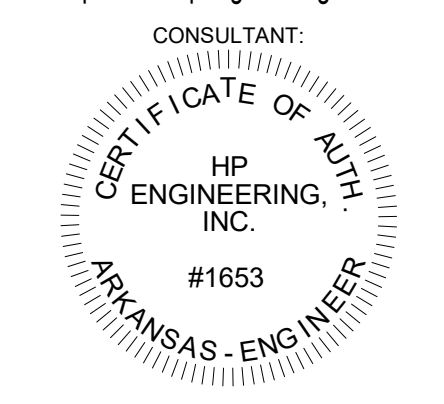
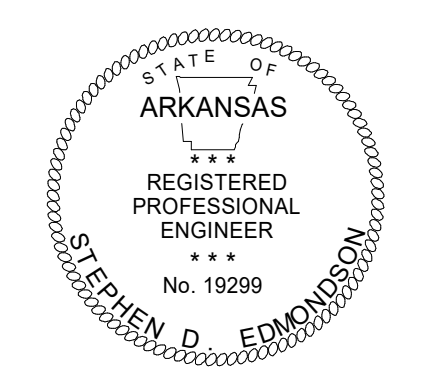


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**Bentonville Public Library
Expansion**
405 S Main Street
Bentonville, AR 72712

Engineer Seal



Signature: *Stephen Edmondson*
Print Name: Stephen Edmondson
Date: 03-20-2023 License No.: 19299

BID SET

ISSUE / REVISION

Mark	Date	Description
	12/10/2021	SCHEMATIC DESIGN PRICING
	6/22/2022	DESIGN DEVELOPMENT PRICING
	8/1/2022	DD VE OPTION B
	10/13/2022	PRE APP SET
	10/28/2022	LARGE SCALE DEVELOPMENT SUBMITTAL
	10/31/2022	CD PRICING SET
	11/14/2022	SECOND LSD SUBMITTAL
	11/28/2022	THIRD LSD SUBMITTAL
	12/21/2022	PERMIT SET
	1/6/2023	BID SET
	1/18/2023	ADDENDUM #1
	1/19/2023	ADDENDUM #2
	3/22/2023	ASH-01

