHASES 1 AND 2.



4 FP-201 — EXISTING FIRE PROTECTION WATER SERVICE ENTRANCE PHASING MODIFICATIONS
SCALE: 1/16"=1'-0"

KEY PLAN:

KEY PLAN
SCALE:NOT TO SCALE

SED CONTROL NO. 27-01-00-01-0-024-009

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BCA ARCHITECTS ENGINEERS

Port PRIDE

RAN FIRE PROTECTION ENGINEERING

PORT JERVIS CITY SCHOOL DISTRICT
RENOVATIONS TO:
PORT JERVIS MIDDLE SCHOOL
Port Jervis - Orange County - New York

REV	DATE	DESCRIPTION

DRAWN BY	PROJECT NUMBER
CMC	2019-011 PH1
CHECKED BY	DATE
DRN	11/12/2021

PHASE TWO TEMPORARY FIRE PROTECTION PLAN

BUILDING	SHEET NUMBER
MS	FP-201

RE-BID