Issued 03/20/2023

**FIRE PROTECTION
NOTES AND PLAN**

FP001

GENERAL PLUMBING SEISMIC NOTES

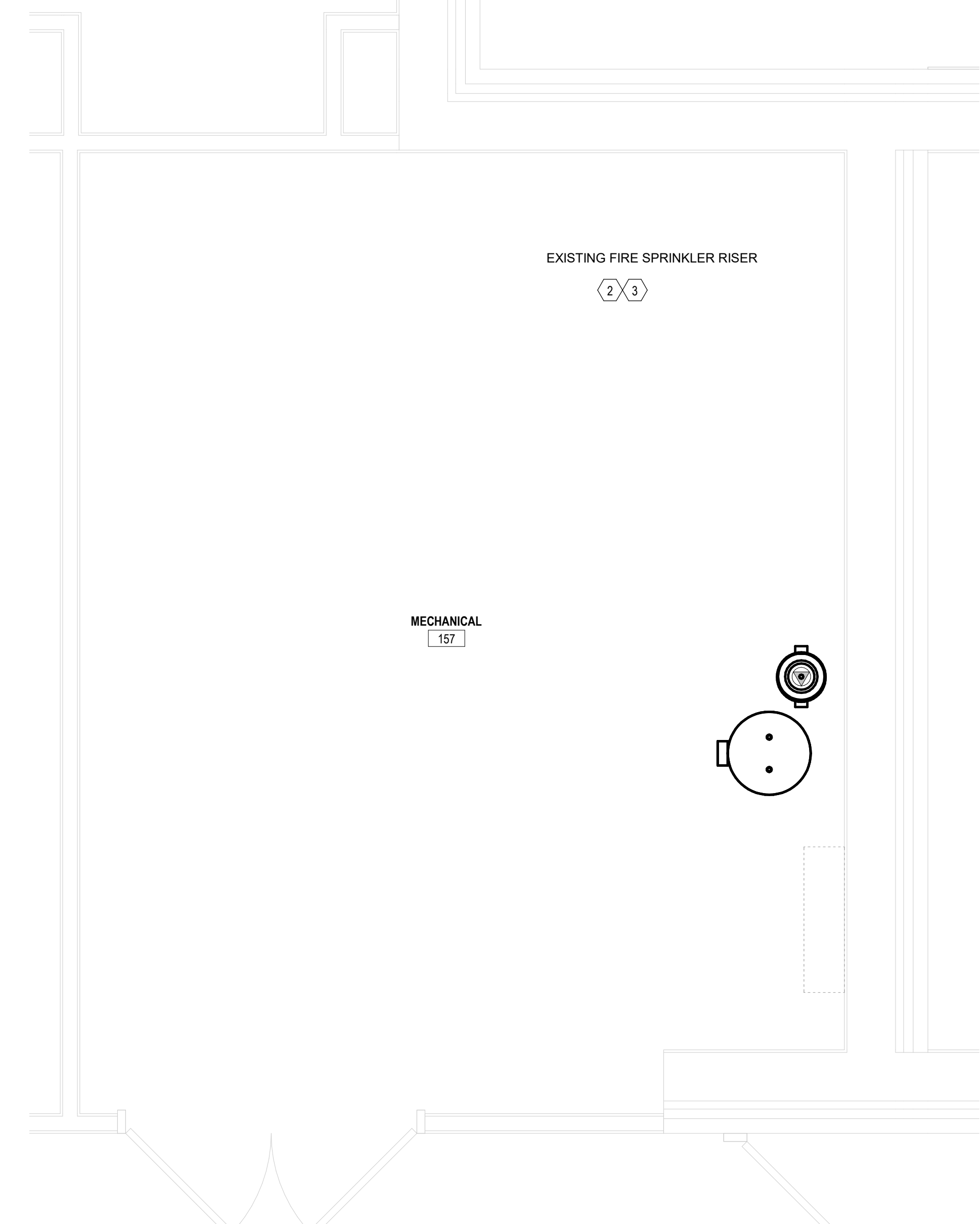
- 1 PROVIDE VIBRATION AND SEISMIC CONTROLS FOR FIRE-SUPPRESSION PIPING AND EQUIPMENT FOR DEVICES FOR FIRE-SUPPRESSION EQUIPMENT AND SYSTEMS.
- 2 PROVIDE VIBRATION AND SEISMIC CONTROLS FOR PLUMBING PIPING AND EQUIPMENT
- 3 COORDINATE ALL VIBRATION ISOLATION DEVICE INSTALLATION AND SEISMIC BRACING FOR PLUMBING PIPING AND EQUIPMENT WITH OTHER SYSTEMS AND EQUIPMENT IN THE VICINITY, INCLUDING OTHER SUPPORTS AND RESTRAINTS, IF ANY.
- 4 TESTING AGENCY QUALIFICATIONS: AN INDEPENDENT AGENCY, WITH THE EXPERIENCE AND CAPABILITY TO CONDUCT THE TESTING INDICATED, THAT IS AN NRTL AS DEFINED BY OSHA IN 29 CFR 1910.7 AND THAT IS ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION.
- 5 COMPLY WITH SEISMIC-RESTRAINT REQUIREMENTS IN THE INTERNATIONAL BUILDING CODE
- 6 WELDING QUALIFICATIONS: QUALITY PROCEDURES AND PERSONNEL ACCORDING TO AWS D1.1/D1.1M, "STRUCTURAL WELDING CODE-STEEL."
- 7 SEISMIC-RESTRAINT DEVICES SHALL HAVE HORIZONTAL AND VERTICAL LOAD TESTING AND ANALYSIS AND SHALL BEAR ANCHORAGE PRE-APPROVAL DPA NUMBER FROM OSHPD, PRE-APPROVAL BY ICC-ES, OR PRE-APPROVAL BY ANOTHER AGENCY ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION, SHOWING MAXIMUM SEISMIC RESTRAINT RATINGS. RATINGS BASED ON INDEPENDENT TESTING ARE PREFERRED TO RATINGS BASED ON CALCULATIONS. IF PRE-APPROVED RATINGS ARE UNAVAILABLE, SUBMITTALS BASED ON INDEPENDENT TESTING ARE PREFERRED. CALCULATIONS (INCLUDING COMBINING SHEAR AND TENSILE LOADS) TO SUPPORT SEISMIC RESTRAINT DESIGNS MUST BE SIGNED AND SEALED BY A QUALIFIED PROFESSIONAL ENGINEER.
- 8 SEISMIC RESTRAINTS FOR MEP EQUIPMENT AND SYSTEMS
- 9 BUILDING IS CLASSIFIED AS SEISMIC DESIGN CATEGORY C. CONTRACTOR SHALL PROVIDE SEISMIC BRACING FOR PIPING, DUCTWORK AND EQUIPMENT TO MEET ALL LOCAL AND NATIONAL CODE REQUIREMENTS.
- 10 CONTRACTOR'S RESPONSIBILITIES INCLUDE PROVIDING ALL SUBMITTALS AND DETAILS WITH STRUCTURAL ENGINEER'S CERTIFICATION FOR PERMITTING.
- 11 SEISMIC PROTECTION FOR CONCERNS OF ALL BUILDING SYSTEMS INCLUDING BUT NOT LIMITED TO MECHANICAL, PLUMBING, AND ELECTRICAL MUST MEET MINIMUM REQUIREMENTS OF ALL APPLICABLE CODES FOR BUILDINGS CLASSIFIED SEISMIC PROTECTION MEASURES TO BE APPLIED SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ALL APPLICABLE LOCAL, STATE, AND/OR FEDERAL CODES AND WITH MANUFACTURER'S REQUIREMENTS, THE MOST STRINGENT SHALL APPLY.

KEYNOTES

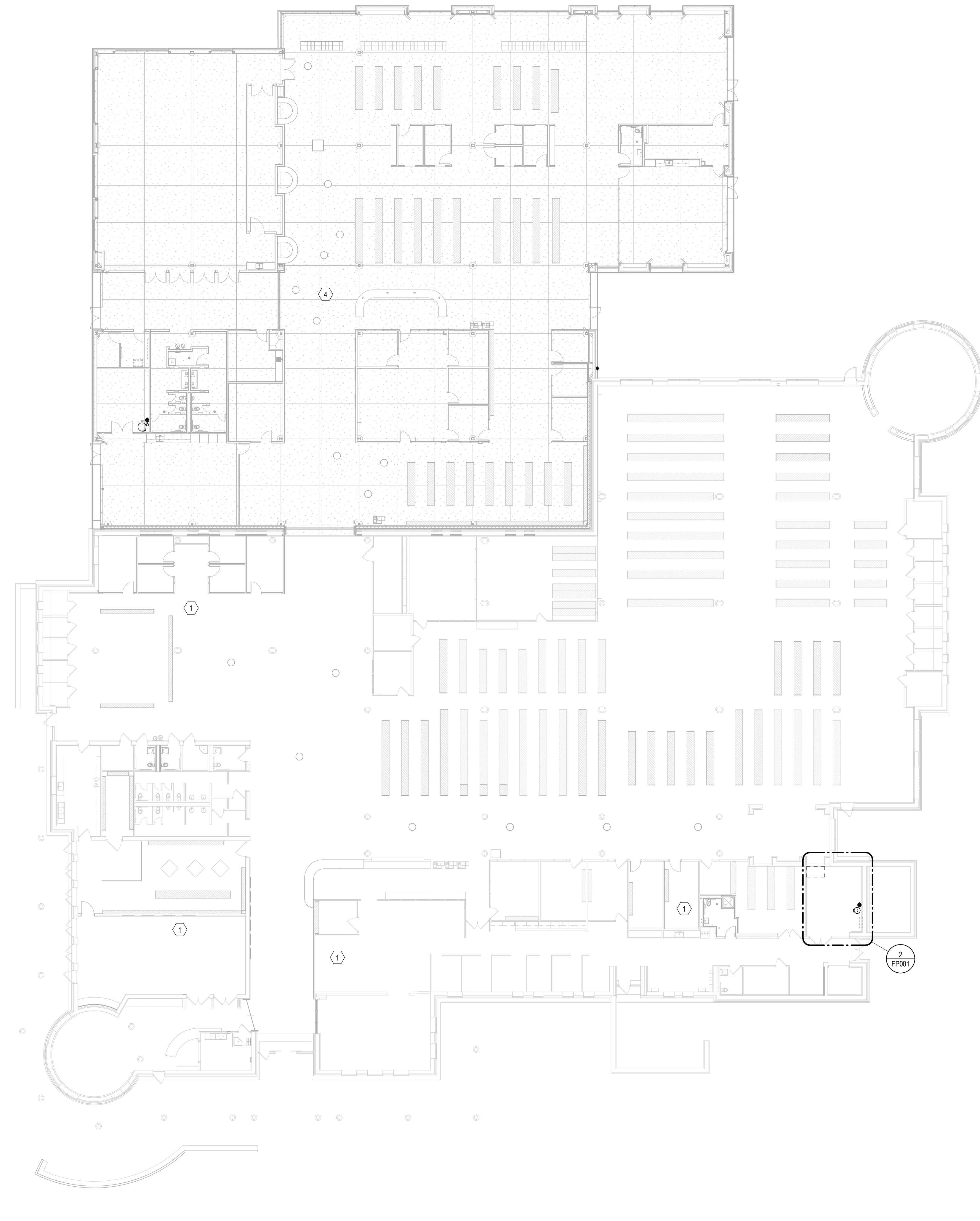
- 1 RECONFIGURE AND/OR RELOCATE EXISTING SPRINKLER HEADS TO NEW LAYOUT. REFER TO ARCHITECTURAL PLANS. MODIFY EXISTING AND/OR PROVIDE NEW PIPING AND HEADS AS NEEDED TO ACCOMMODATE NEW LAYOUT. ALL WORK TO BE DESIGNED AND PERFORMED BY A LICENSED FIRE PROTECTION DESIGN/BUILD CONTRACTOR.
- 2 FIRE PROTECTION CONTRACTOR SHALL MODIFY EXISTING SPRINKLER SYSTEM FOR NEW ADDITION. REFER TO GENERAL FIRE SPRINKLER NOTES AND SPECIFICATIONS.
- 3 FIRE PROTECTION CONTRACTOR SHALL CONNECT A NEW HEADER TO THE EXISTING FIRE SUPPRESSION SYSTEM FOR THE NEW ADDITION AND ROUTE A NEW MAIN TO THE NEW ADDITION. CONTRACTOR SHALL FIELD VERIFY EXACT LOCATION AND SIZE PRIOR TO CONSTRUCTION.
- 4 ALL NEW SPRINKLER HEADS ARE TO BE CONCEALED TYPE (TYPICAL). SEE ARCHITECTURAL CRP FOR LOCATIONS OF EXPOSED CEILING AND TYPE SPRINKLER HEAD USED AT THEIR LOCATIONS. ALIGN WITH OTHER DEVICES AND CENTERED IN CEILING PANELS (TYPICAL).

GENERAL FIRE SPRINKLER NOTES

- 1 RUN ALL PIPING PARALLEL OR PERPENDICULAR TO STRUCTURE IN ALL AREAS. SPRINKLER CONTRACTOR SHALL COORDINATE LOCATION OF HORIZONTAL SPRINKLER PIPING WITH OTHER TRADES TO MISS ALL LIGHT FIXTURES, DUCTS, WAX BOXES, AIR DIFFUSERS AND ALL OTHER ITEMS WHERE CEILING CLEARANCES ARE CLOSE. PROVIDE ADDITIONAL MAINS IF NECESSARY FOR CEILING CLEARANCES.
- 2 DESIGN, FABRICATE, INSTALL THE FIRE PROTECTION AUTOMATIC SPRINKLER SYSTEM IN AN ACCEPTABLE MANNER TO THE STATE HEALTH DEPARTMENT, LOCAL FIRE MARSHALL AND THE ARCHITECT/ENGINEER.
- 3 PAY ALL PERMITS, LICENSES, FEES, DEPOSITS AND CHARGES IN CONNECTION WITH THE WORK, EXCEPT AS NOTED HEREIN. SECURE ALL NECESSARY APPROVALS.
- 4 DESIGN AND INSTALL THE SYSTEM PER THE REQUIREMENTS OF NFPA NO. 13. ALL DEFICIENCIES SHALL BE THE RESPONSIBILITY OF THE SPRINKLER CONTRACTOR AND ANY DEVIATIONS FROM THE REQUIREMENTS IN NFPA NO. 13 AND/OR THE APPROVED PLANS SHALL REQUIRE SPECIAL PERMISSION FROM THE ARCHITECT.
- 5 COMPLY WITH ALL RULES, REGULATIONS, LAWS AND ORDINANCES OF THE STATE, LOCAL, CITY OR COUNTY AUTHORITIES AND UTILITY COMPANIES.
- 6 THE AUTOMATIC SPRINKLER SYSTEM SHALL BE DESIGNED, FABRICATED, INSTALLED AND TESTED BY AN EXPERIENCED CONTRACTOR AND LICENSED BY THE STATE TO PERFORM SUCH WORK.
- 7 SUBMIT SHOP DRAWINGS TO THE ARCHITECT AND THE OWNER'S INSURANCE COMPANY FOR APPROVAL BEFORE BEING SENT TO THE ARCHITECT. ALL SHOP DRAWINGS MUST BEAR THE INSURANCE SERVICE OFFICES (ISO) STAMP OF ACCEPTANCE AND THE LOCAL FIRE MARSHALL'S STAMP OF APPROVAL.
- 8 SUBMIT COMPLETE LAYOUT DRAWING OF OVERHEAD SPRINKLER SYSTEM AND RELATED EQUIPMENT INDICATING RELATIONSHIP OF ALL THE OVERHEAD ITEMS INCLUDING CEILING AIR DIFFUSERS, LIGHTING FIXTURES, BEAMS AND ALL OTHER ITEMS. ALL SPRINKLER HEADS SHALL BE SPACED PER NFPA.
- 9 SUBMIT COMPLETE DETAILS AND SECTIONS TO CLEARLY DEFINE AND CLARIFY THE DESIGN, INCLUDING A LIST OF MATERIALS DESCRIBING ALL PROPOSED MATERIALS WITH MANUFACTURER'S NAME AND CATALOG NUMBER.
- 10 PROVIDE SPRINKLER HEAD(S) FOR EACH ROOMSPACE FOR COMPLETE PROTECTION.
- 11 UPON COMPLETION OF THE SPRINKLER SYSTEM INSTALLATION, TEST AND RE-TEST THE COMPLETE INSTALLATION AND MAKE ALL CORRECTIONS AS NECESSARY TO SECURE ACCEPTANCE BY FIRE MARSHALL. FURNISH ALL TEST EQUIPMENT AND PERSONNEL REQUIRED.
- 12 AFTER THE FIRE SPRINKLER SYSTEM HAS BEEN COMPLETELY TESTED, INSPECTED AND APPROVED, SECURE A LETTER OF FINAL ACCEPTANCE FROM THE ADMINISTRATIVE AUTHORITY ADDRESSED TO THE SPRINKLER COMPANY RESPONSIBLE FOR THE INSTALLATION, PREPARED IN TRIPPLICATE, DELIVER ALL THREE COPIES TO THE ARCHITECT.
- 13 UNDERWRITERS LABORATORIES (UL) AND/OR FACTORY MUTUAL RESEARCH CORPORATION (FMRC) APPROVED EQUIPMENT SHOULD BE UTILIZED WHERE APPLICABLE AND THE DETAILS OF THE INSTALLATION SHOULD CONFORM TO FACTORY MUTUAL ENGINEERING ASSOCIATION (FMEA) GOOD PRACTICES.
- 14 A CORROSION-RESISTANT PLACARD SHALL BE PLACED ON THE BASE OF THE RISER STATING THE DESIGN CRITERIA AND RESULTING DEMAND AT THE BASE OF THE RISER, INCLUDING HOSE STREAM ALLOWANCES, ALL PIPING, FITTINGS, HANGERS, VALVES, AND DEVICES ARE TO COMPLY WITH NFPA NO. 13.
- 15 ALL PIPES SHALL MEET OR EXCEED CORROSION RESISTANCE RATIO OF SCHEDULE 40 STEEL PIPE. FIELD COORDINATION IS REQUIRED ESPECIALLY WHEN CUTTING OR ADJUSTING PIPES FOR SPRINKLER INSTALLATION, AS PER THE REQUIREMENTS OF THE DEPARTMENT OF HEALTH, ALL UNDERGROUND PIPING IS TO BE CHLORINATED.
- 16 FLOW AND TAMPER SWITCHES SHALL BE PROVIDED BY FIRE ALARM CONTRACTOR AND INSTALLED BY SPRINKLER CONTRACTOR. WIRING SHALL BE PROVIDED BY FIRE ALARM CONTRACTOR. EXPOSED SPRINKLER PIPING SHALL BE PAINTED, COLOR SHALL BE SPECIFIED BY ARCHITECT.
- 17 PROVIDE COMPONENTS FOR FULL FLOW TESTING OF BACKFLOW DEVICE.
- 18 IN AREAS SUBJECT TO FREEZING, PROVIDE DRY SPRINKLER SYSTEM OR COORDINATE WITH MECHANICAL SUBCONTRACTOR TO PROVIDE HEATING EQUIPMENT TO MAINTAIN ANY SPACES AT 40°F OR ABOVE.
- 19 CONTRACTOR SHALL COORDINATE COLOR OF SPRINKLER HEADS WITH OWNER/ARCHITECT.
- 20 CONTRACTOR SHALL MATCH TYPE AND COLOR OF EXISTING SPRINKLER HEADS.
- 21 FIRE CONTRACTOR SHALL PROVIDE AS AN ADD ALTERNATE BID, HAVE A FLOW TEST DONE FOR THE FIRE SUPPRESSION TO DETERMINE IF A BOOSTER PUMP WILL BE REQUIRED. IF ONE IS REQUIRED, CONTRACTOR SHALL PROVIDE IT. COORDINATE ELECTRICAL REQUIREMENTS WITH THE ELECTRICAL CONTRACTOR.
- 22 EXISTING LIBRARY WILL HAVE REMODEL WORK. CONTRACTOR SHALL INVESTIGATE EXISTING CONDITIONS AND COORDINATE AREAS OF CHANGE WITH ARCHITECTURAL DRAWINGS. CONTRACTOR SHALL MATCH TYPE AND COLOR OF EXISTING SPRINKLER HEADS FOR THE AREAS THAT ARE BEING CHANGED.



1 2 ENLARGED FIRE PROTECTION PLAN - SPRINKLER ROOM
FP001 1/2" = 1'-0"



1 LEVEL 1 PLUMBING PLAN
FP001 1/16" = 1'-0"